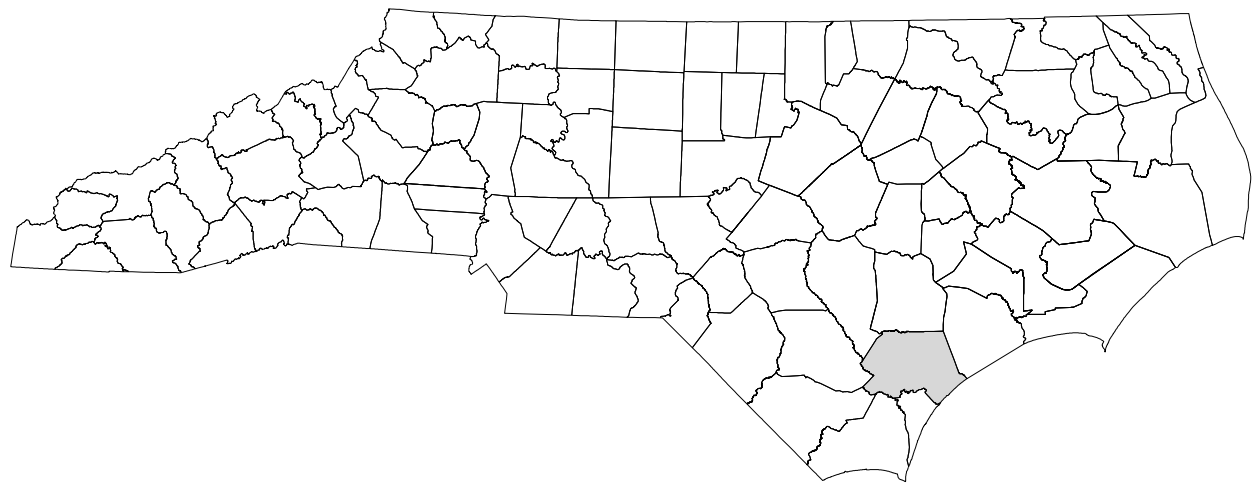


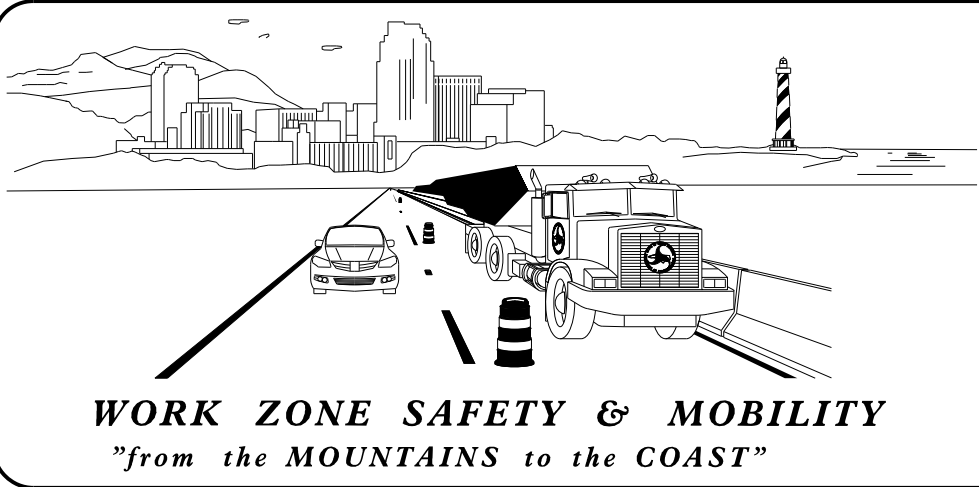
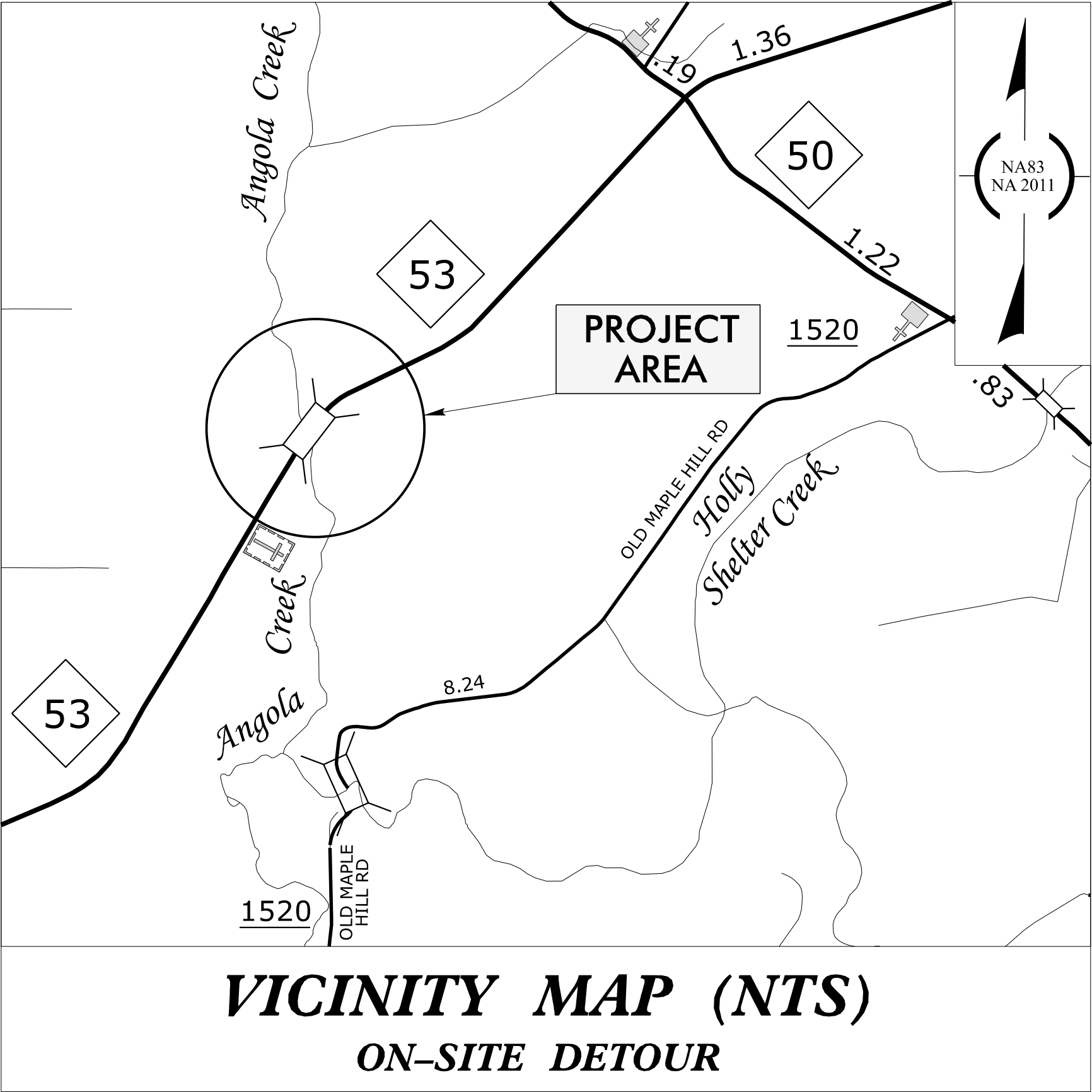
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

PENDER COUNTY



LOCATION: REPLACE BRIDGE 700037 ON NC 53
OVER ANGOLA CREEK



PLANS PREPARED BY:

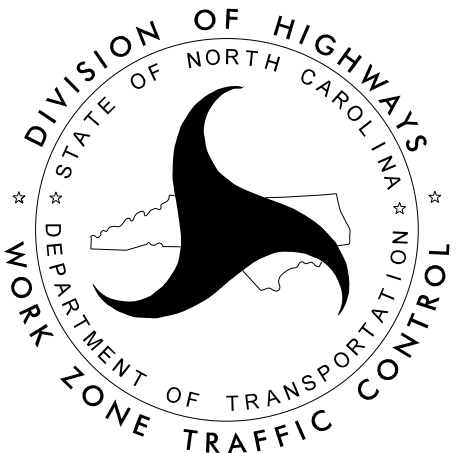
DAVID Z. KEISER, P.E.
PROJECT ENGINEER

SAMUEL S. MILLER, E.I.
PROJECT DESIGN ENGINEER

NCDOT CONTACTS:

KARMEN E. MILLER, P.E.
WORK ZONE TRAFFIC CONTROL
REGIONAL ENGINEER

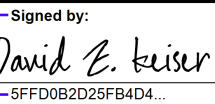
CHRISTOPHER B. HOWARD
WORK ZONE TRAFFIC CONTROL
PROJECT DESIGN ENGINEER



INDEX OF SHEETS

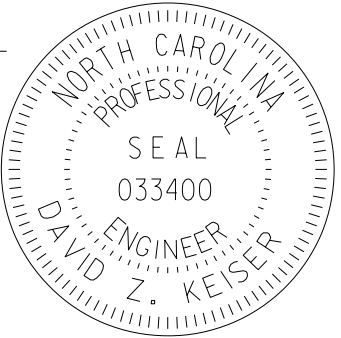
SHEET NO.	TITLE
TMP-1	TITLE SHEET, VICINITY MAP, AND INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, AND LEGEND
TMP-1B THRU TMP-1C	TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT STRATEGIES AND GENERAL NOTES)
TMP-2	TEMPORARY SHORING DATA
TMP-3	TEMPORARY TRAFFIC CONTROL PHASING
TMP-4 THRU TMP-5	TEMPORARY TRAFFIC CONTROL PHASE I DETAIL
TMP-6 THRU TMP-7	TEMPORARY TRAFFIC CONTROL PHASE II DETAIL
TMP-8	TEMPORARY TRAFFIC CONTROL PHASE II TYPICAL SECTIONS
TMP-9 THRU TMP-10	TEMPORARY TRAFFIC CONTROL PHASE III DETAIL
TMP-11 THRU TMP-12	TEMPORARY TRAFFIC CONTROL PHASE IV DETAIL

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APPROVED: 

DATE: 7/31/2026

SEAL



SHEET NO.
TMP-1

PROJECT: BR-0174

6/16/2026
User: dmsmith-az02-pw.bentley.com
User: MILLERS
C:\Users\dmsmith-az02-pw.bentley.com\Documents\17240\28887\10 Transportation\04 Client Folder Structure\BR-0174\Work Zone Traffic Control\BR-0174_TMP_TC01A.dgn

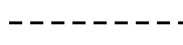
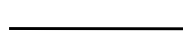
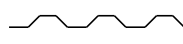
ROADWAY STANDARD DRAWINGS

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

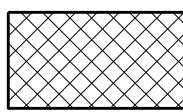
STD. NO.	TITLE
1101.01	WORK ZONE ADVANCE WARNING SIGNS FOR TWO-WAY UNDIVIDED FACILITIES
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1130.01	DRUMS
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGERS
1160.01	TEMPORARY CRASH CUSHION
1180.01	SKINNY DRUMS
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO-LANE AND MULTI-LANE ROADWAYS
1205.12	PAVEMENT MARKINGS - BRIDGES
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 & BARRIER DELINEATORS - TYPES AND MOUNTING
1262.01	GUARDRAIL END DELINEATION
1266.01	RAISED PAVEMENT MARKERS - TUBULAR MARKERS

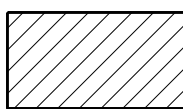
LEGEND

GENERAL

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

 WORK AREA

 REMOVAL

 WEDGE AND/OR WIDEN (USING FLAGGERS)

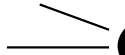
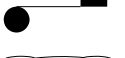
SIGNALS

