



(Version 2.08; Released April 2018)

WBS Element: SF-390057 TIP No.: BP2.R006 County(ies): GREENE Page 1 of 1

General Project Information

WBS Element:	SF-390057	TIP Number:	BP2-R006	Project Type:	Bridge Replacement	Date:	11/5/2021
NCDOT Contact:	Michael Aman, PE			Contractor / Designer:	CDM Smith / Shirshant Sharma		
Address:	1037 W. H. Smith Blvd Greenville, NC,27834			Address:	5400 Glenwood Avenue, Ste. 400 Raleigh,NC 27612		
	Phone:	(252) 439-2812			Phone:	(704) 208-2241	
	Email:	mcaman@ncdot.gov			Email:	Sharmas2@cdmsmith.com	
City/Town:	Snow Hill, NC			County(ies):	Greene		
River Basin(s):	Neuse			CAMA County?	No		
Wetlands within Project Limits?	Yes						

Project Description

Project Length (lin. miles or feet):	0.12	Surrounding Land Use:	Agricultural, Rural Land					
		Proposed Project			Existing Site			
Project Built-Upon Area (ac.)	0.3	ac.			0.3	ac.		
Typical Cross Section Description:	Bridge : Two 10' lanes, 3' to the right and 3' to the left paved shoulders Approach: Two 10' lanes, variable paved shoulders			Bridge: Two 9' lanes, 5' to the left and right shoulders Approach: Two 9' lanes, no shoulders				
Annual Avg Daily Traffic (veh/hr/day):	Design/Future:	400	Year:	2042	Existing:	200	Year:	2019

General Project Narrative:
(Description of Minimization of Water Quality Impacts)

The existing 52', 3 span bridge over Polecat Creek on SR 1405 is being replaced with a 57' long 22'-1" X 9'-3" Aluminium Box Culvert. The road on the top of the culvert will be on normal crown with 10' travel lanes with 3' shoulders on both sides. Overall drainage patterns will be maintained with Special lateral V Ditch on both sides of the culverts. Class-I riprap protection has been designed on both inlet and outlet of the culvert to prevent future bank erosion and stream migration. Impervious dikes will be used to prevent sediment from entering the stream while the removal of end bents during clear and grubbing phase and will also implementing on pump around operation during construction of culvert on final phase and will be dewatered as needed.

Waterbody Information

Surface Water Body (1):	Polecat Creek		NCDWR Stream Index No.:	27-86-25			
NCDWR Surface Water Classification for Water Body	Primary Classification:	Class C					
	Supplemental Classification:	Swamp Waters (Sw)		(NSW)			
Other Stream Classification:	None						
Impairments:	None						
Aquatic T&E Species?	No	Comments:					
NRTR Stream ID:				Buffer Rules in Effect:	Neuse		
Project Includes Bridge Spanning Water Body?	No	Deck Drains Discharge Over Buffer?	N/A	Dissipater Pads Provided in Buffer?	N/A		
Deck Drains Discharge Over Water Body?	No	(If yes, provide justification in the General Project Narrative)		(If yes, describe in the General Project Narrative; if no, justify in the General Project Narrative)			
(If yes, provide justification in the General Project Narrative)							

09/08/09

PROJECT: BP2.R006

CONTRACT:

