

U-2211 B

NC 16
From North of Tower Road (SR 1895)
to Caleb Setzer Road (SR 1800) Southeast of Newton
Catawba County
Federal Aid No. STP-16(4)
State Project No. 8.1792501
T.I.P. No. R-3100

ADMINISTRATIVE ACTION

FINDING OF NO SIGNIFICANT IMPACT

U. S. DEPARTMENT OF TRANSPORTATION

FEDERAL HIGHWAY ADMINISTRATION

AND

N. C. DEPARTMENT OF TRANSPORTATION

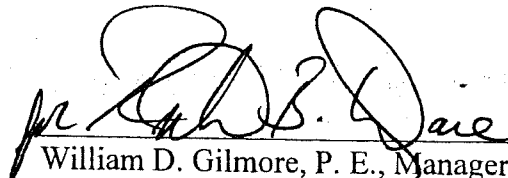
DIVISION OF HIGHWAYS

Submitted Pursuant to 42 U. S. C. 4332(2)(c)

APPROVED:

12/7/98

Date




William D. Gilmore, P. E., Manager
Planning and Environmental Branch, NCDOT

12/17/98

Date

FOR


Nicholas Graf, P. E.
Division Administrator, FHWA

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FINDING OF NO SIGNIFICANT IMPACT

December, 1998

Documentation Prepared in Planning and Environmental Branch By:

Clarence W. Coleman, Jr.

Clarence W. Coleman, Jr., P. E.
Project Planning Engineer

Linwood Stone

Linwood Stone, CPM
Project Planning Unit Head

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SUMMARY OF ENVIRONMENTAL AND SPECIAL PROJECT COMMITMENTS

- A. The North Carolina Department of Transportation's NCDOT's Best Management Practices for the Protection of Water Supply Watersheds will be strictly enforced throughout the duration of the project. Provisions to preclude unnecessary contamination by toxic substances during the construction interval will also be strictly enforced to protect the High Quality Waters of Maiden Creek.
- B. The Geotechnical Unit will conduct a thorough survey for contaminated soil and groundwater prior to right of way acquisition if property is to be acquired on any of the ten sites identified as possibly hazardous.
- C. Special attention will be given to proper installation and maintenance of all erosion and sedimentation control devices.
- D. Any "major" stream relocations will be designed according to the North Carolina Wildlife Resources Commission (NCWRC) guidelines "N.C. Stream Protection and Improvement Guidelines". Proposed channel designs will be similar to original channels in width, depth, gradient, and substrate. Site specific requirements for re-establishment of bank vegetation with planting regime, meanders, and habitat structures will be determined through coordination with the NCWRC field staff during the hydraulic phase of the project.
- E. To ensure that all borrow and waste activities occur on high ground, NCDOT shall require its contractors and/or agents to identify all areas to be used to borrow material, or to dispose of dredged, fill, or waste material. Documentation of the location and characteristics of all borrow and disposal sites associated with this project shall be available to the U. S. Army Corps of Engineers upon completion.

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FINDING OF NO SIGNIFICANT IMPACT

Prepared by the
Planning and Environmental Branch
Division of Highways
North Carolina Department of Transportation
in consultation with the
Federal Highway Administration

I. TYPE OF ACTION

This is a Federal Highway Administration (FHWA) administrative action, Finding of No Significant Impact (FONSI).

The FHWA has determined this project will not have any significant impact on the human environment. This FONSI is based on the Environmental Assessment which has been independently evaluated by the FHWA and determined to adequately and accurately discuss the environmental issues and impacts of the proposed project. The Environmental Assessment provides sufficient evidence and analysis for determining that an Environmental Impact Statement is not required. The FHWA takes full responsibility for the accuracy, scope, and content of the Environmental Assessment.

II. DESCRIPTION OF THE PROPOSED ACTION

The North Carolina Department of Transportation (NCDOT), Division of Highways, proposes to widen NC 16 from a two-lane roadway to a multi-lane facility in Catawba County. The project originates just north of Tower Road (SR 1895) and terminates approximately 750 meters (2500 feet) north of Caleb Setzer Road (SR 1800), southeast of Newton. The proposed project is divided into three sections: (1) Section A, from north of Tower Road (SR 1895) to Ball's Creek Road (SR 1810)/Providence Mill Road (SR 1810), (2) Section B, from Ball's Creek Road/Providence Mill Road to Claremont Road (SR 1801), and (3) Section C, beginning at Claremont Road and ending approximately 750 meters (2500 feet) north of Caleb Setzer Road (SR 1800) (See Appendix A of Environmental Assessment, Figures 1A and 2). The total project length is approximately 14.5 kilometers (9.0 miles). The length of Section A is approximately 8.5 kilometers (5.3 miles), Section B is approximately 4.4 kilometers (2.7 miles), and Section C is approximately 1.6 kilometers (1.0 mile).

The recommended typical cross section for Section A is a four-lane divided shoulder section with a 14-meter (46-foot) median. For Sections B and C, the recommended typical cross section is a five-lane, 19.2-meter (64-foot) face to face of curbs, curb and gutter facility.

The subject project is included in the 2000-2006 Draft Transportation Improvement Program (T.I.P.) with an estimated cost of \$27,000,000. The current estimated cost is \$30,000,500. Section C is scheduled for right of way acquisition in Federal Fiscal Year (FFY) 2002 and construction in FFY 2004. This schedule coincides with the right of way and construction schedules for Section A of the proposed Newton Conover Eastern Loop (T.I.P. No. U-2404). Section A is scheduled for right of way in FFY 2006. Right of way acquisition for Section B and construction of Sections A and B are scheduled beyond FFY 2006.

III. ACTIONS REQUIRED BY OTHER AGENCIES

It is anticipated permits for impacts to jurisdictional wetlands and surface waters will be required. This is in accordance with provisions of Section 404 of the Clean Water Act (33 U.S.C. 1344). A Section 401 Water Quality certification will be required from the North Carolina Department of Environment, Health and Natural Resources (DEHNR) for activities resulting in discharge into any streams involved with this project.

IV. NEED FOR ACTION

The purpose of widening NC 16 is to improve traffic service for motorists in the project area. NC 16 is a major north-south route in the western piedmont of North Carolina. The portion of NC 16 studied in this report serves as a radial route between Charlotte and Newton. NC 16 is also heavily used to access Interstate 40.

