

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

ROCKINGHAM COUNTY

PROJECT NOTES FOR:
BR-0041 & BR-0043

SHEET NO.
TMP-1

1. CONCURRENT CONSTRUCTION OF BRIDGES

EACH PROJECT HAS PHASING SPECIFIC TO EACH BRIDGE. THE COMBINED PROJECTS DO NOT REQUIRE COORDINATED PHASING BETWEEN THEM IN ORDER TO MEET COMMITMENTS.

CONCURRENT CONSTRUCTION MAY OCCUR ON BOTH PROJECTS IN ACCORDANCE WITH UTILITY-BY-OTHERS PROVISIONS, PENDING ACQUISITIONS, AND AS DIRECTED BY THE ENGINEER.

2. OVERLAPPING AND CONCURRENT DEVICES

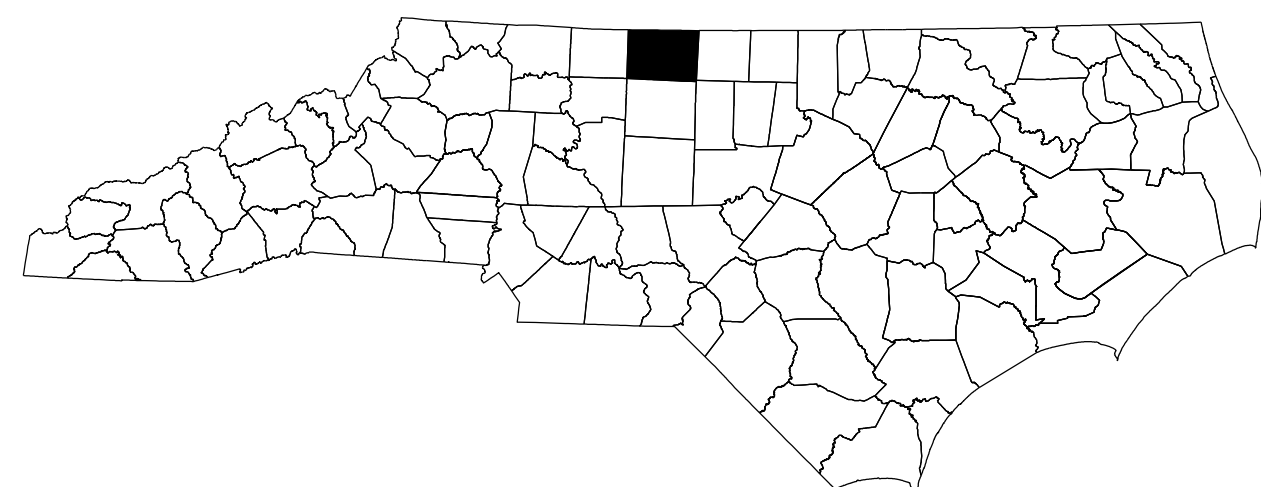
IF THERE ARE ANY OVERLAPPING OR CONCURRENT DEVICES IN CONFLICT WITH ONE ANOTHER AT ANY TIME DURING CONSTRUCTION OF EITHER PROJECT, THIS SHOULD BE REMEDIATED IMMEDIATELY. ADAPT THE DEVICES TO MEET FIELD CONDITIONS. MODIFICATION OF DEVICES MAY INCLUDE MOVING, SUPPLEMENTING, COVERING OR REMOVAL OF DEVICES AS DIRECTED BY THE ENGINEER.

3. MAINTENANCE OF LONG TERM DEVICES

BOTH PROJECTS HAVE SIGNS AND DEVICES THAT WILL BE UTILIZED FOR LONG PERIODS OF TIME (> 1 YEAR) IF USED FOR BOTH PROJECT SITES. ALL SIGNING DEVICES SHALL BE VISUALLY INSPECTED ON A REGULAR BASIS TO CONFIRM THAT ANY LONG TERM SIGNAGE AND DEVICES ARE STILL IN PLACE AND VISIBLE AND BEING USED AS ORIGINALLY PLACED AND INTENDED. THE RESIDENT ENGINEER SHALL DETERMINE WHAT THE REGULAR BASIS TIME FRAME IS TO INSPECT SIGNS AND DEVICES.

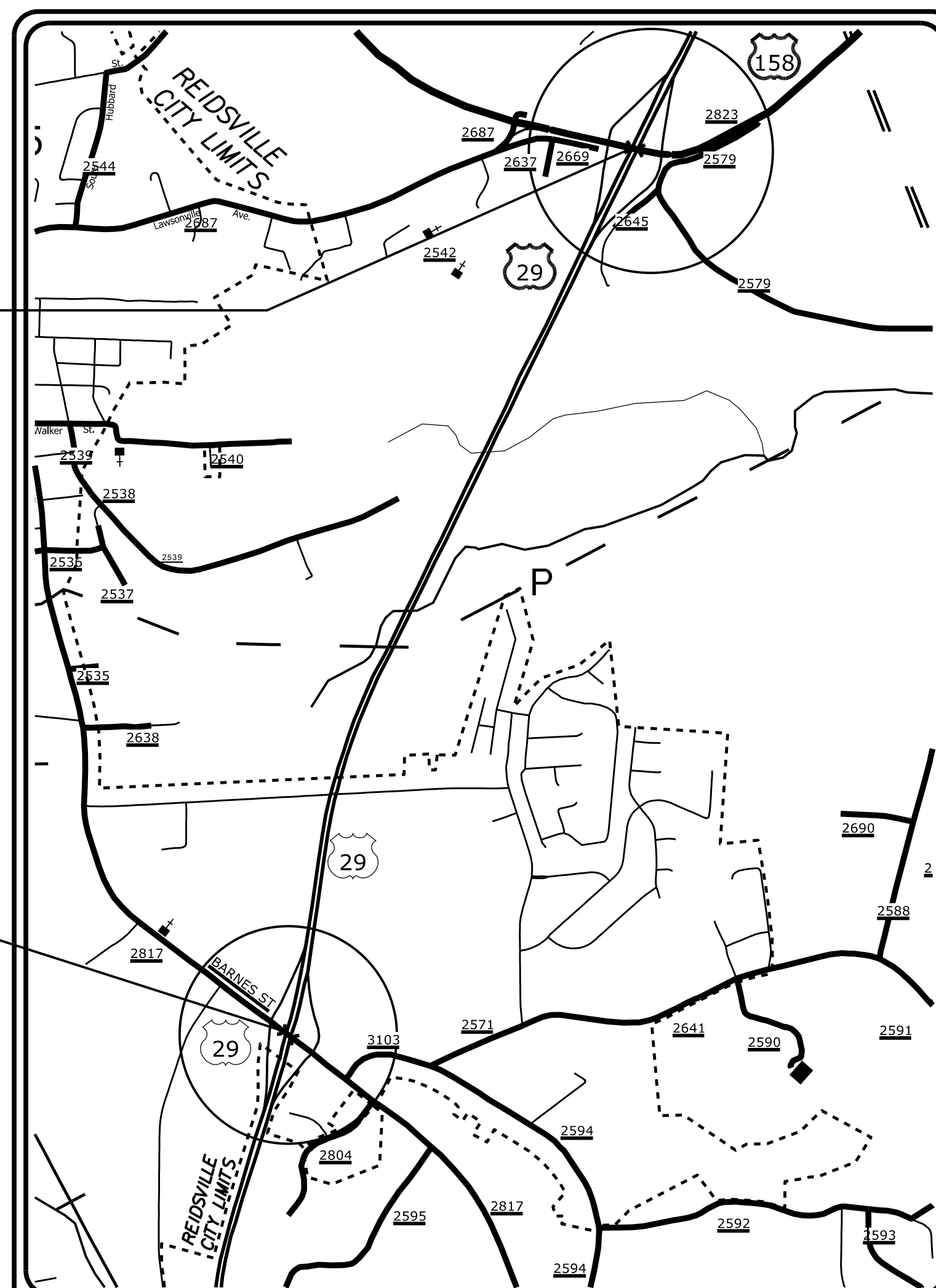
BR-0043

158 /NC 14 OVER US 29



BR-0041

SR 2817 (BARNES ST) OVER US 29



VICINITY MAP
NOT TO SCALE

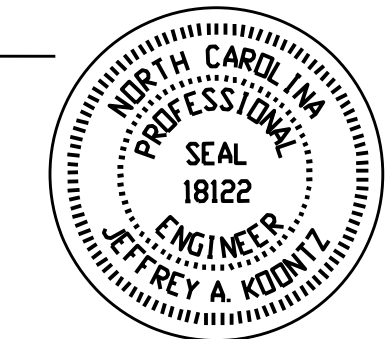
LOCATION:

BRIDGE REPLACEMENTS OVER US 29 AT:

- BR-0041: BRIDGE 780001 ON SR 2817 (BARNES ST)
- BR-0043: BRIDGE 780151 ON US 158 /NC 14

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

APPROVED: Jeffrey A. Koontz
DATE: 2/21/2023



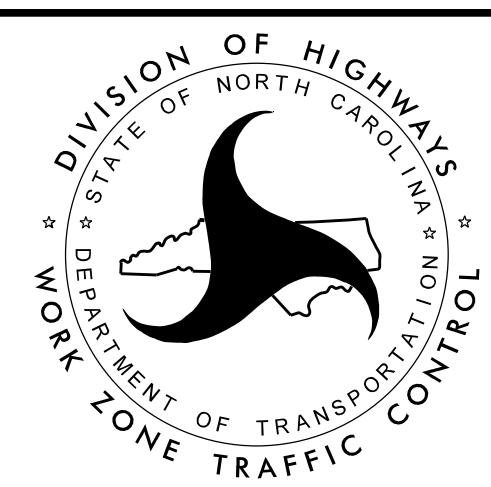
SEAL

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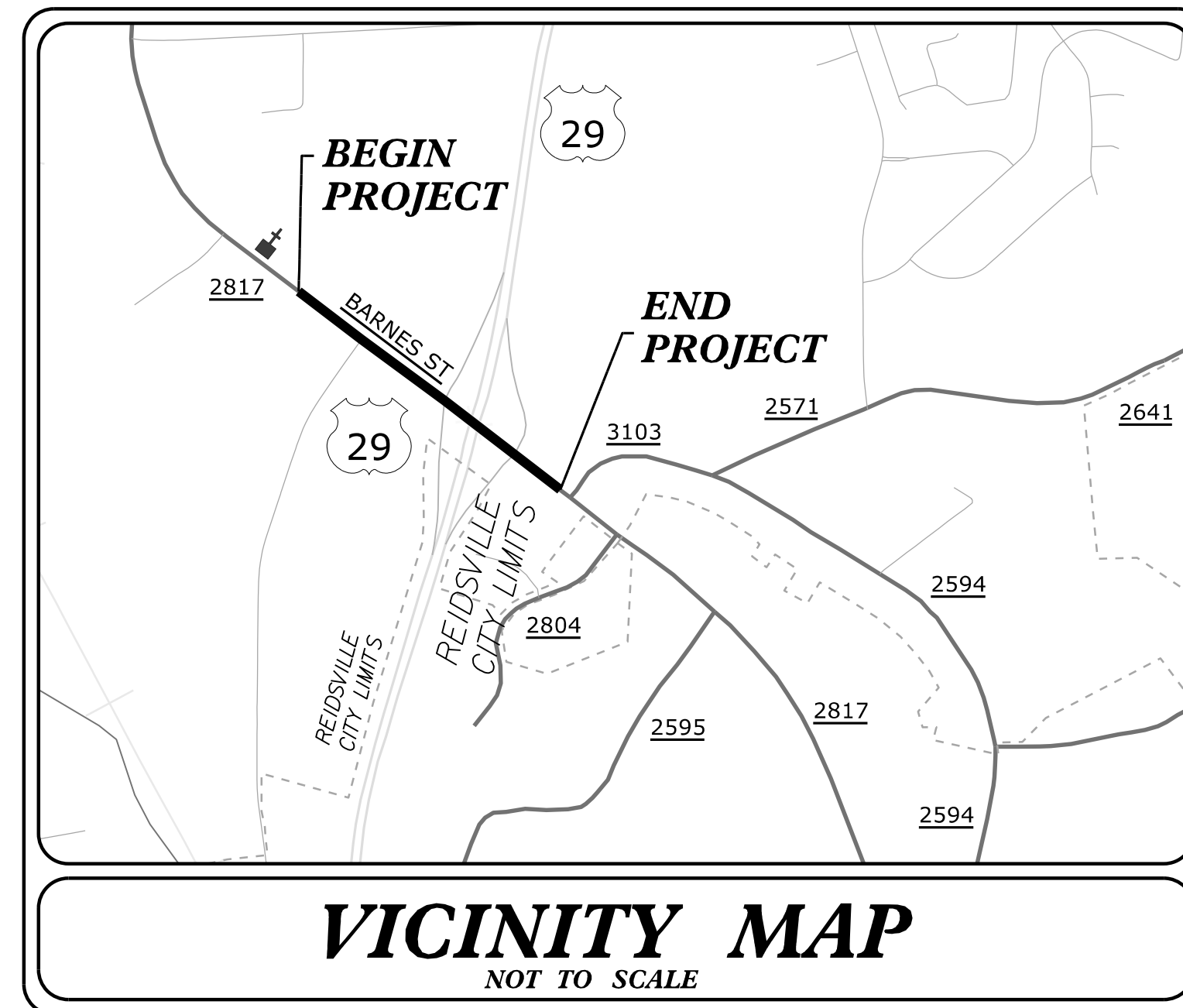
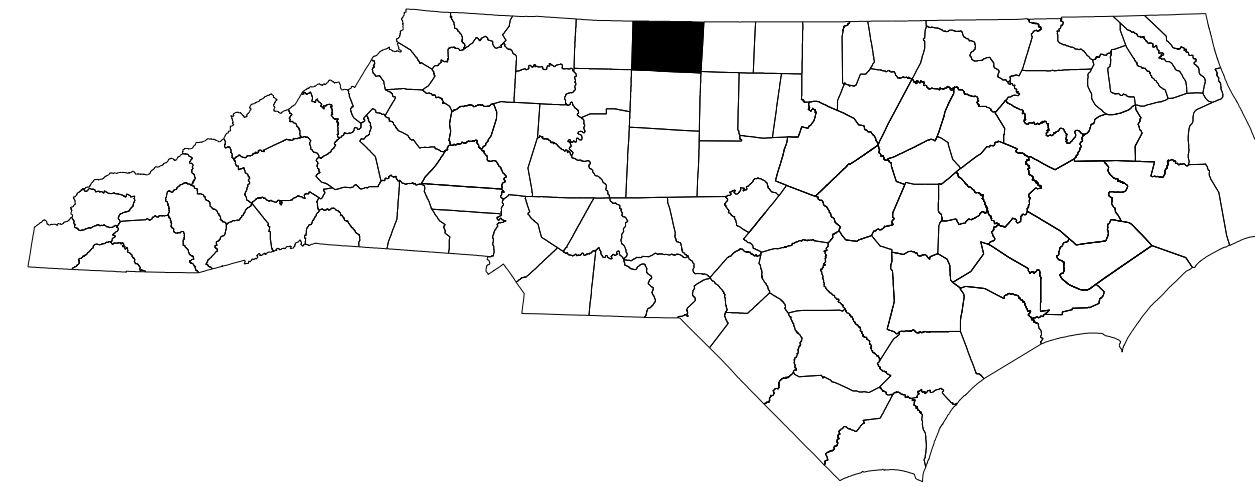
PROJECTS: BR-0041 & BR-0043
CONTRACT:

\$\$\$\$\$SYTIME\$\$\$\$\$
\$\$\$\$\$DGN\$\$\$\$\$
\$\$\$\$\$USERNAM\$\$\$\$\$

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

ROCKINGHAM COUNTY



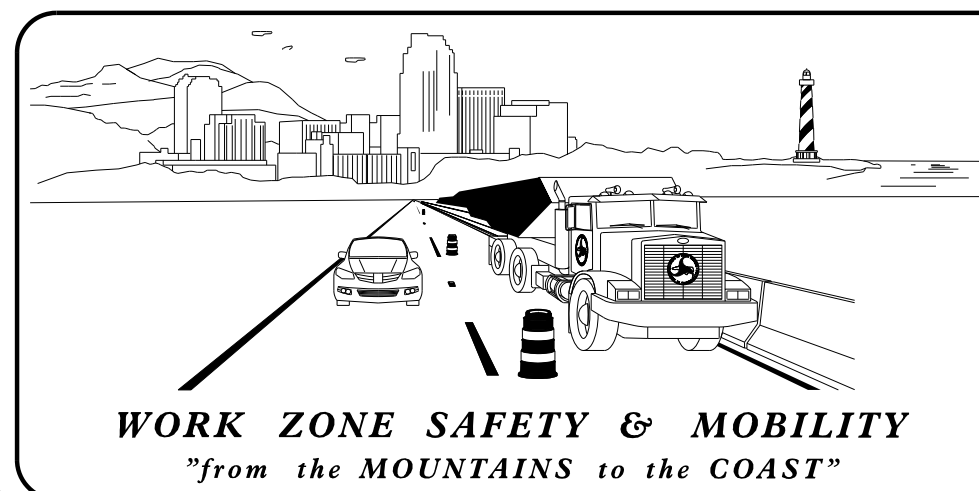
**LOCATION: BRIDGE 780001 ON SR 2817 (BARNES ST)
OVER US 29**

TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND STRUCTURE

INDEX OF SHEETS

SHEET NO.	TITLE
TMP-1	TITLE SHEET, VICINITY MAP, AND INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, AND LEGEND
TMP-2 THRU TMP-2A	GENERAL & PROJECT NOTES
TMP-2B	TEMPORARY SHORING DETAILS
TMP-2C	TEMPORARY SHORING NOTES
TMP-2D	RAMP DETOUR DETAIL
TMP-2E	WORK ZONE VARIABLE SPEED LIMIT REDUCTION
TMP-3 THRU TMP-3B	TRAFFIC CONTROL PHASING NOTES
PHASE I	
TMP-04 THRU TMP-06	PHASE I WATER MAIN RELOCATION DETAILS
TMP-04A THRU TMP-06A	PHASE I SR 2817 DETAILS
TMP-07	PHASE I US 29 DETAILS
PHASE II	
TMP-8 THRU TMP-10	PHASE II 2817 DETAILS
PHASE III & IV	
TMP-11 THRU TMP-11B	PHASE III US 29 DETAILS
TMP-12 THRU TMP-14	PHASE III & IV SR 2817 DETAILS
TMP-15	PHASE IV US 29 DETAILS

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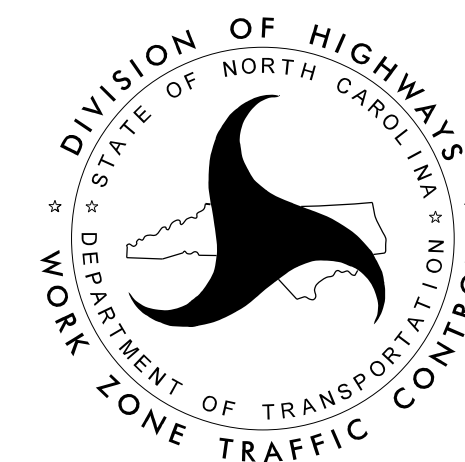


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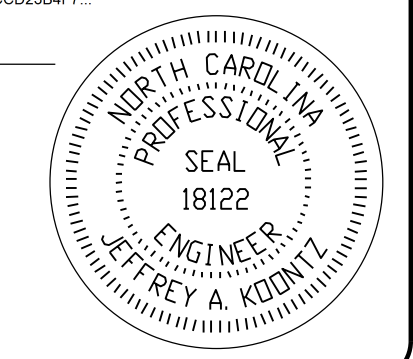
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APPROVED: Jeffrey A. Koontz
DATE: 2/15/2023



SEAL

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 WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW BOARDS
1130.01	DRUMS
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1160.01	TEMPORARY CRASH CUSHION
1165.01	TRUCK MOUNTED ATTENUATOR
1170.01	PORTABLE CONCRETE BARRIER
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO LANE AND MULTILANE ROADWAYS
1205.03	PAVEMENT MARKINGS - EXITS AND ENTRANCE RAMP
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
- EXIST. PVMT.
- NORTH ARROW
- PROPOSED PVMT.
- TEMPORARY SHORING

- WORK AREA
- REMOVAL
- TEMP. PAVEMENT

SIGNALS

- EXISTING
- PROPOSED
- TEMPORARY
- PORTABLE

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

PAINT	
P1	WHITE EDGE LINE 4"
P2	WHITE SOLID LANE LINE 4"
P3	10 FT. WHITE SKIP 4"
P4	3 FT.-9 FT./SP WHITE MINISKIP 4"
P5	2 FT. - 6 FT./SP WHITE MINISKIP (4")
P11	YELLOW SINGLE CENTERLINE 4"
P12	10 FT. YELLOW SKIP (4")
P13	YELLOW DOUBLE CENTER 4"
P14	2 FT-6 FT/SP YELLOW MINISKIP 4"
P20	WHITE EDGE LINE 6"
P21	WHITE SOLID LANE LINE 6"
P22	10 FT. WHITE SKIP 6"
P30	YELLOW EDGELINE 6"
P41	WHITE DIAGONAL 8"
P42	YELLOW DIAGONAL 8"
61	WHITE STOP LINE 24"
P70	LEFT TURN ARROW
P71	RIGHT TURN ARROW
P72	STRAIGHT ARROW
P73	COMBO LEFT/STRAIGHT ARROW
P100	ALPHA CHARACTER
P102	12" YIELD LINE

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APPROVED: DATE: 2/22/2023 SEAL			ROADWAY STANDARD DRAWINGS & LEGEND
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

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.

GENERAL NOTES

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

TIME RESTRICTIONS - REQUIRES INTERMEDIATE CONTRACT TIME PROJECT SPECIAL PROVISIONS

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

ROAD NAME	DAY AND TIME RESTRICTIONS
US 29 & RAMPS	MONDAY-SUNDAY 6:00 AM TO 7:00 PM
ALL OTHER ROADS	

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

ROAD NAME

US 29 & RAMPS
ALL OTHER ROADS

HOLIDAY

- FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
- FOR NEW YEAR'S, BETWEEN THE HOURS OF 6:00 A.M. DECEMBER 31st TO 6:00 P.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 7:00 P.M. THE FOLLOWING TUESDAY.
- FOR EASTER, BETWEEN THE HOURS OF 6:00 A.M. THURSDAY AND 7:00 P.M. MONDAY.
- FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY TO 7:00 P.M. TUESDAY.
- FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 7:00 P.M. THE DAY AFTER INDEPENDENCE DAY.

IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 6:00 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 7:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.
- FOR LABOR DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY AND 7:00 P.M. TUESDAY.
- FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00 A.M. TUESDAY TO 7:00 P.M. MONDAY.
- FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 7:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

C) DO NOT STOP TRAFFIC AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS	DURATION AND OPERATION
SR 2817 WATLINGTON INDUSTRIAL DR	MONDAY THRU SUNDAY 6:00 AM TO 7:00 PM	15 MINS FOR TRAFFIC SHIFTS

D) DO NOT CLOSE ROAD AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
US 29	MONDAY THRU SUNDAY 5:00 AM TO 1:00 AM
US 29 RAMPS	MONDAY THRU SUNDAY 5:00 AM TO 10:00 PM

E) DO NOT CONDUCT MULTI-VEHICLE HAULING AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
US 29	MONDAY-FRIDAY 6:00 AM-9:00 AM & 4:00 PM-6:00 PM

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

LANE AND SHOULDER CLOSURE REQUIREMENTS

F) 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.

H) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.

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

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

J) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRAFFIC CONTROL PLANS, ROADWAY STANDARD DRAWINGS, OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.

K) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY, RAMP, OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.

L) PROVIDE TRAFFIC CONTROL FOR APPROPRIATE LANE CLOSURES FOR SURVEYING DONE BY THE DEPARTMENT.

PAVEMENT EDGE DROP OFF REQUIREMENTS

M) 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.

N) 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) 200 FT IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

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

SIGNING

P) 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.

Q) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.

R) COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED TO CLOSE THE ROAD WHEN ROAD CLOSURE IS NOT IN OPERATION.

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

TRAFFIC BARRIER

T) INSTALL TEMPORARY BARRIER ACCORDING TO THE TRANSPORTATION MANAGEMENT PLANS A MAXIMUM OF TWO (2) WEEKS PRIOR TO BEGINNING WORK IN ANY LOCATION. ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION PROCEED IN A CONTINUOUS MANNER TO COMPLETE THE PROPOSED WORK IN THAT LOCATION UNLESS OTHERWISE STATED IN THE TRANSPORTATION MANAGEMENT PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT PLACE BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE.

ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION AND NO WORK IS PERFORMED BEHIND THE TEMPORARY BARRIER FOR A PERIOD LONGER THAN TWO (2) MONTHS, REMOVE / RESET TEMPORARY BARRIER AT NO COST TO THE DEPARTMENT UNLESS OTHERWISE STATED IN THE TRANSPORTATION MANAGEMENT PLANS, TEMPORARY BARRIER IS PROTECTING A HAZARD, OR AS DIRECTED BY THE ENGINEER.

INSTALL TEMPORARY BARRIER WITH THE TRAFFIC FLOW BEGINNING WITH THE UPSTREAM SIDE OF TRAFFIC. REMOVE TEMPORARY BARRIER AGAINST THE TRAFFIC FLOW BEGINNING WITH THE DOWNSTREAM SIDE OF TRAFFIC.

INSTALL AND SPACE DRUMS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH) TO CLOSE OR KEEP THE SECTION OF THE ROADWAY CLOSED UNTIL THE TEMPORARY BARRIER CAN BE PLACED OR AFTER THE TEMPORARY BARRIER IS REMOVED.

