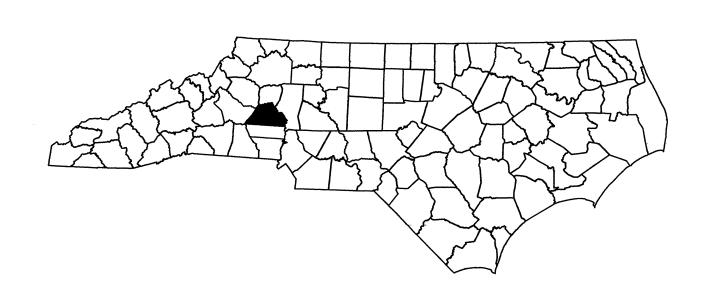
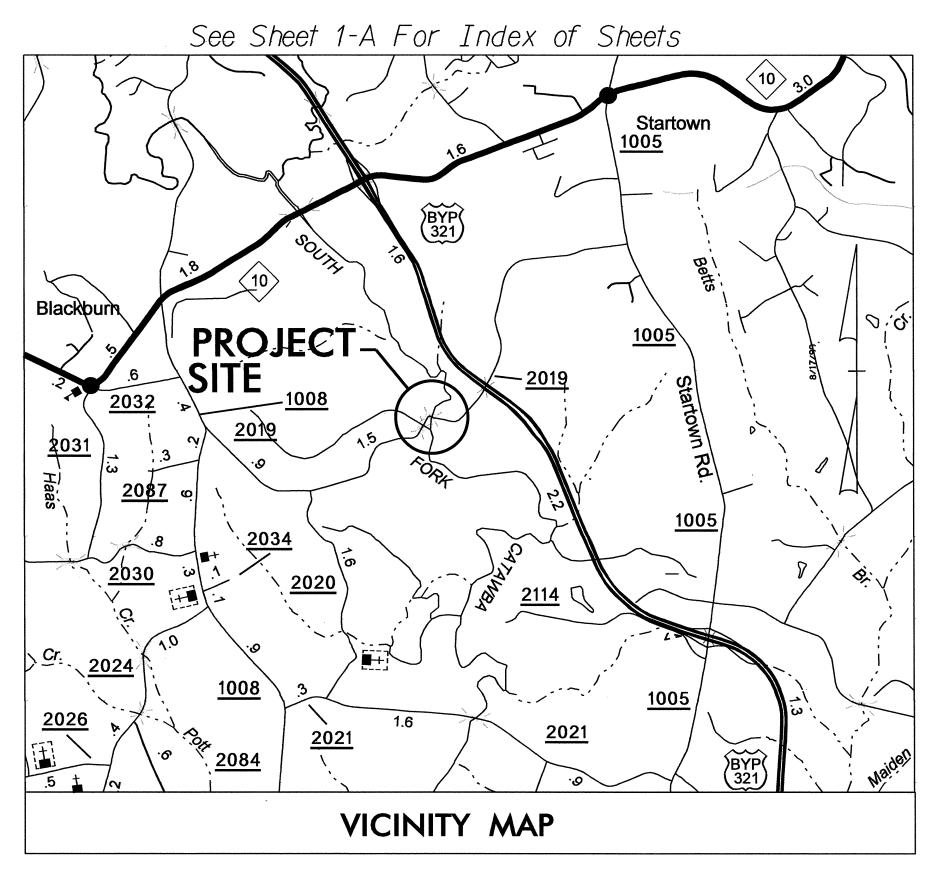
STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

