STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

STATE PROJECT REFERENCE NO. SHEET NO. TCP-1

PLAN FOR PROPOSED TRAFFIC CONTROL, MARKING & DELINEATION

CRAVEN COUNTY

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
1101.03	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
1205.06	PAVEMENT MARKINGS - THRU LANE DROPS
1205.07	PAVEMENT MARKINGS - PEDESTRIAN CROSSWALKS
1205.08	PAVEMENT MARKINGS - SYMBOLS & WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1205.10	PAVEMENT MARKINGS - SCHOOL AREAS
	PAVEMENT MARKINGS - RAILROAD CROSSINGS
1205.12	PAVEMENT MARKINGS - BRIDGES
	PAVEMENT MARKER SPACING
1251.01	RAISED PAVEMENT MARKERS (TEMPORARY & PERMANENT)
1261.01	GUARDRAIL & BARRIER DELINEATOR SPACING
	GUARDRAIL & BARRIER DELINEATOR TYPES
1262.01	GUARDRAIL END DELINEATION
1264.01	OBJECT MARKERS
1264.02	PLACEMENT OF OBJECT MARKERS

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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

DRUM 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

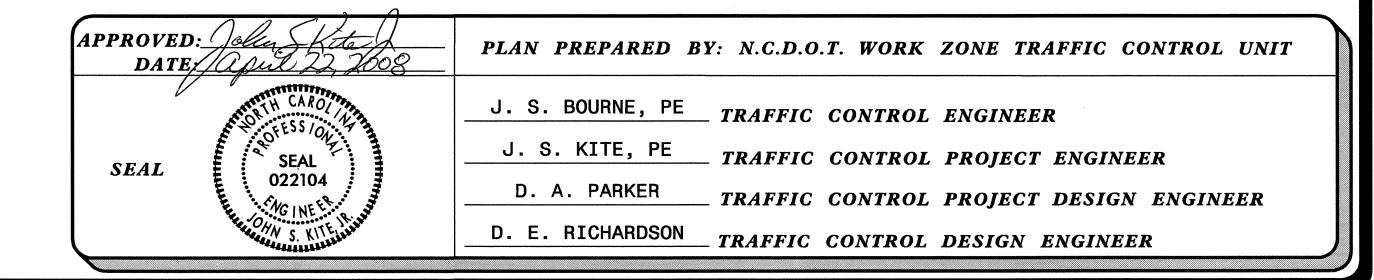
PAVEMENT MARKINGS

CRYSTAL/CRYSTAL PAVEMENT MARKER

◆ YELLOW/YELLOW PAVEMENT MARKER

CRYSTAL/RED PAVEMENT MARKER

PAVEMENT MARKING SYMBOLS



TIP PROJECT:

PROJECT NOTES

PROJ. REFERENCE NO.	SHEET NO.
R-3403AB	TCP-2
	108-2

GENERAL NOTES

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS, OR RESULT IN DUPLICATE, OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING OR REMOVAL OF DEVICES, AS DIRECTED BY THE ENGINEER.

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT, EXCEPT WHEN OTHERWISE NOTED IN THE PLAN, OR DIRECTED BY THE ENGINEER.

TIME RESTRICTIONS

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

ROAD NAME

DAY AND TIME RESTRICTIONS

-L- US 17

MONDAY THRU FRIDAY 6:30AM TO 8:30AM MONDAY THRU FRIDAY 4PM TO 7PM

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

ROAD NAME

-L- US 17

HOLIDAY

- 1. FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
- 2. FOR NEW YEAR'S, BETWEEN THE HOURS OF 4:00 P.M. DECEMBER 31st TO 8:30 A.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 8:30 A.M. THE FOLLOWING TUESDAY.
- 3. FOR EASTER, BETWEEN THE HOURS OF 4:00 P.M. THURSDAY AND 8:30 A.M. MONDAY.
- 4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 4:00 P.M. FRIDAY TO 8:30 A.M. TUESDAY.
- 5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:30 A. M. THE FRIDAY BEFORE THE WEEK OF INDEPENDENCE DAY TO THE FOLLOWING TUESDAY AT 8:30 A. M. AFTER INDEPENDENCE DAY.
- 6. FOR LABOR DAY, BETWEEN THE HOURS OF 4:00 P.M. FRIDAY AND 8:30 A.M. TUESDAY.
- 7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 4:00 P.M. TUESDAY TO 8:30 A.M. MONDAY.
- 8. FOR CHRISTMAS, BETWEEN THE HOURS OF 4:00 P.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 8:30 A.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

-L- US 17

MONDAY THRU FRIDAY 6:30 AM TO 8:30 AM AND 4PM TO 7PM 15 MINS TRAFFIC SHIFTS

LANE AND SHOULDER 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 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 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.
- G) 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.
- H) DO NOT INSTALL MORE THAN 1 MILE OF LANE CLOSURE ON US 17 MEASURED FROM THE BEGINNING OF THE MERGE TAPER TO THE END OF THE LANE CLOSURE.
- I) DO NOT INSTALL MORE THAN ONE LANE CLOSURE, IN ANY ONE DIRECTION, ON US 17.

PAVEMENT EDGE DROP OFF REQUIREMENTS

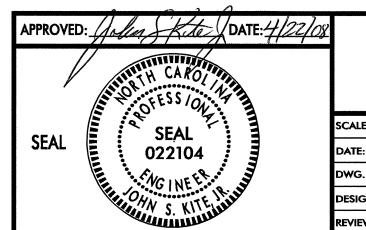
J) BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPENED TRAVEL LANE THAT HAS AN EDGE OF PAVEMENT DROP-OFF AS FOLLOWS:

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.

OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.



PROJECT NOTES

DATE:

DWG. BY:

DER

DESIGN BY:

DER

REVIEWED BY:



REVISIONS

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PROJECT NOTES CONT'D

PROJ. REFERENCE NO. SHEET NO.

R-3403AB

TCP-2A

TRAFFIC PATTERN ALTERATIONS

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

SIGNING

- M) 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.
- N) PROVIDE PERMANENT SIGNING.
- O) PROVIDE DETOUR SIGNING WITHIN AND OFF THE PROJECT LIMITS.
- P) COVER OR REMOVE ALL DETOUR SIGNS WITHIN AND OFF THE PROJECT LIMITS WHEN A 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 FT IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

TRAFFIC CONTROL DEVICES

- S) SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH), EXCEPT 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY, WHEN LANE CLOSURES ARE NOT IN EFFECT. WHEN SKINNY DRUMS ARE ALLOWED, REFER TO SECTION 1180 OF STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES OR AS SHOWN IN THE PLANS.
- T) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.
- U) 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

V) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOWS:

ROAD NAME

MARKING

MARKER

-L- US 17 ALL -Y- LINES 6" THERMOPLASTIC 4" THERMOPLASTIC

SNOWPLOWABLE NONE

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

ROAD NAME

MARKING

MARKER

ALL ROADS

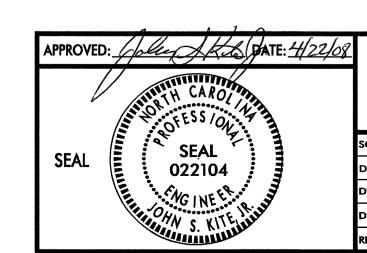
PAINT

TEMP RAISED

- X) 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.
- 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.
- AA) TRACE THE PROPOSED MONOLITHIC ISLAND LOCATIONS WITH PROPER COLOR PAVEMENT MARKINGS PRIOR TO INSTALLATION. PLACE CONES TO DELINEATE ANY PROPOSED MONOLITHIC ISLANDS BEFORE INSTALLATION

MISCELLANEOUS

BB) POLICE MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS, AS DIRECTED BY THE ENGINEER.



PROJECT NOTES

SCALE: NONE

DATE:

DWG. BY: DER

DESIGN BY: DER

REVIEWED BY:



REVISIONS

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PHASE I

- STEP 1 INSTALL ALL ADVANCED WORK ZONE WARNING SIGNS.
- STEP 2 USING RSD 1101.02, SHEET 1 OF 9 WHERE NECESSARY, AND TCP-4 THRU 12 CONSTRUCT UP TO, BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE ON THE FOLLOWING:
 - -L- STA 50+90+/- TO 140+70+/- LT (INCLUDING CULVERTS AT 66+10+/- AND 109+30+/-)
 -L- STA 147+00+/- TO 167+52+/- LT
 -CY8- STA 10+10+/- TO 11+26+/-Y8- STA 12+60+/- TO 18+39+/-Y9A- STA 11+00+/- TO 12+52+/-Y11- 10+00+/- TO 12+82+/-Y13- 14+40 TO 17+93+/-
 - AWAY FROM TRAFFIC, CONSTRUCTION MAY BEGIN AT THE FOLLOWING LOCATIONS:
 - -L- STA 50+90+/- TO 55+25+/-
 - CLOSE -Y9- AND CONSTRUCT FROM 11+50+/- TO 14+35+/-.
 - PLACE AND COVER DETOUR SIGNS FOR -Y13- CLOSURE.
- STEP 3 UNCOVER DETOUR SIGNS AND USING RSD 1101.03, SHEET 1 OF 9, CLOSE -Y13- AND DETOUR TRAFFIC ONTO ROUTE SHOWN ON TCP-15. CONSTRUCT FROM -Y13- 12+00+/- TO 14+40+/- AND FROM -EY13- 23+03+/- TO 23+46+/- UP TO, BUT NOT INCLUDING, FINAL LAYER OF SURFACE COURSE. SEE TCP-13.
- STEP 4 WITH -Y13- (ANTIOCH RD) STILL DETOURED, CONSTRUCT UP TO, BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE ON THE FOLLOWING:
 - -L- STA 140+70+/- TO 147+00+/-
 - RE-OPEN -Y9-
- STEP 5 AWAY FROM TRAFFIC, PLACE TEMPORARY PAVEMENT MARKINGS AND MARKERS AS MUCH AS POSSIBLE WITHOUT INTERFERING WITH TRAFFIC.

PHASE II

MAJOR TRAFFIC SHIFT TO PHASE II INTERMEDIATE TRAFFIC PATTERN.

NOTE: COORDINATE TRAFFIC SHIFT WITH R-3403AA.

WORK IN A CONTINUOUS MANNER TO COMPLETE STEP 1.

- STEP 1 CONSTRUCT THE TIE IN AT THE NORTHERN END OF THE PROJECT AND OPEN PROJECT TO PHASE II TRAFFIC PATTERN IN THE FOLLOWING SEQUENCE:
 - A. USING FLAGGERS, TIE IN THE PROPOSED SB LANES AND PLACE TEMPORARY WHITE EDGELINE AND DOUBLE YELLOW CENTERLINE FROM -L- STA 165+00+/- TO 169+00+/-.
 - B. USING FLAGGERS, TIE IN THE PROPOSED NB LANES AND PLACE TEMPORARY WHITE EDGELINE FROM -L- STA 165+00+/- TO 169+00+/-.
- NOTE: USE A PILOT VEHICLE TO ROUTE TRAFFIC INTO THE PROPOSED SB LANES BETWEEN -Y11- (WILDLIFE RD) THROUGH THE NORTHERN PROJECT LIMITS.

