R-2612 A

TIP PROJECT:

STATE PROJECT REFERENCE NO.	SHEET NO.
R-2612 A	TCP-1

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED TRAFFIC CONTROL, MARKING & DELINEATION

GUILFORD 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
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1115.01	FLASHING ARROW PANELS
1130.01	DRUMS
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1165.01	TRUCK MOUNTED IMPACT ATTENUATOR
1180.01	SKINNY-DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS
1205.03	PAVEMENT MARKINGS - INTERCHANGES
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.06	PAVEMENT MARKINGS - THRU LANE DROPS
1205.08	PAVEMENT MARKINGS - SYMBOLS & WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1205.12	PAVEMENT MARKINGS - BRIDGES
1250.01	PAVEMENT MARKER SPACING
1251.01	RAISED PAVEMENT MARKERS - (TEMPORARY & PERMANENT)
1261.01	GUARDRAIL & BARRIER DELINEATOR SPACING
1261.02	GUARDRAIL & BARRIER DELINEATOR TYPES
1262.01	GUARDRAIL END DELINEATION
1264.01	OBJECT MARKERS
1264.02	PLACEMENT OF OBJECT MARKERS
1267.01	FLEXIBLE DELINEATOR INSTALLATION
1267.02	FLEXIBLE DELINEATOR SPACING
1267.03	FLEXIBLE DELINEATOR - INTERCHANGES

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TCP-26 & TCP-27	DETOUR DETAILS
TCP-28	ADVANCED WORK ZONE WARNING SIGNS
SD-1	SPECIAL SIGN DESIGN

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
- 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

APPROVED: John S. Kite Jr.
DATE: August 3, 2010

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 022104 ENGINEER JOHN S. KITE JR.

PLAN PREPARED BY: N.C.D.O.T. WORK ZONE TRAFFIC CONTROL UNIT

J. S. BOURNE, PE	TRAFFIC CONTROL ENGINEER
J. S. KITE, PE	TRAFFIC CONTROL PROJECT ENGINEER
D. A. PARKER	TRAFFIC CONTROL PROJECT DESIGN ENGINEER
D. E. RICHARDSON	TRAFFIC CONTROL DESIGN ENGINEER

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PROJECT NOTES

PROJ. REFERENCE NO.	SHEET NO.
R-2612A	TCP-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 421 NB	7AM TO 9AM MONDAY THRU FRIDAY
-L- US 421 SB	4PM TO 6PM MONDAY THRU FRIDAY

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

ROAD NAME
-L- US 421

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 7AM DECEMBER 31st TO 6PM JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 6PM THE FOLLOWING TUESDAY.
3. FOR EASTER, BETWEEN THE HOURS OF 7AM THURSDAY AND 6PM MONDAY.
4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 7AM FRIDAY TO 6PM TUESDAY.
5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 7AM THE DAY BEFORE INDEPENDENCE DAY AND 6PM THE DAY AFTER INDEPENDENCE DAY.

   IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 7AM THE THURSDAY BEFORE INDEPENDENCE DAY AND 6PM THE TUESDAY AFTER INDEPENDENCE DAY.
6. FOR LABOR DAY, BETWEEN THE HOURS OF 7AM FRIDAY AND 6PM TUESDAY.
7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 7AM TUESDAY TO 6PM MONDAY.
8. FOR CHRISTMAS, BETWEEN THE HOURS OF 7AM THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 6PM THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

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

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 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 REMAIN 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) PROVIDE TRAFFIC CONTROL FOR APPROPRIATE LANE CLOSURES FOR SURVEYING DONE BY THE DEPARTMENT.

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.

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

TRAFFIC PATTERN ALTERATIONS

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

APPROVED: DATE: 9/24/10

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 022104 ENGINEER JOHN S. KITE, JR.

PROJECT NOTES

SCALE:	NONE
DATE:	
DWG. BY:	
DESIGN BY:	
REVIEWED BY:	

DIVISION OF HIGHWAYS — TRAFFIC ENGINEERING BRANCH — TRAFFIC CONTROL UNIT

REVISIONS	
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PROJ. REFERENCE NO.	SHEET NO.
R-2612A	TCP-2A

PROJECT NOTES

GENERAL NOTES CONT'D

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 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.

TRAFFIC BARRIER

R) 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.

S) PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER AT ALL TIMES DURING THE INSTALLATION AND REMOVAL OF THE BARRIER BY EITHER A TRUCK MOUNTED 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

T) SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH), EXCEPT 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY 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.

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

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

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

ROAD NAME	MARKING	MARKER
ALL ROADS	PAINT	TEMP RAISED

X) PLACE ONE APPLICATION OF PAINT FOR TEMPORARY TRAFFIC PATTERNS. PLACE A SECOND APPLICATION OF PAINT SIX (6) MONTHS AFTER THE INITIAL APPLICATION AND EVERY SIX MONTHS AS DIRECTED BY THE ENGINEER.

Y) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

Z) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

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

TEMPORARY / FINAL SIGNALS

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

MISCELLANEOUS

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

APPROVED: _____ DATE: 9/24/10

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 022104 ENGINEER JOHN S. KITE, III

PROJECT NOTES

SCALE:	NONE
DATE:	
DWG. BY:	
DESIGN BY:	
REVIEWED BY:	

REVISIONS

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PHASING

PROJ. REFERENCE NO.	SHEET NO.
R-2612A	TCP-3

PHASE I

STEP 1 - INSTALL ALL ADVANCED WORK ZONE WARNING SIGNS. SEE TCP-28.

