



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY  
GOVERNOR

LYNDO TIPPETT  
SECRETARY

November 28, 2007

MEMORANDUM TO: Mr. C. E. Lassiter, Jr., PE  
Division Two Engineer

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

SUBJECT: Craven County, NC 43 Connector from NC 55 to US17;  
T.I.P. Number R-4463; WBS No. 35601.1.1; State Project  
No. 6.804857

Attached are the U. S. Army Corps of Engineers 404 Individual Permit and the special 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. Rob Hanson, P.E., PDEA Eastern Region Unit Head  
Mr. Jay B. Johnson, Division Environmental Officer

## PROJECT COMMITMENTS

**NC 43 CONNECTOR  
FROM NC 55 TO US17  
CRAVEN COUNTY, NORTH CAROLINA  
WBS NO. 35601.1.1  
STATE PROJECT NO. 6.804857  
T.I.P. NO. R-4463**

In addition to all standard procedures and measures, including North Carolina Department of Transportation's (NCDOT) Best Management Practices (BMPs) for Protection of Surface Waters, the following special commitments have been agreed to.

Additions to the project commitments are printed in *italics*, with any deletions shown by using ~~strike through~~ text.

### **Commitments Developed During Project Development**

#### ***Roadway Design Unit***

In lieu of a ramp in the southeast quadrant of the interchange at US 70, the interchange will be constructed with a ramp/loop configuration in the southwest quadrant. However, the NCDOT will purchase right-of-way for a future ramp in the southeast quadrant should it be warranted by future traffic volumes or after the construction of the (currently unfunded) NC 43 Connector south of US 70.

*Action: Section A is currently unfunded and not scheduled for construction. The need for a ramp/loop in the southeast quadrant will be evaluated during final design for Section A.*

#### ***Roadway Design Unit & Project Development & Environmental Analysis Branch***

To minimize noise impacts, a noise wall is proposed along the western boundary of the Trent Creek subdivision, just north of US 17. This commitment is subject to a detailed design noise study and additional public involvement efforts.

*Action: Section A is currently unfunded and not scheduled for construction. A detailed design noise study will be conducted during final design for Section A.*

~~Wildlife crossing(s) for small animal passage will be constructed south of US 70 along the NC 43 Connector. The exact location(s) and sizing of wildlife crossing(s) will be addressed during the final design phase. Animal passage design will be subject to approval by the US Fish and Wildlife Service and the NC Wildlife Resources Commission.~~

*Action: US Fish and Wildlife Service and NC Wildlife Resources have agreed that proposed wildlife crossings are not warranted for this project.*

## **Commitments Developed During Permitting**

### ***Division 4 Construction***

The Section 404 authorization is only for Section R-4463-B. Construction on section R-4463-A shall not commence until final design has been completed and plans have been approved by the District Engineer.

The permittee shall require its contractors and/or agents to comply with the terms and conditions of the permit in the construction and maintenance of the project, and shall provide each of its contractors and/or agents associated with the construction or maintenance of the project with a copy of the permit, and any authorized modifications. A copies of the permits, and any authorized modifications, including all conditions, shall be available at the project site during construction and maintenance of the project.

The 401 Water Quality Certification only authorizes impacts to jurisdictional resources associated with the R-4463B section of the project. When final design plans are completed for R-4463 Section A, a modification to the 401 Water Quality Certification and the Neuse River Riparian Buffer Certification shall be submitted with five copies and fees to the NC Division of Water Quality. Final designs shall reflect all appropriate avoidance, minimization, and mitigation for impacts to wetlands, streams, and other surface waters, and buffers. No construction activities that impact any wetlands, streams, surface waters, or buffers located in R-4463 Section A shall begin until after the permittee applies for, and receives a written modification of the 401 Water Quality Certification and the Neuse River Riparian Buffer Authorization from the NC Division of Water Quality.

### ***Project Development and Environmental Analysis Branch***

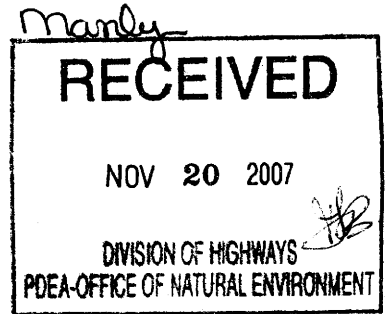
Compensatory mitigation for the unavoidable impacts to 4.42 acres of non-riparian wetlands associated with the proposed project shall be provided by the Ecosystem Enhancement Program (EEP), as outlined in the letter dated May 21, 2007 from William D. Gilmore, EEP Director. The EEP will provide the compensatory mitigation as follows:

Lower Neuse River, CU 03020204 (8.84 acres non-riparian):

In order to compensate for impacts to 4.42 acres of Non-Riparian wetlands, the permittee shall make payment to the North Carolina Ecosystem Enhancement Program (NC EEP) in the amount determined by the NC EEP, sufficient to perform the restoration of 8.84 acres of non-Riparian wetlands in the Neuse River Basin, Cataloging Unit 03020204.



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



IN REPLY REFER TO

November 19, 2007

Regulatory Division

Action ID 2007-02231-125

Gregory J. Thorpe, Ph. D.  
Environmental Manager Director  
Project Development and Environmental Analysis Branch  
North Carolina Department of Transportation  
1598 Mail Service Center  
Raleigh, North Carolina 27699-1598

Dear Dr. Thorpe:

Enclosed is a Department of the Army permit to construct TIP project R-4463, a four-lane divided expressway with a 46-foot median and partial control of access. The project, located west of New Bern in Craven County, is referred to as the NC 43 Connector (Bosch Boulevard) and is approximately 4.5 miles in length and has been divided into two sections, Section A and Section B. The proposed project is located in the Neuse River Basin, Hydrologic Unit 03020204.

Any deviation in the authorized work will likely require modification of this permit. If a change in the authorized work is necessary, you should promptly submit revised plans to the Corps showing the proposed changes. You may not undertake the proposed changes until the Corps notifies you that your permit has been modified.

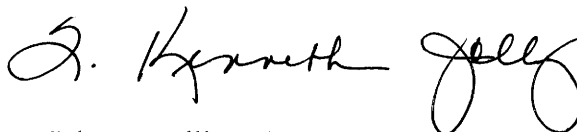
Carefully read your permit. The general and special conditions are important. Your failure to comply with these conditions could result in a violation of Federal law. Certain significant conditions require that:

- a. You must complete construction before December 31, 2012.
- b. You must allow representatives from this office to make periodic visits to your worksite as deemed necessary to assure compliance with permit plans and conditions.

You must notify this office in advance as to when you intend to commence and complete work.

You should address all questions regarding this authorization to Mr. William Wescott at the Washington Regulatory Field Office, telephone (252) 975-1616, extension 31.

Sincerely,



*for* John E. Pulliam, Jr.  
Colonel, U.S. Army  
District Commander

Enclosures

Copy Furnished (with enclosures):

Chief, Source Data Unit  
NOAA/National Ocean Service  
ATTN: Sharon Tear N/CS261  
1315 East-West Hwy., Rm 7316  
Silver Spring, MD 20910-3282

Copies Furnished (with special conditions and plans):

Mr. Ronald J. Mikulak, Chief  
Wetlands Regulatory Section  
61 Forsyth Street  
Atlanta, Georgia 30303

Mr. Pete Benjamin  
U.S. Fish and Wildlife Service  
Fish and Wildlife Enhancement  
Post Office Box 33726  
Raleigh, North Carolina 27636-3726

Mr. Ron Sechler  
National Marine Fisheries Service  
Pivers Island  
Beaufort, North Carolina 28516

Mr. Doug Huggett  
Division of Coastal Management  
North Carolina Department of  
Environment and Natural Resources  
400 Commerce Avenue  
Morehead City, North Carolina 28557

Mr. David Rackley  
National Marine Fisheries Service  
219 Fort Johnson Road  
Charleston, South Carolina 29412-9110

RECEIVED

NOV - 9 2007

DEPARTMENT OF THE ARMY PERMIT

Permittee **North Carolina Department of Transportation, Gregory J. Thorpe, Ph.D.**

Permit No. **SAW-2007-02231-125**

Issuing Office **CESAW-RG-W**

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: **The proposed TIP project R-4463 involves constructing a four-lane divided expressway with a 46-foot median and partial control of access. The project is approximately 4.5 miles and proposes to construct on new location an extension of NC 43 from NC 55 to US 17. The proposed project would fill 4.04 acres of jurisdictional wetlands and require an additional 0.33 acres of mechanized clearing and 0.05 acres of excavation in wetlands. Permanent impacts to jurisdictional wetlands would total 4.42 acres.**

Project Location: **The project, located west of New Bern in Craven County, is referred to as the NC 43 Connector (Bosch Boulevard) and is approximately 4.5 miles in length and has been divided into two sections, Section A and Section B. The proposed project is located in the Neuse River Basin, Hydrologic Unit 03020204.**

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on **December 31, 2010**. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit,

Special Conditions:

### **SEE ATTACHED SPECIAL CONDITIONS**

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:
  - ( ) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).
  - ( X ) Section 404 of the Clean Water Act (33 U.S.C. 1344).
  - ( ) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).
2. Limits of this authorization.
  - a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.
  - b. This permit does not grant any property rights or exclusive privileges.
  - c. This permit does not authorize any injury to the property or rights of others.
  - d. This permit does not authorize interference with any existing or proposed Federal project.
3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:
  - a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
  - b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
  - c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
  - d. Design or construction deficiencies associated with the permitted work.

- e. Damage claims associated with any future modification, suspension, or revocation of this permit.
4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.
5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:
- a. You fail to comply with the terms and conditions of this permit.
  - b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).
  - c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit, Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

E. L. Leek 11.6.07  
 (PERMITTEE) **North Carolina Department of Transportation** (DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

J. Kenneth Kelly 11-19-07  
 (DISTRICT ENGINEER) **JOHN E. PULLIAM, JR., COLONEL** (DATE)

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

\_\_\_\_\_  
 (TRANSFEE) (DATE)



**SPECIAL CONDITIONS (Action ID. SAW-2007-02231-125; NCDOT/TIP R-4463)**

COMPLIANCE WITH PLANS

- a) This authorization is only for Section R-4463-B. Construction on section R-4463-A shall not commence until final design has been completed and plans have been approved by the District Engineer.
- b) All work must be performed in strict compliance with the attached plans, which are a part of this permit. Any modification to the permit plans must be approved by the USACE prior to implementation.

ACTIVITIES NOT AUTHORIZED

- c) Except as authorized by this permit or any USACE approved modification to this permit, no excavation, fill, or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, within waters or wetlands, nor shall any activities take place that cause the degradation of waters or wetlands. In addition, except as specified in the plans attached to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, in such a manner as to impair normal flows and circulation patterns within, into, or out of waters or wetlands or to reduce the reach of waters or wetlands.

This permit does not authorize temporary placement or double handling of excavated or fill material within jurisdictional waters, including wetlands, outside the permitted area. Additionally, no construction materials or equipment will be placed or stored within jurisdictional waters, including wetlands.

CONSTRUCTION PLANS

- d) The permittee will ensure that the construction design plans for this project do not deviate from the permit plans attached to this authorization. Written verification shall be provided that the final construction drawings comply with the attached permit drawings prior to any active construction in waters of the United States, including wetlands. Any deviation in the construction design plans will be brought to the attention of the Corps of Engineers, Washington Regulatory Field Office prior to any active construction in waters or wetlands.
- e) Prior to commencing construction within jurisdictional waters of the United States for any portion of the proposed project, the permittee shall forward the latest version of project construction drawings to the Corps of Engineers, Washington Regulatory Field Office NCDOT Regulatory Project Manager. Half-size drawings will be acceptable.

## POLLUTION SPILLS

f) All mechanized equipment will be regularly inspected and maintained to prevent contamination of waters and wetlands from fuels, lubricants, hydraulic fluids, or other toxic materials. No equipment staging or storage of construction material will occur in wetlands. Hydro-seeding equipment will not be discharged or washed out into any surface waters or wetlands. In the event of a spill of petroleum products or any other hazardous waste, the permittee shall immediately report it to the N.C. Division of Water Quality at (919) 733-5083 or (800) 662-7956 and provisions of the North Carolina Oil Pollution and Hazardous Substances Control Act will be followed.

## NOTIFICATION

g) The permittee shall advise the Corps in writing at least two weeks prior to beginning the work authorized by this permit and again upon completion of the work authorized by this permit.

## CLEAN FILL MATERIAL

h) Unless otherwise authorized by this permit, all fill material placed in waters or wetlands shall be generated from an upland source and will be clean and free of any pollutants except in trace quantities. Metal products, organic materials (including debris from land clearing activities), or unsightly debris will not be used.

## CONTRACTOR COMPLIANCE

i) The permittee shall require its contractors and/or agents to comply with the terms and conditions of this permit in the construction and maintenance of this project, and shall provide each of its contractors and/or agents associated with the construction or maintenance of this project with a copy of this permit, and any authorized modifications. A copy of this permit, and any authorized modifications, including all conditions, shall be available at the project site during construction and maintenance of this project.

## SEDIMENTATION AND EROSION CONTROL MEASURES

j) The permittee shall use 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" to assure compliance with the appropriate turbidity water quality standard. Erosion and sediment control practices must 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 standards. Additionally, the project must remain in full compliance with all aspects of the Sedimentation Pollution Control Act of 1973 (North Carolina General Statutes Chapter 113A Article 4).

Adequate sedimentation and erosion control measures must be implemented prior to any ground disturbing activities to minimize impacts to downstream aquatic resources. These measures must be inspected and maintained regularly, especially following rainfall events. All fill material must be adequately stabilized at the earliest practicable date to prevent sediment from entering into adjacent waters or wetlands.

The permittee shall remove all sediment and erosion control measures placed in wetlands or waters, and shall restore natural grades in those areas, prior to project completion.

No fill or excavation for the purposes of sedimentation and erosion control shall occur within jurisdictional waters, including wetlands, unless it is included on the plan drawings and specifically authorized by this permit.

#### REPORTING OF VIOLATIONS

k) The permittee will report any violation of these conditions or violations of Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act in writing to the Corps of Engineers, Washington Regulatory Field Office NCDOT Regulatory Project Manager, within 24 hours of the permittee's discovery of the violation.

#### COMPLIANCE WITH SPECIAL CONDITIONS

l) Failure to institute and carry out the details of these special conditions, will result in a directive to cease all ongoing and permitted work within waters and/or wetlands associated with the permitted project, or such other remedies and/or fines as the District Engineer or his authorized representatives may seek.

#### PRECONSTRUCTION MEETING

m) The permittee shall schedule a preconstruction meeting between its representatives, the contractor's representatives, and the Corps of Engineers, Washington Regulatory Field Office, NCDOT Regulatory Project Manager, prior to any work within jurisdictional waters and wetlands to ensure that there is a mutual understanding of all of the terms and conditions contained within this Department of the Army Permit. The permittee shall provide the Corps of Engineers, Washington Regulatory Field Office, NCDOT Regulatory Project Manager, with a copy of the final plans at least two weeks prior to the preconstruction meeting along with a description of any changes that have been made to the project's design, construction methodology or construction timeframe. The permittee shall schedule the preconstruction meeting for a time when the Corps of Engineers and North Carolina Division of Water Quality (NCDWQ) Project Managers can attend. The permittee shall invite the Corps and NCDWQ Project Managers a minimum of thirty (30) days in advance of the scheduled meeting in order to provide those individuals with ample opportunity to schedule and participate in the required meeting.

## BORROW AND WASTE

n) To ensure that all borrow and waste activities occur on high ground and do not result in the degradation of adjacent wetlands and streams, except as authorized by this permit, the permittee 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. The permittee shall provide the Corps of Engineers with appropriate maps indicating the locations of proposed borrow or waste sites as soon as the permittee has that information. The permittee will coordinate with the Corps of Engineers before approving any borrow or waste sites that are within 400 feet of any streams or wetlands. All jurisdictional wetland boundaries on borrow and waste sites shall be verified by the Corps of Engineers and shown on the approved reclamation plans. The permittee shall ensure that all such areas comply with Special Condition b) of this permit, and shall require and maintain documentation of the location and characteristics of all borrow and disposal sites associated with this project. This information will include data regarding soils, vegetation and hydrology sufficient to clearly demonstrate compliance with the Special Condition b). All information will be available to the Corps of Engineers upon request. NCDOT shall require its contractors to complete and execute reclamation plans for each waste and borrow site and provide written documentation that the reclamation plans have been implemented and all work is completed. This documentation will be provided to the Corps of Engineers within 30 days of the completion of the reclamation work.

## EEP MITIGATION

o) Compensatory mitigation for the unavoidable impacts to 4.42 acres of non-riparian wetlands associated with the proposed project shall be provided by the Ecosystem Enhancement Program (EEP), as outlined in the letter dated May 21, 2007 from William D. Gilmore, EEP Director. The EEP will provide the compensatory mitigation as follows:

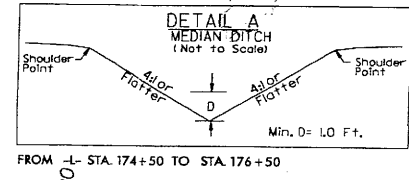
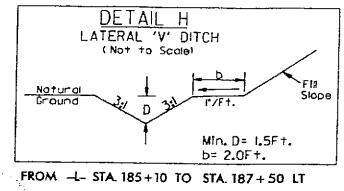
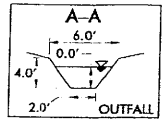
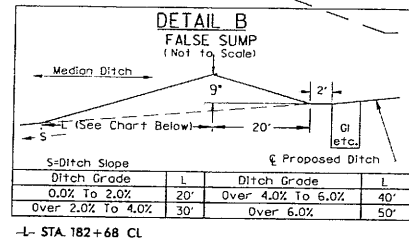
Lower Neuse River, CU 03020204 (8.84 acres non-riparian):

In order to compensate for impacts to 4.42 acres of Non-Riparian wetlands, the permittee shall make payment to the North Carolina Ecosystem Enhancement Program (NC EEP) in the amount determined by the NC EEP, sufficient to perform the restoration of 8.84 acres of non-Riparian wetlands in the Neuse River Basin, Cataloging Unit 03020204.

Construction within jurisdictional areas on the property shall begin only after the permittee has made full payment to the NC EEP and provided a copy of the payment documentation to the Corps, and the NC EEP has provided written confirmation to the Corps that it agrees to accept responsibility for the mitigation work required, in compliance with Section X of the Amendment No. 2 to the Memorandum of Agreement between the North Carolina Department of Environment and Natural Resources, the North Carolina Department of Transportation, and the United States Army Corps of Engineers, Wilmington District, dated March 8, 2007.

**English**  
50 0 50 100  
**PLANS**  
03/26/07

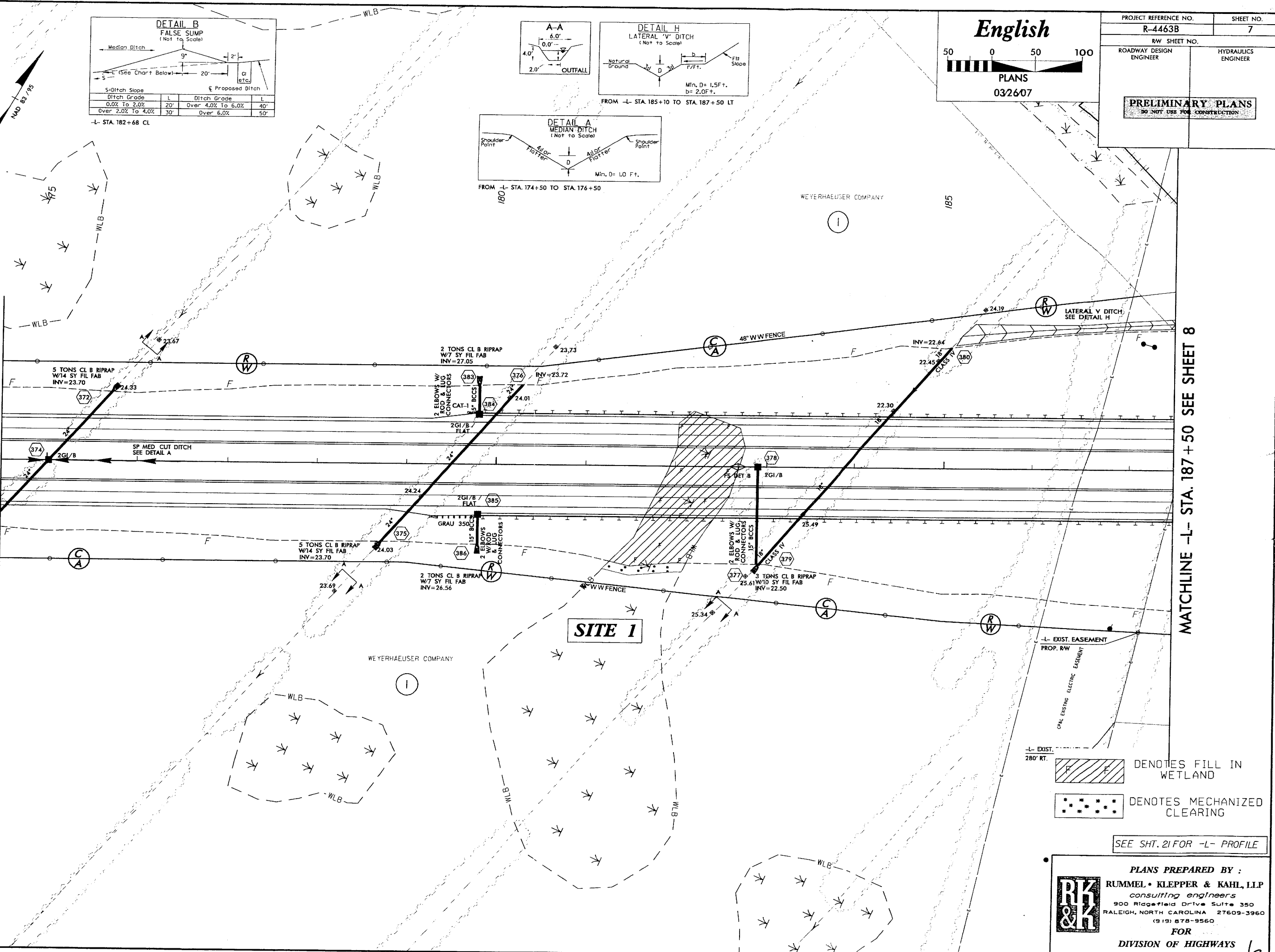
**PRELIMINARY PLANS**  
DO NOT USE FOR CONSTRUCTION



MATCHLINE -L- STA. 174+50 SEE SHEET 6

MATCHLINE -L- STA. 187+50 SEE SHEET 8

REVISIONS  
March 26, 2007: -L- monument at exist r/w 187+110.21/195+11 was previously labeled 190' LT.



