

**PROJECT SPECIAL PROVISION**

(10-18-95)

Z-1

**PERMITS**

The Contractor's attention is directed to the following permits, which have been issued to the Department of Transportation by the authority granting the permit.

<b><u>PERMIT</u></b>	<b><u>AUTHORITY GRANTING THE PERMIT</u></b>
Dredge and Fill and/or Work in Navigable Waters (404)	U. S. Army Corps of Engineers
Water Quality (401)	Division of Environmental Management, DENR State of North Carolina

The Contractor shall comply with all applicable permit conditions during construction of this project. Those conditions marked by \* are the responsibility of the department and the Contractor has no responsibility in accomplishing those conditions.

Agents of the permitting authority will periodically inspect the project for adherence to the permits.

The Contractor's attention is also directed to Articles 107-10 and 107-13 of the *2012 Standard Specifications* and the following:

Should the Contractor propose to utilize construction methods (such as temporary structures or fill in waters and/or wetlands for haul roads, work platforms, cofferdams, etc.) not specifically identified in the permit (individual, general, or nationwide) authorizing the project it shall be the Contractor's responsibility to coordinate with the Engineer to determine what, if any, additional permit action is required. The Contractor shall also be responsible for initiating the request for the authorization of such construction method by the permitting agency. The request shall be submitted through the Engineer. The Contractor shall not utilize the construction method until it is approved by the permitting agency. The request normally takes approximately 60 days to process; however, no extensions of time or additional compensation will be granted for delays resulting from the Contractor's request for approval of construction methods not specifically identified in the permit.

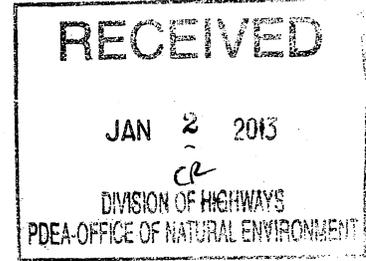
**Where construction moratoriums are contained in a permit condition which restricts the Contractor's activities to certain times of the year, those moratoriums will apply only to the portions of the work taking place in the waters or wetlands provided that activities outside those areas is done in such a manner as to not affect the waters or wetlands.**



REPLY TO  
ATTENTION OF:

DEPARTMENT OF THE ARMY  
WILMINGTON DISTRICT, CORPS OF ENGINEERS  
69 DARLINGTON AVENUE  
WILMINGTON, NORTH CAROLINA 28403-1343

December 12, 2012



Regulatory Division

Action ID No. SAW-1992-03237; TIP Project No. R-2303 Cumberland, Sampson, and Duplin Counties, North Carolina

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

Dear Dr. Thorpe:

In accordance with your complete written request of August 1, 2012 and the ensuing administrative record, enclosed is one copy of a Department of the Army permit to directly discharge fill material into waters and wetlands adjacent to various Creeks, and their tributaries in order to construct Section A of TIP# R-2303 (Hwy 24), Cumberland County, North Carolina. Section A improvements begins 2.8 miles east of I-95 (west of SR 1006) and ends at SR 1853 (John Nunnery Road) and totals 6.8 miles.

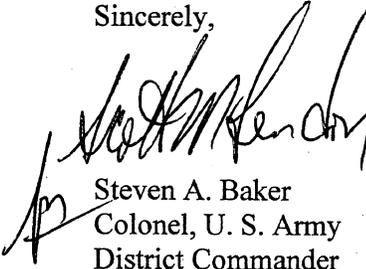
Any deviation in the authorized work will likely require modification of this permit. If a change in the authorized work is necessary, you should promptly submit revised plans to the Corps showing the proposed changes. You may not undertake the proposed changes until the Corps notifies you that your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

- a. You must complete construction before December 31, 2017.
- b. You must notify this office in advance as to when you intend to commence and complete work.
- c. 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 should address all questions regarding this authorization to Mr. Brad Shaver in the Wilmington Regulatory Field Office, telephone number (910) 251-4611.

Sincerely,



Steven A. Baker  
Colonel, U. S. Army  
District Commander

Enclosures

Copies Furnished (with enclosures):

Chief, Source Data Unit  
NOAA/National Ocean Service  
1315 East-West Highway, Room 3716  
Silver Spring, Maryland 20910-3282

Copies Furnished (with Special Conditions and plans):

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

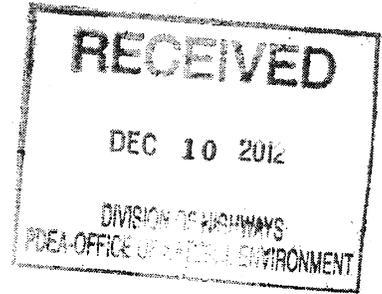
Mr. Ron Sechler  
National Marine Fisheries Service  
Pivers Island  
Beaufort, North Carolina 28516

Ms. Jennifer Derby, Chief  
Wetlands Protection Section – Region IV  
Water Management Division  
U.S. Environmental Protection Agency  
61 Forsyth Street, SW  
Atlanta, Georgia 30303-8931

Mr. Jeffrey Garnett  
Wetlands and Marine Regulatory Section  
Water Protection Division – Region IV  
U.S. Environmental Protection Agency  
61 Forsyth Street, SW  
Atlanta, Georgia 30303-8931

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

Mr. Pace Wilber  
National Marine Fisheries Service  
2191 Fort Johnson Road  
Charleston, South Carolina 29412-9110



## DEPARTMENT OF THE ARMY PERMIT

Permittee: North Carolina Department of Transportation (NCDOT)

Permit No.: SAW-1992-03237

R-2303 A-F

Issuing Office: CESA-W-RG-L

**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:** Widening, new location segments, and other improvements to the existing NC 24 roadway from 2.8 miles east of I-95 to I-40 to create a four-lane divided facility.

**Project Location:** 2.8 miles eastward of Interstate 95 (I-95) in Cumberland County and progresses with both on location improvements and bypass improvements eastward through Sampson County until Interstate 40 (I-40) in Duplin County. The project can be generally located at Latitude 35.0024 N and Longitude -78.6549 W. The project area crosses South River, Big Swamp, Little Coharie Creek, Bearskin Swamp, Great Coharie Creek, Six Runs Creek, and their tributaries.

### General Conditions:

1. The time limit for completing the work authorized ends on December 31, 2017. 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).
- 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.



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.

\_\_\_\_\_  
(TRANSFEEE)

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

\*U.S. GOVERNMENT PRINTING OFFICE: 1986 - 717-425

**SPECIAL CONDITIONS (Action ID SAW 1992-03237)**

In accordance with 33 U.S.C. 1341(d), all conditions of the North Carolina Division of Water Quality 401 Water Quality Certification #3942 is incorporated as part of the Department of the Army permit.

**1. Phased Permit**

This permit only authorizes work on Section A of TIP R-2303. Construction on Sections B-F of TIP R-2303 shall not commence until final design has been completed for those sections, the permittee has minimized impacts to waters and wetlands to the maximum extent practicable, any modifications to the plans, and a compensatory mitigation plan, have been approved by the US Army Corps of Engineers (the Corps).

**2. Plans**

A. 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, Wilmington Regulatory Field Office prior to any active construction in waters or wetlands.

B. 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. A copy of this permit, including all conditions, shall be available at the project site during construction and maintenance of this project.

**3. Pre Construction Meeting**

The permittee shall schedule and attend a preconstruction meeting between its representatives, the contractors representatives, and the Corps of Engineers, Wilmington 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 the terms and conditions contained with this Department of Army Permit. The permittee shall provide the USACE, Wilmington Field Office, NCDOT Project Manager, with a copy of the final permit 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 frame when the USACE, NCDCM, and NCDWQ Project Managers can attend. The permittee shall invite the Corps, NCDCM, 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.

4. Culverts

A. Unless otherwise requested in the applicant's application and depicted on the approved work plans, culverts greater than 48 inches in diameter will be buried at least one foot below the bed of the stream. Culverts 48 inches in diameter and less shall be buried or placed on the stream bed as practicable and appropriate to maintain aquatic passage, and every effort shall be made to maintain existing channel slope. The bottom of the culvert must be placed at a depth below the natural stream bottom to provide for passage during drought or low flow conditions. Destabilizing the channel and head cutting upstream should be considered in the placement of the culvert. The excavation required, typically noted as temporary stream impact, should be restored to its original elevation at the completion of the culvert installation.

B. Measures will be included in the construction/installation that will promote the safe passage of fish and other aquatic organisms. The dimension, pattern, and profile of the stream above and below a pipe or culvert should not be modified by widening the stream channel or by reducing the depth of the stream in connection with the construction activity. The width, height, and gradient of a proposed opening should be such as to pass the average historical low flow and spring flow without adversely altering flow velocity. Spring flow should be determined from gauge data, if available. In the absence of such data, bankfull flow can be used as a comparable level.

C. Except as specified in the plans attached to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, in such a manner as to impair normal flows and circulation patterns within waters or wetlands or to reduce the reach of waters or wetlands. Culverts placed across wetland fills purely for the purposes of equalizing surface water do not have to be buried.

5. Sediment Erosion Control

A. During the clearing phase of the project, heavy equipment must not be operated in surface waters or stream channels. Temporary stream crossings will be used to access the opposite sides of stream channels. All temporary diversion channels and stream crossings will be constructed of non-erodible materials. Grubbing of riparian vegetation will not occur until immediately before construction begins on a given segment of stream channel.

B. No fill or excavation impacts for the purposes of sedimentation and erosion control shall occur within jurisdictional waters, including wetlands, unless the impacts are included on the plan drawings and specifically authorized by this permit. This permit does not authorize temporary placement or double handling of excavated or fill material within waters or wetlands outside the permitted area.

C. The permittee shall remove all sediment and erosion control measures placed in

wetlands or waters, and shall restore natural grades on those areas, prior to project completion.

D. 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. This shall include, but is not limited to, the immediate installation of silt fencing or similar appropriate devices around all areas subject to soil disturbance or the movement of earthen fill, and the immediate stabilization of all disturbed areas. 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.

E. The permittee shall install barrier fencing around all wetlands that are not to be disturbed to make them readily visible and prevent construction equipment from inadvertently entering or disturbing these areas.

#### 6. Temporary Fills

Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

#### 7. Borrow and Waste

A. 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 USACE 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 USACE before approving any borrow or waste sites that are within 400 feet of any streams or wetlands. The evaluation of impacts to jurisdictional resources (waters and wetlands) associated with borrow/waste sites should include any haul roads or other access points.

#### 8. Mitigation

A. The permittee, NCDOT, is the party responsible for the implementation and performance and long term management of the compensatory mitigation project.

B. The permittee shall maintain the entire mitigation site in its natural condition, as altered by the work in the mitigation plan, in perpetuity. Prohibited activities within the mitigation site specifically include, but are not limited to: Filling; grading; excavating; earth movement of any kind; construction of roads, walkways, buildings, signs, or any other structure; any activity that may alter the drainage patterns on the property; the destruction, cutting, removal, mowing, or other alteration of vegetation on the property; disposal or storage of any garbage, trash, debris or other waste material; graze or water animals, or use for any agricultural or horticultural purpose; or any other activity which will result in the property being adversely impacted or destroyed, except as specifically authorized by this permit.

C. The permittee shall not sell or otherwise convey any interest in the mitigation property used to satisfy the mitigation requirements for this permit to any third party, without written approval from the Wilmington District Corps of Engineers.

D. The permittee shall contact the Corps of Engineers, Wilmington Regulatory Field Office NCDOT Regulatory Project Manager for the project, to provide that individual with the opportunity to attend the annual mitigation monitoring efforts.

E. In order to compensate for impacts associated with this permit, mitigation shall be provided in accordance with the provisions outlined on the most recent version of the attached Compensatory Mitigation Responsibility Transfer Form. The requirements of this form, including any special conditions listed on this form, are hereby incorporated as special conditions of this permit authorization.

\*\* Note, breakdown of impacts to required mitigation for Section A:

- 2.46 acres of riparian impacts will be mitigated by debiting Privateer Farms mitigation site at 3:1, resulting in a 7.38 acre debit
- 5.22 acres of non-riparian impacts will be mitigated through EEP at 2:1, resulting in a 10.44 acre debit
- 572 linear feet of stream impact minus 41 linear feet of stream bank stabilization which will not require compensatory mitigation leaves 531 linear feet subject to mitigation. 294 linear feet of stream relocation (Site #8) will serve as on-site mitigation with the remaining balance of 237 linear feet of impact mitigated at 2:1 from EEP, resulting in a 474 linear feet debit.

F. Prior to the introduction of stream flow, the restored channel will be allowed to stabilize for one growing season or until such time as the permittee can demonstrate to the Corps satisfaction that the channel has adequately stabilized.

G. The NCDOT should continue to pursue and investigate on-site mitigation opportunities as plans are finalized for Sections E and F of TIP R-2303.

## 9. Cultural Resources

A. NCDOT shall abide by all stipulations identified in the Memorandum of Agreement between the Federal Highway Administration and the North Carolina State Historic Preservation

Officer, concurred by NCDOT and executed August 27, 2010, **copy attached**.

B. NCDOT shall comply with its commitments regarding the following historic property: the Maxwell House (CD 0133). Specifically, NCDOT shall implement the landscaping plan approved by the North Carolina State Historic Preservation Officer, reference the July 27, 2012 NCDOT correspondence to the Deputy State Historic Preservation Officer, **copy attached**.

#### 10. Enforcement

A. The permittee, upon receipt of a notice of revocation of this permit or upon its expiration before completion of the work will, without expense to the United States and in such time and manner as the Secretary of the Army or his authorized representative may direct, restore the water or wetland to its pre-project condition.

B. Violations of these conditions or violations of Section 404 of the Clean Water Act must be reported in writing to the Wilmington District U.S. Army Corps of Engineers within 24 hours of the permittee's discovery of the violation.

C. If the permittee discovers any previously unknown historic or archaeological sites while accomplishing the authorized work, he shall immediately stop work and notify the Wilmington District Commander who will initiate the required State/Federal coordination.

#### 11. Jurisdiction Note

The project has been field reviewed but only Section A to date has been processed through as a final Jurisdictional Determination. Section A appeals information was forwarded to property owners whose land contained waters of the U.S. within the approved corridor. The Notification of Appeal letter was dated August 16, 2012 and the affected parties were given 60 days to appeal any jurisdictional determinations. No appeals were received within the 60 days timeframe. Sections B-F are currently viewed as a Preliminary Jurisdictional Determination.

**U.S. ARMY CORPS OF ENGINEERS**  
**Wilmington District**  
**Compensatory Mitigation Responsibility Transfer Form**

Permittee: North Carolina Department of Transportation  
 Project Name: R-2303 Section A

Action ID: SAW-1992-03237  
 County: Cumberland

**Instructions to Permittee:** The Permittee must provide a copy of this form to the Mitigation Sponsor, either an approved Mitigation Bank or the North Carolina Ecosystem Enhancement Program (NCEEP), who will then sign the form to verify the transfer of the mitigation responsibility. Once the Sponsor has signed this form, it is the Permittee's responsibility to ensure that to the U.S. Army Corps of Engineers (USACE) Project Manager identified on page two is in receipt of a signed copy of this form before conducting authorized impacts, unless otherwise specified below. If more than one mitigation Sponsor will be used to provide the mitigation associated with the permit, or if the impacts and/or the mitigation will occur in more than one 8-digit Hydrologic Unit Code (HUC), multiple forms will be attached to the permit, and the separate forms for each Sponsor and/or HUC must be provided to the appropriate mitigation Sponsors.

**Instructions to Sponsor:** The Sponsor should verify that the mitigation requirements shown below are available and ensure that they have received payment before signing this form. By signing below, the Sponsor is accepting responsibility for the identified mitigation. Once the form is signed, the Sponsor must update the appropriate ledger and provide a copy of the signed form to the Permittee and to the USACE Bank/ILF Manager. The Sponsor must also comply with all reporting requirements established in their authorizing instrument.

**Permitted Impacts and Compensatory Mitigation Requirements:**

**Permitted Impacts Requiring Mitigation\***      8-digit HUC and Basin: 03030004, Cape Fear River Basin

Stream Impacts (linear feet)			Wetland Impacts (acres)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-riverine	Non-Riparian	Coastal
237					5.22	

\*If more than one mitigation sponsor will be used for the permit, only include impacts to be mitigated by this sponsor.

**Compensatory Mitigation Requirements:**      8-digit HUC and Basin: 03030004, Cape Fear River Basin

Stream (credits)			Wetland (credits)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-riverine	Non-Riparian	Coastal
474					10.44	

**Mitigation Site Debited:** NCEEP

(For banks, list the name of the bank to be debited, and the specific site if an umbrella bank. For NCEEP, list "NCEEP" and "Advance Credits", "Unassigned", or the name of the site name if specified in the acceptance letter from NCEEP.)

*Section to be completed by the Mitigation Bank or ILF Sponsor*

**Statement of Mitigation Liability Acceptance:** I, the undersigned, verify that I am authorized to approve mitigation transactions for the Mitigation Bank/ILF Sponsor shown below, and certify that the Sponsor agrees to accept full responsibility for providing the mitigation identified in this document (see table above), associated with the USACE Permittee and Action ID number shown. I also verify that released credits (and/or advance credits for ILF programs), as approved by the USACE, are currently available at the bank/ILF site identified below. Further, I understand that if the Sponsor fails to provide the required compensatory mitigation, the USACE Wilmington District Engineer may pursue measures against the Sponsor to ensure compliance associated with the mitigation requirements.

Mitigation Bank/ILF Sponsor Name: \_\_\_\_\_

Name of Sponsor's Authorized Representative: \_\_\_\_\_

\_\_\_\_\_  
 Signature of Sponsor's Authorized Representative

\_\_\_\_\_  
 Date of Signature

USACE Wilmington District  
Compensatory Mitigation Responsibility Transfer Form, Page 2

Conditions for Transfer of Compensatory Mitigation Credit:

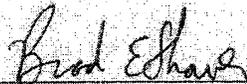
- Once this document has been signed by the Mitigation Sponsor and the USACE is in receipt of the signed form, the Permittee is no longer responsible for providing the mitigation identified in this form, though the Permittee remains responsible for any other mitigation requirements stated in the permit conditions.
- Construction within jurisdictional areas authorized by the permit identified on page one of this form can begin only after the USACE is in receipt of a copy of this document signed by the Sponsor, confirming that the Sponsor has accepted responsibility for providing the mitigation requirements listed herein. For authorized impacts conducted by the North Carolina Department of Transportation (NCDOT), construction within jurisdictional areas may proceed upon permit issuance; however, a copy of this form signed by the Sponsor must be provided to the USACE within 30 days of permit issuance. NCDOT remains fully responsible for the mitigation until the USACE has received this form, confirming that the Sponsor has accepted responsibility for providing the mitigation requirements listed herein.
- Signed copies of this document must be retained by the Permittee, Mitigation Bank/ILF Sponsor, and in the USACE administrative records for both the permit and the Bank/ILF Instrument. It is the Permittee's responsibility to provide a signed copy of this form to the USACE Project Manager at the address below.
- If changes are proposed to the type, amount or location of mitigation after this form has been signed and returned to the USACE, the Sponsor must obtain case-by-case approval from the USACE Project Manager and/or North Carolina Interagency Review Team (NCIRT). If approved, higher mitigation ratios may be applied, as per current District guidance and a new version of this form must be completed and included in the USACE administrative records for both the permit and the Bank/ILF Instrument.

Comments/Additional Conditions:

This form is not valid unless signed by the mitigation Sponsor and USACE Project Manager. For questions regarding this form or any of the conditions of the permit authorization, contact the Project Manager at the address below.

USACE Project Manager: Brad Shaver  
 USACE Field Office: Wilmington Regulatory Field Office  
 US Army Corps of Engineers  
 69 Darlington Avenue  
 Wilmington, NC 28403

Email:



USACE Project Manager Signature

November 26, 2012

Date of Signature

Current Wilmington District mitigation guidance, including information on mitigation ratios, functional assessments, and mitigation bank location and availability, and credit classifications (including stream temperature and wetland groupings) is available at <http://ribits.usace.army.mil>.

**U.S. ARMY CORPS OF ENGINEERS**  
**Wilmington District**  
**Compensatory Mitigation Responsibility Transfer Form**

Permittee: North Carolina Department of Transportation  
 Project Name: R-2303 Section A

Action ID: SAW-1992-03237  
 County: Cumberland

**Instructions to Permittee:** The Permittee must provide a copy of this form to the Mitigation Sponsor, either an approved Mitigation Bank or the North Carolina Ecosystem Enhancement Program (NCEEP), who will then sign the form to verify the transfer of the mitigation responsibility. Once the Sponsor has signed this form, it is the Permittee's responsibility to ensure that to the U.S. Army Corps of Engineers (USACE) Project Manager identified on page two is in receipt of a signed copy of this form before conducting authorized impacts, unless otherwise specified below. If more than one mitigation Sponsor will be used to provide the mitigation associated with the permit, or if the impacts and/or the mitigation will occur in more than one 8-digit Hydrologic Unit Code (HUC), multiple forms will be attached to the permit, and the separate forms for each Sponsor and/or HUC must be provided to the appropriate mitigation Sponsors.

**Instructions to Sponsor:** The Sponsor should verify that the mitigation requirements shown below are available and ensure that they have received payment before signing this form. By signing below, the Sponsor is accepting responsibility for the identified mitigation. Once the form is signed, the Sponsor must update the appropriate ledger and provide a copy of the signed form to the Permittee and to the USACE Bank/ILF Manager. The Sponsor must also comply with all reporting requirements established in their authorizing instrument.

**Permitted Impacts and Compensatory Mitigation Requirements:**

**Permitted Impacts Requiring Mitigation\***      8-digit HUC and Basin: 03030004, Cape Fear River Basin

Stream Impacts (linear feet)			Wetland Impacts (acres)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-riverine	Non-Riparian	Coastal
			2.46			

\*If more than one mitigation sponsor will be used for the permit, only include impacts to be mitigated by this sponsor.

**Compensatory Mitigation Requirements:**      8-digit HUC and Basin: 03030005, Cape Fear River Basin

Stream (credits)			Wetland (credits)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-riverine	Non-Riparian	Coastal
			7.38			

**Mitigation Site Debited:** NCDOT UMBI Site, Privateer Farm

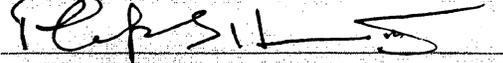
(For banks, list the name of the bank to be debited, and the specific site if an umbrella bank. For NCEEP, list "NCEEP" and "Advance Credits", "Unassigned", or the name of the site name if specified in the acceptance letter from NCEEP.)

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Mitigation Bank/ILF Sponsor Name: PRIVATEER FARM / NCDOT

Name of Sponsor's Authorized Representative: PHILIP S. HARRIS III

      12/13/2012  
 Signature of Sponsor's Authorized Representative      Date of Signature

USACE Wilmington District  
Compensatory Mitigation Responsibility Transfer Form, Page 2

Conditions for Transfer of Compensatory Mitigation Credit:

- Once this document has been signed by the Mitigation Sponsor and the USACE is in receipt of the signed form, the Permittee is no longer responsible for providing the mitigation identified in this form, though the Permittee remains responsible for any other mitigation requirements stated in the permit conditions.
- Construction within jurisdictional areas authorized by the permit identified on page one of this form can begin only after the USACE is in receipt of a copy of this document signed by the Sponsor, confirming that the Sponsor has accepted responsibility for providing the mitigation requirements listed herein. For authorized impacts conducted by the North Carolina Department of Transportation (NCDOT), construction within jurisdictional areas may proceed upon permit issuance; however, a copy of this form signed by the Sponsor must be provided to the USACE within 30 days of permit issuance. NCDOT remains fully responsible for the mitigation until the USACE has received this form, confirming that the Sponsor has accepted responsibility for providing the mitigation requirements listed herein.
- Signed copies of this document must be retained by the Permittee, Mitigation Bank/ILF Sponsor, and in the USACE administrative records for both the permit and the Bank/ILF Instrument. It is the Permittee's responsibility to provide a signed copy of this form to the USACE Project Manager at the address below.
- If changes are proposed to the type, amount or location of mitigation after this form has been signed and returned to the USACE, the Sponsor must obtain case-by-case approval from the USACE Project Manager and/or North Carolina Interagency Review Team (NCIRT). If approved, higher mitigation ratios may be applied, as per current District guidance and a new version of this form must be completed and included in the USACE administrative records for both the permit and the Bank/ILF Instrument.

Comments/Additional Conditions:

This form is not valid unless signed by the mitigation Sponsor and USACE Project Manager. For questions regarding this form or any of the conditions of the permit authorization, contact the Project Manager at the address below.

USACE Project Manager: Brad Shaver  
 USACE Field Office: Wilmington Regulatory Field Office  
 US Army Corps of Engineers  
 69 Darlington Avenue  
 Wilmington, NC 28403

Email:



USACE Project Manager Signature

November 26, 2012

Date of Signature

Current Wilmington District mitigation guidance, including information on mitigation ratios, functional assessments, and mitigation bank location and availability, and credit classifications (including stream temperature and wetland groupings) is available at <http://ribits.usace.army.mil>.



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE  
GOVERNOR

EUGENE A. CONTI, JR.  
SECRETARY

July 27, 2012

Ramona Bartos  
Deputy State Historic Preservation Officer  
North Carolina Department of Cultural Resources  
4617 Mail Service Center  
Raleigh, North Carolina 27699-4617

Dear Ms. Bartos:

RE: R-2303A, Cumberland and Sampson Counties, Widen NC 24/27 at the Maxwell House (CD 0133), WBS# 34416, Federal Aid# STPNHF-F-8-2(17)

The North Carolina Department of Transportation (NCDOT) is concluding planning studies for the above-referenced project. Please find attached one (1) set of the landscape design plans for the Maxwell House (National Register-listed property). These plans were developed to meet the conditions of the finding of no adverse effect as discussed during the effects assessment meeting in January 1999. Please review the plans and provide any comments to me by August 31, 2012.

Thank you for your consideration and cooperation. If you have any questions concerning the accompanying information please feel free to contact me at [mfurr@ncdot.gov](mailto:mfurr@ncdot.gov) or 919-707-6068.

Sincerely,

A handwritten signature in black ink that reads "Mary Pope Furr". The signature is fluid and cursive.

Mary Pope Furr  
Historic Architecture Section

Attachment

Cc: Mark Pierce, P.E., Project Engineer, PDEA

MAILING ADDRESS:  
NC DEPARTMENT OF TRANSPORTATION  
HUMAN ENVIRONMENT SECTION  
1598 MAIL SERVICE CENTER  
RALEIGH NC, 27699-1598

TELEPHONE: 919-707-6000  
FAX: 919-212-5785

WEBSITE: [WWW.NCDOT.ORG](http://WWW.NCDOT.ORG)

LOCATION:  
PROJECT DEVELOPMENT &  
ENVIRONMENTAL ANALYSIS BRANCH -  
CENTURY CENTER RIDGE BUILDING B  
1020 BIRCH RIDGE DRIVE  
RALEIGH NC, 27610

Federal Aid # STPNHF-F-8-2(17) TP # R-2303 County: Cumberland, Sampson, Duplin Cos.

CONCURRENCE FORM  
FOR  
ASSESSMENT OF EFFECTS

Project Description: NC 24 from 2.8 miles East of I-95 to I-40 - Upgrade Existing Alternative w. m shallow Bypasses

1/21/1999, representatives of the

- North Carolina Department of Transportation (NCDOT)
- Federal Highway Administration (FHWA)
- North Carolina State Historic Preservation Office (SHPO)
- Other \_\_\_\_\_

I have reviewed the subject project and agreed

there are no effects on the National Register-listed property within the project area of potential effect and listed on the reverse.

there are no effects on the National Register-eligible properties located within the project's area of potential effect and listed on the reverse.

there is an effect on the National Register-listed property/properties within the project's area of potential effect. The property/properties and the effect(s) are listed on the reverse.

there is an effect on the National Register-eligible property/properties within the project's area of potential effect. The property/properties and effect(s) are listed on the reverse.

Signed:

Mary Pope 1/21/1999  
representative, NCDOT, Historic Architectural Resources Section Date

Wendy J. Trub 1/19/99  
FHWA, for the Division Administrator, or other Federal Agency Date

Debra B. Bevin 1/22/99  
representative, SHPO Date

Wendy J. Trub 2/19/99  
State Historic Preservation Officer Date

Federal Aid # STPNHF-F-8-2(17) TIP # R-2303 County Cumberland, Sampson, Duplin

Properties within area of potential effect for which there is no effect. Indicate if property is National Register-listed (NR) or determined eligible (DE).

Autyville School (DE)  
George Washington Bullard House (DE)

Properties within area of potential effect for which there is an effect. Indicate property status (NR or DE) and describe effect.

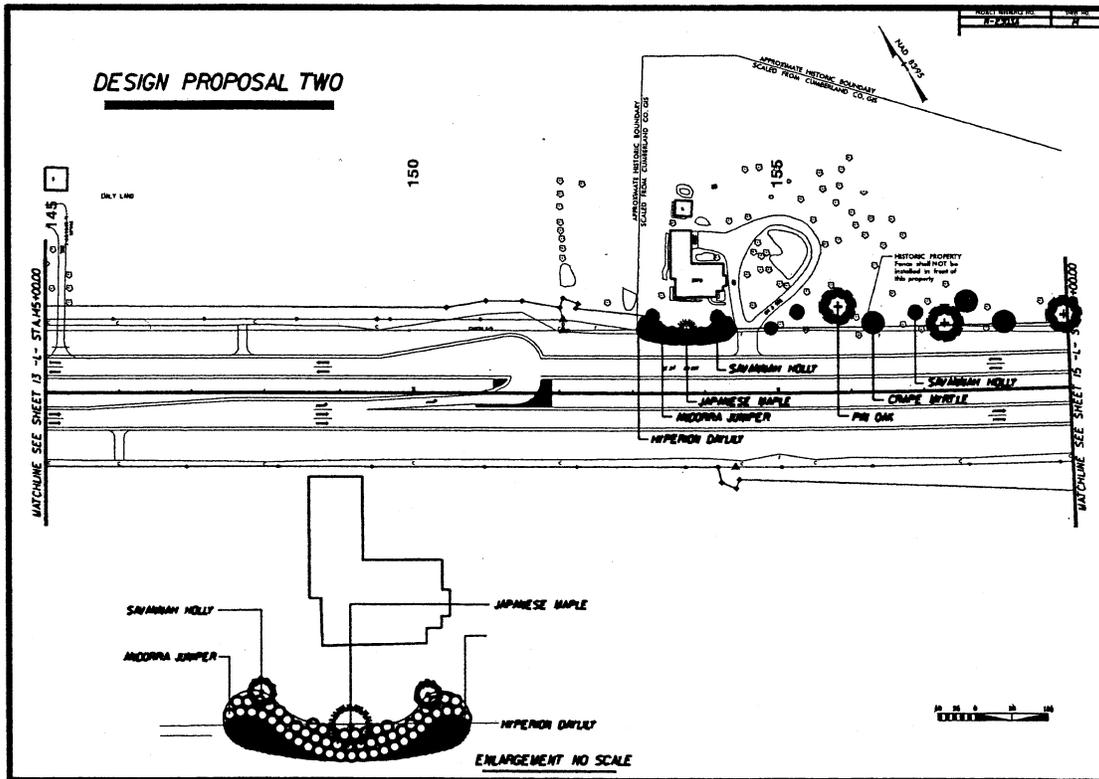
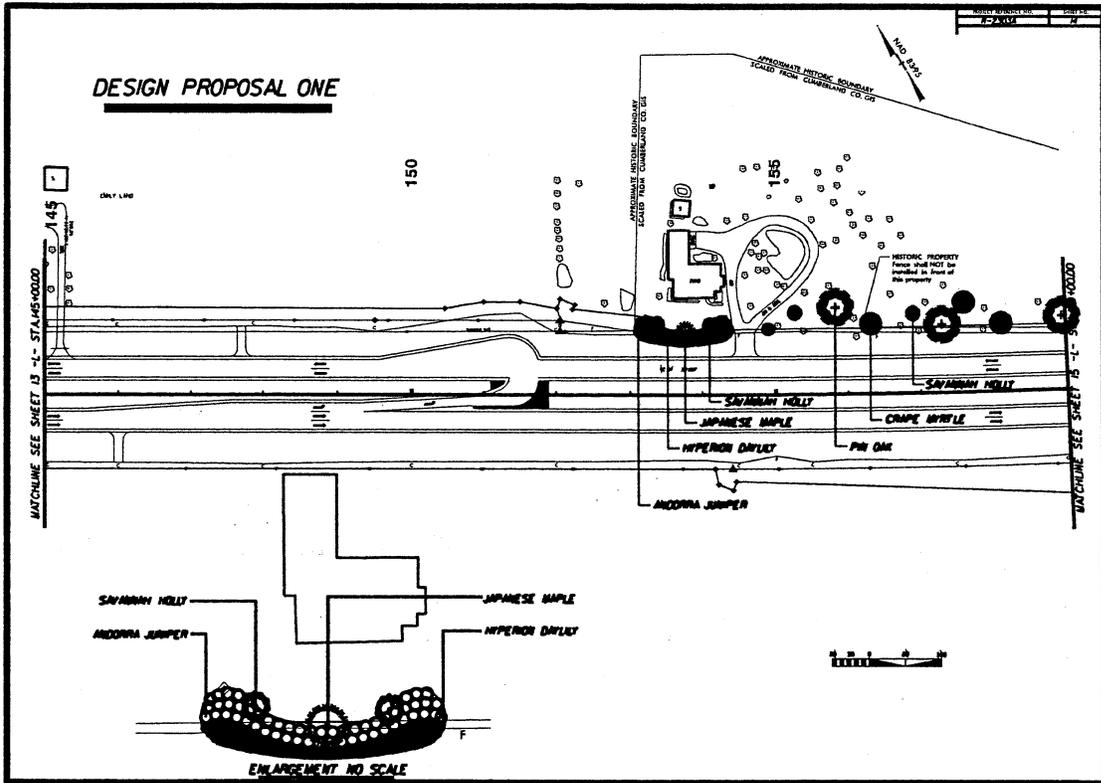
Maxwell House (NR) - conditional no adverse effect  
JT Kennedy House (DE) - conditional no adverse effect

Reason(s) why effect is not adverse (if applicable).

Maxwell House - NCDOT plans to widen away from house  
3 will develop a landscaping plan <sup>along new road</sup> to be reviewed by SHPO.

J.T. Kennedy House - NCDOT will develop a landscaping plan to be reviewed by SHPO <sub>along new road</sub>

Initialed: NCDOT MPA FHWA UAT SHPO WVS



Memorandum of Agreement  
Between the Federal Highway Administration  
and  
State Historic Preservation Officer  
for  
NC 24 Widening from East of Fayetteville to Warsaw,  
Cumberland, Sampson and Duplin counties, North Carolina  
TIP Project R-2303  
Federal Aid Project F-8-2(17)

Whereas, the Federal Highway Administration (FHWA) has determined that the widening of NC 24 from east of Fayetteville to Warsaw in Cumberland, Sampson and Duplin Counties (the Undertaking) will have an adverse effect upon archaeological sites 31SP331 and 31DP226/226\*\*, properties determined eligible for listing on the National Register of Historic Places; and

Whereas, FHWA has consulted with the North Carolina State Historic Preservation Office (HPO) pursuant to 36CFR Part 800, regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470f); and

Whereas, in accordance with 36 CFR Part 800, FHWA acknowledges and accepts the advice and conditions outlined in the Advisory Council on Historic Preservation's (Council) "Recommended Approach for Consultation on the Recovery of Significant Information from Archaeological Sites," published in the Federal Register (DF Doc. 99-12055) on May 17, 1999; and

Whereas, the North Carolina Department of Transportation (NCDOT) has participated in the consultation and been invited to concur in the Memorandum of Agreement (MOA) as a consulting party in the development of this MOA; and

Whereas, the signatories and concurring parties agree that the recovery of significant information from the archaeological sites listed above may be done in accordance with the published guidance; and

Whereas, the signatories and concurring parties agree that it is in the public interest to expend funds for the recovery of significant information from these archaeological sites to mitigate the adverse effects of the project;

Now, therefore, the FHWA and HPO agree that the undertaking shall be implemented in accordance with the following stipulations in order to take in to account the effect of the undertaking on the historic properties.

**\* Stipulations:**

FHwA will ensure that the following measures are carried out:

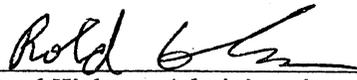
- I. The NCDOT will develop separate Data Recovery Plans (DRP) for sites 31SP331 and 31DP226/226\*\*, the sites that will be affected by the subject Undertaking, in consultation with the HPO.
- II. The NCDOT will ensure that the DRP will be implemented after Right of Way is acquired or once Right of Entry is secured from the property owners and prior to construction activities within the site locations as shown in the DRP.
- III. Upon completion of each Data Recovery effort, the NCDOT will prepare and forward a Management Summary to HPO detailing the results of the Data Recovery field investigations. The Management Summaries will contain sufficient information to demonstrate that the field investigation portions of the DRP have been implemented.
- IV. Upon receipt of each Management Summary HPO will respond within ten (10) days to the recommendations contained within the document.
- V. Upon acceptance of the recommendations contained in each Management Summary HPO will issue the NCDOT documentation that the Data Recovery field investigations have been completed.
- VI. The analyses and reports detailing sites 31SP331 and 31SP226/226\*\* will be completed by the NCDOT or their consultants within twelve (12) months after completion of the fieldwork.
- VII. If historic properties are discovered or unanticipated effects on historic properties are found after FHwA approves the Undertaking and construction has commenced, FHwA will consult with HPO and the property owner(s) in accordance with 36 CFR 800.13(b). Inadvertent or accidental discovery of human remains will be handled in accordance with North Carolina General Statutes 65 and 70.
- VIII. Any Signatory may terminate this MOA by providing notice to the other party(ies) provided that the party(ies) will consult during the period prior to termination to seek agreement on amendments or other actions that would avoid termination. Termination of this MOA will require compliance with 36 CFR 800. This MOA may be terminated by the execution of a subsequent MOA that explicitly terminates or supersedes its terms.

**Other Terms and Conditions**

This agreement shall be null and void if its terms are not carried out within five (5) years from the date of its execution, unless the signatories agree in writing to an extension for carrying out its terms.

Execution of this MOA by the FHWA and HPO, its subsequent acceptance by the Council, and implementation of its terms are evidence that the FHWA has afforded the Council an opportunity to comment on the Undertaking, and that the FHWA has taken into account the effects of the Undertaking on historic properties.

**AGREE:**

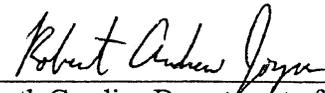
  
Federal Highway Administration

Date: 8-27-10

*Deputy*   
State Historic Preservation Officer

Date: 8-25-10

**CONCUR:**

  
North Carolina Department of Transportation

Date: 8/13/10

REPLY TO  
ATTENTION OF:DEPARTMENT OF THE ARMY  
WILMINGTON DISTRICT, CORPS OF ENGINEERS  
69 DARLINGTON AVENUE  
WILMINGTON, NORTH CAROLINA 28403-1343

March 5, 2013

Regulatory Division

Action ID No. SAW-1992-03237

R-2303B

Gregory J. Thorpe, Ph.D.  
Environmental Management Director, PDEA  
North Carolina Department of Transportation  
1598 Mail Service Center  
Raleigh, North Carolina 27699-1598

Dear Mr. Thorpe:

Reference the Department of the Army (DA) permit issued on December 12, 2012, for the discharge of fill material into waters and wetlands adjacent to various Creeks, and their tributaries in order to construct Section A of TIP# R -2303 (NC 24), Cumberland County, North Carolina. Reference is also made to your permit modification dated January 29, 2013 with revision dated February 25, 2013. Additional information was submitted on February 22 and 25, 2013. This information was submitted to request authorization to construct Section B of TIP#R-2303 starting east of Stedman in Cumberland County and ending west of Roseboro in Sampson County, a total of 6.891 miles. Specifically, the request is to impact an additional 5.76 acres of wetlands and 296 linear feet of stream channel necessary for the construction of Section B.

I have determined that the proposed project modifications described above are not contrary to the public interest and consistent with the 404 (B)(1) and therefore, the DA permit is hereby modified. The following conditions specific to Section B have been added:

**All original conditions in the December 12, 2012 permit remain valid and are enforceable with Section B authorization. Special Conditions for the permit modification are the following:**

1. This permit modification only authorizes work on Section B of TIP R-2303. Construction on Sections C-F of TIP R-2303 shall not commence until final design has been completed for those sections, the permittee has minimized impacts to waters and wetlands to the maximum extent practicable, any modifications to the plans, and a compensatory mitigation plan, have been approved by the US Army Corps of Engineers (COE). Approved permit plans for section B are attached.
2. The Permittee shall fully implement the compensatory mitigation plan (Section B only), entitled Mitigation Plan, dated February 22, 2013 for the unavoidable impacts

to 5.76 acres of wetlands. Activities prescribed by this plan shall be initiated prior to, or concurrently with, commencement of any construction activities within jurisdictional areas authorized by this permit. The permittee shall re-establish, enhance, and preserve 5.13 acres of wetlands in accordance with the plan, with the following conditions:

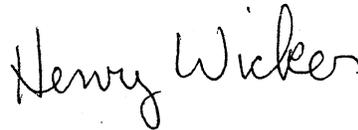
- A) Any changes or modifications to your mitigation plan shall be approved by the Corps.
  - B) All mitigation areas shall be monitored for a minimum of 5 years or until deemed successful by the Corps in accordance with the monitoring requirements included in the mitigation plan.
3. **REMEDIAL MITIGATION PLAN:** If the compensatory mitigation fails to meet the performance standards 5 years after completion of the compensatory mitigation objectives, the compensatory mitigation will be deemed unsuccessful. Within 60 days of notification by the Corps that the compensatory mitigation is unsuccessful, the Permittee shall submit to the Corps an alternate compensatory mitigation proposal to fully offset the functional loss that occurred as a result of the project. The alternate compensatory mitigation proposal may be required to include additional mitigation to compensate for the temporal loss of wetland function associated with the unsuccessful compensatory mitigation activities. The Corps reserves the right to fully evaluate, amend, and approve or reject the alternate compensatory mitigation proposal. Within 120 days of Corps approval, the Permittee will complete the alternate compensatory mitigation proposal.
4. In order to compensate for impacts associated with this permit, mitigation shall be provided in accordance with the provisions outlined on the most recent version of the attached Compensatory Mitigation Responsibility Transfer Form. The requirements of this form, including any special conditions listed on this form, are hereby incorporated as special conditions of this permit modification authorization.

**\*\* Note, breakdown of impacts to required mitigation for Section B:**

- 4.58 acres of riparian impacts will be mitigated through on-site mitigation of 5.31 acres of riparian mitigation comprised of restoration, enhancement, and preservation.
- 1.18 acres of non-riparian impacts will be mitigated through EEP at 2:1, resulting in a 2.36 acre debit.
- 296 linear feet of stream impact will be mitigated at 2:1 from EEP, resulting in a 592 linear feet debit.

