



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY PERDUE
GOVERNOR

EUGENE CONTI
SECRETARY

February 22, 2012

MEMORANDUM TO: Mr. Jerry Jennings, PE
Division 1 Engineer

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

SUBJECT: Camden County, Widening of US 158 from Elizabeth City to
the separation of US 158 and NC 34; Federal Aid Project No.
STP-158(2); WBS Element 34430.1.1.
TIP R-2414A&B

Attached are the modifications to the U.S. Army Corps of Engineers Section 404 Individual Permit, the N.C. Division of Water Quality Section 401 Water Quality Certification, and the N.C. Division of Coastal Management CAMA Permit. All environmental permits have been received for continued construction of this project.

A copy of this permit package will be posted on the NCDOT website at:
<http://www.ncdot.gov/doh/preconstruct/pe/neu/permit.html>

cc:

Dr. Gregory J. Thorpe, PhD, PDEA Unit Manager
Mr. Majed Alghandour, P. E., Programming and TIP
Mr. Jay Bennett, P.E., Roadway Design Unit
Mr. Dewayne Sykes, P.E. Utilities Unit
Mr. Art McMillan, P.E., Hydraulics Unit
Mr. Greg Perfetti, P.E., Structure Design Unit
Mr. Ron Hancock, P.E., State Roadway Construction Engineer
Mr. Mike Robinson, P.E., State Bridge Construction Engineer
Mr. Rob Hanson, P.E., PDEA Eastern Region Section Head
Mr. Clay Willis, Division Environmental Officer
Ms. Beth Harmon, EEP
Mr. Phillip Ayscue, NCDOT External Audit Branch

PROJECT COMMITMENTS

R-2414

**Widening of US 158 from Elizabeth City to the
separation of US 158 and NC 34 in Camden County
W.B.S. No. 34430.1.1, Federal Aid Project No. STP-158(2)**

COMMITMENTS THAT APPLY TO R-2414 A & B

Commitments Developed Through Project Development and Design

Roadside Environmental Unit

NCDOT best management practices will be adhered to during construction to minimize negative environmental impacts.

This is a standard NCDOT practice.

Cleared areas will be revegetated as quickly as possible during construction.

This is a standard NCDOT practice.

Special attention will be given to proper installation and maintenance of all erosion and sedimentation control devices.

This is a standard NCDOT practice.

Division 1 Construction Unit

There will be an in-water work moratorium for anadromous for this project from February 15 to June 15.

This environmental commitment will be implemented during the construction phase of the project.

Neither waste sites nor borrow sites will be allowed in wetlands.

This environmental commitment will be implemented during the construction phase of the project.

To ensure all borrow and waste activities occur on high ground, NCDOT shall require its contractors and/or agents to identify all areas to be used to borrow material, or to dispose of dredged, fill, or waste material. Documentation of the location and characteristics of all borrow and disposal sites associated with the project shall be available to the Corps upon request.

This environmental commitment will be implemented during the construction phase of the project.

Commitments Developed During Project Permitting

Division 1 Construction Unit

CAMA Permit issued January 12, 2009 Condition No. 6

In accordance with commitments made in your application, mechanized clearing shall not be used for the purpose of clearing vegetation in relocating overhead power lines within jurisdictional wetlands.

NCDWQ Certification issued December 18, 2008, Condition No. 4

The placement of culverts and other structures in waters, streams, and wetlands 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 DWQ. If this condition is unable to be met due to bedrock or other limiting features encountered during construction, please contact the NC DWQ for guidance on how to proceed and to determine whether or not a modification to this certification will be required.

CAMA Permit issued January 12, 2009 Condition No. 3

All pipe and culvert bottoms shall be buried at least one foot below normal bed elevation when they are placed within the Public Trust Area of Environmental Concern (AEC) as designated by the Coastal Area Management Act (CAMA). Culverts placed in wetlands are not subject to this burial requirement.

NCDWQ Certification issued December 18, 2008, Condition No. 6

The permittee will need to adhere to all appropriate in-water work moratoriums (including the use of pile driving or vibration techniques) prescribed by the NC Wildlife Resources Commission, the US Fish and Wildlife Service, and National Marine Fisheries Service. No in-water work is permitted between February 15 and June 15 of any year, without prior approval from the NC Division of Water Quality and the NC Wildlife Resources Commission, and Division of Coastal Management. In addition, the permittee shall conform to the NCDOT policy entitled "Stream Crossing Guidelines for Anadromous Fish Passage (May 12, 1997) at all times.

NCDWQ Certification issued December 18, 2008, Condition No. 11
No utilities shall be relocated into jurisdictional wetland areas.

NCDWQ Certification issued December 18, 2008, Condition No. 24
All fill slopes located in jurisdictional wetlands shall be placed at slopes no flatter than 3:1, unless otherwise authorized by this certification.

NCDWQ Certification issued December 18, 2008, Condition No. 26
The outside buffer, wetland or water boundary located within the construction corridor approved by this certification 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.

CAMA Permit issued January 12, 2009 Condition No. 6
In accordance with commitments made by the permittee, all clearing within wetlands shall be accomplished by hand clearing only. Any other method of clearing within wetlands shall require additional approval from the Division [of Coastal Management].
~~Modification to CAMA Permit, issued October 22, 2010, authorizes mechanized clearing necessary for the mass soil improvement activity.~~

CAMA Permit issued January 12, 2009 Condition No. 19
Construction or removal of the temporary construction sheeting is prohibited while the moratorium referenced in Condition No. 2 of the CAMA permit is in effect without prior approval of the Division [of Coastal Management], in consultation with WRC.

NCDWQ Certification issued December 18, 2008, Condition No. 9
All pile driving or drilling activities shall be enclosed in turbidity curtains unless otherwise approved by DWQ in this certification.

Natural Environment Unit Section

Compensatory mitigation for impacts to ~~4.36 4.66 4.70~~ 4.74 acres of wetlands and ~~247~~ 246 linear feet of stream associated with the authorized project is required. The North Carolina Ecosystem Enhancement Program (EEP) has indicated in a letter dated ~~July 14, 2008 May 25, 2010 September 20, 2010 October 1, 2010~~, December 14, 2011, that they will assume responsibility for satisfying the federal Clean Water Act compensatory mitigation requirements for the above-referenced project, ~~in accordance with the Tri-Party MOA signed on July 22, 2003 and the Dual-Party MOA signed on April 12, 2004.~~

In accordance with the permit application, compensatory mitigation for permanent stream impacts associated with the authorized project also includes on-site mitigation

for 50 linear feet of stream impacts at the culvert-to-bridge replacement location at Site 11 within TIP No. R-2414A.

Natural Environment Unit Section and Roadside Environmental Unit

CAMA Permit issued January 12, 2009 Condition No. 24

Due to the possibility that compaction, mechanized clearing and/or other site alterations might prevent the temporary Coastal Wetland impact areas from re-attaining pre-project wetland functions, the permittee shall provide an annual update on the Coastal Wetland areas temporarily impacted by this project. This annual update shall consist of photographs and a brief written report on the progress of these temporarily impacted areas in re-attaining their pre-project wetland functions. Within three years after project completion, the permittee shall hold an agency field meeting with DCM to determine if the Coastal Wetland areas temporarily impacted by this project have re-attained pre-project wetland functions. If at the end of three years DCM determines that the Coastal Wetland areas temporarily impacted by the project have not re-attained pre-project wetland functions, DCM will determine whether compensatory wetland mitigation shall be required.

COMMITMENTS THAT APPLY TO R-2414 B

Commitments Developed Through Project Development and Design

Roadway Design Unit/ Division 1/ Right of Way Branch/ Human Environment Unit Section

NCDOT will avoid impacting the Sawyer Graveyard.

The Sawyer Graveyard will not be impacted during construction – construction limits have been placed adjacent to the graveyard. NCDOT will mark the graveyard prior to beginning construction activities with orange protective fencing.

In accordance with Environmental Commitments contained within the Finding of No Significant Impact and Programmatic Section 4(f) Evaluations dated 7/13/98, the permittee shall move the Creekmore Store to the rear of its property for mitigation purposes. The permittee shall coordinate with the State Historic Preservation Officer prior to construction so that measures are taken to preserve the historic character of the Creekmore Store. Project construction shall not commence for section B of the project until NCDOT has completed all the requirements and implemented the stipulations agreed to by NCDOT, State Historic Preservation Office (SHPO) and the Federal Highway Administration (FHWA).

Commitments Developed During Project Permitting

Division 1 Construction Unit

Modification to NCDWQ Certification issued October 20, 2010, Condition No. 5
Should any dry or uncured mixing agent come in contact with jurisdictional waters, the NCDWQ shall be notified as quickly as possible, but no later than 24 hours after first knowledge that contact has occurred. If such contact should occur, the NCDOT and its contractors shall cease work immediately and take appropriate actions to remediate the contact. Work shall not begin until the DWQ has been notified and the issue has been resolved to the NCDWQ's satisfaction.