V. CIRCULATION OF ENVIRONMENTAL ASSESSMENT

The Environmental Assessment was circulated among the following federal, state, and local agencies. Written comments were received from agencies noted with an asterisk (*).

- *U. S. Army Corps of Engineers
- *U. S. Fish and Wildlife Service
- U. S. Department of Interior
- Federal Emergency Management Administration
- U. S. Advisory Council on Historic Preservation
- U. S. Department of Agriculture
- U. S. Environmental Protection Agency
- U. S. Soil Conservation Service
- U. S. Geological Survey
- *N. C. State Clearinghouse, Department of Administration
- *N. C. Department of Environment, Health, and Natural Resources
- *N. C. Department of Cultural Resources, Division of Archives and History

- *N. C. Wildlife Resources Commission
- N. C. Department of Human Resources
- N. C. Department of Public Instruction
- *Catawba County Public Schools
- *Catawba County Planning
- *City of Newton

* Denotes agencies from which input was received

VI. COMMENTS RECEIVED ON ENVIRONMENTAL ASSESSMENT

A. U.S. Army Corp of Engineers

1. Comment:

“Based on review of Panels 140, 145, 285, and 325 of the 1980 Catawba County Flood Insurance Rate Map (FIRM), the roadway crosses Smyre Creek at the upper limit of the approximately-mapped portion of this stream. No other identified flood hazard areas are indicated on the FIRM as being affected by the roadway. However, from a review of the USGS topographical map ‘Denver, N.C.’, it appears that the road crosses South Fork and a tributary, both of which may have sufficient areas to produce flooding. We recommend that the three crossings mentioned be designed so as to not significantly increase upstream flooding, and that your office coordinate with the county to ensure compliance with their flood plain ordinance.

Response:

NCDOT will design the three referenced crossings to not significantly increase flooding. Also, representatives of the Hydraulics Unit of NCDOT will coordinate with Catawba County officials to ensure compliance with their flood plain ordinance.

2. Comment:

Based on information presented in the Environmental Assessment and our previous onsite inspection of the road corridor, we anticipate that impacts to waters and wetlands from this project will be minimal, provided that lengthy longitudinal channel encroachments are avoided or minimized through the use of asymmetrical widening. It is likely that Nationwide Permit No. 26 will expire before construction is initiated on this project. The proposed culvert extensions could each be authorized by Nationwide Permit No. 14, provided that they are individually complete projects on separate stream channels and meet all other terms and conditions.

Response:

Comments are noted.

B. U.S. Fish and Wildlife Service1. Comment:

“In the EA you conclude that the project will have no effect on the federally threatened dwarf-flowered heartleaf (*Hexastylis naniflora*). The Service agrees that this project will not affect this listed species and believes the requirements under Section 7 of the Act are fulfilled. However, obligations under Section 7 of the Act must be reconsidered if: (1) new information reveals impacts of this identified action that may affect listed species or critical habitat in a manner not previously considered, (2) this action is subsequently modified in a manner that was not considered in this review, or (3) a new species is listed or critical habitat is determined that may be affected by the identified action.”

Response:

Comments are noted.

2. Comment:

“Under Section VI.H.7, Construction Impacts, of the EA, it is noted that prior to the approval of any borrow source developed for use on this project, the contractor shall obtain certification from the State Historic Preservation Officer. Because of similar resource concerns from the development of any contractor borrow sites associated with this project, the Service recommends that you **include borrow and/or waste sites within the EA** and consider the potential impacts to all resources – cultural, wetland, stream, farmland, and air, as well as **federally listed species**. This recommendation was included in our September 26, 1995, letter regarding the subject project as well. Even though the location and development of borrow sites is normally left to the contractor, the sites are often solely for use by the project and should be considered. The Service looks forward to receiving a list of potential borrow development sites, with a site-by-site determination of the effects on species that are protected under the Act. The Service will provide updated species lists for [Catawba] County and/or other potential borrow sites upon request.”

Response:

To ensure that all borrow and waste activities occur on high ground, NCDOT shall require its contractors and/or agents to identify all areas to be used to borrow material, or to dispose of dredged, fill, or waste material.

Documentation of the location and characteristics of all borrow and disposal sites associated with this project shall be available to the resource agencies upon completion. NCDOT will also require the contractor to evaluate borrow and waste sites for threatened and endangered species.

3. Comment:

“According to information in the EA, there will be impacts to twelve perennial streams and a small wetland (<1/10 acre). If we are asked to review a permit application(s) for this project, we will likely recommend that: (1) any disturbance of stream and wetland areas be avoided to the maximum extent possible (by bridging the stream and its bank-full width and by altering the route around, or bridging, the wetland area); (2) stringent erosion and sedimentation controls be installed and maintained in order to prevent unnecessary impacts to aquatic resources; (3) a vegetated buffer be maintained between the construction corridor and any wetland or stream; and (4) temporary or permanent herbaceous vegetation be planted on all bare soil within 15 days of any ground-disturbing activities in order to prevent soil erosion. The Service will likely recommend that some form of compensatory mitigation be provided for unavoidable impacts to wetlands and streams. Since most of these streams have been impacted by agriculture and/or suburban land uses, there are likely sufficient opportunities to restore stream reaches within or adjacent to the proposed right of way. The Service recommends that the permit application include a complete description of the wetlands and streams impacted. Stream morphology descriptions should follow Rosgen (1994, 1996).”

Response:

NCDOT will comply with the recommendations outlined above to the full extent practicable. A complete description of the impacted wetlands and streams will be included the permit application.

C. Department of Environmental Health and Natural Resources (Division of Water Quality)

1. Comment:

“Culvert extensions and/or channel changes requiring losses in excess of 150 feet linear distance of any single perennial stream will require mitigation in accordance with DWQ Wetland Rules {15 A NCAC 2H.0506(b)(6)}. Table 2 in the EA provides a very helpful summary of stream impacts to be associated with this project. Based upon this table, it appears that only Site 5 (unnamed tributary to Smyre Creek) and possibly Site 6/6A (unnamed tributary to Smyre Creek) will impact over 150 feet linear distance of a perennial stream; however, the text indicates that several crossings will exceed 150 feet. In order to improve the

usefulness of this summary for our review, we suggest that DOT provide a numerical estimation of linear impacts for each of the twelve perennial stream crossings. DOT has committed to relocation of streams based upon future consultation with the North Carolina Wildlife Resources Commission. If these methods do not prove suitable to replace the functions and values of the existing streams, the Wetland Restoration Program will be available to use for stream mitigation.”

