STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

STATE PROJECT REFERENCE NO. SHEET NO. B-4466 TCP-1

PLAN FOR PROPOSED TRAFFIC CONTROL, MARKING & DELINEATION

CLAY COUNTY

SHEET NO.

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.	<u>TITLE</u>
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER 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	DRUM
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1180.01	SKINNY-DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.12	PAVEMENT MARKINGS - BRIDGES
1261.01	GUARDRAIL & BARRIER DELINEATOR SPACING
1261.02	GUARDRAIL & BARRIER DELINEATOR TYPES
1262.01	GUARDRAIL END DELINEATION

INDEX OF SHEETS

TITLE

TCP - 1	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS,
	LEGEND, TEMPORARY PAVEMENT MARKING SCHEDULE AND
	INDEX OF SHEETS
TCP-2	PHASING AND PROJECT NOTES
TCP-3	DETOUR I
TCP-4	DETAIL
TCP-5	DETOUR II
TCP-6	ADVANCE WORK ZONE WARNING SIGNS
SD-1	TEMPORARY DETOUR SIGNS
	(PINE LOG RD. & WEST GUM LOG RD.)
PM-1	FINAL PAVEMENT MARKING PLAN AND FINAL PAVEMENT

MARKING SCHEDULE

TEMPORARY PAVEMENT MARKING SCHEDULE

SYMBOL	DESCRIPTION	PAVEMENT	MARKINGS		M QUANTITY REAKDOWN	ТОТ	AL
PA	WHITE EDGE LINE (1X)	PAINT ((4")	32	00 FT	3200	FT
PI	YELLOW DOUBLE CENTER LINE (1X)	PAINT ((4")	160	00 FT	3200	FT
P4	WHITE STOPBAR (1X)	PAINT ((24")	;	30 FT	30	FT
NOTE:	FOR EACH PAINT PAVEMENT MARKI	NG ITEM, 1	1X IMPLIES IN	SINGLE APPL	ICATION,		

LEGEND

GENERAL

DIRECTION OF TRAFFIC FLOW

--- NORTH ARROW

— PROPOSED PVMT. ----- EXIST. PVMT.

WORK AREA

REMOVAL OF EXISTING PAVEMENT

TRAFFIC CONTROL DEVICES

T TYPE I BARRICADE

TYPE III BARRICADE

▲ CONE

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

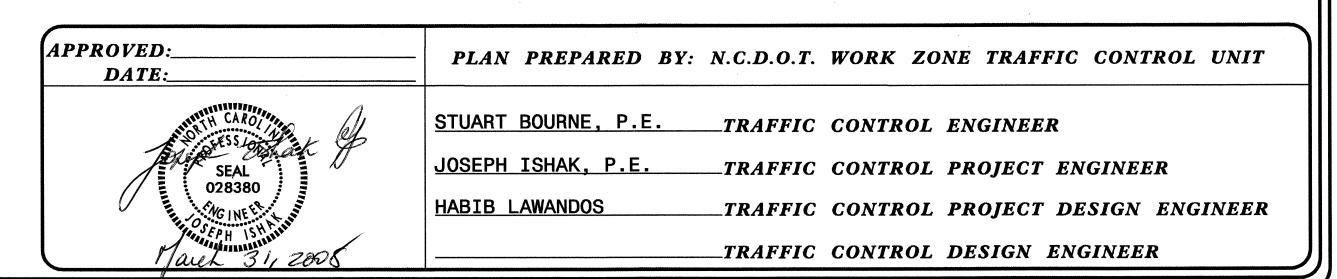
PAVEMENT MARKINGS

CRYSTAL/CRYSTAL PAVEMENT MARKER

YELLOW/YELLOW PAVEMENT MARKER

CRYSTAL/RED PAVEMENT MARKER

PAVEMENT MARKING SYMBOLS



PROJ. REFERENCE NO. SHEET NO. B-4466 TCP-2

STEP 1:

USING RSD 1101.02, SHEET 1 OF 9, AND SHEET TCP-6, INSTALL ADVANCE WORK ZONE WARNING SIGNS ON SR 1104 (PINE LOG RD.) AND SR 1107 (WEST GUM LOG RD.).

