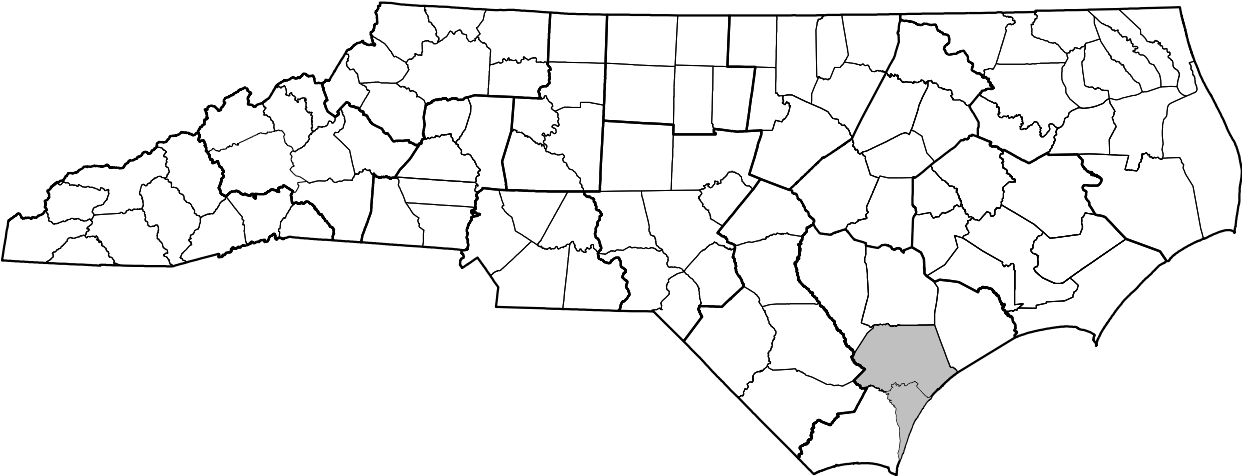


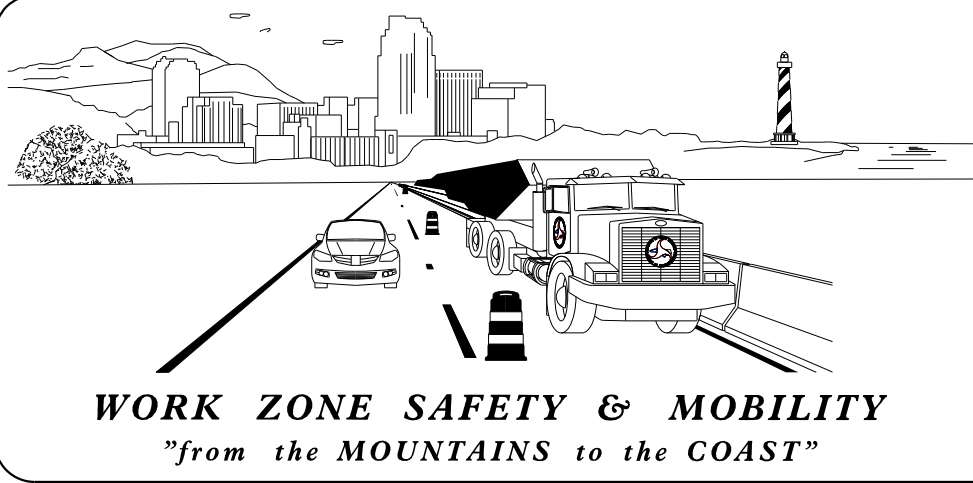
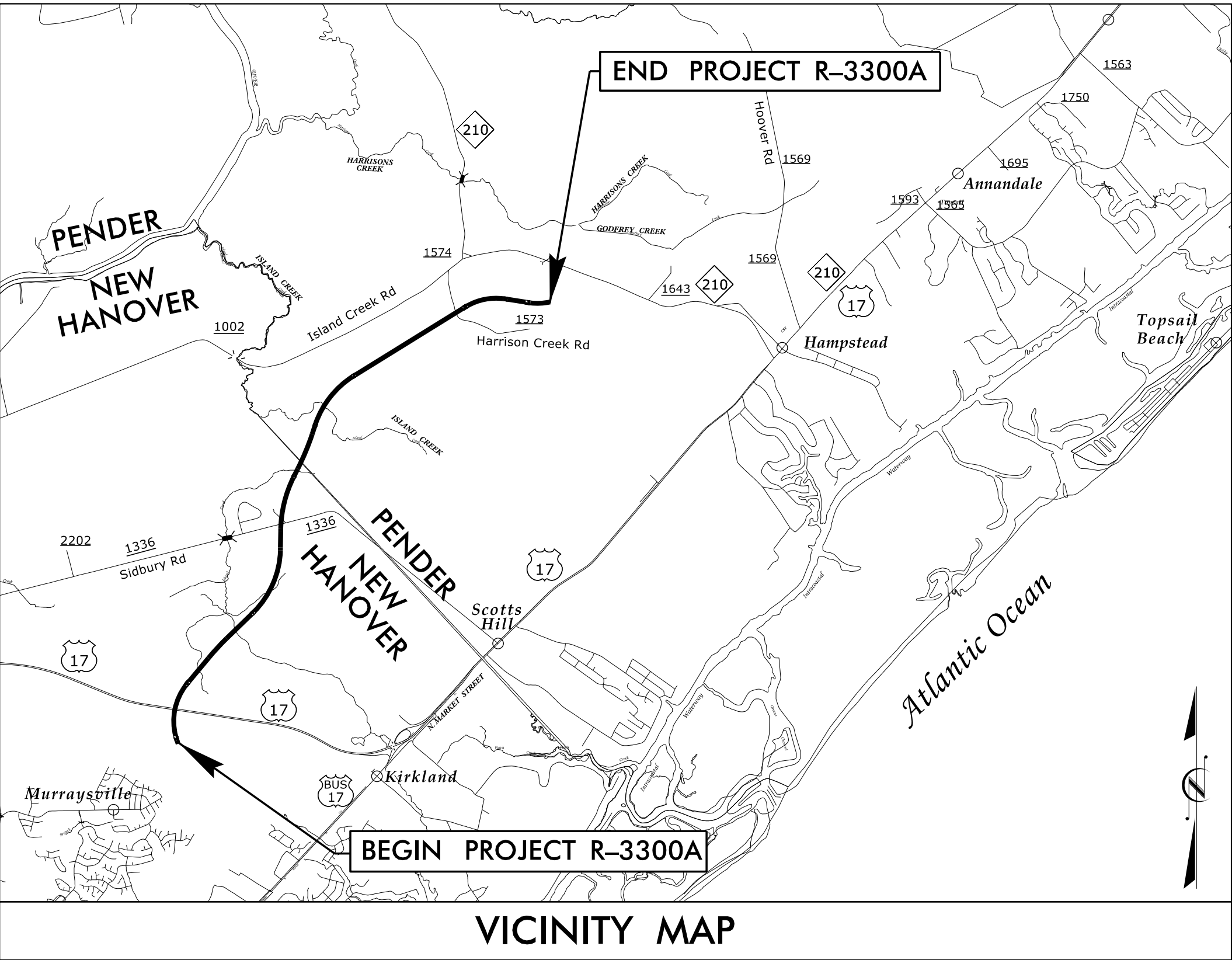
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

NEW HANOVER &
PENDER COUNTY
DIVISION 3

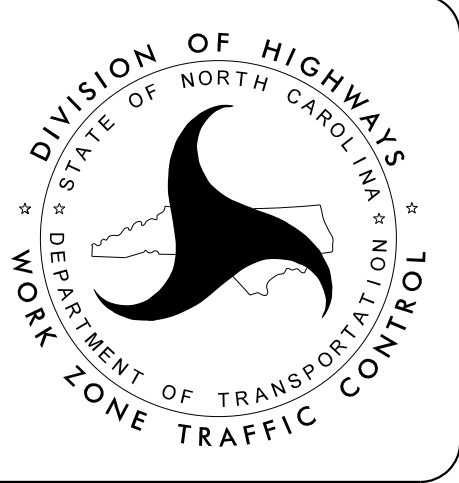


LOCATION: NC-417 (HAMPSTEAD BYPASS) FROM I-140
(WILMINGTON BYPASS) TO SOUTH OF NC-210



PLANS PREPARED BY:
JAY W. WOOLARD, PE
SENIOR TRANSPORTATION ENGINEER
ANDREW N. GOOD
TRANSPORTATION DESIGNER

NCDOT CONTACTS:
TRACE HOWELL, PE
DIVISION 3 CONTACT



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Signed by:
J.W. Woolard
Professional Engineer
19862
BB00204885CA

3/11/2025

SHEET NO.	TITLE
TMP-1	TITLE SHEET, VICINITY MAP, AND INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, AND LEGEND
TMP-1B	WORK ZONE IMPACTS, MANAGEMENT STRATEGIES
TMP-1C & 1D	GENERAL NOTES
TMP-1E	AREA DESIGNATIONS
TMP-2	PORTABLE CONCRETE BARRIER AT TEMPORARY SHORING LOCATIONS
TMP-2A - 2E	TEMPORARY SHORING NOTES
TMP-2F - 2H	TEMPORARY SHORING SECTIONS/TYPICALS
TMP-3 & 3A	TEMPORARY TRAFFIC CONTROL PHASING
TMP-4 - 8	AREA 2 PHASE I - NC-140 -Y33-
TMP-9 - 13	AREA 2 PHASE II - NC-140 -Y33-
TMP-14 - 18	AREA 2 PHASE III - NC-140 -Y33-
TMP-19 - 21	AREA 3 PHASE I - SIDBURY RD -Y34-
TMP-22 - 24	AREA 3 PHASE II - SIDBURY RD -Y34-
TMP-25 - 27	AREA 3 PHASE III - SIDBURY RD -Y34-
TMP-28 - 30	AREA 4 PHASE I - HARRISON CREEK RD -Y35-
TMP-31	AREA 4 PHASE II - HARRISON CREEK RD -Y35-
TMP-32 - 34	AREA 4 PHASE III - HARRISON CREEK RD -Y35-

TIP PROJECT: R-3300A

SHEET NO.
TMP-1

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
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1160.01	TEMPORARY CRASH CUSHION
1165.01	TRUCK MOUNTED ATTENUATOR
1170.01	PORTABLE CONCRETE BARRIER
1180.01	SKINNY - DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO LANE AND MULTILANE ROADWAYS
1205.12	PAVEMENT MARKINGS - BRIDGES

TEMPORARY PAVEMENT MARKING SCHEDULE

	PAINT PAVEMENT MARKING LINES (4")
P1	WHITE EDGELINE
P2	WHITE SOLID LANE LINE
P3	10 FT. WHITE SKIP
P4	3 FT. - 9 FT./SP WHITE MINISKIP
P5	2 FT. - 6 FT./SP WHITE MINISKIP
P10	YELLOW EDGELINE
P11	YELLOW SINGLE CENTER
P12	10 FT. YELLOW SKIP
P13	YELLOW DOUBLE CENTER
	PAINT PAVEMENT MARKING LINES (24")
P61	WHITE STOPBAR

LEGEND

GENERAL

	DIRECTION OF TRAFFIC FLOW
	EXIST. PVMT.
	PROPOSED PVMT.
	NORTH ARROW
	TEMP. SHORING (LOCATION PURPOSES ONLY)
	WORK AREA
	PREVIOUSLY STARTED / CONCURRENT CONSTRUCTION
	PAVEMENT REMOVAL
	TEMPORARY PAVEMENT

TRAFFIC CONTROL DEVICES

TEMPORARY DEVICES	PREVIOUSLY PLACED	
		BARRICADE (TYPE III)
		TUBULAR MARKER
		DRUM
		FLASHING ARROW BOARD
		FLAGGER
		LAW ENFORCEMENT
		TRUCK MOUNTED ATTENUATOR (TMA)
		CHANGEABLE MESSAGE SIGN
		TEMPORARY CRASH CUSHION
		PORTABLE CONCRETE BARRIER

PAVEMENT MARKINGS

	EXISTING LINES	
TEMPORARY MARKINGS	PREVIOUSLY PLACED	
		WHITE EDGE LINE
		YELLOW EDGE LINE
		BROKEN LANE LINES
		MINISKIP LANE LINES
		DOUBLE YELLOW LINES
		GORELINE
		STOP BAR

SIGNALS

	EXISTING	PROPOSED	TEMPORARY

TEMPORARY SIGNING

TEMPORARY SIGNS	PREVIOUSLY PLACED	
		PORTABLE SIGN
		STATIONARY SIGN
		STATIONARY OR PORTABLE SIGN

PAVEMENT MARKING SYMBOLS

	EXISTING PAVEMENT MARKING SYMBOLS (HOLLOW)	
<u>TEMPORARY SYMBOLS</u>	<u>PREVIOUSLY PLACED</u>	
		PAVEMENT MARKING SYMBOLS
ONLY	ONLY	PAVEMENT MARKING ALPHANUMERIC CHARACTERS

PAVEMENT MARKERS

	CRYSTAL/CRYSTAL
	CRYSTAL/RED
	YELLOW/YELLOW

WORK ZONE IMPACTS MANAGEMENT STRATEGIES

WORK ZONE IMPACTS - MANAGEMENT STRATEGIES ARE IN ACCORDANCE WITH THE FEDERAL PUBLICATION "DEVELOPING AND IMPLEMENTING TRANSPORTATION MANAGEMENT PLANS FOR WORK ZONES" IN THE RULE ON WORK ZONE SAFETY AND MOBILITY 23 CFR 630 SUBPART J.

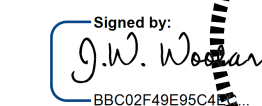
THE STRATEGIES LISTED BELOW ARE POTENTIAL ANTICIPATED FOR THIS PROJECT, HOWEVER, SOME MAY BE ADDED AND OTHERS MAY BE OMITTED AS THE PLANS PROGRESS TOWARDS THE FINAL STAGE UPON AWARD OF THE PROJECT.

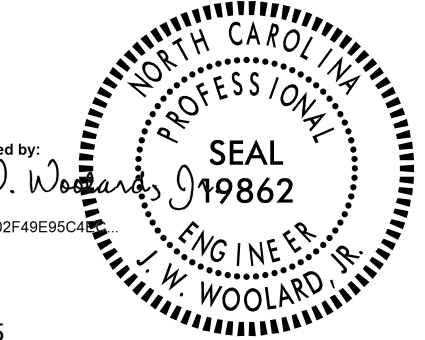
TEMPORARY TRAFFIC CONTROL (TTC)			TRANSPORTATION OPERATIONS (TO)		PUBLIC INFORMATION (PI)
A. CONTROL STRATEGIES	B. TRAFFIC CONTROL DEVICES	C. PROJECT COORDINATION, CONTRACTING AND INNOVATIVE CONSTRUCTION STRATEGIES	A. CORRIDOR/ NETWORK MANAGEMENT STRATEGIES	C. WORK ZONE SAFETY MANAGEMENT STRATEGIES	
CONSTRUCTION PHASING	TEMPORARY SIGNS				
FULL ROADWAY CLOSURES	o WARNING	PROJECT COORDINATION	TEMPORARY TRAFFIC SIGNALS	TEMPORARY TRAFFIC SIGNALS	
LANE SHIFTS OR CLOSURES	o REGULATORY			TEMPORARY TRAFFIC BARRIER	
o REDUCED LANE WIDTHS TO MAINTAIN NUMBER OF LANES (CONSTRUCTION)	o GUIDE/ INFORMATION	o COORDINATION WITH OTHER PROJECTS IF NEEDED		CRASH-CUSHIONS	
o LANE CLOSURES TO PROVIDE WORKER SAFETY	CHANGEABLE MESSAGE SIGNS (CMS)	o UTILITIES COORDINATION		CONSTRUCTION SAFETY SUPERVISORS/ INSPECTORS	
o REDUCED SHOULDER WIDTH TO MAINTAIN NUMBER OF LANES	ARROW BOARDS	o RIGHT-OF-WAY COORDINATION			
NIGHT WORK	CHANNELIZING DEVICES	o COORDINATION WITH OTHER TRANSPORTATION INFRASTRUCTURE			
WEEKEND WORK	TEMPORARY PAVEMENT MARKINGS				
WORK HOUR RESTRICTIONS FOR PEAK TRAVEL	FLAGGERS				
OFF-SITE DETOURS/USE OF ALTERNATE ROUTES	UNIFORMED LAW ENFORCEMENT OFFICERS				
	TEMPORARY TRAFFIC SIGNALS				
	LIGHTING DEVICES				

3/11/2025
Us\Traffic\Transportation Management\Plan\TCP\PLAN SHEETS\IR-3300A_TMP_01B.MGMT STRATEGIES.dgn
angood



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Signed by:

J.W. WOOLLARD, R.



3/11/2025

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WORK ZONE IMPACTS,
MANAGEMENT
STRATEGIES

GENERAL NOTES

PROJ. REFERENCE NO.	SHEET NO.
R-3300A	TMP-1C

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) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS	
NC 140 (-Y33-)	6:00 A.M. TO 7:00 P.M.	MONDAY - SUNDAY
SIDBURY RD. (-Y34-)	6:00 A.M. TO 9:00 A.M. 3:00 P.M. TO 6:00 P.M.	MONDAY - FRIDAY MONDAY - FRIDAY
HARRISON CREEK RD. (-Y35-)	6:00 A.M. TO 9:00 A.M. 3:00 P.M. TO 6:00 P.M.	MONDAY - FRIDAY MONDAY - FRIDAY
-L1-	6:00 A.M. TO 7:00 P.M.	MONDAY - SUNDAY
-L1_NORTHERN-	6:00 A.M. TO 7:00 P.M.	MONDAY - SUNDAY
NC 210 (-Y30-)	6:00 A.M. TO 7:00 P.M.	MONDAY - SUNDAY

B) DO NOT CLOSE OR NARROW TRAVEL LANES DURING HOLIDAYS AND SPECIAL EVENTS AS FOLLOWS:

ROAD NAME
NC 140 (-Y33-), -L1-, -L1_NORTHERN-, NC 210 (-Y30-), SIDBURY RD (-Y34-), AND HARRISON CREEK RD (-Y35-)
HOLIDAY
1) FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
2) FOR NEW YEAR'S, BETWEEN THE HOURS OF 6:00 A.M. DECEMBER 31ST TO 7:00 P.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 7:00 P.M. THE FOLLOWING TUESDAY.
3) FOR EASTER, BETWEEN THE HOURS OF 6:00 A.M. THURSDAY AND 7:00 P.M. MONDAY.
4) FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY TO 7:00 P.M. TUESDAY.
5) FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 7:00 P.M. THE DAY AFTER INDEPENDENCE DAY. IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY; THEN BETWEEN THE HOURS OF 6:00 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 7:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.
6) FOR LABOR DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY AND 7:00 P.M. TUESDAY.
7) FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00 A.M. TUESDAY TO 7:00 P.M. MONDAY.
8) FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 7:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.
9) FOR THE AZALEA FESTIVAL EVENT, BETWEEN THE HOURS OF 5:00 A.M. THE TUESDAY BEFORE THE WEEKEND OF THE AZALEA FESTIVAL TO 7:00 P.M. MONDAY AFTER THE WEEKEND OF THE AZALEA FESTIVAL.

C) DO NOT STOP TRAFFIC AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS	DURATION AND OPERATION
NC 140 (-Y33-), -L1-, EXISTING FLYOVER TO WEST NC 140.	MONDAY TO SUNDAY 5:00 A.M. TO 11:00 P.M.	30 MINUTES HANGING GIRDERS

D) DO NOT CONDUCT ANY HAULING OPERATIONS AGAINST THE FLOW OF TRAFFIC OF AN OPEN TRAVELWAY UNLESS THE HAULING OPERATION IS PROTECTED BY BARRIER OR GUARDRAIL OR AS DIRECTED BY THE ENGINEER.

LANE AND SHOULDER CLOSURE REQUIREMENTS

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.

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 BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.

G) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 5 FT OF AN OPEN TRAVEL LANE, ON AN UNDIVIDED FACILITY, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 10 FT OF AN OPEN TRAVEL LANE, ON A DIVIDED FACILITY, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

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, OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.

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.

PAVEMENT EDGE DROP OFF REQUIREMENTS

J) BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPEN TRAVEL LANE THAT HAS A DROP-OFF AS FOLLOWS:

BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.

BACKFILL DROP-OFFS THAT EXCEED 3 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS LESS THAN 45 MPH.

BACKFILL WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER, AT NO EXPENSE TO THE DEPARTMENT.

K) 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 (W8-11) 500 FT IN ADVANCE AND A MINIMUM OF ONCE EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

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

SIGNING

M) 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.

N) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

O) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 500 FT IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

TRAFFIC BARRIER

P) 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 MANAGEMENT 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.

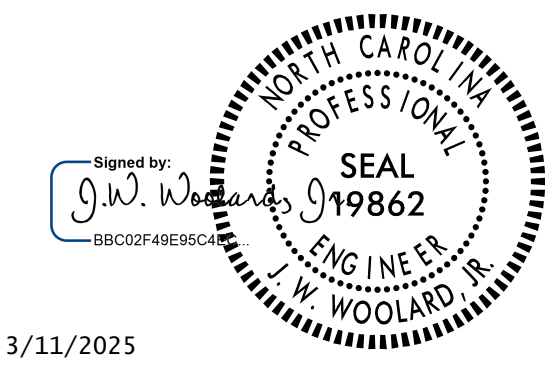
Q) PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER AT ALL TIMES DURING THE INSTALLATION AND REMOVAL OF THE BARRIER BY EITHER A TRUCK MOUNTED ATTENUATOR (MAXIMUM 72 HOURS) OR A TEMPORARY CRASH CUSHION.

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



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SEAL 19862
ENGINEER
J.W. WOOLARD, P.E.
3/11/2025

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GENERAL NOTES

GENERAL NOTES

PROJ. REFERENCE NO.	SHEET NO.
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TRAFFIC CONTROL DEVICES

- R) 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).
- S) PLACE TYPE III BARRICADES WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.
- T) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES (DRUMS) PERPENDICULAR TO THE EDGE OF TRAVELWAY ON (500 FT) CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

PAVEMENT MARKINGS AND MARKERS

- U) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:
- | | | |
|-----------|---------|------------------|
| ROAD NAME | MARKING | MARKER |
| ALL ROADS | PAINT | TEMPORARY RAISED |
| BRIDGES | PAINT | TEMPORARY RAISED |
- V) 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.
- W) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- X) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.
- Y) TRACE THE (EXISTING AND/OR PROPOSED) MONOLITHIC ISLAND LOCATIONS WITH THE PROPER COLOR PAVEMENT MARKING PRIOR TO (REMOVAL AND/OR INSTALLATION). PLACE (DRUMS, OR TUBULAR MARKERS) TO DELINEATE ANY (EXISTING AND/OR PROPOSED) MONOLITHIC ISLANDS (AFTER REMOVAL AND/OR BEFORE INSTALLATION).

MISCELLANEOUS

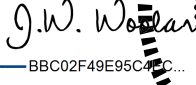
- Z) MAINTAIN VEHICULAR ACCESS TO ALL DRIVEWAYS DURING THE LIFE OF THE CONTRACT, UNLESS OTHERWISE NOTED IN THE PHASING OR DIRECTED BY THE ENGINEER. USE INCIDENTAL STONE WHEN NECESSARY.
- AA) ALL DIMENSIONS AND STATIONS IN THE TRANSPORTATION MANAGEMENT PLAN AND PHASING ARE APPROXIMATE (+/-); FIELD ADJUST AS NECESSARY OR AS DIRECTED BY THE ENGINEER.

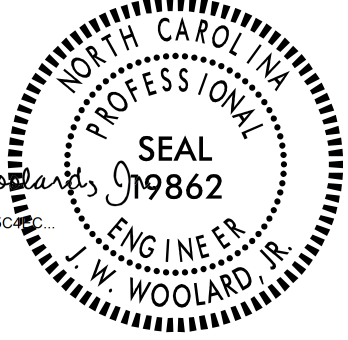
- BB) CHANGEABLE MESSAGE SIGN MESSAGES SHOWN ARE EXAMPLES. OTHER MESSAGES MAY BE USED AS CONDITIONS WARRANT. ALL MESSAGES AND LOCATIONS MUST BE APPROVED BY THE ENGINEER PRIOR TO INCORPORATING.
- CC) COMPLETE ANY PROPOSED OR TEMPORARY WIDENING IN SUCH A MANNER THAT PONDING OF WATER WILL NOT OCCUR IN THE TRAVEL LANE.
- DD) ENSURE THE OVERSIZE/OVERWEIGHT PERMIT UNIT (919) 814-3700 HAS BEEN ADVISED OF THE ONGOING TRAFFIC OPERATIONS THROUGH THE DIVISION OFFICE.
- EE) 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.
- FF) 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.
- GG) DRAINAGE CONSTRUCTION SHOWN IN THE TRANSPORTATION MANAGEMENT PLAN IS A GENERAL REPRESENTATION OF WORK TO BE PERFORMED DURING A PARTICULAR PHASE OF CONSTRUCTION. REFER TO THE ROADWAY PLANS FOR DRAINAGE ITEMS. IN THE EVENT THERE IS A DISCREPANCY BETWEEN WHAT IS SHOWN IN THE TRANSPORTATION MANAGEMENT PLAN AND THE ROADWAY PLAN, THE ROADWAY PLAN SHALL GOVERN OVER THE TRANSPORTATION MANAGEMENT PLAN.
- HH) 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 (W8-7), AND BLACK ON ORANGE "PAVEMENT ENDS" SIGNS (W8-3) 100 FEET AND 500 FEET RESPECTIVELY IN ADVANCE OF THE UNEVEN AREAS (REFER TO RSD 1101.11 SHEET 4 OF 4). USE DRUMS TO DELINEATE THE EDGE OF ROADWAY ALONG UNPAVED AREAS.

3/31/2025
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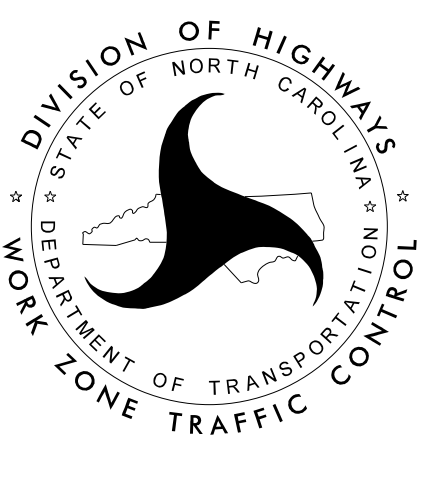
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Signed by:

J.W. WOOLLARD, R.



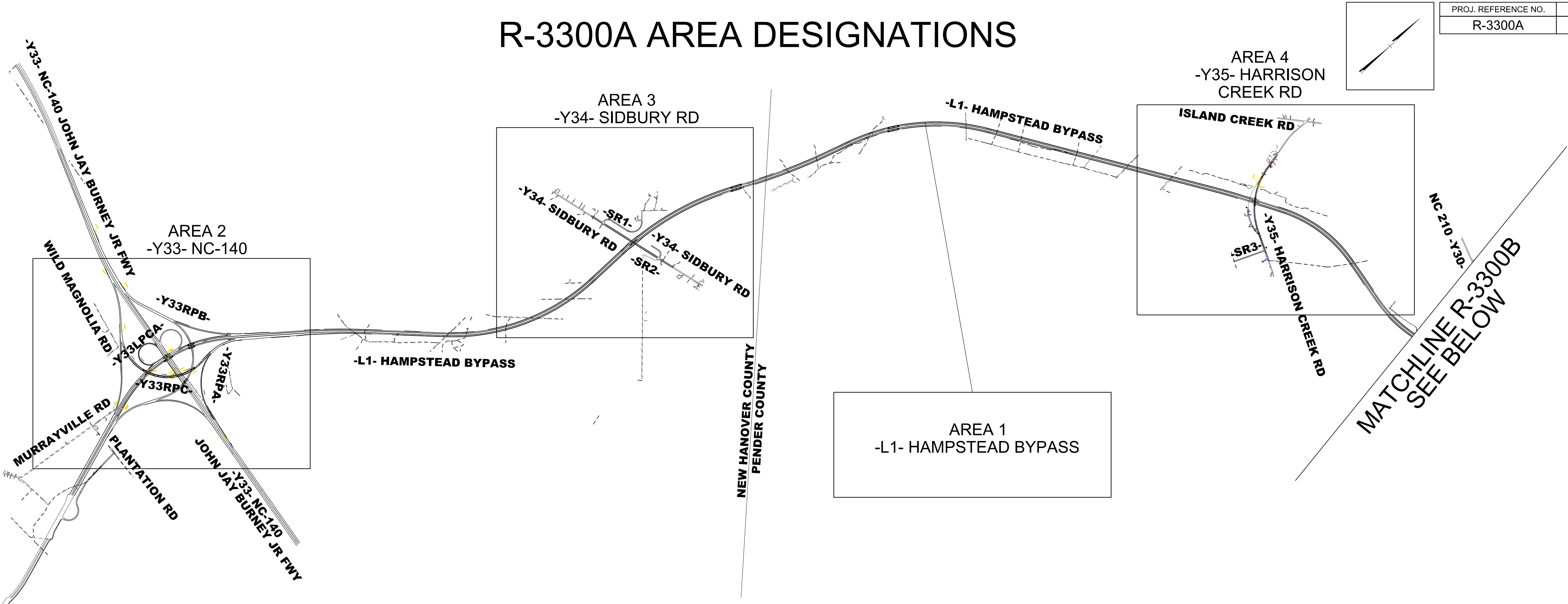
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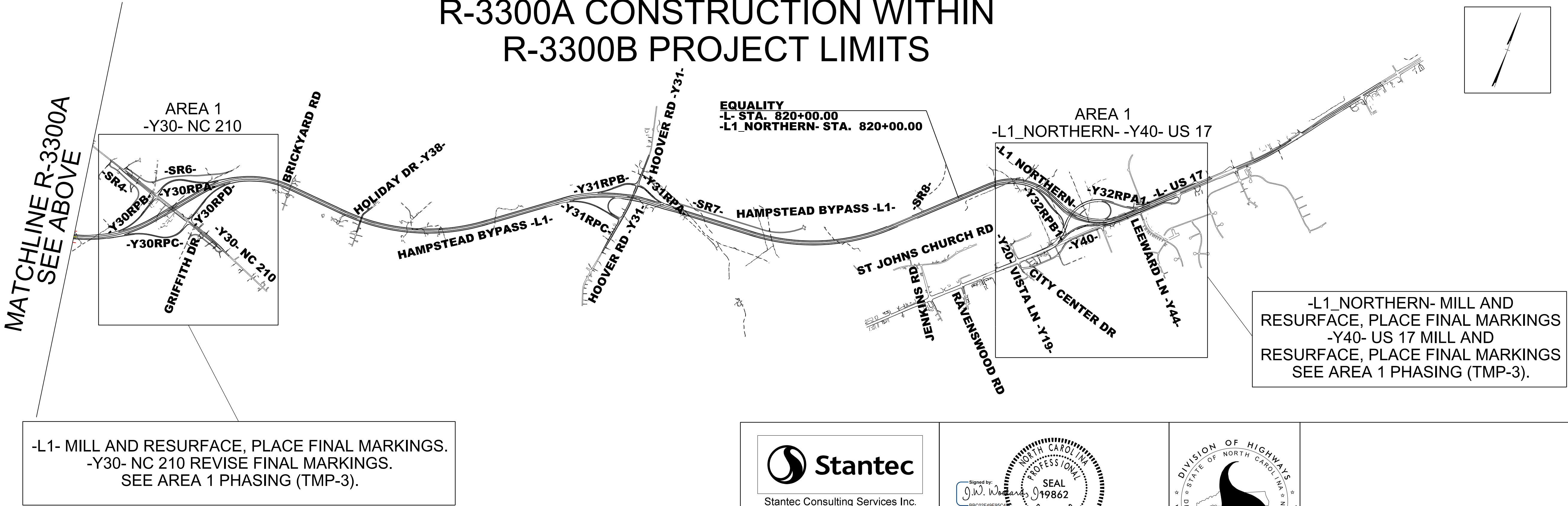


GENERAL NOTES

R-3300A AREA DESIGNATIONS



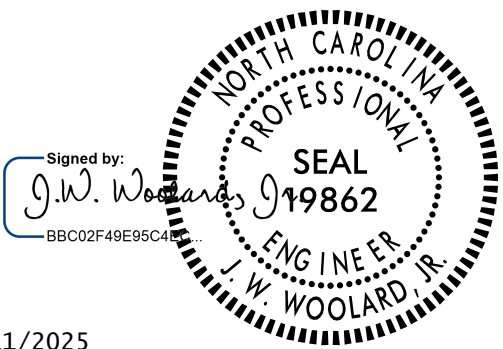
R-3300A CONSTRUCTION WITHIN R-3300B PROJECT LIMITS



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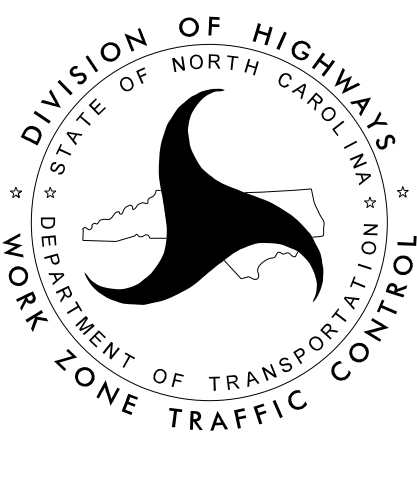


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Signed by: J.W. Woolard
SEAL
19862
ENGINEER
J.W. WOOLARD, P.E.
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AREA DESIGNATIONS

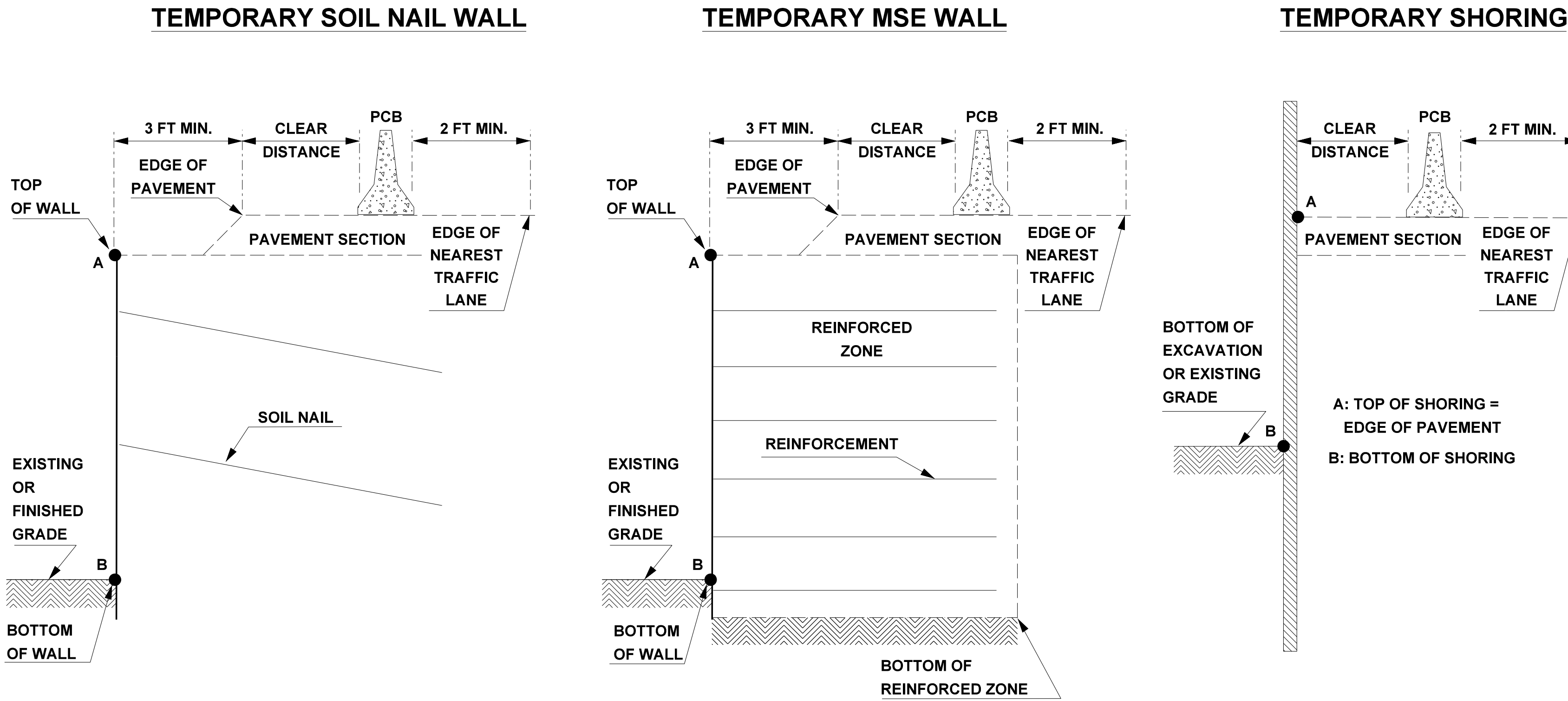


FIGURE A

NOTES

- 1- REFER TO THE TRAFFIC CONTROL PLANS FOR TEMPORARY SHORING LOCATIONS AND NOTES.
- 2- REFER TO THE "TEMPORARY SHORING" STANDARD PROVISION FOR INFORMATION ABOUT TEMPORARY SHORING AND PORTABLE CONCRETE BARRIER (PCB).
- 3- PCB IS REQUIRED IF TEMPORARY SHORING/WALL IS LOCATED WITHIN THE CLEAR ZONE IN ACCORDANCE WITH THE AASHTO ROADSIDE DESIGN GUIDE. DO NOT PLACE BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE. (CONTACT NCDOT PAVEMENT MANAGEMENT FOR APPLICABLE PAVEMENT DESIGN).
- 4- BASED ON THE CLEAR DISTANCE, OFFSET, DESIGN SPEED AND PAVEMENT TYPE, CHOOSE AN UNANCHORED OR ANCHORED PCB FROM THE TABLE SHOWN IN FIGURE B. CLEAR DISTANCE IS DEFINED AS SHOWN IN FIGURE A AND OFFSET IS DEFINED AS SHOWN IN FIGURE B.
- 5- AT THE CONTRACTOR'S OPTION OR IF THE MINIMUM REQUIRED CLEAR DISTANCE IS NOT AVAILABLE, SET PCB NEXT TO AND UP AGAINST THE TRAFFIC SIDE OF THE TEMPORARY SHORING/WALLS EXCEPT FOR BARRIER ABOVE TEMPORARY WALLS. PCB WITH THE MINIMUM REQUIRED CLEAR DISTANCE IS REQUIRED ABOVE TEMPORARY WALLS.
- 6- USE NCDOT PORTABLE CONCRETE BARRIER (PCB) IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1170.01 AND SECTION 1170 OF THE STANDARD SPECIFICATIONS.
- 7- SET PCB WITH A MINIMUM HORIZONTAL DISTANCE OF 2 FT BETWEEN THE FRONT FACE OF THE BARRIER AND THE EDGE OF THE NEAREST TRAFFIC LANE AS SHOWN IN FIGURE A UNLESS OTHERWISE SHOWN IN THE PLANS OR APPROVED BY THE ENGINEER.
- 8- FOR PCB ABOVE AND BEHIND TEMPORARY WALLS, PROVIDE A MINIMUM DISTANCE OF 3 FT BETWEEN THE EDGE OF PAVEMENT AND THE WALL FACE AS SHOWN IN FIGURE A. IF THIS MINIMUM REQUIRED DISTANCE IS NOT AVAILABLE, CONTACT THE ENGINEER.
- 9- TABLE SHOWN IN FIGURE B IS BASED ON NCDOT RESEARCH PROJECT NO. 2005-010 WITH VEHICLE TYPE USED FOR NCHRP 350 CRASH TESTS.