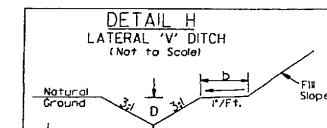
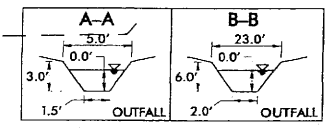
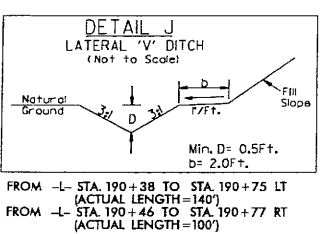
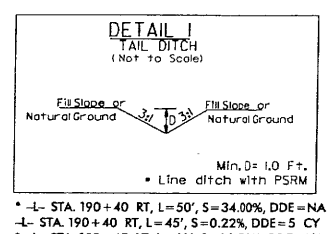
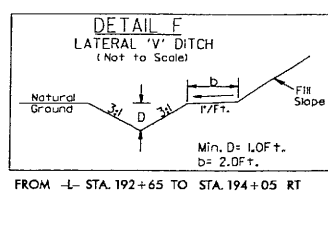
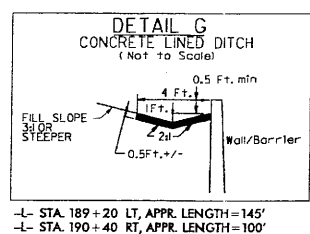
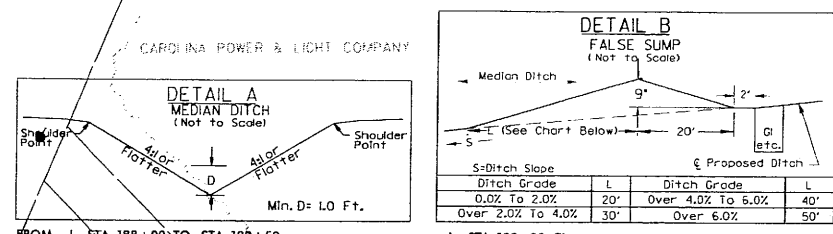
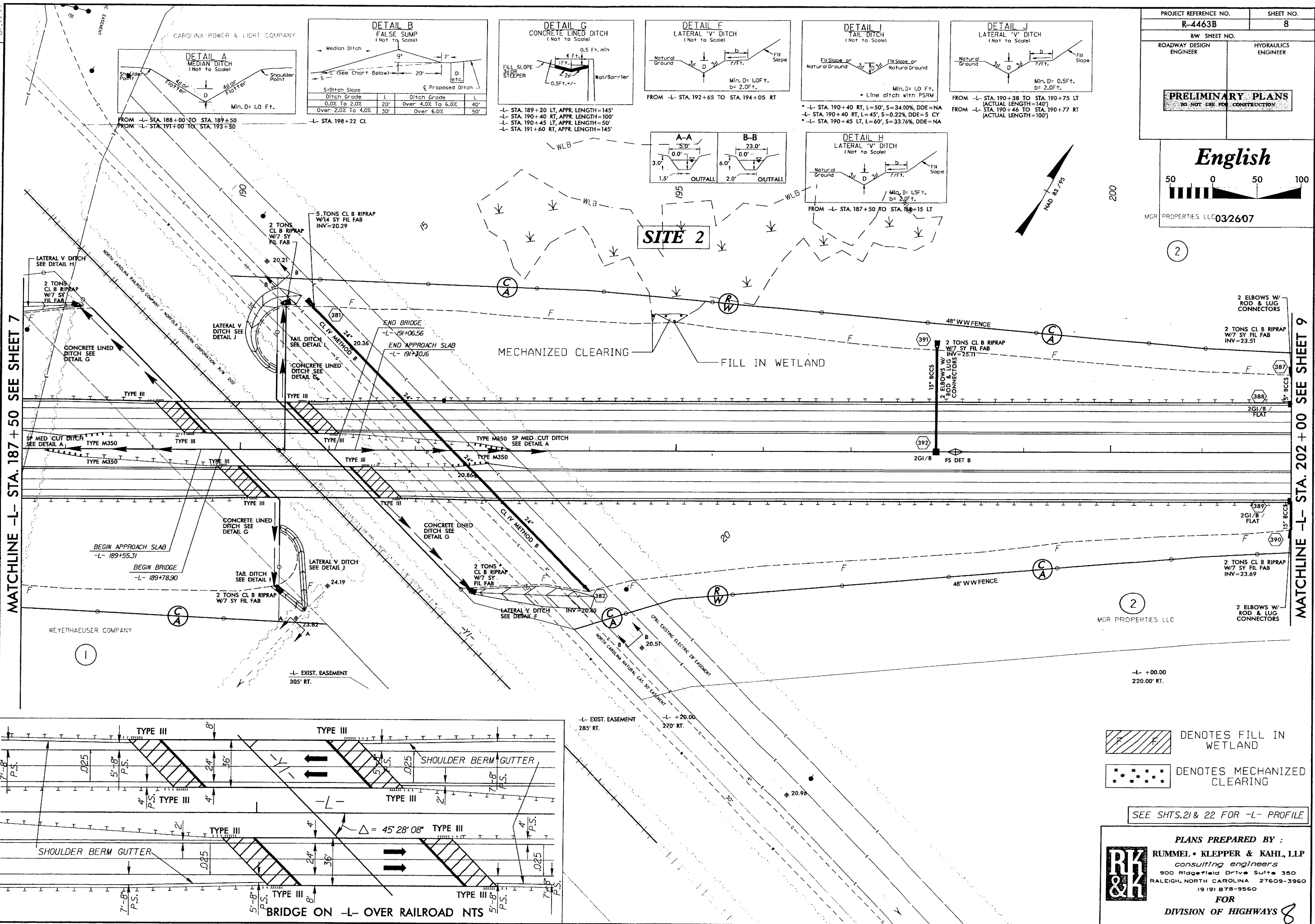
-L- EXIST. EASEMENT PROP. RW  
-L- EXIST. EASEMENT PROP. RW  
-L- EXIST. 280' RT.  
DENOTES FILL IN WETLAND  
DENOTES MECHANIZED CLEARING

SEE SHT. 21 FOR -L- PROFILE

**PLANS PREPARED BY :**  
**RUMMEL • KLEPPER & KAHL, LLP**  
consulting engineers  
900 Ridgefield Drive Suite 350  
RALEIGH, NORTH CAROLINA 27609-3960  
(919) 878-9560  
FOR  
DIVISION OF HIGHWAYS

03/26/07 09:00:40  
C:\Users\jgibson\Documents\Drawings\184463B\1101\_PMI\1101.dgn

(2)



REVISIONS  
 March 26, 2007: -L- monument at existing r/w(193+84.65)/205' Rt. was previously labeled 200' Rt.

-L- +00.00  
 220.00' RT.

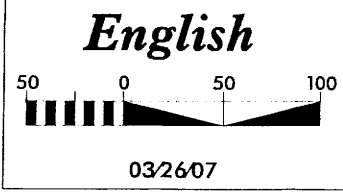
DENOTES FILL IN WETLAND  
 DENOTES MECHANIZED CLEARING

SEE SHTS. 21 & 22 FOR -L- PROFILE

**PLANS PREPARED BY:**  
 RUMMEL • KLEPPER & KAHL, LLP  
 consulting engineers  
 900 Ridgely Drive Suite 350  
 RALEIGH, NORTH CAROLINA 27609-3960  
 (919) 878-9560  
 FOR  
 DIVISION OF HIGHWAYS 8

26501 09.04.04  
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PROJECT REFERENCE NO. <b>R-4463B</b>	SHEET NO. <b>10</b>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	



**DETAIL B**  
FALSE SUMP  
(Not to Scale)

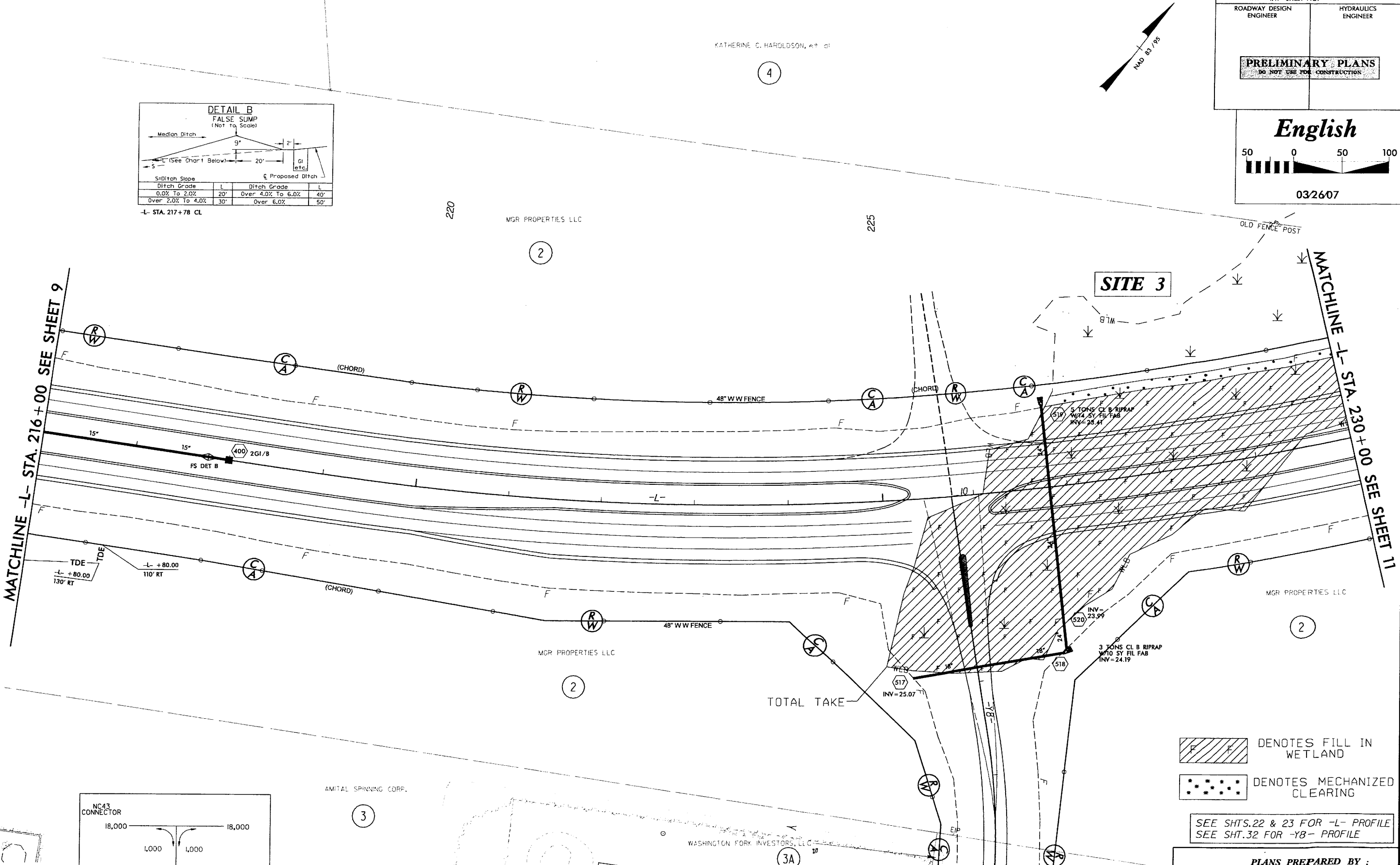
Ditch Slope	Proposed Ditch
Ditch Grade	Ditch Grade
0.0% To 2.0%	Over 4.0% To 6.0%
Over 2.0% To 4.0%	Over 6.0%
20'	40'
30'	50'

-L- STA. 217+78 CL

REVISIONS

MATCHLINE -L- STA. 216+00 SEE SHEET 9

MATCHLINE -L- STA. 230+00 SEE SHEET 11



**NC43 CONNECTOR**

18,000	1,000	1,000	18,000
2025 ADT		2,000	
SR 1304 BOSCH BLVD.			
PROJECTED TRAFFIC VOLUMES			

- DENOTES FILL IN WETLAND
- DENOTES MECHANIZED CLEARING

SEE SHTS. 22 & 23 FOR -L- PROFILE  
SEE SHT. 32 FOR -YB- PROFILE

**PLANS PREPARED BY :**

**RUMMEL • KLEPPER & KAHL, LLP**  
consulting engineers  
900 Ridgely Drive Suite 350  
RALEIGH, NORTH CAROLINA 27609-3960  
(919) 878-9560

FOR  
**DIVISION OF HIGHWAYS** / 6

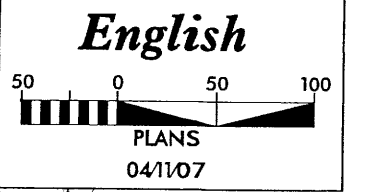
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jgarcia



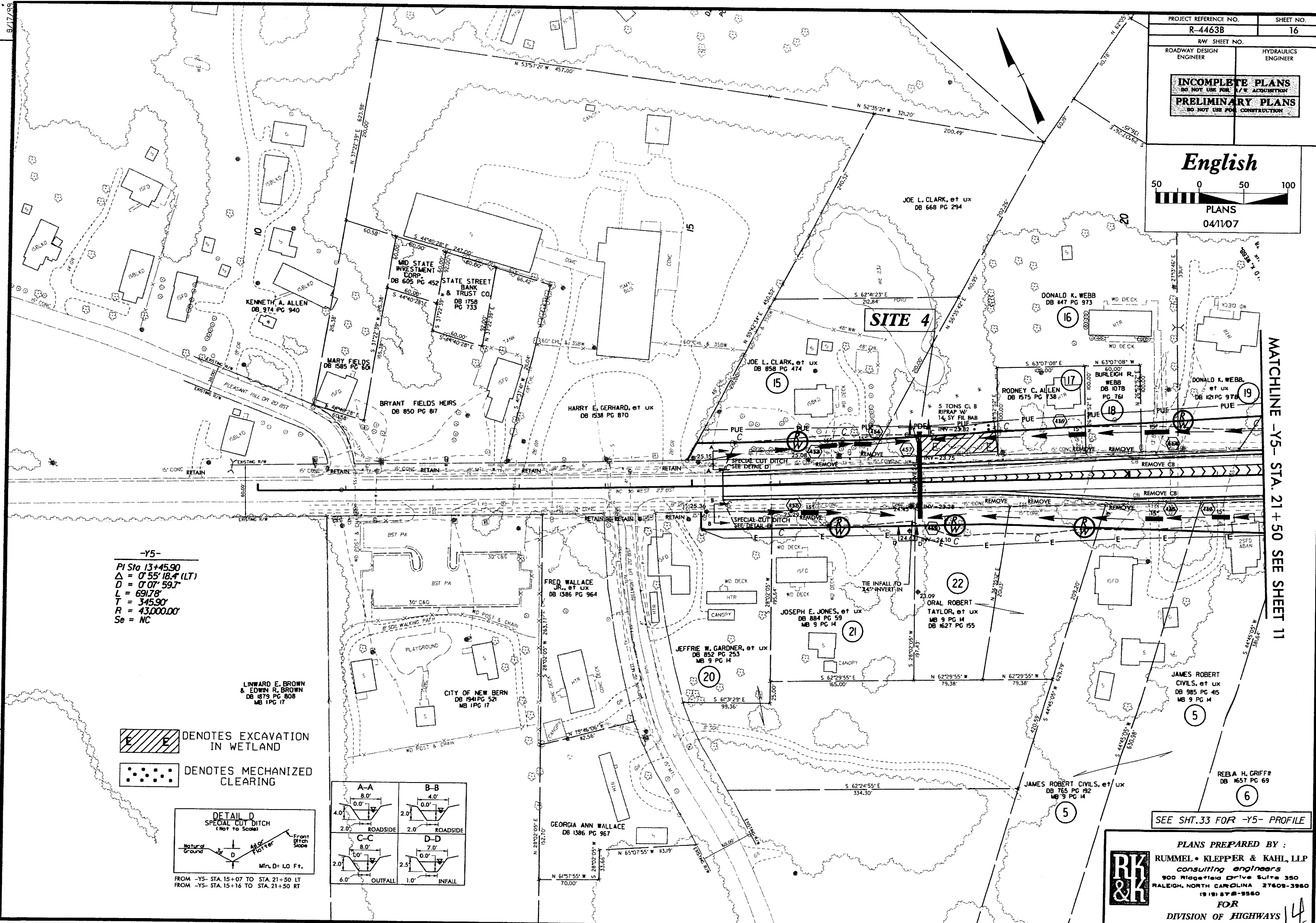


**INCOMPLETE PLANS**  
DO NOT USE FOR ACQUISITION

**PRELIMINARY PLANS**  
DO NOT USE FOR CONSTRUCTION



MATCHLINE -Y5- STA. 21+50 SEE SHEET 11

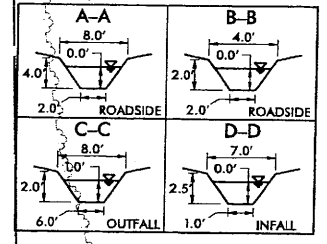
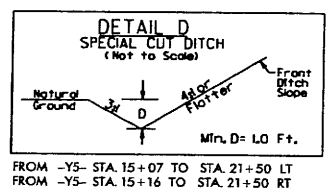


**-Y5-**

PI Sta 13+45.90  
 $\Delta = 0'55''18.4$  (LT)  
 $D = 0'07''59.7$   
 $L = 691.78'$   
 $T = 345.90'$   
 $R = 43,000.00'$   
 $Se = NC$

DENOTES EXCAVATION IN WETLAND

DENOTES MECHANIZED CLEARING



SEE SHT. 33 FOR -Y5- PROFILE

**PLANS PREPARED BY :**

**RK & K**  
**RUMMEL • KLEPPER & KAHL, LLP**  
*consulting engineers*  
 900 Ridgedale Drive Suite 350  
 RALEIGH, NORTH CAROLINA 27609-3960  
 (919) 878-9560

FOR  
**DIVISION OF HIGHWAYS**

8/17/99  
 04/16/07 09:39:03  
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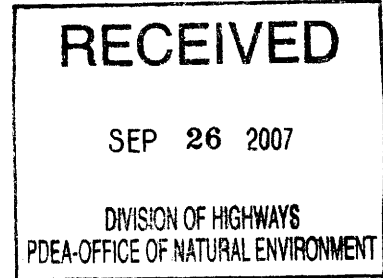
Michael F. Easley, Governor  
William G. Ross Jr., Secretary  
North Carolina Department of Environment and Natural Resources

Coleen H. Sullins, Director  
Division of Water Quality

*Manley*

September 21, 2007

Dr. Greg Thorpe, PhD., Manager  
Planning and Environmental Branch  
North Carolina Department of Transportation  
1548 Mail Service Center  
Raleigh, North Carolina, 27699-1548



Subject: 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act and NEUSE BUFFER RULES with ADDITIONAL CONDITIONS for Proposed construction of the NC 43 Connector (Bosch Boulevard) from NC 43 to US 17 in Craven County, State Project No. 6.804857, TIP 4463, Sections A and B.  
DWQ Project No. 20070932; WQC003673

*R*

Dear Dr. Thorpe:

Attached hereto is a copy of Water Quality Certification No. 003673 issued to The North Carolina Department of Transportation dated August 17, 2007.

If we can be of further assistance, do not hesitate to contact us.

Sincerely,

Coleen H. Sullins  
Director

Attachments

cc: William Wescott, US Army Corps of Engineers, Washington Field Office  
Chris Militscher, Environmental Protection Agency  
Travis Wilson, NC Wildlife Resources Commission  
Gary Jordan, US Fish and Wildlife Service  
Steve Sollod, Division of Coastal Management  
Garcy Ward, DWQ Washington Regional Office  
File Copy



**401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act and Neuse Buffer Rules with ADDITIONAL CONDITIONS**

**THIS 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 (DWQ) Regulations in 15 NCAC 2H .0500 and [15A NCAC 2B .0233. This certification authorizes the NCDOT to impact 4.42 acres of jurisdictional wetlands in Craven County. The NCDOT is not requesting impacts to any jurisdictional streams or buffered areas for this project. Therefore, **no impacts to jurisdictional streams or buffers within the Neuse River basin are allowed under this certification.** The project shall be constructed pursuant to the application dated received June 19, 2007. Authorized impacts are as described below:

**Wetland Impacts in the Neuse River Basin**

Section/Site	Fill (permanent) (ac)	Fill (temporary) (ac)	Excavation (ac)	Mechanized Clearing (ac)	Hand Clearing (ac)	Area under Bridge (ac)	Total Wetland Impact (ac)
<b>4463A Site:</b>							
1	1.47	0.00	0.00	0.15	0.00	0.00	1.62
2	0.40	0.00	0.00	0.04	0.00	0.00	0.44
<b>4463A TOTAL:</b>	<b>1.87</b>	<b>0.00</b>	<b>0.00</b>	<b>0.19</b>	<b>0.00</b>	<b>0.00</b>	<b>2.06</b>
<b>4463B Site:</b>							
1	0.28	0.00	0.00	0.02	0.00	0.00	0.30
2	0.00	0.00	0.00	0.01	0.00	0.00	0.01
3	1.89	0.00	0.00	0.09	0.00	0.00	1.98
4	0.00	0.00	0.05	0.02	0.00	0.00	0.07
<b>4463B TOTAL:</b>	<b>2.17</b>	<b>0.00</b>	<b>0.05</b>	<b>0.14</b>	<b>0.00</b>	<b>0.00</b>	<b>2.36</b>
<b>PROJECT TOTAL:</b>	<b>4.04</b>	<b>0.00</b>	<b>0.05</b>	<b>0.33</b>	<b>0.00</b>	<b>0.00</b>	<b>4.42</b>

**Total Wetland Impacts for Project: 4.42 acres.**

The application provides adequate assurance that the discharge of fill material into the wetlands or waters of the Neuse River Basin or in conjunction with the proposed development will not result in a violation of applicable Water Quality Standards and discharge guidelines. Therefore, the State of North Carolina certifies that this activity will not violate the applicable portions of Sections 301, 302, 303, 306, 307 of PL 92-500 and PL 95-217 if conducted in accordance with the application and conditions hereinafter set forth.

This approval is only valid for the purpose and design that you submitted in your application dated received June 19, 2007. Should your project change, you are required to notify the DWQ and submit a new application. If the property is sold, the new owner must be given a copy of this Certification and approval letter, and is thereby responsible for complying with all the conditions. If any additional wetland impacts, or stream impacts, for this project (now or in the future) exceed one acre or 150 linear feet, respectively, additional compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). For this approval to remain valid, you are required to comply with all the conditions listed below. In addition, you should obtain all other federal, state or local permits before proceeding with your project including (but not limited to) Sediment and Erosion control, Coastal Stormwater, Non-discharge and Water Supply watershed regulations. This Certification shall expire on the same day as the expiration date of the corresponding Corps of Engineers Permit.



