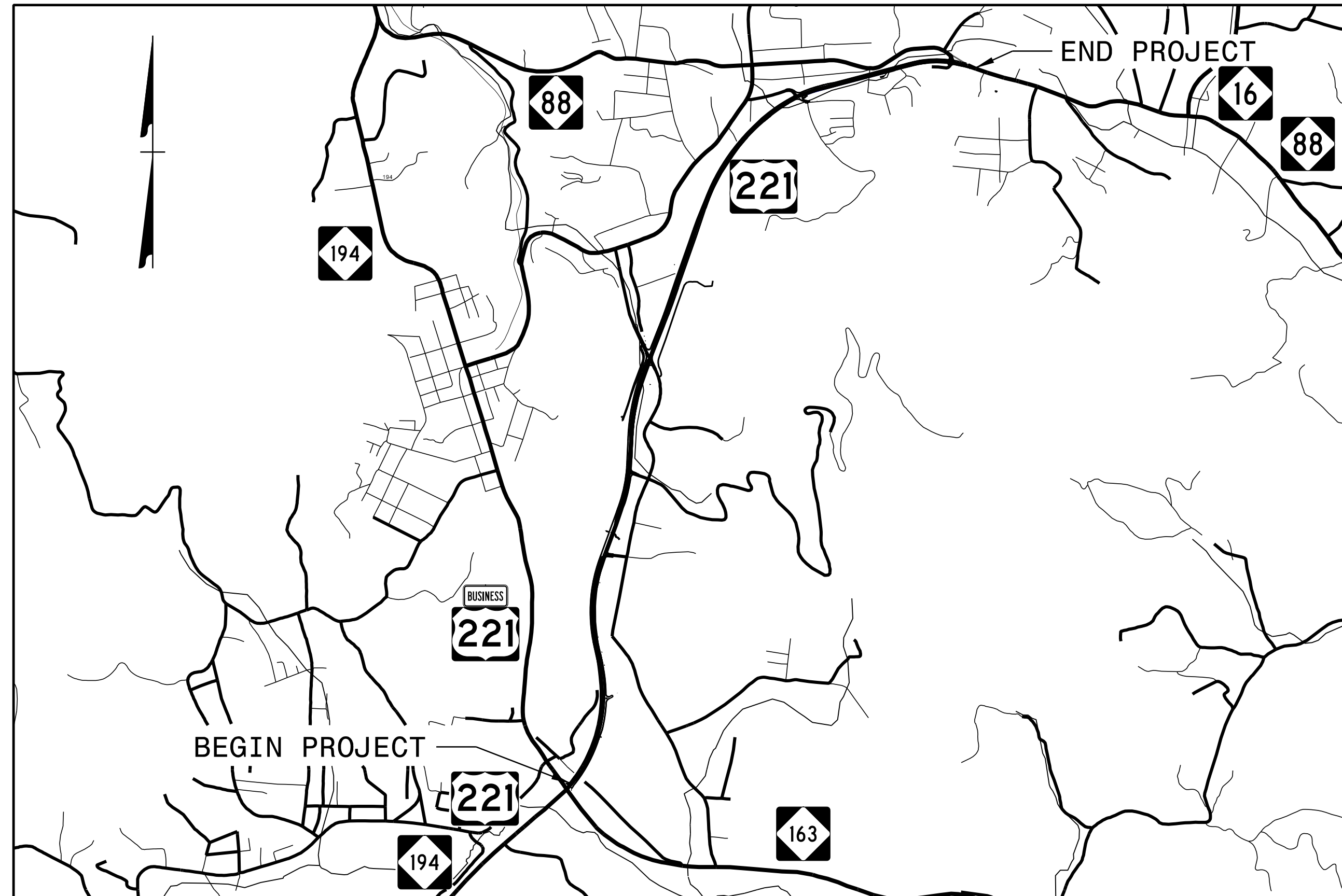
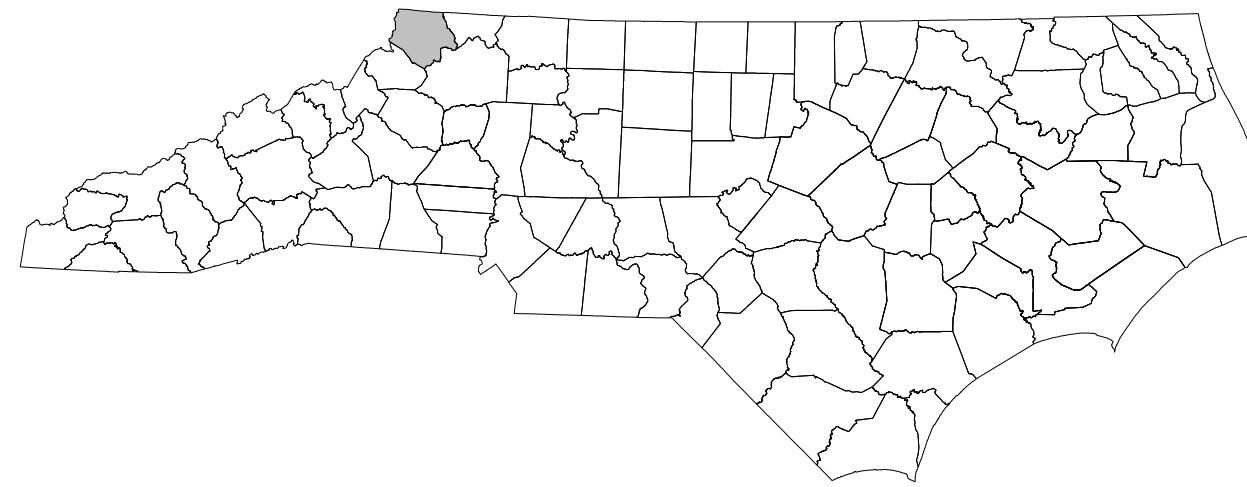


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

ASHE COUNTY



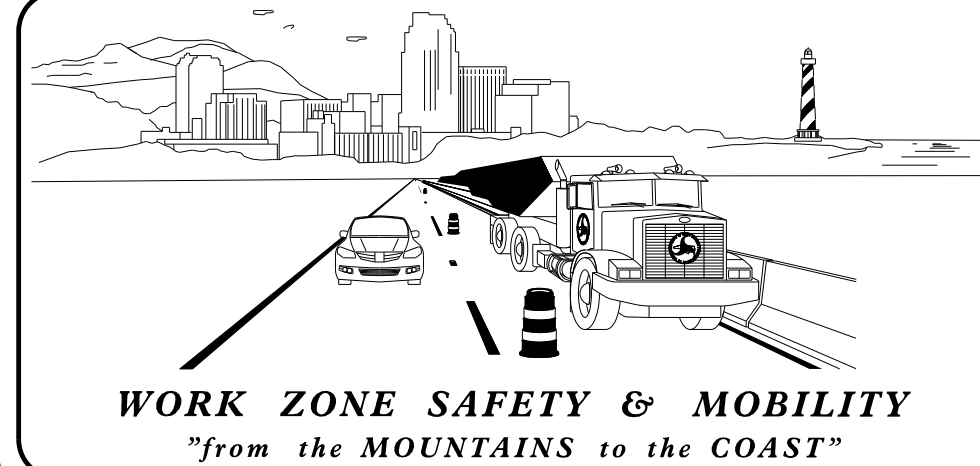
SHEET NO.	TITLE
TMP-1	TITLE SHEET, VICINITY MAP, AND INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, AND LEGEND
TMP-1B AND 1C	TRANSPORTATION OPERATIONS PLAN: (GENERAL NOTES)
TMP-2	PORTABLE CONCRETE BARRIER AT TEMPORARY SHORING LOCATIONS
TMP-2A	TEMPORARY SHORING NOTES
TMP-2B AND 2C	OFFSITE DETOUR DETAILS
TMP-3 AND 3A	TEMPORARY TRAFFIC CONTROL PHASING
TMP-4 THRU 18	TEMPORARY TRAFFIC CONTROL PHASE I DETAILS
TMP-19 THRU 27	TEMPORARY TRAFFIC CONTROL PHASE II DETAILS
TMP-28 THRU 37	TEMPORARY TRAFFIC CONTROL PHASE III DETAILS
TMP-38 THRU 52	TEMPORARY TRAFFIC CONTROL PHASE IV DETAILS
TMP-53 THRU 67	TEMPORARY TRAFFIC CONTROL PHASE V DETAILS

SHEET NO.
TMP-1

R-2915E

TIP PROJECT:

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

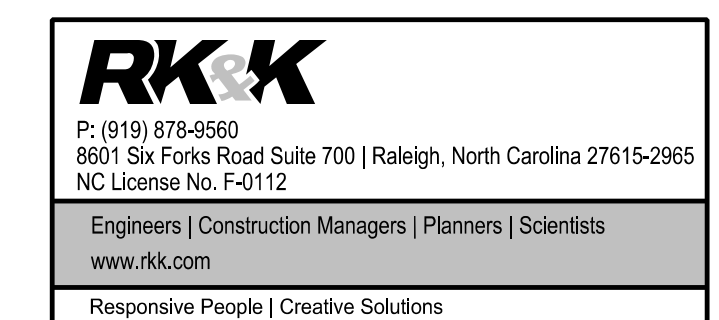
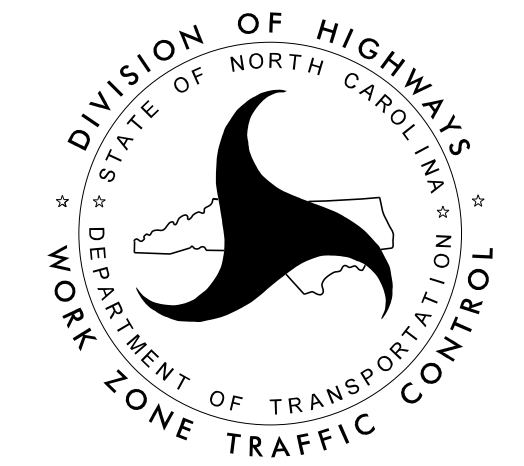


PLANS PREPARED BY:
K. BISBY, PE / M. COLE

B. HOLDEN, PE

NCDOT CONTACTS:
JOE LAWS, PE
PROJECT ENGINEER

PROJECT DESIGN ENGINEER



APPROVED: *Kevin W. Bisby*
3CE3C9A8DF46481
DATE: 2/7/2020

SEAL



2/7/2020
R-2915E-TMP_PSH01.dgn

ROADWAY STANDARD DRAWINGS

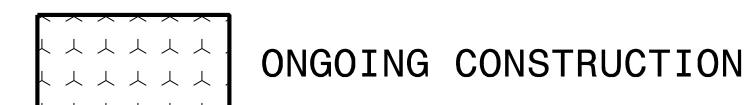
THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.01	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
1101.06	WARNING SIGNS FOR BLASTING ZONES
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	DRUM
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1160.01	TEMPORARY CRASH CUSHION
1165.01	WORK VEHICLE LIGHTING SYSTEMS AND TMA DELINEATION
1170.01	POSITIVE PROTECTION
1180.01	SKINNY-DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO-LANE AND MULTI-LANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.06	PAVEMENT MARKINGS - LANE DROPS
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1205.12	PAVEMENT MARKINGS - BRIDGES
1205.13	PAVEMENT MARKINGS - LANE REDUCTIONS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY
1261.01	GUARDRAIL AND BARRIER DELINEATORS - INSTALLATION SPACING
1261.02	GUARDRAIL AND BARRIER DELINEATORS - TYPES AND MOUNTING
1262.01	GUARDRAIL END DELINEATION

LEGEND

GENERAL

- DIRECTION OF TRAFFIC FLOW
- DIRECTION OF PEDESTRIAN TRAFFIC FLOW
- EXIST. PVMT.
- NORTH ARROW
- PROPOSED PVMT.
- TEMP. SHORING (LOCATION PURPOSES ONLY)



SIGNALS

- EXISTING
- PROPOSED
- TEMPORARY

PAVEMENT MARKINGS

- EXISTING LINES
- TEMPORARY LINES

TRAFFIC CONTROL DEVICES

- BARRICADE (TYPE III)
- CONE
- DRUM
- SKINNY DRUM
- TUBULAR MARKER
- TEMPORARY CRASH CUSHION
- FLASHING ARROW BOARD
- FLAGGER
- LAW ENFORCEMENT
- TRUCK MOUNTED ATTENUATOR (TMA)
- CHANGEABLE MESSAGE SIGN

TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

PAVEMENT MARKERS

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

PAVEMENT MARKING SYMBOLS

- PAVEMENT MARKING SYMBOLS

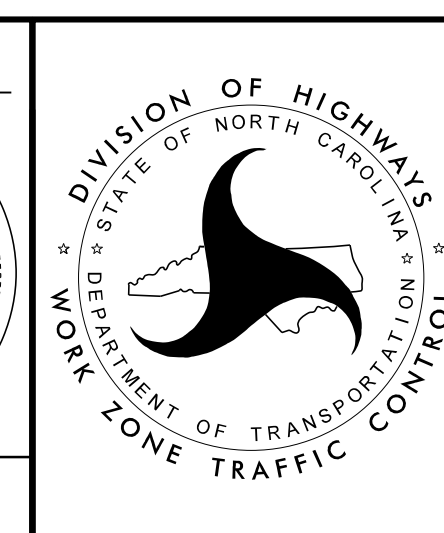
TEMPORARY PAVEMENT MARKING SCHEDULE

PAINT			
Symbol	Description	Symbol	Description
P2	WHITE STOPBAR (24")	PP	YELLOW DIAGONAL (8")
P8	2 FT. - 6 FT./SP WHITE MINISKIP (4")	PR	WHITE SOLID LANE LINE (8")
P9	2 FT. - 6 FT./SP YELLOW MINISKIP (4")	PU	WHITE DIAGONAL (12")
P13	3 FT. - 9 FT./SP WHITE MINISKIP (8")	PV	YELLOW DIAGONAL (12")
PA	WHITE EDGELINE (4")	QA	LEFT TURN ARROW
PB	YELLOW EDGELINE (4")	QB	RIGHT TURN ARROW
PC	10 FT. WHITE SKIP (4")	QC	STRAIGHT ARROW
PD	3 FT. - 9 FT./SP WHITE MINISKIP (4")	QD	COMBO. LEFT/STRAIGHT ARROW
PE	WHITE SOLID LANE LINE (4")	QE	COMBO. RIGHT/STRAIGHT ARROW
PI	YELLOW DOUBLE CENTER (4")	QI	ALPHANUMERIC CHAR.
PN	WHITE GORELINE (8")	QN	24" YIELD LINE TRIANGLE
PO	WHITE DIAGONAL (8")	QP	MERGE ARROW

PAVEMENT MARKERS	
Symbol	Description
MH	TEMPORARY RAISED MARKER (Yellow/Yellow)
MI	TEMPORARY RAISED MARKER (Crystal/Red)

APPROVED:
 DATE: 2/7/2020

SEAL



ROADWAY STANDARD DRAWINGS & LEGEND

PROJ. REFERENCE NO.	SHEET NO.
R - 2915E	TMP - 1B

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions

GENERAL NOTES

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

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

TIME RESTRICTIONS

A) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
US 221, US 221 BUSINESS AND NC 163	MONDAY THROUGH FRIDAY 7:00 AM TO 8:30 AM

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

ROAD NAME

US 221, US 221 BUSINESS AND NC 163

HOLIDAY

- FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
- FOR NEW YEAR'S, BETWEEN THE HOURS OF 7:00 AM DECEMBER 31ST TO 6:00 PM JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY, THEN UNTIL 6:00 PM THE FOLLOWING TUESDAY.
- FOR EASTER, BETWEEN THE HOURS OF 7:00 AM THURSDAY AND 6:00 PM MONDAY.
- FOR MEMORIAL DAY, BETWEEN THE HOURS OF 7:00 AM FRIDAY TO 6:00 PM TUESDAY.
- FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 7:00 AM THE DAY BEFORE INDEPENDENCE DAY AND 6:00 PM THE DAY AFTER INDEPENDENCE DAY. IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY, THEN BETWEEN THE HOURS OF 7:00 AM THE THURSDAY BEFORE INDEPENDENCE DAY AND 6:00 PM THE TUESDAY AFTER INDEPENDENCE DAY.
- FOR LABOR DAY, BETWEEN THE HOURS OF 7:00 AM FRIDAY TO 6:00 PM TUESDAY.
- FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 7:00 AM TUESDAY AND 6:00 PM MONDAY.
- FOR CHRISTMAS, BETWEEN THE HOURS OF 7:00 AM THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 6:00 PM THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.
- FOR "CHRISTMAS IN JULY" CELEBRATION, THE 1ST WEEKEND IN JULY, BETWEEN THE HOURS OF 7:00 AM FRIDAY TO 6:00 PM MONDAY.

C) DO NOT STOP TRAFFIC AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS	DURATION AND OPERATION
US 221, US 221 BUSINESS AND NC 163	MONDAY THROUGH FRIDAY 7:00 AM TO 8:30 AM	15 MINUTES FOR TRAFFIC SHIFTS, PAVEMENT TIE-INS AND PAVEMENT MARKING TIE-INS

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

LANE AND SHOULDER CLOSURE REQUIREMENTS

- 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.
- WHEN PERSONNEL OR EQUIPMENT ARE WORKING WITHIN 15 FT. OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING RDWY. STD. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL, OR A LANE CLOSURE IS INSTALLED.
- WHEN PERSONNEL OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT. OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING RDWY. STD. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

WHEN PERSONNEL 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 RDWY. STD. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

- WHEN PERSONNEL OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL, CLOSE THE LANE ACCORDING TO THE TRAFFIC CONTROL PLANS, ROADWAY STANDARD DRAWINGS, OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.
- DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT. ON BOTH SIDES OF AN OPEN TRAVEL WAY, RAMP, OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.

PAVEMENT EDGE DROP-OFF REQUIREMENTS

- BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPENED TRAVEL LANE THAT HAS AN EDGE OF PAVEMENT 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.
- 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' IN ADVANCE AND A MINIMUM OF EVERY 2000' THROUGHOUT THE UNEVEN AREA.

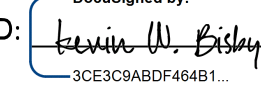

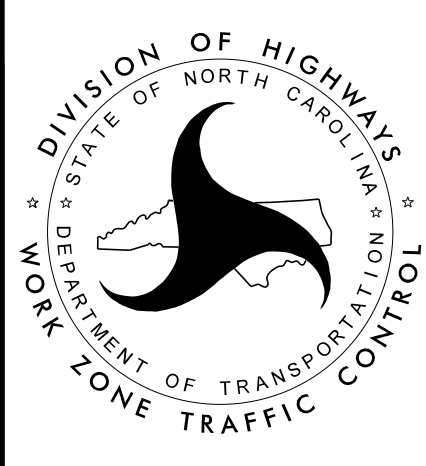
TRAFFIC PATTERN ALTERATIONS

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

SIGNING

- 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.

2/7/2020 R-2915E-TMP_PSH01B.dgn

APPROVED:  DATE: 2/7/2020 SEAL DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			TRANSPORTATION OPERATIONS PLAN GENERAL NOTES
---	---	---	--

PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-1C

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rk.com
 Responsive People | Creative Solutions

GENERAL NOTES

- N) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.
- O) COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED TO CLOSE THE ROAD WHEN ROAD CLOSURE IS NOT IN OPERATION.
- P) COVER OR REMOVE ALL SIGNS REQUIRED FOR THE OFF-SITE DETOUR WHEN THE DETOUR IS NOT IN OPERATION.
- Q) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.
- R) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) OR "BUMP" SIGNS (W8-1) (500') IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

TRAFFIC BARRIER

- S) 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. CONSTRUCT A TEMPORARY ASPHALT PAD TO THE EDGE AND ELEVATION OF THE EXISTING PAVEMENT AS NEEDED TO ACCOMMODATE BARRIER.

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 (55 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.

- T) 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: (SEE ALSO 1101.05)

POSTED SPEED LIMIT (mph)	MINIMUM OFFSET (ft.)
< 40	15
45 - 50	20
55	25
> 60	30

TRAFFIC CONTROL DEVICES

- U) WHEN LANE CLOSURES ARE NOT IN EFFECT SPACE CHANNELIZING DEVICES IN WORK AREA NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT 70 FT. EXCEPT, 10 FT. ON-CENTER IN RADII, AND 3 FT. OFF THE EDGE OF AN OPEN TRAVEL WAY. REFER TO STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SECTION 1130 (DRUMS), 1135 (CONES) AND 1180 (SKINNY DRUMS) FOR ADDITIONAL REQUIREMENTS.
- V) PLACE TYPE III BARRICADES WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE THE ENTIRE ROADWAY.

PAVEMENT MARKINGS AND MARKERS

- W) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:

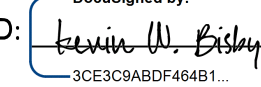
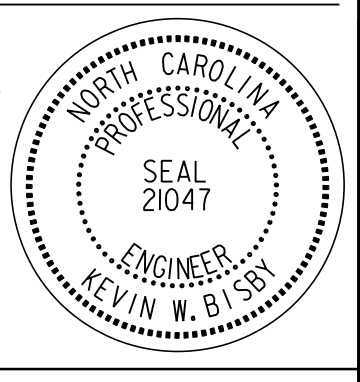

ROAD NAME	MARKING	MARKER
US 221	PAINT	RAISED REFLECTIVE, (TEMP.)
ALL OTHER ROADS	PAINT	NONE

- X) PLACE ONE APPLICATION OF PAINT FOR TEMPORARY TRAFFIC PATTERNS. PLACE A SECOND APPLICATION OF PAINT SIX MONTHS AFTER THE INITIAL APPLICATION AND EVERY SIX MONTHS AS DIRECTED BY THE ENGINEER.
- Y) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- Z) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

MISCELLANEOUS

- AA) LAW ENFORCEMENT MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND INTERSECTIONS AS DIRECTED BY THE ENGINEER.

2/7/2020 R-2915E-TMP_PSH01C.dgn

<p>APPROVED: </p> <p>DATE: 2/7/2020</p> <p style="text-align: center;">SEAL</p>			<p>TRANSPORTATION OPERATIONS PLAN</p> <p>GENERAL NOTES</p>
<p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>			

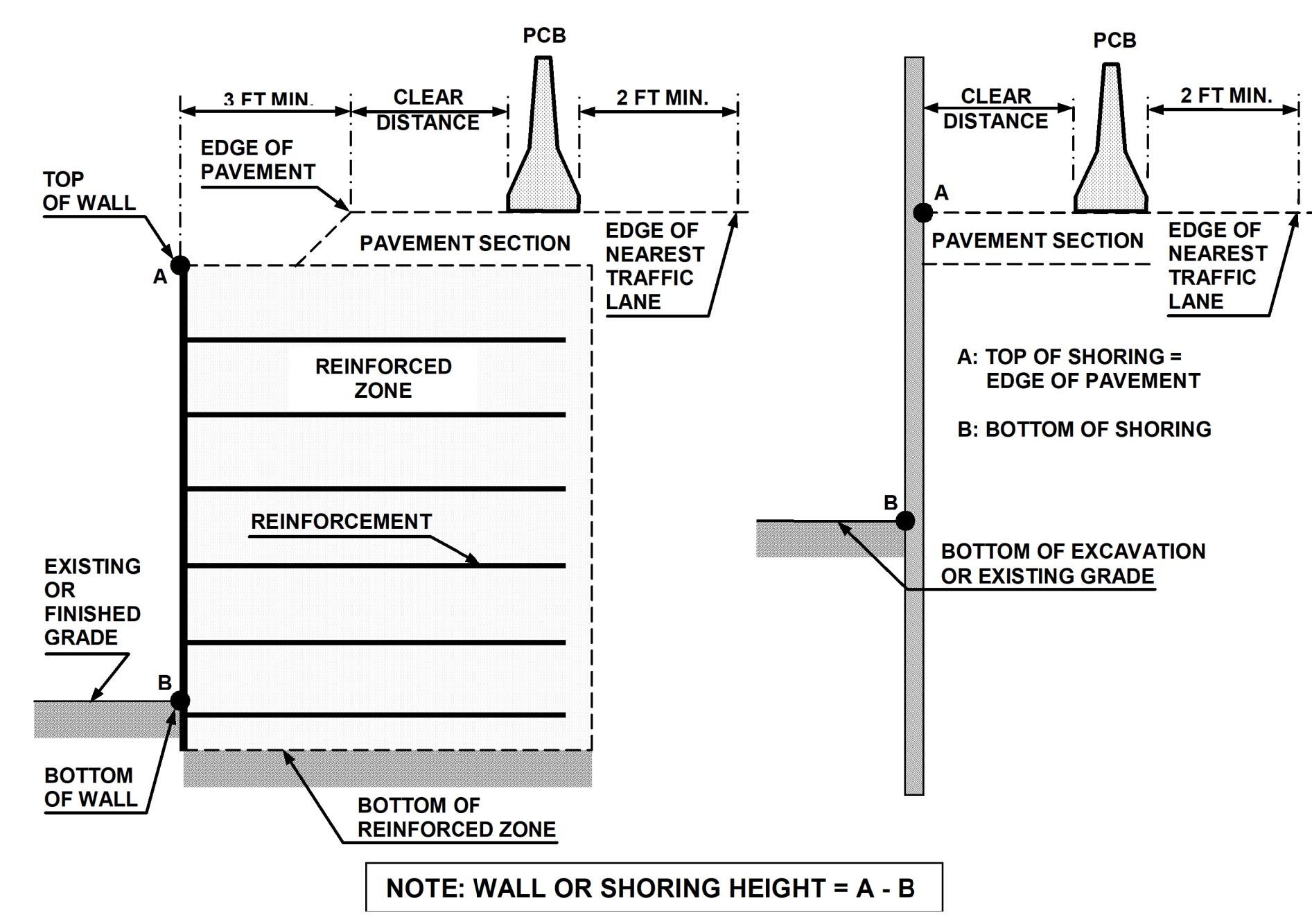


FIGURE A

NOTES

- 1- REFER TO THE TRAFFIC CONTROL PLANS FOR TEMPORARY SHORING LOCATIONS AND NOTES.
- 2- REFER TO THE "TEMPORARY SHORING" PROJECT SPECIAL PROVISION FOR INFORMATION ABOUT TEMPORARY SHORING AND PORTABLE CONCRETE BARRIER (PCB).
- 3- PCB IS REQUIRED IF TEMPORARY SHORING 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 UNIT 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 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- PCB REQUIREMENTS FOR TEMPORARY WALLS APPLY TO TEMPORARY MECHANICALLY STABILIZED EARTH (MSE) WALLS AND TEMPORARY SOIL NAIL WALLS.
- 8- 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 AND OR AS APPROVED BY THE ENGINEER.
- 9- 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 THESE MINIMUM REQUIRED DISTANCES ARE NOT AVAILABLE, CONTACT THE ENGINEER.
- 10- TABLE SHOWN IN FIGURE B IS BASED ON NCDOT RESEARCH PROJECT NO. 2005-010 WITH VEHICLE TYPE USED FOR NCHRP 350 CRASH TESTS. BARRIER DEFLECTIONS AND RESULTING MINIMUM REQUIRED CLEAR DISTANCES MIGHT VARY SIGNIFICANTLY FOR LARGER HEAVIER VEHICLES, RUNS OF BARRIER LESS THAN 200 FT IN LENGTH AND WET OR DRY PAVEMENT.

MINIMUM REQUIRED CLEAR DISTANCE, inches

Barrier Type	Pavement Type	Offset * ft	Design Speed, mph					
			<30	31-40	41-50	51-60	61-70	71-80
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
		50-56	32	36	42	44	47	50
	>56	32	36	42	45	47	51	
	Concrete	<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
		38-44	25	26	28	30	34	37
		44-50	26	26	28	32	35	37
50-56		26	26	28	32	35	38	
>56	26	27	29	32	36	38		
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

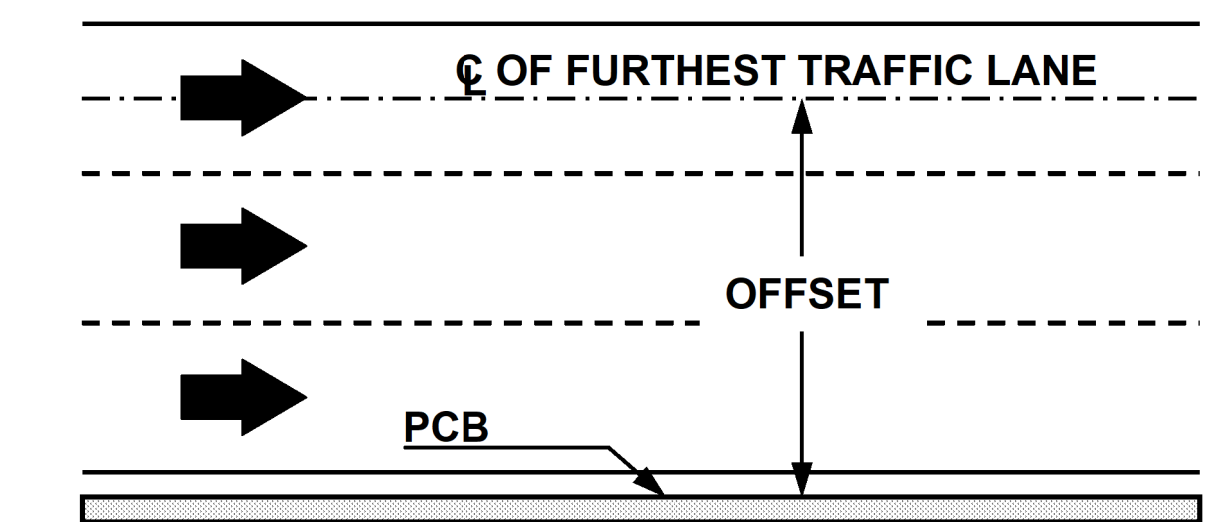
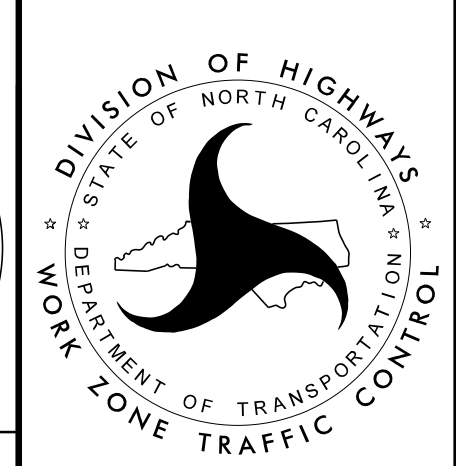


FIGURE B

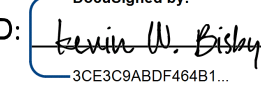
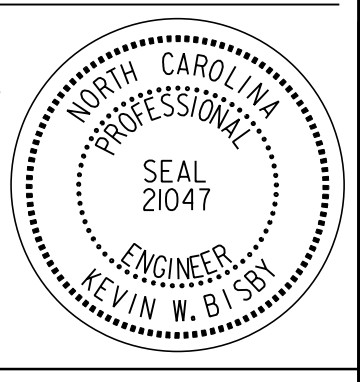
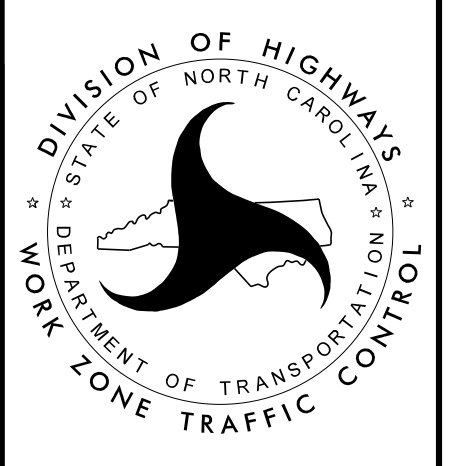
APPROVED: _____ DATE: _____ SEAL		PORTABLE CONCRETE BARRIER AT TEMPORARY SHORING LOCATIONS
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		

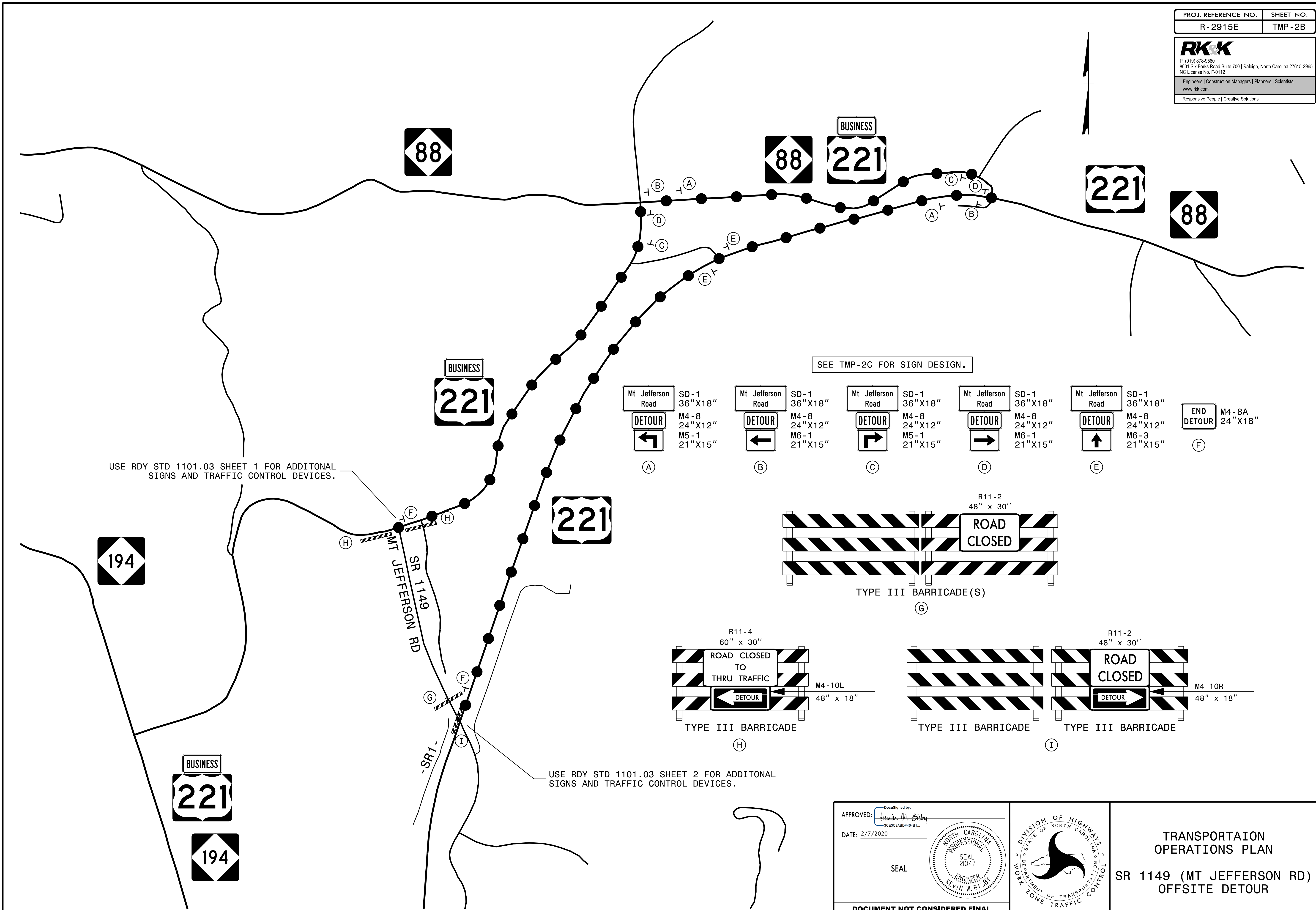
TEMPORARY SHORING TABLE					
SHORING I.D.	BEGIN/OFFSET		END/OFFSET		SHORING QTY (ft ²)
1	-L- STA 675+97±	8.7' RT	-L- STA 676+81±	3.4' RT	945
2	-L- STA 676+03±	16.4' RT	-L- STA 676+91±	16.4' RT	568
3	-L- STA 707+71±	8.9' LT	-L- STA 708+29±	9.0' LT	584
4	-L- STA 707+74±	10.1' RT	-L- STA 708+26±	10.2' RT	320
5	-L- STA 711+67±	7.6' LT	-L- STA 712+27±	6.0' LT	275
6	-L- STA 711+47±	12.5' RT	-L- STA 712+24±	13.1' RT	662
7	-L- STA 719+85±	4.0' RT	-L- STA 720+46±	4.0' RT	444
8	-L- STA 719+85±	12.5' RT	-L- STA 720+45±	13.4' RT	599
9	-L- STA 734+65±	1.0' LT	-L- STA 735+15±	1.4' LT	288
10	-L- STA 734+66±	8.2' RT	-L- STA 735+14±	8.7' RT	417
11	-L- STA 742+27±	12.0' LT	-L- STA 742+89±	12.0' LT	328
12	-L- STA 742+21±	2.1' LT	-L- STA 742+89±	2.8' LT	577
13	-L- STA 764+34±	1.6' RT	-L- STA 765+34±	3.1' LT	892
14	-L- STA 764+45±	12.0' RT	-L- STA 765+49±	12.0' RT	557
15	-L- STA 776+65±	9.6' LT	-L- STA 777+30±	10.1' LT	640
16	-L- STA 776+62±	12.0' RT	-L- STA 777+33±	12.0' RT	558
17	-L- STA 780+79±	11.0' LT	-L- STA 781+44±	11.0' LT	650
18	-L- STA 780+82±	12.0' RT	-L- STA 781+43±	12.0' RT	416
19	-L- STA 675+59±	22.4' LT	-L- STA 676+77±	20.0' LT	1016
20	-L- STA 675+64±	16.3' LT	-L- STA 676+82±	14.0' LT	759
21	-L- STA 792+66±	2.7' LT	-L- STA 793+48±	2.8' LT	753
22	-L- STA 792+66±	4.4' RT	-L- STA 793+49±	8.4' RT	1027
23	-L- STA 826+60±	2.8' LT	-L- STA 827+22±	2.8' LT	443
24	-L- STA 826+59±	6.3' RT	-L- STA 827+25±	6.2' RT	691
25	-L- STA 838+21±	0.2' LT	-L- STA 838+87±	0.2' LT	378
26	-L- STA 838+00±	18.0' RT	-L- STA 838+70±	18.0' RT	422

Temporary Shoring Notes

- FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.
- BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION FOR THE LOCATIONS LISTED IN THE TABLE, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.
- AT THE CONTRACTOR'S OPTION AND AS APPLICABLE, USE STANDARD TEMPORARY SHORING OR A TEMPORARY WALL FOR THE TEMPORARY SHORING LOCATIONS LISTED IN THE TABLE. SEE STANDARD DRAWING NO. 1801.01 (ROADWAY PLAN SHEET 2G-1) FOR STANDARD TEMPORARY SHORING. SEE STANDARD DRAWING NO. 1801.02 (ROADWAY PLAN SHEETS 2G-2 TO 2G-4) FOR STANDARD TEMPORARY WALLS.
- WHERE THE STANDARD TEMPORARY SHORING DETAILS DO NOT APPLY, DESIGN TEMPORARY SHORING FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:
 - UNIT WEIGHT (γ): 120 PCF
 - FRICTION ANGLE (ϕ): 30 DEGREES
 - COHESION (c) = 0 PSF
 - GROUNDWATER ELEVATION: VARIES, ASSUME ELEVATION EQUIVALENT TO BOTTOM OF SHORING ELEVATION
- THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION. THE SUBSURFACE INFORMATION THAT IS AVAILABLE CAN BE FOUND IN THE ROADWAY SUBSURFACE INVENTORY REPORT.
- DRIVEN PILING FOR TEMPORARY SHORING LOCATIONS NOS. 9, 10, 11, 12, 15, 16, 17 AND 18 MAY NOT PENETRATE BELOW THE REQUIRED MINIMUM TIP ELEVATION DUE TO OBSTRUCTIONS, VERY DENSE OR HARD SOIL, BOULDERS, WEATHERED ROCK OR HARD ROCK.
- IT MAY BE PREFERRED TO USE A TEMPORARY SOIL NAIL WALL FOR TEMPORARY SHORING LOCATIONS LISTED IN THE TABLE. FOR TEMPORARY SOIL NAIL WALLS, SEE TEMPORARY SOIL NAIL WALLS PROVISION.

2/7/2020 R-2915E-TMP_PSH02A.dgn

APPROVED:  DATE: 2/7/2020 SEAL			TEMPORARY SHORING INFORMATION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

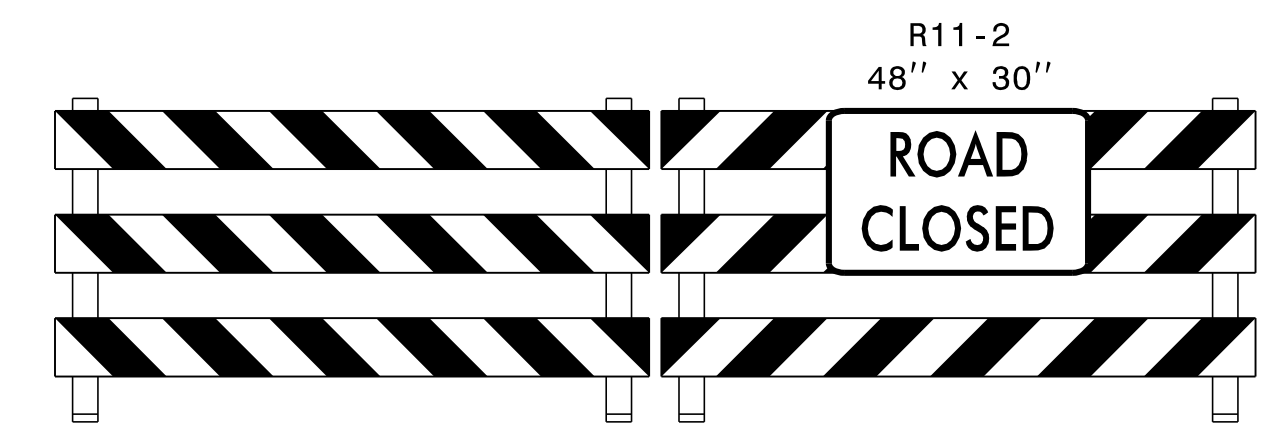


USE RDY STD 1101.03 SHEET 1 FOR ADDITIONAL SIGNS AND TRAFFIC CONTROL DEVICES.

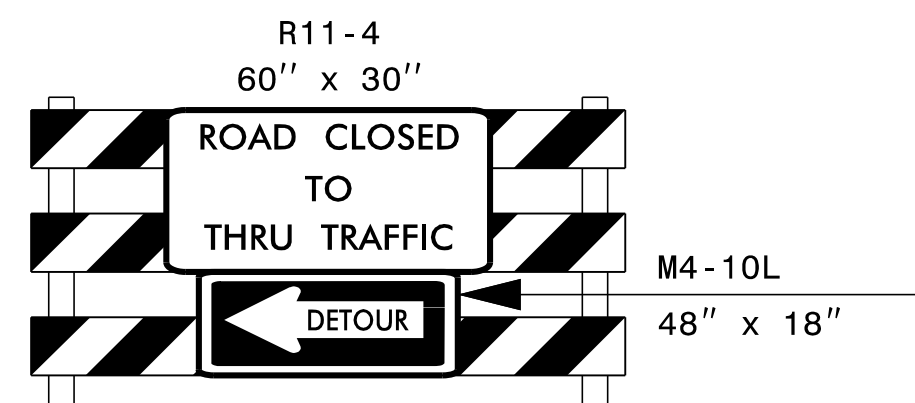
USE RDY STD 1101.03 SHEET 2 FOR ADDITIONAL SIGNS AND TRAFFIC CONTROL DEVICES.

SEE TMP-2C FOR SIGN DESIGN.

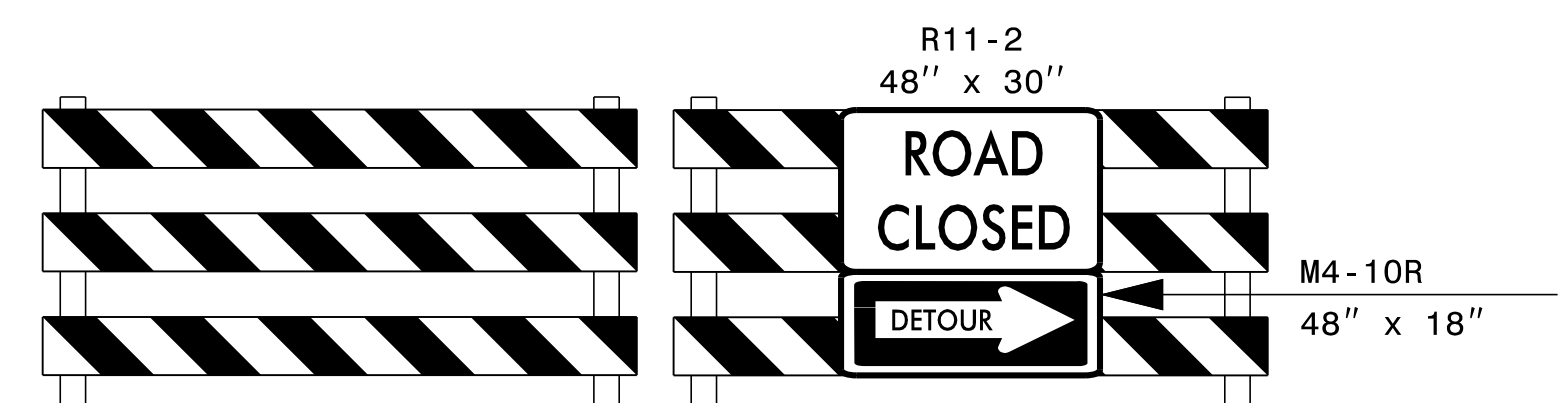
- | | | | | | |
|--|--|--|--|--|---------------------------|
| Mt Jefferson Road
SD-1
36" X 18" | Mt Jefferson Road
SD-1
36" X 18" | Mt Jefferson Road
SD-1
36" X 18" | Mt Jefferson Road
SD-1
36" X 18" | Mt Jefferson Road
SD-1
36" X 18" | END
M4-8A
24" X 18" |
| DETOUR
M4-8
24" X 12" | DETOUR
M4-8
24" X 12" | DETOUR
M4-8
24" X 12" | DETOUR
M4-8
24" X 12" | DETOUR
M4-8
24" X 12" | |
| M5-1
21" X 15" | M6-1
21" X 15" | M5-1
21" X 15" | M6-1
21" X 15" | M6-3
21" X 15" | (F) |



TYPE III BARRICADE(S)



TYPE III BARRICADE

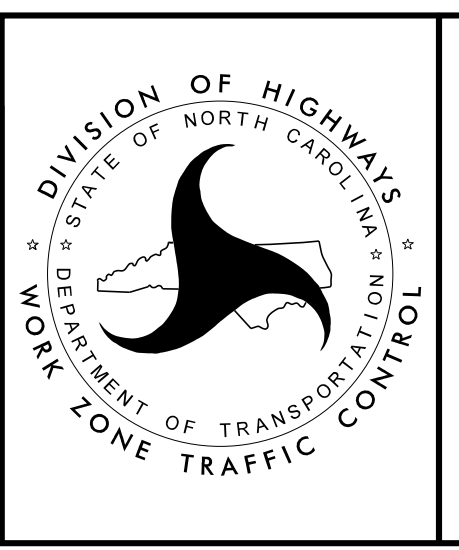


TYPE III BARRICADE

APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020

SEAL

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



TRANSPORTATION OPERATIONS PLAN

SR 1149 (MT JEFFERSON RD) OFFSITE DETOUR

PROJ. REFERENCE NO. R-2915E	SHEET NO. TMP-2C
--------------------------------	---------------------

RK&K
P: (919) 878-9560
8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
NC License No. F-0112
Engineers | Construction Managers | Planners | Scientists
www.rkk.com
Responsive People | Creative Solutions

<p>SIGN NUMBER: SD-1 TYPE: D QUANTITY: SEE PLAN</p> <p>SIGN WIDTH: 3'-0" HEIGHT: 1'-6" TOTAL AREA: 4.5 Sq.Ft.</p> <p>BORDER TYPE: RECESSED RECESS: 0.38" WIDTH: 0.63" RADII: 1.5"</p> <p>NO. Z BARS: LENGTH:</p> <p style="text-align: center;">USE NOTES: 1, 2</p> <ol style="list-style-type: none"> 1. Legend and border shall be direct applied black non-reflective sheeting. 2. Background shall be NC Grade B fluorescent orange retroreflective sheeting. 	<p>BACKG COLOR: Orange COPY COLOR: Black</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>SYMBOL</th> <th>X</th> <th>Y</th> <th>WID</th> <th>HT</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table> <p>MAT'L: 0.080" ALUMINUM</p>	SYMBOL	X	Y	WID	HT																															<p>DESIGN BY: K. Bisby PROJECT ID: R-2915E</p> <p>CHECKED BY: B. Holden LOCATION: See Plans</p> <p>Mar 27, 2019 DIV: 11</p>	<p style="text-align: center;">Spacing Factor is 1 unless specified otherwise</p>
SYMBOL	X	Y	WID	HT																																		

LETTER POSITIONS

Letter spacings are to start of next letter															Series/Size	
															Text Length	
	M	t		J	e	f	f	e	r	s	o	n				C 2000
	4.2	3.1	1.4	4	2.7	2.4	1.5	1.6	2.6	1.6	2	2.6	2	4.2		27.5
	R	o	a	d												C 2000
	13.2	2.7	2.4	2.5	2	13.2										9.7

FILENAME: R-2915E_TMP_PSH02X NORTH CAROLINA D.O.T. SIGN DETAIL

<p>APPROVED: </p> <p>DATE: 2/7/2020</p> <p style="text-align: center;">SEAL</p> <p style="text-align: center;">DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>			<p>SIGN DESIGN</p>
--	--	--	--------------------

TRAFFIC CONTROL PHASING

PROJ. REFERENCE NO.	SHEET NO.
R - 2915E	TMP - 3

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions

PHASE I

STEP 1:
 ERECT ADVANCED WORK ZONE WARNING SIGNS ON -L- LINE AND -Y- LINES IN ACCORDANCE WITH RDWY STD 1101.01.

STEP 2:
 USING RDWY STD 1101.02, PAVE EXISTING ROADWAYS EXCLUDING THE FINAL LAYER OF SURFACE AND APPLY PAVEMENT MARKINGS AS FOLLOWS: (SEE TMP-6, 10, 11, 14 THROUGH 16)

- -Y32A-
- -L- STA 748+97± TO STA 762+88±; PAVING SHOULD TAKE PLACE DURING THE CLOSURE OF SR 1149 (MT JEFFERSON RD) WEST OF US 221.
- -Y35- FROM -L- TO STA 19+00±
- -L- STA 806+37± TO STA 826+10±
- -Y36- SR 1254 (LONG ST)

NOTE:
 THE CONTRACTOR SHALL COMPLETE CONSTRUCTION OF -Y35- SR 1149 (MT JEFFERSON RD) WITHIN 21 CALENDAR DAYS. (SEE SPECIAL PROVISIONS)

USING RDWY STD 1101.03 SHEETS 1 AND 2, CLOSE -Y35- SR 1149 (MT JEFFERSON RD) WEST OF -L- US 221, AND CONSTRUCT EXCLUDING THE FINAL LAYER OF SURFACE COURSE. APPLY PAVEMENT MARKINGS AND OPEN TO TRAFFIC. (SEE TMP-2B, 2C AND 11)

USING RDWY STD 1101.02 AND AWAY FROM TRAFFIC, **BEGIN** WIDENING AND TEMPORARY PAVEMENT CONSTRUCTION EXCLUDING THE FINAL LAYER OF SURFACE COURSE AS FOLLOWS: (SEE TMP-4 THROUGH 16)

- -L- STA 668+25± TO STA 698+42± RT
- -L- STA 700+00± TO STA 762+88± LT
- -L- STA 756+88± TO STA 787+00± RT
- -L- STA 793+92± TO STA 826+10± LT
- -Y36- STA 11+90± TO -L- LT

TEMPORARY SHORING WILL BE REQUIRED FOR CERTAIN DRAINAGE CONSTRUCTION AS INDICATED AND MAY COMMENCE ONCE PORTABLE CONCRETE BARRIER IS SET.

USING RDWY STD 1101.02, REVISE PAVEMENT MARKINGS, SHIFT TRAFFIC ON -L- US 221 AND SET PORTABLE CONCRETE BARRIER AS SHOWN. TEMPORARY SIGNALS SHALL BE CONSTRUCTED AND ACTIVATED WHEN NEEDED. (SEE TMP-4, 5, 7 THROUGH 13, 15)

USING RDWY STD 1101.02, CONSTRUCT -SR1- FROM STA 10+00± TO -Y35- SR 1149 (MT JEFFERSON RD). (SEE TMP-10, 11)

USING RDWY STD 1101.02, CONSTRUCT TEMPORARY PAVEMENT TO THE EDGE AND ELEVATION OF THE EXISTING PAVEMENT AS FOLLOWS: (SEE TMP-9, 10, 13, 14, 16, 17)

- -L- STA 733+41± TO STA 738+98± RT
- -L- STA 788+40± TO STA 796+74± RT
- -L- STA 822+82± TO STA 846+06± RT

PHASE II

STEP 1:
COMPLETE CONSTRUCTION BEGUN IN PHASE I AS FOLLOWS:

- -L- STA 668+25± TO STA 698+42± RT
- -L- STA 752+50± TO STA 762+88± LT
- -Y36- STA 11+90± TO -L- LT

STEP 2:
 USING RDWY STD 1101.02, PAVE -L- STA 668+25± RT TO STA 676+00± AND -L- STA 695+19± TO STA 700+45± RT EXCLUDING THE FINAL LAYER OF SURFACE COURSE. SET PORTABLE CONCRETE BARRIER, APPLY PAVEMENT MARKINGS, REVISE THE TEMPORARY SIGNAL AND DIRECT -L- US 221 TRAFFIC ONTO THE PROPOSED NORTHBOUND LANES IN A TWO LANE, TWO WAY PATTERN. (SEE TMP-19 THROUGH 22)

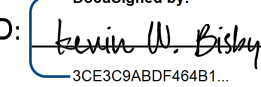


USING RDWY STD 1101.02, APPLY PAVEMENT MARKINGS AND DIRECT -L- US 221 TRAFFIC ONTO THE TEMPORARY PAVEMENT FROM -L- STA 788+40± TO STA 798+54±. SET PORTABLE CONCRETE BARRIER. (SEE TMP-23, 24)

USING RDWY STD 1101.02, APPLY PAVEMENT MARKINGS AND DIRECT -L- US 221 TRAFFIC ONTO THE TEMPORARY PAVEMENT FROM -L- STA 822+82± TO STA 846+06±. SET PORTABLE CONCRETE BARRIER. (SEE TMP-25 THROUGH 27)

STEP 3:
 USING RDWY STD 1101.02 AND BEHIND BARRIER CONSTRUCT -L- STA 787+97± TO STA 793+92± LT EXCLUDING THE FINAL LAYER OF SURFACE COURSE. (SEE TMP-23, 24)

USING RDWY STD 1101.02 AND BEHIND BARRIER CONSTRUCT -L- US 221 FROM STA 826+10± TO STA 849+47± LT EXCLUDING THE FINAL LAYER OF SURFACE COURSE. (SEE TMP-25 THROUGH 27)

2/7/2020
 R-2915E-TMP_PSH03.dgn

APPROVED:  DATE: 2/7/2020 <div style="text-align: center;">  SEAL ENGINEER KEVIN W. BISBY </div>		<h2 style="margin: 0;">TRAFFIC CONTROL PHASING</h2>
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		

TRAFFIC CONTROL PHASING (cont.)

PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-3A

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions

PHASE III

STEP 1:

COMPLETE CONSTRUCTION BEGUN IN PHASE I FROM -L- STA 793+92± TO STA 826+10± LT.

