



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

April 4, 2019

N.C. Division of Coastal Management
1638 Mail Service Center
Raleigh, NC 27699-1638

ATTN: Ms. Cathy Brittingham, NCDOT Coordinator

Subject: Certification for DCM Consistency for the proposed US 70 Havelock Bypass in Craven County. TIP No. R-1015. WBS 34360.1.2.

Dear Madam:

The purpose of this letter and information package is to revise our request for concurrence from the Division of Coastal Management (DCM) for the North Carolina Department of Transportation's (NCDOT) consistency certification submitted on November 27, 2018 for the above-mentioned project. This package consists of revised permit drawings and a revised Division of Mitigation Services acceptance letter.

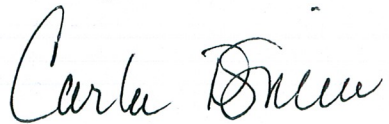
As you are aware, the NCDOT proposes to construct a new US 70 bypass of Havelock, Craven County. NCDOT has also applied for a U.S. Army Corps of Engineers (USACE) Section 404 Individual Permit as well as a N.C. Division of Water Resources (DWR) Individual 401 Water Quality Certification. During discussions with the USACE and DWR it was decided that 0.6 acre of mechanized land clearing should be adjusted to hand clearing to better comply with project commitments from the project Final Environmental Impact Statement.

Enclosed you will find revised permit drawings for the area between stations 338+00 to 393+00. This affects permit sites 26, 27, 28A, 28B, 29, 30, and 31. The mechanized clearing shown at those sites has been changed to hand clearing. This coincides with the clearing restrictions already indicated in the erosion control plans. Revised summary sheets are also enclosed, which show the shift of 0.6 acre of wetlands clearing impacts at the affected sites from the mechanized land clearing column to the hand clearing column. As a result, the Department has reduced the proposed compensatory mitigation to correspond with this reduction in permanent impacts.

NCDOT has reviewed the State's coastal program under 15 CFR 930.58 and 15A NCAC 07M. Specifically, we have considered the shoreline erosion, mitigation and coastal water quality policies, and the Craven County CAMA Core Land Use Plan as well as the City of Havelock 2030 Comprehensive Plan. NCDOT certifies that the proposed activity complies with the enforceable policies of North Carolina's approved management program and will be conducted in a manner consistent with said program.

If you have any questions or need additional information, please contact Gordon Cashin at (919) 707-6107 or gcashin@ncdot.gov.

Sincerely,

Handwritten signature of Carla Dineen in cursive.

for Philip S. Harris III, P.E., C.P.M., Unit Head
Environment Analysis Unit

cc: Mr. Stephen Lane, NCDCM



NORTH CAROLINA
Environmental Quality

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

TIM BAUMGARTNER
Director

April 2, 2019

Mr. Philip S. Harris, P.E., CPM
Environmental Analysis Unit
North Carolina Department of Transportation
1598 Mail Service Center
Raleigh, North Carolina 27699-1598

Dear Mr. Harris:

Subject: DMS Mitigation Acceptance Letter:

R-1015, US 70 – Havelock Bypass from North of Pine Grove to North of the Carteret County Line, Craven County

The purpose of this letter is to notify you that the Division of Mitigation Services (DMS) will provide the stream, wetland and buffer mitigation for the subject project. Based on the information supplied by you on April 2, 2019, the impacts are located in CU 03020204 of the Neuse River basin in the Southern Outer Coastal Plain (SOCP) Eco-Region, and are as follows:

Stream and Wetlands	River Basin	CU Location	Eco-Region	Stream			Wetlands		
				Cold	Cool	Warm	Riparian	Non-Riparian	Coastal Marsh
Impacts	Neuse	03020204	SOCP	0	0	2,870.0	15.82	97.73	0

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

All buffer mitigation requests and approvals are administrated through the Riparian Restoration Buffer Fund. The NCDOT will be responsible to ensure that appropriate compensation for the buffer mitigation will be provided in the agreed upon method of fund transfer. Upon receipt of the NCDWR's Buffer Authorization Certification, DMS will transfer funds from the NCDOT 2984 Fund into the Riparian Restoration Buffer Fund. Upon completion of transfer payment, NCDOT will have completed its riparian buffer mitigation responsibility for TIP Number R-1015. Subsequently, DMS will conduct a review of current NCDOT ILF Program mitigation projects in the river basin to determine if available buffer mitigation credits exist. If there are buffer mitigation credits available, then the Riparian Restoration Buffer Fund will purchase the appropriate amount of buffer mitigation credits from NCDOT ILF Program.



Mr. Harris
April 2, 2019
Page Two
NCDOT TIP R-1015

Buffer	River Basin	CU	Eco-Region	Buffer Impacts		
				Zone 1	Zone 2	TOTAL
Impacts	Neuse	03020204	SOCP	47,407.0	37,382.0	84,789.0

This mitigation acceptance letter replaces the mitigation acceptance letter issued on November 20, 2018. DMS commits to implementing sufficient compensatory mitigation credits to offset the impacts associated with this project as determined by the regulatory agencies in accordance with the In-Lieu Fee Instrument dated July 28, 2010. If the above referenced impact amounts are revised, then this mitigation acceptance letter will no longer be valid and a new mitigation acceptance letter will be required from DMS

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

Sincerely,



James B. Stanfill
DMS Asset Management Supervisor

Cc: Mr. Monte Matthews, USACE – Raleigh Regulatory Field Office
Ms. Amy Chapman, NC Division of Water Resources
File: R-1015 Revised