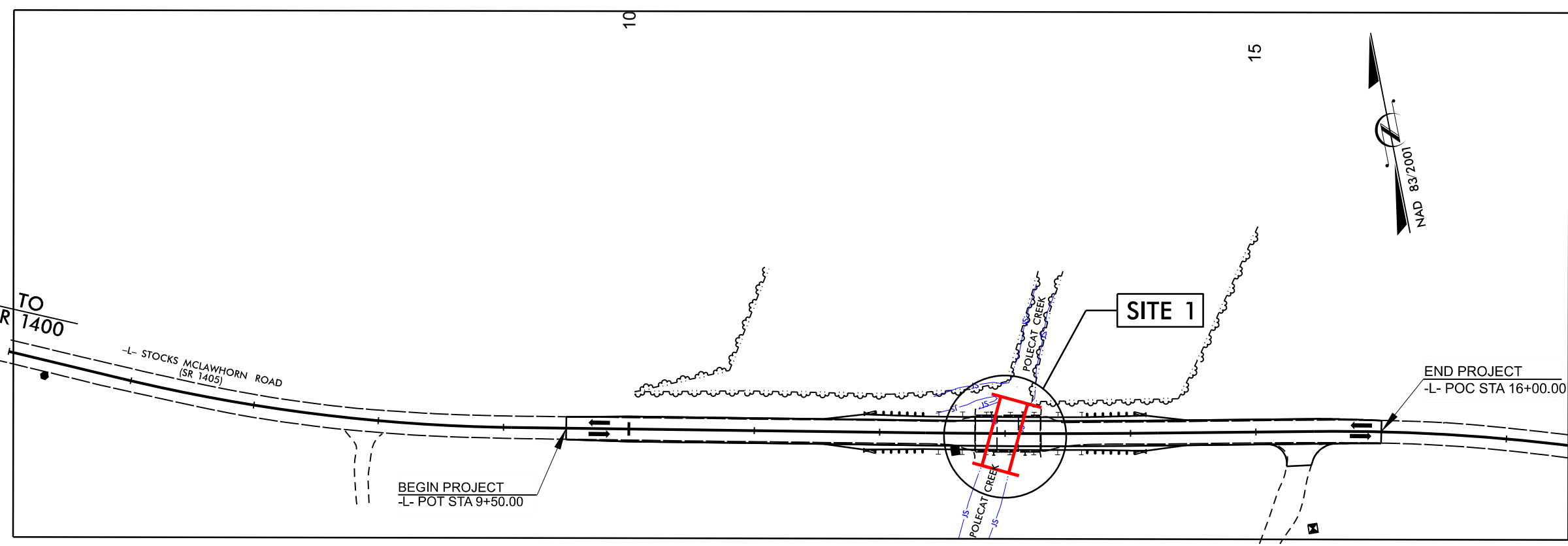
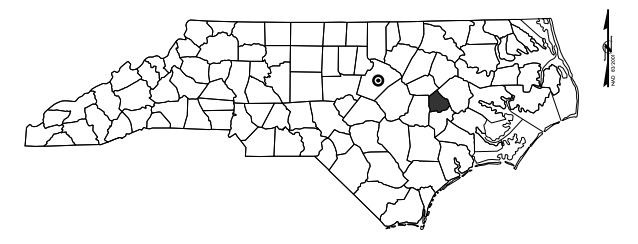
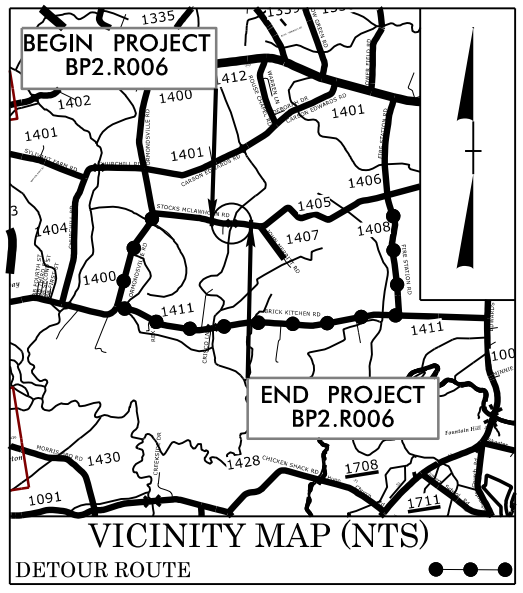
STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

GREENE COUNTY

LOCATION: *BRIDGE NO. 390057 OVER POLECAT CREEK
ON SR 1405 (STOCKS MCLAWHORN ROAD)*

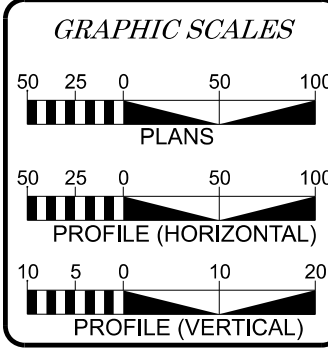
SURFACE WATER IMPACTS PERMIT

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BP2.R006	1	5
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	
BP2.R006.1	N/A	PE	
BP2.R006.2	N/A	R/W, UTIL	
BP2.R006.3	N/A	CONST	



