



SHEET NO.

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TMP-1A	LIS AND
TMP-1B,1C	GEN
TMP-2	POR LOC
TMP-2A	TEM
TMP-3	TEM
TMP-4	CUL
TMP-5	SID
TMP-6	РНА
TMP - 7	PHA
TMP-8	- Y1
TMP-9	US
TMP-10	PHA
TMP-11-13	US
TMP-14-15	US
TMP-16	US



INDEX OF	SHEETS	SHEET NO.
TITL	Ε	
TITLE SHEET, VICINITY MA		
LIST OF APPLICABLE ROADW AND LEGEND	VAY STANDARD DRAWINGS,	
GENERAL NOTES		
PORTABLE CONCRETE BARRIE LOCATIONS	ER AT TEMPORARY SHORING	
TEMPORARY SHORING NOTES		
TEMPORARY TRAFFIC CONTRO	DL PHASING	
CULVERT SHORING DETAIL		
SIDEWALK CLOSURE DETAIL		
PHASE I & II OUTSIDE WI	DENING CONSTRUCTION DETAILS	
PHASE I & II OUTSIDE WI	DENING CONSTRUCTION TYPICAL DRAWING	
-Y18- EUCALYPTUS RD DET	OUR ROUTE	
US 401 -L- AT NC 59 PHAS	SE I INTERSECTION DETAIL	
PHASE III MEDIAN CONSTRU	JCTION DETAILS	
US 401 -L- PHASE III STE	EP 2	S
US 401 -L- PHASE III STE	EP 3	4(
US 401 -L- AT NC 59 PHAS	SE III INTERSECTION DETAIL	
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	DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
	J. W. Woohandly P	
antec	SEAL 19862	
Services Inc. Road, Suite 300	SEAL 19862	
	19862 WOOLARD	

11/11/2024

ROADWAY STANDARD DRAWINGS

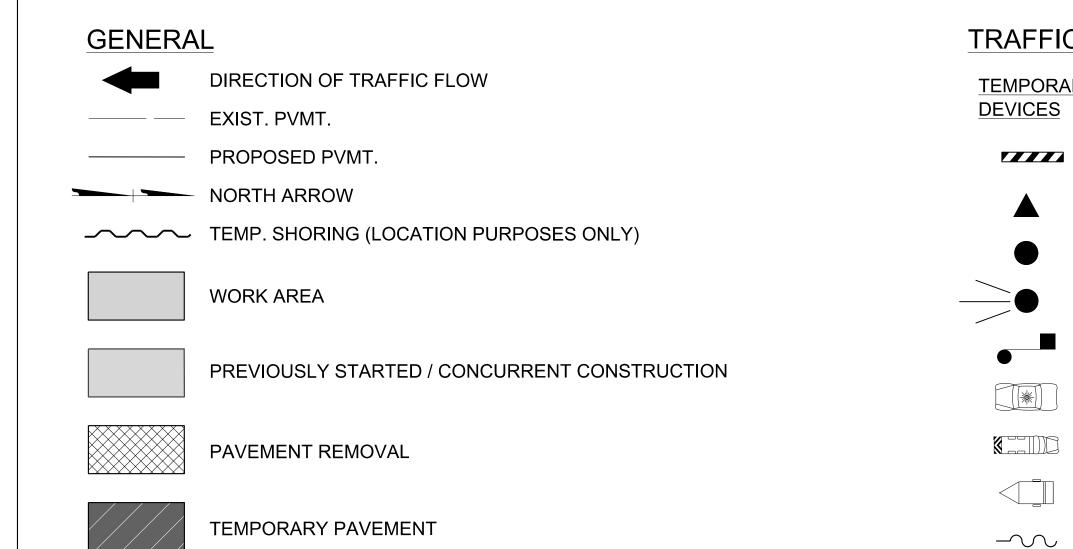
THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" -PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2024 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.

TITLE

1101.01	WORK ZONE ADVANCE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW BOARDS
1130.01	DRUMS
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1160.01	TEMPORARY CRASH CUSHION
1165.01	WORK VEHICLE LIGHTING SYSTEMS AND TMA DELINEATIO
1170.01	PORTABLE CONCRETE BARRIER
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO LANE AND MULTILANE ROAD
1261.01	GUARDRAIL AND BARRIER DELINEATORS - INSTALLATION S
1261.02	GUARDRAIL AND BARRIER DELINEATORS - TYPES AND MO
1262.01	GUARDRAIL END DELINEATION
1264.01	OBJECT MARKERS - TYPES
1264.02	OBJECT MARKERS - INSTALLATION

LEGEND



ON

ADWAYS **SPACING** OUNTING

PAVEMENT MARKINGS

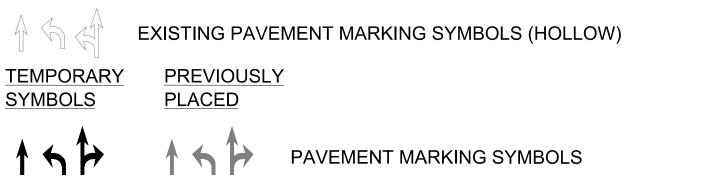
——— E	EXISTING LINES	5	SIGNALS		TEMPOF
<u>TEMPORARY</u> MARKINGS	PREVIOUSLY PLACED	$\underline{\prime}$	EXISTING		
		WHITE EDGE LINE			P
		YELLOW EDGE LINE			
		BROKEN LANE LINES	TEMPORAR	Y SIGNIN	IG
		MINISKIP LANE LINES	TEMPORARY	PREVIOUS	SLY
		DOUBLE YELLOW LINES	SIGNS	PLACED	
		GORELINE	\triangleleft	\triangleleft	PORTABLE SIGN
		STOP BAR	<u> </u>	<u> </u>	STATIONARY SIGN
			\bigcirc	\bigcirc	STATIONARY OR P

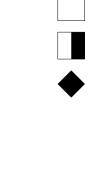
PAVEMENT MARKING ALPHANUMERIC CHARACTERS

PAVEMENT MARKING SYMBOLS

UNL

ONLY







			PROJ. REFERENCE NO.	SHEET NO.
			U-4405B	TMP-1A
	ONTROL	DEVICES		
ARY S	PREVIOU: PLACED	SLY		
2		BARRICADE (TYPE III)		
		CONE		
		DRUM		
_		FLASHING ARROW BOARD		
		FLAGGER		
		LAW ENFORCEMENT		
}		TRUCK MOUNTED ATTENUATOR (T	MA)	
		CHANGEABLE MESSAGE SIGN		
	-~~~	TEMPORARY CRASH CUSHION		
I		PORTABLE CONCRETE BARRIER		

TEMPORARY

RY SIGN

STATIONARY OR PORTABLE SIGN

PAVEMENT MARKERS

- CRYSTAL/CRYSTAL
- CRYSTAL/RED
- YELLOW/YELLOW



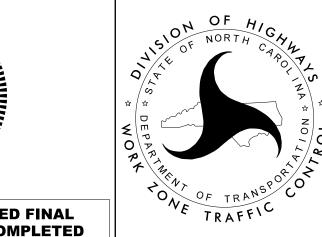
TO MEE OVERLA	T FIELD CONDIT APPING OF DEVIC MENTING, COVE	IONS OR RESU CES. MODIFICA	ROADWAY DETAILS ARI LT IN DUPLICATE OR UN TION MAY INCLUDE: MC OVAL OF DEVICES AS D	NDESIRED)VING,
THE CO		ROJECT EXCEP	PLY AT ALL TIMES FOR T T WHEN OTHERWISE NO	
TIME	RESTRICTIONS			
A)	DO NOT CLOSE	E TWO (2) TR	AVEL LANES AS FOLL	_OWS:
ROAD			DAY AND TIME R	
	(RAEFORD RD) -Y13- (SKIBO	RD)	6:00 AM TO 7:0 MONDAY THRU SU	
B)	DO NOT CLOSE AS FOLLOWS:	OR NARROW	TRAVEL LANES DURING	HOLIDAYS AND SPECIAL EVI
	ROAD NAME ALL ROADS			
	HOLIDAY			
1)			IRRENCE THAT CREATE HE ENGINEER.	ES UNUSUALLY HIGH TRAFFIC
2)	JANUARY 2ND.	IF NEW YEAR'S		0 AM DECEMBER 31ST TO 7:0 SATURDAY, SUNDAY, OR SDAY.
3)	FOR EASTER, E	BETWEEN THE	HOURS OF 6:00 AM THU	RSDAY AND 7:00 PM MONDA
4)	FOR MEMORIA	L DAY, BETWEE	EN THE HOURS OF 6:00	AM FRIDAY TO 7:00 PM TUESI
5)	INDEPENDENC IF INDEPENDEN THEN BETWEE	E DAY AND 7:00 NCE DAY IS ON N THE HOURS () PM THE DAY AFTER IN A FRIDAY, SATURDAY, 3	SUNDAY OR MONDAY; DAY BEFORE INDEPENDENCE
6)	FOR LABOR DA	Y, BETWEEN T	HE HOURS OF 6:00 AM F	FRIDAY TO 7:00 PM TUESDAY
7)	FOR THANKSG MONDAY.	IVING DAY, BET	WEEN THE HOURS OF	6:00 AM TUESDAY TO 7:00 PM
8)	THANKSGIVING	G TO 7:00 PM JA	ANUARY 2ND. IF NEW YE	6:00 AM THE TUESDAY BEFC EAR'S DAY IS ON A FRIDAY, PM THE FOLLOWING TUESDA
C)	DO NOT STOP	TRAFFIC AS FC	LLOWS:	
	NAME OADS	6:00 AM TO 7	ME RESTRICTIONS 7:00 PM RU SUNDAY	DURATION AND OPERA 15 MINUTES TRAFFIC S
	DO NOT COND	JCT MULTIPLE	VEHICLE HAULING AS F	OLLOWS:
D)	NAME	DAY AND TIN 6:00 AM TO 7	ME RESTRICTIONS 7:00 PM	

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				PROJ. REFERENCE NO.	SHEET NO
<u>(</u> -	ENERAL NOTES			U-4405B	TMP-1
ΙA	NE AND SHOULDER CLOSURE REQUIREMENTS	PAVEMENT EDGE DROP OFF			
	INE AND SHOULDER OLOGORE REQUIREMENTS	TAVENERT EDGE DROF OT			
E)	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.	,	PE UP TO THE EDGE AND ELE DJACENT TO AN OPEN TRAVE		OP-OFF
F)	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	BACKFILL DROP-OFFS 1 LIMITS OF 45 MPH OR G	THAT EXCEED 2 INCHES ON RO REATER.	OADWAYS WITH POSTE	D SPEED
	BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.	BACKFILL DROP-OFFS 1 LIMITS LESS THAN 45 M	THAT EXCEED 3 INCHES ON RO	OADWAYS WITH POSTE	D SPEED
G)	ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD		LE COMPACTED MATERIAL, AS ENSE TO THE DEPARTMENT.	S APPROVED BY THE	
	DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.	LANES OF TRAFFIC FOF	FERENCE OF 2 INCHES IN ELE R NOMINAL LIFTS OF 1.5 INCHE NES" SIGNS (W8-11) 500 FT IN /	ES. INSTALL ADVANCE	
	WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO A DIVIDED FACILITY AND WITHIN 10 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING		MILE THROUGHOUT THE UNE		UIVI
	NO 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.	TRAFFIC PATTERN ALTERAT	TIONS		
H)	WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRANSPORTATION MANAGEMENT PLANS, ROADWAY STANDARD DRAWINGS,	P) NOTIFY THE ENGINEER PATTERN ALTERATION.	R THIRTY (30) CALENDAR DAYS	S PRIOR TO ANY TRAFF	IC
	OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL	SIGNING			
I.	AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.		ORK ZONE WARNING SIGNS WI RAVEL LANE AND NO MORE TH		
I)	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.				
J)	DO NOT INSTALL MORE THAN 0.5 MILES OF LANE CLOSURE ON RAEFORD RD (-L-)	,	D DEVICES REQUIRED TO CLO DRAWINGS AND TRANSPORT		
	MEASURED FROM THE BEGINNING OF THE MERGE TAPER TO THE END OF THE LANE CLOSURE.	AND			
K)	DO NOT INSTALL MORE THAN 2 SIMULTANEOUS LANE CLOSURES IN ANY ONE DIRECTION ON RAEFORD RD (-L-).	PROVIDE SIGNING REQ TRANSPORTATION MAN	QUIRED FOR THE OFF-SITE DE NAGEMENT PLANS.	TOUR ROUTE AS SHOW	/N IN THE
L)	PROVIDE A MINIMUM OF 1 MILE BETWEEN LANE CLOSURES, MEASURED FROM THE END OF ONE CLOSURE TO THE BEGINNING OF THE MERGE TAPER OF THE NEXT	S) ENSURE ALL NECESSA TRAFFIC PATTERN.	ARY SIGNING IS IN PLACE PRIC	OR TO ALTERING ANY	
	LANE CLOSURE.	,	ANGE "DIP" SIGNS (W8-2) AND		
M)	PROVIDE TRAFFIC CONTROL FOR APPROPRIATE LANE CLOSURES FOR SURVEYING DONE BY THE DEPARTMENT.	(W8-1) 500 FT IN ADVAN ENGINEER.	ICE OF THE UNEVEN AREA, OI	R AS DIRECTED BY THE	