U) 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	MINIMUM OFFSET
40 OR LESS	15 FT
45 - 50	20 FT
55	25 FT
60 MPH OR HIGHER	30 FT

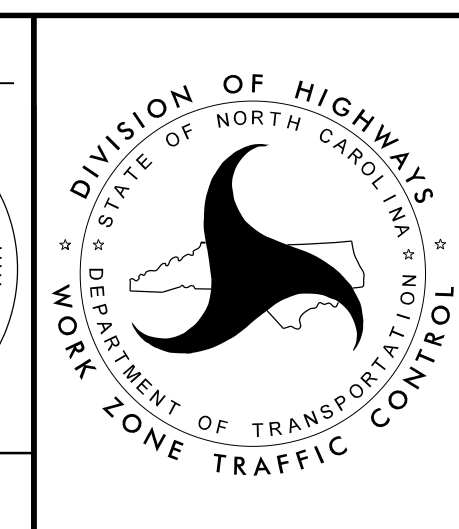
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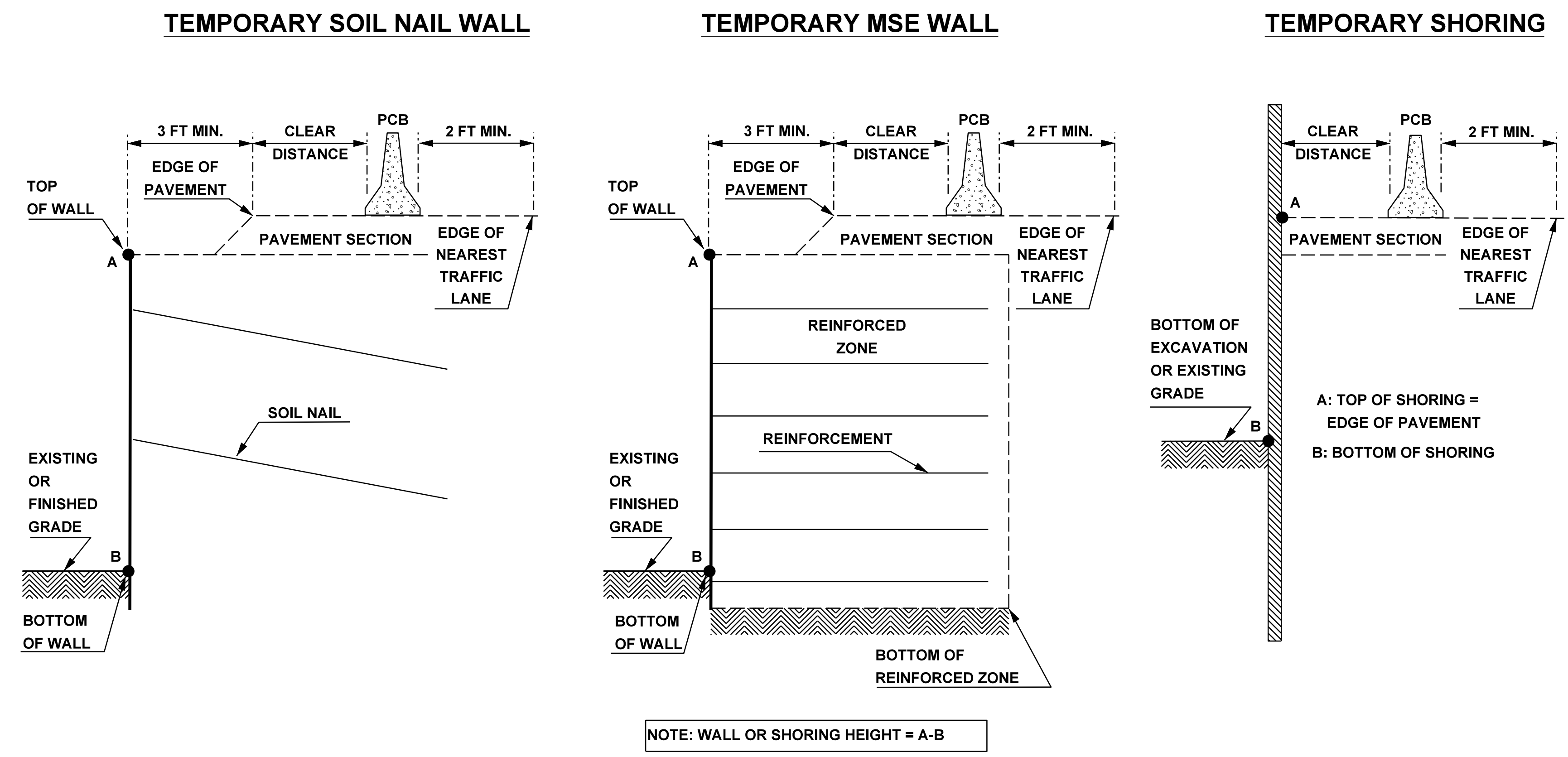
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DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
WORK ZONE TRAFFIC CONTROL

GENERAL NOTES



NOTE: WALL OR SHORING HEIGHT = A-B

FIGURE A

NOTES

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

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	
Anchored PCB	Asphalt	All Offsets	24 for All Design Speeds					
		Concrete (including bridge approach slabs)	All Offsets	12 for All Design Speeds				

* See Figure Below

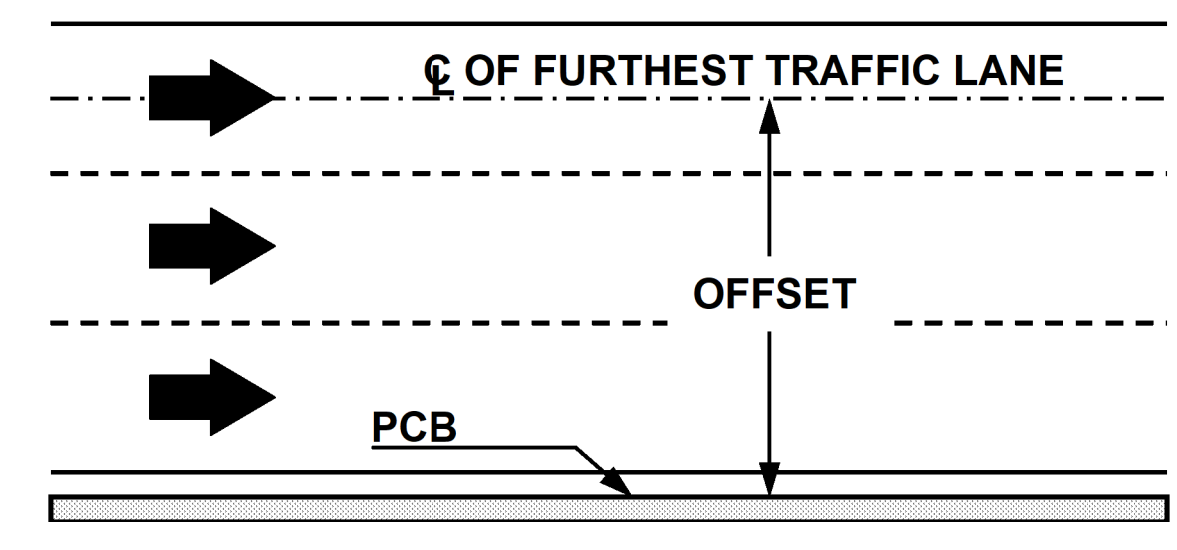


FIGURE B

2/15/2023 BR0041.TC_TMP_03.SHORING_DETAIL.dgn jon.ar.chambault

APPROVED: <i>Jeffrey A. Kodyntz</i> DATE: 2/15/2023 SEAL			PORTABLE CONCRETE BARRIER AT TEMPORARY SHORING LOCATIONS
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

TEMPORARY SHORING NOTES

TEMPORARY SHORING NO. **1A** (SEE SHEET TMP-06A)

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

DESIGN TEMPORARY SHORING FROM STATION 33+10 +/- -L-, 4.6 FT. LT. TO STATION 33+93 +/- -L-, 4.6 LT., FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT OF SOIL ABOVE WATER TABLE, $\gamma = 120$ PCF
 UNIT WEIGHT OF SOIL BELOW WATER TABLE, $\gamma' = 60$ PCF
 FRICTION ANGLE, $\phi = 30$
 COHESION, $c = 0$ PSF
 GROUNDWATER ELEVATION = 790 FT

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 33+10 +/- -L-, 4.6 FT. LT. TO STATION 33+93 +/- -L-, 4.6 LT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 33+10 +/- -L-, 4.6 FT. LT. TO STATION 33+93 +/- -L-, 4.6 LT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.02 FOR STANDARD TEMPORARY WALL.

TEMPORARY SHORING NO. **1B** (SEE SHEET TMP-06A)

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

DESIGN TEMPORARY SHORING FROM STATION 33+18 +/- -L-, 2.0 FT. LT, TO STATION 33+98 +/- -L-, 1.0 FT. RT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT OF SOIL ABOVE WATER TABLE, $\gamma = 120$ PCF
 UNIT WEIGHT OF SOIL BELOW WATER TABLE, $\gamma' = 60$ PCF
 FRICTION ANGLE, $\phi = 30$
 COHESION, $c = 0$ PSF
 GROUNDWATER ELEVATION = 724 FT.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 33+18 +/- -L-, 2.0 FT. LT, TO STATION 33+98 +/- -L-, 1.0 FT. RT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

DRIVEN PILING FOR TEMPORARY SHORING FROM STATION 33+18 +/- -L-, 2.0 FT. LT, TO STATION 33+98 +/- -L-, 1.0 FT. RT MAY NOT PENETRATE BELOW ELEVATION 774 FT. DUE TO OBSTRUCTIONS, VERY DENSE OR HARD SOIL, BOULDERS OR WEATHERED OR HARD ROCK.

TEMPORARY SHORING NO. **2A** (SEE SHEET TMP-06A)

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

DESIGN TEMPORARY SHORING FROM STATION 35+53 +/- -L-, 4.7 FT. LT. TO STATION 36+30 +/- -L-, 4.7 LT., FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT OF SOIL ABOVE WATER TABLE, $\gamma = 120$ PCF
 UNIT WEIGHT OF SOIL BELOW WATER TABLE, $\gamma' = 60$ PCF
 FRICTION ANGLE, $\phi = 30$
 COHESION, $c = 0$ PSF
 GROUNDWATER ELEVATION = 784 FT

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 35+53 +/- -L-, 4.7 FT. LT. TO STATION 36+30 +/- -L-, 4.7 LT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 35+53 +/- -L-, 4.7 FT. LT. TO STATION 36+30 +/- -L-, 4.7 LT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.02 FOR STANDARD TEMPORARY WALL.

TEMPORARY SHORING NO. **2B** (SEE SHEET TMP-06A)

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

DESIGN TEMPORARY SHORING FROM STATION 35+50 +/- -L-, 1.0 FT. RT., TO STATION 36+18 +/- -L-, 1.0 FT. RT., FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

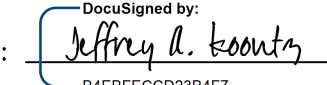
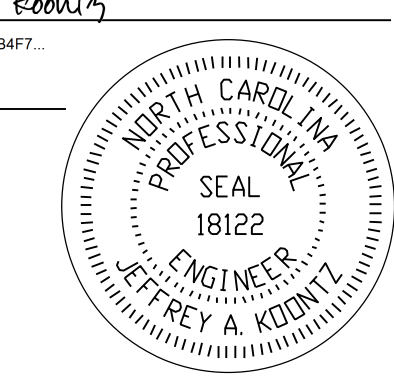

UNIT WEIGHT OF SOIL ABOVE WATER TABLE, $\gamma = 120$ PCF
 UNIT WEIGHT OF SOIL BELOW WATER TABLE, $\gamma' = 60$ PCF
 FRICTION ANGLE, $\phi = 30$
 COHESION, $c = 0$ PSF
 GROUNDWATER ELEVATION = 784 FT.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 35+50 +/- -L-, 1.0 FT. RT., TO STATION 36+18 +/- -L-, 1.0 FT. RT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

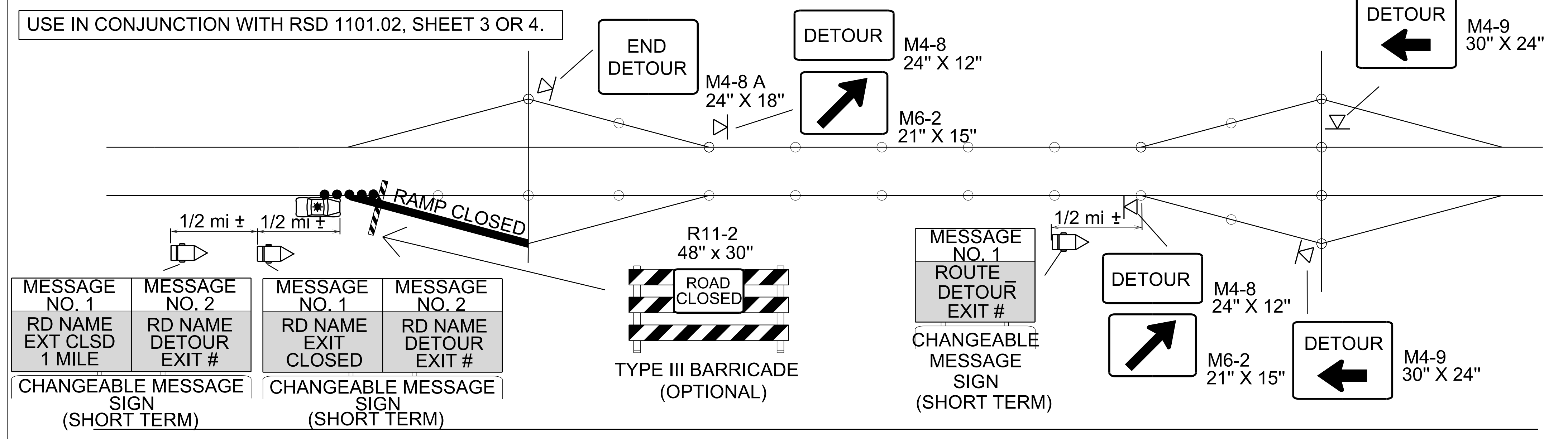
DRIVEN PILING FOR TEMPORARY SHORING FROM STATION 35+50 +/- -L-, 1.0 FT. RT., TO STATION 36+18 +/- -L-, 1.0 FT. RT., MAY NOT PENETRATE BELOW ELEVATION 767 FT DUE TO OBSTRUCTIONS, VERY DENSE OR HARD SOIL, BOULDERS OR WEATHERED OR HARD ROCK.

2/15/2023 BR0041.TC.TMP_PSH_02C_TempShoringNotes.dgn jon_ar_chambault

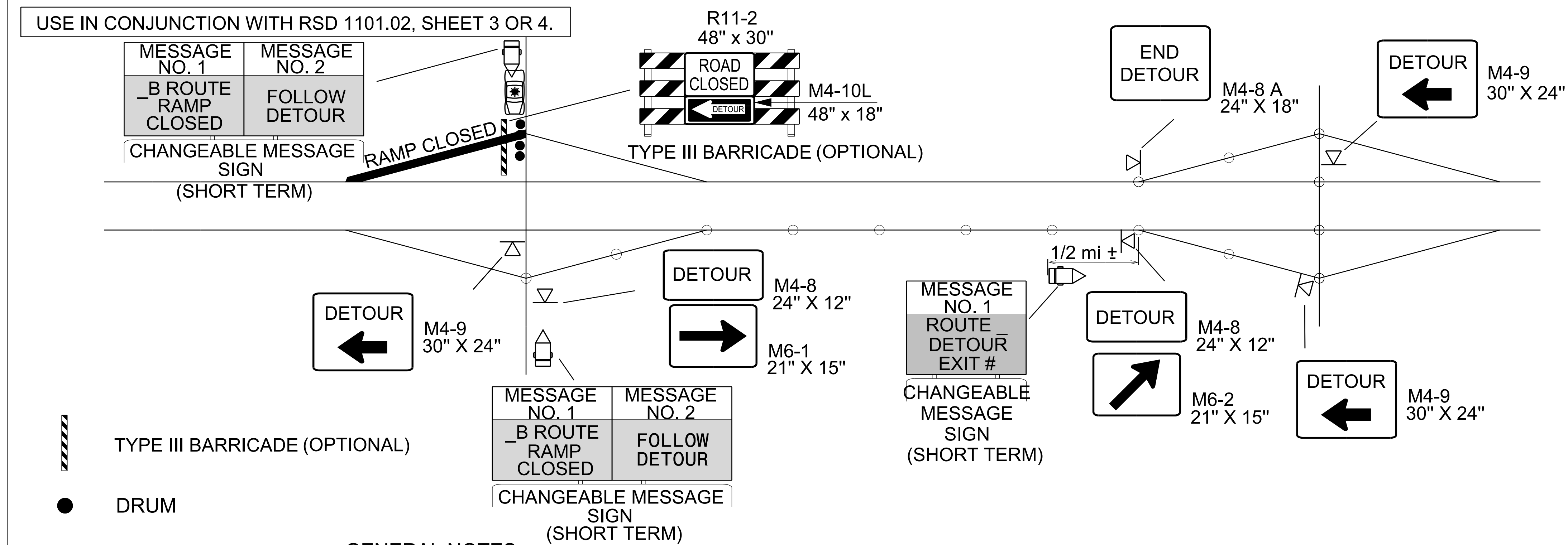
APPROVED:  DATE: 2/15/2023 <div style="text-align: center;">  </div>		<h2 style="margin: 0;">TEMPORARY SHORING NOTES</h2>
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		

TYPICAL RAMP DETOURS

SHORT TERM CLOSURE AND DETOUR OF OFF-RAMP TO ADJACENT INTERCHANGE



SHORT TERM CLOSURE AND DETOUR OF ON-RAMP TO ADJACENT INTERCHANGE



GENERAL NOTES

1. THIS DRAWING IS INTENDED FOR USE DURING SHORT TERM CLOSURES OF INTERSTATE AND FREEWAY RAMPS.
2. RAMP CLOSURES SHALL BE APPROVED BY THE ENGINEER.
3. IF RAMP CLOSURE RESTRICTIONS APPLY, SEE SPECIAL PROVISION, "INTERMEDIATE CONTRACT TIMES AND LIQUIDATED DAMAGES".

- TYPE III BARRICADE (OPTIONAL)
- DRUM
- LAW ENFORCEMENT
- DETOUR ROUTE

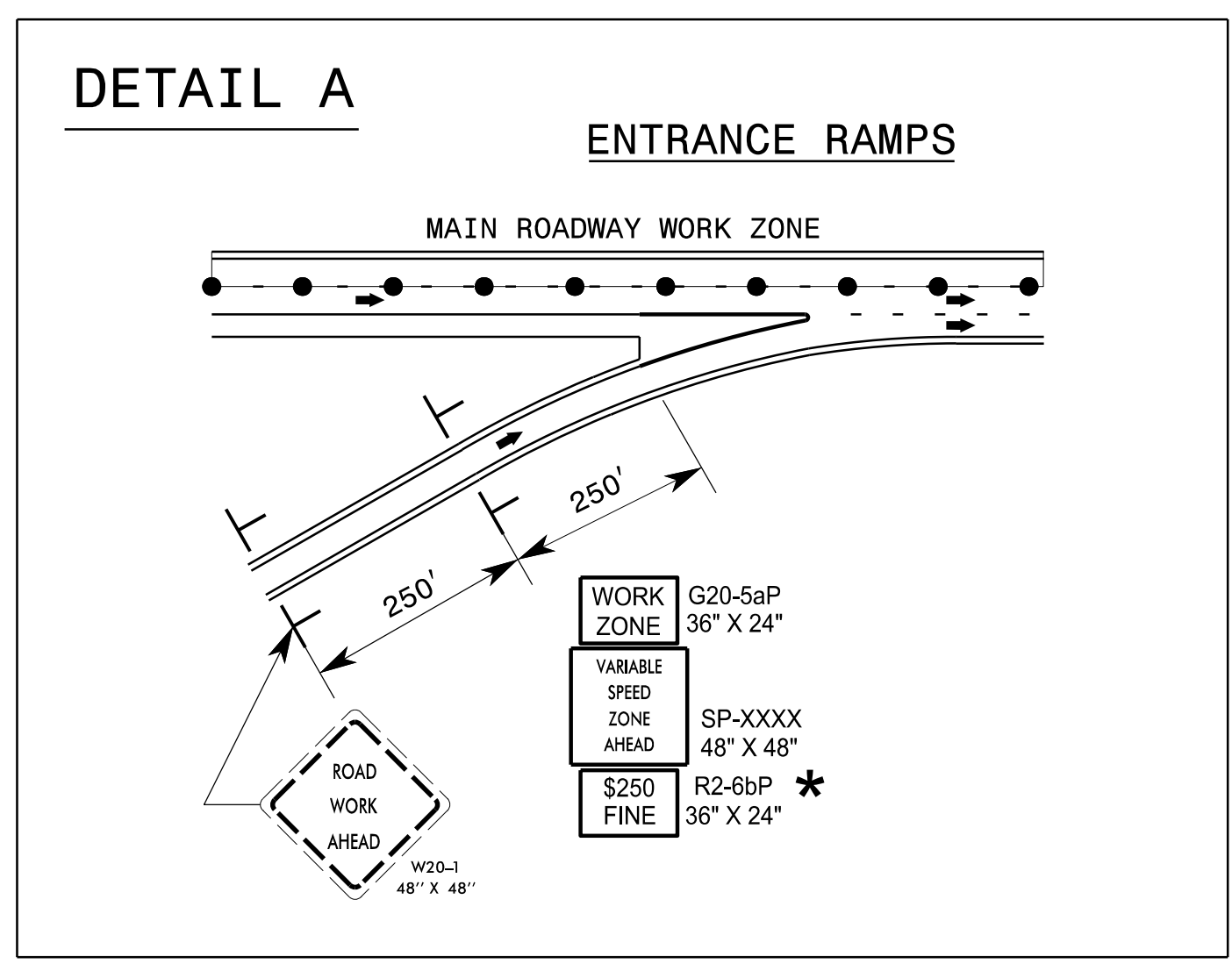
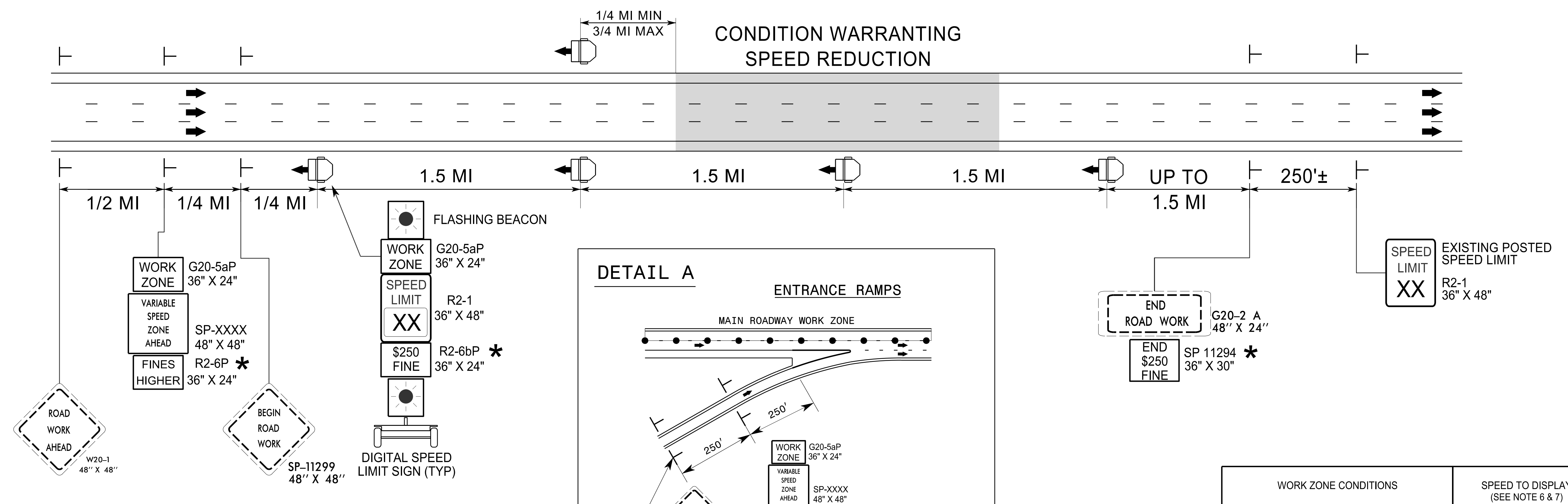
2/15/2023 15:57:50 TC_TMP_02E_RampDetour.dgn jon.ar-chambault

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APPROVED:
 DATE: 2/15/2023
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DIVISION OF HIGHWAYS
 NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 WORK ZONE TRAFFIC CONTROL

RAMP & LOOP CLOSURE DETOUR DETAIL



* USE ONLY IF ORDINANCED. SEE NOTE 5 BELOW.

NOTES

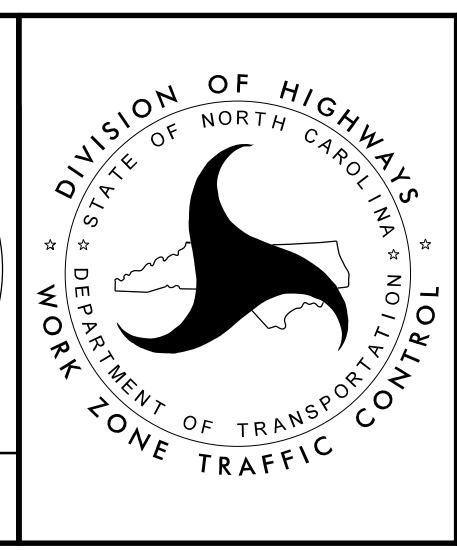
1. THE DIGITAL SPEED LIMITS SIGNS WILL BE INSTALLED (TRAILER MOUNTED OR STATIONARY MOUNTED) IN ADVANCE OF AND SPACED APPROXIMATELY 1.5 MILES THROUGHOUT THE THE PROJECT LIMITS, UNLESS DIRECTED OTHERWISE.
2. WITHIN 1/4 TO 3/4 MILE UPSTREAM OF CONDITION WARRANTING A SPEED REDUCTION, PLACE A DIGITAL SPEED LIMIT SIGN ON BOTH THE INSIDE AND OUTSIDE SHOULDERS, UNLESS DIRECTED OTHERWISE BY THE ENGINEER. AT ALL OTHER LOCATIONS DOWNSTREAM, PLACE A SINGLE DIGITAL SPEED LIMIT SIGN ON THE OUTSIDE SHOULDER.

IF SIGNS ARE NOT HIGHLY VISIBLE TO ALL MOTORISTS, SUPPLEMENTAL DIGITAL SPEED LIMIT SIGNS ARE PERMITTED ON THE MEDIAN SHOULDER.
3. THE DIGITAL SPEED LIMIT SIGNS TAKE PRECEDENCE OVER EXISTING SPEED LIMIT SIGNS AND SHOULD REMAIN UPRIGHT AND VISIBLE AT ALL TIMES. ALL EXISTING SPEED LIMIT SIGNS SHALL BE COVERED OR REMOVED FOR DURATION OF THE PROJECT.
4. NCDOT HAS SOLE AUTHORITY OF THE SPEED LIMITS DISPLAYED ON THE DIGITAL SPEED LIMIT SIGNS.
5. THE WORK ZONE VARIABLE SPEED LIMIT AND THE \$250 SPEEDING PENALTY ARE SEPARATE ORDINANCES THAT MUST BE SIGNED BY THE STATE TRAFFIC ENGINEER TO BE VALID AND ENFORCEABLE. WITHOUT SIGNED ORDINANCES, THE SPEED LIMIT ON A FACILITY SHALL REMAIN UNCHANGED AND/OR HIGHER FINES SIGNS SHALL NOT BE USED.
6. THE REDUCED SPEED SHALL BE DISPLAYED A MINIMUM OF 1/4 MILE AND A MAXIMUM OF 3/4 MILE IN ADVANCE OF AND THROUGHOUT THE AREA MEETING CONDITIONS LISTED IN THE CHART. THE EXISTING SPEED LIMIT SHALL BE DISPLAYED ON ALL OTHER DIGITAL SPEED LIMIT SIGNS.
7. THE SPEED DISPLAYED SHALL BE THE LOWER OF THE EXISTING SPEED LIMIT OR THE SPEED IN THE WORK ZONE CONDITION CHART.
8. THE BEACONS ON THE DIGITAL SPEED LIMIT SIGNS SHALL ONLY FLASH DURING TIMES THE SPEED IS REDUCED, AND REMAIN OFF AT ALL OTHER TIMES.