~~Modification to NCDWQ Certification issued October 20, 2010, Condition No. 4
Any mixing agent to be used in the mass soil mixing process stored onsite shall be stored in upland areas away from jurisdictional waters. Additionally, some type of containment fence shall be installed and maintained around storage areas as to protect jurisdictional waters from receiving any potential contaminated runoff from the storage area.~~

~~Modification to CAMA Permit, issued October 22, 2010, Condition No. 4
In accordance with commitments made by the permittee, impervious dikes shall be installed to provide a complete barrier between the soil mixing activity and the surrounding aquatic resources abutting this activity.~~

Modification to CAMA Permit, issued October 22, 2010, Condition No. 5
Construction and removal* of the impervious dikes is prohibited while the moratorium referenced in Condition No. 2 of this permit modification is in effect, without prior approval of DCM, in consultation with WRC.

**DCM conveys its approval to remove the impervious dike during the in-water moratorium in accordance with the included e-mail found in the CAMA Permit from the N.C. Wildlife Resources Commission on 10/28/10 and NCDOT on 10/26/10.*

~~Modification to CAMA Permit, issued October 22, 2010, Condition No. 6
The impervious dikes shall be properly maintained and retained until the soil mixture is complete and all of the work area contained by the impervious dikes has been stabilized. The impervious dikes shall be removed in a manner that does not cause or create the potential for sedimentation and erosion into wetlands or Waters of the State.~~

Modification to CAMA Permit, issued January 24, 2012, Condition No. 4
The authorized buoyant cement (aka foamed concrete) shall not be allowed to contact the water or enter into the adjacent wetlands or Waters of the State until it no longer poses a threat to aquatic organisms.



IN REPLY REFER TO

DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS

Washington Regulatory Field Office
Post Office Box 1000
Washington, North Carolina 27889-1000

January 25, 2012

Regulatory Division

Action ID No. SAW-1994-02124

Dr. Gregory J. Thorpe, Ph.D.
Environmental Management Director, PDEA
N.C. Department of Transportation
1548 Mail Service Center
Raleigh, North Carolina 27699-1548

Dear Dr. Thorpe:

Reference the Department of the Army (DA) permit issued to you on February 5, 2009, to widen approximately 5.5 miles of US 158/NC34 (TIP R-2414 A & B) from an existing two lane facility to a multi-lane facility from just east of the Pasquotank River to the US 158/NC 34 split in Belcross, Camden County, North Carolina. Also reference your subsequent written request dated December 16, 2011, for a permit modification to place additional fill in jurisdictional wetlands at sites 3 and 6 of the B section of the project to insure stability around the culverts being installed at these sites.

The proposed modification will increase jurisdictional impacts at the B section of the project by filling an additional 0.04 acres of wetlands and reduce the hand clearing impacts by 0.02 acres.

This modification request was coordinated with the appropriate State and Federal agencies and the coordination revealed no objections to this modification request. Therefore, the permit is hereby modified in accordance with the specific work activities described above and in the enclosed plans. It is understood that all conditions of the original permit remain applicable and that the expiration date is unchanged. In addition, the permittee will comply with the following special permit conditions:

- a. All work authorized by this permit modification must be performed in strict compliance with the attached work plans, which is part of this permit. Any modification to the permit plans must be approved by USACE prior to implementation.
- b. The permittee shall require its contractors and/or agents to comply with the terms and conditions of this permit in the construction and maintenance of this project, and shall provide each of its contractors and/or agents associated with the construction or maintenance of this

project with a copy of this permit, and any authorized modifications. A copy of this permit, and any authorized modifications, including all conditions, shall be available at the project site during construction and maintenance of this project.

c. Special condition t. of the original permit referenced above is hereby modified as follows: Compensatory mitigation for the loss of 246 linear feet of stream and 4.74 acres of riparian wetlands associated with the proposed project shall be provided by the Ecosystem Enhancement Program (EEP), as outlined in the letter dated December 14, 2011 from Michael Ellison, EEP Director. Pursuant to the EEP In-Lieu Fee Instrument, signed on July 28, 2010, the EEP will provide 492 linear feet of warm-water restoration equivalent stream mitigation and 9.5 acres of restoration equivalent riparian wetland mitigation in the Pasquotank River basin (Hydrologic Cataloging Unit 03010205) by one year of the date of this permit. A minimum of 1:1 (impact to mitigation) must be in the form of wetland restoration. The NCDOT shall, within 30 days of the issue date of this permit, certify that sufficient funds have been provided to EEP to complete the required mitigation, pursuant to Paragraph V. of the MOA.

Any questions regarding this correspondence may be directed to Mr. Bill Biddlecome, NCDOT Coordinator/Regulatory Project Manager at the Washington Regulatory Field Office, telephone (910) 251-4558.

Sincerely,


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

Enclosure:

Copies Furnished (without enclosure):

Ms. Cathy Brittingham
Division of Coastal Management
1638 Mail Service Center
Raleigh, North Carolina 27699-1638

Mr. David Wainwright
Water Quality Section
North Carolina Division of Environment
and Natural Resources
1650 Mail Service Center
Raleigh, North Carolina 27699-1650

Mr. Steven Lane
N.C. Department of Environment and Natural Resources
Division of Coastal Management
400 Commerce Avenue
Morehead City, North Carolina 28557

Mr. Garcy Ward
NCDWQ Washington Regional Office
943 Washington Square Mall
Washington, North Carolina 27889



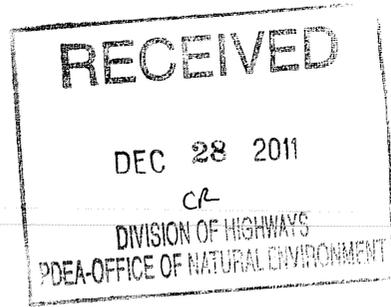
North Carolina Department of Environment and Natural Resources

Division of Water Quality
Coleen H. Sullins
Director

December 21, 2011

Beverly Eaves Perdue
Governor

Dee Freeman
Secretary



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

Subject: Modification to the 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water with ADDITIONAL CONDITIONS for Proposed improvements to US 158/NC 34 from East of the Pasquotank River to the US 158/NC 34 split in Camden County, Federal Aid Project No. STP-158(2), TIP R-2414A and R-2414B.
DWQ Project No. 20081602 v.4
WQC No. 003774

Dear Dr. Thorpe:

Attached hereto is a modification of Certification No. 003774 issued to The North Carolina Department of Transportation (NCDOT) dated December 18, 2008.

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

Sincerely,

Coleen H. Sullins
Director

Attachments

- cc: Bill Biddlecome, US Army Corps of Engineers, Washington Field Office
- Jerry Jennings, PE, Division 1 Engineer
- Clay Willis, Division 1 Environmental Officer
- Chris Militscher, Environmental Protection Agency
- Travis Wilson, NC Wildlife Resources Commission (electronic copy only)
- Cathy Brittingham, Division of Coastal Management
- Garcy Ward, DWQ, Washington Regional Office
- File Copy

Transportation Permitting Unit
1650 Mail Service Center, Raleigh, North Carolina 27699-1650
Location: 512 N. Salisbury Street, Raleigh, North Carolina 27604
Phone: 919-807-6300 \ FAX: 919-8076494
Internet: <http://h2o.enr.state.nc.us/ncwetlands/>



**Modification to the 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act
with ADDITIONAL CONDITIONS**

THIS CERTIFICATION is issued in conformity with the requirements of Section 401 Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Quality (NCDWQ) Regulations in 15 NCAC 2H .0500. This certification authorizes the NCDOT to convert 0.04 acres of previously approved hand clearing impacts to 0.04 acres of wetland fill with an additional 0.02 acres of hand clearing (for a project total of 14.57 acres impact) in Camden County. The project shall be constructed pursuant to the modification dated received December 20, 2011. **This certification does not allow any additional impacts to jurisdictional streams.** The authorized impacts are as described below:

Wetland Impacts in the Pasquotank River Basin

Site	Permanent Fill (ac)	Fill (temp.) (ac)	Excavation (ac)	Mechanized Clearing (ac)	Hand Clearing	Total Wetland Impact (ac)	Impacts Req. Mitigation
IMPACTS APPROVED FOR R-2414B							
Site 3	0.02	0	0	0	-0.02	0	0.02
Site 6	0.02	0	0	0	0	0.02	0.02
TOTAL:	0.04	0	0	0	-0.02	0.02	0.04
PREVIOUS IMPACTS:	4.65	0.00	0.06	0.00	9.84	14.55	4.71
TOTAL IMPACTS APPROVED FOR PROJECT							
TOTAL:	4.69	0.00	0.06	0.00	9.82	14.57	4.75

Total Wetland Impact for Project: 14.57 acres.

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

This approval is only valid for the purpose and design that you submitted in your modified application dated received December 20, 2011. All the authorized activities and conditions of certification associated with the original Water Quality Certification dated December 18, 2008 as well as the clarification letter dated June 1, 2009, and subsequent modifications dated June 28, 2010 and October 20, 2010 still apply except where superceded by this certification. Should your project change, you are required to notify NCDWQ and submit a new application. If the property is sold, the new owner must be given a copy of this Certification and approval letter, and is thereby responsible for complying with all the conditions. If any additional wetland impacts, or stream impacts, for this project (now or in the future) exceed one acre or 150 linear feet, respectively, additional compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). For this approval to remain valid, you are required to comply with all the conditions listed below. In addition, you should obtain all other federal, state or local permits before proceeding with your project including (but not limited to) Sediment and Erosion control, Coastal Stormwater, Non-discharge and Water Supply watershed regulations. This Certification shall expire on the same day as the expiration date of the corresponding Corps of Engineers Permit.