Response:

Upon review of the latest preliminary design plans, it is likely no perennial stream will be relocated by the proposed project. Also, stream mitigation will not be required since culvert extensions will not exceed 45 meters (150 feet).

2. Comment:

“Based upon the stream and wetland impacts described in the EA, General Certification 3103 will likely be applicable to this project. Final Permit authorization will require formal application by NCDOT and written concurrence from DWQ. DOT should be aware that this approval will be contingent upon evidence of avoidance and minimization of wetland and stream impacts to the extent practical, and provision of wetland and stream mitigation where necessary.”

Response:

Comments are noted.

D. North Carolina Wildlife Resources Commission

Comment:

“In general we concur with the EA for this project and could agree to a Finding of No Significant Impact (FONSI). However, we offer the following recommendations to lessen impacts to aquatic resources.

1. Culvert extensions at sites 1, 2, 2A, 3-6, and 6A should be buried one foot below the normal stream bottom in order to maintain fish passage through the culvert.
2. Channel relocations proposed at drainage structures sites 1, 5, and 6A should match existing channel conditions in width, depth, gradient, and substrate. These channels should not be ripraped channels, but channels designed according to current methods developed by Dave Rosgen utilizing both hard (bankfull riprap/root wads) and

bioengineering methods.

3. Relocated channels should be revegetated using silky (bushy) dogwood (*Cornus amomum*) silky willow (*Salix sericea*) Hazel (tag) Alder (*Alnus serrulata*) Planted along the toe of the bank on 2.5-foot centers provide a more permanent solution to bank erosion problems and stream shading.”

Response:

NCDOT will fully consider each recommendation to lessen impacts to aquatic resources. Recommendations will be incorporated into the final design of the project if they are found to be practicable. Designs will be coordinated with resource agencies as they are developed.

E. North Carolina Department of Environment and Natural Resources (Division of Environmental Health)

Comment:

“The referenced project will cross several streams and will affect the Town of Maiden’s water shed. Some of the streams will be relocated. We need more information on the relocations and procedures and precautions to be carried out to minimize water quality problems.”

Response:

NCDOT's Best Management Practices for the Protection of Water Supply Watersheds will be strictly enforced throughout the duration of the project. Provisions to preclude unnecessary contamination by toxic substances during the construction interval will also be strictly enforced to protect the High Quality Waters of Maiden Creek. Please refer to Section VI.C.1 of this report for additional information.

VII. COMMENTS RECEIVED DURING AND SUBSEQUENT TO THE PUBLIC HEARING

On July 14, 1998, a formal public hearing for the project was held at the Newton-Conover Civic and Performance Place in Newton. Approximately 200 people attended the hearing, including representatives from Catawba County, the City of Newton, and NCDOT. Eight people spoke and NCDOT received correspondence from nineteen citizens following the hearing. Most citizens living adjacent to NC 16 were concerned about the amount of right of way that would be acquired for the project. Comments during and subsequent to the hearing focused on the following issues:

A. Comment:

Why were there no alternative routes considered for this project?

Response:

Following the Citizens Informational Workshop held on December 11, 1995, NCDOT design staff conducted a preliminary investigation of realigning NC 16 on new location. It was determined an alignment on new location would relocate several residences since the new alignment would eventually tie into existing NC 16 south of Caleb Setzer Road. The new location alignment would be required to tie into NC 16 south of Caleb Setzer Road due to the proposed Newton Conover Eastern Loop (T.I.P. No. U-2404) (Refer to Figure 2 of Environmental Assessment). Therefore, based on the recommendations of our design staff, no alternative routes are discussed in regard to costs and environmental/social impacts in the Environmental Assessment for this project because the option of alternative corridors was discarded.

B. Comment:

NCDOT should recommend a five-lane typical cross section for Section A to reduce the number of relocatees.

Response:

A four-lane divided typical cross section is recommended for Section A for several reasons. First, the typical section for the proposed relocation of NC 16 from Lucia to north of Tower Road (SR 1800) (T.I.P. No. R-2206) is a four-lane divided facility with full control of access. Since Project R-2206 ties into existing NC 16 north of Tower Road, a four-lane divided cross section, with no control of access due to existing development, is proposed for continuity. Also, the four-lane divided section is appropriate for Section A because of the rural characteristics of this area.

A 14.2-meter (46-foot) median is recommended as part of the typical cross section for Section A. The 14.2-meter (46-foot) median width is the standard median width to be used when widening existing two-lane roadways to four-lane divided facilities. This median would increase safety in regard to turning movements at median crossovers. Moreover, bus safety will be greatly improved since buses will be able to wait in the median crossover before making turning movements without obstructing through movements of vehicles traveling in both the northbound and southbound directions.

VIII. REVISIONS AND ADDITIONS TO THE ENVIRONMENTAL ASSESSMENT

A. Project Schedule

Following the public hearing, the right of way schedule has changed from Federal Fiscal Year (FFY) 1998 to FFY 2002 and construction has changed from FFY 1999 to FFY 2004. This change occurred to improve the coordination of the right of way and construction schedules of Section C with the proposed Newton-Conover Eastern Loop (T.I.P. No. U-2404).

B. Cross Section

Figure 3B, located in Appendix A of the Environmental Assessment (EA), incorrectly shows 2.4-meter (8-foot) berms. The proposed berm width is 3.0 meters (10 feet) (See Figure 2 of this report).

