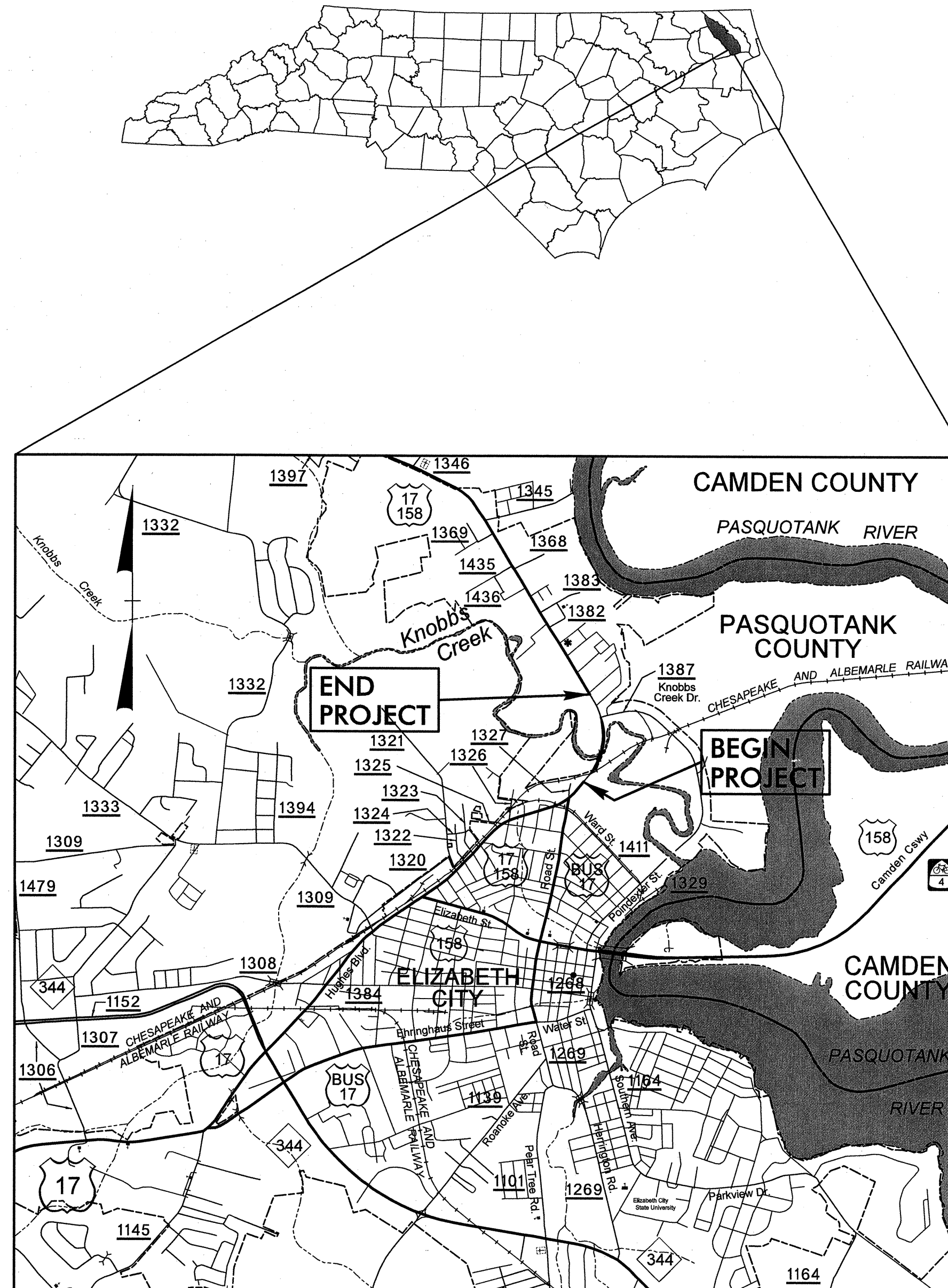


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

PASQUOTANK COUNTY



INDEX OF SHEETS

SHEET NO.	TITLE
TMP-1	TITLE SHEET WITH VICINITY MAP & INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND, AND TEMPORARY PAVEMENT MARKING
TMP-1B & TMP-1C	TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT STRATEGIES, LOCAL NOTES AND GENERAL NOTES)
TMP-2	PORTABLE CONCRETE BARRIER AT TEMPORARY SHORING LOCATIONS
TMP-2A & TMP-2B	TEMPORARY SHORING DATA SHEET
TMP-2C	RAILROAD CROSSING DETAIL
TMP-2D	DETAIL DRAWING FOR PAVEMENT MARKINGS- SYMBOLS AND WORD MESSAGES (1205.08 SHEET 3 OF 8)
TMP-3	PHASING
TMP-4 THRU TMP-6	PHASE I DETAILS
TMP-7 THRU TMP-9	PHASE II DETAILS
TMP-10 & TMP-12	PHASE III DETAILS

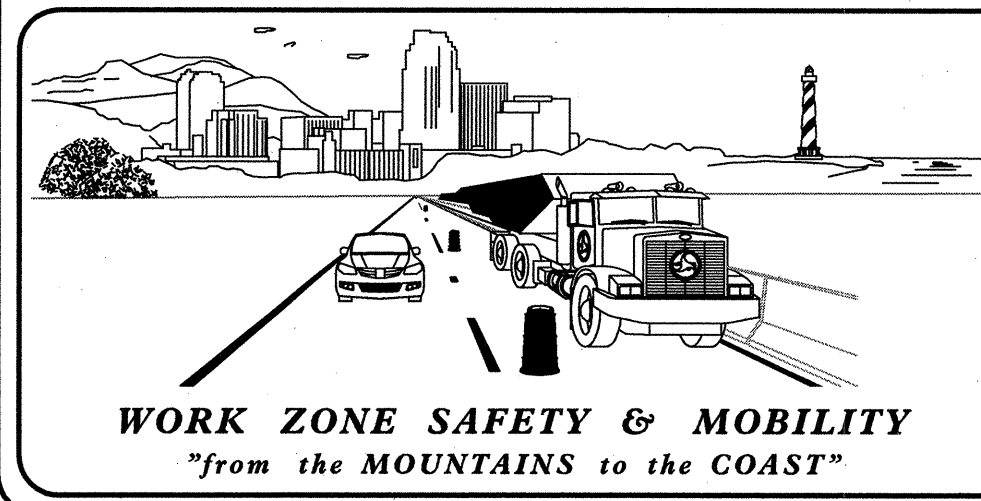
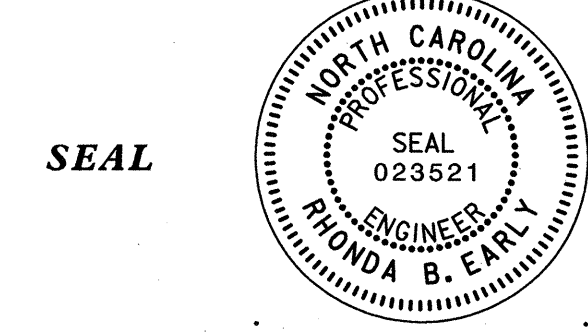
SHEET NO.
TMP-1

B-4599

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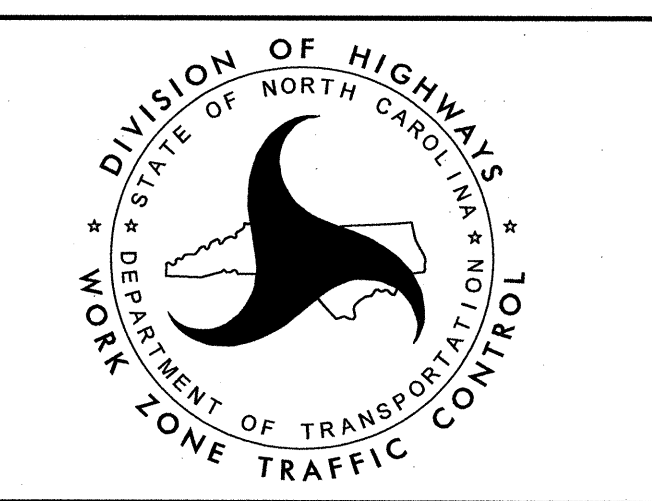
R. B. EARLY, PE TRAFFIC CONTROL PROJECT ENGINEER
R. B. EARLY, PE TRAFFIC CONTROL PROJECT DESIGN ENGINEER
J. A. PHILLIPS TRAFFIC CONTROL DESIGN ENGINEER

APPROVED: *Ronda B. Early*
DATE: 3.5.12



N.C.D.O.T. WORK ZONE TRAFFIC CONTROL
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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
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DAVID BISSETTE, P.E. TRAFFIC CONTROL PROJECT DESIGN ENGINEER
 TRAFFIC CONTROL DESIGN ENGINEER



TIP PROJECT:

\$\$\$\$\$SYTIME\$\$\$\$\$
\$\$\$\$\$DCN\$\$\$\$\$
\$\$\$\$\$SERNAME\$\$\$\$\$

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 ADVANCED WARNING SIGNS
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
1115.01	FLASHING ARROW PANELS
1130.01	DRUM
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1160.01	TEMPORARY CRASH CUSHION
1165.01	TRUCK MOUNTED IMPACT ATTENUATOR
1170.01	PORTABLE CONCRETE BARRIER
1180.01	SKINNY-DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.08	PAVEMENT MARKINGS - SYMBOLS & WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1205.11	PAVEMENT MARKINGS - RAILROAD CROSSINGS
1205.12	PAVEMENT MARKINGS - BRIDGES
1250.01	PAVEMENT MARKER SPACING
1251.01	RAISED PAVEMENT MARKERS (TEMPORARY)
1261.01	GUARDRAIL & BARRIER DELINEATOR SPACING
1261.02	GUARDRAIL & 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
- WEDGE &/OR WIDEN
- TEMPORARY ALIGNMENT
- ONGOING CONSTRUCTION

TRAFFIC CONTROL DEVICES

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

TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

SIGNALS

- EXISTING
- PROPOSED
- TEMPORARY

PAVEMENT MARKINGS

- EXISTING LINES
- TEMPORARY LINES

PAVEMENT MARKERS

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

PAVEMENT MARKING SYMBOLS

- PAVEMENT MARKING SYMBOLS

TEMPORARY PAVEMENT MARKING

SYMBOL	DESCRIPTION	PAY ITEM	
PAVEMENT MARKING LINES			
		PAINT (4")	
PA	WHITE EDGELINE	PAINT (4")	
PB	YELLOW EDGELINE		
PC	10 FT WHITE SKIP		
PD	2 FT WHITE MINISKIP		
PE	WHITE SOLID LANE LINE		
PF	10 FT YELLOW SKIP		
PH	YELLOW SINGLE CENTER LINE		
PI	YELLOW DOUBLE CENTER LINE		
PS	WHITE DIAGONAL		PAINT (8")
PV	YELLOW DIAGONAL		
P3	WHITE RRX	PAINT (16")	
P4	WHITE STOP BAR	PAINT (24")	
P5	WHITE TRANSVERSE LINE		
RA	WHITE EDGELINE	REMOVABLE TAPE (4")	
RB	YELLOW EDGELINE		
RC	10 FT WHITE SKIP		

PAVEMENT MARKING SYMBOLS & CHARACTERS

		PAINT SYMBOL
QA	LEFT TURN ARROW	PAINT CHARACTER
QI	ALPHANUMERIC CHARACTER	

NOTE: FOR EACH PAINT PAVEMENT MARKING ITEM, REFER TO GENERAL NOTE (Z) FOR NUMBER OF APPLICATIONS.

PAVEMENT MARKERS

		TEMPORARY RAISED
MH	YELLOW & YELLOW	TEMPORARY RAISED
MI	CRYSTAL & RED	

SYSTEMS: DCDON
 USE: ENR
 QA/QC STAGE: RFC
 REVIEW: _____
 CONCUR: _____
 REVISE: _____
 VERIFY: _____

RFC

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APPROVED: *[Signature]* DATE: 3-5-12
 SEAL

DIVISION OF HIGHWAYS
 NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 WORK ZONE TRAFFIC CONTROL

TRANSPORTATION
 MANAGEMENT PLAN
 ROADWAY STANDARD
 DRAWINGS & LEGEND

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 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 DIRECTED BY THE ENGINEER.

TIME RESTRICTIONS

A) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
US 17 / 158	MONDAY THRU SUNDAY 7:00 AM - 7:00 PM

B) DO NOT CLOSE OR NARROW TRAVEL LANES DURING HOLIDAYS AND SPECIAL EVENTS AS FOLLOWS:

ROAD NAME
US 17 / 158

HOLIDAY

- FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
- FOR NEW YEAR'S, BETWEEN THE HOURS OF 7:00 A.M. DECEMBER 31ST TO 7:00 P.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN UNTIL 7:00 P.M. THE FOLLOWING TUESDAY.
- FOR EASTER, BETWEEN THE HOURS OF 7:00 A.M. THURSDAY AND 7:00 P.M. MONDAY.
- FOR MEMORIAL DAY, BETWEEN THE HOURS OF 7:00 A.M. FRIDAY TO 7:00 P.M. TUESDAY.
- FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 7:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 7:00 P.M. THE DAY AFTER INDEPENDENCE DAY.

IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 7:00 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 7:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.
- FOR LABOR DAY, BETWEEN THE HOURS OF 7:00 A.M. FRIDAY TO 7:00 P.M. TUESDAY.
- FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 7:00 A.M. TUESDAY TO 7:00 P.M. MONDAY.
- FOR CHRISTMAS, BETWEEN THE HOURS OF 7:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 7:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

C) DO NOT STOP TRAFFIC AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS	DURATION AND OPERATION
US 17 / 158	MONDAY-SUNDAY: 7:00AM-7:00PM	30 MINUTES FOR TRAFFIC SHIFTS & SIGNAL INSTALLATION

LANE CLOSURE REQUIREMENTS

- D) 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.
- E) 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.

F) 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.

G) 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 REMAINS WITHIN THE CLOSED TRAVEL LANE.

H) 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.

I) DO NOT INSTALL MORE THAN ONE (1) SIMULTANEOUS LANE CLOSURE IN ANY ONE DIRECTION ON US 17/158.

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) 500' IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

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

SIGNING

N) INSTALL ADVANCE WORK ZONE WARNING SIGNS 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) 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.

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.

R) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 500' IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

TRAFFIC BARRIER

S) INSTALL TEMPORARY BARRIER ACCORDING TO THE TRAFFIC CONTROL 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 TRAFFIC CONTROL 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 TRAFFIC CONTROL 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.

T) 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 IMPACT 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:

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

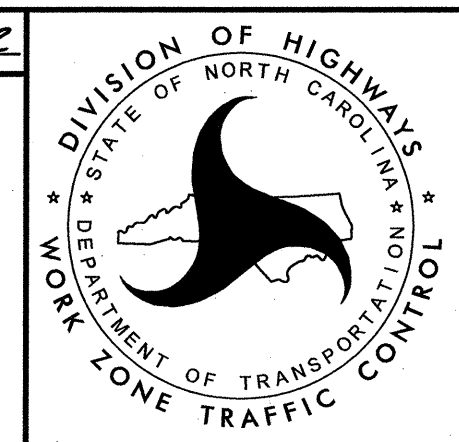
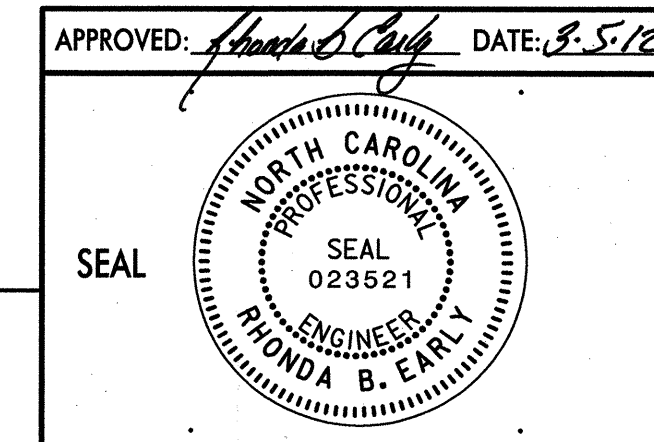
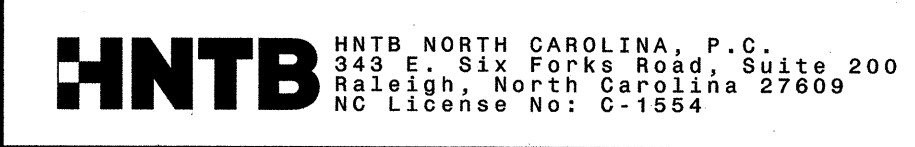
TRAFFIC CONTROL DEVICES

U) 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 OPENED 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.

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

W) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES (DRUMS) PERPENDICULAR TO THE EDGE OF THE TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

8/17/99
 REVISIONS
 RFC
 QA/QC STAGE:
 REVIEW:
 CONCUR:
 REVISE:
 VERIFY:



TRANSPORTATION
MANAGEMENT PLAN

GENERAL NOTES

GENERAL NOTES

LOCAL NOTES

MANAGEMENT STRATEGIES

PAVEMENT MARKINGS AND MARKERS

- X) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS SHOWN IN THE PAVEMENT MARKING PLAN.
- Y) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:

ROAD NAME	MARKING	MARKER
ALL ROADS	PAINT	TEMPORARY RAISED
CONCRETE (BRIDGE)	REMOVABLE TAPE	TEMPORARY RAISED

- Z) 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.
- AA) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- BB) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.
- CC) TRACE THE PROPOSED MONOLITHIC ISLAND LOCATIONS WITH PROPER COLOR PAVEMENT MARKINGS PRIOR TO INSTALLATION. PLACE DRUMS TO DELINEATE ANY PROPOSED MONOLITHIC ISLANDS BEFORE INSTALLATION.

TEMPORARY / FINAL SIGNALS

- DD) SHIFT AND REVISE ALL SIGNAL HEADS AS SHOWN ON THE SIGNAL PLANS.

MISCELLANEOUS

- EE) POLICE MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS, AS DIRECTED BY THE ENGINEER.
- FF) IN THE EVENT A TIE-IN CANNOT BE MADE IN ONE DAYS TIME, BRING THE TIE-IN AREA TO AN APPROPRIATE ROADWAY ELEVATION, AS DETERMINED BY THE ENGINEER. PLACE BLACK ON ORANGE "LOOSE GRAVEL" SIGNS (W8-7) AND BLACK ON ORANGE "PAVEMENT ENDS" SIGNS (W8-3) 500 FT AND 1000 FT RESPECTIVELY IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS TO DELINEATE THE EDGE OF ROADWAY ALONG UNPAVED AREAS.
- GG) ALL WHEEL CHAIR RAMP LOCATIONS SHALL BE DERIVED FROM STATIONING SHOWN ON PAVEMENT MARKING PLANS OR AS DIRECTED BY THE ENGINEER IN COORDINATION WITH THE SIGNING AND DELINEATION UNIT.
- HH) USE STEEL PLATES TO COVER PARTIALLY CONSTRUCTED DRAINAGE STRUCTURES AND BACKFILL AROUND EXPOSED STRUCTURES SO THAT IT IS NOT A HAZARD TO THE MOTORIST OR PEDESTRIAN.

RAILROAD COORDINATION

- II) NOTIFY THE CHESAPEAKE ALBERMARLE GENERAL MANAGER A MINIMUM OF TWENTY-ONE (21) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION TO COORDINATE ANY SIGNAL RELOCATION.
GENERAL MANAGER (RAIL AMERICA) - DAVID POPE (843-749-0687)
- JJ) RAILROAD COORDINATION & IMPROVEMENTS WEST OF US 17/158 SHALL BE COMPLETED PRIOR TO SHIFTING ANY TRAFFIC. RAILROAD COORDINATION AND IMPROVEMENTS EAST OF US 17/158 SHALL BE COMPLETED IN PHASE III (AFTER SHIFTING TRAFFIC TO FINAL PATTERN). RAILROAD SIGNAL RELOCATION AND INSTALLATION SHALL BE COORDINATED DURING CONSTRUCTION.

