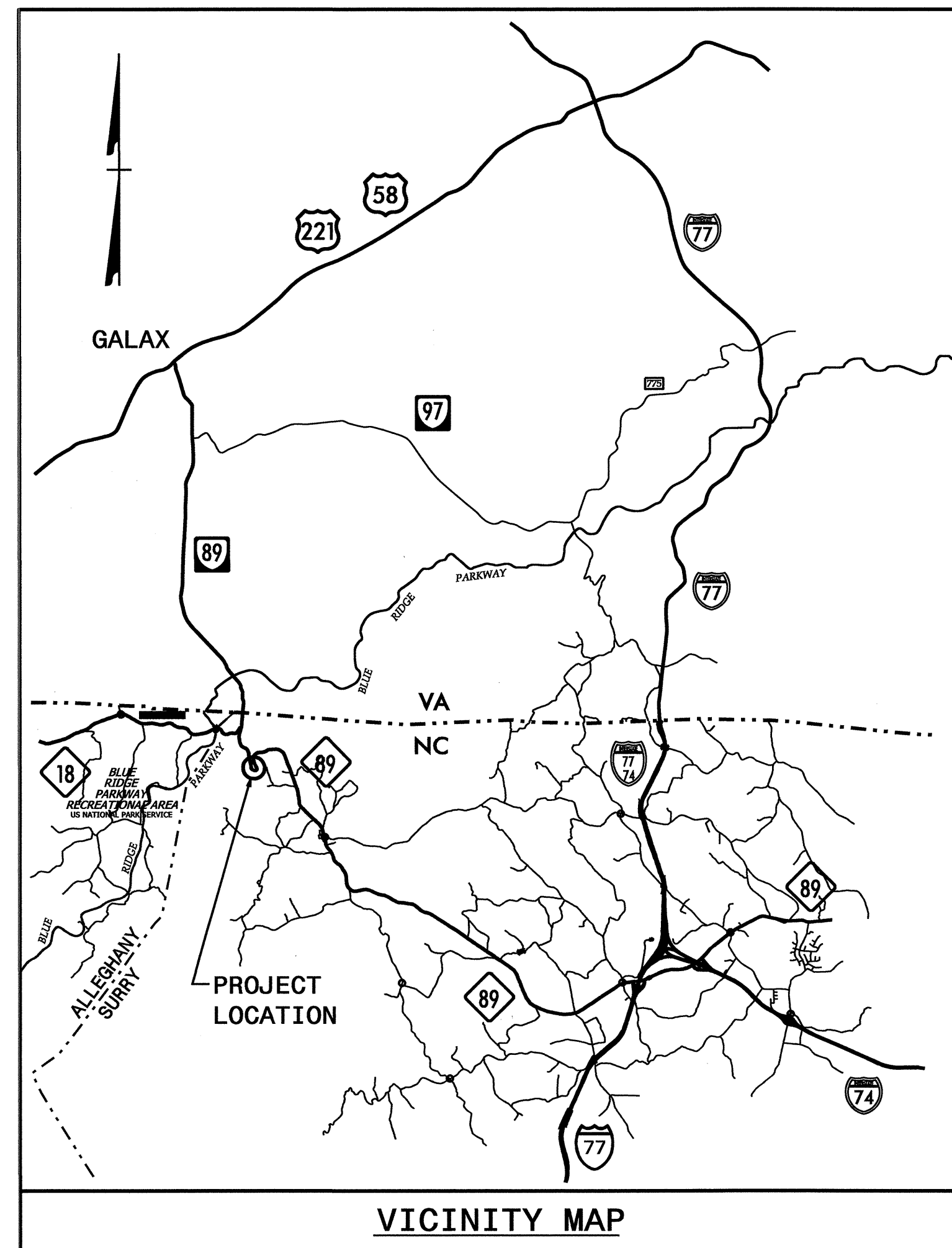
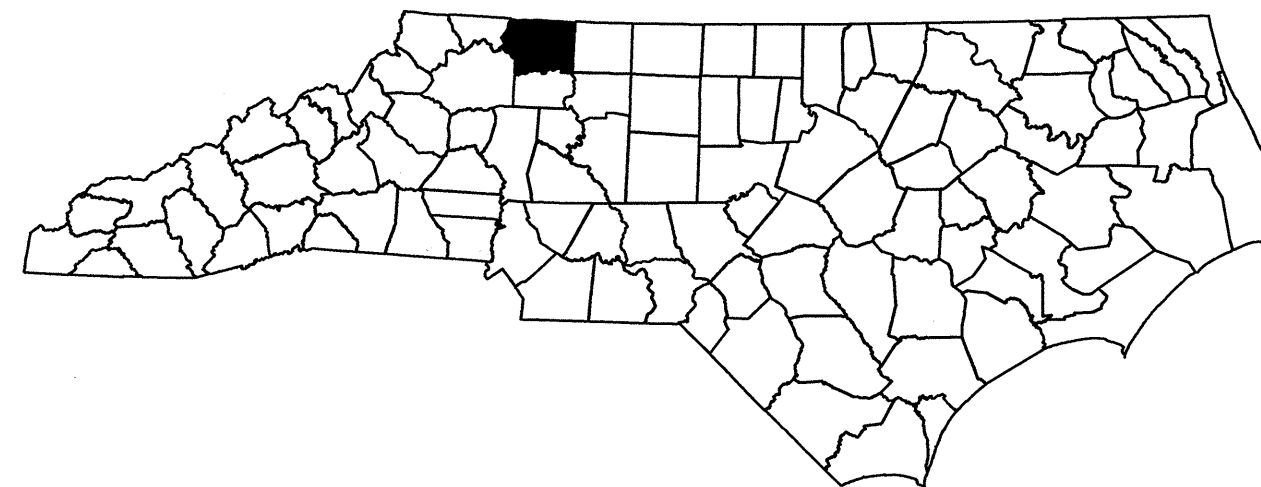


STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**TRANSPORTATION MANAGEMENT PLAN**

**SURRY COUNTY**



LOCATION: NC 89 APPROX. 1 MILE SOUTH OF NC/VA STATE LINE

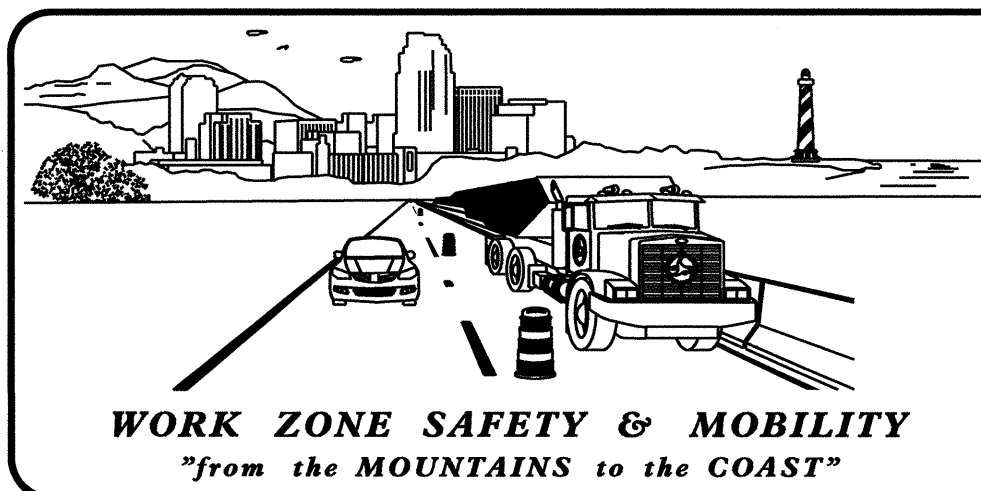
<b>INDEX OF SHEETS</b>	
SHEET NO.	TITLE
TMP-1	TITLE SHEET, AND INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, AND LEGEND
TMP-1B TO TMP-1C	TRANSPORTATION OPERATIONS PLAN: (TRANSPORTATION OPERATIONS & GENERAL NOTES)
TMP-2	PHASING
TMP-3, TMP-3A, TMP-3B	PHASE I DETAILS
TMP-4	PHASE II DETAILS
TMP-5, TMP-5A	OFF-SITE DETOUR PLAN
TMP-5B	ENLARGED DETOUR PLAN 1
TMP-5C	ENLARGED DETOUR PLANS 2 & 3
TMP-5D	DETOUR SIGNS AND CHANGEABLE MESSAGE SIGNS DETAILS

SHEET NO.  
TMP-1

**W-5307**

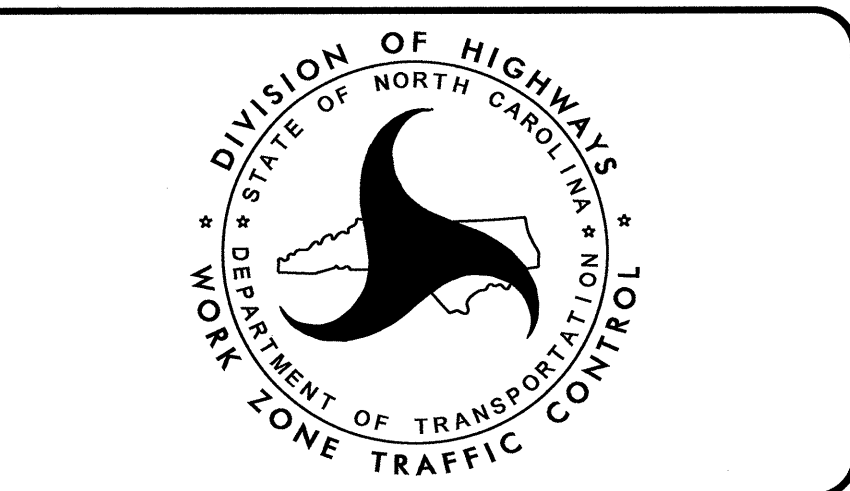
**TIP PROJECT:**

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kbroodwell AT TEL244739



**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. GILSTRAP TRAFFIC CONTROL PROJECT DESIGN ENGINEER  
KEN BROADWELL TRAFFIC CONTROL DESIGN ENGINEER



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

<u>STD. NO.</u>	<u>TITLE</u>
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
1130.01	DRUMS
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1160.01	TEMPORARY CRASH CUSHION
1165.01	WORK VEHICLE LIGHTING SYSTEMS AND TMA DELINEATION
1170.01	PORTABLE CONCRETE BARRIER
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

## LEGEND

### GENERAL

- DIRECTION OF TRAFFIC FLOW
- EXISTING
- NORTH ARROW
- PROPOSED
- WORK AREA
- PAVEMENT REMOVAL

### TRAFFIC CONTROL DEVICES

- BARRICADE (TYPE III)
- CONE
- DRUM
- TEMPORARY CRASH CUSHION
- FLAGGER
- TRUCK MOUNTED ATTENUATOR (TMA)
- CHANGEABLE MESSAGE SIGN

### TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

### SIGNALS

- TEMPORARY

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APPROVED: _____ DATE: _____ 		<b>ROADWAY STANDARD DRAWINGS &amp; LEGEND</b>
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# TRANSPORTATION OPERATIONS

## CONSTRUCTION

REALIGN NC 89 AROUND A MOUNTAIN TO IMPROVE SAFETY AND ELIMINATE MAINTAINANCE CONCERNS WITH EXISTING SLOPE STABILIZATION. CONSTRUCTION WILL INCLUDE ROCK CUTS THROUGH THE MOUNTAINS WHICH WILL REQUIRE BLASTING.