Condition(s) of Certification:

1. This modification is applicable only to the additional proposed activities. All of the authorized activities and conditions of certification associated with the original Water Quality Certification dated December 18, 2008 and subsequent modifications dated June 28, 2010 and October 20, 2010 still apply except where superceded by this certification.
2. Compensatory mitigation for impacts to 0.04 acres riparian wetlands is required. We understand that you have chosen to perform compensatory mitigation for impacts to wetlands through the North Carolina Ecosystem Enhancement Program (EEP), and that the EEP has agreed to implement the mitigation for the project. EEP has indicated in a letter dated December 14, 2011 that they will assume responsibility for satisfying the federal Clean Water Act compensatory mitigation requirements for the above-referenced

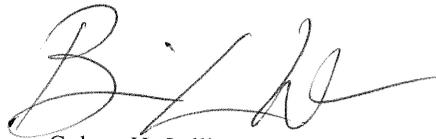
project, in accordance with the North Carolina Department of Environment and Natural Resources' Ecosystem Enhancement Program In-Lieu Fee Instrument signed July 28, 2010.

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

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

This the 21st day of December 2011

DIVISION OF WATER QUALITY

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

Coleen H. Sullins
Director

Permit Class
MODIFICATION/MINOR

Permit Number
03-09

STATE OF NORTH CAROLINA
Department of Environment and Natural Resources
and
Coastal Resources Commission

Permit

for

Major Development in an Area of Environmental Concern
pursuant to NCGS 113A-118

Excavation and/or filling pursuant to NCGS 113-229

Issued to N.C. Department of Transportation, 1598 Mail Service Center, Raleigh, NC 27699-1598

Authorizing development in Camden County at unnamed tributary to the Pasquotank River,

US 158 widening, as requested in the permittee's application letters dated 12/16/11, 1/9/12,
1/11/12 and 1/19/12, including the attached workplan drawings (17) as described in Condition No. 1 below.

This permit, issued on January 24, 2012, is subject to compliance with the application (where consistent with the permit), all applicable regulations, special conditions and notes set forth below. Any violation of these terms may be subject to fines, imprisonment or civil action; or may cause the permit to be null and void.

B-Section of TIP No. R-2414

- 1) All work authorized by this minor modification shall be carried out in accordance with the following attached workplan drawings (17), except as modified herein: 2 dated 11/12/11; 2 dated 12/7/11; 8 dated 12/11; and 5 dated as received on 1/20/12.
- 2) Unless specifically altered herein, this minor modification authorizes the following: use of buoyant cement (aka foamed concrete) instead of mass soil mixing and placement of culverts on timber piles at sites 3, 6 and 7; and use of reinforced concrete box culverts (RCBC) instead of aluminum culverts at sites 3 and 6; all as depicted on the attached workplan drawings.
- 3) In accordance with commitments made by the permittee, no in-water work shall be conducted between February 15th to June 15th of any year without prior approval of the N.C. Division of Coastal Management (DCM), in consultation with the N.C. Wildlife Resources Commission (WRC).

(See attached sheet for Additional Conditions)

This permit action may be appealed by the permittee or other qualified persons within twenty (20) days of the issuing date. An appeal requires resolution prior to work initiation or continuance as the case may be.

This permit must be accessible on-site to Department personnel when the project is inspected for compliance.

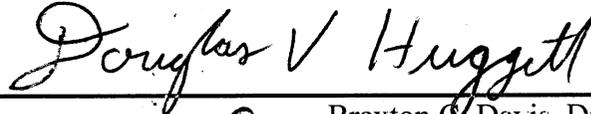
Any maintenance work or project modification not covered hereunder requires further Division approval.

All work must cease when the permit expires on

No expiration date, pursuant to GS 136-44.7B

In issuing this permit, the State of North Carolina agrees that your project is consistent with the North Carolina Coastal Management Program.

Signed by the authority of the Secretary of DENR and the Chairman of the Coastal Resources Commission.



for Braxton C. Davis, Director
Division of Coastal Management

This permit and its conditions are hereby accepted.

Signature of Permittee

ADDITIONAL CONDITIONS

- 4) The authorized buoyant cement (aka foamed concrete) shall not be allowed to contact the water in or entering into the adjacent wetlands or Waters of the State until it no longer poses a threat to aquatic organisms.
- 5) Construction staging areas shall not be located in wetlands or Waters of the State.

NOTE: The activities authorized by this minor modification will increase the project's total permanent wetland impacts by 0.04 acres of riparian wetlands and decrease the project's total hand clearing impacts by 0.02 acres of riparian wetlands. In accordance with the Ecosystem Enhancement Program (EEP) letter dated 12/14/11, compensatory mitigation for the additional permanent impacts of 0.04 acres of riparian wetlands shall be provided by the EEP.

- 6) The N.C. Division of Water Quality authorized a modification of the proposed project on 12/21/11 under Water Quality Certification No. 003774 (DWQ Project No. 20081602 v.4). Any violation of the Certification approved by DWQ shall be considered a violation of this CAMA permit.
- 7) This permit modification does not eliminate the need to obtain any additional state, federal or local permits, approvals or authorizations that may be required.
- 8) This minor modification shall be attached to the original of Permit No. 03-09, which was issued on 1/12/09, as well as all subsequent letters of refinement and modifications, and copies of all documents shall be readily available on site when a Division representative inspects the project for compliance.
- 9) All conditions and stipulations of the active permit remain in force under this minor modification unless specifically altered herein.

NOTE: The U.S. Army Corps of Engineers has assigned the project COE Action ID. No. SAW-1994-02124.

WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS				
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	-L- 47+83 LT / 47+94 RT	1 @ 30" RCP					0.01					
2	-L- 51+60 LT / 51+95 RT	1 @ 30" RCP	0.09				0.05					
3	-L- 55+12 LT / 56+49 RT	1 @8ft x 6ft RCBC	0.67				0.24	0.04	0.01	121	29	
	-L- 57+44 RT / 58+25 RT		0.10		0.05							
4	-L- 62+65 LT / 62+94 RT	1 @ 24" RCP	0.06				0.04					
5	-L- 67+19 LT / 67+70 RT	1 @ 30" RCP	0.08				0.06					
6	-L- 72+48 LT / 74+48 RT	2@6ft x 5ft RCBC	0.87		0.01		0.37	0.05	0.01	92	21	
Old Site 7	-L- 82+43 / 82+83 RT	SITE DELETED										
7	-L- 88+48L / 89+68L	1 @ 16ft x 6ft Al Box	0.38				0.16	0.02	0.01	83	19	
TOTALS:			2.25		0.06		0.93	0.11	0.03	296	69	

0.21ac of Temporary Fill in Wetlands in the Hand Clearing areas for erosion control measures.

Permit Drawing

Sheet 1 of 38

Revised: December 2011

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

CAMDEN COUNTY
PROJECT 8.T020401 (R-2414B)
US 158 - NC 34 WIDENING

SHEET

REV 12/11

REVISIONS

11/07/06 - REVISED ROW AND TCE ON PARCEL 22.(ABP)
 R/W REVISION - REVISED PROPERTY OWNER NAMES ON PARCEL NO.13,17,18,19,20,21 & 23. ADDED PARCEL NO.16A & 17A.BAM
 R/W REVISION - REVISED PROPERTY OWNER NAME ON PARCEL NO.22.BAM

TRANSITE CONSULTING ENGINEERS, INCORPORATED
 1300 Paddock Drive, Suite G-10
 Raleigh, N.C. 27609

WETHERILL ENGINEERING
 TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
 CIVIL/SITE DESIGN - DESIGN - CONSTRUCTION OBSERVATION

PROJECT REFERENCE NO. R-2414B	SHEET NO. 6
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

