



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J. ERIC BOYETTE
SECRETARY

June 06, 2022

Addendum No. 1

RE: Contract # C204722

WBS # 47092.3.1

STATE FUNDED

Columbus County (R-5819, R-5820)

INTERSECTIONS OF US-74/76 AT SR-1740 (OLD LAKE RD) AND SR-1735
(CHANCEY TOWN RD)

June 21, 2022 Letting

To Whom It May Concern:

Reference is made to the plans and proposal form furnished to you on this project.

The following revisions have been made to the Right of Way plans.

Sheet No.	Revision
RW03E-1A	Revised to reflect changes shown below
RW03E-2A	Revised to reflect changes shown below
RW13A	Added parcel 5Z. Changed PUE to DUE on parcel 5Z. Removed TCE on parcel 11. Eliminated parcel 11
RW20A	Updated TCE and PDE on parcel 46. Added 15" drive pipe on parcel 46.

Please void the above listed Sheets in your plans and staple the revised Sheets thereto.

The following revisions have been made to the proposal.

Page No.	Revision
Proposal Cover	Note added that reads "Includes Addendum No. 1 Dated 06-06-2022"
P-1	Revised to reflect the Department's receipt of the permits
New Pages P-2 thru P-75	Permit added to the proposal

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
CONTRACT STANDARDS AND DEVELOPMENT
1591 MAIL SERVICE CENTER
RALEIGH, NC 27699-1591

Telephone: (919) 707-6900
Fax: (919) 250-4127
Customer Service: 1-877-368-4968

Location:
1020 BIRCH RIDGE DR.
RALEIGH, NC 27610

Website: www.ncdot.gov

Please void the above listed existing Pages in your proposal and staple the revised Pages thereto.

Staple New Pages P-2 thru P-75 after revised Page P-1 in your proposal.

The contract will be prepared accordingly.

Sincerely,

DocuSigned by:
Ronald E. Davenport, Jr.
F81B6038A47A442...

Ronald E. Davenport, Jr., PE
State Contract Officer

RED/jjr
Attachments

cc: Mr. Lamar Sylvester, PE Mr. Forrest Dungan, PE
Mr. H. L. "Drew" Cox, PE Ms. Jaci Kincaid
Mr. Boyd Tharrington, PE Mr. Kyle Kempf
Mr. Jon Weathersbee, PE Ms. Lori Strickland
Mr. Mike Gwyn Ms. Penny Higgins
Mr. Ken Kennedy, PE Project File (2)

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH, N.C.

PROPOSAL

INCLUDES ADDENDUM No.1 DATED 06-06-2022

DATE AND TIME OF BID OPENING: **Jun 21, 2022 AT 02:00 PM**

CONTRACT ID C204722
WBS 47092.3.1

FEDERAL-AID NO. STATE FUNDED
COUNTY COLUMBUS
T.I.P NO. R-5819, R-5820
MILES 2.202
ROUTE NO. US-74/76
LOCATION INTERSECTIONS OF US-74/76 AT SR-1740 (OLD LAKE RD) AND SR-1735
(CHANCEY TOWN RD).

TYPE OF WORK GRADING, DRAINAGE, PAVING, AND STRUCTURES.

NOTICE:

ALL BIDDERS SHALL COMPLY WITH ALL APPLICABLE LAWS REGULATING THE PRACTICE OF GENERAL CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA WHICH REQUIRES THE BIDDER TO BE LICENSED BY THE N.C. LICENSING BOARD FOR CONTRACTORS WHEN BIDDING ON ANY NON-FEDERAL AID PROJECT WHERE THE BID IS \$30,000 OR MORE, EXCEPT FOR CERTAIN SPECIALTY WORK AS DETERMINED BY THE LICENSING BOARD. BIDDERS SHALL ALSO COMPLY WITH ALL OTHER APPLICABLE LAWS REGULATING THE PRACTICES OF ELECTRICAL, PLUMBING, HEATING AND AIR CONDITIONING AND REFRIGERATION CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA. NOTWITHSTANDING THESE LIMITATIONS ON BIDDING, THE BIDDER WHO IS AWARDED ANY FEDERAL - AID FUNDED PROJECT SHALL COMPLY WITH CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA FOR LICENSING REQUIREMENTS WITHIN 60 CALENDAR DAYS OF BID OPENING.

BIDS WILL BE RECEIVED AS SHOWN BELOW:

THIS IS A ROADWAY & STRUCTURE PROPOSAL

5% BID BOND OR BID DEPOSIT REQUIRED

PROJECT SPECIAL PROVISION

(10-18-95) (Rev. 3-21-17)

Z-1a

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
Water Quality (401)	Division of Environmental Management, DEQ 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 *2018 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 restricted waters, wetlands or buffer zones, provided that activities outside those areas is done in such a manner as to not affect the restricted waters, wetlands or buffer zones.



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

May 27, 2022

Regulatory Division

Action ID. SAW-2020-00846

Mr. Gregory Price
North Carolina Department of Transportation
Division 6, DEO
PO Box 1150
Fayetteville, North Carolina 28302

Dear Mr. Price,

In accordance with the written request of July 29, 2021 and the ensuing administrative record, enclosed is an electronic copy of a permit to discharge dredged or fill material into waters of the U.S. in association with construction activities related to the proposed conversion of the intersection of US 74/76 and Old Lake Road (SR 1740) to a grade separation, the conversion of the intersection of US 74/76 and Chauncey Town Road (SR 1735) to an interchange, construction of a roundabout at the intersection of Sam Potts Highway (NC 214)/ Chauncey Town Road, and construction of a service road from Chauncey Town Road to Old Lake Road north of US 74/76 in Columbus County, near Lake Waccamaw North Carolina. **STIP: R-5819 and R-5820.**

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

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

- a. You must complete construction before December 31, 2027.
- b. You must notify this office in advance as to when you intend to commence and complete work.
- c. You must allow representatives from this office to make periodic visits to your worksite as deemed necessary to assure compliance with permit plans and conditions.

You should address all questions regarding this authorization to Ms. Liz Hair at the Wilmington Regulatory Field Office, telephone 910-251-4049.

FOR THE CHIEF, REGULATORY DIVISION

 Date: 2022.05.27
12:10:16 -04'00'

Monte Matthews
Lead Project Manager
Wilmington Regulatory Division

District Enclosures:

Electronic Copies Furnished (with enclosures):

Chief, Source Data Unit
NOAA/National Ocean Service
1315 East-west Highway, Room 7316
Silver Spring, Maryland 20910-3282

Copies Furnished with Special Conditions and Plans:

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

Dr. Pace Wilber
National Marine Fisheries Service
101 Pivers Island Road
Beaufort, North Carolina 28516

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

Mr. Jonathan Howell
Division of Coastal Management
North Carolina Department of
Environmental Quality
400 Commerce Avenue
Morehead City, North Carolina 28557
Ms. Amy Chapman

Transportation Permitting Unit
Division of Water Resources
Department of Environmental Quality
1617 Mail Service Center
Raleigh, North Carolina 27

DEPARTMENT OF THE ARMY PERMIT

Permittee: North Carolina Department of Transportation
Attn: Mr. Greg Price

Permit No.: SAW-2020-00846, STIP: R-5819 AND R-5820.

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 North Carolina Department of Transportation (NCDOT) proposes to convert the intersection of US 74/76 and Old Lake Road (SR 1740) to a grade separation, convert the intersection of US 74/76 and Chauncey Town Road (SR 1735) to an interchange, construct a roundabout at the intersection of Sam Potts Highway (NC 214)/ Chauncey Town Road, and construct a service road from Chauncey Town Road to Old Lake Road north of US 74/76 in Columbus County, North Carolina.

Proposed total impacts: Associated with the overall R-5819 and R-5820 project include permanent impacts (fill, excavation, mechanized land clearing, and bank stabilization) to aquatic resources total 12.885 acres wetland and 94 linear feet of stream channel. Proposed hand clearing in wetlands totals 0.273-acres

Project Location: The proposed project is located along the intersection of US 74/76 and Old Lake Road (SR 1740), the intersection of US 74/76 and Chauncey Town Road (SR 1735), the intersection of Sam Potts Highway (NC 214)/ Chauncey Town Road, and along Georgia Road between Chauncey Town Road and Old Lake Road, north of US 74/76 in Columbus County, North Carolina.

General Conditions:

1. The time limit for completing the work authorized ends on **December 31, 2027**. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit,

Special Conditions:

SEE ATTACHED SPECIAL CONDITIONS

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

- () Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).
- (X) Section 404 of the Clean Water Act (33 U.S.C. 1344).
- () Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

- a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.
- b. This permit does not grant any property rights or exclusive privileges.
- c. This permit does not authorize any injury to the property or rights of others.
- d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

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

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

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

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

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

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

Gregory W. Price
 (PERMITEE) NC DEPARTMENT OF TRANSPORTATION
 ATTN: MR. GREG PRICE

5/27/2022
 (DATE)

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

FOR
 (DISTRICT ENGINEER) BENJAMIN A. BENNETT, COLONEL

 (DATE)

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

 (TRANSFeree)

 (DATE)

SPECIAL CONDITIONS

SAW-2020-00846

R-5819 and R-5820

1. **Work Limits:** All work authorized by this permit shall be performed in strict compliance with the attached permit plans entitled Wetland and Surface Water Impacts-R-5819 and R-5820 and the Wetland and Surface Water Impacts Summary Tables dated February 14, 2022. The Permittees shall ensure that the construction design plans for this project do not deviate from the permit plans attached to this authorization. Any modification to the attached permit plans must be approved by the U.S. Army Corps of Engineers (Corps) prior to any active construction in waters or wetlands.
2. **Unauthorized Dredge and/or Fill:** Except as authorized by this permit or any Corps approved modification to this permit, no excavation, fill, or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, within waters or wetlands, or shall any activities take place that cause the degradation of waters or wetlands. There shall be no excavation from, waste disposal into, or degradation of, jurisdictional wetlands or waters associated with this permit without appropriate modification of this permit, including appropriate compensatory mitigation. This prohibition applies to all borrow and waste activities connected with this project. In addition, except as specified in the plans attached to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, in such a manner as to impair normal flows and circulation patterns within, into, or out of waters or wetlands or to reduce the reach of waters or wetlands.
3. **Permit Distribution:** The Permittees 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 and drawings shall be available at the project site during construction and maintenance of this project.
4. **Preconstruction Meeting:** The Permittee shall schedule and attend a preconstruction meeting between its representatives, the contractor's representatives, and the Corps, Wilmington Field Office, NCDOT Regulatory Project Manager, prior to any work within jurisdictional waters and wetlands to ensure that there is a mutual understanding of all the terms and conditions contained with this Department of Army Permit. The Permittee shall provide the Corps, Wilmington Field Office, NCDOT Project Manager, with a copy of the final permit plans at least two weeks prior to the preconstruction meeting along with a description of any changes that have been made to the project's design, construction methodology or construction timeframe. The Permittee shall schedule the preconstruction meeting for a time frame when the Corps and North Carolina Division of Water Resources

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(NCDWR) Project Managers can attend. The Permittee shall invite the Corps and NCDWR Project Managers a minimum of thirty (30) days in advance of the scheduled meeting in order to provide those individuals with ample opportunity to schedule and participate in the required meeting. The thirty (30) day requirement can be waived with the concurrence of the Corps.

5. **Notification of Construction Commencement and Completion:** The Permittees shall notify the Corps in writing prior to beginning the work authorized by this permit and again upon completion of the work authorized by this permit.
6. **Reporting Address:** All reports, documentation, and correspondence required by the conditions of this permit shall be submitted to the following: U.S. Army Corps of Engineers, Wilmington District Wilmington Field Office, Attn: Liz Hair at 910-251-4049 / sarah.e.hair@usace.army.mil. The Permittees shall reference the following permit number, SAW-2020-00846, on all submittals.
7. **Permit Revocation:** The Permittees, 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.
8. **Reporting Violations:** Violation of these permit conditions or violation of Section 404 of the Clean Water Act shall be reported to the Corps in writing and by telephone at: 910-251-4049 / sarah.e.hair@usace.army.mil within 24 hours of the Permittee's discovery of the violation.
9. **Endangered Species Act:** The Permittees shall implement all necessary measures to ensure the authorized activity does not kill, injure, capture, harass, or otherwise harm any federally-listed threatened or endangered species. While accomplishing the authorized work, if the Permittees discover or observe an injured or dead threatened or endangered species, the U.S. Army Corps of Engineers, Wilmington District Wilmington Field Office, Attn: Liz Hair at 910-251-4049/ sarah.e.hair@usace.army.mil will be immediately notified to initiate the required Federal coordination.
 - a. In June 2022, NCDOT will conduct the appropriate surveys for the wood stork (*Mycteria americana*), the red-cockaded woodpecker (*Picoides borealis*), and Cooley's meadowrue (*Thalictrum cooleyi*). Results of these surveys will be provided to the Corps and the U.S. Fish and Wildlife Service.

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- b. The U.S. Fish and Wildlife Service's (USFWS's) Programmatic Biological Opinion (PBO) titled, "NCDOT Program Effects on the Northern Long-eared Bat in Divisions 1-8", dated November 6, 2020, contains agreed upon conservation measures for the NLEB. As noted in the PBO, applicability of these conservation measures varies depending on the location of the project. Your authorization under this Department of the Army permit is conditional upon your compliance with all applicable agreed upon conservation measures in the PBO, which are incorporated by reference in this permit. Failure to comply with the applicable these conservation measures would constitute non-compliance with your Department of the Army permit. The USFWS is the appropriate authority to determine compliance with the terms and conditions of its PBO, and with the ESA.

10. **National Historic Preservation Act:** While accomplishing the authorized work, if the Permittees discover any previously unknown cultural resources, the District Engineer will be immediately notified so that required coordination can be initiated with the North Carolina Division of Natural and Cultural Resources.

11. **Culverts:**
 - a. Unless otherwise requested in the application and depicted on the approved permit plans, culverts greater than 48 inches in diameter shall 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 shall be placed at a depth below the natural stream bottom to provide for passage during drought or low flow conditions. Culverts shall be designed and constructed in a manner that minimizes destabilization and head cutting.

 - b. Measures shall 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 shall not be modified by widening the stream channel or by reducing the depth of the stream in connection with the construction activity. The width, height, and gradient of a proposed opening shall be such as to pass the average historical low flow and spring flow without adversely altering flow velocity. Spring flow should be determined from gauge data, if available. In the absence of such data, bankfull flow can be used as a comparable level.

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- c. The Permittee shall implement all reasonable and practicable measures to ensure that equipment, structures, fill pads, work, and operations associated with this project do not adversely affect upstream and/or downstream reaches. Adverse effects include, but are not limited to, channel instability, flooding, and/or stream bank erosion. The Permittee shall routinely monitor for these effects, cease all work when detected, take initial corrective measures to correct actively eroding areas, and notify this office immediately. Permanent corrective measures may require additional authorization by the Corps.
 - d. Culverts placed within wetlands must be installed in a manner that does not restrict the flows and circulation patterns of waters of the United States. Culverts placed across wetland fills purely for the purposes of equalizing surface water shall not be buried, but the culverts must be of adequate size and/or number to ensure unrestricted transmission of water.
12. **Maintain Flows and Circulation Patterns of Waters:** 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 and/or wetlands.
13. **Sediment and Erosion Control:**
 - a. During the clearing phase of the project, heavy equipment shall 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 includes, but is not limited to, sediment control fences and other barriers intended to catch sediment losses.
 - c. The Permittees shall remove all sediment and erosion control measures placed in waters and/or wetlands, and shall restore natural grades on those areas, prior to project completion.

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- d. The Permittees 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 ensure compliance with the appropriate turbidity water quality standard. Erosion and sediment control practices shall be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to ensure 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 shall 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 shall be implemented prior to any ground disturbing activities to minimize impacts to downstream aquatic resources. These measures shall be inspected and maintained regularly, especially following rainfall events. All fill material shall be adequately stabilized at the earliest practicable date to prevent sediment from entering adjacent waters or wetlands.
14. **Clean Fill:** The Permittees shall use only clean fill material for this project. The fill material shall be free of items such as trash, construction debris, metal and plastic products, and concrete block with exposed metal reinforcement bars. Soils used for fill shall not be contaminated with any toxic substance in concentrations governed by Section 307 of the Clean Water Act. Unless otherwise authorized by this permit, all fill material placed in waters or wetlands shall be generated from an upland source.
15. **Temporary Fills:** Within thirty (30) days of the date of completing the authorized work, the Permittee shall remove all temporary fills in waters of the United States and restore the affected areas to pre-construction contours and elevations. The affected areas shall be re-vegetated with native, non-invasive vegetation as necessary to minimize erosion and ensure site stability.
16. **Borrow and Waste:** To ensure that all borrow and waste activities occur on high ground and do not result in the degradation of adjacent waters and wetlands, except as authorized by this permit, the Permittee shall require its contractors and/or agents to identify all areas to be used as borrow and/or waste sites associated with this project. The Permittee shall provide the Corps with appropriate maps indicating the locations of proposed borrow and/or waste sites as soon as such information is

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available. The Permittee shall submit to the Corps site-specific information needed to ensure that borrow and/or waste sites comply with all applicable Federal requirements, to include compliance with the Endangered Species Act and the National Historic Preservation Act, such as surveys or correspondence with agencies (e.g., the USFWS, the NC-HPO, etc.). The required information shall also include the location of all aquatic features, if any, out to a distance of 400 feet beyond the nearest boundary of the site. The Permittee shall not approve any borrow and/or waste sites before receiving written confirmation from the Corps that the proposed site meets all Federal requirements, whether or not waters of the U.S., including wetlands, are located in the proposed borrow and/or waste site. All delineations of aquatic sites on borrow and/or waste sites shall be verified by the Corps and shown on the approved reclamation plans. The Permittee shall ensure that all borrow and/or waste sites comply with Special Condition 2 of this permit. Additionally, the Permittee shall produce and maintain documentation of all borrow and waste sites associated with this project. This documentation will include data regarding soils, vegetation, hydrology, any delineation(s) of aquatic sites, and any jurisdictional determinations made by the Corps to clearly demonstrate compliance with Special Condition 2. All information will be available to the Corps upon request. The Permittee shall require its contractors to complete and execute reclamation plans for each borrow and/or waste site and provide written documentation that the reclamation plans have been implemented and all work is completed. This documentation will be provided to the Corps within 30 days of the completion of the reclamation work.

17. **Water Contamination:** All mechanized equipment shall 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 Permittees shall immediately report it to the N.C. Division of Water Resources at (919) 733-3300 or (800) 858-0368 and provisions of the North Carolina Oil Pollution and Hazardous Substances Control Act shall be followed.
18. **Aquatic Life Movement:** No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area. All discharges of dredged or fill material within waters of the United States shall be designed and constructed, except as authorized as indirect impacts, to maintain low flows to sustain the movement of aquatic species.
19. **Prohibitions on Concrete:** The Permittees shall take measures necessary to prevent live or fresh concrete, including bags of uncured concrete, from coming into

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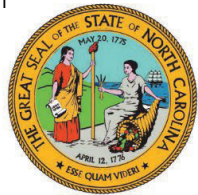
contact with any water in or entering waters of the United States. Water inside coffer dams or casings that has been in contact with concrete shall only be returned to waters of the United States when it no longer poses a threat to aquatic organisms (concrete is set and cured).

20. **Compensatory Mitigation:** 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 Forms. The requirements of these forms, including any special conditions listed on these forms, are hereby incorporated as special conditions of this permit.

ROY COOPER
Governor

ELIZABETH S. BISER
Secretary

RICHARD E. ROGERS, JR.
Director



NORTH CAROLINA
Environmental Quality

March 23, 2022

Gregory W. Price, PWS
Division Environmental Officer
North Carolina Department of Transportation
431 Transportation Drive
Fayetteville, NC 28302

Subject: 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act with ADDITIONAL CONDITIONS for Proposed improvements to convert at-grade intersection of US 74/76 and SR 1735 (Chauncey Town Road) to interchange; Convert at grade intersection of US 74/76 and SR 1740 (Old Lake Road) to grade separation; Construct roundabout at the intersection of NC 214/SR 1735 (Chauncey Town Road); Construct service road between SR 1735 and SR 1740 north of US 74/76 in Columbus County, STIP No. R-5819 & R-5820. NCDWR Project No. 20211693.

Dear Mr. Price:

Attached hereto is a copy of Certification No. 004664 issued to The North Carolina Department of Transportation (NCDOT) dated received November 22,2021 and revised February 22, 2022.

This approval is for the purpose and design described in your application. The plans and specifications for this project are incorporated by reference as part of this Water Quality Certification. If you change your project, you must notify the Division and you may be required to submit a new application package with the appropriate fee. If the property is sold, the new owner must be given a copy of this Certification and is responsible for complying with all conditions. [15A NCAC 02H .0507(d)(2)]. This Certification does not relieve the permittee of the responsibility to obtain all other required Federal, State, or Local approvals before proceeding with the project, including those required by, but not limited to, Sediment and Erosion Control, Non-Discharge, Water Supply Watershed, and Trout Buffer regulations.

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

Sincerely,

DocuSigned by:

Amy Chapman

9C9886312DCD474...

Richard E. Rogers, Jr., Director
Division of Water Resources



Attachments

Electronic copy only distribution:

Liz Hair, US Army Corps of Engineers, Wilmington Field Office
Chris Rivenbark, NC Department of Transportation
Gary Jordan, US Fish and Wildlife Service
Travis Wilson, NC Wildlife Resources Commission
Beth Harmon, Division of Mitigation Services
Hannah Sprinkle, NC Division of Water Resources Wilmington Regional Office
File Copy

401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water 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 Resources (NCDWR) Regulations in 15 NCAC 2H .0500. This certification authorizes the NCDOT to impact a total of 13.684 acres of jurisdictional wetlands, and 410 linear feet of jurisdictional streams in Columbus County. The project shall be constructed pursuant to the application dated received November 22, 2021 and revised February 22, 2022. The authorized impacts are as described below:

R-5819:

Stream Impact in the Lumber River Basin

Permit Drawing Site Number	Type	Permanent Impacts (lf)	Temporary Impacts (lf)	Total Impact (lf)
18	Perennial	---	6	6
19	Perennial	94	310	404
Total Impacts		94	316	410

includes bank stabilization

Wetland Impacts in the Lumber River Basin

Permit Drawing Site Number	Type	Permanent Fill (ac)	Temporary Fill (ac)	Excavation (ac)	Mechanized Clearing (ac)	Hand Clearing (ac)	Total Wetland Impact (ac)
7	Riparian	2.643	---	0.230	0.888	0.020	3.781
8	Non-Riparian	0.823	---	0.075	0.278	---	1.176
12	Riparian	---	---	0.28	0.122	---	0.402
13	Riparian	---	---	0.46	0.13	---	0.59
14	Non-Riparian	0.004	---	---	0.01	---	0.014
15	Non-Riparian	---	---	0.008	0.013	---	0.021
16	Riparian	1.058	---	0.251	0.282	0.043	1.634
17	Riparian	---	0.37	---	---	---	0.37
18	Riparian	0.001	---	---	0.021	---	0.022
Total Impacts		4.529	0.37	1.304	1.744	0.06	8.01

Open Water Impacts in the Lumber River Basin

Permit Drawing Site Number	Type	Permanent Fill (ac)	Temporary Fill (ac)	Total Wetland Impact (ac)
20	Tributary	0.042	---	0.042
Total Impacts				0.042

R-5820:

Wetland Impacts in the Lumber River Basin

Permit Drawing Site Number	Type	Permanent Fill (ac)	Temporary Fill (ac)	Excavation (ac)	Mechanized Clearing (ac)	Hand Clearing (ac)	Total Wetland Impact (ac)
3	Non-Riparian	0.098	0.156	---	---	---	0.254
4	Non-Riparian	1.889	---	---	0.329	---	2.218
5	Non-Riparian	0.721	---	---	0.208	---	0.929
6	Non-Riparian	---	---	0.01	0.025	---	0.035
9	Non-Riparian	---	---	0.31	0.2	---	0.51
10*	Non-Riparian	---	---	0.338	0.211	0.21	0.759
11	Non-Riparian	---	---	0.032	0.097	---	0.129
12	Non-Riparian	---	---	0.525	0.315	---	0.84
Total Impacts		2.708	0.156	1.215	1.385	0.21	5.674

utilities included

Open Water Impacts in the Lumber River Basin

Permit Drawing Site Number	Type	Permanent Fill (ac)	Temporary Fill (ac)	Total Wetland Impact (ac)
1	Tributary	0.202	0.015	0.217
4	Tributary	0.038	0.003	0.041
9	Tributary	0.003	0.001	0.004
11	Tributary	0.1	0.1	0.2
12	Tributary	0.19	---	0.19
Total Impacts		0.533	0.119	0.652

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

This approval is only valid for the purpose and design that you submitted in your application dated received November 22, 2021 and revised February 22, 2022. Should your project change, you are required to notify the NCDWR 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 300 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.

This Water Quality Certification neither grants nor affirms any property right, license, or privilege in any lands or waters, or any right of use in any waters. This Water Quality Certification does not authorize any person to interfere with the riparian rights, littoral rights, or water use rights of any other person and does not create any prescriptive right or any right of priority regarding any usage of water. This Water Quality Certification shall not be interposed as a defense in any action respecting the determination of riparian or littoral rights or other rights to water use. No consumptive user is deemed by virtue of this Water Quality Certification to possess any prescriptive or other right of priority with respect to any other consumptive user regardless of the quantity of the withdrawal or the date on which the withdrawal was initiated or expanded. Upon the presentation of proper credentials, the Division may inspect the property.