BLASTING, DEBRIS REMOVAL AND LIMITED CONTRACTOR STAGING AREA AVAILABILITY ARE THE DRIVING FACTORS DURING CONSTRUCTION. THE WORK ZONE TRAFFIC CONTROL CONSTRUCTION STRATEGY IS TO PLACE TRAFFIC IN A ONE-LANE, TWO-WAY TRAFFIC PATTERN USING A TEMPORARY SIGNAL SYSTEM AND PORTABLE CONCRETE BARRIER, AND USE AN OFF-SITE DETOUR DURING BLASTING OPERATIONS.

THE 40 MILE OFF-SITE DETOUR ROUTE TRAVELS INTO VIRGINIA. VDOT AUTHORITIES HAVE BEEN NOTIFIED AND THEIR REQUIREMENTS INCORPORATED INTO THE TRAFFIC MANAGEMENT PLAN. NCDOT CONSTRUCTION PERSONNEL WILL COORDINATE WITH VDOT PERSONNEL DURING CONSTRUCTION ACTIVITIES, SEE GENERAL NOTE "AA" ON SHEET TMP-1C.

## TMP DESIGN PARAMETERS

CONTRACTOR SHALL FURNISH AND INSTALL FIVE CHANGEABLE MESSAGE SIGNS ALONG NC 89 (-L-), INCLUDING TWO IN VIRGINIA, FOR PUBLIC INFORMATION, AND TRAVEL ALERTS RELATED TO TEMPORARY ROAD CLOSURES FOR ROCK BLASTING OPERATIONS. SEE GENERAL NOTE "C" ON THIS SHEET FOR PROCEDURES AND DAY & TIME RESTRICTIONS.

CONTRACTOR SHALL ONLY BE ALLOWED TO UTILIZE THE TEMPORARY SIGNAL SYSTEM AND PORTABLE CONCRETE BARRIER FOR THE ONE-LANE, TWO-WAY TEMPORARY TRAFFIC PATTERN BETWEEN APRIL 1, 2013 AND DECEMBER 1, 2013. AS DIRECTED BY THE ENGINEER THE CONTRACTOR MAY CONDUCT CONSTRUCTION OPERATIONS OUTSIDE THESE DATES.

# GENERAL NOTES

## LANE AND SHOULDER CLOSURE REQUIREMENTS

- E) 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.
  - F) 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.
  - G) 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.
- H) 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.
  - I) 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.
  - J) PROVIDE TRAFFIC CONTROL FOR APPROPRIATE LANE CLOSURES FOR SURVEYING DONE BY THE DEPARTMENT.

## PAVEMENT EDGE DROP OFF REQUIREMENTS

- K) 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.

- L) 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) 200 FEET IN ADVANCE OF THE UNEVEN AREA.

## TRAFFIC PATTERN ALTERATIONS

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

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 UNDESIRABLE 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.

- A) DO NOT STOP TRAFFIC FOR MORE THAN 30 MINUTES AS FOLLOWS:

ROAD NAME	OPERATION
NC 89	TRAFFIC SHIFTS, TIE-IN CONSTRUCTION, DEBRIS REMOVAL OTHER THAN THAT WHICH IS CREATED FROM A BLASTING OPERATION, AND ALL OTHER TRAFFIC OPERATIONS AS DIRECTED BY THE ENGINEER

- B) FOR SHORT TERM ROAD CLOSURES 30 MINUTES OR LESS STOP TRAFFIC IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NUMBER 1101.03 SHEET 8 OF 9. PLACE BOTH SIGNALS IN THE STOP (RED) MODE DURING CLOSURE.

- C) FOR ROAD CLOSURES ASSOCIATED WITH BLASTING OPERATIONS AND REMOVAL OF BLAST DEBRIS FROM THE ROADWAY, PLACE TRAFFIC ONTO THE OFF-SITE DETOUR. THE ALLOWABLE DAYS AND TIMES ARE AS FOLLOWS (SEE INTERMEDIATE CONTRACT TIME SPECIAL PROVISION AND LIQUIDATED DAMAGES):

NOTE: AS DIRECTED BY THE ENGINEER BLASTING OPERATIONS MAY BE CONDUCTED OUTSIDE THE TIME FRAMES LISTED BELOW ONLY IF THE SPECIFIC BLASTING OPERATION WILL NOT IMPACT TRAFFIC ON NC 89.

LIMITED TO ONE DAY PER WEEK	DAY	TIME
OR	MONDAY	7:00 P.M. TO 5:00 A.M. THE NEXT MORNING
	WEDNESDAY	
	TUESDAY	BETWEEN THE HOURS OF 11:00 A.M. AND 3:00 P.M.
	THURSDAY	BETWEEN THE HOURS OF 11:00 A.M. AND 3:00 P.M.

## PERFORM BLASTING OPERATIONS IN THE FOLLOWING SEQUENCE:

1. NOTIFY THE ENGINEER 10 BUSINESS DAYS PRIOR TO THE FIRST BLASTING OPERATION ON THE PROJECT. NOTIFY THE ENGINEER 2 BUSINESS DAYS PRIOR TO SUBSEQUENT BLASTING OPERATIONS.
2. CHANGE MESSAGES ON CHANGEABLE MESSAGE SIGNS ALONG NC 89 AND IN VIRGINIA ACCORDANCE WITH TMP-5D AND UN-COVER OFF-SITE DETOUR ROUTE SIGNING.
3. CLOSE NC 89 PER ROADWAY STANDARD DRAWING NUMBERS 1101.03 SHEET 1 OF 9, 1101.06 SHEET 1 OF 1, SHEETS TMP-5, TMP-5A, TMP-5B, TMP-5C, TMP-5D AND PLACE TRAFFIC ONTO THE OFF-SITE DETOUR.
4. PERFORM BLASTING OPERATION & DEBRIS REMOVAL.
5. OPEN NC 89 TO TRAFFIC.
6. IMMEDIATELY CHANGE MESSAGES ON CHANGEABLE MESSAGE SIGNS IN ACCORDANCE WITH TMP-5D AND COVER OFF-SITE DETOUR SIGNING.

- D) DO NOT CONDUCT ANY HAULING OPERATIONS AGAINST THE FLOW OF TRAFFIC OF AN OPEN TRAVELWAY UNLESS THE HAULING OPERATION IS PROTECTED BY BARRIER OR GUARDRAIL OR AS DIRECTED BY THE ENGINEER.

APPROVED: _____ DATE: _____		TRANSPORTATION OPERATIONS AND GENERAL NOTES

## GENERAL NOTES, CONT'D

### SIGNING

- N) INSTALL ADVANCE WORK ZONE WARNING SIGNS ("ROAD WORK AHEAD" W20-1 AND "END ROAD WORK" G20-2A) 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.
- O) INSTALL SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.
- INSTALL SIGNING REQUIRED FOR THE OFF-SITE DETOUR ROUTE AS SHOWN IN THE TRAFFIC CONTROL PLANS.
- P) 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.
- Q) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

### TRAFFIC BARRIER

- R) INSTALL TEMPORARY BARRIER ACCORDING TO THE TRANSPORTATION MANAGEMENT PLANS A MAXIMUM OF TWO (2) WEEKS PRIOR TO BEGINNING WORK IN ANY LOCATION. ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION PROCEED IN A CONTINUOUS MANNER TO COMPLETE THE PROPOSED WORK IN THAT LOCATION UNLESS OTHERWISE STATED IN THE TRANSPORTATION MANAGEMENT PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT PLACE BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE.

ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION AND NO WORK IS PERFORMED BEHIND THE TEMPORARY BARRIER FOR A PERIOD LONGER THAN TWO (2) MONTHS, REMOVE / RESET TEMPORARY BARRIER AT NO COST TO THE DEPARTMENT UNLESS OTHERWISE STATED IN THE TRANSPORTATION MANAGEMENT PLANS, TEMPORARY BARRIER IS PROTECTING A HAZARD, OR AS DIRECTED BY THE ENGINEER.

INSTALL TEMPORARY BARRIER WITH THE TRAFFIC FLOW BEGINNING WITH THE UPSTREAM SIDE OF TRAFFIC. REMOVE TEMPORARY BARRIER AGAINST THE TRAFFIC FLOW BEGINNING WITH THE DOWNSTREAM SIDE OF TRAFFIC.

INSTALL AND SPACE DRUMS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH) TO CLOSE OR KEEP THE SECTION OF THE ROADWAY CLOSED UNTIL THE TEMPORARY BARRIER CAN BE PLACED OR AFTER THE TEMPORARY BARRIER IS REMOVED.

- S) PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER AT ALL TIMES DURING THE INSTALLATION AND REMOVAL OF THE BARRIER BY EITHER A TRUCK MOUNTED ATTENUATOR (MAXIMUM 72 HOURS) OR A TEMPORARY CRASH CUSHION.

PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER FROM ONCOMING TRAFFIC AT ALL TIMES BY A TEMPORARY CRASH CUSHION UNLESS THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER IS OFFSET FROM ONCOMING TRAFFIC AS FOLLOWS OR AS SHOWN IN THE PLANS: (SEE ALSO 1101.05)

POSTED SPEED LIMIT	MINIMUM OFFSET
40 OR LESS	15 FT
45 - 50	20 FT
55	25 FT
60 MPH or HIGHER	30 FT

### TRAFFIC CONTROL DEVICES

- T) 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.
- U) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.
- V) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 300 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.
- W) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:
- | ROAD NAME          | MARKING | MARKER           |
|--------------------|---------|------------------|
| EXISTING NC 89     | PAINT   | TEMPORARY RAISED |
| PROPOSED NC 89 -L- | PAINT   | TEMPORARY RAISED |
- X) 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.
- Y) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- Z) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

### MISCELLANEOUS

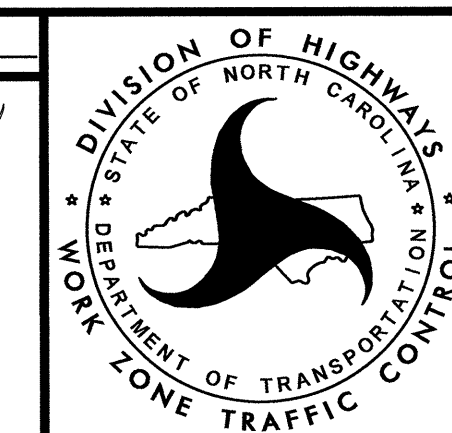
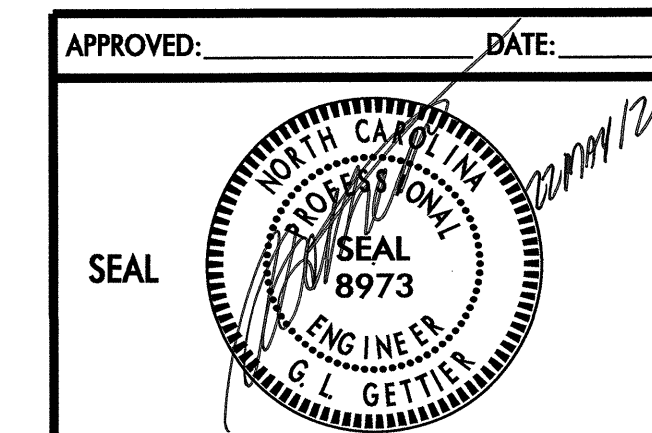
- AA) A LAND USE PERMIT IS REQUIRED FROM THE VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT) FOR THE OFF-SITE DETOUR SIGNAGE IN VIRGINIA. THE ENGINEER WILL CONTACT MR. DAN R. HUFF, P.E., AREA LAND USE ENGINEER/VDOT, P.O. BOX 188, HILLSVILLE, VA 24343 (TELEPHONE 276-730-0021), TO OBTAIN THE PERMIT FOR THE OFF-SITE DETOUR SIGNAGE AND CHANGEABLE MESSAGE SIGNS (CMS) INSTALLATION IN VIRGINIA.