This modification approval will be utilized for future compliance of the project. If you have questions, please contact Brad Shaver of the Wilmington Regulatory Field Office, at telephone (910) 251-4611.

Sincerely,



for Steven A. Baker  
Colonel, U. S. Army  
District Commander

Copies Furnished (electronic w/o attachments):

Mr. Mason Herndon, NCDWQ  
Mr. Stoney Mathis, NCDOT  
Mr. Chris Rivenbark, NCDOT  
Mr. Chris Manly, NCDOT  
Mr. Chris Militscher, USEPA  
Mr. Gary Jordan, USFWS  
Mr. Travis Wilson, NCWRC  
Ms. Beth Harmon, NCEEP  
Mr. Todd Tugwell, USACE

U.S. ARMY CORPS OF ENGINEERS

Wilmington District

**Compensatory Mitigation Responsibility Transfer Form**

Permittee: North Carolina Department of Transportation  
 Project Name: R-2303 Section B

Action ID: SAW-1992-03237  
 County: Sampson

**Instructions to Permittee:** The Permittee must provide a copy of this form to the Mitigation Sponsor, either an approved Mitigation Bank or the North Carolina Ecosystem Enhancement Program (NCEEP), who will then sign the form to verify the transfer of the mitigation responsibility. Once the Sponsor has signed this form, it is the Permittee's responsibility to ensure that to the U.S. Army Corps of Engineers (USACE) Project Manager identified on page two is in receipt of a signed copy of this form before conducting authorized impacts, unless otherwise specified below. If more than one mitigation Sponsor will be used to provide the mitigation associated with the permit, or if the impacts and/or the mitigation will occur in more than one 8-digit Hydrologic Unit Code (HUC), multiple forms will be attached to the permit, and the separate forms for each Sponsor and/or HUC must be provided to the appropriate mitigation Sponsors.

**Instructions to Sponsor:** The Sponsor should verify that the mitigation requirements shown below are available and ensure that they have received payment before signing this form. By signing below, the Sponsor is accepting responsibility for the identified mitigation. Once the form is signed, the Sponsor must update the appropriate ledger and provide a copy of the signed form to the Permittee and to the USACE Bank/ILF Manager. The Sponsor must also comply with all reporting requirements established in their authorizing instrument.

**Permitted Impacts and Compensatory Mitigation Requirements:**

**Permitted Impacts Requiring Mitigation\***

8-digit HUC and Basin: 03030006, Cape Fear River Basin

Stream Impacts (linear feet)			Wetland Impacts (acres)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-riverine	Non-Riparian	Coastal
296					1.18	

\*If more than one mitigation sponsor will be used for the permit, only include impacts to be mitigated by this sponsor.

**Compensatory Mitigation Requirements:**

8-digit HUC and Basin: 03030004, Cape Fear River Basin

Stream (credits)			Wetland (credits)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-riverine	Non-Riparian	Coastal
592					2.36	

Mitigation Site Debited: NCEEP

(For banks, list the name of the bank to be debited, and the specific site if an umbrella bank. For NCEEP, list "NCEEP" and "Advance Credits", "Unassigned", or the name of the site name if specified in the acceptance letter from NCEEP.)

**Section to be completed by the Mitigation Bank or ILF Sponsor**

**Statement of Mitigation Liability Acceptance:** I, the undersigned, verify that I am authorized to approve mitigation transactions for the Mitigation Bank/ILF Sponsor shown below, and certify that the Sponsor agrees to accept full responsibility for providing the mitigation identified in this document (see table above), associated with the USACE Permittee and Action ID number shown. I also verify that released credits (and/or advance credits for ILF programs), as approved by the USACE, are currently available at the bank/ILF site identified below. Further, I understand that if the Sponsor fails to provide the required compensatory mitigation, the USACE Wilmington District Engineer may pursue measures against the Sponsor to ensure compliance associated with the mitigation requirements.

Mitigation Bank/ILF Sponsor Name: \_\_\_\_\_

Name of Sponsor's Authorized Representative: \_\_\_\_\_

\_\_\_\_\_  
 Signature of Sponsor's Authorized Representative

\_\_\_\_\_  
 Date of Signature

USACE Wilmington District  
Compensatory Mitigation Responsibility Transfer Form, Page 2

Conditions for Transfer of Compensatory Mitigation Credit:

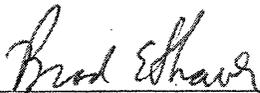
- Once this document has been signed by the Mitigation Sponsor and the USACE is in receipt of the signed form, the Permittee is no longer responsible for providing the mitigation identified in this form, though the Permittee remains responsible for any other mitigation requirements stated in the permit conditions.
- Construction within jurisdictional areas authorized by the permit identified on page one of this form can begin only after the USACE is in receipt of a copy of this document signed by the Sponsor, confirming that the Sponsor has accepted responsibility for providing the mitigation requirements listed herein. For authorized impacts conducted by the North Carolina Department of Transportation (NCDOT), construction within jurisdictional areas may proceed upon permit issuance; however, a copy of this form signed by the Sponsor must be provided to the USACE within 30 days of permit issuance. NCDOT remains fully responsible for the mitigation until the USACE has received this form, confirming that the Sponsor has accepted responsibility for providing the mitigation requirements listed herein.
- Signed copies of this document must be retained by the Permittee, Mitigation Bank/ILF Sponsor, and in the USACE administrative records for both the permit and the Bank/ILF Instrument. It is the Permittee's responsibility to provide a signed copy of this form to the USACE Project Manager at the address below.
- If changes are proposed to the type, amount or location of mitigation after this form has been signed and returned to the USACE, the Sponsor must obtain case-by-case approval from the USACE Project Manager and/or North Carolina Interagency Review Team (NCIRT). If approved, higher mitigation ratios may be applied, as per current District guidance and a new version of this form must be completed and included in the USACE administrative records for both the permit and the Bank/ILF Instrument.

Comments/Additional Conditions:

This form is not valid unless signed by the mitigation Sponsor and USACE Project Manager. For questions regarding this form or any of the conditions of the permit authorization, contact the Project Manager at the address below.

USACE Project Manager: Brad Shaver  
 USACE Field Office: Wilmington Regulatory Field Office  
 US Army Corps of Engineers  
 69 Darlington Avenue  
 Wilmington, NC 28403

Email:



USACE Project Manager Signature

March 5, 2013

Date of Signature

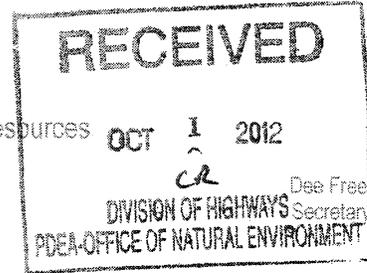
Current Wilmington District mitigation guidance, including information on mitigation ratios, functional assessments, and mitigation bank location and availability, and credit classifications (including stream temperature and wetland groupings) is available at <http://ribits.usace.army.mil>.

R-29



North Carolina Department of Environment and Natural Resources

Division of Water Quality  
Charles Wakild, P.E.  
Director



Beverly Eaves Perdue  
Governor

September 24, 2012

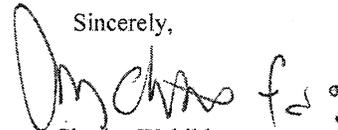
Dr. Greg Thorpe, Ph.D., Manager  
Project Development and Environmental Analysis  
North Carolina Department of Transportation  
1598 Mail Service Center  
Raleigh, North Carolina, 27699-1598

Subject: 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water with ADDITIONAL CONDITIONS for Proposed improvements to NC 24 from 2.8 miles east of I-95 to I-40 in Cumberland, Sampson and Counties, Federal Aid Project No. STPNHF-F-8-2(17), WBS No. 34416.1.1, TIP R-2303. NCDWQ Project No. 20120240

Dear Dr. Thorpe:

Attached hereto is a copy of Certification No. 3942 issued to The North Carolina Department of Transportation (NCDOT) dated September 24, 2012.

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

Sincerely,  
  
Charles Wakild  
Director

Attachments

- cc: Brad Shaver, US Army Corps of Engineers, Wilmington Field Office (electronic copy only)
- Greg Burns, PE, Division 8 Engineer
- Jim Rerko, Division 8 Environmental Officer
- Chris Militscher, Environmental Protection Agency (electronic copy only)
- Gary Jordan, US Fish and Wildlife Service (electronic copy only)
- Travis Wilson, NC Wildlife Resources Commission
- Jason Elliott, NCDOT, Roadside Environmental Unit
- Jim Stanfill, Ecosystem Enhancement Program
- Sonia Carrillo, NCDWQ Central Office
- File Copy

Transportation and Permitting Unit  
1650 Mail Service Center, Raleigh, North Carolina 27699-1617  
Location: 512 N. Salisbury St. Raleigh, North Carolina 27604  
Phone: 919-807-6300 | FAX: 919-807-6492  
Internet: [www.ncwaterquality.org](http://www.ncwaterquality.org)

One  
North Carolina  
Naturally

**401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act 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 (NCDWQ) Regulations in 15 NCAC 2H .0500. This certification authorizes the NCDOT to impact 7.68 acres of jurisdictional wetlands, 0.72 acres of waters and 599 linear feet of jurisdictional streams in Cumberland and Sampson Counties. The project shall be constructed pursuant to the application dated received August 2, 2012. **No impacts to Sections B, C, D or F are being authorized at this time.** The authorized impacts are as described below:

**Stream Impacts in the Cape Fear River Basin**

Site	Station	Permanent Fill in Intermittent Stream (linear ft)	Temporary Fill in Intermittent Stream (linear ft)	Permanent Fill in Perennial Stream (linear ft)	Temporary Fill in Perennial Stream (linear ft)	Total Stream Impact (linear ft)	Stream Impacts Requiring Mitigation (linear ft)
<b>R-2303A</b>							
8	300+06 to 305+40-L-	0	0	531	0	531**	237
8	304+40 to 304+51-L-LT	0	0	41*	27	68	41
<b>Total</b>		<b>0</b>	<b>0</b>	<b>572</b>	<b>27</b>	<b>599</b>	<b>278</b>
<b>R-2303B***</b>							
<b>Total</b>		<b>-</b>	<b>-</b>	<b>296</b>	<b>113</b>	<b>409</b>	<b>-</b>
<b>R-2303C***</b>							
<b>Total</b>		<b>-</b>	<b>-</b>	<b>2,990</b>	<b>301</b>	<b>3,291</b>	<b>-</b>
<b>R-2303D***</b>							
<b>Total</b>		<b>-</b>	<b>-</b>	<b>1,792</b>	<b>77</b>	<b>1,869</b>	<b>-</b>
<b>R-2303E***</b>							
<b>Total</b>		<b>-</b>	<b>-</b>	<b>1,336</b>	<b>155</b>	<b>1,491</b>	<b>-</b>
<b>R-2303F***</b>							
<b>Total</b>		<b>-</b>	<b>-</b>	<b>3,859</b>	<b>294</b>	<b>4,153</b>	<b>-</b>
<b>Project Total</b>							
<b>Project Total</b>		<b>-</b>	<b>-</b>	<b>10,845</b>	<b>967</b>	<b>11,812</b>	<b>-</b>

\*Bank stabilization; \*\*294 lf of stream will be relocated.

\*\*\*Sections B through F stream impacts are projected based on preliminary design and include perennial and intermittent systems.

**Total Stream Impact for Project: 11,812 linear feet (599 linear feet for Section A)**

**Wetland Impacts in the Cape Fear River Basin**

Site	Station	Wetland Type*	Fill (ac)	Fill (temporary) (ac)	Excavation (ac)	Mechanized Clearing (ac)	Hand Clearing (ac)	Total Wetland Impact (ac)
<b>R-2303A</b>								
2	73+00 to 85+00-L-	NR	4.44	0	0	0.53	0	4.97
5	167+09 to 168+51-L-	NR	0.04	0	0	0.03	0	0.07
8	296+63 to 304+66-L-	R	2.03	0	0.02	0.20	0	2.25
9	321+92 to 322+64-L-RT	R	0.07	0	<0.01	0.02	0	0.09
9	321+58 to 322+98-L-LT	R	0.07	0	0.02	0.03	0	0.12
10	344+83 to 349+01-L-Rt	NR	0.08	0	0	0.10	0	0.18
<b>Total</b>			<b>6.73</b>	<b>0</b>	<b>0.04</b>	<b>0.91</b>	<b>0</b>	<b>7.68</b>
<b>R-2303B**</b>								
<b>Total</b>			<b>5.70</b>	<b>0.12</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>5.82</b>
<b>R-2303C**</b>								
<b>Total</b>			<b>12.13</b>	<b>0</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>12.13</b>
<b>R-2303D**</b>								
<b>Total</b>			<b>8.38</b>	<b>0</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>8.38</b>
<b>R-2303E**</b>								
<b>Total</b>			<b>1.58</b>	<b>0</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.58</b>
<b>R-2303F**</b>								
<b>Total</b>			<b>21.80</b>	<b>0</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>21.80</b>

Project Total						
Project Total	56.32	0.12	0.04	0.91	0	57.39

\*Wetland Type: R = Riparian; NR=Non-Riparian

\*\* Sections B through F wetland impacts are projected based on preliminary design.

**Total Wetland Impact for Project: 57.39 (7.68 acres for Section A)**

### Open Water (Ponds/Tributary) Impacts in the Cape Fear River Basin

Site	Station	Permanent Fill in Open Waters (ac)	Temporary Fill in Open Waters (ac)	Total Fill in Open Waters (ac)
1	69+45 to 70+63 -L-RT	0.16	0	0.16
1	70+93 to 72+81-L-RT	0.11	0	0.11
4	131+57 to 133+50-L-RT	0.18	0	0.18
6	178+97 to 179+07-L-RT	0.02	0	0.02
7	200+65 to 202+44-L-	0.24	0	0.24
9	322+10-L-Rt	0.01	0	0.01
9	322+10-L-Rt (Bank Stabilization)	<0.01	0	<0.01
<b>Total*</b>		<b>0.72</b>	<b>0</b>	<b>0.72</b>

\*Open Water Impacts for Sections B through F have not been projected based on preliminary design.

**Total Open Water Impact for Section A: 0.72 acres.**

The application provides adequate assurance that the discharge of fill material into the waters of the Cape Fear River Basin 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 August 2, 2012. Should your project change, you are required to notify the NCDWQ 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:

##### Project Specific Conditions

1. The NCDOT Division Environmental Officer or Environmental Assistant will conduct a pre-construction meeting with all appropriate staff to ensure that the project supervisor and essential staff understand the potential issues with stream and pipe alignment at the permitted site. NCDWQ staff shall be invited to the pre-construction meeting.
  
2. At locations where ponds will be drained, proper measures will be taken to drain the pond with limited impact to upstream and downstream channel stability as well as to native aquatic species. Proper measures will be taken to avoid sediment release and/or sediment accumulation downstream as a result of pond draining. If typical pond draining techniques will create significant disturbance to native aquatic species, additional measures such as collection and relocation may be necessary to prevent a significant fish kill. NCDOT shall consult with NC Wildlife Resources staff to determine if there are any sensitive species, and the most appropriate measures to limit impacts to these species. The permittee shall observe any natural channel re-establishment, or utilize natural channel construction techniques, to ensure that the jurisdictional stream channel above and below the drained pond remain stable, and that no additional impacts occur within the natural stream channel as a result of draining the pond.

3. All channel relocations will be constructed in a dry work area and stabilized before stream flows are diverted. Channel relocations will be completed and stabilized, and must be approved on site by NCDWQ staff, prior to diverting water into the new channel. Whenever possible, channel relocations shall be allowed to stabilize for an entire growing season. Vegetation used for bank stabilization shall be limited to native woody species, and should include establishment of a 30 foot wide wooded and an adjacent 20 foot wide vegetated buffer on both sides of the relocated channel to the maximum extent practical. All stream banks shall be matted with coir fiber matting. Also, rip-rap may be allowed if it is necessary to maintain the physical integrity of the stream, but the applicant must provide written justification and any calculations used to determine the extent of rip-rap coverage requested. Once the stream has been turned into the new channel, it may be necessary to relocate stranded fish to the new channel to prevent fish kills.
4. Riprap shall not be placed in the active thalweg channel or placed in the streambed in a manner that precludes aquatic life passage. Bioengineering boulders or structures should be properly designed, sized and installed.
5. For streams being impacted due to site dewatering activities, the site shall be graded to its preconstruction contours and revegetated with appropriate native species.
6. The stream channel shall be excavated no deeper than the natural bed material of the stream, to the maximum extent practicable. Efforts must be made to minimize impacts to the stream banks, as well as to vegetation responsible for maintaining the stream bank stability. Any applicable riparian buffer impact for access to stream channel shall be temporary and be revegetated with native riparian species.
7. Pipes and culverts used exclusively to maintain equilibrium in wetlands, where aquatic life passage is not a concern, shall not be buried. These pipes shall be installed at natural ground elevation.
- \* 8. Compensatory mitigation for 278 linear feet of impact to streams is required. We understand that you have chosen to perform compensatory mitigation for impacts to streams 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 July 26, 2012 that they will assume responsibility for satisfying the federal Clean Water Act compensatory mitigation requirements for the above-referenced project, in accordance with the EEP Mitigation Banking Instrument signed July 28, 2010.
- \* 9. Compensatory mitigation for impacts to 5.22 acres of non-riparian wetlands is required. We understand that you have chosen to perform compensatory mitigation for impacts to non-riparian 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 July 26, 2012 that they will assume responsibility for satisfying the federal Clean Water Act compensatory mitigation requirements for the above-referenced project, in accordance with the EEP Mitigation Banking Instrument signed July 28, 2010.
- \* 10. Compensatory mitigation for the 2.46 acres of riparian wetland impacts is required. We understand that you have chosen to debit mitigation from Privateer Farm Mitigation Bank. Privateer Farm Mitigation Bank is located in Cumberland and Bladen County in HUC 03030005; adjacent to Section A of the project HUC (03030006). Since there are no available credits existing in HUC 03030006, it is DWQ's policy to debit adjacent HUCs at a 3:1 ratio. This certification gives you approval to debit 7.38 acres of riparian wetland mitigation from the Privateer Farm Mitigation Bank to satisfy the mitigation requirements of this permit.
11. When final design plans are completed for R-2303 Section(s) B through F, a modification to the 401 Water Quality 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-2303 Section(s) B through F shall begin until after the permittee applies for, and receives a written modification of the 401 Water Quality Certification and the from the NC Division of Water Quality.

#### General Conditions

12. Unless otherwise approved in this certification, placement of culverts and other structures in open waters and streams shall be placed below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20 percent of the culvert diameter for culverts having a diameter less than 48 inches, to allow low flow passage of water and aquatic life. Design and placement of culverts and other

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structures including temporary erosion control measures shall not be conducted in a manner that may result in dis-equilibrium of wetlands or streambeds or banks, adjacent to or upstream and downstream of the above structures. The applicant is required to provide evidence that the equilibrium is being maintained if requested in writing by NCDWQ. If this condition is unable to be met due to bedrock or other limiting features encountered during construction, please contact NCDWQ for guidance on how to proceed and to determine whether or not a permit modification will be required.

13. 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.
14. 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.
15. The dimension, pattern and profile of the stream above and below the crossing shall not be modified. Disturbed floodplains and streams shall be restored to natural geomorphic conditions.
16. The use of rip-rap above the Normal High Water Mark shall be minimized. Any rip-rap placed for stream stabilization shall be placed in stream channels in such a manner that it does not impede aquatic life passage.
- \* 17. The Permittee shall ensure that the final design drawings adhere to the permit and to the permit drawings submitted for approval.
18. All work in or adjacent to stream waters shall be conducted in a dry work area. Approved BMP measures from the most current version of NCDOT Construction and Maintenance Activities manual such as sandbags, rock berms, cofferdams and other diversion structures shall be used to prevent excavation in flowing water.
19. Heavy equipment shall be operated from the banks rather than in the stream channel in order to minimize sedimentation and reduce the introduction of other pollutants into the stream.
20. 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.
21. No rock, sand or other materials shall be dredged from the stream channel except where authorized by this certification.
22. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited.
23. 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 NCDWQ 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, NCDWQ may reevaluate and modify this certification.
24. All fill slopes located in jurisdictional wetlands shall be placed at slopes no flatter than 3:1, unless otherwise authorized by this certification..
25. A copy of this Water Quality Certification shall be maintained 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.
26. 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.
27. The issuance of this certification does not exempt the Permittee from complying with any and all statutes, rules, regulations, or ordinances that may be imposed by other government agencies (i.e. local, state, and

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federal) having jurisdiction, including but not limited to applicable buffer rules, stormwater management rules, soil erosion and sedimentation control requirements, etc.

28. The Permittee shall report any violations of this certification to the Division of Water Quality within 24 hours of discovery.
- \* 29. Upon completion of the project (including any impacts at associated borrow or waste sites), the NCDOT Division Engineer shall complete and return the enclosed "Certification of Completion Form" to notify NCDWQ when all work included in the 401 Certification has been completed.
30. Native riparian vegetation must be reestablished in the riparian areas within the construction limits of the project by the end of the growing season following completion of construction.
31. 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, or access roads to 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.
32. 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.
33. Sediment and erosion control measures shall not be placed in wetlands or waters unless otherwise approved by this Certification.

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 you wish to contest any statement in the attached Certification you must file a petition for an administrative hearing. You may obtain the petition form from the office of Administrative hearings. You must file the petition with the office of Administrative Hearings within sixty (60) days of receipt of this notice. A petition is considered filed when it is received in the office of Administrative Hearings during normal office hours. The Office of Administrative Hearings accepts filings Monday through Friday between the hours of 8:00am and 5:00pm, except for official state holidays. The original and one (1) copy of the petition must be filed with the Office of Administrative Hearings.

The petition may be faxed-provided the original and one copy of the document is received by the Office of Administrative Hearings within five (5) business days following the faxed transmission. The mailing address for the Office of Administrative Hearings is:

Office of Administrative Hearings  
6714 Mail Service Center  
Raleigh, NC 27699-6714  
Telephone: (919)-431-3000, Facsimile: (919)-431-3100

A copy of the petition must also be served on DENR as follows:

Mr. William Cary, General Counsel  
Department of Environment and Natural Resources  
1601 Mail Service Center  
Raleigh, NC 27699-1601

This the 24th day of September 2012

DIVISION OF WATER QUALITY

A handwritten signature in black ink, appearing to read "Charles Wakild" followed by a flourish and the word "for:".

Charles Wakild  
Director

WQC No. 3942

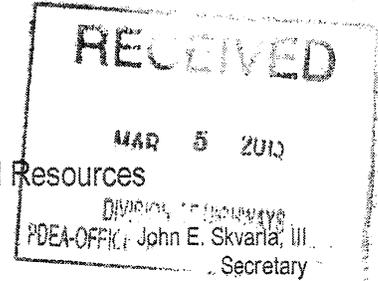
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North Carolina Department of Environment and Natural Resources

Division of Water Quality  
Charles Wakild, P. E.  
Director

Pat McCrory  
Governor



February 25, 2013

Dr. Greg Thorpe, PhD., Manager  
Project Development and Environmental Analysis  
North Carolina Department of Transportation  
1598 Mail Service Center  
Raleigh, North Carolina, 27699-1598

Subject: Modification of 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water with ADDITIONAL CONDITIONS for Proposed improvements to NC 24 from SR 1853 (John Nunnery Rd.) in Cumberland County to US 421-701/SR 1296 (Sunset Avenue) in Sampson County, Federal Aid Project No. STPNHF-F-8-2(17), WBS No. 34416. TIP R-2303B.

NCDWQ Project No. 20120240v.2

Dear Dr. Thorpe:

Attached hereto is a modification of Certification No. 3942 issued to The North Carolina Department of Transportation (NCDOT) dated September 24, 2012.

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

Sincerely,

Charles Wakild  
Director

Attachments

cc: Brad Shaver, US Army Corps of Engineers, Wilmington Field Office (electronic copy only)  
Greg Burns, PE, Division 6 Engineer  
Jim Rerko, Division 6 Environmental Officer  
Chris Militscher, Environmental Protection Agency (electronic copy only)  
Gary Jordan, US Fish and Wildlife Service (electronic copy only)  
Travis Wilson, NC Wildlife Resources Commission  
Jason Elliott, NCDOT, Roadside Environmental Unit  
Jim Stanfill, Ecosystem Enhancement Program  
Sonia Carrillo, NCDWQ Central Office  
File Copy

Transportation and Permitting Unit  
1650 Mail Service Center, Raleigh, North Carolina 27699-1617  
Location: 512 N. Salisbury St. Raleigh, North Carolina 27604  
Phone: 919-807-6300 \ FAX: 919-807-6492  
Internet: [www.ncwaterquality.org](http://www.ncwaterquality.org)

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**Modification to the 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act  
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 (NCDWQ) Regulations in 15 NCAC 2H .0500. This certification authorizes the NCDOT to impact an additional 10.35 acres of jurisdictional wetlands, 1.65 acres of waters and 439 linear feet of jurisdictional streams in Cumberland and Sampson Counties for the construction of **R-2303B** only. The project shall be constructed pursuant to the revised application dated received February 15, 2013 and revisions received electronically on February 25, 2012. **No impacts to Sections C, D or F are being authorized with this certification.** The authorized impacts are as described below:

**Stream Impacts in the Cape Fear River Basin**

Site	Station	Permanent Fill in Intermittent Stream (linear ft)	Temporary Fill in Intermittent Stream (linear ft)	Permanent Fill in Perennial Stream (linear ft)	Temporary Fill in Perennial Stream (linear ft)	Total Stream Impact (linear ft)	Stream Impacts Requiring Mitigation (linear ft)
<b>R-2303A<sup>(1)</sup></b>							
<b>Total</b>		<b>0</b>	<b>0</b>	<b>572</b>	<b>27</b>	<b>599</b>	<b>278</b>
<b>R-2303B</b>							
7A	431+78 to 434+23-L-	158	0	0	0	158	158
21	712+14 to 714+41-L-	0	0	193 <sup>(2)</sup>	88	281	241
<b>Total</b>		<b>158</b>	<b>0</b>	<b>193<sup>(2)</sup></b>	<b>88</b>	<b>439</b>	<b>351</b>
<b>R-2303C<sup>(3)</sup></b>							
<b>Total</b>		<b>-</b>	<b>-</b>	<b>2,990</b>	<b>301</b>	<b>3,291</b>	<b>-</b>
<b>R-2303D<sup>(3)</sup></b>							
<b>Total</b>		<b>-</b>	<b>-</b>	<b>1,792</b>	<b>77</b>	<b>1,869</b>	<b>-</b>
<b>R-2303E<sup>(3)</sup></b>							
<b>Total</b>		<b>-</b>	<b>-</b>	<b>1,336</b>	<b>155</b>	<b>1,491</b>	<b>-</b>
<b>R-2303F<sup>(3)</sup></b>							
<b>Total</b>		<b>-</b>	<b>-</b>	<b>3,859</b>	<b>294</b>	<b>4,153</b>	<b>-</b>
<b>Project Total</b>							
<b>Project Total</b>		<b>158</b>	<b>-</b>	<b>10,742</b>	<b>942</b>	<b>11,842</b>	<b>-</b>

<sup>(1)</sup>Impacts authorized in the original 401 certification dated September 24, 2012. <sup>(2)</sup>Includes 55 linear feet of bank stabilization.

<sup>(3)</sup>Sections C through F stream impacts are projected based on preliminary design and include perennial and intermittent systems.

**Total Stream Impact for Project: 11,842 linear feet (439 linear feet for Section B)**

**Wetland Impacts in the Cape Fear River Basin**

Site	Station	Wetland Type <sup>(1)</sup>	Fill (ac)	Fill (temporary) (ac)	Excavation (ac)	Mechanized Clearing (ac)	Hand Clearing (ac)	Total Wetland Impact (ac)	Impacts Requiring Mitigation (ac)
<b>R-2303A<sup>(2)</sup></b>									
<b>Total</b>			<b>6.73</b>	<b>0</b>	<b>0.04</b>	<b>0.91</b>	<b>0</b>	<b>7.68</b>	<b>7.68</b>
<b>R-2303B</b>									
1	388+00 to 391+28-L-	R	1.26	0	0	0.14	0	1.40	1.40
2	391+28 to 402+13-L-	R	0	0	0.09	<0.01	3.53	3.62	0.09
3	14+18 to 15+09-Y13-RT	NR	0.01	0	0	0.02	0	0.03	0.03
5	425+57 to 426+51-L-LT	R	0.02	0	0	0.02	0	0.04	0.04
7B	431+78 to 434+23-L-	R	0.23	0	0.01	0.03	0	0.27	0.27
8	437+97 to 439+15-L-RT	NR	0.07	0	0	0.02	0	0.09	0.09
10 <sup>(3)</sup>	542+45 to 545+21-L-LT	NR	0.09	0	0	0.06	0	0.15	0.15
11	554+06 to 558+53-L-LT	NR	0.01	0	0	0.10	0	0.11	0.11
12	554+38 to 557+27-L-RT	NR	0.28	0	0	0.03	0	0.31	0.31
14	623+20 to 624+12-L-RT	NR	0.10	0	0.03	<0.01	0	0.13	0.13
15	654+75 to 663+38-L-	R	2.13	0	0	0.41	0.17	2.71	2.54

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16	669+18 to 670+85-L-LT	NR	0.26	0	0	0.06	0	0.32	0.32
17	670+13 to 672+92-L-RT	NR	0.05	0	0	0.02	0	0.07	0.07
21	712+14 to 714+41-L-	R	0.13	0.12	0.01	0.06	0	0.32	0.20
<b>R-2303B UTILITIES</b>									
1	472+00-L-	NR	0	0	0	0	0.6	0.6	0
3	545+00-L-	NR	0	0	0.01	0	0	0.01	0.01
4	584+00-L-	NR	0	0	0.10	0	0	0.10	0.10
6	670+00-L-	NR	0	0	0.01	0	0.02	0.03	0.01
7	713+00-L-	R	0	0	0.04	0	0	0.04	0.04
<b>Total</b>			<b>4.64</b>	<b>0.12</b>	<b>0.30</b>	<b>0.97</b>	<b>4.32</b>	<b>10.35</b>	<b>5.91</b>
<b>R-2303C<sup>(4)</sup></b>									
<b>Total</b>			<b>12.13</b>	<b>0</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>12.13</b>	<b>-</b>
<b>R-2303D<sup>(4)</sup></b>									
<b>Total</b>			<b>8.38</b>	<b>0</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>8.38</b>	<b>-</b>
<b>R-2303E<sup>(4)</sup></b>									
<b>Total</b>			<b>1.58</b>	<b>0</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.58</b>	<b>-</b>
<b>R-2303F<sup>(4)</sup></b>									
<b>Total</b>			<b>21.80</b>	<b>0</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>21.80</b>	<b>-</b>
<b>Project Total</b>									
<b>Project Total</b>			<b>55.26</b>	<b>0.12</b>	<b>0.34</b>	<b>1.88</b>	<b>4.32</b>	<b>61.92</b>	<b>-</b>

<sup>(1)</sup> Wetland Type: R = Riparian; NR=Non-Riparian, <sup>(2)</sup> Impacts authorized in the original 401 certification dated September 24, 2012.

<sup>(3)</sup> Resource is regulated by DWQ only, <sup>(4)</sup> Sections C through F wetland impacts projected based on preliminary design.

**Total Wetland Impact for Project: 61.92 (10.35 acres for Section B)**

### Open Water (Ponds/Tributary) Impacts in the Cape Fear River Basin

Site	Station	Permanent Fill in Open Waters (ac)	Temporary Fill in Open Waters (ac)	Total Fill in Open Waters (ac)
<b>R-2303A<sup>(1)</sup></b>				
<b>Total</b>		<b>0.72</b>	<b>0</b>	<b>0.72</b>
<b>R-2303B</b>				
4	424+51 to 426+05-L-LT	0.25	0	0.25
6	430+34 to 432+25-L-RT	0.19	0	0.19
9	438+58 to 441+68-L-LT	0.73	0	0.73
13	576+76 to 576+89-L-RT	<0.01	<0.01	<0.01
18	674+45 to 674+81-L-RT	<0.01	<0.01	<0.01
19	680+56 to 684+21-L-LT	0.44	0	0.44
20	681+95 to 682+15-L-RT	<0.01	<0.01	<0.01
<b>Total</b>		<b>1.63</b>	<b>0.02</b>	<b>1.65</b>
<b>Section A &amp; B Total</b>		<b>2.35</b>	<b>0.02</b>	<b>2.37</b>

\*Open Water Impacts for Sections C through F have not been projected based on preliminary design.

<sup>(1)</sup> Impacts authorized in the original 401 certification dated September 24, 2012.

**Total Open Water Impact for Sections A & B: 0.72 acres. (1.65 acres for Section B)**

The application provides adequate assurance that the discharge of fill material into the waters of the Cape Fear River Basin 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 modified application dated received February 15, 2013 and revisions received electronically on February 25, 2012. All the authorized activities and conditions of certification associated with the original Water Quality Certification dated September 24, 2012 still apply except where superceded by this certification. Should your project change, you are required to notify NCDWQ 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:

### Project Specific Conditions

1. This modification is applicable only to the additional proposed activities. All of the authorized activities and conditions of certification associated with the original Water Quality Certification dated September 24, 2012 still apply except where superseded by this certification
2. The post-construction removal of any temporary bridge structures must return the project site to its preconstruction contours and elevations. The impacted areas shall be revegetated with appropriate native species.
3. Strict adherence to the most recent version of NCDOT's Best Management Practices For Bridge Demolition and Removal approved by the US Army Corps of Engineers is a condition of the 401 Water Quality Certification.
4. Bridge piles and bents shall be constructed using driven piles (hammer or vibratory) or drilled shaft construction methods. More specifically, jetting or other methods of pile driving are prohibited without prior written approval from NCDWQ first.
5. Bridge deck drains shall not discharge directly into the stream. Stormwater shall be directed across the bridge and pre-treated through site-appropriate means (grassed swales, pre-formed scour holes, vegetated buffers, etc.) before entering the stream. Please refer to the most current version of *Stormwater Best Management Practices*.
6. The project must be constructed in accordance with the Stormwater Management Plan submitted in the application and dated September 27, 2011.
7. Native material shall be placed inside of the reinforced concrete box culverts at Permit Site 21 to provide a natural streambed in the low flow channel and floodplain benches between the sills in the overflow barrels. If possible, the material placed inside of the culvert should be the same native material that is excavated from the streambed and/or floodplain during the construction of these structures. Rip rap is not permissible in the low flow channel; however it may be used to supplement the natural material in the overflow barrels.
- \* 8. Compensatory mitigation for 351 linear feet of impact to streams is required. We understand that you have chosen to perform compensatory mitigation for impacts to streams 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 February 19, 2013 that they will assume responsibility for satisfying the federal Clean Water Act compensatory mitigation requirements for the above-referenced project, in accordance with the EEP Mitigation Banking Instrument signed July 28, 2010.
- \* 9. Compensatory mitigation for impacts to 1.33 acres of non-riparian wetlands is required. We understand that you have chosen to perform compensatory mitigation for impacts to non-riparian 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 February 19, 2013 that they will assume responsibility for satisfying the federal Clean Water Act compensatory mitigation requirements for the above-referenced project, in accordance with the EEP Mitigation Banking Instrument signed July 28, 2010.
10. Compensatory mitigation for impacts to 4.58 acres of riparian wetlands is required. The permittee shall comply with the revised on-site wetland mitigation plan Sites B-1 and B-2 submitted on February 22, 2013. All on-site mitigation sites shall be protected in perpetuity by a conservation easement or through NCDOT fee simple acquisition and recorded in the NCDOT Natural Environment Unit mitigation geodatabase.
11. For the forested wetland restoration mitigation sites B-1 and B-2, the permittee shall plant 680 stems/acre. Vegetation success shall be measured by survivability over a 5-year monitoring period. Survivability will be based on 320 stems/acre after three (3) years and 260 stems after five (5) years. A survey of vegetation during the growing season shall be conducted annually over the five-year monitoring period and submitted

## R-40

to the NC Division of Water Quality. If the surviving vegetation densities are below the required thresholds after the five-year monitoring period, the site may still be declared successful at the discretion of and with written approval from the NC Division of Water Quality.

12. For the wetland mitigation sites located from B-1 and B-2, hydrologic success of the sites will be attained by restoration of a hydrologic regime that results in inundation or saturation of the soils within 12 inches of the ground surface for at least 12.5 percent of the growing season. The hydrologic monitoring shall persist for a total of five (5) years. At the end of the monitoring period, NCDWQ will review the monitoring results for the mitigation site. Based on the results of the monitoring, NCDWQ will determine if the mitigation site is successful or if additional maintenance and monitoring is necessary to demonstrate site success.
13. Success of the mitigation site shall be determined by NCDWQ during an on-site visit at or near the end of the monitoring period.
14. When final design plans are completed for R-2303 Section(s) E through F, a modification to the 401 Water Quality 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-2303 Section(s) C through F shall begin until after the permittee applies for, and receives a written modification of the 401 Water Quality Certification and the from the NC Division of Water Quality.

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 you wish to contest any statement in the attached Certification you must file a petition for an administrative hearing. You may obtain the petition form from the office of Administrative hearings. You must file the petition with the office of Administrative Hearings within sixty (60) days of receipt of this notice. A petition is considered filed when it is received in the office of Administrative Hearings during normal office hours. The Office of Administrative Hearings accepts filings Monday through Friday between the hours of 8:00am and 5:00pm, except for official state holidays. The original and one (1) copy of the petition must be filed with the Office of Administrative Hearings.

The petition may be faxed-provided the original and one copy of the document is received by the Office of Administrative Hearings within five (5) business days following the faxed transmission. The mailing address for the Office of Administrative Hearings is:

Office of Administrative Hearings  
6714 Mail Service Center  
Raleigh, NC 27699-6714  
Telephone: (919)-431-3000, Facsimile: (919)-431-3100

A copy of the petition must also be served on DENR as follows:

Mr. Lacy Presnell, General Counsel  
Department of Environment and Natural Resources  
1601 Mail Service Center  
Raleigh, NC 27699-1601

This the 25th day of February 2013

DIVISION OF WATER QUALITY

  
Charles Wakild  
Director



## **ON-SITE MITIGATION**

### **1.0 BASELINE INFORMATION**

TIP R-2303 involves improvements to existing NC Highway 24 from 2.8 miles eastward of Interstate 95 (I-95) in Cumberland County to Interstate 40 (I-40) in Duplin County. The study corridor for this project ranges from 400 feet wide for widening sections to 1000 feet wide for bypass areas and is situated within the inner Coastal Plain physiographic province. Topography within the study area is described as nearly level to sloping with the majority of the topographic breaks found near the larger wetland systems. Land use within the project study area between towns is mostly rural in nature and includes a mixture of agricultural, residential, silvicultural, and industrial uses.

The project is located within USGS Hydrologic Cataloging Unit 03030006, and NC Division of Water Quality (NCDWQ) sub-basins 03-06-18 and 03-06-19 within the Cape Fear River Basin. Sub-basin 03-06-18 includes the South River and its tributaries as well as Big Swamp and its tributaries while sub-basin 03-06-19 includes Little Coharie Creek, Bearskin Swamp, Moccasin Branch, Great Coharie Creek, Six Runs Creek, and Buckhall Creek along with all their tributaries.

The R-2303 Natural Resources Technical Report (NRTR) dated January 2004 provides further details concerning existing roadway/project study area conditions and jurisdictional resources. The mitigation site selection and mitigation work plan sections of this plan will refer to the identification labels given the affected jurisdictional resources in that document as well as the Final Environmental Impact Statement (FEIS) dated 3-31-2010.

### **2.0 SITE SELECTION**

#### **R-2303B Mitigation Site 1 (ONE ID #082-007)**

This site begins on plan sheet 8 south of Station 423+50 Rt. at the existing intersection of Gray Street and Old Stage Road and ends south of Station 439 Rt. on plan sheet 9. It is part of the South River watershed and involves a series of ponds (43 and 45) as well as three jurisdictional wetlands (42, 44 and 46), and one intermittent stream (SR4) that flows out of pond 43. Lynn Haven sand, a hydric soil in Sampson County, is the soil type found within this area.

#### **R-2303B Mitigation Site 2 (ONE ID #082-008)**

This site begins on plan sheet 26 at Sta. 680+20 Lt. at the ROW line and ends on plan sheet 27 at Sta. 685+50.38 Lt. at Boren Brick Road. The pond (88) will be drained as part of the construction of R-2303B. Currently, the pond connects a jurisdictional wetland area upstream to jurisdictional wetlands and a UT to Big Swamp downstream through a series of pipes under Boren Brick Road and existing NC Hwy 24. The existing wetland system above Boren Brick Road, wetland 88A, will

be used as the reference wetland system.

**R-2303C Mitigation Site 1 (ONE ID #082-009)**

This site is located on plan sheet 23 from approximately Sta. 1000 to 1005 Lt. The pond (133) will be drained as part of the construction of R-2303B. The pond is surrounded by Wagram loamy sand soils. It has a headwater wetland system located adjacent to its northeastern corner and outflows into a UT to Little Coharie (LC11) through a 36" pipe under existing NC Hwy 24.

**R-2303D Mitigation Site 1 (ONE ID #082-010)**

This site is located on plan sheet 18 northwest of approximate Sta. 1290 to 1295 Lt. Wetland 161 located adjacent to NC Hwy 24 is a riparian wetland that is bisected by the existing causeway of NC 24. A portion of Wetland 161 has been clear cut. This wetland also includes an excavated pond and side cast spoil. Soils within this mitigation area are either Johns fine sandy loam or Kalmia sandy loam. Both are non-hydric with hydric inclusions in Sampson County.

**R-2303D Mitigation Site 2 (ONE ID #082-011)**

This site is located on plan sheet 20 from approximately Sta. 1321+50 Lt. to Sta. 1325+50 Lt. on plan sheet 21. It is bordered on the north and west by wetland 165 and on the east by wetland 167. The soils in this area are mapped as Paxville fine loamy sand, a hydric soil in Sampson County. Wetland 165 is part of a 4600 acre NCEEP high quality wetland mitigation site known as the Great Coharie Tract (GCT). An old abandoned causeway extends into the wetland from NC Hwy 24.

**3.0 SITE PROTECTION INSTRUMENT**

The mitigation areas are presently located within or will be located within the NCDOT Right-of-Way for the project. They will be managed to prohibit all use inconsistent with its use as mitigation property, including any activity that would materially alter the biological integrity or functional and educational value of the site, consistent with the mitigation plan.

The site is designated on the plan sheets as a mitigation area and will be placed on the Natural Environment Section's Mitigation GeoDatabase. This database is provided to all NCDOT personnel as a record of mitigation sites and their attributes, including prohibited activities. NCDOT is held by virtue of the permit associated with this mitigation site and the associated roadway impacts to protect the site in perpetuity.

