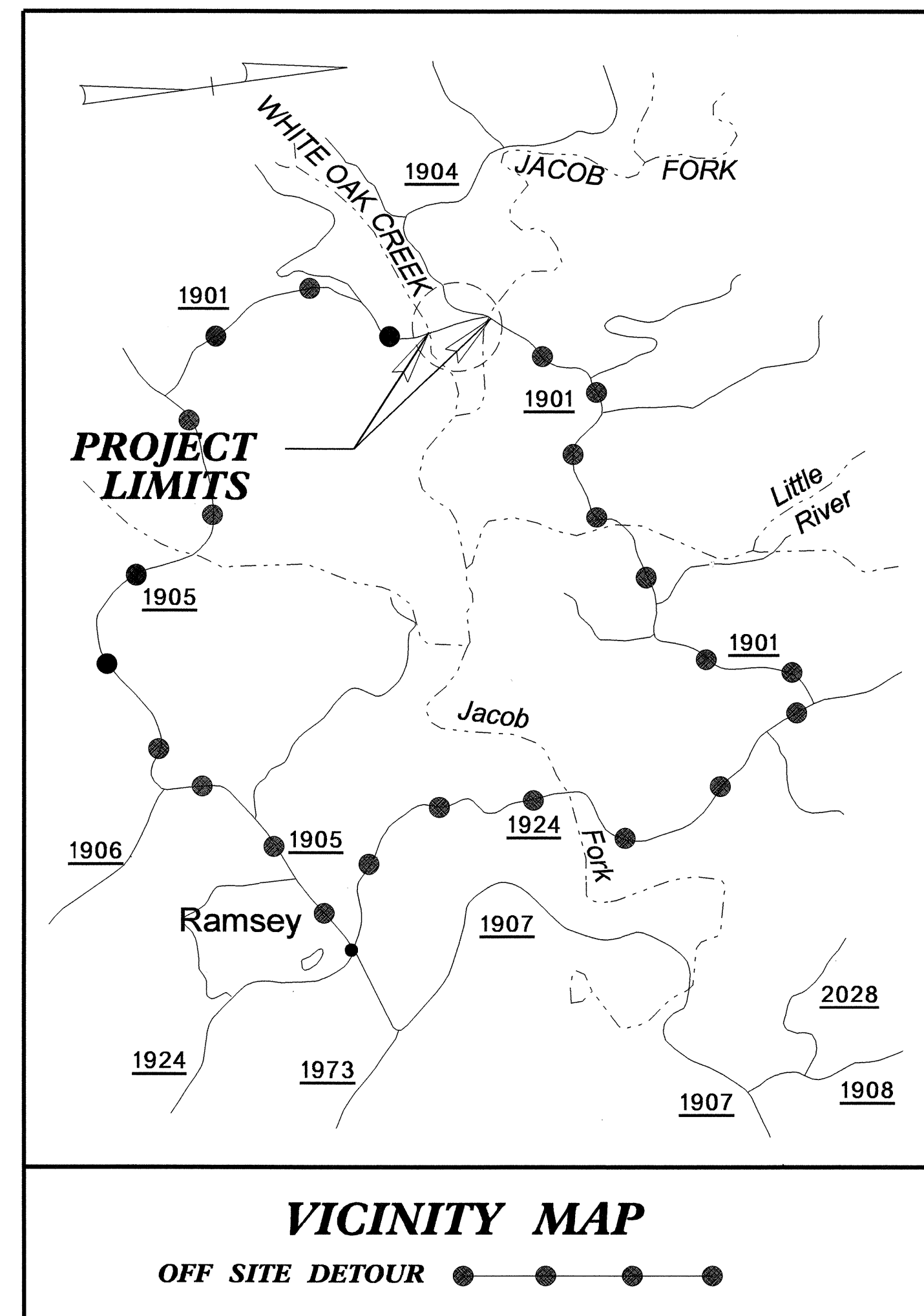
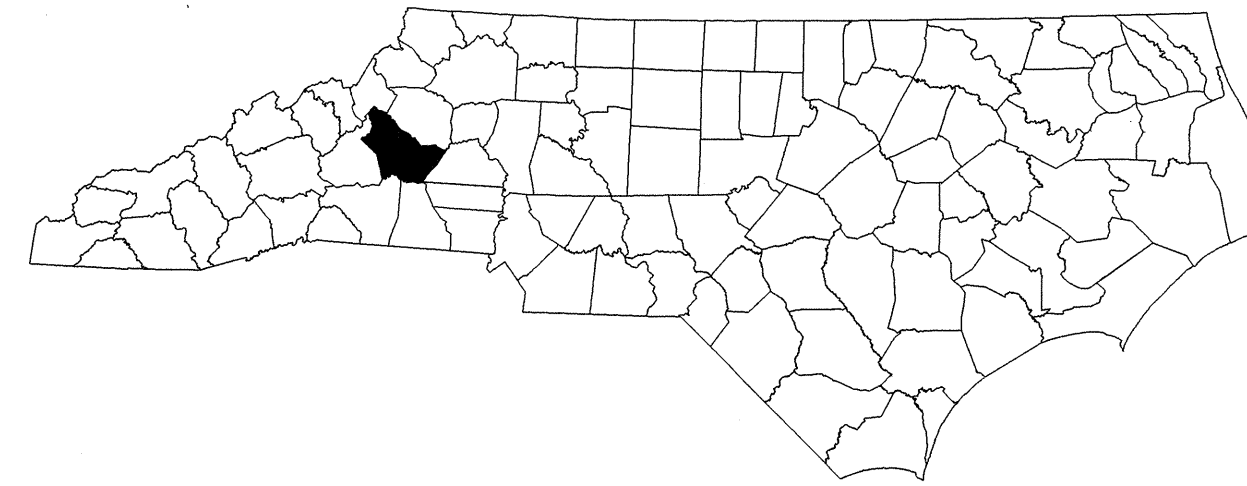


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

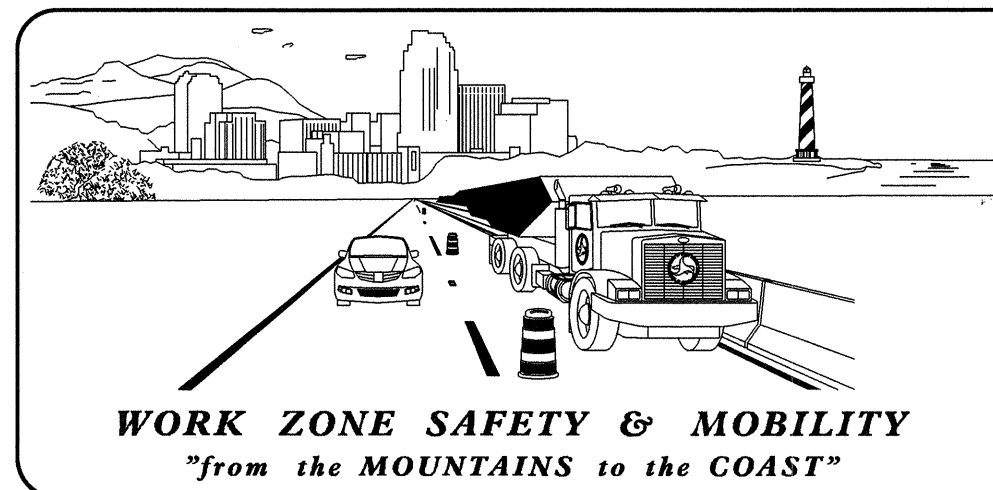
BURKE COUNTY



INDEX OF SHEETS

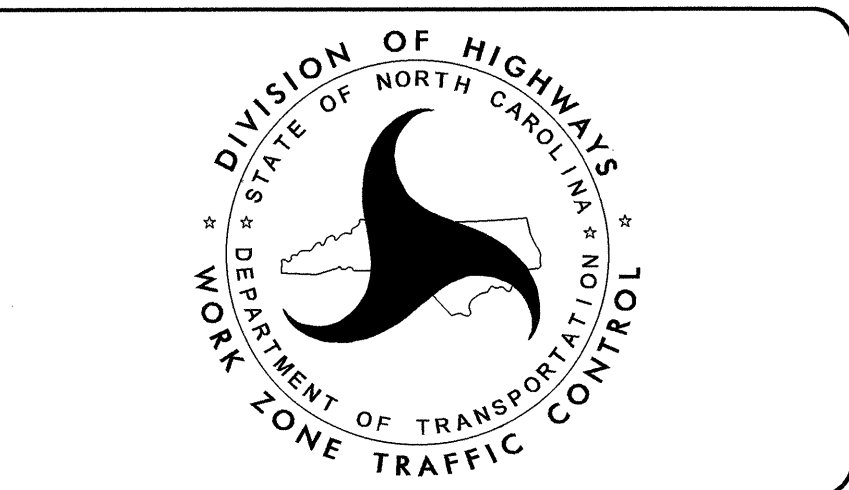
SHEET NO.	TITLE
TMP-1	TITLE SHEET, AND INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND, AND TEMPORARY PAVEMENT MARKING
TMP-1B	TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT STRATEGIES, GENERAL NOTES AND PHASING)
TMP-2	PHASE I OFFSITE DETOUR
TMP-3	PHASE I DETAIL
TMP-4	PHASE I DETAIL
TMP-5	PHASE II OFFSITE DETOUR
TMP-6	PHASE II DETAIL
TMP-7	PHASE II DETAIL
SD-1	SIGN DESIGN

28-DEC-2011 16:00
S:\DOT\GIS\SR\001\Prj\3\TIP\Projects-B\B4046\TrafficControl\top\B-4046_TC_TMP_01.dgn
shossam AT 1E248373