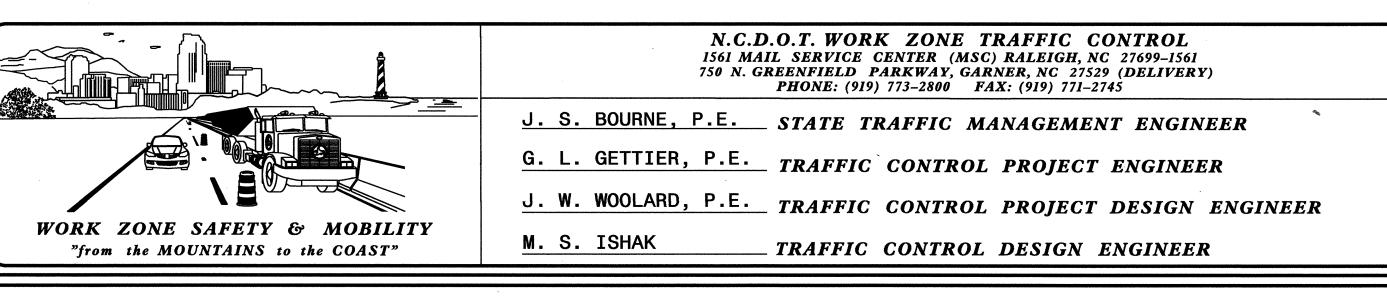
TRANSPORTATION MANAGEMENT PLAN

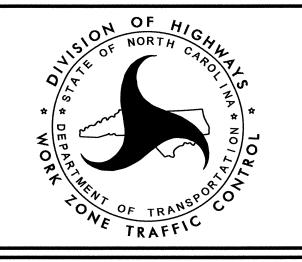
CATAWBA COUNTY





BRIDGE NO 95 ON ROCKY FORD RD (SR 2019) OVER THE SOUTH FORK CATAWBA RIVER





INDEX OF SHEETS

SHEET NO. **TITLE** TMP - 1 TITLE SHEET, AND INDEX OF SHEETS ROADWAY STANDARD DRAWINGS & LEGEND TMP-2A **GENERAL NOTES PHASING** TMP-4 & 4A PHASE I OFFSITE DETOUR TMP-6 & 6A PHASE II SD - 1

SIGN DESIGN

APPROVED:

SEAL

4458

SHEET NO.

TMP-1

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 JANAUARY 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

TITLE
WORK ZONE WARNING SIGNS
TEMPORARY LANE CLOSURES
TEMPORARY ROAD CLOSURES
TEMPORARY SHOULDER CLOSURES
WORK ZONE VEHICLE ACCESSES TRAFFIC CONTROL DESIGN TABLES
STATIONARY WORK ZONE SIGNS
PORTABLE WORK ZONE SIGNS DRUMS
CONES
BARRICADES
FLAGGING DEVICES
PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
PAVEMENT MARKINGS - TWO LANE AND MULTILANE ROADWAYS
PAVEMENT MARKINGS - BRIDGES
RAISED PAVEMENT MARKERS - (PERMANENT AND TEMPORARY)
GUARDRAIL AND BARRIER DELINEATORS - INSTALLATION SPACING
GUARDRAIL AND BARRIER DELINEATORS - TYPES AND MOUNTING
GUARDRAIL END DELINEATION

LEGEND

TEMPORARY PAVEMENT MARKING

PAINT 4"

WHITE EDGELINE

YELLOW DOUBLE CENTER

GENERAL

----- EXIST. PVMT.

NORTH ARROW



WORK AREA



TRAFFIC CONTROL DEVICES

BARRICADE (TYPE III)



DRUM SKINNY DRUM O TUBULAR MARKER

TEMPORARY SIGNING

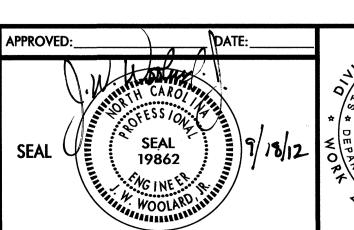
OPPORTABLE SIGN

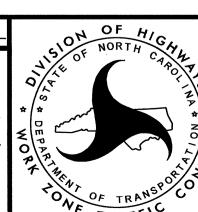
STATIONARY SIGN

PAVEMENT MARKINGS

----EXISTING LINES

----TEMPORARY LINES





ROADWAY STANDARD DRAWINGS & LEGEND

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.

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

PAVEMENT EDGE DROP OFF REQUIREMENTS

G) 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 A 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.

H) 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 ONCE EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

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

SIGNING

- J) 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.
- K) 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.

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.
- O) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES (DRUMS, CONES OR SKINNY DRUMS) PERPENDICULAR TO THE EDGE OF TRAVELWAY ON (500 FT) CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

PAVEMENT MARKINGS AND MARKERS

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

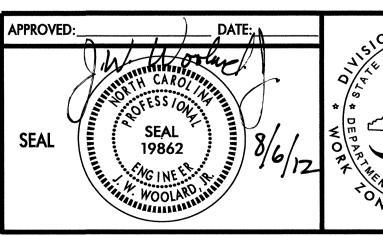
ROAD NAME

MARKING

- 1- ALL ROADS
- 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.