PERATION FFIC SHIFTS





GENERAL NOTES

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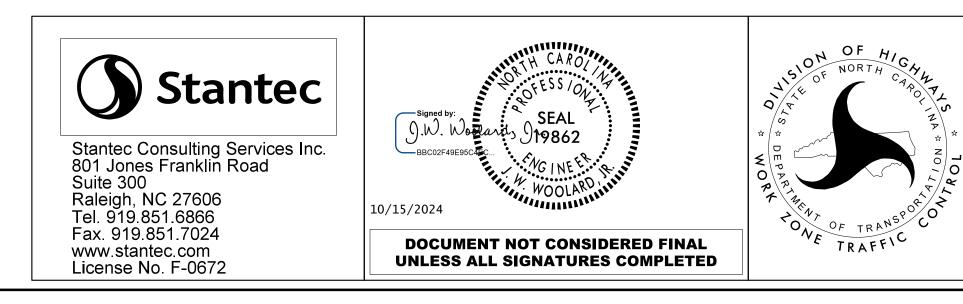
U)	
0)	INSTALL TEMPORARY BARRIER ACCORDING TO THE TRANSPORTATION MANAGEMENT PLANS A MAXIMUM OF TWO (2) WEEKS PRIOR TO BEGINNING WORK IN ANY LOCATION. ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION PROCEED IN A CONTINUOUS MANNER TO COMPLETE THE PROPOSED WORK IN THAT LOCATION UNLESS OTHERWISE STATED IN THE TRANSPORTATION MANAGEMENT PLANS OR AS DIRECTED BY THE ENGINEER.
	DO NOT PLACE BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE.
	ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION AND NO WORK IS PERFORMED BEHIND THE TEMPORARY BARRIER FOR A PERIOD LONGER THAN TWO (2) MONTHS, REMOVE/RESET TEMPORARY BARRIER AT NO COST TO THE DEPARTMENT UNLESS OTHERWISE STATED IN THE TRANSPORTATION MANAGEMEN PLANS, TEMPORARY BARRIER IS PROTECTING A HAZARD, OR AS DIRECTED BY THE ENGINEER.
	INSTALL TEMPORARY BARRIER WITH THE TRAFFIC FLOW BEGINNING WITH THE UPSTREAM SIDE OF TRAFFIC. REMOVE TEMPORARY BARRIER AGAINST THE TRAFFIC FLOW BEGINNING WITH THE DOWNSTREAM SIDE OF TRAFFIC.
	INSTALL AND SPACE DRUMS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH) TO CLOSE OR KEEP THE SECTION OF THE ROADWAY CLOSED UNTIL THE TEMPORARY BARRIER CAN BE PLACED OR AFTER THE TEMPORARY BARRIER IS REMOVED.
√)	PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER AT ALL TIMES DURING THE INSTALLATION AND REMOVAL OF THE BARRIER BY EITHER A TRUCK MOUNTED ATTENUATOR (MAXIMUM 72 HOURS) OR A TEMPORARY CRASH CUSHION.
	PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER FROM ONCOMING TRAFFIC AT ALL TIMES BY A TEMPORARY CRASH CUSHION UNLESS THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER IS OFFSET FROM ONCOMING TRAFFIC AS FOLLOWS OR AS SHOWN IN THE PLANS:
	POSTED SPEED LIMIT MINIMUM OFFSET
	40 OR LESS 15 FT 45-50 20 FT 55 25 FT 60 MPH or HIGHER 30 FT
тр	
	AFFIC CONTROL DEVICES WHEN LANE CLOSURES ARE NOT IN EFFECT SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH), EXCEPT 10 FT ON-CENTER IN RADII, 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.
W)	WHEN LANE CLOSURES ARE NOT IN EFFECT SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH), EXCEPT 10 FT ON-CENTER IN RADII, 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

GENERAL NOTES

	PAVEMENT MARKINGS AND MARKERS	JJ) (
K	Z) INSTALL TEMPORARY PAVEMENT MARKINGS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:	KK)
HAT T	ROAD NAMEMARKINGALL ROADSPAINT	, LL) M
	AA) PLACE ONE APPLICATION OF PAINT FOR TEMPORARY TRAFFIC PATTERNS. PLACE A SECOND APPLICATION OF PAINT SIX (6) MONTHS AFTER THE INITIAL APPLICATION AND EVERY SIX MONTHS AS DIRECTED BY THE ENGINEER.	MM)
WO	BB) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.	F (
IENT	CC) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.	NN) /
Т	DD) TRACE THE (EXISTING AND/OR PROPOSED) MONOLITHIC ISLAND LOCATIONS WITH THE PROPER COLOR PAVEMENT MARKING PRIOR TO (REMOVAL AND/OR INSTALLATION). PLACE (DRUMS, CONES, OR TUBULAR MARKERS) TO DELINEATE ANY (EXISTING AND/OR PROPOSED) MONOLITHIC ISLANDS (AFTER REMOVAL AND/OR BEFORE INSTALLATION).	
	MISCELLANEOUS	
	EE) USE LAW ENFORCEMENT TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND OR INTERSECTIONS AS SHOWN IN PLANS OR DIRECTED BY THE ENGINEER.	
RY	FF) ALL CURB RAMP LOCATIONS SHALL BE DERIVED FROM STATIONING SHOWN ON PAVEMENT MARKING PLANS OR AS DIRECTED BY THE ENGINEER IN COORDINATION WITH THE SIGNING AND DELINEATION UNIT.	
OM HE	GG) CONTRACTOR SHALL MAINTAIN SIDEWALK ACCESS AT ALL TIMES AS STATED IN THE PHASING. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE TEMPORARY SIDEWALKS (CONCRETE, ASPHALT, OR OTHER SUITABLE MATERIAL AS APPROVED BY THE ENGINEER) AT ALL LOCATIONS WHERE THE OPEN PEDESTRIAN TRAVELWAY HAS BEEN REMOVED FOR CONSTRUCTION OPERATIONS (UTILITIES, DRAINAGE, ETC.).	
	HH) MAINTAIN VEHICULAR ACCESS TO ALL DRIVEWAYS DURING THE LIFE OF THE CONTRACT, UNLESS OTHERWISE NOTED IN THE PHASING OR DIRECTED BY THE ENGINEER. USE INCIDENTAL STONE WHEN NECESSARY.	1) C A N

II) ALL DIMENSIONS AND STATIONS IN THE TRANSPORTATION MANAGEMENT PLAN AND PHASING ARE APPROXIMATE (+/-); FIELD ADJUST AS NECESSARY OR AS

DIRECTED BY THE ENGINEER.



PROJ. REFERENCE NO. U-4405B	SHEET NO. TMP-1C
U-4405B	TMP-1C

- COMPLETE ANY PROPOSED OR TEMPORARY WIDENING IN SUCH A MANNER THAT PONDING OF WATER WILL NOT OCCUR IN THE TRAVEL LANE.
- ENSURE THE OVERSIZE/OVERWEIGHT PERMIT UNIT (919) 814-3700 HAS BEEN ADVISED OF THE ONGOING TRAFFIC OPERATIONS THROUGH THE DIVISION OFFICE.

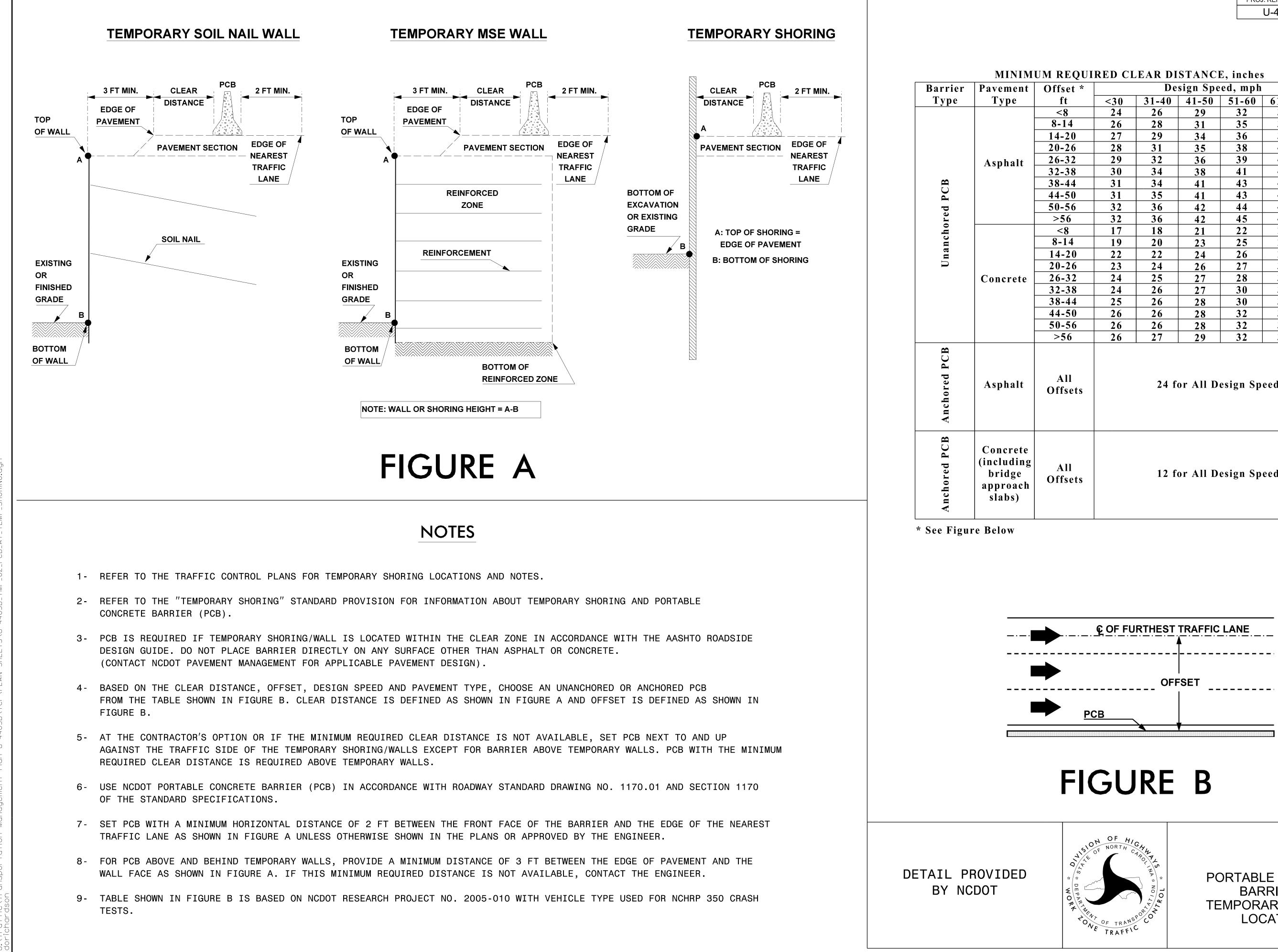
MAINTAIN EXISTING GUARDRAIL UNTIL PROPOSED FILL SLOPES ARE COMPLETED TO THE POINT THAT FIELD CONDITIONS NO LONGER MEET GUARDRAIL WARRANTS AS DIRECTED BY THE ENGINEER.

- MAINTAIN ALL EXISTING SIGNING ON PROJECT (WARNING, REGULATORY AND GUIDE SIGNS). WHERE CONSTRUCTION AFFECTS THE LOCATION OF A SIGN, RELOCATE AS NECESSARY, OR INSTALL REPLACEMENT SUCH THAT THE FUNCTION OF THE SIGN IS MAINTAINED AT ALL TIMES. DURING RELOCATION OF STOP SIGNS PROVIDE FLAGGERS WITH "FLAGGER AHEAD" (W20-7a) AND "BE PREPARED TO STOP" (W3-4) SIGNS AS NECESSARY TO MAINTAIN INTERSECTION TRAFFIC.
- ANY SIGNAL PUT IN FLASH MODE MUST HAVE LAW ENFORCEMENT PRESENT TO DIRECT TRAFFIC.

LOCAL NOTES

CONTRACTOR MAY PLACE TEMPORARY MARKINGS IN THE FINAL PATTERN AS ALLOWED BY THE ENGINEER. MAKE ADJUSTMENTS AS NEEDED TO MAINTAIN LANE CONTINUITY AS DIRECTED BY THE ENGINEER.

GENERAL NOTES



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	26-32	29	32	36	39	42	45		
	32-38	30	34	38	41	43	46		
	38-44	31	34	41	43	45	48	_	
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	<u>32-38</u> <u>38-44</u>	24 25	26	27	<u>30</u>	<u> </u>	36		
	44-50	25	$\frac{26}{26}$	28	30	34	37		
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	>56	26	26 27	28 29	<u>32</u> 32	<u> </u>	<u>38</u> 38		
phalt	All Offsets		24 for All Design Speeds						
ncrete cluding ridge proach abs)	All Offsets		12 for All Design Speeds						

PORTABLE CONCRETE **BARRIER AT** TEMPORARY SHORING LOCATIONS

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VTraffic/Transportation Management Plan U-4405B\TCP\PLAN SHEETS\U-4405B_TMP_02A_TEMPORARY_SHORING_NOTES. Arichardson

THE TEMPORARY SHORING NOTES SHOWN ON THIS SHEET WERE PROVIDED THROUGH A SEALED DOCUMENT FROM THE GEOTECHNICAL ENGINEER. THE DOCUMENT WAS SUBMITTED TO THE EASTERN WZTC ENGINEER ON SEPTEMBER 13, 2017 AND SEALED BY A PROFESSIONAL ENGINEER, THEIN TUN ZAN, LICENSE #030943.