-  EXISTING
-  PROPOSED
-  TEMPORARY
-  EXISTING
-  PROPOSED
-  TEMPORARY
-  EXISTING
-  PROPOSED
-  TEMPORARY

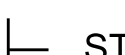
PAVEMENT MARKINGS

-  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

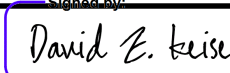
PAVEMENT MARKING SYMBOLS

-  PAVEMENT MARKING SYMBOLS

TEMPORARY PAVEMENT MARKING

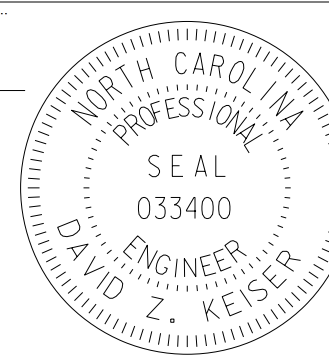
SYMBOL	DESCRIPTION
	PAINT PAVEMENT MARKING LINES (4")
P1	WHITE EDGELINE
P11	YELLOW SINGLE CENTER
P13	YELLOW DOUBLE CENTER
	TEMPORARY RAISED PAVEMENT MARKERS
MA	TEMPORARY RAISED MARKER (YELLOW & YELLOW)

CDM Smith
CDM Smith Inc.
4130 Parklake Avenue
Suite 350
Raleigh, NC 27612-4461
NC COA No. F-1255

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ROADWAY STANDARD
DRAWINGS & LEGEND

MANAGEMENT STRATEGIES

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

RECOMMENDED STRATEGIES:

TRAFFIC MANAGEMENT STRATEGIES:

- A) LANE SHIFTS OR CLOSURES
- B) SHOULDER CLOSURES
- C) ONE-LANE, TWO WAY OPERATION (FLAGGING)
- D) WORK HOUR RESTRICTIONS FOR PEAK TRAVEL
- E) ON-SITE DETOURS

WORK ZONE SAFETY & MOBILITY STRATEGIES:

- F) SPEED LIMIT REDUCTION

CONTRACTING & INNOVATIVE CONSTRUCTION STRATEGIES:

- G) INTERMEDIATE CONTRACT TIMES / LIQUIDATED DAMAGES

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 UNDESIRE

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
-L- NC 53	MONDAY THRU FRIDAY 6:00 A.M. TO 9:00 A.M. AND 4:00 P.M. TO 7:00 P.M.
-L- NC 53	FRIDAY 4:00 P.M. THRU MONDAY 9:00 A.M.
-LDET- NC 53	MONDAY THRU FRIDAY 6:00 A.M. TO 9:00 A.M. AND 4:00 P.M. TO 7:00 P.M.
-LDET- NC 53	FRIDAY 4:00 P.M. THRU MONDAY 9:00 A.M.

HOURS SUBJECT TO CHANGE DUE TO TRAFFIC CONDITIONS - NIGHTTIME OPERATIONS WILL BE REQUIRED WHEN WARRANTED.

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

ROAD NAME

- L- NC 53
- LDET- NC 53

HOLIDAY

1. FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
2. FOR NEW YEAR'S, BETWEEN THE HOURS OF 4:00 P.M. DECEMBER 31st TO 9:00 A.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 9:00 A.M. THE FOLLOWING TUESDAY.

3. FOR EASTER, BETWEEN THE HOURS OF 4:00 P.M. THURSDAY AND 9:00 A.M. MONDAY.

4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 4:00 P.M. FRIDAY TO 9:00 A.M. TUESDAY.

5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 4:00 P.M. THE DAY BEFORE INDEPENDENCE DAY AND 9:00 A.M. THE DAY AFTER INDEPENDENCE DAY.

IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 4:00 P.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 9:00 A.M. THE TUESDAY AFTER INDEPENDENCE DAY.

6. FOR LABOR DAY, BETWEEN THE HOURS OF 4:00 P.M. FRIDAY AND 9:00 A.M. TUESDAY.

7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 4:00 P.M. TUESDAY TO 9:00 A.M. MONDAY.

8. FOR CHRISTMAS, BETWEEN THE HOURS OF 4:00 P.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 9:00 A.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

C) 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

D) 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.

E) 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.

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

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

G) 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.

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

PAVEMENT EDGE DROP OFF REQUIREMENTS

I) 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.

J) DO NOT EXCEED A DIFFERENCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) 500 FT IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

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

SIGNING

L) 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.

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

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

TRAFFIC CONTROL DEVICES

O) WHEN LANE CLOSURES ARE NOT IN EFFECT SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH) EXCEPT, 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY. REFER TO STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SECTIONS 1130 (DRUMS), 1135 (CONES) AND 1180 (SKINNY DRUMS) FOR ADDITIONAL REQUIREMENTS.

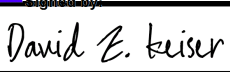
P) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.

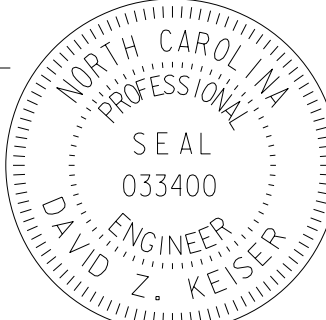
Q) PLACE ADDITIONAL SETS OF THREE DRUMS PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

PROJ. REFERENCE NO.	SHEET NO.
BR-0174	TMP-1B

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CDM Smith
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4130 Parklake Avenue
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Raleigh, NC 27612-4461
NC COA No. F-1255

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TRANSPORTATION
OPERATIONS
PLAN

GENERAL NOTES

PAVEMENT MARKINGS AND MARKERS

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

ROAD NAME	MARKING	MARKER
-L- NC 53	PAINT	NONE
-LDET- NC 53	PAINT	TEMPORARY RAISED

S) PLACE ONE APPLICATION OF PAINT FOR TEMPORARY TRAFFIC PATTERNS. PLACE A SECOND APPLICATION OF PAINT SIX (6) MONTHS AFTER THE INITIAL APPLICATION AND EVERY SIX MONTHS AS DIRECTED BY THE ENGINEER.

T) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

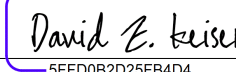
U) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY’S OPERATION.

PROJ. REFERENCE NO.	SHEET NO.
BR-0174	TMP-1C

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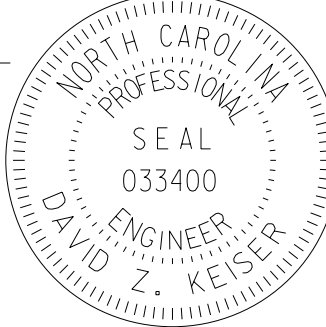
CDM
Smith

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4130 Parklake Avenue
Suite 350
Raleigh, NC 27612-4461
NC COA No. F-1255

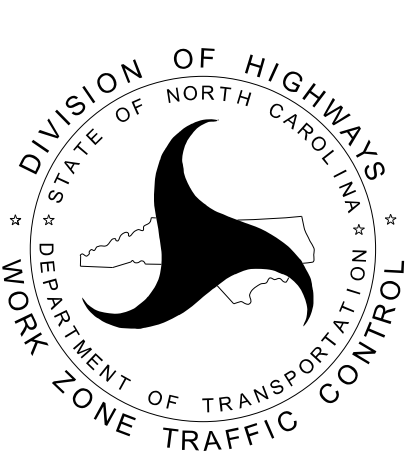
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DATE: 7/31/2026

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TRANSPORTATION
OPERATIONS
PLAN

TEMPORARY SHORING DATA

SHORING LOCATION NO. 1
FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR
TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING
PROVISION.

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

DESIGN TEMPORARY SHORING FROM STATION -L- 18+40 ±, 27 FT RT, TO
STATION -L- 19+22 ±, 27 FT RT, 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 = 12 FT ±

DO NOT USE CANTILEVER, BRACED AND/OR ANCHORED SHORING FOR
TEMPORARY SHORING FROM -L- 18+40 ±, 27 FT RT, TO STATION -L-
19+22 ±, 27 FT RT.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL
FOR TEMPORARY SHORING FROM -L- 18+40 ±, 27 FT RT, TO STATION -L-
19+22 ±, 27 FT RT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.02
FOR STANDARD TEMPORARY WALLS.

WHEN BACKFILL FOR BRIDGE APPROACH FILLS OVERLAPS WITH THE
REINFORCED ZONE OF TEMPORARY WALLS, USE SHORING BACKFILL
OR BACKFILL MATERIAL REQUIRED FOR BRIDGE APPROACH FILLS,
WHICHEVER IS BETTER, IN THE REINFORCED ZONE OF TEMPORARY
WALLS.

SHORING LOCATION NO. 2
FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR
TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING
PROVISION.

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

DESIGN TEMPORARY SHORING FROM STATION -L- 20+54 ±, 27 FT RT, TO
STATION -L- 21+42 ±, 27 FT RT, 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 = 12 FT ±

DO NOT USE CANTILEVER, BRACED AND/OR ANCHORED SHORING FOR
TEMPORARY SHORING FROM -L- 20+54 ±, 27 FT RT, TO STATION -L-
21+42 ±, 27 FT RT.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL
FOR TEMPORARY SHORING FROM -L- 20+54 ±, 27 FT RT, TO STATION -L-
21+42 ±, 27 FT RT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.02
FOR STANDARD TEMPORARY WALLS.

WHEN BACKFILL FOR BRIDGE APPROACH FILLS OVERLAPS WITH THE
REINFORCED ZONE OF TEMPORARY WALLS, USE SHORING BACKFILL
OR BACKFILL MATERIAL REQUIRED FOR BRIDGE APPROACH FILLS,
WHICHEVER IS BETTER, IN THE REINFORCED ZONE OF TEMPORARY
WALLS.

THE TEMPORARY SHORING NOTES SHOWN ON THIS SHEET WERE PROVIDED
THROUGH A SEALED DOCUMENT FROM THE GEOTECHNICAL ENGINEERING
UNIT. THE DOCUMENT WAS SUBMITTED TO THE WZTC SECTION ON APRIL 24, 2025
AND SEALED BY A PROFESSIONAL ENGINEER, ANDREW DRDA, LICENSE # 060350.



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DATE: _____
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TEMPORARY SHORING DATA

PROJ. REFERENCE NO.	SHEET NO.
BR-0174	TMP-3

PHASING

NOTES: COMPLETE ANY PROPOSED WIDENING IN SUCH A MANNER THAT PONDING OF WATER WILL NOT OCCUR IN THE TRAVEL LANE. THIS MAY REQUIRE A COMBINATION OF INSTALLATION OF PROPOSED PIPES, TEMPORARY PIPES, STEEL PLATES, AND TEMPORARY DITCHES.

ALL REFERENCES TO CONSTRUCTION INCLUDE PAVING UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE UNLESS SPECIFICALLY CALLED FOR.

PHASE I

STEP 1:

INSTALL ADVANCE WORK ZONE WARNING SIGNS ACCORDING TO RSD 1101.01 (SHEET 3 OF 3).

STEP 2:

AWAY FROM TRAFFIC, WHILE MAINTAINING EXISTING TRAFFIC PATTERNS, CONSTRUCT THE DETOUR BRIDGE AND ROADWAY FROM -LDET- STA. 13+40 +/- TO -LDET- STA. 22+40 +/- . TOP DOWN CONSTRUCTION SHALL BE USED TO CONSTRUCT THE DETOUR BRIDGE (SEE SHEETS TMP-4 THRU TMP-5).

STEP 3:

USING RSD 1101.02 (SHEET 1 OF 19) AND FLAGGERS AS NEEDED, CONSTRUCT THE DETOUR TIE-INS FROM -LDET- STA. 10+00 +/- TO -LDET- STA. 13+40 +/- AND FROM -LDET- STA. 22+40 +/- TO -LDET- STA. 29+08 +/- , TYING INTO THE WORK COMPLETED IN PHASE I STEP 2 (SEE SHEETS TMP-4 THRU TMP-5).

PHASE II

STEP 1:

AWAY FROM TRAFFIC AND/OR USING RSD 1101.02 (SHEET 1 OF 19) AND FLAGGERS AS NEEDED, INSTALL TEMPORARY PAVEMENT MARKINGS AND MARKERS ON -LDET-. USING RSD 1101.03 (SHEET 3 OF 9), SHIFT TRAFFIC ONTO -LDET- (SEE SHEETS TMP-6 THRU TMP-7).