PROJ. REFERENCE NO.	SHEET NO.
R-3300A	TMP-2

Barrier Type	Pavement Type	Offset * ft	Design Speed, mph						
			<30	31-40	41-50	51-60	61-70	71-80	
			<8	8-14	14-20	20-26	26-32	32-38	>38
Unanchored PCB	Asphalt	<8	24	26	29	32	36	40	
		8-14	26	28	31	35	38	42	
		14-20	27	29	34	36	39	43	
		20-26	28	31	35	38	40	44	
		26-32	29	32	36	39	42	45	
		32-38	30	34	38	41	43	46	
		38-44	31	34	41	43	45	48	
		44-50	31	35	41	43	46	49	
	Concrete	50-56	32	36	42	44	47	50	
		>56	32	36	42	45	47	51	
		<8	17	18	21	22	25	26	
		8-14	19	20	23	25	26	29	
		14-20	22	22	24	26	28	31	
		20-26	23	24	26	27	30	34	
		26-32	24	25	27	28	32	35	
		32-38	24	26	27	30	33	36	
Anchored PCB	Asphalt	All Offsets	24 for All Design Speeds						
Anchored PCB	Concrete (including bridge approach slabs)	All Offsets	12 for All Design Speeds						

* See Figure Below

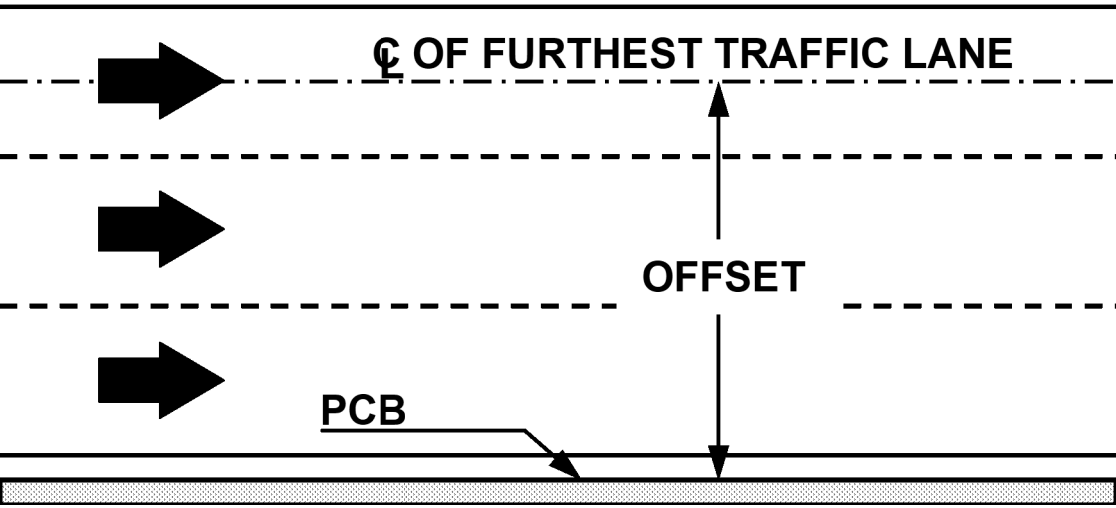


FIGURE B

DETAIL PROVIDED BY NCDOT



PORTABLE CONCRETE BARRIER AT TEMPORARY SHORING LOCATIONS

TEMPORARY SHORING LOCATION NO. 01	SEE SHEET TMP-7
ESTIMATED QUANTITY = 223.6 SF	

-L1- STA. 219+27, 13.0' LT TO -L1- STA. 219+79, 13.0' LT
LENGTH=52.0' AVERAGE HEIGHT = 4.3' MAX HEIGHT = 7.7'

1. FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.
2. BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.
3. DESIGN TEMPORARY SHORING FROM -L1- STATION 219+27, 13.0' LT TO STATION 219+79, 13.0' 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 = 38 FT

4. AT THE CONTRACTORS OPTION, USE STANDARD SHORING FOR TEMPORARY SHORING FROM -L1- STATION 219+27, 13.0' LT TO STATION 219+79, 13.0 LT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

TEMPORARY SHORING LOCATION NO. 03	SEE SHEET TMP-5
ESTIMATED QUANTITY = 330.0 SF	

-Y33- STA. 79+55, 55.8' LT TO -Y33- STA. 80+15, 55.8' LT
LENGTH=60.0' AVERAGE HEIGHT = 5.5' MAX HEIGHT = 8.2'

1. FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.
2. BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.
3. DESIGN TEMPORARY SHORING FROM -Y33- STATION 79+55, 55.8' LT TO STATION 80+15, 55.8' 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 = 38 FT

4. AT THE CONTRACTORS OPTION, USE STANDARD SHORING FOR TEMPORARY SHORING FROM -Y33- STATION 79+55, 55.8' LT TO STATION 80+15, 55.8 LT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

TEMPORARY SHORING LOCATION NO. 02	SEE SHEET TMP-5
ESTIMATED QUANTITY = 336.0 SF	

-Y33- STA. 79+08, 67.8' RT TO -Y33- STA. 79+68, 67.8' RT
LENGTH=60.0' AVERAGE HEIGHT = 5.6' MAX HEIGHT = 8.4'

1. FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.
2. BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.
3. DESIGN TEMPORARY SHORING FROM -Y33- STATION 79+08, 67.8' RT TO STATION 79+68, 67.8' RT 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 = 38 FT

4. AT THE CONTRACTORS OPTION, USE STANDARD SHORING FOR TEMPORARY SHORING FROM -Y33- STATION 79+08, 67.8' RT TO STATION 79.68, 67.8 RT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

TEMPORARY SHORING LOCATION NO. 04	SEE SHEET TMP-10
ESTIMATED QUANTITY = 539 SF	

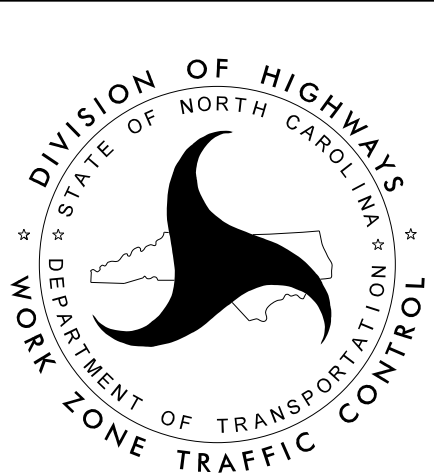
-Y33RPCA- STA. 42+75, 35.6' RT TO -Y33RPCA- STA. 43+35, 14.6' LT
LENGTH=70' AVERAGE HEIGHT = 7.7' MAX HEIGHT = 11.5'

1. FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.
2. BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.
3. DESIGN TEMPORARY SHORING FROM -Y33RPCA- STATION 42+75, 35.6' RT TO STATION 43+35, 14.6' 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 = 39 FT

4. AT THE CONTRACTORS OPTION, USE STANDARD SHORING FOR TEMPORARY SHORING FROM -Y33RPCA- STATION 42+75, 35.6' RT TO STATION 43+35, 14.6 LT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

THE TEMPORARY SHORING NOTES 01, 02, 03, AND 04 SHOWN ON THIS SHEET WERE PROVIDED THROUGH A SEALED DOCUMENT FROM THE GEOTECHNICAL ENGINEER. THE DOCUMENT WAS SUBMITTED TO STANTEC CONSULTING ON (OCTOBER 02, 2023) AND SEALED BY A PROFESSIONAL ENGINEER, (JEREMY R. HAMM), LICENSE #039779.



TEMPORARY
SHORING
NOTES

TEMPORARY SHORING LOCATION NO. 05

SEE SHEET TMP-4

ESTIMATED QUANTITY = 448.0 SF

-Y33- STA. 74+08, 10.5' LT TO -Y33- STA. 74+88, 10.5' LT
LENGTH=80.0' AVERAGE HEIGHT = 5.6' MAX HEIGHT = 8.5'

1. FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.
2. BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.
3. DESIGN TEMPORARY SHORING FROM -Y33- STATION 74+08, 10.5' LT TO STATION 74+88, 10.5' 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 = 38 FT

4. AT THE CONTRACTORS OPTION, USE STANDARD SHORING FOR TEMPORARY SHORING FROM -Y33- STATION 74+08, 10.5' LT TO STATION 74+88, 10.5 LT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

TEMPORARY SHORING LOCATION NO. 06

SEE SHEET TMP-4

ESTIMATED QUANTITY = 448.0 SF

-Y33- STA. 74+08, 10.5' RT TO -Y33- STA. 74+88, 10.5' RT
LENGTH=80.0' AVERAGE HEIGHT = 5.6' MAX HEIGHT = 8.5'

1. FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.
2. BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.
3. DESIGN TEMPORARY SHORING FROM -Y33- STATION 74+08, 10.5' RT TO STATION 74+88, 10.5' RT 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 = 38 FT

4. AT THE CONTRACTORS OPTION, USE STANDARD SHORING FOR TEMPORARY SHORING FROM -Y33- STATION 74+08, 10.5' RT TO STATION 74+88, 10.5 RT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

TEMPORARY SHORING LOCATION NO. 07

SEE SHEET TMP-31

ESTIMATED QUANTITY = 2700.0 SF

-Y35- STA. 16+50, 33.0' RT TO -Y35- STA. 19+50, 68.8' RT
LENGTH=300.0' AVERAGE HEIGHT = 9.0' MAX HEIGHT = 11.8'

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 -Y35- 16+50±, 33' RT TO 19+50±, 68.8' RT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT (γ) = 115 PCF (EL≥29 FT±)
= 95 PCF (EL<29 FT± & ≥ 20 FT±)
= 115 PCF (EL<20 FT± & ≥ 16 FT±)
= 90 PCF (EL<16 FT± & ≥ 4 FT±)
= 125 PCF (EL<4 FT)

FRICTION ANGLE (ϕ) = 30 DEGREES (EL≥29 FT±)
= 0 DEGREES (EL<29 & ≥ 20 FT±)
= 31 DEGREES (EL<20 & ≥ 16 FT±)
= 0 DEGREES (EL<16 & ≥ 4 FT±)
= 33 DEGREES (EL<4 FT±)

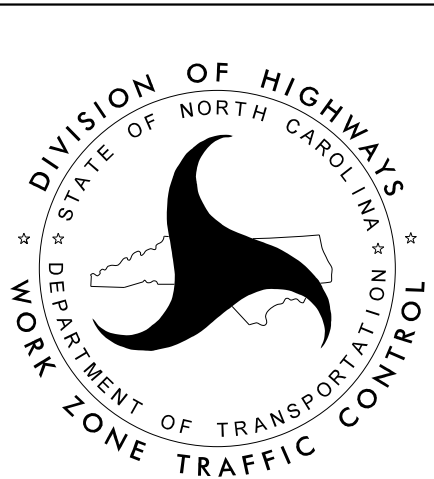
COHESION (c) = 0 PSF (EL≥ 29 FT±)
= 300 PSF (EL<29 FT± & ≥ 20 FT±)
= 0 PSF (EL<20 FT± & ≥ 16 FT±)
= 200 PSF (EL<16 FT± & ≥ 4 FT±)
= 0 PSF (EL<4 FT±)

GROUNDWATER ELEVATION = 29 FT±

DO NOT USE CANTILEVER, BRACED OR ANCHORED SHORING FOR TEMPORARY SHORING FROM STATION -Y35- 16+50±, 33' RT TO 19+50±, 68.8' RT.

THE TEMPORARY SHORING NOTES 05 AND 06 SHOWN ON THIS SHEET WERE PROVIDED THROUGH A SEALED DOCUMENT FROM THE GEOTECHNICAL ENGINEER. THE DOCUMENT WAS SUBMITTED TO STANTEC CONSULTING ON (OCTOBER 02, 2023) AND SEALED BY A PROFESSIONAL ENGINEER, (JEREMY R. HAMM), LICENSE #039779.

THE TEMPORARY SHORING NOTE 07 SHOWN ON THIS SHEET WERE PROVIDED THROUGH A SEALED DOCUMENT FROM THE GEOTECHNICAL ENGINEER. THE DOCUMENT WAS SUBMITTED TO STANTEC CONSULTING ON (OCTOBER 24, 2023) AND SEALED BY A PROFESSIONAL ENGINEER, (YINHUI LIU), LICENSE #034020.



TEMPORARY SHORING NOTES

TEMPORARY SHORING LOCATION NO. 08

SEE SHEET TMP-5

ESTIMATED QUANTITY = 140.0 SF

-Y33- STA. 77+40, 15.0' LT TO -Y33- STA. 77+80, 15.0' LT
LENGTH=40.0' AVERAGE HEIGHT = 3.5' MAX HEIGHT = 5.0'

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 -Y33- 77+40±, 15' LT TO 77+80±, 15' LT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT (γ) = 110 PCF (EL≥23 FT±)
= 95 PCF (EL<23 FT± & ≥ 10 FT±)
= 100 PCF (EL<10 FT± & ≥ 5 FT±)
= 130 PCF (EL<5 FT)

FRICTION ANGLE (ϕ) = 30 DEGREES (EL≥23 FT±)
= 0 DEGREES (EL<23 & ≥ 10 FT±)
= 28 DEGREES (EL<10 & ≥ 5 FT±)
= 38 DEGREES (EL<5 FT±)

COHESION (c) = 0 PSF (EL≥23 FT±)
= 200 PSF (EL<23 FT± & ≥ 10 FT±)
= 0 PSF (EL<10 FT± & ≥ 5 FT±)
= 0 PSF (EL<5 FT±)

GROUNDWATER ELEVATION = 39 FT±

DO NOT USE A TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION --Y33- 77+40±, 15' LT TO 77+80±, 15' LT.

TEMPORARY SHORING LOCATION NO. 09

SEE SHEET TMP-5

ESTIMATED QUANTITY = 140.0 SF

-Y33- STA. 77+40, 15.0' RT TO -Y33- STA. 77+80, 15.0' RT
LENGTH=40.0' AVERAGE HEIGHT = 3.5' MAX HEIGHT = 5.0'

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 -Y33- 77+40±, 15' RT TO 77+80±, 15' RT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT (γ) = 110 PCF (EL≥23 FT±)
= 95 PCF (EL<23 FT± & ≥ 10 FT±)
= 100 PCF (EL<10 FT± & ≥ 5 FT±)
= 130 PCF (EL<5 FT)

FRICTION ANGLE (ϕ) = 30 DEGREES (EL≥23 FT±)
= 0 DEGREES (EL<23 & ≥ 10 FT±)
= 28 DEGREES (EL<10 & ≥ 5 FT±)
= 38 DEGREES (EL<5 FT±)

COHESION (c) = 0 PSF (EL≥23 FT±)
= 200 PSF (EL<23 FT± & ≥ 10 FT±)
= 0 PSF (EL<10 FT± & ≥ 5 FT±)
= 0 PSF (EL<5 FT±)

GROUNDWATER ELEVATION = 39 FT±

DO NOT USE A TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION --Y33- 77+40±, 15' RT TO 77+80±, 15' RT.

TEMPORARY SHORING LOCATION NO. 10

SEE SHEET TMP-5

ESTIMATED QUANTITY = 280.0 SF

-Y33- STA. 77+15, 60.0' RT TO -Y33- STA. 77+55, 60.0' RT
LENGTH=40.0' AVERAGE HEIGHT = 7.0' MAX HEIGHT = 10.0'

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 -Y33- 77+15±, 60' RT TO 77+55±, 60' LT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT (γ) = 110 PCF (EL≥23 FT±)
= 95 PCF (EL<23 FT± & ≥ 10 FT±)
= 100 PCF (EL<10 FT± & ≥ 5 FT±)
= 130 PCF (EL<5 FT)

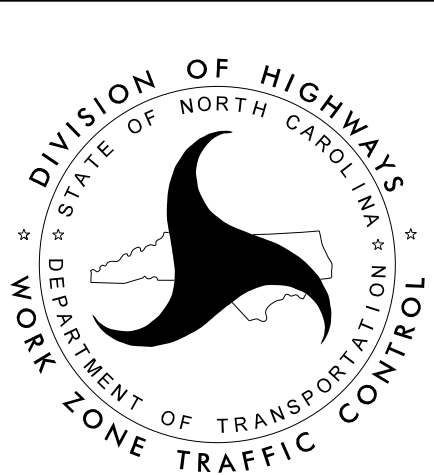
FRICTION ANGLE (ϕ) = 30 DEGREES (EL≥23 FT±)
= 0 DEGREES (EL<23 & ≥ 10 FT±)
= 28 DEGREES (EL<10 & ≥ 5 FT±)
= 38 DEGREES (EL<5 FT±)

COHESION (c) = 0 PSF (EL≥23 FT±)
= 200 PSF (EL<23 FT± & ≥ 10 FT±)
= 0 PSF (EL<10 FT± & ≥ 5 FT±)
= 0 PSF (EL<5 FT±)

GROUNDWATER ELEVATION = 39 FT±

DO NOT USE A TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION --Y33- 77+15±, 60' RT TO 77+55±, 15' RT.

THE TEMPORARY SHORING NOTE 08, 09, and 10 SHOWN ON THIS SHEET WERE PROVIDED THROUGH A SEALED DOCUMENT FROM THE GEOTECHNICAL ENGINEER. THE DOCUMENT WAS SUBMITTED TO STANTEC CONSULTING ON (JUNE 01, 2024) AND SEALED BY A PROFESSIONAL ENGINEER, (YINHUI LIU), LICENSE #034020.



TEMPORARY SHORING NOTES

SEE SHEET TMP-2H

TEMPORARY SHORING LOCATION NO. 11

ESTIMATED QUANTITY = 110.4 SF

-L- STA. 201+61, 90.25' LT TO -L- STA. 201+93, 90.25' LT
LENGTH=32' AVERAGE HEIGHT = 3.45' MAX HEIGHT = 5'

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- 201+61±, 90.25' LT TO 201+93±, 90.25' LT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT (γ) = 115 PCF (EL≥41 FT±)
= 120 PCF (EL<41 FT± & EL≥38 FT±)
= 110 PCF (EL<38 FT± & EL≥36 FT±)
= 95 PCF (EL<36 FT±)

FRICTION ANGLE (ϕ) = 30 DEGREES (EL≥41 FT±)
= 32 DEGREES (EL<41 FT± & EL≥38 FT±)
= 29 DEGREES (EL<38 FT± & EL≥36 FT±)
= 0 DEGREES (EL<36 FT±)

COHESION (c) = 0 LB/SF (EL≥36FT±)
= 300 PSF (EL<36 FT±)

GROUNDWATER ELEVATION = 39 FT±

DO NOT USE A TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -L- 201+61±, 90.25' LT TO 201+93±, 90.25' LT.

AT THE CONTRACTOR'S OPTION, USE A STANDARD SHORING FOR TEMPORARY SHORING FROM -L- 201+61±, 90.25' LT TO 201+93±, 90.25' LT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

SEE SHEET TMP-2H

TEMPORARY SHORING LOCATION NO. 13

ESTIMATED QUANTITY = 78.4 SF

-L- STA. 201+63 3.75' LT TO -L- STA. 201+91, 3.75' LT
LENGTH=28' AVERAGE HEIGHT = 2.8' MAX HEIGHT = 4'

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- 201+63±, 3.75' LT TO 201+91±, 3.75' LT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT (γ) = 115 PCF (EL≥41 FT±)
= 120 PCF (EL<41 FT± & EL≥38 FT±)
= 110 PCF (EL<38 FT± & EL≥36 FT±)
= 95 PCF (EL<36 FT±)

FRICTION ANGLE (ϕ) = 30 DEGREES (EL≥41 FT±)
= 32 DEGREES (EL<41 FT± & EL≥38 FT±)
= 29 DEGREES (EL<38 FT± & EL≥36 FT±)
= 0 DEGREES (EL<36 FT±)

COHESION (c) = 0 LB/SF (EL≥36FT±)
= 300 PSF (EL<36 FT±)

GROUNDWATER ELEVATION = 39 FT±

DO NOT USE A TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -L- 201+63±, 3.75' LT TO 201+91±, 3.75' LT.

AT THE CONTRACTOR'S OPTION, USE A STANDARD SHORING FOR TEMPORARY SHORING FROM -L- 201+63±, 3.75' LT TO 201+91±, 3.75' LT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

SEE SHEET TMP-2H

TEMPORARY SHORING LOCATION NO. 12

ESTIMATED QUANTITY = 52.8 SF

-L- STA. 201+65, 3.75' RT TO -L- STA. 201+89, 3.75' RT
LENGTH=24' AVERAGE HEIGHT = 2.2' MAX HEIGHT = 3'

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- 201+65±, 3.75' RT TO 201+89±, 3.75' RT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT (γ) = 115 PCF (EL≥41 FT±)
= 120 PCF (EL<41 FT± & EL≥38 FT±)
= 110 PCF (EL<38 FT± & EL≥36 FT±)
= 95 PCF (EL<36 FT±)

FRICTION ANGLE (ϕ) = 30 DEGREES (EL≥41 FT±)
= 32 DEGREES (EL<41 FT± & EL≥38 FT±)
= 29 DEGREES (EL<38 FT± & EL≥36 FT±)
= 0 DEGREES (EL<36 FT±)

COHESION (c) = 0 PSF (EL≥36 FT±)
= 300 PSF (EL<36 FT±)

GROUNDWATER ELEVATION = 39 FT±

DO NOT USE A TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -L- 201+65±, 3.75' RT TO 201+89±, 3.75' RT.

AT THE CONTRACTOR'S OPTION, USE A STANDARD SHORING FOR TEMPORARY SHORING FROM -L- 201+65±, 3.75' RT TO 201+89±, 3.75' RT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

SEE SHEET TMP-2H

TEMPORARY SHORING LOCATION NO. 14

ESTIMATED QUANTITY = 110.4 SF

-Y33- STA. 99+94, 75.75' LT TO -Y33- STA. 100+26, 75.75' LT
LENGTH=32' AVERAGE HEIGHT = 3.45' MAX HEIGHT = 5'

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 -Y33- 99+94±, 75.75' LT TO 100+26±, 75.75' LT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT (γ) = 110 PCF (EL≥38 FT±)
= 120 PCF (EL<38 FT± & EL≥34 FT±)
= 115 PCF (EL<34 FT±)

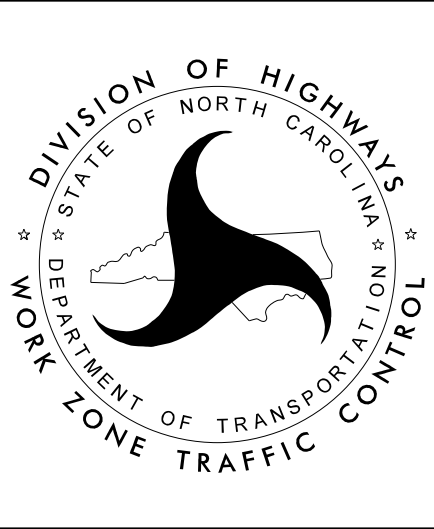
FRICTION ANGLE (ϕ) = 29 DEGREES (EL≥38 FT±)
= 33 DEGREES (EL<38 FT± & EL≥34 FT±)
= 30 DEGREES (EL<34 FT±)

COHESION (c) = 0 LB/SF

GROUNDWATER ELEVATION = 41 FT±

DO NOT USE A TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -Y33- 99+94±, 75.75' LT TO 100+26±, 75.75' LT.

THE TEMPORARY SHORING NOTES SHOWN ON THIS SHEET WERE PROVIDED THROUGH A SEALED DOCUMENT FROM THE GEOTECHNICAL ENGINEER. THE DOCUMENT WAS SUBMITTED TO STANTEC CONSULTING ON (APRIL 3, 2025) AND SEALED BY A PROFESSIONAL ENGINEER, (YINHUI LIU), LICENSE #034020.



TEMPORARY SHORING NOTES
(PROPOSED SIGN ASSEMBLIES)

SEE SHEET TMP-2H

TEMPORARY SHORING LOCATION NO. 15

ESTIMATED QUANTITY = 110.4 SF

-Y33- STA. 47+99, 87.25' RT TO -Y33- STA. 48+31, 87.25' RT
LENGTH=32' AVERAGE HEIGHT = 3.45' MAX HEIGHT = 5'

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 -Y33- 47+99±, 87.25' RT TO 48+31±, 87.25' RT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT (γ) = 105 PCF (EL≥37 FT±)
= 110 PCF (EL<37 FT± & EL≥35 FT±)
= 120 PCF (EL<35 FT±)
FRICTION ANGLE (ϕ) = 28 DEGREES (EL≥37 FT±)
= 30 DEGREES (EL<37 FT±& EL≥35 FT±)
= 33 DEGREES (EL<35 FT±)
COHESION (c) = 0 LB/SF
GROUNDWATER ELEVATION = 39 FT±

DO NOT USE A TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -Y33- 47+99±, 87.25' RT TO 48+31±, 87.25' RT.

SEE SHEET TMP-2H

TEMPORARY SHORING LOCATION NO. 16

ESTIMATED QUANTITY = 110.4 SF

-Y33RPCA- STA. 18+20, 39.5' RT TO -Y33RPCA- STA. 18+52, 39.5' RT
LENGTH=32' AVERAGE HEIGHT = 3.45' MAX HEIGHT = 5'

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 -Y33RPCA- 18+20±, 39.5' RT TO 18+52±, 39.5' RT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT (γ) = 115 PCF
FRICTION ANGLE (ϕ) = 30 DEGREES
COHESION (c) = 0 LB/SF
GROUNDWATER ELEVATION = 41 FT±

DO NOT USE A TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -Y33RPCA- 18+20±, 39.5' RT TO 18+52±, 39.5' RT.

AT THE CONTRACTOR'S OPTION, USE A STANDARD SHORING FOR TEMPORARY SHORING FROM -Y33RPCA- 18+20±, 39.5' RT TO 18+52±, 39.5' RT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

SEE SHEET TMP-2H

TEMPORARY SHORING LOCATION NO. 17

ESTIMATED QUANTITY = 110.4 SF

-Y33- STA. 51+84, 98.25' LT TO -Y33- STA. 52+16, 98.25' LT
LENGTH=32' AVERAGE HEIGHT = 3.45' MAX HEIGHT = 5'

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 -Y33- 51+84±, 98.25' LT TO 52+16±, 98.25' LT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT (γ) = 115 PCF (EL≥36 FT±)
= 120 PCF (EL<36 FT±)
FRICTION ANGLE (ϕ) = 30 DEGREES (EL≥36 FT±)
= 34 DEGREES (EL<36 FT±)
COHESION (c) = 0 LB/SF
GROUNDWATER ELEVATION = 40 FT±

DO NOT USE A TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -Y33- 51+84±, 98.25' LT TO 52+16±, 98.25' LT.

AT THE CONTRACTOR'S OPTION, USE A STANDARD SHORING FOR TEMPORARY SHORING FROM -Y33- 51+84±, 98.25' LT TO 52+16±, 98.25' LT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

SEE SHEET TMP-2H

TEMPORARY SHORING LOCATION NO. 18

ESTIMATED QUANTITY = 123.4 SF

-Y33- STA. 36+33, 87.25' LT TO -Y33- STA. 36+97, 87.25' LT
LENGTH=34' AVERAGE HEIGHT = 3.63' MAX HEIGHT = 5.5'

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.

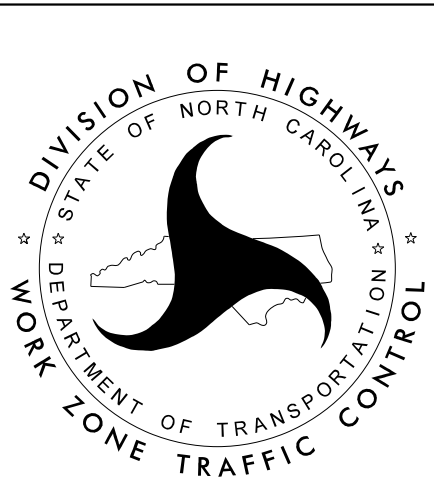
DESIGN TEMPORARY SHORING FROM STATION -Y33- 36+33±, 87.25' LT TO 36+97±, 87.25' LT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT (γ) = 115 PCF (EL≥34 FT±)
= 120 PCF (EL<34 FT±)
FRICTION ANGLE (ϕ) = 30 DEGREES (EL≥34 FT±)
= 34 DEGREES (EL<34 FT±)
COHESION (c) = 0 LB/SF
GROUNDWATER ELEVATION = 40 FT±

DO NOT USE A TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -Y33- 36+33±, 87.25' LT TO 36+97±, 87.25' LT.