NOTE: THE LAND USE PERMIT HAS TO BE APPROVED & ACQUIRED PRIOR TO INSTALLATION OF THE OFF-SITE DETOUR SIGNAGE IN VIRGINIA.

NOTE: CONTRACTOR SHALL BE RESTRICTED FROM CLOSING NC 89 DURING HOLIDAYS AS STATED IN THE LAND USE PERMIT/NOTICE OF PERMITTEE LIABILITY (PERMITTEE AGREEMENT FOR LAND USE PERMIT ISSUANCE) AND DURING THE WEEK OF THE FIDDLER'S CONVENTION IN CITY OF GALAX, VA.

THE ENGINEER WILL NOTIFY MR. TODD MARTIN AT todd.martin@vdot.virginia.gov AND THE TRANSPORTATION OPERATIONS CENTER (TOC) AT salemtoc@vdot.virginia.gov 10 BUSINESS DAYS PRIOR TO THE OFF-SITE DETOUR BEING UTILIZED FOR THE FIRST BLASTING OPERATION AND TWO BUSINESS DAYS PRIOR TO SUBSEQUENT BLASTING OPERATIONS. THE TOC SHALL ALSO BE CONTACTED AT 888-782-7982 FOR ANY ITEM REQUIRING IMMEDIATE NOTIFICATION DURING CONSTRUCTION, AS IT RELATES TO TRAFFIC MANAGEMENT IN VIRGINIA.

THE ENGINEER WILL NOTIFY MR. DAN R. HUFF, P.E., WHEN THE OFF-SITE DETOUR WILL NO LONGER BE UTILIZED AND THAT THE SIGNAGE & CMSs WILL BE REMOVED FROM VIRGINIA.



GENERAL NOTES, CONT'D

## PHASING

CONTRACTOR SHALL WORK IN A CONTINUOUS MANNER TO COMPLETE PHASE I, STEP 1 THRU PHASE II, STEP 2. (SEE INTERMEDIATE CONTRACT TIME AND SPECIAL PROVISION)

NOTE: BEFORE BEGINNING CONSTRUCTION PLACE ADVANCE WORK ZONE WARNING SIGNS ("ROAD WORK AHEAD" W20-1 AND "END ROAD WORK" G20-2A) ALONG NC 89 (-L-) AS SHOWN ON SHEET TMP-3.

NOTE: CONTRACTOR SHALL ONLY BE ALLOWED TO UTILIZE THE TEMPORARY SIGNAL SYSTEM AND PORTABLE CONCRETE BARRIER FOR THE ONE-LANE, TWO-WAY TEMPORARY TRAFFIC PATTERN BETWEEN APRIL 1, 2013 AND DECEMBER 1, 2013 (SEE PHASE I, STEP 2 THRU PHASE II, STEP 2). AS DIRECTED BY THE ENGINEER THE CONTRACTOR MAY CONDUCT CONSTRUCTION OPERATIONS OUTSIDE OF THESE DATES.

### PHASE I

STEP 1: - THE CONTRACTOR MAY, USING RSD 1101.02, SHEET 1 OF 15 & RSD 1101.03, SHEET 8 OF 9, BEGIN CLEARING & GRUBBING AND CONDUCT CONSTRUCTION OPERATIONS AS DIRECTED BY THE ENGINEER (SEE CONSTRUCTION PLANS).

NOTE: WITH THE ENGINEER'S APPROVAL, THE CONTRACTOR MAY CONDUCT BLASTING OPERATIONS AS OUTLINED/STATED IN GENERAL NOTES "C", "M", "O", "P", "Q" & "AA", SEE SHEET TMP-1B & TMP-1C.

STEP 2: - THE CONTRACTOR SHALL, USING RSD 1101.02, SHEET 1 OF 15 & RSD 1101.03, SHEET 8 OF 9:

-- INSTALL TEMPORARY SIGNAL SYSTEM AND ALL ADDITIONAL WARNING SIGNS (SEE SIGNAL PLANS AND TMP-3).

-- PLACE TEMPORARY PAVEMENT MARKINGS (PAINT) & TEMPORARY RAISED PAVEMENT MARKERS, INSTALL PORTABLE CONCRETE BARRIER (PCB) AND PLACE TRAFFIC INTO A TEMPORARY ONE-LANE, TWO-WAY TRAFFIC PATTERN IN THE EXISTING SB LANE OF NC 89 (SEE SHEETS TMP-3 TO TMP-3B).

STEP 3: - THE CONTRACTOR SHALL CONSTRUCT PROPOSED ROADWAY, AS MUCH AS POSSIBLE, UP TO, BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE (SEE CONSTRUCTION PLANS AND SHEETS TMP-3 TO TMP-3B).

NOTE: THE CONTRACTOR SHALL CONDUCT BLASTING OPERATIONS AS OUTLINED/STATED IN GENERAL NOTES "C", "M", "O", "P", "Q" & "AA", SEE SHEET TMP-1B & TMP-1C.

- THE CONTRACTOR MAY PLACE TEMPORARY PAVEMENT MARKINGS(PAINT)/ TEMPORARY RAISED PAVEMENT MARKERS AS MUCH AS POSSIBLE, AND INSTALL TEMPORARY/FINAL SIGNING AS REQUIRED FOR THE TEMPORARY TRAFFIC PATTERN AS SHOWN ON SHEET TMP-4.

### PHASE II

STEP 1: - THE CONTRACTOR SHALL, USING TEMPORARY SIGNAL SYSTEM, RSD 1101.02, SHEET 1 OF 15 & RSD 1101.03, SHEET 8 OF 9:

-- REMOVE PCB AS REQUIRED TO CONSTRUCT PROPOSED TIE-INS, PLACE THE REMAINDER OF THE TEMPORARY PAVEMENT MARKINGS(PAINT)/TEMPORARY RAISED PAVEMENT MARKERS AND SHIFT TRAFFIC TO A TEMPORARY ONE-LANE, TWO-WAY TRAFFIC PATTERN IN THE PROPOSED NB LANE OF NC 89 (SEE CONSTRUCTION PLANS AND SHEET TMP-4).

-- REMOVE THE REMAINDER OF THE PCB AND INSTALL DRUMS AS SHOWN ON SHEET TMP-4.

STEP 2: - THE CONTRACTOR SHALL, USING TEMPORARY SIGNAL SYSTEM, RSD 1101.02, SHEET 1 OF 15 & RSD 1101.03, SHEET 8 OF 9:

-- AS DIRECTED BY THE ENGINEER, CONSTRUCT THE REMAINDER OF THE PROPOSED ROADWAY UP TO, BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE SO AS TO BE ABLE TO OPEN PROPOSED NC 89 TO THE FINAL TRAFFIC PATTERN (SEE CONSTRUCTION PLANS).

-- PLACE TEMPORARY PAVEMENT MARKINGS(PAINT)/TEMPORARY RAISED PAVEMENT MARKERS FOR THE FINAL TRAFFIC PATTERN AS SHOWN IN THE FINAL PAVEMENT MARKING PLANS.

-- OPEN TO THE FINAL TRAFFIC PATTERN (SEE CONSTRUCTION PLANS AND FINAL PAVEMENT MARKING PLANS).

-- AS DIRECTED BY THE ENGINEER, BEGIN REMOVAL OF TEMPORARY SIGNAL SYSTEM.

STEP 3: - THE CONTRACTOR SHALL, USING RSD 1101.02, SHEET 1 OF 15 & RSD 1101.03, SHEET 8 OF 9:

-- COMPLETE REMOVAL OF TEMPORARY SIGNAL SYSTEM BEGUN IN PHASE II, STEP 2.

-- COMPLETE REMAINDER OF PROPOSED PROJECT, EXCEPT WORK LISTED IN PHASE III (SEE CONSTRUCTION PLANS).

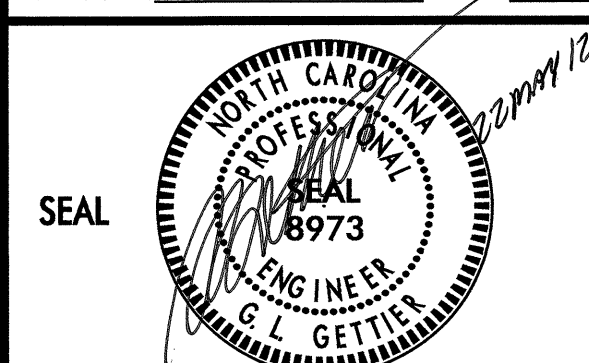
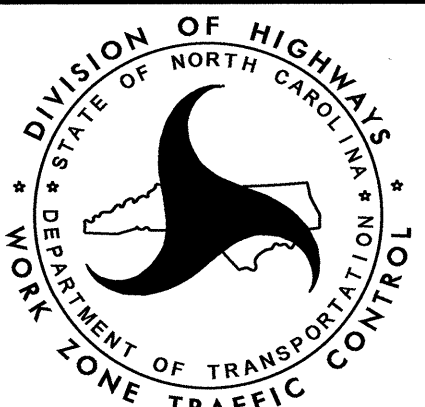
### PHASE III

