

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.

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

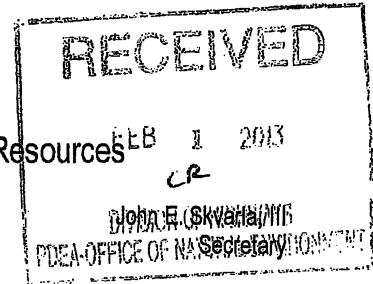
Where construction moratoriums are contained in a permit condition which restricts the Contractor's activities to certain times of the year, those moratoriums will apply only to the portions of the work taking place in the waters or wetlands provided that activities outside those areas is done in such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



North Carolina Department of Environment and Natural Resources

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

Pat McCrory
Governor



January 25, 2013

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

Subject: 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act with
ADDITIONAL CONDITIONS for proposed NC 133 Connector from NC 21/NC 133 (Southport Supply
Road) to NC 87/NC133 (River Road) in Brunswick County, Federal Aid Project No. STP-133(3), WBS
No. 34531.1.1.1, TIP R-3324.

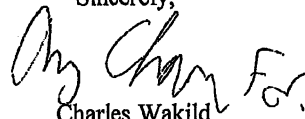
NCDWQ Project No. 12-0711
NCDWQ Certification No. 3949

Dear Dr. Thorpe:

Attached hereto is a copy of Certification No. 3949 issued to The North Carolina Department of Transportation
(NCDOT) dated January 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
Karen Fussell, PE, Division 3 Engineer
Stoney Mathis, Division 3 Environmental Officer (electronic copy only)
Chris Militsher, Environmental Protection Agency (electronic copy only)
Gary Jordan, US Fish and Wildlife Service (electronic copy only)
Travis Wilson, NC Wildlife Resources Commission (electronic copy only)
Jason Elliott, NCDOT, Roadside Environmental Unit
Steve Sollod, Division of Coastal Management
Michael Ellison, 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

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One
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**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 11.17 acres of jurisdictional wetlands and 1,702 linear feet of jurisdictional streams in Brunswick County. The project shall be constructed pursuant to the revised application dated received December 19, 2012 and additional information received on January 24, 2013. 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) | Bank Stabilization (linear ft) | Total Stream Impact (linear ft) | Stream Impacts Requiring Mitigation (linear ft) |
|--------------|---------------------|---|---|--|--|--------------------------------|---------------------------------|---|
| 1 | 22+00-L- | 0 | 0 | 0 | 160 | 26 | 186 | 0 |
| 4 | 51+70 to 60+00-L- | 0 | 0 | 481* | 0 | 0 | 481 | 131 |
| 5 | 61+00 to 73+40-L- | 0 | 0 | 242 | 0 | 0 | 242 | 242 |
| 6 | 83+50 to 91+70-L- | 0 | 0 | 395 | 73 | 0 | 468 | 395 |
| 9 | 112+80-L- | 0 | 0 | 128 | 55 | 0 | 183 | 0 |
| 11 | 123+50 to 127+60-L- | 0 | 0 | 96 | 46 | 0 | 142 | 0 |
| TOTAL | | 0 | 0 | 1,342 | 334 | 26 | 1,702 | 768 |

Total Stream Impact for Project: 1,702 linear feet

*350 linear feet of stream will be relocated

Wetland Impacts in the Cape Fear River Basin

| Site | Station | Wetland Type | Fill (ac) | Fill (temporary) (ac) | Excavation (ac) | Drainage Effect (ac) | Mechanized Clearing (ac) | Hand Clearing (ac) | Total Wetland Impact (ac) | Impacts Requiring Mitigation |
|------|---------------------|--------------|-----------|-----------------------|-----------------|----------------------|--------------------------|--------------------|---------------------------|------------------------------|
| 2 | 12+30 to 25+00-Y1- | NR | 0.10 | 0 | 0.03 | 0 | 0 | 0 | 0.13 | 0.13 |
| 4 | 51+70 to 60+00-L- | NR | 0.15 | 0.03* | 0 | 0 | 0 | 0.06 | 0.24 | 0.15 |
| 5 | 61+00 to 73+40-L- | NR | 1.98 | 0.15* | 0.05 | 0 | 0 | 0.35 | 2.53 | 2.03 |
| 6 | 83+50 to 91+70-L- | R | 1.08 | 0.39 | 0.18 | 0 | 0.21 | 0 | 1.86 | 1.47 |
| 7 | 98+00-L- | NR | 0.06 | 0.01* | 0 | 0 | 0 | 0.03 | 0.10 | 0.06 |
| 8 | 104+00 to 107+70-L- | NR | 0.56 | 0.05* | 0 | 0 | 0 | 0.12 | 0.73 | 0.56 |
| 10 | 113+60 to 118+80-L- | NR | 0.49 | 0.06* | 0 | 0 | 0 | 0.14 | 0.69 | 0.49 |
| 11 | 123+50 to 127+60-L- | NR | 1.05 | 0 | 0 | 0 | 0.22 | 0 | 1.27 | 1.27 |
| 12 | 32+00 to 81+50-Y2- | NR | 0 | 0.18* | 0.09 | 1.7 | 0 | 0.43 | 2.40 | 1.79 |
| 13 | 46+00 to 47+30-Y1- | R | <0.01 | 0 | 0.04 | 0 | 0 | 0.01 | 0.05 | 0.04 |

UTILITIES

| | | | | | | | | | | |
|--------------|------------------|----|-------------|-------------|-------------|------------|-------------|-------------|--------------|-------------|
| A1/A2 | See UPD 9 of 17 | NR | <0.01** | 0 | 0 | 0 | 0 | 0.36 | 0.36 | 0 |
| A3 | See UPD 10 of 17 | NR | <0.01** | 0 | 0 | 0 | 0 | 0.40 | 0.40 | 0 |
| A4/A5 | See UPD 11 of 17 | NR | <0.01** | 0 | 0 | 0 | 0 | 0.32 | 0.32 | 0 |
| A6/A7 | See UPD 12 of 17 | NR | <0.01** | 0 | 0 | 0 | 0 | 0.06 | 0.06 | 0 |
| A8 | See UPD 13 of 17 | NR | <0.01** | 0 | 0 | 0 | 0 | 0.03 | 0.03 | 0 |
| TOTAL | | | 5.47 | 0.87 | 0.39 | 1.7 | 0.43 | 2.31 | 11.17 | 7.99 |

Total Wetland Impact for Project: 11.17 acres.

*denotes temporary fill in hand clearing areas for erosion control measures

**power pole installation

R – Riparian wetland; NR- Non riparian wetland

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 revised application dated received December 19, 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. 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.
3. If multiple pipes or barrels are required, they shall be designed to mimic natural stream cross section as closely as possible including pipes or barrels at flood plain elevation and/or sills where appropriate. Widening the stream channel should be avoided. Stream channel widening at the inlet or outlet end of structures typically decreases water velocity causing sediment deposition that requires increased maintenance and disrupts aquatic life passage.
4. Native material shall be placed inside of the reinforced concrete box culverts at Permit Sites 9 and 11 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.
5. No drill slurry or water that has been in contact with uncured concrete shall be allowed to enter surface waters. This water shall be captured, treated, and disposed of properly.
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. Channel relocations shall be completed and stabilized, and approved on site by DWQ staff, prior to diverting water into the new channel. Stream banks shall be matted with coir-fiber matting. Vegetation used for bank stabilization shall be limited to native riparian vegetation, and should include establishment of a vegetated buffer on both sides of the relocated channel to the maximum extent practical. 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.

8. The proposed excavation of the existing causeway at Site 6 shall be conducted in a manner that floodplain adjacent to the channel relocation is at an elevation equivalent to the adjacent and undisturbed wetland elevation.
9. Pipes and culverts used exclusively to maintain equilibrium in wetlands and/or served as floodplain pipes, where aquatic life passage is not a concern shall not be buried. These pipes shall be installed at natural ground elevation.
10. 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.
11. 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*.
12. 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.
13. Due to the possibility that compaction and/or other site alterations might prevent the temporary wetland impact area from re-attaining jurisdictional wetland status; the permittee shall provide an update on the wetland areas temporarily impacted at Site 6. This update shall be conducted a minimum of two growing seasons after completion of the work at Site 6 and shall consist of photographs and a brief report on the progress of the areas in re-attaining wetland jurisdictional status. Upon submission of this update to NCDWQ, the permittee shall schedule an agency field meeting with the NCDWQ to determine if the wetland areas temporarily impacted by this project have re-attained jurisdictional wetland status. If the wetland areas temporarily impacted by this project have not re-attained jurisdictional wetland status, NCDWQ shall determine if compensatory wetland mitigation is be required.
- * 14. Compensatory mitigation for 768 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 17, 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.
- * 15. Compensatory mitigation for impacts to 1.51 acre of riparian and 6.48 acre of non riparian wetlands is required. We understand that you have chosen to perform compensatory mitigation for impacts to wetlands through the North Carolina Ecosystem Enhancement Program (EEP), and that the EEP has agreed to implement the mitigation for the project. EEP has indicated in a letter dated July 17, 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.
16. The project shall be constructed in accordance with Stormwater Permit Number SW081020 which was issued to this project by the DWQ Stormwater Permitting Unit on October 29, 2008.

General Condition

17. 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 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.
18. 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.
19. 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.
20. 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.
21. 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.
- * 22. The Permittee shall ensure that the final design drawings adhere to the permit and to the permit drawings submitted for approval.
23. 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.
24. 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.
25. 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.
26. No rock, sand or other materials shall be dredged from the stream channel except where authorized by this certification.
27. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited.
28. 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.

29. All fill slopes located in jurisdictional wetlands shall be placed at slopes no flatter than 3:1, unless otherwise authorized by this certification..
30. 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.
31. 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.
32. 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 federal) having jurisdiction, including but not limited to applicable buffer rules, stormwater management rules, soil erosion and sedimentation control requirements, etc.
33. The Permittee shall report any violations of this certification to the Division of Water Quality within 24 hours of discovery.
- * 34. 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.
35. 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.
36. 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.
37. 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.
38. 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. Lacey Presnell, General Counsel
Department of Environment and Natural Resources
1601 Mail Service Center
Raleigh, NC 27699-1601

This the 25th day of January 2013

DIVISION OF WATER QUALITY



Charles Wakild
Director

WQC No. 3949



North Carolina Department of Environment and Natural Resources
Division of Coastal Management

Pat McCrory
Governor

Braxton C. Davis
Director

John E. Skvarla, III
Secretary

January 16, 2013

Gregory J. Thorpe, Ph.D., Manager
Project Development and Environmental Analysis Branch
NC Department of Transportation
1548 Mail Service Center
Raleigh, North Carolina 27699-1598

SUBJECT: Consistency Concurrence - ~~CD10-002~~ CD13-002 (Corrected)
Proposed NC 133 Connector, from NC 211-133 (Southport-Supply Road) to
NC 87-133 (River Road) in Brunswick County, R-3324 (DCM#20120067)

Dear Dr. Thorpe:

The Division of Coastal Management (DCM) received NC Department of Transportation's (NCDOT) Consistency Determination certifying that the subject project is consistent with the NC Coastal Management Program on July 23, 2012. NCDOT's Consistency Certification documentation was distributed to State agencies with a regulatory interest for review and to provide DCM with comments on the potential impacts of the project on each agency's resources.

The proposed project, which was taken through the merger process, is a two-lane facility on new location from NC 211-133 (Southport-Supply Road) to NC 87-133 (River Road) in Brunswick County. The 2.1 mile long project includes a reconfiguration of the intersection of NC 87, NC 133, and the entrance road to the Sunny Point Military Terminal. No Coastal Area Management Act (CAMA) Areas of Environmental Concern (AECs) will be impacted by the construction of the proposed project.

Based on the review of NCDOT's Consistency Certification and the supplementary supporting documentation, comments received from the interested State agencies, and the enforceable policies of the NC Coastal Management Program, DCM concurs, as conditioned below, that the proposed project is consistent, to the maximum extent practicable, with North Carolina's certified coastal management program provided that the following conditions are implemented.

- NCDOT shall obtain and comply with a NC Division of Water Quality (DWQ), Section 401, Water Quality Certification. A copy of the 401 Water Quality Certification shall be forward to DCM.

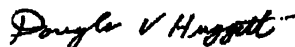
- In accordance with correspondence to NCDOT by DWQ, dated January 10, 2013, NCDOT shall obtain a revised Mitigation Acceptance Letter from the EEP to cover all required mitigation. Any future unanticipated, substantial, increases in impacts may require NCDOT to revise the Consistency Certification for this project.
- This project shall comply with all requirements of DWQ Stormwater Permit No. SW8 081020, issued on October 29, 2008.
- This project shall conform to all requirements of the NC Sedimentation Pollution Control Act and NCDOT's Memorandum of Agreement with the Division of Energy, Mineral and Land Resources.
- Unless specifically altered herein, the environmental commitments made within the Federal Consistency Certification, dated July 23, 2012, and within the Environmental Assessment, signed by NCDOT on July 6, 2006, and the Finding of No Significant Impact, signed by NCDOT on October 29, 2007, shall be met unless otherwise negotiated with state regulatory agencies. DCM shall be notified of any deviation from the stated commitments and a revised Consistency Determination may be necessary.

These conditions allow DCM to concur with the proposed action. It should be noted, that in accordance with 15 CFR 930.4, if the conditions of concurrence are not met, then this concurrence shall be considered an objection to the action. Should there be disagreement of any stated conditions of concurrence; a response to this correspondence is requested, as soon as possible, to resolve any disagreement with the conditions.

Should the project be modified, a revised Consistency Certification could be necessary. This might take the form of either a supplemental Consistency Determination pursuant to 15 CFR 930.46, or a new Consistency Determination pursuant to 15 CFR 930.36.

If you have any questions on this Consistency Concurrence, please contact Steve Sollod at (919) 707-9152 or via e-mail at steve.sollod@ncdenr.gov. Thank you for your consideration of the North Carolina Coastal Management Program.

Sincerely,



Doug Huggett
Manager, Major Permits and Consistency Unit

cc: Beth Harmon, EEP
Stephen Lane, DCM
John Merritt, NCDOT
Chris Rivenbark, NCDOT
Stephen Rynas, DCM
Brad Shaver, USACE

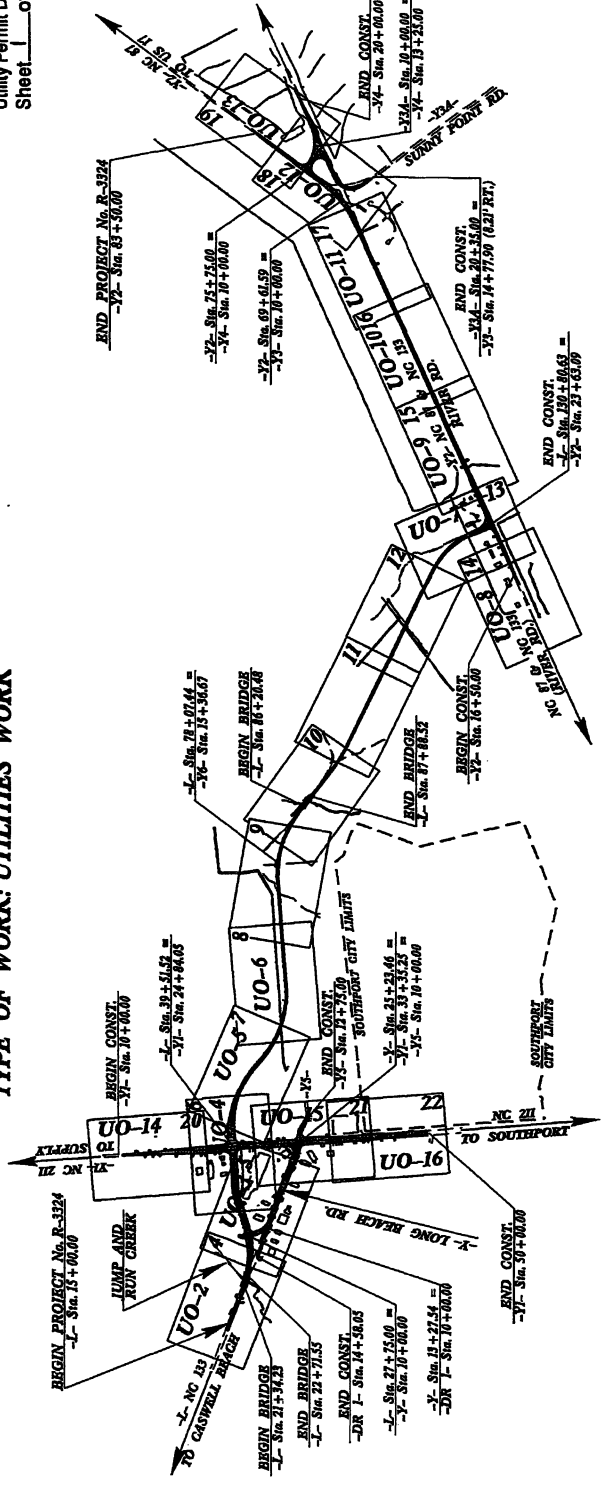
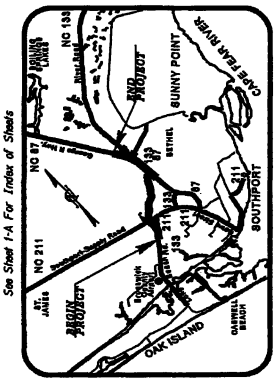
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
NEU PERMIT DRAWINGS
BRUNSWICK COUNTY

TIP PROJ. NO. **R-3324**
SHEET NO. **UO-1**

RECEIVED
NOV 10 2012
DIVISION OF HIGHWAYS
OFFICE OF NATURAL ENVIRONMENT

LOCATION: NEW ROUTE FROM NC 133 (LONG BEACH RD.) TO NC 133

UTILITY PERMIT DRAWING
Sheet 1 of 17



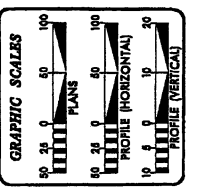
PREPARED BY THE OFFICE OF
DIVISION OF HIGHWAYS
UTILITIES UNIT
UTILITIES ENGINEERING
700 N. HARRIS STREET
RALEIGH, NC 27601
PHONE: 919-733-1111
FAX: 919-733-1111

FOR THE PROJECT ENGINEER
Rosa Washington, P.E. UTILITIES SECTION ENGINEER
Steve McLean, P.E. UTILITIES SECTION ENGINEER
James H. Eckhardt UTILITIES PROJECT ENGINEER

- UTILITY OWNERS ON PROJECT**
- (1) Brunswick EMC - Power
 - (2) Progress Energy - Power
 - (3) Atlantic Telephone Membership Corp. - Telephone
 - (4) AT&T - Telephone
 - (5) Time Warner Cable - CATV
 - (6) City of Southport - Prop. 18' Rows Main sewer
 - (7) Brunswick County Public Utilities - 12" P.M.C. @ 12' W.L.

INDEX OF SHEETS

| SHEET NO. | DESCRIPTION |
|-----------------|-------------------------------|
| UO-1 | TITLE SHEET |
| UO-2 THRU UO-16 | UTILITY BY OTHERS PLAN SHEETS |



TIP PROJECT: R-3324

PROJECT REFERENCE NO. R-3924
 SHEET NO. UO-2

UTILITIES BY OTHERS

NOTE:
 ALL PROPOSED UTILITY WORK
 SHOWN ON THIS SHEET WILL
 BE DONE BY OTHERS

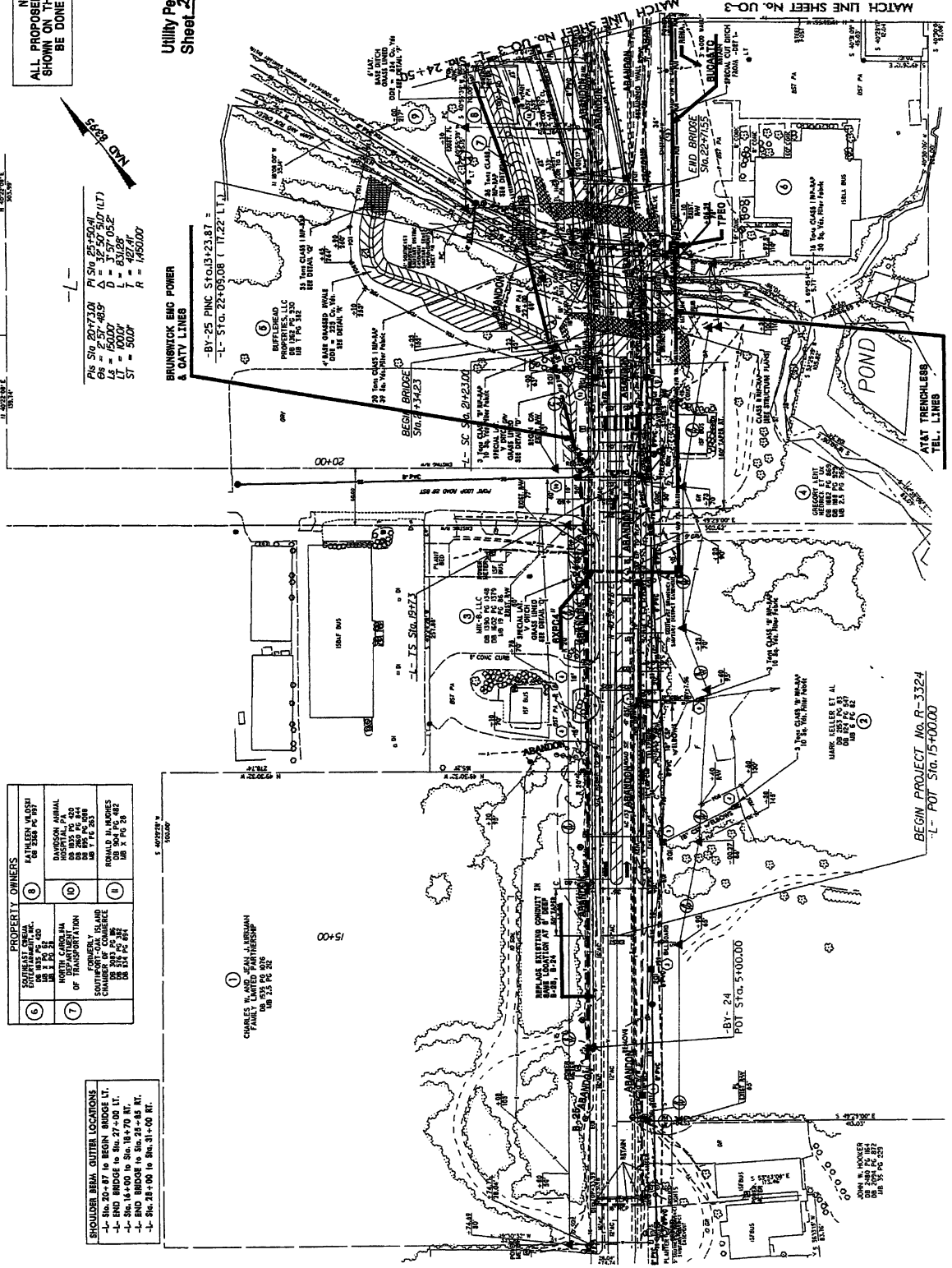
Fig Sta 20+73.00 PI Sta 20+50.41
 Ch = 2.57' - 48.9'
 D = 200.0'
 LT = 100.0'
 ST = 500.0'
 R = 1450.000

Utility Permit Drawing
 Sheet 2 of 17

| PROPERTY OWNERS | |
|-----------------|---|
| 6 | SOUTHWEST ANIMAL HOSPITAL 100 2500 PG 197 100 2500 PG 197 100 2500 PG 197 |
| 7 | NORTH CAROLINA CHAMBER OF COMMERCE 100 2500 PG 197 100 2500 PG 197 100 2500 PG 197 |
| 8 | CHARLES H. WARDEN 100 2500 PG 197 100 2500 PG 197 100 2500 PG 197 |
| 9 | HATHLEIN V. OSH 100 2500 PG 197 100 2500 PG 197 100 2500 PG 197 |
| 10 | HARRISON ANIMAL HOSPITAL 100 2500 PG 197 100 2500 PG 197 100 2500 PG 197 |

SHOULDER AREA CUTTER LOCATIONS
 -L- Sta. 20+27 to BEGIN BRIDGE LT.
 -L- END BRIDGE to Sta. 27+00 LT.
 -L- Sta. 14+00 to Sta. 18+70 RT.
 -L- END BRIDGE to Sta. 25+45 RT.
 -L- Sta. 28+00 to Sta. 31+00 RT.

CHARLES H. WARDEN
 FARMERS' UNION
 100 2500 PG 197
 100 2500 PG 197
 100 2500 PG 197



BEGIN PROJECT No. R-3324
 -L- POT Sta. 15+00.00

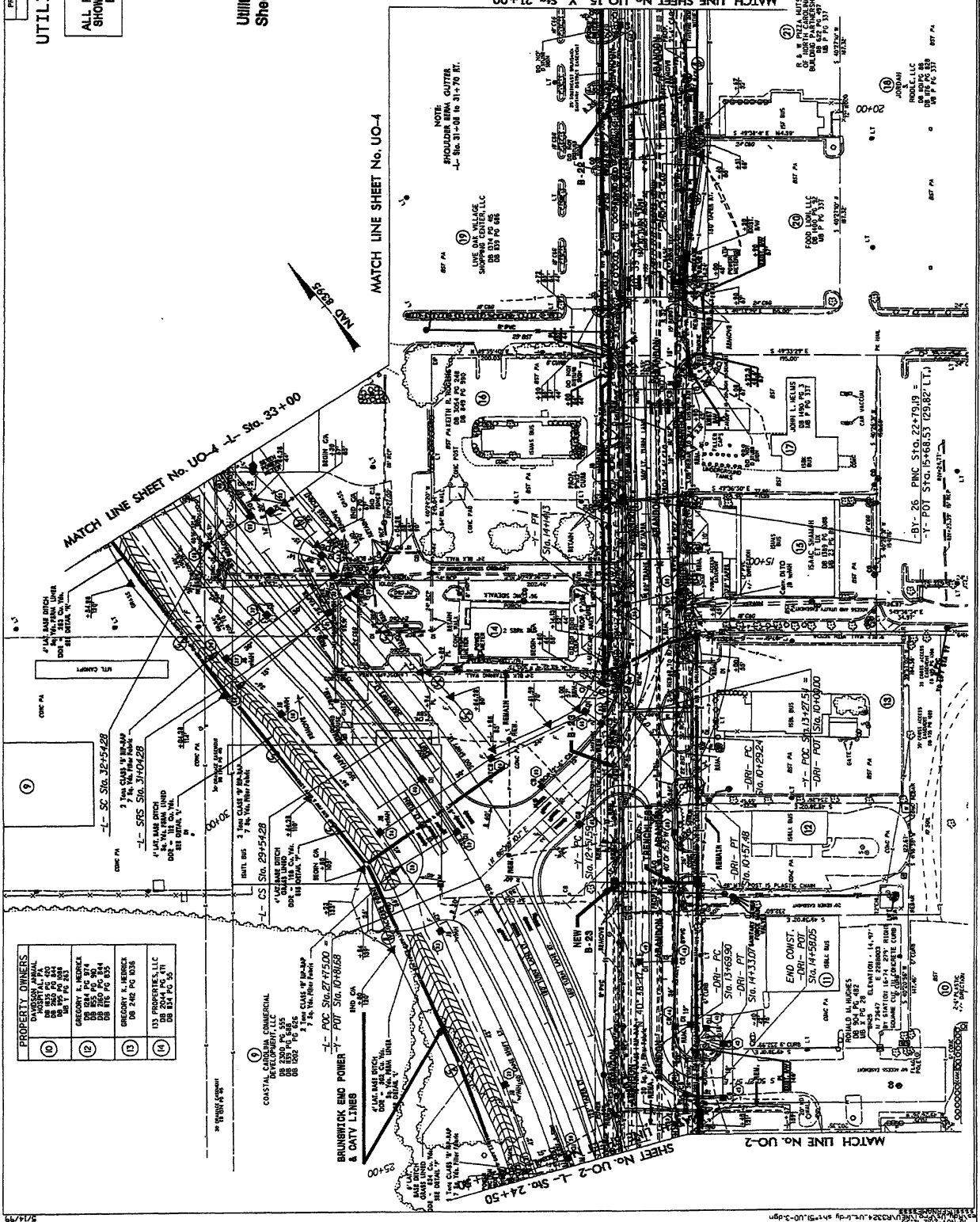
MATCH LINE SHEET No. UO-3

PROJECT REFERENCE NO. R-3324
 SHEET NO. UO-3

UTILITIES BY OTHERS

NOTE:
 ALL PROPOSED UTILITY WORK
 SHOWN ON THIS SHEET WILL
 BE DONE BY OTHERS

Utility Permit Drawing
 Sheet 3 of 17



| PROPERTY OWNERS | |
|-----------------|---|
| (1) | DANIELSON APN 011 DB 835 PG 400 DB 835 PG 401 DB 835 PG 402 DB 835 PG 403 |
| (2) | CHRYSTAL TRUCK DB 835 PG 404 DB 835 PG 405 DB 835 PG 406 |
| (3) | GREGORY K. REBER DB 242 PG 808 DB 242 PG 809 DB 242 PG 810 |
| (4) | US TRANSPORTS, LLC DB 2004 PG 11 DB 2004 PG 12 DB 2004 PG 13 |

(1) COASTAL CALIFORNIA COMMERCIAL DEVELOPMENT, LLC
 DB 835 PG 400
 DB 835 PG 401
 DB 835 PG 402

(2) BRUNWICK EMO POWER & DUTY LINES
 DB 835 PG 400
 DB 835 PG 401
 DB 835 PG 402

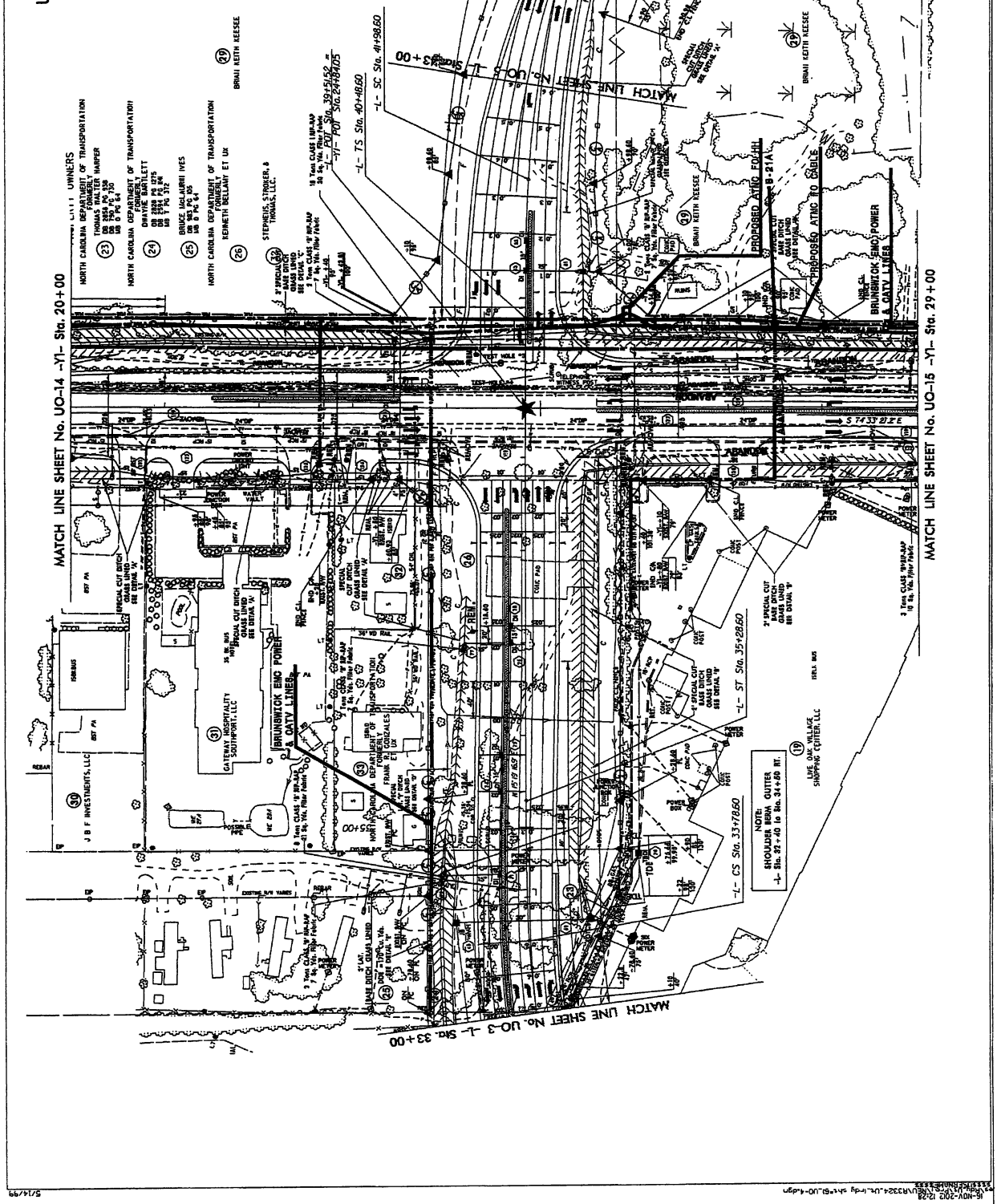
(11) END CONST.
 DB 147 PG 5025
 DB 147 PG 5026
 DB 147 PG 5027

PROJECT REFERENCE NO. R-3324
SHEET NO. UD-4

UTILITIES BY OTHERS

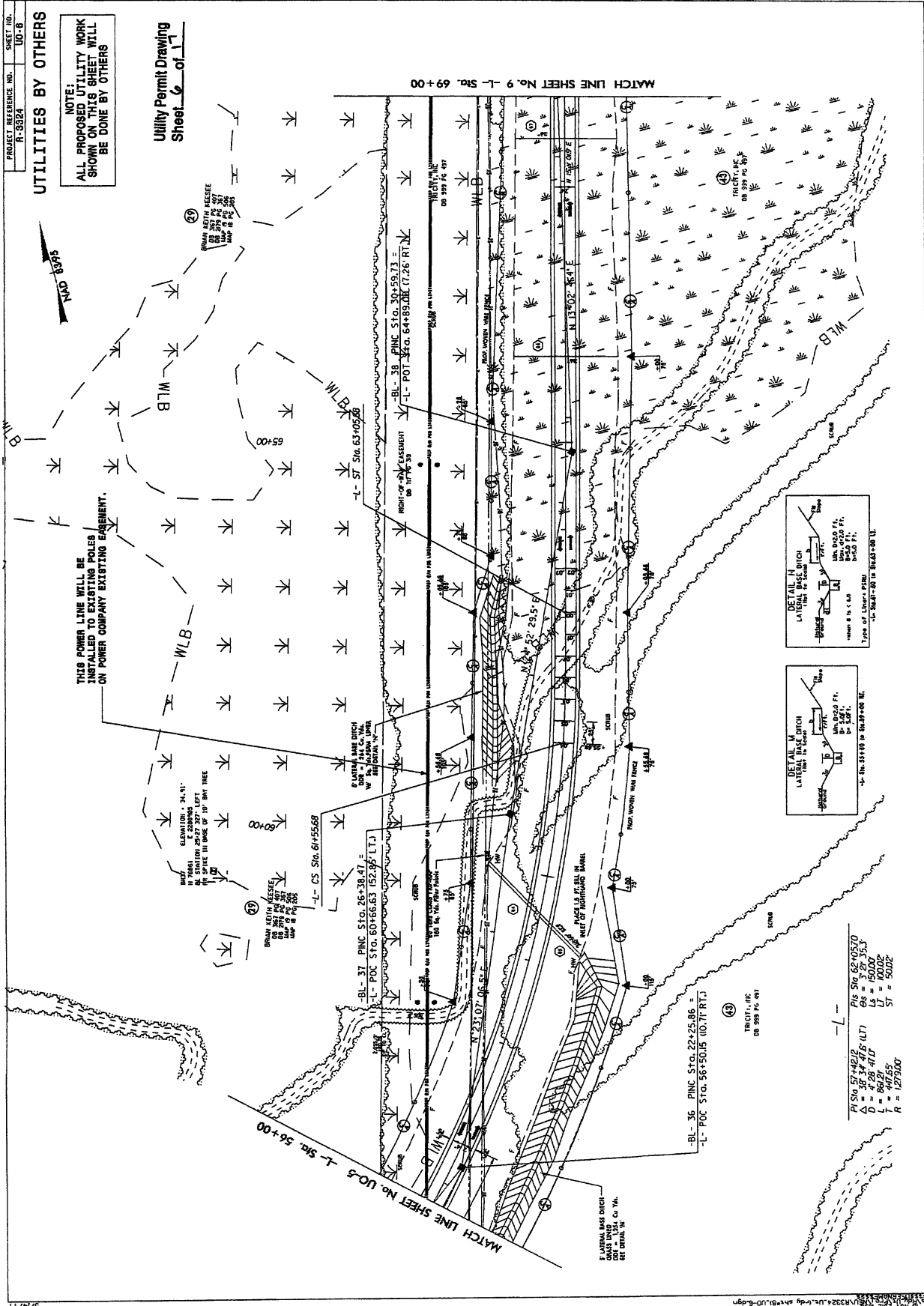
NOTE:
ALL PROPOSED UTILITY WORK
SHOWN ON THIS SHEET WILL
BE DONE BY OTHERS

Utility Permit Drawing
Sheet 4 of 11



5/14/19

15-NOV-2018 10:30:00 AM R:\3324\UD-4.dwg sht=08 UD-4.dgn



PROJECT REFERENCE NO. R-3924
SHEET NO. U0-B

UTILITY BY OTHERS

NOTE:
ALL PROPOSED UTILITY WORK
SHOWN ON THIS SHEET WILL
BE DONE BY OTHERS

Utility Permit Drawing
Sheet 6 of 11

THIS POWER LINE WILL BE
INSTALLED TO EXISTING POLES
ON POWER COMPANY EXISTING EQUIPMENT.