	WORK ZONE CONDITIONS	SPEED TO DISPLAY (SEE NOTE 6 & 7)
LANE CLOSURES	2 LANES REDUCED TO 1 LANE	55
	3 LANES REDUCED TO 1 LANE	55
	3 LANES REDUCED TO 2 LANES	60
	4 LANES REDUCED TO 1 LANE	55
	4 LANES REDUCED TO 2 LANES	60
	4 LANES REDUCED TO 3 LANES	65
CONTINUOUS BARRIER (LENGTH OF BARRIER GREATER THAN 1 MILE)	1 OPEN LANE WITH CONTINUOUS BARRIER ON BOTH SHOULDERS	55
	1 OPEN LANE WITH CONTINUOUS BARRIER ON 1 SHOULDER	60
	3 OR 2 OPEN LANES WITH CONTINUOUS BARRIER ON BOTH SHOULDERS	60
	3 OR 2 OPEN LANES WITH CONTINUOUS BARRIER ON 1 SHOULDER	65
	4 OPEN LANES WITH BARRIER CONTINUOUS ON BOTH SHOULDERS	65
	4 OPEN LANES WITH BARRIER CONTINUOUS ON 1 SHOULDER	EXISTING
	UNEVEN LANES	60

2/15/2023 BR0041.TC_TMP_2E_WZ_Var-SpeedLimit+Reduction_DetailSheet.dgn jon_ar-chambault

APPROVED: *Jeffrey A. Kowitz*
 DATE: 2/15/2023
 SEAL



WORK ZONE VARIABLE SPEED LIMIT REDUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PHASE I

STEP 1) PRIOR TO ANY CONSTRUCTION ACTIVITY, INSTALL WORK ZONE ADVANCE WARNING SIGNS ON ALL ROADS INVOLVED: US 29, BARNES ST. (SR 2817), WATLINGTON INDUSTRIAL DR., AND HOLIDAY LOOP ACCORDING TO THE ROADWAY STANDARD DRAWING 1101.01.

-L- ROADWAY & WATERLINE CONSTRUCTION

STEP 2) WORK AWAY FROM TRAFFIC OR USE RSD 1101.02 (SHEET 2 OF 14) FOR TEMPORARY CLOSURE OF WESTBOUND SR 2817 (BARNES ST) OR (SHEET 1 OF 14) WITH FLAGGERS TO PERFORM THE FOLLOWING: (SEE TMP-4 THRU TMP-6 AND TMP-4A THRU TMP-6A)

BEGIN CONSTRUCTION OF THE WATER MAIN RELOCATION ALONG BARNES STREET, NOT INCLUDING THE SECTION UNDER US 29 AND CONNECTION TO EXISTING ON THE WESTERN END. INSTALL DRUMS TO CLOSE RAMP SHOULDERS PRIOR TO JACK AND BORE OPERATION OUTSIDE OF CLEAR ZONE TO INSTALL WATER MAIN UNDER -RPA- AND -RPD-. USE RSD 1101.02 (SHEET 1 OF 14) AND FLAGGERS TO CONSTRUCT WATERLINE EXTENSION ON WATLINGTON INDUSTRIAL DRIVE.

BEGIN CONSTRUCTION OF WESTBOUND -L- SR 2817 (BARNES ST) AND TEMPORARY PAVEMENT UP TO EXISTING EDGE AND ELEVATION ACCORDING TO THE FOLLOWING STATIONS:

- L- STA. 16+00 +/- TO -L- STA. 30+60 +/- LT
- L- STA. 39+41 +/- TO -L- STA. 42+00 +/- LT
- L- STA. 32+13 +/- TO -L- STA. 32+22 +/- RT (TEMP PVT)
- L- STA. 35+99 +/- TO -L- STA. 37+93 +/- RT (TEMP PVT)

USE DETAIL ON TMP-2E TO CLOSE RAMP AND DETOUR RAMP TRAFFIC TO THE ADJACENT INTERCHANGE AND CONSTRUCT RAMP A AND RAMP D ACCORDING TO THE FOLLOWING STATIONS:

- RPA- STA. 12+50 TO -RPA- STA. 13+51 +/- RT
- RPD- STA. 11+70 TO -RPD- STA. 13+75 +/-

WHEN WORKING AT THE SIGNALIZED INTERSECTIONS, USE RSD 1101.02 (SHEET 1 OF 14) AND FLAGGERS AS NEEDED FOR TEMPORARY LANE CLOSURES TO INSTALL SR 2817 TEMPORARY SIGNALS AT -Y1- (WATLINGTON INDUSTRIAL DR), RAMP A/RAMP B, AND RAMP C/RAMP D. (SEE TMP-5A AND TMP-6A)

STEP 3) USE RSD 1101.02 (SHEET 4 OF 14) FOR TEMPORARY LANE CLOSURES ON US 29, REMOVE EXISTING LANE MARKING AND PLACE TEMPORARY MARKINGS (PAINT) TO NARROW THE INSIDE LANE ACCORDING TO THE FOLLOWING STATIONS: (SEE TMP-07)

- Y- STA. 12+00 +/- TO 28+50 +/- NBL
- Y- STA. 13+00 +/- TO 30+00 +/- SBL

AND INSTALL PORTABLE CONCRETE BARRIER (PCB) ALONG THE MEDIAN AND OUTSIDE SHOULDERS OF SBL & NBL US 29 ACCORDING TO THE FOLLOWING STATIONS: (SEE TMP-07)

- Y- STA. 14+00 +/- TO 27+00 +/- NBL LT & RT
- Y- STA. 14+50 +/- TO 28+00 +/- SBL MEDIAN
- Y- STA. 14+50 +/- TO 29+50 +/- SBL OUTSIDE

GRADING AND DRAINAGE BEHIND BARRIER (MEDIAN OR OUTSIDE WIDENING) MAY BEGIN FOR -Y- US 29 ACCORDING TO THE FOLLOWING STATIONS: (SEE TMP-11 AND TMP-11B)

- Y- STA. 15+00 +/- TO STA. 26+00 +/-

STEP 4) WORK BEHIND BARRIER, JACK AND BORE THE WATER MAIN UNDER US 29. (SEE TMP-6)

STEP 5) USE RSD 1101.02 (SHEET 3 OF 14) FOR TEMPORARY OUTSIDE LANE CLOSURE OF WESTBOUND SR 2817 (BARNES ST) AND PLACE DRUMS AND SKINNY DRUMS FOR TEMPORARY TRAFFIC PATTERN TO COMPLETE CONSTRUCTION OF THE WATERLINE TIE AT THE WESTERN END AND MAKE FINAL PAVEMENT REPAIRS. (SEE TMP-6)

AT THE END OF WORK EACH NIGHT PRIOR TO COMPLETION, INSTALL TRAFFIC BEARING PLATE OVER OPEN TRENCH, MOVE DRUMS AND SKINNY DRUMS AND OPEN BOTH WESTBOUND LANES OF SR 2817 (BARNES ST) TO TRAFFIC.

STEP 6) USE RSD 1101.02 (SHEET 1 OF 14) AND FLAGGERS FOR TEMPORARY LANE CLOSURES TO REMOVE EXISTING CONCRETE MEDIAN ISLAND ON BARNES ST AT RAMPS A & B, AT RAMPS C & D, WEST OF BRIDGE, AND CHANNELIZATION ISLAND AT RAMP C AND CONSTRUCT TEMPORARY PAVEMENT UP TO EXISTING EDGE AND ELEVATION. (SEE TMP-5A THRU TMP-6A AND ROADWAY PLAN SHEET 2B-2)

PLACE DRUMS AND TEMPORARY PAVEMENT MARKINGS (PAINT) TO DELINEATE THE ISLANDS UNTIL TRAFFIC SHIFT IN STEP 7.

STEP 7) USE FLAGGERS FOR TEMPORARY LANE CLOSURES ON SR 2817 (BARNES ST) REMOVE CONFLICTING MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING (PAINT) AND MARKERS (RAISED) ACCORDING TO THE FOLLOWING STATIONS: (SEE TMP-5A AND TMP-6A AND ROADWAY PLAN SHEET 2B-1 FOR -LDET-1- ALIGNMENT)

- L- STA. 22+00 +/- TO -L- STA 23+54 +/-
- L- STA. 29+52 +/- TO -L- STA 41+04 +/-

UNCOVER AND ACTIVATE TEMPORARY SIGNALS AT -Y1- (WATLINGTON INDUSTRIAL DR), RAMP A/RAMP B AND RAMP C/RAMP D AND SHIFT SR 2817 (BARNES ST) AND RAMP TRAFFIC INTO TEMPORARY 2-LANE, 2-WAY -LDET-1- PATTERN.

STEP 8) USE RSD 1101.02 (SHEET 1 OF 14) AND FLAGGERS FOR TEMPORARY LANE CLOSURE AND PLACE THE PCB ALONG BARNES ST ACCORDING TO THE FOLLOWING STATIONS: (SEE TMP-5A THRU TMP-6A)

- L- STA. 32+50 +/- TO -L- STA. 37+45 +/- RT
- L- STA. 36+00 +/- TO -L- STA. 37+40 +/- RT

-L- ROADWAY & BRIDGE CONSTRUCTION

STEP 9) WORK BEHIND BARRIER AND CONSTRUCT -L- (BARNES ST) ROADWAY, TEMPORARY PAVEMENT, AND STAGE 1 BRIDGE DEMOLITION AND CONSTRUCTION, INCLUDING STAGE 1 WALLS ACCORDING TO THE FOLLOWING STATIONS: (SEE TMP-5A THRU TMP-6A, ROADWAY PLAN SHEET 2B-2, AND STRUCTURE PLANS FOR DETAILS).

- L- STA. 31+70 +/- TO STA. 33+83.5 +/- LT
- L- STA. 33+83.5 +/- TO STA. 35+62.5 +/- LT (BRG STAGE

1)

- L- STA. 35+62.5 +/- TO STA. 38+25 +/- LT
- L- STA. 31+55 +/- TO STA. 33+43 +/- LT (TEMP PVT)
- L- STA. 35+69 +/- TO STA. 38+35 +/- LT (TEMP PVT)

GIRDER REMOVAL AND INSTALLATION OVER US 29

STEP 9A) WORK OVER CONSECUTIVE NIGHTS DURING THE ALLOWABLE CLOSURE HOURS, REMOVE GIRDERS OF WESTBOUND SR 2817 OVER NORTHBOUND US 29 AS FOLLOWS:

USE RSD 1101.03 (SHEET 7 OF 9) FOR TEMPORARY CLOSURE OF US 29 WITH TRAFFIC DETOURED VIA INTERCHANGE RAMP AND RSD 1101.03 (8 OF 9) FOR TEMPORARY ROAD CLOSURE OF SR 2817.

AT THE END OF EACH NIGHT, OPEN ALL LANES TO TRAFFIC.

USE THE SAME STEPS FOR TEMPORARY ROAD CLOSURES TO INSTALL GIRDERS OVER NORTHBOUND US 29.

STEP 9B) WORK OVER CONSECUTIVE NIGHTS DURING THE ALLOWABLE CLOSURE HOURS, REMOVE GIRDERS OF WESTBOUND SR 2817 OVER SOUTHBOUND US 29 AS FOLLOWS:

USE RSD 1101.03 (SHEET 7 OF 9) FOR TEMPORARY CLOSURE OF US 29 WITH TRAFFIC DETOURED VIA INTERCHANGE RAMP AND RSD 1101.03 (SHEET 8 OF 9) FOR TEMPORARY ROAD CLOSURE OF SR 2817.

AT THE END OF EACH NIGHT, OPEN ALL LANES TO TRAFFIC.


USE THE SAME STEPS FOR TEMPORARY ROAD CLOSURES TO INSTALL GIRDERS OVER SOUTHBOUND US 29.

PHASE II

-L- ROADWAY & BRIDGE CONSTRUCTION

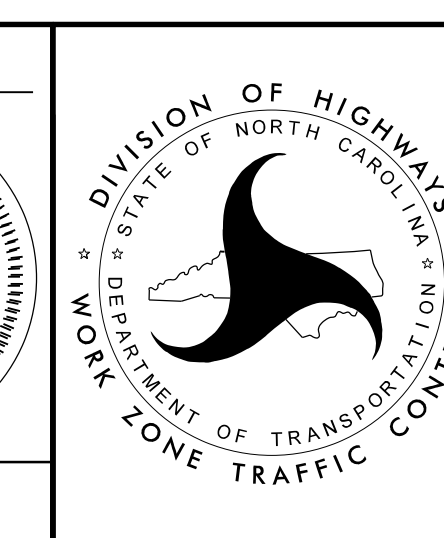
STEP 1) WORK BEHIND BARRIER OR AWAY FROM TRAFFIC AND PLACE TEMPORARY PAVEMENT MARKING (PAINT) AND MARKERS (RAISED) AND PCB ALONG -LDET-2- ALIGNMENT ACCORDING TO THE FOLLOWING STATIONS (SEE TMP-9 AND TMP-10 AND ROADWAY PLAN SHEET 2B-1 FOR -LDET-2 ALIGNMENT):

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APPROVED: 
DATE: 2/15/2023

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PROJECT PHASING

-L- STA. 32+40+/- TO -L- STA 37+40+/- LT PCB
 -L- STA. 33+20+/- TO -L- STA 37+00+/- LT PCB
 -L- STA. 32+02+/- TO -L- STA 37+65+/- PVT MARKING

USE RSD 1101.02 (SHEET 1 OF 14) AND FLAGGERS FOR TEMPORARY LANE CLOSURES AND INSTALL AND COVER TEMPORARY SIGNAL AT BOTH RAMP TERMINAL INTERSECTIONS.

STEP 2) USE RSD 1101.02 (SHEET 1 OF 14) AND FLAGGERS FOR TEMPORARY LANE CLOSURES TO PLACE TEMPORARY PAVEMENT MARKINGS (PAINT) AND MARKERS (RAISED) ALONG REMAINING -LDET-2- ALIGNMENT ACCORDING TO THE FOLLOWING STATIONS: (SEE TMP-9 THRU TMP-10)

-L- STA. 27+29+/- TO 32+02+/-
 -L- STA. 37+65+/- TO 42+00+/-

PLACE DRUMS, UNCOVER AND ACTIVATE TEMPORARY SIGNAL, AND SHIFT TRAFFIC INTO -LDET-2- PATTERN ACROSS BRIDGE.

STEP 3) WORK BEHIND BARRIER OR USE RSD 1101.02 (SHEETS 2 OF 14) FOR TEMPORARY LANE CLOSURES AND CONSTRUCT -L- (SR 2817) ROADWAY UP TO EXISTING EDGE AND ELEVATION AND STAGE 2 BRIDGE CONSTRUCTION ACCORDING TO THE FOLLOWING STATIONS: (SEE TMP-8 THRU TMP-10 AND STRUCTURE PLANS)

-L- STA. 16+00+/- TO STA. 33+83.5+/- RT
 -L- STA. 33+83.5+/- TO STA. 35+62.5+/- RT (BRG STAGE 2)
 -L- STA. 35+62.5+/- TO STA. 42+00+/- RT

INCLUDING STAGE 2 DEMOLITION OF THE WESTBOUND SEGMENT OF THE EXISTING BRIDGE AND CONSTRUCTION OF STAGE 2 BRIDGE OVER US 29 WITH RETAINING WALLS.

USE DETAIL ON TMP-2E TO CLOSE RAMPS AND DETOUR RAMP TRAFFIC TO THE NEXT INTERCHANGE AND CONSTRUCT RAMPS UP BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE ACCORDING TO THE FOLLOWING STATION: (SEE TMP-9 AND TMP-10)

-RPB- STA. 15+00+/- TO STA. 16+31+/-
 -RPC- STA. 12+20+/- TO STA. 13+61+/-

GIRDER REMOVAL AND INSTALLATION OVER US 29

STEP 3A) WORK OVER CONSECUTIVE NIGHTS DURING THE ALLOWABLE CLOSURE HOURS, REMOVE GIRDERS OF EASTBOUND SR 2817 OVER NORTHBOUND US 29 AS FOLLOWS:

USE RSD 1101.03 (SHEET 7 OF 9) FOR TEMPORARY CLOSURE OF US 29 WITH TRAFFIC DETOURED VIA INTERCHANGE RAMP AND RSD 1101.03 (8 OF 9) FOR TEMPORARY ROAD CLOSURE OF SR 2817.

AT THE END OF EACH NIGHT, OPEN ALL LANES TO TRAFFIC.

USE THE SAME STEPS FOR TEMPORARY ROAD CLOSURES TO INSTALL GIRDERS OVER NORTHBOUND US 29.

TEP 3B) WORK OVER CONSECUTIVE NIGHTS DURING THE ALLOWABLE CLOSURE HOURS, REMOVE GIRDERS OF EASTBOUND SR 2817 OVER SOUTHBOUND US 29 AS FOLLOWS:

USE RSD 1101.03 (SHEET 7 OF 9) FOR TEMPORARY CLOSURE OF US 29 WITH TRAFFIC DETOURED VIA INTERCHANGE RAMP AND RSD 1101.03 (SHEET 8 OF 9) FOR TEMPORARY ROAD CLOSURE OF SR 2817.

AT THE END OF EACH NIGHT, OPEN ALL LANES TO TRAFFIC.

USE THE SAME STEPS FOR TEMPORARY ROAD CLOSURES TO INSTALL GIRDERS OVER SOUTHBOUND US 29.

PHASE III, STEP 1 CONSTRUCTION OF -Y- (US 29) BETWEEN THE PCB (TRAVEL LANES) MAY BEGIN CONCURRENTLY WITH WORK ON -L- ONCE THE EXISTING BRIDGE GIRDERS ARE REMOVED.

PHASE III, STEP 9 CONSTRUCTION OF -L- (SR 2817) MAY BEGIN PRIOR TO PHASE III, STEP 1 CONSTRUCTION OF -Y- (US 29).

PHASE III

-Y- US 29 ROADWAY CONSTRUCTION

STEP 1) USE RSD 1101.02 (SHEET 4 OF 14) FOR TEMPORARY LANE CLOSURE OF US 29 REMOVE PHASE I, STEP 3 TEMPORARY PAVEMENT MARKING ACCORDING TO THE FOLLOWING: (SEE TMP-11)

COVER TEMPORARY MARKINGS ON US 29 WITH 12" BLACK PAVEMENT MARKING LINES (SEE LOCAL NOTES) AND PLACE TEMPORARY PAVEMENT MARKING (PAINT) AND MARKERS (RAISED) FOR NEW US 29 TRAFFIC PATTERN ACCORDING TO THE FOLLOWING STATION: (SEE TMP-11)

-Y- STA. 10+50 +/- TO STA. 29+50 +/- NBL
 -Y- STA. 11+50 +/- TO STA. 33+00 +/- SBL

SHIFT US 29 TRAFFIC TO NEW PATTERN AND USE RSD 1101.02 (SHEET 4 OF 14) FOR TEMPORARY LANE CLOSURES TO RESET THE PCB ACCORDING TO THE FOLLOWING STATIONS: (SEE TMP-11)

-Y- STA. 14+50 +/- TO STA. 26+50 +/- NBL RT & LT
 -Y- STA. 14+00 +/- TO STA. 28+00 +/- SBL RT
 -Y- STA. 14+00 +/- TO STA. 29+50 +/- SBL LT

STEP 2) WORK BEHIND BARRIER TO COMPLETE CONSTRUCTION OF -Y- (US 29) MEDIAN UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE, ACCORDING TO THE FOLLOWING STATIONS: (SEE TMP-11)

-Y- STA. 15+00 +/- TO STA. 26+00 +/- MEDIAN LT & RT

STEP 3) USE RSD 1101.02 (SHEET 4 OF 14) FOR TEMPORARY INSIDE LANE CLOSURES FOR THE FOLLOWING: (SEE TMP-11A)

REMOVE US 29 MEDIAN PCB AND PLACE DRUMS ALONG MEDIAN

WEDGE OVER EXISTING TRAVEL LANES UP TO EXISTING EDGE AND ELEVATION OF NEW US 29 MEDIAN PAVEMENT

COVER EXISTING PAVEMENT MARKINGS WITH 12" BLACK PAVEMENT MARKING LINES (SEE LOCAL NOTES) AND PLACE TEMPORARY PAVEMENT MARKING (PAINT) AND MARKERS (RAISED), SHIFTING INSIDE TRAVEL LANE, THEN OUTSIDE TRAVEL LANE INTO NEW TEMPORARY PATTERN, ACCORDING TO THE FOLLOWING STATIONS: (SEE TMP-11A)

-Y- STA. 10+50 +/- TO STA. 29+50 +/- NBL
 -Y- STA. 11+50 +/- TO STA. 33+00 +/- SBL

STEP 4) USE RSD 1101.02 (SHEET 4 OF 14) FOR TEMPORARY OUTSIDE LANE CLOSURES TO RESET AND ANCHOR PCB ALONG US 29 OUTSIDE SHOULDERS ACCORDING TO THE FOLLOWING STATION: (SEE TMP-11B)

-Y- STA. 14+00 +/- TO STA. 26+50 +/- NBL (RESET & ANCHOR)
 -Y- STA. 14+50 +/- TO STA. 27+00 +/- SBL (RESET & ANCHOR)
 -Y- STA. 27+00 +/- TO STA. 28+00 +/- SBL (RESET)

MAINTAIN TRAFFIC IN STEP 3 TRAFFIC PATTERN.

STEP 5) CONTINUE WORK BEHIND BARRIER TO CONSTRUCT -Y- (US 29) OUTSIDE WIDENING UP TO, BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE ACCORDING TO THE FOLLOWING STATIONS: (SEE TMP-11B)

-Y- STA. 15+00+/- TO STA. 26+00+/- OUTSIDE

STEP 6) USE RAMP CLOSURE DETAIL ON TMP-2E AND PLACE CMS TWO WEEKS IN ADVANCE OF SCHEDULED RAMP CLOSURE WEEKEND. PLACE AND COVER OFF-SITE DETOUR SIGNS.

INTERMEDIATE CONTRACT TIME

COMPLETE THE FOLLOWING WORK OF PHASE III, STEP 7 FOR -RPA- DRAINAGE CROSSING IN ACCORDANCE WITH THE INTERMEDIATE CONTRACT TIME OF 56 CONSECUTIVE HOURS (FRIDAY 10:00 P.M. TO MONDAY AT 6:00 A.M.) (SEE SPECIAL PROVISIONS).

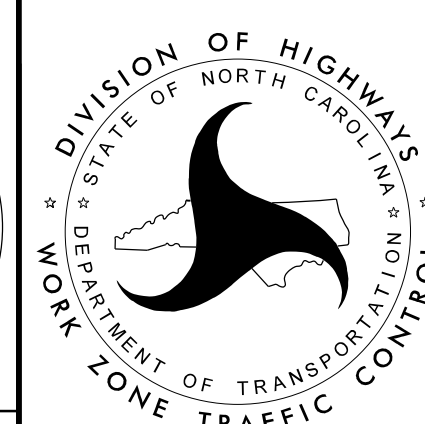
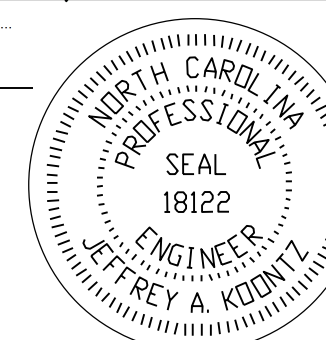
STEP 7) UPDATE CMS MESSAGES, UNCOVER DETOUR SIGNS AND PLACE DRUMS AND BARRICADE TO CLOSE -RPA- SHIFT RAMP TRAFFIC TO DETOUR.

CONSTRUCT THE PROPOSED DRAINAGE ACROSS RAMP A.

COMPLETE PAVEMENT REPAIRS, REMOVE RAMP CLOSURE AND DETOUR SIGNS AND OPEN RAMP TO TRAFFIC.



APPROVED: *Jeffrey A. Koontz*
 DATE: 2/15/2023
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PROJECT PHASING

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STEP 8) COMPLETE CONSTRUCTION OF US 29 OUTSIDE WIDENING FROM STEP 6.

USE RSD 1101.02 (SHEET 4 OF 14) FOR TEMPORARY LANE CLOSURES AND REMOVE OUTSIDE PCB ON US 29 AND PLACE DRUMS ALONG OUTSIDE SHOULDERS. (SEE TMP-15)

SR 2817 (BARNES ST) STAGE 3 BRIDGE CONSTRUCTION

STEP 9) USE RSD 1101.02 (SHEET 1 OF 14) AND FLAGGERS AS NEEDED FOR TEMPORARY LANE CLOSURES, INSTALL AND COVER TEMPORARY SIGNALS AT BOTH RAMP TERMINALS.

WORK AWAY FROM TRAFFIC OR BEHIND BARRIER TO PLACE TEMPORARY PAVEMENT MARKINGS (PAINT) AND MARKERS (RAISED) ON THE WESTBOUND LANE OF -L- ACCORDING TO THE FOLLOWING STATIONS: (SEE TMP-13 THRU TMP-14)

- L- STA. 32+31+/- TO STA. 33+83.5+/- WBL
- L- STA. 33+83.5+/- TO STA. 35+62.5+/- WBL
- L- STA. 35+62.5+/- TO STA. 38+17+/- WBL

STEP 10) USE RSD 1101.02 (SHEET 1 AND 4 OF 14) AND FLAGGERS AS NEEDED, COMPLETE TEMPORARY PAVEMENT MARKING (PAINT) AND MARKERS (RAISED) ACCORDING TO THE FOLLOWING STATIONS: (SEE TMP-13 THRU TMP-14)

- L- STA. 28+00+/- TO STA. 32+31 +/-
- L- STA. 38+17+/- TO STA. 42+00 +/-

PLACE DRUMS IN MEDIAN, UNCOVER AND ACTIVATE SIGNALS AND SHIFT TRAFFIC INTO TEMPORARY PATTERN.

SHIFT WESTBOUND TRAFFIC INTO NEW WESTBOUND LANE AND USE FLAGGERS TO STOP EASTBOUND TRAFFIC AND COMPLETE PAVEMENT MARKING FOR THE EASTBOUND LANE AND TO RESET PCB ALONG -L- ACCORDING TO THE FOLLOWING STATION: (SEE TMP-13 AND TMP-14).

- L- STA. 31+82+/- TO STA. 37+82 +/- LT

STEP 11) WORK BEHIND BARRIER TO CONSTRUCT STAGE 3 SIDEWALK AND RAIL ALONG WESTBOUND LANE OF THE PROPOSED BRIDGE AND -L- (SR 2817) AND RAMP CONSTRUCTION UP TO, BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE, ACCORDING TO THE FOLLOWING STATIONS: (SEE TMP-13 THRU TMP-14)

- L- STA. 31+60+/- TO STA. 38+37+/- LT

USE DETAIL ON TMP-2E TO CLOSE RAMPS AND DETOUR RAMP TRAFFIC TO THE NEXT INTERCHANGE AND CONSTRUCT RAMPS UP BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE ACCORDING TO THE FOLLOWING STATIONS:

- RPA- STA. 12+50+/- TO -RPA- STA. 13+51+/- LT

STEP 12) USE RSD 1101.02 (SHEETS 1 OF 14) AND FLAGGERS FOR TEMPORARY LANE CLOSURE AND REMOVE PCB ACROSS BRIDGE.