**Condition(s) of Certification:**

1. All fill slopes located in jurisdictional wetlands shall be placed at slopes no flatter than 3:1, unless otherwise authorized by this certification.
2. The outside buffer, wetland or water boundary located within the construction corridor approved by this authorization shall be clearly marked by highly visible fencing prior to any land disturbing activities. Impacts to areas within the fencing are prohibited unless otherwise authorized by this certification.
3. Native riparian vegetation must be reestablished within the construction limits of the project by the end of the growing season following completion of construction.
4. There shall be no excavation from, or waste disposal into, jurisdictional wetlands or waters associated with this permit without appropriate modification. Should waste or borrow sites be located in wetlands or streams, compensatory mitigation will be required since that is a direct impact from road construction activities.
6. The permittee and its authorized agents shall conduct its activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with §303(d) of the Clean Water Act) and any other appropriate requirements of State and Federal law. If DWQ determines that such standards or laws are not being met (including the failure to sustain a designated or achieved use) or that State or federal law is being violated, or that further conditions are necessary to assure compliance, DWQ may reevaluate and modify this certification.
7. Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to protect surface waters standards:
  - a. The erosion and sediment control measures for the project must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Sediment and Erosion Control Planning and Design Manual*.
  - b. The design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal, or exceed, the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*. The devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
  - c. For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*.
  - d. The reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act.
9. Compensatory mitigation for impacts to non-riverine wetlands is required. We understand that you have chosen to perform compensatory mitigation for impacts to wetlands through the North Carolina Ecosystem Enhancement Program (EEP), and that the EEP has agreed to implement the mitigation for the project. EEP has indicated in a letter dated May 21, 2007 that they will assume responsibility for satisfying the federal Clean Water Act compensatory mitigation requirements for the above-referenced project, in accordance with the Tri-Party MOA signed on July 22, 2003 and the Dual-Party MOA signed on April 12, 2004.
10. Sediment and erosion control measures shall not be placed in wetlands or waters unless otherwise approved by this Certification.



11. All mechanized equipment operated near surface waters must be regularly inspected and maintained to prevent contamination of stream waters from fuels, lubricants, hydraulic fluids, or other toxic materials.
12. This 401 Water Quality Certification only authorizes impacts jurisdictional resources associated with the R-4463B section of this project. When final design plans are completed for R-4463 Section A, a modification to the 401 Water Quality Certification and the Neuse River Riparian Buffer Certification shall be submitted with five copies and fees to the NC Division of Water Quality. Final designs shall reflect all appropriate avoidance, minimization, and mitigation for impacts to wetlands, streams, and other surface waters, and buffers. No construction activities that impact any wetlands, streams, surface waters, or buffers located in R-4463 Section A shall begin until after the permittee applies for, and receives a written modification of the 401 Water Quality Certification and the Neuse River Riparian Buffer Authorization from the NC Division of Water Quality.
13. During the construction of the project, no staging of equipment of any kind is permitted in waters of the U.S., or protected riparian buffers.
14. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited.
15. If concrete is used during construction, a dry work area shall be maintained to prevent direct contact between curing concrete and stream water. Water that inadvertently contacts uncured concrete shall not be discharged to surface waters due to the potential for elevated pH and possible aquatic life and fish kills.
16. A copy of this Water Quality Certification shall be posted on the construction site at all times. In addition, the Water Quality Certification and all subsequent modifications, if any, shall be maintained with the Division Engineer and the on-site project manager.
17. Upon completion of the project, the NCDOT Division Engineer shall complete and return the enclosed "Certification of Completion Form" to notify DWQ when all work included in the 401 Certification has been completed.

Violations of any condition herein set forth may result in revocation of this Certification and may result in criminal and/or civil penalties. This Certification shall become null and void unless the above conditions are made conditions of the Federal 404 and/or Coastal Area Management Act Permit. This Certification shall expire upon the expiration of the 404 or CAMA permit.

If this Certification is unacceptable to you have the right to an adjudicatory hearing upon written request within sixty (60) days following receipt of this Certification. This request must be in the form of a written petition conforming to Chapter 150B of the North Carolina General Statutes and filed with the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, N.C. 27699-6714. If modifications are made to an original Certification, you have the right to an adjudicatory hearing on the modifications upon written request within sixty (60) days following receipt of the Certification. Unless such demands are made, this Certification shall be final and binding.

This the 21st day of September 2007

DIVISION OF WATER QUALITY

Coleen H. Sullins  
Director

WQC No. 003673

# Certification of Completion

DWQ Project No.: \_\_\_\_\_ County: \_\_\_\_\_

Applicant: \_\_\_\_\_

Project Name: \_\_\_\_\_

Date of Issuance of Isolated Wetland Permit: \_\_\_\_\_

## Certificate of Completion

Upon completion of all work approved within the **401 Water Quality Certification and Buffer Rules**, and any subsequent modifications, the applicant is required to return this certificate to the 401/Wetlands Unit, North Carolina Division of Water Quality, 1621 Mail Service Center, Raleigh, NC, 27699-1621. This form may be returned to DWQ by the applicant, the applicant's authorized agent, or the project engineer. It is not necessary to send certificates from all of these.

### *Applicant's Certification*

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

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

### *Agent's Certification*

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

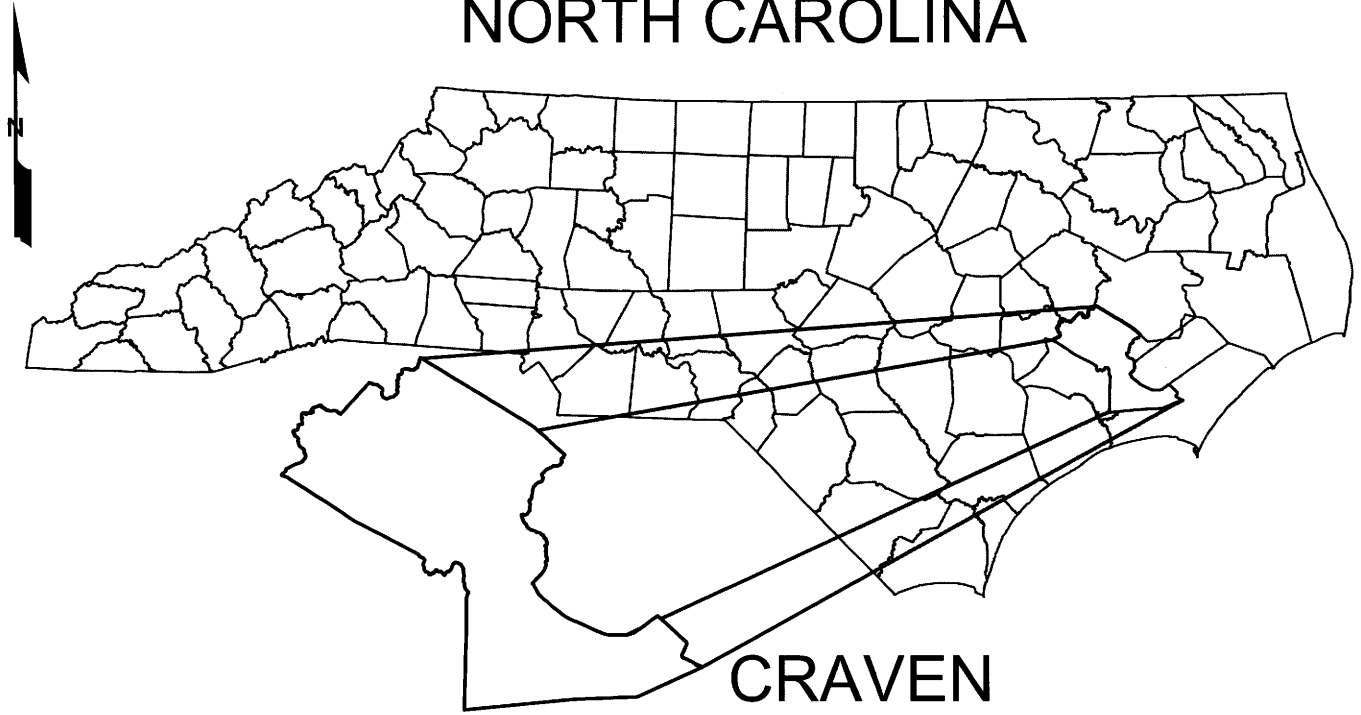
Signature: \_\_\_\_\_ Date: \_\_\_\_\_

### *If this project was designed by a Certified Professional*

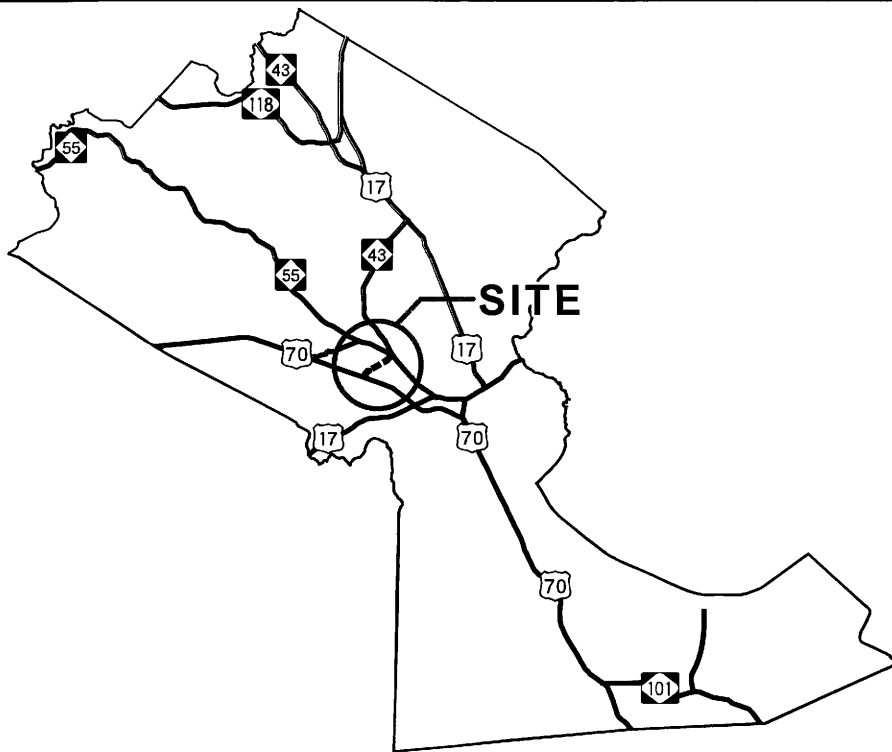
I, \_\_\_\_\_, as a duly registered Professional \_\_\_\_\_ (i.e., Engineer, Landscape Architect, Surveyor, etc.) in the State of North Carolina, having been authorized to observe (periodically, weekly, full time) the construction of the project, for the Permittee hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the **401 Water Quality Certification and Buffer Rules**, the approved plans and specifications, and other supporting materials.

Signature: \_\_\_\_\_ Registration No. \_\_\_\_\_ Date \_\_\_\_\_

# NORTH CAROLINA



# CRAVEN

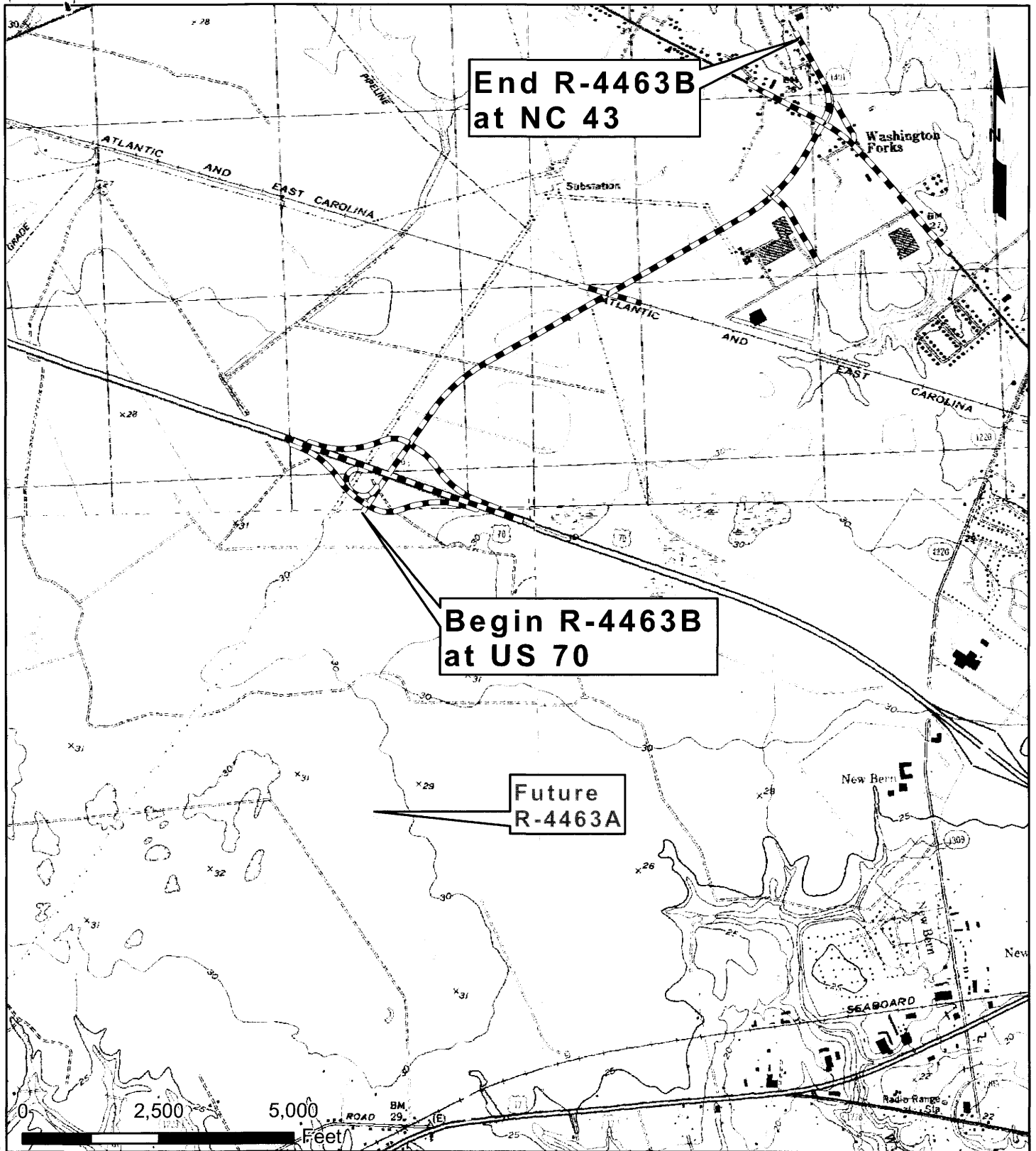


# VICINITY MAPS

**NCDOT**

**DIVISION OF HIGHWAYS  
CRAVEN COUNTY  
PROJECT: 35601.3.2 (R-4463B)  
NC 43 CONNECTOR**

03/26/07



**End R-4463B  
at NC 43**

**Begin R-4463B  
at US 70**

**Future  
R-4463A**

1 inch equals 2,500 feet

# LOCATION

**NCDOT**

**DIVISION OF HIGHWAYS  
CRAVEN COUNTY  
PROJECT: 35601.3.2 (R-4463B)  
NC 43 CONNECTOR**

03/26/07



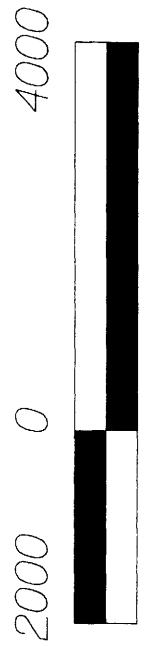
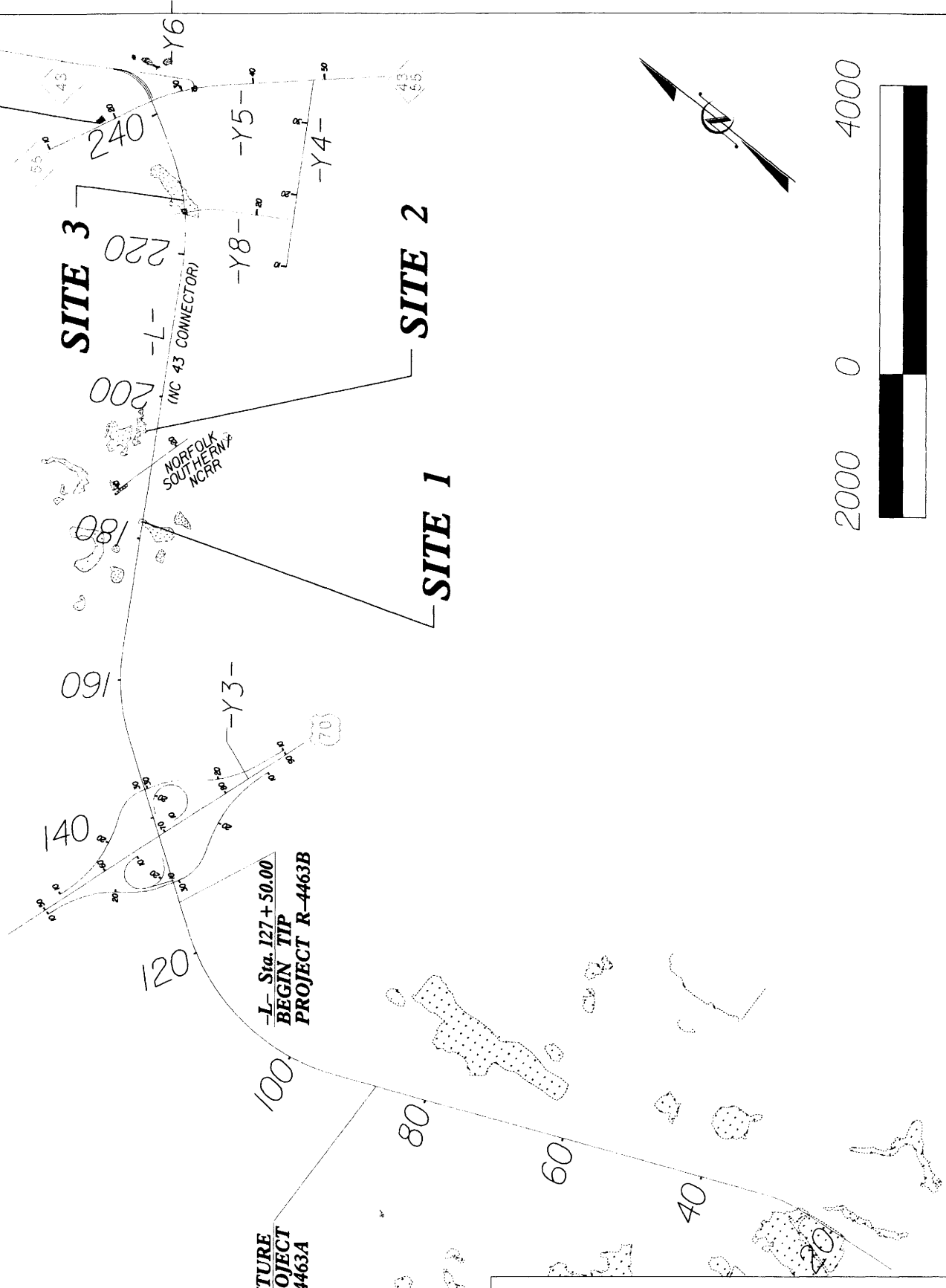
END PROJECT  
-L- POTSta. 255 + 00.00

SITE 4

SITE 3

SITE 2

SITE 1



# SITE MAP

N.C. DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
CRAVEN COUNTY

PROJECT 35601.3.2 (R-4463B)

NC 43 CONNECTOR

**WETLAND PERMIT IMPACT SUMMARY**

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS						SURFACE WATER IMPACTS						
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)			
1	-L- 181+20 to 182+76 LT & RT	Roadway	0.28	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
2	-L- 194+70 to 195+12 LT	Roadway	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
3	-L- 224+97 to 231+13 LT & RT	Roadway	1.89	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
4	-Y5- 17+60 LT	Roadway	0.00	0.00	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
<b>TOTALS:</b>			<b>2.17</b>		<b>0.05</b>	<b>0.14</b>									

Note: Site 2 includes 1.3 square feet of fill in wetland (rounds to 0.000 acres)

NC DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

GRAVEN COUNTY  
STATE PROJ. NO. 35601.3.2 (R-4463B)

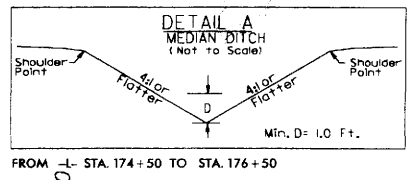
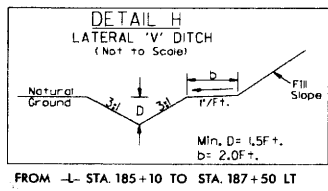
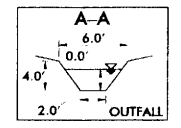
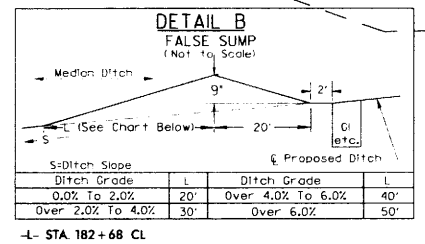
4/11/2007

PROP. NO.	PROPERTY OWNER NAME	PROP. OWNER MAILING ADDRESS
1	WEYERHAEUSER COMPANY	C/O Joel Sickert, Land Adjustment Program Manager Carolina Timberlands 1123 Dinah's Landing Rd. Washington, NC 27889
2	MGR PROPERTIES LLC	Marvin Raines, GRI 312 South Front St. New Bern, NC 28560
16	Donald K. Webb C/O Mr. and Mrs. Donald Webb (refer to parcel 16)	350 NC Hwy 55 W New Bern, NC 28562
		<p>N.C. DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS</p> <p>CRAVEN COUNTY PROJECT: 35601.3.2 (R-4463B)</p> <p>4/11/2007</p>

**English**

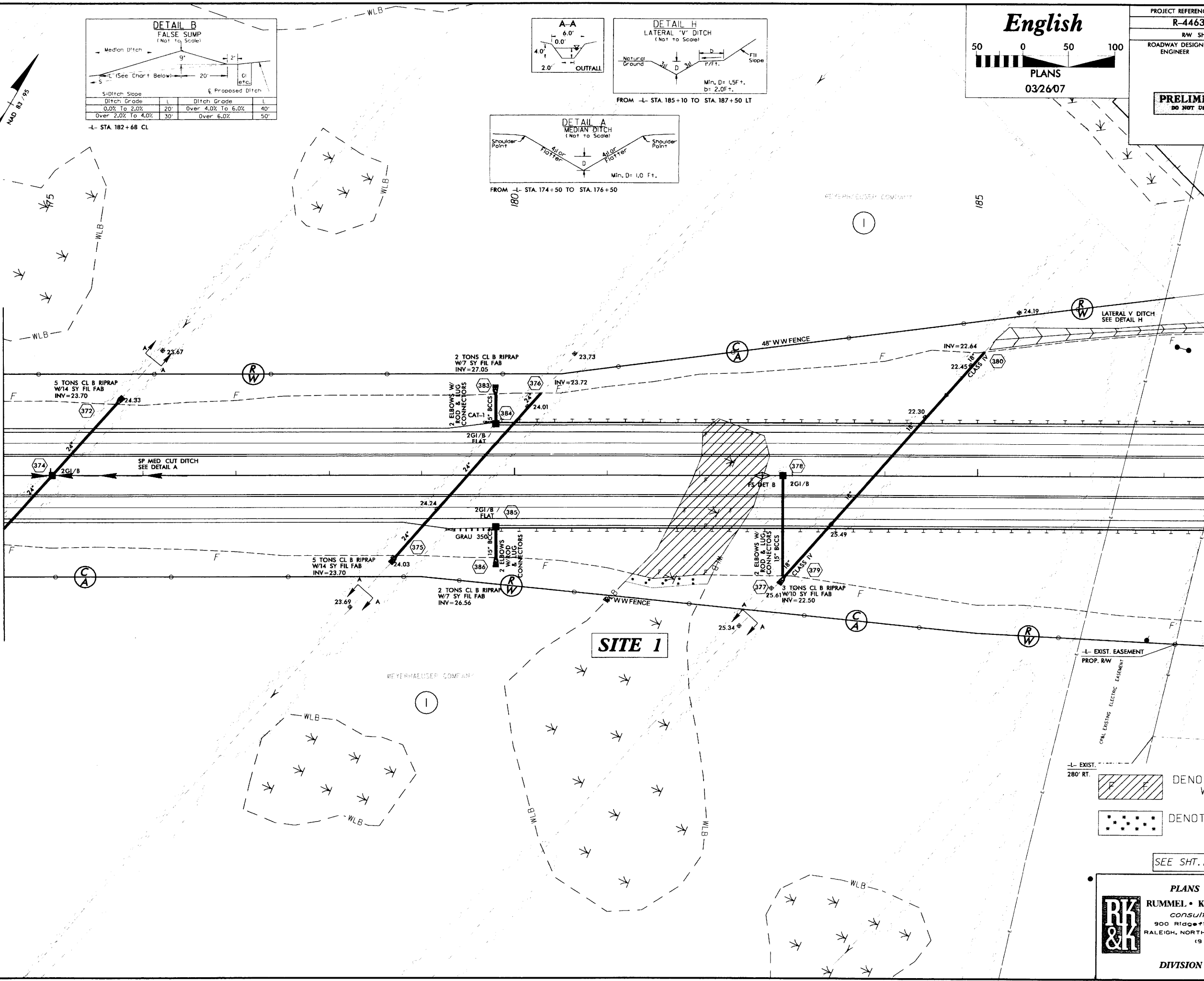
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**PLANS**  
03/26/07



MATCHLINE -L- STA. 174+50 SEE SHEET 6

MATCHLINE -L- STA. 187+50 SEE SHEET 8



**SITE 1**

REVISIONS

March 26, 2007: -L- monument at exist r/w (187+11.02)/195' LT was previously labeled 190' LT.