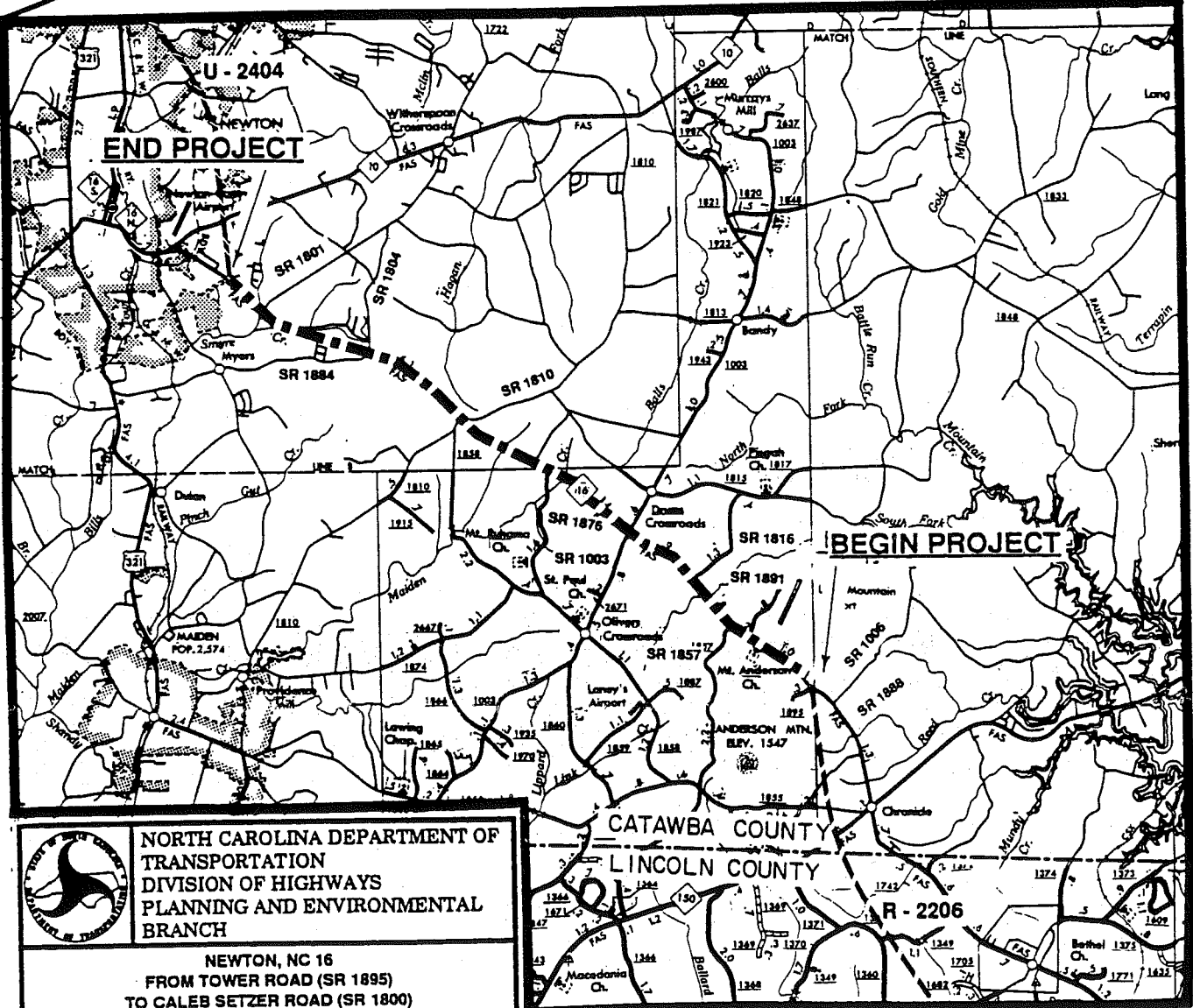
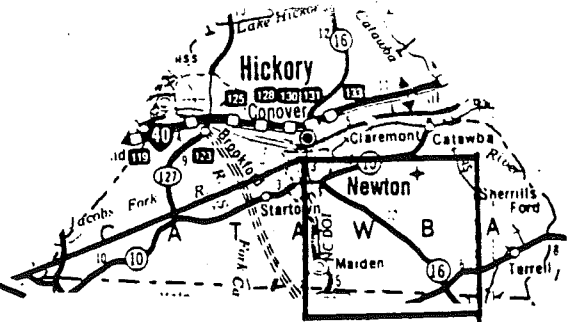
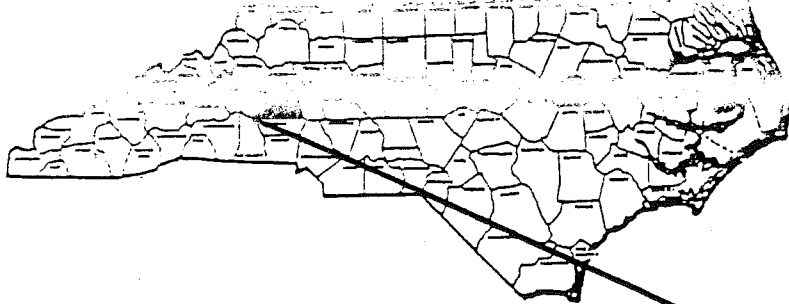
IX. BASIS FOR FINDING OF NO SIGNIFICANT IMPACT

The comments received on the Environmental Assessment did not reveal any significant impacts resulting from the proposed project. The recommended improvements will result in the relocation of 34 residence, 4 businesses, and 1 non-profit organization. It has been determined that the project will not result in the fragmentation of any established neighborhoods.

Based upon a study of the proposed project documented in the Environmental Assessment, and upon comments received from federal, state, and local agencies and the public, it is the finding of the North Carolina Department of Transportation and the Federal Highway Administration that this project will not have a significant adverse impact upon the human or natural environment. Therefore, an environmental impact statement will not be required.