STEP 2 - AWAY FROM TRAFFIC, BEGIN CLEARING AND GRUBBING OPERATIONS THROUGHOUT THE PROJECT LIMITS.

- INSTALL AND COVER TEMPORARY SIGNAL AT LIBERTY RD AND HAGAN STONE PARK RD. (SEE SIGNAL PLANS)

- INSTALL AND COVER WOODY MILL DETOUR SIGNING. SEE DETAIL 1 ON TCP-26.

- INSTALL AND COVER TEMPORARY SIGNAL AT LIBERTY RD AND COMPANY MILL RD. (SEE SIGNAL PLANS)

NOTE: WOODY MILL RD SHALL NOT BE CLOSED EARLIER THAN 3 DAYS PRIOR TO THE COMMENCEMENT OF MAJOR GRADING OPERATIONS ON -Y- NORTH OF THE PROPOSED STRUCTURE OVER US 421 OR AS DIRECTED BY THE ENGINEER.

STEP 3 - ACTIVATE TEMPORARY SIGNAL ON LIBERTY RD AND HAGAN STONE PARK RD.

- USING RSD 1101.03, SHEET 2 AND TCP-26, CLOSE AND DETOUR WOODY MILL RD.

- USING RSD 1101.02, SHEET 3, CONSTRUCT 4 x 50 TEMPORARY ASPHALT PADS AND PLACE MEDIAN PCB FOR BENT CONSTRUCTION. SEE TCP-7.

NOTE: STEPS 4 THRU 6 MAY BE PERFORMED CONCURRENTLY.

STEP 4 - AWAY FROM TRAFFIC, BEGIN GRADING/DRAINAGE, END BENT CONSTRUCTION AND PAVING OPERATIONS, INCLUDING CONCRETE ISLANDS UP TO, BUT NOT INCLUDING, THE FINAL LAYER OF SURFACE COURSE IN THE FOLLOWING LOCATIONS: (SEE TCP-4 THRU TCP-10)

-Y- STA 15+00+/- TO 46+50+/- (SEE TCP-7, 8 & 10)
-Y1- STA 19+40+/- TO 50+15+/- (SEE TCP-4, 5 & 8)
-Y1- STA 51+25+/- TO 82+75+/- (SEE TCP-6)
-Y3- STA 15+00+/- TO 16+05+/- (SEE TCP-8)
-RPB- STA 14+00+/- TO 28+60+/- (SEE TCP-6)
-LPB- STA 13+00+/- TO 20+90+/- (SEE TCP-6)
-L- STA 50+29+/- TO -RPC- STA 30+19+/- (SEE TCP-6 & 7)
-RPD- STA 14+10+/- TO 19+50+/- (SEE TCP-7 & 9)
-RPD- STA 20+13+/- TO 23+08+/- (SEE TCP-7)

- BEHIND PCB, CONSTRUCT THE MEDIAN BENT AND GUARDRAIL. SEE TCP-7.

STEP 5 - USING RSD 1101.02, SHEET 1, BEGIN WIDENING TO THE EDGE AND ELEV OF EXISTING PAVEMENT AT THE FOLLOWING LOCATIONS:
-Y- STA 10+00+/- TO 15+00+/- (SEE TCP-10)
-Y2- STA 10+05+/- TO 23+50+/- (SEE TCP-10)

STEP 6 - USING RSD 1101.02, SHEET 3, CONSTRUCT THE FOLLOWING UP TO, BUT NOT INCLUDING, THE FINAL LAYER OF SURFACE COURSE:
CROSS OVER (SEE ROADWAY PLANS AND TCP-5 & 7)
-L- STA 80+75+/- TO 93+65+/- (PAVED SHOULDER REPLACEMENT) (SEE TCP-9)

STEP 7 - USING RSD 1101.02, SHEET 3, PLACE PCB ON NEWLY CONSTRUCTED PAVED SHOULDER. (SEE TCP-9)

STEP 8 - CONSTRUCT -L- FROM STA 80+75+/- TO 93+68+/- UP TO, BUT NOT INCLUDING, THE FINAL LAYER OF SURFACE COURSE AND INSTALL PROPOSED GUARDRAIL. (SEE TCP-9)

STEP 9 - USING RSD 1101.02, SHEET 3, REMOVE PCB FROM -L- STA 77+40+/- TO 93+70+/-.

PHASE II

STEP 1 - CONTINUE THE WORK BEGUN IN PHASE I, STEP 4.

STEP 2 - COMPLETE -Y1-,-Y-, AND -Y3- BETWEEN -Y4- AND EXISTING COMPANY MILL RD. UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE AS BEGUN IN PHASE I STEP 5.

- INSTALL AND COVER DETOUR SIGNING FOR COMPANY MILL RD. SEE DETAIL 3 ON TCP-27

COMPLETE THE WORK OF PHASE II, STEP 3 THRU 5 FROM 6PM FRIDAY TO 6AM MONDAY (SEE ICT AND LD'S)

STEP 3 - USING RSD 1101.03, SHEETS 1 & 2, CLOSE AND DETOUR COMPANY MILL RD. SEE DETAIL 3 ON TCP-27.