N.C.D.O.T. WORK ZONE TRAFFIC CONTROL
1580 MAIL SERVICE CENTER (MSC) RALEIGH, NC 27699-1580
1020 BIRCH RIDGE DRIVE, RALEIGH, NC 27610 (DELIVERY)
PHONE: (919) 250-4094 FAX: (919) 250-4098

J. S. BOURNE, P.E. STATE TRAFFIC MANAGEMENT ENGINEER
J. ISHAK, P.E. TRAFFIC CONTROL PROJECT ENGINEER
B. SCHOENBAUER, P.E. TRAFFIC CONTROL PROJECT DESIGN ENGINEER
S. HASSAN TRAFFIC CONTROL DESIGN ENGINEER



APPROVED: *Ben Ashombauer*
DATE: *January 3, 2012*

SEAL

PAUL SCHOENBAUER
PROFESSIONAL ENGINEER
LICENSE NO. 35496
STATE OF NORTH CAROLINA

TIP PROJECT: B-4046

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

STD. NO.	TITLE
1101.01	WORK ZONE ADVANCE 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
1170.01	PORTABLE CONCRETE BARRIER
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1250.01	PAVEMENT MARKER SPACING
1251.01	RAISED PAVEMENT MARKERS - (PERMANENT AND TEMPORARY)
1261.01	GUARDRAIL AND BARRIER DELINEATOR SPACING
1261.02	GUARDRAIL AND BARRIER DELINEATOR TYPES
1262.01	GUARDRAIL END DELINEATION

LEGEND

GENERAL

- DIRECTION OF TRAFFIC FLOW
- DIRECTION OF PEDESTRIAN TRAFFIC FLOW
- EXIST. PVMT.
- NORTH ARROW
- PROPOSED PVMT.

- WORK AREA
- REMOVAL
- TEMPORARY PAVEMENT
- N/A

TRAFFIC CONTROL DEVICES

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

TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

SIGNALS

- EXISTING
- PROPOSED
- T
E
M
P
ORARY

PAVEMENT MARKINGS

- EXISTING LINES
- TEMPORARY LINES

PAVEMENT MARKERS

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

PAVEMENT MARKING SYMBOLS

- PAVEMENT MARKING SYMBOLS

TEMPORARY PAVEMENT MARKING

TEMPORARY PAVEMENT MARKING SCHEDULE		
SYMBOL	DESCRIPTION	
		TEMPORARY PAVEMENT MARKINGS
		PAINT (4")
PA	WHITE EDGELINE (2X)	
PI	DOUBLE YELLOW CENTER LINE (2X)	
P4	WHITE STOP BAR (2X)	

NOTE: FOR EACH PAINT PAVEMENT MARKING ITEM, 1X IMPLIES A SINGLE APPLICATION, 2X IMPLIES TWO APPLICATIONS, AND 3X IMPLIES THREE APPLICATIONS.

28-DEC-2011 15:59 \\dot\dfsroot\10\p\c\1\TIP\Projects-B\B4046\TrafficControl\Tc\B-4046-TC-TMP_Ol.dgn

APPROVED: <i>em Schomauer</i> DATE: 1/3/2012			ROADWAY STANDARD DRAWINGS & LEGEND
SEAL			

MANAGEMENT STRATEGIES

THE FOLLOWING LISTED STRATEGIES DERIVE FROM DETAILED DESIGN LEVEL ASSESSMENTS OF THE WORK ZONE IMPACTS CONDUCTED DURING THE DEVELOPMENTAL STAGES OF THIS TRANSPORTATION MANAGEMENT PLAN (TMP).

RECOMMENDED MANAGEMENT STRATEGIES RELATIVE TO THIS TMP ARE AS FOLLOWS:

- FULL ROAD CLOSURES
TRAFFIC TO BE MAINTAINED ON THE FOLLOWING OFF-SITE DETOUR ROUTE FOR EACH BRIDGE REPLACEMENT DURING THE PROJECT. EACH BRIDGE SHALL SERVE AS PART OF THE DETOUR ROUTE FOR ACCESS TO SOUTH MOUNTAINS STATE PARK WHILE THE OTHER BRIDGE IS BEING REPLACED.

SR 1905 (MT. GILEAD RD.) AND SR 1924 (OLD NC 18).
- ONE-LANE TWO-WAY TRAFFIC
TRAFFIC TO BE MAINTAINED ON SR 1901 (WARDS GAP RD.) AND SR 1904 (S. MOUNTAIN PARK AVE.) UTILIZING FLAGGERS AS NECESSARY.

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.

TRAFFIC PATTERN ALTERATIONS

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

SIGNING

- B) 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.

- C) 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.

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

TRAFFIC CONTROL DEVICES

- E) 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 WHEN LANE CLOSURES ARE NOT IN EFFECT. WHEN SKINNY DRUMS ARE ALLOWED REFER TO SECTION 1180 OF STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES OR AS SHOWN IN THE PLANS.

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

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

ROAD NAME	MARKING	MARKER
WARDS GAP RD.	PAINT	RAISED
SOUTH MOUNTAIN PARK AVE.	PAINT	RAISED

- H) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

- I) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

PHASING

PHASE 1

STEP 1: USING ROADWAY STANDARD DRAWING 1101.03, SHEET 1 OF 9; TMP-2; AND SD-1, INSTALL DETOUR SIGNS. COVER EXISTING GUIDE SIGNS TO SOUTH MOUNTAINS STATE PARK ON SR 1905 (MOUNT GILEAD RD.). USING ROADWAY STANDARD DRAWING 1101.01, SHEET 3 OF 3; TMP-3; AND TMP-4, INSTALL WORK ZONE SIGNS, PLACE TYPE III BARRICADES TO CLOSE STRUCTURE NO. 175 TO TRAFFIC, AND PLACE BARRIERS TO CLOSE SR 1905 (WARDS GAP RD.) FROM STA. 10+00 TO STA. 17+60 +/- TO THROUGH TRAFFIC. PLACE TEMPORARY PAVEMENT MARKINGS AS SHOWN, AND DETOUR TRAFFIC.

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

- A) REMOVE EXISTING STRUCTURE NO. 175 AND CONSTRUCT PROPOSED STRUCTURE. SEE ROADWAY AND STRUCTURE PLANS.
- B) COMPLETE THE ROADWAY UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE FROM -L- STA. 10+00 +/- TO -L- STA. 17+80 +/--. SEE ROADWAY PLANS. TIE IN TO EXISTING -L-/-Y- TO ALLOW ACCESS TO EXISTING DRIVEWAYS.
- C) PLACE TEMPORARY PAVEMENT MARKINGS IN ACCORDANCE TO FINAL PAVEMENT MARKING PLANS OR AS DIRECTED BY THE ENGINEER.

-USING FLAGGERS,

- A) CONSTRUCT SHOULDERS ON PROPOSED -Y-. WEDGE AND LEVEL -Y- TO PROPOSED GRADE FROM STA. 13+25 TO STA. 15+25+/-, AND TIE IN -Y- TO PROPOSED -L- BEHIND ROAD CLOSURE. USING TEMPORARY PAVEMENT, WEDGE AND LEVEL OVER EXISTING PAVEMENT BETWEEN -Y-, STA. 15+05 +/- TO EXISTING BRIDGE NO. 38 TO MAINTAIN ACCESS TO SOUTH MOUNTAINS STATE PARK.
- B) REAPPLY TEMPORARY PAVEMENT MARKINGS AS SHOWN ON TMP-4 AFTER WEDGING AND LEVELING. PLACE TEMPORARY PAVEMENT MARKINGS ON -Y-, FROM STA. 13+25 TO STA. 14+65, IN ACCORDANCE TO FINAL PAVEMENT MARKING PLAN. BEHIND ROAD CLOSURE, PLACE TEMPORARY PAVEMENT MARKINGS ON -L-, FROM STA. 10+25 TO STA. 17+60 +/-, AS SHOWN TMP-6 IN ACCORDANCE TO FINAL PAVEMENT MARKING PLANS.

STEP 3: A) REMOVE BARRICADES AND ALL OTHER ROAD CLOSURE DEVICES FOR BRIDGE NO. 175, AND OPEN SR 1901 (WARDS GAP RD.) TO REALIGNED TWO-LANE TWO-WAY TRAFFIC PATTERN. REMOVE, INSTALL, AND/OR REVISE ALL DETOUR SIGNS TO MATCH PHASE II DETOUR PATTERN USING ROADWAY STANDARD DRAWING 1101.03, SHEET 1 OF 9; TMP-5; AND SD-1. UNCOVER EXISTING GUIDE SIGNS TO SOUTH MOUNTAINS STATE PARK ON SR 1905 (MOUNT GILEAD RD.), AND COVER EXISTING GUIDE SIGNS TO SOUTH MOUNTAINS STATE PARK ON SR 1924 (OLD NC 18). USE FLAGGERS AS NECESSARY TO DIRECT TRAFFIC UNTIL PHASE II ROAD CLOSURE IN ORDER TO MAINTAIN ACCESS TO SOUTH MOUNTAINS STATE PARK.

- B) IN A CONTINUOUS MANNER FROM STEP 3A, PLACE TYPE III BARRICADES, DRUMS, AND BARRIERS TO CLOSE SR 1901 (WARDS GAP RD.) TO TRAFFIC, FROM STA. 17+60 +/- TO STA. 23+65 USING ROADWAY STANDARD DRAWING 1101.01, SHEET 3 OF 3; TMP-6; AND TMP-7. PLACE TEMPORARY MARKINGS AS SHOWN, AND DETOUR TRAFFIC.