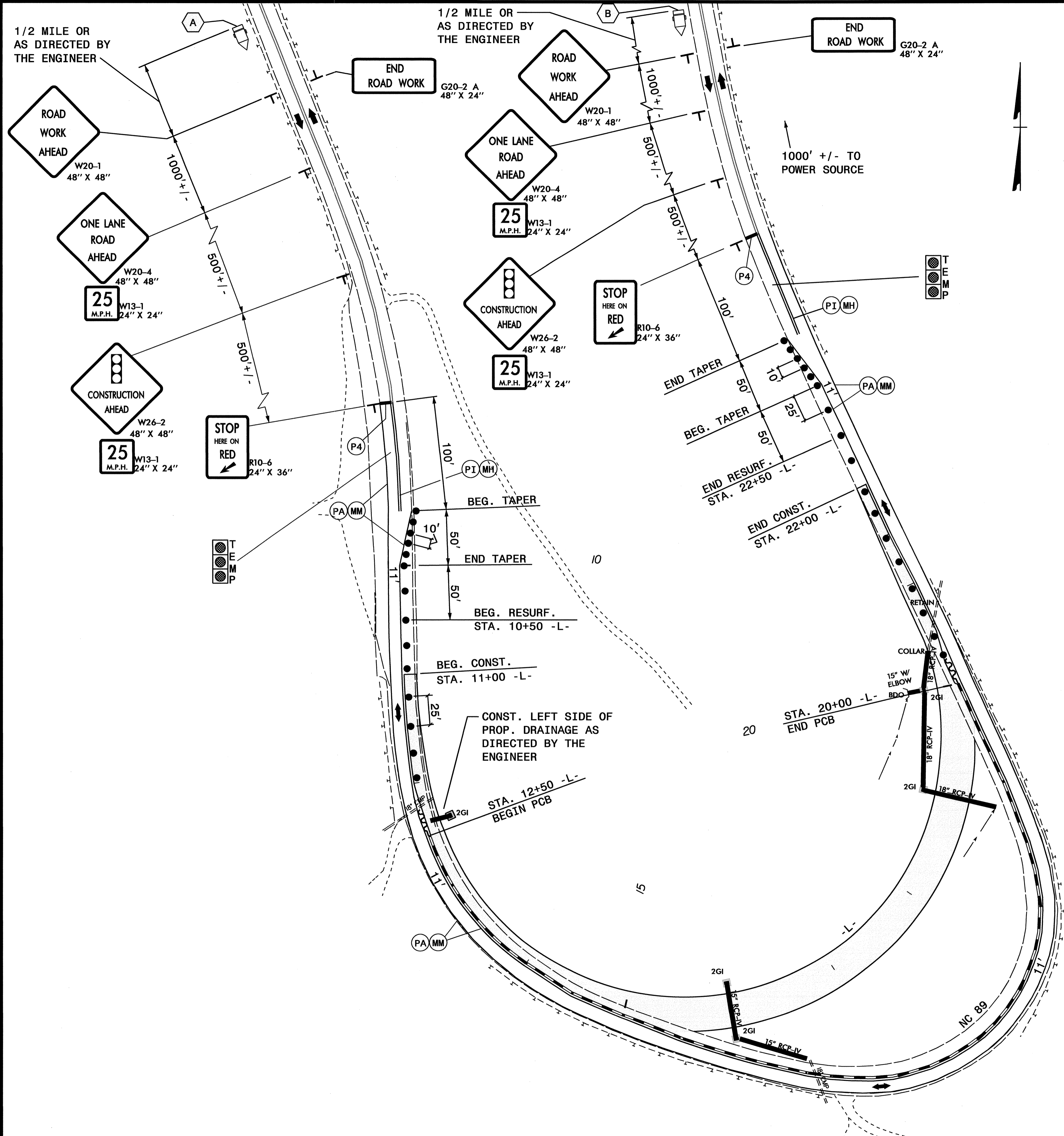
STEP 1: - THE CONTRACTOR SHALL, USING RSD 1101.02, SHEET 1 OF 15 & RSD 1101.03, SHEET 8 OF 9:

-- PAVE THE FINAL LAYER OF SURFACE COURSE, PLACE THE FINAL PAVEMENT MARKINGS & MARKERS AND OPEN TO THE FINAL TRAFFIC PATTERN (SEE CONSTRUCTION PLANS AND FINAL PAVEMENT MARKING PLANS).

-- REMOVE REMAINDER OF TRAFFIC CONTROL DEVICES.

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APPROVED: _____ DATE: _____			PHASING
SEAL			



**TEMPORARY PAVEMENT MARKING / MARKER**

PAVEMENT MARKING - PAINT	
(PA)	WHITE EDGELINE (4")
(PI)	DOUBLE YELLOW CENTERLINE (4")
(P4)	WHITE STOPBAR (24")

PAVEMENT MARKER	
(MH)	YELLOW / YELLOW TEMPORARY RAISED
(MM)	CRYSTAL / CRYSTAL TEMPORARY RAISED

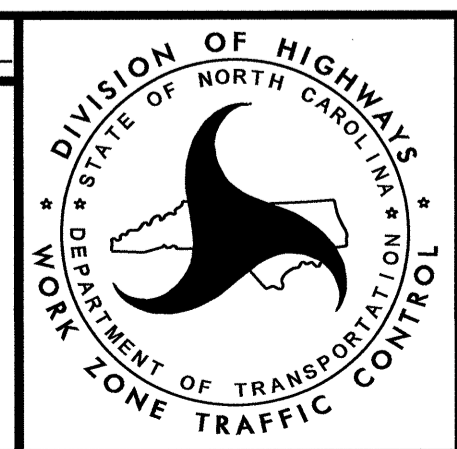
**NOTES**

1. TEMPORARY RAISED PAVEMENT MARKERS SHALL BE SPACED AT 10' IN SHIFT TAPERS AND 25' IN TANGENT SECTIONS.
2. SEE SHEETS TMP-3A & TMP-3B FOR CROSS SECTIONS.
3. SEE SHEET TMP-5D FOR CHANGEABLE MESSAGE SIGN (CMS) MESSAGES.

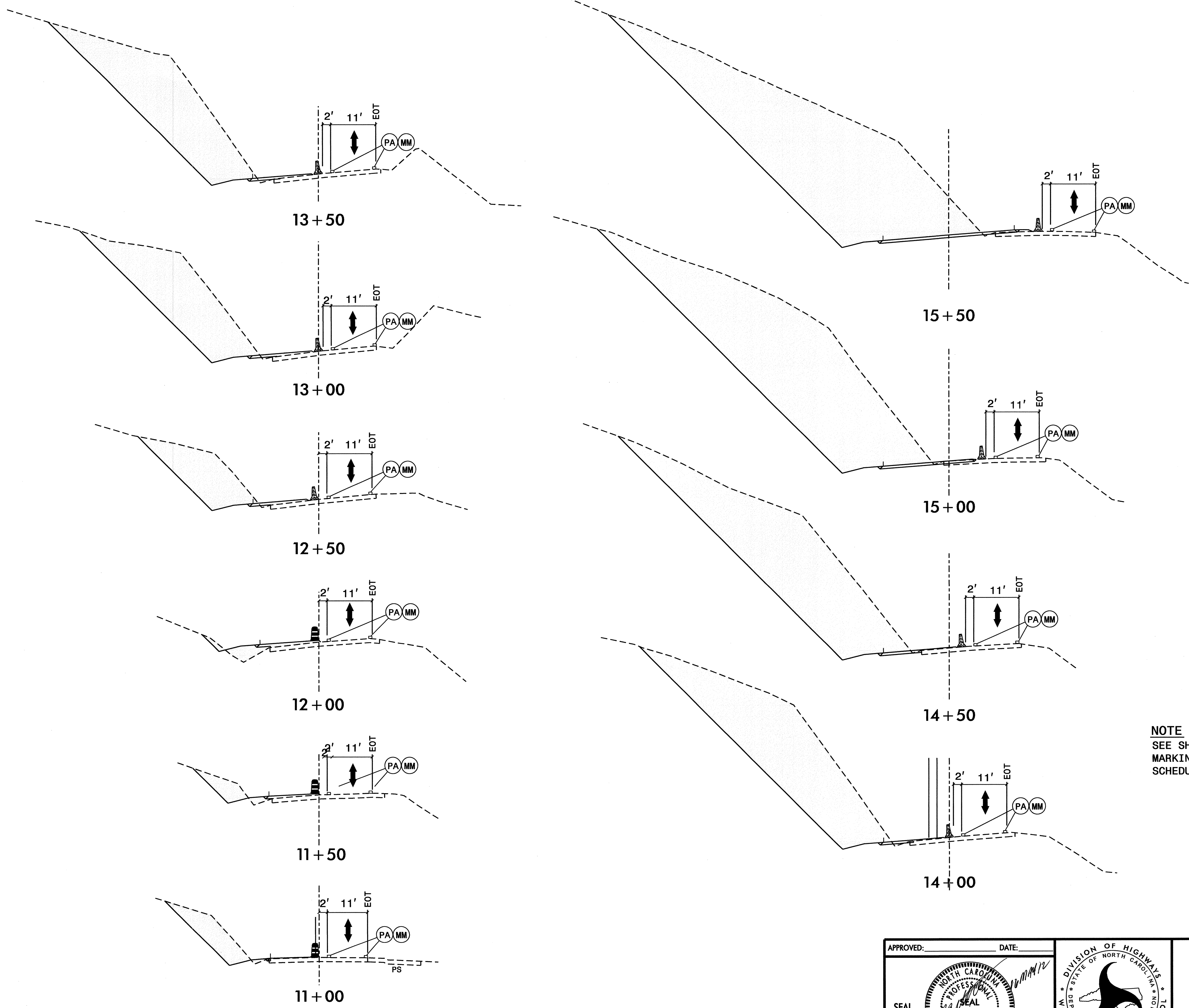
16-MAY-2012 10:38  
 W:\Projects\5307\TrafficControl\TrafficControl\TCP\W-5307-TC-TMP-3.dgn  
 kbroodwell AT TEL244739

APPROVED: \_\_\_\_\_ DATE: 16 MAY 12

SEAL



**PHASE I DETAILS**



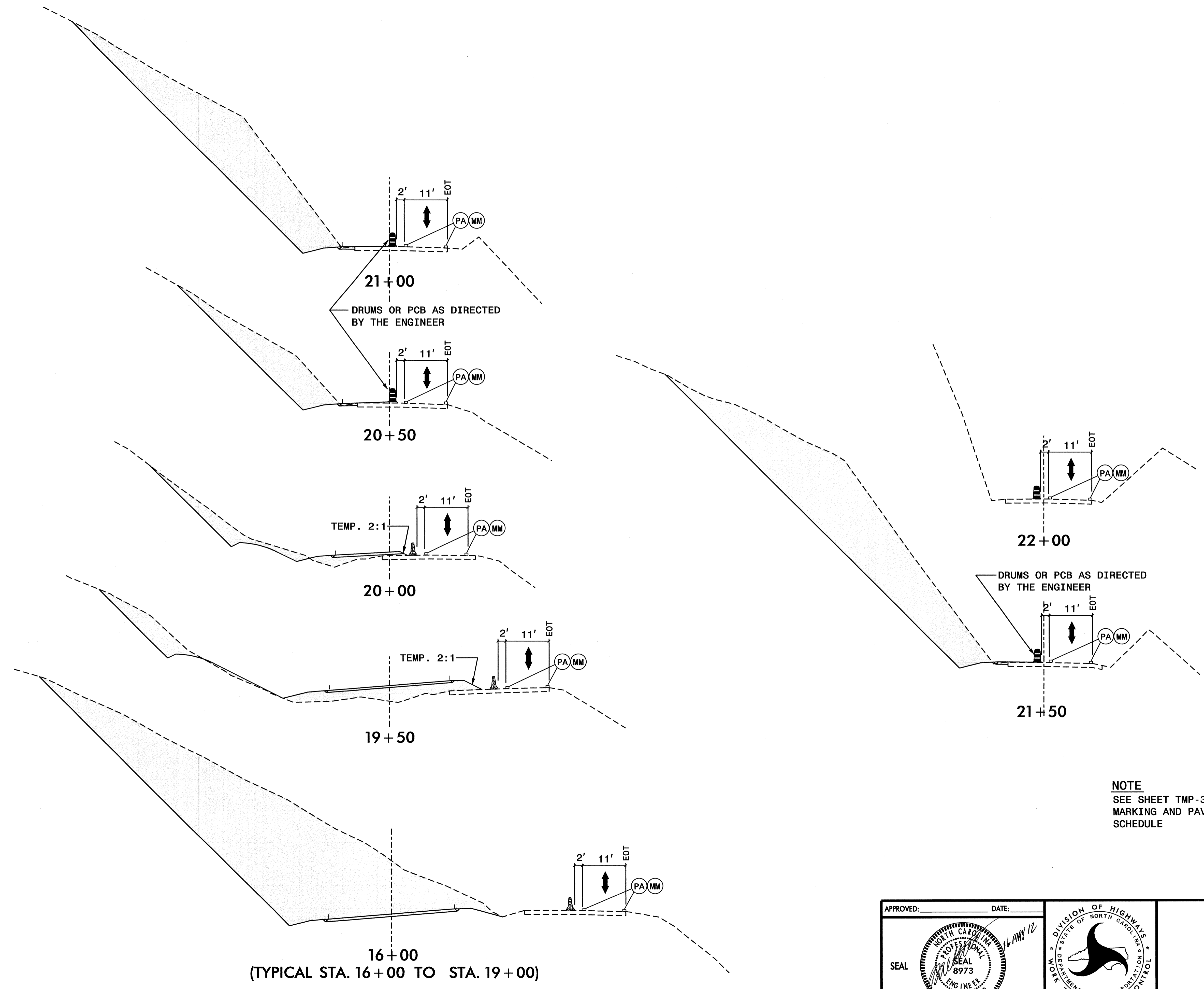
**NOTE**  
 SEE SHEET TMP-3 FOR PAVEMENT  
 MARKING AND PAVEMENT MARKER  
 SCHEDULE