**4.0 OBJECTIVES**

The goal of the proposed onsite mitigation is to mitigate for impacts due to R-2303 by restoring adjacent wetland and stream systems to their natural conditions through the removal of the degrading factors of ponding, fill, and disturbance. This will be achieved on seven individual sites

described below for a total of 15.89 acres of wetland and 900 feet of stream.

## **5.0 MITIGATION WORK PLAN**

Each mitigation site will be constructed along with the construction of its associated section of the roadway project. Following the successful completion of site grading and stabilization, each site will be replanted with appropriate native tree species. Wetland restoration areas will be planted with a mix of bare-root tree species at a density of 680 stems per acre. The stream restoration areas will be stabilized by planting a mix of live stakes on three foot centers and matting with coir fiber on the banks as necessary. Reforestation plans for each can be found in Appendix B.

Native wetland seed and mulch will be applied on all disturbed areas within the mitigation sites for stabilization purposes according to guidance and standard procedures of NCDOT's Roadside Environmental Unit. An as-built report will be submitted within 60 days of completion of the project.

The Natural Environment Section shall be contacted to provide construction assistance to ensure that each mitigation area is constructed appropriately.

### **R-2303B Mitigation Site 1**

NCDOT will drain P43 and P45 in conjunction with the construction of R-2303B. Based on topography and soils, the draining of these two features will result in restoration of a total of 1.84 acres of riparian wetlands. It will also result in the enhancement of 5.41 acres of wetlands (wetlands 42 and 44) and the preservation of 0.23 acres at wetland 46.

### **R-2303B Mitigation Site 2**

NCDOT will restore 2.19 acres of riparian wetlands at Site 2. The pond associated with this mitigation area, identified as 88 in the NRTR, will be drained as part of the construction of R-2303B. The existing 30" pipe under NC Hwy 24 will be replaced and the invert of the new structure will be adjusted to assist in the wetland restoration within the drained pond 88.

Wetland 88a is a riparian wetland located on the east side of Boren Brick Road. It will be used as a reference for the reforestation plan of wetland restoration within pond 88. Soils within this wetland as well as adjacent to the pond are mapped as Aycok silt loam, a non-hydric soil in Sampson County, as well as Nahunta loam, a non-hydric soil with hydric inclusions.

### **R-2303C Mitigation Site 1**

The pond associated with this mitigation area, identified as 133 in the NRTR, will be drained as part of the construction of R-2303C. The existing pipe under NC Hwy 24 will be replaced and the invert of the new structure will be adjusted to assist in the wetland and stream restoration within the drained pond 133. This new structure will outfall into LC11, a UT to Little Coharie. LC11 has a C Sw classification and is a Rosgen E type channel. Based on valley length and topography, NCDOT will restore 550 ft. of the stream system within this drained pond area as well as restore 2.5 acres of riparian wetlands.

**R-2303D Mitigation Site 1**

This site involves removing a portion of pavement and causeway along existing NC 24 and grading to match elevations within the adjacent Wetland 161. It also involves backfilling the existing pond with material side cast to match the existing, adjacent wetland elevation. The clear cut portion of Wetland 161 within the ROW will be revegetated. This work will result in the restoration of 1.55 acres and enhancement of 1.3 acres of riparian wetland.

**R-2303D Mitigation Site 2**

This site involves the removal of an old roadway causeway and grading to match elevations within the adjacent Wetlands 165 and 167. NCDOT will restore 0.87 acres of riparian wetland in this area.

**6.0 PERFORMANCE STANDARDS**

The hydrologic success criteria requires that the site demonstrate saturation or inundation within 12 inches of the soil surface for a consecutive 12.5% of the growing season during years of normal rainfall. Groundwater monitoring gauge will be installed in existing, adjacent reference wetlands where practical and feasible for comparison to groundwater gauges throughout the restoration and enhancement (B site 1) areas.

Success for vegetation monitoring within the riparian buffer and wetland areas are based on the survival of at least 260 stems of five year old trees at year five. Assessment of channel stability will be based on the survival of riparian vegetation and lack of significant bank erosion, channel widening or down-cutting.

**7.0 MONITORING REQUIREMENTS**

Groundwater gauges will be installed within the wetland enhancement (on B Site 1) and restoration areas as for hydrologic monitoring. Gauges will be placed within the enhancement areas pre-construction to collect baseline data for comparison, analysis, and determination of enhancement area boundaries. Number and placement of gauges will be site specific and determined based on contour intervals.

The following components of Level 1 stream restoration monitoring will be performed each year of the 5-year monitoring period: reference photos, visual inspection of channel stability, and plant survival. Specific problem areas and proposed/required remedial action will be identified.

Vegetation monitoring will consist of counts of planted stems within 50 x 50 foot plots established within the restoration and enhancement (D site 1) areas. Plot locations will be randomly selected.

These monitoring activities will be conducted for five years and documented in an annual report distributed to the regulatory agencies.

**8.0 OTHER INFORMATION**

N/A

**9.0 DETERMINATION OF CREDITS**

Based on field and meeting discussions with agency representatives and per the NCDOT plans and 401/404 permit application for R-2303; NCDOT proposes the following types of mitigation and ratios for each site.

Roadway Section Site Number	Wetland Restoration Acres (1:1)	Wetland Enhancement Acres (5:1)	Wetland Preservation Acres (10:1)	Stream Restoration Feet (1:1)	Stream Preservation Feet (10:1)
B Site1	1.84	5.41	0.23		
B Site 2	2.19	-	-	-	-
C Site 1	2.5	-	-	550	-
D Site 1	1.55	1.3	-	-	-
D Site 2	0.87	-	-	-	-

An as-built report will be submitted within 60 days of completion of the each mitigation site to verify actual mitigation areas constructed and planted. The success of the mitigation areas and determination of final credits will be based upon successful completion and closeout of the monitoring period.

**9.1 CREDIT RELEASE SCHEDULE**

NCDOT proposes immediate, full release of the proposed mitigation as on-site mitigation for unavoidable impacts associated with R-2303.

**10.0 GEOGRAPHIC SERVICE AREA**

The proposed Geographic Service Area (GSA) for the mitigation sites is composed of the 8-digit Hydrologic Cataloging Unit (HUC) 03030006.

**11.0 MAINTENANCE PLAN**

The mitigation site will be held by NCDOT and placed on the NES mitigation geodatabase. Once monitoring is completed and the site is closed out, it will be placed in the NCDOT Stewardship Program for long term maintenance and protection.

If an appropriate third party recipient is identified in the future, then the transfer of the property will include a conservation easement or other measure to protect the natural features and mitigation value of the site in perpetuity.

**12.0 LONG TERM ADAPTIVE MANAGEMENT PLAN**

The sites will be managed by the NCDOT according to the mitigation plan. Beaver management will be instituted during the monitoring period if necessary. Encroachments into the mitigation areas will be investigated and appropriate measures taken to minimize any negative effects. In the event that unforeseen issues arise that affect the management of the site, any remediation will be addressed by NCDOT in coordination with the Interagency Review Team.

**13.0 FINANCIAL ASSURANCES**

NCDOT is held by permit conditions associated with R-2303 to preserve the mitigation areas. NCDOT has established funds for each project and within each Division to monitor mitigation sites and to protect them in perpetuity.

**ECOSYSTEM ENHANCEMENT PROGRAM**

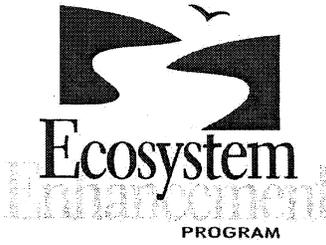
**Mitigation Total for Sections A-F\***

Cape Fear 03030006 SICP	Stream			Wetland			Buffer (sq. ft.)	
	Cold	Cool	Warm	Riparian	Non-Riparian	Coastal Marsh	Zone 1	Zone 2
Impacts (feet/acres)	0	0	9186**	31.68	15.11	0	0	0

\*See Appendix A for individual EEP Mitigation Acceptance Letters

**APPENDIX A – EEP letters**

R-44 B



February 19, 2013

Mr. Gregory J. Thorpe, Ph.D.  
Manager, Project Development and Environmental Analysis Unit  
North Carolina Department of Transportation  
1548 Mail Service Center  
Raleigh, North Carolina 27699-1548

Dear Dr. Thorpe:

Subject: EEP Mitigation Acceptance Letter:

R-2303B, NC 24 from SR 1853 (John Nunnery Road) to SR 1404 (Dowdy Road),  
Cumberland and Sampson Counties

The purpose of this letter is to notify you that the Ecosystem Enhancement Program (EEP) will provide the compensatory stream and non-riparian wetland mitigation for the subject project. Based on the information supplied by you on February 13, 2013, the impacts are located in CU 03030006 of the Cape Fear River basin in the Southern Inner Coastal Plain (SICP) Eco-Region, and are as follows:

Cape Fear 03030006 SICP	Stream			Wetlands			Buffer (Sq. Ft.)	
	Cold	Cool	Warm	Riparian	Non-Riparian	Coastal Marsh	Zone 1	Zone 2
Impacts* (feet/acres)	0	0	296	0	1.33	0	0	0

\*Some of the stream and wetland impacts may be proposed to be mitigated at a 1:1 mitigation ratio. See permit application for details.

**This mitigation acceptance letter replaces the mitigation acceptance letters issued on February 28, 2012 and January 29, 2013.** EEP commits to implementing sufficient compensatory non-riparian wetland mitigation credits to offset the impacts associated with this project as determined by the regulatory agencies in accordance with the N.C. Department of Environment and Natural Resources' Ecosystem Enhancement Program In-Lieu Fee Instrument dated July 28, 2010. The stream impact and associated mitigation need were under projected by the NCDOT in the 2013 impact data. EEP will commit to implement sufficient compensatory stream mitigation credits to offset the impacts associated with this project as determined by the regulatory agencies using the delivery timeline listed in Section F.3.c.iii of the N.C. Department of Environment and Natural Resources' Ecosystem Enhancement Program In-Lieu Fee Instrument dated July 28, 2010. If the above referenced impact amounts are revised, then this mitigation acceptance letter will no longer be valid and a new mitigation acceptance letter will be required from EEP.

If you have any questions or need additional information, please contact Ms. Beth Harmon at 919-707-8420.

Sincerely,

Michael Ellison  
EEP Acting Director

cc: Mr. Brad Shaver, USACE – Wilmington Regulatory Field Office  
Ms. Amy Chapman, Division of Water Quality, Wetlands/401 Unit  
File: R-2303 B Revised

*Restoring... Enhancing... Protecting Our State*



R-44 C



**MITIGATION REQUEST FORM  
TRI-PARTY MOA (NCDOT)**



Revised 3/24/2008

Fill in requested information, print out the form, sign and date, and either mail to EEP, 1652 Mail Service Center, Raleigh, NC 27699-1652, or fax to 919-715-2219. Attachments are acceptable for clarification purposes.

Electronic submissions are permissible; however, an acceptance letter cannot be sent until the original signed form has been received.

NCDOT CONTACT INFORMATION		REGULATORY CONTACT INFORMATION	
Agency/Division	NCDOT-Highways	USACE Office	Regulatory Field Office
Branch	PDEA-NEU	USACE Contact	Mr. Brad Shaver
Mailing Address	1598 Mail Service Center	Mailing Address	Post Office Box 1890
City, State, Zip	Raleigh, NC 27699-1598	City, State, Zip	Wilmington, NC 28402-1890
Project Manager	Chris Manley	USACE Fax Number	(910) 251-4025
Telephone Number	(919) 707-6000	NCDWQ Contact	
E-Mail Address	cdmanley@dot.state.nc.us	Mailing Address	
Supervisor	Chris Rivenbark	City, State, Zip	
Telephone Number	(919) 707-6000	NCDWQ Fax Number	

PROJECT LOCATION INFORMATION AND IMPACTS			
TIP Number(s)	R-2303 C		
TIP Description	NC 24 FROM SR 1404 (DOWDY RD) TO SR 1303 (MITCHELL LOOP RD)		
Current Let Date	7/16/13		
NCDOT Highway Division	Division 3		
County(ies)	Sampson		
EEP Ecoregion(s)	Southern Inner Coastal Plain		
River Basin(s)	Cape Fear		
Cataloging Unit(s) (8-digit)	03030006		
Total Stream (feet)	Warm	1,649	
	Cool		
	Cold		
	TOTAL	1,649	
Total Riparian Wetland Impact (acres)	7.29		
Total Non-Riparian Wetland Impact (acres)	3.69		
Total Coastal Marsh Impact (acres)			
Total Buffer Impact	Zone 1 (square feet)		
	Zone 2 (square feet)		

OTHER INFORMATION	
USACE Action ID Number (if known)	
NCDWQ Project Number (if known)	
NCDOT Project Number (if known)	

Comments:

<p><b>IMPORTANT</b></p> <p>Check below if this request is a:</p> <p><input type="checkbox"/> New Mitigation Request</p> <p><input checked="" type="checkbox"/> Revision to a current acceptance</p>	<p><b>Signature of Applicant or Agent:</b></p> <p>_____</p> <p>Date: _____</p>
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------

R-44D



**MITIGATION REQUEST FORM  
TRI-PARTY MOA (NCDOT)**

Revised 3/24/2008



Fill in requested information, print out the form, sign and date, and either mail to EEP, 1652 Mail Service Center, Raleigh, NC 27699-1652, or fax to 919-715-2219. Attachments are acceptable for clarification purposes.

Electronic submissions are permissible; however, an acceptance letter cannot be sent until the original signed form has been received.

NCDOT CONTACT INFORMATION		REGULATORY CONTACT INFORMATION	
Agency/Division	NCDOT-Highways	USACE Office	Regulatory Field Office
Branch	PDEA-NEU	USACE Contact	Mr. Brad Shaver
Mailing Address	1598 Mail Service Center	Mailing Address	Post Office Box 1890
City, State, Zip	Raleigh, NC 27699-1598	City, State, Zip	Wilmington, NC 28402-1890
Project Manager	Chris Manley	USACE Fax Number	(910) 251-4025
Telephone Number	(919) 707-6000	NCDWQ Contact	
E-Mail Address	cdmanley@dot.state.nc.us	Mailing Address	
Supervisor	Chris Rivenbark	City, State, Zip	
Telephone Number	(919) 707-6000	NCDWQ Fax Number	

**PROJECT LOCATION INFORMATION AND IMPACTS**

TIP Number(s)	R-2303 D		
TIP Description	NC 24 FROM SR 1303 (MITCHELL LOOP RD) TO US 421-701/SR 1296		
Current Let Date	7/16/13		
NCDOT Highway Division	Division 3		
County(ies)	Sampson		
EEP Ecoregion(s)	Southern Inner Coastal Plain		
River Basin(s)	Cape Fear		
Cataloging Unit(s) (8-digit)	03030006		
Total Stream (feet)	Warm	1,809	
	Cool		
	Cold		
	TOTAL	1,809	
Total Riparian Wetland Impact (acres)	3.35		
Total Non-Riparian Wetland Impact (acres)	2.53		
Total Coastal Marsh Impact (acres)			
Total Buffer Impact	Zone 1 (square feet)		
	Zone 2 (square feet)		

**OTHER INFORMATION**

USACE Action ID Number (if known)	
NCDWQ Project Number (if known)	
NCDCM Project Number (if known)	

Comments:

<b>IMPORTANT</b>	<b>Signature of Applicant or Agent:</b>
<p>Check below if this request is a:</p> <p><input type="checkbox"/> New Mitigation Request</p> <p><input checked="" type="checkbox"/> Revision to a current acceptance</p>	<p>_____</p> <p>Date: _____</p>

**R-44E**

**APPENDIX B – Reforestation Details**

PROJECT NUMBER	DATE
RE-208	12-7
NO. SHEET NO.	PROJECT
1	REFORESTATION
DRAWN BY	
CHECKED BY	

## REFORESTATION

□ TREE REFORESTATION SHALL BE PLANTED 6 FT. TO 10 FT. ON CENTER RANDOM SPACING, AVERAGING 8 FT. ON CENTER, APPROXIMATELY 680 PLANTS PER ACRE.

### REFORESTATION

MIXTURE, TYPE, SIZE AND FURNISH SHALL CONFORM TO THE FOLLOWING:

25% QUERCUS PHELLOS	WILLOW OAK	12 in - 18 in BR
25% QUERCUS NIGRA	WATER OAK	12 in - 18 in BR
25% BETULA NIGRA	RIVER BIRCH	12 in - 18 in BR
25% FRAXINUS PENNSYLVANICA	GREEN ASH	12 in - 18 in BR

## REFORESTATION DETAIL SHEET

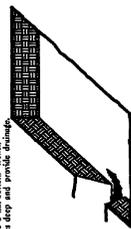
KCCOART - BOALBORN ENVIRONMENTAL UNIT

### PLANTING DETAILS

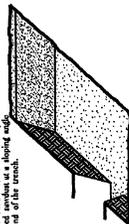
#### SEEDLING / LINER BAREROOT PLANTING DETAIL

#### HEALING IN

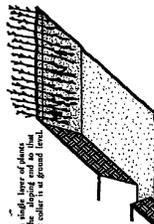
1. Loosen a half-gallon size in a shady, well protected area.
2. Excavate a six billion literm.
3. Insert drip and provide drainage.



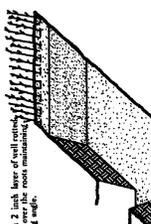
3. Bedding the surface with a 2 inch layer of well screened material to a depth of 2 inches in one end of the trench.



4. Place a single layer of plants against the sloping end of the trench so that the root collar is at ground level.



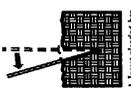
5. Place a 2 inch layer of soil covering the roots maintaining a 4 inch depth.



6. Repeat layers of plants and soil until a necessary and water thoroughly.

#### DIBBLE PLANTING METHOD USING THE ARC PLANTING BAR

1. Insert planting bar at shown and pull handle toward planter.



2. Remove planting bar and place seedling at correct depth.



3. Insert planting bar 2 inches toward planter from seedling.



4. Pull handle of bar toward planter, forcing soil to bottom.



5. Push handle forward firmly, soil at top.



6. Push handle forward thoroughly. Water seedling.

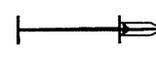


#### PLANTING NOTES:

**PLANTING BAR**  
The planting bar should be kept in a moist container to prevent the root system from drying.



**ARC PLANTING BAR**  
The planting bar should be kept in a moist container to prevent the root system from drying. 4 inch wide and 1 inch thick at center.



**ROOT PRUNING**  
All seedlings shall be root pruned to a maximum of 10 inches below the root collar.

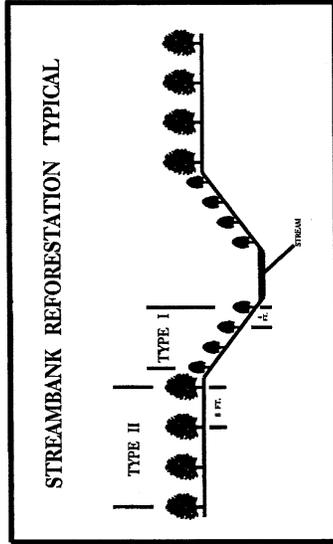


PROJECT NUMBER	2-2-74
DATE	2-2-74
DESIGNED BY	PROJ. ENGINEER
CHECKED BY	PROJ. ENGINEER

TYPE 1 STREAMBANK REFORESTATION SHALL BE PLANTED 3 FT. TO 5 FT. ON CENTER, RANDOM SPACING, AVERAGING 4 FT. ON CENTER, APPROXIMATELY 2724 PLANTS PER ACRE.

TYPE 2 STREAMBANK REFORESTATION SHALL BE PLANTED 6 FT. TO 10 FT. ON CENTER, RANDOM SPACING, AVERAGING 8 FT. ON CENTER, APPROXIMATELY 680 PLANTS PER ACRE.

NOTE: TYPE 1 AND TYPE 2 STREAMBANK REFORESTATION SHALL BE PAID FOR AS "STREAMBANK REFORESTATION"



STREAMBANK REFORESTATION MIXTURE, TYPE, SIZE AND FURNISH SHALL CONFORM TO THE FOLLOWING:

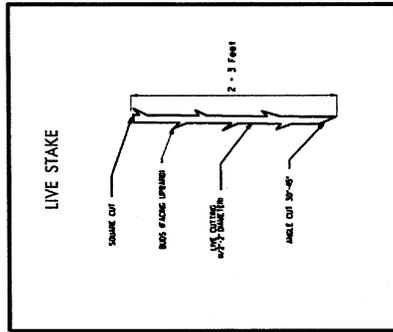
TYPE 1	50% SALIX NIGRA	BLACK WILLOW	2 ft - 3 ft LIVE STAKES
	50% CORNUS AMOMUM	SILKY DOGWOOD	2 ft - 3 ft LIVE STAKES
TYPE 2	25% QUERCUS PHELLOS	WILLOW OAK	12 in - 18 in BR
	25% QUERCUS NIGRA	WATER OAK	12 in - 18 in BR
	25% BETULA NIGRA	RIVER BIRCH	12 in - 18 in BR
	25% FRAXINUS PENNSYLVANICA	GREEN ASH	12 in - 18 in BR

SEE PLAN SHEETS FOR AREAS TO BE PLANTED

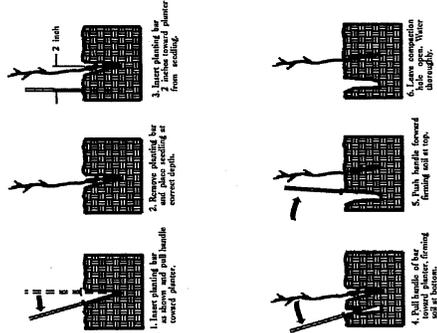
**STREAMBANK REFORESTATION  
DETAIL SHEET 1 OF 2**  
HARRISBURG - BALTIMORE ENVIRONMENTAL UNIT

**PLANTING DETAILS**

LIVE STAKES PLANTING DETAIL



BARE ROOT PLANTING DETAIL  
DIRTLE PLANTING METHOD  
USING THE EBC PLANTING BAR

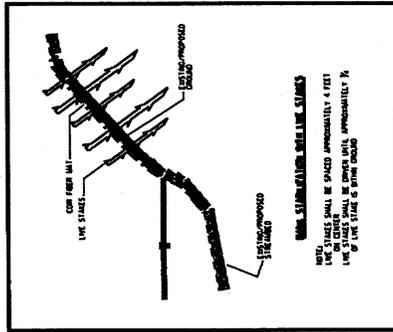


**PLANTING NOTES:**

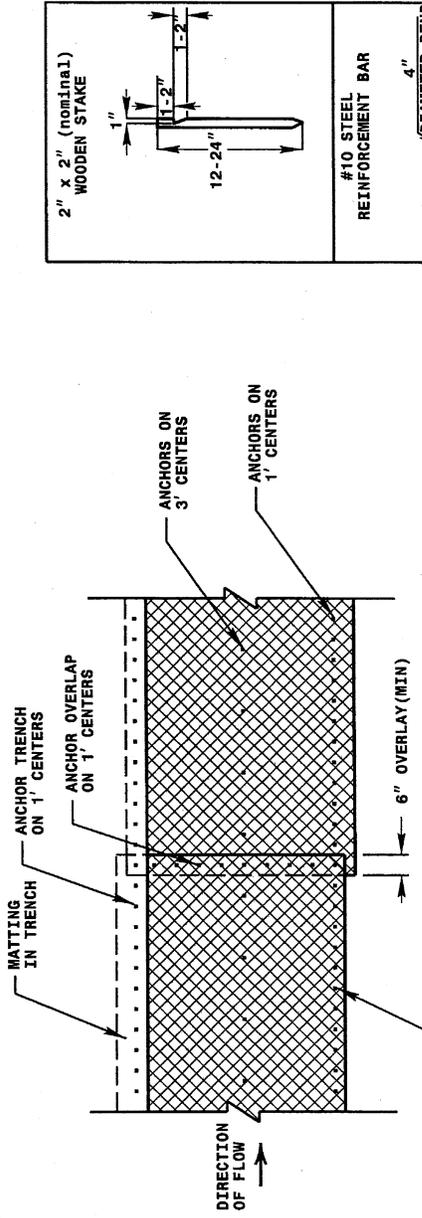
PLANTING BAG  
All live stakes shall be planted in a planting bag. The bag shall be placed in the hole and the root system shall be covered with soil.

SEC PLANTING BAR  
The planting bar shall be used to plant the live stakes. The bar shall be pushed forward and pulled back to plant the stake.

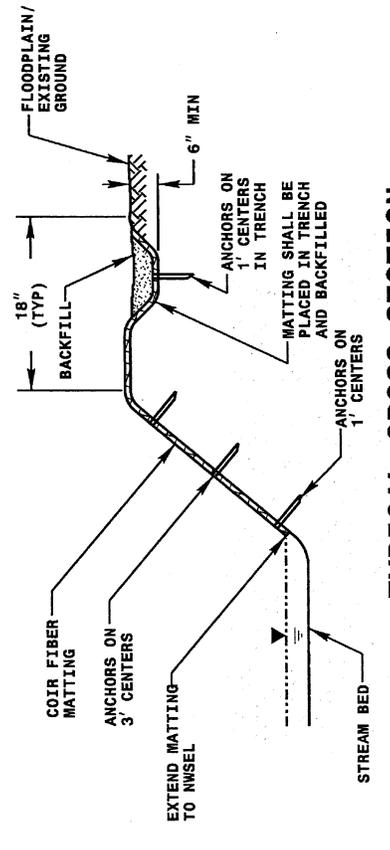
ROOT PRUNING  
All root systems shall be pruned to remove any damaged or diseased roots. The root system shall be pruned to a maximum of 10 inches below the root collar.



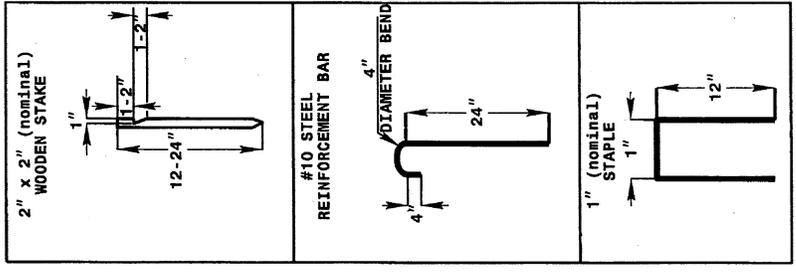
PROJECT NO.	1-2-2018
SHEET NO.	2 OF 3
DATE	10/2018
DESIGNED BY	POWELL ENGINEERS
CHECKED BY	POWELL ENGINEERS



**PLAN VIEW**



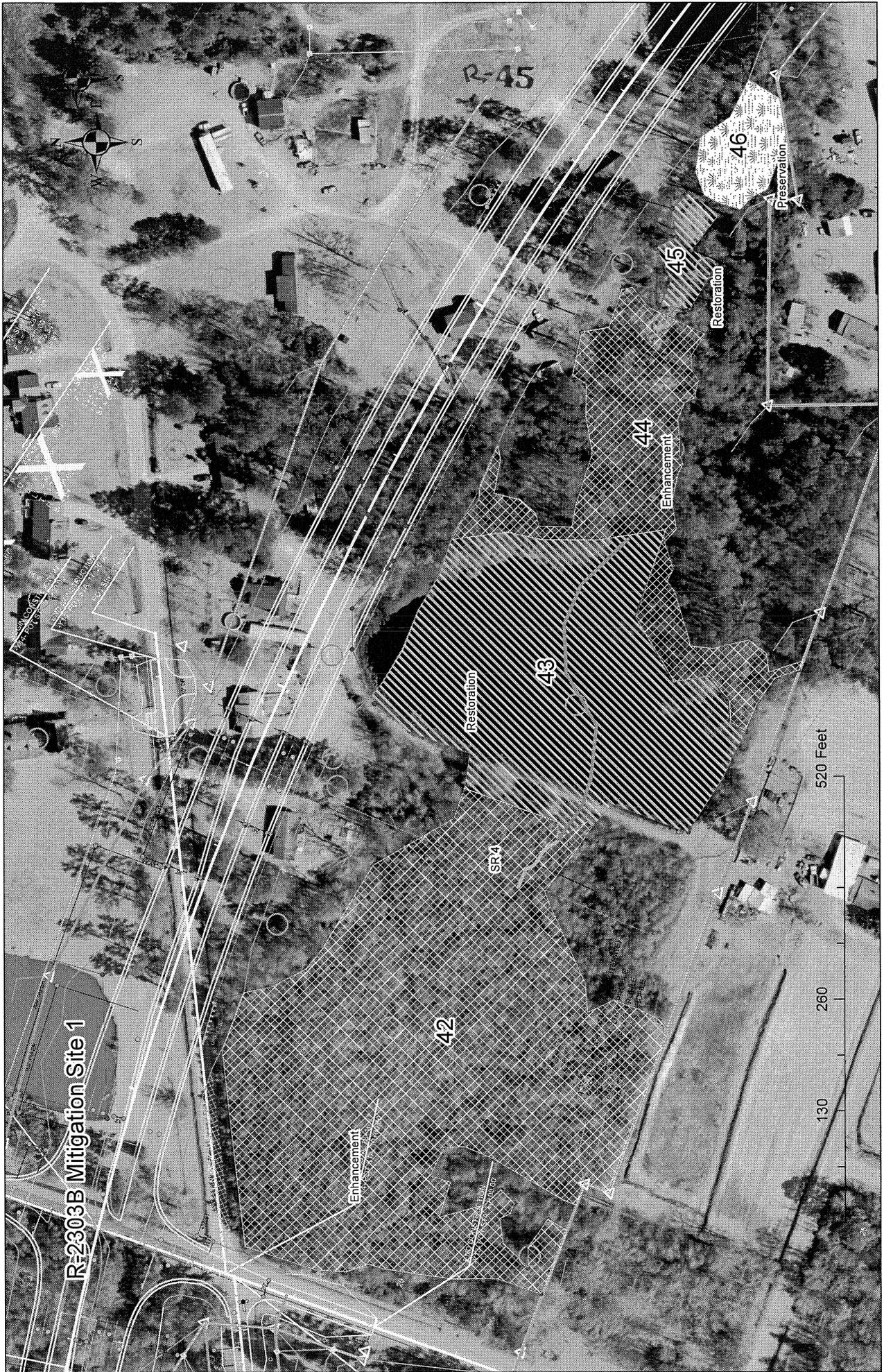
**TYPICAL CROSS SECTION**

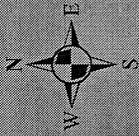


**ANCHOR OPTIONS**

**STREAMBANK REFORESTATION**  
**DETAIL SHEET 2 OF 2**  
NCMAAT - NATURES ENVIRONMENTAL UNIT

**COIR FIBER MATTING DETAIL**  
NOT TO SCALE





246

88a

Boren Brick Road

88

Restoration

R-2303B Mitigation Site 2





PI Sta 1003+58.00  
 $D = 2^{\circ} 27' 14.2''$  (RT)  
 $D = 0^{\circ} 34' 22.6''$   
 $L = 428.30'$   
 $T = 214.18'$   
 $R = 10,000.00'$

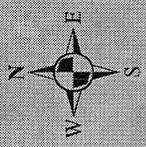
280 Feet

140

70

0

R-2303C Mitigation Site 1



PI Sta 1007+58.50  
 $D = 2^{\circ} 27' 14.2''$  (RT)  
 $D = 0^{\circ} 34' 22.6''$   
 $L = 428.30'$   
 $T = 214.18'$   
 $R = 10,000.00'$

1000

133

Stream Restoration

Restoration

R-47

12" DIA

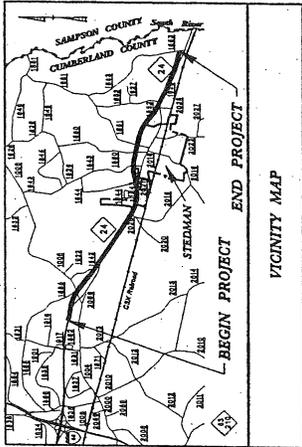
CAT 1

10" DIA





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



VICINITY MAP

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

# CUMBERLAND COUNTY

LOCATION: NC 24 FROM WEST OF SR 1006 (MAXWELL RD./ CLINTON RD.) TO SR 1853 (JOHN NUNNERY RD.)

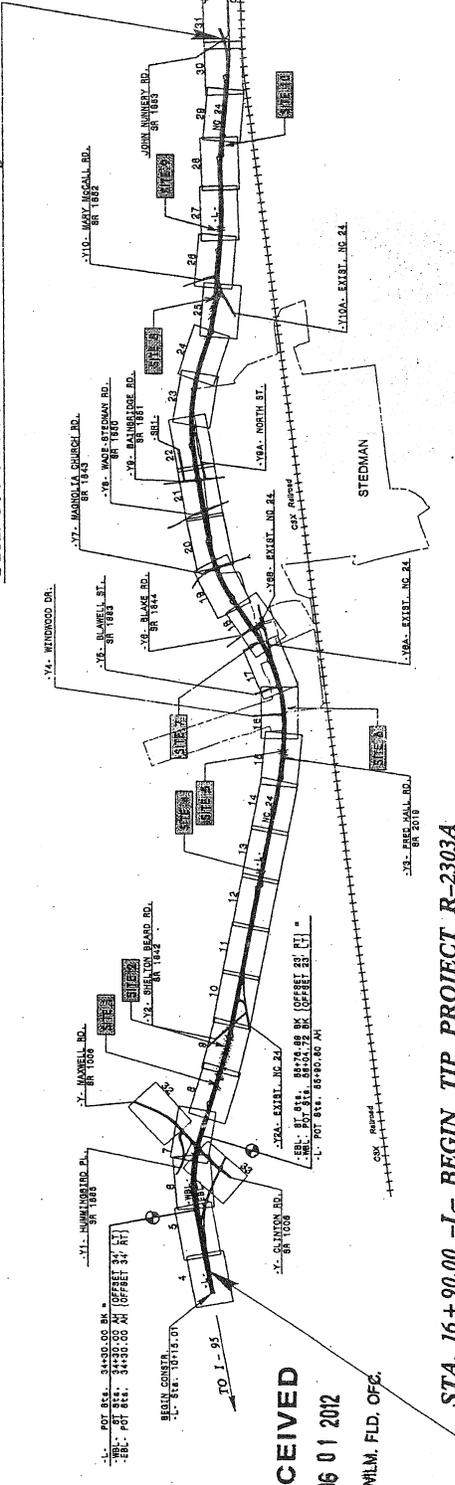
TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND SIGNALS

Permit Drawing  
Sheet 1 of 40  
Revised 7/23/12

DATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
N.C.	R-2303A	1	
34416.1.1	STPHH-F-207	P.E.	
34416.2.2		RAW UTIL.	



STA. 376 + 28.96 -L- END TIP PROJECT R-2303A

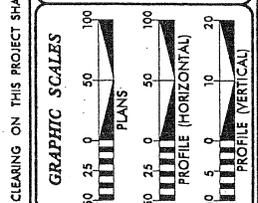


STA. 16 + 90.00 -L- BEGIN TIP PROJECT R-2303A

A PORTION OF THE PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF STEDMAN. THIS IS A LIMITED AND PARTIAL CONTROL OF ACCESS PROJECT WITH ACCESS BEING LIMITED TO POINTS AS SHOWN ON THE PLANS.

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

## WETLAND PERMIT / STREAM IMPACT



DESIGN DATA	
ADT 2011	= 19,264
ADT 2031	= 30,144
DHV	= 11 %
D	= 65 %
T	= 8 %
V	= 60 MPH
FUNC. CLASS. = ERY TYPE II	
* TIST 5% DUAL 3% STATEWIDE TIER	

PROJECT LENGTH	
LENGTH ROADWAY TIP PROJECT R-2303A	= 6.807 MILES
TOTAL LENGTH TIP PROJECT R-2303A	= 6.807 MILES

DIVISION OF HIGHWAYS	
1000 Birch Ridge Dr., Raleigh, NC, 27610	
RIGHT OF WAY DATE:	October 15, 2010
LETTING DATE:	October 16, 2012
APPROVED BY:	GARY LOVERING, PE Project Engineer
DESIGNED BY:	RICK DECOLA, PE Project Design Engineer

HYDRAULICS ENGINEER	
SIGNATURE:	ROADWAY DESIGN ENGINEER
DATE:	

PRELIMINARY PLANS  
FOR THE STATE OF NORTH CAROLINA

DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA

STATE HIGHWAY DESIGN ENGINEER

TIP PROJECT: R-2303A

CONTRACT:













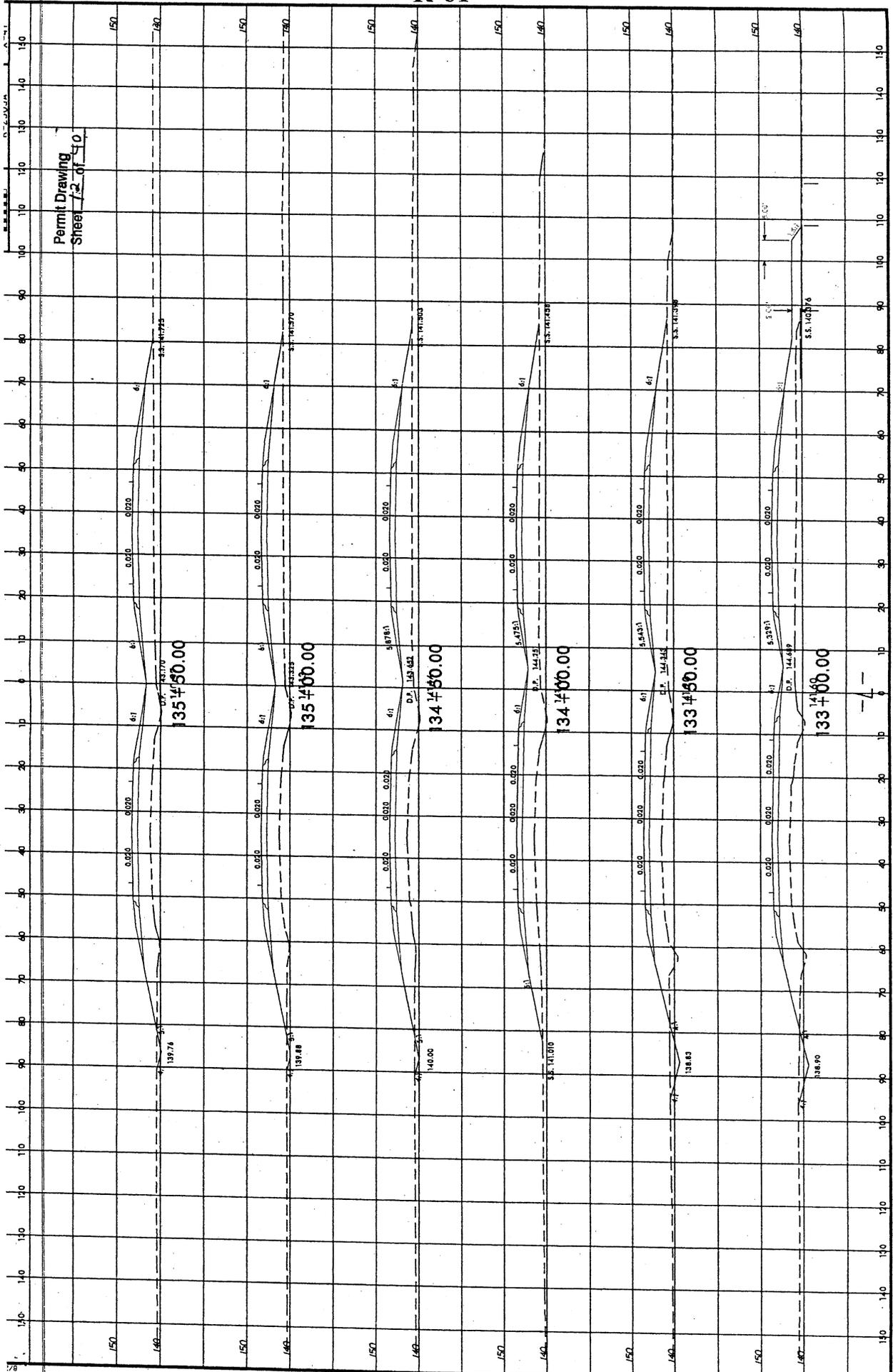








Permit Drawing  
Sheet 12 of 50







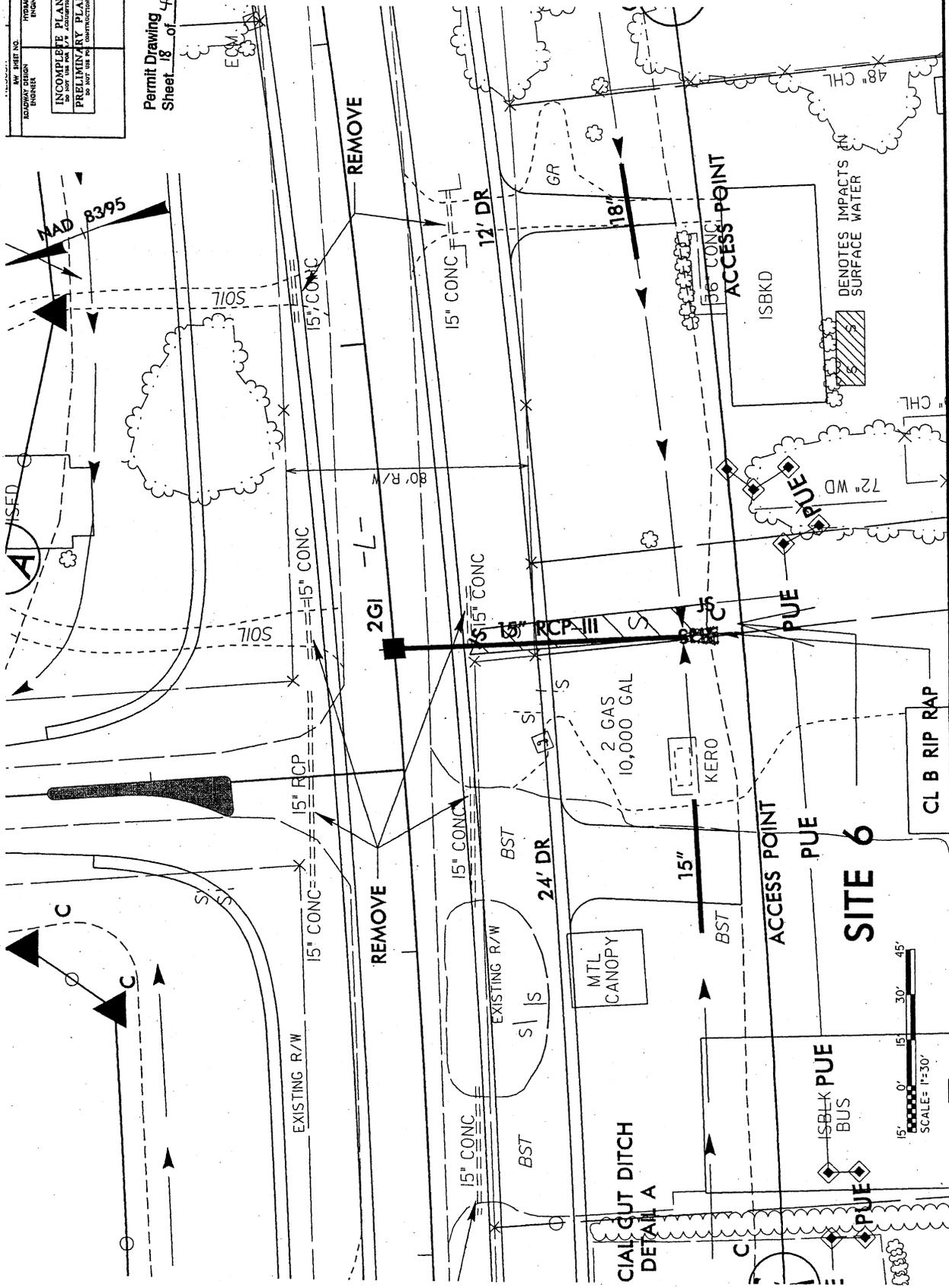






BY: SHEP NO.	DATE:
DESIGNED BY:	ENGINEER:
CHECKED BY:	INCHARGE:
<b>INCOMPLETE PLANS</b> DO NOT USE FOR PERMITS <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