- LN-1 SHORING WILL BE REQUIRED TO CONSTRUCT PROPOSED FILL AT BRIDGE APPROACH AND END BENT. SEE TMP-2A & 2B FOR SHORING NOTES.
- LN-2 COORDINATE ALL ACTIVITIES AROUND RAILROAD WITH CHESAPEAKE ALBERMARLE GENERAL MANAGER (RAIL AMERICA) DAVID POPE AT 843-749-0687. RAILROAD FLAGGER(S) MUST BE PRESENT AT ANY TIME A TRAIN IS EXPECTED WHEN SIGNAL(S) ARE NOT IN OPERATION.
- LN-3 WEDGE NBL FROM CROWN TO EXISTING EDGE OF PAVEMENT PROVIDING A TEMPORARY CROSS-SLOPE FOR NBL THAT IS LESS THAN 0.06. (NBL WILL BE WEDGED TO PROPOSED GRADE IN PHASE III.)
- LN-4 WEDGE EXISTING PAVEMENT TO TIE TO PROPOSED PAVEMENT SO THAT A SMOOTH TRAVEL SURFACE IS PROVIDED AND PONDING OF WATER IS PREVENTED.
- LN-5 WEDGE INTERSECTION AS NEEDED TO MAINTAIN ACCESS AND PREVENT PONDING OF WATER.
- LN-6 REPLACE PAVEMENT MARKINGS IN EXISTING PATTERN.
- LN-7 USE TEMPORARY GRAU-350 TO PROTECT UNFINISHED SECTION OF GUARDRAIL UNTIL PERMANENT ANCHOR CAN BE INSTALLED.
- LN-8 SHORING WILL BE REQUIRED TO STABILIZE EXISTING ROAD DURING EXCAVATION FOR END BENTS AND TO STABILIZE NEW EMBANKMENT ADJACENT TO EXISTING ROAD. SEE TMP-2A & 2B FOR SHORING NOTES.
- LN-9 PCB ALONG -L- (US 17/158):
* MUST HAVE A MINIMUM OF 33 INCHES BETWEEN BARRIER AND HAZARD / DROP OFF OR BE ANCHORED BARRIER;
* LENGTH OF NEED BASED USING A RUN OUT LENGTH OF 330';
* MUST HAVE A MINIMUM FLARE OF 11:1 ON APPROACH END.
- LN-10 -Y3- AND/OR -Y4- MAY BE CLOSED TO TRAFFIC TO COMPLETE PAVING AND CURB & GUTTER CONSTRUCTION; HOWEVER, THEY MAY NOT BE CLOSED AT THE SAME TIME AND SIGNING IS INSTALLED ACCORDING TO RSD 1101.03 (SHEET 2 OF 9) TO ENGINEERS APPROVAL.
- LN-11 SHORING WILL BE REQUIRED TO EXCAVATION UNDERCUT AREA AND TO STABILIZE EXISTING ROAD. SEE SHEETS TMP-2A & 2B FOR SHORING NOTES.

THE OBJECTIVE OF THIS PROJECT IS TO REPLACE THE DUAL STRUCTURES WITH A SINGLE STRUCTURE BY CONSTRUCTING THE PROPOSED BRIDGE IN TWO STAGES WHILE MAINTAINING A MINIMUM OF TWO LANES IN EACH DIRECTION DURING PEAK HOURS.

DURING PHASE I, THE LEFT MOST SIDE OF THE BRIDGE WILL BE CONSTRUCTED, ALONG WITH WIDENING TO THE LEFT. WEDGING OF EXISTING LANES WILL BE NECESSARY TO PREVENT PONDING OF WATER. THE LAST STEP OF THIS PHASE CALLS FOR THE INSTALLATION OF THE RAILROAD SIGNAL AND GATES FOR THE SOUTHBOUND (LEFT SIDE) LANES.

PHASE II BEGINS WITH THE SOUTHBOUND TRAFFIC ON THE NEWLY CONSTRUCTED LEFT SIDE. AT THIS TIME, BRIDGE #2 IS REMOVED AND THE REMAINDER OF THE PROPOSED BRIDGE WILL BE CONSTRUCTED ALONG WITH IMPROVEMENTS REQUIRED TO ALLOW THE NORTHBOUND LANES TO BE SHIFTED TO THE NEW STRUCTURE.

PHASE III BEGINS WITH THE NORTHBOUND TRAFFIC ON THE NEWLY CONSTRUCTED BRIDGE AND INSTALLATION OF NEW RAILROAD SIGNAL AND GATES FOR THE NORTHBOUND LANES. WEDGING AND WIDENING TO THE RIGHT, CONSTRUCTION OF CURB AND GUTTER, AND IMPROVEMENTS TO Y, Y1, Y2 & Y3 ARE COMPLETED USING FLAGGERS AND LANE CLOSURES. ONCE ALL OF THE PAVEMENT REMOVAL, BRIDGE REMOVAL AND CURB AND GUTTER CONSTRUCTION IS COMPLETED AND THE FINAL SIGNAL IS INSTALLED AND THE FINAL LAYER OF SURFACE COURSE MARKINGS WILL BE PLACED.

8/17/99

REVISIONS

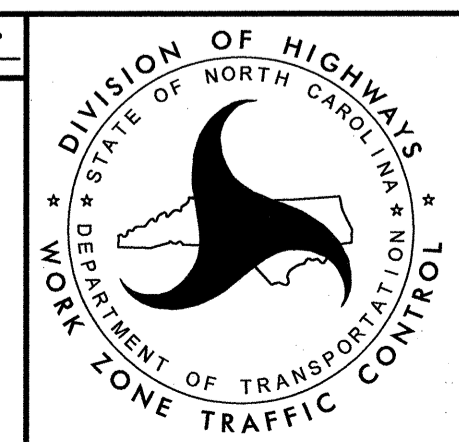
RFC

SYSTEMS
 CONSTRUCTION
 CONSULTANTS
 INC.

QA/QC STAGE:
 REVIEW:
 CONCUR:
 REVISE:
 VERIFY:

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APPROVED: *Phonda B. Early* DATE: 8-5-12
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PHONDA B. EARLY
023521



TRANSPORTATION
MANAGEMENT PLAN

GENERAL NOTES

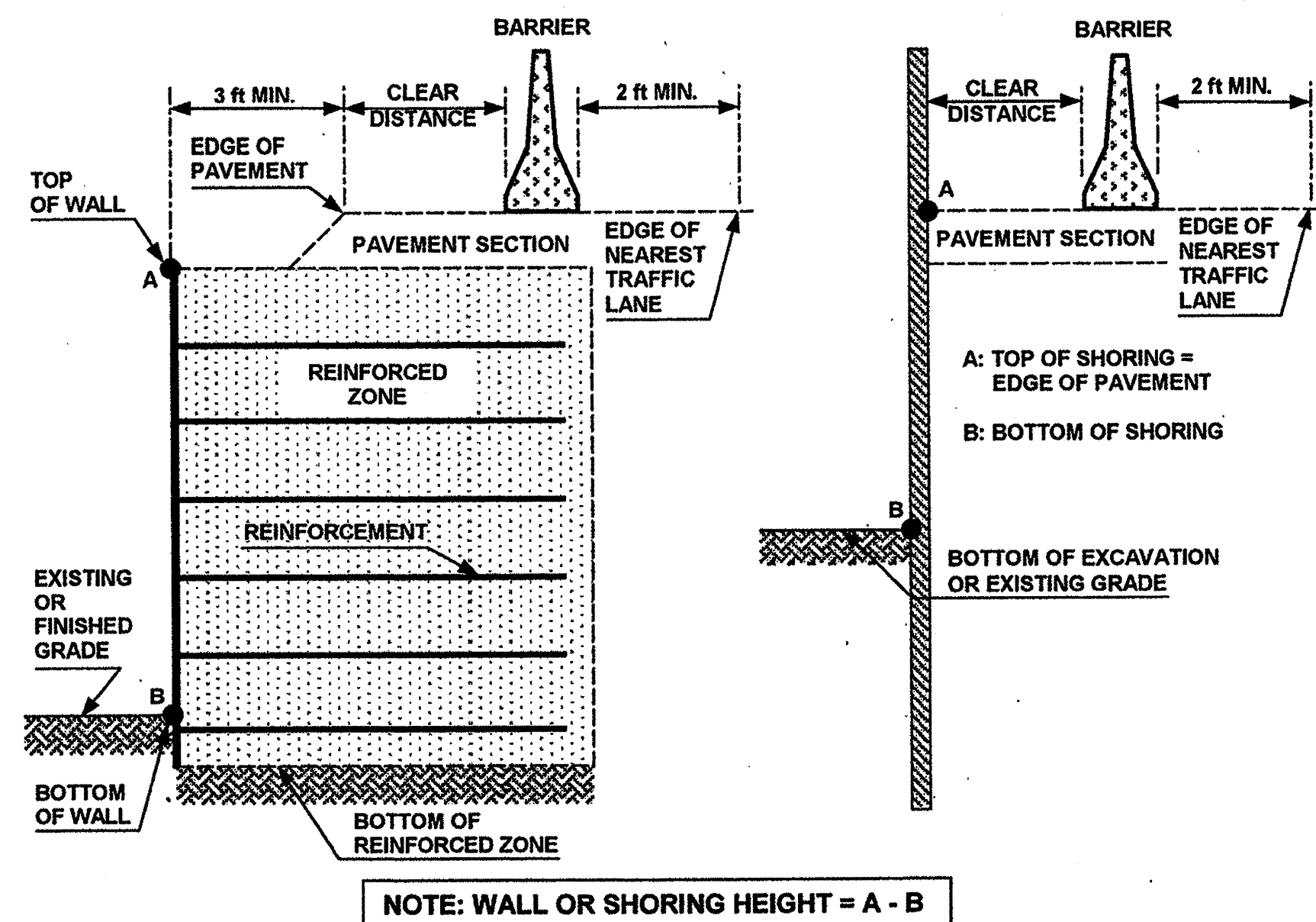


FIGURE A

NOTES

- REFER TO THE TRAFFIC CONTROL PLANS FOR SHORING LOCATIONS AND SOIL PARAMETERS.
- REFER TO THE "TEMPORARY SHORING" PROJECT SPECIAL PROVISION FOR MORE INFORMATION ABOUT TEMPORARY SHORING, MEASUREMENT AND PAYMENT.
- PROVIDE PORTABLE CONCRETE BARRIER TO PROTECT TEMPORARY SHORING IF SHORING IS LOCATED WITHIN THE CLEAR ZONE AS DEFINED IN THE AASHTO ROADSIDE DESIGN GUIDE. DO NOT PLACE BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE. (CONTACT NCDOT PAVEMENT MANAGEMENT UNIT FOR APPLICABLE PAVEMENT DESIGN).
- BASED ON THE CLEAR DISTANCE, OFFSET, DESIGN SPEED AND PAVEMENT TYPE, CHOOSE AN UNANCHORED PCB, ANCHORED PCB OR AN OREGON BARRIER FROM THE TABLE SHOWN IN FIGURE B. FOR TRAFFIC LANES AND PORTABLE CONCRETE BARRIER LOCATED ABOVE AND BEHIND TEMPORARY SHORING, THE FOLLOWING ARE DEFINED AS:

CLEAR DISTANCE - HORIZONTAL DISTANCE FROM THE BACK FACE OF THE BARRIER TO THE EDGE OF PAVEMENT FOR TEMPORARY MSE WALL OR TO THE FACE OF NON-ANCHORED TEMPORARY SHORING AS SHOWN IN FIGURE A.

OFFSET - HORIZONTAL DISTANCE FROM THE FRONT FACE OF THE BARRIER TO CENTERLINE OF THE FURTHEST TRAFFIC LANE AS SHOWN IN FIGURE B FOR 3 TRAFFIC LANES.
- AT THE CONTRACTOR'S OPTION OR IF THE MINIMUM REQUIRED CLEAR DISTANCE IS NOT AVAILABLE, SET AN UNANCHORED PCB AGAINST THE TRAFFIC SIDE OF THE SHORING AND DESIGN SHORING FOR TRAFFIC IMPACT OR USE THE "SURCHARGE CASE WITH TRAFFIC IMPACT" FOR THE STANDARD TEMPORARY SHORING. DO NOT PLACE BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE. (CONTACT NCDOT PAVEMENT MANAGEMENT UNIT FOR APPLICABLE PAVEMENT DESIGN).
- USE NCDOT PORTABLE CONCRETE BARRIER (PCB) IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1170.01 AND SECTION 1170 OF THE STANDARD SPECIFICATIONS.
- USE OREGON TALL F-SHAPE CONCRETE BARRIER IN ACCORDANCE WITH DETAIL DRAWING AND SPECIAL PROVISION OBTAINED FROM: WORK ZONE TRAFFIC CONTROL UNIT WEB PAGE.
- UNLESS NOTED OTHERWISE ON THE PLANS, SET PORTABLE CONCRETE BARRIER WITH A MINIMUM DISTANCE OF 2 FT BETWEEN THE FRONT FACE OF THE BARRIER AND THE EDGE OF THE NEAREST TRAFFIC LANE AS SHOWN IN FIGURE A.
- FOR PORTABLE CONCRETE BARRIER ABOVE AND BEHIND TEMPORARY MSE WALLS, PROVIDE A MINIMUM DISTANCE OF 3 FT BETWEEN THE EDGE OF PAVEMENT AND THE WALL FACE AS SHOWN IN FIGURE A. IF THESE MINIMUM REQUIRED DISTANCES ARE NOT AVAILABLE, CONTACT THE ENGINEER.
- TABLE SHOWN IN FIGURE B IS BASED ON NCDOT RESEARCH PROJECT NO. 2005-010 WITH VEHICLE TYPE USED FOR NCHRP 350 CRASH TESTS. BARRIER DEFLECTIONS AND RESULTING MINIMUM REQUIRED CLEAR DISTANCES MIGHT VARY SIGNIFICANTLY FOR LARGER HEAVIER VEHICLES, RUNS OF BARRIER LESS THAN 200' IN LENGTH AND WET OR DRY PAVEMENT.

		MINIMUM REQUIRED CLEAR DISTANCE, inches						
Barrier Type	Pavement Type	Offset *	Design Speed, mph					
			<30	31-40	41-50	51-60	61-70	
Unanchored PCB	Asphalt	<8	24	26	29	32	36	40
		8-14	26	28	31	35	38	42
		14-20	27	29	34	36	39	43
		20-26	28	31	35	38	40	44
		26-32	29	32	36	39	42	45
		32-38	30	34	38	41	43	46
		38-44	31	34	41	43	45	48
	Concrete	44-50	31	35	41	43	46	49
		50-56	32	36	42	44	47	50
		>56	32	36	42	45	47	51
		<8	17	18	21	22	25	26
		8-14	19	20	23	25	26	29
		14-20	22	22	24	26	28	31
		20-26	23	24	26	27	30	34
Anchored PCB or Oregon Barrier	Asphalt	26-32	24	25	27	28	32	35
		32-38	24	26	27	30	33	36
		38-44	25	26	28	30	34	37
		44-50	26	26	28	32	35	37
		50-56	26	26	28	32	35	38
		>56	26	27	29	32	36	38
		All Offsets	24 for All Design Speeds					
	Concrete (including bridge approach slabs)	All Offsets	12 for All Design Speeds					

* See Figure Below

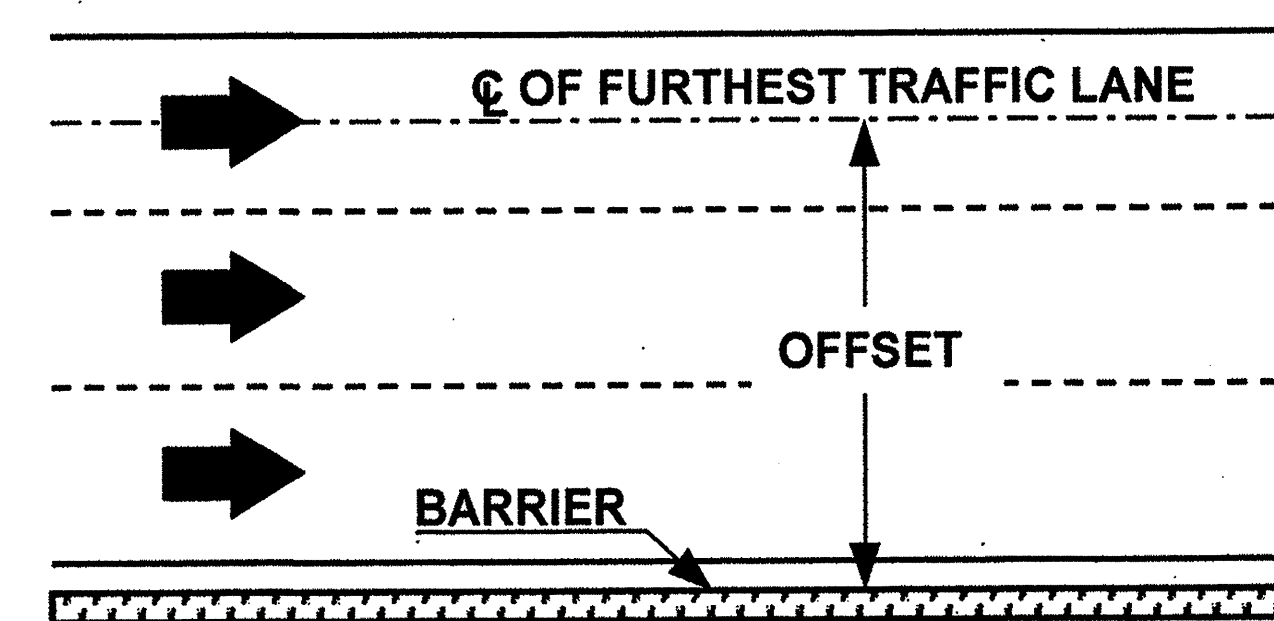
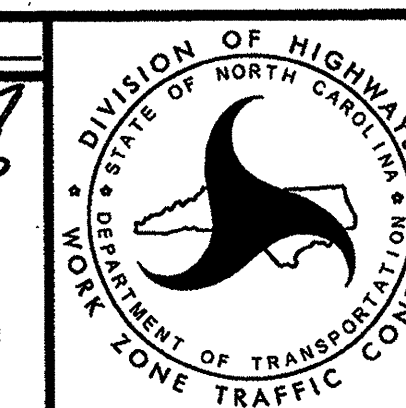


FIGURE B

APPROVED: *[Signature]* DATE: *[Date]*
 SEAL 028380
 Sept 2010



PORTABLE CONCRETE BARRIER
 AT
 TEMPORARY SHORING LOCATIONS

TEMPORARY SHORING DATA

SHORING LOCATION NO. 1

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

DESIGN TEMPORARY SHORING FROM STATION 20+67± -L-, 6.0 FT.± RIGHT, TO STATION 21+09± -L-, 6.0 FT.± RIGHT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

- UNIT WEIGHT (γ) = 120 LB/CF
- FRICTION ANGLE (ϕ) = 30 DEGREES
- COHESION (c) = 0 LB/SF
- GROUNDWATER ELEVATION = 0.0 FT

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 20+67± -L-, 6.0 FT.± RIGHT, TO STATION 21+09± -L-, 6.0 FT.± RIGHT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

DO NOT USE A TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 20+67± -L-, 6.0 FT.± RIGHT, TO STATION 21+09± -L-, 6.0 FT.± RIGHT.

AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY SHORING FOR TEMPORARY SHORING FROM STATION 20+67± -L-, 6.0 FT.± RIGHT, TO STATION 21+09± -L-, 6.0 FT.± RIGHT. SEE STANDARD DRAWING NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

SHORING LOCATION NO. 2

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

DESIGN TEMPORARY SHORING FROM STATION 27+98± -L-, 6.0 FT.± RIGHT, TO STATION 28+35± -L-, 6.0 FT.± RIGHT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

- UNIT WEIGHT (γ) = 120 LB/CF
- FRICTION ANGLE (ϕ) = 30 DEGREES
- COHESION (c) = 0 LB/SF
- GROUNDWATER ELEVATION = 0.0 FT

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 27+98± -L-, 6.0 FT.± RIGHT, TO STATION 28+35± -L-, 6.0 FT.± RIGHT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

DO NOT USE A TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 27+98± -L-, 6.0 FT.± RIGHT, TO STATION 28+35± -L-, 6.0 FT.± RIGHT.

AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY SHORING FOR TEMPORARY SHORING FROM STATION 27+98± -L-, 6.0 FT.± RIGHT, TO STATION 28+35± -L-, 6.0 FT.± RIGHT. SEE STANDARD DRAWING NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

SHORING LOCATION NO. 3

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

DESIGN TEMPORARY SHORING FROM STATION 19+50± -L-, 5.0 FT.± RIGHT, TO STATION 20+79± -L-, 5.0 FT.± RIGHT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

- UNIT WEIGHT (γ) = 120 LB/CF
- FRICTION ANGLE (ϕ) = 30 DEGREES
- COHESION (c) = 0 LB/SF
- GROUNDWATER ELEVATION = 0.0 FT

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 19+50± -L-, 5.0 FT.± RIGHT, TO STATION 20+79± -L-, 5.0 FT.± RIGHT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

DO NOT USE CANTILEVER, BRACED AND/OR ANCHORED SHORING FOR TEMPORARY SHORING FROM STATION 19+50± -L-, 5.0 FT.± RIGHT, TO STATION 20+79± -L-, 5.0 FT.± RIGHT.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 19+50± -L-, 5.0 FT.± RIGHT, TO STATION 20+79± -L-, 5.0 FT.± RIGHT. SEE STANDARD DRAWING NO. 1801.02 FOR STANDARD TEMPORARY WALLS.

WHEN BACKFILL FOR BRIDGE APPROACH FILLS OVERLAPS WITH THE REINFORCED ZONE OF TEMPORARY WALLS, USE SHORING BACKFILL OR BACKFILL MATERIAL REQUIRED FOR BRIDGE APPROACH FILLS, WHICHEVER IS BETTER, IN THE REINFORCED ZONE OF TEMPORARY WALLS.

SHORING LOCATION NO. 4

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

DESIGN TEMPORARY SHORING FROM STATION 20+95± -L-, 41.0 FT.± RIGHT, TO STATION 21+37± -L-, 41.0 FT.± RIGHT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

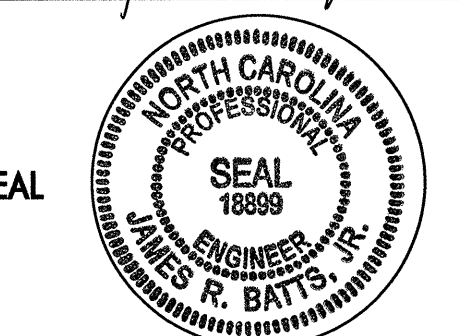
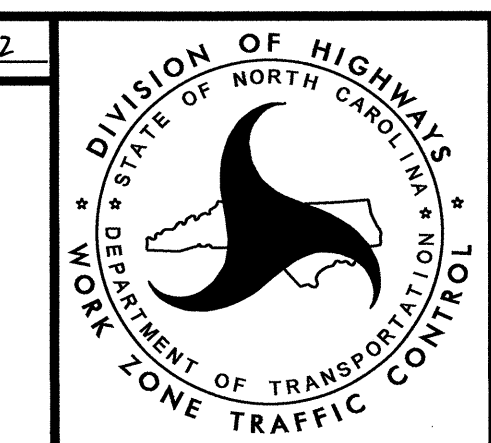
- UNIT WEIGHT (γ) = 120 LB/CF
- FRICTION ANGLE (ϕ) = 30 DEGREES
- COHESION (c) = 0 LB/SF
- GROUNDWATER ELEVATION = 0.0 FT

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 20+95± -L-, 41.0 FT.± RIGHT, TO STATION 21+37± -L-, 41.0 FT.± RIGHT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

DO NOT USE A TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 20+95± -L-, 41.0 FT.± RIGHT, TO STATION 21+37± -L-, 41.0 FT.± RIGHT.

AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY SHORING FOR TEMPORARY SHORING FROM STATION 20+95± -L-, 41.0 FT.± RIGHT, TO STATION 21+37± -L-, 41.0 FT.± RIGHT. SEE STANDARD DRAWING NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

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APPROVED: <i>James R. Battis</i> DATE: 2/7/12 		<h2 style="margin: 0;">TEMPORARY SHORING DATA</h2>
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TEMPORARY SHORING DATA

SHORING LOCATION NO. 5

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

DESIGN TEMPORARY SHORING FROM STATION 27+99± -L-, 41.0 FT.± RIGHT, TO STATION 28+36± -L-, 41.0 FT.± RIGHT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

- UNIT WEIGHT (γ) = 120 LB/CF
- FRICTION ANGLE (ϕ) = 30 DEGREES
- COHESION (c) = 0 LB/SF
- GROUNDWATER ELEVATION = 0.0 FT

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 27+99± -L-, 41.0 FT.± RIGHT, TO STATION 28+36± -L-, 41.0 FT.± RIGHT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

DO NOT USE A TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 27+99± -L-, 41.0 FT.± RIGHT, TO STATION 28+36± -L-, 41.0 FT.± RIGHT.

AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY SHORING FOR TEMPORARY SHORING FROM STATION 27+99± -L-, 41.0 FT.± RIGHT, TO STATION 28+36± -L-, 41.0 FT.± RIGHT. SEE STANDARD DRAWING NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

SHORING LOCATION NO. 6

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

DESIGN TEMPORARY SHORING FROM STATION 19+14± -L-, 40.0 FT.± RIGHT, TO STATION 21+30± -L-, 40.0 FT.± RIGHT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

- UNIT WEIGHT (γ) = 120 LB/CF
- FRICTION ANGLE (ϕ) = 30 DEGREES
- COHESION (c) = 0 LB/SF
- GROUNDWATER ELEVATION = 0.0 FT

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 19+14± -L-, 40.0 FT.± RIGHT, TO STATION 21+30± -L-, 40.0 FT.± RIGHT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

DO NOT USE CANTILEVER, BRACED AND/OR ANCHORED SHORING FOR TEMPORARY SHORING FROM STATION 19+14± -L-, 40.0 FT.± RIGHT, TO STATION 21+30± -L-, 40.0 FT.± RIGHT.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 19+14± -L-, 40.0 FT.± RIGHT, TO STATION 21+30± -L-, 40.0 FT.± RIGHT. SEE STANDARD DRAWING NO. 1801.02 FOR STANDARD TEMPORARY WALLS.

WHEN BACKFILL FOR BRIDGE APPROACH FILLS OVERLAPS WITH THE REINFORCED ZONE OF TEMPORARY WALLS, USE SHORING BACKFILL OR BACKFILL MATERIAL REQUIRED FOR BRIDGE APPROACH FILLS, WHICHEVER IS BETTER, IN THE REINFORCED ZONE OF TEMPORARY WALLS.

SHORING LOCATION NO. 7

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

DESIGN TEMPORARY SHORING FROM STATION 12+60± -L-, 32.0 FT.± RIGHT, TO STATION 13+30± -L-, 32.0 FT.± RIGHT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

- UNIT WEIGHT (γ) = 120 LB/CF
- FRICTION ANGLE (ϕ) = 30 DEGREES
- COHESION (c) = 0 LB/SF
- GROUNDWATER ELEVATION = 1.8 FT

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 12+60± -L-, 32.0 FT.± RIGHT, TO STATION 13+30± -L-, 32.0 FT.± RIGHT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

DO NOT USE A TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 12+60± -L-, 32.0 FT.± RIGHT, TO STATION 13+30± -L-, 32.0 FT.± RIGHT.

SHORING LOCATION NO. 8

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.


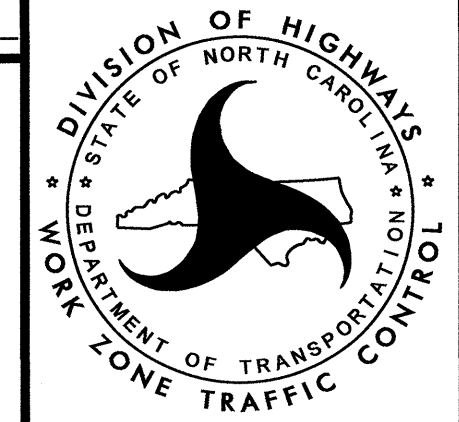
DESIGN TEMPORARY SHORING FROM STATION 16+60± -L-, 27.0 FT.± LEFT, TO STATION 19+25± -L-, 2.5 FT.± LEFT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

- UNIT WEIGHT (γ) = 120 LB/CF
- FRICTION ANGLE (ϕ) = 30 DEGREES
- COHESION (c) = 0 LB/SF
- GROUNDWATER ELEVATION = 1.2 FT

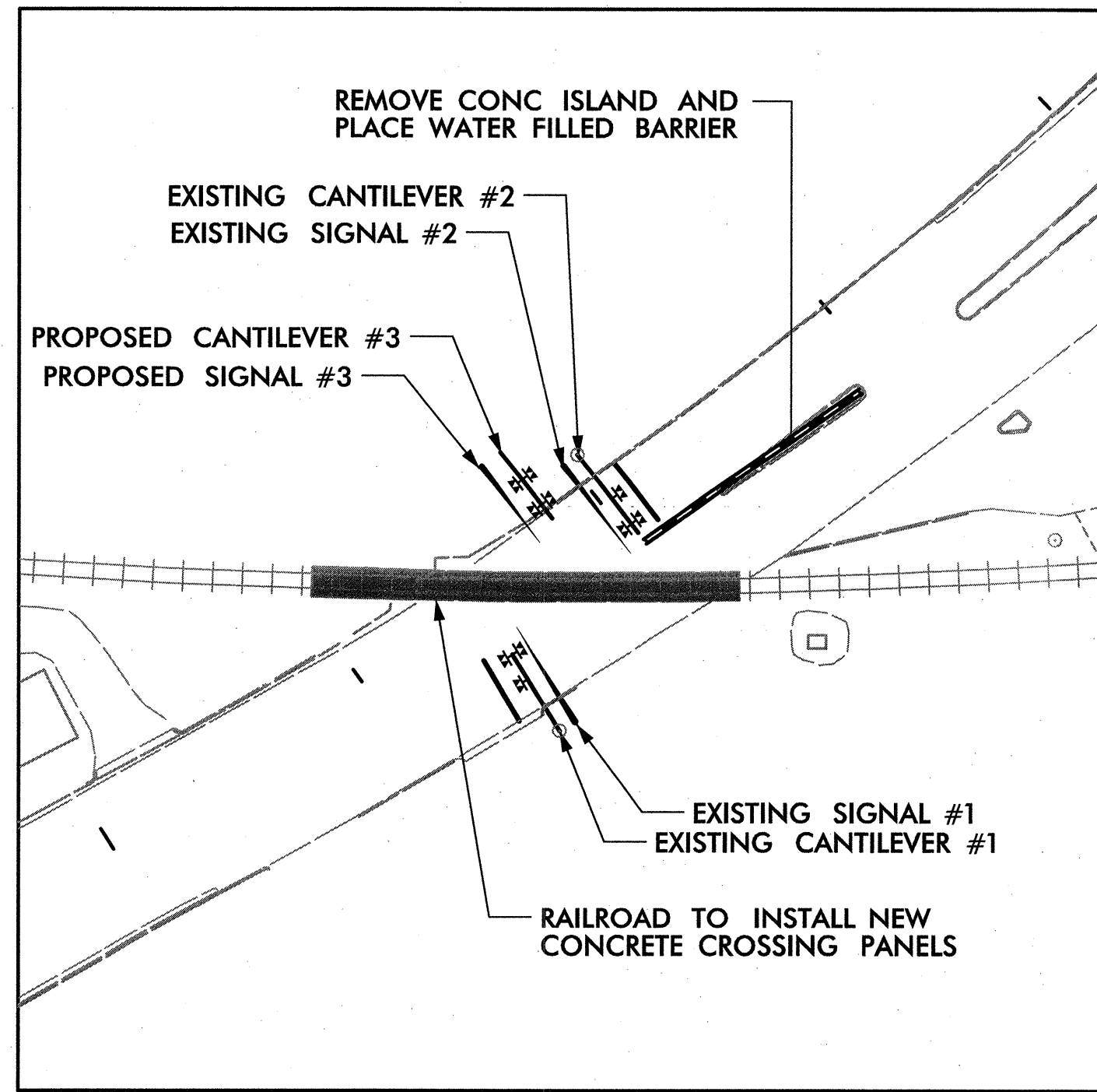
LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 16+60± -L-, 27.0 FT.± LEFT, TO STATION 19+25± -L-, 2.5 FT.± LEFT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

DO NOT USE A TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 16+60± -L-, 27.0 FT.± LEFT, TO STATION 19+25± -L-, 2.5 FT.± LEFT.

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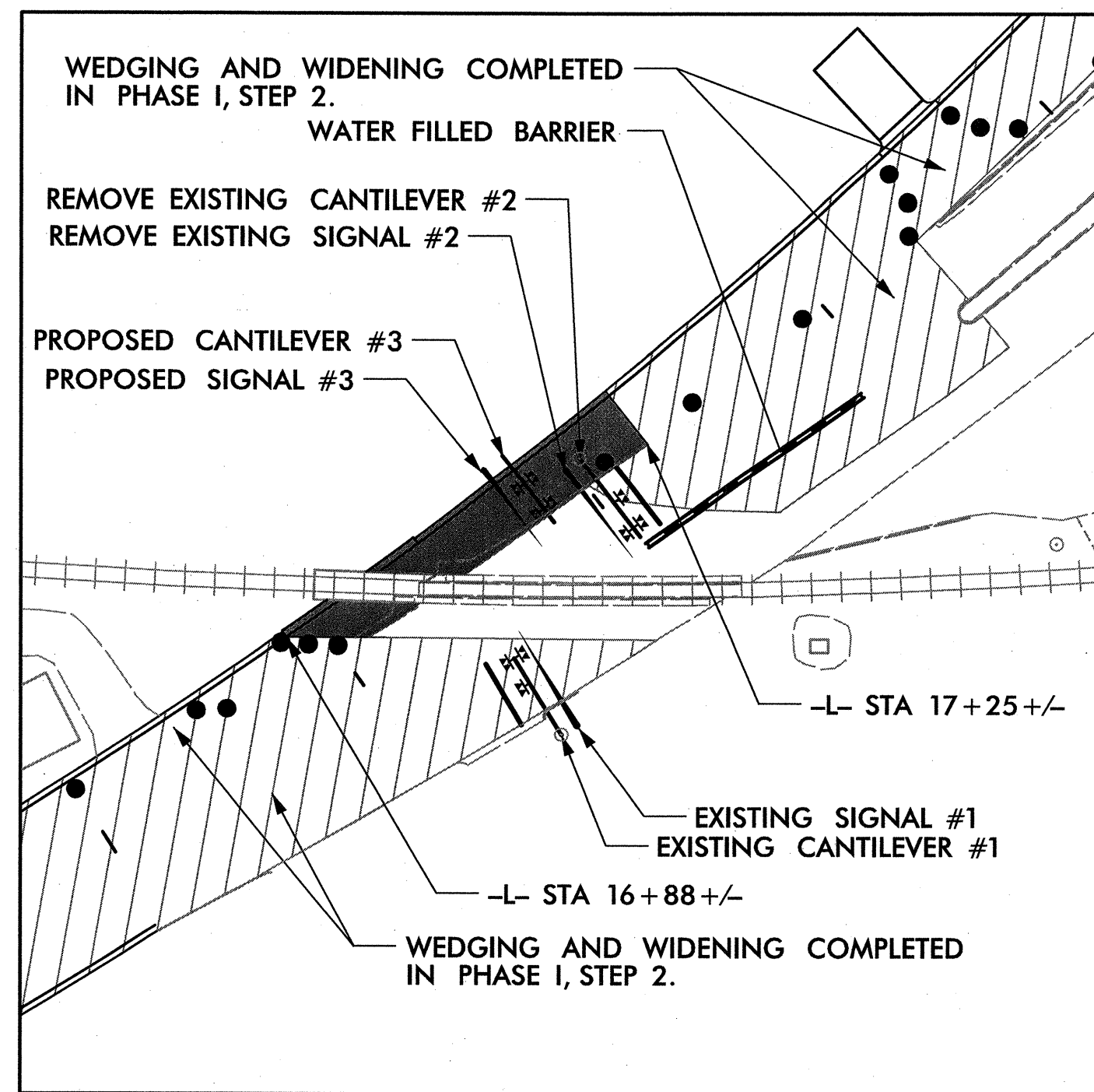
APPROVED: <u>James K. Batts, Jr.</u> DATE: <u>3/7/12</u> 		TEMPORARY SHORING DATA
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8/17/99



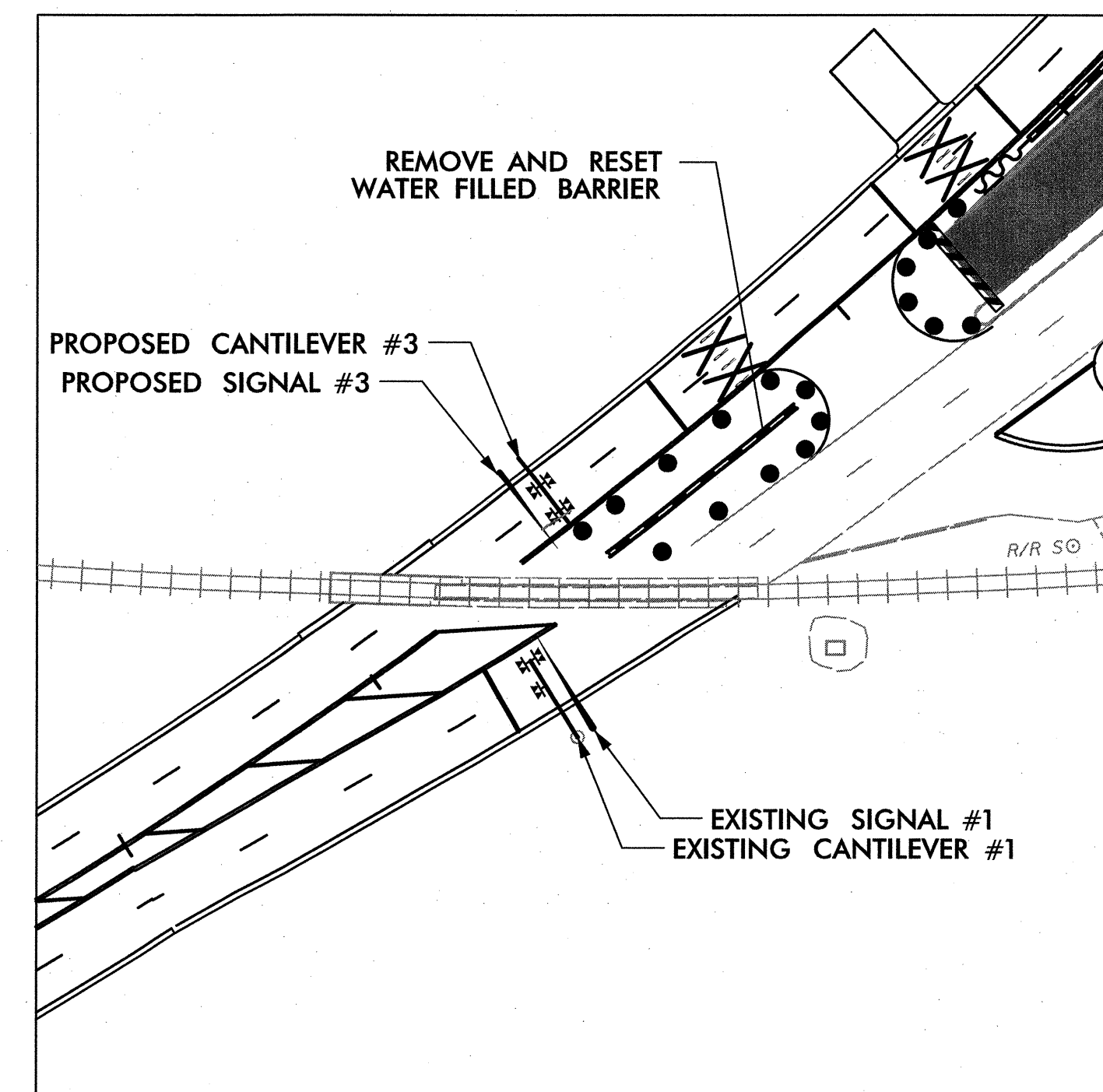
STAGE 1A

(WORK OCCURRING IN PHASE I, STEP 1)
USING RAILROAD FLAGGERS, RSD 1101.02 (SHEET 3 OF 15) AND RSD 1101.04 (SHEET 1 OF 1) AS NEEDED, RAILROAD WILL COMPLETE THE FOLLOWING:
* INSTALL NEW CONCRETE CROSSING PANELS
* INSTALL NEW SIGNAL & CANTILEVER ON LEFT OF -L-
* INSTALL NEW HOUSE TO OPERATE THE RAILROAD EQUIPMENT
NO CHANGE IN TRAFFIC PATTERN OR EXISTING RAIL SIGNALS.