STEP 2:

- IN A CONTINUOUS MANNER PERFORM THE FOLLOWING:
- 1) USING RSD 1101.02, SHEET 1 OF 9, MODIFY PAVEMENT MARKINGS AT INTERSECTION OF SR 1104 & SR 1107, AND TIE TO EXISTING PAVEMENT MARKINGS AT -Y- STA.11+00+/ AND -L- STA.16+26+/-AS SHOWN ON SHEET TCP-4.
- 2) USING RSD 1101.03, SHEETS 1 OF 9 & 2 OF 9, INSTALL TYPE III BARRICADES AND TEMPORARY DETOUR SIGNS. CLOSE SR 1104 FROM -L- STA.16+85+/- TO -L- STA. 22+50+/-, AND DETOUR TRAFFIC OFFSITE AS SHOWN ON SHEET TCP-3.

STEP 3:

- 1) USING RSD 1101.02, SHEET 1 OF 9, INSTALL TEMPORARY GUARDRAIL FROM -L- STA.15+77+/- TO -Y- STA.10+40+/-. SEE SHEET TCP-4.
- 2) AWAY FROM TRAFFIC, REMOVE EXISTING STRUCTURE, CONSTRUCT PROPOSED STRUCTURE AND ROADWAY UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE FROM -L- STA.16+85+/- TO -L- STA.22+50+/-. SEE ROADWAY PLANS, STRUCTURE PLANS, AND SHEET TCP-4.
 - USING RSD 1101.02, SHEET 1 OF 9, PERFORM THE FOLLOWING:
 - * BEGIN CONSTRUCTION UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE OF PROPOSED -L- FROM STA. 10+00+/- TO STA.16+85+/-. SEE SHEET TCP-4.
 - * BEGIN CONSTRUCTION OF PROPOSED DRAINAGE WITHIN THE PROJECT LIMITS. SEE HYDRO AND ROADWAY PLANS.

COMPLETE THE WORK REQUIRED IN STEP 4, WITHIN (14) FOURTEEN CONSECUTIVE CALENDAR DAYS. SEE INTERMEDIATE CONTRACT TIME FOR LIQUIDATED DAMAGES.

STEP 4:

- 1) USING RSD 1101.03, SHEET 1 OF 9, PERFORM THE FOLLOWING AT PROJECT LIMITS. DETOUR TRAFFIC OFFSITE AS SHOWN ON SHEET TCP-5:
 - PLACE TYPE III BARRICADES ON SR 1107 (WEST GUM LOG RD.) AND CLOSE ROAD TO TRAFFIC.
 - ADD TYPE III BARRICADES ON SR 1104 (PINE LOG RD.) AND CLOSE ROAD TO TRAFFIC.
- INSTALL DETOUR SIGNS AS SHOWN ON SHEET TCP-5.
- 2) AWAY FROM TRAFFIC, PERFORM THE FOLLOWING:
 - 1. REMOVE TEMPORARY GUARDRAIL, INSTALLED IN STEP 3, FROM -L- STA.15+77+/- TO -Y- STA.10+40+/-.
 - 2. COMPLETE CONSTRUCTION UP TO BUT NOT INCLUDING FINAL SURFACE COURSE OF PROPOSED -L- FROM STA.10+00+/- TO STA. 22+50+/- AND PROPOSED -Y- FROM STA.10+00 TO STA.11+87+/- INCLUDING C & G ON -Y- LINE AND DRAINAGE WORK ON -L- & -Y- LINES.
 - 3. PLACE TEMPORARY PAVEMENT MARKINGS (PAINT) AND TIE TO EXISTING MARKINGS AT PROJECT LIMITS AS FOLLOWS: * FROM -L- STA.10+00+/- TO -L- STA.22+50+/-
 - * FROM -Y- STA.10+00 TO -Y- STA.11+87+/-.
 - 4. REMOVE OFFSITE DETOUR SIGNS AND TEMPORARY TRAFFIC CONTROL DEVICES. OPEN -L- AND -Y- TO PRPOSED TRAFFIC PATTERN.

