

- 1. KING RD.**
- 2. MORGANTON RD.**
- 4. PLANK RD.**
- 7. ATF RD.**

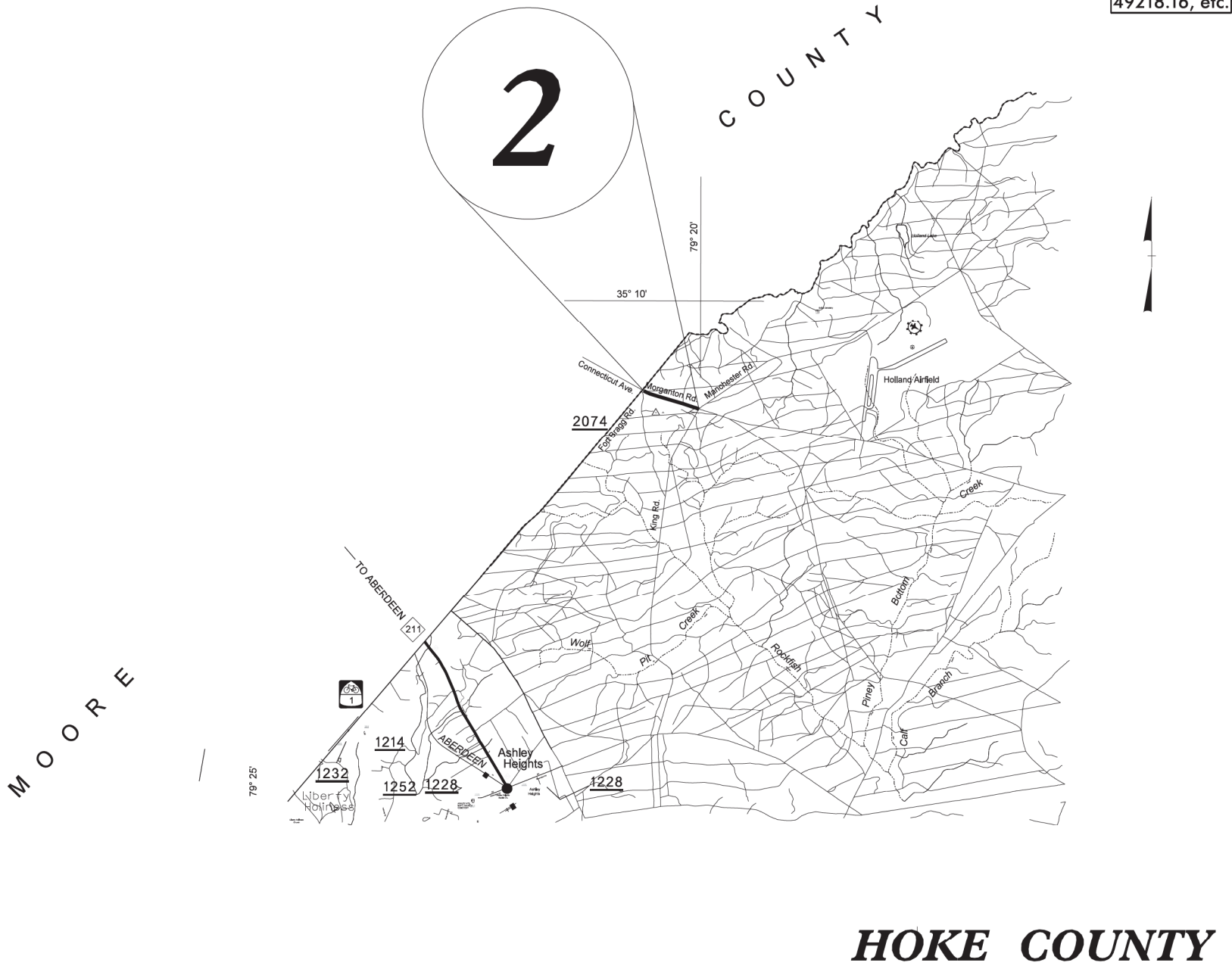


HOKE COUNTY

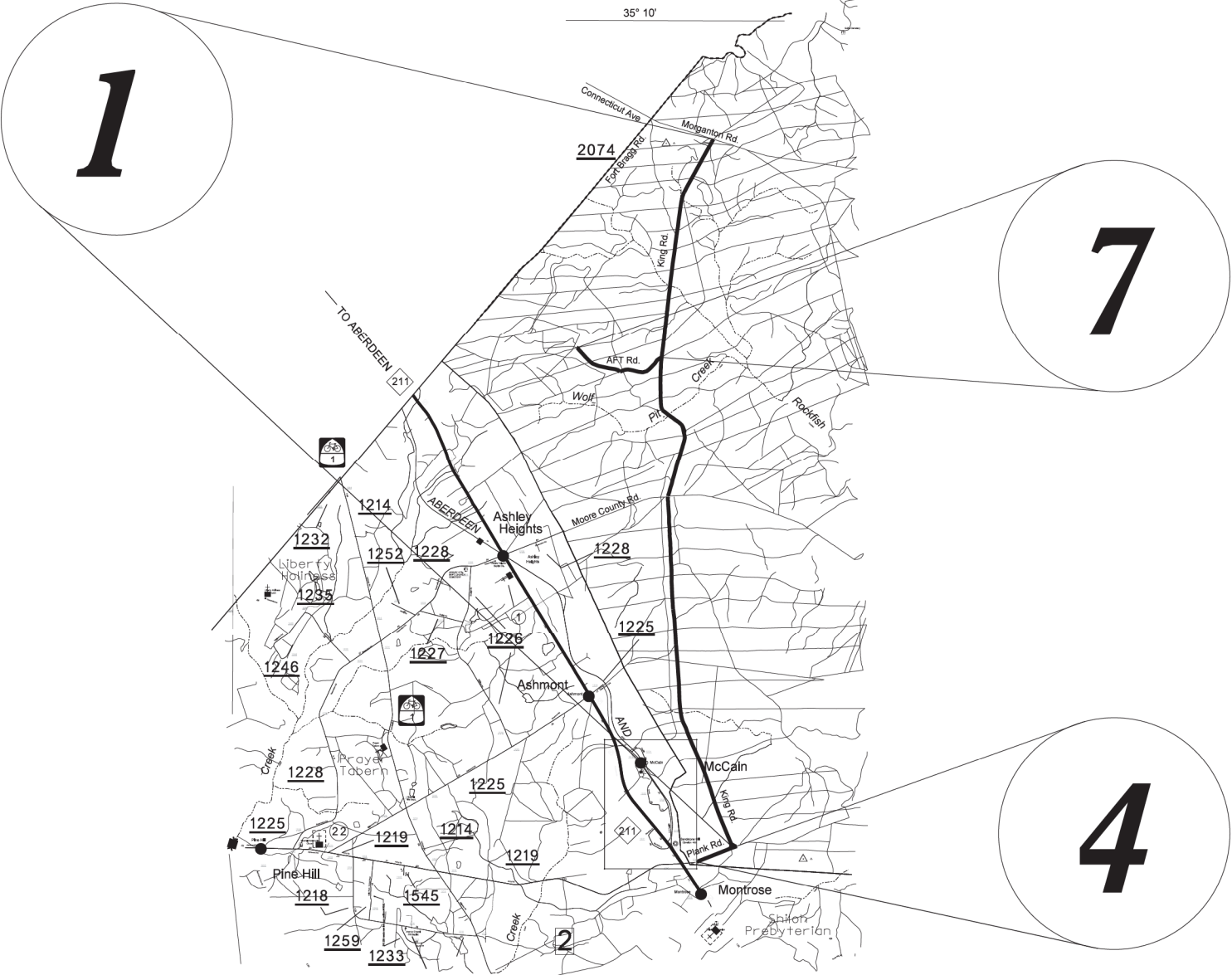
5/28/99

2/27/2024
T:\Projects\49218.16\Mapa_Typ_Details.dgn

2/27/2024
 I:\Projects\49218.16\Drawings\Mapa_Typ_Details.dwg
 5/28/24



HOKE COUNTY



HOKE COUNTY

5/28/24

2/28/2024
11:51:10 AM
C:\Users\jbragg\OneDrive\Documents\Maps_Typ_Details.dgn

PROJECT REFERENCE NO.	SHEET NO.
49218.16, etc.	4

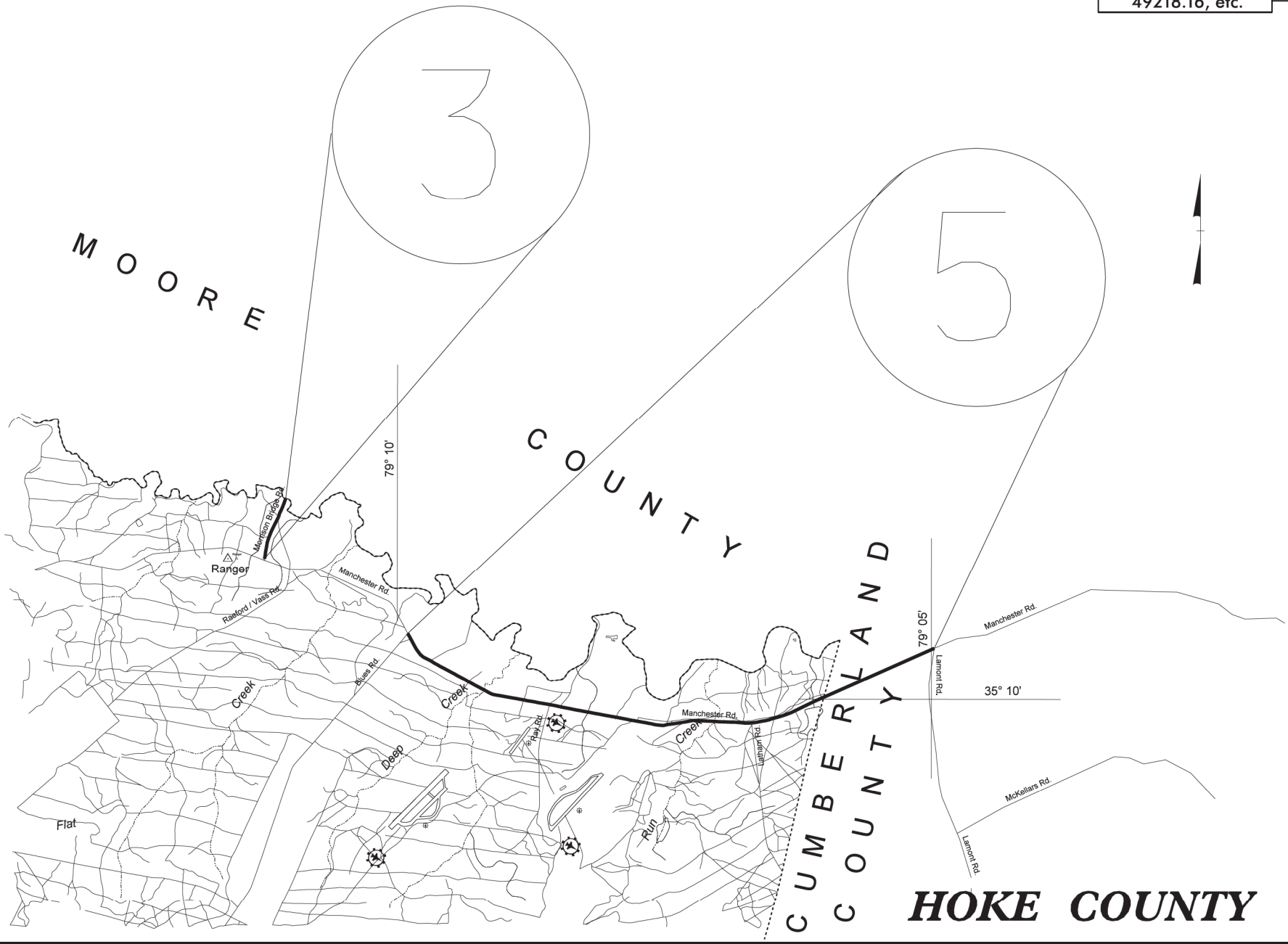


3. MORRISON BRIDGE RD.
5. MANCHESTER RD.
6. MANCHESTER RD.

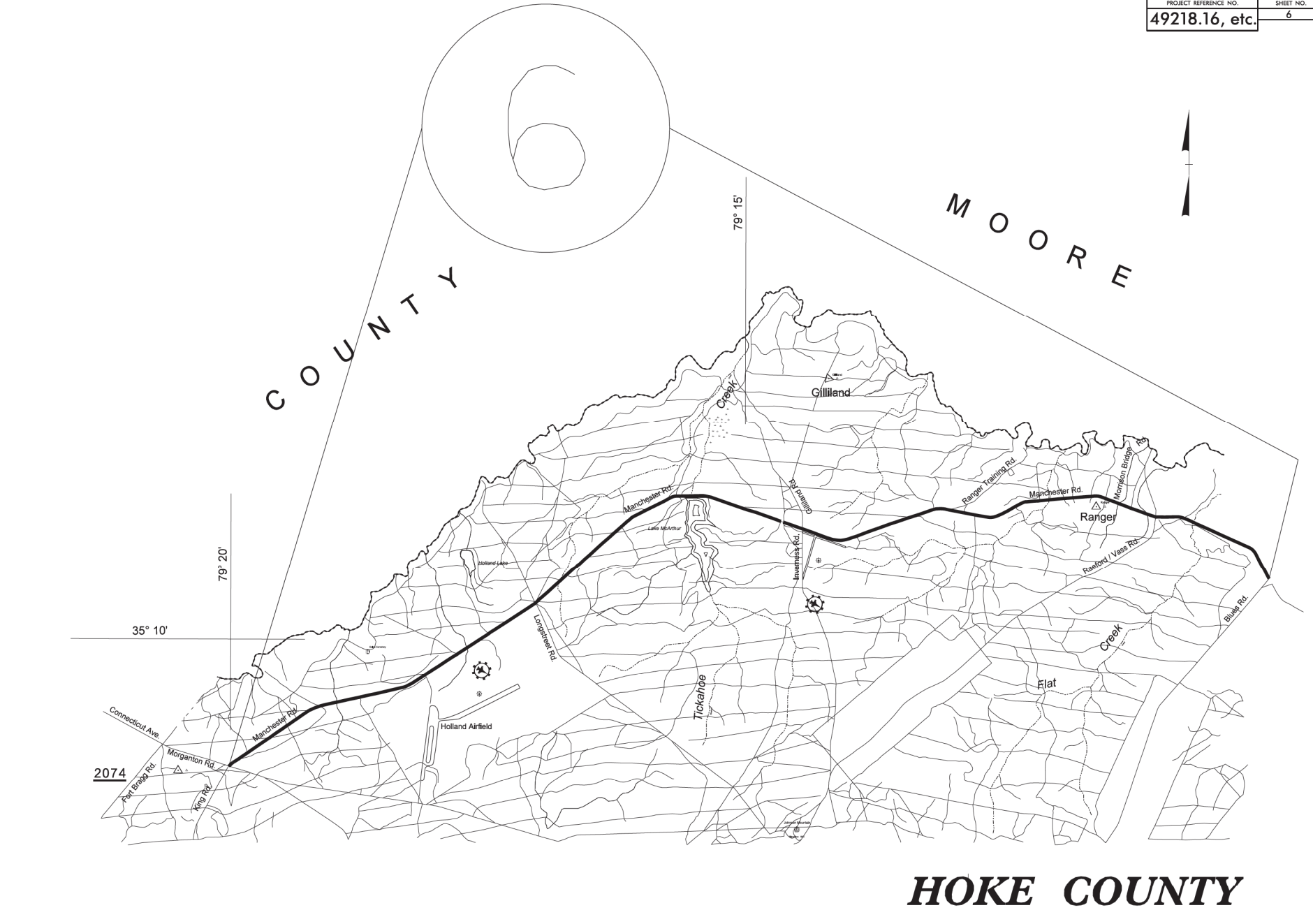
HOKE COUNTY

5/28/99

2/28/2024
11:41:51 AM
C:\Users\jbragg\My Documents\11-11-2023\11-11-2023.dwg



2/28/2024
 I:\Projects\49218.16\Drawings\Mapa_Typ_Details.dwg
 5/28/24



HOKE COUNTY

040377

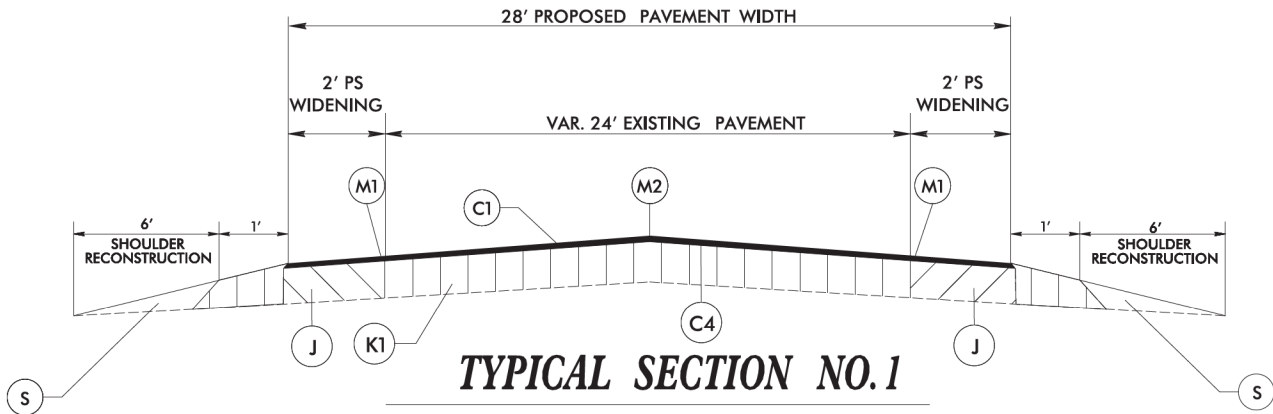
WBS ELEMENT	SHEET NO.
49218.16	7

PROJECT NOTES

1. RECLAMATION WIDTH SHALL BE A MINIMUM OF TWO FEET BEYOND PROPOSED EDGE OF PAVEMENT (1' ON EACH SIDE OF ROADWAY), INCLUDING ALL WIDENING AREAS.
2. VEGETATION MUST BE REMOVED FROM SHOULDER 1 FOOT BEYOND PROPOSED EDGE OF PAVEMENT PRIOR TO FDR.
3. MAINTAIN ONE LANE OPEN AT ALL TIMES DURING CONSTRUCTION. MILITARY TRAFFIC/EQUIPEMENT ONLY TO BE ALLOWED ON CEMENT TREATED BASE PRIOR TO PAVING.
4. CONTRACTOR SHALL WET CURE FDR UP UNTIL THE SINGLE SEAL IS PLACED.
5. EXCLUDE FDR FOR EXISTING CONCRETE SLAB AT KING AND MOORE COUNTY ROAD INTERSECTION AND AT CULVERT OVER JENNIE CREEK DUE TO EXISTING ASPHALT THICKNESS.

