



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

August 31, 2007

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

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

SUBJECT: Beaufort County, Improvements to US 17 from south of SR
1149 (Price Rd.) to north of SR 1509 (Springs Rd); T.I.P.
Number R-2510B; Federal Aid Project No. MAF-75-3 (26)

Attached are the modifications to the U. S. Army Corps of Engineers Individual 404, the 401 Water Quality Certification and the CAMA permit from Division Coastal Management for the above referenced project. All environmental permits have been received for the construction of this project.

PSH/gyb

Attachment

Cc:

Mr. Majed Alghandour, P. E., Programming and TIP
Mr. Jay Bennett, P.E., Roadway Design
Dr. David Chang, P.E., Hydraulics
Mr. Randy Garris, P.E. State Contract Officer
Mr. Art McMillan, P.E., Highway Design
Mr. Greg Perfetti, P.E., Structure Design
Mr. Mark Staley, Roadside Environmental
Mr. John F. Sullivan, FHWA
Mr. Rob Hanson, P.E., PDEA Eastern Region Unit Head
Mr. Jay B. Johnson, Division Environmental Officer



IN REPLY REFER TO

**DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS**

Washington Regulatory Field Office
P.O. Box 1000
Washington, North Carolina 27889-1000

July 13, 2007

RECEIVED

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DIVISION OF HIGHWAYS
PDEA-OFFICE OF NATURAL ENVIRONMENT

Regulatory Division

ORM ID SAW-199301143

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

Dear Dr. Thorpe:

Reference the Department of the Army permit issued to you on January 17, 2006, for Section A and January 17, 2007, for Section B of the U.S. Highway 17 Washington Bypass project (R-2510), starting from 0.5 mile south of Possum Track Road (NCSR 1127) south of Chocowinity, in Beaufort County and ending at US 17 north of SR 1509 (Springs Road), and your written request of June 4, 2007, for permit modification to Section A and your written requests of June 4, 2007 and July 2, 2007, for permit modification to Section B. The permit modification requests are as follows:

Section A	Sheets 9 & 10	0.15 acres of additional hand clearing for powerline
Section B	Site 4	0.05 acres of additional permanent wetland impacts
Section B	Site 6	0.32 acres of additional hand clearing on south end
Section B	Site 6	0.08 acres of additional hand clearing on north end
Section B	Site 6	Temporary use of mats in wetlands

The permit is hereby modified to include the work as indicated above and shown on the enclosed plans. It is understood that all conditions of the original permit remain applicable and that the expiration date is unchanged.

Sincerely,

David M. Lekson, P.W.S.
Chief, Washington Regulatory Field Office

Enclosures

Copies Furnished (without enclosures):

Mr. Steve Sollod
Division of Coastal Management
1638 Mail Service Center
Raleigh, North Carolina 27699-16387

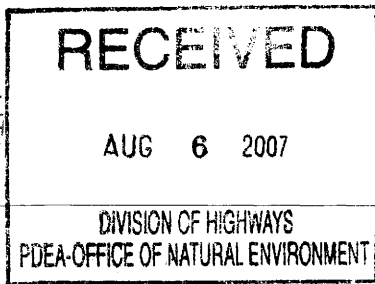
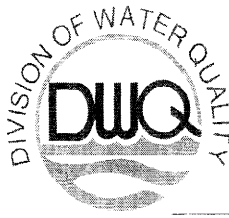
Mr. John Hennessy
Water Quality Section
Division of Environmental Management
North Carolina Department of Environment
and Natural Resources
1650 Mail Service Center
Raleigh, North Carolina 27699-1650

Mr. Travis Wilson
Eastern Region Highway Project Coordinator
Habitat Conservation Program
1142 I-85 Service Road
Creedmoor, North Carolina 27522

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

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

Mr. Chris Militscher
C/O FHWA
U.S. Environmental Protection Agency
Raleigh Office
310 New Bern Avenue, Room 206
Raleigh, North Carolina 27601



Michael F. Easley, Governor
William G. Ross Jr., Secretary
North Carolina Department of Environment and Natural Resources
Coleen H. Sullins Director
Division of Water Quality



August 2, 2007

AUG 06 2007

Preconstruction
Project Development and
Environmental Analysis Branch

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

Subject: Modification to the 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act Tar-Pamlico Buffer Rules with ADDITIONAL CONDITIONS for Proposed improvements to US 17 from south of SR1149 (Price Rd.) to north of SR 1509 (Springs Rd.) in Beaufort County, Federal Aid Project No.MAF-75-3 (26), TIP R-2510B. DWQ Project No. 20050785 v.6, v.7

Dear Dr. Thorpe:

Attached hereto is a modification of Certification No. 3527 issued to The North Carolina Department of Transportation dated September 6, 2005, and modified January 24, 2007, February 13, 2007, and July 9, 2007. This modification is applicable only to the additional activities in R-2510 section B. All the authorized activities and conditions associated with the original Water Quality Certification dated September 6, 2005 and subsequent modifications still apply except where superseded by this certification.

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

Sincerely,

for Coleen H. Sullins
Director

Attachments

- cc: Mr. William Wescott, Corps of Engineers, Washington Field Office
Kathy Matthews, US EPA, Region IV
Mr. Jay Johnson, Division 2 Environmental Officer, PO Box 1587, Greenville, NC 27835
Mr. Steven Sollod, NCDENR- DCM, 2728-168 Capital Blvd., Parker Lincoln Bldg., Raleigh, NC 27604
Mr. Garcy Ward, NC DWQ, Washington Regional Office
Central Files
File Copy

Modification to the 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act and Tar-Pamlico River Buffer Authorization with Additional Conditions

THIS CERTIFICATION is issued in conformity with the requirements of Section 401 Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Quality (DWQ) Regulations in 15 NCAC 2H .0500 and 15A NCAC .0259 for the Tar-Pamlico Basin. This certification authorizes the NCDOT to impact 7.92 acres of jurisdictional wetlands, 2,368 linear feet of jurisdictional streams and 372,740 square feet of protected riparian buffers in Beaufort County. The project shall be constructed pursuant to the modification requests dated June 4, 2007 and July 2, 2007. The authorized impacts are as described below:

Wetland Impacts in the Tar-Pamlico River Basin Approved with Original Certification

Section B Site:	Fill (Permanent) (ac)	Fill (Temporary) (ac)	Excavation (ac)	Mechanized Clearing (ac)	Hand Clearing (ac)	Total Wetland Impact (ac)
1	0.09			0.007		0.10
2			0.017	0.013		0.03
3	0.43			0.040		0.47
4	3.06			0.149		3.18
5	0.12			0.011		0.13
6	0.22	0.05		0.0		0.27
7	1.55					1.55
8	0.04					0.04
9	0.13			0.017		0.15
10	0.22			0		0.22
11	0					
Initial Total:	5.86	0.05	0.017	0.237	0	6.14

Wetland Impacts in the Tar-Pamlico River Basin Approved with February 13, 2007 Modification

Section B Site:	Fill (Permanent) (ac)	Fill (Temporary) (ac)	Excavation (ac)	Mechanized Clearing (ac)	Hand Clearing (ac)	Total Wetland Impact (ac)
1	0.11			0.02		0.13
2						
3	1.00			0.45		1.45
4	2.04			0.14		2.18
5	0.15			0.02		0.17
6	0.24		0.05	1.83	33.11	2.12
7	1.56					1.56
8						
9	0.10			0.06		0.16
10	0.13			0.02		0.15
11						
Total impacts with Feb. 13, 2007 modification	5.33	0.00	0.05	2.54	33.11	7.92
Difference between Initial and Feb. 13, 2007 modification	- 0.53	- 0.05	+ 0.033	+ 2.303	+ 33.11	+ 1.78

Wetland Impacts in the Tar-Pamlico River Basin Approved By This Certification

Section B Site:	Fill (Permanent) (ac)	Fill (Temporary) (ac)	Excavation (ac)	Mechanized Clearing (ac)	Hand Clearing (ac)	Total Wetland Impact (ac)
1	0.11			0.02		0.13
2						
3	1.00			0.45		1.45
4	2.04		0.03	0.16		2.23
5	0.15			0.02		0.17
6	0.24		0.05	1.83	33.51	2.12
7	1.56					1.56
8						
9	0.10			0.01		0.11
10	0.13			0.02		0.15
11						
Modified Total	5.33		0.08	2.51	33.51	7.92*
Difference between Feb. 13, 2007 modification and this certification	0		+0.03	-0.03	+ 0.4	0