Permit Drawing
Sheet 1 of 5

INCOMPLETE PLANS
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DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



DESIGN DATA

ADT 2022 =	220
ADT 2042 =	400
K =	N/A %
D =	N/A %
T =	6 %*
V =	60 MPH
* TTST =	N/A DUAL = N/A
FUNC CLASS =	LOCAL
SUB-REGIONAL TIER	

PROJECT LENGTH

PROJECT LENGTH FOR PROJECT BP2.R006:	
LENGTH ROADWAY	= 0.123 MILES
LENGTH CULVERT	= TBD MILES
TOTAL LENGTH	= 0.123 MILES

NCDOT CONTACT: MICHAEL AMAN, PE

PREPARED IN THE OFFICE OF:

CDM Smith
CDM Smith Inc.
5400 Glenwood Avenue
Suite 400
Raleigh, NC 27612-3228
NC COA No. F-1255

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: JULY 26, 2021

LETTING DATE: JANUARY 12, 2022

ADAM M. CONRAD, PE
PROJECT ENGINEER

MONIQUE N. GYANT, EI
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

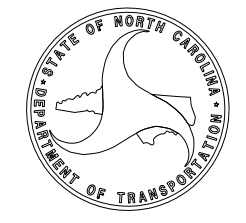
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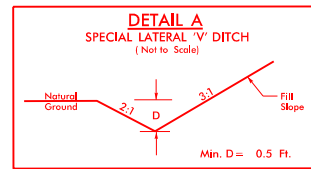
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ROADWAY DESIGN ENGINEER

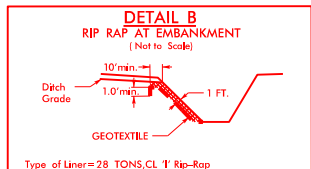
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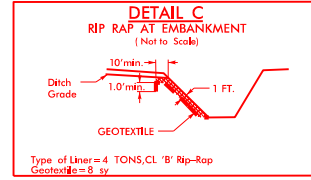




FROM STA. 9+50 TO STA. 12+50 LT -L-
 FROM STA. 13+22 TO STA. 14+47 LT -L-
 FROM STA. 10+50 TO STA. 12+75 RT -L-
 FROM STA. 13+10 TO STA. 16+00 RT -L-



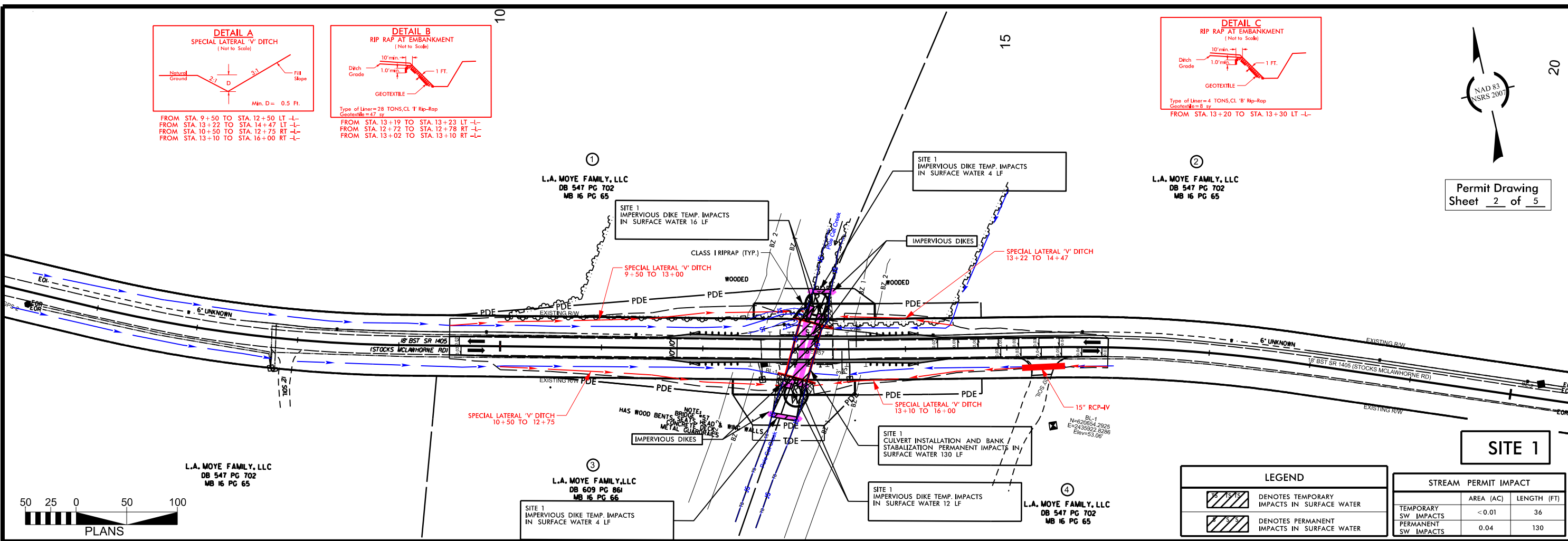
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 Geotextile = #1.99
 FROM STA. 13+19 TO STA. 13+23 LT -L-
 FROM STA. 12+72 TO STA. 12+78 RT -L-
 FROM STA. 13+02 TO STA. 13+10 RT -L-