16-MAY-2012 10:39  
 \\w01\proj\TIPProjects\W-5307\TrafficControl\TCP\W-5307\_TC\_TMP-3.dgn  
 kbr\codwell AT 12244739

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

SEAL

**PHASE I DETAILS**



**NOTE**  
 SEE SHEET TMP-3 FOR PAVEMENT  
 MARKING AND PAVEMENT MARKER  
 SCHEDULE

16-MAY-2012 10:40  
 N:\dot\gfrs\0911\TIPProjects\W\5307\TrafficControl\TCP\W-5307\_TC\_TMP-3.dgn  
 R:\ocdwell\_AT\_1E244739

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

SEAL

**PHASE I DETAILS**



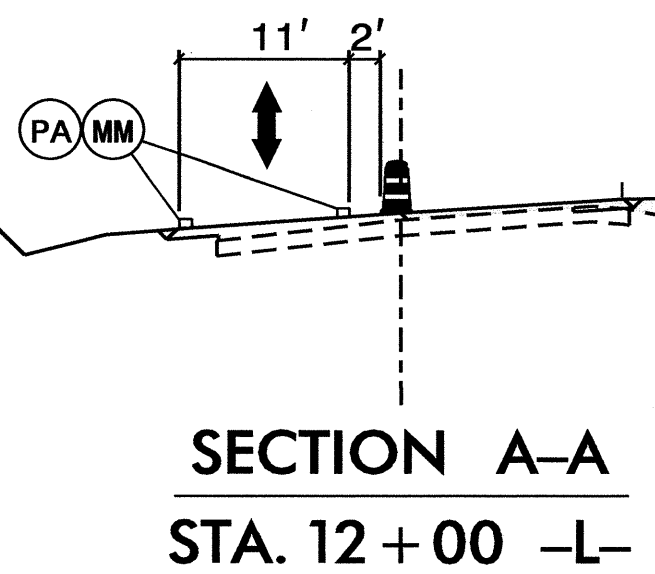
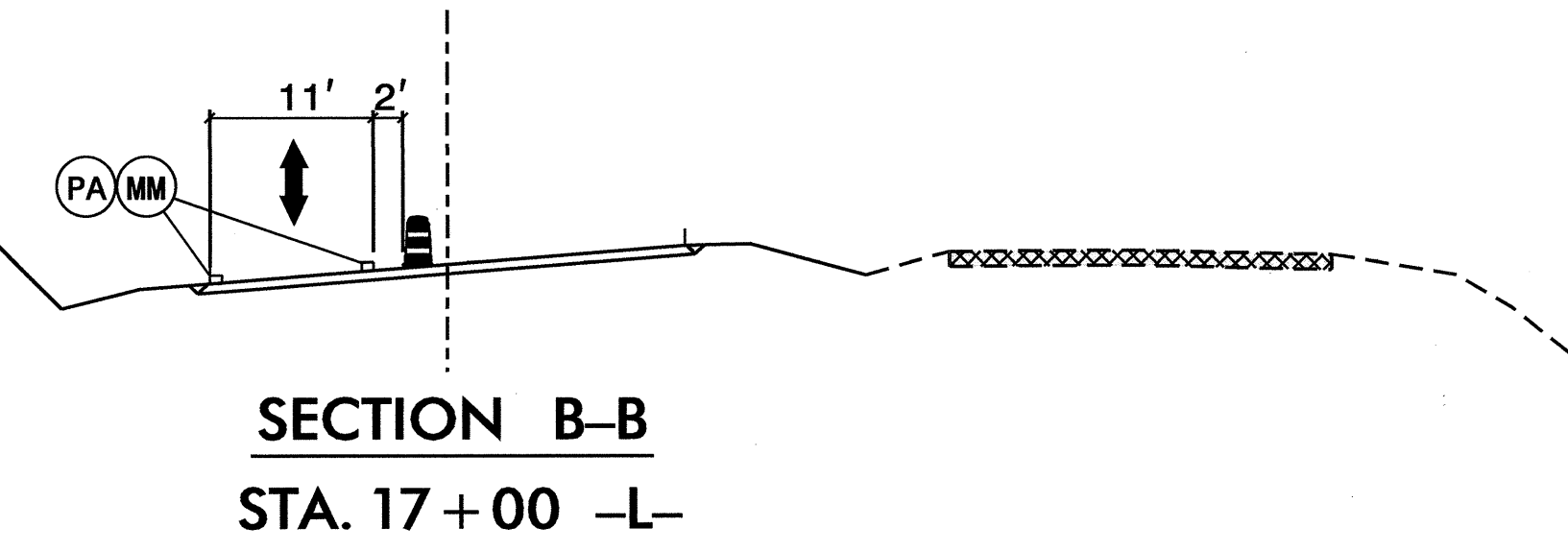
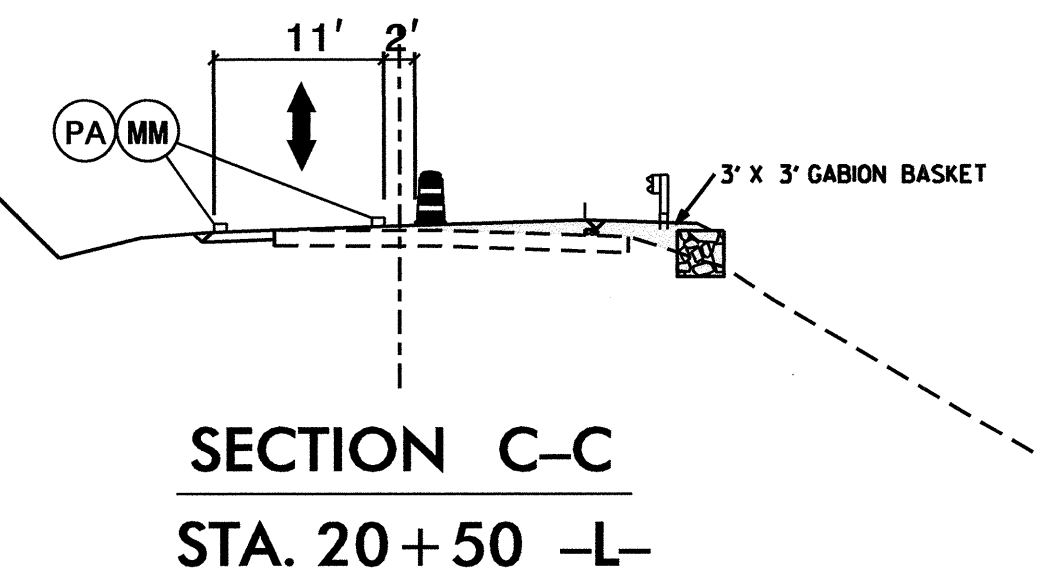
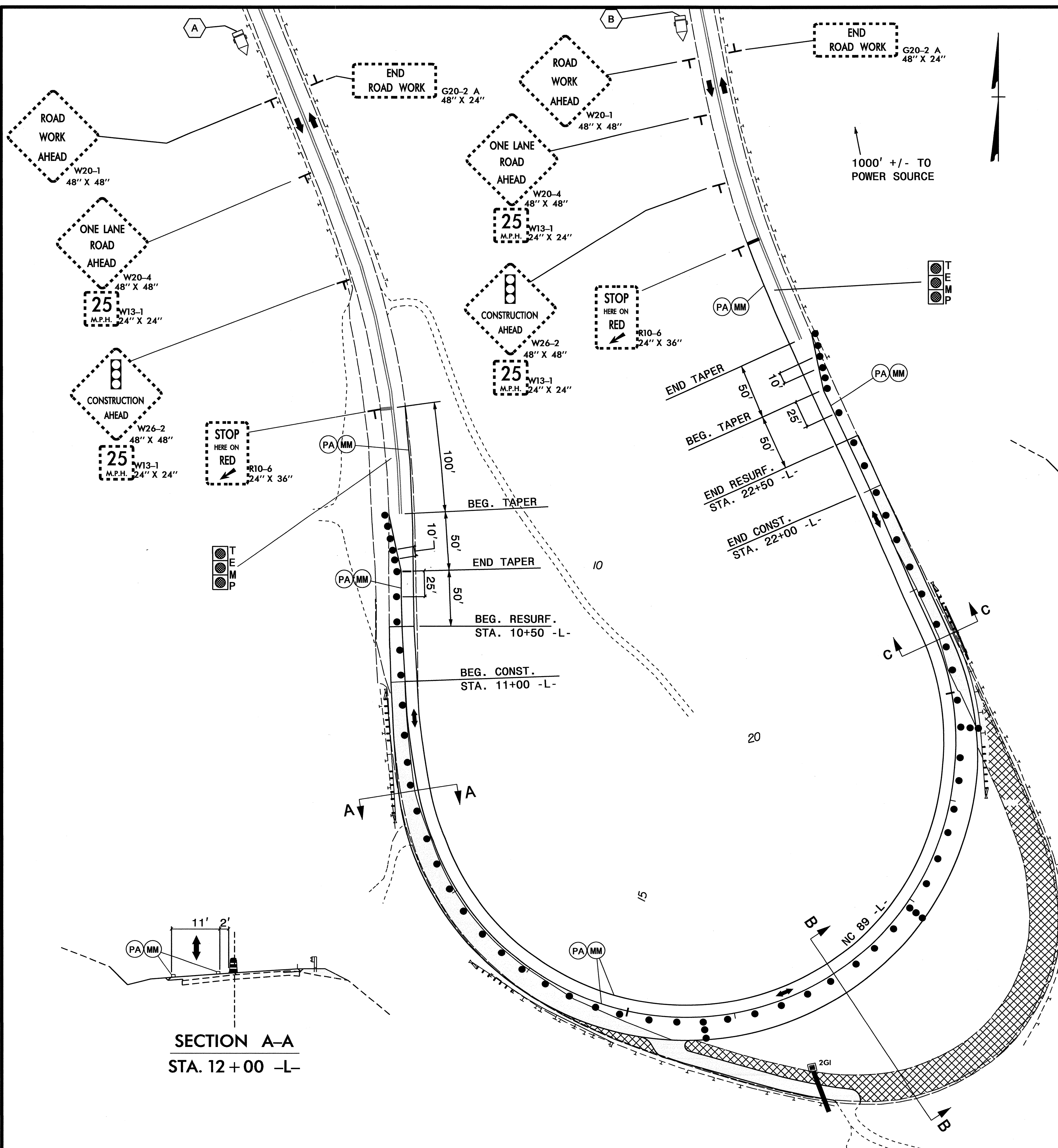
**TEMPORARY PAVEMENT MARKING / MARKER**

PAVEMENT MARKING - PAINT	
(PA)	WHITE EDGELINE (4")
(PI)	DOUBLE YELLOW CENTERLINE (4")
(P4)	WHITE STOPBAR (24")

PAVEMENT MARKER	
(MH)	YELLOW / YELLOW TEMPORARY RAISED
(MM)	CRYSTAL / CRYSTAL TEMPORARY RAISED

**NOTES**

1. TEMPORARY RAISED PAVEMENT MARKERS SHALL BE SPACED AT 10' IN SHIFT TAPERS AND 25' IN TANGENT SECTIONS.
2. SEE SHEET TMP-5D FOR CHANGEABLE MESSAGE SIGN (CMS) MESSAGES.