Permit Drawing  
Sheet 18 of 40



01/2

NO.	DATE	REVISIONS



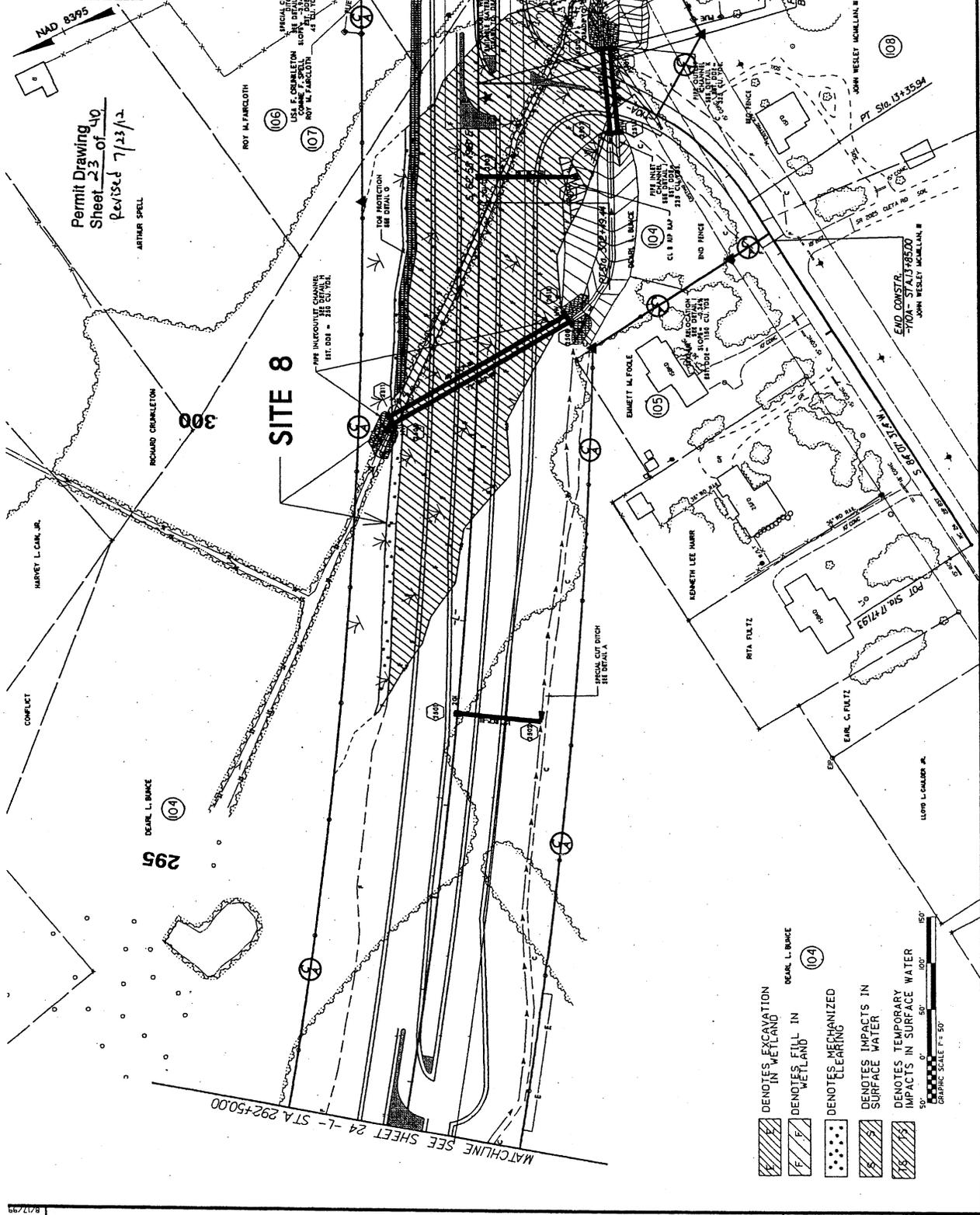




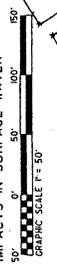


PROJECT REFERENCE NO. R-2303A  
 SHEET NO. 25  
 HYDRAULICS ENGINEER  
 PERMITTING DIVISION  
 PRELIMINARY PLANS  
 DO NOT USE FOR CONSTRUCTION

Permit Drawing  
 Sheet 23 of 40  
 Revised 7/13/12



- DENOTES EXCAVATION IN WETLAND
- DENOTES FILL IN WETLAND
- DENOTES MECHANIZED CLEARING
- DENOTES IMPACTS IN SURFACE WATER
- DENOTES TEMPORARY IMPACTS IN SURFACE WATER



REVISIONS

7/23/2012  
 12:52 PM  
 R:\my\offices\TEMP\15\_Envr\enr\m\15\150303\150303.dwg  
 08/17/12



PROJECT REFERENCE NO.	259
SHEET NO.	107
DATE	7/23/12
DESIGNED BY	LISA F. CRUNKLETON
CHECKED BY	CONNIE F. SPELL
APPROVED BY	ROY M. FAIRCLOTH
SCALE	1"=50'
DATE	7/23/12
PROJECT	PRELIMINARY PLANS
NOT TO BE USED FOR CONSTRUCTION	

**SITE 8**  
 PIPE INLET/OUTLET CHANNEL  
 SEE DETAIL H  
 EST. DDE = 250 CU. YDS.

**SPECIAL CUI DITCH**  
 SEE DETAIL E  
 SLOPE = 0.34%  
 EST. DDE = 45 CU. YDS.

LISA F. CRUNKLETON  
 CONNIE F. SPELL  
 ROY M. FAIRCLOTH

Permit Drawing  
 Sheet 25 of 40  
 Revise 1 - 7/23/12



TOE PROTECTION  
 SEE DETAIL G

BACKFILL WITH  
 SUITABLE MATERIAL  
 /GRADE TO DRAIN

CL B RIP RAP  
 EST. = 2 TONS

PIPE INLET CHANNEL  
 SEE DETAIL J  
 EST. DDE = 225 CU. YDS.

PIPE OUTLET CHANNEL  
 SEE DETAIL K  
 EST. DDE = 325 CU. YDS.

STREAM RELOCATION  
 CHANNEL/FLOODPLAIN  
 EXCAVATION  
 REMOVE EXISTING  
 ROADFILL TO N.G.  
 SEE DETAIL L  
 SLOPE = -0.39%  
 EST. DDE = 1225 CU. YDS.

EMMETT M. FOGLE

DEARL A. BUNCE

END FENCE

SCALE = 1"=50'

- DENOTES EXCAVATION IN WETLAND
- DENOTES FILL IN WETLAND
- DENOTES MECHANIZED CLEARING
- DENOTES IMPACTS IN SURFACE WATER
- DENOTES TEMPORARY IMPACTS IN SURFACE WATER

REVISIONS

PROJ. APPROVAL NO. R2303A SHEET NO. 13 P.L.

64/1508 Permit Drawing  
6/14/12 Sheet 26 of 40

300

200

100

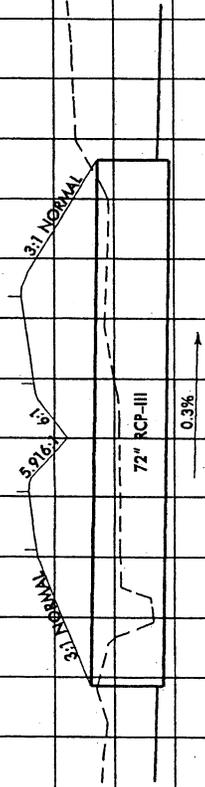
0

100

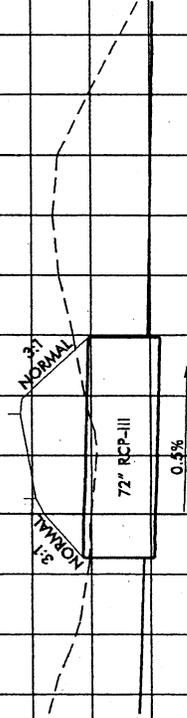
200

300

Q STA. 300+64 -L-  
ELEV. = 118.9'  
SKEW = 60°  
1 @ 72" RCP



Q STA. 11+40 -Y10A+  
ELEV. = 120.3'  
SKEW = 65°  
1 @ 72" RCP



SITE 8

130

120

110

130

120

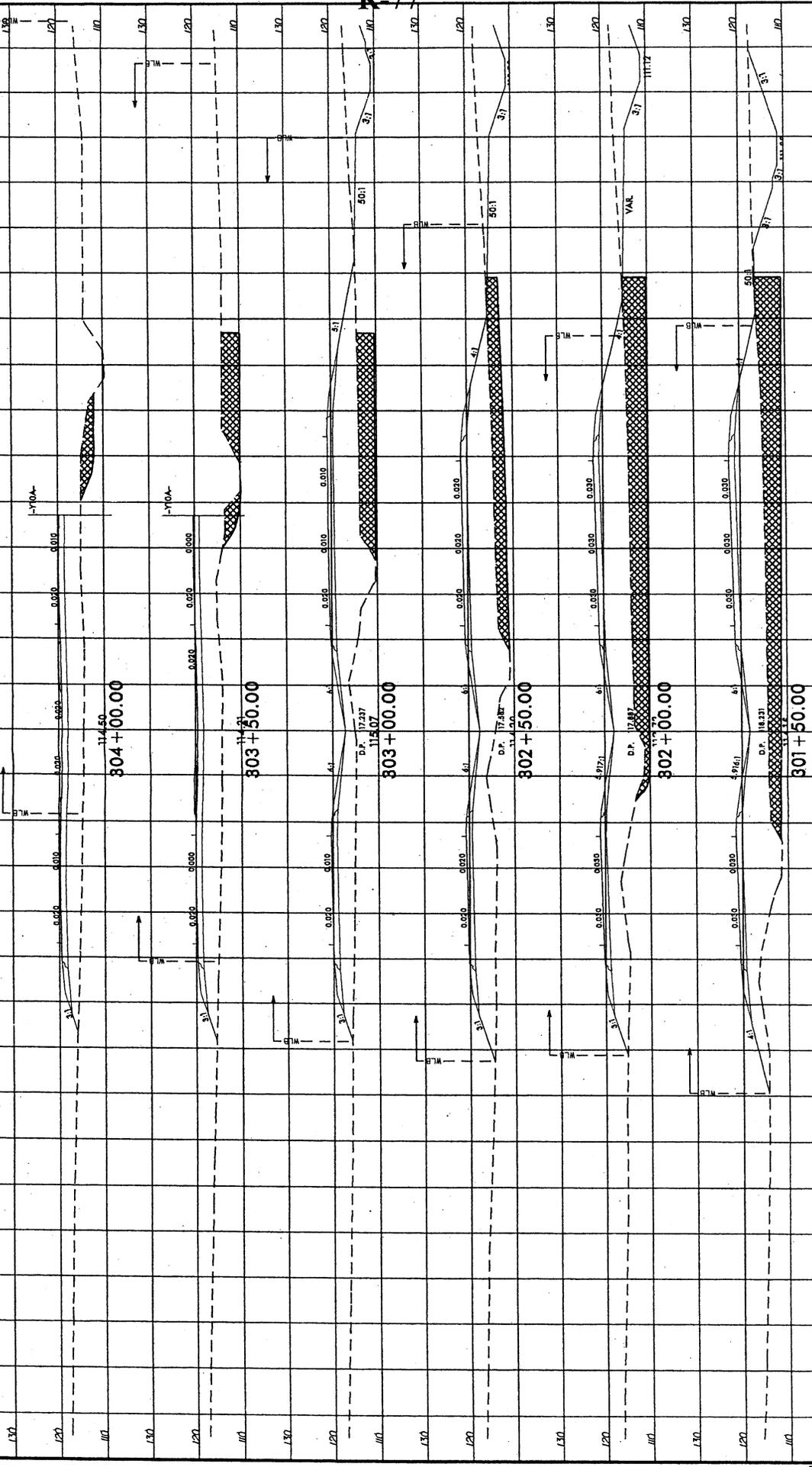
110

9/23/12



R-2303A X-38

Permit Drawing  
6/20/12 Sheet 28 of 40



UNDERCUT EXCAVATION

R-2303A  
 R.W. SHEET NO.  
 HYDRAULICS  
 ENGINEER

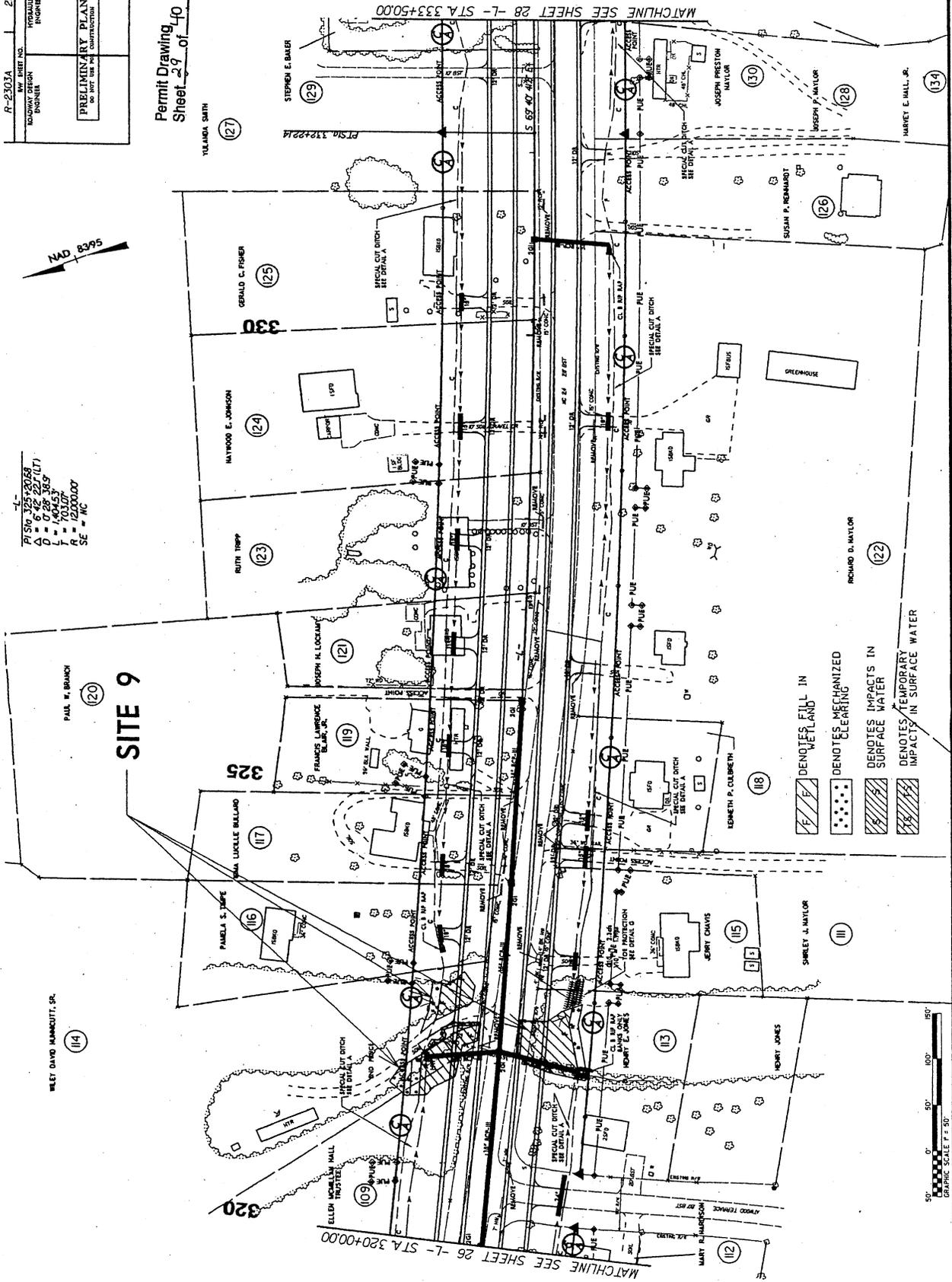
PRELIMINARY PLANS  
 DO NOT USE FOR CONSTRUCTION

Permit Drawing  
Sheet 29 of 40



LS -  
 PLS 325 5028  
 D = 28 34.9  
 L = 1404.3  
 T = 70.007  
 SE = 1200000  
 SF = 10

# SITE 9



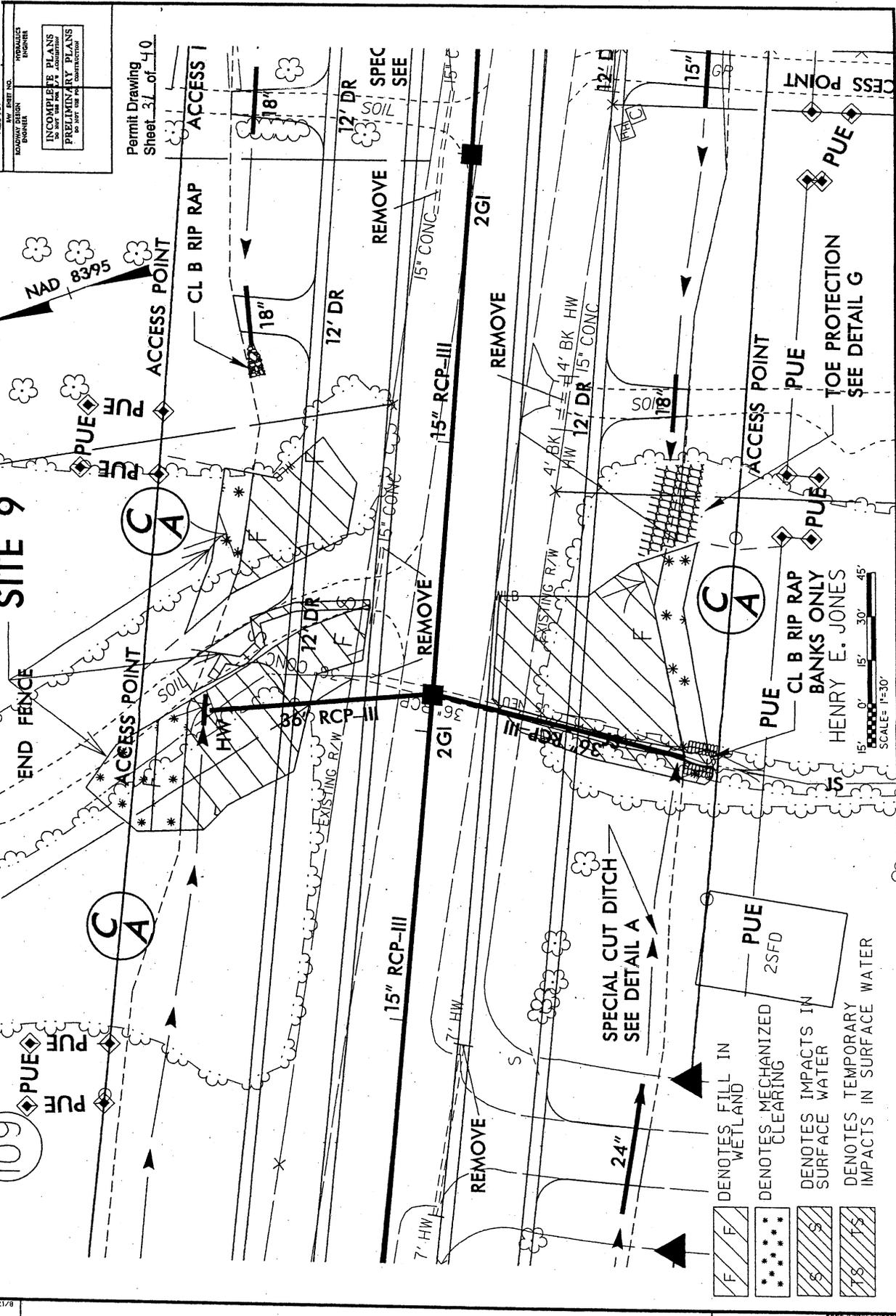
- DENOTES FILL IN WETLAND
- DENOTES MECHANIZED CLEARING
- DENOTES IMPACTS IN SURFACE WATER
- DENOTES TEMPORARY IMPACTS IN SURFACE WATER



RIGHT OF WAY REVISION - JANUARY 18, 2001 - ADDED PARCEL NO. 111.

NO.	DESCRIPTION	DATE
1	ISSUED FOR PERMIT	1/18/01
2	REVISION	1/18/01





HYDRAULIC DESIGN SHEET  
 HYDRAULIC DESIGN SHEET  
 INCOMPLETE PLANS  
 PRELIMINARY PLANS  
 DO NOT USE FOR CONSTRUCTION

Permit Drawing  
 Sheet 37 of 40

**SITE 9**

END FENCE

109

1109

8/12

- DENOTES FILL IN WETLAND
- DENOTES MECHANIZED CLEARING
- DENOTES IMPACTS IN SURFACE WATER
- DENOTES TEMPORARY IMPACTS IN SURFACE WATER

SCALE: 1"=30'

HENRY E. JONES

CL B RIP RAP BANKS ONLY

ACCESS POINT

PUE

SPECIAL CUT DITCH—  
 SEE DETAIL A

24"

REMOVE

7' HW

15" RCP-III

REMOVE

2GI

15" RCP-III

REMOVE

86" RCP-II

REMOVE

12' DR

REMOVE

15" CONC

REMOVE

12' DR

REMOVE

15" CONC

REMOVE

15" RCP-III

REMOVE

15" CONC

18"

REMOVE

12' DR

REMOVE

15" CONC

REMOVE

2GI

15" CONC

REMOVE

12' DR

REMOVE

15" CONC

REMOVE













BOUNDARY DESIGN SHEET	PROJ. SHEET NO.
INCOMPLETE PLANS DO NOT USE FOR PERMITTING PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

Permit Drawing  
 Sheet 38 of 40

**PROPERTY OWNERS**  
 NAMES AND ADDRESSES

PARCEL NO.	NAMES	ADDRESSES
------------	-------	-----------

- |     |                            |                                         |
|-----|----------------------------|-----------------------------------------|
| 86  | DOUGLAS BRYANT             | P.O. BOX 513<br>STEDMAN, NC 28391       |
| 104 | DEARL L. BUNCE             | 414 GLENWOOD DR.<br>LEXINGTON, NC 27292 |
| 113 | HENRY E. JONES             | 8321 CLINTON RD.<br>STEDMAN, NC 28391   |
| 114 | WILEY DAVID HUNNICUTT, Sr. | 8321 CLINTON RD.<br>STEDMAN, NC 28391   |
| 139 | JOHN JOSEPH STILES         | 102 COHARIE DR.<br>CLINTON, NC 28328    |

**NCDOT**  
 DIVISION OF HIGHWAYS  
 CUMBERLAND COUNTY  
 PROJECT: 441611 (R-283A)  
 STEDMAN  
 NC 24 FROM SR 1066  
 TO SR 1863

SHEET OF 3/16/11

**PROPERTY OWNERS**  
 NAMES AND ADDRESSES

PARCEL NO.	NAMES	ADDRESSES
------------	-------	-----------

- |    |                        |                                                  |
|----|------------------------|--------------------------------------------------|
| 14 | JOSEPH P. RIDDLE, III  | P.O. BOX 53729<br>FAYETTEVILLE, NC 28305         |
| 15 | PREMIUM STANDARD FARMS | 623 SOUTHEAST Blvd.<br>CLINTON, NC 28328         |
| 16 | DONALD CULBRETH        | 427 HILLSBORO St.<br>STEDMAN, NC 28391           |
| 20 | CANDACE JO CARTER      | 4160 PLEASANT VIEW DR.<br>FAYETTEVILLE, NC 28301 |
| 31 | RICHARD R. ALLEN, Jr.  | 6044 CLINTON RD.<br>STEDMAN, NC 28391            |
| 43 | DWIGHT KIM JOHNSON     | 3102 AUDUBON PLACE<br>WILSON, NC 27896           |
| 44 | STACY R. CARR, III     | 211 OLD STAGE RD.<br>AUTRYVILLE, NC 28318        |
| 56 | ROBERT E. OLIVER       | 6644 CLINTON RD.<br>STEDMAN, NC 28391            |

**NCDOT**  
 DIVISION OF HIGHWAYS  
 CUMBERLAND COUNTY  
 PROJECT: 441611 (R-283A)  
 STEDMAN  
 NC 24 FROM SR 1066  
 TO SR 1863

SHEET OF 3/16/11

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	69+45 to 70+63-L-RT. 70+93 to 72+81-L-RT	Fill								0.16						
2	73+00 to 85+00-L-	Fill	4.44			0.53										
3	ELIMINATED															
4	131+57 to 133+50-L-RT	Fill								0.18						
5	167+09 to 168+51-L-RT	Fill	0.04			0.03										
6	178+97 to 179+07-L-RT	Fill								0.02						
7	200+65 to 202+44-L-	Fill								0.24						
8	* 296+63 to 304+66-L- 300+06 to 305+40-L- 2*(1@72" & 1@48")	Fill	2.03		0.02	0.20				0.08		531.00				
	304+40 to 304+51-L-LT	Bank Stabilization								<0.01	<0.01	41.00	27.00			
TOTALS:			6.51		0.02	0.76				0.79	<0.01	572	27			

Permit Drawing  
 Sheet 39 of 40  
 Revised 7/23/12

Site 1, 4 and 7 are Pond surface water impacts.

\*Site 8 Wetland sta. 296+63 -L- impact shown as a total take due to ditch.  
 Additional impact outside of ditch is 0.02 acres. Also, there will be 294 ft of stream relocation.

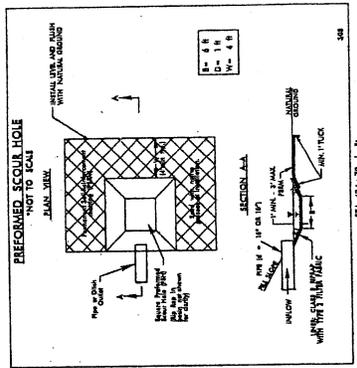
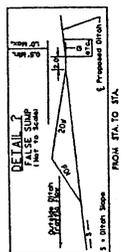
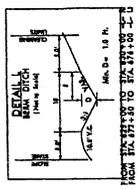
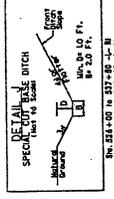
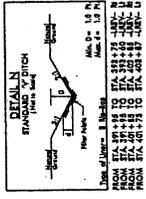
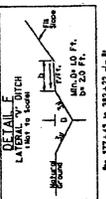
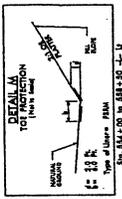
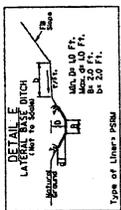
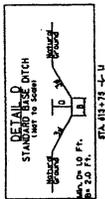
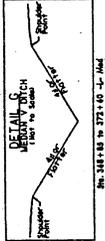
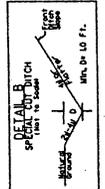
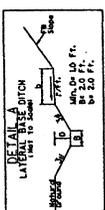
NC DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 CUMBERLAND COUNTY  
 WBS - 34416.1.1 (R-2303A)





PROJECT REFERENCE NO. <b>R-2303B</b>	SHEET NO. <b>2-G</b>
BY SHEET NO. <b>ROADWAY DESIGN ENGINEER</b>	HYDRAULICS ENGINEER

Permit Drawing Sheet 2 of 56



Profile on Hand Control Outside of Station

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Sta. 397+20	397+20
Sta. 397+30	397+30
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MATCHLINE SHEET 7 -L- STA. 401+00

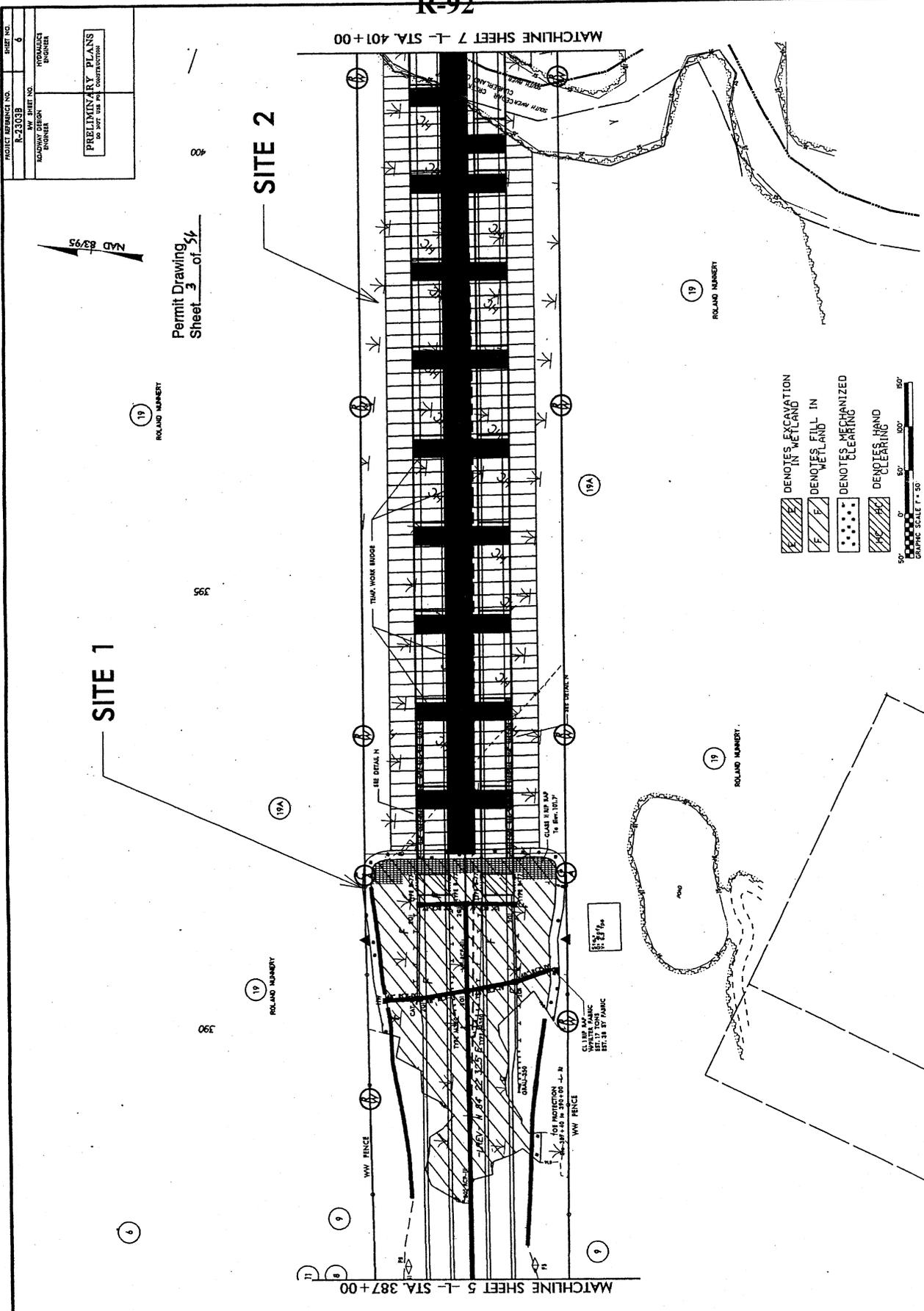
PROJECT REFERENCE NO.	R-33039
DATE	6/20/12
PROJECT NO.	6
DATE	6/20/12
NO. SHEET NO.	3
DATE	6/20/12
DESIGNER	HYDROLOGICAL ENGINEERING
OWNER	WISCONSIN DEPARTMENT OF TRANSPORTATION
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	



Permit Drawing  
Sheet 3 of 34

SITE 1

SITE 2



LEGEND:

- DENOTES EXCAVATION IN WETLAND
- DENOTES FILL IN WETLAND
- DENOTES MECHANIZED CLEARING
- DENOTES HAND CLEARING

GRAPHIC SCALE: 1" = 50'

0' 50' 100' 150'

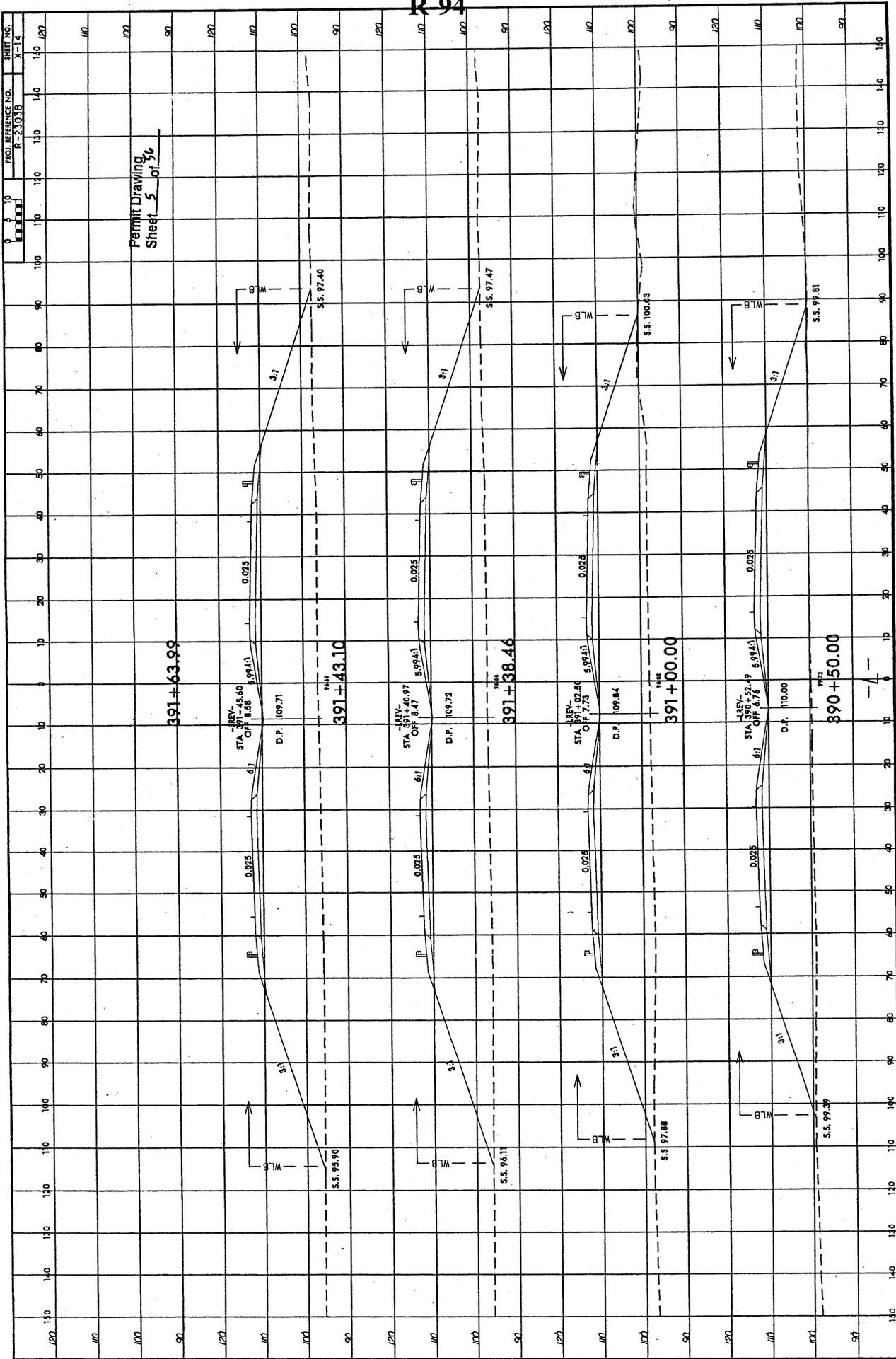
MATCHLINE SHEET 5 -L- STA. 387+00



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EROL REFERENCE NO.  
R-23038

SHEET NO.  
X-14

Permit Drawing  
Sheet 5 of 36

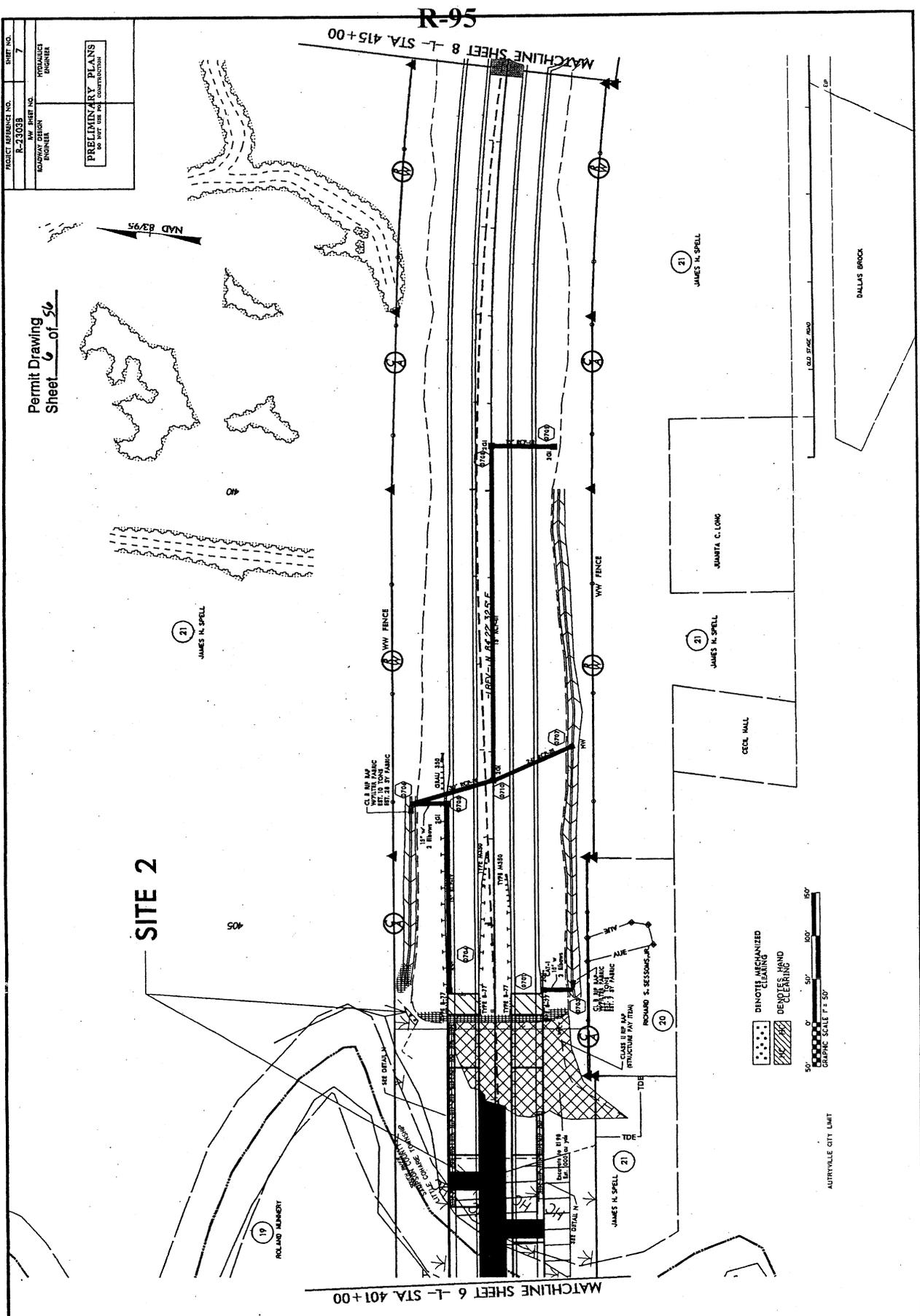


8/23/99

6/20/2012  
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m.kester

PROJECT REFERENCE NO. R-23038  
 SHEET NO. 7  
 HYDRAULIC ENGINEER  
 ROADWAY DESIGN ENGINEER  
 PRELIMINARY PLANS  
 DO NOT USE FOR CONSTRUCTION

