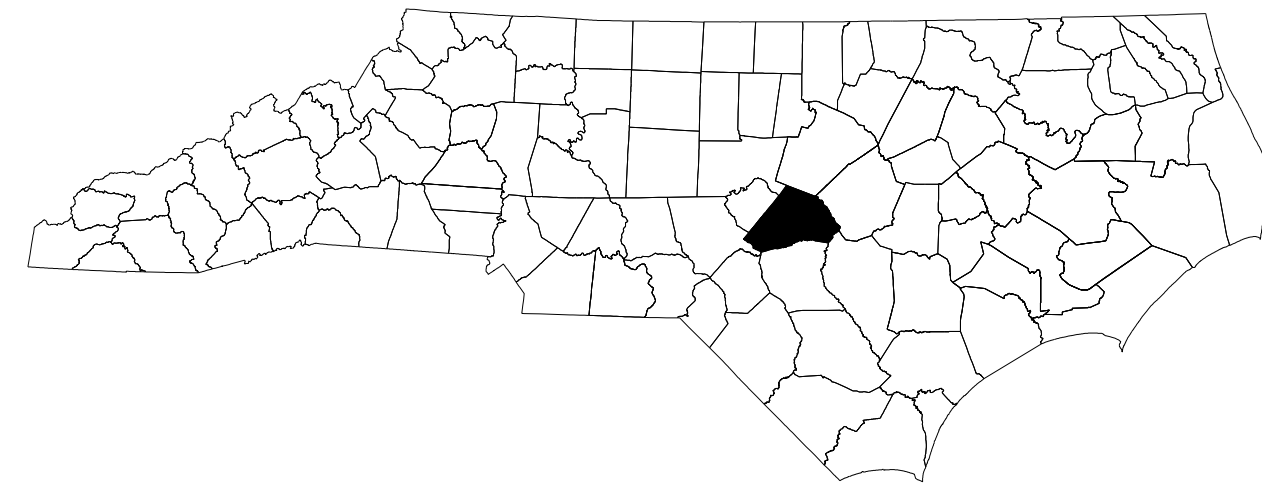


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