* Total Wetland Impact excludes temporary impacts from hand clearing

Riparian Buffer Impacts in the Tar-Pamlico River Basin Approved with Original Certification

Section B, Site:	Zone 1 Impact (sq ft)	minus Wetlands in Zone 1 (sq ft)	= Zone 1 Buffers (not wetlands) (sq ft)	Zone 1 Buffer Mitigation Required* (using 3:1 ratio)	Zone 2 Impact (sqFt)	minus Wetlands in Zone 2 (sq ft)	= Zone 2 Buffers (not wetlands) (sq ft)	Zone 2 Buffer Mitigation Required* (using 1.5:1 ratio)
1	6,676.6	4,312.9	2,363.7	N/A	4,450.0	0	4,450.0	N/A
2	2,842.1	1,179.5	1,662.6	N/A	1,992.6	98.8	1,893.8	N/A
3								
4	49,735.4	48,299.0	1,436.4	4,309.2	32,361	24,287.9	8,073.1	12,109.7
5								
6A	9,424.7	35.5	9,389.2	N/A	6,215.2	3	6,212.3	N/A
6B	10,118.4	7.5	10,110.9	N/A	6,628.1	3	6,625.1	N/A
6C	29,045.5	35.5	29,010.0	N/A	19,778.2	41.5	19,736.7	N/A
7	60,721.8	3,079.2	57,642.6	172,927.8	38,160.8	5,244.5	32,916.3	49,374.5
8								
9	16,736.8	2,253.9	14,482.9	43,448.7	11,154.9	1,944.5	9,210.4	13,815.6
10								
11								
Initial Total:	185,301.3	59,203	126,098.3	220,685.7	120,740.8	31,623.2	89,117.7	75,299.8

Riparian Buffer Impacts in the Tar-Pamlico River Basin Approved by the Feb. 13, 2007 Modification

Section B, Site:	Zone 1 Impact (sq ft)	minus Wetlands in Zone 1 (sq ft)	= Zone 1 Buffers (not wetlands) (sq ft)	Zone 1 Buffer Mitigation Required* (using 3:1 ratio)		Zone 2 Impact (sq ft)	minus Wetlands in Zone 2 (sq ft)	= Zone 2 Buffers (not wetlands) (sq ft)	Zone 2 Buffer Mitigation Required* (using 1.5:1 ratio)
1	11,774.5	5,350.8	6,423.7	19,271.1		7,951.6	0	7,951.6	11,927.4
2									
3	27,846.2	24,339.3	3,506.9	10,520.7		16,695.9	14,777.6	1,918.3	2,877.5
4	30,705.3	30,244.9	460.4	1,381.2		18,371.3	13,698.0	4,673.3	7,010.0
5									
6	55,841.7	2,488.0	53,353.7	N/A*		31,147.1	578.0	30,569.1	N/A*
7	73,267.8	2,331.1	70,936.7	212,810.1		48,125.5	4,926.6	43,198.9	64,798.4
8									
9	25,212.8	1,408.0	23,804.8	71,414.4		16,114.5	2,968.5	13,146.0	19,719.0
10									
11	5,719.5	0	5,719.5	N/A*		3,965.9	0	3,965.9	N/A*
Feb. 13, 2007 Total:	230,367.8	66,162.1	164,205.7	315,397.5		142,371.8	36,948.7	105,423.1	106,332.3
Difference Between Initial and Feb. 13, 2007 Totals:	+ 45,066.5	+ 6,959.1	+ 38,107.4	+ 94,711.8		+ 21,631	+ 5,325.5	+ 16,305.4	+ 31,032.5

* Site 6 = No mitigation required for the bridge structure per 15A NCAC 2B .0259 (6).

* Site 11 = Total for Site is less than 1/3 acre and 150 linear feet of impact, no mitigation required.

Riparian Buffer Impacts in the Tar-Pamlico River Basin Approved by this Certification

Section B, Site:	Zone 1 Impact (sq ft)	minus Wetlands in Zone 1 (sq ft)	= Zone 1 Buffers (not wetlands) (sq ft)	Zone 1 Buffer Mitigation Required* (using 3:1 ratio)		Zone 2 Impact (sq ft)	minus Wetlands in Zone 2 (sq ft)	= Zone 2 Buffers (not wetlands) (sq ft)	Zone 2 Buffer Mitigation Required* (using 1.5:1 ratio)
1	11,774.5	5,350.8	6,423.7	19,271.1		7,951.6	0	7,951.6	11,927.4
2									
3	27,846.2	24,339.3	3,506.9	10,520.7		16,695.9	14,777.6	1,918.3	2,877.5
4	30,705.3	30,244.9	460.4	1,381.2		18,371.3	13,698.0	4,673.3	7,010.0
5									
6	55,841.7	2,488.0	53,353.7	N/A*		31,147.1	578.0	30,569.1	N/A*
7	73,267.8	2,331.1	70,936.7	212,810.1		48,125.5	4,926.6	43,198.9	64,798.4
8									
9	25,212.8	1053.0	24,159.8	72,479.4		16,114.5	1,801.5	14,313	21,469.5
10									
11	5,719.5	0	5,719.5	N/A*		3,965.9	0	3,965.9	N/A*
MODIFIED TOTAL:	230,367.8	65,807.1	164,560.7	316,462.5		142,371.8	35,781.7	106,590.1	108,082.8
Difference Between Feb. 13, 2007 modification and this certification:	0	- 355	+ 355	+ 1,065		0	- 1,167.0	+ 1,167.0	+ 1,750.5

* Site 6 = No mitigation required for the bridge structure per 15A NCAC 2B .0259 (6).

* Site 11 = Total for Site is less than 1/3 acre and 150 linear feet of impact, no mitigation required.

Total Buffer Impact for Section B Approved By This Certification: 372,740 square feet.

Total Buffer Mitigation Required for Section B Approved By This Certification: 424,545 square feet

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

This approval is only valid for the purpose and design that you submitted in your modified applications dated received June 11, 2007 and received July 9, 2007. All the authorized activities and conditions associated with the original Water Quality Certification dated September 6, 2005, and all subsequent modifications still apply except where superseded by this certification. Should your project change, you are required to notify the DWQ and submit a new application. If the property is sold, the new owner must be given a copy of this Certification and approval letter, and is thereby responsible for complying with all the conditions. If any additional wetland impacts, or stream impacts, for this project (now or in the future) exceed one acre or 150 linear feet, respectively, additional compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). For this approval to remain valid, you are required to comply with all the conditions listed below. In addition, you should obtain all other federal, state or local permits before proceeding with your project including (but not limited to) Sediment and Erosion control, Coastal Stormwater, Non-discharge and Water Supply watershed regulations. This Certification shall expire on the same day as the expiration date of the corresponding Corps of Engineers Permit.

Condition(s) of Certification:

1. The only modifications to the design of the project authorized by this certification are those submitted in your applications received June 4, 2007 and July 2, 2007. All authorized activities and conditions associated with the original Water Quality Certification dated September 6, 2005 and all other corresponding modifications still apply except where superseded by this certification.
2. Compensatory mitigation for impacts to 105,487.5 square feet of protected riparian buffers in Zone 1 and 72,055.1 square feet of protected riparian buffer in Zone 2 shall be required as described below, and replaces condition #2 in the 401 Water Quality Certification dated February 13, 2007:

Riparian Buffer Zone	Area To Be Mitigated (sq.ft)	Mitigation Ratio	Area to Be Mitigated (sq. ft)
Zone 1	105,487.5	3:1	316,462.5
Zone 2	72,055.1	1.5:1	108,082.7
TOTAL:			424,545.2

We understand that you have chosen to perform compensatory mitigation for impacts to protected buffers through use of the North Carolina Ecosystem Enhancement Program (EEP). Mitigation for unavoidable impacts to Tar-Pamlico Riparian Buffers shall be provided in the Tar-Pamlico River Basin (HUC 03020104) and done in accordance with 15A NCAC 2B .0259. EEP has indicated in a letter dated October 27, 2006 that they will assume responsibility for satisfying the compensatory mitigation requirements for the above-referenced project, in accordance with the Tri-Party MOA signed on July 22, 2003 and the Dual-Party MOA signed on April 12, 2004.

