

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

STATE PROJECT REFERENCE NO.	SHEET NO.
B-3818	TCP-1

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

B-3818

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
1101.02	TEMPORARY LANE 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
1135.01	CONES
1150.01	FLAGGERS
1160.01	TEMPORARY CRASH CUSHION
1165.01	TRUCK MOUNTED IMPACT ATTENUATOR
1170.01	PORTABLE CONCRETE BARRIER
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
1250.01	PAVEMENT MARKER SPACING
1251.01	RAISED PAVEMENT MARKERS
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, LEGEND AND INDEX OF SHEETS
TCP-2	PROJECT NOTES
TCP-3	PROJECT PHASING AND PAVEMENT MARKING SCHEDULE
TCP-4 - TCP-5	PHASE I DETAILS
TCP-6	DETAIL DRAWING FOR TWO-WAY UNDIVIDED AND URBAN FREEWAYS ADVANCED WORK ZONE WARNING SIGNS

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
 - FLASHING ARROW PANEL (TYPE C)
 - TYPE 'B' WARNING LIGHT
 - STATIONARY SIGN
 - PORTABLE SIGN
 - STATIONARY OR PORTABLE SIGN
 - WARNING FLAGS
 - 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

TIP PROJECT:

SYSTEM: D:\DCN\...
USER: ...

PLAN REVIEWED BY: N.C.D.O.T. WORK ZONE TRAFFIC CONTROL UNIT	APPROVED: DATE: 5-24-07	PLAN PREPARED FOR N.C.D.O.T. BY: 1616 EAST MILLBROOK ROAD, SUITE 310 RALEIGH, NORTH CAROLINA 27609 PHONE: (919) 876-6888
J.S. BOURNE, P.E. TRAFFIC CONTROL ENGINEER	SEAL	J.T. BROOKS, P.E. PROJECT ENGINEER
G.L. GETTIER, P.E. TRAFFIC CONTROL PROJECT ENGINEER		J.A. WILES DESIGN ENGINEER
J.W. GILSTRAP TRAFFIC CONTROL PROJ. DESIGN ENGINEER		J.A. WILES DESIGN TECHNICIAN
TRAFFIC CONTROL DESIGN ENGINEER		

PHASING

PHASE I

NOTES: RETURN TRAFFIC TO THE EXISTING PATTERN AT THE END OF EACH WORK DAY UNLESS OTHERWISE STATED IN THE PHASING OR DIRECTED BY THE ENGINEER.

COMPLETE ANY PROPOSED OR TEMPORARY WIDENING IN SUCH A MANNER THAT PONDING OF WATER WILL NOT OCCUR IN THE TRAVEL LANE.

PRIOR TO ANY CONSTRUCTION OPERATIONS, PLACE ADVANCED SIGNING IN ACCORDANCE WITH NCDOT DETAIL SHOWN ON SHEET TCP-6.

STEP 1 USING RSD 1101.02 (SHEET 1 OF 7), PLACE INCIDENTAL STONE ALONG EXISTING LEFT LANE OF -L-, STA 11+15+/- TO STA 16+75+/- FROM CROWN POINT TO 3' BEYOND EDGE OF TRAVELWAY SO THAT THE RESULTING EDGE OF TRAVEL IS WITHIN 3" OF PROPOSED EOP ELEVATION AND INSTALL TEMPORARY SHORING AND PORTABLE CONCRETE BARRIER ON LEFT SIDE OF EXISTING ROAD FROM STA 13+25 TO STA 16+05 OR AS DIRECTED BY ENGINEER. (REFER TO SHEETS TCP-4 AND TCP-5.)

STEP 2 USING RSD NO 1101.01 (SHEET 1 OF 7), CONSTRUCT PROPOSED BRIDGE AND ROADWAY FROM STA 10+00+/- TO STA 17+00+/- UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. USE INCIDENTAL STONE TO TRANSITION TO EXISTING FROM STA 9+00+/- TO STA 10+00+/- . (SEE CONSTRUCTION PLANS AND SHEET TCP-5.)