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. NCDWR staff shall be invited to the pre-construction meeting. [15A NCAC 02H.0506(b)(2) and (b)(3)]
2. Compensatory mitigation for impacts to 12.79 acres wetlands is required. We understand that you have chosen to perform compensatory mitigation for impacts to wetlands through the North Carolina Division of Mitigation Services (DMS) (formerly NCEEP), and that the DMS has agreed to implement the mitigation for the project. DMS has indicated in a letter dated March 23, 2022 that they will assume responsibility for satisfying the federal Clean Water Act compensatory mitigation requirements for the above-referenced project, in accordance with DMS's Mitigation Banking Instrument signed July 28, 2010.

General Conditions

3. If the project occurs in waters or watersheds classified as Primary Nursery Areas (PNAs), SA, WS-I, WS-II, High Quality Waters (HQW), or Outstanding Resource Waters (ORW), then the sedimentation and erosion control designs shall comply with the requirements set forth in 15A NCAC 04B .0124, *Design Standards in Sensitive Watershed*. [15A NCAC 02H.0506(b)(3) and (c)(3); GC 4135]
4. For projects impacting waters classified by the NC Environmental Management Commission as Outstanding Resource Waters (ORW), Trout (Tr), High Quality Waters (HQW), or Water Supply I or II

(WSI, WSII) stormwater shall be directed to vegetated buffer areas, grass-lined ditches or other means appropriate to the site for the purpose of pre-treating storm water runoff prior to discharging directly into streams. Mowing of existing vegetated buffers is strongly discouraged.

5. The permittee shall use /Design Standards in Sensitive Watersheds/(15A NCAC 4B.0124[a]-[e]) in areas draining to (WS-I,WS-II, ORW, HQW, ORW, Tr. However, due to the size of the project, the NCDOT shall not be required to meet 15A NCAC 4B .0124(a) regarding the maximum amount of uncovered acres.
6. 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.
7. The Permittee shall report any violations of this certification to the Division of Water Resources within 24 hours of discovery. [15A NCAC 02B.0506(b)(2)]
- * 8. The Permittee shall ensure that the final design drawings adhere to the permit and to the permit drawings submitted for approval. [15A NCAC 02H .0507 (c) and 15A NCAC 02H .0506 (b)(2) and (c)(2)]
9. The outside buffer, wetland or water boundary located within the construction corridor approved by this authorization, including all non-commercial borrow and waste sites associated with the project, 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. [15A NCAC 02H.0501 and .0502]
10. 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. [15A NCAC 02B.0200]
11. 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. [15A NCAC 02H.0506(b)(2)]
12. 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. [15A NCAC 02H.0506(b)(2)]
13. 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. [15A NCAC 02H.0506(b)(2)]
14. 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. [15A NCAC 02H.0506(b)(3) and (c)(3)]
15. 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. [15A NCAC 02H.0506(b)(3)]
16. 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. [15A NCAC 02H.0506(b)(3)]

17. No rock, sand or other materials shall be dredged from the stream channel except where authorized by this certification. [15A NCAC 02H.0506(b)(3)]
18. When applicable, all construction activities shall be performed and maintained in full compliance with G.S. Chapter 113A Article 4 (Sediment and Pollution Control Act of 1973). Regardless of applicability of the Sediment and Pollution Control Act, all projects shall incorporate appropriate Best Management Practices for the control of sediment and erosion so that no violations of state water quality standards, statutes, or rules occur. [15A NCAC 02H.0506(b)(3) and (c)(3) and 15A NCAC 02B.0200]
19. All devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) sites, including contractor-owned or leased borrow pits associated with the project. Sufficient materials required for stabilization and/or repair of erosion control measures and stormwater routing and treatment shall be on site at all times.
20. 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 the NCDWR 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, the NCDWR may reevaluate and modify this certification. [15A NCAC 02B.0200]
21. All fill slopes located in jurisdictional wetlands shall be placed at slopes no flatter than 3:1, unless otherwise authorized by this certification. [15A NCAC 02H.0506(b)(2)]
22. NCDOT shall be in compliance with the NCS00250 issued to the NCDOT, including the applicable requirements of the NCG01000. Please note the extra protections for the sensitive watersheds.
23. The post-construction removal of any temporary bridge structures must return the project site to its preconstruction contours and elevations. The impacted areas shall be revegetated with appropriate native species. [15A NCAC 02H.0506(b)(2)]
24. 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. To meet the requirements of NCDOT's NPDES permit NCS000250, please refer to the most recent version of the *North Carolina Department of Transportation Stormwater Best Management Practices Toolbox* manual for approved measures. [15A NCAC 02H.0507(d)(2) and 15A NCAC 02H.0506(b)(5)]
25. 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 the NCDWR first. [15A NCAC 02H.0506(b)(2)]
26. 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. [15A NCAC 02H.0506(b)(3)]
27. A turbidity curtain will be installed in the stream if driving or drilling activities occur within the stream channel, on the stream bank, or within 5 feet of the top of bank, or during the removal of bents from an old bridge. This condition can be waived with prior approval from the NCDWR. [15A NCAC 02H.0506(b)(3)]
28. All bridge construction shall be performed from the existing bridge, temporary work bridges, temporary causeways, or floating or sunken barges. If work conditions require barges, they shall be floated into position and then sunk. The barges shall not be sunk and then dragged into position. Under no

circumstances should barges be dragged along the bottom of the surface water. [15A NCAC 02H.0506(b)(3)]

29. 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 down stream of the above structures. The applicant is required to provide evidence that the equilibrium is being maintained if requested in writing by the NCDWR. If this condition is unable to be met due to bedrock or other limiting features encountered during construction, please contact the NCDWR for guidance on how to proceed and to determine whether or not a permit modification will be required. [15A NCAC 02H.0506(b)(2)]
30. 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. [15A NCAC 02H.0506(b)(2)]
31. 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. [15A NCAC 02H.0506(b)(2)]
32. 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. [15A NCAC 02H.0506(b)(2)]
33. Pipes and culverts used exclusively to maintain equilibrium in wetlands, where aquatic life passage is not a concern, shall not be buried. These pipes shall be installed at natural ground elevation.
34. Tall fescue shall not be used in the establishment of temporary or permanent groundcover within riparian areas. For the establishment of permanent herbaceous cover, erosion control matting shall be used in conjunction with an appropriate native seed mix on disturbed soils within the riparian area and on disturbed steep slopes with the following exception. Erosion control matting is not necessary if the area is contained by perimeter erosion control devices such as silt fence, temporary sediment ditches, basins, etc. Matting should be secured in place with staples, stakes, or wherever possible, live stakes of native trees. Erosion control matting placed in riparian areas shall not contain a nylon mesh grid, which can impinge and entrap small animals. For the establishment of temporary groundcover within riparian areas, hydroseeding along with wood or cellulose based hydro mulch applied from a fertilizer- and limestone-free tank is allowable at the appropriate rate in conjunction with the erosion control measures. Discharging hydroseed mixtures and wood or cellulose mulch into surface waters is prohibited. Riparian areas are defined as a distance 25 feet landward from top of stream bank.
35. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited. [15A NCAC 02H.0506(b)(3)]
36. 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. [15A NCAC 02B.0XXX(10)]

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 [15A NCAC 02H.0506(b)(3) and (c)(3):
 - 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 surface waters, or within 5 feet of the top of bank, without prior approval from DWR. [15A NCAC 02H.0506(b)(3) and (c)(3)]

39. 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. [15A NCAC 02H.0506(b)(3) and (c)(3)]

40. 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. [15A NCAC 02H .0507(c) and 15A NCAC 02H .0506 (b)(2) and (c)(2)]

- * 41. 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 the NCDWR when all work included in the 401 Certification has been completed. [15A NCAC 02H.0502(f)]

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. Please be aware that impacting waters without first applying for and securing the issuance of a 401 Water Quality Certification violates Title 15A of the North Carolina Administrative Code (NCAC) 2H .0500. Title 15A NCAC 2H .0500 requires certifications pursuant to Section 401 of the Clean Water Act whenever construction or operation of facilities will result in a discharge into navigable waters, including wetlands, as described in 33 Code of Federal Regulations (CFR) Part 323. It also states any person desiring issuance of the State certification or coverage under a general certification required by Section 401 of the Federal Water Pollution Control Act shall file with the Director of the North Carolina Division of Water Quality. Violations of any condition herein set forth may result in revocation of this Certification and may result in criminal and/or civil penalties. Pursuant to G.S. 143-215.6A, these violations and any future violations are subject to a civil penalty assessment of up to a maximum of \$25,000.00 per day for each violation.

This approval and its conditions are final and binding unless contested [G.S. 143-215.5]. Please be aware that impacting waters without first applying for and securing the issuance of a 401 Water Quality Certification violates Title 15A of the North Carolina Administrative Code (NCAC) 2H .0500. Title 15A NCAC 2H .0500 requires certifications pursuant to Section 401 of the Clean Water Act whenever construction or operation of facilities will

result in a discharge into navigable waters, including wetlands, as described in 33 Code of Federal Regulations (CFR) Part 323. It also states any person desiring issuance of the State certification or coverage under a general certification required by Section 401 of the Federal Water Pollution Control Act shall file with the Director of the North Carolina Division of Water Quality. Pursuant to G.S. 143-215.6A, these violations and any future violations are subject to a civil penalty assessment of up to a maximum of \$25,000.00 per day for each violation.

This Certification can be contested as provided in Chapter 150B of the North Carolina General Statutes by filing a Petition for a Contested Case Hearing (Petition) with the North Carolina Office of Administrative Hearings (OAH) within sixty (60) calendar days. Requirements for filing a Petition are set forth in Chapter 150B of the North Carolina General Statutes and Title 26 of the North Carolina Administrative Code. Additional information regarding requirements for filing a Petition and Petition forms may be accessed at <http://www.ncoah.com/> or by calling the OAH Clerk's Office at (919) 431-3000.

A party filing a Petition must serve a copy of the Petition on:

William F. Lane, General Counsel
Department of Environmental Quality
1601 Mail Service Center
Raleigh, NC 27699-1601

If the party filing the Petition is not the permittee, then the party must also serve the recipient of the Certification in accordance with N.C.G.S 150B-23(a).

This the 23rd day of March 2022

DIVISION OF WATER RESOURCES

DocuSigned by:

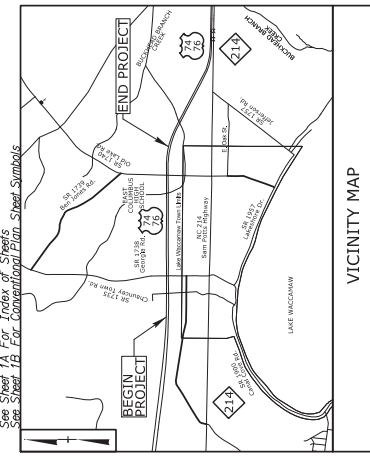

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Richard E. Rogers, Jr., Director

WQC No. 004664

TIP PROJECT: R-5819R-5820

CONTRACT:



See Sheet 1A For Trace of Streets
See Sheet 1B For Computed Plan Sheet Symbols

BEGIN TIP PROJECT R-5819R-5820
-JWB- POC STA. 18+50.00
-LEB- POC STA. 18+50.00

PERMIT DRAWING SHEET 1 OF 47

02/14/2022

STATE	N.C.	PROJECT NUMBER	R-5819R-5820
DATE	4/09/22	ROW	PE
	4/09/22	CONST	CONST

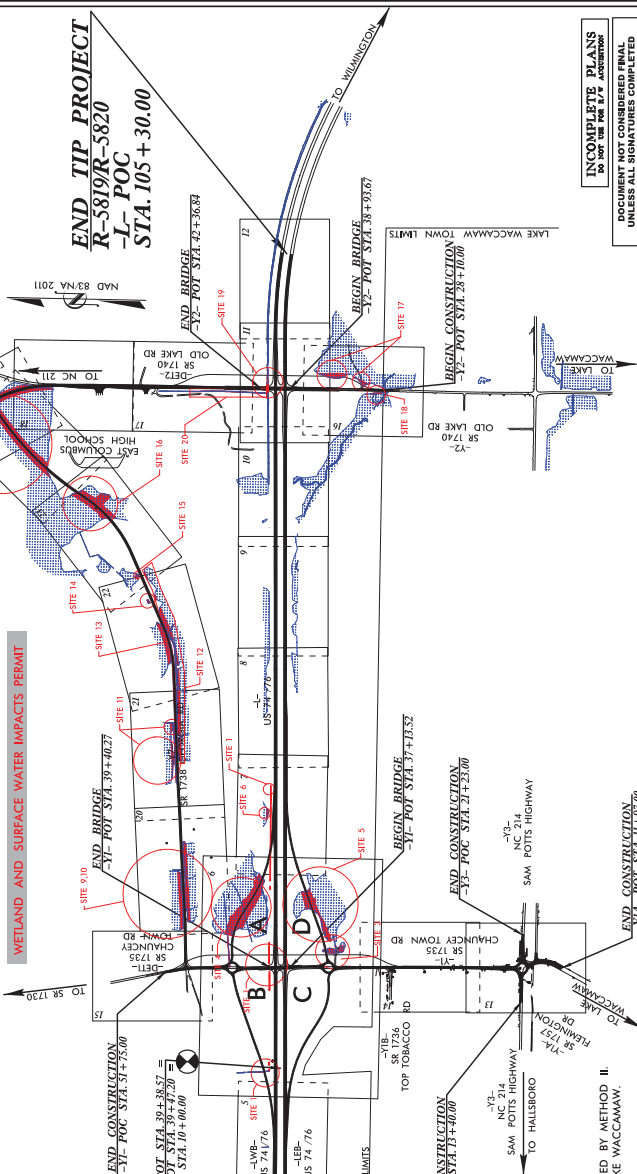
NOT FOR CONSTRUCTION, FOR FEMA PERMITTING

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
COLUMBUS COUNTY

LOCATION: SR 1740 (OLD LAKE ROAD) CONVERT AT-GRADE INTERSECTION TO GRADE SEPARATION (R-5819) SR 1735 (CHAUNCEY TOWN ROAD) CONVERT AT-GRADE INTERSECTION TO INTERCHANGE (R-5820)

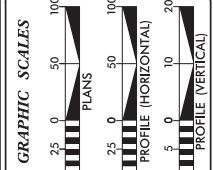
TYPE OF WORK: GRADING, PAVING, DRAINAGE, STRUCTURES

WETLAND AND SURFACE WATER IMPACTS PERMIT



INCOMPLETE PLANS DO NOT PERMIT CONSTRUCTION UNLESS ALL SIGNATURES COMPLETED

NOTES:
 1. CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.
 2. A PORTION OF THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF LAKE WACCAMAW.
 3. THERE ARE NO DESIGN EXCEPTIONS ANTICIPATED ON THIS PROJECT.
 4. THIS IS A CONTROLLED-ACCESS PROJECT WITH ACCESS BEING LIMITED TO INTERCHANGES.



DESIGN DATA

ADT 2022	= 14,400
ADT 2042	= 18,000
K	= 8 %
D	= 55 %
T	= 20 %
V	= 75 MPH
* 15% TIST + 4% DUAL CLASS INTERSTATE STATEWIDE TIER	

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT R-5819R-5820	= 2.202 MILES
TOTAL LENGTH TIP PROJECT R-5819R-5820	= 2.202 MILES

Prepared in the Office of:

NV5

FOR THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
MARCH 22, 2021

LETTING DATE:
JUNE 21, 2022

NGDOT CONTACT:

HYDRAULICS ENGINEER

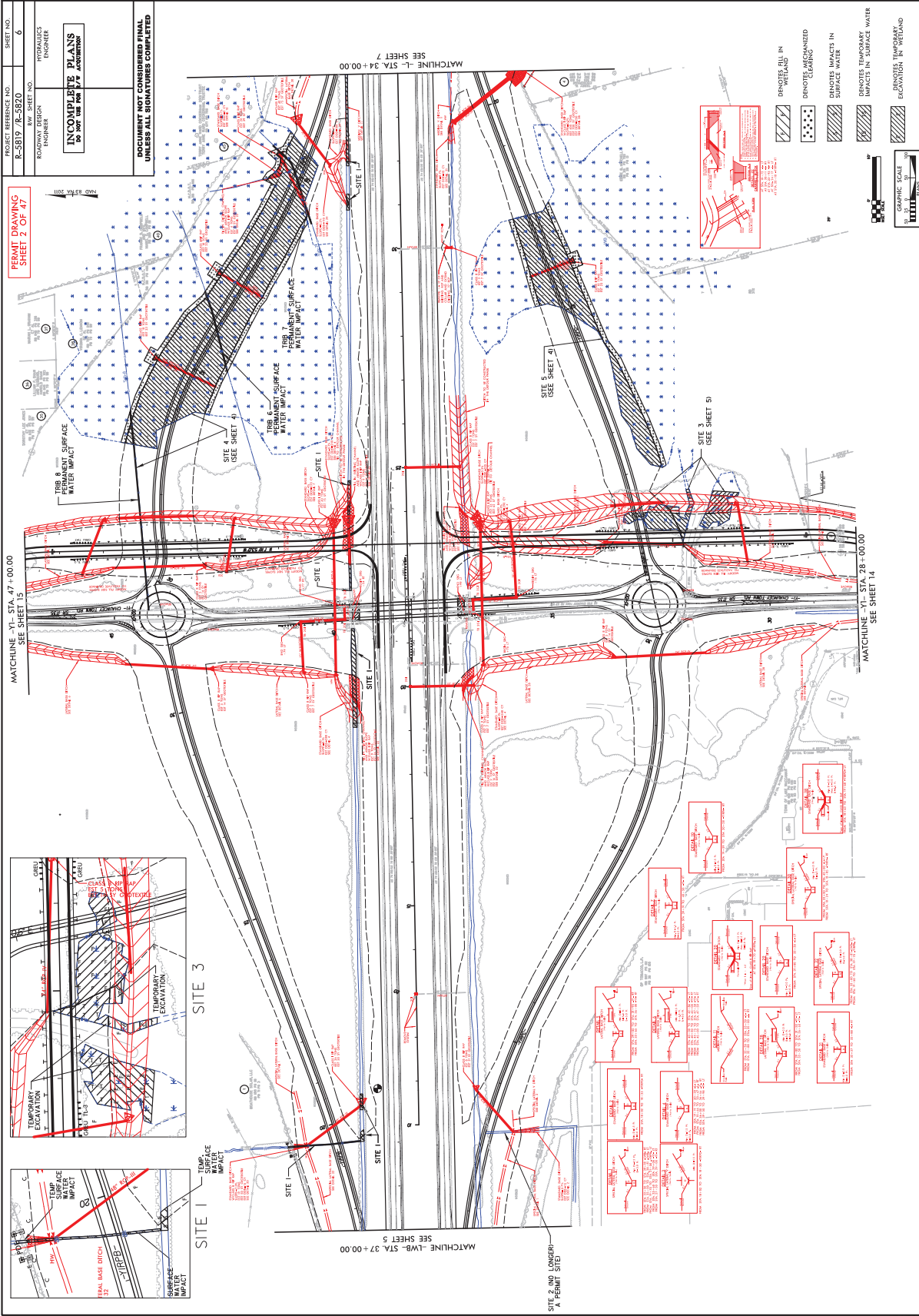
NOT FOR CONSTRUCTION, FOR FEMA PERMITTING

PROJECT MANAGER: **JOHNNY BANKS**

PROJECT MANAGER: **STEVE A. DRUM, PE**

PROJECT MANAGER: **JOHN GAUTHER**

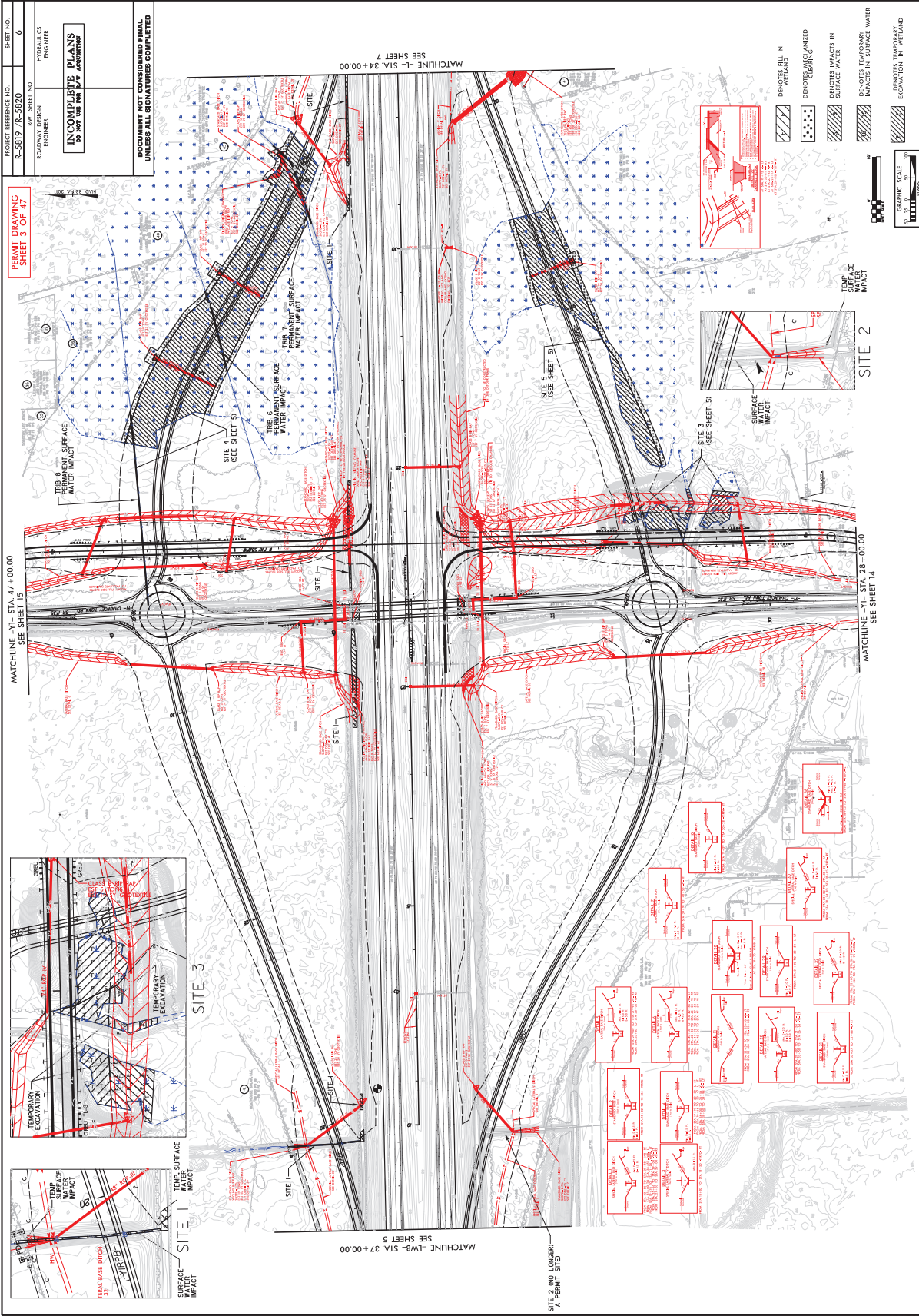




8/17/99

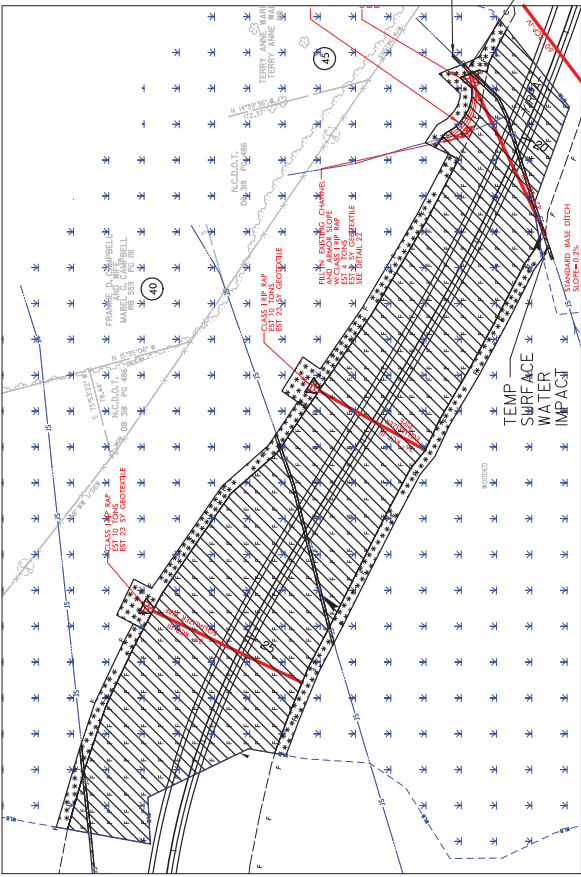
PROJECT REFERENCE NOS.	SHEET NO.
R-5812 / R-5820	6
DESIGNER	HYDRAULICS ENGINEER
ENGINEER	ROADWAY DESIGN
INFORMED BY	INFORMED BY
FOR THE USE OF	FOR THE USE OF

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

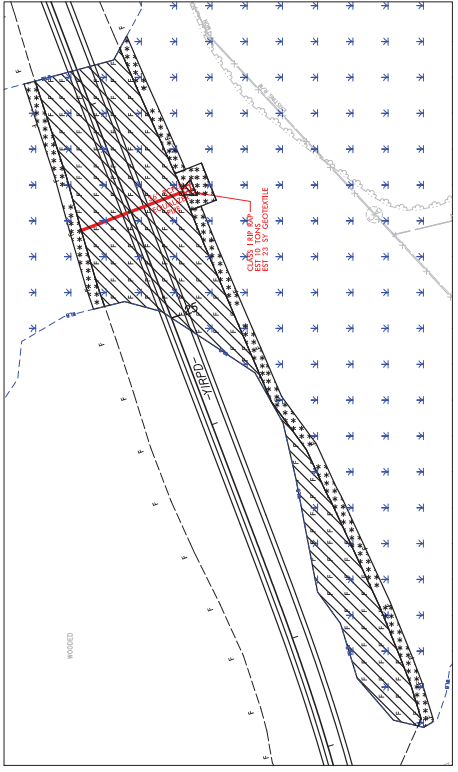


PROJECT REFERENCE NOS. E-5812 / E-5870	SHEET NO.
ROW SHEET NO.	
ROADWAY DESIGN ENGINEER	
HYDRAULICS ENGINEER	
INVENTORY OF PLANTS TO BE REMOVED OR ADJUSTED	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	





