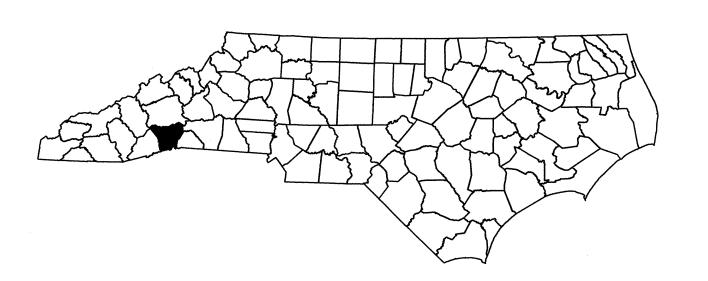
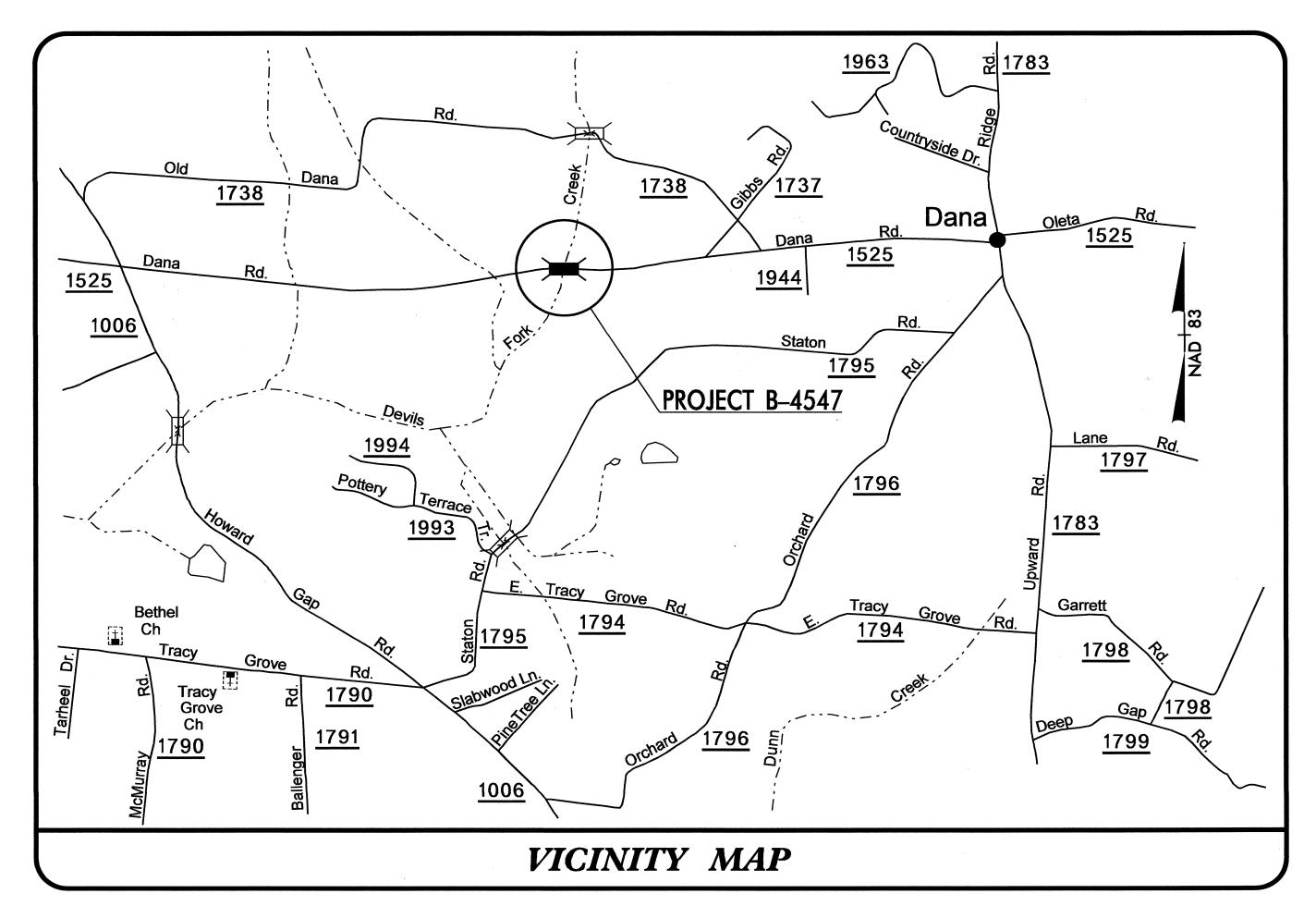
STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