NOTE: PLACE TYPE III BARRICADES & DRUMS TO KEEP PROPOSED ROADWAY CLOSED TO TRAFFIC.

STEP 3 PLACE TEMPORARY PAVEMENT MARKINGS (PAINT) AND SHIFT TRAFFIC TO PROPOSED ROADWAY. USE TMIA(S) TO PROTECT MOTORIST FROM UNFINISHED GUARDRAIL. (SEE CONSTRUCTION PLANS AND SHEET TCP-5.)

NOTE: PLACE TYPE III BARRICADES & DRUMS TO KEEP EXISTING ROADWAY CLOSED TO TRAFFIC.

STEP 4 USING RSD NO 1101.02 (SHEET 1 OF 7), COMPLETE PROPOSED GUARDRAIL AND CONSTRUCT THE FOLLOWING UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE AND PLACE TEMPORARY (PAINT) PAVEMENT MARKING:
 -L- FROM STA 7+04 TO STA 10+00+/-
 -L- FROM STA 17+00+/- TO STA 18+58
 -Y- & -Y1-
 (SEE CONSTRUCTION PLANS AND SHEET TCP-5.)

USING RSD NO 1101.02 (SHEET 1 OF 7), REMOVE TEMPORARY SHORING, EXISTING BRIDGE AND EXISTING NC 90.
 (SEE CONSTRUCTION PLANS.)

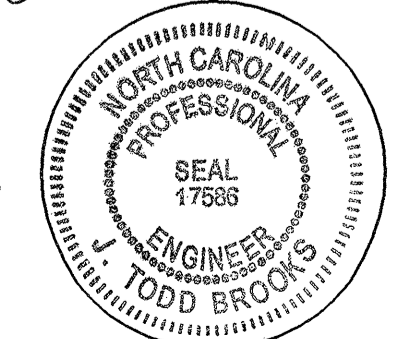
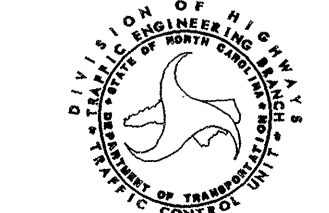
STEP 5 USING RSD NO 1101.02 (SHEET 1 OF 7), PLACE FINAL LAYER OF SURFACE COURSE, FINAL PAVEMENT MARKINGS (POLYUREA), PERMANENT RAISED PAVEMENT MARKERS, AND OPEN TO TRAFFIC. (SEE CONSTRUCTION PLANS)