<u>STEP 5:</u>

USING RSD 1101.02, SHEET 1 OF 9, PERFORM THE FOLLOWING:

- 1) REMOVE EXISTING ROADWAY. SEE ROADWAY PLANS.
- 2) PLACE FINAL LAYER OF SURFACE COURSE AND FINAL PAVEMENT MARKINGS (PAINT) ON -L- (SR 1104 PINE LOG RD.) AND -Y-(SR 1107 WEST GUM LOG RD.), AS SHOWN ON SHEET PM-1.
- 3) REMOVE ALL TEMPORARY SIGNS INCLUDING ADVANCE WORK ZONE SIGNS AND ALL TRAFFIC CONTROL DEVICES.

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 PROJECT 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.
- 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) DO NOT INSTALL MORE THAN ONE SIMULTANEOUS LANE CLOSURES, IN ANY ONE DIRECTION, ON SR 1104 (PINE LOG RD.) AND SR 1107 (WEST GUM LOG RD.).

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 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

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

SIGNING

PROJECT NOTES

- I) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- J) STATE FORCES WILL BE RESPONSIBLE FOR PERMANENT SIGNING.
- K) PROVIDE DETOUR SIGNING WITHIN AND OFF THE PROJECT LIMITS.
- L) COVER OR REMOVE ALL DETOUR SIGNS WITHIN AND OFF THE PROJECT LIMITS WHEN DETOUR IS NOT IN OPERATION.
- M) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

TRAFFIC CONTROL DEVICES

- N) SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH), EXEPT 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.
- O) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.
- P) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

PAVEMENT MARKINGS AND MARKERS

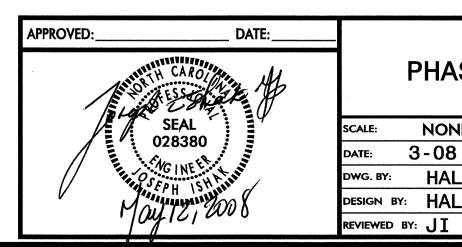
Q) INSTALL FINAL PAVEMENT MARKINGS ON THE FINAL SURFACE AS FOLLOWS:

ROAD NAME	MARKING	MARKER
SR 1104 (PINE LOG RD.)	PAINT	N/A
SR 1107 (WEST GUM LOG RD.)	PAINT	N/A

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

ROAD NAME	MARKING	MARKER
SR 1104 (PINE LOG RD.)	PAINT	N/A
SR 1107 (WEST GUM LOG RD.)	PAINT	N/A

- S) 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.
- T) 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.
- U) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.