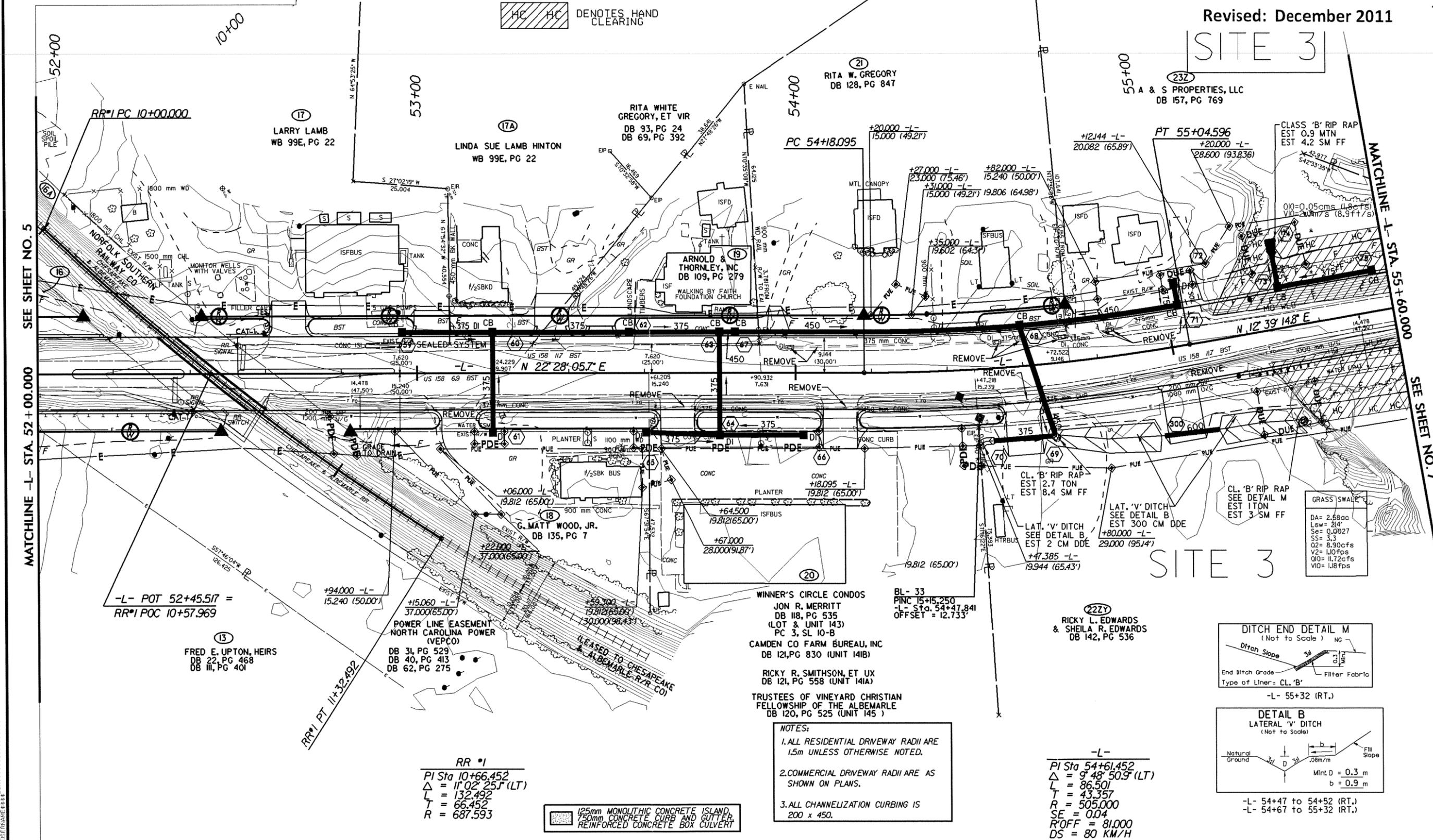
Permit Drawing

Sheet 15 of 38

Revised: December 2011

DENOTES FILL IN WETLAND

DENOTES HAND CLEARING



SEE SHEET NO. 5

MATCHLINE -L- STA. 52+00.000

MATCHLINE -L- STA. 55+60.000

SEE SHEET NO. 7

*****SHEET NUMBER*****

13 FRED E. UPTON, HEIRS
 DB 22, PG 468
 DB 11, PG 401

17 LARRY LAMB
 WB 99E, PG 22

17A LINDA SUE LAMB HINTON
 WB 99E, PG 22

RITA WHITE GREGORY, ET VIR
 DB 93, PG 24
 DB 69, PG 392

21 RITA W. GREGORY
 DB 128, PG 847

232 A & S PROPERTIES, LLC
 DB 157, PG 769

19 ARNOLD & THORNTON, INC
 DB 109, PG 279

18 G. MATT WOOD, JR.
 DB 135, PG 7

POWER LINE EASEMENT
 NORTH CAROLINA POWER (VEPCO)
 DB 31, PG 529
 DB 40, PG 413
 DB 62, PG 275

WINNER'S CIRCLE CONDOS
 JON R. MERRITT
 DB 118, PG 535
 (LOT & UNIT 143)
 PC 3, SL 10-B

CAMDEN CO FARM BUREAU, INC
 DB 121, PG 830 (UNIT 141B)

RICKY R. SMITHSON, ET UX
 DB 121, PG 558 (UNIT 141A)

TRUSTEES OF VINEYARD CHRISTIAN FELLOWSHIP OF THE ALBEMARLE
 DB 120, PG 525 (UNIT 145)

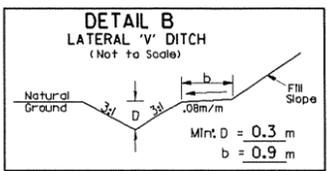
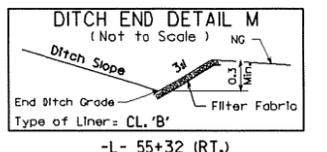
222Y RICKY L. EDWARDS & SHEILA R. EDWARDS
 DB 142, PG 536

RR #1
 PI Sta 10+66.452
 $\Delta = 11^{\circ}02'25''$ (LT)
 L = 132.492
 T = 66.452
 R = 687.593

125mm MONOLITHIC CONCRETE ISLAND, 750mm CONCRETE CURB AND GUTTER, REINFORCED CONCRETE BOX CULVERT

NOTES:
 1. ALL RESIDENTIAL DRIVEWAY RADII ARE 1.5m UNLESS OTHERWISE NOTED.
 2. COMMERCIAL DRIVEWAY RADII ARE AS SHOWN ON PLANS.
 3. ALL CHANNELIZATION CURBING IS 200 x 450.

-L-
 PI Sta 54+61.452
 $\Delta = 9^{\circ}48'50''$ (LT)
 L = 86.501
 T = 43.357
 R = 505.000
 SE = 0.04
 R/OFF = 81.000
 DS = 80 KM/H



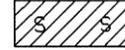
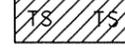
GRASS SWALE
 DA= 2.5800
 Lw= 214
 Se= 0.0027
 Ss= 3.3
 O2= 8.90cfs
 V2= 1.10fps
 Q10= 11.72cfs
 V10= 1.18fps

SITE 3

SITE 3

REVISIONS

11/07/06 - REVISED ROW, TCE & PDE ON PARCEL 25.(ABP)
 R/W REVISION - REVISED PROPERTY OWNER NAMES ON PARCEL NO.23 & 24. ADDED PARCEL NO.24A & 25A. CORRECTED PROPERTY OWNER NAMES CHARLES H.HODGES & HOWARD S.STEVENS, HEIRS. BAM
 R/W REVISION - REVISED PROPERTY OWNER NAME ON PARCEL NO.22. BAM

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

BLUE SKY DEVELOPMENT, LLC
 DB 138, PG 109
 PC-3, SL 77-B (PLAT)



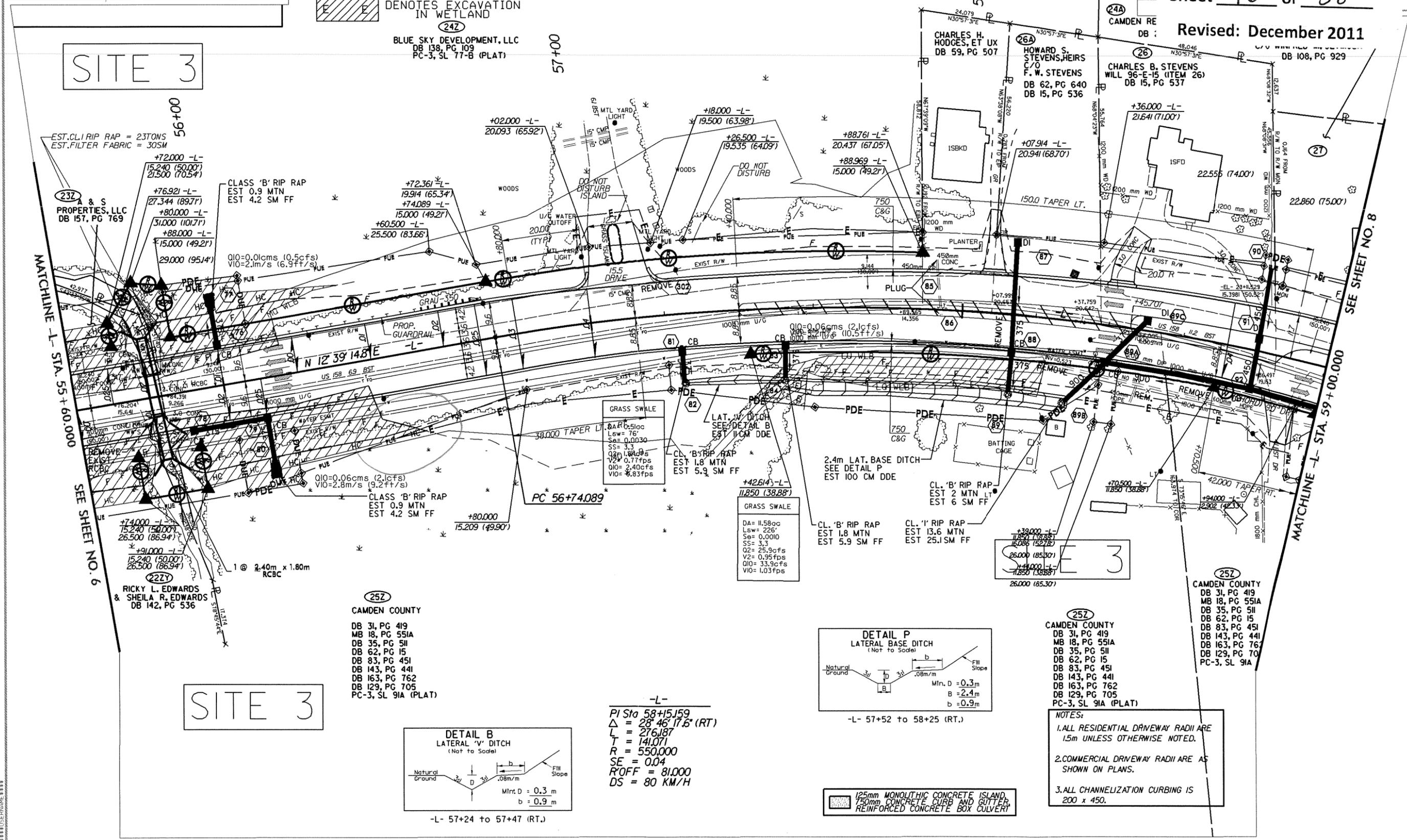
WETHERELL ENGINEERING
 TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
 CIVIL/SITE DESIGN - GEOTECHNICAL - CONSTRUCTION OBSERVATION