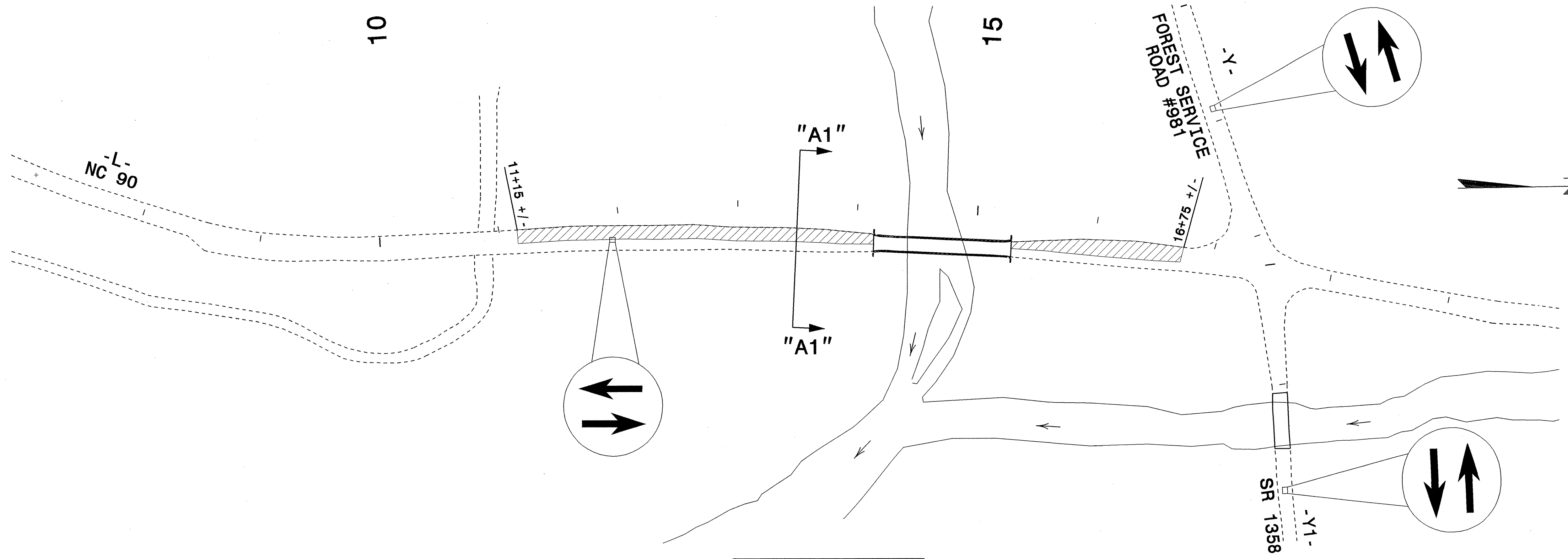
PVMT MARKING SCHEDULE

SYMBOL	DESCRIPTION	PAY ITEM	QUANTITY BREAKDOWN	TOTAL QUANTITY
<u>INTERMEDIATE PAVEMENT MARKING LINES</u>				
		PAINT (4")		10074 LF
PA	WHITE EDGELINE		5082 LF	
PI	DOUBLE YELLOW CENTER LINE		4992 LF	
		PAINT (24")		84 LF
P4	WHITE STOPBAR		84 LF	
<u>FINAL PAVEMENT MARKING LINES</u>				
		POLYUREA (4")		5037 LF
VA	WHITE EDGELINE		2541 LF	
