

8/17/99

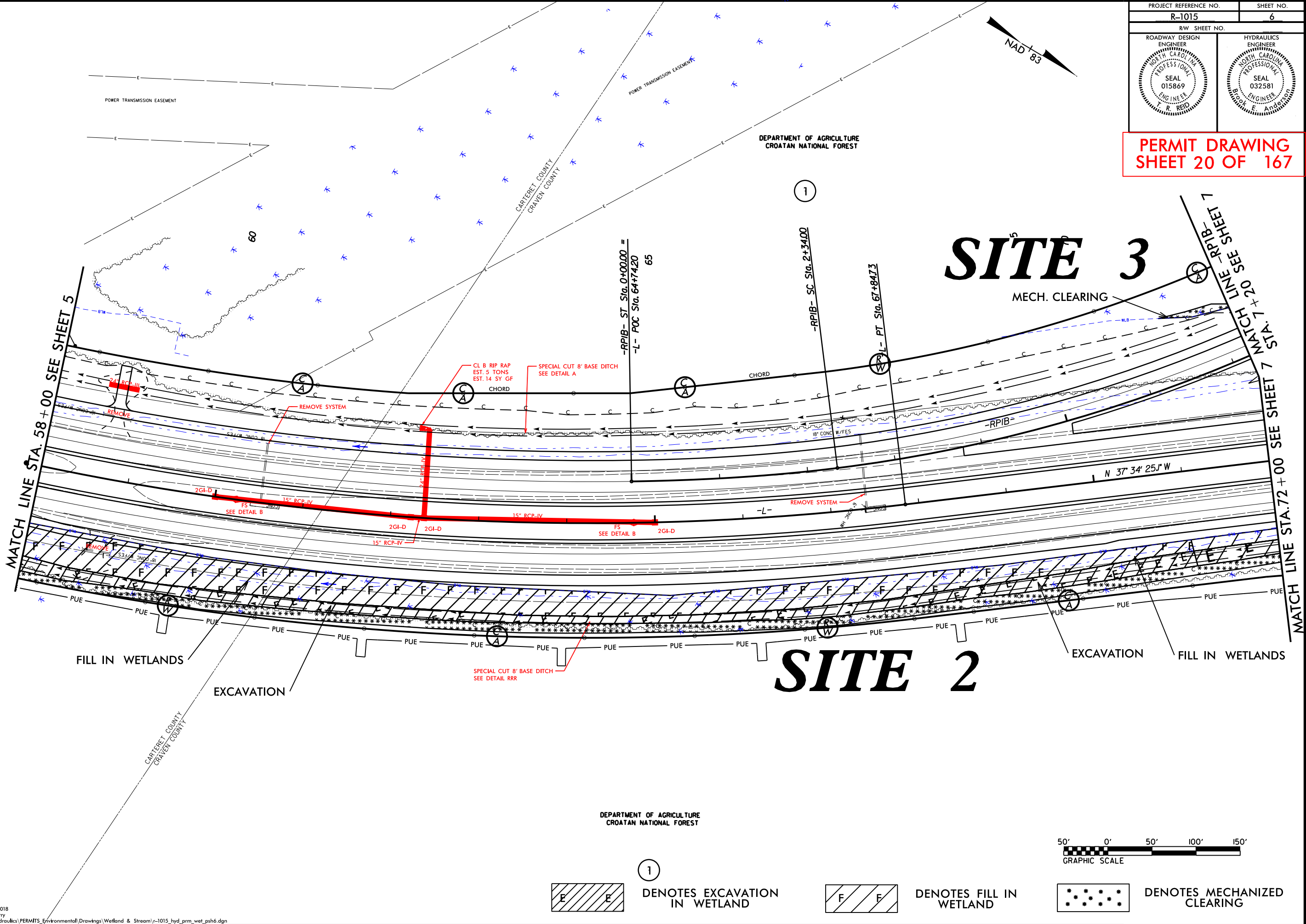
REVISIONS

10/29/18 - PARCEL 1 - ADDED PUE -L- RT STA.58+00.00 TO STA.72+00.00

SYTIME
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11/4/2018
mgberry

PROJECT REFERENCE NO.	SHEET NO.
R-1015	6
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	