CLOSE ACCESS TO EXISTING US 17 AT -Y12-. ALLOW ACCESS VIA -Y9-

ADJUST STOPBARS AND STOPSIGNS AT THE FOLLOWING -Y- LINE INTERSECTIONS: -Y5- E PINE ST -CY8- -Y9- OLD VANCEBORO RD

- -Y9- OLD VANCEBORO -Y9A- LUFFERY RD -Y11- WILDLIFE RD -Y10- BLUE TOP RD
- C. OPEN THE PROJECT TO PHASE II TRAFFIC PATTERN.

THE FOLLOWING -Y- LINE INTERSECTIONS WITH US 17 SHALL REMAIN CLOSED:

- -Y12- OLD VANCEBORO RD
- STEP 2 USING RSD 1101.02, SHEET 1 OF 9, CONSTRUCT UP TO, BUT NOT INCLUDING, THE FINAL LAYER OF SURFACE COURSE ON THE FOLLOWING:
 - -L- STA 55+25+/- TO 164+00+/- SEE TCP-17 THRU TCP-24
 - AWAY FROM TRAFFIC, COMPLETE THE FOLLOWING CONSTRUCTION:
 - -L- STA 50+90+/- TO 55+25+/- SEE TCP-18.

PHASE III

NOTE: COORDINATE TRAFFIC SHIFT WITH R-3403AA.

WORK IN A CONTINUOUS MANNER TO COMPLETE STEP 1.

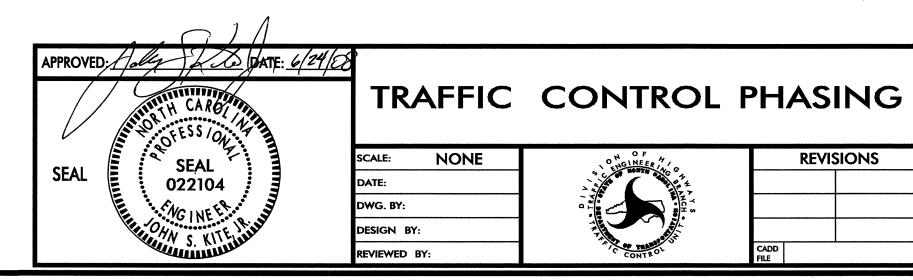
STEP 1 - A. USE FLAGGERS OR POLICE TO HOLD TRAFFIC AT THE FOLLOWING -Y- LINE INTERSECTIONS WITH US 17:

-Y9- OLD VANCEBORO RD -Y9A- LUFFERY RD -Y11- WILDLIFE RD -Y10- BLUE TOP RD

- B. USING FLAGGERS, IN CONJUNCTION WITH A PILOT VEHICLE, PLACE NB TRAFFIC IN THE PROPOSED OUTSIDE NB LANES BEGINNING AT THE SOUTHERN END OF THE PROJECT THROUGH THE NORTHERN PROJECT LIMITS. SB TRAFFIC REMAINS IN CURRENT PATTERN.
- C. USING FLAGGERS AND A PILOT VEHICLE, PLACE TEMPORARY PAVEMENT MARKINGS AND MARKERS IN THE FINAL PATTERN ON REMAINING PARTS OF NB AND SB LANES.

ADJUST STOPBARS AND STOP SIGNS AT ALL-Y- LINE INTERSECTIONS.

- D. OPEN ALL -Y- LINES.
- STEP 2 WITH INSIDE LANES DRUMMED OFF, CONSTRUCT ALL MEDIAN CONCRETE ISLANDS. SEE TCP-25.
- STEP 3 USING RSD 1101.02, SHEETS 1 & 3 OF 9, PLACE THE FINAL LAYER OF SURFACE COURSE ON ALL ROADS.
- STEP 4 USING RSD 1101.02, SHEETS 1 & 3 OF 9, PLACE THE FINAL PAVEMENT MARKINGS AND MARKERS ON ALL ROADS.
- STEP 5 REMOVE ALL REMAINING TRAFFIC CONTROL DEVICES.



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TEMPORARY SHORING NOTES

PROJ. REFERENCE NO. SHEET NO.

R-3403AB

TCP-3A

Temporary Shoring No. 1

(AS SHOWN ON TCP-6)

DO NOT USE STANDARD TEMPORARY SHORING FROM STATION 65+80 +/- -L- TO STATION 66+05 +/- -L-, 2 FT. RIGHT.

DO NOT USE A TEMPORARY MSE WALL FROM STATION 65+80 +/- -L- TO STATION 66+05 +/- -L-, 2 FT. RIGHT.

TEMPORARY SHORING MAY BE REQUIRED FROM STATION 65+80 +/- -L- TO STATION 66+05 +/- -L-, 2 FT. RIGHT. SEE TEMPORARY SHORING SPECIAL PROVISION.

WHEN USING CONTRACTOR DESIGNED SHORING FROM STATION 65+80 +/- -L- TO STATION 66+05 +/- -L-, 2 FT. RIGHT, DESIGN SHORING FOR THE FOLLOWING IN-SITU ASSUMED 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

FOR CONTRACTOR DESIGNED SHORING, SURVEY THE SHORING LOCATION TO DETERMINE EXISTING ELEVATIONS AND ACTUAL DESIGN HEIGHTS BEFORE BEGINNING DESIGN.

ESTIMATED QUANTITY AT THIS LOCATION = 200 SF

Temporary Shoring No. 2

(AS SHOWN ON TCP-6)

DO NOT USE STANDARD TEMPORARY SHORING FROM STATION 66+15 +/- -L- TO STATION 66+40 +/- -L-, 2 FT. RIGHT.

DO NOT USE A TEMPORARY MSE WALL FROM STATION 66+15 +/- -L- TO STATION 66+40 +/- -L-, 2 FT. RIGHT.

TEMPORARY SHORING MAY BE REQUIRED FROM STATION 66+15 +/- -L- TO STATION 66+40 +/- -L-, 2 FT. RIGHT. SEE TEMPORARY SHORING SPECIAL PROVISION.

WHEN USING CONTRACTOR DESIGNED SHORING FROM STATION 66+15 +/- -L- TO STATION 66+40 +/- -L-, 2 FT. RIGHT, DESIGN SHORING FOR THE FOLLOWING IN-SITU ASSUMED 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

FOR CONTRACTOR DESIGNED SHORING, SURVEY THE SHORING LOCATION TO DETERMINE EXISTING ELEVATIONS AND ACTUAL DESIGN HEIGHTS BEFORE BEGINNING DESIGN.

ESTIMATED QUANTITY AT THIS LOCATION = 200 SF

Temporary Shoring No. 3

(AS SHOWN ON TCP-9)

DO NOT USE STANDARD TEMPORARY SHORING FROM STATION 108+50 +/- -L- TO STATION 109+25 +/- -L-.

DO NOT USE A TEMPORARY MSE WALL FROM STATION 108+50 +/- -L- TO STATION 109+25 +/- -L-.

TEMPORARY SHORING MAY BE REQUIRED STATION 108+50 +/- -L- TO STATION 109+25 +/- -L-. SEE TEMPORARY SHORING SPECIAL PROVISION.

WHEN USING CONTRACTOR DESIGNED SHORING FROM STATION 108+50 +/- -L- TO STATION 109+25 +/- -L-, DESIGN SHORING FOR THE FOLLOWING IN-SITU ASSUMED SOIL PARAMETERS:

UNIT WEIGHT OF SOIL ABOVE WATER TABLE, $\mathcal{Y}=$ 120 PCF UNIT WEIGHT OF SOIL BELOW WATER TABLE, $\mathcal{Y}=$ 60 PCF FRICTION ANGLE, $\phi=$ 30 DEGREES COHESION, c = 0 PSF

FOR CONTRACTOR DESIGNED SHORING, SURVEY THE SHORING LOCATION TO DETERMINE EXISTING ELEVATIONS AND ACTUAL DESIGN HEIGHTS BEFORE BEGINNING DESIGN.

ESTIMATED QUANTITY AT THIS LOCATION = 675 SF

Temporary Shoring No. 4

(AS SHOWN ON TCP-9)

DO NOT USE STANDARD TEMPORARY SHORING FROM STATION 109+45 +/- -L- TO STATION 109+75 +/- -L-.

DO NOT USE A TEMPORARY MSE WALL FROM STATION 109+45 +/- -L- TO STATION 109+75 +/- -L-.

TEMPORARY SHORING MAY BE REQUIRED FROM STATION 109+45 +/- -L- TO STATION 109+75 +/- -L-. SEE TEMPORARY SHORING SPECIAL PROVISION.

WHEN USING CONTRACTOR DESIGNED SHORING FROM STATION 109+45 +/- -L- TO STATION 109+75 +/- -L-, DESIGN SHORING FOR THE FOLLOWING IN-SITU ASSUMED SOIL PARAMETERS:

UNIT WEIGHT OF SOIL ABOVE WATER TABLE, $\gamma=$ 120 PCF

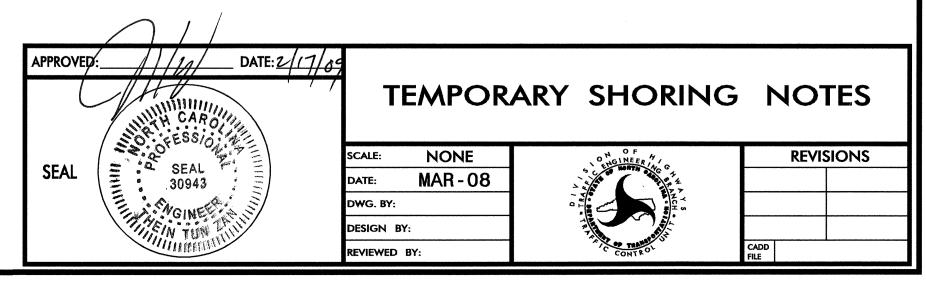
UNIT WEIGHT OF SOIL BELOW WATER TABLE, γ = 60 PCF

FRICTION ANGLE, ϕ = 30 DEGREES

COHESION, c = 0 PSF

FOR CONTRACTOR DESIGNED SHORING, SURVEY THE SHORING LOCATION TO DETERMINE EXISTING ELEVATIONS AND ACTUAL DESIGN HEIGHTS BEFORE BEGINNING DESIGN.