APPENDIX A

FIGURES



**NORTH CAROLINA DEPARTMENT OF
TRANSPORTATION
DIVISION OF HIGHWAYS
PLANNING AND ENVIRONMENTAL
BRANCH**

**NEWTON, NC 16
FROM TOWER ROAD (SR 1895)
TO CALEB SETZER ROAD (SR 1800)
CATAWBA COUNTY
TIP NO. R - 3100
STATE PROJECT NO. 8.1792501**

0 mile 2
0 kilometers 3.225

FIG. 1

**PROPOSED TYPICAL CROSS SECTION
FIVE-LANE CURB AND GUTTER FACILITY**

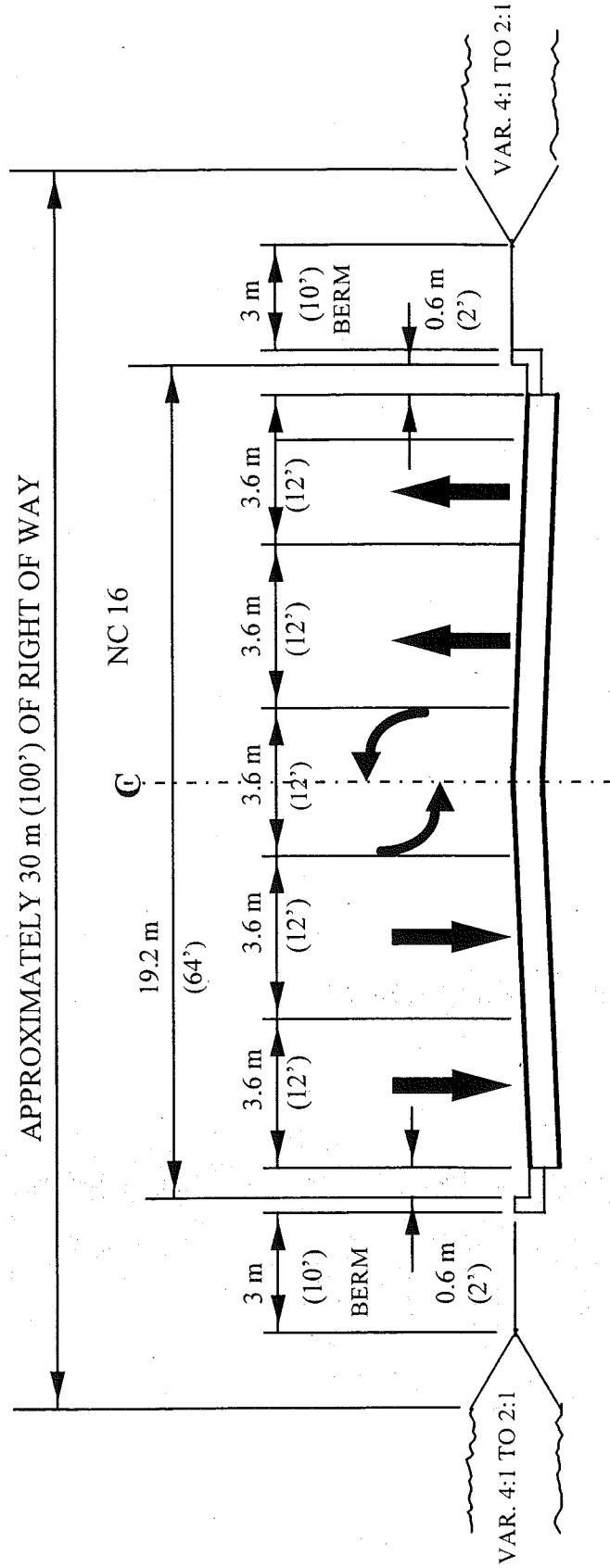


FIGURE 2

NOT TO SCALE

APPENDIX B

AGENCY COMMENTS



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS
P.O. BOX 1890
WILMINGTON, NORTH CAROLINA 28402-1890

June 30, 1998

Planning Services Section

Mr. William D. Gilmore, P.E., Manager
Planning and Environmental Branch
North Carolina Division of Highways
Post Office Box 25201
Raleigh, North Carolina 27611-5201

Dear Mr. Gilmore:

This is in response to a letter from your office dated February 27, 1998, requesting our comments on the "Federal Environmental Assessment for Widening of NC 16, From North of Tower Road (SR 1895) to Caleb Setzer Road (SR 1800) Southeast of Newton, Catawba County, Federal Aid Project No. STP-16(4), State Project No. 8.1792501, TIP No. R-3100" (Regulatory Division Action I.D. No. 199830712).

Our comments involve impacts to flood plains and jurisdictional resources, which include waters, wetlands, and U.S. Army Corps of Engineers projects. There are no Corps projects which would be impacted by the proposed improvements. Enclosed are our comments on the other issues.

We appreciate the opportunity to comment on this project. If we can be of further assistance, please contact us.

Sincerely,

C. E. Shuford, Jr., P.E.
Chief, Technical Services Division

Enclosure

U.S. ARMY CORPS OF ENGINEERS, WILMINGTON DISTRICT, COMMENTS ON:

"Federal Environmental Assessment for Widening of NC 16, From North of Tower Road (SR 1895) to Caleb Setzer Road (SR 1800) Southeast of Newton, Catawba County, Federal Aid Project No. STP-16(4), State Project No. 8.1792501, TIP No. R-3100" (Regulatory Division Action I.D. No. 199830712)

1. FLOOD PLAINS: POC - Bobby L. Willis, Planning Services Section, at (910) 251-4728

The proposed project is located in Catawba County and partially within the jurisdictional limits of the city of Newton, both of which are participants in the National Flood Insurance Program. From a review of the pertinent United States Geological Survey (USGS) topo map of the area ("Newton, N.C.") and Panel 140 of the September 1980 Catawba County Flood Insurance Rate Map (FIRM), it does not appear that the proposed portion of roadway improvements within the jurisdictional limits of Newton is located in an identified flood hazard area.

Based on a review of Panels 140, 145, 285, and 325 of the FIRM, the roadway crosses Smyre Creek at the upper limit of the approximately-mapped portion of this stream. No other identified flood hazard areas are indicated on the FIRM's as being affected by the roadway. However, from a review of the USGS topo map "Denver, N.C.", it appears that the road crosses South Fork and a tributary, both of which may have sufficient drainage areas to produce flooding. We recommend that the three crossings mentioned be designed so as to not significantly increase upstream flooding, and that your office coordinate with the county to ensure compliance with their flood plain ordinance.

