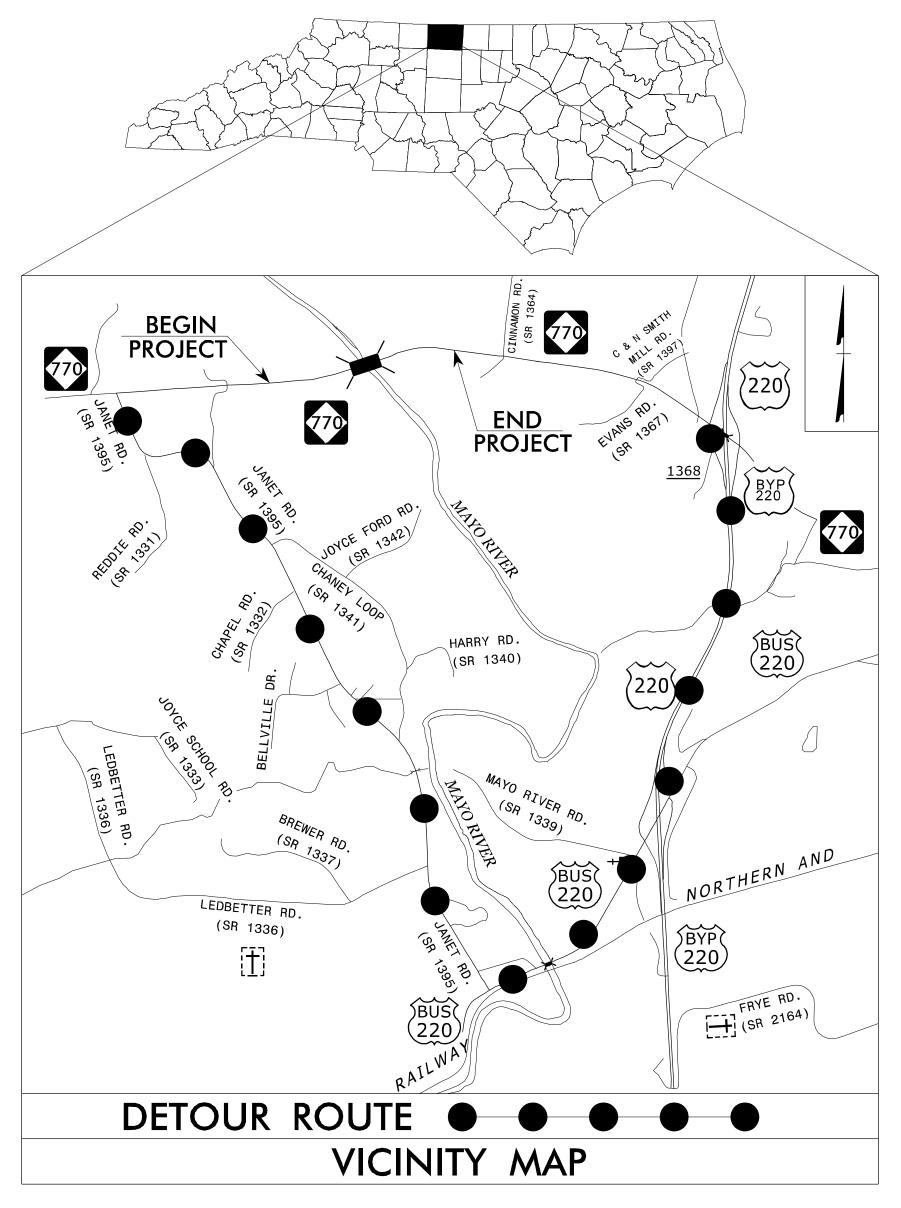
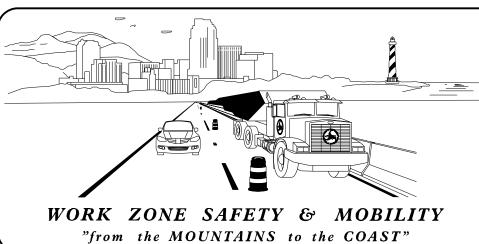
# TRANSPORTATION MANAGEMENT PLAN