ESTIMATED QUANTITY AT THIS LOCATION = 270 SF



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PROJ. REFERENCE NO. SHEET NO. R-3403AB TCP-4

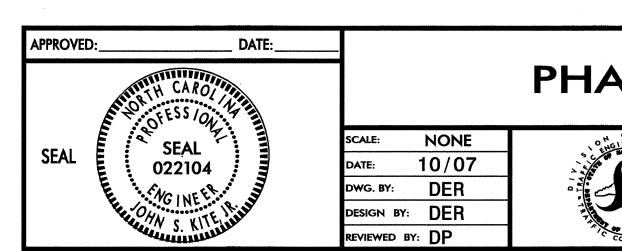
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PHASE I

REVISIONS

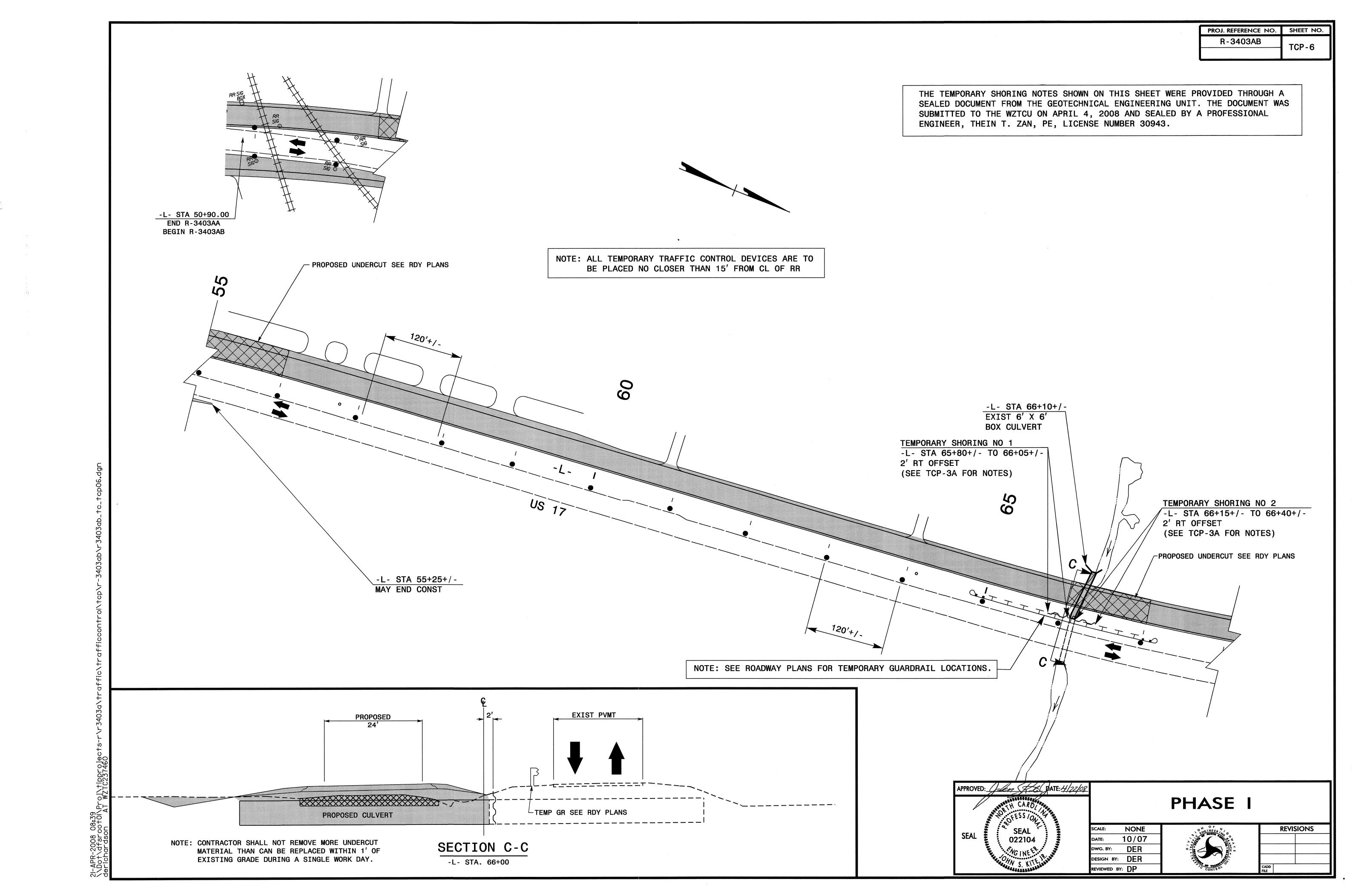
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TCP-5
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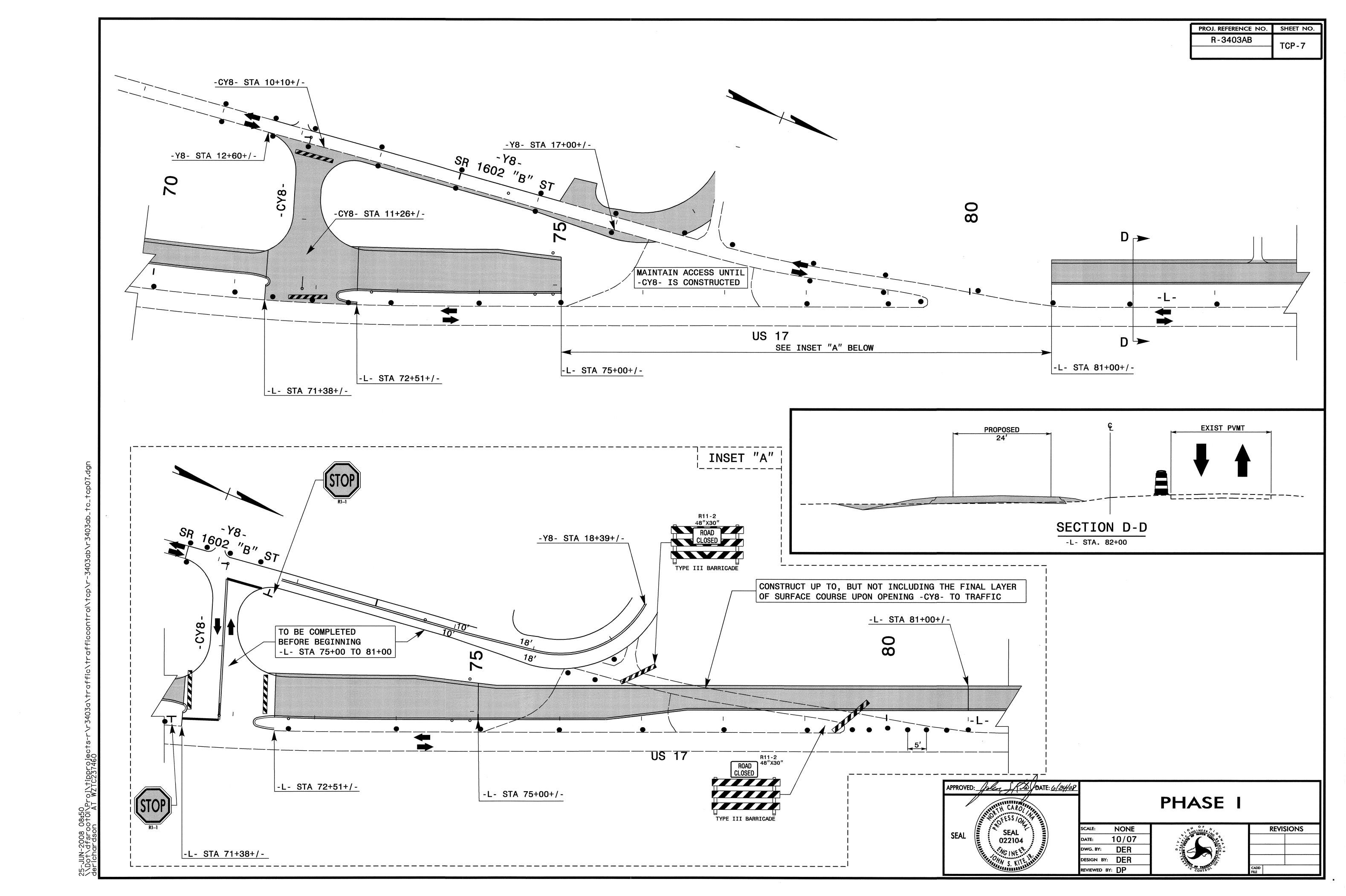
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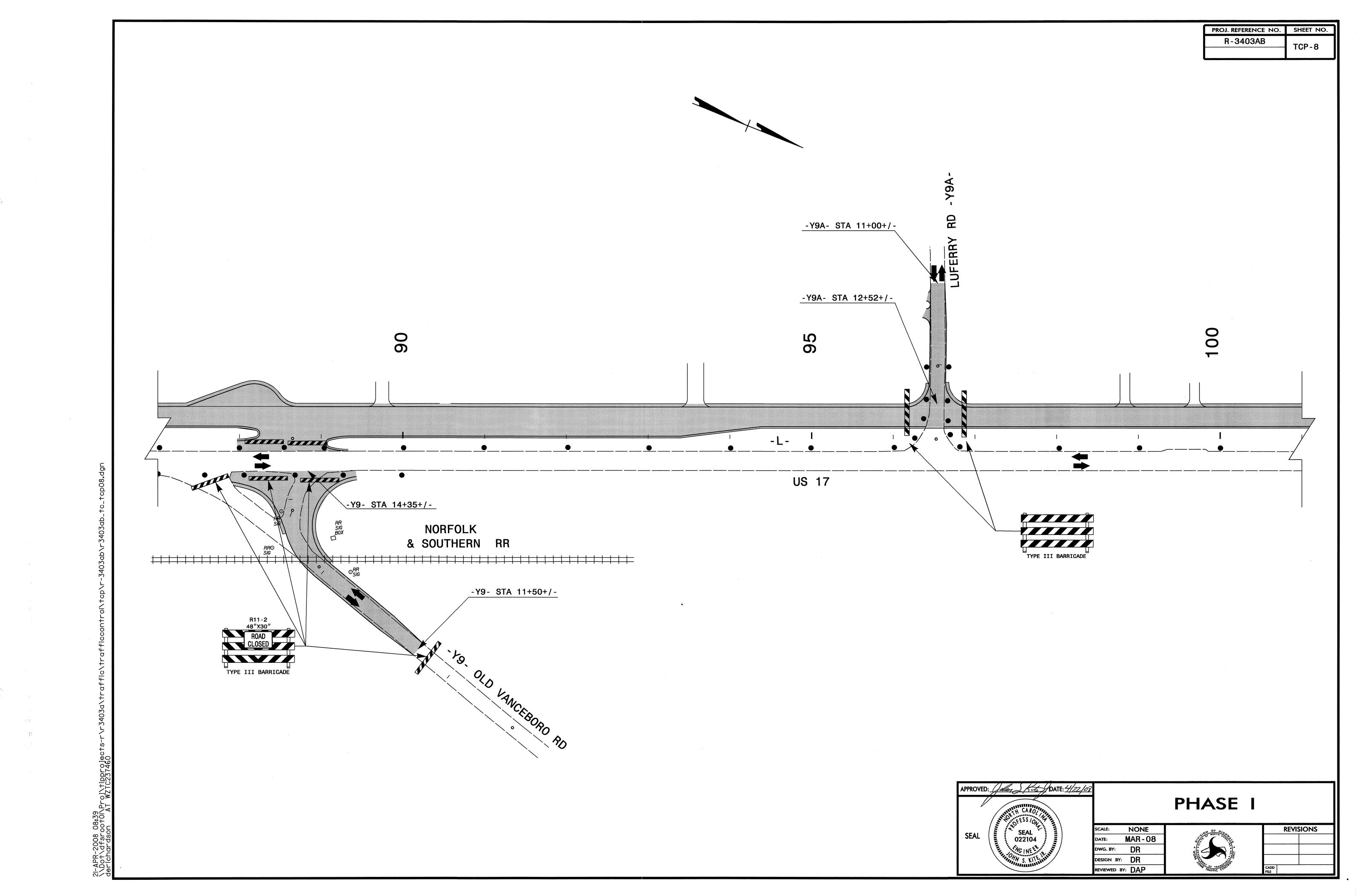