PHASE IV

STEP 1) USE RSD 1101.02 (SHEETS 3 AND 4 OF 14) FOR TEMPORARY LANE CLOSURES ON -L- (BARNES ST), -Y- (US 29), AND RAMPS TO CONSTRUCT MONOLITHIC ISLANDS AND PLACE THE FINAL LAYER OF SURFACE COURSE. USE RSD 1205.01, 1205.02, 1205.04, 1205.05, 1205.08, 1205.09, 1205.12, 1250.01, AND 1253.01 TO PLACE FINAL PAVEMENT MARKING (THERMOPLASTIC AND POLYUREA) AND MARKERS (SNOWPLOWABLE AND RAISED) IN FINAL PATTERN ACCORDING TO THE FOLLOWING STATIONS: (SEE TMP-12 THRU TMP-15 AND PAVEMENT MARKING PLANS)

- L- STA. 16+00 +/- TO STA. 42+00 +/-
- Y- STA. 15+00+/- TO STA. 26+00+/-
- Y1- STA. 11+00+/- TO STA. 12+19+/-
- RPA- STA. 12+50 +/- TO STA. 13+51 +/-
- RPB- STA. 15+00 +/- TO STA. 16+31 +/-
- RPC- STA. 12+20 +/- TO STA. 13+61 +/-
- RPD- STA. 11+70 +/- TO STA. 13+75 +/-

AND COVER TEMPORARY PAVEMENT MARKINGS WITH 12" BLACK MARKING LINES (SEE LOCAL NOTES) AND PLACE FINAL PAVEMENT MARKING (POLYUREA) AND MARKERS (SNOWPLOWABLE) BACK INTO ORIGINAL PATTERN ACCORDING TO THE FOLLOWING STATIONS:

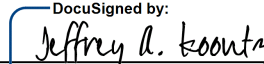
- Y- STA. 10+50 +/- TO STA. 15+00 +/- NBL
- Y- STA. 11+50 +/- TO STA. 15+00 +/- SBL
- Y- STA. 26+00 +/- TO STA. 29+50 +/- NBL
- Y- STA. 26+00 +/- TO STA. 33+00 +/- SBL

COVER ANY TEMPORARY PAVEMENT MARKINGS ON -L- (SR 2817) THAT EXTEND BEYOND THE FINAL PAVING LIMITS WITH 12" BLACK PAVEMENT MARKING LINES (SEE LOCAL NOTES) OR REMOVE MARKINGS AS DIRECTED BY THE ENGINEER. PLACE FINAL PAVEMENT MARKINGS (POLYUREA) IN THE ORIGINAL PATTERN.

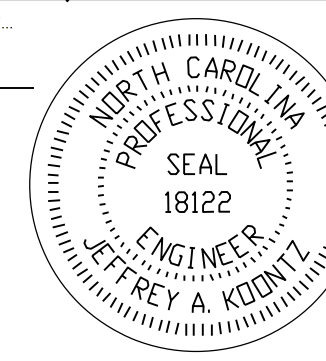
REMOVE ALL REMAINING TRAFFIC CONTROL SIGNS AND DEVICES AND OPEN PROJECT FULLY TO TRAFFIC.

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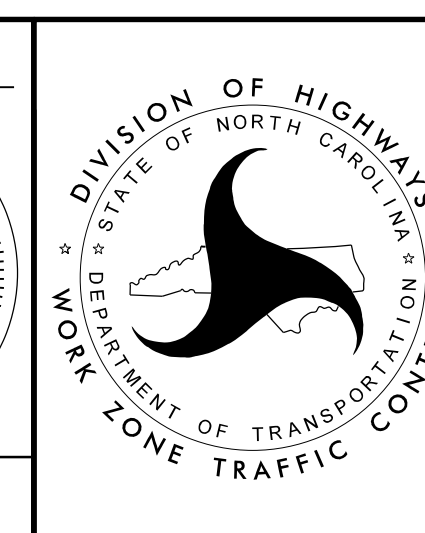
AECOM
 NC Firm License No.: F-0342
 5438 Wade Park Boulevard
 Suite 200 Raleigh, NC 27607
 Phone: 919-461-1100

APPROVED: 
 DATE: 2/15/2023

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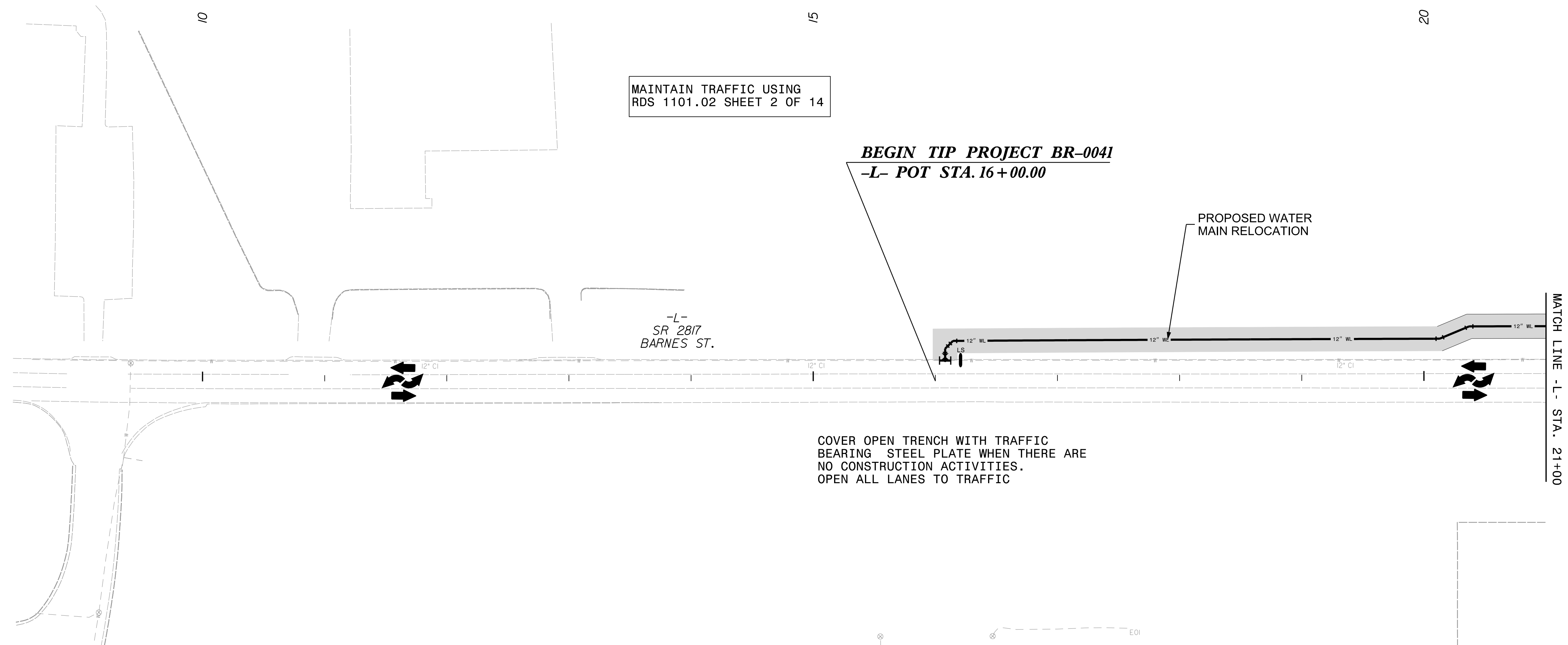


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PROJECT PHASING

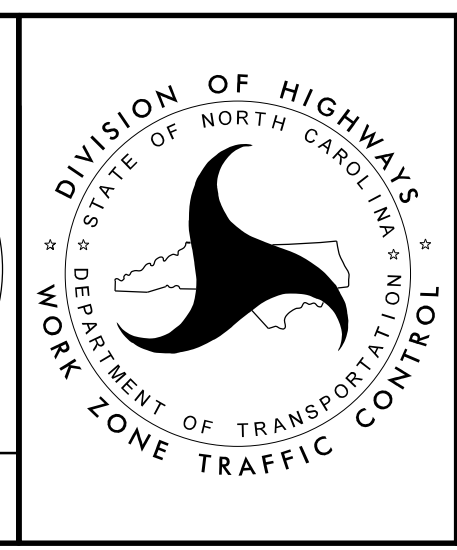
PROJ. REFERENCE NO.	SHEET NO.
BR - 0041	TMP - 4



2/15/2023
 BR0041_LC_TMP_04_P1A_sht.dgn
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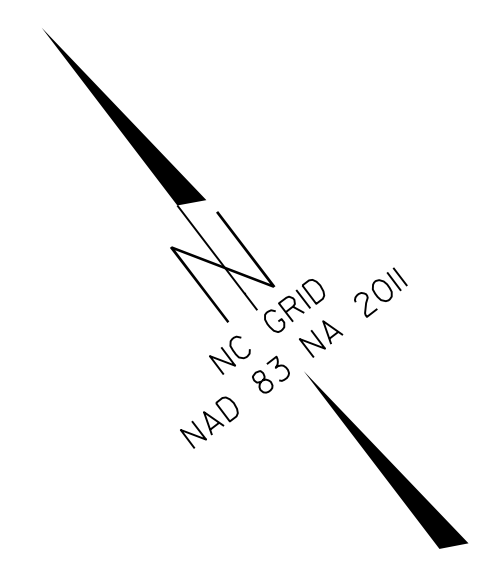
WORK ZONE

APPROVED:
DocuSigned by: Jeffrey A. Kiddy
B4EBFECCD2384F7
 DATE: 2/15/2023
 SEAL

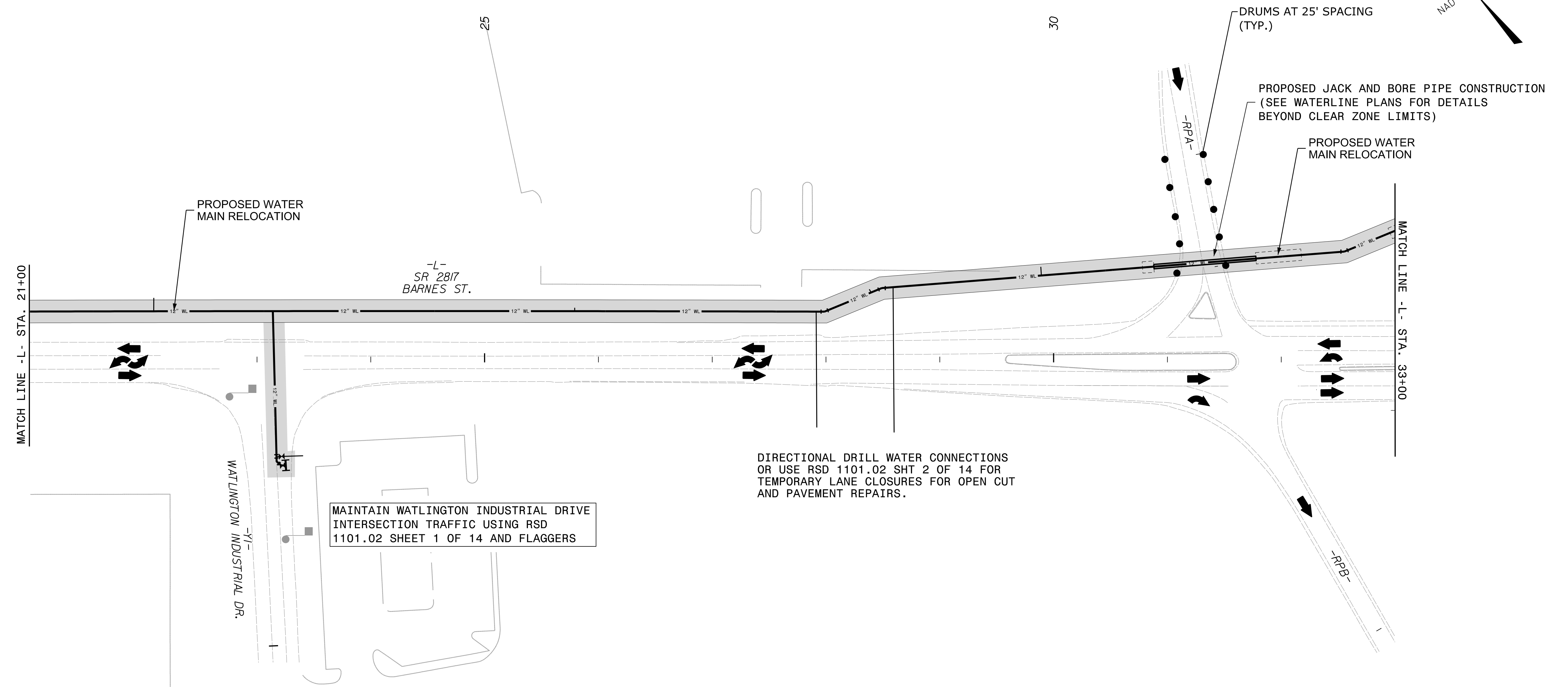


PHASE I DETAILS
WATER MAIN
RELOCATION

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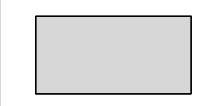


MAINTAIN BARNES ST TRAFFIC
USING RDS 1101.02 SHEET 2 OF 14



MAINTAIN WATLINGTON INDUSTRIAL DRIVE
INTERSECTION TRAFFIC USING RSD
1101.02 SHEET 1 OF 14 AND FLAGGERS

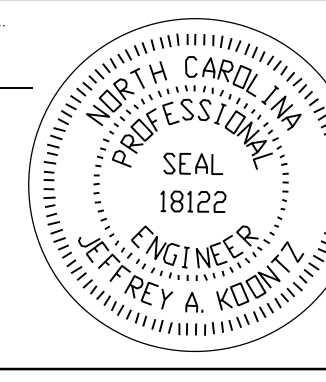
DIRECTIONAL DRILL WATER CONNECTIONS
OR USE RSD 1101.02 SHT 2 OF 14 FOR
TEMPORARY LANE CLOSURES FOR OPEN CUT
AND PAVEMENT REPAIRS.

 WORK ZONE

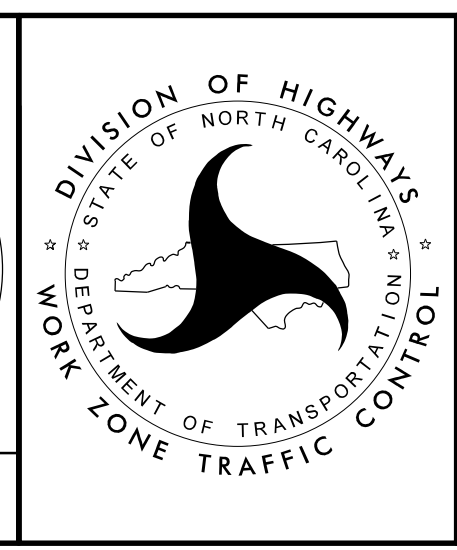
2/15/2023
BR0041.TC_TMP_04_Pha1_sh2.dgn
jon.ar.chambault

APPROVED: *Jeffrey A. Kodyntz*
DATE: 2/15/2023

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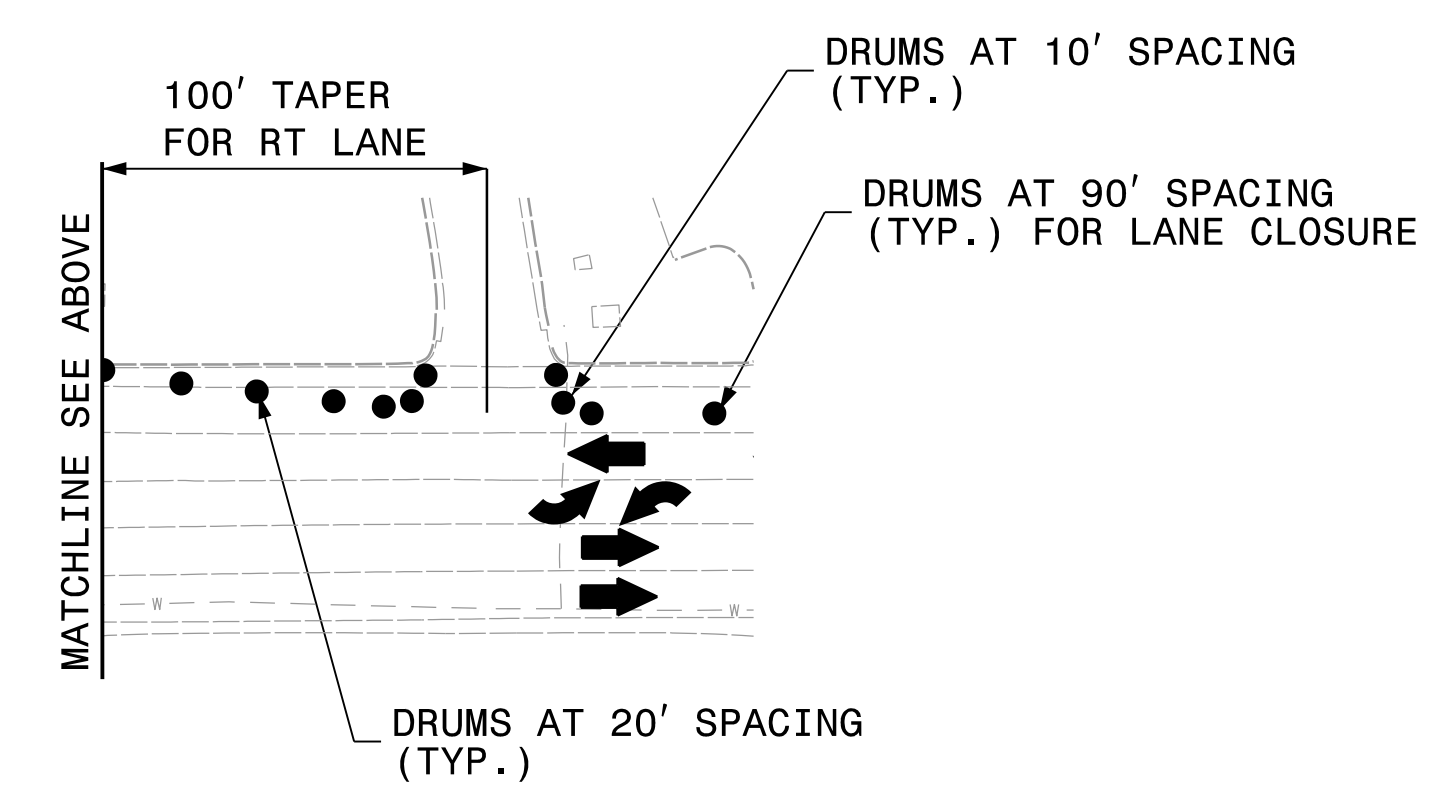
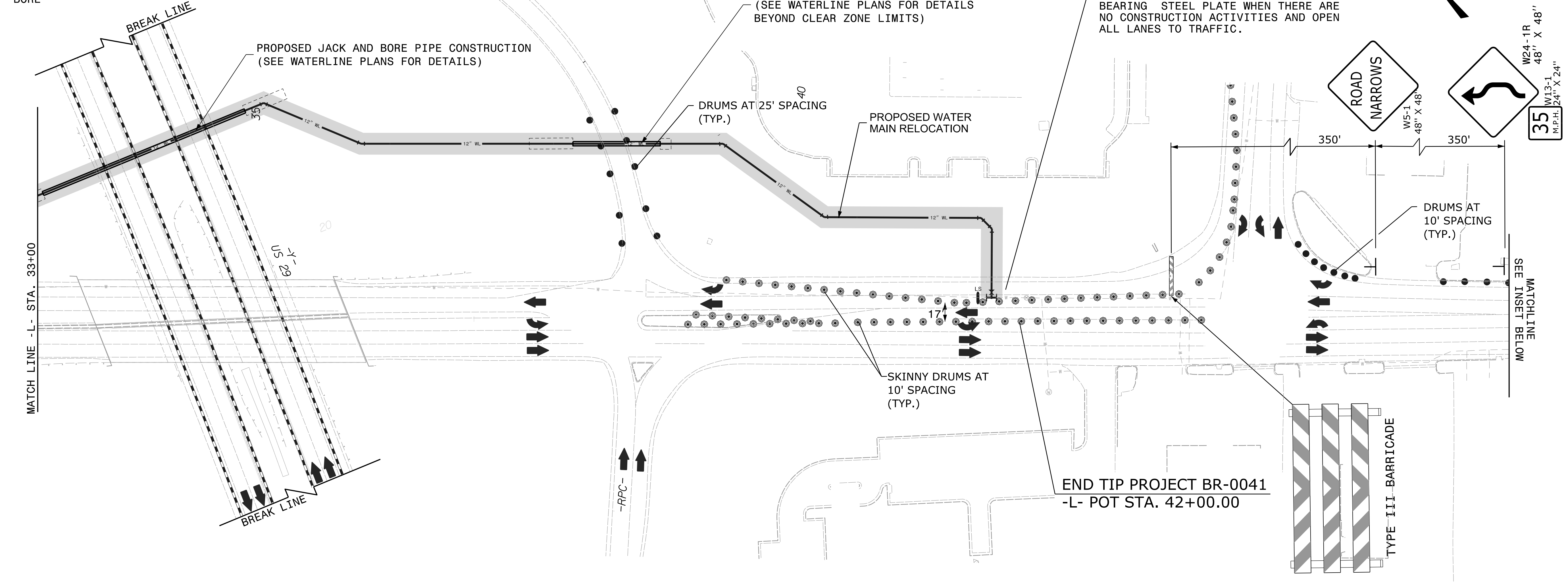
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**PHASE I DETAILS
WATER MAIN
RELOCATION**

TEMPORARY TRAFFIC PATTERN SHOWN IS SUBJECT TO THE LANE CLOSURE TIME RESTRICTIONS DEFINED IN THE GENERAL NOTES.

SEE TMP-7 FOR US 29 PCB AND TEMP PVT MARKING COMPLETED PRIOR TO JACK AND BORE



WORK ZONE

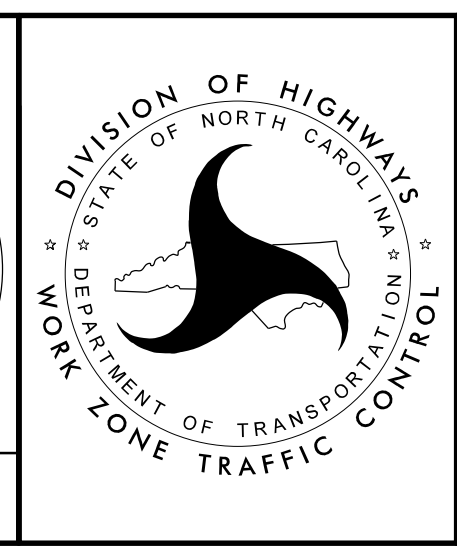
2/15/2023
BR0041.TC_TMP_04_Pha1_sh3.dgn
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DATE: 2/15/2023

SEAL

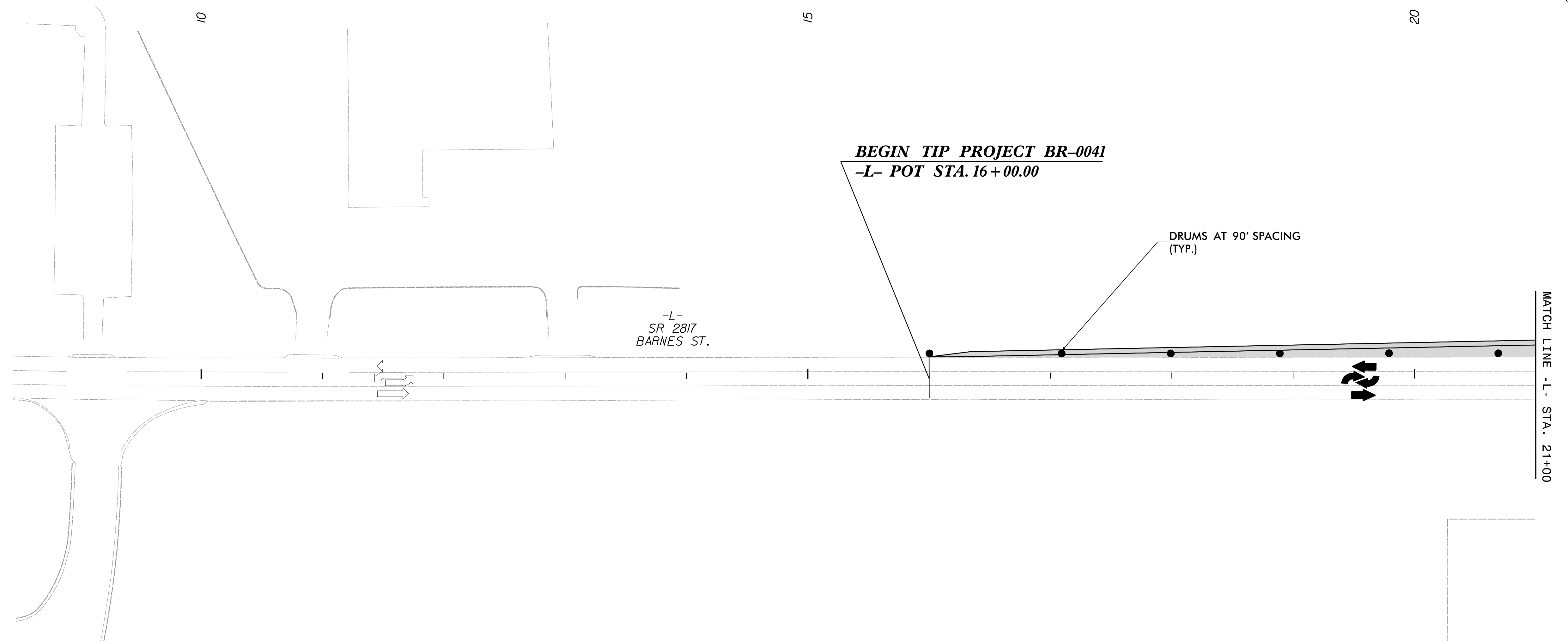
PROFESSIONAL ENGINEER
JEFFREY A. KODYNTZ
18122

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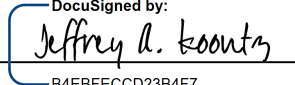
PHASE I DETAILS
WATER MAIN
RELOCATION

PROJ. REFERENCE NO.	SHEET NO.
BR - 0041	TMP - 4A



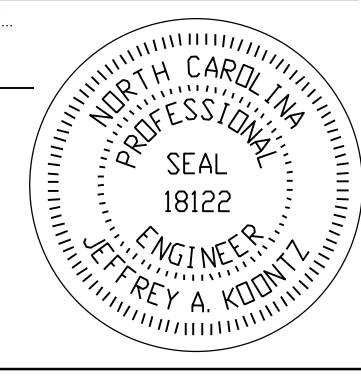
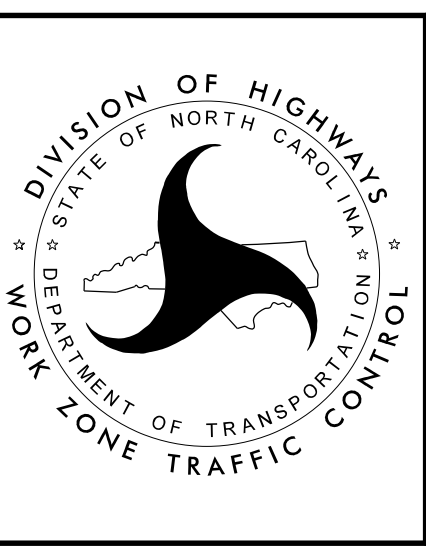
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BR0041_TIP_TMP_04_Phi.shl.dgn
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DocuSigned by:
Jeffrey A. Koontz
B4EBFECCD23BAF7