WOOD
ELEVATION = 24.41'
IN TRUNK
= 23.88' AT
TOP OF
TRUNK
ELEVATION IN
SPRICE IN DITCH OF 10' WIDE TREE

BRAIN LEVITY ASSESSE
ON STA. 57+42.0
ON STA. 57+42.0
ON STA. 57+42.0
ON STA. 57+42.0

EASMENT FOR LATERAL DITCH
30' WIDE
W/ 10' WIDE POWER LINE

BRAIN LEVITY ASSESSE
ON STA. 60+56.63
ON STA. 60+56.63
ON STA. 60+56.63

-L- CS Sta. 61+55.68
-L- ST Sta. 63+09.80
-L- POT Sta. 64+89.02

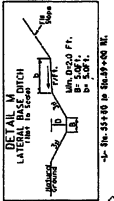
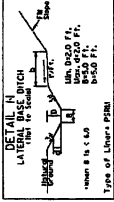
-BL- 37 PINC Sta. 26+38.47 =
-L- POC Sta. 60+56.63 (52.85' LT.)

-BL- 38 PINC Sta. 30+59.73 =
-L- POT Sta. 64+89.02 (7.26' RT.)

-BL- 36 PINC Sta. 22+25.86 =
-L- POC Sta. 56+50.05 (10.71' RT.)

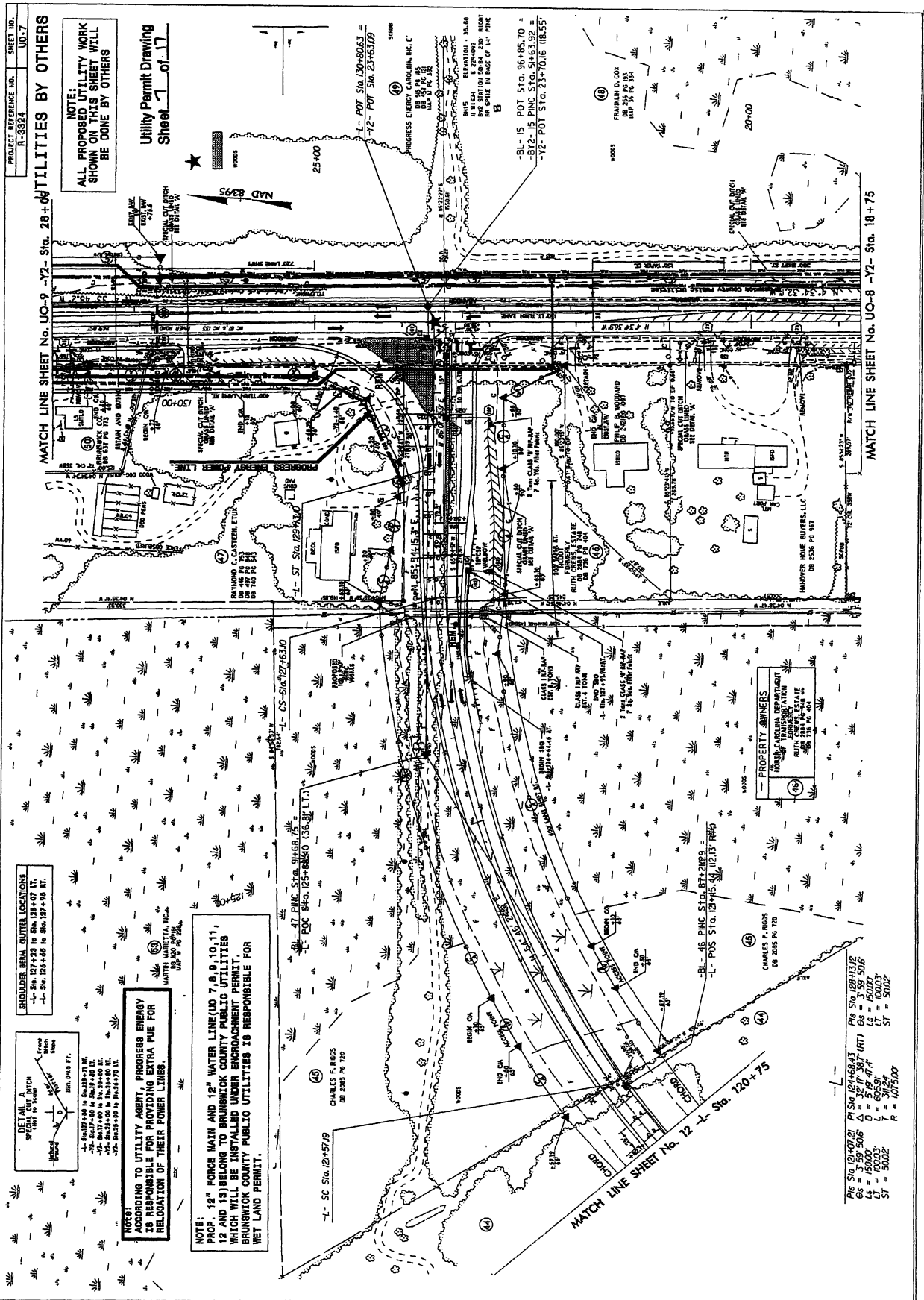
TRACT 1, INC.
05 999 P.C. 997

PI Sta. 57+42.0 P
Δ = 35.34' (45' LT)
D = 42.28' (47'
T = 447.65'
R = 1,275.00'



| | |
|---------------------|-------------------|
| PI Sta. 57+42.0 | PI Sta. 62+05.70 |
| Δ = 35.34' (45' LT) | Δ = 37.28' (53.3' |
| D = 42.28' (47' | L = 50.00' |
| T = 447.65' | ST = 50.00' |
| R = 1,275.00' | |

11-NOV-2002 11:32 AM R:\326\Utility\4181\10-6.dgn



PROJECT REFERENCE NO. R-5324 SHEET NO. UD-7
 MATCH LINE SHEET No. UD-9 -Y2- Sta. 28+00 UTILITIES BY OTHERS
 NOTE:
 ALL PROPOSED UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS
 Utility Permit Drawing
 Sheet 1 of 17

PROPERTY OWNERS:
 MARY W. ROBERTSON
 WALTER W. ROBERTSON
 RUTH L. ROBERTSON
 2850 S.W. 100th Ave.
 DEERFIELD, FL 33442

CS-51a 127+63.0
 L- SC Sta. 121+57.9
 P.O.C. Sta. 125+18.60 (336, 81, L.T.)
 47 PNC Sta. 91+66.75
 46 PNC Sta. 87+212.9
 45 PNC Sta. 101+115.44 (12.13' RMG)
 44 PNC Sta. 96+85.70
 43 PNC Sta. 93+53.92
 42 PNC Sta. 91+66.75
 41 PNC Sta. 89+00.00
 40 PNC Sta. 86+00.00
 39 PNC Sta. 83+00.00
 38 PNC Sta. 80+00.00
 37 PNC Sta. 77+00.00
 36 PNC Sta. 74+00.00
 35 PNC Sta. 71+00.00
 34 PNC Sta. 68+00.00
 33 PNC Sta. 65+00.00
 32 PNC Sta. 62+00.00
 31 PNC Sta. 59+00.00
 30 PNC Sta. 56+00.00
 29 PNC Sta. 53+00.00
 28 PNC Sta. 50+00.00
 27 PNC Sta. 47+00.00
 26 PNC Sta. 44+00.00
 25 PNC Sta. 41+00.00
 24 PNC Sta. 38+00.00
 23 PNC Sta. 35+00.00
 22 PNC Sta. 32+00.00
 21 PNC Sta. 29+00.00
 20 PNC Sta. 26+00.00
 19 PNC Sta. 23+00.00
 18 PNC Sta. 20+00.00
 17 PNC Sta. 17+00.00
 16 PNC Sta. 14+00.00
 15 PNC Sta. 11+00.00
 14 PNC Sta. 8+00.00
 13 PNC Sta. 5+00.00
 12 PNC Sta. 2+00.00
 11 PNC Sta. 0+00.00

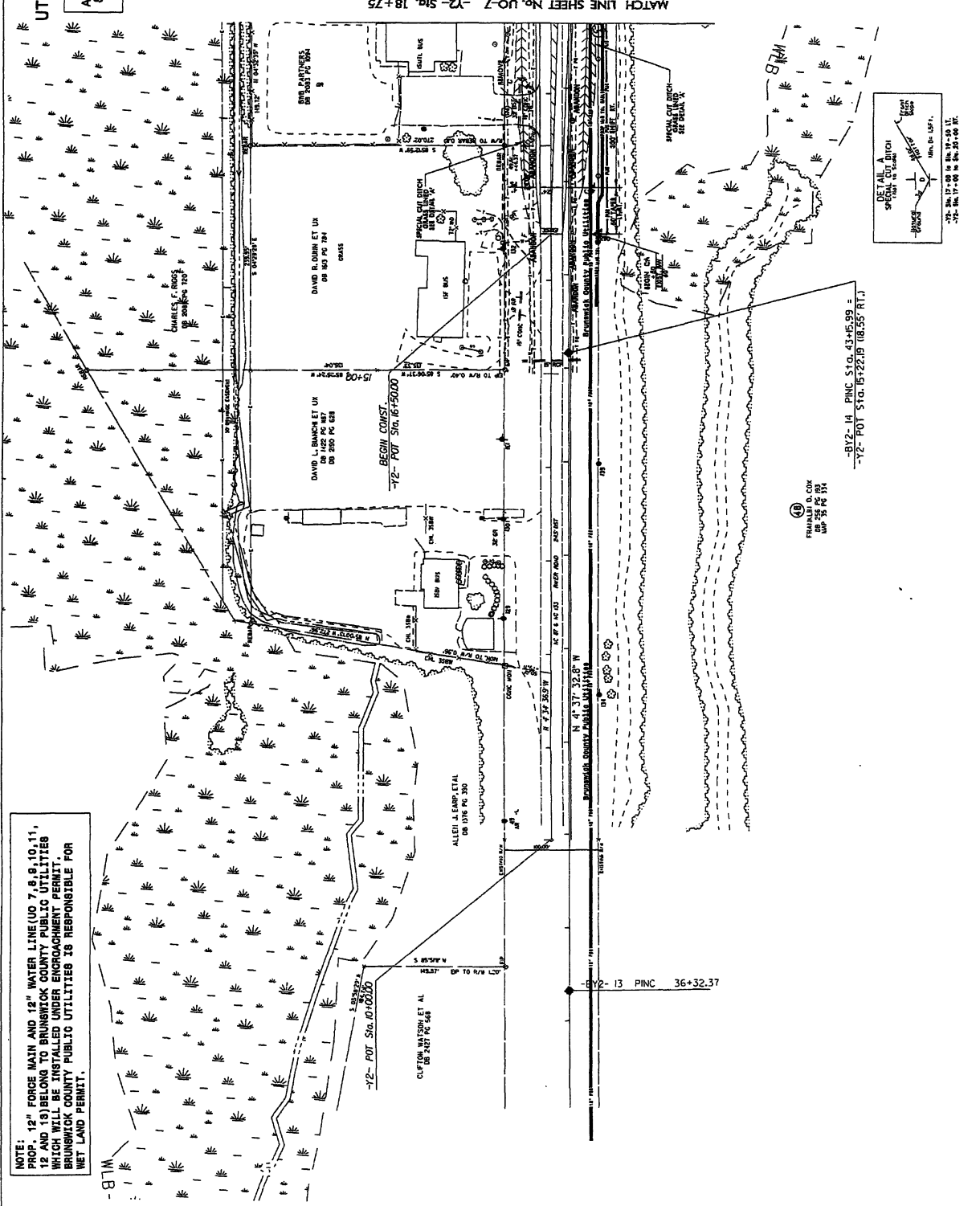
MATCH LINE SHEET No. UD-8 -Y2- Sta. 18+75
 MATCH LINE SHEET No. 12 -L- Sta. 120+75

PROJECT REFERENCE NO. R-3524
SHEET NO. UO-9

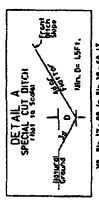
UTILITIES BY OTHERS

NOTE:
ALL PROPOSED UTILITY WORK
SHOWN ON THIS SHEET WILL
BE DONE BY OTHERS

Utility Permit Drawing
Sheet 9 of 9



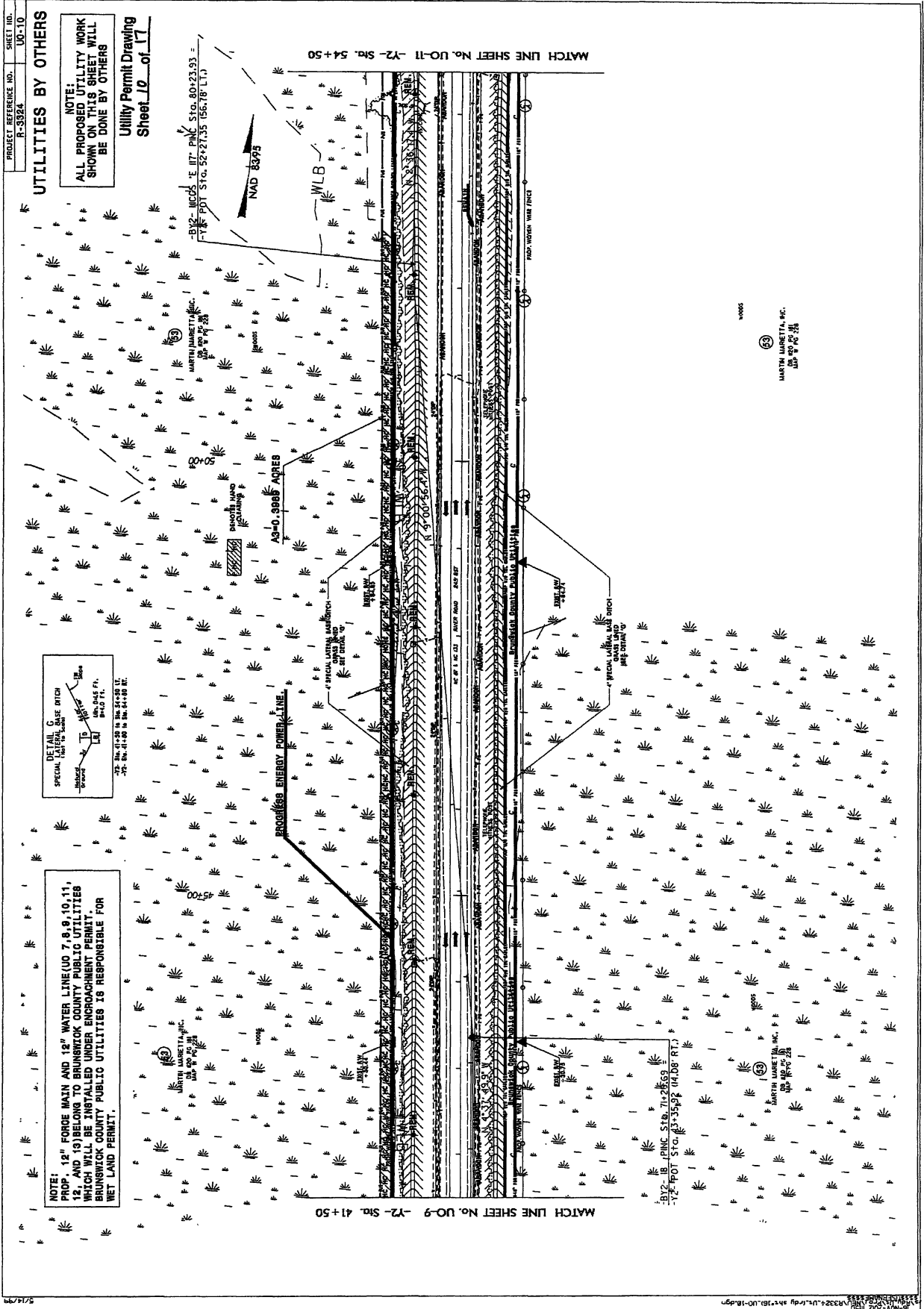
NOTE:
PROP. 12" FORCE MAIN AND 12" WATER LINE (UO 7,8,9,10,11, 12 AND 13) BELONG TO BRUNSWICK COUNTY PUBLIC UTILITIES WHICH WILL BE INSTALLED UNDER ENCROACHMENT PERMIT. BRUNSWICK COUNTY PUBLIC UTILITIES IS RESPONSIBLE FOR WET LAND PERMIT.



FRANKLIN G. COX
008 255 PG 008
008 255 PG 008

-BY2- 14 PINC S+G. 43+45.99 =
-72- POT ST CL. 15+22.19 18.55' FT.)

MATCH LINE SHEET No. UO-7 -72- Sta. 18+75



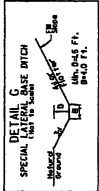
PROJECT REFERENCE NO.
R-5324

SHEET NO.
UO-10

UTILITIES BY OTHERS

NOTE:
ALL PROPOSED UTILITY WORK
SHOWN ON THIS SHEET WILL
BE DONE BY OTHERS

Utility Permit Drawing
Sheet 10 of 17



NOTE:
PROP. 12" FORCE MAIN AND 12" WATER LINE (UO 7, 8, 9, 10, 11, 12, AND 13) BELONG TO BRUNSWICK COUNTY PUBLIC UTILITIES WHICH WILL BE INSTALLED UNDER ENCROACHMENT PERMIT. BRUNSWICK COUNTY PUBLIC UTILITIES IS RESPONSIBLE FOR WET LAND PERMIT.

BY2 - MCCOY E. IIT. INC. STA. 80+21.93 -
BY1 - POT STA. 52+21.35 (56+18 FT.)

WOODS

WOODS

WOODS

WOODS

MATCH LINE SHEET No. UO-11 -Y2- Sgs. 54+50

MATCH LINE SHEET No. UO-9 -Y2- Sgs. 41+50

BY2 - IB PINC STA. 71+26.99
-Y2- POT STA. 33+35.92 (44+08 FT.)

WOODS

WOODS

WOODS

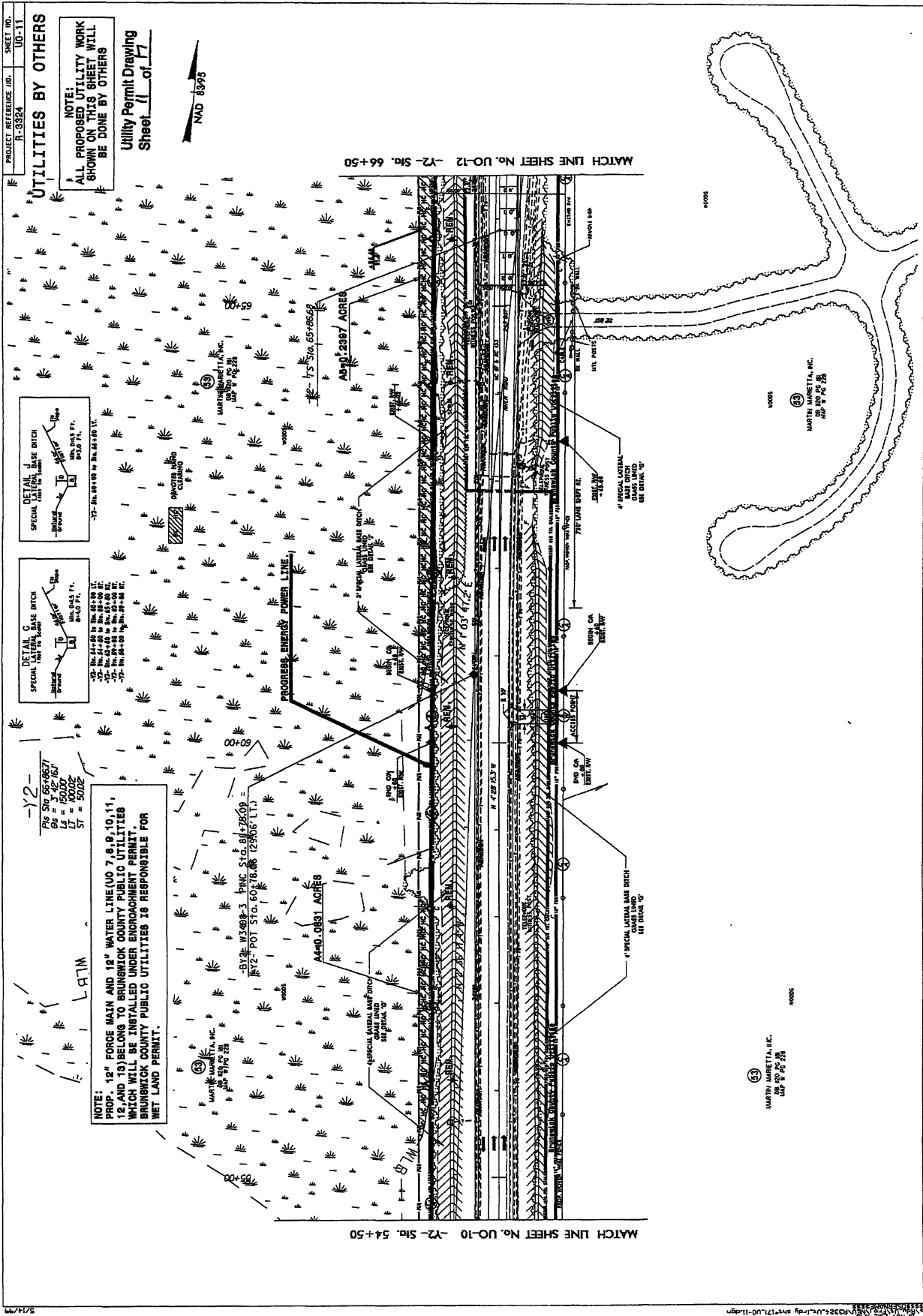
WOODS

WOODS

WOODS

WOODS

WOODS

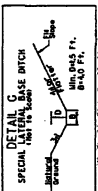
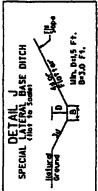


PROJECT REFERENCE NO. FL-3324
 SHEET NO. UO-11

UTILITIES BY OTHERS

NOTE:
 ALL PROPOSED UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS

Utility Permit Drawing
 Sheet 11 of 17



-Y2-
 CS = 15000
 LS = 15000
 ST = 3000

NOTE:
 PROP. 12" FORCE MAIN AND 18" WATER LINE (UO 7, 8, 9, 10, 11, 12, AND 13) BELONG TO BRUNSWICK COUNTY PUBLIC UTILITIES WHICH WILL BE INSTALLED UNDER ENCROACHMENT PERMIT. BRUNSWICK COUNTY PUBLIC UTILITIES IS RESPONSIBLE FOR NET LAND PERMIT.

BRUNSWICK COUNTY PUBLIC UTILITIES

BY: W3408-3 PINC 510, 814, 2509 =
 RY2 - POT STA. 60+78.88 (2906' LTJ)

A4=0.0831 ACRES

MARTIN MARETTA, INC.
 110 S. W. 25th St.
 Ft. Lauderdale, FL 33304

MATCH LINE SHEET No. UO-12 -Y2- Sta. 66+50

MATCH LINE SHEET No. UO-10 -Y2- Sta. 54+50

5/17/17

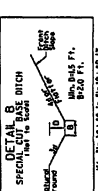
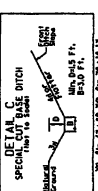
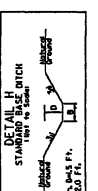
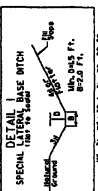
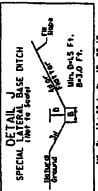
16-NV-202
 10/23/2017
 11:00 AM

PROJECT REFERENCE NO. R-8924 SHEET NO. 10-12

UTILITIES BY OTHERS

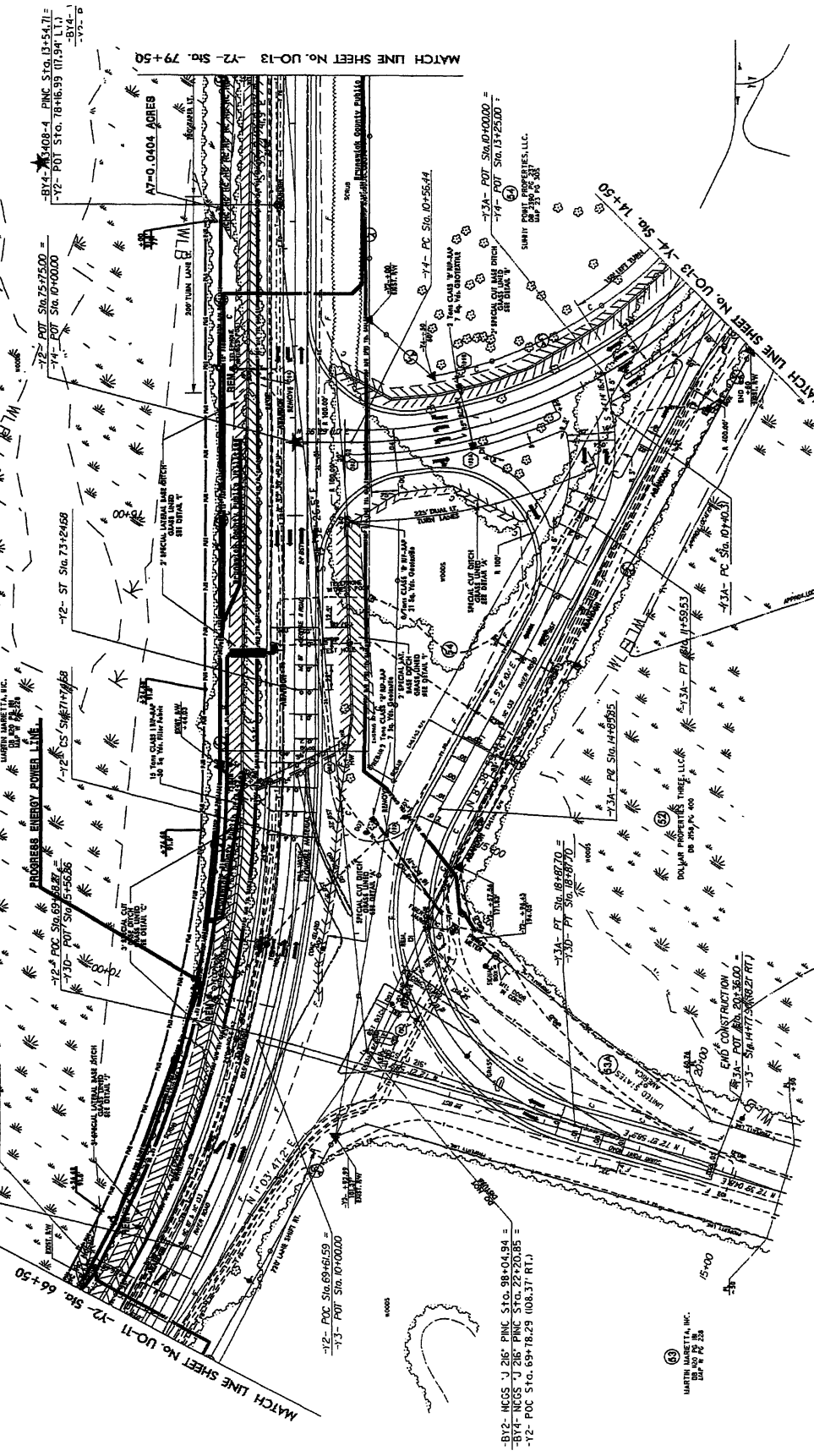
NOTE:
ALL PROPOSED UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS

Utility Permit Drawing
Sheet 12 of 17



NOTE:
PROP. 12" FORCE MAIN AND 12" WATER LINE (UD 7, 8, 9, 10, 11, 12 AND 13) BELONG TO BRUNSWICK COUNTY PUBLIC UTILITIES WHICH WILL BE INSTALLED UNDER ENCROACHMENT PERMIT. BRUNSWICK COUNTY PUBLIC UTILITIES IS RESPONSIBLE FOR WET LAND PERMIT.

AG=0.0188 ACRES
PINS SW/4-18877 PI S/C 89+53.32
C/S = 3.42 167' D/A = 4.55 87'
L/S = 15000' S/A = 5022' R = 22054'
S = 5022' N = 22054'

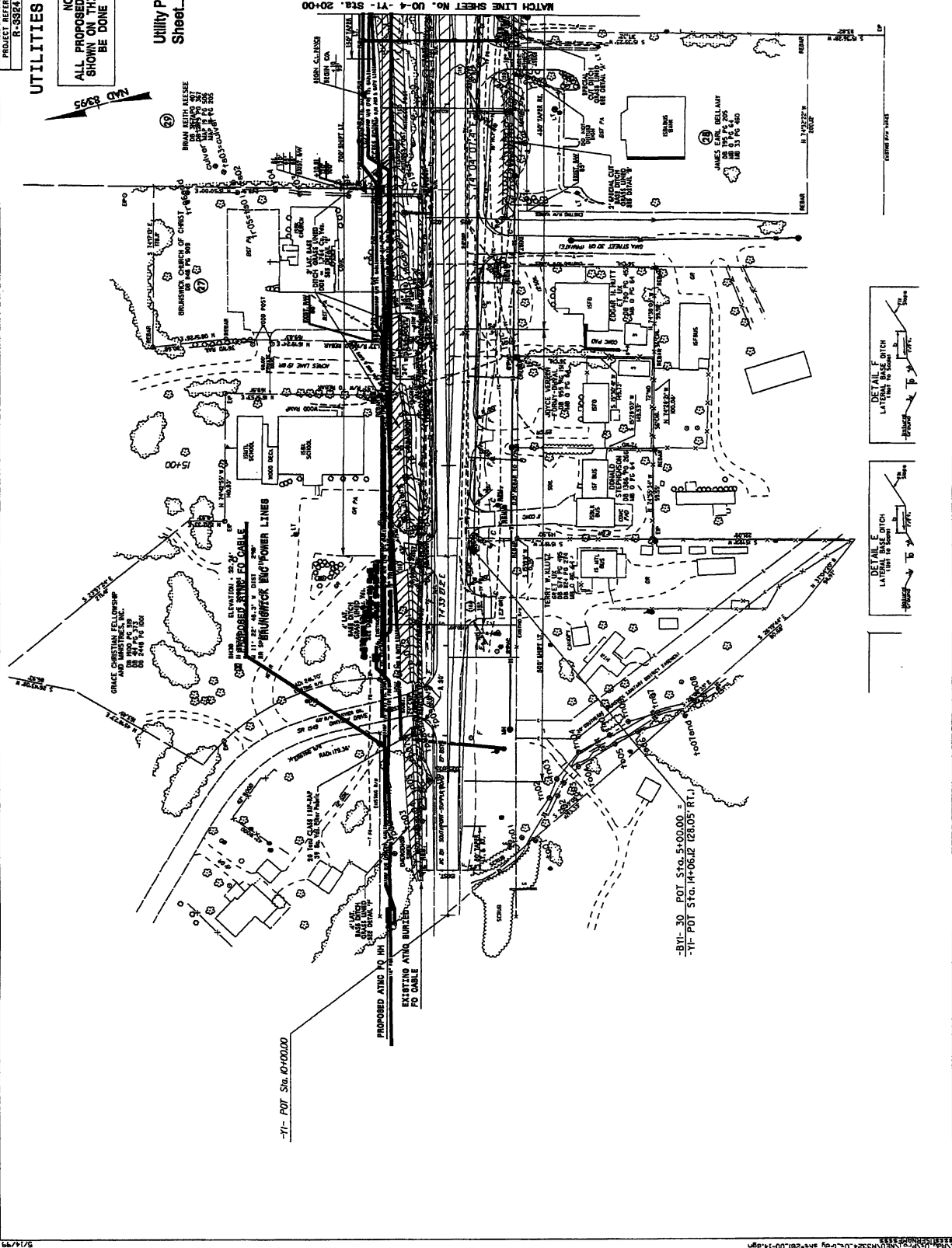


PROJECT REFERENCE NO. R-5324
SHEET NO. UC-14

UTILITIES BY OTHERS

NOTE:
ALL PROPOSED UTILITY WORK
SHOWN ON THIS SHEET WILL
BE DONE BY OTHERS

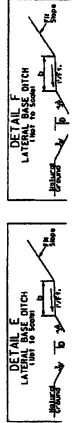
Utility Permit Drawing
Sheet 14 of 17



MATCH LINE SHEET NO. UC-4-Y1-STA. 20+00

-Y1- POT Sta. 0+00.00

-BY1-30 POT Sta. 5+00.00 =
-Y1- POT Sta. 4+06.12 (28.05 RT.)



PROJECT REFERENCE NO. R-3324
SHEET NO. UO-18

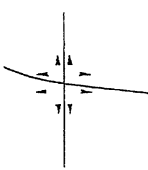
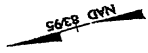
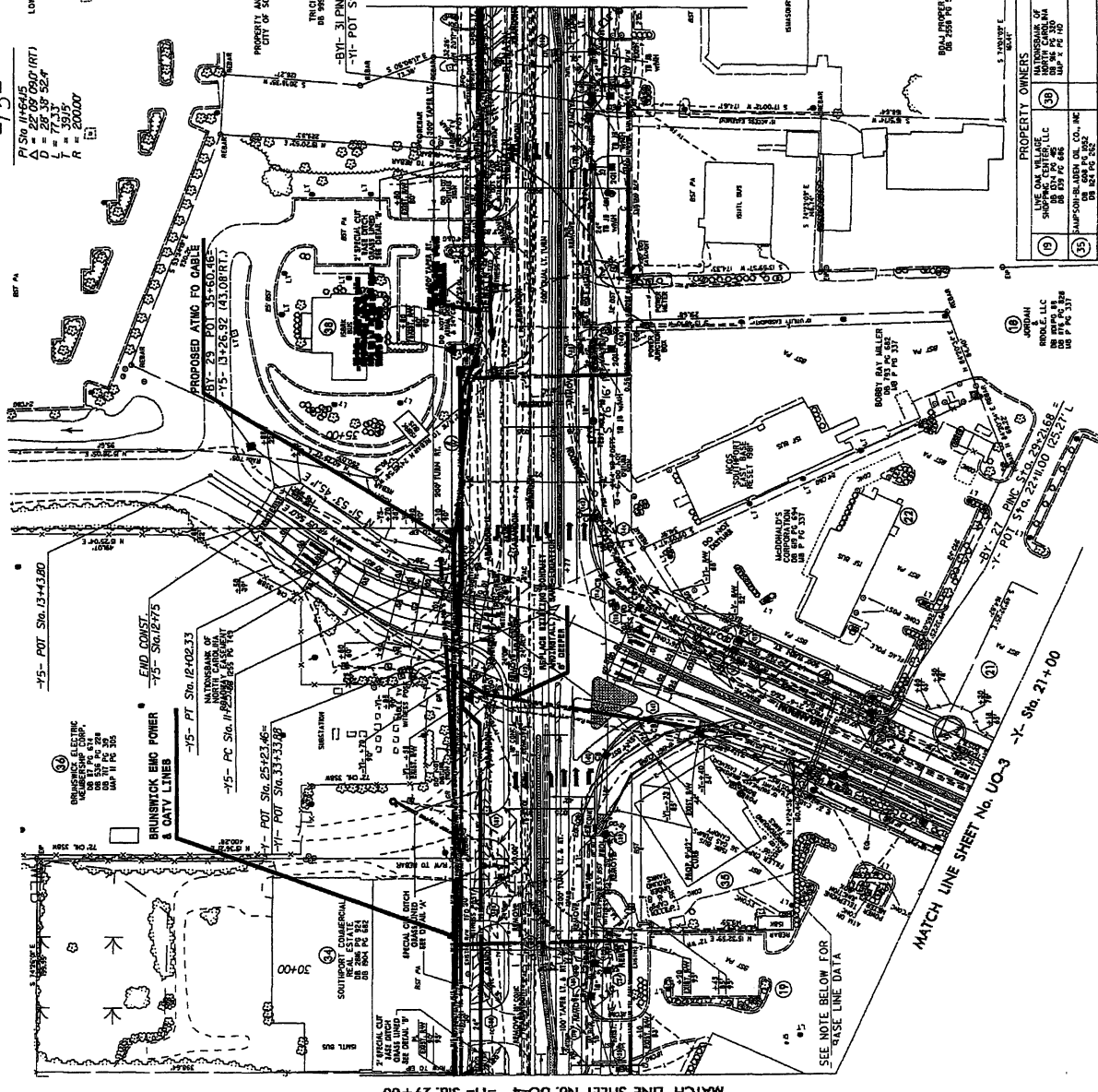
UTILITIES BY OTHERS

NOTE:
ALL PROPOSED UTILITY WORK
SHOWN ON THIS SHEET WILL
BE DONE BY OTHERS

Utility Permit Drawing
Sheet 15 of 17

LOWE'S HOME CENTERS, INC.
10000 W. STATE ST.
MADISON, WI 53719

-Y5-
P/Sig. 116645
Δ = 22' 00" 00.00' (RT)
D = 28' 30" 52.4"
T = 53' 15"
R = 200.00'



MATCH LINE SHEET No. UO-4 -Y1- Sta. 29+00

MATCH LINE SHEET No. UO-3 -X- Sta. 21+00

MATCH LINE SHEET No. UO-16 -Y1- Sta. 39+00

-Y5- POT Stg. 13+43.80

BRUNSWICK ENG POWER & CABLE LINES
END CONST. -5'- SCALE 1/8"=1'-0"
-Y5- PT Stg. 12+02.33
NATIONWIDE OF
-Y5- PC Stg. 11+80.00
-Y1- POT Stg. 25+23.46
-Y1- POT Stg. 33+53.00

PROPOSED ATING TO CABLE
-Y5- POT Stg. 13+80.16
-Y5- PC Stg. 13+26.92 (43.00 RT)

PROPERTY OWNERS
LIVE OAK VILLAGE LLC
SHEPHERD ST. 10000 W. STATE ST.
MADISON, WI 53719
SIMPSON COMMERCIAL CO., INC.
10000 W. STATE ST.
MADISON, WI 53719

PROPERTY OWNERS
SOUTHPORT COMMERCIAL
10000 W. STATE ST.
MADISON, WI 53719

PROPERTY OWNERS
SOUTHPORT COMMERCIAL
10000 W. STATE ST.
MADISON, WI 53719

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10000 W. STATE ST.
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PROPERTY OWNERS
SOUTHPORT COMMERCIAL
10000 W. STATE ST.
MADISON, WI 53719

PROPERTY OWNERS
SOUTHPORT COMMERCIAL
10000 W. STATE ST.
MADISON, WI 53719

-Y5- POT Stg. 13+43.80

-Y5- POT Stg. 13+43.80

-Y5- POT Stg. 13+43.80

-Y5- POT Stg. 13+43.80

-Y5- POT Stg. 13+43.80

-Y5- POT Stg. 13+43.80

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-Y5- POT Stg. 13+43.80

-Y5- POT Stg. 13+43.80

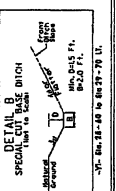
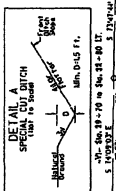
-Y5- POT Stg. 13+43.80

-Y5- POT Stg. 13+43.80

-Y5- POT Stg. 13+43.80

-Y5- POT Stg. 13+43.80

SEE NOTE BELOW FOR
BASE LINE DATA



| | |
|----|---|
| 19 | PROPERTY OWNERS LIVE OAK VILLAGE LLC SHEPHERD ST. 10000 W. STATE ST. MADISON, WI 53719 |
| 39 | PROPERTY OWNERS SOUTHPORT COMMERCIAL 10000 W. STATE ST. MADISON, WI 53719 |
| 35 | PROPERTY OWNERS SOUTHPORT COMMERCIAL 10000 W. STATE ST. MADISON, WI 53719 |

PROPERTY OWNERS
SOUTHPORT COMMERCIAL
10000 W. STATE ST.
MADISON, WI 53719

PROPERTY OWNERS
SOUTHPORT COMMERCIAL
10000 W. STATE ST.
MADISON, WI 53719

PROPERTY OWNERS
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10000 W. STATE ST.
MADISON, WI 53719

PROPERTY OWNERS
SOUTHPORT COMMERCIAL
10000 W. STATE ST.
MADISON, WI 53719

| WETLAND PERMIT IMPACT SUMMARY | | | | | | | | | | | | |
|-------------------------------|-------------------|-----------------------|---------------------------------|-----------------------------|-----------------------------|--------------------------------------|--------------------------------|---------------------------|-----------------------|---|-------------------------------------|----------------------------|
| | | WETLAND IMPACTS | | | | | SURFACE WATER IMPACTS | | | | | |
| Site No. | Station (From/To) | Structure Size / Type | Permanent Fill In Wetlands (ac) | Temp. Fill In Wetlands (ec) | Excavation in Wetlands (ac) | Mechanized Cleaning in Wetlands (ac) | Hand Cleaning in Wetlands (ec) | Permanent SW impacts (ac) | Temp. SW impacts (ac) | Existing Channel Impacts Permanent (ft) | Existing Channel Impacts Temp. (ft) | Natural Stream Design (ft) |
| A1&A2 | sheet UO-9 | O/H Power Line | <0.01 | | | | 0.36 | | | | | |
| A3 | sheet UO-10 | O/H Power Line | <0.01 | | | | 0.40 | | | | | |
| A4&A5 | sheet UO-11 | O/H Power Line | <0.01 | | | | 0.32 | | | | | |
| A6&A7 | sheet UO-12 | O/H Power Line | <0.01 | | | | 0.06 | | | | | |
| A8 | sheet UO-13 | O/H Power Line | <0.01 | | | | 0.03 | | | | | |
| | | | | | | | | | | | | |
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| | | | | | | | | | | | | |
| TOTALS: | | | <0.01 | 0.00 | 0.00 | 0.00 | 0.85 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Some proposed underground utilities will be installed by trenchless installation thru the wetlands.