AT THE CONTRACTOR'S OPTION, USE A STANDARD SHORING FOR TEMPORARY SHORING FROM -Y33- 36+33±, 87.25' LT TO 36+97±, 87.25' LT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

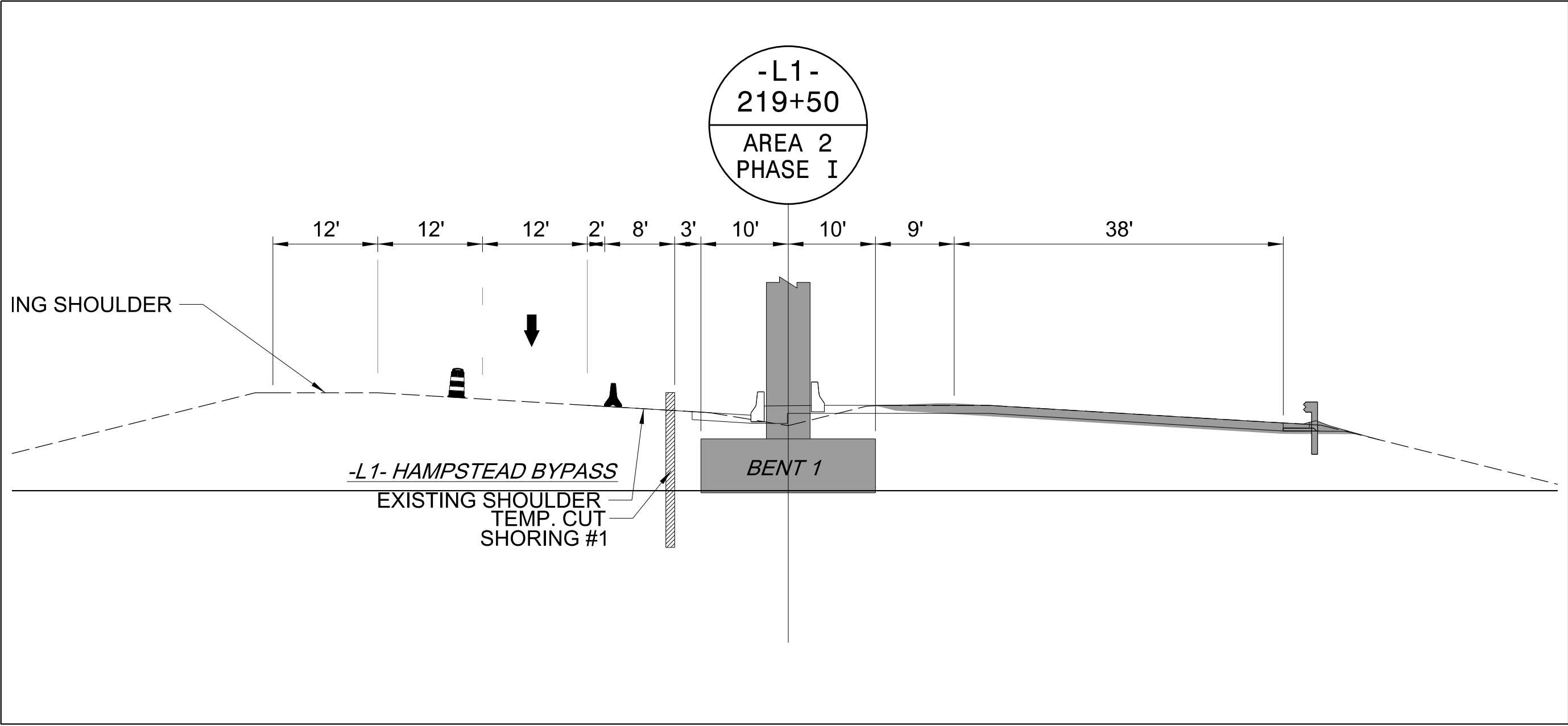
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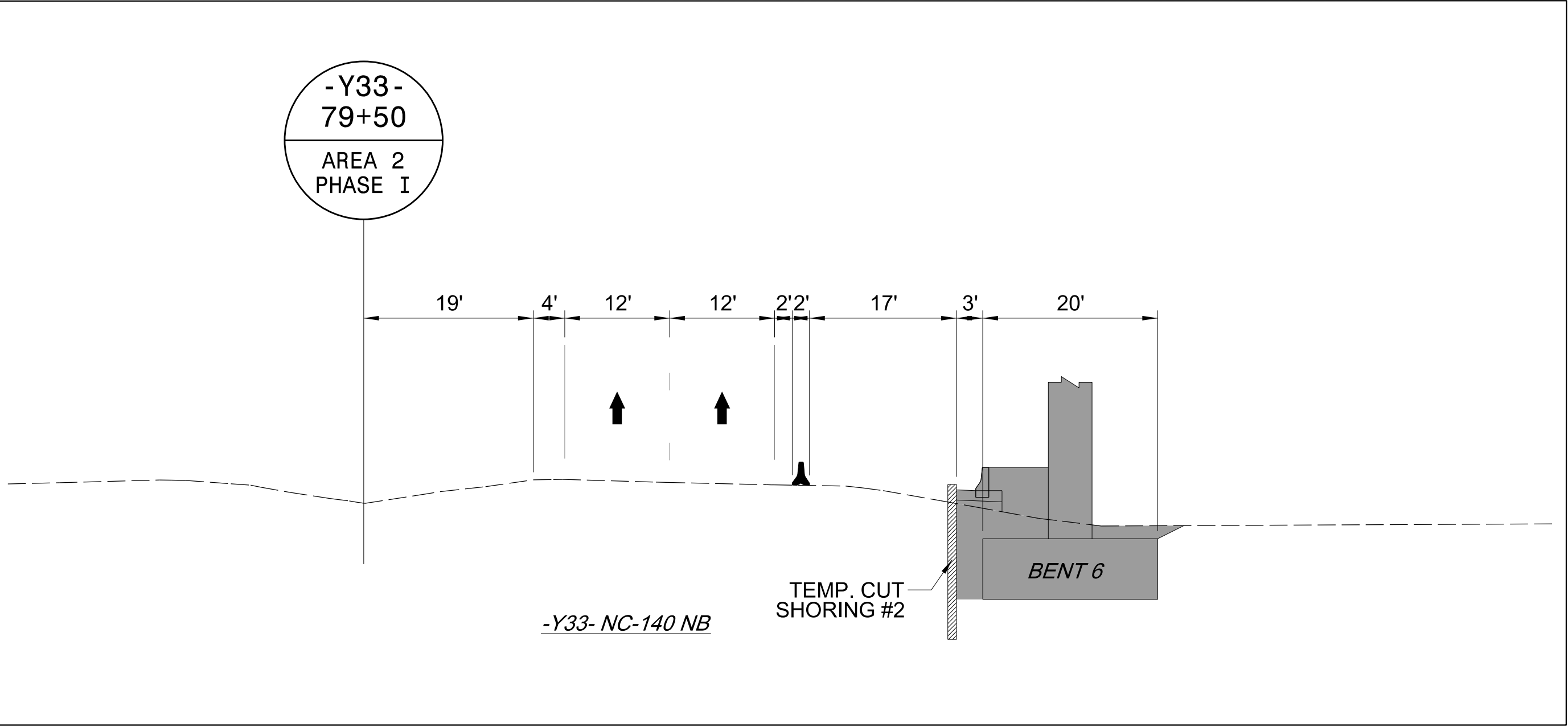
TEMPORARY SHORING NOTES
(PROPOSED SIGN ASSEMBLIES)

PROJ. REFERENCE NO.	SHEET NO.
R-3300A	TMP-2F

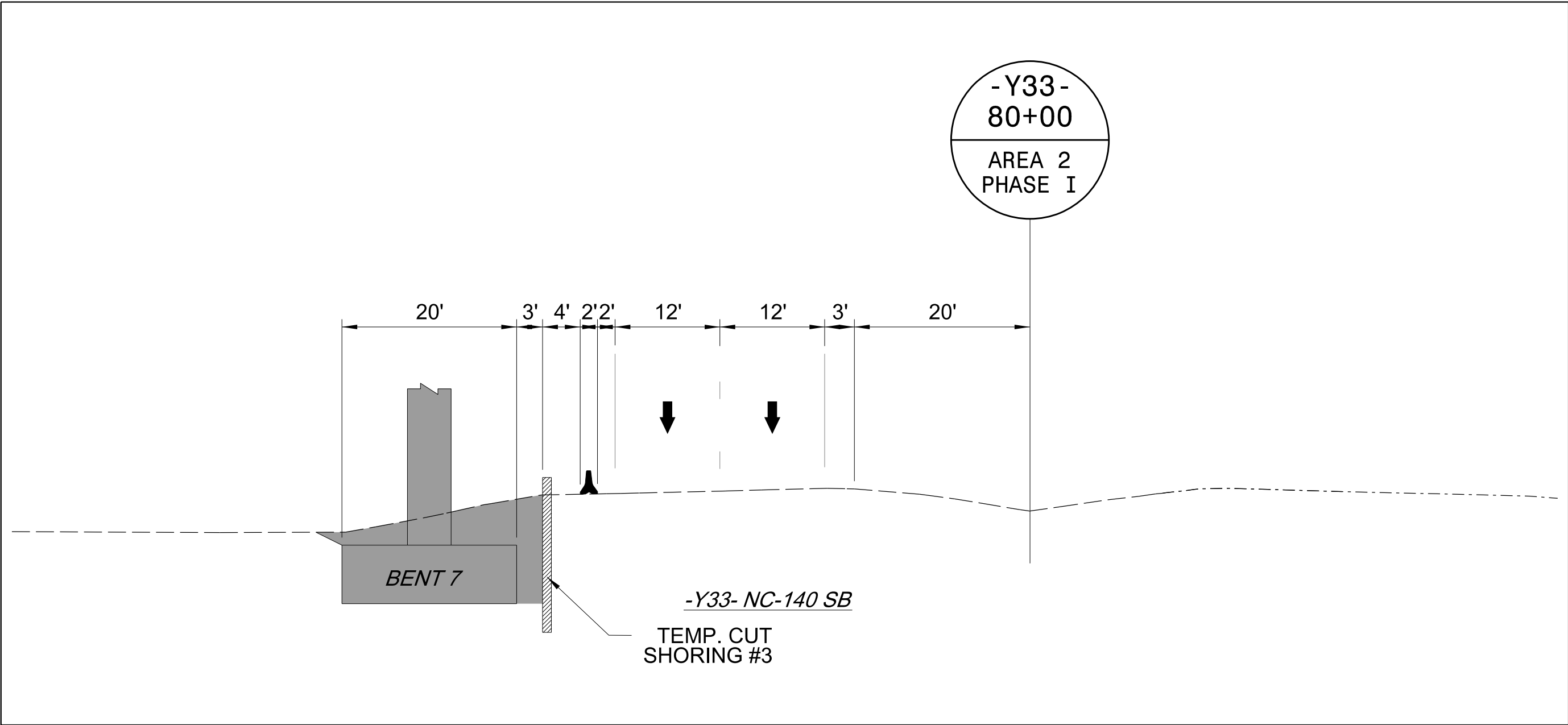
BRIDGE #1 BENT 1



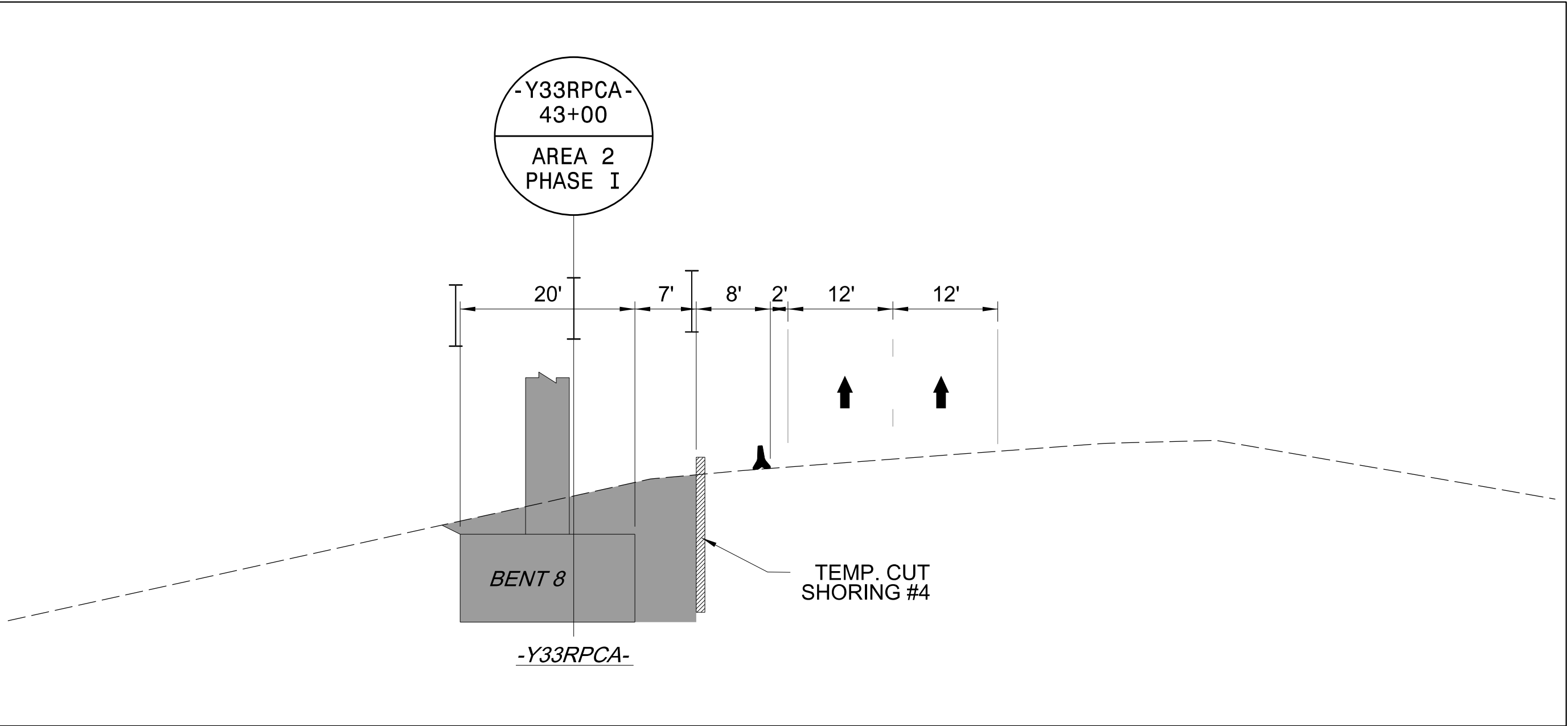
BRIDGE #1 BENT 6



BRIDGE #1 BENT 7



BRIDGE #1 BENT 8



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Signed by: *J.W. Woolard*
SEAL
19862
ENGINEER
J.W. WOOLARD, R.
3/11/2025

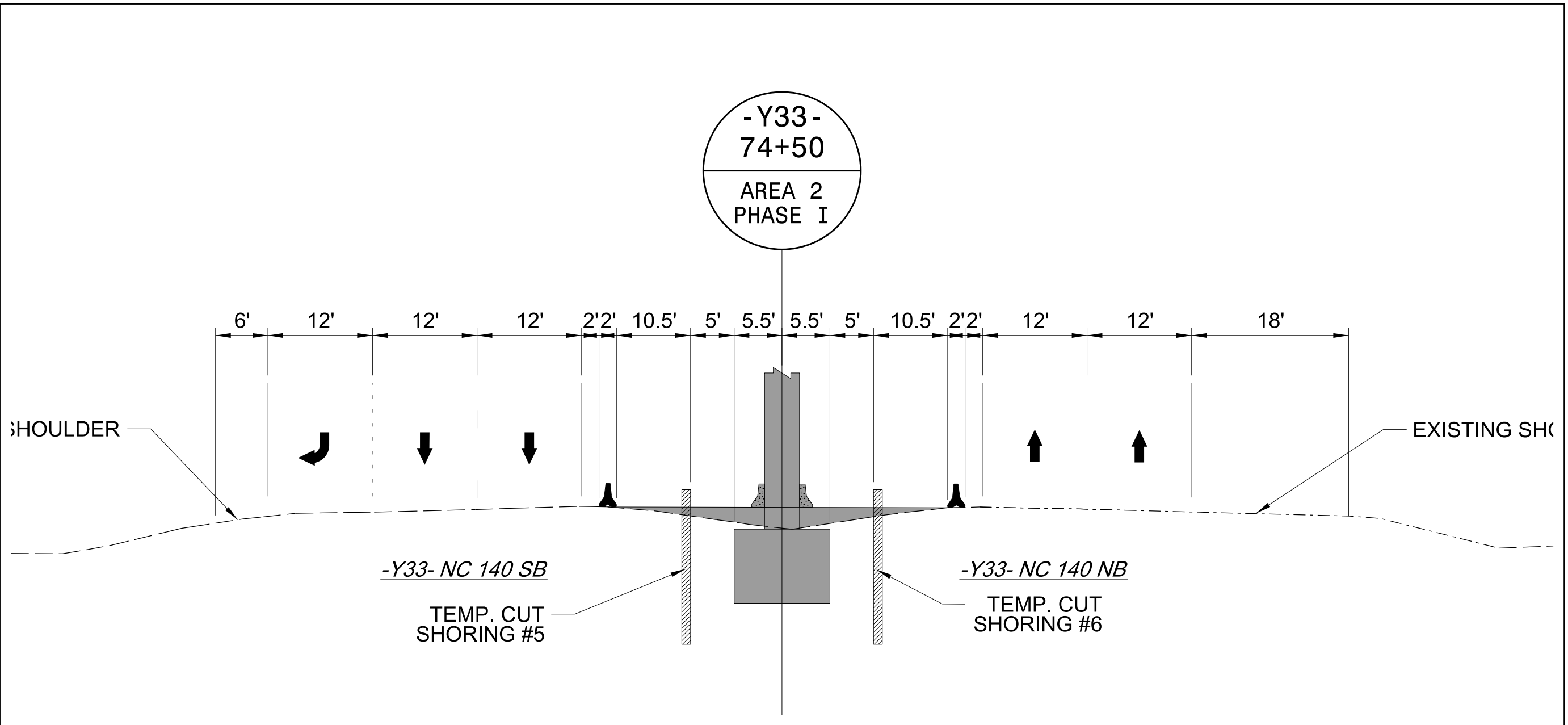
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DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
WORK ZONE TRAFFIC CONTROL

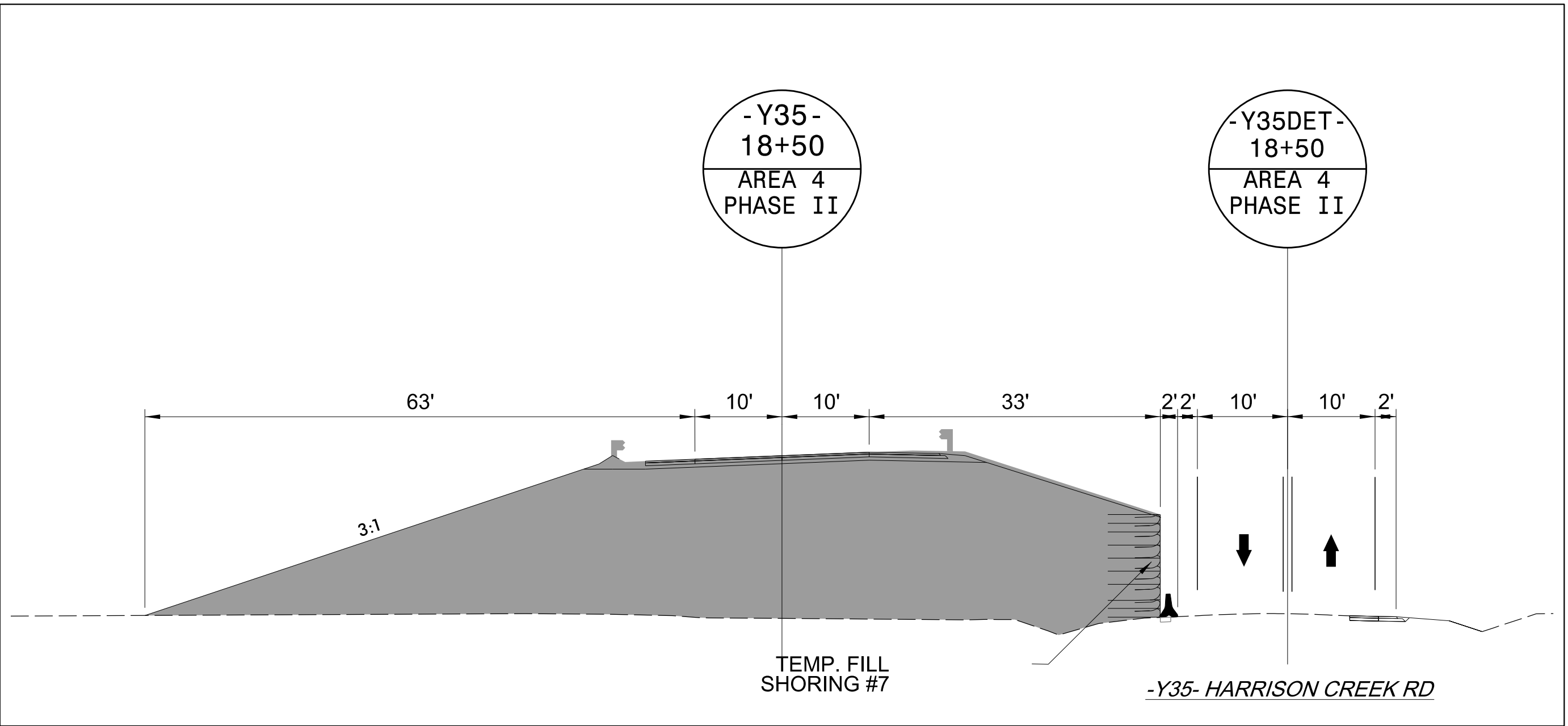
TEMPORARY
SHORING
SECTIONS

PROJ. REFERENCE NO.	SHEET NO.
R-3300A	TMP-2G

BRIDGE #2 MEDIAN BENT



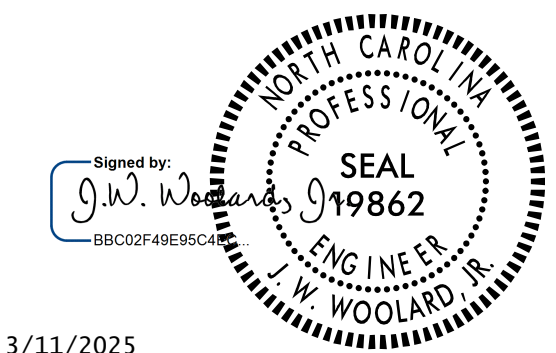
-Y35- CONSTRUCTION



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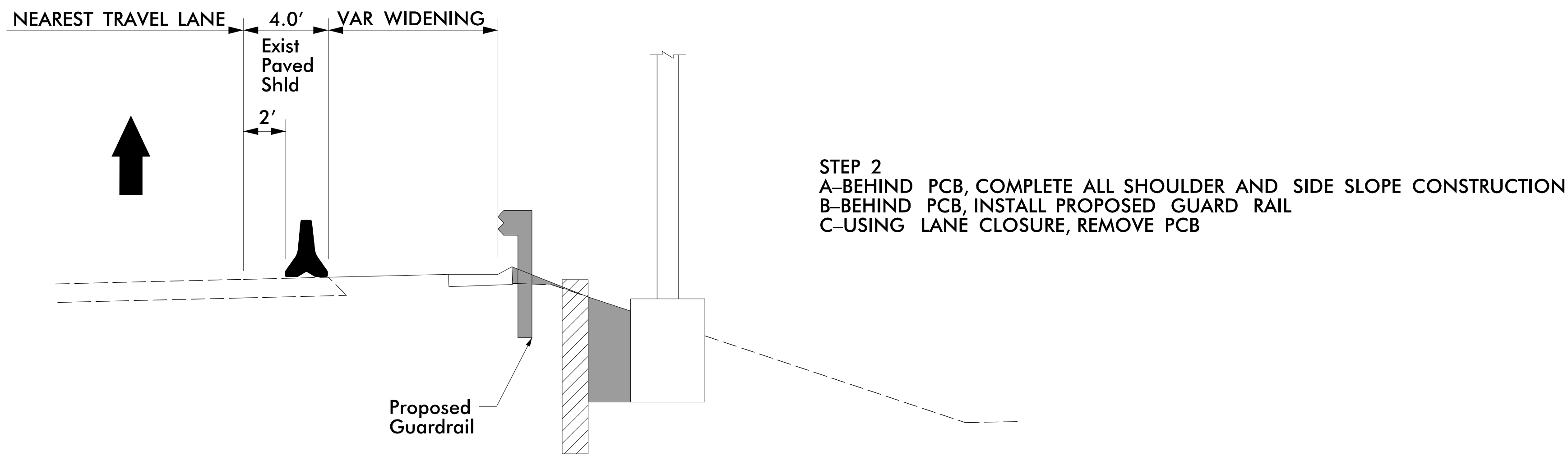
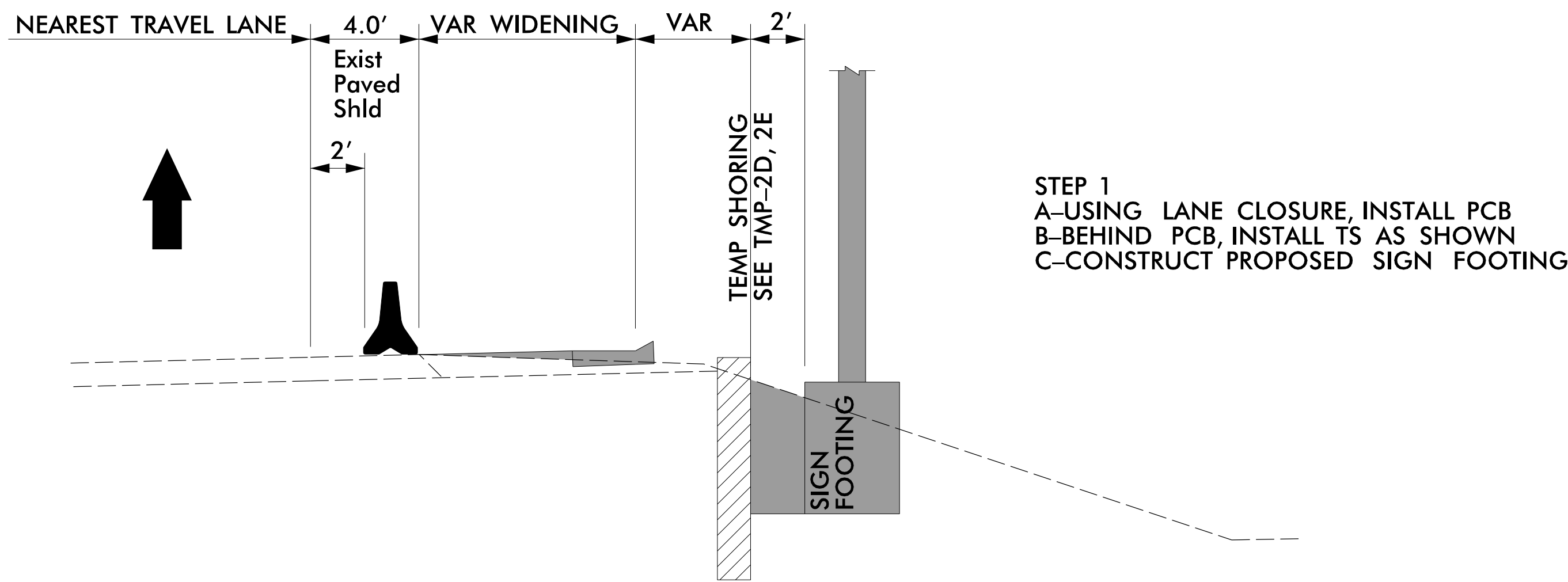
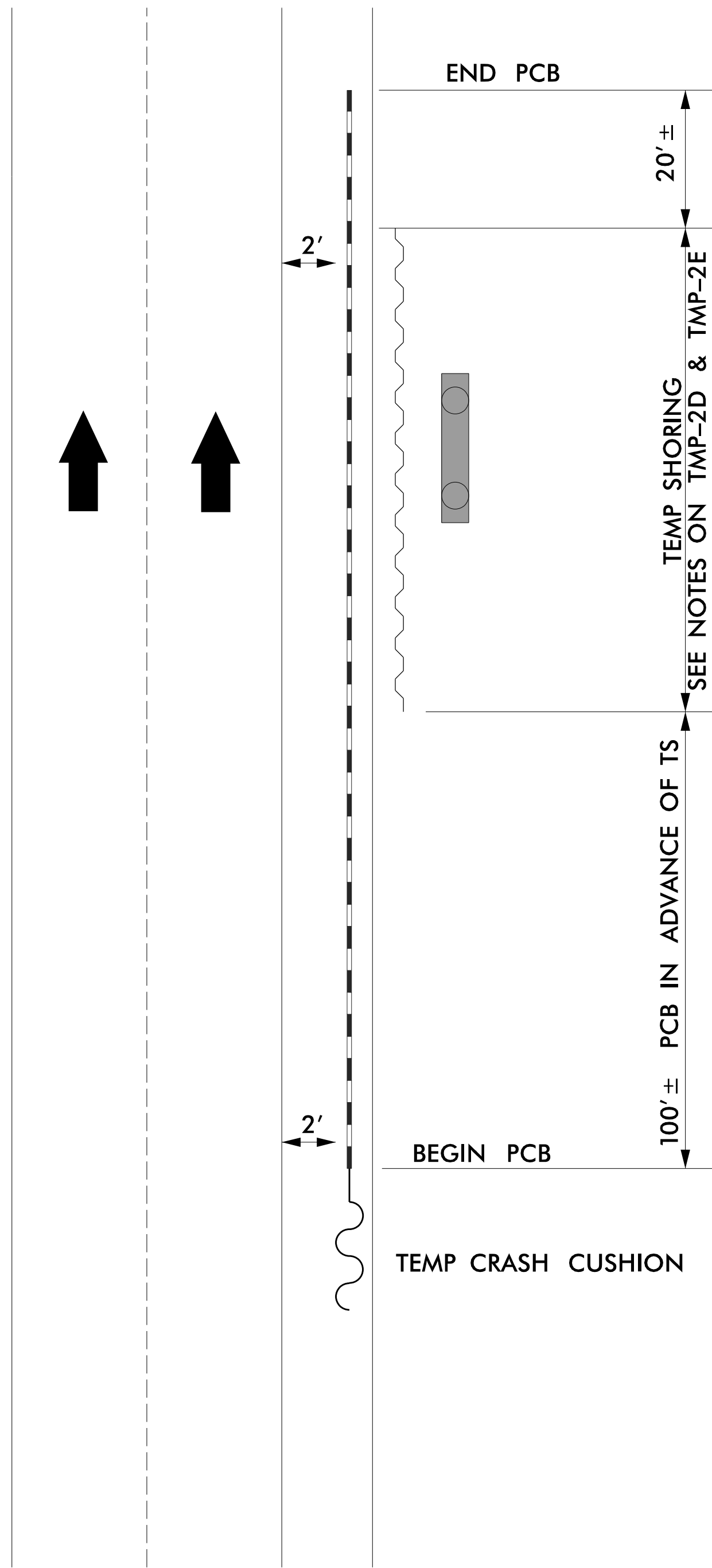


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TEMPORARY
SHORING
SECTIONS

PROPOSED SIGN ASSEMBLY TYPICALS

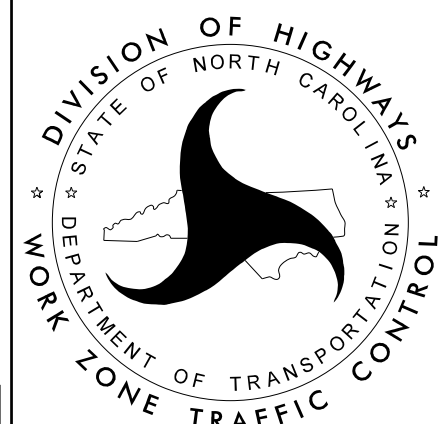


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PHASE I: (NOT SHOWN)

CONSTRUCT PROPOSED -L1- (HAMPSTEAD BYPASS) INCLUDING PROPOSED STRUCTURE* UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.

- L1- STA. 205+87± TO -L1- STA. 353+00±
- L1- STA. 358+00± TO -L1REV- STA. 521+00±
- L1REV- STA. 522+00± TO -L1- STA. 578+00±

PHASE II: (NOT SHOWN)

USING RSD 1101.02 AND LANE CLOSURES COMPLETE THE FOLLOWING:

- PLACE FINAL LAYER OF SURFACE COURSE AND FINAL PAVEMENT MARKINGS.
 - L1- STA. 173+60± RT TO -L1- STA. 620+73± RT,
 - L1- STA. 220+35± LT TO -L1- STA. 618+52± LT.
- MILL AND PLACE FINAL LAYER OF SURFACE COURSE AND FINAL PAVEMENT MARKINGS.
 - Y30RPA- STA. 5+00± TO -Y30RPA- STA. 8+32± (SEE PMP-37),
 - L1- STA. 618+52± LT TO -L1- STA. 650+00± LT (SEE PMP-37, 38, AND 39),
 - Y40- STA. 238+92± TO -Y40- 256+67± (SEE PMP-54, 55),
 - L1_NORTHERN- STA. 854+00± RT TO -L1_NORTHERN- STA. 866+61± RT (SEE PMP-53, 54, 55).
- PLACE FINAL PAVEMENT MARKINGS:
 - Y30- STA. 30+25± RT TO -Y30- STA. 35+78± RT (SEE PMP-51),
 - Y30- STA. 35+18± LT TO -Y30- STA. 40+32± LT (SEE PMP-36, 51),
 - Y30- STA. 44+85± RT TO -Y30- STA. 46+28± RT (SEE PMP-52).
- REMOVE ANY TRAFFIC CONTROL DEVICES AND OPEN -L1- (HAMPSTEAD BYPASS) TO TRAFFIC.

PHASING

AREA 2

PHASE I: (TMP-4-8)

PRIOR TO ANY WORK OPERATIONS, INSTALL WORK ZONE ADVANCE WARNING SIGNS ON -Y33- (NC-140, JOHN JAY BURNEY JR FWY), -L1- (HAMPSTEAD BYPASS), PER ROADWAY STANDARD DRAWING 1101.01, SHEET 2.

USING TEMPORARY LANE CLOSURES PER ROADWAY STANDARD DRAWING 1101.02, SHEET 3 PERFORM THE FOLLOWING:

STEP 1:

- CONSTRUCT TEMPORARY ASPHALT PAD -Y33- (NC-140) STA. 72+74± RT TO STA. 73+22± RT, STA. 77+30± RT TO STA. 78+40± RT, STA. 78+05± LT TO STA. 79+15± LT, STA. 80+90± LT TO STA. 81+42± LT.

STEP 2:

- INSTALL PCB ON EXISTING MEDIAN SHOULDER OF SB -L-, INSTALL TEMPORARY SHORING #1 AND CONSTRUCT -Y33RPCA- BENT 1 (SEE TMP-7).
- INSTALL PCB ON EXISTING OUTSIDE SHOULDER OF EB -Y33-, INSTALL TEMPORARY SHORING #2 AND CONSTRUCT -Y33RPCA- BENT 6 (SEE TMP-5).
- INSTALL PCB ON EXISTING OUTSIDE SHOULDER OF WB -Y33-, INSTALL TEMPORARY SHORING #3 AND CONSTRUCT -Y33RPCA- BENT 7 (SEE TMP-5).
- INSTALL TEMPORARY SHORING #5 & #6 AND CONSTRUCT -L1- MEDIAN BENT 2 (SEE TMP-4).
- INSTALL TEMPORARY ASHPALT PAD, PCB, AND TEMPORARY SHORING #8, #9, & #10 AS SHOWN ON TMP-5
- BEGIN CONSTRUCTION OF PROPOSED -Y33RPA- STA. 12+26± TO STA. 33+79± UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.
- BEGIN CONSTRUCTION OF PROPOSED -Y33RPB- STA. 5+00± (NOT SHOWN) TO STA. 24+51± UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.
- BEGIN CONSTRUCTION OF PROPOSED -Y33RPCA- INCLUDING PROPOSED STRUCTURE UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE STA. 22+61± TO STA. 30+73±, STA. 34+70± TO STA. 39+45±, STA. 44+03± TO STA. 59+99± (NOT SHOWN).
- BEGIN CONSTRUCTION OF PROPOSED -Y33LPC- STA. 5+00± TO STA. 19+30± UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.