AWAY FROM TRAFFIC, SET PORTABLE CONCRETE BARRIER AS INDICATED. (SEE TMP-32, 33, 35, 36). REMAINING BARRIER SHALL BE SET ONCE TRAFFIC HAS BEEN SHIFTED INTO THE REVISED TRAFFIC PATTERN.

STEP 2:

USING RDWY STD 1101.02, REMOVE PORTABLE CONCRETE BARRIER FROM NORTHBOUND US 221; PAVE -L- STA 668+25± TO STA 671+50± LT EXCLUDING THE FINAL LAYER OF SURFACE COURSE, APPLY PAVEMENT MARKINGS, REVISE THE TEMPORARY SIGNAL AT US 221/NC 163/NC 194/US 221 BUS, AND DIRECT US 221 SOUTHBOUND TRAFFIC ONTO THE PROPOSED NORTHBOUND LANES. (SEE TMP-28 THROUGH 31)

USING RDWY STD 1101.02 REMOVE PORTABLE CONCRETE BARRIER AS NEEDED, PAVE -L- STA 786+74± TO STA 792+04± LT; -L- STA 840+83± TO STA 844+90± LT EXCLUDING THE FINAL LAYER OF SURFACE COURSE, APPLY PAVEMENT MARKINGS, REVISE THE TEMPORARY SIGNAL AT US 221/ SR 1254 (LONG ST), AND DIRECT US 221 TRAFFIC ONTO THE PROPOSED SOUTHBOUND LANES IN A TWO LANE, TWO WAY PATTERN. SET PORTABLE CONCRETE BARRIER AS SHOWN. (SEE TMP-32 THROUGH 37)

STEP 3:

USING RDWY STD 1101.02, CONSTRUCT EXCLUDING THE FINAL LAYER OF SURFACE COURSE AS FOLLOWS: (SEE TMP-28 THROUGH 36)

- -L- STA 671+50± TO STA 700+00± LT
- -L- STA 787+00± TO STA 844+90± RT

PHASE IV

STEP1:

COMPLETE CONSTRUCTION BEGUN IN PHASE I AS FOLLOWS:

- -L- STA 700+00± TO STA 752+50± LT
- -L- STA 756+88± TO STA 787+00± RT

STEP 2:

USING RDWY STD 1101.02, APPLY PAVEMENT MARKINGS, REVISE TEMPORARY SIGNALS, AND DIRECT -L- US 221 TRAFFIC INTO THE PATTERN SHOWN. (SEE TMP-38 THROUGH 52)

STEP 3:

USING RDWY STD 1101.02, SET PORTABLE CONCRETE BARRIER AND CONSTRUCT EXCLUDING THE FINAL LAYER OF SURFACE COURSE AND PAVEMENT REMOVAL AS FOLLOWS: (SEE TMP-41 THROUGH 49)

- -L- STA 700+45± TO STA 754+89± RT
- -L- STA 761+57± TO STA 792+41± LT

PHASE V

STEP 1:

USING RDWY STD 1101.02, REMOVE PORTABLE CONCRETE BARRIER.

STEP 2:

USING RDWY STD 1101.02, APPLY PAVEMENT MARKINGS, REVISE TEMPORARY SIGNALS, AND DIRECT TRAFFIC INTO THE PATTERN SHOWN. (SEE TMP-53 THROUGH 67)

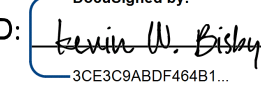


STEP 3:

USING RDWY STD 1101.02 CONSTRUCT MONOLITHIC ISLANDS AND REMOVE EXISTING PAVEMENT. (SEE TMP-53 THROUGH 55, 57, 58, 60, 64 THROUGH 67)

STEP 4:

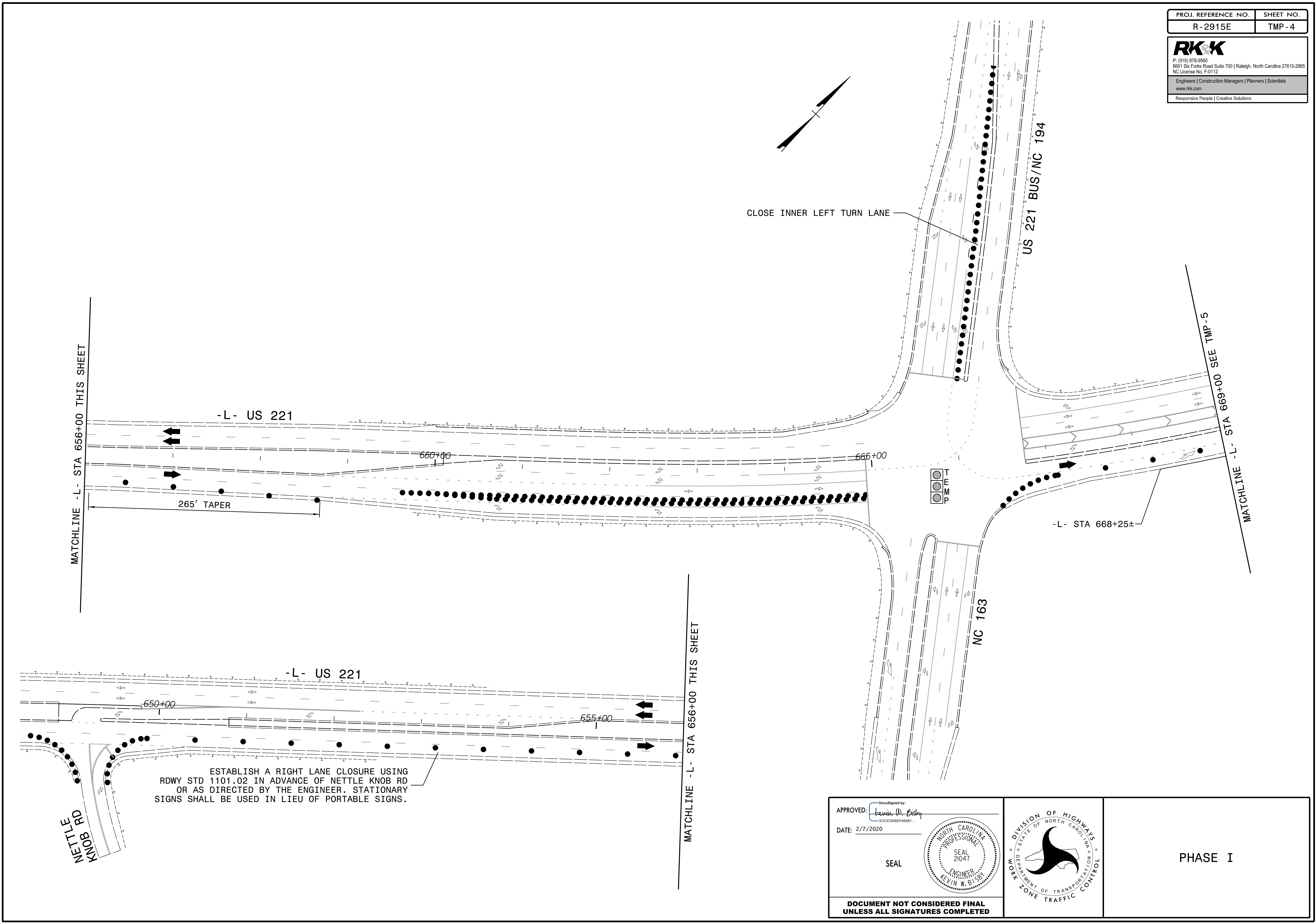
USING RDWY STD 1101.02, PAVE THE FINAL LAYER OF SURFACE COURSE, APPLY FINAL PAVEMENT MARKINGS, CONSTRUCT AND ACTIVATE FINAL SIGNALS, AND DIRECT TRAFFIC INTO THE FINAL PATTERN. (SEE PAVEMENT MARKING PLAN)

2/7/2020
R-2915E-TMP_PSH03A.dgn

APPROVED:  DATE: 2/7/2020 <div style="text-align: center;">  SEAL ENGINEER KEVIN W. BISBY </div>		<h2 style="margin: 0;">TRAFFIC CONTROL PHASING</h2>
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		

PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-4

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions



MATCHLINE -L- STA 656+00 THIS SHEET

-L- US 221

265' TAPER

660+00

665+00

US 221 BUS/NC 194

-L- STA 668+25±

MATCHLINE -L- STA 669+00 SEE TMP-5

-L- US 221

650+00

655+00

MATCHLINE -L- STA 656+00 THIS SHEET

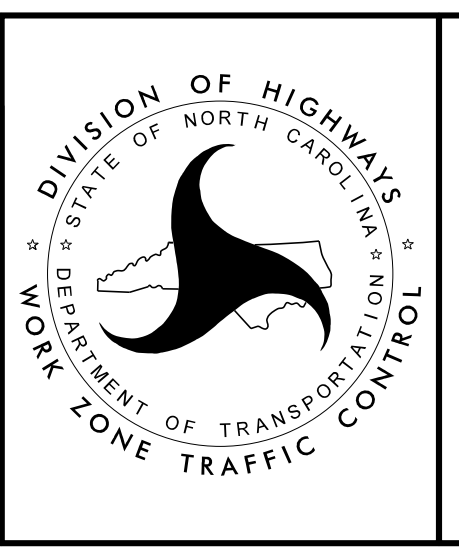
NETTLE KNOB RD

ESTABLISH A RIGHT LANE CLOSURE USING RDWY STD 1101.02 IN ADVANCE OF NETTLE KNOB RD OR AS DIRECTED BY THE ENGINEER. STATIONARY SIGNS SHALL BE USED IN LIEU OF PORTABLE SIGNS.

APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020

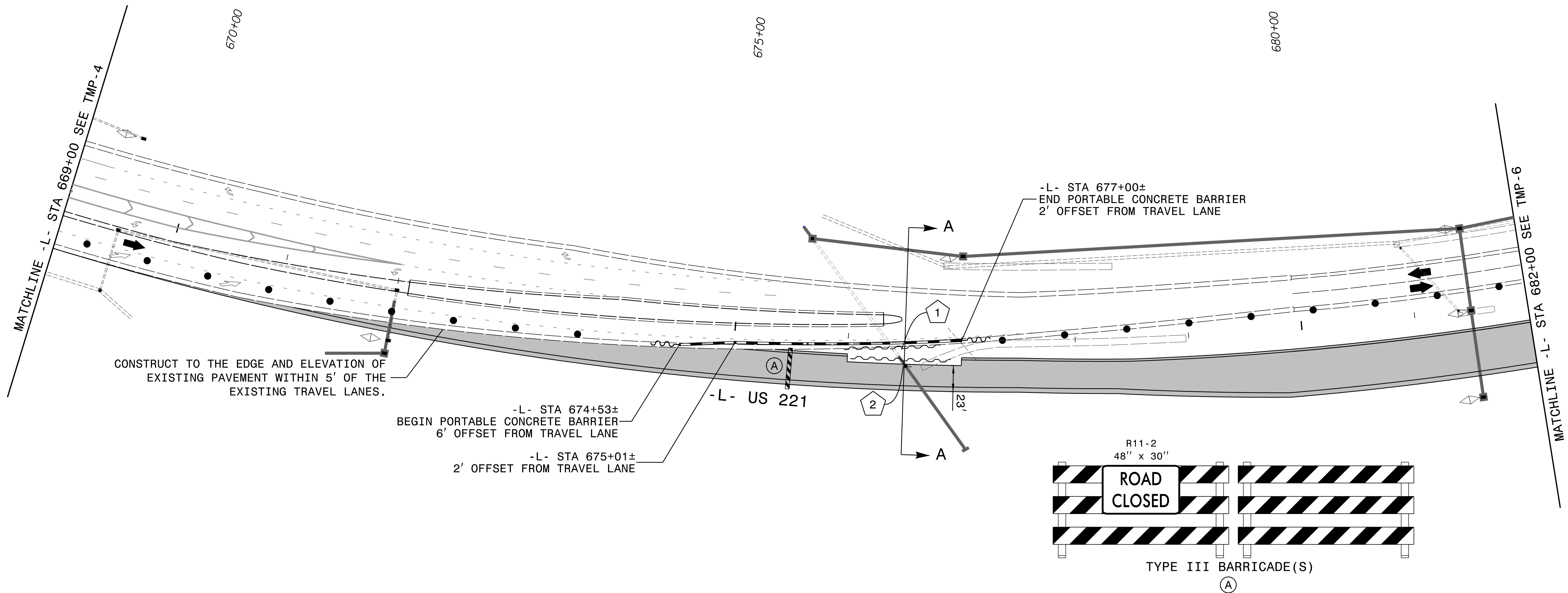
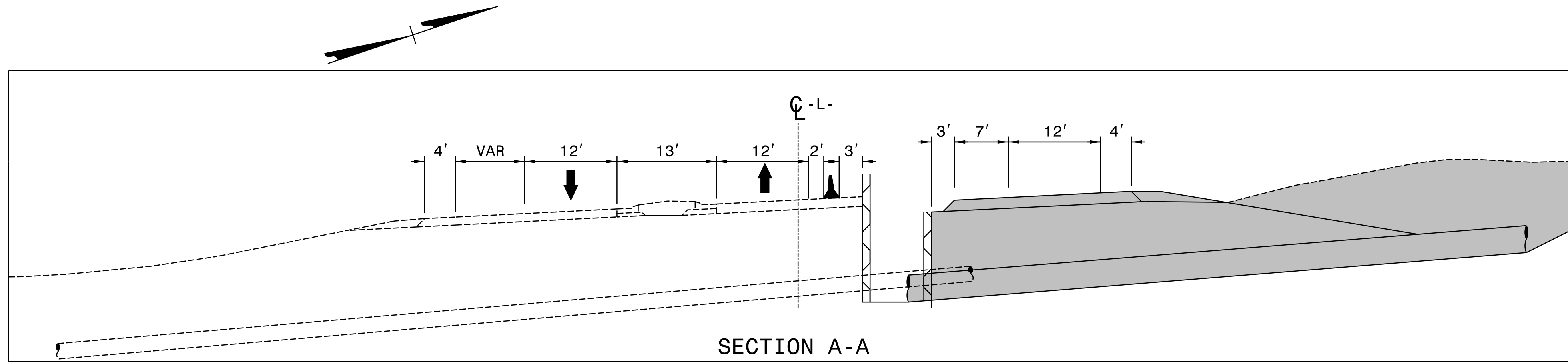
SEAL

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



DIVISION OF HIGHWAYS
 DEPARTMENT OF TRANSPORTATION
 WORK ZONE TRAFFIC CONTROL

PHASE I



TEMPORARY SHORING TABLE					
SHORING I.D.	BEGIN/OFFSET		END/OFFSET		SHORING QTY (ft ²)
1	-L- STA 675+97±	8.7' RT	-L- STA 676+81±	3.4' RT	945
2	-L- STA 676+03±	16.4' RT	-L- STA 676+91±	16.4' RT	568

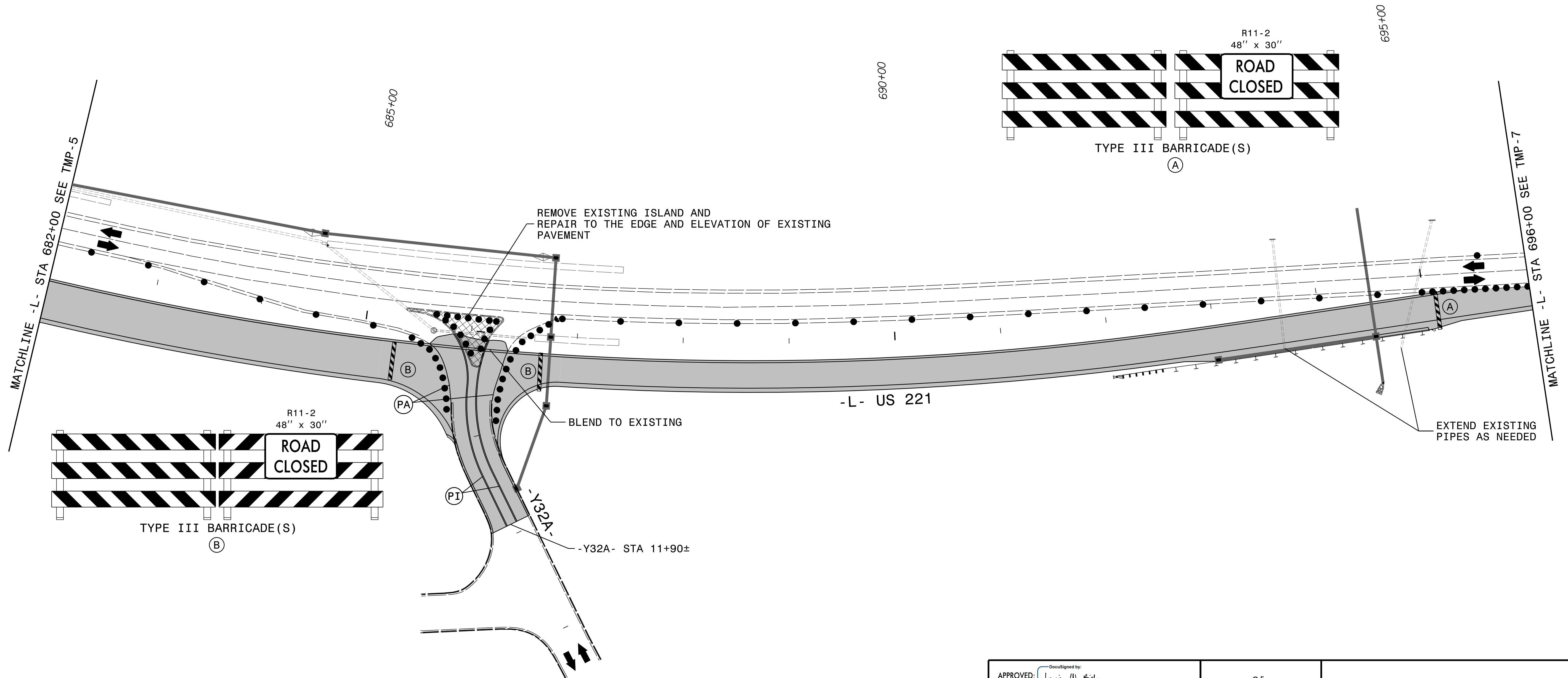
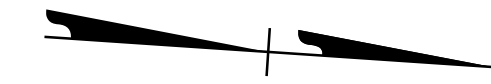
APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020

SEAL

PROFESSIONAL ENGINEER
 KEVIN W. BISBY
 SEAL 21047
 NORTH CAROLINA

DIVISION OF HIGHWAYS
 NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 TRAFFIC CONTROL

PHASE I

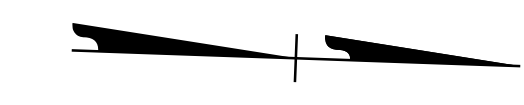


2/7/2020
R-2915E_TMP_PSH06.dgn

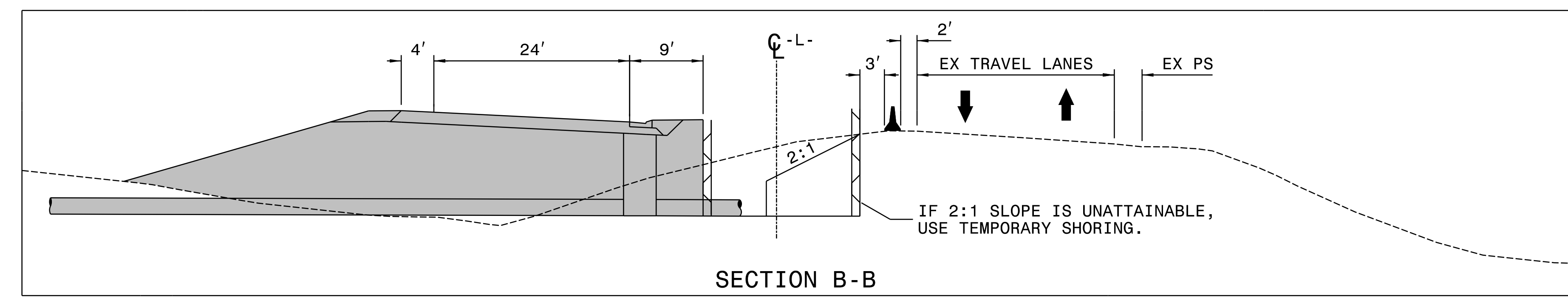
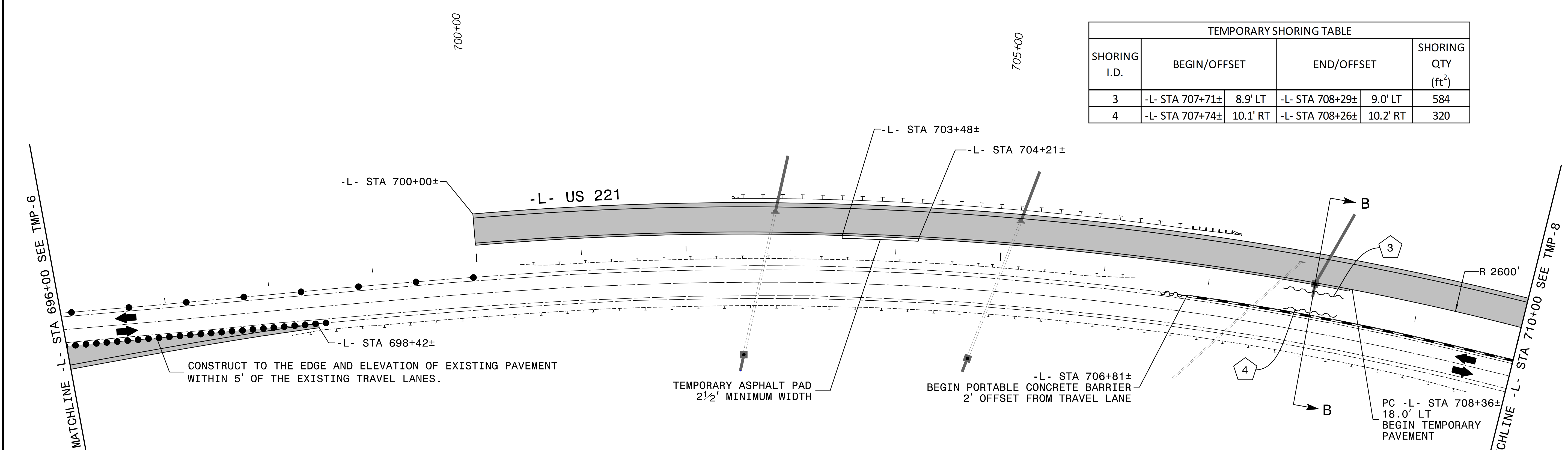
<p>APPROVED: <i>Kevin W. Bisby</i> <small>DocuSigned by: Kevin W. Bisby 3CE3C948DF46481</small></p> <p>DATE: 2/7/2020</p> <p>SEAL</p> <p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>		<p style="text-align: center;">PHASE I</p>
--	--	--

PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-7

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions



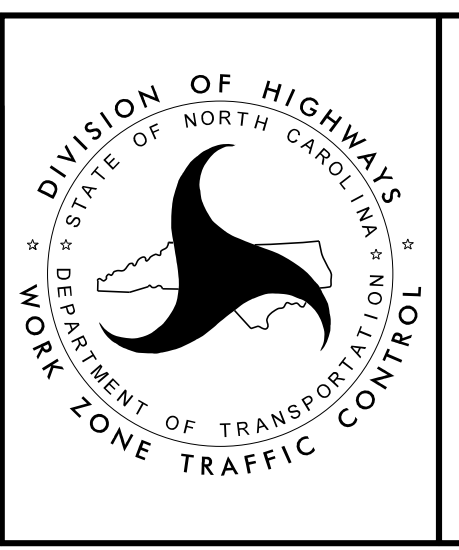
TEMPORARY SHORING TABLE					
SHORING I.D.	BEGIN/OFFSET	END/OFFSET	SHORING QTY (ft ²)		
3	-L- STA 707+71±	8.9' LT	-L- STA 708+29±	9.0' LT	584
4	-L- STA 707+74±	10.1' RT	-L- STA 708+26±	10.2' RT	320



APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020

SEAL

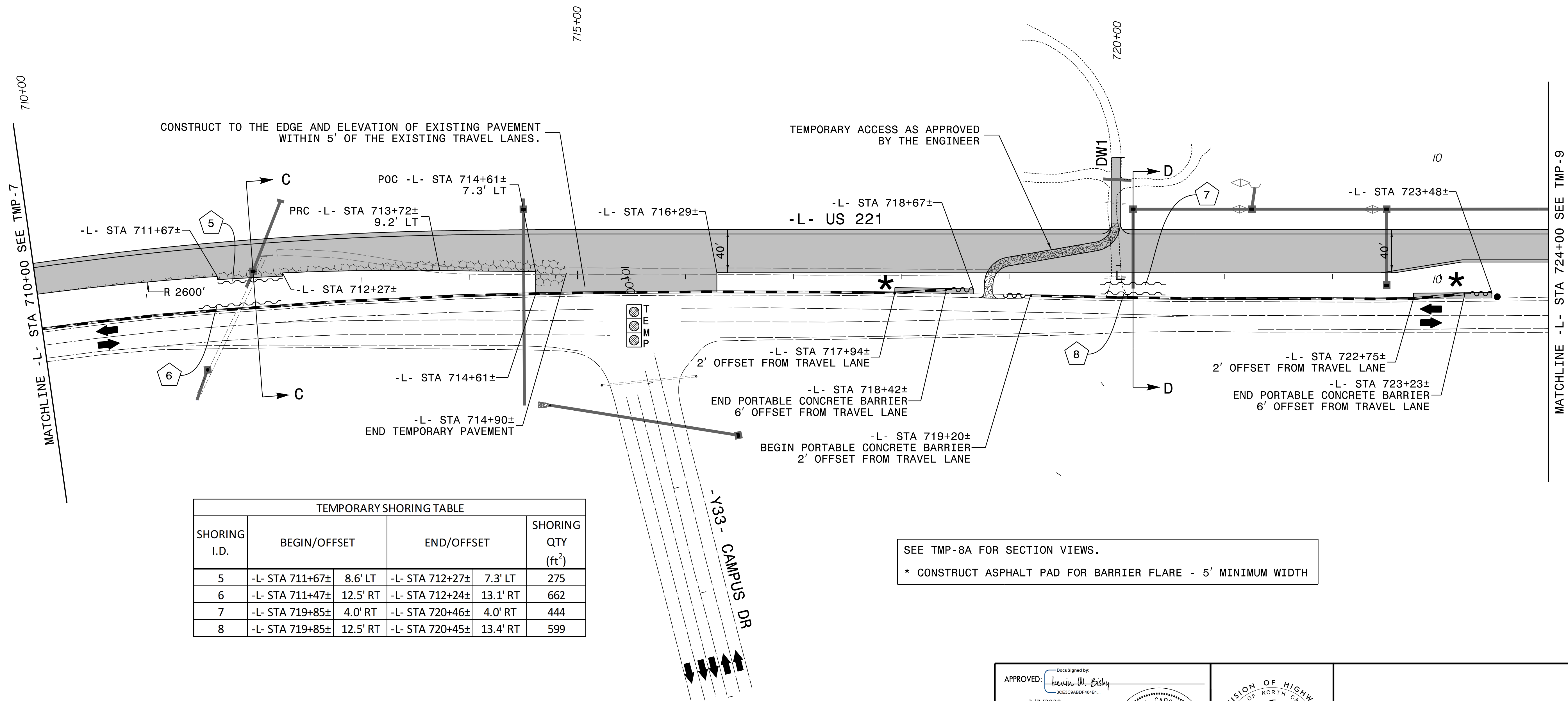
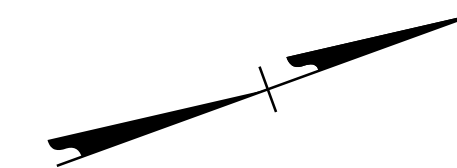
PROFESSIONAL ENGINEER
 KEVIN W. BISBY
 SEAL 21047
 NORTH CAROLINA



PHASE I

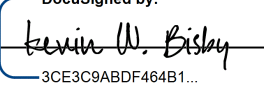
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

2/7/2020 R-2915E-TMP_PSH07.dgn





SEE TMP-8A FOR SECTION VIEWS.
 * CONSTRUCT ASPHALT PAD FOR BARRIER FLARE - 5' MINIMUM WIDTH

2/7/2020 R-2915E-TMP_PSH08.dgn

APPROVED: 
 DATE: 2/7/2020

SEAL

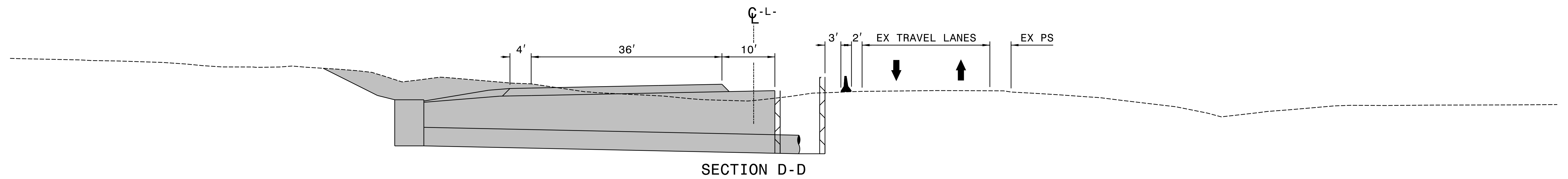
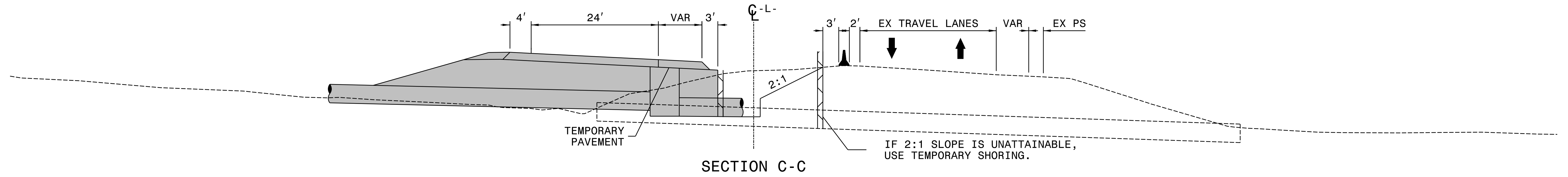



DIVISION OF HIGHWAYS
 NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 WORK ZONE TRAFFIC CONTROL

PHASE I

PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-8A

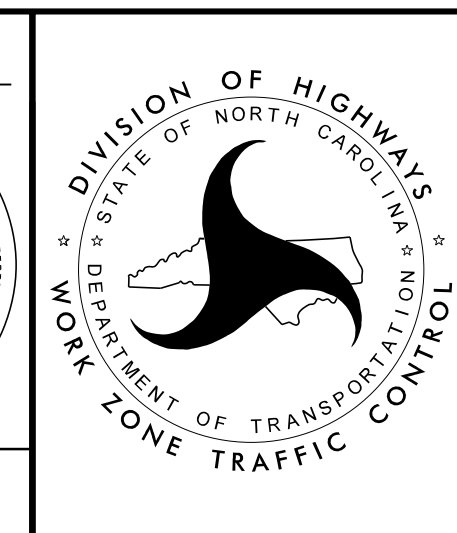
RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions



2/7/2020
R-2915E_TMF_PSH08A.dgn

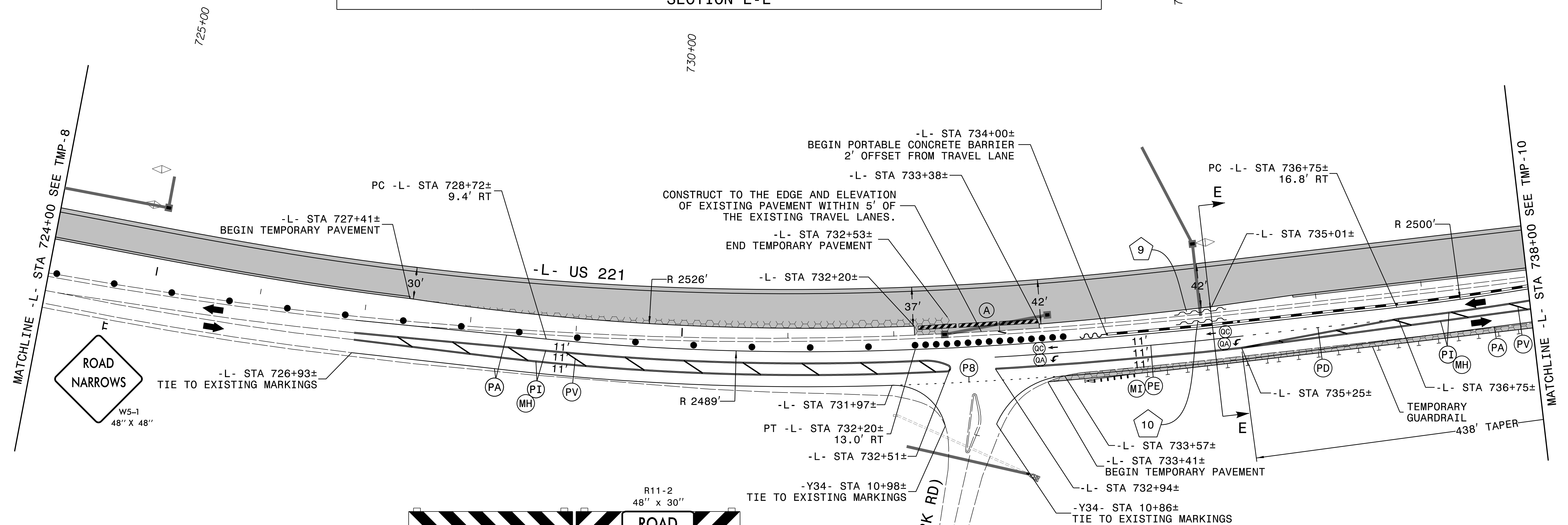
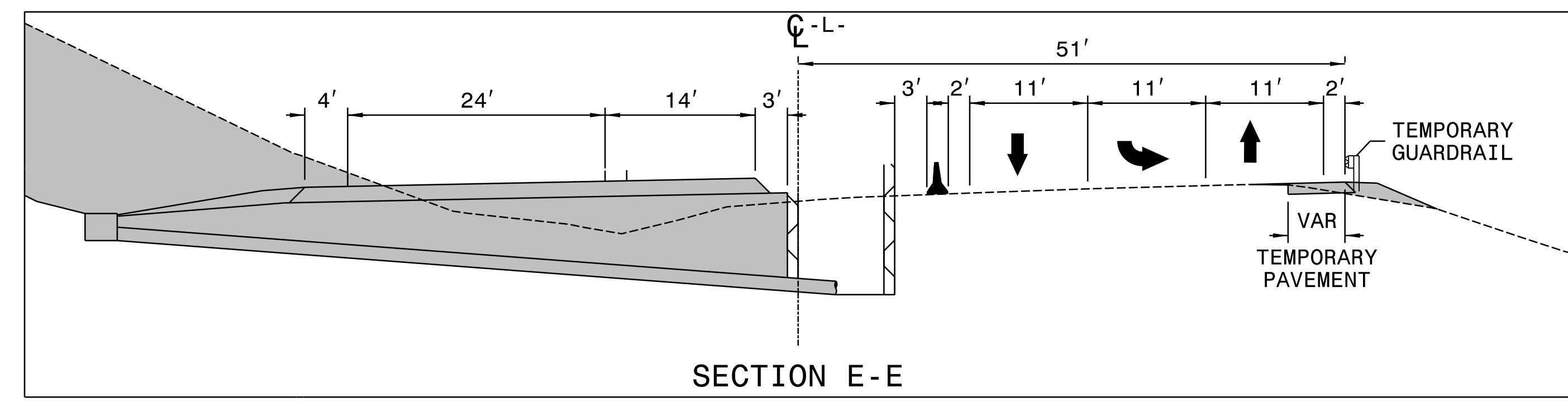
APPROVED: *Kevin W. Bisby*
DocuSigned by: Kevin W. Bisby
3CE3C9ABDF46481
 DATE: 2/7/2020

SEAL



PHASE I

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



TEMPORARY SHORING TABLE					
SHORING I.D.	BEGIN/OFFSET	END/OFFSET	SHORING QTY (ft ²)		
9	-L- STA 734+65± 1.0' LT	-L- STA 735+15± 1.4' LT	288		
10	-L- STA 734+66± 8.2' RT	-L- STA 735+14± 8.7' RT	417		

APPROVED: *Kevin W. Esby*
 DATE: 2/7/2020

SEAL

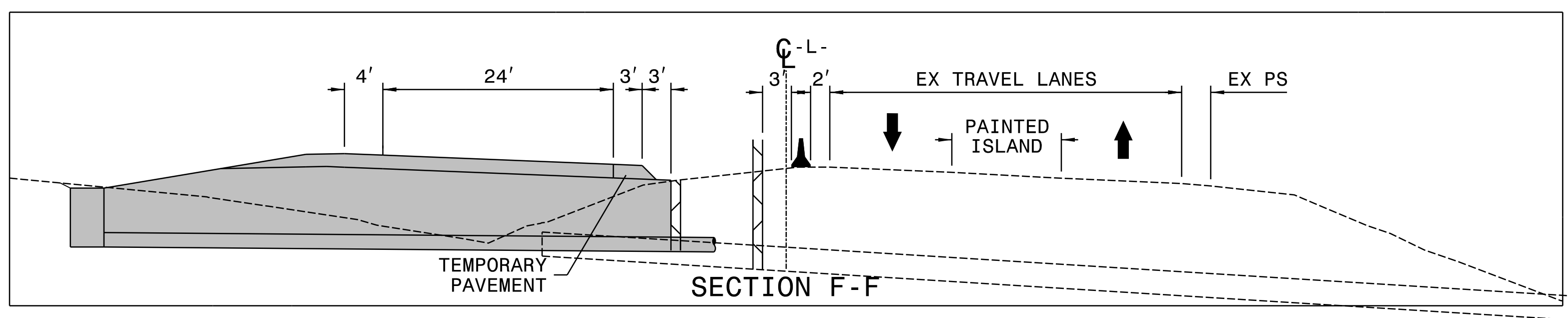
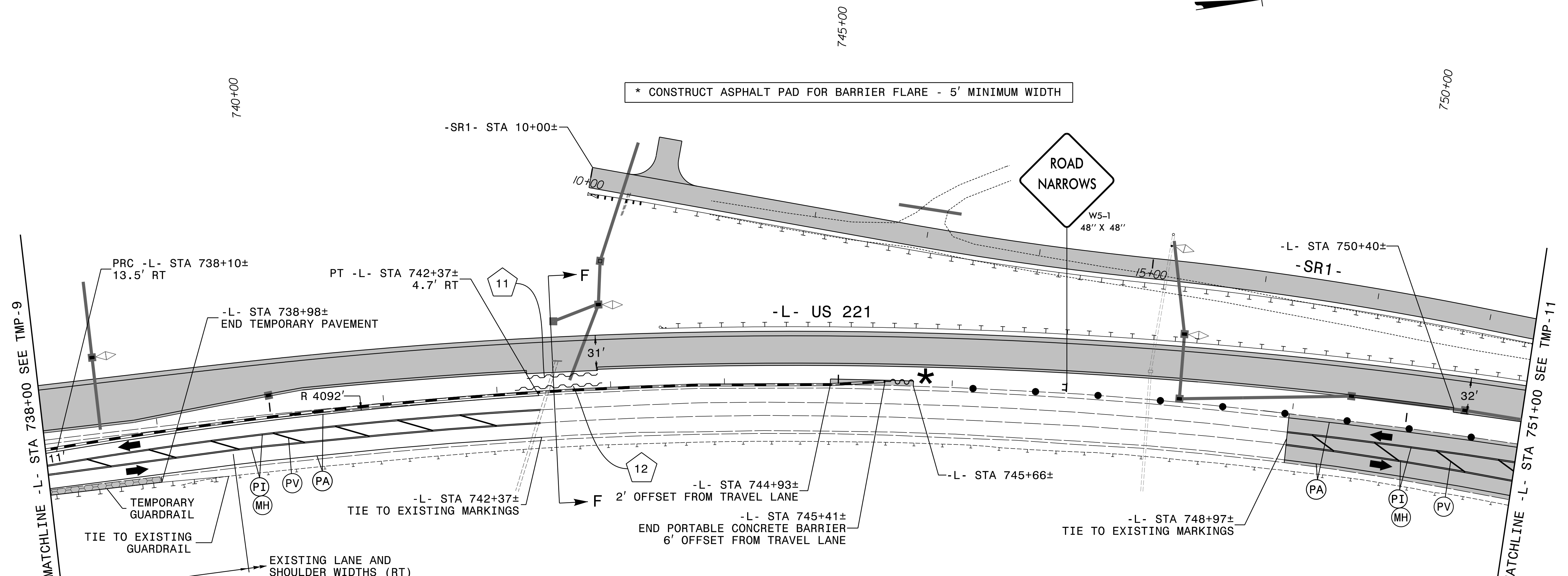
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NORTH CAROLINA PROFESSIONAL ENGINEER KEVIN W. ESBY

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

OK ZONE TRAFFIC CONTROL

PHASE I



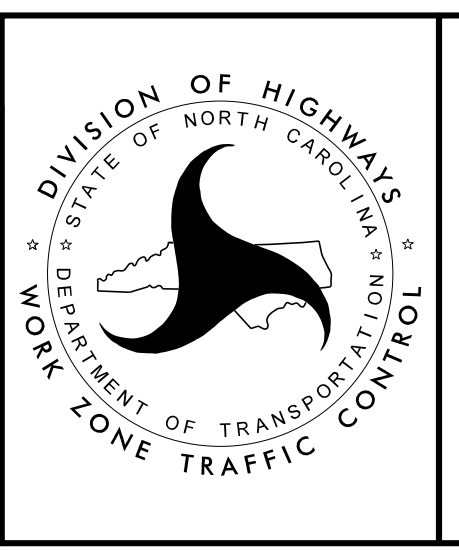
TEMPORARY SHORING TABLE					
SHORING I.D.	BEGIN/OFFSET		END/OFFSET		SHORING QTY (ft ²)
11	-L- STA 742+27±	12.0' LT	-L- STA 742+89±	12.0' LT	328
12	-L- STA 742+16±	2.1' LT	-L- STA 742+93±	2.8' LT	735

APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020

SEAL

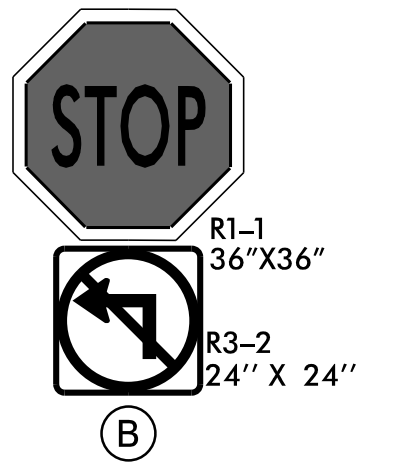
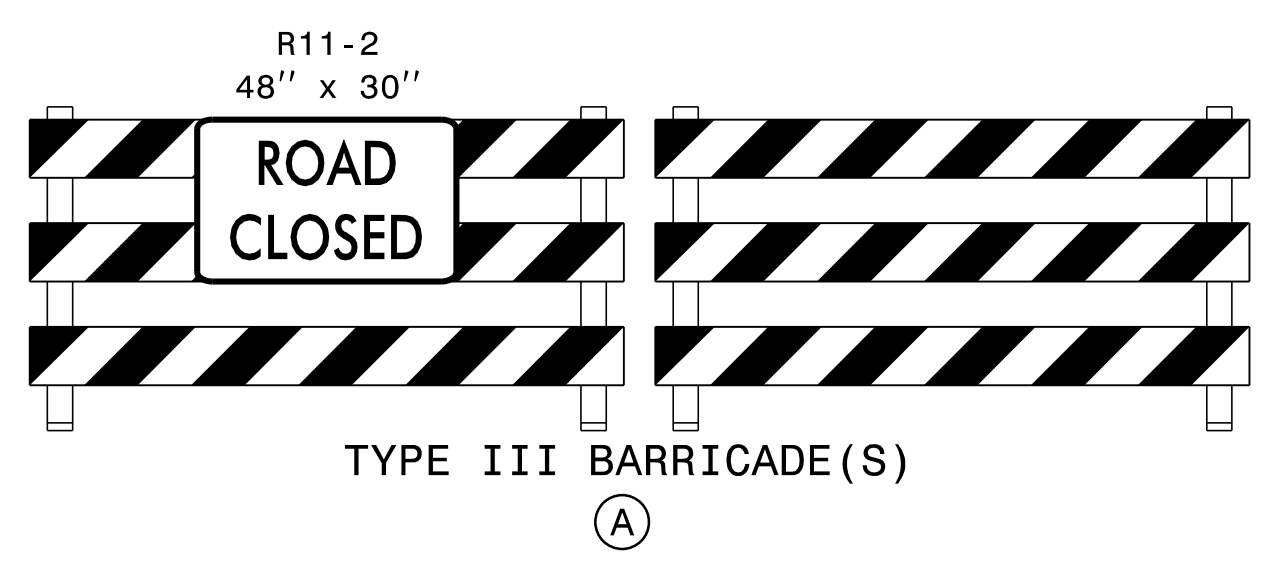
SEAL 21047
 ENGINEER KEVIN W. BISBY

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

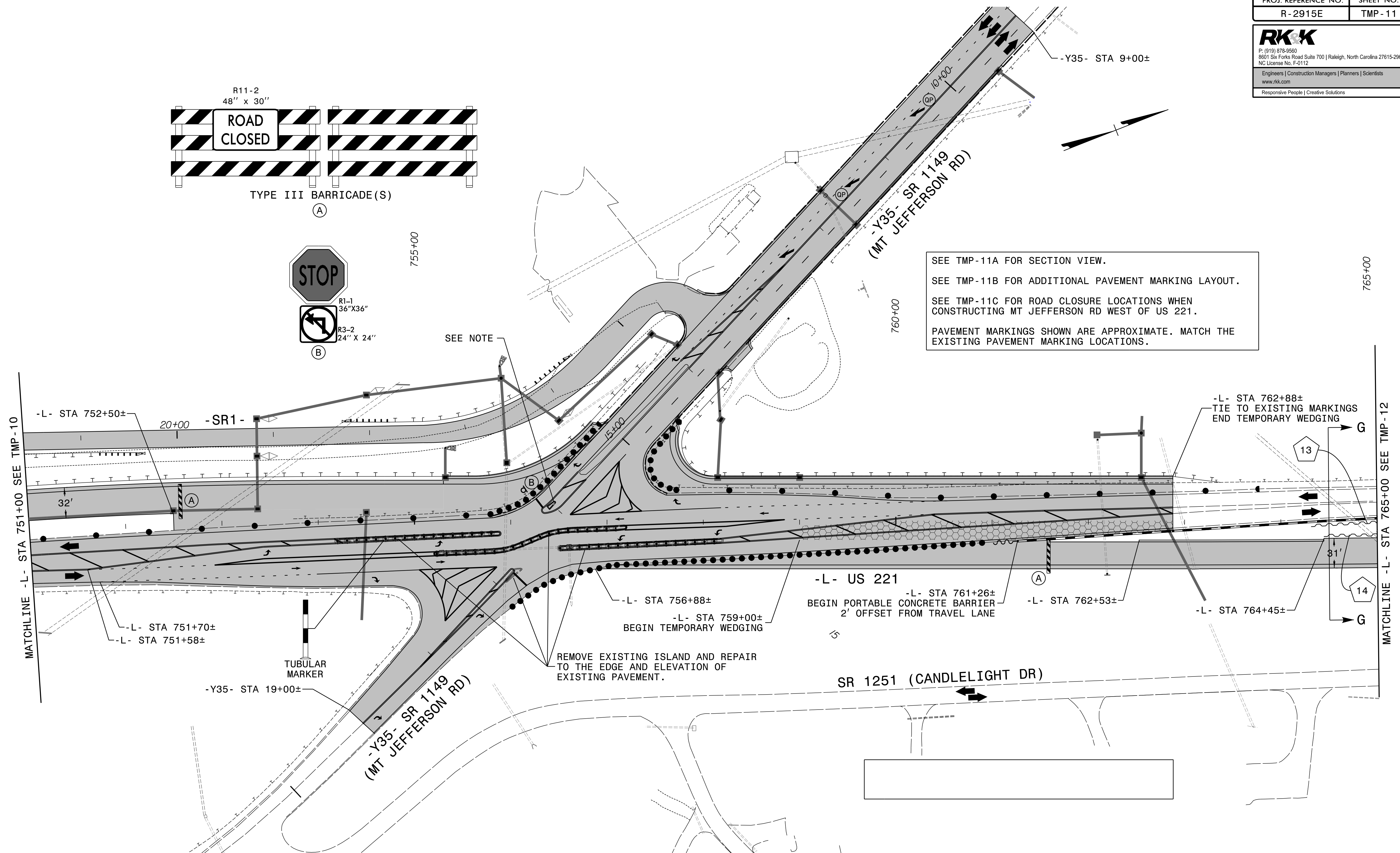


DIVISION OF HIGHWAYS
 DEPARTMENT OF TRANSPORTATION
 WORK ZONE TRAFFIC CONTROL

PHASE I

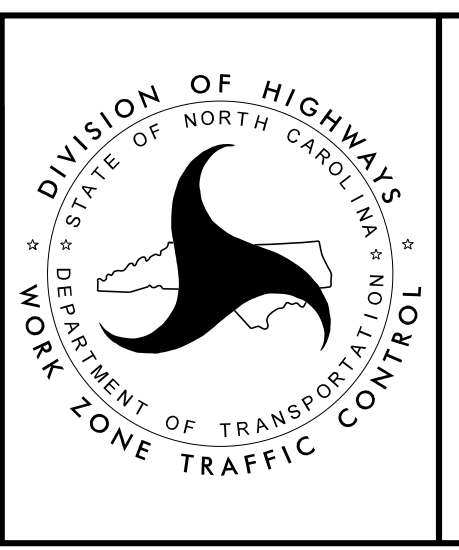


SEE TMP-11A FOR SECTION VIEW.
 SEE TMP-11B FOR ADDITIONAL PAVEMENT MARKING LAYOUT.
 SEE TMP-11C FOR ROAD CLOSURE LOCATIONS WHEN CONSTRUCTING MT JEFFERSON RD WEST OF US 221.
 PAVEMENT MARKINGS SHOWN ARE APPROXIMATE. MATCH THE EXISTING PAVEMENT MARKING LOCATIONS.