STEP 2:

AWAY FROM TRAFFIC, REMOVE THE EXISTING BRIDGE (REFER TO STRUCTURE PLANS) AND CONSTRUCT AS MUCH OF -L- AS POSSIBLE FROM -L- STA. 16+50 +/- TO -L- STA. 25+00 +/- WITHOUT DISTURBING -LDET-, UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE, INCLUDING THE PROPOSED BRIDGE AND TEMPORARY SHORING (SEE SHEETS TMP-6 THRU TMP-7). THE REMAINING PORTIONS OF THE SHOULDER AND GUARDRAIL WILL BE CONSTRUCTED DURING PHASE III (SEE SHEET TMP-8, TYPICAL SECTIONS A-A AND C-C).

STEP 3:

USING RSD 1101.02 (SHEET 1 OF 19) AND FLAGGERS AS NEEDED, CONSTRUCT AS MUCH OF THE WIDENING/WEDGING AS POSSIBLE FROM -L- STA. 12+55 +/- TO -L- STA. 16+50 +/- AND FROM -L- STA. 25+00 +/- TO -L- STA. 31+75 +/- UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. PERFORM WEDGING ALONG -L- AND -LDET- AS NEEDED TO PROVIDE A SMOOTH PAVEMENT TRANSITION FOR TRAFFIC. AWAY FROM TRAFFIC, PLACE FINAL PAVEMENT MARKINGS ON THE STRUCTURE PER THE PAVEMENT MARKING PLANS UPON COMPLETION OF PHASE II, PRIOR TO TRAFFIC SHIFT IN PHASE III.

PHASE III

INTERMEDIATE CONTRACT TIME: COMPLETE THE WORK REQUIRED IN PHASE III - STEPS 1 AND 2 IN TWENTY (20) CONSECUTIVE CALENDAR DAYS (SEE CONTRACT FOR LIQUIDATED DAMAGES).

STEP 1:

AWAY FROM TRAFFIC AND/OR USING RSD 1101.02 (SHEET 1 OF 19) AND FLAGGERS AS NEEDED, INSTALL TEMPORARY PAVEMENT MARKINGS ON -L- FROM -L- STA. 11+55 +/- TO -L- 19+06 +/- AND FROM -L- STA. 20+61 +/- TO -L- STA. 31+80 +/- . SHIFT SB NC 53 TRAFFIC INTO THE FINAL TRAFFIC PATTERN ON -L- WHILE MAINTAINING NB NC 53 TRAFFIC IN THE SAME TRAFFIC PATTERN AS PHASE II. (SEE SHEETS TMP-9 THRU TMP-10).

STEP 2:

AWAY FROM TRAFFIC, CONSTRUCT THE REMAINDER OF -L- FROM -L- STA. 16+31 +/- TO -L- STA. 18+50 +/- AND FROM -L- STA. 21+50 +/- TO -L- STA. 23+35 +/- UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. CONSTRUCT THE REMAINDER OF THE GUARDRAIL USING TEMPORARY CRASH CUSHION OR ANOTHER APPROVED DEVICE AS DIRECTED BY THE ENGINEER (SEE SHEETS TMP-9 THRU TMP-10).

PHASE IV

STEP 1:

AWAY FROM TRAFFIC AND/OR USING RSD 1101.02 (SHEET 1 OF 19) AND FLAGGERS AS NEEDED, SHIFT NB NC 53 TRAFFIC INTO THE FINAL TRAFFIC PATTERN ON -L-. PLACE THE FINAL LAYER OF SURFACE COURSE, PERFORM MILLING/RESURFACING, AND INSTALL FINAL PAVEMENT MARKINGS AND MARKERS ON -L- (SEE SHEETS TMP-11 THRU TMP-12).

STEP 2:

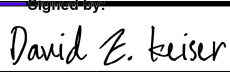
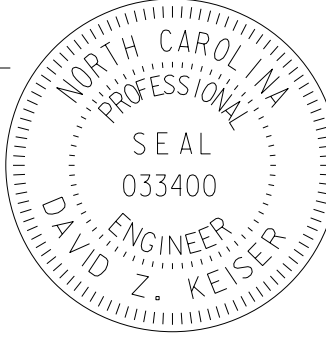
AWAY FROM TRAFFIC AND/OR USING RSD 1101.02 (SHEET 1 OF 19) AND FLAGGERS AS NEEDED, REMOVE THE DETOUR ROADWAY AND BRIDGE FROM -LDET- STA. 10+00 +/- TO -LDET- STA. 29+08 +/- (SEE SHEETS TMP-11 THRU TMP-12).

STEP 3:

REMOVE ALL WORK ZONE TRAFFIC CONTROL DEVICES.

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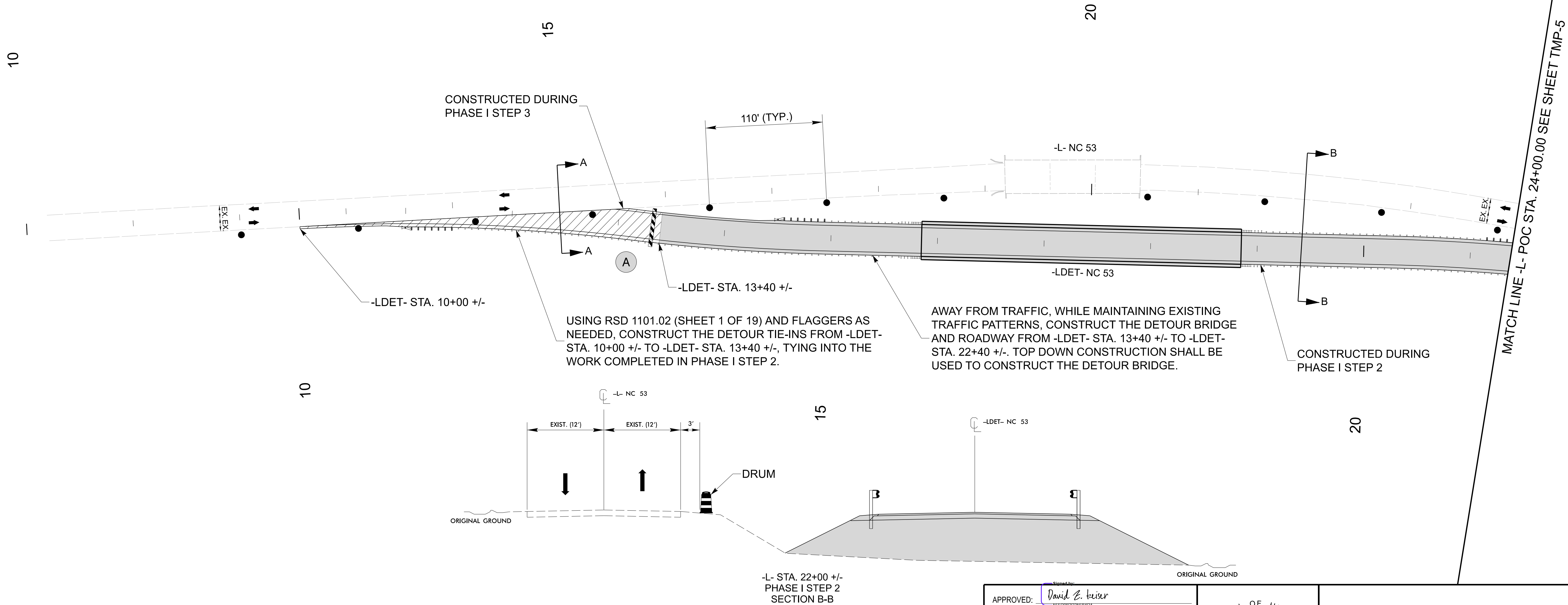
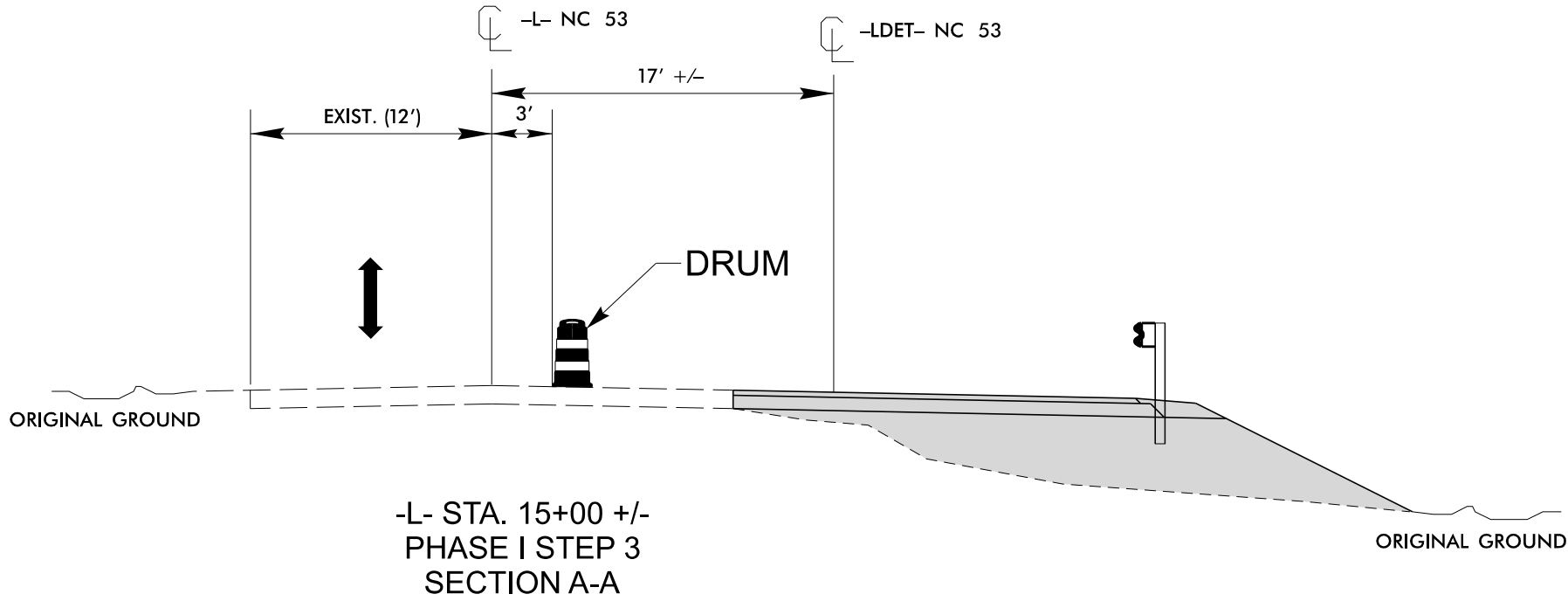
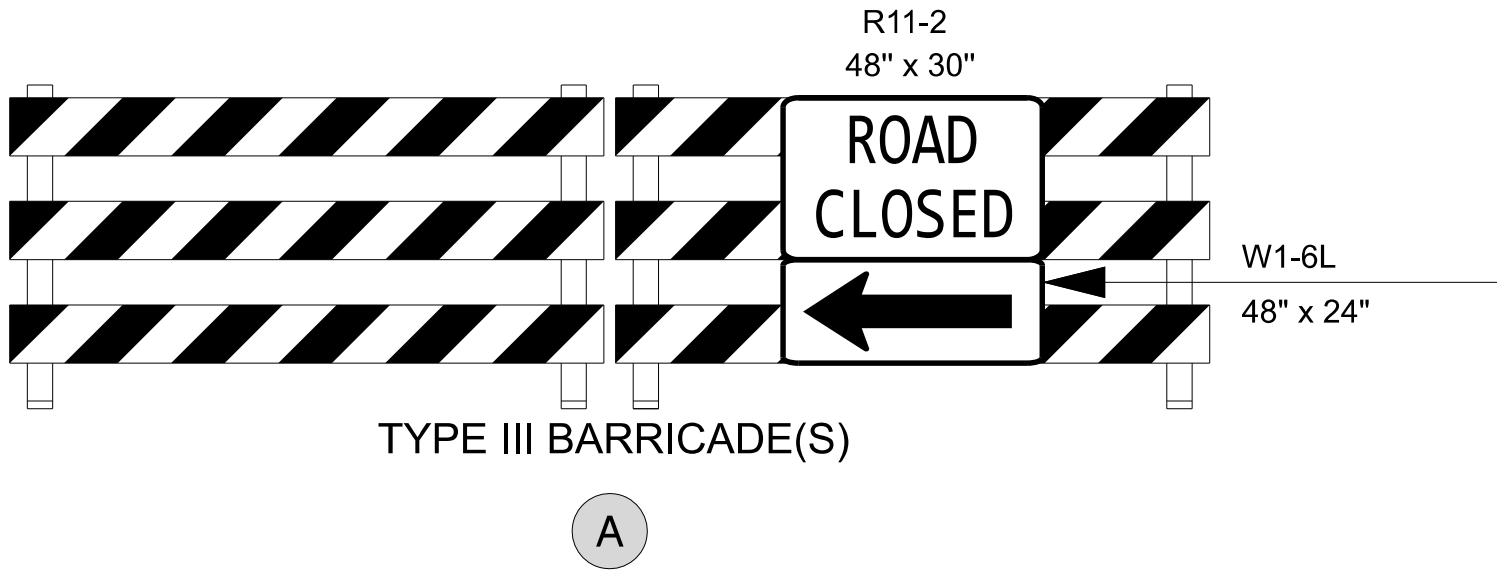
**CDM
Smith**
CDM Smith Inc.
4130 Parklake Avenue
Suite 350
Raleigh, NC 27612-4461
NC CDA No. F-1255