PERMIT DRAWING
SHEET 20 OF 167

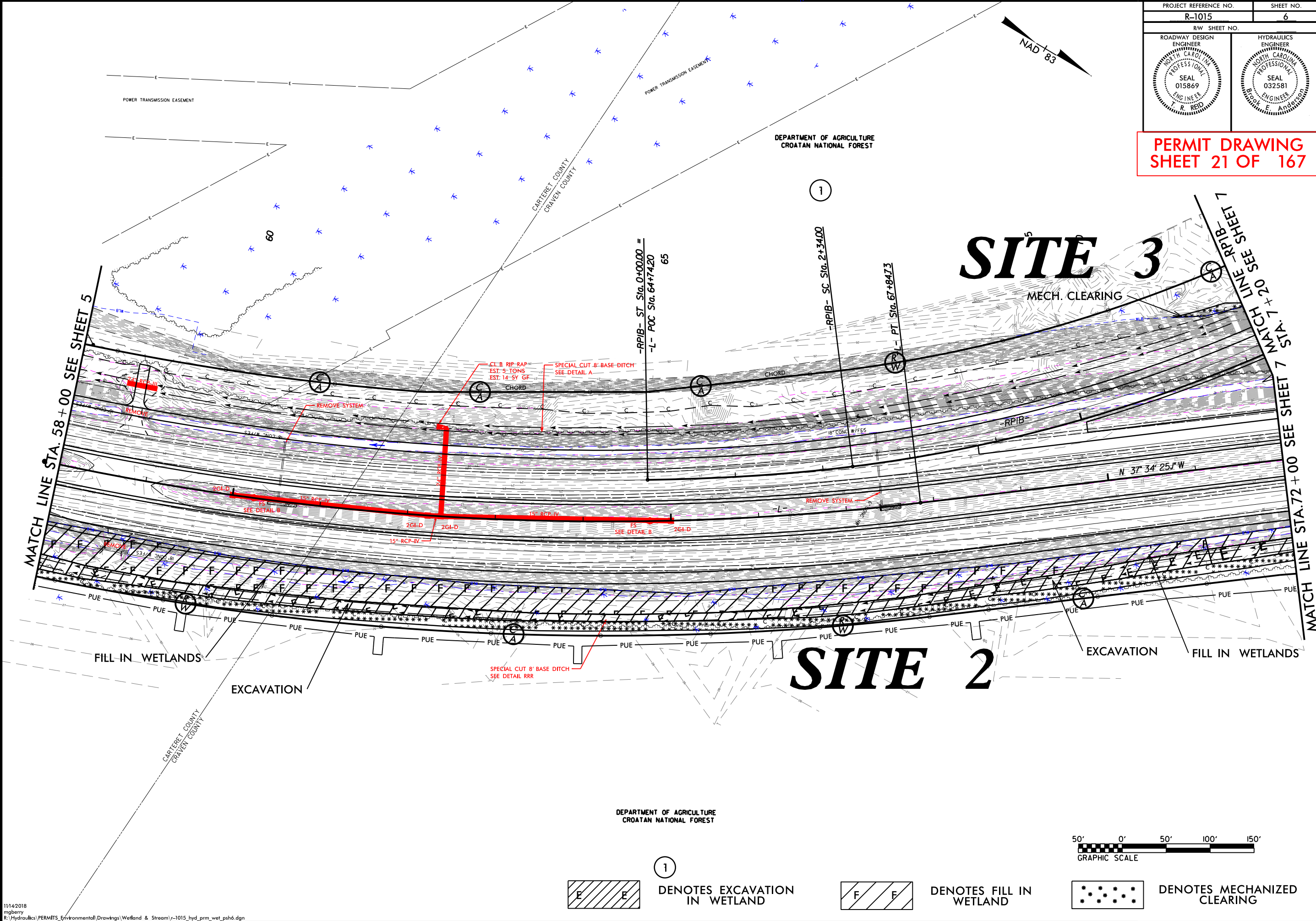


8/17/99

REVISIONS

10/29/18 - PARCEL 1 - ADDED PUE -L- RT STA.58+00.00 TO STA.72+00.00

SYTIME
DESIGN
11/14/2018
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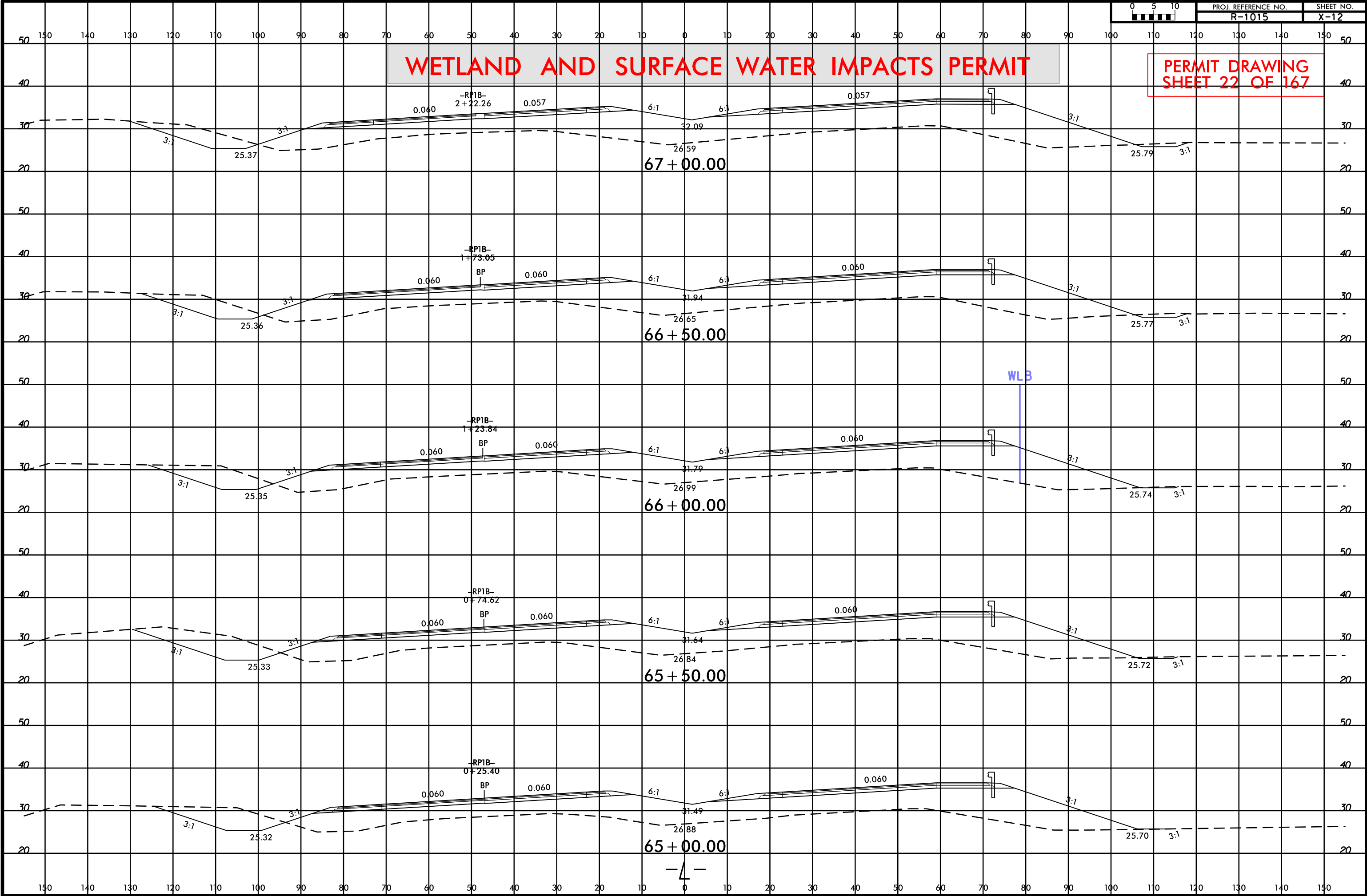
6/23/16



PROJ. REFERENCE NO.	SHEET NO.
R-1015	X-12

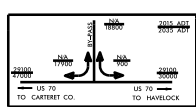
WETLAND AND SURFACE WATER IMPACTS PERMIT

PERMIT DRAWING
SHEET 22 OF 167



6/23/16
mjberry
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\$\$\$\$\$SDON\$\$\$\$\$
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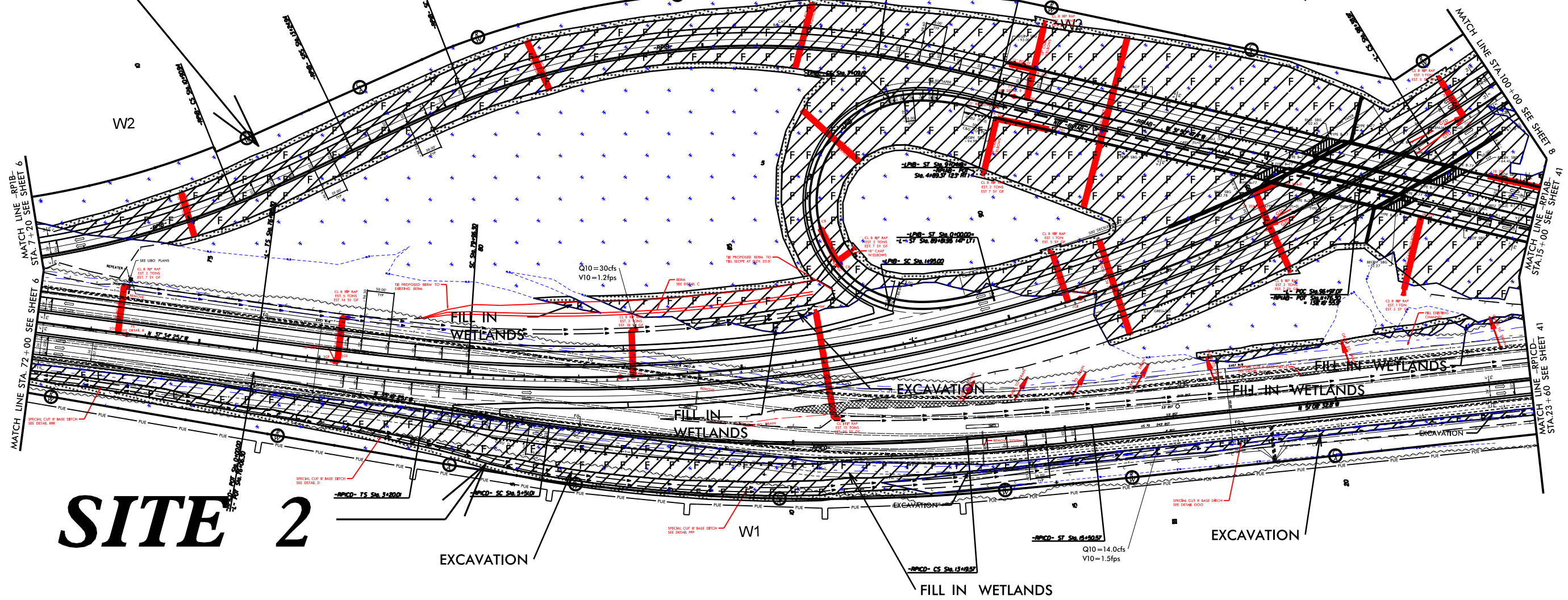
REVISIONS



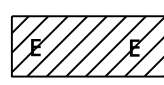
DEPARTMENT OF AGRICULTURE
CRISTIAN NATIONAL FOREST

PROJECT REFERENCE NO. R-105		SHEET NO. 23
ROADWAY DESIGN ENGINEER SEAL 015849 DATE 01/18/2018	SURVEILLANCE ENGINEER SEAL 032281 DATE 01/18/2018	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		
PERMIT DRAWING SHEET 23 OF 167		

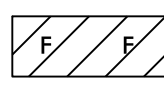
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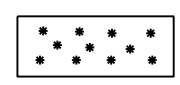
SITE 2