VI	DOUBLE YELLOW CENTER LINE		2496 LF	
		POLYUREA (24")		42 LF
V2	WHITE STOPBAR		42 LF	
<u>PERMANENT RAISED PAVEMENT MARKERS</u>				
		MARKERS		82 EA
MA	YELLOW & YELLOW		18 EA	
SP	CRYSTAL & CRYSTAL		64 EA	

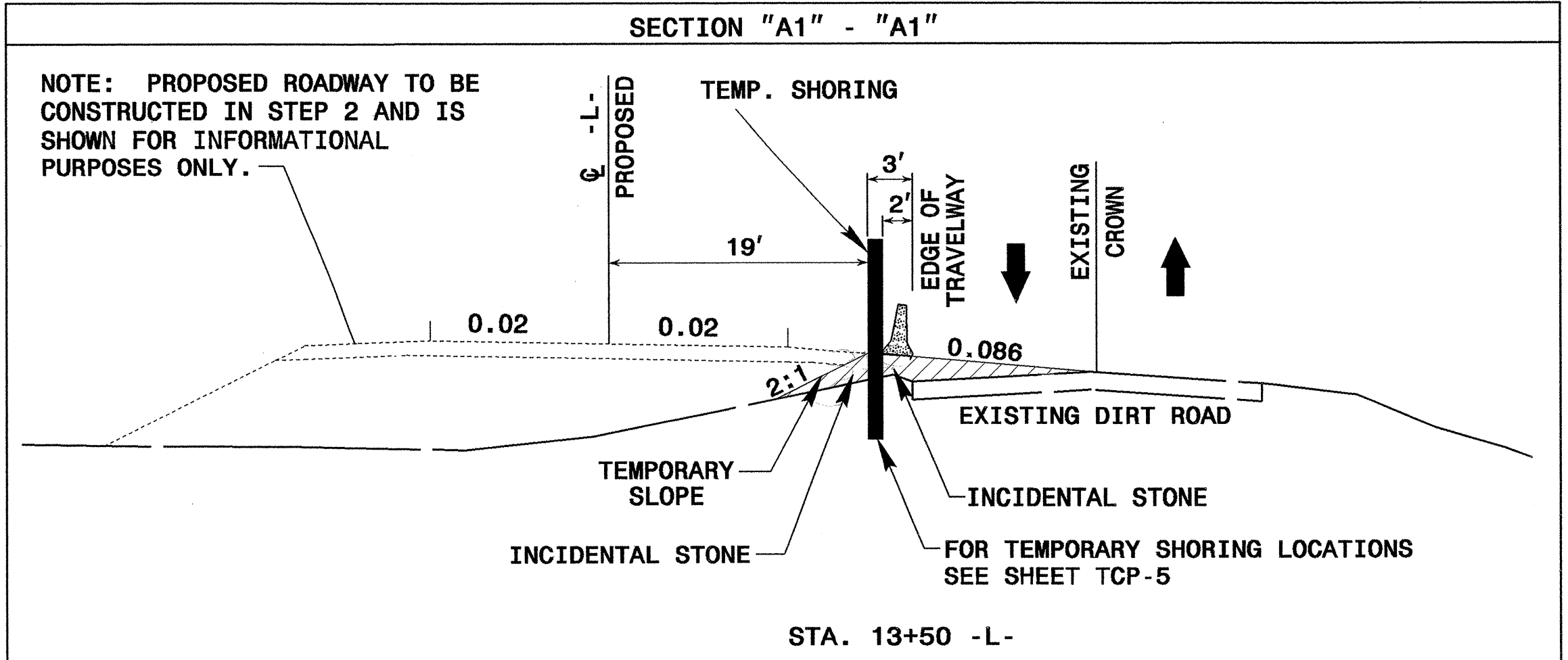
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PBS&J 1616 EAST MILLBROOK ROAD, SUITE 310
 RALEIGH, NORTH CAROLINA 27609
 PHONE: (919) 876-6888