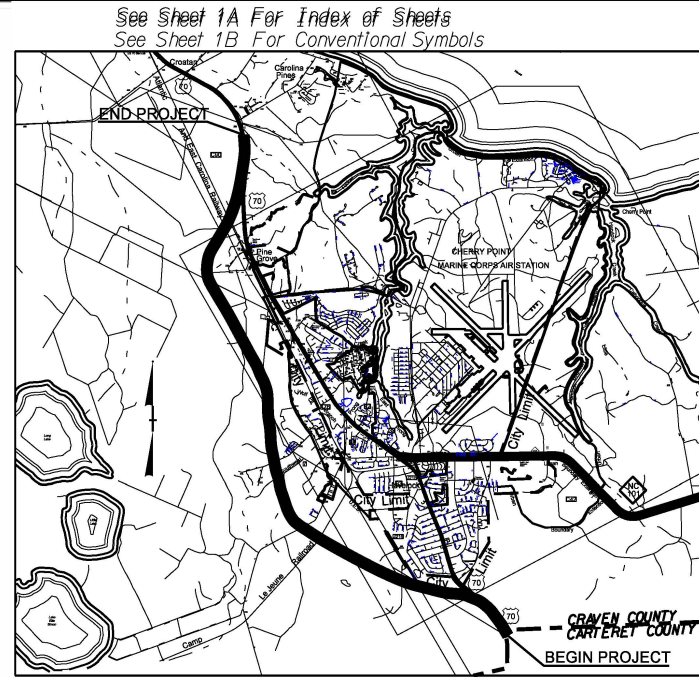


Revised 4/1/2019

4/2019
 smh
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 USERNAME: smh

TIP PROJECT: R-1015

CONTRACT: C204177



VICINITY MAP

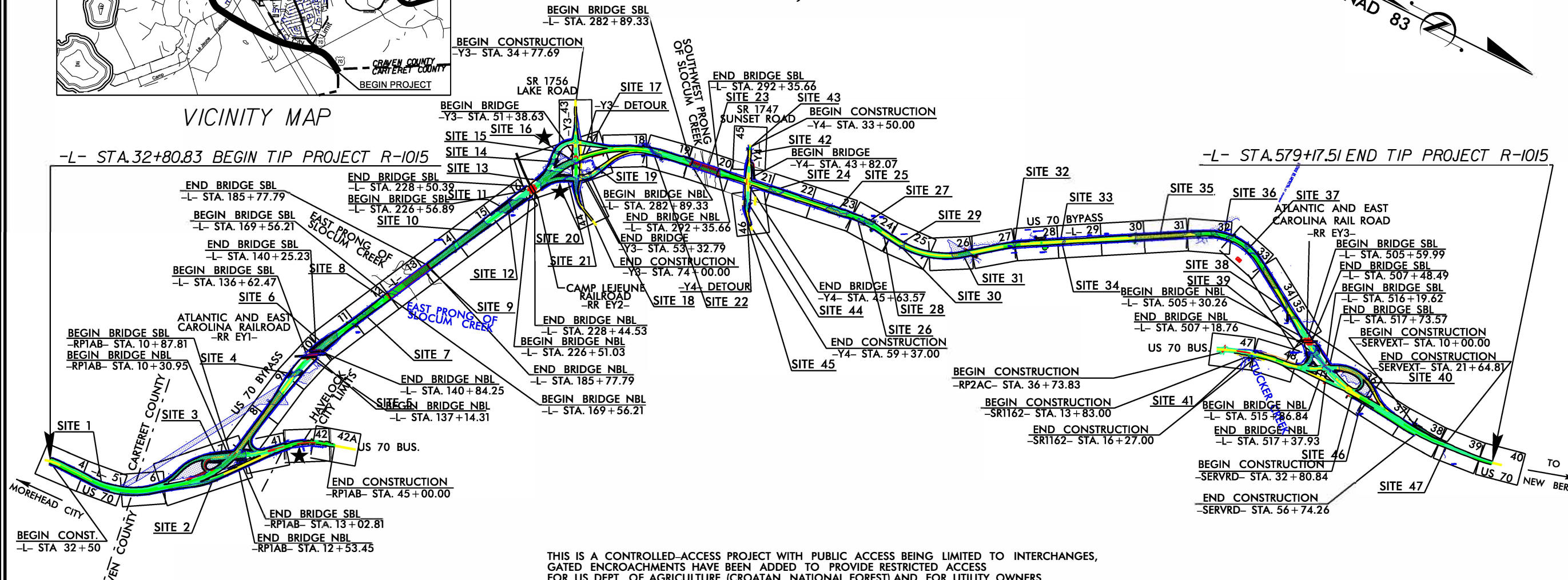
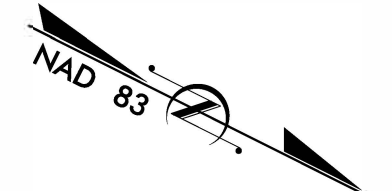
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
CRAVEN / CARTERET COUNTY

LOCATION: US 70 (HAVELOCK BYPASS) FROM SOUTH OF CARTERET / CRAVEN COUNTY LINE TO SOUTH OF SR 1176, (CAROLINA PINES BLVD.)

TYPE OF WORK: GRADING, DRAINAGE, PAVING, WIDENING, CULVERTS
SIGNING, SIGNALS AND STRUCTURES

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-1015	1	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	
34360.1.2	NHF-70(49)	PE	
34360.2.4	NHF-70(49)	RW	
34360.2.5	NHF-70(49)	UTIL	
34360.3.4	NHF-70(49)	CONST	

PERMIT DRAWING
 SHEET 1 OF 167

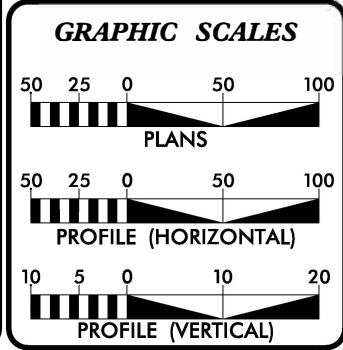


THIS IS A CONTROLLED-ACCESS PROJECT WITH PUBLIC ACCESS BEING LIMITED TO INTERCHANGES, GATED ENCROACHMENTS HAVE BEEN ADDED TO PROVIDE RESTRICTED ACCESS FOR US DEPT. OF AGRICULTURE (CROATAN NATIONAL FOREST) AND FOR UTILITY OWNERS.

WETLAND AND SURFACE WATER IMPACTS PERMIT

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

★ SIGNAL LOCATION
 NCDOT CONTACT: ROADWAY DESIGN PROJECT ENGINEER
 GARY LOVERING, P.E.



DESIGN DATA

ADT 2015 = N/A
ADT 2035 = 22,900
K = 9 %
D = 60 %
T = 3 % *
V = 70 MPH
* TTST 3% DUAL 3%
FUNC. CLASS = FREEWAY (FUTURE INTERSTATE)

PROJECT LENGTH

LENGTH OF ROADWAY TIP PROJECT R-1015	= 9.691 MILES
LENGTH OF STRUCTURE TIP PROJECT R-1015	= 0.657 MILES
TOTAL LENGTH OF TIP PROJECT R-1015	= 10.348 MILES
USED NBL FOR PROJECT LENGTHS	

Prepared for NCDOT In the Office of:

moffatt & nichol

4100 FALLS OF NEUSE ROAD, SUITE 300
 RALEIGH, NORTH CAROLINA 27609
 (919) 781-4626 VOICE (919) 781-4869 FAX (F-0105)

2018 STANDARD SPECIFICATIONS	RIGHT OF WAY DATE: SEPTEMBER 16, 2016
LETTING DATE: MARCH 19, 2019	TIM REID, PE <small>PROJECT ENGINEER</small> <hr/> TRENT HUFFMAN, PE <small>PROJECT DESIGN ENGINEER</small>

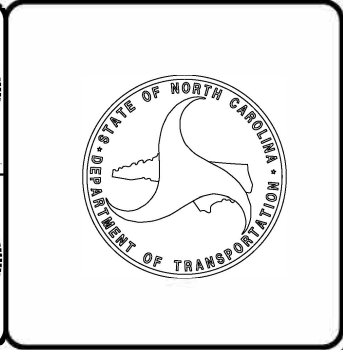
HYDRAULICS ENGINEER

SIGNATURE: _____

ROADWAY DESIGN ENGINEER

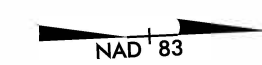
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moffatt & nichol



