

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

STATE PROJECT REFERENCE NO.	SHEET NO.
B-4524	TCP-1

**PLAN FOR PROPOSED  
TRAFFIC CONTROL, MARKING & DELINEATION  
GRANVILLE COUNTY**

B-4524

**ROADWAY STANDARD DRAWINGS**

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT-N.C. DEPARTMENT OF TRANSPORTATION-RALEIGH, N.C., DATED JULY 2006 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.03	TEMPORARY ROAD CLOSURES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1145.01	BARRICADES TYPE III
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS
1205.12	PAVEMENT MARKINGS - BRIDGES
1250.01	PAVEMENT MARKER SPACING
1251.01	RAISED PAVEMENT MARKERS (TEMPORARY & PERMANENT)
1261.01	GUARDRAIL & BARRIER DELINEATOR SPACING
1261.02	GUARDRAIL & BARRIER DELINEATOR TYPES
1262.01	GUARDRAIL END DELINEATION

**INDEX OF SHEETS**

SHEET NO.	TITLE
TCP-1	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, FINAL PAVEMENT MARKING SCHEDULE, LEGEND AND INDEX OF SHEETS
TCP-2	PROJECT NOTES AND PHASING
TCP-3	DETOUR ROUTE AND BARRICADE PLACEMENT
SD-1	SPECIAL SIGN DESIGN

**LEGEND**

- GENERAL**
- DIRECTION OF TRAFFIC FLOW
  - NORTH ARROW
  - PROPOSED PVMT. EXIST. PVMT.
  - WORK AREA
  - REMOVAL OF EXISTING PAVEMENT

**TRAFFIC CONTROL DEVICES**

- TYPE I BARRICADE
- TYPE II BARRICADE
- TYPE III BARRICADE
- CONE
- DRUM SKINNY DRUM
- FLASHING ARROW PANEL (TYPE C)
- STATIONARY SIGN
- PORTABLE SIGN
- STATIONARY OR PORTABLE SIGN
- CRASH CUSHION
- CHANGEABLE MESSAGE SIGN
- TRUCK MOUNTED IMPACT ATTENUATOR (TMIA)
- POLICE
- FLAGGER

**PAVEMENT MARKINGS**

- CRYSTAL/CRYSTAL PAVEMENT MARKER
- YELLOW/YELLOW PAVEMENT MARKER
- CRYSTAL/RED PAVEMENT MARKER
- PAVEMENT MARKING SYMBOLS

**FINAL PAVEMENT MARKING SCHEDULE**

SYMBOL	DESCRIPTION	PAVEMENT MARKINGS	PAY ITEM QUANTITY BREAKDOWN	TOTAL
PA	WHITE EDGE LINE (2X)	PAINT (4")	800 FT	1600 FT
PI	YELLOW DOUBLE CENTER (2X)	PAINT (4")	400 FT	1600 FT
		MARKERS		
MA	YELLOW & YELLOW	PERMANENT RAISED PAVEMENT MARKERS	6 EA	6 EA
<b>NOTE:</b> FOR EACH PAINT PAVEMENT MARKING ITEM, 1X IMPLIES A SINGLE APPLICATION, 2X IMPLIES TWO APPLICATIONS, AND 3X IMPLIES THREE APPLICATIONS.				

TIP PROJECT:

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APPROVED: _____ DATE: _____	PLAN PREPARED BY: N.C.D.O.T. WORK ZONE TRAFFIC CONTROL UNIT
	J. STUART BOURNE, P. E. TRAFFIC CONTROL ENGINEER
	JOSEPH ISHAK, P.E. TRAFFIC CONTROL PROJECT ENGINEER
	J.L. PORTANOVA, P.E. TRAFFIC CONTROL PROJECT DESIGN ENGINEER
	ALLA LYUDMIRSKAYA TRAFFIC CONTROL DESIGN ENGINEER

## PROJECT 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 AS DIRECTED BY THE ENGINEER.

### TRAFFIC PATTERN ALTERATIONS

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

### SIGNING

- B) PROVIDE PERMANENT SIGNING.
- C) PROVIDE DETOUR SIGNING WITHIN AND OFF THE PROJECT LIMITS.
- D) COVER OR REMOVE ALL DETOUR SIGNS WITHIN AND OFF THE PROJECT LIMITS WHEN A DETOUR IS NOT IN OPERATION.
- E) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

### TRAFFIC CONTROL DEVICES

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

### PAVEMENT MARKINGS AND MARKERS

- G) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOW:

ROAD NAME	MARKING	MARKER
SR 1309 (BEN THORPE RD.)	PAINT	PERMANENT RAISED

- H) PLACE TWO APPLICATIONS OF PAINT PAVEMENT MARKINGS ON THE FINAL WEARING SURFACE. PLACE THE SECOND APPLICATION OF PAINT UPON SUFFICIENT DRYING TIME OF THE FIRST.
- I) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

## PHASING



**STEP 1:** USING RSD 1101.03, SHEET 1 OF 9, SHEETS TCP-3 AND SD-1, INSTALL DETOUR SIGNS, PLACE TYPE III BARRICADES TO CLOSE SR 1309 (BEN THORPE RD.) TO THROUGH TRAFFIC, AND DETOUR TRAFFIC OFFSITE.