PROJ. REFERENCE NO.	SHEET NO.
R-3300A	TMP-3

AREA 2

PHASE II: (TMP-9-13)

USING TEMPORARY LANE CLOSURES PER ROADWAY STANDARD DRAWING 1101.02, SHEET 3 PERFORM THE FOLLOWING:

STEP 1:

- PLACE PORTABLE CONCRETE BARRIER ON -Y33- (NC-140) STA. 77+92± TO STA. 81+80± (LEFT SIDE MEDIAN SHOULDER), STA. 91+80± TO STA. 103+60± (LEFT SIDE OUTSIDE SHOULDER), STA. 77+50± TO STA. 81+42± (RIGHT SIDE MEDIAN SHOULDER), STA. 67+95± TO STA. 85+76± (RIGHT SIDE OUTSIDE SHOULDER).
- INSTALL PCB ON EXISTING RAMP, INSTALL TEMPORARY SHORING #4 AND CONSTRUCT -Y33RPCA- BENT 8 (SEE TMP-10).

STEP 2:

- CONSTRUCT PROPOSED -Y33- (NC-140) WIDENING UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT. STA. 92+54± TO STA. 102+75± (LEFT SIDE), STA. 69+09± TO STA. 85+01± (RIGHT SIDE).
- CONSTRUCT -Y33RPA- RAMP TIE-IN UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT. -Y33RPA- STA. 2+25± TO STA. 12+45±

-COMPLETE CONSTRUCTION OF PROPOSED -Y33RPA-, -Y33RPB-, -Y33RPC-, AND -Y33LPC STARTED IN PHASE 1, STEP 2.

STEP 3:

COMPLETE CONSTRUCTION STARTED IN AREA 2, PHASE 1, STEP 2.

PHASE III: (TMP-14-18)

STEP 1:

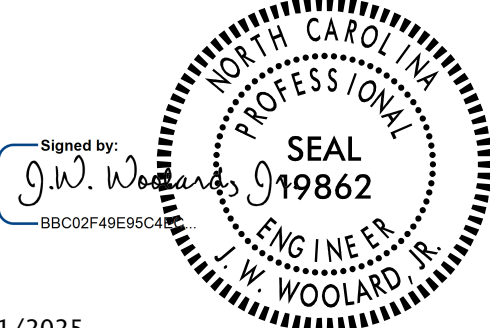
- USING RSD 1101.03, SHEET 9 AS NEEDED INSTALL FULL SPAN OVERHEAD STRUCTURES AND SIGNS INSIDE AND OUTSIDE OF THE PROJECT LIMITS. INSTALL PCB AND TEMPORARY SHORING AS SHOWN ON TMP-2H.
- USING 1101.02, SHEET 3 AS NEEDED INSTALL CANTILEVER OVERHEAD STRUCTURES AND SIGNS INSIDE AND OUTSIDE OF THE PROJECT LIMITS. INSTALL PCB AND TEMPORARY SHORING AS SHOWN ON TMP-2H.
- COVER PROPOSED SIGNS UNTIL TRAFFIC IS PLACED IN THE FINAL PATTERN.

STEP 2:

- USING RSD 1101.02, SHEETS 3, AND 4 AS NEEDED PLACE FINAL LAYER OF SURFACE COURSE.
- USING 1101.02 SHEETS 15, AND 16 AS NEEDED PLACE FINAL PAVEMENT MARKINGS AND MARKERS.
- REMOVE ANY TRAFFIC CONTROL DEVICES AND OPEN -L1-, -Y33-, -Y33RPA-, -Y33RPB-, -Y33RPCA-, AND -Y33LPC- TO THE FINAL TRAFFIC PATTERN.



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Signed by: J.W. Woolard
SEAL
19862
ENGINEER
J.W. WOOLARD, P.E.

3/11/2025

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PHASING

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PHASE I: (TMP-19,20,21)

PRIOR TO ANY WORK OPERATIONS, INSTALL WORK ZONE ADVANCE WARNING SIGNS ON -Y34- (SIDBURY RD), PER ROADWAY STANDARD DRAWING 1101.01, SHEET 3.
USING TEMPORARY LANE CLOSURES PER ROADWAY STANDARD DRAWING 1101.02, SHEET 1PERFORM THE FOLLOWING:

- CONSTRUCT PROPOSED -Y34DET- STA. 10+00± TO STA. 37+55±.
- CONSTRUCT PROPOSED -SR1- STA. 10+50± TO STA. 23+00± UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.
- CONSTRUCT PROPOSED -SR9- STA. 10+95± TO STA. 15+00± UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.
- CONSTRUCT TEMPORARY PAVEMENT -Y34DET- STA. 22+60± TO STA. 23+00±.
- CONSTRUCT PROPOSED -SR2- STA. 10+50± TO STA. 17+12± UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.

PHASE 2: (TMP-22,23,24)

NOTE: CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL EXISTING ACCESSES TO -Y34- (SIDBURY RD). PRIOR TO SHIFTING TRAFFIC ONTO -Y34DET-, CONTRACTOR SHALL SUBMIT AND HAVE APPROVED BY THE ENGINEER A PLAN TO MAINTAIN ALL EXISTING ACCESSES TO -Y34-.

USING TEMPORARY LANE CLOSURES PER ROADWAY STANDARD DRAWING 1101.02, SHEET 1 PERFORM THE FOLLOWING:

STEP 1:

PLACE TEMPORARY MARKINGS ON -Y34DET- AND -SR1-, SHIFT TRAFFIC ONTO -Y34DET- AND -SR1-, AND CLOSE -Y34- (SIDBURY RD).

STEP 2:

- CONSTRUCT PROPOSED -Y34- (SIDBURY RD) STA. 11+50± TO STA. 36+20± INCLUDING PROPOSED STRUCTURE UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.
- BEGIN CONSTRUCTION OF PROPOSED -L1- (HAMPSTEAD BYPASS) STA. 353+00± TO STA. 355+00± UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.
- CONSTRUCT -SR1- STA. 10+17± TO STA. 10+50± UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.
- CONSTRUCT PROPOSED -SR9- STA. 15+00± TO STA. 15+40± UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.
- CONSTRUCT PROPOSED -SR2- STA. 10+14± TO STA. 10+50± UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.

PHASE 3: (TMP-25,26,27)

USING TEMPORARY LANE CLOSURES PER ROADWAY STANDARD DRAWING 1101.02, SHEET 1 PERFORM THE FOLLOWING:

STEP 1:
COMPLETE CONSTRUCTION OF PROPOSED -Y34- (SIDBURY RD) STA. 9+50± TO 12+50±, AND 34+50± TO STA. 37+50±. UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. PLACE TEMPORARY MARKINGS IN FINAL PATTERN ON ALL OF -Y34-, -SR1-, AND -SR2-. SHIFT TRAFFIC ONTO -Y34-, -SR1-, AND -SR2-. CLOSE -Y34DET-.

STEP 2:
- REMOVE -Y34DET-, AND FARM RD AS SHOWN IN THE CONSTRUCTION PLANS.

- COMPLETE CONSTRUCTION OF PROPOSED -L1- (HAMPSTEAD BYPASS) STA. 353+00± TO STA. 355+00± AND CONSTRUCT -L1- STA. 355+00± TO STA. 358+00± UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.

STEP 3:
USING RSD 1101.02 (SHEETS 1 AND 3 OF 14) PLACE FINAL LAYER OF SURFACE COURSE AND FINAL PAVEMENT MARKINGS. REMOVE ANY TRAFFIC CONTROL DEVICES AND OPEN -Y34-, -SR1-, -SR2-, AND -L1- TO THE FINAL TRAFFIC PATTERN.

PHASING
AREA 4

PHASE I: (TMP-28,29,30)

PRIOR TO ANY WORK OPERATIONS, INSTALL WORK ZONE ADVANCE WARNING SIGNS ON -Y35- (HARRISON CREEK RD), PER ROADWAY STANDARD DRAWING 1101.01, SHEET 3 OF 3.

USING TEMPORARY LANE CLOSURES PER ROADWAY STANDARD DRAWING 1101.02, SHEET 1 PERFORM THE FOLLOWING:

- CONSTRUCT PROPOSED -Y35DET- STA. 12+10± TO STA. 19+40±.
- CONSTRUCT TEMPORARY PAVEMENT -Y35_DET- 16+10± TO STA. 16+94±.
- CONSTRUCT TEMPORARY PAVEMENT -Y35- 18+34± TO STA. 20+00±.
- BEGIN CONSTRUCTION OF PROPOSED -Y35- (HARRISION CREEK RD) AND PROPOSED STRUCTURE STA. 19+50± TO STA. 32+00±, UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.
- BEGIN CONSTRUCTION OF PROPOSED -Y35- (HARRISION CREEK RD) STA. 32+00± TO STA. 37+25±, UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT.
- BEGIN CONSTRUCTION OF PROPOSED -DRW1- STA. 10+15± TO STA. 10+74± UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.
- BEGIN CONSTRUCTION OF PROPOSED -SR3- STA. 10+09± TO 18+35± UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.

PHASE II: (TMP-31)

USING TEMPORARY LANE CLOSURES PER ROADWAY STANDARD DRAWING 1101.02, SHEET 1 PERFORM THE FOLLOWING:

- PLACE TEMPORARY MARKINGS AND SHIFT TRAFFIC ONTO -Y35DET-
- BEGIN CONSTRUCTION OF PROPOSED -Y35- 12+00± TO STA. 14+00± UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT.
- INSTALL PCB ON SHOULDER OF -Y35_DET-, INSTALL TEMPORARY SHORING #7 AND CONSTRUCT PROPOSED -Y35- (HARRISION CREEK RD) FROM STA. 12+00± TO STA. 19+50± UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.
- COMPLETE CONSTRUCTION OF PROPOSED -Y35- (HARRISION CREEK RD) STA. 19+50± TO STA. 32+00± UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE (NOT SHOWN).
- COMPLETE CONSTRUCTION OF PROPOSED -DRW1- STA. 10+15± TO 10+74± UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE (NOT SHOWN).
- COMPLETE CONSTRUCTION OF PROPOSED -SR3- STA. 10+09± TO 18+35± UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE (NOT SHOWN).

PHASE III: (TMP-32,33,34)

USING TEMPORARY LANE CLOSURES PER ROADWAY STANDARD DRAWING 1101.02, SHEET 1 PERFORM THE FOLLOWING:

STEP 1:

- COMPLETE CONSTRUCTION OF PROPOSED -Y35- (HARRISON CREEK RD) FROM STA. 12+00± TO STA. 14+00±, AND STA. 32+00± TO STA. 37+25±, UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.
- CONSTRUCT PROPOSED -DRW1- STA. 10+74± TO STA. 11+58±.
- PLACE TEMPORARY MARKINGS ON ALL OF -Y35- (HARRISON CREEK RD), -SR3-, AND -DRW1-. SHIFT TRAFFIC ONTO PROPOSED -Y35-, -SR3-, AND -DRW1-. CLOSE EXISTING -Y35- (HARRISON CREEK RD).

STEP 2:

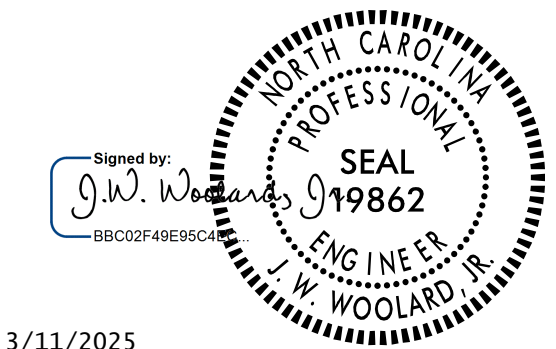
- REMOVE EXISTING -Y35- (HARRISION CREEK RD).
- REMOVE EXISTING -Y35DET-
- CONSTRUCT PROPOSED -L1REV1- (HAMPSTEAD BYPASS) STA. 521+00± TO 522+00± UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.

STEP 3:

- PLACE FINAL LAYER OF SURFACE COURSE AND FINAL PAVEMENT MARKINGS.
- REMOVE ANY TRAFFIC CONTROL DEVICES AND OPEN -Y35-, -L1REV1-, -DRW1-, AND -SR3- TO THE FINAL TRAFFIC PATTERN.



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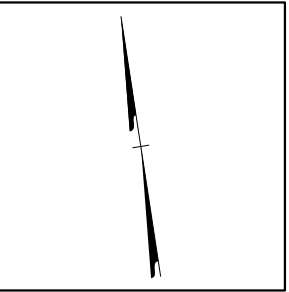
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ENGINEER
J.W. WOOLLARD, P.E.

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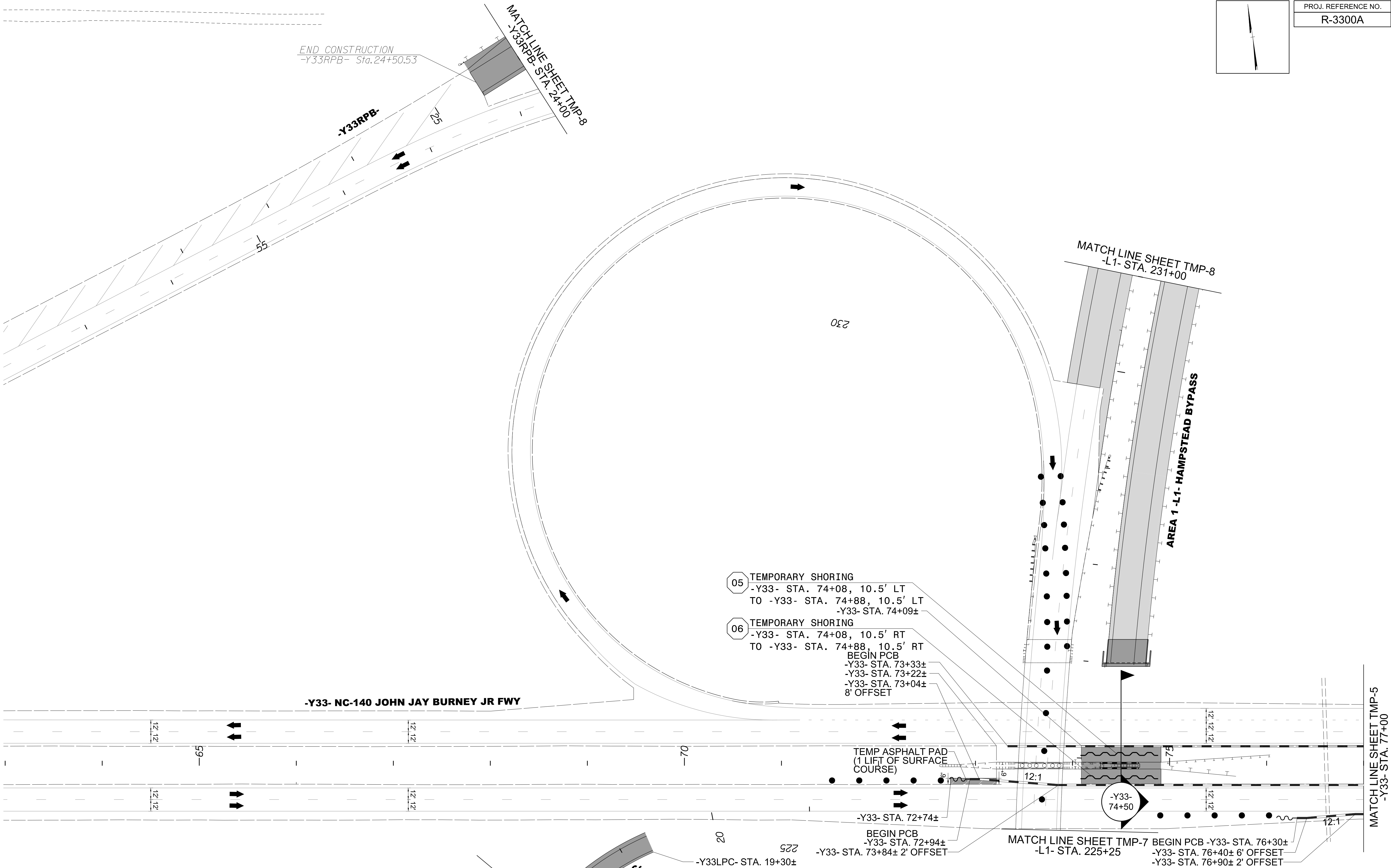
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PHASING

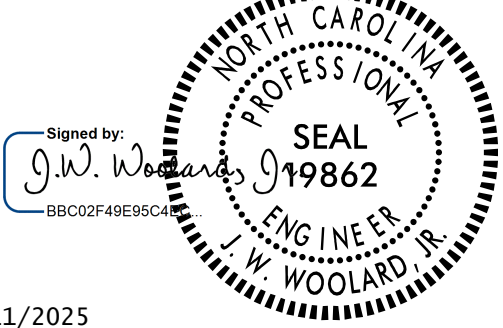


PROJ. REFERENCE NO.	SHEET NO.
R-3300A	TMP-4



- NOTES:
- REFER TO SHEET TMP-2B FOR TEMPORARY SHORING NOTES.
 - REFER TO SHEET TMP-2G FOR CROSS SECTIONS AT TEMPORARY SHORING LOCATIONS.

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**NC-140 -Y33-
AREA 2
PHASE I**



MATCH LINE SHEET TMP-8
-Y33RPCA- STA. 48+00

-L1- STA. 232+36± 280' LT
-Y33RPCA- STA. 44+80± 87' LT

NOTE:
REFER TO SHEET TMP-2A, AND TMP-2C FOR TEMPORARY SHORING NOTES.

TEMPORARY SHORING 10
-Y33- STA. 77+15, 60.0' RT
TO -Y33- STA. 77+55, 60.0' RT

TEMPORARY SHORING 09
-Y33- STA. 77+40, 15.0' RT
TO -Y33- STA. 77+80, 15.0' RT

TEMPORARY SHORING 08
-Y33- STA. 77+40, 15.0' LT
TO -Y33- STA. 77+80, 15.0' LT

-Y33- STA. 78+05±
2' OFFSET

-Y33- STA. 78+84±
8' OFFSET
BEGIN PCB
-Y33- STA. 79+06±
-Y33- STA. 78+94±
END PCB
-Y33- STA. 79+15±

BENT 7

OFFSET 4'

TEMPORARY SHORING 03
-Y33- STA. 79+55, 55.8' LT
TO -Y33- STA. 80+15, 55.8' LT

OFFSET 12'

USING RSD 1101.02 SHEET 3
CLOSE RIGHT LANE TO TRAFFIC

-Y33- STA. 81+50±
2' OFFSET
-Y33- STA. 82+00±
6' OFFSET
END PCB
-Y33- STA. 79+06±

-Y33- NC-140 JOHN JAY BURNIE JR FWY

-Y33- STA. 81+42±

-Y33- STA. 80+90±

TEMP ASPHALT PAD
(1 LIFT OF SURFACE COURSE)

-Y33- STA. 78+40±

-Y33- STA. 77+30±

END PCB
-Y33- STA. 75+65±

BENT 6

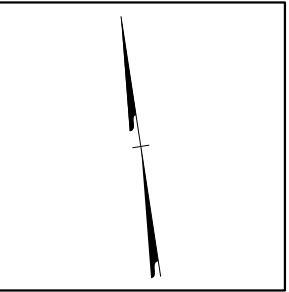
MATCH LINE SHEET TMP-7
-Y33RPCA- STA. 39+00

END PCB
-Y33- STA. 80+17±

TEMPORARY SHORING 02
-Y33- STA. 79+08, 67.8' RT
TO -Y33- STA. 79+68, 67.8' RT
-Y33RPCA- STA. 39+45±

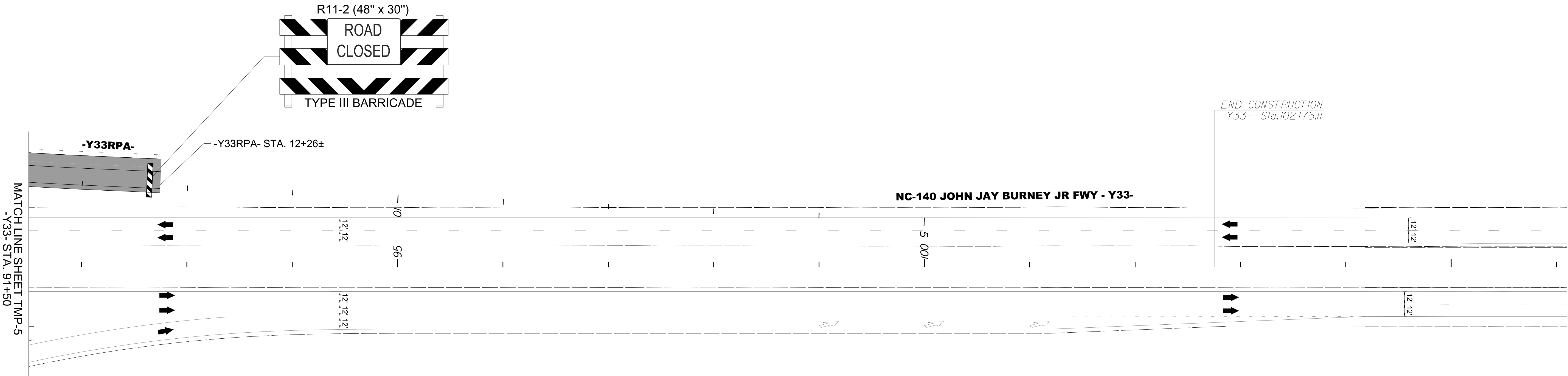
MATCH LINE SHEET TMP-6
-Y33- STA. 91+50

NC-140 -Y33-
AREA 2
PHASE I



PROJ. REFERENCE NO.	SHEET NO.
R-3300A	TMP-6

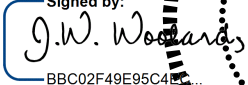
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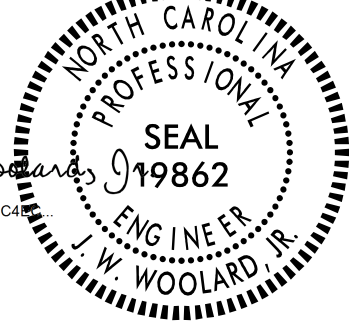


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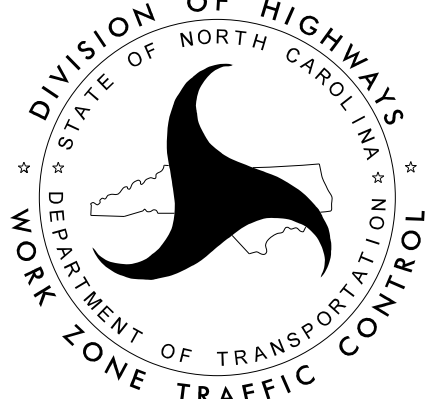
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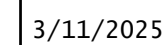


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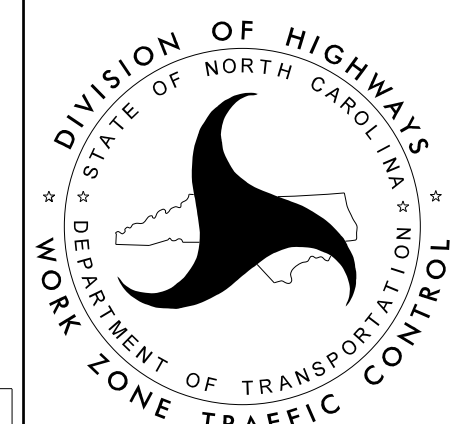
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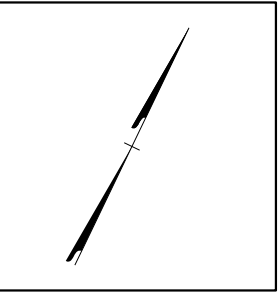
NC-140 -Y33-
AREA 2
PHASE I



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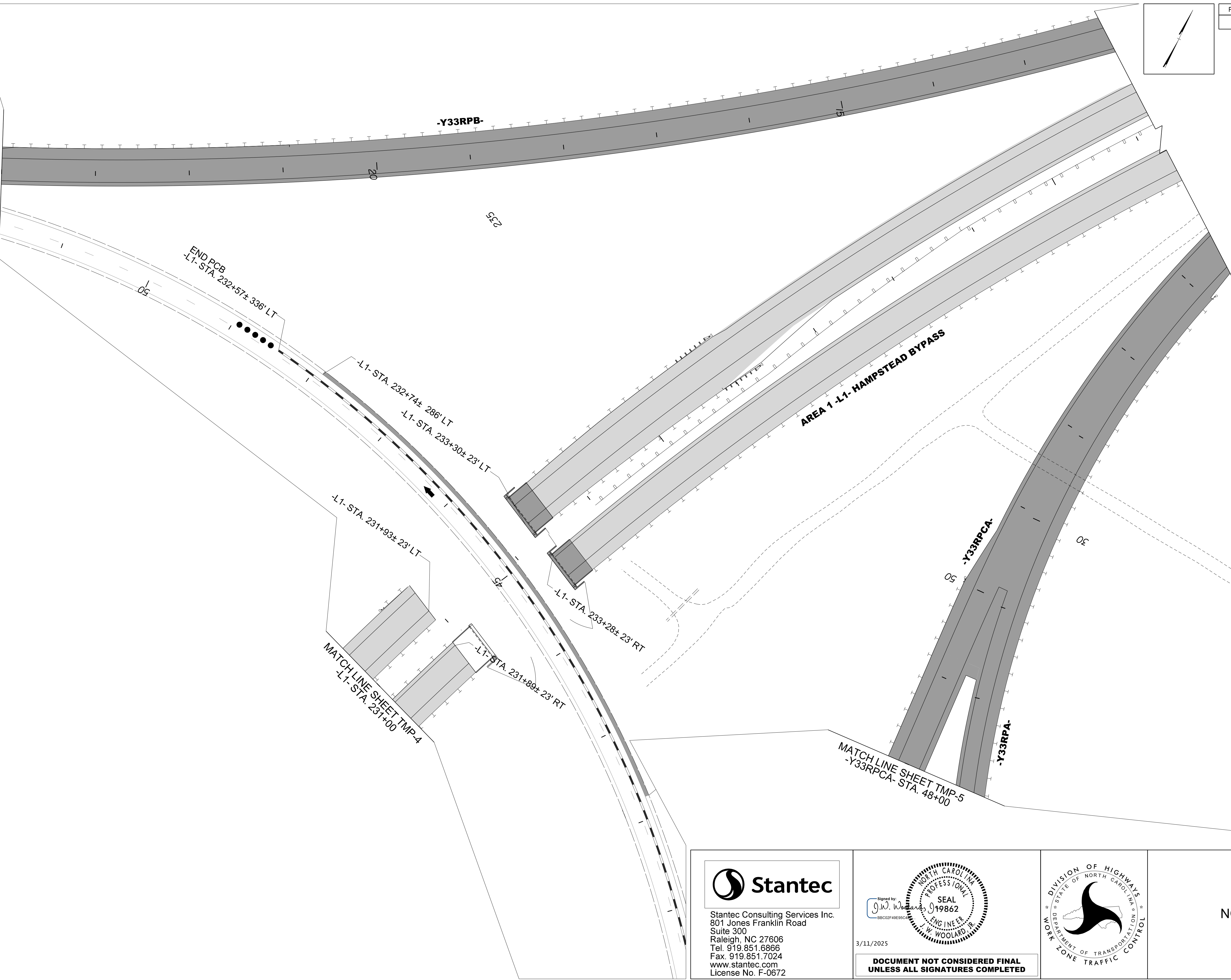


NC-140 -Y33-
AREA 2
PHASE I



PROJ. REFERENCE NO.	SHEET NO.
R-3300A	TMP-8

MATCH LINE SHEET TMP-4
-Y33RPB- STA. 24+00



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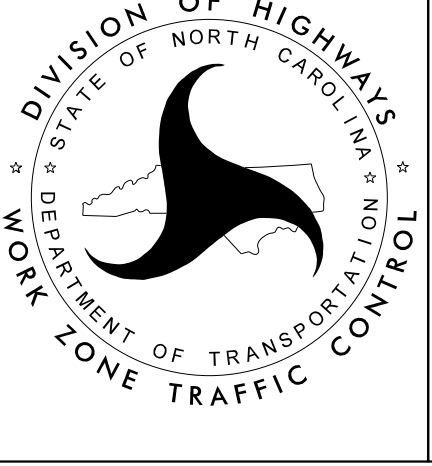
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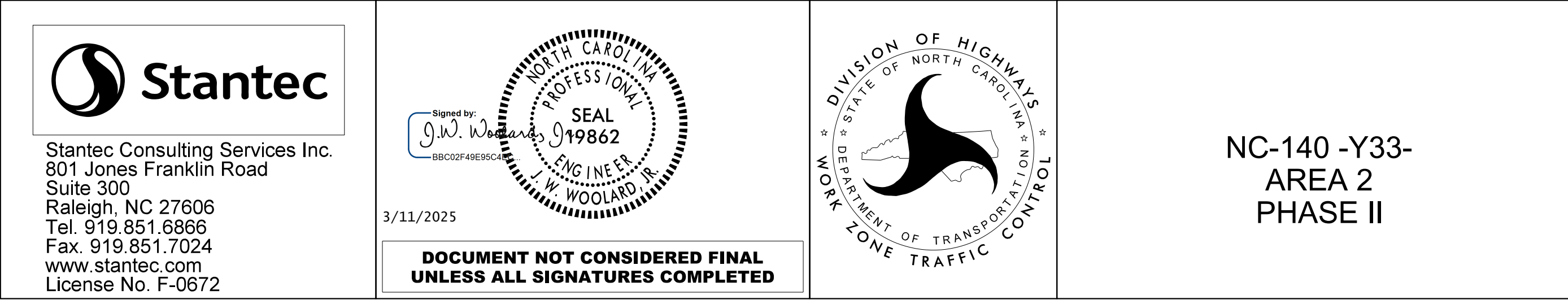
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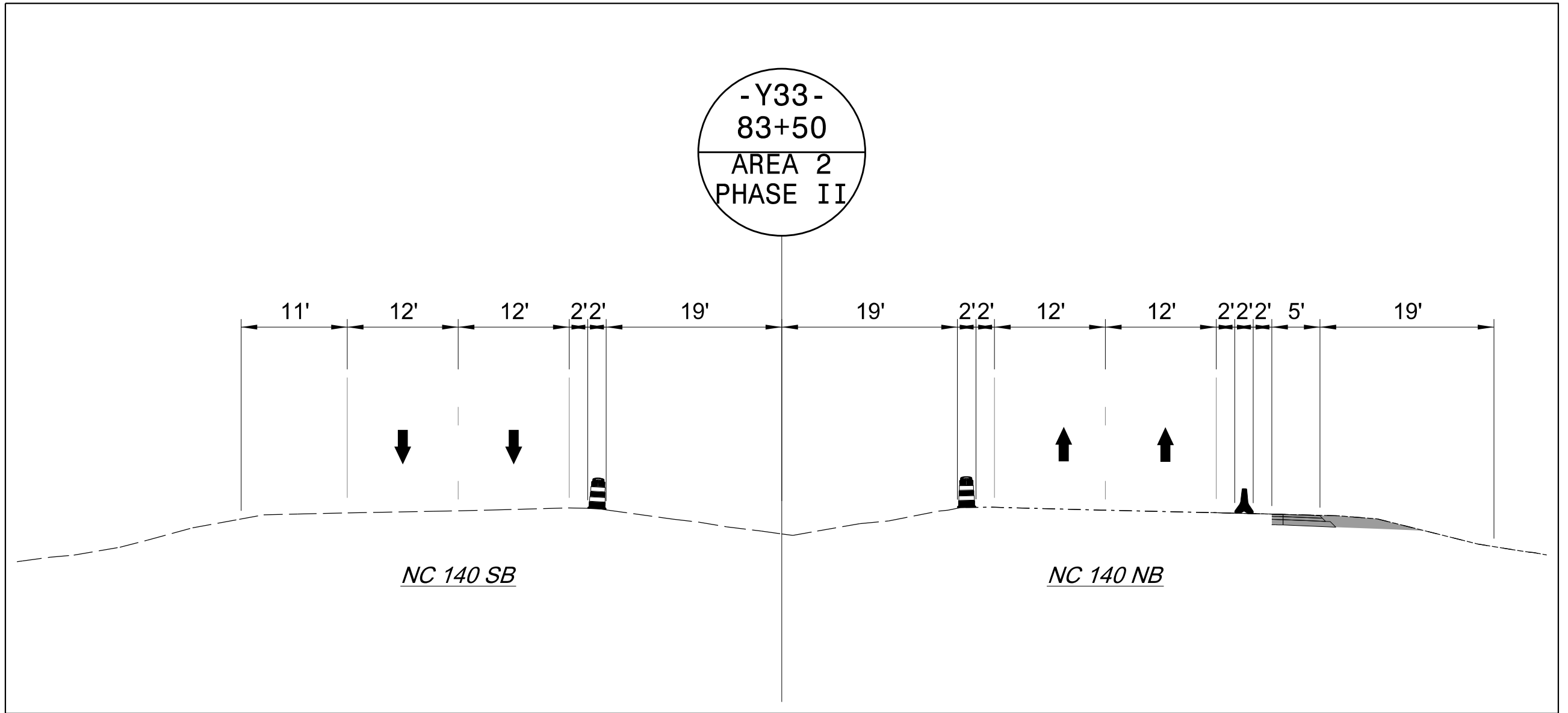
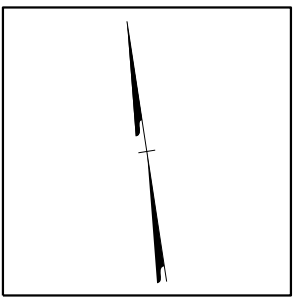
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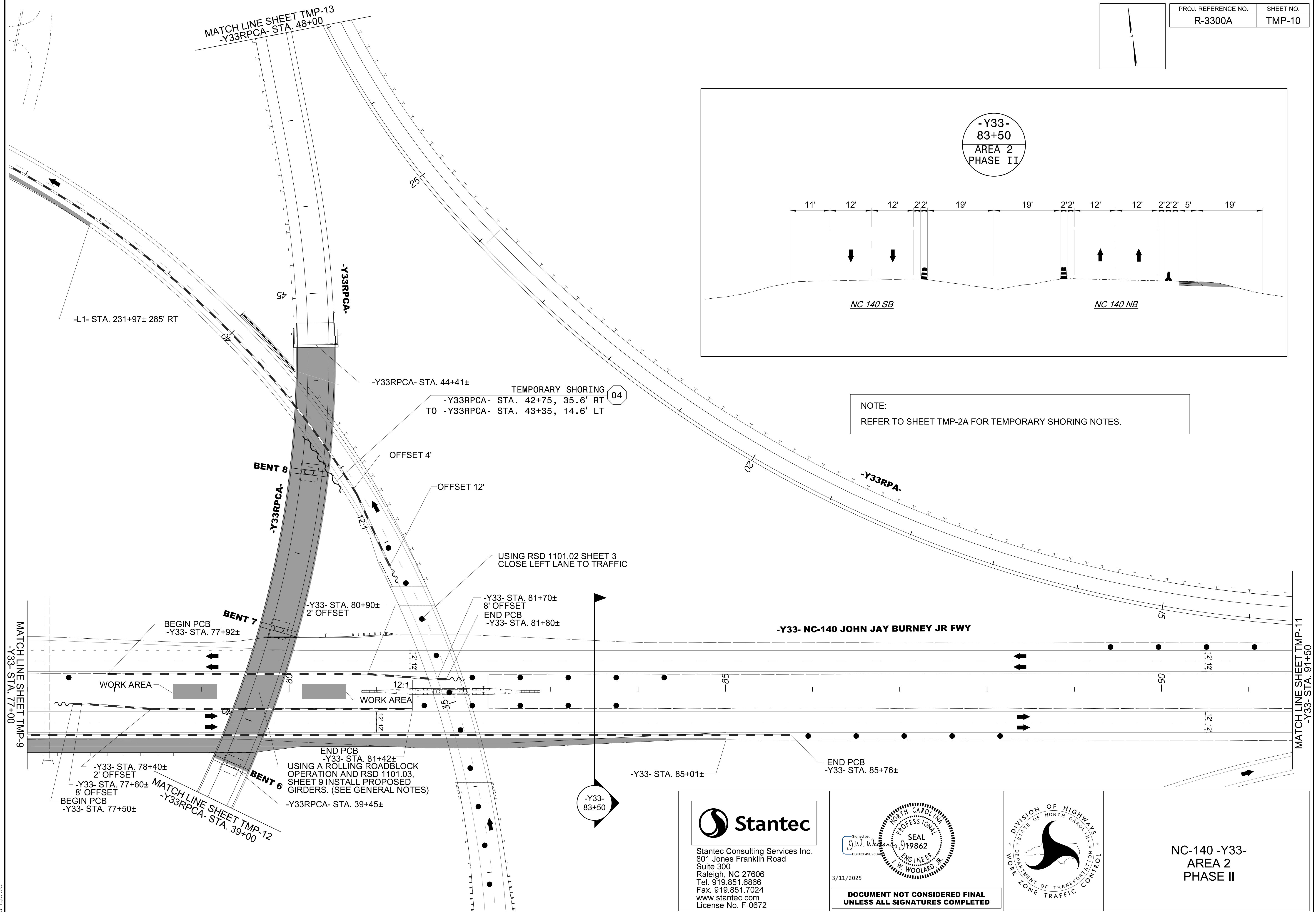


NC-140 -Y33-
AREA 2
PHASE I





NOTE:
REFER TO SHEET TMP-2A FOR TEMPORARY SHORING NOTES.