Type of Liner = 4 TONS, CL 'B' Rip-Rap
 Geotextile = #1.99
 FROM STA. 13+20 TO STA. 13+30 LT -L-



Permit Drawing
 Sheet 2 of 5

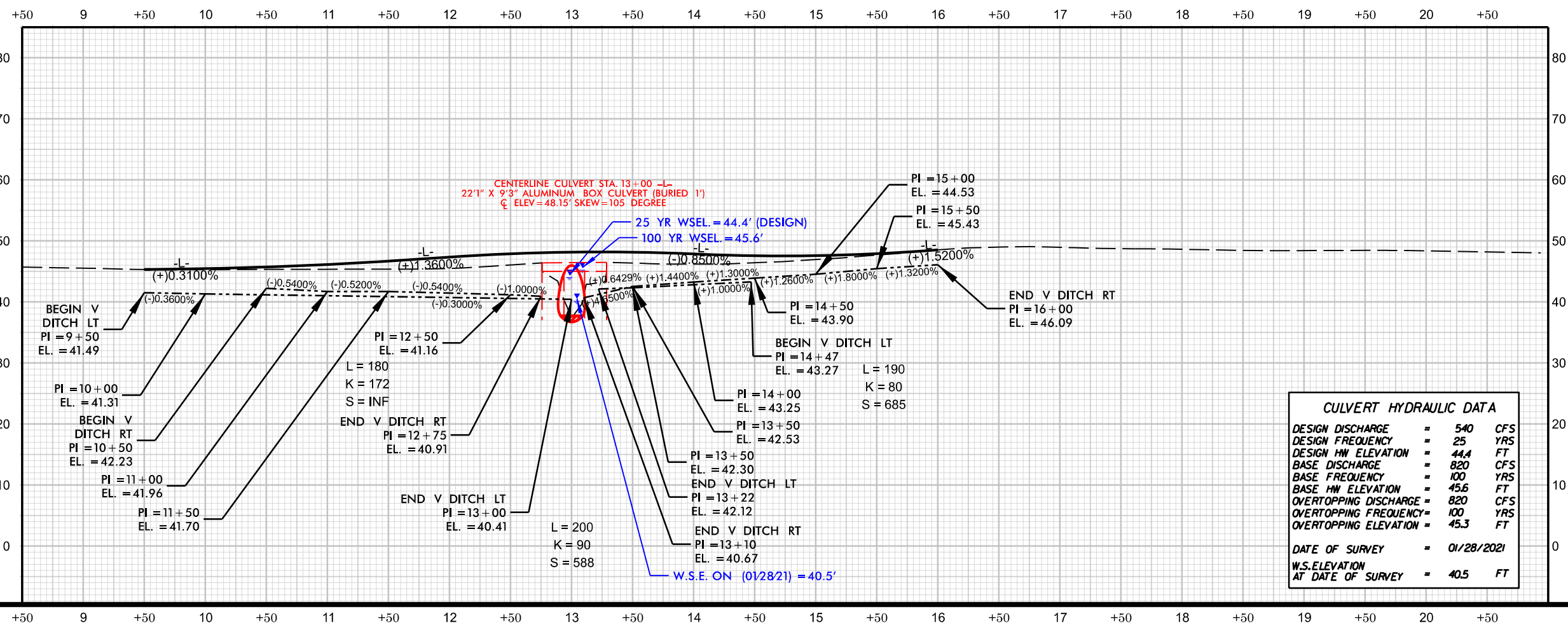


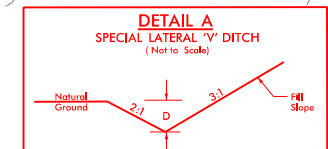
LEGEND

	DENOTES TEMPORARY IMPACTS IN SURFACE WATER
	DENOTES PERMANENT IMPACTS IN SURFACE WATER

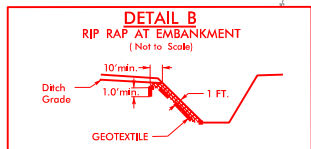
STREAM PERMIT IMPACT

	AREA (AC)	LENGTH (FT)
TEMPORARY SW IMPACTS	<0.01	36