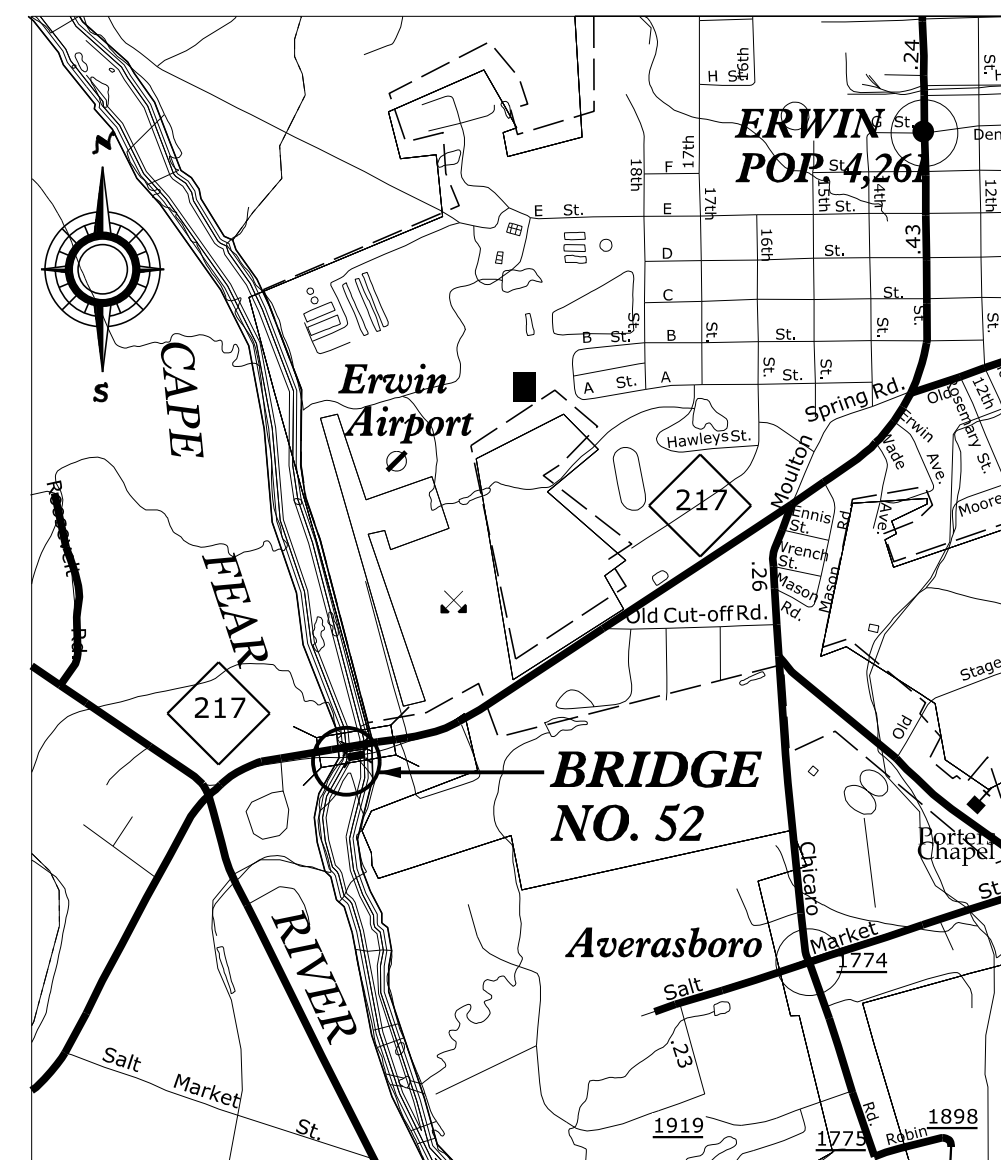
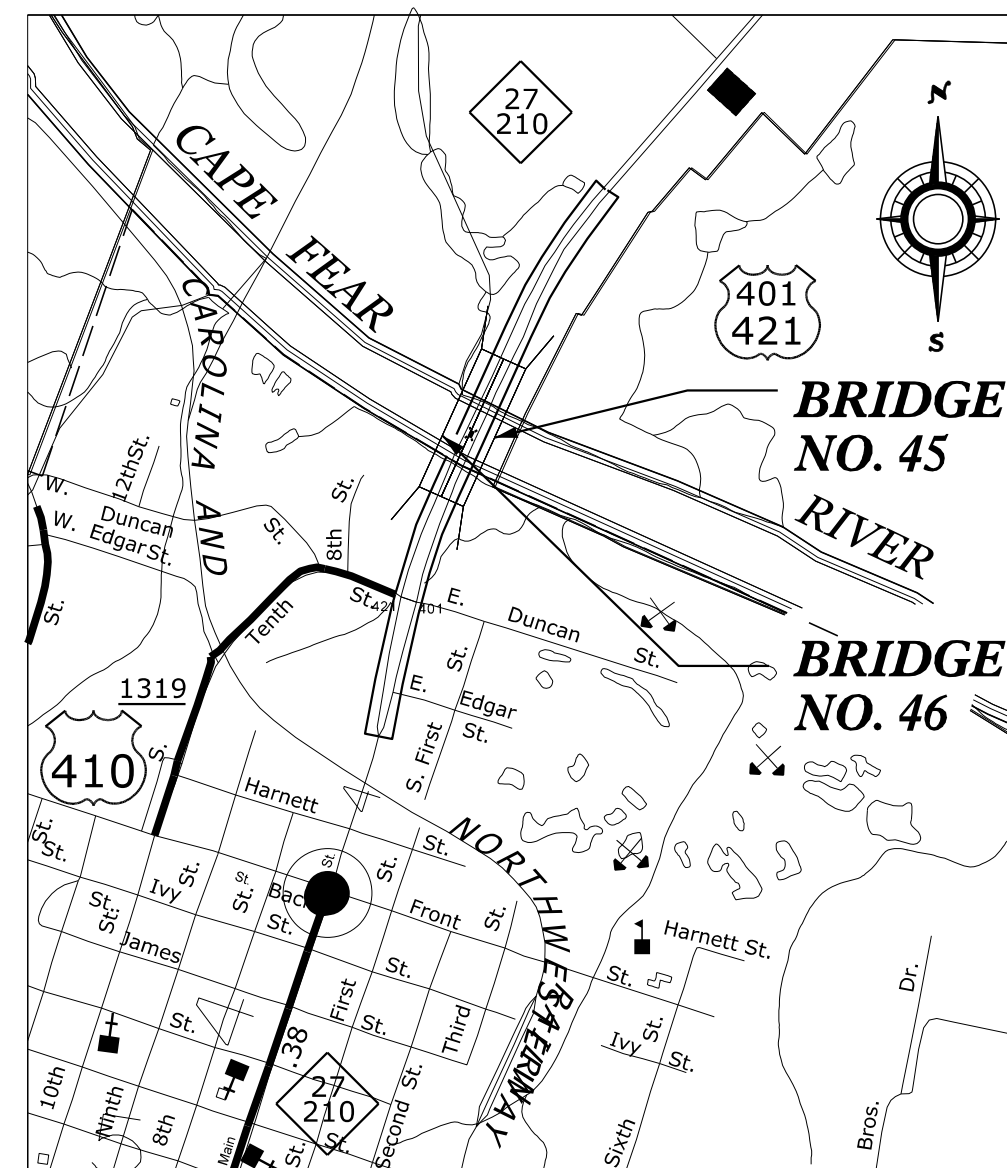
HARNETT COUNTY