TRAN SITE CONSULTING
 ENGINEERS, INCORPORATED
 1300 Paddock Drive, Suite 9-10
 Raleigh, N.C. 27609
 License No. C-1428

METRIC

R-2414B 7

Permit Drawing
 Sheet 16 of 38
 Revised: December 2011



SITE 3

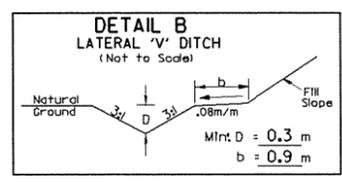
SITE 3

MATCHLINE - L - STA. 55 + 60.000
SEE SHEET NO. 6

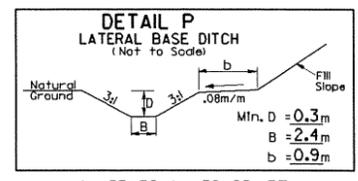
MATCHLINE - L - STA. 59 + 00.000
SEE SHEET NO. 8

(252)
 CAMDEN COUNTY
 DB 31, PG 419
 MB 18, PG 551A
 DB 35, PG 511
 DB 62, PG 15
 DB 83, PG 451
 DB 143, PG 441
 DB 163, PG 762
 DB 129, PG 705
 PC-3, SL 91A (PLAT)

(252)
 CAMDEN COUNTY
 DB 31, PG 419
 MB 18, PG 551A
 DB 35, PG 511
 DB 62, PG 15
 DB 83, PG 451
 DB 143, PG 441
 DB 163, PG 762
 DB 129, PG 705
 PC-3, SL 91A (PLAT)



-L- 57+24 to 57+47 (RT.)



-L- 57+52 to 58+25 (RT.)

-L-
 PI Sta 58+15.59
 $\Delta = 28' 46'' 17.8''$ (RT)
 L = 276.187
 T = 141.071
 R = 550.000
 SE = 0.04
 R'OFF = 81.000
 DS = 80 KM/H

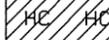
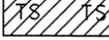
 125mm MONOLITHIC CONCRETE ISLAND, 150mm CONCRETE CURB AND GUTTER, REINFORCED CONCRETE BOX CULVERT

NOTES:

- ALL RESIDENTIAL DRIVEWAY RADII ARE 1.5m UNLESS OTHERWISE NOTED.
- COMMERCIAL DRIVEWAY RADII ARE AS SHOWN ON PLANS.
- ALL CHANNELIZATION CURBING IS 200 x 450.

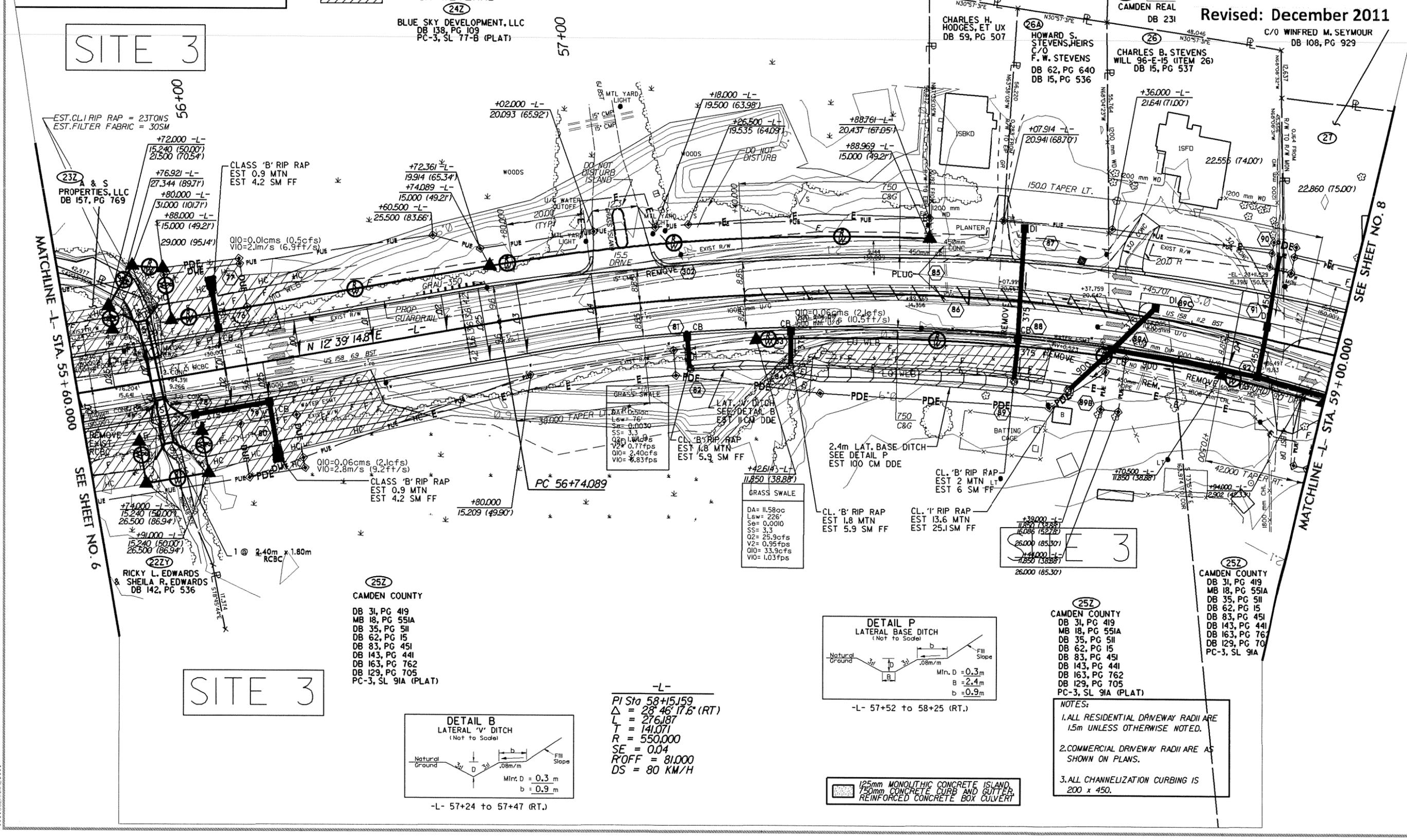
REVISIONS

11/07/06 - REVISED ROW, TCE & PDE ON PARCEL 25 (ABP)
 R/W REVISION - REVISED PROPERTY OWNER NAMES ON PARCEL NO. 23 & 24. ADDED PARCEL NO. 24A & 25A. CORRECTED PROPERTY OWNER NAMES CHARLES H. HODGES & HOWARD S. STEVENS, HEIRS. BAM
 R/W REVISION - REVISED PROPERTY OWNER NAME ON PARCEL NO. 22. BAM

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

WETTERELL ENGINEERING
 TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
 CIVIL/SITE DESIGN - GIS/SPS - CONSTRUCTION OBSERVATION

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 ENGINEERS, INC. INCORPORATED
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 Raleigh, N.C. 27609
 License No. C-1628



SITE 3

SITE 3

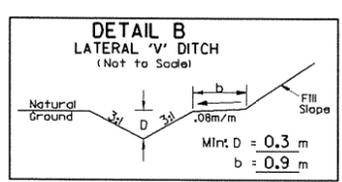
BLUE SKY DEVELOPMENT, LLC
 DB 138, PG 109
 PC-3, SL 77-B (PLAT)

23Z
 A & S
 PROPERTIES, LLC
 DB 157, PG 769

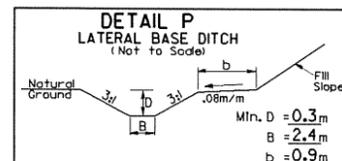
22Z
 RICKY L. EDWARDS
 & SHEILA R. EDWARDS
 DB 142, PG 536

25Z
 CAMDEN COUNTY
 DB 31, PG 419
 MB 18, PG 551A
 DB 35, PG 511
 DB 62, PG 15
 DB 83, PG 451
 DB 143, PG 441
 DB 163, PG 762
 DB 129, PG 705
 PC-3, SL 91A (PLAT)

25Z
 CAMDEN COUNTY
 DB 31, PG 419
 MB 18, PG 551A
 DB 35, PG 511
 DB 62, PG 15
 DB 83, PG 451
 DB 143, PG 441
 DB 163, PG 762
 DB 129, PG 705
 PC-3, SL 91A (PLAT)



-L-
 PI Sta 58+15.59
 $\Delta = 28^\circ 46' 17.8''$ (RT)
 L = 276.87
 T = 141.071
 R = 550.000
 SE = 0.04
 R'OFF = 81.000
 DS = 80 KM/H



125mm MONOLITHIC CONCRETE ISLAND,
 750mm CONCRETE CURB AND GUTTER,
 REINFORCED CONCRETE BOX CULVERT

NOTES:

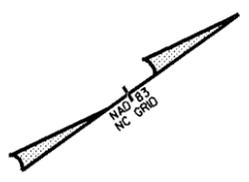
1. ALL RESIDENTIAL DRIVEWAY RADII ARE 1.5m UNLESS OTHERWISE NOTED.
2. COMMERCIAL DRIVEWAY RADII ARE AS SHOWN ON PLANS.
3. ALL CHANNELIZATION CURBING IS 200 x 450.