PHASE 2

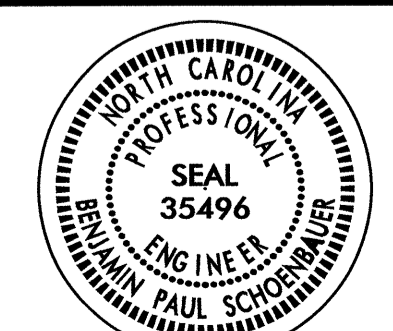

STEP 1: AWAY FROM TRAFFIC, COMPLETE THE FOLLOWING:

- A) REMOVE EXISTING STRUCTURE NO. 38 AND CONSTRUCT PROPOSED STRUCTURE. SEE ROADWAY AND STRUCTURE PLANS.
- B) CONSTRUCT PROPOSED ROADWAY AND BRIDGE APPROACHES UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. TIE IN NEWLY CONSTRUCTED ROADWAY TO PROPOSED -L-/-Y- AND EXISTING -L- AT STA. 23+50. WEDGE AND LEVEL -L- AND -Y- AS NECESSARY OR AS DIRECTED BY THE ENGINEER. PLACE TEMPORARY PAVEMENT MARKINGS IN ACCORDANCE TO FINAL PAVEMENT MARKING PLAN OR AS DIRECTED BY THE ENGINEER.

STEP 2: REMOVE ALL ROAD CLOSURE AND SIGNING, AND OPEN SR 1901 (WARDS GAP RD.) AND SR 1904 (S. MOUNTAIN STATE PARK RD.) TO PROPOSED TRAFFIC PATTERN.

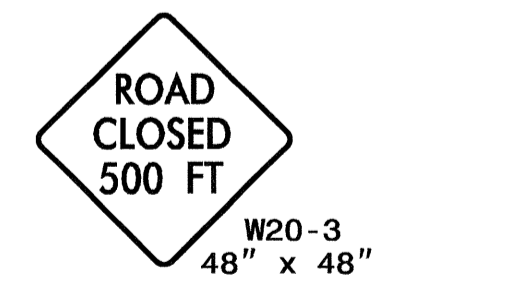