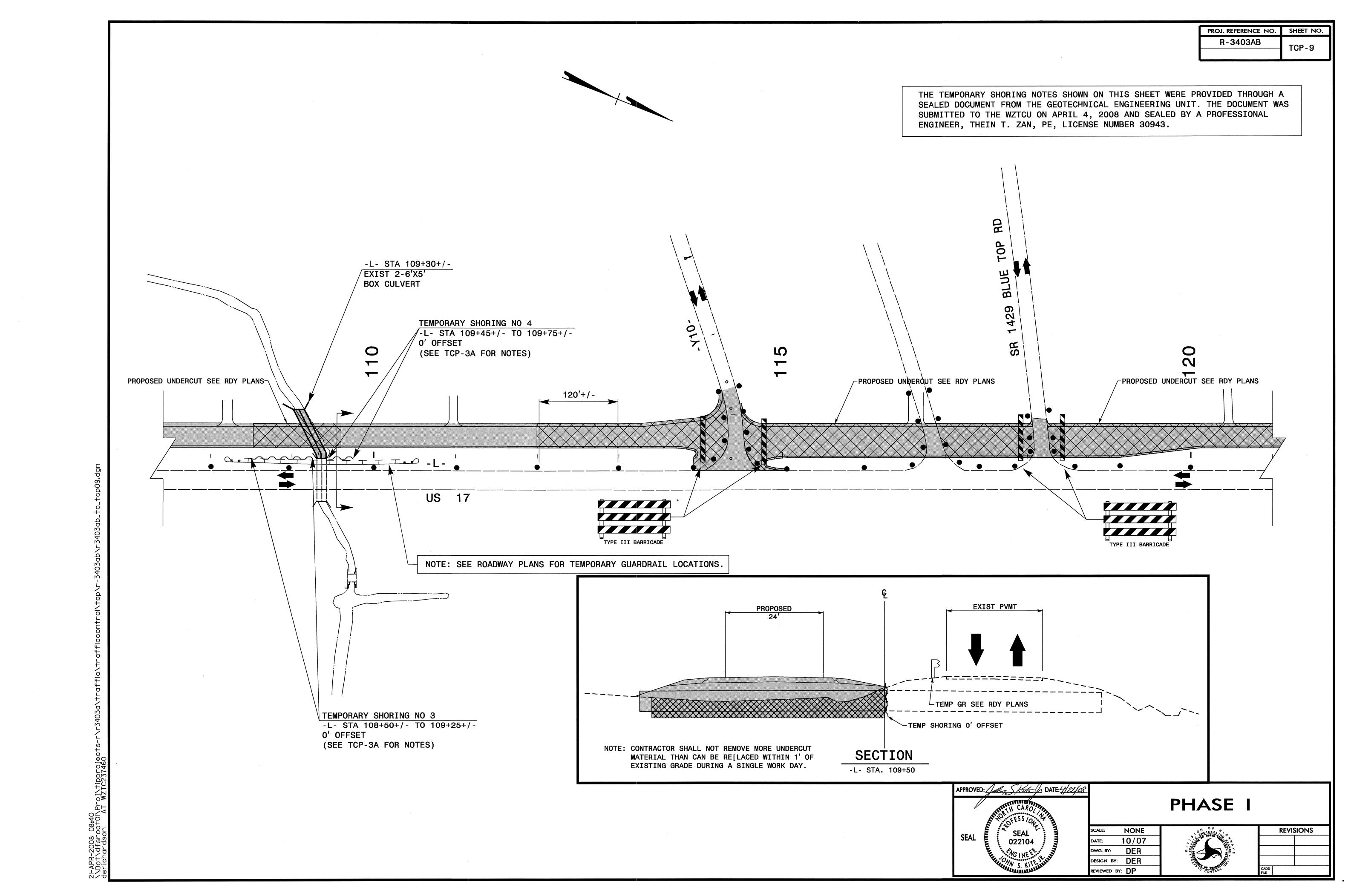
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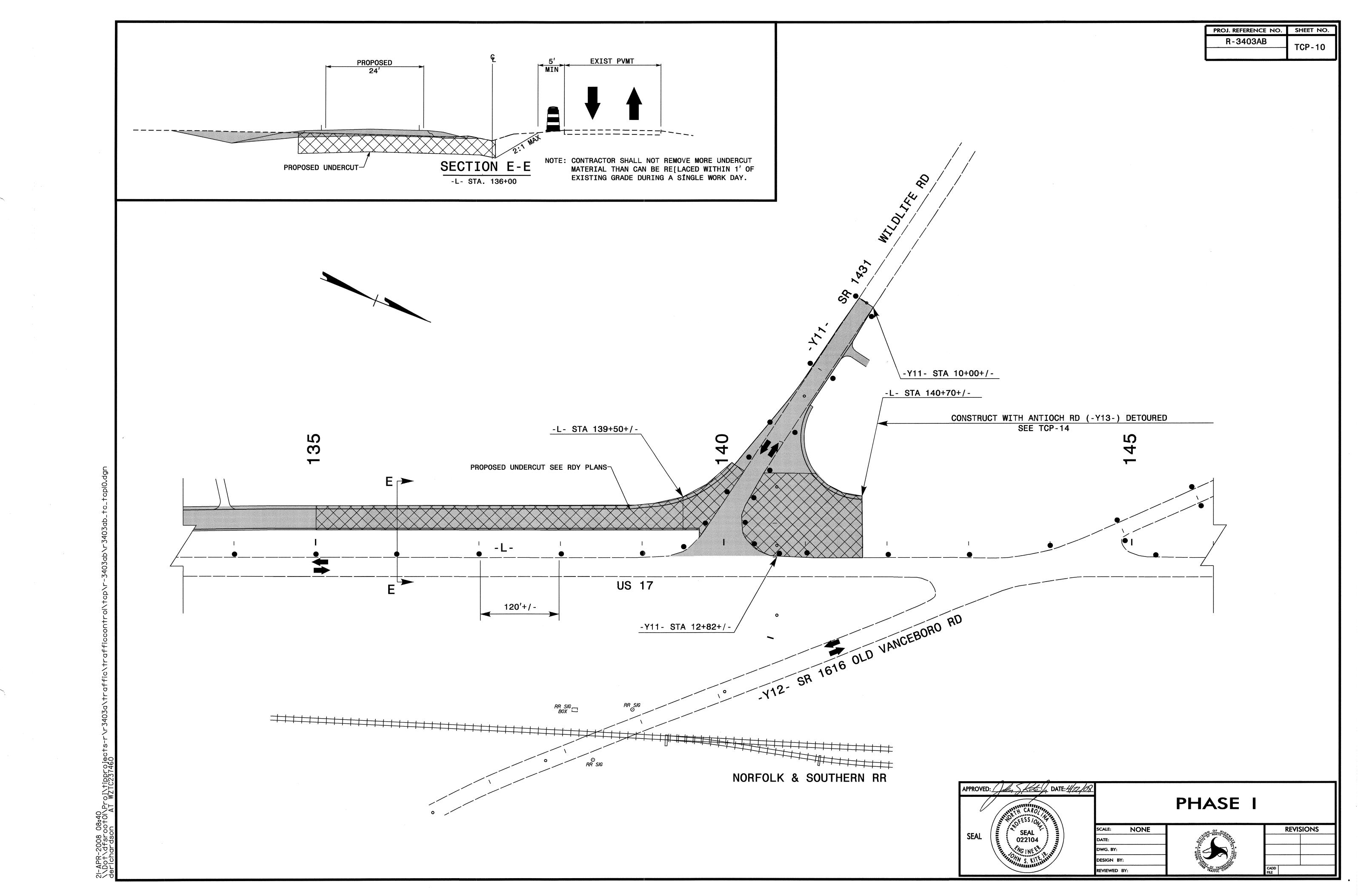
REVISIONS