DENOTES FILL IN WETLAND

DENOTES MECHANIZED CLEARING

SEE SHT. 21 FOR -L- PROFILE

**PLANS PREPARED BY :**

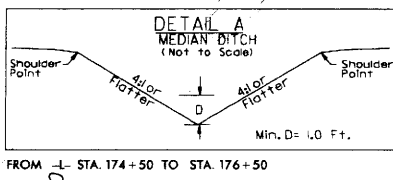
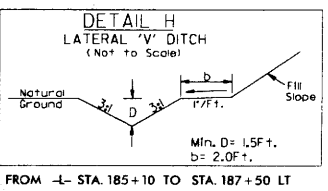
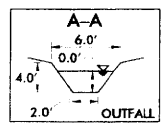
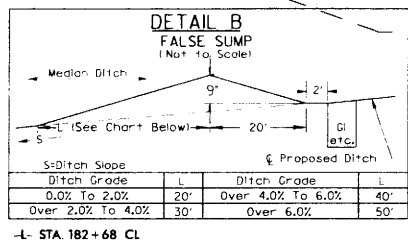
**RK & K**  
RUMMEL • KLEPPER & KAHL, LLP  
consulting engineers  
900 Ridgefield Drive Suite 350  
RALEIGH, NORTH CAROLINA 27609-3960  
(919) 878-9560

**FOR**  
DIVISION OF HIGHWAYS

04/26/07 09:00:40  
C:\projects\4463B\Drawings\4463B.dwg (1/1) 10/12/07 10:12:14 AM

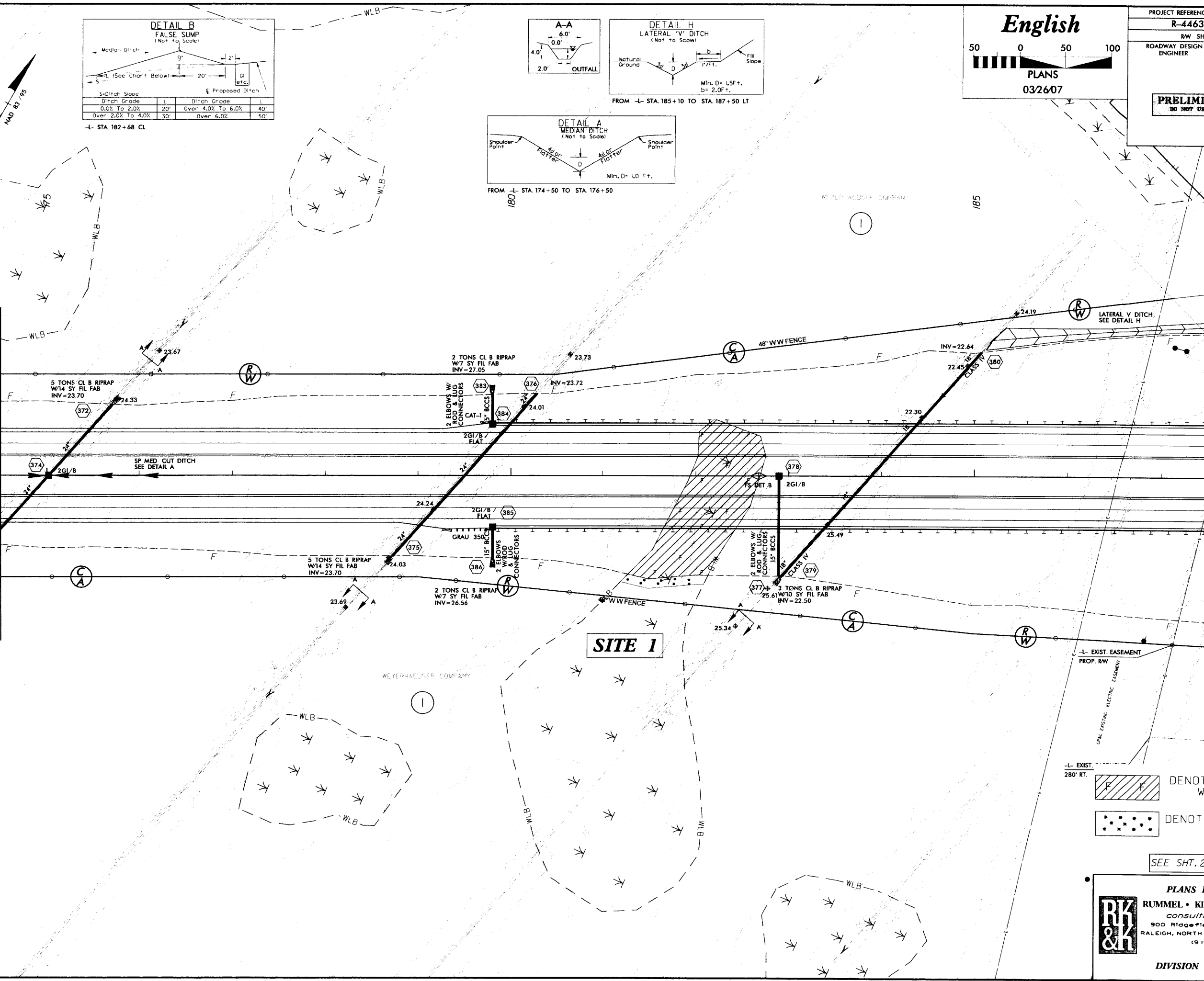
**English**

50 0 50 100  
PLANS  
03/26/07



MATCHLINE -L- STA. 174+50 SEE SHEET 6

MATCHLINE -L- STA. 187+50 SEE SHEET 8



-L- EXIST. 280' RT. DENOTES FILL IN WETLAND

DENOTES MECHANIZED CLEARING

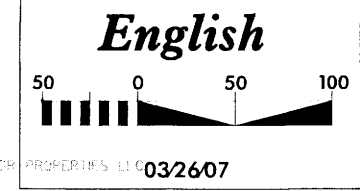
SEE SHT. 21 FOR -L- PROFILE

**PLANS PREPARED BY :**  
**RUMMEL • KLEPPER & KAHL, LLP**  
*consulting engineers*  
 900 Ridgewood Drive Suite 350  
 RALEIGH, NORTH CAROLINA 27609-3960  
 (919) 878-9560  
**FOR**  
**DIVISION OF HIGHWAYS** 7

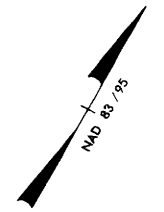
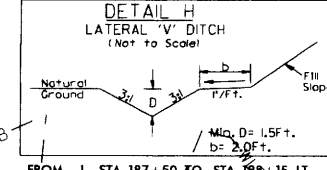
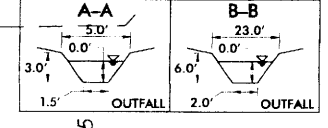
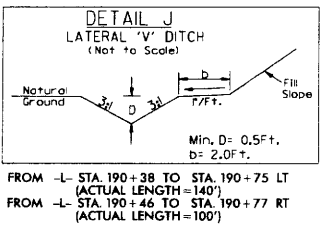
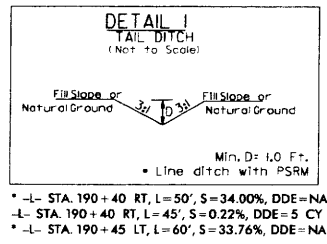
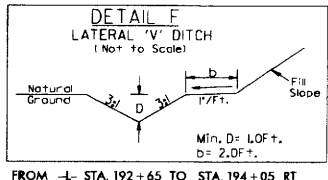
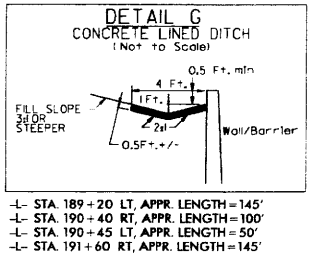
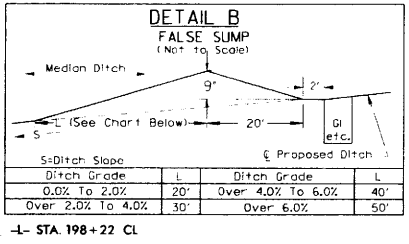
REVISIONS

March 26, 2007: -L- monument at exist r/w (187+11.02)/195' Lt. was previously labeled 190' Lt.

04/26/07 08:48:50  
 C:\p\proj\10000000\10000000.dwg  
 10/11/07 10:17:43  
 10/11/07 10:17:43

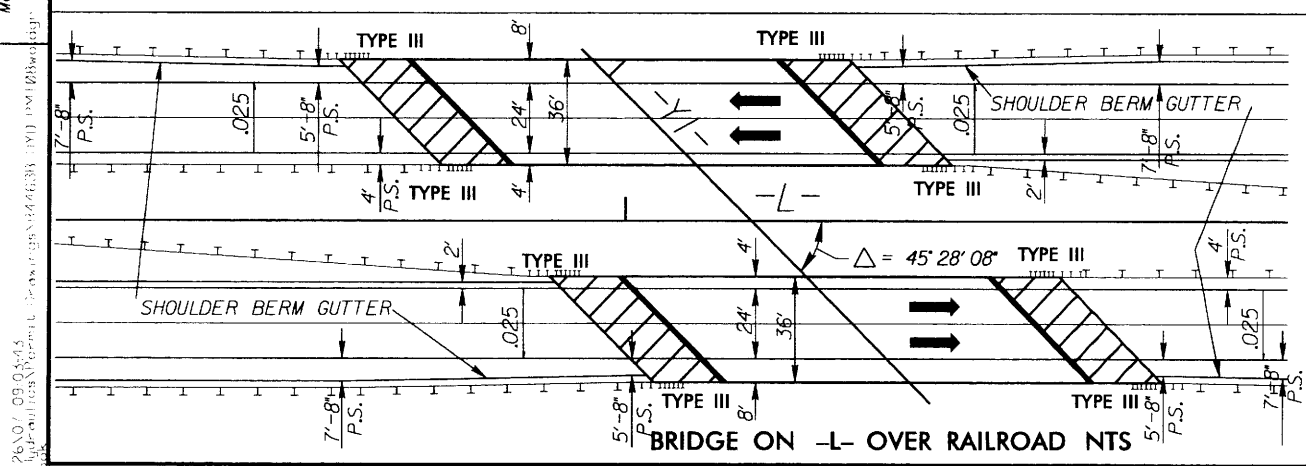


(2)



MATCHLINE -L- STA. 187 + 50 SEE SHEET 7

MATCHLINE -L- STA. 202 + 00 SEE SHEET 9



DENOTES FILL IN WETLAND

DENOTES MECHANIZED CLEARING

SEE SHTS. 21 & 22 FOR -L- PROFILE

**PLANS PREPARED BY :**

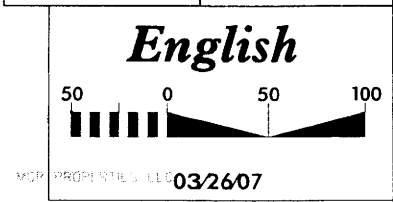
**RK & K**  
RUMMEL • KLEPPER & KAHL, LLP  
consulting engineers  
900 Ridgeland Drive Suite 350  
RALEIGH, NORTH CAROLINA 27609-3960  
(919) 878-9560

FOR  
**DIVISION OF HIGHWAYS**

REVISIONS  
March 26, 2007: -L- monument at existing r/w(93+84.65)/205 Rt. was previously labeled 200' Rt.

26A07 09 04 13  
Hydraulics/Highway/Projects/4463B/101/1012300313

PROJECT REFERENCE NO. <b>R-44638</b>	SHEET NO. <b>8</b>
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

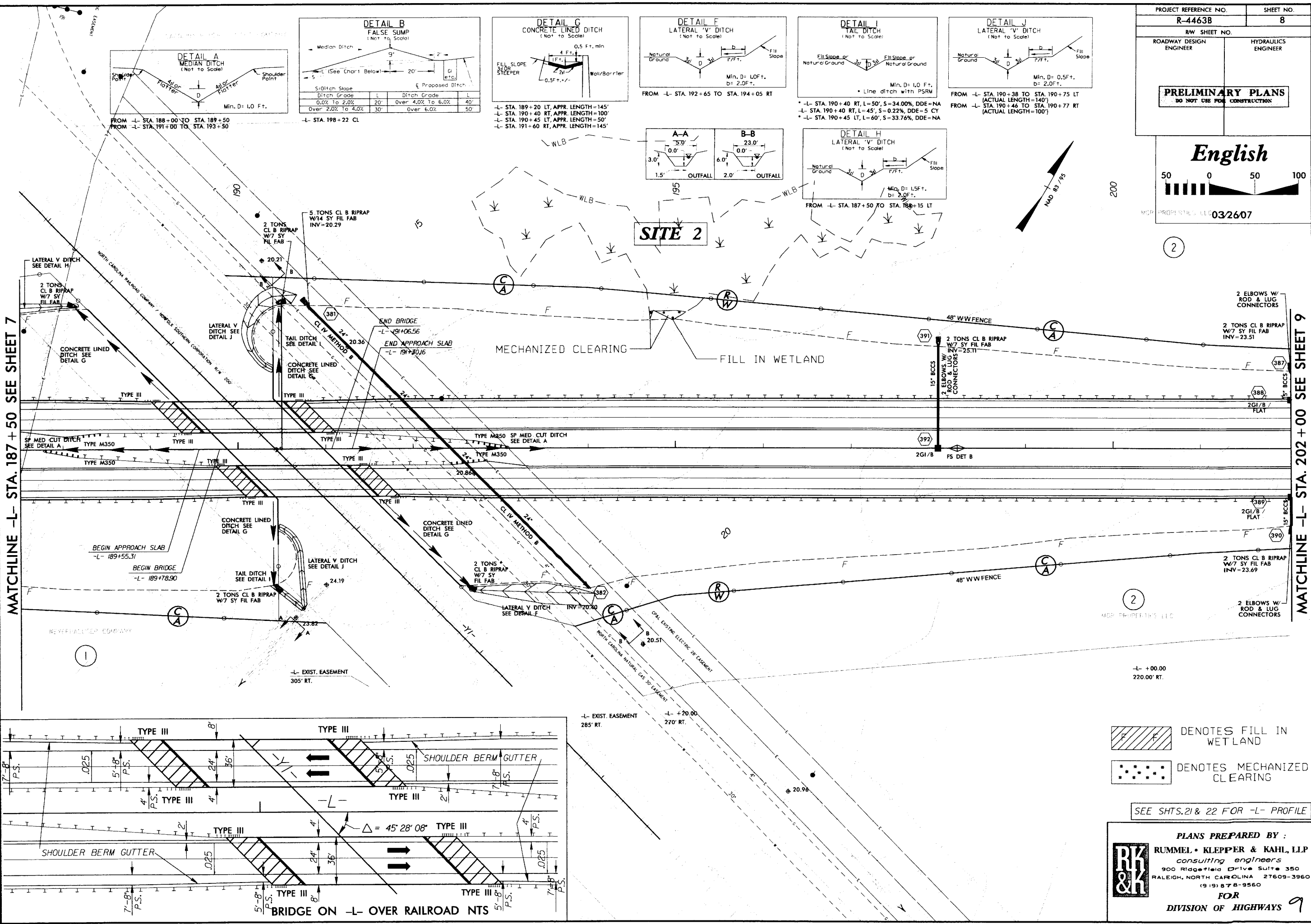


REVISIONS

March 26, 2007: -L- monument at existing r/w(193+84.65)/205' Rt. was previously labeled 200' Rt.

MATCHLINE -L- STA. 187 +50 SEE SHEET 7

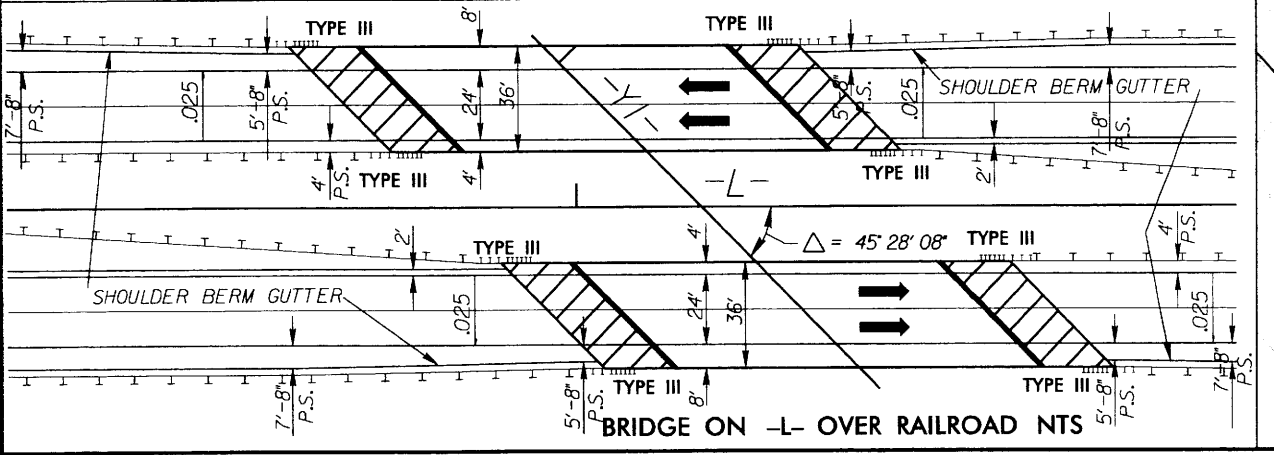
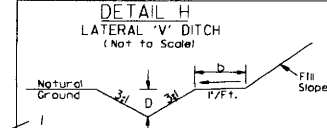
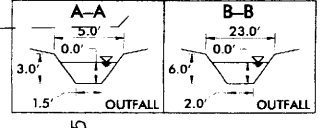
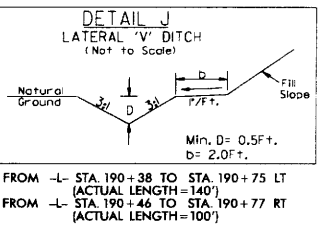
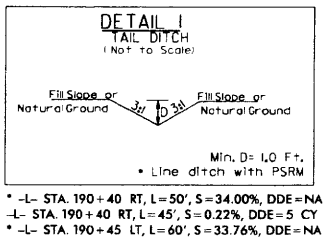
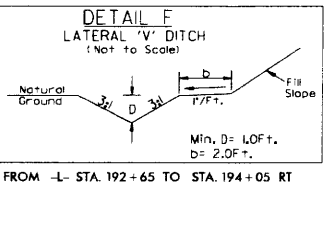
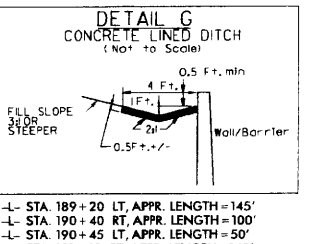
MATCHLINE -L- STA. 202 +00 SEE SHEET 9



**DETAIL B**  
FALSE SUMP  
(Not to Scale)

S-Ditch Slope	L	Ditch Grade	L
0.0% To 2.0%	20'	Over 4.0% To 6.0%	40'
Over 2.0% To 4.0%	30'	Over 6.0%	50'

-L- STA. 198 + 22 CL



DENOTES FILL IN WETLAND

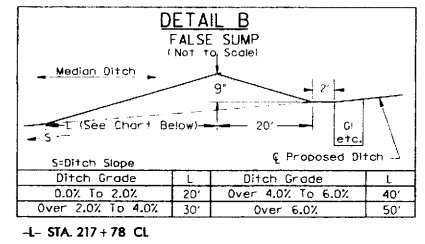
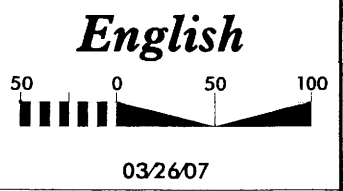
DENOTES MECHANIZED CLEARING

SEE SHTS. 21 & 22 FOR -L- PROFILE

**PLANS PREPARED BY:**

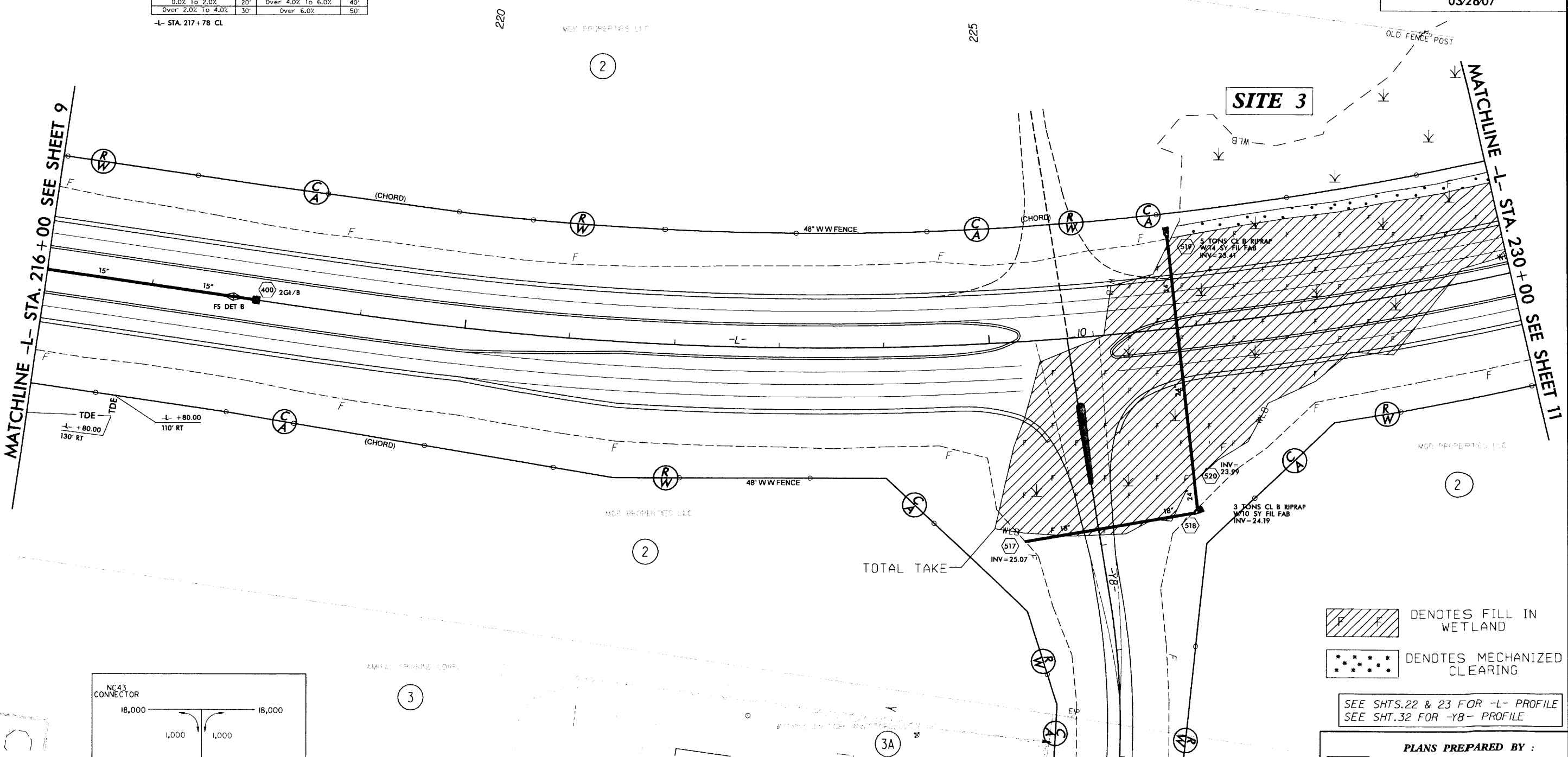
**RUMMEL • KLEPPER & KAHL, LLP**  
consulting engineers  
900 Ridgely Drive Suite 350  
RALEIGH, NORTH CAROLINA 27603-3960  
(919) 878-9560

FOR  
**DIVISION OF HIGHWAYS** **9**



MATCHLINE -L- STA. 216 + 00 SEE SHEET 9

MATCHLINE -L- STA. 230 + 00 SEE SHEET 11



**NC43 CONNECTOR**

18,000	1,000	1,000	18,000
2025 ADT		2,000	
SR 1304 BOSCH BLVD.			