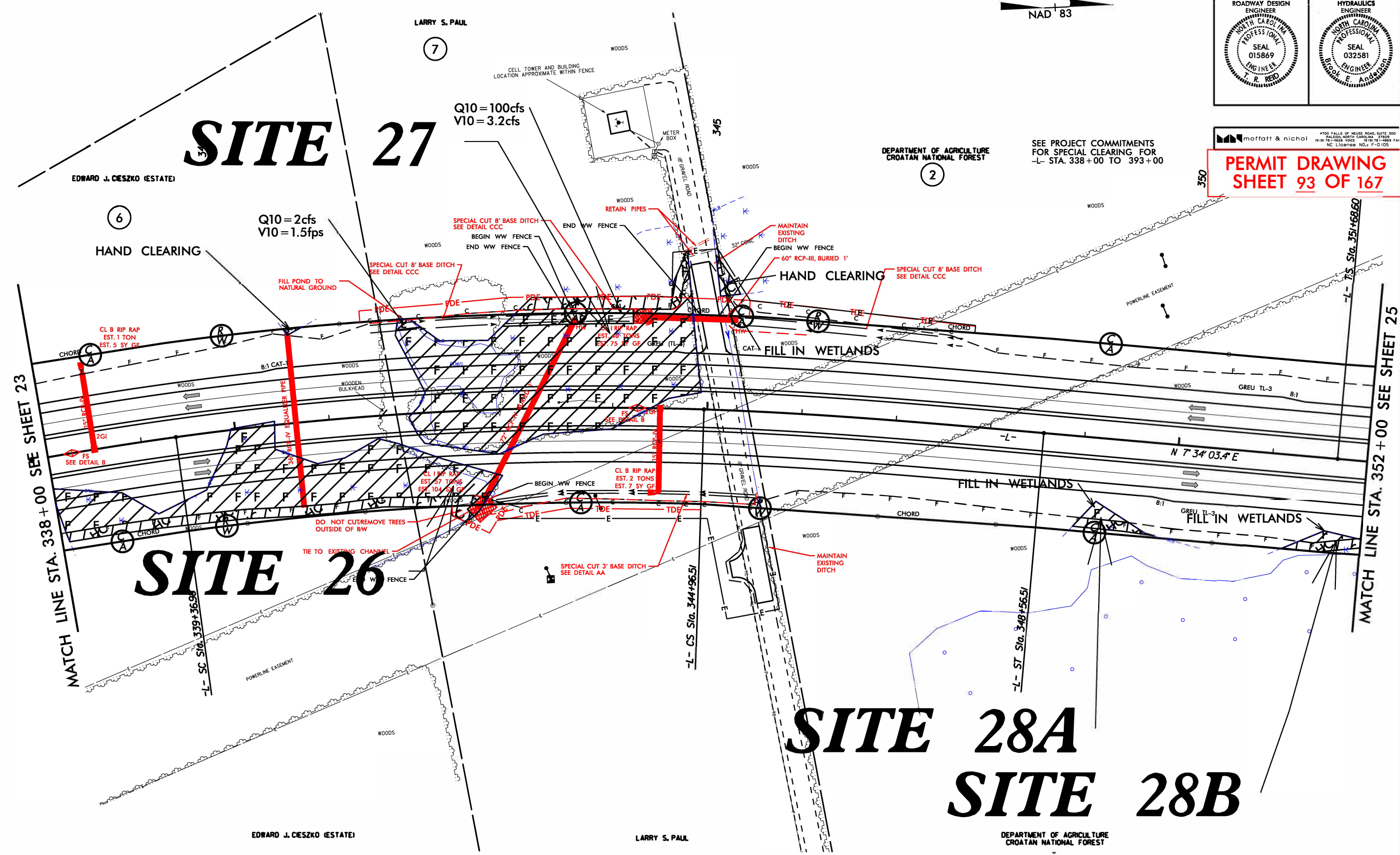
Revised 4/1/2019

PROJECT REFERENCE NO. R-1015	SHEET NO. 24
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 015869 T. R. REID	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 032581 BOOK E AND B



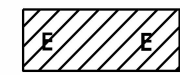
SEE PROJECT COMMITMENTS FOR SPECIAL CLEARING FOR -L- STA. 338+00 TO 393+00

PERMIT DRAWING SHEET 93 OF 167



REVISIONS

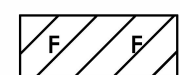
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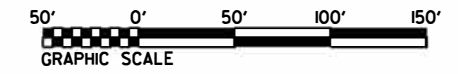
DENOTES EXCAVATION IN WETLAND



DENOTES HAND CLEARING



DENOTES FILL IN WETLAND



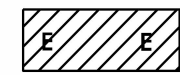
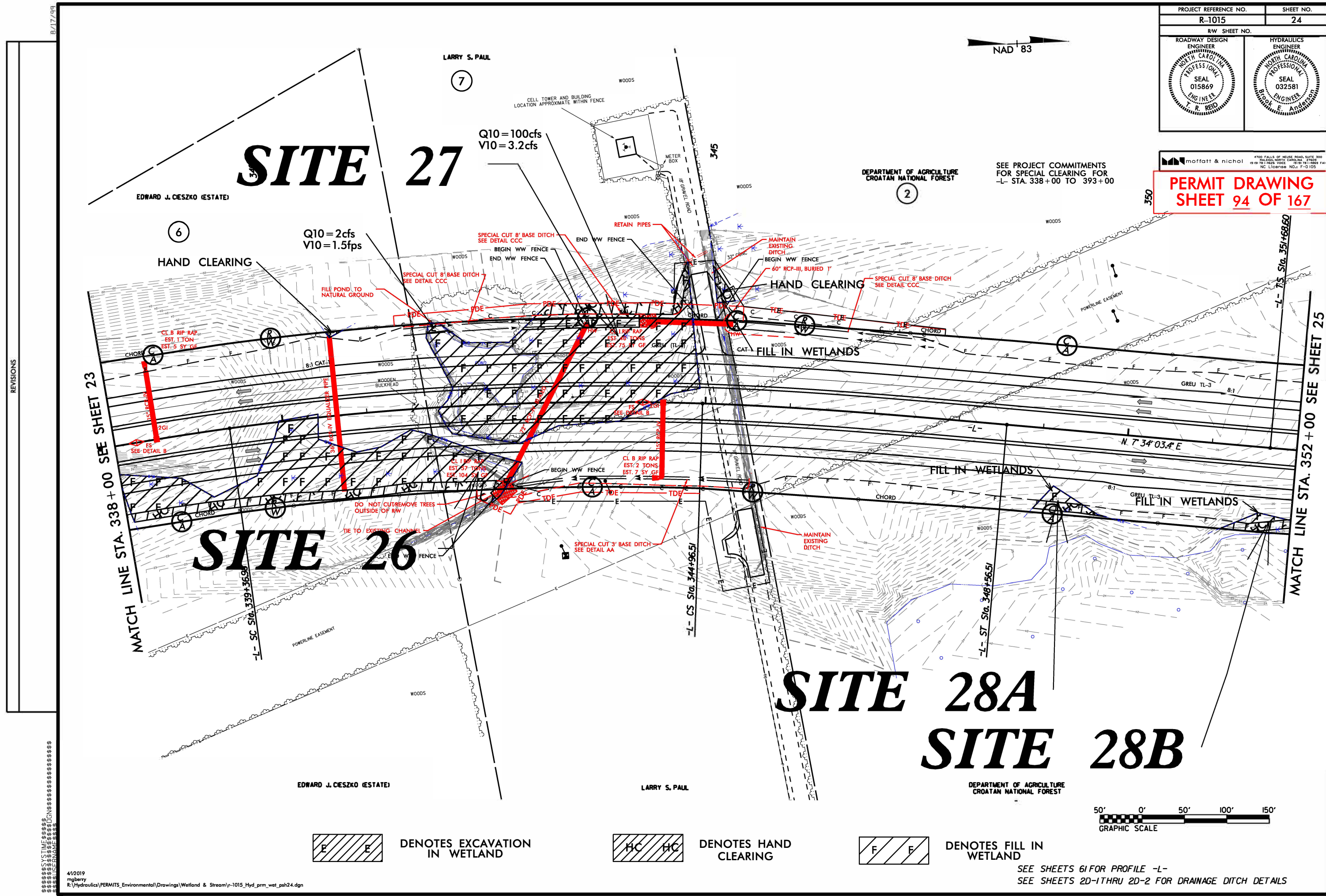
SEE SHEETS 61 FOR PROFILE -L-
SEE SHEETS 2D-1 THRU 2D-2 FOR DRAINAGE DITCH DETAILS