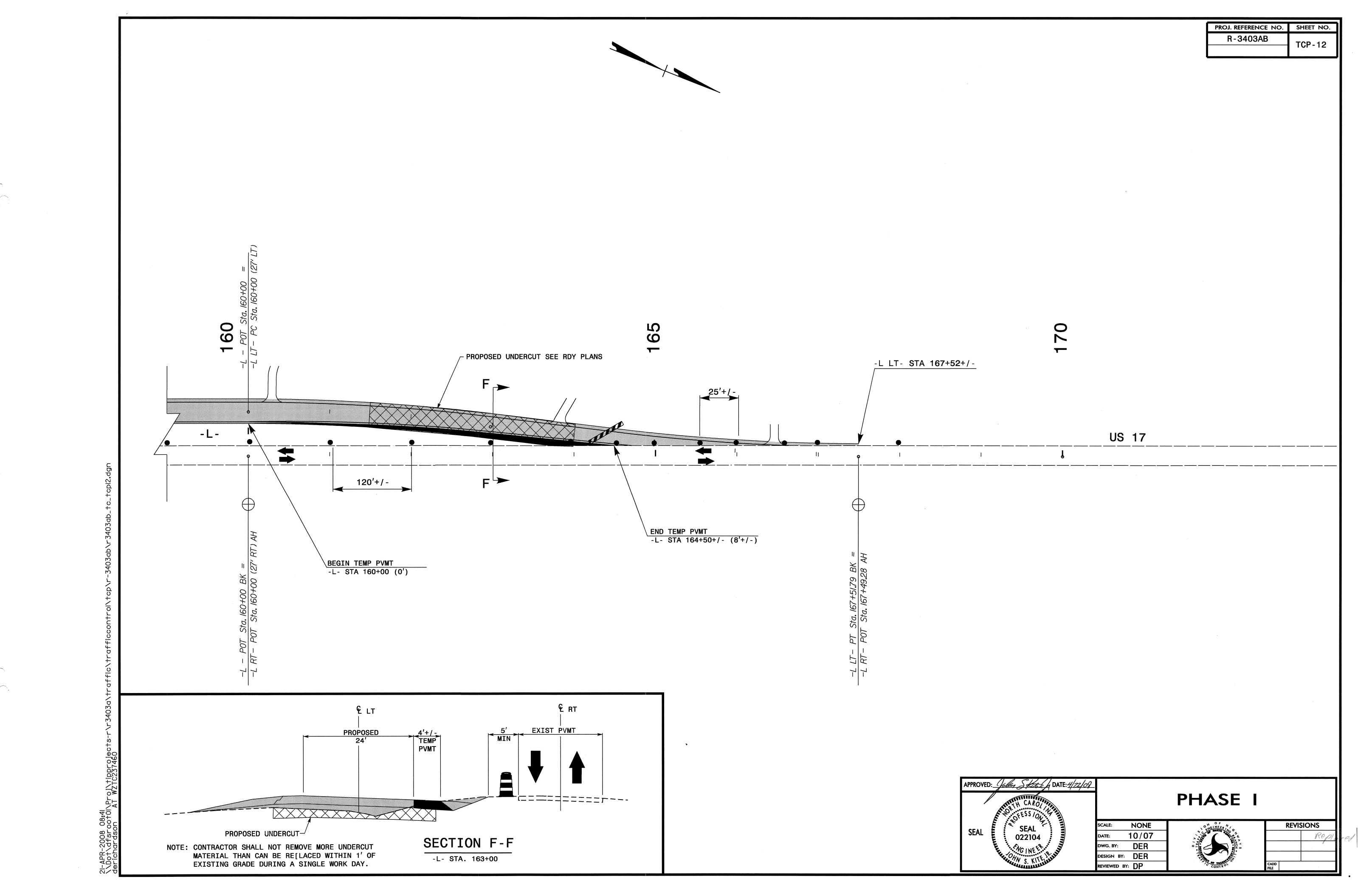






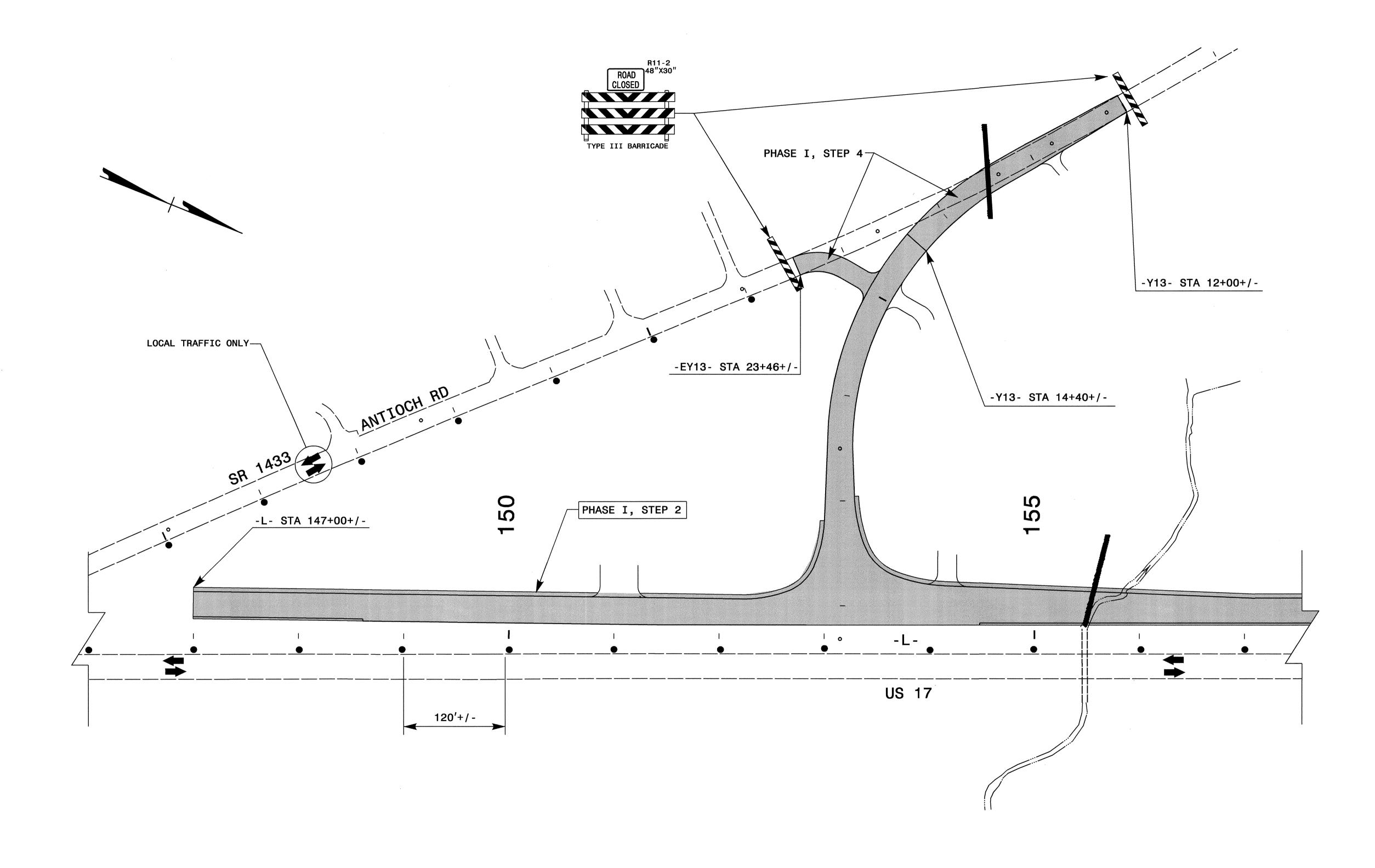


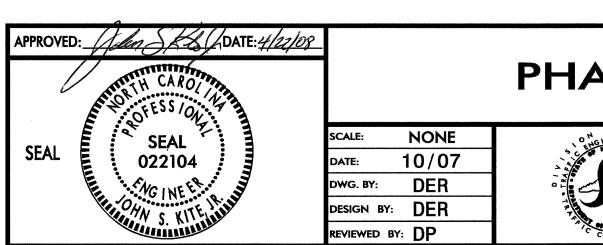
PROJ. REFERENCE NO. SHEET NO. R-3403AB TCP-11 -Y13- STA 14+40+/--L- STA 147+00+/-CONSTRUCT WITH
ANTIOCH RD
(-Y13-) DETOURED
SEE TCP-14 -Y13--150 155 -L-US 17 120′+/--Y13- STA 17+93+/-APPROVED: John Skite JDATE:4/22/08 PHASE I REVISIONS 10/07



SEE TCP-15 FOR DETOUR ROUTE.

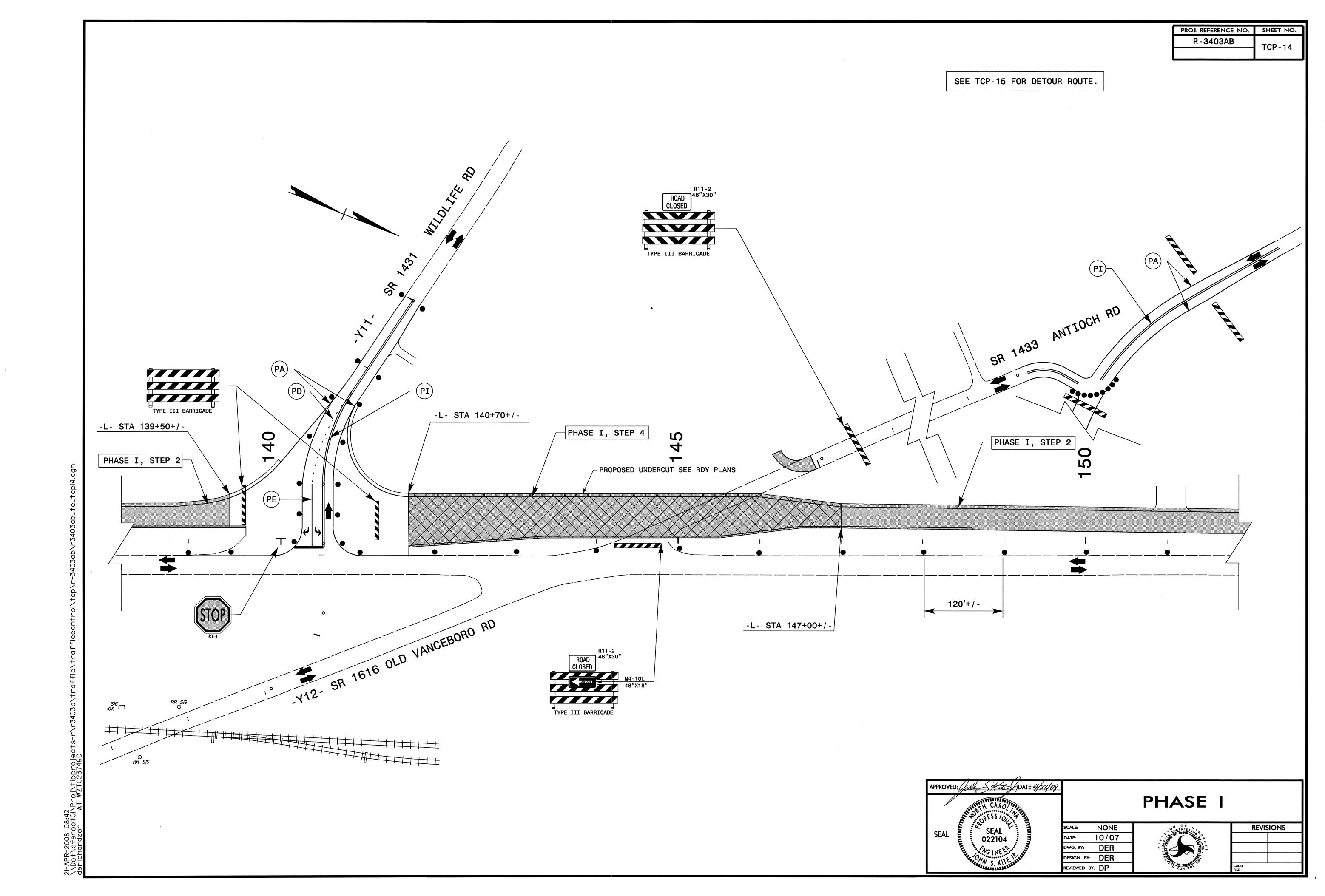
PROJ. REFERENCE NO. SHEET NO. R-3403AB TCP-13