PAVEMENT SCHEDULE

C1	PROP. APPROX. 2.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C2	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C3	PROP. APPROX. 3.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS
C4	ASPHALT SURFACE TREATMENT, SINGLE SEAL
D1	PROP. APPROX. 3.0" ASPHALT CONC. INTERMWDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
E1	PROP. APPROX. 5.0" ASPHALT CONC. BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
J	FOR ALL WIDENING AREAS REMOVE MATERIAL TO 6" DEPTH AND REPLACE WITH AGGREGATE BASE COURSE
K1	PROP. 12" FULL DEPTH RECLAMATION USING A CEMENT RATE OF 69 LBS. PER SQ. YD.
K2	PROP. 12" FULL DEPTH RECLAMATION USING A CEMENT RATE OF 60 LBS. PER SQ. YD.
M1	MILLED RUMBLE STRIPS (EDGE LINE)
M2	MILLED RUMBLE STRIPS (CENTERLINE)
S	AGGREGATE SHOULDER BORROW (ASB)
U	EXISTING PAVEMENT
V1	1.5" MILLING
V2	2" MILLING

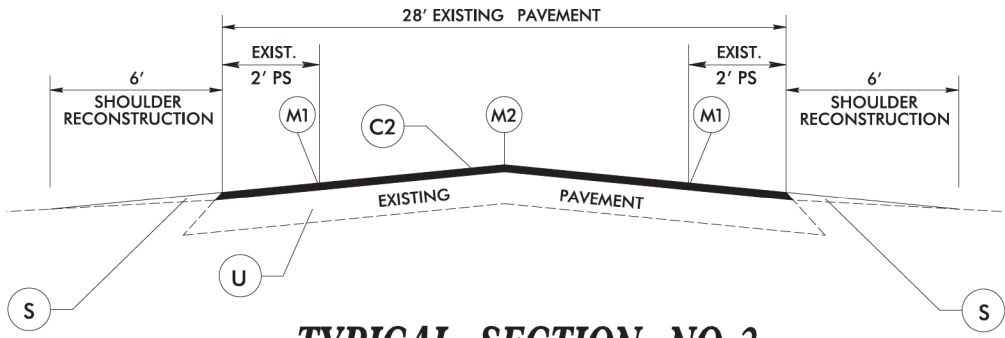


TYPICAL SECTION NO. 1

USE FOR MAP #1
KING RD

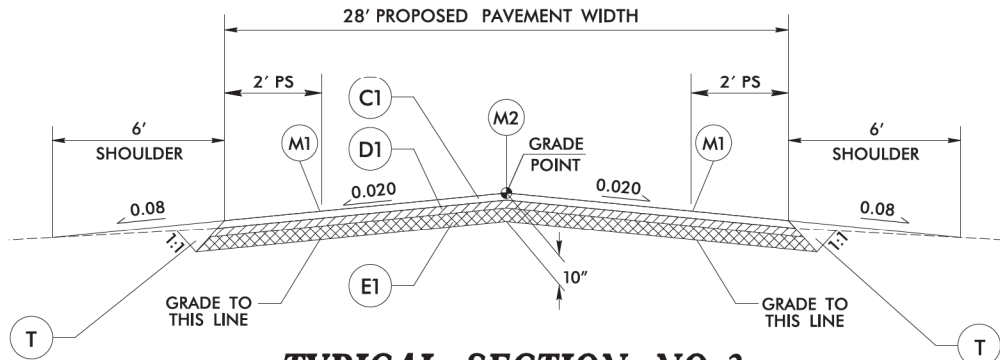
(1 MILE SOUTH OF MORGANTON RD
TO INTERSECTION REALIGNMENT
LIMITS STA. 13 + 73.24)

2/11/2024
C:\Users\Brogan\OneDrive\Documents\2024\02\11\2024\Map1.dgn



TYPICAL SECTION NO. 2

USE FOR MAP #1
 KING RD
 (FROM CONNETTICUTT/MORGANTON RD
 TO 1 MILE SOUTH)

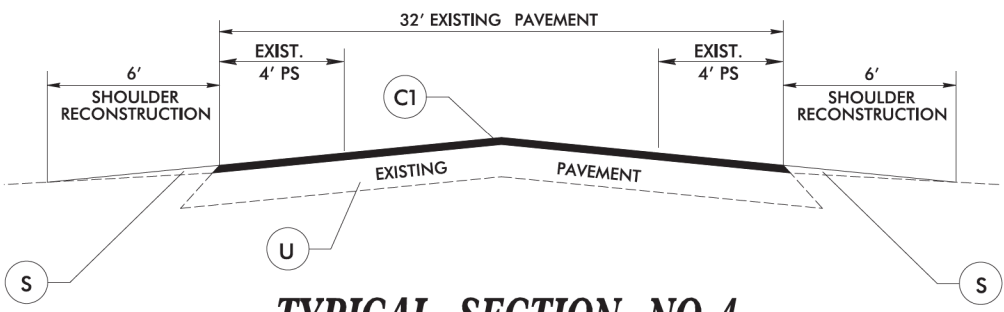


TYPICAL SECTION NO. 3

USE FOR MAP #1
 KING RD
 -EL- STA. 10+11.57 TO 13+73.24

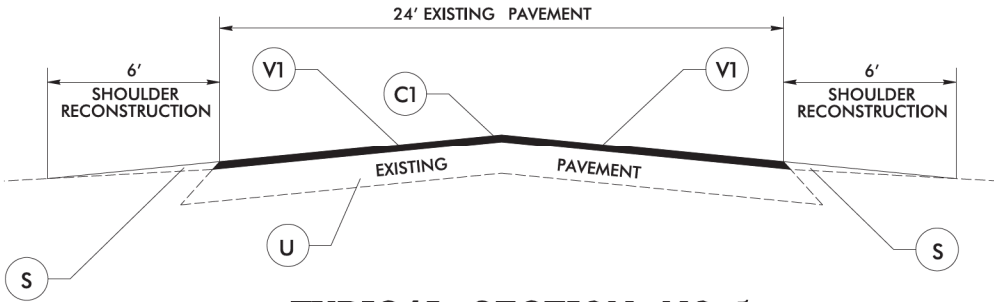
PAVEMENT SCHEDULE

C1	PROP. APPROX. 2.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C2	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C3	PROP. APPROX. 3.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS
C4	ASPHALT SURFACE TREATMENT, SINGLE SEAL
D1	PROP. APPROX. 3.0" ASPHALT CONC. INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
E1	PROP. APPROX. 5.0" ASPHALT CONC. BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
J	FOR ALL WIDENING AREAS REMOVE MATERIAL TO 6" DEPTH AND REPLACE WITH AGGREGATE BASE COURSE
K1	PROP. 12" FULL DEPTH RECLAMATION USING A CEMENT RATE OF 69 LBS. PER SQ. YD.
K2	PROP. 12" FULL DEPTH RECLAMATION USING A CEMENT RATE OF 60 LBS. PER SQ. YD.
M1	MILLED RUMBLE STRIPS (EDGE LINE)
M2	MILLED RUMBLE STRIPS (CENTERLINE)
S	AGGREGATE SHOULDER BORROW (ASB)
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V1	1.5" MILLING
V2	2" MILLING



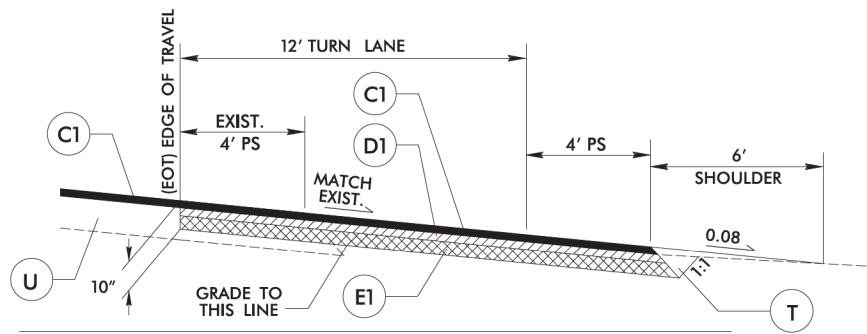
TYPICAL SECTION NO. 4

USE FOR MAP #4
PLANK RD



TYPICAL SECTION NO. 5

USE FOR MAP #2
MORGANTON RD



USE IN CONJUNCTION WITH TYPICAL SECTION NO. 4
MAP 4 PLANK RD.
PAVEMENT WIDENING LT.
-EY- STA. 15+04.34 TO 17+65.62

PAVEMENT SCHEDULE

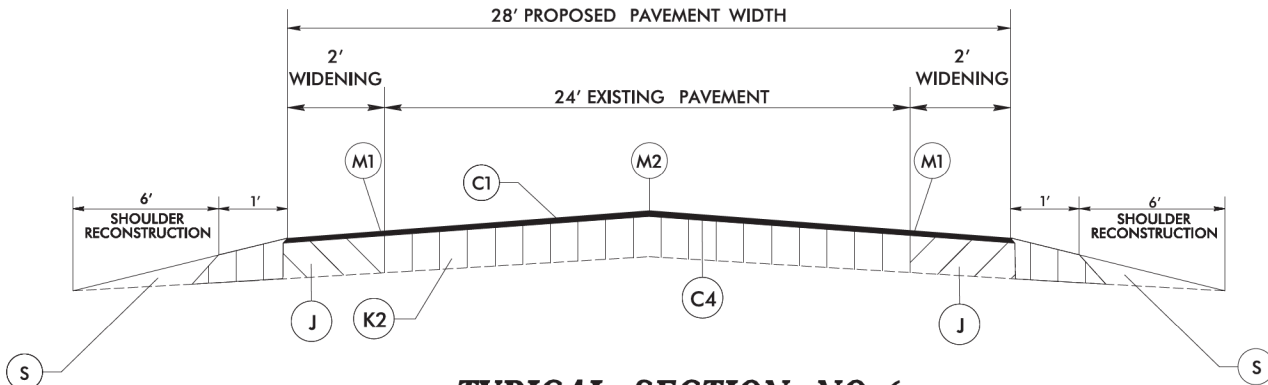
C1	PROP. APPROX. 2.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C2	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C3	PROP. APPROX. 3.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS
C4	ASPHALT SURFACE TREATMENT, SINGLE SEAL
D1	PROP. APPROX. 3.0" ASPHALT CONC. INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
E1	PROP. APPROX. 5.0" ASPHALT CONC. BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
J	FOR ALL WIDENING AREAS REMOVE MATERIAL TO 6" DEPTH AND REPLACE WITH AGGREGATE BASE COURSE
K1	PROP. 12" FULL DEPTH RECLAMATION USING A CEMENT RATE OF 69 LBS. PER SQ. YD.
K2	PROP. 12" FULL DEPTH RECLAMATION USING A CEMENT RATE OF 60 LBS. PER SQ. YD.
M1	MILLED RUMBLE STRIPS (EDGE LINE)
M2	MILLED RUMBLE STRIPS (CENTERLINE)
S	AGGREGATE SHOULDER BORROW (ASB)
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V1	1.5" MILLING
V2	2" MILLING

PROJECT NOTES

1. RECLAMATION WIDTH SHALL BE A MINIMUM OF TWO FEET BEYOND PROPOSED EDGE OF PAVEMENT (1' ON EACH SIDE OF ROADWAY), INCLUDING ALL WIDENING AREAS.
2. VEGETATION MUST BE REMOVED FROM SHOULDER 1 FOOT BEYOND PROPOSED EDGE OF PAVEMENT PRIOR TO FDR.
3. MAINTAIN ONE LANE OPEN AT ALL TIMES DURING CONSTRUCTION. MILITARY TRAFFIC/EQUIPEMENT ONLY TO BE ALLOWED ON CEMENT TREATED BASE PRIOR TO PAVING.
4. CONTRACTOR SHALL WET CURE FDR UP UNTIL THE SINGLE SEAL IS PLACED.
5. EXCLUDE FDR FOR EXISTING CONCRETE SLAB AT KING AND MOORE COUNTY ROAD INTERSECTION AND AT CULVERT OVER JENNIE CREEK DUE TO EXISTING ASPHALT THICKNESS.

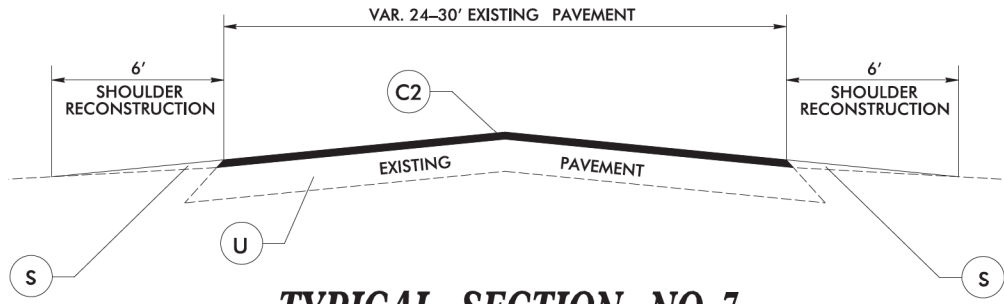
PAVEMENT SCHEDULE

C1	PROP. APPROX. 2.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C2	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C3	PROP. APPROX. 3.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS
C4	ASPHALT SURFACE TREATMENT, SINGLE SEAL
D1	PROP. APPROX. 3.0" ASPHALT CONC. INTERMWDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
E1	PROP. APPROX. 5.0" ASPHALT CONC. BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
J	FOR ALL WIDENING AREAS REMOVE MATERIAL TO 6" DEPTH AND REPLACE WITH AGGREGATE BASE COURSE
K1	PROP. 12" FULL DEPTH RECLAMATION USING A CEMENT RATE OF 69 LBS. PER SQ. YD.
K2	PROP. 12" FULL DEPTH RECLAMATION USING A CEMENT RATE OF 60 LBS. PER SQ. YD.
M1	MILLED RUMBLE STRIPS (EDGE LINE)
M2	MILLED RUMBLE STRIPS (CENTERLINE)
S	AGGREGATE SHOULDER BORROW (ASB)
U	EXISTING PAVEMENT
V1	1.5" MILLING
V2	2" MILLING



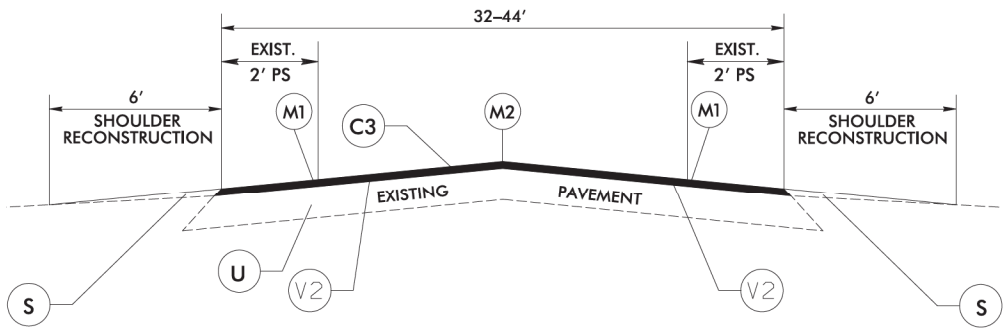
TYPICAL SECTION NO. 6

USE FOR MAP #6
MANCHESTER RD



TYPICAL SECTION NO. 7

USE FOR MAP #3
MORRISON BRIDGE RD



TYPICAL SECTION NO. 8

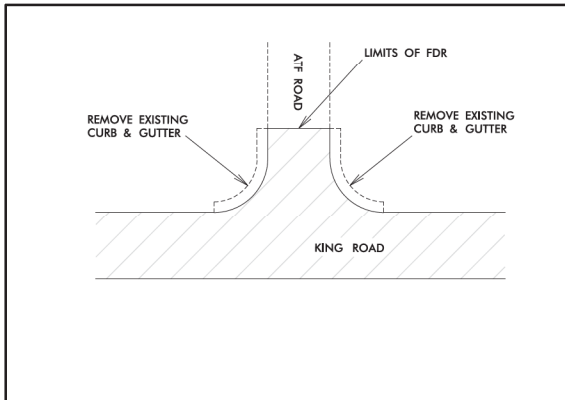
USE FOR MAP #5
MANCHESTER RD

PAVEMENT SCHEDULE

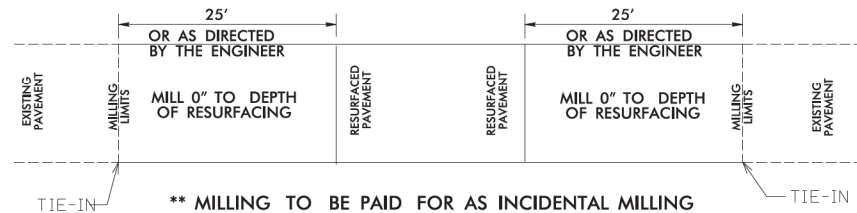
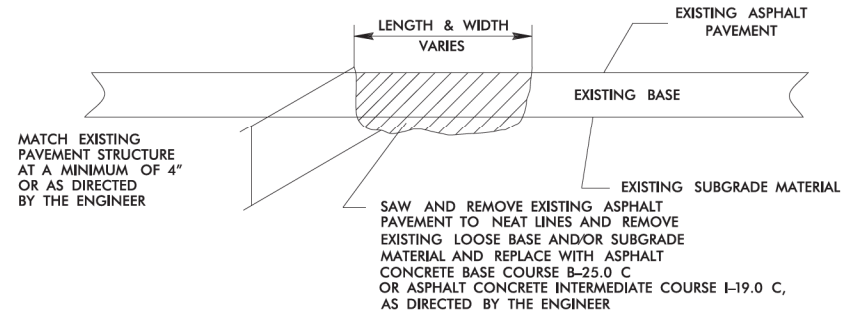
C1	PROP. APPROX. 2.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C2	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C3	PROP. APPROX. 3.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS
C4	ASPHALT SURFACE TREATMENT, SINGLE SEAL
D1	PROP. APPROX. 3.0" ASPHALT CONC. INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
E1	PROP. APPROX. 5.0" ASPHALT CONC. BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
J	FOR ALL WIDENING AREAS REMOVE MATERIAL TO 6" DEPTH AND REPLACE WITH AGGREGATE BASE COURSE
K1	PROP. 12" FULL DEPTH RECLAMATION USING A CEMENT RATE OF 69 LBS. PER SQ. YD.
K2	PROP. 12" FULL DEPTH RECLAMATION USING A CEMENT RATE OF 60 LBS. PER SQ. YD.
M1	MILLED RUMBLE STRIPS (EDGE LINE)
M2	MILLED RUMBLE STRIPS (CENTERLINE)
S	AGGREGATE SHOULDER BORROW (ASB)
U	EXISTING PAVEMENT
V1	1.5" MILLING
V2	2" MILLING

DETAILS

DETAILS OF PATCHING EXISTING PAVEMENT PRIOR TO RESURFACING



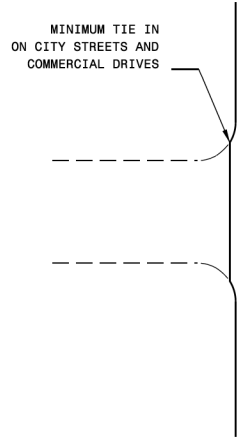
USE DETAIL FOR MAP #7
ATF ROAD ENTRANCE



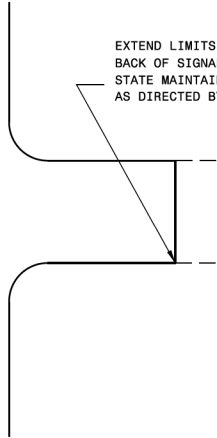
PAVEMENT TIE-IN DETAIL

STAKING (FULL DEPTH RECLAMATION):

Prior to milling existing asphalt, contractor shall install offset stakes. Stakes shall be referenced off the centerline of existing alignment. Place every 100 feet in tangent sections (alternating sides of the road) and every 50 feet in curves. Stakes should be left in place and maintained until the project is accepted. Payment for staking will be incidental to Soil Cement Base (Full Depth Reclamation).