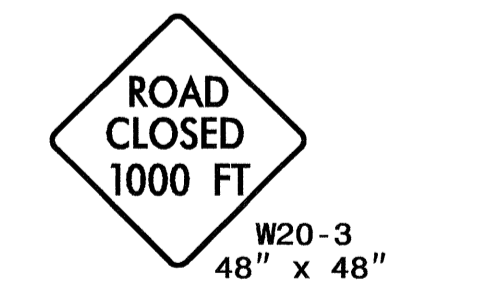
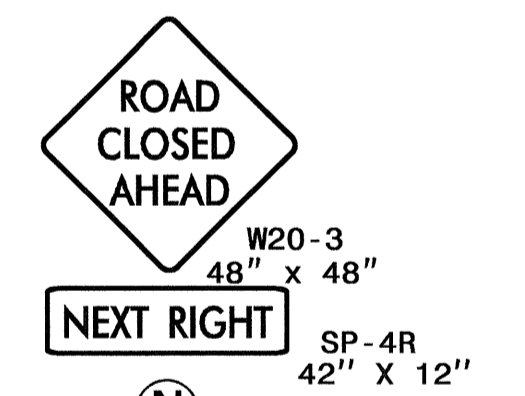
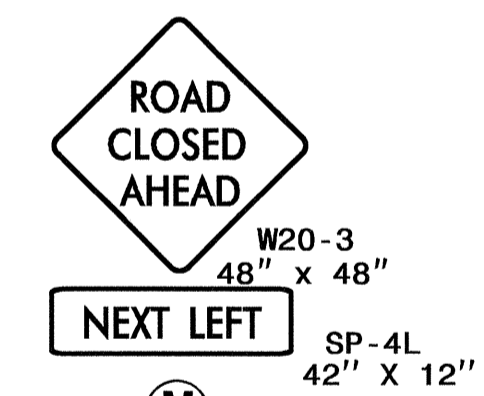
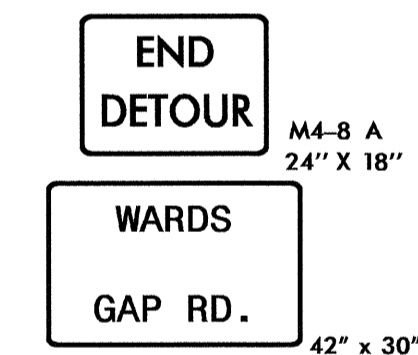
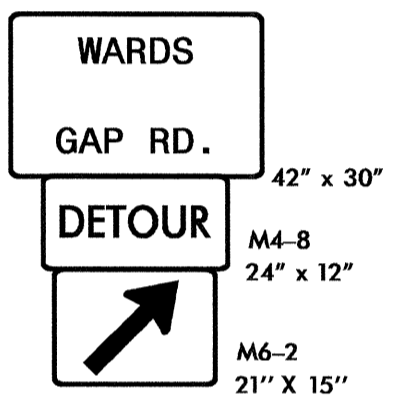
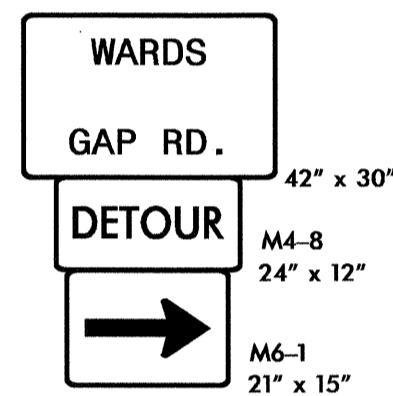
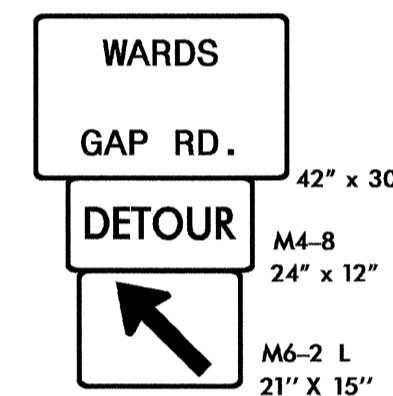
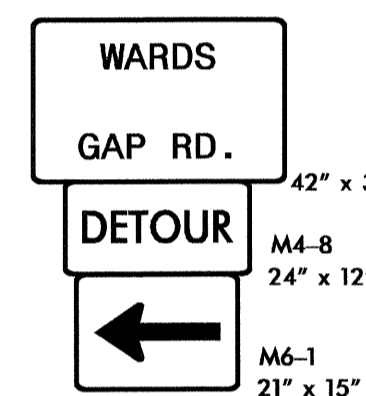
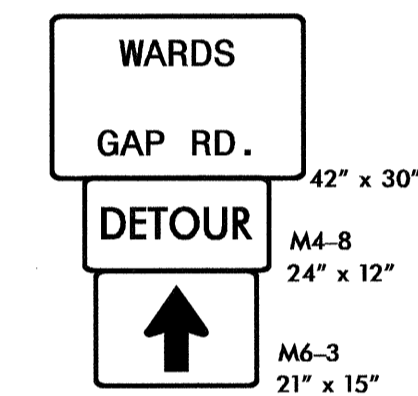
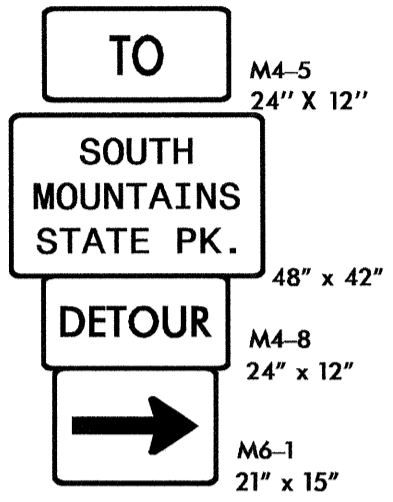
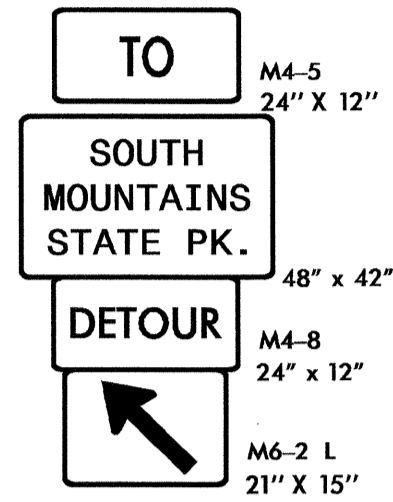
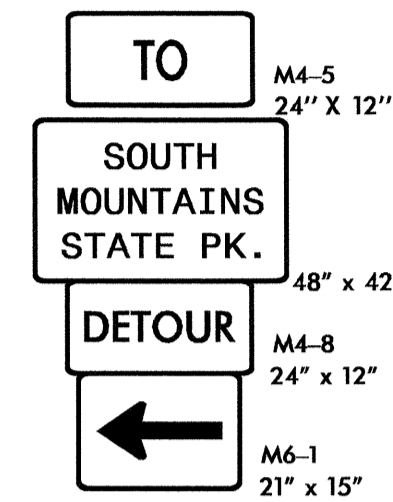
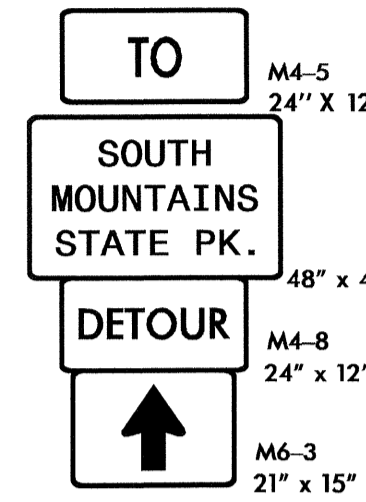
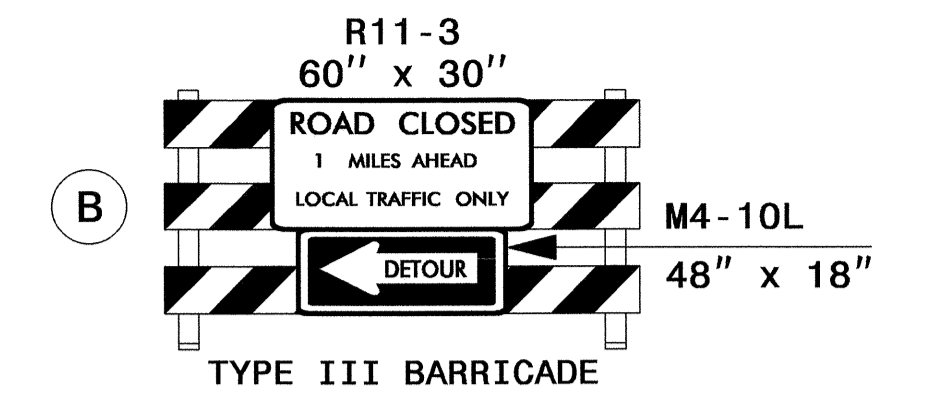
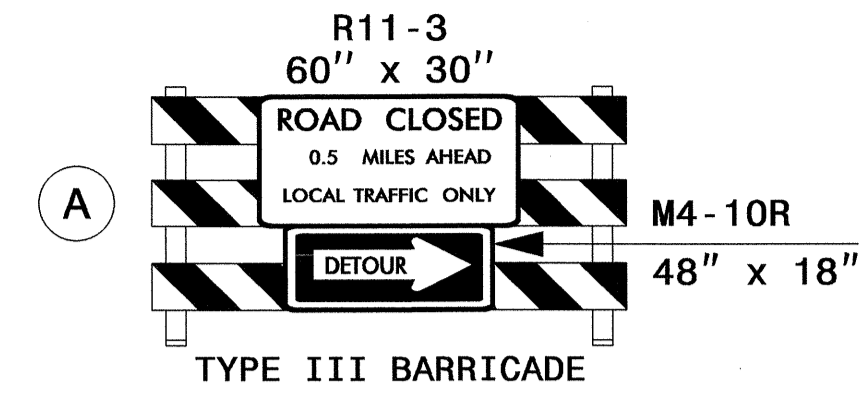
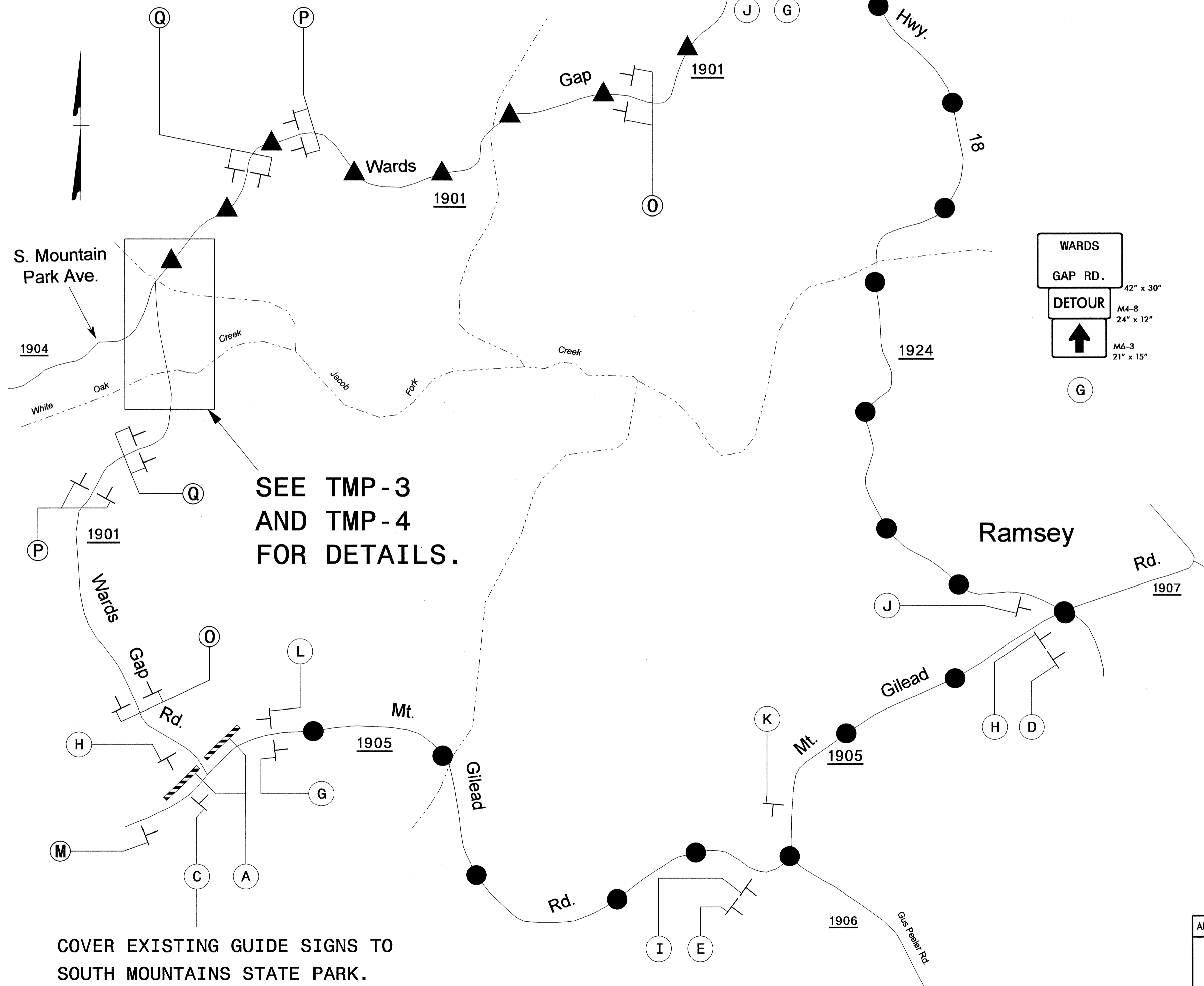
STEP 3: USING FLAGGERS, PLACE FINAL SURFACE COURSE ON -L- AND -Y-. PLACE FINAL PAVEMENT MARKINGS.