SEE SHEET TMP-4
TEMPORARY SHORING LOCATION NO. 01 ESTIMATED QUANTITY = 2145.0 SF
-L- STA. 137+28±, 50′± RT TO -L- STA. 138+71±, 50′± RT LENGTH=143′ AVERAGE HEIGHT = 15.0 FT MAXIMUM HEIGHT = 15.7 FT
FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.
BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.
DESIGN TEMPORARY SHORING FROM STATION -L- 137+28±, 50' RT, TO STATION -L- 138+71±, 50' RT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION: UNIT WEIGHT, $(\gamma) = 120 \text{ LB/CF}$ FRICTION ANGLE, $(\phi) = 30 \text{ DEGREES}$ COHESION, (c) = 0 LB/SF GROUNDWATER ELEVATION = 136.0 FT
DO NOT USE A TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -L- 137+28±, 50' RT, TO STATION -L- 138+71±, 50' RT.

TEMPORARY SHORING LOCATION NO.02 SEE SHEET TMP-4 ESTIMATED QUANTITY = 1602.3 SF
-L- STA. 137+14±, 50′± LT TO -L- STA. 138+61±, 50′± LT LENGTH=147′ AVERAGE HEIGHT = 10.9 FT MAXIMUM HEIGHT = 14.5 FT
FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.
BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.
DESIGN TEMPORARY SHORING FROM STATION -L- 137+14±, 50' LT, TO STATION -L- 138+61±, 50' LT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION: UNIT WEIGHT, (γ) = 120 LB/CF FRICTION ANGLE, (ϕ) = 30 DEGREES COHESION, (c) = 0 LB/SF GROUNDWATER ELEVATION = 139.0 FT
DO NOT USE A TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -L- 137+14±, 50' LT, TO STATION -L- 138+61±, 50' LT.

	PROJ. REFERENCE NO. SHEET NO. U-4405B TMP-2A
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NE TRAFFIC	NOTES

	SING RSD 1101.01 INSTALL ADVANCE WARNING SIGNS ON -L- AND AL Y- LINES.
S	TEP 2
C A	OTE CONTRACTOR SHALL PROVIDE A PEDESTRIAN TRANSPORT SERVICE THROU ND /OR AROUND THE PROJECT WHEN EXISTING SIDEWALK CANNOT BE AINTAINED THROUGH THE WORK ZONE.
) SING TEMPORARY LANE CLOSURES, THE DETAILS ON SHEETS TMP-6 & ND RSD 1101.02, CONSTRUCT AS FOLLOWS:
-	-L- 103+45± TO 142+25±(LT) AND 142+25± TO 204+20±(RT), INCLUDING WATER AND SEWER LINES, DRAINAGE, CURB & GUTTER, PROPOSED GUARD RAIL, SIDEWALK, AND PAVEMENT UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. ADJUST ANY SIG AS NEEDED (SEE SIGNAL PLANS). WEDGE EXISTING PAVEMENT AS NECESSARY TO MAINTAIN TRAFFIC AND ACCOMMODATE DRAINAGE. (SE LOCAL NOTE 1)(SEE TMP-9)
-	RIGHT SIDE OF -L- (FROM 220+00±TO 223+00±), INCLUDING DRAINAGE, PIPE CULVERT INSTALLATION, AND HEADWALL CONSTRUCT
-	USING FLAGGERS AND RSD 1101.02, CONSTRUCT ALL DRIVEWAY TIE-INS, INCLUDING DRAINAGE, IN A CONTINUOUS MANNER WHILE MAINTAINING ACCESS AT ALL TIMES.
-	-Y1O-,-Y11-,-Y12-,-Y14-,-Y16-,-Y18- UP TO, BUT NOT INCLUDIN THE FINAL LAYER OF SURFACE COURSE. WEDGE EXISTING PAVEMENT NECESSARY TO MAINTAIN TRAFFIC AND ACCOMODATE DRAINAGE.
-	CONSTRUCT ALL CROSS PIPES 36" OR LESS IN HALF SECTIONS USIN LANE CLOSURES, RSD 1101.02, AND LAW ENFORCEMENT AS NEEDED, BETWEEN THE FOLLOWING HOURS:
	MONDAY THRU THURSDAY 10:00 PM TO 6:00 AM FRIDAY AT 10:00 PM TO MONDAY AT 6:00 AM
-	USING THE DETAIL ON TMP-5, CLOSE EXISTING SIDEWALK AND DETO PEDESTRIANS TO THE SIDEWALK ON THE OTHER SIDE OF -L
-	CULVERT CONSTRUCTION AS FOLLOWS: 1-USING RSD 1101.02, INSTALL PCB AS SHOWN ON TMP-4 2-BEHIND PCB, INSTALL TEMP SHORING LOC 01 3-BEHIND PCB, CONSTRUCT CULVERT EXTENSION 4-USING RSD 1101.02, REMOVE/RELOCATE PCB
	<u>CT</u> . USING A ROAD CLOSURE AS SHOWN ON TMP-8, CLOSE -Y18- AT -L- AND CONSTRUCT THE 48" PIPE ACROSS -Y18- FROM 9:00 PM FRIDAY 5:00 AM MONDAY (SEE SPECIAL PROVISIONS)
2	. USING LANE CLOSURES, RSD 1101.02 AND LAW ENFORCEMENT AS NEEDED, CONSTRUCT 42" PIPE ACROSS HOPE MILLS RD IN A CONTIN MANNER.
	<u>CT</u> OMPLETE PHASE I, STEP 2B FROM 9:00 PM FRIDAY TO 5:00 AM MOND SEE SPECIAL PROVISIONS.
B C) CONSTRUCT RIGHT SIDE OF 48" RCP AT -L- 176+83± TO THE MEDIAN A CONTINUOUS OPERATION USING LANE CLOSURES AND RSD 1101.02.
	<u>CT</u> OMPLETE PHASE I, STEP 2C FROM 9:00 PM FRIDAY TO 5:00 AM MOND SEE SPECIAL PROVISIONS.
C C	;) CONSTRUCT RIGHT SIDE OF 48" RCP AT -L- 181+34± TO THE MEDIAN A CONTINUOUS OPERATION USING LANE CLOSURES AND RSD 1101.02.

<u>ICT</u> COMPLETE PHASE I, STEP 2D FROM 9:00 PM FRIDAY TO 5:00 AM MONDAY. SEE LIQUIDATED DAMAGES.	ICT
D) INSTALL TEMPORARY SIGNAL AS SHOWN IN SIGNAL PLANS FOR THE PATTERN SHOWN ON TMP-9.	COMPLETE MONDAY B)
INSTALL TRAFFIC PATTERN SHOWN ON TMP-9, ACTIVATE THE TEMP SIGNAL, AND INSTALL 24" WATERLINE IN HOPE MILLS RD. USE LAW ENFORCEMENT AS NEEDED AND AS DIRECTED BY THE ENGINEER. SEE UTILITY PLANS.	CONSTRUC CONTIN
REPLACE PAVEMENT, INSTALL ANY MISSING PAVEMENT MARKINGS, AND REOPEN HOPE MILLS RD TO EXISTING PATTERN.	MONDAY C) CONSTRUCT
PHASE II	CONTIN
STEP 1	
A) USING TEMPORARY LANE CLOSURES, THE DETAILS ON SHEETS TMP-6 & 7, AND RSD 1101.02, CONSTRUCT THE FOLLOWING:	PHASE II STEP 1 CONTRACTO
 -L- 103+45± TO 142+25±(RT) AND 142+25± TO 204+20±(LT), INCLUDING WATER AND SEWER LINES, DRAINAGE, CURB & GUTTER, SIDEWALK, AND PAVEMENT UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. ADJUST ANY SIGNALS AS NEEDED (SEE SIGNAL PLANS). WEDGE EXISTING PAVEMENT AS NECESSARY TO MAINTAIN TRAFFIC 	USING RSI LANE IN I MONOLITH: THE CONS ⁻
AND ACCOMMODATE DRAINAGE. (SEE LOCAL NOTE 1) - LEFT SIDE OF -L- (FROM 220+00±TO 223+00±), INCLUDING DRAINAGE, PIPE CULVERT INSTALLATION, AND HEADWALL CONSTRUCTION.	FROM FROM
- USING FLAGGERS AND RSD 1101.02, CONSTRUCT ALL DRIVEWAY TIE-INS, INCLUDING DRAINAGE, IN A CONTINUOUS MANNER WHILE	(NOTE: PI END OF E
MAINTAINING ACCESS AT ALL TIMES.	STEP 2
- USING LANE CLOSURES AND RSD 1101.02, CONSTRUCT -Y9-,-Y13-,-Y15- UP TO, BUT NOT INCLUDING, THE FINAL LAYER OF SURFACE COURSE. WEDGE EXISTING PAVEMENTS NECESSARY TO MAINTAIN TRAFFIC AND ACCOMODATE DRAINAGE.	USING RSI AND TRAFI THRU TMP
- CONSTRUCT ALL CROSS PIPES 36" OR LESS IN HALF SECTIONS USING LANE CLOSURES AS NEEDED BETWEEN THE FOLLOWING HOURS:	SHIFT TR/ ISLANDS /
MONDAY THRU THURSDAY 10:00 PM TO 6:00 AM FRIDAY AT 10:00 PM TO MONDAY AT 6:00 AM	STEP 3 USING RSI MARKINGS
- USING THE DETAIL ON TMP-5, CLOSE EXISTING SIDEWALK AND DETOUR PEDESTRIANS TO THE SIDEWALK ON THE OTHER SIDE OF -L	SHIFT TRATINGS
- USING LANE CLOSURES, RSD 1101.02 AND LAW ENFORCEMENT AS NEEDED, CONSTRUCT 54" PIPE ACROSS LAFAYETTE FORD LINCOLN ENTRANCE IN A CONTINUOUS MANNER.	ISLAND AI 137+70±
- CULVERT CONSTRUCTION AS FOLLOWS:	COMPLETE
1-USING RSD 1101.02, INSTALL PCB AS SHOWN ON TMP-4 2-BEHIND PCB, INSTALL TEMP SHORING LOC 02	STEP 4
3-BEHIND PCB, CONSTRUCT CULVERT EXTENSION 4-USING RSD 1101.02, REMOVE/RELOCATE PCB	USING RSI SURFACE (-L- AND / ADJUSTMEI
	STEP 5
	REMOVE A
	FINAL TR
Stantec	-Signed by: . W. W. BARDULLARD, D. -BBCAF49E3504EC FESS/01
Stantec Consulting Services Inc.	SEAL 19862
Stanted Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. 919.851.6866	WOOLARD WITH
Fax. 919.851.7024 DOCUME	NT NOT CONSIDERED

	PROJ. REFERENCE NO.	SHEET NO.
	U-4405B	TMP-3
ETE PHASE II, STEP 1B FROM 9:00 PM FRIDAY NDAY. SEE SPECIAL PROVISIONS.	TO 5:00 AM	
RUCT LEFT SIDE OF 48" RCP AT -L- 176+83± T NTINUOUS OPERATION USING LANE CLOSURES AND		A
ETE PHASE II, STEP 1C FROM 9:00 PM FRIDAY NDAY. SEE SPECIAL PROVISIONS.	TO 5:00 AM	
RUCT LEFT SIDE OF 48" RCP AT -L- 181+34± T NTINUOUS OPERATION USING LANE CLOSURES AND		A

[]

OR MAY BEGIN THE FOLLOWING:

SD 1101.02 AND THE DETAILS ON TMP-10, CLOSE THE INSIDE EACH DIRECTION AND CONSTRUCT 1'-6" CURB & GUTTER OR HIC CONCRETE ISLANDS AND PROPOSED DRAINAGE AS SHOWN IN STRUCTION PLANS:

-L- 103+45±(BEGINNING OF PROJECT) TO -L- 137+70±AND -L- 148+88± TO 204+20±(END OF PROJECT)

PLACE TRAFFIC BACK IN THE ORIGINAL TRAFFIC PATTERN AT THE EACH WORK PERIOD.)

SD 1101.02 (SHEET 7), PLACE TEMPORARY PAVEMENT MARKINGS FFIC CONTROL DEVICES ON -L- AS SHOWN ON SHEETS TMP-11 P-13 FROM -L- 130+75± TO -L- 150+50±.

RAFFIC TO THE NEW PATTERN AND CONSTRUCT THE MEDIAN AS SHOWN ON SHEETS TMP-11 THROUGH TMP-13.

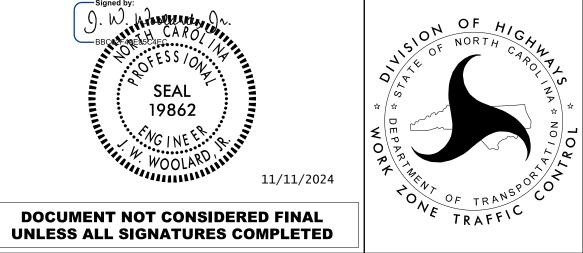
SD 1101.02 (SHEETS 3 AND 7) PLACE TEMPORARY PAVEMENT IN FINAL PATTERN (SEE PMP)

RAFFIC TO THE NEW PATTERN AND USING THE DETAILS ON CLOSE THE INSIDE LANES ON EACH SIDE OF THE PROPOSED ND CONSTRUCT THE MONOLITHIC CONCRETE ISLAND FROM -L-TO -L- 148+88± AS SHOWN ON SHEETS TMP-14 AND TMP-15.

