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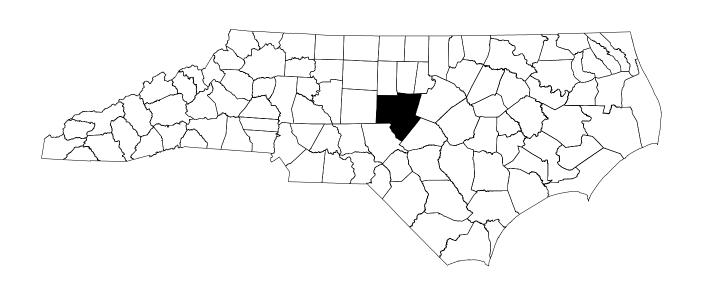
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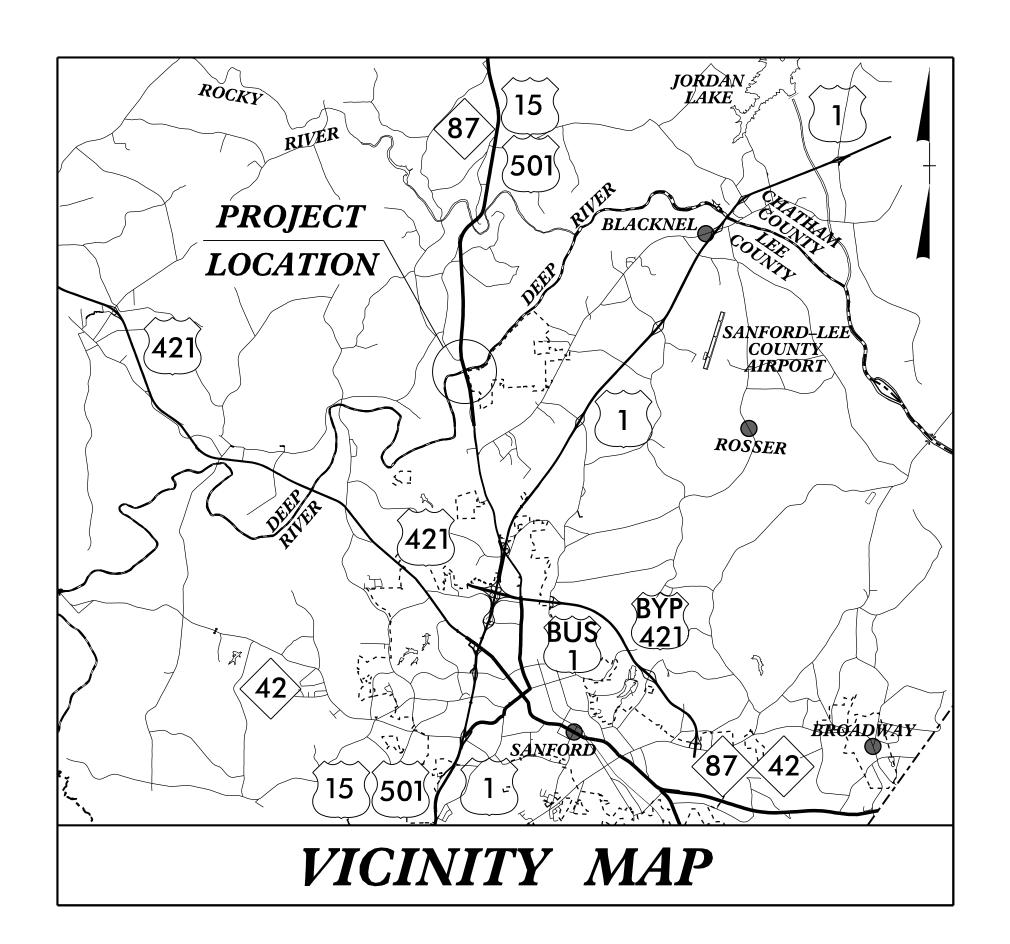
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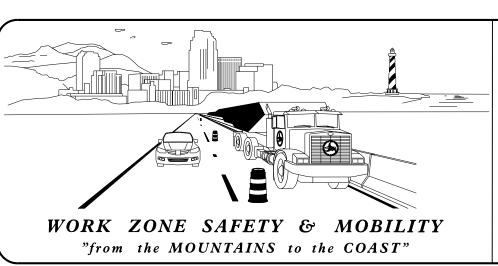
STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

LEE & CHATHAM COUNTIES







PLANS PREPARED BY:

RICK DECOLA, PE

PROJECT MANAGER

DEB WEAVER, PE

SENIOR TRAFFIC ENGINEER

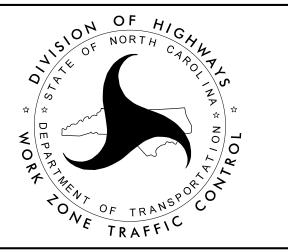
NCDOT CONTACTS:

KENNETH C. THORNEWELL, PE

PROJECT ENGINEER

MIKE STEELMAN

PROJECT DESIGN ENGINEER



INDEX OF SHEETS

SHEET NO.	<u>TITLE</u>
TMP - 1	TITLE SHEET, VICINITY MAP, AND INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, AND LEGEND
TMP-2	TRANSPORTATION OPERATIONS PLAN: GENERAL NOTES AND MANAGEMENT STRATEGIES
TMP-2A	TEMPORARY SHORING DATA
TMP-3	TEMPORARY TRAFFIC CONTROL PHASING
TMP - 4	TRAFFIC CONTROL PHASE I DETAILS
TMP-5	TRAFFIC CONTROL PHASE I DETAILS
TMP-6	TRAFFIC CONTROL PHASE I DETAILS
TMP-7	TRAFFIC CONTROL PHASE I DETAILS
TMP-8	TRAFFIC CONTROL PHASE II DETAILS
TMP-9	TRAFFIC CONTROL PHASE II DETAILS
TMP - 10	TRAFFIC CONTROL PHASE II DETAILS
TMP - 11	TRAFFIC CONTROL PHASE II DETAILS