APPROVED:  SFFD082025F8AD4...
DATE: 7/31/2026
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TEMPORARY TRAFFIC CONTROL
PHASING

PROJ. REFERENCE NO.	SHEET NO.
BR-0174	TMP-4



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4130 Parklake Avenue
Suite 350
Raleigh, NC 27612-4461
NC COA No. F-1255

APPROVED: David E. Keiser
DATE: 7/31/2026

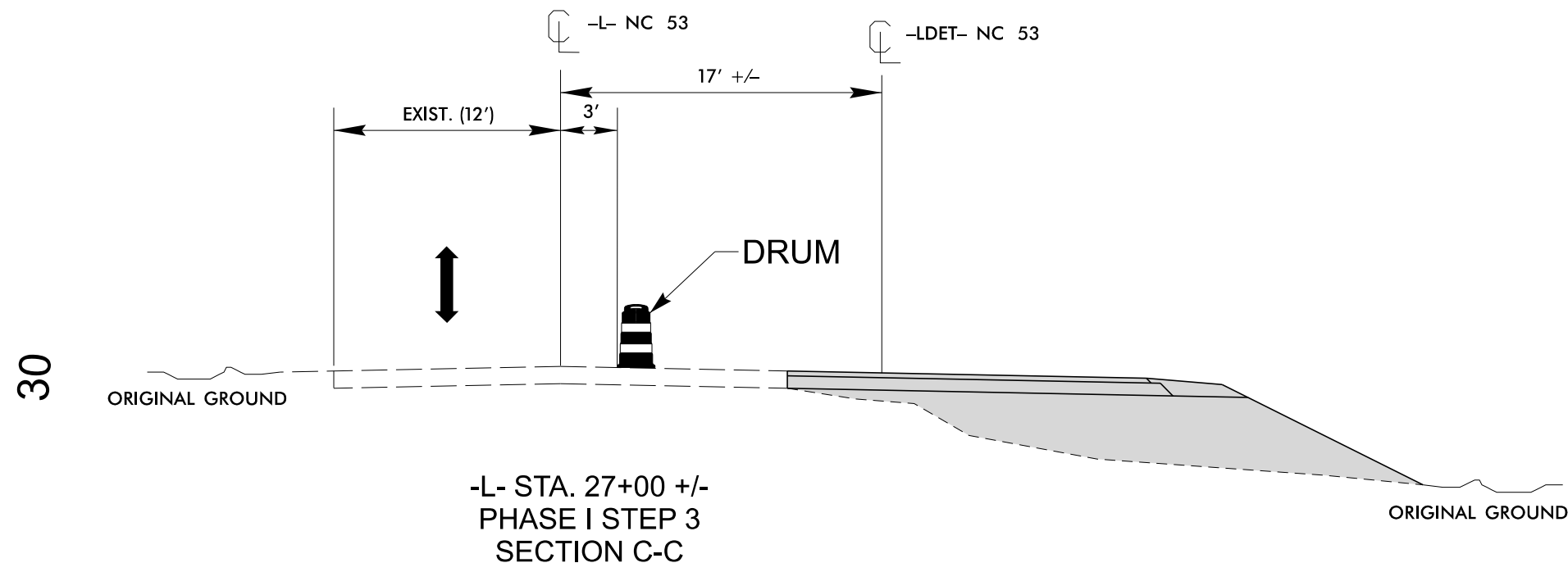
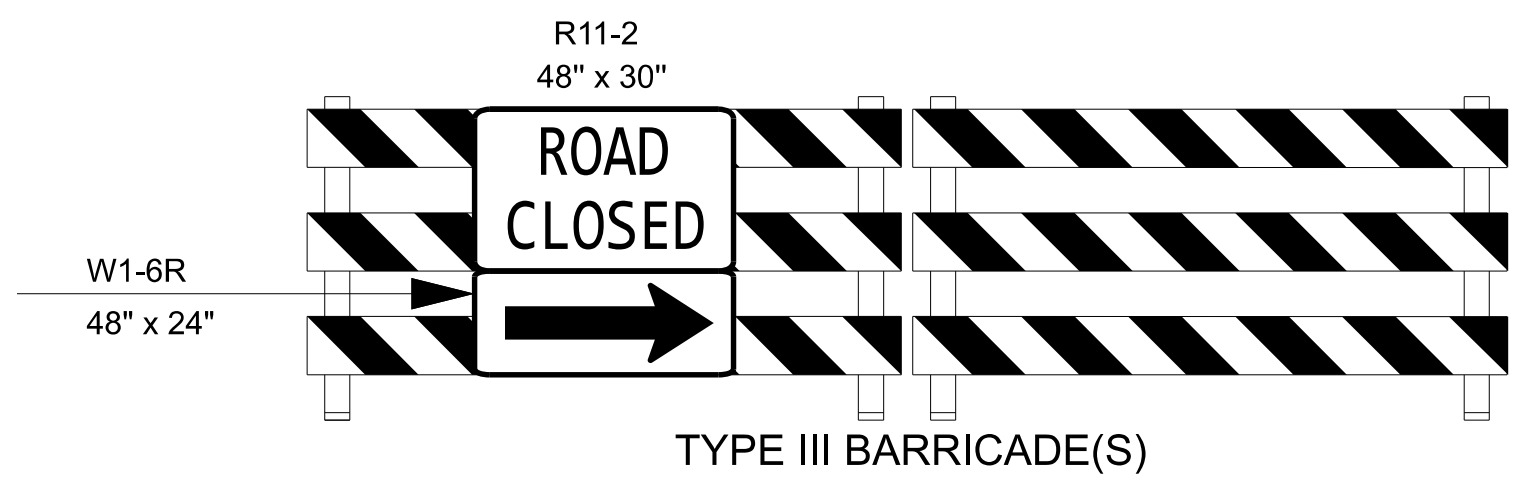
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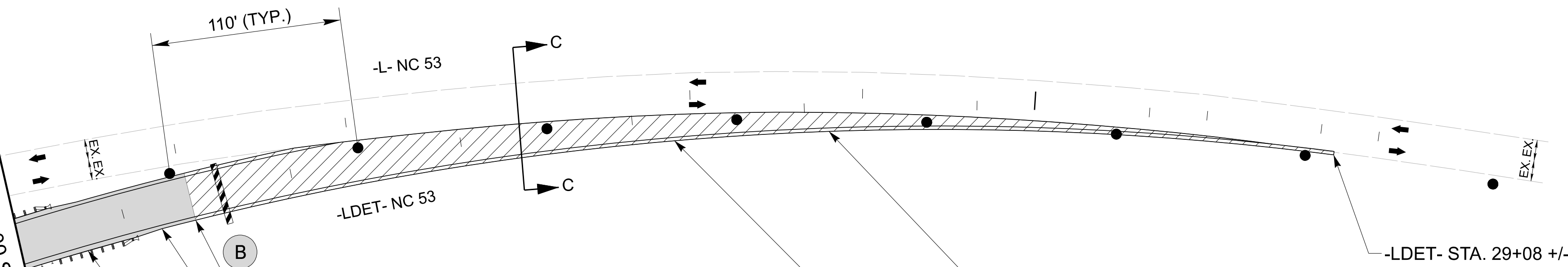


**TEMPORARY TRAFFIC CONTROL
PHASE I DETAIL**

PROJ. REFERENCE NO.	SHEET NO.
BR-0174	TMP-5



MATCH LINE-L-POC STA. 24+00.00 SEE SHEET TMP-4



CONSTRUCTED DURING PHASE I STEP 3

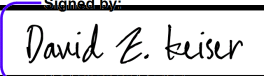
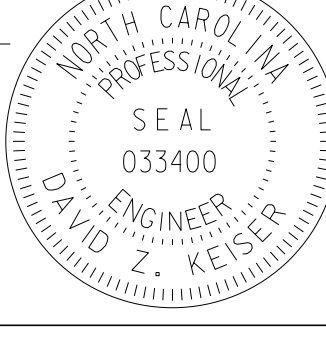
USING RSD 1101.02 (SHEET 1 OF 19) AND FLAGGERS AS NEEDED, CONSTRUCT THE DETOUR TIE-INS FROM -LDET- STA. 22+40 +/- TO -LDET- STA. 29+08 +/-, TYING INTO THE WORK COMPLETED IN PHASE I STEP 2.

CONSTRUCTED DURING PHASE I STEP 2

AWAY FROM TRAFFIC, WHILE MAINTAINING EXISTING TRAFFIC PATTERNS, CONSTRUCT THE DETOUR BRIDGE AND ROADWAY FROM -LDET- STA. 13+40 +/- TO -LDET- STA. 22+40 +/- . TOP DOWN CONSTRUCTION SHALL BE USED TO CONSTRUCT THE DETOUR BRIDGE.