LOCATION: BRIDGE #45 ON US 401 NBL /US 421/NC 27/NC 210 OVER CAPE FEAR RIVER.
BRIDGE #46 ON US 401 SBL /US 421/NC 27/NC 210 OVER CAPE FEAR RIVER.
BRIDGE #52 ON NC 217 OVER CAPE FEAR RIVER.

TYPE OF WORK: CONCRETE BRIDGE DECK REHABILITATION BY SCARIFICATION, SHOTBLASTING, AND PLACEMENT OF POLYESTER POLYMER CONCRETE; RECONSTRUCTION OF BRIDGE DECK JOINTS AND SEALS; SUBSTRUCTURE CONCRETE REPAIRS WITH SHOTCRETE, EPOXY RESIN INJECTION AND EPOXY COATING OF TOP OF SUBSTRUCTURE CAPS.

VICINITY MAP



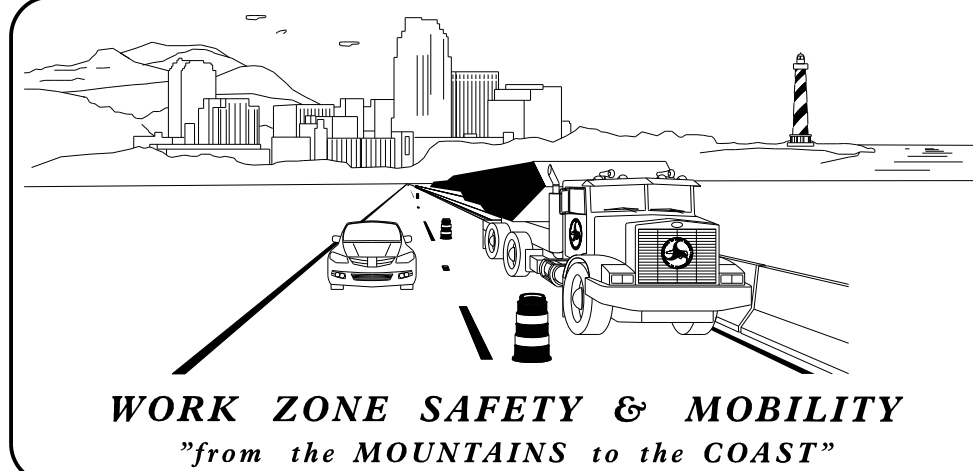
INDEX OF SHEETS

SHEET NO.	TITLE
TMP-1	TITLE SHEET, VICINITY MAP, AND INDEX OF SHEETS
TMP-1A	ROADWAY STANDARD DRAWINGS AND LEGEND
TMP-1B	GENERAL NOTES AND MANAGEMENT STRATEGIES
TMP-2	TEMPORARY TRAFFIC CONTROL BRIDGE NO. 45, 46, and 52

SHEET NO.