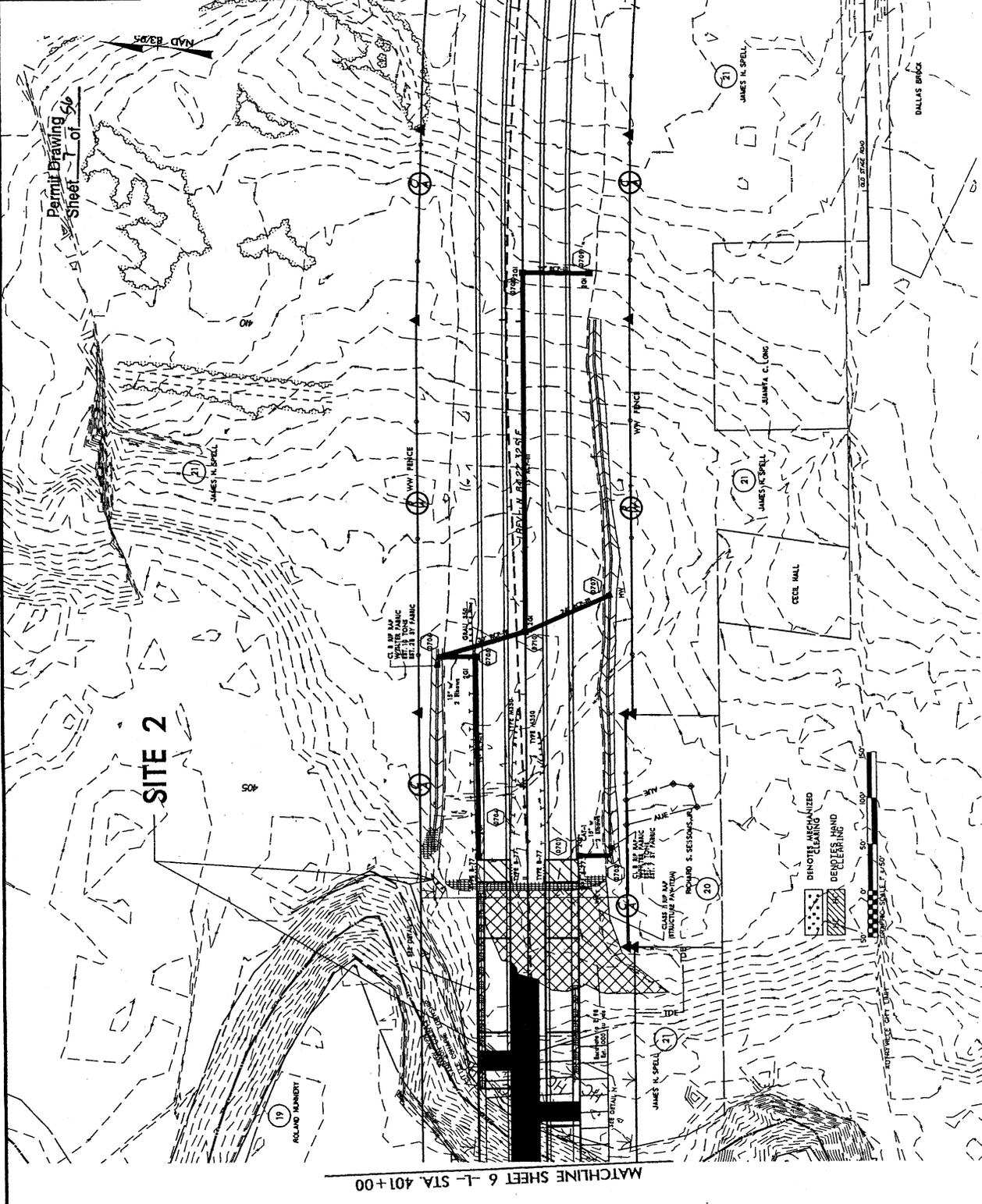
Permit Drawing  
 Sheet 6 of 36



REVISIONS

NO.	DATE	DESCRIPTION

PROJECT NUMBER: R-2033	SHEET NO: 7
DESIGNER: ROADWAY DESIGN ENGINEER	CHECKER: MECHANICAL ENGINEER
PRELIMINARY PLANS AS PART OF THE CONSTRUCTION	



REVISIONS

5/21/2012  
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PROJECT NUMBER AND NAME	2303B
ENGINEER	HYDRAULIC ENGINEER
DATE	NOV 8
<b>PRELIMINARY PLANS</b> NO NOT FOR CONSTRUCTION	

**SITE 3**

Permit Drawing Sheet 10 of 30

**SITE 4**

**SITE 5**

MATCHLINE SHEET 7 - L - STA. 415+00

MATCHLINE SHEET 9 - L - STA. 429+00

GRAPHIC SCALE 1" = 50'

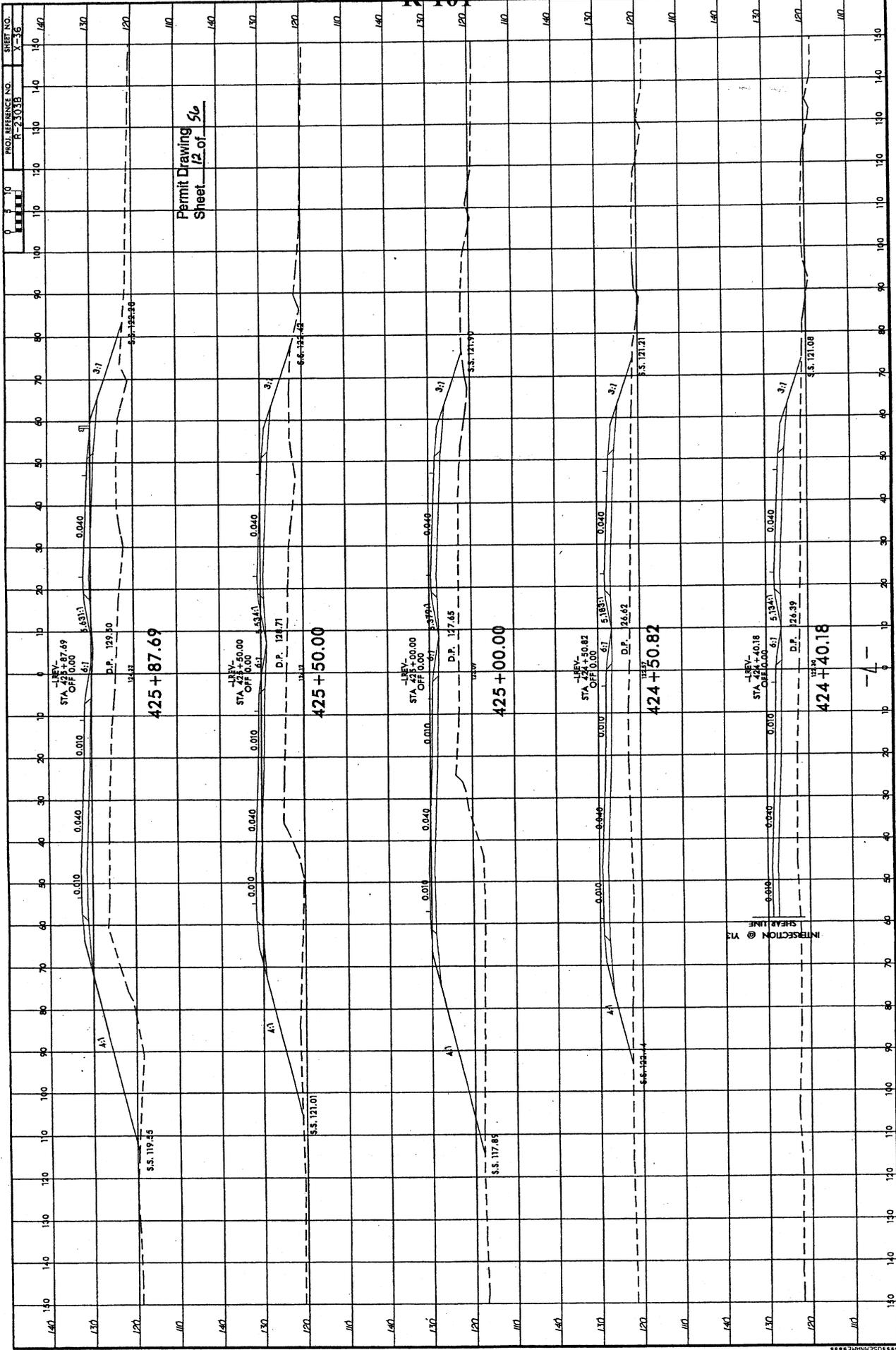
REVISIONS

09/16/11 R/W REVISION (PJS) - THE R/W LINE WAS ADJUSTED TO THE EXISTING PROPERTY LINE ON PARCEL 25 (BERTIE A WILLIAMS)

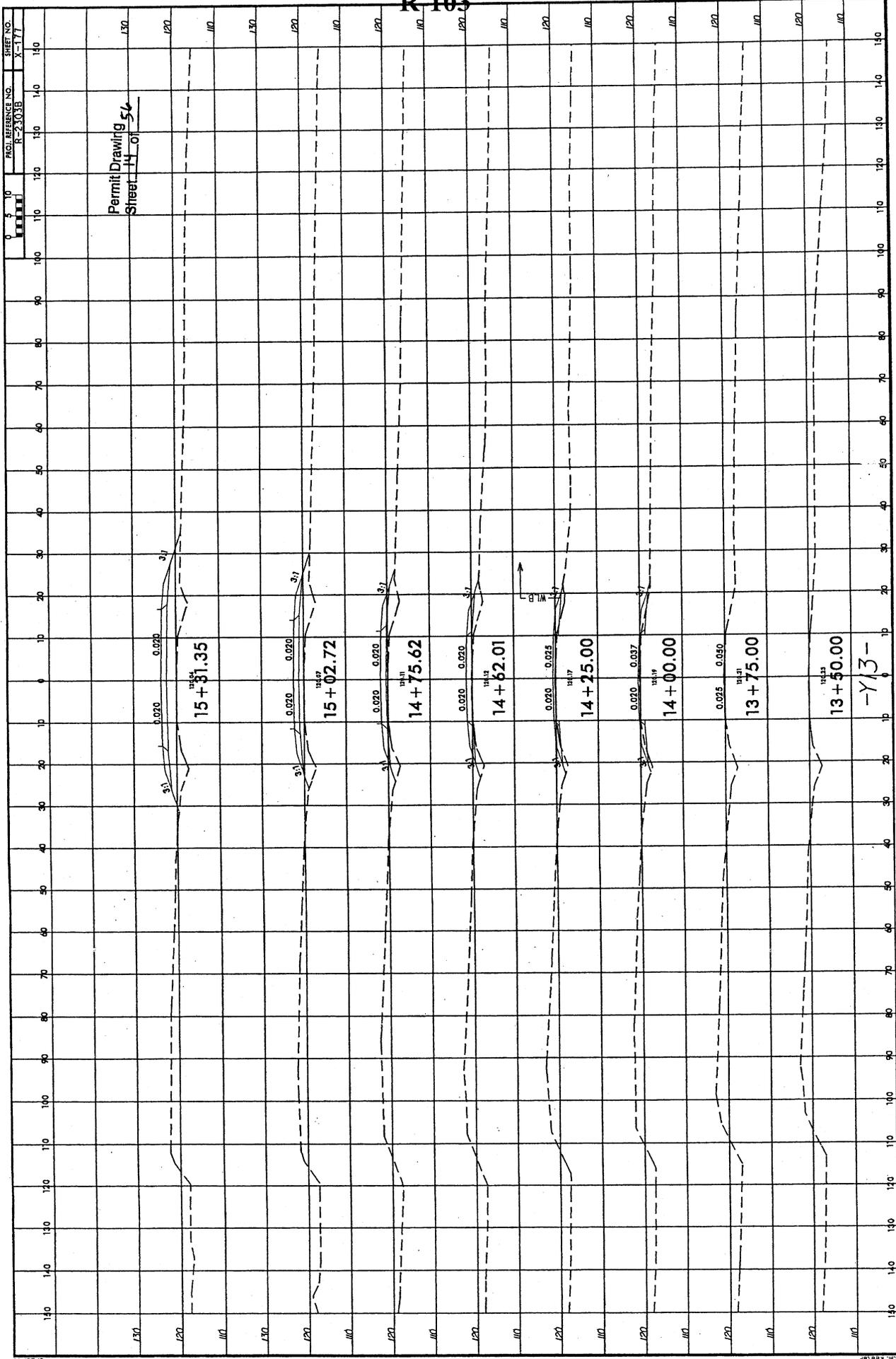
02/26/11 R/W REVISION (PJS) - THE OFFSETS WERE CORRECTED ON PARCEL 25 (BERTIE A WILLIAMS)

03/08/11 R/W REVISION (PJS) - THE R/W LINE WAS ADJUSTED TO THE EXISTING PROPERTY LINE ON PARCEL 25 (BERTIE A WILLIAMS)





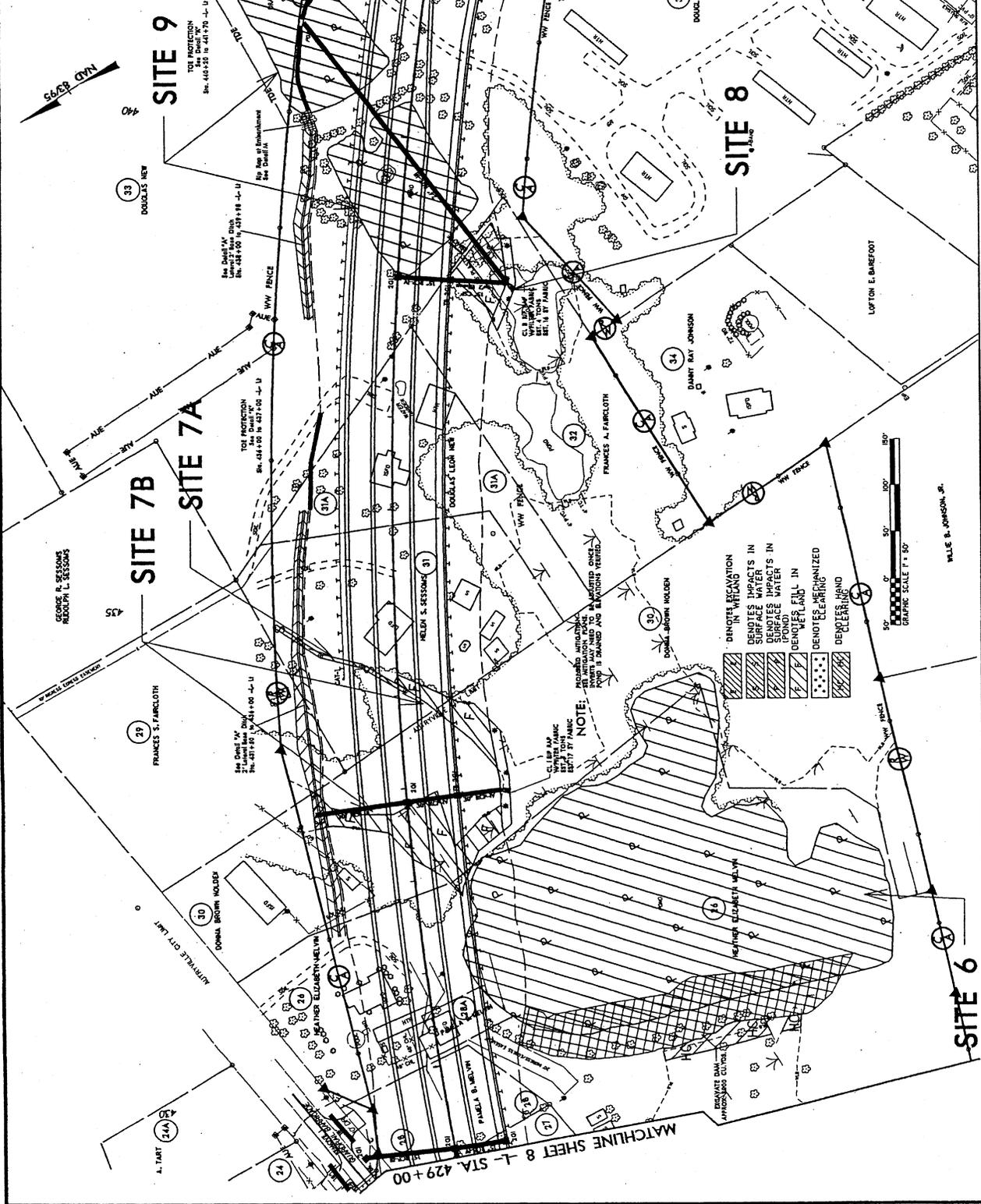




PROJECT REFERENCE NO.	DATE NO.
8-31033	9
PROJECT SHEET NO.	HYDRAULIC ENGINEER
1	ENGINEER

**PRELIMINARY PLANS**  
FOR THE PROPOSED  
CONSTRUCTION

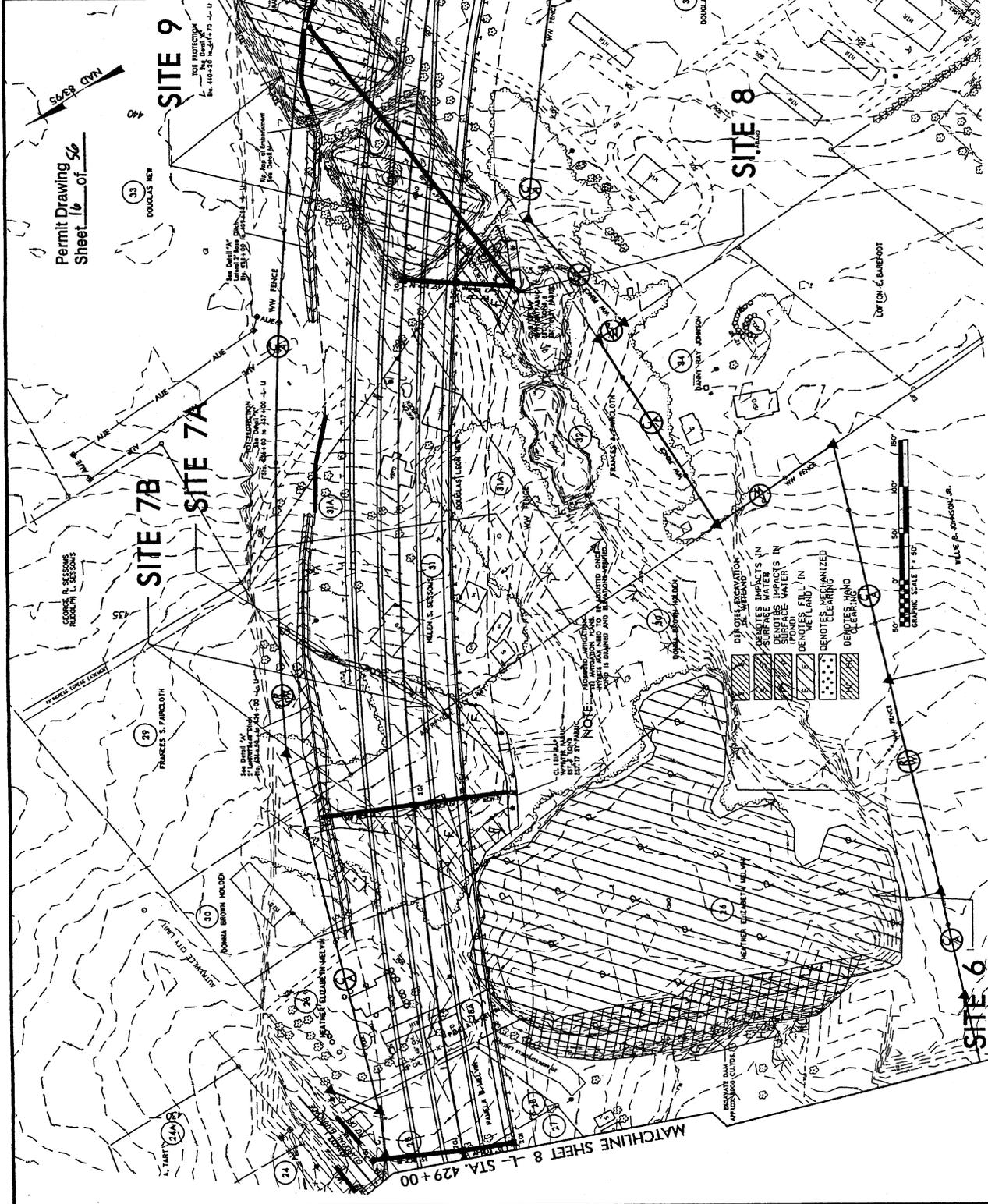
**SITE 9** Permit Drawing  
Sheet 12 of 34



REVISIONS

09/16/R/W REVISION (P.S.) - THE R/W LINE WAS ADJUSTED TO THE EXISTING PROPERTY LINE ON PARCEL 26 (HEATHER ELIZABETH MELVIN), PARCEL 24 (KAREN E. JOHNSON), PARCEL 25 (BROWN D. SESSONS), AND PARCEL 24 (KAREN E. JOHNSON).  
08/25/R/W REVISION (P.S.) - THE OFFSETS WERE CORRECTED ON PARCEL 26 (HEATHER ELIZABETH MELVIN), PARCEL 25 (BROWN D. SESSONS), AND PARCEL 24 (KAREN E. JOHNSON).

PROJECT REFERENCE NO.	9
PROJECT NAME	ROADWAY DESIGN
DATE	10/11/11
DESIGNER	PRODIGES ENGINEER
CHECKER	PRODIGES ENGINEER
DATE	10/11/11
SCALE	AS SHOWN
STATUS	PRELIMINARY PLANS
NOTES	DO NOT USE FOR CONSTRUCTION



REVISIONS

09/01/11 R/W REVISION (R/S) - THE R/W LINE WAS ADJUSTED TO THE EXISTING PROPERTY LINE ON PARCEL 25 (HEATHER ELIZABETH MELVIN), PARCEL 30 (DONNA BROWN HOLDEN), PARCEL 34 (CLARA E. JOHNSON), PARCEL 35 (BRON D. SESSOMS) AND PARCEL 36 (CLARA E. JOHNSON).

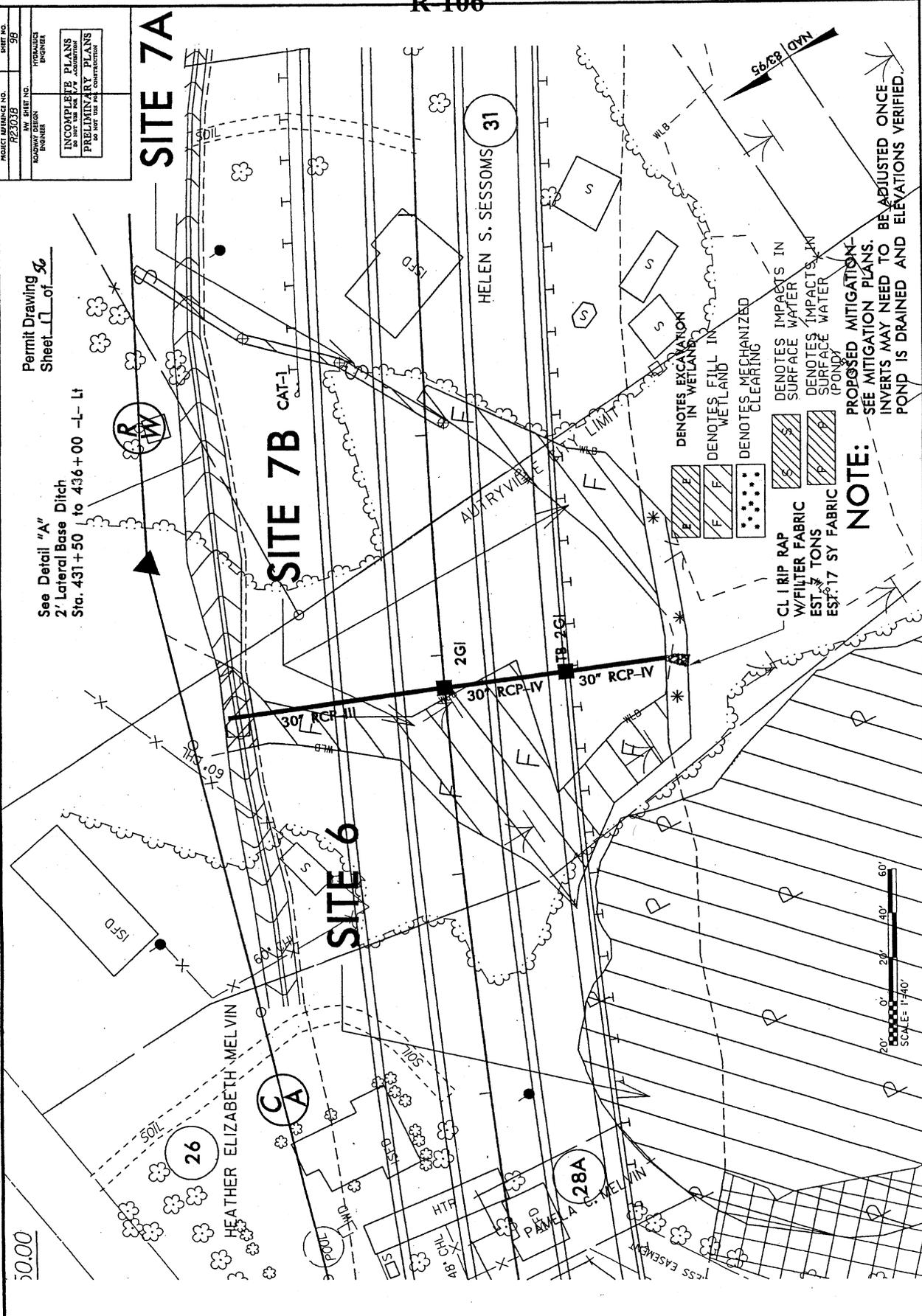
08/25/11 R/W REVISION (R/S) - THE OFFSETS WERE CORRECTED ON PARCEL 26 (HEATHER ELIZABETH MELVIN).

08/17/09

PROJECT NUMBER AND SHEET NO.	R2303B	28
DATE	11/11/11	
DESIGNED BY	ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR CONSTRUCTION		
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION		

Permit Drawing  
Sheet 1 of 2

See Detail "A"  
2' Lateral Base Ditch  
Sta. 431+50 to 436+00 -L- Lt

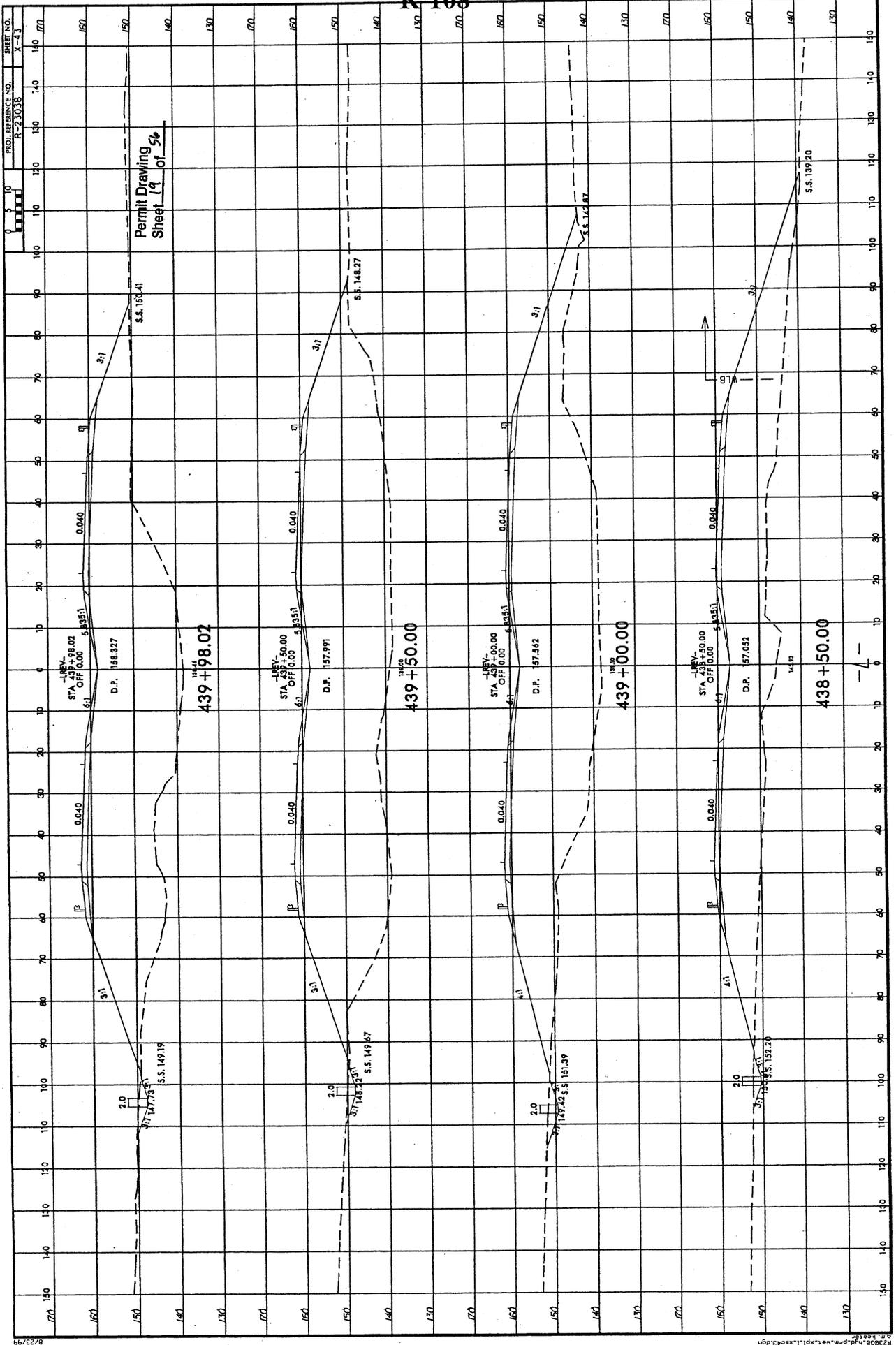


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B/17/94

EMSONS





6/22/2012  
 OnSite  
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 8/23/99



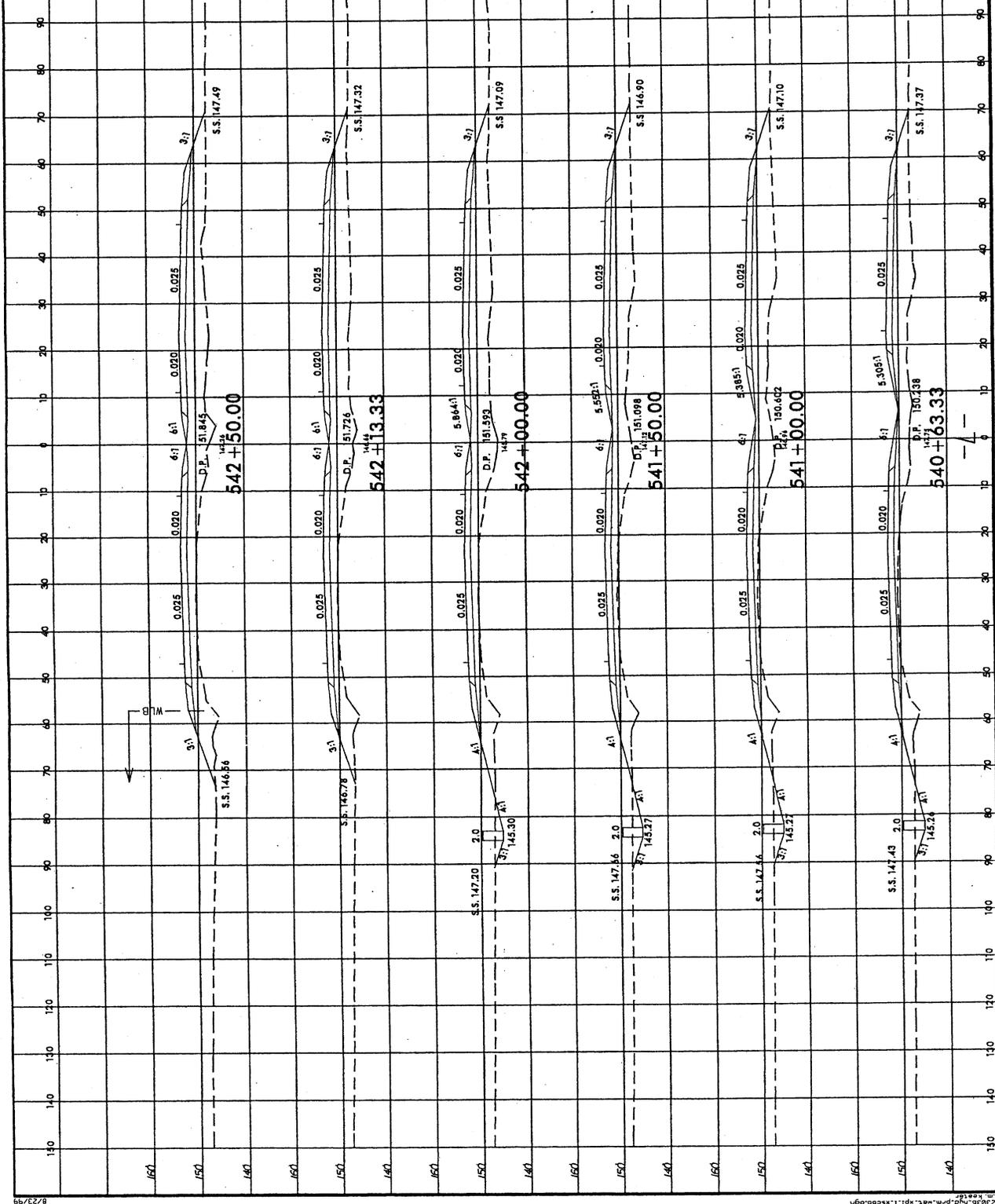


SHEET NO. X-88  
 PROJ. REFERENCE NO. P-2303B

0 5 10 100 110 120 130 140

Permit Drawing  
 Sheet 22 of 24

R 111



6/23/99

6/22/2012  
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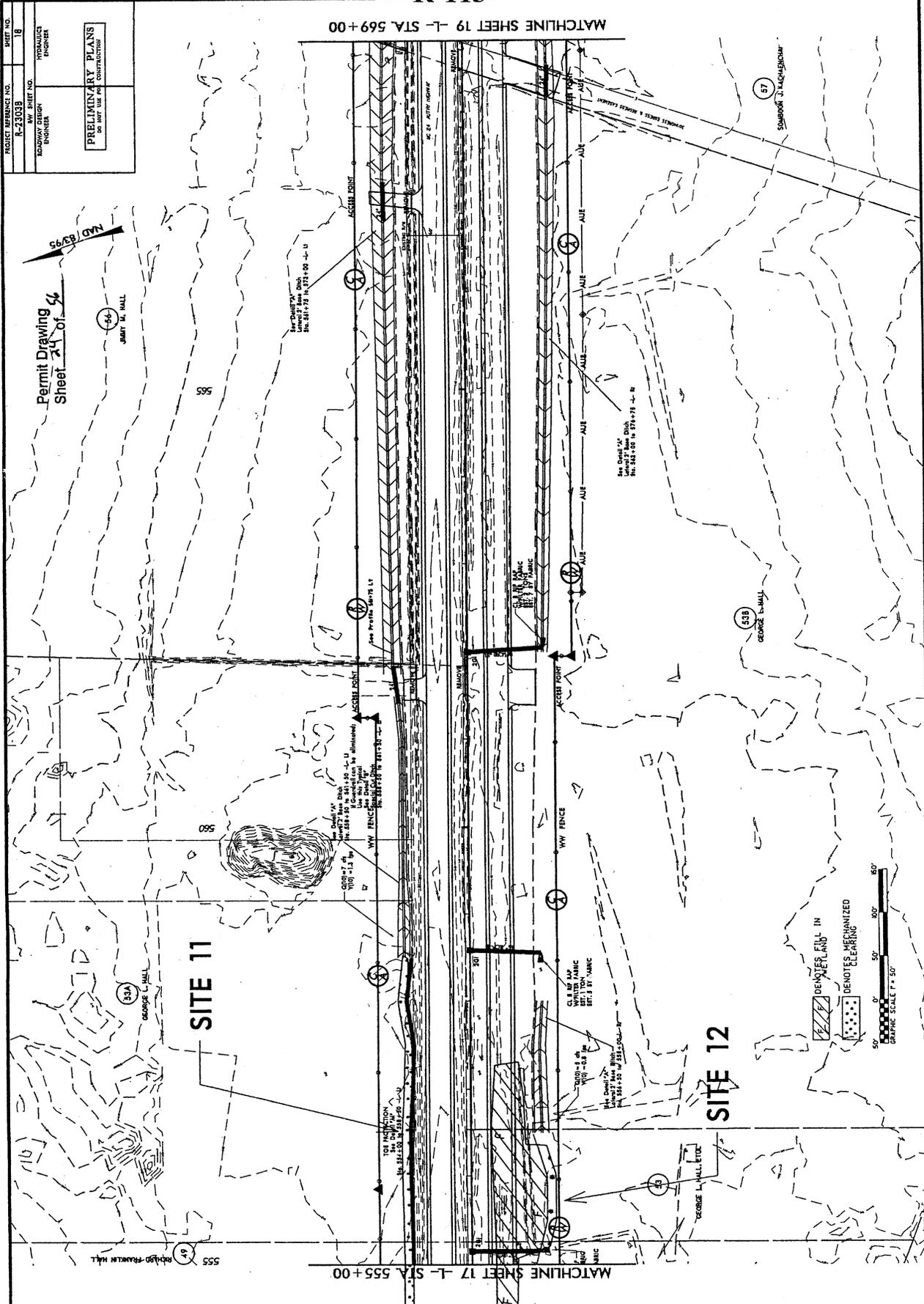


MATCHLINE SHEET 19 -L- STA. 569+00

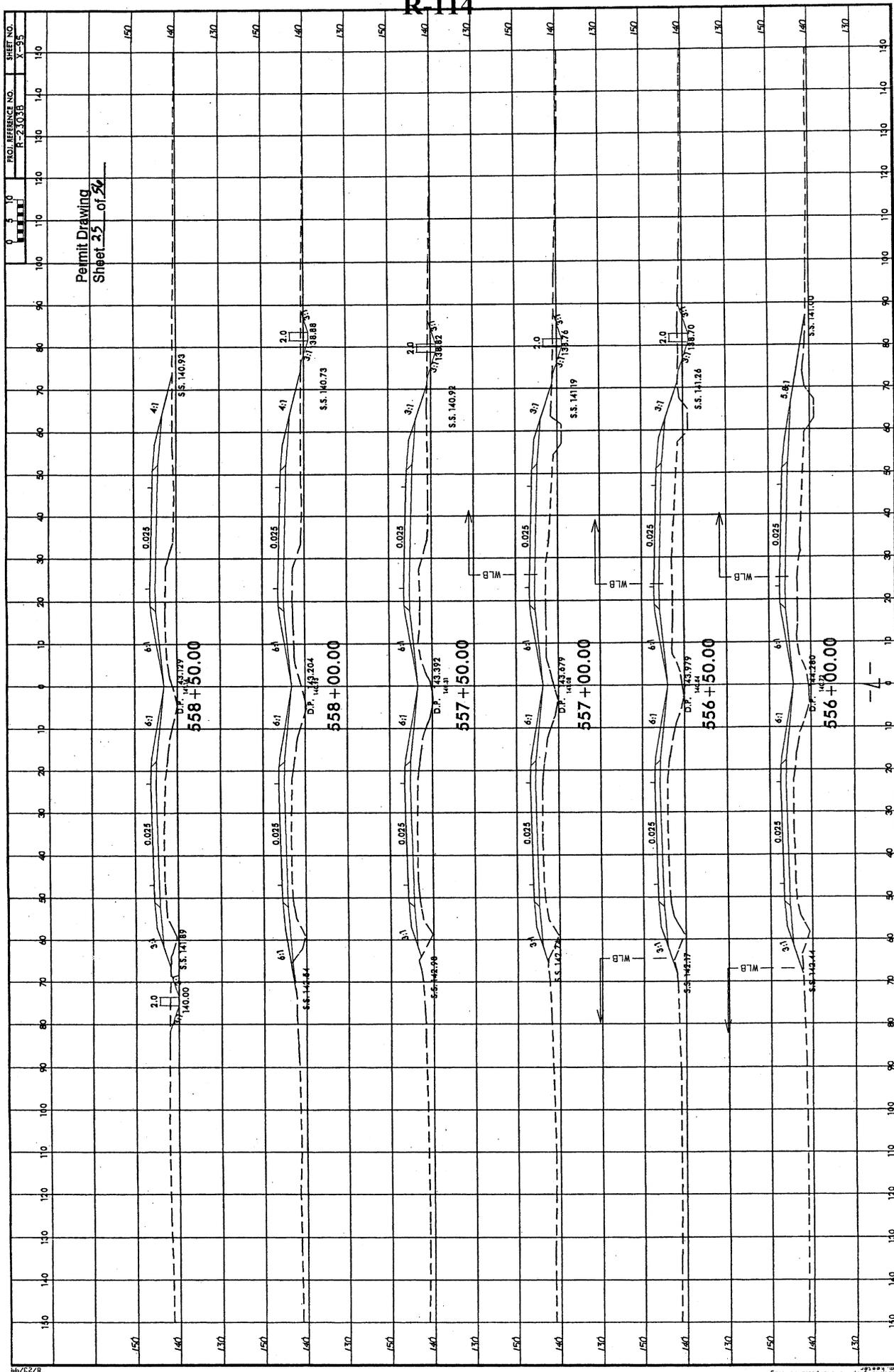
MATCHLINE SHEET 17 -L- STA. 555+00

PROJECT REFERENCE NO.	SHEET NO.
B-2303B	18
AW SHEET NO.	HYDRAULICS
ROADWAY DESIGN	ENGINEER
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

Permit Drawing  
Sheet 14 of 56



1/22/11 R/W REVISIONS, ADDED PROPERTY LINES PER DB 1200 PG 769 MB 27/90.  
 REVISIONS  
 6/27/2012  
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PROJ. REFERENCE NO. R-2303B SHEET NO. X-35  
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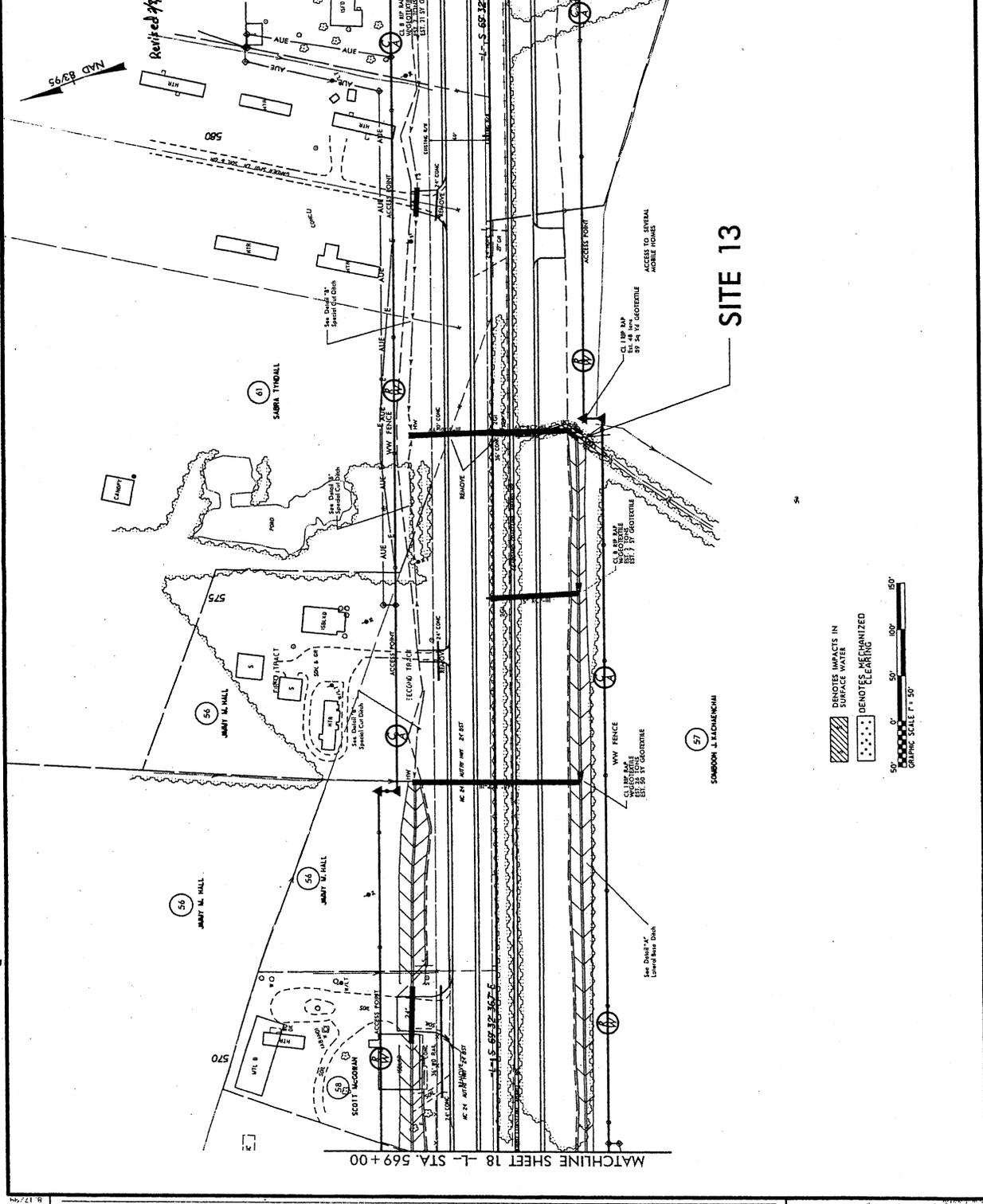
Permit Drawing  
 Sheet 25 of 24

6/22/2012  
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RECEIVED  
FEB 20 2013  
REQ. WINN-DIEB GFG

PROJECT REFERENCE NO.	82409
PROJECT NO.	17
DESIGNER	ROADWAY DESIGN ENGINEER
DATE	NOVEMBER 2012
PREPARED BY	ROADWAY DESIGN ENGINEER
CHECKED BY	ROADWAY DESIGN ENGINEER
APPROVED BY	ROADWAY DESIGN ENGINEER

Revised 2/13 Permit Drawing  
Sheet 26 of 56

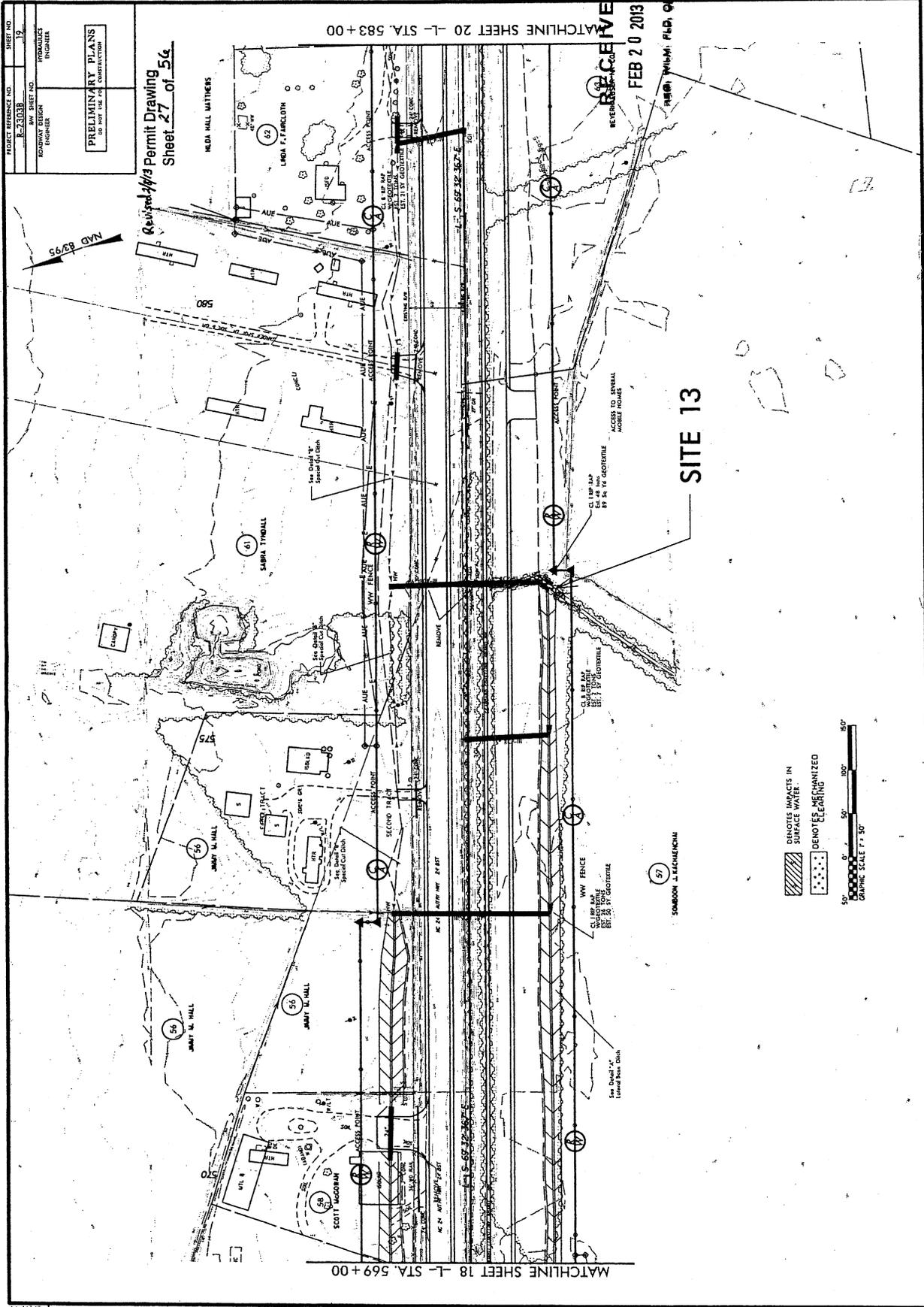


SITE 13

DENOTES IMPACTS IN SURFACE WATER  
 DENOTES MECHANIZED CLEARING  
 GRAPHIC SCALE 1" = 50'  
 0 50 100 150

09/25/11 R/W REVISION (P/S) - THE DESERTS WERE CORRECTED AND ACCESS POINT WAS ADDED FROM STA. 578+500 TO STA. 579+500. RT. ON PARCEL 57 (SANDYON J. BUCHHEIMER, PARCEL 58) AND NEIL FARLOTH (PARCEL 53, WETENHEUSER COMPANY) WAS REMOVED TO WETENHEUSER NR. CO.