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PLANS PREPARED BY:

Mead-Hunt

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Procusigned by:

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12/21/2018

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TMP-1

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PROJECT:

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ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" -PROJECT SERVICES UNIT - 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.	<u>TITLE</u>
1101.01	WORK ZONE ADVANCE WARNING SIGNS
1101.02	TEMPORARY LANE 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	DRUM
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1180.01	SKINNY-DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO-LANE AND MULTI-LANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
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 AND BARRIER DELINEATORS - TYPES AND MOUNTING
1262.01	GUARDRAIL END DELINEATION
1264.01	OBJECT MARKERS - TYPES
1264.02	OBJECT MARKERS - INSTALLATION

LEGEND

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GENERAL

DIRECTION OF TRAFFIC FLOW DIRECTION OF PEDESTRIAN TRAFFIC FLOW

----- EXIST. PVMT.

NORTH ARROW

— PROPOSED PVMT.

TEMP. SHORING (LOCATION PURPOSES ONLY)

WORK AREA

REMOVAL

STRUCTURE EXCAVATION

INCIDENTAL STONE

SIGNALS

EXISTING

PAVEMENT MARKINGS

——EXISTING LINES ——TEMPORARY LINES

TRAFFIC CONTROL DEVICES

BARRICADE (TYPE III)

DRUM SKINNY DRUM O 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 MARKINGS

CA-IV COLD APPLIED PLASTIC (TYPE IV) - WHITE EDGELINE (4")

COLD APPLIED PLASTIC (TYPE IV) - YELLOW DOUBLE CENTER (4")

PAINT - WHITE EDGELINE (4")

PAINT - 3 FT.-9 FT./SP WHITE MINISKIP (4")

PAINT - WHITE SOLID LANE LINE (4")

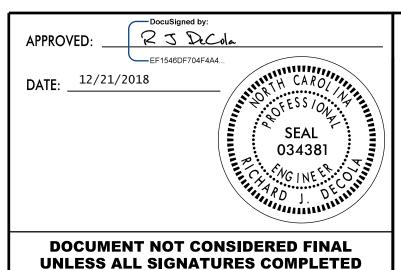
PAINT - YELLOW DOUBLE CENTER (4")

PAINT - YELLOW DIAGONAL (12") PV

PAINT - WHITE STOPBAR (24")

PAINT - 2 FT.-6 FT./SP WHITE MINISKIP (4")

PAINT - LEFT TURN ARROW





ROADWAY STANDARD DRAWINGS, LEGEND & TEMPORARY PAVEMENT **MARKINGS**

GENERAL NOTES

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

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

TIME RESTRICTIONS

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

ROAD NAME

US 15-501/NC 87 (-L-)

DAY AND TIME RESTRICTIONS

MONDAY THRU FRIDAY

7:00 A.M. - 9:00 A.M. 4:00 P.M. - 6:00 P.M.

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

ROAD NAME

US 15-501/NC 87 (-L-)

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 7:00 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 6:00 P.M. THE FOLLOWING TUESDAY.
- 3. FOR EASTER, BETWEEN THE HOURS OF 7:00 A.M. THURSDAY AND 6:00 P.M. MONDAY.
- 4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 7:00 A.M. FRIDAY TO 6:00 P.M. TUESDAY.
- 5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 7:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 6:00 P.M. THE DAY AFTER INDEPENDENCE DAY.

IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 7:00 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 6:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.

- 6. FOR LABOR DAY, BETWEEN THE HOURS OF 7:00 A.M. FRIDAY TO 6:00 P.M. TUESDAY.
- 7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 7:00 A.M. TUESDAY TO 6:00 P.M. MONDAY.
- 8. FOR CHRISTMAS, BETWEEN THE HOURS OF 7:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 6:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

LANE AND SHOULDER CLOSURE REQUIREMENTS

C) 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.

- D) 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.
- E) 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.
- F) 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.
- DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVEL WAY, RAMP, OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.

PAVEMENT EDGE DROP OFF REQUIREMENTS

H) 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.

I) 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

J) NOTIFY THE ENGINEER TWENTY ONE (21) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

SIGNING

- K) 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.
- L) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

TRAFFIC CONTROL DEVICES

M) 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.

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

PAVEMENT MARKINGS AND MARKERS

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

ROAD NAME MARKING MARKER
ALL ROADS PAINT TEMPORARY
PROPOSED BRIDGE COLD APPLIED PLASTIC - TYPE IV TEMPORARY

P) 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.

PROJ. REFERENCE NO.

B-4968

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SHEET NO.

TMP-2

- Q) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- R) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.
- S) REMOVAL OF THE TEMPORARY PAVEMENT MARKINGS SHALL BE ACCOMPLISHED BY USING WATER BLASTING, SAND BLASTING, SHOT BLASTING SYSTEMS OR OTHER APPROVED SYSTEMS TO MINIMIZE DAMAGE TO THE ROAD SURFACE. ALL SYSTEMS SHALL BE REQUIRED TO REMOVE 100% OF THE PAVEMENT MARKING WITHOUT REMOVING MORE THAN 1/32 IN OF THE PAVEMENT SURFACE.
- T) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS SHOWN IN FINAL PAVEMENT MARKING PLAN.

MANAGEMENT STRATEGIES

THE PROJECT CONSISTS OF REPLACING BRIDGE NO. 10 ON US 15-501/NC 87. DURING CONSTRUCTION OF THE PROPOSED BRIDGE, US 15-501/NC 87 TRAFFIC WILL REMAIN IN A TWO-LANE, TWO-WAY PATTERN ON THE EXISTING ROADWAY.