3. Compensatory mitigation for impacts to 7.92 acres of jurisdictional wetlands shall be done. Total mitigation shall be provided as described below, and replaces condition #11 in the 401 Water Quality Certification dated September 6, 2005:

Wetland Type	Area (ac)	Riparian Wetlands Mitigated Onsite	Area To Be Mitigated Offsite	Mitigation Ratio	Acres To Be Mitigated (ac)
Riparian	6.04	0.70	5.34	2:1	10.68
Non-Riparian	1.88	0	1.88	2:1	3.76
TOTAL:					14.44

Offsite Compensatory Mitigation

Compensatory mitigation for impacts to 10.68 acres of riparian wetlands and 3.76 acres of non-riparian wetlands not mitigated onsite shall be mitigated in Hydrologic Cataloging Unit 03020104. These impacts associated with the proposed project shall be provided by the Ecosystem Enhancement Program (EEP), as outlined in the letter dated August 4, 2005, and in accordance with the Memorandum of Agreement (MOA) between the State of North Carolina and the US Army Corps of Engineers signed on July 22, 2003.

- Compensatory mitigation for impacts to 2,368 linear feet of streams shall be done at a replacement ratio of 1:1. Applying a replacement ratio of 1:1, total mitigation for 2,368 linear feet of streams shall be provided as described below, and replaces condition #12 in the 401 Water Quality Certification dated September 6, 2005:

Offsite Compensatory Mitigation

Compensatory mitigation for the unavoidable impacts to 2,368 linear feet of streams in the Hydrologic Cataloging Unit 03020104 associated with the proposed project shall be provided by the Ecosystem Enhancement Program (EEP), as outlined in the letter dated August 4, 2005, and in accordance with the Memorandum of Agreement (MOA) between the State of North Carolina and the US Army Corps of Engineers signed on July 22, 2003.

- Prior to planting any of the vegetation for the wetland restoration sites located at the Osprey Seafood mitigation site and the Packing House Road mitigation site, a planting plan shall be submitted to, and approved by, the NC Division of Water Quality.
- During construction of the Osprey Seafood and Packing House Road mitigation sites, the areas to be restored shall be graded to an elevation that approximates adjacent wetlands, and then ripped to promote vegetation re-establishment.
- For the aforementioned wetland mitigation sites (the Osprey Seafood and Packing House Road mitigation sites), success shall be tracked over a 3-year period. The NCDOT shall submit an annual summary report (including pictures of the sites) at the end of each of the first two years after the completion of the project. The report shall discuss the site's vegetative and hydrologic changes. This report can be qualitative in nature and is in lieu of the usual quantitative hydrology and vegetative success criteria. At the end of the third year after project completion, the NCDOT will coordinate a field visit to the sites, at which time the DWQ will determine the success of the mitigation, and the sites may be declared successful with written approval from the NC Division of Water Quality. If, at the end of the 3-year monitoring period, the NC Division of Water Quality feels that the success cannot be determined or has not been achieved, then the NCDOT shall coordinate field visits on an annual basis until the NCDWQ is satisfied that the sites are successful.
- The permittee and its authorized agents shall conduct its activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with §303(d) of the Clean Water Act) and any other appropriate requirements of State and Federal law. If DWQ determines that such standards or laws are not being met (including the failure to sustain a designated or achieved use) or that State or federal law is being violated, or that further conditions are necessary to assure compliance, DWQ may reevaluate and modify this certification.

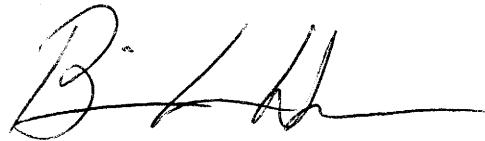
9. Upon completion of the project, the NCDOT Division Engineer shall complete and return the enclosed "Certification of Completion Form" to notify DWQ when all work included in the 401 Certification has been completed.
10. A copy of this Water Quality Certification shall be posted on the construction site at all times. In addition, the Water Quality Certification and all subsequent modifications, if any, shall be maintained with the Division Engineer and the on-site project manager.

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

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

This the 2nd day of August, 2007

DIVISION OF WATER QUALITY

A handwritten signature in black ink, appearing to read 'C. H. Sullins', written over a horizontal line.

for Coleen H. Sullins,
Director

Modification to WQC No. 3527



DWQ Project No.: _____

County: _____

Applicant: _____

Project Name: _____

Date of Issuance of 401 Water Quality Certification: _____

Certificate of Completion

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

Applicant's Certification

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

Signature: _____ Date: _____

Agent's Certification

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

Signature: _____ Date: _____

Engineer's Certification

_____ Partial _____ Final

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

Signature _____ Registration No. _____

Date _____



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

Michael F. Easley, Governor

James H. Gregson, Director

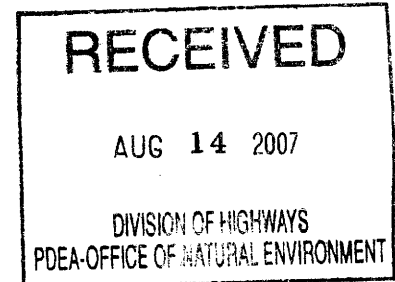
William G. Ross, Deputy Director
Preconstruction
Project Development and
Environmental Analysis Branch

RECEIVED
Division of Highways

AUG 09 2007

August 6, 2007

Mr. Gregory J. Thorpe, Ph.D.
Environmental Management Director
NC Department of Transportation
Project Development and Environmental Analysis Branch
1548 Mail Service Center
Raleigh, NC 27699-1548



RE: Refinement of CAMA Major Development Permit No. 29-07 (TIP No. R-2510B)
US-17 from South of SR-1149 to US-17 North of SR1509 in Beaufort County.

Dear Dr. Thorpe:

This letter is in response to the two separate requests, one dated June 4, 2007 and the other dated July 2, 2007, that you sent to this Division regarding modification of the permitted wetland impacts and a change in buffer accounting associated with R-2510-B. In your June 4, 2007 request, you propose to change the type of wetland impacts permitted at Sites 4 and 9. Your request indicates that there would be no change in the total amount of wetland impacts, however, excavation in wetlands would increase by 0.03 acre and mechanized clearing would increase by 0.02 acre at Site 4. This would be offset by a 0.05 acre reduction of wetland impacts at Site 9. The request also proposes to mitigate for an additional 1,522 sq. ft of Tar-Pamlico Riparian Buffer Zone due to the re-classification of wetlands within the Buffer Zone to non-jurisdictional status.

Your request dated July 2, 2007 proposes to modify the wetland impacts permitted at Site 6. The request proposes to increase the total area of wetlands hand cleared by 0.32 acre at the south end of the bridge, which will allow for the accommodation of slightly longer Launching Gantry support beams between Sta. 325+50 through Sta. 344+00. You also propose to use Shuggart Swamp Mats on the north end of the bridge between Sta. 472+00 through Sta. 476+20. to allow the construction of the bridge to begin while the Launching Gantry is being constructed. The use of the mats would require an additional 0.08 acre of hand clearing to accommodate the mats.

This **Letter of Refinement** authorizes the modification of the permitted wetland impacts and the change in buffer accounting associated with R-2510-B, as described in your request letters dated June 4, 2007 and July 2, 2007 and as shown in two drawings (dated received June 11, 2007) and in eight drawings (dated received July 11, 2007). This letter shall be attached to the original of amended CAMA Permit No. 29-07, which was issued on March 6, 2007 and all documents must be readily available on site when a DCM representative inspects the project for compliance. All conditions and stipulations of the active permit remain in force unless altered herein.

1638 Mail Service Center, Raleigh, North Carolina 27699-1638
Phone: 919-733-2293 \ FAX: 919-733-1495 \ Internet: www.nccoastalmanagement.net

Please contact Stephen Lane at (252) 808-2808 ext. 232 if you have any questions or concerns.

Sincerely,

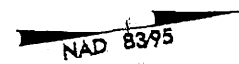
A handwritten signature in black ink that reads "Doug Huggett". The signature is written in a cursive style with a large initial "D".