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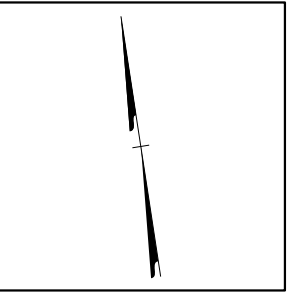
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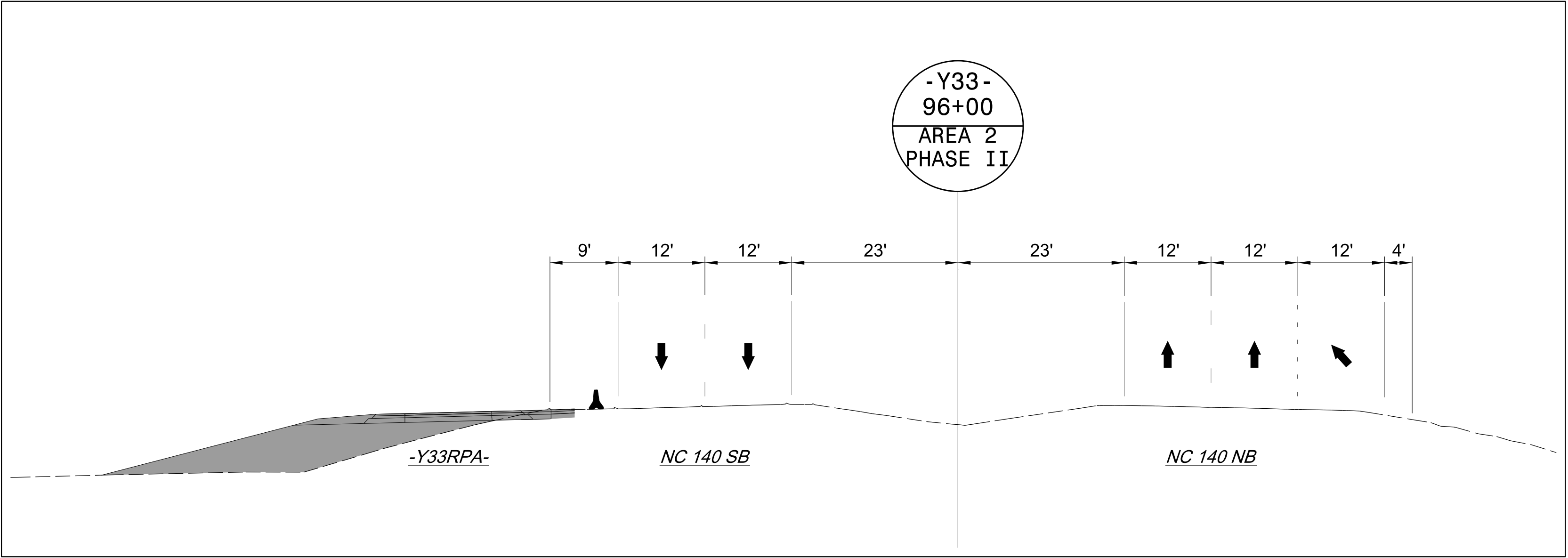
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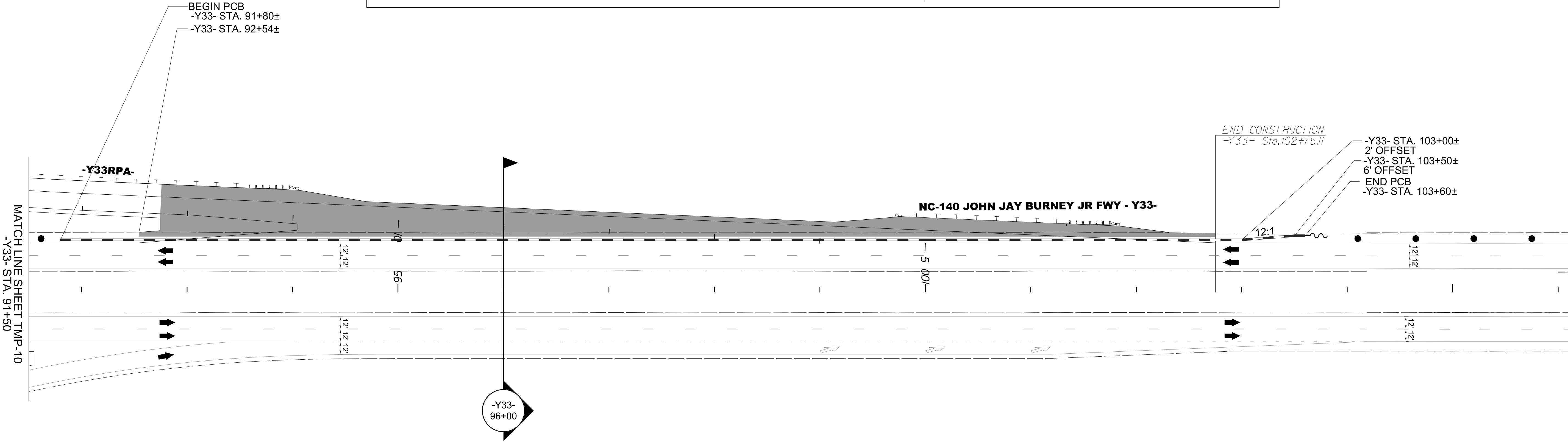
NC-140 -Y33-
AREA 2
PHASE II



PROJ. REFERENCE NO.	SHEET NO.
R-3300A	TMP-11



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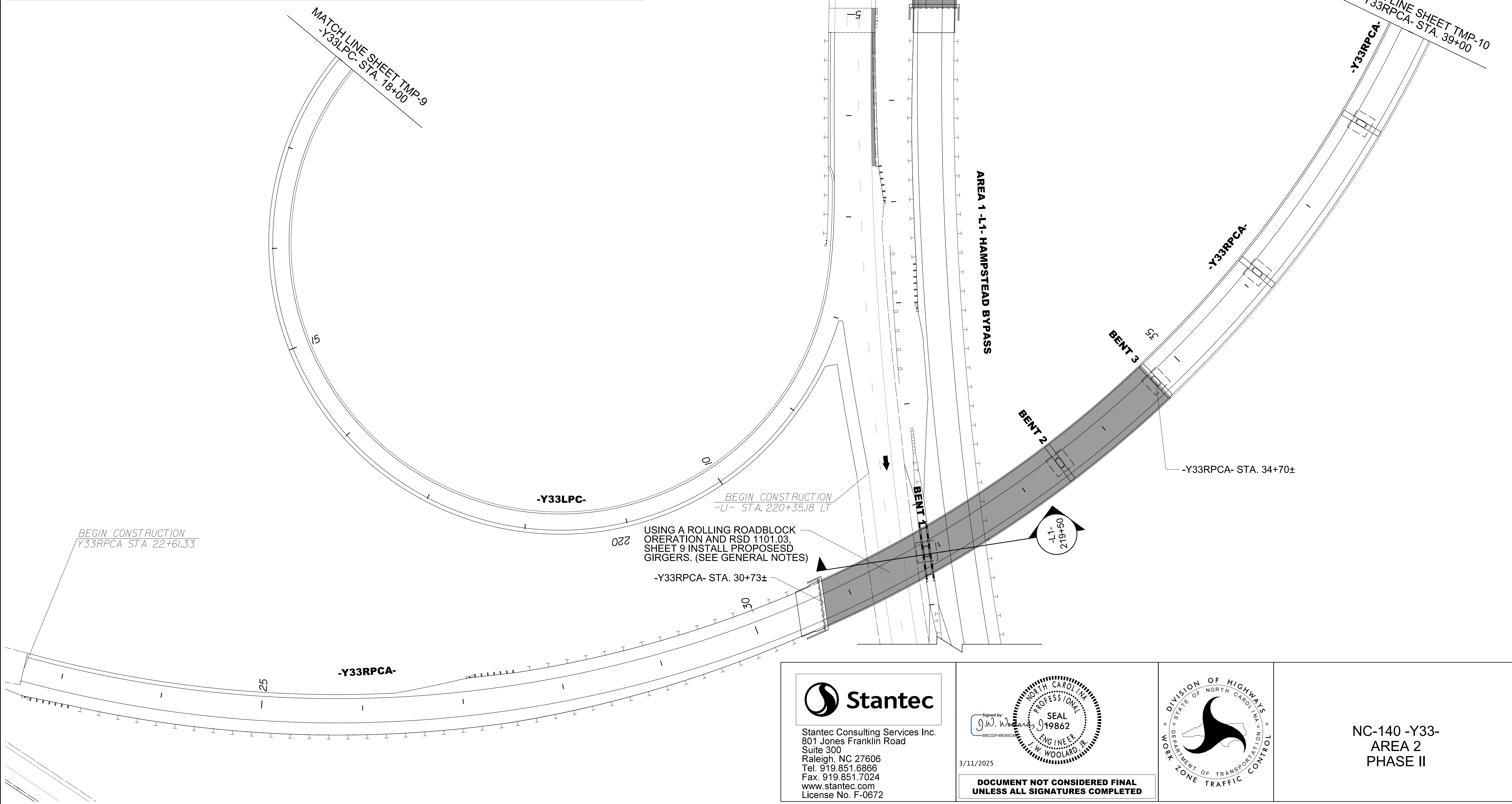
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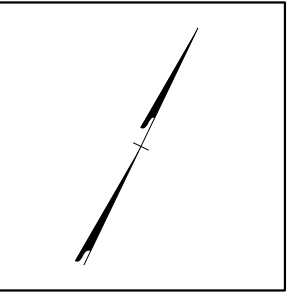
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NC-140 -Y33-
AREA 2
PHASE II



NC-140 -Y33-
AREA 2
PHASE II



PROJ. REFERENCE NO.	SHEET NO.
R-3300A	TMP-13

MATCH LINE SHEET TMP-9
-Y33RPB- STA. 24+00

-Y33RPB-

-L1- STA. 232+48± 334' LT
-L1- STA. 232+48± 283' LT

-L1- STA. 233+30± 23' LT

-L1- STA. 231+93± 23' LT

MATCH LINE SHEET TMP-9
-L1- STA. 231+00

-L1- STA. 231+89± 23' RT

-L1- STA. 233+28± 23' RT

-L1- STA. 231+97± 285' RT

AREA 1 -L1- HAMPSTEAD BYPASS

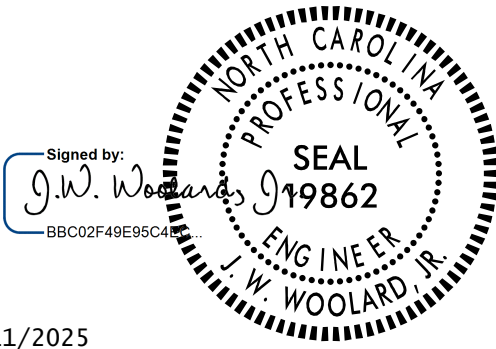
-Y33RPCA-

-Y33RPA-

MATCH LINE SHEET TMP-10
-Y33RPCA- STA. 48+00



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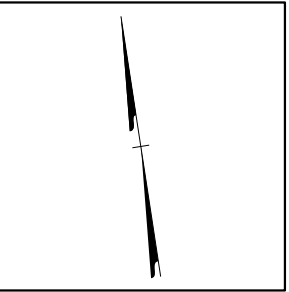


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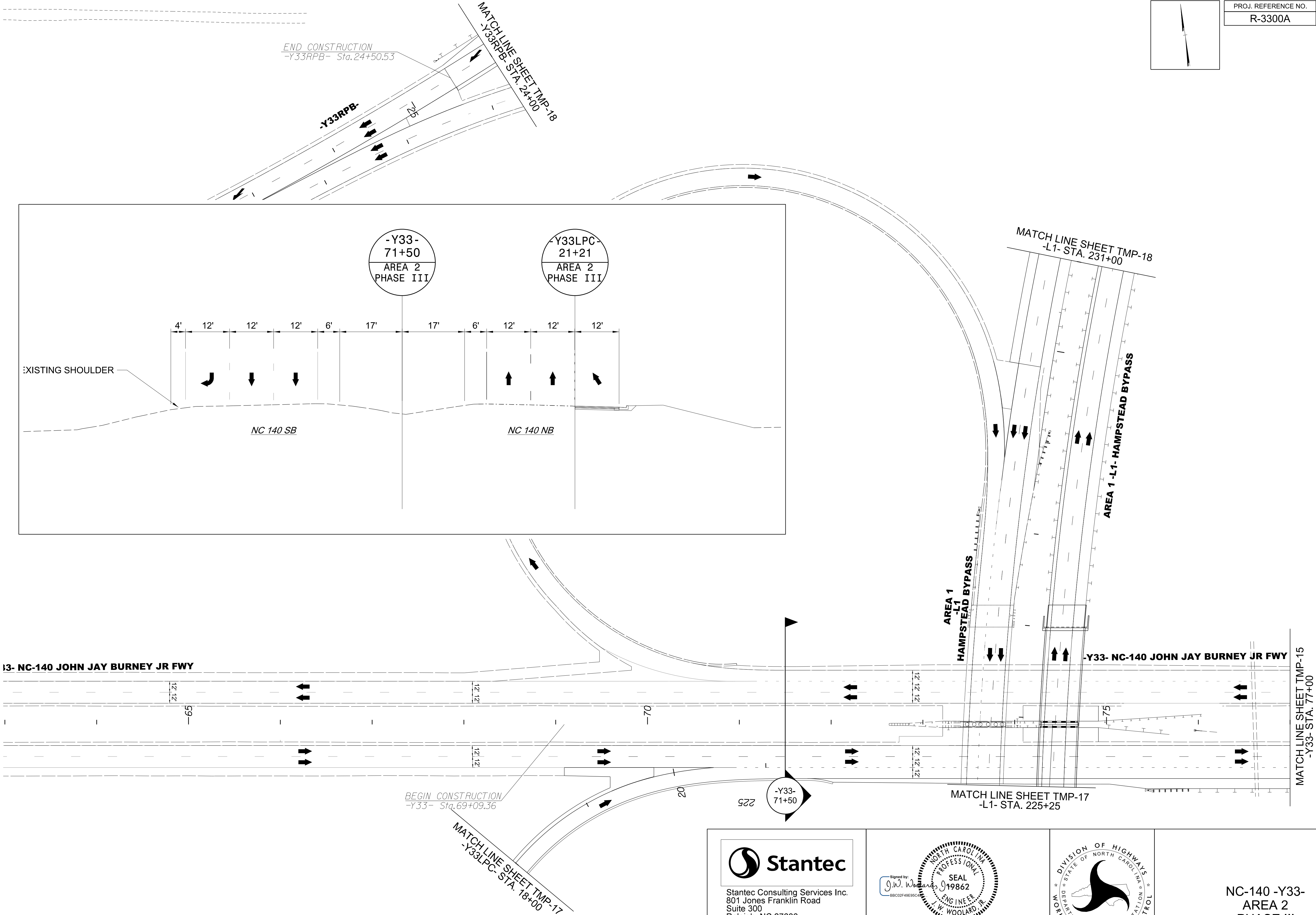
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NC-140 -Y33-
AREA 2
PHASE II



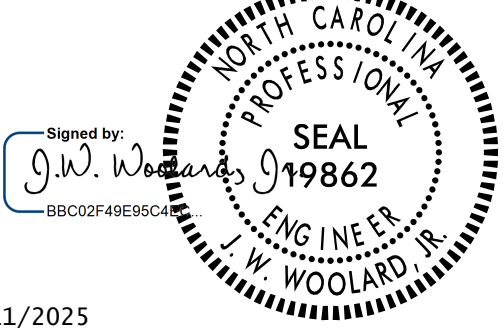
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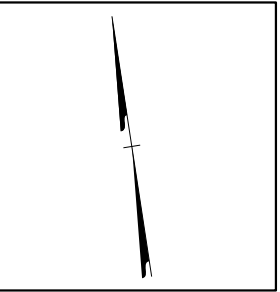
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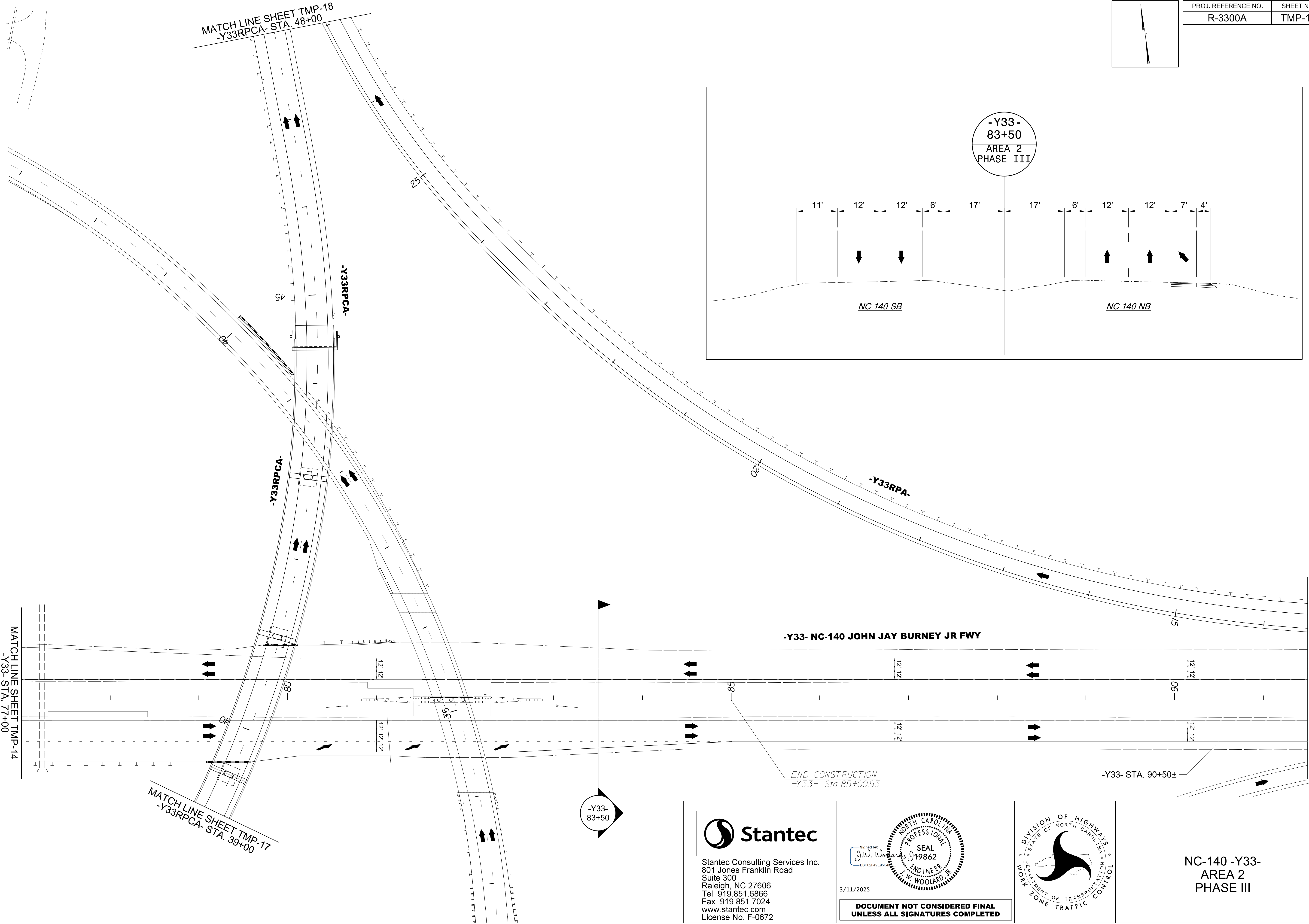
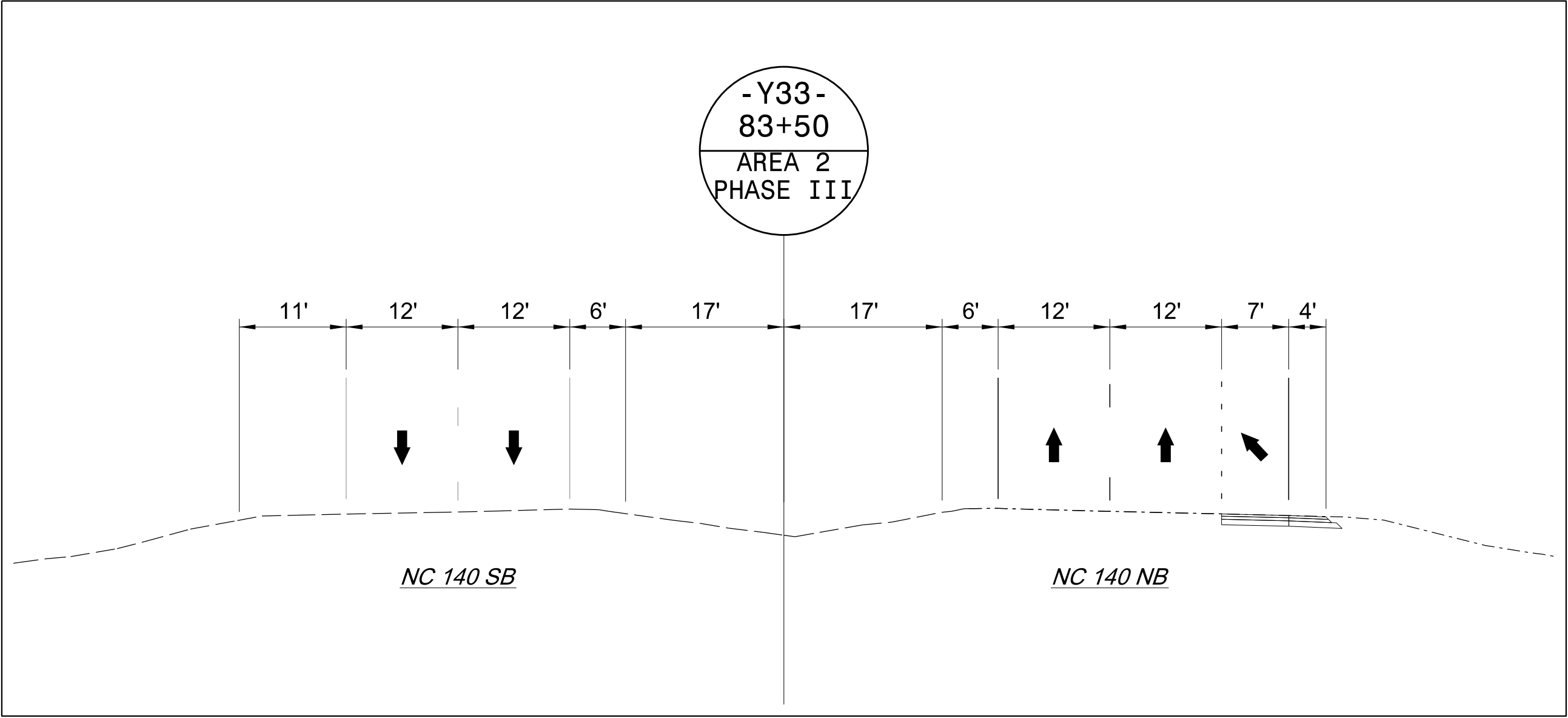
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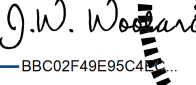
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AREA 2
PHASE III

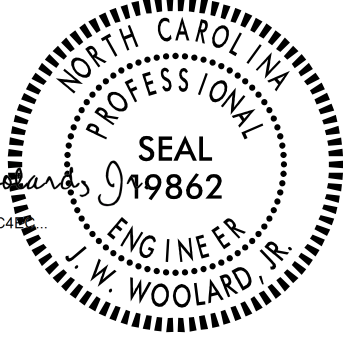


PROJ. REFERENCE NO.	SHEET NO.
R-3300A	TMP-15



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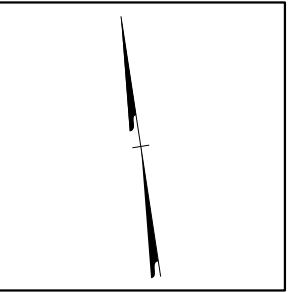


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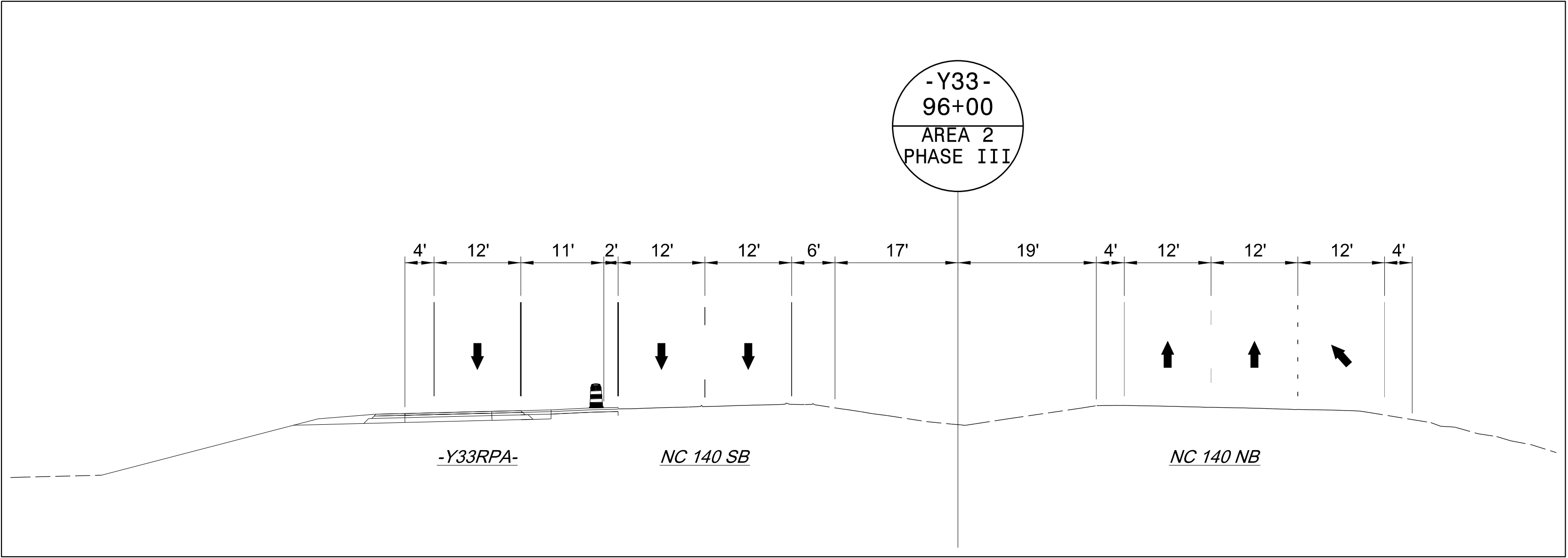
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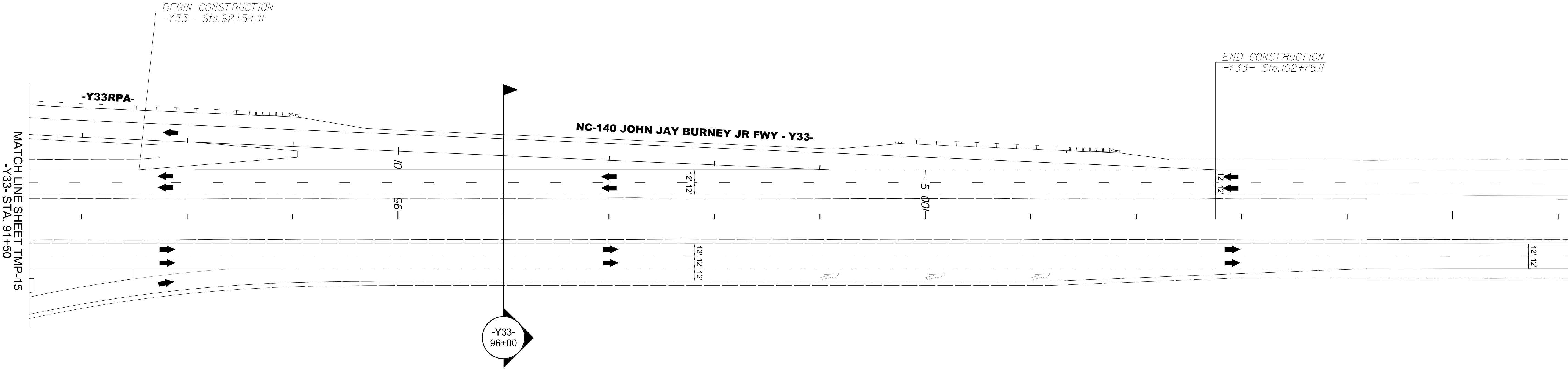
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AREA 2
PHASE III



PROJ. REFERENCE NO.	SHEET NO.
R-3300A	TMP-16



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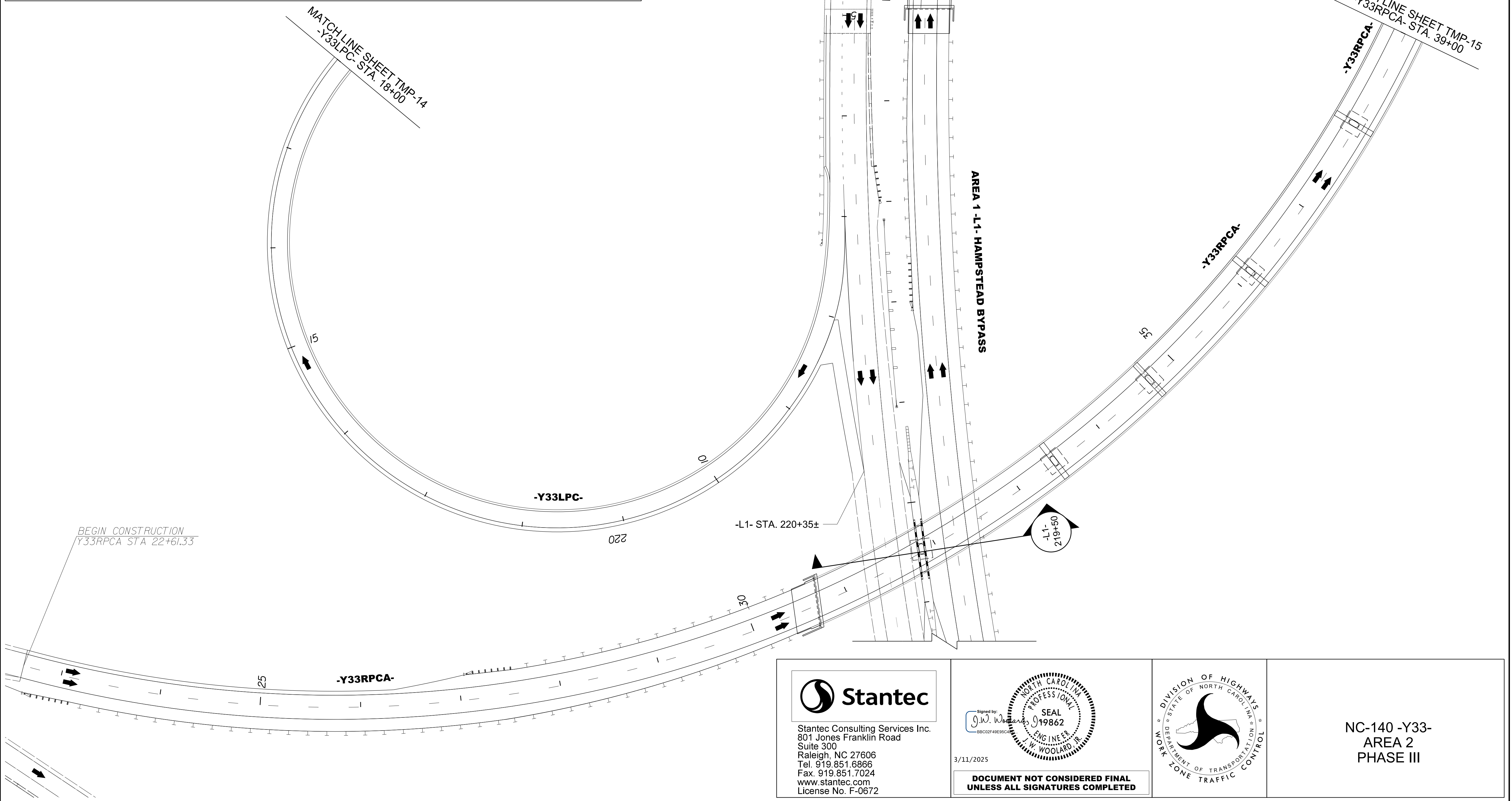
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ENGINEER
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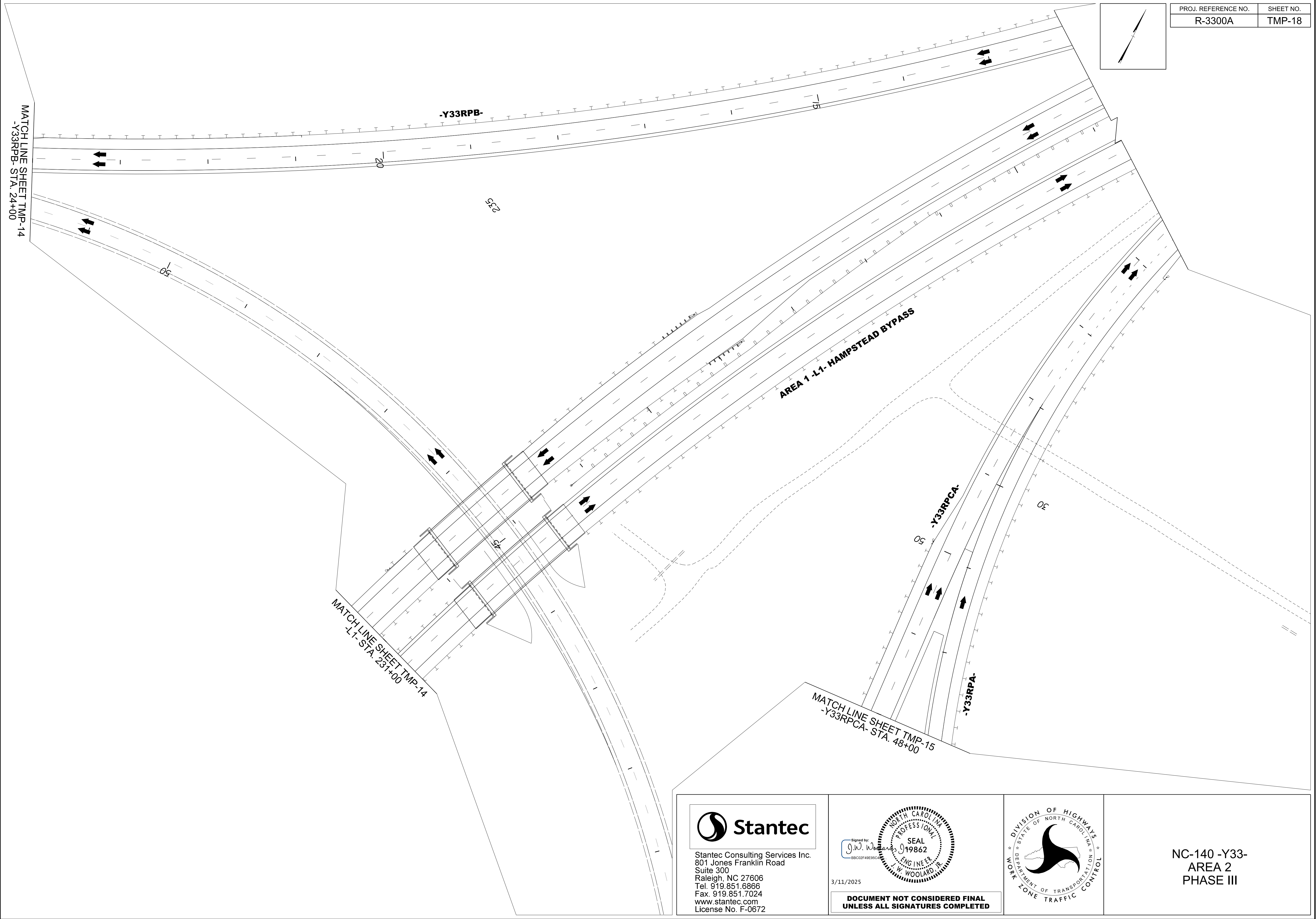
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PHASE III