DENOTES EXCAVATION
IN WETLAND



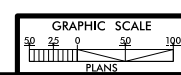
DENOTES FILL IN
WETLAND



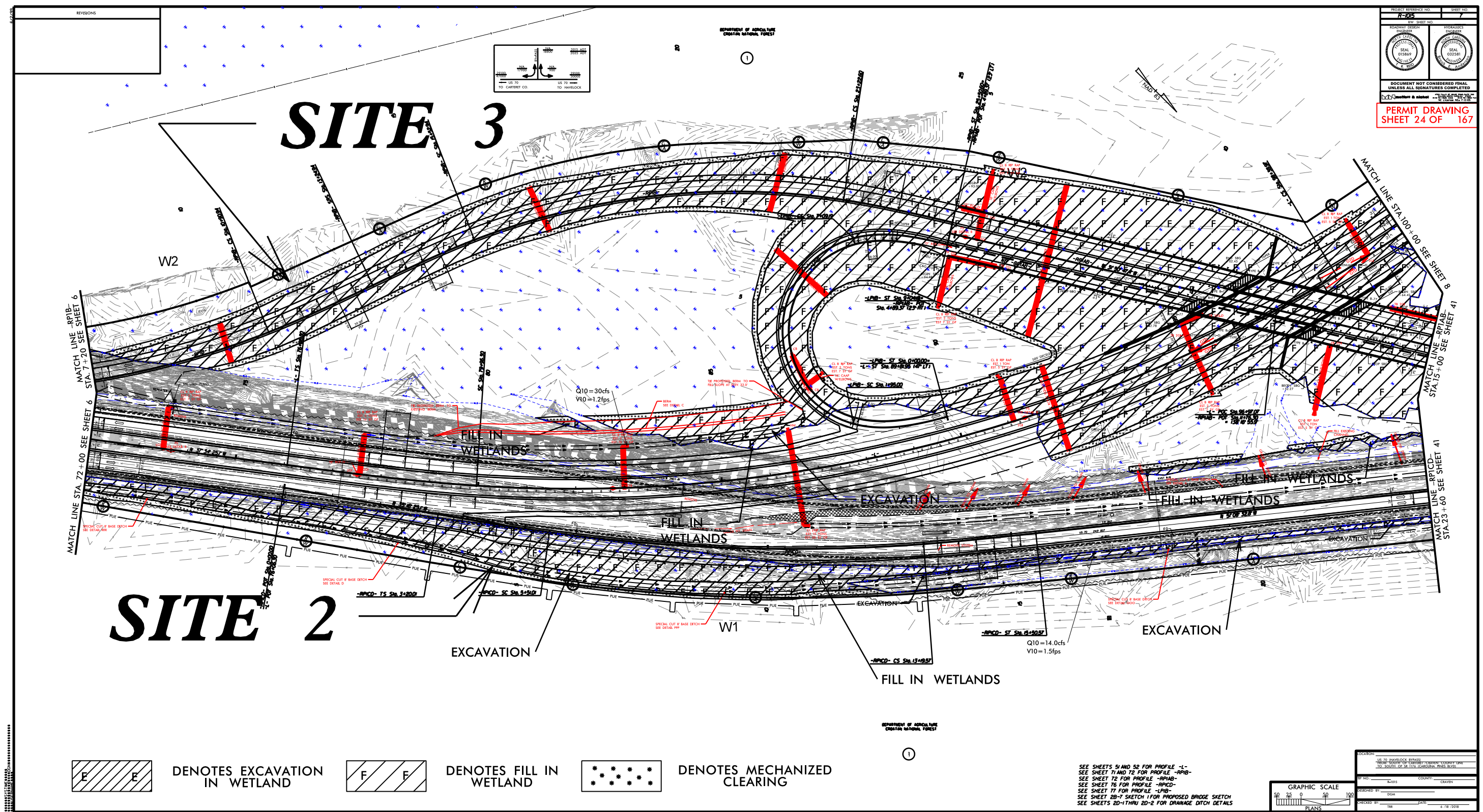
DENOTES MECHANIZED
CLEARING

DEPARTMENT OF AGRICULTURE
CRISTIAN NATIONAL FOREST

SEE SHEETS 51 AND 52 FOR PROFILE -L-
SEE SHEET 71 AND 72 FOR PROFILE -RPIB-
SEE SHEET 72 FOR PROFILE -RPIB-
SEE SHEET 76 FOR PROFILE -RPIB-
SEE SHEET 77 FOR PROFILE -LPIB-
SEE SHEET 28-7 SKETCH 1 FOR PROPOSED BRIDGE SKETCH
SEE SHEETS 20-1 THRU 20-2 FOR DRAINAGE DITCH DETAILS



LOCATION US 70, HAVLOCK, ALASKA MILE 1.5 SOUTH OF HAVLOCK, CRISTIAN NATIONAL FOREST 100 SOUTH OF US 70, HAVLOCK, ALASKA	
PROJECT NO. R-105	COUNTY CRISTIAN
DESIGNED BY DGH	CHECKED BY TAR
DATE 6/18/2018	



8/17/99

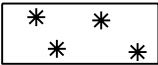
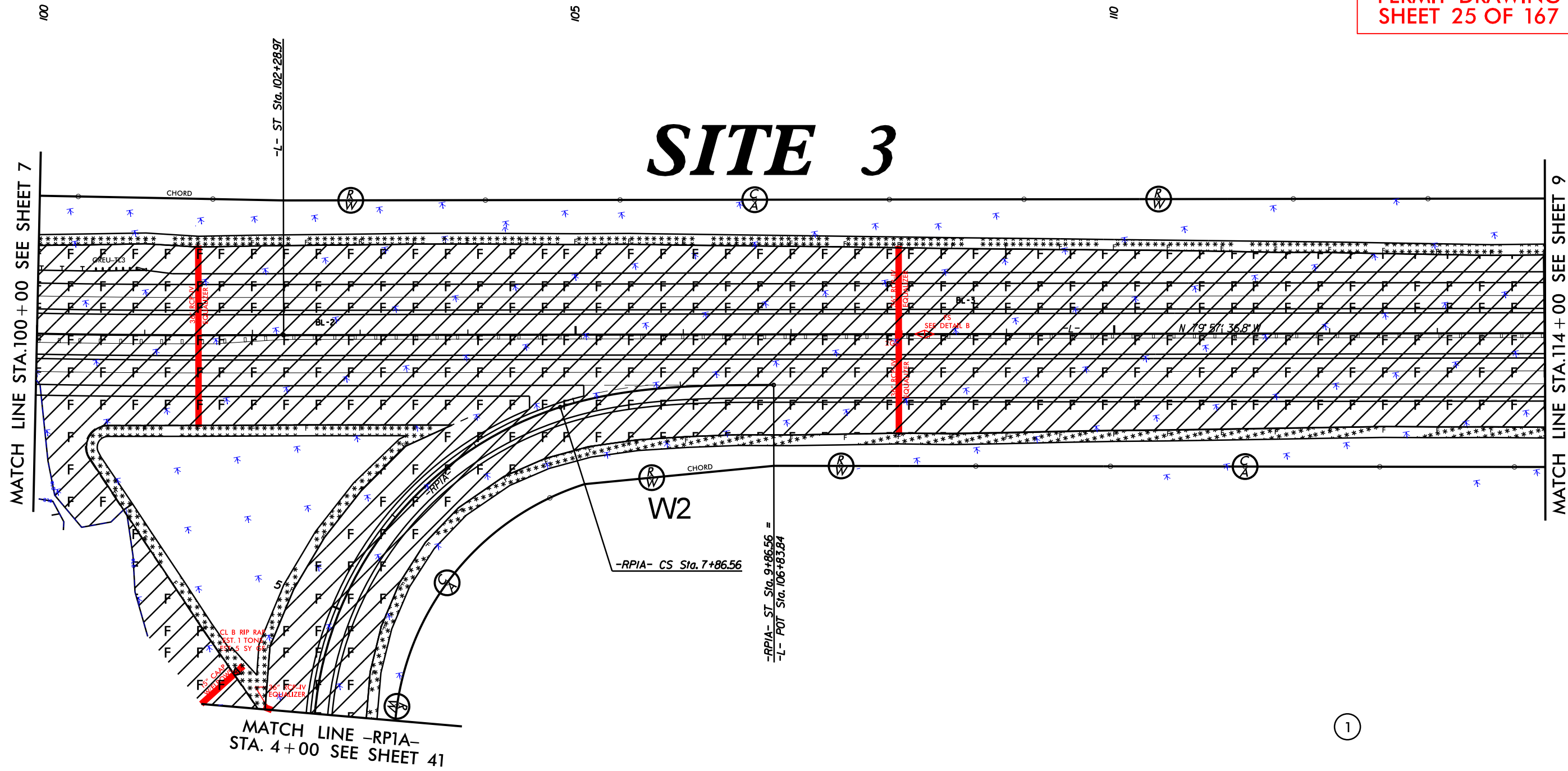
REVISIONS

11/14/2018
mgberry
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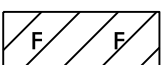
PROJECT REFERENCE NO.		SHEET NO.	
R-1015		8	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	

moffatt & nichol
4700 FALLS OF NEUSE ROAD, SUITE 300
RALEIGH, NORTH CAROLINA 27607
(919) 781-4826 VOICE (919) 781-4884 FAX
NC LICENSE NO. F-0105