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User: MILLERS

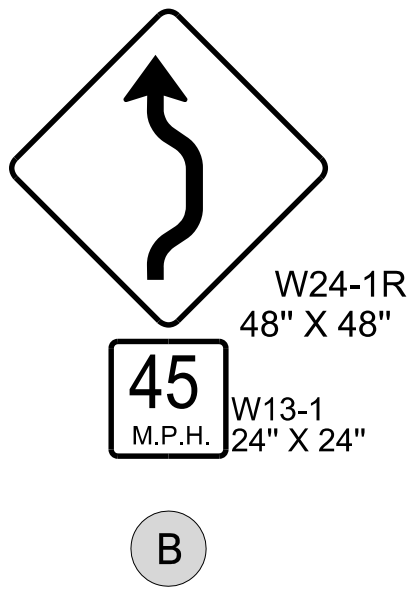
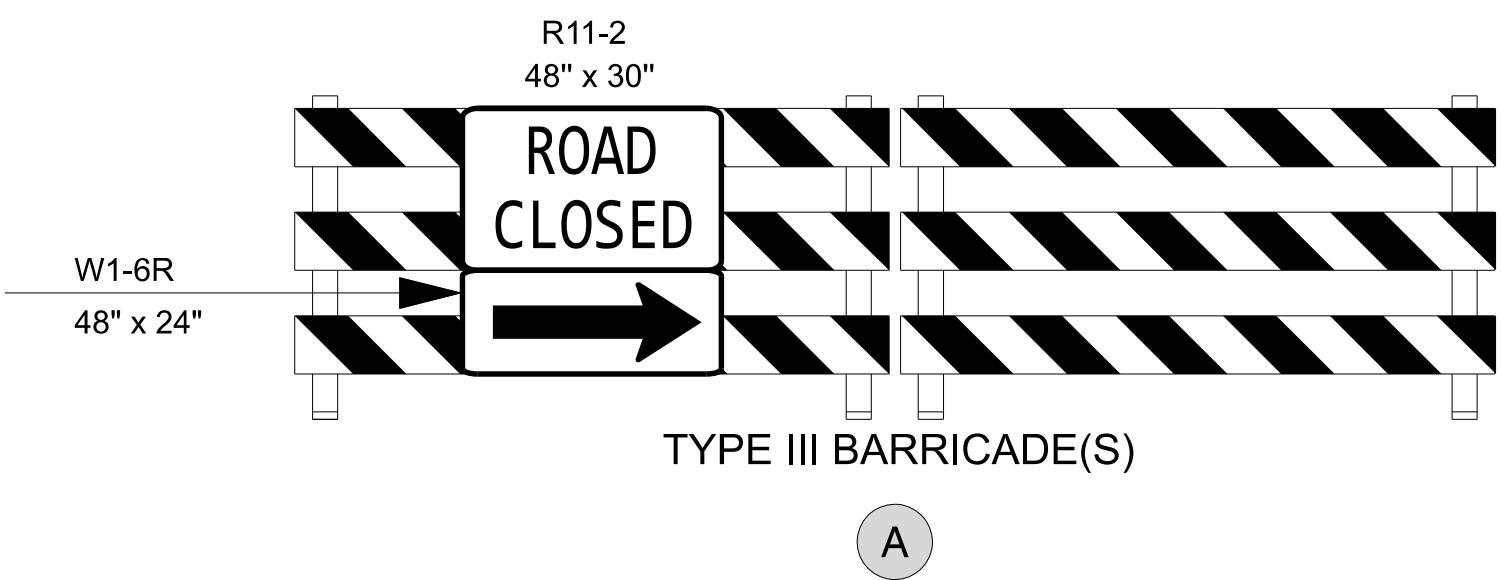
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CDM Smith Inc.
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NC COA No. F-1255

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TEMPORARY TRAFFIC CONTROL
PHASE I DETAIL

PROJ. REFERENCE NO.	SHEET NO.
BR-0174	TMP-6



* SEE SHEET TMP-8 FOR TEMPORARY TRAFFIC CONTROL TYPICAL SECTIONS



USING RSD 1101.02 (SHEET 1 OF 19) AND FLAGGERS AS NEEDED, CONSTRUCT AS MUCH OF THE WIDENING/WEDGING AS POSSIBLE FROM -L- STA. 12+55 +/- TO -L- STA. 16+50 +/- UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. PERFORM WEDGING ALONG -L- AND -LDET- AS NEEDED TO PROVIDE A SMOOTH PAVEMENT TRANSITION FOR TRAFFIC.

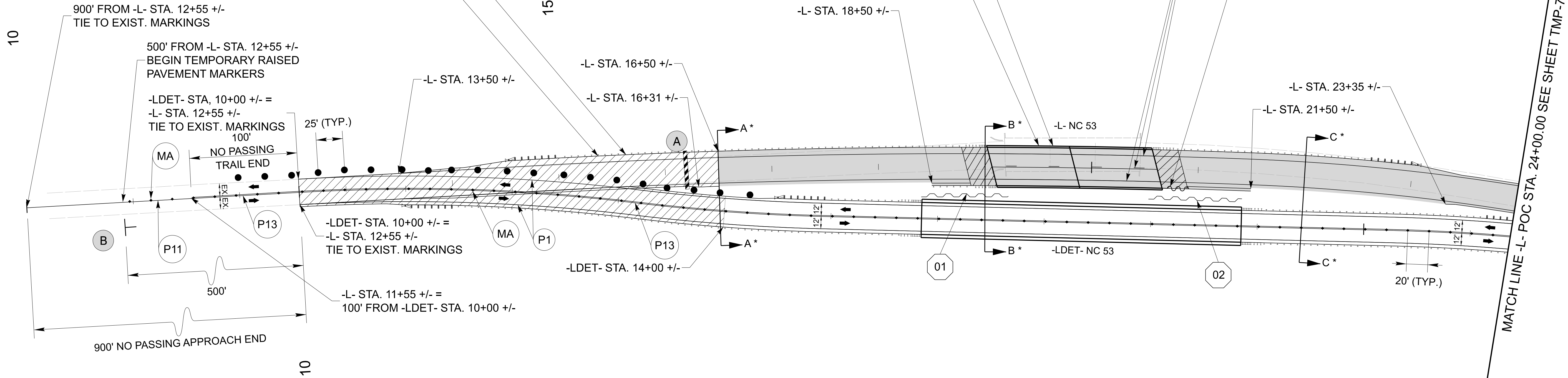
CONSTRUCTED DURING PHASE II STEP 2

AWAY FROM TRAFFIC, PLACE FINAL PAVEMENT MARKINGS ON THE STRUCTURE PER THE PAVEMENT MARKING PLANS UPON COMPLETION OF PHASE II, PRIOR TO TRAFFIC SHIFT IN PHASE III.

PLACE TEMPORARY CRASH CUSHION, OR ANOTHER APPROVED DEVICE AS DIRECTED BY THE ENGINEER, TO PROTECT BRIDGE RAIL AHEAD OF TRAFFIC SHIFT FOR PHASE III.

AWAY FROM TRAFFIC, REMOVE THE EXISTING BRIDGE (REFER TO STRUCTURE PLANS) AND CONSTRUCT AS MUCH OF -L- AS POSSIBLE FROM -L- STA. 16+50 +/- TO -L- STA. 25+00 +/- WITHOUT DISTURBING -LDET-, UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE, INCLUDING THE PROPOSED BRIDGE.

CONSTRUCTED DURING PHASE II STEP 3



01 QUANTITY = 600 SQ. FT.

TEMPORARY SHORING
FROM -L- STA. 18+40.00, 27.00' RT
TO -L- STA. 19+22.00, 27.00' RT

(SEE SHEET TMP-2 FOR
TEMPORARY SHORING NOTES)

02 QUANTITY = 660 SQ. FT.

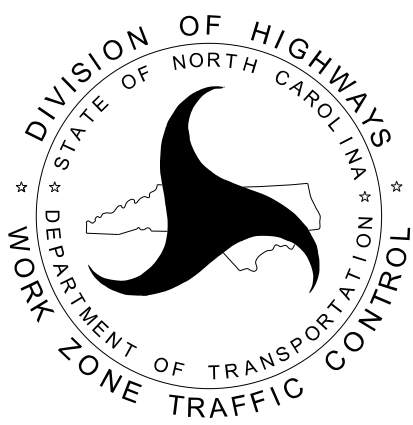
TEMPORARY SHORING
FROM -L- STA. 20+54.00, 27.00' RT
TO -L- STA. 21+42.00, 27.00' RT

(SEE SHEET TMP-2 FOR
TEMPORARY SHORING NOTES)



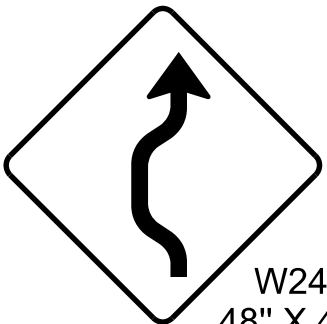
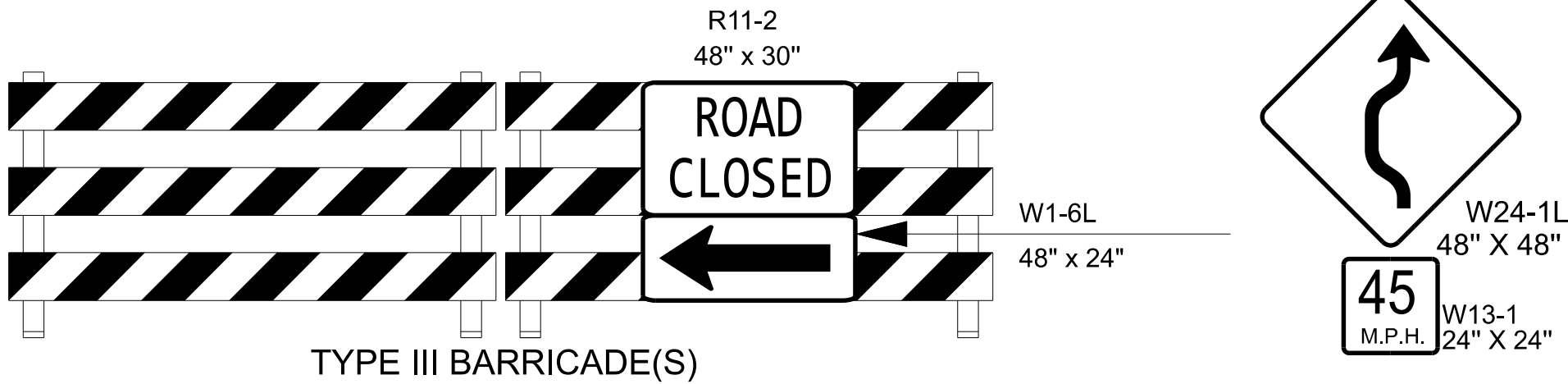
CDM Smith Inc.
4130 Parklake Avenue
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TEMPORARY TRAFFIC CONTROL
PHASE II DETAIL

PROJ. REFERENCE NO.	SHEET NO.
BR-0174	TMP-7



CONSTRUCTED DURING
PHASE II STEP 2

AWAY FROM TRAFFIC, REMOVE THE EXISTING BRIDGE (REFER TO
STRUCTURE PLANS) AND CONSTRUCT AS MUCH OF -L- AS
POSSIBLE FROM -L- STA. 16+50 +/- TO -L- STA. 25+00 +/- WITHOUT
DISTURBING -LDET-, UP TO BUT NOT INCLUDING THE FINAL LAYER
OF SURFACE COURSE, INCLUDING THE PROPOSED BRIDGE.

USING RSD 1101.02 (SHEET 1 OF 19) AND FLAGGERS AS NEEDED,
CONSTRUCT AS MUCH OF THE WIDENING/WEDGING AS
POSSIBLE FROM -L- STA. 25+00 +/- TO -L- STA. 31+75 +/- UP TO
BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.
PERFORM WEDGING ALONG -L- AND -LDET- AS NEEDED TO
PROVIDE A SMOOTH PAVEMENT TRANSITION FOR TRAFFIC.