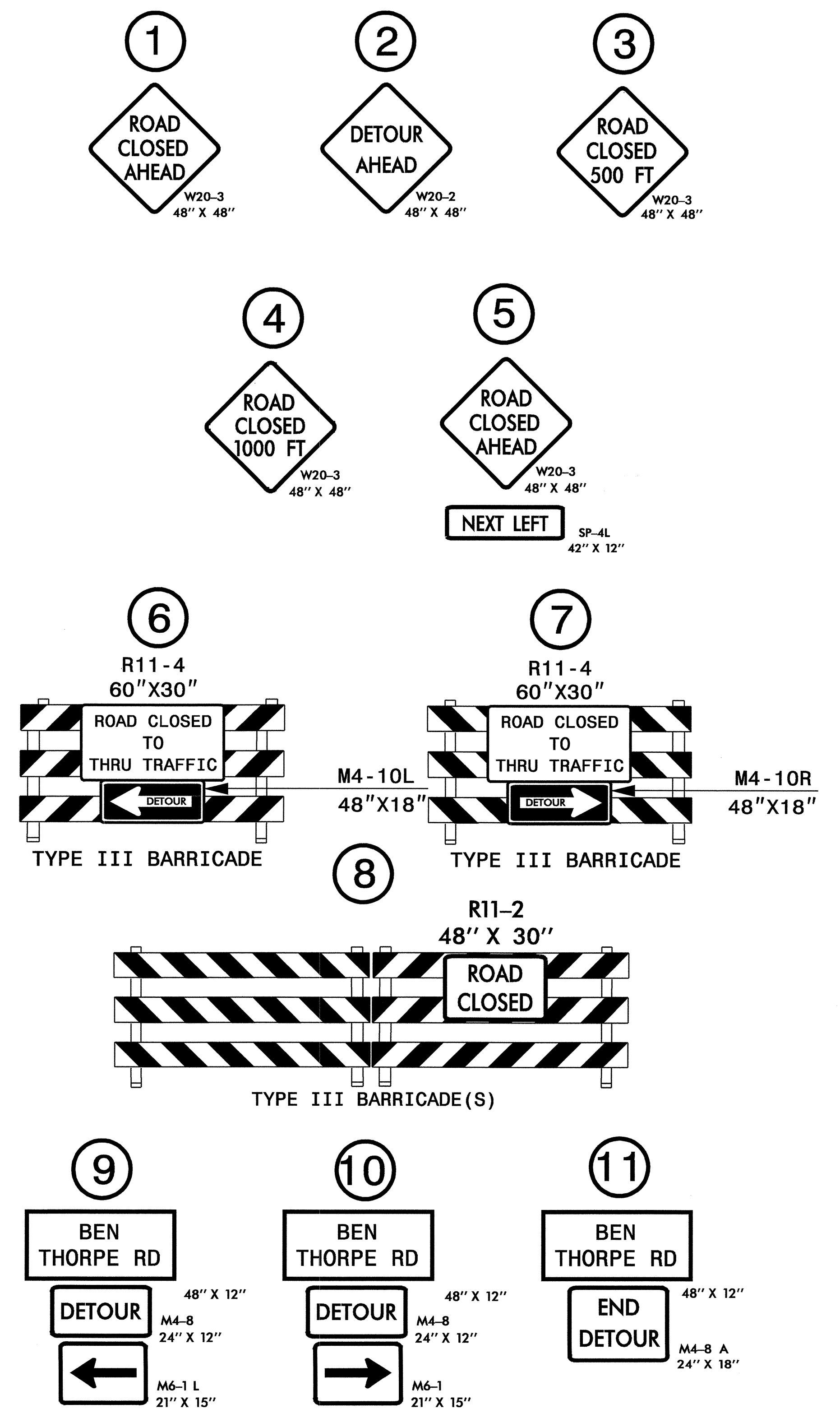
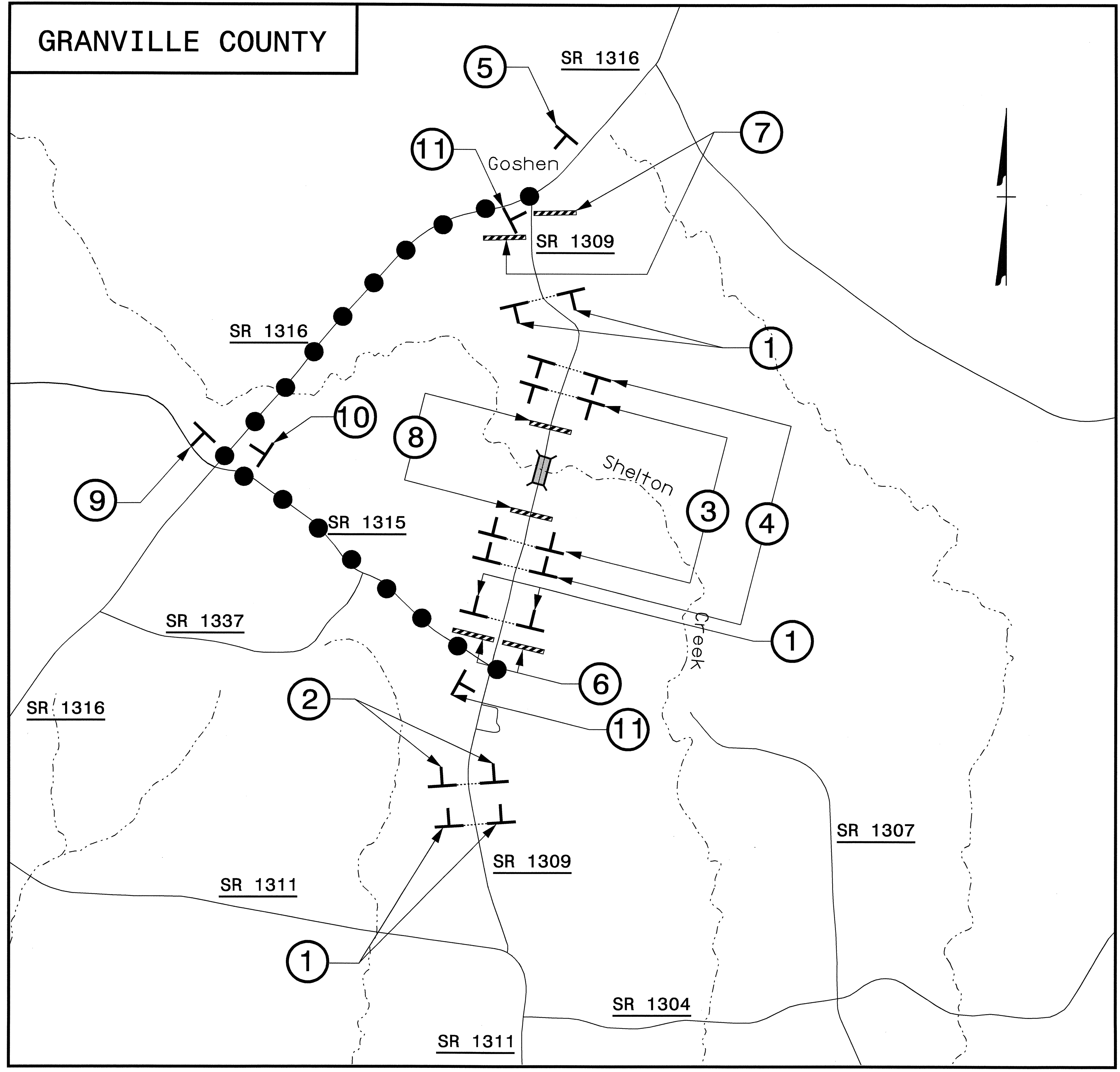
**STEP 2:** AWAY FROM TRAFFIC, COMPLETE THE FOLLOWING:

- 1) - REMOVE EXISTING STRUCTURE No.193 AND CONSTRUCT PROPOSED STRUCTURE FROM -L- STA.13+81+/- TO -L- STA.14+81+/- . SEE ROADWAY PLANS.
- CONSTRUCT PROPOSED ROADWAY UP TO AND INCLUDING FINAL LAYER OF SURFACE COURSE FROM -L- STA.12+50+/- TO -L- STA.16+20+/- . SEE ROADWAY PLANS.
- 2) PLACE FINAL PAVEMENT MARKING (PAINT) & FINAL PAVEMENT MARKERS (PERMANENT RAISED) FROM -L- STA. 12+50+/- TO -L- STA.16+20+/- , AND TIE IN TO EXISTING PAVEMENT MARKING.

**STEP 3:** REMOVE ALL TEMPORARY WORK ZONE TRAFFIC CONTROL DEVICES AND ALL DETOUR SIGNING. OPEN SR 1309 (BEN THORPE RD.) TO TWO-LANE, TWO-WAY TRAFFIC PATTERN.

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APPROVED: _____	DATE: _____	<b>PROJECT NOTES AND PHASING</b>	
	SCALE: NONE		REVISIONS
	DATE: AUG-08		
	DWG. BY: AYL		
	DESIGN BY: AYL		
REVIEWED BY: JLP			



OFF-SITE DETOUR ROUTE ●●●●●

**NOTES:**  
 1. SEE SHEET SD-1 FOR DETOUR SIGN DESIGN.  
 2. SEE RSD 1101.03, SHEET 1 OF 9, FOR SIGN SPACING DISTANCES.

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APPROVED: _____ DATE: _____	<b>DETOUR ROUTE AND BARRICADE PLACEMENT</b>		
	SCALE: NONE		
	DATE: 03-19-07		REVISIONS
	DWG. BY: AYL		
	DESIGN BY: AYL		
REVIEWED BY: JLP			