TMP-1

12/9/2021 \\dot\dfsroot\0\NSPProj\Special\5BPR34\TrafficControl\TCP\5BPR34_TC_TMP_1.dgn User:tmkelly



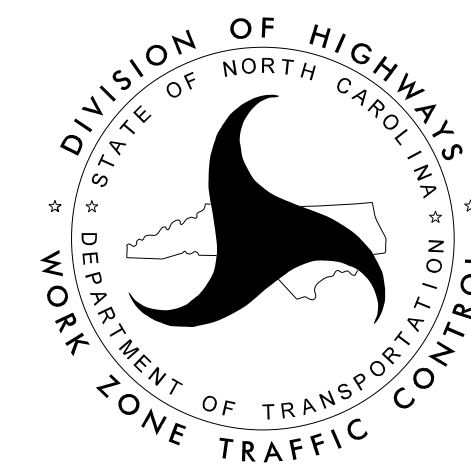
PLANS PREPARED BY:

J. D. BEAVER, PE

NCDOT CONTACTS:

K. C. THORNEWELL, JR, PE
PROJECT ENGINEER

J. D. BEAVER, PE
PROJECT DESIGN ENGINEER



DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

APPROVED: *Kenneth C. Thornevell, Jr., P.E.*

DATE: 01/12/2022

SEAL



TIP PROJECT: 15BPR.34

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
1101.11	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
1150.01	FLAGGING DEVICES
1165.01	TRUCK MOUNTED ATTENUATOR
1180.01	SKINNY - DRUMS
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO LANE AND MULTILANE ROADWAYS
1205.12	PAVEMENT MARKINGS - BRIDGES
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - (PERMANENT AND TEMPORARY)

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

SIGNALS

- EXISTING
- PROPOSED
- TEMPORARY

PAVEMENT MARKINGS

- EXISTING LINES
- TEMPORARY LINES

TRAFFIC CONTROL DEVICES

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

TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

PAVEMENT MARKERS

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

PAVEMENT MARKING SYMBOLS

- PAVEMENT MARKING SYMBOLS

12/9/2021
 \\dot\dfsroot\0\NSPProj\Special\15BPR34\TrafficControl\TCP\15BPR34_TC_TMP_1A.dgn
 User:tmkelly

APPROVED: DATE: 01/12/2022			<p style="text-align: center;">ROADWAY STANDARD DRAWINGS & LEGEND</p>
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

MANAGEMENT STRATEGIES

RECOMMENDED STRATEGIES:

BRIDGE NO. 45 AND 46

- SINGLE LANE CLOSURES

BRIDGE NO. 52

- ONE LANE, TWO-WAY OPERATION (FLAGGING)

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 A LANE OF TRAFFIC DURING THE FOLLOWING TIME RESTRICTIONS:

ROAD NAME	DAY AND TIME RESTRICTIONS
US-401	MONDAY THROUGH FRIDAY
NC-277	FROM 7:00 AM TO 9:00 AM AND FROM 4:00 PM TO 6:00 PM

- B) DO NOT CLOSE OR NARROW A LANE OF TRAFFIC DURING HOLIDAYS AND SPECIAL EVENTS AS FOLLOWS:

1. FOR ANY UNEXPECTED OCCURENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES AS DIRECTED BY THE ENGINEER.
2. FOR NEW YEAR'S, BETWEEN THE HOURS OF 6:00 AM DECEMBER 31ST TO 9:00 PM JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY, THEN UNTIL 9:00 PM THE FOLLOWING TUESDAY.
3. FOR EASTER, BETWEEN THE HOURS OF 6:00 AM THURSDAY TO 9:00 PM MONDAY.
4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00 AM FRIDAY TO 9:00 PM TUESDAY.
5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00 AM THE DAY BEFORE INDEPENDENCE DAY TO 9:00 PM THE DAY AFTER INDEPENDENCE DAY. IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY, THEN BETWEEN THE HOURS OF 6:00 AM THE THURSDAY BEFORE INDEPENDENCE DAY TO 9:00 PM THE FOLLOWING TUESDAY.
6. FOR LABOR DAY, BETWEEN THE HOURS OF 6:00 AM FRIDAY TO 9:00 PM TUESDAY.
7. FOR THANKSGIVING, BETWEEN THE HOURS OF 6:00 AM TUESDAY TO 9:00 PM MONDAY.
8. FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 AM THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 9:00 PM THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

GENERAL NOTES

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 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.
- E) DO NOT INSTALL MORE THAN ONE LANE CLOSURE IN ANY ONE DIRECTION ON ALL ROADS.