# ROCKINGHAM COUNTY



LOCATION: BRIDGE NO. 35 ON NC 770 OVER MAYO RIVER TYPE OF WORK: GRADING, PAVING, DRAINAGE AND STRUCTURE



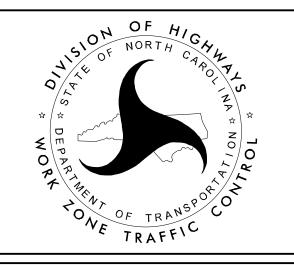
PLANS PREPARED BY:

WILLIAM DEBREW

DESIGN ENGINEER

KEN THORNEWELL, PE PROJECT ENGINEER MIKE STEELMAN PROJECT DESIGN ENGINEER

NCDOT CONTACTS:



# INDEX OF SHEETS

SHEET NO.	<u>TITLE</u>
TMP-1	TITLE SHEET, VICINITY MAP, AND INDEX OF SHEET
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, AND LEGEND
TMP-1B	TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT STRATEGIES, GENERAL NOTES, AND PHASING NOTES)
TMP-2	ROAD CLOSURE AND OFFSITE DETOUR SIGNING
TMP-3	NC-770 ROAD CLOSURE BARRICADE DETAIL

UNLESS ALL SIGNATURES COMPLETED

APPROVED: Kenneth C. Thornewell Jr., P.C. **DATE**: 04/02/2024

DOCUMENT NOT CONSIDERED FINAL

SEAL

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 WARNING SIGNS	
1101.02	TEMPORARY LANE CLOSURES	
1101.03	TEMPORARY ROAD CLOSURES	
1101.04	TEMPORARY SHOULDER CLOSURES	
1101.05	WORK ZONE VEHICLE ACCESSES	
1101.06	WARNING SIGNS FOR BLASTING ZONES	
1101.11	TRAFFIC CONTROL DESIGN TABLES	
1110.01	STATIONARY WORK ZONE SIGNS	
1110.02	PORTABLE WORK ZONE SIGNS	
1115.01	FLASHING ARROW BOARDS	
1130.01	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	
1180.01	SKINNY - DRUMS	
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS	
1205.02	PAVEMENT MARKINGS - TWO LANE AND MULTILANE ROADWAYS	
1205.03	PAVEMENT MARKINGS - EXITS AND ENTRANCE RAMPS	
1205.04	PAVEMENT MARKINGS - INTERSECTIONS	
1205.05	PAVEMENT MARKINGS - TURN LANES	
1205.06	PAVEMENT MARKINGS - LANE DROPS	
1205.07	PAVEMENT MARKINGS - PEDESTRIAN CROSSWALKS	
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES	
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS	
1205.10	PAVEMENT MARKINGS - SCHOOL AREAS	
1205.11	PAVEMENT MARKINGS - RAILROAD CROSSINGS	
	PAVEMENT MARKINGS - BRIDGES	
1205.13	PAVEMENT MARKINGS - LANE REDUCTIONS	
	PAVEMENT MARKINGS - ROUNDABOUTS	
1205.15	PAVEMENT MARKINGS - SUPERSTREETS	
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	

PROJ. REFERENCE NO. SHEET NO. BR - 0093 TMP - 1A

# **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

PROPOSEI

T E TEMPORARY P 0 R PORTAB

#### PAVEMENT MARKINGS

——EXISTING LINES
——TEMPORARY LINES

# TRAFFIC CONTROL DEVICES

BARRICADE (TYPE III)

CO

DRUM SKINNY DRUM O TUBULAR MARKER

TEMPORARY CRASH CUSHION

FLASHING ARROW BOARD
FLAGGER

LAW ENFORCEMENT

TRUCK MOUNTED ATTENUATOR (TMA)

CHANGEABLE MESSAGE SIGN

### TEMPORARY SIGNING

O 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

P1 WHITE EDGELINE

P13 DOUBLE YELLOW CENTER LINE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

OF HIGH A SPORT OF TRANSPORD OF

ROADWAY STANDARD DRAWINGS & LEGEND

OJ. REFERENCE NO.	SHEET NO.
BR-0093	TMP-1B

# MANAGEMENT STRATEGIES

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

#### FLAGGER OPERATION

- COMPLETE RESURFACING OF SR 1395 (JANET RD), PRIOR TO CLOSING NC 770.