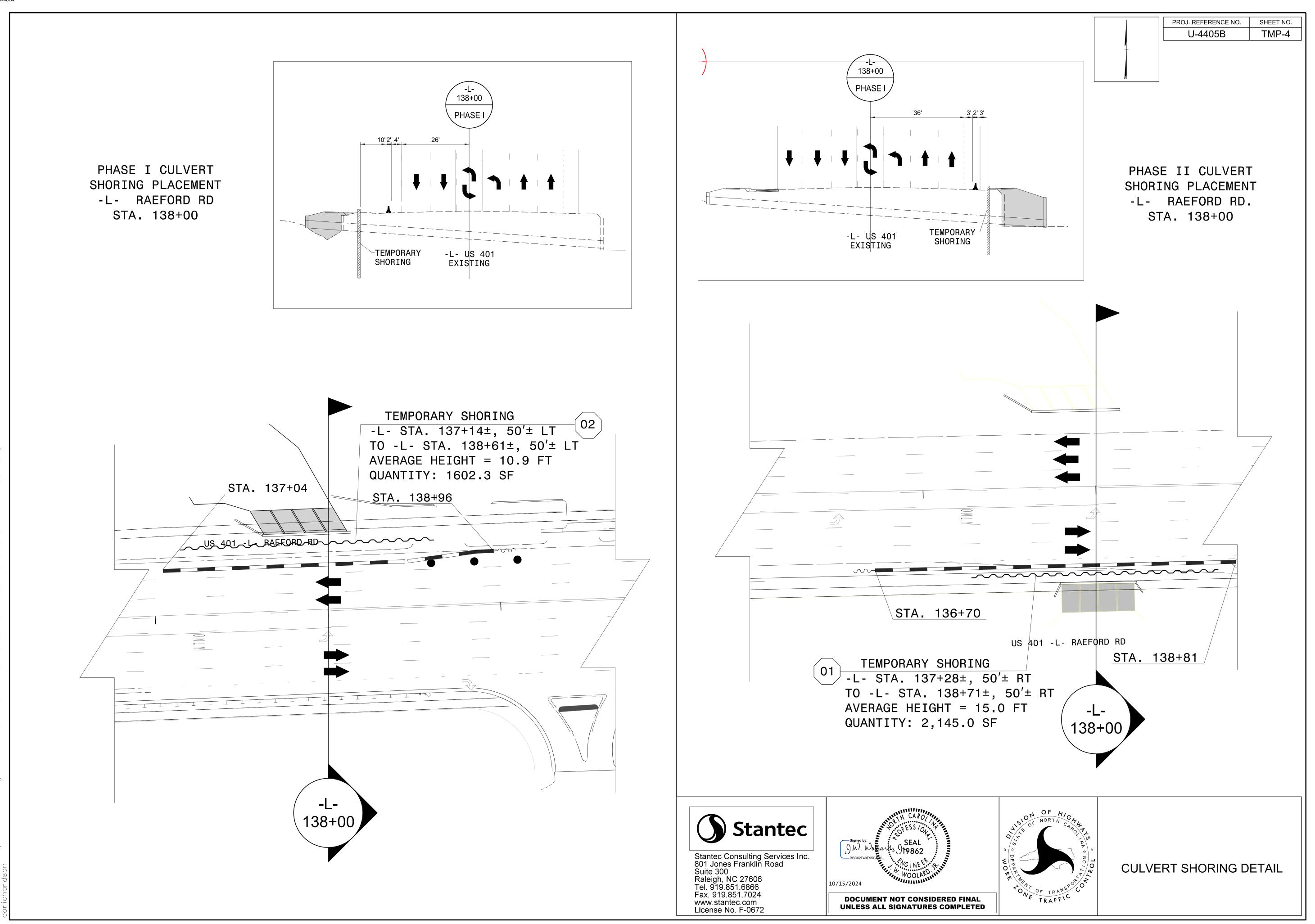
THE WORK STARTED IN PHASE III, STEP 1.

SD 1101.02 (SHEETS 3 AND 7), PLACE THE FINAL LAYER OF COURSE, FINAL PAVEMENT MARKINGS, AND PAVEMENT MARKERS ON ALL -Y- LINES THROUGHOUT THE PROJECT. MAKE ANY FINAL ENTS NEEDED TO THE PROPOSED SIGNALS.

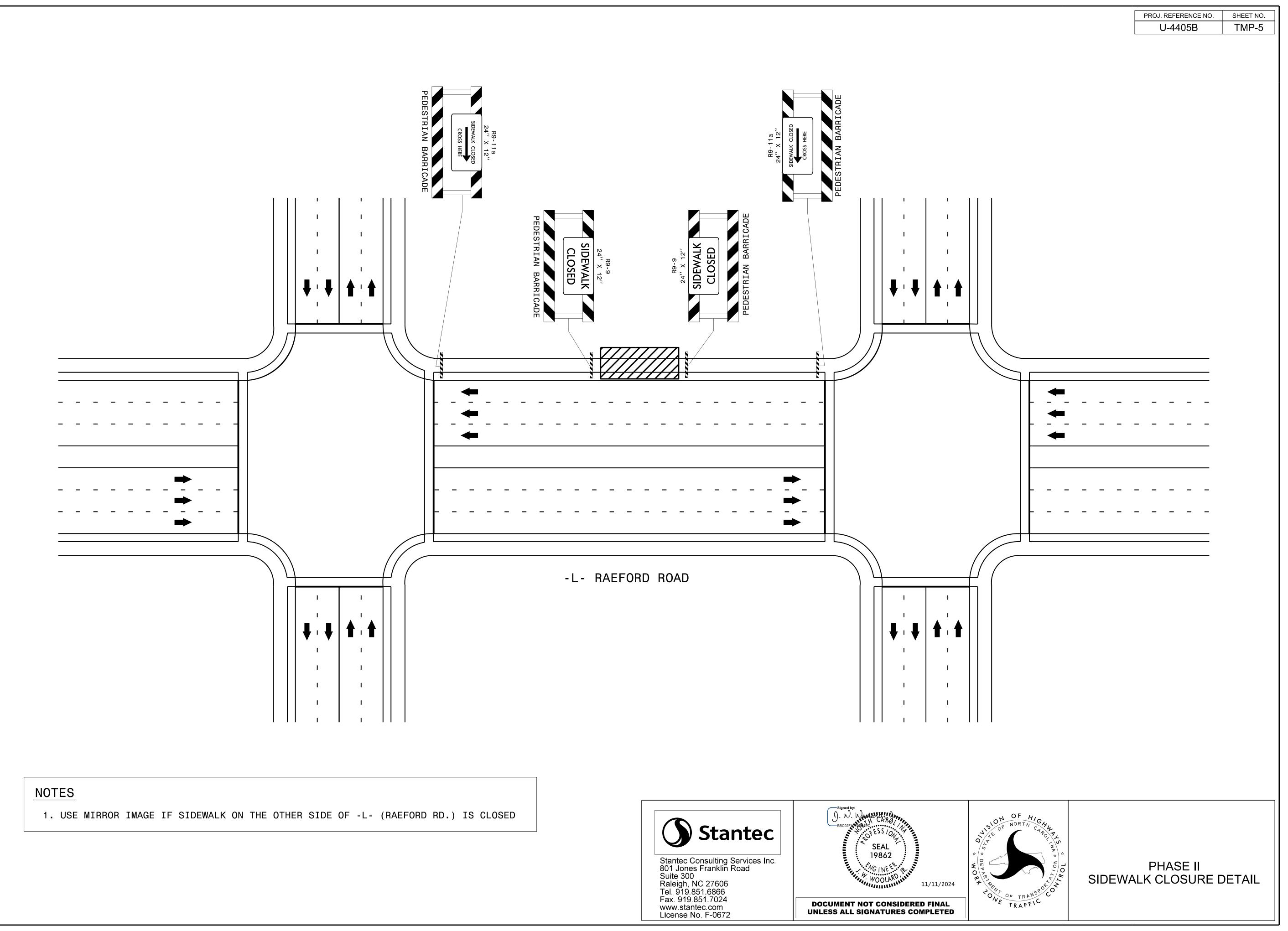
ALL TRAFFIC CONTROL DEVICES AND OPEN THE PROJECT TO THE RAFFIC PATTERN.



TEMPORARY TRAFFIC CONTROL PHASING



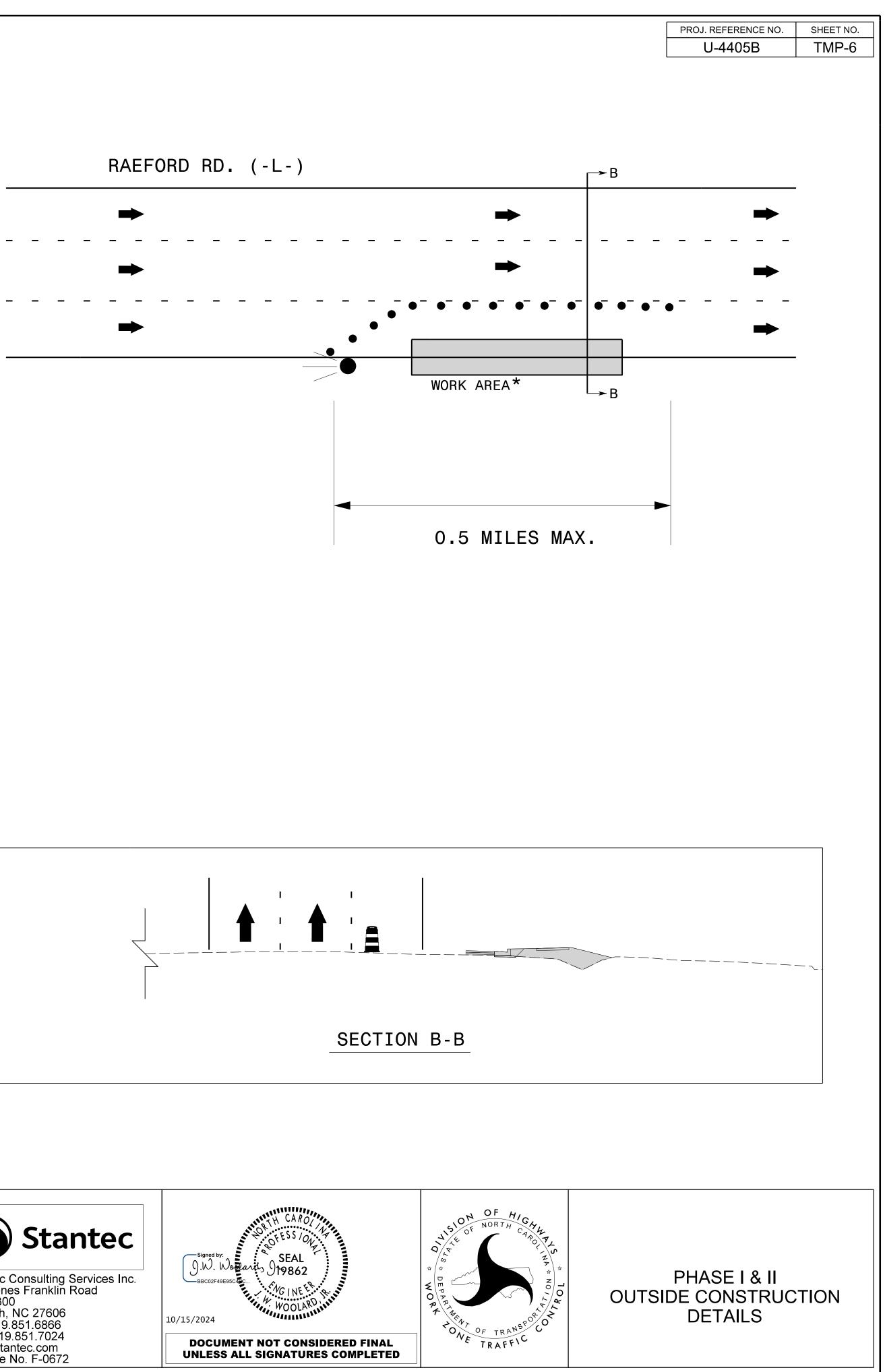
UNITEDITION MANAGEMENT PLAN U-4405BNTCPNPLAN SHEETSNU-4405B_TMP_04_CULVERT SHORING DETAIL.