THE TIE-IN CONSTRUCTION, TRAFFIC SHIFTS, AND PLACEMENT OF FINAL SURFACE COURSE AND PAVEMENT MARKINGS WILL BE PERFORMED USING TEMPORARY SHOULDER CLOSURES, TEMPORARY LANE CLOSURES, AND FLAGGER OPERATIONS.

ACCESS FOR LOCAL TRAFFIC, INCLUDING DRIVEWAYS, MUST BE PROVIDED AT ALL TIMES WITHIN THE PROJECT LIMITS.

DOCUMENT NOT CONSIDERED FINAL

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TRANSPORTATION OPERATIONS PLAN

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PROJ. REFERENCE NO.

B-4968

PLANS PREPARED BY:

SHEET NO. TMP-2A

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SHORING LOCATION NO. (1)

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

DESIGN TEMPORARY SHORING FROM STATION -L- 31+00±, 25 FT RIGHT, TO STATION -L- 31+75±, 25 FT RIGHT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION: UNIT WEIGHT OF SOIL ABOVE WATER TABLE (γ) = 120 PCF UNIT WEIGHT OF SOIL BELOW WATER TABLE $(\gamma') = 60$ PCF

FRICTION ANGLE (ϕ) = 30 DEGREES COHESION (c) = 0 PSFGROUNDWATER ELEVATION = 210 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 -L- 31+00±, 25 FT RIGHT, TO STATION -L- 31+75±, 25 FT RIGHT. 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 -L- 31+00±, 25 FT RIGHT, TO STATION -L- 31+75±, 25 FT RIGHT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.02 FOR STANDARD TEMPORARY WALLS.

SHORING LOCATION NO. 2

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

DESIGN TEMPORARY SHORING FROM STATION -L- 31+20±, 50 FT RIGHT, TO STATION -L- 31+70±, 50 FT RIGHT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT OF SOIL ABOVE WATER TABLE (γ) = 120 PCF UNIT WEIGHT OF SOIL BELOW WATER TABLE $(\gamma') = 60$ PCF FRICTION ANGLE (ϕ) = 30 DEGREES COHESION (c) = 0 PSFGROUNDWATER ELEVATION = 210 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 -L- 31+20±, 50 FT RIGHT, TO STATION -L- 31+70±, 50 FT RIGHT. 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 STANDARD TEMPORARY SHORING FOR TEMPORARY SHORING FROM STATION -L- 31+20±, 50 FT RIGHT, TO STATION -L- 31+70±, 50 FT RIGHT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

DRIVEN PILE FOR TEMPORARY SHORING FROM STATION -L- 31+20±, 50 FT RIGHT, TO STATION -L- 31+70±, 50 FT RIGHT WILL NOT PENETRATE BELOW ELEVATION 195 FT DUE TO OBSTRUCTIONS, VERY DENSE OR HARD SOIL, BOULDERS, OR WEATHERED OR HARD ROCK.

SHORING LOCATION NO. 3

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

DESIGN TEMPORARY SHORING FROM STATION -L- 37+55±, 25 FT RIGHT, TO STATION -L- 38+35±, 25 FT RIGHT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION: UNIT WEIGHT OF SOIL ABOVE WATER TABLE (γ) = 120 PCF UNIT WEIGHT OF SOIL BELOW WATER TABLE $(\gamma') = 60$ PCF

FRICTION ANGLE () = 30 DEGREES COHESION (c) = 0 PSF

GROUNDWATER ELEVATION = 206 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 -L- 37+55±, 25 FT RIGHT, TO STATION -L- 38+35±, 25 FT RIGHT. 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 -L- 37+55±, 25 FT RIGHT, TO STATION -L- 38+35±, 25 FT RIGHT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.02 FOR STANDARD TEMPORARY WALLS.

SHORING LOCATION NO. 4

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

DESIGN TEMPORARY SHORING FROM STATION -L- 36+65±, 50 FT RIGHT, TO STATION -L- 37+95±, 50 FT RIGHT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT OF SOIL ABOVE WATER TABLE (γ) = 120 PCF UNIT WEIGHT OF SOIL BELOW WATER TABLE (γ') = 60 PCF FRICTION ANGLE (ϕ) = 30 DEGREES COHESION (c) = 0 PSFGROUNDWATER ELEVATION = 206 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 -L- 36+65±, 50 FT RIGHT, TO STATION -L- 37+95±, 50 FT RIGHT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

DRIVEN PILE FOR TEMPORARY SHORING FROM STATION -L- 36+65±, 50 FT RIGHT, TO STATION -L- 37+95±, 50 FT RIGHT WILL NOT PENETRATE BELOW ELEVATION 195 FT DUE TO OBSTRUCTIONS, VERY DENSE OR HARD SOIL, BOULDERS, OR WEATHERED OR HARD ROCK.

> RJ DeCola APPROVED: DATE: 12/21/2018 SEAL 034381

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TEMPORARY SHORING NOTES

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 OCTOBER 8, 2018 AND SEALED BY A PROFESSIONAL ENGINEER, DAVID L. TEAGUE, PE, LICENSE NUMBER 027869.

PLANS PREPARED BY:

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TEMPORARY TRAFFIC CONTROL PHASING

PHASE I

- STEP 1: INSTALL WORK ZONE ADVANCE WARNING SIGNS AS SHOWN ON RSD 1101.01 (SHEET 3 OF 3).
- STEP 2: AWAY FROM TRAFFIC CONSTRUCT -L- LINE INCLUDING NEW BRIDGE AND ROADWAY APPROACHES, DRAIANGE, GUARDRAIL, PAVE UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE, AND INSTALL TEMPORARY SHORING LOCATIONS 1 THROUGH 4 AS FOLLOWS (SEE TMP-4 THRU TMP-6):
 - -L- STA 22+00+/- TO -L- STA 46+50+/-
- STEP 3: USING RSD 1101.02 (SHEET 1 OF 14), CONSTRUCT DRAINAGE AND WIDEN -L- LINE AND -Y- LINE UP TO EXISTING EDGE OF PAVEMENT ELEVATIONS AS FOLLOWS (TMP-4 AND TMP-6 THRU TMP-7):
 - -L- STA 13+00+/- TO -L- STA 22+00+/--L- STA 46+50+/- TO -L- STA 63+00+/--Y- STA 12+00+/- TO -Y- STA 13+38+/-
- STEP 4: USING FLAGGERS, AS NECESSARY, REMOVE EXISTING CONCRETE ISLAND ON -Y- LINE AND CONSTRUCT CONCRETE ISLAND ON -Y- LINE AS SHOWN ON TMP-6.