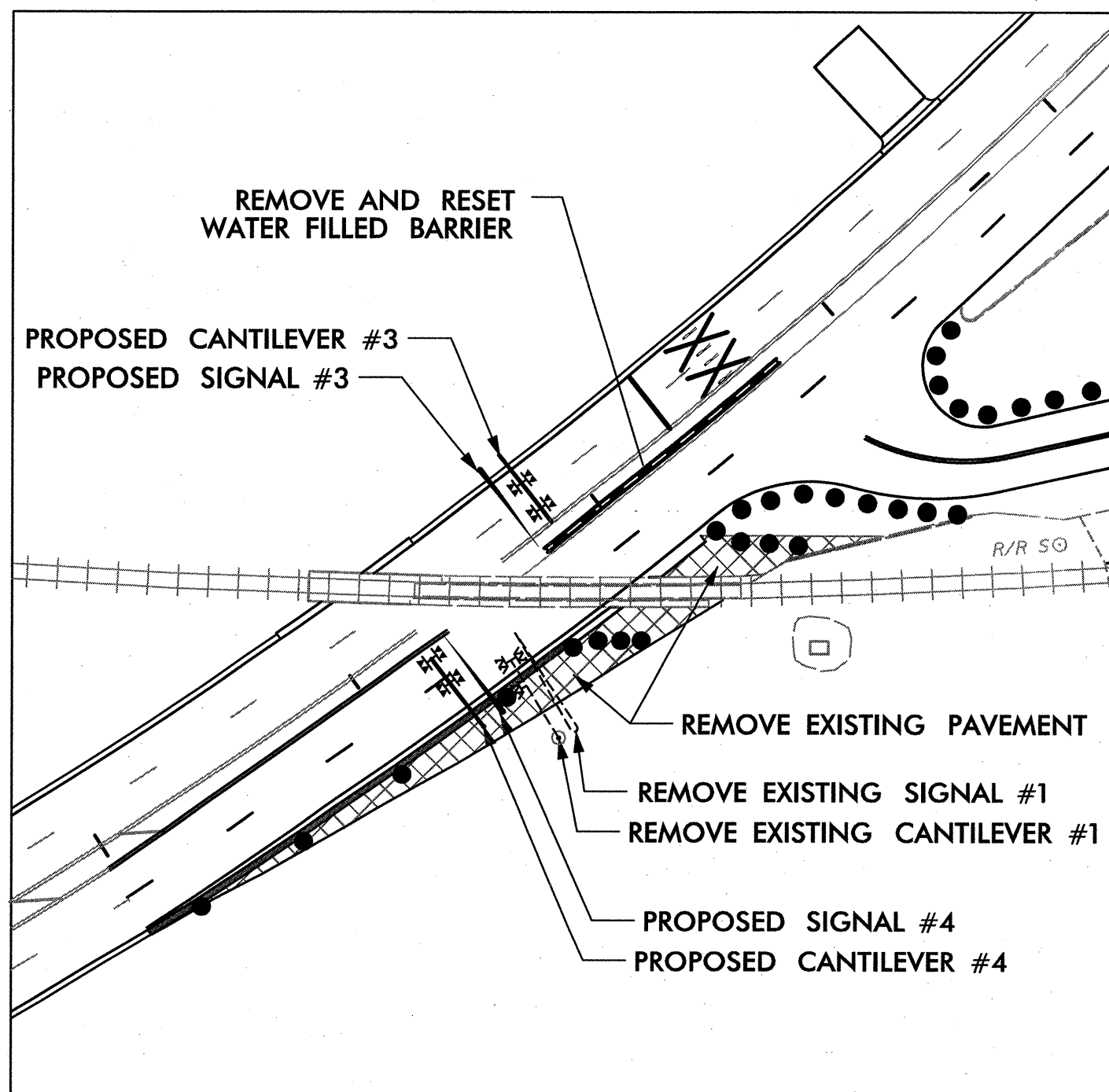
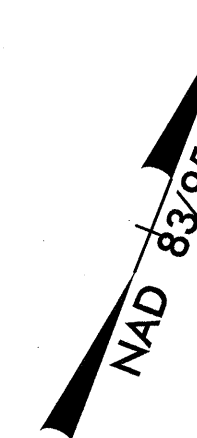
STAGE 1B

(WORK OCCURRING IN PHASE I, STEP 4)
USING RAILROAD FLAGGERS, RSD 1101.02 (SHEET 3 OF 15) AND RSD 1101.04 (SHEET 1 OF 1) AS NEEDED, COMPLETE THE FOLLOWING:
* RAILROAD WILL REMOVE EXISTING CANTILEVER #2 AND SIGNAL #2 INCLUDING FOUNDATIONS.
* CONSTRUCT PROPOSED WIDENING LEFT EXISTING ROAD FROM STA 16+88+/- TO STA 17+25+/- UP TO BUT NOT INCLUDING FINAL LAYER OF SURFACE COURSE.
* RAILROAD WILL ACTIVATE NEW RAILROAD SIGNALS ON THE LEFT SIDE OF -L-.



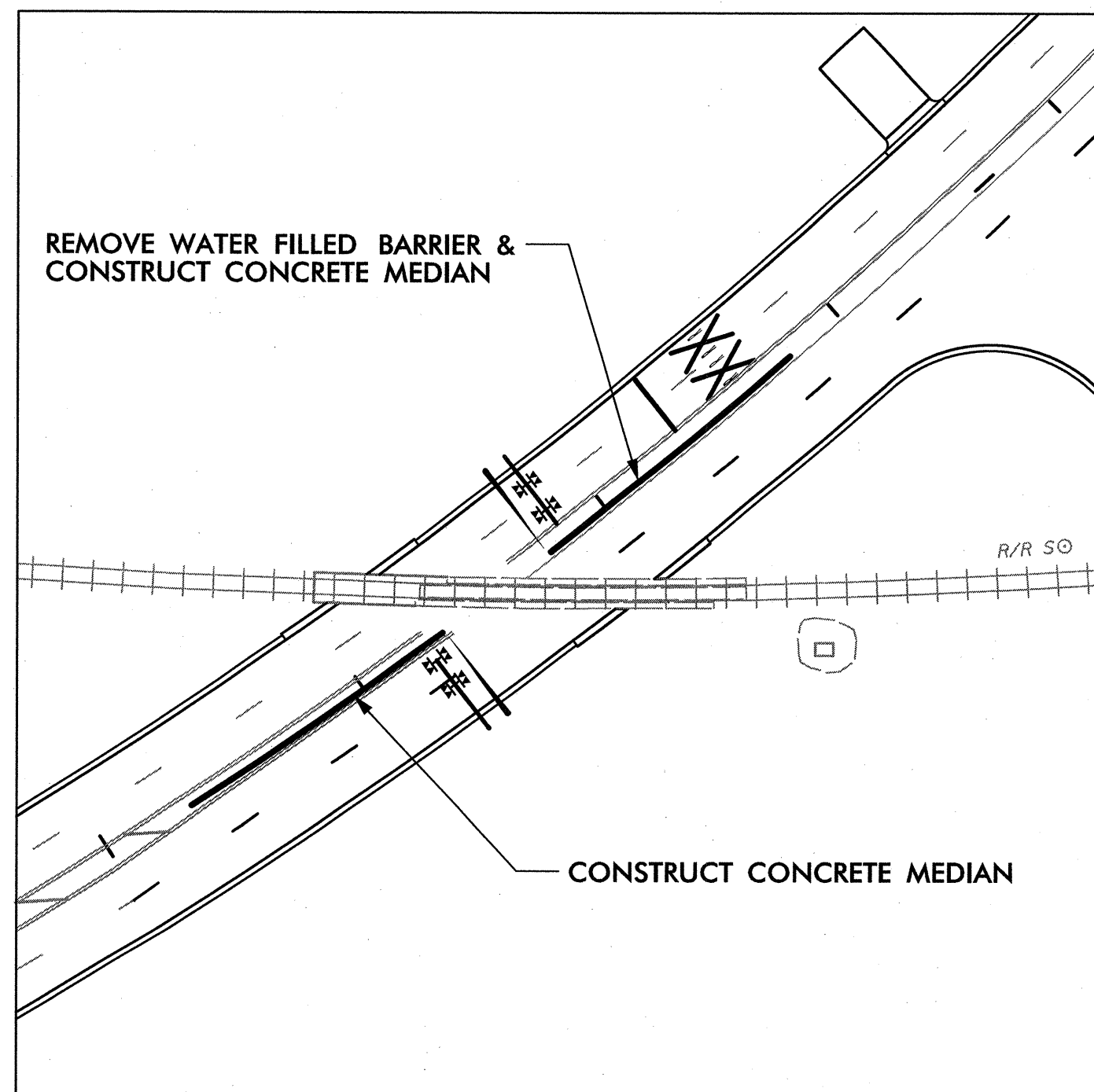
STAGE 2A

(WORK OCCURRING IN PHASE II, STEPS 1 THRU 3)
DETAIL DEPICTS TRAFFIC PATTERN DURING PHASE II.



STAGE 2B

(WORK OCCURRING IN PHASE II, STEP 4)
USING RAILROAD FLAGGERS, RSD 1101.02 (SHEET 3 OF 15) AND RSD 1101.04 (SHEET 1 OF 1) AS NEEDED, COMPLETE THE FOLLOWING:
* RAILROAD WILL REMOVE EXISTING CANTILEVER #1 AND SIGNAL #1 INCLUDING FOUNDATIONS.
* RAILROAD WILL INSTALL AND ACTIVATE NEW RAILROAD SIGNAL #4 AND CANTILEVER #4 ON THE RIGHT SIDE OF -L-. (SOME PAVEMENT REMOVAL REQUIRED)
* CONSTRUCT PROPOSED CURB & GUTTER /SHOULDER AND PAVEMENT REMOVAL RIGHT OF EXISTING ROAD FROM STA 15+00+/- TO -Y1- UP TO BUT NOT INCLUDING FINAL LAYER OF SURFACE COURSE.



STAGE 3

(WORK OCCURRING IN PHASE III)
USING RSD 1101.02 (SHEET 3 OF 15) AND RAILROAD FLAGGER AS NEEDED, CONSTRUCT PROPOSED CONCRETE MEDIAN, PLACE FINAL LAYER OF SURFACE COURSE AND FINAL PAVEMENT MARKING.
TRAFFIC IS IN FINAL PATTERN (SHOWN).

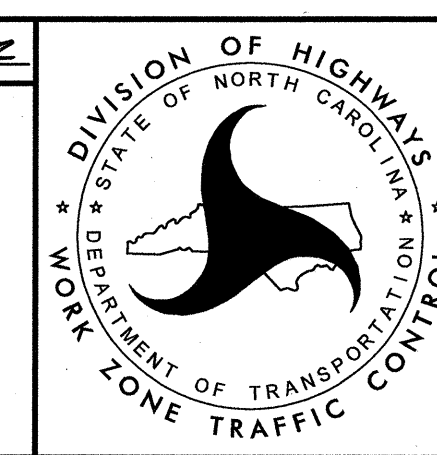
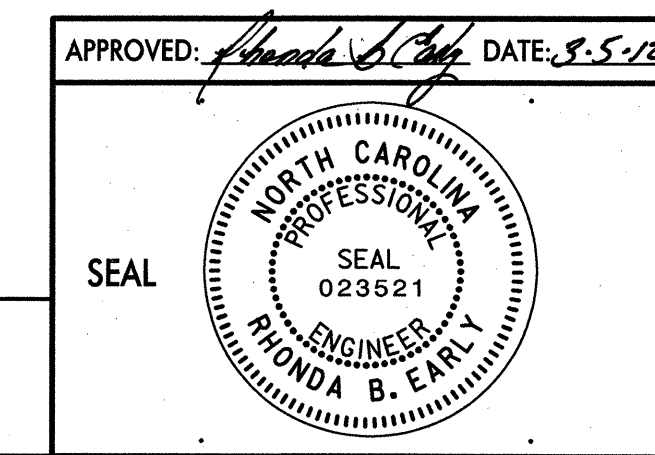
NOTES:

- A) THE TERM "RAILROAD WILL" IS TO BE INTERPRETED THAT CHESAPEAKE & ALBEMARLE RAILROAD WILL ARRANGE FOR THE WORK LISTED TO BE COMPLETED BY OTHERS AND THAT THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE RAILROAD.
- B) NOTIFY THE CHESAPEAKE ALBEMARLE GENERAL MANAGER A MINIMUM OF TWENTY-ONE (21) CALENDAR DAYS PRIOR TO ANY CONSTRUCTION REQUIRING RAILROAD COORDINATION OR RAILROAD FLAGGERS.
GENERAL MANAGER (RAIL AMERICA) - DAVID POPE (843-749-0687)

REVISIONS

RFC

Q/A/QC STAGE: _____
REVIEW: _____
CONCUR: _____
REVISE: _____
VERIFY: _____

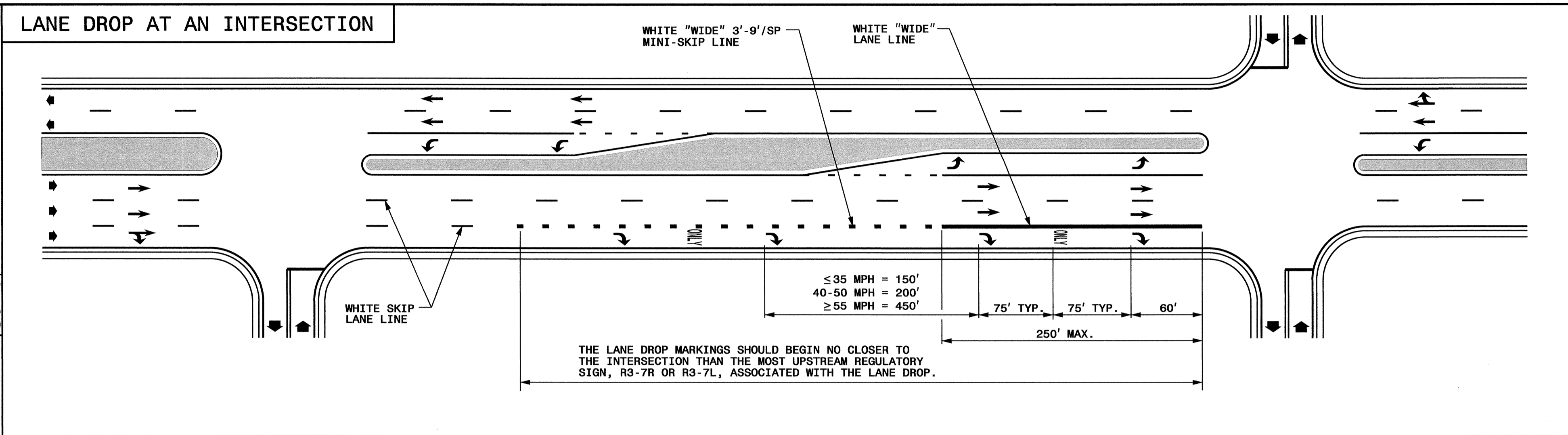


TRANSPORTATION
MANAGEMENT PLAN
RAILROAD CROSSING
DETAIL

HNTB HNTB NORTH CAROLINA, P.C.
343 E. Six Forks Road, Suite 200
Raleigh, North Carolina 27609
NC License No. C-1554

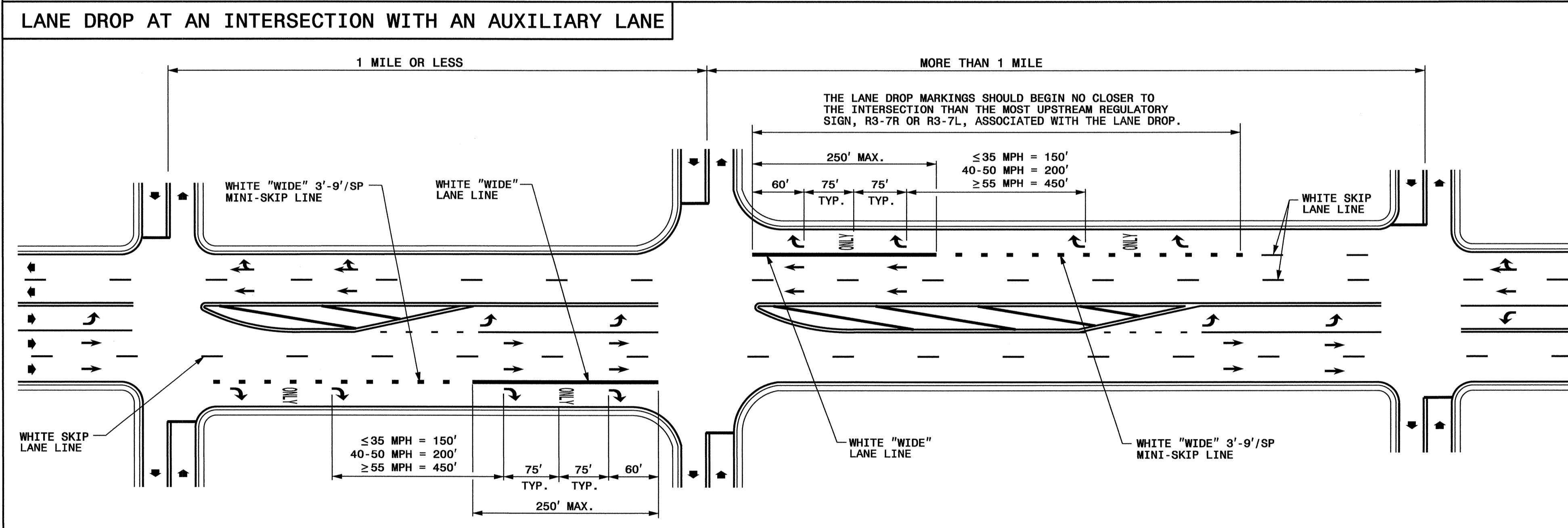
TIP NO. B-4599	SHEET NO. TMP-2D
APPROVED: <i>[Signature]</i>	
DATE: <i>3/6/12</i>	
SEAL	

STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.



STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR
PAVEMENT MARKINGS
 LANE DROPS



ENGLISH STANDARD DRAWING FOR
PAVEMENT MARKINGS
 LANE DROPS

- GENERAL NOTES:**
- USE THE GUIDANCE SHOWN ON THE ABOVE DETAILS IN CONJUNCTION WITH INTERSECTION GUIDANCE SHOWN ON ROADWAY STANDARD DRAWING 1205.04.
 - LANE LINES INDICATED AS "WIDE" SHALL BE AT LEAST TWICE THE WIDTH OF THE NORMAL LINE.

LEGEND	
W = WIDTH OF TRAVEL LANE	ONLY PAVEMENT MARKING SYMBOLS & CHARACTERS
➔ DIRECTION OF TRAFFIC FLOW	

SHEET 1 OF 3
1205D06

SHEET 1 OF 3
1205D06

**REVISED PAVEMENT MARKING
ROADWAY STANDARD DRAWING**

06-MAR-2012 14:28 S:\S&DU\Standard Drawings\Standard Drawings\MP\2012 Standard Drawings\1205D06L_Rev12.dwg AT TE244745

PHASING

NOTES:

REPLACE MARKINGS AND RETURN TRAFFIC TO THE CURRENT TRAFFIC PATTERN AT THE END OF EACH WORK PERIOD UNLESS OTHERWISE NOTED IN THE PHASING OR DIRECTED BY THE ENGINEER.

MAINTAIN VEHICULAR ACCESS TO ALL RESIDENCES AND BUSINESSES DURING THE LIFE OF THE CONTRACT UNLESS OTHERWISE NOTED IN THE PHASING OR DIRECTED BY THE ENGINEER.

COMPLETE ANY PROPOSED WIDENING IN SUCH A MANNER THAT PONDING OF WATER WILL NOT OCCUR IN THE TRAVEL LANE. THIS MAY REQUIRE A COMBINATION OF INSTALLATION OF PROPOSED PIPES, TEMPORARY PIPES, STEEL PLATES, AND TEMPORARY MEDIAN AND OUTSIDE DITCHES.

PAVE PROPOSED CONSTRUCTION, UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE, IN ALL PHASES UNTIL STATED TO INSTALL FINAL LAYER IN THE PHASING.

PHASE I

(SEE SHEETS TMP-4 THRU TMP-6)

STEP 1: BEGIN CONSTRUCTION OF PROPOSED BRIDGE (LEFT SIDE ONLY) TO 1.5' RT OF -L- CENTERLINE. INSTALL TEMPORARY GUARDRAIL AND ANCHORS ALONG EXISTING SOUTHBOUND LANE FROM -L- STA 19+22+/- TO STA 20+95+/- . INSTALL SHORING #1 & #2 TO EXCAVATE FOR END BENTS. (LN-1,8)

BEGIN INSTALLATION OF TEMPORARY SIGNAL #1 AT -Y2- .

USING RSD 1101.02 (SHEET 1,3 & 7 OF 15), REMOVE EXISTING ISLANDS ON -L- STA 17+50+/- AND -Y1- STA 10+65+/- AND REPAIR PAVEMENT. INSTALL WATER-FILLED BARRIER FROM -L- STA 17+04+/- TO STA 17+92+/- .

CHESAPEAKE & ALBEMARLE RAILROAD WILL INSTALL NEW RAILROAD CONCRETE CROSSING PANELS, PROPOSED CANTILEVER #3 AND SIGNAL #3 AND INSTALL A NEW HOUSE TO OPERATE THE RAILROAD EQUIPMENT. (LN-2)

USING RSD 1101.02 (SHEET 3 OF 15) AS NEEDED, INSTALL SHORING #8 TO EXCAVATE UNDERCUT AND REPLACE WITH SUITABLE MATERIAL. REMOVE SHORING #8 WHEN COMPLETE. (LN-11)

STEP 2: USING RSD 1101.02 (SHEETS 3 & 7 OF 15), COMPLETE THE FOLLOWING:
 * WEDGE & WIDEN LEFT SIDE FROM STA 12+25+/- TO RAILROAD AND WEDGE RIGHT SIDE FROM RIGHT EOP TO EDGE OF LEFT SIDE WEDGING CREATING NEW CROWN POINT. (LN-2,3,4,6)
 * WEDGE EXISTING PAVEMENT FROM STA 17+00+/- TO STA 18+40+/- FROM LEFT EOP TO EXISTING CROWN POINT AND WIDEN (LEFT SIDE) FROM STA 17+25+/- TO BRIDGE. SHORING #3 REQUIRED FOR EMBANKMENT. RE-INSTALL WATER-FILLED BARRIER IN ORIGINAL LOCATION. (LN-4,6,8)
 * COMPLETE AND ACTIVATE TEMPORARY SIGNAL #1 AND WIDEN TO LEFT SIDE FROM BRIDGE TO STA 40+00 AND WEDGE EXISTING PAVEMENT FROM LEFT EOP TO CROWN POINT FROM STA 31+00+/- TO STA 40+00+/- . BEGIN INSTALLATION OF TEMPORARY SIGNAL #2. (LN-5,6)

STEP 3: COMPLETE LEFT SIDE OF BRIDGE BEGUN IN STEP 1 AND INSTALL ANCHORED BARRIER AS SHOWN ON TMP-7 & TMP-8.

STEP 4: COORDINATING WITH THE RAILROAD MANAGER TO ENSURE PROPER FLAGGING OPERATIONS ACROSS RAILROAD UNTIL NEW SIGNAL IS ACTIVATED, COMPLETE THE FOLLOWING IN ORDER: SEE DETAIL SHEET TMP-12. (LN-2)
 * CONSTRUCT -L- (LEFT SIDE) FROM RAILROAD TO STA 17+25+/-
 * CHESAPEAKE & ALBEMARLE RAILROAD WILL INSTALL & ACTIVATE NEW RR SIGNAL AND GATE

STEP 5: COMPLETE INSTALLATION OF TEMPORARY SIGNAL #2. (LN-2)

STEP 6: PLACE TEMPORARY MARKINGS AS SHOWN ON TMP-7 & TMP-8, SHIFT SB TRAFFIC TO NEW PATTERN AND ACTIVATE TEMPORARY SIGNAL #2. (LN-2) (REMOVE AND RESET WATER FILLED BARRIER FROM -L- STA 16+88+/- TO STA 17+68+/- AS SHOWN ON TMP-7).

PHASE II

(SEE SHEETS TMP-7 THRU TMP-9)

STEP 1: INSTALL TEMPORARY GUARDRAIL AND ANCHORS ALONG EXISTING NBL FROM -L- STA 18+68+/- TO STA 21+35+/- (BRIDGE). REMOVE BRIDGE #2 (SBL) AND BEGIN CONSTRUCTION OF REMAINDER OF PROPOSED BRIDGE (RIGHT SIDE). INSTALL SHORING #4 & #5 TO EXCAVATE FOR END BENTS AND REMOVE SHORING #1 AND #3 AS NECESSARY. REMOVE SHORING #4 & #5 WHEN END BENTS ARE COMPLETED. (LN-1,8)

BEGIN INSTALLATION OF TEMPORARY SIGNAL #3 AT -Y2- .

USING RSD 1101.02 (SHEET 3 OF 15) AS NEEDED, INSTALL SHORING #7 TO EXCAVATE UNDERCUT AND REPLACE WITH SUITABLE MATERIAL. REMOVE SHORING #7 WHEN COMPLETE. (LN-11)

STEP 2: USING RSD 1101.02 (SHEET 3 & 4 OF 12) AS NEEDED, CONSTRUCT:
 * -L- (NBL) FROM STA 18+40+/- TO BRIDGE (SHORING #6 REQUIRED FOR EMBANKMENT) (LN-4,6,8)
 * -L- (NBL) FROM BRIDGE TO STA 31+00+/-
 * -L- WEDGE INTERSECTION AT -Y2- TO PROVIDE SMOOTH TIE TO EXISTING PAVEMENT

STEP 3: COMPLETE RIGHT SIDE OF BRIDGE BEGUN IN STEP 1 AND REMOVE ANCHORED BARRIER PLACED IN PHASE I, STEP 3.

COMPLETE INSTALLATION OF TEMPORARY SIGNAL #3 AT -Y2- .

STEP 4: COORDINATING WITH THE RAILROAD MANAGER TO ENSURE PROPER FLAGGING OPERATIONS ACROSS RAILROAD UNTIL NEW SIGNAL IS ACTIVATED, COMPLETE THE FOLLOWING IN ORDER: SEE DETAIL SHEET TMP-2C. (LN-2,7)
 * PLACE TEMPORARY MARKINGS AS SHOWN ON TMP-10 & TMP-11, REMOVE AND RESET WATER-FILLED BARRIER FROM -L- STA 16+80+/- TO STA 17+76+/- AND SHIFT NB TRAFFIC TO NEW PATTERN AND ACTIVATE TEMP SIGNAL #3.
 * CHESAPEAKE & ALBEMARLE RAILROAD WILL REMOVE EXISTING RR SIGNAL & GATE AND INSTALL & ACTIVATE PROPOSED RAILROAD SIGNAL & GATE ON RIGHT AT -L- STA 16+50+/- . (REQUIRES SOME REMOVAL OF EXISTING PAVEMENT FOR SIGNAL & GATE INSTALLATION.)
 * COMPLETE PAVEMENT REMOVAL AND CONSTRUCTION OF RIGHT SIDE WEDGING AND CURB AND GUTTER/SHOULDER FROM -L- STA 12+25+/- TO EXISTING -Y1- AS SHOWN ON SHEET TMP-10. (LN-3,4,6)

PHASE III

(SEE SHEETS TMP-10 THRU TMP-12)

STEP 1: USING RSD 1101.02 (SHEETS 1 & 3 OF 15), CONSTRUCT -Y1- FROM -L- TO STA 11+65+/- AND SHIFT -Y1- TRAFFIC TO NEW PATTERN. THEN CONSTRUCT RIGHT SIDE CURB & GUTTER AND PAVEMENT REMOVAL ON -L- FROM RAILROAD TO STA 19+17+/- . COMPLETE INSTALLATION OF GUARDRAIL ON -L- FROM STA 19+00+/- TO STA 20+00+/- . (LN-2)

USING RSD 1101.02 (SHEETS 1 & 3 OF 15), REMOVE ABANDONED PAVEMENT FROM -Y1- TO BRIDGE.

AWAY FROM TRAFFIC, REMOVE BRIDGE #1 (NBL).

USING RSD 1101.02 (SHEETS 1,2 & 3 OF 15), COMPLETE THE FOLLOWING:
 * -L- FROM STA 29+16+/- TO 40+00+/- (RIGHT SIDE)
 * -Y2- FROM -L- TO STA 12+05+/-
 * -Y3- FROM -L- TO STA 11+30+/- (LN-10)
 * -Y4- FROM -L- TO STA 11+25+/- (LN-10)
 * REMOVE ABANDONED PAVEMENT FROM BRIDGE TO STA 37+50+/- .
 * BEGIN INSTALLATION OF FINAL SIGNAL.

STEP 2: PLACE TEMPORARY PAVEMENT MARKING IN FINAL PATTERN ON -L- RIGHT TURN LANE FROM BRIDGE TO -Y2- AND OPEN RIGHT TURN LANE TO TRAFFIC.

COMPLETE AND ACTIVATE FINAL SIGNAL.

STEP 3: CONSTRUCT PROPOSED ISLANDS, PLACE FINAL LAYER OF SURFACE COURSE AND FINAL PAVEMENT MARKING ON ALL ROADS. (REFER TO FINAL PAVEMENT MARKING PLANS.)

REVISIONS

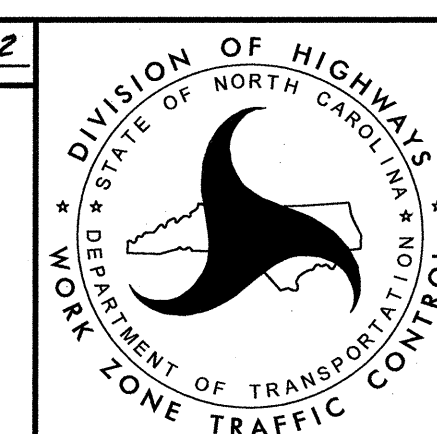
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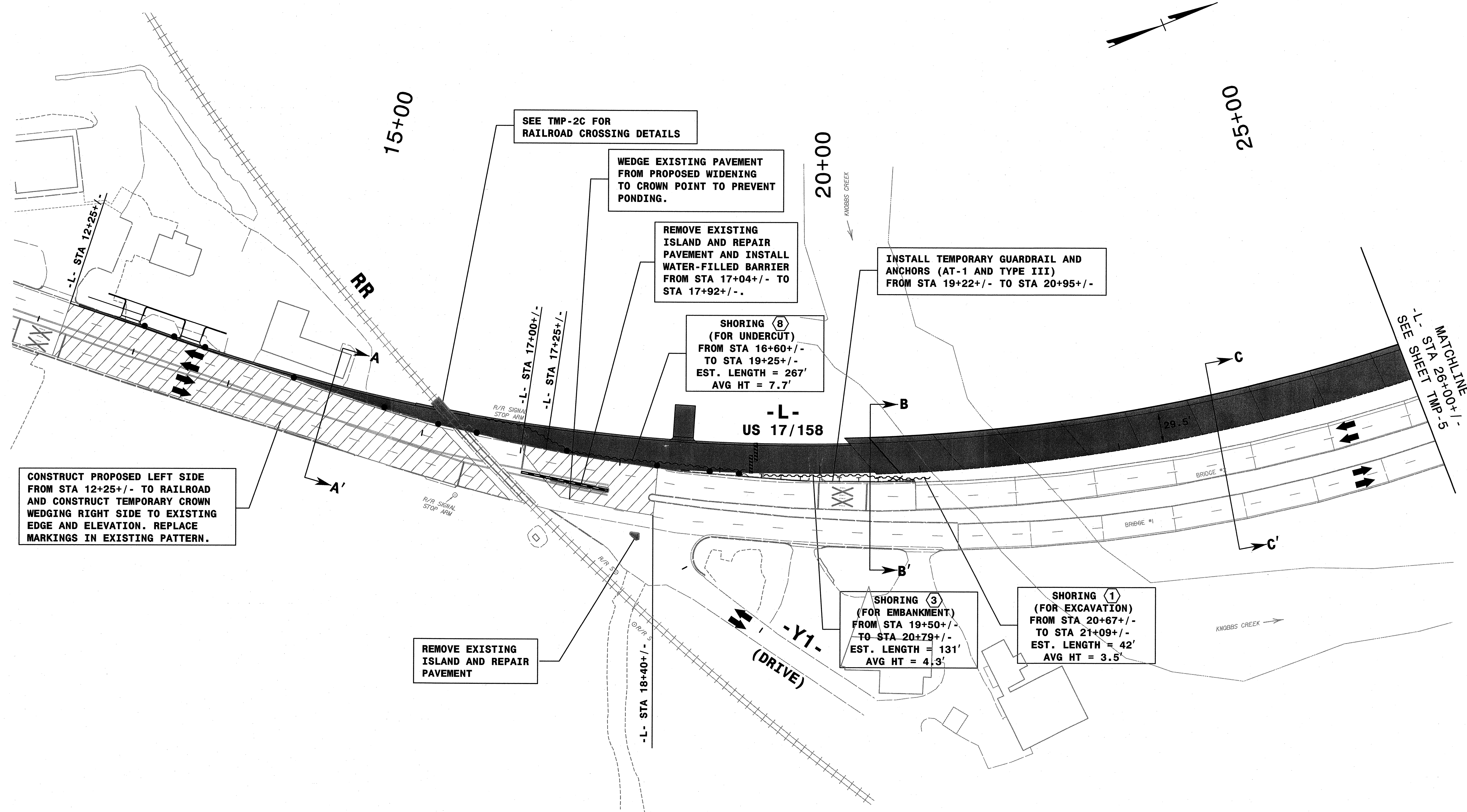
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TRANSPORTATION MANAGEMENT PLAN
PHASING

8/17/99



CONSTRUCT PROPOSED LEFT SIDE FROM STA 12+25+/- TO RAILROAD AND CONSTRUCT TEMPORARY CROWN WEDGING RIGHT SIDE TO EXISTING EDGE AND ELEVATION. REPLACE MARKINGS IN EXISTING PATTERN.

REMOVE EXISTING ISLAND AND REPAIR PAVEMENT

SEE TMP-2C FOR RAILROAD CROSSING DETAILS

WEDGE EXISTING PAVEMENT FROM PROPOSED WIDENING TO CROWN POINT TO PREVENT PONDING.

REMOVE EXISTING ISLAND AND REPAIR PAVEMENT AND INSTALL WATER-FILLED BARRIER FROM STA 17+04+/- TO STA 17+92+/-.

SHORING (B) (FOR UNDERCUT) FROM STA 16+60+/- TO STA 19+25+/- EST. LENGTH = 267' AVG HT = 7.7'

INSTALL TEMPORARY GUARDRAIL AND ANCHORS (AT-1 AND TYPE III) FROM STA 19+22+/- TO STA 20+95+/-

SHORING (3) (FOR EMBANKMENT) FROM STA 19+50+/- TO STA 20+79+/- EST. LENGTH = 131' AVG HT = 4.3'

SHORING (1) (FOR EXCAVATION) FROM STA 20+67+/- TO STA 21+09+/- EST. LENGTH = 42' AVG HT = 3.5'

- REFER TO SHEET TMP-6 FOR CUT SECTION(S).
- REFER TO SHEET TMP-2C FOR RAILROAD CROSSING DETAILS.
- REFER TO SHEETS TMP-2A & TMP-2B FOR SHORING NOTES.