REVISIONS

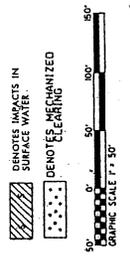


PROJECT REFERENCE NO.	SHEET NO.
R-2303B	19
BY SHEET NO.	HYDRAULICS
ROADWAY DESIGN	STRUCTURES
ENGINEER	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

Reviewed 1/13 Permit Drawing  
 Sheet 27 of 56

RECEIVED  
 FEB 20 2013  
 RABR WILM. PLD. CIG

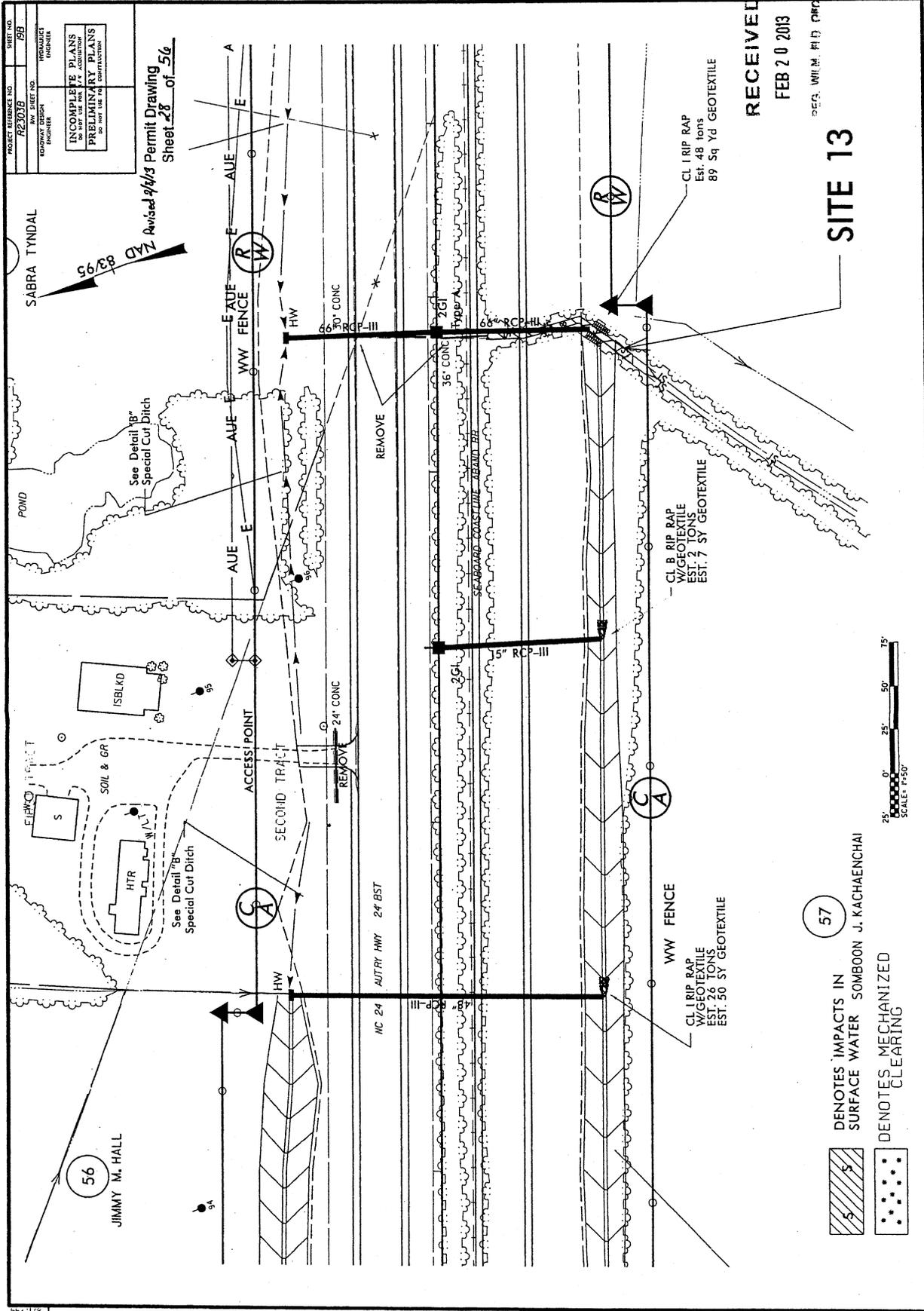
SITE 13



08/26/11 B/W REVISION (P15) - THE DESIGNS WERE CORRECTED AND ACCESS POINT WAS ADDED FROM -L- STA. 578+500 TO STA. 579+500 ON PARCEL 57 (SAMBOON J. KACHENKINI) PARCEL 52 (LINDA M. FARCLOTH) PARCEL 53 (MELBA KUSER COMPANY) PARCEL 54 (REMOVED TO MEYERHUSEN NR CO.)

8/27/11

REVISIONS



PROJECT REFERENCE NO. 223015  
 ROADWAY DESIGN ENGINEER  
 SHEET NO. 19B  
 HYDRAULICS ENGINEER

INCOMPLETE PLANS  
 PRELIMINARY PLANS  
 DO NOT USE FOR CONSTRUCTION

Revised 9/6/13 Permit Drawing  
 Sheet 28 of 56

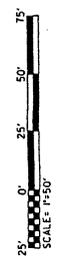
RECEIVED  
 FEB 20 2013  
 DEPT. OF HIGHWAY ENGINEERING

SITE 13

56  
 JIMMY M. HALL

57  
 DENOTES IMPACTS IN  
 SURFACE WATER  
 SOMBOON J. KACHAENCHAI

DENOTES MECHANIZED  
 CLEARING

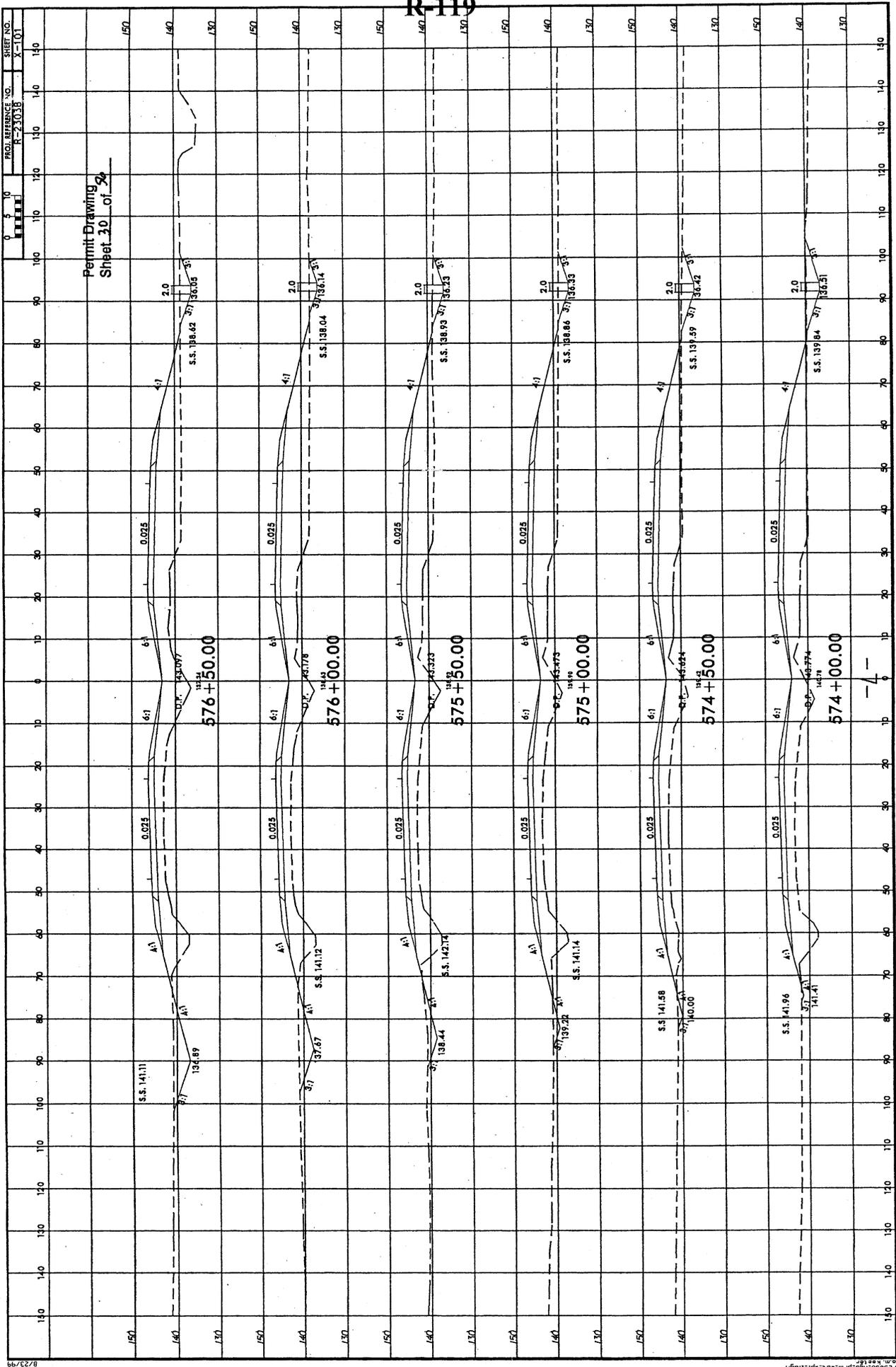


NO.	DESCRIPTION	DATE



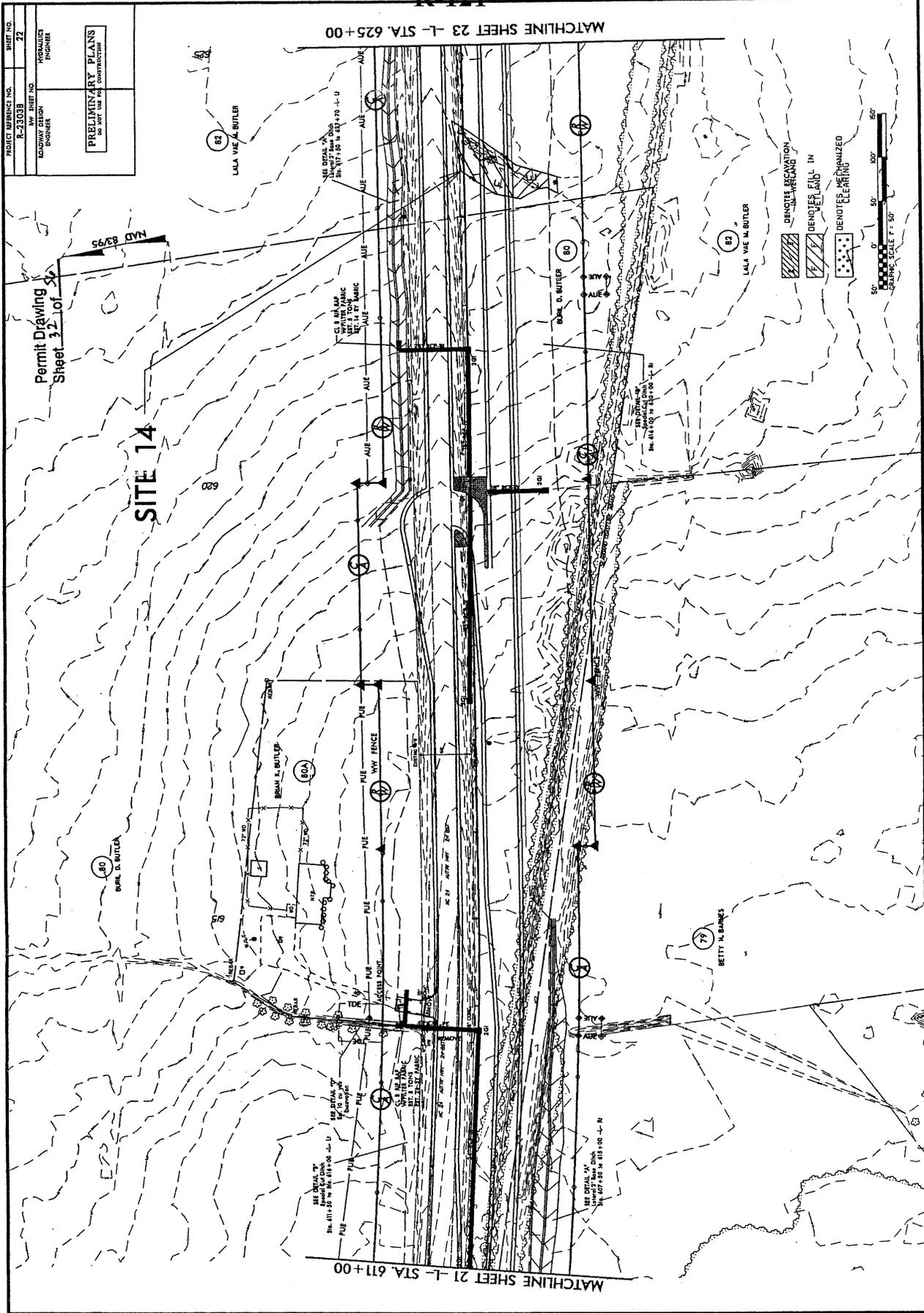


Permit Drawing  
Sheet 20 of 20



R-119





PROJECT REFERENCE NO.	SHEET NO.
E-13033	22
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

Permit Drawing  
Sheet 22 of 24

**SITE 14**

MATCHLINE SHEET 23 - L- STA. 625+00

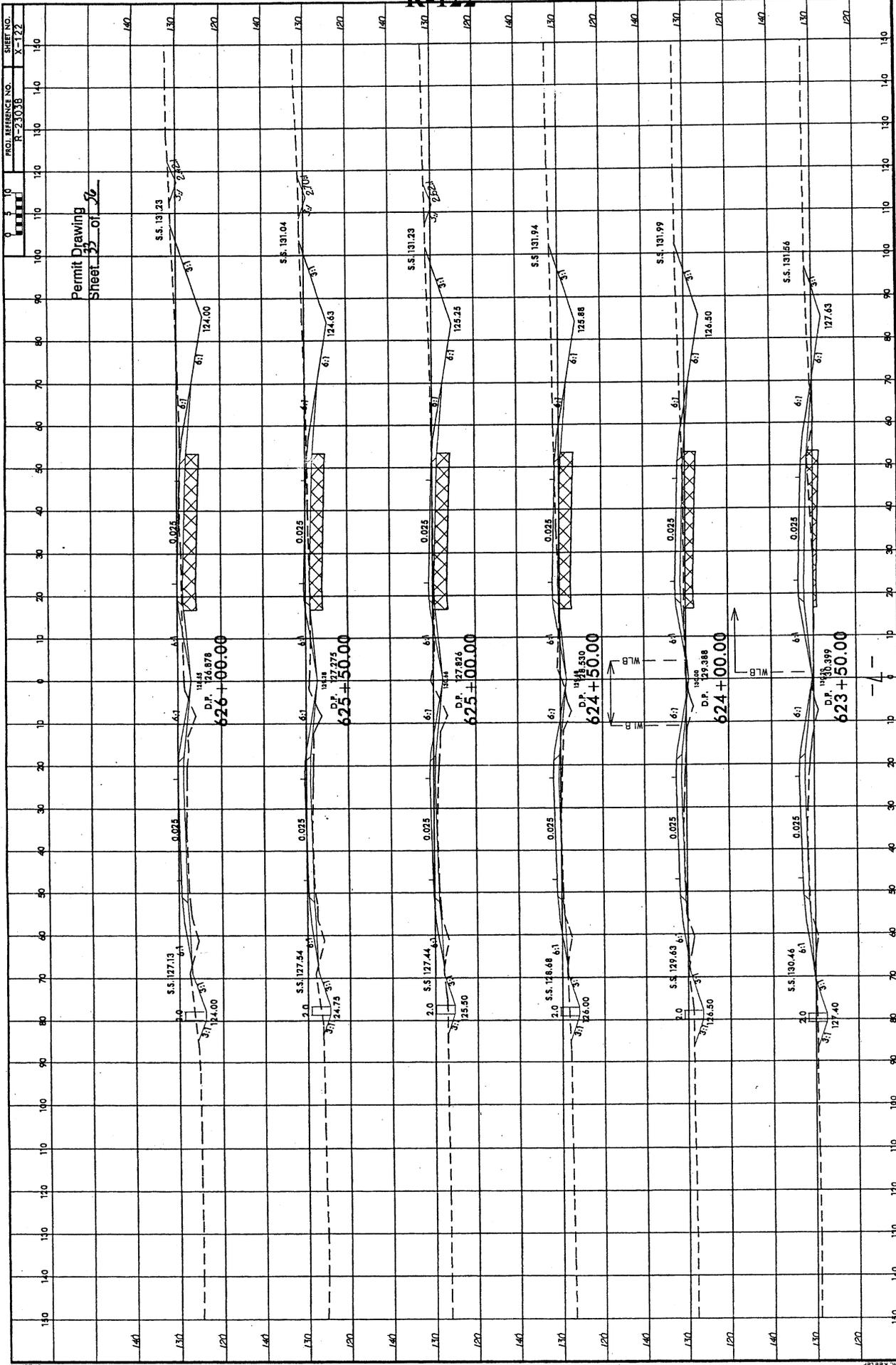
MATCHLINE SHEET 21 - L- STA. 611+00

DENOTES EXCAVATION  
 DENOTES FILL IN  
 DENOTES CLEARING

50' 0" 100' 0" 150' 0" 200' 0" 250' 0"  
 GRAPHIC SCALE 1" = 50'

REVISIONS

08/26/11 R/W REVISION (P/S) - PARCEL 79 (JAMES C. BARNES) WAS RENAMED TO (BETTY H. BARNES), PARCEL 80 (BRAIN K. BUTLER) WAS SPLIT INTO PARCEL 80 (BRAIN D. BUTLER) AND PARCEL 80A (BRAIN K. BUTLER)



Permit Drawing  
Sheet 35 of 36

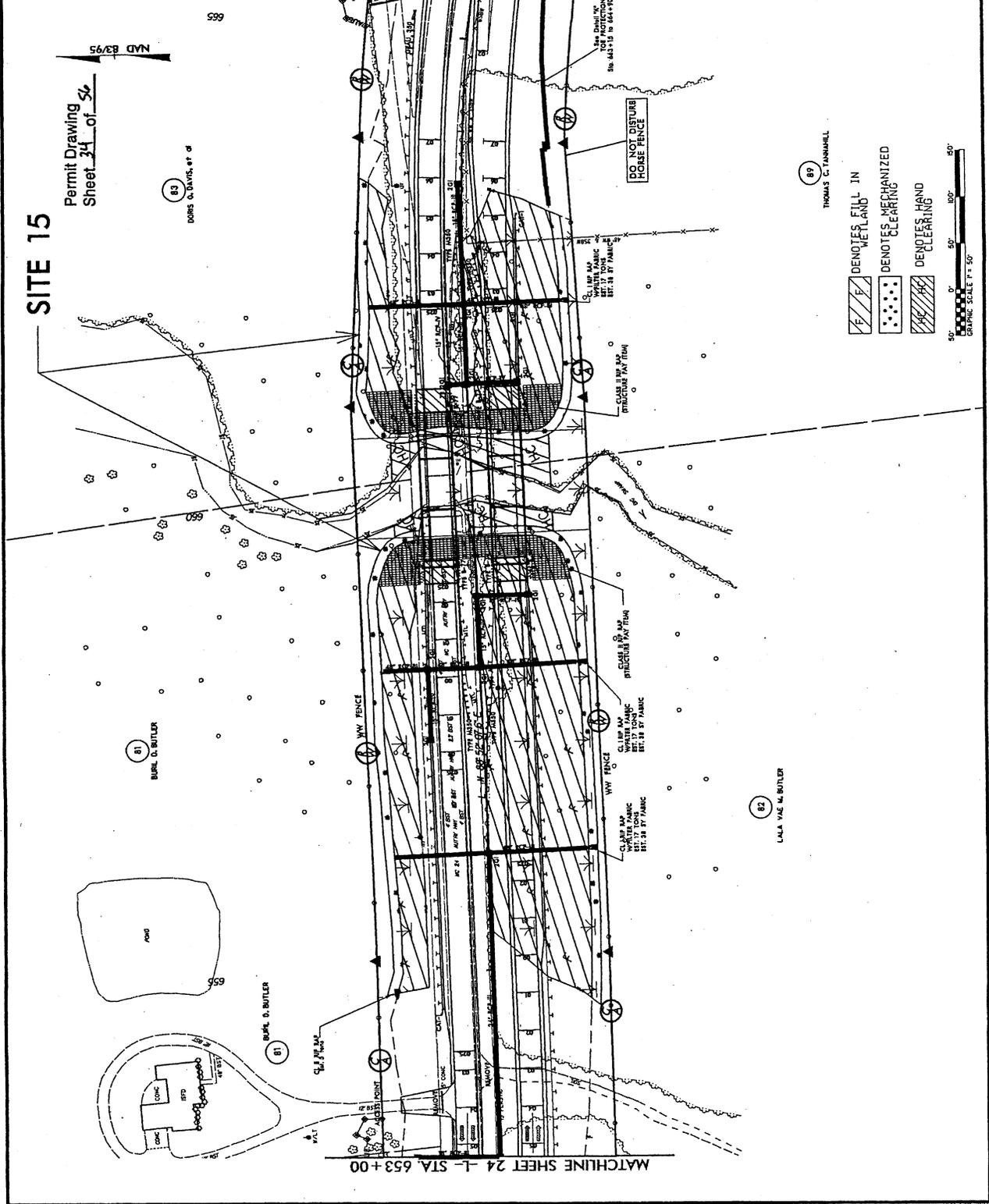
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R-122		R-23035		R-23035		R-23035		R-23035		R-23035		R-23035		R-23035		R-23035		R-23035		R-23035		R-23035		R-23035		R-23035		R-23035		R-23035	
SHEET NO.		R-23035		R-23035		R-23035		R-23035		R-23035		R-23035		R-23035		R-23035		R-23035		R-23035		R-23035		R-23035		R-23035		R-23035		R-23035	
X-122		X-122		X-122		X-122		X-122		X-122		X-122		X-122		X-122		X-122		X-122		X-122		X-122		X-122		X-122		X-122	

PROJECT REFERENCE NO. E-23038	SHEET NO. 25
BY SHEET NO. ROADWAY DESIGNER ENGINEER	BY SHEET NO. HYDRAULIC ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

# SITE 15

Permit Drawing  
Sheet 34 of 54

NAD 83/95



69 THOMAS C. TAMMHELL

DENOTES FILL IN WETLAND  
 DENOTES MECHANIZED CLEARING  
 DENOTES HAND CLEARING

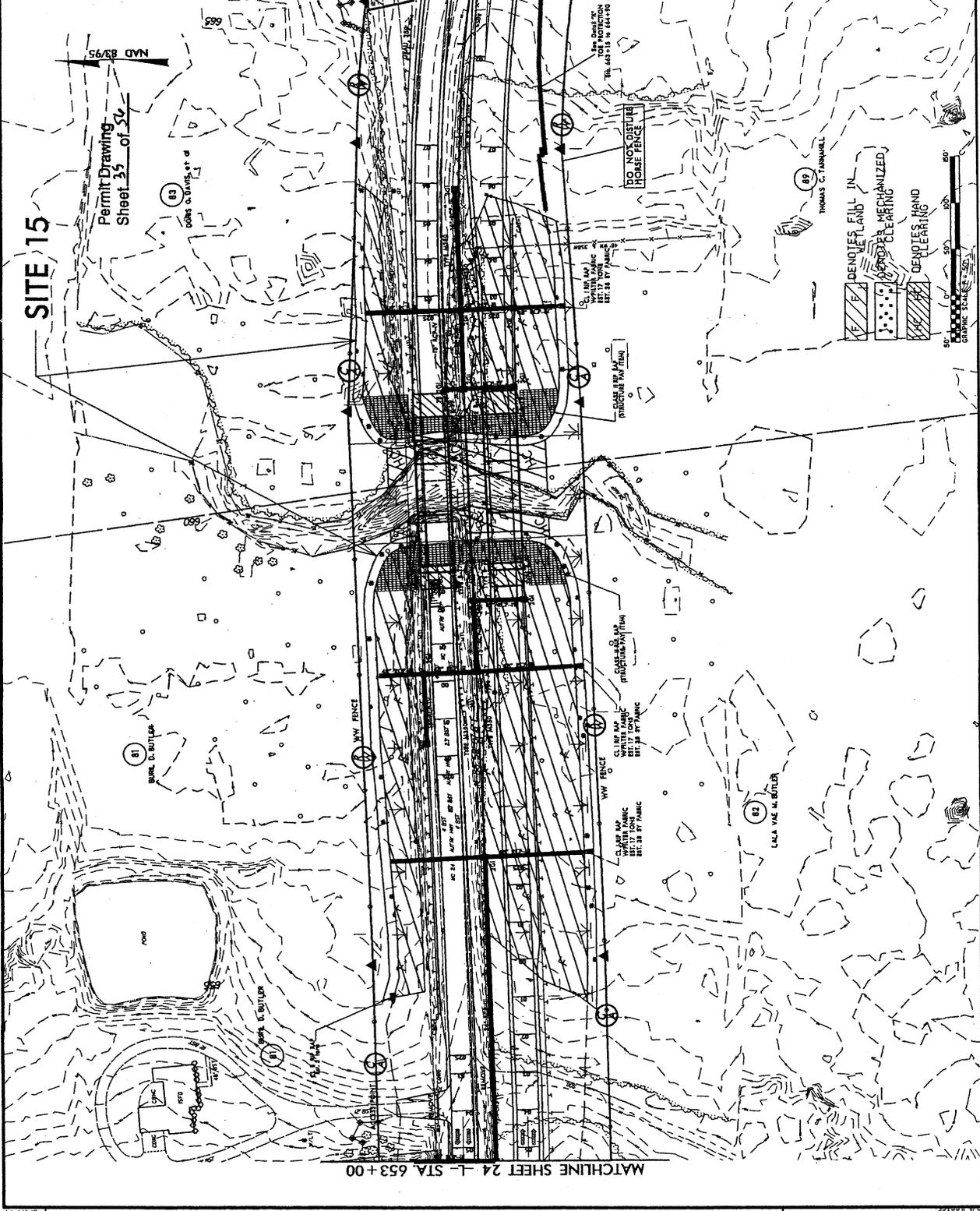
GRAPHIC SCALE 1" = 50'

08/26/11 R/W REVISION (P/S) - PARCEL 09 WILLIAM W. MANHOFF WAS RENAMED TO THOMAS C. TAMMHELL

REVISIONS

6/27/2012  
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 gmh@ter  
 123380.dwg  
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PROJECT REFERENCE NO. K-2303B	SHEET NO. 25
DESIGNER KIMBERLY M. HAYDEN ENGINEER	CHECKER MICHAEL J. HAYDEN ENGINEER
PRELIMINARY PLANS AS NOT FOR CONSTRUCTION	



SITE 15

Permit Drawing  
Sheet 35 of 54

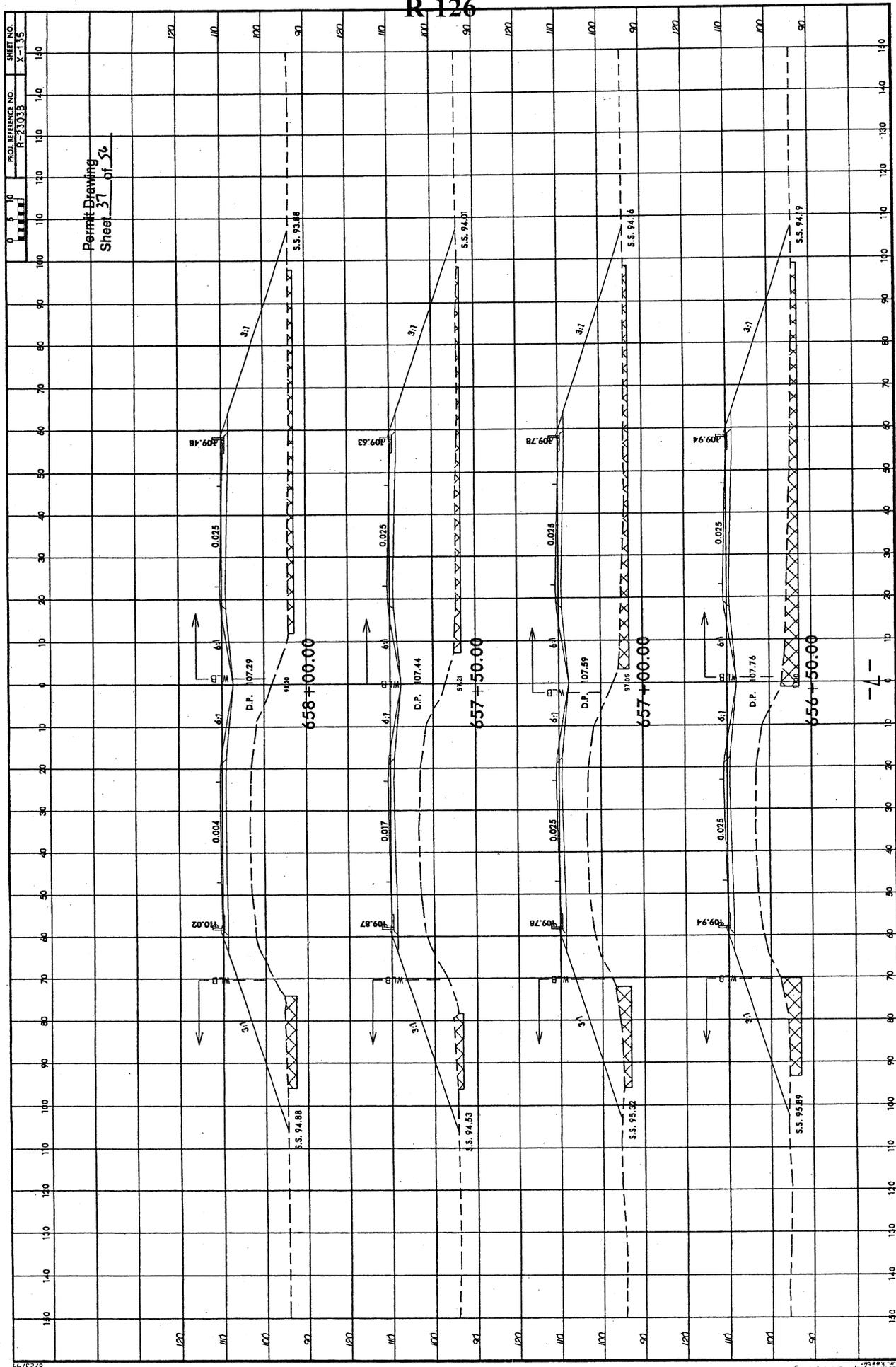
MATCHLINE SHEET 24 L- STA. 653+00

MATCHLINE SHEET 26 L- STA. 667+00

08/26/11 R/W REVISION (P/S) - PARCEL 89 WILLIAM M. BAIRDWAYS REMOVED TO THOMAS C. TANNHILL  
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 6/17/99



Permit Drawing  
 Sheet 37 of 56

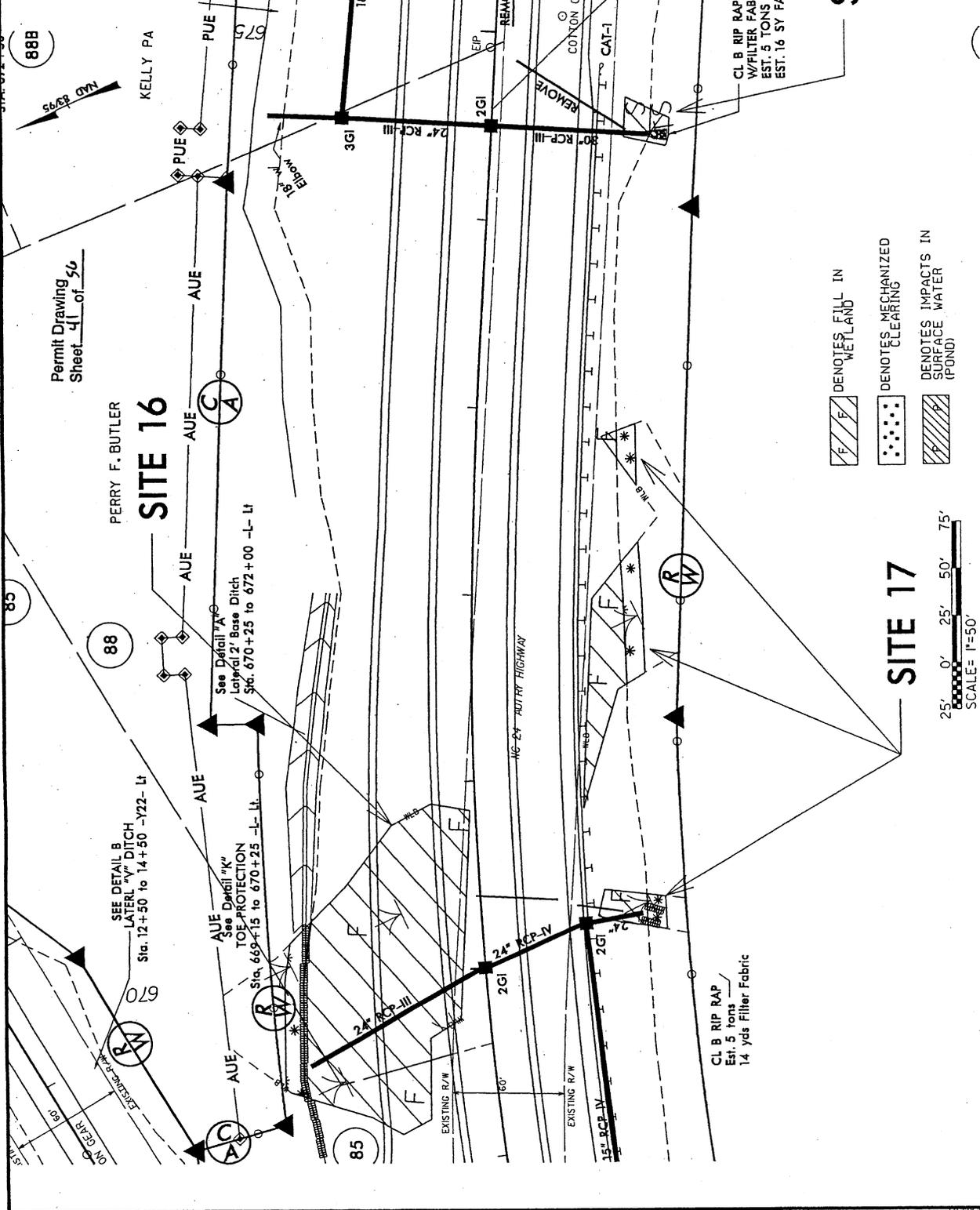








PROJECT NUMBER: 712019  
 SHEET NO: 265  
 ROADWAY DESIGN ENGINEER: HYDRAULICS ENGINEER  
 INCOMPLETE PLANS  
 DO NOT USE FOR CONSTRUCTION  
 PREPARED BY: J. J. WATSON  
 FOR: STATE OF PENNSYLVANIA  
 DEPARTMENT OF TRANSPORTATION



Permit Drawing  
 Sheet 41 of 56

PERRY F. BUTLER

**SITE 16**

-  DENOTES FILL IN WETLAND
-  DENOTES MECHANIZED CLEARING
-  DENOTES IMPACTS IN SURFACE WATER (POND)

**SITE 17**



**SITE 18**

See D  
 Specia  
 Sta. 67

SHEET NO. X-142  
 PROJ. REFERENCE NO. R-2303B

0 5 10

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

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

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

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Permit Drawing  
 Sheet 42 of 56