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 BRUNSWICK COUNTY
 TIP PROJECT (R-3324)

Utility Permit Drawing
 Sheet 17 of 17

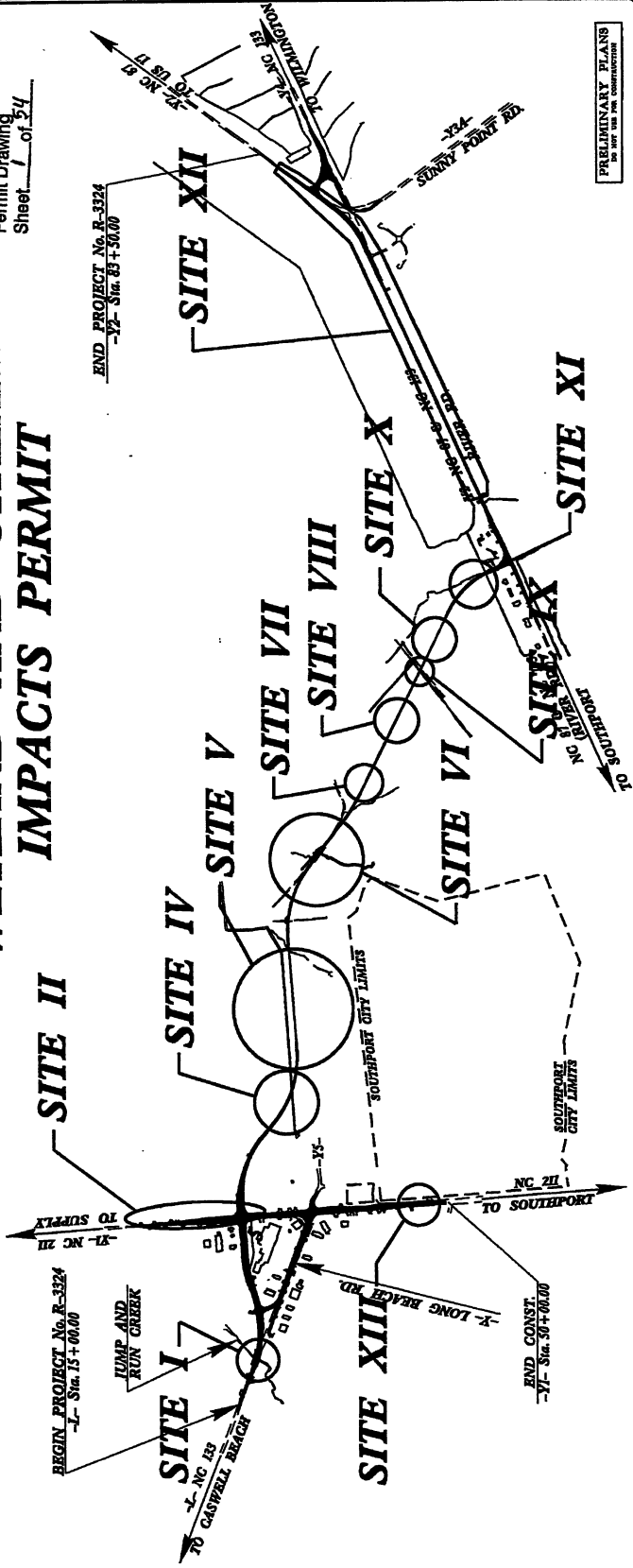
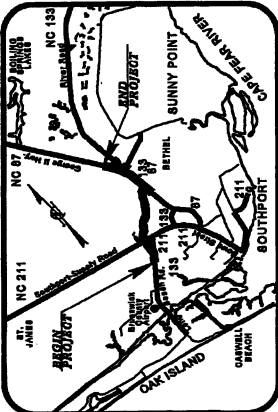
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

BRUNSWICK COUNTY

LOCATION: NEW ROUTE FROM NC 133 (LONG BEACH RD.) TO NC 133.
TYPE OF WORK: GRADING, DRAINAGE, PAVING, SIGNALS, STRUCTURES,
CULVERTS, RETAINING WALL.

**WETLAND AND STREAM
IMPACTS PERMIT**

| | | | |
|--------------|--|-------------|--------|
| STATE | NC | PROJECT NO. | R-3324 |
| COUNTY | BRUNSWICK | DATE | 1 |
| PROJECT NAME | NEW ROUTE FROM NC 133 (LONG BEACH RD.) TO NC 133 | | |
| DESIGNER | HW & UNILITE CONSULT. | DATE | 1 |
| PROJECT NO. | 34501.1 | DATE | 1 |
| PROJECT NO. | 34501.2 | DATE | 1 |
| PROJECT NO. | 34501.3 | DATE | 1 |
| PROJECT NO. | 34501.4 | DATE | 1 |
| PROJECT NO. | 34501.5 | DATE | 1 |



PRELIMINARY PLANS
BY HW & UNILITE CONSULTANTS

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

| | |
|-------------------------|------|
| HYDRAULICS ENGINEER | DATE |
| ROADWAY DESIGN ENGINEER | DATE |

Presented to the Office of:
DIVISION OF HIGHWAYS
1400 State Street, Raleigh, NC, 27611

RIGHT OF WAY DATE: MARCH 31, 2008
LETTING DATE: FEBRUARY 15, 2013

PROJECT MANAGER: JIMMY GOODNIGHT, PE
PERMITTING MANAGER: STEVE KENDALL, PE

PROJECT LENGTH

LENGTH ROADWAY TIP No. R-3324 (-L-) = 2.93 MILES
LENGTH ROADWAY TIP No. R-3324 (-R-) = 1.14 MILES

LENGTH STRUCTURES PROJECT No. R-3324
(@ Jump--Run Creek) = 0.065 MILES
(@ Thk to Dutchman Creek) = 0.039 MILES

TOTAL LENGTH TIP PROJECT No. R-3324 = 3.271 MILES

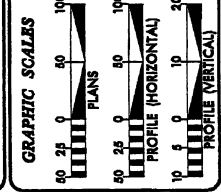
DESIGN DATA

ADT 2009 = 9,514 - 13,720
ADT 2033 = 13,620 - 47,170

DHY = 50 %
D = 10 %
T = 5 %
V = 50 MPH

FUNCTIONAL CLASSIFICATION: LOCAL

* TST 2% DUAL 3%



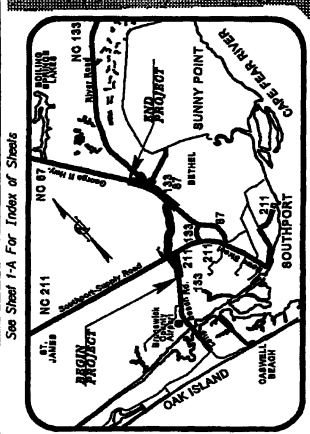
TIP PROJECT: R-3324

CONTRACT: C202155

*****51 TIME*****
*****USER NAME*****



| | |
|-----------------------|--------------|
| STATE | N.C. |
| FED. HIGHWAY DISTRICT | 1 |
| PROJECT NO. | R-3324 |
| DATE | 3/27/08 |
| BY | J. J. JENSEN |
| CHECKED BY | W. E. JENSEN |
| DATE | 3/27/08 |



See Sheet I-A For Index of Sheets

CONTRACT: C202155 TIP PROJECT: R-3324

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

HYDROLOGICAL ENGINEER

PROJECT ENGINEER

PROJECT ENGINEER

Prepared in the Office of:
DIVISION OF HIGHWAYS
1000 Bank Street Dr., Raleigh, NC, 27601

IN CHARGE ENGINEER

RIGHT OF WAY DATE:
MARCH 31, 2008

LETTING DATE:
FEBRUARY 15, 2013

JIMMY GOODNIGHT, PE
PROJECT ENGINEER

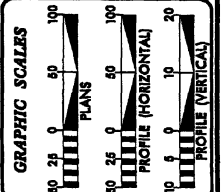
STEVE KENDALL, PE
PROJECT ENGINEER

PROJECT LENGTH

| | |
|---|---------------|
| LENGTH ROADWAY TIP No. R-3324 (-L-) | = 2.193 MILES |
| LENGTH ROADWAY TIP No. R-3324 (-R-) | = 1.134 MILES |
| LENGTH STRUCTURES PROJECT No. R-3324: (@ Jump-in-Rain Creek) | = 0.026 MILES |
| (@ Trib. to Dutchman Creek) | = 0.009 MILES |
| TOTAL LENGTH TIP PROJECT No. R-3324 | = 3.371 MILES |

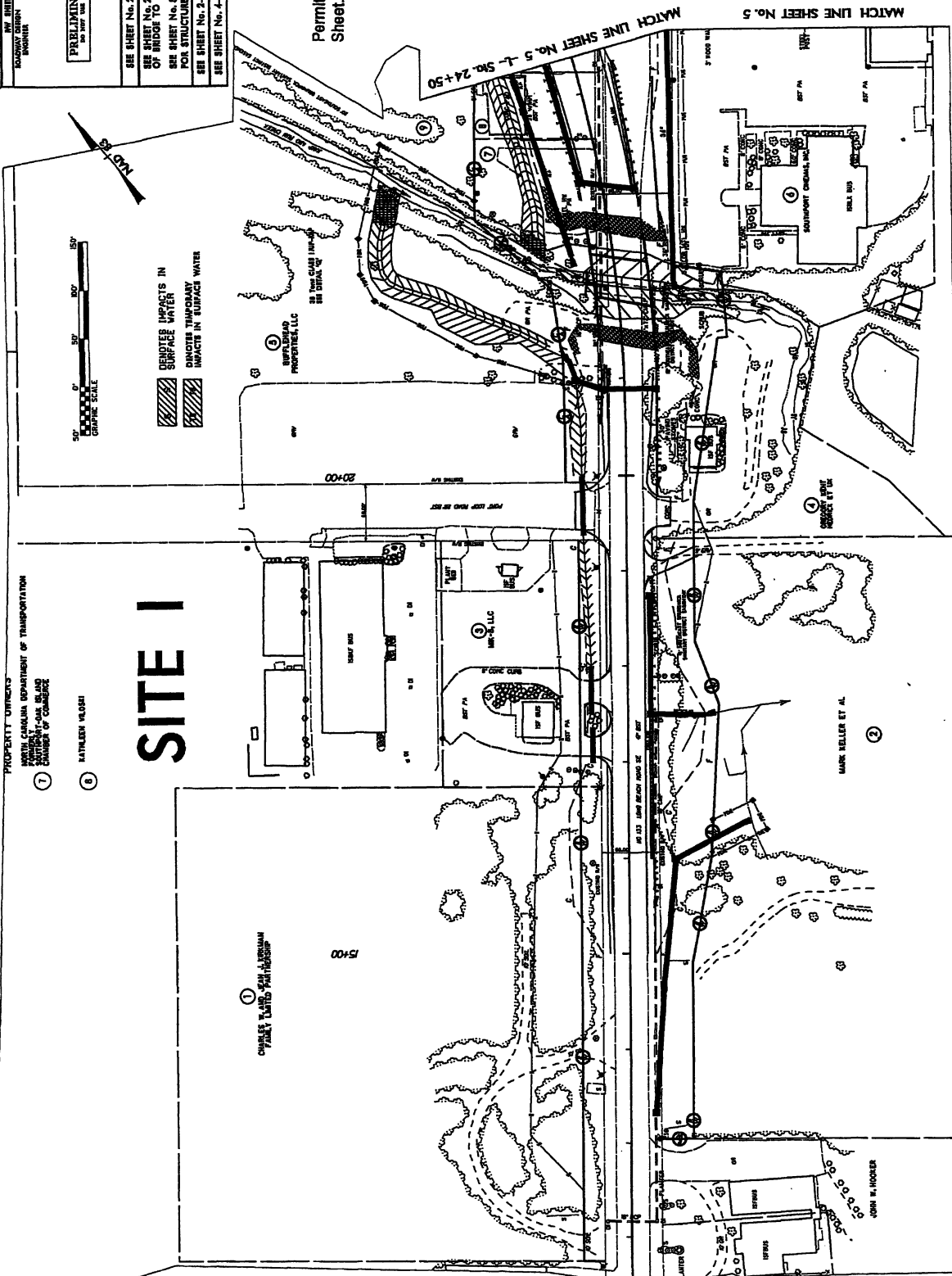
DESIGN DATA

| | |
|----------------------------|-------------------|
| ADT 2009 | = 9,514 - 13,720 |
| ADT 2033 | = 13,420 - 47,170 |
| DRY | = 50 % |
| D | = 10 % |
| T | = 5 % |
| V | = 50 MPH |
| FUNCTIONAL CLASSIFICATION: | LOCAL |
| | * TRST 2% DUAL 3% |

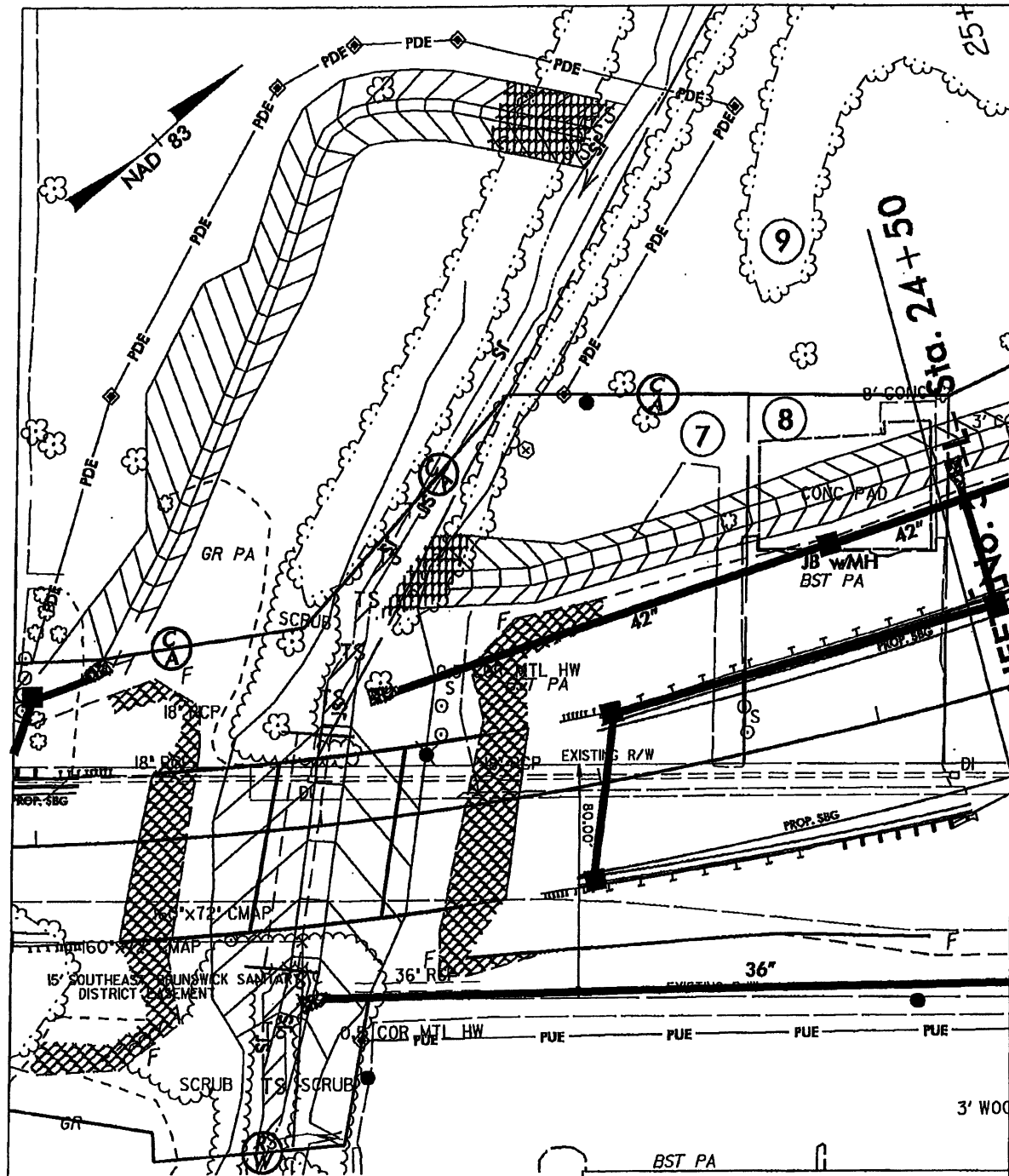


| | |
|--|--------------------|
| PROJECT NO. | 4 |
| DATE | 7-3-24 |
| BY | RESOURCES ENGINEER |
| CHECKED BY | ENGINEER |
| APPROVED BY | ENGINEER |
| PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION | |
| SEE SHEET No. 23 FOR -L- PROFILE | |
| SEE SHEET No. 2-1 FOR RELATIONSHIP OF BRIDGE TO ROADWAY SKETCH | |
| SEE SHEET No. 4-1 to 4-4 FOR STRUCTURE PLANS | |
| SEE SHEET No. 2-1 FOR DITCH DETAILS | |
| SEE SHEET No. 4-A FOR OTHER PLANS | |

Permit Drawing
Sheet 3 of 54





PROPERTY OWNERS
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
SOUTHWEST-CAROLINA ROAD
DIVISION OF CONSTRUCTION

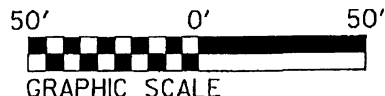


...IE SHEET NO. 3

SITE I

Permit Drawing
Sheet 4 of 54

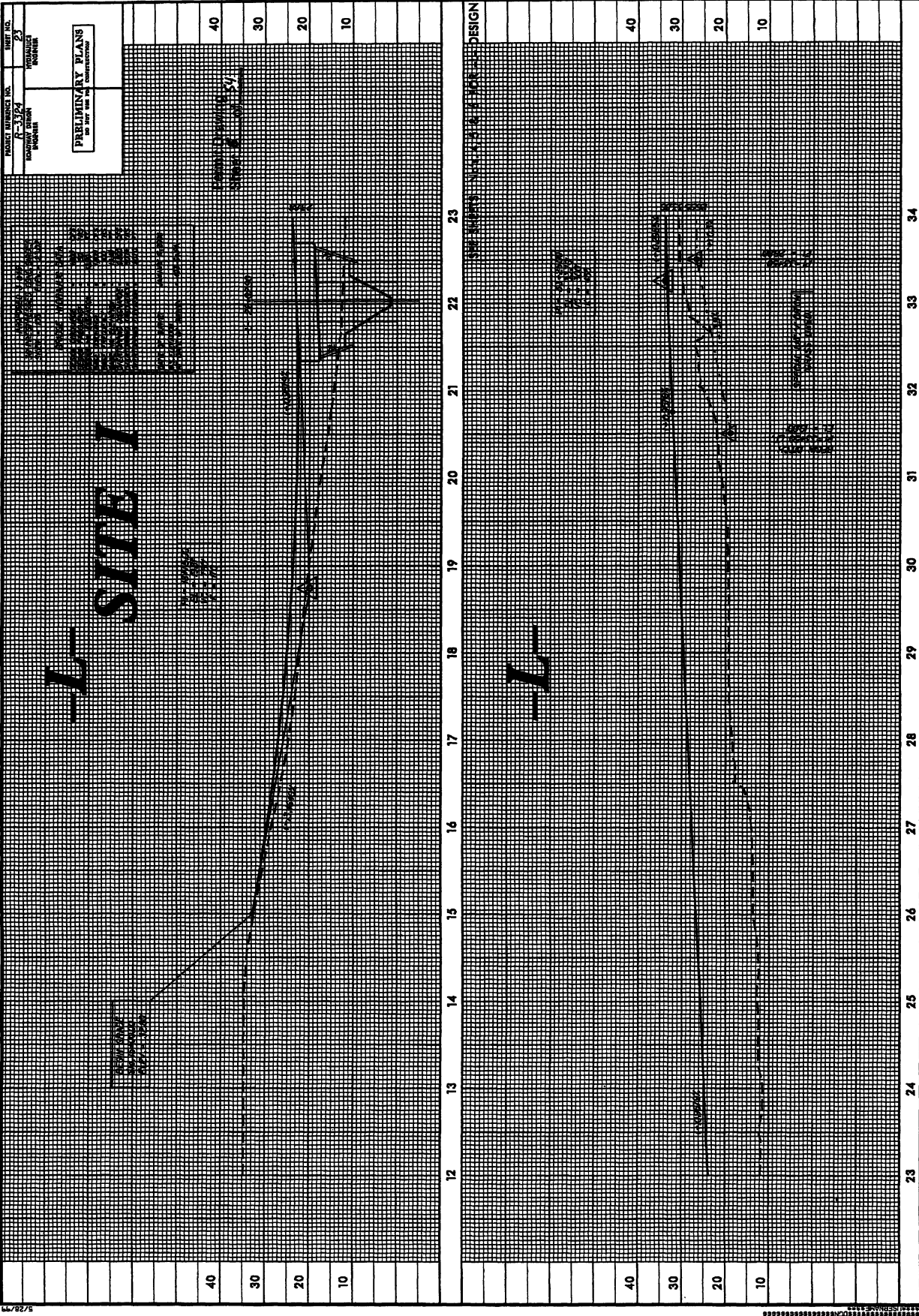
-  DENOTES IMPACTS IN SURFACE WATER
-  DENOTES TEMPORARY IMPACTS IN SURFACE WATER



NCDOT
 DIVISION OF HIGHWAYS
 BRUNSWICK COUNTY
 PROJECT: 3453.1.1 (R-3320)

NEW ROUTE FROM NC 133
 TO NC 133 AND NC 87

SHEET OF 12/04/12



PROJECT NUMBER 100
SHEET NO. 3
DESIGNED BY
DRAWN BY
CHECKED BY
DATE

PROPOSED PLAN
1/10/2014

5/28/14

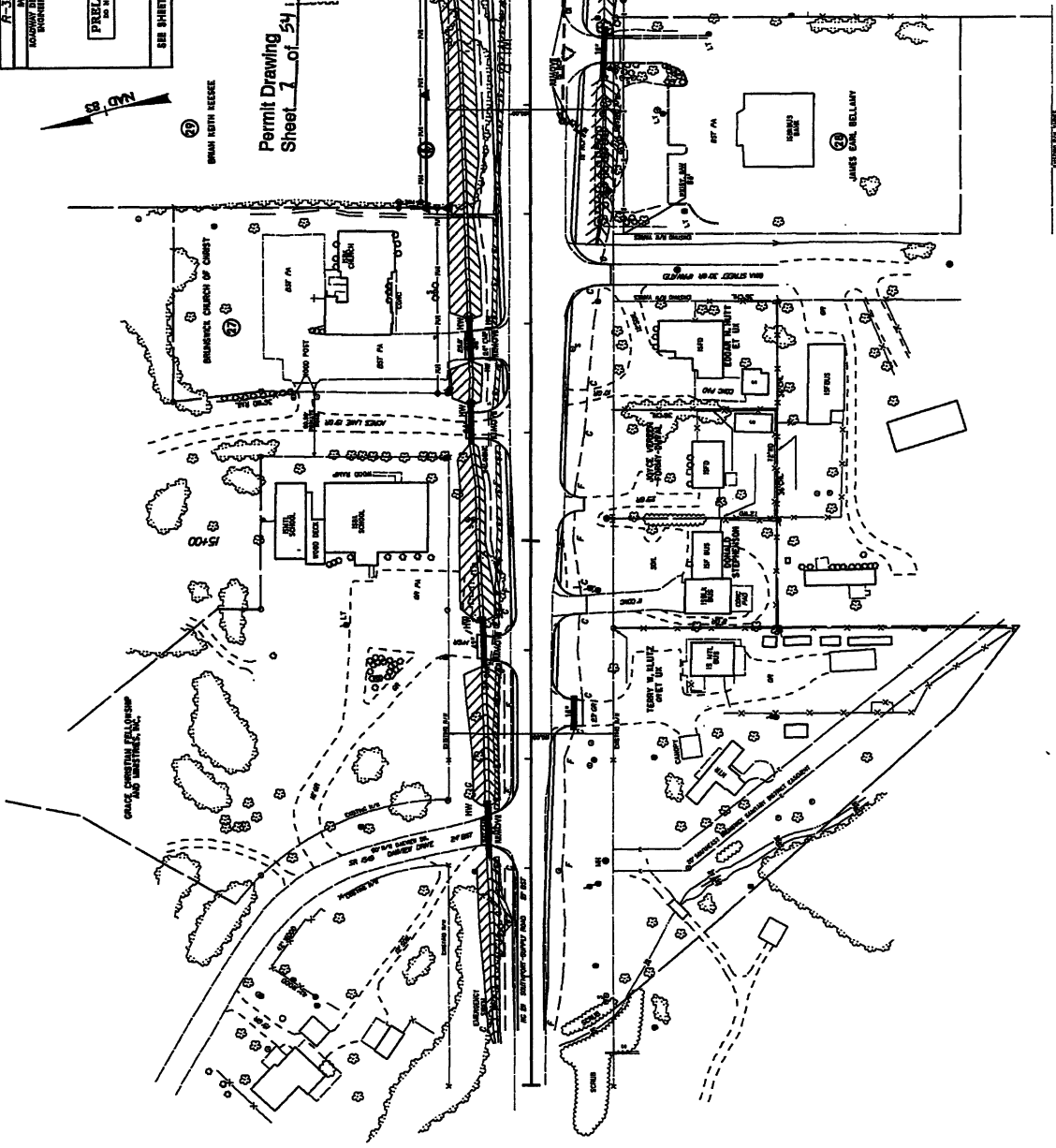
5/28/14

| | |
|--|-----------------|
| PROJECT REFERENCE NO. A-3324 | SHEET NO. 20 |
| ROADWAY DESIGN DIVISION | FORWARDED BY |
| PRELIMINARY PLANS do not use for construction | |
| SEE SHEET No. 19 FOR "T"- PROFILE | |

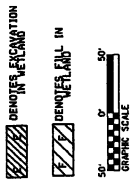


Permit Drawing
Sheet 7 of 54

MATCH LINE SHEET No. 6 - 71- Sht. 20+00



SITE II



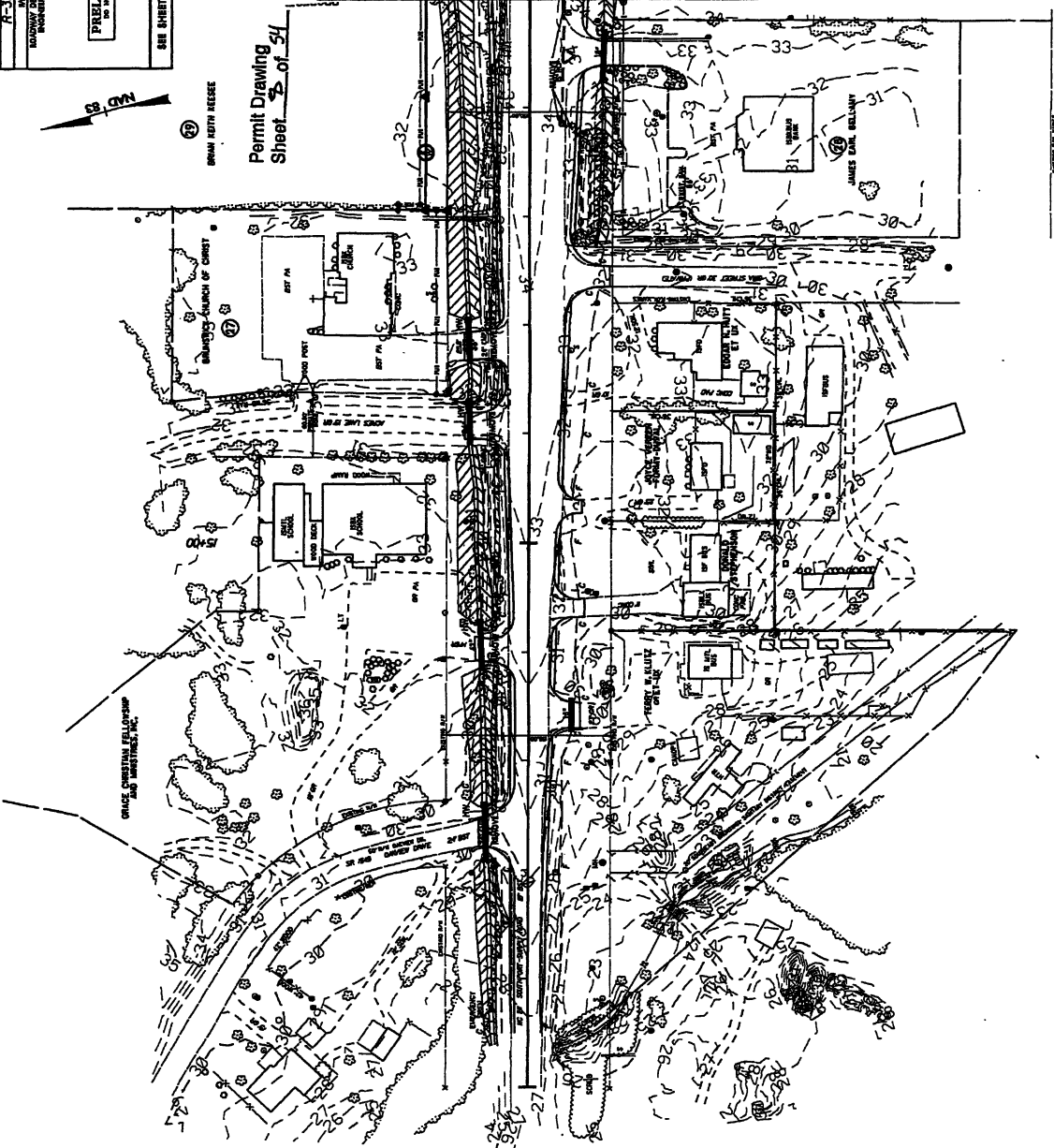
| | |
|--|----------------------------|
| PROJECT REFERENCE NO. R-1324 | DRAWING NO. 20 |
| BY K. J. HANSEN | CHECKED BY K. J. HANSEN |
| PRELIMINARY PLANS OF THE PROJECT | |
| SEE SHEET No. 19 FOR -Y1- PROFILE | |



DRAIN WITH RESEVE

Permit Drawing
Sheet 5 of 54

MATCH LINE SHEET No. 6 -Y1- STA. 20+00

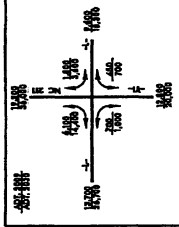


SITE II

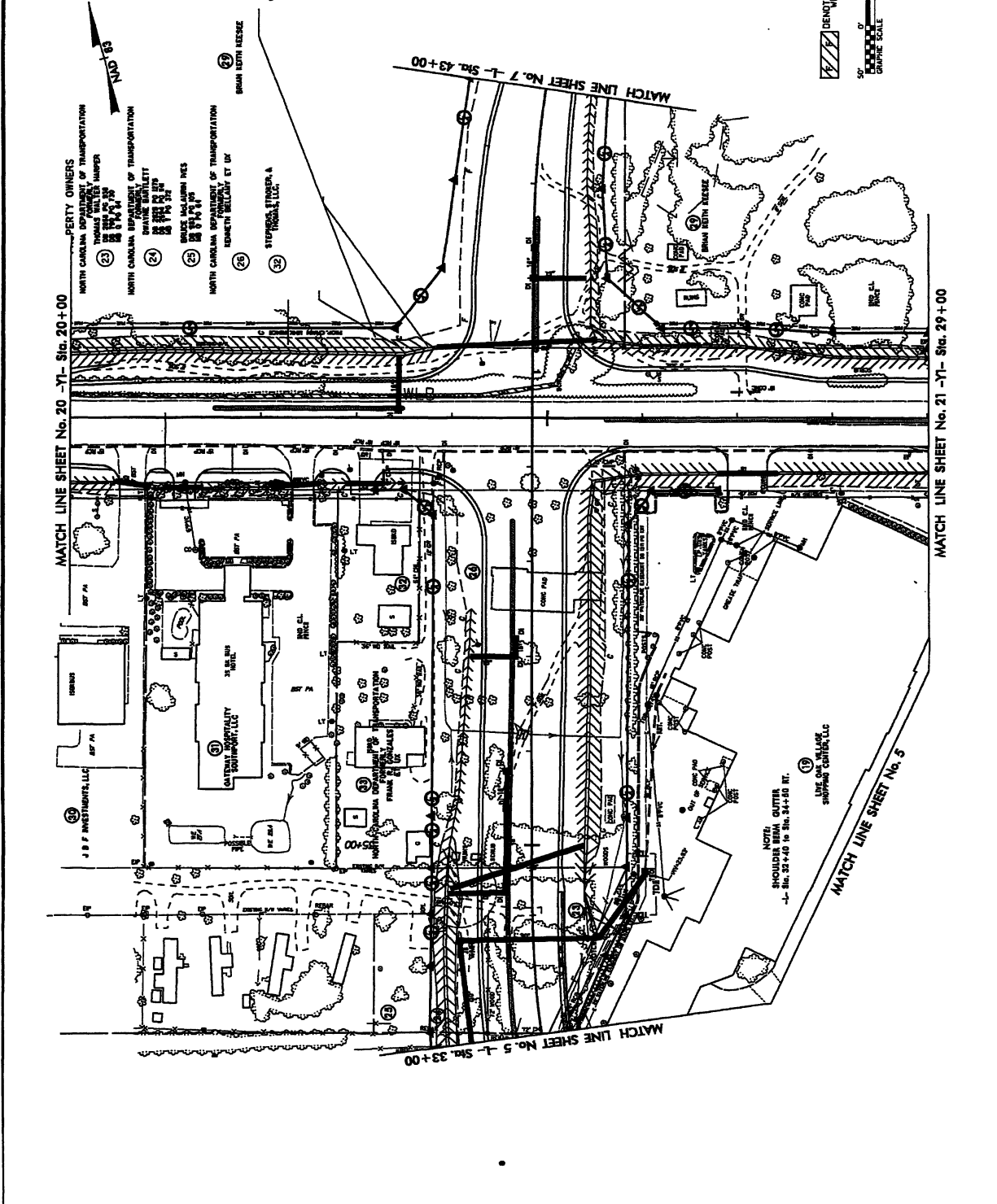
- DENOTES EXCAVATION
- DENOTES FILL IN
- GRAPHIC SCALE

| | |
|---|--------------|
| PROJECT REFERENCE NO. | R-3324 |
| SHEET NO. | 6 |
| DATE | 10/20/11 |
| DESIGNED BY | W. J. HARRIS |
| CHECKED BY | W. J. HARRIS |
| APPROVED BY | W. J. HARRIS |
| PRELIMINARY PLANS DO NOT BE USED FOR CONSTRUCTION | |
| SEE SHEET No. 23 & 24 FOR --L- PROFILE | |
| SEE SHEET No. 29 FOR --YI- PROFILE | |
| SEE SHEET 2-H FOR DITCH DETAILS | |