TEMPORARY SHORING TABLE					
SHORING I.D.	BEGIN/OFFSET		END/OFFSET		SHORING QTY (ft ²)
13	-L- STA 764+31±	1.7' RT	-L- STA 765+37±	3.2' LT	985
14	-L- STA 764+45±	12.0' RT	-L- STA 765+49±	12.0' RT	557

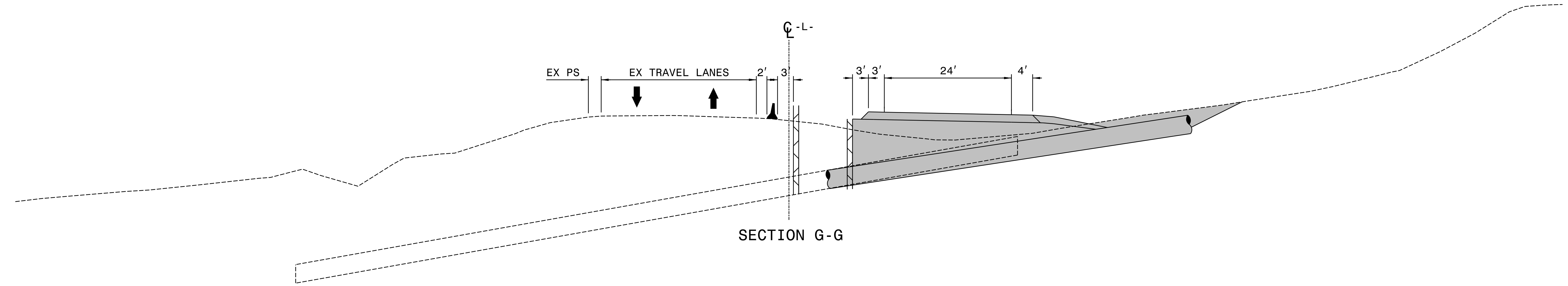
APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020
 SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 KEVIN W. BISBY
 SEAL 21047



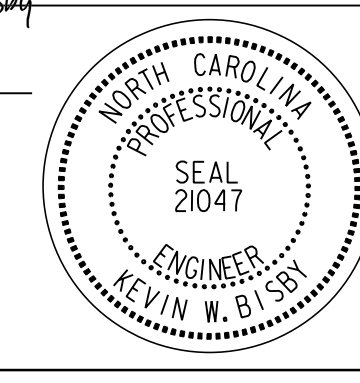
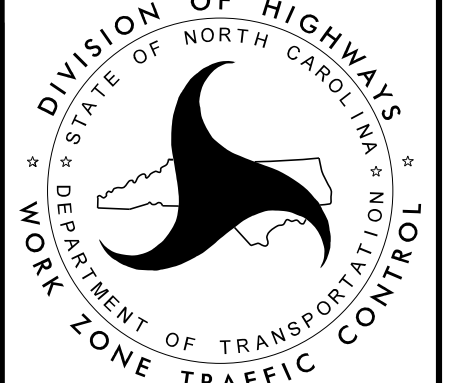
PHASE I

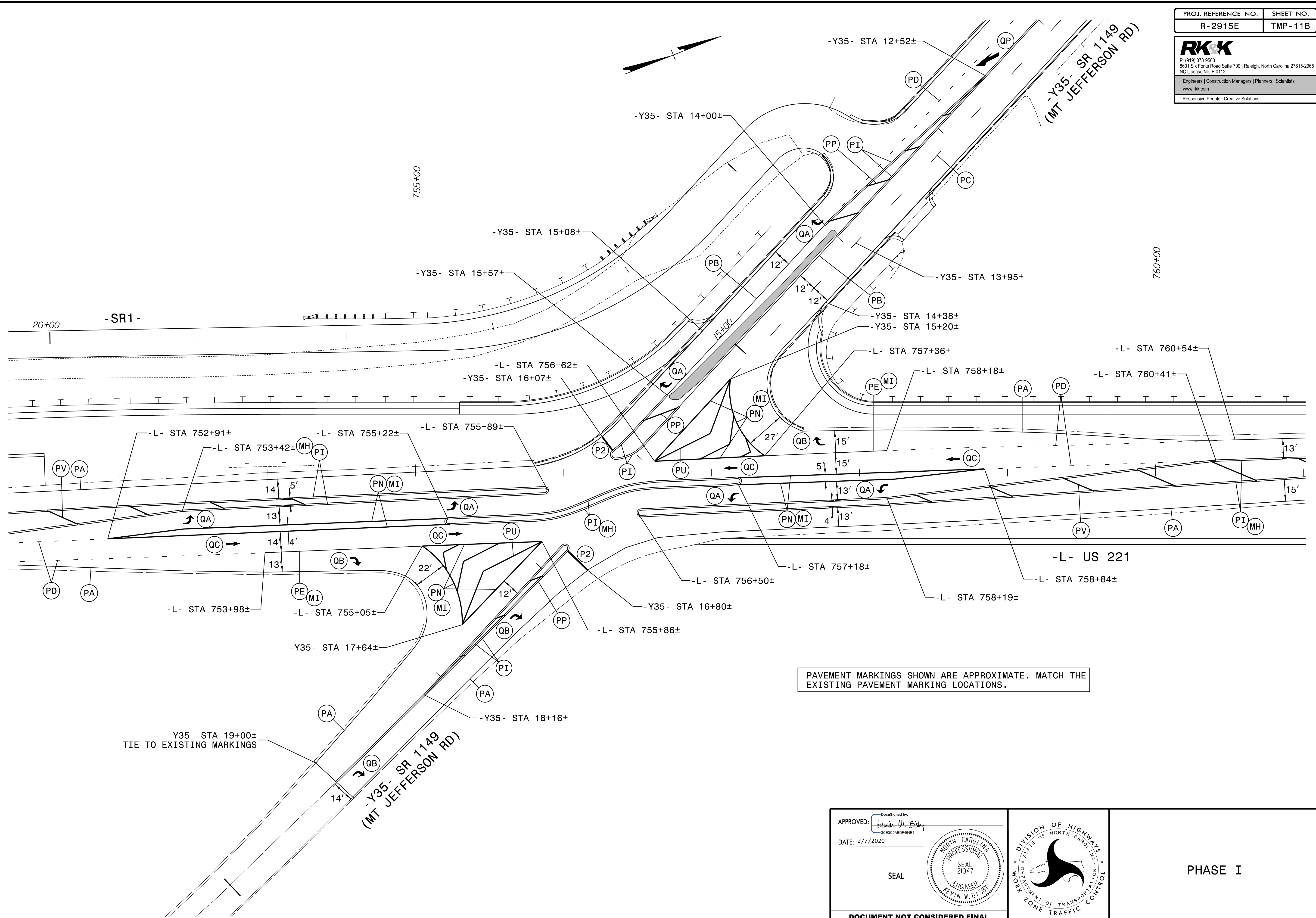
PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-11A

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions



2/7/2020
 R-2915E_TMP_PSHIA.dgn

<p>APPROVED: <i>Kevin W. Bisby</i> <small>DocuSigned by: Kevin W. Bisby 3CE3C948DF46481</small></p> <p>DATE: 2/7/2020</p> <p>SEAL</p> 		<p>PHASE I</p>
<p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>		



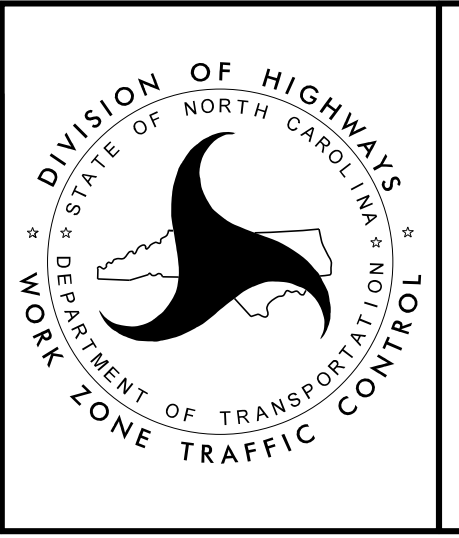
2/7/2020
R-2915E_TMP_PSHIB.dgn

APPROVED: Kevin W. Esby
 DATE: 2/7/2020

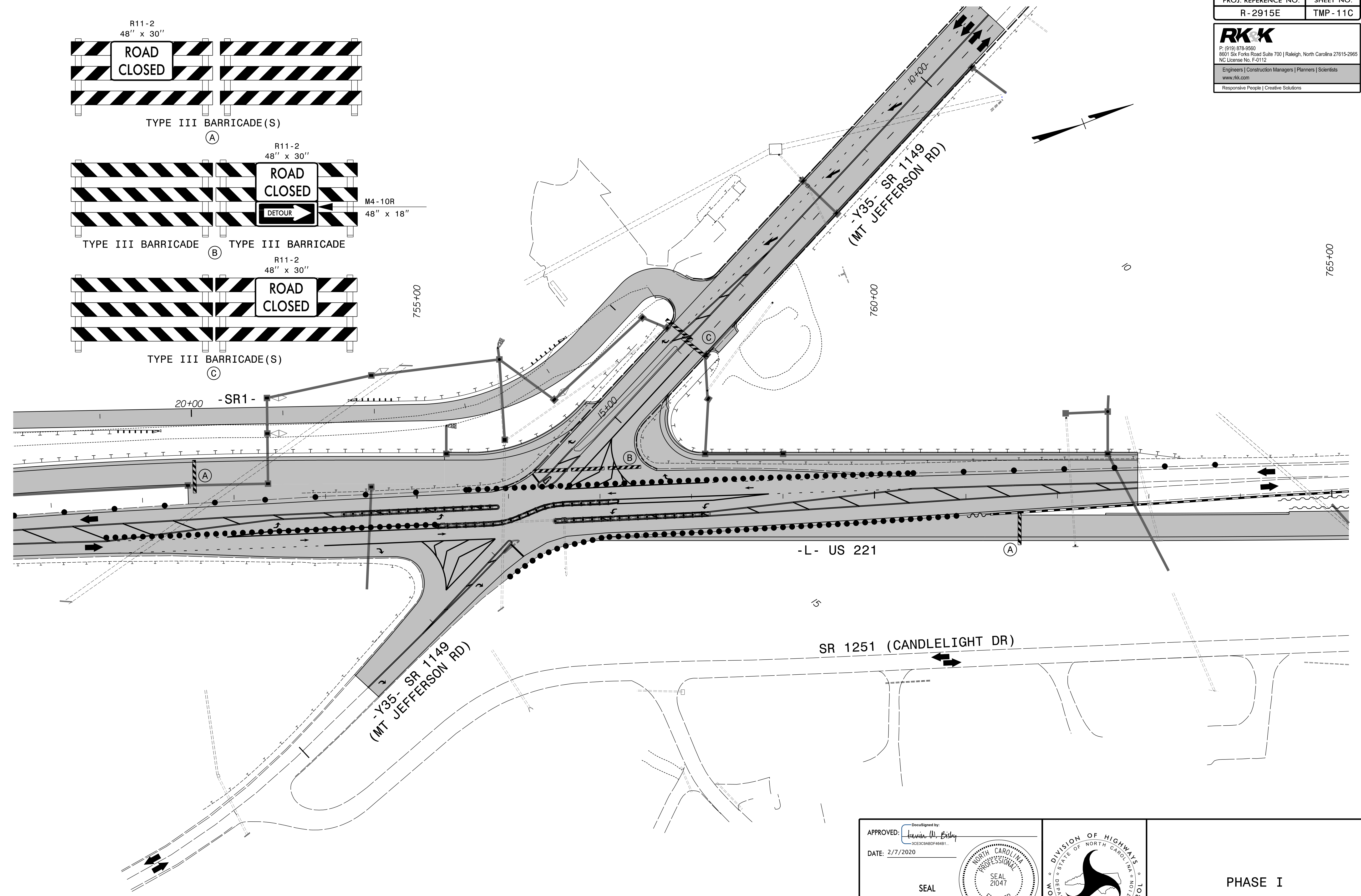
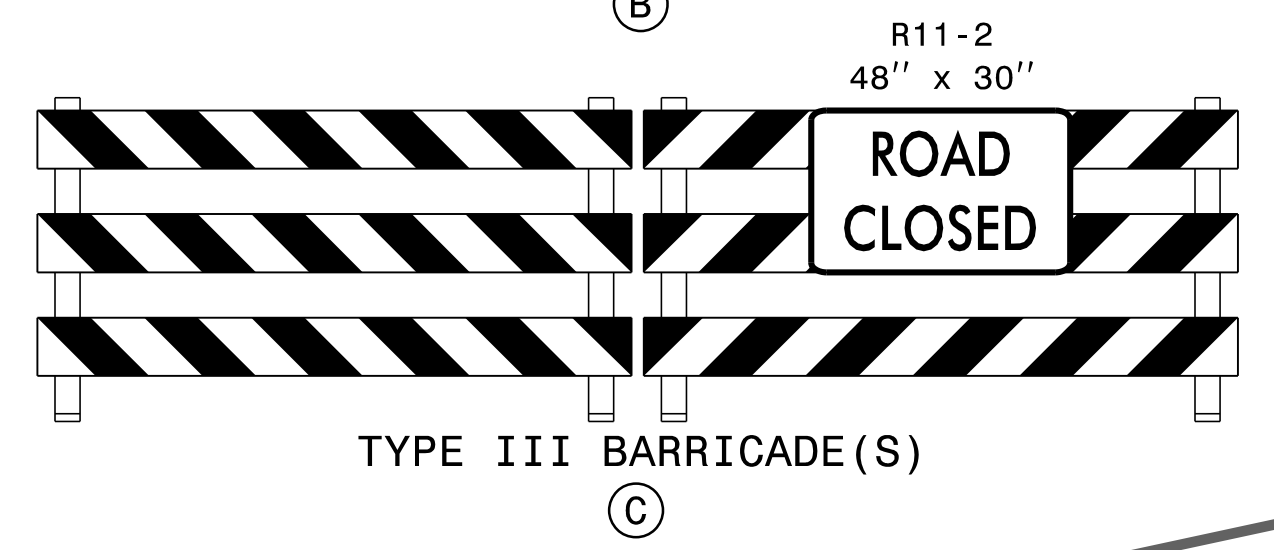
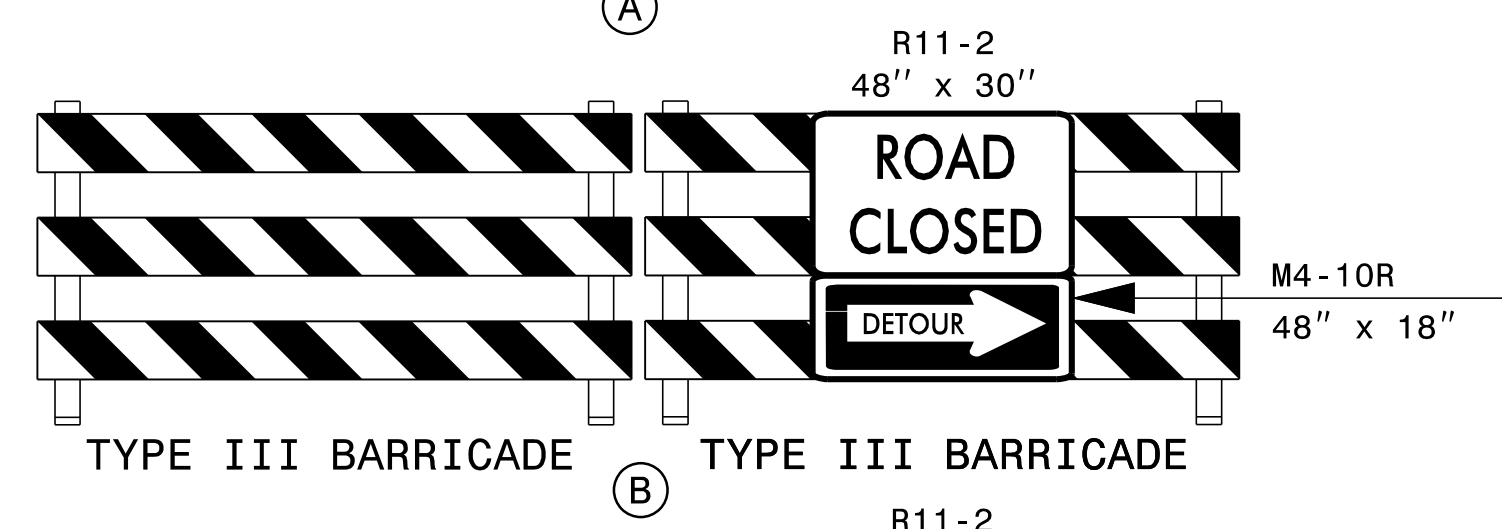
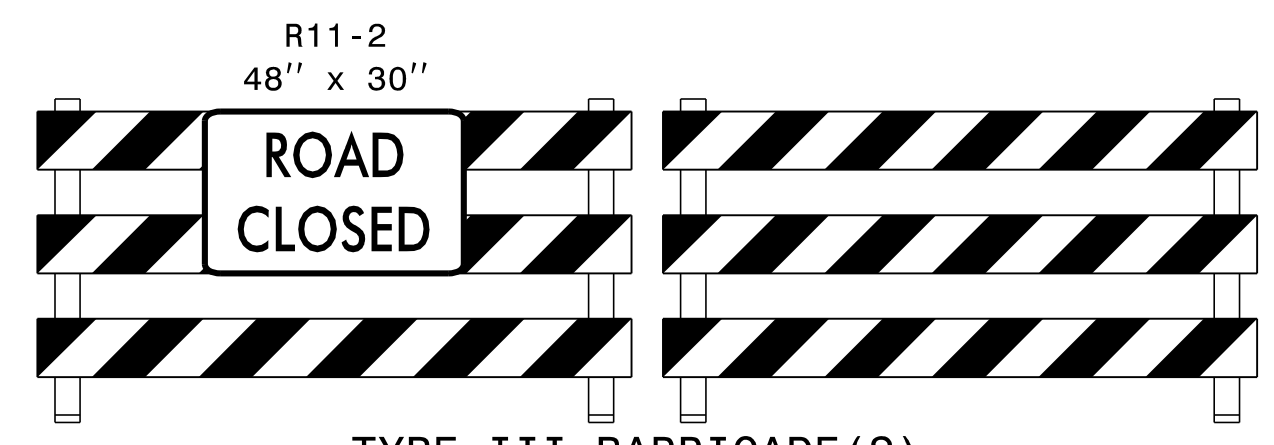
SEAL

SEAL
 NORTH CAROLINA
 PROFESSIONAL
 ENGINEER
 KEVIN W. ESBY
 21047

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



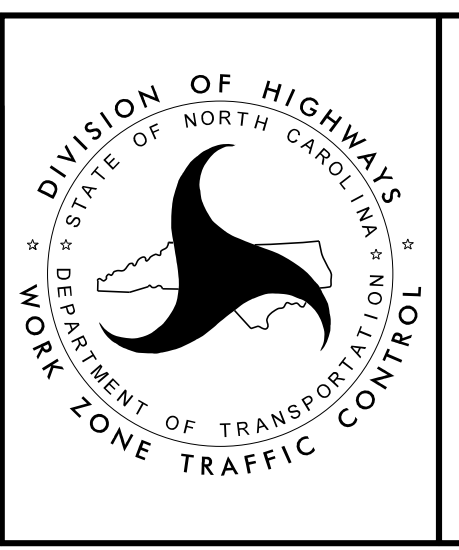
PHASE I



APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020

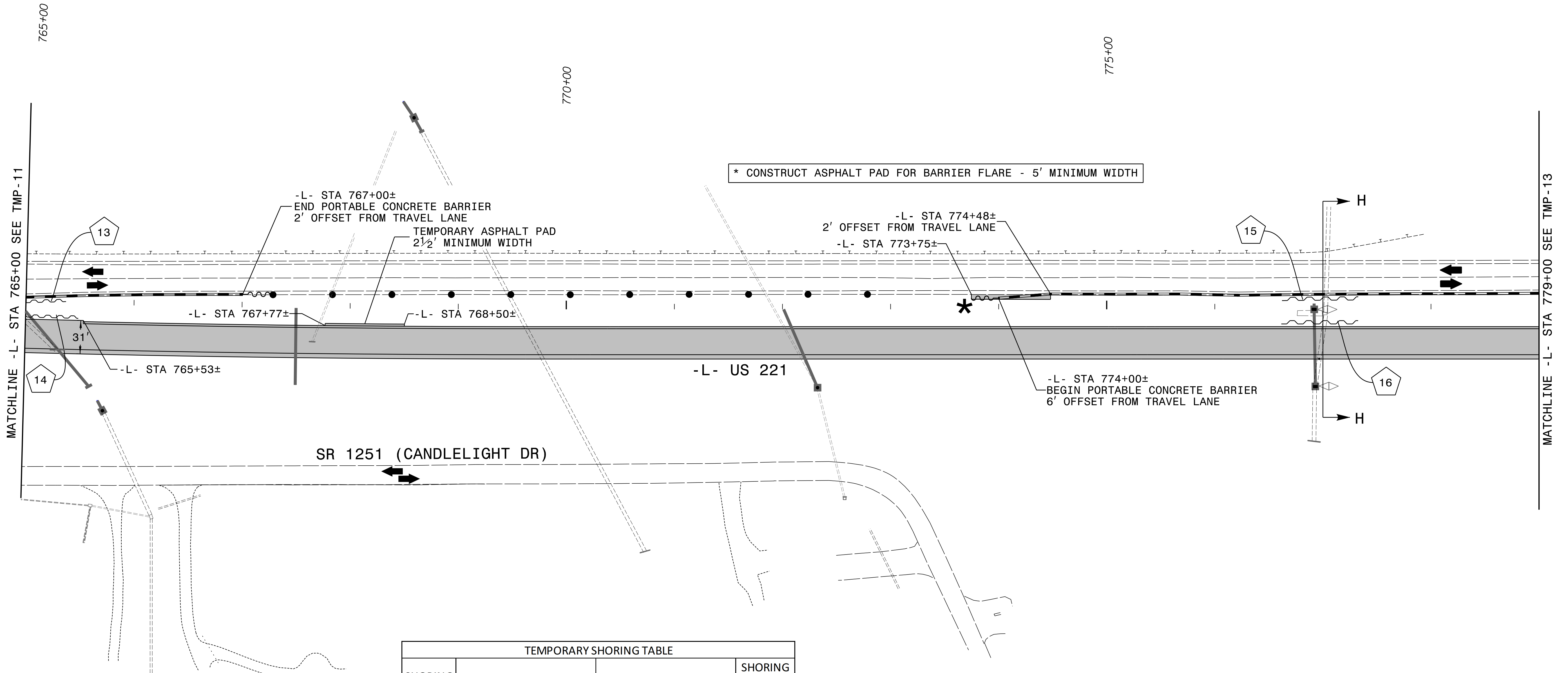
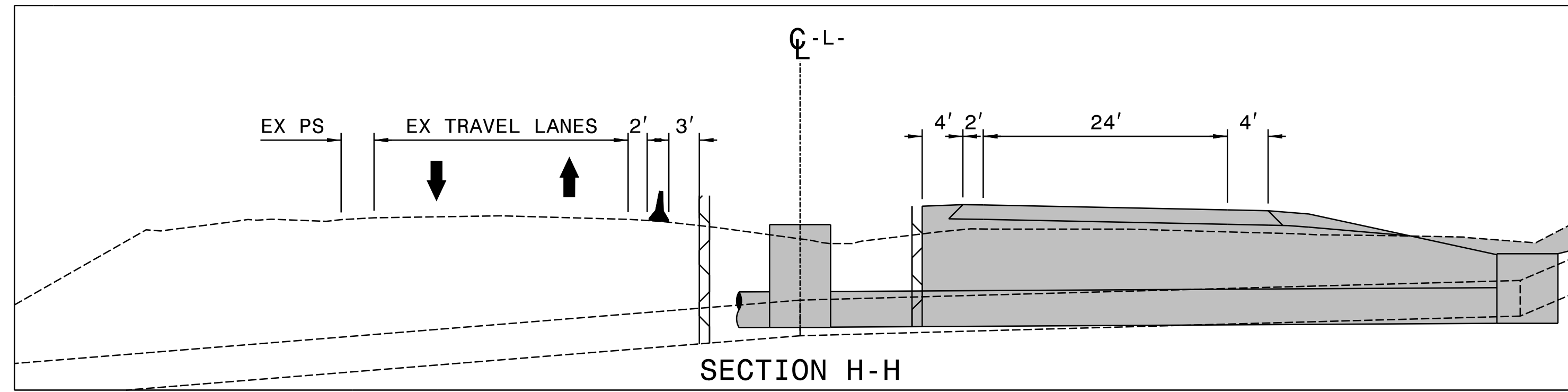
SEAL

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



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

PHASE I

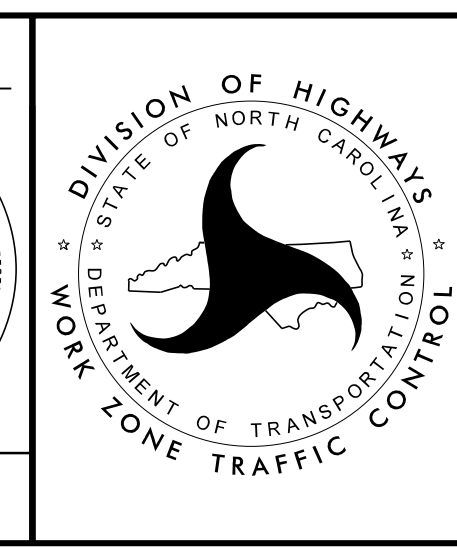


TEMPORARY SHORING TABLE					
SHORING I.D.	BEGIN/OFFSET		END/OFFSET		SHORING QTY (ft ²)
13	-L- STA 764+31±	1.7' RT	-L- STA 765+37±	3.2' LT	985
14	-L- STA 764+45±	12.0' RT	-L- STA 765+49±	12.0' RT	557
15	-L- STA 7+77±	9.5' LT	-L- STA 777+33±	10.1' LT	759
16	-L- STA 776+62±	12.0' RT	-L- STA 777+33±	12.0' RT	558

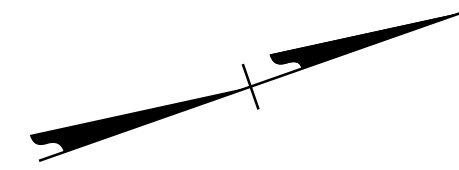
APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020

SEAL

DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED



PHASE I



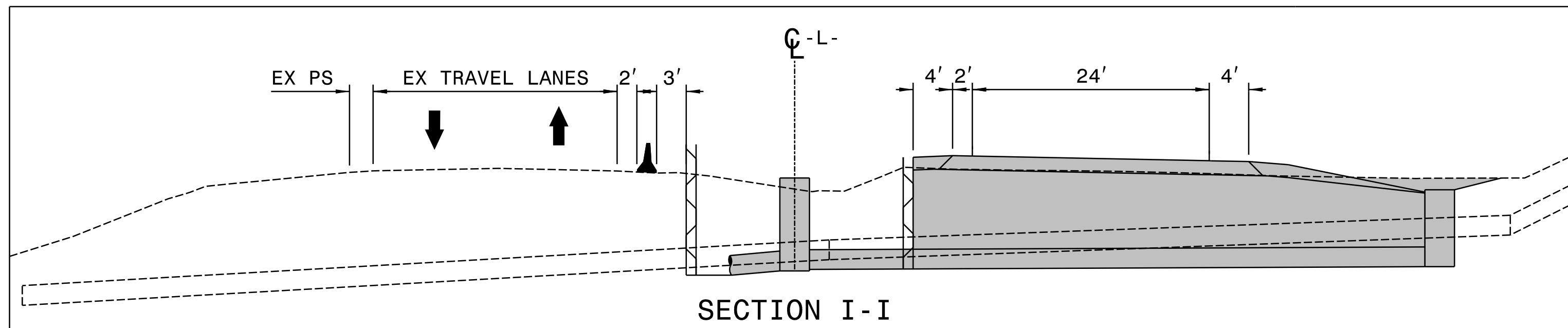
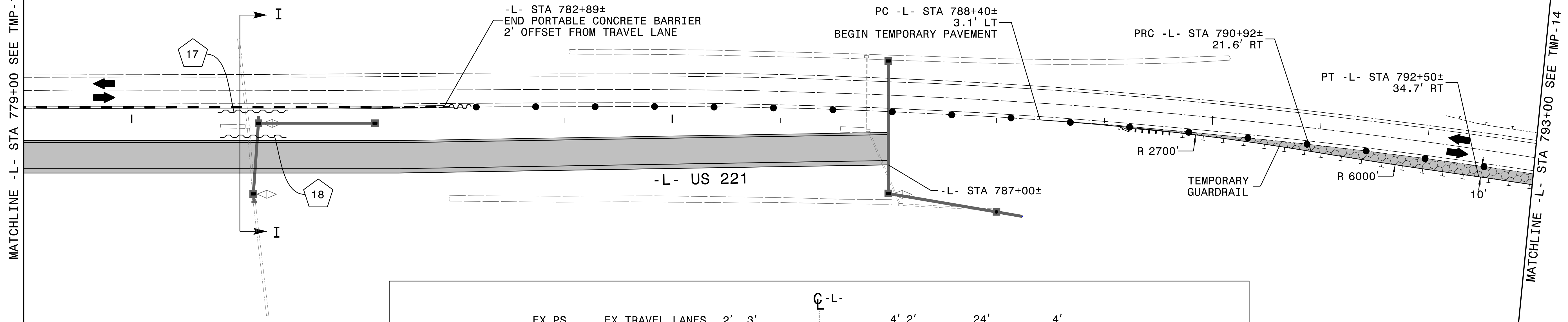
780+00

785+00

790+00

TEMPORARY SHORING TABLE					
SHORING I.D.	BEGIN/OFFSET		END/OFFSET		SHORING QTY (ft ²)
17	-L- STA 780+79±	11.0' LT	-L- STA 781+44±	11.0' LT	650
18	-L- STA 780+82±	12.0' RT	-L- STA 781+43±	12.0' RT	416

MATCHLINE -L- STA 779+00 SEE TMP-12

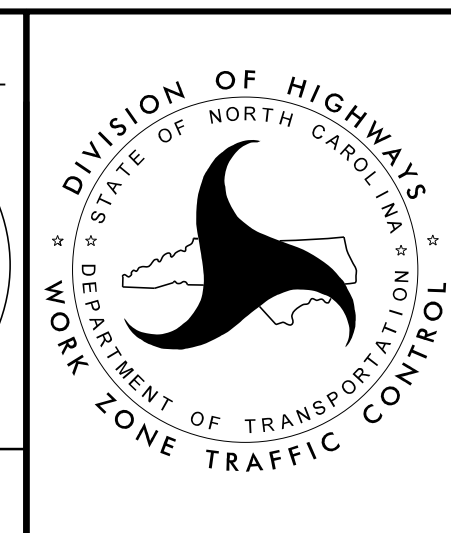


2/7/2020
 R-2915E_TMP_PSHI3.dgn

APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020

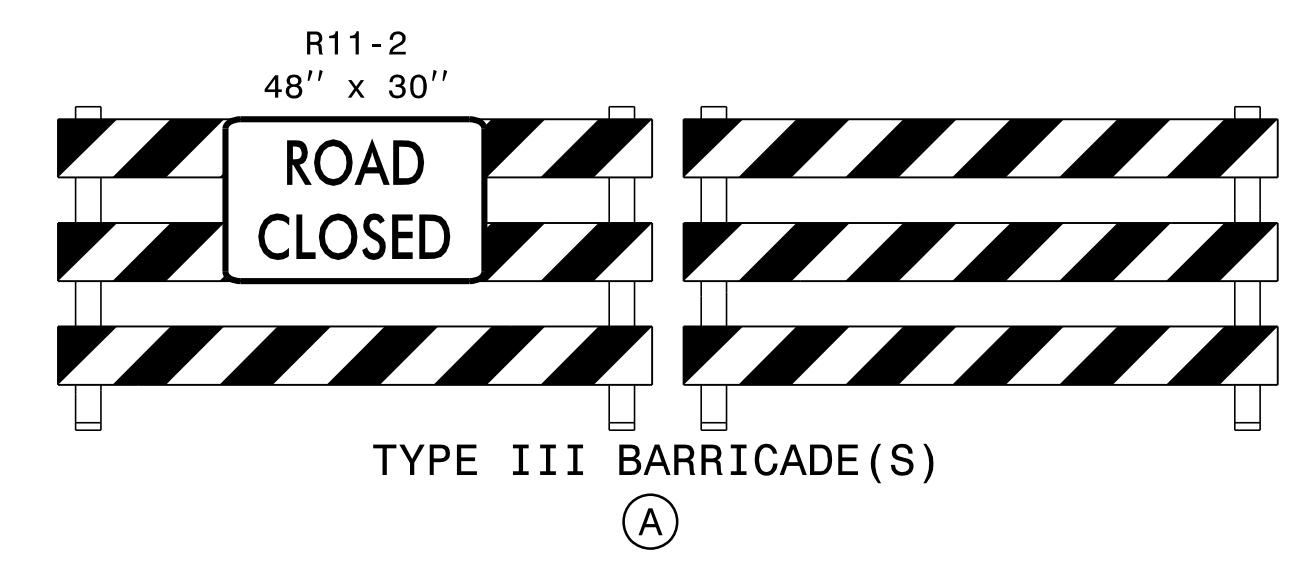
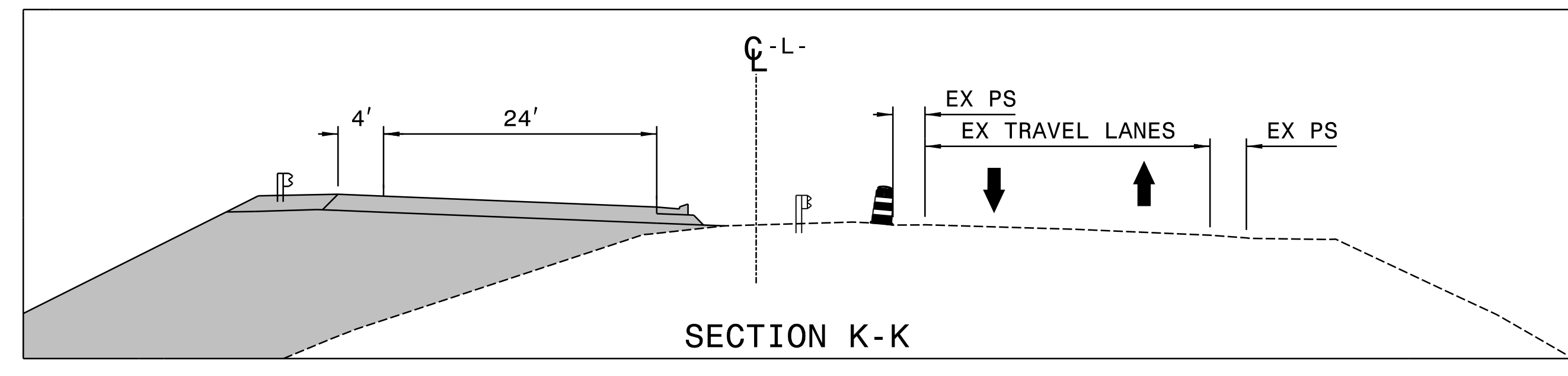
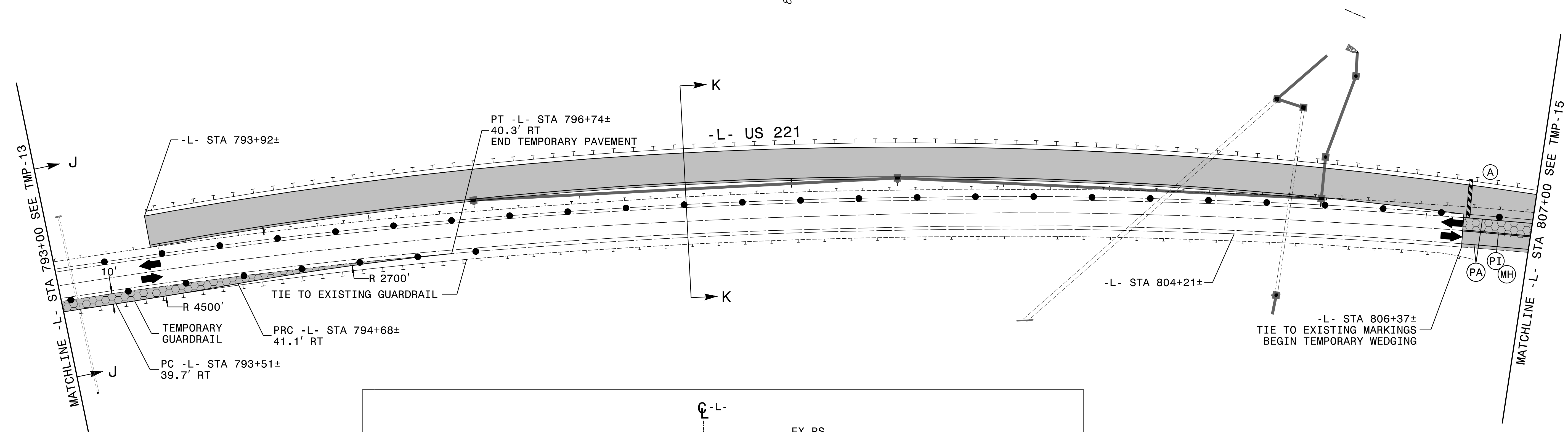
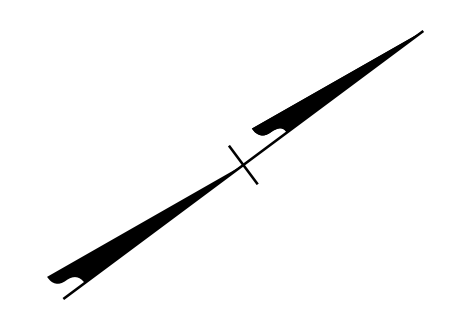
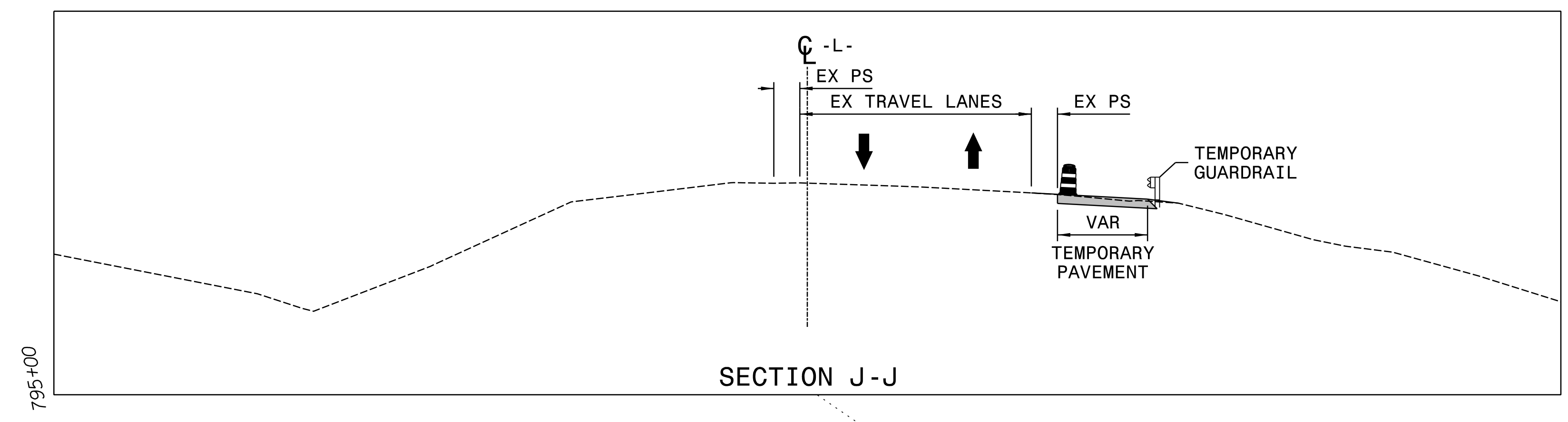
SEAL

PROFESSIONAL SEAL
 NORTH CAROLINA
 21047
 ENGINEER
 KEVIN W. BISBY



PHASE I

DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED



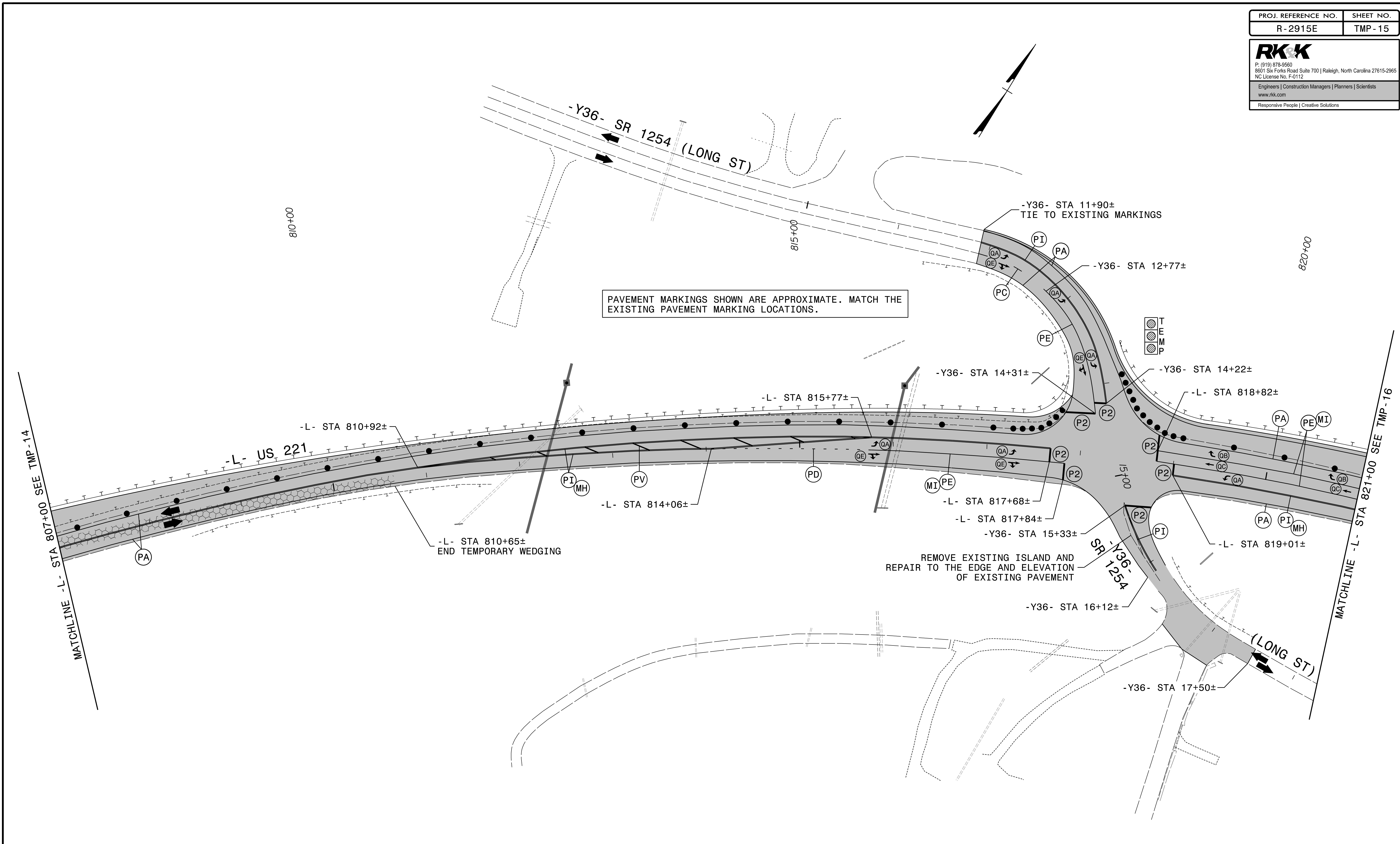
APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020

SEAL

PHASE I

PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-15

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions

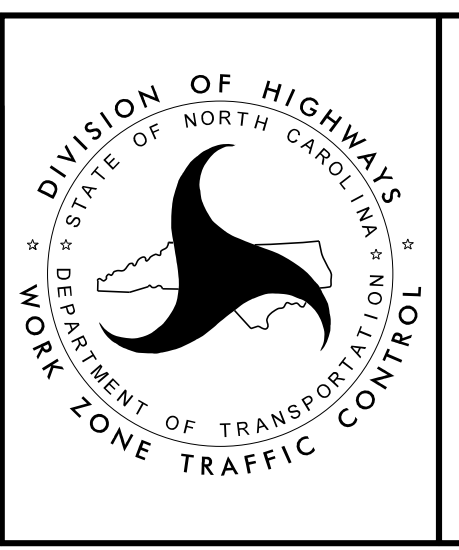


2/7/2020
R-2915E-TMP_PSH15.dgn

APPROVED: *Kevin W. Esby*
 DATE: 2/7/2020

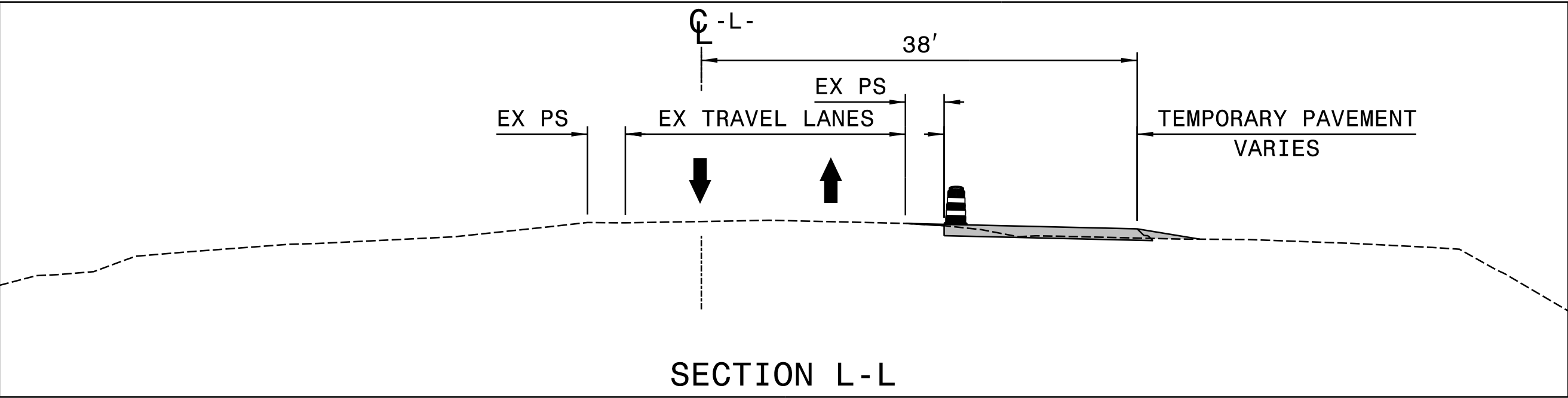
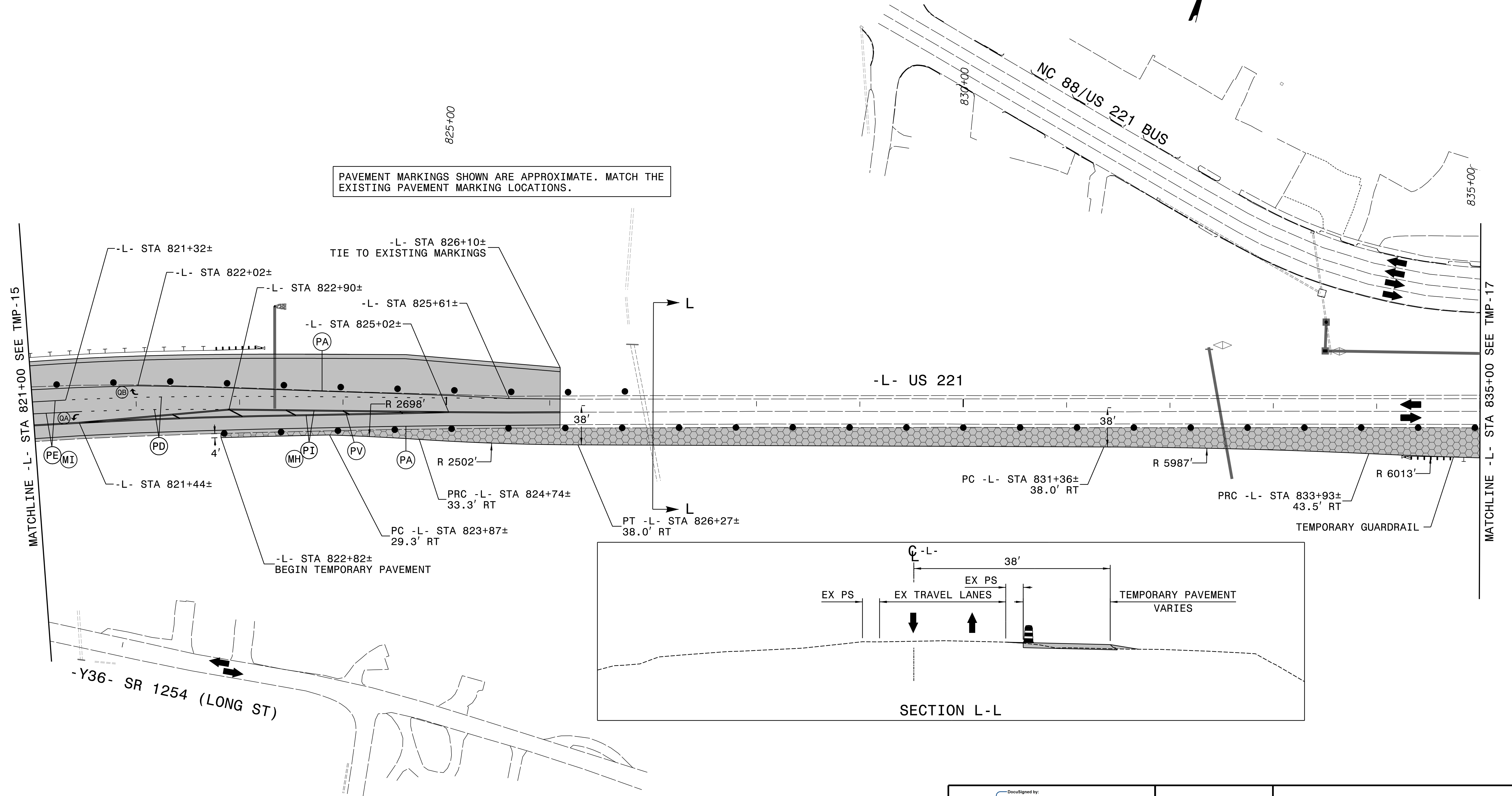
SEAL

PROFESSIONAL SEAL
 NORTH CAROLINA
 21047
 ENGINEER
 KEVIN W. ESBY



PHASE I

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



2/7/2020
R-2915E_TMP_PSH16.dgn

APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020

SEAL

PROFESSIONAL ENGINEER
 KEVIN W. BISBY
 SEAL 21047
 NORTH CAROLINA

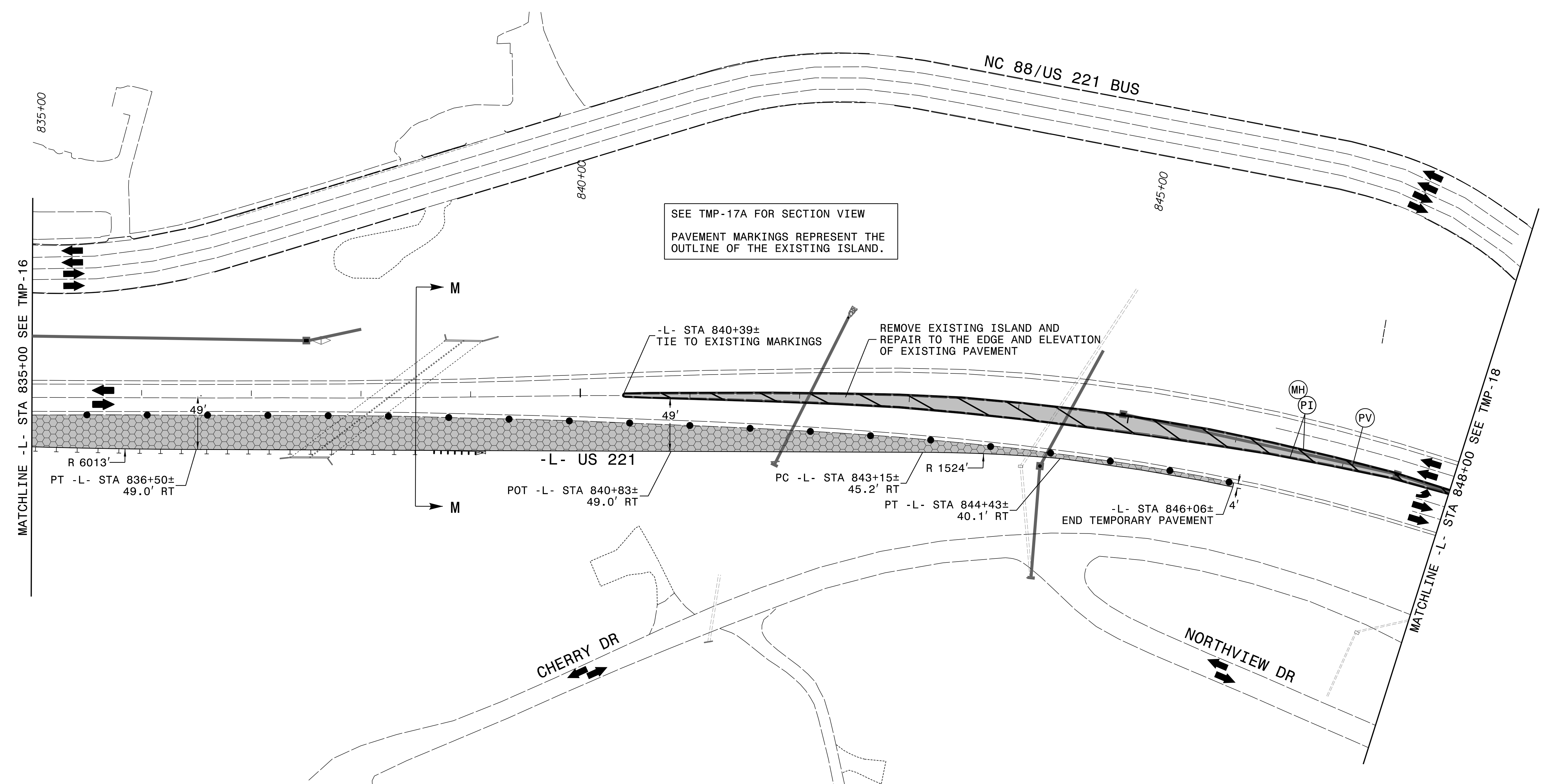
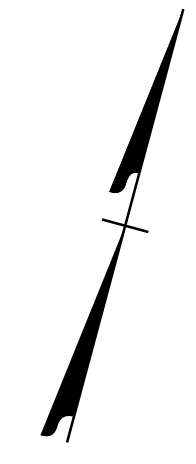


PHASE I

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-17

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions



SEE TMP-17A FOR SECTION VIEW
 PAVEMENT MARKINGS REPRESENT THE
 OUTLINE OF THE EXISTING ISLAND.

-L- STA 840+39±
 TIE TO EXISTING MARKINGS

REMOVE EXISTING ISLAND AND
 REPAIR TO THE EDGE AND ELEVATION
 OF EXISTING PAVEMENT

MATCHLINE -L- STA 835+00 SEE TMP-16

MATCHLINE -L- STA 848+00 SEE TMP-18

R 6013'
 PT -L- STA 836+50±
 49.0' RT

-L- US 221
 POT -L- STA 840+83±
 49.0' RT

PC -L- STA 843+15±
 45.2' RT

R 1524'
 PT -L- STA 844+43±
 40.1' RT

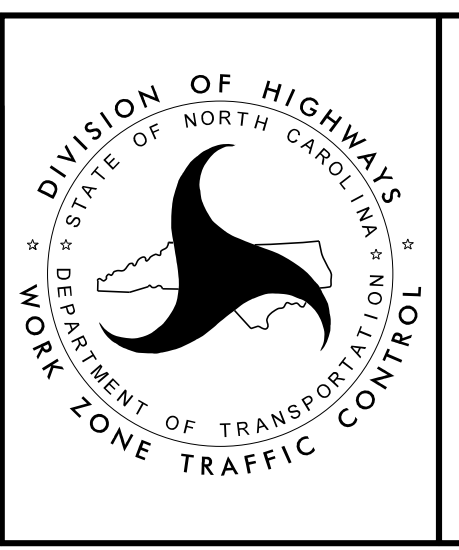
-L- STA 846+06±
 END TEMPORARY PAVEMENT

2/7/2020
 R-2915E_TMP_PSHIT.dgn

APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020

SEAL

DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED

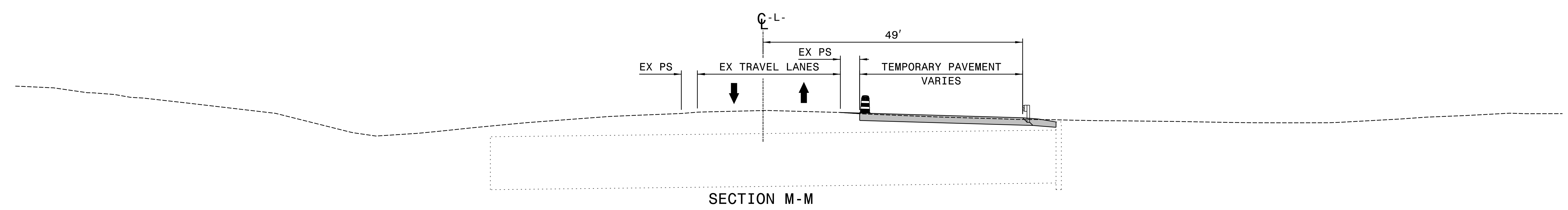


DIVISION OF HIGHWAYS
 STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 WORK ZONE TRAFFIC CONTROL

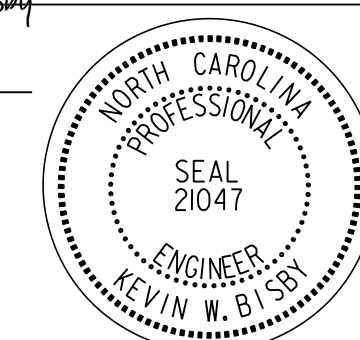
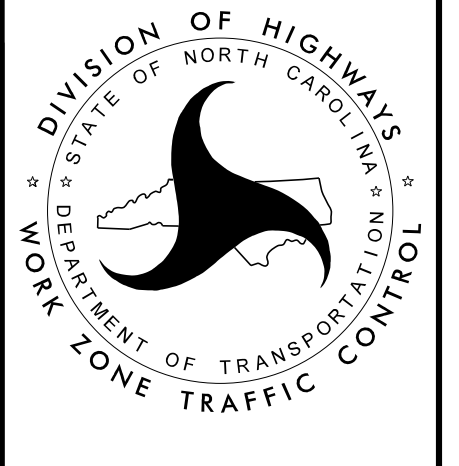
PHASE I

PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-17A

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rk.com
 Responsive People | Creative Solutions

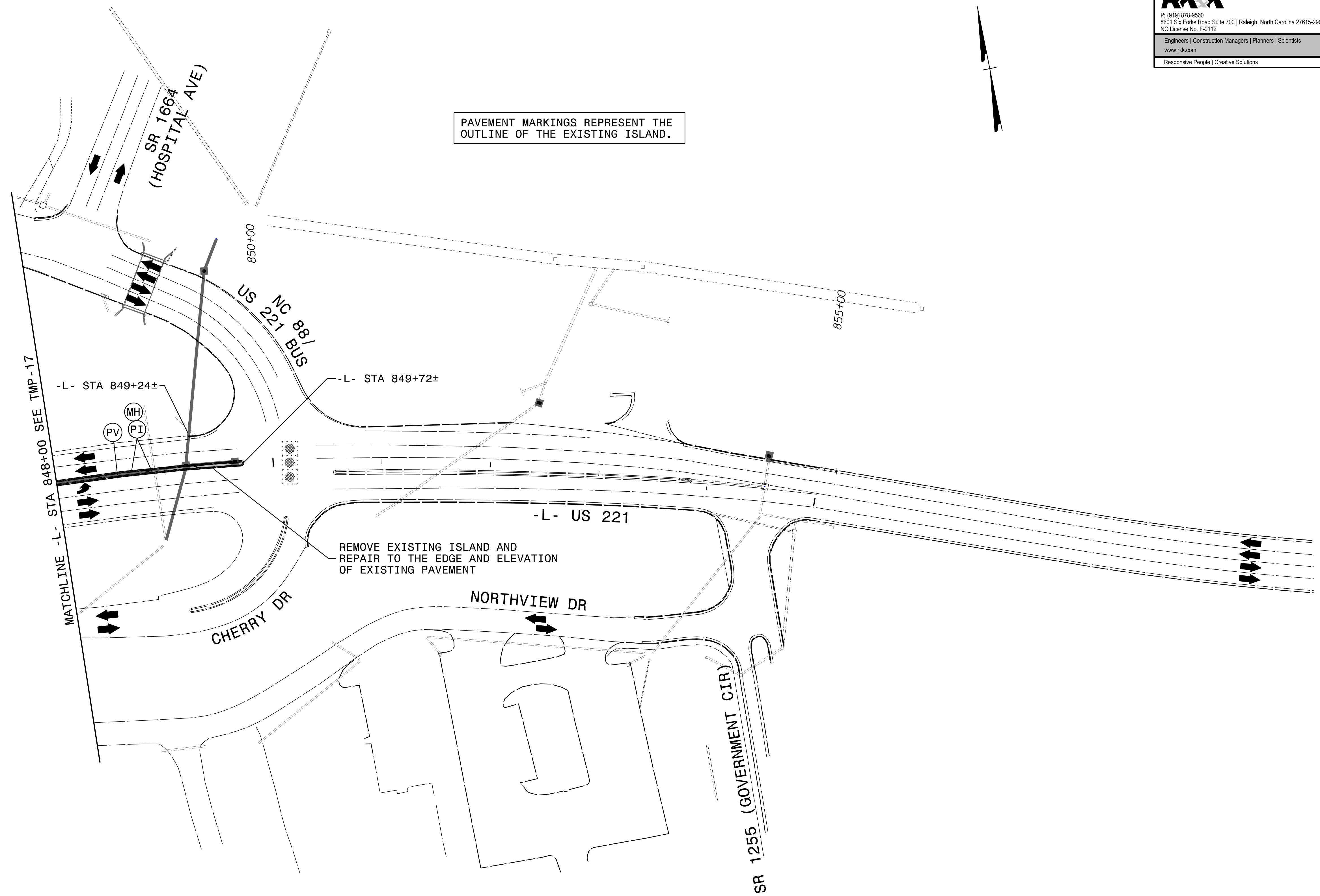
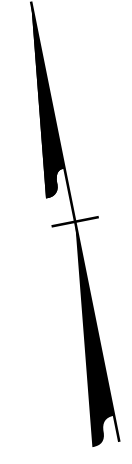


2/7/2020
R-2915E_TMP_PSHITA.dgn

<p>APPROVED: <i>Kevin W. Bisby</i> <small>DocuSigned by: Kevin W. Bisby 3CE3C9ABDF46481</small></p> <p>DATE: 2/7/2020</p> <p>SEAL</p> 		<p>PHASE I</p>
<p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>		

PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-18

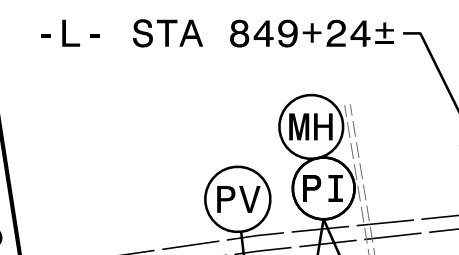
RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions



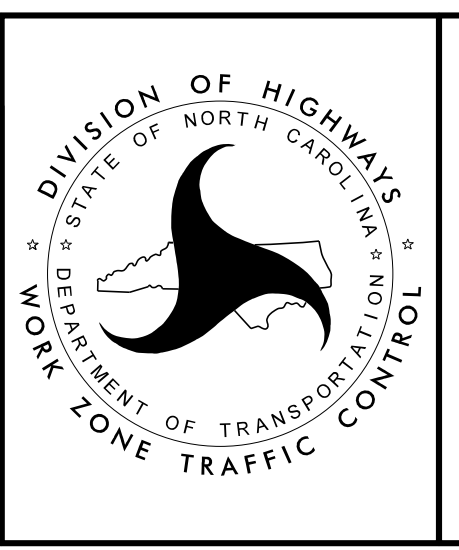
PAVEMENT MARKINGS REPRESENT THE OUTLINE OF THE EXISTING ISLAND.