2. WATERS AND WETLANDS: POC - Mr. Steve Lund, Asheville Field Office, Regulatory Division, at (704) 271-4857

Based on information presented in the Environmental Assessment and our previous onsite inspection of the road corridor, we anticipate that impacts to waters and wetlands from this project will be minimal, provided that lengthy longitudinal channel encroachments are avoided or minimized through the use of asymmetrical widening. It is likely that Nationwide Permit No. 26 will expire before construction is initiated on this project. The proposed culvert extensions could each be authorized by Nationwide Permit No. 14, provided that they are individually complete projects on separate stream channels and meet all other terms and conditions.

Any questions concerning Department of the Army permits should be directed to Mr. Lund.



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Asheville Field Office
160 Zillicoa Street
Asheville, North Carolina 28801

April 10, 1998

Mr. H. Franklin Vick, P.E., Manager
Planning and Environmental Branch
Division of Highways
North Carolina Department of Transportation
P.O. Box 25201
Raleigh, North Carolina 27611-5201

Dear Mr. Vick:

Subject: Environmental assessment for widening of NC 16 from north of Tower Road (SR 1895) to Caleb Setzer Road (SR 1800), southeast of Newton, Catawba County, North Carolina (TIP No. R-3100)

We received your letter of February 27, 1998, which included the environmental assessment (EA) and notified us that you anticipate a determination of no significant impact upon the human environment as a result of the subject highway project. The U.S. Fish and Wildlife Service (Service) is providing the following comments in accordance with the provisions of Section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531-1543) (Act).

In the EA you conclude that the project will have no effect on the federally threatened dwarf-flowered heartleaf (*Hexastylis naniflora*). The Service agrees that this project will not affect this listed species and believes the requirements under Section 7 of the Act are fulfilled. However, obligations under Section 7 of the Act must be reconsidered if: (1) new information reveals impacts of this identified action that may affect listed species or critical habitat in a manner not previously considered, (2) this action is subsequently modified in a manner that was not considered in this review, or (3) a new species is listed or critical habitat is determined that may be affected by the identified action.

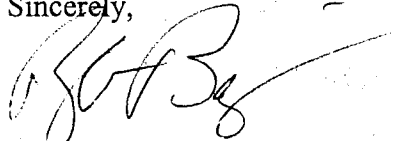
Under Section VI.H.7, Construction Impacts, of the EA, it is noted that prior to the approval of any borrow source developed for use on this project, the contractor shall obtain certification from the State Historic Preservation Officer. Because of similar resource concerns from the development of any contractor borrow sites associated with this project, the Service recommends that you **include borrow and/or waste sites within the EA** and consider the potential impacts to all resources--cultural, wetland, stream, farmland, and air, as well as **federally listed species**. This

recommendation was included in our September 26, 1995, letter regarding the subject project as well. Even though the location and development of borrow sites is normally left to the contractor, the sites are often solely for use by the project and should be considered. The Service looks forward to receiving a list of potential borrow development sites, with a site-by-site determination of the effects on species that are protected under the Act. The Service will provide updated species lists for Forsyth County and/or other potential borrow sites upon request.

According to information in the EA, there will be impacts to twelve perennial streams and a small wetland (<1/10 acre). If we are asked to review a permit application(s) for this project, we will likely recommend that: (1) any disturbance of stream and wetland areas be avoided to the maximum extent possible (by bridging the stream and its bank-full width and by altering the route around, or bridging, the wetland area); (2) stringent erosion and sedimentation controls be installed and maintained in order to prevent unnecessary impacts to aquatic resources; (3) a vegetated buffer be maintained between the construction corridor and any wetland or stream; and (4) temporary or permanent herbaceous vegetation be planted on all bare soil within 15 days of any ground-disturbing activities in order to prevent soil erosion. The Service will likely recommend that some form of compensatory mitigation be provided for unavoidable impacts to wetlands and streams. Since most of these streams have been impacted by agriculture and/or suburban land uses, there are likely sufficient opportunities to restore stream reaches within or adjacent to the proposed right-of-way. The Service recommends that the permit application include a complete description of the wetlands and streams impacted. Stream morphology descriptions should follow Rosgen (1994, 1996).

Thank you allowing us the opportunity to provide these comments; please keep us informed as to the progress of this project. In any future correspondence concerning this matter, please reference our Log Number 4-2-95-122.

Sincerely,



for
Brian P. Cole
State Supervisor

State of North Carolina
Department of Environment
and Natural Resources
Division of Water Quality



James B. Hunt, Jr., Governor
Wayne McDevitt, Secretary
A. Preston Howard, Jr., P.E., Director

March 17, 1998

MEMORANDUM

To: Lisa Martin

Through: John Dorney *J. Dorney*

From: Cyndi Bell *CB*

Subject: Environmental Assessment for NC 16 from North of Tower Road (SR 1895) to Caleb Setzer Road (SR 1800) Southeast of Newton Catawba County
State Project No. 8.1792501, T.I.P. No. R-3100;
DENR #98-0540; DWQ #11989

The referenced document has been reviewed by this office. The Division of Water Quality (DWQ) is responsible for the issuance of the Section 401 Water Quality Certification for activities which impact waters of the state including wetlands. The project will involve up to 0.6 acre of fill in wetlands and twelve perennial stream crossings. NCDOT has sufficiently addressed the questions DWQ raised in our scoping comments.

Culvert extensions and/or channel changes requiring losses in excess of 150 feet linear distance of any single perennial stream will require mitigation in accordance with DWQ Wetland Rules {15A NCAC 2H.0506(b)(6)}. Table 2 in the EA provides a very helpful summary of stream impacts to be associated with this project. Based upon this table, it appears that only Site 5 (unnamed tributary to Smyre Creek) and possibly Site 6/6A (unnamed tributary to Smyre Creek) will impact over 150 feet linear distance of a perennial stream; however, the text indicates that several crossings will exceed 150 feet. In order to improve the usefulness of this summary for our review, we suggest that DOT provide a numerical estimation of linear impacts for each of the twelve perennial stream crossings. DOT has committed to relocation of streams based upon future consultation with the North Carolina Wildlife Resources Commission. If these methods do not prove suitable to replace the functions and values of the existing streams, the Wetland Restoration Program will be available to use for stream mitigation.

Based upon the stream and wetland impacts described in the EA, General Certification 3103 will likely be applicable to this project. Final permit authorization will require formal application by NCDOT and written concurrence from DWQ. DOT should be aware that this approval will be contingent upon evidence of avoidance and minimization of wetland and stream impacts to the extent practical, and provision of wetland and stream mitigation where necessary.