PHASE II

- STEP 1: USING RSD NO. 1101.02 (SHEET 1 OF 14), PAVE UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE AS FOLLOWS (SEE TMP-8 AND TMP-10 THRU TMP-11):
 - -L- STA 13+00+/- TO -L- STA 22+00+/--L- STA 46+50+/- TO -L- STA 63+00+/--Y- STA 12+00+/- TO -Y- STA 13+38+/-
 - USING RSD NO. 1101.02 (SHEET 1 OF 14), PLACE TEMPORARY PAVEMENT MARKINGS AND MARKERS IN FINAL PATTERN (SEE FINAL PAVEMENT MARKING PLANS) AS FOLLOWS (SEE TMP-8 THRU TMP-11):
 - -L- STA 13+00+/- TO -L- STA 63+00+/--Y- STA 12+00+/- TO -Y- STA 13+38+/-

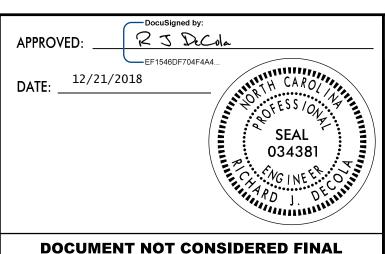
PHASE II

- STEP 2: USING FLAGGERS, AS NECESSARY, SHIFT TRAFFIC FROM A TWO-LANE, TWO WAY PATTERN TO A NEW TWO-LANE, TWO WAY PATTERN ON -L- LINE.
- STEP 3: USING FLAGGERS, AS NECESSARY, REMOVE EXISTING BRIDGE AS SHOWN ON TMP-9. REMOVE TEMPORARY SHORING LOCATIONS 1 THROUGH 4 ONCE BRIDGE REMOVAL IS COMPLETE.
- STEP 4: USING FLAGGERS, AS NECESSARY, REMOVE EXISTING PAVEMENT, DRAINAGE, AND GUARDRAIL AS SHOWN ON TMP-8 THRU TMP-11.

PHASE III

- STEP 1: USING RSD NO. 1101.02 (SHEET 1 OF 14), PAVE THE FINAL LAYER OF SURFACE COURSE FOR ALL LINES AS FOLLOWS:
 - -L- STA 13+00+/- TO -L- STA 63+00+/--Y- STA 12+00+/- TO -Y- STA 13+38+/-
- STEP 2: USING RSD NO. 1101.02 (SHEET 1 OF 14), PLACE FINAL PAVEMENT MARKINGS AND MARKERS FOR ALL LINES (SEE FINAL PAVEMENT MARKING PLANS).

REMOVE ALL TRAFFIC CONTROL DEVICES AND SIGNAGE.



UNLESS ALL SIGNATURES COMPLETED



TEMPORARY
TRAFFIC CONTROL
PHASING

PROJ. REFERENCE NO.