Revised 4/1/2019

PROJECT REFERENCE NO. R-1015	SHEET NO. 24
ROADWAY DESIGN ENGINEER T. R. REID	HYDRAULICS ENGINEER T. R. REID

SEE PROJECT COMMITMENTS FOR SPECIAL CLEARING FOR -L- STA. 338+00 TO 393+00

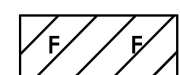
PERMIT DRAWING SHEET 94 OF 167



DENOTES EXCAVATION IN WETLAND



DENOTES HAND CLEARING



DENOTES FILL IN WETLAND

SEE SHEETS 61 FOR PROFILE -L-
SEE SHEETS 2D-1 THRU 2D-2 FOR DRAINAGE DITCH DETAILS

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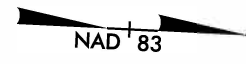
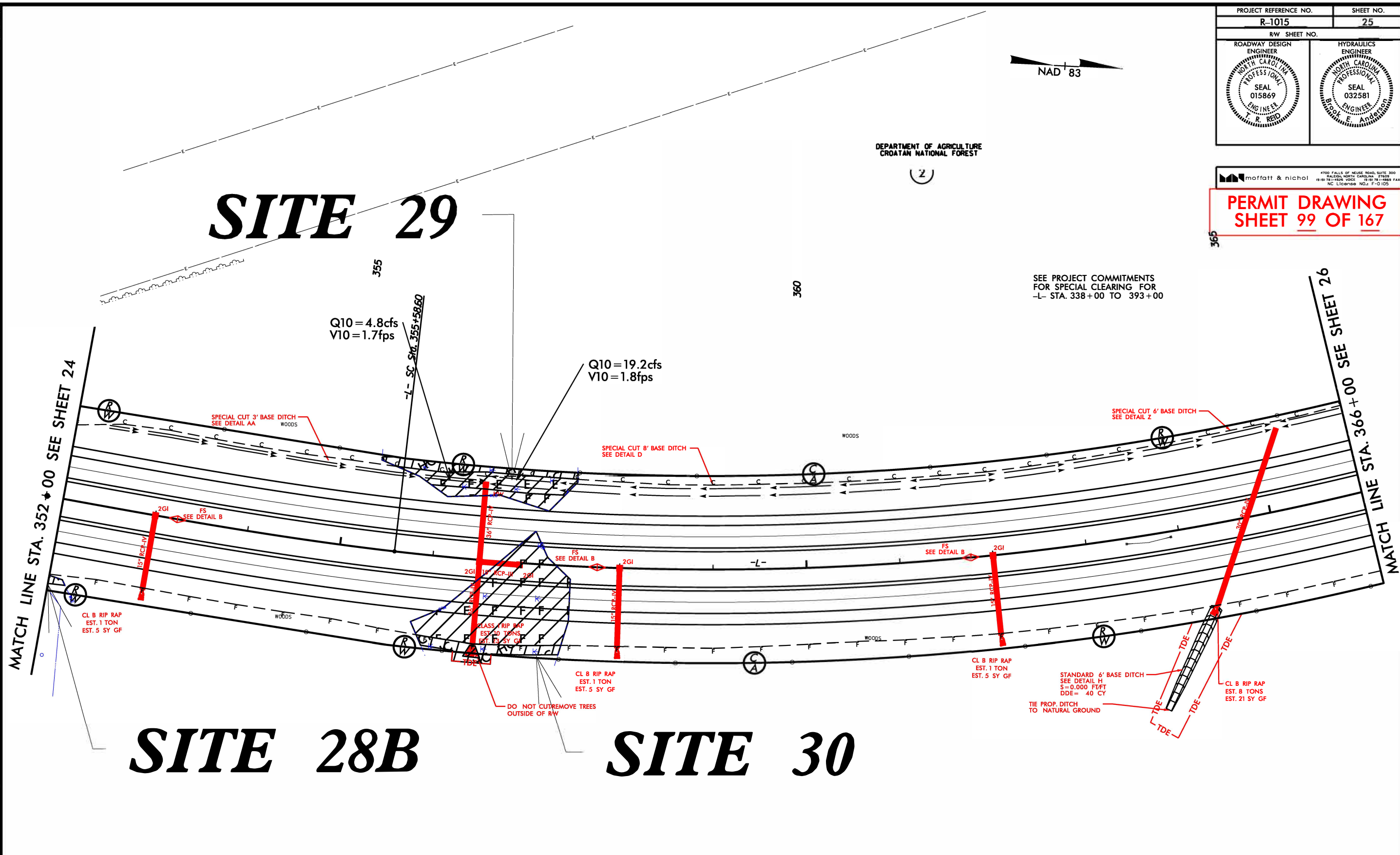
Revised 4/1/2019

7/13/2018 - PARCEL 2 - CHANGED PDE TO TDE STATION -L- 355+30 TO 356+70 RT
 PARCEL 2 - REVISED TDE STATION 365+90 TO 366+90 RT

REVISIONS
 4/2019
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PROJECT REFERENCE NO. R-1015	SHEET NO. 25
RW SHEET NO.	
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 015869 T. R. REID	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 032581 BOOK E. A. ANDERSON
moffatt & nichol 4700 FALLS OF NEUSE ROAD, SUITE 300 RALEIGH, NORTH CAROLINA 27609 919.781.4828 VOICE 919.781.1888 FAX NC LICENSE NO. F-0105	

PERMIT DRAWING SHEET 99 OF 167



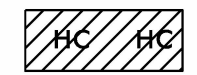
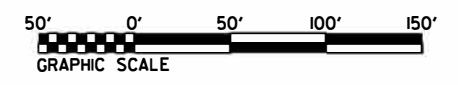
DEPARTMENT OF AGRICULTURE
 CROATAN NATIONAL FOREST

SEE PROJECT COMMITMENTS
 FOR SPECIAL CLEARING FOR
 -L- STA. 338+00 TO 393+00

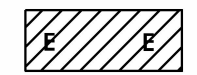
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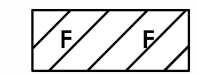
DEPARTMENT OF AGRICULTURE
 CROATAN NATIONAL FOREST



DENOTES HAND CLEARING



DENOTES EXCAVATION IN WETLAND



DENOTES FILL IN WETLAND

SEE SHEET 61 FOR PROFILE -L-
 SEE SHEETS 2D-1 THRU 2D-2 FOR DRAINAGE DITCH DETAILS

Revised 4/1/2019

7/13/2018 - PARCEL 2 - CHANGED PDE TO TDE STATION -L- 356+30 TO 356+70 RT
PARCEL 2 - REVISED TDE STATION 365+90 TO 366+50 RT