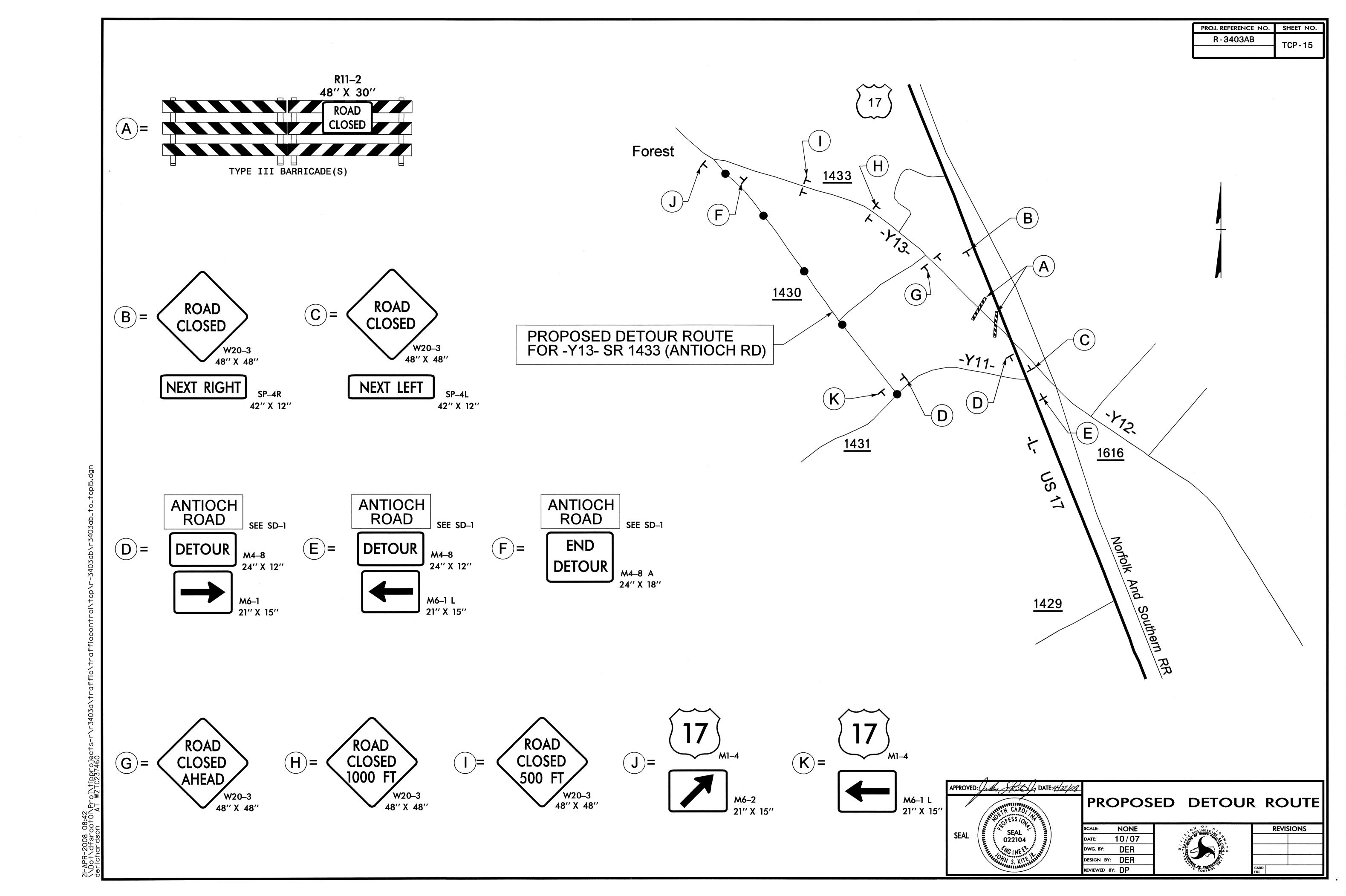




PHASE I

REVISIONS





PROJ. REFERENCE NO. SHEET NO.

R-3403AB

TCP-16

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SEAL

SEAL

OZ2104

DATE:

DESIGNATION S. KITELINIAN S. KITELINIA

PHASE II

CALE:	NONE	
DATE:	10/07	
WG. BY:	DR	
DESIGN BY:	DR	
EVIEWED BY	DΔP	



REVISIONS

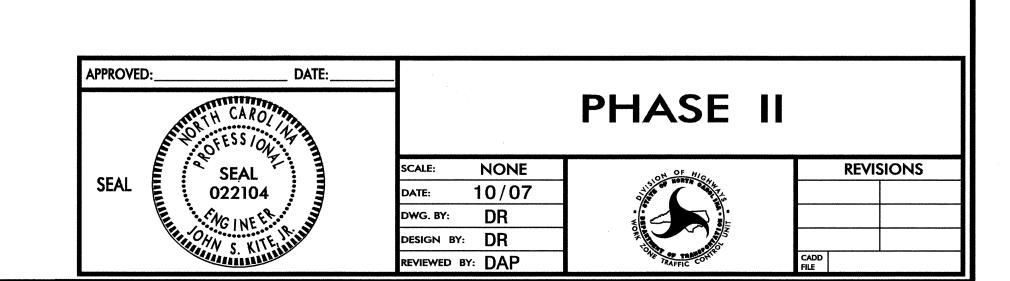
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PROJ. REFERENCE NO. SHEET NO.

R-3403AB

TCP-17

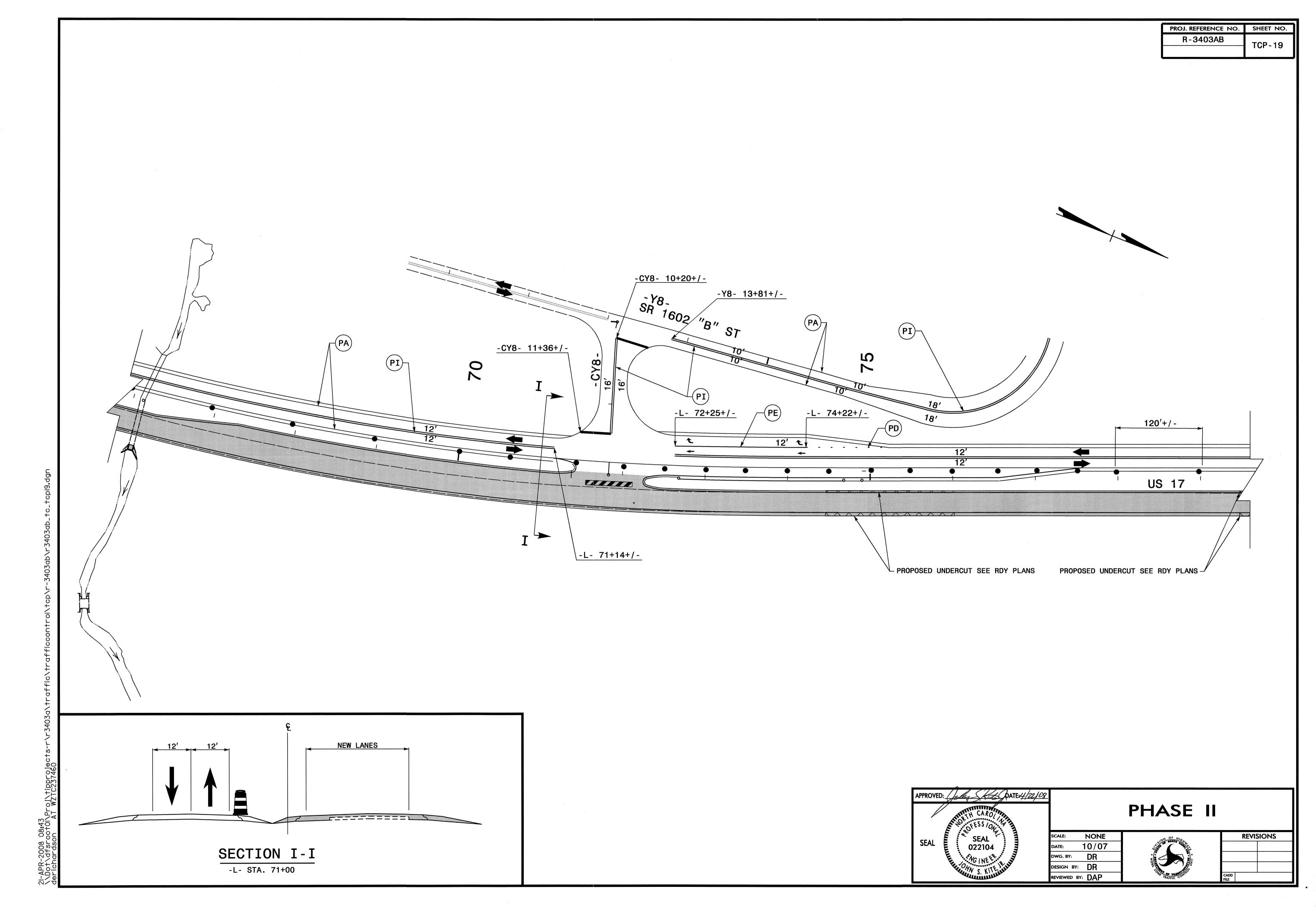
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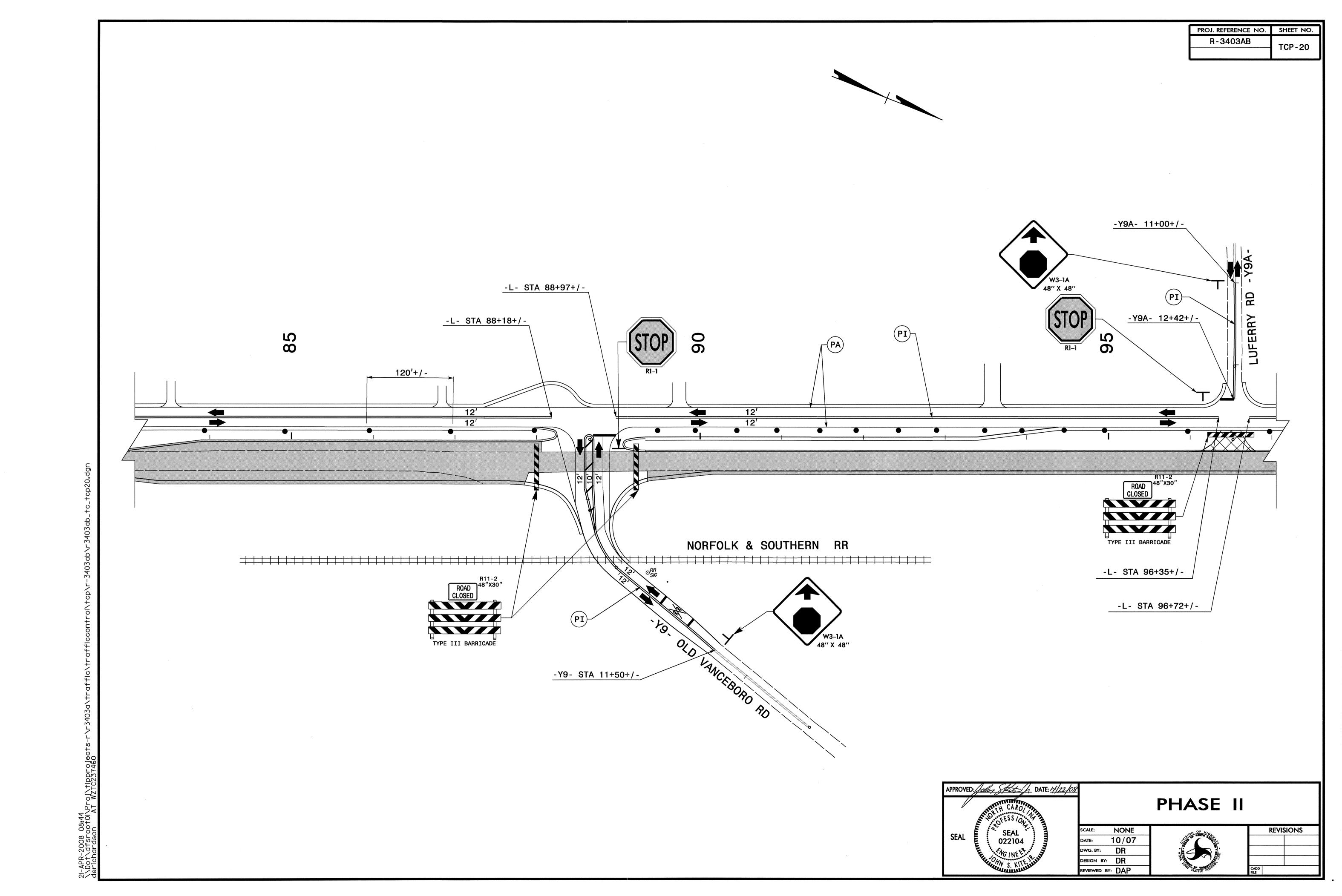