PROJECTED TRAFFIC VOLUMES

DENOTES FILL IN WETLAND

DENOTES MECHANIZED CLEARING

SEE SHTS. 22 & 23 FOR -L- PROFILE  
SEE SHT. 32 FOR -Y8- PROFILE

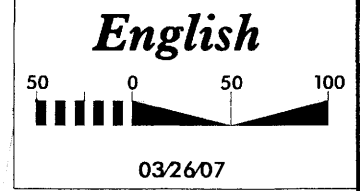
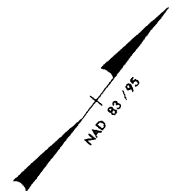
**PLANS PREPARED BY :**  
**RUMMEL • KLEPPER & KAHL, LLP**  
*consulting engineers*  
 900 Ridgefield Drive Suite 350  
 RALEIGH, NORTH CAROLINA 27609-3960  
 (919) 878-9560  
**FOR**  
**DIVISION OF HIGHWAYS 16**

MATCHLINE -Y8- STA. 14 + 00 SEE SHEET 15

REVISIONS

DATE: 03/26/07 09:40:00  
 DRAWN BY: [unreadable]  
 CHECKED BY: [unreadable]  
 APPROVED BY: [unreadable]





**DETAIL B**  
FALSE SUMP  
(Not To Scale)

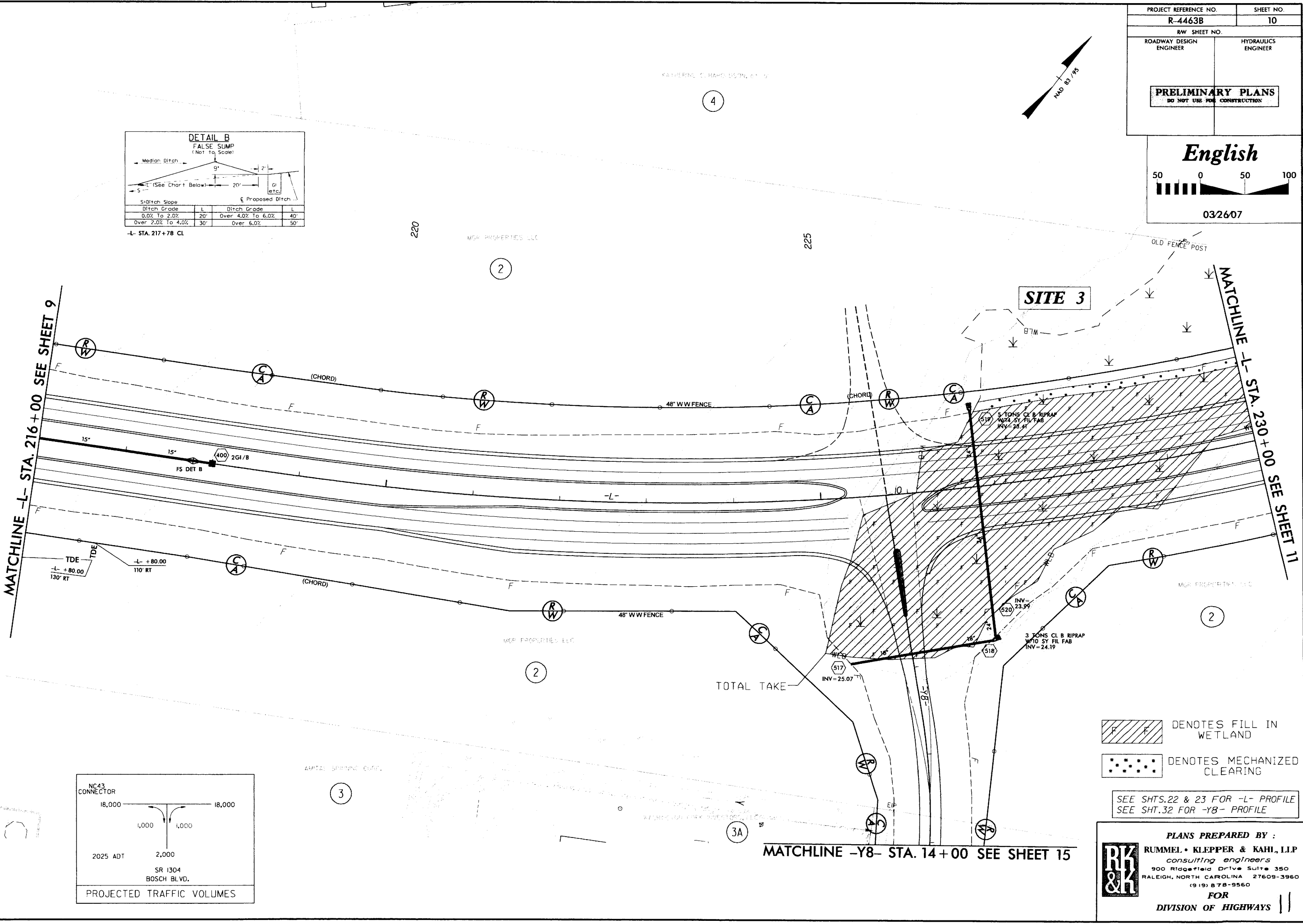
Ditch Slope	Ditch Grade	Ditch Grade	Ditch Grade
0.0% To 2.0%	20"	Over 4.0% To 6.0%	40"
Over 2.0% To 4.0%	30"	Over 6.0%	50"

-L- STA. 217+78 CL

REVISIONS

MATCHLINE -L- STA. 216+00 SEE SHEET 9

MATCHLINE -L- STA. 230+00 SEE SHEET 11



**NC43 CONNECTOR**

18,000	18,000
1,000	1,000
2025 ADT	2,000
SR 1304 BOSCH BLVD.	

PROJECTED TRAFFIC VOLUMES

DENOTES FILL IN WETLAND

DENOTES MECHANIZED CLEARING

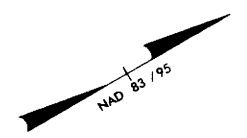
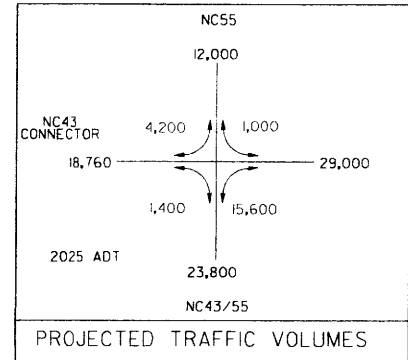
SEE SHTS. 22 & 23 FOR -L- PROFILE  
SEE SHT. 32 FOR -Y8- PROFILE

**PLANS PREPARED BY :**  
**RUMMEL • KLEPPER & KAHL, L.P.**  
*consulting engineers*  
 900 Ridgefield Drive Suite 350  
 RALEIGH, NORTH CAROLINA 27609-3960  
 (919) 878-9560  
**FOR**  
**DIVISION OF HIGHWAYS**

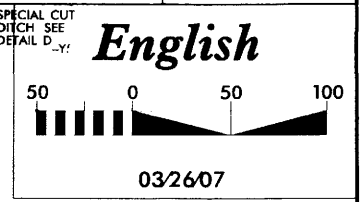
MATCHLINE -Y8- STA. 14+00 SEE SHEET 15

03/26/07 05:48:29  
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10/11/07

PROJECT REFERENCE NO. <b>R-4463B</b>	SHEET NO. <b>11</b>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

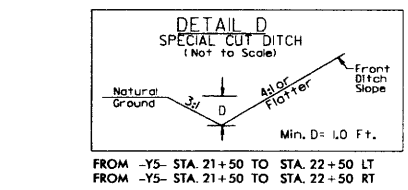
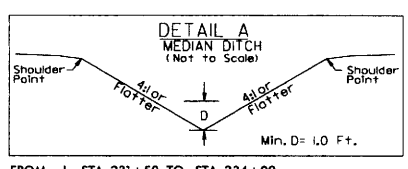
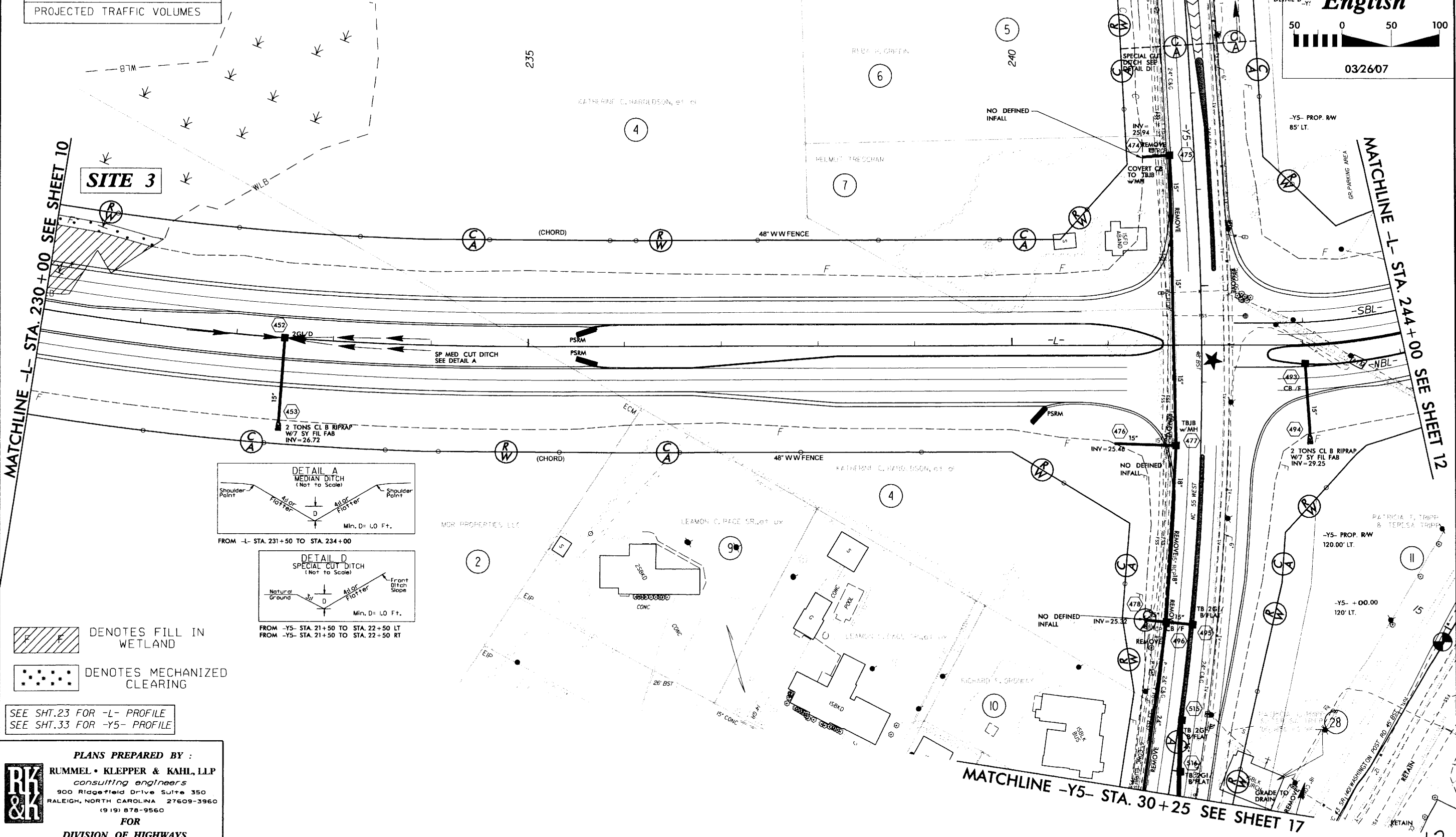


**MATCHLINE -Y5- STA. 21+50**  
**SEE SHEET 16**



-Y5- PROP. RW  
85' LT.

**English**



DENOTES FILL IN WETLAND  
 DENOTES MECHANIZED CLEARING

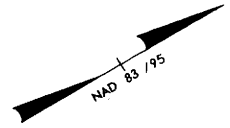
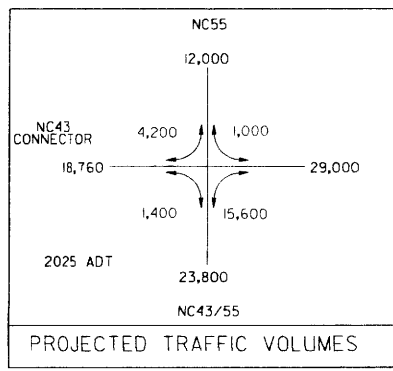
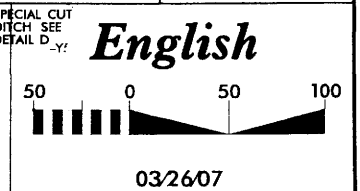
SEE SHT. 23 FOR -L- PROFILE  
SEE SHT. 33 FOR -Y5- PROFILE

**PLANS PREPARED BY :**  
**RUMMEL • KLEPPER & KAHL, LLP**  
consulting engineers  
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RALEIGH, NORTH CAROLINA 27609-3960  
(919) 878-9560  
**FOR**  
**DIVISION OF HIGHWAYS**

**MATCHLINE -Y5- STA. 30+25**  
**SEE SHEET 17**

PROJECT REFERENCE NO. <b>R-4463B</b>		SHEET NO. <b>11</b>
RW SHEET NO.		HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER		

**PRELIMINARY PLANS**  
DO NOT USE FOR CONSTRUCTION



MATCHLINE -Y5- STA. 21+50  
SEE SHEET 16

MATCHLINE -L- STA. 244+00  
SEE SHEET 12

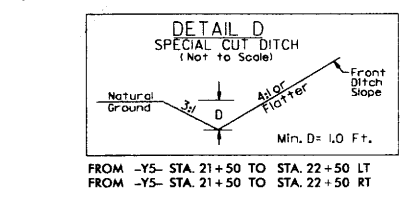
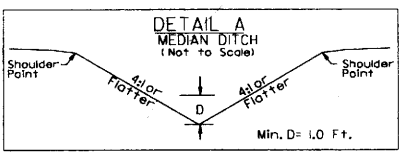
MATCHLINE -Y5- STA. 30+25  
SEE SHEET 17

MATCHLINE -L- STA. 230+00  
SEE SHEET 10

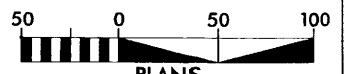
- DENOTES FILL IN WETLAND
- DENOTES MECHANIZED CLEARING

SEE SHT.23 FOR -L- PROFILE  
SEE SHT.33 FOR -Y5- PROFILE

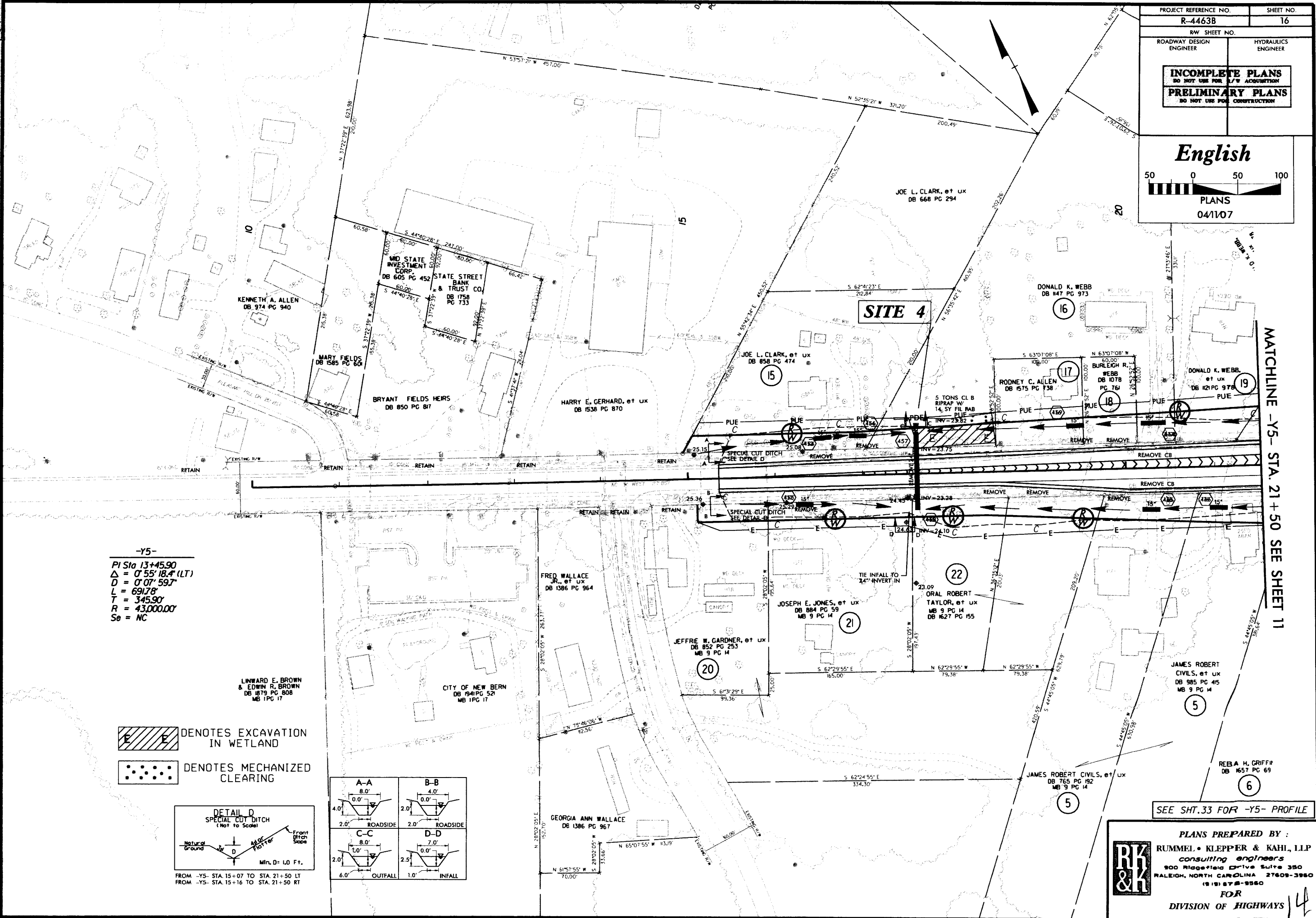
**PLANS PREPARED BY :**  
**RUMMEL • KLEPPER & KAHL, LLP**  
*consulting engineers*  
 900 Ridgely Drive Suite 350  
 RALEIGH, NORTH CAROLINA 27609-3960  
 (919) 878-9560  
 FOR  
**DIVISION OF HIGHWAYS**



REVISIONS

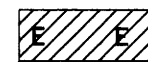
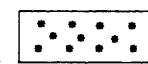
PROJECT REFERENCE NO. R-4463B	SHEET NO. 16
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR L/W ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	
<b>English</b>  PLANS 04/11/07	

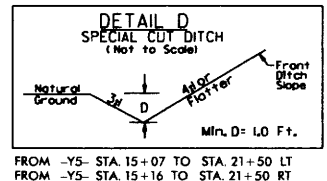
8/17/99  
 04/16/07 09:39:03  
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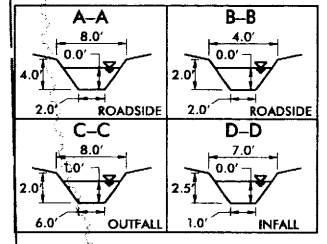
-Y5-

$PI Sta 13+45.90$   
 $\Delta = 0^\circ 55' 18.4" (LT)$   
 $D = 0^\circ 07' 59.7"$   
 $L = 691.78$   
 $T = 345.90$   
 $R = 43,000.00'$   
 $Se = NC$