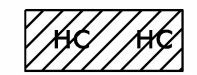
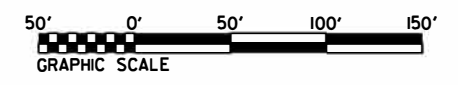
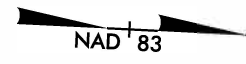
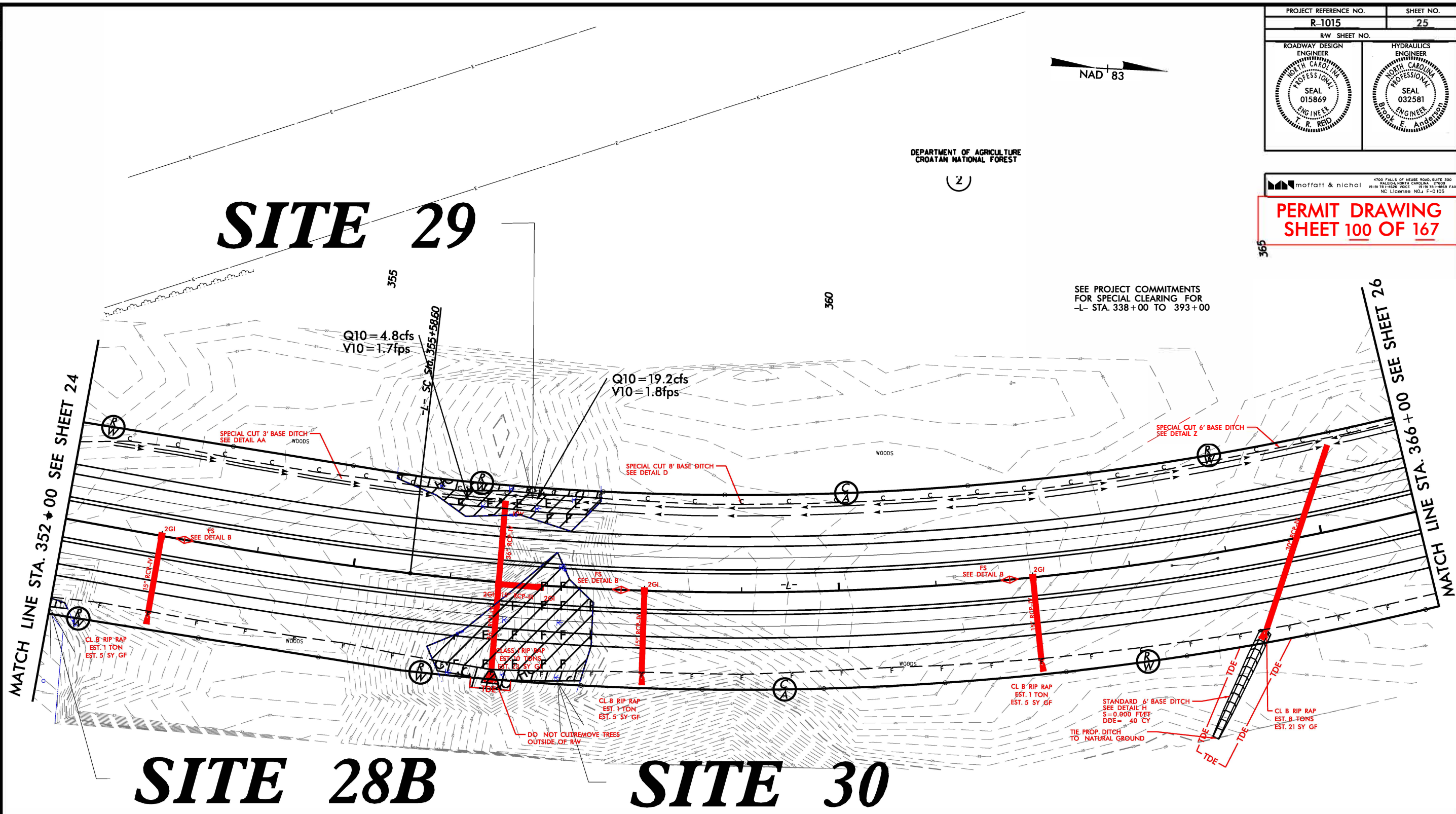
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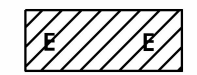
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RW SHEET NO.	
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 015869 T. R. REID	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 032581 BOOK E. A. ANDERSON

moffatt & nichol
4700 FALLS OF NEUSE ROAD, SUITE 300
RALEIGH, NORTH CAROLINA 27609
919 781-4826 VOICE 919 781-1988 FAX
NC License NO. J F-D 105

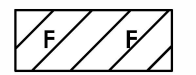
PERMIT DRAWING
SHEET 100 OF 167



DENOTES HAND CLEARING



DENOTES EXCAVATION IN WETLAND



DENOTES FILL IN WETLAND

SEE SHEET 6I FOR PROFILE -L-
SEE SHEETS 2D-1 THRU 2D-2 FOR DRAINAGE DITCH DETAILS

Revised 4/1/2019

REVISIONS

7/13/2018 - PARCEL 3 - ELIMINATED PDE STATION -L- 369+50 TO 369+05 RT
 PARCEL 3 - ELIMINATED PDE STATION -L- 370+05 TO 371+70 RT
 PARCEL 3 - ADDED TIE STATION -L- 379+30 TO 380+00 RT
 PARCEL 2 - CHANGED TIE TO PDE AND REVISED AREA STATION -L- 378+35 TO 378+66 LI
 PARCEL 2 - REVISED TIE AREA STATION -L- 377+58 TO 378+80 LI

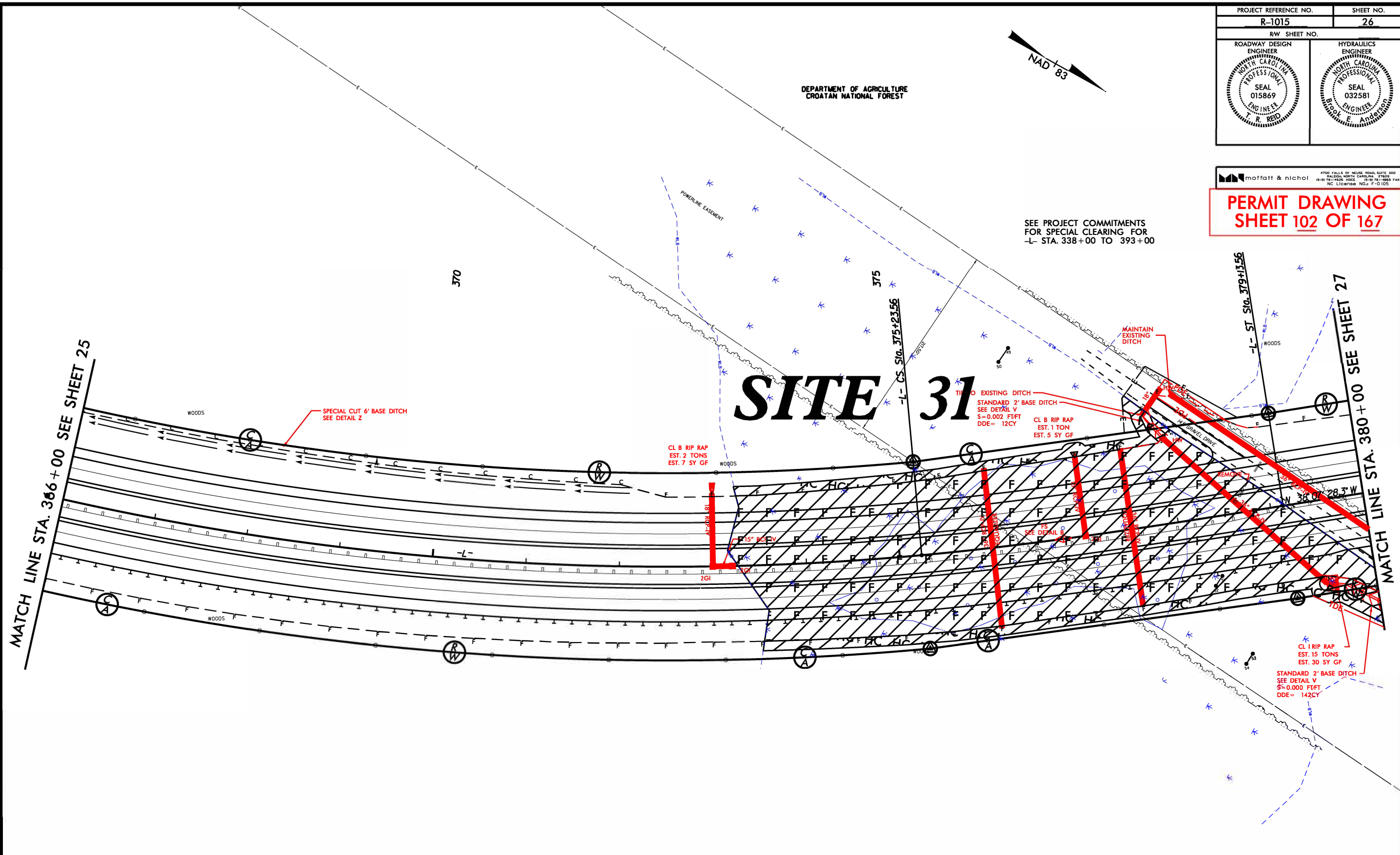
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PROJECT REFERENCE NO. R-1015	SHEET NO. 26
RW SHEET NO.	
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 015869 T. A. REID	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 032581 B. A. ANDERSON

moffatt & nichol
 4700 FALLS OF NEUSE ROAD, SUITE 300
 RALEIGH, NORTH CAROLINA 27609
 (919) 781-4828 VOICE (919) 781-1868 FAX
 NC LICENSE NO. F-01025