**PERMIT DRAWING
SHEET 4 OF 47**

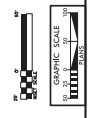


SITE 4



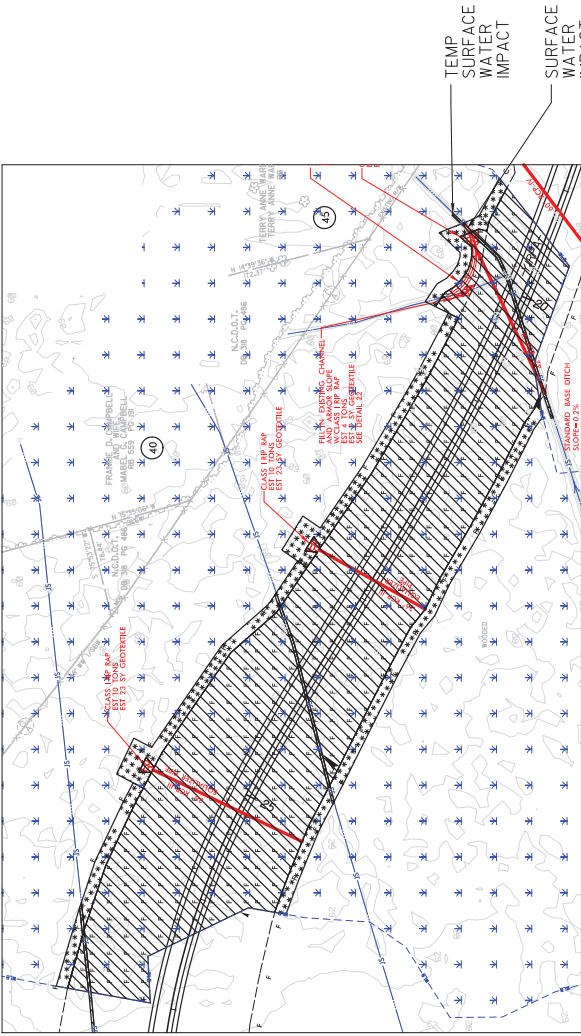
SITE 5

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

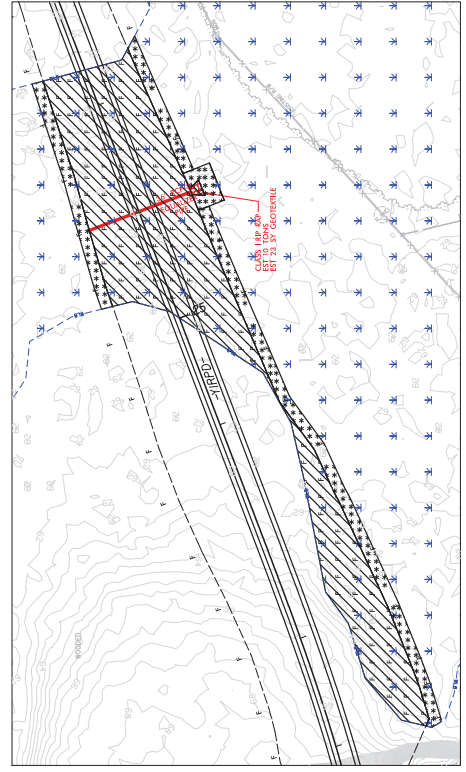


PROJECT REFERENCE NO. E-5819 / E-5870	SHEET NO.
ROW SHEET NO.	
ROADWAY DESIGN ENGINEER HYDRAULICS ENGINEER	
INCOMPLETE PLANS DO NOT BE USED FOR CONSTRUCTION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

PERMIT DRAWING
SHEET 5 OF 47

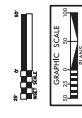


SITE 4

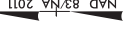


SITE 5

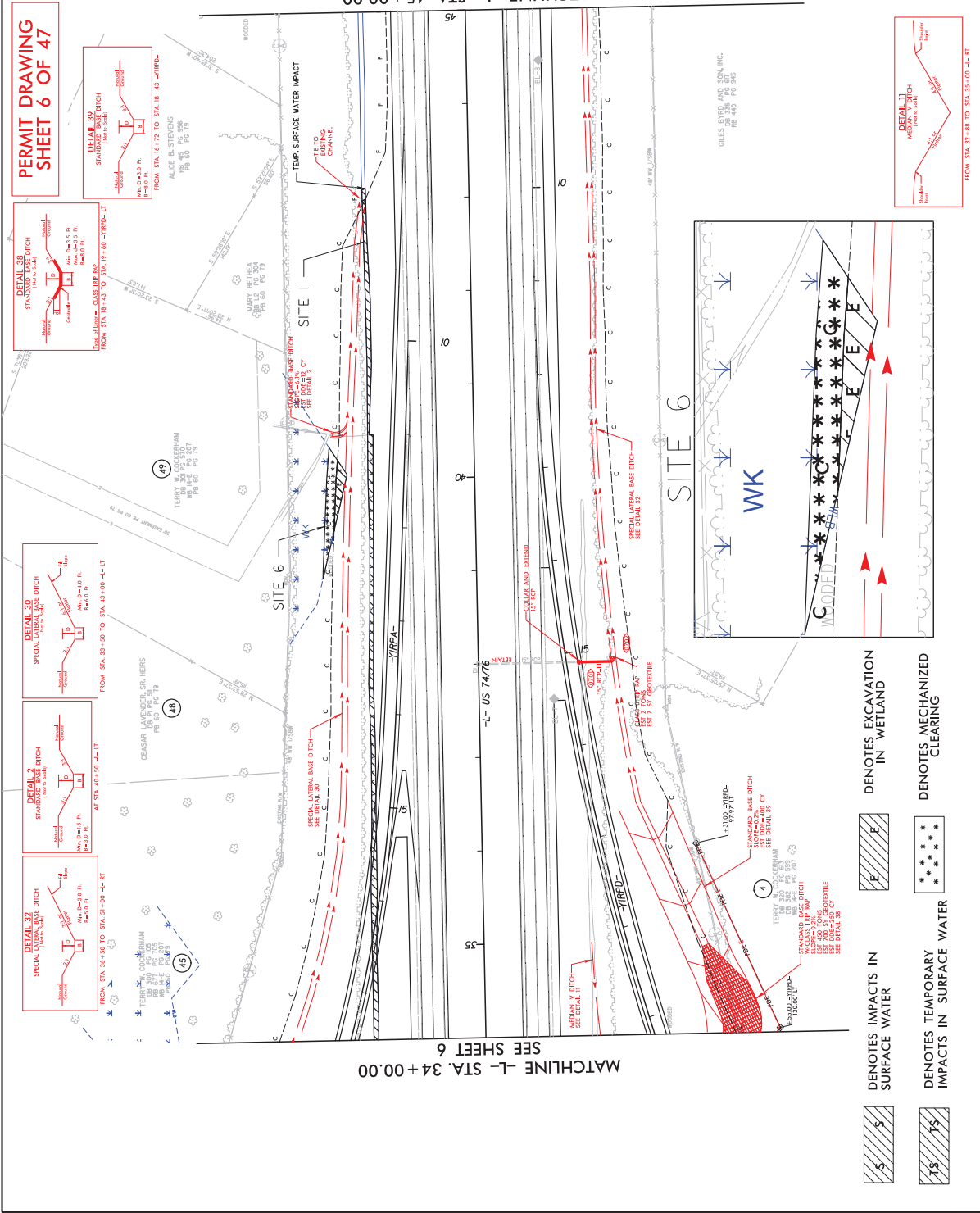
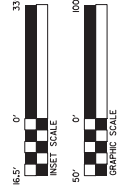
- DENOTES IMPACTS IN SURFACE WATER
- DENOTES TEMPORARY IMPACTS IN SURFACE WATER
- DENOTES FILL IN WETLAND
- DENOTES MECHANIZED CLEARING



PROJECT REFERENCE NOS. R-5819/R-5820	SHEET NO. 7
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETION BY AASHTO	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



MATCHLINE -L- STA. 45+00.00
SEE SHEET 8



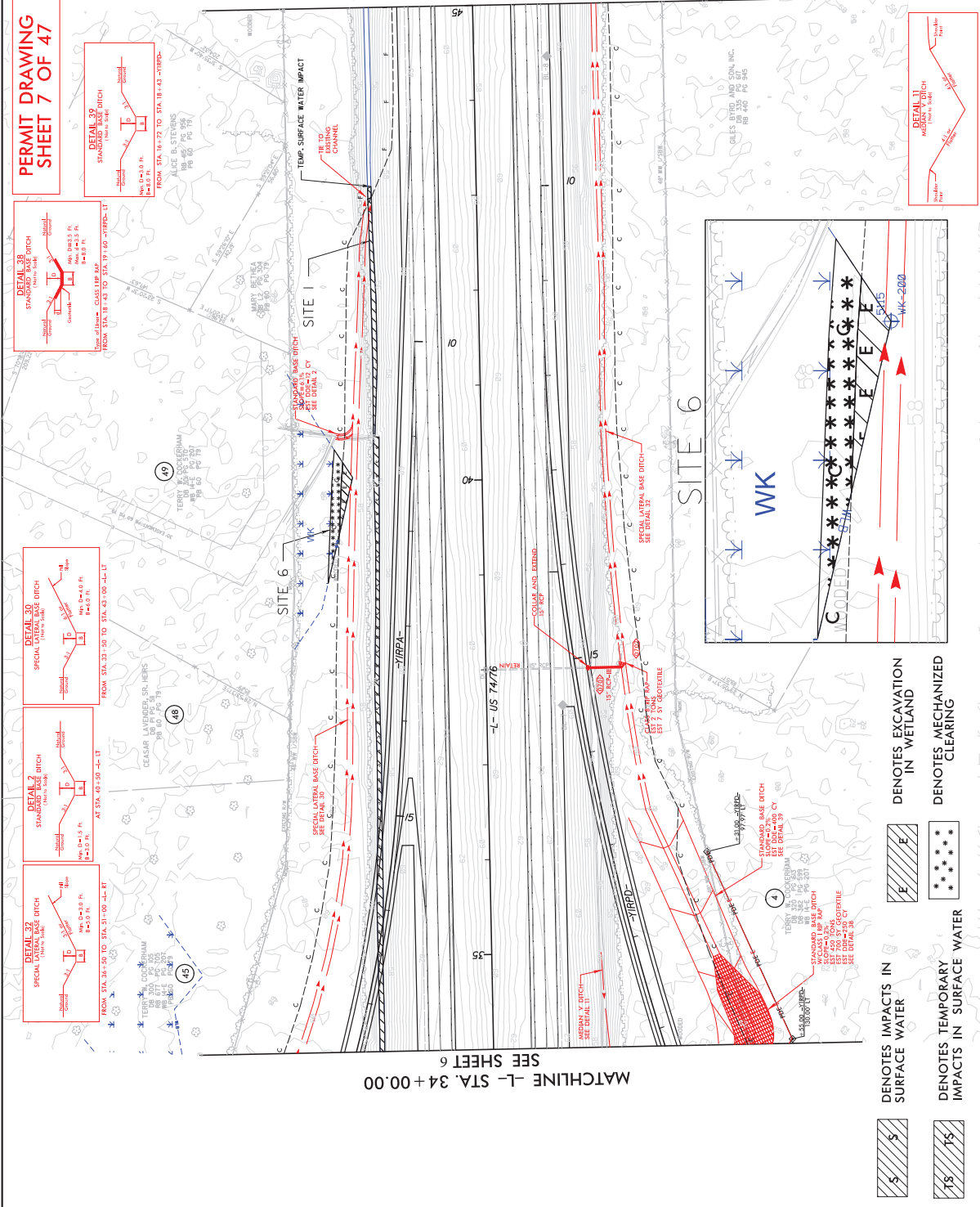
PROJECT REFERENCE NO.	SHEET NO.
R-5919/R-5920	7
RFW SHEET NO.	MUNICIPAL
PROPOSING ENGINEER	ENGINEER

**INCOMPLETE PLANS
DO NOT USE FOR PERMIT ACQUISITION**

**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**

NAD 83/NA 2011

MATCHLINE -L- STA. 45+00.00
SEE SHEET 8



MATCHLINE -L- STA. 34+00.00
SEE SHEET 6

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

**PERMIT DRAWING
SHEET 7 OF 47**

DETAIL 38
STANDARD BASE DITCH
FROM STA. 18+42 TO STA. 19+10.50
MAX. 12+5.0 P.
MIN. 4+2.5 P.
BASE 4.0 P.

DETAIL 39
STANDARD BASE DITCH
FROM STA. 19+72 TO STA. 18+42
MAX. 12+5.0 P.
MIN. 4+2.5 P.
BASE 4.0 P.

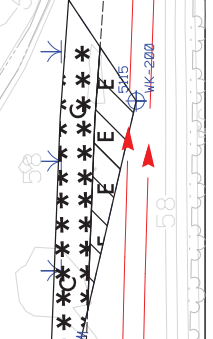
DETAIL 30
SPECIAL LATERAL BASE DITCH
FROM STA. 33+25 TO STA. 43+00
MAX. 2+4.0 P.
MIN. 0+0 P.
BASE 4.0 P.

DETAIL 2
STANDARD BASE DITCH
AT STA. 43+50 -L- T
MAX. 12+5.0 P.
MIN. 4+2.5 P.
BASE 4.0 P.

DETAIL 32
SPECIAL LATERAL BASE DITCH
FROM STA. 24+00 TO STA. 31+00
MAX. 12+5.0 P.
MIN. 4+2.5 P.
BASE 4.0 P.

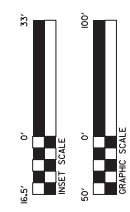
DETAIL 1
STANDARD BASE DITCH
FROM STA. 18+42 TO STA. 19+10.50
MAX. 12+5.0 P.
MIN. 4+2.5 P.
BASE 4.0 P.

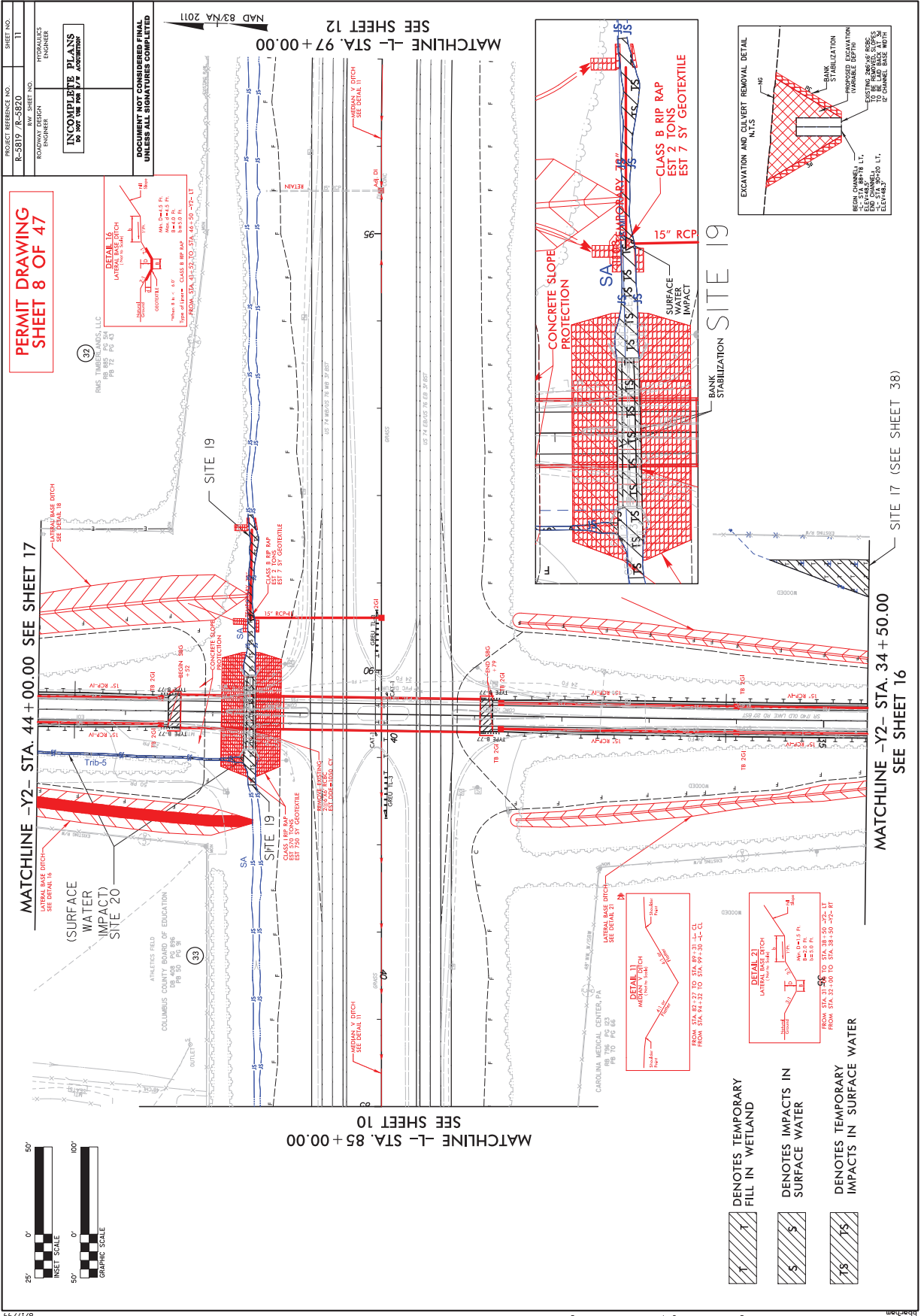
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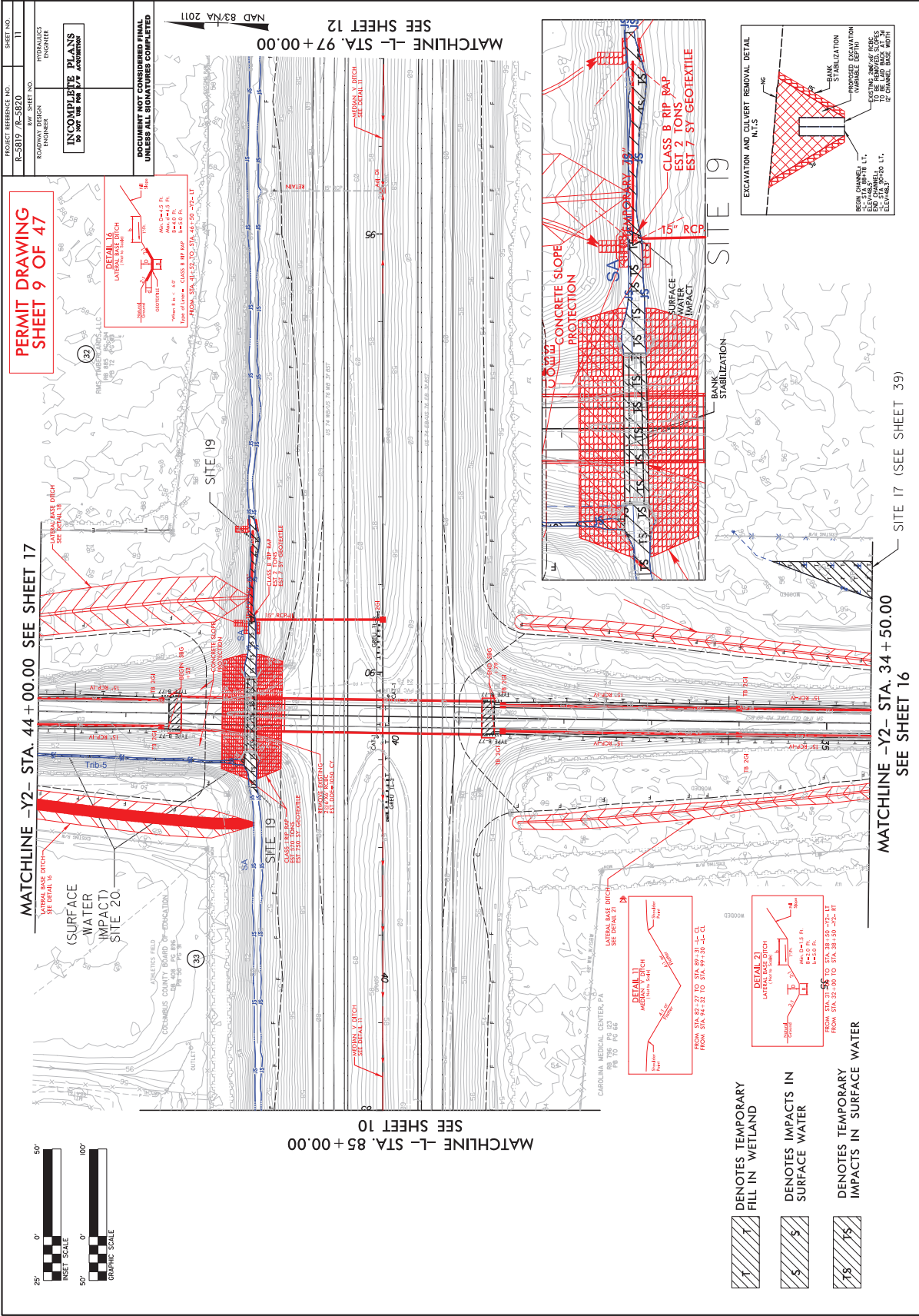


DETAIL 11
WETLAND DITCH
FROM STA. 32+48 TO STA. 33+00
MAX. 12+5.0 P.
MIN. 4+2.5 P.
BASE 4.0 P.