REVISIONS
 11/07/06 - REVISED ROW, TCE & PDE ON PARCEL 36.(ABP)
 R/W REVISION - REVISED PROPERTY OWNER NAME ON PARCEL NO.42 & ADDED DEED BOOK DESCRIPTION TO PARCEL NO.44. BAM

WETHERELL ENGINEERING
 TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
 CIVIL/SITE DESIGN - GS/OPS - CONSTRUCTION OBSERVATION

TRANSITE CONSULTING ENGINEERS, INCORPORATED
 1300 Piedmont Drive, Suite G-10
 Raleigh, N.C. 27609

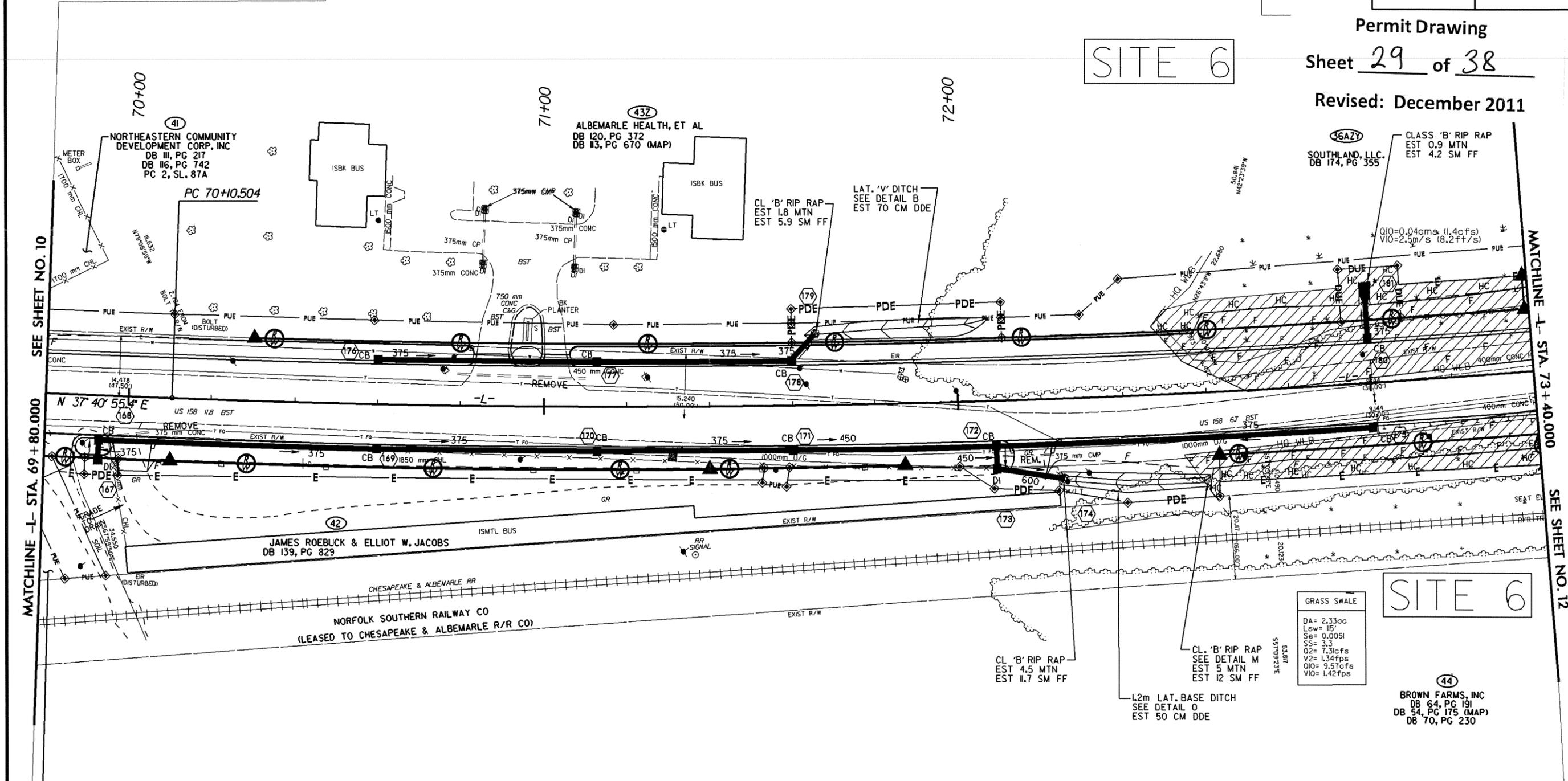
PROJECT REFERENCE NO. R-2414B	SHEET NO. 11
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	
CONST. REV.	
R/W REV.	



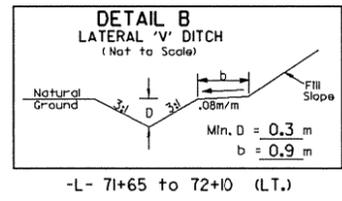
F F DENOTES FILL IN WETLAND
HC HC DENOTES HAND CLEARING

SITE 6

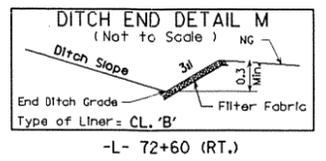
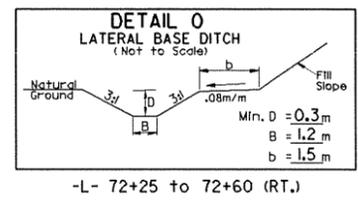
Permit Drawing
 Sheet 29 of 38
 Revised: December 2011



36
 GEORGE WOOD FARMS, INC
 DB 115, PG 607
 DB 115, PG 621



-L-
 PI Sta 72+27.319
 $\Delta = 8' 51'' 20''$ (LT)
 L = 432.766
 T = 216.815
 R = 2,800.000
 SE = NC
 DS = 80 KM/H



GRASS SWALE
 DA= 2.33oc
 Lw= 15'
 Se= 0.005f
 SS= 3.3
 Q2= 7.3cfs
 V2= 1.34fps
 Q10= 9.57cfs
 V10= 1.42fps

SITE 6

44
 BROWN FARMS, INC
 DB 64, PG 191
 DB 64, PG 175 (MAP)
 DB 70, PG 230

125mm MONOLITHIC CONCRETE ISLAND,
 150mm CONCRETE CURB AND GUTTER,
 REINFORCED CONCRETE BOX CULVERT

NOTE: ALL DRIVES ARE 6.0 METERS UNLESS OTHERWISE DENOTED
 SEE SHEET NO. 22 FOR -L- GRADE AND PROFILE.

REVISIONS

11/07/06 - REVISED ROW, TCE & PDE ON PARCEL 36.(ABP)
 R/W REVISION - REVISED PROPERTY OWNER NAME ON PARCEL
 NO.42 & ADDED DEED BOOK DESCRIPTION TO PARCEL
 NO.44. BAM

WETHERELL ENGINEERING
 528 Janna Park Dr., Suite 104
 Raleigh, N.C. 27604
 Tel: 919 881 8877
 Fax: 919 881 8107

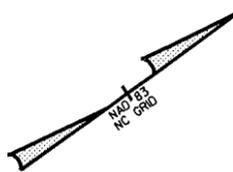
TRAN SITE CONSULTING
 ENGINEERS, INC. INCORPORATED
 1300 Paddock Drive, Suite G-10
 Raleigh, N.C. 27609