PAINT

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





GENERAL NOTES

PHASE 1

- STEP 1) INSTALL ADVANCE WORK ZONE WARNING SIGNS ACCORDING TO ROADWAY STANDARD DRAWING NO. 1101.01
- STEP 2) -AWAY FROM TRAFFIC, CONSTRUCT PROPOSED -L- BRIDGE AND APPROACHES AND -Y1-UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE AS SHOWN ON SHEET TMP-4A & B FROM -L- STA 13+16 +/- TO -L- STA 30+20 +/-
 - -USING TMP-5 AND ROADWAY STANDARD DRAWING 1101.03, SHEET 1 OF 9, CONTRACTOR MAY BEGIN INSTALLATION OF OFFSITE DETOUR SIGNING AND ROAD CLOSURE SIGNING. COVER SIGNS.
- NOTE: ALL OFF-SITE DETOUR SIGNING AND ROAD CLOSURE SIGNING SHALL BE COVERED UNTIL ROCKY FORD RD IS READY TO BE CLOSED.

PHASE 2

- NOTE: PROVIDE ACCESS TO LOCAL RESIDENTS AND BUSINESSES DURING CONSTRUCTION AND WHILE ROCKY FORD RD IS CLOSED TO THROUGH TRAFFIC
- NOTE: COMPLETE THE WORK OF PHASE 2, STEP 1 THROUGH STEP 4 IN TWENTY-ONE (21) CONSECUTIVE CALENDAR DAYS. (SEE CONTRACT TIME AND LIQUIDATED DAMAGES).
- STEP 1) USING TMP-5 AND ROADWAY STANDARD DRAWING 1101.03, SHEET 1 OF 9, COMPLETE INSTALLATION OF OFFSITE DETOUR SIGNING AND ROAD CLOSURE SIGNING. CLOSE SR 2019 AND PLACE TRAFFIC ON THE OFFSITE DETOUR.

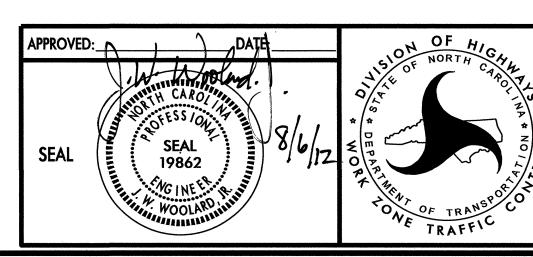
 COVER ADVANCE WORK ZONE WARNING SIGNS PREVIOUSLY INSTALLED IN PHASE 1, STEP 1.
- STEP 2) AWAY FROM TRAFFIC, CONSTRUCT PROPOSED TIE-INS FOR -L- AND -Y1- UP
 TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE
- STEP 3) PLACE TEMPORARY PAVEMENT MARKINGS ON -L- AS SHOWN IN THE FINAL PAVEMENT.

 MARKING PLAN. UNCOVER ADVANCE WORK ZONE WARNING SIGNS COVERED IN PHASE 2,

 STEP 1.
- STEP 4) OPEN -L- (RELOCATED SR 2019) TO THE PROPOSED 2-LANE, 2-WAY TRAFFIC PATTERN. REMOVE OFFSITE DETOUR SIGNING AND ROAD CLOSURE SIGNING.

PHASE 3

- STEP 1) AWAY FROM TRAFFIC, REMOVE THE EXISTING BRIDGE NO. 95 AND EXISTING APPROACHES(SEE SHEET TCP 6A & B AND ROADWAY PLANS).
- STEP 2) USING ROADWAY STANDARD DRAWING 1101.02, SHEET 1 OF 15, PLACE THE FINAL LAYER OF SURFACE COURSE AND FINAL PAVEMENT MARKINGS.
- STEP 3) REMOVE ALL WORK ZONE TRAFFIC CONTROL DEVICES AND ADVANCE WORK ZONE WARNING SIGNS.



PHASING