STEP 4 - AWAY FROM TRAFFIC, CONSTRUCT THE FOLLOWING UP TO, BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE:
- -Y- STA 46+50+/- TO 54+00+/-
- -Y3- STA 12+00+/- TO 15+00+/-

STEP 5 - OPEN COMPANY MILL RD TO INTERMEDIATE TRAFFIC PATTERN. SEE TCP-11 & DETAIL 4 ON TCP-27.

STEP 6 - USING RSD 1101.02, SHEET 3, WHERE NECESSARY, COMPLETE MEDIAN CROSSOVER, -RPC- AND -RPD- (INCLUDING STA 19+50+/- TO 20+13+/-) AS BEGUN IN PHASE I, STEP 4.

CONDUCT THE WORK OF PHASE II, STEP 7 FROM MIDNIGHT TO 6AM OVER CONSECUTIVE NIGHTLY WORK PERIODS (SEE ICT AND LD'S)

STEP 7 - USE MEDIAN CROSSOVER AND COMPLETED -RPC- AND -RPD- TO INSTALL STEEL GIRDERS OVER US 421 AS FOLLOWS:

FOR SPAN A, SEE TCP-12 THRU TCP-15:

A - USING DETAIL B ON TCP-26, CLOSE HAGAN STONE PARK RD AND DETOUR TRAFFIC.
B - USING RSD 1101.02, SHEET 3, PLACE EXISTING SIGNALS IN FLASH MODE. SEE TCP-12.
C - SHIFT ALL SB US 421 TRAFFIC TO RAMP C AND RAMP D. SEE RSD 1101.03, SHEET 7.
D - SHIFT ALL NB US 421 TRAFFIC TO CROSSOVERS. SEE RSD 1101.03, SHEET 6.
E - INSTALL BRIDGE GIRDERS OVER NB US 421.
F - REMOVE TRAFFIC CONTROL DEVICES AND RE-OPEN HAGAN-STONE PARK RD TO TRAFFIC AND US 421 TO A 4 LANE, 2 WAY PATTERN.
G - REPEAT A-F AS NECESSARY TO COMPLETE GIRDER INSTALLATION OVER CONSECUTIVE NIGHTS OR AS DIRECTED BY THE ENGINEER.

FOR SPAN B, SEE TCP-16 THRU TCP-18:

A - SHIFT ALL SB US 421 TRAFFIC TO RAMP C AND RAMP D. SEE RSD 1101.03, SHEET 7.
B - RETAIN ALL NB US 421 TRAFFIC IN EXISTING LANES.
C - INSTALL BRIDGE GIRDERS OVER SB US 421.
D - REMOVE TRAFFIC CONTROL DEVICES AND RE-OPEN HAGAN-STONE PARK RD TO TRAFFIC AND US 421 TO A 4 LANE, 2 WAY PATTERN.
E - REPEAT A-D AS NECESSARY TO COMPLETE GIRDER INSTALLATION OVER CONSECUTIVE NIGHTS OR AS DIRECTED BY THE ENGINEER.

STEP 8 - USING RSD 1101.02, SHEET 3, REMOVE MEDIAN PCB.

STEP 9 - COMPLETE ANY REMAINING WORK BEGUN IN PHASE I, STEP 4 AND PLACE TEMPORARY PAVEMENT MARKINGS IN THE FINAL TRAFFIC PATTERN.

- INSTALL AND COVER ALL FINAL SIGNALS.

APPROVED: DATE: 9/24/10

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 022104 ENGINEER JOHN S. KYLE, JR.

PHASING

SCALE: NONE	REVISIONS
DATE:	
DWG. BY:	
DESIGN BY:	
REVIEWED BY:	
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DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH NORTH CAROLINA DEPARTMENT OF TRANSPORTATION TRAFFIC CONTROL

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derichardson AT WZTC237460

PHASING (CONT'D)

PROJ. REFERENCE NO.	SHEET NO.
R-2612A	TCP-3A

PHASE III

STEP 1 - USE TYPE III BARRICADES TO CLOSE ACCESS TO US 421 FROM HAGEN STONE PARK RD (NORTH SIDE) AND DETOUR TRAFFIC AS SHOWN ON TCP-26 DETAIL 2. PLACE EXISTING SIGNAL IN FLASH MODE.

STEP 2 - USING RSD 1101.02, SHEET 3, TIE IN LOOP B FROM -LPB- STA 13+00+/- TO -L- STA 72+18+/-. DRUM OFF UPON COMPLETION. (SEE TCP-21)

- USING RSD 1101.02, SHEET 3, TIE IN RAMP B FROM -L- STA 41+30+/- TO -RPB- STA 14+00+/-. DRUM OFF UPON COMPLETION. (SEE TCP-20)

NOTE: WORK IN A CONTINUOUS MANNER TO COMPLETE THE WORK OF STEP 3 THRU 5 IN A SINGLE WORK PERIOD.

STEP 3 - USING RSD 1101.02, SHEET 1, PLACE THE FIRST LIFT OF SURFACE COURSE AND TEMPORARY PAINT PAVEMENT MARKINGS IN THE FINAL PATTERN ON LIBERTY ST AND WOODY MILL RD IN THE FOLLOWING LOCATIONS:

-Y2- STA 10+00+/- TO 23+50+/-
-Y- STA 10+00+/- TO 15+25+/-

STEP 4 - USE TYPE III BARRICADES TO CLOSE ACCESS FROM US 421 TO HAGEN STONE PARK RD. (SOUTH SIDE)

- USE TYPE III BARRICADES TO CLOSE ACCESS TO -Y1- FROM COMPANY MILL RD.