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CONSTRUCTED DURING
PHASE II STEP 3

-LDET- STA. 29+08 +/- =
-L- STA. 31+75 +/-
TIE TO EXIST. MARKINGS

-L- STA. 30+65 +/-

900' NO PASSING APPROACH END

500'

P13

P11

900' FROM -L- STA. 31+75 +/-
TIE TO EXIST. MARKINGS

100'
NO PASSING
TRAIL END

-LDET- STA. 29+08 +/- =
-L- STA. 31+75 +/-
TIE TO EXIST. MARKINGS

500' FROM -L- STA. 31+75 +/-
END TEMPORARY RAISED
PAVEMENT MARKERS

-L- STA. 32+75 +/- =
100' FROM -LDET- STA. 29+08 +/-

MATCH LINE -L- POC STA. 24+00.00 SEE SHEET TMP-6

25

-L- NC 53

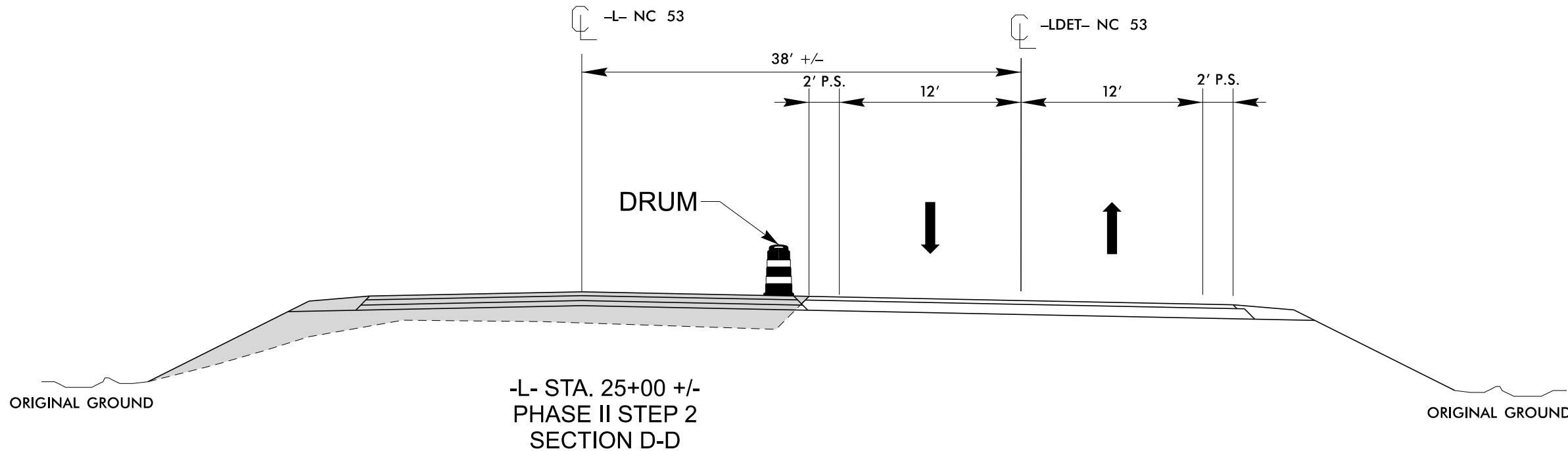
-LDET- NC 53

20' (TYP.)

-LDET- STA. 21+50 +/-

-L- STA. 25+00 +/-

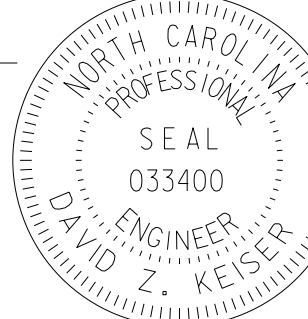
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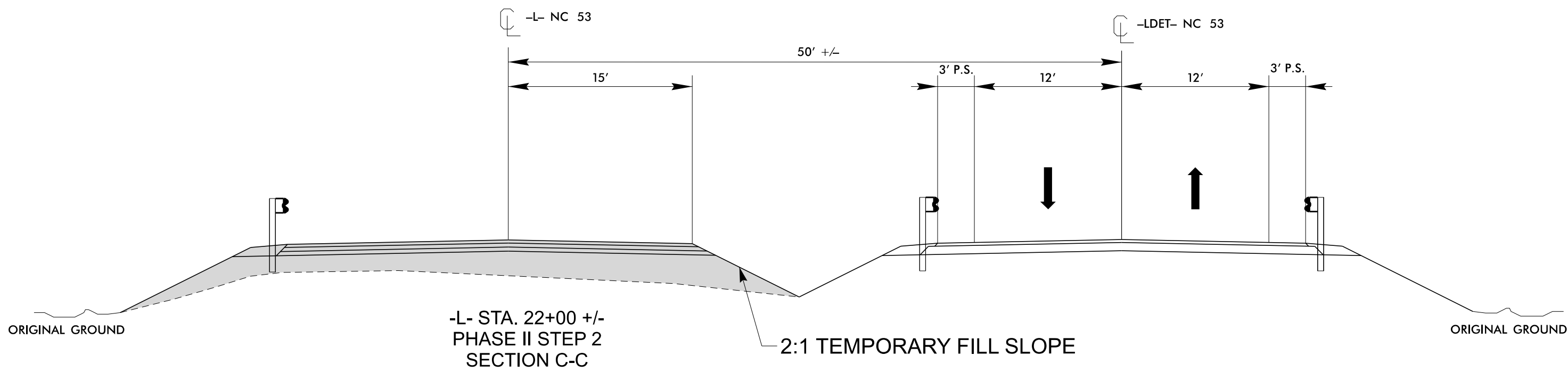
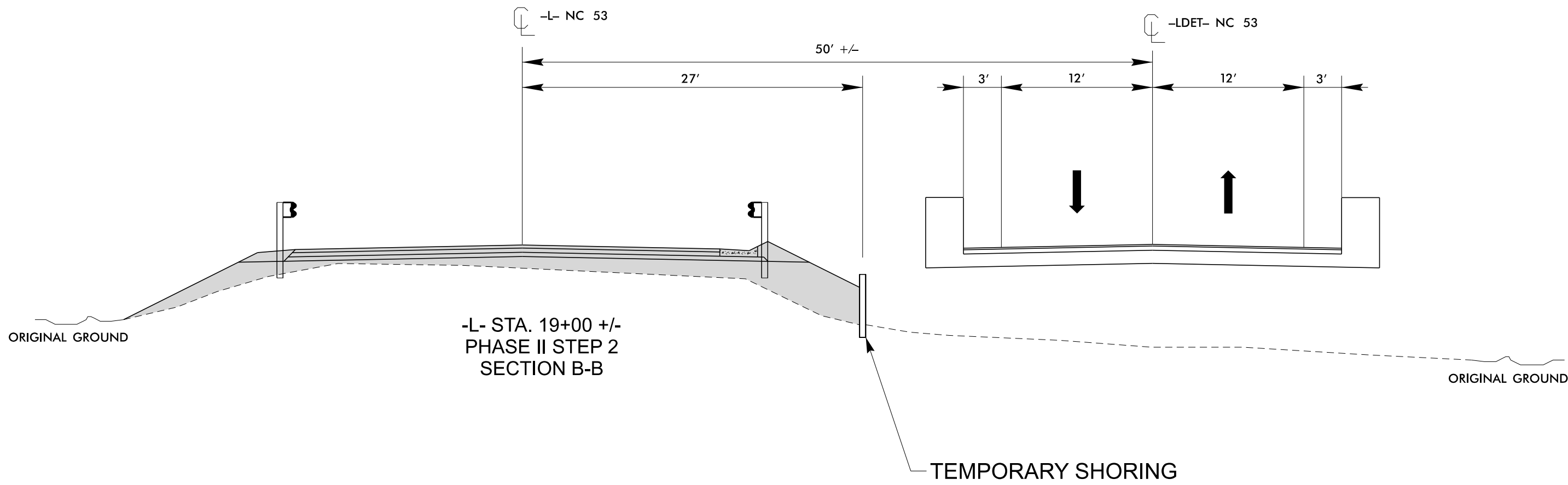
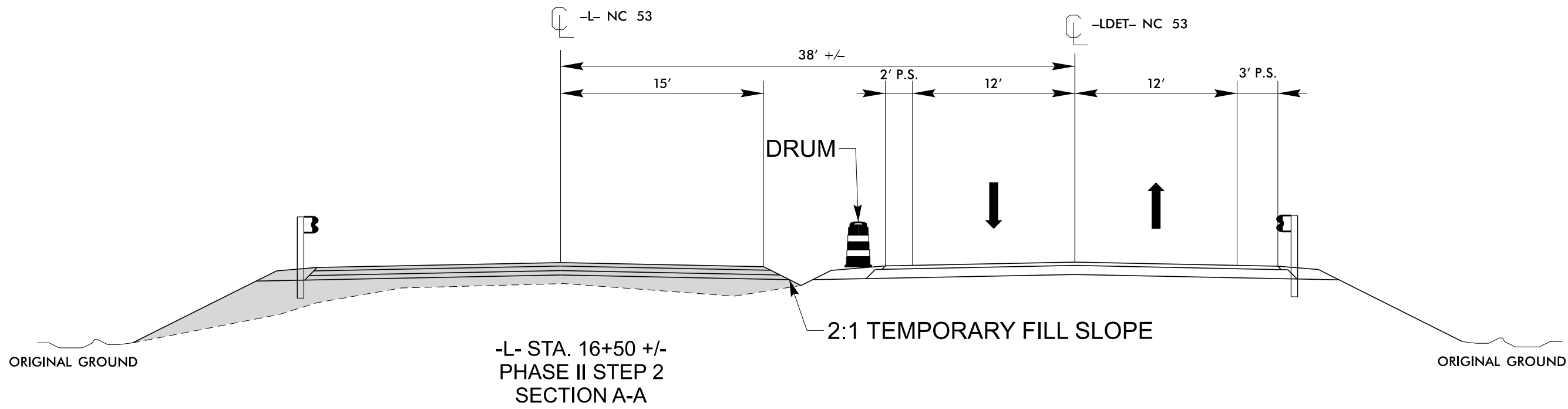