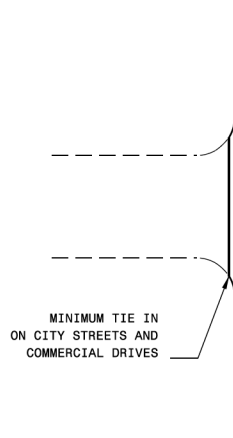


MINIMUM TIE IN
ON CITY STREETS AND
COMMERCIAL DRIVES

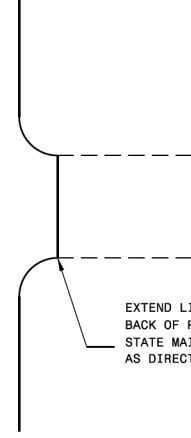


EXTEND LIMITS TO
BACK OF SIGNAL LOOPS ON
STATE MAINTAINED ROADS
AS DIRECTED BY THE ENGINEER

TYPICAL DETAIL OF PROJECT LIMITS AT
SIGNALIZED Y LINES



MINIMUM TIE IN
ON CITY STREETS AND
COMMERCIAL DRIVES



EXTEND LIMITS TO
BACK OF RADIUS ON
STATE MAINTAINED ROADS
AS DIRECTED BY THE ENGINEER

TYPICAL DETAIL OF PROJECT LIMITS AT
UNSIGNALIZED Y LINES

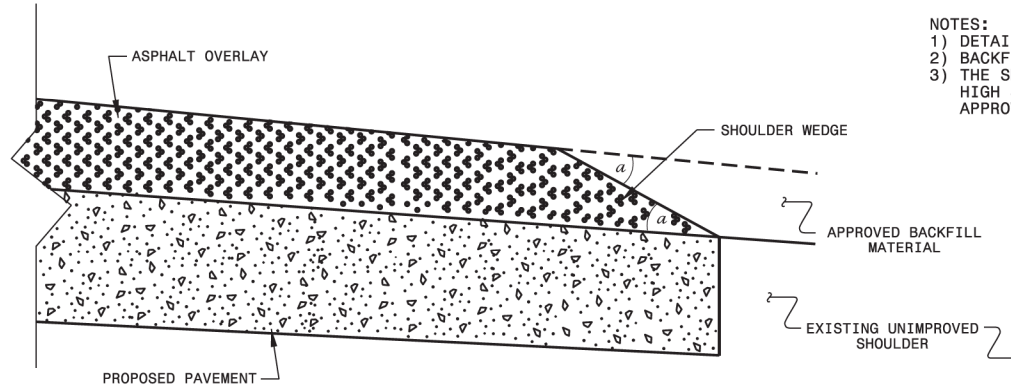
ADDITIONAL INTERSECTIONS (NON-TYPICAL)

Extend paving limits to back of radius
or loop on the following intersections:

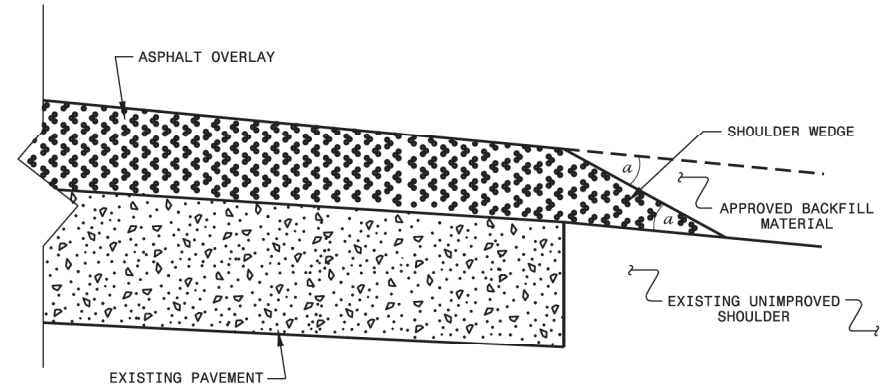
MAP#	STREET NAME	COMMENTS
#1 KING ROAD	MOORE COUNTY RD	PAVE TO BACK OF RADIUS
#1 KING ROAD	ATF RD	PAVE TO BACK OF RADIUS
#1 KING ROAD / #6 MANCHESTER RD	MORGANTON RD	PAVE TO JOINT ON WEST SIDE, END OF PAVEMENT ON EAST SIDE
#5 MANCHESTER RD	BLUES RD	PAVE TO BACK OF RADIUS
#5 MANCHESTER RD	RAY RD	PAVE TO BACK OF RADIUS
#5 MANCHESTER RD	LATHAM RD	PAVE TO BACK OF RADIUS
#5 MANCHESTER RD	JOHN NEIL SHAW RD	PAVE TO BACK OF RADIUS
#5 MANCHESTER RD	LAMONT RD	PAVE TO BACK OF RADIUS
#6 MANCHESTER RD	RAEFORD/VASS RD	PAVE TO BACK OF RADIUS
#6 MANCHESTER RD	MORRISON BRIDGE RD	PAVE TO BACK OF RADIUS
#1 KING RD, #5 & #6 MANCHESTER RD	ALL EXISTING PAVED DRIVEWAY/STREET TURNOUTS	PAVE TO BACK OF RADIUS

NOTES:

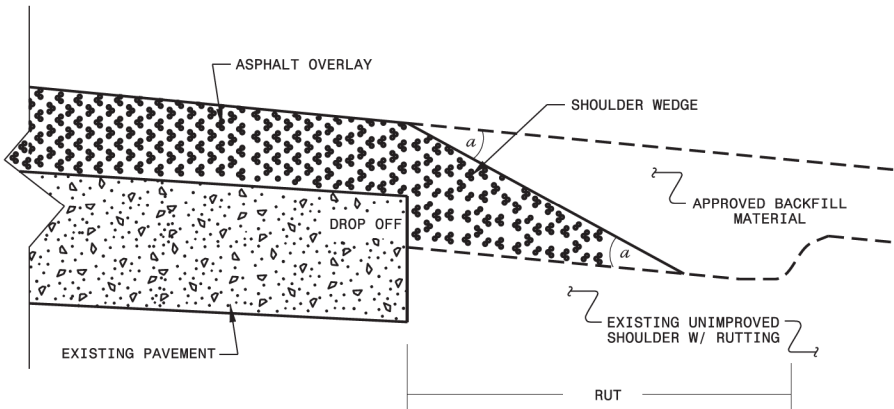
- 1) DETAIL DOES NOT APPLY TO OGAFD AND ULTRA-THIN BONDED WEARING COURSE.
- 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
- 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS, SIDE STREETS, HIGH SHOULDERS, AND OTHER LOCATIONS NOT FEASIBLE TO CONSTRUCT AS APPROVED BY THE ENGINEER.



SHOULDER WEDGE DETAIL
 (Resurfacing Projects w/ Widening or
 with Existing Paved Shoulder having no dropoffs)



SHOULDER WEDGE DETAIL
 (Resurfacing Projects w/ NO Widening)



SHOULDER WEDGE DETAIL
 (Resurfacing Adjacent to
 Rutted Shoulder)

- SHOULDER WEDGE ANGLE = 30°

CONTRACT STANDARDS AND DEVELOPMENT UNIT	
<small>Office 919-707-6950 FAX 919-250-4119</small>	
SHOULDER WEDGE DETAILS	
ORIGINAL BY: T.SPELL	DATE: 7-18-11
MODIFIED BY:	DATE: 2/2/16
CHECKED BY:	DATE:
FILE SPIC: s:\user\deta11\stand\shoulderwedgeta11.dgn	

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

001
 002
 003
 004
 005
 006
 007
 008
 009
 010
 011
 012
 013
 014
 015
 016
 017
 018
 019
 020
 021
 022
 023
 024
 025
 026
 027
 028
 029
 030
 031
 032
 033
 034
 035
 036
 037
 038
 039
 040
 041
 042
 043
 044
 045
 046
 047
 048
 049
 050
 051
 052
 053
 054
 055
 056
 057
 058
 059
 060
 061
 062
 063
 064
 065
 066
 067
 068
 069
 070
 071
 072
 073
 074
 075
 076
 077
 078
 079
 080
 081
 082
 083
 084
 085
 086
 087
 088
 089
 090
 091
 092
 093
 094
 095
 096
 097
 098
 099
 100

8/17/19


REVISIONS

2/6/2021
12:45:00
C:\Users\jacob\Documents\Manchester_Rd_rdy.pstx_13.dgn

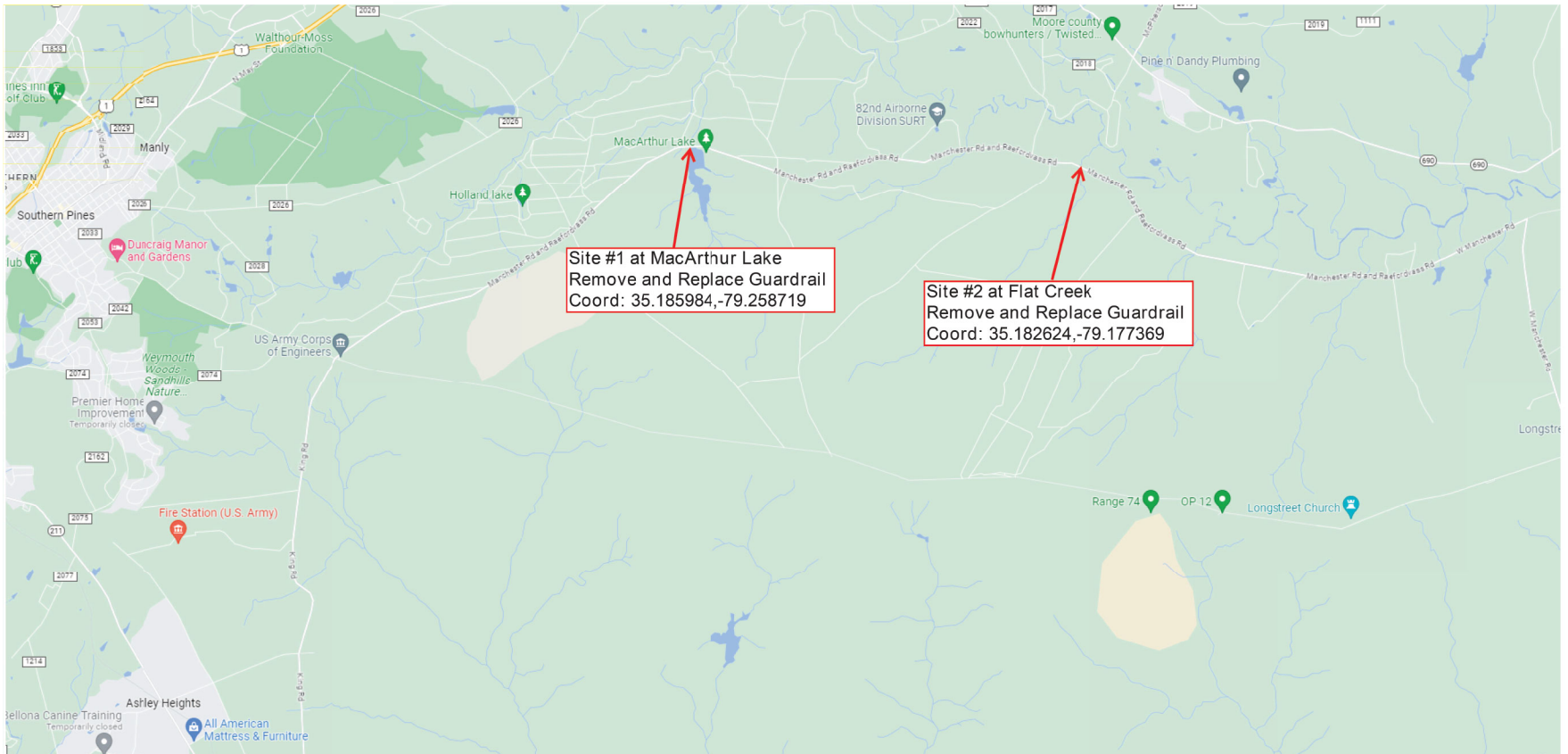


1223 Jones Franklin Rd
Raleigh, N.C. 27606
License No. F-0377
Bus: 919 851 8077
Fax: 919 851 8107

TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

PROJECT REFERENCE NO. 4921824	SHEET NO. 14
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

Manchester Road Guardrail Replacement Locations



Site #1 at MacArthur Lake
Remove and Replace Guardrail
Coord: 35.185984,-79.258719

Site #2 at Flat Creek
Remove and Replace Guardrail
Coord: 35.182624,-79.177369

8/17/16

REVISIONS

1/1/16 10:16:16 AM King_Rd_rdy.dwg
WETHERILL



1223 Jones Franklin Rd.
Raleigh, N.C. 27606
License No. F-0377
Bus: 919 851 8077
Fax: 919 851 8107

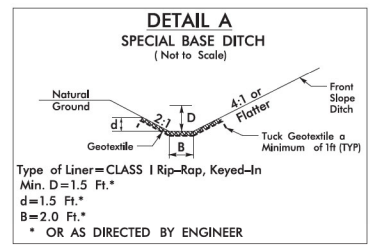
TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

KING ROAD PROPOSED DITCH STABILIZATION

PROJECT REFERENCE NO. 4921816	SHEET NO. 15
RW SHEET NO.	
ROADWAY DESIGN 1/8"=100' ENGINEER WETHERILL ENGINEERING SEAL 018981	HYDRAULICS 1/8"=100' ENGINEER WETHERILL ENGINEERING SEAL 15833
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

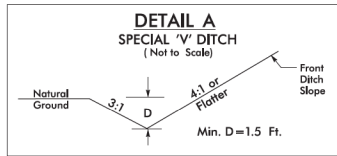


Ditch stabilization
on east side of King Road. From
approximately 1,030 ft north of Gum
Branch Creek to 1,930 feet north
(900' total)

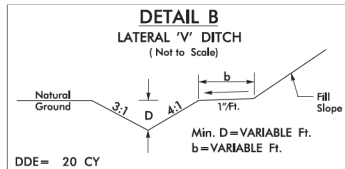


B/17/199

REVISIONS



FROM STA. 10+32 TO STA. 14+00 EL. LT.
 FROM STA. 10+39 TO STA. 13+73 EL. RT.
 FROM STA. 13+00 TO STA. 14+50 EY. LT.
 FROM STA. 15+48 TO STA. 16+80 EY. LT.



DDE = 20 CY
 FROM STA. 14+00 TO STA. 14+60 EL. LT.