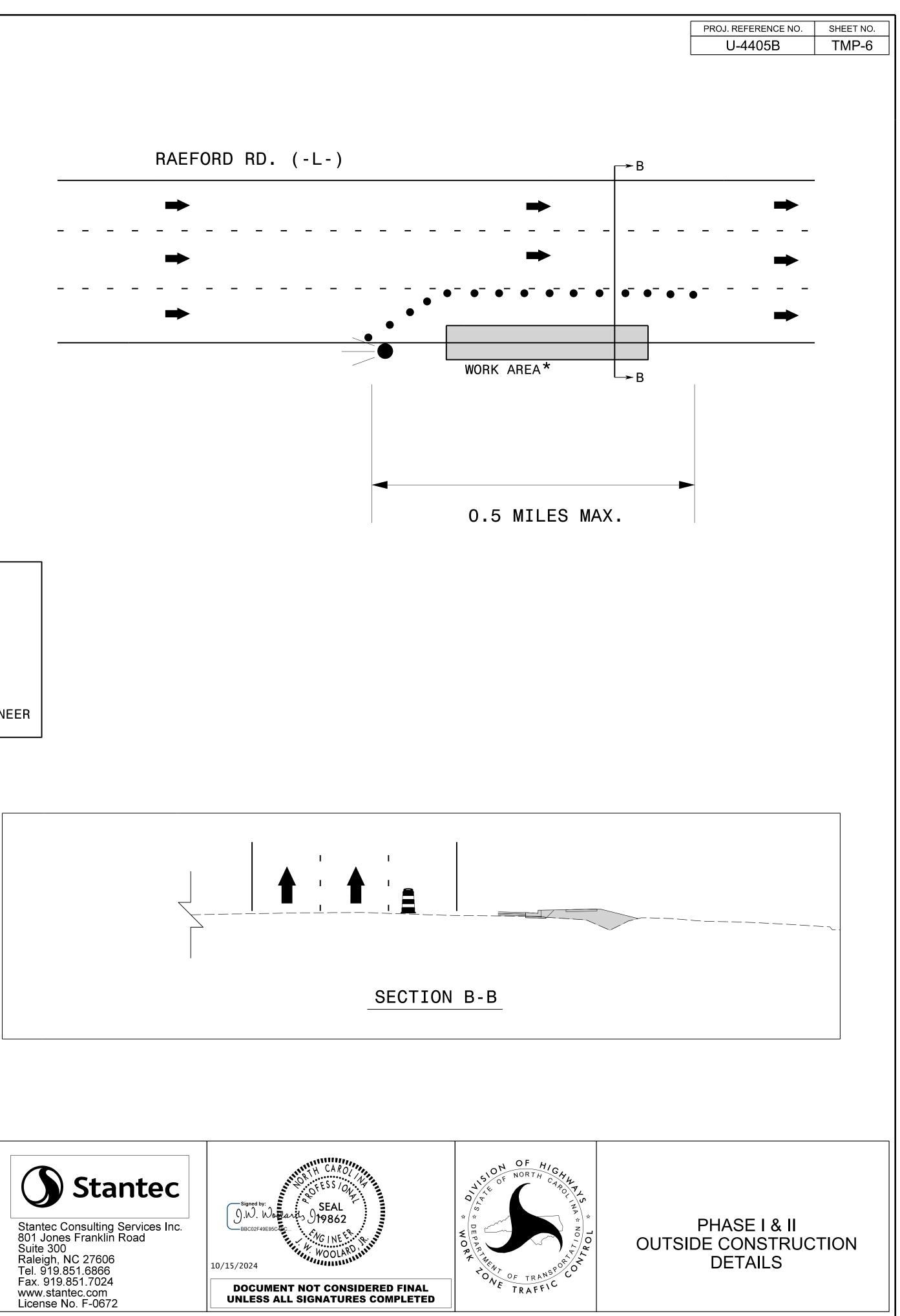


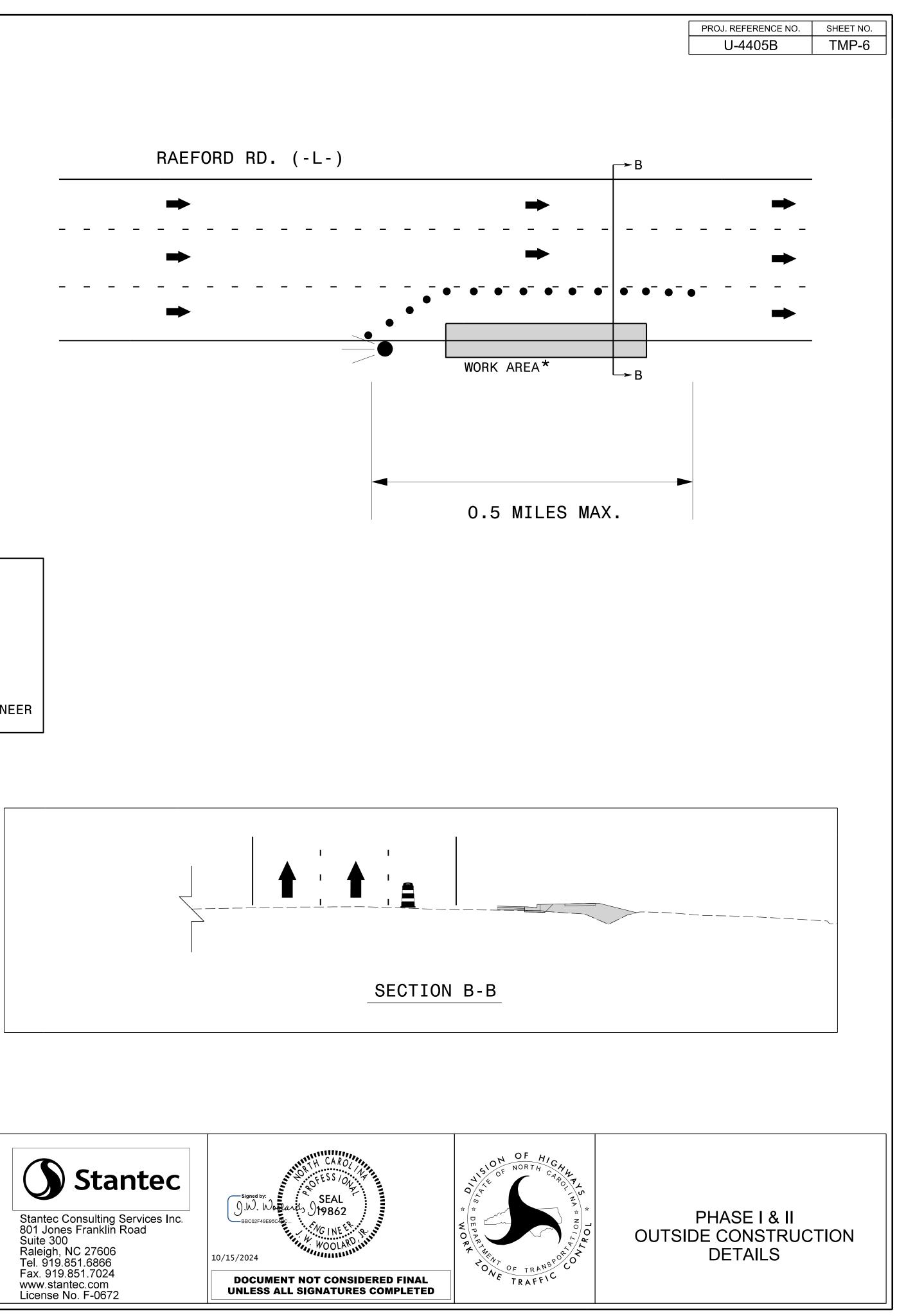
NOTES

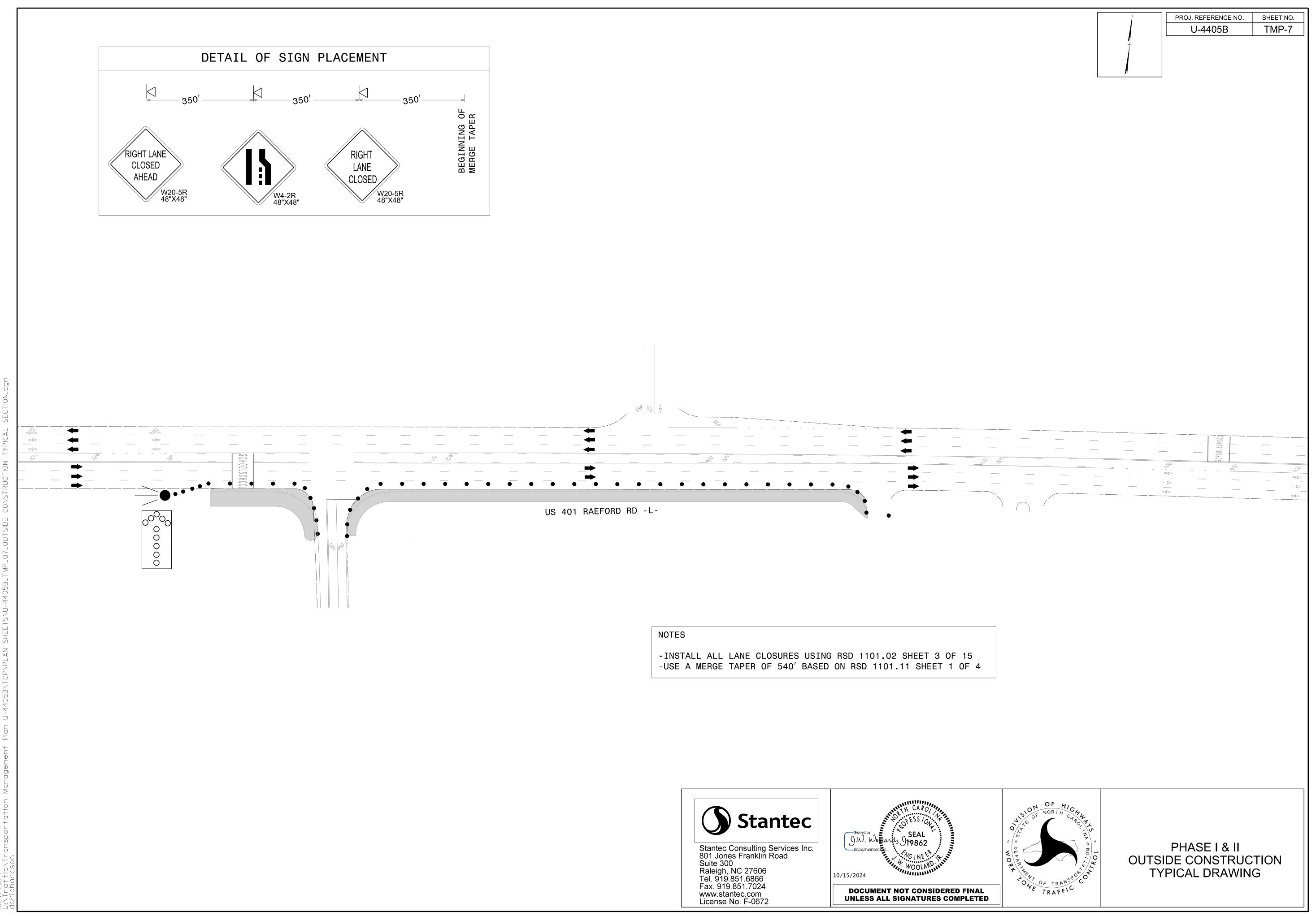
- 1. INSTALL ALL LANE CLOSURE PER RSD 1101.02 (SHEET 3).
- 2. MAXIMUM LENGTH OF EACH LANE CLOSURE IS 0.5 MILES.
- 3. MINIMUM LENGTH BETWEEN LANE CLOSURES IS 1 MILE.
- 4. MAXIMUM NUMBER OF LANE CLOSURES IN ONE DIRECTION IS 2.