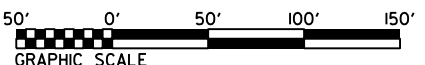
PERMIT DRAWING
SHEET 25 OF 167



DENOTES MECHANIZED
CLEARING



DENOTES FILL IN
WETLAND



8/17/99

REVISIONS

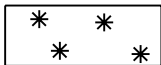
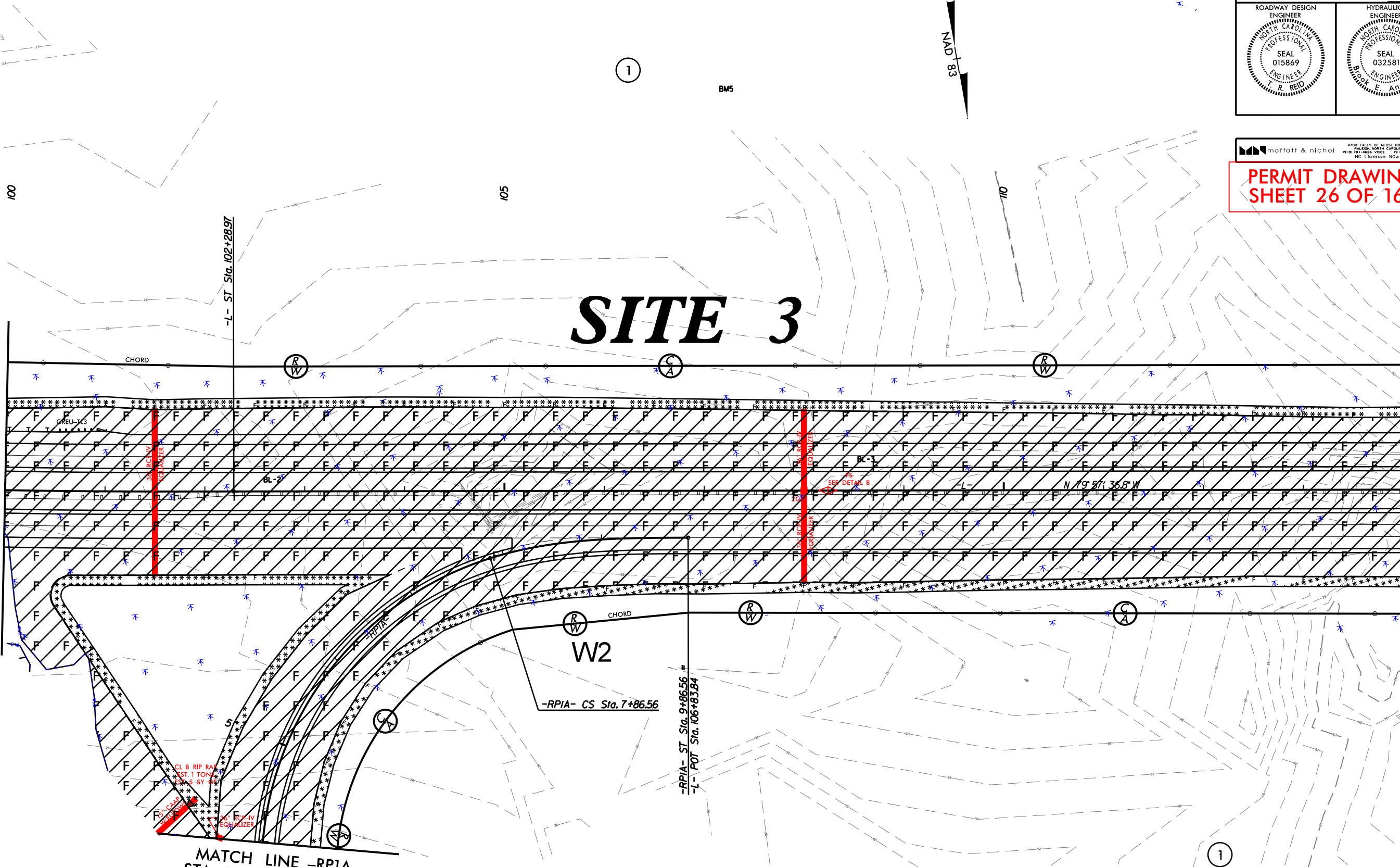
11/14/2018
mgberry
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MATCH LINE STA.100+00 SEE SHEET 7

MATCH LINE -RPIA-
STA. 4+00 SEE SHEET 41

MATCH LINE STA.114+00 SEE SHEET 9

SITE 3



DENOTES MECHANIZED
CLEARING



DENOTES FILL-IN
WETLAND



PROJECT REFERENCE NO. R-1015		SHEET NO. 8	
RW SHEET NO.		HYDRAULICS ENGINEER	
ROADWAY DESIGN ENGINEER		NORTH CAROLINA PROFESSIONAL SEAL 015869 T. R. REID	

moffatt & nichol
4700 FALLS OF NEUSE ROAD, SUITE 300
RALEIGH, NORTH CAROLINA 27607
(919) 781-4826 VOICE (919) 781-4884 FAX
NC LICENSE NO. F-0105