00+91

-EL- STA. 13+73.24
 END FULL DEPTH SECTION
 BEGIN FDR SECTION

LATERAL V DITCH
 (SEE DETAIL B)



1223 Jones Franklin Rd
 Raleigh, N.C. 27606
 License No. F-0377
 Bus: 919 851 8077
 Fax: 919 851 8107

TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
 CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

KING ROAD/PLANK ROAD

PROJECT REFERENCE NO. 4921816	SHEET NO. 16
RW SHEET NO.	
ROADWAY DESIGN ENGINEER 2/27/2018 SEAL 018981	HYDRAULICS ENGINEER 2/27/2018 SEAL 15833
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

SCALE 1" = 30'

10+00

* REMOVE EXISTING
 GUARDRAIL, WOVEN
 WIRE GATES,
 POSTS AND CABLES

-EL- PI Sta. 13+04.22

SPECIAL V DITCH
 (SEE DETAIL A)

TRANSITION TO TIE
 TO EXISTING DITCH

REMOVE EXISTING
 GUARDRAIL

-EY- STA. 14+29.81
 BEGIN
 4' PAVED SHOULDER LT.
 TIE TO EXISTING

SPECIAL V DITCH
 (SEE DETAIL A)

SPECIAL V DITCH
 (SEE DETAIL A)

SPECIAL V DITCH
 (SEE DETAIL A)

-EY- STA. 17+65.62
 END
 4' PAVED SHOULDER LT.
 TIE TO EXISTING

PLANK RD. PAVED ROADWAY

-EY-

PLANK RD. PAVED ROADWAY

* REMOVAL OF EXISTING
 WOVEN WIRE GATES, POSTS, CABLES, ETC.
 TO BE PAID FOR UNDER
 GRADING (LS)

* REMOVE EXISTING
 GUARDRAIL, WOVEN WIRE GATES,
 POSTS AND CABLES

-EL- POT Sta. 10+00.00=
 -EY- POT Sta. 15+04.34

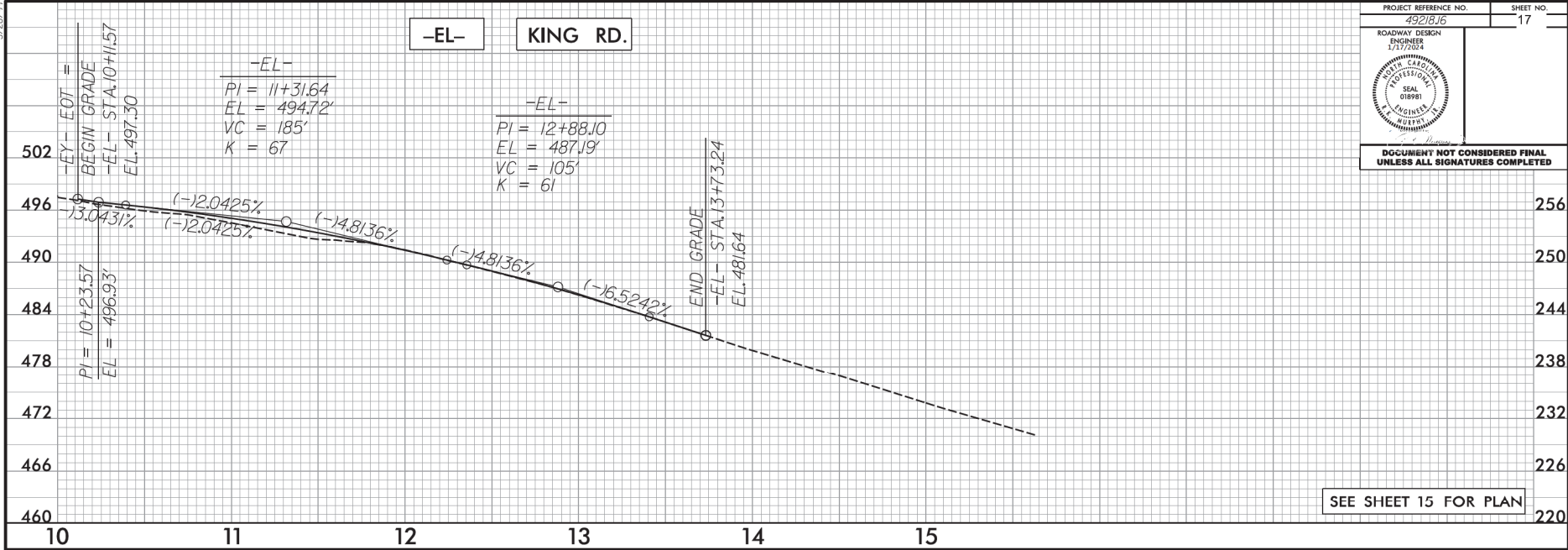
REMOVAL OF
 EXISTING PAVEMENT



2/17/2018
 2:17:42 PM
 W:\Projects\16_King Rd_rdp_pah-15.dgn
 W:\Projects\16_King Rd_rdp_pah-15.dgn

5/28/2016

PROJECT REFERENCE NO. 4921816	SHEET NO. 17
ROADWAY DESIGN ENGINEER 11/17/2014	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



1/14/2016 10:16:16 AM King Rd - 2500' - 16.dgn

12/26/07

COMPUTED BY: SLK DATE: 11/20/03
 CHECKED BY: RKM DATE: 12/14/2023

STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS

PROJECT REFERENCE NO. 4921B,16, 4921B,24 SHEET NO. 18

PAVEMENT REMOVAL SUMMARY

SURVEY LINE	STATION	STATION	LOCATION L/R/R/CL	YD ¹
EL- KING ROAD	10+11.57	13+73.24	LT & RT	2,757.44
TOTAL:				2,757.44
SAY:				2,760

Note: Approximate quantities only. Unclassified Excavation, Fine Grading, Clearing and Grubbing and Removal of Existing Pavement will be paid for at the contract lump sum price for "Grading."

"N" = DISTANCE FROM EDGE OF LANE TO FACE OF GUARDRAIL
 TOTAL SHOULDER WIDTH = DISTANCE FROM EDGE OF TRAVEL LANE TO SHOULDER BREAK POINT.
 FLARE LENGTH = DISTANCE FROM LAST SECTION OF PARALLEL GUARDRAIL TO END OF GUARDRAIL.
 W = TOTAL WIDTH OF FLARE FROM BEGINNING OF TAPER TO END OF GUARDRAIL.
 G = GATING IMPACT ATTENUATOR TYPE 350
 NG = NON-GATING IMPACT ATTENUATOR TYPE 350

SUMMARY OF EARTHWORK

STATION	STATION	UNCL. EXCAV.	EMBANK. +20%	BORROW	WASTE
-EL- KING ROAD	10+11.57 TO 14+50.00	856	6		850
SUBTOTALS:		856	6		850
SUBTOTALS:					
PROJECT TOTALS:		856	6		850
GRAND TOTALS:		856			
SAY:		865			

GUARDRAIL SUMMARY

SURVEY LINE	BEG. STA. LATITUDE	END STA. LONGITUDE	LOCATION	LENGTH			WARRANT POINT		"N" DIST. FROM E.O.L.	TOTAL SHOUL. WIDTH	FLARE LENGTH		W		ANCHORS							IMPACT ATTENUATOR TYPE 350		SINGLE FACED GUARDRAIL	REMOVE EXISTING GUARDRAIL	REMOVE AND STOCKPILE EXISTING GUARDRAIL	REMARKS				
				STRAIGHT	SHOP CURVED	DOUBLE FACED	APPROACH END	TRAILING END			APPROACH END	TRAILING END	APPROACH END	TRAILING END	XI MOD	TYPE III	GREU TL-3	AT-1	CAT-1	VI MOD	BIC	AT-1	EA					G	NG		
SITE 1 MANCHESTER RD.	35.185984	-79.252719	LT. & RT.	2,425.00'		50'			6'-0"	9'-0"	50'-0"	50'-0"																2,425.00'			
SITE 2 MANCHESTER RD.	35.182624	-79.177369	LT. & RT.	200.00'					4'-0"	7'-0"	50'-0"	50'-0"																200.00'			
EL- KING RD.																												90.00'			
EL- PLANK RD.																												66.00'			
				PROJECT SUBTOTAL	2,625.00'																										
				LESS ANCHOR DEDUCTIONS	(-356.25'																										
				GR PROJECT TOTAL	2,268.75'																										
				PERMANENT GR SAY	2,275.00'	50'																									

GUARDRAIL ANCHOR DEDUCTIONS
 GREU TL-3 = 7 @ 50' = 350'
 AT-1 = 1 @ 6.25' = 6.25'
 TOTAL DEDUCTIONS = 356.25'

4/4/2007 12:21:00 Manchester_Rld_cul_psh_3B-1.dgn

PROJECT NO.	SHEET NO.	TOTAL NO.
49218.16, 49218.17	19	
49218.16, ETC.		

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	BEGIN MP	END MP	0000400000-N	0043000000-N	0134000000-E	0241000000-E	1121000000-E	1187000000-E	1220000000-E	1245000000-E	1260000000-E	1297000000-E	1330000000-E	1491000000-E	1503000000-E	1523000000-E	1575000000-E	
														CONSTRUCTI ON SURVEYING	GRADING	DRAINAGE DITCH EXCAVATION	GENERIC GRADING ITEM, SOIL CEMENT BASE (FULL DEPTH RECLAMATION)	AGGREGATE BASE COURSE	PORTLAND CEMENT FOR SOIL CEMENT BASE	INCIDENTAL STONE BASE	SHOULDER RECONSTRUCTI ON	AGGREGATE SHOULDER BORROW	1.5" MILLING	2" MILLING	INCIDENTAL MILLING	BASE COURSE, 825.0C	INTERMEDIAT E COURSE, 119.0C	SURFACE COURSE, 59.5C	ASPHALT BINDER FOR PLANT MIX
														LS	LS	CY	SY	TONS	TON	TONS	SMI	TON	SY	SY	SY	TONS	TONS	TONS	TONS
										MI	FT																		
49218.16	Hoke	1	KING ROAD	FDR - FROM MORGANTON RD TO INTERSECTION REALIGNMENT LIMITS (STA. 13+73.24)	1.2	2	2WU	NO	NO	7.17	28	0.07	7.24				108,767	4,952	3,752	250	14.35	2,060.00					14,391	853	
49218.16	Hoke	1	KING ROAD	INTERSECTION REALIGNMENT (KING RD AT PLANK RD)	3	2	2WU	NO	NO	0.07	28	0	0.07	1.00	1.00	20.00	108,767	4,952	3,752	350	14.35	2,060.00			425	257	167	41	
TOTAL FOR MAP NO. 1										7.24				1.00	1.00	20.00	108,767	4,952	3,752	350	14.35	2,060.00			425	257	14,558	894	
TOTAL FOR PROJ NO. 49218.16										7.24				1.00	1.00	20.00	108,767	4,952	3,752	350	14.35	2,060.00			425	257	14,558	894	
49218.17	Hoke	2	MORGANTON ROAD	RESURFACING - FROM CJ EAST OF INTERSECTION OF SR 2074 (FORT BRAGG RD) TO CJ AT INTERSECTION WITH MANCHESTER RD.	5	2	2WU	NO	NO	0.58	24	0	0.58								1.17	164.00	8,227				1,014	61	
TOTAL FOR MAP NO. 2										0.58											1.17	164.00	8,227				1,014	61	
TOTAL FOR PROJ NO. 49218.17										0.58											1.17	164.00	8,227				1,014	61	
49218.18	Hoke	3	MORRISON BRIDGE ROAD	RESURFACING - FROM END OF STATE MAINTENANCE TO MANCHESTER RD	7	2	2WU	NO	NO	0.58	24	0	0.58								1.10	155.00		600			619	37	
TOTAL FOR MAP NO. 3										0.58											1.10	155.00		600			619	37	
TOTAL FOR PROJ NO. 49218.18										0.58											1.10	155.00		600			619	37	
49218.23	Hoke	4	PLANK ROAD	RESURFACING AND WIDENING - FROM 800' EAST OF CL OF NC HWY 211 TO CJ EAST OF KING ROAD	4	2	2WU	NO	NO	0.42	32	3.74	4.16								0.79	141.00		344	135	83	888	65	
TOTAL FOR MAP NO. 4										0.42											0.79	141.00		344	135	83	888	65	
TOTAL FOR PROJ NO. 49218.23										0.42											0.79	141.00		344	135	83	888	65	
49218.24	Cumberland, Hoke	5	MANCHESTER ROAD	RESURFACING - FROM LAMONT RD TO C.J. WEST OF BLUES RD	8	2	2WU	NO	NO	5.03	32	0	5.03								10.06	1,409.00		101,209			18,703	1,109	
TOTAL FOR MAP NO. 5										5.03											10.06	1,409.00		101,209			18,703	1,109	
49218.24	Hoke	6	MANCHESTER ROAD	FDR - FROM CJ WEST OF BLUES RD TO CJ EAST OF MORGANTON RD	6	2	2WU	NO	NO	10.61	24	0	10.61				186,883	8,515	5,606		21.23	2,973.00				19,673	1,161		
TOTAL FOR MAP NO. 6										10.61							186,883	8,515	5,606		21.23	2,973.00				19,673	1,161		
TOTAL FOR PROJ NO. 49218.24										15.64							186,883	8,515	5,606		31.29	4,382.00		101,209			38,376	2,270	
49218.25	Hoke	7	ATF ROAD	PAVEMENT MARKINGS - FROM KING RD TO C.J.		2	2WU	NO	NO	0.9	24	0	0.9																
TOTAL FOR MAP NO. 7										0.9																			
TOTAL FOR PROJ NO. 49218.25										0.9																			
GRAND TOTAL										25.36				1.00	1.00	20.00	295,650	13,467	9,358	350	48.70	6,902.00	8,227	101,209	944	560	340	55,455	3,327

PROJECT NO.	SHEET NO.	TOTAL NO.
49218.16, 49218.17		
49218.18, ETC.	20	

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	BEGIN MP	END MP	1704000000-E	1814500000-E	1838000000-E	1838500000-N	1840000000-E	3030000000-E	3045000000-E	3150000000-N	3195000000-N	3287000000-N	3360000000-E	3628000000-E	3656000000-E	6000000000-E	6099000000-E	6012000000-E		
														PATCHING EXISTING PAVEMENT	ASPHALT SURFACE TREATMENT, SINGLE SEAL	EMULSION FOR ASPHALT SURFACE TREATMENT	VACUUM TRUCK	MILLED RUMBLE STRIPS	STEEL BEAM GUARDRAIL	STEEL BEAM GUARDRAIL, SHOP CURVED	ADDITIONAL GUARDRAIL POSTS	GUARDRAIL END UNITS, TYPE AT-1	GUARDRAIL END UNITS, TYPE TL-3	REMOVE EXISTING GUARDRAIL	RIP RAP, CLASS I	GEOTEXTILE FOR DRAINAGE	TEMPORARY SILT FENCE	STONE FOR EROSION CONTROL, CLASS B	SEDIMENT CONTROL STONE		
														MI	FT	TONS	SY	GAL	WK	LF	LF	LF	EA	EA	EA	LF	TON	SY	LF	TON	TON
49218.16	Hoke	1	KING ROAD	FDR - FROM MORGANTON RD TO INTERSECTION REALIGNMENT LIGHTS (STA. 13+73.24)	1,2	2	2WU	NO	NO	7.17	28	0.07	7.24	75	108,767.00	38,068	5.00	113,752							880	1,800.00	500	65.00	25		
49218.16	Hoke	1	KING ROAD	INTERSECTION REALIGNMENT (KING RD AT PLANK RD)	3	2	2WU	NO	NO	0.07	28	0	0.07					930						90.00		500	65.00	25			
TOTAL FOR MAP NO. 1														75	108,767.00	38,068	5.00	114,682							90.00	880	1,800.00	1,000	130.00	50	
TOTAL FOR PROJ NO. 49218.16														75	108,767.00	38,068	5.00	114,682							90.00	880	1,800.00	1,000	130.00	50	
49218.17	Hoke	2	MORGANTON ROAD	RESURFACING - FROM CJ EAST OF INTERSECTION OF SR 2074 (FORT BRAGG RD) TO CJ AT INTERSECTION WITH MANCHESTER RD.	5	2	2WU	NO	NO	0.58	24	0	0.58																		
TOTAL FOR MAP NO. 2																															
TOTAL FOR PROJ NO. 49218.17																															
49218.18	Hoke	3	MORRISON BRIDGE ROAD	RESURFACING - FROM END OF STATE MAINTENANCE TO MANCHESTER RD	7	2	2WU	NO	NO	0.58	24	0	0.58																		
TOTAL FOR MAP NO. 3																															
TOTAL FOR PROJ NO. 49218.18																															
49218.23	Hoke	4	PLANK ROAD	RESURFACING AND WIDENING - FROM 800' EAST OF CL OF NC HWY 211 TO CJ EAST OF KING ROAD	4	2	2WU	NO	NO	0.42	32	3.74	4.16																		
TOTAL FOR MAP NO. 4																															
TOTAL FOR PROJ NO. 49218.23																															
49218.24	Cumberland, Hoke	5	MANCHESTER ROAD	RESURFACING - FROM LAMONT RD TO C.J. WEST OF BLUES RD	8	2	2WU	NO	NO	5.03	32	0	5.03	110				79,675													
TOTAL FOR MAP NO. 5																															
49218.24	Hoke	6	MANCHESTER ROAD	FDR - FROM CJ WEST OF BLUES RD TO CJ EAST OF MORGANTON RD	6	2	2WU	NO	NO	10.61	24	0	10.61		186,883.00	65,409	10.00	168,062	2,275.00	50.00	5.00	1.00	7.00	2,625.00		500	75.00	30			
TOTAL FOR MAP NO. 6															10.61	186,883.00	65,409	10.00	168,062	2,275.00	50.00	5.00	1.00	7.00	2,625.00		500	75.00	30		
TOTAL FOR PROJ NO. 49218.24															15.64	186,883.00	65,409	10.00	247,737	2,275.00	50.00	5.00	1.00	7.00	2,625.00		500	75.00	30		
49218.25	Hoke	7	ATF ROAD	PAVEMENT MARKINGS - FROM KING RD TO C.J.	2	2WU	NO	NO	0.9	24	0	0.9																			
TOTAL FOR MAP NO. 7																															
TOTAL FOR PROJ NO. 49218.25																															
GRAND TOTAL										25.36				270	295,650.00	103,477	15.00	362,419	2,275.00	50.00	5.00	1.00	7.00	2,781.00	880	1,800.00	1,500	205.00	80		

PROJECT NO.	SHEET NO.	TOTAL NO.
49218.16, 49218.17 49218.18, ETC.	21	

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	BEGIN MP	END MP	6015000000-E	6018000000-E	6021000000-E	6029000000-E	6030000000-E	6036000000-E	6042000000-E	6071010000-E	6084000000-E	6087000000-E	6090000000-E	6093000000-E	6096000000-E	6114500000-N	6117000000-N	
														TEMPORARY MULCHING	SEED FOR TEMPORARY SEEDING	FERTILIZER FOR TEMPORARY SEEDING	SAFETY FENCE	SILT EXCAVATION	MATTING FOR EROSION CONTROL	1/4" HARDWARE CLOTH	WATTLE	SEED & MULCHING	MOWING	SEED FOR REPAIR SEEDING	FERTILIZER FOR REPAIR SEEDING	SEED FOR SUPPLEMENTAL SEEDING	SPECIALIZED HAND MOWING	RESPONSE FOR EROSION CONTROL	
														MI	FT														
														ACR	LB	TON	LF	CY	SY	LF	LF	AC	ACR	LB	TON	LB	MHR	EA	
49218.16	Hoke	1	KING ROAD	FDR - FROM MORGANTON RD TO INTERSECTION REALIGNMENT LIGHTS (STA. 13+73.24)	1.2	2	2WU	NO	NO	7.17	28	0.07	7.24	0.50	100.00	0.50	300	90	200.00	35.00	170	0.50	14	50.00	0.25	50.00	25	3	
49218.16	Hoke	1	KING ROAD	INTERSECTION REALIGNMENT (KING RD AT PLANK RD)	3	2	2WU	NO	NO	0.07	28	0	0.07	0.50	100.00	0.50	300	90	200.00	35.00	170	0.50	1	50.00	0.25	50.00	25	2	
TOTAL FOR MAP NO. 1										7.24				1.00	200.00	1.00	300	180	400.00	70.00	340	1.00	15	100.00	0.50	100.00	25	5	
TOTAL FOR PROJ NO. 49218.16										7.24				1.00	200.00	1.00	300	180	400.00	70.00	340	1.00	15	100.00	0.50	100.00	25	5	
49218.17	Hoke	2	MORGANTON ROAD	RESURFACING - FROM CJ EAST OF INTERSECTION OF SR 2074 (FORT BRAGG RD) TO CJ AT INTERSECTION WITH MANCHESTER RD.	5	2	2WU	NO	NO	0.58	24	0	0.58																
TOTAL FOR MAP NO. 2										0.58																			
TOTAL FOR PROJ NO. 49218.17										0.58																			
49218.18	Hoke	3	MORRISON BRIDGE ROAD	RESURFACING - FROM END OF STATE MAINTENANCE TO MANCHESTER RD	7	2	2WU	NO	NO	0.58	24	0	0.58																
TOTAL FOR MAP NO. 3										0.58																			
TOTAL FOR PROJ NO. 49218.18										0.58																			
49218.23	Hoke	4	PLANK ROAD	RESURFACING AND WIDENING - FROM 800' EAST OF CL OF NC HWY 211 TO CJ EAST OF KING ROAD	4	2	2WU	NO	NO	0.42	32	3.74	4.16																
TOTAL FOR MAP NO. 4										0.42																			
TOTAL FOR PROJ NO. 49218.23										0.42																			
49218.24	Cumberland, Hoke	5	MANCHESTER ROAD	RESURFACING - FROM LAMONT RD TO C.J. WEST OF BLUES RD	8	2	2WU	NO	NO	5.03	32	0	5.03																
TOTAL FOR MAP NO. 5										5.03																			
49218.24	Hoke	6	MANCHESTER ROAD	FDR - FROM CJ WEST OF BLUES RD TO CJ EAST OF MORGANTON RD	6	2	2WU	NO	NO	10.61	24	0	10.61	0.50	100.00	0.50	300	100	250.00	50.00	300	0.50	25	50.00	0.25	50.00	50	5	
TOTAL FOR MAP NO. 6										10.61				0.50	100.00	0.50	300	100	250.00	50.00	300	0.50	25	50.00	0.25	50.00	50	5	
TOTAL FOR PROJ NO. 49218.24										15.64				0.50	100.00	0.50	300	100	250.00	50.00	300	0.50	25	50.00	0.25	50.00	50	5	
49218.25	Hoke	7	ATF ROAD	PAVEMENT MARKINGS - FROM KING RD TO C.J.		2	2WU	NO	NO	0.9	24	0	0.9																
TOTAL FOR MAP NO. 7										0.9																			
TOTAL FOR PROJ NO. 49218.25										0.9																			
GRAND TOTAL										25.36				1.50	300.00	1.50	600	280	650.00	120.00	640	1.50	40	150.00	0.75	150.00	75	10	