STEP 5 - ACTIVATE SIGNAL AT -Y-/-Y2-, PULL DRUMS AND BARRICADES AND OPEN WOODY MILL RD AND COMPANY MILL RD, (-Y-), LIBERTY RD (-Y2-), RAMP B AND LOOP B, RAMP C AND RAMP D TO THE FINAL PATTERN.

- COVER/REMOVE DETOUR SIGNING

STEP 6 - USING RSD 1101.02, SHEET 1, COMPLETE TIE IN OF -Y1- AND -Y4- UP TO BUT NOT INCLUDING THE FIRST LAYER OF SURFACE COURSE AND PLACE TEMPORARY PAINT PAVEMENT MARKINGS IN THE FINAL PATTERN. KEEP ACCESS TO -Y1- NORTH OF -Y4- CLOSED.

NOTE: WORK IN A CONTINUOUS MANNER TO COMPLETE THE WORK OF STEP 7 AND 8 IN A SINGLE WORK PERIOD.

STEP 7 - USING RSD 1101.02, SHEET 1, PLACE TRAFFIC IN A 1 LANE 2 WAY PATTERN IN THE EXISTING WB LANE OF MINDEN RD AND TIE IN THE PROPOSED EB LANE TO -Y1- UP TO BUT NOT INCLUDING THE FINAL LAYER AND PLACE TEMPORARY PAINT PAVEMENT MARKINGS IN THE FINAL PATTERN.

STEP 8 - PULL BARRICADES AND OPEN ACCESS FROM COMPANY MILL RD TO MINDEN RD.

- USE TYPE III BARRICADES AND DRUMS TO CLOSE ACCESS TO EXISTING MINDIN RD FROM US 421.

- USING RSD 1101.02, SHEET 1, PLACE TRAFFIC IN A 1 LANE 2 WAY PATTERN IN THE PROPOSED EB LANE OF MINDEN RD (USING NEW -Y1-) AND TIE IN THE PROPOSED WB LANE TO -Y1- UP TO BUT NOT INCLUDING THE FINAL LAYER AND PLACE TEMPORARY PAINT PAVEMENT MARKINGS IN THE FINAL PATTERN.

STEP 9 - USING RSD 1101.02, SHEETS 1 AND 3, REMOVE EXISTING PAVEMENT. (SEE TCP-22 THRU TCP-25)

STEP 10- USING RSD 1101.02, SHEETS 1 AND 3, PLACE FINAL LAYER OF SURFACE COURSE AND MARKINGS THROUGHOUT THE PROJECT LIMITS. (SEE PAVEMENT MARKING PLANS)

STEP 11- REMOVE ALL TRAFFIC CONTROL DEVICES.

APPROVED: [signature] DATE: 8/3/10

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 022104 ENGINEER JOHN S. KITE JR.

PHASING

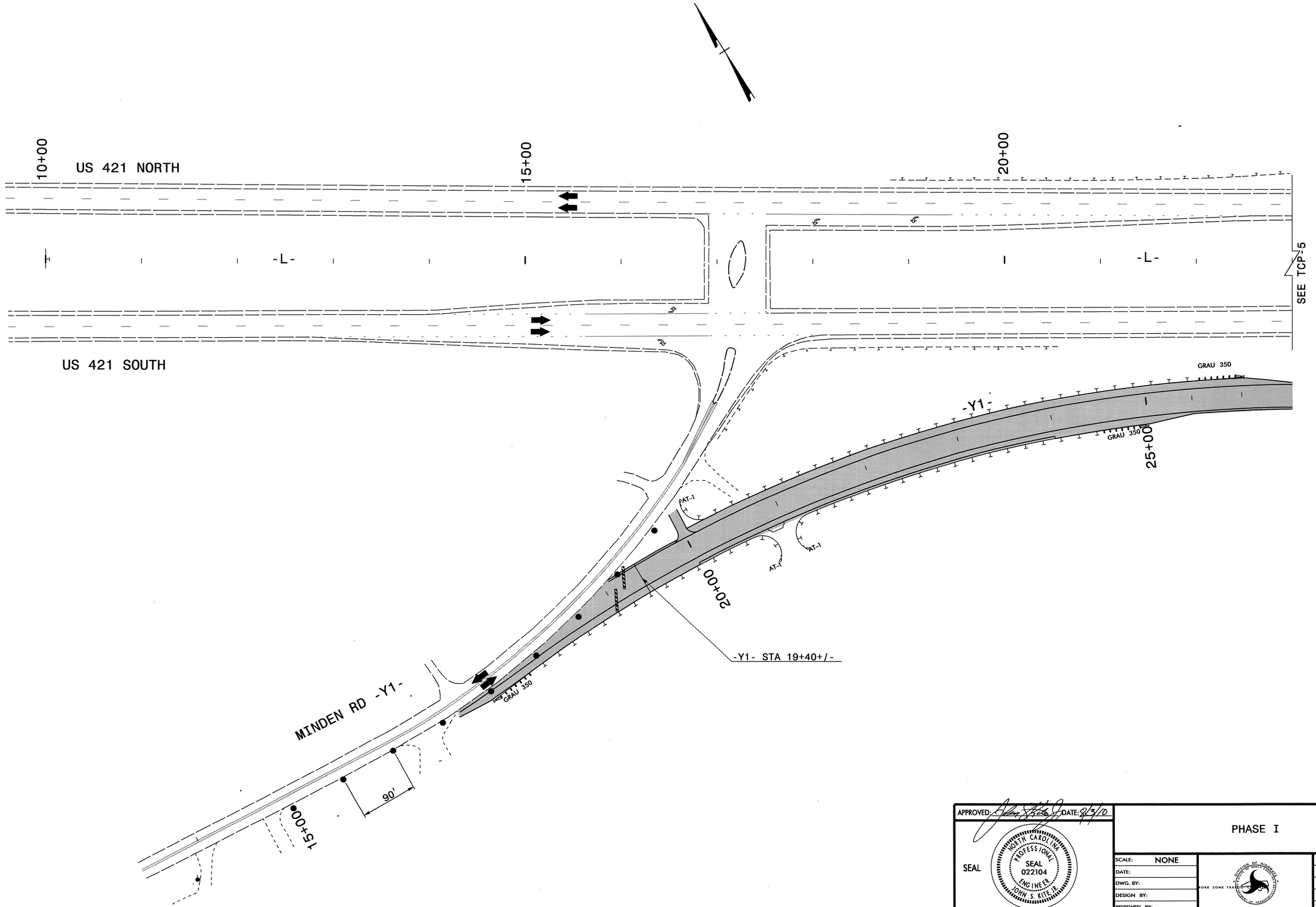
SCALE: NONE
DATE:
DWG. BY:
DESIGN BY:
REVIEWED BY:

REVISIONS

CADD FILE

03-AUG-2010 12:04
\\pot\dfsroot01\Proj\TIPProjects-R\R2612A\Traffic\TrafficControl\TCP\r2612a_tc_btcp.dgn
derichardson AT WZTC237460

PROJ. REFERENCE NO.	SHEET NO.
R-2612A	TCP-4



APPROVED: [signature] DATE: 8/3/10

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 022104 ENGINEER JOHN S. KITE, JR.

PHASE I

SCALE:	NONE
DATE:	
DWG. BY:	
DESIGN BY:	
REVIEWED BY:	

WORK ZONE TRAFFIC CONTROL

REVISIONS

CADD FILE

02-AUG-2010 13:07
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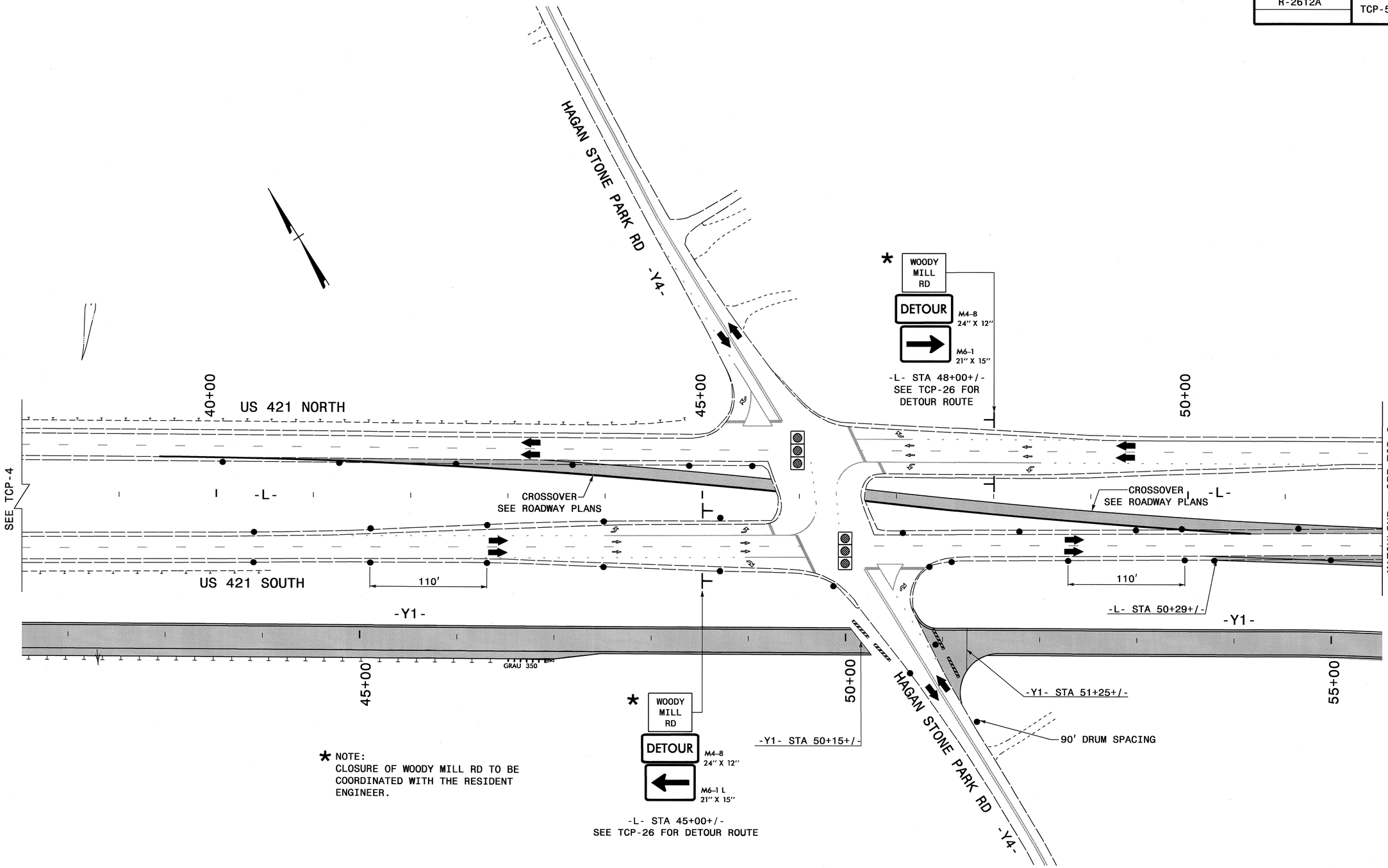
derichardson AT WZTC237460