PERMANENT SW IMPACTS	0.04	130

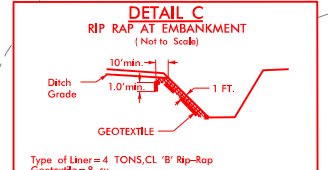




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FROM STA. 13+10 TO STA. 16+00 RT -L-

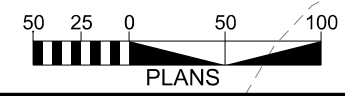
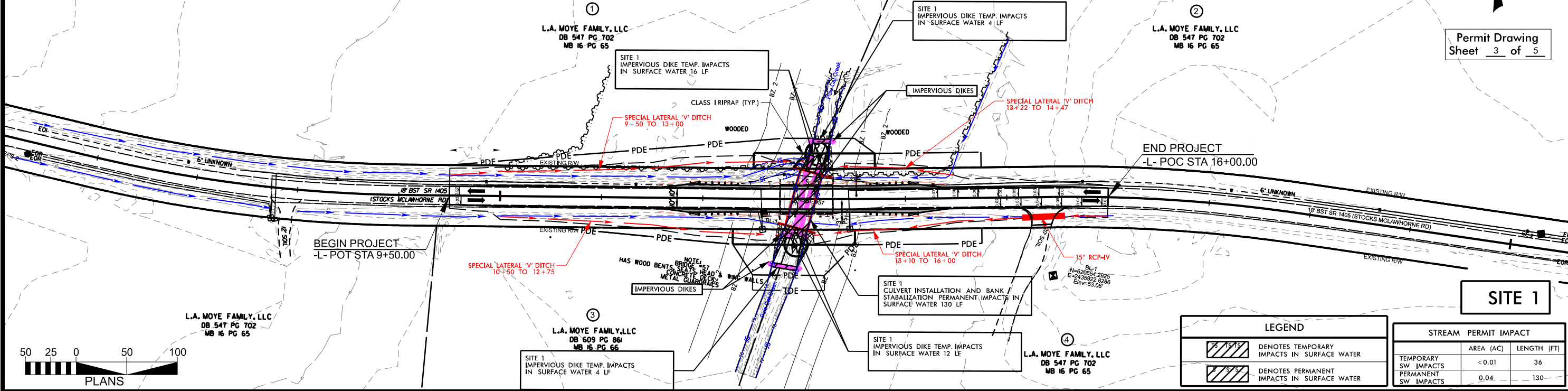


Type of Liner=28 TONS,CL 1' Rip-Rap
Geotextile=47 sy
FROM STA. 13+19 TO STA. 13+23 LT -L-
FROM STA. 12+72 TO STA. 12+78 RT -L-
FROM STA. 13+02 TO STA. 13+10 RT -L-