 DENOTES EXCAVATION IN WETLAND  
 DENOTES MECHANIZED CLEARING



FROM -Y5- STA. 15+07 TO STA. 21+50 LT  
 FROM -Y5- STA. 15+16 TO STA. 21+50 RT



SEE SHT. 33 FOR -Y5- PROFILE

**PLANS PREPARED BY :**  

**RUMMEL • KLEPPER & KAHL, LLP**  
 consulting engineers  
 900 Ridgedale Drive Suite 350  
 RALEIGH, NORTH CAROLINA 27609-3960  
 (919) 878-9560  
 FOR  
 DIVISION OF HIGHWAYS

MATCHLINE -Y5- STA. 21+50 SEE SHEET 11

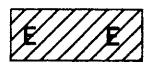
PROJECT REFERENCE NO. <b>R-4463B</b>	SHEET NO. <b>16</b>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR E/W ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	
<b>English</b>	
50 0 50 100 PLANS 04/11/07	

B/17/99

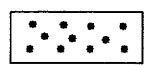
REVISIONS

MATCHLINE -Y5- STA. 21+50 SEE SHEET 11

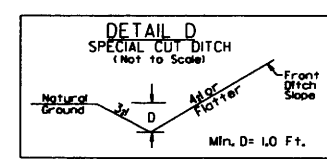
-Y5-  
 PI Sta 13+45.90  
 $\Delta = 0^{\circ} 55' 18.4" (LT)$   
 $D = 0^{\circ} 07' 59.7"$   
 $L = 69.78'$   
 $T = 345.90'$   
 $R = 43,000.00'$   
 $Se = NC$



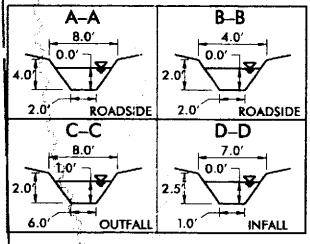
DENOTES EXCAVATION IN WETLAND



DENOTES MECHANIZED CLEARING



FROM -Y5- STA. 15+07 TO STA. 21+50 LT  
 FROM -Y5- STA. 15+16 TO STA. 21+50 RT



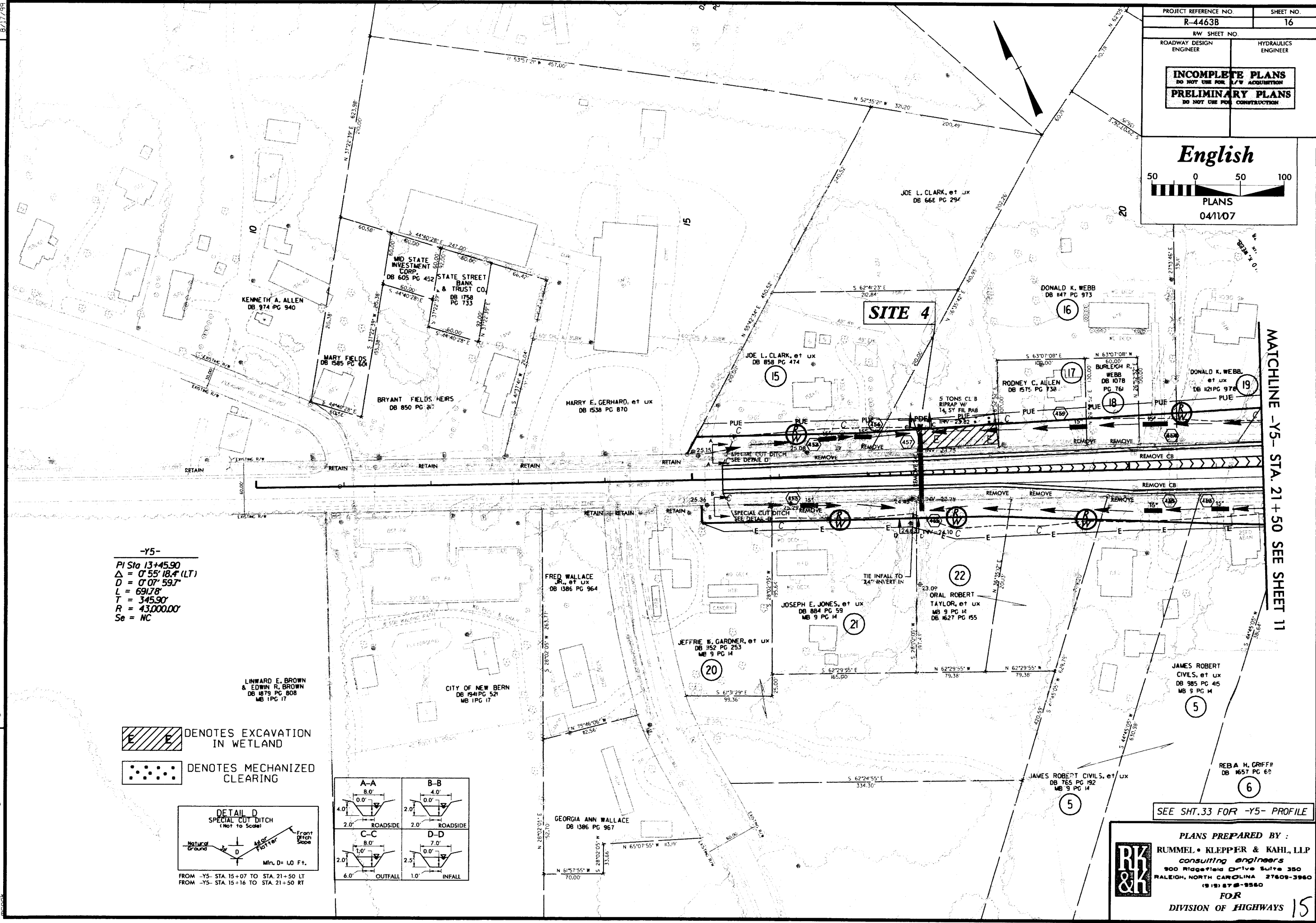
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 09/17/99

SEE SHT. 33 FOR -Y5- PROFILE

PLANS PREPARED BY :

**RK & K**  
**RUMMEL • KLEPPER & KAHL, LLP**  
*consulting engineers*  
 800 Ridgefield Drive Suite 350  
 RALEIGH, NORTH CAROLINA 27608-3580  
 (919) 878-3550

FOR  
**DIVISION OF HIGHWAYS 15**

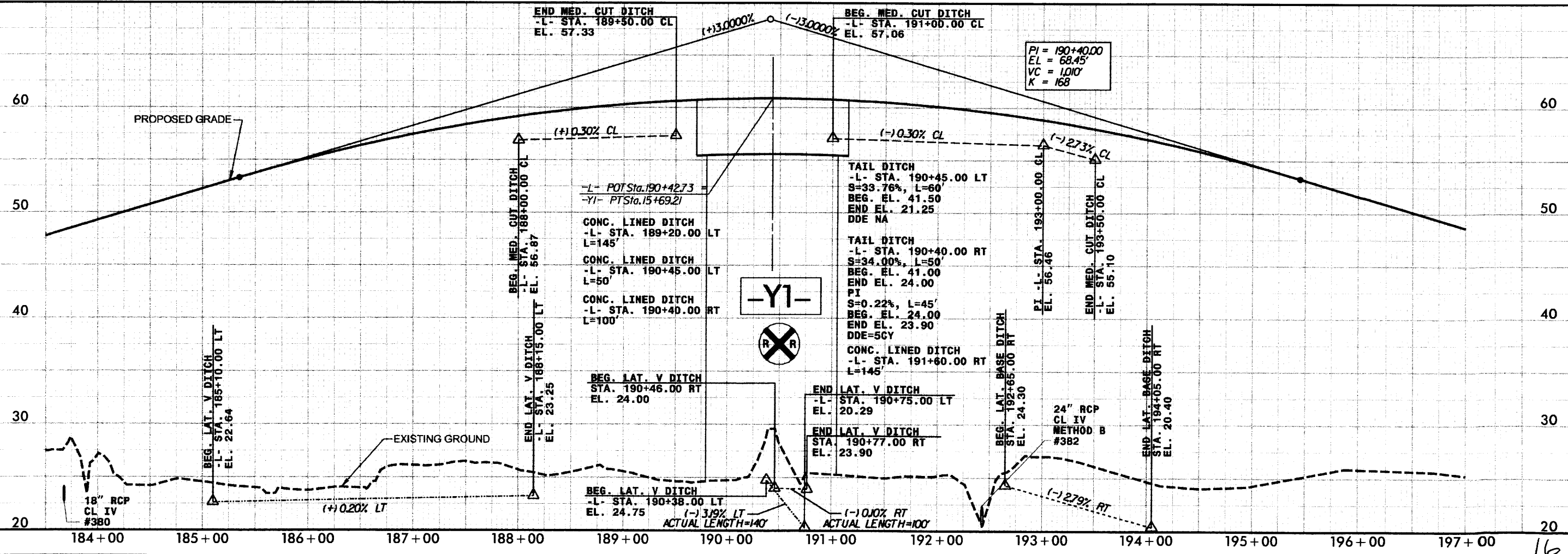
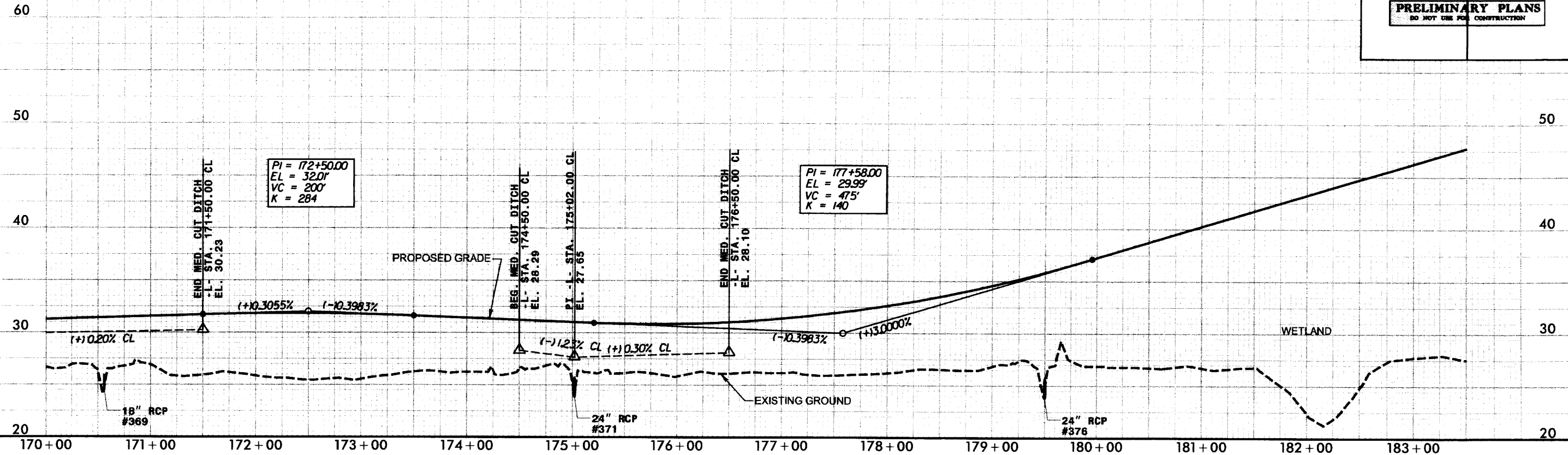


5/28/99

V = 60 mph  
Ks = 136  
Kcr = 151  
Lmin = 200'



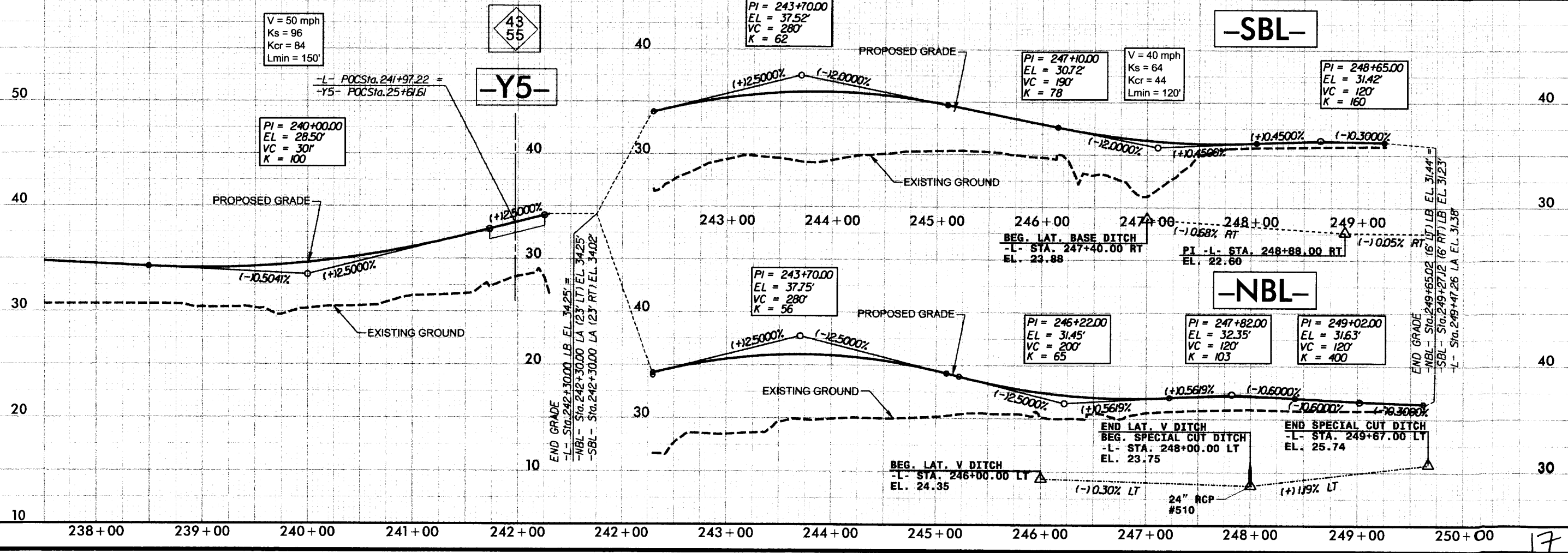
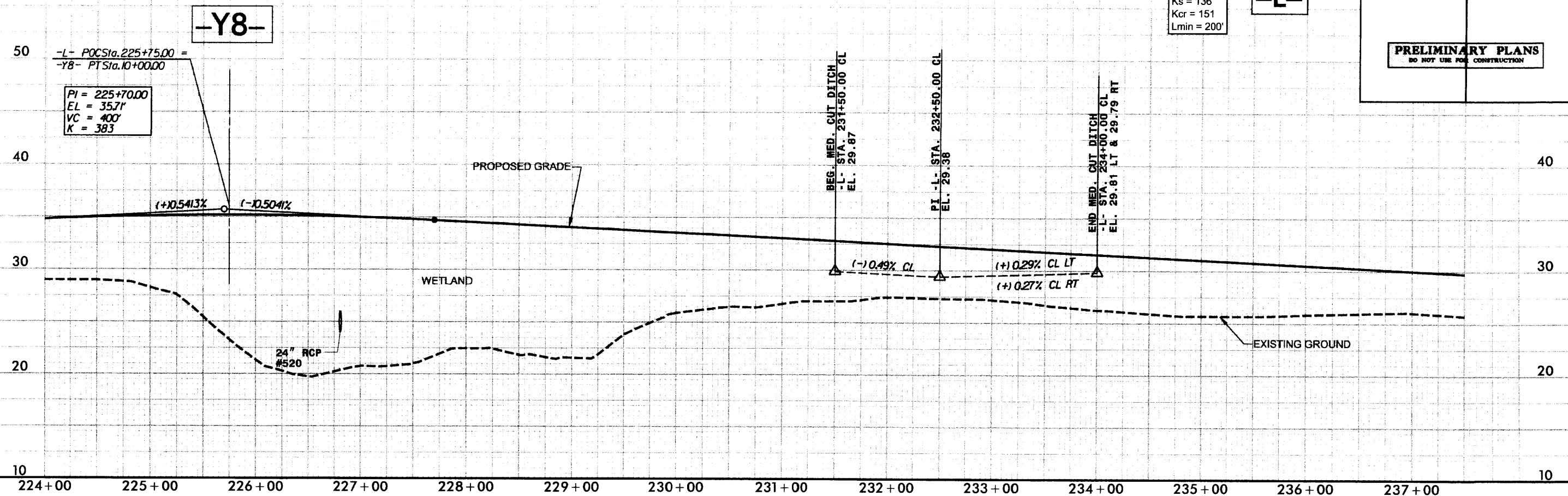
PROJECT REFERENCE NO. <b>R-4463B</b>	SHEET NO. <b>21</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	



R:\Roadway\Proj\R4463B\rdy\_p121.dgn

V = 60 mph  
Ks = 136  
Kcr = 151  
Lmin = 200'

-L-



5/28/99

Q:\26\07\_04\552\_Roadway\Proj\R4463B\_rdy\_pf123.dgn

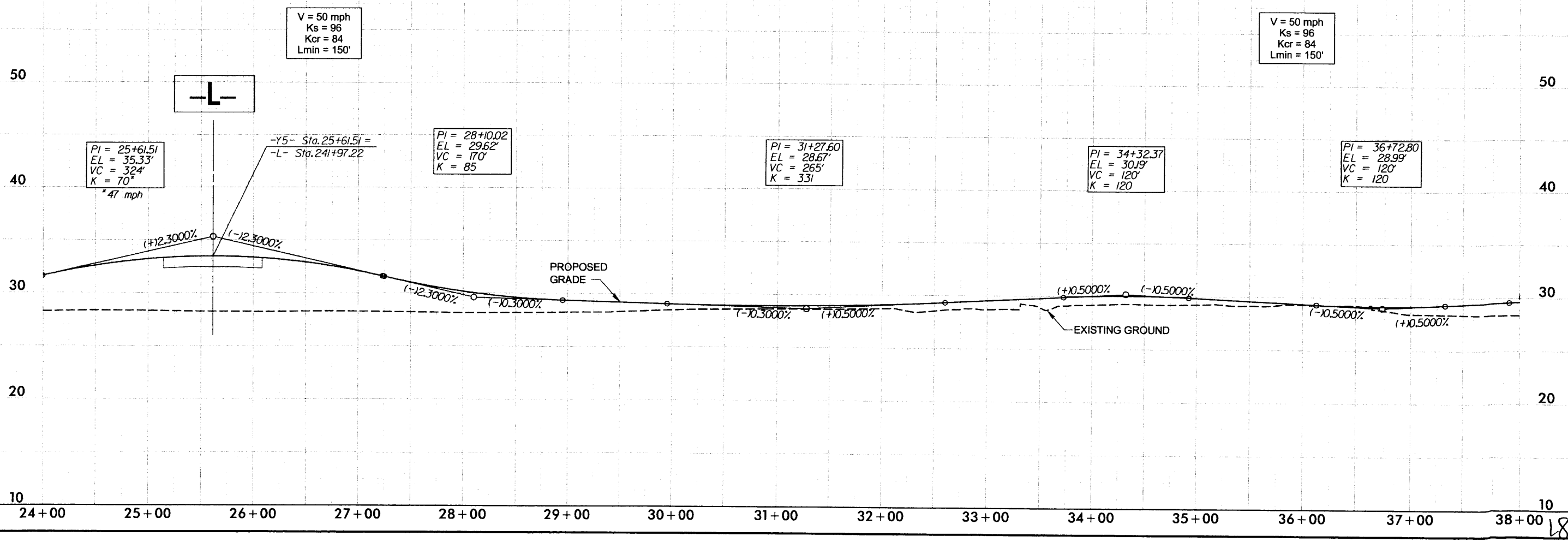
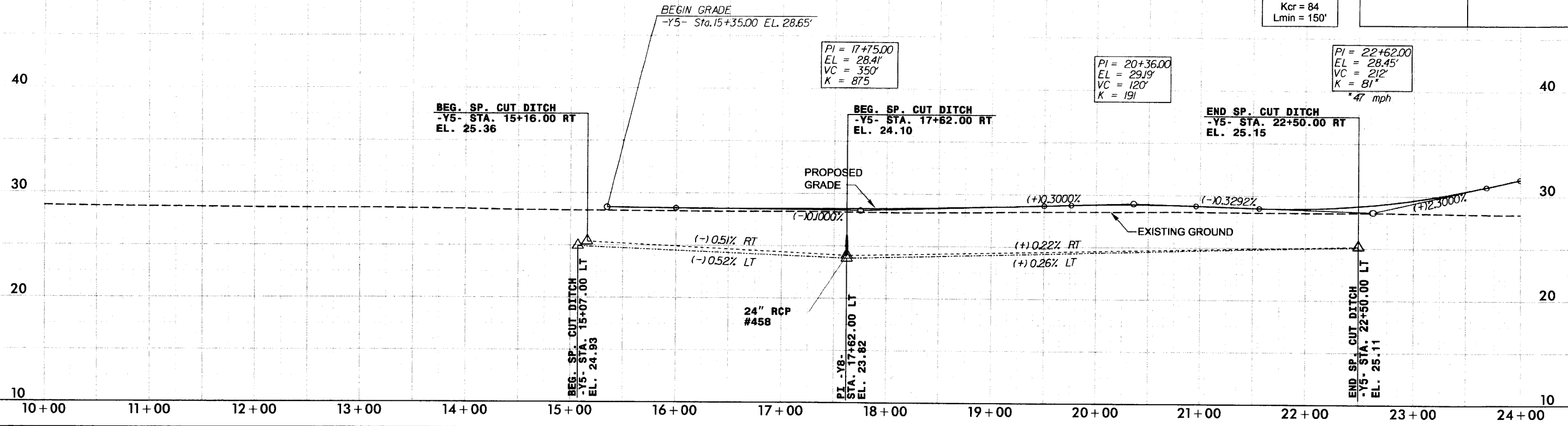
2/25/07

2/7/2007  
C:\roadwork\proj\4463B\rdy\pf33.dgn

PROJECT REFERENCE NO. <b>R-4463B</b>	SHEET NO. <b>33</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