Doug Huggett
Major Permits and Consistency Coordinator

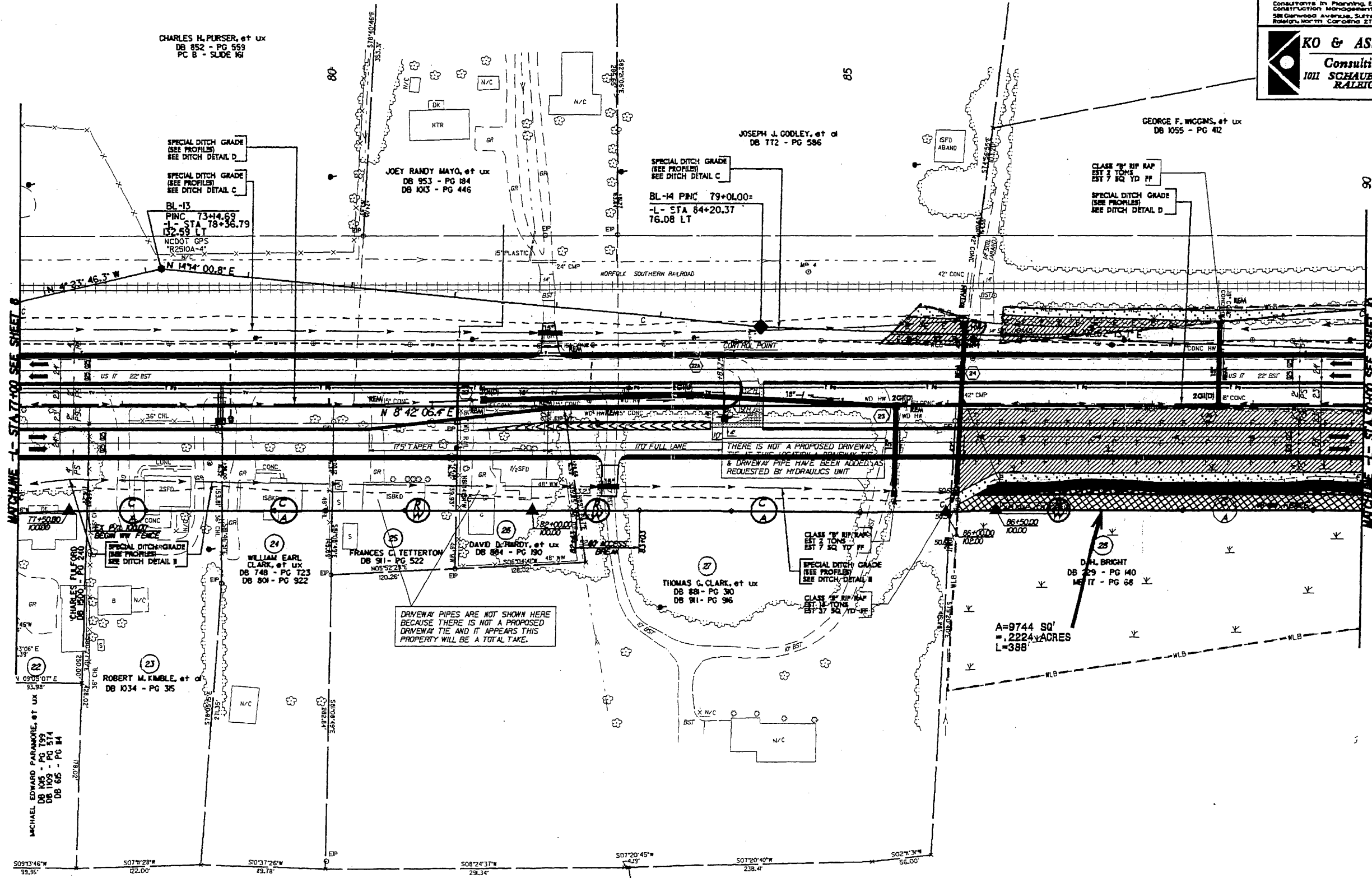
cc: William Wescott, USACE
Garcy Ward, DWQ
Stephen Lane, NCDCM
Steve Sollod, NCDCM
Jackie Armstrong, NCDOT Design Services
Paul Newman, FLUN
Andy Blankenship, PE, NCDOT Roadside Environmental
Jay Johnson, NCDOT

NOTE: ALL DRIVEWAY CONNECTIONS ARE 6" ABC UNLESS OTHERWISE NOTED

SEE SHEET 25 FOR -L- PROFILE SEE SHEET 2C FOR DITCH DETAILS ALL DRIVEWAYS ARE 16' WIDE WITH 10' RADII UNLESS OTHERWISE NOTED



PROJECT REFERENCE NO. R-2510A	SHEET NO. 9
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS	
Permit Drawing Sheet _____ of _____	
Carter Burgess Consultants in Planning, Engineering, Architecture, Construction Management and Related Services 588 Glenwood Avenue, Suite 300 Raleigh, North Carolina 27606	
KO & ASSOCIATES, P.C. Consulting Engineers 1011 SCHAUH DR., SUITE #202 RALEIGH, N.C. 27606	



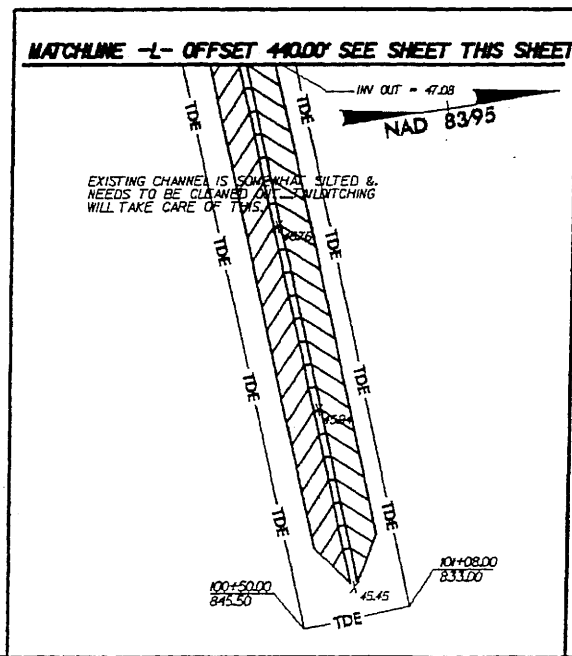
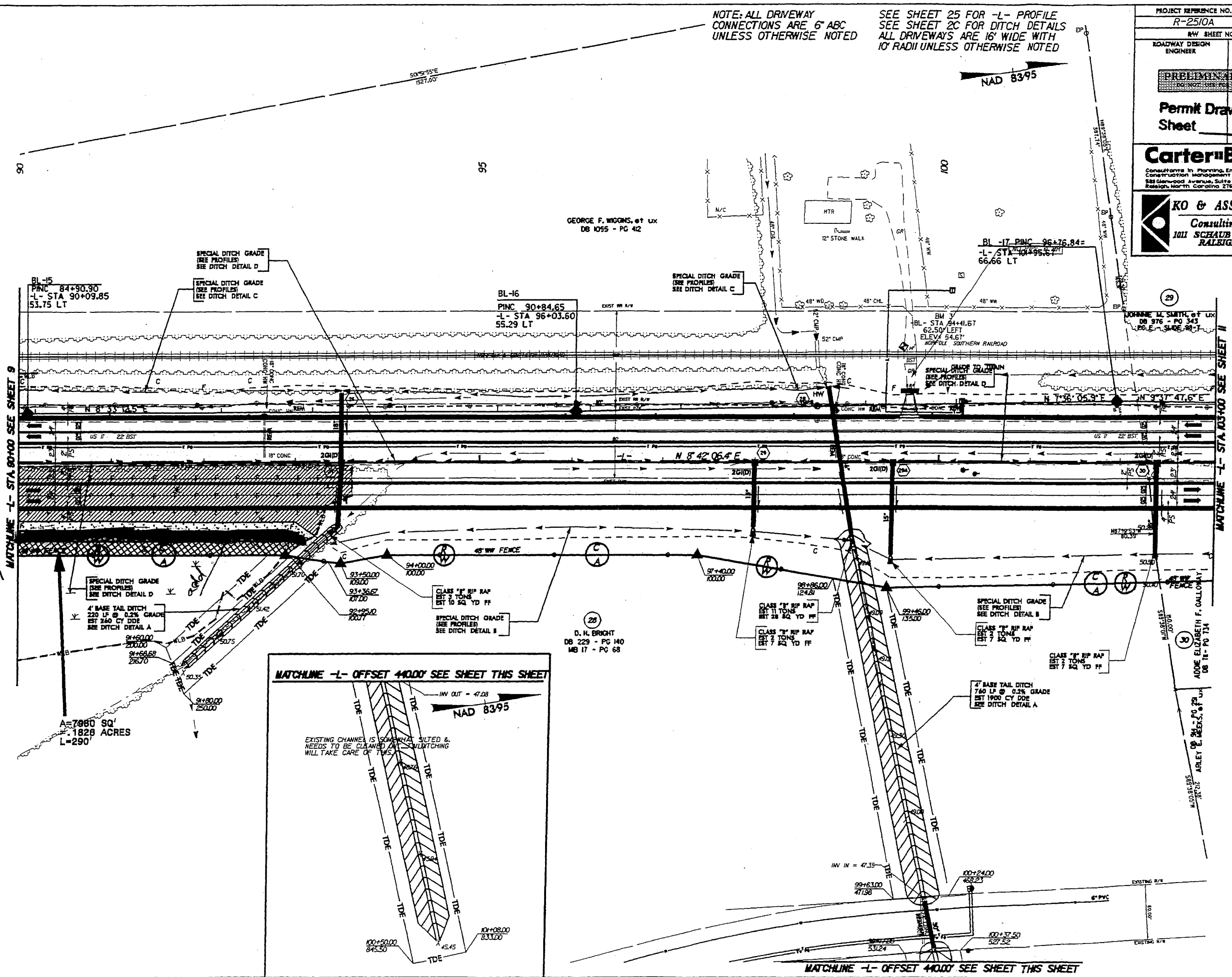
add
3/8/07
revision