FROM STA. 32+48 TO STA. 33+00 -L- RT

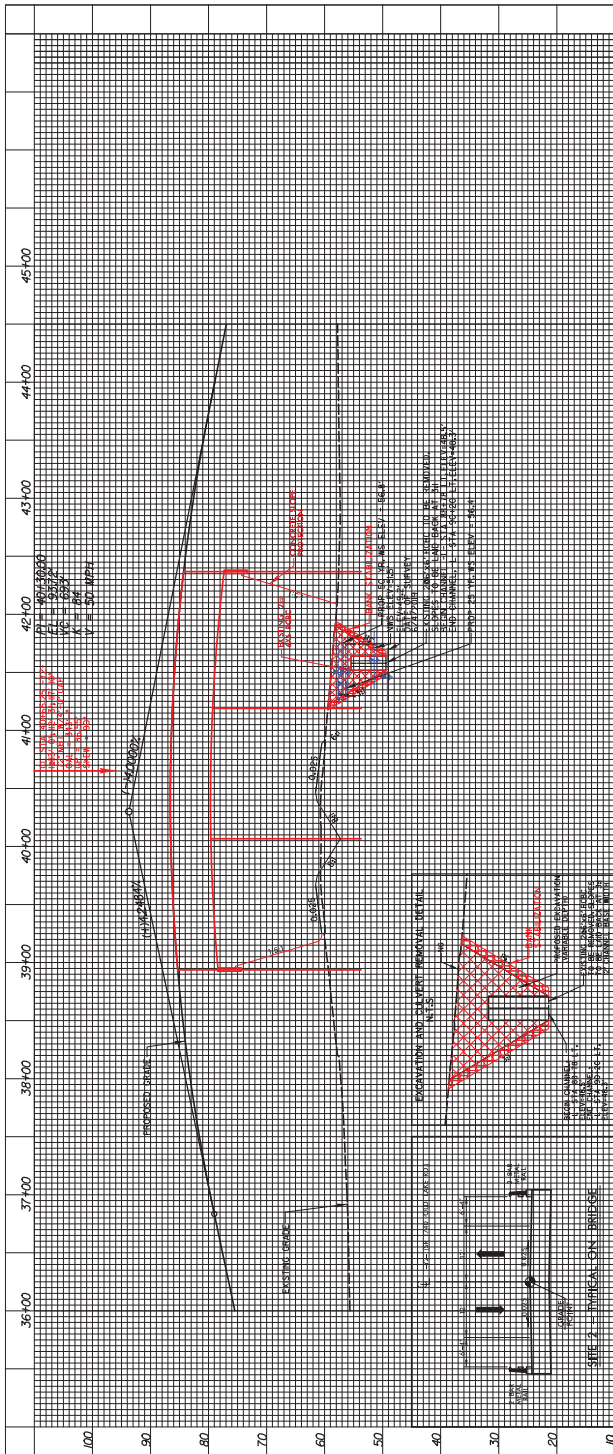


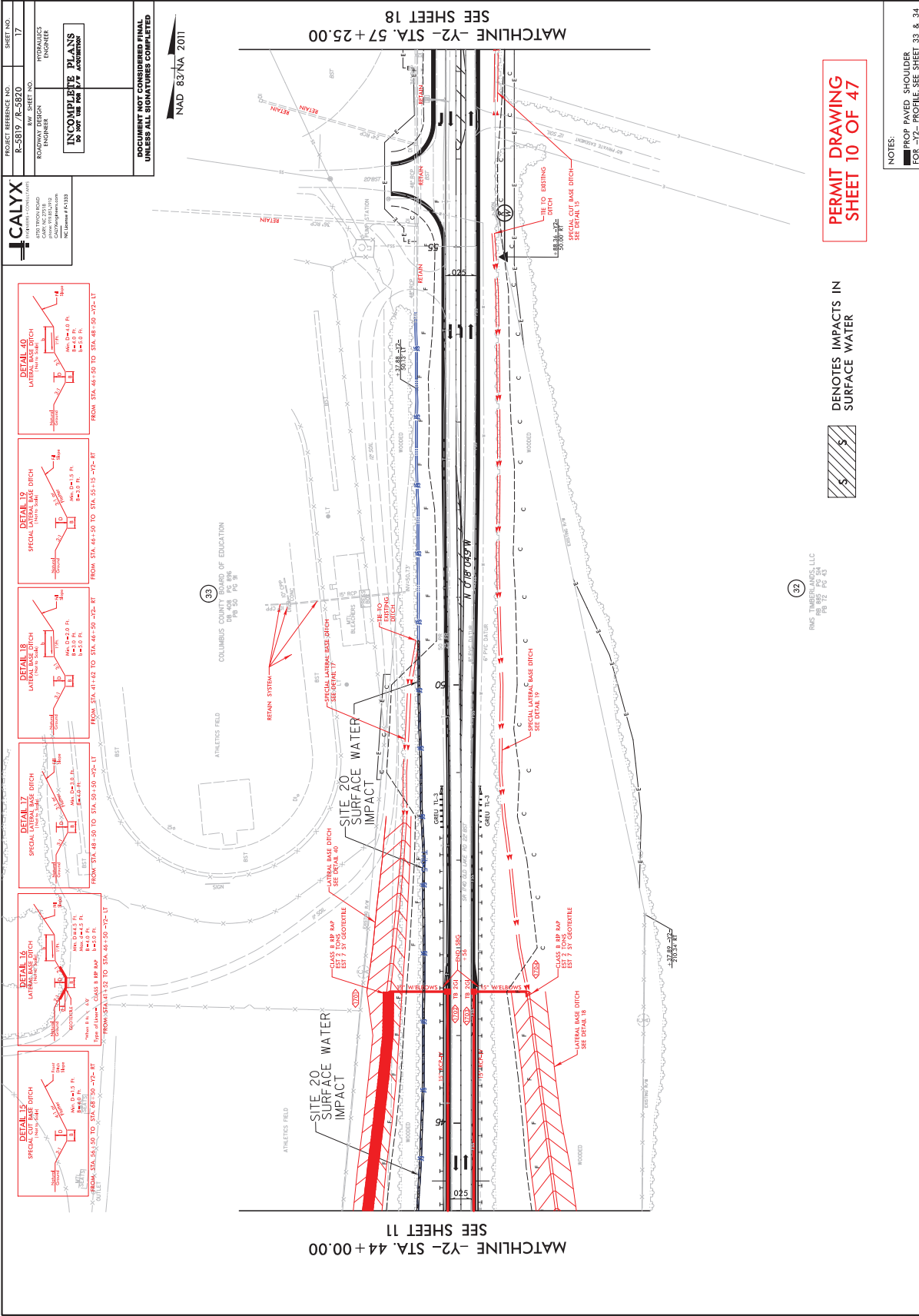




PERMIT DRAWING
SHEET 9A OF 47

PROJECT REFERENCE NO. R-5819 R-5820	SHEET NO. 11A
DESIGNER ENGINEER	DATE 11/1/2010
CHECKER ENGINEER	SCALE AS SHOWN
<p>INCOMPLETE PLANS DO NOT USE FOR CONSTRUCTION</p>	
<p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>	





8/17/99

PROJECT REFERENCE NO. B-5819 / B-5820 SHEET NO. 17

HYDRAULICS ENGINEER

ROADWAY DESIGN ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83/NA 2011

MATCHLINE -Y2- STA. 44+00.00 SEE SHEET 11

MATCHLINE -Y2- STA. 57+25.00 SEE SHEET 18

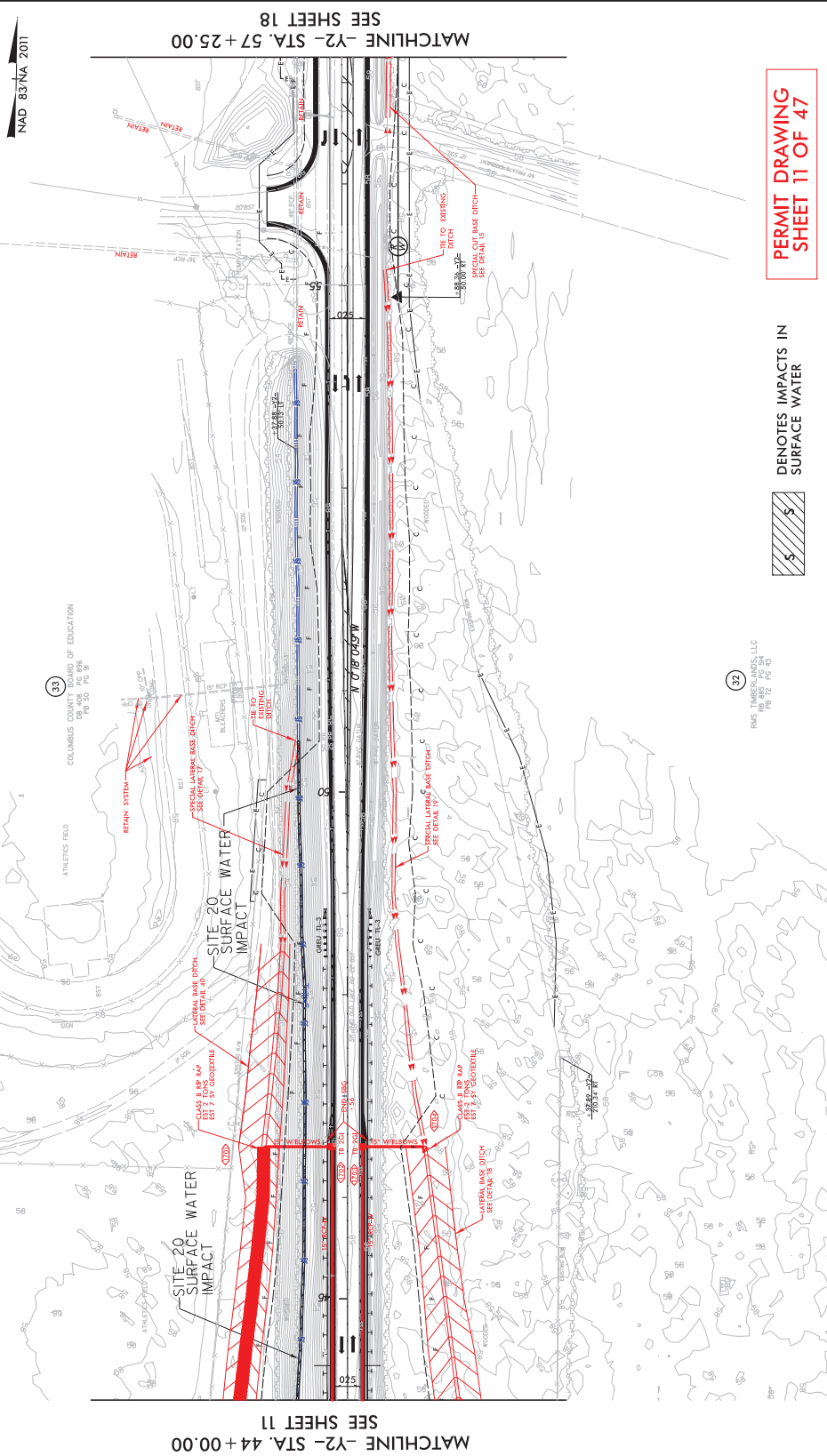
PERMIT DRAWING SHEET 10 OF 47

DENOTES IMPACTS IN SURFACE WATER

PROOF PAVED SHOULDER FOR 15' TYPICAL; SEE SHEET 33 & 34

8/17/99

<p>4825 TOWN ROAD ANN ARBOR, MI 48106 PH: 734.761.1313 WWW.ICALYX.COM MICHIGAN REG. # 041333</p>	PROJECT REFERENCE NOS.	SHEET NO.
	R-5819 / B-5820	17
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	
INFORMED BY PLANS FOR THE PROJECT		
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		



- DETAIL 15**
SPECIAL LATERAL DITCH
FROM STA. 48+50 TO STA. 48+50+25.47
MIN. D=2.5 FT.
MAX. D=5.0 FT.
- DETAIL 16**
LATERAL BASE DITCH
FROM STA. 48+50 TO STA. 48+50+25.47
MIN. D=2.5 FT.
MAX. D=5.0 FT.
- DETAIL 17**
SPECIAL LATERAL DITCH
FROM STA. 48+50 TO STA. 48+50+25.47
MIN. D=2.5 FT.
MAX. D=5.0 FT.
- DETAIL 18**
LATERAL BASE DITCH
FROM STA. 48+50 TO STA. 48+50+25.47
MIN. D=2.5 FT.
MAX. D=5.0 FT.
- DETAIL 19**
SPECIAL LATERAL DITCH
FROM STA. 48+50 TO STA. 48+50+25.47
MIN. D=2.5 FT.
MAX. D=5.0 FT.
- DETAIL 20**
LATERAL BASE DITCH
FROM STA. 48+50 TO STA. 48+50+25.47
MIN. D=2.5 FT.
MAX. D=5.0 FT.

MATCHLINE -Y2- STA. 44+00.00
SEE SHEET 11

MATCHLINE -Y2- STA. 57+25.00
SEE SHEET 18

PERMIT DRAWING
SHEET 11 OF 47

DENOTES IMPACTS IN SURFACE WATER

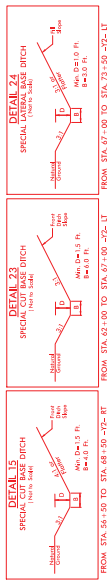
NOTES:
 PROOF PAVED SHOULDER FOR -15'- TROPIC; SEE SHEET 33 & 34

PROJECT REFERENCE NO.	R-5819	SHEET NO.	18
REV. SHEET NO.	78-5820	ENGINEER	HYDRAULICS ENGINEER
DESIGNER	ROADWAY DESIGN ENGINEER	DATE	12/15/17
IN COMPLIANCE WITH MISSOURI PERMIT REGULATIONS			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

NAD 83/NA 2011

MATCH LINE -Y2- STA 70+00.00
SEE SHEET 19

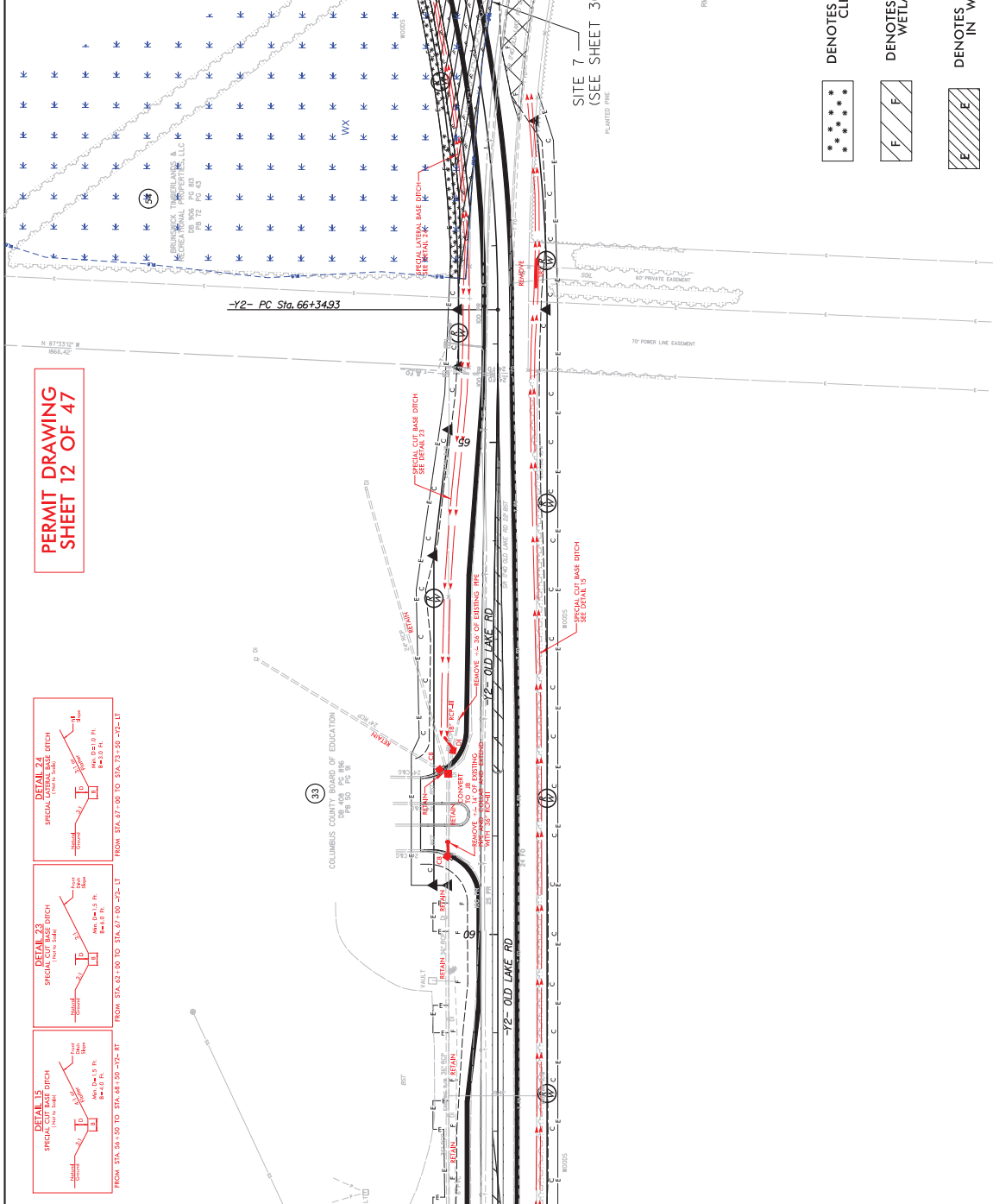
PERMIT DRAWING
SHEET 12 OF 47



-Y2- PC Sta. 66+34.93

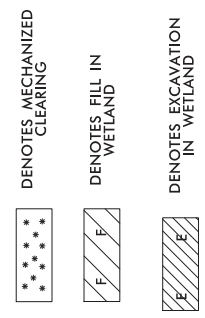
COLUMBIAN COUNTY BOARD OF EDUCATION
PROJECT NO. 15-00000000
PC 50+00.00

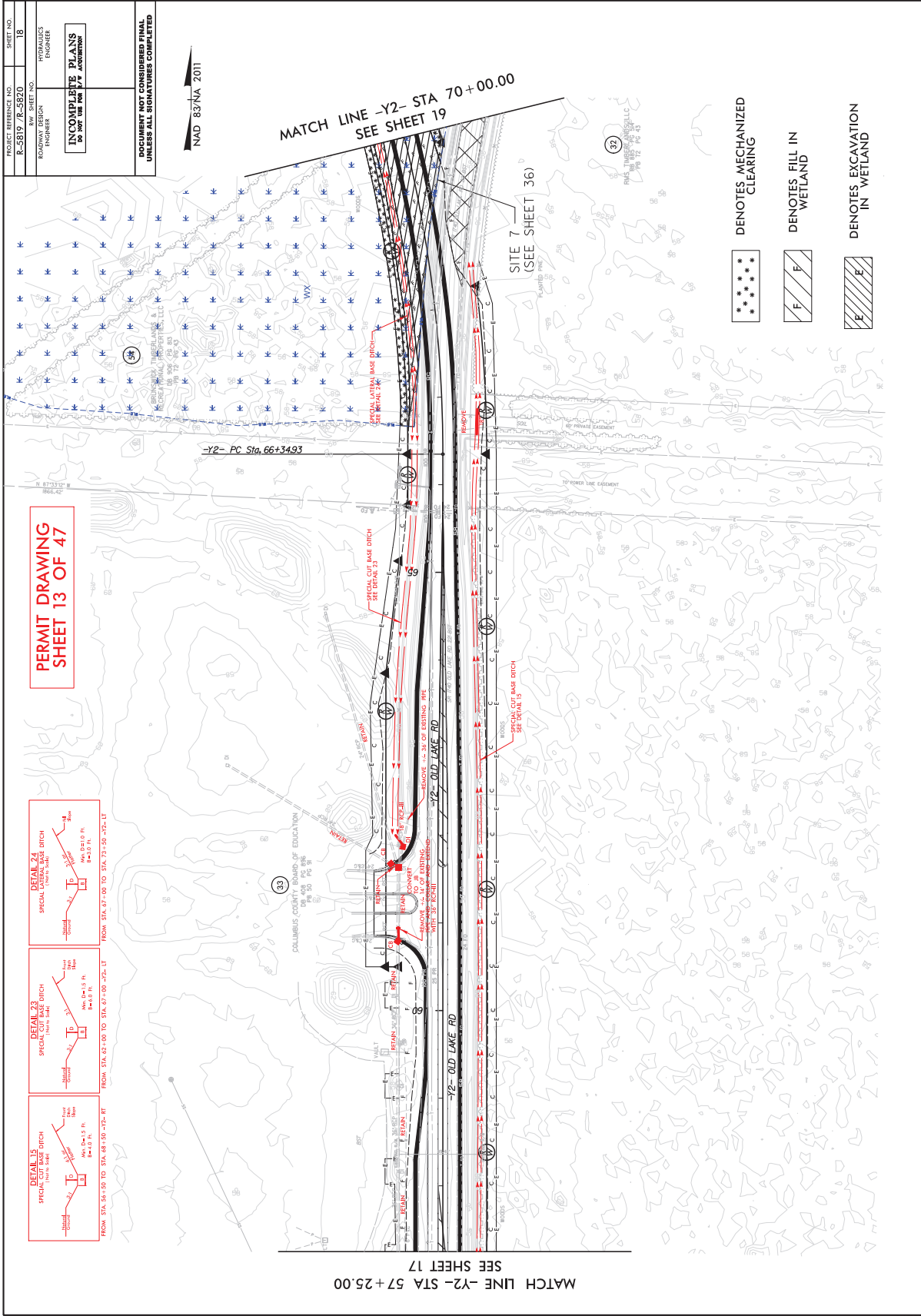
MATCH LINE -Y2- STA 57+25.00
SEE SHEET 17



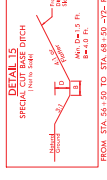
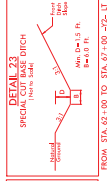
SITE 7
(SEE SHEET 36)

32
RMS SURVEYING & CONSULTING, LLC
PC 12+00.00





PERMIT DRAWING SHEET 13 OF 47

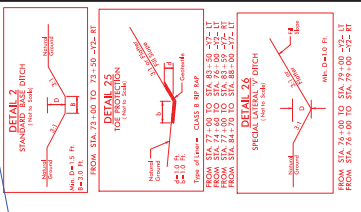
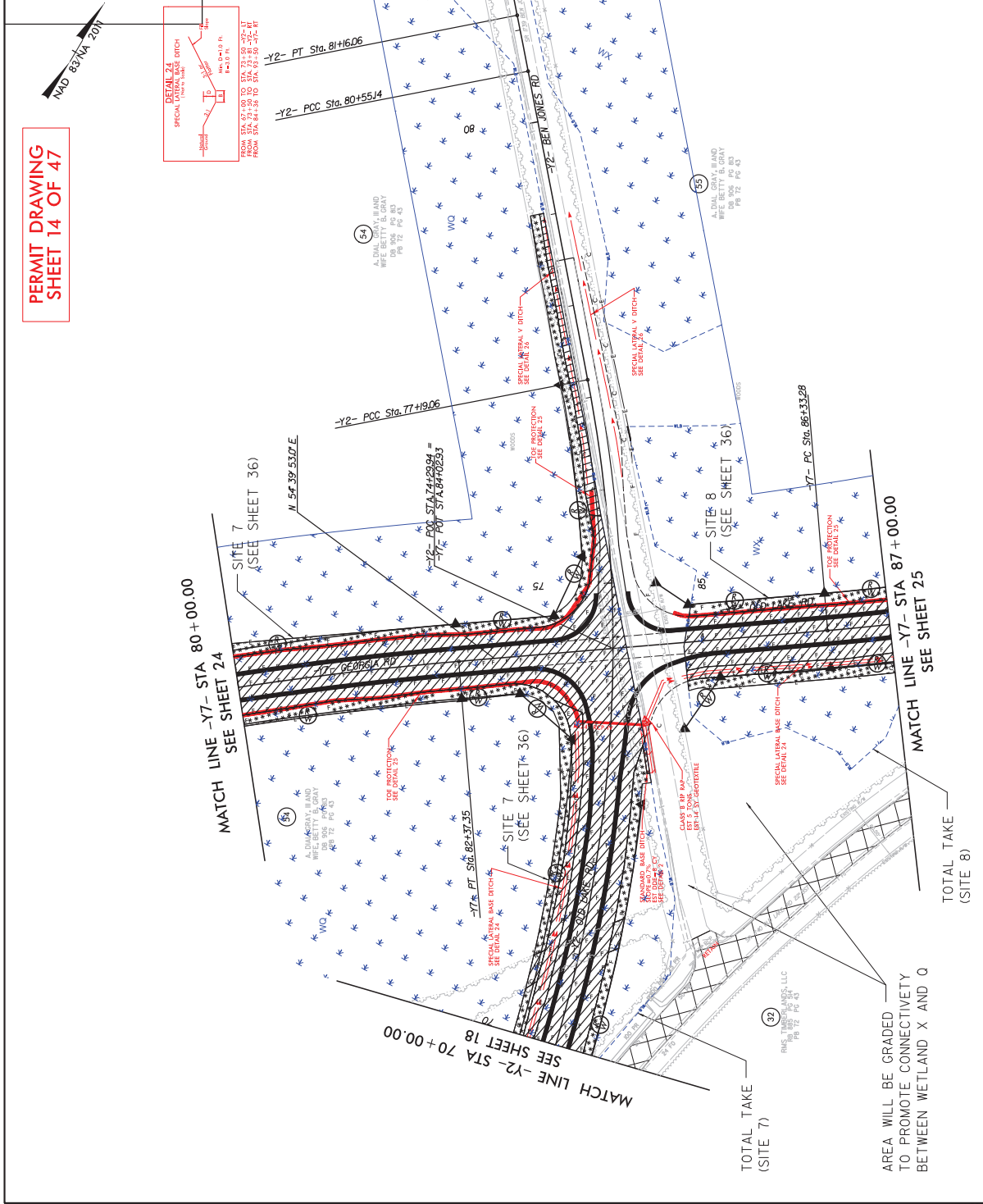
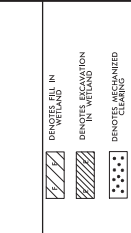


MATCH LINE -Y2- STA 57 + 25.00 SEE SHEET 17

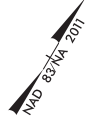
**PERMIT DRAWING
SHEET 14 OF 47**

PROJECT REFERENCE NOS.	SHEET NO.
R-5819, R-5820	19
REV. SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
IN COMPLY WITH ALL APPLICABLE REGULATIONS	

**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**

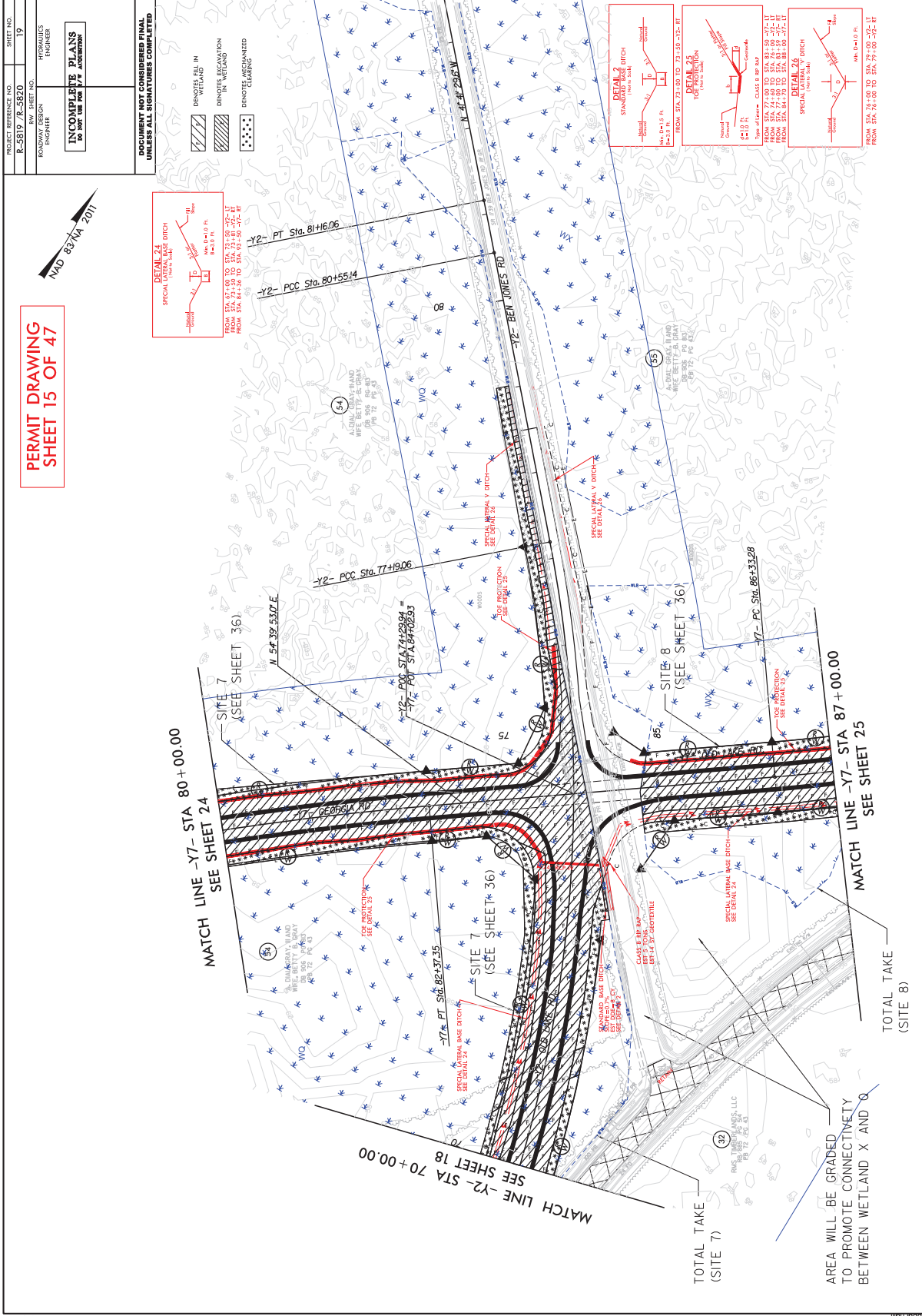
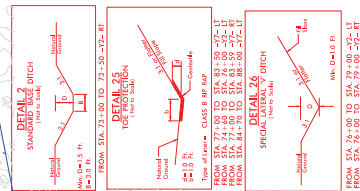