Type of Liner=4 TONS,CL 1' Rip-Rap
Geotextile=8 sy
FROM STA. 13+20 TO STA. 13+30 LT -L-

Permit Drawing
Sheet 3 of 5



LEGEND

	DENOTES TEMPORARY IMPACTS IN SURFACE WATER
	DENOTES PERMANENT IMPACTS IN SURFACE WATER

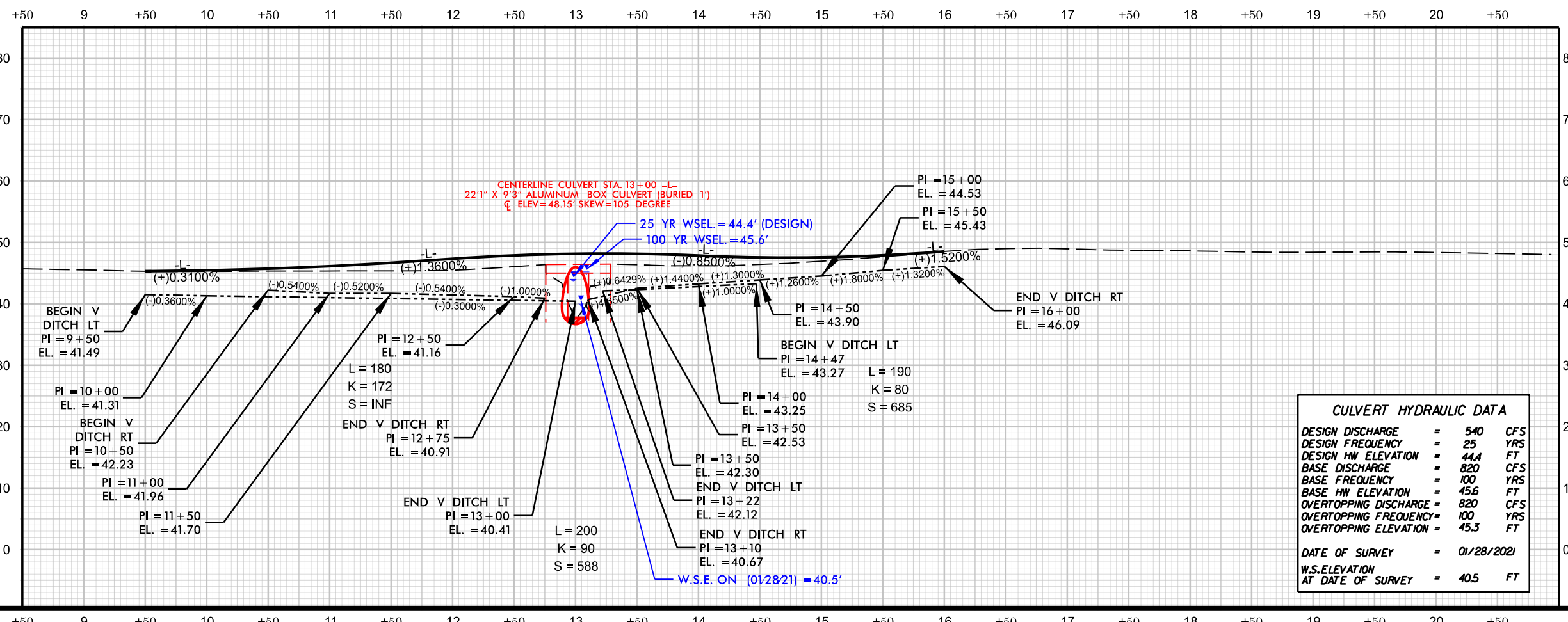
STREAM PERMIT IMPACT

	AREA (AC)	LENGTH (FT)
TEMPORARY SW IMPACTS	<0.01	36
PERMANENT SW IMPACTS	0.04	130

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STATE OF NORTH CAROLINA
ROADWAY DESIGN UNIT

CDM Smith
5400 Glenwood Avenue
Raleigh, NC 27612-0228
NC CDM No. F-1202

INCOMPLETE PLANS
DO NOT USE FOR AS CONSTRUCTION



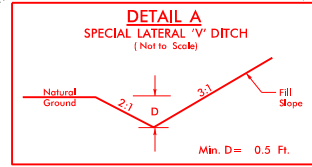
CULVERT HYDRAULIC DATA

DESIGN DISCHARGE	=	540	CFS