HENDERSON COUNTY





WORK ZONE SAFETY & MOBILITY "from the MOUNTAINS to the COAST"

N.C.D.O.T. WORK ZONE TRAFFIC CONTROL

1561 MAIL SERVICE CENTER (MSC) RALEIGH, NC 27699-1561

750 N. GREENFIELD PARKWAY, GARNER, NC 27529 (DELIVERY)

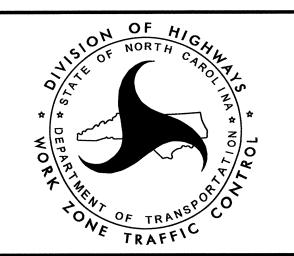
PHONE: (919) 773-2800 FAX: (919) 771-2745

J. S. BOURNE, P.E. STATE TRAFFIC MANAGEMENT ENGINEER

G. L. GETTIER, P.E. TRAFFIC CONTROL PROJECT ENGINEER

J. W. WOOLARD, P.E. TRAFFIC CONTROL PROJECT DESIGN ENGINEER

S. B. COATS TRAFFIC CONTROL DESIGN ENGINEER



INDEX OF SHEETS

SHEET NO. TITLE TITLE SHEET, AND INDEX OF SHEETS TMP-1 LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND, AND TEMPORARY PAVEMENT MARKINGS TMP-1A TRANSPORTATION OPERATIONS PLAN: (TRANSPORTATION TMP-1B OPERATIONS AND GENERAL NOTES) PHASING AND PHASE I DETAILS TMP-2

PHASE II DETAILS TMP-3 PHASE III DETAILS TMP-4

B

APPROVED:_ DATE:_ SEAL

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:

STD. NO.	<u>TITLE</u>
1101.01	WORK ZONE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD 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	FLAGGING DEVICES
1180.01	SKINNY - DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO LANE AND MULTILANE ROADWAYS
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

LEGEND

TEMPORARY PAVEMENT MARKINGS

PA - 4" WHITE EDGELINE (PAINT) PI - 4" YELLOW DOUBLE CENTER (PAINT)

NORTH ARROW

----- EXIST. PVMT.

— PROPOSED PVMT.

WORK AREA

REMOVAL

GENERAL

USER DEFINED (IF NEEDED)

DIRECTION OF TRAFFIC FLOW

DIRECTION OF PEDESTRIAN TRAFFIC FLOW

USER DEFINED (IF NEEDED)

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

SIGNALS







PAVEMENT MARKINGS

----EXISTING LINES ----TEMPORARY LINES

PAVEMENT MARKERS

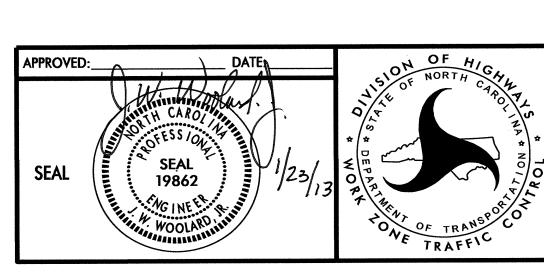
CRYSTAL/CRYSTAL

CRYSTAL/RED

YELLOW/YELLOW

PAVEMENT MARKING SYMBOLS

PAVEMENT MARKING SYMBOLS



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.

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.

TRAFFIC PATTERN ALTERATIONS

G) NOTIFY THE ENGINEER TWENTY ONE (21) 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 TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.