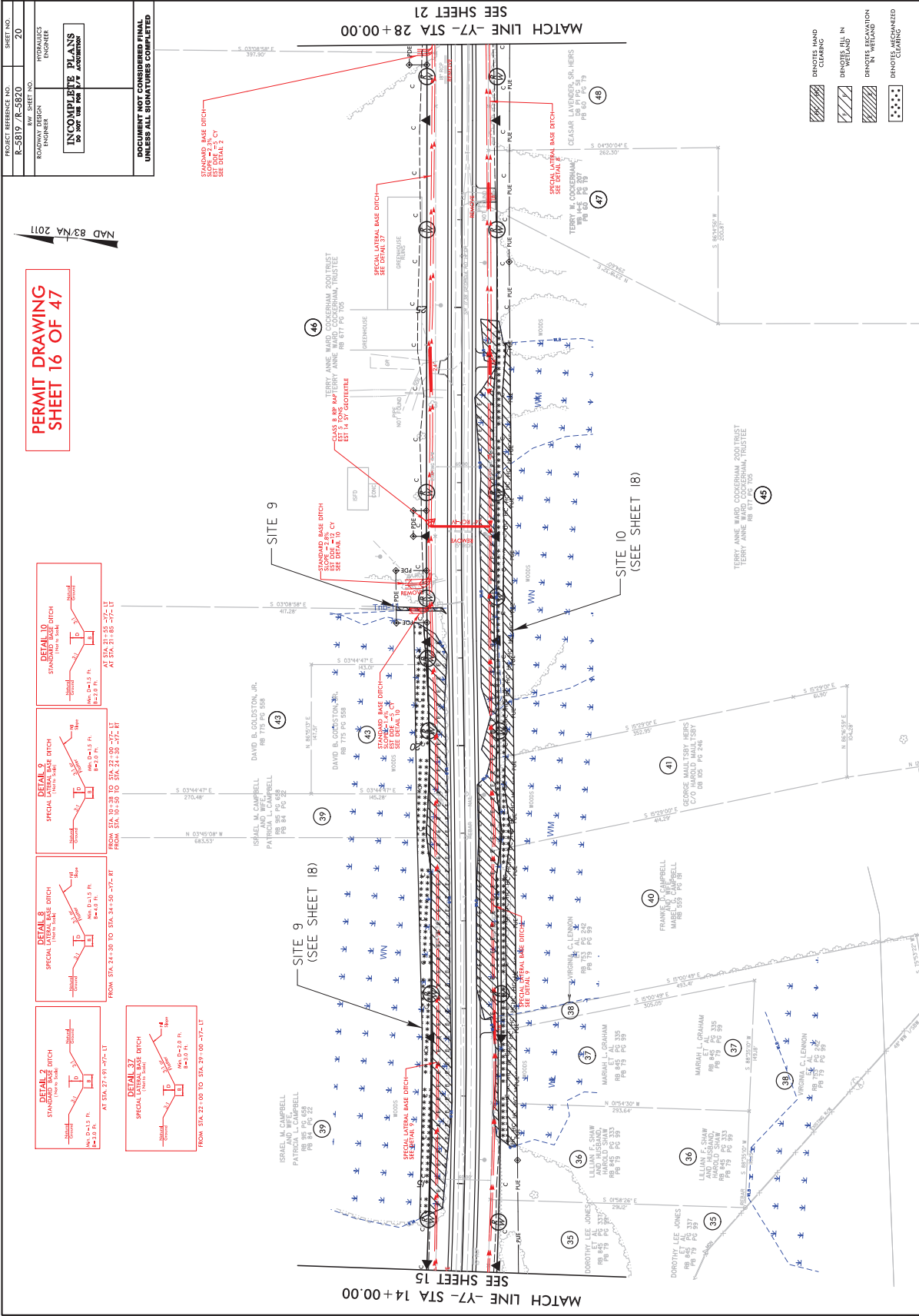
PERMIT DRAWING
SHEET 15 OF 47



PROJECT REFERENCE NOS.	SHEET NO.
R-5819 / R-5820	19
REV. SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
IN COMPLETION OF PERMITTING	

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



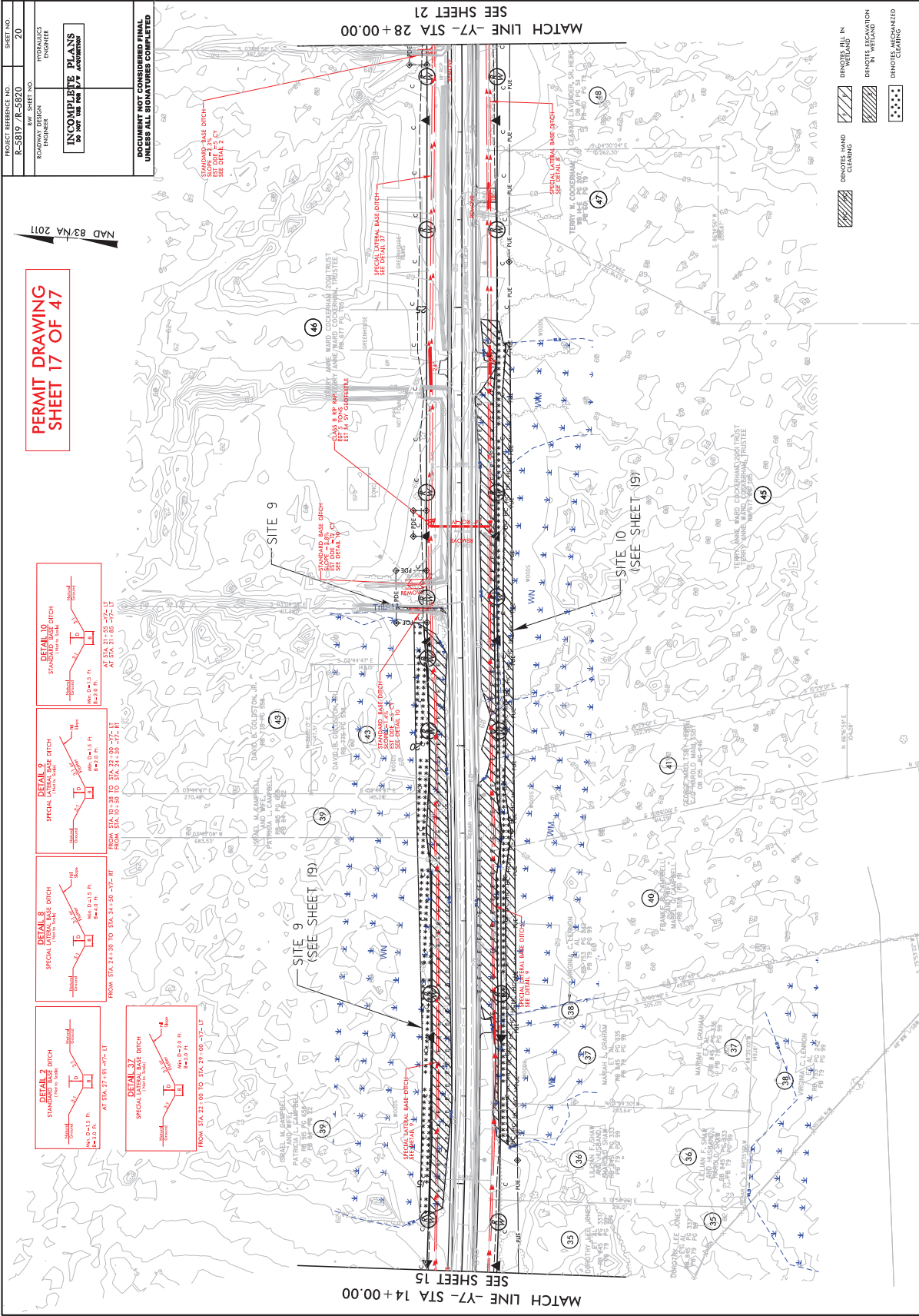
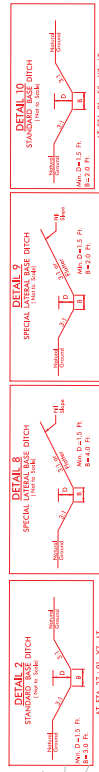


PROJECT REFERENCE NOS.	SHEET NO.
R-5819, R-5820	20
ROWWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INFORMED BY PLANS TO BE USED FOR PERMITTING	

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING SHEET 17 OF 47

NAD 83/NA 2011



MATCH LINE -Y7- STA 14+00.00 SEE SHEET 15

MATCH LINE -Y7- STA 28+00.00 SEE SHEET 21

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

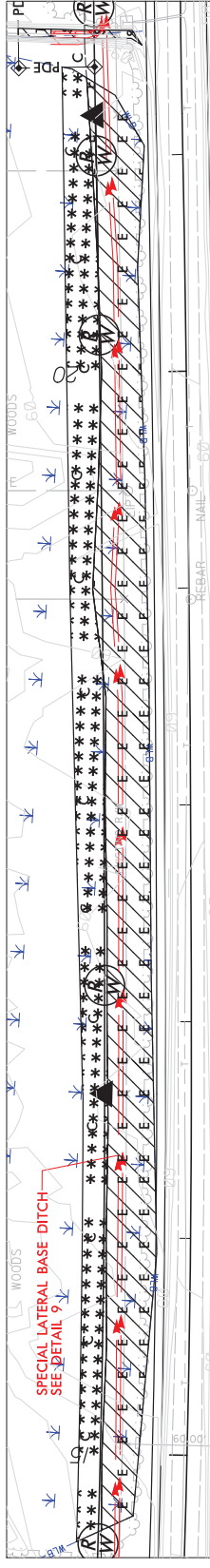
8/17/99

\\s:\projects\PERMITS\Environmental\Drawings\5819\5820\5820.dwg

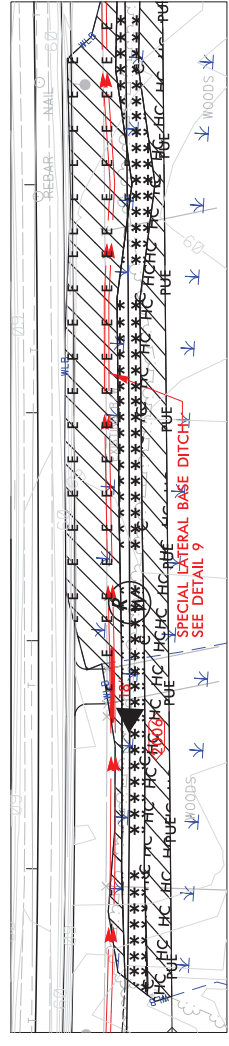
PROJECT REFERENCE NOS. R-5819 / R-5820	SHEET NO.
ROW SHEET NO. ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INFORMED BY PLANS FOR THE PROJECT IN COMPLIANCE WITH THE PERMITS	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

**PERMIT DRAWING
SHEET 19 OF 47**

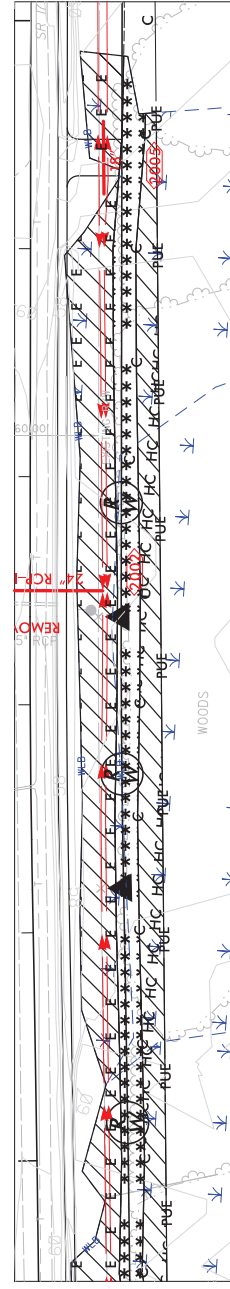
NAD 83/NA 2011



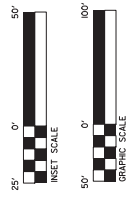
SITE 9



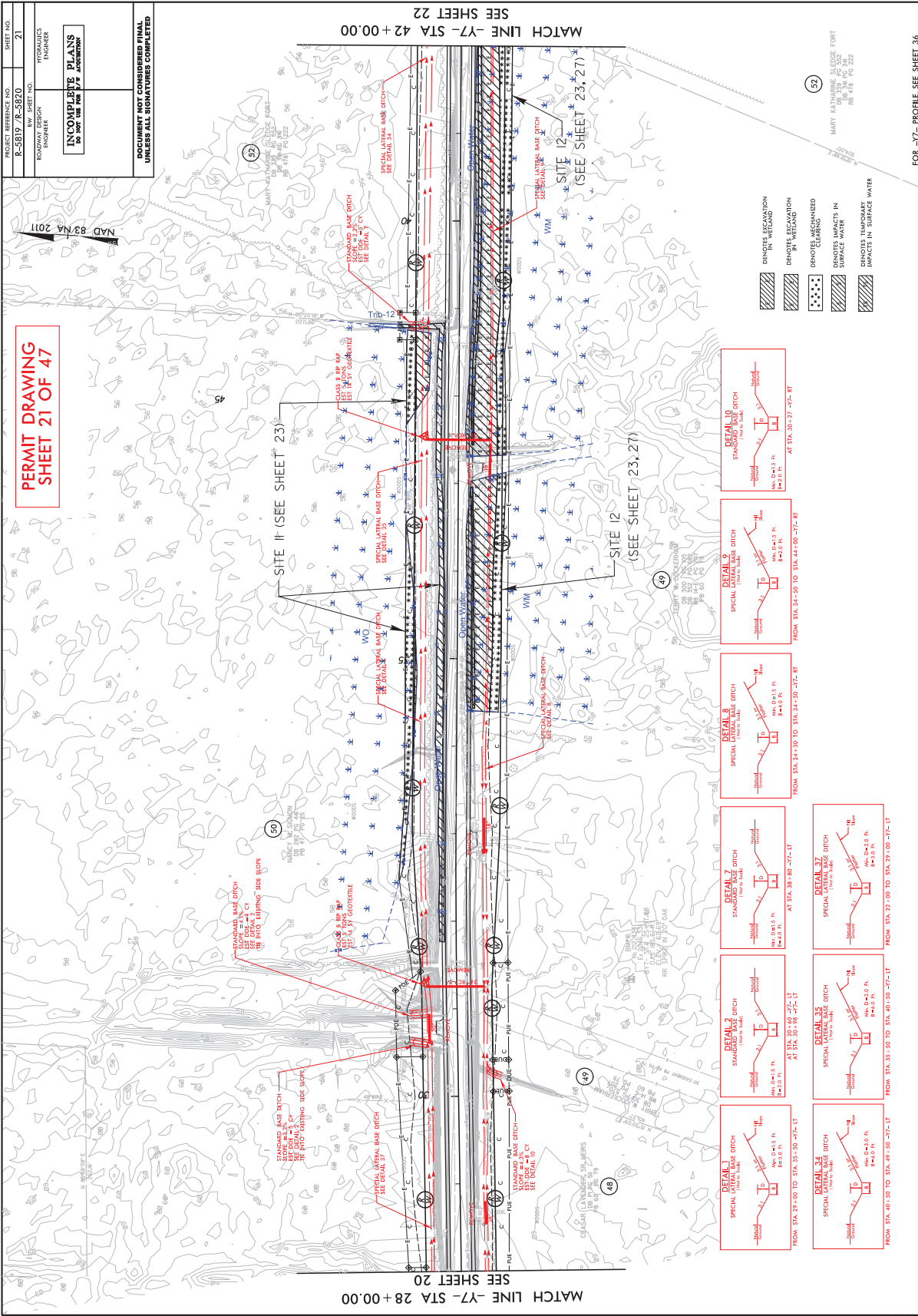
SITE 10



SITE 10 CONT.



- DENOTES HAND CLEARING
- DENOTES FILL IN WETLAND
- DENOTES RECLAMATION IN WETLAND
- DENOTES UNMANAGED CLEARING

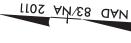


FOR -Y7- PROFILE, SEE SHEET 36

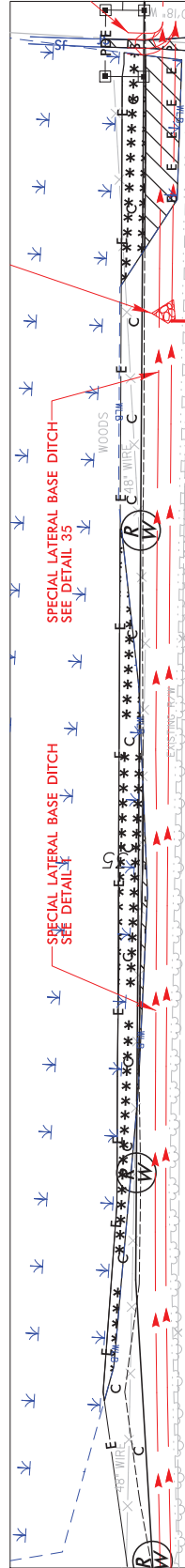
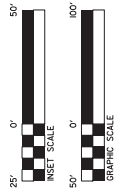
8/17/19

PERMIT DRAWING
SHEET 22 OF 47

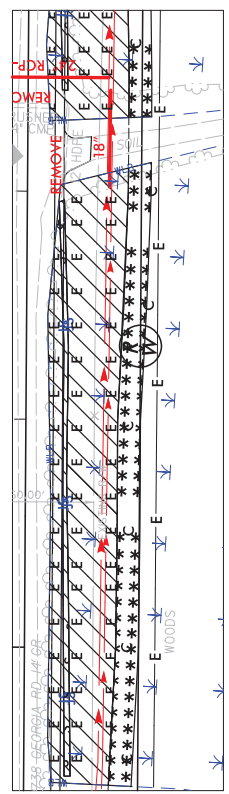
PROJECT REFERENCE NOS. R-5819 / R-5820	SHEET NO.
ROW DESIGN ENGINEER	HYDRAULICS ENGINEER
IN COMPLY WITH MDOT'S STANDARD SPECIFICATIONS	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



- DENOTES EXCAVATION IN VEGETATION
- DENOTES EXCAVATION IN VEGETATION
- DENOTES MECHANIZED CLEANING
- DENOTES IMPACTS IN SURFACE WATER
- DENOTES TEMPORARY IMPACTS IN SURFACE WATER

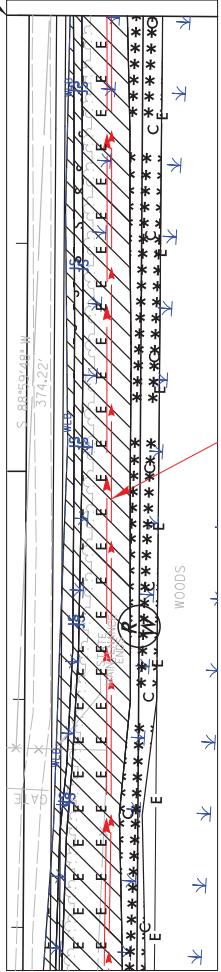


SITE II



SITE I2

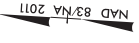
SHEET 22 MATCHLINE
SITE I2 BLOW UP CONTINUES
ON SHEET 26



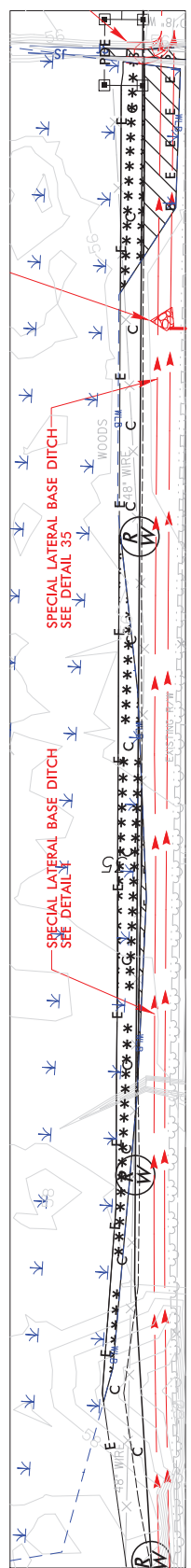
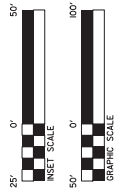
SITE I2 CONT.

PROJECT REFERENCE NOS. R-5819 / R-5820	SHEET NO.
ROW DESIGN ENGINEER	HYDRAULICS ENGINEER
IN COMPLY WITH MDOT AND ALL APPLICABLE REGULATIONS	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

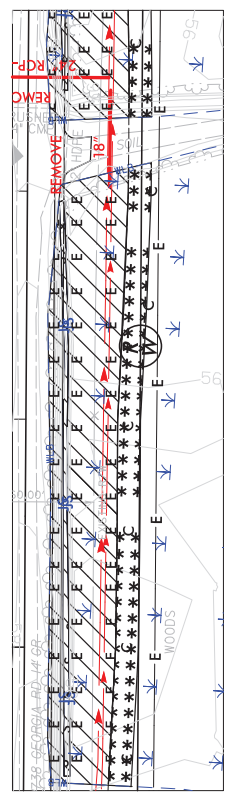
**PERMIT DRAWING
SHEET 23 OF 47**



- DENOTES EXCAVATION IN VEGETATION
- DENOTES EXCAVATION IN VEGETATION
- DENOTES MECHANIZED CLEARING
- DENOTES IMPACTS IN SURFACE WATER
- DENOTES TEMPORARY IMPACTS IN SURFACE WATER

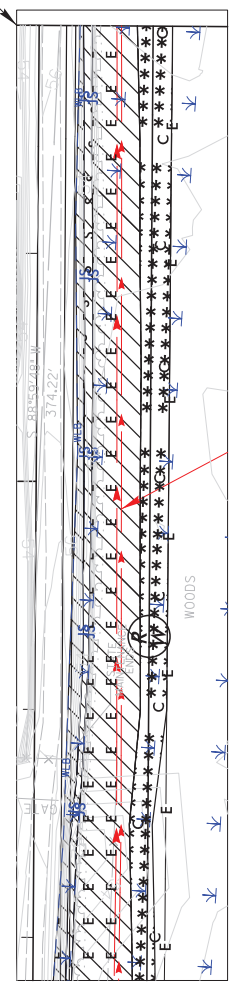


SITE II



SITE I2

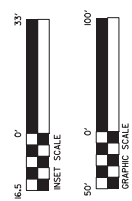
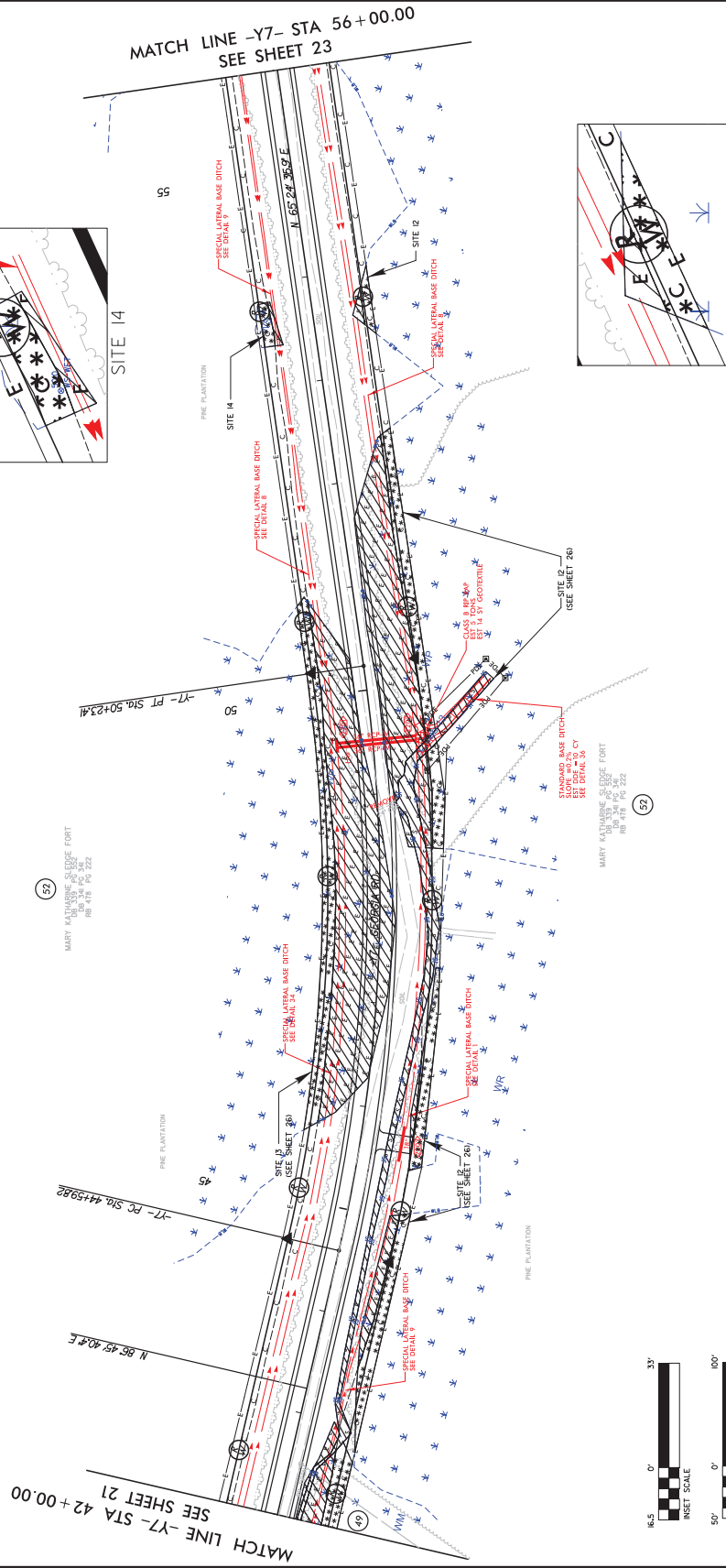
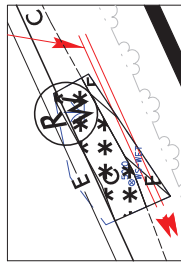
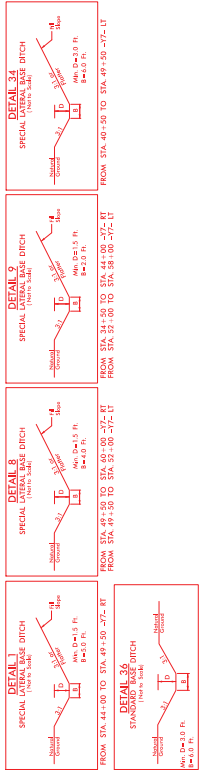
SHEET 23 MATCHLINE
SITE I2 BLOW UP CONTINUES
ON SHEET 27