PROJ. REFERENCE NO.	SHEET NO.
R-2612A	TCP-5



* NOTE:
CLOSURE OF WOODY MILL RD TO BE COORDINATED WITH THE RESIDENT ENGINEER.

APPROVED: [signature] DATE: 8/3/10

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 022104 ENGINEER JOHN S. KITE, JR.

PHASE I

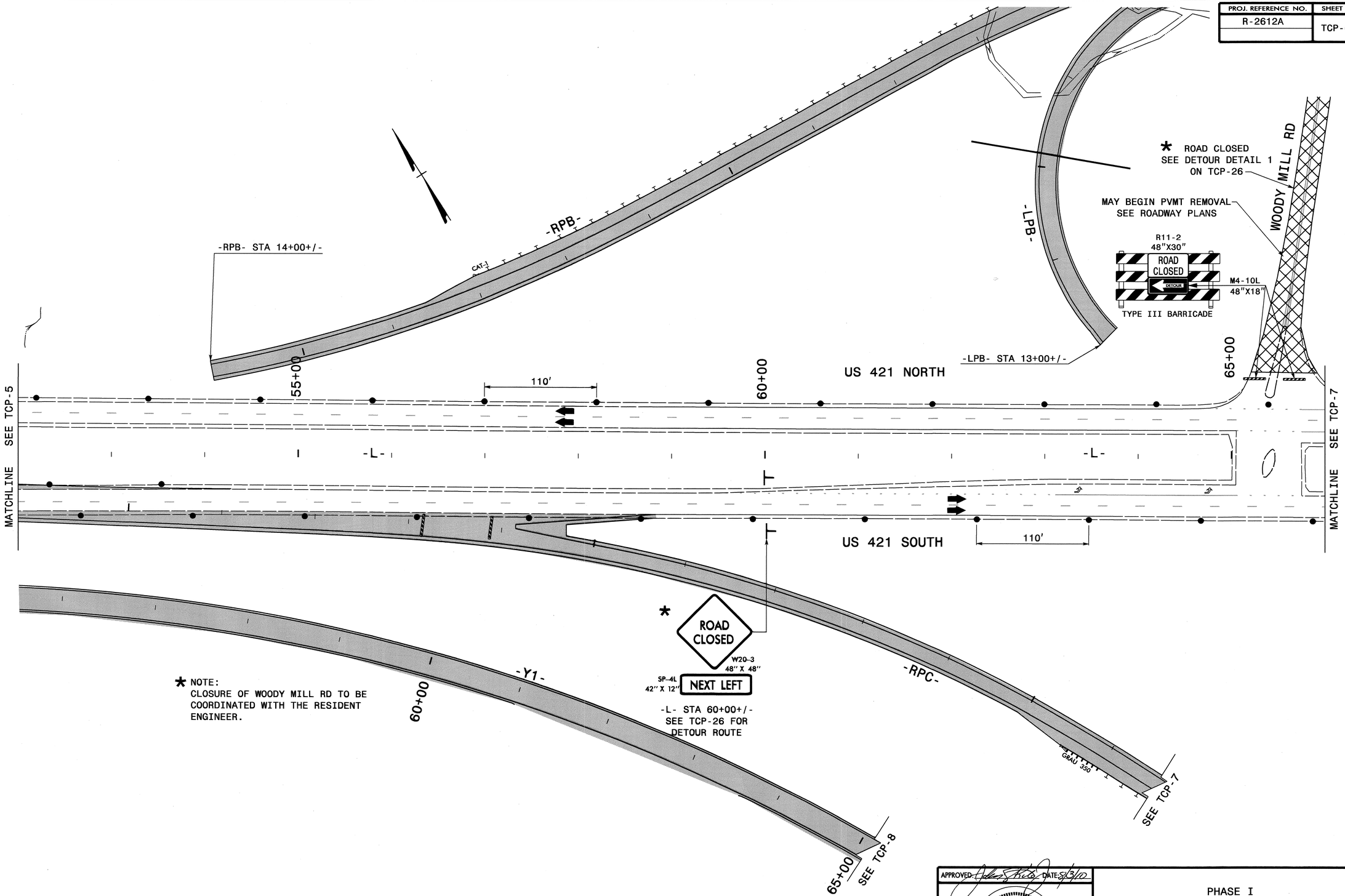
SCALE:	NONE
DATE:	
DWG. BY:	
DESIGN BY:	
REVIEWED BY:	

REVISIONS

CADD FILE

03-AUG-2010 12:06
\\Dot\dfsroot01\Proj\TIPProjects-R\R2612A\Traffic\TrafficControl\TCP\r2612a_tc_tcp05.dgn
derichardson AT WZTC237460

PROJ. REFERENCE NO.	SHEET NO.
R-2612A	TCP-6



* NOTE:
CLOSURE OF WOODY MILL RD TO BE COORDINATED WITH THE RESIDENT ENGINEER.