PERMIT DRAWING
SHEET 102 OF 167

SEE PROJECT COMMITMENTS FOR SPECIAL CLEARING FOR -L- STA. 338+00 TO 393+00

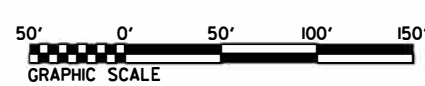


SITE 31

DEPARTMENT OF AGRICULTURE
 CROATAN NATIONAL FOREST

(2)

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



SEE SHEETS 62 FOR PROFILE -L-
 SEE SHEETS 2D-1THRU 2D-2 FOR DRAINAGE DITCH DETAILS

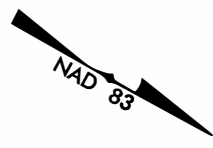
Revised 4/1/2019

7/13/2018 - REVISIONS
PARCEL 3 - ELIMINATED POE STATION -L- 368+50 TO 369+05 RT
PARCEL 3 - ELIMINATED POE STATION -L- 370+05 TO 371+70 RT
PARCEL 3 - ADDED POE STATION -L- 379+30 TO 380+00 RT
PARCEL 2 - CHANGED IDE TO POE AND REVISED AREA STATION -L- 378+35 TO 378+66 LT
PARCEL 2 - REVISED TOE AREA STATION -L- 377+58 TO 378+80 LT

PROJECT REFERENCE NO. R-1015	SHEET NO. 26
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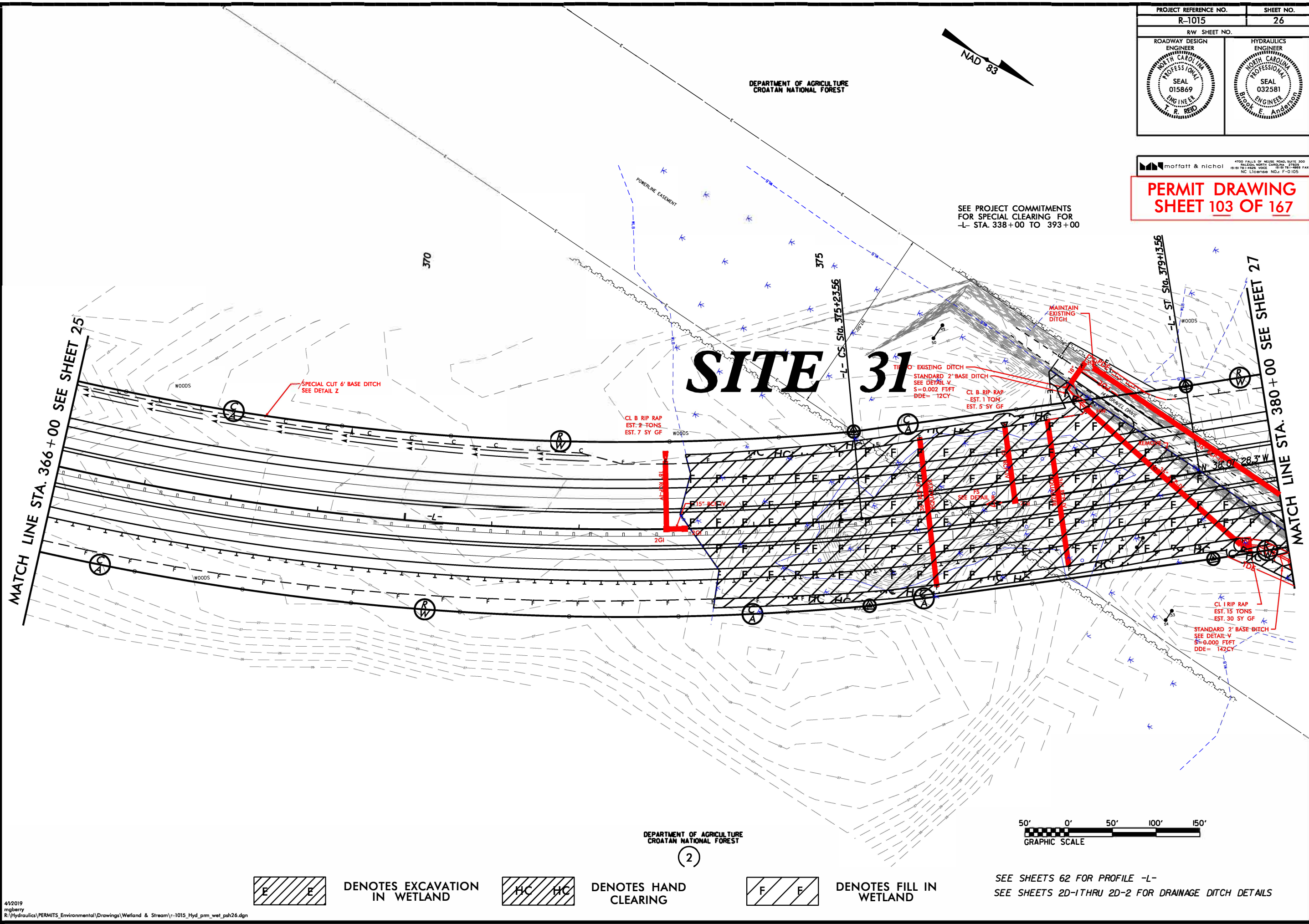
moffatt & nichol
4700 FALLS OF NEUSE ROAD, SUITE 300
RALEIGH, NORTH CAROLINA 27607
919.781.4828 VOICE 919.781.2825 FAX
NC LICENSE NO. F-01025

PERMIT DRAWING
SHEET 103 OF 167



DEPARTMENT OF AGRICULTURE
CROATAN NATIONAL FOREST

SEE PROJECT COMMITMENTS
FOR SPECIAL CLEARING FOR
-L- STA. 338+00 TO 393+00



MATCH LINE STA. 366+00 SEE SHEET 25

MATCH LINE STA. 380+00 SEE SHEET 27

SITE 31

DEPARTMENT OF AGRICULTURE
CROATAN NATIONAL FOREST

(2)