58 MAR 19 AM 10:39



☒ North Carolina Wildlife Resources Commission ☒

512 N. Salisbury Street, Raleigh, North Carolina 27604-1188, 919-733-3391
Charles R. Fullwood, Executive Director

MEMORANDUM

TO: Melba McGee, Legislative and Intergovernmental Affairs
Dept. of Environment and Natural Resources

FROM: Joe H. Mickey, Jr., Western Piedmont Region Coordinator
Habitat Conservation Program

DATE: March 19, 1998

SUBJECT: State Clearinghouse Project No. 98-0540: NC 16 from Tower Road (SR 1895) to Caleb Setzer Road (SR 1800) Southeast to Newton, Catawba County. Fed. Aid. No. STP-16(4), State Proj. No. 8.1792501, TIP No. R-3100.

This correspondence responds to a request by you for our review and comments on the Environmental Assessment (EA) for the above referenced project. These comments are provided in accordance with the provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661-667d.) and the North Carolina Environmental Policy Act (G.S. 113A-1 through 113A-10; 1 NCAC 25).

In general we concur with the EA for this project and could agree to a Finding of No Significant Impact (FONSI). However, we offer the following recommendations to lessen impacts to aquatic resources.

1. Culvert extensions at sites 1, 2, 2A, 3-6, and 6A should be buried one foot below the normal stream bottom in order to maintain fish passage through the culvert.
2. Channel relocations proposed at drainage structures sites 1, 5, and 6A should match existing channel conditions in width, depth, gradient, and substrate. These channels should not be ripraped channels, but channels designed according to current methods developed by Dave Rosgen utilizing both hard (bankfull riprap/root wads) and bioengineering methods.
3. Relocated channels should be revegetated using silky (bushy) dogwood (*Cornus amomum*) silky willow (*Salix sericea*) Hazel (tag) Alder (*Alnus serrulata*) planted along the toe of the bank on 2.5-foot centers provide a more permanent solution to bank erosion problems and stream shading.

Thank you for the opportunity to review and comment on this project. If you have any questions regarding these comments, please contact me at 336/366-2982.

cc: H. Franklin Vick, NCDOT

NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES
MOORESVILLE REGIONAL OFFICE



JAMES B. HUNT JR.
GOVERNOR

WAYNE McDEVITT
SECRETARY

DIVISION OF ENVIRONMENTAL HEALTH

March 26, 1998

MEMORANDUM TO: Faith Abbott
PWSS - Raleigh Central Office
E. D. Herndon

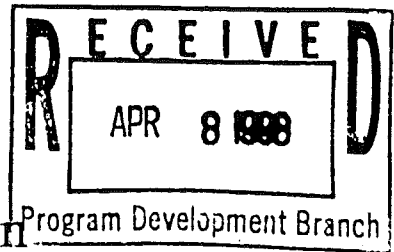
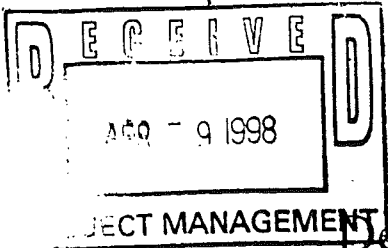
FROM: E.D. Herndon
Regional Engineer
Public Water Supply Section
Mooresville Regional Office

SUBJECT: Clearing House Project # 980540
N.C. Hwy 16 Improvement
Catawba County

The referenced project will cross several streams and will affect the Town of Maiden's water shed. Some of the streams will be relocated. We need more information on the relocations and procedures and precautions to be carried out to minimize water quality problems.

EDH/bp

Stone/Coleman



North Carolina
Department of Administration

James B. Hunt, Jr., Governor

Katie G. Dorsett, Secretary

April 6, 1998

Mr. Whit Webb
N.C. Department of Transportation
Program Development Branch
Transportation Building
Raleigh, NC 27611

*cc - chris
Katie G. Dorsett
SP
4-9-98*

Dear Mr. Webb:

Re: SCH File # 98-E-4220-0540; Environmental Assessment Proposed Widening of NC 16 From a Two-Lane Roadway to a Multi-Lane Facility in Catawba County; TIP #R-3100

The above referenced project has been reviewed through the State Clearinghouse Intergovernmental Review Process. Attached to this letter are comments made by agencies reviewing this document.

Should you have any questions, please do not hesitate to call me at (919) 733-7232.

Sincerely,

Mrs. Chrys Baggett, Director
N. C. State Clearinghouse-

Attachments

cc: Region E

| | |
|--------------------------|------------------------|
| PROJECT FILE | |
| <input type="checkbox"/> | GENERAL CORRESPONDENCE |
| <input type="checkbox"/> | PUBLIC HEARING |
| <input type="checkbox"/> | FILE WITH ESTIMATES |
| <input type="checkbox"/> | _____ |

NORTH CAROLINA STATE CLEARINGHOUSE
DEPARTMENT OF ADMINISTRATION
INTERGOVERNMENTAL REVIEW

STATE NUMBER: 98-E-4220-0540 F02
DATE RECEIVED: 03/05/1998
AGENCY RESPONSE: 03/31/1998 *due 3/27*
REVIEW CLOSED: 04/05/1998

Ms. Renee Gledhill-Earley
Clearinghouse Coordinator
Dept. of Cultural Resources
Archives-History Bldg.
Raleigh NC

MAR 09 1998

NO DCB
3/13/98

REVIEW DISTRIBUTION
Dept. of Agriculture
Dept. of Crime Cont./ Public Safety
Dept. of Cultural Resources
Dept. of Environment & Natural Res
Western Piedmont COG

PROJECT INFORMATION

APPLICANT: N.C. Department of Transportation
TYPE: National Environmental Policy Act
RD: Environmental Assessment
DESC: Proposed Widening of NC 16 From a Two-Lane Roadway to a Multi-Lane Facility in
Catawba County; TIP #R-3100

NO DCB 3/23/98

The attached project has been submitted to the N. C. State Clearinghouse for intergovernmental review. Please review and submit your response by the above indicated date. If additional review time is needed, please contact this office at (919) 733-7232.