APPROVED: John S. Kite DATE: 8/3/10

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 022104 ENGINEER JOHN S. KITE, JR.

PHASE I

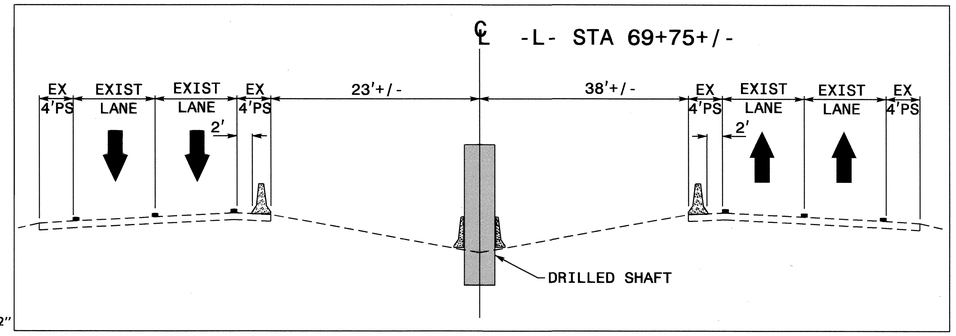
SCALE:	NONE
DATE:	
DWG. BY:	
DESIGN BY:	
REVIEWED BY:	

REVISIONS

CADD FILE

03-AUG-2010 12:06
\\Dot\dfsroot01\Proj\TIPProjects-R\R2612A\Traffic\TrafficControl\TCP\r2612a_tc_tcp06.dgn
derichardson AT WZTC237460

PROJ. REFERENCE NO.	SHEET NO.
R-2612A	TCP-7



SEE TCP-10

30+00

-Y-

* ROAD CLOSED
W20-3
48" X 48"

NEXT RIGHT
SP-4R
42" X 12"

-L- STA 69+40+/-
END PCB

-L- STA 71+00+/-
SEE TCP-26 FOR DETOUR ROUTE

50'x4' TEMPORARY ASPHALT
(2" S9.5B)

110'

70+00

US 421 NORTH

-L- STA 73+30+/-
END PCB 6' OS

50'x4' TEMPORARY ASPHALT
(2" S9.5B)

75+00

MATCHLINE SEE TCP-6

-L-

-L- STA 67+00+/-
2' OS

BRIDGE FOOTING

-L- STA 72+80+/-
2' OS

-L-
CROSSOVER
SEE ROADWAY PLANS

110'

MATCHLINE SEE TCP-9

US 421 SOUTH

-L- STA 66+50+/-
BEG PCB 6' OS

-L- STA 71+40+/-
END PCB 2' OS

-L- STA 77+40+/-
BEGIN PCB 6' OS
W/CC

-L- STA 77+90+/-
2' OS

STEP 7

-RPD- STA 19+50+/-

50'x4' TEMPORARY ASPHALT
(2" S9.5B)

-RPD-

-Y- STA 36+75+/-

-Y-

-RPC- STA 30+19+/-=
-RPD- STA 23+08+/-

CAT-1

CAT-1

-RPD- STA 20+13+/-

COMPANY MILL RD -Y-

* NOTE:
CLOSURE OF WOODY MILL RD TO BE COORDINATED WITH THE RESIDENT ENGINEER.

SEE TCP-4

-RPC-

-Y- STA 39+00+/-

GRAU 350

SEE TCP-8

SEE TCP-8

APPROVED: [signature] DATE: 9/23/10

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 022104 ENGINEER JOHN S. KITE, III