DATE: 2/15/2023

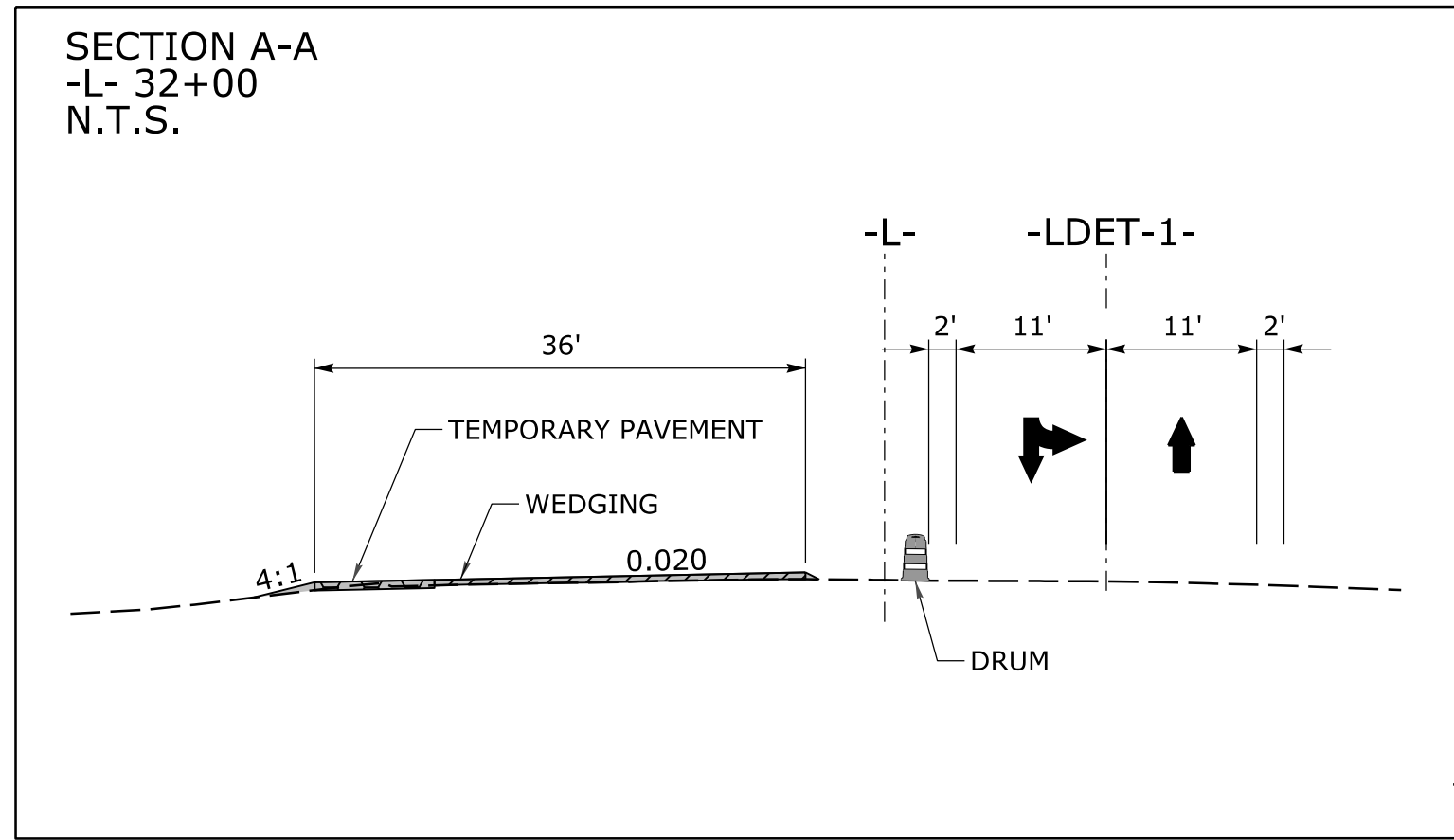
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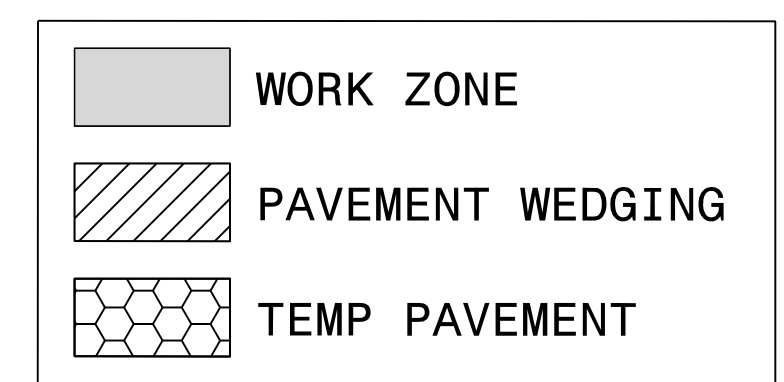
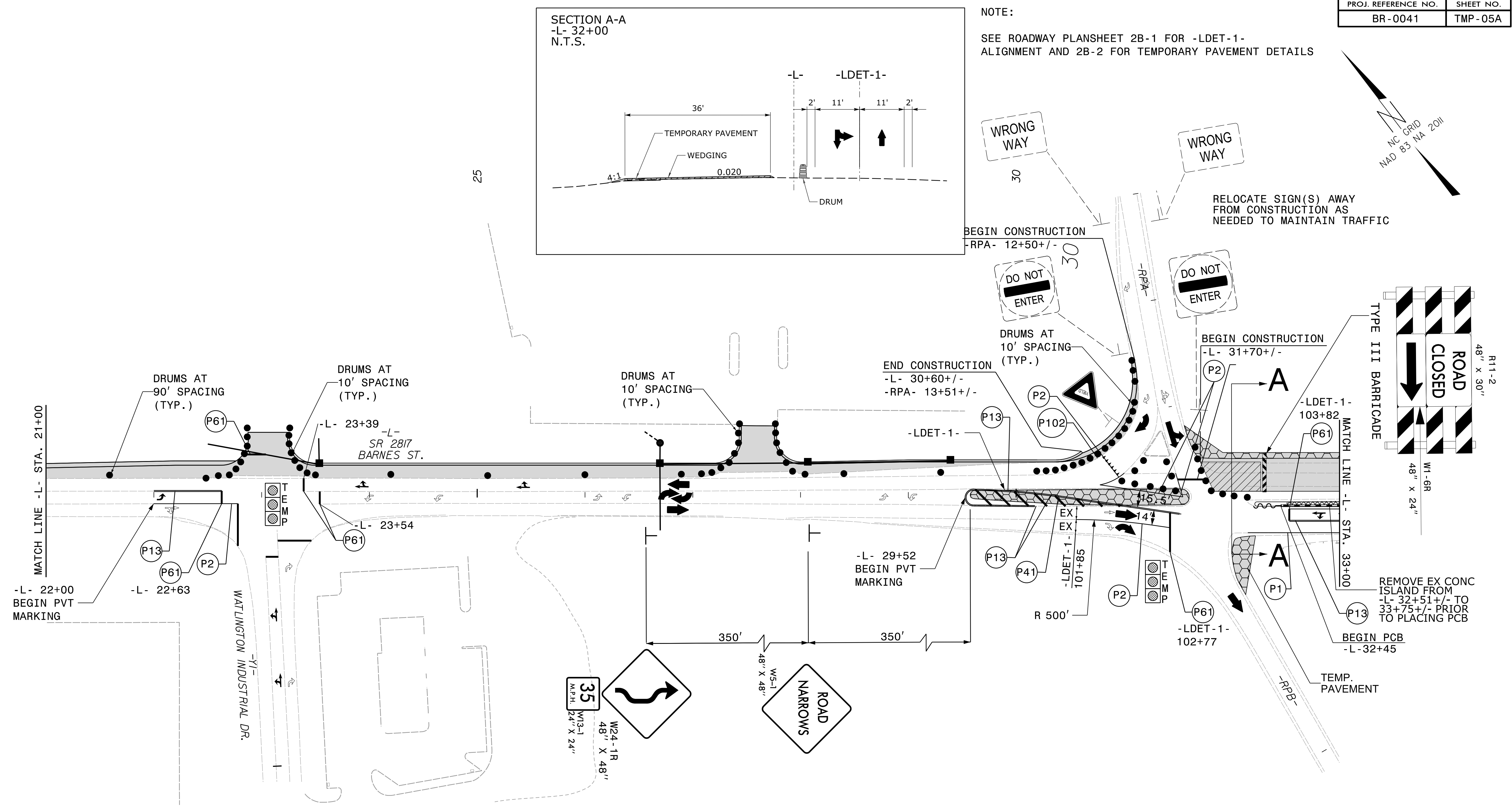
PHASE I DETAILS
SR 2817

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PROJ. REFERENCE NO.	SHEET NO.
BR-0041	TMP-05A



NOTE:
SEE ROADWAY PLANSHEET 2B-1 FOR -LDET-1- ALIGNMENT AND 2B-2 FOR TEMPORARY PAVEMENT DETAILS

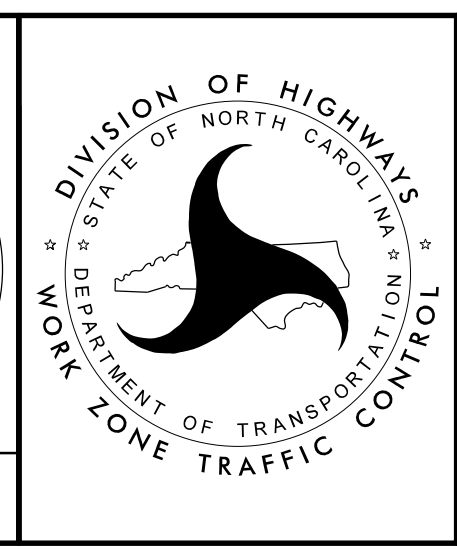


APPROVED: *Jeffrey D. Keeney*

DATE: 2/15/2023

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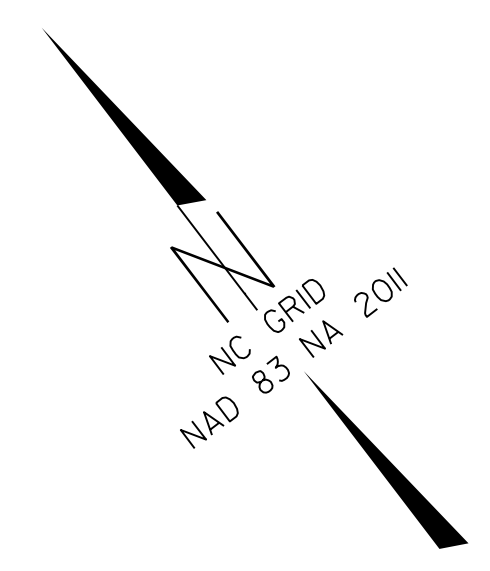
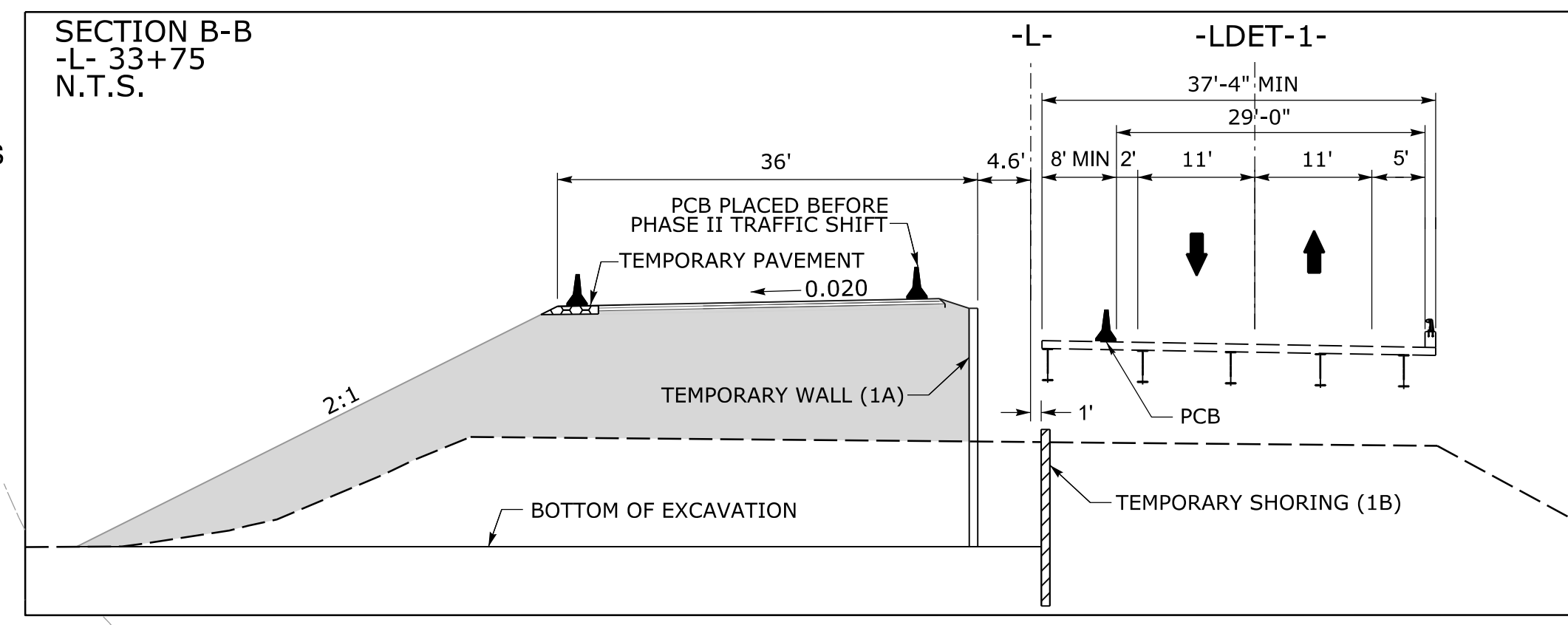
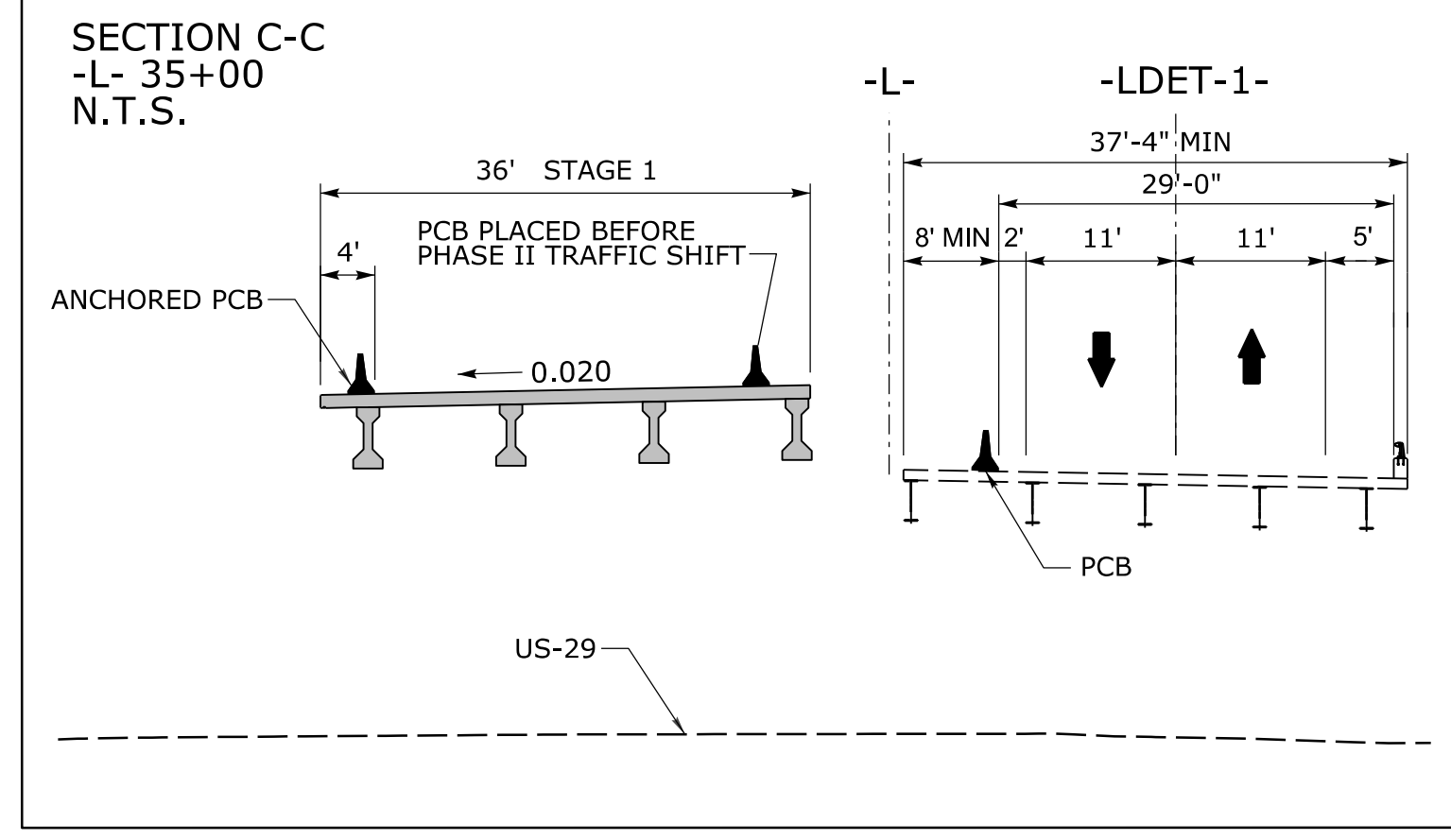
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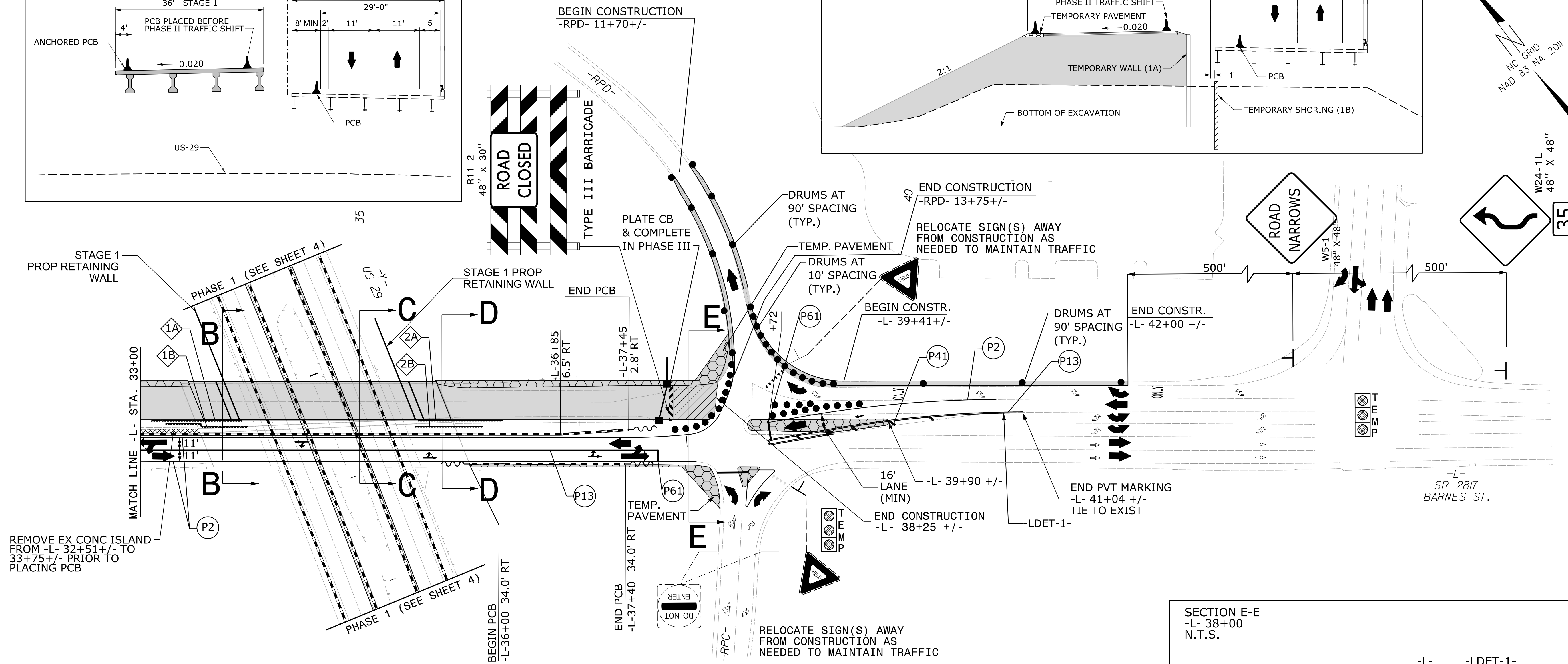
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
WORK ZONE TRAFFIC CONTROL

PHASE I DETAILS
SR 2817

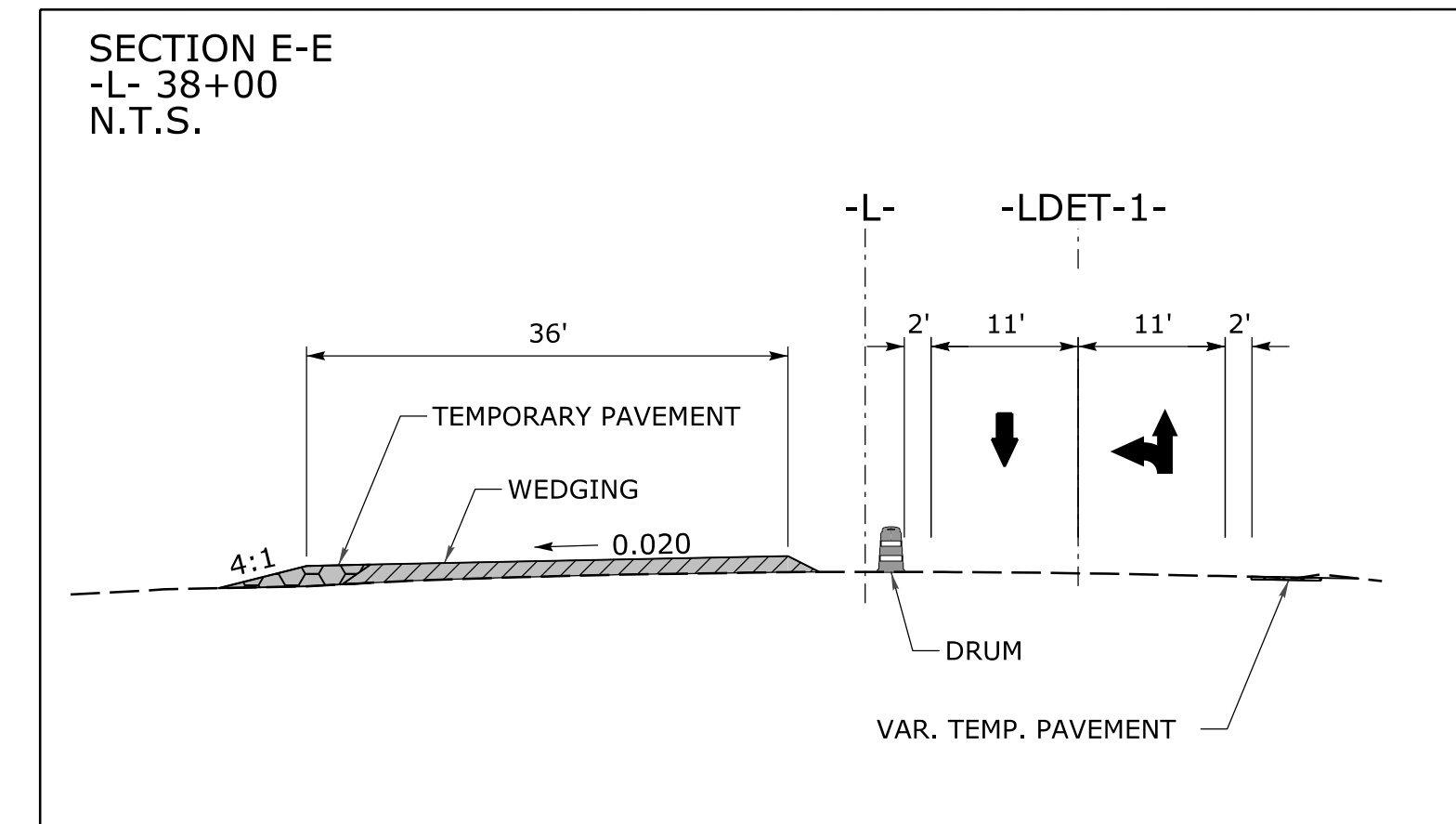
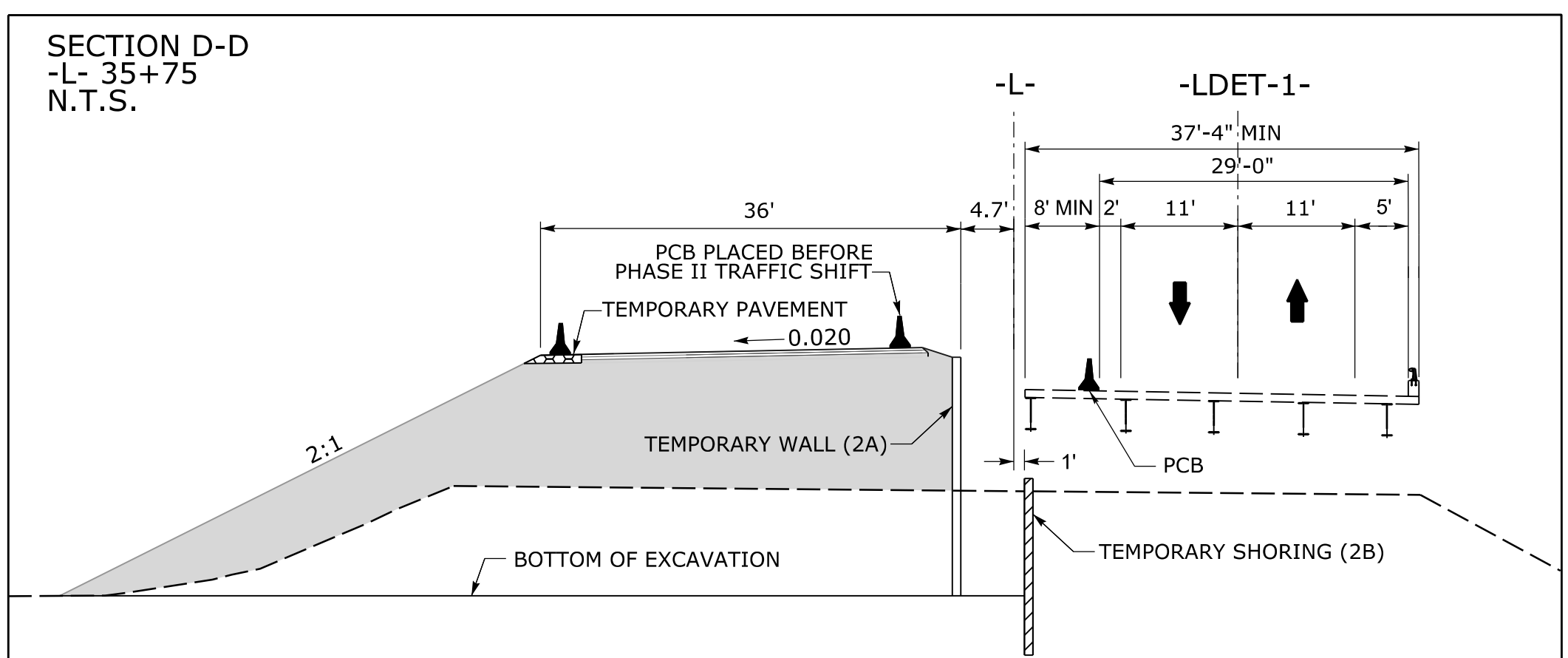
2/15/2023
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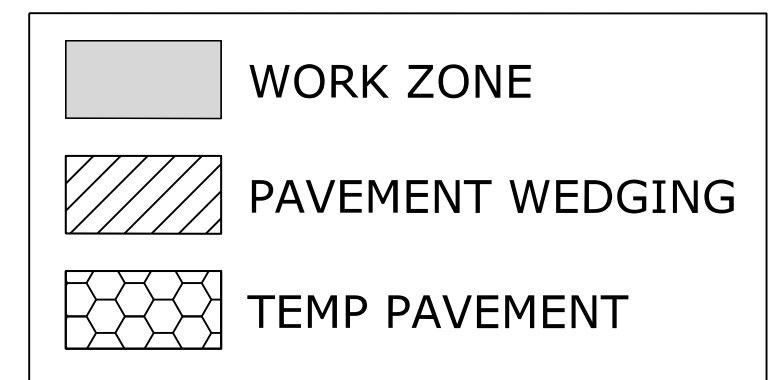
NOTE:
SEE ROADWAY PLANSHEET 2B-1 FOR -LDET-1- ALIGNMENT AND 2B-2 FOR TEMPORARY PAVEMENT DETAILS