SITE II



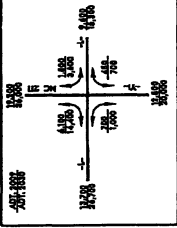
Permit Drawing
Sheet VI of 54



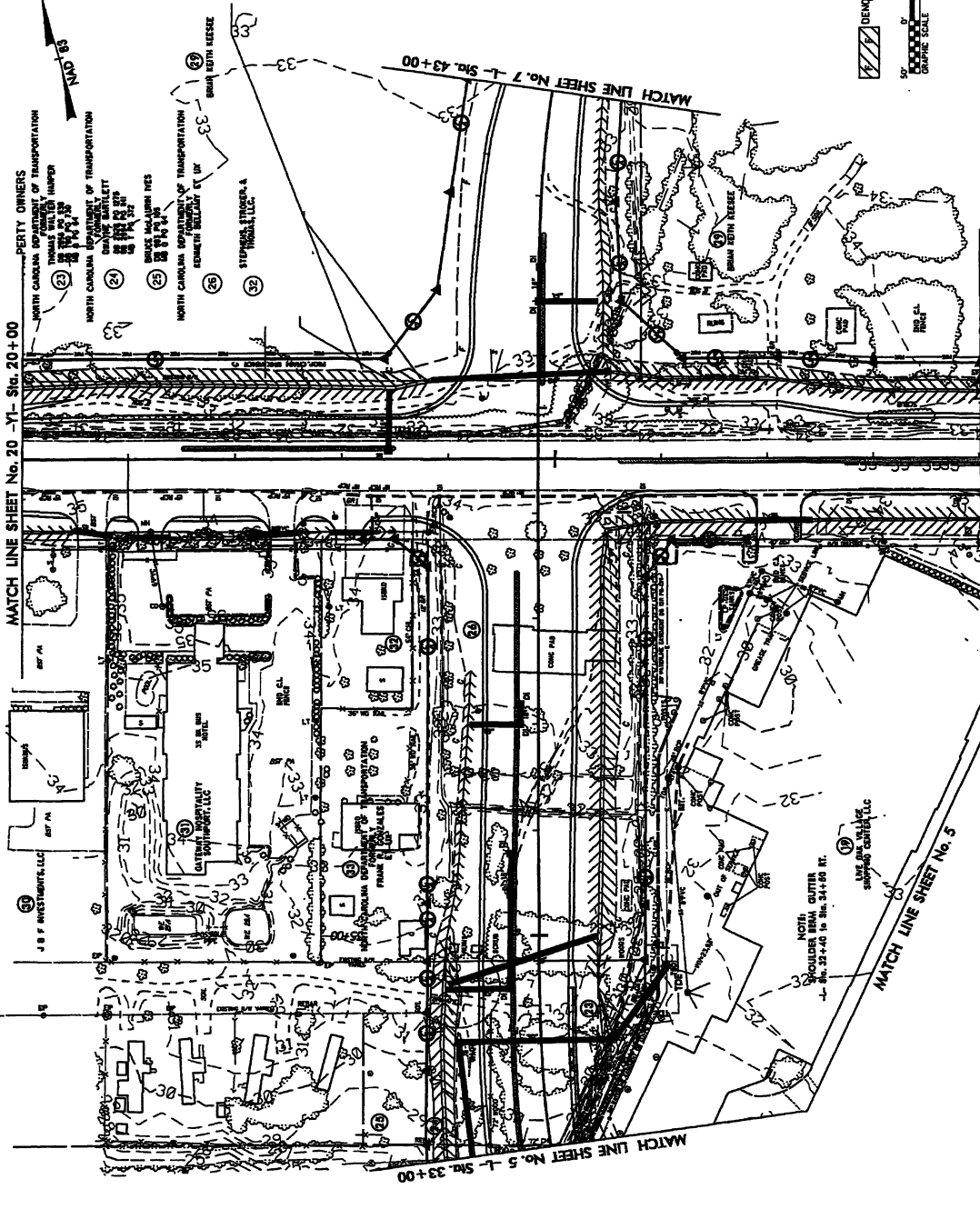
| | | | |
|--------------------------------------|--|------------------|--|
| PROJECT REFERENCE NO. R-374 | | SHEET NO. 6 | |
| BY SHEET NO. REVISIONS | | OWNER BROWDER | |
| PRELIMINARY PLANS FOR THE PROJECT | | | |

SEE SHEET No. 23 & 24 FOR -L- PROFILE
SEE SHEET No. 29 FOR -YI- PROFILE
SEE SHEET 2-H FOR DITCH DETAILS

SITE II



Permit Drawing
Sheet 6 of 54



- PROPERTY OWNERS**
- ① NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 - ② THOMAS WILLIS HANPNER
 - ③ J & F INVESTMENTS, LLC
 - ④ EASTVIEW PROPERTY DEVELOPMENT, LLC
 - ⑤ NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 - ⑥ PAVEMENT, INC.
 - ⑦ HESS, INC.
 - ⑧ NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 - ⑨ EDWORTH BELLEFANT, JR.
 - ⑩ STEPHEN E. TINKER, A PROFESSIONAL ENGINEER, LLC

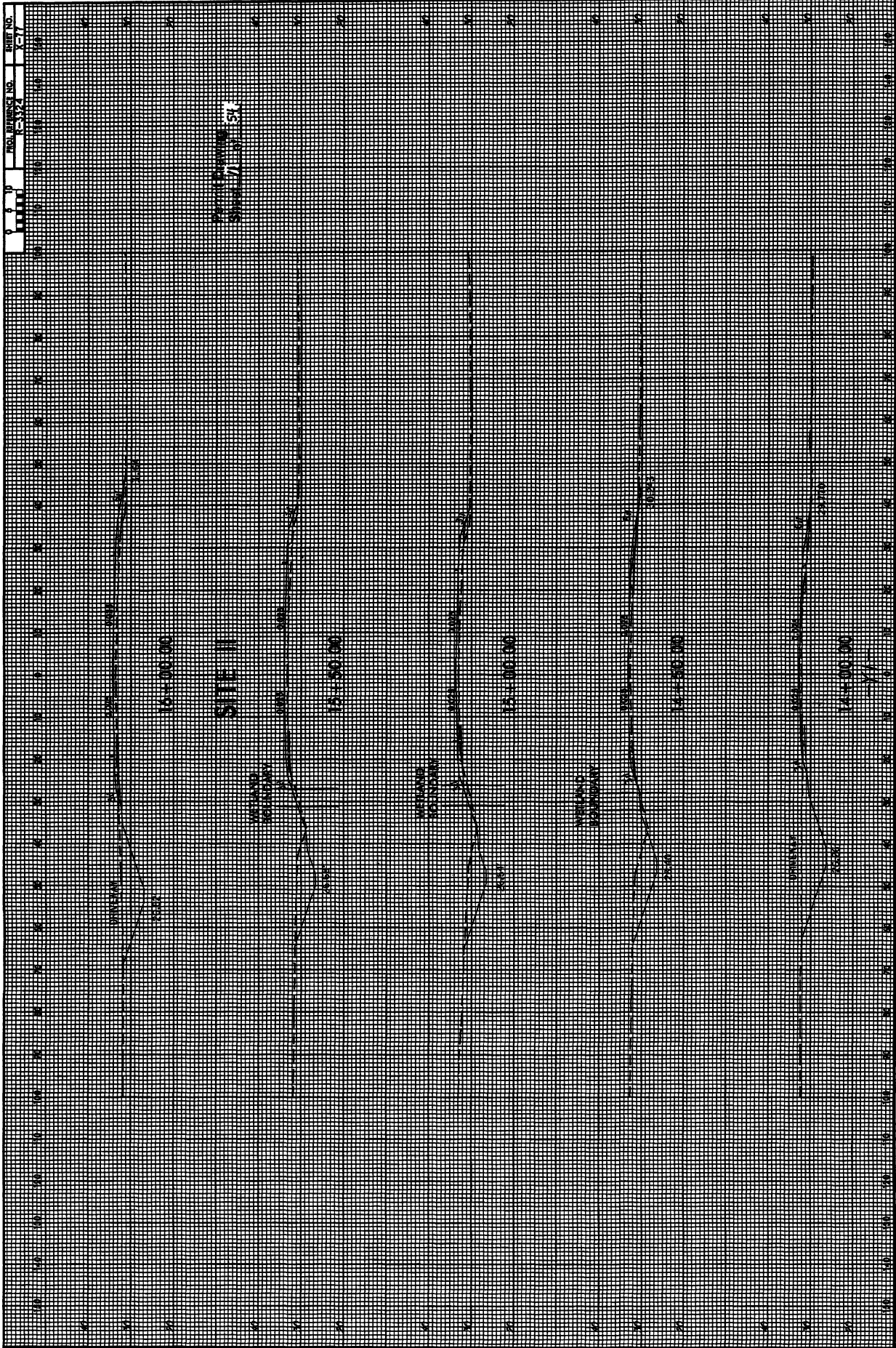
NOTE:
SHOULDER BERM CUTTER
-L- Sta. 33+40 to Sta. 34+00 RT.
LINE AND WALLS STOPPING CATERpillar, LLC

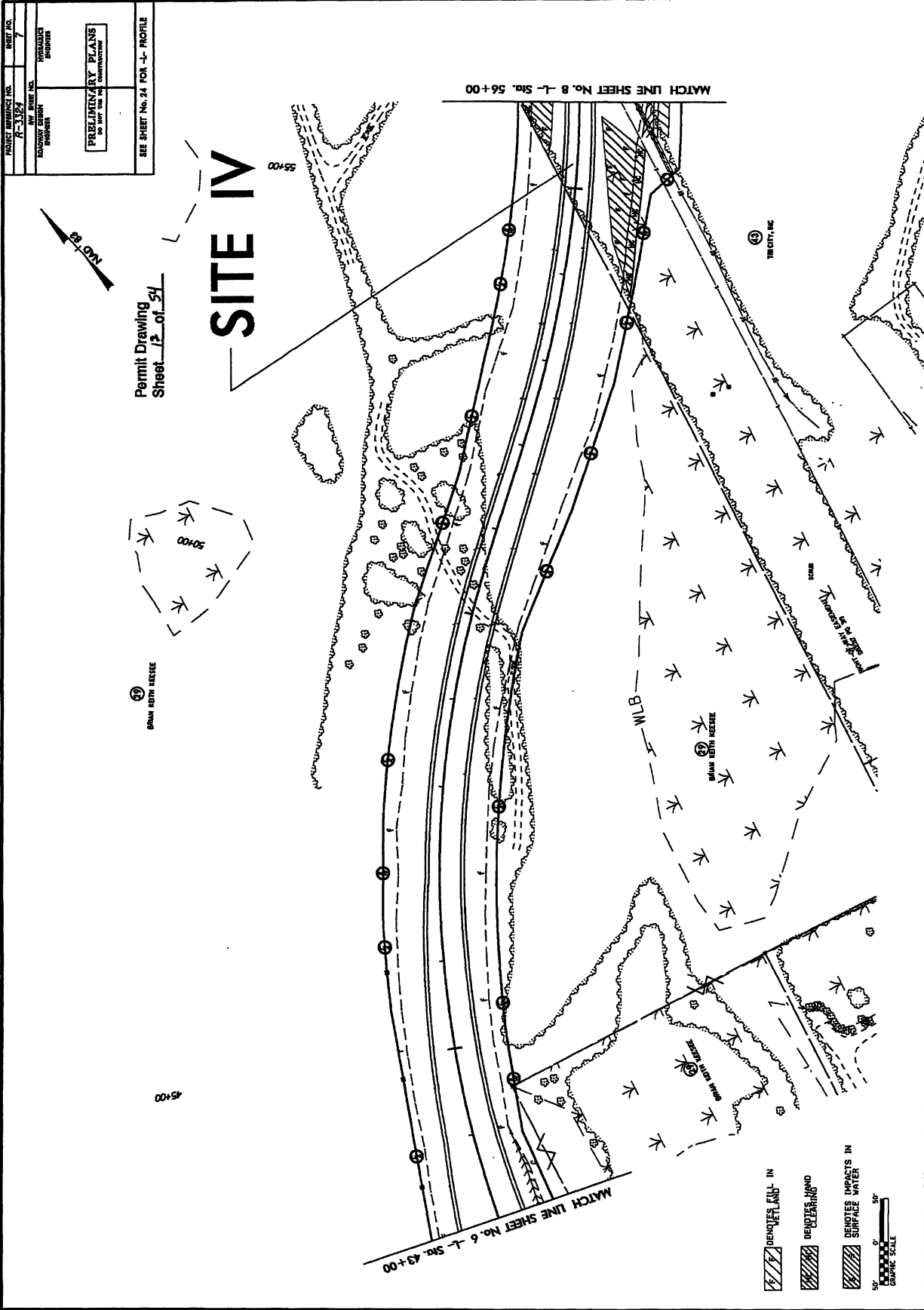
MATCH LINE SHEET No. 21 -YI- Sta. 29+00

MATCH LINE SHEET No. 20 -YI- Sta. 20+00

MATCH LINE SHEET No. 5 -L- Sta. 33+00

MATCH LINE SHEET No. 5





8/17/99

| | |
|---|------------------------|
| PROJECT NUMBER NO. R-1524 | SHEET NO. 7 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
| PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION | |
| SEE SHEET NO. 24 FOR -J- PROFILE | |



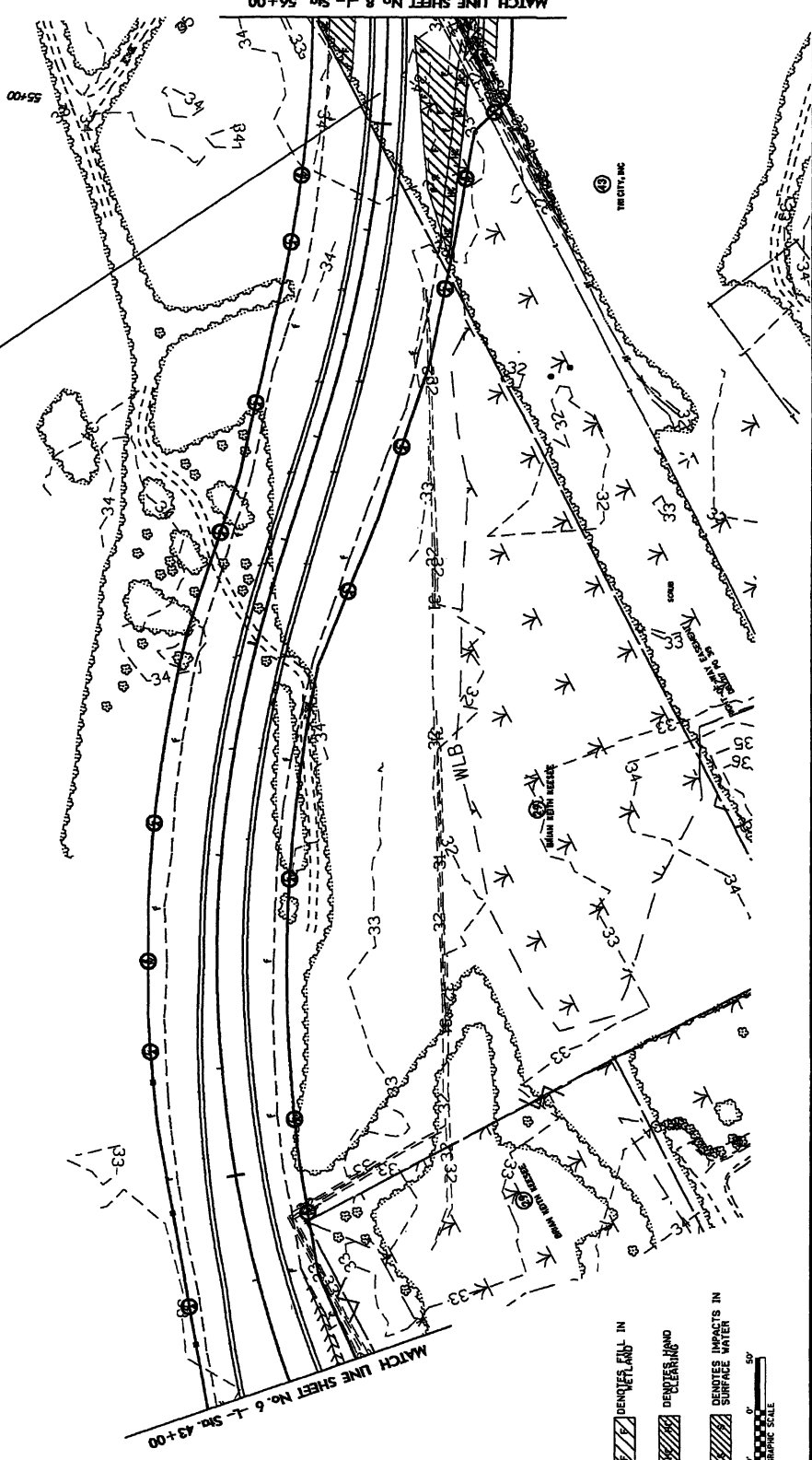
Permit Drawing
Sheet 15 of 24



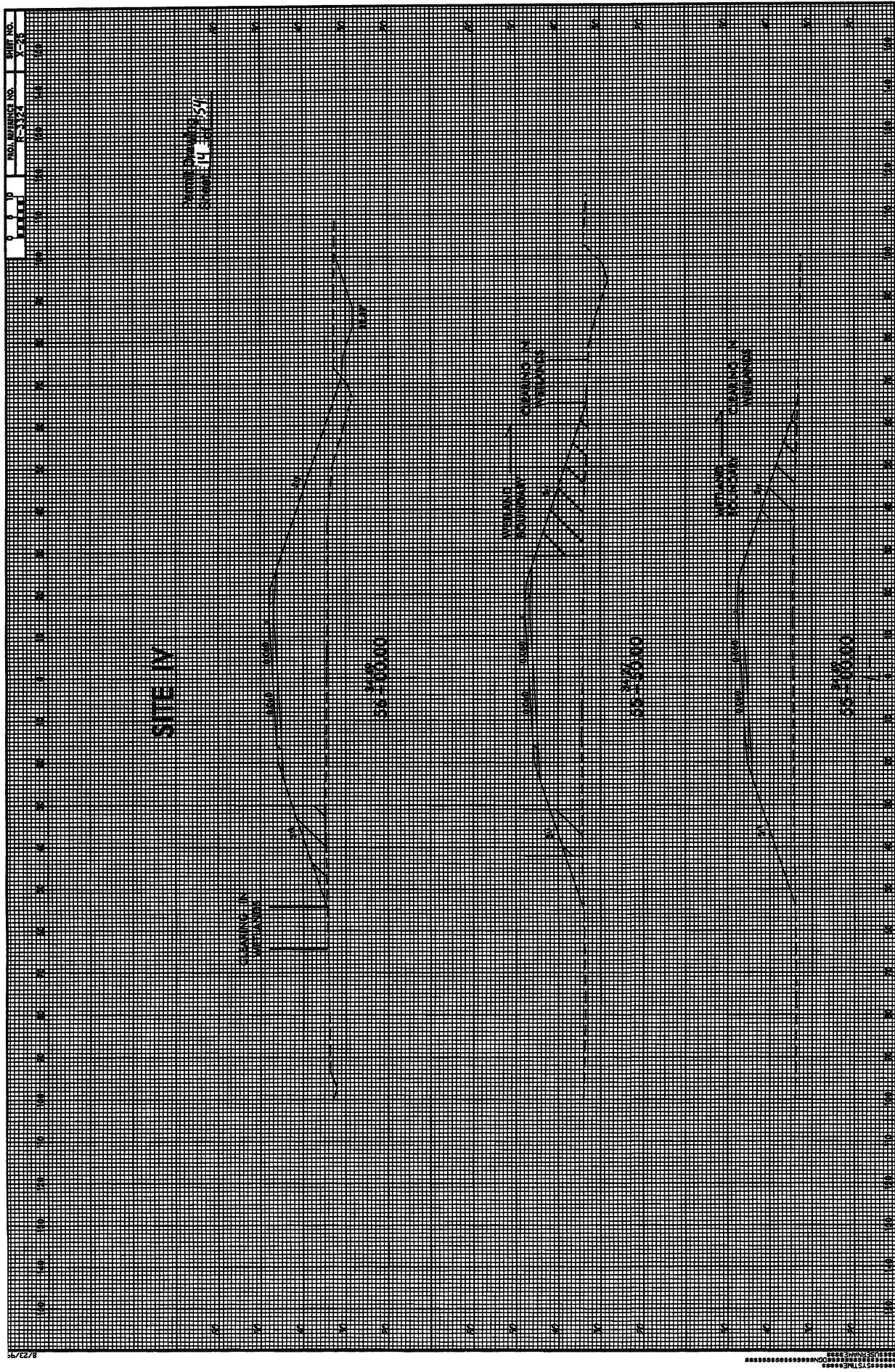
①
DRAIN BASIN RESERVE

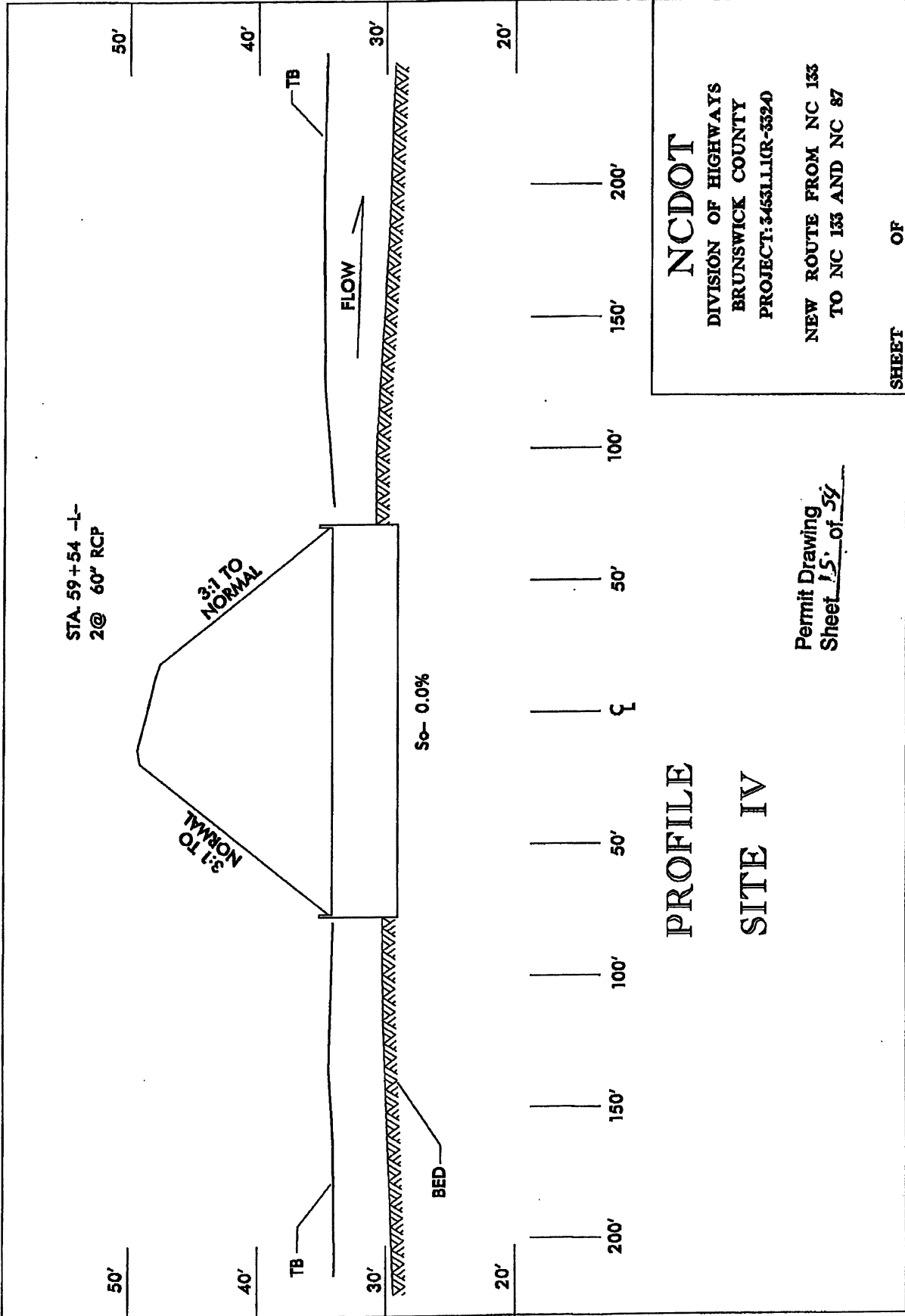
45+00

SITE IV



| | |
|--|----------------------------------|
| | DENOTES LAND IN CLEARING |
| | DENOTES IMPACTS IN SURFACE WATER |
| | 0 25 50 FOOT GRAPHIC SCALE |





PROFILE
SITE IV

Permit Drawing
Sheet 15 of 59

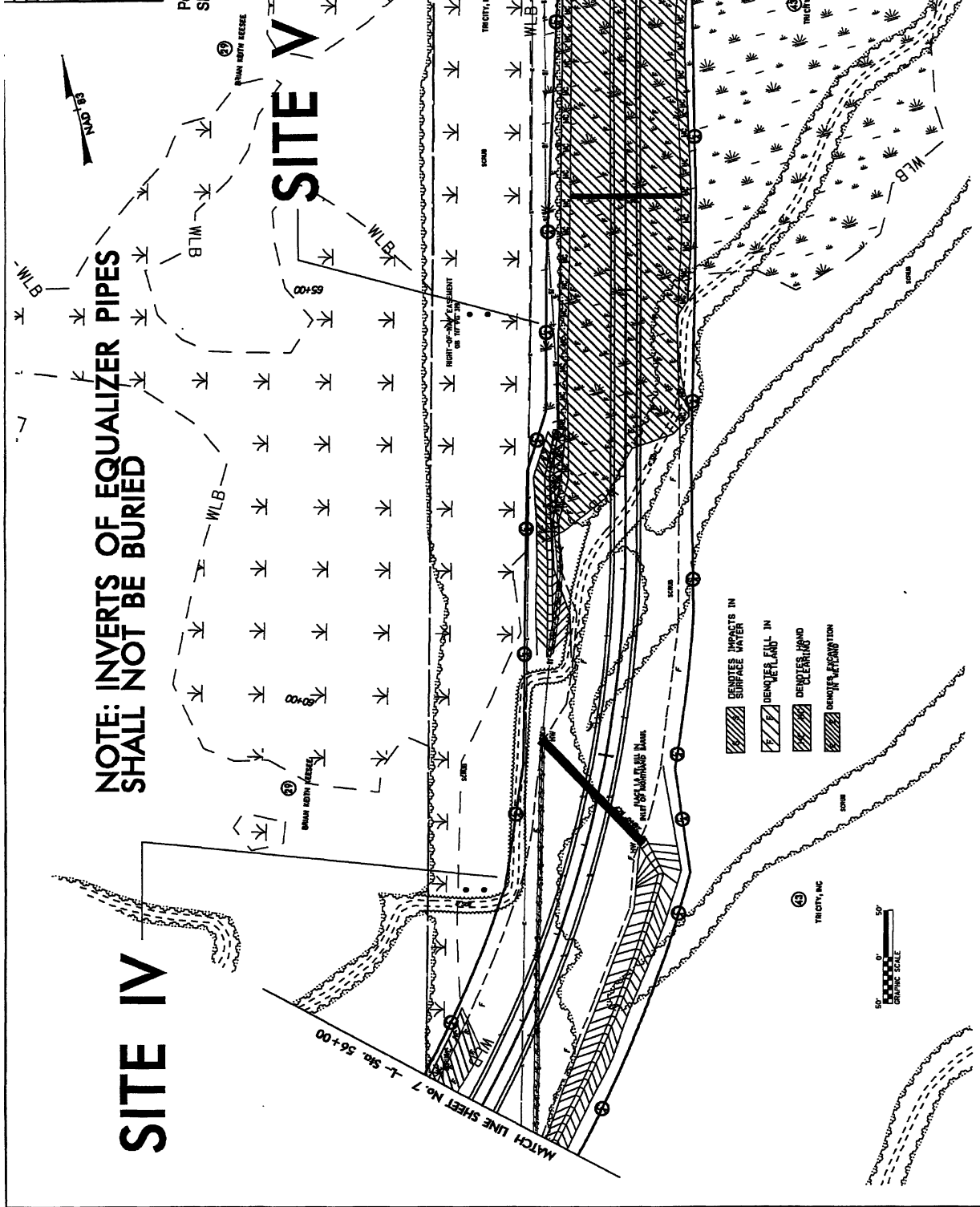
NCDOT
DIVISION OF HIGHWAYS
BRUNSWICK COUNTY
PROJECT: 345311(R-3324)

NEW ROUTE FROM NC 133
TO NC 133 AND NC 87

SHEET OF

| | |
|---|---------------------|
| PROJECT REFERENCE NO. | 7-1324 |
| DATE | 8 |
| DESIGNED BY | HYDRAULICS ENGINEER |
| CHECKED BY | HYDRAULICS ENGINEER |
| PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION | |

Permit Drawing
 Sheet 16 of 54



NOTE: INVERTS OF EQUALIZER PIPES SHALL NOT BE BURIED

SITE IV

SITE V

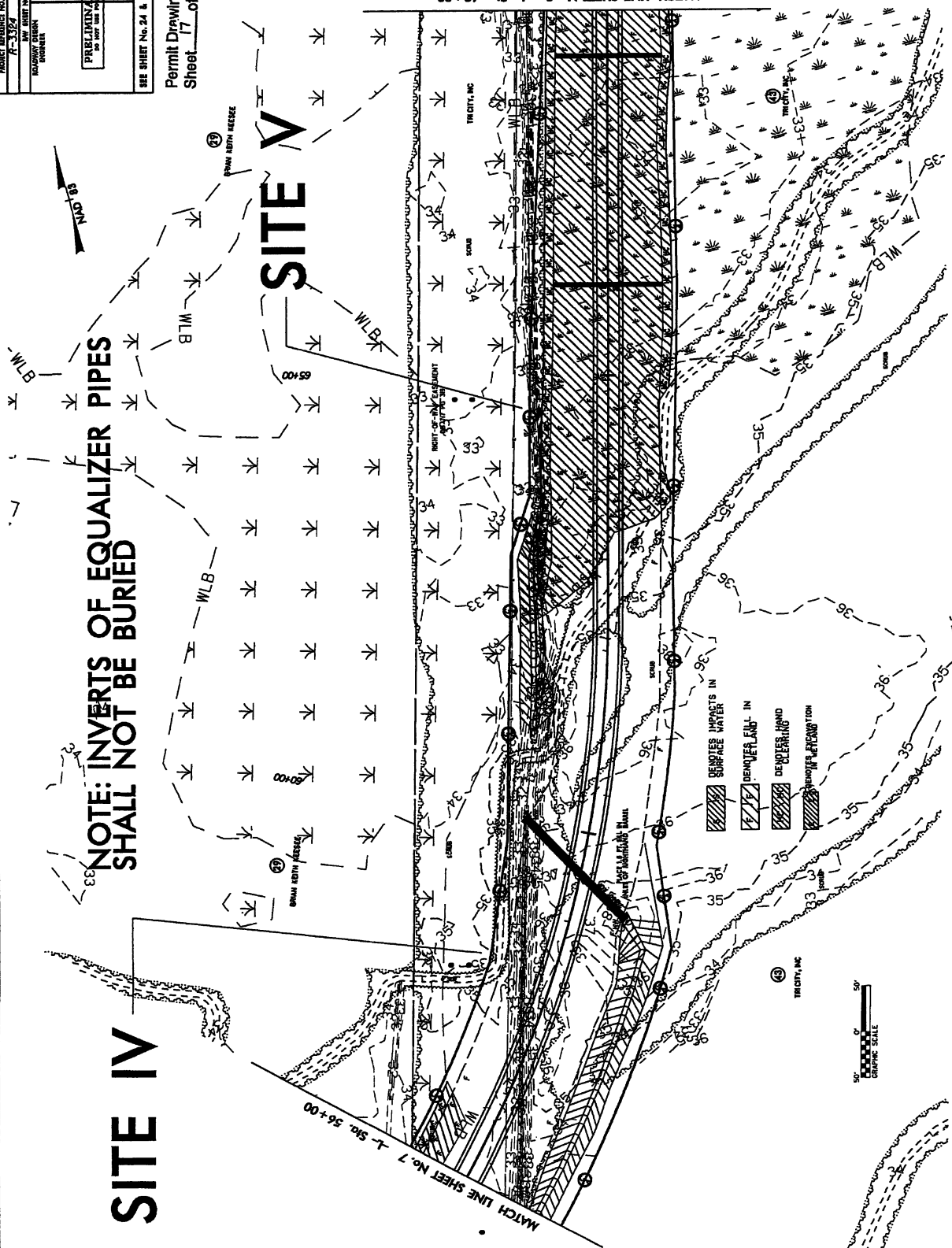
MATCH LINE SHEET No. 7 - L. Sgs. 56+00

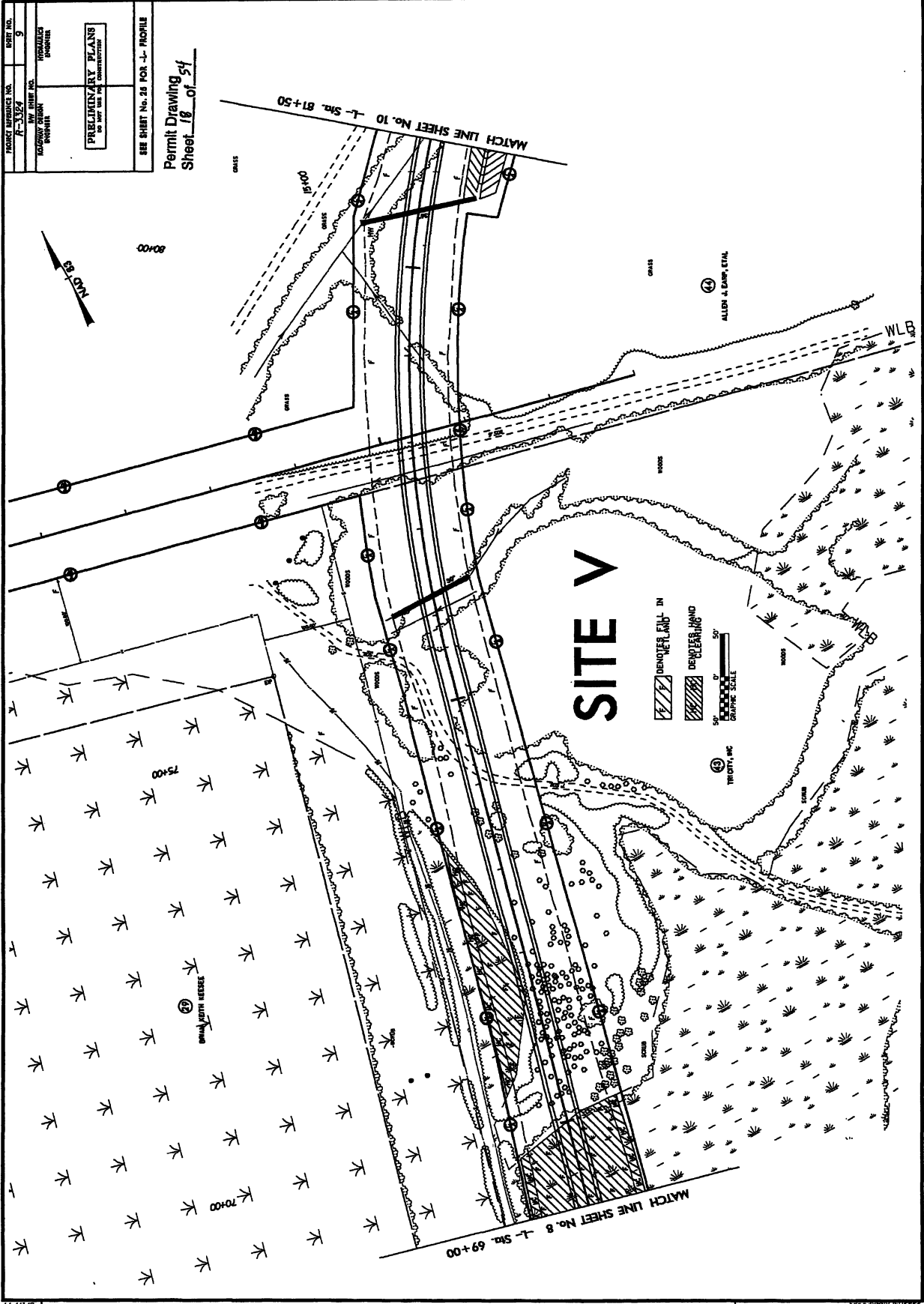
MATCH LINE SHEET No. 9 - L. Sgs. 69+00

| | |
|--------------------|--------------------|
| PROJECT NUMBER NO. | 8 |
| PERMIT NO. | 17-3389 |
| ISSUED BY | PROVALISE ENGINEER |
| DATE | NOV 18 2013 |
| PROJECT NAME | PROVALISE ENGINEER |
| PROJECT NO. | 17-3389 |
| ISSUED BY | PROVALISE ENGINEER |
| DATE | NOV 18 2013 |