DR-MAR-2007 11:32
\\util\es\proj\2510a\we\lond\2510a09.dwg

NOTE: ALL DRIVEWAY CONNECTIONS ARE 6' ABC UNLESS OTHERWISE NOTED


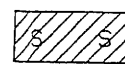
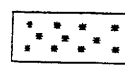
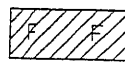

SEE SHEET 25 FOR -L- PROFILE
SEE SHEET 2C FOR DITCH DETAILS
ALL DRIVEWAYS ARE 16' WIDE WITH 10' RADI UNLESS OTHERWISE NOTED

PROJECT REFERENCE NO. R-2510A		SHEET NO. 10	
R/W SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
PRELIMINARY PLANS			
Permit Drawing Sheet _____ of _____			
Carter Burgess			
<small>Consultants in Planning, Engineering, Architecture, Construction Management and Related Services 583 Glenwood Avenue, Suite 300 Raleigh, North Carolina 27602</small>			
KO & ASSOCIATES, P.C.			
<small>Consulting Engineers 1011 SCHAUH DR. SUITE #202 RALEIGH, N.C. 27606</small>			



3/8/07
revision

DB-MAR-2007 13:22 10b_wetland-r-2510a.dgn

-  DENOTES EXCAVATION IN WETLAND
-  DENOTES FILL IN SURFACE WATER
-  DENOTES MECHANIZED CLEARING
-  DENOTES FILL IN WETLAND
-  DENOTES WETLANDS IN INTERCHANGE NOT CLEARED OR FILLED

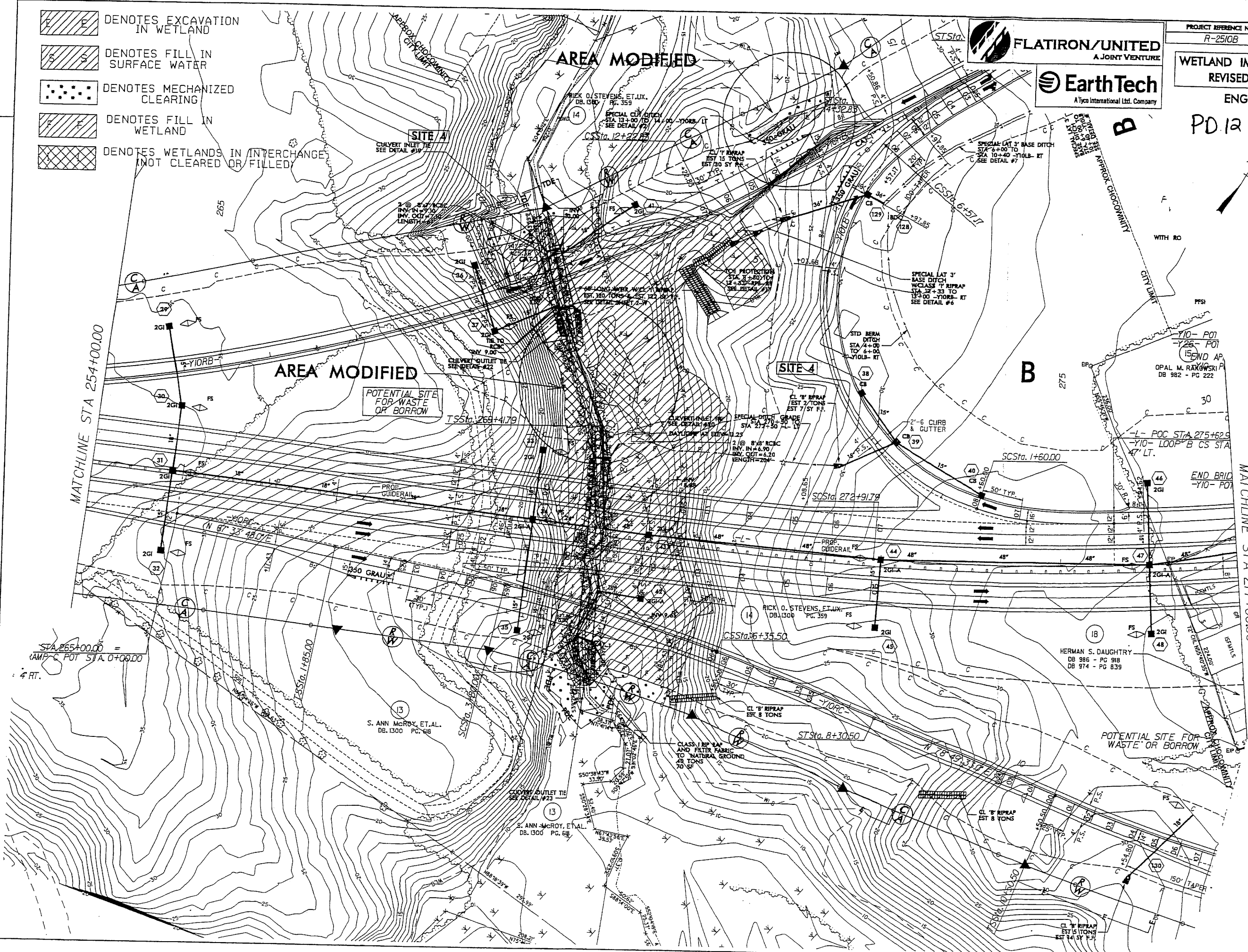
FLATIRON/UNITED
A JOINT VENTURE

EarthTech
A tyco International Ltd. Company

PROJECT REFERENCE NO. R-2510B	SHEET NO. 7.5
WETLAND IMPACT SHEET REVISED 4/19/07	
ENGLISH	

PD 12 of 105

REVISIONS
 1) Added small wetland impact left of station 13+50 - Y10RFB - 4/19/07 - JGD
 2) Revised hatching of wetland impact inside buffers to "isolated wetlands - not cleared" - 4/19/07 - JGD
 USER: #40568**
 DATE: #04/19/07**
 TIME: #09:11:00**
 DGN: #00000**



REVISIONS

1) Added Additional Clearing Limits From Beg Bridge to Bent 17 (Approx. Sta 325+50 to Sta 344+00 -L-) 06-01-07 JRH