REMOVE EX CONC ISLAND FROM -L- 32+51 +/- TO 33+75 +/- PRIOR TO PLACING PCB



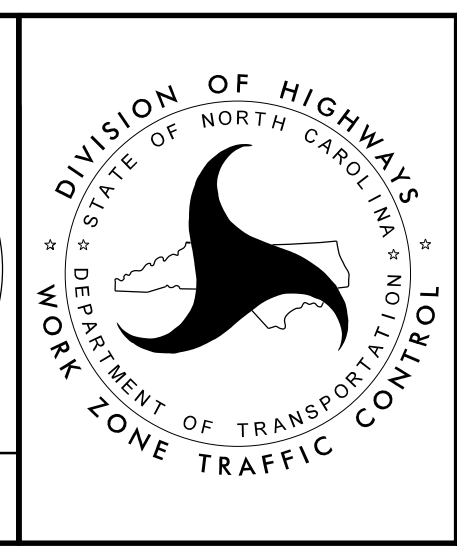
- 1A QUANTITY = 1660 SQ FT
TEMPORARY WALL
-L- STA 33+10.00, 4.6' LT
-L- STA 33+93.00, 4.6' LT
- 1B QUANTITY = 1920 SQ FT
TEMPORARY SHORING
-L- STA 33+18.00, 2.0' LT
-L- STA 33+55.00, 2.0' LT
-L- STA 33+56.00, 1.0' RT
-L- STA 33+98.00, 1.0' RT
- 2A QUANTITY = 1386 SQ FT
TEMPORARY WALL
-L- STA 35+53.00, 4.7' LT
-L- STA 36+30.00, 4.7' LT
- 2B QUANTITY = 1360 SQ FT
TEMPORARY SHORING
-L- STA 35+50.00, 1.0' RT
-L- STA 36+18.00, 1.0' RT



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DATE: 2/15/2023

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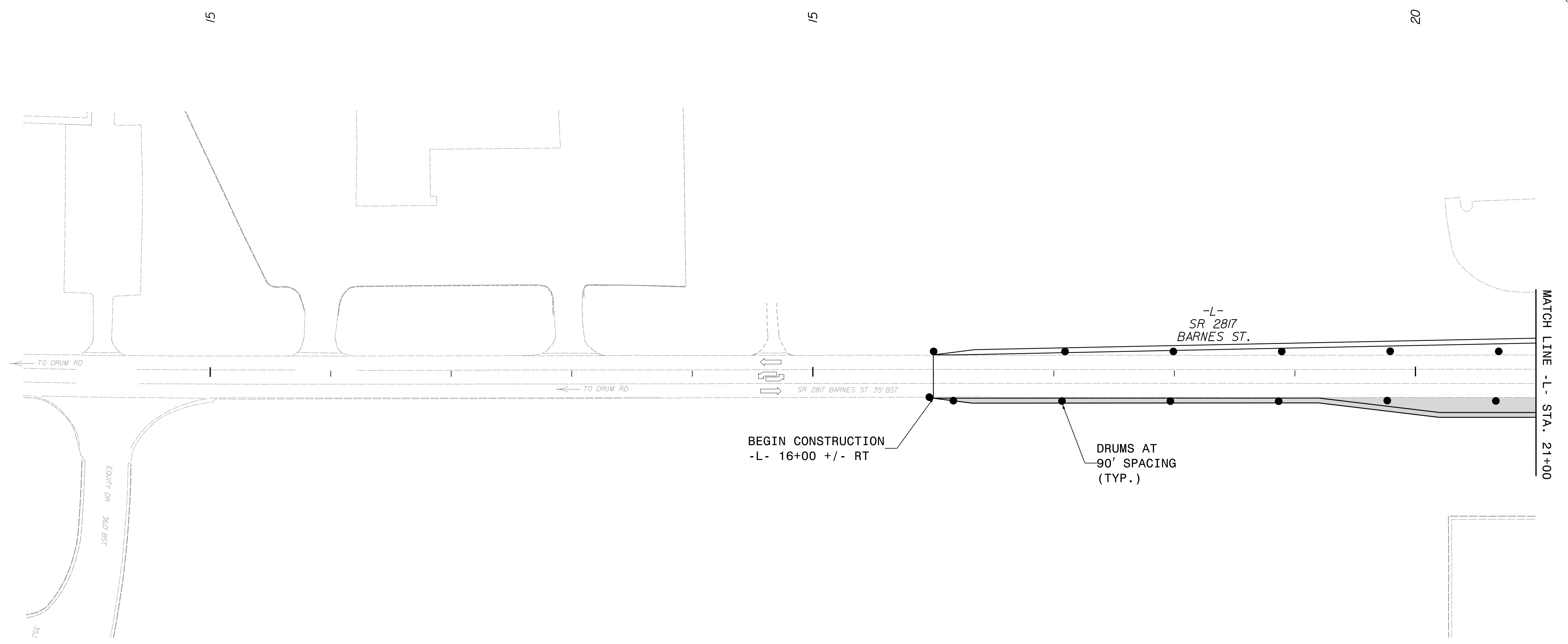
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PHASE I DETAILS
SR 2817

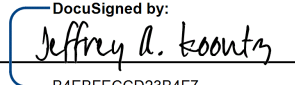
2/15/2023 BR0041.TC_TMP_04_Phi sh3.dgn ion_ar_chambault

PROJ. REFERENCE NO.	SHEET NO.
BR - 0041	TMP - 08



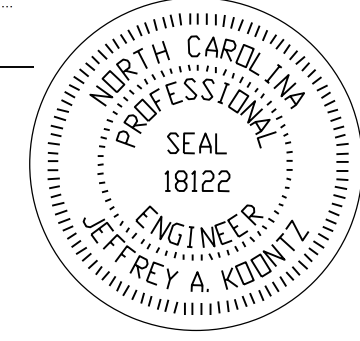
 WORK ZONE

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BR0041.TC_TMP_04_Ph2_sht.dgn
jon.ar.chambault

APPROVED: 
DocuSigned by:
Jeffrey A. Koontz
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DATE: 2/15/2023

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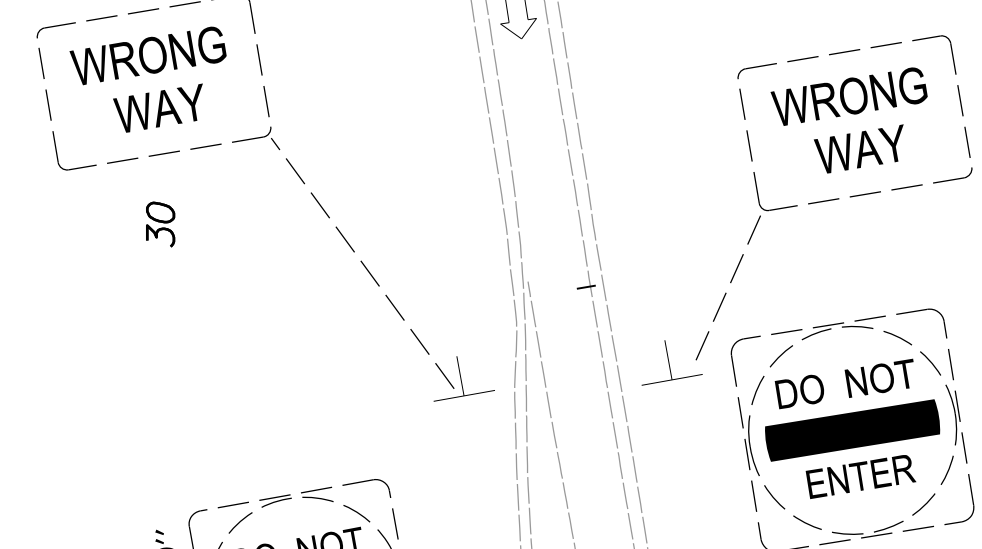
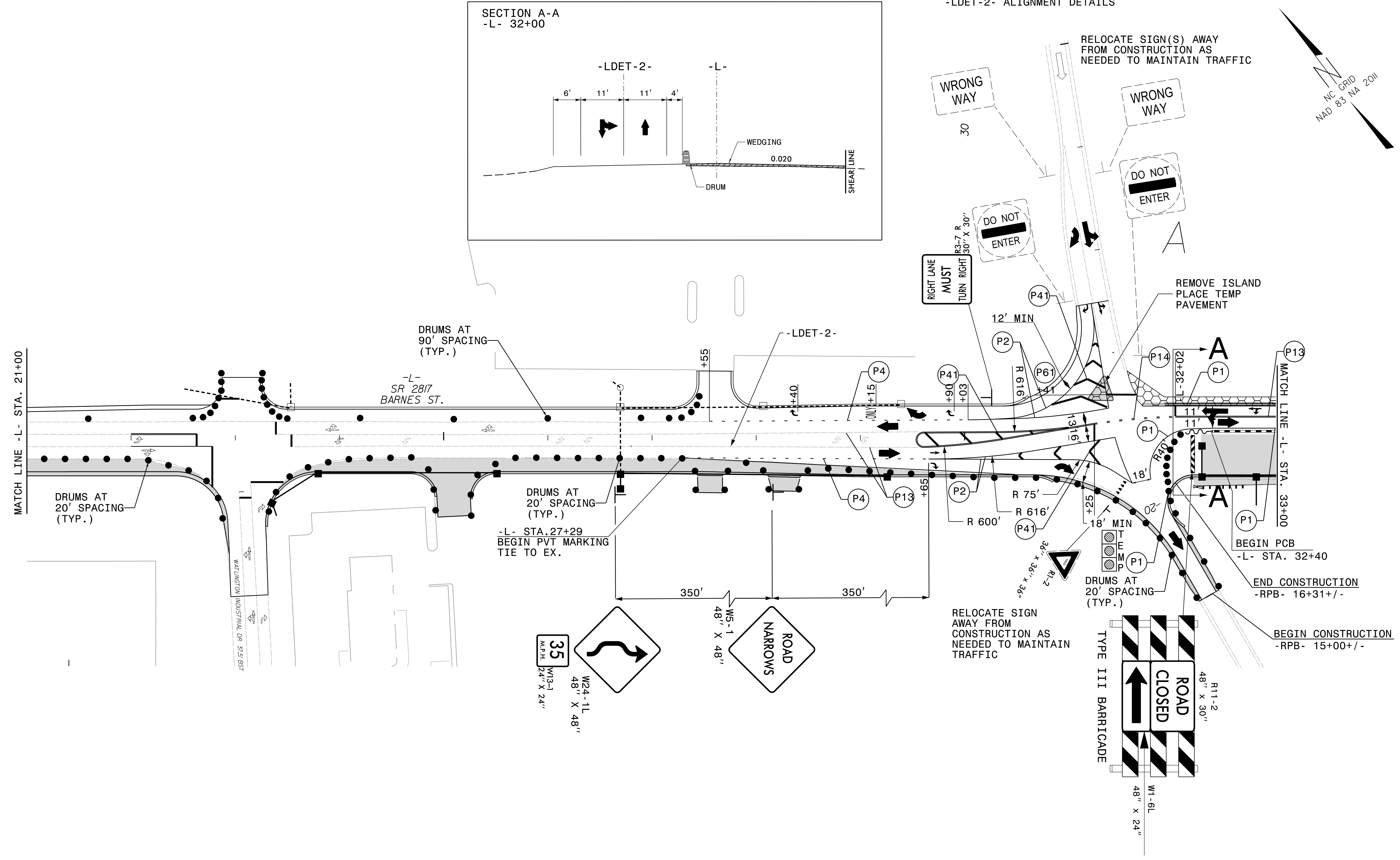
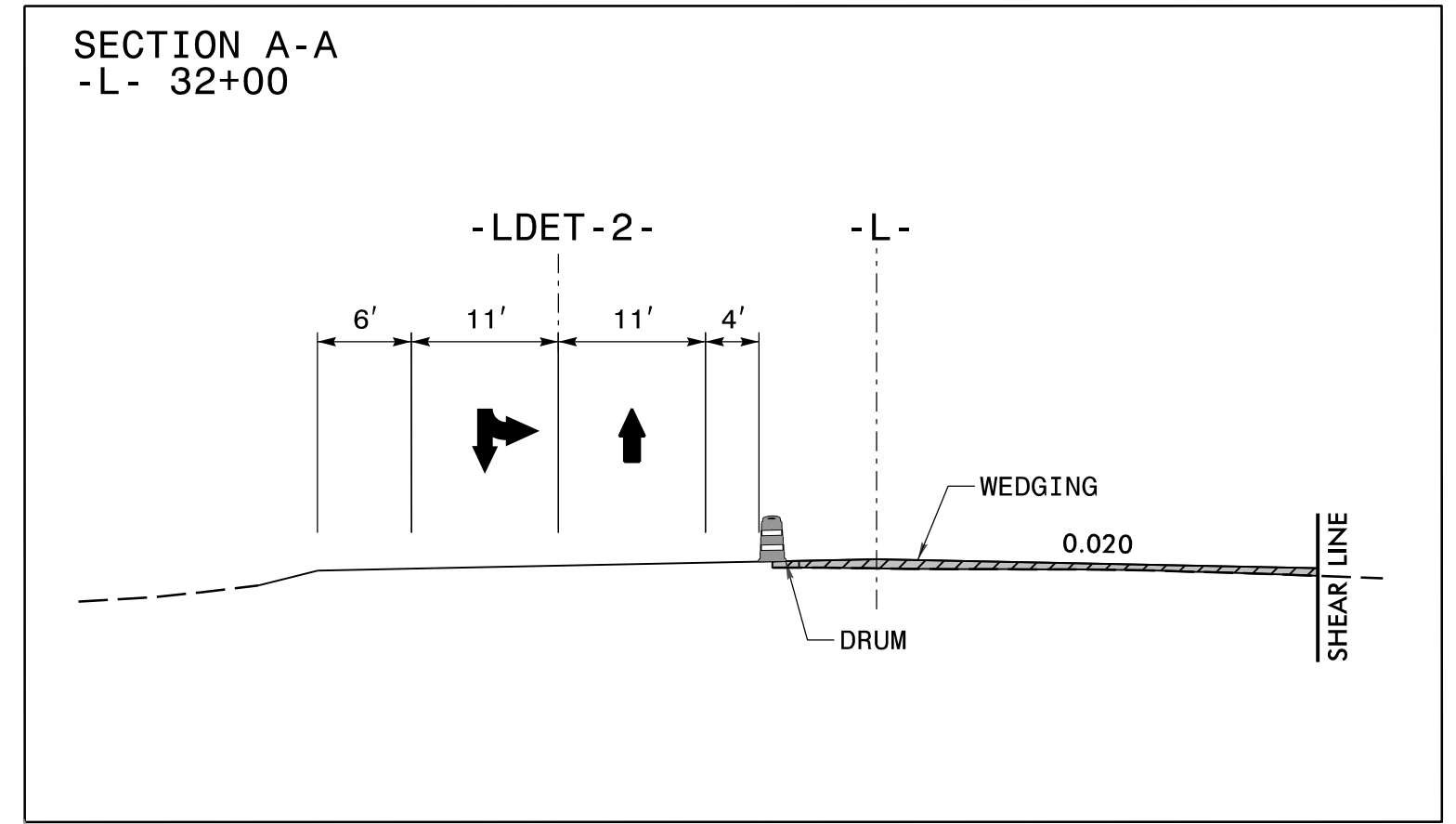
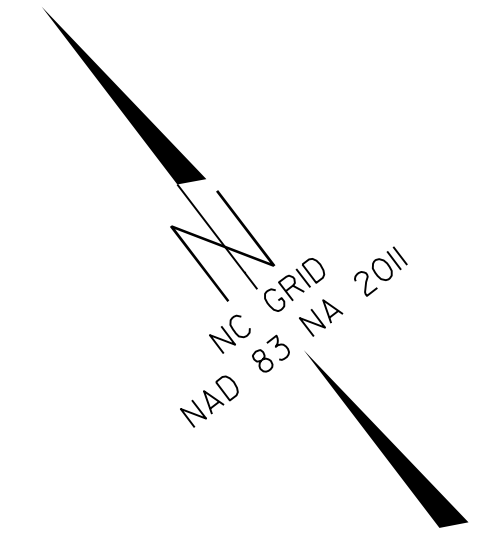


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**PHASE II DETAILS
SR 2817**

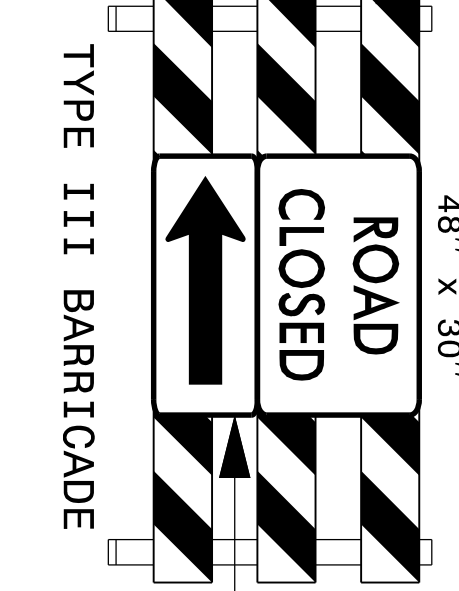
NOTE:
SEE ROADWAY PLANSHEET 2B-1 FOR
-LDET-2- ALIGNMENT DETAILS



RELOCATE SIGN(S) AWAY FROM CONSTRUCTION AS NEEDED TO MAINTAIN TRAFFIC

REMOVE ISLAND PLACE TEMP PAVEMENT

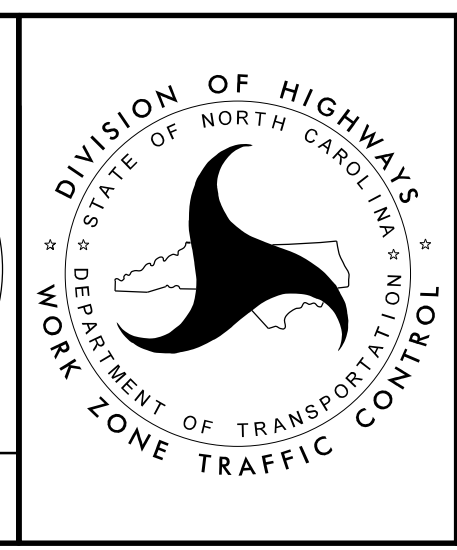
RELOCATE SIGN AWAY FROM CONSTRUCTION AS NEEDED TO MAINTAIN TRAFFIC



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DATE: 2/15/2023

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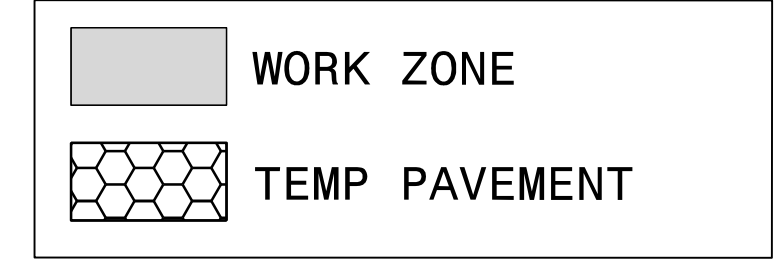
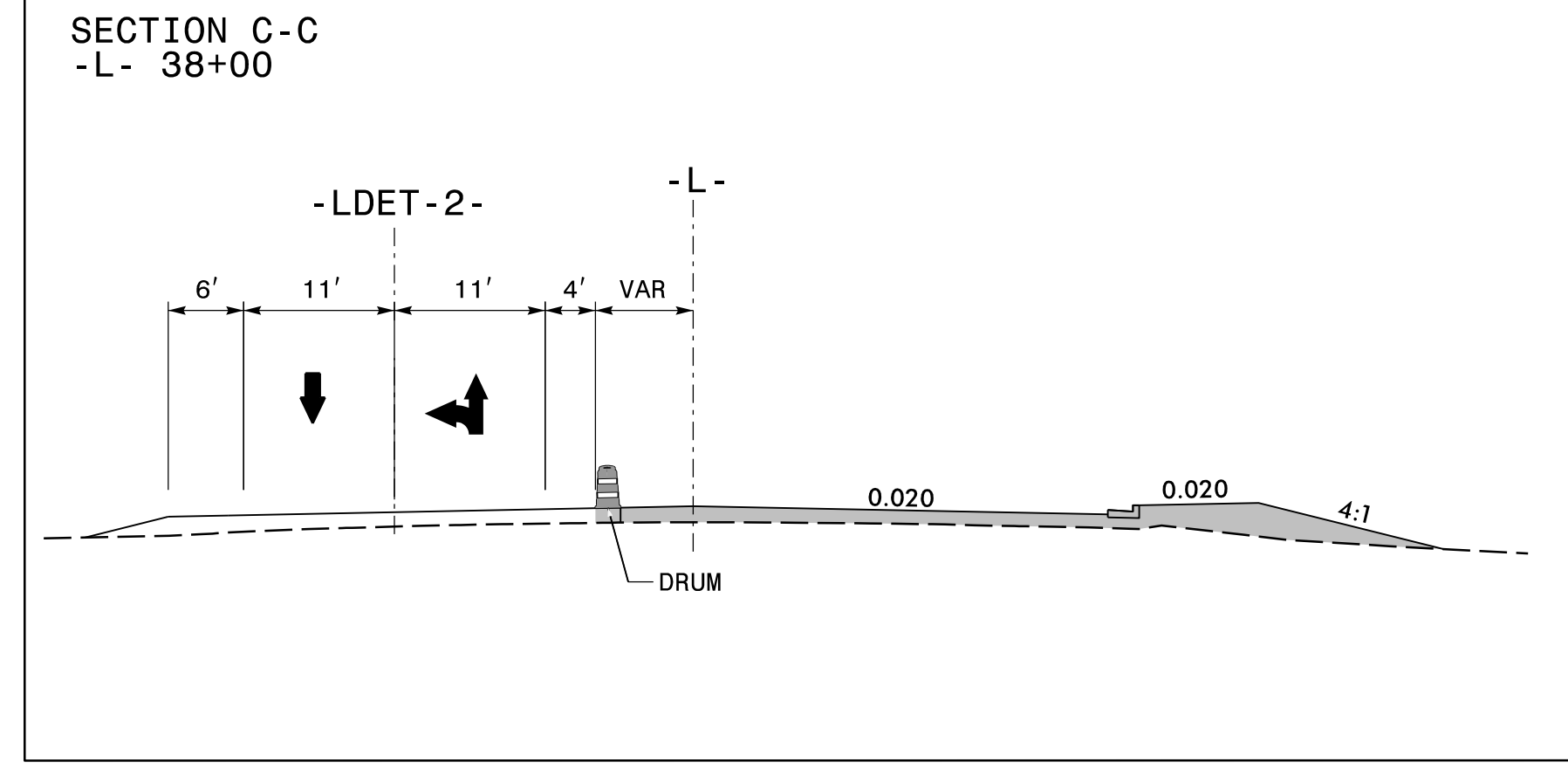
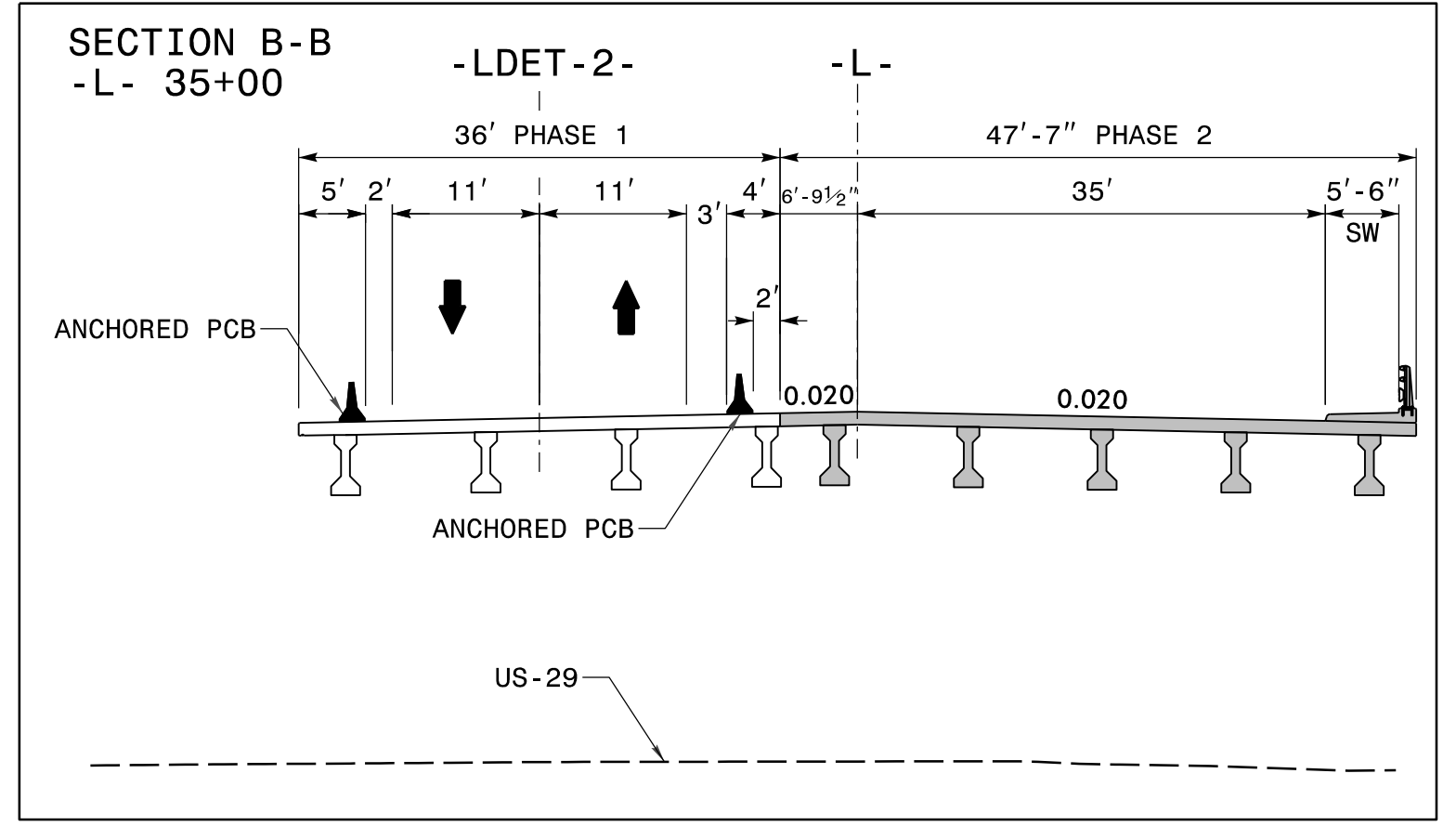
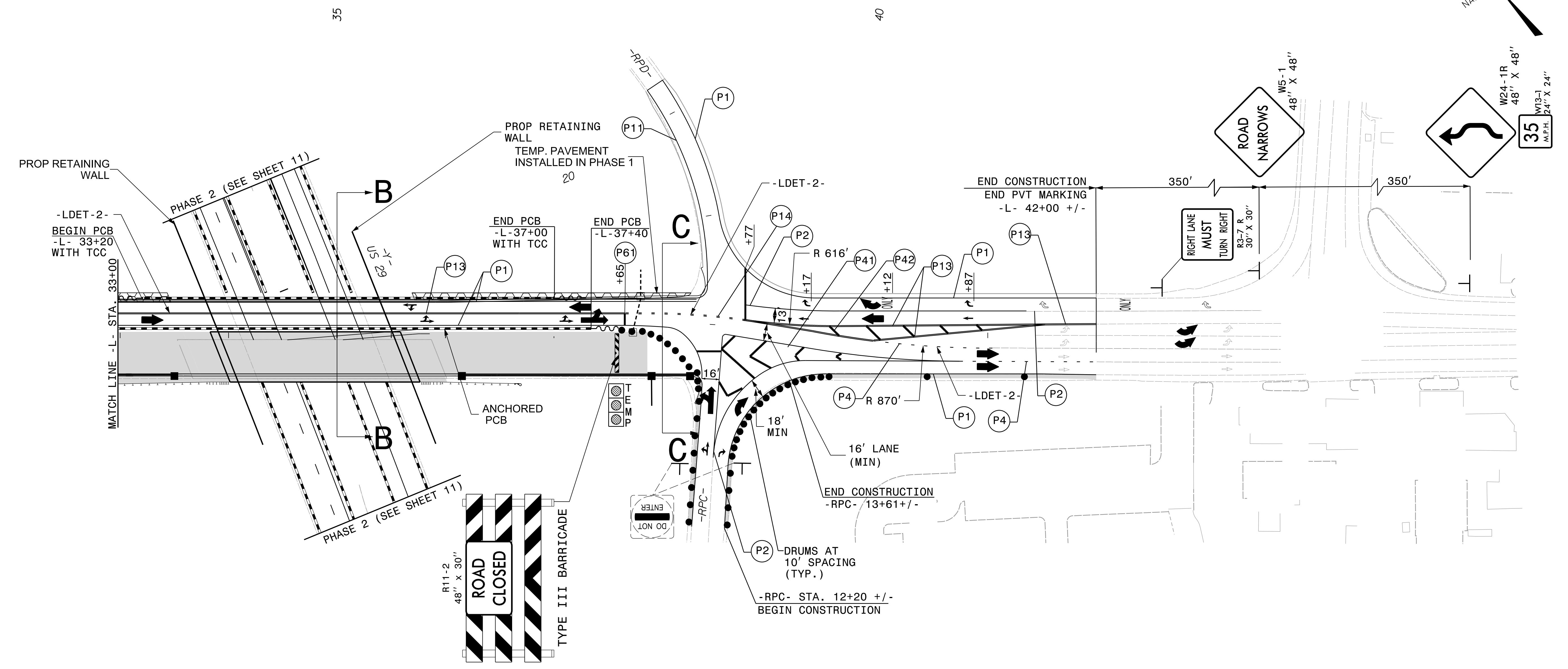