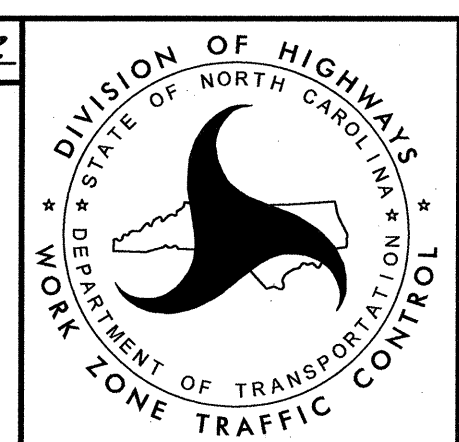
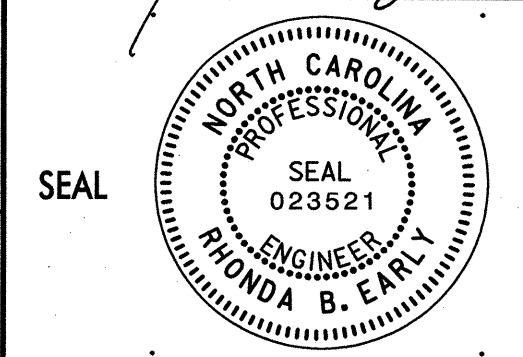
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TRANSPORTATION MANAGEMENT PLAN

PHASE I DETAIL

SHEET 1 OF 2

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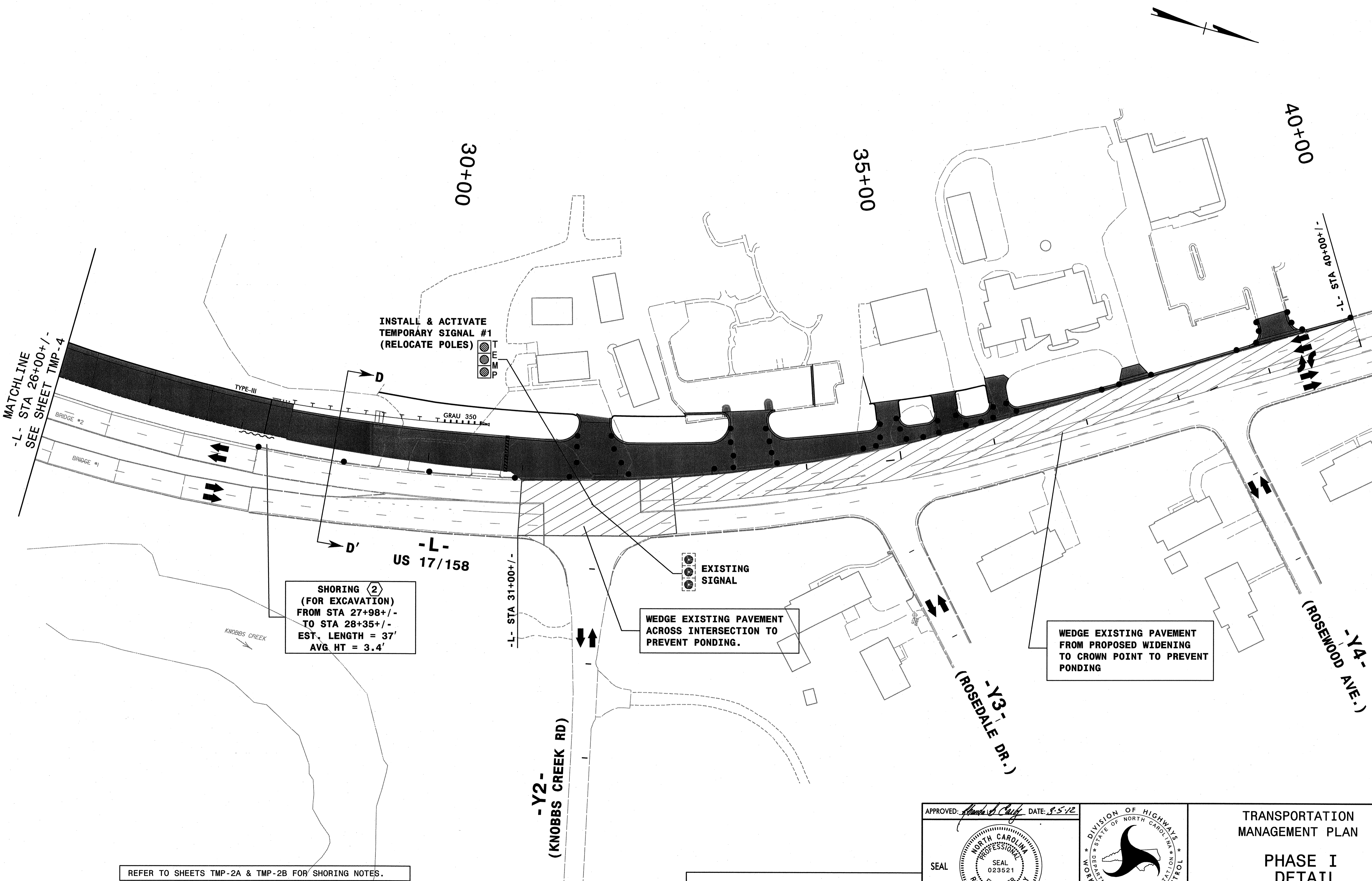
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REFER TO SHEETS TMP-2A & TMP-2B FOR SHORING NOTES.
REFER TO SHEET TMP-6 FOR CUT SECTION(S).

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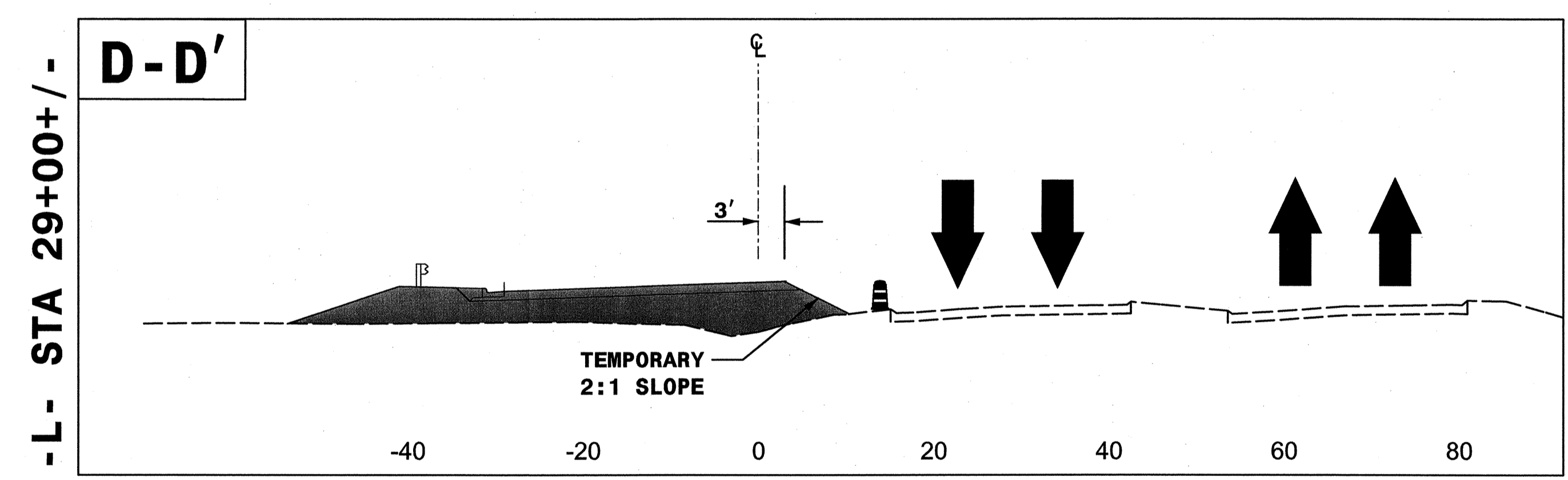
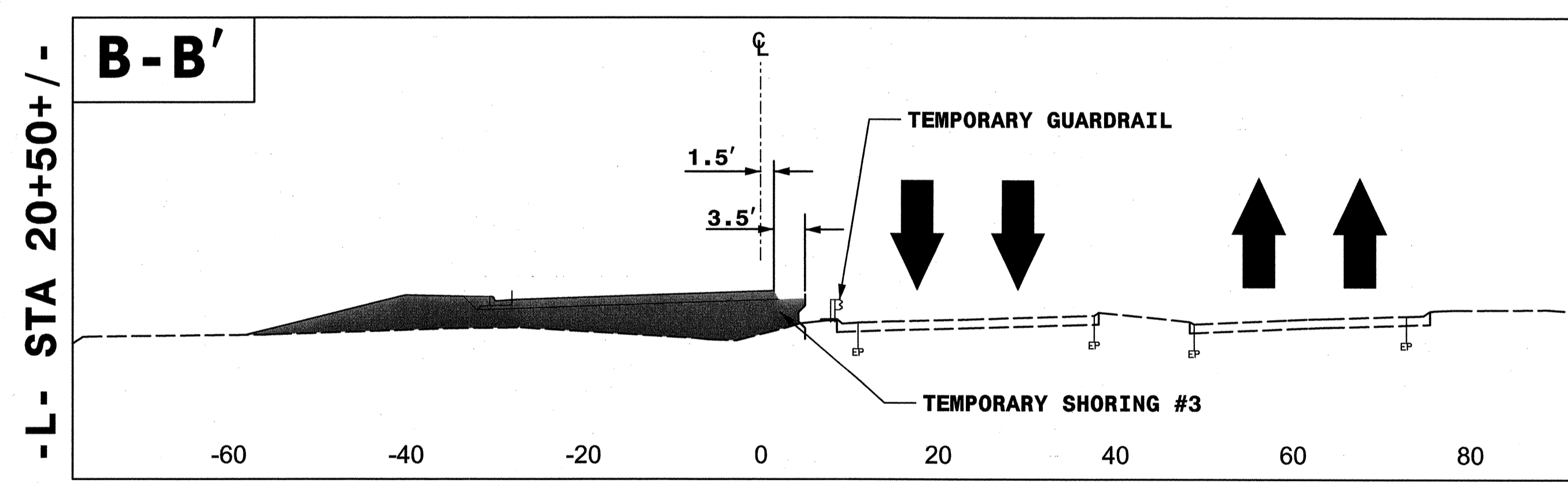
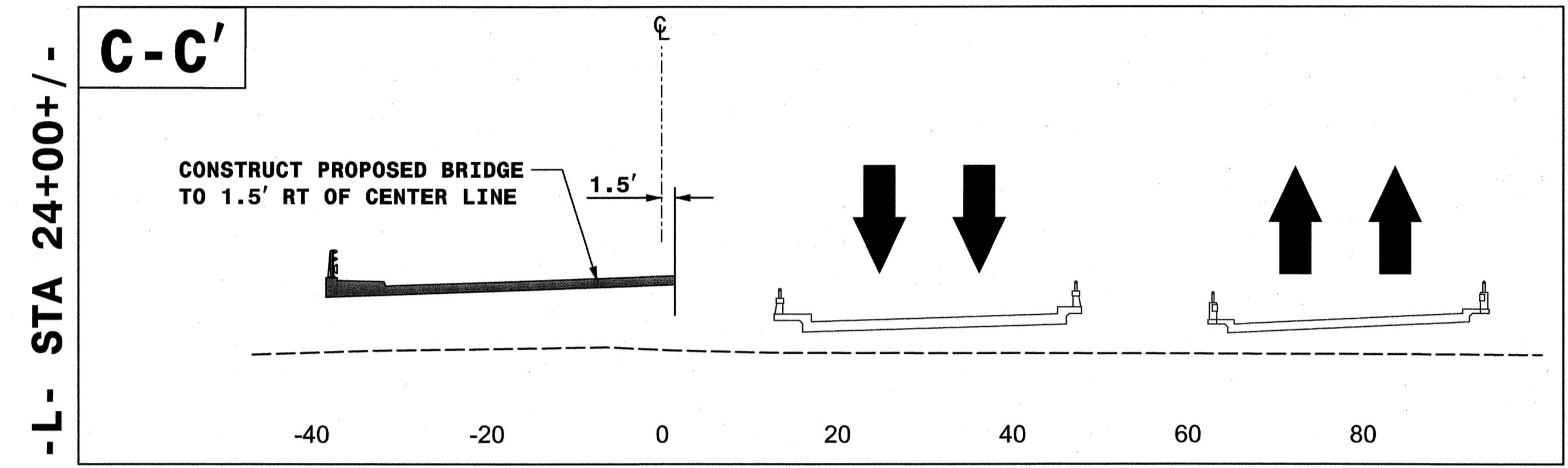
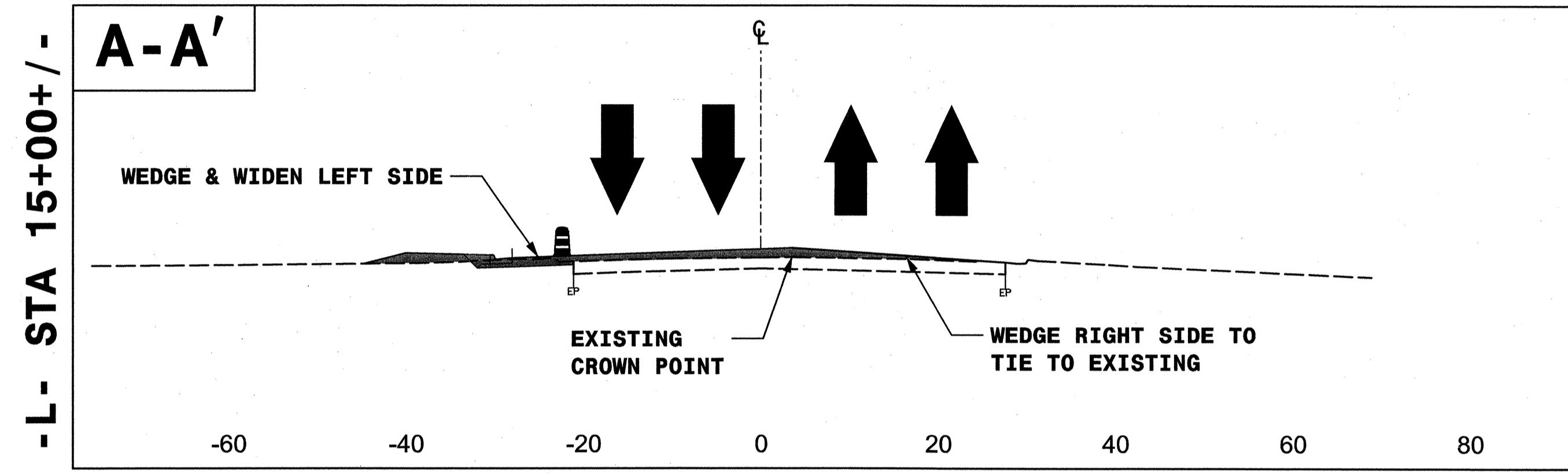
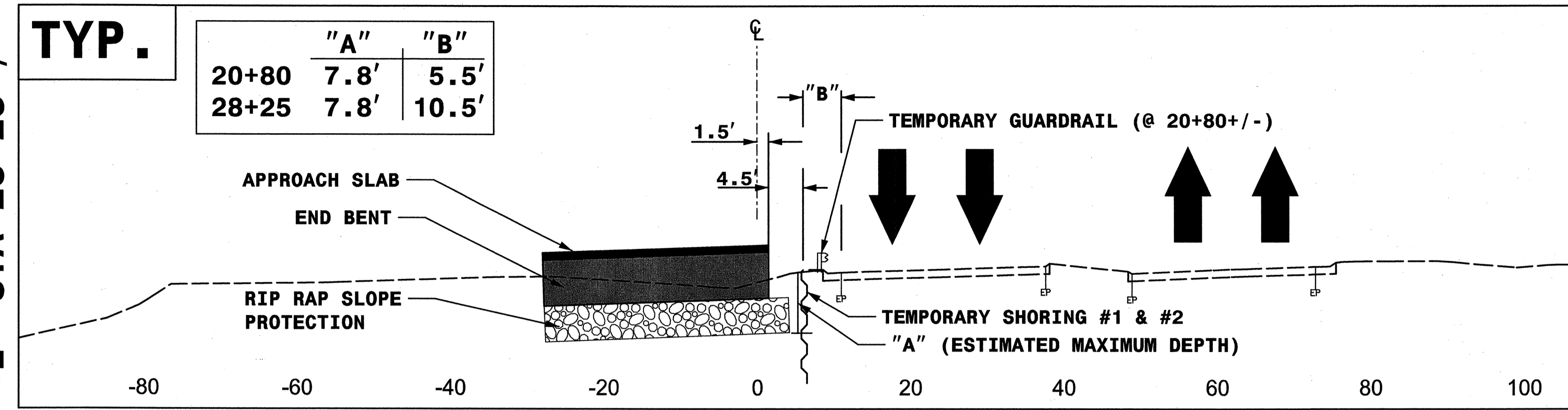
TRANSPORTATION MANAGEMENT PLAN
PHASE I
DETAIL
SHEET 2 OF 2

8/17/99

TYPICAL FOR:
 -L- STA 20+80+/-
 -L- STA 28+25+/-

TYP.

	"A"	"B"
20+80	7.8'	5.5'
28+25	7.8'	10.5'



REVISIONS

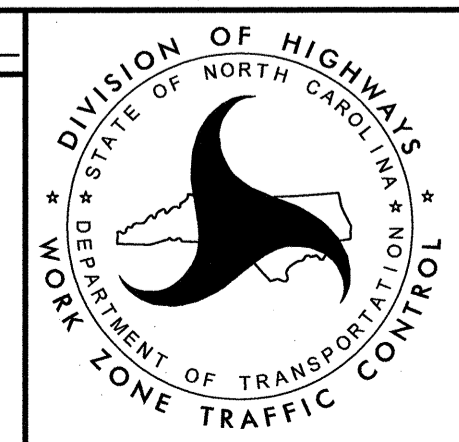
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REFER TO SHEETS TMP-2A & TMP-2B FOR SHORING NOTES.

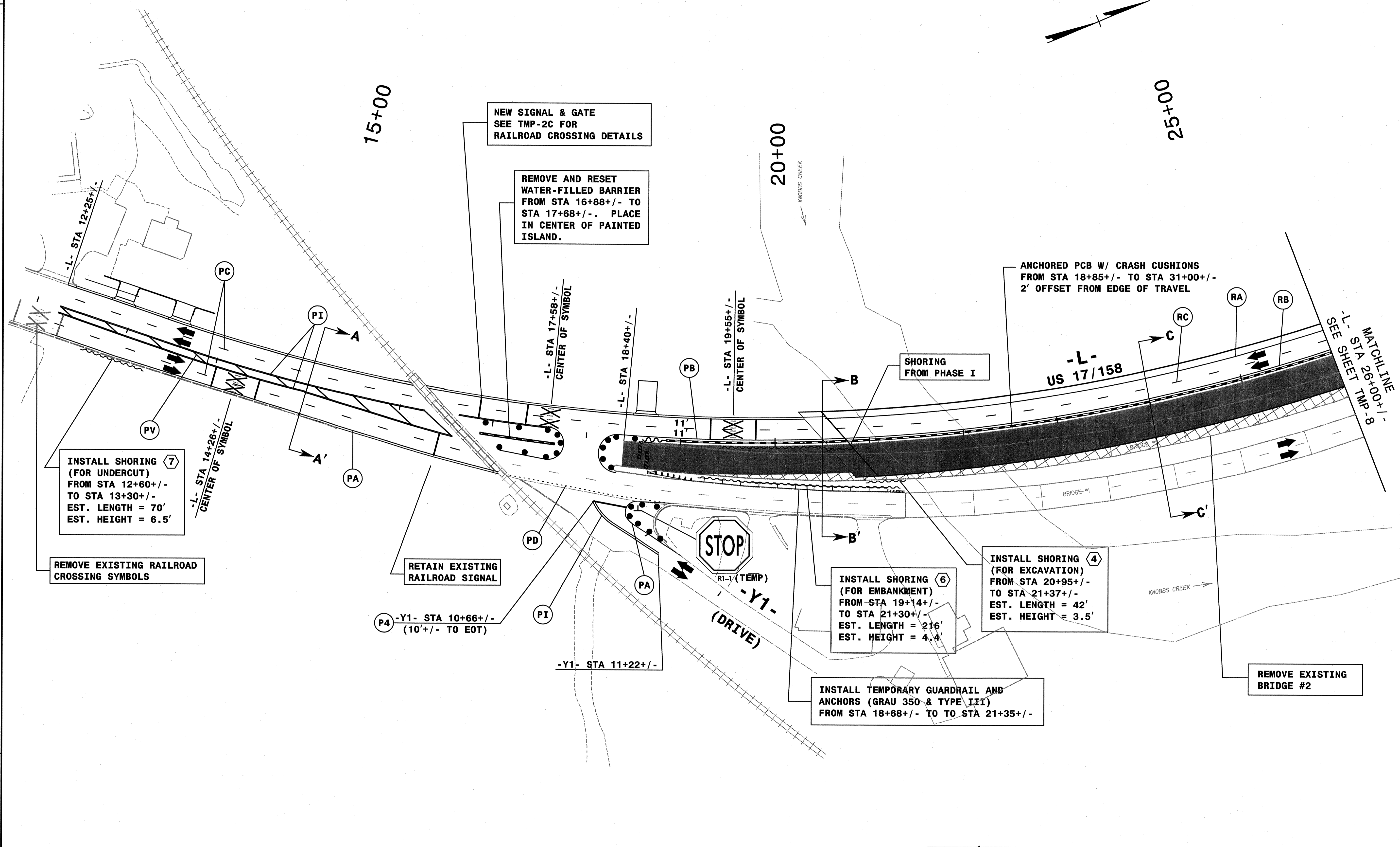
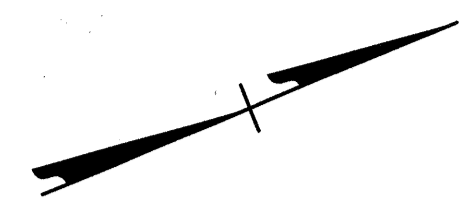
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TRANSPORTATION MANAGEMENT PLAN
 PHASE I CUT SECTIONS

8/17/99



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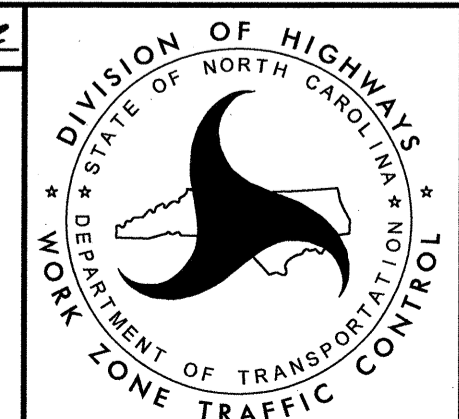
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REFER TO SHEET TMP-9 FOR CUT SECTION(S).
 REFER TO SHEET TMP-2C FOR RAILROAD CROSSING DETAILS.
 REFER TO SHEETS TMP-2A & TMP-2B FOR SHORING NOTES.