STEP 4: REMOVE ALL WORKZONE TRAFFIC CONTROL DEVICES. OPEN -L- AND -Y- TO THE FINAL TRAFFIC PATTERN.

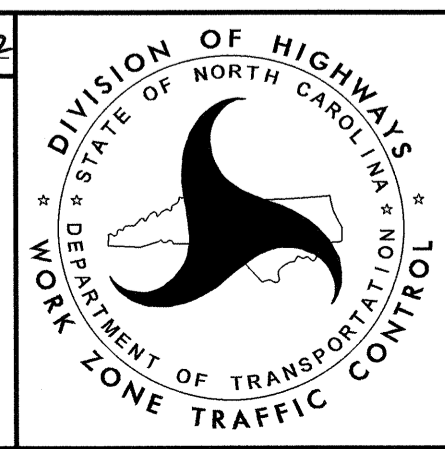
<p>APPROVED: <i>Paul Schor</i> DATE: 1/6/2012</p> 		<h1 style="margin: 0;">TRANSPORTATION OPERATIONS PLAN</h1>
---	---	--

OFFSITE
 DETOUR
 ROUTE

SOUTH
 MOUNTAINS
 STATE PARK
 ROUTE



APPROVED: *Ben Schwaninger* DATE: 1/3/2012



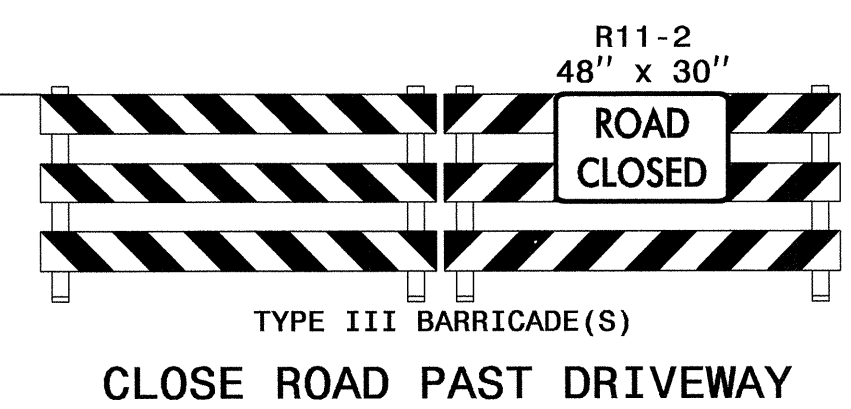
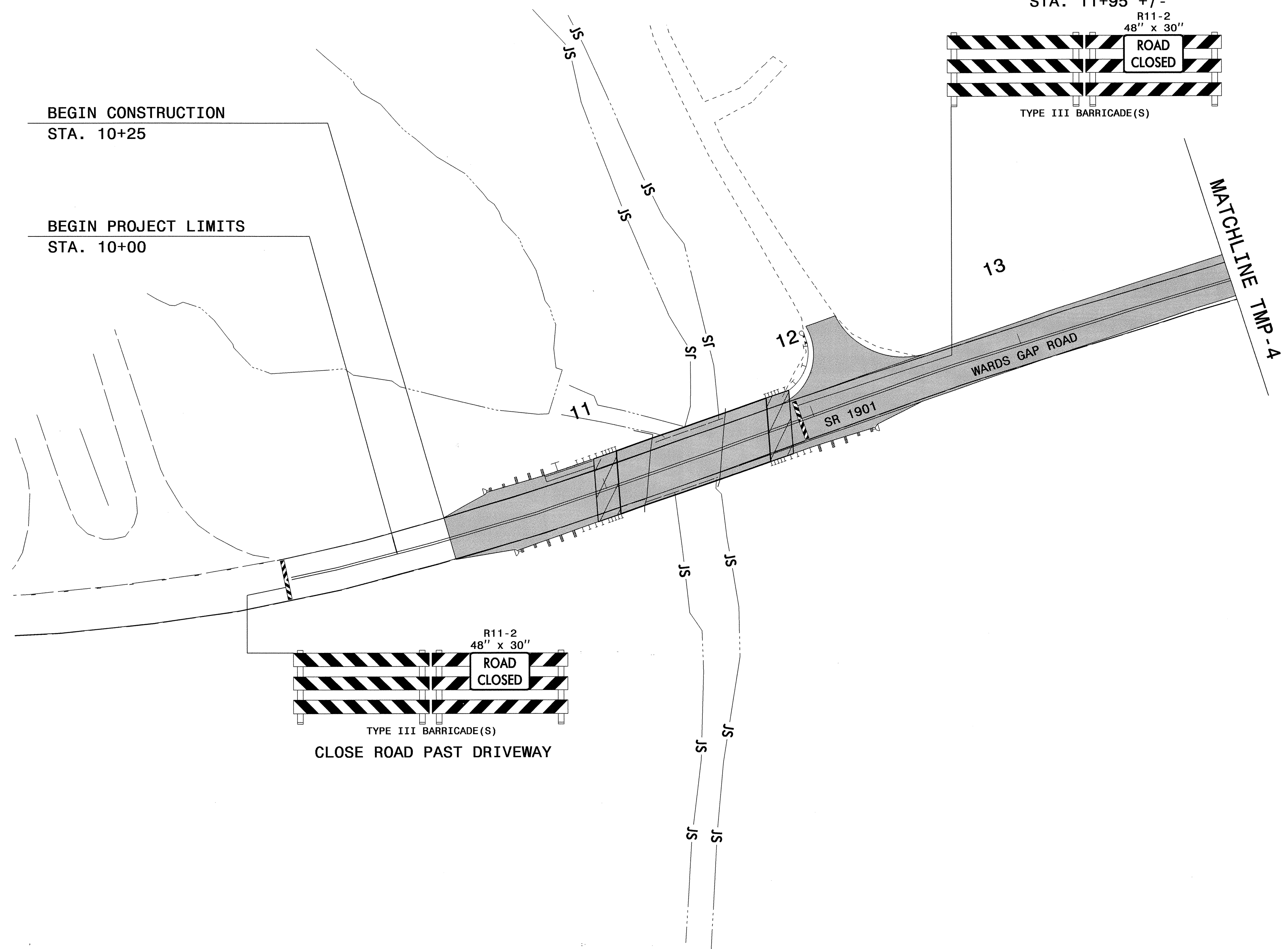
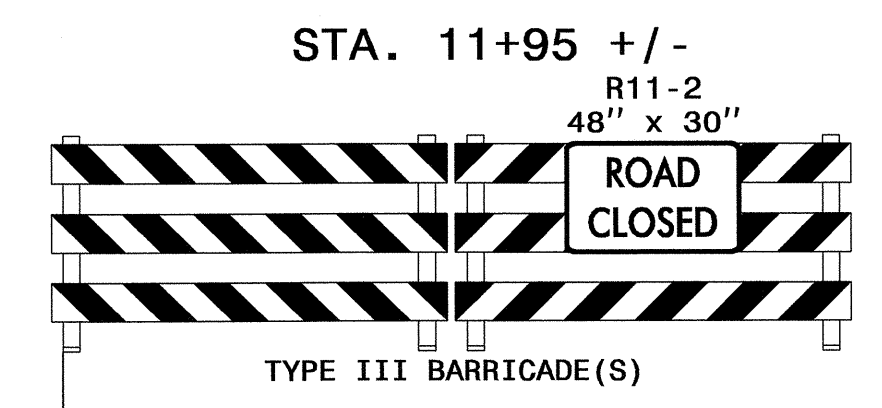
PHASE I
 OFFSITE DETOUR

28-DEC-2011 15:59
 \\dot\dfsroco\01\Proj\TIP\Projects\B\4046\Traffic\TrafficControl\Toc\B-4046_TC_TMP_03.dgn
 shassan AT TE248373

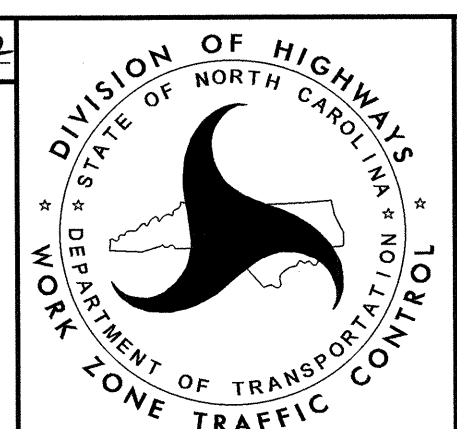
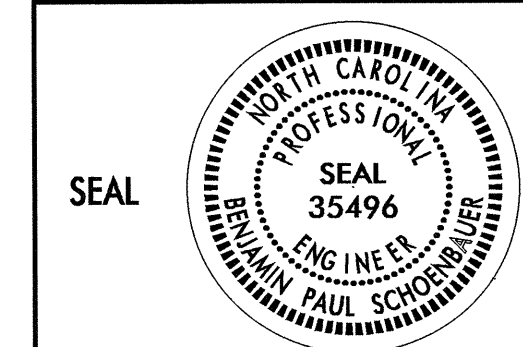