#### ROAD CLOSURE

- MAINTAIN (NC 770) TRAFFIC ON OFF-SITE DETOUR VIA SR 1395 (JANET RD), US 220 BUS, AND US 220.

# **PHASING**

#### PHASE I

- STEP 1 INSTALL ADVANCED WARNING SIGNS FOR JANET ROAD RESURFACING. (SEE RSD 1101.01, SHEET 3 OF 3)
- STEP 2 USING RSD 1101.02, SHEET 1 OF 19, RESURFACE JANET ROAD AND PLACE TEMPORARY/FINAL PAVEMENT MARKINGS IN ACCORDANCE WITH THE ROADWAY PLANS.
- STEP 3 REMOVE ADVANCE WARNING SIGNS FOR JANET ROAD RESURFACING.

#### PHASE II

- STEP 1 USING RSD 1101.03, SHEET 1 OF 9, AND SHEETS TMP-2 AND TMP-3, INSTALL ROAD CLOSURE AND DETOUR SIGNS, PLACE TYPE III BARRICADES TO CLOSE NC-770 TO THROUGH TRAFFIC, AND DETOUR NC-770 TRAFFIC OFF-SITE.
- STEP 2 AWAY FROM TRAFFIC, COMPLETE THE FOLLOWING:
  - 1) REMOVE EXISTING STRUCTURE AND CONSTRUCT PROPOSED STRUCTURE.
    (SEE ROADWAY AND STRUCTURE PLANS)
  - 2) CONSTRUCT PROPOSED ROADWAY UP TO AND INCLUDING FINAL LAYER OF SURFACE COURSE. (SEE ROADWAY PLANS)
  - 3) PLACE FINAL PAVEMENT MARKINGS AND TIE INTO EXISTING PAVEMENT MARKINGS. (SEE PAVEMENT MARKING PLANS)
- STEP 3 REMOVE ALL TEMPORARY TRAFFIC CONTROL DEVICES, ALL ROAD CLOSURE AND DETOUR SIGNING AND OPEN NC-770 TO PROPOSED TRAFFIC PATTERN.

#### 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.

#### LANE AND SHOULDER CLOSURE REQUIREMENTS

- A) 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.
- B) 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.
- C) 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.
- O) 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 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

F) 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.

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

#### TRAFFIC PATTERN ALTERATIONS

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

#### SIGNING

- I) 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.
- J) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.
  - PROVIDE SIGNING REQUIRED FOR THE OFF-SITE DETOUR ROUTE AS SHOWN IN THE TRAFFIC CONTROL PLANS.
- K) COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED TO CLOSE THE ROAD WHEN ROAD CLOSURE IS NOT IN OPERATION.
  - COVER OR REMOVE ALL SIGNS REQUIRED FOR THE OFF-SITE DETOUR WHEN THE DETOUR IS NOT IN OPERATION.
- L) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.
- M) 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

- N) WHEN LANE CLOSURES ARE NOT IN EFFECT SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (55 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.
- O) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2, ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.

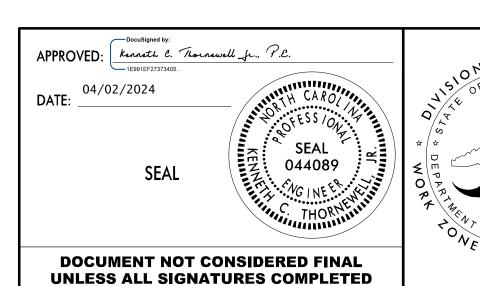
#### PAVEMENT MARKINGS AND MARKERS

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

ROAD NAME MARKING MARKER

JANET RD PAINT NONE

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



TRANSPORTATION OPERATIONS PLAN