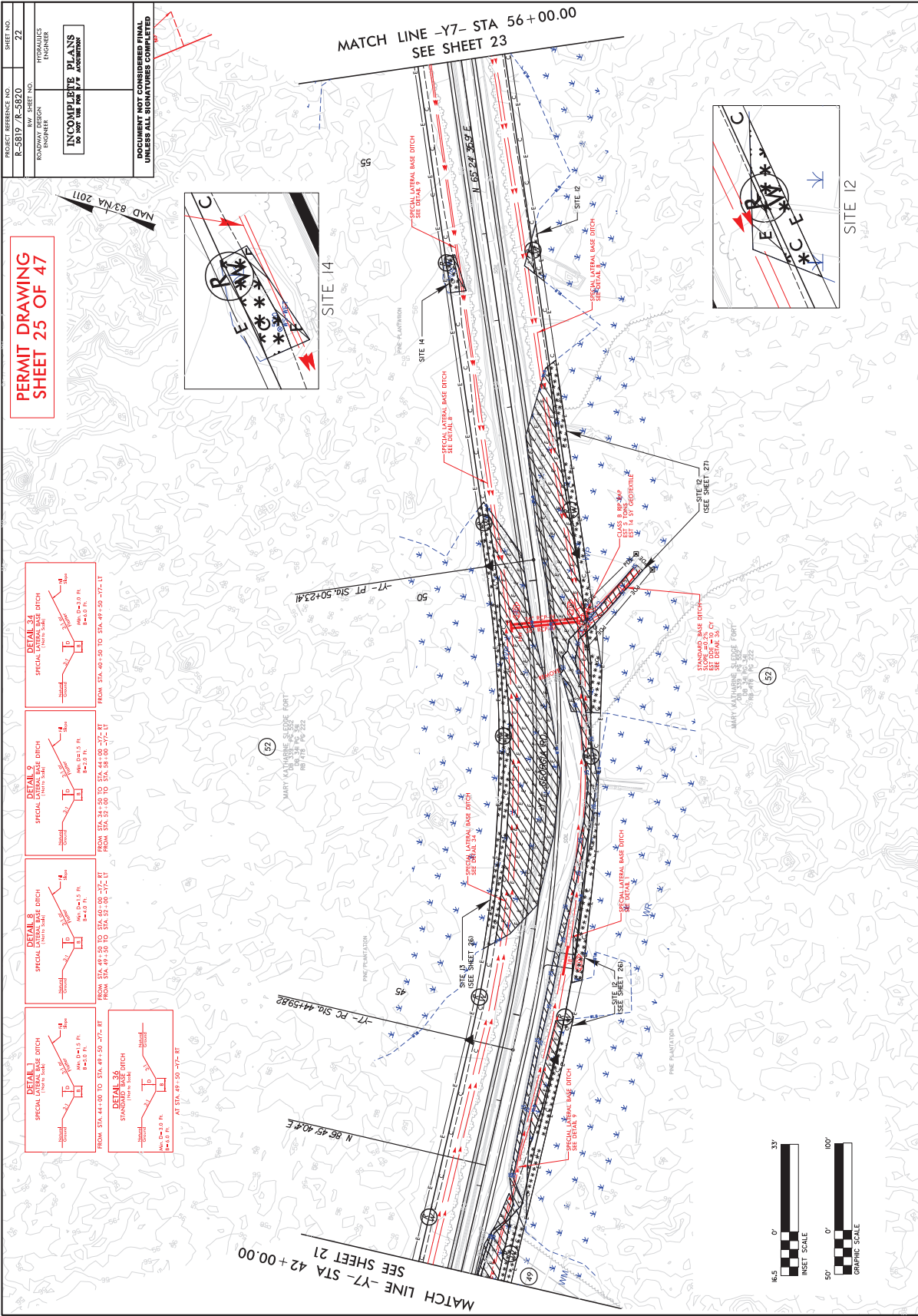


SITE I2 CONT.

PROJECT REFERENCE NOS.	SHEET NO.
R-5819, R-5820	22
ROW DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETION OF THIS DRAWING IS NOT PERMITTED WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

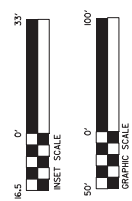
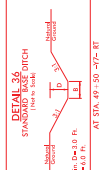
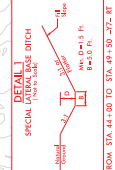
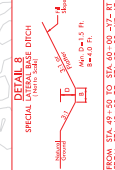
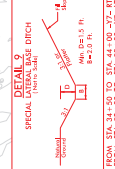
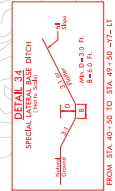
PERMIT DRAWING
SHEET 24 OF 47





**PERMIT DRAWING
SHEET 25 OF 47**

PROJECT REFERENCE NOS.	SHEET NO.
R-5819, R-5820	22
ROWWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETION PLANS DO NOT BE USED FOR PERMITTING	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

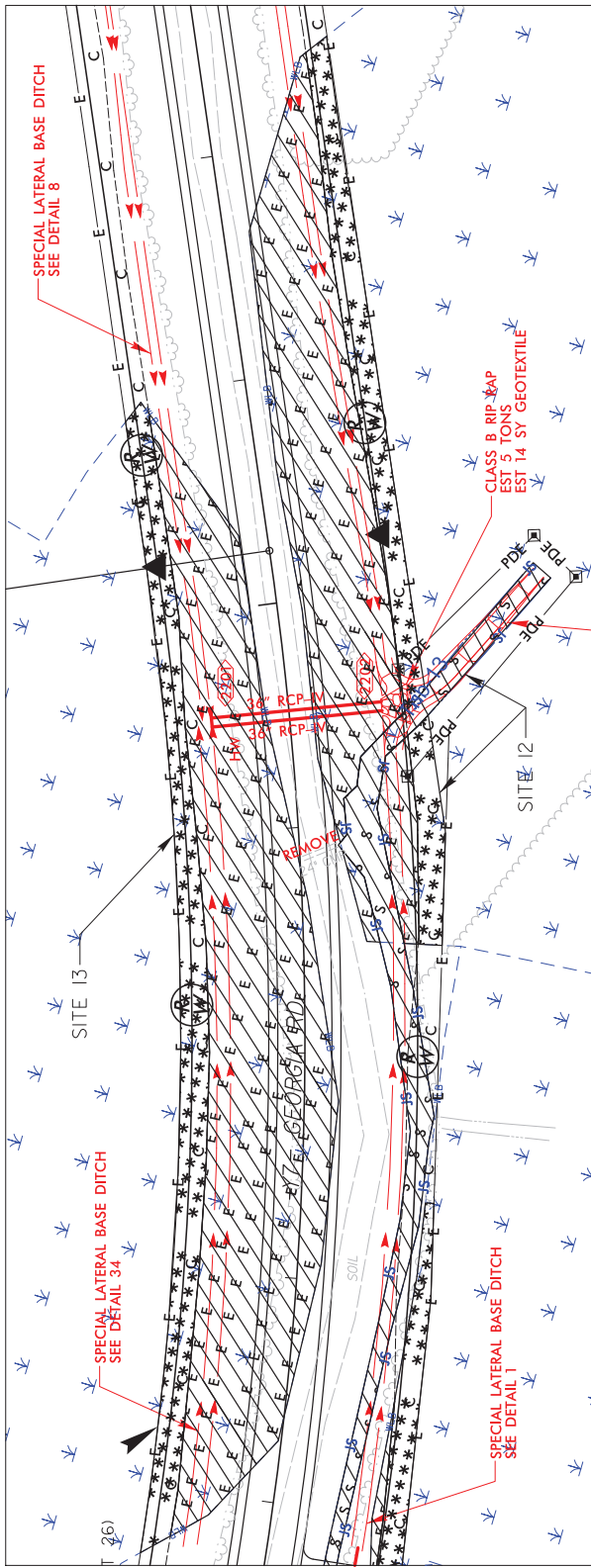
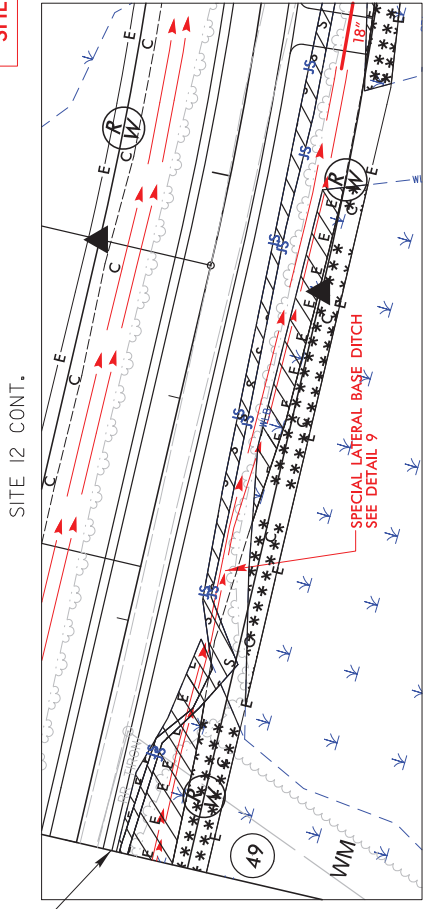


PROJECT REFERENCE NOS.	SHEET NO.
R-5819, R-5820	
ROWWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INFORMED BY PLANS TO WHICH THIS DRAWING IS REFERENCED	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

PROJECT REFERENCE NOS.
R-5819, R-5820
ROWWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
INFORMED BY PLANS TO WHICH THIS DRAWING IS REFERENCED
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

**PERMIT DRAWING
SHEET 26 OF 47**

NAD 83/NA 2011

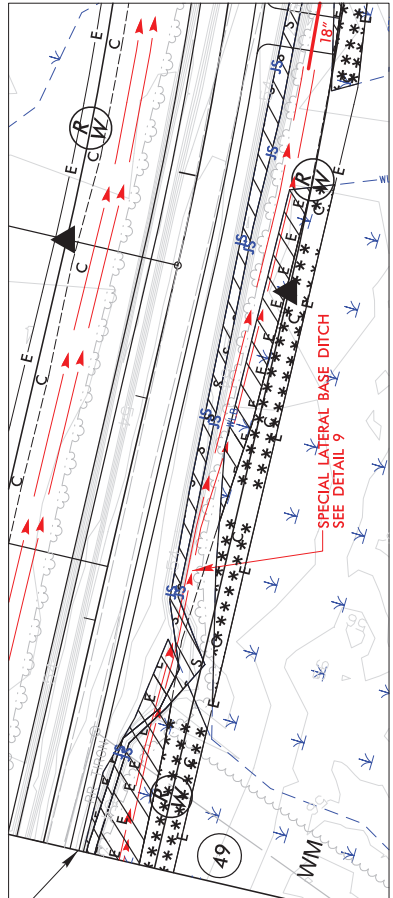


PROJECT REFERENCE NOS. R-5819, R-5820	SHEET NO. 1
ROWWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<p>INFORMED BY PLANS FOR THE PROJECT</p>	
<p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>	

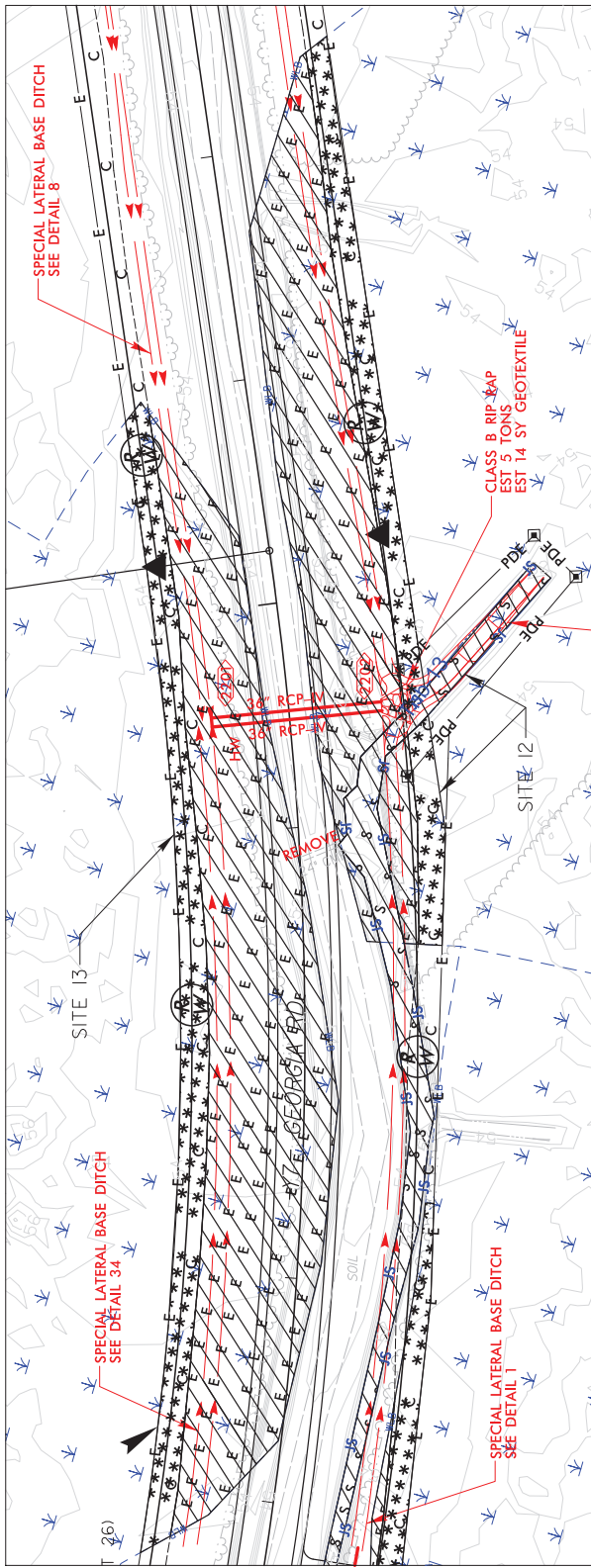
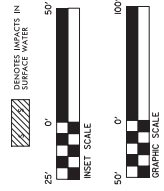
PERMIT DRAWING
SHEET 27 OF 47

NAD 83/NA 2011

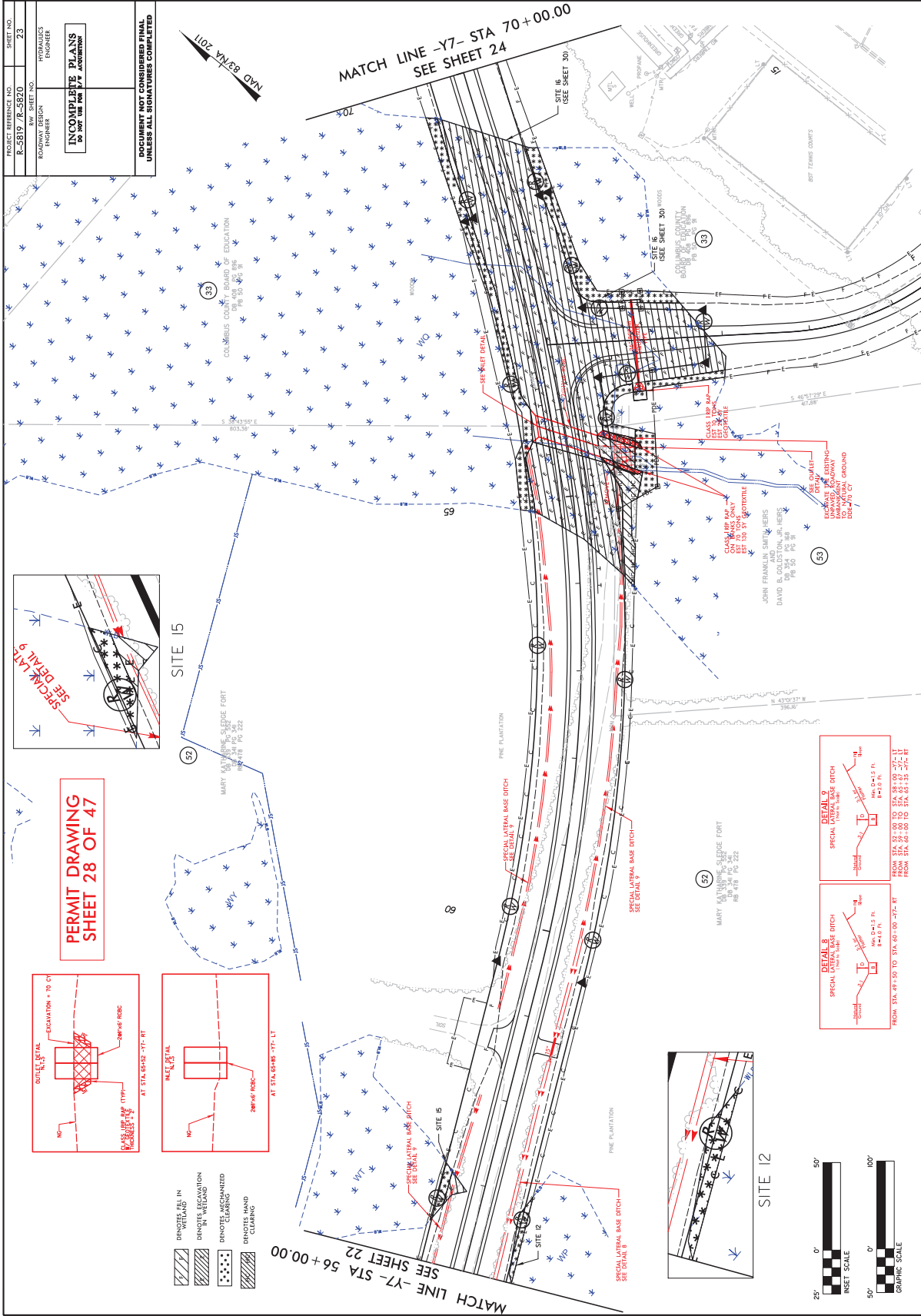
SITE 12 CONT.



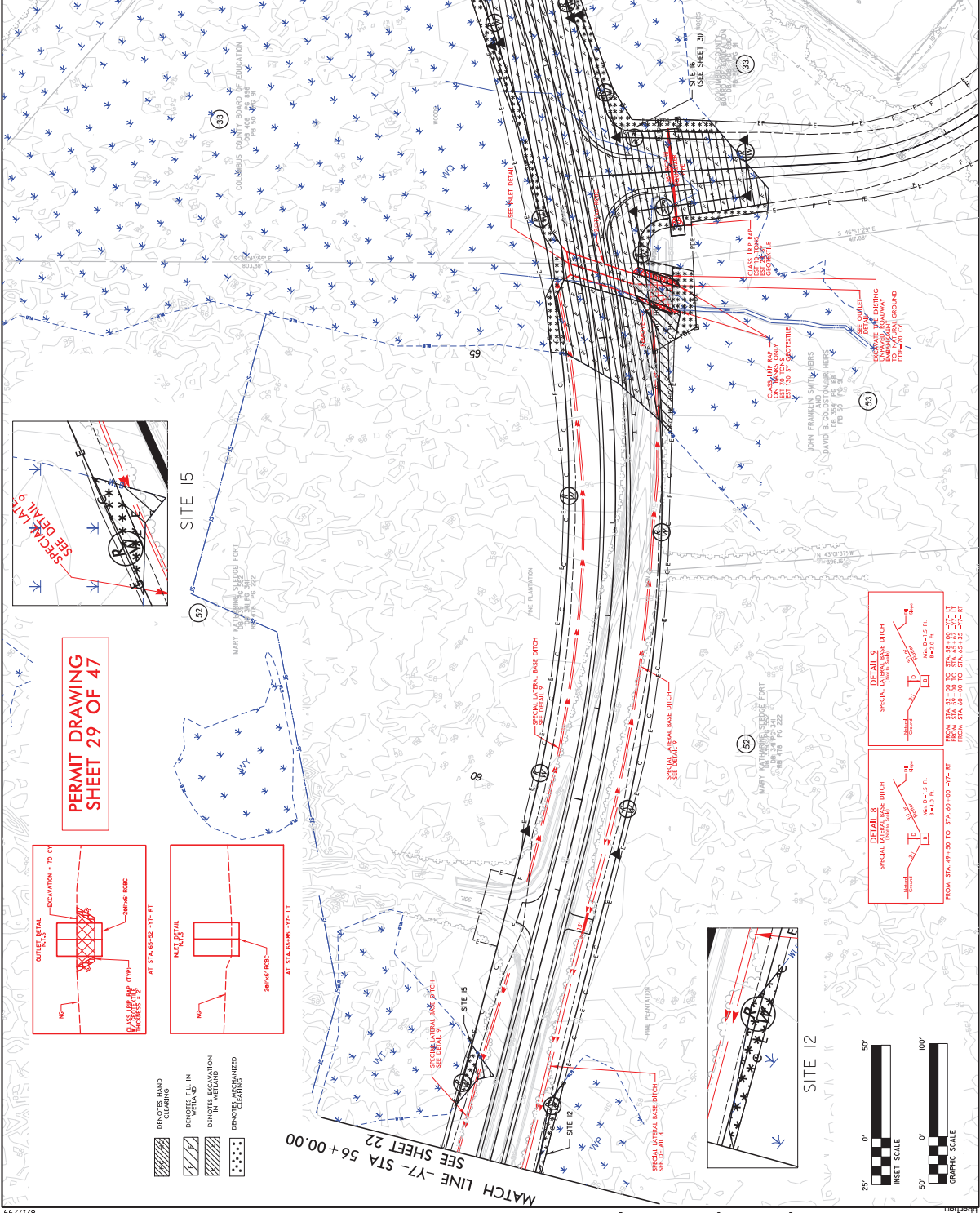
PSH 22 MATCH LINE



SITE 12 CONT. AND SITE 13



PROJECT REFERENCE NOS.	SHEET NO.
R-5819, R-5820	23
ROWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT BE USED FOR CONSTRUCTION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

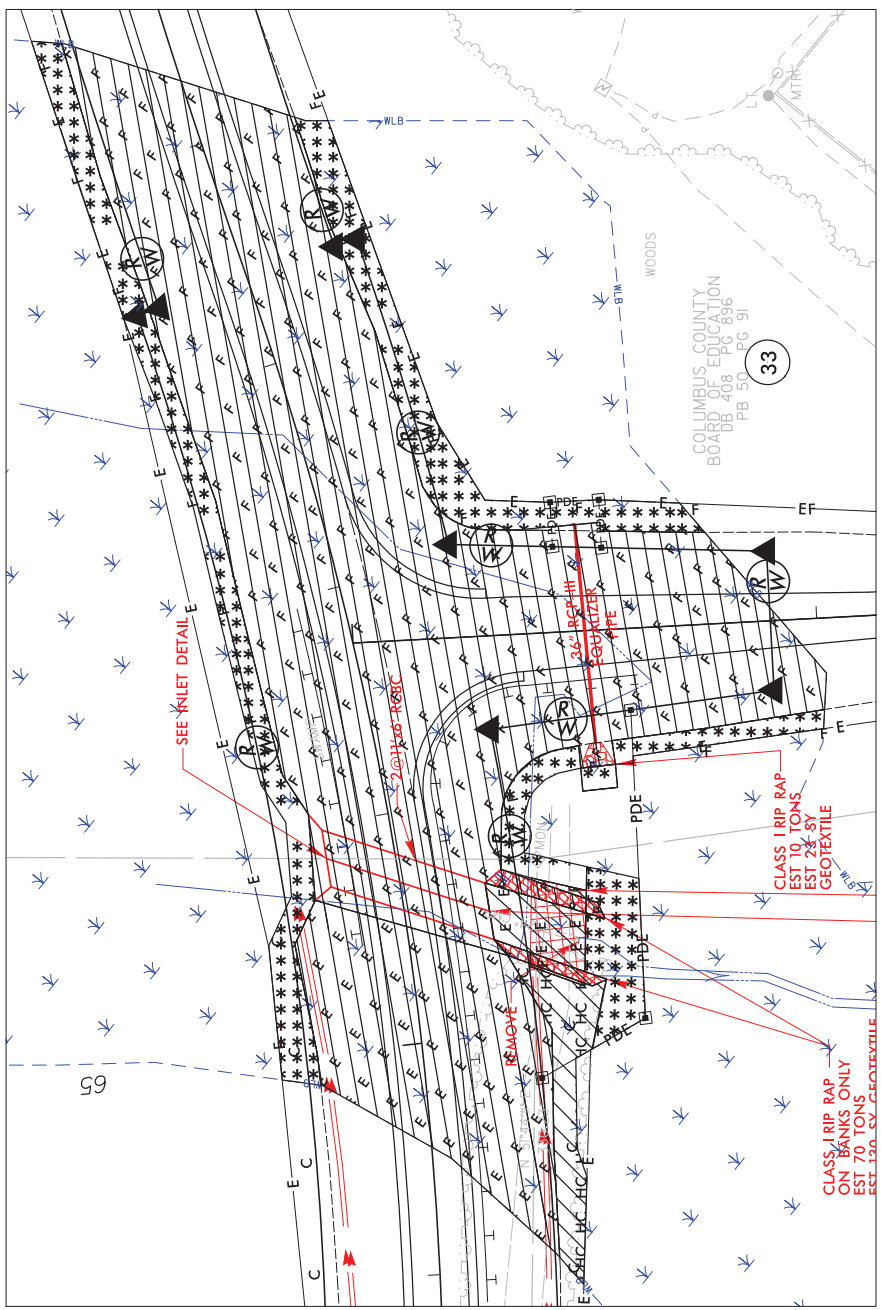
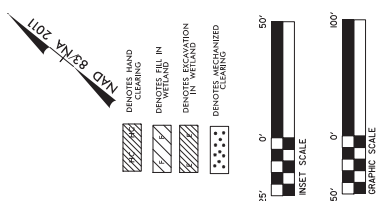