BEGIN CONSTRUCTION
STA. 10+25

BEGIN PROJECT LIMITS
STA. 10+00

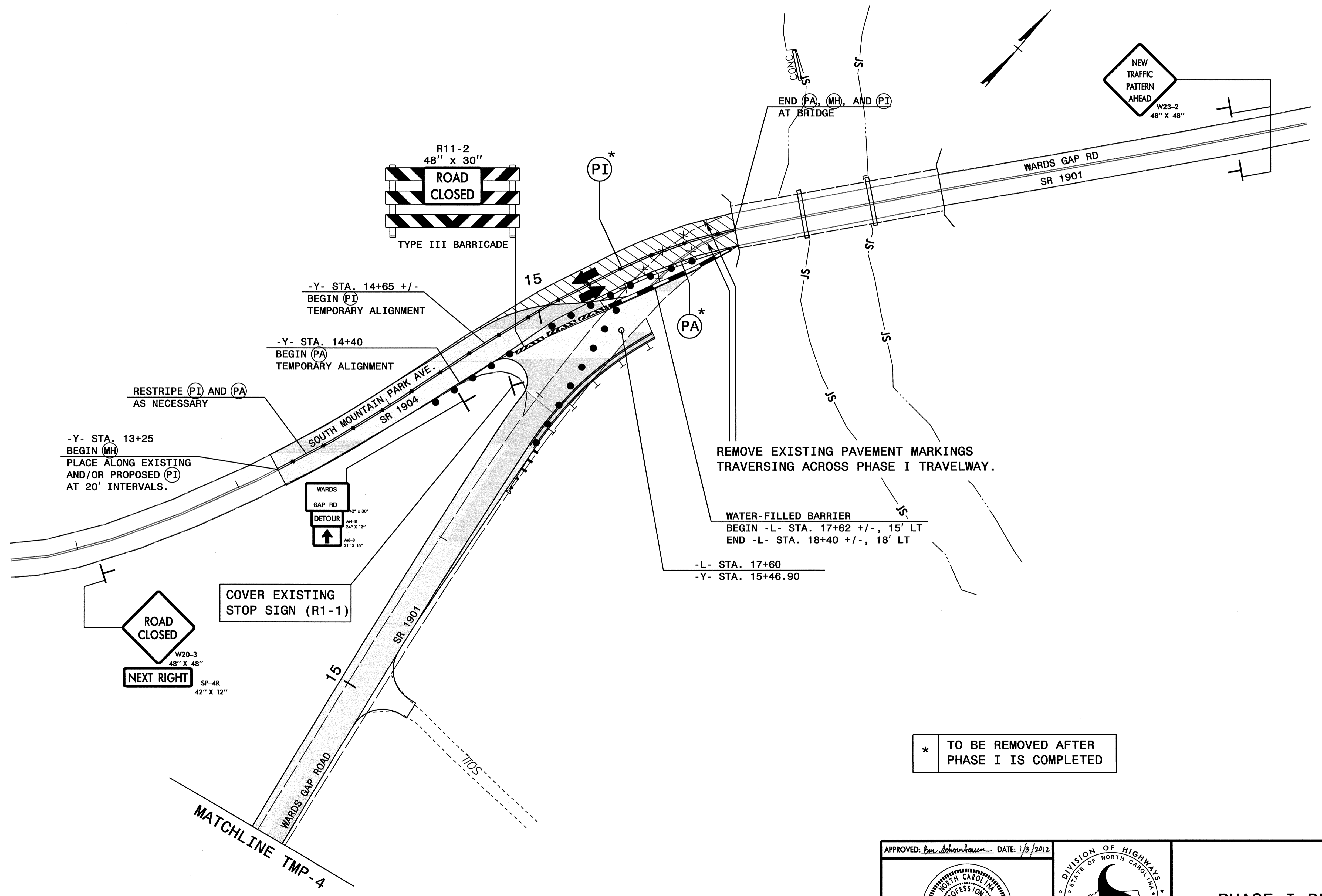


APPROVED: *[Signature]* DATE: 1/3/2012



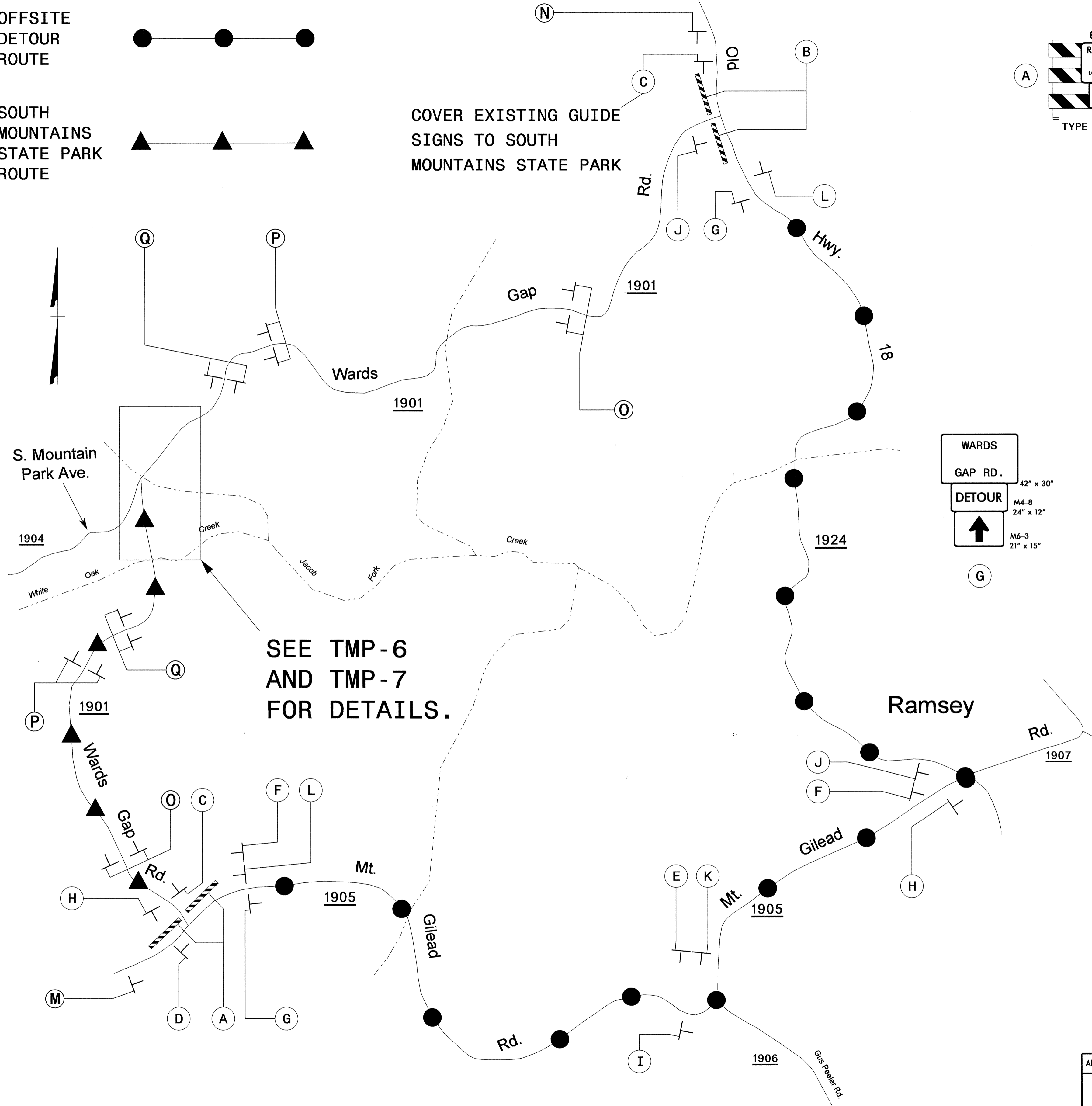
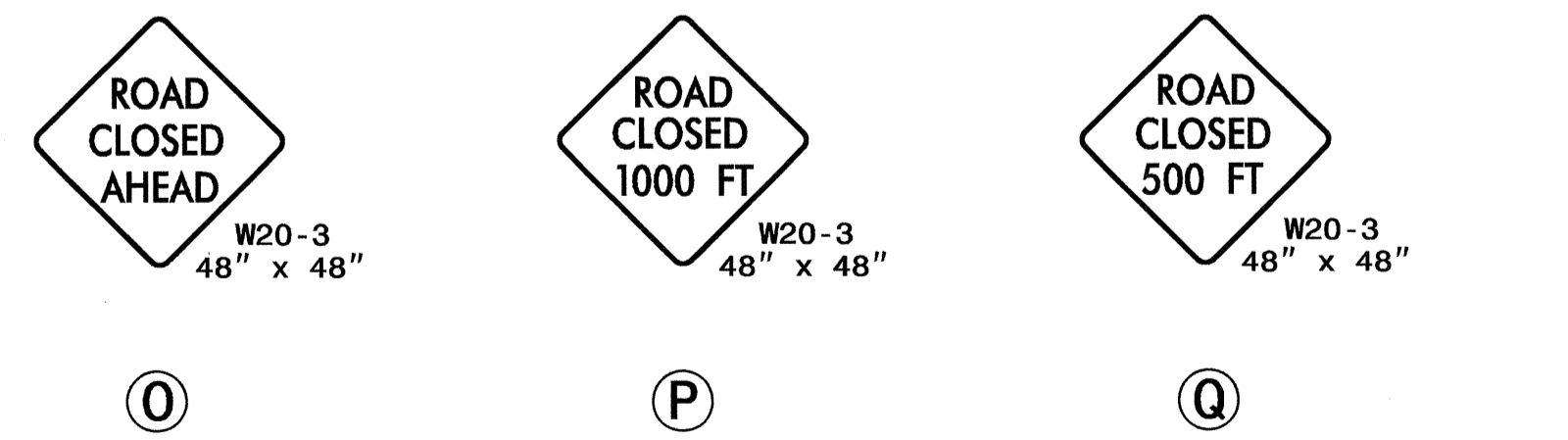