REMOVE EXISTING ISLAND AND REPAIR TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT

MATCHLINE -L- STA 848+00 SEE TMP-17



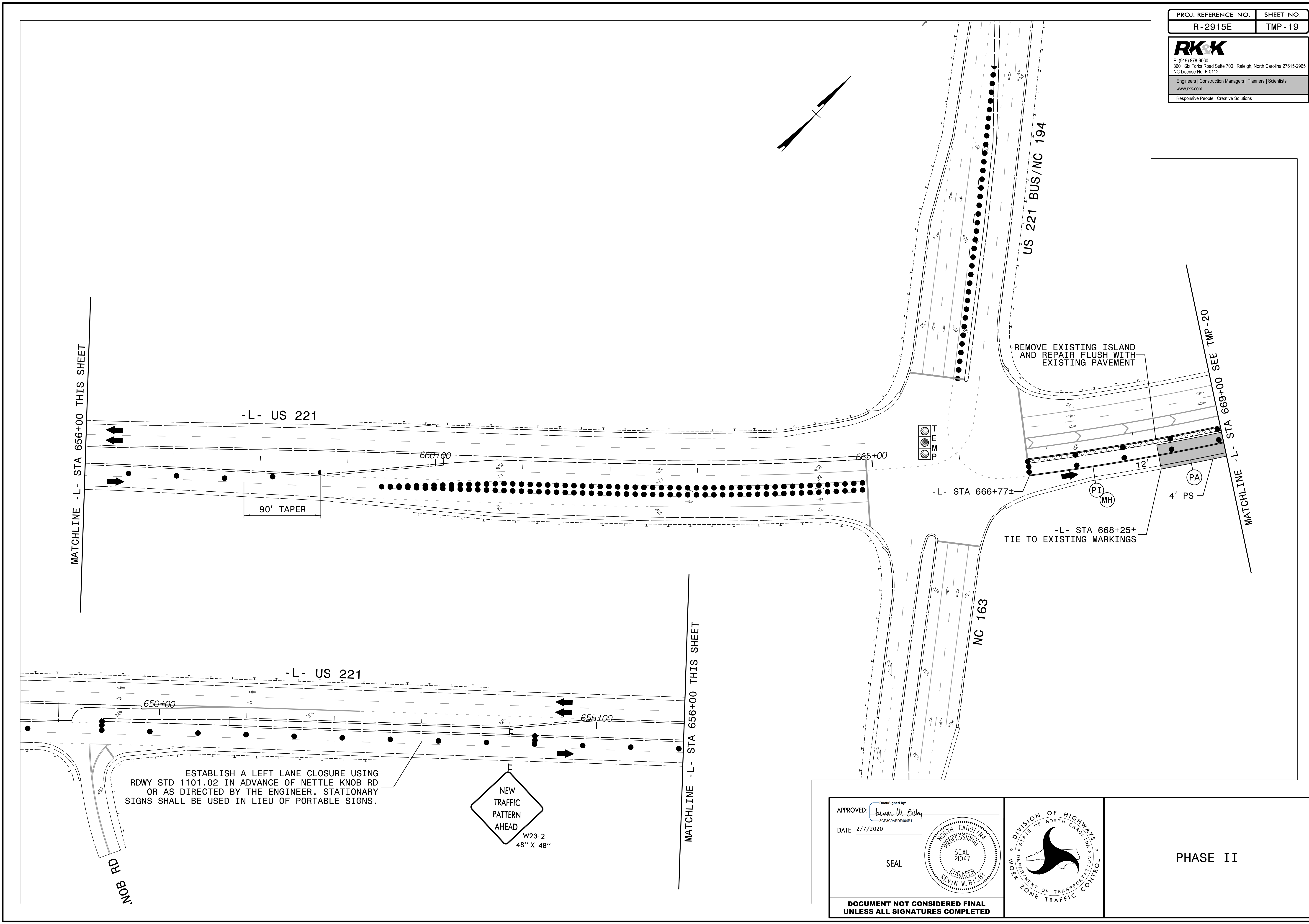
APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020
 SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL 21047
 KEVIN W. BISBY



PHASE I

PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-19

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions



MATCHLINE -L- STA 656+00 THIS SHEET

-L- US 221

90' TAPER

660+00

665+00

-L- STA 666+77±

-L- STA 668+25±
TIE TO EXISTING MARKINGS

REMOVE EXISTING ISLAND
AND REPAIR FLUSH WITH
EXISTING PAVEMENT

4' PS

PI

MH

MATCHLINE -L- STA 669+00 SEE TMP-20

NC 163

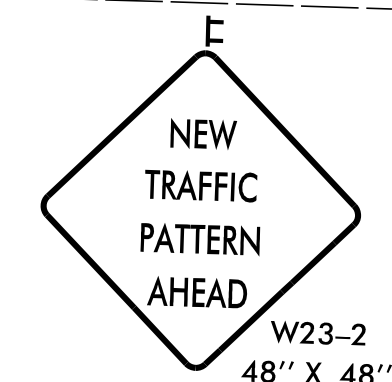
-L- US 221

650+00

655+00

MATCHLINE -L- STA 656+00 THIS SHEET

ESTABLISH A LEFT LANE CLOSURE USING
RDWY STD 1101.02 IN ADVANCE OF NETTLE KNOB RD
OR AS DIRECTED BY THE ENGINEER. STATIONARY
SIGNS SHALL BE USED IN LIEU OF PORTABLE SIGNS.

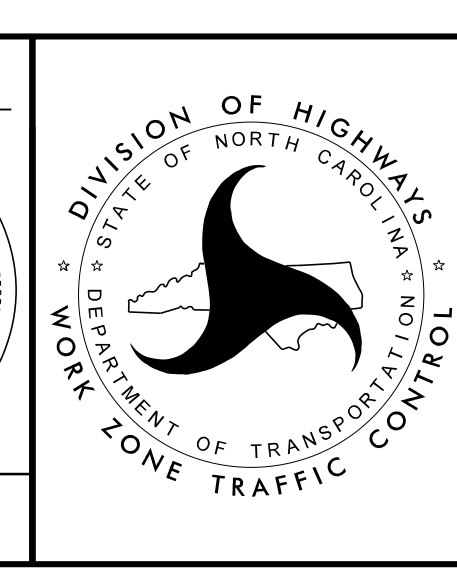


NETTLE KNOB RD

APPROVED: *Kevin W. Esby*
 DATE: 2/7/2020

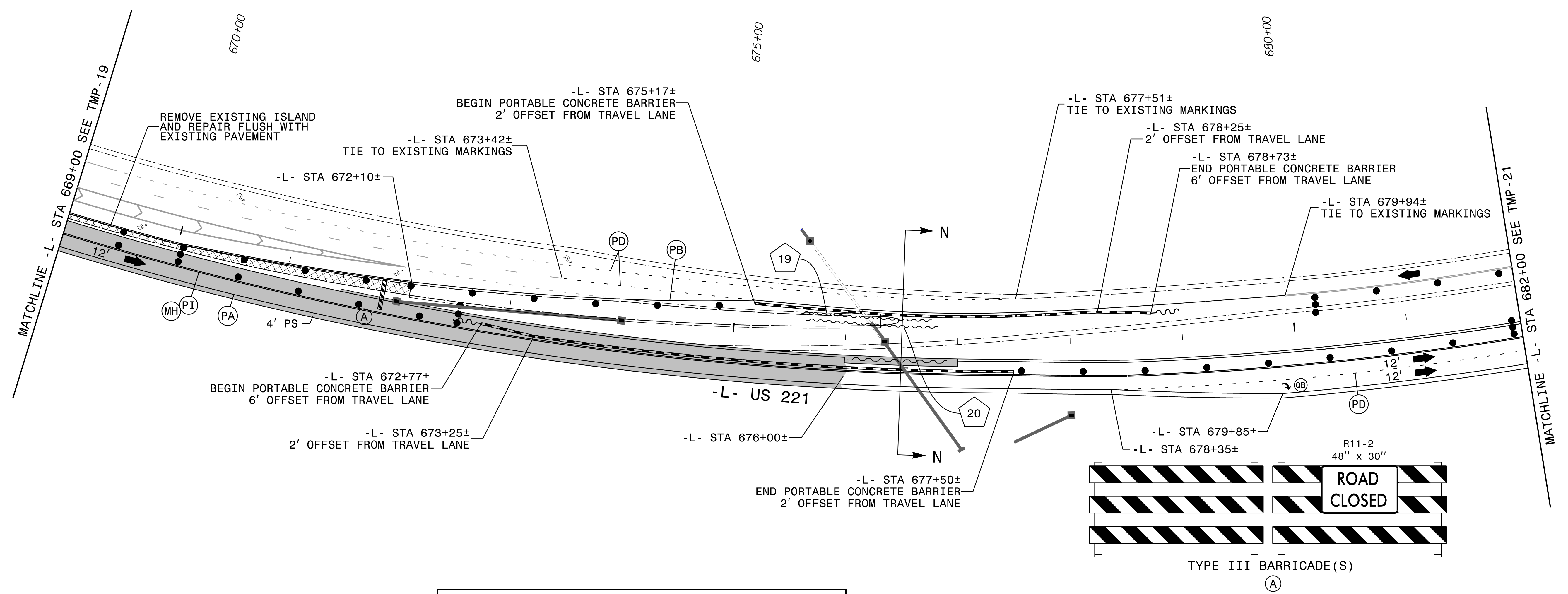
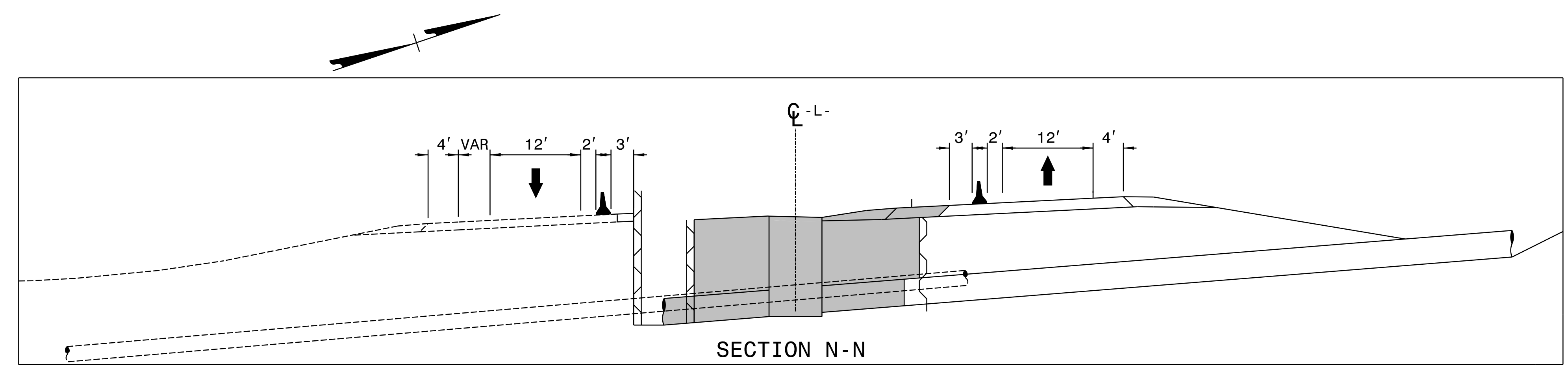
SEAL

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



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

PHASE II



TEMPORARY SHORING TABLE					
SHORING I.D.	BEGIN/OFFSET		END/OFFSET		SHORING QTY (ft ²)
19	-L- STA 675+59±	22.4' LT	-L- STA 676+77±	20.0' LT	1016
20	-L- STA 675+64±	16.3' LT	-L- STA 676+82±	14.0' LT	759

APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020

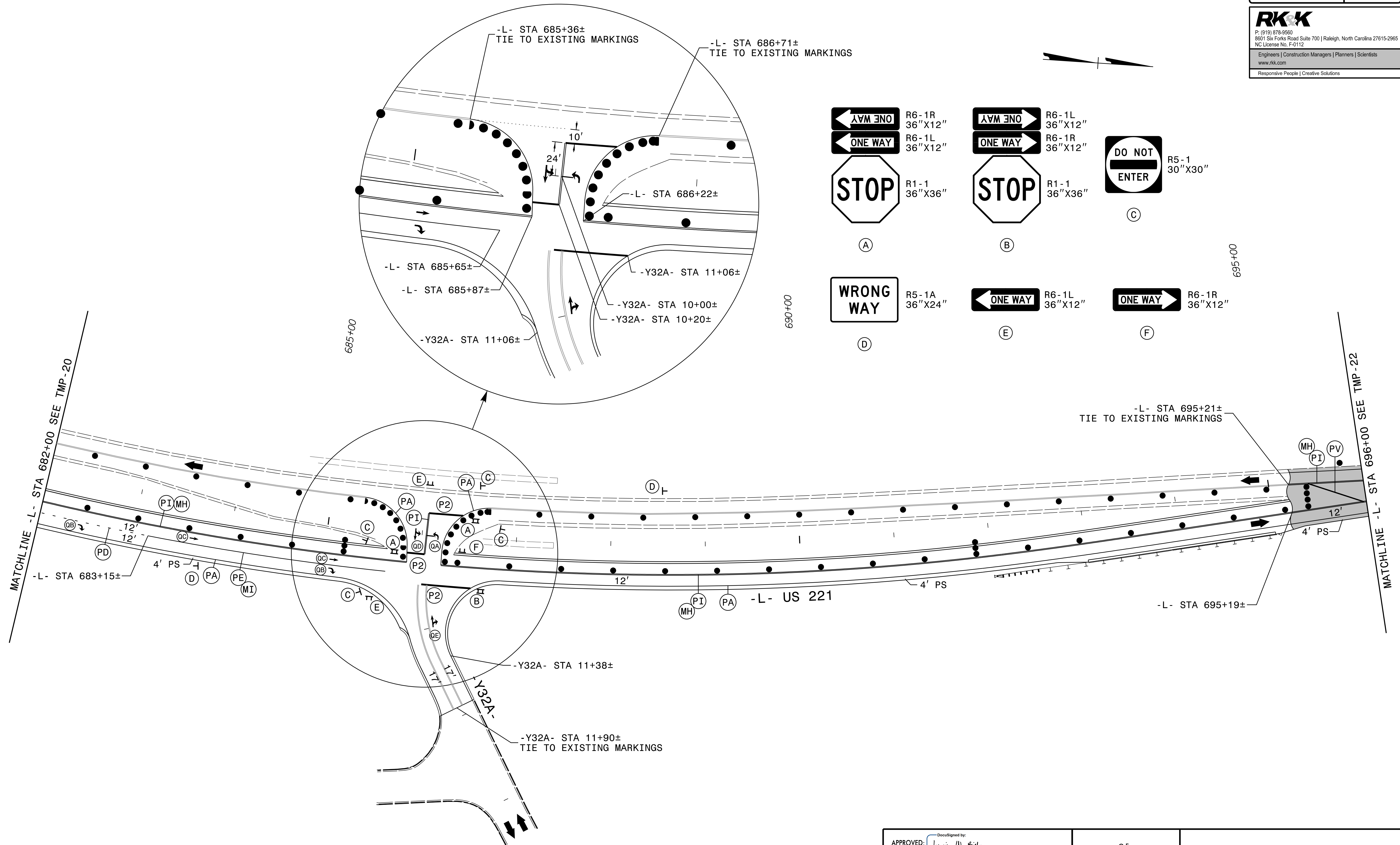
SEAL

SEAL 21047
 ENGINEER
 KEVIN W. BISBY

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

PHASE II

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



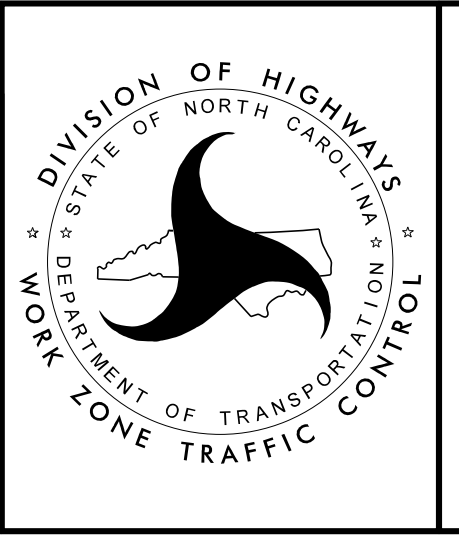
2/7/2020
R-2915E-TMP_PSH21.dgn

APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020

SEAL

SEAL
 NORTH CAROLINA
 PROFESSIONAL
 ENGINEER
 KEVIN W. BISBY
 21047

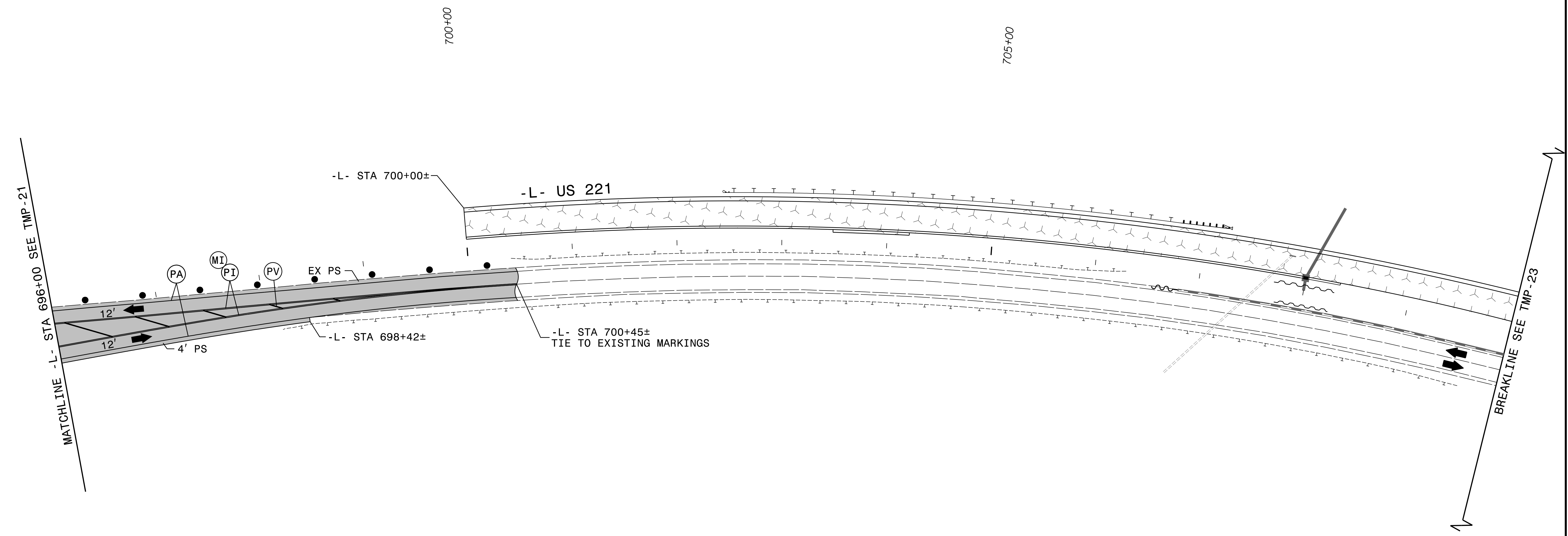
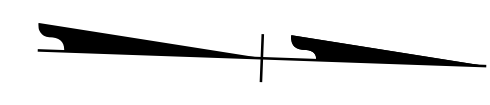
**DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED**



PHASE II

PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-22

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions

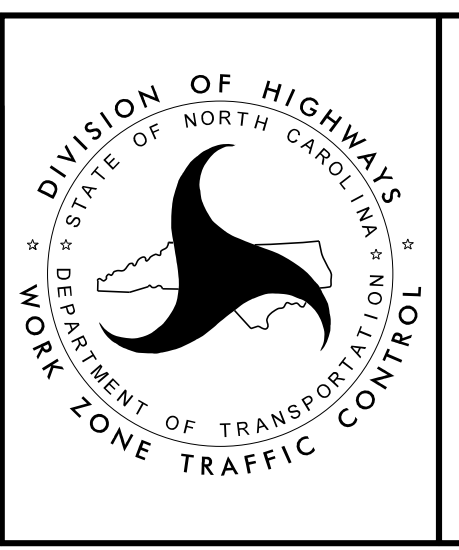


2/7/2020
R-2915E-TMP_PSH22.dgn

APPROVED: *Kevin W. Bisby*
DocuSigned by: Kevin W. Bisby
 3CE3C9ABDF46481

DATE: 2/7/2020

SEAL

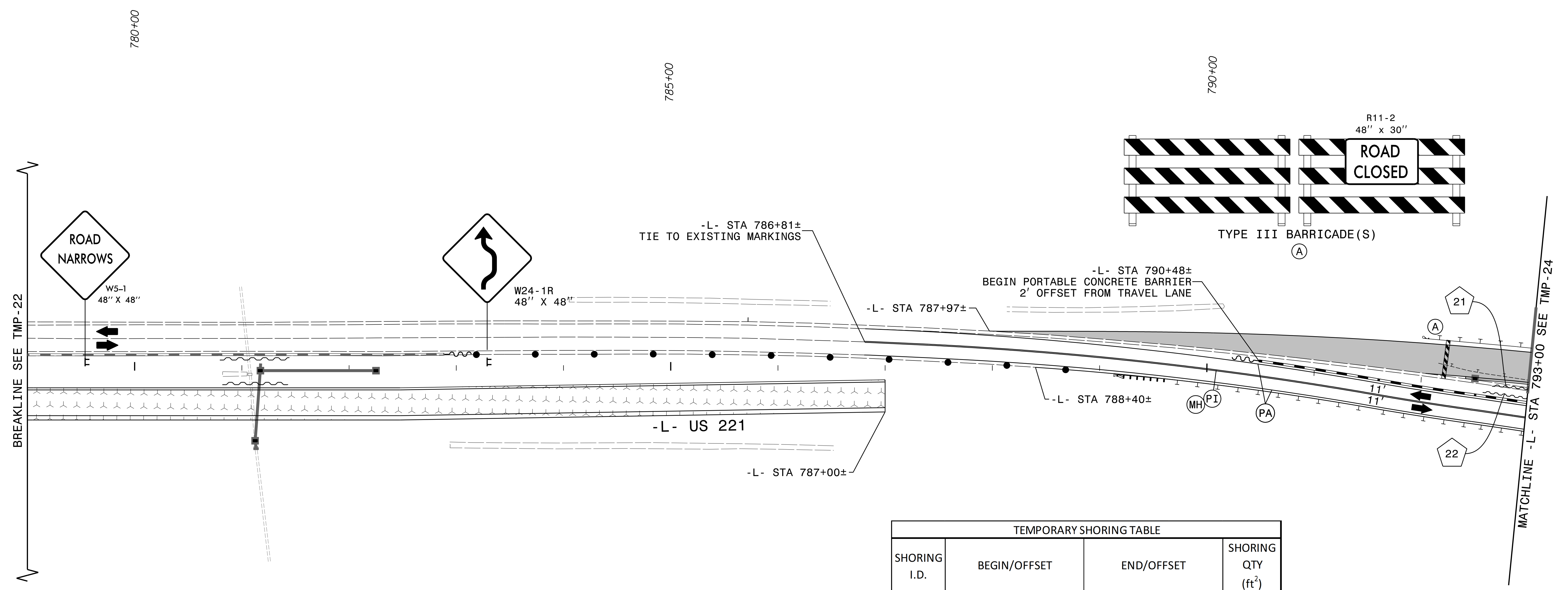


PHASE II

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PROJ. REFERENCE NO. R-2915E	SHEET NO. TMP-23
--------------------------------	---------------------

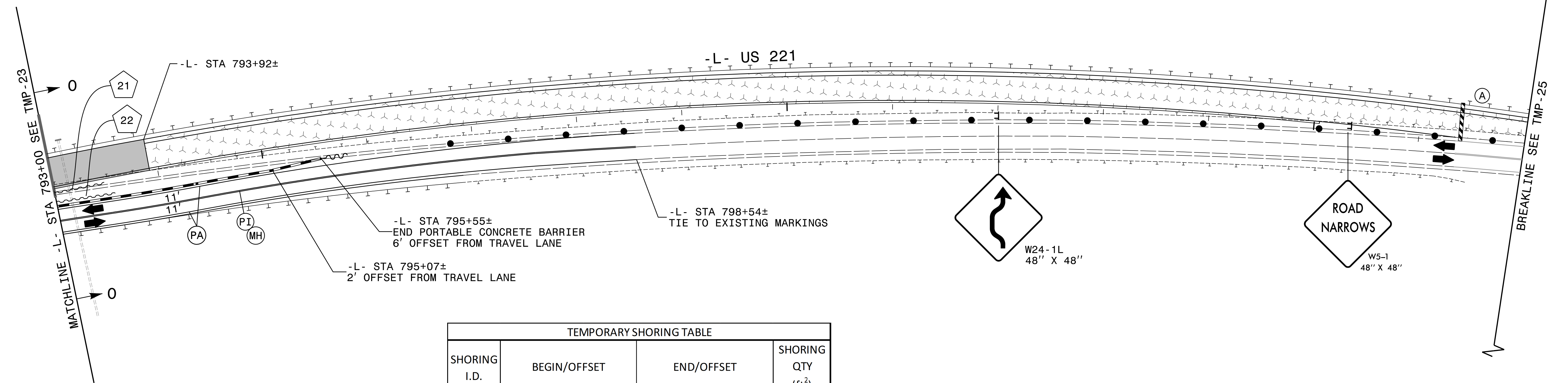
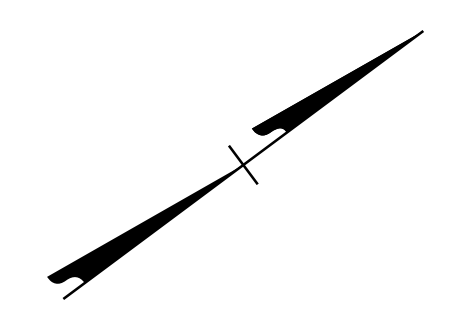
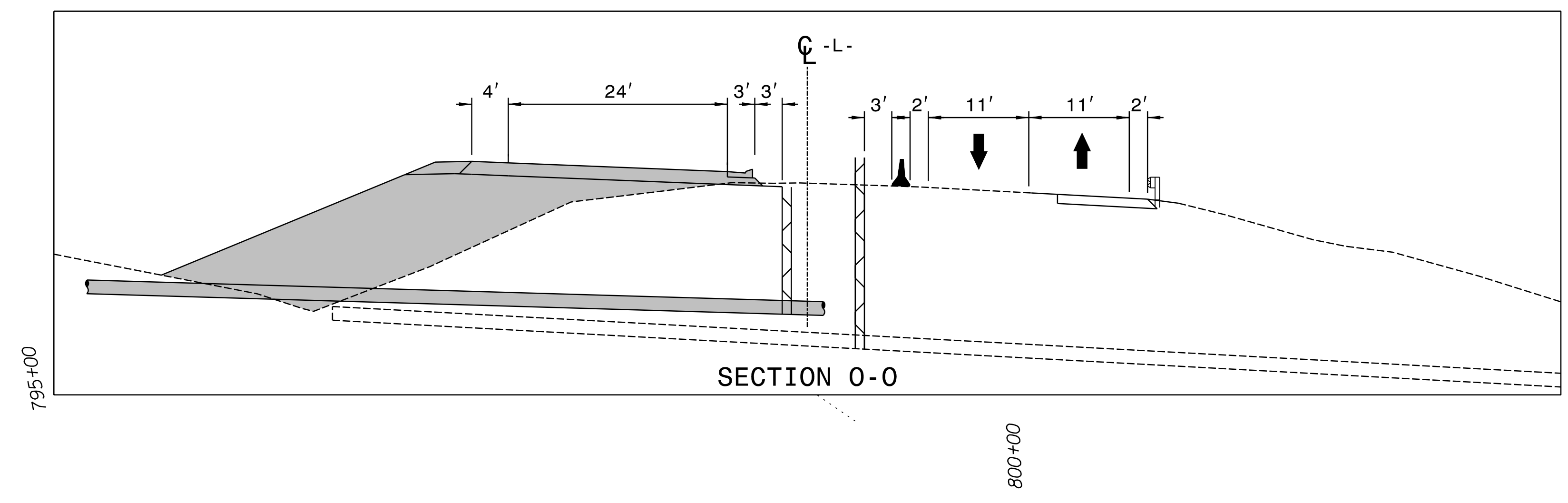
RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions



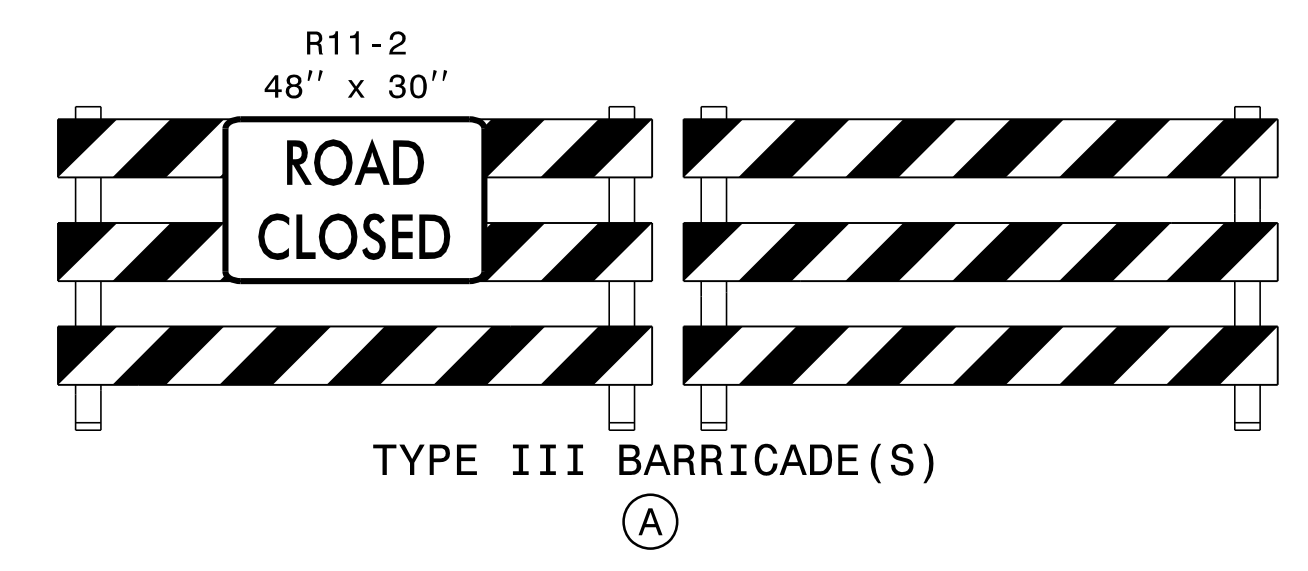
TEMPORARY SHORING TABLE					
SHORING I.D.	BEGIN/OFFSET		END/OFFSET		SHORING QTY (ft ²)
21	-L- STA 792+66±	2.7' LT	-L- STA 793+48±	2.8' LT	753
22	-L- STA 792+58±	3.9' RT	-L- STA 793+56±	8.7' RT	1410

2/7/2020 R-2915E-TMP_PSH23.dgn

APPROVED: DATE: 2/7/2020 SEAL			PHASE II
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

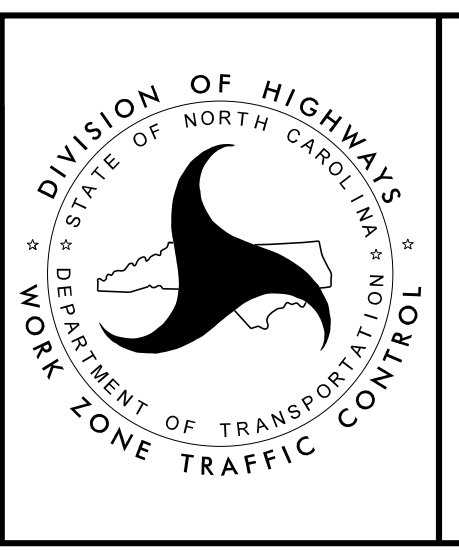


TEMPORARY SHORING TABLE					
SHORING I.D.	BEGIN/OFFSET		END/OFFSET		SHORING QTY (ft ²)
21	-L- STA 792+66±	2.7' LT	-L- STA 793+48±	2.8' LT	753
22	-L- STA 792+58±	3.9' RT	-L- STA 793+56±	8.7' RT	1410



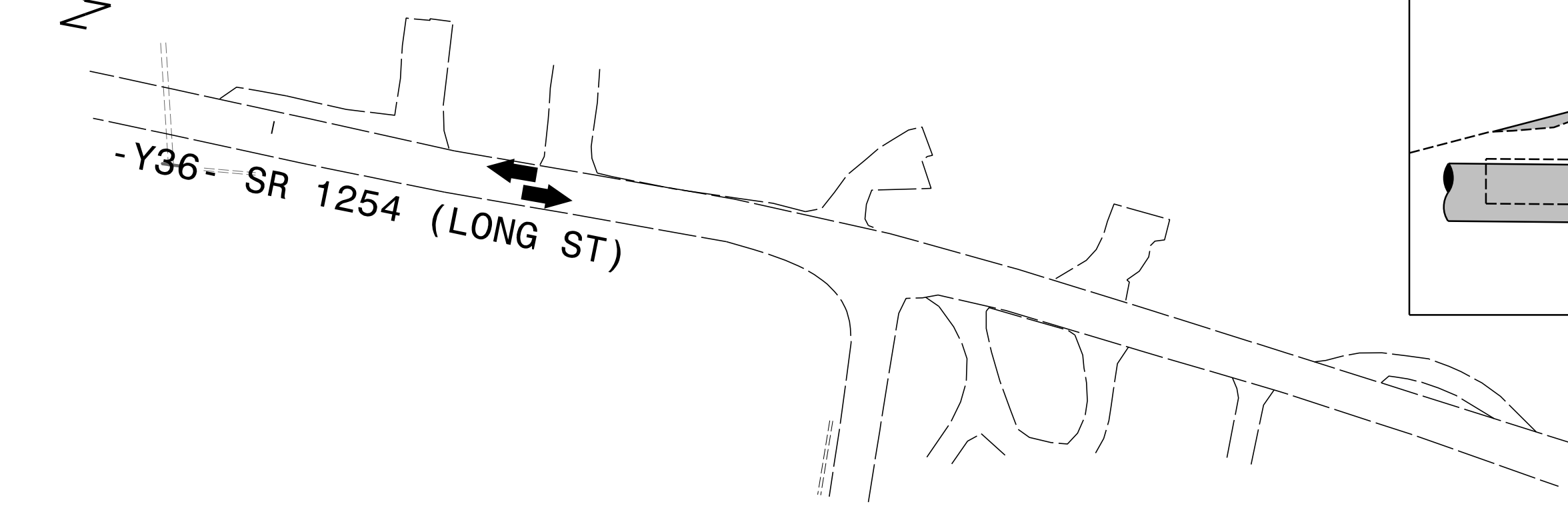
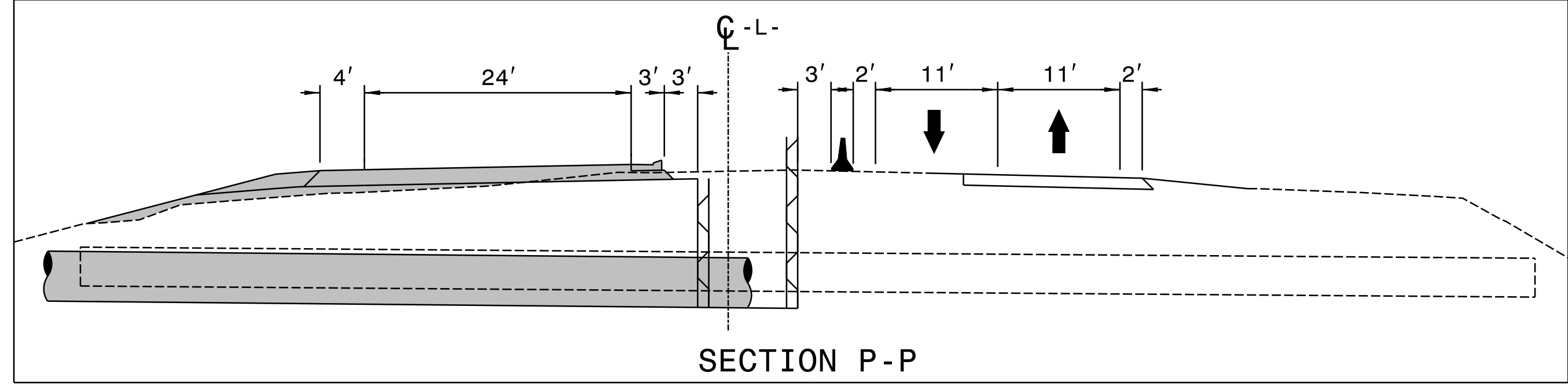
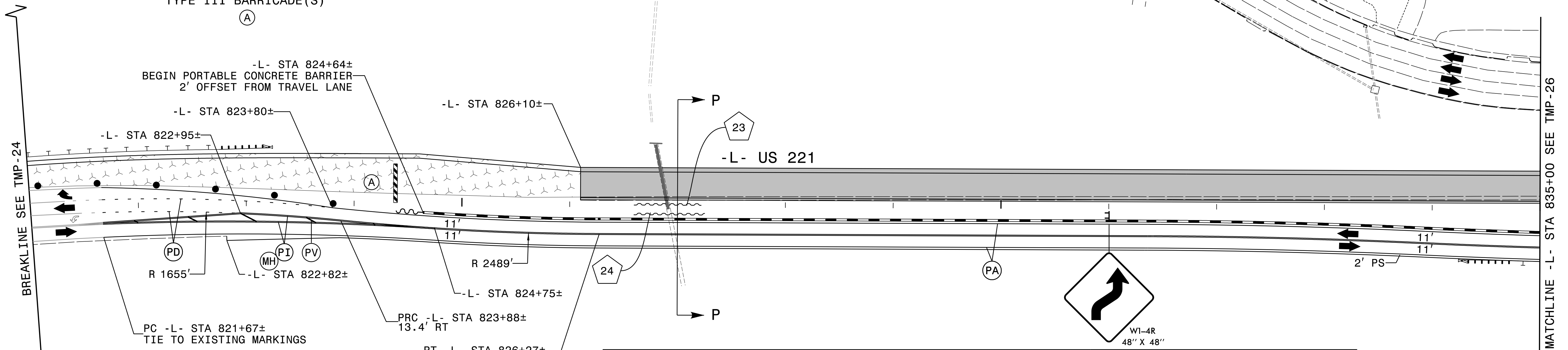
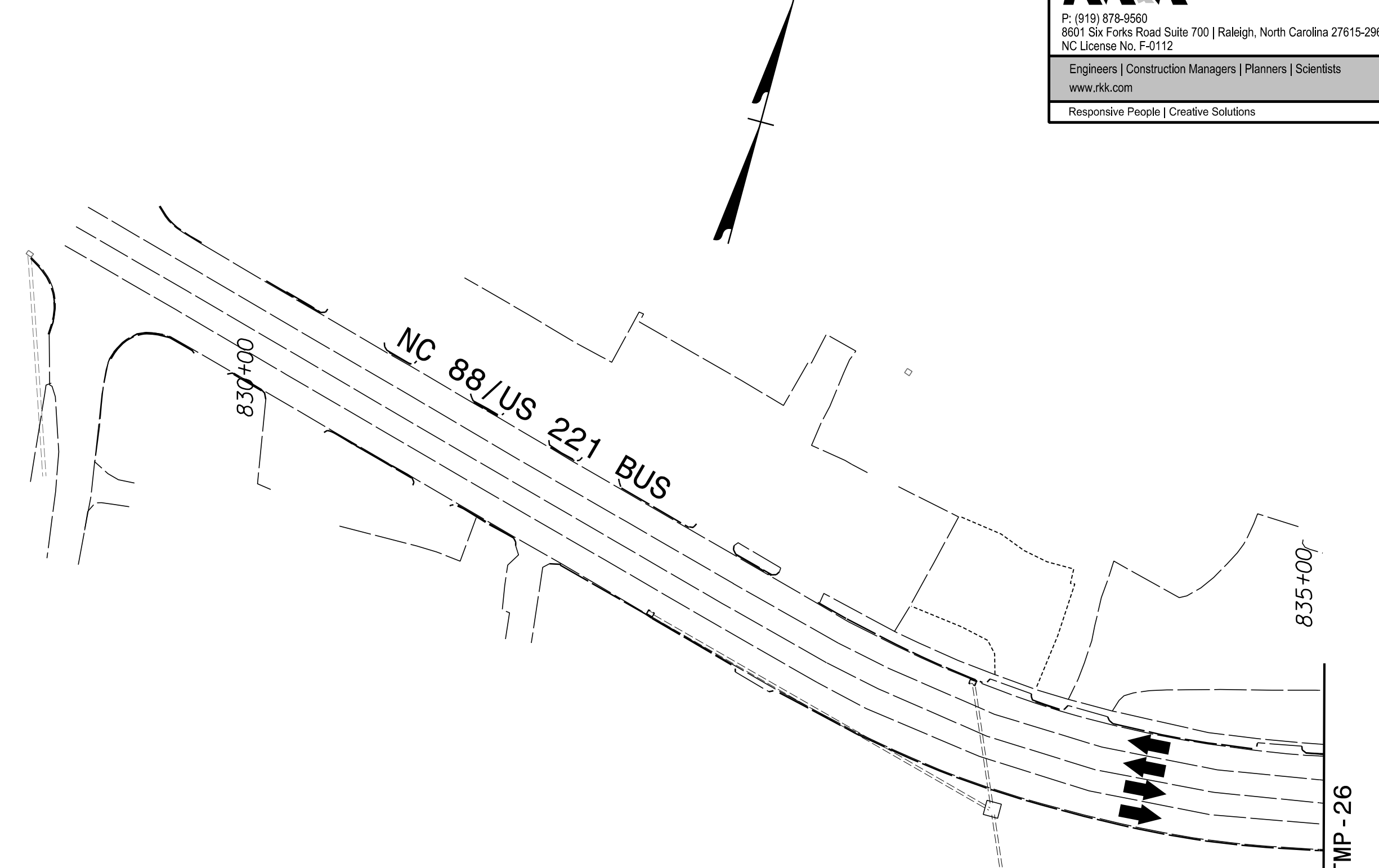
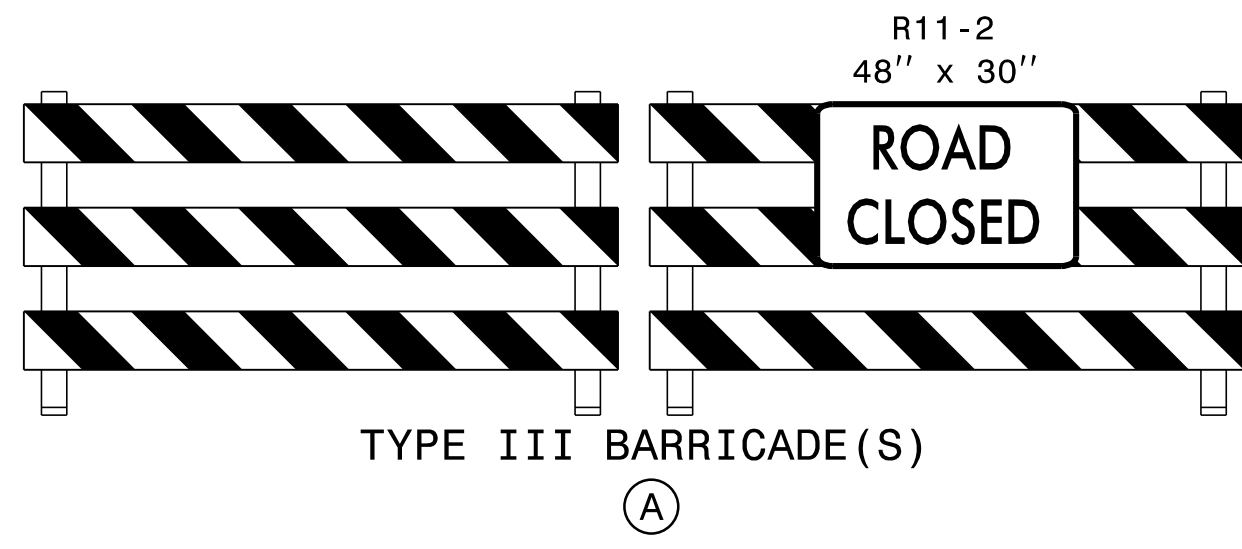
APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020

SEAL



PHASE II

TEMPORARY SHORING TABLE					
SHORING I.D.	BEGIN/OFFSET		END/OFFSET		SHORING QTY (ft ²)
23	-L- STA 826+60±	2.8' LT	-L- STA 827+22±	2.8' LT	443
24	-L- STA 826+59±	6.3' RT	-L- STA 827+25±	6.2' RT	691



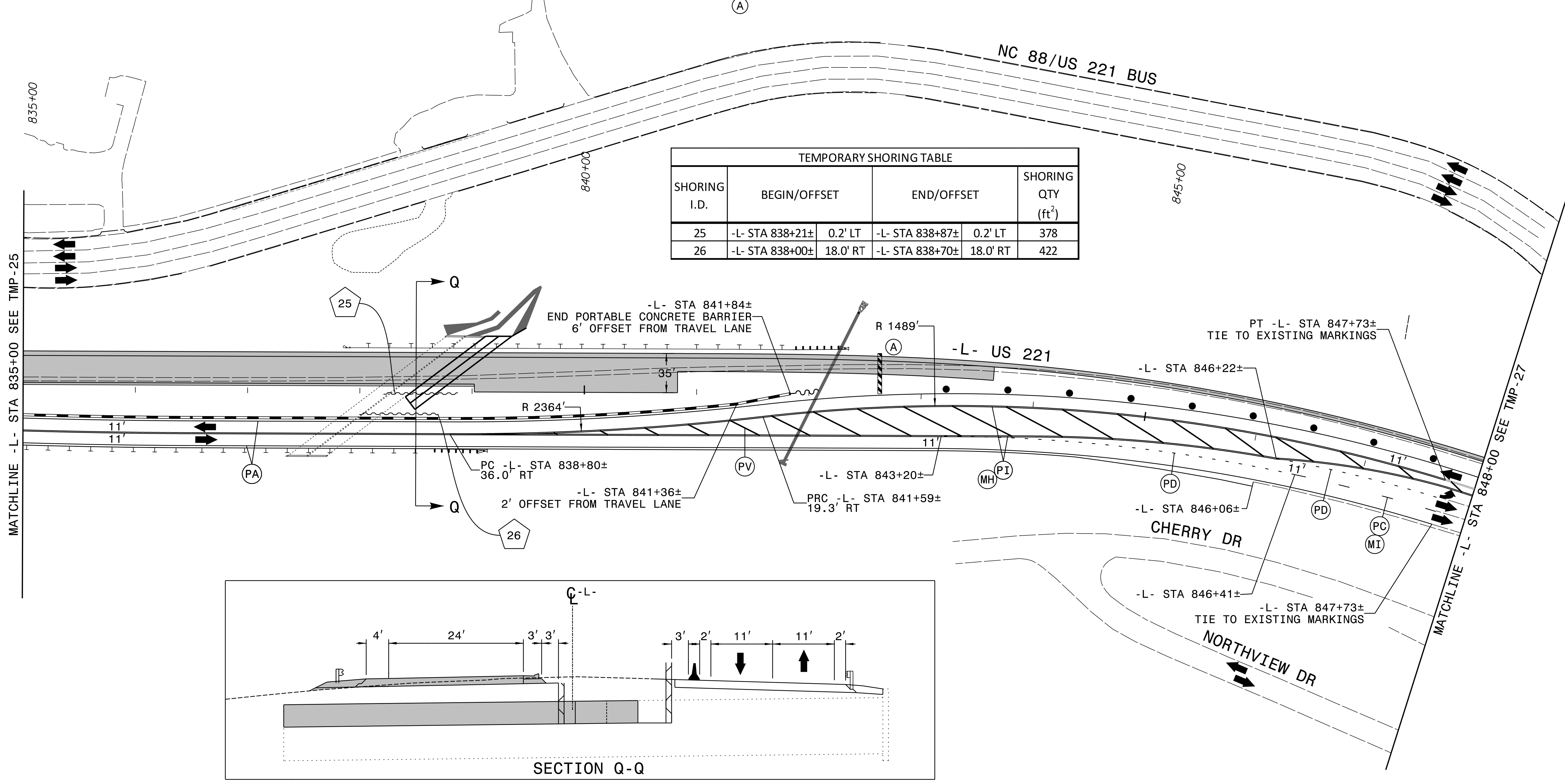
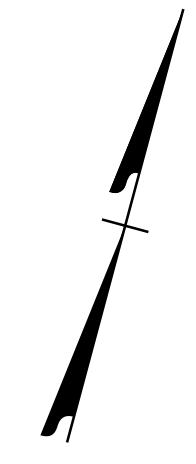
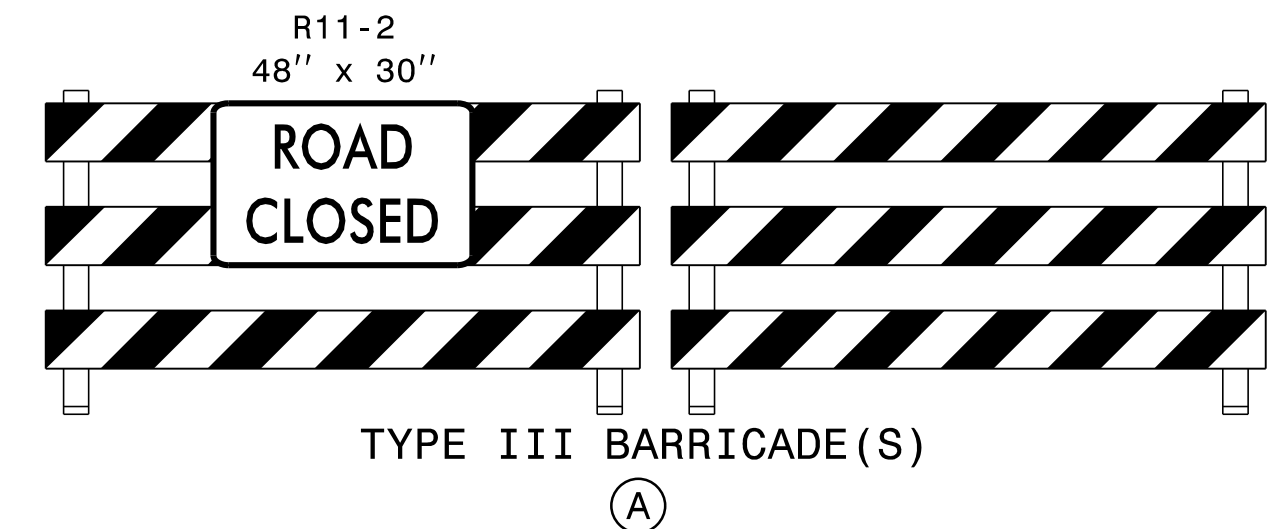
APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020