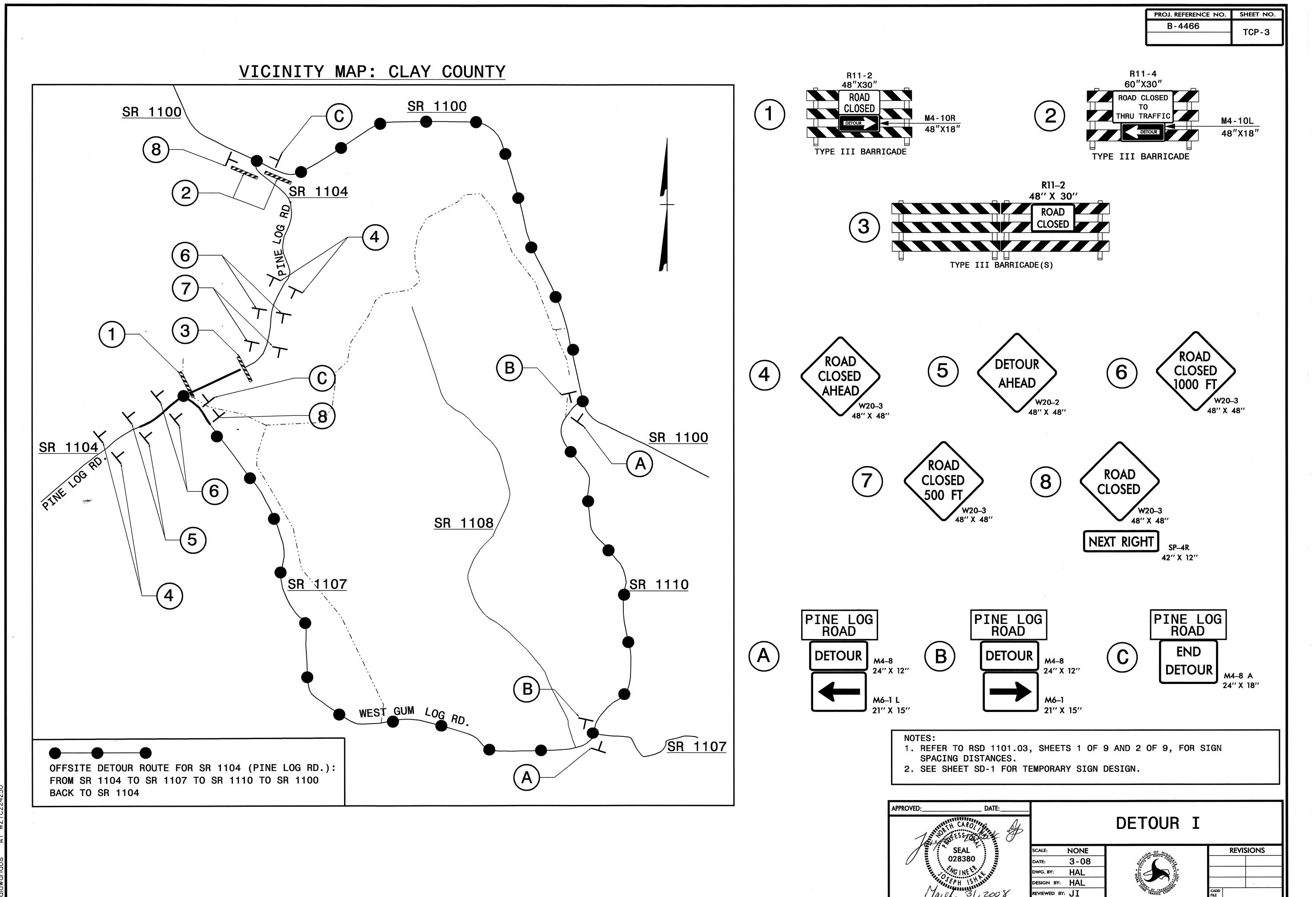
PHASING AND PROJECT NOTES

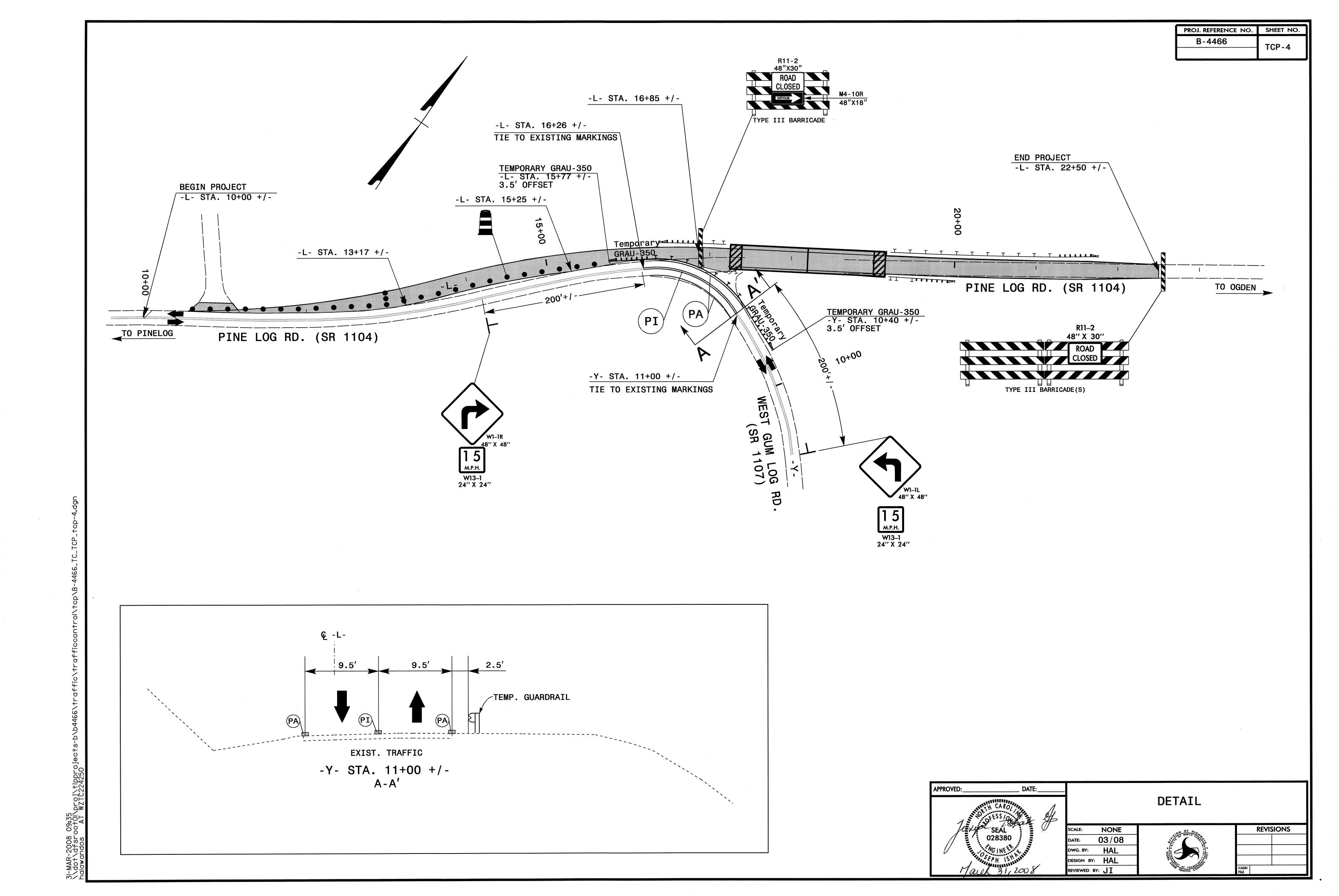
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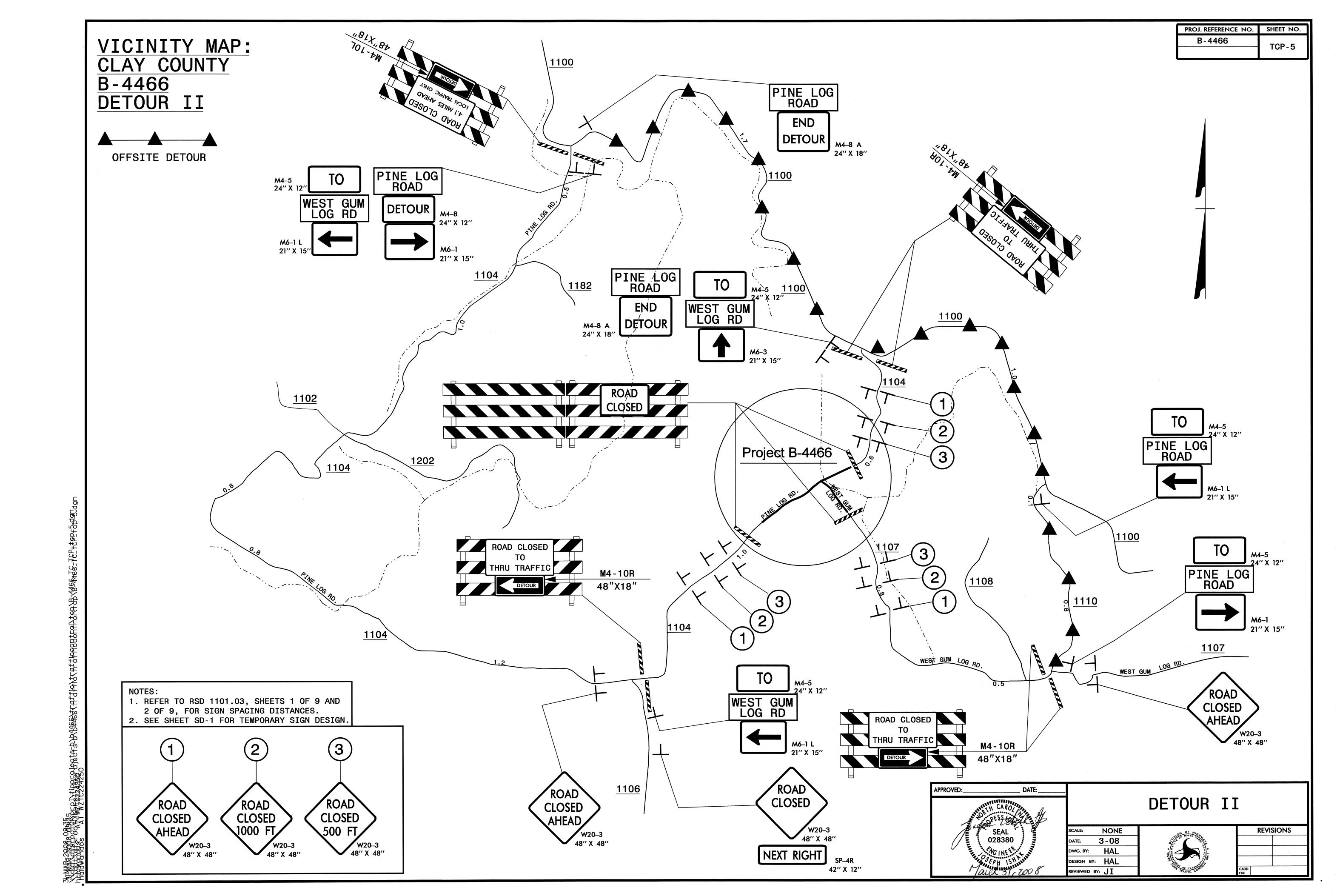
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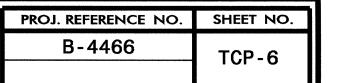
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REVISIONS