**-Y5-**

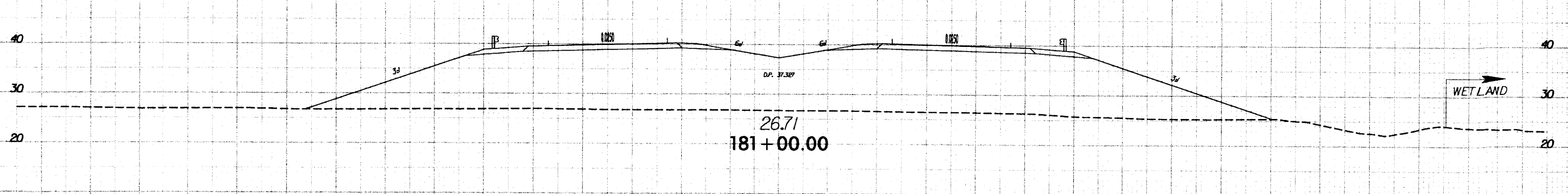
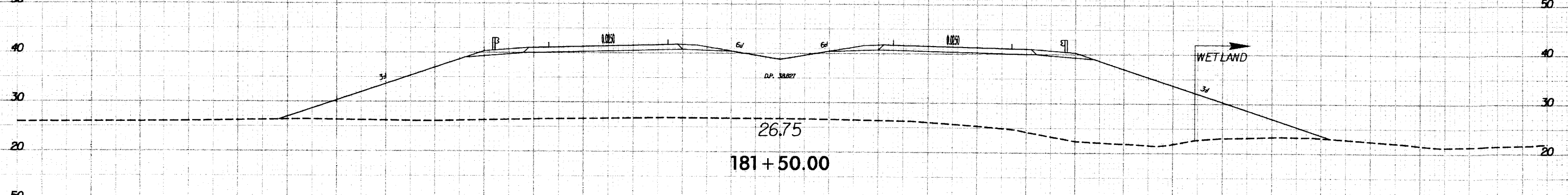
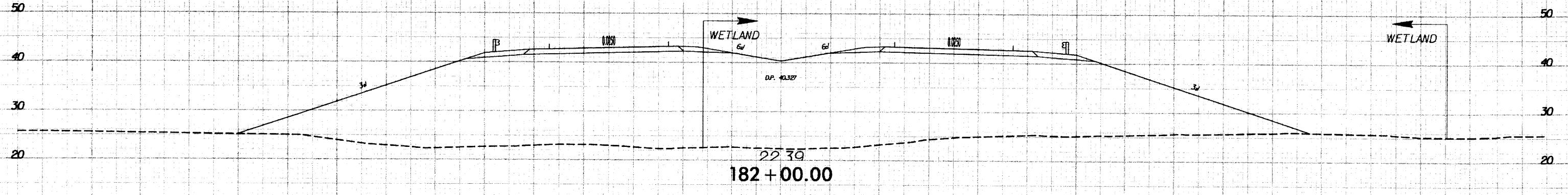
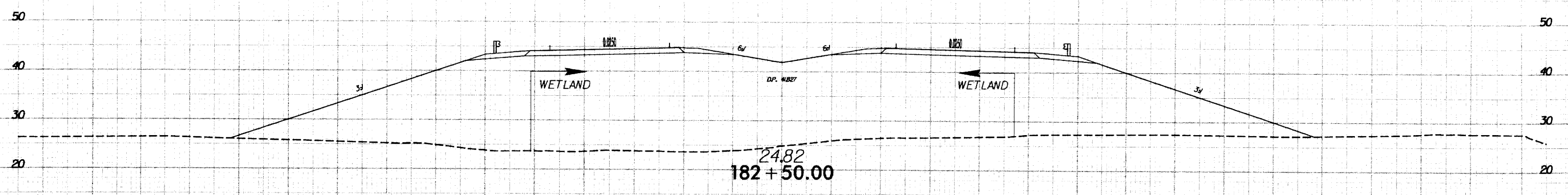
V = 50 mph  
Ks = 96  
Kcr = 84  
Lmin = 150'





B/23/99

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150



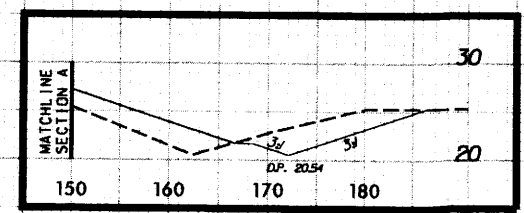
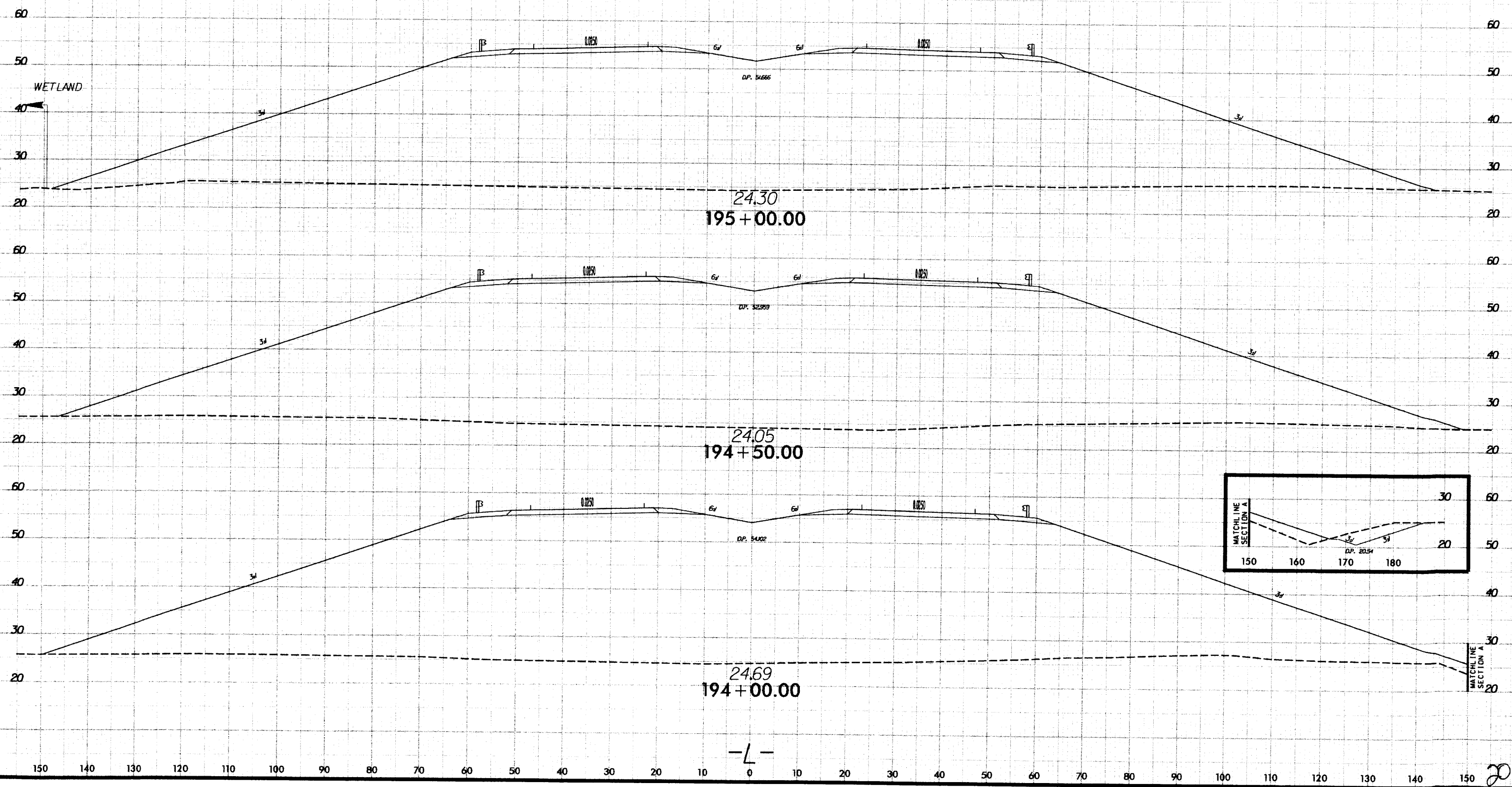
-L-

03/26/01 10:55:14  
R:\Roadway\Xsc\4463b\rdg\pl\_1.dgn  
mebak

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

8/23/99

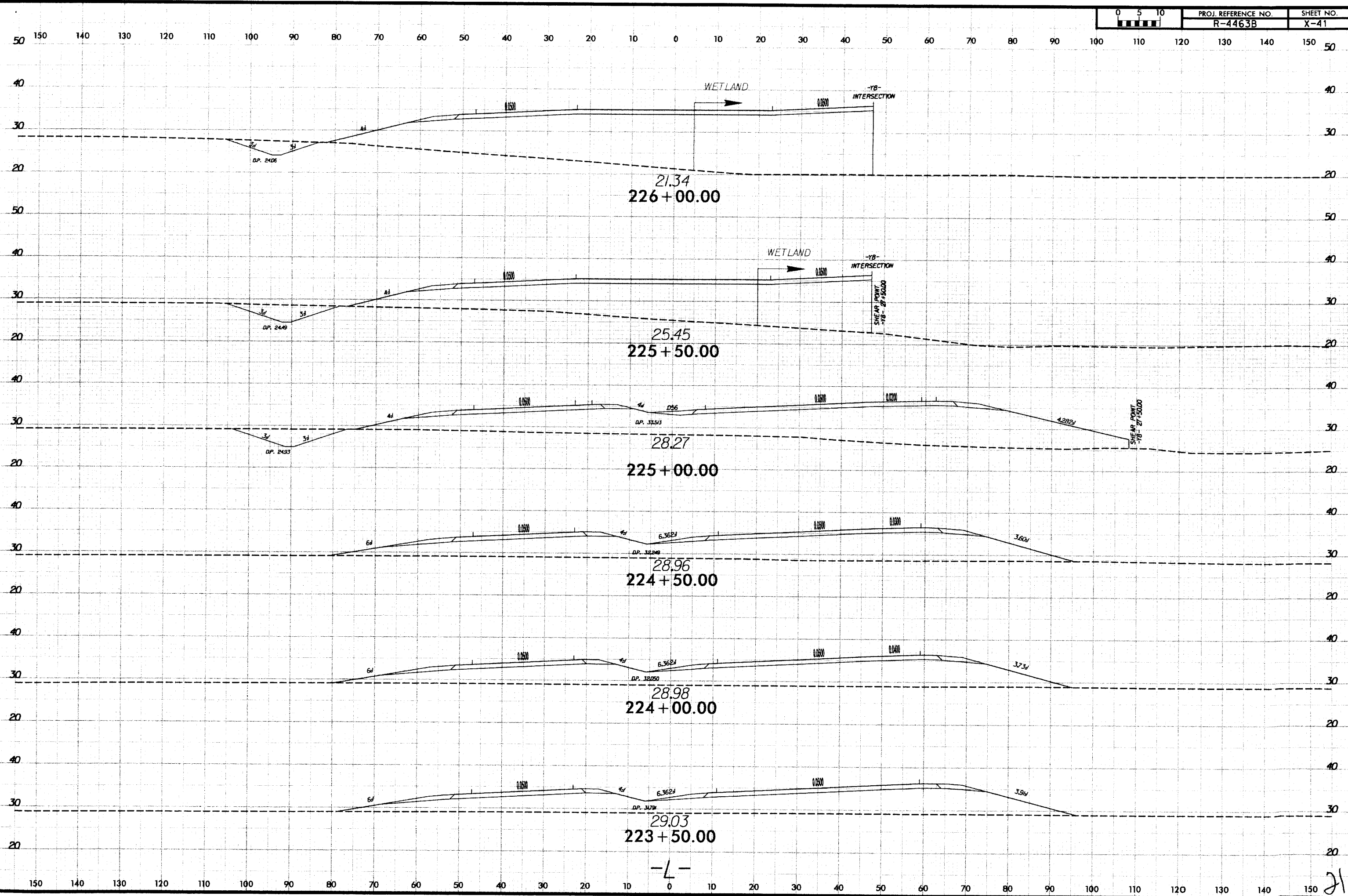
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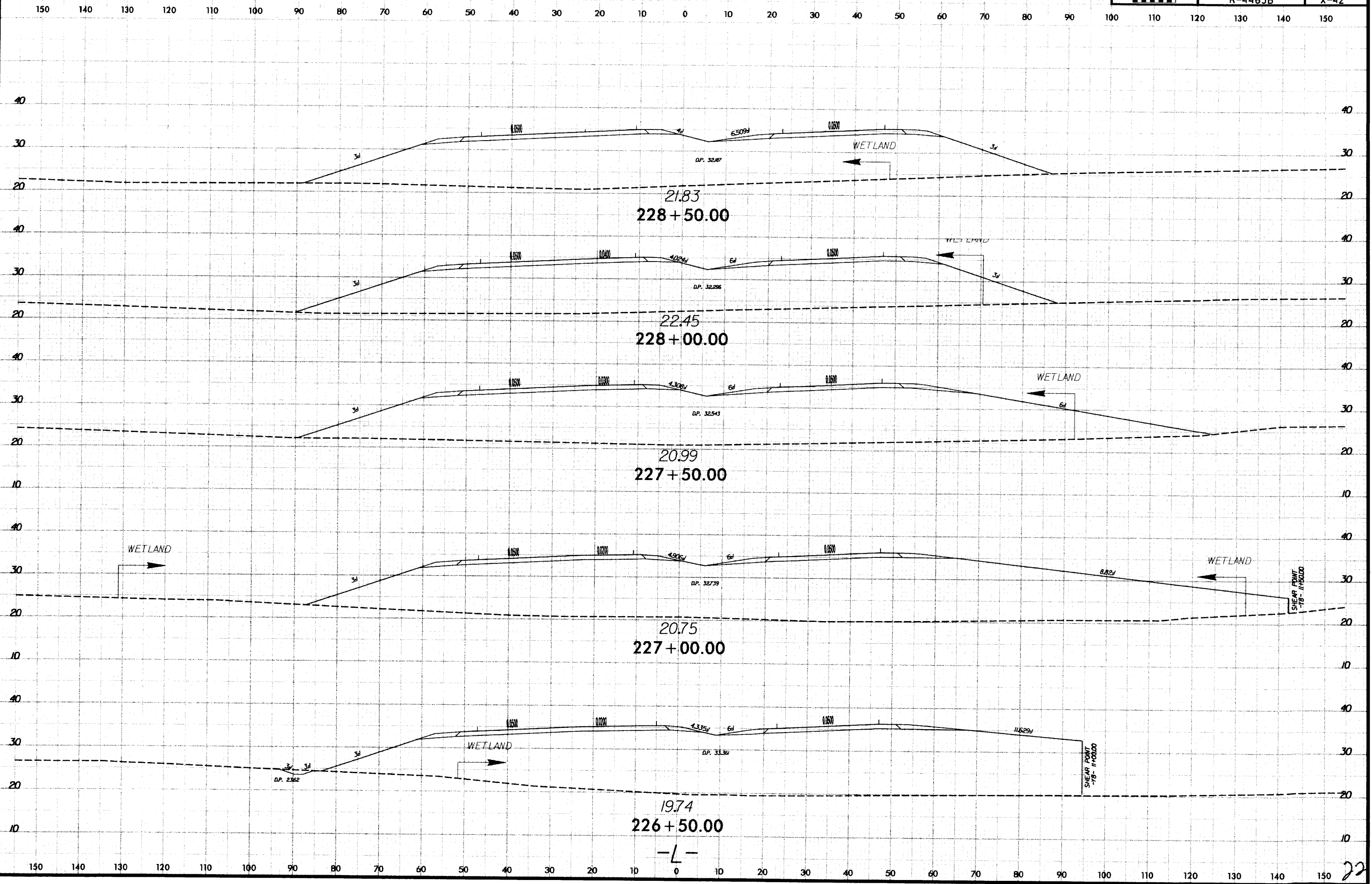
-L-

20



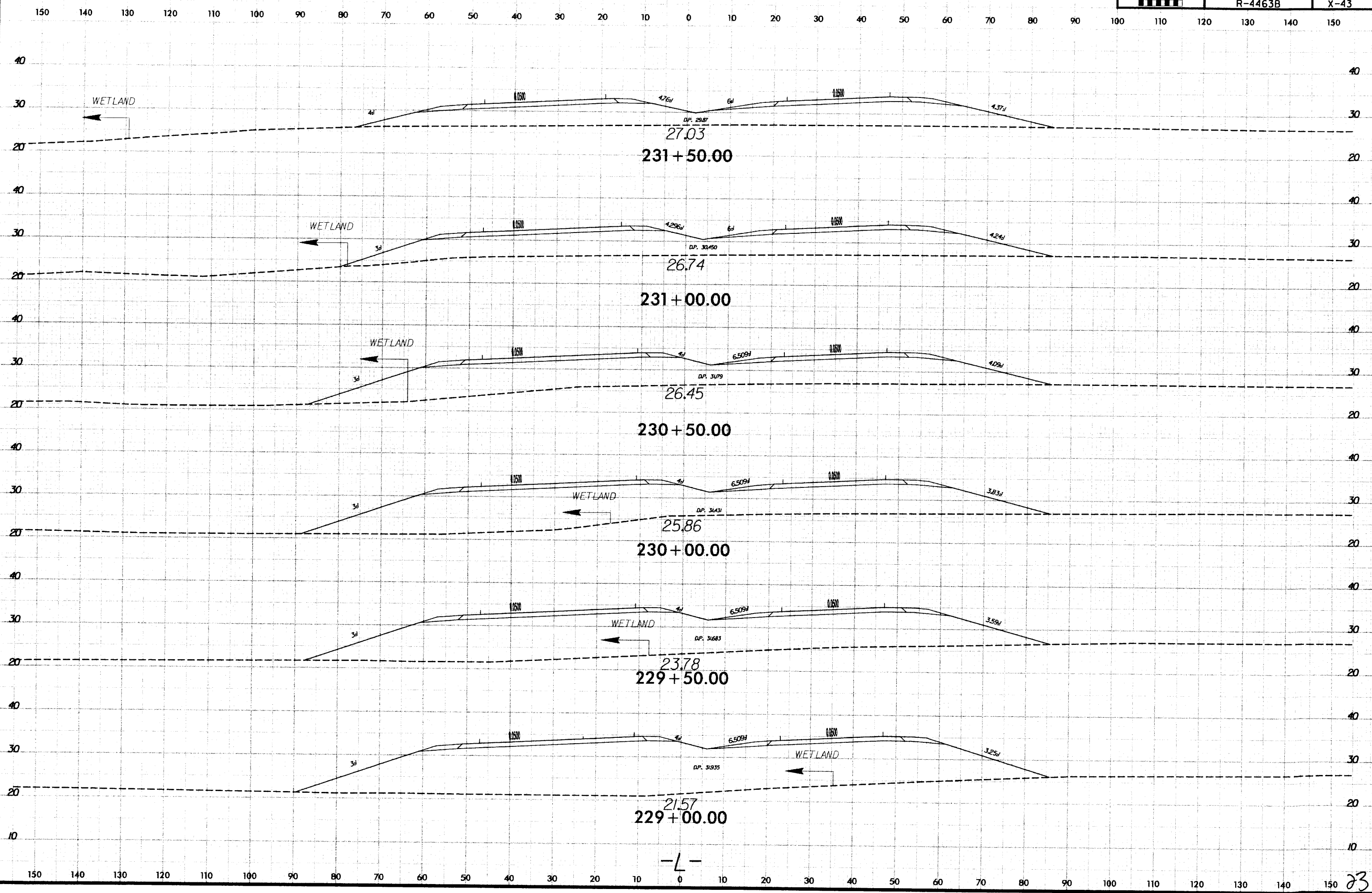
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8/23/99



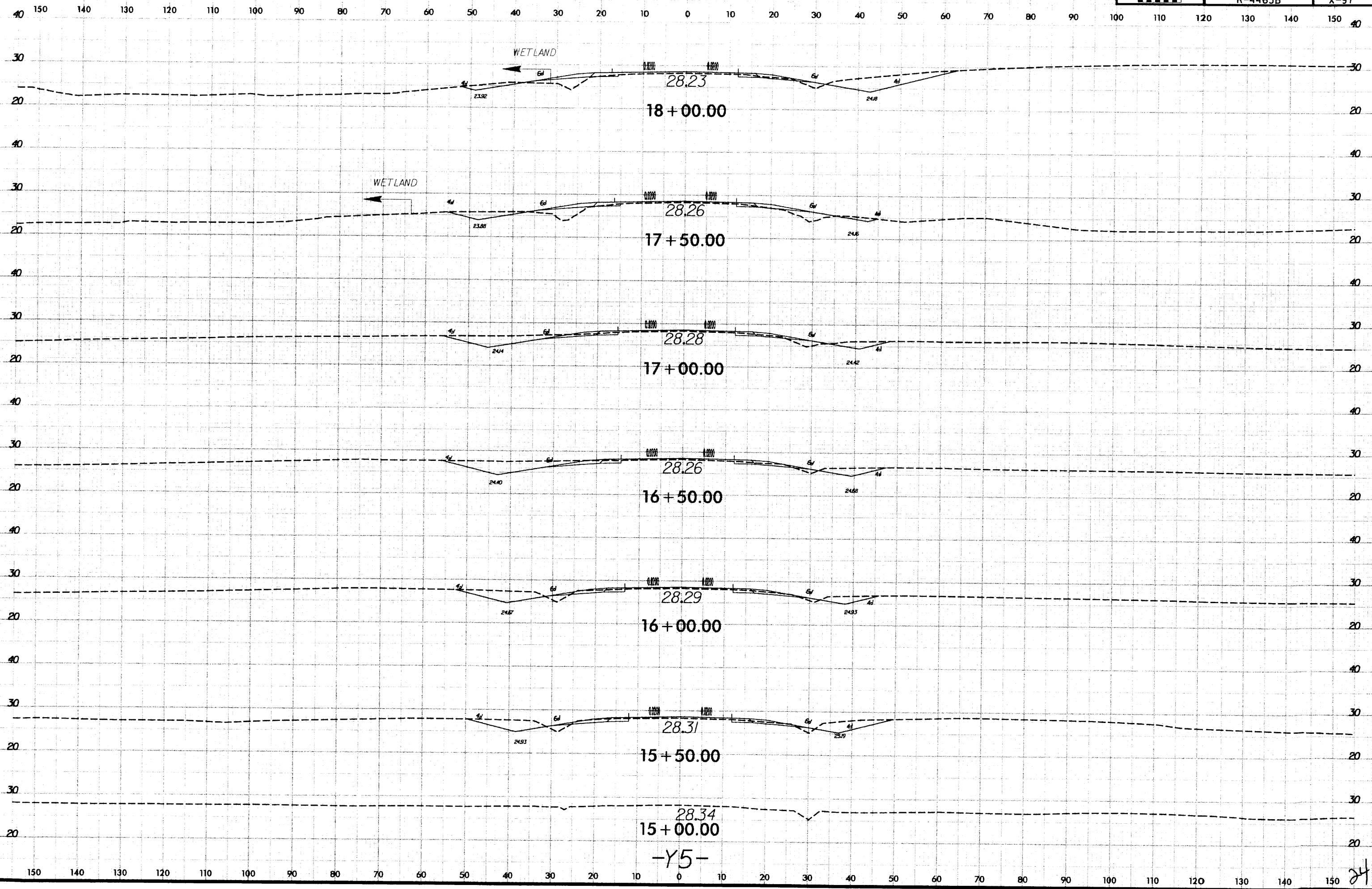
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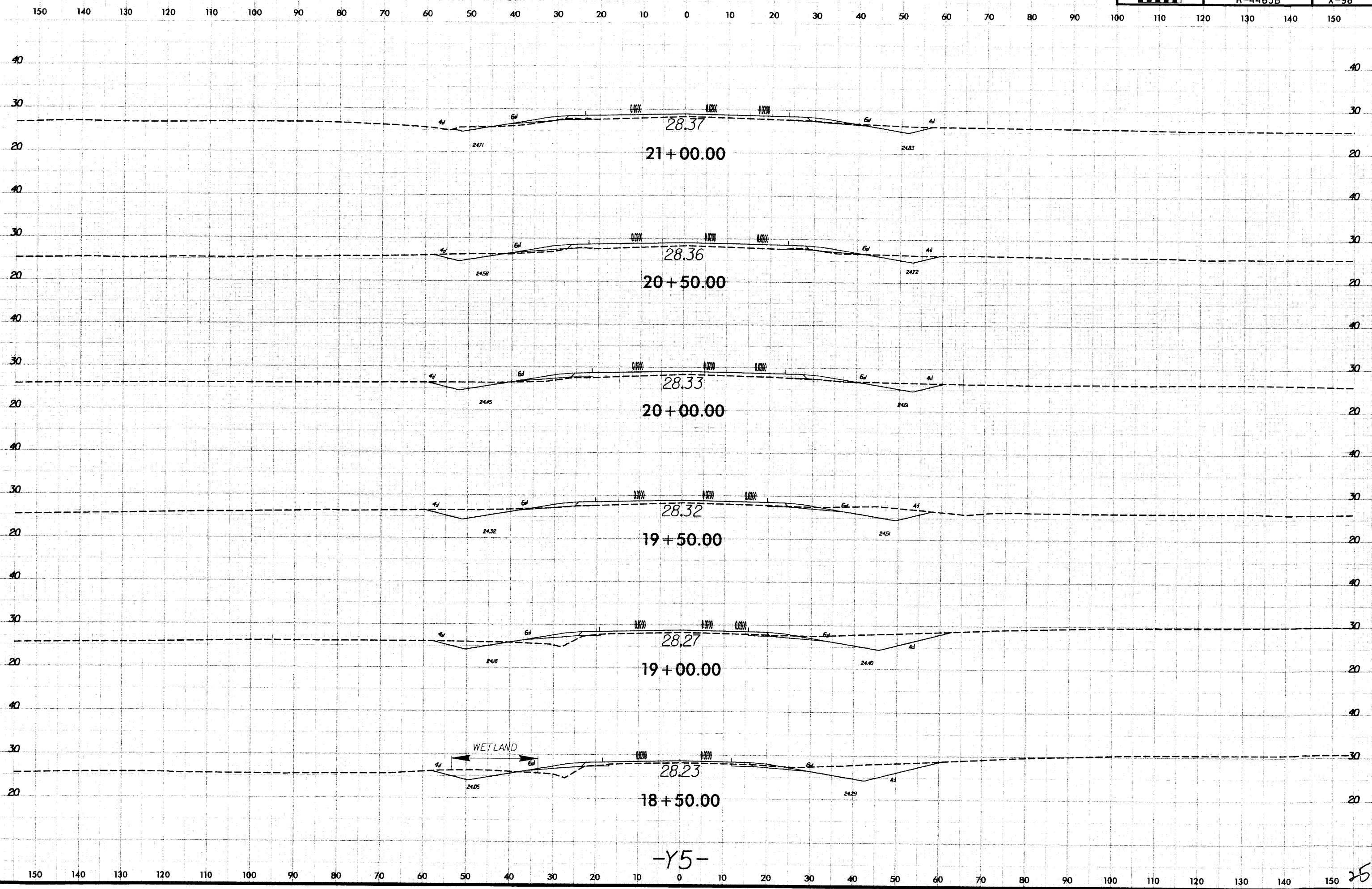
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24