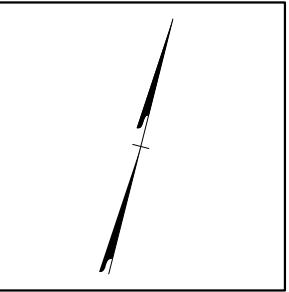


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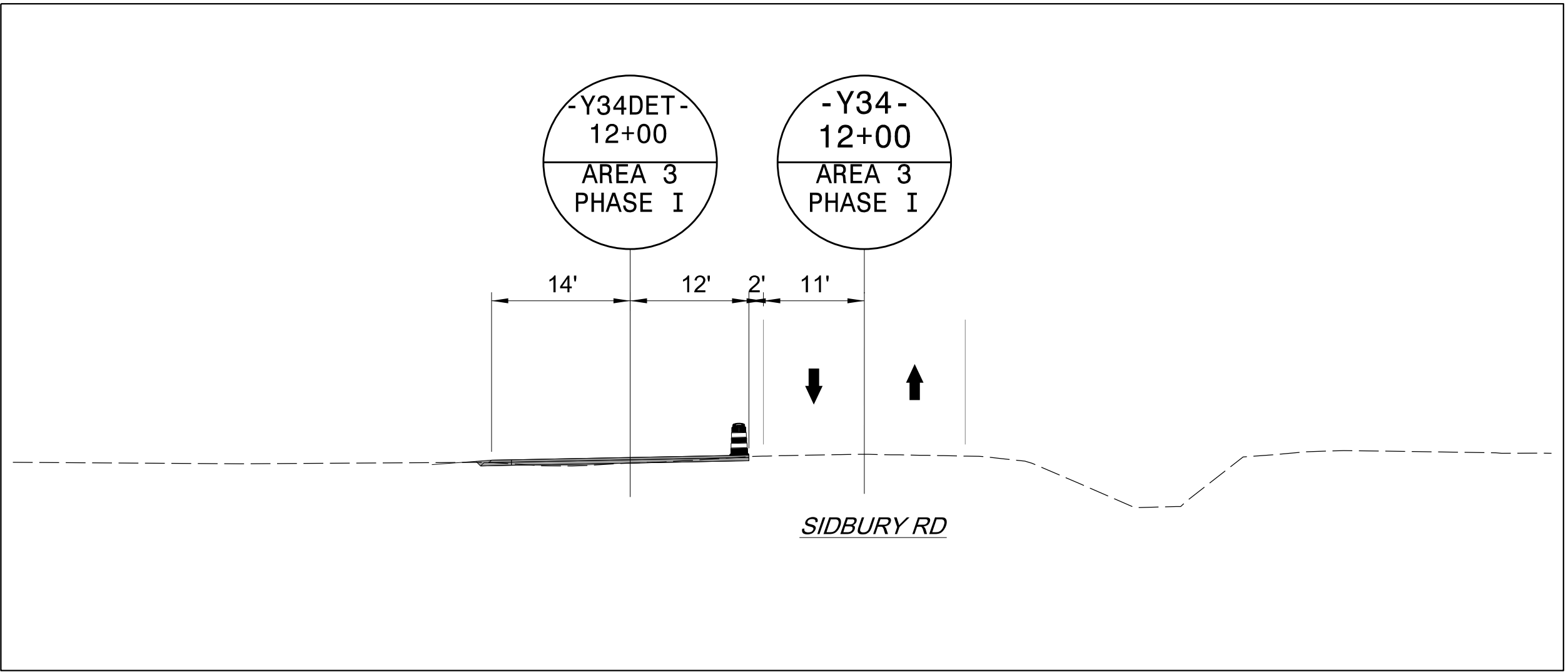
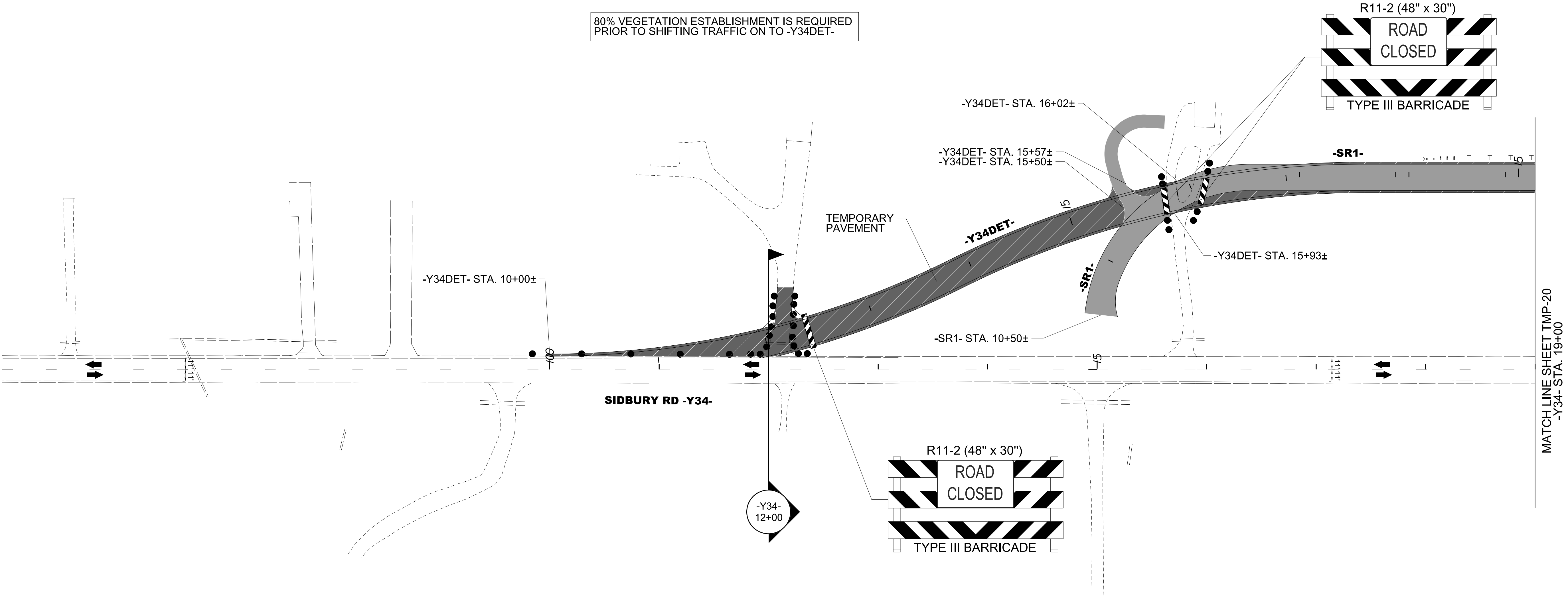
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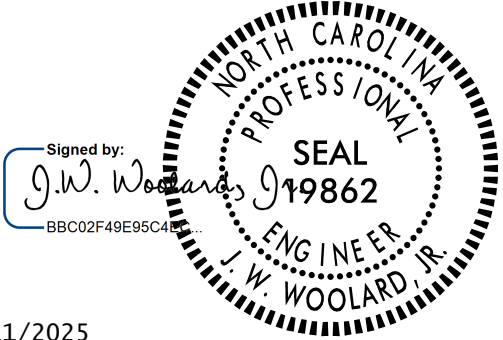


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R-3300A	TMP-19

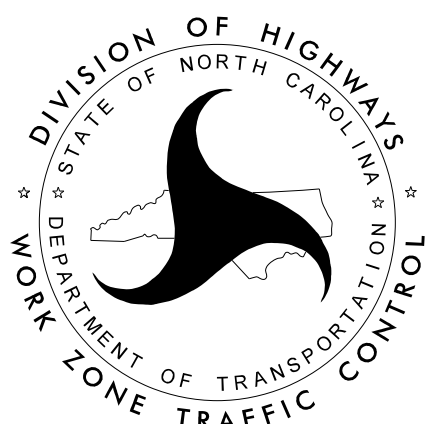


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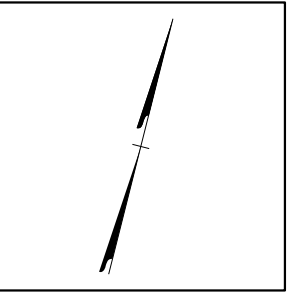
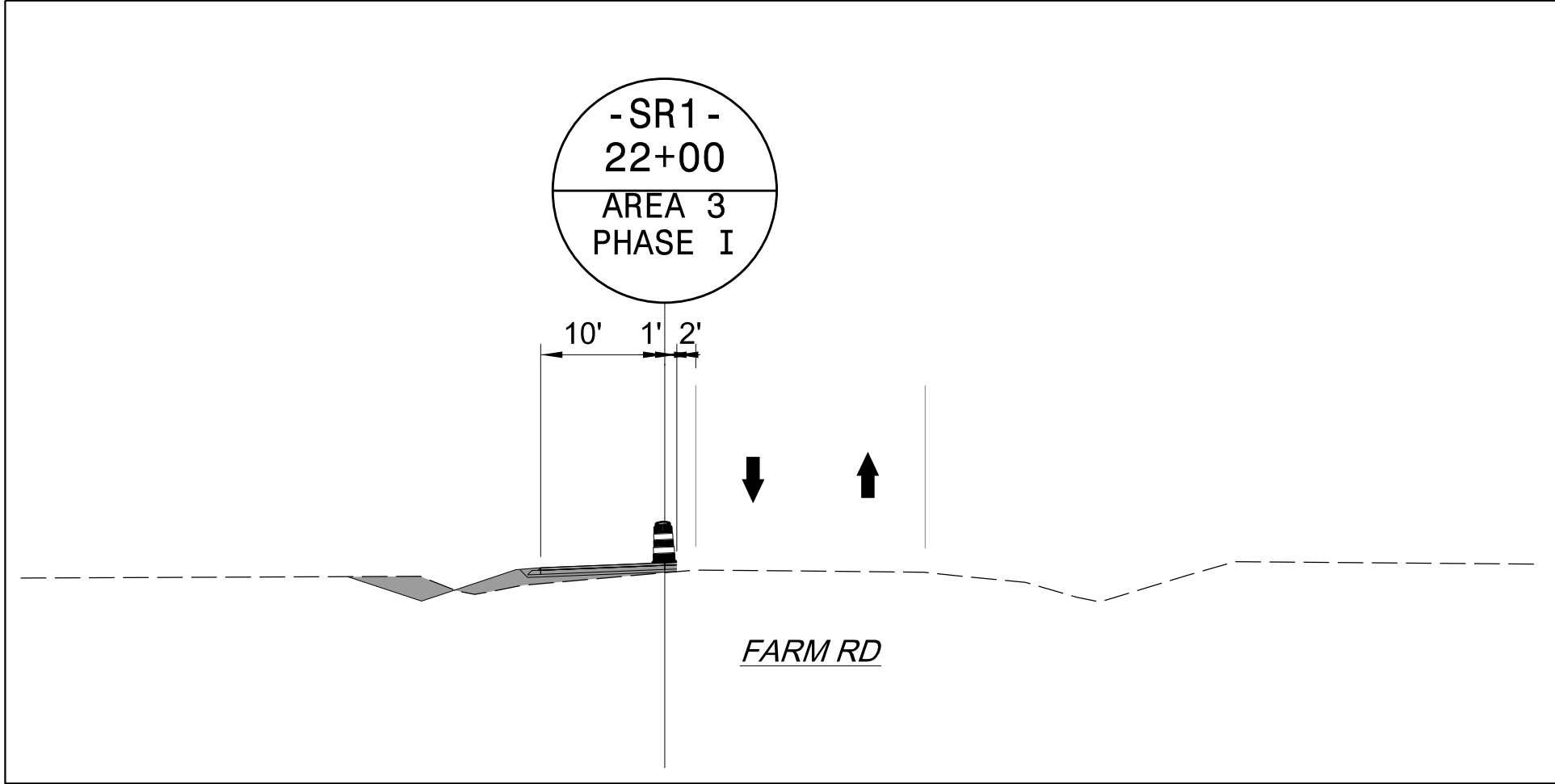
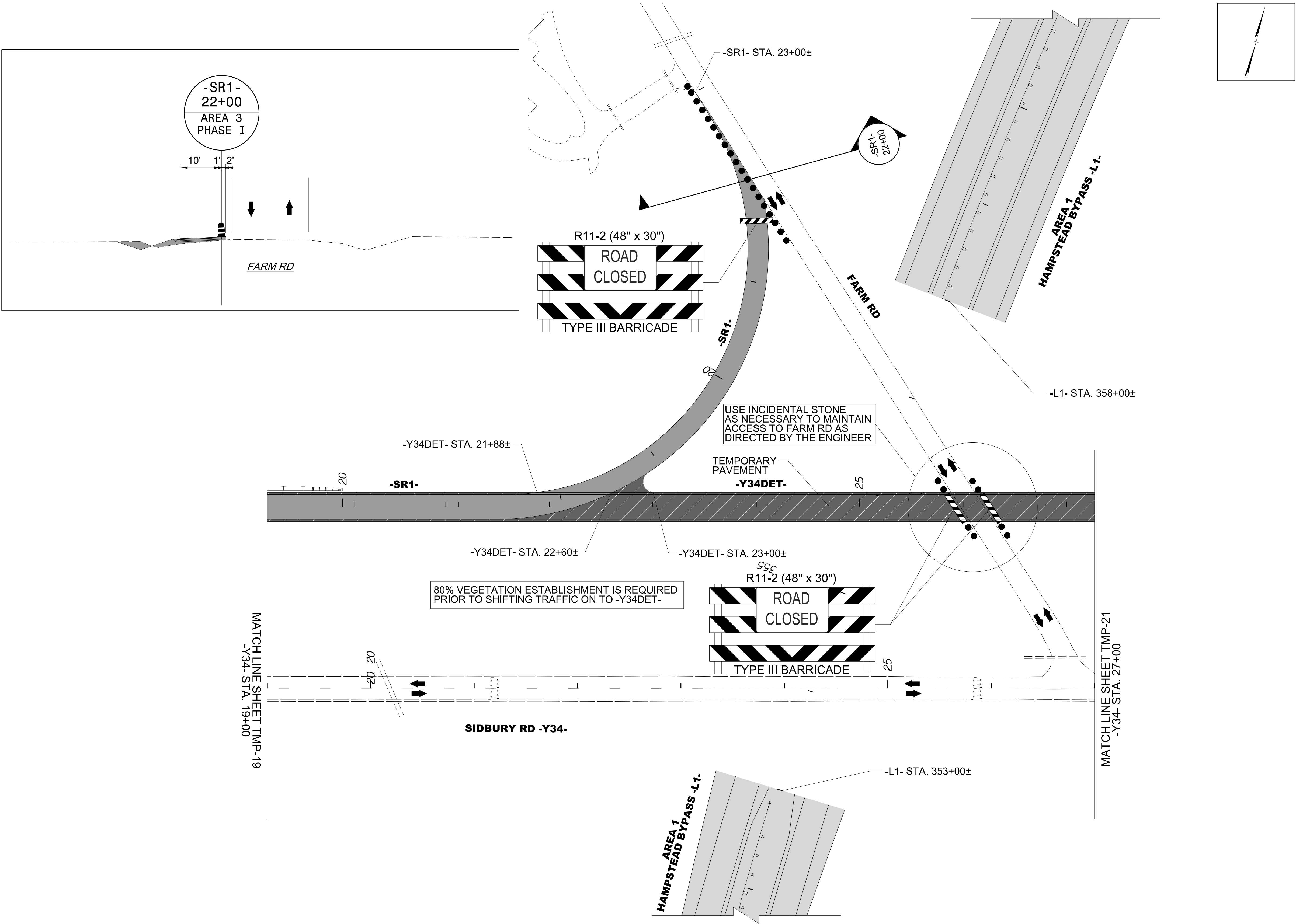


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AREA 3
PHASE I

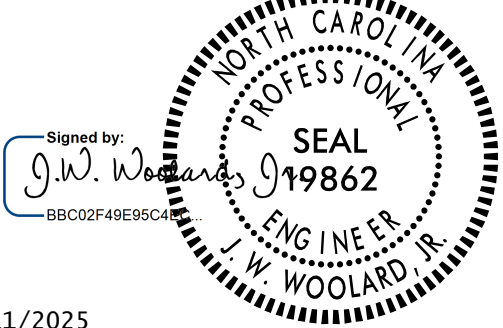
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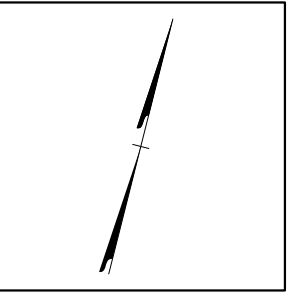
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J.W. WOOLARD, P.E.

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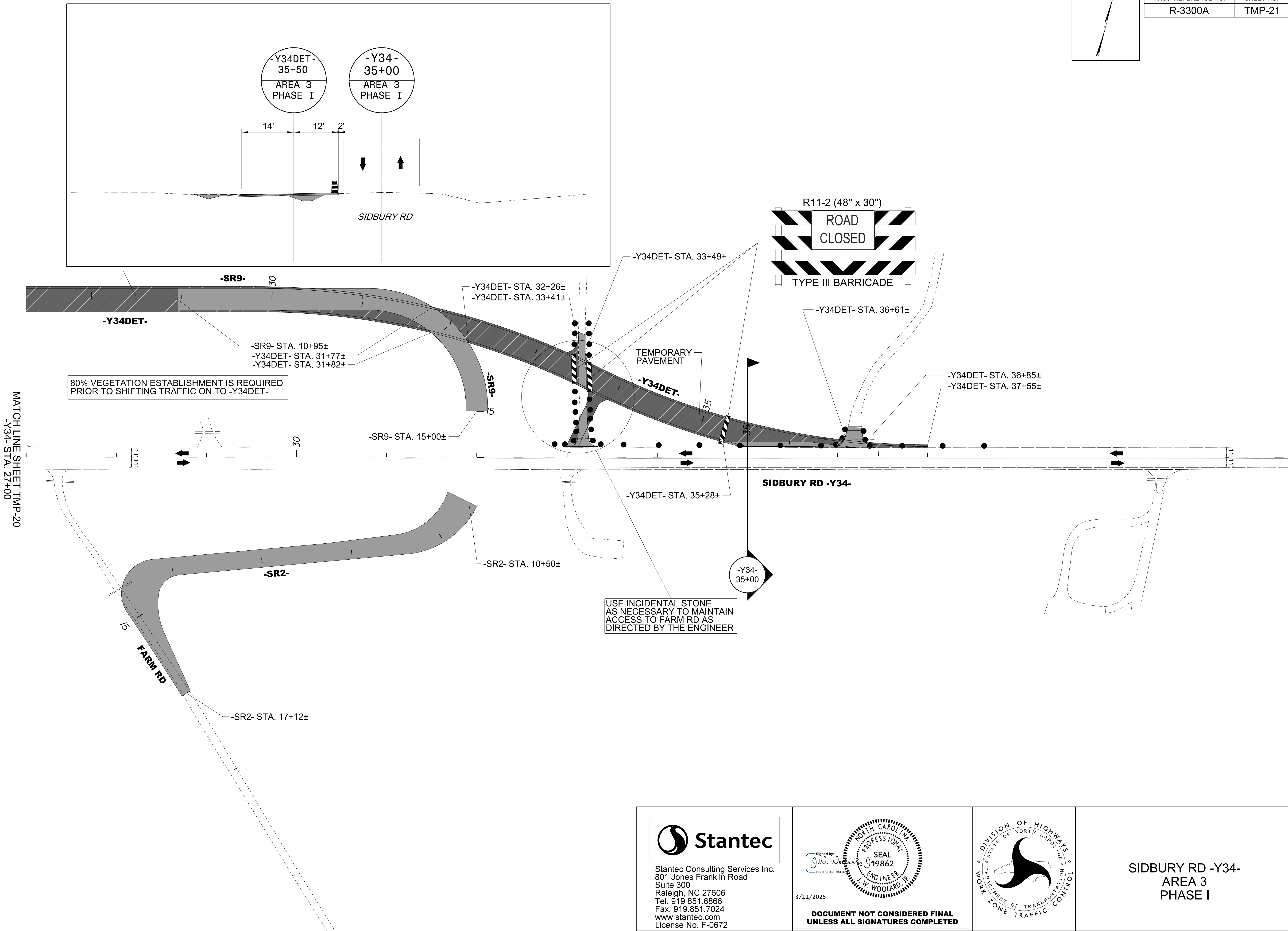
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AREA 3
PHASE I



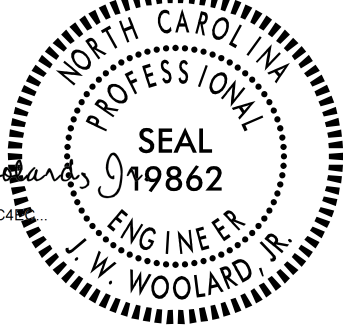
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R-3300A	TMP-21



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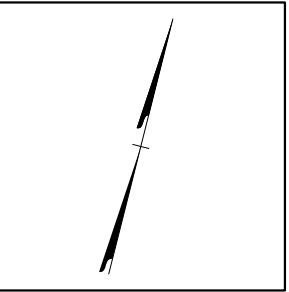

J.W. WOOLARD, P.E.
19862

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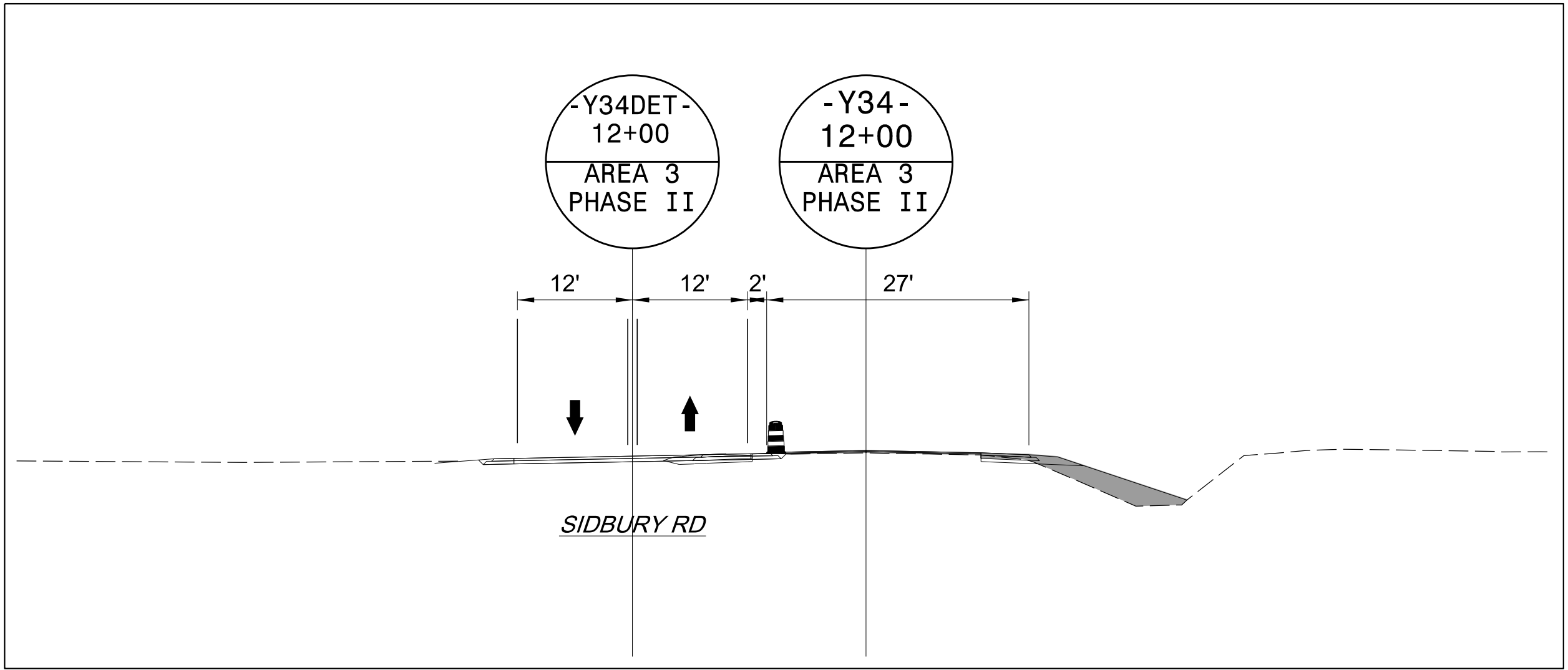
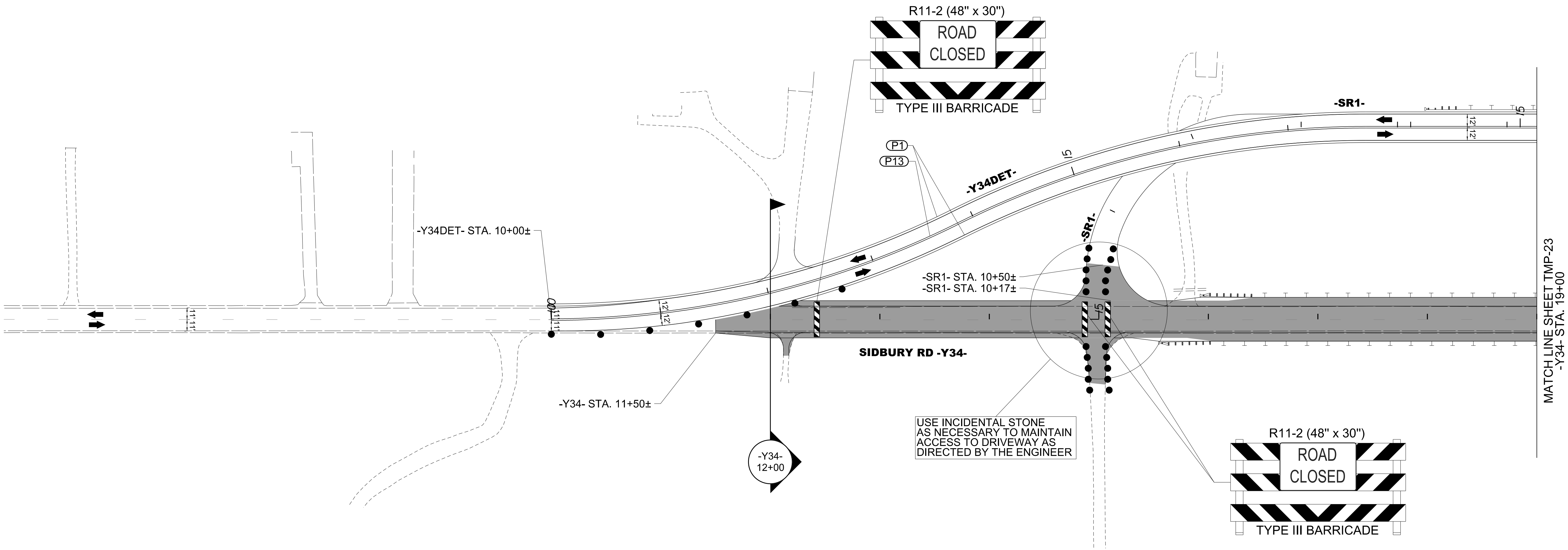
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AREA 3
PHASE I**



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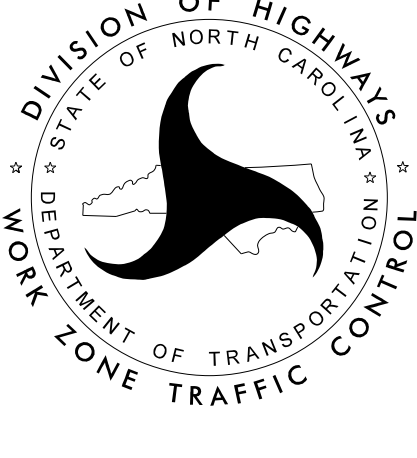
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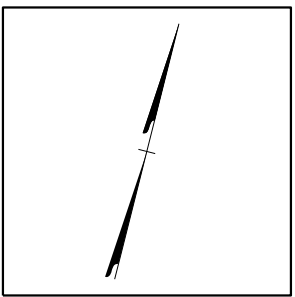
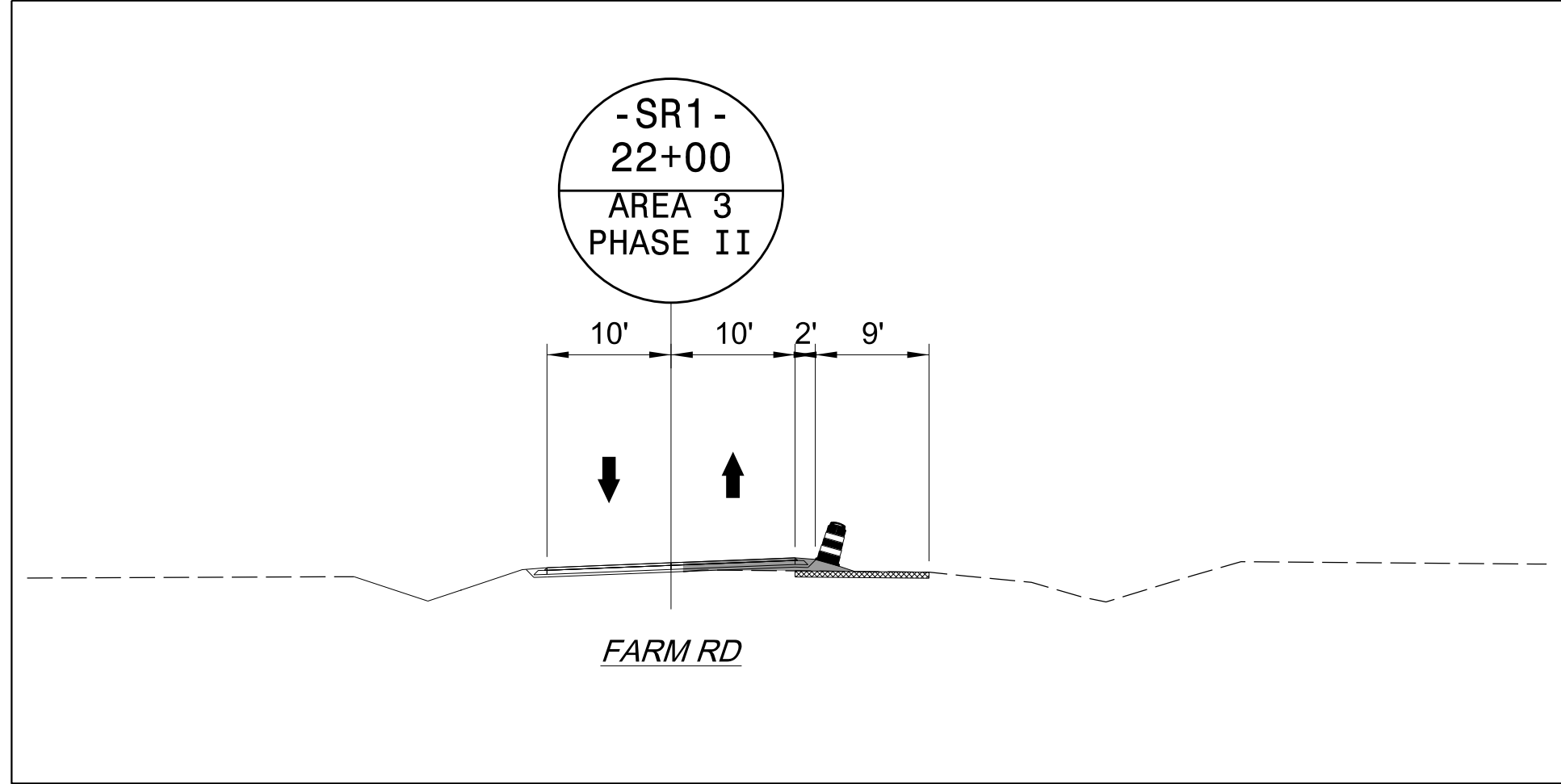
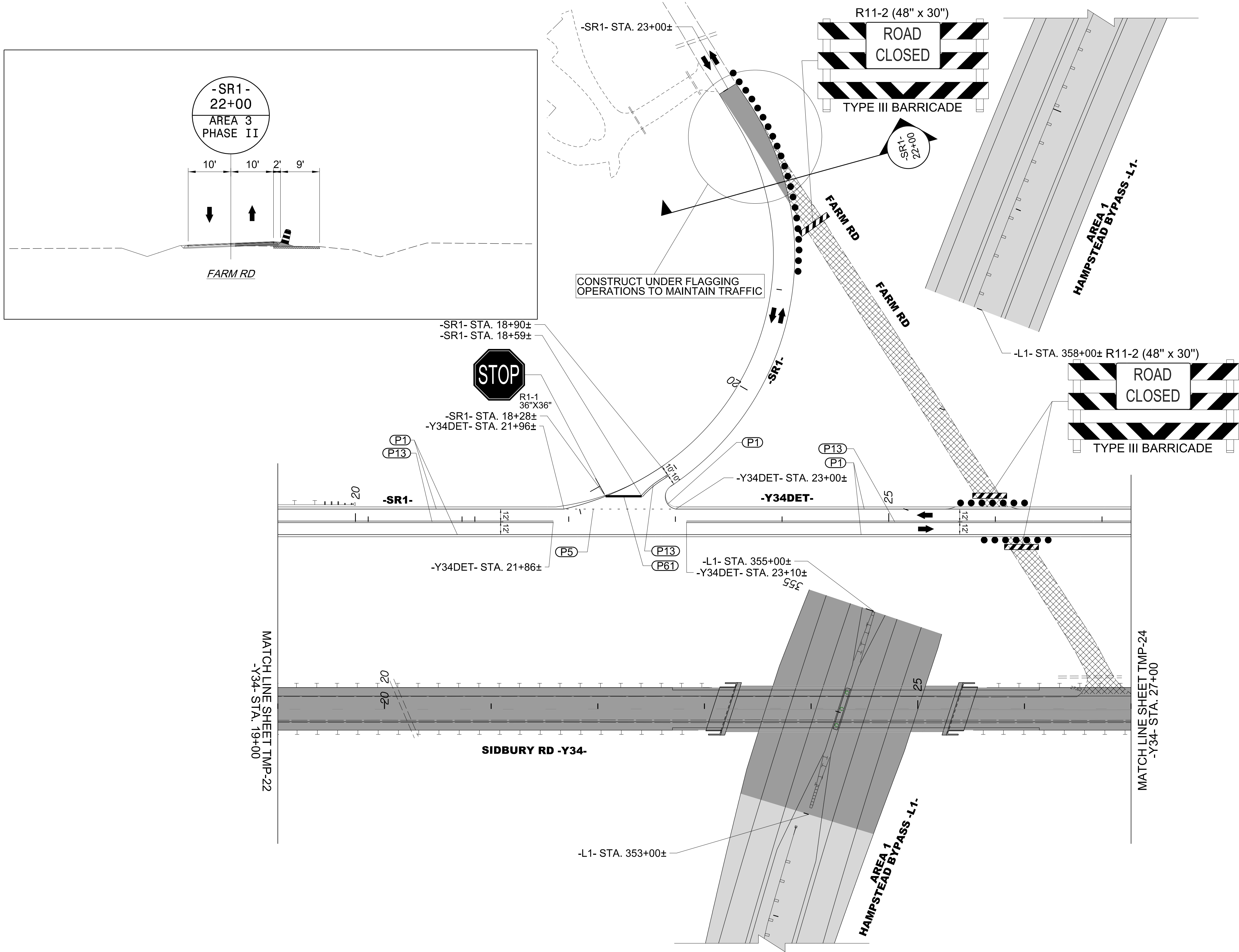
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ENGINEER
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AREA 3
PHASE II