DESIGN FREQUENCY	=	25	YRS
DESIGN HW ELEVATION	=	44.4	FT
BASE DISCHARGE	=	820	CFS
BASE FREQUENCY	=	100	YRS
BASE HW ELEVATION	=	45.6	FT
OVERTOPPING DISCHARGE	=	820	CFS
OVERTOPPING FREQUENCY	=	100	YRS
OVERTOPPING ELEVATION	=	45.3	FT
DATE OF SURVEY	=	01/28/2021	
W.S. ELEVATION AT DATE OF SURVEY	=	40.5	FT

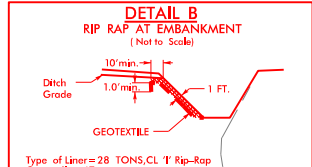


Permit Drawing
Sheet 4 of 5

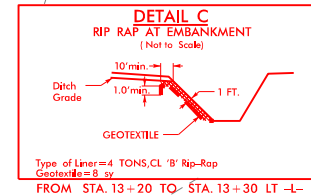
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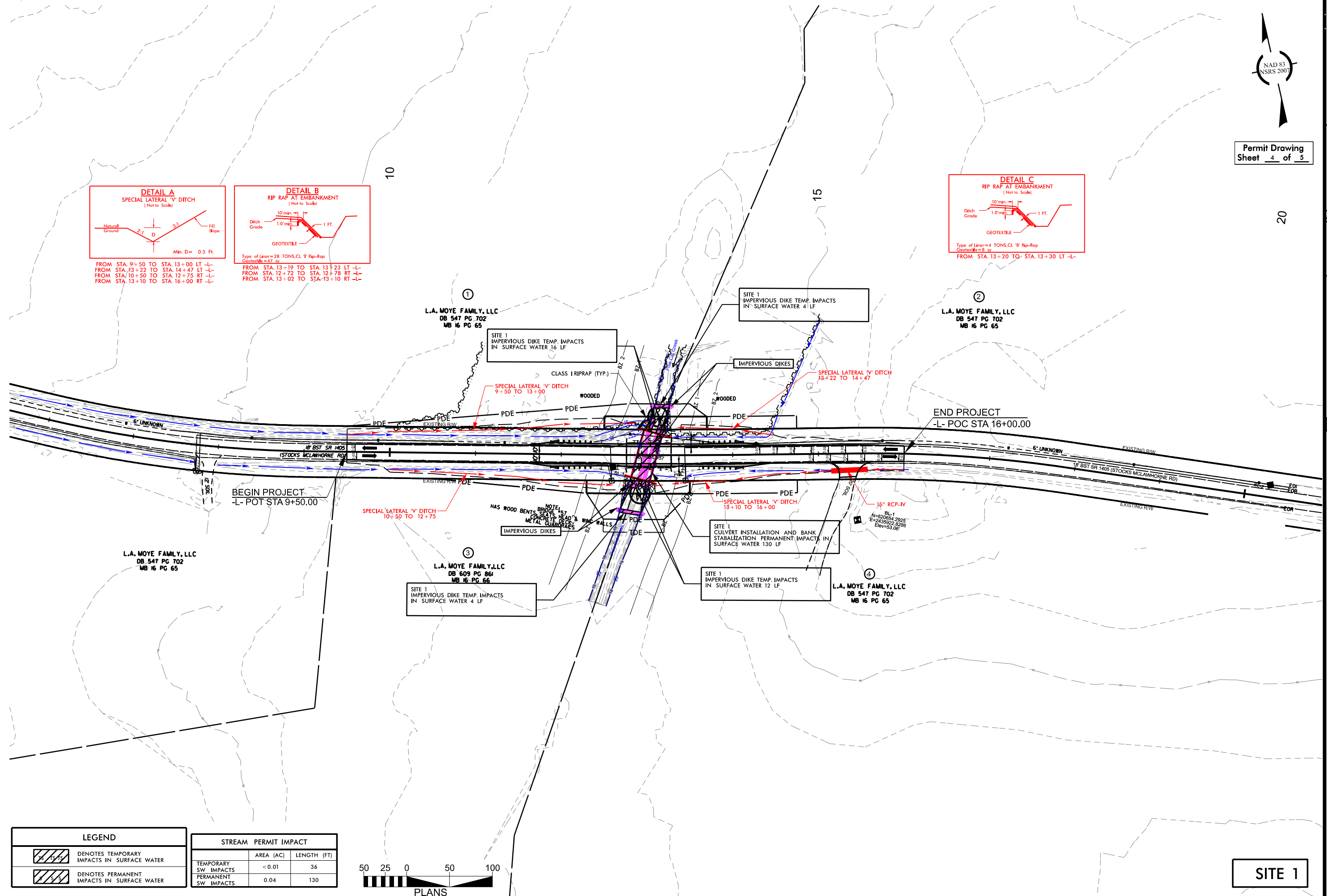
FROM STA. 9+50 TO STA. 13+00 LT -L-
FROM STA. 13+22 TO STA. 14+47 LT -L-
FROM STA. 10+50 TO STA. 12+75 RT -L-
FROM STA. 13+10 TO STA. 16+00 RT -L-