USER: #SUSERS
 DATE: #DATESS
 TIME: #TIMESS
 DCR: #SDCRSS

FLATIRON/UNITED
 A JOINT VENTURE

EarthTech
 A Tyco International Ltd. Company

PROJECT REFERENCE NO.	SHEET NO.
R-250B	12.0

WETLAND IMPACT SHEET
 REVISED 6-1-07

Permit Drawing
 Sheet 19 of 105

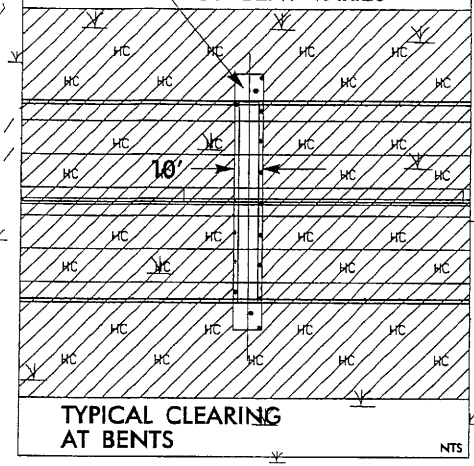
E DENOTES EXCAVATION
 IN WETLAND

HC DENOTES HAND
 CLEARING

HAND CLEARING REFERS TO
 MACHINE CLEARING WITH
 GRUBBING AT PIERS ONLY.
 SEE DETAIL ON SHEET 12

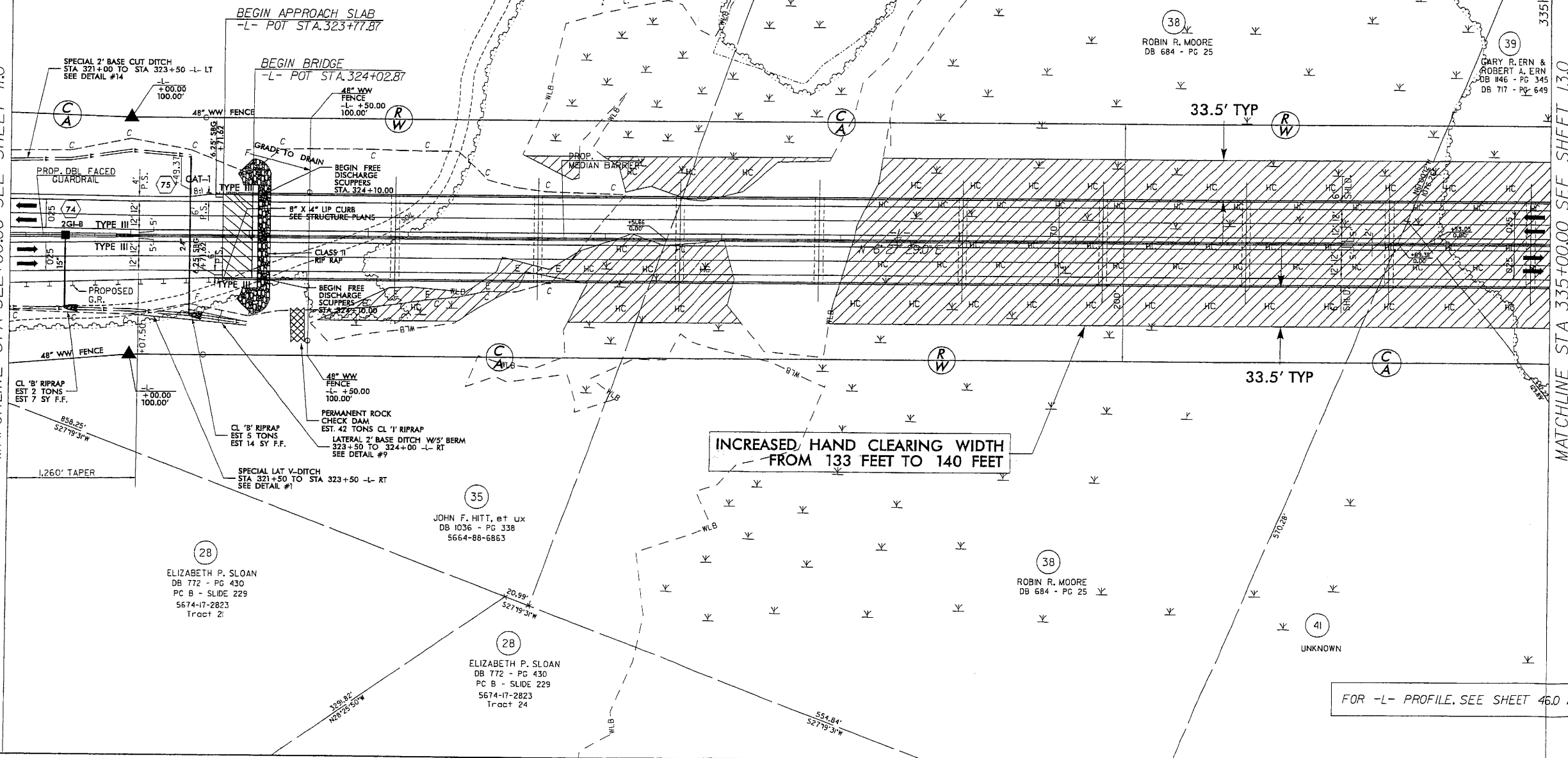
**MECHANIZED
 CLEARING**


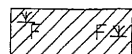
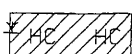
ENGLISH
 DISTANCE TO CENTER
 OF BENT VARIES