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**TEMPORARY TRAFFIC CONTROL
PHASE II DETAIL**

PROJ. REFERENCE NO.	SHEET NO.
BR-0174	TMP-8



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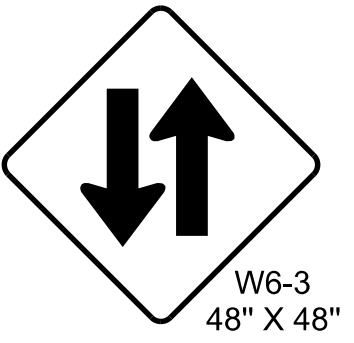
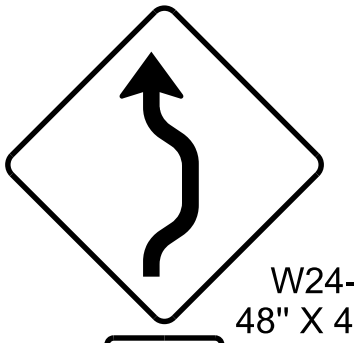
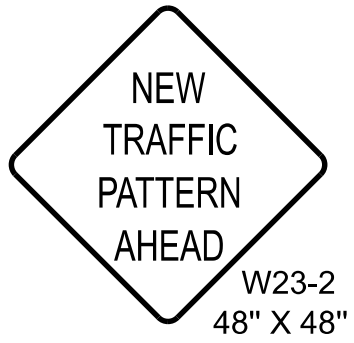
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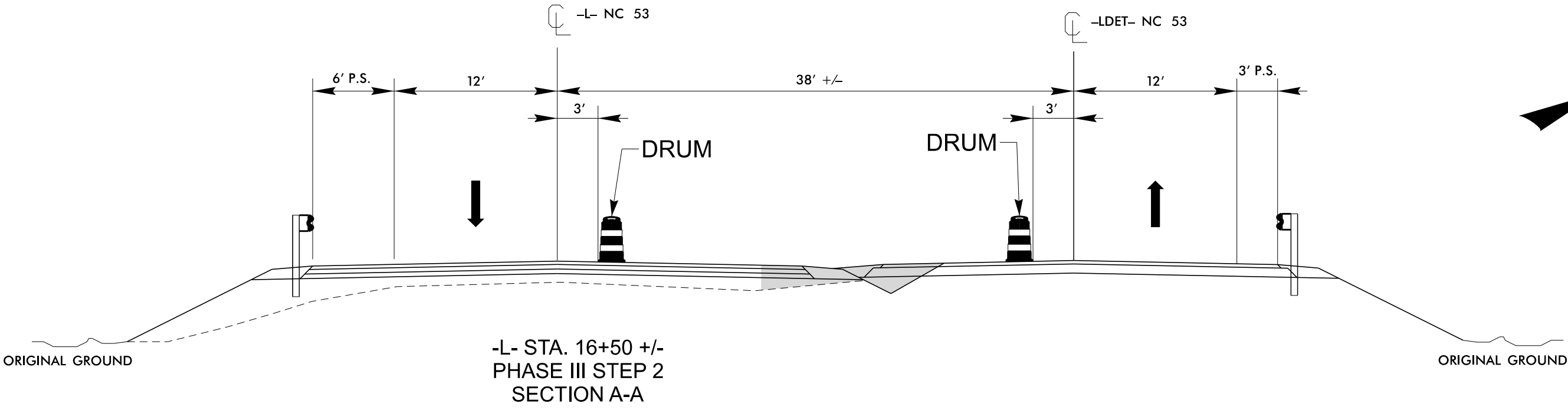
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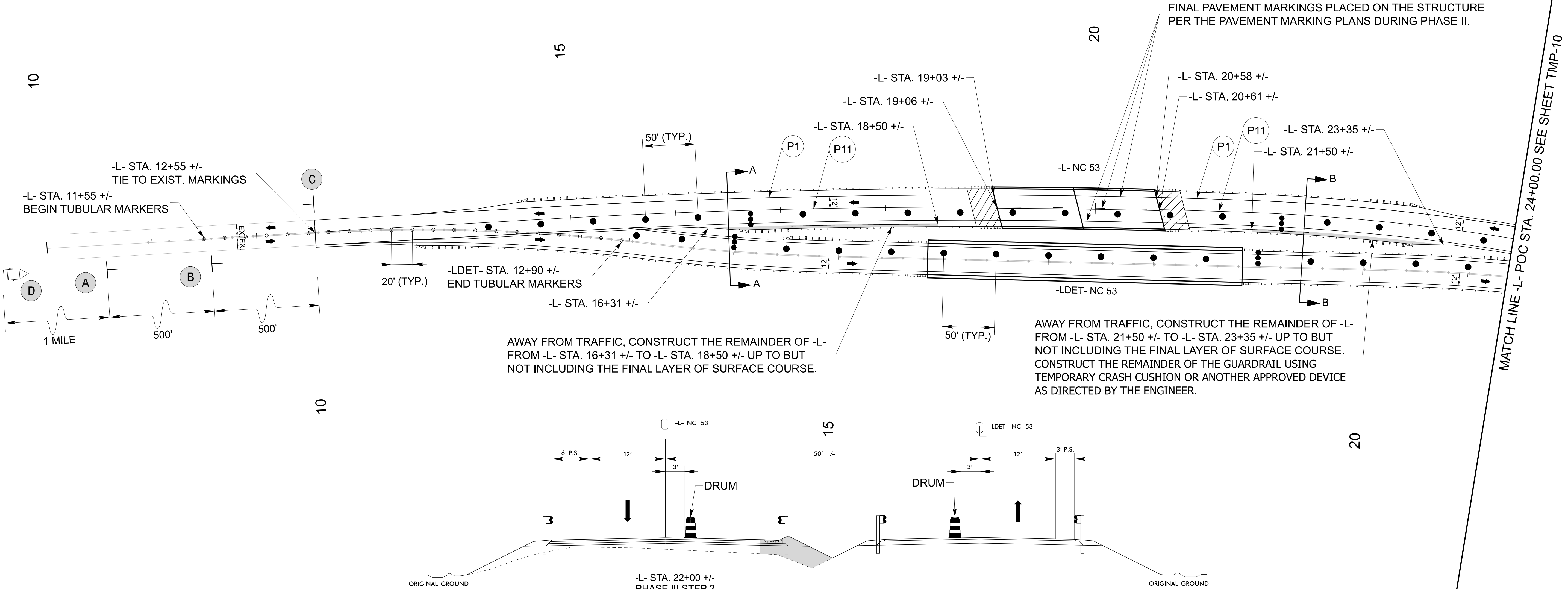
TEMPORARY TRAFFIC CONTROL
PHASE II TYPICAL SECTIONS



MESSAGE NO. 1	MESSAGE NO. 2
NEW TRAFFIC PATTERN	USE CAUTION
CHANGEABLE MESSAGE SIGN	



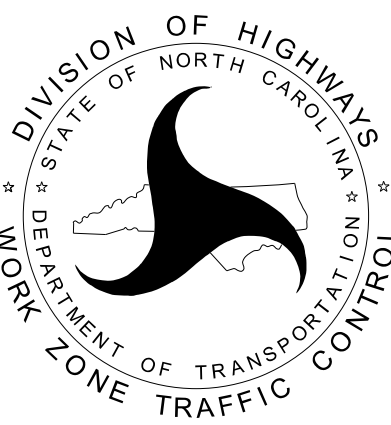
NOTE: GRAYSCALE TEMPORARY PAVEMENT MARKINGS/MARKERS TO REMAIN FROM PREVIOUS PHASE



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User: MILLERS

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TEMPORARY TRAFFIC CONTROL
PHASE III DETAIL

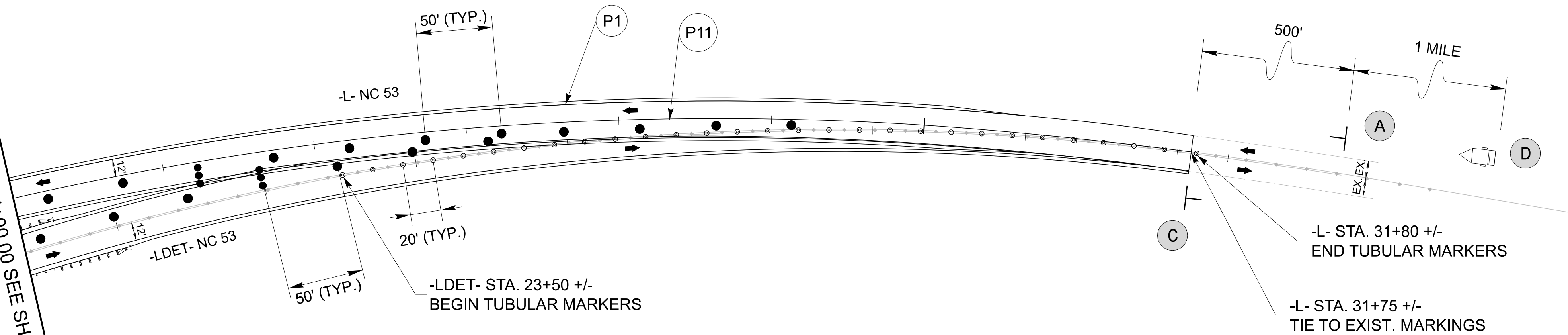


PROJ. REFERENCE NO.	SHEET NO.
BR-0174	TMP-10

MATCH LINE - L- POC STA. 24+00.00 SEE SHEET TMP-9

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NOTE: GRAYSCALE TEMPORARY PAVEMENT MARKINGS/MARKERS TO REMAIN FROM PREVIOUS PHASE



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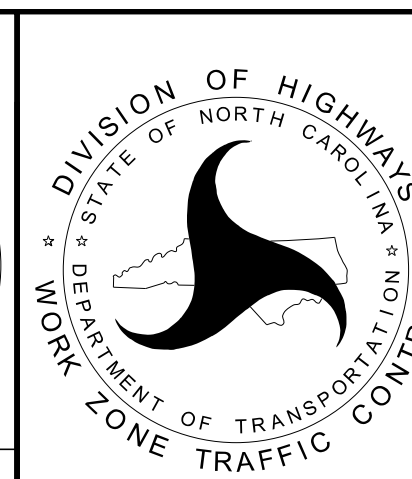
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SEAL

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PROFESSIONAL
SEAL
033400
ENGINEER
DAVID E. KEISER

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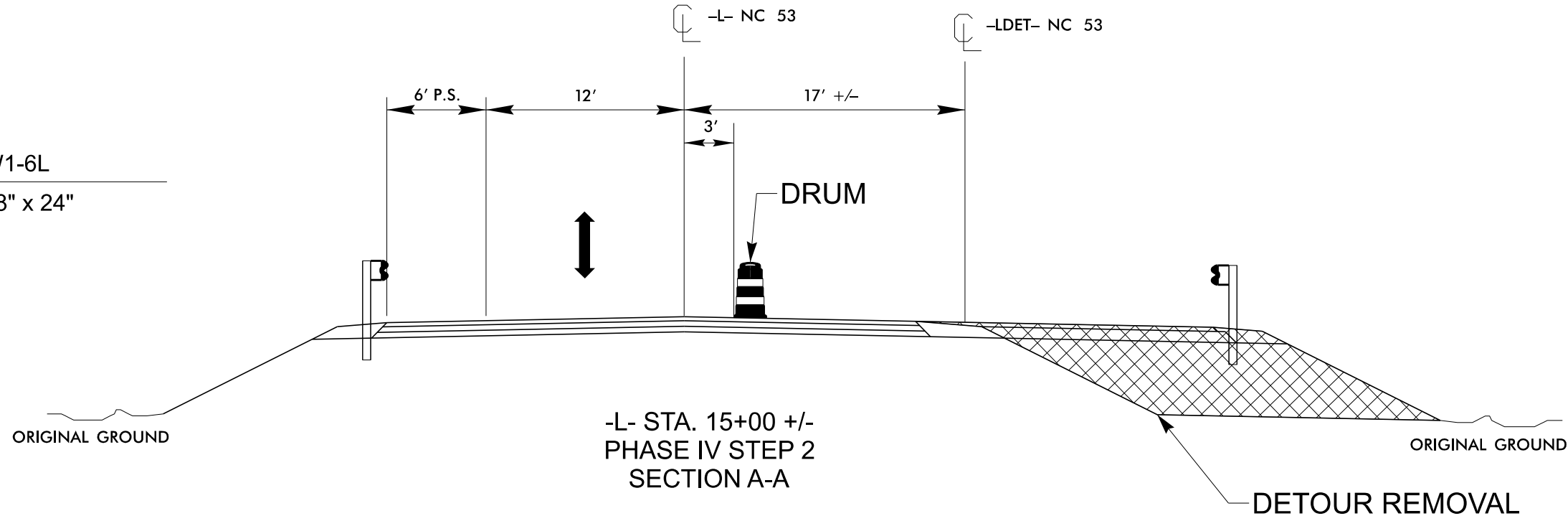
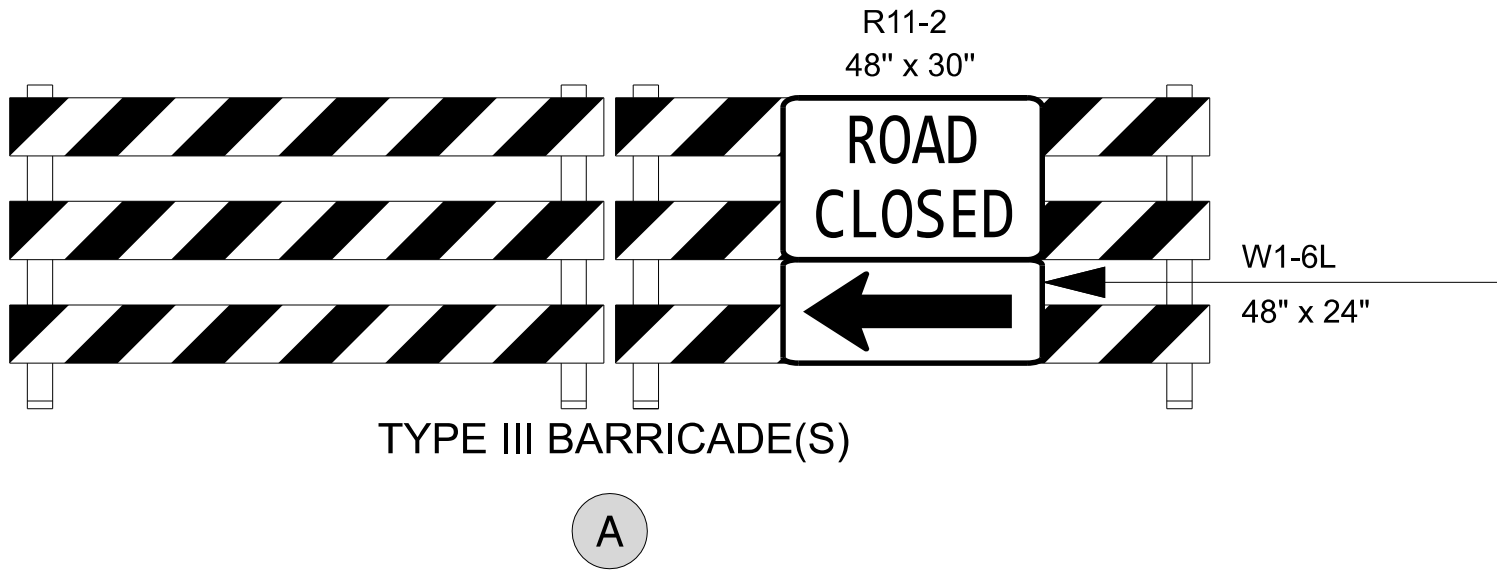