PAVEMENT EDGE DROP OFF REQUIREMENTS

- F) 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

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

SIGNING

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

TRAFFIC CONTROL DEVICES

- J) 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.
- K) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES DRUMS PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

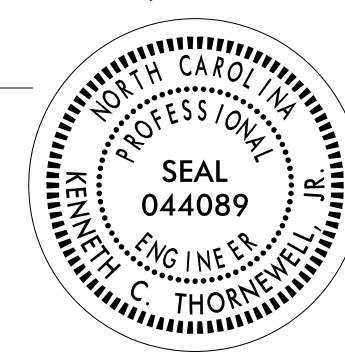
PAVEMENT MARKINGS AND MARKERS

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

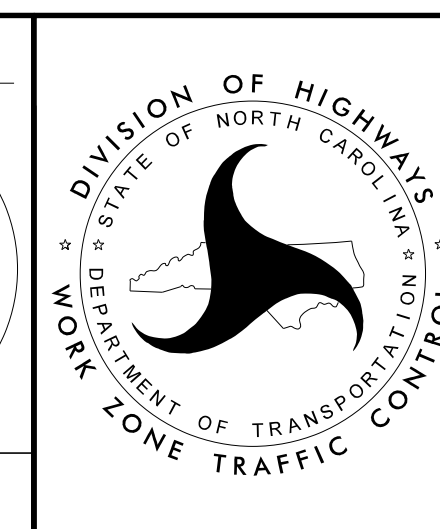
ROAD NAME	MARKING	MARKER
US 401	COLD APPLIED PLASTIC TYPE IV	NONE
NC 217	COLD APPLIED PLASTIC TYPE IV	NONE

- M) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- N) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

DocuSigned by:
Kenneth C. Thornwell, Jr., P.E.
 1E091EF27373405
 APPROVED: _____
 DATE: 01/12/2022