PROJECT REFERENCE NO. R-244B		SHEET NO. 11
R/W SHEET NO.		
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION		

Permit Drawing

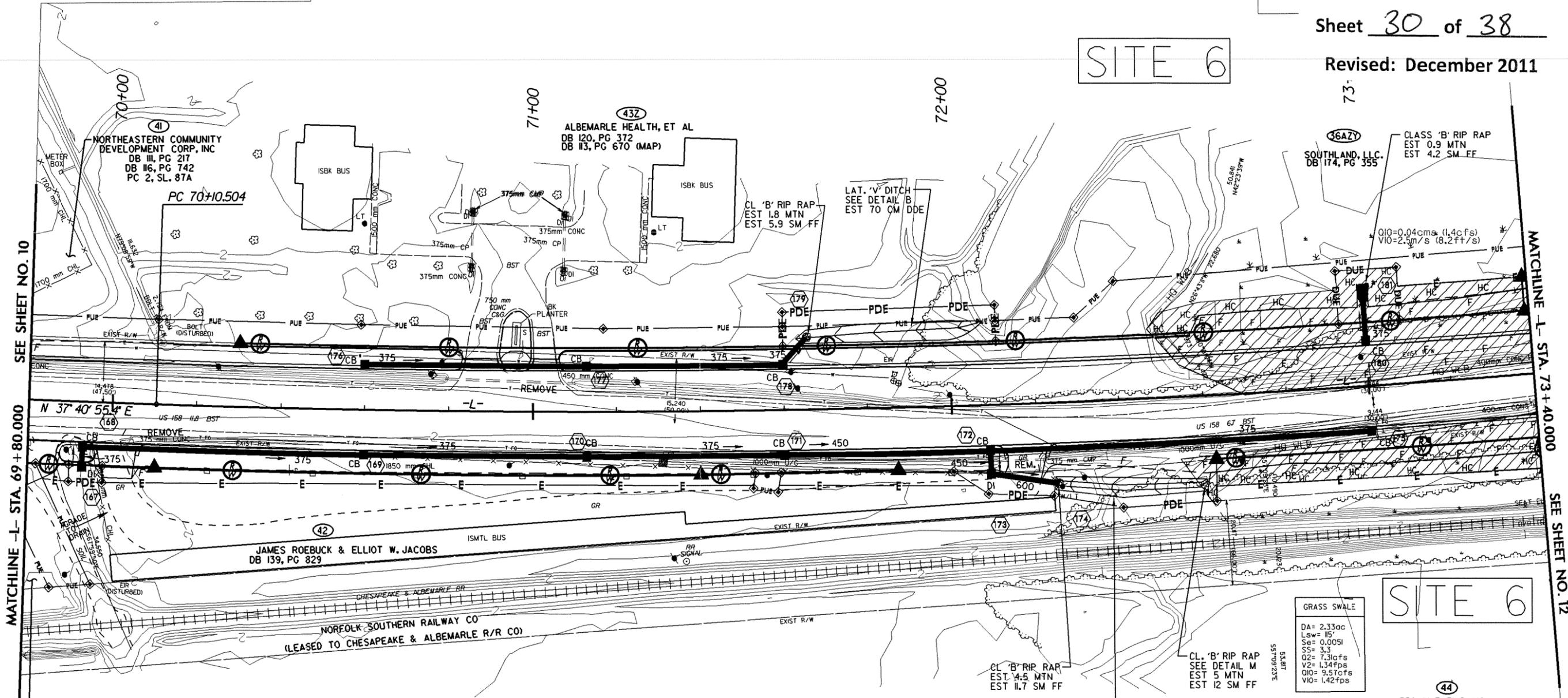
Sheet 30 of 38

Revised: December 2011



F F DENOTES FILL IN WETLAND
HC HC DENOTES HAND CLEARING

SITE 6



SEE SHEET NO. 10

MATCHLINE -L- STA. 69+80.000

MATCHLINE -R- STA. 73+40.000

SEE SHEET NO. 12

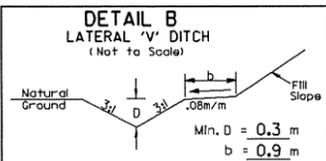
36
 GEORGE WOOD FARMS, INC
 DB 115, PG 607
 DB 115, PG 621

42
 JAMES ROEBUCK & ELLIOT W. JACOBS
 DB 139, PG 829

43Z
 ALBEMARLE HEALTH, ET AL
 DB 120, PG 372
 DB 113, PG 670 (MAP)

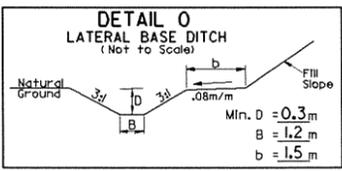
GRASS SWALE
 DA= 2.33ac
 Lsw= 15'
 Ss= 0.0051
 Ss= 3.3
 V2= 1.34fps
 Q10= 9.57cfs
 V10= 1.42fps

44
 BROWN FARMS, INC
 DB 64, PG 191
 DB 54, PG 175 (MAP)
 DB 70, PG 230

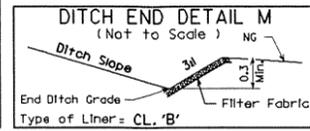


-L- 71+65 to 72+0 (LT.)

-L-
 PI Sta 72+27.319
 $\Delta = 8' 51'' 20''$ (LT.)
 L = 432.766
 T = 216.815
 R = 2800.000
 SE = NC
 DS = 80 KM/H



-L- 72+25 to 72+60 (RT.)



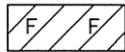
-L- 72+60 (RT.)

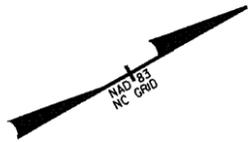
125mm MONOLITHIC CONCRETE ISLAND, 750mm CONCRETE CURB AND GUTTER, REINFORCED CONCRETE BOX CULVERT

NOTE: ALL DRIVES ARE 6.0 METERS UNLESS OTHERWISE DENOTED

SEE SHEET NO. 22 FOR -L- GRADE AND PROFILE.

REVISIONS
 R/W REVISION - REVISED PDE & TCE ON PARCEL NO.36.(BAM)
 R/W REVISION - ADDED DEED BOOK DESCRIPTION TO PARCEL NO.44. BAM

 DENOTES FILL IN WETLAND
 DENOTES HAND CLEARING
 DENOTES EXCAVATION IN WETLAND



WETHERILL ENGINEERING
 TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
 CIVIL/SITE DESIGN - GIS/GIS - CONSTRUCTION ADMINISTRATION

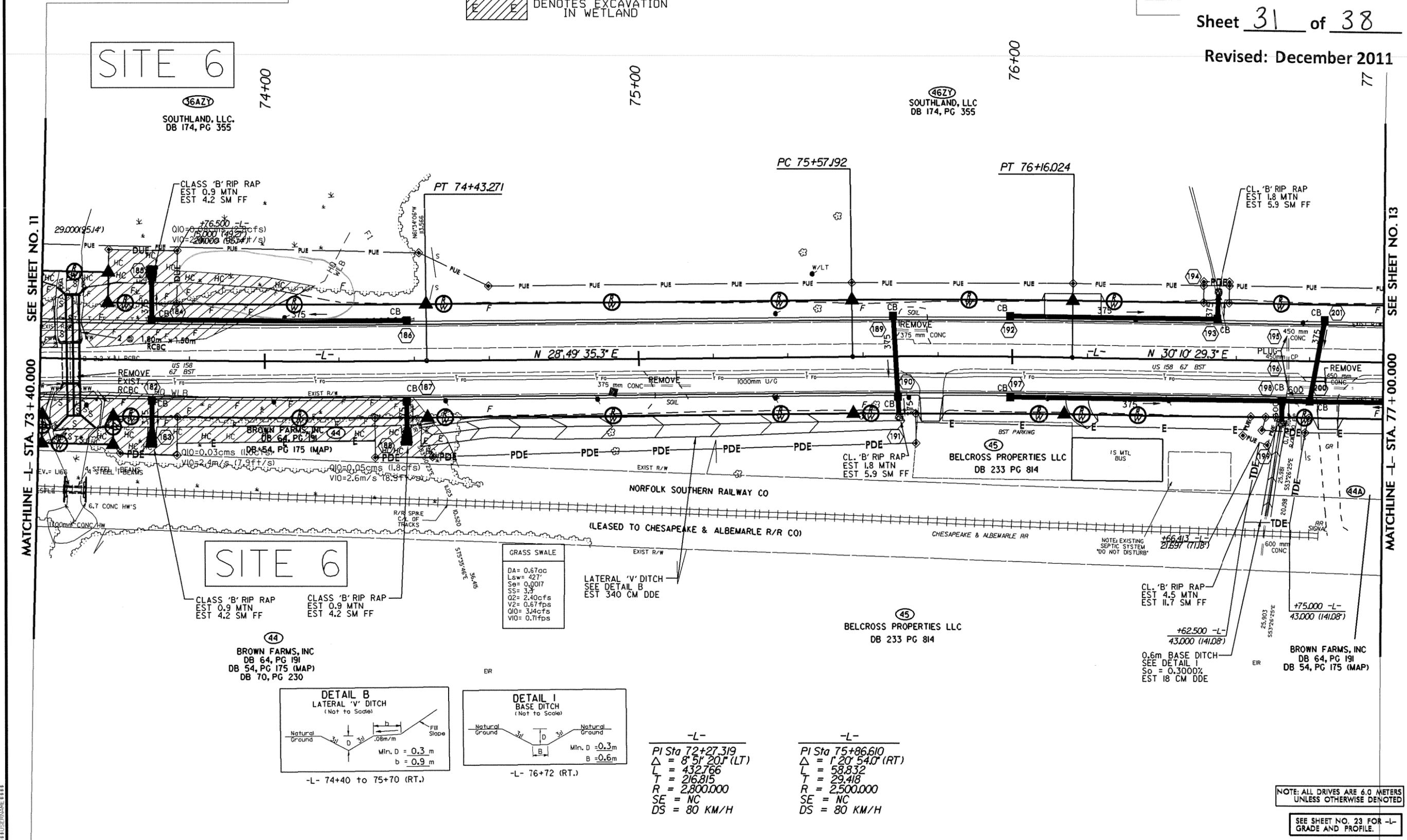
TRANSITE CONSULTING
 ENGINEERS, INCORPORATED
 1300 Paddock Drive, Suite G-10
 Raleigh, N.C. 27609