B-4968 TMP-4

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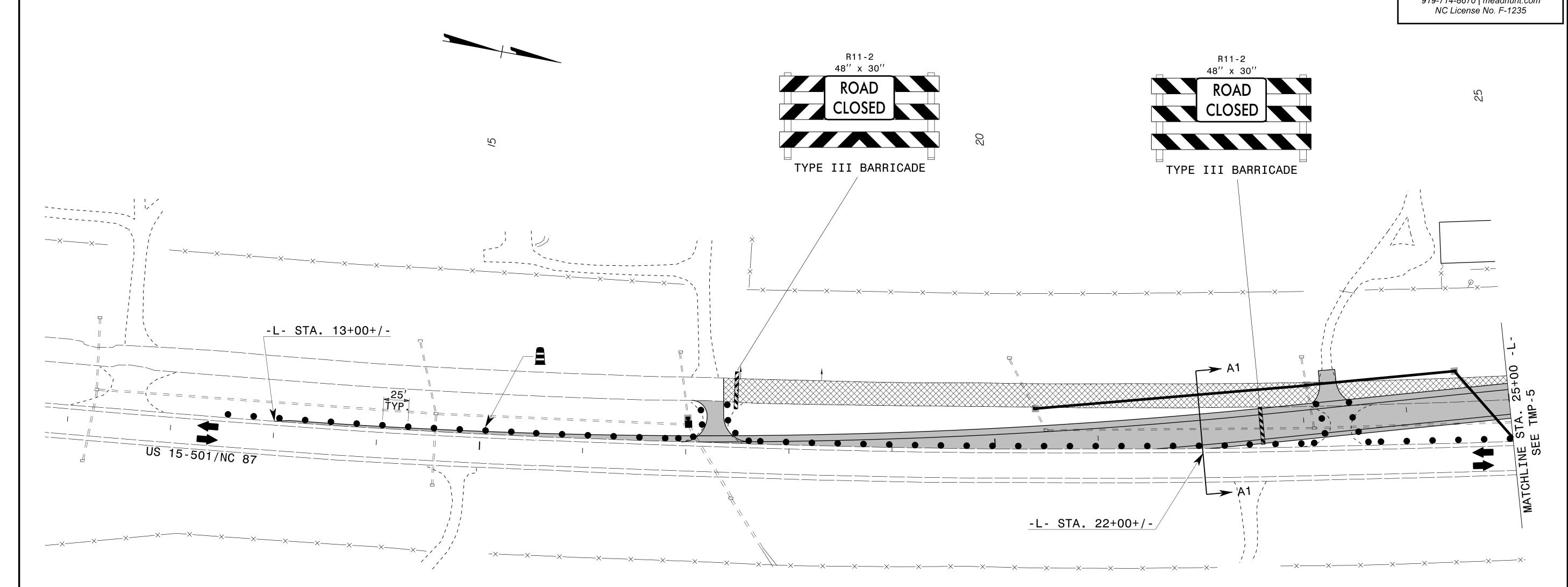
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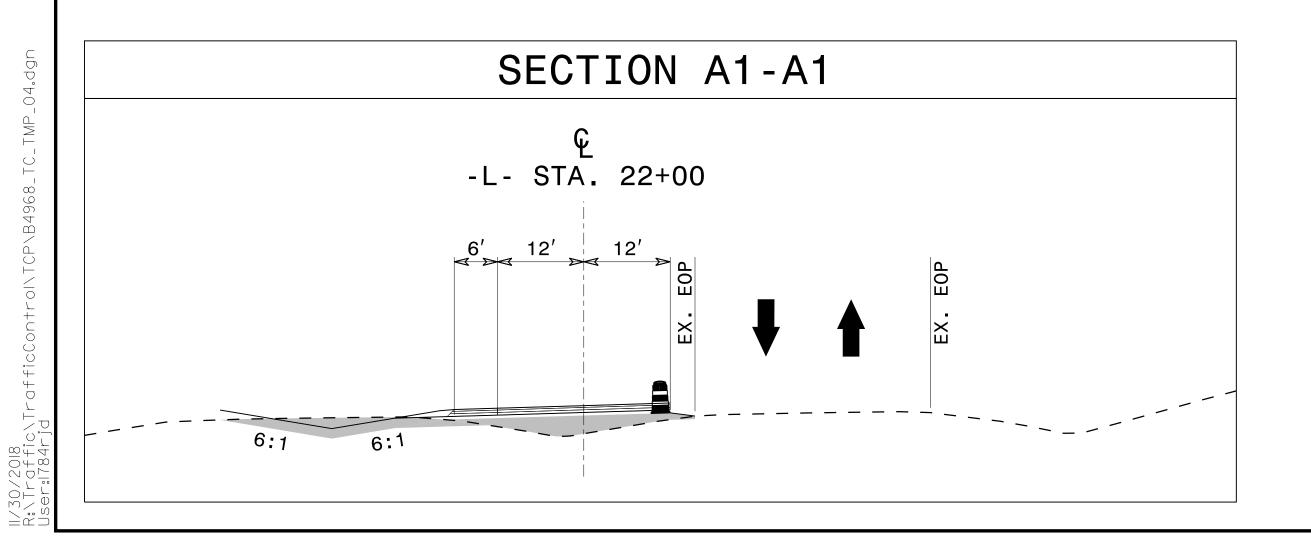
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