MATCHLINE STA 322+00.00 SEE SHEET 11.0

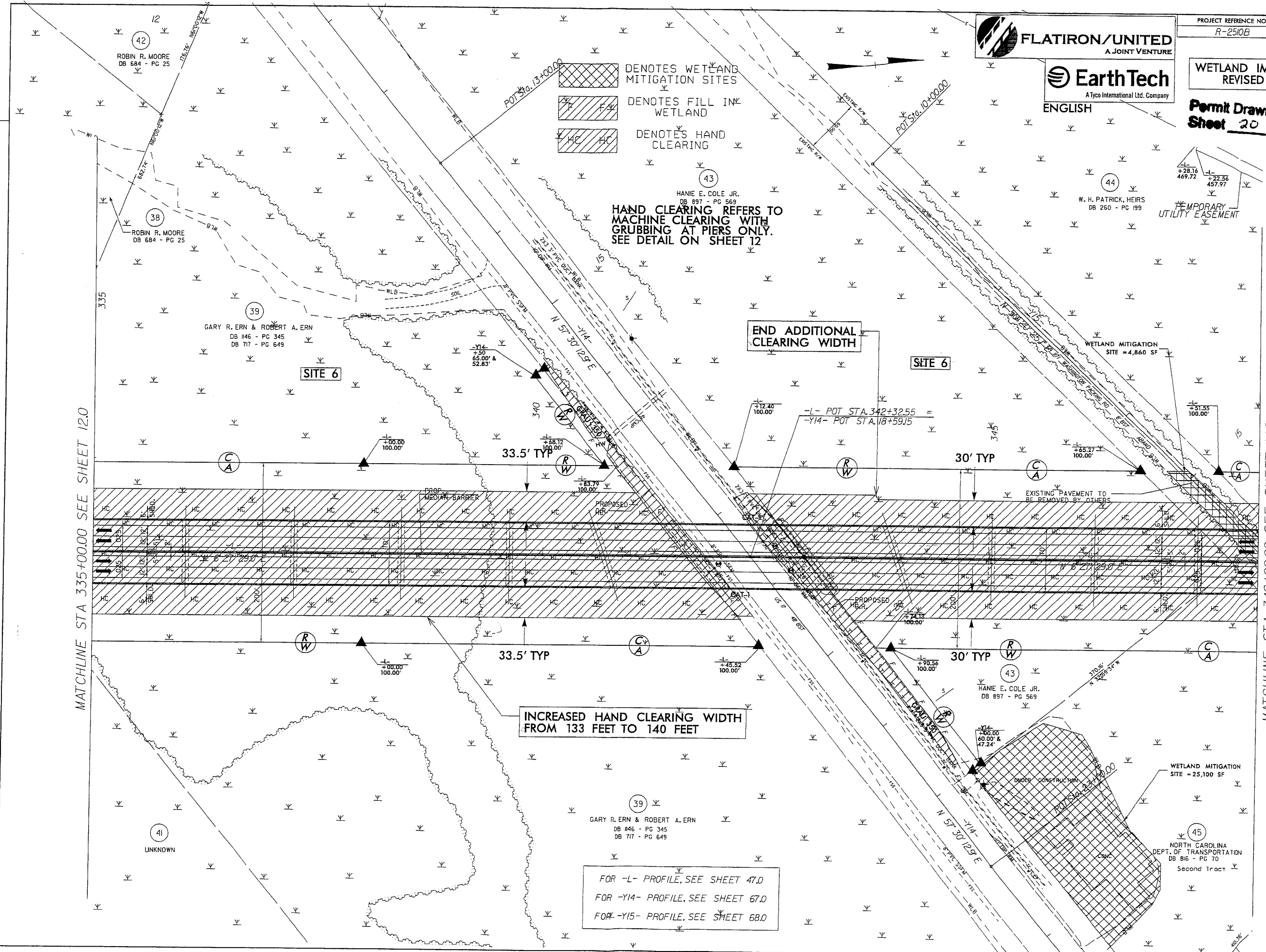
MATCHLINE STA 335+00.00 SEE SHEET 13.0



 DENOTES WETLAND MITIGATION SITES
 DENOTES FILL IN WETLAND
 DENOTES HAND CLEARING

HAND CLEARING REFERS TO MACHINE CLEARING WITH GRUBBING AT PIERS ONLY. SEE DETAIL ON SHEET 12

TEMPORARY UTILITY EASEMENT
 +28.16
 469.72
 +22.56
 457.97



END ADDITIONAL CLEARING WIDTH

SITE 6

WETLAND MITIGATION SITE = 4,860 SF

INCREASED HAND CLEARING WIDTH FROM 133 FEET TO 140 FEET

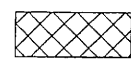
FOR -L- PROFILE, SEE SHEET 47.0
 FOR -Y14- PROFILE, SEE SHEET 67.0
 FOR -Y15- PROFILE, SEE SHEET 68.0

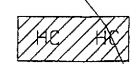
MATCHLINE STA 335+00.00 SEE SHEET 12.0

MATCHLINE STA 348+00.00 SEE SHEET 14.0

REVISIONS
 1) Added Additional Clearing Limits From Beg Bridge to Bent 17 (Approx. Sta 325+50 to Sta 344+00 -L-) 06-01-07 JRH

USER: #USERS#
 DATE: #DATE#
 TIME: #TIME#
 DGN: #DGN#

 SHUGGART SWAMP MATS
(NO GRUBBING—HAND CLEARING ONLY)
0.80 AC MATTED AREA
0.08 AC ADDITIONAL HAND CLEARING

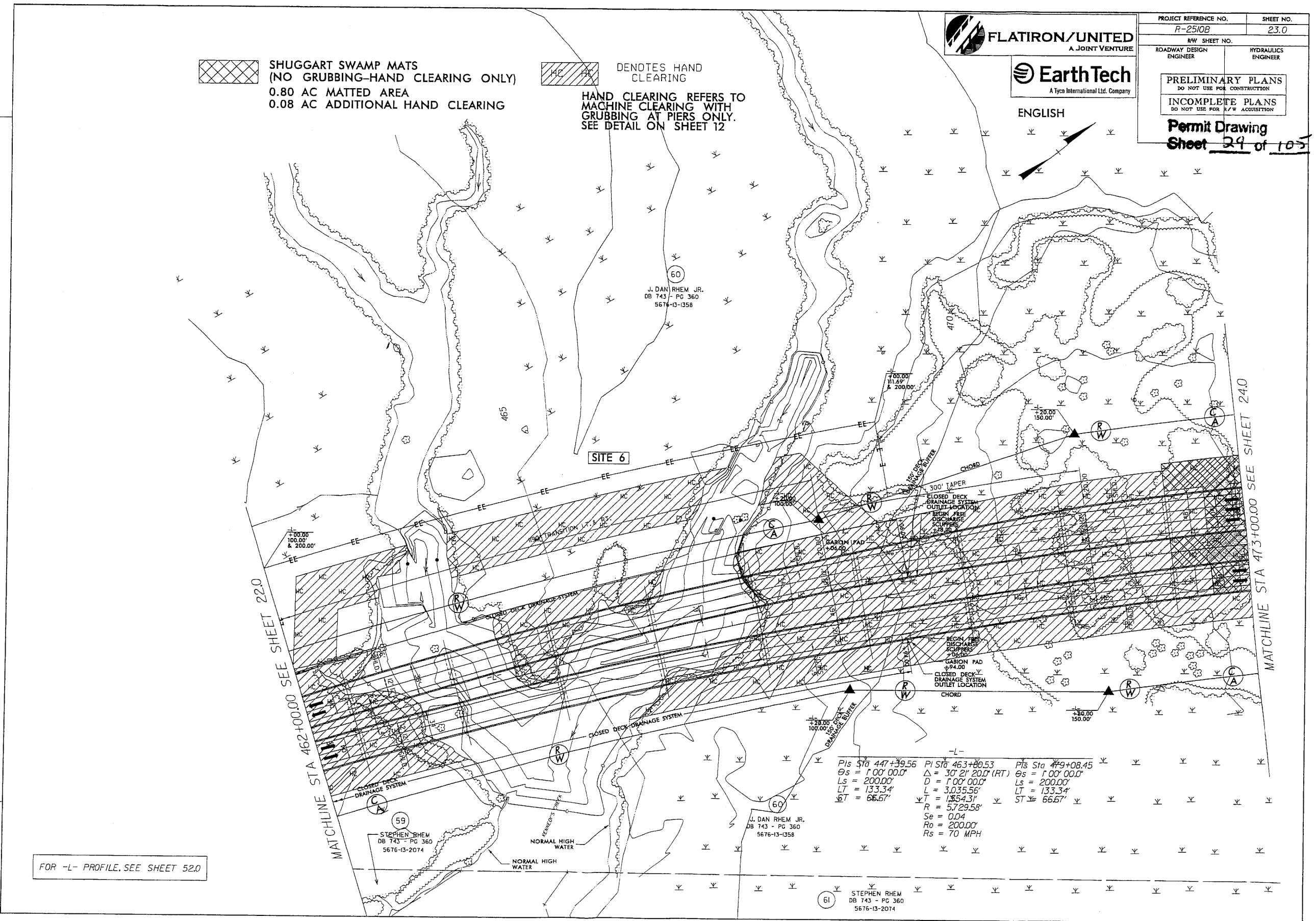
 DENOTES HAND CLEARING
HAND CLEARING REFERS TO
MACHINE CLEARING WITH
GRUBBING AT PIERS ONLY.
SEE DETAIL ON SHEET 12

ENGLISH

REVISIONS:

USER: RHEM
TIME: 1/17/08
DGN: RHEM

FOR -L- PROFILE, SEE SHEET 52.0



-L-

PIs Sta 447+39.56	PI Sta 463+80.53	PIs Sta 479+08.45
$\theta_s = 1^{\circ}00'00.0''$	$\Delta = 30^{\circ}21'20.0''$ (RT)	$\theta_s = 1^{\circ}00'00.0''$
$L_s = 200.00'$	$D = 1^{\circ}00'00.0''$	$L_s = 200.00'$
$LT = 133.34'$	$L = 3.03556'$	$LT = 133.34'$
$\Delta T = 66.67'$	$R = 1354.31'$	$ST = 66.67'$
	$R = 5729.58'$	
	$Se = 0.04$	
	$Rc = 200.00'$	
	$R_s = 70$ MPH	

59
STEPHEN RHEM
DB 743 - PG 360
5676-13-2074

60
J. DAN RHEM JR.
DB 743 - PG 360
5676-13-1358

61
STEPHEN RHEM
DB 743 - PG 360
5676-13-2074

60
J. DAN RHEM JR.
DB 743 - PG 360
5676-13-1358

SITE 6

MATCHLINE STA 473+00.00 SEE SHEET 24.0

MATCHLINE STA 462+00.00 SEE SHEET 22.0

FOR -L- PROFILE, SEE SHEET 52.0 AND 53.0
 FOR -Y19RB- PROFILE, SEE SHEET 61.0
 FOR -Y19RC- PROFILE, SEE SHEET 61.0
 FOR -SR6- PROFILE, SEE SHEET 74.0

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ENGLISH

PROJECT REFERENCE NO. R-2510B SHEET NO. 24.0

R/W SHEET NO.