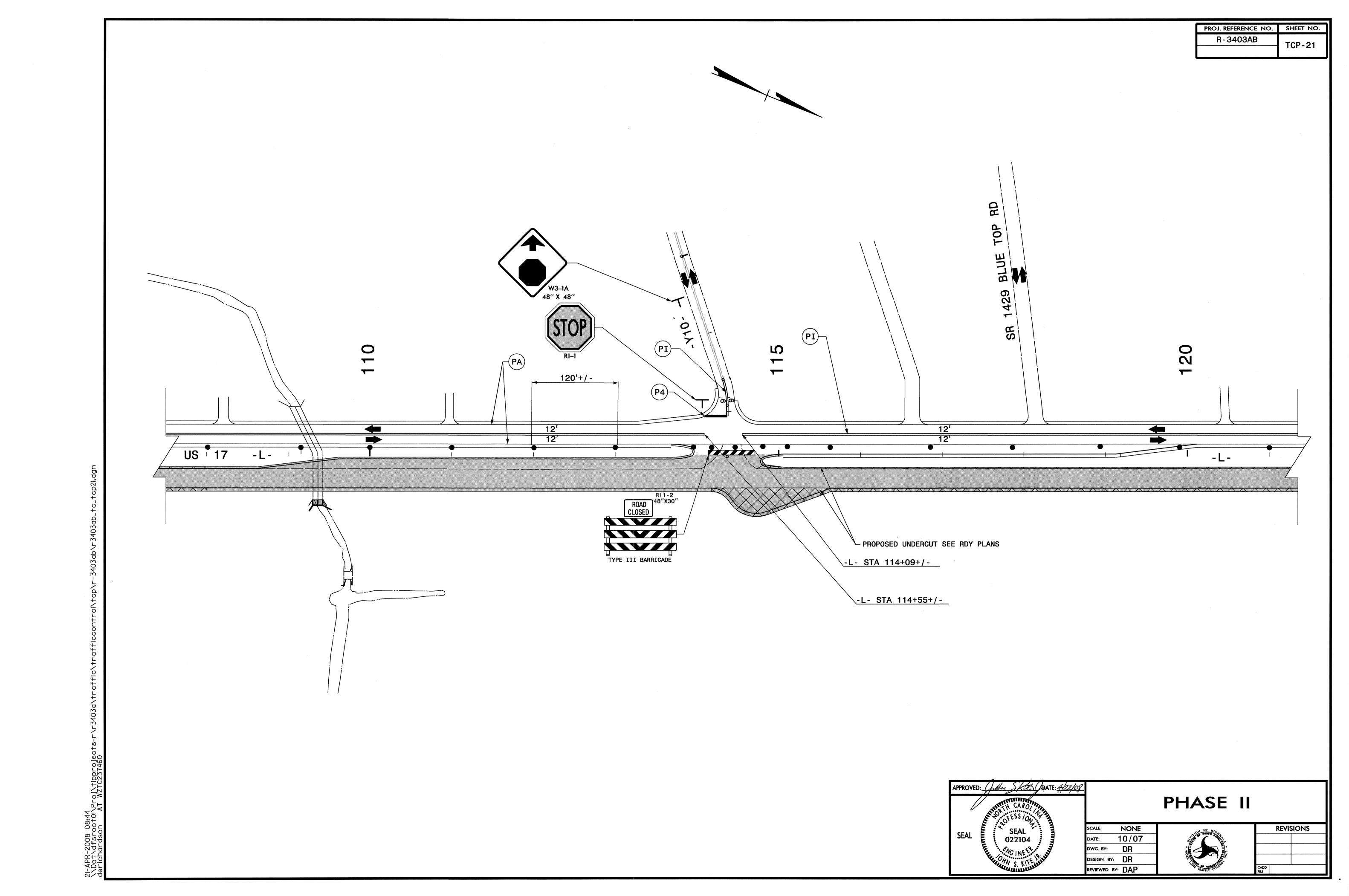
\\Dot\dfsrootol\proj\tipprojects-r\r3403a\traffic\trafficcontrol\tcp\r-3403ab\r3403 derichardson AT WZTC237460

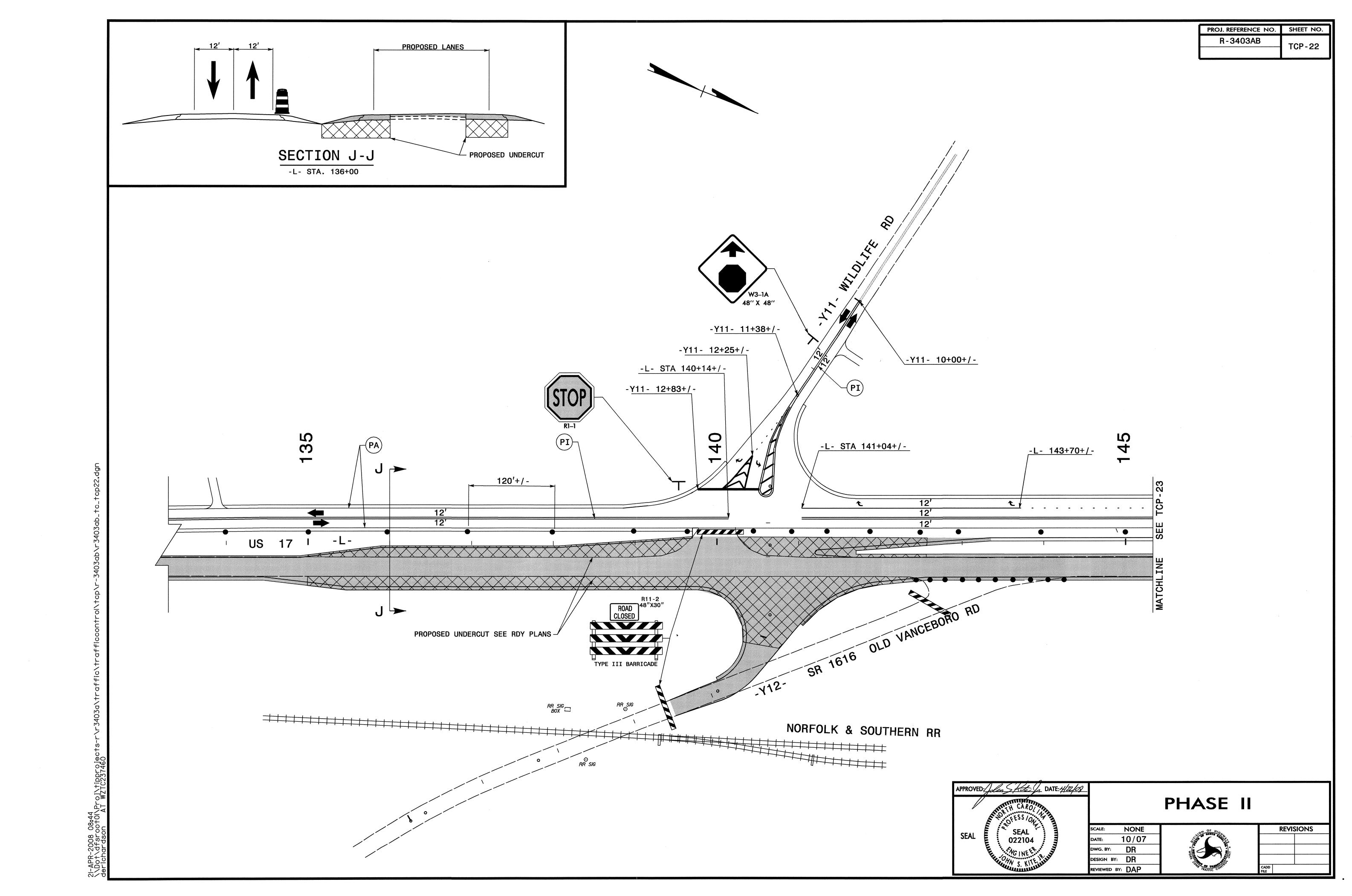
R-3403AB TCP-18 NOTE: ALL TEMPORARY TRAFFIC CONTROL DEVICES ARE TO BE PLACED NO CLOSER THAN 15' FROM CL OF RR -L- STA 50+90.00 END R-3403AA BEGIN R-3403AB 09 ► PROPOSED UNDERCUT SEE RDY PLANS 120'+/-PHASE II REVISIONS NONE 10/07