SEAL

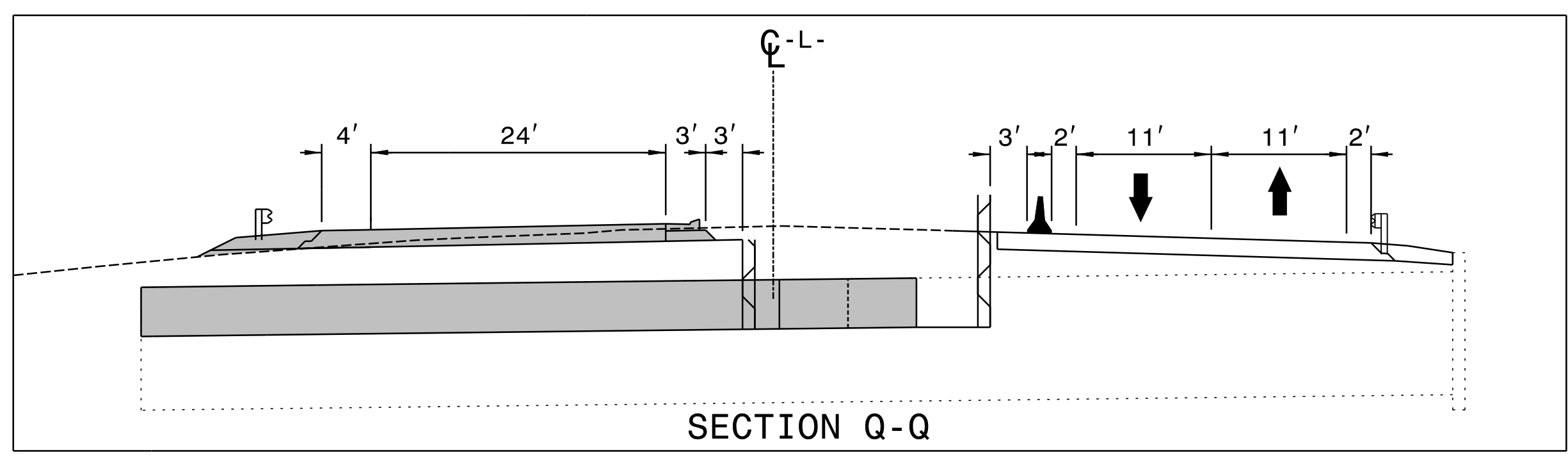
DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED

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

PHASE II



TEMPORARY SHORING TABLE					
SHORING I.D.	BEGIN/OFFSET		END/OFFSET		SHORING QTY (ft ²)
25	-L- STA 838+21±	0.2' LT	-L- STA 838+87±	0.2' LT	378
26	-L- STA 838+00±	18.0' RT	-L- STA 838+70±	18.0' RT	422

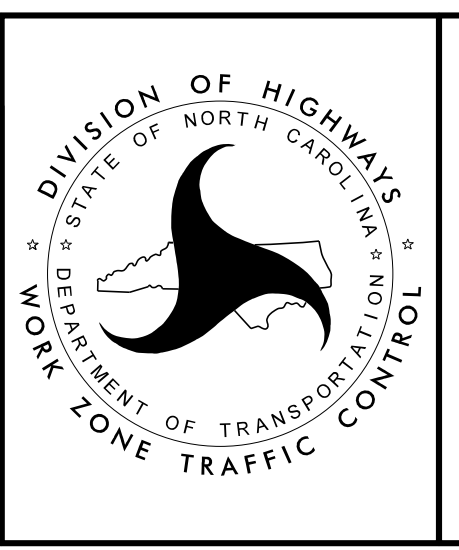


2/7/2020
R-2915E-TMP_PSH26.dgn

APPROVED: *Kevin W. Bisby*
DATE: 2/7/2020

SEAL

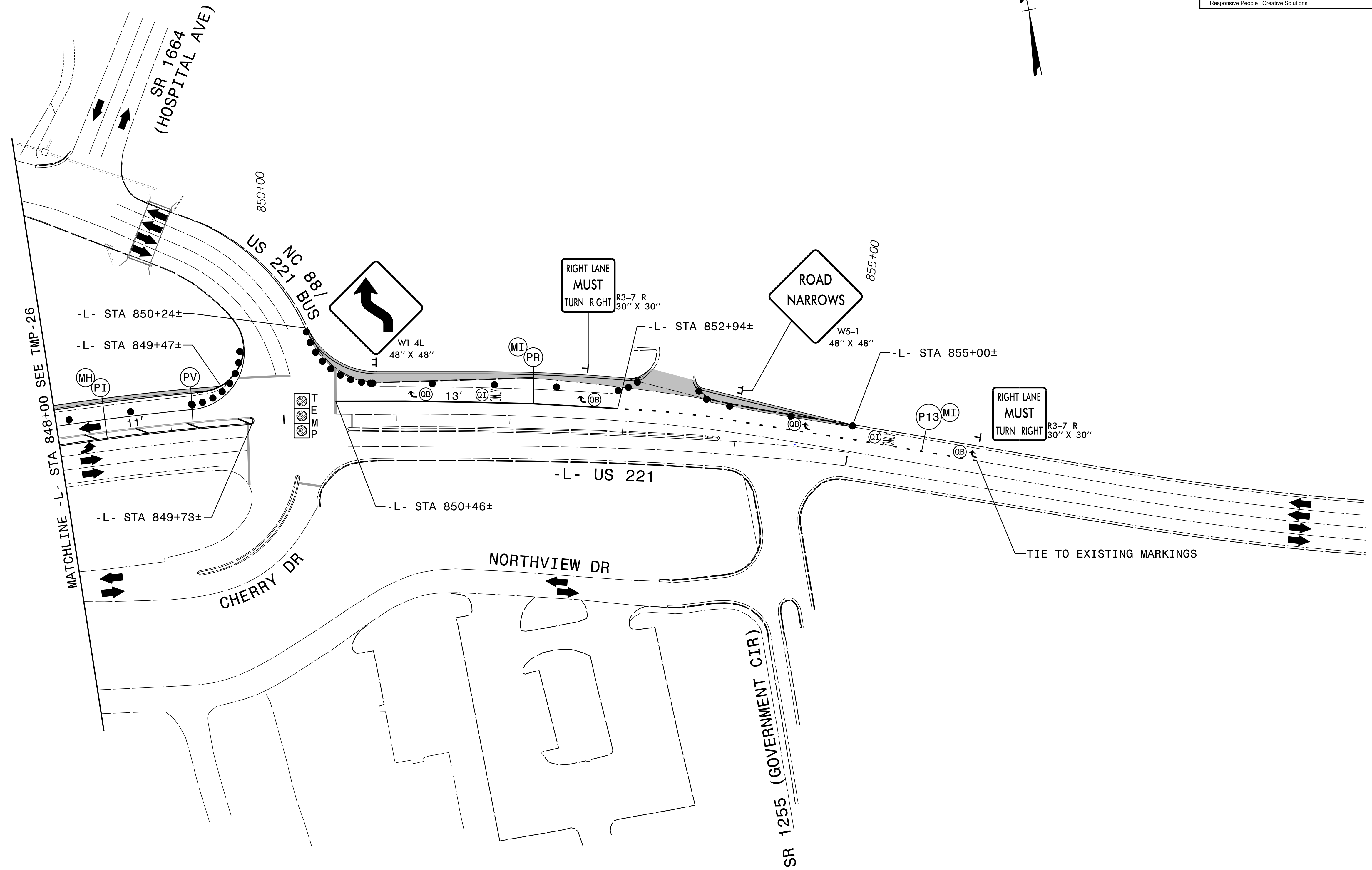
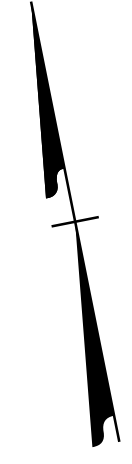
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



PHASE II

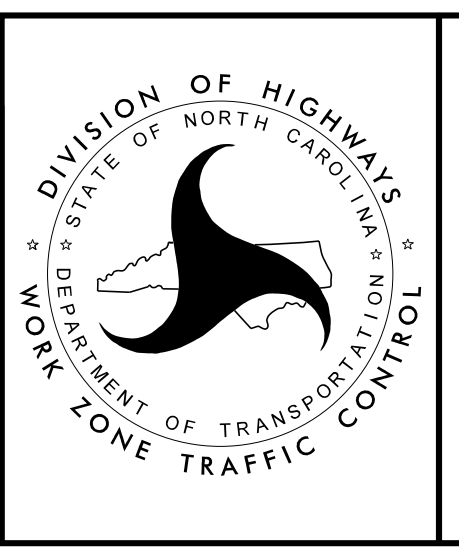
PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-27

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions



2/7/2020
R-2915E-TMP_PSH27.dgn

APPROVED: Kevin W. Bisby
 DATE: 2/7/2020
 SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL 21047
 KEVIN W. BISBY

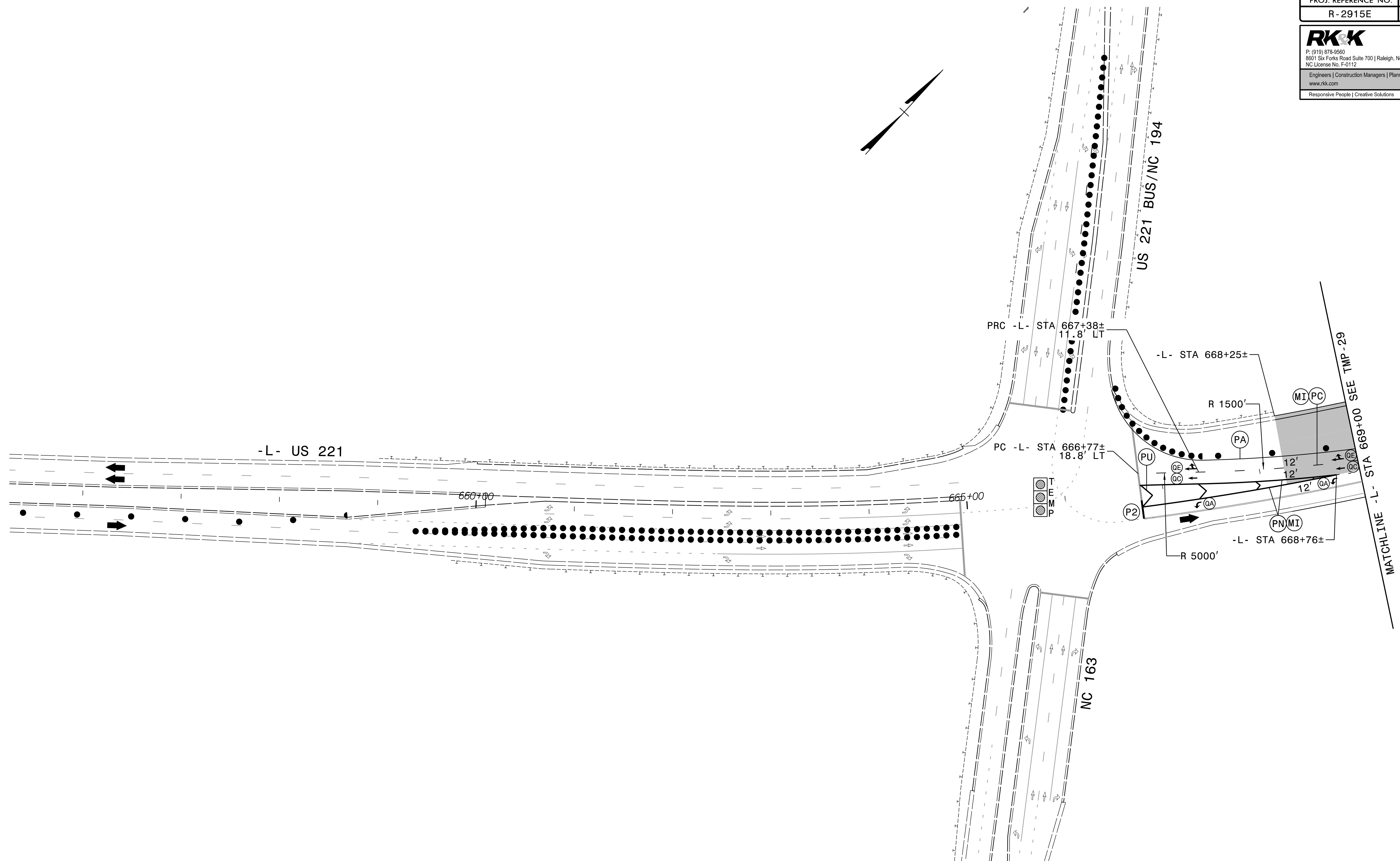


PHASE II

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-28

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions



2/7/2020
R-2915E-TMP_PSH28.dgn

APPROVED: *Kevin W. Esby*
DocuSigned by: Kevin W. Esby
3CE3C9A8DF468E1
 DATE: 2/7/2020

SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL 21047
 KEVIN W. ESBY

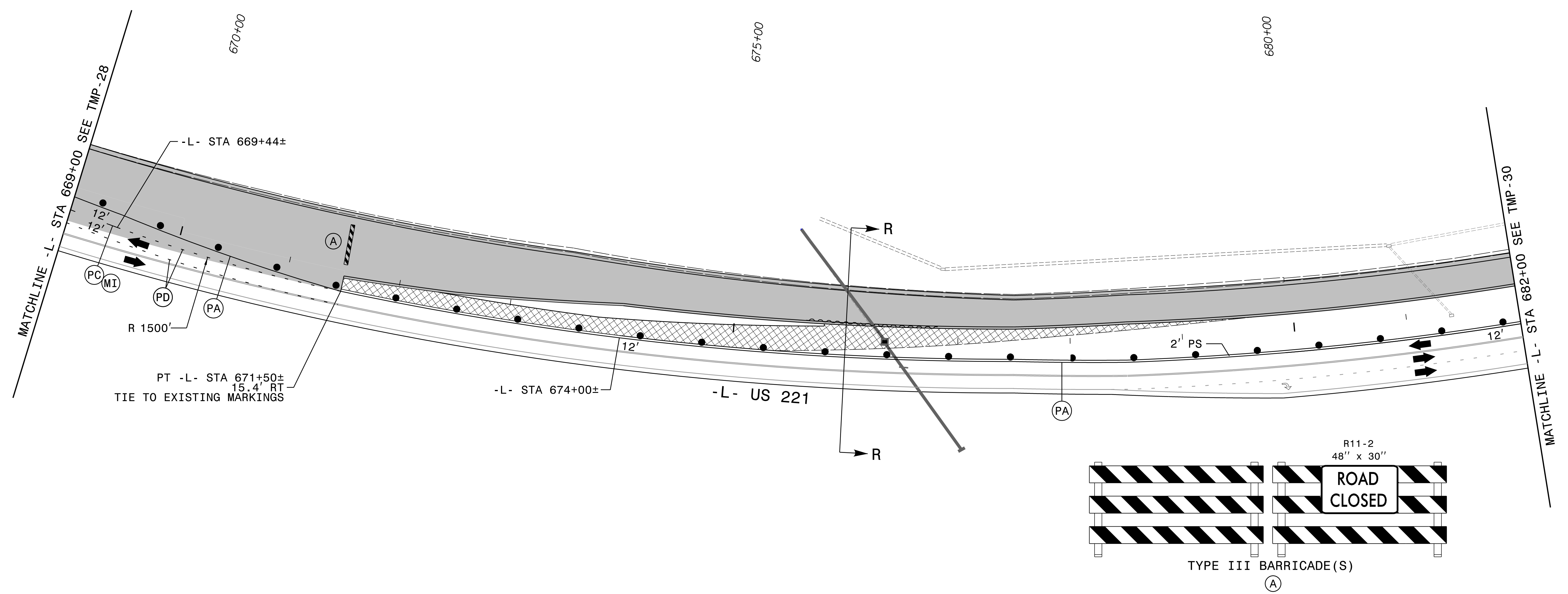
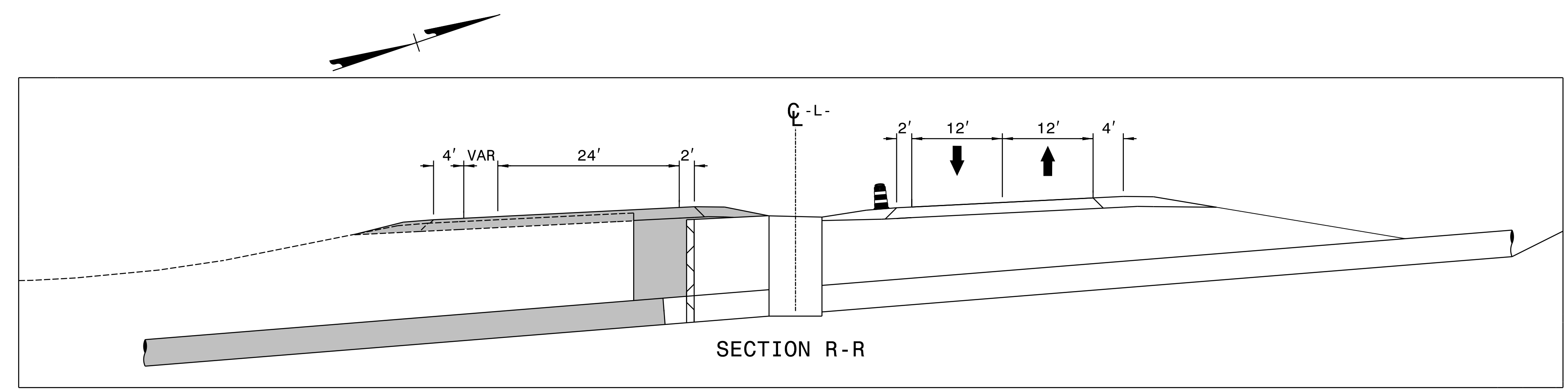


PHASE III

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

PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-29

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions

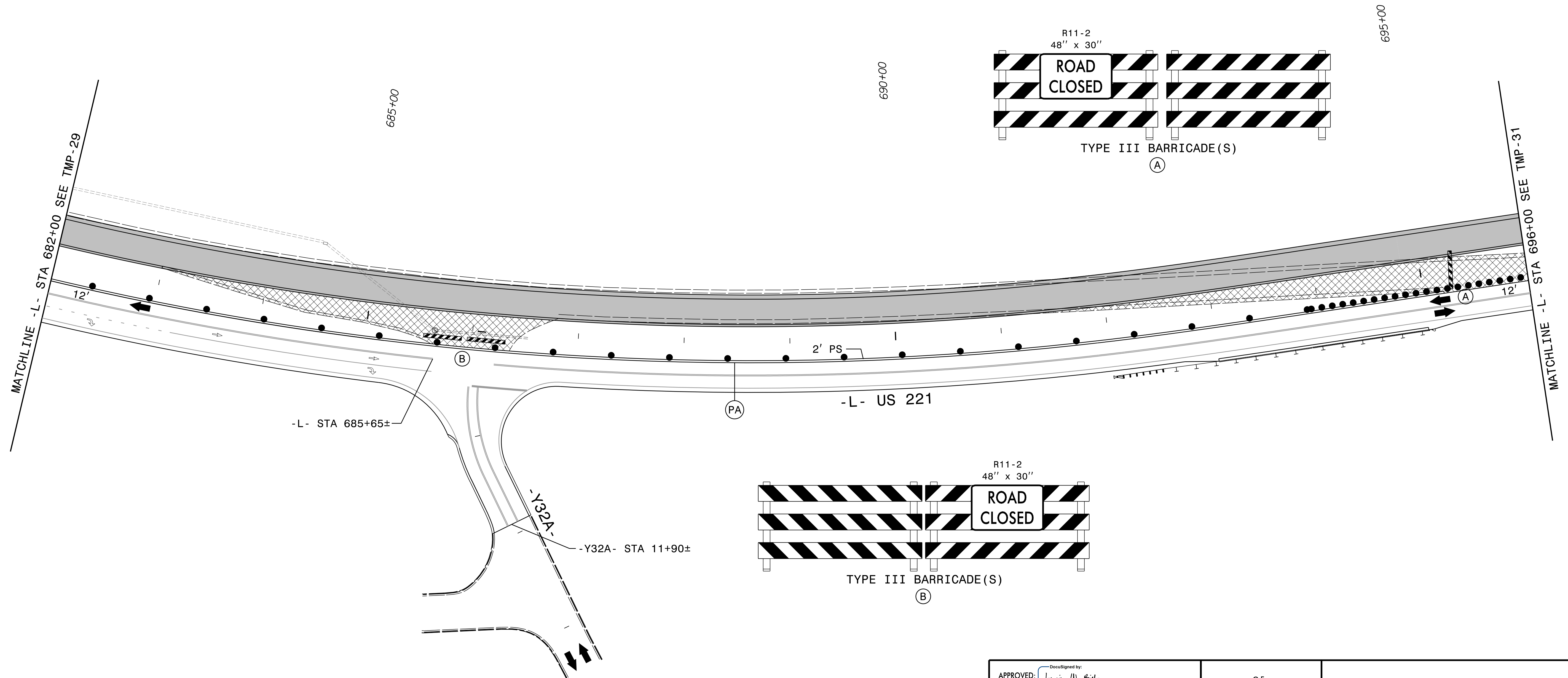
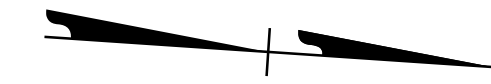


2/7/2020
R-2915E_TMP_PSH29.dgn

APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020
 SEAL

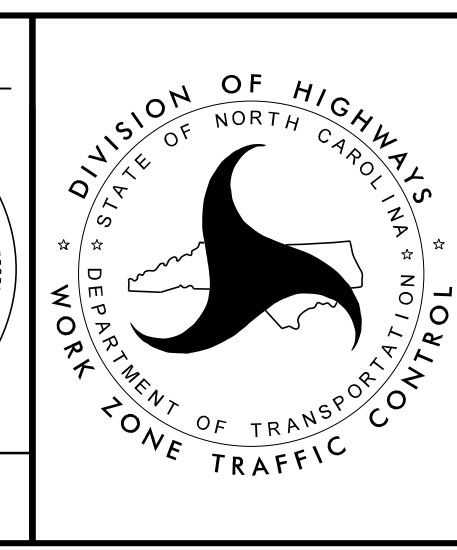
PHASE III

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020

SEAL

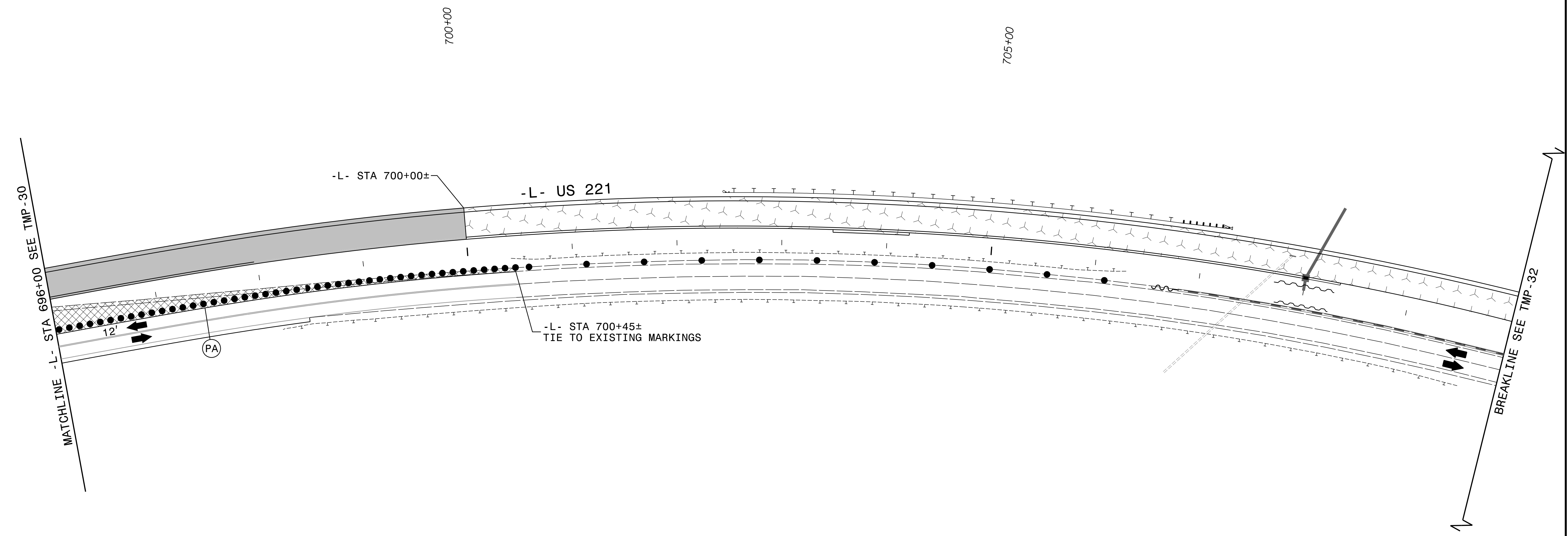
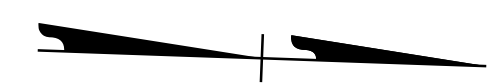


PHASE III

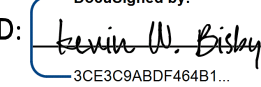
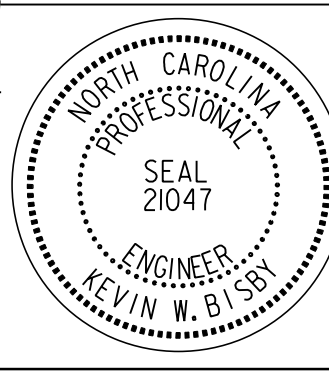
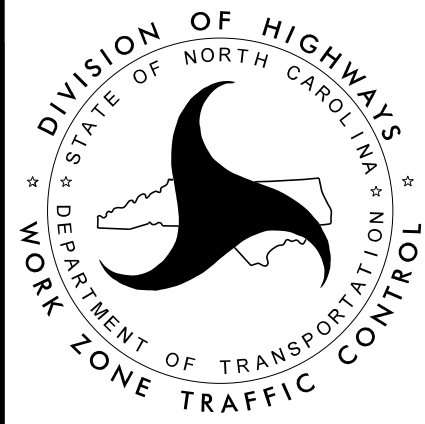
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

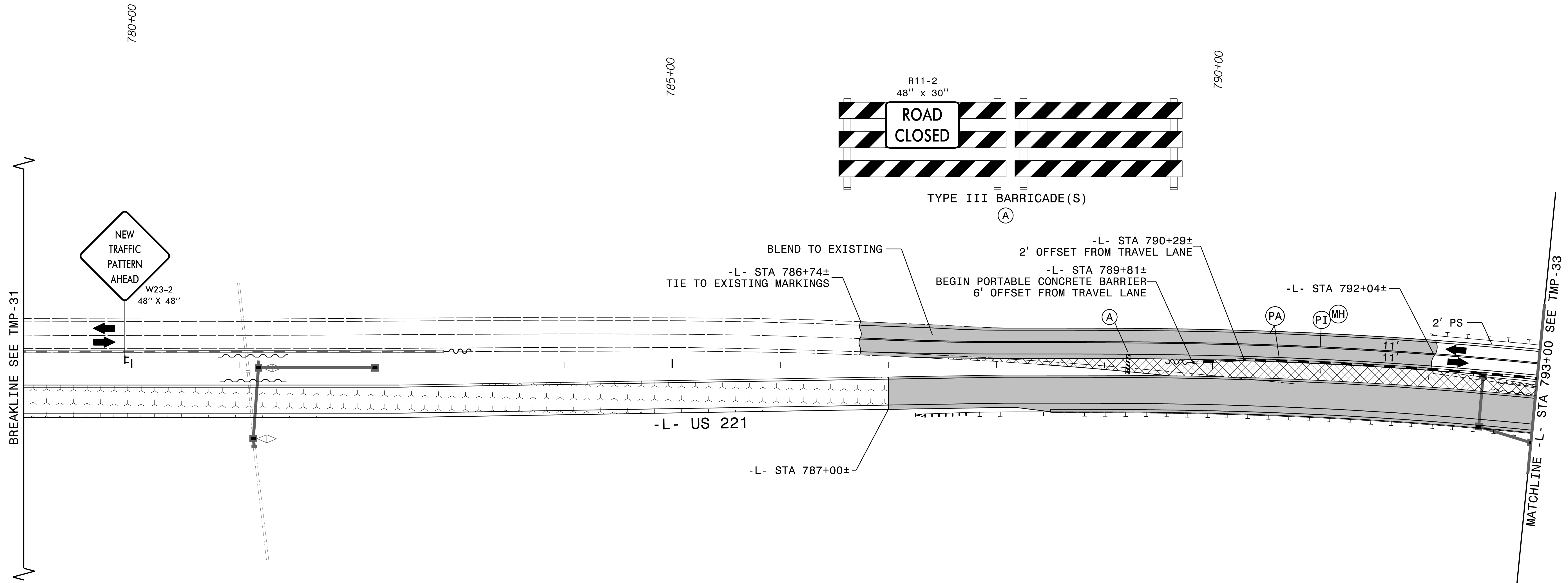
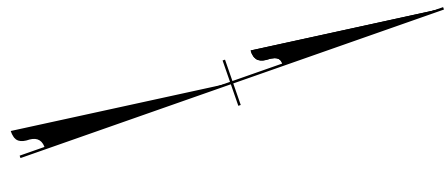
PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-31

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions



2/7/2020
R-2915E_TMP_PSH31.dgn

APPROVED:  DATE: 2/7/2020 SEAL			PHASE III
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			



2/7/2020
 R-2915E-TMP_PSH32.dgn

APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020

SEAL

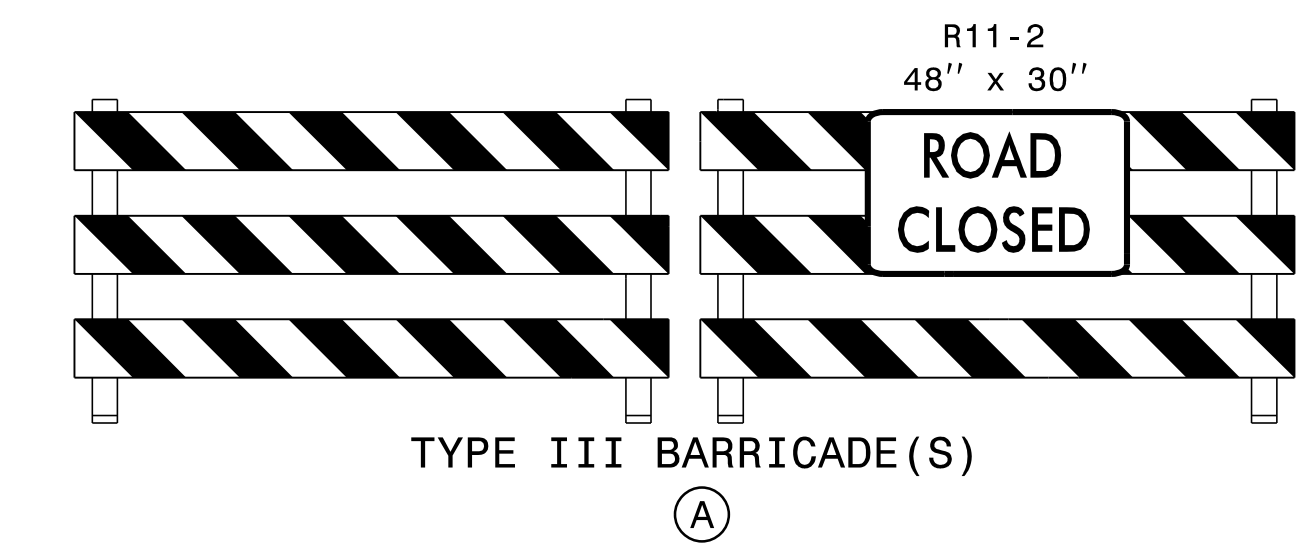
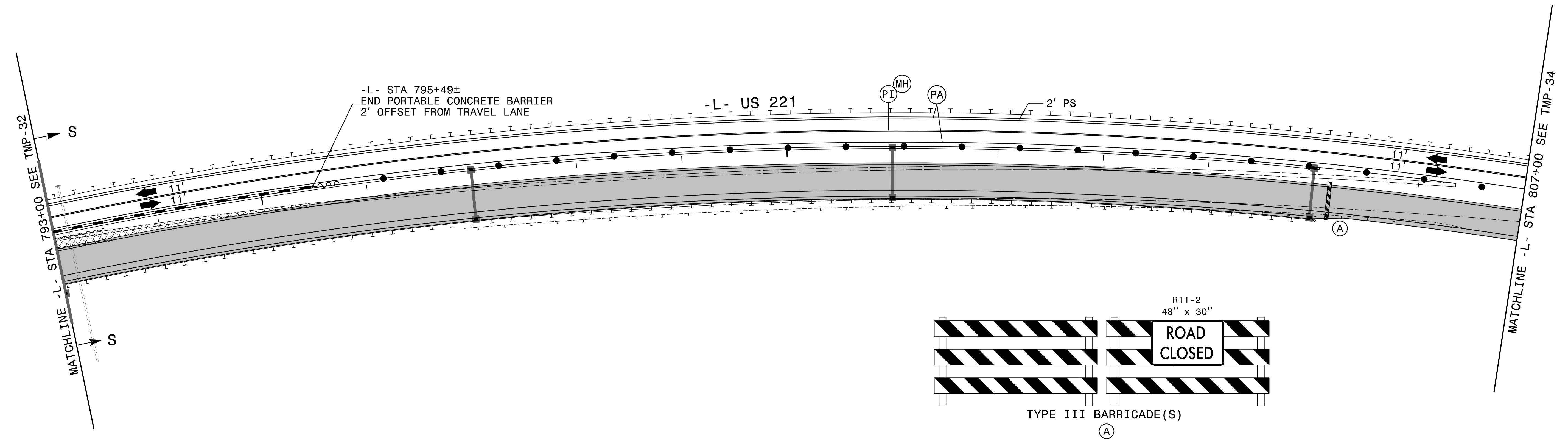
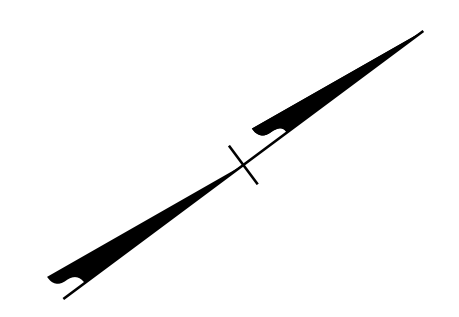
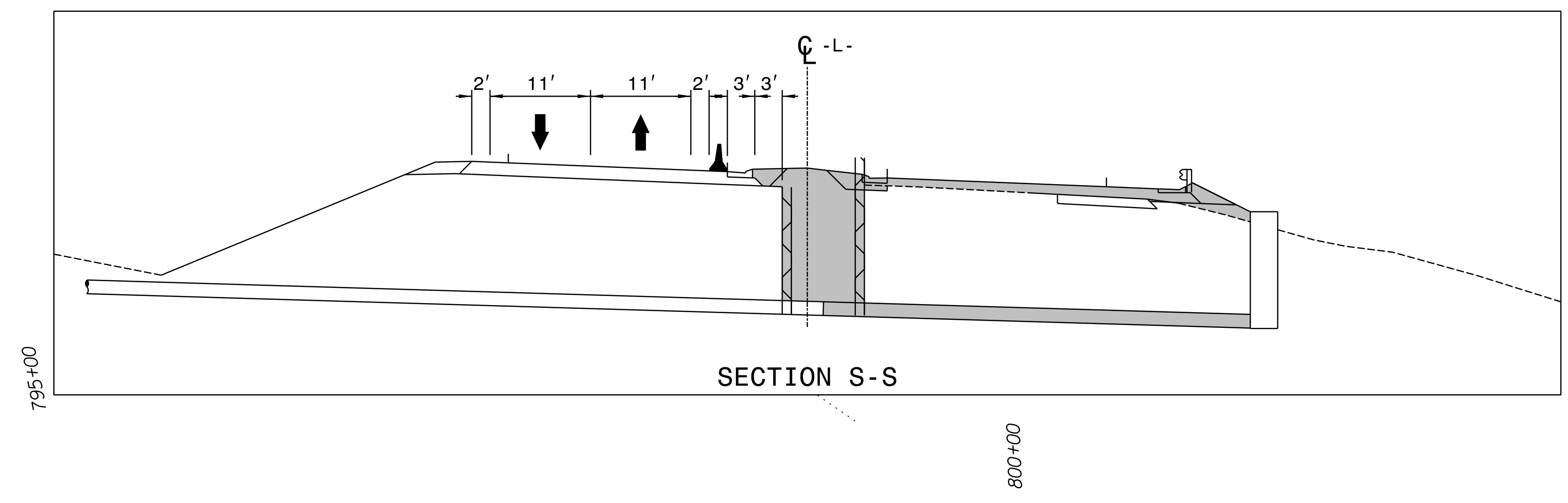


PHASE III

DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED

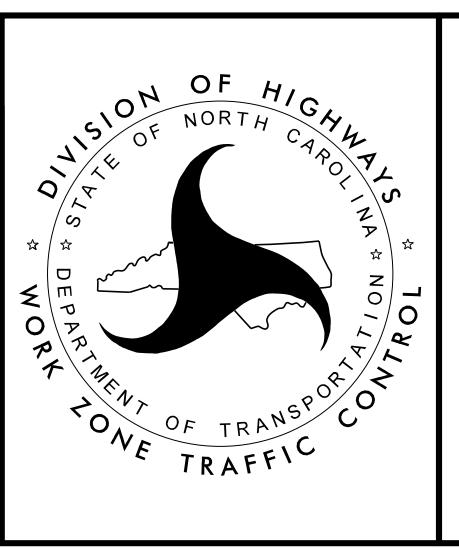
PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-33

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions



2/7/2020
R-2915E_TMP_PSH33.dgn

APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020
 SEAL

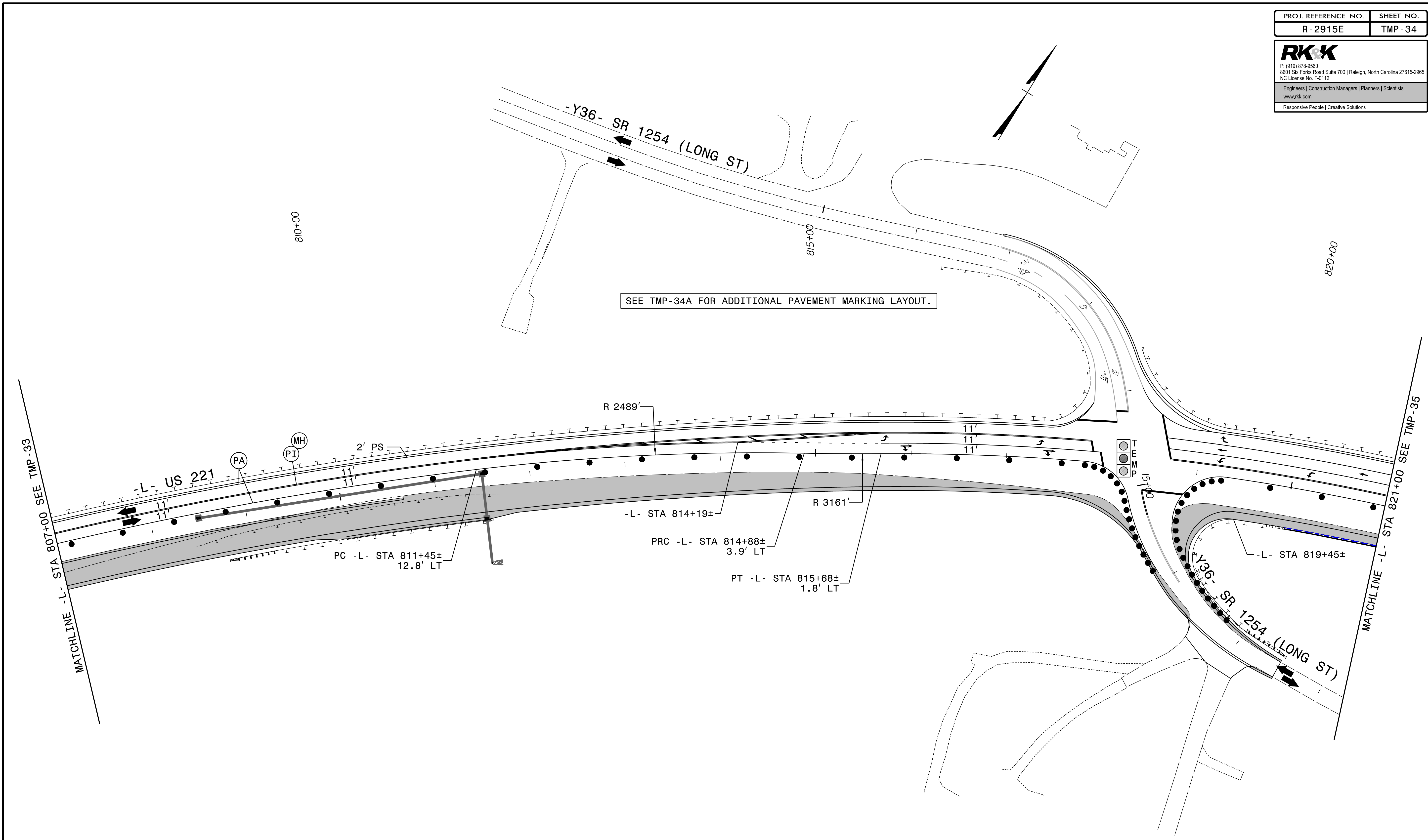


PHASE III

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

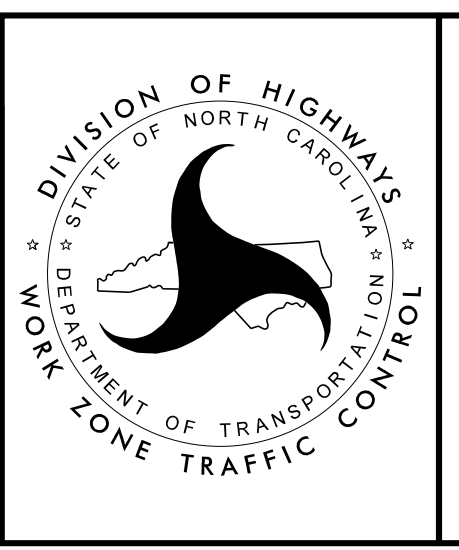
PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-34

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions



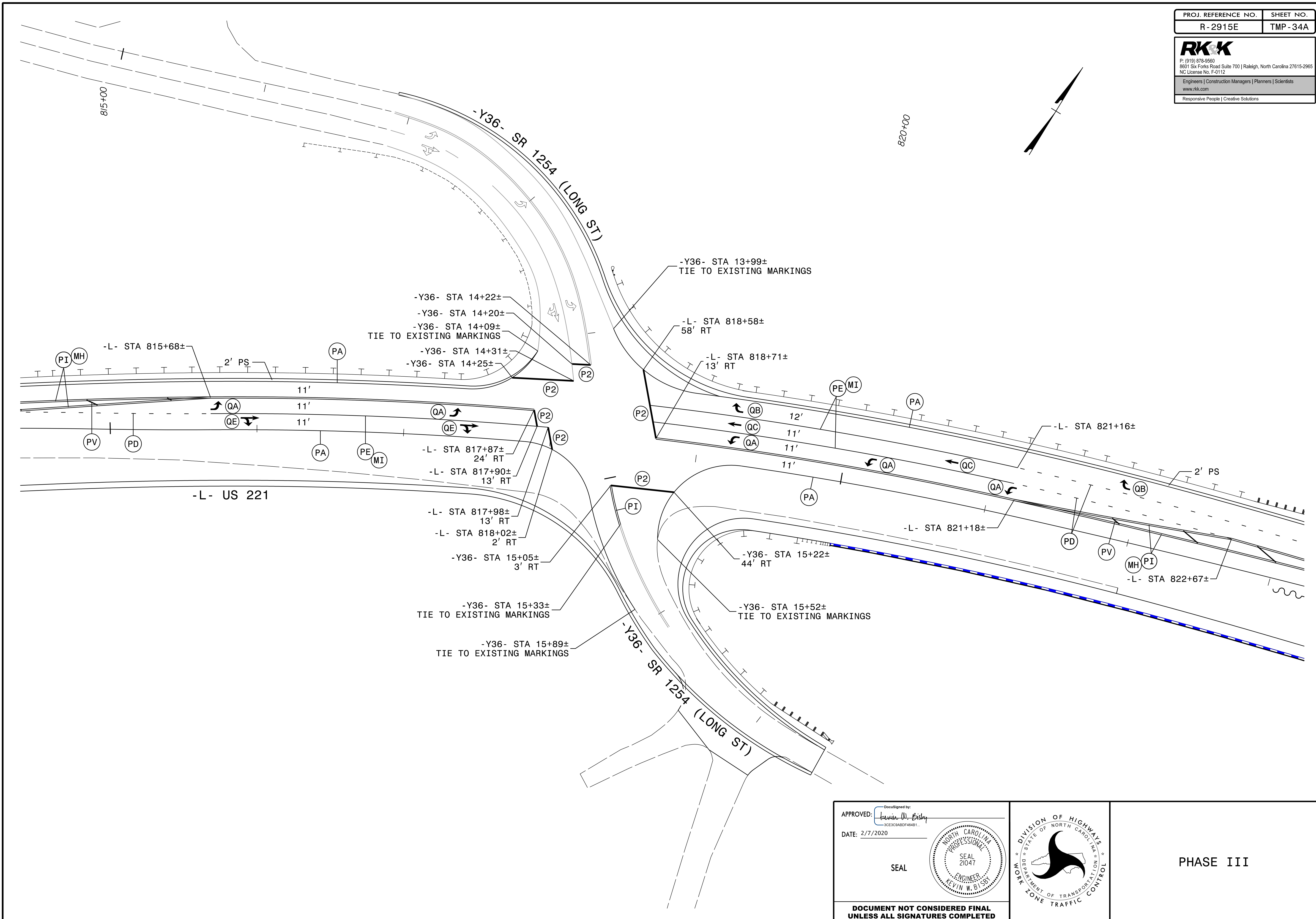
2/7/2020
R-2915E-TMP_PSH34.dgn

APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020
 SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL 21047
 KEVIN W. BISBY



PHASE III

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



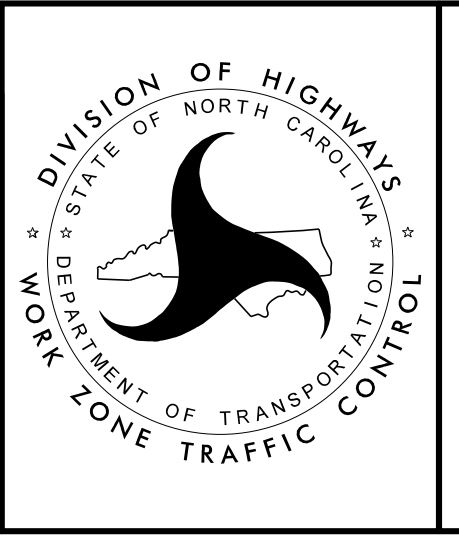
2/7/2020
R-2915E_TMP_PSH34A.dgn

APPROVED: Kevin W. Bisby
 DATE: 2/7/2020

SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL 21047
 KEVIN W. BISBY

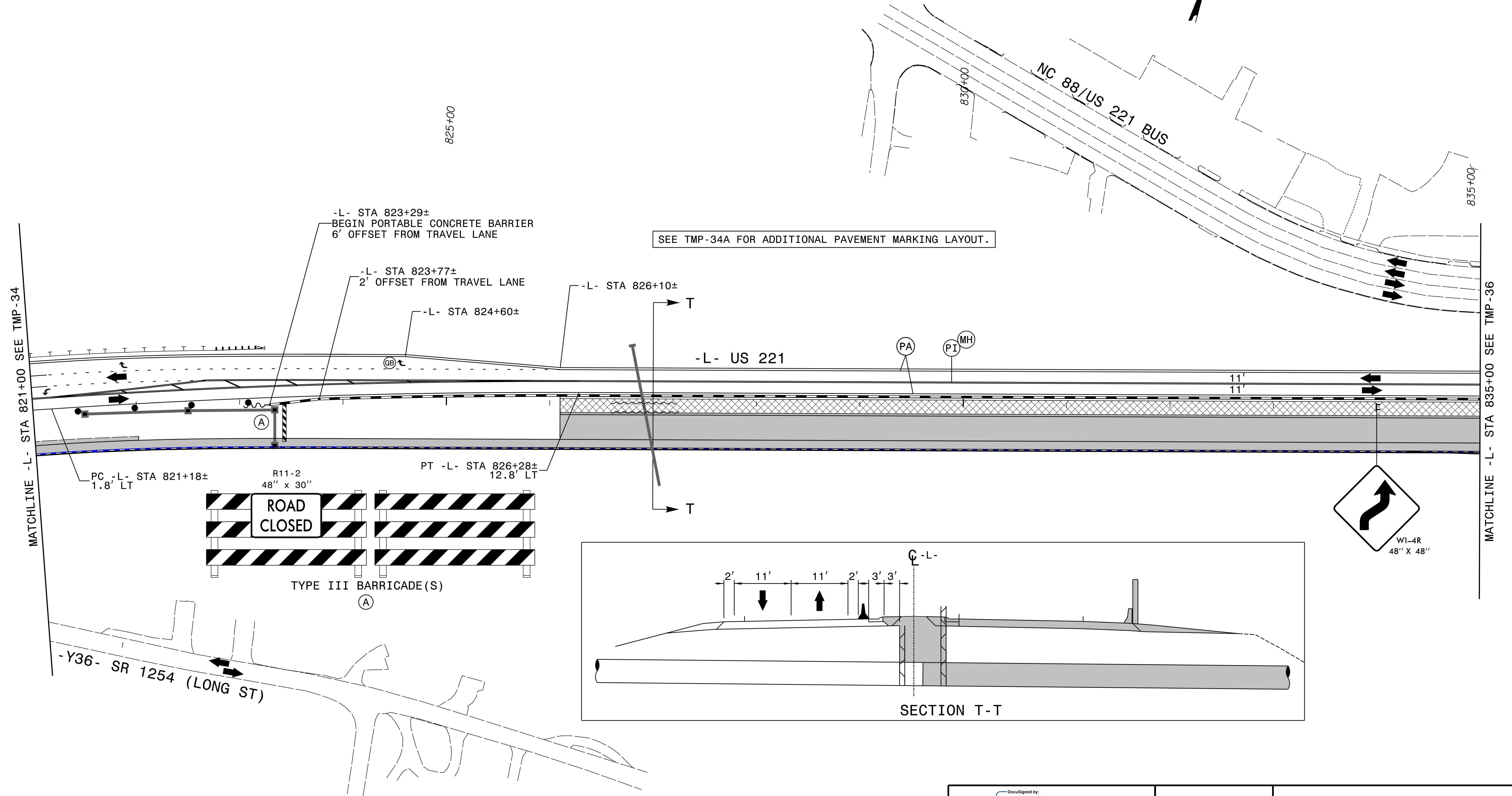
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



PHASE III

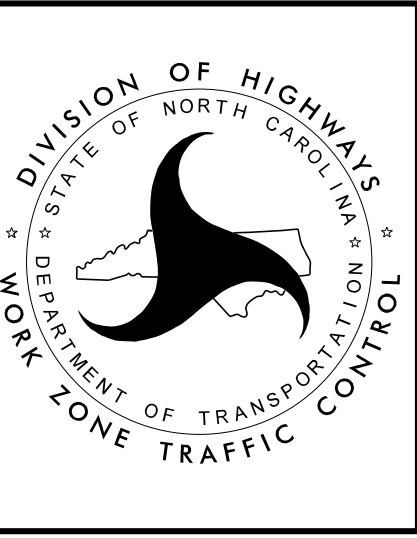
PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-35

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions



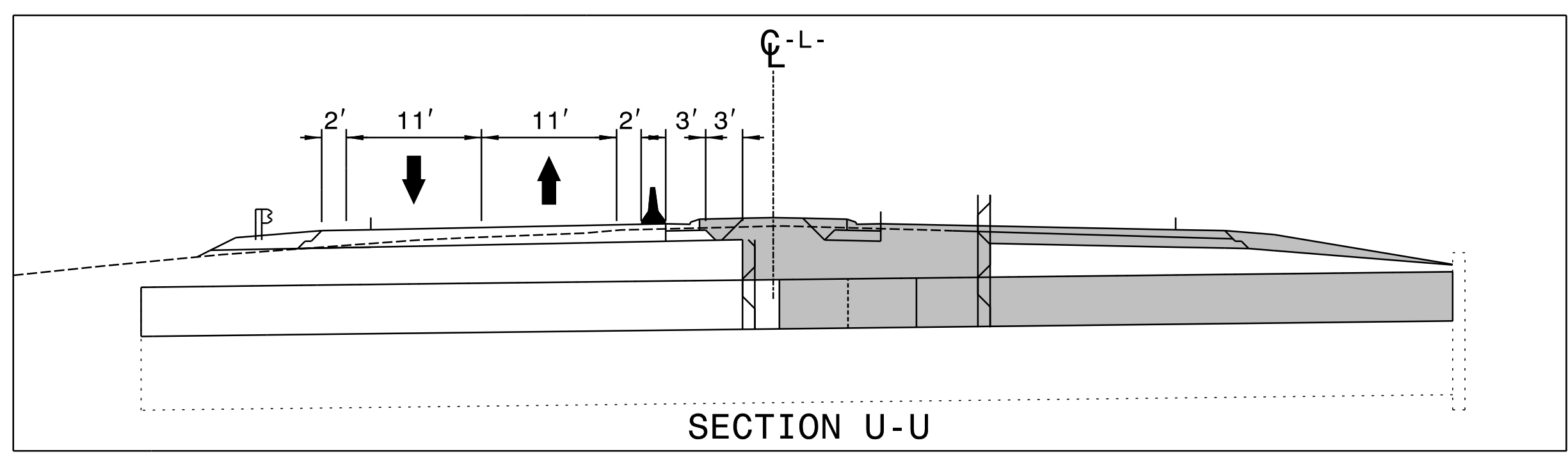
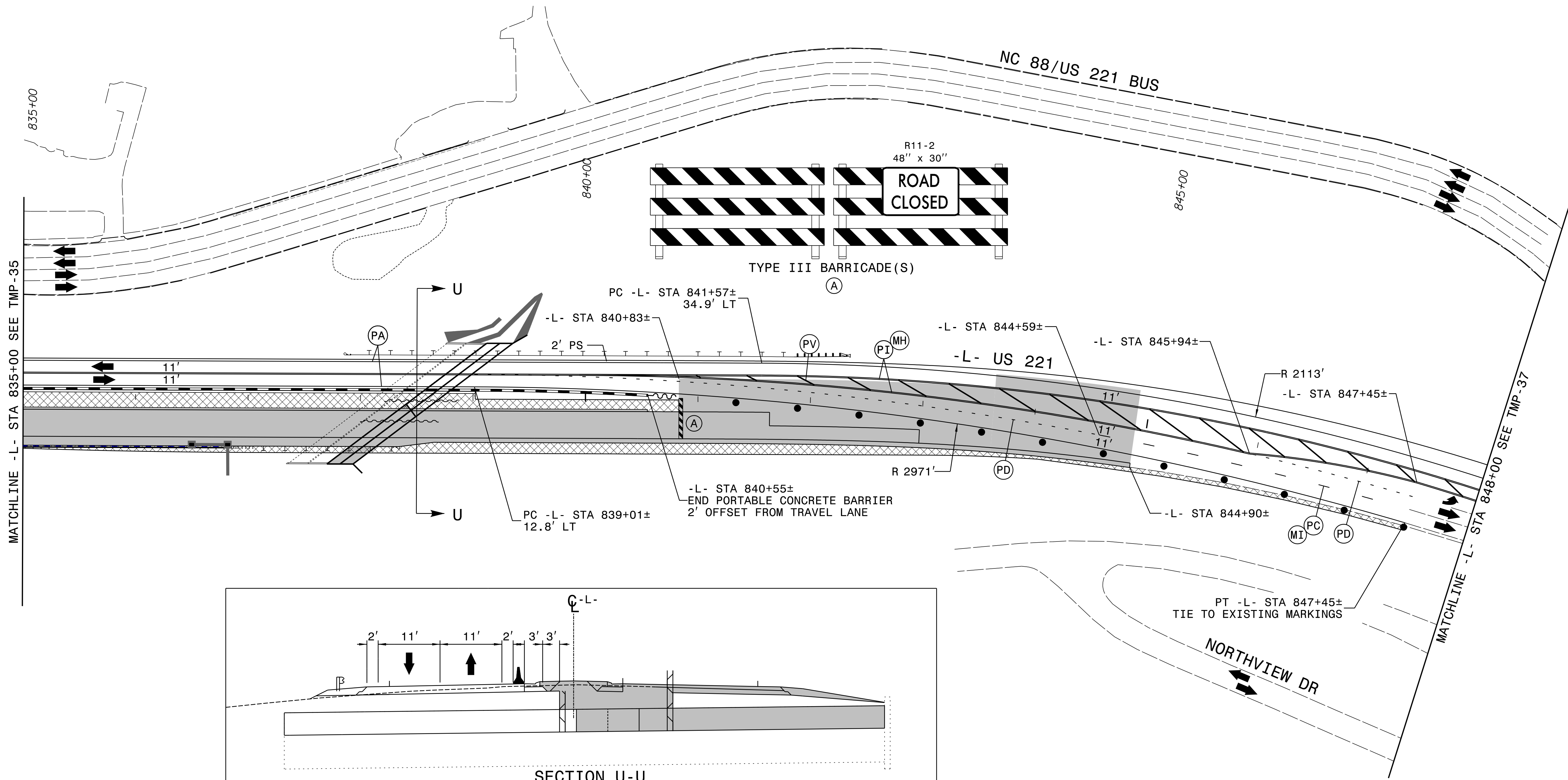
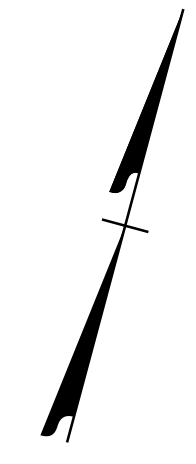
2/7/2020
R-2915E_TMP_PSH35.dgn

APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020
 SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL 21047
 KEVIN W. BISBY



PHASE III

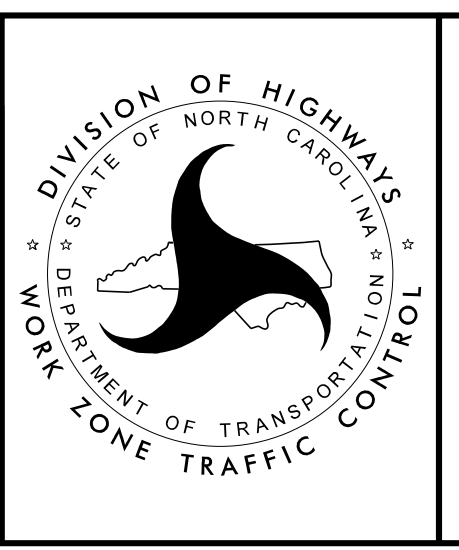
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020

SEAL

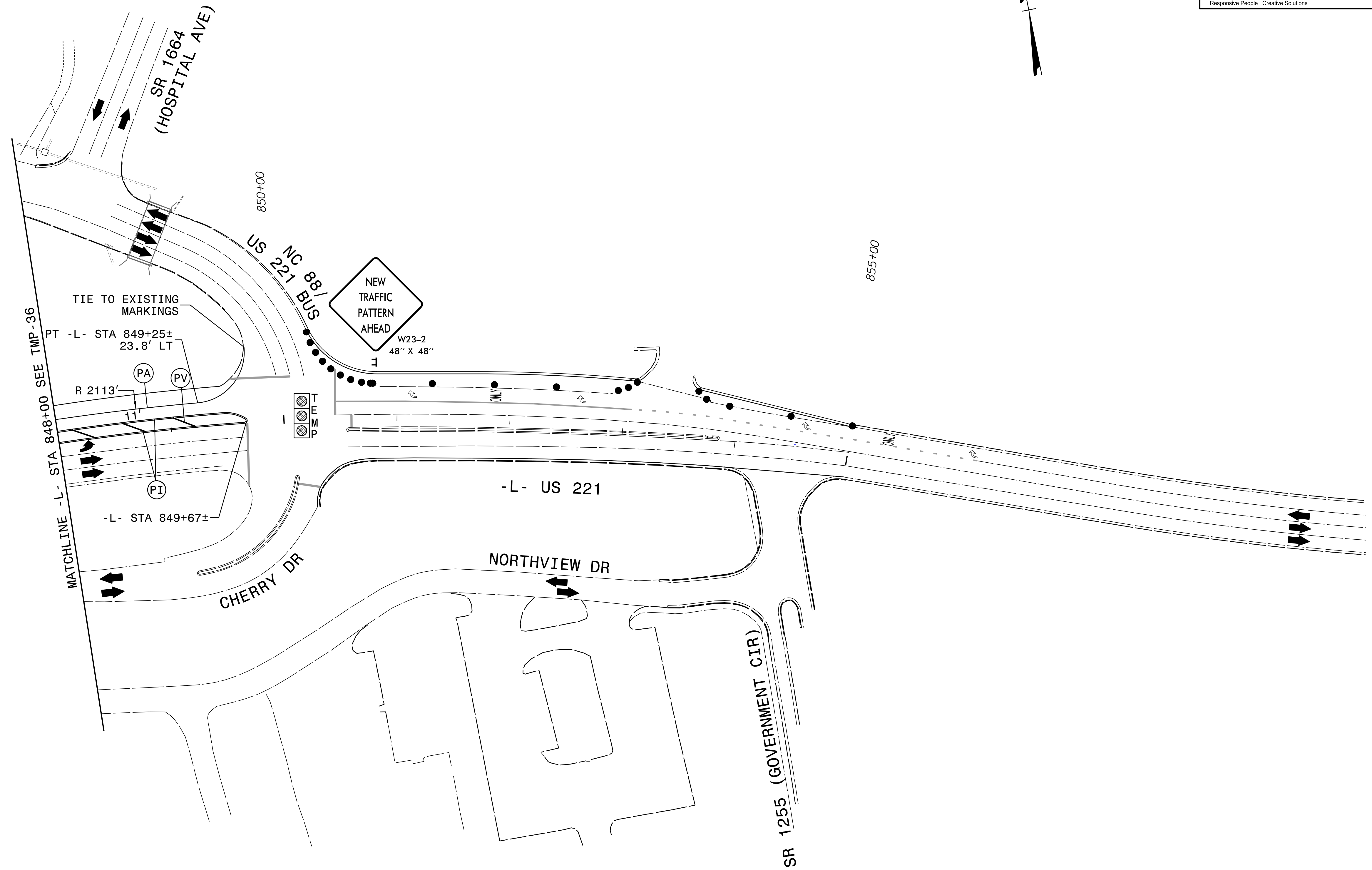
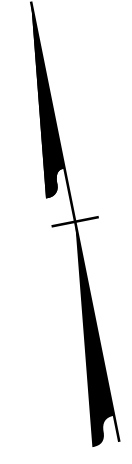
DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED



PHASE III

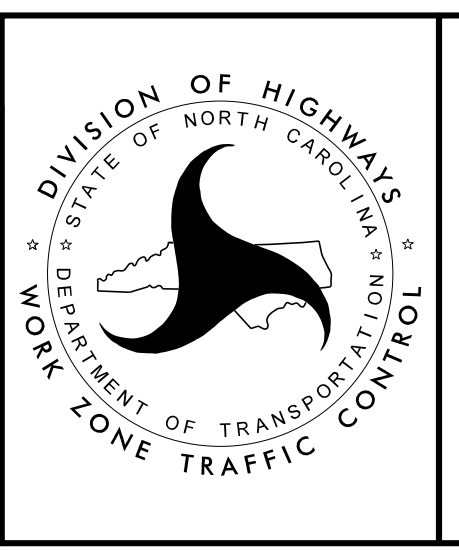
PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-37

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions



2/7/2020
 R-2915E-TMP_PSH37.dgn

APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020
 SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL 21047
 KEVIN W. BISBY

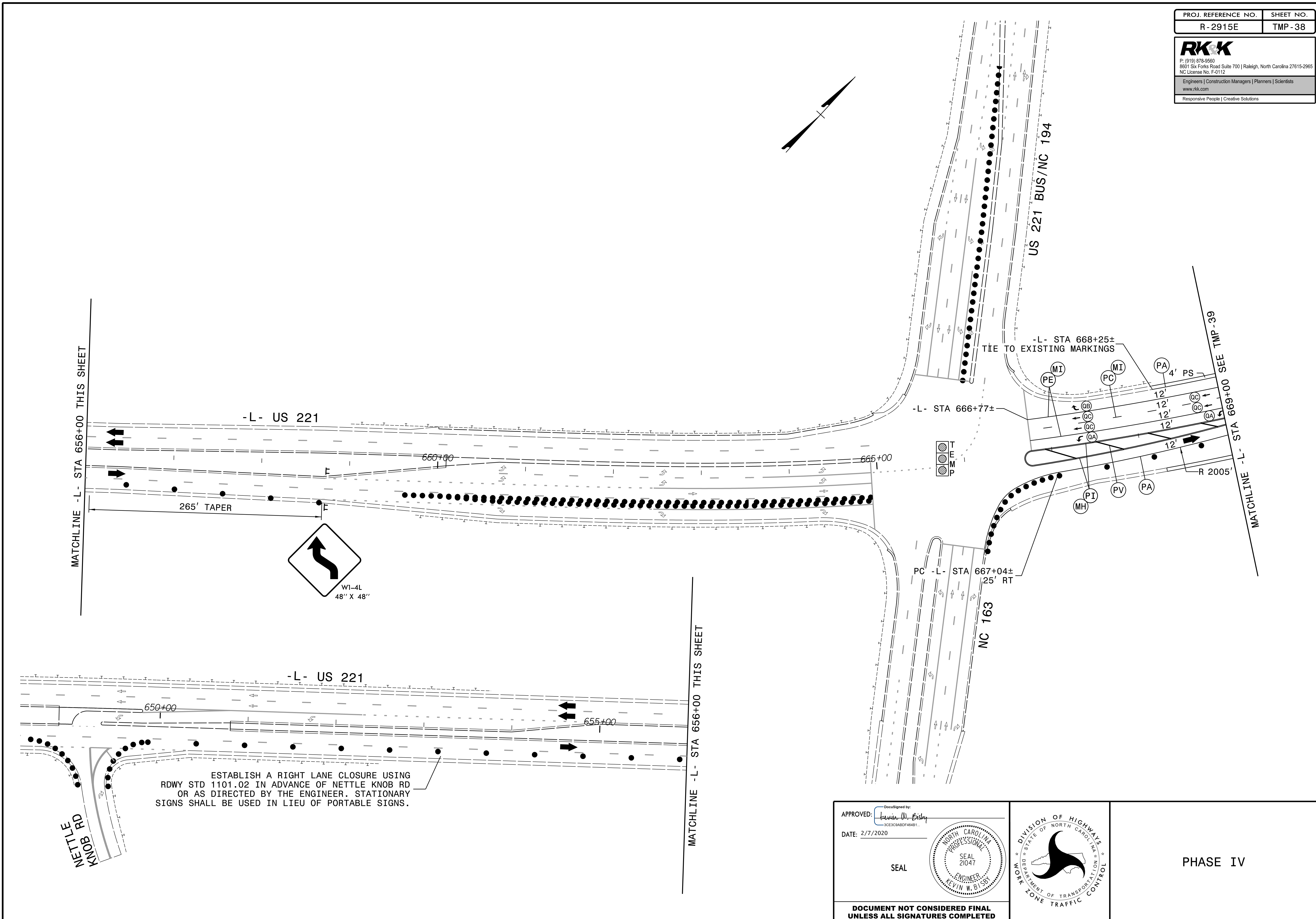


PHASE III

DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED

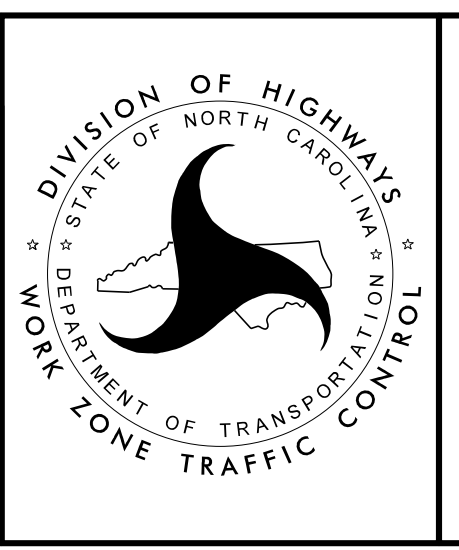
PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-38

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions



2/7/2020
R-2915E-TMP_PSH38.dgn

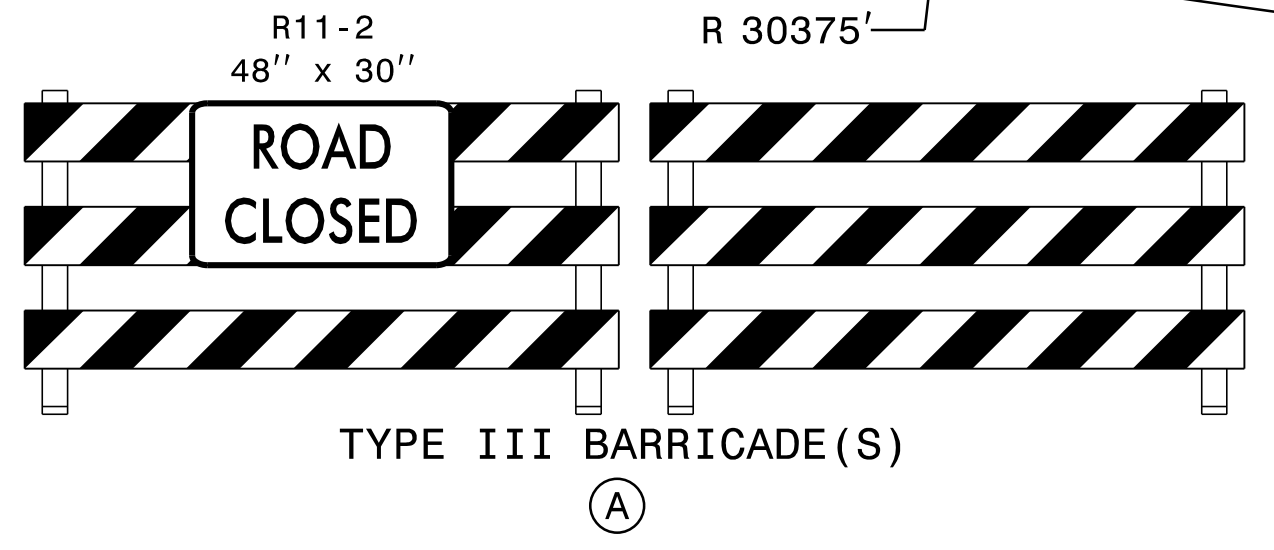
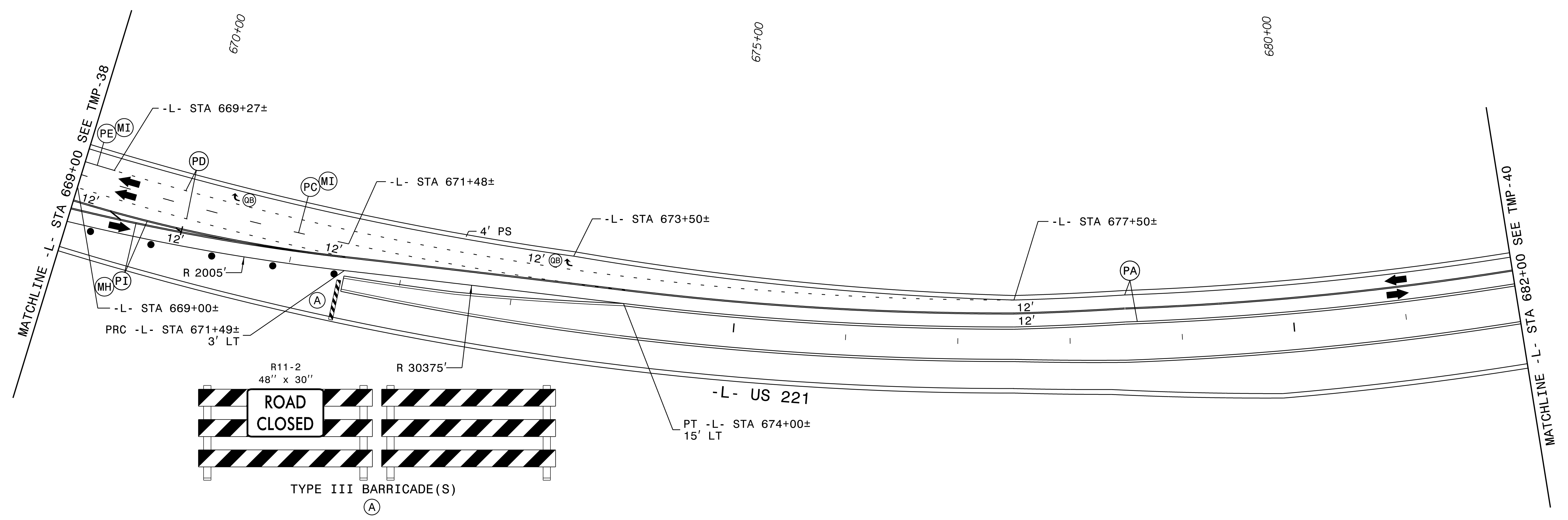
APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020
 SEAL
 DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED



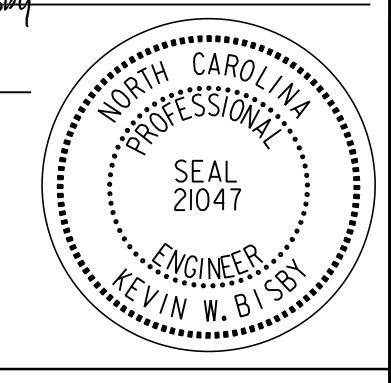
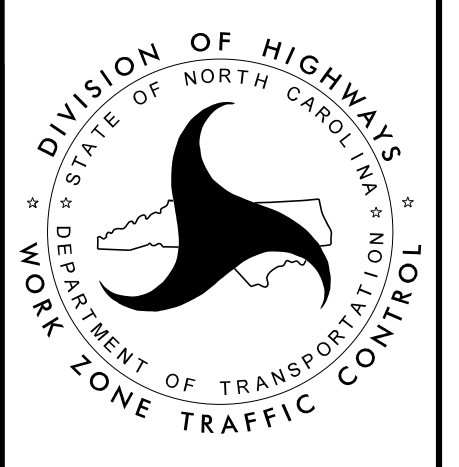
DIVISION OF HIGHWAYS
 STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 WORK ZONE TRAFFIC CONTROL
 PHASE IV

PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-39

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions

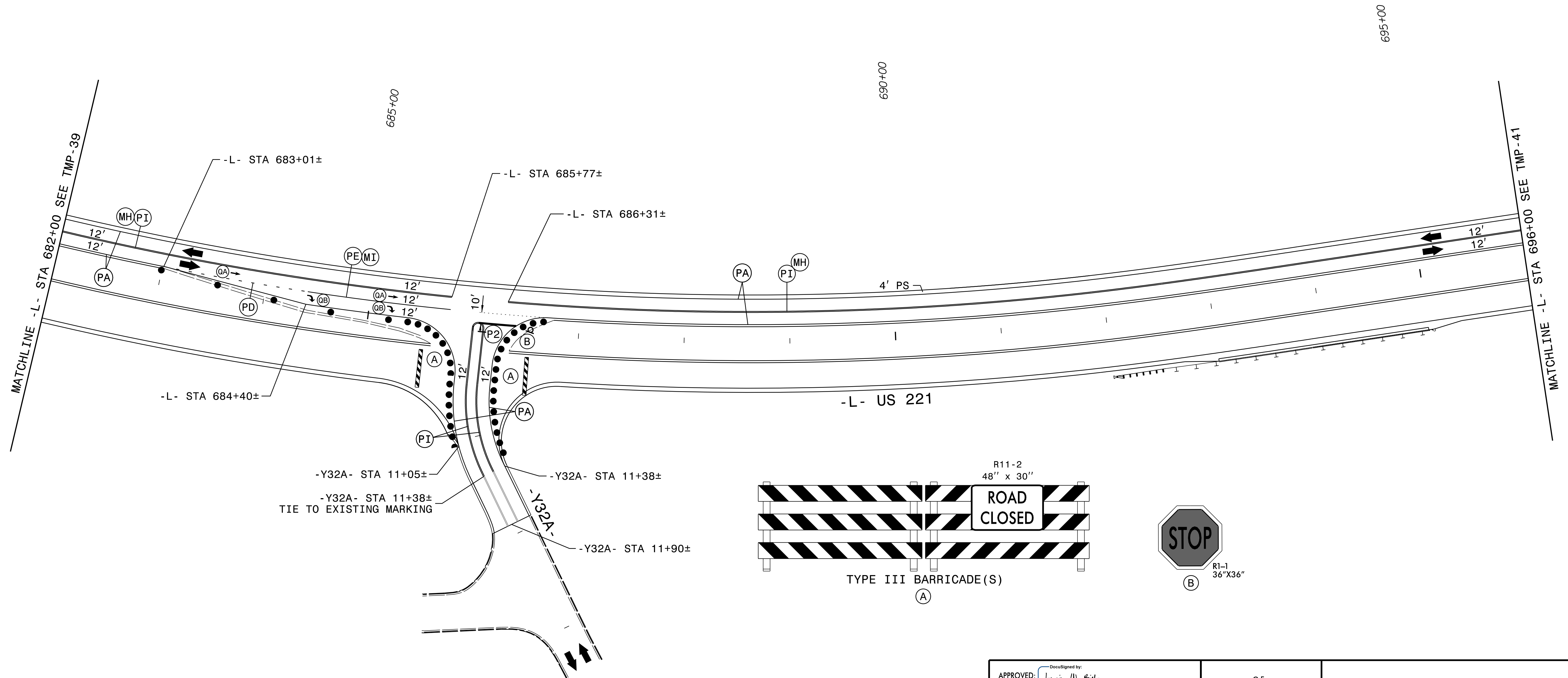
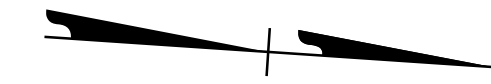


2/7/2020
R-2915E-TMP_PSH39.dgn

APPROVED: <i>Kevin W. Bisby</i> DATE: 2/7/2020 SEAL 		PHASE IV
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		

PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-40

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions



2/7/2020
R-2915E-TMP_PSH40.dgn

APPROVED: Kevin W. Bisby
DocuSigned by: Kevin W. Bisby
3CE3C948DF46481
 DATE: 2/7/2020

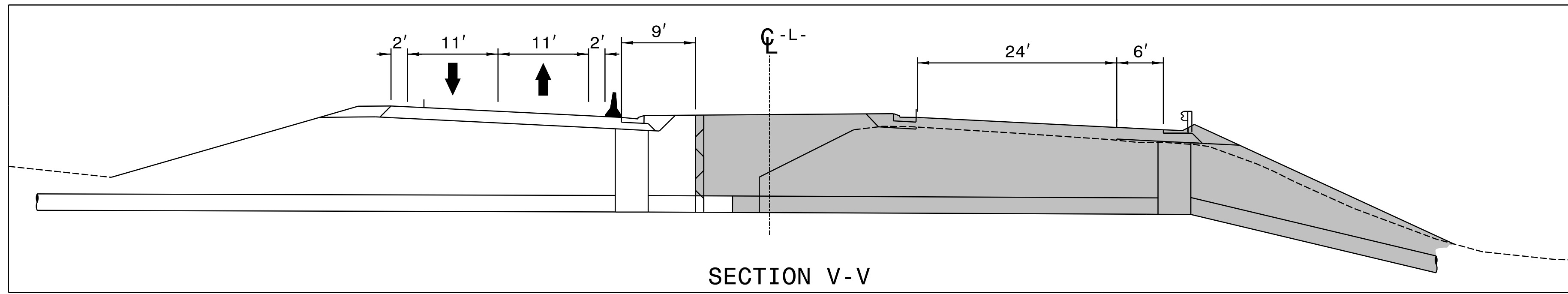
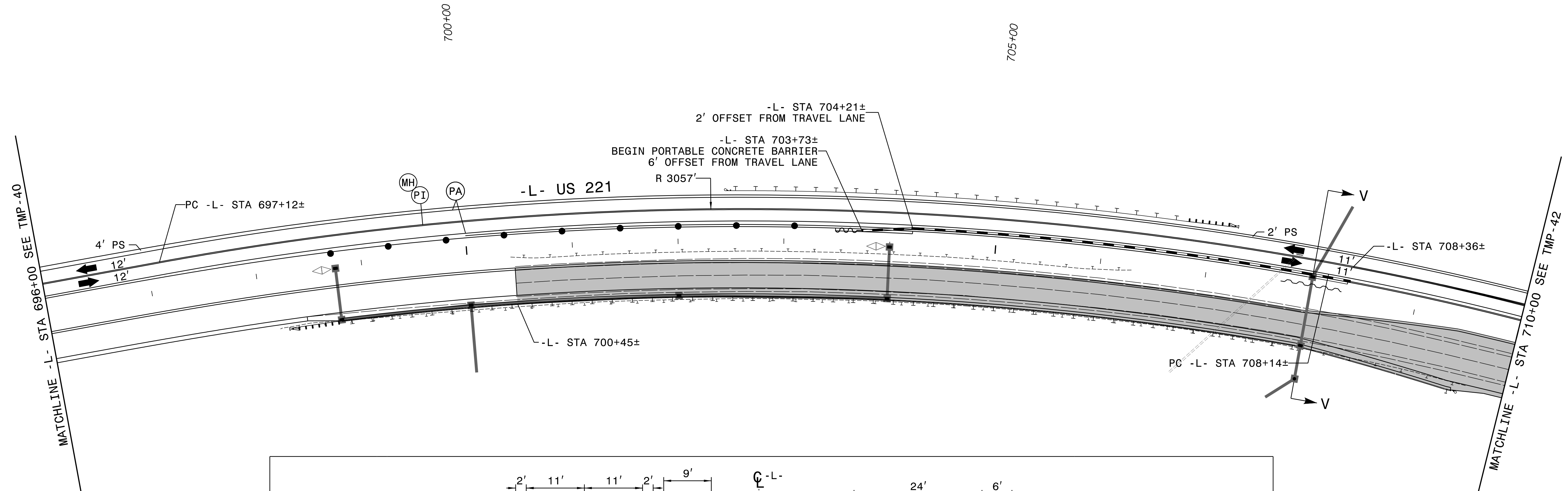
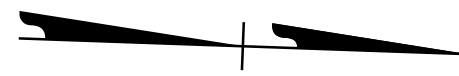
SEAL

PHASE IV

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-41

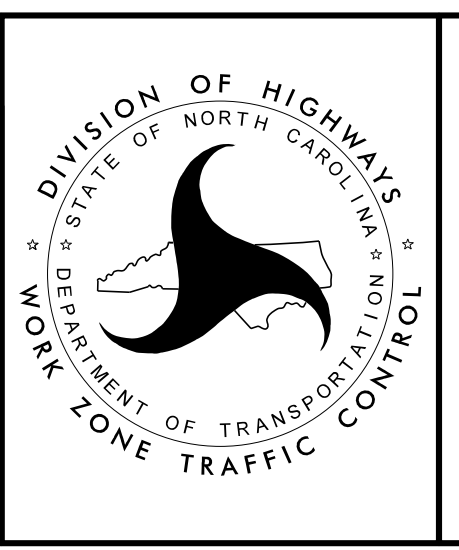
RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions



SECTION V-V

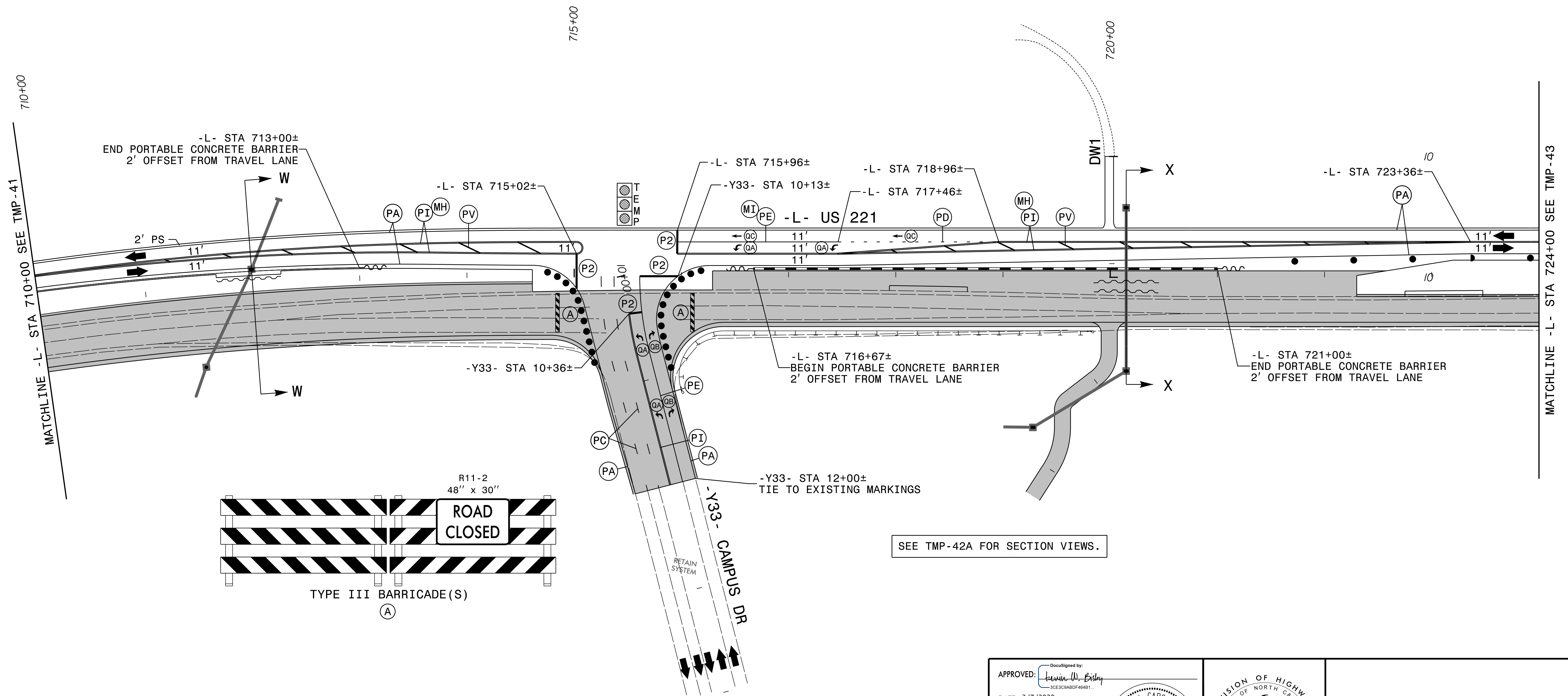
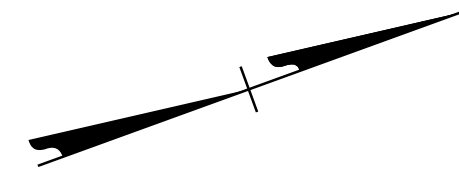
2/7/2020
 R-2915E_TMP_PSH41.dgn

APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020
 SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL 21047
 KEVIN W. BISBY



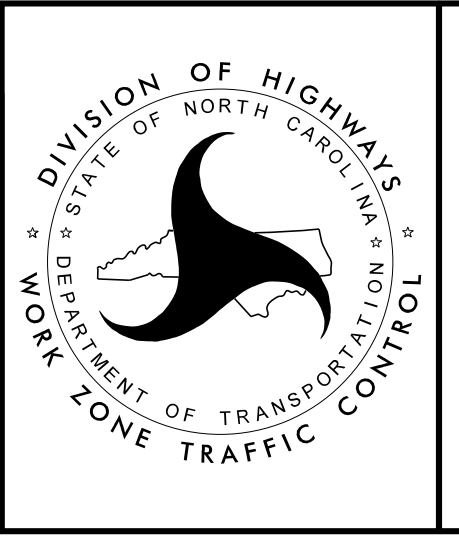
PHASE IV

DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED



APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020

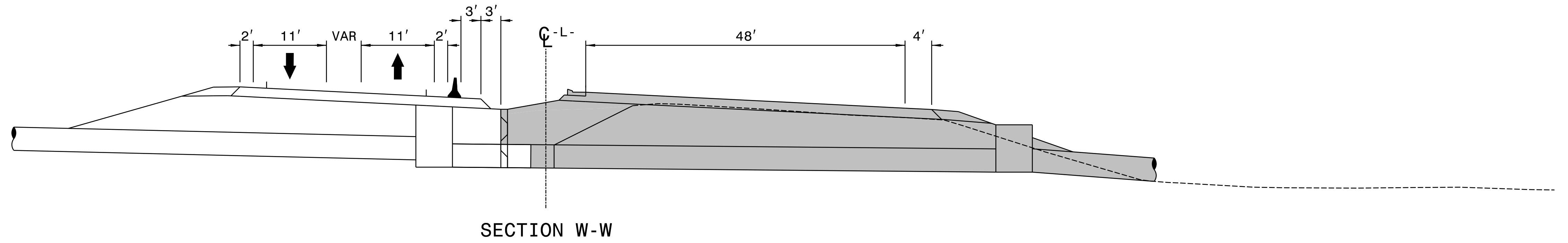
SEAL



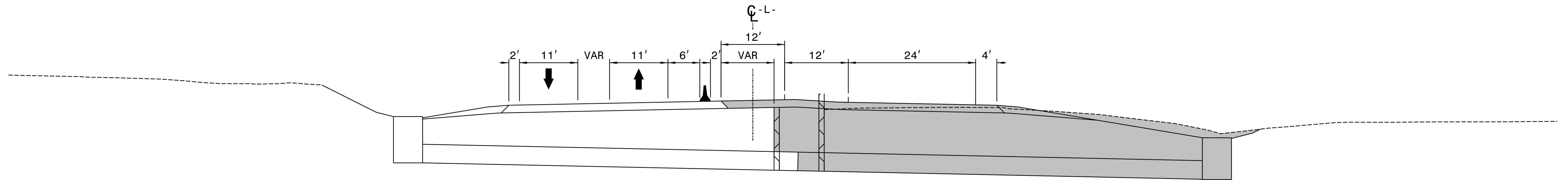
PHASE IV

PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-42A

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-01112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions



SECTION W-W

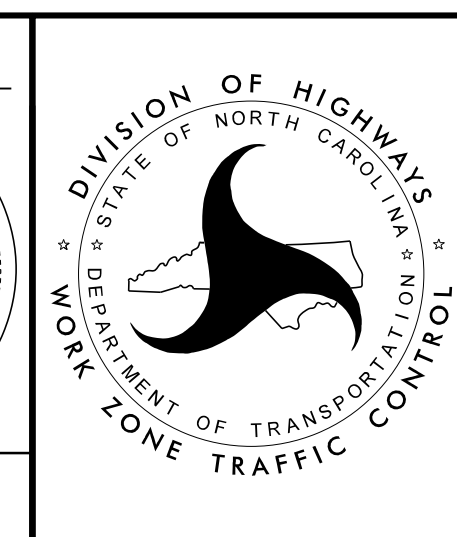


SECTION X-X

2/7/2020
R-2915E_TMP_PSH42A.dgn

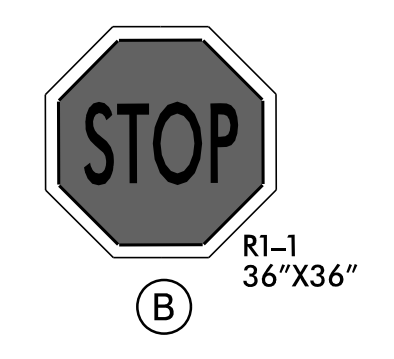
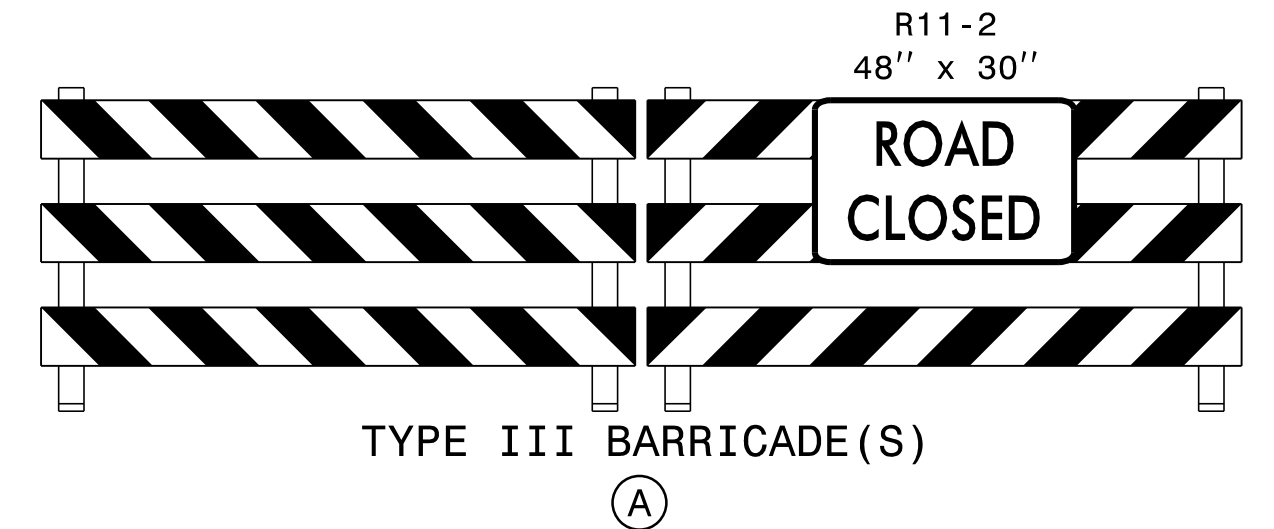
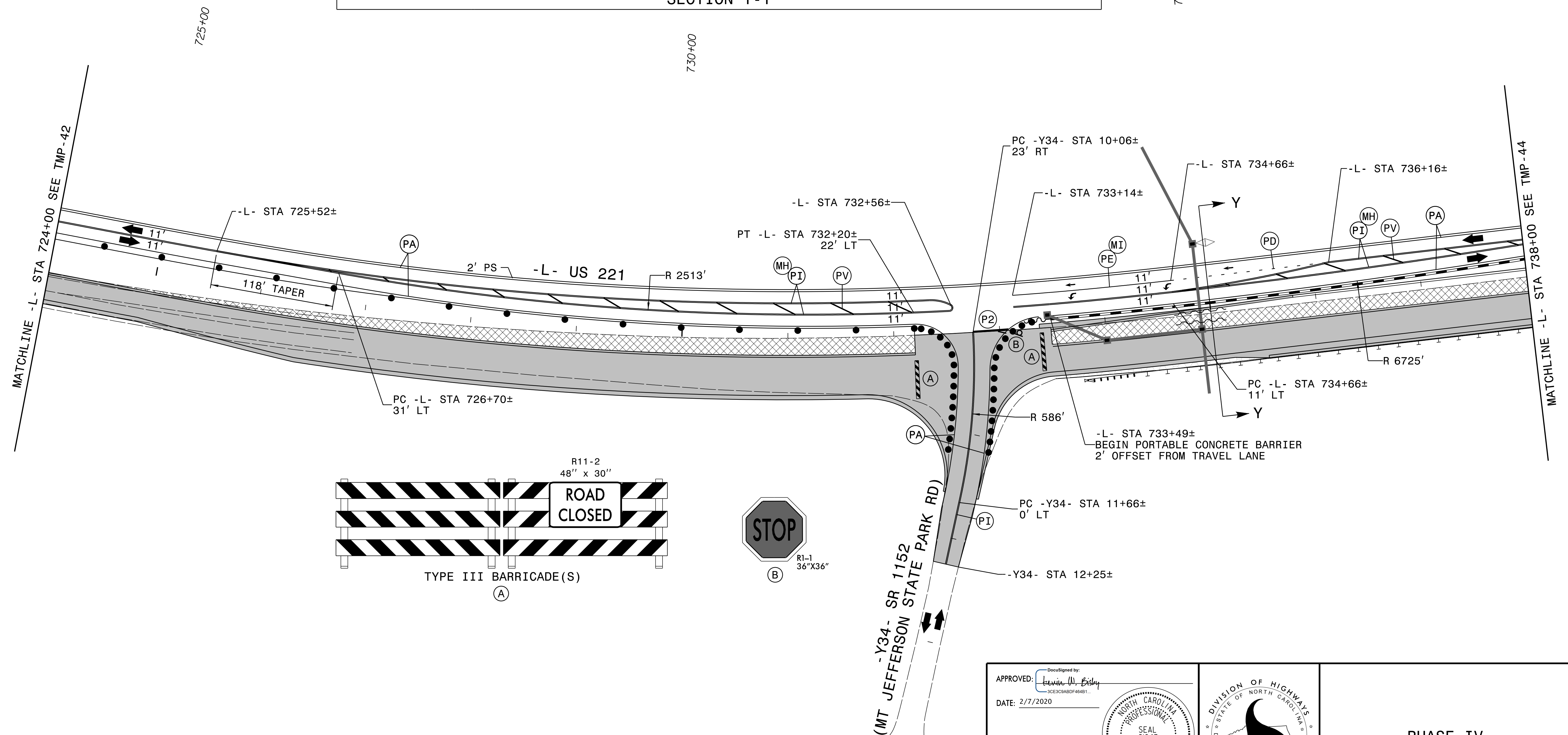
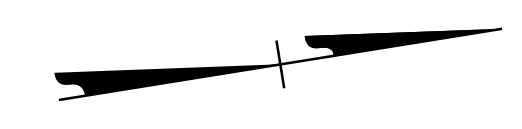
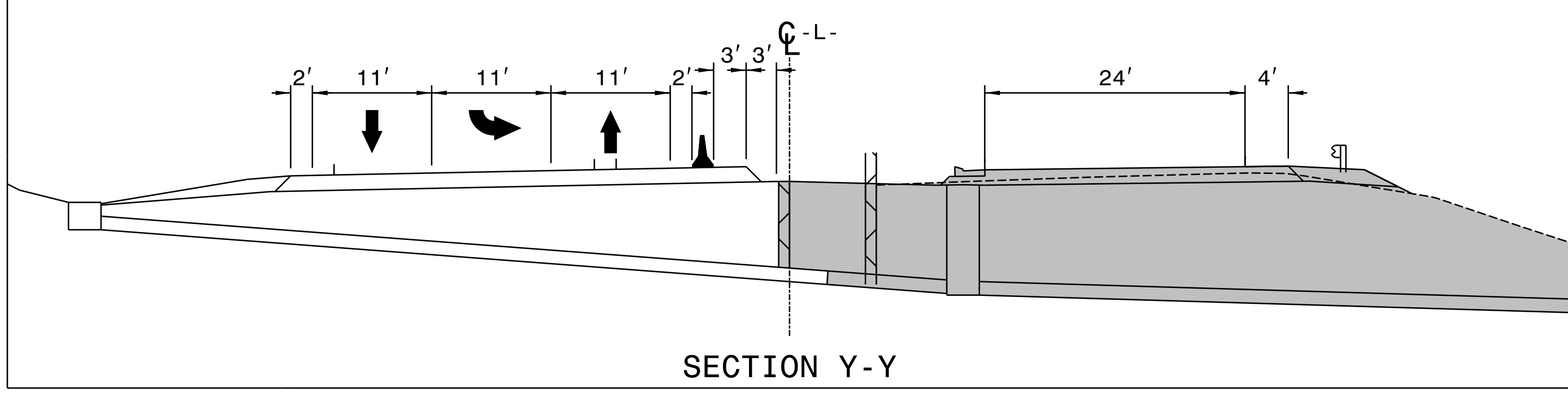
APPROVED: *Kevin W. Bisby*
DocuSigned by: Kevin W. Bisby
3CE3C9ABDF46481
 DATE: 2/7/2020

SEAL



PHASE IV

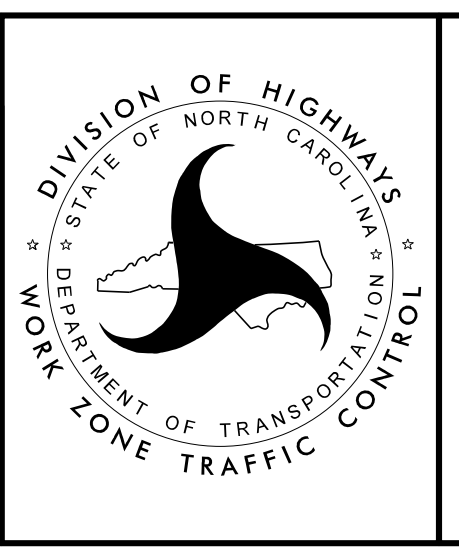
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



APPROVED: Kevin W. Bisby
 DATE: 2/7/2020

SEAL

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

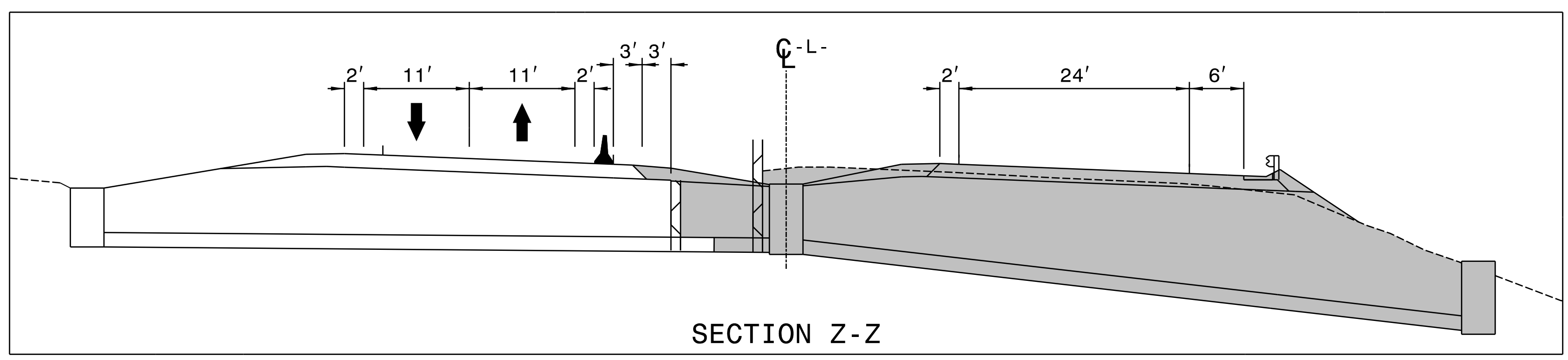
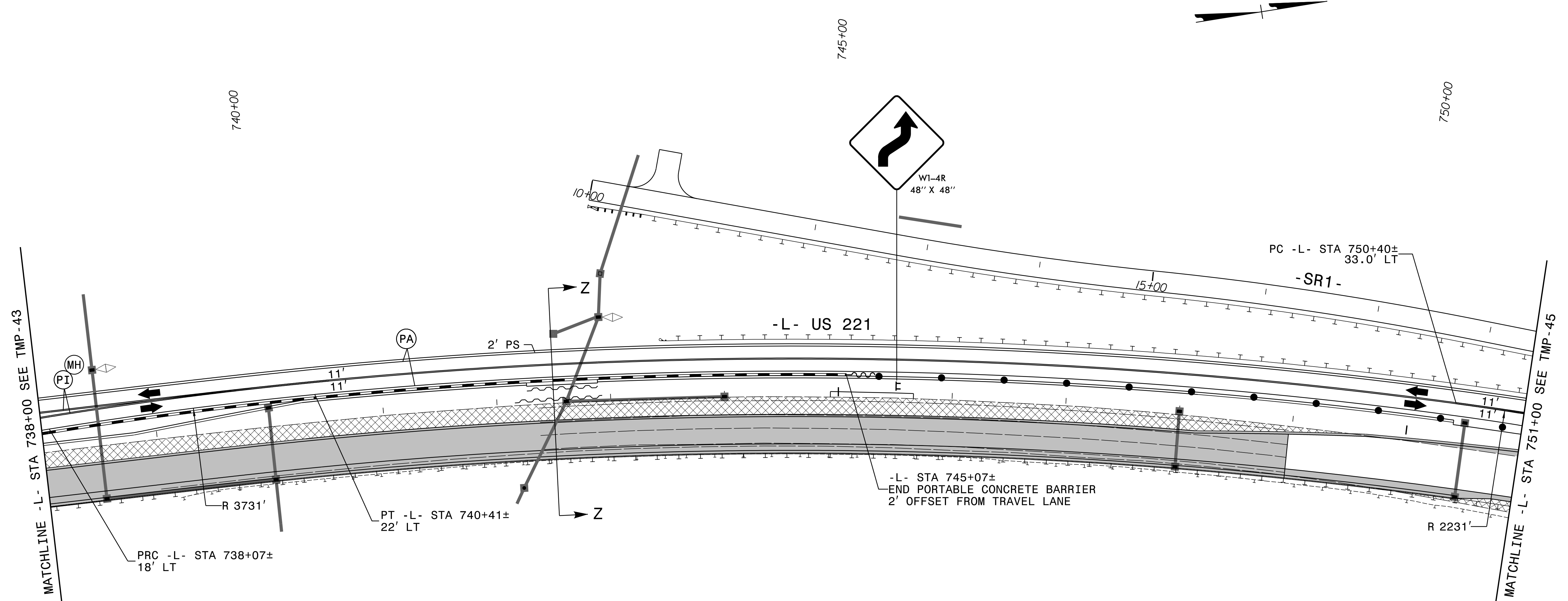


DIVISION OF HIGHWAYS
 NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 WORK ZONE TRAFFIC CONTROL

PHASE IV

PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-44

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions



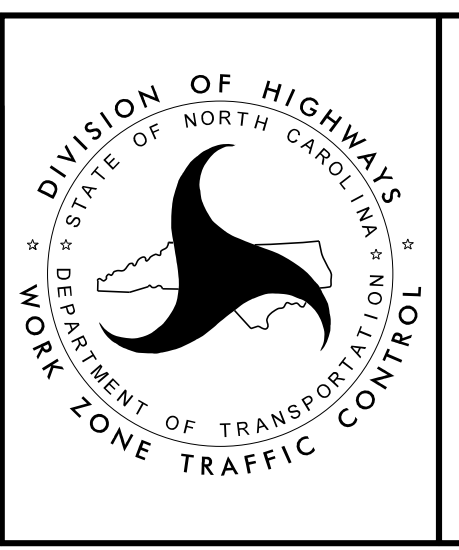
2/7/2020
R-2915E_TMP_PSH44.dgn

APPROVED: *Kevin W. Bisby*
DocuSigned by: Kevin W. Bisby
3CE3C9ABDF46481

DATE: 2/7/2020

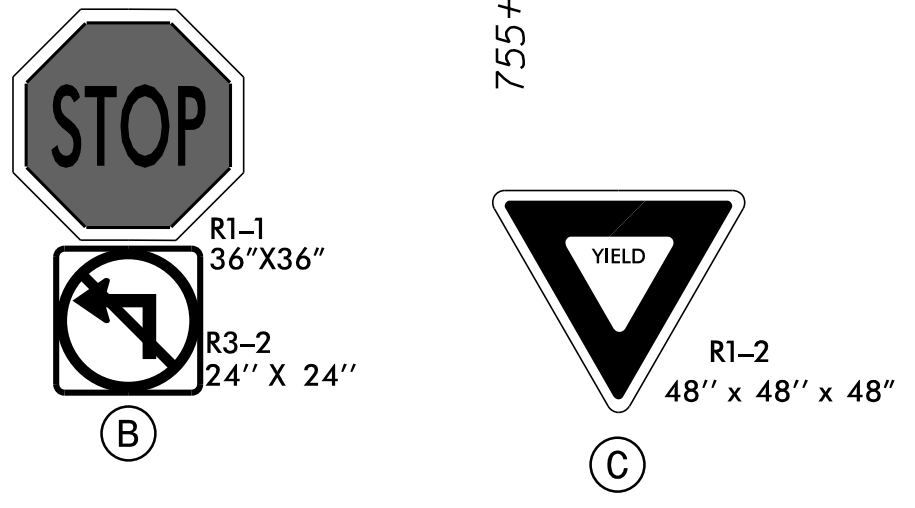
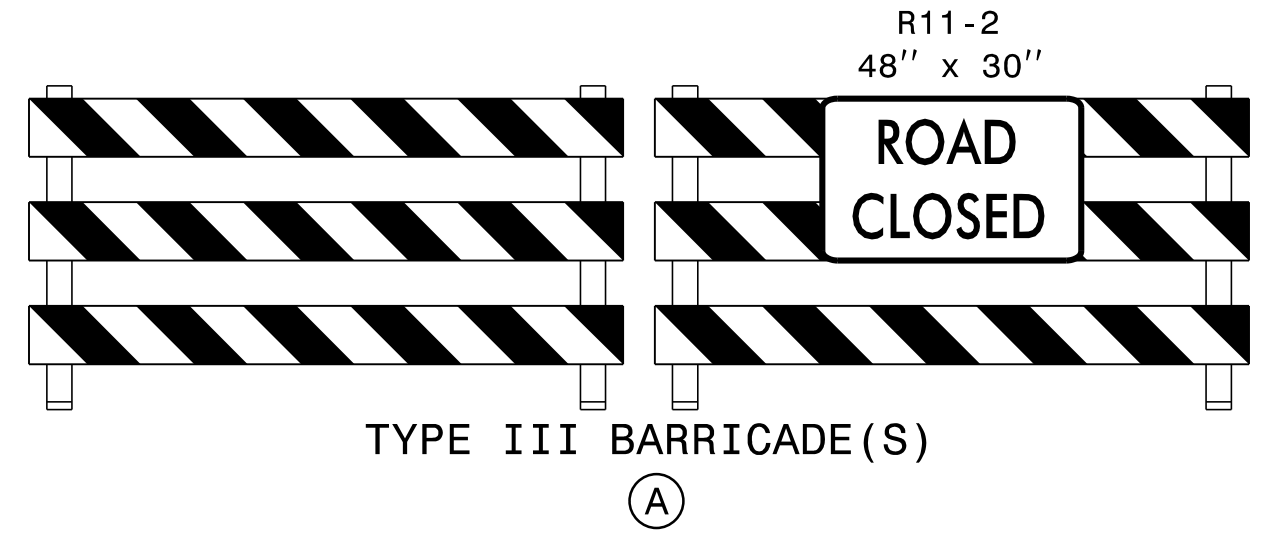
SEAL

PROFESSIONAL SEAL
 NORTH CAROLINA
 21047
 ENGINEER
 KEVIN W. BISBY

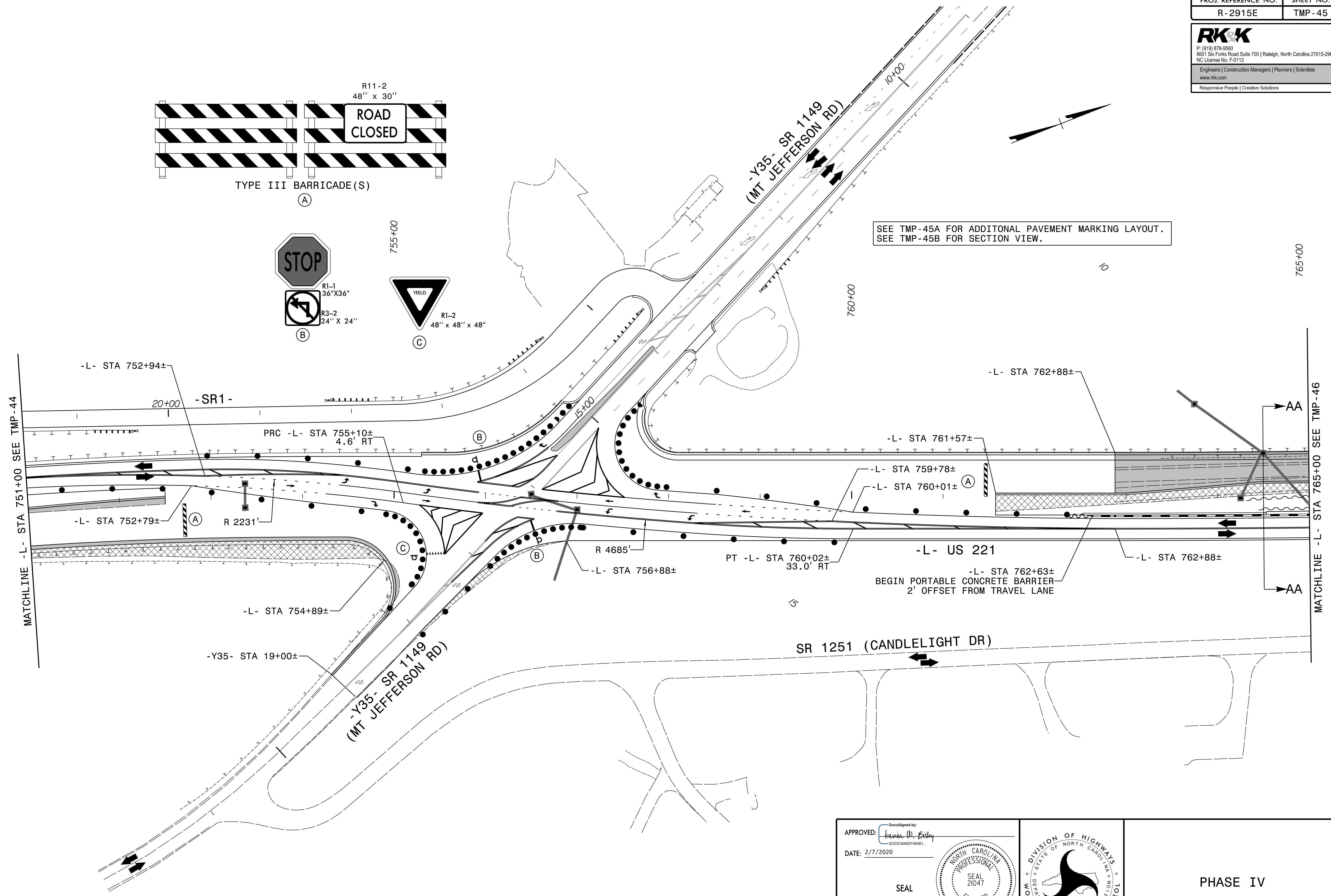


PHASE IV

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



SEE TMP-45A FOR ADDITIONAL PAVEMENT MARKING LAYOUT.
 SEE TMP-45B FOR SECTION VIEW.



APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020

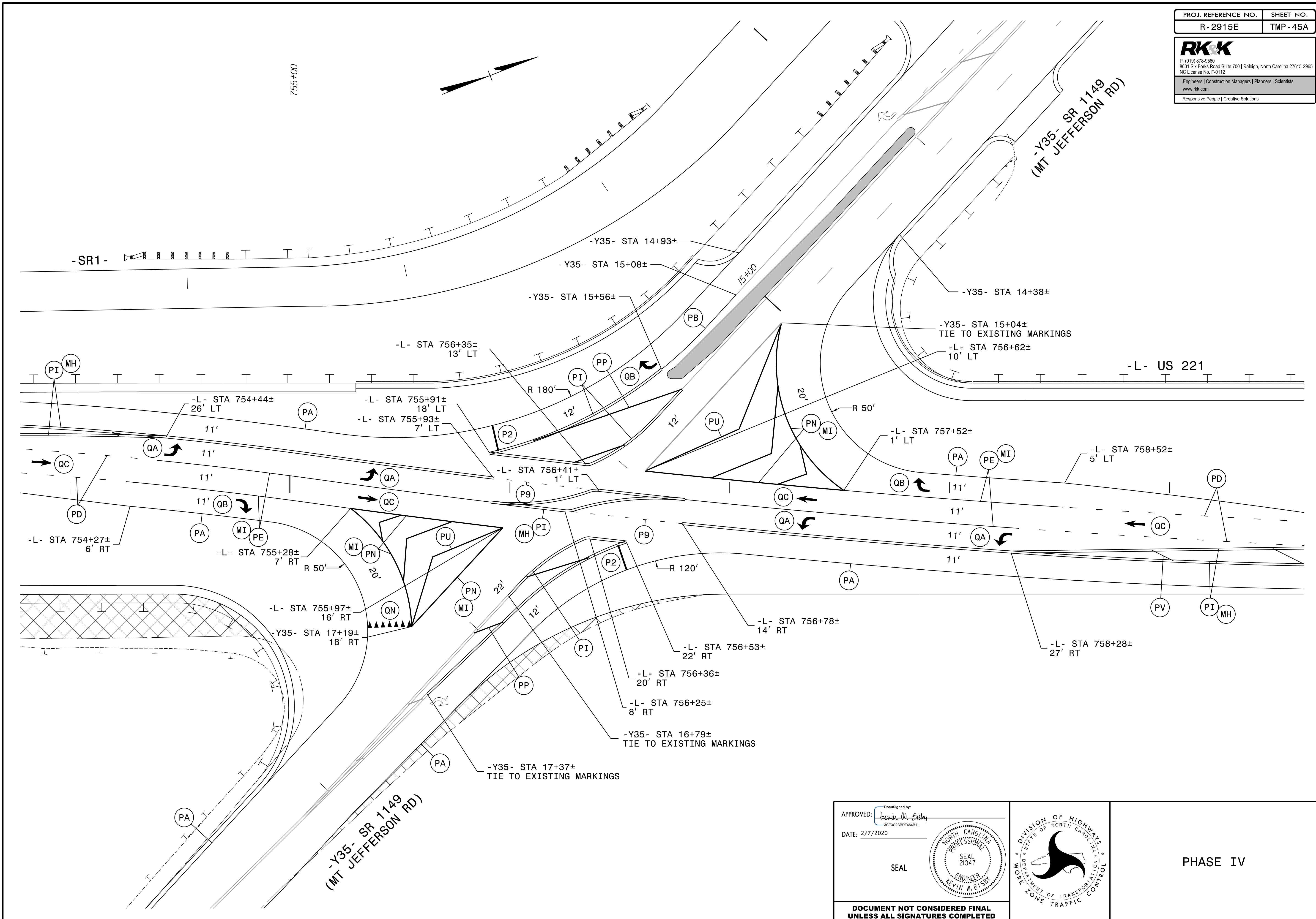
SEAL

NORTH CAROLINA
 PROFESSIONAL
 SEAL
 21047
 ENGINEER
 KEVIN W. BISBY

DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED

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

PHASE IV

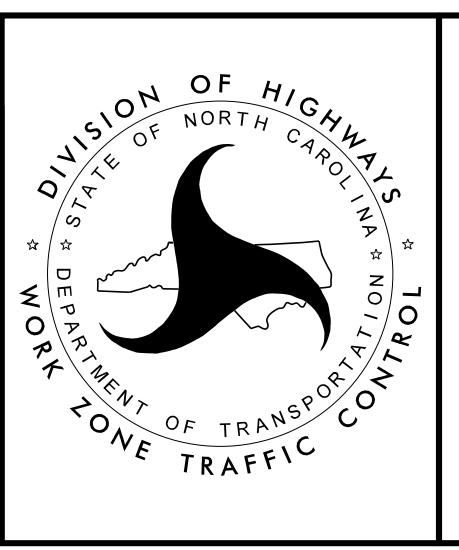


2/7/2020
R-2915E_TMP_PSH45A.dgn

APPROVED: Kevin W. Bisby
 DATE: 2/7/2020

SEAL

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

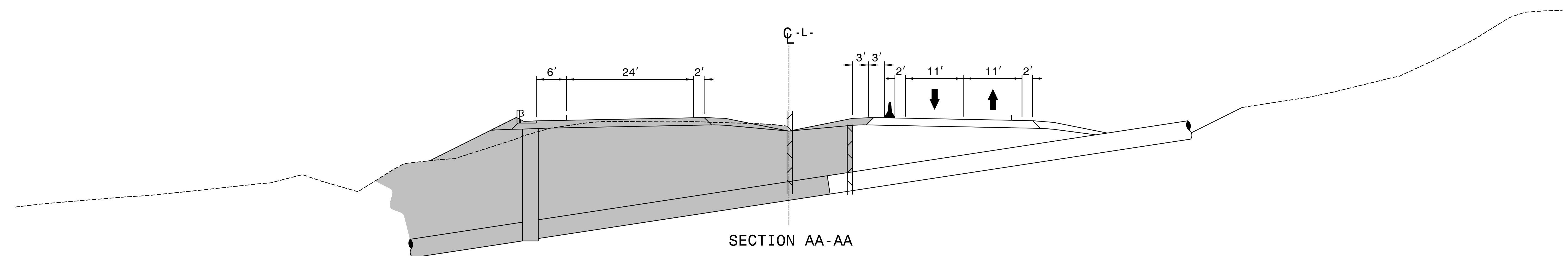


DIVISION OF HIGHWAYS
 NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 WORK ZONE TRAFFIC CONTROL

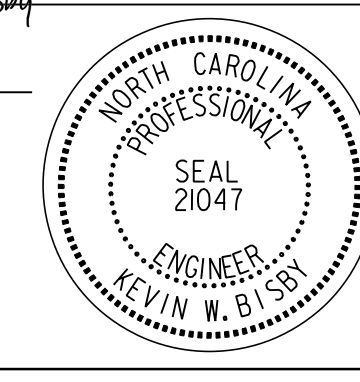
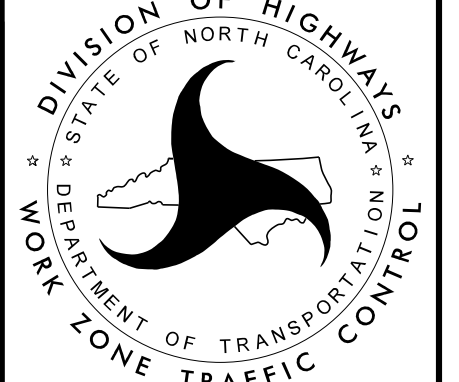
PHASE IV

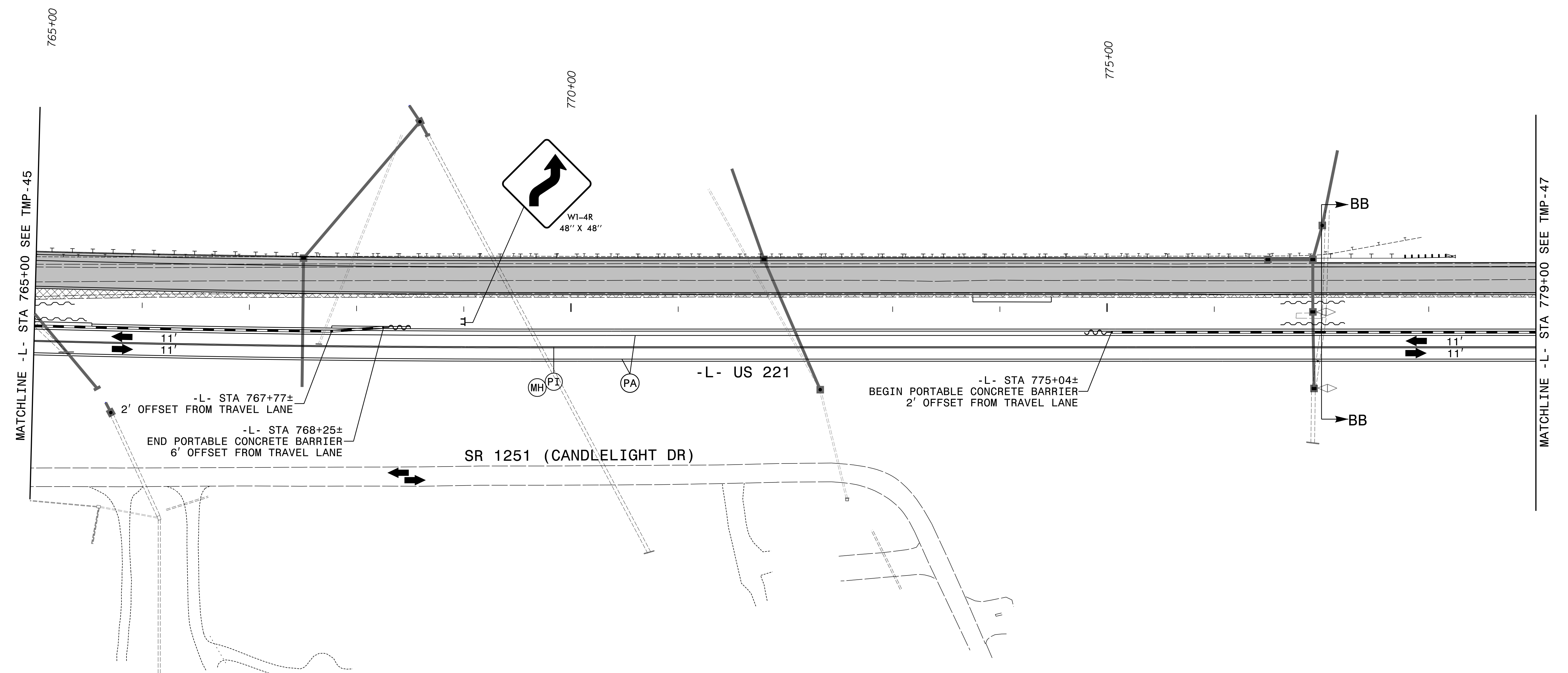
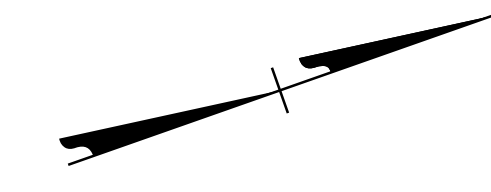
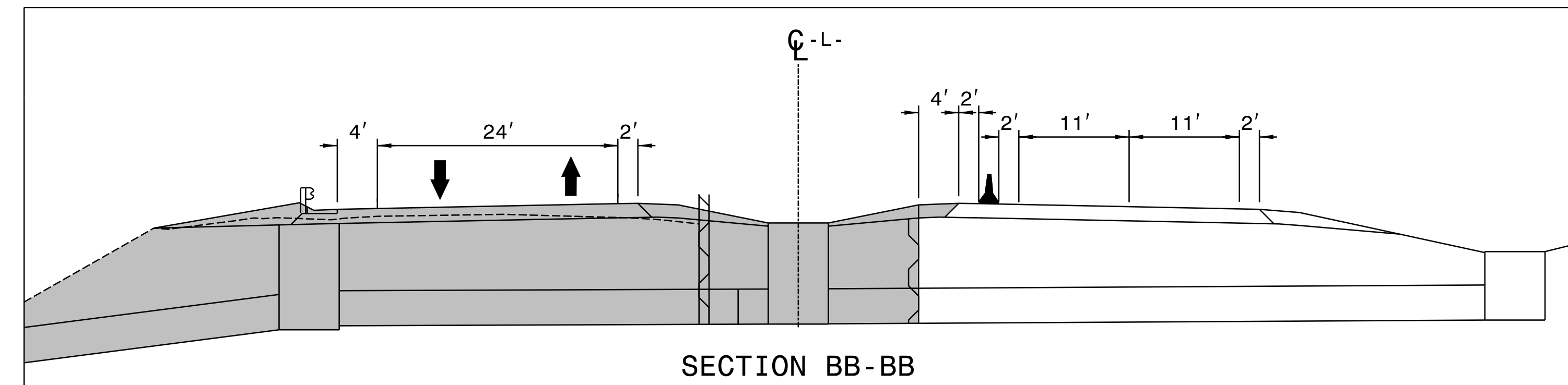
PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-45B

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions



2/7/2020
 R-2915E_TMF_PSH45B.dgn

<p>APPROVED: <i>Kevin W. Bisby</i> <small>DocuSigned by: Kevin W. Bisby 3CE3C948DF46481...</small></p> <p>DATE: 2/7/2020</p> <p>SEAL</p> 		<p>PHASE IV</p>
<p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>		



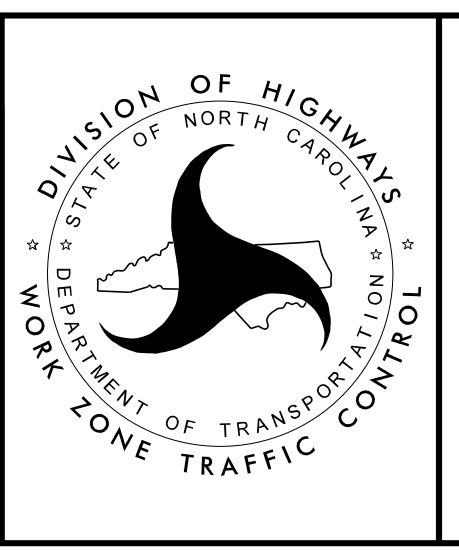
2/7/2020
 R-2915E-TMP_PSH46.dgn

APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020

SEAL

NORTH CAROLINA
 PROFESSIONAL
 SEAL
 21047
 ENGINEER
 KEVIN W. BISBY

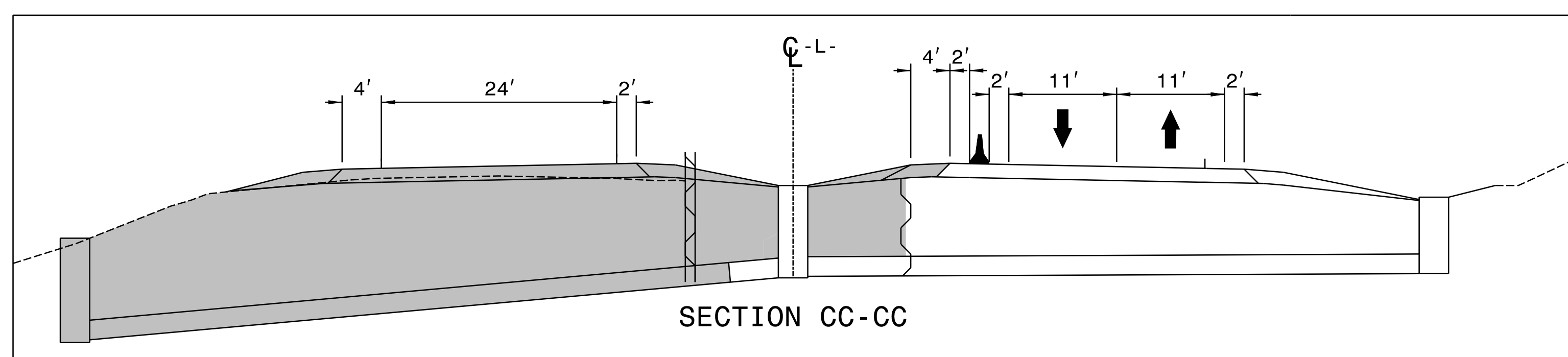
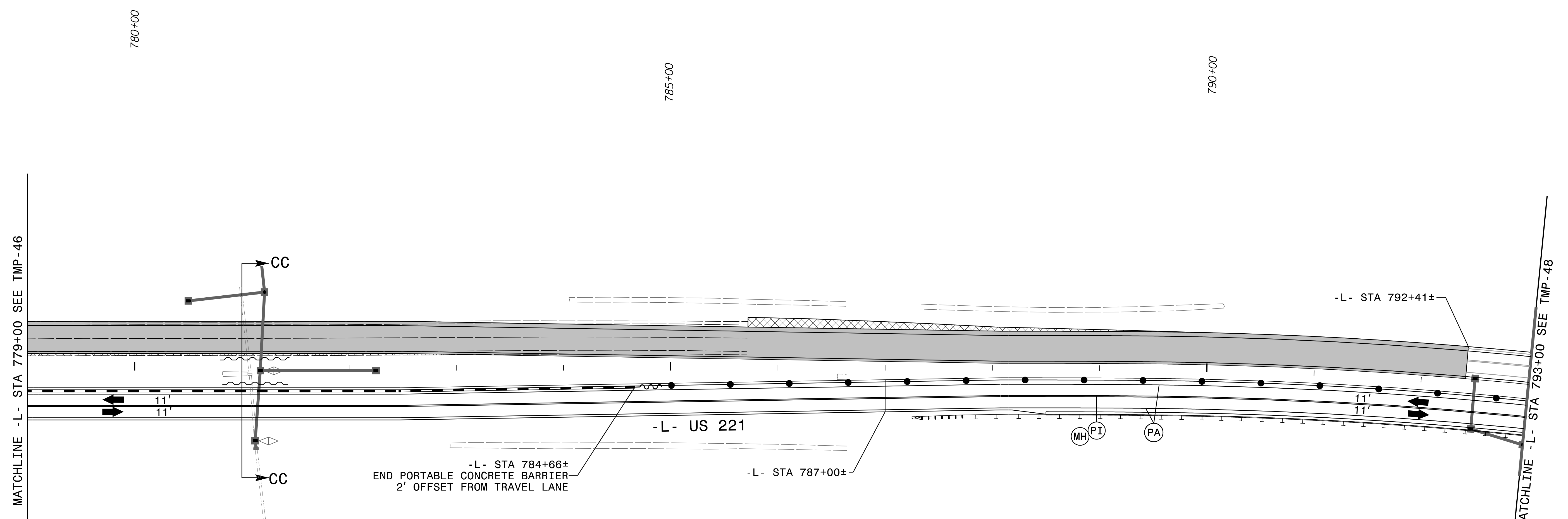
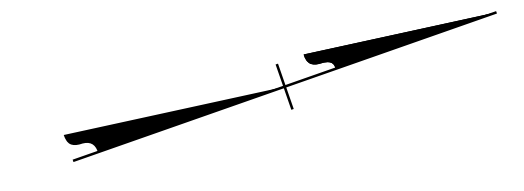
DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED



PHASE IV

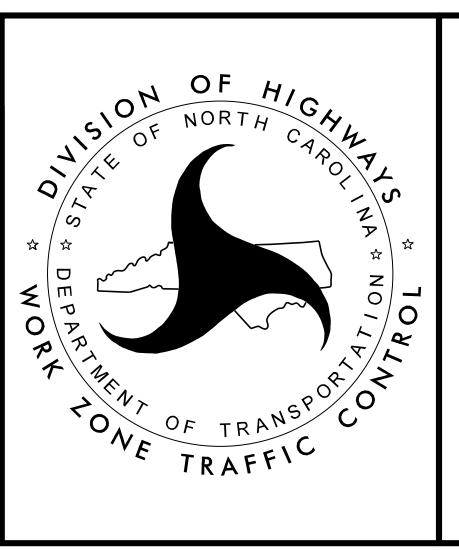
PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-47

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions



2/7/2020
R-2915E_TMP_PSH47.dgn

APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020
 SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL 21047
 KEVIN W. BISBY

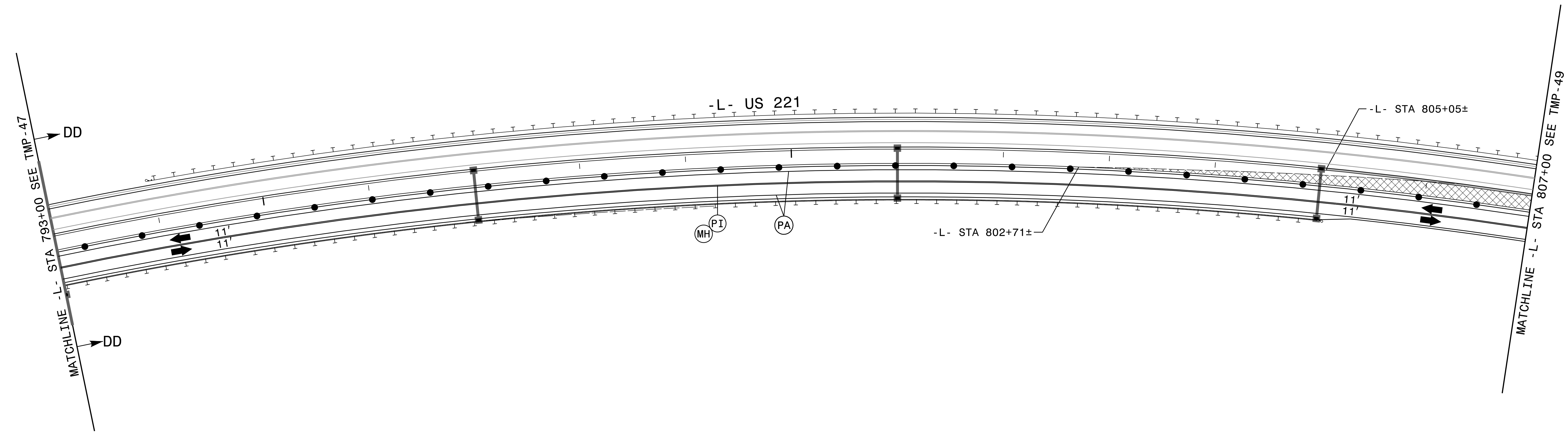
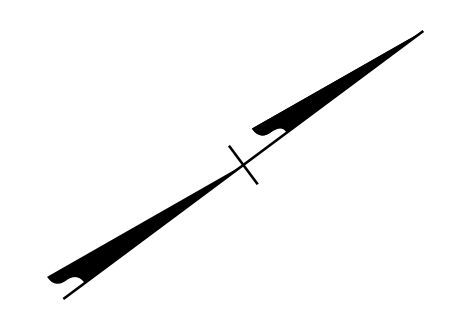
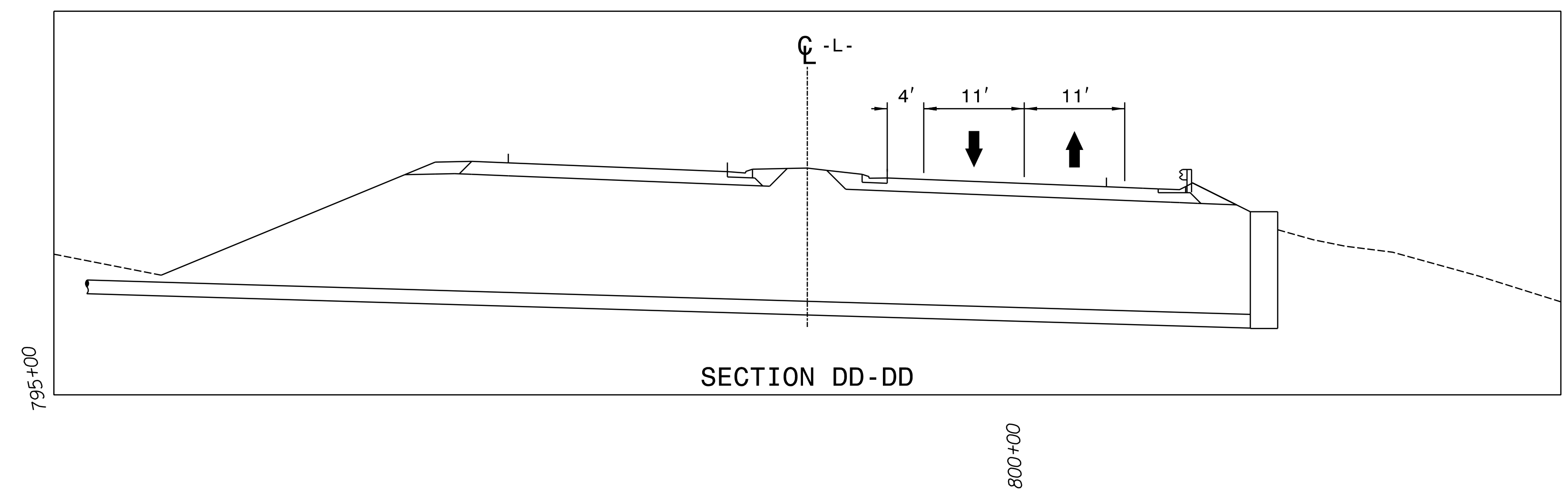


PHASE IV

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-48

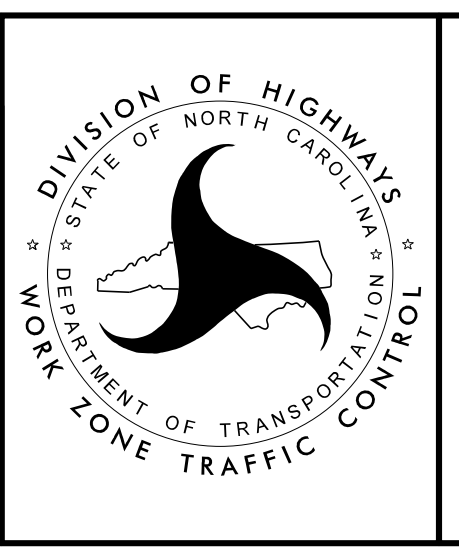
RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions



2/7/2020
 R-2915E_TMP_PSH48.dgn

APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020

SEAL

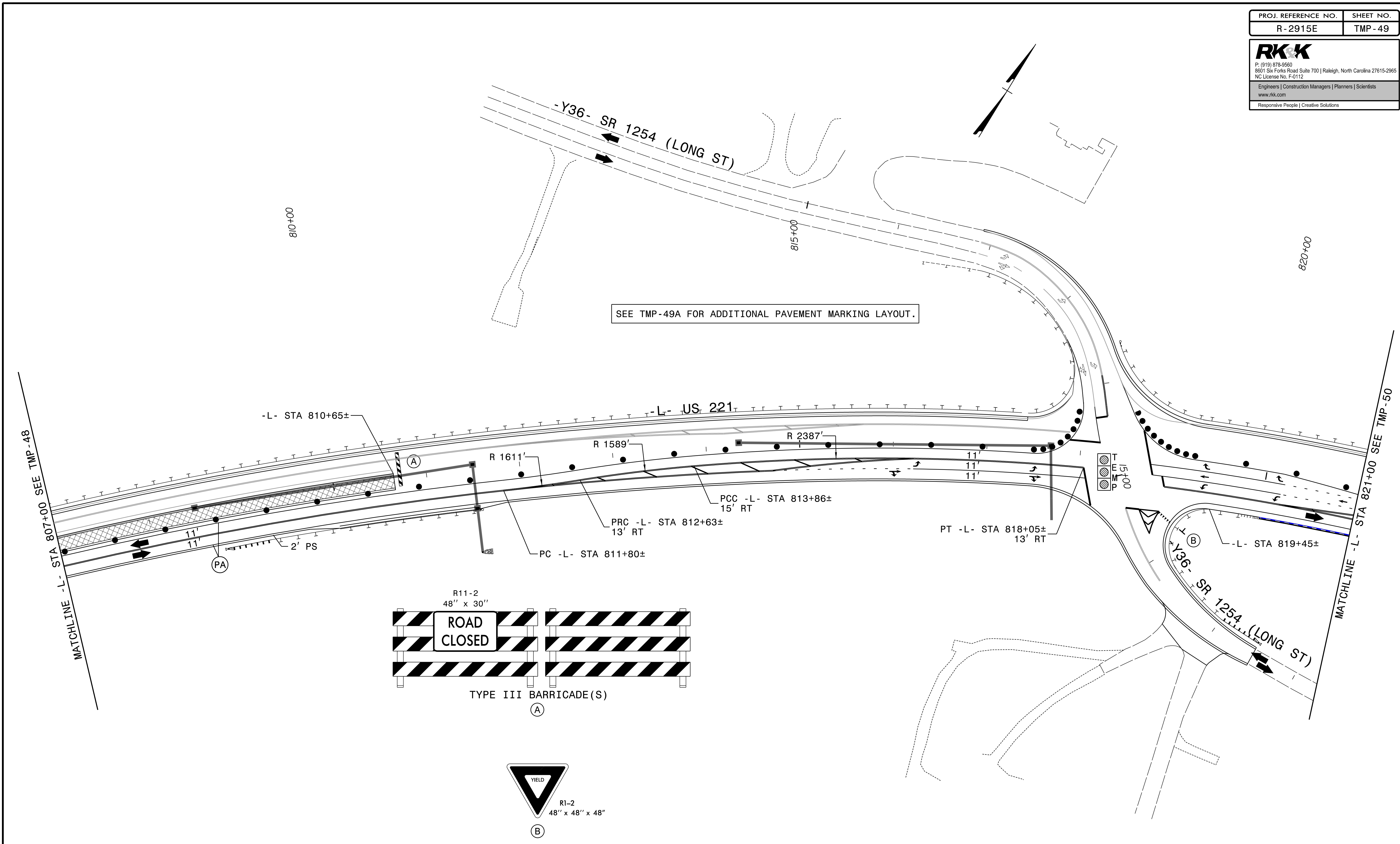


PHASE IV

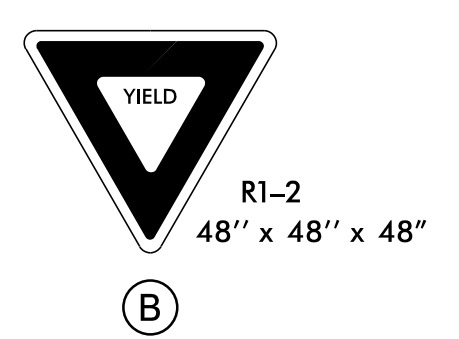
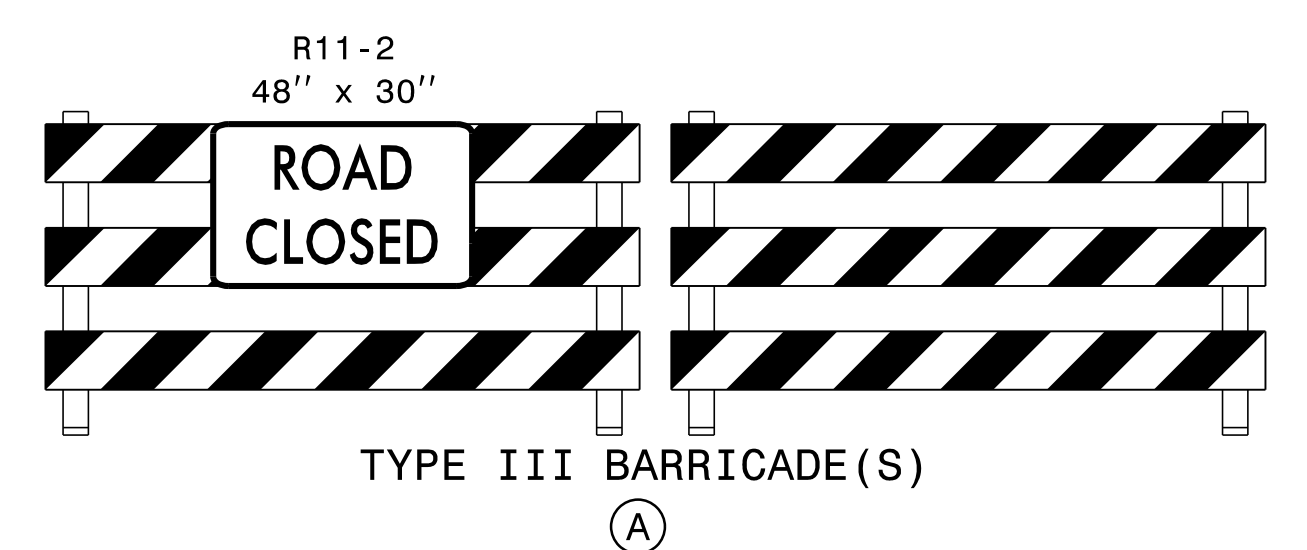
DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED

PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-49

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions



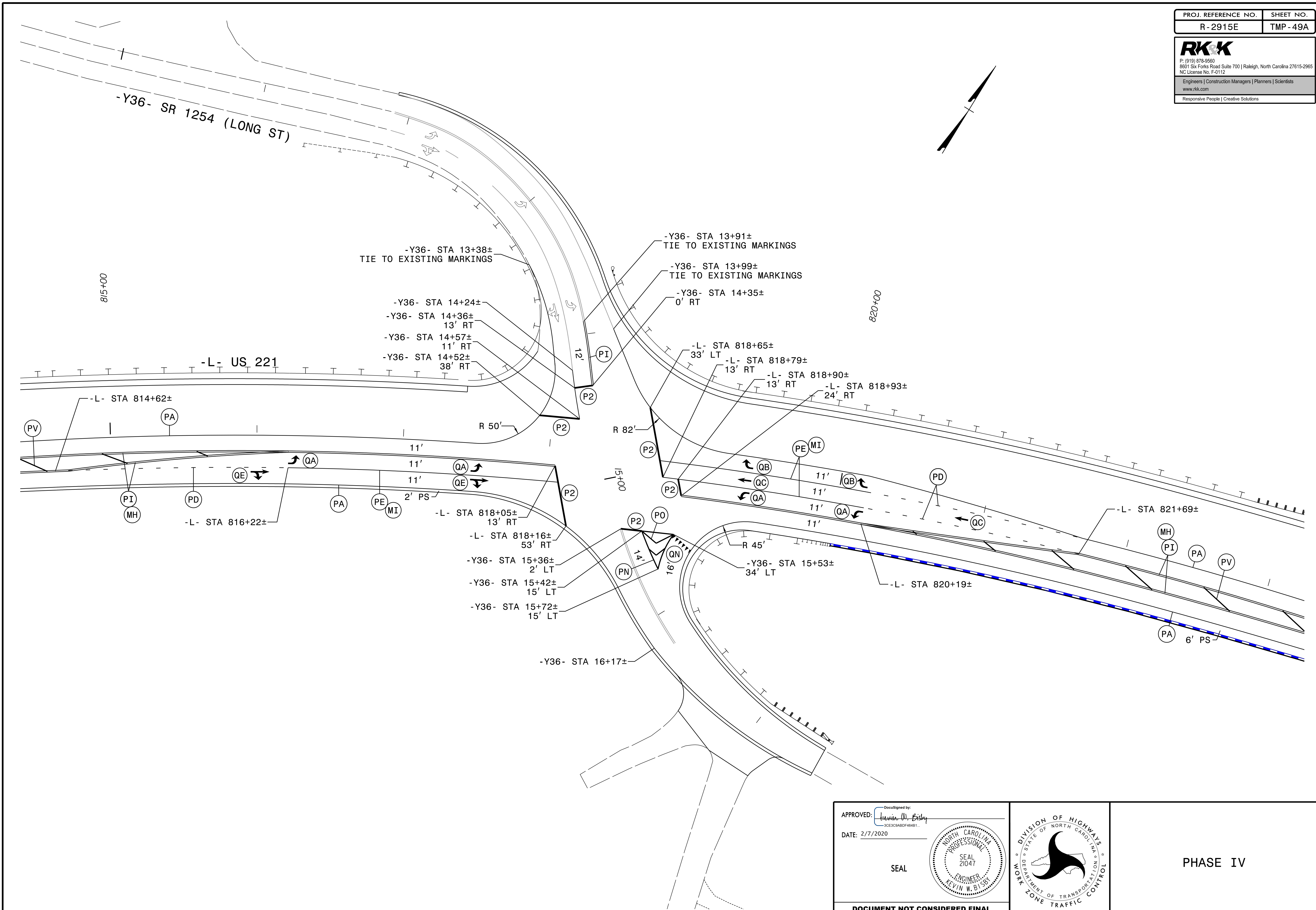
SEE TMP-49A FOR ADDITIONAL PAVEMENT MARKING LAYOUT.



APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020

SEAL

PHASE IV



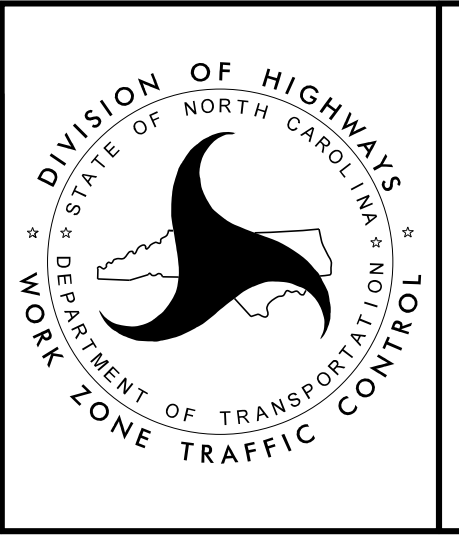
2/7/2020
R-2915E-TMP_PSH49A.dgn

APPROVED: Kevin W. Bisby
 DATE: 2/7/2020

SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL 21047
 KEVIN W. BISBY

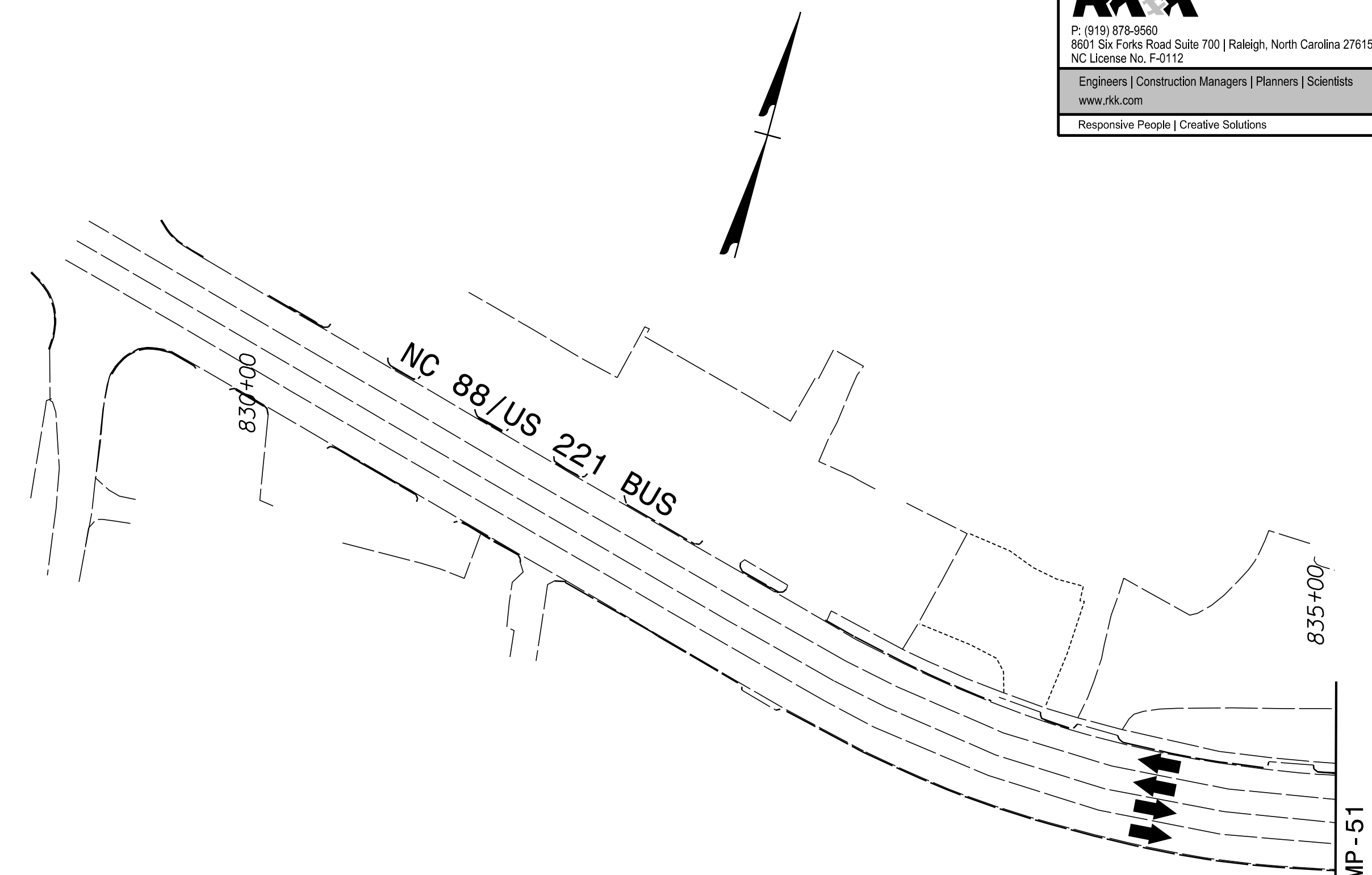
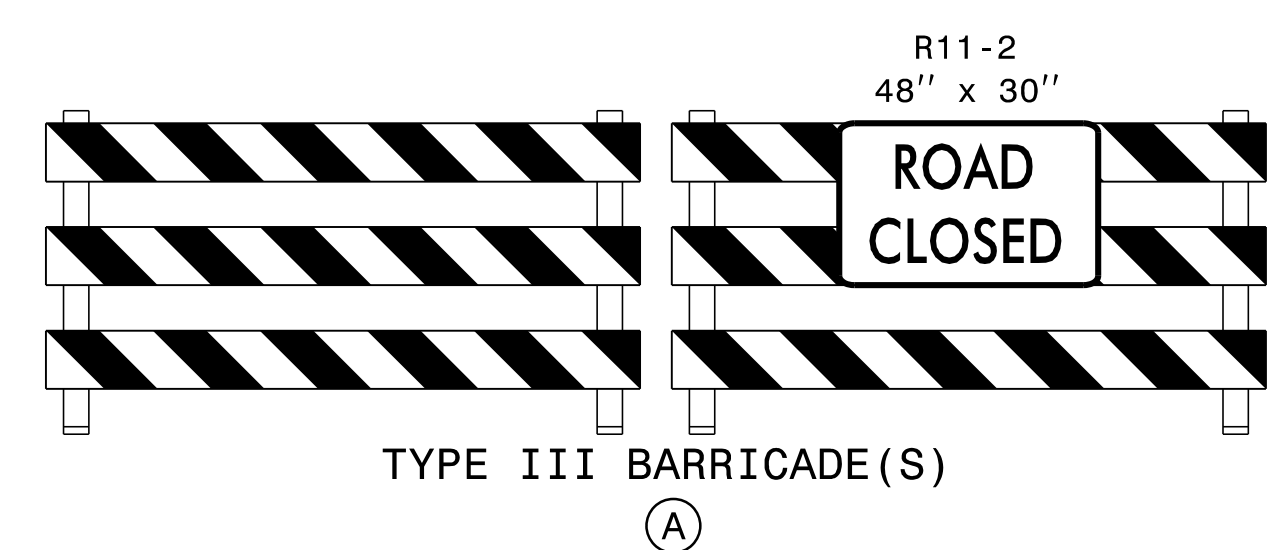
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



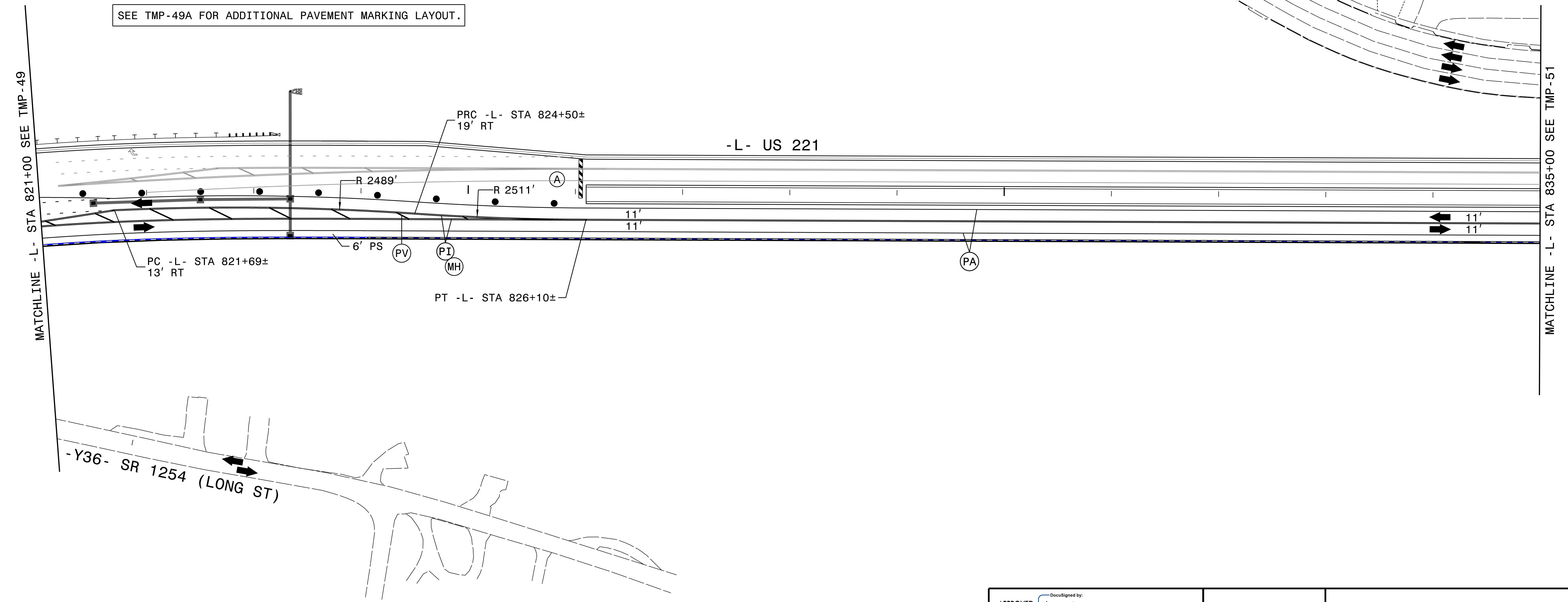
PHASE IV

PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-50

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions

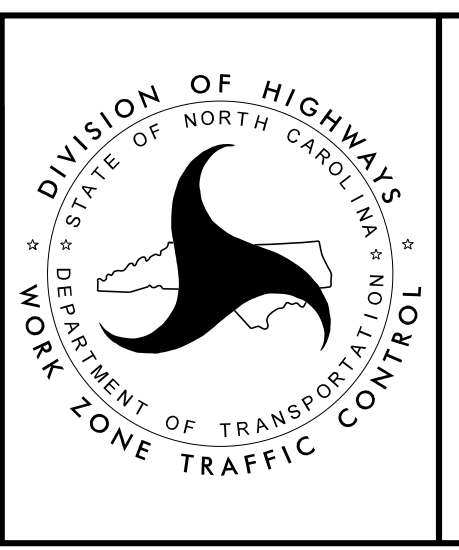


SEE TMP-49A FOR ADDITIONAL PAVEMENT MARKING LAYOUT.