TRANSPORTATION

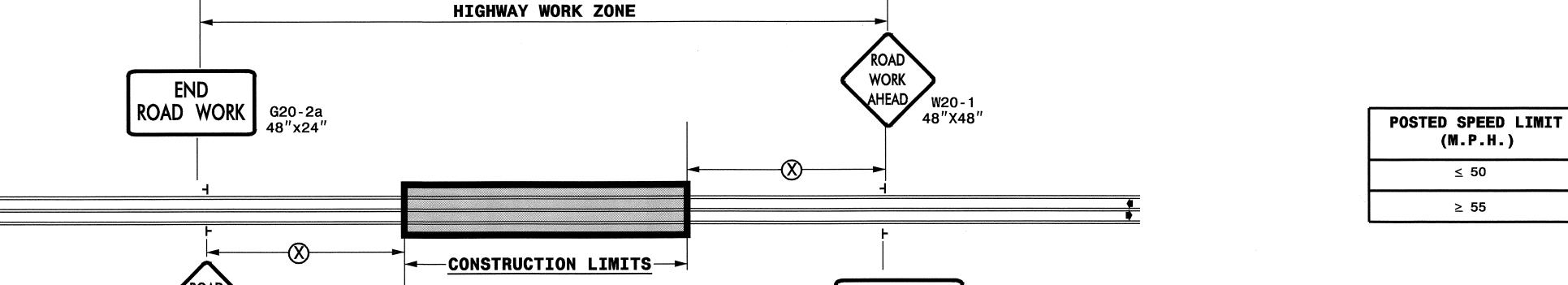
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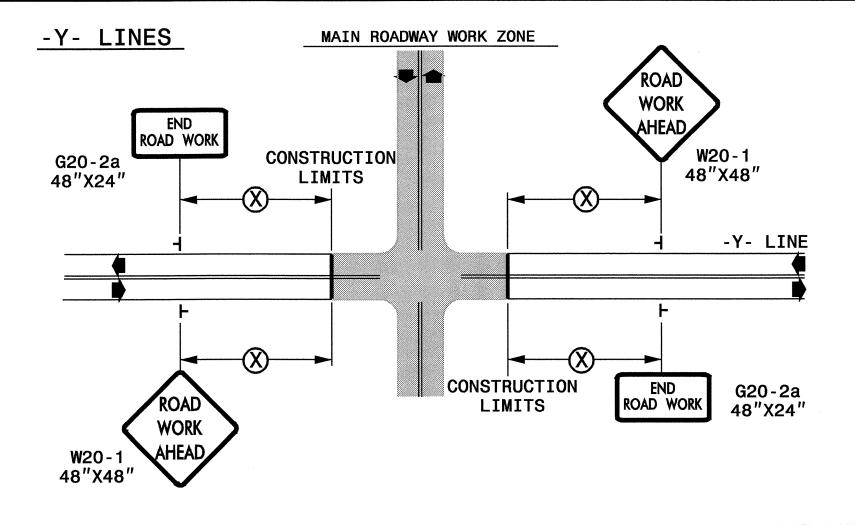
CAROLINA RECOMMENDED MINIMUM SIGN SPACING NORTH 500' 1000' 0F