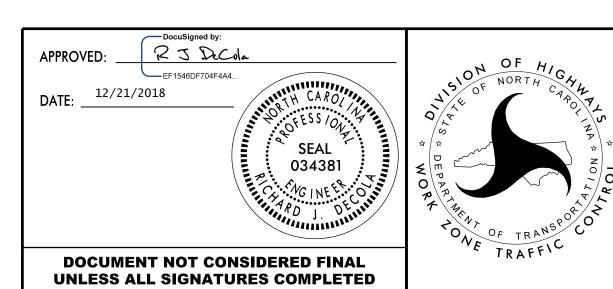
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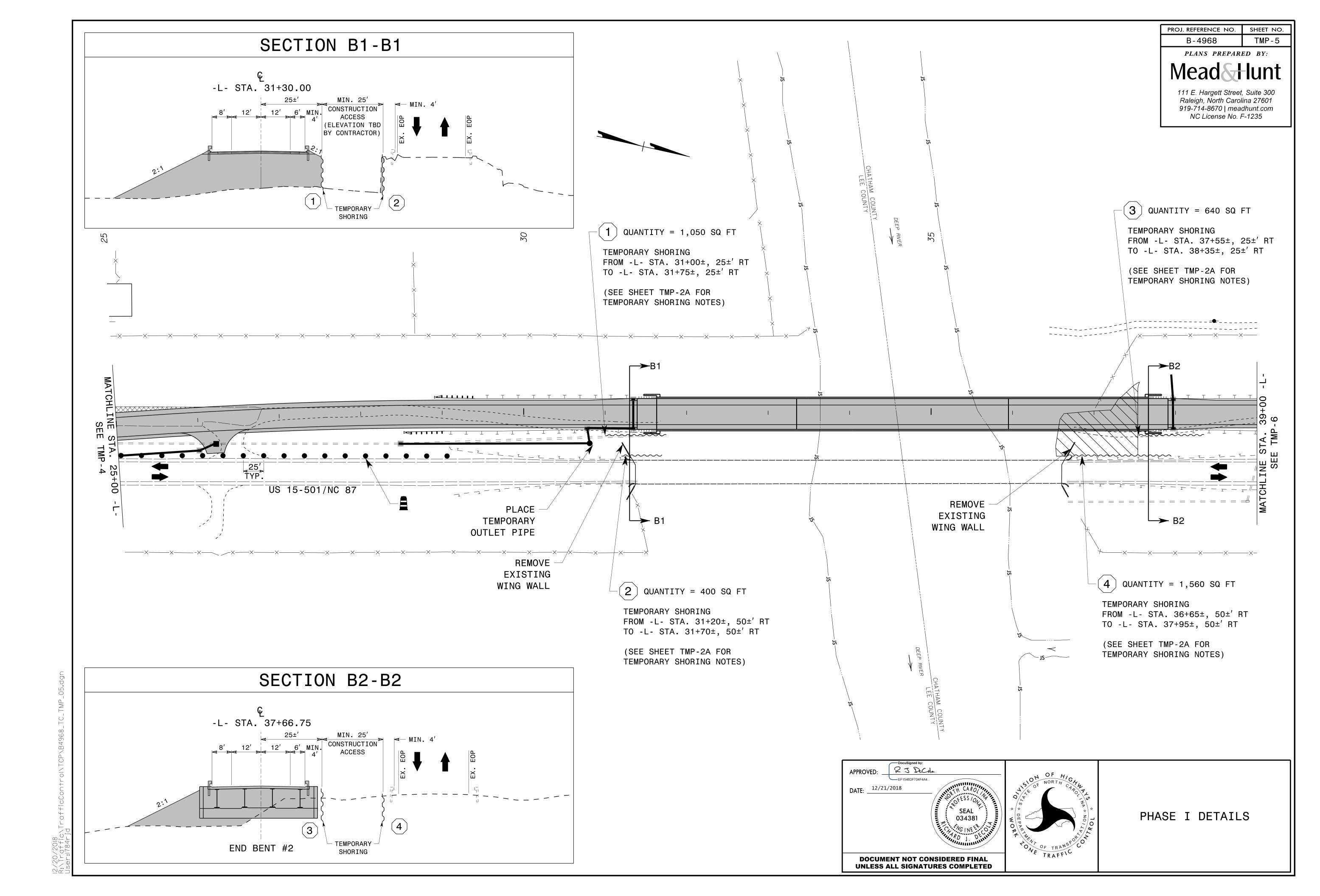
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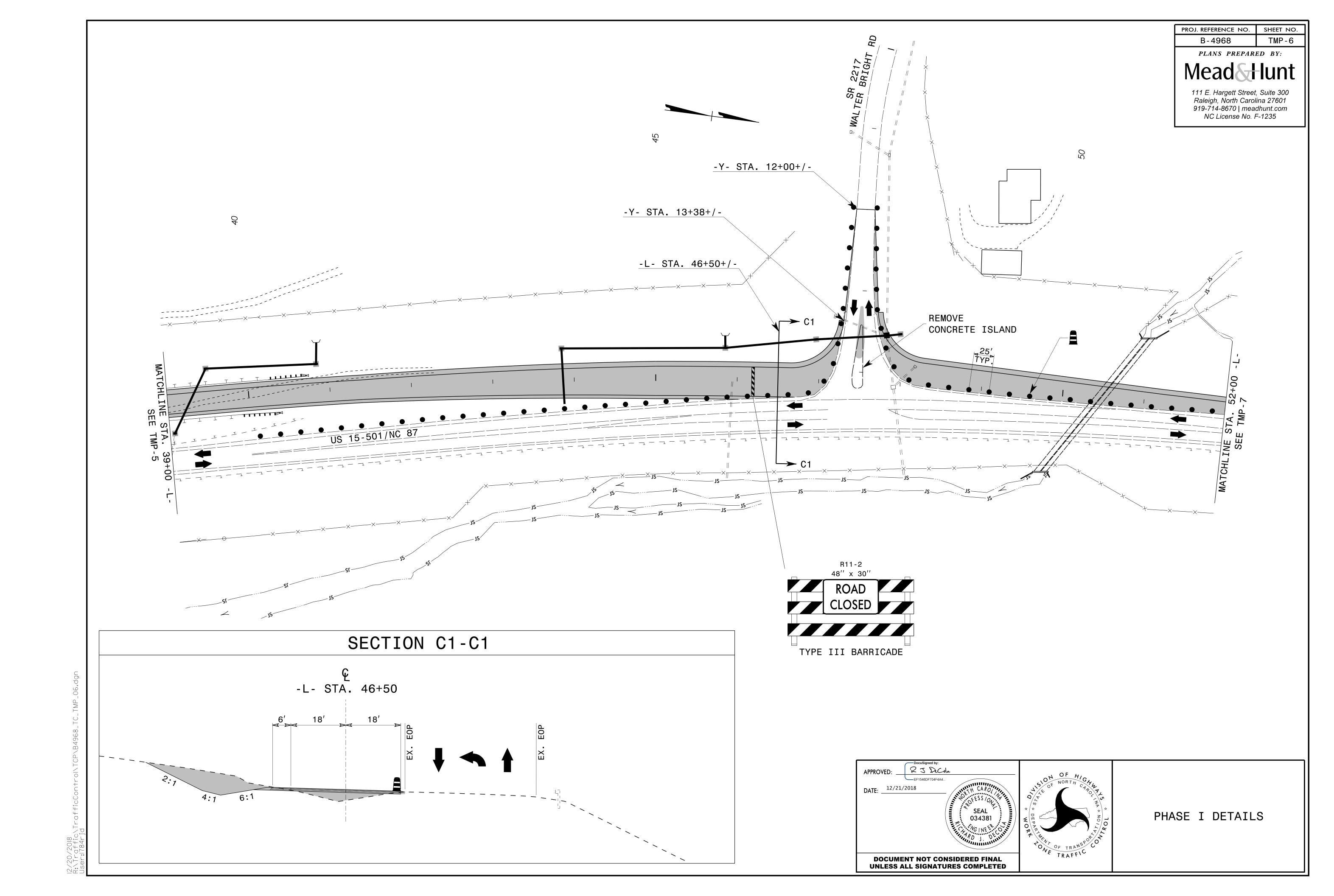