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PHASE II DETAILS
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jon.ar.chambault

NOTE:
SEE ROADWAY PLANSHEET 2B-1 FOR
-LDET-2- ALIGNMENT DETAILS

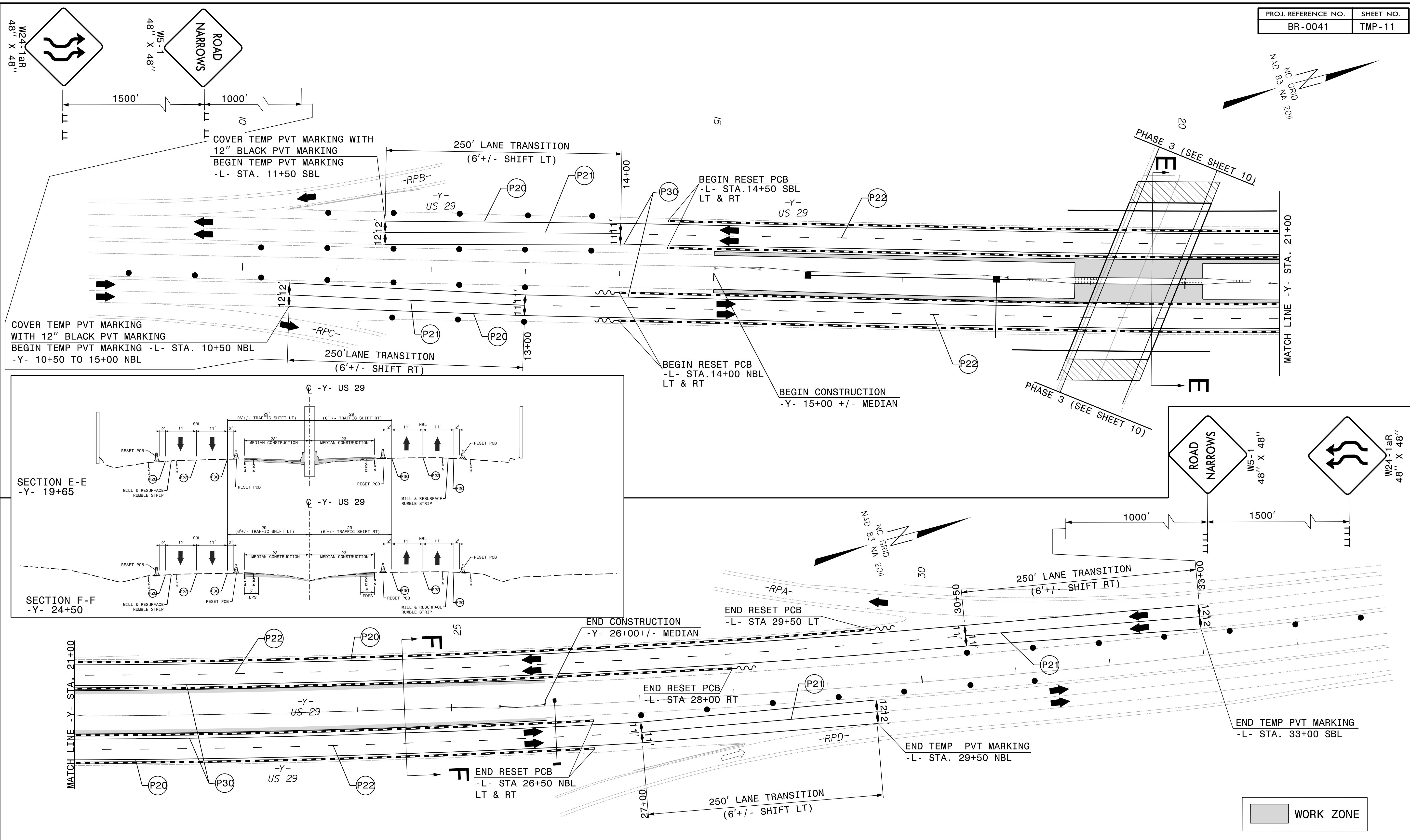


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BR0041.TC_TMP_04_Ph2_sh3.dgn
jon.ar.chambault

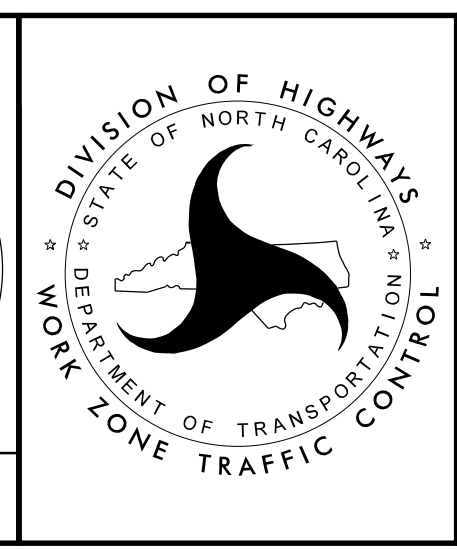


2/15/2023 BR0041.TC_TMP_04_Ph2_sh4.dgn jon.ar.chambault

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DATE: 2/15/2023

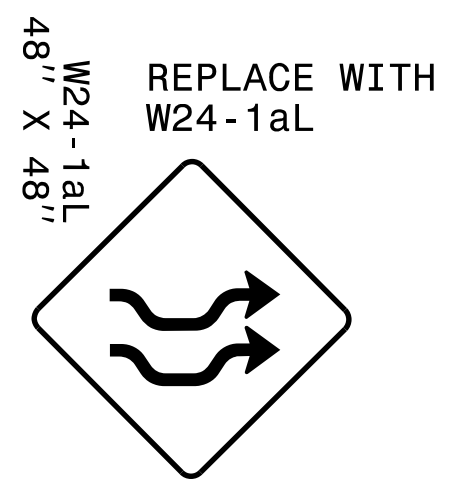
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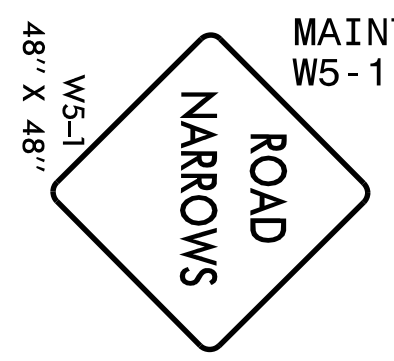


PHASE III DETAILS
US 29

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BR-0041	TMP-11A

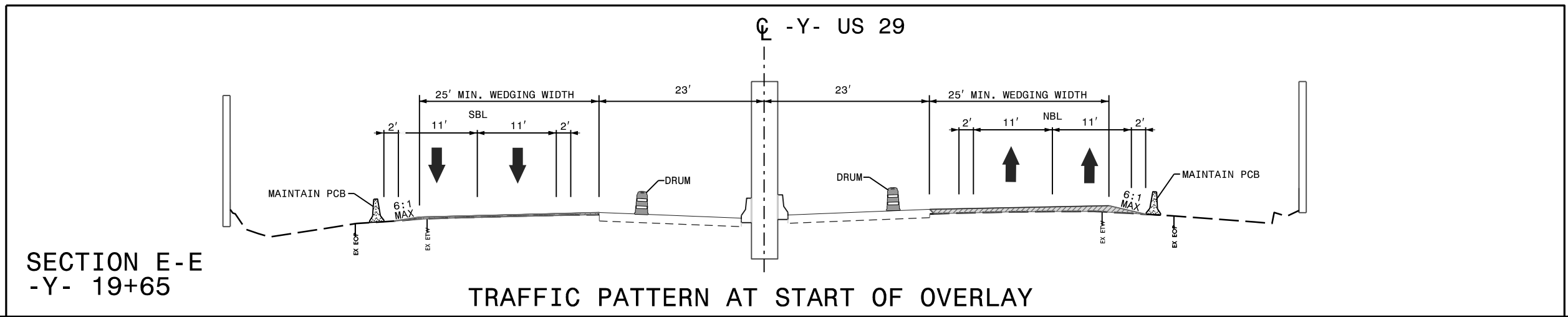
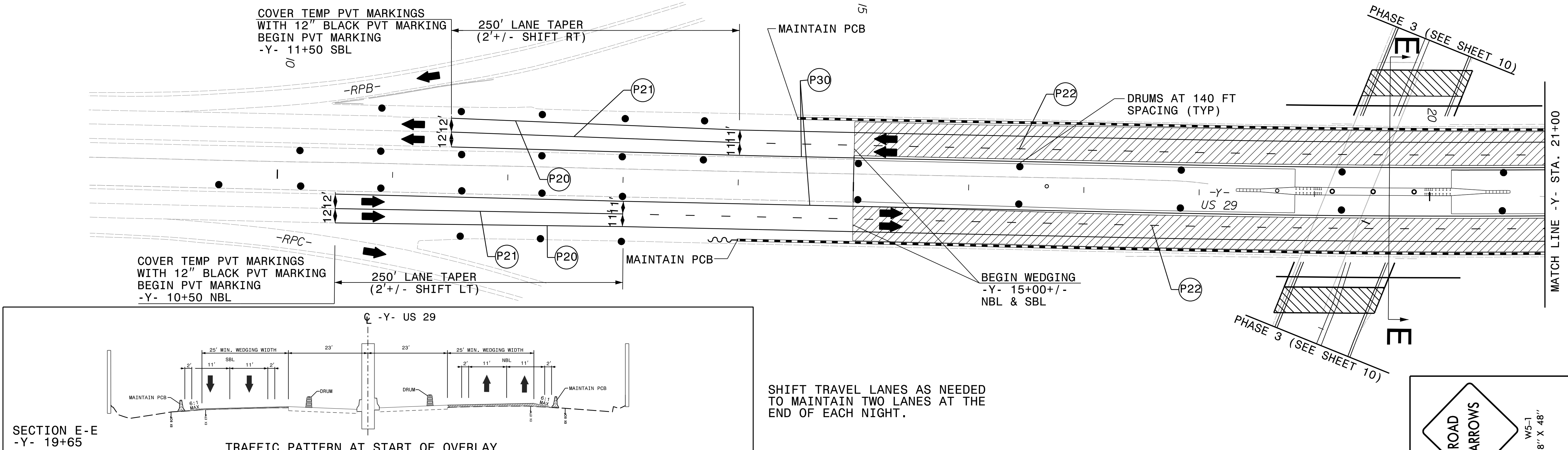
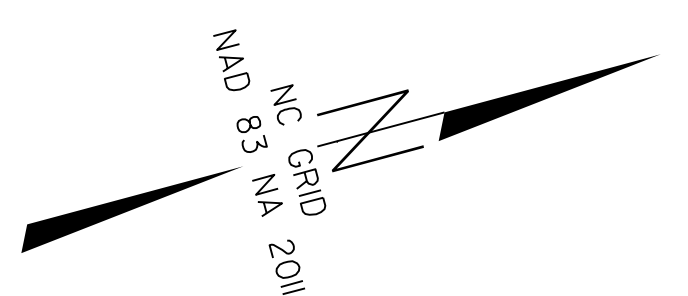


REPLACE WITH
W24-1aL

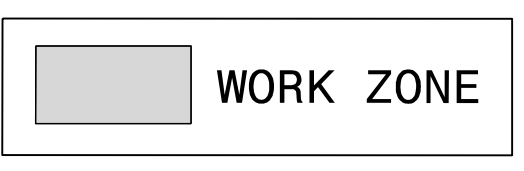
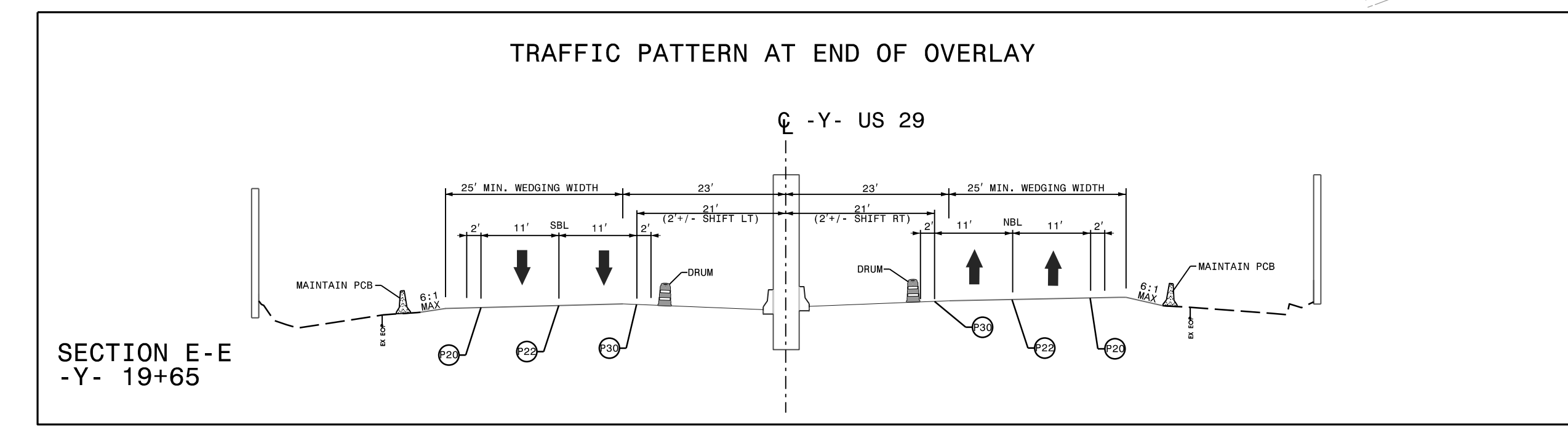
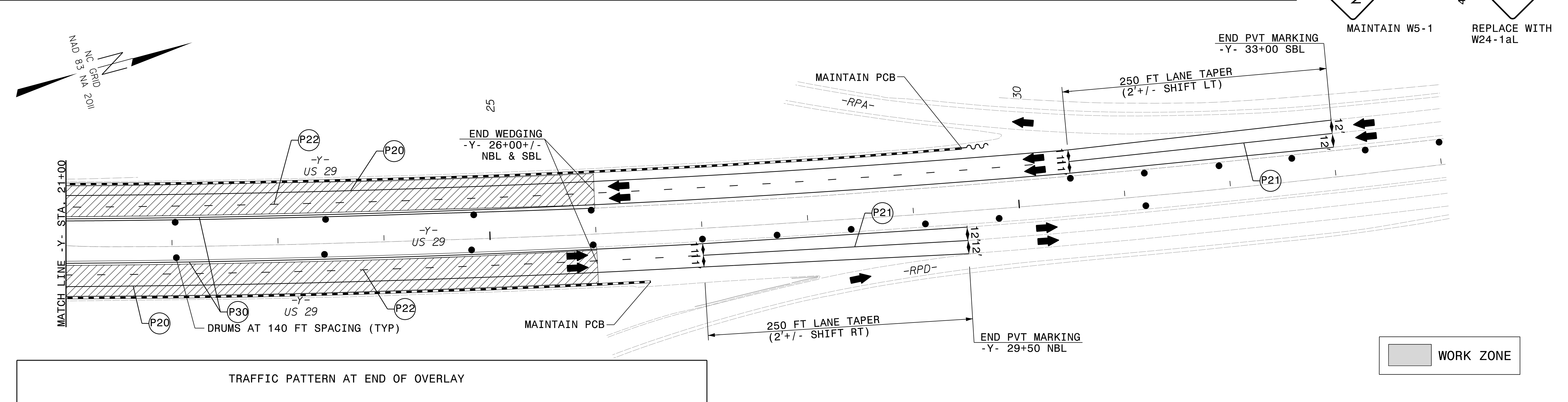
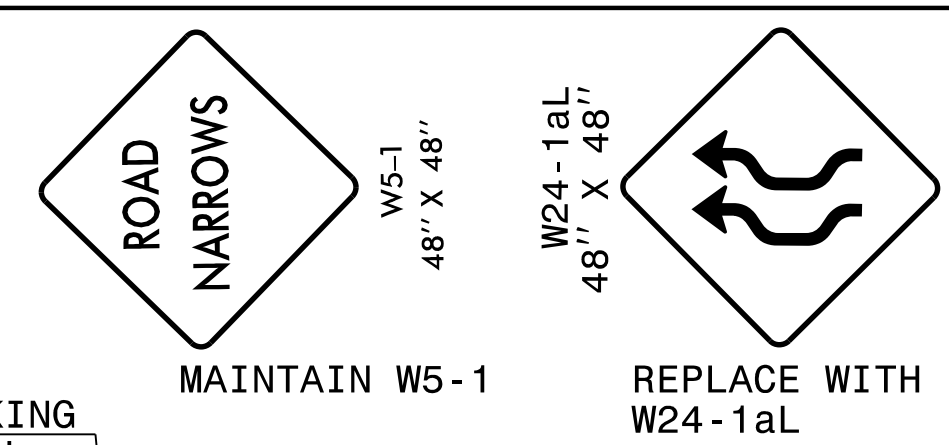


MAINTAIN
W5-1

PAVEMENT MARKING SHOWN IS
AFTER OVERLAY IS COMPLETED



SHIFT TRAVEL LANES AS NEEDED
TO MAINTAIN TWO LANES AT
THE END OF EACH NIGHT.