AS A RESULT OF THIS REVIEW THE FOLLOWING IS SUBMITTED:

- NO COMMENT
- COMMENTS ATTACHED

SIGNED BY: Renee Gledhill-Earley
DATE: 3/24/98

RECEIVED

MAR 26 1998

N.C. STATE CLEARINGHOUSE

MAR 10 1998

MAR 16 1998

NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES



JAMES B. HUNT JR.
GOVERNOR

WAYNE McDEVITT
SECRETARY

MEMORANDUM

TO: Chrys Baggett
State Clearinghouse

FROM: Melba McGee ✓
Environmental Review Coordinator

RE: 98-0540 EA for NC 16 from North of Tower Road
to Caleb Setzer Road Southeast of Newton,
Catawba County

DATE: April 2, 1998

The Department of Environment and Natural Resources has reviewed the subject proposal. This department ask that careful consideration be given to the attached recommendations provided by our commenting divisions. The applicant is encouraged to work directly with our agencies in addressing their issues.

Thank you for the opportunity to respond.

attachments

RECEIVED

APR 6 1998

N.C. STATE CLEARINGHOUSE

State of North Carolina
Department of Environment
and Natural Resources
Division of Water Quality



James B. Hunt, Jr., Governor
Wayne McDevitt, Secretary
A. Preston Howard, Jr., P.E., Director

March 17, 1998

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Through: John Dorney *J. Dorney*

From: Cyndi Bell *CB*

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NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
MOORESVILLE REGIONAL OFFICE

JAMES B. HUNT JR.
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DIVISION OF ENVIRONMENTAL HEALTH

March 26, 1998

WAYNE McDEVITT
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MEMORANDUM TO: Faith Abbott
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E.A.H.
FROM: E.D. Herndon
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EDH/bp

INTERGOVERNMENTAL REVIEW – PROJECT COMMENTS

Project Number: 98-1540 Due Date: 3/30/98

After review of this project it has been determined that the ENR permit(s) and/or approvals indicated may need to be obtained in order for this project to comply with North Carolina Law. Questions regarding these permits should be addressed to the Regional Office indicated on the reverse of the form. All regulations, information and guidelines relative to these plans and permits are available from the same Regional Office.

| PERMITS | SPECIAL APPLICATION PROCEDURES or REQUIREMENTS | Normal Process Time (statutory time limit) |
|---|---|--|
| <input type="checkbox"/> Permit to construct & operate wastewater treatment facilities, sewer system extensions & sewer systems not discharging into state surface waters. | Application 90 days before begin construction or award of construction contracts. On-site inspection. Post-application technical conference usual. | 30 days (90 days) |
| <input type="checkbox"/> NPDES - permit to discharge into surface water and/or permit to operate and construct wastewater facilities discharging into state surface waters. | Application 180 days before begin activity. On-site inspection. Pre-application conference usual. Additionally, obtain permit to construct wastewater treatment facility-granted after NPDES. Reply time, 30 days after receipt of plans or issue of NPDES permit- whichever is later. | 90-120 days (N/A) |
| <input type="checkbox"/> Water Use Permit | Pre-application technical conference usually necessary | 30 days (N/A) |
| <input type="checkbox"/> Well Construction Permit | Complete application must be received and permit issued prior to the installation of a well. | 7 days (15 days) |
| <input type="checkbox"/> Dredge and Fill Permit | Application copy must be served on each adjacent riparian property owner. On-site inspection. Pre-application conference usual. Filling may require Easement to Fill from N.C. Department of Administration and Federal Dredge and Fill Permit. | 55 days (90 days) |
| <input type="checkbox"/> Permit to construct & operate Air Pollution Abatement facilities and/or Emission Sources as per 15 A NCAC (2Q.0100, 2Q.0300, 2H.0600) | N/A | 60 days |
| <input checked="" type="checkbox"/> Any open burning associated with subject proposal must be in compliance with 15 A NCAC 2D.1900 | | |
| <input type="checkbox"/> Demolition or renovations of structures containing asbestos material must be in compliance with 15 A NCAC 2D.1110 (a) (1) which requires notification and removal prior to demolition. Contact Asbestos Control Group 919-733-0820. | N/A | 60 days (90 days) |
| <input type="checkbox"/> Complex Source Permit required under 15 A NCAC 2D.0800 | | |
| <input checked="" type="checkbox"/> The Sedimentation Pollution Control Act of 1973 must be properly addressed for any land disturbing activity. An erosion & sedimentation control plan will be required if one or more acres to be disturbed. Plan filed with proper Regional Office (land Quality Sect.) At least 30 days before beginning activity. A fee of \$30 for the first acre and \$2000 for each additional acre or part must accompany the plan. | | 20 days (30 days) |
| <input type="checkbox"/> The Sedimentation Pollution control Act of 1973 must be addressed with respect to the referenced Local Ordinance. | | (30 days) |
| <input type="checkbox"/> Mining Permit | On-site inspection usual. Surety bond filed with ENR. Bond amount varies with type mine and number of acres of affected land. Any are mined greater than one acre must be permitted. The appropriate bond must be received before the permit can be issued. | 30 days (60 days) |
| <input type="checkbox"/> North Carolina Burning permit | On-site inspection by N.C. Division Forest Resources if permit exceeds 4 days | 1 day (N/A) |
| <input type="checkbox"/> Special Ground Clearance Burning Permit - 22 counties in coastal N.C. with organic soils | On-site inspection by N.C. Division Forest Resources required "if more than five acres of ground clearing activities are involved. Inspections should be requested at least ten days before actual burn is planned." | 1 day (N/A) |
| <input type="checkbox"/> Oil Refining Facilities | N/A | 90-120 days (N/A) |
| <input checked="" type="checkbox"/> Occupational Safety Permit | If permit required, application 60 days before begin construction. Applicant must hire N.C. qualified engineer to: prepare plans, inspect construction, certify construction is according to ENR approved plans. May also require permit under mosquito control program. And a 404 permit from Corps of Engineers. An inspection of site is necessary to verify Hazard Classification. A minimum fee of \$200.00 must accompany the application. An additional processing fee based on a percentage of the total project cost will be required upon completion. | 30 days (60 days) |