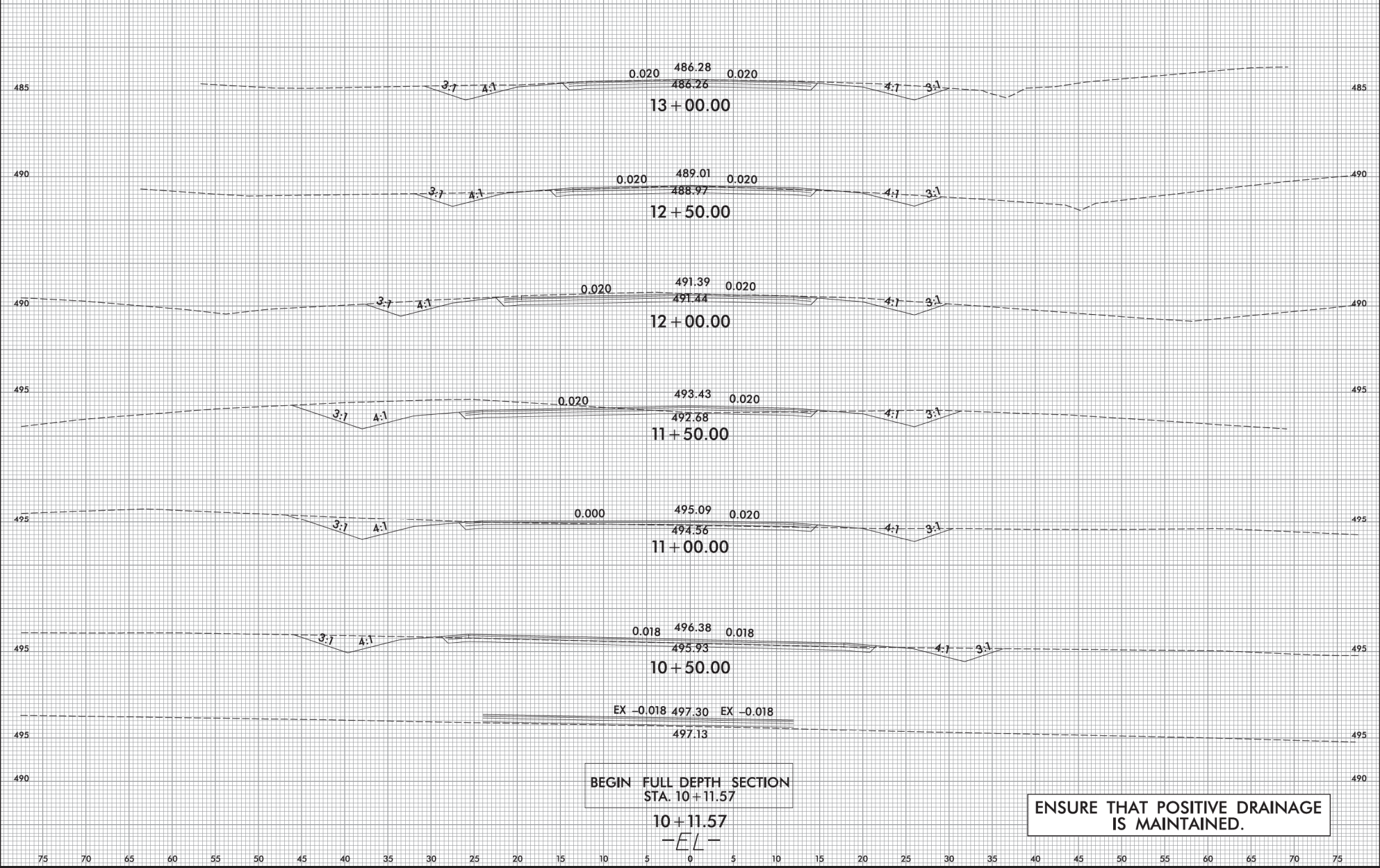
PROJECT NO.	SHEET NO.	TOTAL NO.
49218.16, 49218.17 49218.18, ETC.	22	

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP	4400000000-E	4410000000-E	4413000000-E	4420000000-N	4445000000-E	4457000000-N	4688000000-E	4695000000-E	4709000000-E	4725000000-E	4815000000-E	4820000000-E	4835000000-E	4845000000-N	4905100000-N	4905100000-N												
												WORK ZONE SIGNS (STATIONARY)	BARRICADE MOUNTED WORK ZONE SIGN	WORK ZONE ADVANCE/GENERAL WARNING SIGNING	PORTABLE CHANGEABLE MESSAGE SIGN	TYPE III BARRICADE	TEMPORARY TRAFFIC CONTROL	6" X 90 M WHITE THERMO	6" X 90 M YELLOW THERMO	8" X 90 M WHITE THERMO	24" X 90 M WHITE THERMO	THERMO RT ARROW 90 M	THERMO LT ARROW 90 M	6" WHITE PAINT	6" YELLOW PAINT	8" WHITE PAINT	24" WHITE PAINT	PAINT LT ARROW	PAINT RT ARROW	NON-CAST IRON SNOWPLOW BLE PAVEMENT MARKER	NON-CAST IRON SNOWPLOW BLE PAVEMENT MARKER								
				MI		FT						SF	SF	SF	EA	LF	LS	LF	LF	LF	EA	EA	LF	LF	LF	EA	EA	EA	EA										
49218.16	Hoke	1	KING ROAD	FDR - FROM MORGANTON RD TO INTERSECTION REALIGNMENT LIPINS (STA. 13+73.24)	1.2	2	2WU	7.17	28	0.07	7.24	126	20	118	2	16		75,647	51,079		15			75,647	51,079		15			487									
49218.16	Hoke	1	KING ROAD	INTERSECTION REALIGNMENT (KING RD AT PLANK RD)	3	2	2WU	0.07	28	0	0.07		20		1	32		915	700		30	1	1	915	700		30	1	1	5	7								
TOTAL FOR MAP NO. 1								7.24				126	40	118	3	48		76,562	51,779		45	1	1	76,562	51,779		45	1	1	492	7								
TOTAL FOR PROJ NO. 49218.16								7.24				126	40	118	3	48	1,000	76,562	51,779		45	1	1	76,562	51,779		45	1	1	492	7								
																		128,341												499									
49218.17	Hoke	2	MORGANTON ROAD	RESURFACING - FROM CJ EAST OF INTERSECTION OF SR 2074 (FORT BRAGG RD) TO CJ AT INTERSECTION WITH MANCHESTER RD.	5	2	2WU	0.58	24	0	0.58							6,170	4,045					6,170	4,045					39									
TOTAL FOR MAP NO. 2								0.58										6,170	4,045					6,170	4,045					39									
TOTAL FOR PROJ NO. 49218.17								0.58									1,000	6,170	4,045					6,170	4,045					39									
																		10,215													39								
49218.18	Hoke	3	MORRISON BRIDGE ROAD	RESURFACING - FROM END OF STATE MAINTENANCE TO MANCHESTER RD	7	2	2WU	0.58	24	0	0.58							6,197	6,197											37									
TOTAL FOR MAP NO. 3								0.58										6,197	6,197											37									
TOTAL FOR PROJ NO. 49218.18								0.58									1,000	6,197	6,197											37									
																		12,394													37								
49218.23	Hoke	4	PLANK ROAD	RESURFACING AND WIDENING - FROM 800' EAST OF CL OF NC HWY 211 TO CJ EAST OF KING ROAD	4	2	2WU	0.42	32	3.74	4.16							5,880	4,234											39	5								
TOTAL FOR MAP NO. 4								0.42										5,880	4,234											39	5								
TOTAL FOR PROJ NO. 49218.23								0.42									1,000	5,880	4,234											39	5								
																		10,114												44									
49218.24	Cumberland, Hoke	5	MANCHESTER ROAD	RESURFACING - FROM LAMONT RD TO C.J. WEST OF BLUES RD	8	2	2WU	5.03	32	0	5.03							53,485	38,338	116				53,485	38,338	116				340									
TOTAL FOR MAP NO. 5								5.03										53,485	38,338	116				53,485	38,338	116				340									
49218.24	Hoke	6	MANCHESTER ROAD	FDR - FROM CJ WEST OF BLUES RD TO CJ EAST OF MORGANTON RD	6	2	2WU	10.61	24	0	10.61	312	60	400	3	48		112,173	68,081					112,173	68,081				705										
TOTAL FOR MAP NO. 6								10.61				312	60	400	3	48		112,173	68,081					112,173	68,081				705										
TOTAL FOR PROJ NO. 49218.24								15.64				312	60	592	3	48	1,000	165,658	106,419	116				165,658	106,419	116			1,045										
																		272,077															1,045						
49218.25	Hoke	7	ATF ROAD	PAVEMENT MARKINGS - FROM KING RD TO C.J.	2	2WU	0.9	24	0	0.9								9,600	9,600										59										
TOTAL FOR MAP NO. 7								0.9										9,600	9,600										59										
TOTAL FOR PROJ NO. 49218.25								0.9									1,000	9,600	9,600										59										
																		19,200													59								
GRAND TOTAL								25.36				438	100	929	6	96	1,000	270,067	182,274	116	45	2	1	248,390	162,243	116	45	1	1	1,711	12								
																		482,341																				1,723	

B:\23\99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	49218.16	X-1



BEGIN FULL DEPTH SECTION
STA. 10+11.57

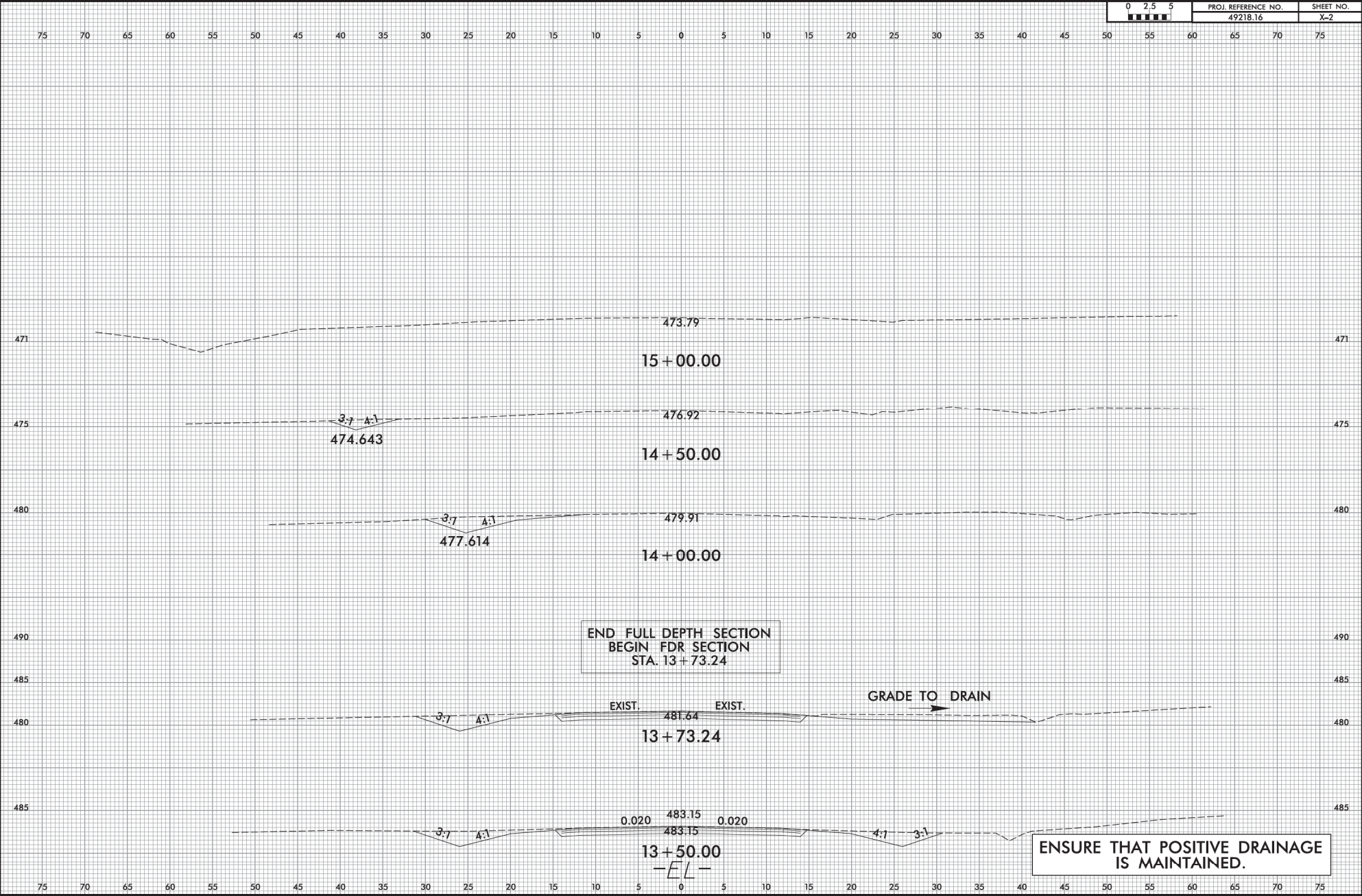
10+11.57
-E/L-

ENSURE THAT POSITIVE DRAINAGE
IS MAINTAINED.