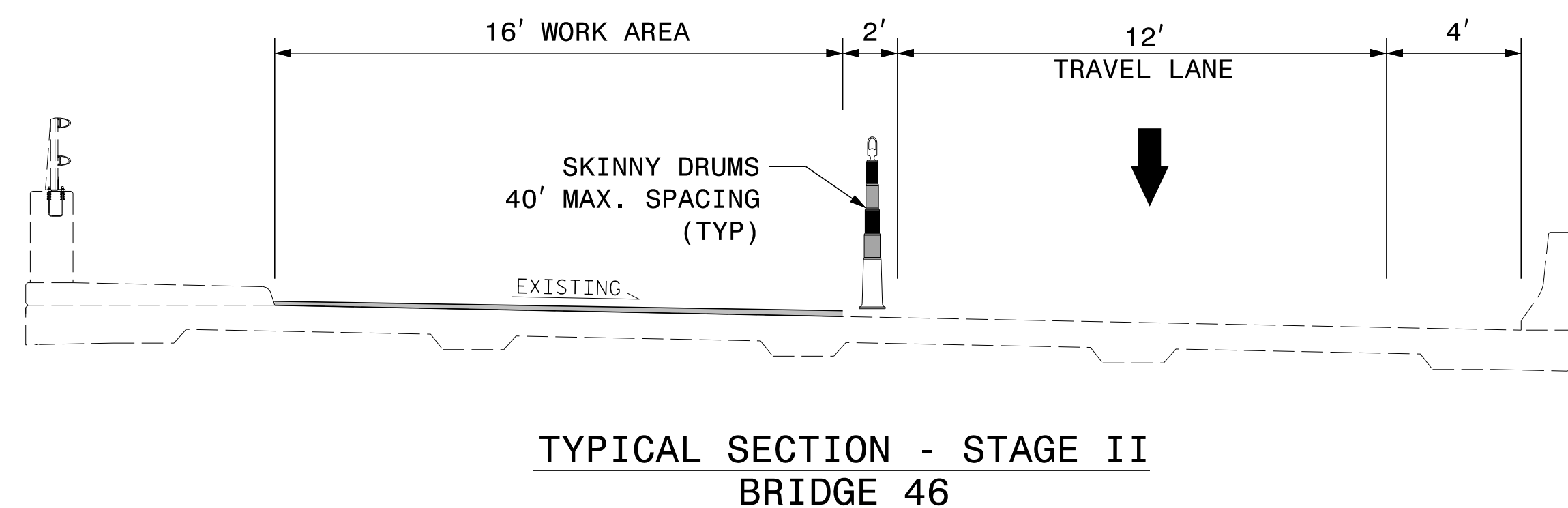
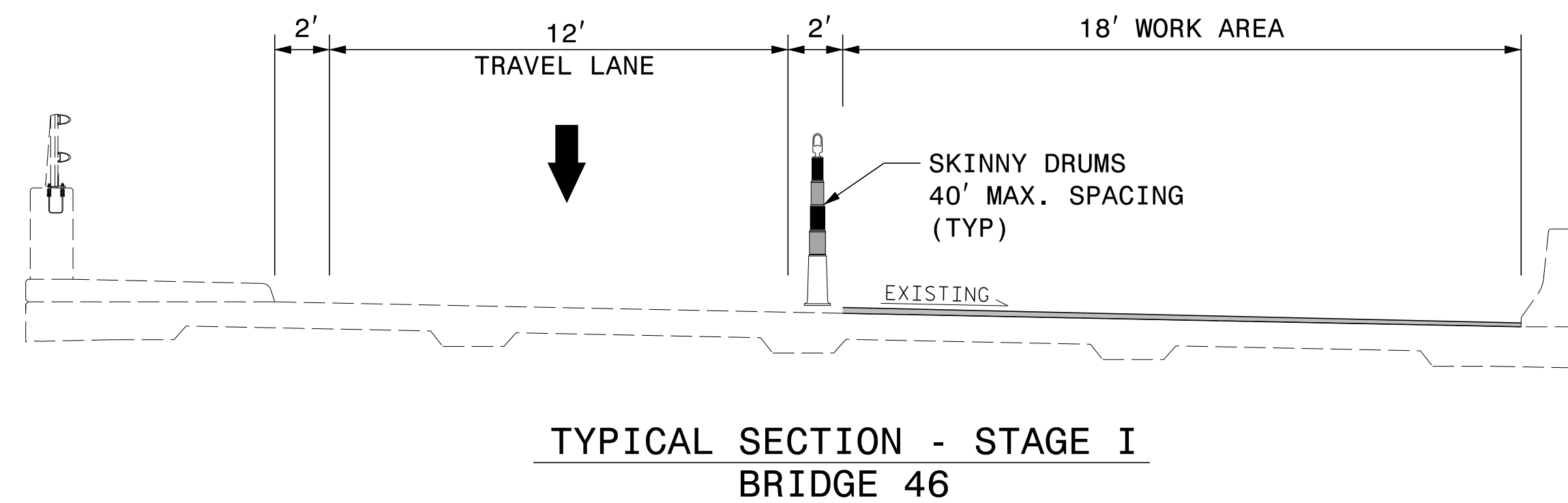