	REMOVES HAND CLEANING
	REMOVES FILL IN WETLAND
	REMOVES ELEVATION IN WETLAND
	REMOVES UNDESIRABLE VEGETATION

2/23/2019 PM 2:22:59 \\redwood\projects\PERMITS\Environmental\Drawings\M819\M828\Hyd\pwr\wtk\CON\SPR23.dgn

PROJECT REFERENCE NO. R-5819 / R-5820	SHEET NO. P-55
DESIGNER RUSSELL W. HARRIS REGISTERED PROFESSIONAL ENGINEER	DATE MAY 2011
INCOMPLETE PLANS DO NOT USE FOR P.P. ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

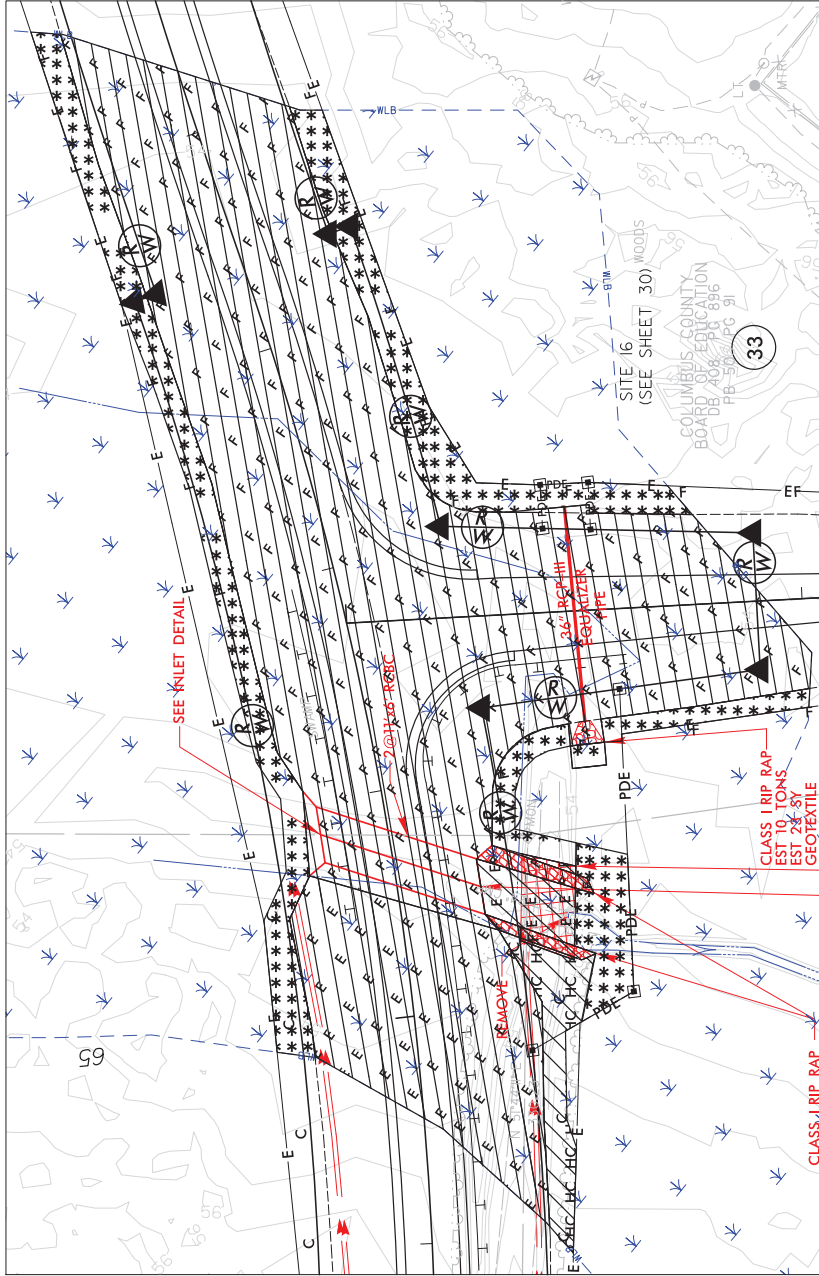
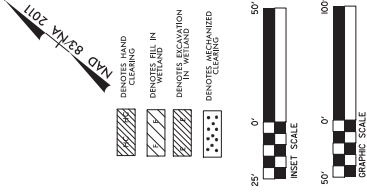
PERMIT DRAWING
SHEET 30 OF 47



SITE I6

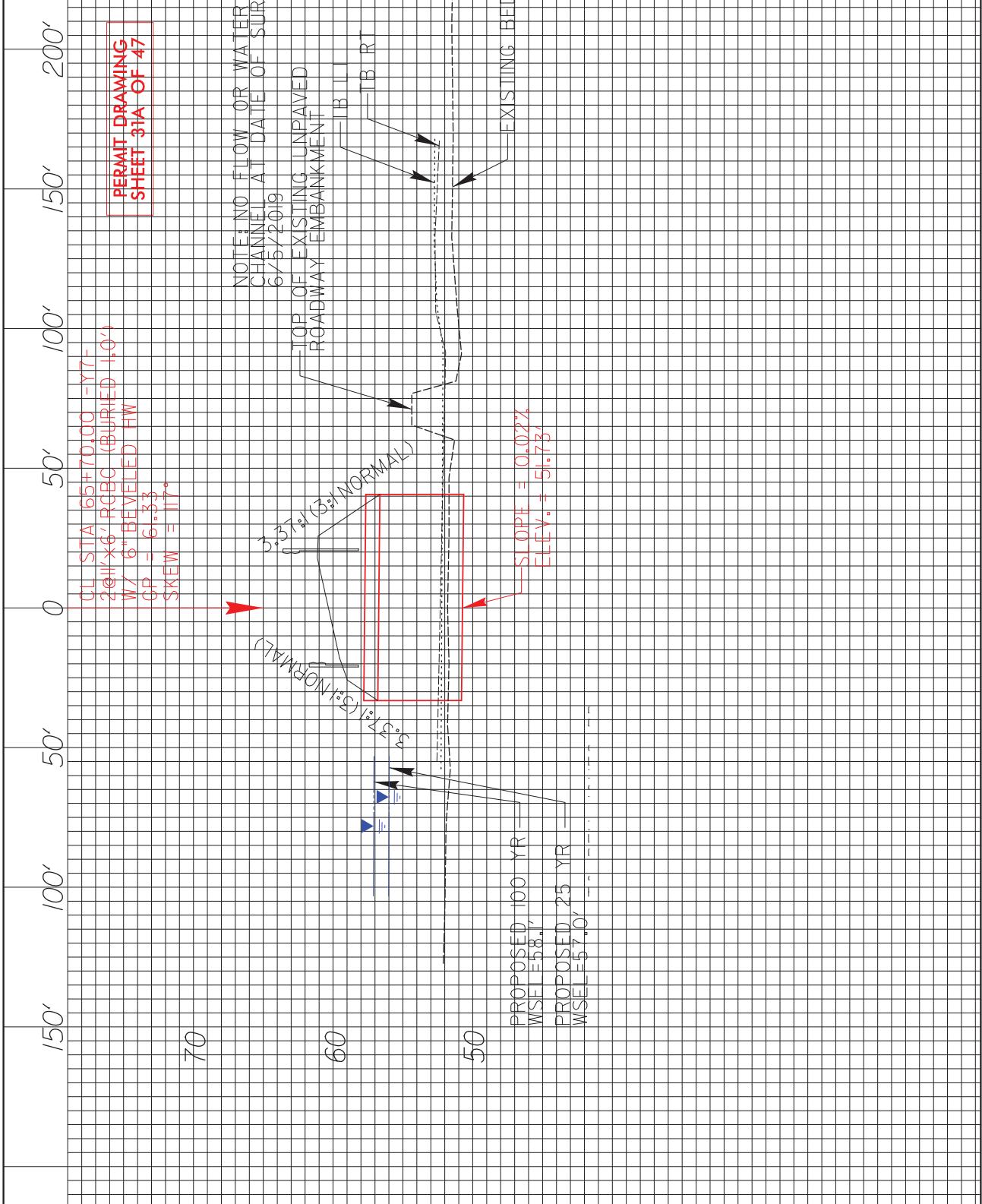
PERMIT DRAWING
SHEET 31 OF 47

PROJECT REFERENCE NO. R-5819 / R-5820	SHEET NO. 31
ROWWAY DESIGN ENGINEER HYDRAULICS ENGINEER	SHEET NO. 31
INVOICES DUE BY 10/15/2011 IN ORDER TO AVOID STOPPAGE OF PERMITS	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



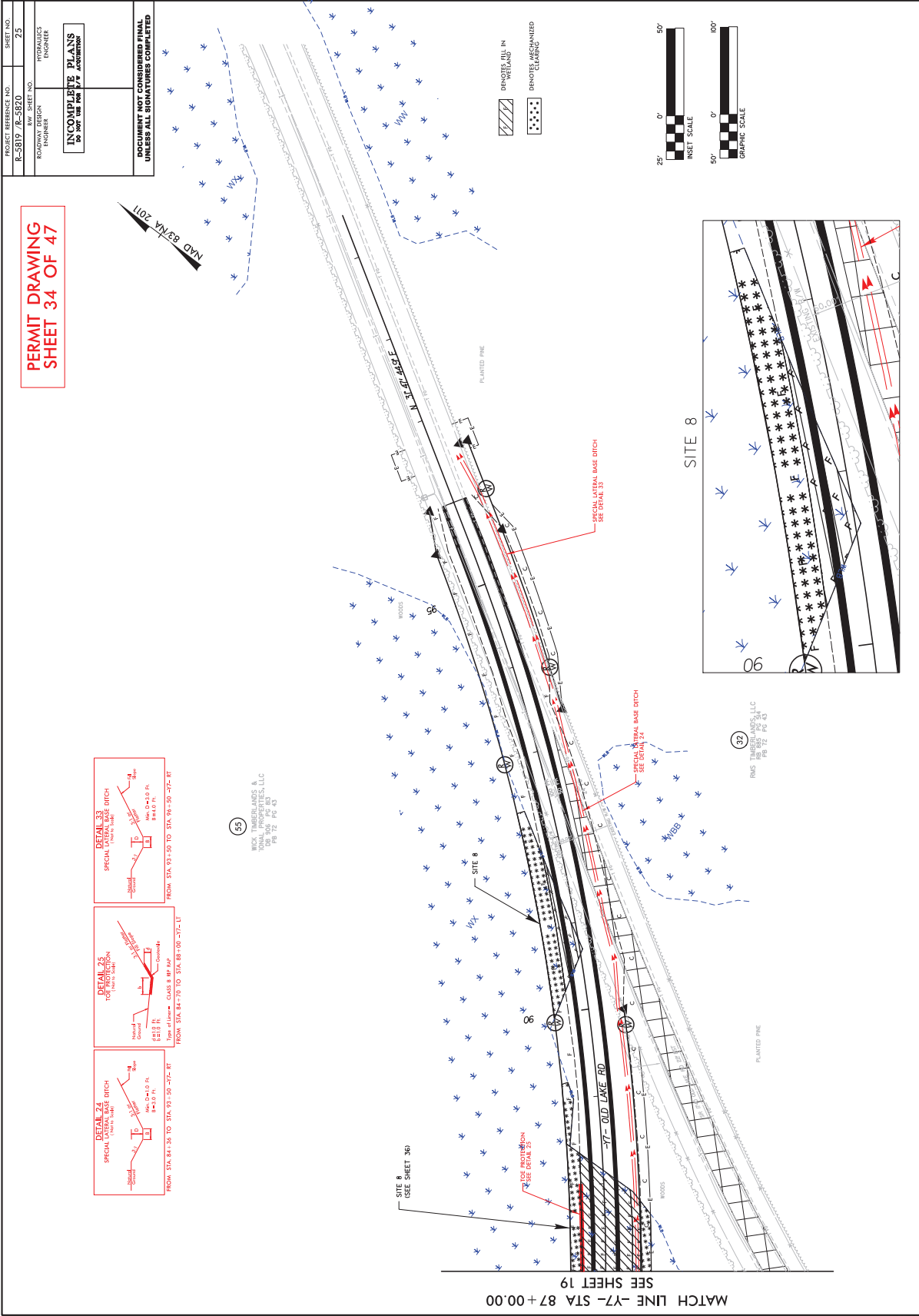
SITE 16

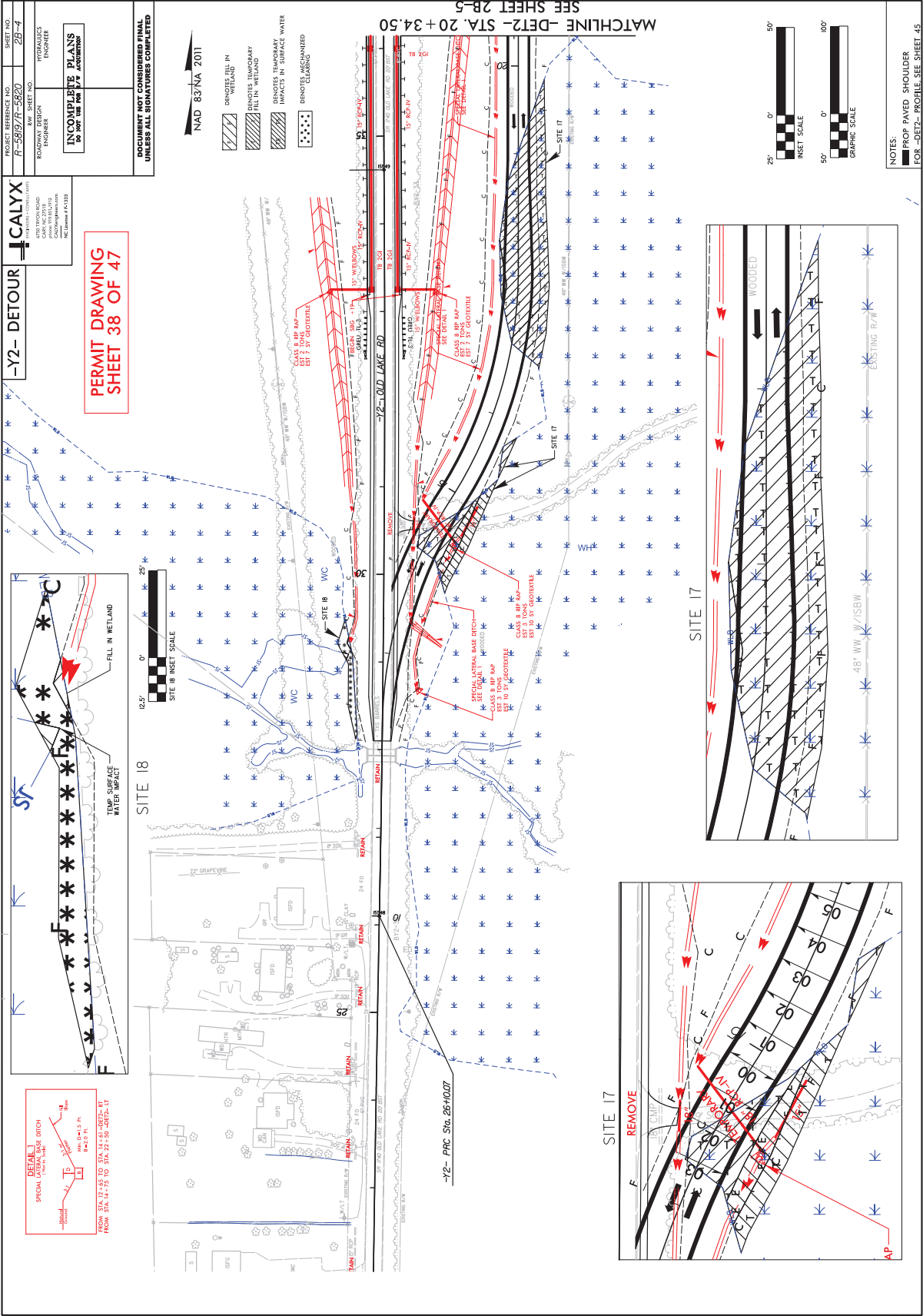
PROJECT REFERENCE NO. R-5819 / R-5820	SHEET NO. 23A
ROW SHEET NO. ROADWAY ENGINEER	INTEGRAL ENGINEER
INCOMPLETE PLANS DO NOT USE FOR U.P. ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



REVISIONS	8/17/99
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8/17/99

\\p010013\PERMITS\Environmental\Drawings\MS19_MS28_Hyd_Plan\K.MO.CM\PSH2B-4.dgn 8/28/93 PM