12/14/2015 10:00 AM R:\23\99\23\99.dwg

B:\23\99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	49218.16	X-2

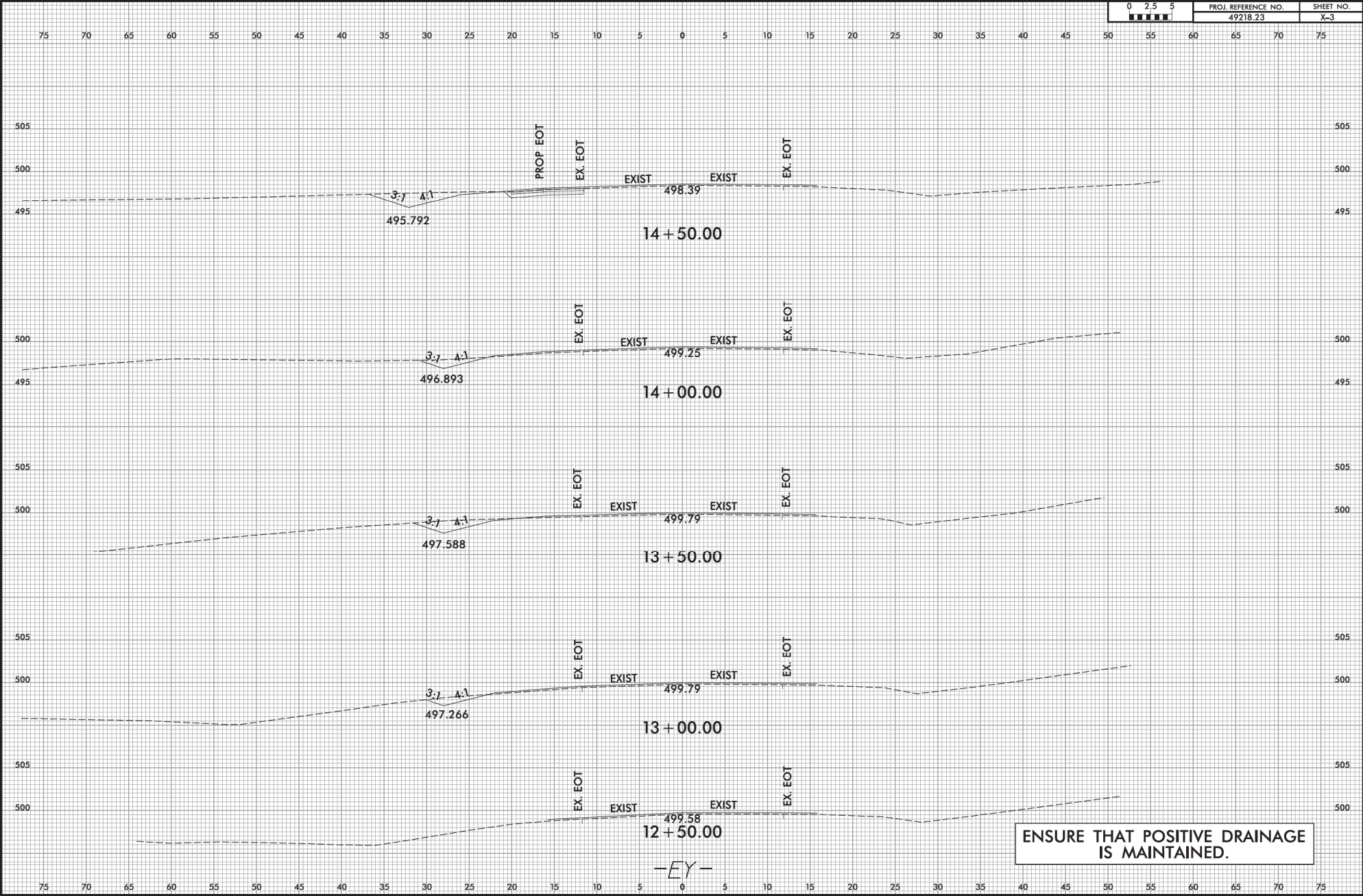


12/14/2015 10:58:11 AM C:\Users\king.RD\My Documents\121818\121818.dgn

8/23/19

12/18/2019 10:58:58 AM
D:\Projects\190810\190810_Plan\190810_Plan_Rd_BDY_XPL.dwg

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	49218.23	X-3

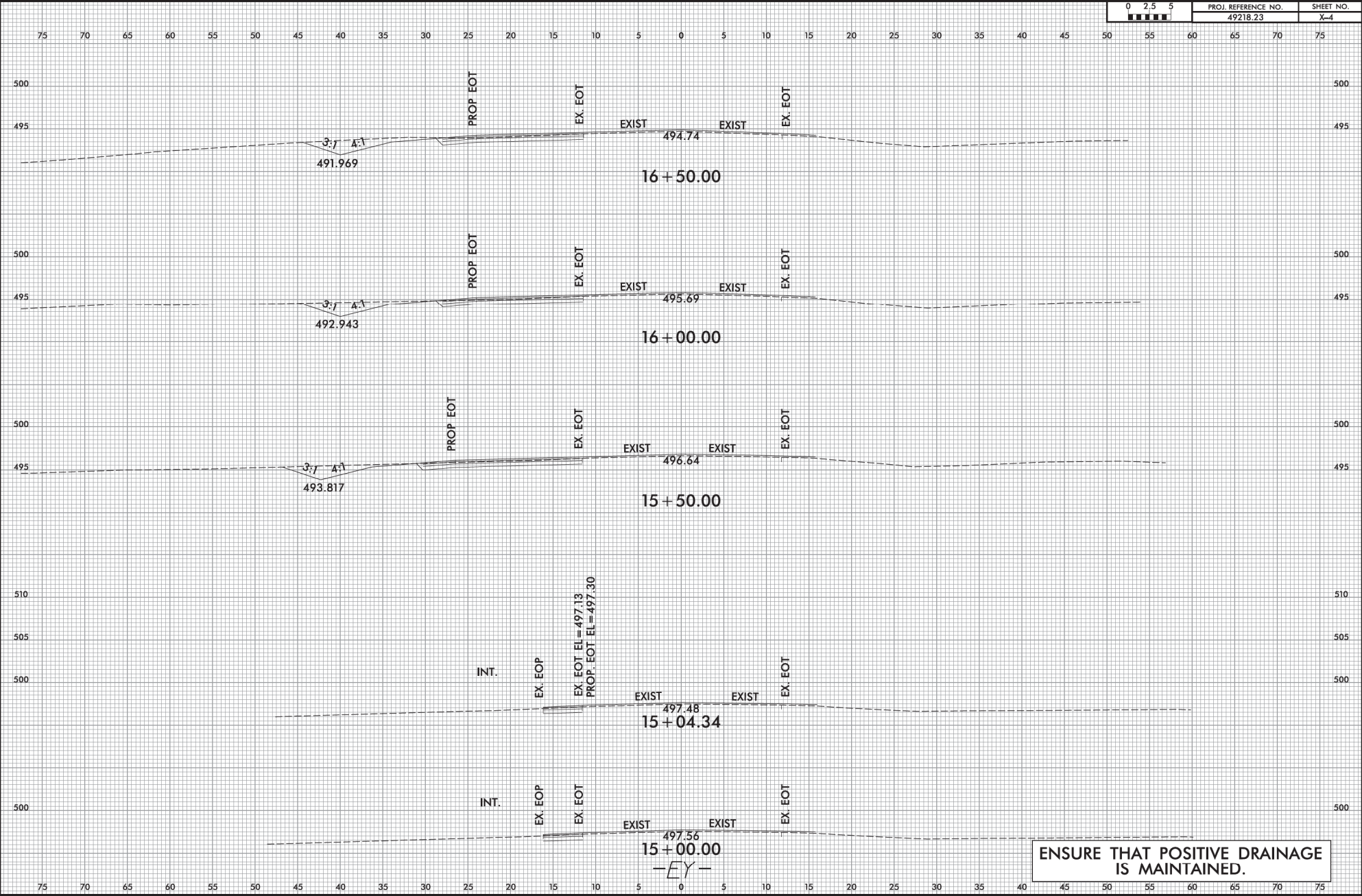


ENSURE THAT POSITIVE DRAINAGE IS MAINTAINED.

-EY-

8/23/19

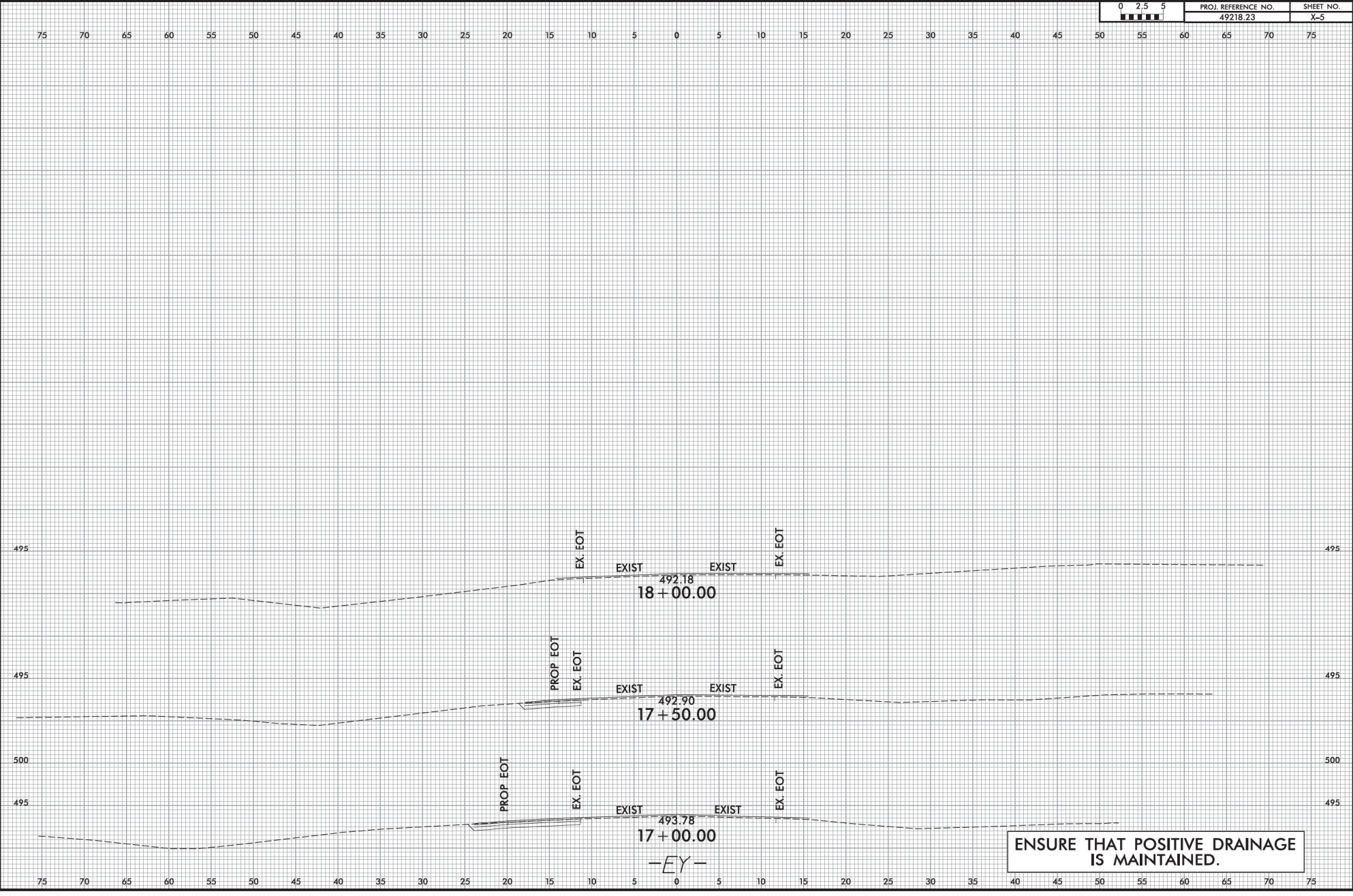
0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	49218.23	X-4



ENSURE THAT POSITIVE DRAINAGE IS MAINTAINED.

12/18/2019 8:58:15 AM C:\Users\p1ank\Public\190823\190823.dwg

0 2.5 5 	PROJ. REFERENCE NO. 49218.23	SHEET NO. X-5
-------------------	---------------------------------	------------------



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

HOKE COUNTY



PHASING

STEP 1) USING ROADWAY STANDARD DRAWING (RSD) 1101.02, 3 OF 9, INSTALL ALL ROAD CLOSURE SIGNING AND DEVICES ON KING ROAD. COVER SIGNS USING AN APPROVED METHOD PER THE DISCRETION OF THE ENGINEER.

- NOTE: INSTALL ROAD CLOSURE BARRICADES (TYPE III WITH BARRICADE MOUNTED SIGN R11-2 ATTACHED) AT MORGANTON AND KING, AND AT PLANK AND KING.

THE CONTRACTOR SHALL COMPLETE STEP 2 BY MAY 1, 2025. SEE INTERMEDIATE CONTRACT TIMES AND LIQUIDATED DAMAGES.

STEP 2) WHEN READY TO CLOSE THE ROADWAY, UNCOVER THE CLOSURE SIGNING, CLOSE KING ROAD AND CONSTRUCT ROADWAY, INCLUDING THE REALIGNMENT OF THE KING RD/PLANK RD INTERSECTION. OPEN KING RD UPON COMPLETION.

- NOTE: CONTRACTOR SHALL ALWAYS MAINTAIN ACCESS TO ATF ROAD DURING CONSTRUCTION ON FINAL PAVED SURFACE. WORK SHALL BE PHASED ALLOWING ACCESS EITHER FROM THE NORTH OR SOUTH ON THE FINAL SURFACE.

STEP 3) USING RSD 1101.03, 2 OF 9, INSTALL ALL ROAD CLOSURE SIGNING AND DEVICES ON MANCHESTER ROAD. COVER SIGNS USING AN APPROVED METHOD PER THE DISCRETION OF THE ENGINEER.

- NOTE: INSTALL ROAD CLOSURE BARRICADES (TYPE III WITH BARRICADE MOUNTED SIGN R11-2 ATTACHED) AT MORGANTON AND MANCHESTER, AND AT MORRISON BRIDGE AND MANCHESTER.

WHEN READY TO CLOSE THE ROADWAY UNCOVER THE ROAD CLOSURE SIGNING, CLOSE MANCHESTER ROAD, AND CONSTRUCT ROADWAY.

THE CONTRACTOR SHALL COMPLETE STEP 4 IN 45 CONSECUTIVE CALENDAR DAYS. SEE INTERMEDIATE CONTRACT TIMES AND LIQUIDATED DAMAGES.

STEP 4) INSTALL OFFSITE DETOUR SIGNING AND DEVICES ON US 1, NC 24, AND NC 87. THEN, INSTALL ROAD CLOSURE BARRICADES (TYPE III WITH BARRICADE MOUNTED SIGN R11-2 ATTACHED) AT THE FOLLOWING LOCATIONS:

- MORRISON BRIDGE RD AND RIVERVIEW DR WHEN COMPLETING FDR SECTION BETWEEN MORRISON BRIDGE RD AND BLUES RD.
- LAMONT AND MANCHESTER JUST WEST OF JOHN NEIL SHAW RD WHEN MORRISON BRIDGE RD CANNOT BE ACCESSED.

CONSTRUCT MANCHESTER FROM MORRISON BRIDGE ROAD TO BLUES RD UP TO AND INCLUDING THE FINAL LIFT OF SURFACE COURSE AND FINAL PAVEMENT MARKINGS.

- NOTE: MANCHESTER RD FROM MORRISON BRIDGE RD TO BLUES RD TO REMAIN OPEN DURING THE MANCHESTER FDR FROM MORRISON BRIDGE RD TO MORGANTON RD.

UPON COMPLETION, OPEN MANCHESTER ROAD BACK TO THE EXISTING PATTERN.

STEP 5) USING LANE CLOSURES, RESURFACE MANCHESTER ROAD, MORRISON BRIDGE ROAD, PLANK, AND MORGANTON ROAD. [SEE ROADWAY PLANS]

USING LANE CLOSURES, INSTALL PAVEMENT MARKINGS ON ATF ROAD.

STEP 6) OPEN ALL ROADS TO THE FINAL TRAFFIC PATTERN AND REMOVE ALL ROAD CLOSURE SIGNING AND TEMPORARY TRANSPORTATION MANAGEMENT DEVICES.

INDEX OF SHEETS

SHEET NO.	TITLE
TMP-01	TITLE SHEET, INDEX OF SHEETS, LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, AND PHASING
TMP-02	TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT STRATEGIES AND GENERAL NOTES)
TMP-03	ADVANCE WARNING SIGNS FOR RURAL AND SUBURBAN 2-LANE ROADWAY RESURFACING

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2024 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.01	WORK ZONE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1145.01	BARRICADES

4/22/2024 4:45:01 PM 8 Fort Bragg Roads\Div 8 Roads and Plans\Traffic\Traffic Design\2 Plan Design\49218.16,etc. TMP_01THo.dgn



<p>PLANS PREPARED BY:</p> <p>R. K. MURPHY, J.R., P.E.</p> <hr/> <p>D. ALLEN HAYES, E.I.</p>	<p>NCDOT CONTACTS:</p> <p>MICHAEL RICKETTS, P.E.</p> <p>PROJECT ENGINEER</p> <hr/> <p>PROJECT DESIGN ENGINEER</p>
--	--



WETHERILL ENGINEERING

1223 Jones Franklin Rd.
Raleigh, N.C. 27606
License No. E-0377
Fax: 919 851 8077
Fax: 919 851 8107

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

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

APPROVED: *[Signature]*

DATE: 4/22/2024

SEAL

SHEET NO.
TMP-01

49218.16, etc.

TIP PROJECT:

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.03	TEMPORARY ROAD CLOSURES
1110.01	STATIONARY WORK ZONE SIGNS
1145.01	BARRICADES

LEGEND

GENERAL

➔ NORTH ARROW

TRAFFIC CONTROL DEVICES

⏏ BARRICADE (TYPE III)

TEMPORARY SIGNING

⌄ STATIONARY SIGN

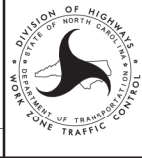
4/22/2024
User: AINBYBS
4/22/2024
User: AINBYBS
8 Fort Bragg Roads, Div 8 Records and Files Traffic\Traffic Design\2 Plan Design\4
WZTC\VDRA\49218\16\etc_TMP_01A_ Legend.dgn



1223 Jones Franklin Rd.
Raleigh, N.C. 27606
License No. F-0377
Bus: 919 851 8077
Fax: 919 851 8107

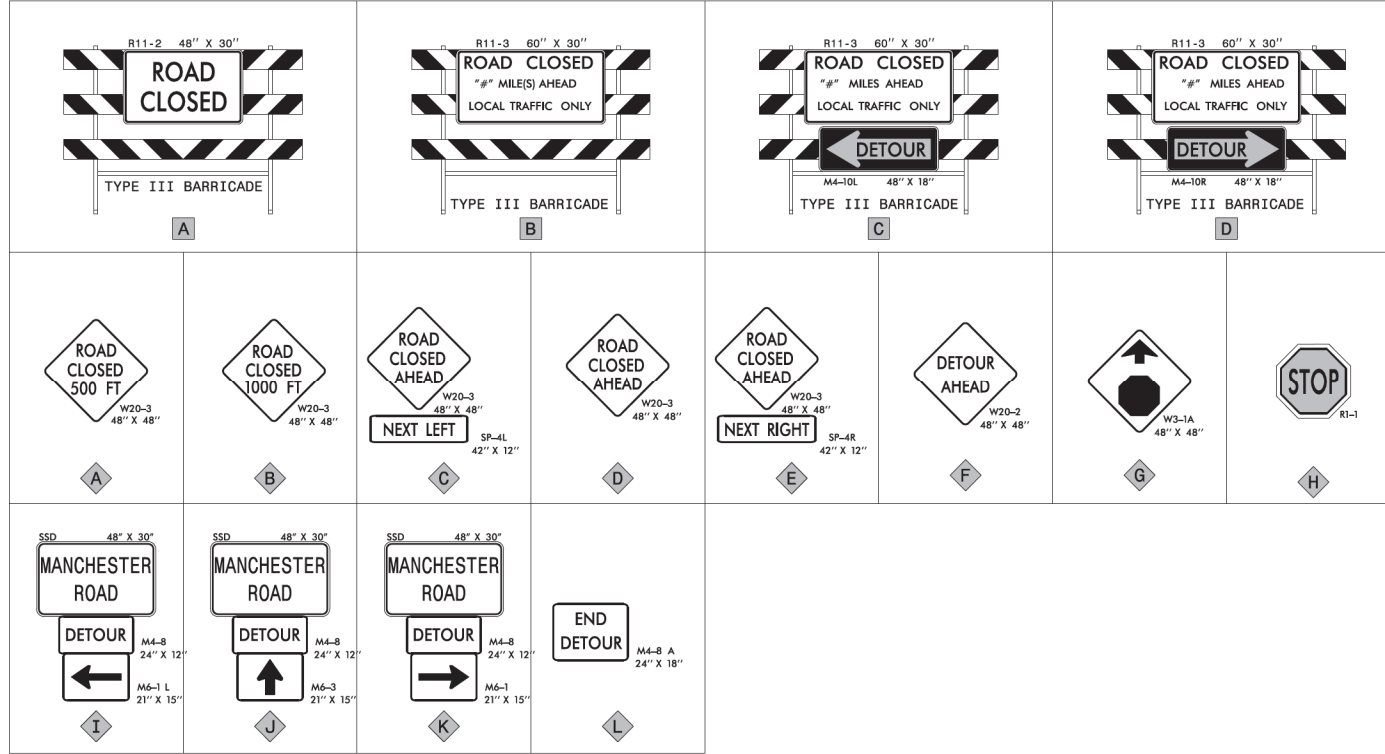
TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
CIVIL/SITE DESIGN - GROUPS - CONSTRUCTION OBSERVATION

APPROVED: _____
DATE: 4/22/2024



LIST OF APPLICABLE
ROADWAY STANDARD
DRAWINGS, AND LEGEND

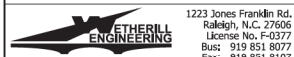
**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**



4/22/2024 4:56:01 PM 8 Fort Bragg Roads, Div 8 Roads and Pipes Traffic Design, WZTC\DRN\49218.16, etc. TMP-01B SLD.dgn User: ablyns

BARRICADES
-WITH MOUNTED SIGNING

SIGNING
-STATIONARY MOUNTED

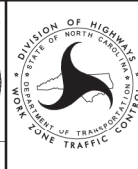


TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
CIVIL/SITE DESIGN - GROUPS - CONSTRUCTION OBSERVATION

APPROVED: *[Signature]*
DATE: 4/22/2024

SEAL 018981
NORTH CAROLINA PROFESSIONAL ENGINEER
MURPHY

**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**



SIGN AND DEVICE LEGEND

GENERAL NOTES

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS, AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS OR RESULT IN DUPLICATE OR UNDESired OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING, OR REMOVAL OF DEVICES AS DIRECTED BY THE ENGINEER.