SEE SHEET No. 24 & 25 FOR --L- PROFILE
 Permit Drawing
 Sheet 17 of 24

NOTE: INVERTS OF EQUALIZER PIPES SHALL NOT BE BURIED





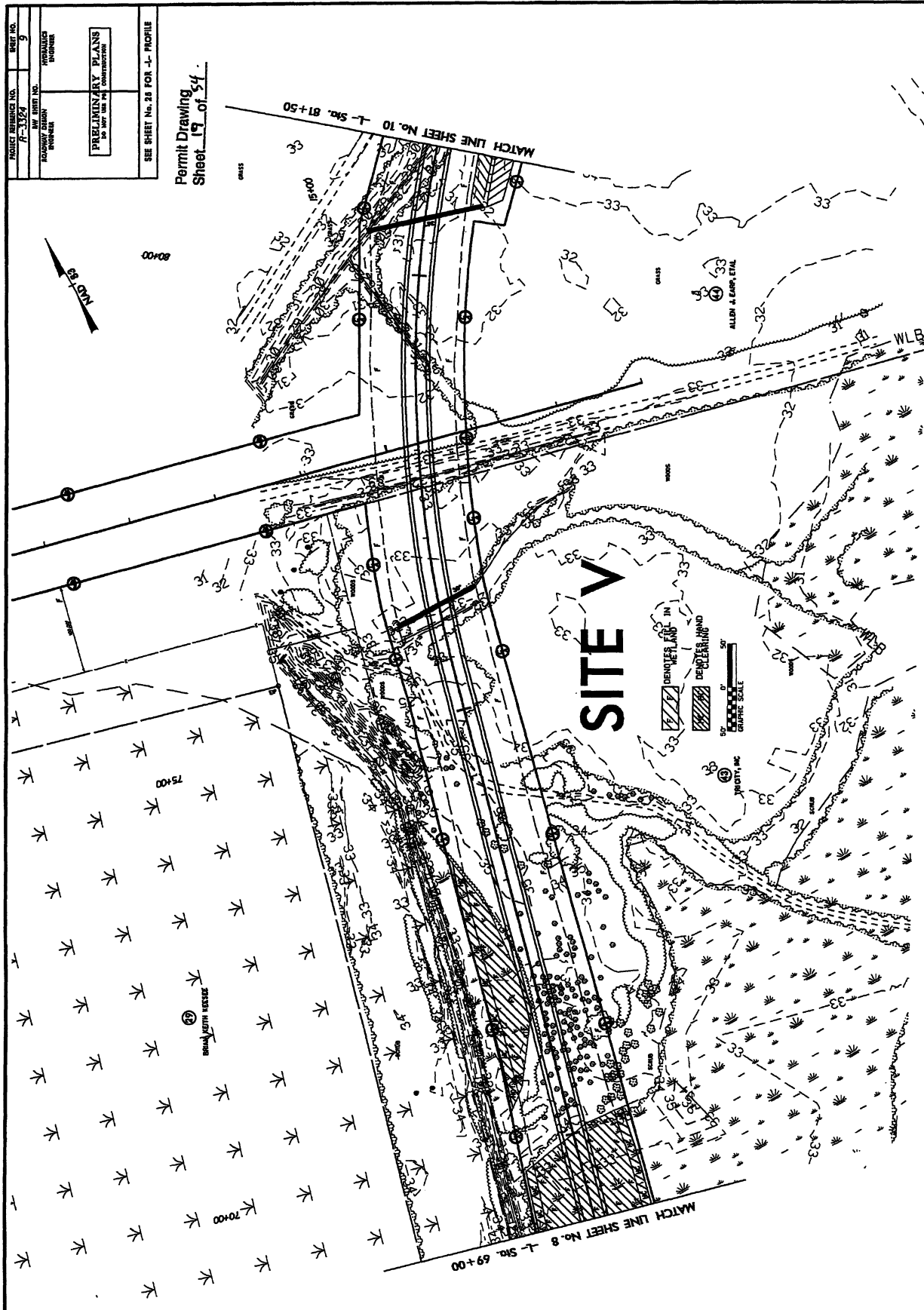
| | |
|-----------------------|---------|
| PROJECT REFERENCE NO. | R-3324 |
| DATE | 9 |
| DESIGNED BY | PERKINS |
| DRAWN BY | PERKINS |
| CHECKED BY | PERKINS |
| APPROVED BY | PERKINS |

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

SEE SHEET No. 25 FOR -J- PROFILE

Permit Drawing
Sheet 18 of 54

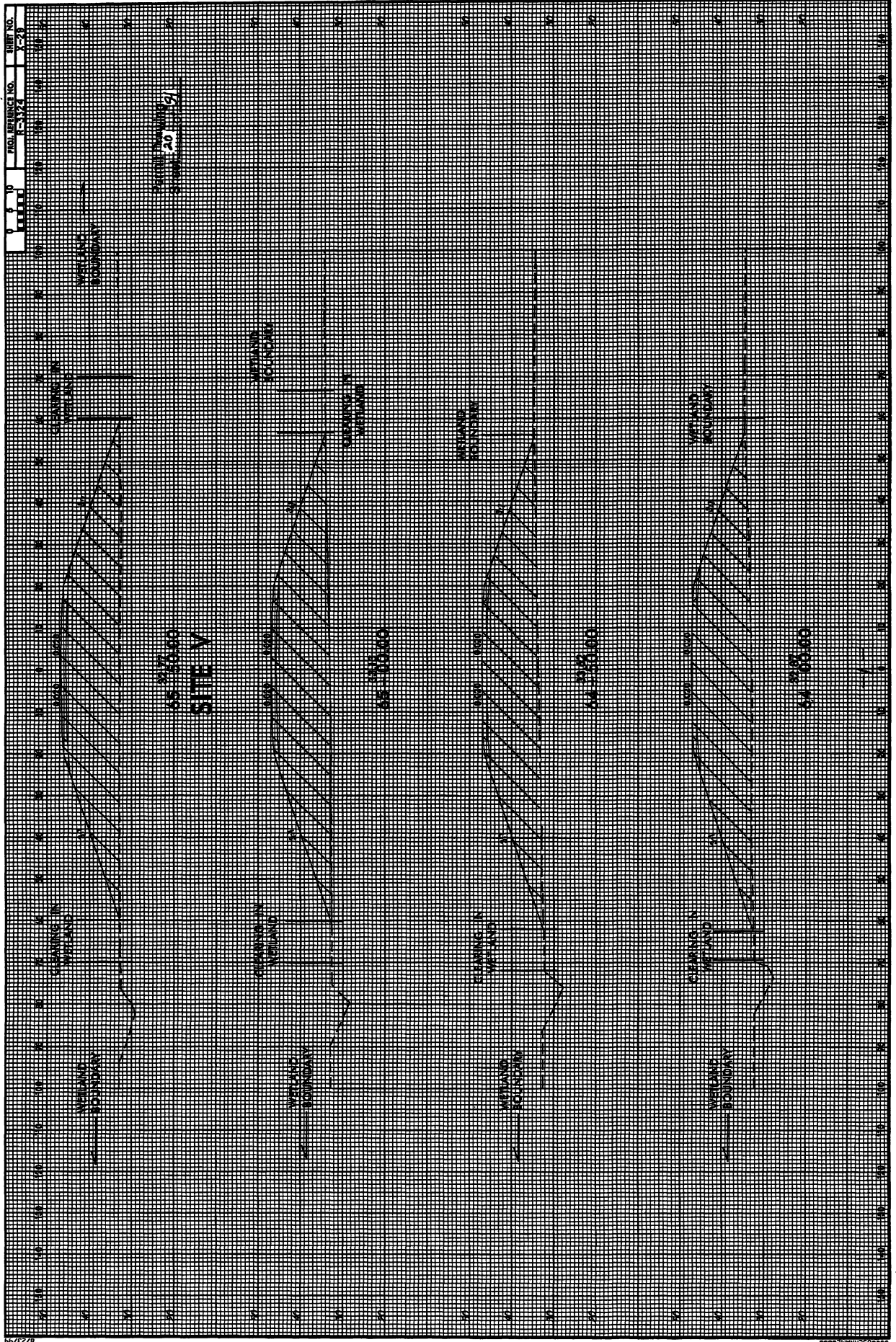
REVISIONS



| | |
|---|----------------------|
| PROJECT REFERENCE NO. R-3324 | SHEET NO. 9 |
| ROADWAY DESIGN SECTION | HYDRAULIC SECTION |
| PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION | |
| SEE SHEET No. 28 FOR -J- PROFILE | |

Permit Drawing
Sheet 17 of 54

REVISIONS

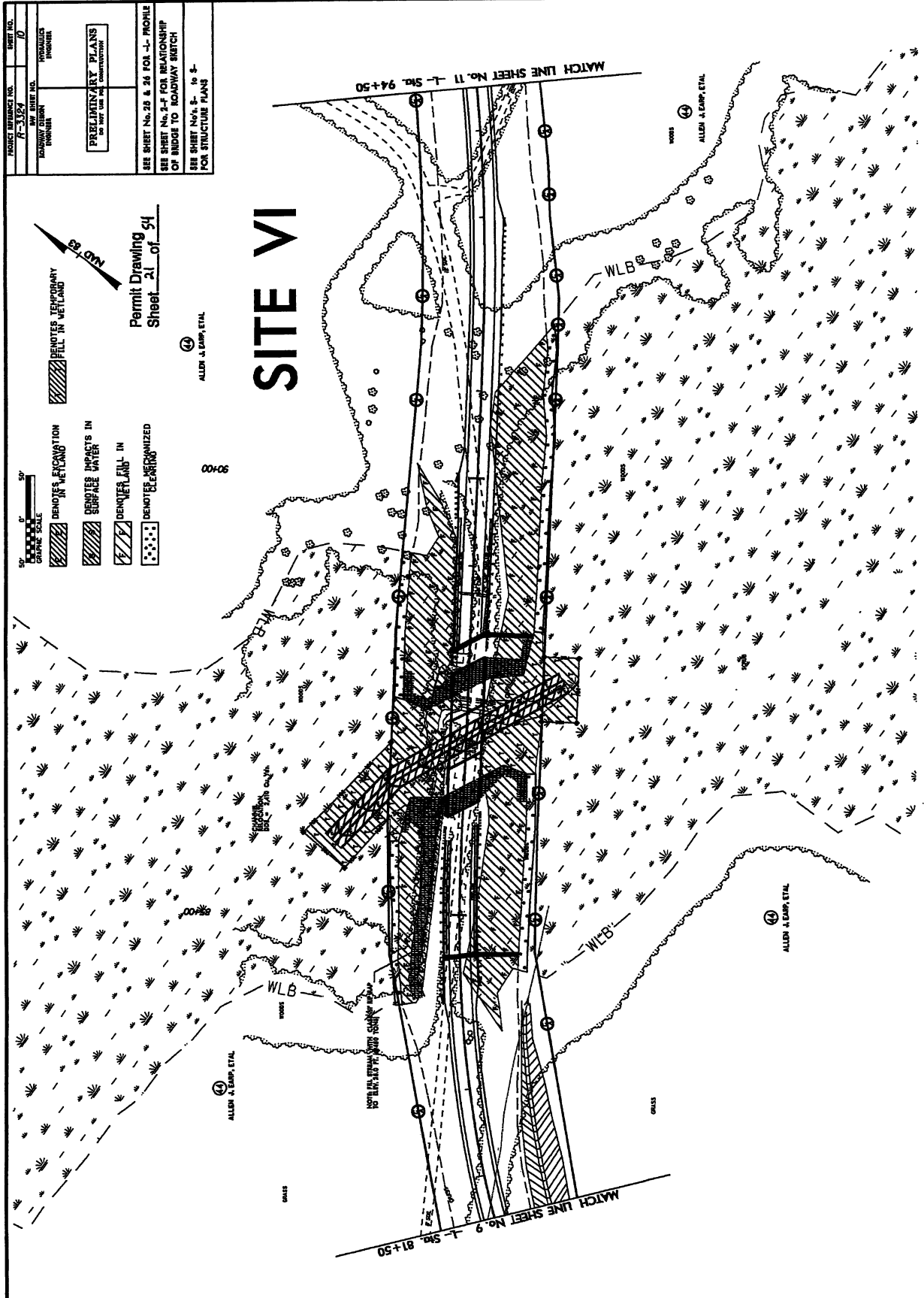


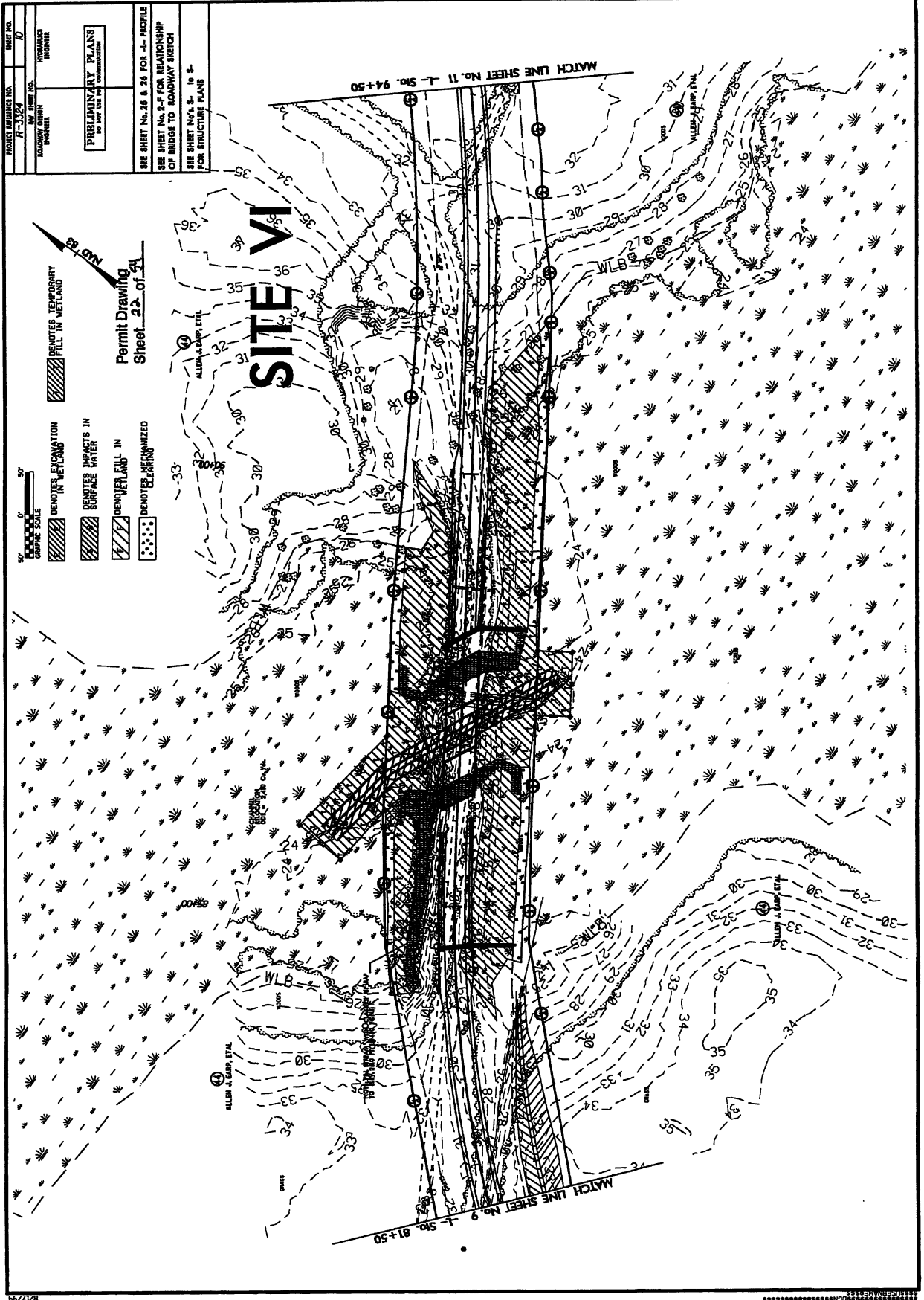
| | |
|----------------------|--|
| PROJECT NUMBER | 7-3529 |
| SHEET NO. | 10 |
| DESIGNER | HYDRAULIC ENGINEER |
| DATE | 11/19/88 |
| PROJECT TITLE | PERMITTING PLANS FOR BRIDGE OVER RIVER |
| CONTRACT NO. | SEE SHEET No. 28 & 29 FOR J-1 PROFILE |
| CONTRACT DESCRIPTION | SEE SHEET No. 2-1 FOR RELATIONSHIP OF BRIDGE TO ROADWAY SWITCH |
| CONTRACT LOCATION | SEE SHEET No. 8-1 to 8-4 FOR STRUCTURE PLANS |

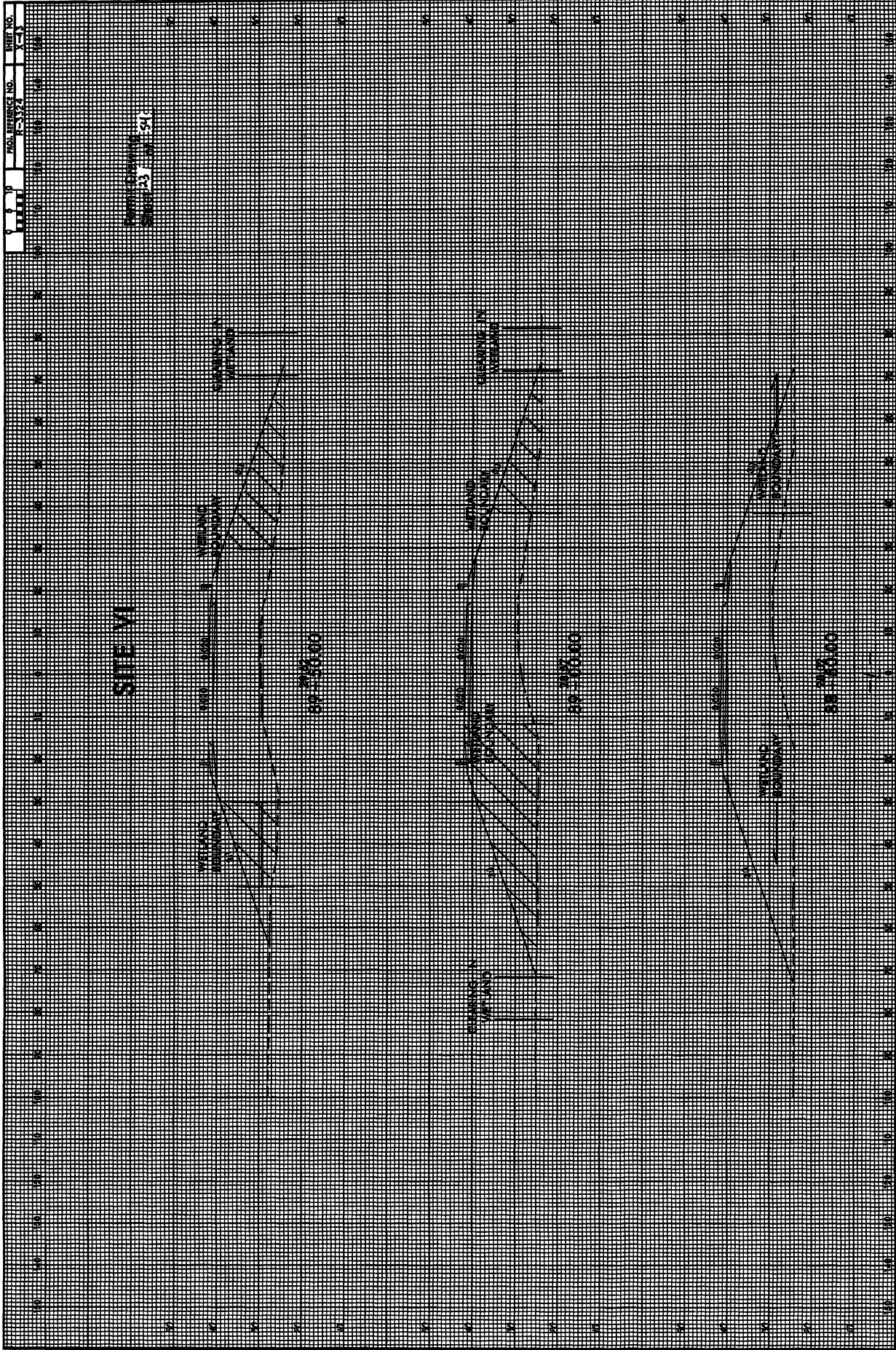
DENOTES TEMPORARY FILL IN WETLAND

Permit Drawing
Sheet 21 of 54

SITE VI



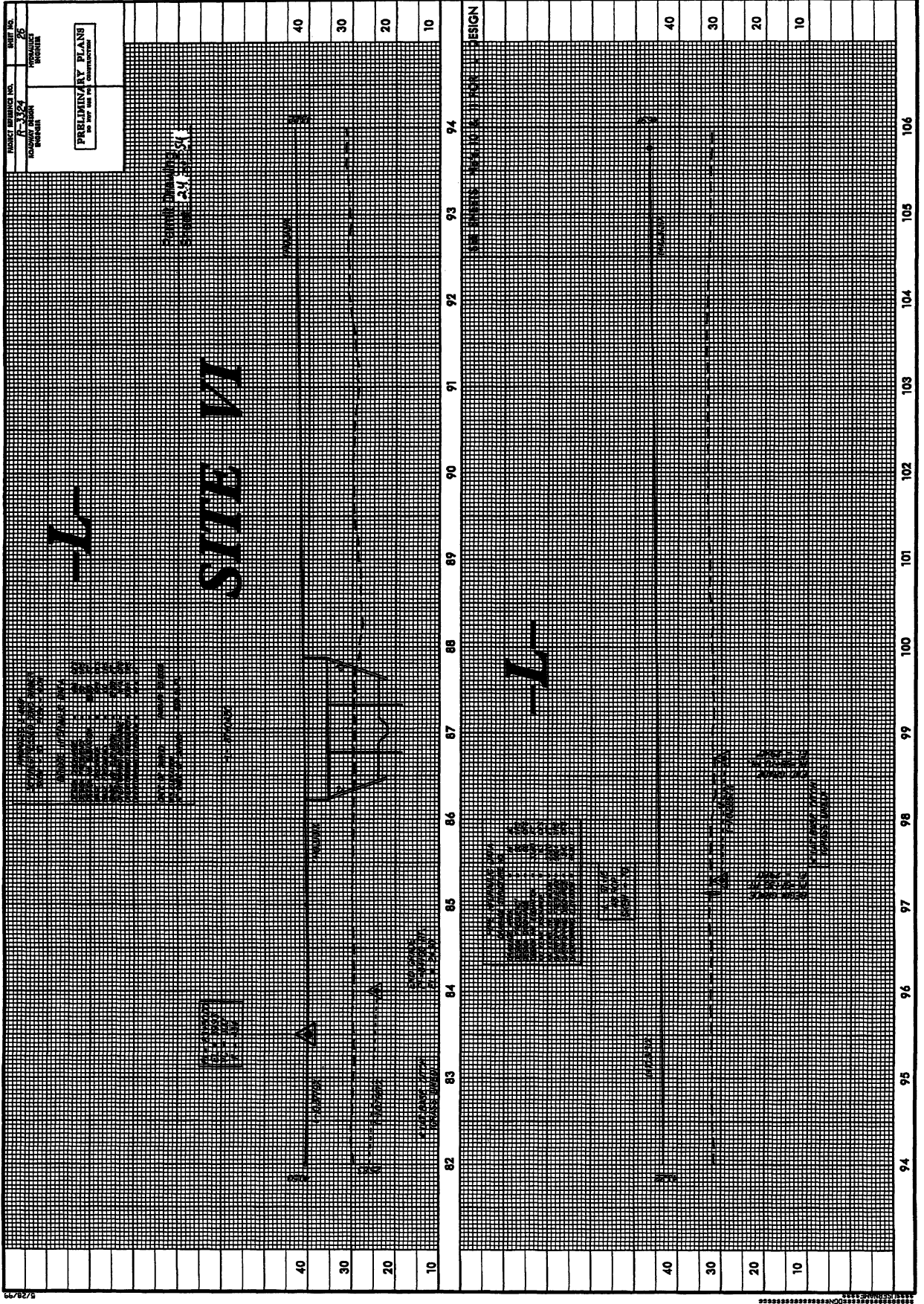




SITE VI

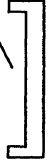
REVISIONS
NO. 1

DATE: 11/15/78
SCALE: 1" = 200'
SHEET NO. 1 OF 1



9/28/79

PROPOSED BRIDGE



Permit Drawing
Sheet 24A of 54
Revised 1/24/13

30'

TB

20'



PROPOSED CHANNEL
RELOCATION

CHANNEL SLOPE- 0.0%

10'

0

100'

200'

300'

50' 0' 50'



HORIZONTAL SCALE

10' 0' 10'



VERTICAL SCALE

PROFILE
CHANNEL RELOCATION
SITE VI

NCDOT

DIVISION OF HIGHWAYS
BRUNSWICK COUNTY
PROJECT: 3-453111 (R-3324)

NEW ROUTE FROM NC 133
TO NC 133 AND NC 87

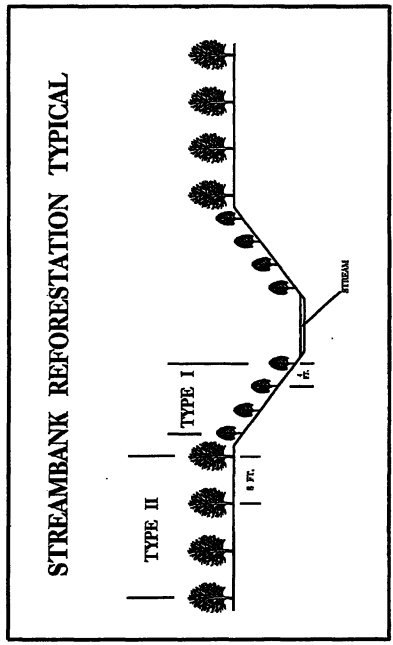
SHEET OF

R-52

| | |
|---------------------------------|--------------------------|
| PROJECT REFERENCE NO. R-3324 | SHEET NO. R-2 |
| DATE 1/24/13 | DESIGNED BY T. HUNTER |
| DRAWN BY T. HUNTER | CHECKED BY T. HUNTER |

- 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"

Permit Drawing
Sheet 2 of 14
Revised 1/24/13



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

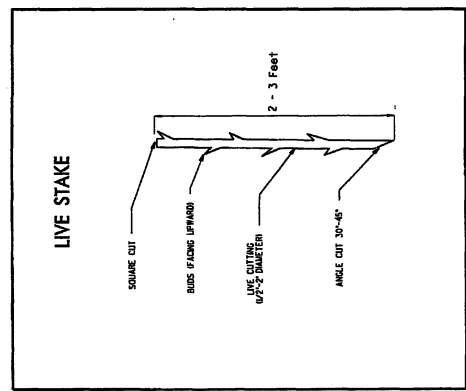
| TYPE 1 | TYPE 2 |
|------------------------------------|---------------------------------------|
| 50% CEPHALANTHUS OCCIDENTALIS | 50% CORNUS AMOMUM |
| 25% TAXODIUM DISTICHUM | 25% FRAXINUS PENNSYLVANICA |
| 25% NYSSA AQUATICA | 25% QUERCUS MICHAUXII |
| BUTTONBUSH 2 ft - 3 ft LIVE STAKES | SILKY DOGWOOD 2 ft - 3 ft LIVE STAKES |
| BALD CYPRESS 12 in - 18 in BR | GREEN ASH 12 in - 18 in BR |
| WATER TUPELO 12 in - 18 in BR | SWAMP CHESTNUT OAK 12 in - 18 in BR |

SEE PLAN SHEETS FOR AREAS TO BE PLANTED

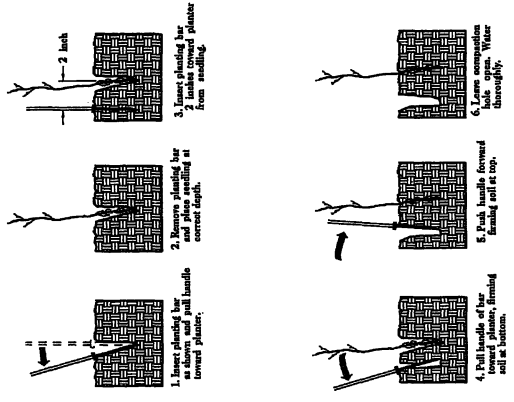
STREAMBANK REFORESTATION
DETAIL SHEET 1 OF 2
N.C.D.O.T. - ROADSIDE ENVIRONMENTAL UNIT

PLANTING DETAILS

LIVE STAKES PLANTING DETAIL



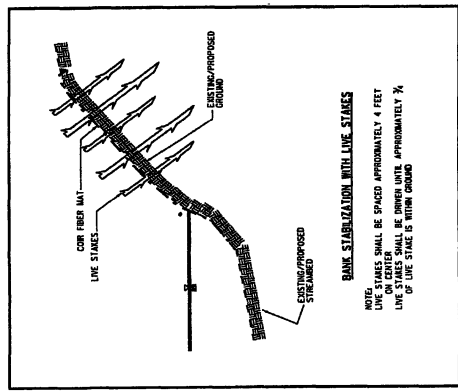
**BAREROOT PLANTING DETAIL
DIBBLE PLANTING METHOD
USING THE IBC PLANTING BAR**



PLANTING NOTES:

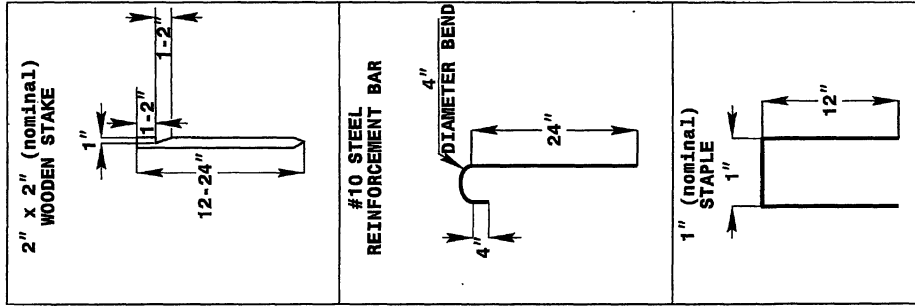
- PLANTING BAG**
Planting bar shall have a 1/2 inch diameter hole in the stem for the root system from drying.
- IBC PLANTING BAR**
Planting bar shall have a 1/2 inch diameter hole in the stem for the root system from drying. The hole shall be 12 inches long, 1 inch thick at each end.
- ROOT PRUNING**
Roots shall be cut to 1/2 inch diameter. If necessary, so that the roots extend more than 1/2 inch outside the root collar.

BANK STABILIZATION WITH LIVE STAKES

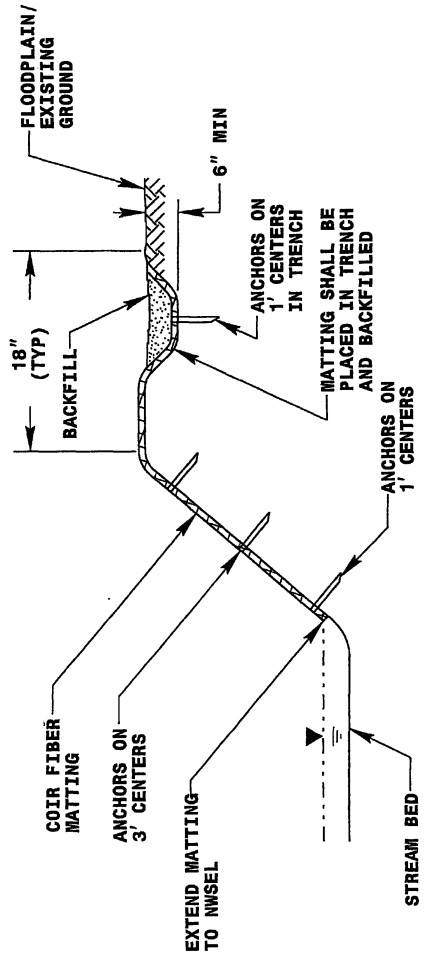
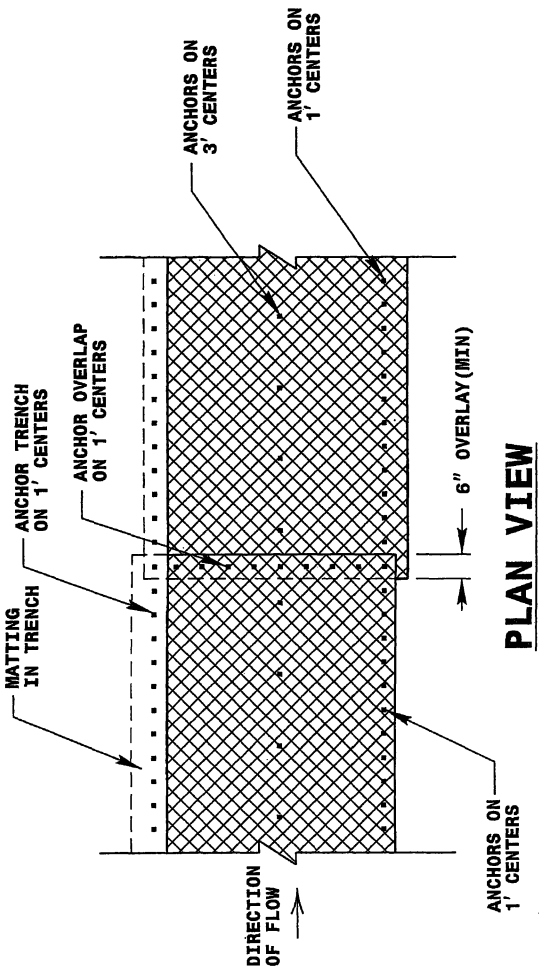


PROJECT REFERENCE NO. **F-3324**
 SHEET NO. **RF-3**
 DRAWN BY **RDG**
 CHECKED BY **RDG**
 ENGINEER

Permit Drawing
 Sheet 24c of 34
 Revised 1/24/13



ANCHOR OPTIONS

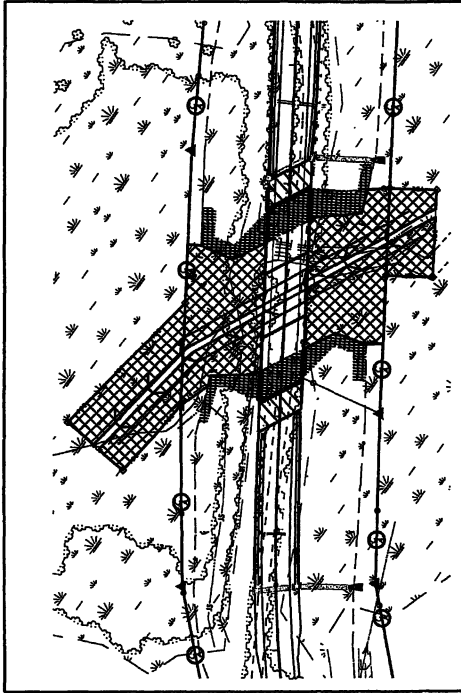


COIR FIBER MATTING DETAIL
 NOT TO SCALE

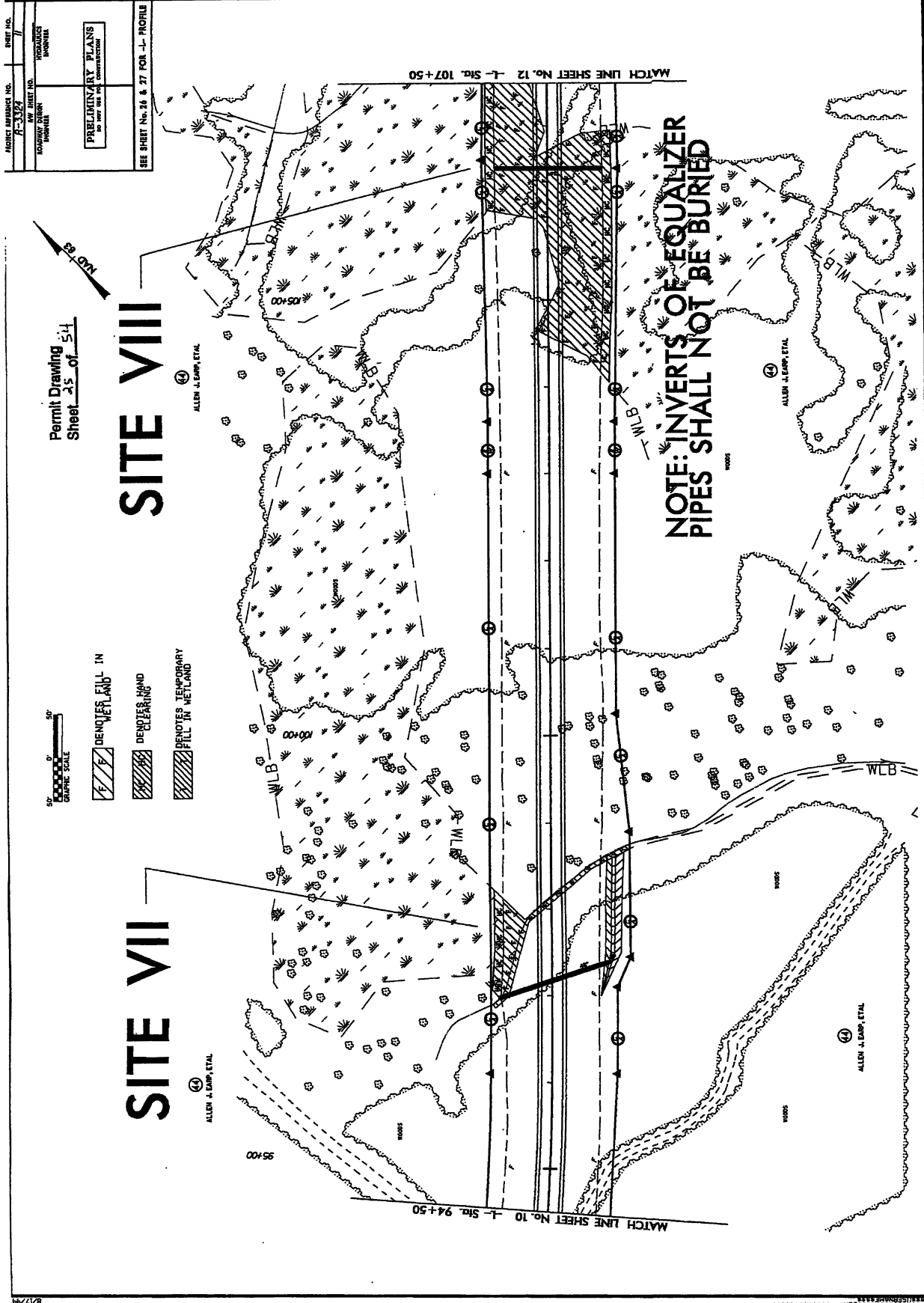
STREAMBANK REFORESTATION
DETAIL SHEET 2 OF 2
 NCDAOT - ROADSIDE ENVIRONMENTAL UNIT