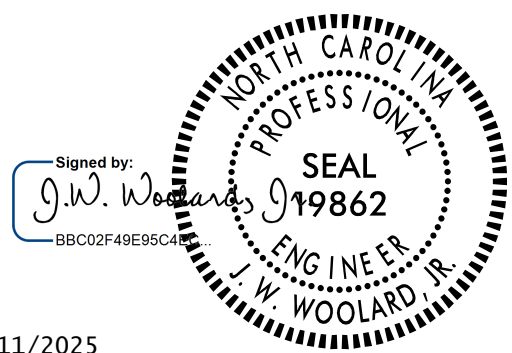
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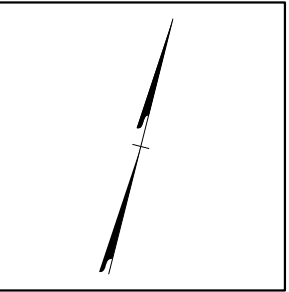


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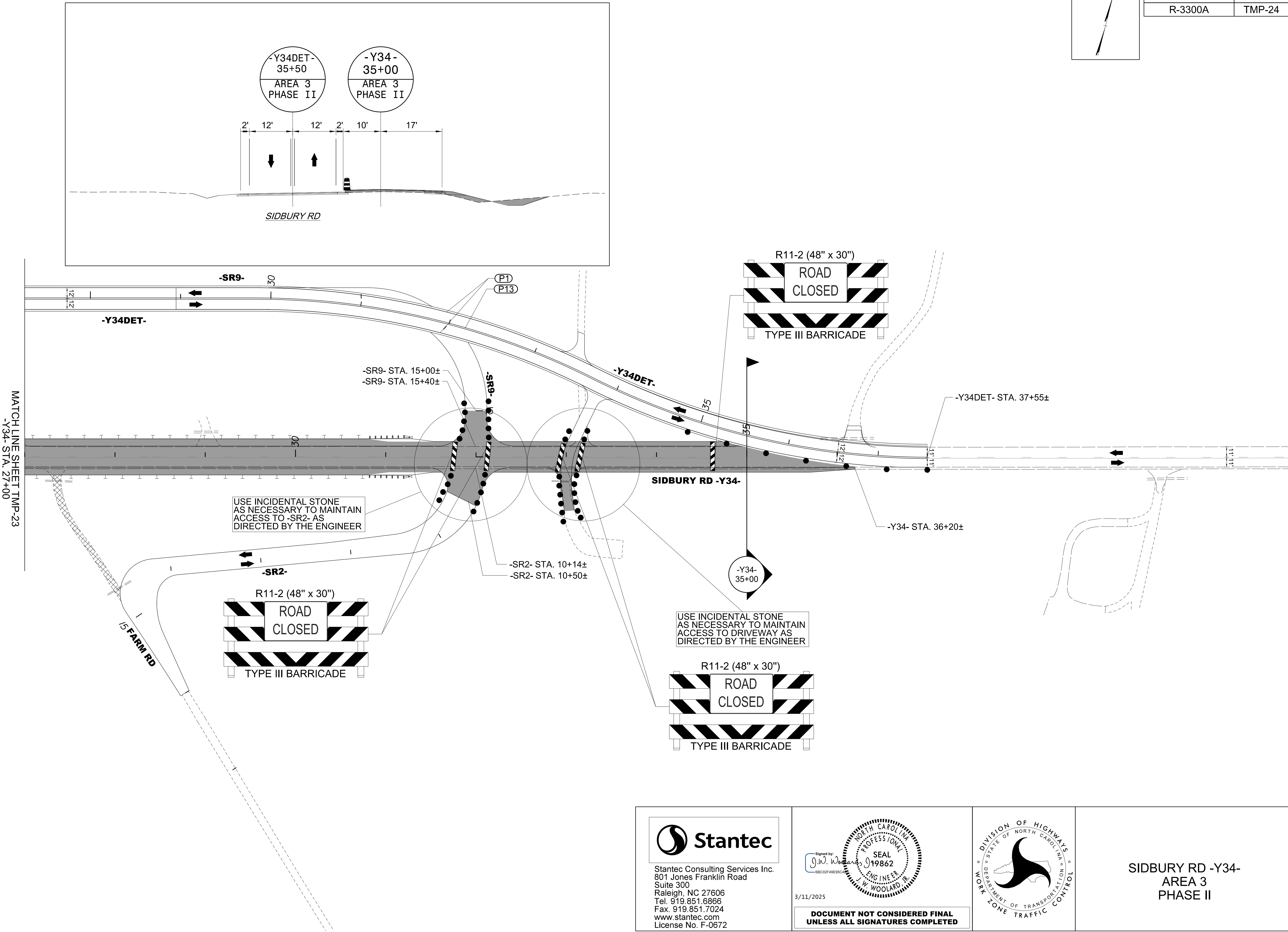
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AREA 3
PHASE II



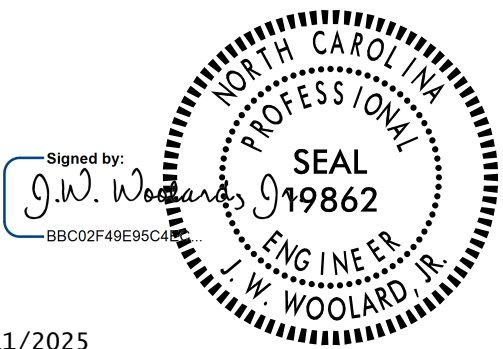
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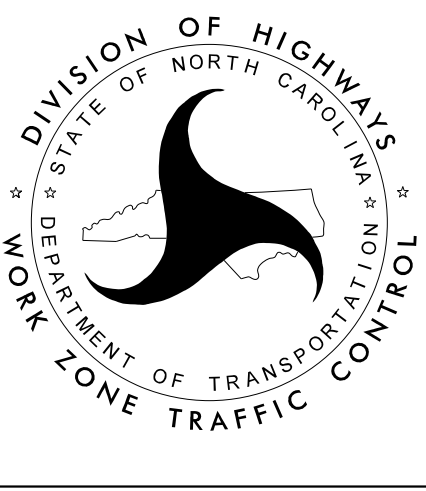


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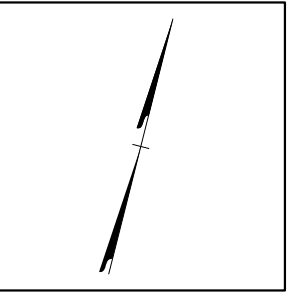


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ENGINEER
J.W. WOOLARD, JR.
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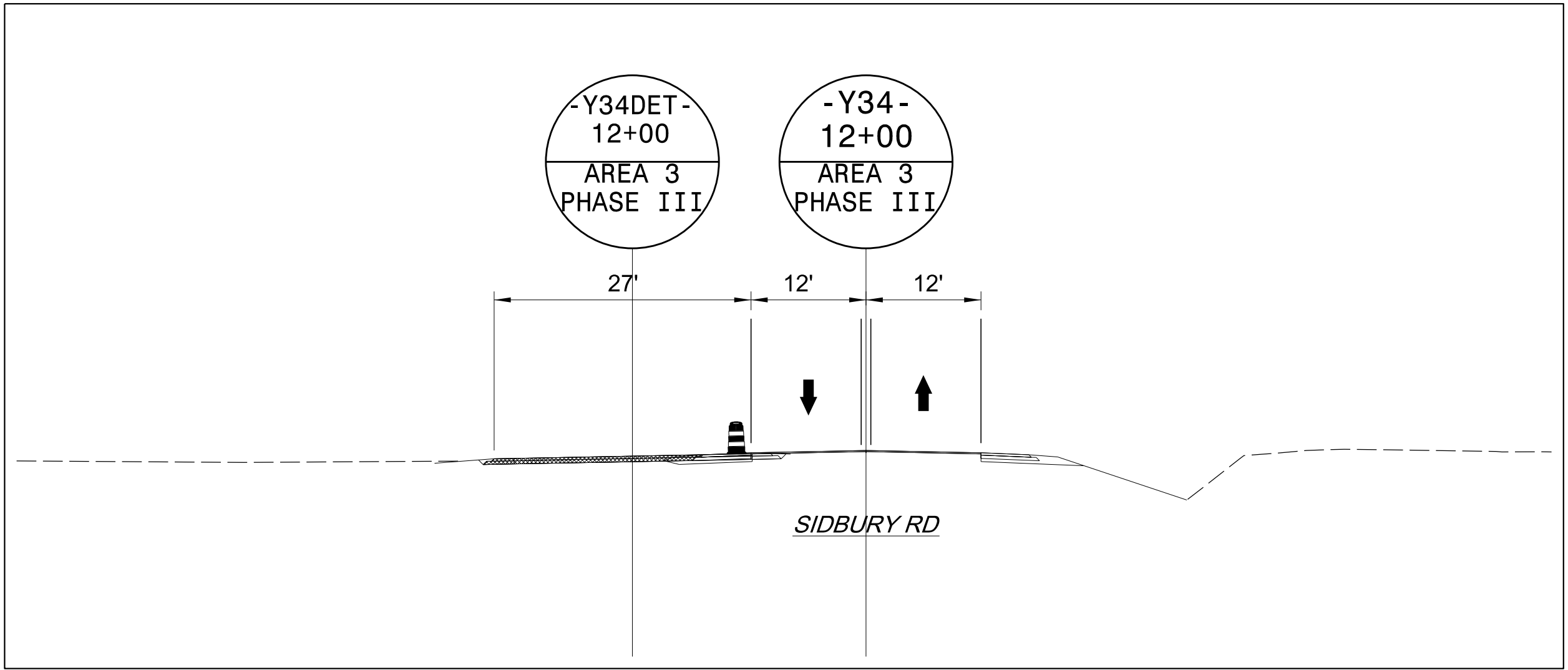
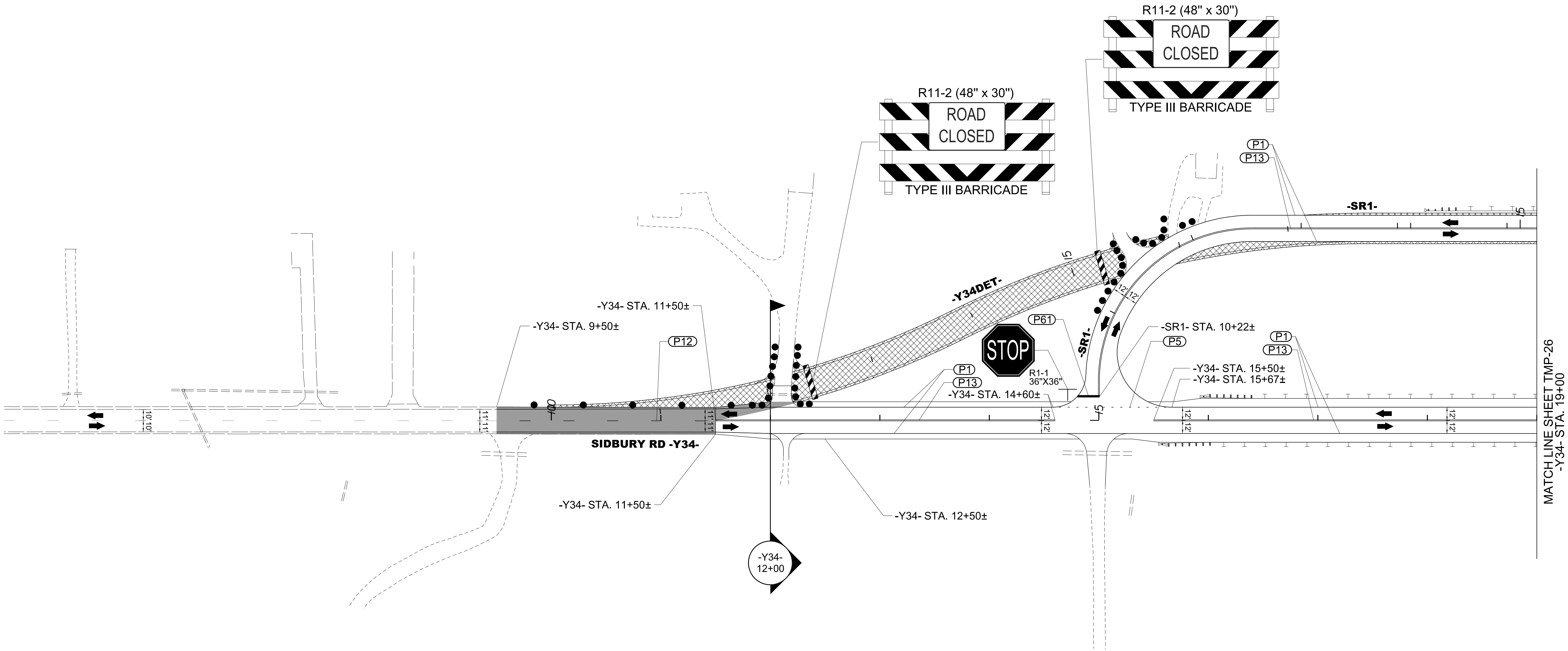
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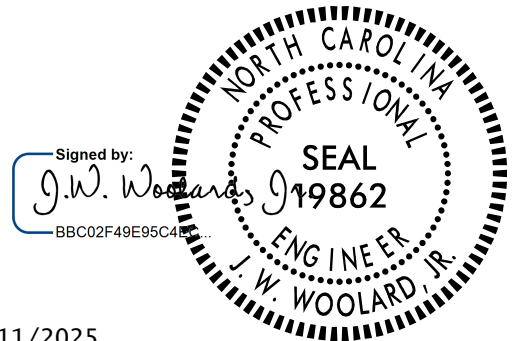
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AREA 3
PHASE II



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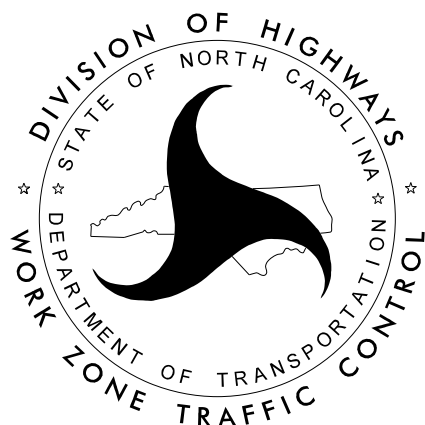


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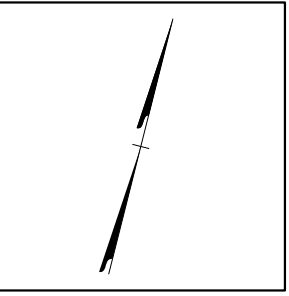
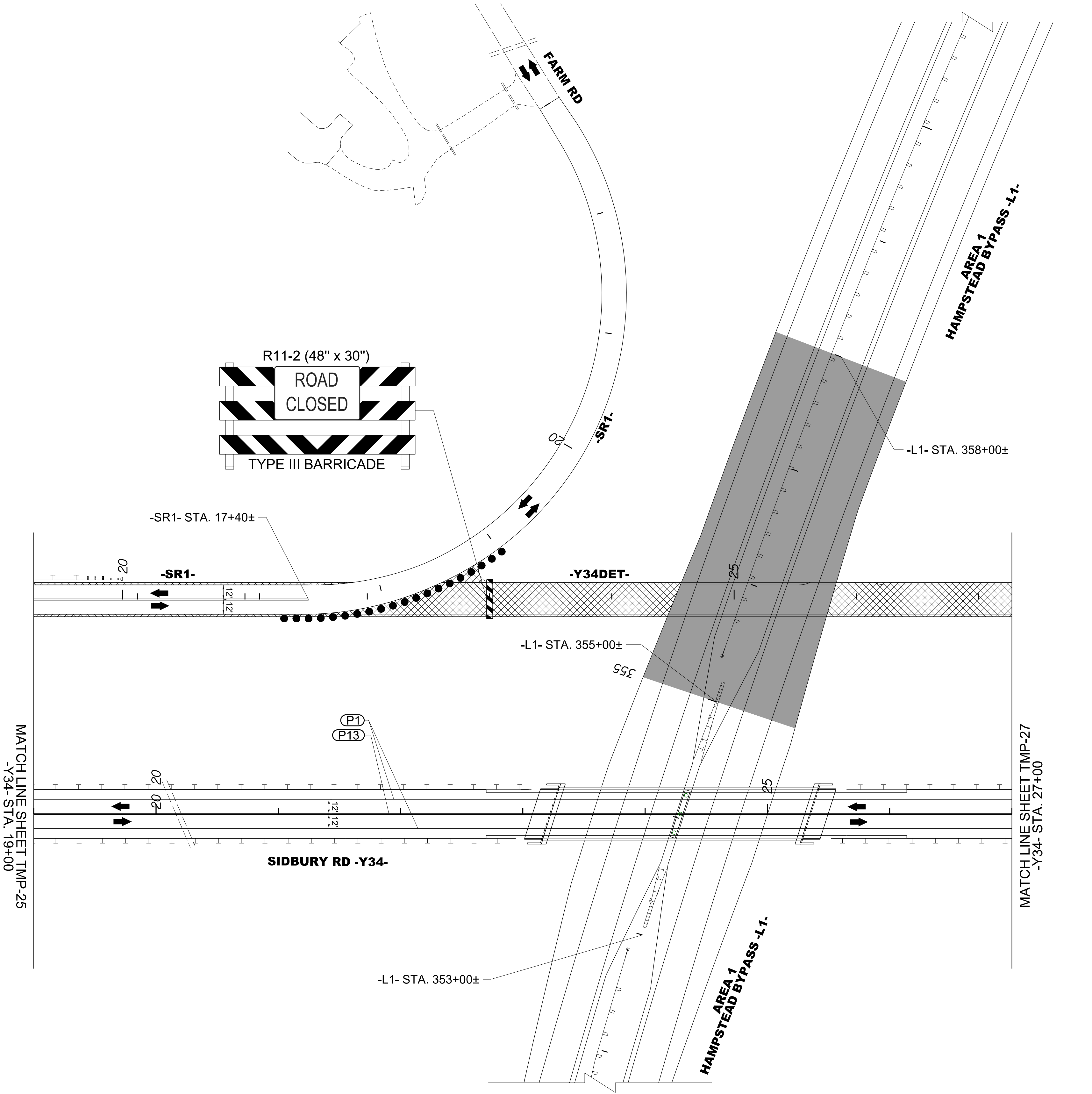
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AREA 3
PHASE III**

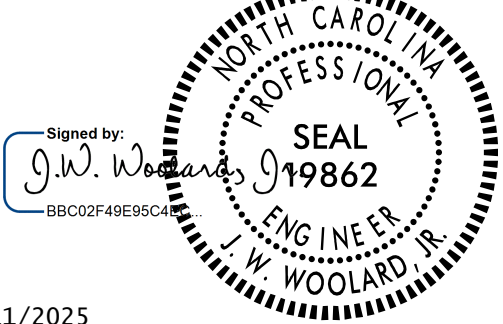
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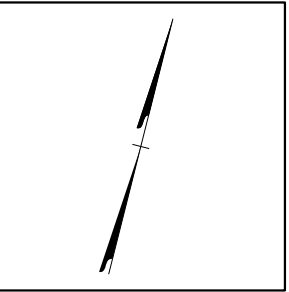


Signed by: *J.W. Woollard*
19862
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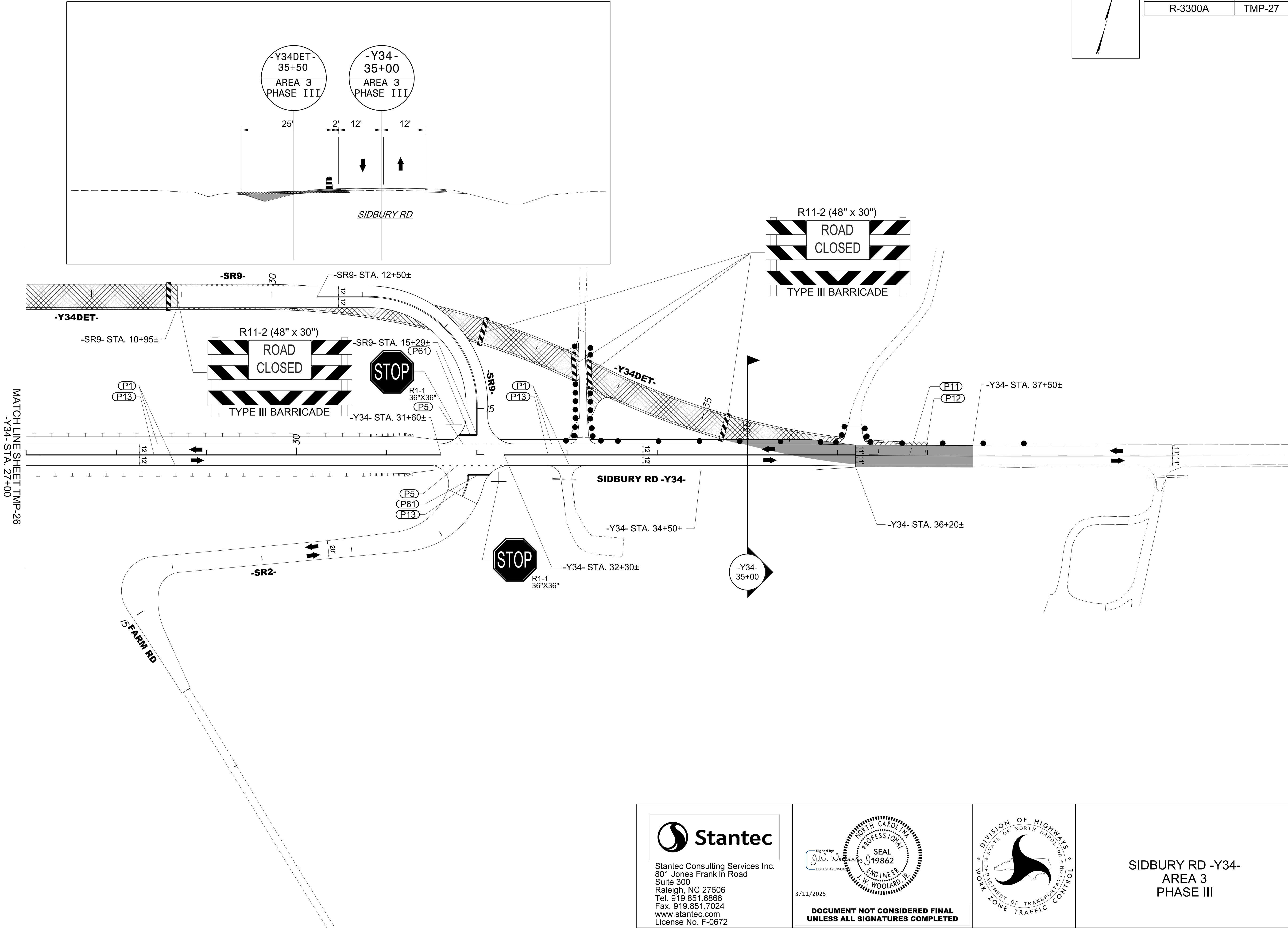
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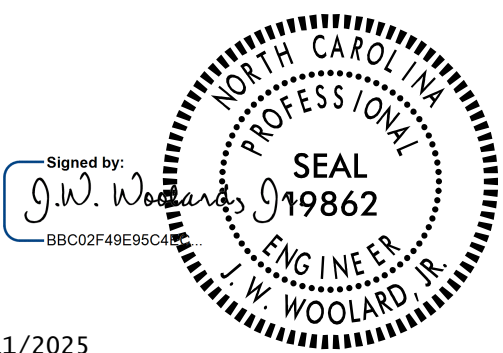
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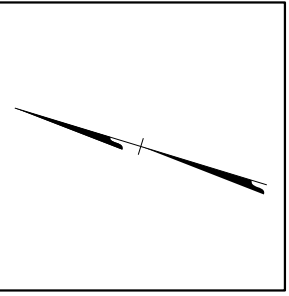
Signed by: J.W. Woollard
Professional Engineer
License No. 19862
State of North Carolina

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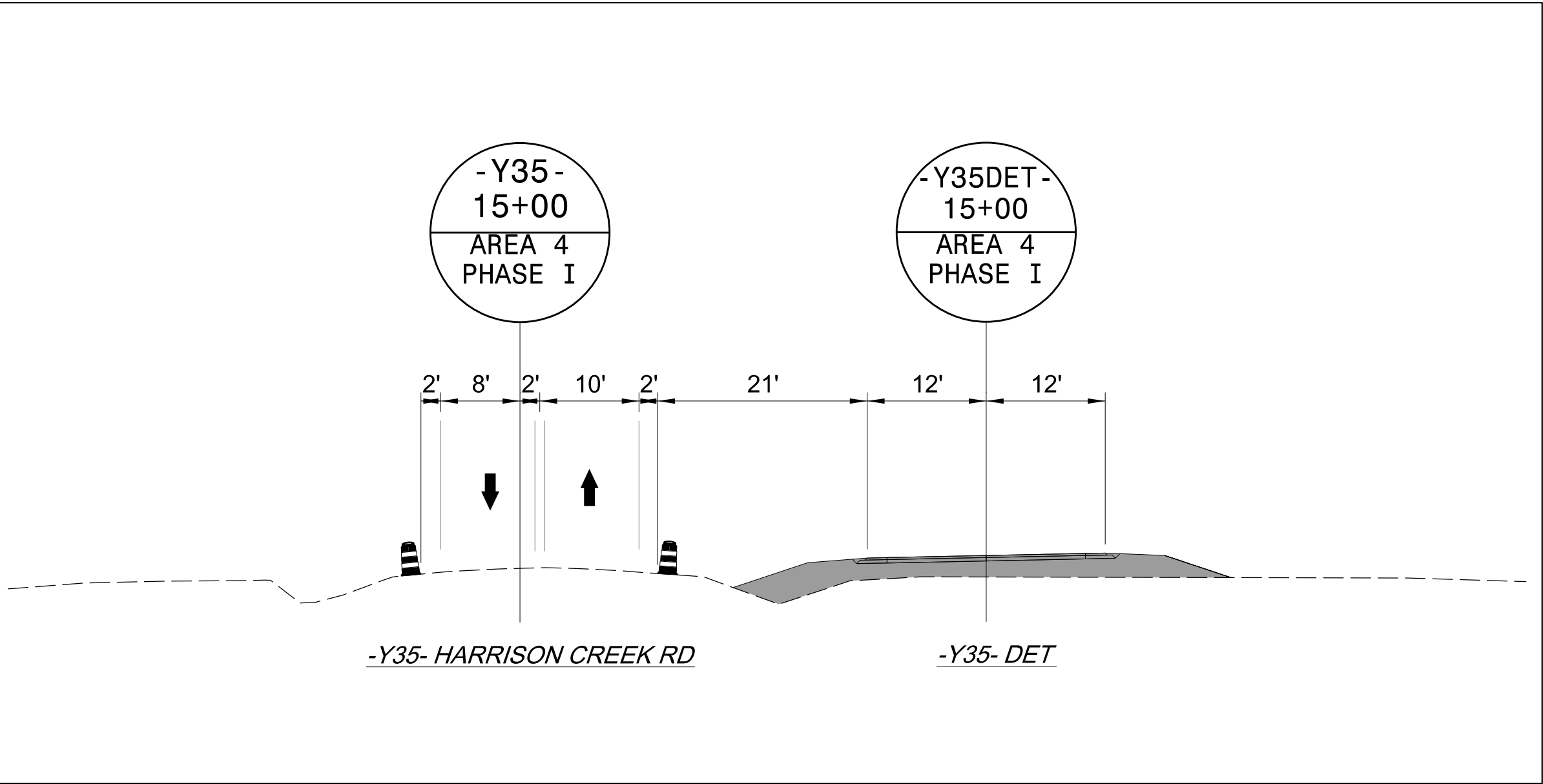
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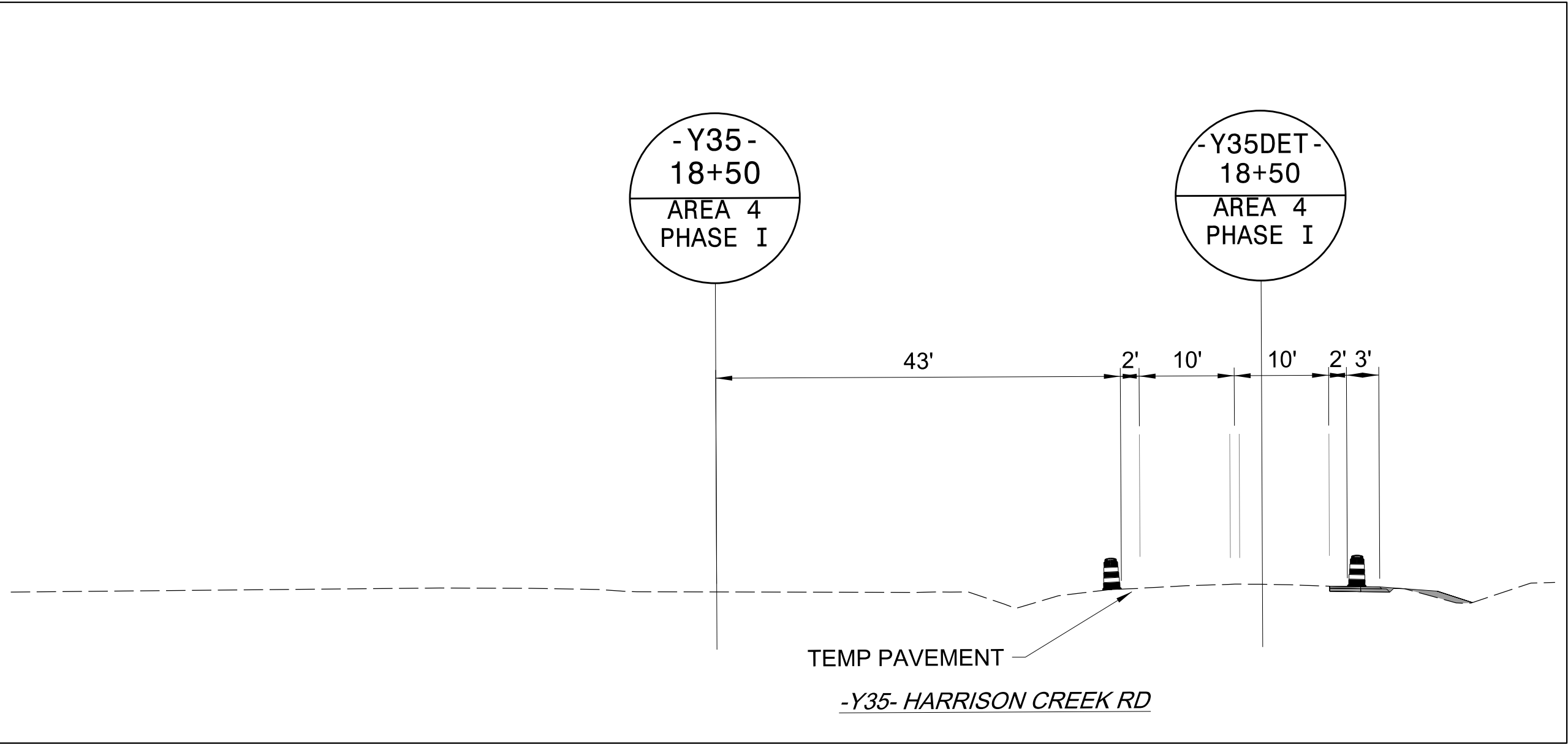
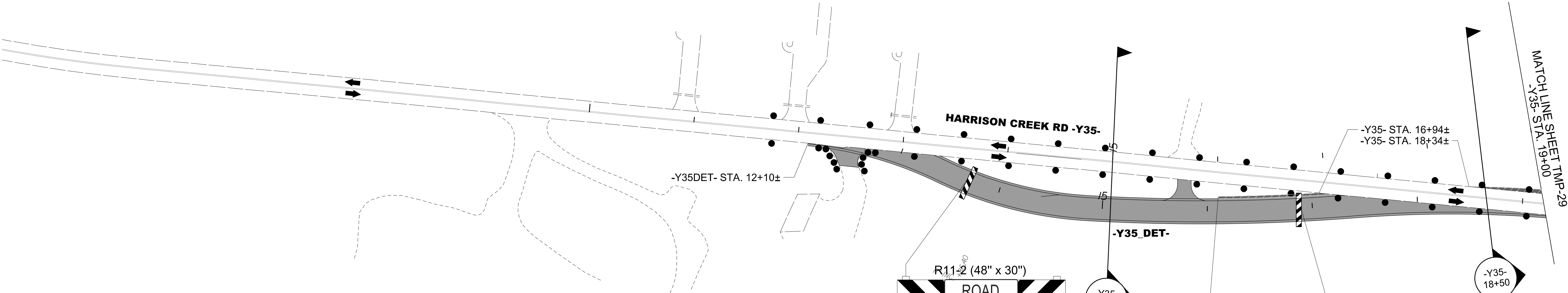
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AREA 3
PHASE III