FROM STA. 13+19 TO STA. 13+23 LT -L-
FROM STA. 12+72 TO STA. 12+78 RT -L-
FROM STA. 13+02 TO STA. 13+10 RT -L-



FROM STA. 13+20 TO STA. 13+30 LT -L-



L.A. MOYE FAMILY, LLC
DB 547 PG 702
MB 16 PG 65

SITE 1
IMPERVIOUS DIKE TEMP. IMPACTS
IN SURFACE WATER 4 LF

L.A. MOYE FAMILY, LLC
DB 547 PG 702
MB 16 PG 65

SITE 1
IMPERVIOUS DIKE TEMP. IMPACTS
IN SURFACE WATER 16 LF

SITE 1
CULVERT INSTALLATION AND BANK
STABILIZATION PERMANENT IMPACTS IN
SURFACE WATER 130 LF

L.A. MOYE FAMILY, LLC
DB 609 PG 861
MB 16 PG 66

SITE 1
IMPERVIOUS DIKE TEMP. IMPACTS
IN SURFACE WATER 4 LF

SITE 1
IMPERVIOUS DIKE TEMP. IMPACTS
IN SURFACE WATER 12 LF

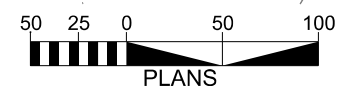
L.A. MOYE FAMILY, LLC
DB 547 PG 702
MB 16 PG 65

LEGEND

	DENOTES TEMPORARY IMPACTS IN SURFACE WATER
	DENOTES PERMANENT IMPACTS IN SURFACE WATER

STREAM PERMIT IMPACT

	AREA (AC)	LENGTH (FT)
TEMPORARY SW IMPACTS	<0.01	36
PERMANENT SW IMPACTS	0.04	130



SITE 1

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STATE OF NORTH CAROLINA
ROADWAY DESIGN UNIT

CDM Smith
4400 Glenwood Avenue
Raleigh, NC 27612-5028
P.O. Box 11100

INCOMPLETE PLANS
DO NOT USE FOR A/E/W ACCOUNTABILITY

REVISIONS

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	12+68.34 / 13+23.57	BANK STABILIZATION ON BOTH LEFT AND RIGHT BANKS						0.04		130		
1	12+65.95 / 13+30.12	IMPERVIOUS DIKE ON BOTH LEFT AND RIGHT BANKS							<0.01		36	
TOTALS:								0.04	0.01	61	52	

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 BRIDGE #057 OVER POLECAT CREEK
 ON SR 1405 (STOCKS MCLAWHORN ROAD)
 GREENE COUNTY
 BP-R006
 SHEET 5 of 5 11/5/2021