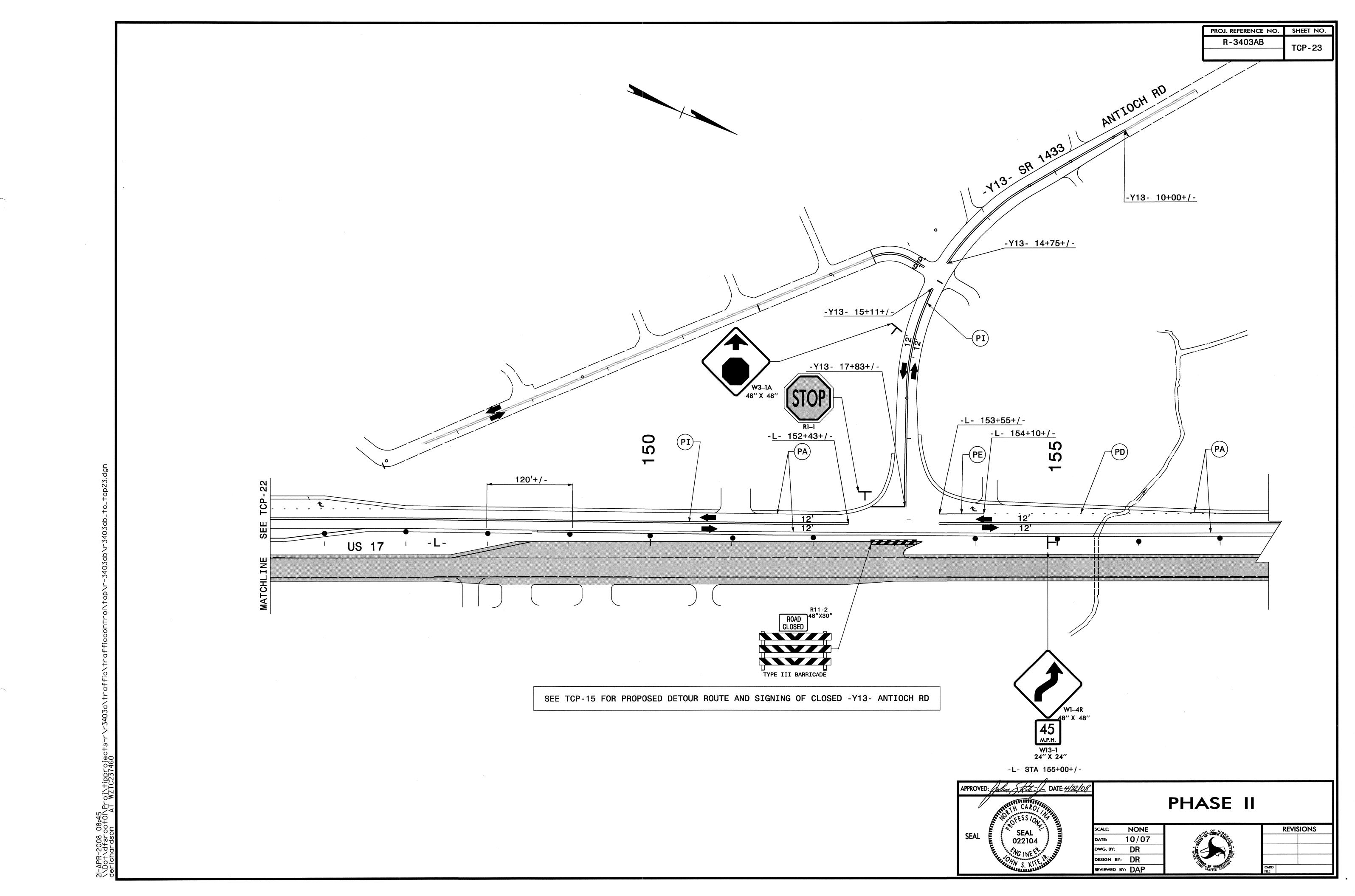
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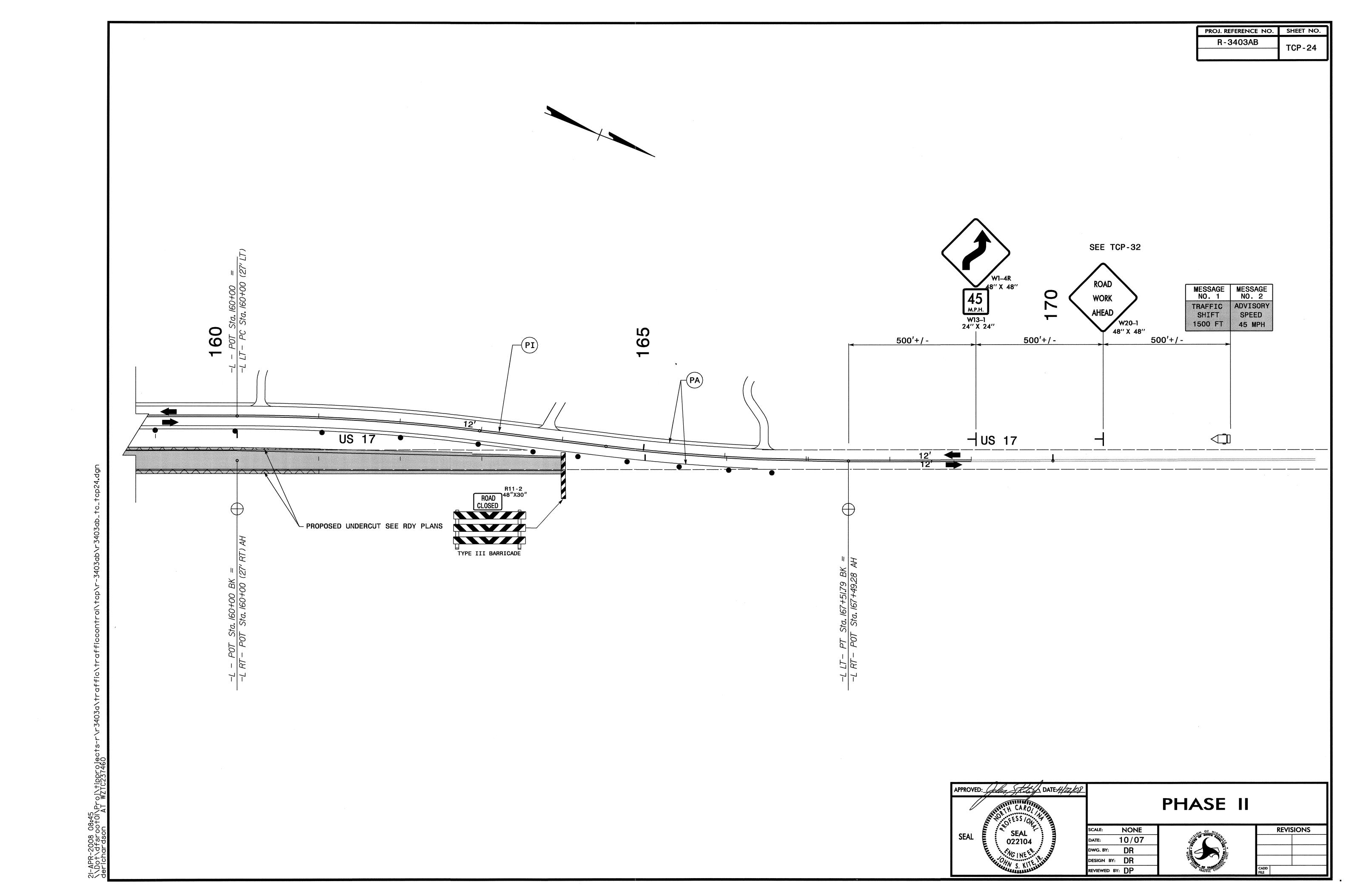












PROJ. REFERENCE NO. R-3403AB TCP-25 140 155 -L- US 17 APPROVED: Jolen State of DATE: 4/22/08 PHASE III -Y12-REVISIONS NONE OLD VANCEBORO ROAD MAR/08

PROJ. REFERENCE NO. R-3403AB TCP-26

Z

RALEIGH,

CAROLINA NORTH

RECOMMENDED MINIMUM

SIGN SPACING

 \otimes

500'

1000'

POSTED SPEED LIMIT

(M.P.H.)

≤ 50

≥ 55

0F 0F STATE DEPT

TRANSPORTATION

HIGHWAYS OF DIVISION

IG FOR /IDED /G SIGNS

SHEET 1 OF 1

APPROVED: John State DATE: 4/21/08 SEAL 022104

LEGEND

■ DIRECTION OF TRAFFIC FLOW

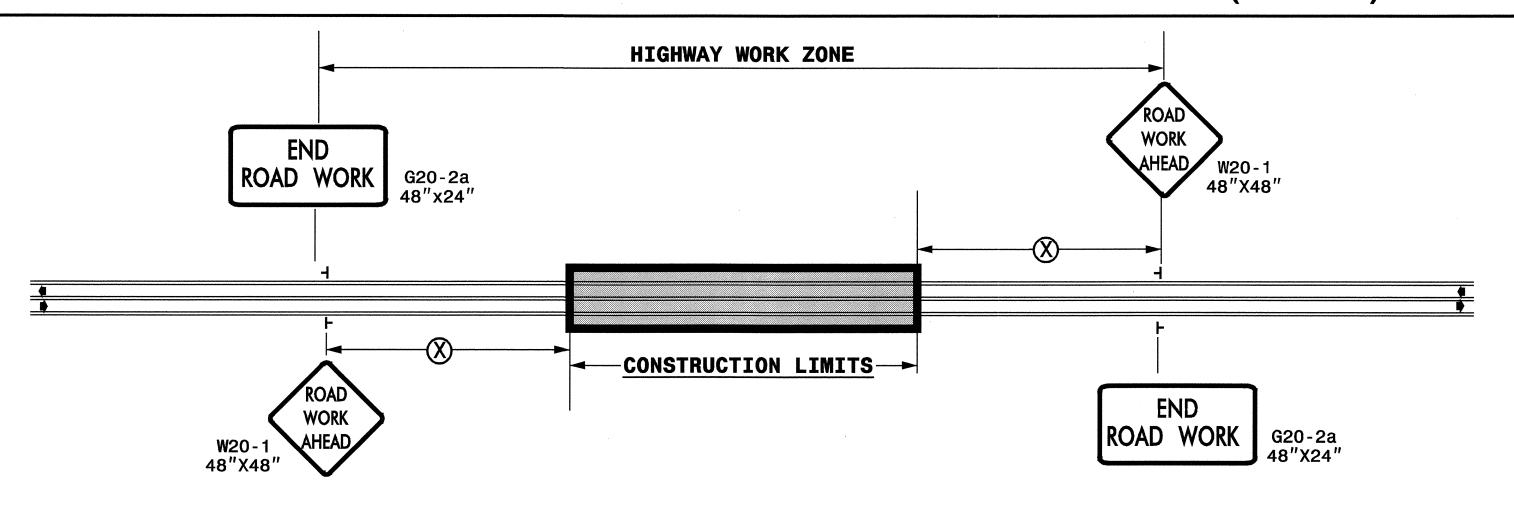
├ STATIONARY SIGN

DETAIL DRAWING FOR TWO-WAY UNDIVIDED AND URBAN FREEWAYS ADVANCED WORK ZONE WARNING SIGNS

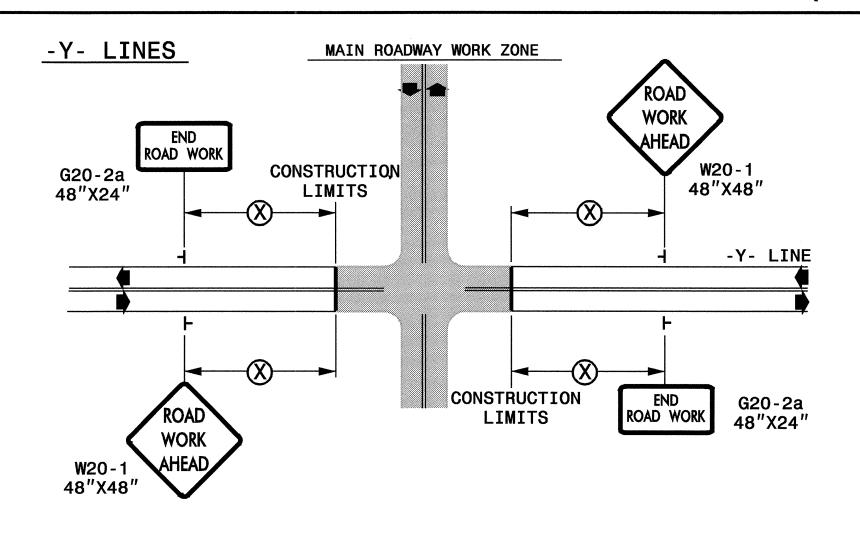
NONE

REVISIONS 7_98 | 10/01 10-98 03/04 01/01 | 11/04

TWO-WAY UNDIVIDED ** (L-LINES)



ROADWAYS INTERSECTING ALONG 2 WAY UNDIVIDED WORK ZONE (Y-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.