ROADWAY DESIGN ENGINEER HYDRAULICS ENGINEER

PRELIMINARY PLANS
 DO NOT USE FOR CONSTRUCTION

INCOMPLETE PLANS
 DO NOT USE FOR R/W ACQUISITION

Permit Drawing
 Sheet 30 of 105

SHUGGART SWAMP MATS
 (NO GRUBBING-HAND CLEARING ONLY)
 0.80 AC MATTED AREA
 0.08 AC ADDITIONAL HAND CLEARING

DENSES HAND CLEARING
 HAND CLEARING REFERS TO MACHINE CLEARING WITH GRUBBING AT PIERS ONLY. SEE DETAIL ON SHEET 12

-L-
 PIs Sta 447+39.56 PI Sta 463+60.53 PIs Sta 479+08.45
 $\Theta_s = 1'00'00''$ $\Delta = 30'21'20''$ (RT) $\Theta_s = 1'00'00''$
 $L_s = 200.00'$ $D = 1'00'00.0'$ $L_s = 200.00'$
 $LT = 133.34'$ $L = 3,035.56'$ $LT = 133.34'$
 $ST = 66.67'$ $T = 1,554.31'$ $ST = 66.67'$
 $R = 5,729.58'$
 $Se = 0.04$
 $Ro = 200.00'$
 $Ds = 60$ MPH

-Y19RB-
 PIs Sta 0+40.00 PIs Sta 2+80.06 PI Sta 4+84.77 PIs Sta 6+88.97
 $\Theta_s = 0'35'42.4''$ $\Theta_s = 4'48'00.0''$ $\Delta = 9'57'23.7''$ (LT) $\Theta_s = 4'48'00.0''$
 $L_s = 120.00'$ $L_s = 240.00'$ $D = 4'00'00.0'$ $L_s = 240.00'$
 $LT = 80.00'$ $LT = 160.06'$ $L = 248.91'$ $LT = 160.06'$
 $ST = 40.00'$ $ST = 80.05'$ $T = 124.77'$ $ST = 80.05'$
 $R = 1,432.39'$
 $Se = 0.08$
 $Ro = 240.00'$
 $Ds = 60$ MPH

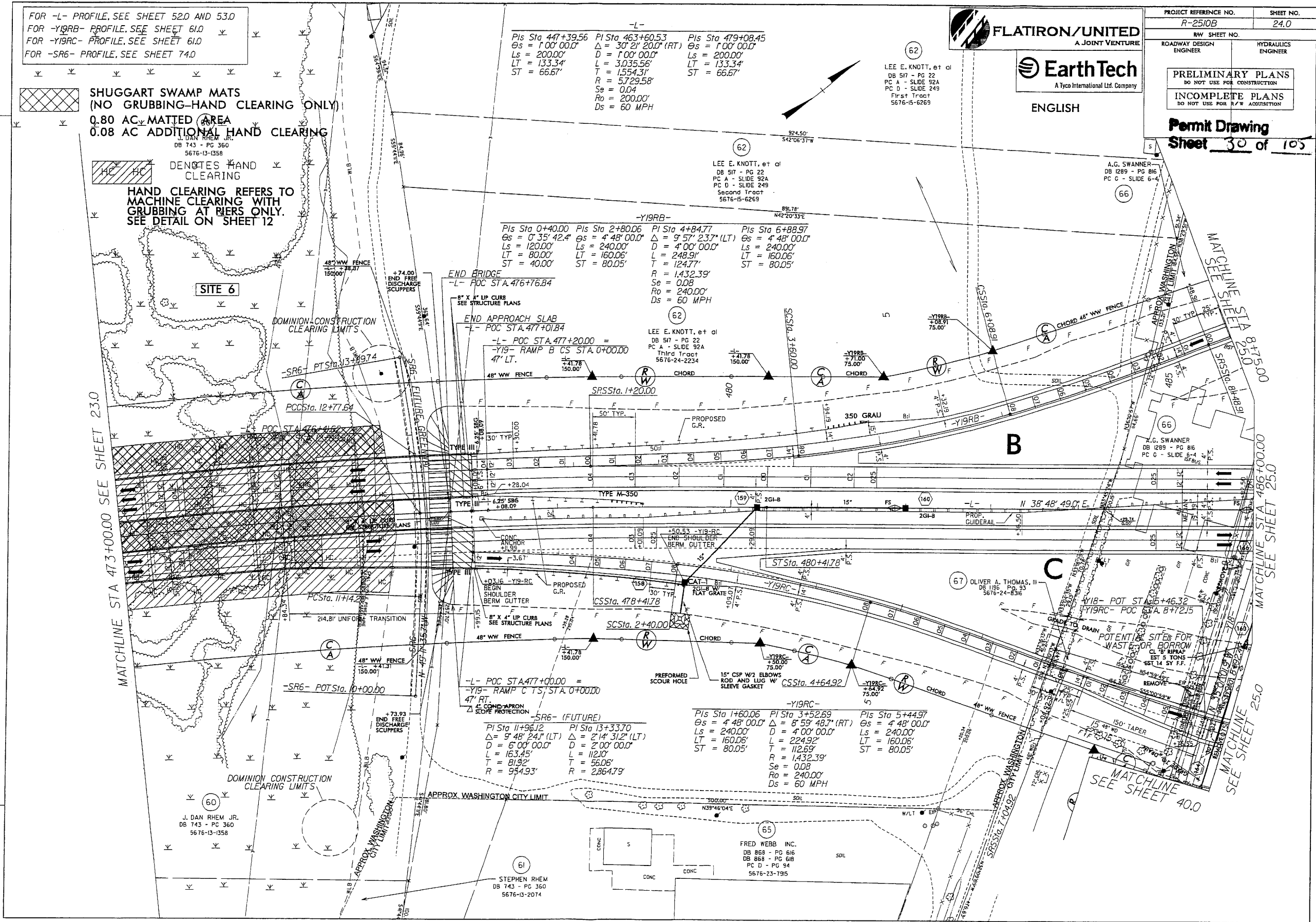
-L- POC STA. 477+20.00 =
 -Y19- RAMP B CS STA. 0+00.00
 47' LT.

-SR6- (FUTURE)
 PIs Sta 11+96.12 PIs Sta 13+33.70
 $\Delta = 9'48'24.1''$ (LT) $\Delta = 2'14'31.2''$ (LT)
 $L_s = 5'00'00.0'$ $D = 2'00'00.0'$
 $LT = 163.45'$ $L = 112.10'$
 $T = 81.92'$ $T = 56.06'$
 $R = 994.93'$ $R = 2,864.79'$

-Y19RC-
 PIs Sta 1+60.06 PIs Sta 3+52.69 PIs Sta 5+44.97
 $\Theta_s = 4'48'00.0''$ $\Delta = 8'59'48.7''$ (RT) $\Theta_s = 4'48'00.0''$
 $L_s = 240.00'$ $D = 4'00'00.0'$ $L_s = 240.00'$
 $LT = 160.06'$ $L = 224.92'$ $LT = 160.06'$
 $ST = 80.05'$ $T = 112.69'$ $ST = 80.05'$
 $R = 1,432.39'$
 $Se = 0.08$
 $Ro = 240.00'$
 $Ds = 60$ MPH

REVISIONS

Revisions:
 USER: #USER#
 DATE: #DATE#
 DRAWN: #DRAWN#
 CHECKED: #CHECKED#



J. DAN RHEM JR.
 DB 743 - PG 360
 5676-13-1358

STEPHEN RHEM
 DB 743 - PG 360
 5676-13-2074

FRED WEBB INC.
 DB 868 - PG 616
 DB 868 - PG 618
 PC D - PG 94
 5676-23-1915

OLIVER A. THOMAS, III
 DB 1186 - PG 93
 5676-24-8316

A.G. SWANNER
 DB 1289 - PG 816
 PC G - SLIDE 6-4

LEE E. KNOTT, et al
 DB 517 - PG 22
 PC A - SLIDE 92A
 PC D - SLIDE 249
 First Tract
 5676-15-6269

LEE E. KNOTT, et al
 DB 517 - PG 22
 PC A - SLIDE 92A
 PC D - SLIDE 249
 Second Tract
 5676-15-6269