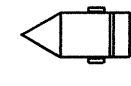

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

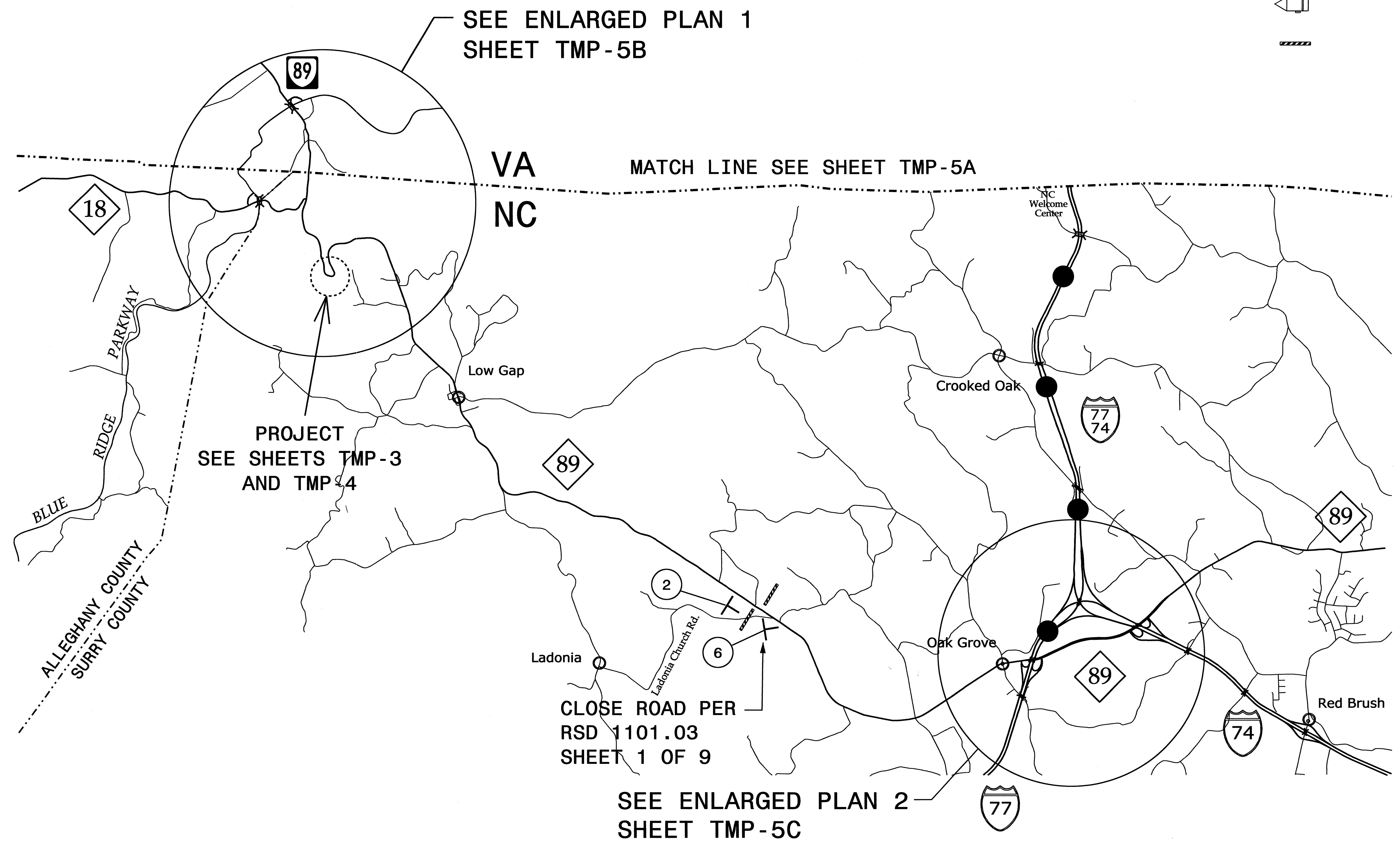
SEAL

**PHASE II DETAILS**

I:\6-MAY-2012 10:42 AM\Projects\TrafficControl\TrafficControl\TCP\W-5307.TC.TMP\_4.dgn  
 kbpcadwell AT TEL24739

**LEGEND**

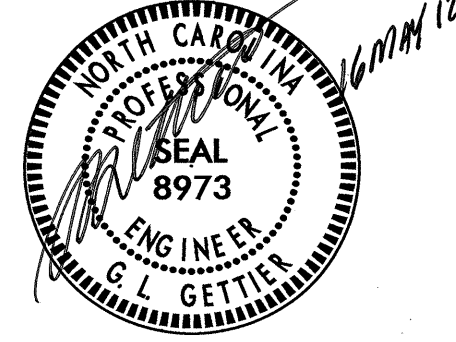

-  OFF-SITE DETOUR ROUTE
-  STATIONARY SIGN
-  CHANGEABLE MESSAGE SIGN (CMS)
-  TYPE III BARRICADE

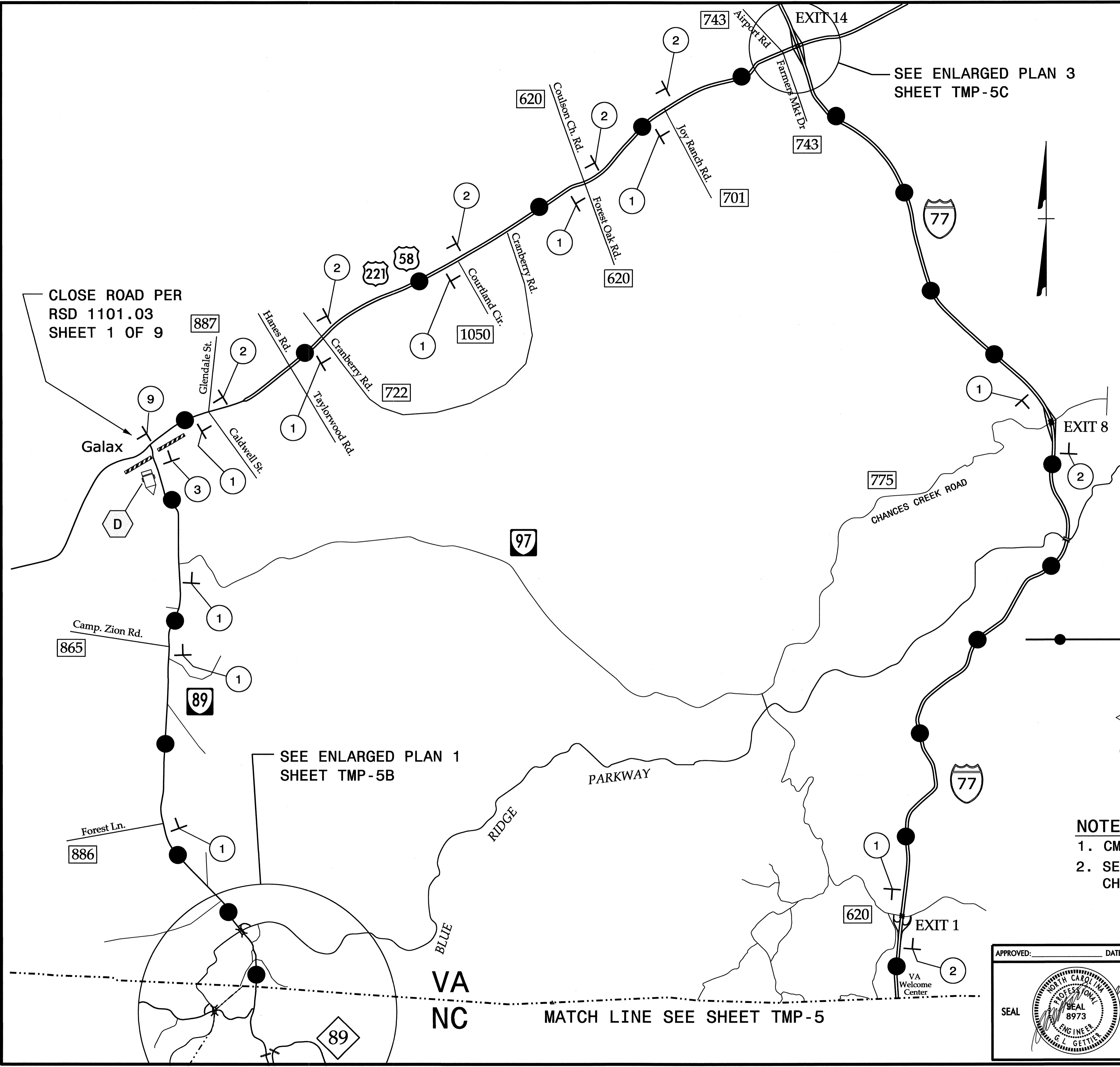


**NOTES**

1. SEE SHEET TMP-5D FOR DETOUR SIGNAGE DETAILS.

16 MAY 2012 10:43  
 \\s01\p01\proj\proj\TrafficControl\TrafficControl\W-5307\TC-TMP-detour.dgn  
 kbrockwell AT TEL244739