**PERMIT DRAWING
SHEET 26 OF 167**

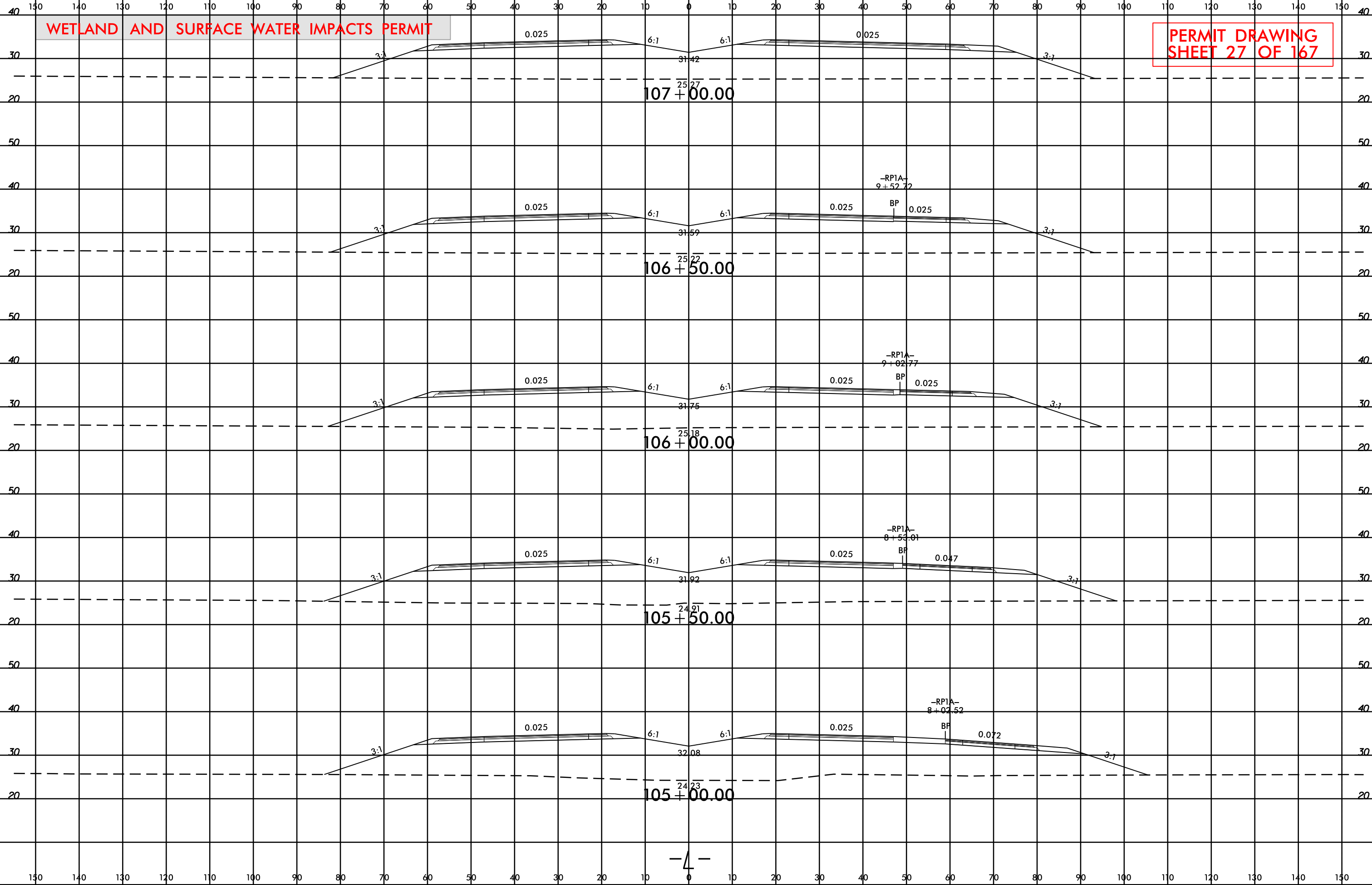
6/23/16



PROJ. REFERENCE NO.	SHEET NO.
R-1015	X-26

WETLAND AND SURFACE WATER IMPACTS PERMIT

PERMIT DRAWING
SHEET 27 OF 167



8/17/99

REVISIONS

11/15/2018
mgberry
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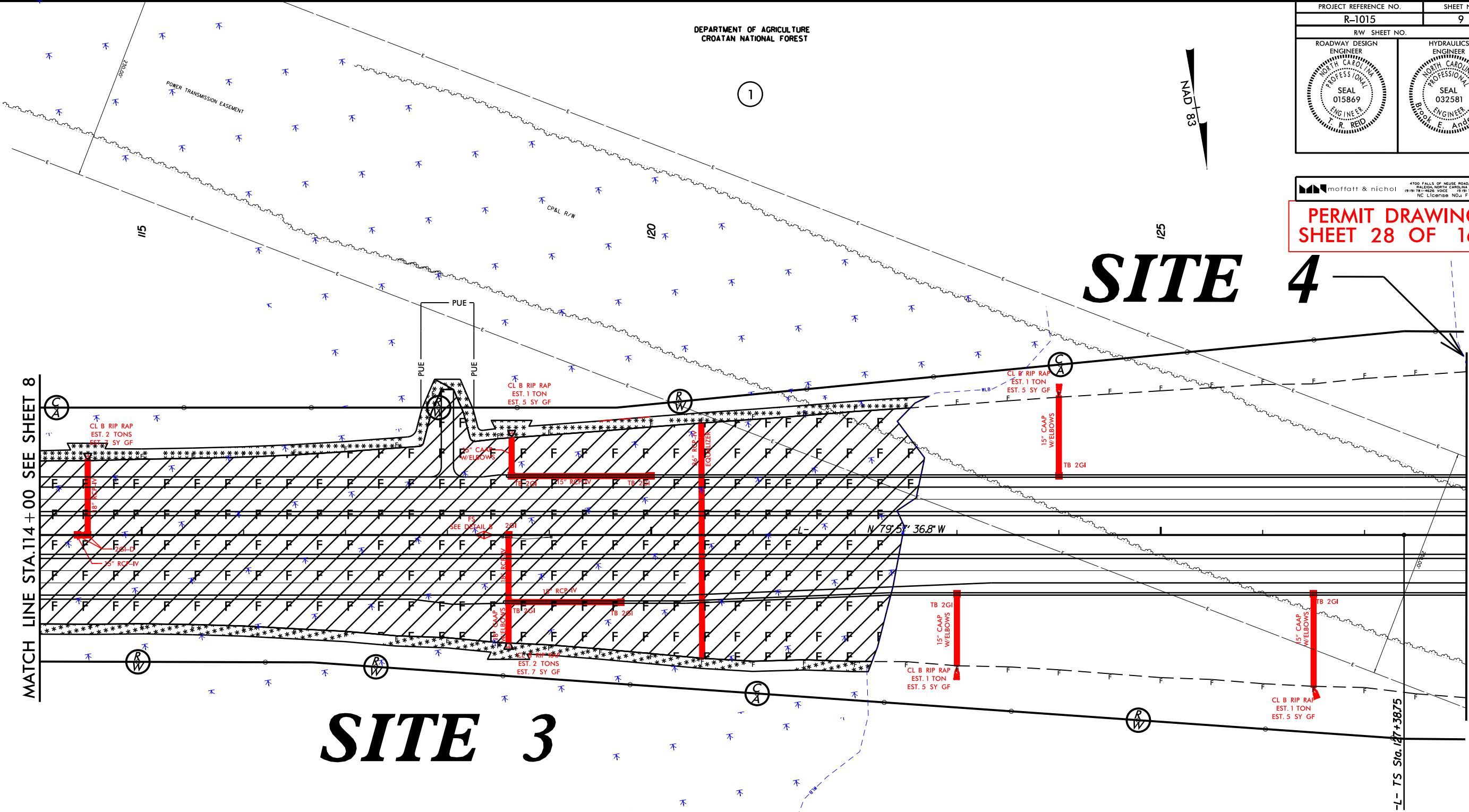
DEPARTMENT OF AGRICULTURE
CROATAN NATIONAL FOREST

1

PROJECT REFERENCE NO. R-1015		SHEET NO. 9	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 015869 T. R. REID		HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 032581 Book E. Anderson	

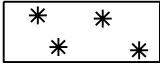
moffatt & nichol
4700 FALLS OF NEUSE ROAD, SUITE 300
RALEIGH, NORTH CAROLINA 27617
(919) 781-4626 VOICE (919) 781-4664 FAX
NC LICENSE NO. F-0105

PERMIT DRAWING
SHEET 28 OF 167



DEPARTMENT OF AGRICULTURE
CROATAN NATIONAL FOREST

1



DENOTES MECHANIZED
CLEARING



DENOTES FILL IN
WETLAND



8/17/99

REVISIONS

11/15/2018
mgberry
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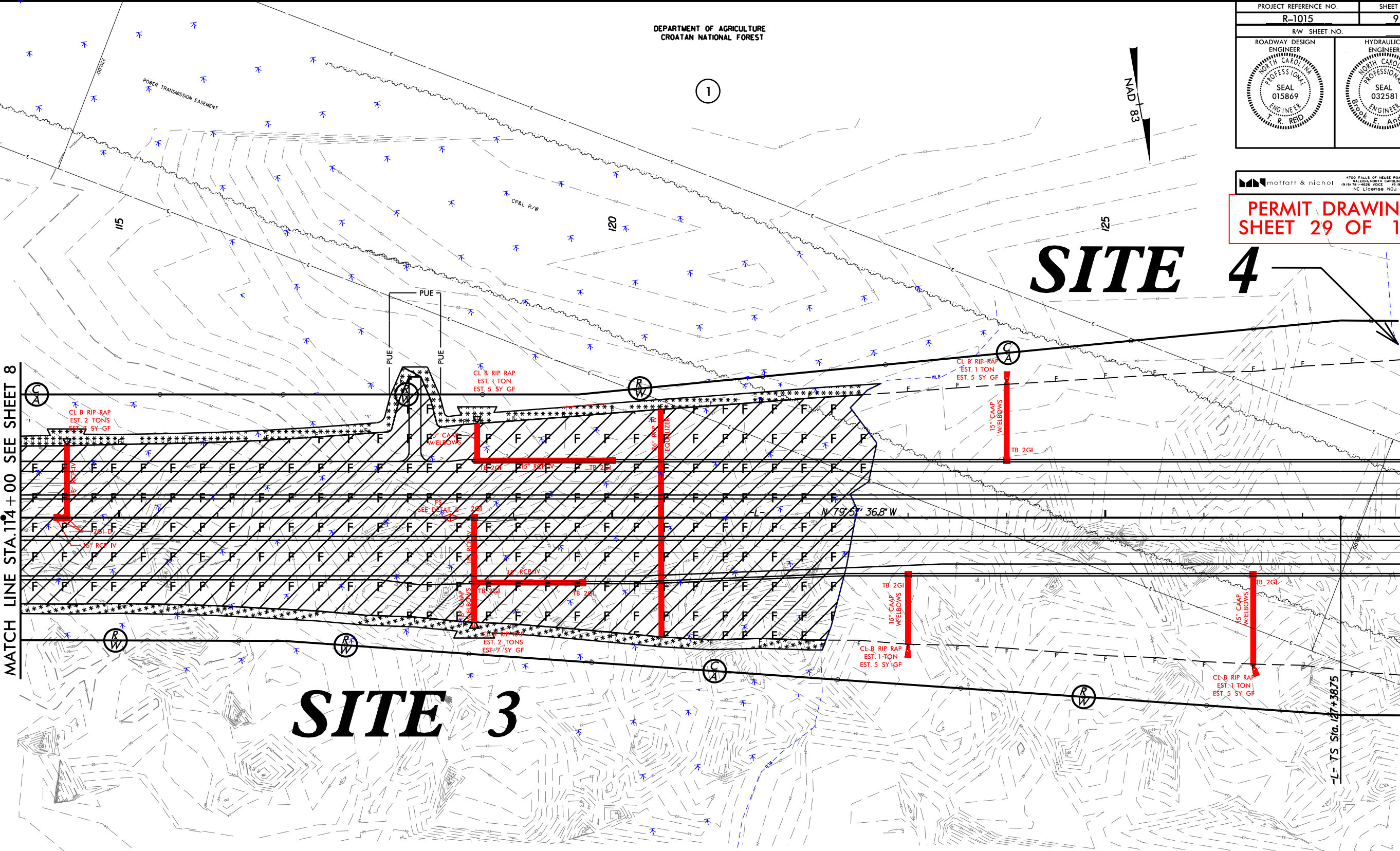
DEPARTMENT OF AGRICULTURE
CROATAN NATIONAL FOREST

1

PROJECT REFERENCE NO. R-1015		SHEET NO. 9	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 015869 T. R. REID		HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 032581 Book E. Anderson	

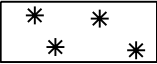
moffatt & nichol
4700 FALLS OF NEUSE ROAD, SUITE 300
RALEIGH, NORTH CAROLINA 27617
(919) 781-4826 VOICE (919) 781-4884 FAX
NC LICENSE NO. F-0105