APPROVED: <i>[Signature]</i> DATE: 10/15/07	PROJECT PHASING & PM SCHEDULE	
	SCALE: NONE	
	DATE: 5/24/07	
	DWG. BY: CRH	
	DESIGN BY: CRH	
REVIEWED BY: JTB	REVISIONS	



STEP 1



PROPOSED CONSTRUCTION (USING FLAGGERS AND LANE CLOSURES)

PBSJ 1616 EAST MILLBROOK ROAD, SUITE 310
 RALEIGH, NORTH CAROLINA 27609
 PHONE: (919) 876-6888

APPROVED: *[Signature]* DATE: 12/15/07

SEAL

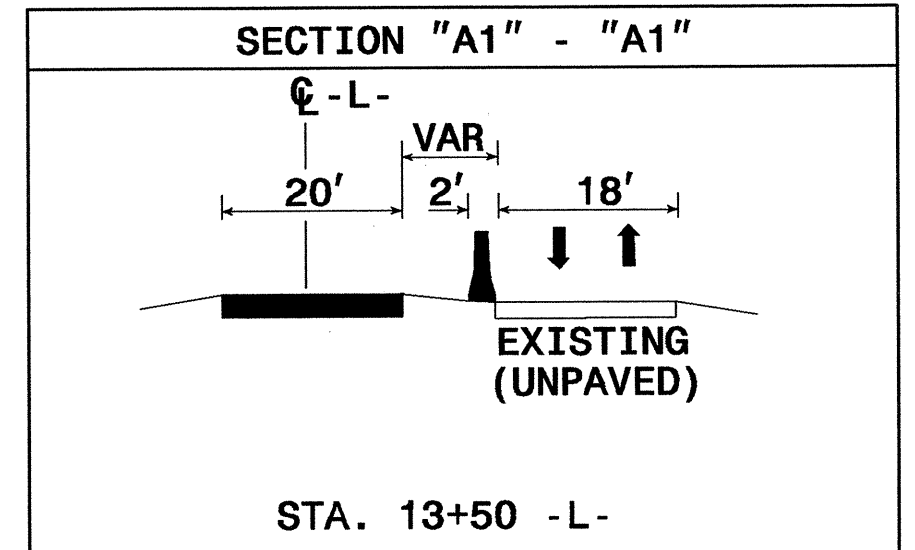
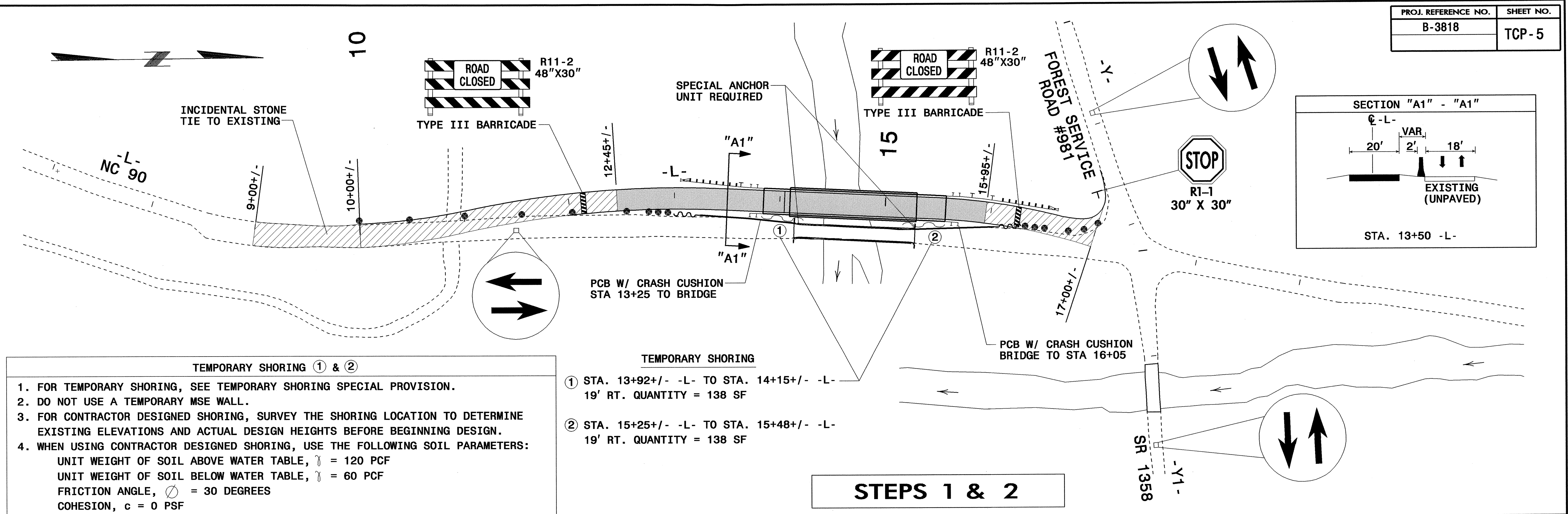
PHASE I DETAILS