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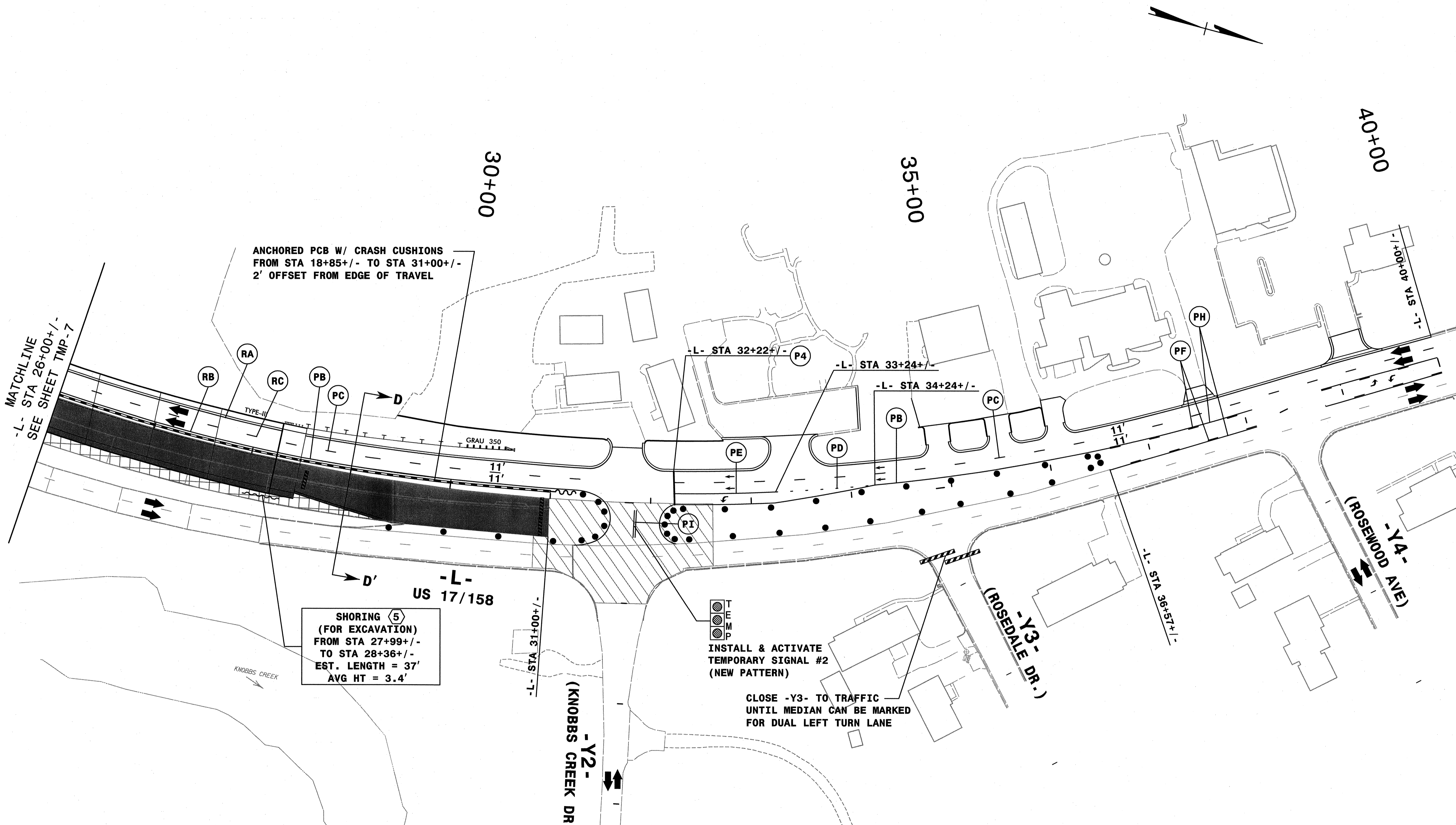
TRANSPORTATION MANAGEMENT PLAN
 PHASE II
 DETAIL
 SHEET 1 OF 2

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REVISIONS

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REFER TO SHEETS TMP-2A & TMP-2B FOR SHORING NOTES.

REFER TO SHEET TMP-9 FOR CUT SECTION(S).

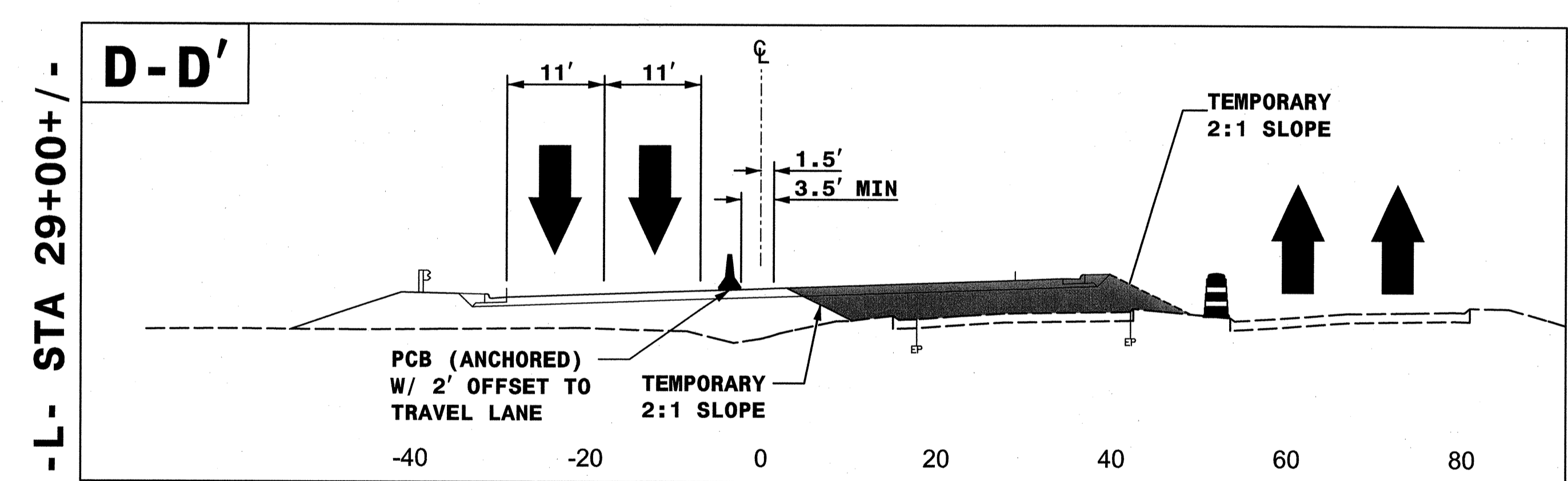
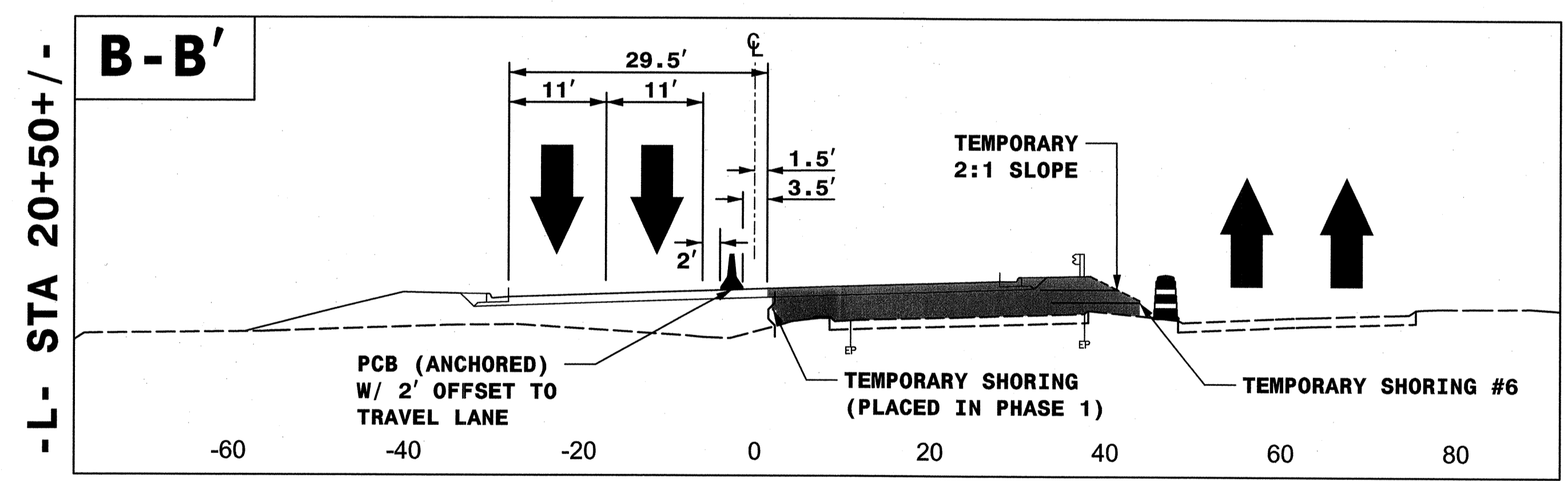
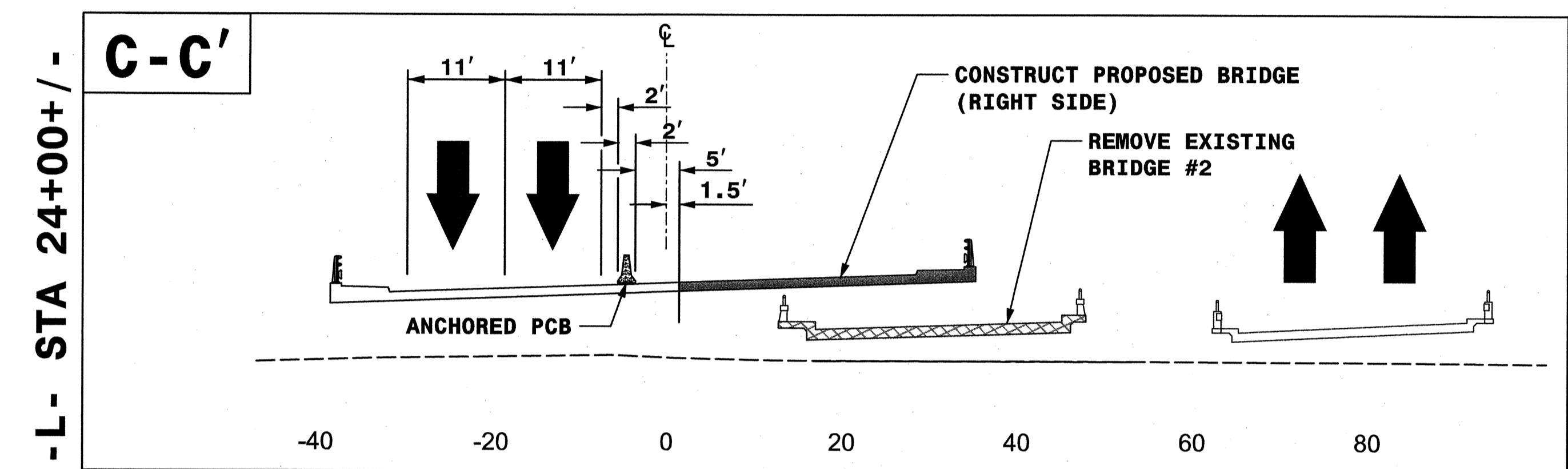
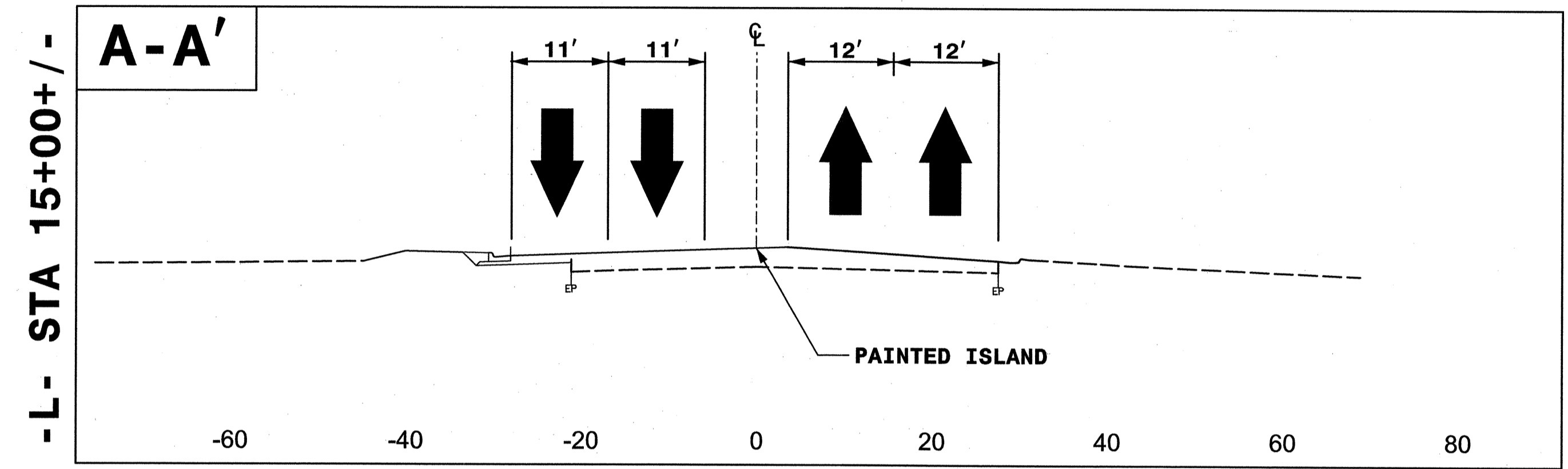
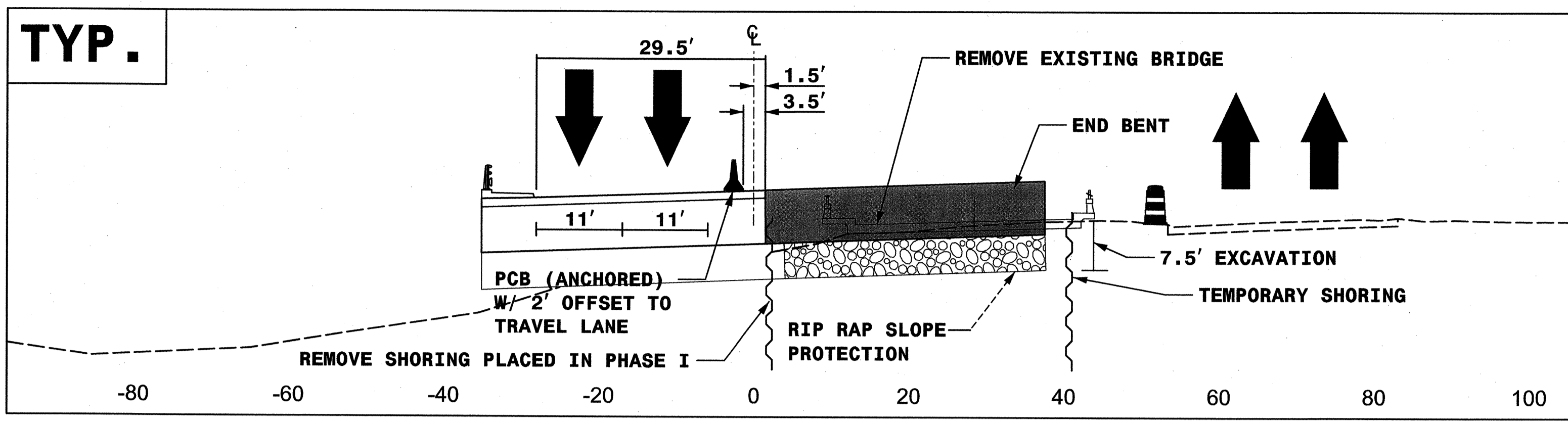
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TRANSPORTATION MANAGEMENT PLAN
 PHASE II
 DETAIL
 SHEET 2 OF 2

TYPICAL FOR:
-L- STA 21+00+/-
-L- STA 28+25+/-



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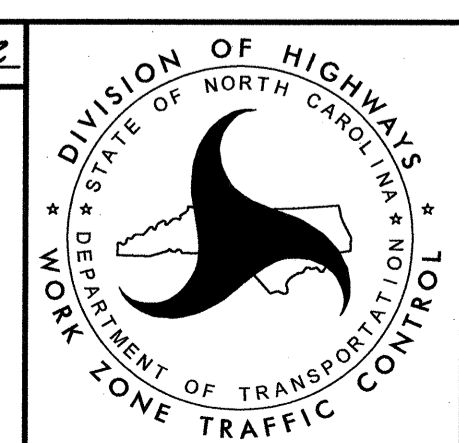
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REFER TO SHEETS TMP-2A & TMP-2B FOR SHORING NOTES.