PERMIT DRAWING
SHEET 29 OF 167



DEPARTMENT OF AGRICULTURE
CROATAN NATIONAL FOREST

1



DENOTES MECHANIZED
CLEARING



DENOTES FILL IN
WETLAND



8/17/99

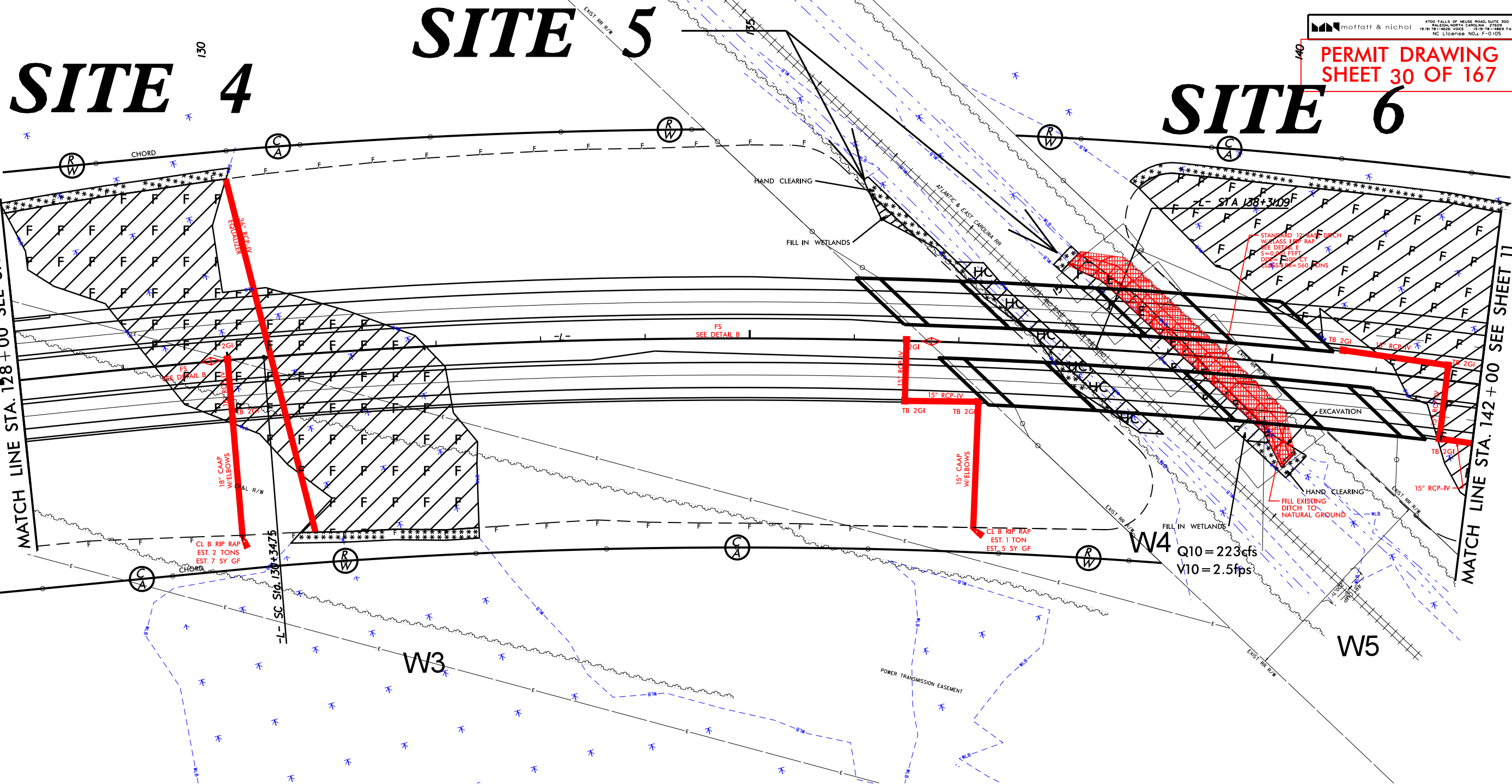
LUKATIAN NATIONAL FOREST

LUKATIAN NATIONAL FOREST

PROJECT REFERENCE NO.	SHEET NO.
R-1015	10
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	

moffatt & nichol
4700 FALLS OF NEUSE ROAD, SUITE 300
RALEIGH, NORTH CAROLINA 27604
(919) 781-4826 VOICE (919) 781-4828 FAX
NC LICENSE NO. F-0105

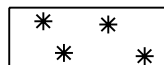
PERMIT DRAWING
SHEET 30 OF 167



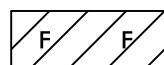
DENOTES EXCAVATION
IN WETLAND



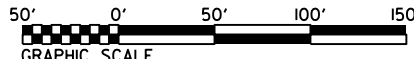
DENOTES HAND
CLEARING



DENOTES MECHANIZED
CLEARING



DENOTES FILL IN
WETLAND



REVISIONS

11/15/2018
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8/17/99

REVISIONS

11/15/2018
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LUKAIAN NATIONAL FOREST

LUKAIAN NATIONAL FOREST

PROJECT REFERENCE NO.	SHEET NO.
R-1015	10
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	

moffatt & nichol
4700 FALLS OF NEUSE ROAD, SUITE 300
RALEIGH, NORTH CAROLINA 27607
(919) 781-4826 VOICE (919) 781-4826 FAX
NC License No. F-0105

PERMIT DRAWING
SHEET 31 OF 167

SITE 4

SITE 5

SITE 6

MATCH LINE STA. 128+00 SEE SHEET 9

MATCH LINE STA. 142+00 SEE SHEET 11

-L- TS Sta. 127+3

-L- SC Sta. 130+3475

W4 Q10 = 223cfs
V10 = 2.5fps

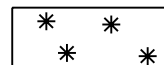
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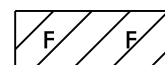
DENOTES EXCAVATION
IN WETLAND



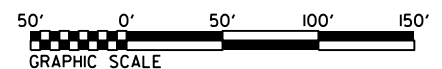
DENOTES HAND
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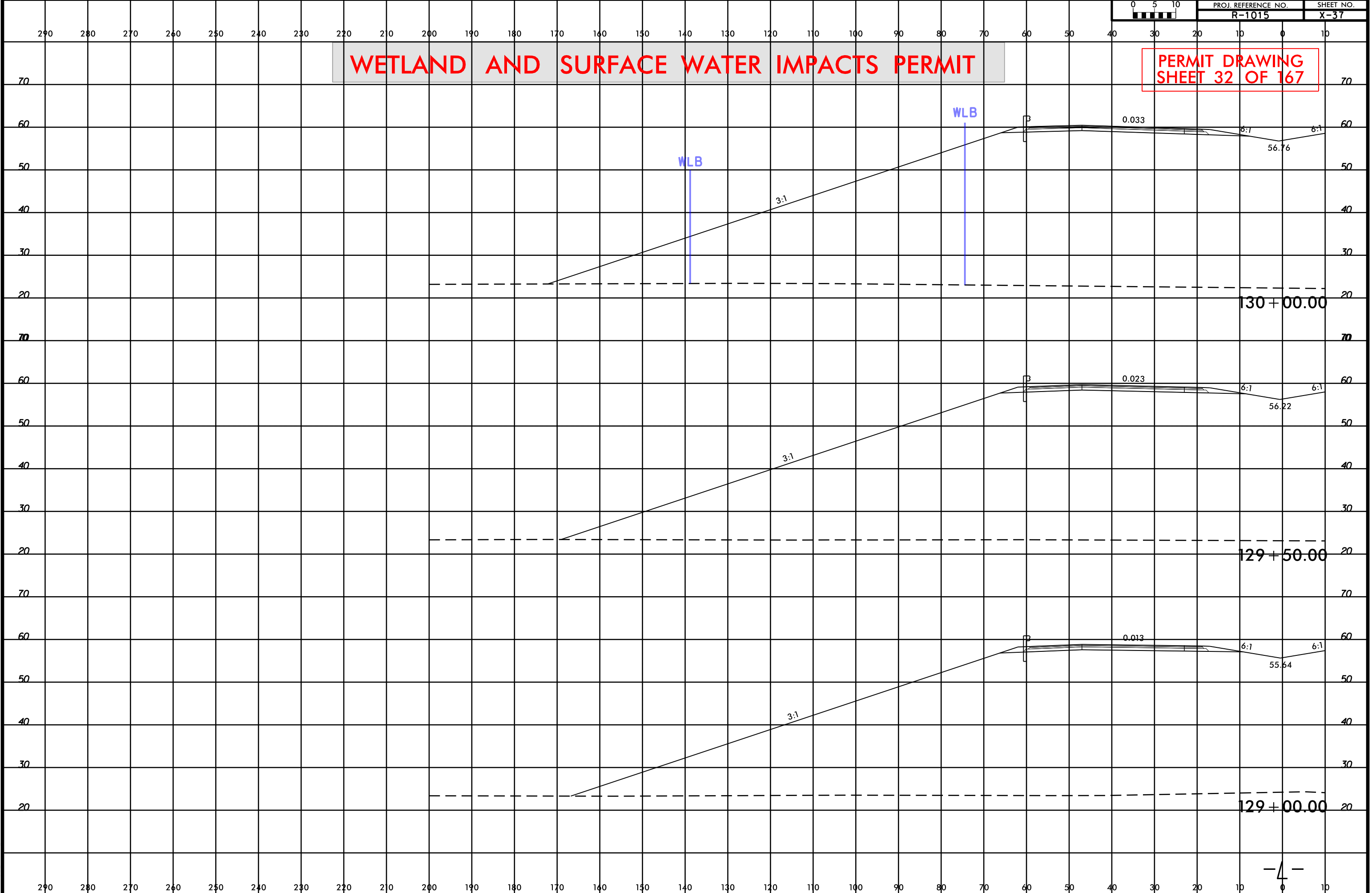
DENOTES MECHANIZED
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DENOTES FILL IN
WETLAND