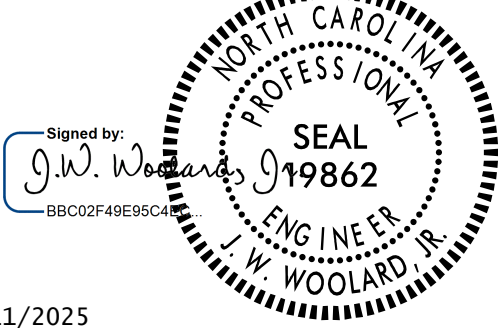
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R-3300A	TMP-28



80% VEGETATION ESTABLISHMENT IS REQUIRED
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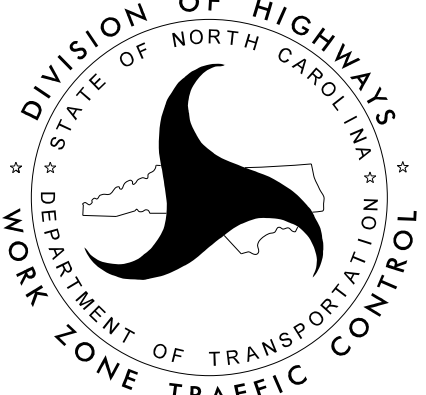


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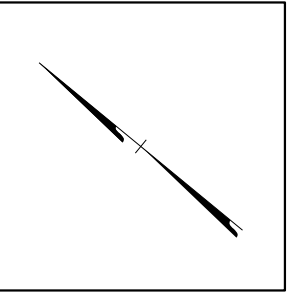


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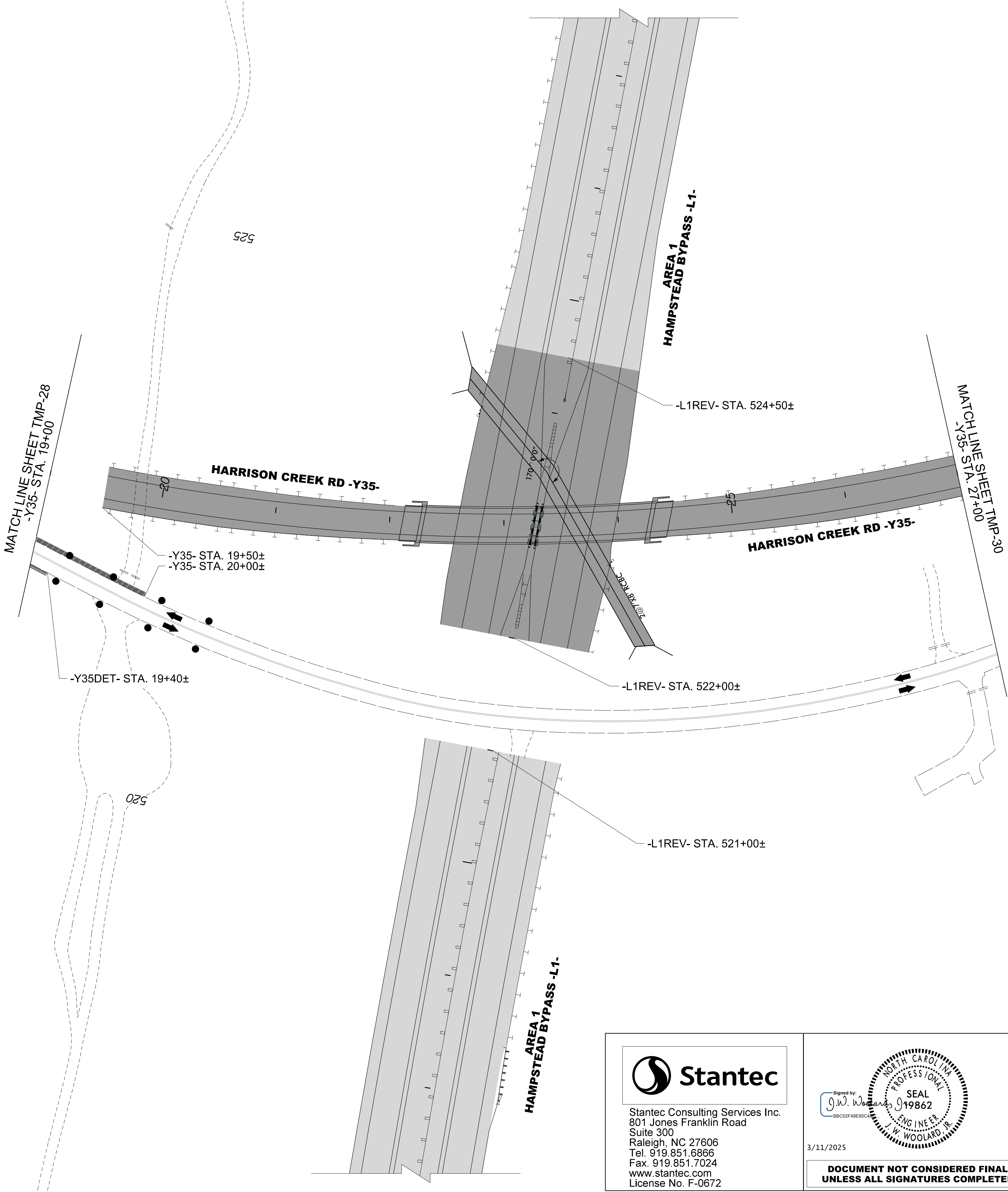
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HARRISON CREEK RD -Y35-
AREA 4
PHASE I

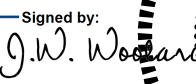


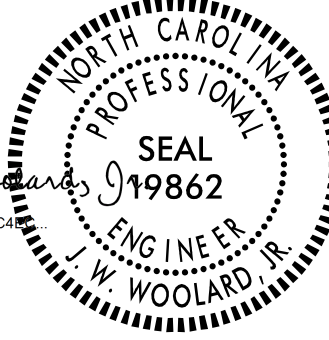
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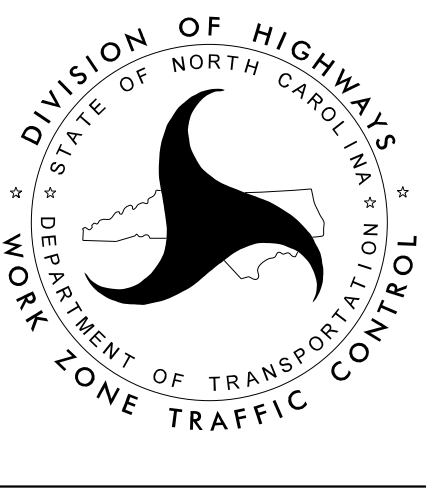
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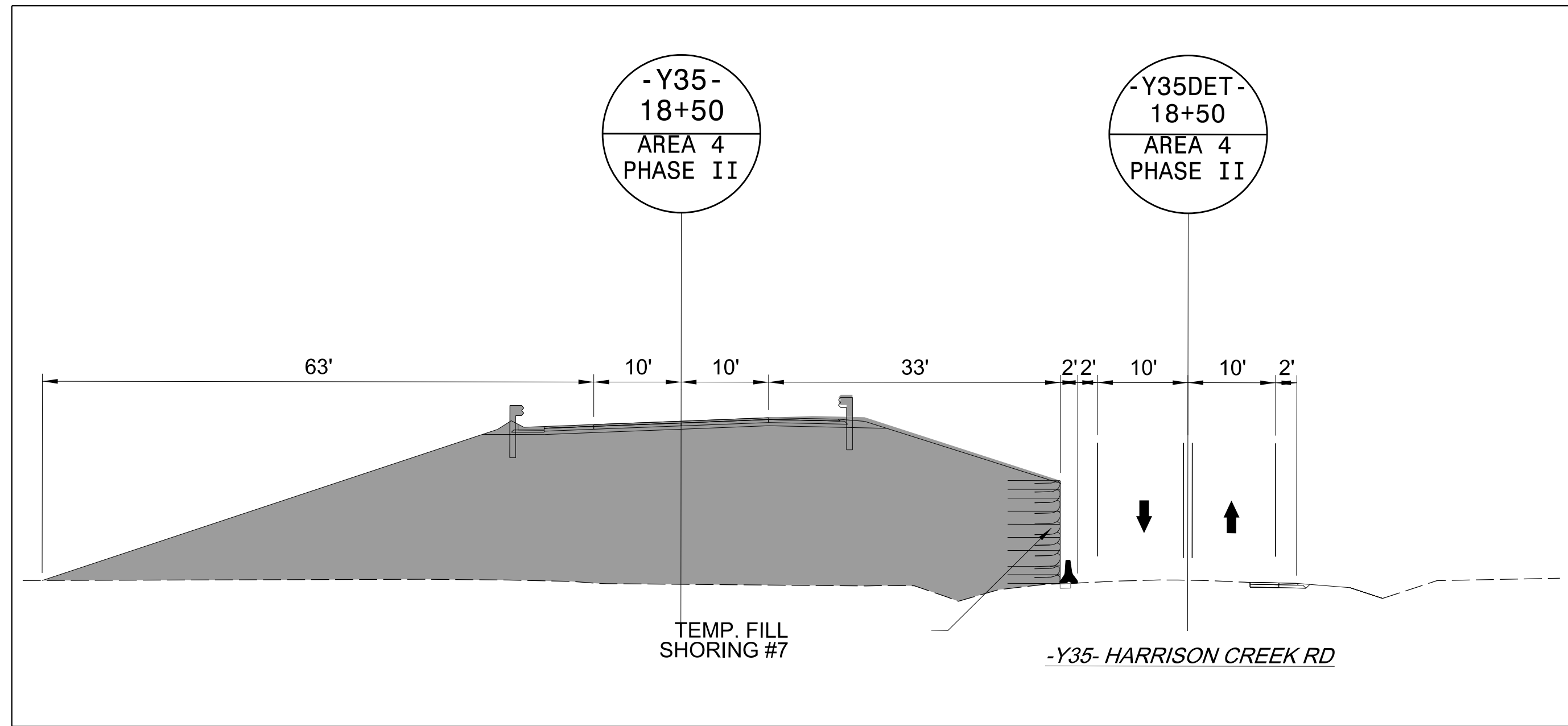
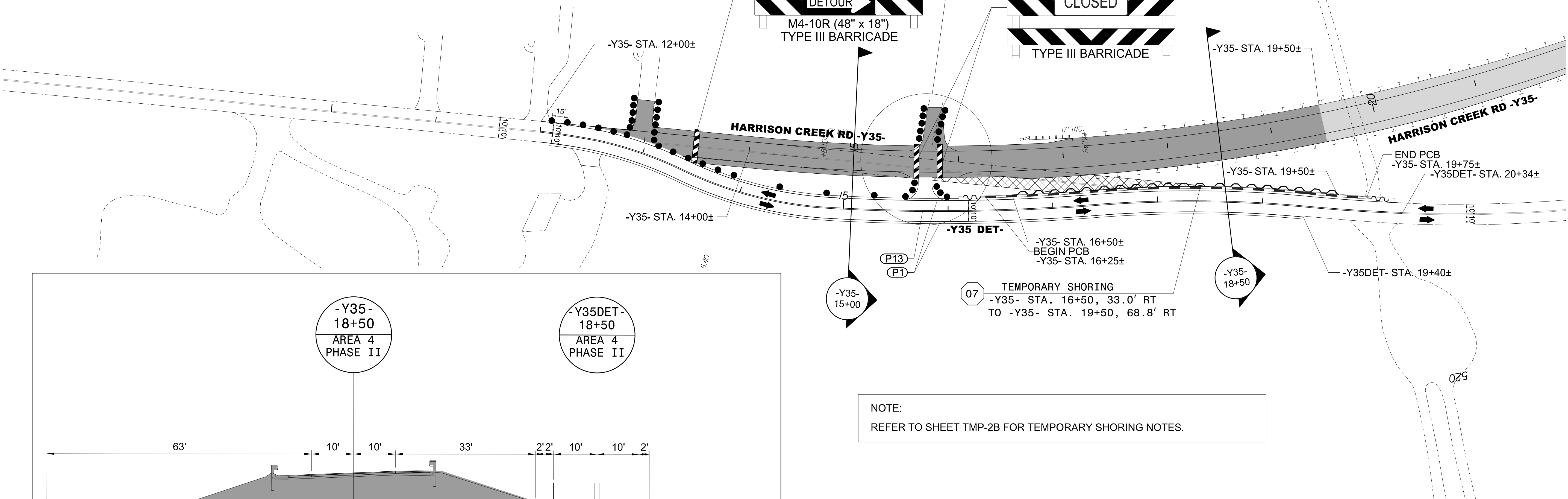
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HARRISON CREEK RD -Y35-
AREA 4
PHASE I





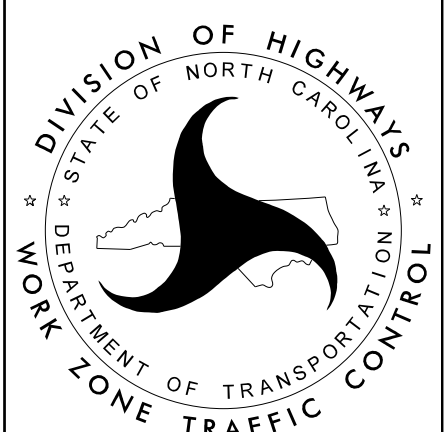
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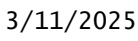
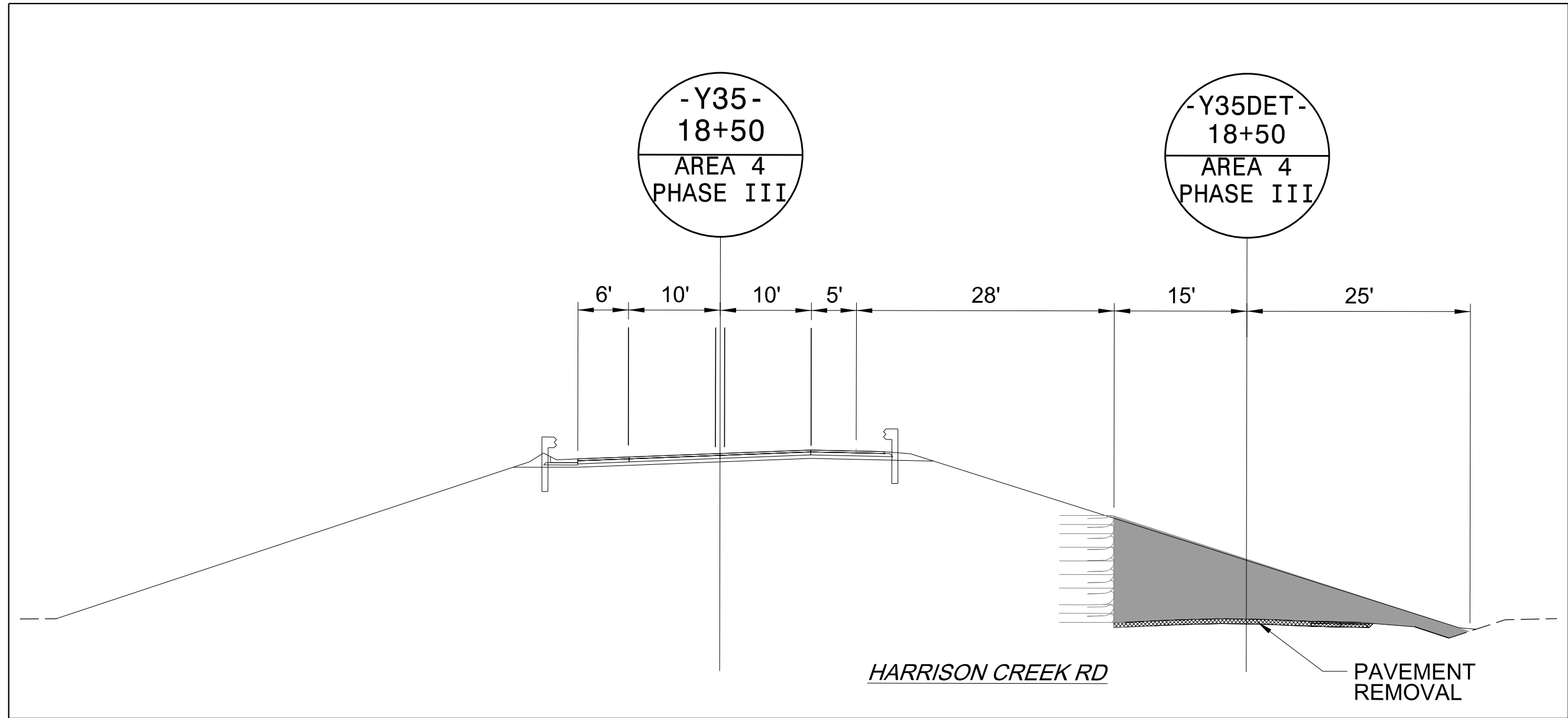
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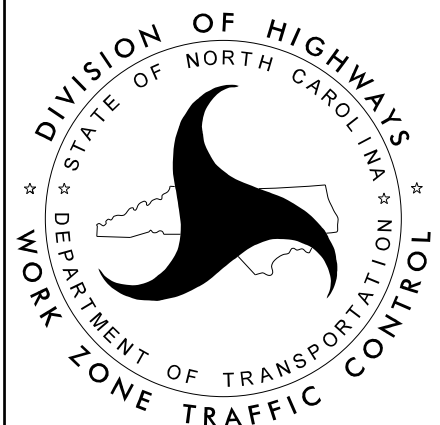

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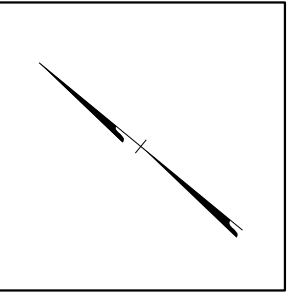
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AREA 4
PHASE II



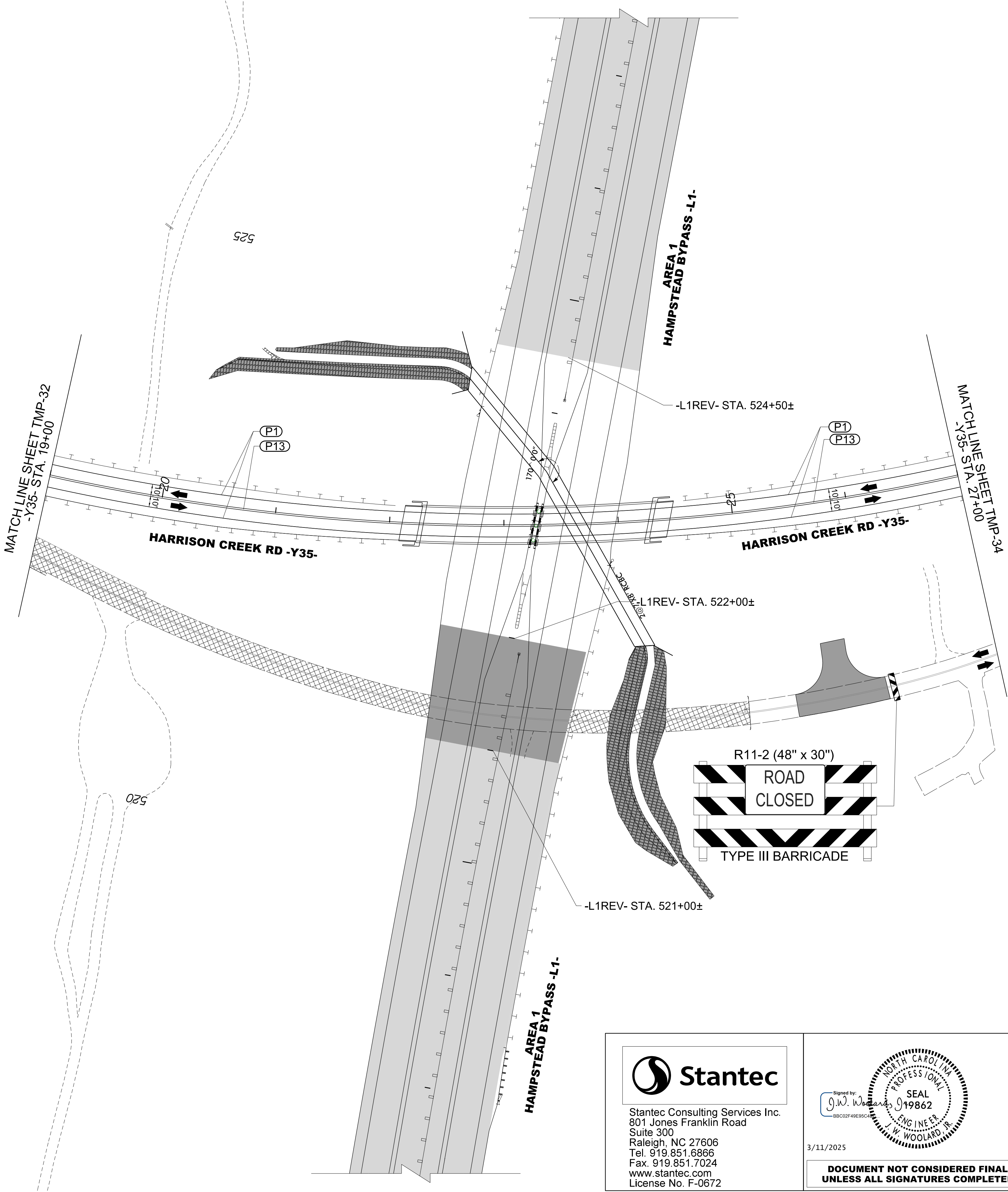
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AREA 4
PHASE III



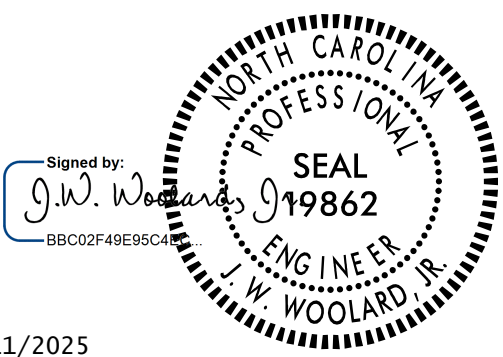
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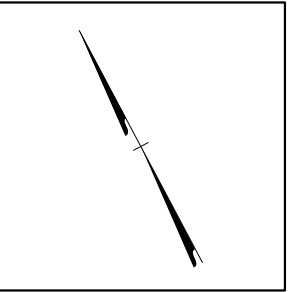


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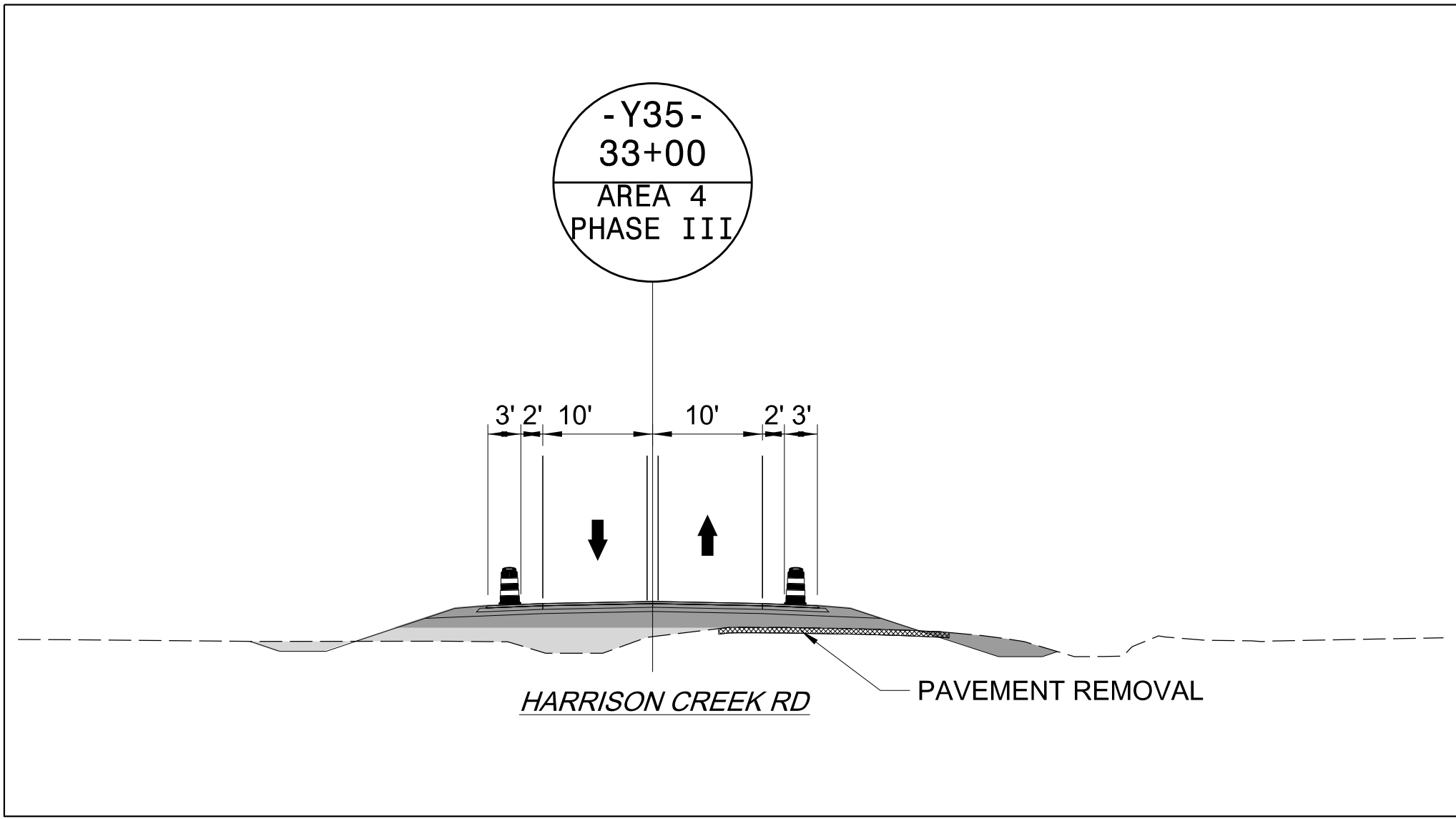


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AREA 4
PHASE III

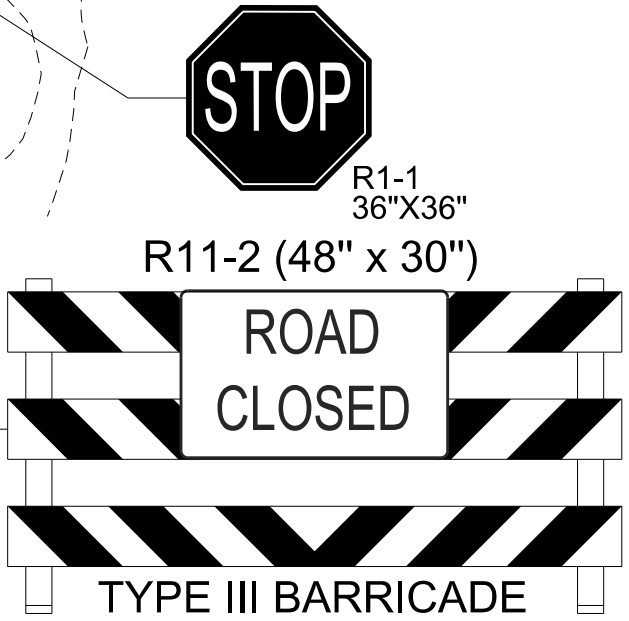


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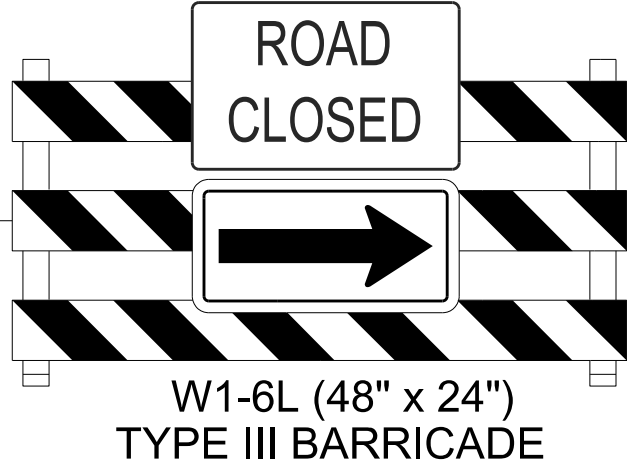
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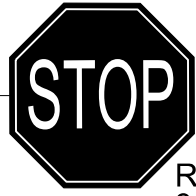
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(P1)
(P13)
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-DRW1- STA. 10+20±
-DRW1- STA. 10+74±
-DRW1- STA. 11+58±
(P13)
(P1)



-Y35- 33+00



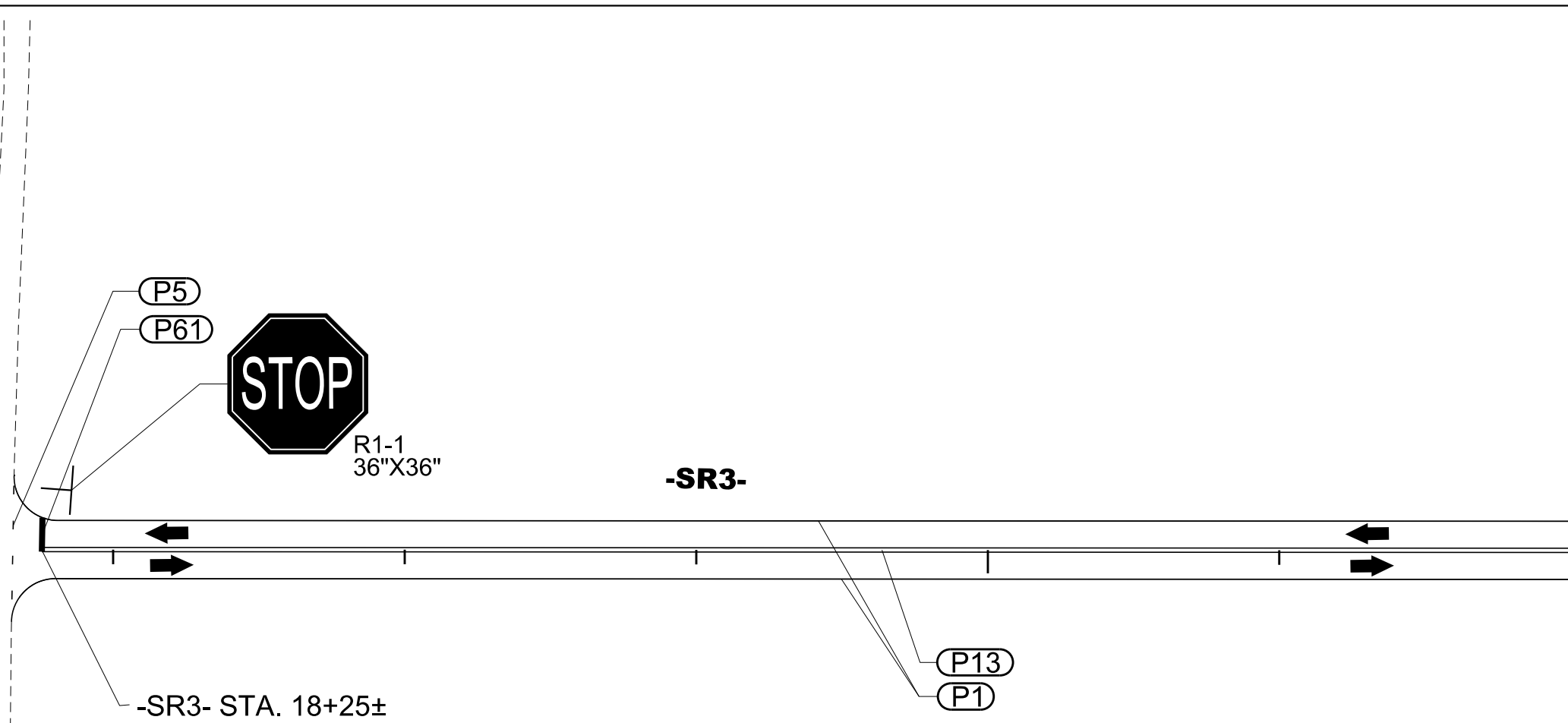
-SR3- STA. 10+15±
-SR3- STA. 10+20±



R1-1
36"X36"

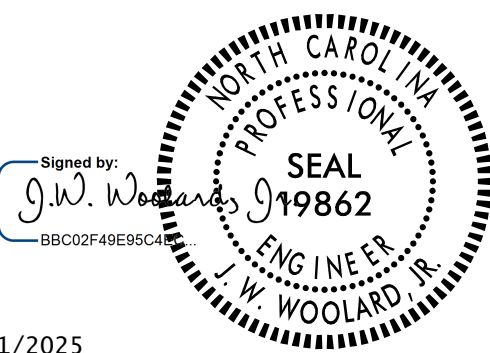
(P1)
(P13)

MATCH LINE SHEET BELOW
-SR3- STA. 14+00

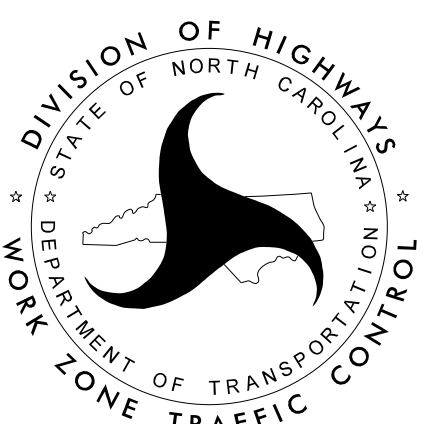


MATCH LINE SHEET ABOVE
-SR3- STA. 14+00

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HARRISON CREEK RD -Y35-
AREA 4
PHASE III