APPROVED: _____ DATE: _____ 		OFF-SITE DETOUR PLAN
--	---	----------------------



CLOSE ROAD PER  
RSD 1101.03  
SHEET 1 OF 9

SEE ENLARGED PLAN 3  
SHEET TMP-5C

SEE ENLARGED PLAN 1  
SHEET TMP-5B

MATCH LINE SEE SHEET TMP-5

**LEGEND**

- OFF-SITE DETOUR ROUTE
- STATIONARY SIGN
- CHANGEABLE MESSAGE SIGN (CMS)
- TYPE III BARRIcade

**NOTES**

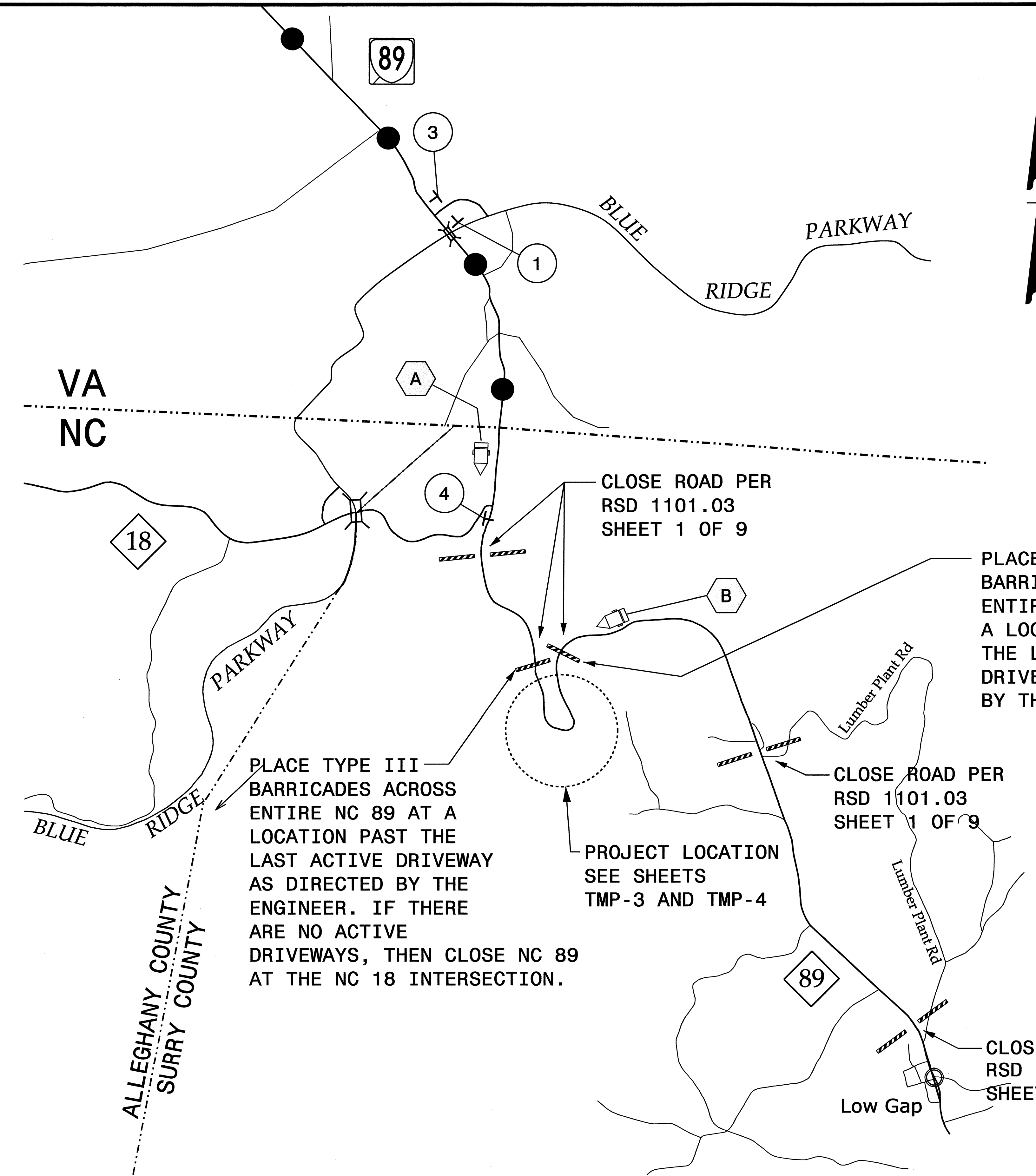
1. CMS LOCATIONS AS DIRECTED BY THE ENGINEER.
2. SEE SHEET TMP-5D FOR DETOUR SIGNAGE AND CHANGEABLE MESSAGE SIGN DETAILS.

22-MAY-2012 07:03 P:\Projects\TrafficControl\W-5307\TrafficControl\W-5307-TC-TMP-detour.dgn  
 Kbr Goodwell AT 12-24-13

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

SEAL

OFF-SITE DETOUR PLAN



PLACE TYPE III BARRICADES ACROSS ENTIRE NC 89 AT A LOCATION PAST THE LAST ACTIVE DRIVEWAY AS DIRECTED BY THE ENGINEER.

PLACE TYPE III BARRICADES ACROSS ENTIRE NC 89 AT A LOCATION PAST THE LAST ACTIVE DRIVEWAY AS DIRECTED BY THE ENGINEER. IF THERE ARE NO ACTIVE DRIVEWAYS, THEN CLOSE NC 89 AT THE NC 18 INTERSECTION.

CLOSE ROAD PER RSD 1101.03 SHEET 1 OF 9

CLOSE ROAD PER RSD 1101.03 SHEET 1 OF 9

CLOSE ROAD PER RSD 1101.03 SHEET 1 OF 9

PROJECT LOCATION SEE SHEETS TMP-3 AND TMP-4

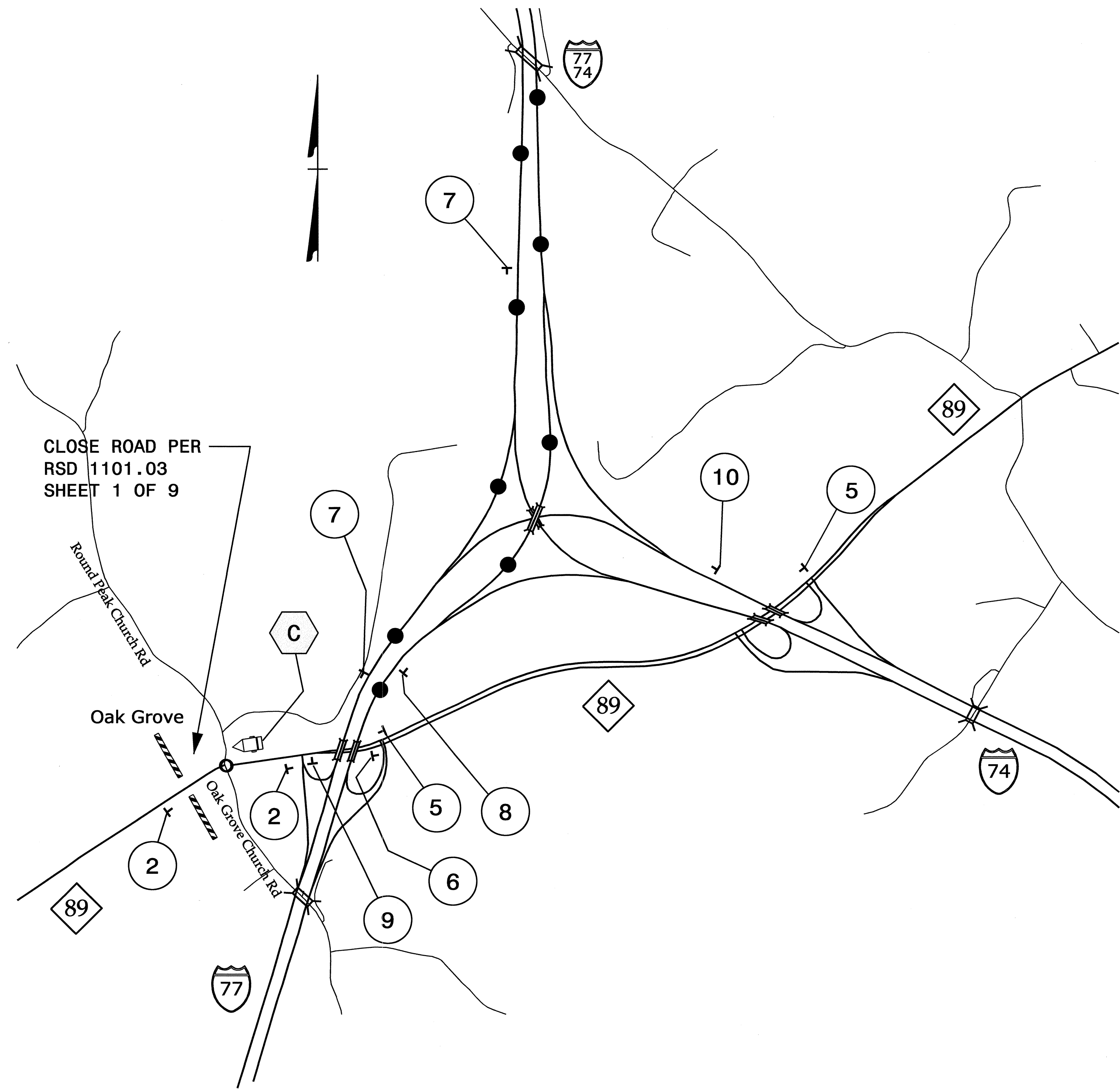
**LEGEND**

	OFF-SITE DETOUR ROUTE
	STATIONARY SIGN
	CHANGEABLE MESSAGE SIGN (CMS)
	TYPE III BARRICADE

- NOTES**
1. CMS LOCATIONS AS DIRECTED BY THE ENGINEER.
  2. SEE SHEETS TMP-5 AND TMP-5A FOR OFF-SITE DETOUR PLAN.
  3. SEE SHEET TMP-5D FOR DETOUR SIGNAGE AND CHANGEABLE MESSAGE SIGN DETAILS.

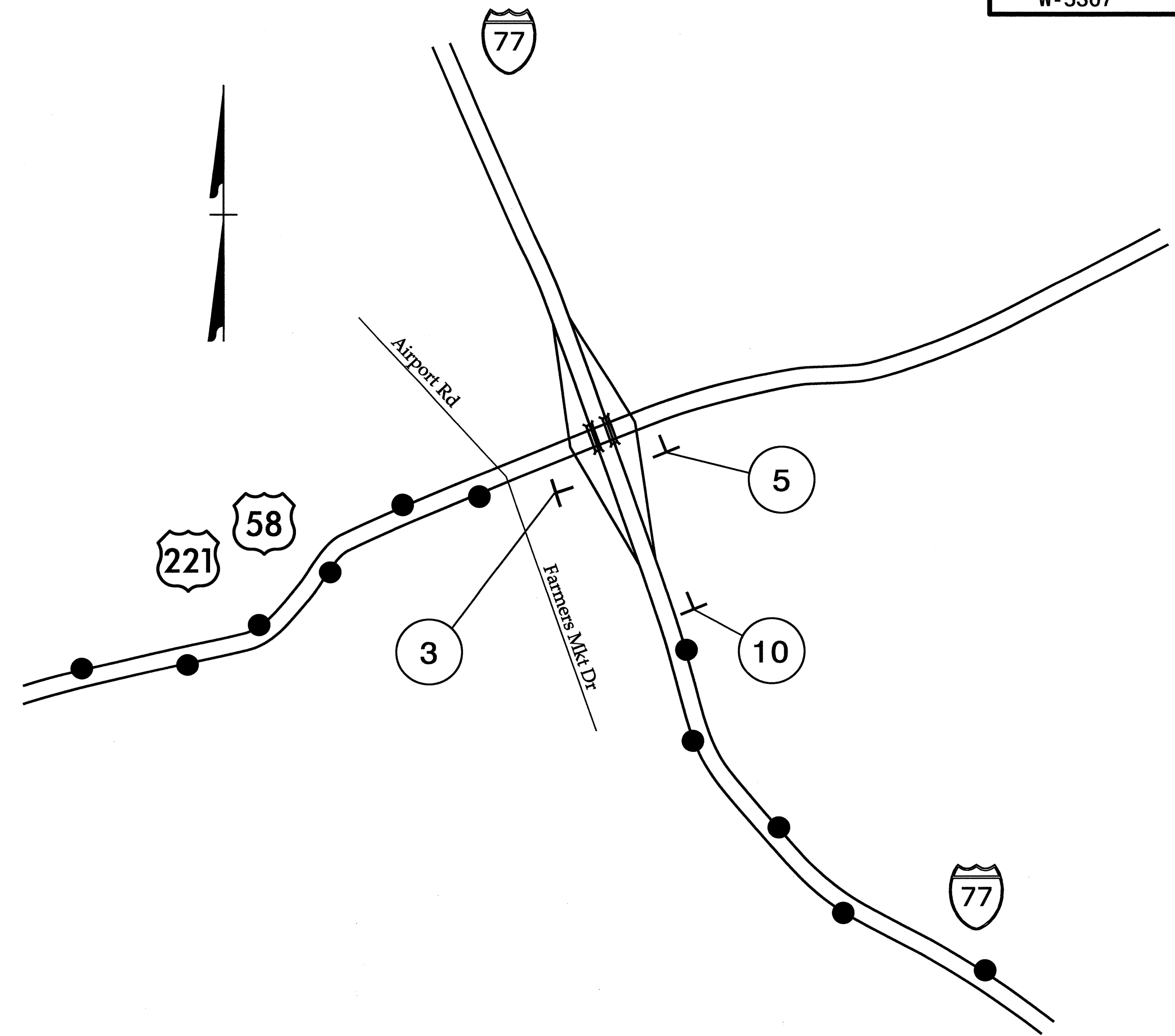
22-MAY-2012 07:04  
 C:\dot\cfs\Projects\W\5307\TrafficControl\TrafficControl\CPN\W-5307-TC-TMP-detour.dgn  
 kbr\codwell AT TEL244739