SCALE:	1:50
DATE:	5/24/07
DWG. BY:	CRH
DESIGN BY:	CRH
REVIEWED BY:	JTB

REVISIONS	

DIVISION OF HIGHWAY

IO-06T-2007 17/29
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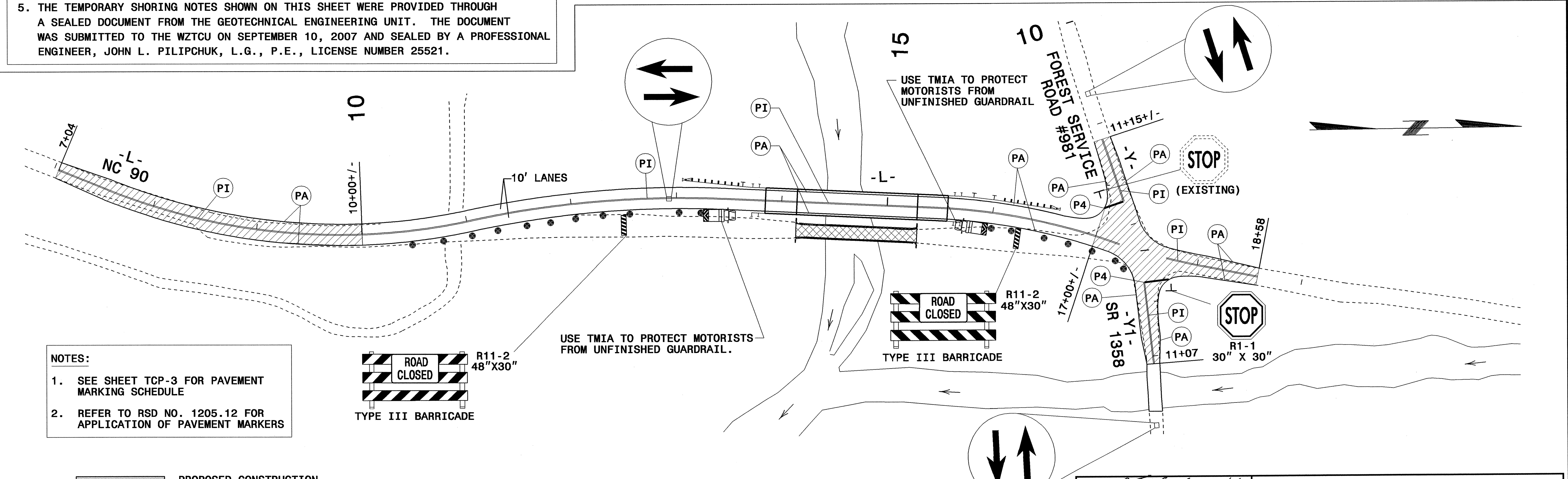
TEMPORARY SHORING ① & ②

1. FOR TEMPORARY SHORING, SEE TEMPORARY SHORING SPECIAL PROVISION.
2. DO NOT USE A TEMPORARY MSE WALL.
3. FOR CONTRACTOR DESIGNED SHORING, SURVEY THE SHORING LOCATION TO DETERMINE EXISTING ELEVATIONS AND ACTUAL DESIGN HEIGHTS BEFORE BEGINNING DESIGN.
4. WHEN USING CONTRACTOR DESIGNED SHORING, USE THE FOLLOWING SOIL PARAMETERS:
 UNIT WEIGHT OF SOIL ABOVE WATER TABLE, $\gamma = 120$ PCF
 UNIT WEIGHT OF SOIL BELOW WATER TABLE, $\gamma = 60$ PCF
 FRICTION ANGLE, $\phi = 30$ DEGREES
 COHESION, $c = 0$ PSF
5. THE TEMPORARY SHORING NOTES SHOWN ON THIS SHEET WERE PROVIDED THROUGH A SEALED DOCUMENT FROM THE GEOTECHNICAL ENGINEERING UNIT. THE DOCUMENT WAS SUBMITTED TO THE WZTCU ON SEPTEMBER 10, 2007 AND SEALED BY A PROFESSIONAL ENGINEER, JOHN L. PILIPCHUK, L.G., P.E., LICENSE NUMBER 25521.

TEMPORARY SHORING

- ① STA. 13+92+/- -L- TO STA. 14+15+/- -L-
19' RT. QUANTITY = 138 SF
- ② STA. 15+25+/- -L- TO STA. 15+48+/- -L-
19' RT. QUANTITY = 138 SF

STEPS 1 & 2



NOTES:

1. SEE SHEET TCP-3 FOR PAVEMENT MARKING SCHEDULE
2. REFER TO RSD NO. 1205.12 FOR APPLICATION OF PAVEMENT MARKERS

PROPOSED CONSTRUCTION (AWAY FROM TRAFFIC)
 PROPOSED CONSTRUCTION (USING FLAGGERS AND LANE CLOSURES)
 REMOVAL

STEPS 3 & 4

PBS&J 1616 EAST MILLBROOK ROAD, SUITE 310
 RALEIGH, NORTH CAROLINA 27609
 PHONE: (919) 876-6888

APPROVED: *[Signature]* DATE: 12/19/07
 SEAL

PHASE I DETAILS

SCALE:	1:50		REVISIONS
DATE:	5/24/07		
DWG. BY:	CRH		
DESIGN BY:	CRH		
REVIEWED BY:	JTB		

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