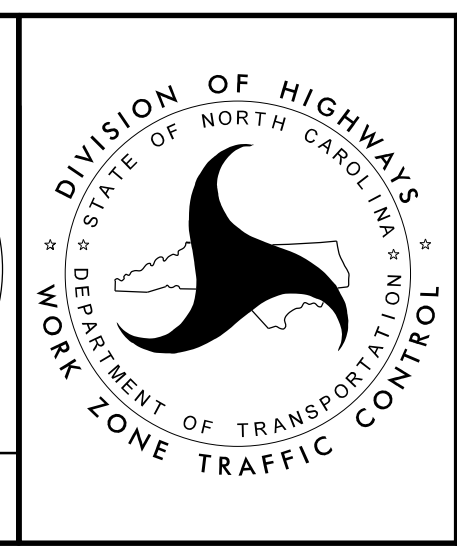


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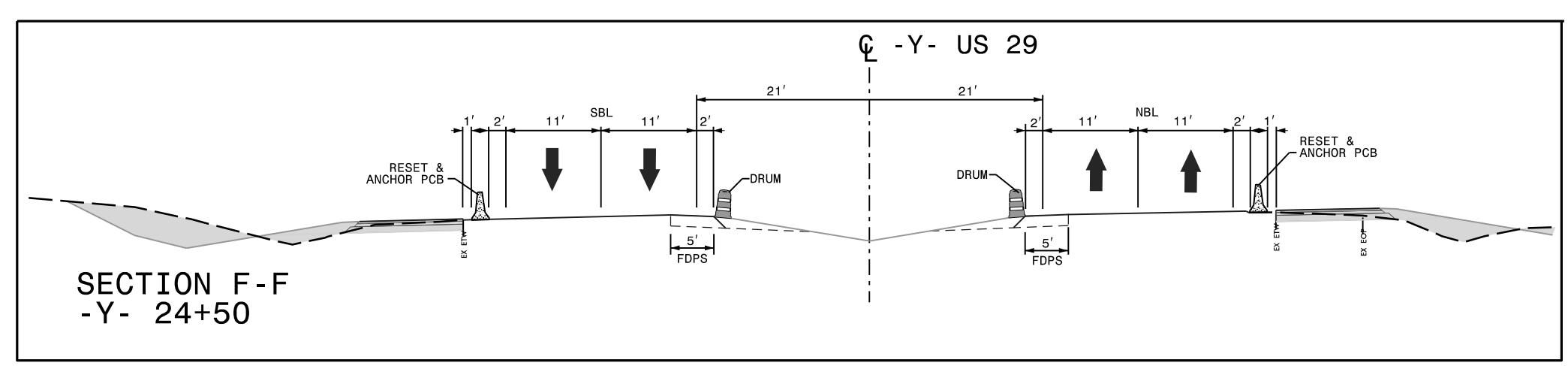
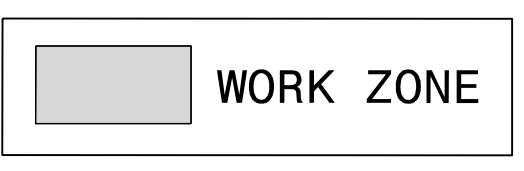
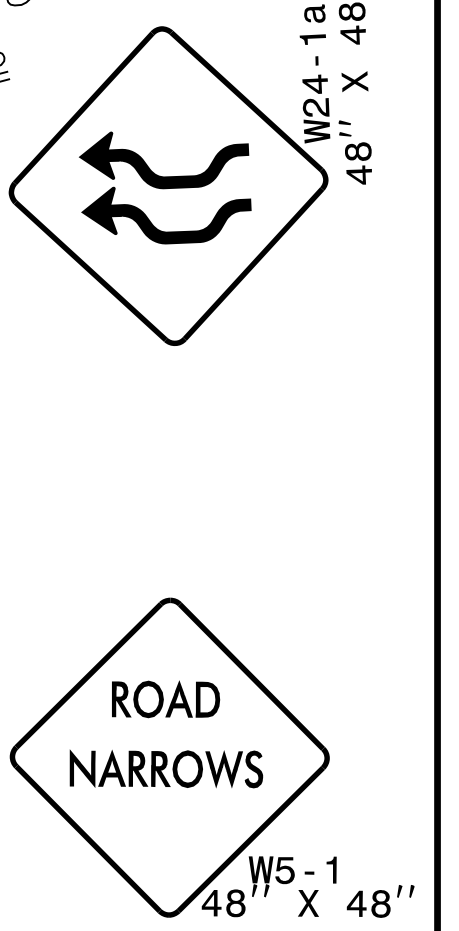
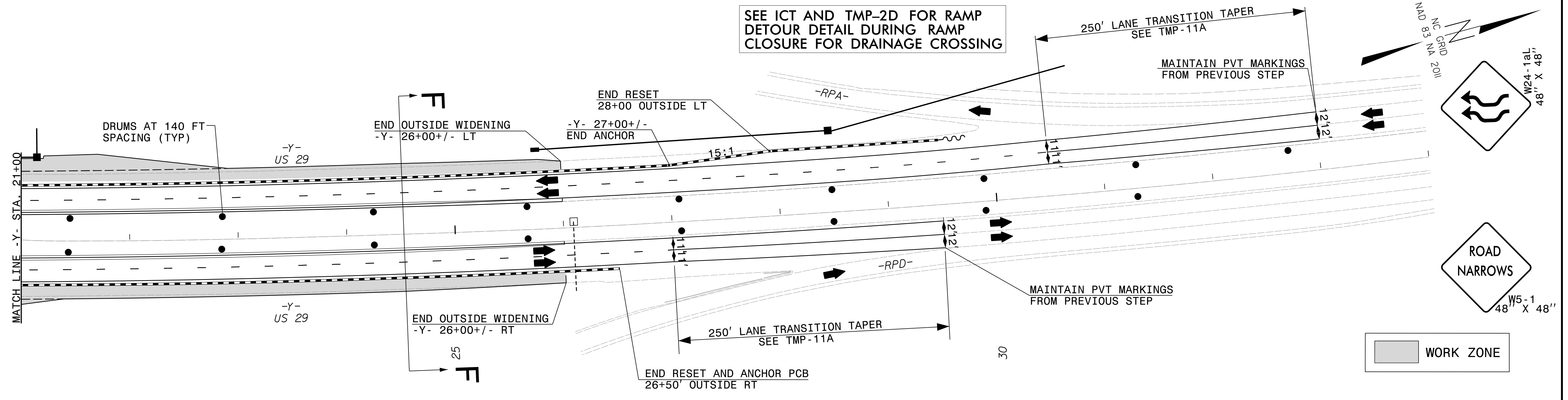
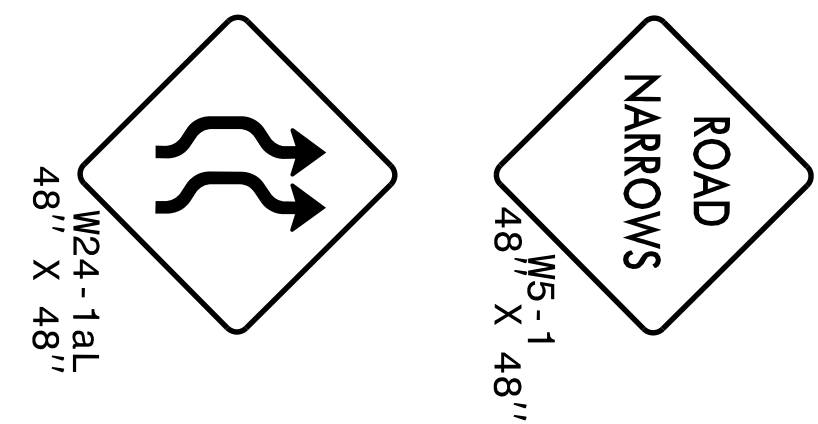
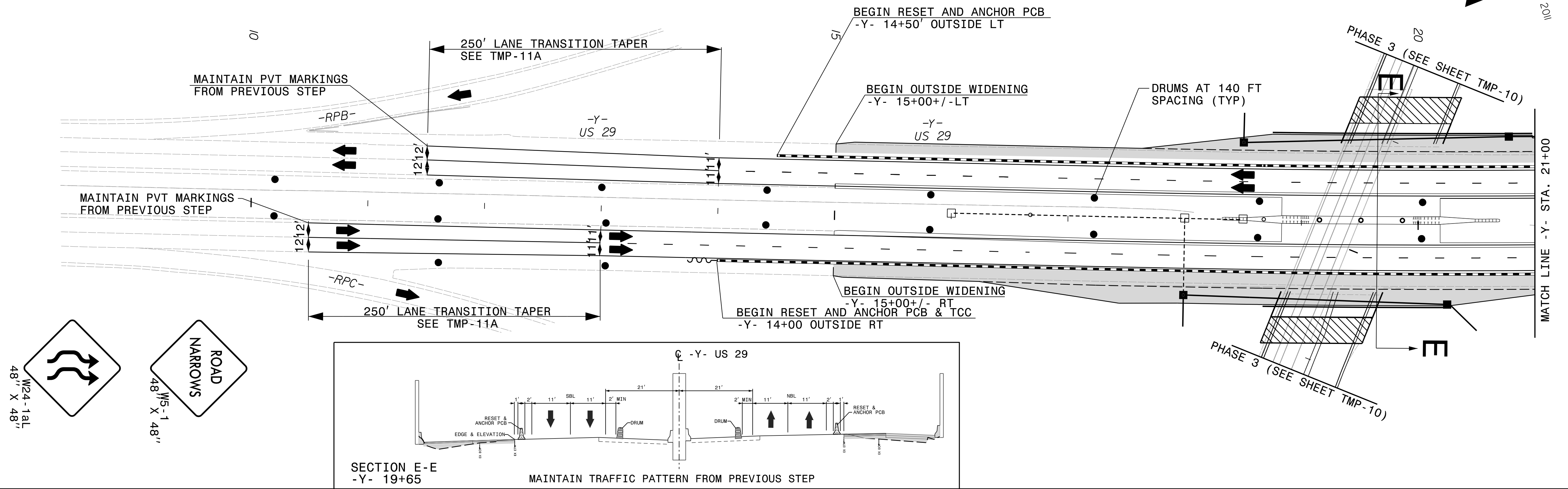
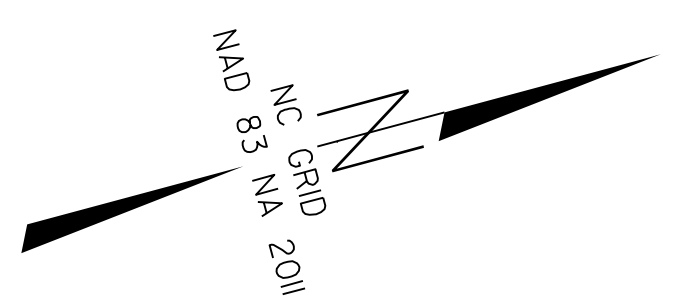
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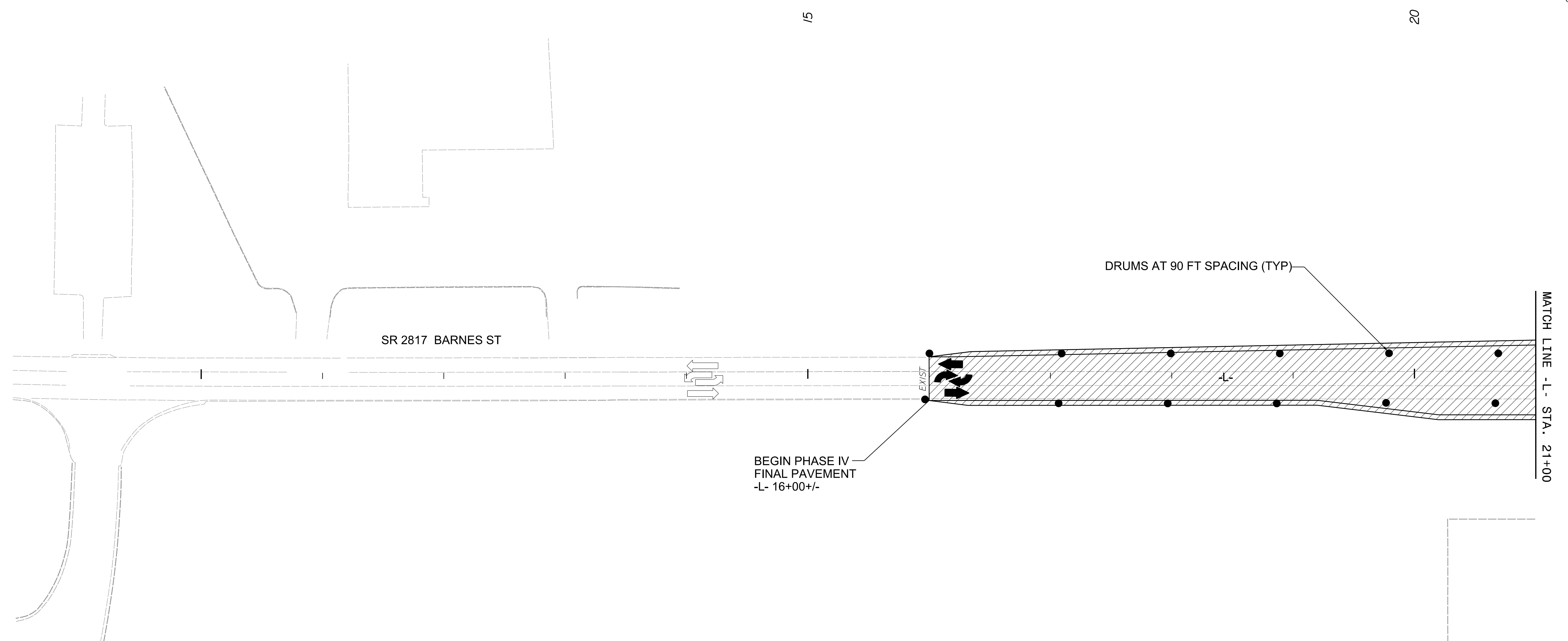


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 DATE: 2/15/2023
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PHASE III DETAILS
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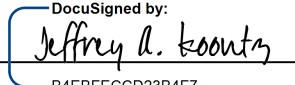
SR 2817 BARNES ST

DRUMS AT 90 FT SPACING (TYP)

BEGIN PHASE IV
FINAL PAVEMENT
-L- 16+00+/-

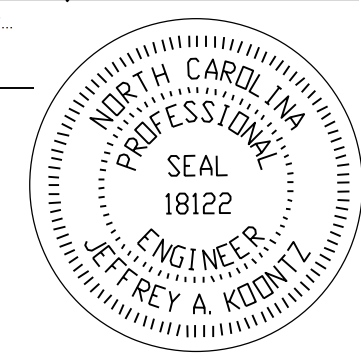
MATCH LINE - L- STA. 21+00

	FINAL PAVEMENT
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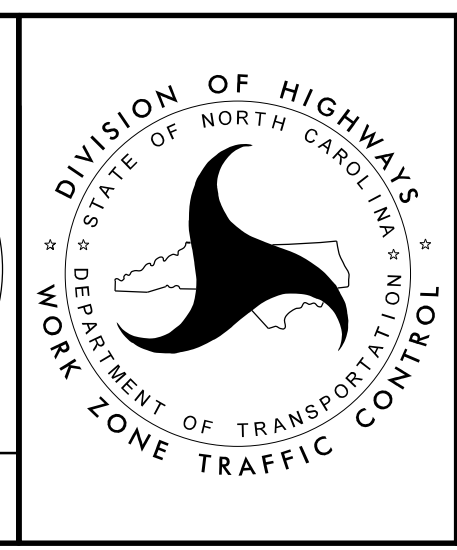
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DATE: 2/15/2023

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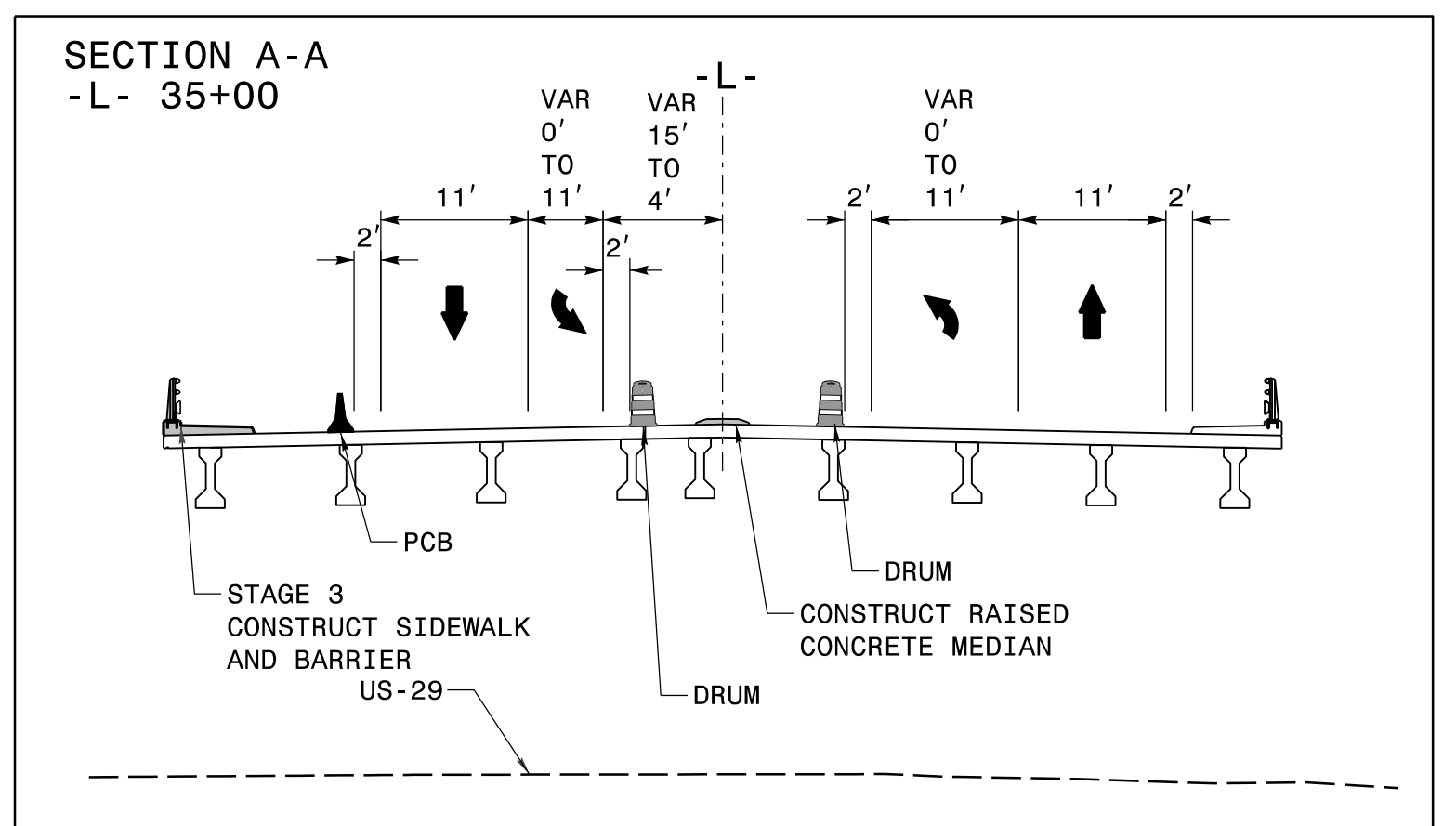
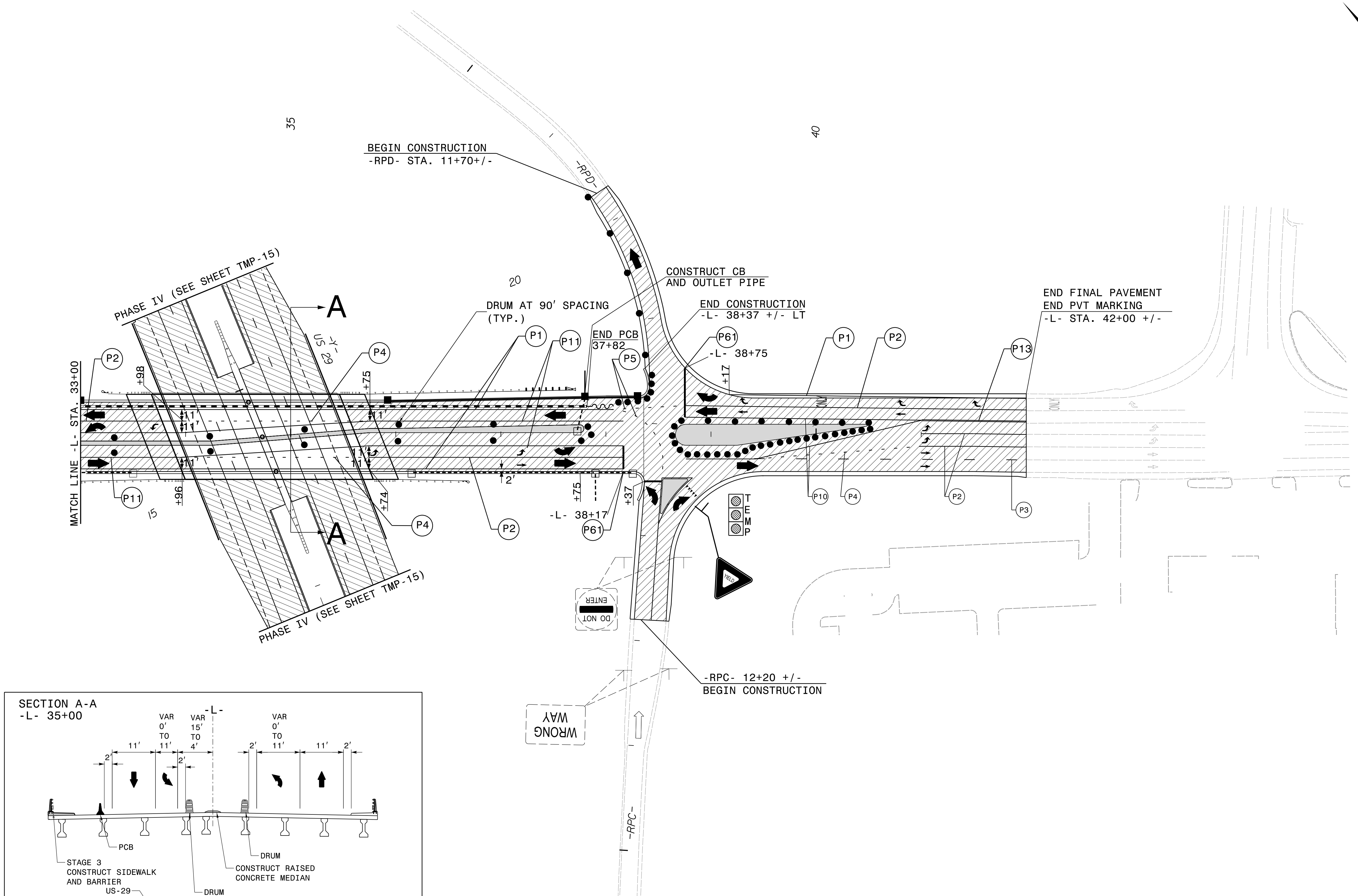
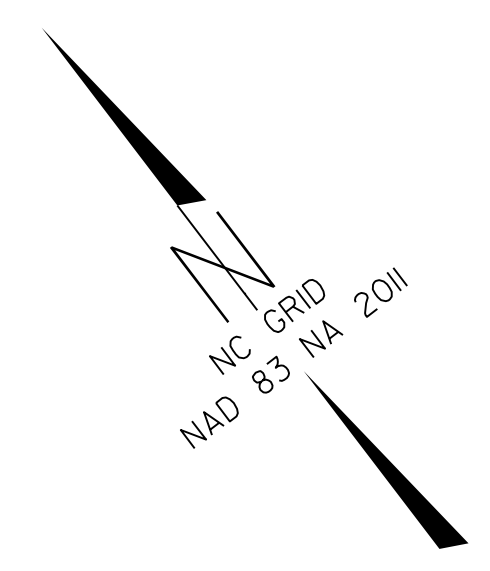


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**PHASE IV DETAILS
SR 2817**

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44E8FECC228AF7

DATE: 2/15/2023

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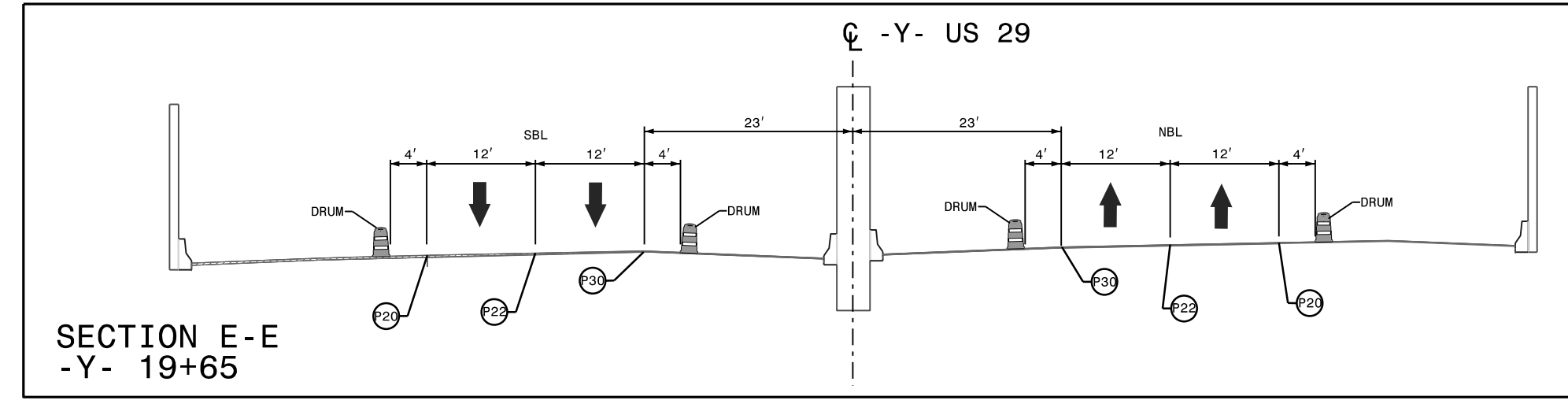
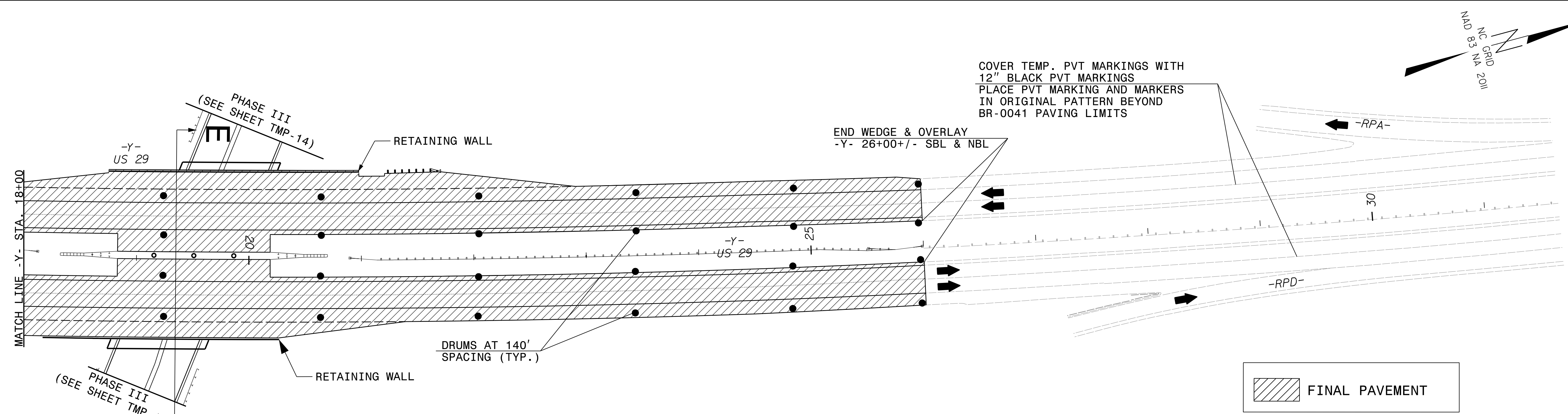
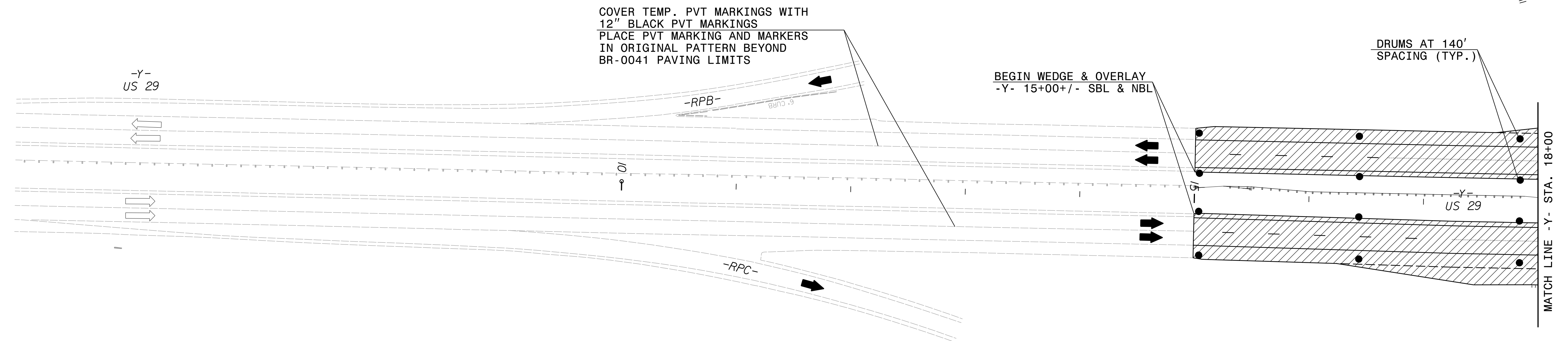
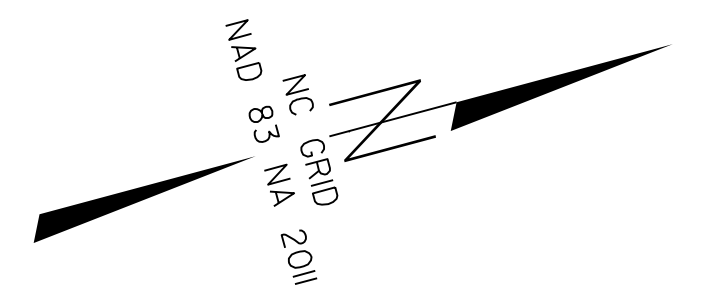
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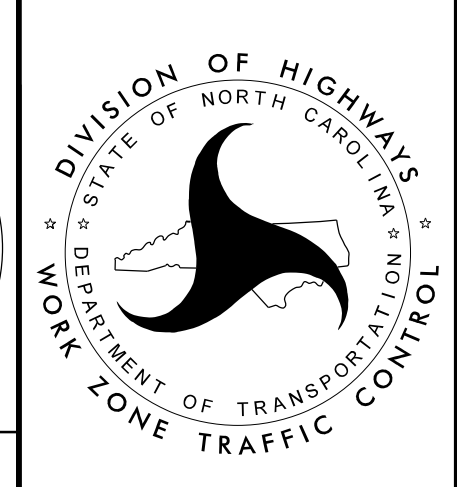
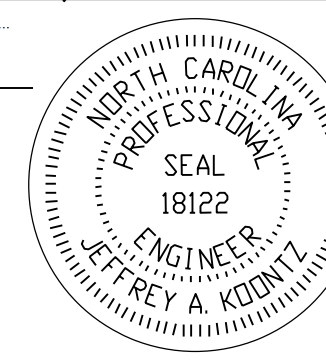
PHASE III & IV DETAILS
SR 2817

PROJ. REFERENCE NO.	SHEET NO.
BR-0041	TMP-15

NOTE:
SEE PAVEMENT MARKING PLANS FOR FINAL PAVEMENT MARKING DETAILS.



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US 29

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