- 

DENOTES EXCAVATION
IN WETLAND
- 

DENOTES HAND
CLEARING
- 

DENOTES FILL IN
WETLAND

SEE SHEETS 62 FOR PROFILE -L-
SEE SHEETS 2D-1 THRU 2D-2 FOR DRAINAGE DITCH DETAILS

Revised 4/1/2019

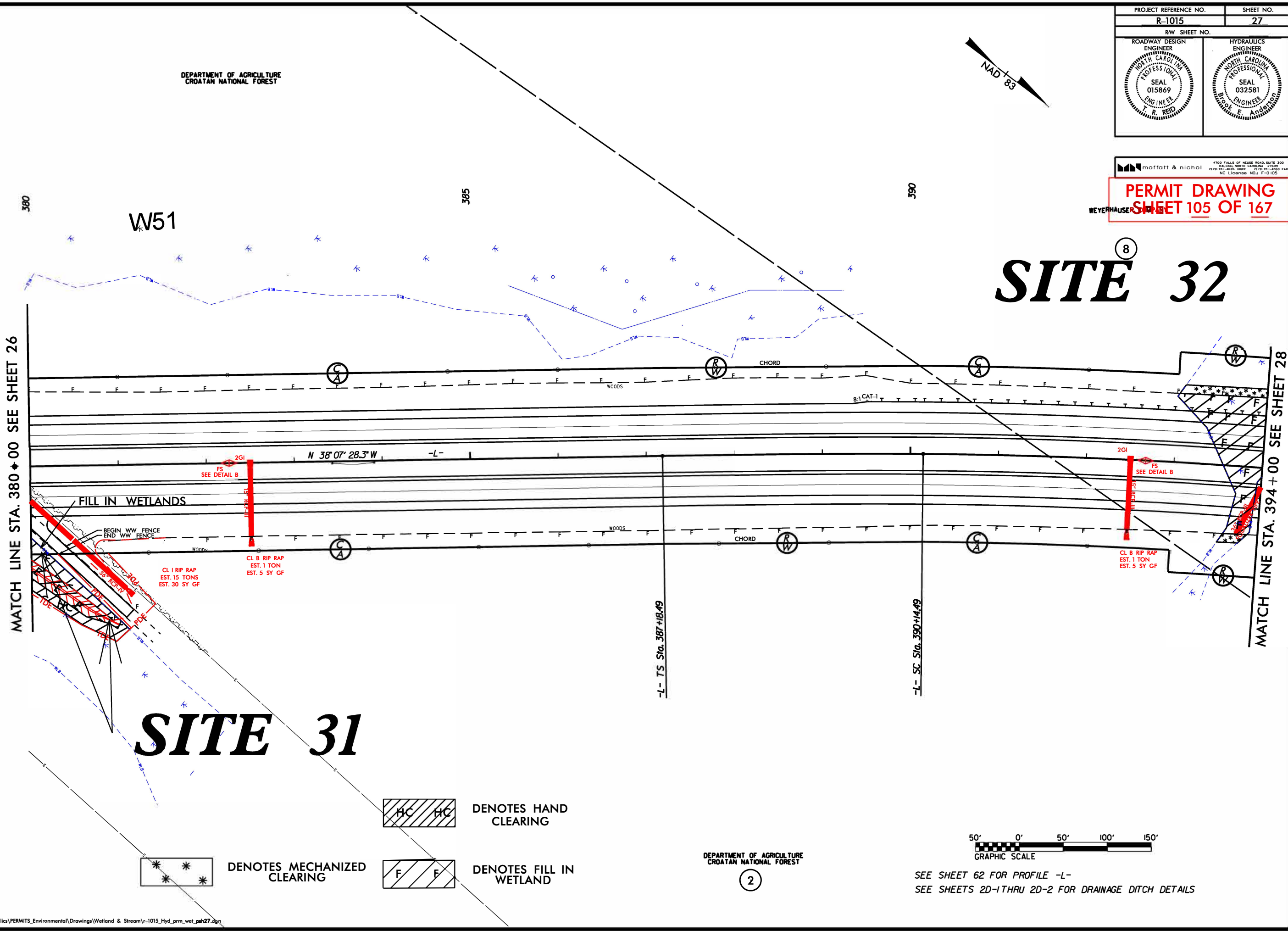
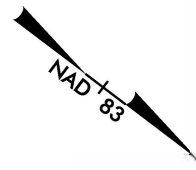
REVISIONS
7/13/2018 - PARCEL 2 - ADDED TDE STATION -L- 380+00 TO 381+12 RT
PARCEL 2 - REVISED PDE AREA STATION -L- 381+12 TO 381+40 RT

PROJECT REFERENCE NO. R-1015	SHEET NO. 27
RW SHEET NO.	
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 015869 T. R. REID	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 032581 B. A. ANDERSON

4100 FALLS OF NEUSE ROAD, SUITE 300
RALEIGH, NORTH CAROLINA 27609
919.781-4828 VOICE 919.781-1885 FAX
NC LICENSE NO. F-D-105

moftatt & nichol

PERMIT DRAWING
SHEET 105 OF 167

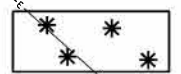


SITE 31

SITE 32



DENOTES HAND CLEARING



DENOTES MECHANIZED CLEARING



DENOTES FILL IN WETLAND

DEPARTMENT OF AGRICULTURE
CROATAN NATIONAL FOREST

2



SEE SHEET 62 FOR PROFILE -L-
SEE SHEETS 2D-1 THRU 2D-2 FOR DRAINAGE DITCH DETAILS

Revised 4/1/2019

7/13/2018 -- PARCEL 2 -- ADDED TDE STATION -L- 380+00 TO 381+12 RT
PARCEL 2 -- REVISED PDE AREA STATION -L- 381+12 TO 381+40 RT

B/17/99

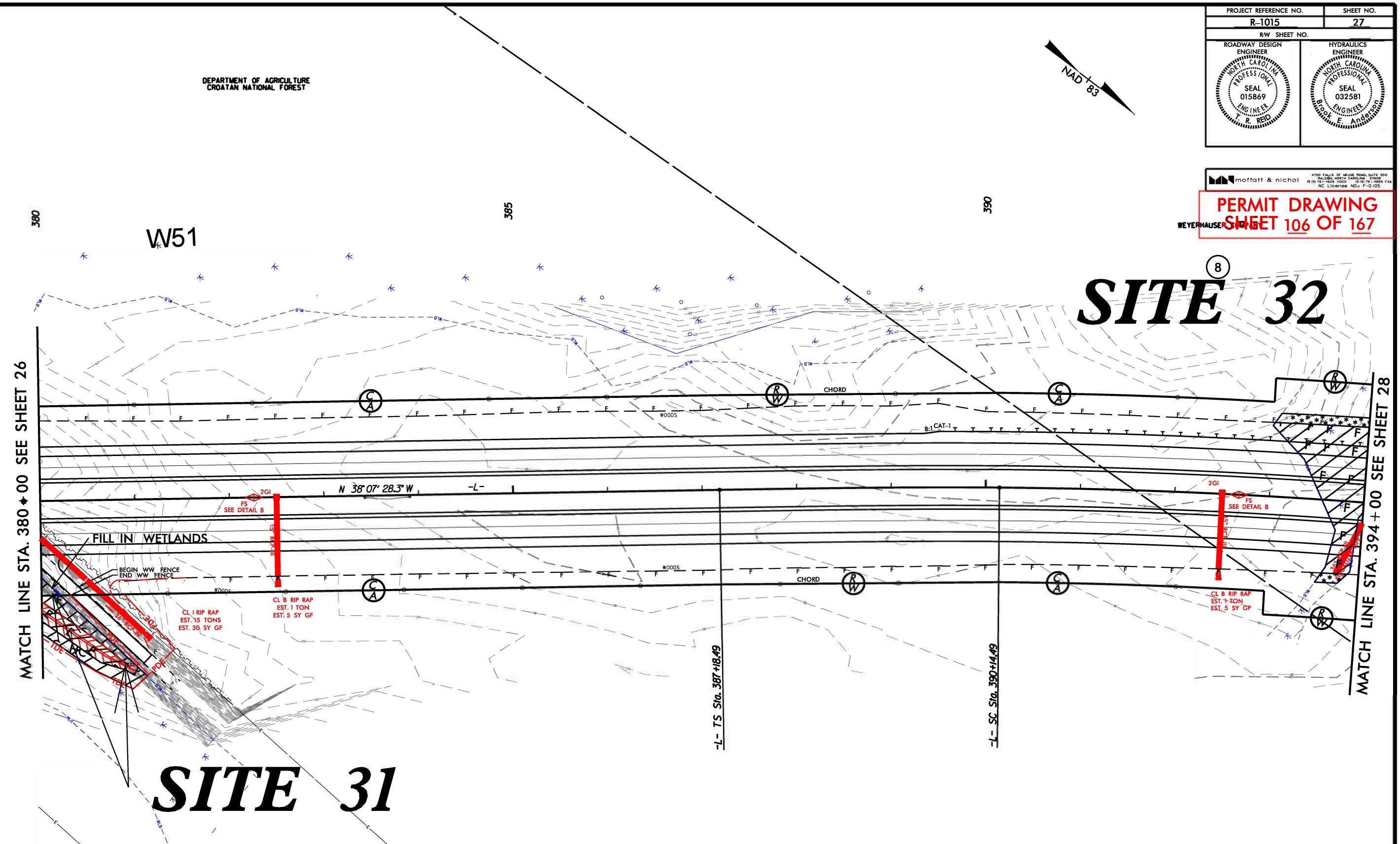
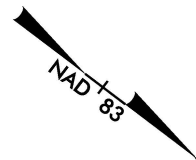
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mgberry
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DEPARTMENT OF AGRICULTURE
CROATAN NATIONAL FOREST