8/23/95

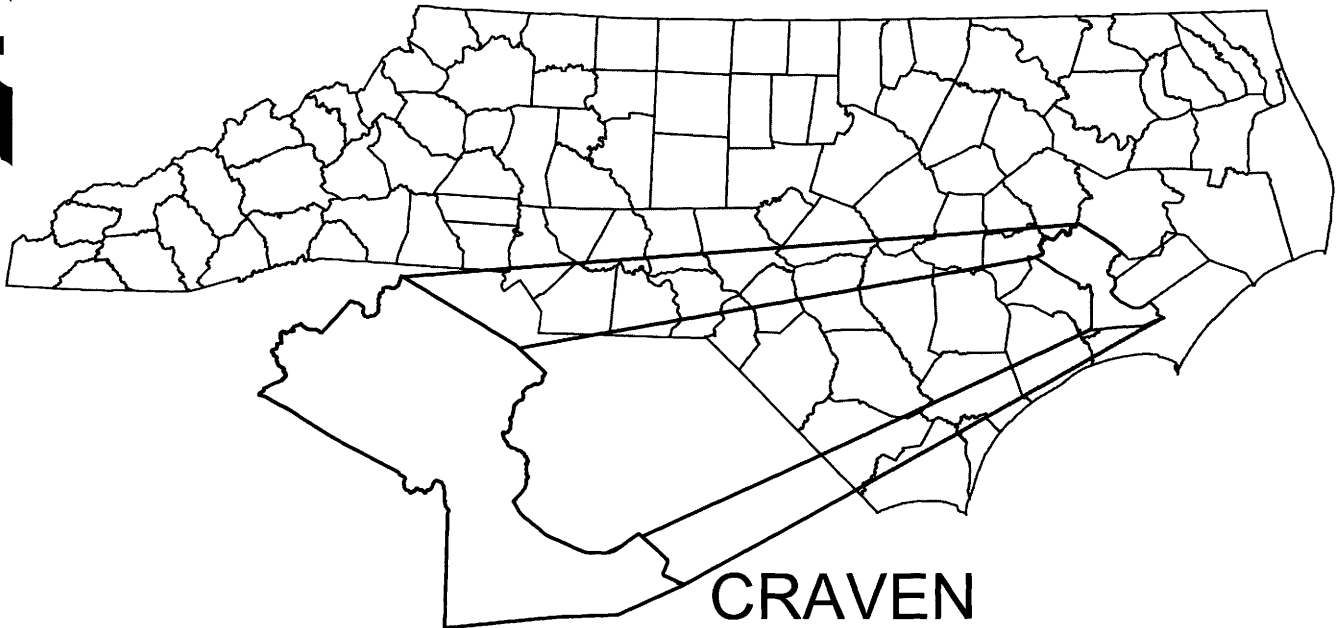


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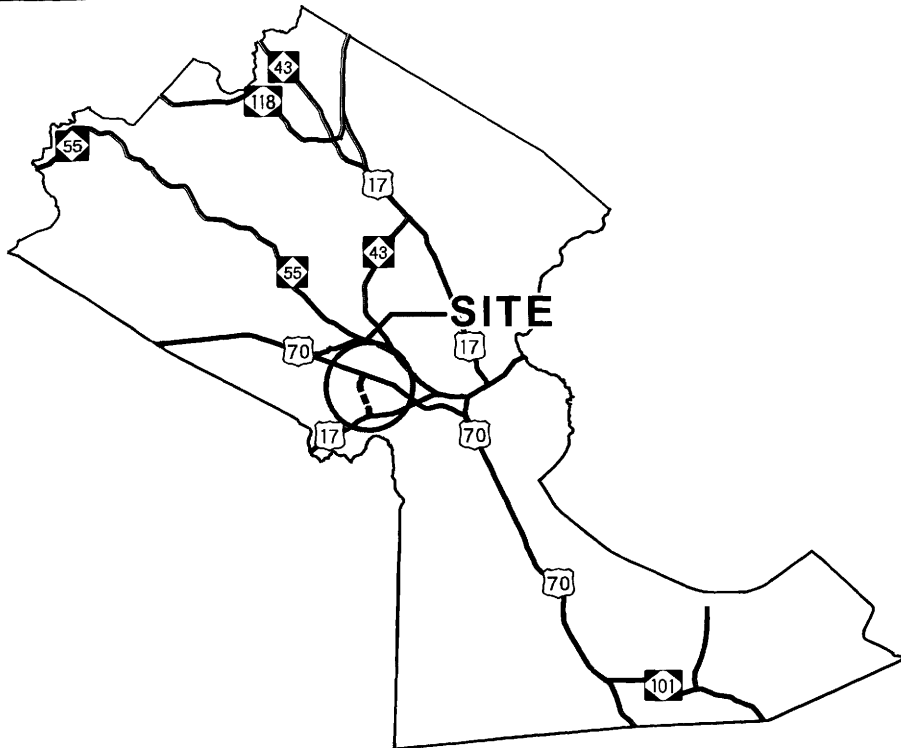
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25

# NORTH CAROLINA



**CRAVEN**



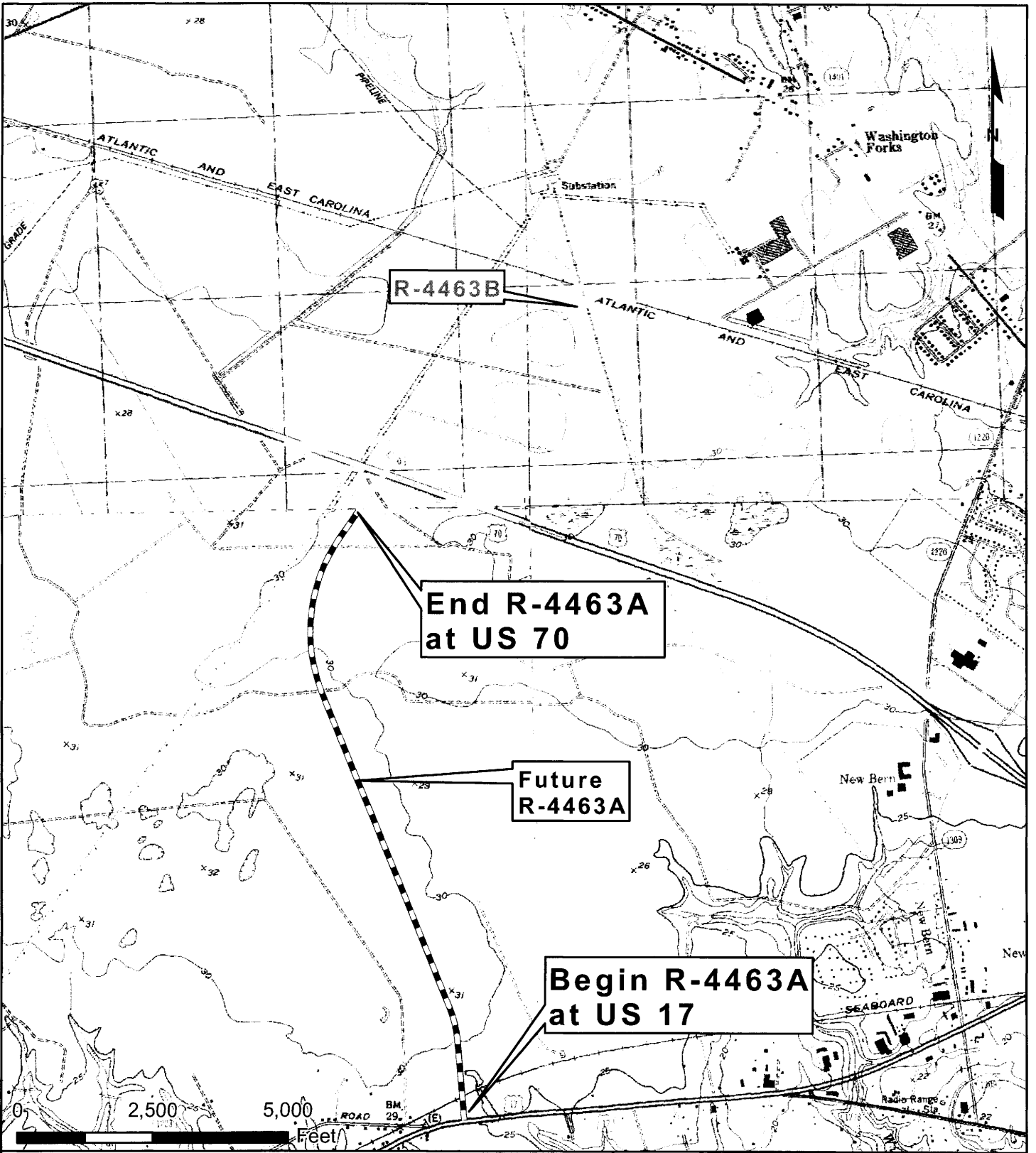
## VICINITY MAPS

**NCDOT**

**DIVISION OF HIGHWAYS  
CRAVEN COUNTY  
PROJECT: R-4463A  
NC 43 CONNECTOR**

03/26/07





1 inch equals 2,500 feet

# LOCATION

**NCDOT**

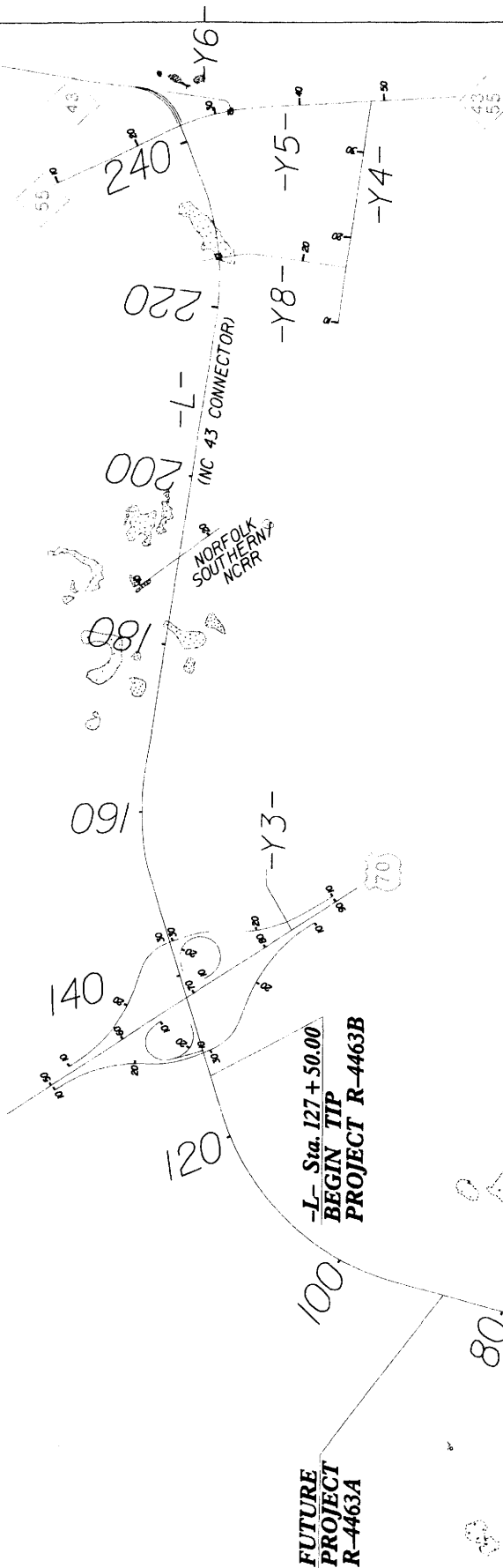
**DIVISION OF HIGHWAYS  
 CRAVEN COUNTY  
 PROJECT: R-4463A  
 NC 43 CONNECTOR**

03/26/07

27

DATE PLOTTED: 03/26/07 10:58:58 AM  
 USER: J. W. GIBSON  
 PROJECT: R-4463A

END PROJECT  
-L- POTSta. 255 + 00.00



-L- Sta. 127 + 50.00  
BEGIN TIP  
PROJECT R-4463B

FUTURE  
PROJECT  
R-4463A

**SITE 2  
PRELIMINARY**  
**SITE 1  
PRELIMINARY**

# SITE MAP

N.C. DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
CRAVEN COUNTY

R-4463A

NC 43 CONNECTOR

**WETLAND PERMIT IMPACT SUMMARY**

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS						
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation In Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)		
1	-L- 17+75 to 24+25 LT (Preliminary)	Roadway	1.47	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0	0	0
2	-L- 24+20 to 26+46 LT (Preliminary)	Roadway	0.40	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0	0	0
<b>TOTALS:</b>			<b>1.87</b>			<b>0.19</b>								

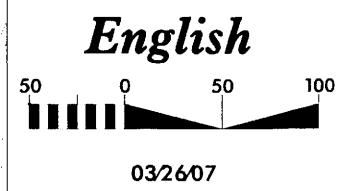
NC DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
  
 CRAVEN COUNTY  
 Preliminary R-4463A

3/26/2007

PROP. NO.	PROPERTY OWNER NAME	PROP. OWNER MAILING ADDRESS
69	WARD, W F JR & RAINES MARVIN L	(Preliminary)
		<p>N.C. DEPT. OF TRANSPORTATION  DIVISION OF HIGHWAYS</p> <p>CRAVEN COUNTY  Preliminary R-4463A</p> <p>3/26/2007</p>

R:\Z-MISC\HYDRO\WETPROP R-4463A.XLS

PROJECT REFERENCE NO. R-4463A	SHEET NO. 2
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR A/W ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	



**SITE 1  
PRELIMINARY  
PERMIT**

WAPLE, W. F. JR. & DANIEL MARVIN, L.P.

(69)

15

20

50

-L- N 5°02'49.5" W

POI STA. 26+10.0  
 POI STA. 26+17.414  
 POI STA. 26+33.34

MATCHLINE -L- STA. 22 + 50 SEE SHEET 3

- DENOTES FILL IN WETLAND
- DENOTES MECHANIZED CLEARING

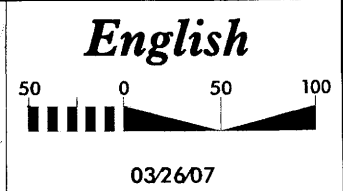
REVISIONS

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 W.F. J. Waple

3/7/01

**E**

PROJECT REFERENCE NO. R-4463A	SHEET NO. 2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR A/W ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	



**SITE 1  
PRELIMINARY  
PERMIT**

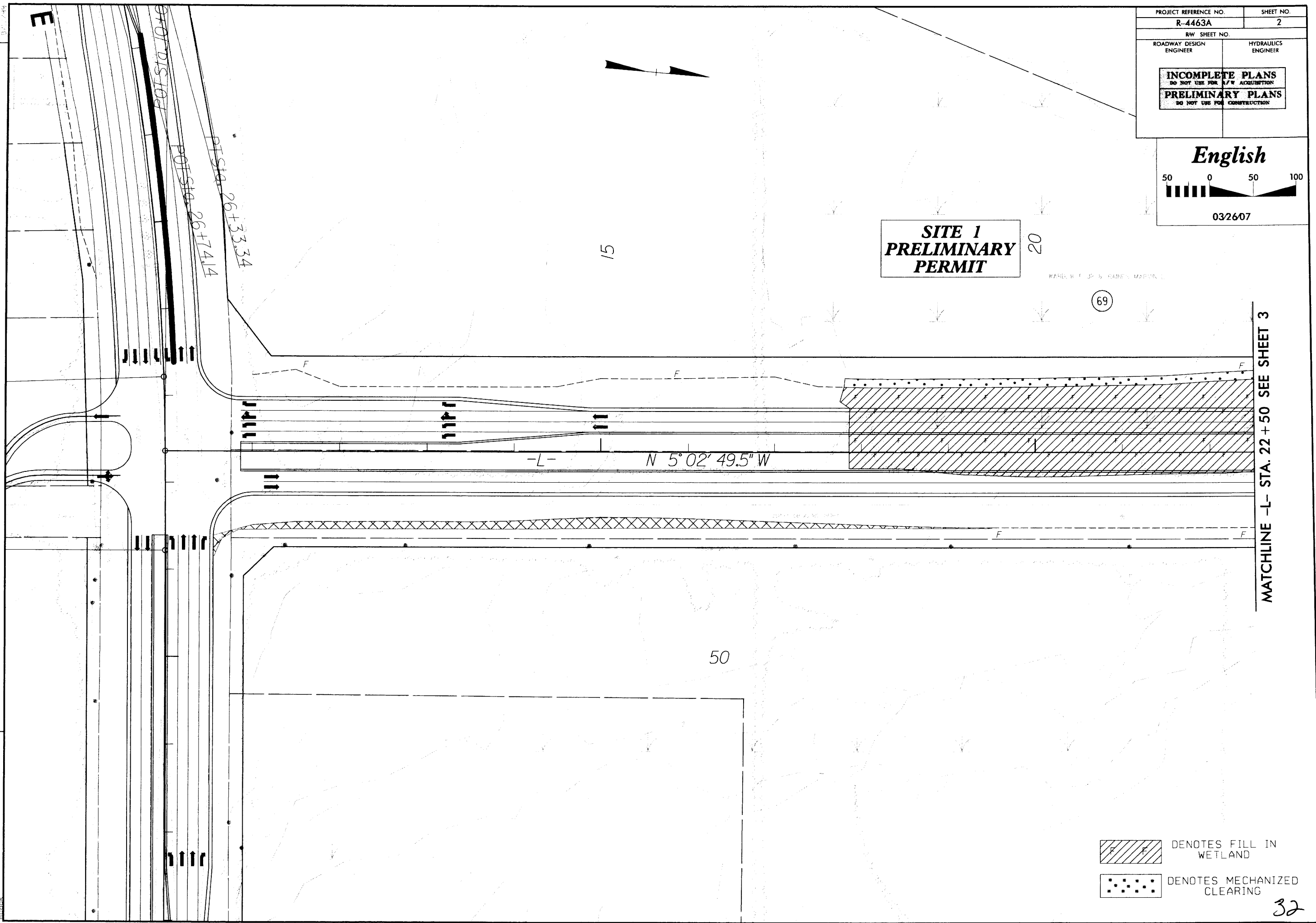
WARRINGTON & BARNES MAPS, L.P.

69

MATCHLINE -L- STA. 22 + 50 SEE SHEET 3

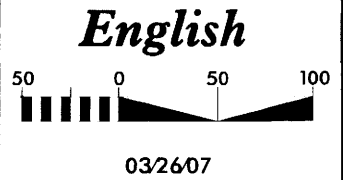
REVISIONS

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- DENOTES FILL IN WETLAND
- DENOTES MECHANIZED CLEARING

PROJECT REFERENCE NO. R-4463B	SHEET NO. 3
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR E/W ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	



35



**SITE 1  
PRELIMINARY  
PERMIT**

**SITE 2  
PRELIMINARY  
PERMIT**

MATCHLINE -L- STA. 22+50 SEE SHEET 2

MATCHLINE -L- STA. 36+00 SEE SHEET 4

WARD, W F JR & RAINES, MARVIN L

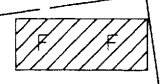
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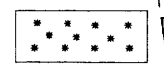
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MYRTLE GROVE RD 30' BST

BROOKSHIRE LN 30' BST



DENOTES FILL IN WETLAND



DENOTES MECHANIZED CLEARING

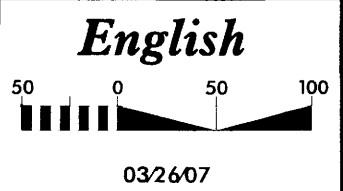
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REVISIONS

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03/26/07

PROJECT REFERENCE NO. <b>R-4463B</b>	SHEET NO. <b>3</b>
RAW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR R/W ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	



35

**SITE 1  
PRELIMINARY  
PERMIT**

**SITE 2  
PRELIMINARY  
PERMIT**

MATCHLINE -L- STA. 22+50 SEE SHEET 2

MATCHLINE -L- STA. 36+00 SEE SHEET 4

ISSta. 23+39.43

SCSta. 26+19.43

CSSta. 29+16.17

SFSta. 31+96.17

25

30

(69)

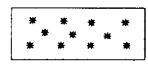
MAPD. W. F. JR. & RAINEE MARVIN

BROOKSHIRE LN 30' BST

MYRTLE GROVE RD 30' BST



DENOTES FILL IN WETLAND



DENOTES MECHANIZED CLEARING

34

REVISIONS

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