TEMPORARY TRAFFIC CONTROL PHASE III DETAIL



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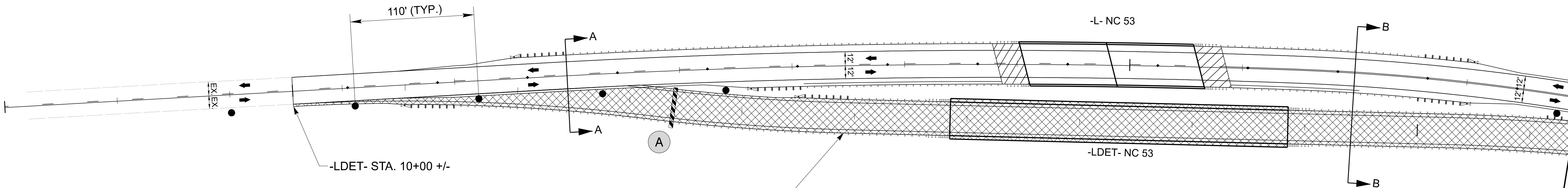
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BR-0174	TMP-11



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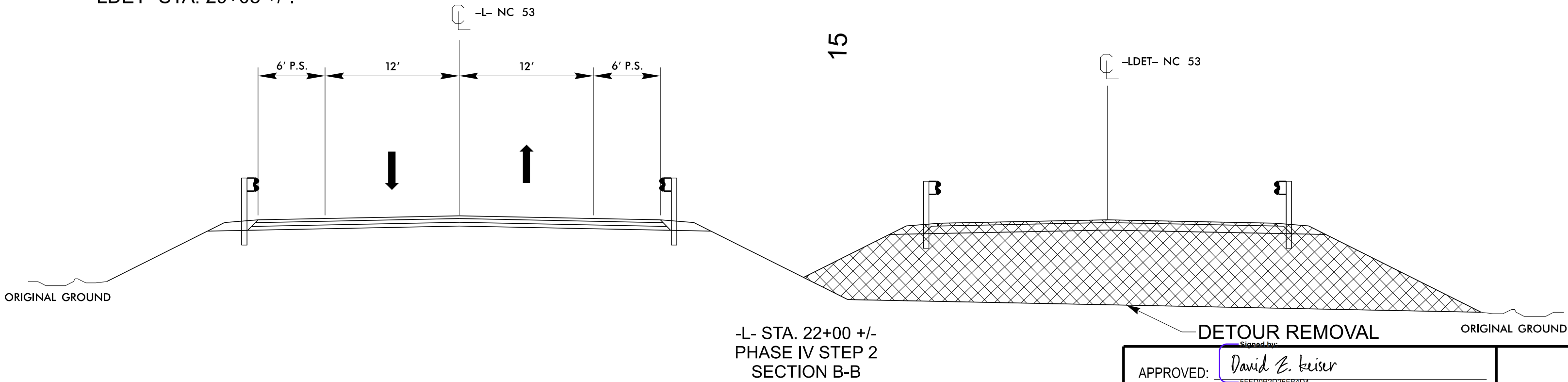
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10

AWAY FROM TRAFFIC AND/OR USING RSD 1101.02 (SHEET 1 OF 19) AND FLAGGERS AS NEEDED, REMOVE THE DETOUR ROADWAY AND BRIDGE FROM -LDET- STA. 10+00 +/- TO -LDET- STA. 29+08 +/-.



-L- STA. 22+00 +/-
PHASE IV STEP 2
SECTION B-B

DETOUR REMOVAL

20

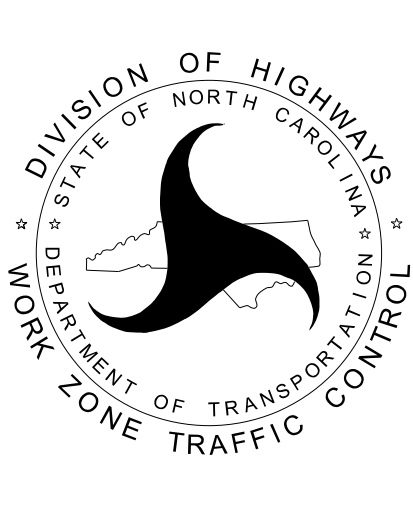
MATCH LINE -L- POC STA. 24+00.00 SEE SHEET TMP-12

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User: J. MILLERS



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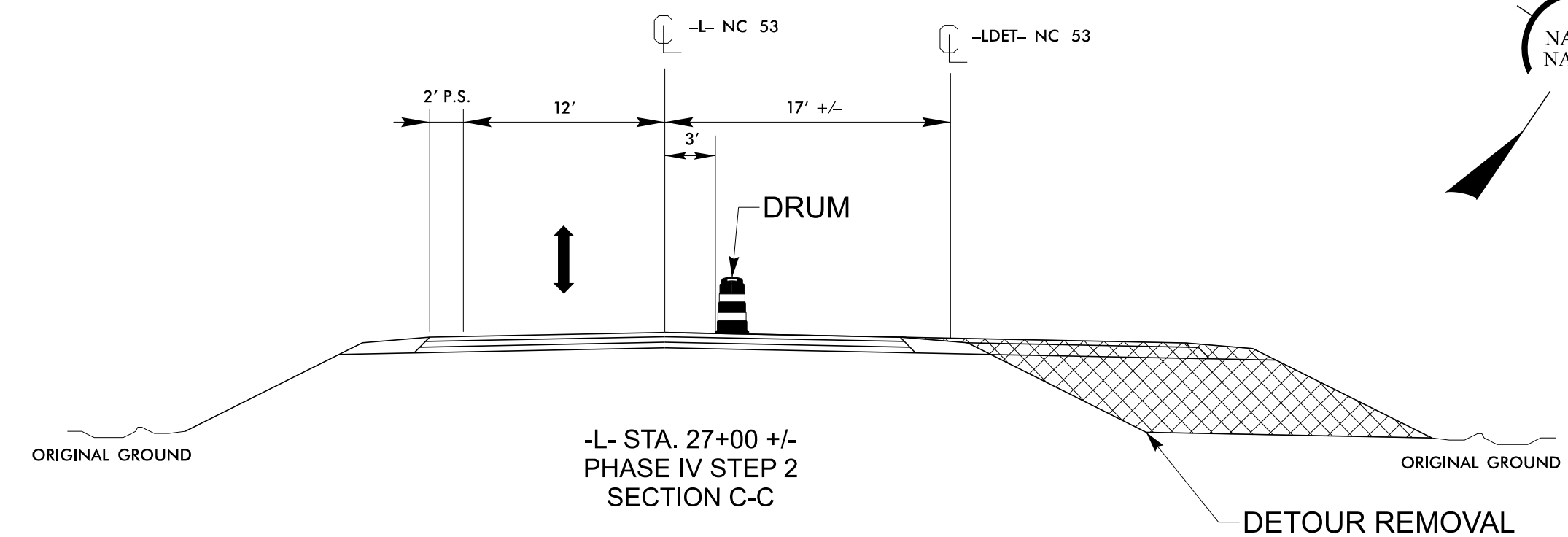
TEMPORARY TRAFFIC CONTROL
PHASE IV DETAIL



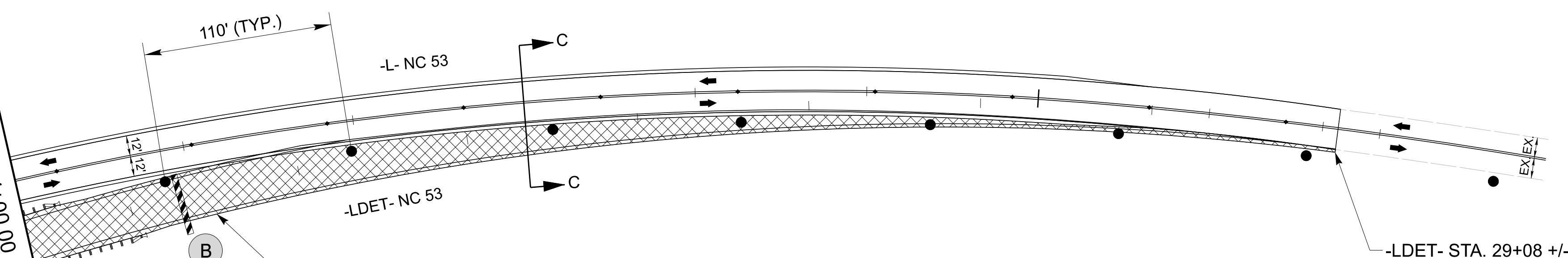
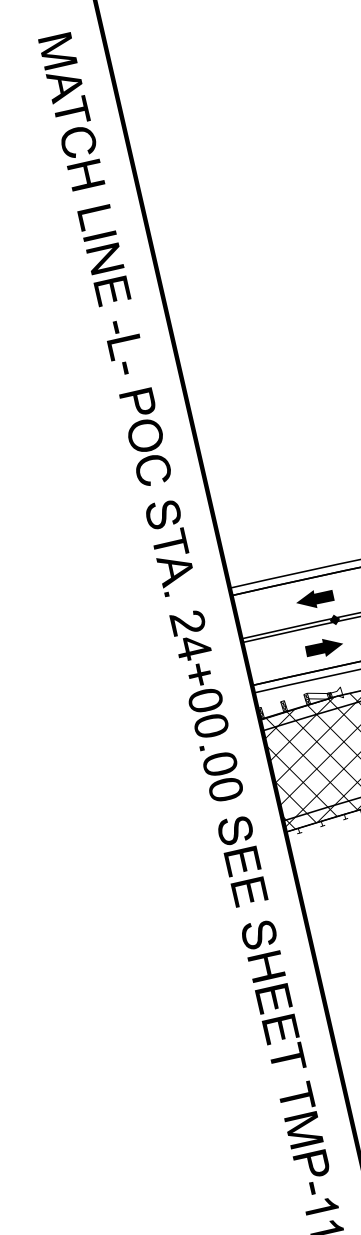
TYPE III BARRICADE(S)

B

30



—DETOUR REMOVAL



AWAY FROM TRAFFIC AND/OR USING RSD 1101.02 (SHEET 1 OF 19) AND FLAGGERS AS NEEDED, REMOVE THE DETOUR ROADWAY AND BRIDGE FROM -LDET- STA. 10+00 +/- TO -LDET- STA. 29+08 +/-.

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6/16/2026
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User:MILLERS

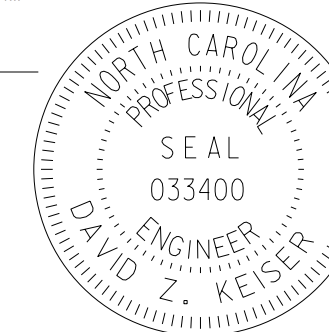
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Suite 350
Raleigh, NC 27612-4461
NC COA No. F-1255

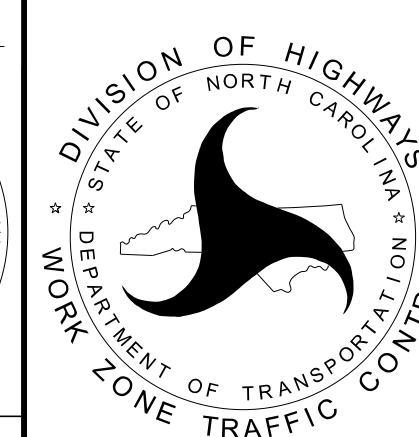
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TEMPORARY TRAFFIC CONTROL PHASE IV DETAIL