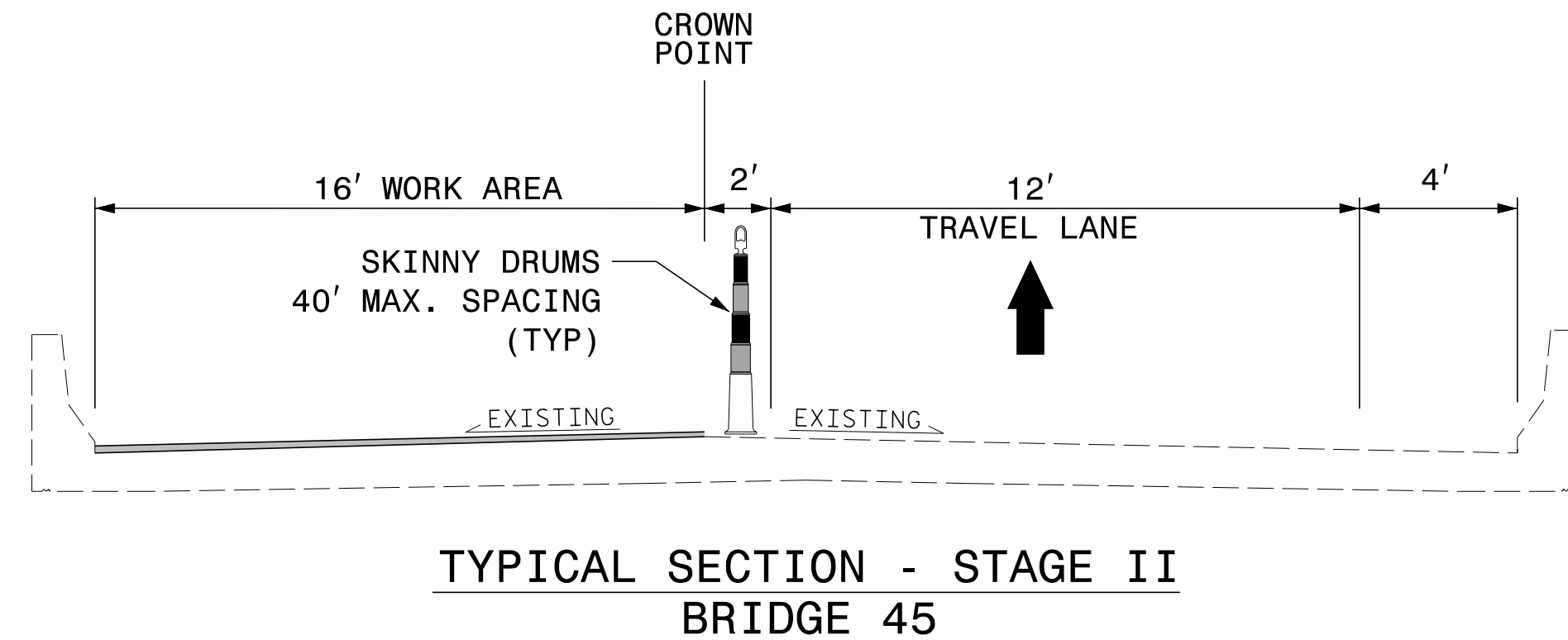
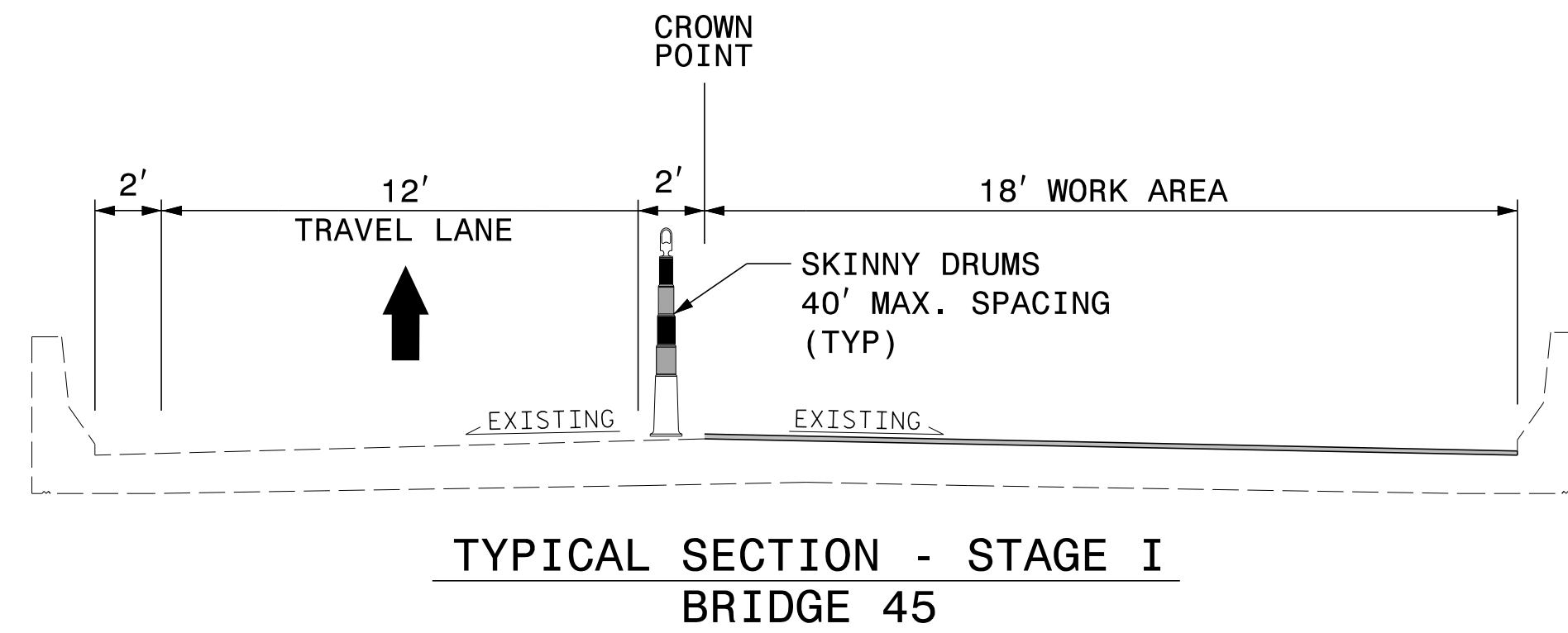