METRIC

PROJECT REFERENCE NO. R-2414B SHEET NO. 12
 R/W SHEET NO.
 ROADWAY DESIGN ENGINEER HYDRAULICS ENGINEER

PRELIMINARY PLANS
 DO NOT USE FOR CONSTRUCTION

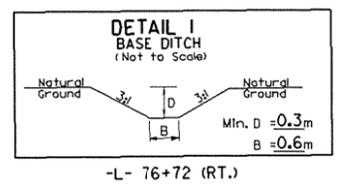
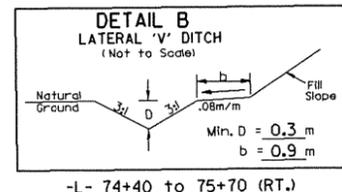
CONST.REV
 R/W RE:
 Permit Drawing
 Sheet 31 of 38
 Revised: December 2011



SITE 6

CLASS 'B' RIP RAP
 EST 0.9 MTN
 EST 4.2 SM FF

44
 BROWN FARMS, INC
 DB 64, PG 191
 DB 54, PG 175 (MAP)
 DB 70, PG 230



GRASS SWALE
 DA = 0.870c
 Lsw = 427'
 Se = 0.0017
 Ss = 3.3
 Q2 = 2.40cfs
 V2 = 0.67fps
 Q10 = 3.4cfs
 V10 = 0.71fps

LATERAL 'V' DITCH
 SEE DETAIL B
 EST 340 CM DDE

-L-
 PI Sta 72+27.319
 $\Delta = 8' 51'' 20.1''$ (LT)
 L = 432.766
 T = 216.815
 R = 2,800.000
 SE = NC
 DS = 80 KM/H

-L-
 PI Sta 75+86.610
 $\Delta = 1' 20'' 54.0''$ (RT)
 L = 58.832
 T = 29.418
 R = 2,500.000
 SE = NC
 DS = 80 KM/H

NOTE: ALL DRIVES ARE 6.0 METERS UNLESS OTHERWISE DENOTED
 SEE SHEET NO. 23 FOR -L- GRADE AND PROFILE.

REVISIONS
 R/W REVISION - REVISED PDE & TCE ON PARCEL NO.36.(BAM)
 R/W REVISION - ADDED DEED BOOK DESCRIPTION TO PARCEL NO.44. BAM

DENOTES FILL IN WETLAND
 DENOTES HAND CLEARING
 DENOTES EXCAVATION IN WETLAND



WETHERILL ENGINEERING
 TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
 CIVIL/SITE DESIGN - DS/PS - CONSTRUCTION OBSERVATION

TRAN SITE CONSULTING ENGINEERS, INCORPORATED
 1300 Paddock Drive, Suite G-10
 Raleigh, N.C. 27609

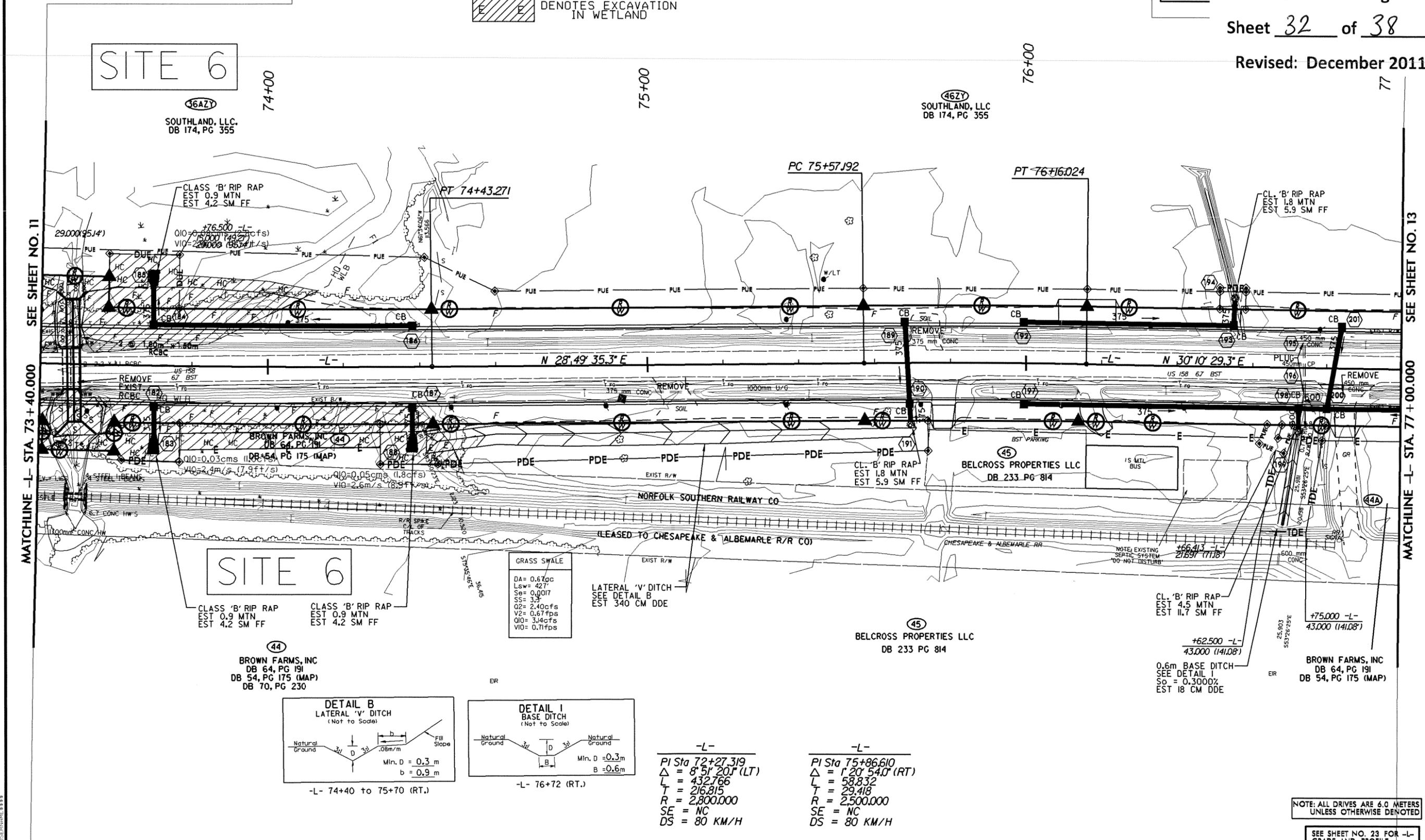
METRIC

5 0 10

PROJECT REFERENCE NO. R-2414B	SHEET NO. 12
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

CONST.REV.
 R/W REV.

Permit Drawing
 Sheet 32 of 38
 Revised: December 2011



SITE 6

CLASS 'B' RIP RAP
 EST 0.9 MTN
 EST 4.2 SM FF

(44)
 BROWN FARMS, INC
 DB 64, PG 191
 DB 54, PG 175 (MAP)
 DB 70, PG 230

GRASS SWALE
 DA = 0.67cc
 Lsw = 427'
 S₀ = 0.0017
 SS = 3.5'
 Q₂ = 2.40cfs
 V₂ = 0.67fps
 Q₁₀ = 3.14cfs
 V₁₀ = 0.71fps

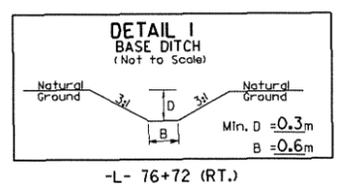
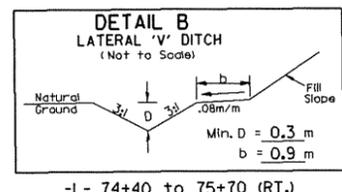
LATERAL 'V' DITCH
 SEE DETAIL B
 EST 340 CM DDE

(45)
 BELCROSS PROPERTIES LLC
 DB 233 PG 814

CLASS 'B' RIP RAP
 EST 4.5 MTN
 EST 11.7 SM FF

0.6m BASE DITCH
 SEE DETAIL I
 S₀ = 0.3000%
 EST 18 CM DDE

(44A)
 BROWN FARMS, INC
 DB 64, PG 191
 DB 54, PG 175 (MAP)



-L-
 PI Sta 72+27.319
 Δ = 8' 51" 20" (LT)
 L = 432.766
 T = 216.815
 R = 2,800.000
 SE = NC
 DS = 80 KM/H

-L-
 PI Sta 75+86.610
 Δ = 1' 20" 54" (RT)
 L = 58.832
 T = 29.418
 R = 2,500.000
 SE = NC
 DS = 80 KM/H

NOTE: ALL DRIVES ARE 6.0 METERS UNLESS OTHERWISE DENOTED

SEE SHEET NO. 23 FOR -L- GRADE AND PROFILE.