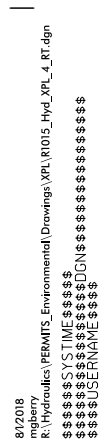


6/23/16
9/2018
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\$\$\$\$\$DON\$\$\$\$\$
\$\$\$\$\$USERNAME\$\$\$\$\$



WETLAND AND SURFACE WATER IMPACTS PERMIT

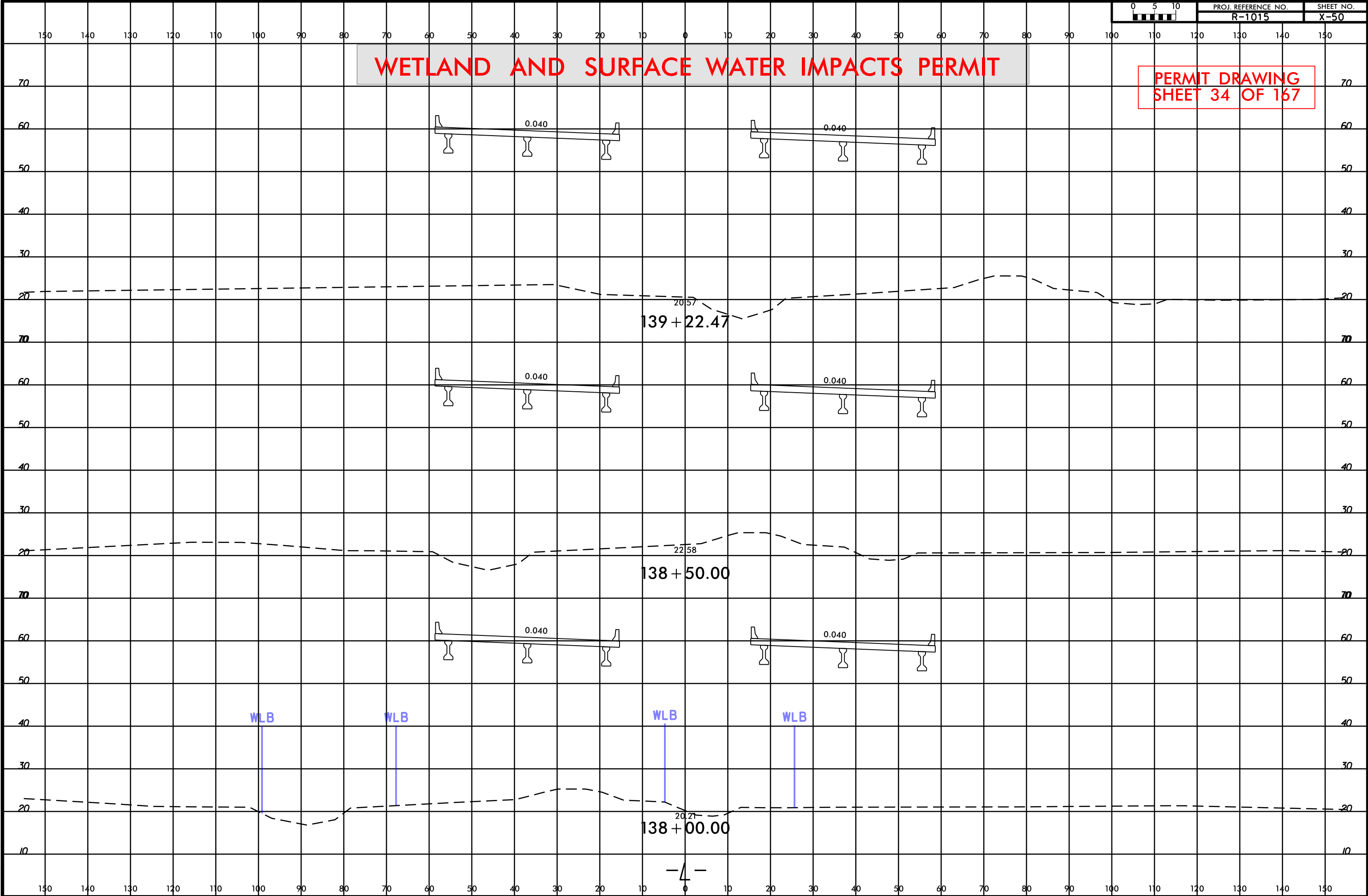
PERMIT DRAWING
SHEET 32 OF 167



6/23/16
9/2/2018
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\$\$\$\$\$\$\$\$\$\$DGN\$\$\$\$\$
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WETLAND AND SURFACE WATER IMPACTS PERMIT

PERMIT DRAWING
SHEET 34 OF 167



SHEET 155 35 OF 167

145

②

DENOTES FILL IN
WETLAND

50' 0' 50' 100' 150'

GRAPHIC SCALE

REVISIONS

ALTERNATE LINE STA 142+00 SEE SHEET 10

MATCH LINE STA.156+00 SEE SHEET 12

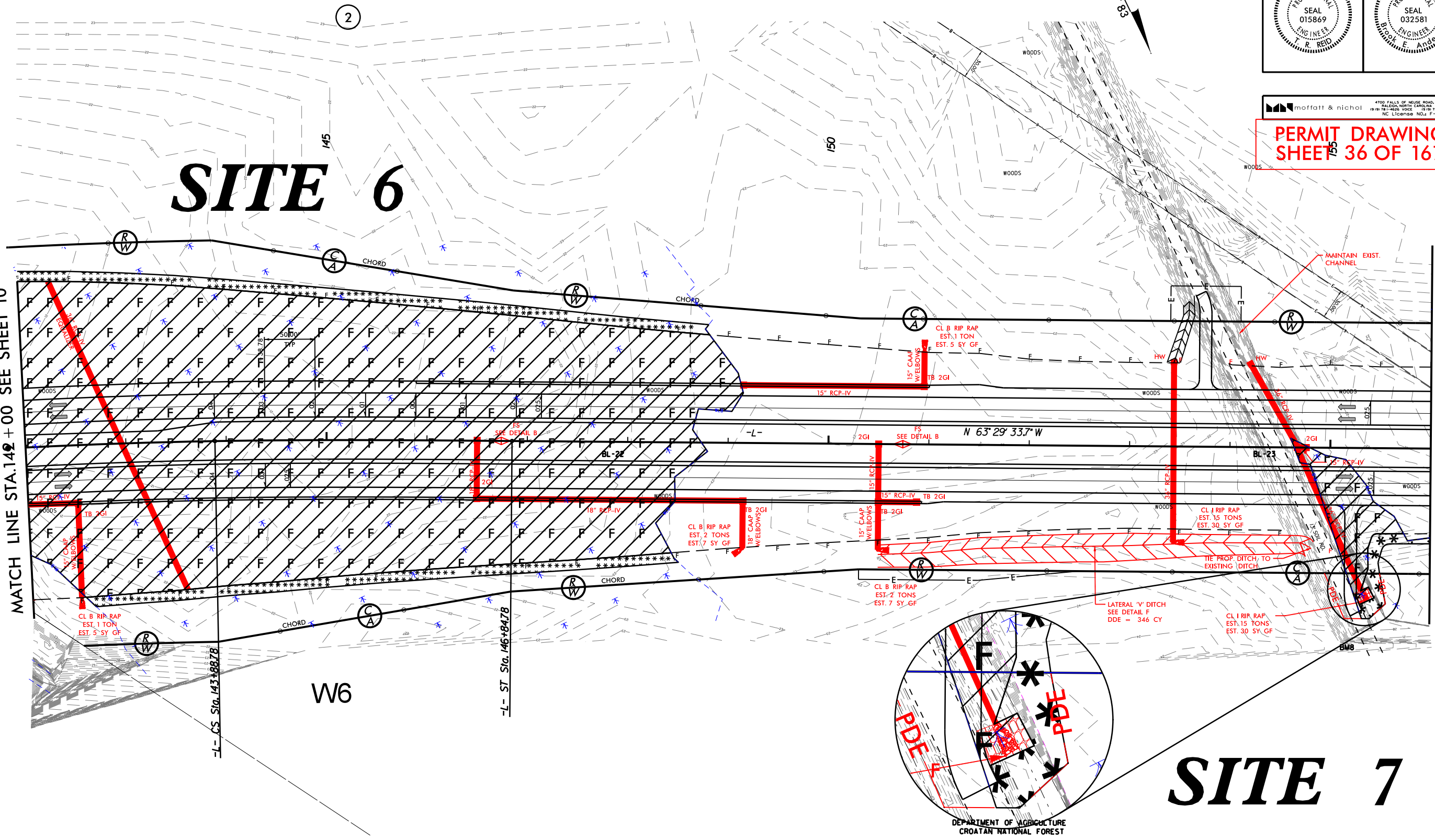
11/15/2018
mgberry
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7/13/2018 - PARCEL 2 - REVISED PDE AT G3B -L- 155+00 RT
PARCEL 2 - CHANGED PDE TO TCE AND REVISED AREA AT G3A -L- STATION 154+00 LT
PARCEL 2 - ADDED TCE STATION -L- 150+31 TO 152+50 RT