PHASE I DETAILS

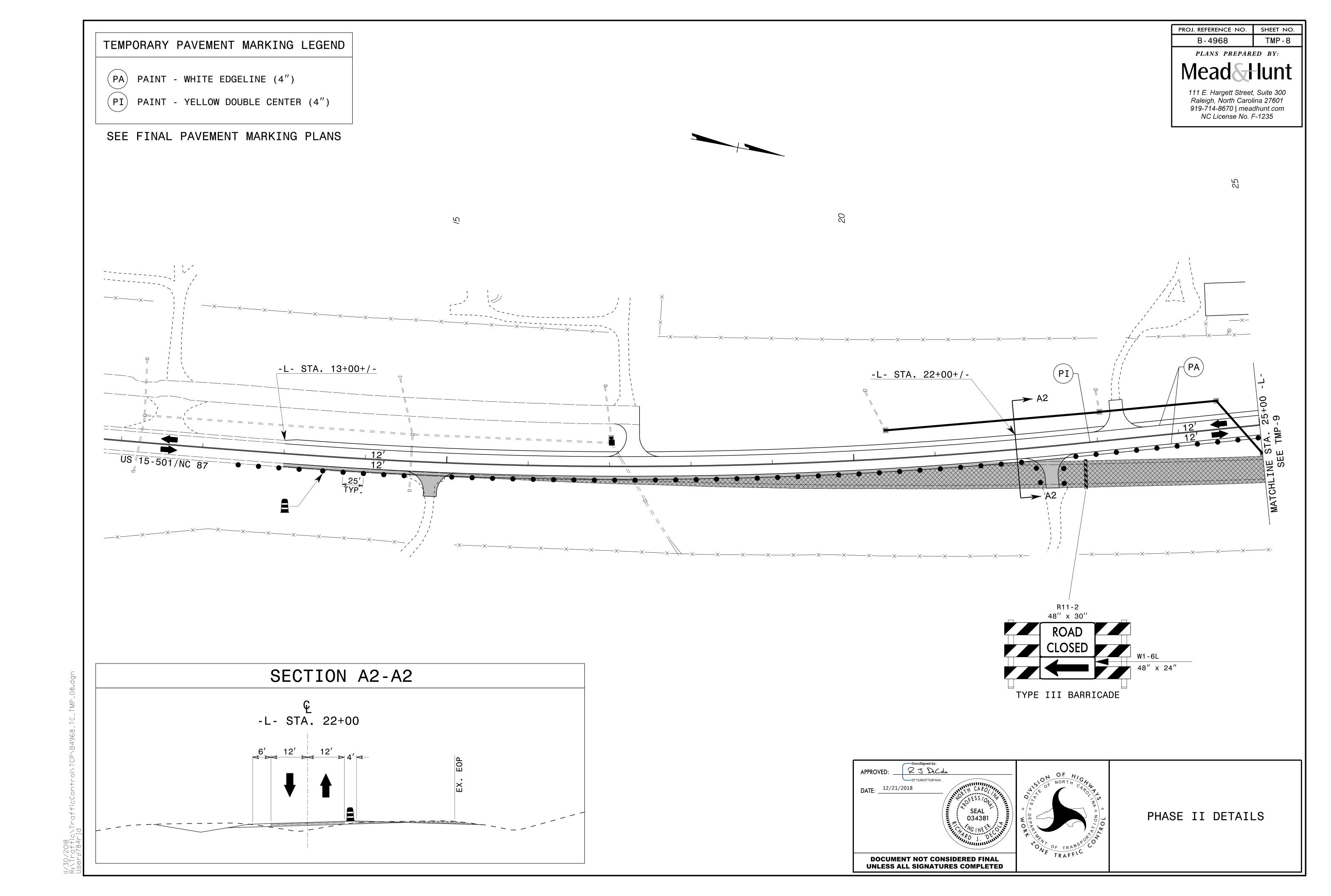


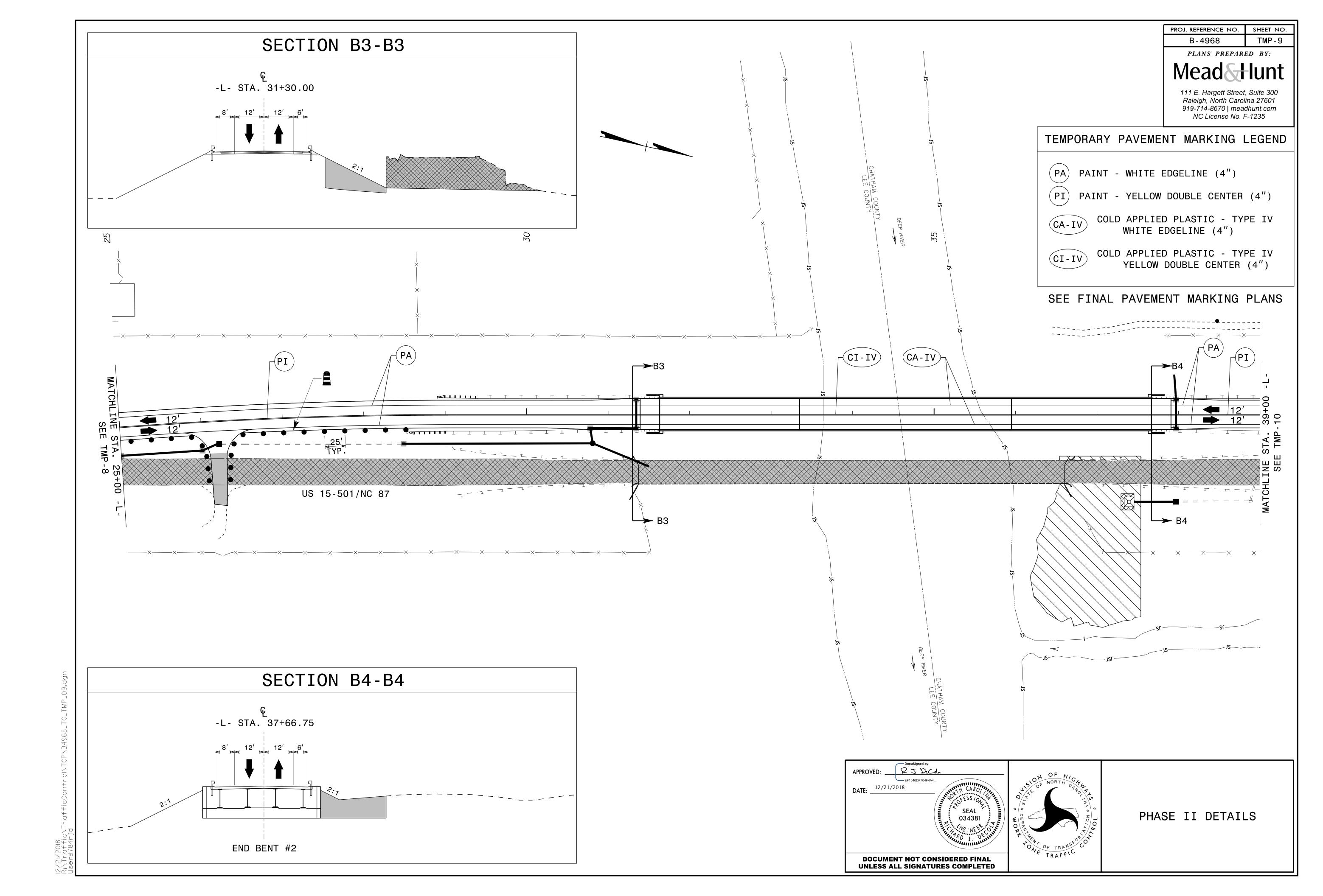


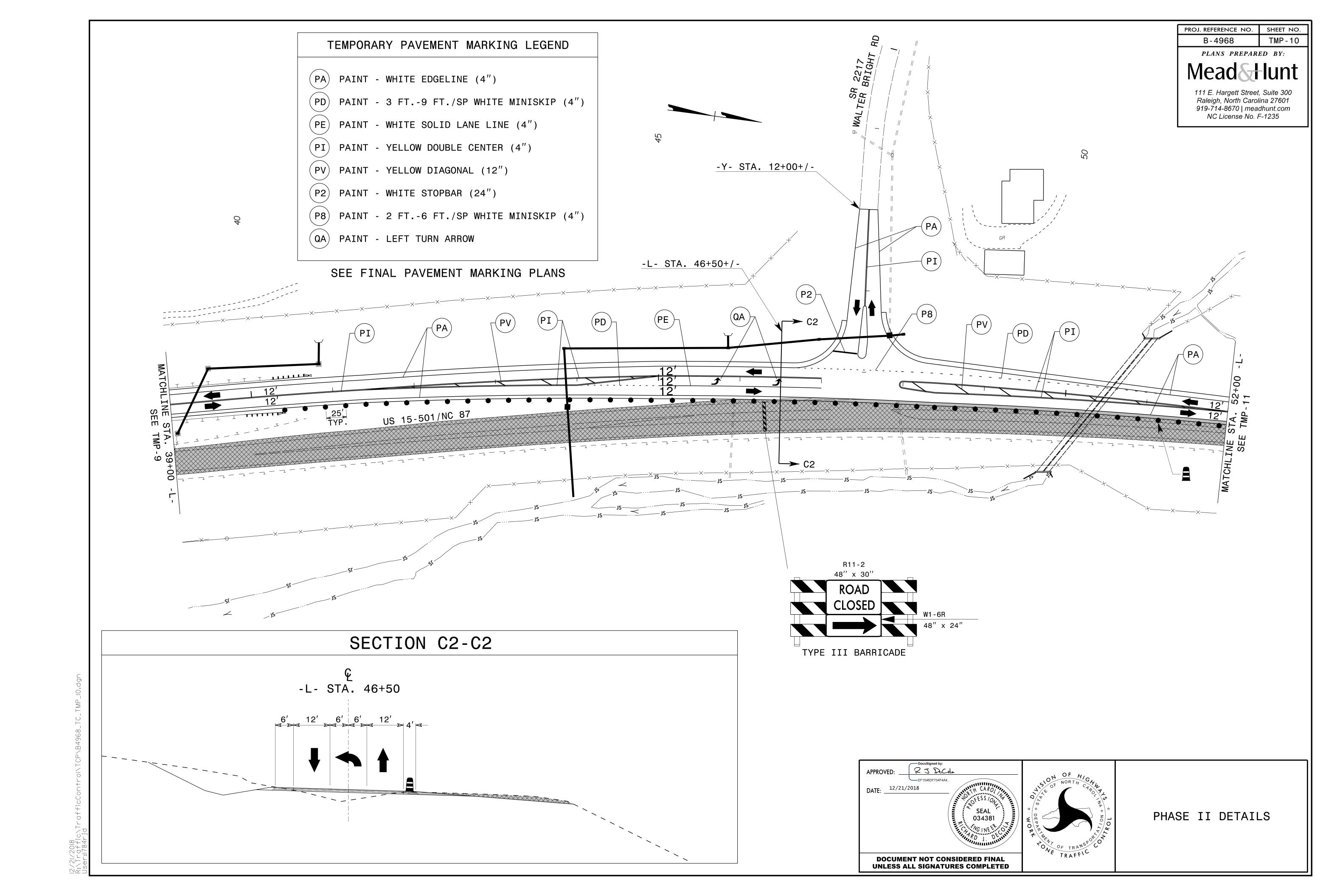
PROJ. REFERENCE NO. B-4968 TMP-7 PLANS PREPARED BY: 111 E. Hargett Street, Suite 300 Raleigh, North Carolina 27601 919-714-8670 | meadhunt.com NC License No. F-1235 -L- STA. 63+00+/-US 15-501/NC 87 APPROVED: Pocusigned by:

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