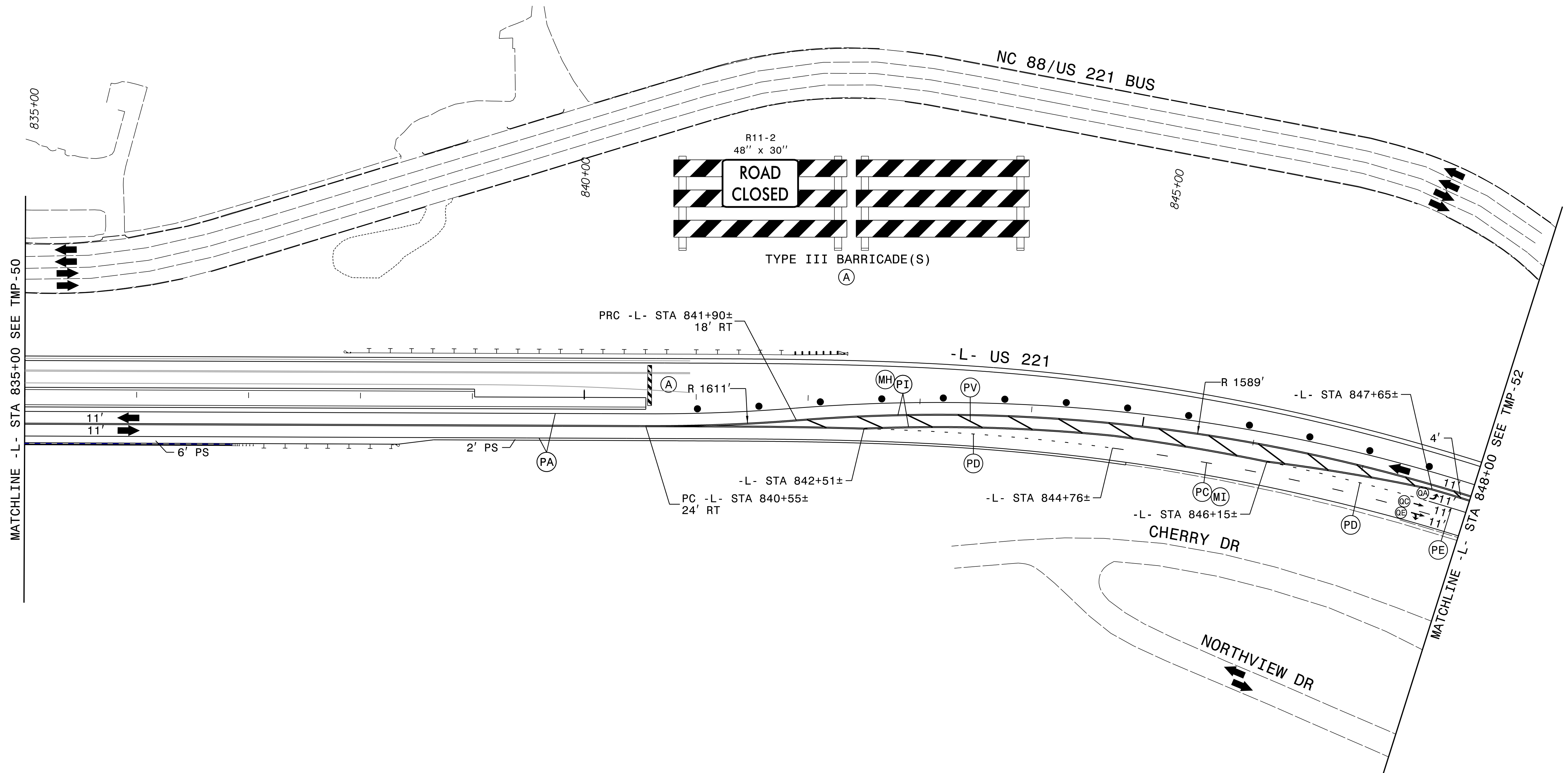
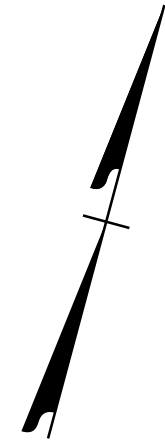
2/7/2020
R-2915E-TMP_PSH50.dgn

APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020
 SEAL
 NORTH CAROLINA
 PROFESSIONAL
 SEAL
 21047
 ENGINEER
 KEVIN W. BISBY



PHASE IV

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

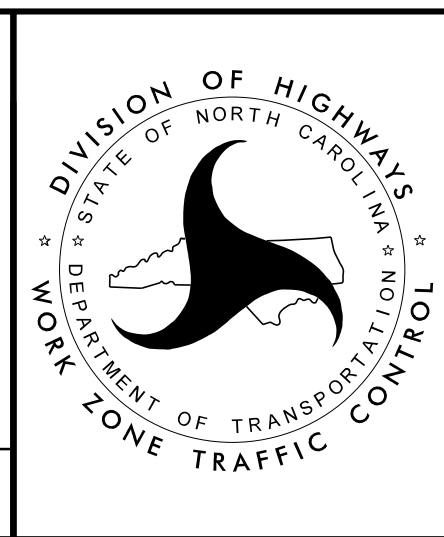


2/7/2020
 R-2915E-TMP_PSH51.dgn

APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020

SEAL

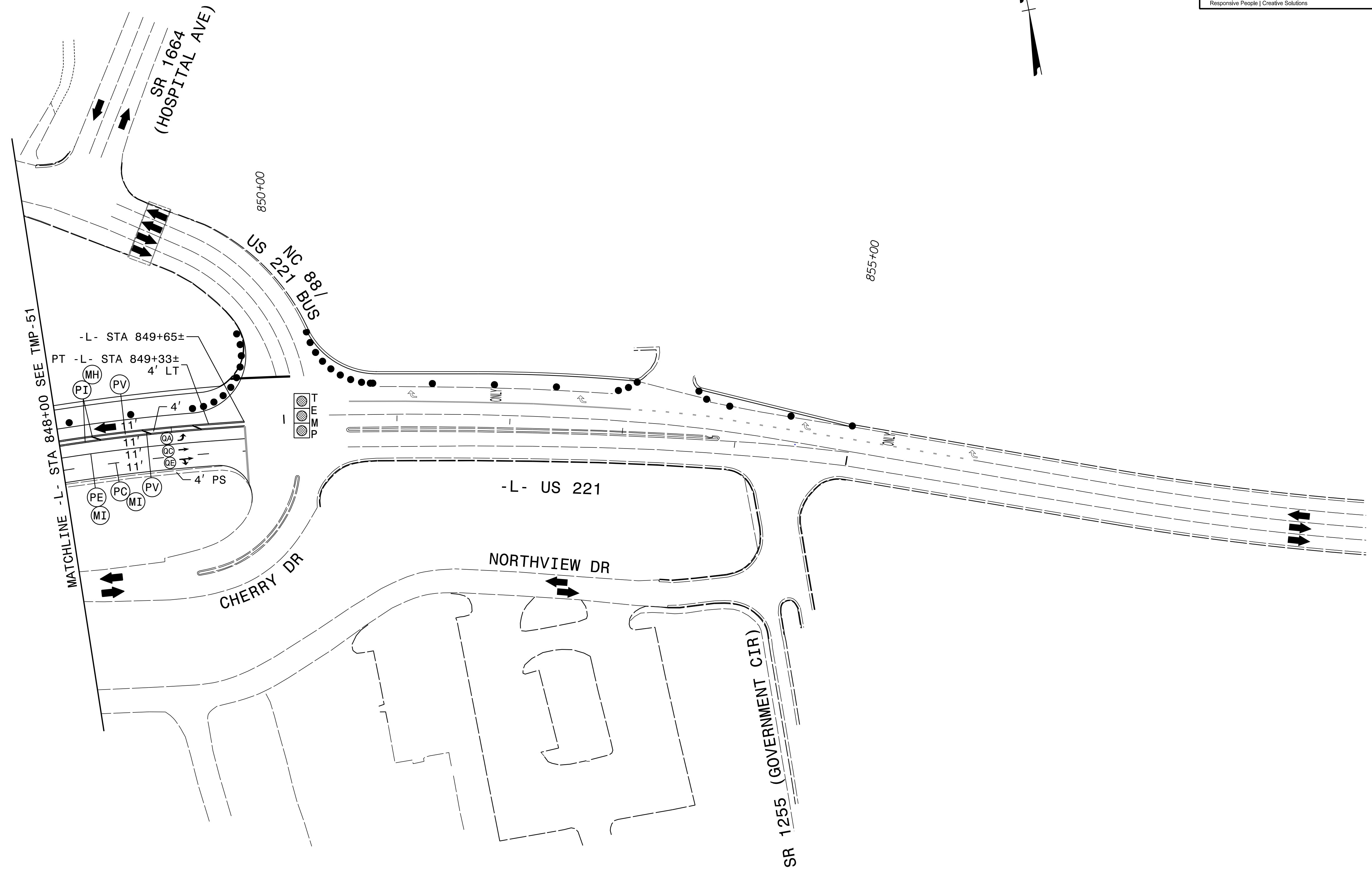
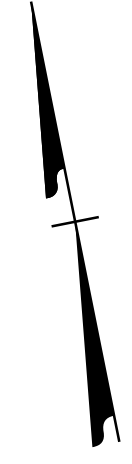
**DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED**



PHASE IV

PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-52

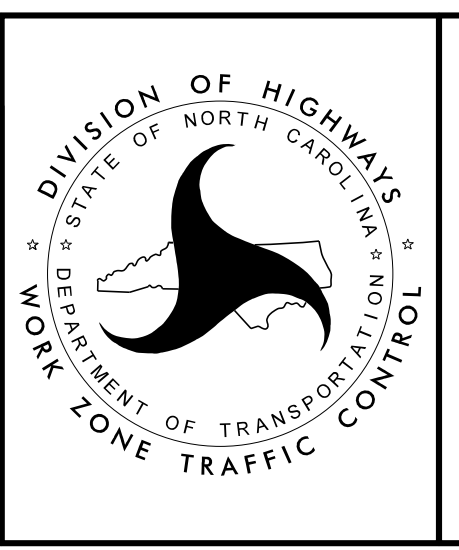
RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions



2/7/2020
R-2915E_TMP_PSH52.dgn

APPROVED: Kevin W. Bisby
DocuSigned by: Kevin W. Bisby
3CE3C9ABDF46481
 DATE: 2/7/2020

SEAL

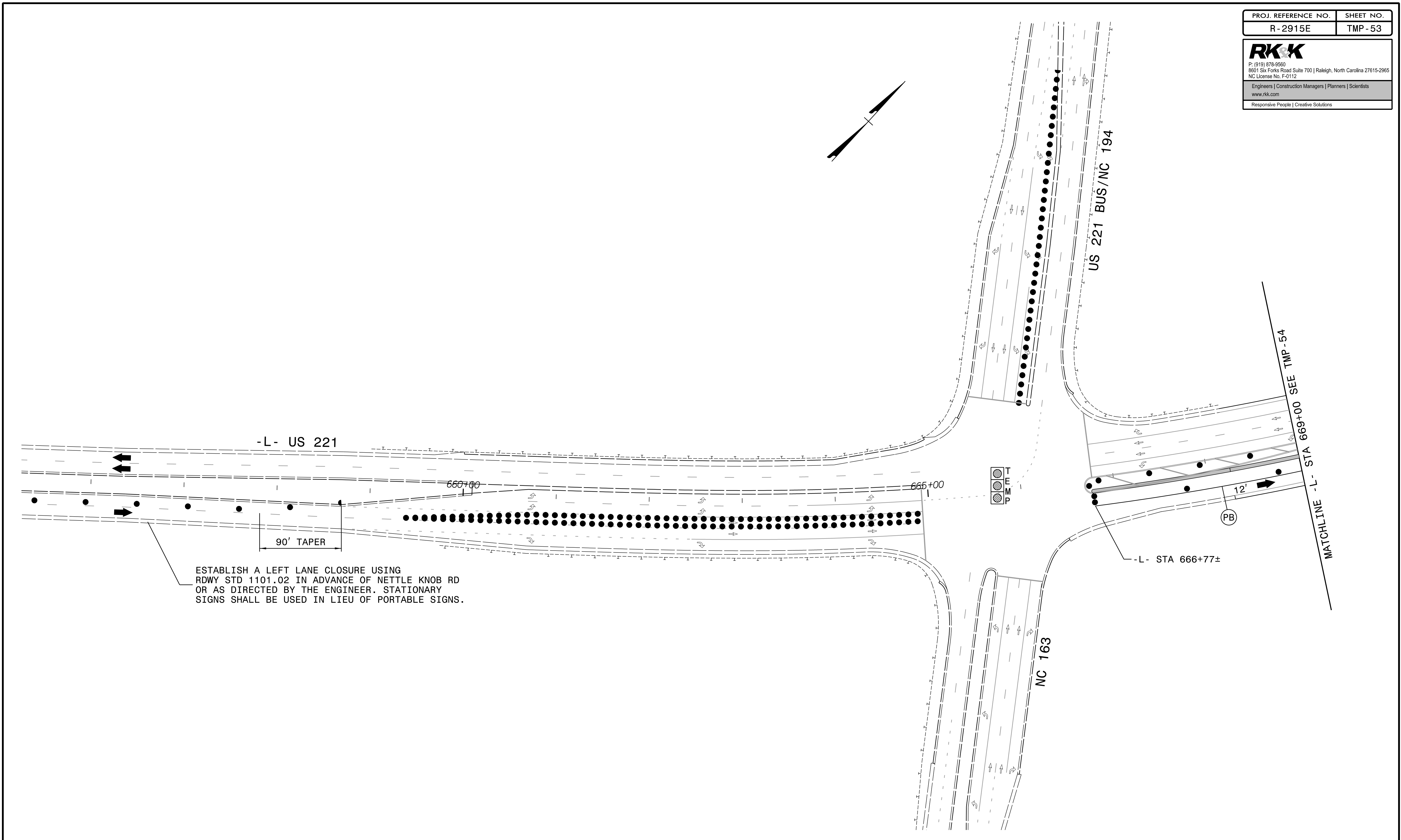


PHASE IV

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

PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-53

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions



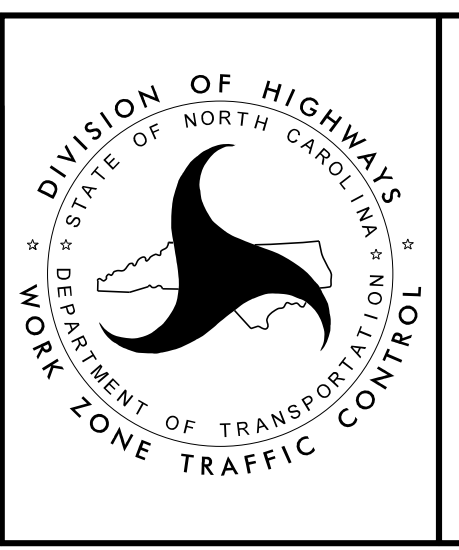
ESTABLISH A LEFT LANE CLOSURE USING RDWY STD 1101.02 IN ADVANCE OF NETTLE KNOB RD OR AS DIRECTED BY THE ENGINEER. STATIONARY SIGNS SHALL BE USED IN LIEU OF PORTABLE SIGNS.

2/7/2020
 R-2915E-TMP_PSH53.dgn

APPROVED: *Kevin W. Esby*
 DATE: 2/7/2020


SEAL

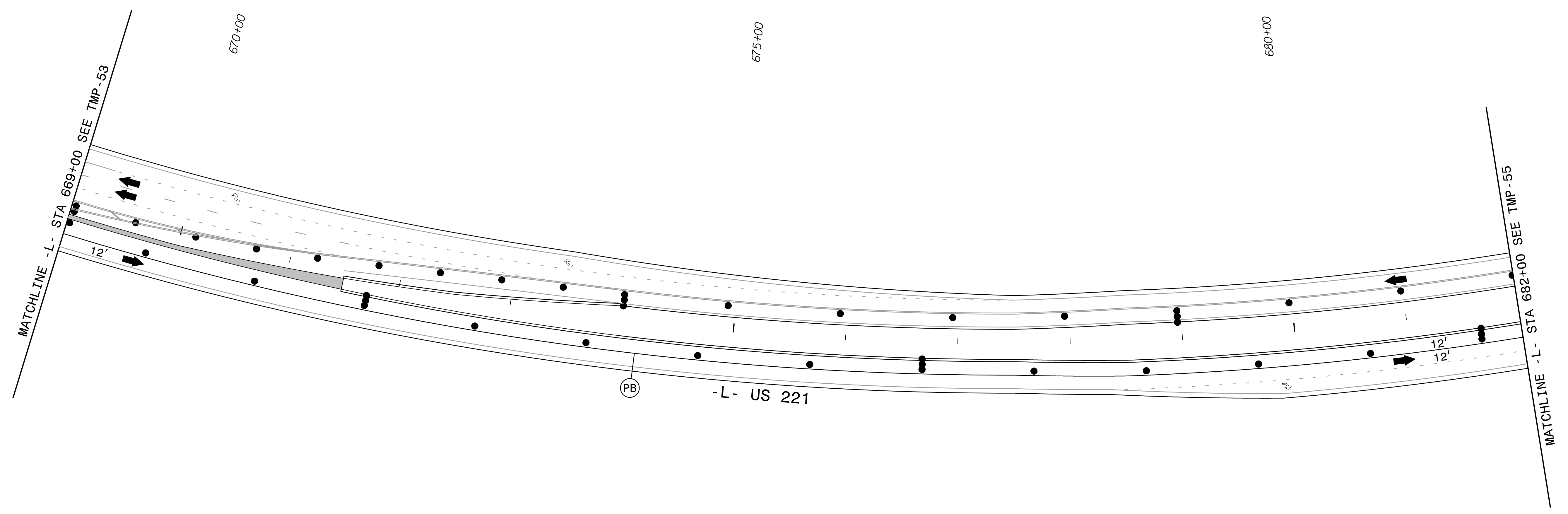
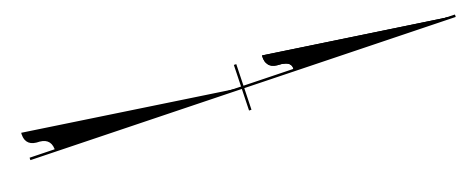
PROFESSIONAL SEAL
 KEVIN W. ESBY
 ENGINEER
 21047



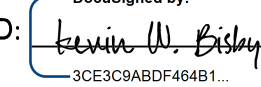
PHASE V

DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED

PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-54
 <small>P: (919) 878-9560 8801 Six Forks Road Suite 700 Raleigh, North Carolina 27615-2965 NC License No. F-0112</small> <small>Engineers Construction Managers Planners Scientists www.rkk.com</small> <small>Responsive People Creative Solutions</small>	

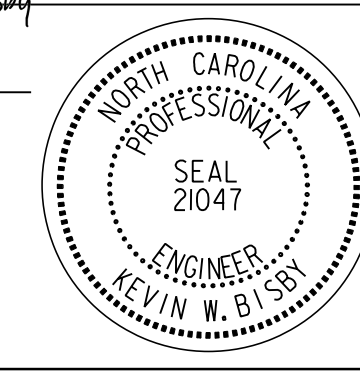
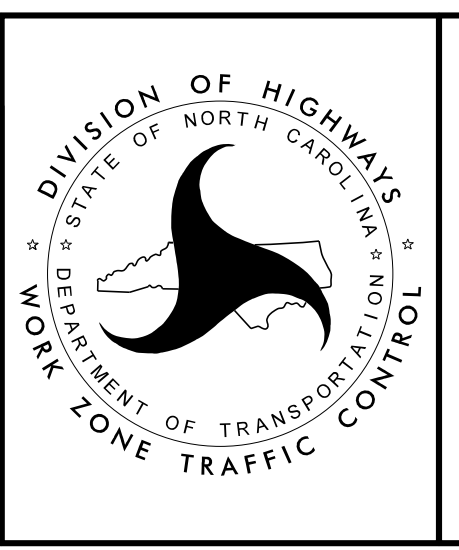


2/7/2020
 R-2915E_TMP_PSH54.dgn

APPROVED: 
DocuSigned by:
 Kevin W. Bisby
 3CE3C9ABDF46481

DATE: 2/7/2020

SEAL

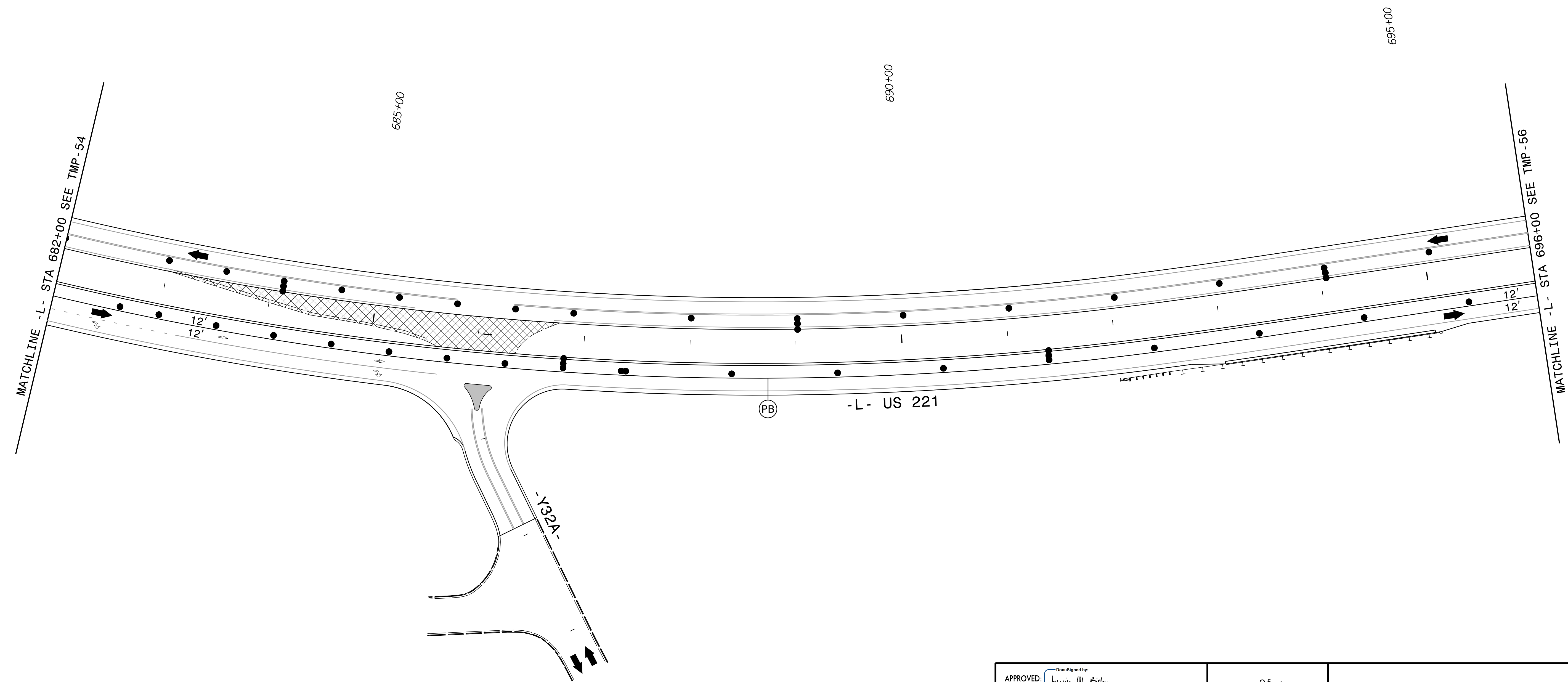



PHASE V

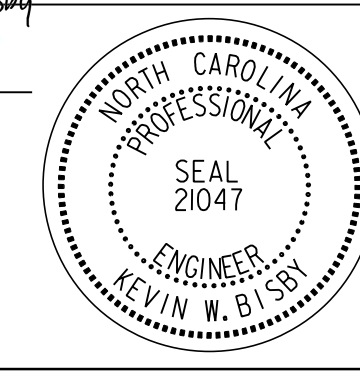
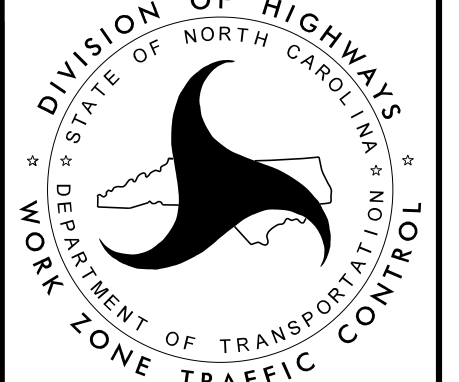
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-55

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions

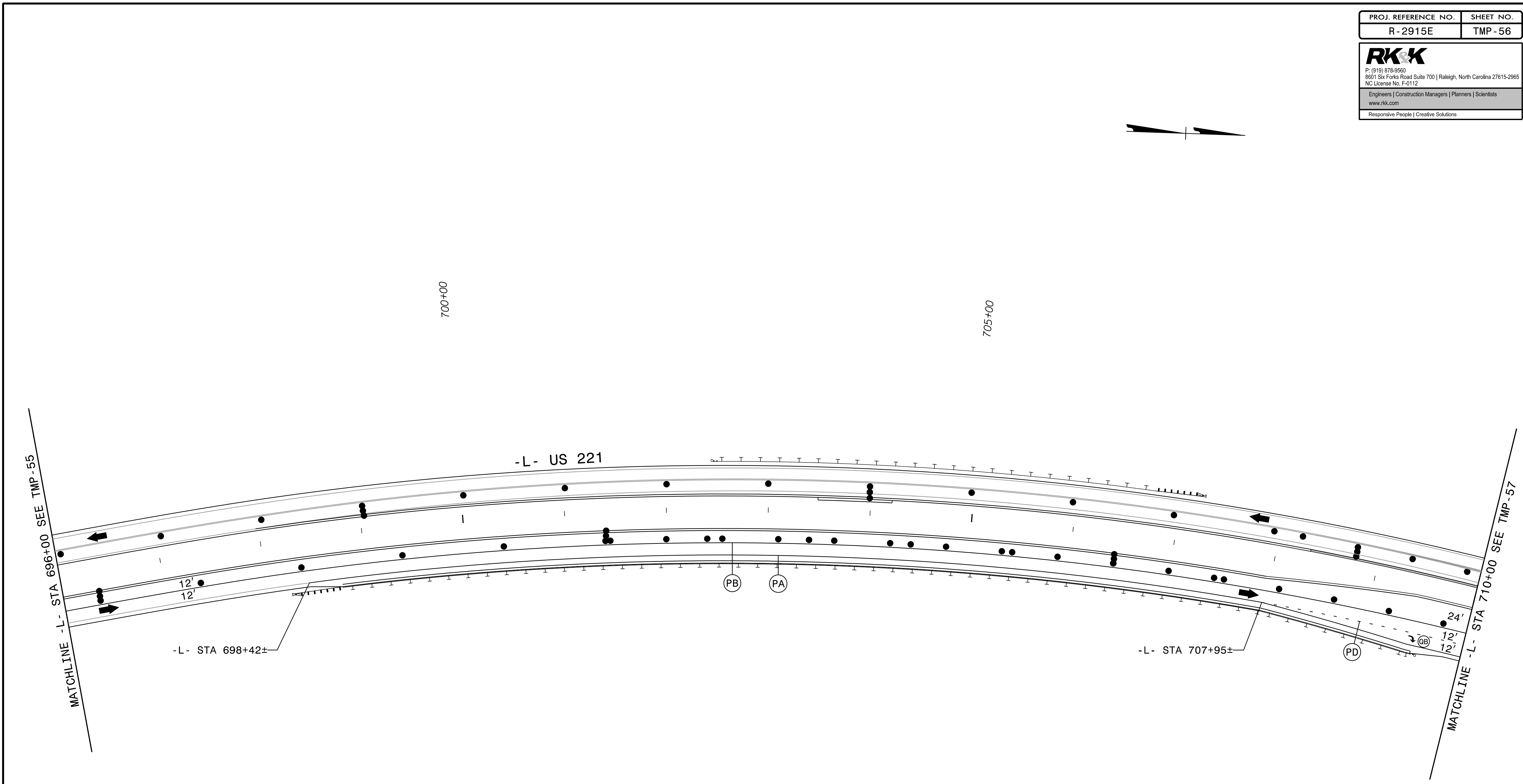
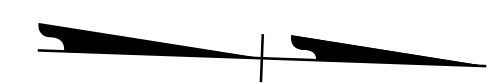


2/7/2020
 R-2915E_TMP_PSH55.dgn

<p>APPROVED: <i>Kevin W. Bisby</i> <small>DocuSigned by: Kevin W. Bisby 3CE3C9ABDF46481</small></p> <p>DATE: 2/7/2020</p> <p>SEAL</p> 		<p>PHASE V</p>
<p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>		

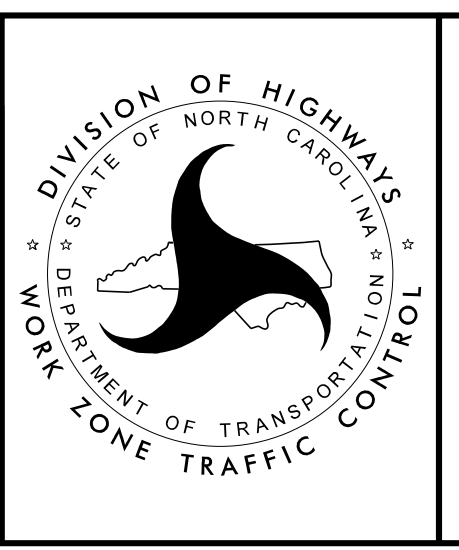
PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-56

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions



2/7/2020
 R-2915E_TMP_PSH56.dgn

APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020
 SEAL

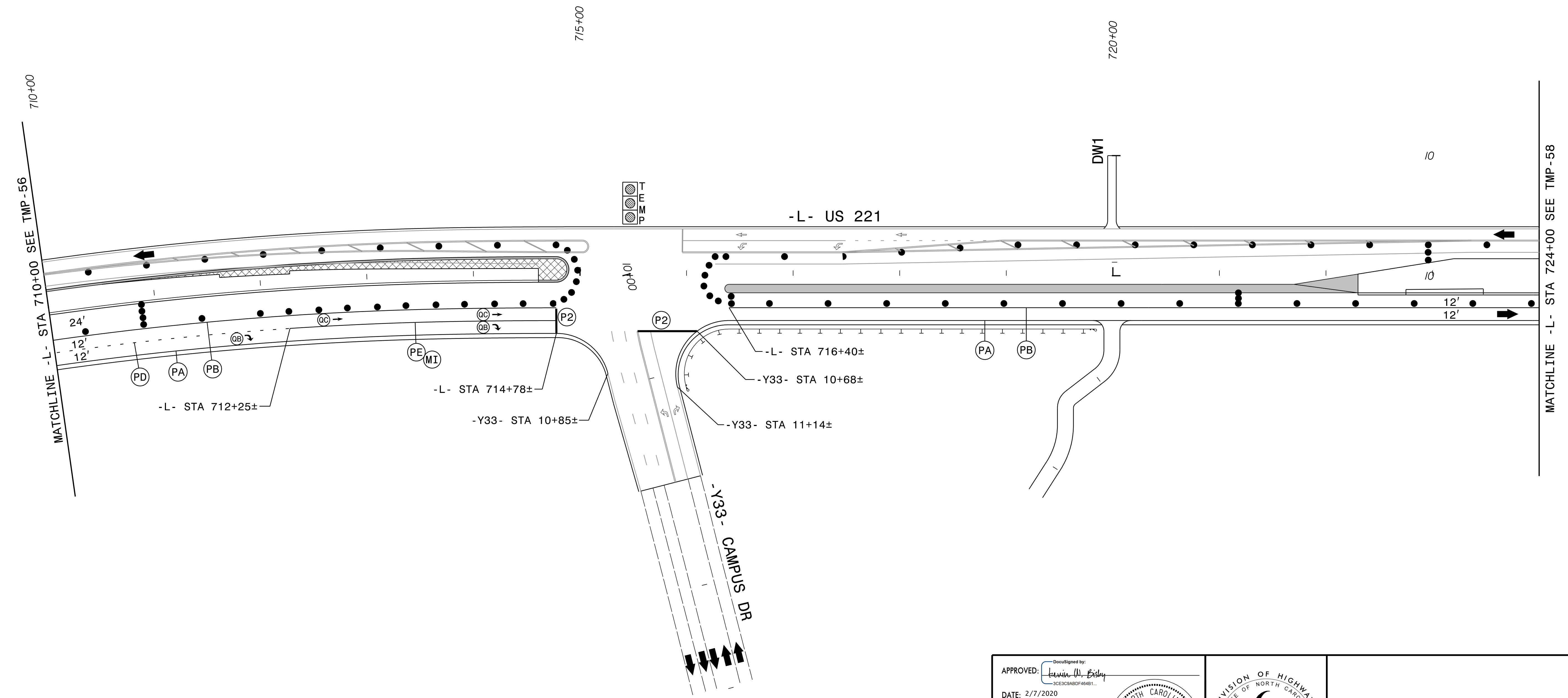
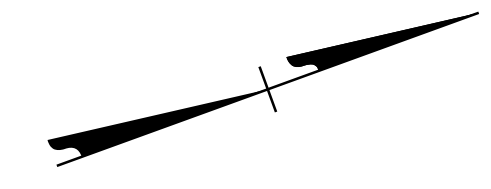


PHASE V

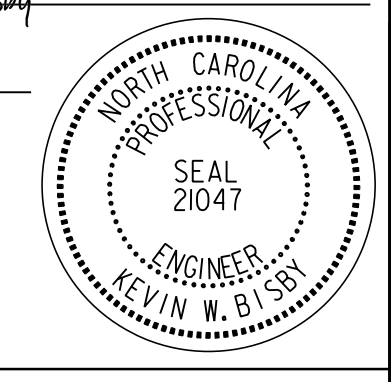
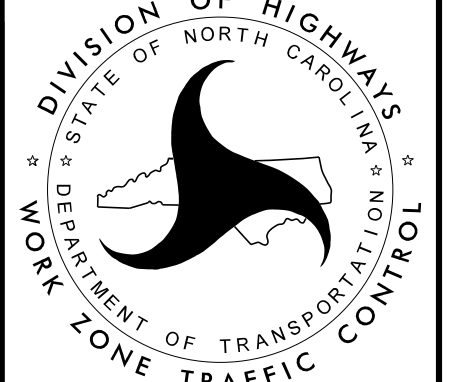
**DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED**

PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-57

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions

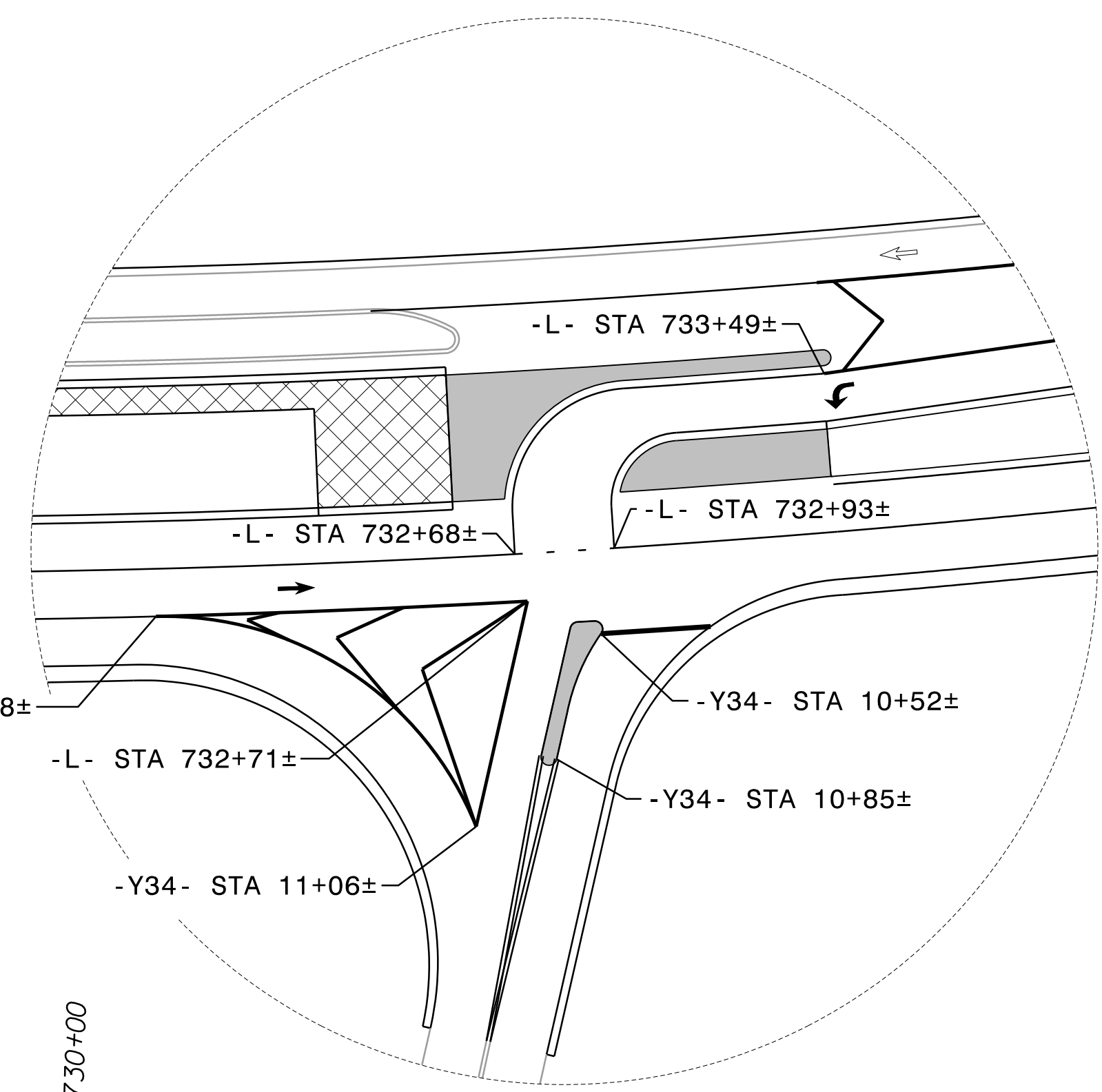
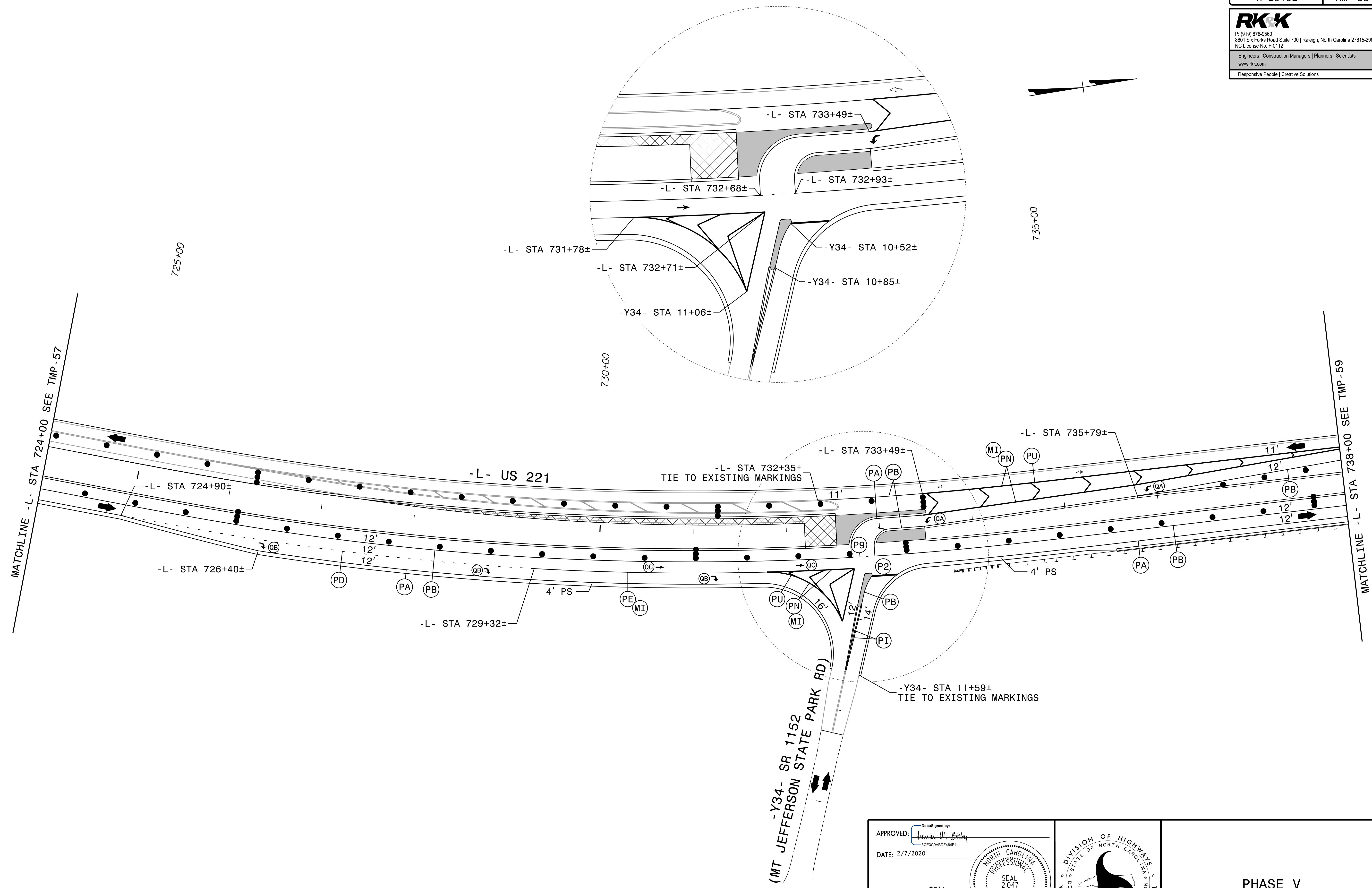


2/7/2020
R-2915E_TMP_PSH57.dgn

APPROVED: <u>Kevin W. Bisby</u> DATE: 2/7/2020 SEAL 		PHASE V
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		

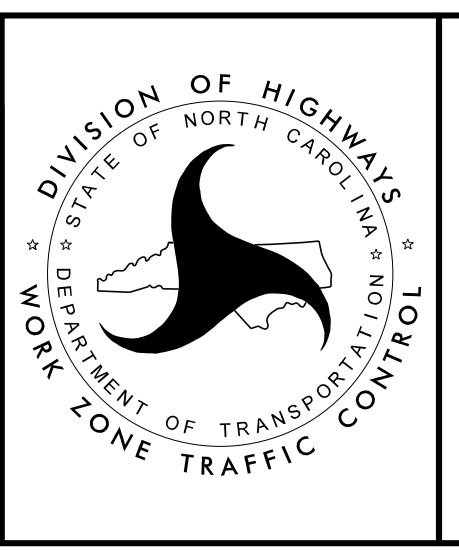
PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-58

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions



2/7/2020
R-2915E-TMP_PSH58.dgn

APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020
 SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL 21047
 KEVIN W. BISBY

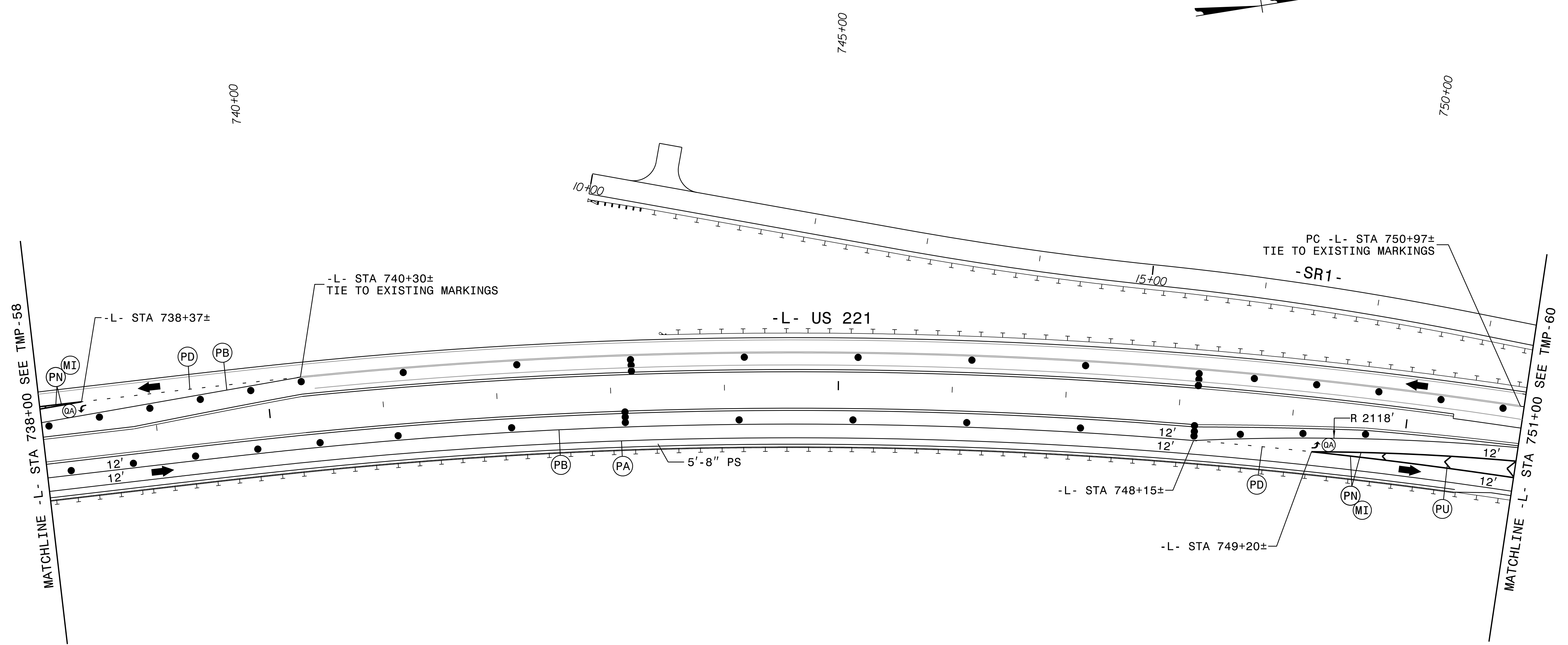


PHASE V

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-59

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions

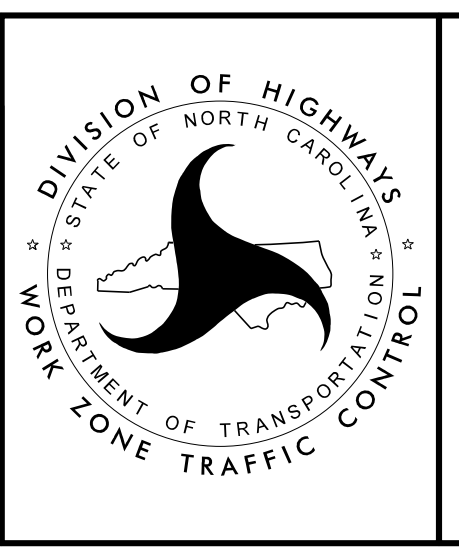


2/7/2020
R-2915E_TMP_PSH59.dgn

APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020

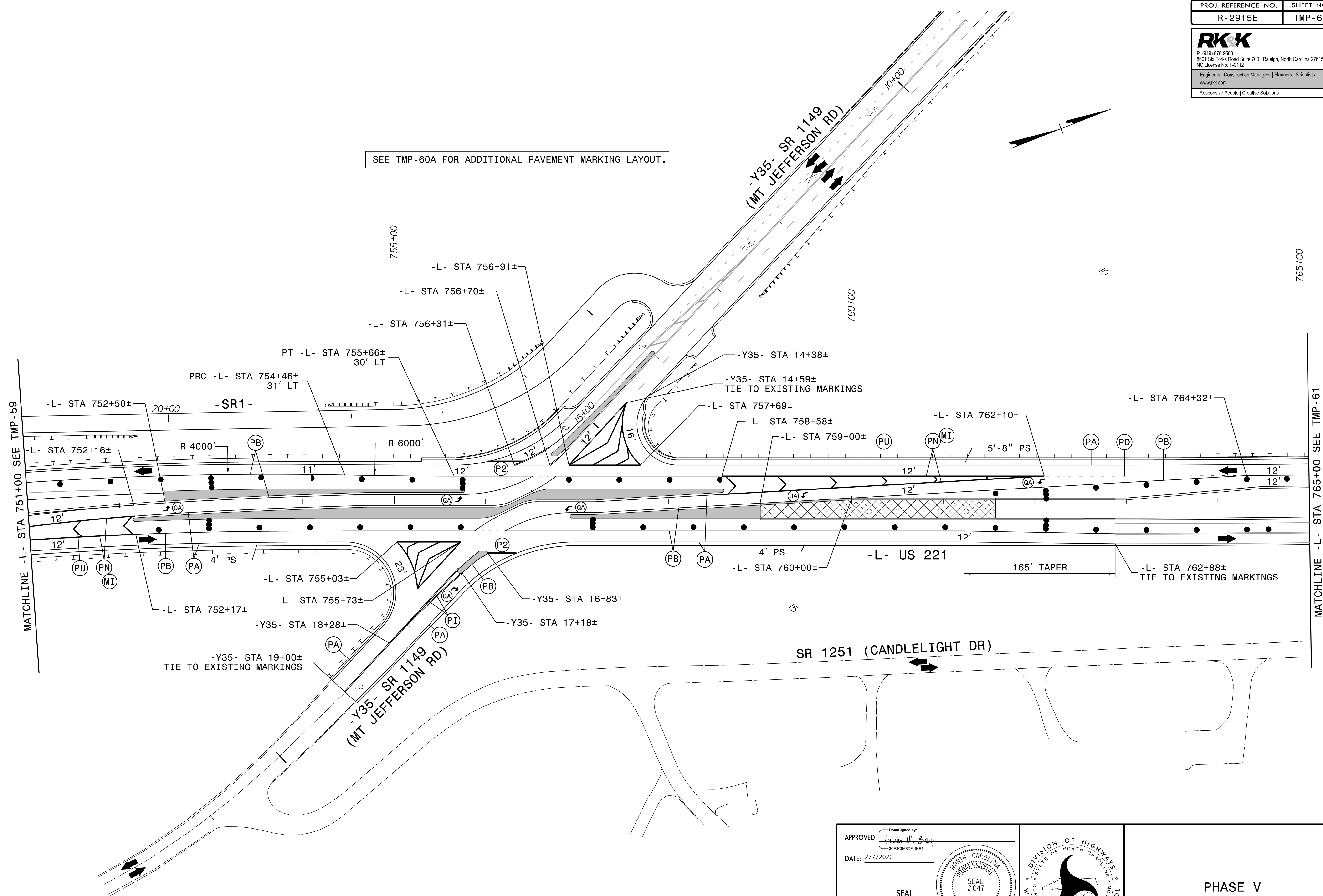
SEAL

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



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

PHASE V



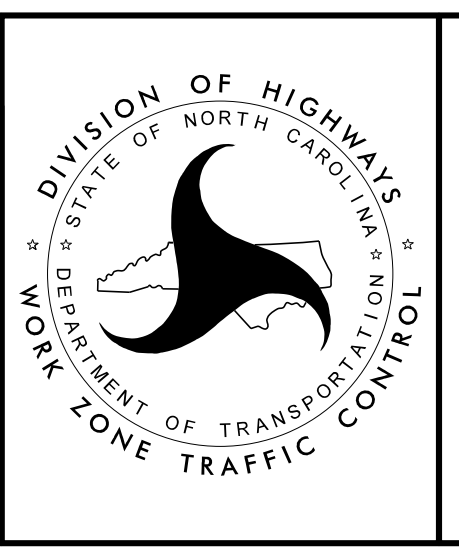
2/7/2020
R-2915E-TMP_PSH60.dgn

APPROVED: *Kevin W. Esby*
 DATE: 2/7/2020

SEAL

SEAL 21047
 ENGINEER
 KEVIN W. ESBY

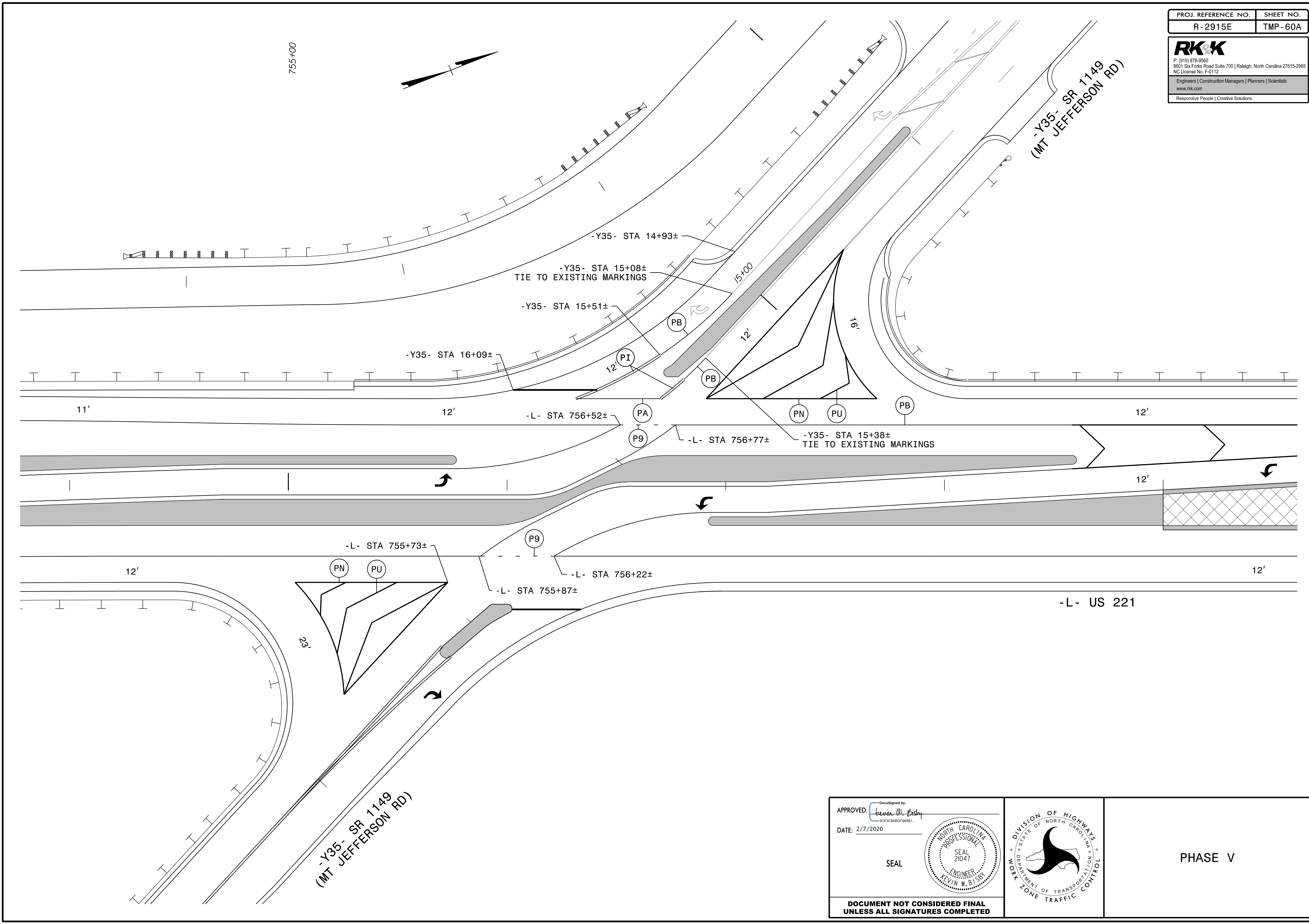
DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED



PHASE V

PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-60A

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions



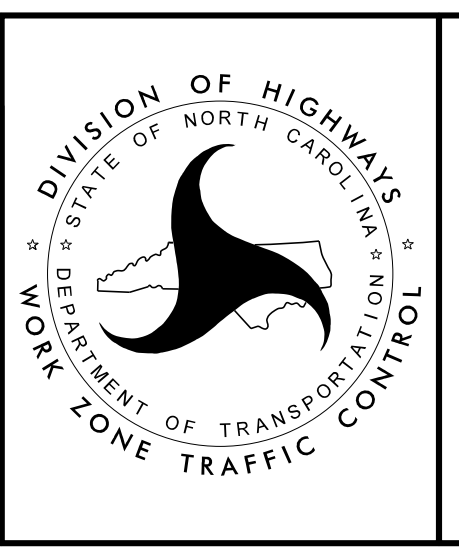
2/7/2020
R-2915E_TMP_PSH60A.dgn

APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020

SEAL

PROFESSIONAL ENGINEER
 KEVIN W. BISBY
 SEAL 21047

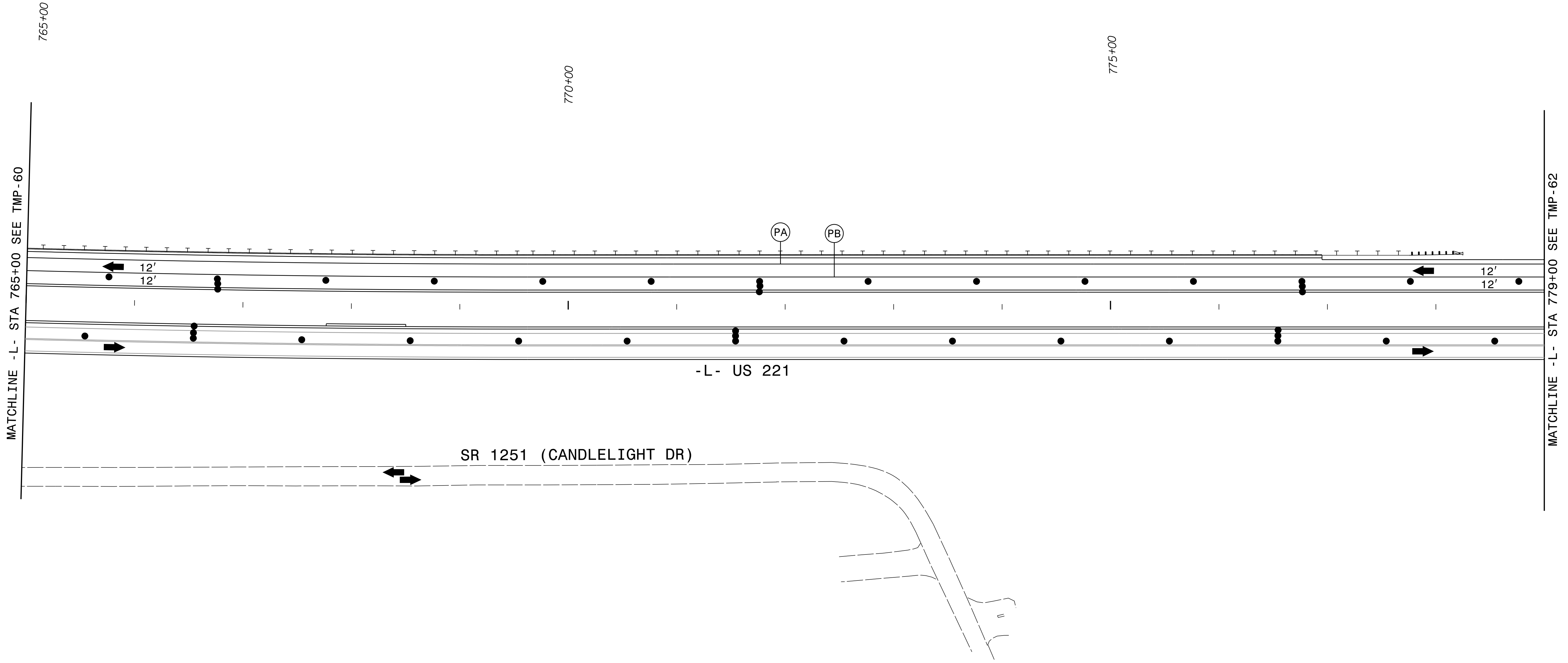
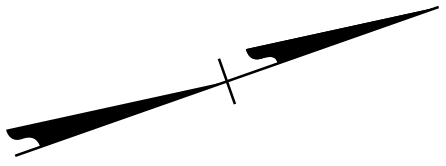
**DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED**



PHASE V

PROJ. REFERENCE NO.	SHEET NO.
R-2915E	TMP-61

RK&K
 P: (919) 878-9560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions

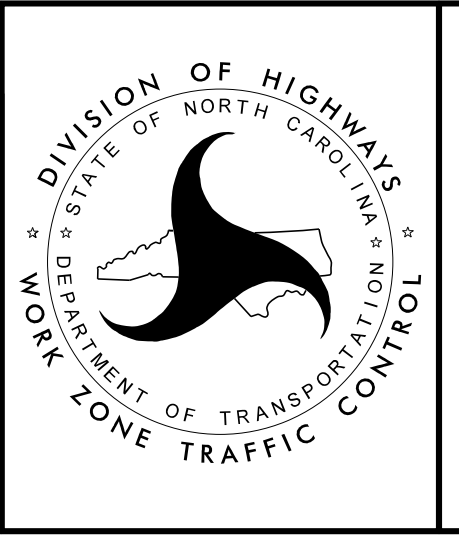


2/7/2020
 R-2915E_TMP_PSH61.dgn

APPROVED: *Kevin W. Bisby*
 DATE: 2/7/2020

SEAL

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



PHASE V