PAVEMENT MARKINGS AND MARKERS

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

ROAD NAME	<u>MARKING</u>	<u>MARKER</u>
SR 1525	PAINT	N/A
-LDET-	PAINT	TEMPORARY

- M) 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.
- N) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

TRANSPORTATION OPERATIONS

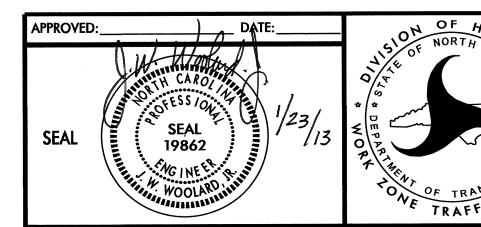
PROJ. REFERENCE	NO.	SHEET	NO.
B-4547		TMP-	1B

CONSTRUCTION

CONSTRUCT ON-SITE DETOUR INCLUDING TEMPORARY PIPE CULVERT AND HEADWALLS. SHIFT EXISTING TRAFFIC TO ON-SITE DETOUR. CONSTRUCT SR 1525 (DANA RD.) INCLUDING NEW CULVERT AND ROADWAY APPROACHES AS SHOWN IN THE CONSTRUCTION PLANS. OBLITERATE ON-SITE DETOUR AND TEMPORARY PAVEMENT AS SHOWN IN THE CONSTRUCTION PLANS.

TMP DESIGN PARAMETERS

UTILIZE FLAGGERS, TEMPORARY SIGNAGE, TRAFFIC CONTROL DEVICES, AND TEMPORARY GUARDRAIL TO CONSTRUCT ON-SITE DETOUR AND SR 1525 (DANA RD.) (SEE SHEET TMP-2 THRU TMP-4).



TRANSPORTATION OPERATIONS PLAN

PHASING

PHASE I

- STEP 1. INSTALL ALL ADVANCE WORK ZONE SIGNS ON SR 1525 (DANA RD.), SEE RSD 1101.01 (SHEET 3 OF 3).
- STEP 2. USING RSD NO. 1101.02 (SHEET 1 OF 15), CONSTRUCT -LDET- LINE, INCLUDING CULVERT PIPE, TEMPORARY DRAINAGE, AND TEMPORARY GUARDRAIL, UP TO EDGE AND ELEVATION OF THE EXISTING PAVEMENT AS FOLLOWS (SEE CONSTRUCTION PLANS AND TMP-2):
 - STA. 10+00+/- -LDET- TO STA. 19+50+/- -LDET-

PHASE II

- STEP 1. USING RSD NO. 1101.02 (SHEET 1 OF 15), PLACE TEMPORARY PAVEMENT MARKINGS AND MARKERS AS FOLLOWS (SEE CONSTRUCTION PLANS AND TMP-3):
 - STA. 9+95+/- -L- TO STA. 27+71+/- -L-