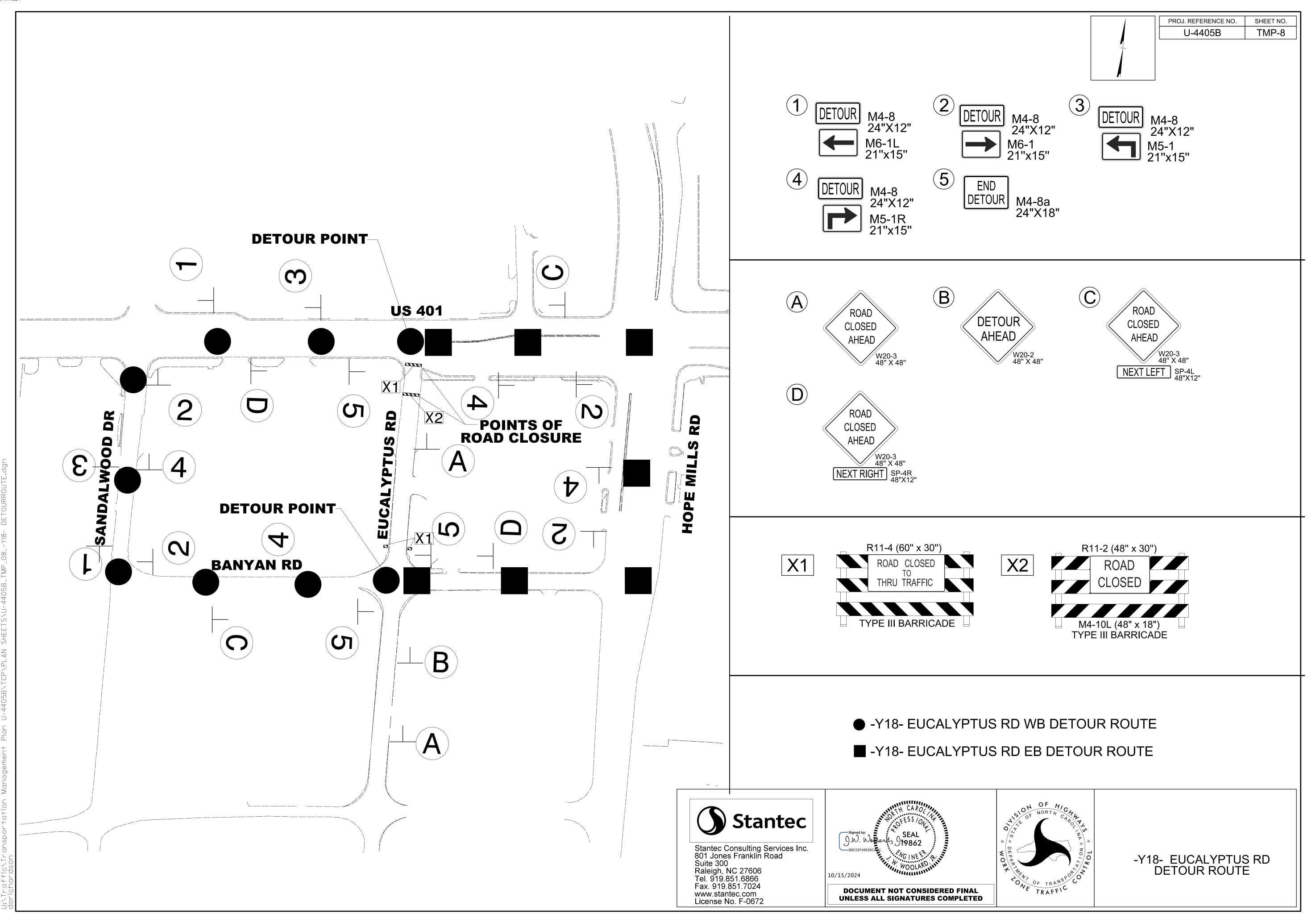


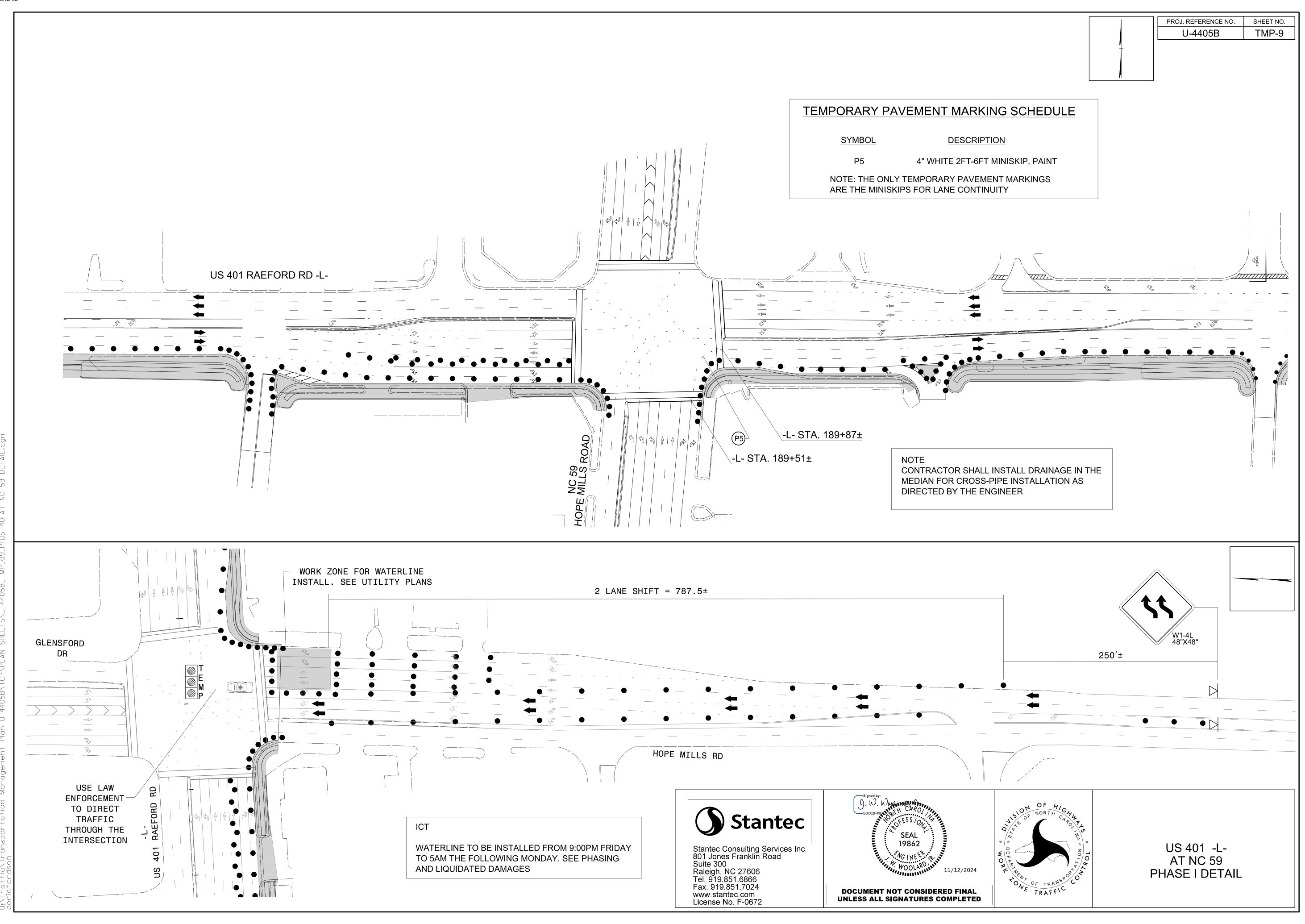
5. CONSTRUCT PROPOSED DRAINAGE, PAVEMENT, CURB & GUTTER, AND SIDEWALK IN EACH WORK AREA . 6. CONTRACTOR SHALL INSTALL DRAINAGE IN THE MEDIAN FOR CROSS-PIPE INSTALLATION AS DIRECTED BY THE ENGINEER