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT EXCEPT WHEN OTHERWISE NOTED IN THE PLAN OR DIRECTED BY THE ENGINEER.

TIME RESTRICTIONS

- A) LIQUIDATED DAMAGES WILL NOT APPLY WHILE A ROAD IS CLOSED IN ACCORDANCE WITH PROJECT PHASING. CONTRACTOR SHALL NOT CLOSE OR NARROW A LANE OF TRAFFIC ON ALL MAPS, DETAIN AND/OR ALTER THE TRAFFIC FLOW ON OR DURING HOLIDAY WEEKENDS, SPECIAL EVENTS, OR ANY OTHER TIME WHEN TRAFFIC IS UNUSUALLY HEAVY, INCLUDING THE FOLLOWING SCHEDULES:

ROAD NAME

- ALL MAPS

HOLIDAY

- FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
- FOR NEW YEAR'S, BETWEEN THE HOURS OF 6:30 A.M. DECEMBER 31st TO 8:00 P.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 8:00 P.M. THE FOLLOWING TUESDAY.
- FOR EASTER, BETWEEN THE HOURS OF 6:30 A.M. THURSDAY AND 8:00 P.M. MONDAY.
- FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:30 A.M. FRIDAY TO 8:00 P.M. TUESDAY.
- FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:30 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 8:00 P.M. THE DAY AFTER INDEPENDENCE DAY.
IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 6:30 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 8:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.
- FOR LABOR DAY, BETWEEN THE HOURS OF 6:30 A.M. FRIDAY AND 8:00 P.M. TUESDAY.
- FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:30 A.M. TUESDAY TO 8:00 P.M. MONDAY.
- FOR CHRISTMAS, BETWEEN THE HOURS OF 6:30 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 8:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.
- HOLIDAYS AND HOLIDAY WEEKENDS SHALL INCLUDE NEW YEAR'S, EASTER, MEMORIAL DAY, INDEPENDENCE DAY, LABOR DAY, THANKSGIVING, AND CHRISTMAS. THE CONTRACTOR SHALL SCHEDULE HIS WORK SO THAT LANE CLOSURES ARE NOT REQUIRED DURING THESE PERIODS, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

LANE AND SHOULDER CLOSURE REQUIREMENTS

- B) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.
- C) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.
- D) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.
- E) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRAFFIC CONTROL PLANS, ROADWAY STANDARD DRAWINGS, OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.
- F) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY, RAMP, OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.
- G) DO NOT INSTALL MORE THAN ONE LANE CLOSURE IN ANY ONE DIRECTION ON ANY RD.
- H) DO NOT EXCEED A DIFFERENCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (WB-11) X FT/MI IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

- I) NOTIFY THE ENGINEER THIRTY (30) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

SIGNING

- J) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- K) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.
AND
PROVIDE SIGNING REQUIRED FOR THE OFF-SITE DETOUR ROUTE AS SHOWN IN THE TRAFFIC CONTROL PLANS.
- L) COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED TO CLOSE THE ROAD WHEN ROAD CLOSURE IS NOT IN OPERATION.
AND
COVER OR REMOVE ALL SIGNS REQUIRED FOR THE OFF-SITE DETOUR WHEN THE DETOUR IS NOT IN OPERATION.
- M) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

TRAFFIC CONTROL DEVICES

- N) WHEN LANE CLOSURES ARE NOT IN EFFECT SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN THE POSTED SPEED LIMIT (MPH) EXCEPT, 10 FT ON-CENTER IN RADIUS, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY. REFER TO STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SECTIONS 1130 (DRUMS), 1135 (CONES) AND 1180 (SKINNY DRUMS) FOR ADDITIONAL REQUIREMENTS.
- O) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.
- P) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

MISCELLANEOUS

- Q) IN THE EVENT A TIE-IN CANNOT BE MADE IN ONE DAY'S TIME, BRING THE TIE-IN AREA TO AN APPROPRIATE ROADWAY ELEVATION AS DETERMINED BY THE ENGINEER. PLACE BLACK ON ORANGE "LOOSE GRAVEL" SIGNS (WB-7) AND BLACK ON ORANGE "PAVEMENT ENDS" SIGNS (WB-3) 500 FT AND 500 FT RESPECTIVELY IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS TO DELINEATE THE EDGE OF ROADWAY ALONG UNPAVED AREAS.

MANAGEMENT STRATEGIES

THE FOLLOWING LISTED WORK ZONE STRATEGIES ARE RECOMMENDED FOR INCLUSION WITHIN THIS TRANSPORTATION MANAGEMENT PLAN (TMP).

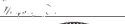
RECOMMENDED STRATEGIES:

- TRAFFIC MANAGEMENT STRATEGIES:
OFF-SITE DETOURS
ONE-LANE, TWO WAY OPERATION (FLAGGING)

4/22/2024 8:47:58 AM C:\Users\jhayes\OneDrive\Desktop\49218.16\Drawings\Traffic\Traffic Management Strategies and General Notes.dwg User: jhayes

ETHERILL ENGINEERING
1223 Jones Franklin Rd.
Raleigh, N.C. 27606
License No. F-0377
Bus: 919 851 8077
Fax: 919 851 8107

TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
CIVIL/SITE DESIGN - GEOTECH - CONSTRUCTION OBSERVATION

APPROVED: 
DATE: 4/22/2024

PROFESSIONAL ENGINEER
SEAL 018981
NORTH CAROLINA
REGISTERED PROFESSIONAL ENGINEER
MURPHY



**TRANSPORTATION OPERATIONS
PLAN: (MANAGEMENT
STRATEGIES AND GENERAL
NOTES)**

**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**

SIGN NUMBER: name TYPE: D QUANTITY: 1 SIGN WIDTH: 4'-0" HEIGHT: 2'-6" TOTAL AREA: 10.0 Sq.Ft. BORDER TYPE: FLUSH RECESS: 0.38" WIDTH: 0.63" RADII: 1.5" NO. Z BARS: LENGTH:	BACKG COLOR: Orange COPY COLOR: Black <table border="1" style="width: 100%; height: 50px;"> <tr> <th>SYMBOL</th> <th>X</th> <th>Y</th> <th>WID</th> <th>HT</th> </tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </table>	SYMBOL	X	Y	WID	HT																																														DESIGN BY: DAH PROJECT ID: 49218.21 CHECKED BY: WEI LOCATION: OFFSITE DETOUR <div style="text-align: center;"> </div>	Nov 7, 2023 DIV: 8
SYMBOL	X	Y	WID	HT																																																	
USE NOTES: <ol style="list-style-type: none"> Legend and border (except those that are colored black) shall be direct applied Grade A sheeting. Background shall be Grade A, B, or C reflective sheeting. Shields; A, B, and C type arrows shall be on 0.032" (0.8mm) aluminum with Grade A reflective sheeting and demountable. Bottom panel shall be yellow Grade C sheeting. Legend shall be direct applied black non-reflective sheeting. Arrow shall be on 0.032" aluminum, black non-reflective sheeting and demountable. Yellow panel is: 																																																					

Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter locations are panel edge to lower left corner

													Series/Size Text Length		
M	A	N	C	H	E	S	T	E	R						
5	9.4	13.6	17.6	21.5	25.6	29	32.6	36.1	39.7				C 2000	38	
R	O	A	D												
15.7	19.5	23.4	27.7											C 2000	15.3

FILENAME: 49218.21_TMP_02 OSD NORTH CAROLINA D.O.T. SIGN DETAIL


NOTES:
1) REFER TO ROADWAY STANDARD DRAWINGS 1101.03, SHEETS 1 & 2 OF 9 FOR APPLICABLE NOTES AND ROAD CLOSURE SIGNING AND DEVICES.



1223 Jones Franklin Rd.
Raleigh, N.C. 27606
License No. F-0377
Bus: 919 851 8077
Fax: 919 851 8107

TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
CIVIL/SITE DESIGN - GROUPS - CONSTRUCTION OBSERVATION

APPROVED: _____
DATE: 4/22/2024

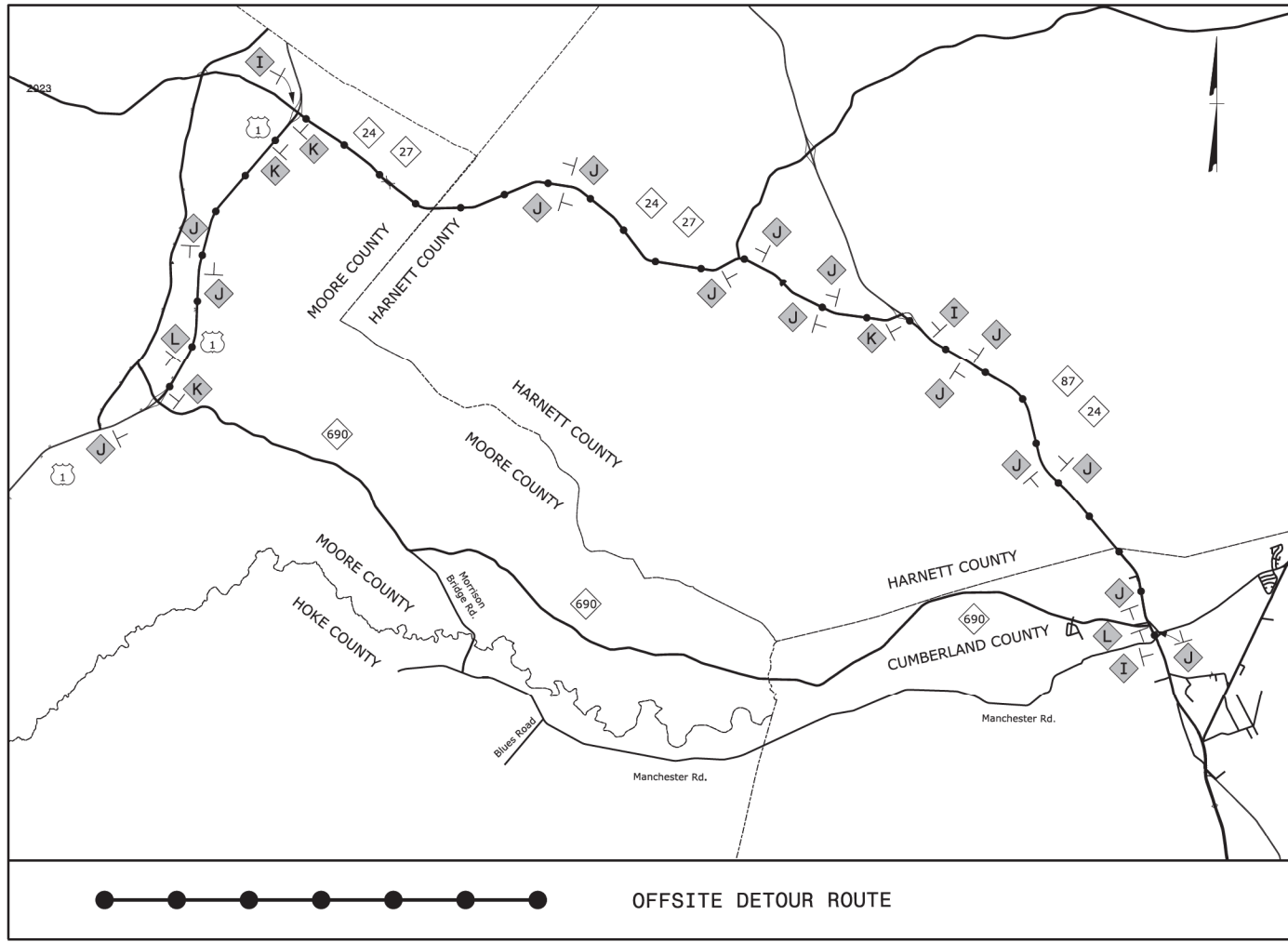


**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**



SPECIAL SIGN DESIGN

4/22/2024 4:55:00 PM C:\Users\user\AppData\Local\Temp\03_SSD.dgn

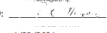


 OFFSITE DETOUR ROUTE

NOTES:
1) REFER TO SHEET TMP-01B FOR SIGN AND DEVICE LEGEND.

ETHERILL ENGINEERING
1223 Jones Franklin Rd.
Raleigh, N.C. 27606
License No. F-0377
Bus: 919 851 8077
Fax: 919 851 8107

TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
CIVIL/SITE DESIGN - GROUPS - CONSTRUCTION OBSERVATION

APPROVED: 
DATE: 4/22/2024

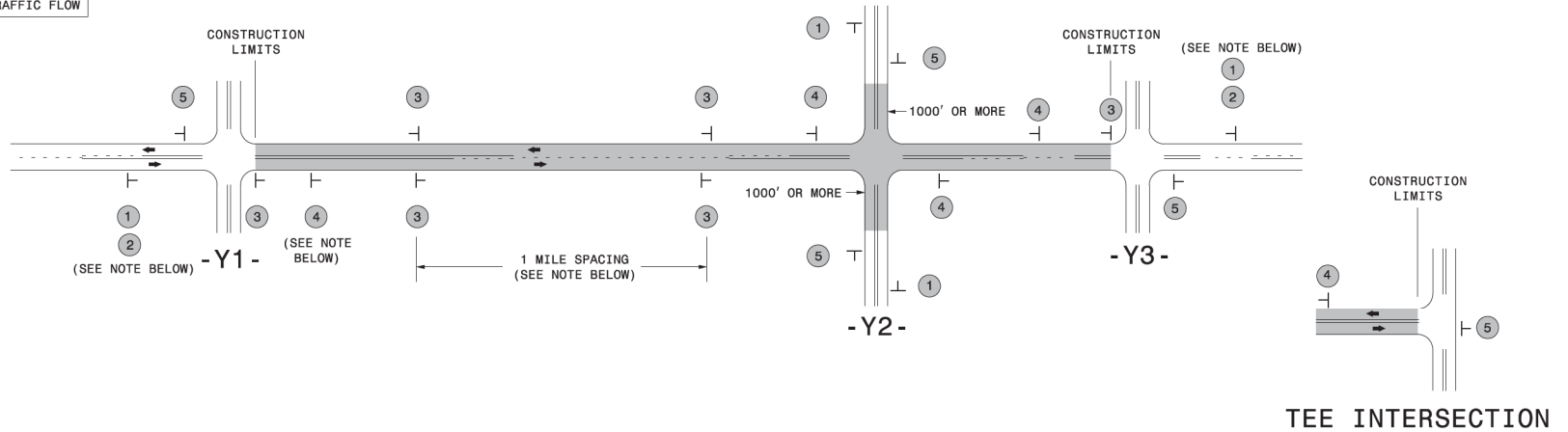


OFFSITE DETOUR

4/22/2024 8 Fort Bragg Roads, Div 8 Roads and Pipes Traffic Design, Plan Design, WZTC\DRN\49218.16, etc. TMP_04_CSD.dgn User: ALBYAS

SIGNING FOR RESURFACING PROJECTS

LEGEND
 STATIONARY SIGN
 DIRECTION OF TRAFFIC FLOW



MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	1	 <small>W20-1 48" X 48"</small>	PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.	
	2	 <small>W7-3aP 24" X 18"</small>	#2 SIGN ONLY USED WHEN CONSTRUCTION LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO NEXT WHOLE NUMBER. (NO FRACTIONAL OR DECIMAL NUMBERS)	
	3	 <small>SP 13107 48" X 48"</small>	- PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER. - AT TEE INTERSECTIONS INSTALL INITIALLY 1/2 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER.	
	4	 <small>SP 13106 48" X 48"</small>	- THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS. - DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS. - INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE. - FOR MULTIPLE -Y- LINES THAT ARE SEPARATED BY 0.25 MILES OR LESS, TREAT AS A SINGLE UNIT AND INSTALL WITHIN 500' OF EACH APPROACH. - A MAXIMUM OF 2 SIGN SETS PER MILE. DO NOT INSTALL WHEN -Y- LINES ARE WITHIN 0.5 MILES FROM "END ROAD WORK" SIGN. - FOR TEE INTERSECTIONS, INSTALL WITHIN 500' +/- OF THE INTERSECTION ALONG -L- LINE.	
	5	 <small>G20-2 A 48" X 24"</small>	PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.	
THE ABOVE SIGNS ARE ALL THAT ARE REQUIRED FOR A CONTRACTOR TO BEGIN A RESURFACING CONTRACT. ANY ADDITIONAL SIGNS REQUESTED BY NCDOT DIVISIONS SHALL BE INSTALLED WITHIN 7 BUSINESS DAYS OF THE START OF CONTRACT WORK.				
MAPS LESS THAN 2 MILES			FOR RESURFACING MAPS WITH CONSTRUCTION LIMITS LESS THAN 2 MILES IN LENGTH, NO STATIONARY SIGNS ARE REQUIRED. USE PORTABLE "ROAD UNDER CONSTRUCTION" OR "ROAD WORK AHEAD" SIGNS IN LIEU OF STATIONARY ADVANCE WARNING SIGNS.	

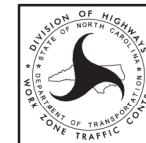
NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:

- 1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE
- 2) SUBDIVISION ROADS
- 3) DEAD END ROADS

WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, PORTABLE ADVANCE WARNING SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.

W20-1
48" X 48"
 PLACED 500' IN ADVANCE OF FLAGGER.

W20-7 A
48" X 48"
 PLACED 250' IN ADVANCE OF FLAGGER.