APPROVED: _____ DATE: _____			<b>ENLARGED DETOUR PLAN 1</b>
SEAL			



CLOSE ROAD PER  
RSD 1101.03  
SHEET 1 OF 9

**ENLARGED PLAN 2**



**ENLARGED PLAN 3**

**LEGEND**

- OFF-SITE DETOUR ROUTE
- STATIONARY SIGN
- CHANGEABLE MESSAGE SIGN (CMS)
- TYPE III BARRICADE

**NOTES**

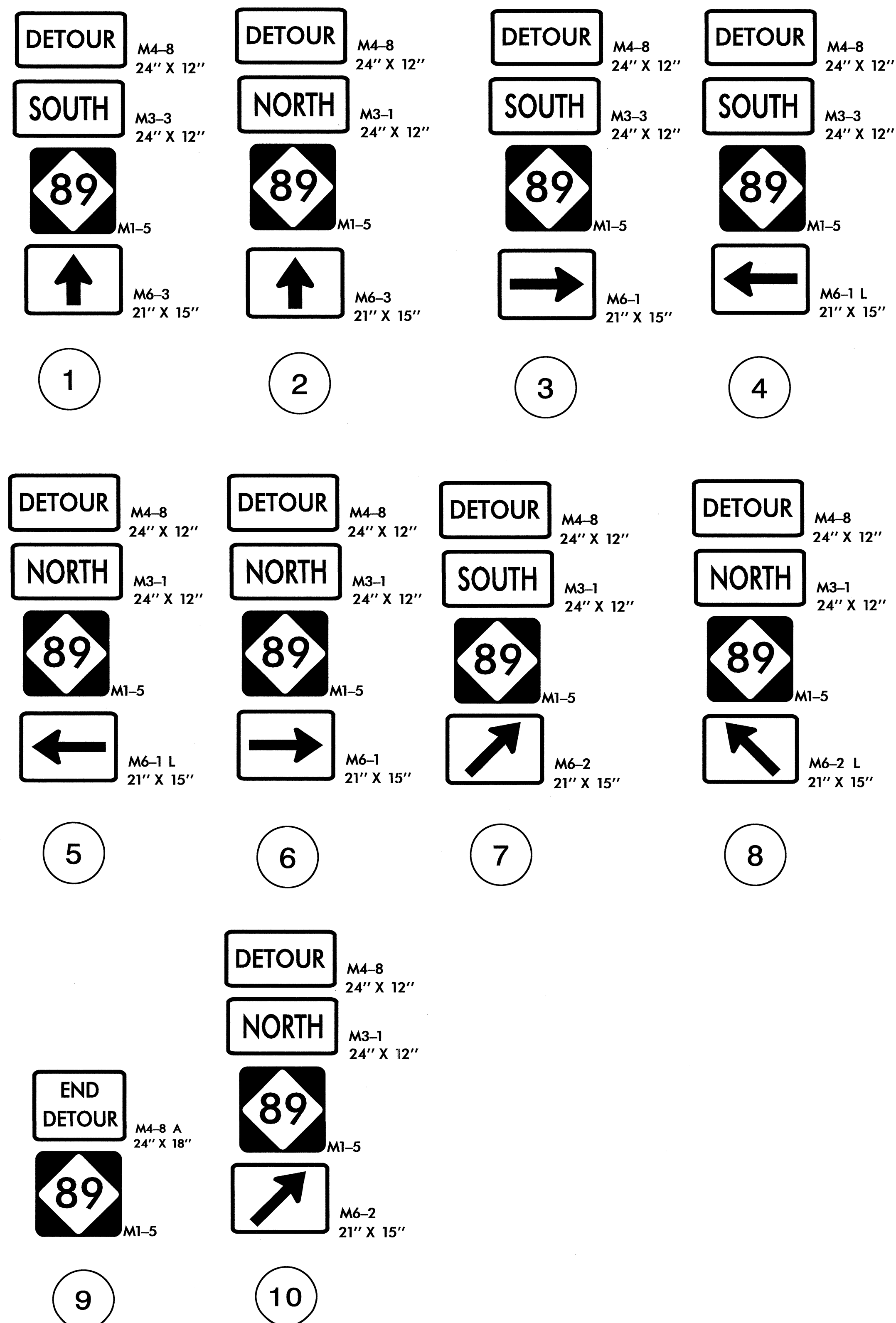
1. CMS LOCATIONS AS DIRECTED BY THE ENGINEER.
2. SEE SHEETS TMP-5 AND TMP-5A FOR OFF-SITE DETOUR PLAN.
3. SEE SHEET TMP-5D FOR DETOUR SIGNAGE AND CHANGEABLE MESSAGE SIGN DETAILS.

22-MAY-2012 07:05  
 C:\d01\cfs\p\proj\TIP\Projects-W\5307\TrafficControl\TCP\W-5307\_TC\_TMP\_detour.dgn  
 kbr\odwell AT TEL244739

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

ENLARGED DETOUR PLANS 2 & 3

CHOOSE THE APPROPRIATE WORDING FOR CHANGEABLE MESSAGE SIGNS FROM THE FOLLOWING MATRIX, OR WORD THE SIGNS AS DIRECTED BY THE ENGINEER



### DETOUR SIGNS

### NOTES

1. ALL DETOUR SIGNS ARE BLACK ON FLOURSCENT ORANGE.
2. REMOVE CMS C AND D AND THE OFF-SITE DETOUR SIGNS WHEN THE DETOUR IS NO LONGER NEEDED.

CHANGEABLE MESSAGE SIGN MATRIX							
A		B		C		D	
MSG. NO. 1 NC 89 SOUTH TO CLOSE	MSG. NO. 2 MON 7PM TO TUE 5AM	MSG. NO. 1 NC 89 NORTH TO CLOSE	MSG. NO. 2 MON 7PM TO TUE 5AM	MSG. NO. 1 NC 89 NORTH TO CLOSE	MSG. NO. 2 MON 7PM TO TUE 5AM	MSG. NO. 1 NC 89 SOUTH TO CLOSE	MSG. NO. 2 MON 7PM TO TUE 5AM
MSG. NO. 1 NC 89 SOUTH TO CLOSE	MSG. NO. 2 WED 7PM TO THUR 5AM	MSG. NO. 1 NC 89 NORTH TO CLOSE	MSG. NO. 2 WED 7PM TO THUR 5AM	MSG. NO. 1 NC 89 NORTH TO CLOSE	MSG. NO. 2 WED 7PM TO THUR 5AM	MSG. NO. 1 NC 89 SOUTH TO CLOSE	MSG. NO. 2 WED 7PM TO THUR 5AM
MSG. NO. 1 NC 89 SOUTH TO CLOSE	MSG. NO. 2 TUESDAY 11 AM TO 3 PM	MSG. NO. 1 NC 89 NORTH TO CLOSE	MSG. NO. 2 TUESDAY 11 AM TO 3 PM	MSG. NO. 1 NC 89 NORTH TO CLOSE	MSG. NO. 2 TUESDAY 11 AM TO 3 PM	MSG. NO. 1 NC 89 SOUTH TO CLOSE	MSG. NO. 2 TUESDAY 11 AM TO 3 PM
MSG. NO. 1 NC 89 SOUTH TO CLOSE	MSG. NO. 2 THURSDAY 11 AM TO 3 PM	MSG. NO. 1 NC 89 NORTH TO CLOSE	MSG. NO. 2 THURSDAY 11 AM TO 3 PM	MSG. NO. 1 NC 89 NORTH TO CLOSE	MSG. NO. 2 THURSDAY 11 AM TO 3 PM	MSG. NO. 1 NC 89 SOUTH TO CLOSE	MSG. NO. 2 THURSDAY 11 AM TO 3 PM
MSG. NO. 1 NC 89 SOUTH TO CLOSE	MSG. NO. 2 TONIGHT 7 PM TO 5 AM	MSG. NO. 1 NC 89 NORTH TO CLOSE	MSG. NO. 2 TONIGHT 7 PM TO 5 AM	MSG. NO. 1 NC 89 NORTH TO CLOSE	MSG. NO. 2 TONIGHT 7 PM TO 5 AM	MSG. NO. 1 NC 89 SOUTH TO CLOSE	MSG. NO. 2 TONIGHT 7 PM TO 5 AM
MSG. NO. 1 NC 89 CLOSED 1 MILE	MSG. NO. 2 DETOUR NC 89 NORTH	MSG. NO. 1 NC 89 CLOSED AHEAD	MSG. NO. 2 DETOUR NC 89 SOUTH	MSG. NO. 1 NC 89 CLOSED 10 MILES	MSG. NO. 2 DETOUR I-77 NORTH	MSG. NO. 1 NC 89 CLOSED 8 MILES	MSG. NO. 2 DETOUR US 58 EAST
MSG. NO. 1 NC 89 OPEN	MSG. NO. 2 ONE LANE PATTERN AHEAD	MSG. NO. 1 NC 89 OPEN	MSG. NO. 2 ONE LANE PATTERN AHEAD	MSG. NO. 1 NC 89 OPEN	MSG. NO. 2	MSG. NO. 1 NC 89 OPEN	MSG. NO. 2

### CHANGEABLE MESSAGE SIGNS

APPROVED: _____ DATE: _____			<b>DETOUR SIGNS &amp; CHANGEABLE MESSAGE SIGNS DETAILS</b>
SEAL			