ROADWAYS INTERSECTING ALONG 2 WAY UNDIVIDED WORK ZONE (Y-LINES)

END

ROAD WORK G20-2a 48"X24"

TWO-WAY UNDIVIDED ** (L-LINES)



GENERAL NOTES

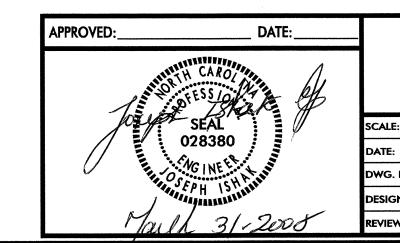
- USE FLUORESCENT ORANGE SHEETING (TYPE VII OR HIGHER) ON ALL ADVANCED WORK ZONE SIGNS.
- DO NOT INSTALL ADVANCE WARNING SIGNS MORE THAN 3 DAYS PRIOR TO BEGINNING OF WORK.
- SIGNS SHOWN ARE REQUIRED FOR WORK ZONES THAT WILL REMAIN IN EFFECT OVERNIGHT. FOR SHORT-TERM DAILY MAINTENANCE TYPE OPERATIONS, THIS SIGNING APPLICATION IS OPTIONAL; MAY USE ONLY APPLICABLE ROADWAY STANDARD DRAWINGS INSTEAD. HOWEVER, IF THIS SIGNING APPLICATION IS USED, SIGNS MAY BE PORTABLE MOUNTED.
- ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE, FIELD ADJUST AS NECESSARY OR AS DIRECTED.
- USE 3LB STEEL U-CHANNEL POST OR 4" X 4" WOOD POST FOR ALL WORK ZONE SIGNS. 3LB STEEL U-CHANNEL POSTS MUST MEET THE REQUIREMENTS OF STANDARD SPECIFICATION SECTION 1094-1(B), MAY BE GALVANIZED STEEL, OR MAY BE PAINTED GREEN BY THE POST MANUFACTURER. SQUARE STEEL TUBING POSTS HAVING EQUIVALENT STRENGTH OF THE 3 LB STEEL U-CHANNEL POST ARE ALSO ACCEPTABLE FOR USE. ERECT SIGNS PER ROADWAY STANDARD DRAWING 1110.01. PAYMENT FOR WOOD POSTS, 3LB STEEL U-CHANNEL AND SQUARE STEEL TUBING POSTS WITH SIGNS WILL BE MADE ACCORDING TO STANDARD SPECIFICATION "WORK ZONE SIGNS" SECTION 1110.
- WHEN NECESSARY, USE SPLICING IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1110.01. REMOVE ENTIRE POST WHEN REMOVING SIGNS WITH SPLICED POSTS.
- DO NOT BACK BRACE SIGN SUPPORTS.
- ** TWO-WAY UNDIVIDED ADVANCE WARNING SIGN CONFIGURATION MAY BE USED ON URBAN MULTI-LANE FACILITIES WHERE CONDITIONS LIMIT THE USE OF DUAL MOUNTED SIGNS AS DETERMINED BY THE ENGINEER.



├ STATIONARY SIGN

■ DIRECTION OF TRAFFIC FLOW

SHEET 1 OF 1



DETAIL	DRAW	ING F	FOR T	WO-W	ΑY
UNDIVIDE	D AN	ID UR	BAN F	FREEV	VAYS
ADVANCED V	NORK :	ZONE	WARN	ING	SIGNS

ì	NONE	୍ଦୃ
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	10–98	03/0		
	01/01	11/0		
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