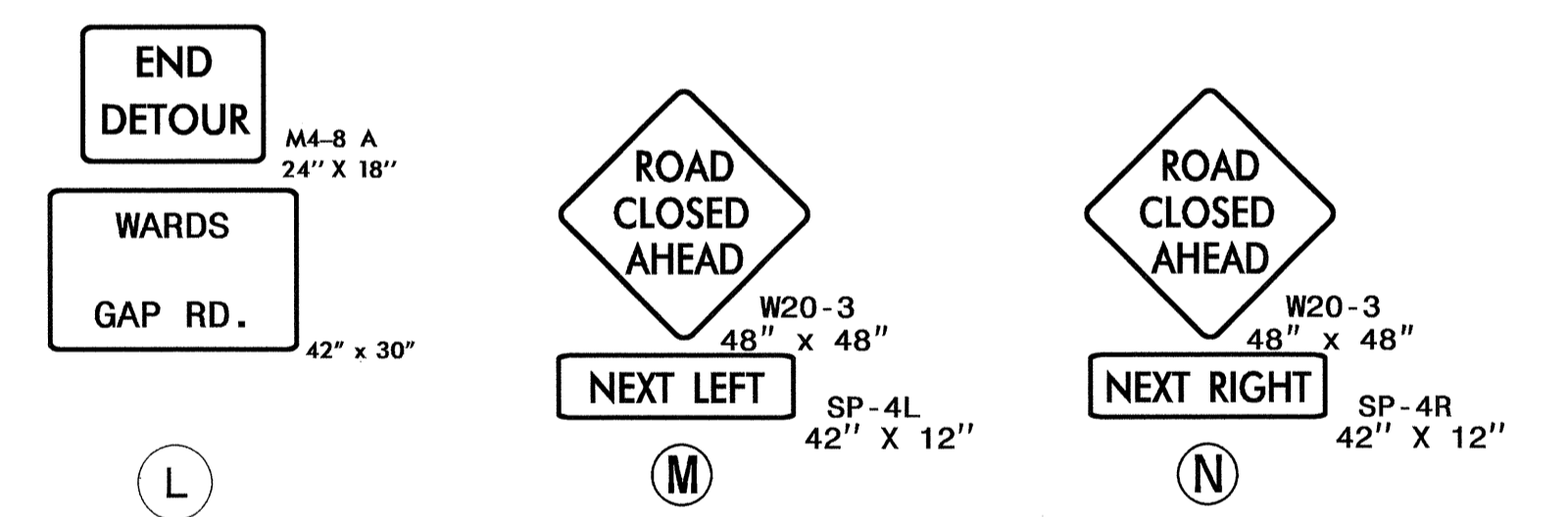
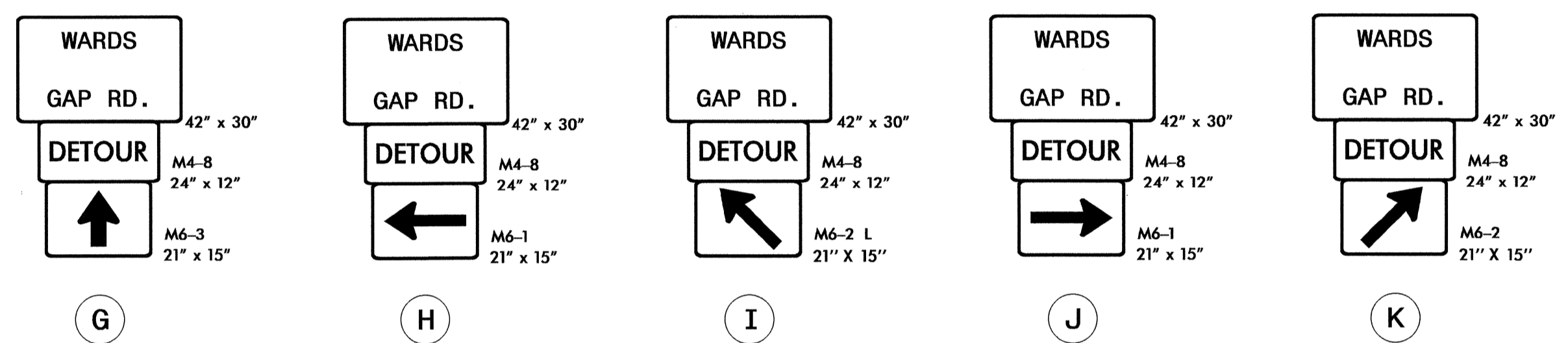
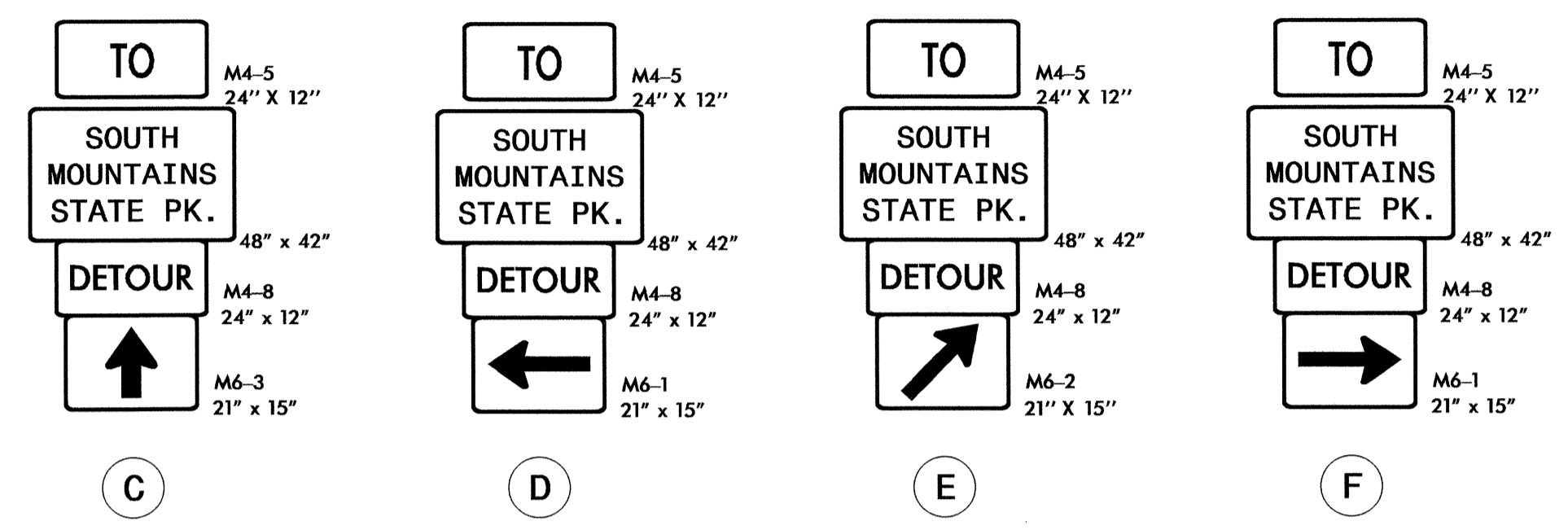
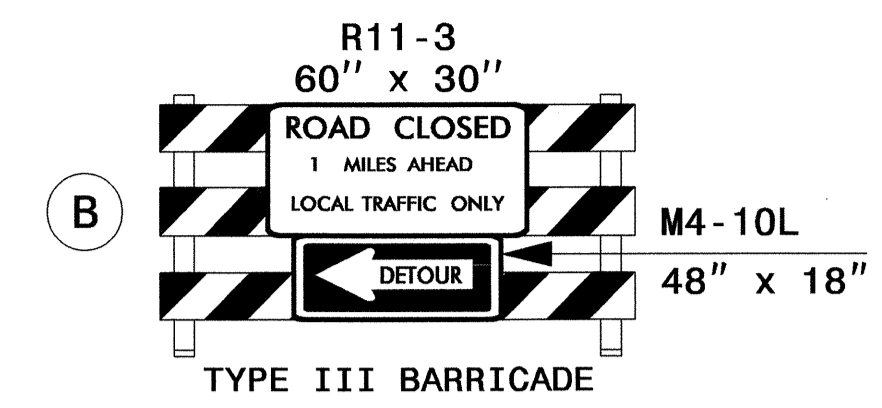
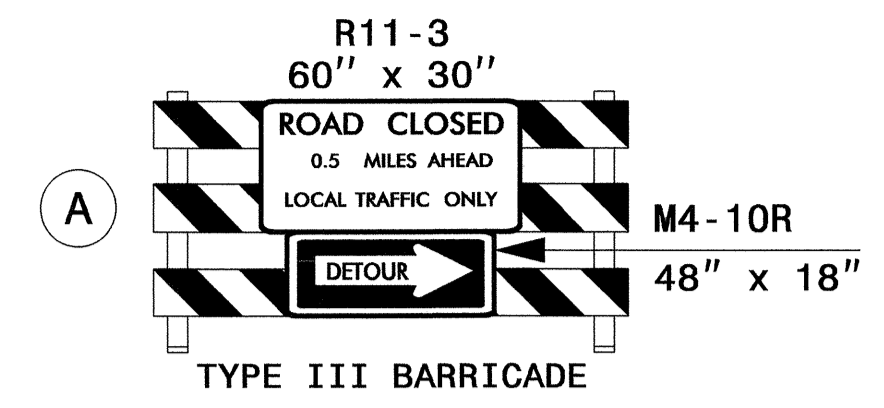
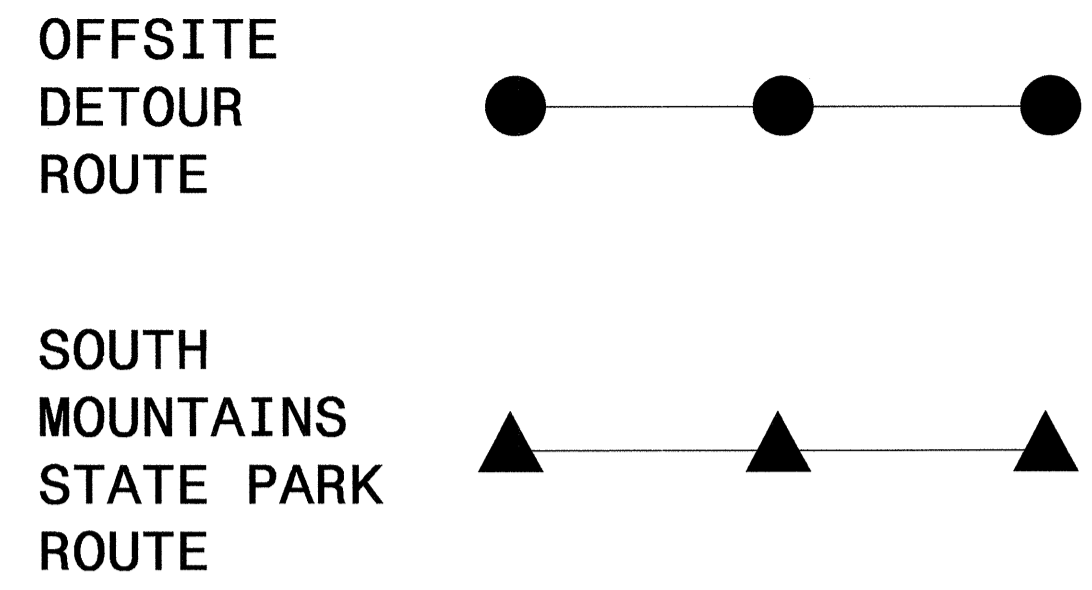
PHASE I DETAIL