- STA. 18+24+/- -L- TO STA. 22+50+/- -L-

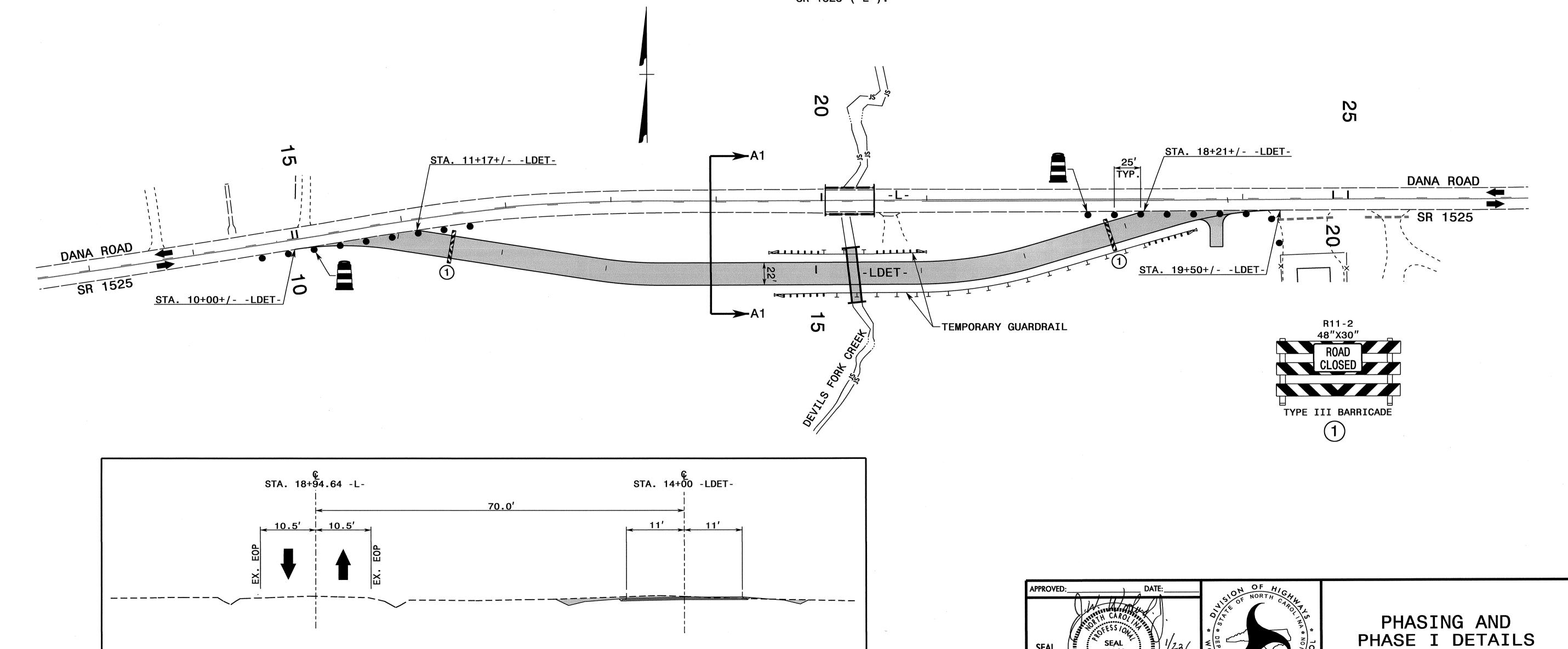
- SHIFT TRAFFIC FROM A TWO-LANE, TWO-WAY TRAFFIC TO A TWO-LANE, TWO-WAY TRAFFIC PATTERN ON -DET- LINE.