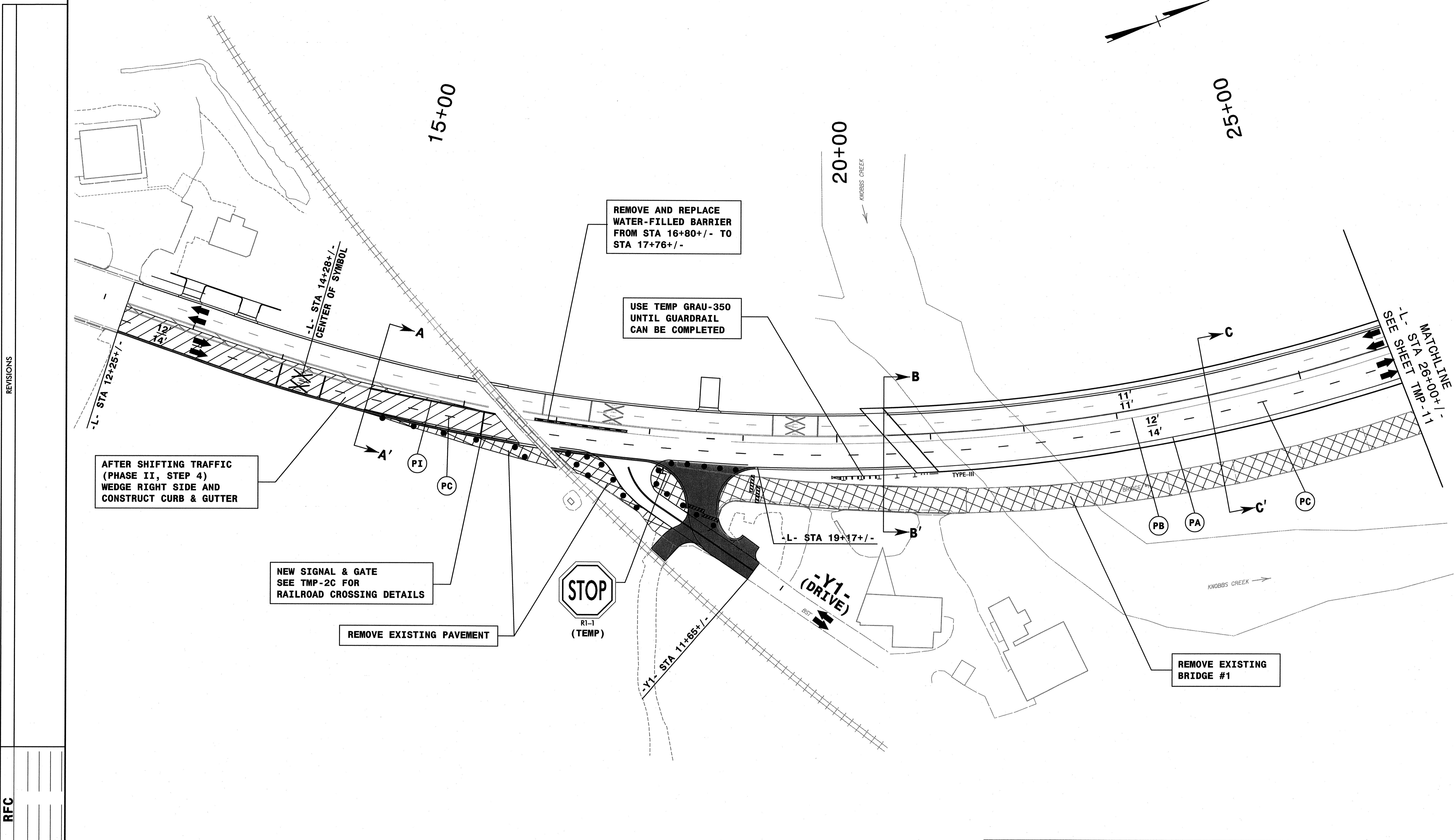
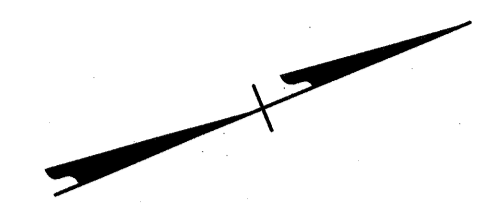
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TRANSPORTATION MANAGEMENT PLAN
 PHASE II CUT SECTIONS

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AFTER SHIFTING TRAFFIC (PHASE II, STEP 4) WEDGE RIGHT SIDE AND CONSTRUCT CURB & GUTTER

NEW SIGNAL & GATE SEE TMP-2C FOR RAILROAD CROSSING DETAILS

REMOVE EXISTING PAVEMENT

REMOVE AND REPLACE WATER-FILLED BARRIER FROM STA 16+80+/- TO STA 17+76+/-

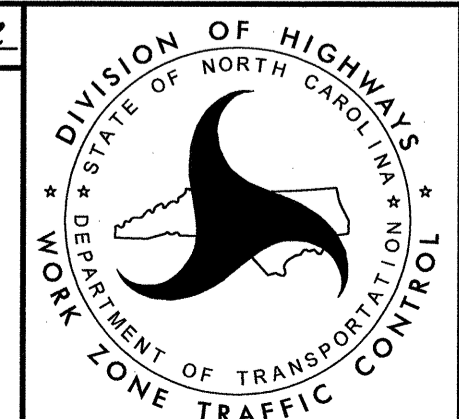
USE TEMP GRAU-350 UNTIL GUARDRAIL CAN BE COMPLETED

REMOVE EXISTING BRIDGE #1

REFER TO SHEETS TMP-12 FOR CUT SECTION(S).

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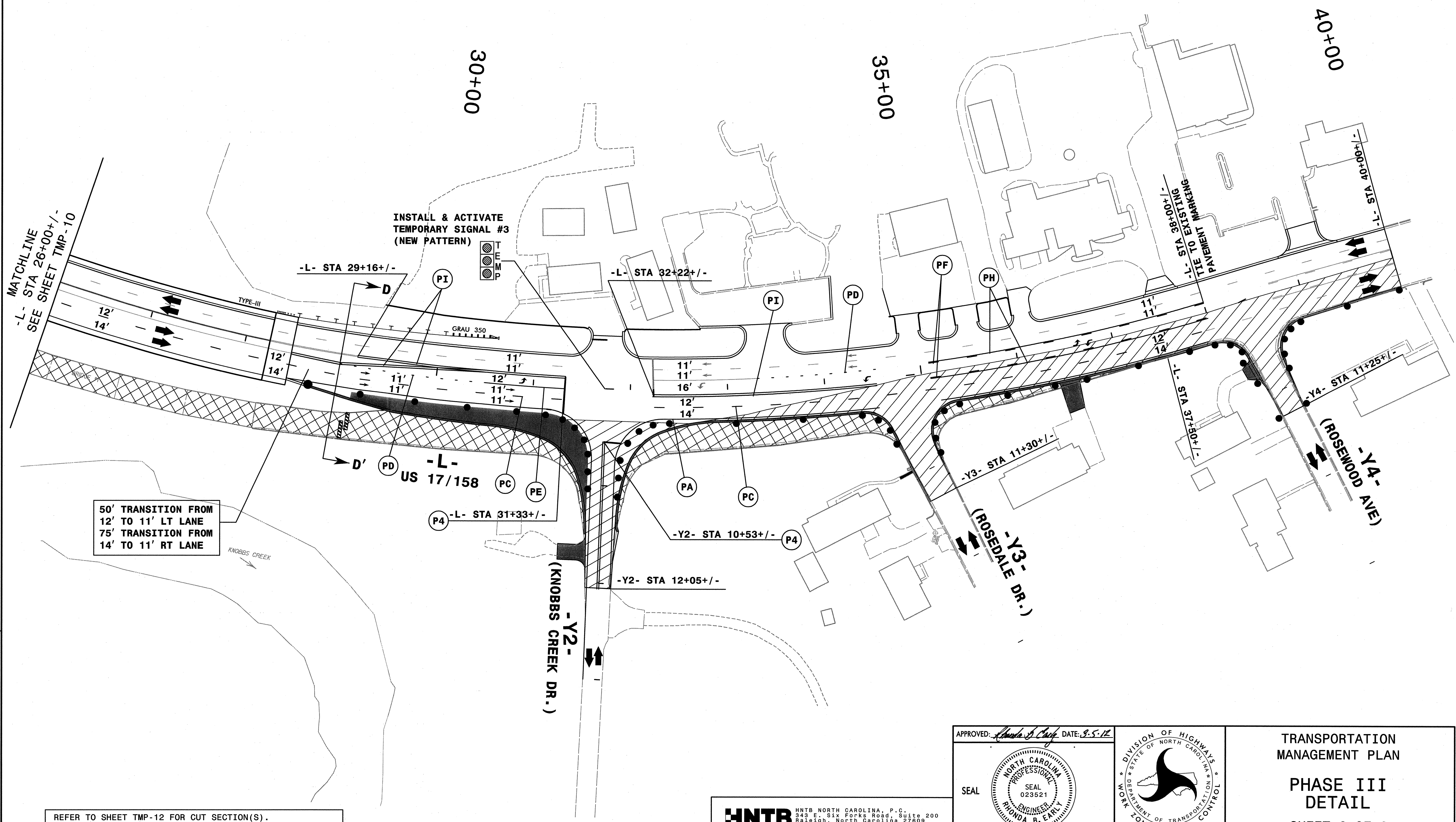
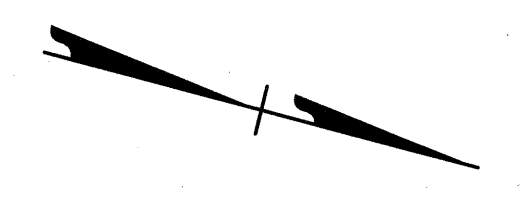
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TRANSPORTATION MANAGEMENT PLAN

PHASE III
 DETAIL

SHEET 1 OF 2



INSTALL & ACTIVATE
TEMPORARY SIGNAL #3
(NEW PATTERN)

50' TRANSITION FROM
12' TO 11' LT LANE
75' TRANSITION FROM
14' TO 11' RT LANE

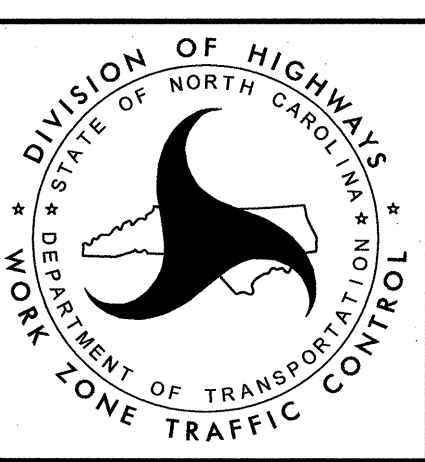
REFER TO SHEET TMP-12 FOR CUT SECTION(S).

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TRANSPORTATION
MANAGEMENT PLAN

**PHASE III
DETAIL**

SHEET 2 OF 2

8/17/99

8/17/99

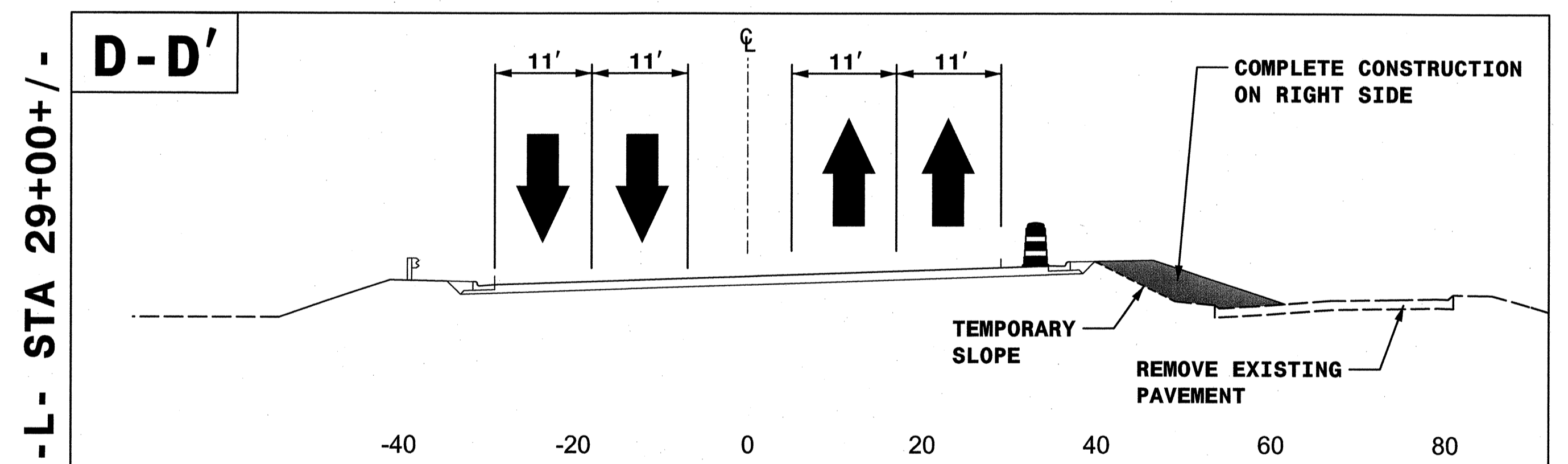
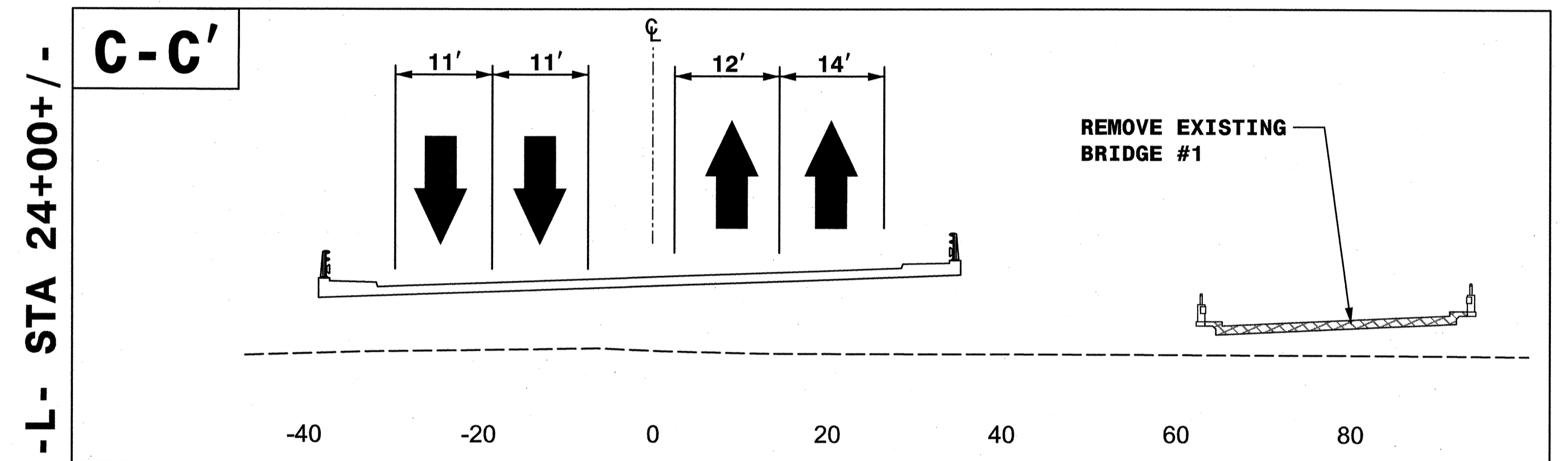
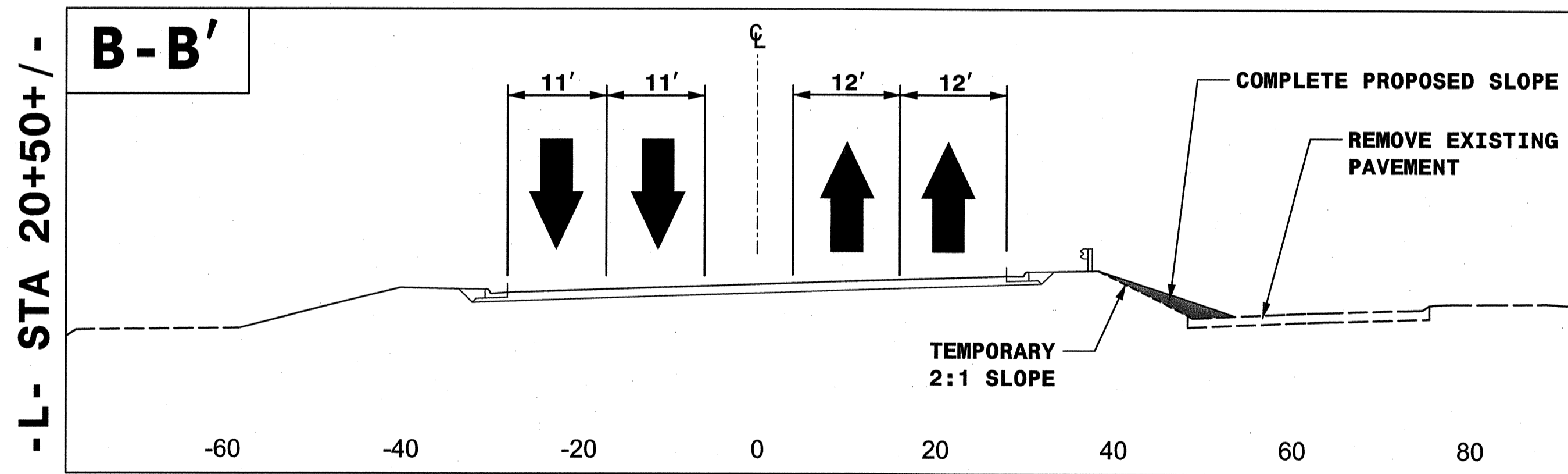
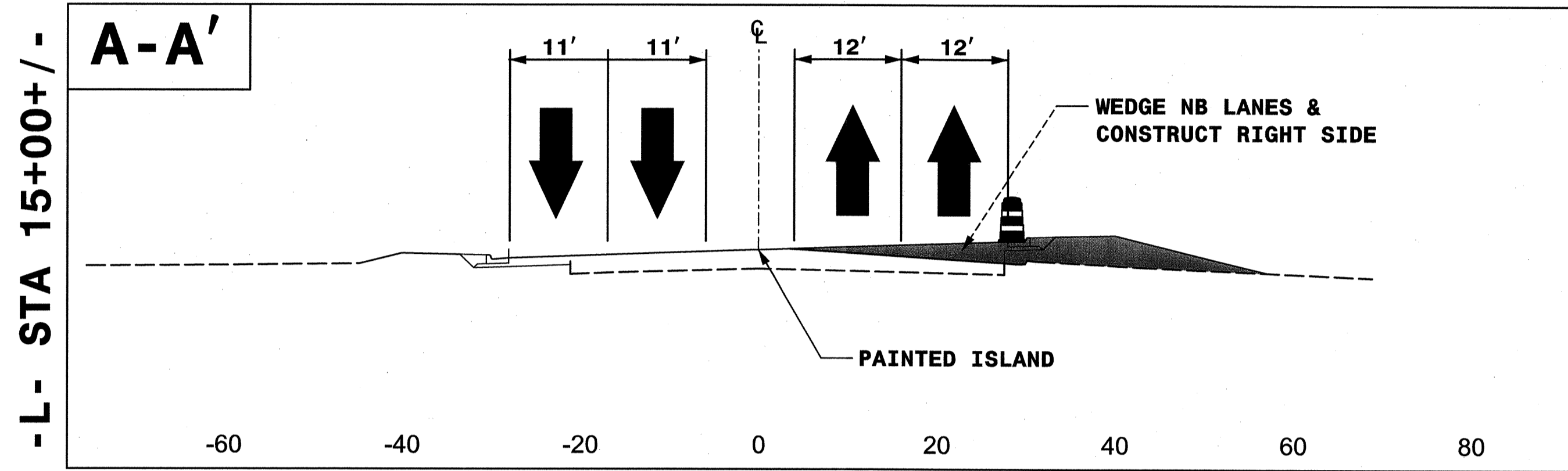
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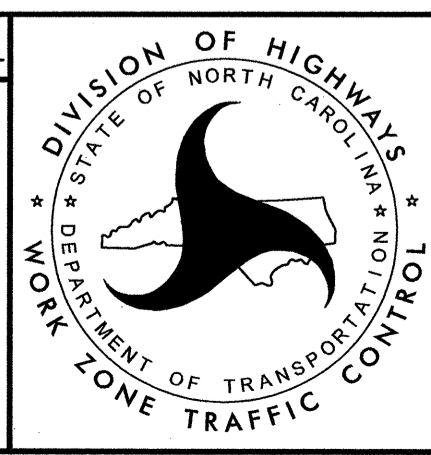
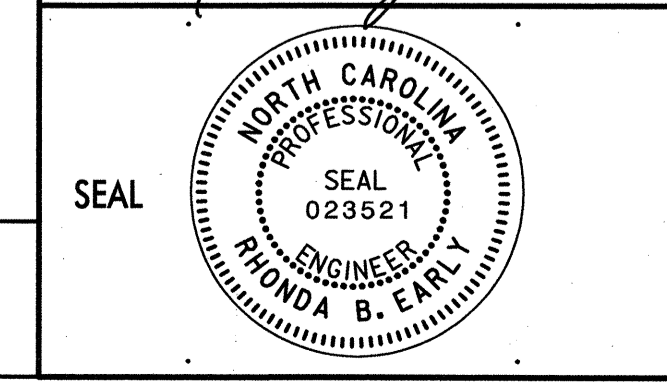
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TRANSPORTATION
MANAGEMENT PLAN

PHASE III
CUT SECTIONS

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