REVISIONS

8/17/99
SYTIME
11/15/2018
mgberry
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MATCH LINE STA.142+00 SEE SHEET 10

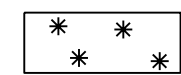


PROJECT REFERENCE NO. R-1015		SHEET NO. 11	
RW SHEET NO.		HYDRAULICS ENGINEER	
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 015869 T. R. REID		HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 032581 Book E. Anderson	

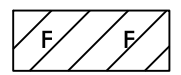
4700 FALLS OF NEUSE ROAD, SUITE 300
RALEIGH, NORTH CAROLINA 27617
(919) 781-4826 VOICE (919) 781-4884 FAX
NC LICENSE NO. F-0105

PERMIT DRAWING
SHEET 36 OF 167

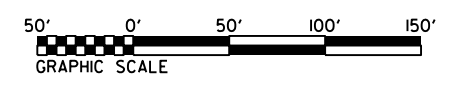
MATCH LINE STA.156+00 SEE SHEET 12



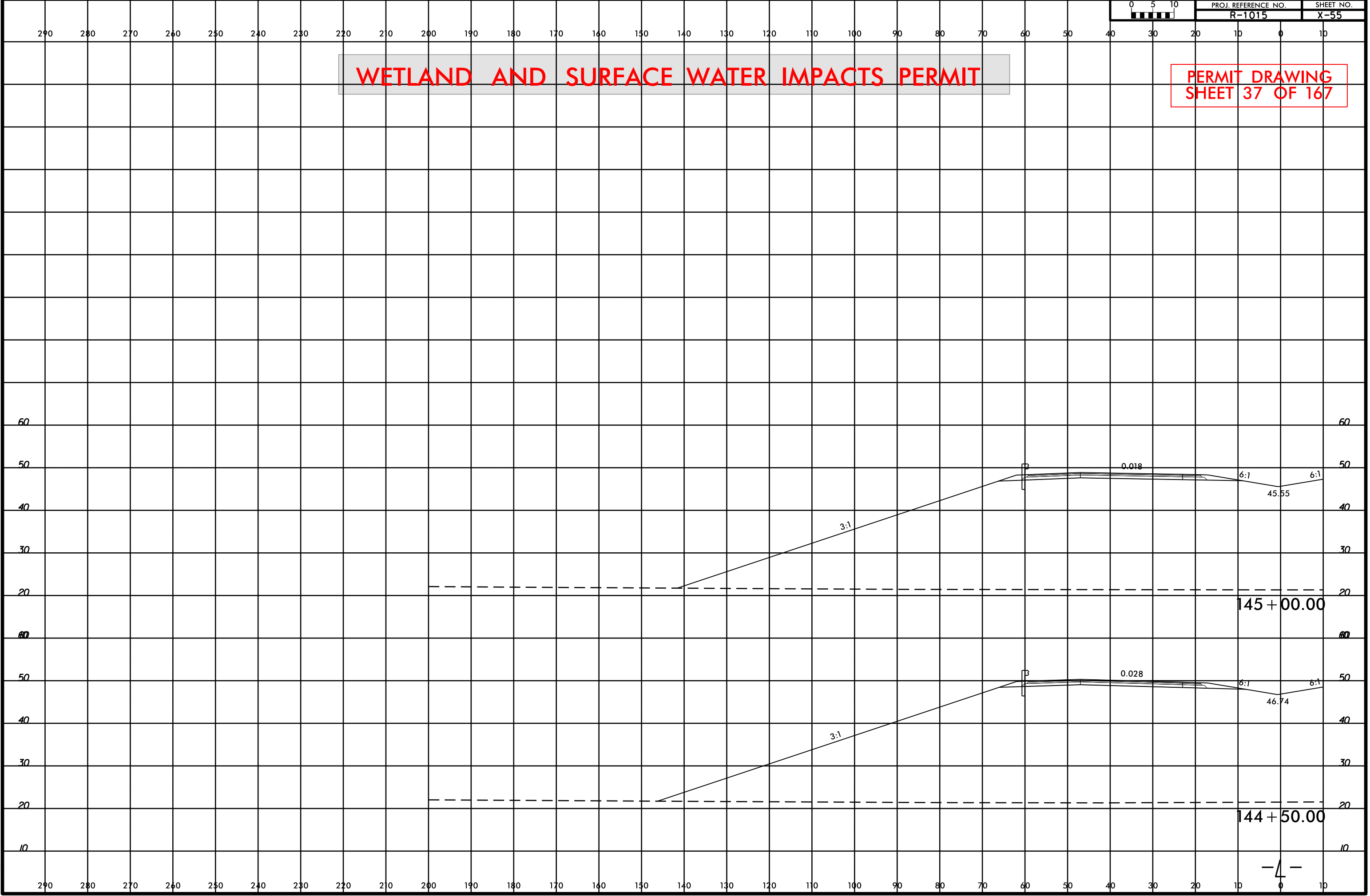
DENOTES MECHANIZED
CLEARING



DENOTES FILL IN
WETLAND



6/23/16
8/1/2018
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\$\$\$\$\$SYTIME\$\$\$\$\$
\$\$\$\$\$SYSDON\$\$\$\$\$
\$\$\$\$\$SERNAME\$\$\$\$\$



PERMIT DRAWING
SHEET 39 OF 167

②

NAD-183

W7

W7

MATCH LINE STA.156+00 SEE SHEET 11

WATER
C
MATCH LINE STA. 170+00 SEE SHEET 13

REVISIONS

7/13/2018 - PARCEL 2 - ADDED TDE STATION -L- 165+40 TO 170+00 RT

[illegible]

11/5/2018
mgberry
R:\Hydraulics\PERMITS Environmental\Drawings\Wetland & Stream\r-1015 Hyd prm wet psh12.dgn

②

50' 0' 50' 100' 150'

GRAPHIC SCALE

11/11/2019

A rectangle with four asterisks inside. Two asterisks are in the top row, and two are in the bottom row.

SEE SHEET 54 FOR PROFILE -L-
SEE SHEET 2B-7 SKETCH 3 FOR PROPOSED BRIDGE SKETCH
SEE SHEET 2D-1 THRU 2D-2 FOR DRAINAGE DITCH DETAILS

PERMIT DRAWING
SHEET 40 OF 167

②

NAD-183

SITE 7

W7

SITE 8 **SITE 9**

W7

MATCH LINE STA. 156+00 SEE SHEET 11

WATER
MATCH LINE STA. 170+00 SEE SHEET 13

REVISIONS

7/13/2018 - PARCEL 2 - ADDED TDE STATION -L- 165+40 TO 170+00 RT

8/17/99

SYSTEMS

11/5/2018
mgberry
R:\Hydraulics\PERMITS Environmental\Drawings\Wetland & Stream\r-1015 Hyd prm wet psh12.dgn

②

50' 0' 50' 100' 150'

GRAPHIC SCALE

WORK BRIDGE

DENOTES MECHANIZED
CLEARING

DENOTES FILL IN
WETLAND

SEE SHEET 54 FOR PROFILE -L-
SEE SHEET 2B-7 SKETCH 3 FOR PROPOSED BRIDGE SKETCH
SEE SHEET 2D-1 THRU 2D-2 FOR DRAINAGE DITCH DETAILS