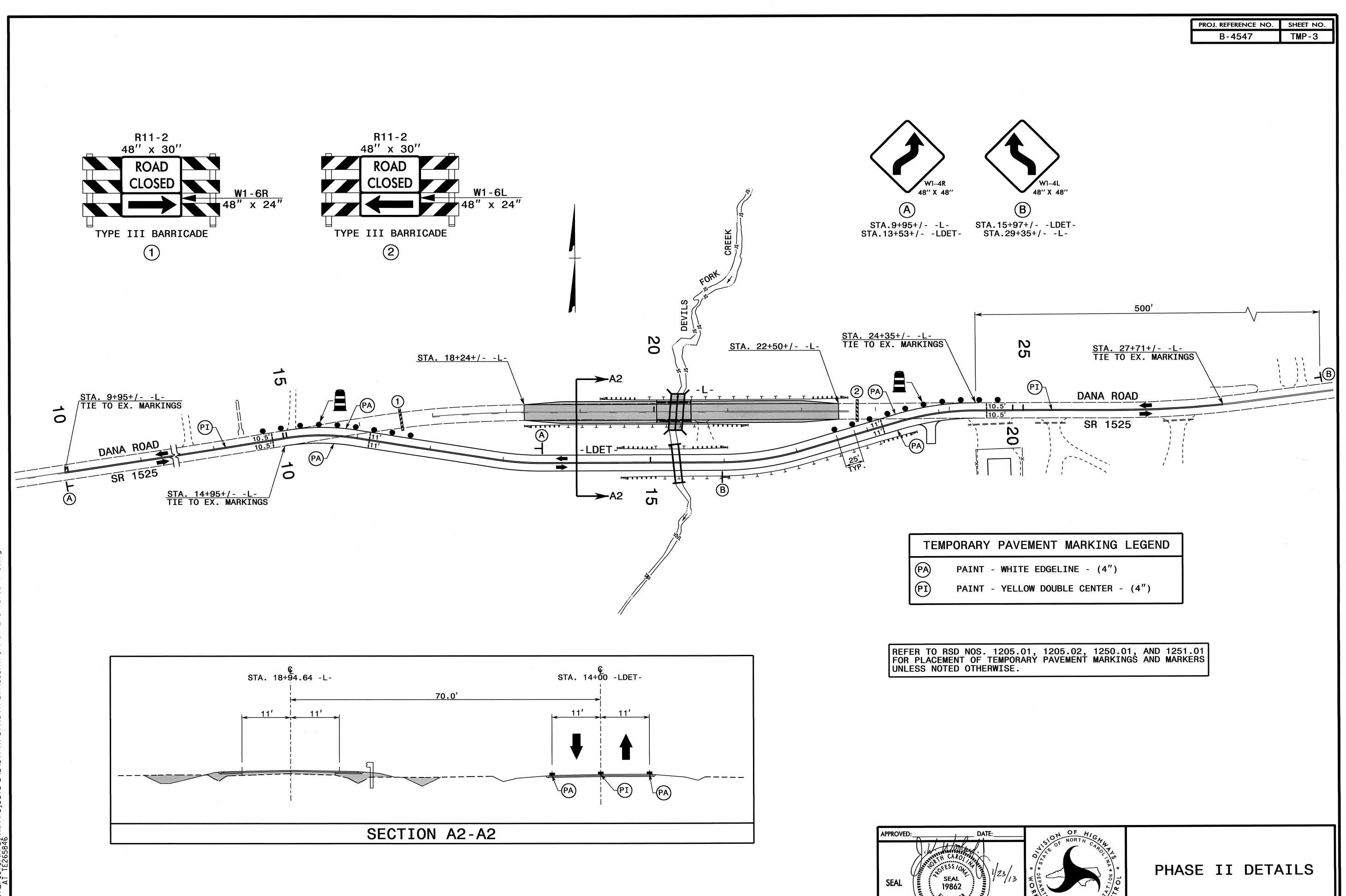
SECTION A1-A1

STEP 2. USING RSD NO. 1101.03 (SHEET 3 OF 9), CONSTRUCT -L- LINE, INCLUDING NEW CULVERT, DRAINAGE, AND GUARDRAIL UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE AS FOLLOWS (SEE CONSTRUCTION PLANS AND TMP-3):

PHASE III

- STEP 1. USING RSD NO. 1101.02 (SHEET 1 OF 15), PAVE/WEDGE -L- LINE UP TO BUT NOT INCLUDING THE FINAL SURFACE COURSE AS FOLLOWS (SEE CONSTRUCTION PLANS AND TMP-4):
 - STA. 14+25+/- -L- TO STA. 18+24+/- -L-- STA. 22+50+/- -L- TO STA. 25+25+/- -L-
 - PLACE TEMPORARY PAVEMENT MARKINGS AND MARKERS AS FOLLOWS (SEE CONSTRUCTION PLANS AND TMP-4):
 - STA. 14+25+/- -L- TO STA. 25+25+/- -L-
 - SHIFT TRAFFIC TO FINAL TRAFFIC PATTERN ON -L- LINE.
- STEP 2. USING RSD NO. 1101.02 (SHEET 1 OF 15), REMOVE TEMPORARY PAVEMENT, CULVERT PIPE, TEMPORARY GUARDRAIL, AND CONSTRUCT DRIVEWAY AS SHOWN ON TMP-4.
- STEP 3. USING RSD NO. 1101.02 (SHEET 1 OF 15), PAVE/WEDGE UP TO AND INCLUDING THE FINAL LAYER OF SURFACE COURSE AS FOLLOWS (SEE CONSTRUCTION PLANS):
 - STA. 14+25+/- -L- TO STA. 25+25+/- -L-
 - USING RSD 1101.02 (SHEET 1 OF 15), PLACE FINAL PAVEMENT MARKINGS AS FOLLOWS (SEE FINAL PAVEMENT MARKING PLANS):
 - STA. 14+25+/- -L- TO STA. 25+25+/- -L-
 - REMOVE ALL TRAFFIC CONTROL DEVICES AND ADVANCE WARNING SIGNS FROM SR 1525 (-L-).





22-JAN-2013 11:35