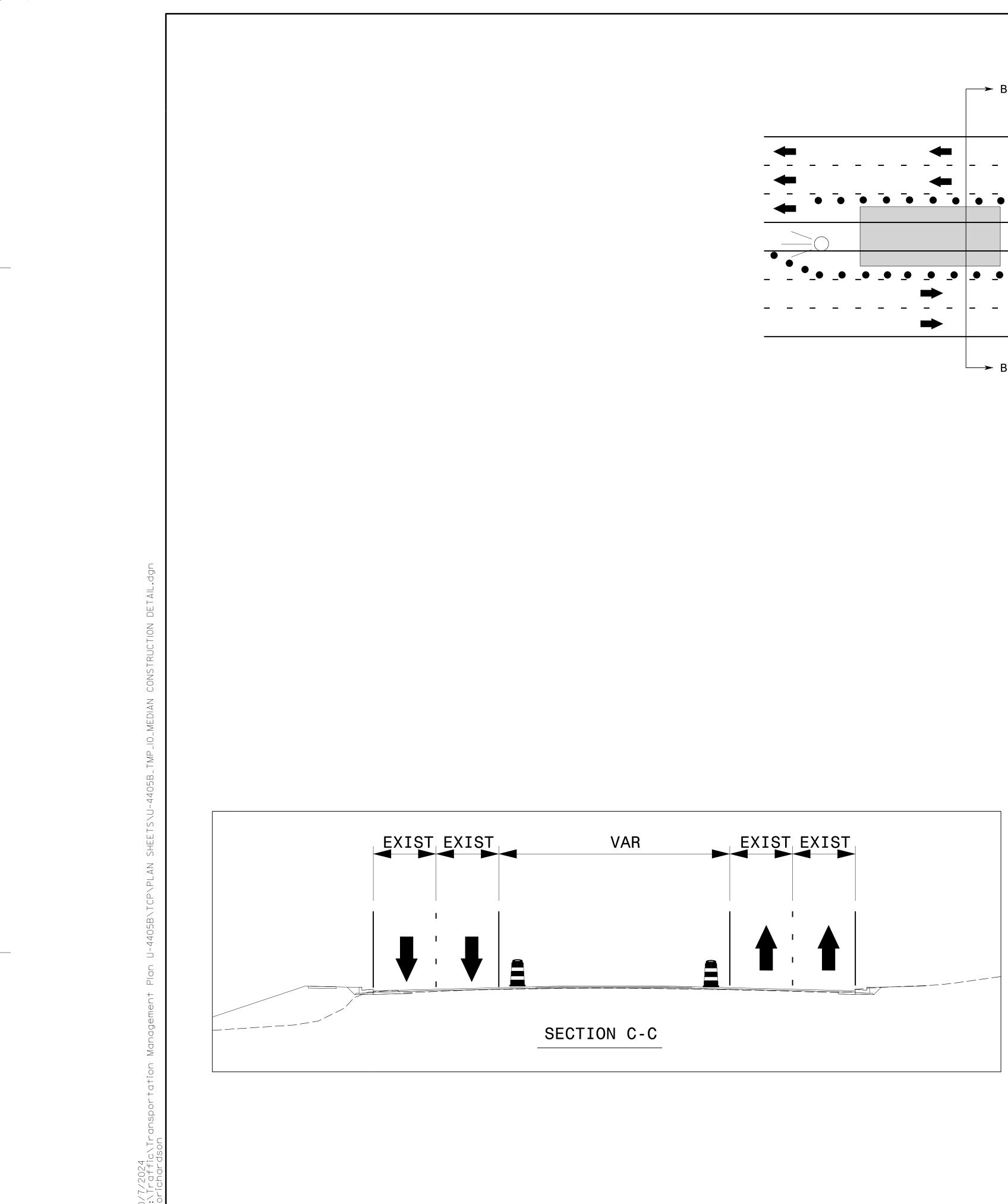


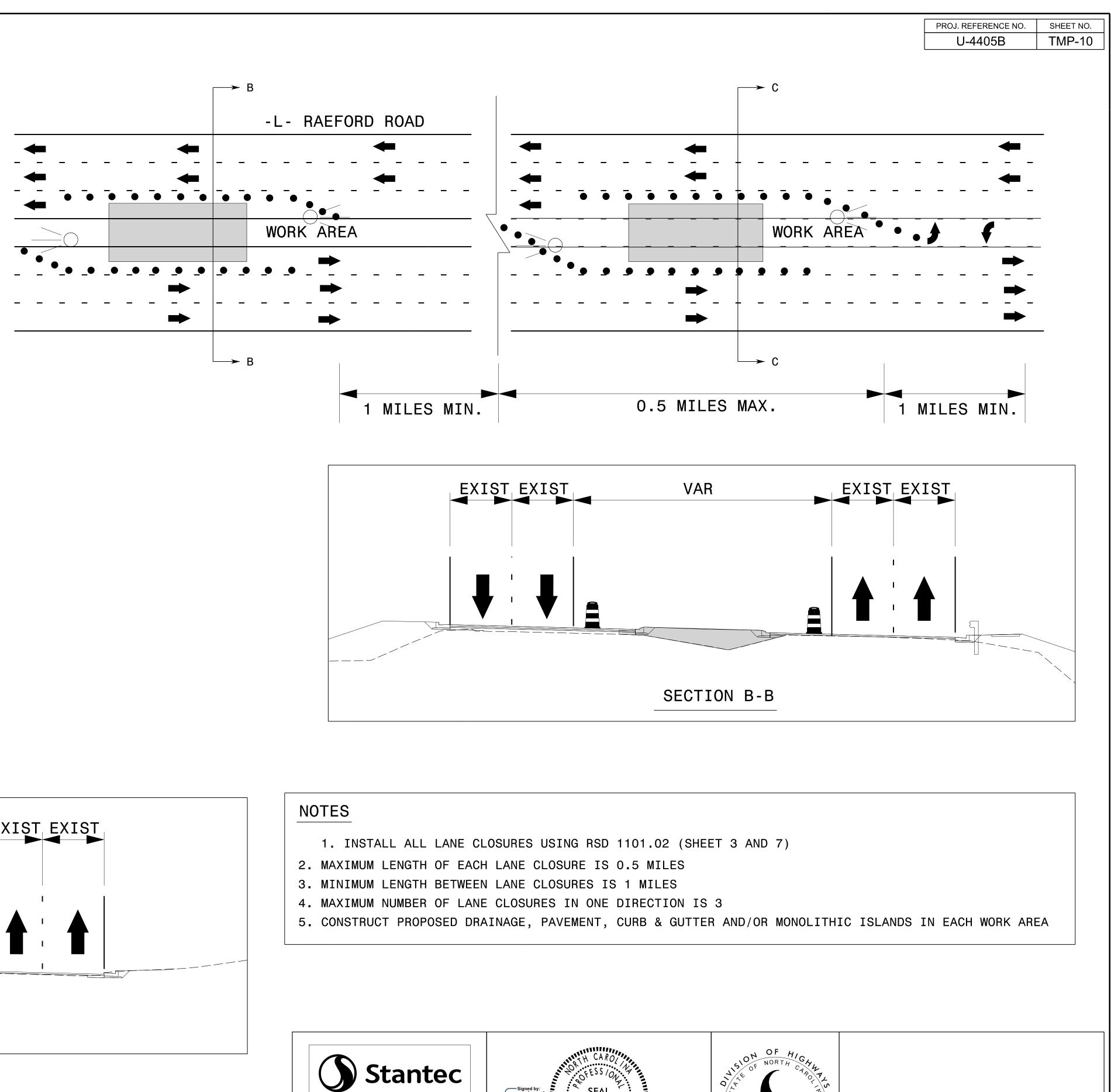


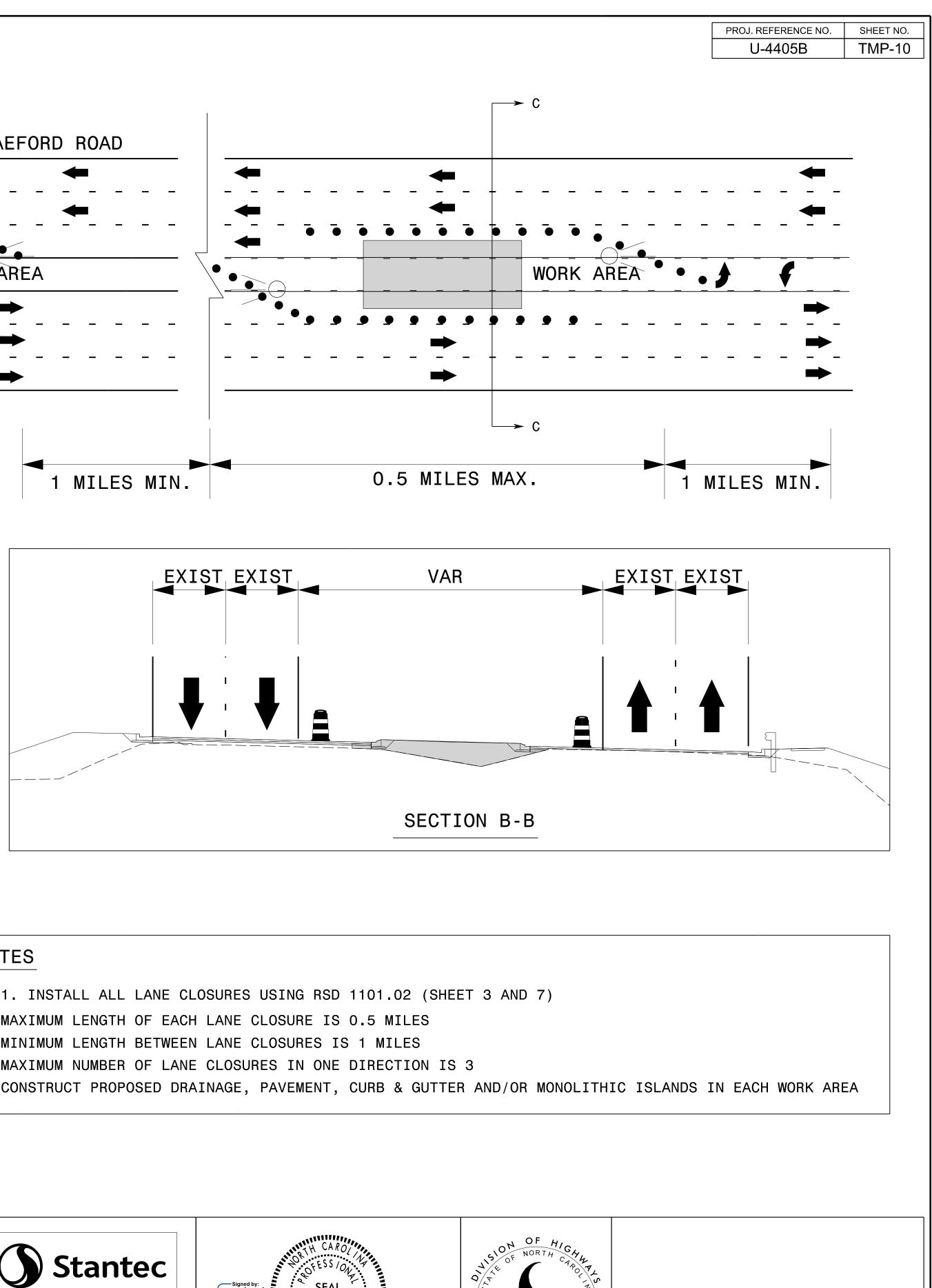


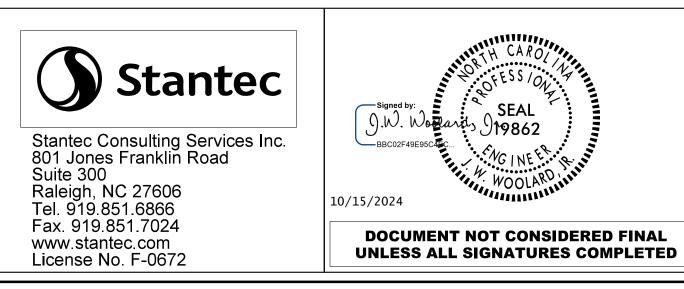






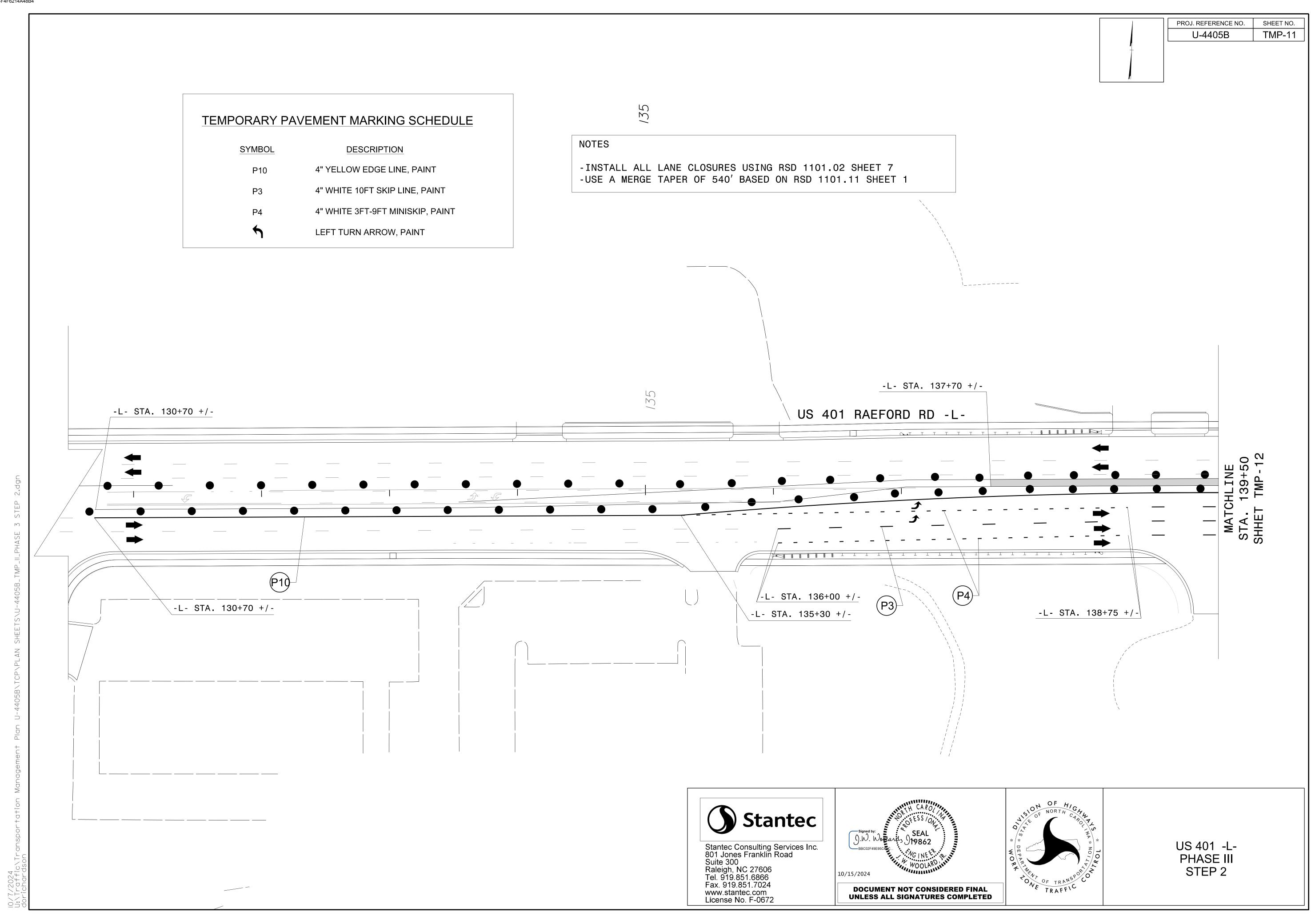




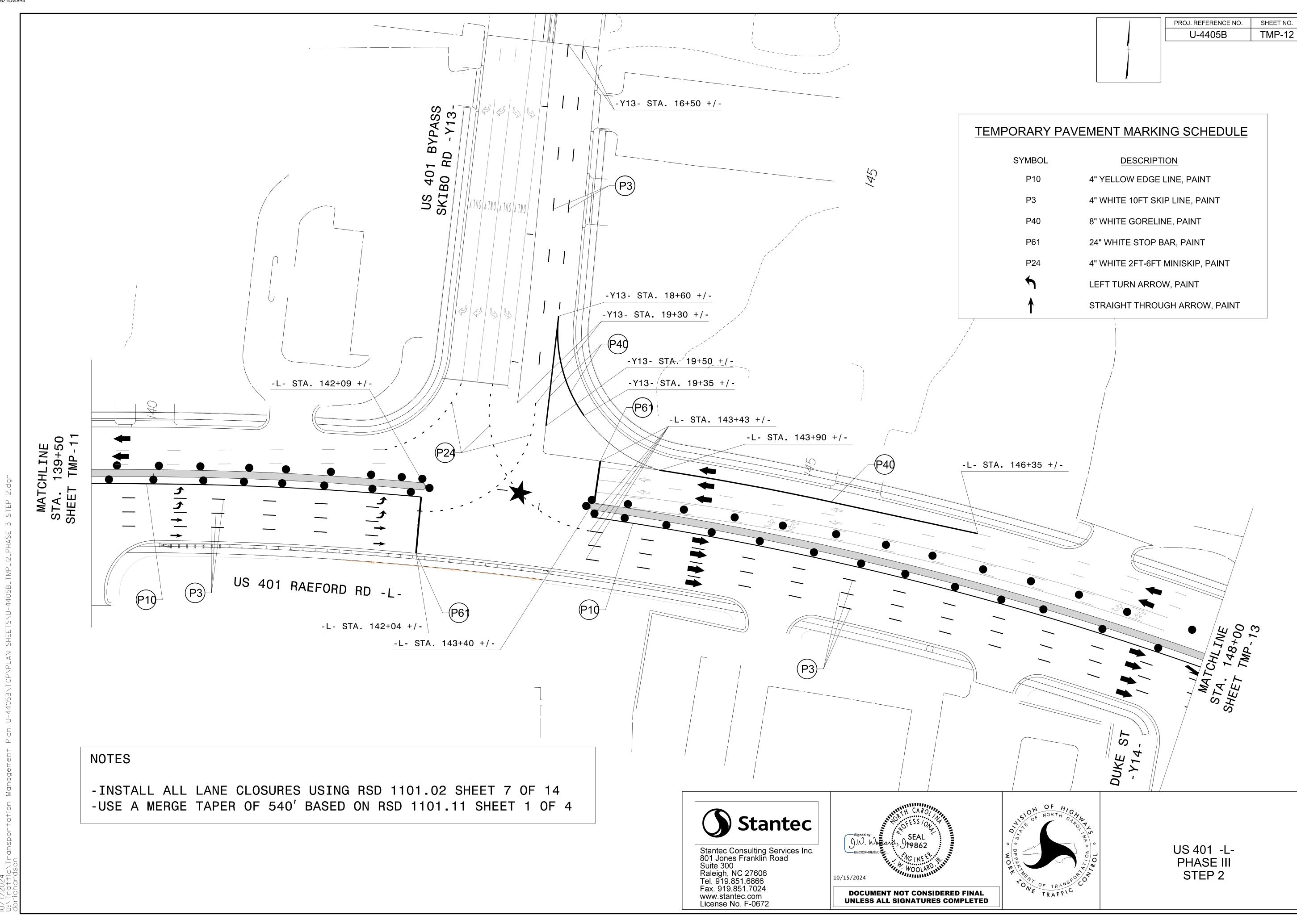


NE TRAFFIC

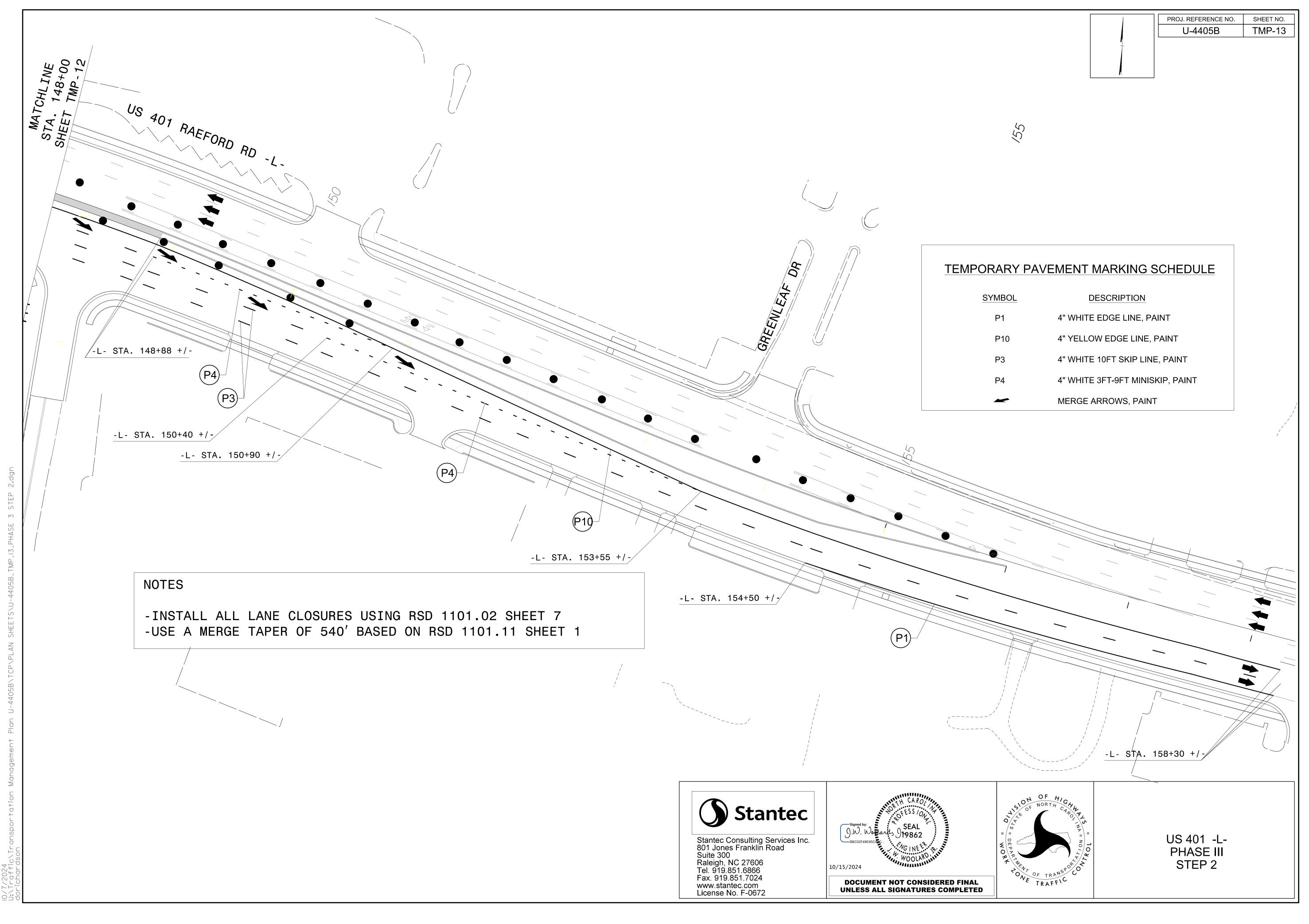