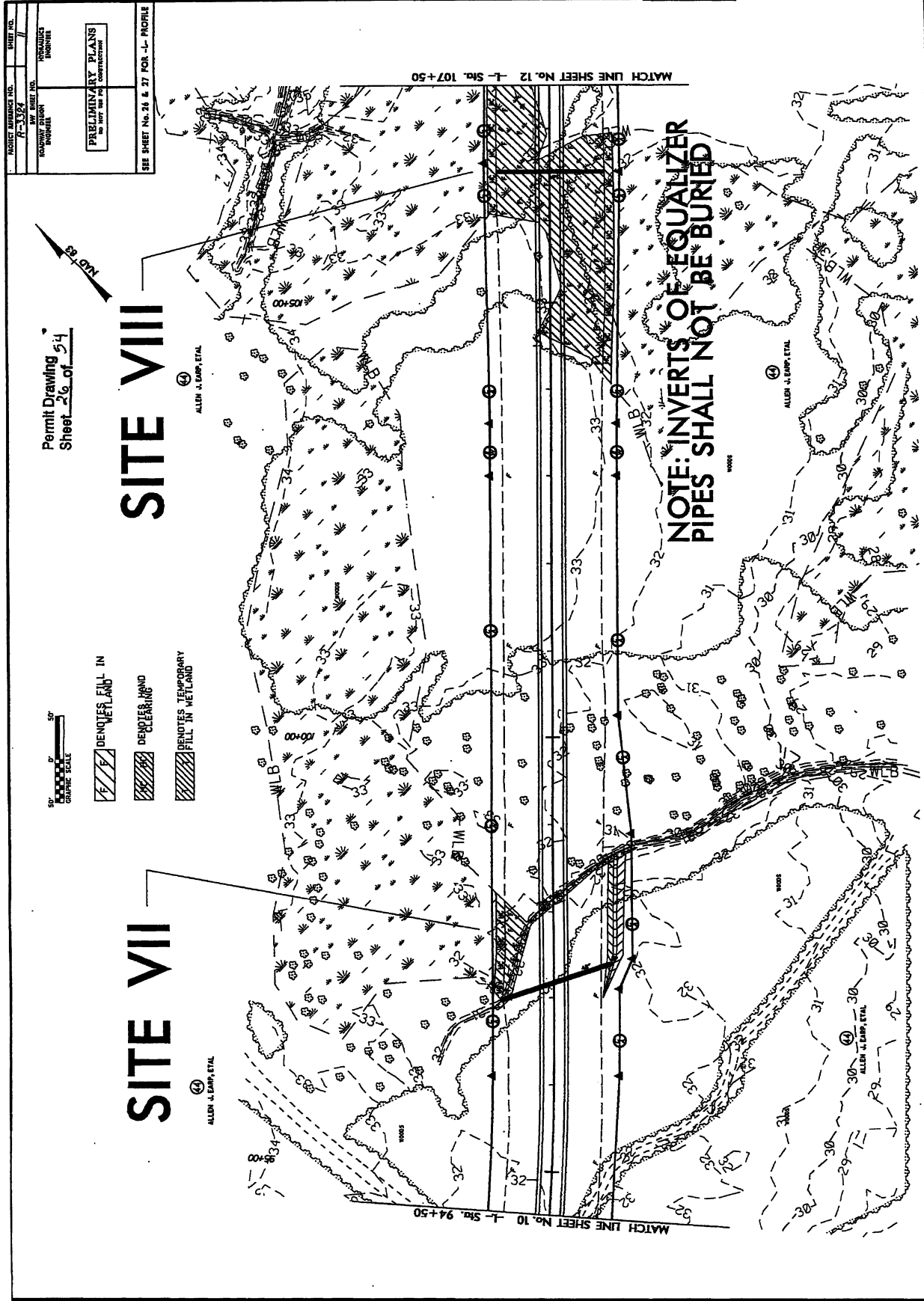
| | | |
|---|--|------------------------------------|
| 0.55 ACRE STREAMBANK REFORESTATION | PROJECT REFERENCE NO. R-3324 | SHEET NO. EC-33A/CORR2/D |
| | NEW SHEET NO. EC-33A/CORR2/D | PROFESSIONAL ENGINEER |
| | REGISTERED PROFESSIONAL ENGINEER | |

Permit Drawing
Sheet 29 D of 34
Revised 1/24/13



SEE RF-2, RF-3 AND PROJECT SPECIAL PROVISIONS





| | |
|---------------------------------------|-------------|
| PROJECT REFERENCE NO. | SHEET NO. |
| 7-3324 | 7 |
| BY SHEET NO. | PREPARED BY |
| CONSTRUCTION | ENGINEER |
| PRELIMINARY PLANS | |
| DO NOT SCALE | |
| SEE SHEET No. 26 & 27 FOR -L- PROFILE | |

Permit Drawing
Sheet 26 of 54

SITE VIII

SITE VII

- DENOTES FILL IN WETLAND
- DENOTES MOUND CLEARING
- DENOTES TEMPORARY FILL IN WETLAND

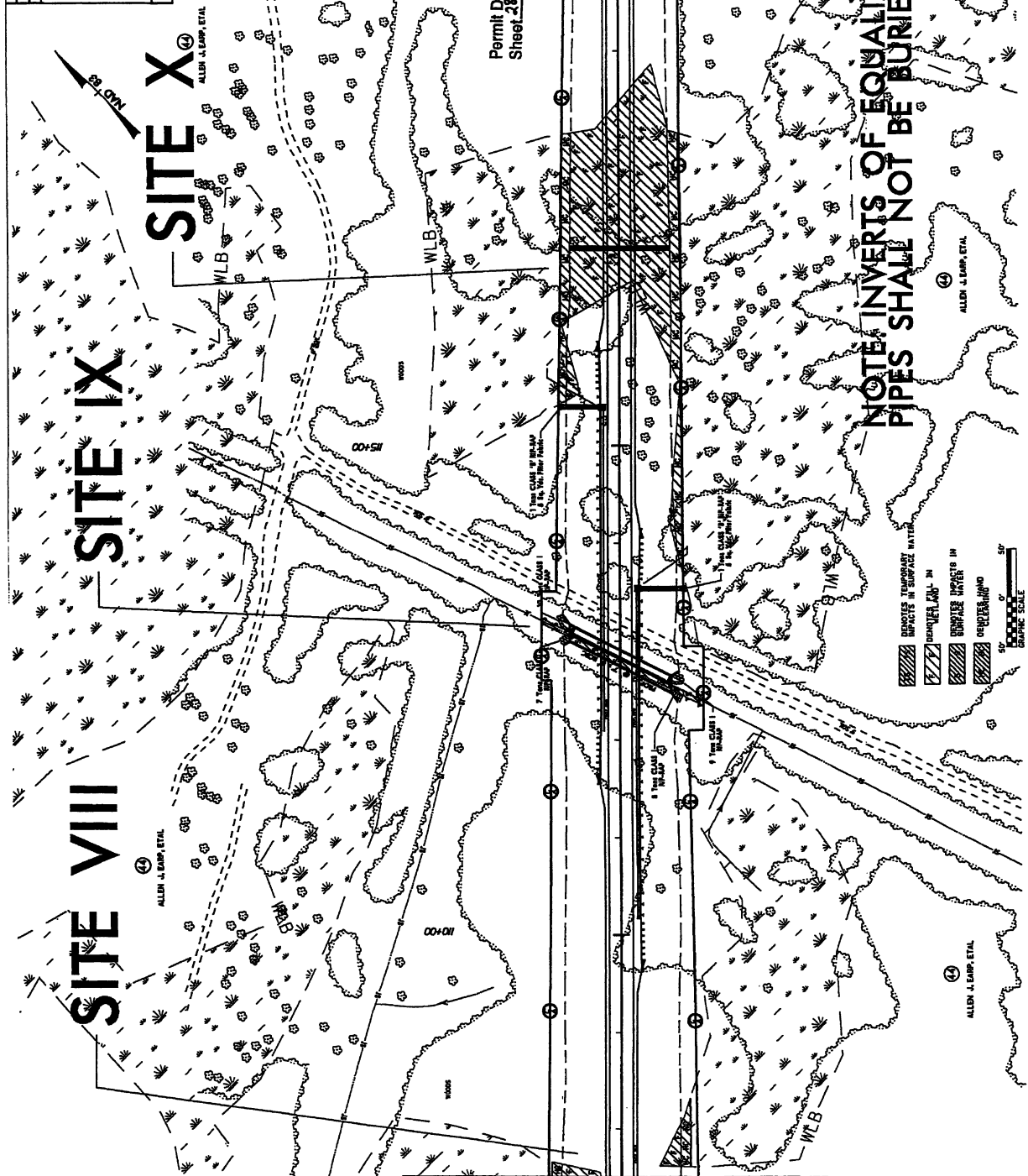
NOTE: INVERTS OF EQUALIZER PIPES SHALL NOT BE BURIED

MATCH LINE SHEET No. 12 -L- Sta. 107+50

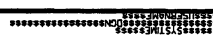
MATCH LINE SHEET No. 10 -L- Sta. 94+50



| | |
|--|-----------|
| PROJECT NUMBER NO. | SHEET NO. |
| R-1324 | 7 |
| BY SHEET NO. | PROFESSOR |
| ADVISORY ENGINEER | ENGINEER |
| PRELIMINARY PLANS DO NOT USE IN CONSTRUCTION | |
| SEE SHEET No. 27 FOR -- PROFILE | |



NOTE: INVERTS OF EQUALIZER PIPES SHALL NOT BE BURIED



R-60

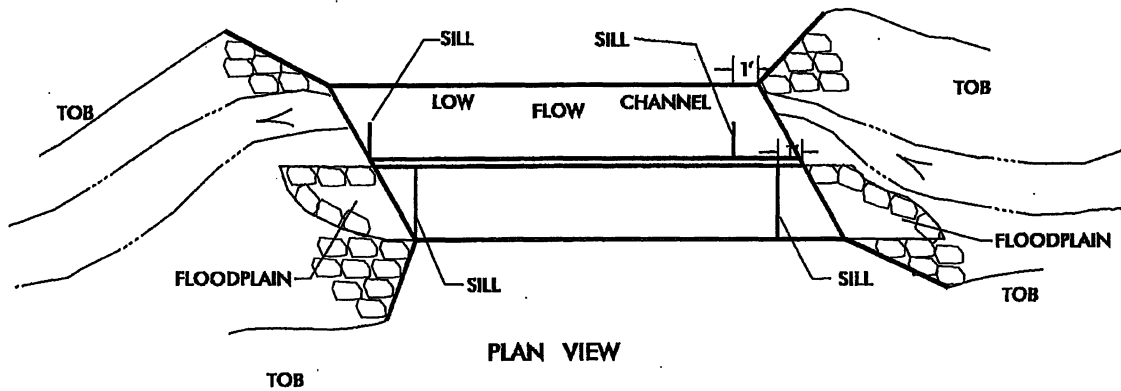
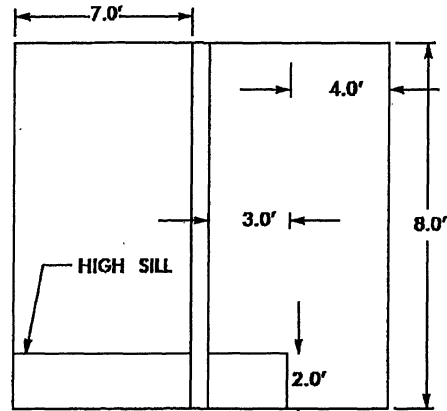
SKEWED MULTI-BARREL LOW FLOW CHANNEL, SILLS AND FLOOD PLAIN

(NOT TO SCALE)

***NOTES:**

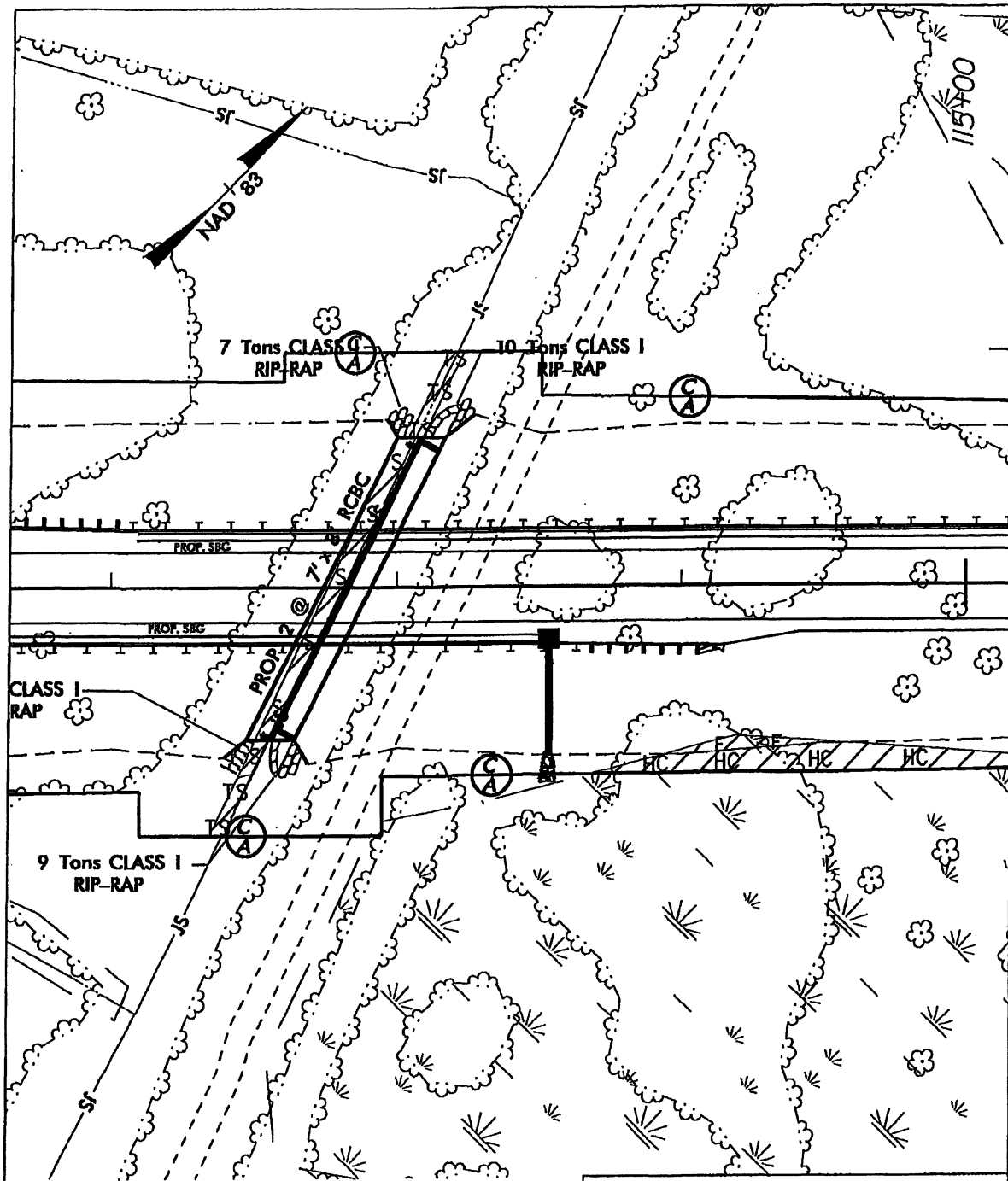
- 1) BED MATERIAL BETWEEN SILLS IN THE CULVERT SHALL PROVIDE A CONTINUOUS LOW FLOW CHANNEL. THE MATERIAL SHALL BE NATIVE SOILS. BED MATERIALS SUBJECT TO APPROVAL BY THE ENGINEER.
- 2) SILLS ARE TO BE 1.0 FT. WIDE, CAST SEPARATELY AND ATTACHED BY DOWELS.
- 3) TOP OF LOW FLOW SILLS SHOULD MATCH STREAM BED ELEVATION IN LOW FLOW CHANNEL OF STREAM. (THALWEG)
- 4) DO NOT SET ELEVATION OF HIGH SILL ABOVE BANK FULL.
- 5) NUMBER OF SILL DETERMINED BY THE ENGINEER.





Permit Drawing
Sheet 29 of 54
Revised 1/24/13



PLAN VIEW
 SITE IX
 -L- STA. 112+82.5
 2@ 7' x 8' RCBC

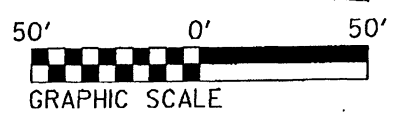
NCDOT
 DIVISION OF HIGHWAYS
 BRUNSWICK COUNTY
 PROJECT: 3453L1.1 (R-3324)
 NEW ROUTE FROM NC 133
 AND NC 87
 SHEET OF 11/06/12



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

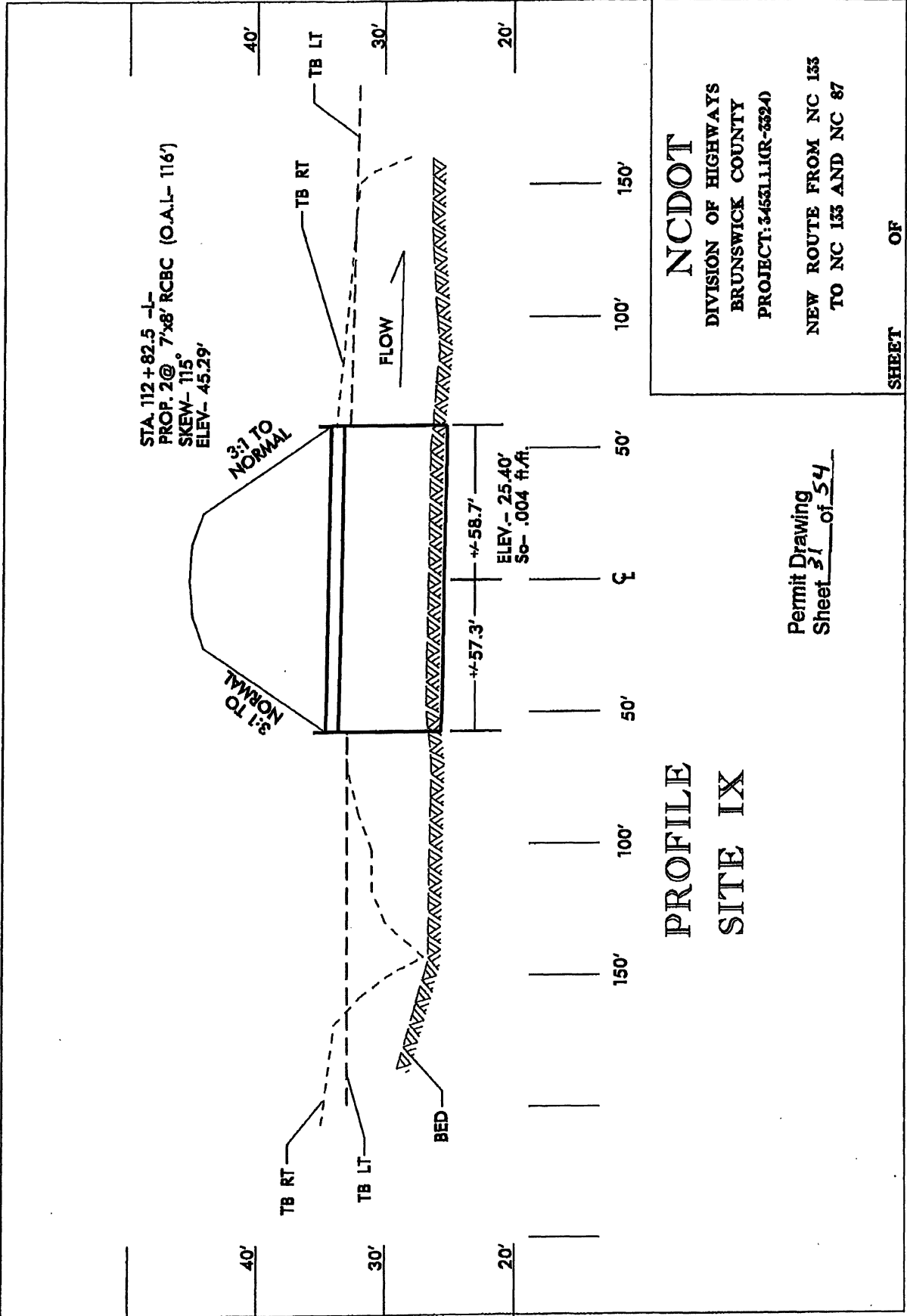
SITE IX

Permit Drawing
Sheet 30 of 34



NCDOT
 DIVISION OF HIGHWAYS
 BRUNSWICK COUNTY
 PROJECT: 34531.1.1 (R-3324)
 NEW ROUTE FROM NC 133
 AND NC 87

SHEET OF 12 / 04 / 12



PROFILE
SITE IX

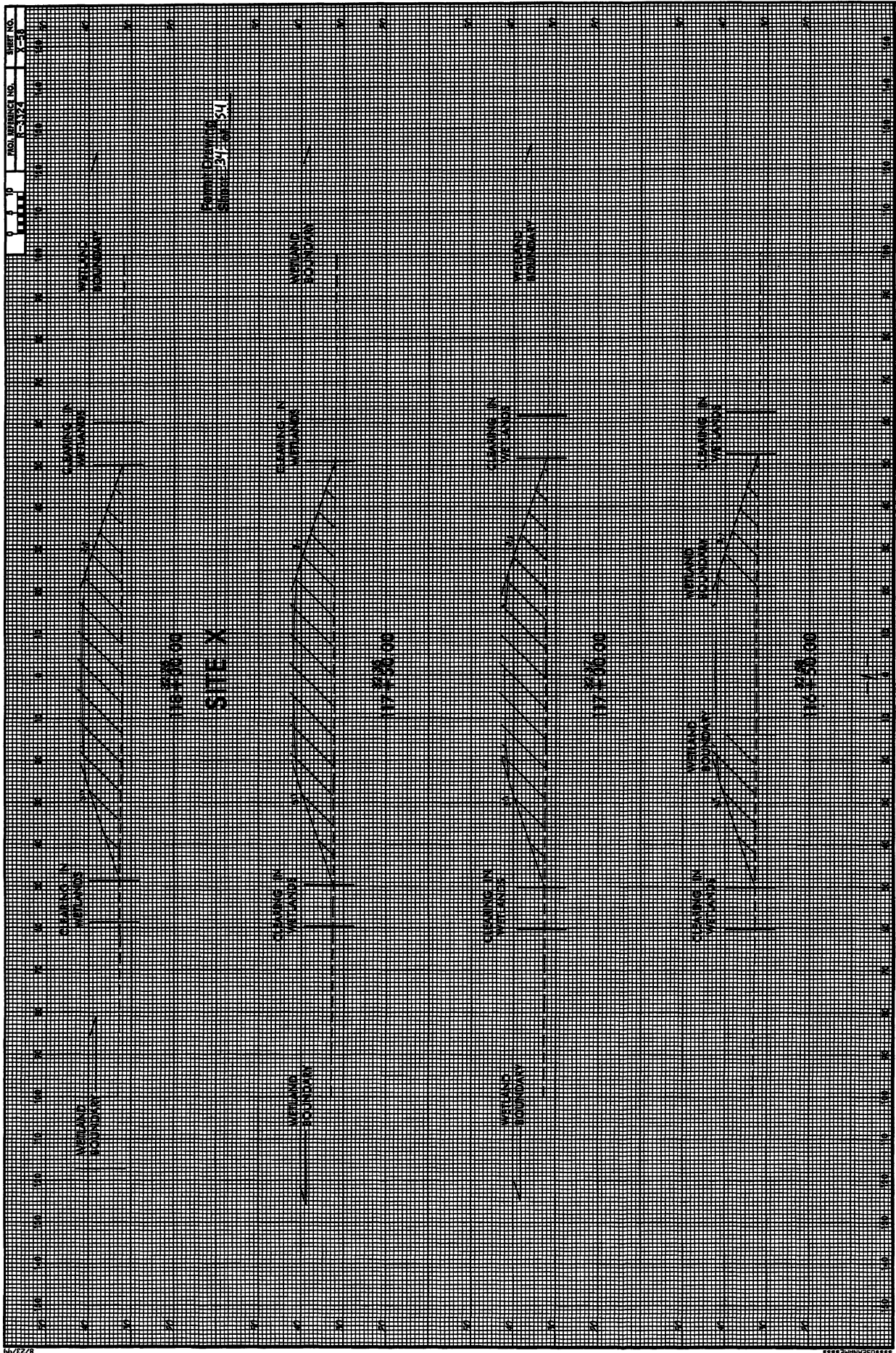
NCDOT

DIVISION OF HIGHWAYS
BRUNSWICK COUNTY
PROJECT: 34531.1(R-5324)

NEW ROUTE FROM NC 133
TO NC 133 AND NC 87

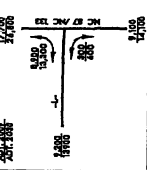
Permit Drawing
Sheet 31 of 54

SHEET OF



PROJECT REFERENCE NO. R-3324
 SHEET NO. 13
 ADVISORY ENGINEER
 PRELIMINARY PLANS
 DO NOT USE FOR CONSTRUCTION

SEE SHEET No. 27 FOR -L- PROFILE
 SEE SHEET No. 30 & 31 FOR -Y2- PROFILE

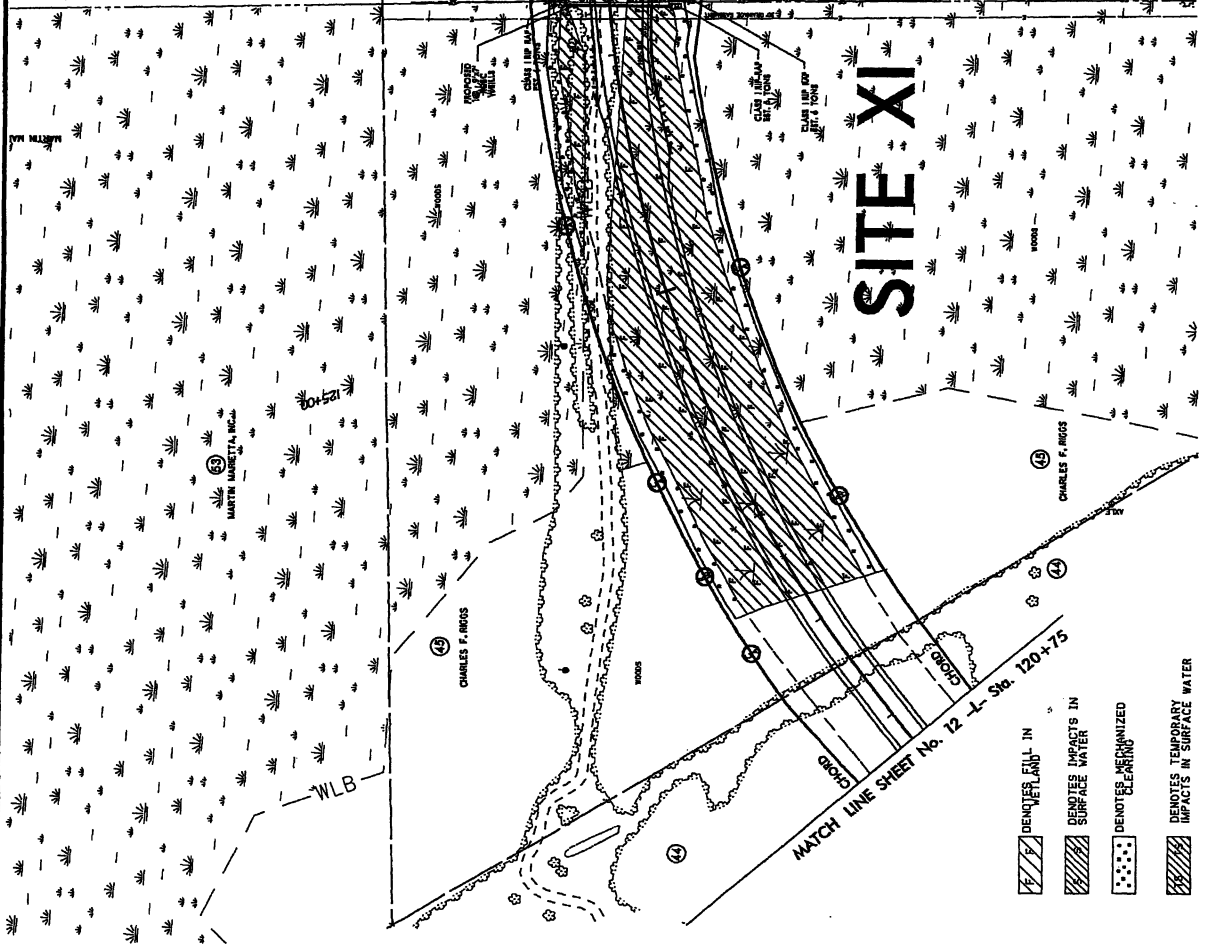


R-66

Permit Drawing,
 Sheet 35 of 34
 Revised 1/24/13

MATCH LINE SHEET No. 15 -Y2- Sta. 28+00

MATCH LINE SHEET No. 14 -Y2- Sta. 18+75



- DENOTES EAVES IN SURFACE WATER
- DENOTES TEMPORARY IMPACTS IN SURFACE WATER
- DENOTES PERMANENTLY IMPACTED AREAS
- DENOTES TEMPORARY IMPACTS IN SURFACE WATER

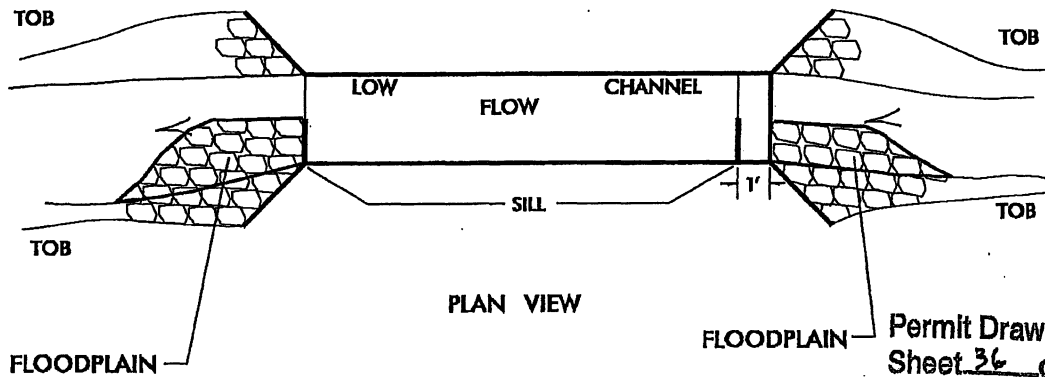
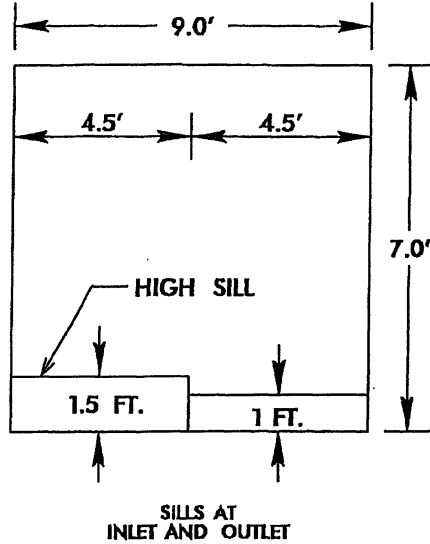


CULVERT SILLS AND FLOODPLAIN

(NOT TO SCALE)

***NOTES:**

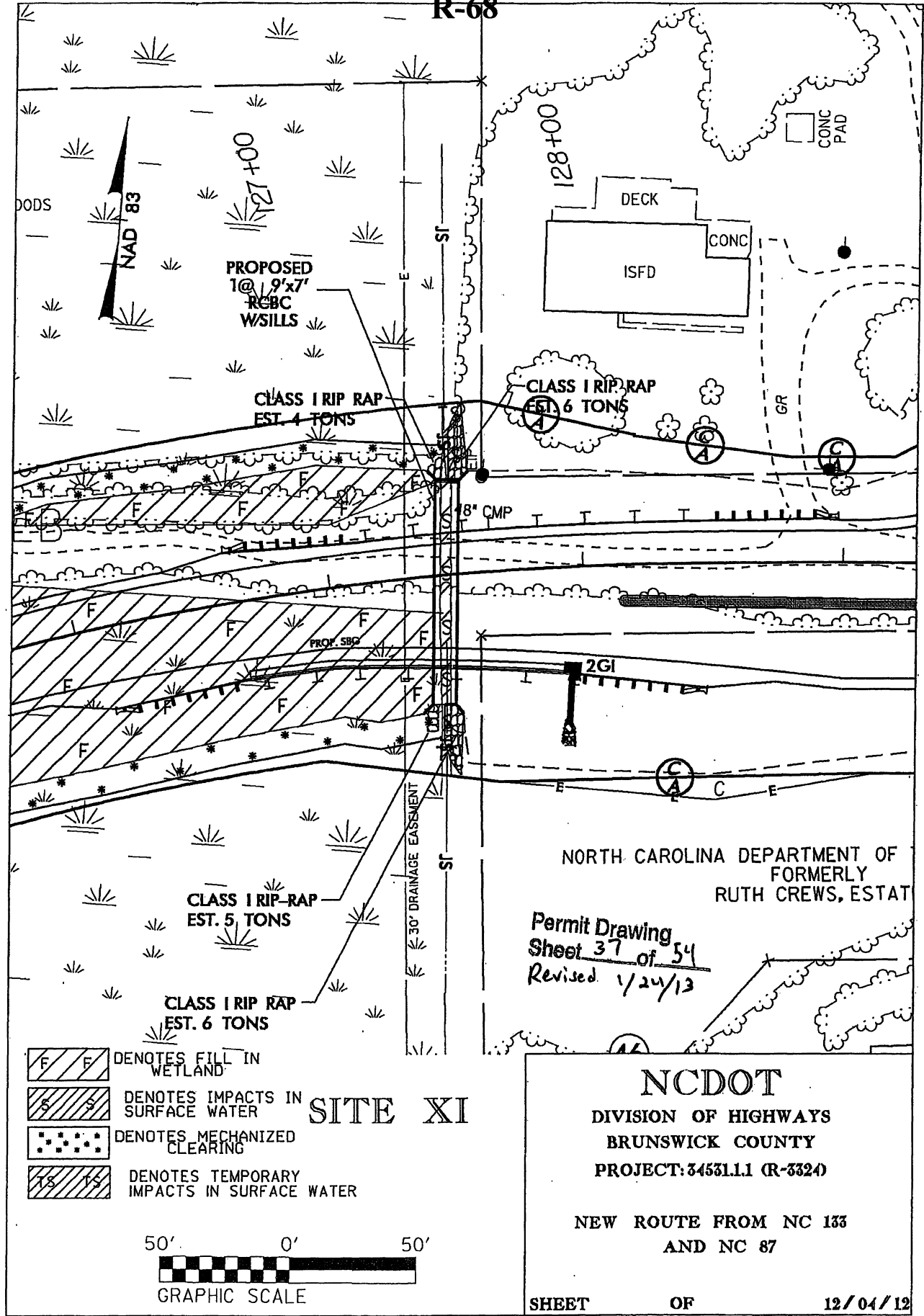
- 1) BED MATERIAL BETWEEN SILLS IN THE CULVERT SHALL PROVIDE A CONTINUOUS LOW FLOW CHANNEL. THE MATERIAL SHALL BE NATIVE SOILS. BED MATERIALS SUBJECT TO APPROVAL BY THE ENGINEER.
- 2) SILLS ARE TO BE 1.0 FT. WIDE, CAST SEPARATELY AND ATTACHED BY DOWELS.
- 3) TOP OF LOW FLOW SILLS SHOULD MATCH STREAM BED ELEVATION IN LOW FLOW CHANNEL OF STREAM. (THALWEG)
- 4) DO NOT SET ELEVATION OF HIGH SILL ABOVE BANK FULL.
- 5) NUMBER OF SILLS DETERMINED BY THE ENGINEER.