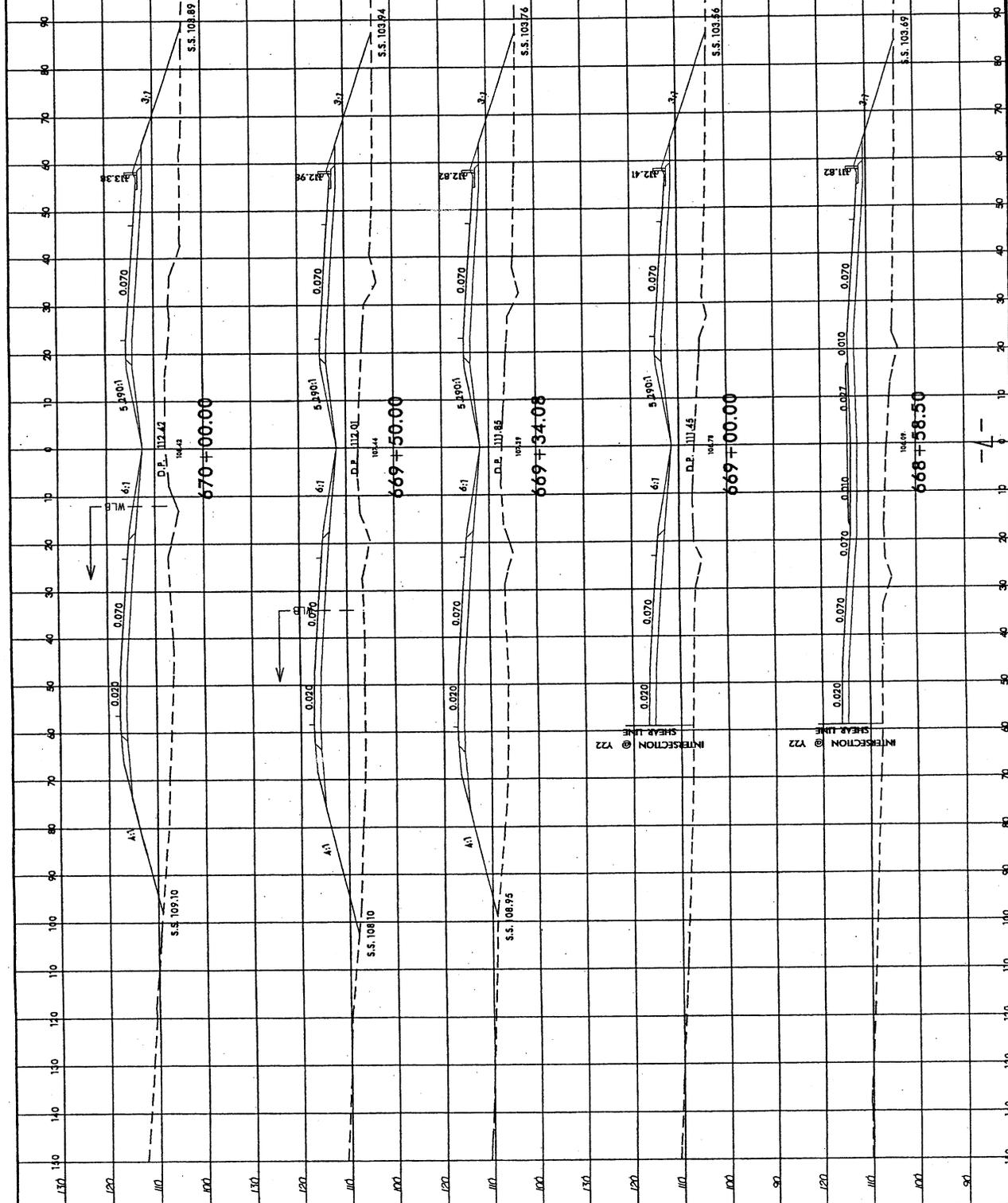
670+00.00

669+50.00

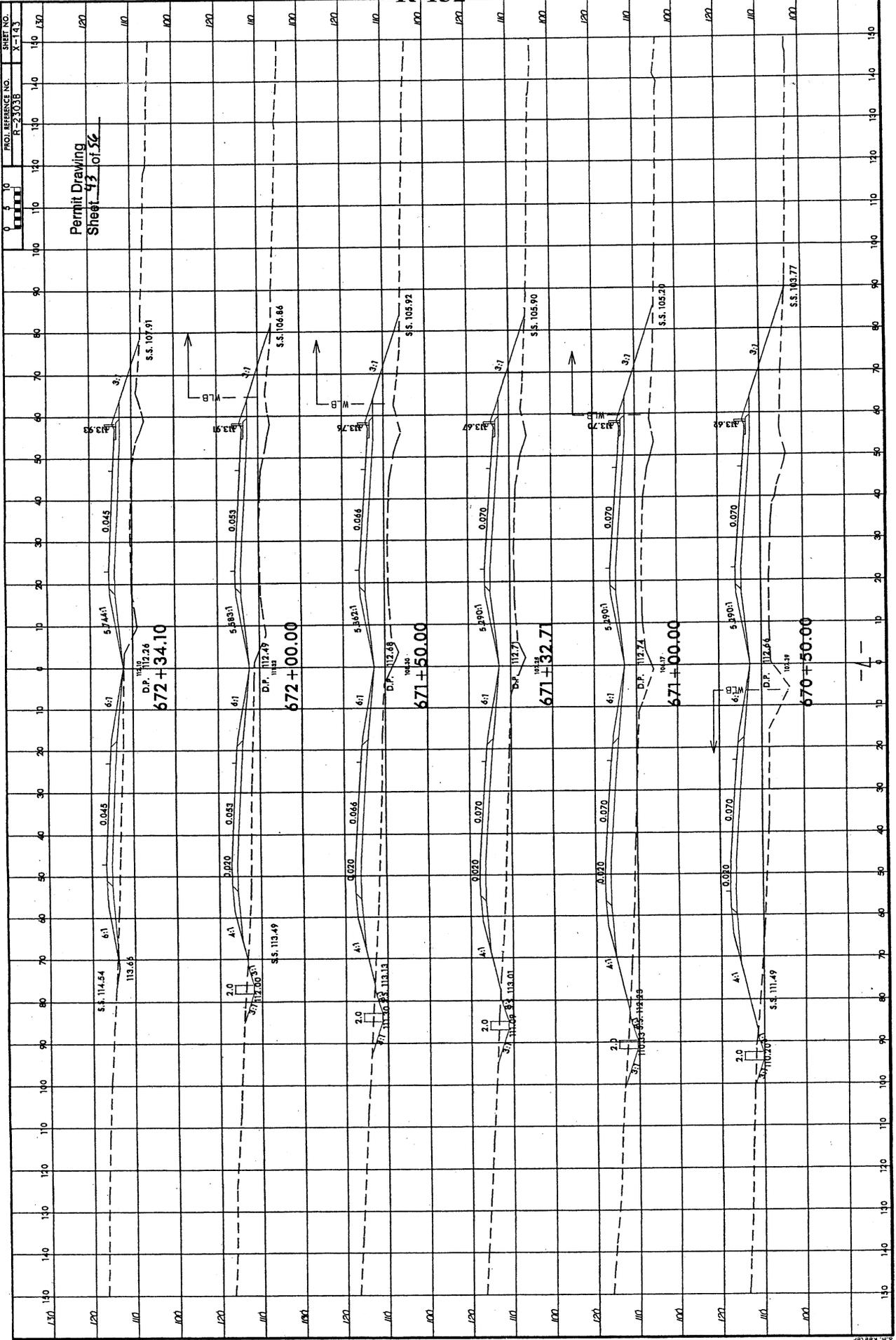
669+34.08

669+00.00

668+58.50



R-131



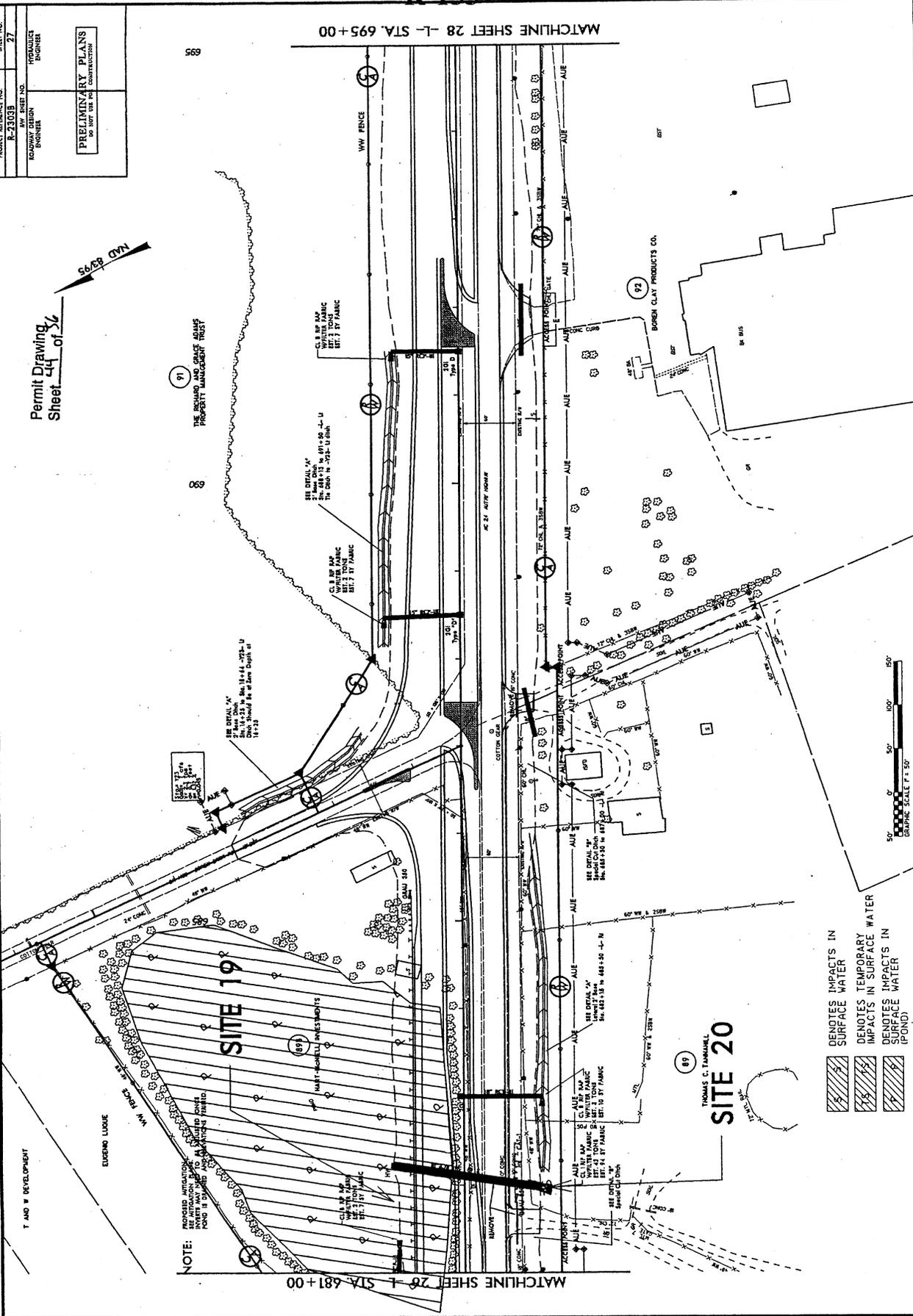
Permit Drawing  
Sheet 43 of 56

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PROJ. REFERENCE NO. R-210338																SHEET NO. X-143															

PROJECT REFERENCE NO. R-2303B	SHEET NO. 27
RAW SHEET NO. ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS  
DO NOT USE FOR  
CONSTRUCTION

Permit Drawing  
Sheet 44 of 46



- DENOTES IMPACTS IN SURFACE WATER
- DENOTES TEMPORARY IMPACTS IN SURFACE WATER
- DENOTES IMPACTS IN SURFACE WATER (POND)

NOTE: PROPOSED IMPROVEMENTS TO SURFACE CHANNELS AND POND II SURFACE CHANNELS ARE SHOWN. POND II SURFACE CHANNELS ARE TO BE REMOVED.

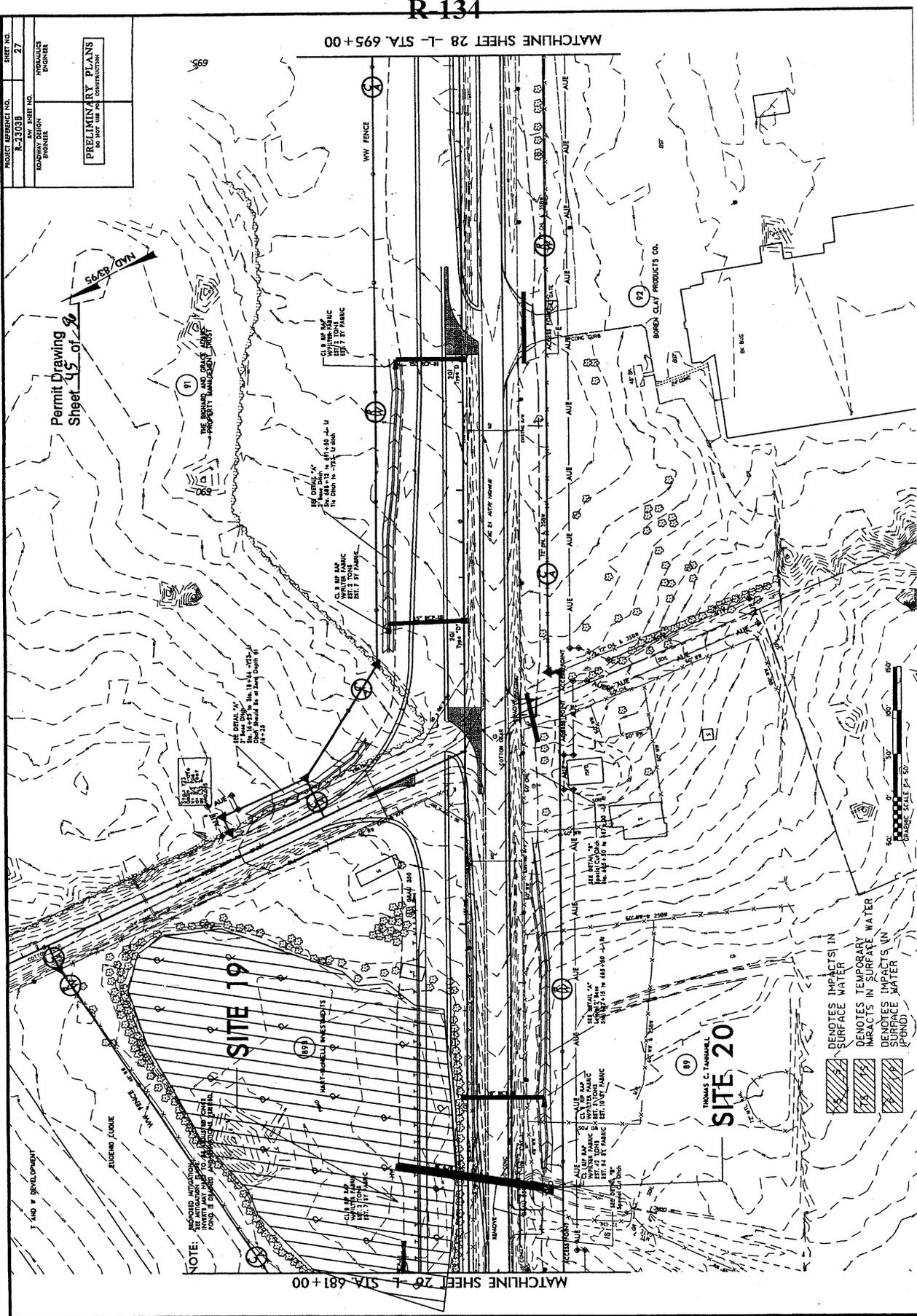
B/17/99

REVISIONS  
11/22/11 R/W REVISION: ADDED 2-60' ACCESS POINT AT PROPERTY LINE PARCELS 089 AND 092.

PROJECT REFERENCE NO.	R-2303B
SHEET NO.	27
ROW SHEET NO.	HYDRAULIC ENGINEER
ROADWAY DESIGN ENGINEER	
<b>PRELIMINARY PLANS</b> DO NOT BE USED FOR CONSTRUCTION	

Permit Drawing  
Sheet 45 of 50

MAINTENANCE TOWN



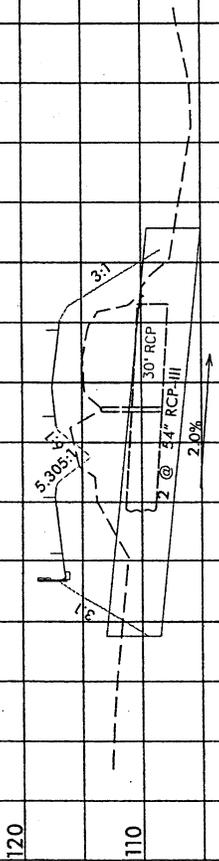


PROJECT REFERENCE NO. **R23038** SHEET NO. **27/PFL**  
 DESIGNER  
 INCOMPLETE PLANS  
 PRELIMINARY PLANS  
 DO NOT USE FOR CONSTRUCTION

Revised 4/17/13  
 Permit Drawing  
 Sheet 47 of 56

100' 0 100'

Q STA. 682+08-L  
 GP. ELEV = 117.3'  
 SKEW = 90°



**SITE 20**

RECEIVED  
 FEB 20 2013

R. WILSON, P.E., C.F.C.



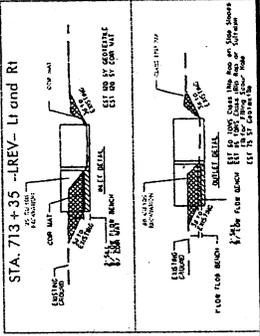
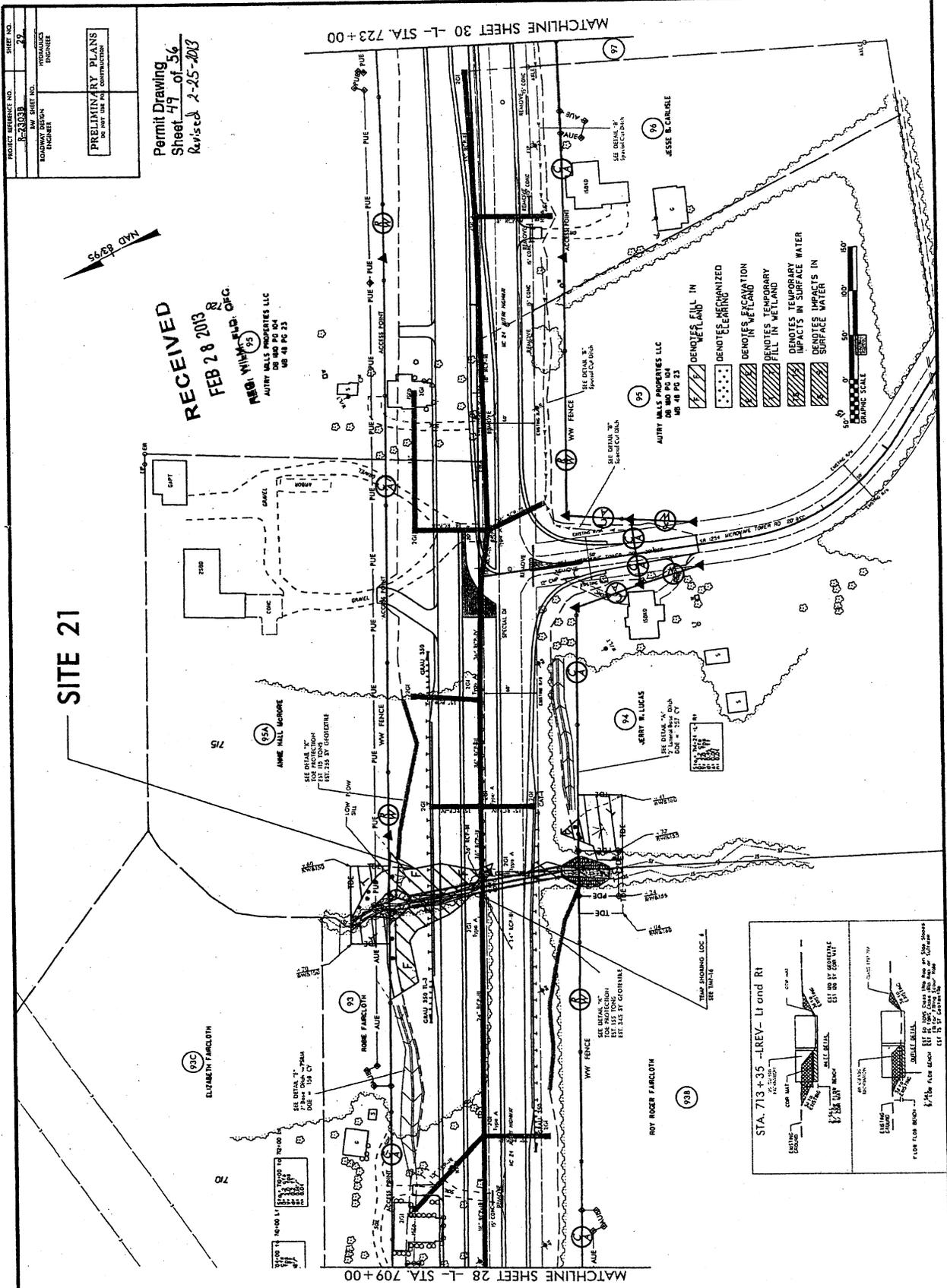
PROJECT REFERENCE NO. R-2303B  
 SHEET NO. 29  
 CIVIL ENGINEER  
 PRELIMINARY PLANS  
 DO NOT USE FOR CONSTRUCTION

Permit Drawing  
 Sheet 49 of 56  
 Revised 2-25-2013



RECEIVED  
 FEB 28 2013  
 MARI WILKINS, P.L.C.  
 AURTY HILLS PROPERTIES LLC  
 200 W. 48th St. PO Box 104  
 W8 48 PC 23

SITE 21



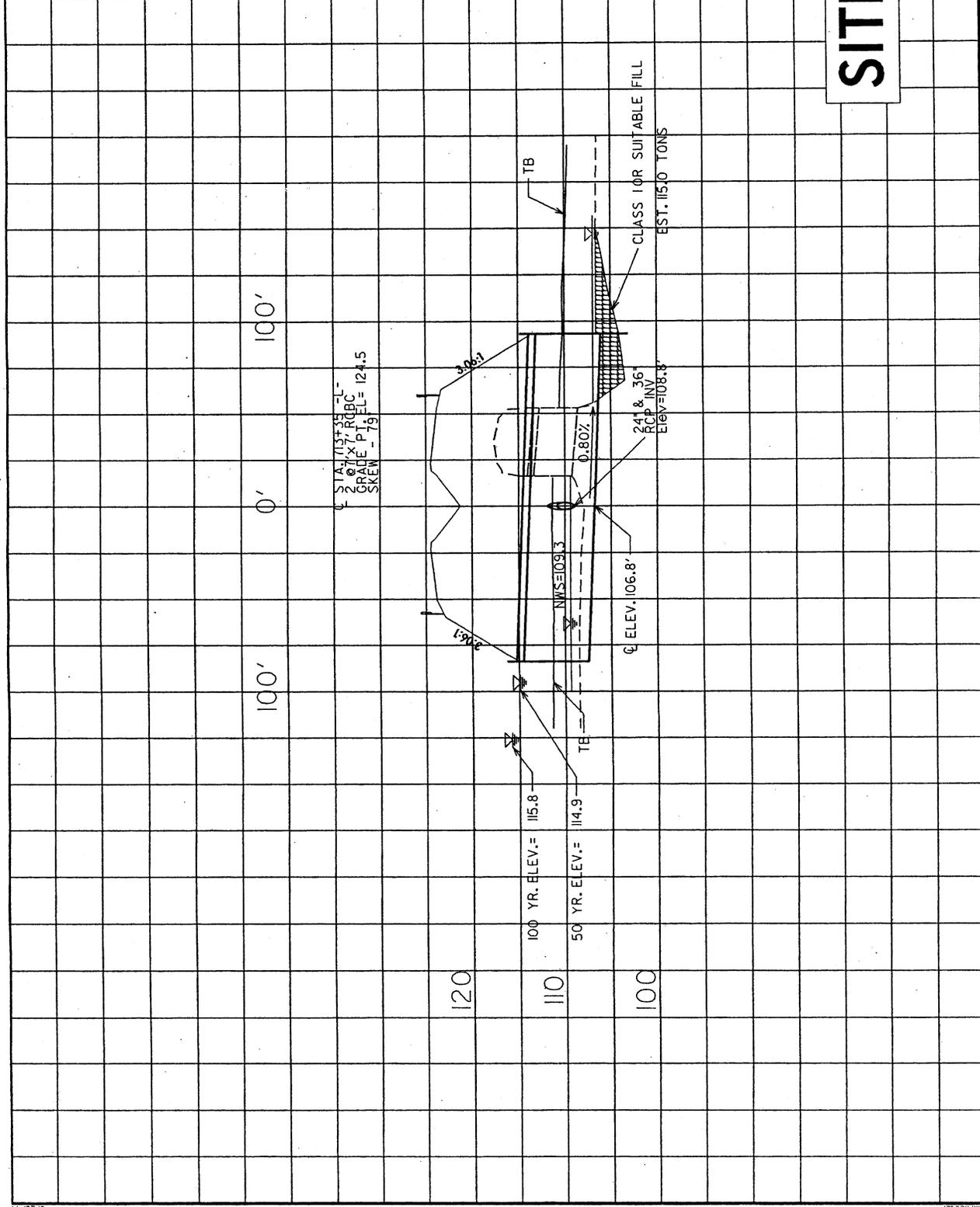
REVISIONS  
 08/25/11 B.M. REVISION (P.S.) - PARCEL 93 (ROBE E. FARCLOTH) WAS SPLIT INTO PARCEL 93 (ROBE E. FARCLOTH) AND PARCEL 93C (LIZABETH FARCLOTH) PARCEL 95A (CHARLES S. LUCAS) WAS REMOVED (LAWRENCE HALL MOOREHEAD)  
 2/25/2013  
 R:\hydro\rules\FERMS\Environment\Drawings\R2303b\hyd.prm\wet.psh29.dgn





PROJ. REFERENCE NO. K2303B SHEET NO. 29 P&L

Permit Drawing  
Sheet 52 of 56



SITE 21



PROJECT REFERENCE NO. <b>R2008</b>	SHEET NO.
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

Revised 2/13 Permit Drawing  
Sheet 54 of 56

**PROPERTY OWNERS**  
NAMES AND ADDRESSES

PARCEL NO.	NAMES	ADDRESSES
83	DORIS O. DAVIS	P.O. BOX 3331 BURLINGTON, NC 27217
85	EDNA S. WILLIAMS BEASLEY	2241 PLEASANT UNION RD. ROSEBORO, NC 28382
88	PERRY F. BUTLER	2227 PLEASANT UNION RD. ROSEBORO, NC 28382
89	WILLIAM M. MAINOR	P.O. BOX 1809 ROSEBORO, NC 28382
89B	SECRETARY OF HOUSING & URBAN DEVELOPMENT	40 MARIETTA ST. ATLANTA, GA 30303
93	ROBIE D. FAIRCLOTH	4412 DUNN RD. ROSEBORO, NC 28382
94	JERRY W. LUCAS	2106 SAPONA RD. FAYETTEVILLE, NC 28301
95A	CHARLES S. LUCAS	2106 SAPONA RD. FAYETTEVILLE, NC 28301

**PROPERTY OWNERS**  
NAMES AND ADDRESSES

PARCEL NO.	NAMES	ADDRESSES
19	ROLAND NUNNERY	374 JOHN NUNNERY RD. STEDMAN, NC 28391
21	JAMES H. SPELL	P.O. BOX 98 ROSEBORO, NC 28382
26	HEATHER ELIZABETH MELVIN	124 EAST OLD STAGE RD. AUTRYVILLE, NC 28318
30	DONNA BROWN HOLDEN	182 OLD STAGE RD. AUTRYVILLE, NC 28318
31	HELEN S. SESSOMS	P.O. BOX 14 AUTRYVILLE, NC 28318
33	DOUGLAS NEW	P.O. BOX 53591 FAYETTEVILLE, NC 28305
46	EDDIE I. HALL	6510 AUTRY HWY. AUTRYVILLE, NC 28318
47	JAMES R. STARLING	P.O. BOX 31 AUTRYVILLE, NC 28318
49	RICHARD FRANKLIN HALL	5650 AUTRY HWY. AUTRYVILLE, NC 28318
50, 53	GEORGE L. HALL	5440 AUTRY HWY. AUTRYVILLE, NC 28318
56	JIMMY M. HALL	567 LIBBIE RD. AUTRYVILLE, NC 28318
81	BURIL D. BUTLER	3700 AUTRY HWY. AUTRYVILLE, NC 28318
82	LALA YAE M. BUTLER	3970 AUTRY HWY. AUTRYVILLE, NC 28318

**NC DOT**

DIVISION OF HIGHWAYS  
CUMBERLAND & SAMPSON COUNTY  
PROJECT: 3441KLI (R-2808B)  
AUTRYVILLE  
NC 24 FROM WEST OF SR 1853  
TO WEST OF SR 1404

SHEET OF 10/16/11

RECEIVED  
FEB 20 2013  
REC. WILLIAM, FLB, CMC

**NC DOT**

DIVISION OF HIGHWAYS  
CUMBERLAND & SAMPSON COUNTY  
PROJECT: 3441KLI (R-2808B)  
AUTRYVILLE  
NC 24 FROM WEST OF SR 1853  
TO WEST OF SR 1404

SHEET OF 10/16/11

RECEIVED

FEB 28 2013

MSR WITH: R-BI, REC.

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	388+00 to 391+28-L-	Fill	1.26			0.14										
**2	391+28 to 402+13-L-	Bridge			0.09	<0.01		3.53								
3	14+18 to 15+09-Y13-RT	Fill	0.01			0.02										
4	424+51 to 426+05-L-LT	Fill								0.25						
5	425+57 to 426+51-L-LT	Fill	0.02			0.02										
**6	430+34 to 432+25-L-RT	Fill/Pond								0.19						
7A	431+78 to 434+23-L-	Fill										158.00				
7B	431+78 to 434+23-L-	Fill	0.23		0.01	0.03				0.02						
8	437+97 to 439+15-L-RT	Fill	0.07			0.02										
9	438+58 to 441+68-L-LT	Fill									0.73					
***10	542+45 to 545+21-L-LT	Fill	0.09			0.06										
11	554+06 to 558+53-L-LT	Fill	0.01			0.10										
TOTALS:			1.69		0.10	0.39		3.53		1.19		158.00				

\* Site 2: Impacts from piles are Str. # 1 148sf, Str. # 2 148sf.

\*\* Site 6: Wetland Sta. 430+34-L-RT impact shown as total take due to Mitigation site. Additional impact outside of s.s. is 2.13 ac.

\*\*\*Site 10: This is a resource that is regulated by the NCDWQ but not by the USACE.

ATN Revised 2/10/05

NC DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
CUMBERLAND/SAMPSON COUNTY  
WBS - 34416.1.1 (R-2303B)

SHEET 2/25/2013

Permit Drawing  
Sheet 55 of 56  
Revised 2-25-2013

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)				
12	554+38 to 557+27-L-RT	Fill	0.28			0.03										
13	576+76 to 576+89-L-RT	Fill								<0.01						
14	623+20 to 624+12-L-RT	Fill	0.10		0.03	<0.01										
15	654+75 to 663+38-L-	Fill / Bridge	2.13			0.41	0.17									
16	669+18 to 670+85-L-LT	Fill	0.26			0.06										
17	670+13 to 672+92-L-RT	Fill	0.05			0.02										
18	674+45 to 674+81-L-RT	Fill								<0.01						
19	680+56 to 684+21-L-LT	Fill / Pond								0.44						
20	681+95 to 682+15-L-RT	Fill								<0.01						
21	712+14 to 714+41 -L- Bank Stabilization	Fill / RCBC	0.13	0.12	0.01	0.06				0.03	<0.01	138.00				88.00
TOTALS:			2.95	0.12	0.04	0.58	0.17	0.51	1.70	0.02	193.00	88.00				
GRAND TOTAL:			4.64	0.12	0.14	0.97	3.70	1.70	0.02	351.00	88.00					

**RECEIVED**  
FEB 20 2013  
REG. WILLIAM FLOR. ENG.

NC DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
CUMBERLAND/SAMPSON COUNTY  
WBS - 34416.1.1 (R-2303B)  
SHEET 2/27/2013

\* Site 14 Wetland sta. 623+20-L-RT impact shown as total take. Additional impact outside slope stake is 0.04 ac.  
\* Site 15: Impacts from piles are Str. # 3 25sf, Str. # 4 25sf. Additional impact outside of ditch is 0.04 ac.  
\* Site 16 Wetland sta. 669+18-L-LT impact shown as total take due to ditch. Additional impact outside of ditch is 0.04 ac.  
\* Site 19 Wetland sta. 680+56-L-LT impact shown as total take due to Mitigation site. Additional impact outside of s.s. is 1.99 ac.

Permit Drawing  
Sheet 54 of 56  
Revised 2-27-2013



TIP NO.  
**R-2303B**

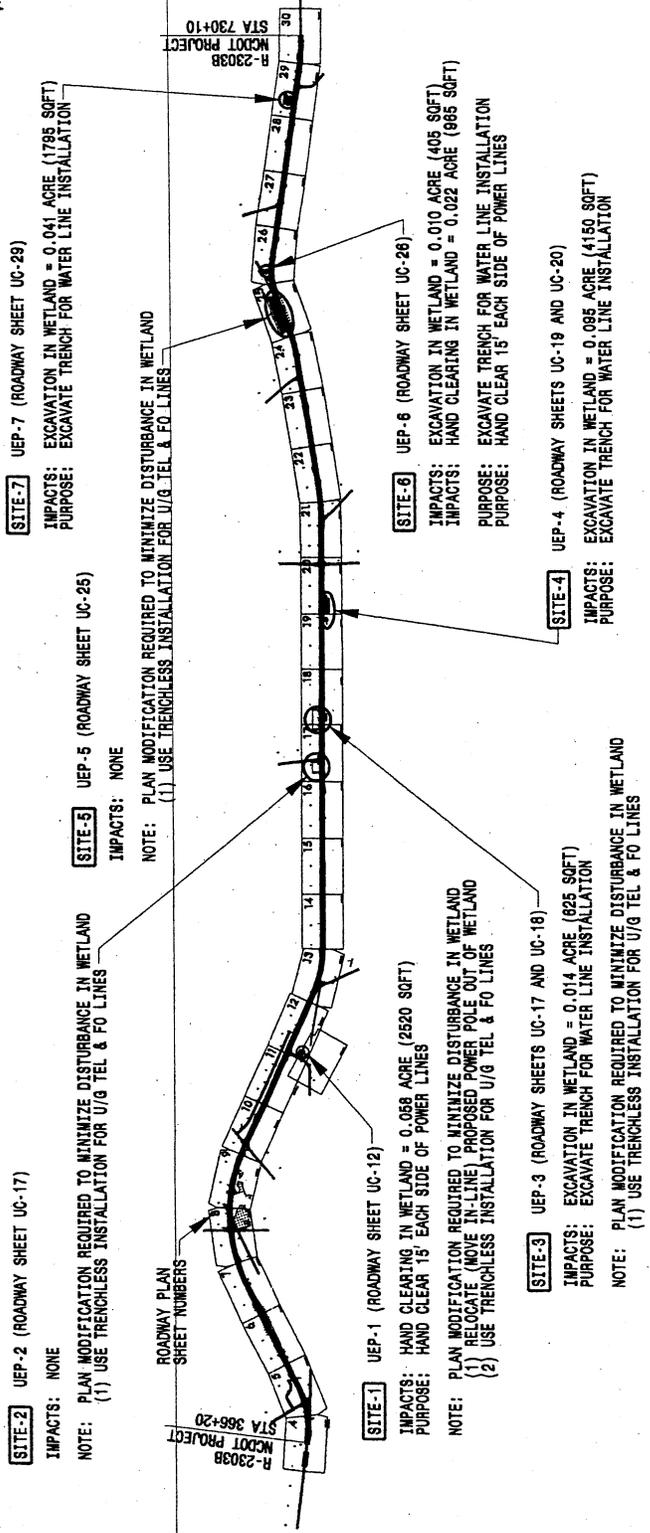
SHEET NO.  
**UEP-0**

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**UTILITY WETLAND IMPACT PLAN**  
**CUMBERLAND & SAMPSON COUNTIES**

RECEIVED  
JAN 31 2013  
REG. WILLM. FLD. OFC.

Utility Permit Drawing  
Sheet 1 of 9



DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
UTILITIES UNIT  
UTILITIES ENGINEERING

IN CHARGE SERVICES CENTER  
ALLISON MC PHEE  
2000 W. GARDNER  
RALEIGH, NC 27617-1640

RALEIGH, NC 27617-1640  
UTILITIES SECTION ENGINEER  
Rae Williams, P.E.  
UTILITIES SQUAD LEADER PROJECT ENGINEER  
Rae Williams, P.E.  
UTILITIES PROJECT DESIGNER  
Ed. Edwards

JANUARY 22, 2013

TOTAL PROJECT ENVIRONMENTAL IMPACTS DUE TO UTILITY RELOCATIONS:

(1) EXCAVATION IN WETLAND = 0.16 ACRE (6975 SQFT)  
(2) HAND CLEARING IN WETLAND = 0.08 ACRE (3485 SQFT)

**INDEX OF SHEETS**

SHEET NO.	DESCRIPTION
UEP-0 (UC-1)	TITLE SHEET
UEP-1 (UC-12)	SITE-1
UEP-2 (UC-17)	SITE-2
UEP-3 (UC-17, UC-18)	SITE-3
UEP-4 (UC-19, UC-20)	SITE-4
UEP-5 (UC-25)	SITE-5
UEP-6 (UC-26)	SITE-6
UEP-7 (UC-29)	SITE-7

TIP PROJECT: R-2303B

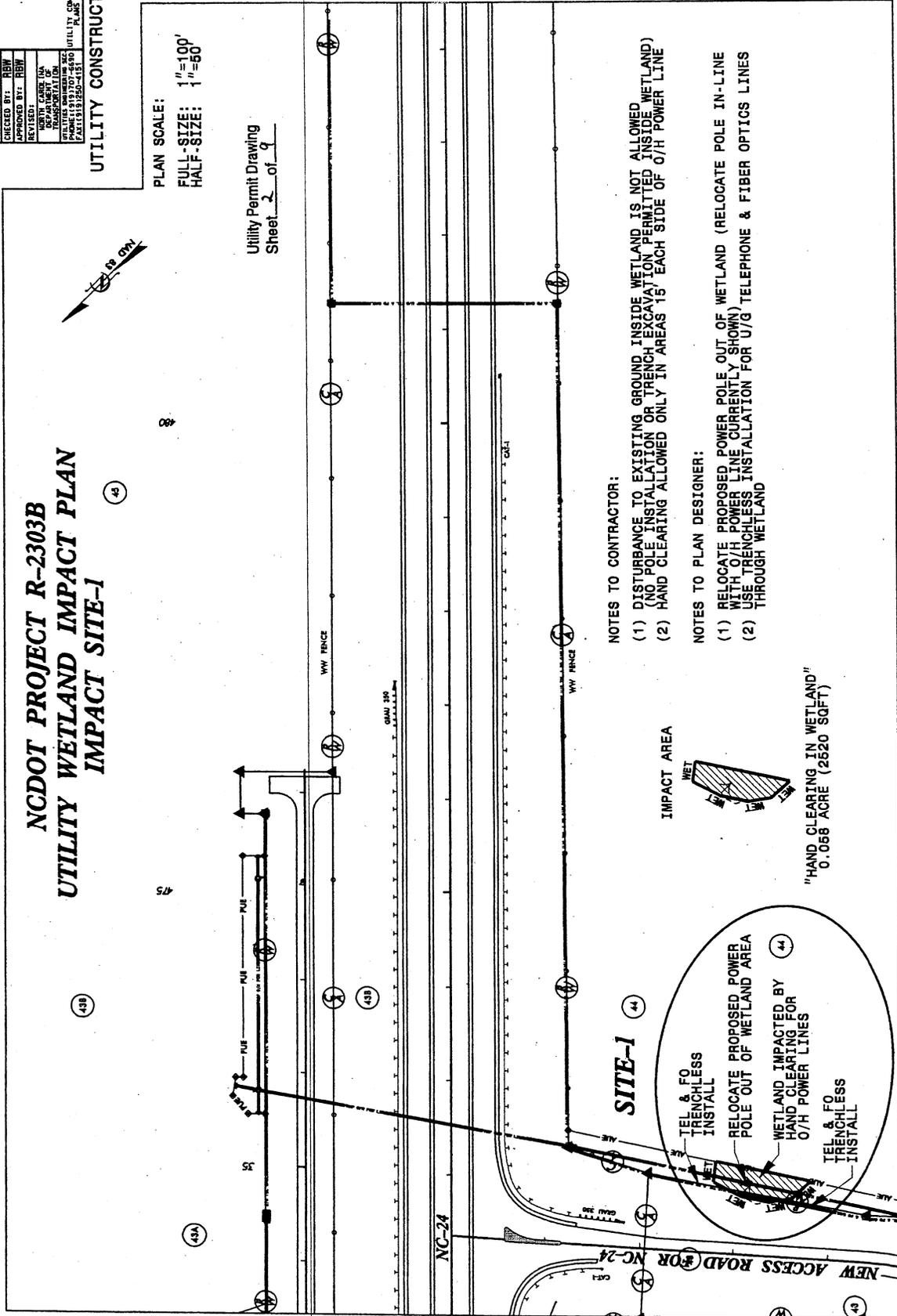
R-2303B		UEP-1	
DESIGNED BY:	EWB	CHECKED BY:	REB
DRAWN BY:	EWB	APPROVED BY:	REB
REVISIONS:			
NORTH CAROLINA TRANSPORTATION TRUST FUND UTILITY CONSTRUCTION PLANS ONLY			

**NC DOT PROJECT R-2303B  
UTILITY WETLAND IMPACT PLAN  
IMPACT SITE-1**

UTILITY CONSTRUCTION

PLAN SCALE:  
FULL-SIZE: 1"=100'  
HALF-SIZE: 1"=50'

Utility Permit Drawing  
Sheet 2 of 9



NOTES TO CONTRACTOR:

- (1) DISTURBANCE TO EXISTING GROUND, INSIDE WETLAND IS NOT ALLOWED (NO POLE INSTALLATION OR TRENCH EXCAVATION PERMITTED INSIDE WETLAND)
- (2) HAND CLEARING ALLOWED ONLY IN AREAS 15' EACH SIDE OF O/H POWER LINE

NOTES TO PLAN DESIGNER:

- (1) RELOCATE PROPOSED POWER POLE OUT OF WETLAND (RELOCATE POLE IN-LINE WITH O/H POWER LINE CURRENTLY SHOWN)
- (2) USE TRENCHLESS INSTALLATION FOR U/G TELEPHONE & FIBER OPTICS LINES THROUGH WETLAND

R-2303B	UEP-2
DESIGNED BY: ENH	
DRAWN BY: ENH	
CHECKED BY: RBW	
APPROVED BY: RBW	
REVISED:	
DATE IN CHARGE (M)	
TRANSPORTATION	
TRAFFIC CONTROL	
UTILITY CONSTRUCTION	
PLANS ONLY	