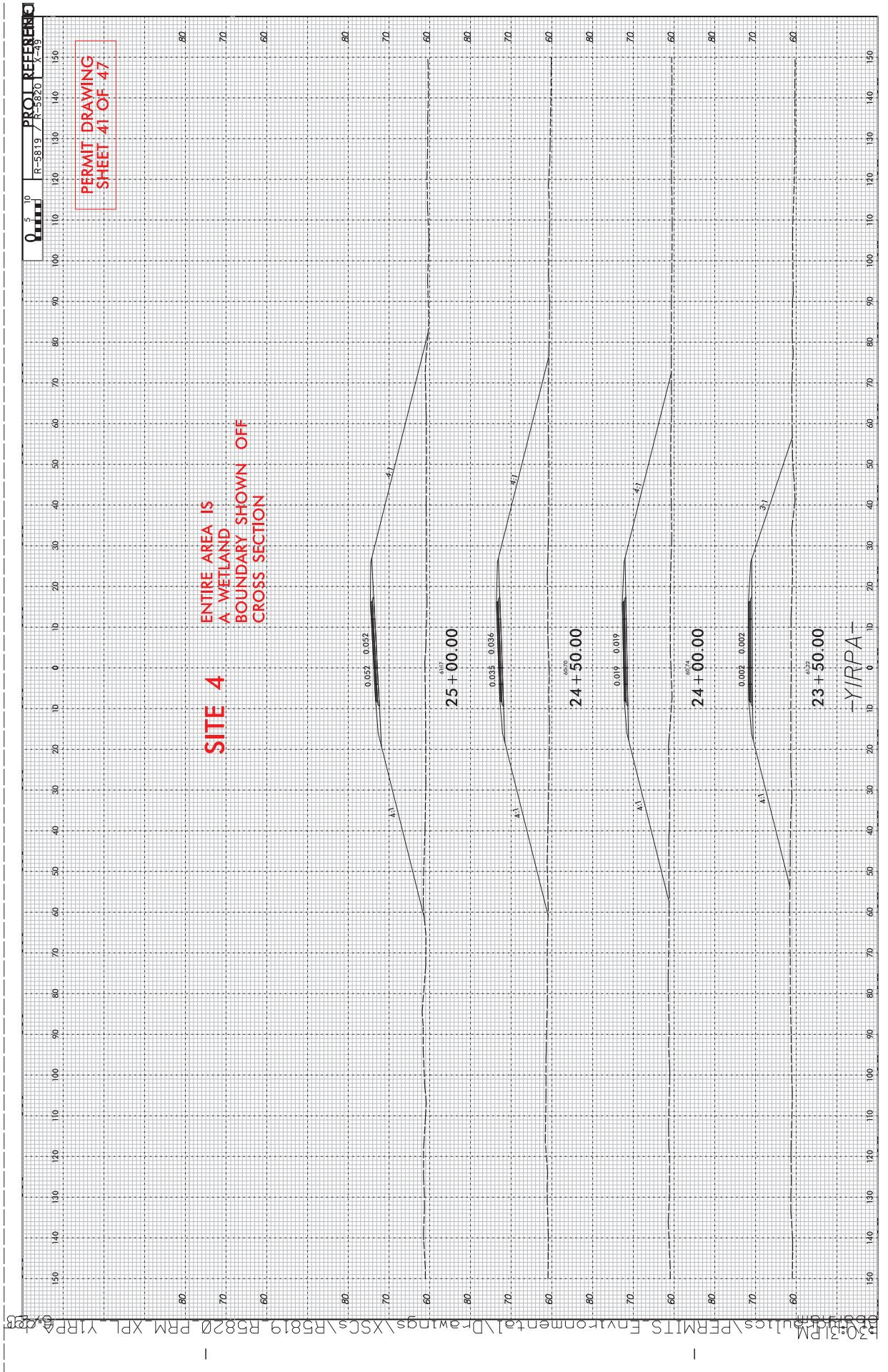
PROJ REFERENCE
R-5819 / R-5820 / A-53



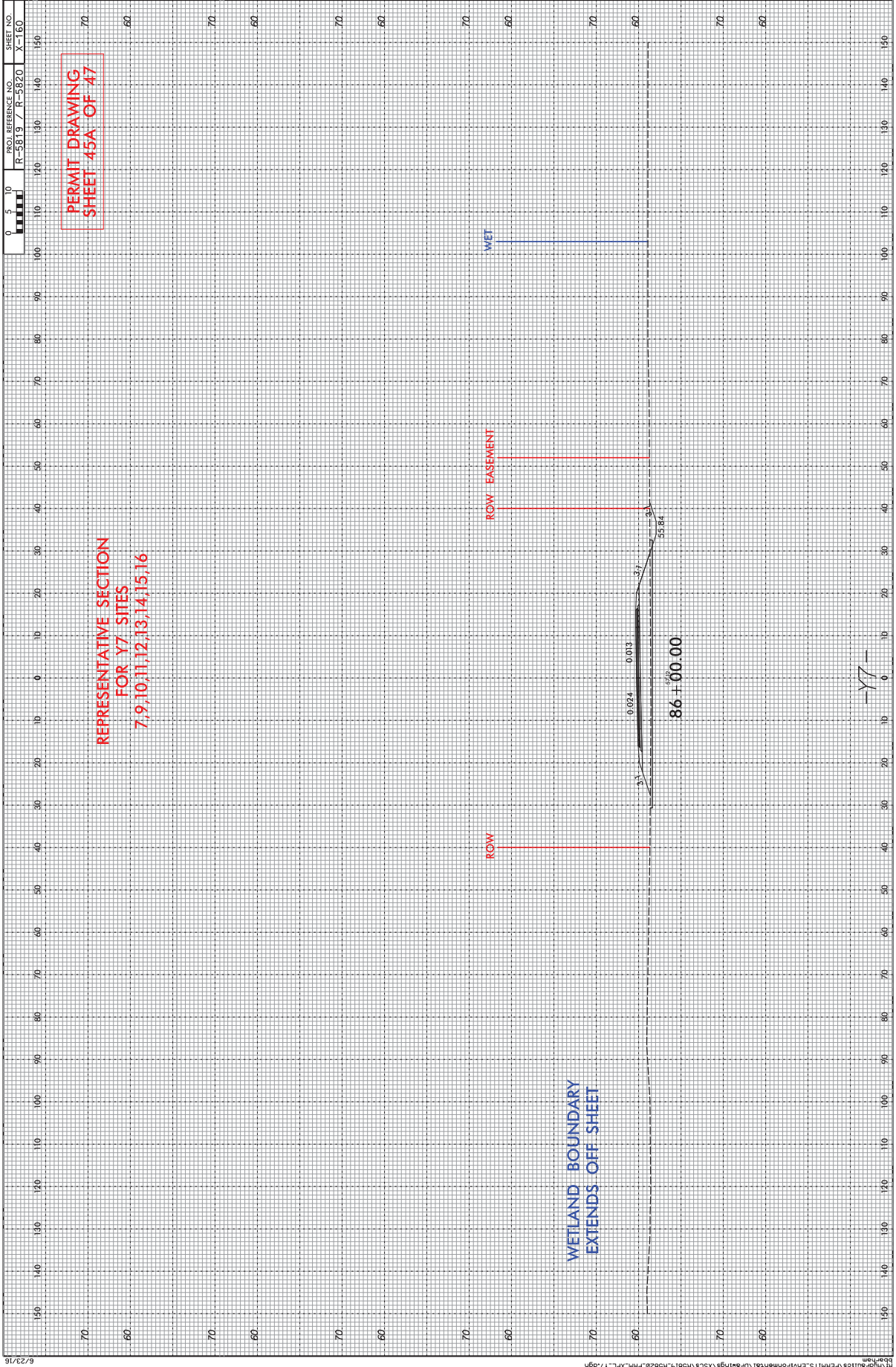
PERMIT DRAWING
SHEET 41 OF 47

SITE 4

ENTIRE AREA IS
A WETLAND
BOUNDARY SHOWN OFF
CROSS SECTION



-YIRPA-



PERMIT DRAWING
SHEET 45A OF 47

REPRESENTATIVE SECTION
FOR Y7 SITES
7,9,10,11,12,13,14,15,16

ROW

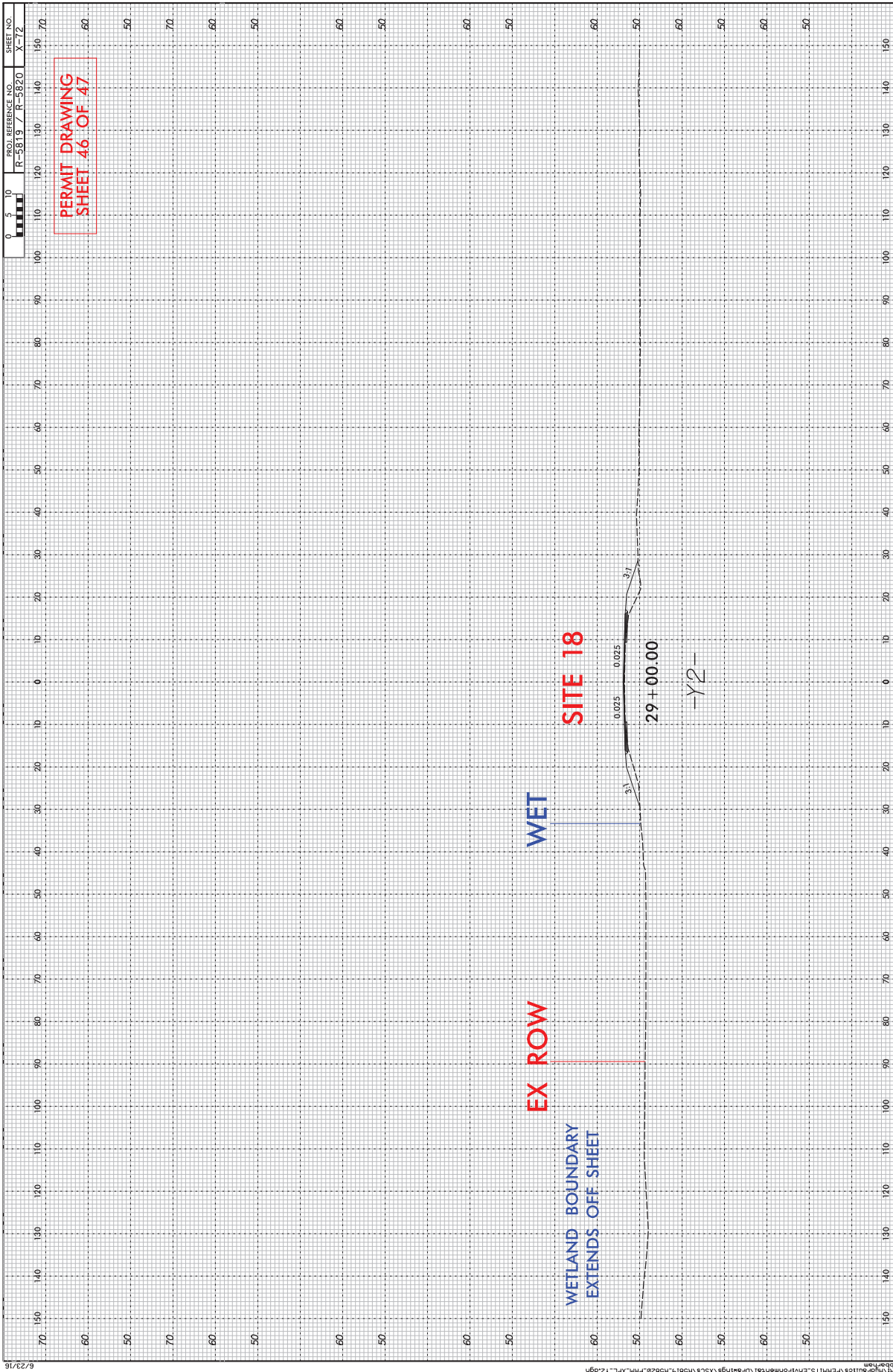
ROW EASEMENT

WET

86+00.00

WETLAND BOUNDARY
EXTENDS OFF SHEET

0	5	10	PROJ. REFERENCE NOS.		SHEET NO.	
0	5	10	R-581.9	R-582.0	X-160	150
0	5	10	120	130	140	150



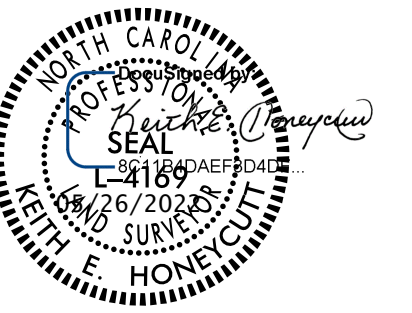
RIGHT OF WAY CONTROL SHEET

PROJECT REFERENCE NO. R-5819R-5820 SHEET NO. RW03E-1A

Location and Surveys

NCDOT
LOCATION AND SURVEYS
DIVISION 6 FIELD OFFICE

PROJECT SURVEYOR



**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**

I, Keith E. Honeycutt, certify that the right of way and permanent easement monumentation for this project shown herein was completed under my direct and responsible charge from an actual survey made under my supervision; that all horizontal closures had a minimum ratio of precision of 1:10,000 (Class A). Field work was performed on 05/10/2022, and all coordinates are based on NAD83/2011. That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 17th day of May, 2022.

DocuSigned by:
Keith E. Honeycutt
Professional Land Surveyor L-4169

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y1	10+74.00	46.00	208644.2844	2144318.7286
Y1	11+25.00	-50.00	208694.4508	2144222.2904
Y1	11+39.08	30.03	208709.2230	2144302.1992
Y1	12+35.00	-50.00	208804.4467	2144221.3373
Y1	13+44.00	37.00	208914.1963	2144307.3897
Y1	13+44.00	30.00	208914.1357	2144300.3900
Y1	15+90.00	-37.00	209159.5460	2144231.2612
Y1	17+23.41	37.00	209293.5921	2144304.1026
Y1	17+23.41	-37.00	209292.9510	2144230.1053
Y1	19+63.45	-37.00	209532.6730	2144227.0665
Y1	19+63.45	37.00	209533.9079	2144301.0562
Y1	20+79.42	-37.00	209648.7245	2144225.2765
Y1	20+79.42	37.00	209649.7721	2144299.2691
Y1	21+25.06	37.00	209695.4972	2144298.5671
Y1	21+54.25	-37.00	209723.4041	2144224.0729

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y7	13+00.00	-40.00	212551.5800	2144487.5231
Y7	13+10.02	40.00	212472.0550	2144500.7850
Y7	14+07.72	40.00	212475.4429	2144598.0005
Y7	14+07.72	-40.00	212555.4078	2144595.6320
Y7	16+66.74	40.00	212487.7942	2144858.1434
Y7	16+66.74	-40.00	212567.6239	2144852.9251
Y7	21+18.87	40.00	212521.8348	2145309.7855
Y7	21+18.87	-40.00	212601.5448	2145302.9792
Y7	22+38.65	40.00	212530.7148	2145428.3946
Y7	22+38.65	-40.00	212610.5496	2145423.2561
Y7	27+13.23	40.00	212561.1977	2145901.9949
Y7	27+13.23	-40.00	212641.0325	2145896.8564
Y7	28+32.53	40.00	212569.8059	2146021.5883
Y7	28+32.53	-40.00	212649.5536	2146015.2403
Y7	31+21.79	-40.00	212672.5061	2146303.5825
Y7	31+21.79	40.00	212592.7583	2146309.9306
Y7	33+02.06	-50.00	212694.7978	2146483.7863
Y7	33+02.06	50.00	212594.9576	2146489.4360
Y7	44+59.82	-50.00	212760.2082	2147639.6984
Y7	44+59.82	50.00	212660.3679	2147645.3482
Y7	50+23.41	-50.00	212890.6544	2148165.5561
Y7	50+23.41	50.00	212799.7357	2148207.1950
Y7	59+52.66	50.00	213186.4048	2149052.1419
Y7	59+52.66	-50.00	213277.3357	2149010.5296
Y7	66+27.00	50.00	213605.8839	2149601.1203
Y7	67+06.00	50.00	213669.9059	2149651.7249
Y7	68+39.09	-40.00	213830.8471	2149652.6712
Y7	68+39.09	-50.00	213836.1130	2149644.1700
Y7	68+39.09	50.00	213783.4545	2149729.1823
Y7	68+39.09	40.00	213788.7204	2149720.6811
Y7	82+37.35	40.00	214789.3430	2150660.9806
Y7	82+37.35	-40.00	214854.6055	2150614.7118
Y7	83+00.00	40.00	214825.5801	2150712.0933
Y7	83+43.00	-40.00	214915.7122	2150700.9031
Y7	84+87.00	-40.00	214998.9960	2150818.3757
Y7	85+15.00	40.00	214949.9276	2150887.4864
Y7	86+33.28	40.00	215018.3383	2150983.9803
Y7	86+33.28	-40.00	215083.6008	2150937.7115
Y7	89+95.08	40.00	215253.9191	2151266.3152
Y7	93+38.59	40.00	215515.9333	2151497.0947
Y7	95+51.30	40.00	215694.3360	2151619.4567
Y7	95+51.30	-40.00	215736.4875	2151551.4623
Y7	96+00.00	-30.00	215772.6096	2151585.6209
Y7	96+60.00	40.00	215786.7229	2151676.7297
Y7	96+60.00	30.00	215791.9919	2151668.2304

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y1A	14+95.00	-37.07	208382.0949	2144308.0543
Y1A	15+95.00	-42.00	208467.2075	2144272.0681

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y1RPD	17+31.00	-97.97	211194.8107	2145655.2324
Y1RPD	19+55.00	-130.00	211104.6026	2145457.9903
Y1RPD	19+87.00	-90.43	211132.1698	2145416.1705

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y2	54+88.36	50.00	213013.7453	2151037.4439
Y2	60+50.00	-50.13	213574.8518	2150934.3579
Y2	60+50.00	-65.00	213574.7736	2150919.4915
Y2	63+85.00	-65.00	213909.7689	2150917.7295
Y2	65+13.00	-49.75	214037.8474	2150932.3107
Y2	65+76.67	-40.00	214101.5722	2150941.7211
Y2	66+34.93	50.00	214160.2966	2151031.4134
Y2	66+34.93	-40.00	214159.8232	2150941.4147
Y2	68+21.16	50.00	214352.1456	2151018.5544
Y2	69+84.74	40.00	214515.8993	2150978.1347
Y2	72+67.12	40.00	214789.6766	2150884.2285
Y2	73+30.00	-40.00	214812.0264	2150784.9746
Y2	73+48.32	79.00	214882.6190	2150882.5519
Y2	74+98.16	47.00	215001.3732	2150776.4139
Y2	75+30.00	-30.00	214985.3468	2150694.5809
Y2	77+19.06	-30.00	215131.5659	2150580.9531

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y3	16+27.00	30.00	208539.9519	2144168.9499
Y3	16+48.00	-65.60	208635.5795	2144189.8389
Y3	18+36.00	-30.00	208599.3147	2144378.1308
Y3	18+43.59	62.00	208507.2563	2144384.9696
Y3	19+25.00	37.00	208531.4284	2144466.4418
Y3	20+31.00	30.00	208536.8877	2144572.3666

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
DR1	11+80.00	-30.00	213561.5573	2149735.6029
DR1	11+80.00	30.00	213521.4103	2149691.0133

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y3	20+25.89	30.35	208536.6245	2144567.2591
Y3	20+25.89	30.00	208536.9740	2144567.2636

REVISIONS

6/2/19

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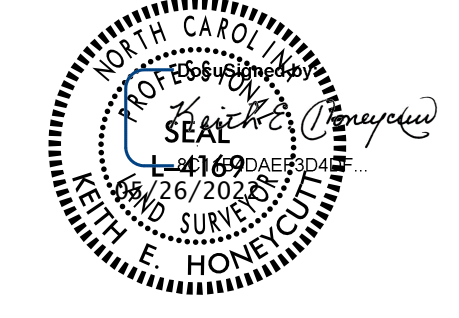
NOTES:

1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
3. RIGHT OF WAY MONUMENTATION ESTABLISHED 05/10/2022.

Location and Surveys

NC DOT
LOCATION AND SURVEYS
DIVISION 6 FIELD OFFICE

PROJECT SURVEYOR



DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

I, Keith E. Honeycutt, certify that the right of way and permanent easement monumentation for this project shown herein was completed under my direct and responsible charge from an actual survey made under my supervision; that all horizontal closures had a minimum ratio of precision of 1:10,000 (Class A). Field work was performed on 05/10/2022, and all coordinates are based on NAD83/2011. That this survey was performed to meet the requirements of 21 NCAC 56.1600 as applicable.

This 17th day of May, 2022.

Designed by
Keith E. Honeycutt
Professional Land Surveyor L-4169

-Y3- PI Sta 11+71.56 Δ = 0° 09' 09.4" (LT) D = 0° 02' 40.1" L = 343.13' T = 171.56' R = 128,825.59'	-Y3- PI Sta 18+86.84 Δ = 1° 29' 31.3" (RT) D = 0° 16' 02.8" L = 557.87' T = 278.95' R = 21,423.02' SE = NC	-Y3- PI Sta 22+79.03 Δ = 0° 15' 19.8" (RT) D = 0° 05' 02.2" L = 226.53' T = 113.26' R = 50,800.59' SE = EX	-Y1A- PI Sta 14+19.68 Δ = 51° 29' 08.4" (LT) D = 16° 51' 06.1" L = 305.52' T = 163.94' R = 340.00' SE = 04
-Y3ROUND- PI Sta 10+51.46 Δ = 89° 23' 55.6" (RT) D = 110° 11' 03.1" L = 81.4' T = 51.46' R = 52.00'	-Y5- PI Sta 11+33.81 Δ = 90° 44' 25.1" (RT) D = 0° 05' 02.2" L = 82.35' T = 52.68' R = 52.00'	-Y5- PI Sta 11+80.49 Δ = 0° 18' 10.9" (RT) D = 0° 05' 02.2" L = 360.97' T = 180.49' R = 68,254.05' SE = EX	
-Y3ROUND- PI Sta 11+97.48 Δ = 66° 20' 28.7" (RT) D = 110° 11' 03.1" L = 60.21' T = 33.99' R = 52.00'	-Y3ROUND- PI Sta 13+03.04 Δ = 113° 31' 10.6" (RT) D = 110° 11' 03.1" L = 103.03' T = 79.34' R = 52.00'		

NAD 83/NA 2011

ADDED PARCEL 5Z. CHANGED PUE TO DUE ON PARCEL 5Z.

REMOVED TCE AND RW ON PARCEL 11. ELIMINATED PARCEL 11.

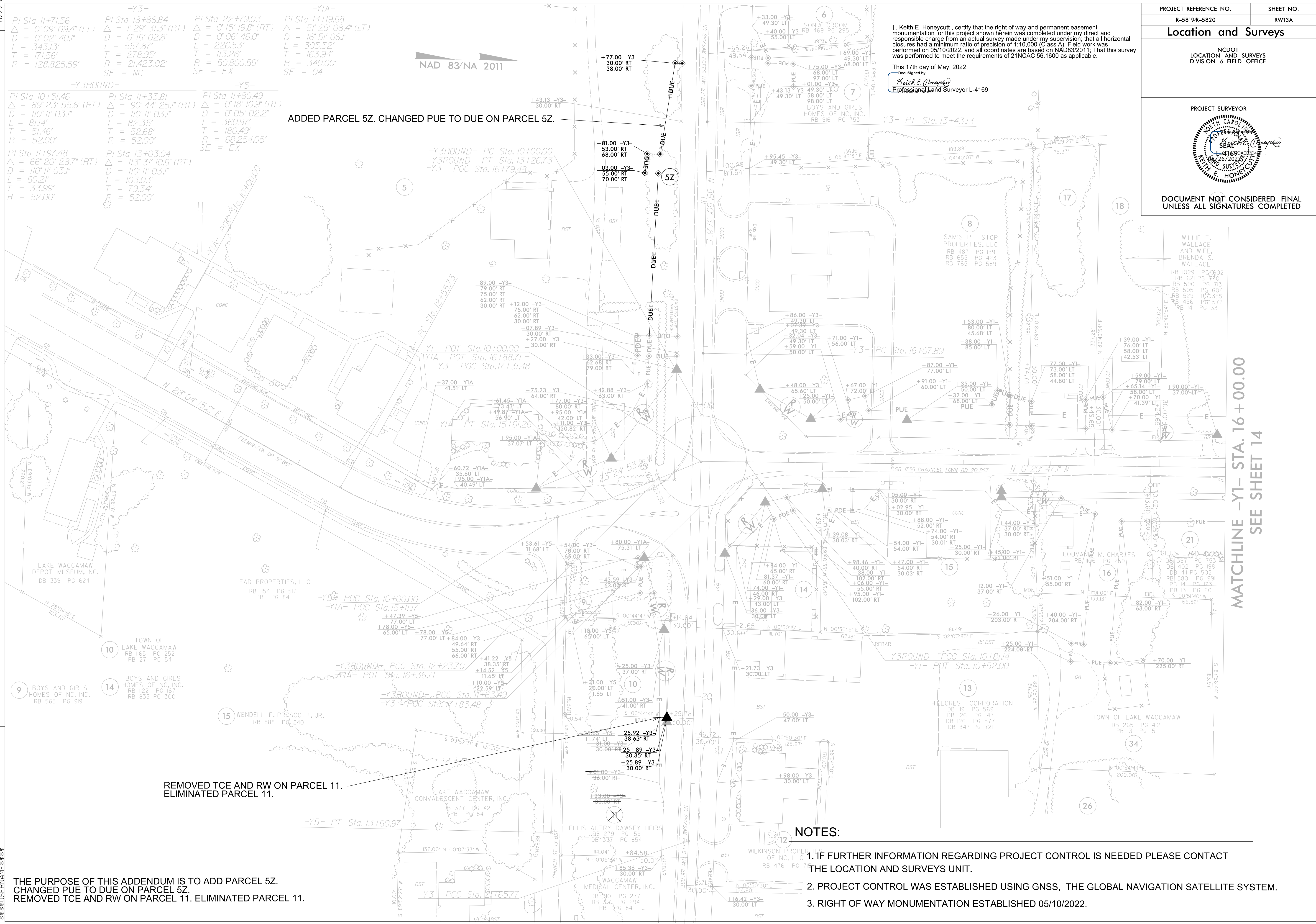
THE PURPOSE OF THIS ADDENDUM IS TO ADD PARCEL 5Z.
CHANGED PUE TO DUE ON PARCEL 5Z.
REMOVED TCE AND RW ON PARCEL 11. ELIMINATED PARCEL 11.

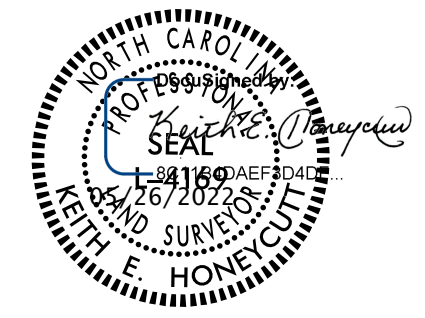
REVISIONS

MATCHLINE -Y1- STA. 16 + 00.00
SEE SHEET 14

NOTES:

- IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
- PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
- RIGHT OF WAY MONUMENTATION ESTABLISHED 05/10/2022.



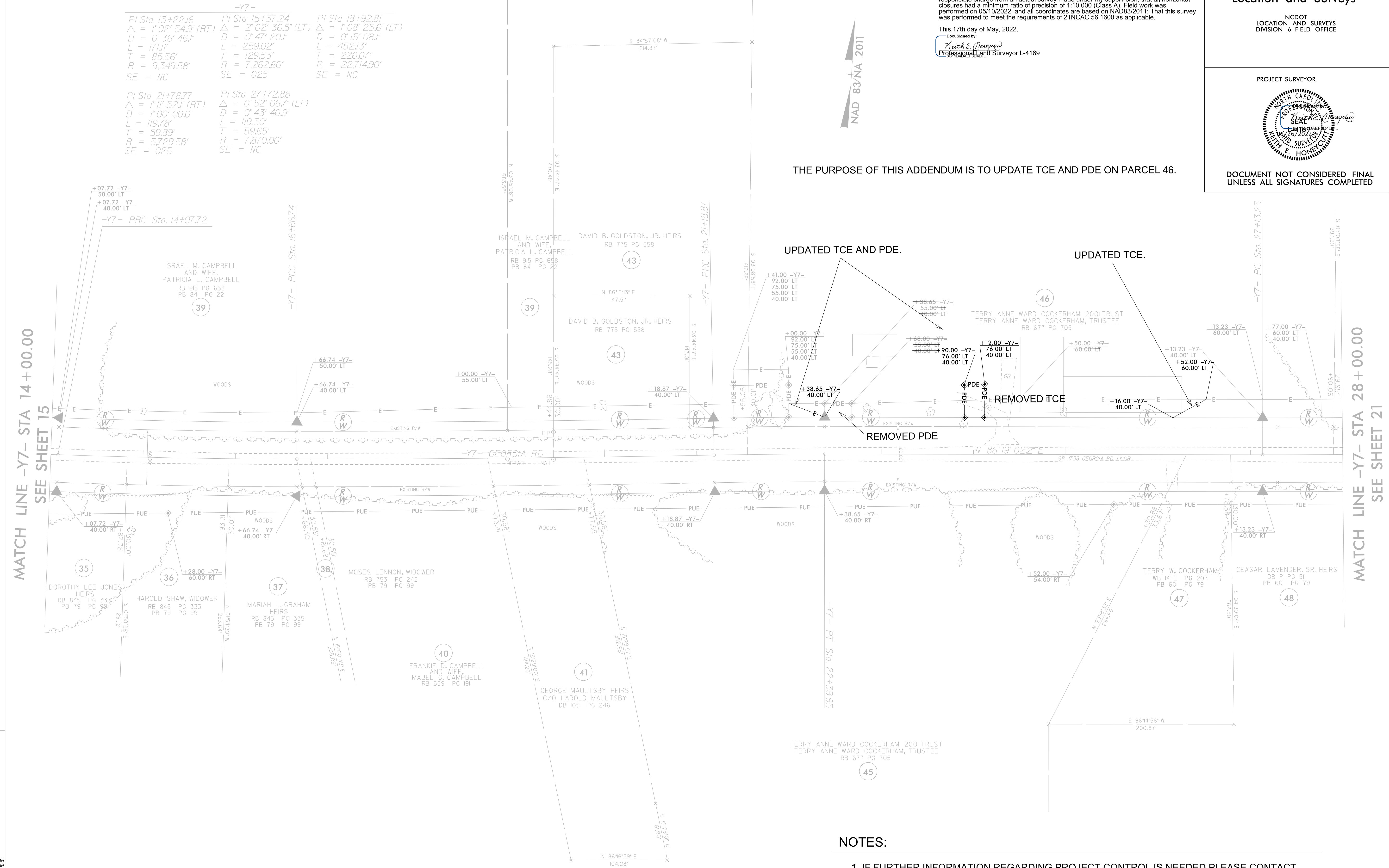
PROJECT REFERENCE NO.	SHEET NO.
R-5819R-5820	RW20A
Location and Surveys	
NCDOT LOCATION AND SURVEYS DIVISION 6 FIELD OFFICE	
PROJECT SURVEYOR	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

I, Keith E. Honeycutt, certify that the right of way and permanent easement monumentation for this project shown herein was completed under my direct and responsible charge from an actual survey made under my supervision; that all horizontal closures had a minimum ratio of precision of 1:10,000 (Class A). Field work was performed on 05/10/2022, and all coordinates are based on NAD83/2011. That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 17th day of May, 2022.

DocuSigned by:
 Keith E. Honeycutt
 Professional Land Surveyor L-4169

THE PURPOSE OF THIS ADDENDUM IS TO UPDATE TCE AND PDE ON PARCEL 46.



-Y7-		
PI Sta 13+22.16 Δ = 1' 02" 54.9" (RT) D = 0' 36" 46.1" L = 17.11' T = 85.56' R = 9,349.58' SE = NC	PI Sta 15+37.24 Δ = 2' 02" 36.5" (LT) D = 0' 47" 20.1" L = 259.02' T = 129.53' R = 7,262.60' SE = 025	PI Sta 18+92.81 Δ = 1' 08" 25.6" (LT) D = 0' 15" 08.1" L = 452.13' T = 226.07' R = 22,714.90' SE = NC
-Y7-		
PI Sta 21+78.77 Δ = 1' 11" 52.1" (RT) D = 1' 00" 00.0" L = 119.78' T = 59.89' R = 5,729.58' SE = 025	PI Sta 27+72.88 Δ = 0' 52" 06.7" (LT) D = 0' 43" 40.9" L = 119.30' T = 59.65' R = 7,870.00' SE = NC	

REVISIONS

MATCH LINE -Y7- STA 14+00.00
SEE SHEET 15

MATCH LINE -Y7- STA 28+00.00
SEE SHEET 21

NOTES:

1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
3. RIGHT OF WAY MONUMENTATION ESTABLISHED 05/10/2022.

DATE PLOTTED: 05/10/2022 10:00 AM
 PLOT BY: J. W. HONEYCUTT
 PROJECT: R-5819R-5820
 SHEET: RW20A