**ADVANCE WARNING SIGNS
FOR
RURAL AND SUBURBAN
2-LANE ROADWAY
RESURFACING**

4/22/2024 10:58:42 AM
C:\Users\jmurphy\OneDrive\Documents\Traffic Design\Traffic Design\2 Plan Design\ Pavement Markings\49218.16,etc..PMP-01Title.dgn

T.I.P.: 49218.16,etc.

**STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING PLAN
HOKE COUNTY**

TIP NO. 49218.16, etc.	SHEET NO. PMP-01
APPROVED: _____	
DATE: 4/22/2024	
SEAL	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

INDEX

SHEET NO.	DESCRIPTION
PMP-01	PAVEMENT MARKING PLAN TITLE AND SCHEDULE SHEET
PMP-02	PAVEMENT MARKING DETAIL

ROADWAY STANDARD DRAWING

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2024 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO-LANE AND MULTILANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY

FINAL PAVEMENT MARKING SCHEDULE

SYMBOL	DESCRIPTION	PAY ITEM
T20	WHITE SOLID EDGE LINE	THERMOPLASTIC (6", 90 MIL)
T21	WHITE SOLID LANE LINE	THERMOPLASTIC (6", 90 MIL)
T23	3 FT. - 9 FT./SP WHITE MINISKIP	THERMOPLASTIC (6", 90 MIL)
T24	2 FT. - 6 FT./SP WHITE MINISKIP	THERMOPLASTIC (6", 90 MIL)
T33	YELLOW DOUBLE CENTER	THERMOPLASTIC (6", 90 MIL)
T61	WHITE STOPBAR	THERMOPLASTIC (24", 90 MIL)
T70	LEFT TURN ARROW	THERMOPLASTIC PAVEMENT MARKING SYMBOLS (90 MIL)
T71	RIGHT TURN ARROW	THERMOPLASTIC PAVEMENT MARKING SYMBOLS (90 MIL)
MA	YELLOW & YELLOW	PERMANENT RAISED MARKER
MB	CRYSTAL & RED	PERMANENT RAISED MARKER

PLAN SUBMITTED TO:

MICHEAL RICKETTS, P.E., PROJECT MANAGER



GENERAL NOTES

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT, EXCEPT WHEN OTHERWISE NOTED IN THE PLAN, OR DIRECTED BY THE ENGINEER.

- A) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOWS:

ROAD NAME	MARKING	MARKER
ALL ROADS	THERMOPLASTIC	PERMANENT RAISED MARKER
- B) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- C) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS.
- D) PASSING ZONES WILL BE DETERMINED IN THE FIELD AND MUST BE APPROVED BY THE ENGINEER.
- E) STOP BAR LOCATION AT NON-SIGNALIZED INTERSECTIONS MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER.
- F) UNLESS OTHERWISE SPECIFIED, HEATED-IN-PLACE THERMOPLASTIC MAY BE USED IN LIEU OF EXTRUDED THERMOPLASTIC FOR STOP BARS, SYMBOLS, CHARACTERS AND DIAGONALS. IF HEATED-IN-PLACE IS USED, IT SHALL BE PAID FOR USING THE EXTRUDED THERMOPLASTIC PAY ITEM.
- G) SEE ROADWAY PLANS FOR ALTERNATE CURB RAMP DESIGNS WHEN INDICATED ON PAVEMENT MARKING DETAIL SHEETS.
- H) ALL STATION ARE CONSIDERED +/- UNLESS OTHERWISE SHOWN ON THE PLANS.

PLAN PREPARED BY: Wetherill Engineering, Inc.

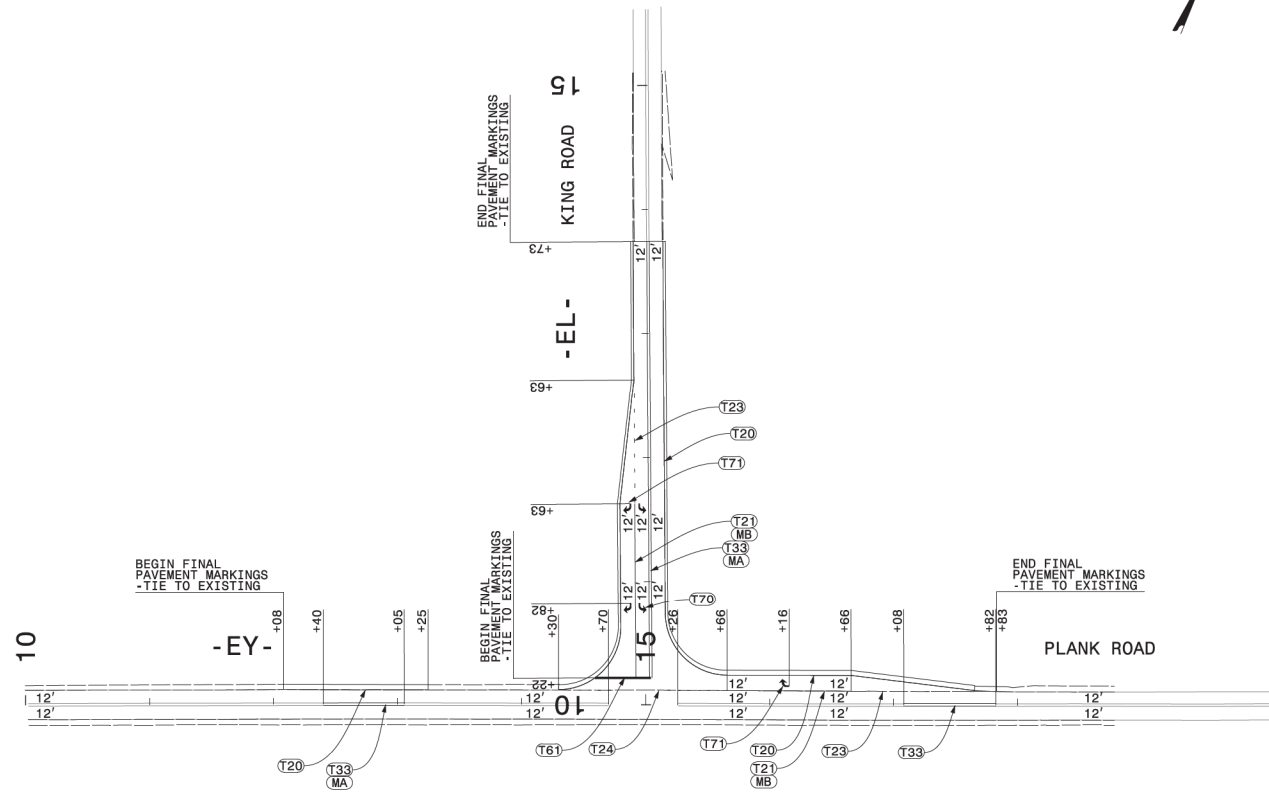
R.K. MURPHY, JR., P.E.	PROJECT MANAGER
D. ALLEN HAYES, E.I.	TRAFFIC DESIGN ENGINEERING INTERN



1223 Jones Road, Raleigh, N.C. 27606
 Phone: 919.851.8077
 Fax: 919.851.8077

TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
 CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

4/22/2024 11:58:42 AM C:\Users\jfranklin\OneDrive\Documents\Projects\49218.16\etc\PMP-02.dgn



TIP NO. 49218.16, etc.	SHEET NO. PMP-02
APPROVED: <i>[Signature]</i>	
DATE: 4/22/2024	
SEAL	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

WETHERILL ENGINEERING

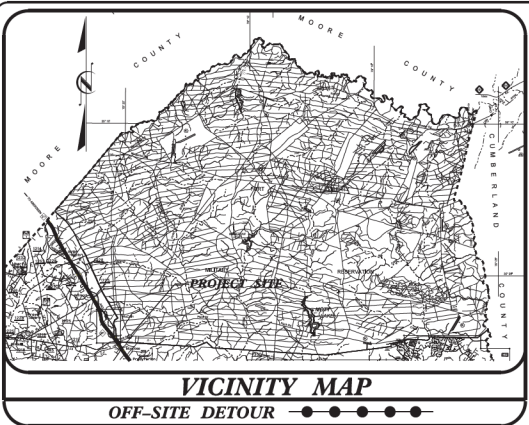
1223 Jones Franklin Rd.
Raleigh, N.C. 27606
License No. F-0377
Bus: 919 851 8077
Fax: 919 851 8107

TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

PAVEMENT MARKING DETAIL

PROJECT: 49218.16

CONTRACT: C204951



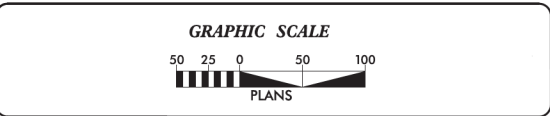
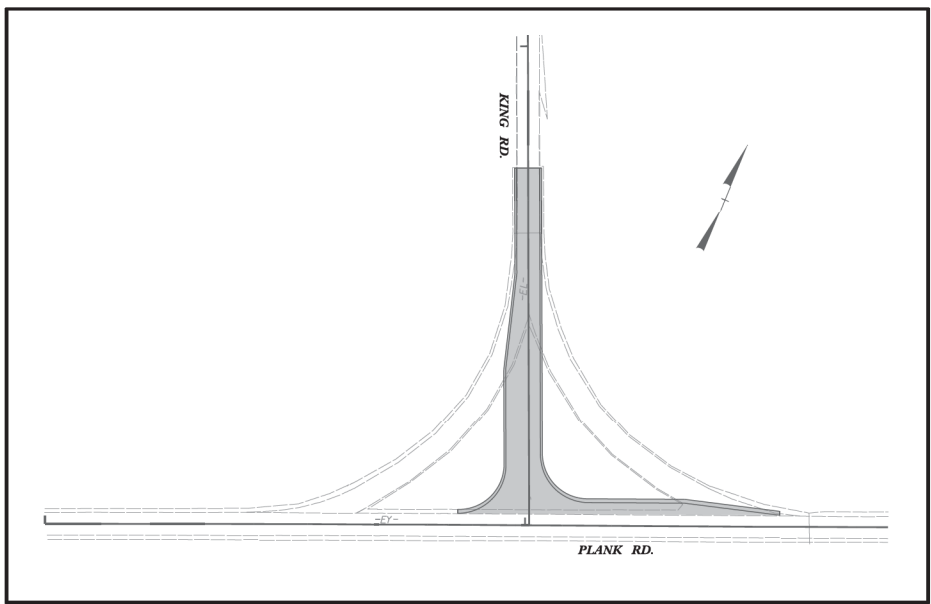
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

HOKE COUNTY

LOCATION: INTERSECTION OF PLANK RD. AND KING RD.
TYPE OF WORK: GRADING, DRAINAGE, PAVING & STRUCTURE

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	49218.16	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

THIS PROJECT CONTAINS EROSION CONTROL PLANS FOR CLEARING AND GRUBBING PHASE OF CONSTRUCTION.



THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE APPLICABLE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE APRIL 1, 2019 AND ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF WATER RESOURCES.

WETHERILL ENGINEERING
1223 JONES FRANKLIN ROAD
RALEIGH, NC 27606
PH: 919 887 8057
FAX: 919 887 8057

Prepared In the Office of:
WETHERILL ENGINEERING, INC.
1223 JONES FRANKLIN ROAD
RALEIGH, NC 27606

Designed by:
KATIE ESTEP 4485
NAME LEVEL III CERTIFICATION NO.

Roadway Standard Drawings

The "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2024 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

4/16/2024 10:00 AM Plank Rd. Detour - TBEI.dwg

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. 49218.16	SHEET NO. EC-02
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

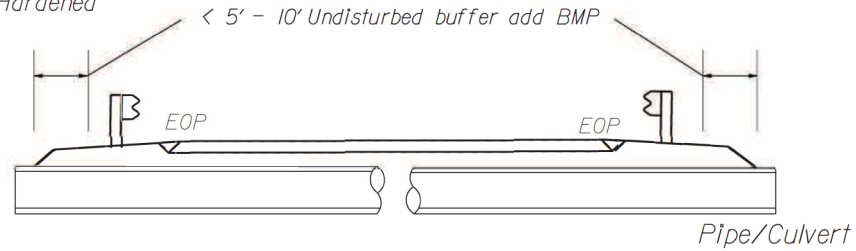
EROSION & SEDIMENT CONTROL LEGEND

Std. #	Description	Symbol	Std. #	Description	Symbol
1605.01	Temporary Silt Fence		1633.01	Temporary Rock Silt Check Type A	
1606.01	Special Sediment Control Fence		1633.02	Temporary Rock Silt Check Type B	
1622.01	Temporary Berms and Slope Drains		1633.03	Temporary Rock Silt Check Type A with Excelsior Matting and Flocculant	
1630.02	Silt Basin Type B		1634.01	Temporary Rock Sediment Dam Type A	
1630.03	Temporary Silt Ditch		1634.02	Temporary Rock Sediment Dam Type B	
1630.04	Stilling Basin		1635.01	Rock Pipe Inlet Sediment Trap Type A	A
1630.05	Temporary Diversion		1635.02	Rock Pipe Inlet Sediment Trap Type B	B
1630.06	Special Stilling Basin		1636.01	Excelsior Wattle Check	
1630.07	Skimmer Basin		1636.01	Excelsior Wattle Check with Flocculant	
1630.08	Tiered Skimmer Basin		1636.01	Coir Fiber Wattle Check	
1630.09	Earthen Dam with Skimmer		1636.01	Coir Fiber Wattle Check with Flocculant	
	Infiltration Basin		1636.02	Silt Fence Excelsior Wattle Break	
	Rock Inlet Sediment Trap:			Silt Fence Coir Fiber Wattle Break	
1632.01	Type A	A	1636.03	Excelsior Wattle Barrier	
1632.02	Type B	B	1636.03	Coir Fiber Wattle Barrier	
1632.03	Type C	C			

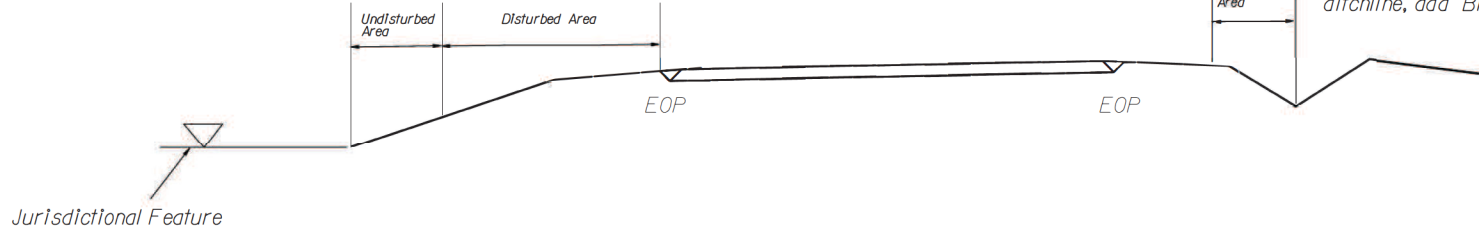
NOTES: Less than 5' - 10' undisturbed buffer from ROW, ditchline, water feature, or drainage Inlet, add BMP.

EROSION CONTROL DETAIL

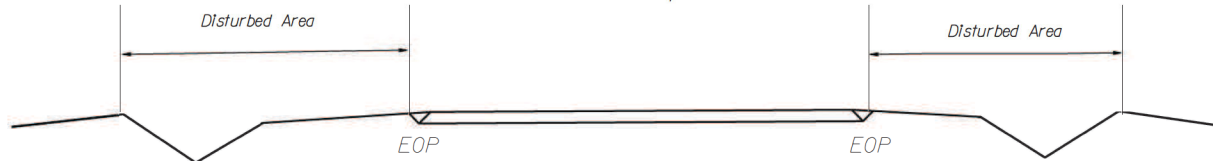
BMP Options: Wattle, Silt Fence or Hardened Aggregate.



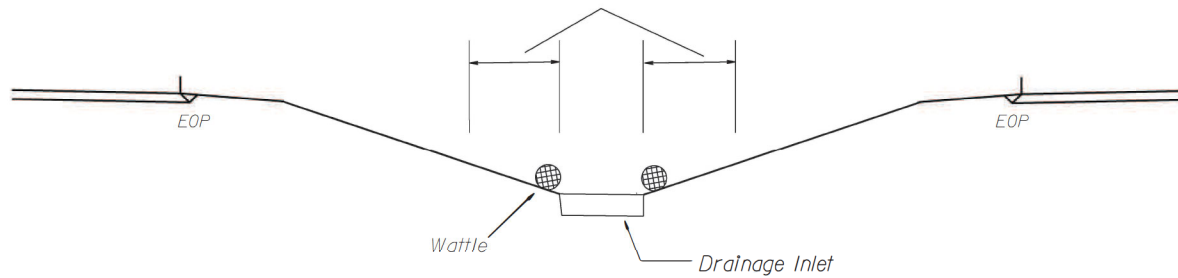
< 5' - 10' Undisturbed buffer from jurisdictional feature add BMP



Use BMP's if shoulders and/or front slopes and/or ditchline and/or backslopes are disturbed



< 5' - 10' Undisturbed buffer from inlet, add wattle



NOT TO SCALE

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. 49218.16	SHEET NO. EC-3
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

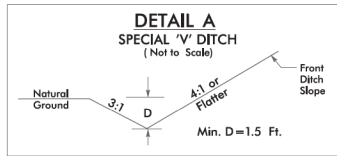
SOIL STABILIZATION TIMEFRAMES

<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 TO 4:1	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH WITH SLOPES STEEPER THAN 4:1. 7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES

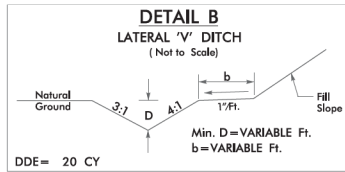
B/17/09

REVISIONS

4/9/2024 4921816_King Rd., PLANK.ene.BDTH.dgn
12:33:43 PM



FROM STA. 10+32 TO STA. 14+00 EL. LT.
 FROM STA. 10+39 TO STA. 13+73 EL. RT.
 FROM STA. 13+00 TO STA. 14+50 EY. LT.
 FROM STA. 15+48 TO STA. 16+80 EY. LT.



FROM STA. 14+00 TO STA. 14+60 EL. LT.

00+91

10+00

-EL- PI Sta. 13+04.22

-EL- POT Sta. 10+00.00=
 -EY- POT Sta. 15+04.34

15+00



1223 Jones Franklin Rd
 Raleigh, N.C. 27606
 License No. F-0377
 Bus: 919 851 8077
 Fax: 919 851 8107

TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
 CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

KING ROAD/PLANK ROAD

PROJECT REFERENCE NO. 4921816	SHEET NO. EC-4/CONSTRJ5
R/W SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**

SCALE 1" = 30'