PHASE III MEDIAN CONSTRUCTION DETAILS

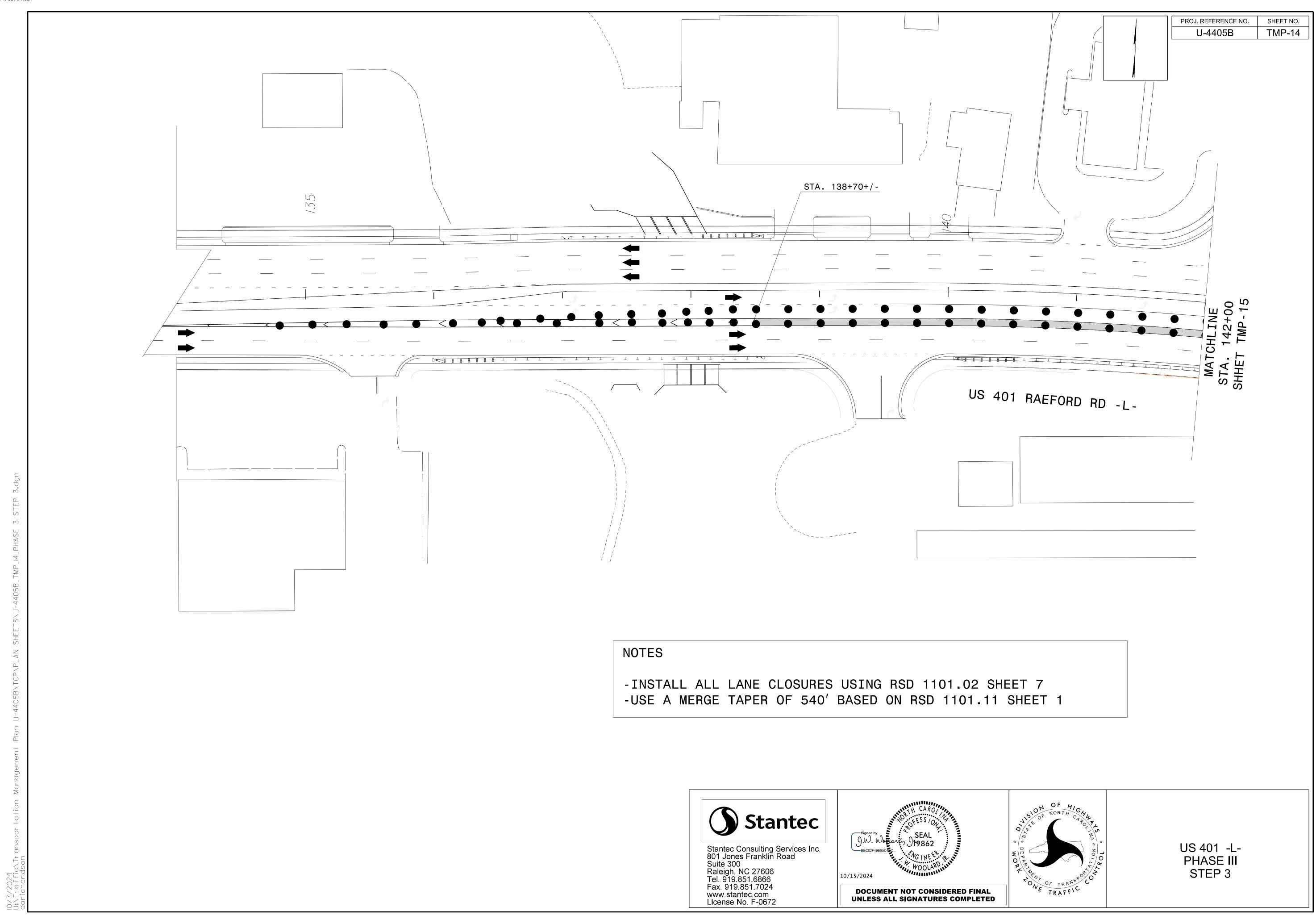


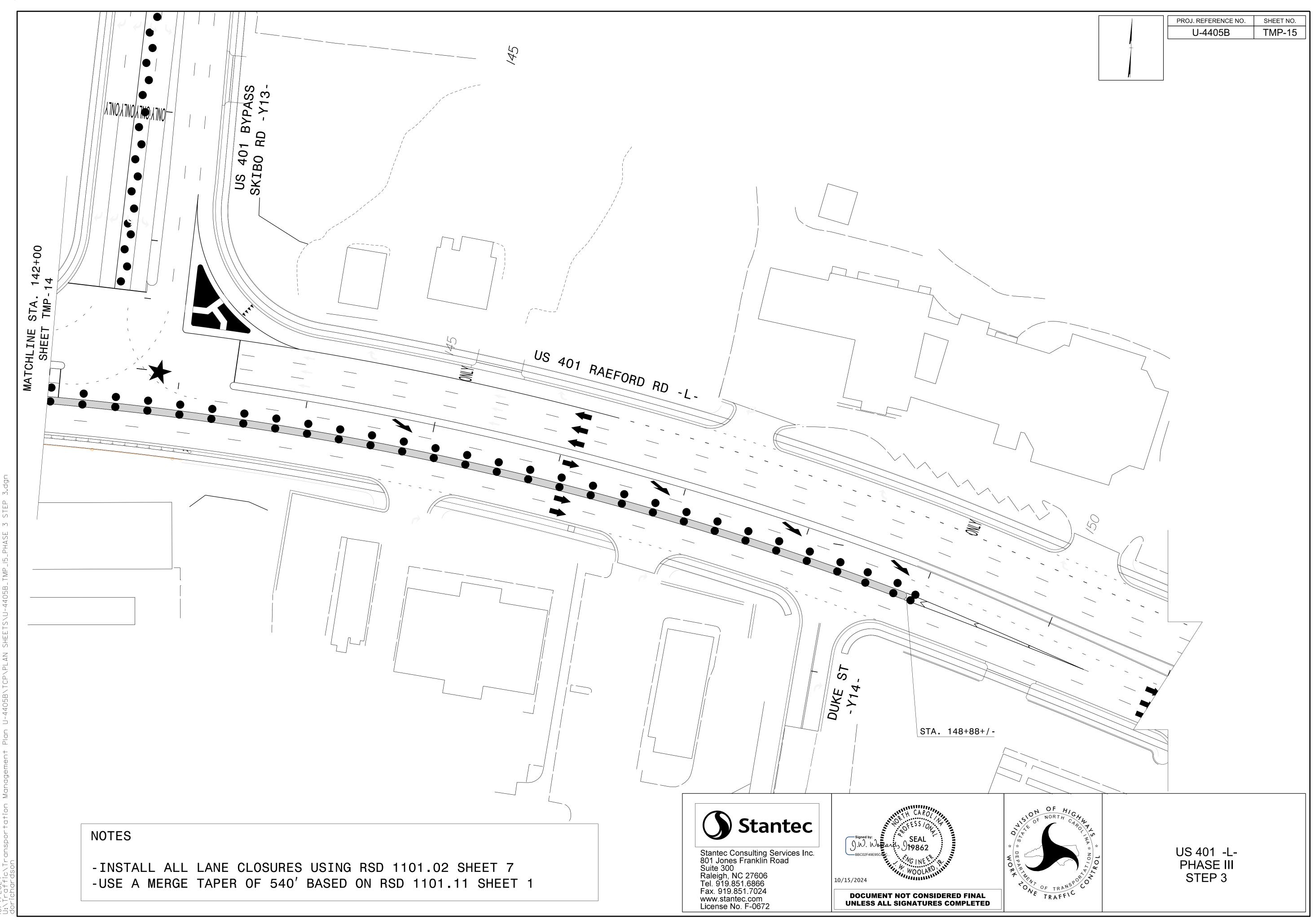


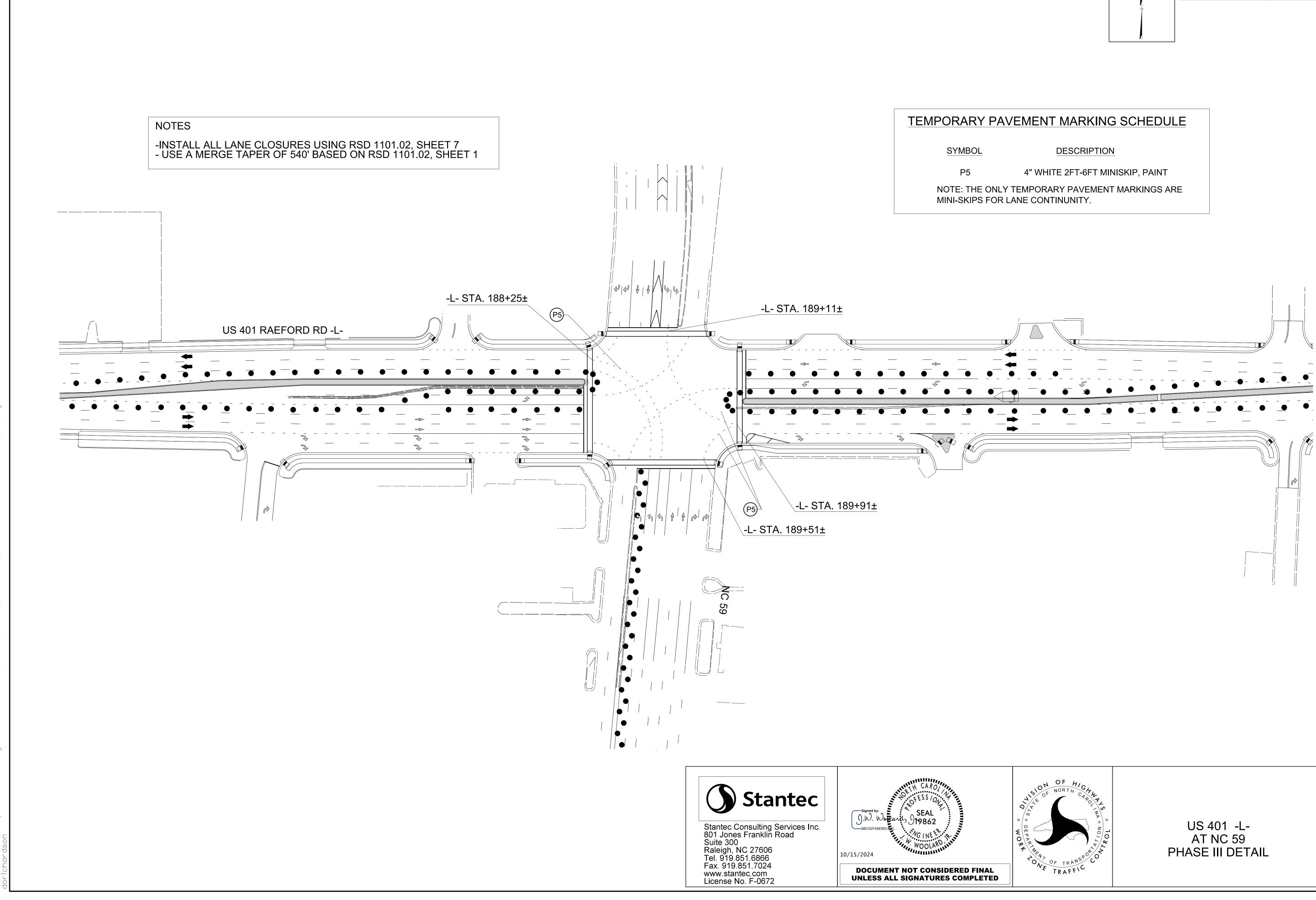


PROJ. REFERENCE NO.	SHEET NO.
U-4405B	TMP-12











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PROJ. REFERENCE NO.	SHEET NO.
U-4405B	TMP-16