**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**



**TRANSPORTATION
OPERATIONS
PLAN**

I:\3\2022\dot\dfs\Root\0\NS\Proj\Special\15BPR34\TrafficControl\TCP\15BPR34_TC_TMP_1B.dgn
 User: tkelly



PHASING - BRIDGES 45 & 46

STAGE I

- STEP 1 - USING ROADWAY STANDARD DRAWINGS (RSD) 1101.01, SHEET 2 OF 3, PLACE ADVANCE WARNING SIGNS.
- STEP 2 - USING RSD 1101.02, SHEET 3 OF 14, CLOSE A SINGLE LANE AND ADJUST PAVEMENT MARKINGS ON BRIDGE AND APPROACHES AS NECESSARY FOR STAGE I SINGLE LANE PATTERN.
- STEP 3 - USING RSD 1101.02, SHEET 3 OF 14, CLOSE A SINGLE LANE AND PERFORM STAGE I BRIDGE WORK.
- STEP 4 - UPON COMPLETION OF BRIDGE WORK, INSTALL TEMPORARY MARKINGS AS NEEDED FOR STAGE II SINGLE LANE PATTERN.

STAGE II

- STEP 1 - USING RSD 1101.02, SHEET 3 OF 14 AND PEDESTRIAN CHANNELIZING DEVICES, CLOSE A SINGLE LANE AND SIDEWALK, IF NECESSARY, AND PERFORM STAGE II BRIDGE WORK.
- STEP 2 - UPON COMPLETION OF BRIDGE WORK, INSTALL TEMPORARY MARKINGS AS NEEDED TO RETURN TRAFFIC TO EXISTING PATTERN.
- STEP 3 - REMOVE ALL STAGE II TRAFFIC CONTROL DEVICES AND RETURN TRAFFIC TO EXISTING PATTERN.
- STEP 4 - USING RSD 1101.02, SHEET 12 OF 14, INSTALL FINAL PAVEMENT MARKING AND MARKERS.
- STEP 5 - REMOVE ANY REMAINING ADVANCE WARNING SIGNS AND DEVICES.

PHASING - BRIDGE 52

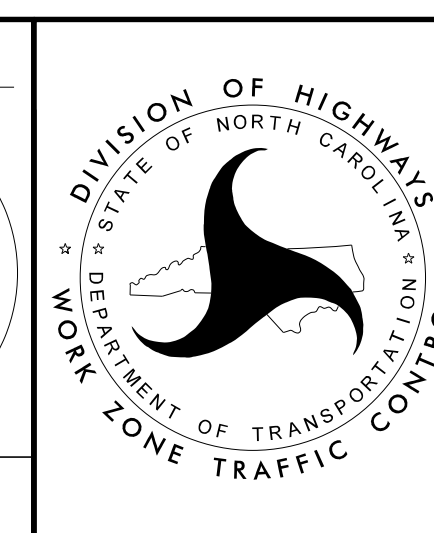
- STEP 1 - USING RSD 1101.01, SHEET 3 OF 3, PLACE ADVANCE WARNING SIGNS.
- STEP 2 - USING RSD 1101.02, SHEET 1 OF 14, CLOSE A SINGLE DIRECTION OF TRAFFIC USING FLAGGERS.
- STEP 3 - COMPLETE BRIDGE WORK REQUIRED. REPEAT STEP 2 AS NEEDED.
- STEP 4 - UPON COMPLETION OF BRIDGE WORK, REMOVE ALL ADVANCE WARNING SIGNS AND DEVICES.

I:\12\2022
 \dot\dfs\Root\0\NSP\Proj\Special\15BPR34\TrafficControl\TCP\15BPR34_TC_TMP_2.dgn
 User: jdbeaver1

APPROVED: *Kenneth C. Thornwell, Jr., P.E.*
 DATE: 01/12/2022

SEAL

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



BRIDGE NOS. 45, 46, & 52

TRAFFIC CONTROL PHASING