Permit Drawing
 Sheet 36 of 54
 Revised 1/24/13

PLAN VIEW
 SITE XI
 -L- STA. 127 + 46
 1 @ 9' X 7' RCBC

NCDOT
 DIVISION OF HIGHWAYS
 BRUNSWICK COUNTY
 PROJECT: 34531.1.1 (R-3324)
 NEW ROUTE FROM NC 133
 AND NC 87
 SHEET OF 10/30/12



PROPOSED
10' x 7'
RCBC
WSILLS

CLASS I RIP RAP
EST. 4 TONS

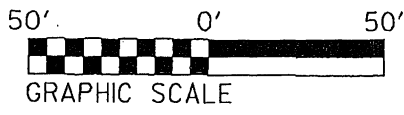
CLASS I RIP RAP
EST. 6 TONS

CLASS I RIP RAP
EST. 5 TONS

CLASS I RIP RAP
EST. 6 TONS

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

SITE XI



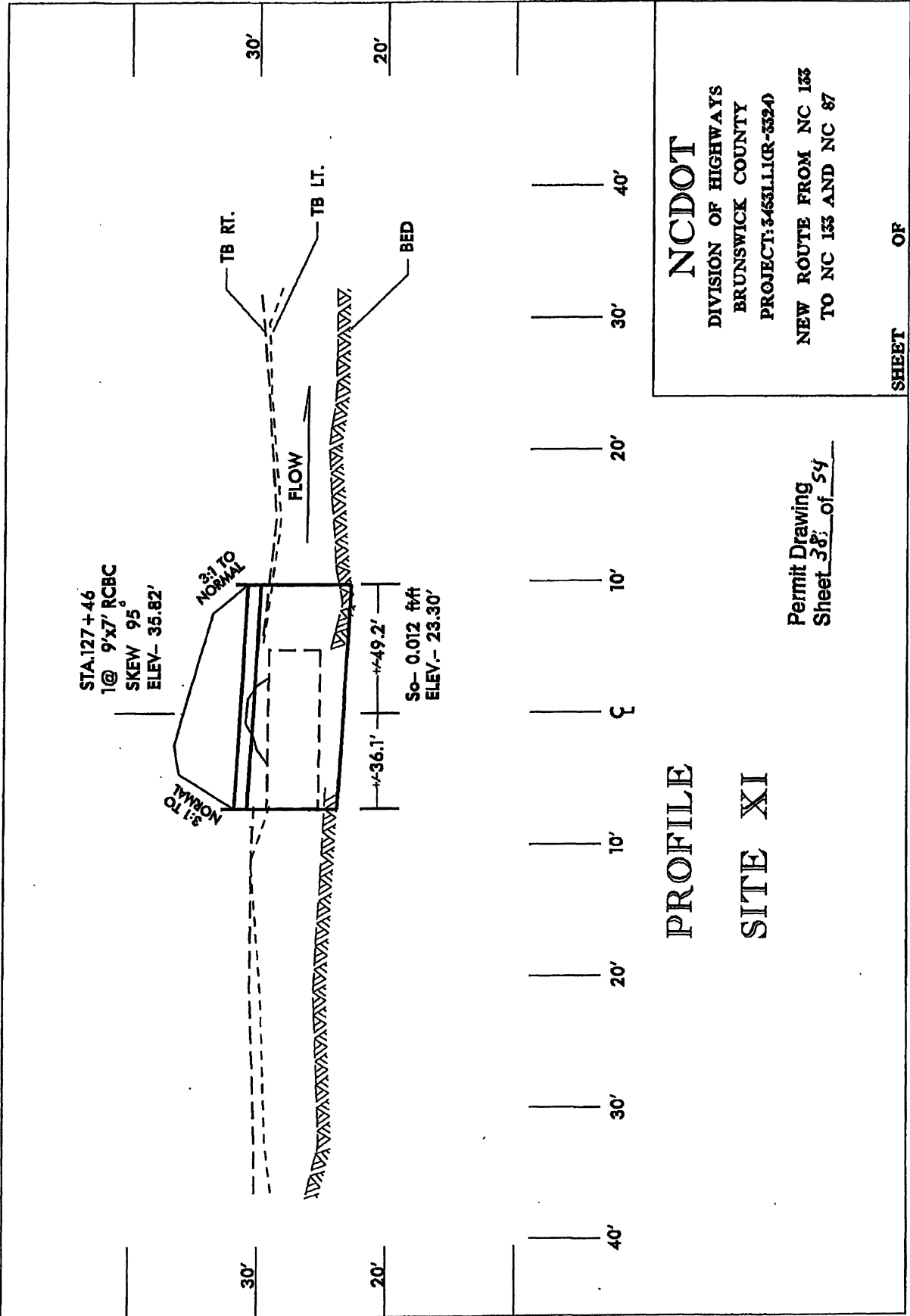
NORTH CAROLINA DEPARTMENT OF
FORMERLY
RUTH CREWS, ESTAT

Permit Drawing
Sheet 37 of 54
Revised 1/24/13

NCDOT
DIVISION OF HIGHWAYS
BRUNSWICK COUNTY
PROJECT: 34531.1.1 (R-3324)

NEW ROUTE FROM NC 133
AND NC 87

SHEET OF 12/04/12



NCDOT

DIVISION OF HIGHWAYS
BRUNSWICK COUNTY
PROJECT: 3-4531.1(CR-5324)

NEW ROUTE FROM NC 133
TO NC 133 AND NC 87

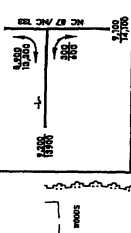
Permit Drawing
Sheet 38 of 54

SHEET OF

PROJECT REFERENCE NO. R-3324
 SHEET NO. 73
 COUNTY OF WINSTON-SALEM
 PRELIMINARY PLANS
 TO BE USED FOR THE PROJECT

PRELIMINARY PLANS
 TO BE USED FOR THE PROJECT

SEE SHEET No. 27 FOR 4" PROFILE
 SEE SHEET No. 30 & 31 FOR 12" PROFILE

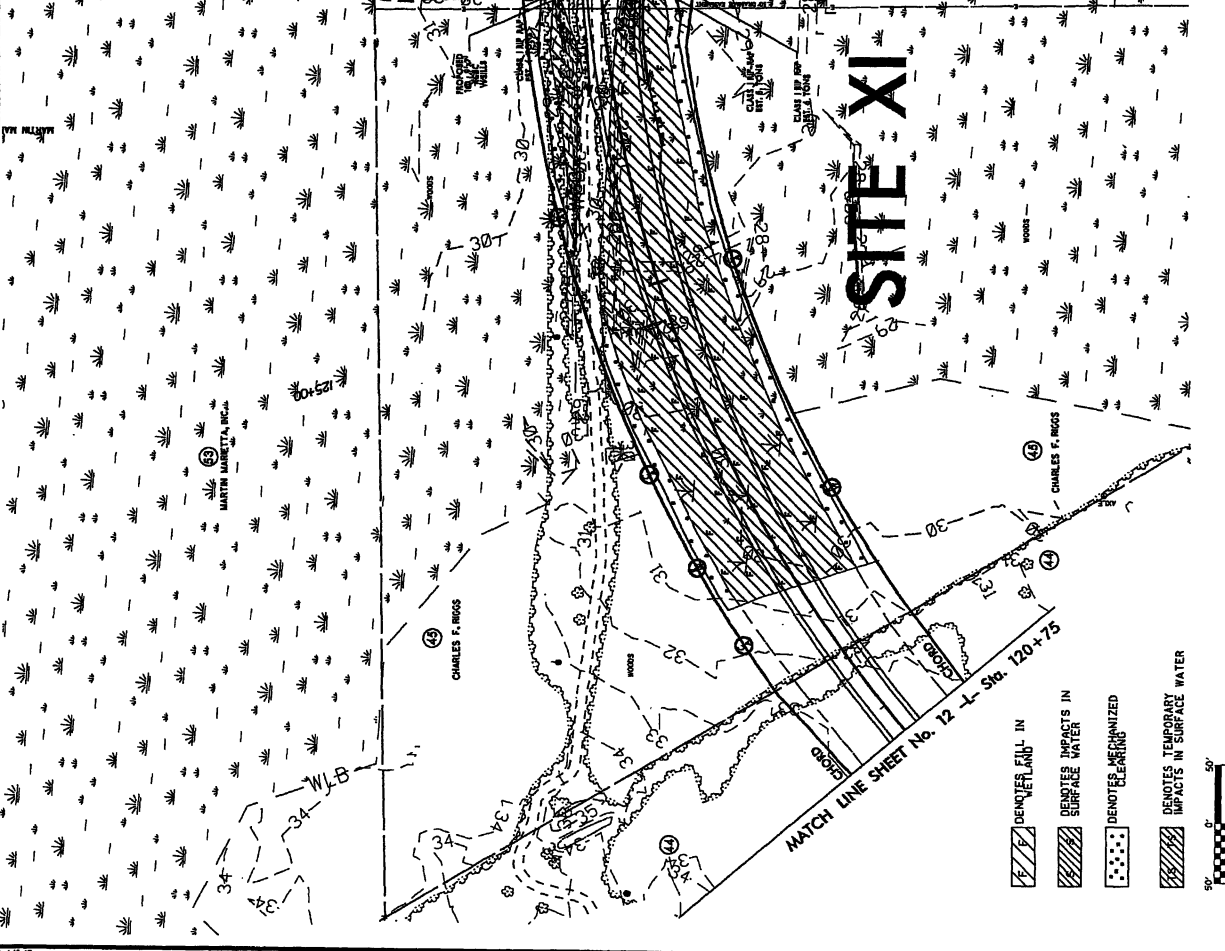


25000
 Permit Drawing
 Sheet 29 of 31
 revised 1/24/13

R-70

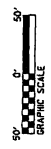
MATCH LINE SHEET No. 15 -Y2- Sta. 28+00

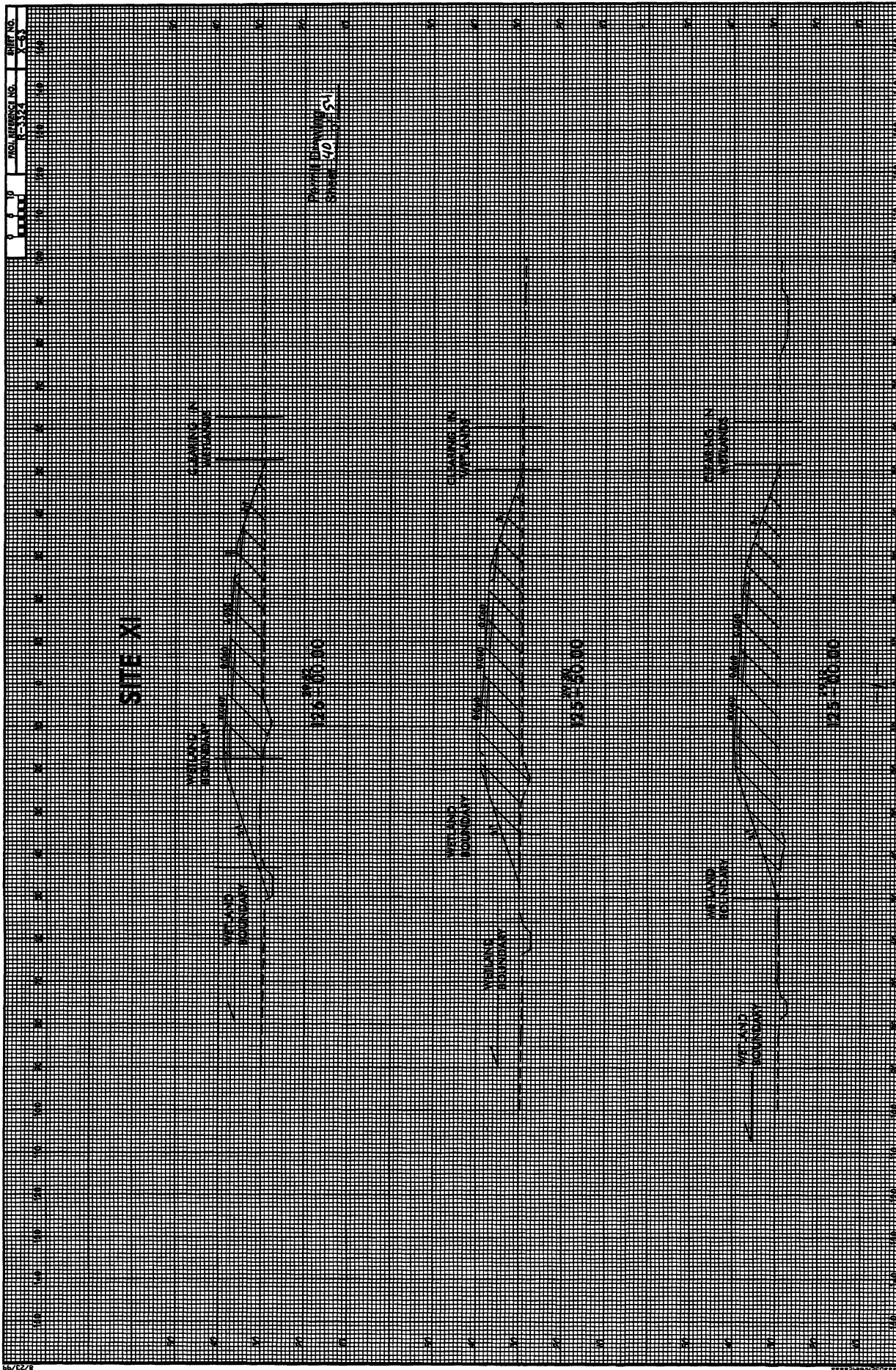
MATCH LINE SHEET No. 14 -Y2- Sta. 18+75



SITE XI

- DENOTES EAVES IN SERVICE WATER
- DENOTES UNSEWERED
- DENOTES TEMPORARY IMPACTS IN SURFACE WATER





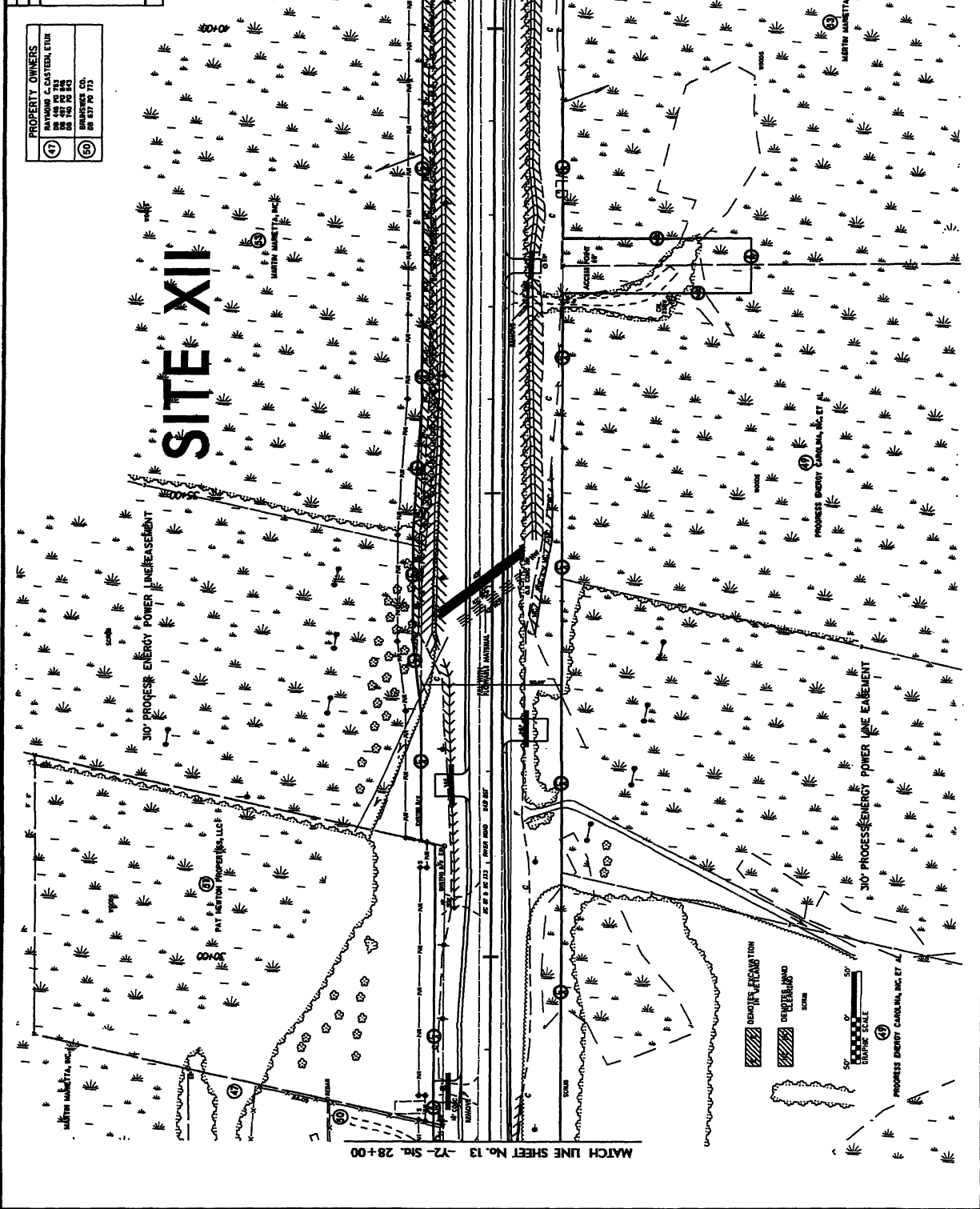
| | |
|-----------------------|---------------|
| PROJECT REFERENCE NO. | 7-3324 |
| SHEET NO. | 15 |
| DATE | NOVEMBER 1988 |
| BY | W. J. GIBSON |
| CHECKED BY | W. J. GIBSON |
| DESIGNED BY | W. J. GIBSON |
| APPROVED BY | W. J. GIBSON |

| | |
|-----------------|----------------------------|
| PROPERTY OWNERS | DAVIDSON, C. CASTLE, ET AL |
| (17) | DAVIDSON, C. CASTLE, ET AL |
| (18) | DAVIDSON, C. CASTLE, ET AL |
| (19) | DAVIDSON, C. CASTLE, ET AL |
| (20) | DAVIDSON, C. CASTLE, ET AL |

PRELIMINARY PLANS
DO NOT CONSTITUTE A CONTRACT

SEE SHEET No. 31 FOR -Y2- PROFILE

Permit Drawing
Sheet 71 of 84



MATCH LINE SHEET No. 13 -Y2- Sta. 28+00

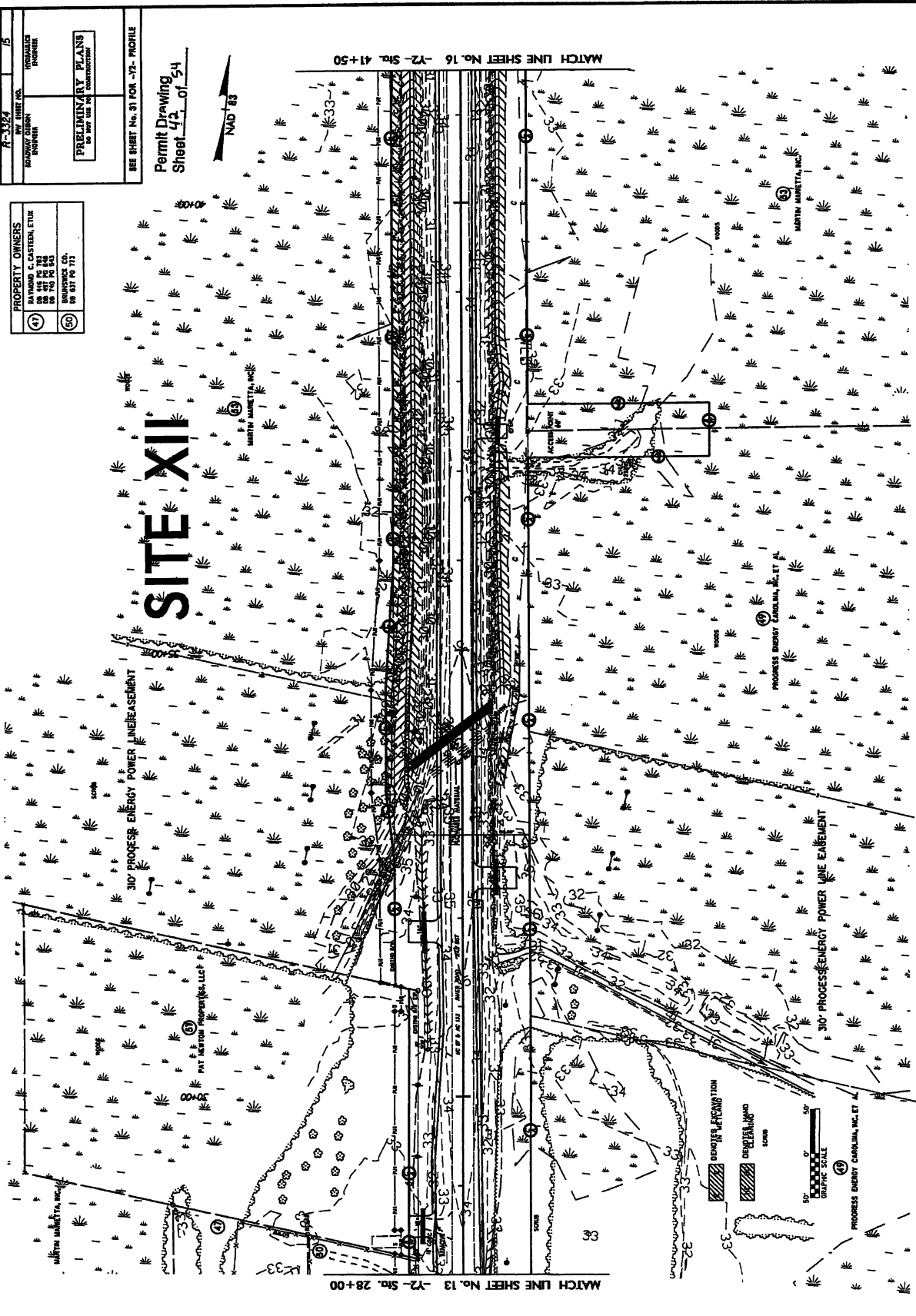
MATCH LINE SHEET No. 16 -Y2- Sta. 41+50

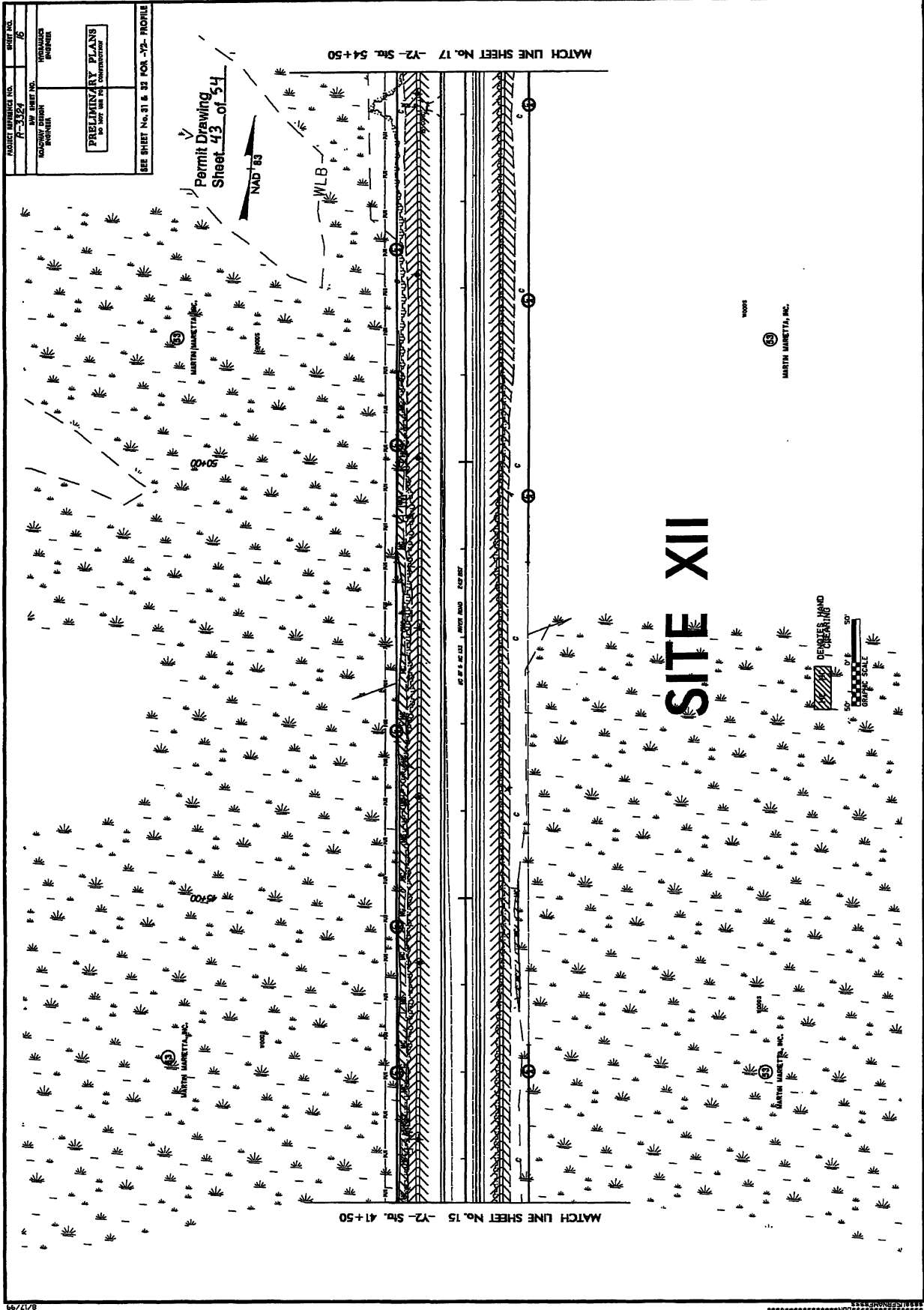
8/17/94

| | | | |
|--|----------|-------------|---------|
| PROJECT NUMBER NO. | 7-3324 | SHEET NO. | 75 |
| DATE | NOV 1983 | DESIGNED BY | W. HALL |
| CHECKED BY | W. HALL | DRAWN BY | W. HALL |
| PRELIMINARY PLANS FOR THE PROPOSED CONSTRUCTION | | | |
| SEE SHEET No. 31 FOR -12- PROFILE | | | |

| | |
|-----------------|--|
| PROPERTY OWNERS | |
| (47) | RAYMOND C. GASTON, ETUX 1110 N. W. 11th St. BIRMINGHAM, AL 35203 PH 857 79 73 |
| (50) | MARTIN MARRETTA, INC. 1110 N. W. 11th St. BIRMINGHAM, AL 35203 PH 857 79 73 |

SITE XII





| | |
|--------------------|------------------------------------|
| PROJECT NUMBER NO. | P-3184 |
| DATE | 1/6 |
| ENGINEER | MARTIN MAURETTA, INC. |
| CHECKED BY | MARTIN MAURETTA, INC. |
| DATE | 1/6 |
| TITLE | PRELIMINARY PLANS FOR CONSTRUCTION |

SEE SHEET No. 31 & 32 FOR 1/2" PROFILE

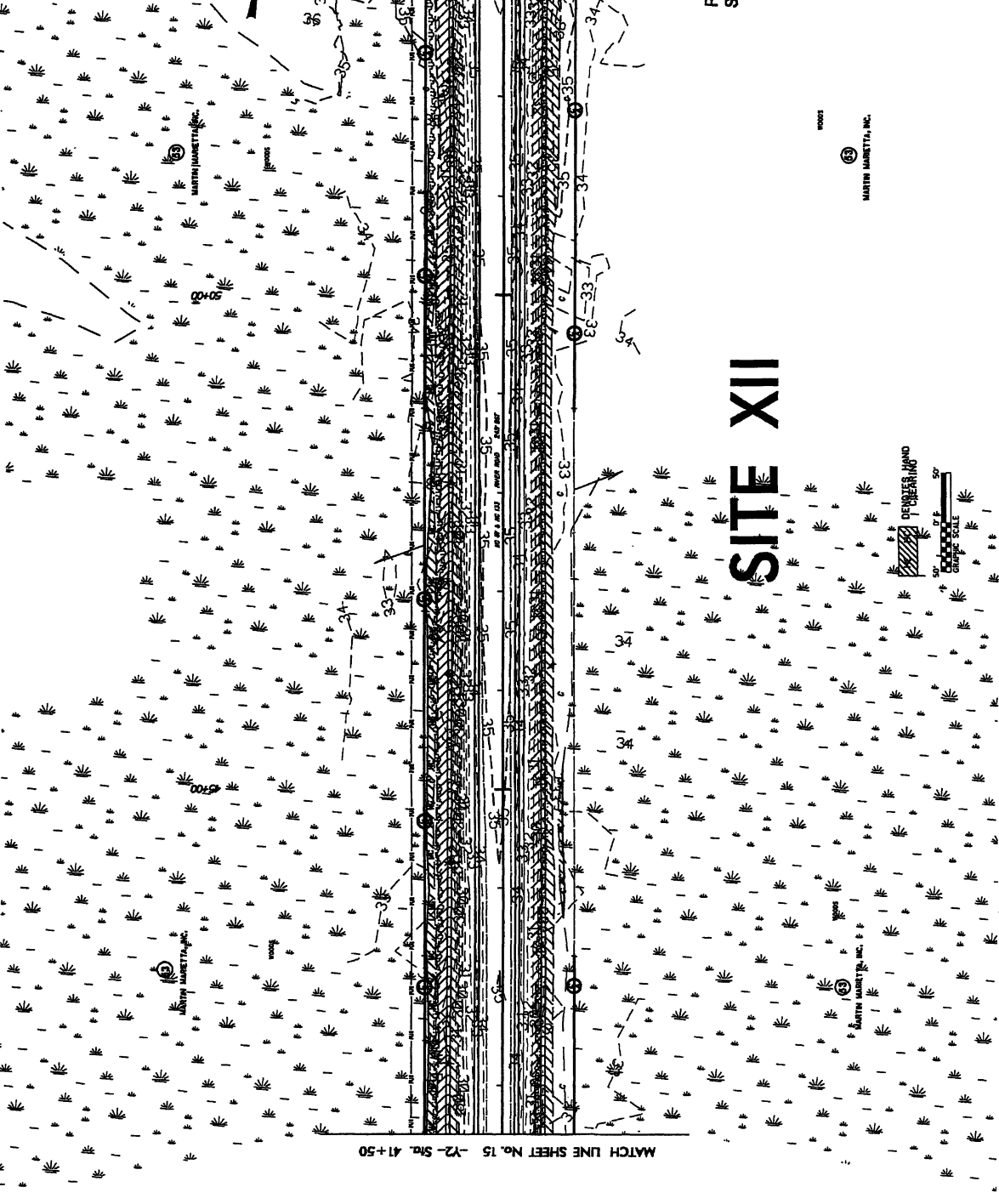
8/17/99

515154.dwg

| | |
|---|-----------|
| PROJECT NUMBER NO. | SHEET NO. |
| F-3324 | 16 |
| INDUSTRY DESIGN | HYDRAULIC |
| WORKS | WORKS |
| PRELIMINARY PLANS FOR THE USE OF THE CONTRACTOR | |
| SEE SHEET No. 31 & 32 FOR -22- FACILITY | |

MATCH LINE SHEET No. 17 -72- Sht. 54+50

Permit Drawing
Sheet 44 of 54



MATCH LINE SHEET No. 15 -72- Sht. 41+50

SITE XII

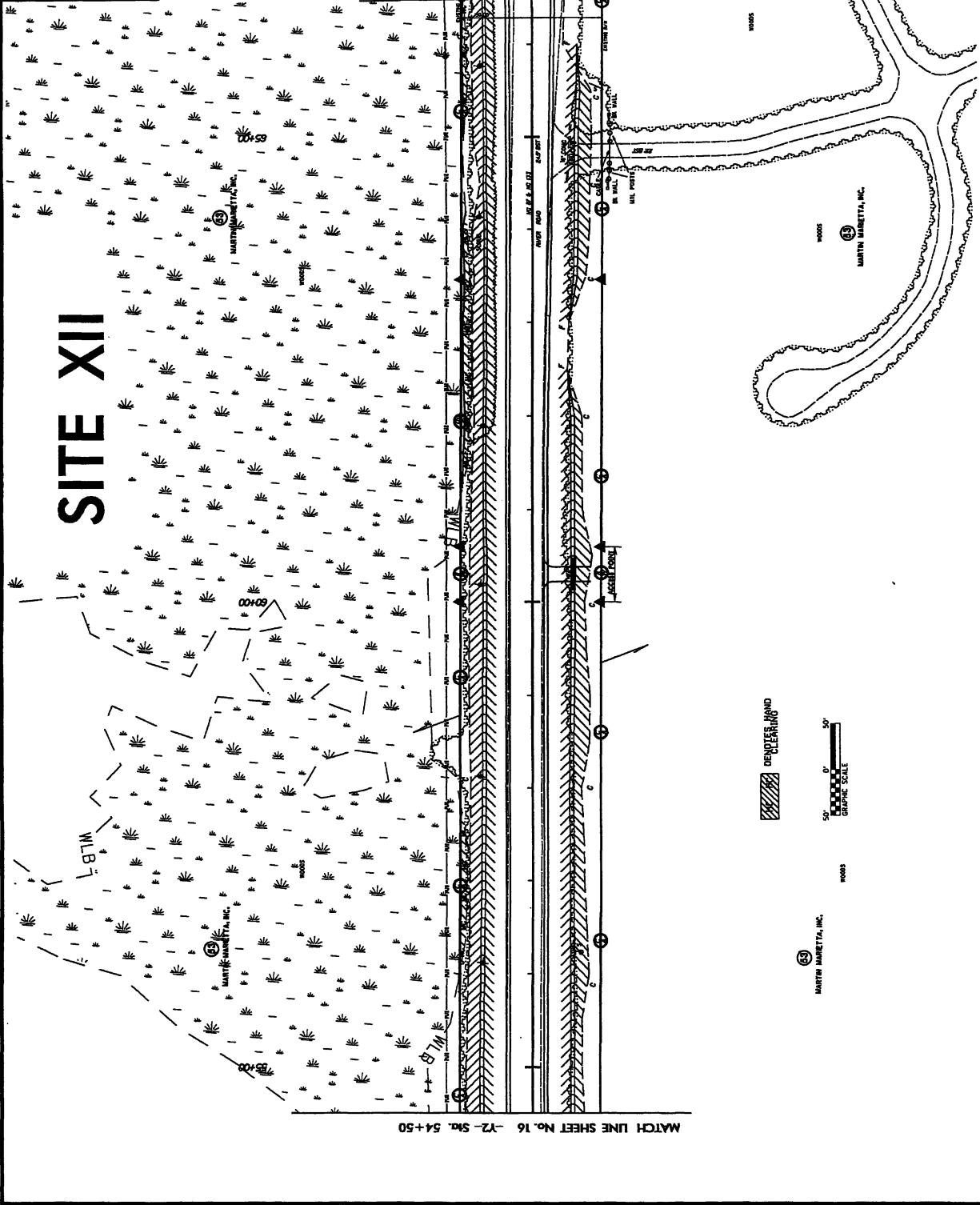
PROJ.
MARTH MARRETTA, INC.



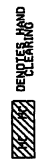
| | |
|--|-----------------------|
| PROJECT REFERENCE NO. A-324 | SHEET NO. 17 |
| DATE SHEET NO. 10/20/63 | DESIGNED BY MARTIN |
| PRELIMINARY PLANS FOR THE USE OF THE CONTRACTOR | |
| SEE SHEET No. 52 FOR -72- PROFILE | |



Permit Drawing
Sheet 45 of 54

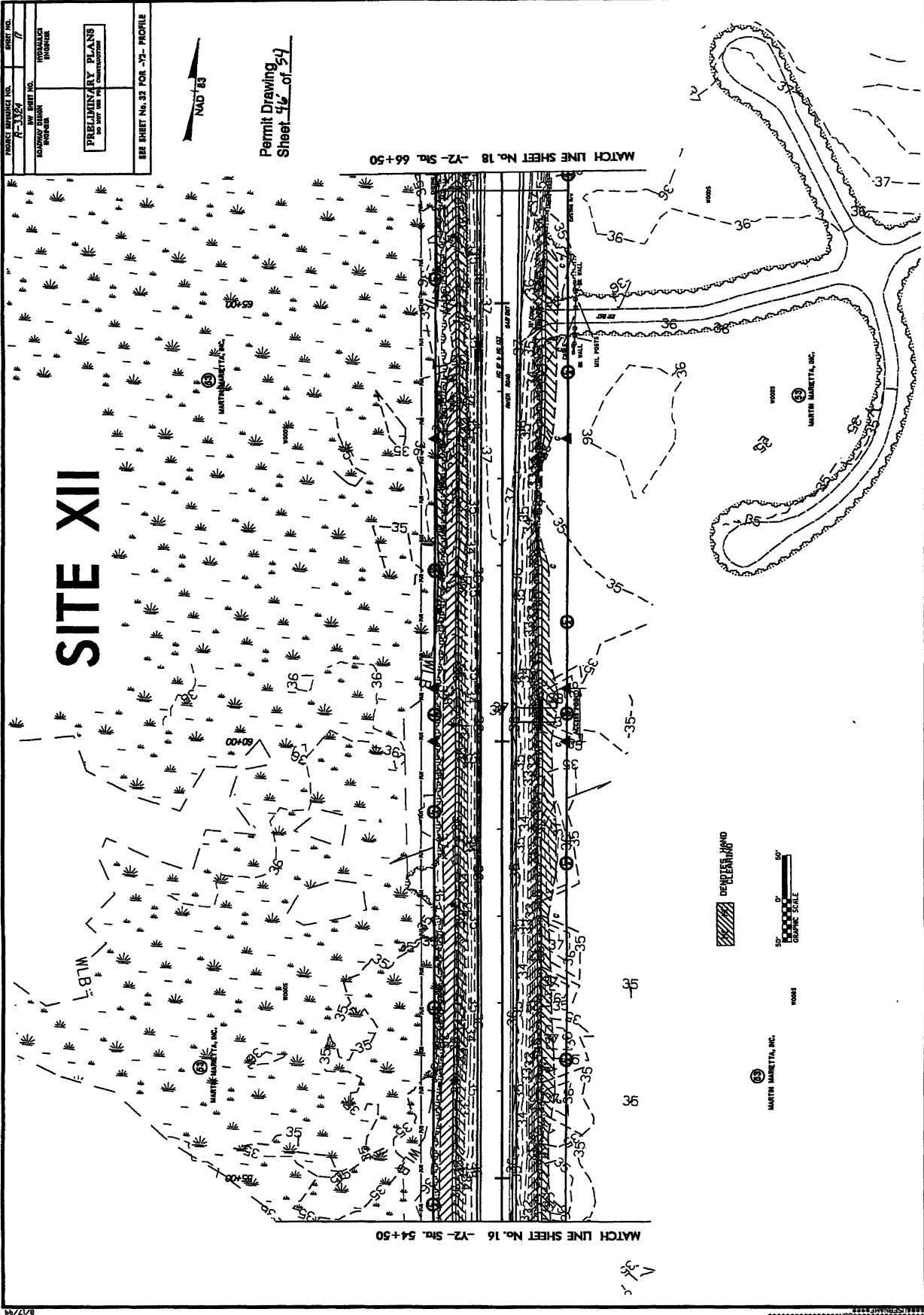


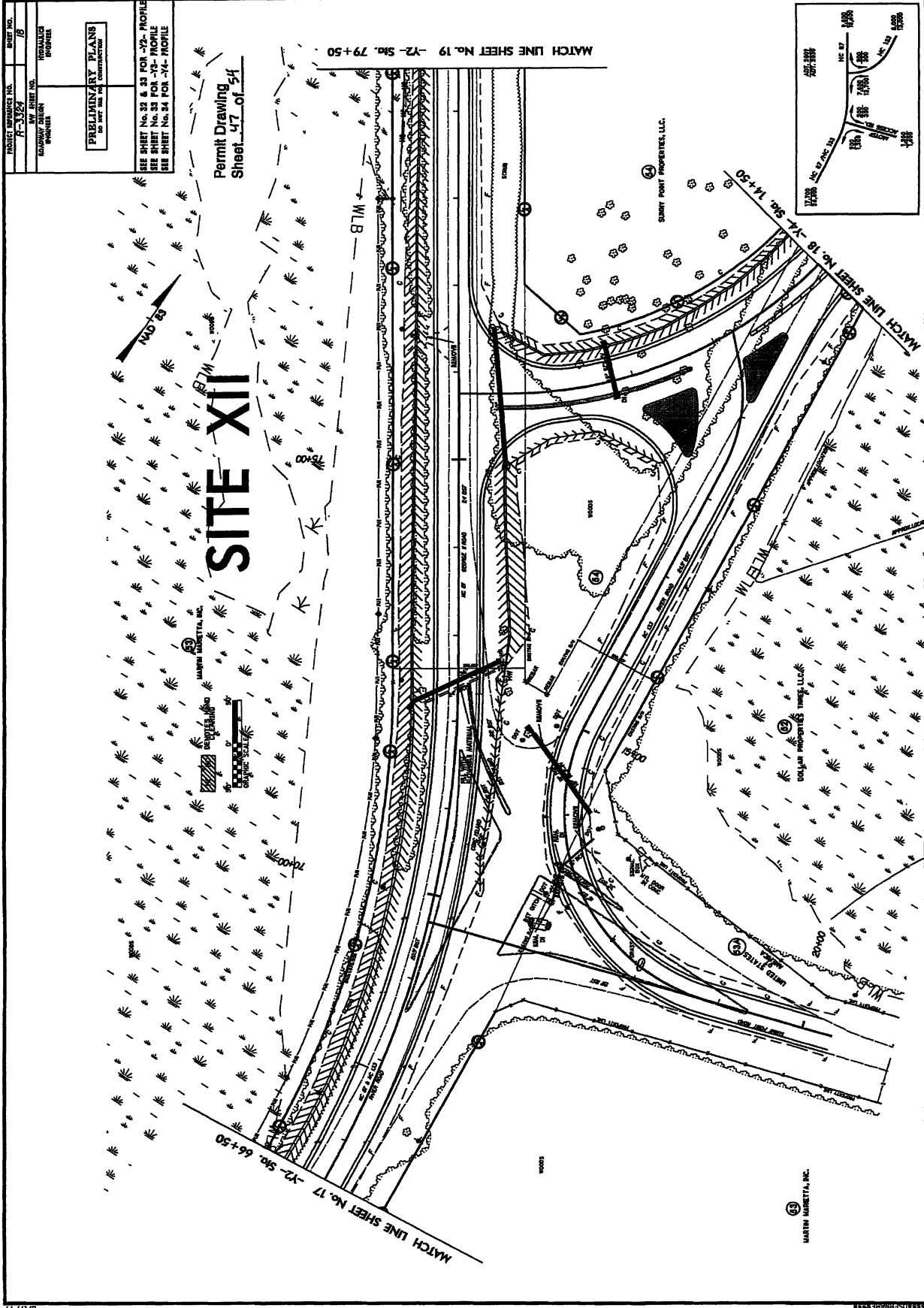
SITE XII



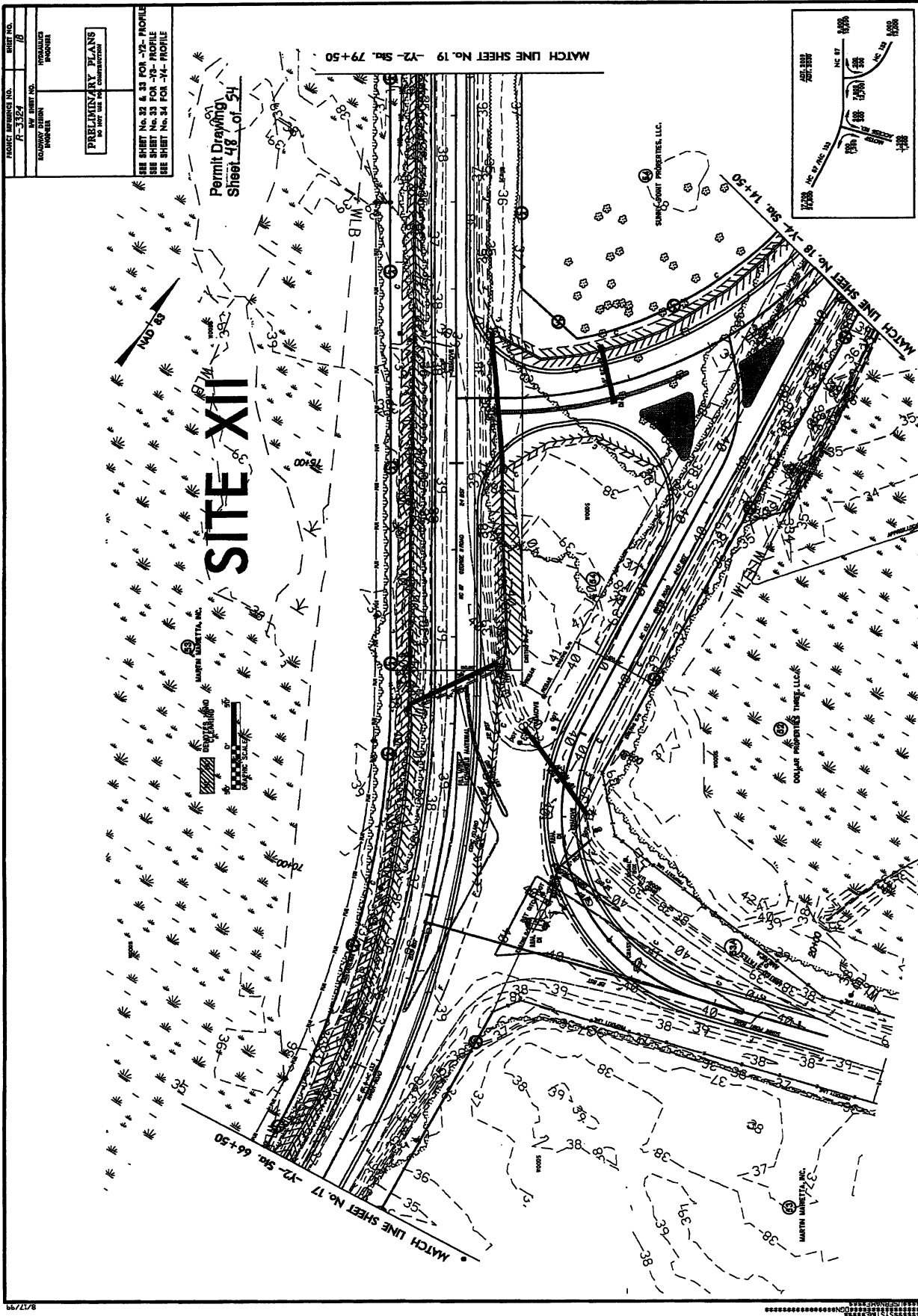
MARTIN MARQUETTA, INC.