# NCDOT PROJECT R-2303B UTILITY ENVIRONMENTAL PERMIT DRAWING IMPACT SITE-2

Utility Permit Drawing  
Sheet 3 of 9

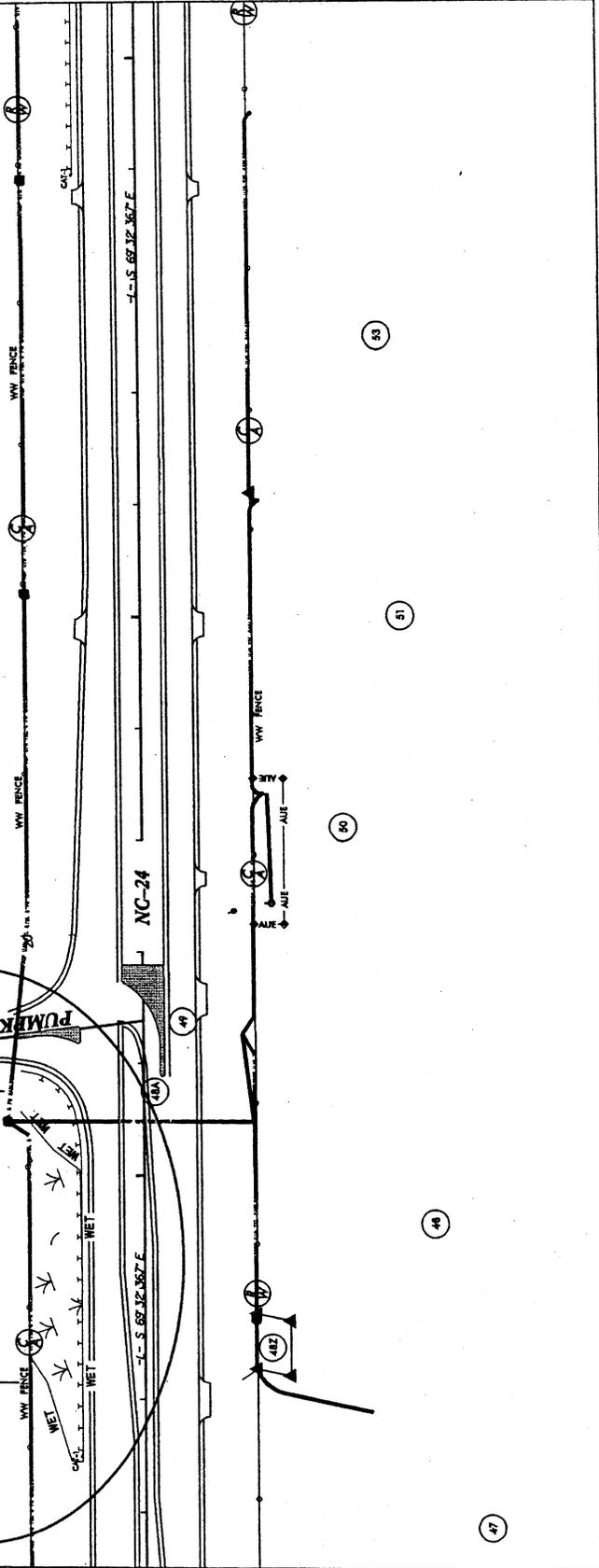
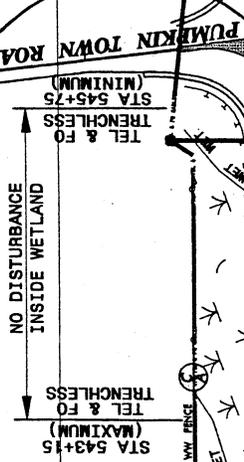
**SITE-2**

PLAN SCALE:  
FULL-SIZE: 1"=100'  
HALF-SIZE: 1"=50'



- NOTES TO CONTRACTOR:**
- (1) DISTURBANCE TO EXISTING GROUND INSIDE WETLAND IS NOT ALLOWED (NO POLE INSTALLATION OR TRENCH EXCAVATION PERMITTED INSIDE WETLAND)
  - (2) HAND CLEARING INSIDE WETLAND IS NOT PERMITTED INSIDE IMPACT SITE-2

- NOTES TO PLAN DESIGNER:**
- (1) USE TRENCHLESS INSTALLATION FOR U/G TELEPHONE & FIBER OPTICS LINES THROUGH WETLAND AREA (BETWEEN STATION LIMITS SHOWN)



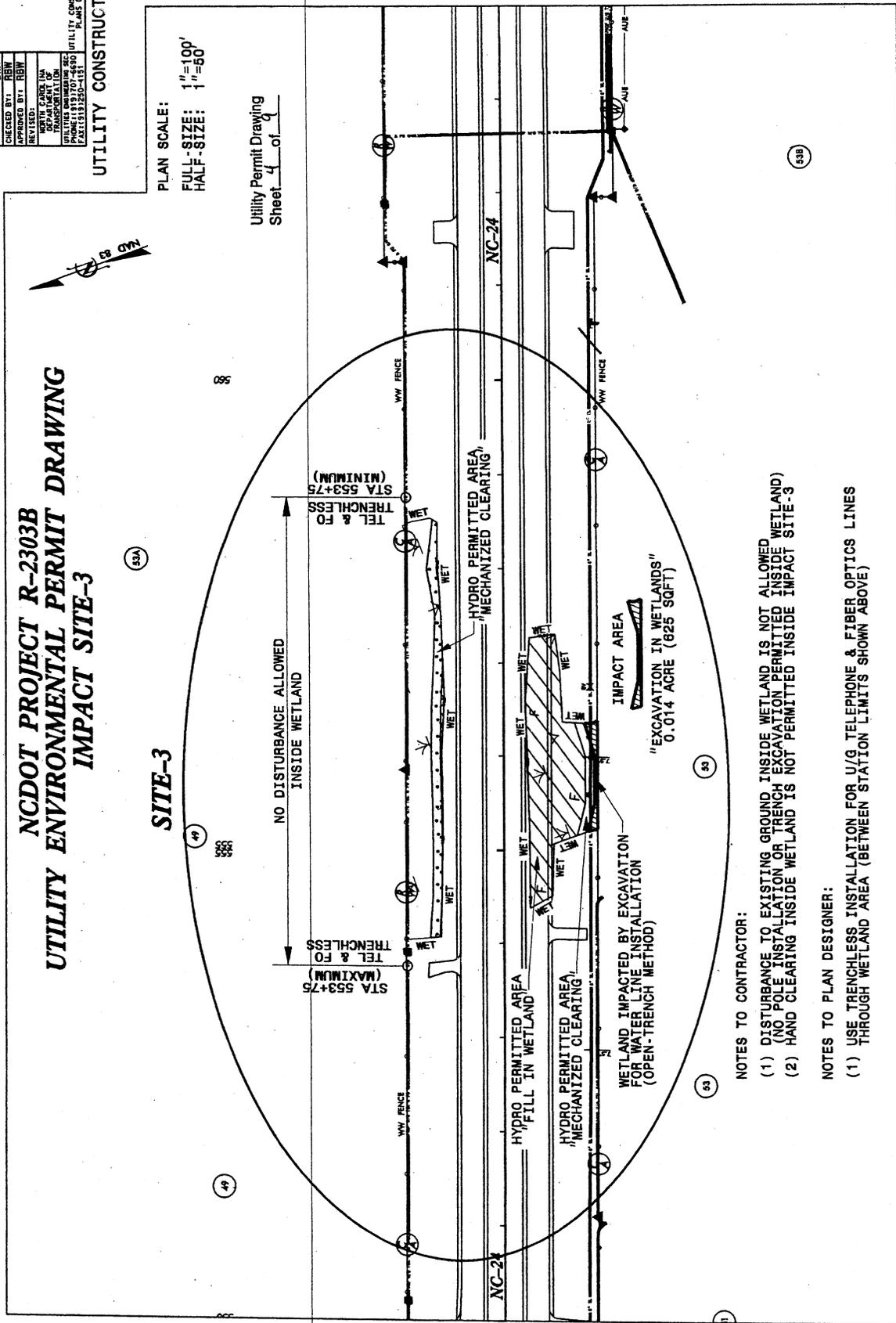
DESIGNED BY: ERM	DATE: 08/11/10
CHECKED BY: ERM	DATE: 08/11/10
APPROVED BY: ERM	DATE: 08/11/10
REVISED BY: ERM	DATE: 08/11/10
PROJECT: R-2303B	DATE: 08/11/10
UTILITY CONSTRUCTION PLANS ONLY	

**NCDOT PROJECT R-2303B  
UTILITY ENVIRONMENTAL PERMIT DRAWING  
IMPACT SITE-3**

UTILITY CONSTRUCTION

PLAN SCALE: 1"=100'  
FULL-SIZE: 1"=80'  
HALF-SIZE: 1"=80'

Utility Permit Drawing  
Sheet 4 of 9



NOTES TO CONTRACTOR:

- (1) DISTURBANCE TO EXISTING GROUND INSIDE WETLAND IS NOT ALLOWED (NO POLE INSTALLATION OR TRENCH EXCAVATION PERMITTED INSIDE WETLAND)
- (2) HAND CLEARING INSIDE WETLAND IS NOT PERMITTED INSIDE IMPACT SITE-3

NOTES TO PLAN DESIGNER:

- (1) USE TRENCHLESS INSTALLATION FOR U/G TELEPHONE & FIBER OPTICS LINES THROUGH WETLAND AREA (BETWEEN STATION LIMITS SHOWN ABOVE)

R-2303B		UEP-4	
DESIGNED BY:	EMM	CHECKED BY:	EMM
DRAWN BY:	EMM	APPROVED BY:	RBM
REVISION:			
NORTH CAROLINA UTILITY CONSTRUCTION PLANS ONLY			

UTILITY CONSTRUCTION

**NCDOT PROJECT R-2303B  
UTILITY ENVIRONMENTAL PERMIT DRAWING  
IMPACT SITE-4**



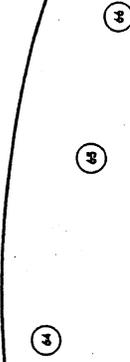
PLAN SCALE: 1"=100'  
FULL-SIZE: 1"=50'

Utility Permit Drawing  
Sheet 5 of 9

**SITE-4**

88

89



NC-24

NC-24

WETLAND IMPACTED BY EXCAVATION  
FOR WATER LINE INSTALLATION  
(OPEN-TRENCH METHOD)

IMPACT AREA

IMPACT AREA

"EXCAVATION IN WETLANDS"  
0.006 ACRE (250 SQFT)

"EXCAVATION IN WETLANDS"  
0.090 ACRE (3900 SQFT)



DESIGNED BY: EWH	DATE: 11/28/03
DRAWN BY: EWH	PROJECT: R-2303B
CHECKED BY: RBW	SCALE: 1"=100'
APPROVED BY: RBW	DATE: 12/1/03
REVISED: (NONE)	BY: (NONE)
FOR: (NONE)	DATE: (NONE)
PROJECT: (NONE)	DATE: (NONE)
DATE: (NONE)	BY: (NONE)
PHONE: (919) 707-4830	FAX: (919) 707-4830
UTILITY CONSTRUCTION	

# NCDOT PROJECT R-2303B UTILITY ENVIRONMENTAL PERMIT DRAWING IMPACT SITE-6

UTILITY CONSTRUCTION

PLAN SCALE:  
FULL SIZE: 1"=100'  
HALF SIZE: 1"=50'

Utility Permit Drawing  
Sheet 7 of 9

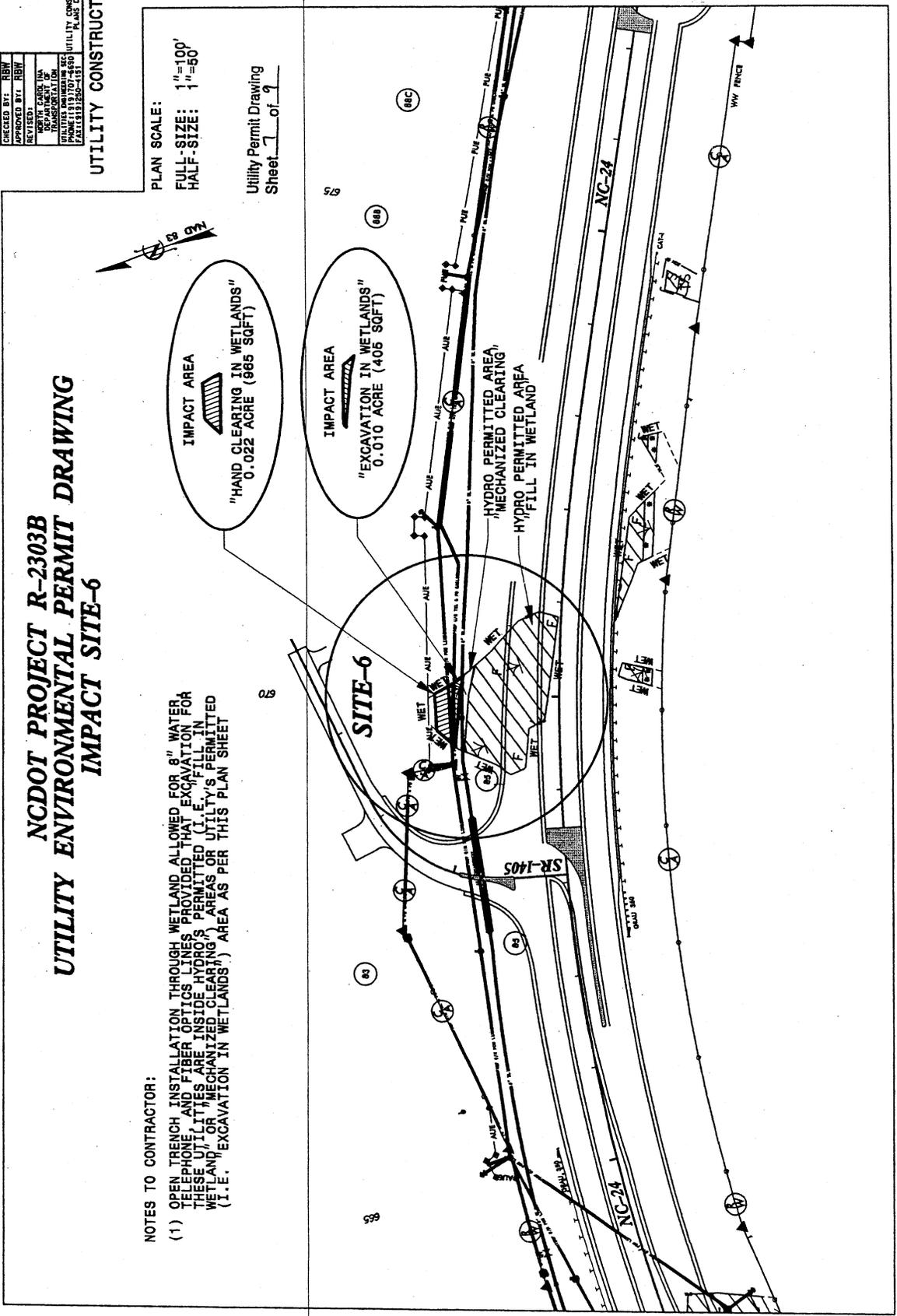
**NOTES TO CONTRACTOR:**

- (1) OPEN TRENCH INSTALLATION THROUGH WETLAND ALLOWED FOR 8" WATER TELEPHONE AND FIBER OPTICS LINES PROVIDED THAT EXCAVATION FOR THESE UTILITIES ARE INSIDE HYDRO'S PERMITTED (I.E. FILL IN WETLAND) OR "MECHANIZED CLEARING" AREAS OR UTILITY'S PERMITTED (I.E. "EXCAVATION IN WETLANDS") AREA AS PER THIS PLAN SHEET

IMPACT AREA  
"HAND CLEARING IN WETLANDS"  
0.022 ACRE (865 SQFT)

IMPACT AREA  
"EXCAVATION IN WETLANDS"  
0.010 ACRE (405 SQFT)

HYDRO PERMITTED AREA  
"MECHANIZED CLEARING"  
HYDRO PERMITTED AREA  
"FILL IN WETLAND"



R-2303B		LEP-7	
DESIGNED BY:	EMH	CHECKED BY:	RBW
DRAWN BY:	EMH	APPROVED BY:	RBW
REVISED:			
NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER EXPIRES 12/31/2011			
UTILITY CONSTRUCTION PLANS ONLY			

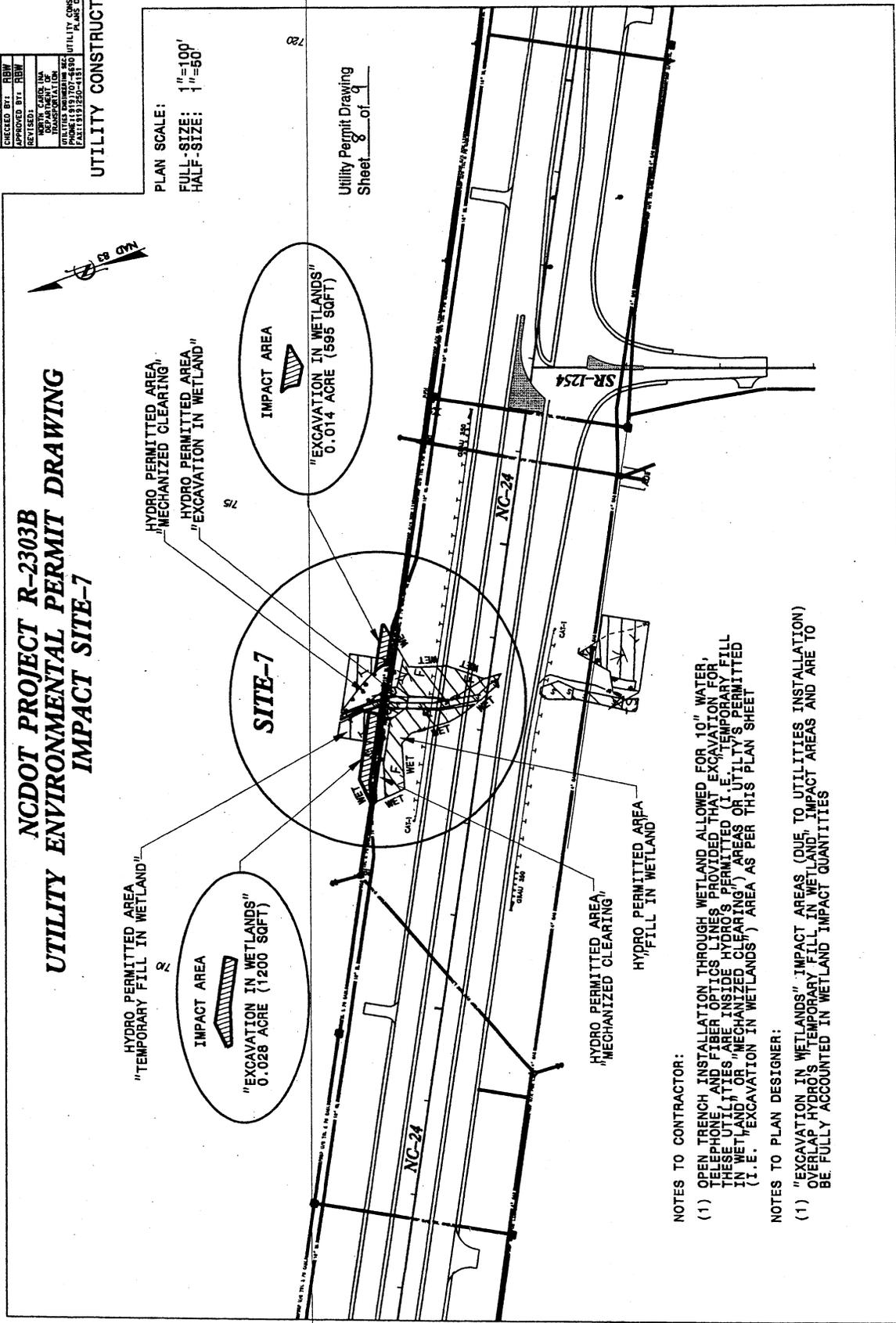
UTILITY CONSTRUCTION

PLAN SCALE:

FULL-SIZE: 1"=100'  
HALF-SIZE: 1"=50'

Utility Permit Drawing  
Sheet 8 of 4

NCDOT PROJECT R-2303B  
UTILITY ENVIRONMENTAL PERMIT DRAWING  
IMPACT SITE-7



NOTES TO CONTRACTOR:

- (1) OPEN TRENCH INSTALLATION THROUGH WETLAND ALLOWED FOR 10" WATER, TELEPHONE, AND FIBER OPTICS LINES PROVIDED THAT EXCAVATION FOR THESE UTILITIES ARE INSIDE HYDRO'S PERMITTED (I.E. "TEMPORARY FILL IN WETLAND") OR "MECHANIZED CLEARING") AREAS OR UTILITY'S PERMITTED (I.E. "EXCAVATION IN WETLANDS") AREA AS PER THIS PLAN SHEET

NOTES TO PLAN DESIGNER:

- (1) "EXCAVATION IN WETLANDS" IMPACT AREAS (DUE TO UTILITIES INSTALLATION) OVERLAP HYDRO'S "TEMPORARY FILL IN WETLAND" IMPACT AREAS AND ARE TO BE FULLY ACCOUNTED IN WETLAND IMPACT QUANTITIES

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	472+00 -L-	O/H POWER						0.06								
3	545+00 -L-	U/G WATER			0.01											
4	584+00 -L-	U/G WATER			0.10											
6	670+00 -L-	U/G WATER			0.01											
6	670+00 -L-	O/H POWER						0.02								
7	713+00 -L-	U/G WATER			0.04											
TOTALS:					0.16			0.08								

NC DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 CUMBERLAND/SAMPSON COUNTY  
 WBS - 34416.1.1 [R-2303B]  
 SHEET 1/22/2018

Utility Permit Drawing  
 Sheet 7 of 7

ATM Revised 3/21/05

Addendum No. 1



REPLY TO  
ATTENTION OF:

**R-156**

DEPARTMENT OF THE ARMY  
WILMINGTON DISTRICT, CORPS OF ENGINEERS  
69 DARLINGTON AVENUE  
WILMINGTON, NORTH CAROLINA 28403-1343

NEW 5-1-13

**RECEIVED**

MAR 27 2013

DIVISION OF HIGHWAYS  
PDEA-OFFICE OF NATURAL ENVIRONMENT

March 22, 2013

Regulatory Division

Action ID No. SAW-1992-03237

Note - Pages 156-165 are  
modifications applicable  
to R-2303A Permit.

Dr. Gregory J. Thorpe, Ph.D.  
Environmental Management Director, PDEA  
North Carolina Department of Transportation  
1598 Mail Service Center  
Raleigh, North Carolina 27699-1598

Dear Dr. Thorpe:

Reference the Department of the Army (DA) permit issued on December 12, 2012, for the discharge of fill material into waters and wetlands adjacent to various Creeks, and their tributaries in order to construct Section A of TIP# R-2303 (NC 24), Cumberland County, North Carolina. Reference is also made to your Section A permit modification request dated March 13, 2013 with revision to work plan drawings dated March 18, 2013. This information was submitted to request authorization to complete utility installation which will result in hand clearing within jurisdictional areas. Specifically, the request is to impact an additional 0.19 acre of wetland that will be cut and maintained in a different vegetative state under overhead power lines.

I have determined that the proposed project modifications described above are not contrary to the public interest and consistent with the 404 (B)(1) and therefore, the DA permit is hereby modified.

This modification approval will be utilized for future compliance of the project. If you have questions, please contact Brad Shaver of the Wilmington Regulatory Field Office, at telephone (910) 251-4611.

Sincerely,

A handwritten signature in black ink, appearing to read "SAB", written over a horizontal line.

FKR Steven A. Baker  
Colonel, U. S. Army  
District Commander

Copies Furnished (electronic):

Mr. Mason Herndon, NCDWQ  
Mr. Stoney Mathis, NCDOT  
Mr. Chris Rivenbark, NCDOT  
Mr. Chris Manley, NCDOT



North Carolina Department of Environment and Natural Resources

Division of Water Quality  
Charles Wakild, P. E.  
Director

Pat McCrory  
Governor

John E. Skvarla, III  
Secretary

March 18, 2013

Dr. Greg Thorpe, PhD., Manager  
Project Development and Environmental Analysis  
North Carolina Department of Transportation  
1598 Mail Service Center  
Raleigh, North Carolina, 27699-1598

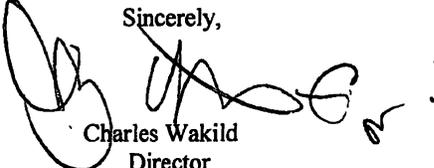
Subject: Modification to the 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water with ADDITIONAL CONDITIONS for Proposed improvements to NC 24 from 2.8 miles east of I-95 in Cumberland County to I-40 in Sampson County, Federal Aid Project No. STPNHF-F-8-2(17), WBS No. 34416.1.1, TIP R-2303A

NCDWQ Project No. 20120240 v.4

Dear Dr. Thorpe:

Attached hereto is a modification of Certification No. 3942 issued to The North Carolina Department of Transportation (NCDOT) dated September 24, 2012 and modification issued February 25, 2013.

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

Sincerely,  
  
Charles Wakild  
Director

Attachments

cc: Brad Shaver, US Army Corps of Engineers, Wilmington Field Office (electronic copy only)  
Greg Burns, PE, Division 6 Engineer  
Jim Rerko, Division 6 Environmental Officer  
Chris Militscher, Environmental Protection Agency (electronic copy only)  
Gary Jordan, US Fish and Wildlife Service (electronic copy only)  
Travis Wilson, NC Wildlife Resources Commission  
Jason Elliott, NCDOT, Roadside Environmental Unit  
Jim Stanfill, Ecosystem Enhancement Program  
Sonia Carrillo, NCDWQ Central Office  
File Copy

Transportation and Permitting Unit  
1650 Mail Service Center, Raleigh, North Carolina 27699-1617  
Location: 512 N. Salisbury St. Raleigh, North Carolina 27604  
Phone: 919-807-6300 \ FAX: 919-807-6488  
Internet: [www.ncwaterquality.org](http://www.ncwaterquality.org)

An Equal Opportunity | Affirmative Action Employer

One  
North Carolina  
*Naturally*

**Modification to the 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act  
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 (NCDWQ) Regulations in 15 NCAC 2H .0500. This certification authorizes the NCDOT to impact an additional 0.19 acres of jurisdictional wetlands in Cumberland County. The project shall be constructed pursuant to the modification dated received March 13, 2013 and revisions received on March 18, 2013. The authorized impacts are as described below:

**Wetland Impacts in the Cape Fear River Basin**

Site	Station	Wetland Type*	Fill (ac)	Fill (temporary) (ac)	Excavation (ac)	Mechanized Clearing (ac)	Hand Clearing (ac)	Total Wetland Impact (ac)
<b>R-2303A Utilities</b>								
U-21	168+00-L-RT	NR	0	0	0	0	0.11	0.11
U-34	322+00-L-LT	R	0	0	0	0	0.01	0.01
U-35	322+50-L-RT	R	0	0	0	0	0.05	0.05
U-36	348+75-L-RT	NR	0	0	0	0	0.02	0.02
<b>Total</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.19</b>	<b>0.19</b>

The application provides adequate assurance that the discharge of fill material into the waters of the Cape Fear River Basin 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 modified application dated received March 13, 2013 and revisions received on March 18, 2013. All the authorized activities and conditions of certification associated with the original Water Quality Certification dated September 24, 2012 and modification issued February 25, 2013 still apply except where superceded by this certification. Should your project change, you are required to notify NCDWQ 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. This modification is applicable only to the additional proposed utility relocation activities. All of the authorized activities and conditions of certification associated with the original Water Quality Certification dated September, 24, 2012 and subsequent modification dated February 15, 2013 still apply except where superceded by this certification.

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 you wish to contest any statement in the attached Certification you must file a petition for an administrative hearing. You may obtain the petition form from the office of Administrative hearings. You must file the petition with the office of Administrative Hearings within sixty (60) days of receipt of this notice. A petition is considered filed when it is received in the office of Administrative Hearings during normal office hours. The Office of

**Addendum No. 1**

**R-160**

**NEW 5-1-13**

Administrative Hearings accepts filings Monday through Friday between the hours of 8:00am and 5:00pm, except for official state holidays. The original and one (1) copy of the petition must be filed with the Office of Administrative Hearings.

The petition may be faxed-provided the original and one copy of the document is received by the Office of Administrative Hearings within five (5) business days following the faxed transmission. The mailing address for the Office of Administrative Hearings is:

Office of Administrative Hearings  
6714 Mail Service Center  
Raleigh, NC 27699-6714  
Telephone: (919)-431-3000, Facsimile: (919)-431-3100

A copy of the petition must also be served on DENR as follows:

Mr. Lacy Presnell, General Counsel  
Department of Environment and Natural Resources  
1601 Mail Service Center

This the 18th day of March 2013

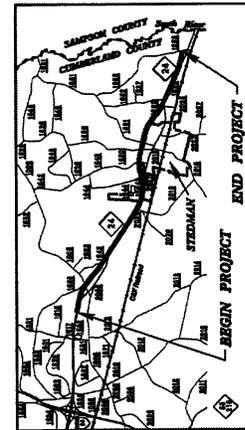
DIVISION OF WATER QUALITY



Charles Wakild  
Director

WQC No. 3942

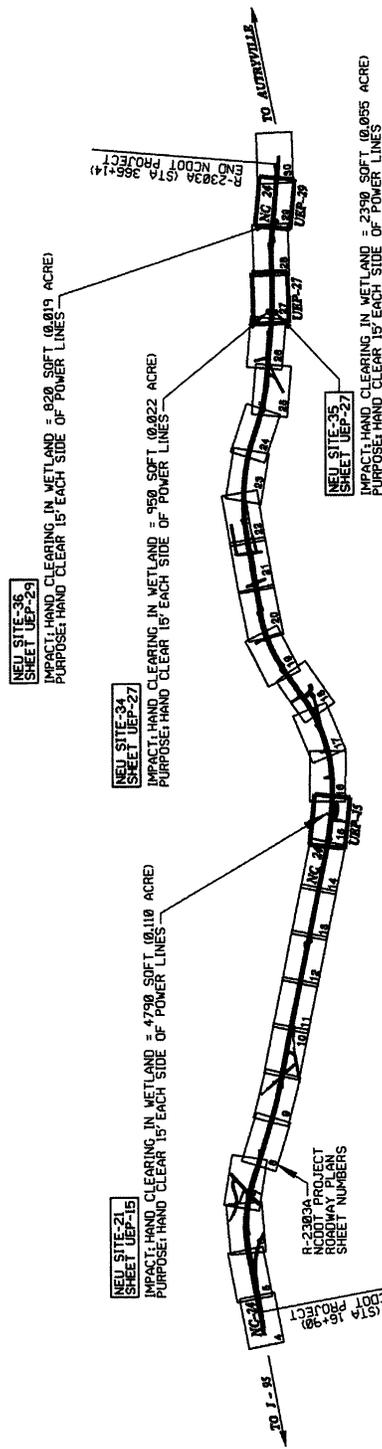
STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS  
UTILITY ENVIRONMENTAL PERMIT PLAN  
CUMBERLAND COUNTY



TELE. NO.	R-2303A
SHEET NO.	UEP-1

Utility Permit Drawing  
Sheet 1 of 5

MARCH 12, 2013  
UTILITY ENVIRONMENTAL PERMIT



- NEU PERMIT DRAWING GENERAL NOTES:
- (1) HAND CLEARING IN WETLANDS IMPACT IS DELINEATED FOR INSTALLATION OF AERIAL POWER LINES WITH BOUNDARY SET AT 15' EACH SIDE OF POWER LINE
  - (2) ALL UNDERGROUND WATER SEWERS, TELEPHONE, FIBER OPTICS, AND CABLE LINES TO BE INSTALLED IN WETLANDS WILL BE INSTALLED IN TRENCHES TO AVOID ENVIRONMENTAL IMPACTS TO WETLANDS WILL RESULT FROM INSTALLATION OF ANY UNDERGROUND UTILITIES

PREPARED BY THE OFFICE OF  
DIVISION OF HIGHWAYS  
UTILITIES UNIT  
UTILITIES ENGINEERING  
200 MAIN STREET, SUITE 200  
RAVENEL, SOUTH CAROLINA 29584  
TEL: (803) 741-4000

FOR THE PROJECT ENGINEER  
Rene W. Williams, P.E. UTILITIES SECTION MANAGER  
Rene Williams, P.E. UTILITIES SECTION MANAGER PROJECT ENGINEER  
Rick Howard UTILITIES PROJECT ENGINEER

PLAN SHEET NUMBERING NOTE:  
UTILITY ENVIRONMENTAL PERMIT PLAN SHEET NUMBERS  
MATCH ROADWAY CONSTRUCTION PLAN SHEET NUMBERS  
(I.E. UTILITY SHEET "UEP-10" = ROADWAY SHEET "10")

**INDEX OF SHEETS**

SHEET NO.	DESCRIPTION
UEP-1	TITLE SHEET
UEP-15	NEU SITE-21
UEP-27	NEU SITE-34, SITE-35
UEP-29	NEU SITE-36

TIP PROJECT: R-2303A

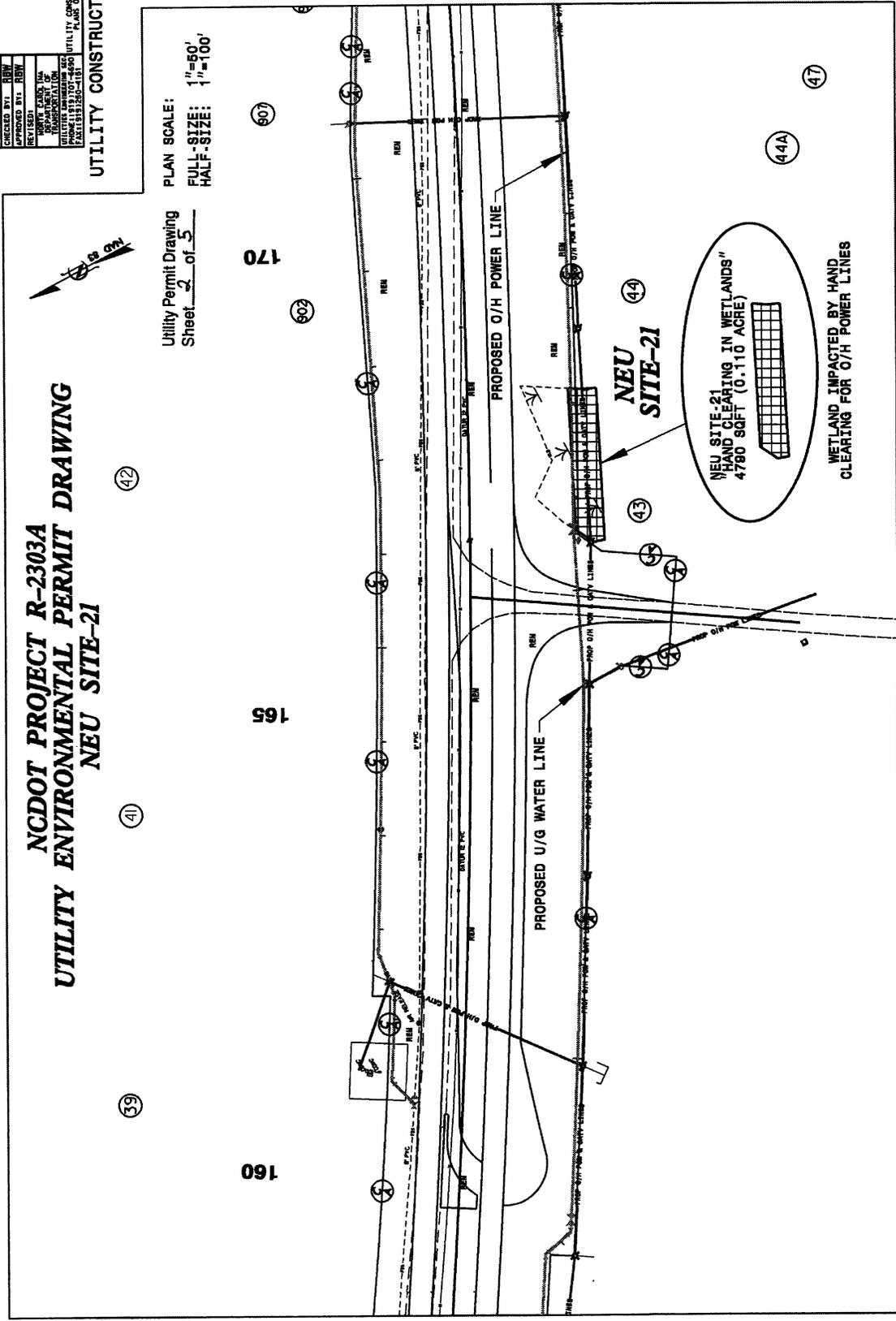
PROJECT REFERENCE NO.	R-2303A	SHEET NO.	15
DESIGNED BY	REB	DATE	11/15/12
DRAWN BY	REB	DATE	11/15/12
CHECKED BY	REB	DATE	11/15/12
APPROVED BY	REB	DATE	11/15/12
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES DIVISION PROJECT 111220303A UTILITY CONSTRUCTION PLANS ONLY			

UTILITY CONSTRUCTION

PLAN SCALE:  
FULL-SIZE: 1"=50'  
HALF-SIZE: 1"=100'

Utility Permit Drawing  
Sheet 2 of 5

NCDOT PROJECT R-2303A  
UTILITY ENVIRONMENTAL PERMIT DRAWING  
NEU SITE-21



PROJECT REFERENCE NO.	SHEET NO.
R-2303A	URP-27
DESIGNED BY: ENH	
CHECKED BY: REW	
APPROVED BY: REW	
REVISION:	
DATE:	
BY:	
FOR:	
DEPARTMENT OF	
TRANSPORTATION	
PROJECT NO.:	
DATE:	
BY:	
FOR:	
DEPARTMENT OF	
TRANSPORTATION	

UTILITY CONSTRUCTION

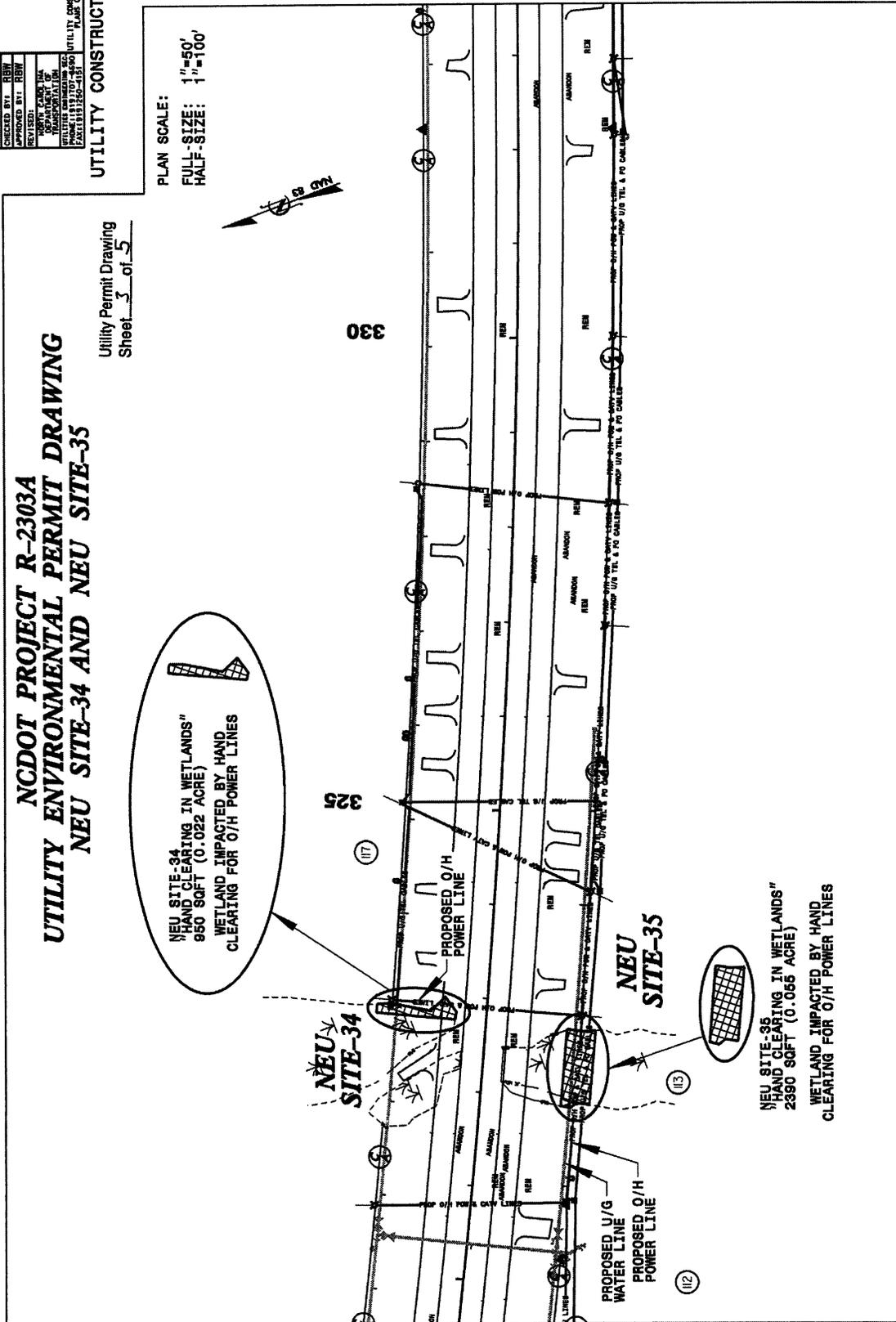
PLAN SCALE:  
FULL-SIZE: 1"=50'  
HALF-SIZE: 1"=100'

Utility Permit Drawing  
Sheet 3 of 5

NCDOT PROJECT R-2303A  
UTILITY ENVIRONMENTAL PERMIT DRAWING  
NEU SITE-34 AND NEU SITE-35

NEU SITE-34  
"HAND CLEARING IN WETLANDS"  
860 SQFT (0.022 ACRE)  
WETLAND IMPACTED BY HAND  
CLEARING FOR O/H POWER LINES

NEU SITE-35  
"HAND CLEARING IN WETLANDS"  
2390 SQFT (0.055 ACRE)  
WETLAND IMPACTED BY HAND  
CLEARING FOR O/H POWER LINES





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)					
21	168+00 -R-	O/H POWER						0.11									
34	322+50 -L-	O/H POWER						0.02									
35	322+50 -R-	O/H POWER						0.06									
36	348+75 -R-	O/H POWER						0.02									
TOTALS:																0.21	

NC DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 CUMBERLAND/SAMPSON COUNTY  
 WBS - 34416.1.1 (R-2303A)  
 SHEET 3/12/2013

Utility Permit Drawing  
 Sheet 5 of 5

ATN Revised 3/31/05