PROJECT REFERENCE NO. R-1015	SHEET NO. 27
RW SHEET NO.	
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 015869 T. A. REID	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 032581 B. A. ANDERSON

moffatt & nichol
4100 FALLS OF NEUSE ROAD, SUITE 300
RALEIGH, NORTH CAROLINA 27609
919 781-8888 VOICE 919 781-1888 FAX
NC LICENSE NO. F-0105

WEYERHAEUSER PERMIT DRAWING SHEET 106 OF 167



SITE 31

SITE 32

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

DEPARTMENT OF AGRICULTURE
CROATAN NATIONAL FOREST
2



SEE SHEET 62 FOR PROFILE -L-
SEE SHEETS 2D-1 THRU 2D-2 FOR DRAINAGE DITCH DETAILS

Revised 4/1/2019

WETLAND AND SURFACE WATER IMPACTS 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)
20	57+34 TO 62+48 -Y3- RT	ROADWAY FILL	1.46		0.10	0.18						
21	58+29 TO 63+51 -Y3- RT	ROADWAY FILL	0.55		0.22	0.08						
21A	58+89 TO 64+03Y3DET- LT/RT	TEMP DETOUR		0.25	0.11		0.12					
22	267+83 TO 273+90 -L- LT/RT	84" RCP, BURIED 1'	0.86			0.12		0.05	0.01	583.6	61.1099	
23	280+57 TO 293+27 -L- LT/RT	Dual Bridge; 7 @ 135', 72" MBT	1.03			0.15	3.05					
24	308+19 TO 314+60 -L- LT/RT	42" RCP	0.74		0.04	0.06						
25A	328+41 TO 336+80 -L- LT/RT	2 @ 72" RCP, BURIED 1'	1.80		0.10	0.12						
25B	325+13 TO 325+48 -L- RT	ROADWAY FILL	< 0.01			< 0.01						
26	337+97 TO 342+81 -L- RT	72" RCP, BURIED 1'	0.48		< 0.01		0.11					
27	340+63 TO 344+93 -L- LT	72" RCP, BURIED 1'	0.79		0.05		0.07					
28A	348+96 TO 349+65 -L- RT	ROADWAY FILL	0.01				0.02					
28B	351+33 TO 352+19 -L- RT	ROADWAY FILL	< 0.01				0.02					
29	355+33 TO 357+51 -L- LT	ROADWAY FILL	0.03		0.07		0.04					
30	355+83 TO 357+47 -L- RT	ROADWAY FILL	0.27				0.04					
31	373+16 TO 380+23 -L- LT/RT	ROADWAY FILL	2.23		0.07		0.31					
32	392+99 TO 399+33 -L- LT/RT	ROADWAY FILL	0.56			0.15						
33	408+22 TO 408+87 -L- LT	ROADWAY FILL	< 0.01			0.01						
34	409+25 TO 409+75 -L- RT	ROADWAY FILL	0.18			< 0.01						
35A	432+62 TO 449+72 -L- LT/RT	ROADWAY FILL	5.49			0.77						
35B	450+94 TO 454+47 -L- LT/RT	ROADWAY FILL	0.71			0.11						
36A	456+65 TO 461+70 -L- LT/RT	84" RCP, BURIED 1'	0.79			0.15						
36B	462+57 TO 464+60 -L- LT/RT	ROADWAY FILL	0.50		0.02	0.05						
37	468+85 TO 486+94 -L- LT/RT	ROADWAY FILL	3.43		0.01	0.50						
SUB TOTALS THIS SHEET*:			21.93	0.25	0.79	2.47	3.77	0.05	0.01	584	61	0

*Rounded totals are sum of actual impacts

NOTES:
Bridge Impacts at Site 23: 0.04 acres for Temporary Bents, <0.01 acres for all permanent bents.

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
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CRAVEN COUNTY
R-1015
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WETLAND AND SURFACE WATER IMPACTS 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)
38A	489+64 TO 493+80 -L- LT/RT	ROADWAY FILL	0.49			0.03						
38B	496+92 TO 498+23 -L- LT/RT	ROADWAY FILL	0.30			0.06						
39	507+39 TO 518+70 -L- LT/RT	2 @ 10'X8' RCBC	2.99		0.07	0.20		0.22	0.03	984.87	116.37	
40	RP2AC/RP2A/LP2A	ROADWAY FILL	5.38		0.12	0.78						
41	41+40 TO 47+97 -RP2AC- LT/RT	EXTEND 3@ 9'X7' RCBC	0.03			0.12		0.05	0.08	48.71	56.79	
42	34+08 TO 37+91 -Y4- LT	72" RCP, BURIED 1'	0.01		0.04	0.06		< 0.01	< 0.01	20.43	11.6	
43	33+80 TO 35+02 -Y4- RT	72" RCP, BURIED 1'	< 0.01		0.01	0.04		< 0.01	< 0.01	41.75	10.35	
44	51+17 TO 53+70 -Y4- LT	2 @ 84" RCP, BURIED1'	0.24		0.02	0.09		0.02	< 0.01	121.5	10.7	
45	50+49 TO 57+08 -Y4DET- LT/RT	2 @ 84" RCP, BURIED1'	0.35			0.12		0.04	0.02	116.4	98.9	
45A	50+47 TO 57+03 -Y4DET-	TEMP DETOUR		0.51			0.19					
46	533+11 -L- RT	30" RCP						< 0.01	< 0.01	10.0	16.0	
47	563+36 -L- RT	36" RCP						< 0.01	< 0.01	12.0	10.0	
SUB TOTAL THIS SHEET:			9.79	0.51	0.27	1.50	0.19	0.34	0.14	1356	331	
SUB TOTAL SHEET 1:			66.94	0.20	2.39	7.46	4.07	0.16	0.04	930	248	
SUB TOTAL SHEET 2:			21.93	0.25	0.79	2.47	3.77	0.05	0.01	584	61	
TOTALS*:			98.66	0.96	3.45	11.43	8.03	0.55	0.19	2869	640	0

*Rounded totals are sum of actual impacts

NOTES:
At Site 45/45A, 0.03 acre of Temporary Fill in Wetlands in the Hand Clearing area for erosion control measures.

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