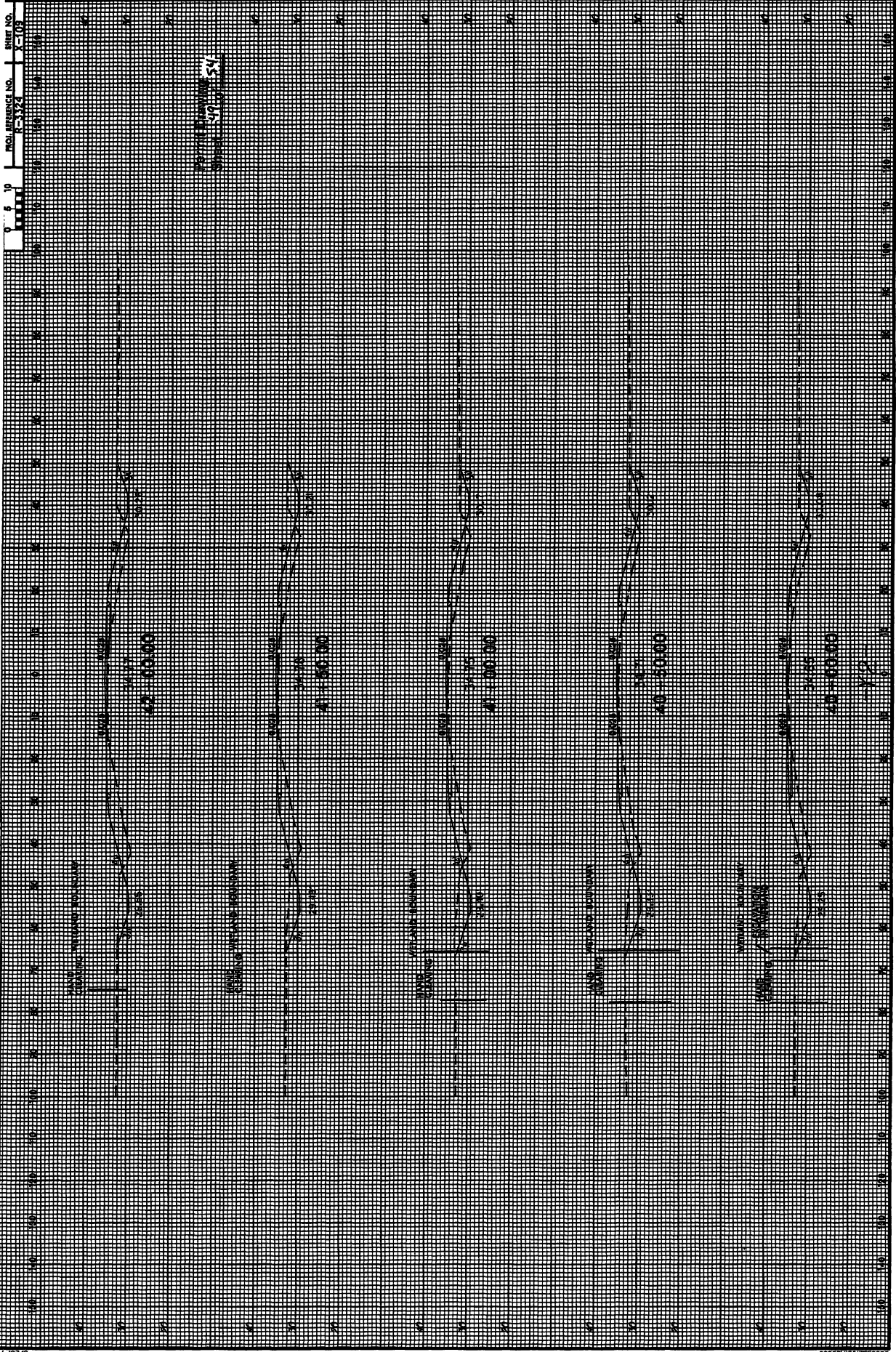
WOODS





0/17/19

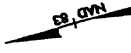
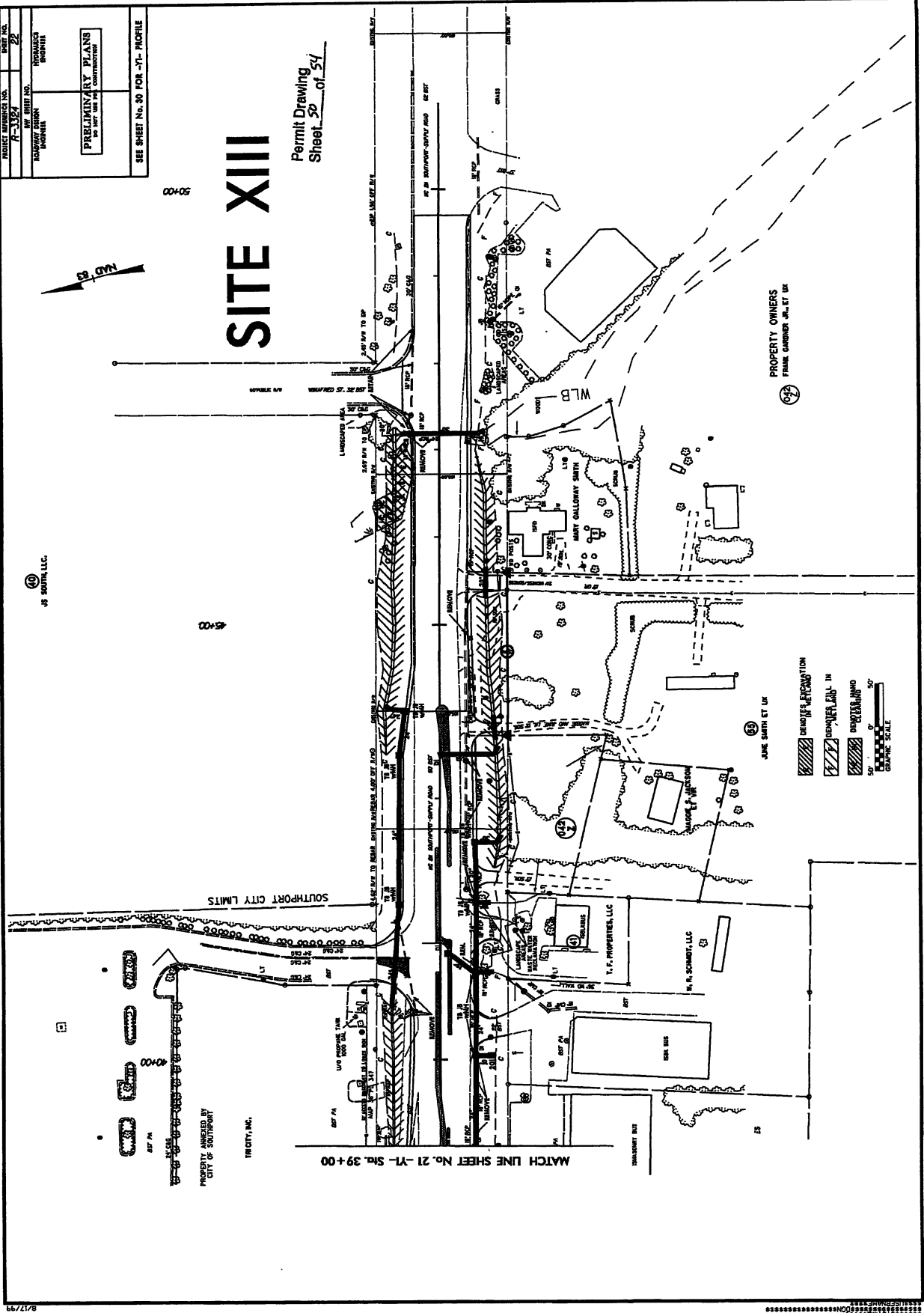




| | |
|--|---------------|
| PROJECT REFERENCE NO. | PERMIT NO. |
| R-3324 | 22 |
| PROJECT LOCATION | PROJECT OWNER |
| HOUSTON | HOUSTON |
| PRELIMINARY PLANS FOR PERMIT AND CONSTRUCTION | |
| SEE SHEET NO. 50 FOR -71- PROFILE | |

SITE XIII

Permit Drawing
Sheet 50 of 54



14 SOUTH, LLC

00+50

SOUTHWEST CITY LIMITS

PROPERTY OWNERS BY
CITY OF SOUTHWEST

THE CITY, INC.

MATCH LINE SHEET No. 21 -71- Sht. 39 + 00

PROPERTY OWNERS
FRANK CARRON JR. ET UX

JANE SMITH ET UX

T.F. PROPERTIES, LLC

W. R. SCHMIDT, LLC

LEGEND

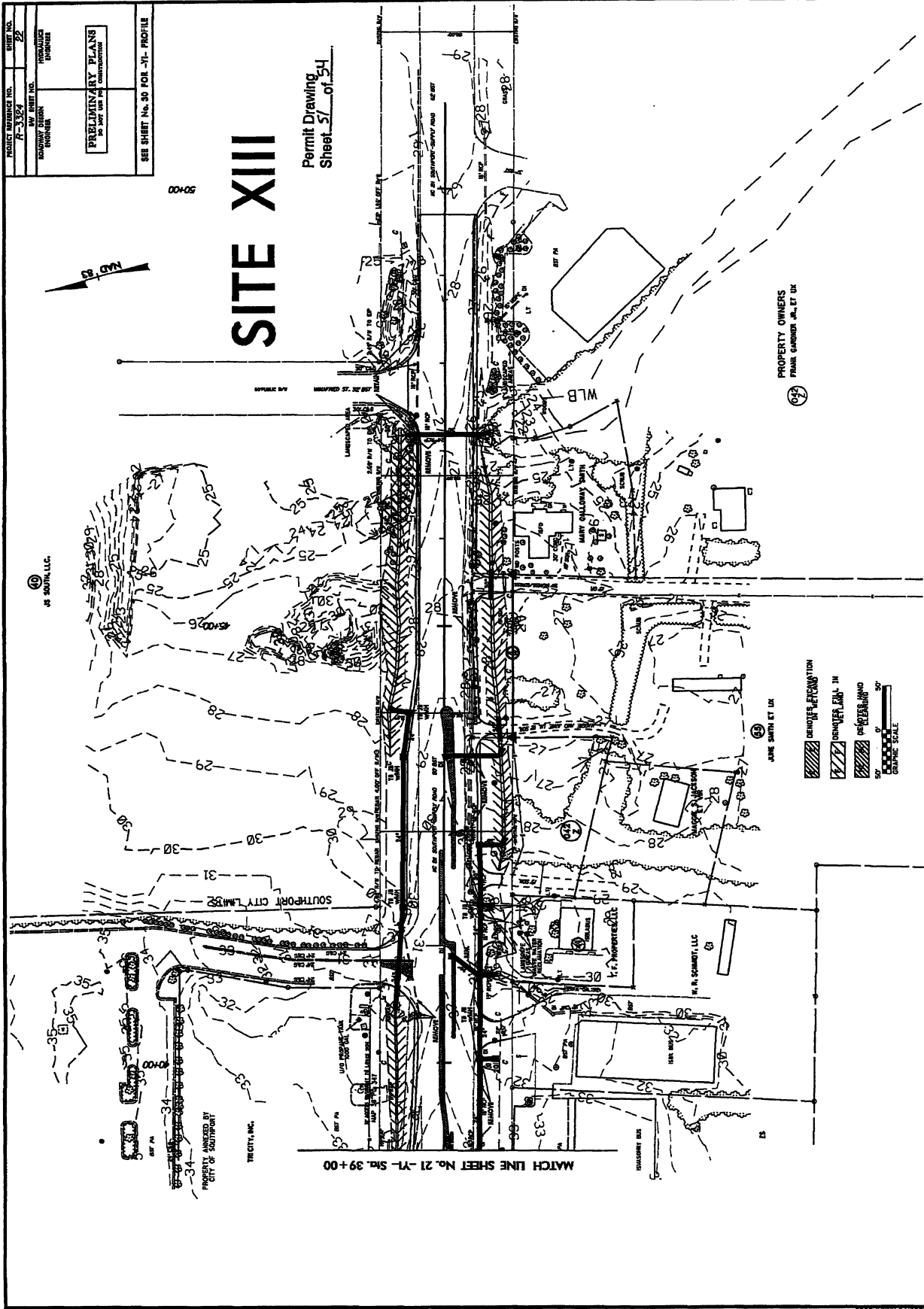
REMOVAL OF EXISTING

CONCRETE

ASPHALT

GRAVEL

0 50 100
GRAPHIC SCALE



| | |
|---|------------------|
| PROJECT REFERENCE NO. A-3324 | SHEET NO. 22 |
| PROPERTY OWNER SOUTH CITY LANE | DATE 08-14-05 |
| PRELIMINARY PLANS NOT FOR CONSTRUCTION | |
| SEE SHEET No. 30 FOR -71- PROFILE | |

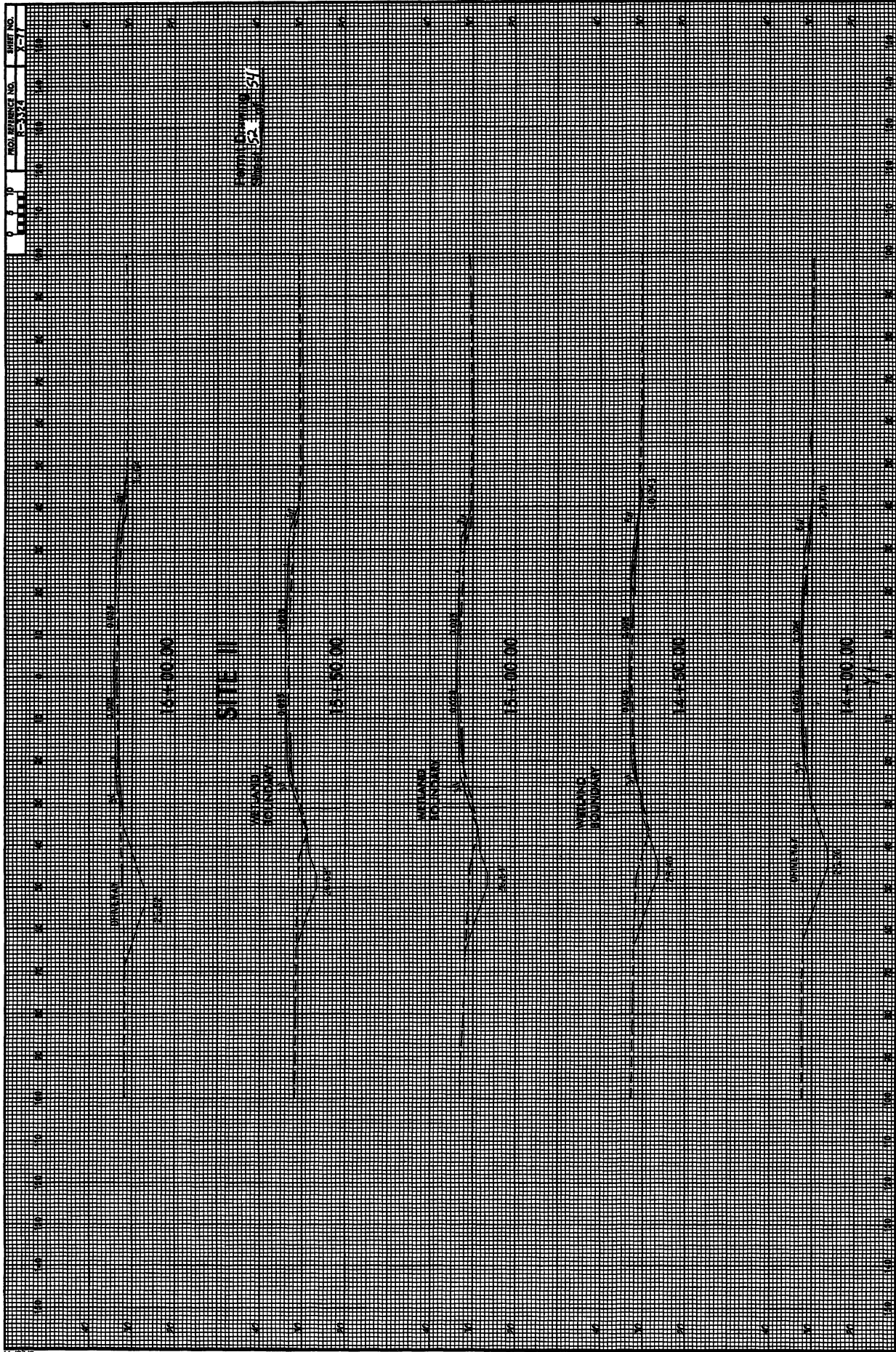
SITE XIII

Permit Drawing
Sheet 57 of 54

MATCH LINE SHEET No. 21 - 71 - Sht. 39 + 00

PROPERTY OWNERS
FRANK GARDNER, JR., ET UX

- DEMOLITION & EXEMPTION
 - UNIMPROVED LAND
 - IMPROVED LAND
- GRAPHIC SCALE
1" = 50'



PROPERTY OWNERS
NAMES AND ADDRESSES

| PARCEL NO. | NAMES | ADDRESSES |
|------------|---|--|
| 4 | GREGORY K. HEDRICK | 504 INDIAN WELLS CIRCLE LEXINGTON, N.C. 27295 |
| 5 | BUFFLE HEAD PROPERTIES, LLC | P.O. BOX 3069 BALD HEAD ISLAND, N.C. 28461 |
| 6 | SOUTHEAST CINEMA ENTERTAINMENT, INC | 4525 PARK ROAD #A-105 CHARLOTTE, N.C. 28209 |
| 7 | SOUTHPORT-OAK ISLAND CHAMBER OF COMMERCE | HWY 133 LONG BEACH RD. SOUTHPORT, N.C. 28461 |
| 43 | TRI CITY, INC. | TRI CITY SHOPPING CENTER ROCKINGHAM, N.C. 28379 |
| 44 | ALLEN J. EARP | P.O. BOX 3649 WILMINGTON, N.C. 28406 |
| 45 | CHARLES F. RIGGS | 202 WARLICK ST. JACKSONVILLE, N.C. 28540 |
| 49 | PROGRESS ENERGY CAROLINA, INC. | P.O. BOX 14042 ST. PETERSBURG, FL. 33733 |
| 53 | MARTIN MARIETTA, INC | 2700 WYCLIFF RD. SUITE 104 RALEIGH, N.C. 27607 |

Permit Drawing
Sheet 53 of 54

NCDOT

DIVISION OF HIGHWAYS
BRUNSWICK COUNTY
PROJECT: 34531.1.1 (R-3324)

NEW ROUTE FROM NC 133
TO NC 133 AND NC 87

SHEET

OF

| 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 (ft) | Existing Channel Impacts Temp. (ft) | Natural Stream Design (ft) | | | | | | | | | | | | | |
| I | 22+00 -L- | BRG 3@45' | | | | | | | | | | | | | | | | | | | | | | | |
| II | 12+30-25+00-Y1- | N/A | 0.10 | | 0.03 | | | | | | | | | | | | | | | | | | | | |
| IV | 51+70-60+00-L- | 2@60' RCP | 0.15 | | | | | | | | | | | | | | | | | | | | | | |
| V | 61+00-73+40-L- | N/A | 1.98 | | 0.05 | | | 0.06 | | | | | | | | | | | | | | | | | |
| VI | 83+50-91+70-L- | BRG 3@55' | 1.08 | 0.39 | 0.18 | 0.21 | | 0.35 | | | | | | | | | | | | | | | | | |
| VII | 98+00 -L- | 48" RCP | 0.06 | <0.01 | | | | 0.03 | | | | | | | | | | | | | | | | | |
| VIII | 104+00-107+70-L- | N/A | 0.56 | | | | | 0.12 | | | | | | | | | | | | | | | | | |
| IX | 112+80 -L- | 2@7'x8' RCBC | 0.49 | | | | | 0.14 | | | | | | | | | | | | | | | | | |
| X | 113+60-118+80-L- | N/A | 1.05 | | | | | 0.43 | | | | | | | | | | | | | | | | | |
| XI | 123+50-127+60-L- | 1@9'x7' RCBC | 1.05 | | | | | 0.09 | | | | | | | | | | | | | | | | | |
| XII | 32+00-81+50-Y2- | N/A | <0.01 | | 0.04 | | | 0.01 | | | | | | | | | | | | | | | | | |
| XIII | 46+00-47+30-Y1- | N/A | <0.01 | | 0.04 | | | 0.01 | | | | | | | | | | | | | | | | | |
| TOTALS: | | | 5.47 | 0.39 | 0.39 | 0.43 | 1.14 | 0.21 | 0.05 | 1368 | 334 | | | | | | | | | | | | | | |

Note: 0.48 acres of Temporary Fill in Wetlands in the Hand Clearing areas for erosion control measures.

Potential ditch effect:

- East side: Station 35+00 north to Station 48+00, 25.77 feet from ditch, equaling 0.81 acre.
- West side: Station 35+00 north to Station 52+00. Station 52+00 to Station 60+00, 16.52 feet from ditch, equaling 0.89 acre.
- * Bank Stabilization

Revised 1/24/13
 Permit Drawing
 Sheet 54 of 54

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

BRUNSWICK COUNTY
 WBS - 34531.i.1 (R-3324)



October 29, 2008

David L. Thomas, P.E., Division Maintenance Engineer
NCDOT
124 Division Drive
Wilmington, NC 28401

**Subject: Permit No. SW8 081020
NCDOT 34531.1.1, TIP Number R-3324
Other Stormwater Permit
Linear Public Road / Bridge Project
Brunswick County**

Dear Mr. Thomas:

The Wilmington Regional Office received a complete Stormwater Management Permit Application for NCDOT 34531.1.1 on October 27, 2008. Staff review of the plans and specifications has determined that the project, as proposed, will comply with the Stormwater Regulations set forth in Title 15A NCAC 2H .1000. We are forwarding Permit No. SW8 081020 dated October 29, 2008, for the construction of the subject project.

This permit shall be effective from the date of issuance until rescinded and shall be subject to the conditions and limitations as specified therein.

If any parts, requirements, or limitations contained in this permit are unacceptable, you have the right to request an adjudicatory hearing upon written request within thirty (30) days following receipt of this permit. This request must be in the form of a written petition, conforming to Chapter 150B of the North Carolina General Statutes, and filed with the Office of Administrative Hearings, P.O. Drawer 27447, Raleigh, NC 27611-7447. Unless such demands are made, this permit shall be final and binding.

If you have any questions please contact either M.J. Naugle or me at (910) 796-7215.

Sincerely,

Georgette Scott
for Edward Beck
Regional Supervisor
Surface Water Protection Section

ENB/mjn: S:\WQS\STORMWATER\PERMIT\081020 oct08
CC: ~~D.R. Henderson, P.E., State Hydraulics Project Engineer~~
D.R. Henderson, P.E., State Hydraulics Engineer
Brunswick, County Building Inspections
Brunswick County Engineering
Division of Coastal Management
Wilmington Regional Office
Central Files
M.J. Naugle

Michael F. Easley, Governor
William G. Ross Jr., Secretary
North Carolina Department of Environment and Natural Resources

Coleen H. Sullins Director
Division of Water Quality
RECEIVED

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Contract Standards and Development

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**DIVISION OF HIGHWAYS
HYDRAULICS**

One North Carolina
Naturally

STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF WATER QUALITY
STATE STORMWATER MANAGEMENT PERMIT
OTHER PERMIT

In accordance with the provisions of Article 21 of Chapter 143, General Statutes of North Carolina as amended, and other applicable Laws, Rules and Regulations

PERMISSION IS HEREBY GRANTED TO

NC Department of Transportation

NCDOT Project Number 34531.1.1, TIP Number 3324

New Route from NC 133 to NC 87, N. of Southport, Brunswick County

FOR THE

Construction of a public road / bridge in compliance with the provisions of 15A NCAC 2H .1000 (hereafter referred to as the "*stormwater rules*") and the approved stormwater management plans and specifications, and other supporting data as attached and on file with and approved by the Division of Water Quality and considered a part of this permit.

The Permit shall be effective from the date of issuance until rescinded and shall be subject to the following specific conditions and limitations:

I. DESIGN STANDARDS

1. The runoff from the impervious surfaces has been directed away from surface waters as much as possible.
2. The amount of built-upon area has been minimized as much as possible.
3. Best Management Practices are employed which minimize water quality impacts.
4. Approved plans and specifications for projects covered by this permit are incorporated by reference and are enforceable parts of the permit.
5. Vegetated roadside ditches are 3:1 slopes or flatter.

II. SCHEDULE OF COMPLIANCE

1. The permittee shall at all time provide adequate erosion control measures in conformance with the approved Erosion Control Plan.
2. The Director may notify the permittee when the permitted site does not meet one or more of the minimum requirements of the permit. Within the time frame specified in the notice, the permittee shall submit a written time schedule to the Director for modifying the site to meet minimum requirements. The permittee shall provide copies of revised plans and certification in writing to the Director that the changes have been made.
3. The permittee shall submit all information requested by the Director or his representative within the time frame specified in the written information request.

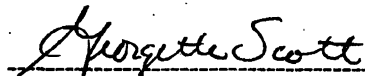
4. The permittee shall submit to the Director and shall have received approval for revised plans, specifications, and calculations prior to construction for the following items:
 - a. Major revisions to the approved plans, such as road realignment, deletion of any proposed BMP, changes to the drainage area or scope of the project, etc.
 - b. Project name change.
 - c. Redesign of, addition to, or deletion of the approved amount of built-upon area, regardless of size.
 - d. Alteration of the proposed drainage.
5. The Director may determine that other revisions to the project should require a modification to the permit.

III. GENERAL CONDITIONS

1. Failure to abide by the conditions and limitations contained in this permit may subject the Permittee to an enforcement action by the Division of Water Quality, in accordance with North Carolina General Statutes 143-215.6A to 143-215.6C.
2. The permit issued shall continue in force and effect until revoked or terminated.
3. The permit may be modified, revoked and reissued or terminated for cause. The filing of a request for a permit modification, revocation and re-issuance, or termination does not stay any permit condition.
4. The issuance of this permit does not prohibit the Director from reopening and modifying the permit, revoking and reissuing the permit, or terminating the permit as allowed by the laws, rules, and regulations contained in Title 15A of the North Carolina Administrative Code, Subchapter 2H.1000; and North Carolina General Statute 143-215.1 et. al.
5. The permit is not transferable to any person except after notice to and approval by the Director. The Director may require modification or revocation and re-issuance of the permit to change the name and incorporate such other requirements as may be necessary. A formal permit request must be submitted to the Division of Water Quality accompanied by the appropriate fee, documentation from both parties involved, and other supporting materials as may be appropriate. The approval of this request will be considered on its merits, and may or may not be approved. The permittee is responsible for compliance with the terms and conditions of this permit until such time as the Director approves the transfer.
6. The issuance of this permit does not preclude the Permittee from complying with any and all statutes, rules, regulations, or ordinances, which may be imposed by other government agencies (local, state and federal), which have jurisdiction.
7. The permittee shall notify the Division of any name, ownership or mailing address changes within 30 days.

Permit issued this, the twenty-ninth day of October 2008.

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION



For Coleen Sullins, Director
Division of Water Quality

By Authority of the Environmental Management Commission

DEPARTMENT OF THE ARMY PERMIT

Permittee: North Carolina Department of Transportation (NCDOT)

Permit No.: SAW-2001-00921

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: The proposed action involves the construction of a two-lane facility on new location from NC 211-133 (Southport Supply Road) to NC 87-133 (River Road), and construct the entrance road to Sunny Point Military Terminal in the city of Southport, Brunswick County.

Project Location: The proposed 2.1 mile highway improvement just outside Southport between NC 211-133 to NC 87-133 is located in southern Brunswick County. The project can be generally located at Latitude 33.9625 N and Longitude -78.0409 W. The project area crosses Dutchman and Jump and Run Creek to include their riparian wetlands and tributaries.

General Conditions:

1. The time limit for completing the work authorized ends on December 31, 2018. 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.**

4. **Reliance on Applicant's Data:** The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.


5. **Reevaluation of Permit Decision.** This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

- a. You fail to comply with the terms and conditions of this permit.
- b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).
- c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

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

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

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



 (PERMITEE) Dr. Gregory J. Thorpe, Ph.D., NCDOT

2.20.13

 (DATE)

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

 (DISTRICT ENGINEER) STEVEN A. BAKER
 Colonel, EN
 Commanding

 (DATE)

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

(TRANSFEEE)

(DATE)

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

SAW-2001-00921, SPECIAL CONDITIONS

In accordance with 33 U.S.C. 1341(d), all conditions of the North Carolina Division of Water Quality (NCDWQ) 401 Water Quality Certification #3949 and the North Carolina Division of Coastal Management Consistency Determination (CD13-002) is incorporated as part of the Department of the Army permit.

1. Plans

A. The permittee will ensure that the construction design plans for this project do not deviate from the permit plans (Permit Drawings sheets 54 of 54 and Utility Permit Drawings sheets 17 of 17, both received December 2012, and revised sheets 24A, 24B, 24C, 29, 35, 36, 37, 39, and 54 dated 1/24/2013) 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 COE, 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.

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.

2. Pre Construction Meeting

A. The Permittee shall schedule an onsite preconstruction meeting between its representatives, the contractor's representatives and the appropriate Corps of Engineers Project Manager prior to undertaking any work within jurisdictional waters and wetlands to ensure that there is a mutual understanding of all terms and conditions contained within the Department of the Army permit. The Permittee shall notify the Corps of Engineers Project Manager a minimum of thirty (30) days in advance of the scheduled meeting in order to provide that individual with ample opportunity to schedule and participate in the required meeting.

B. The permittee shall 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, Mr. Brad Shaver, Regulatory Field Office prior to any active construction in waters or wetlands.

3. 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. Any instability of the stream channel or banks (downcutting, headcutting, or bank erosion) caused by the installation of authorized work shall be corrected before project completion. Any remedial actions to correct stream channel or bank instability shall be coordinated through the appropriate USACE field office project manager prior to execution.

C. 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.

D. 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.

E. Rip rap is prohibited from being placed in the low flow channel of any culvert along this project.

4. 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.

F. All mechanized equipment will be regularly inspected and maintained to prevent contamination of waters and wetlands from fuels, lubricants, hydraulic fluids, or other toxic materials. In the event of a spill of petroleum products or any other hazardous waste, the permittee shall immediately report it to the N.C. Division of Water Quality at (919) 733-3300 or (800) 858-0368 and provisions of the North Carolina Oil Pollution and Hazardous Substances Control Act will be followed.

G. Cleared wetland areas shall be re-vegetated with a wetland seed mix or a mix of native woody species. Fescue grass or any invasive species such as Lespedeza, shall not be used within the wetland areas.

5. Temporary Fills

A. 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.

B. Due to the possibility that compaction, mechanized clearing and/or other site alterations resulting from the authorized temporary fill that might prevent the wetland area at Site # 6 from re-attaining pre-project wetland functions, the permittee shall monitor temporary

wetland impacts for three years after project completion. The permittee shall first schedule a meeting with USACE and NCDWQ to verify the extent and location of temporary impacts upon project completion. The permittee shall then provide an annual update for 3 years on this wetland area impacted by this project. This annual update shall consist of photographs and written report on the progress of this impacted area in re-attaining wetland jurisdictional status. Three years after project completion, the permittee shall schedule an agency field meeting with USACE and NCDWQ to determine if the wetland area impacted by the project has re-attained pre-project wetland functions. If at the end of 3 years the wetland area impacted by the project has not re-attained pre-project wetland functions, USACE and NCDWQ shall determine whether compensatory wetland mitigation shall be required.

6. 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 COE 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 COE 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.

B. Unless otherwise authorized by this permit, all fill material placed in waters or wetlands shall be generated from an upland source and will be clean and free of any pollutants except in trace quantities. Metal products, organic materials (including debris from land clearing activities), or unsightly debris will not be used. Soils used for fill shall not be contaminated with any toxic substance in concentrations governed by Section 307 of the Clean Water Act.

7. 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 COE.

D. 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:

- The total non-riparian impact amount for this project is 7.33 acres. This is broken down to 4.78 acres of permanent impact (fill, excavation, and or mechanized land clearing) for project construction, 0.85 acre permanent forest conversion, and 1.7 acres of drainage through the relocation of highways ditches. The permanent impact and drainage from ditch relocation will be mitigated through the purchase of credits from NCEEP at a 2:1 ratio since the work will not be on-site. The 0.85 acre impact associated with the utility work is being mitigated at a 0.25/1 ratio since it will not be a complete loss of resource just a conversion type. Applying these ratios the NCDOT will debit 13.1725 acres of non-riparian credits.

- The total amount of riparian impact for this project is 1.51 acres. This fill will be mitigated again through the purchase of credits from NCEEP at a 2:1 ratio again since mitigation will come from off-site. The Department will debit 3.02 acres of riparian credits.

- The amount of stream mitigation required for the project would be 992 linear feet and will come from NCEEP credits at a 2:1 ratio since off-site. The Department will debit 1,984 linear feet of stream credits.

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

8. 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 COE 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.

D. A representative of the Corps of Engineers will periodically and randomly inspect the work for compliance with these conditions. Deviations from these procedures may result in an administrative financial penalty and/or directive to cease work until the problem is resolved to the satisfaction of the Corps.

9. Jurisdiction Note

The final jurisdictional determination which is defined by the purchased right of way has been completed and attached to this permit decision. The appeals information has been returned to the Department as an attachment to the permit.