28-DEC-2011 15:59
 N:\dot\dfs\01\01\Projects\B\B4046\TrafficControl\Tcp\B-4046_TC_TMP_04.dgn
 shesson AT 1E248373



30-DEC-2010 09:20
 \\dot\dfs\dot\DOT\Pro\TIP\Projects-B\B4046\TrafficControl\top\B-4046-TC-TMP-05Rr.dgn
 shossan AT 12/24/10

APPROVED: <i>Ben Schwaninger</i> DATE: 1/2/2012 		PHASE I DETAIL
---	--	-----------------------

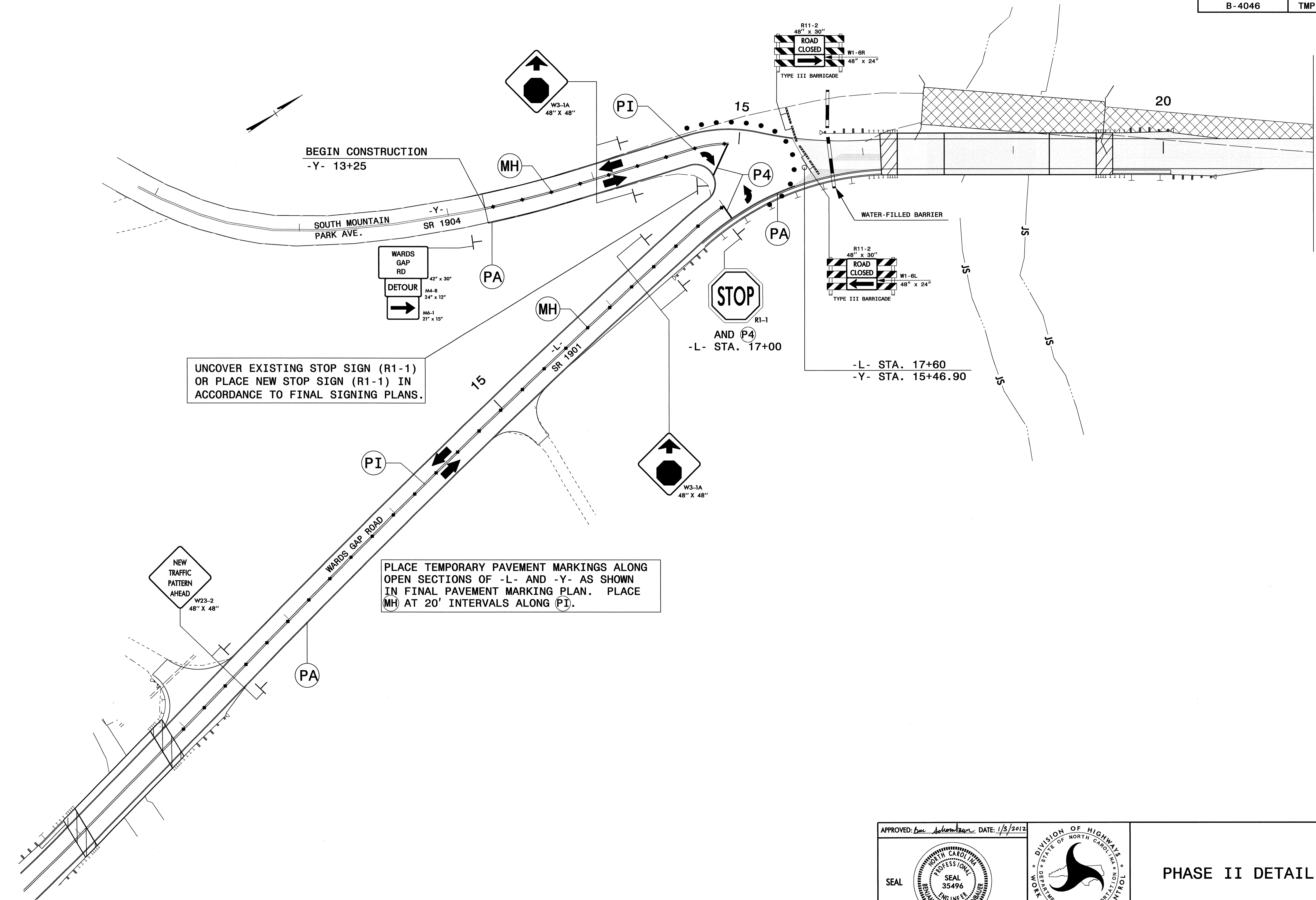


28 DEC 2011 15:59
 N:\proj\dfs\0410\Proj\TIP\Projects-B\B4046\TrafficControl\B-4046-TMP-06.dgn
 shanson AI TEL248373

APPROVED: *[Signature]* DATE: 1/3/2012

DEPARTMENT OF TRANSPORTATION
WORK ZONE TRAFFIC CONTROL

PHASE II
OFFSITE DETOUR



BEGIN CONSTRUCTION
-Y- 13+25

UNCOVER EXISTING STOP SIGN (R1-1)
OR PLACE NEW STOP SIGN (R1-1) IN
ACCORDANCE TO FINAL SIGNING PLANS.

PLACE TEMPORARY PAVEMENT MARKINGS ALONG
OPEN SECTIONS OF -L- AND -Y- AS SHOWN
IN FINAL PAVEMENT MARKING PLAN. PLACE
(MH) AT 20' INTERVALS ALONG (PI).

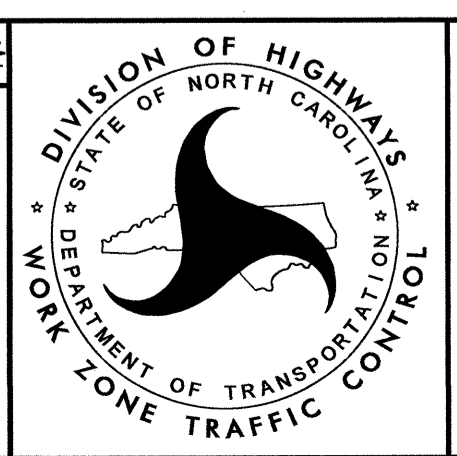
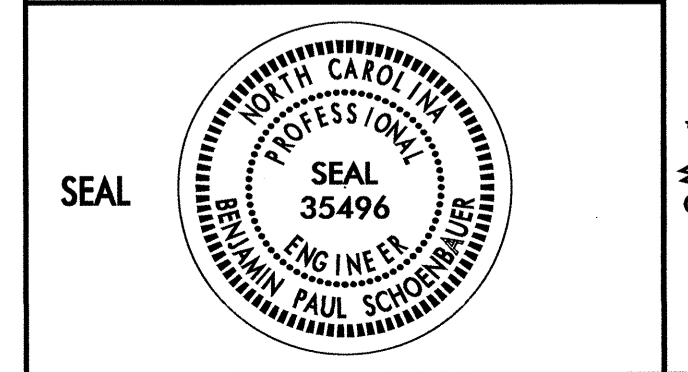
WARDS
GAP
RD
42" x 30"
DETOUR
M4-8
24" x 12"
M6-1
21" x 15"

-L- STA. 17+60
-Y- STA. 15+46.90

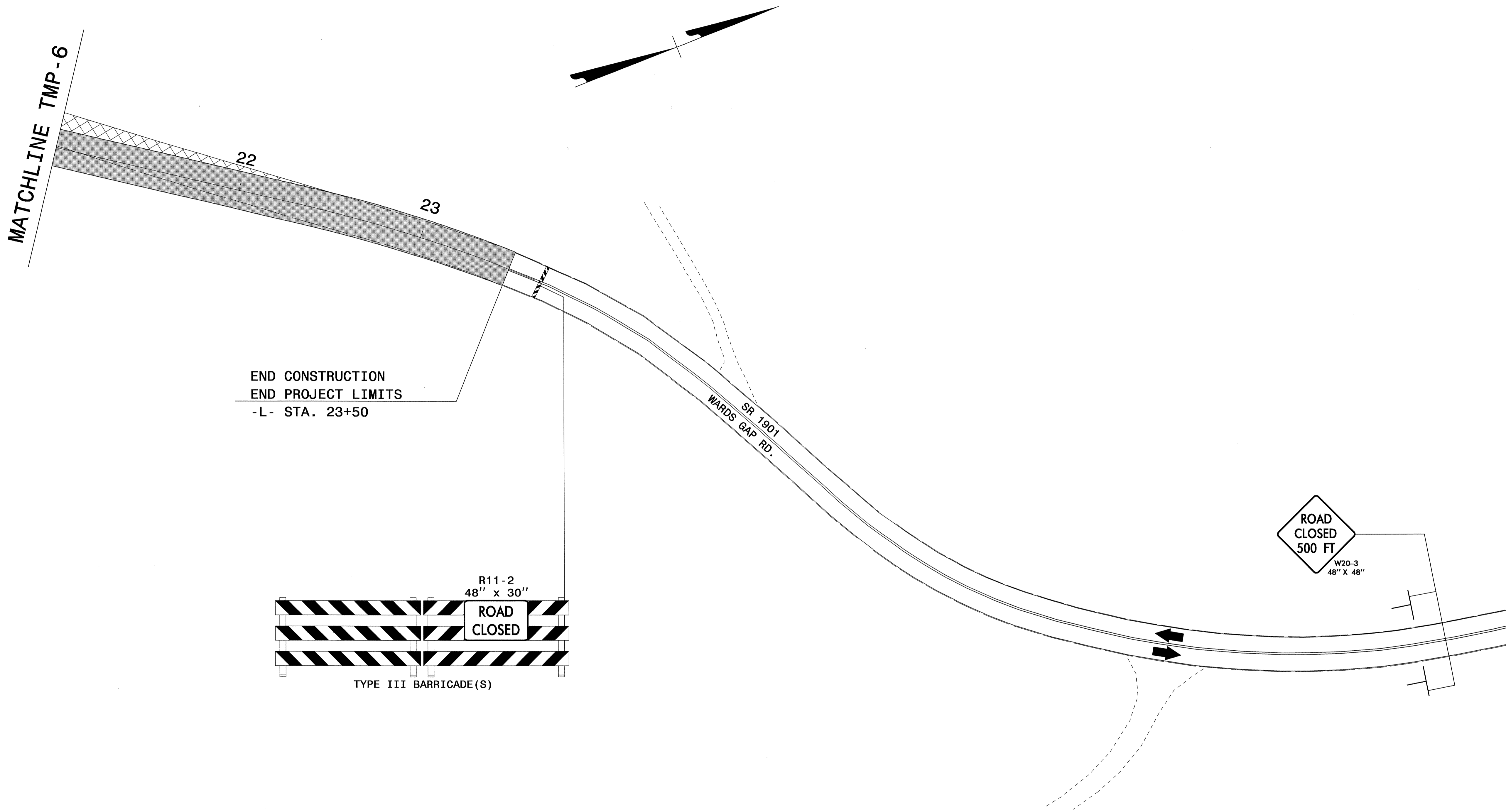
MATCHLINE TMP-7

30-DEC-2011 09:08
\\dot\dfs00101\Proj\TIPProjects\B\4046\TrafficControl\top\B-4046-TC-TMP-07.dgn
shasson AT TE248373

APPROVED: *Paul Schoenberger* DATE: 1/3/2012



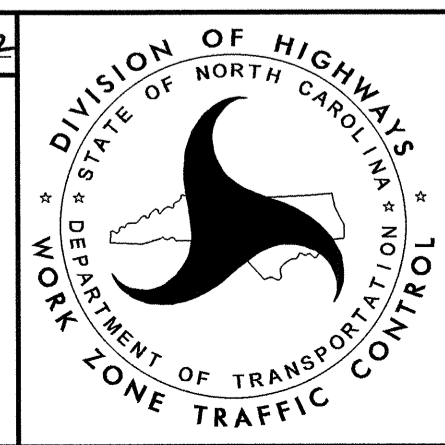
PHASE II DETAIL



28-DEC-2011 16:00
 \\dot\dfs\001\p\c\1\TIPPP\projects-B\B4046\TrafficControl\top\B-4046-TC-TMP-08.dgn
 shossan AT 1E248373

APPROVED: *Ben Schmitt* DATE: 1/3/2012

SEAL



PHASE II DETAIL