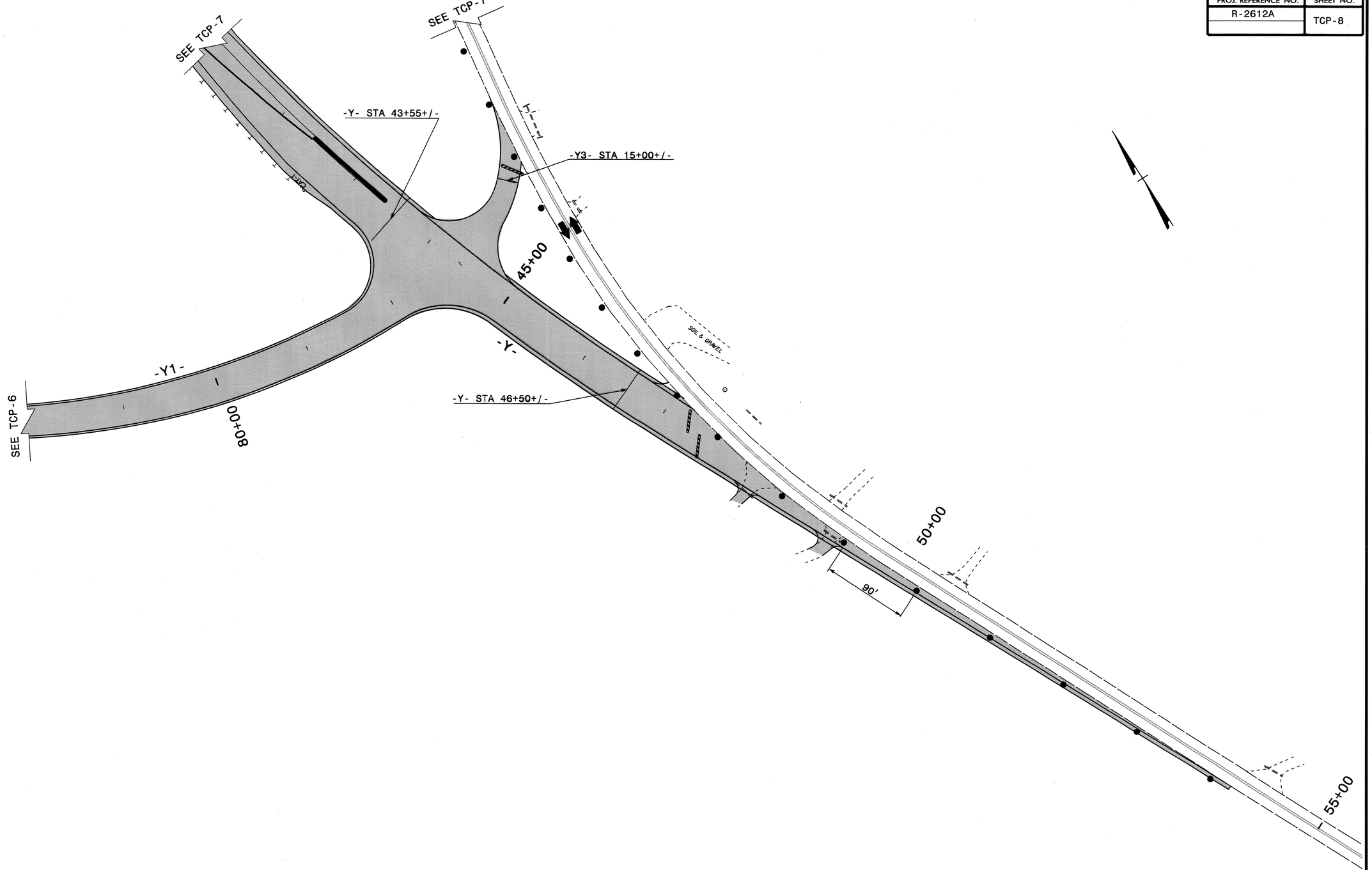
PHASE I

SCALE: NONE	REVISIONS
DATE:	
DWG. BY:	
DESIGN BY:	
REVIEWED BY:	

CADD FILE

22-SEP-2010 09:08
\\dot\dfsroot01\proj\TIPProjects-R\R2612A\Traffic\TrafficControl\TCP\r2612a_tc_tcp07.dgn
derichardson
AT WZTC237460

PROJ. REFERENCE NO.	SHEET NO.
R-2612A	TCP-8



APPROVED: DATE: 8/3/10

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 022104 ENGINEER JOHN S. KITE, JR.

PHASE I

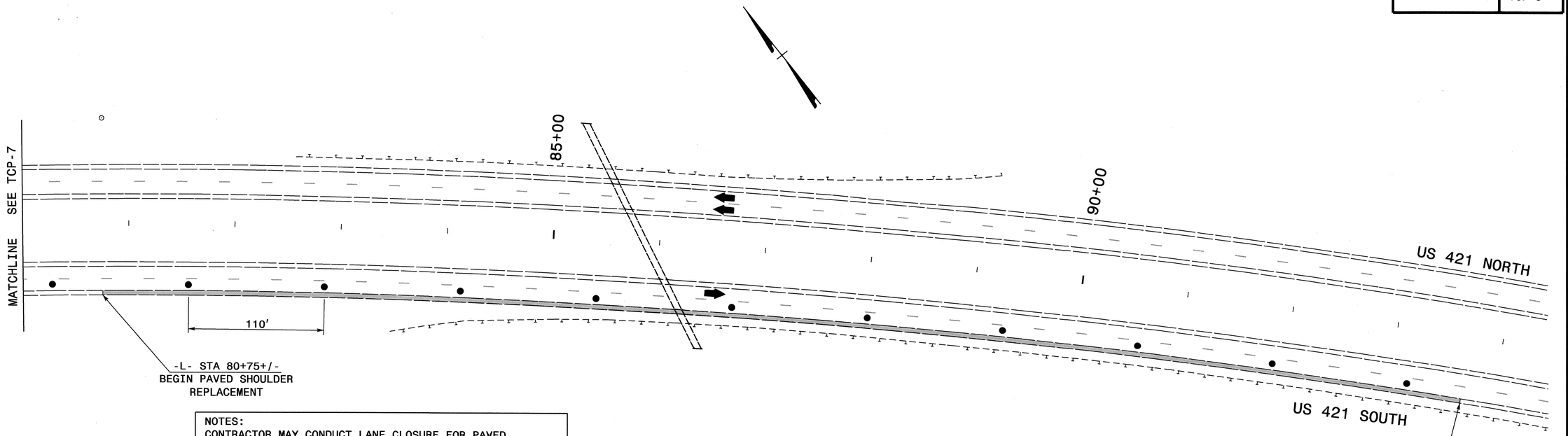
SCALE:	NONE
DATE:	
DWG. BY:	
DESIGN BY:	
REVIEWED BY:	

REVISIONS

CADD FILE

03-AUG-2010 12:08
\\Dot\dfsroot01\Proj\TIPProjects-R\R2612A\Traffic\TrafficControl\TCP\r2612a_tc_tcp08.dgn
derichardson AT WZTC237460

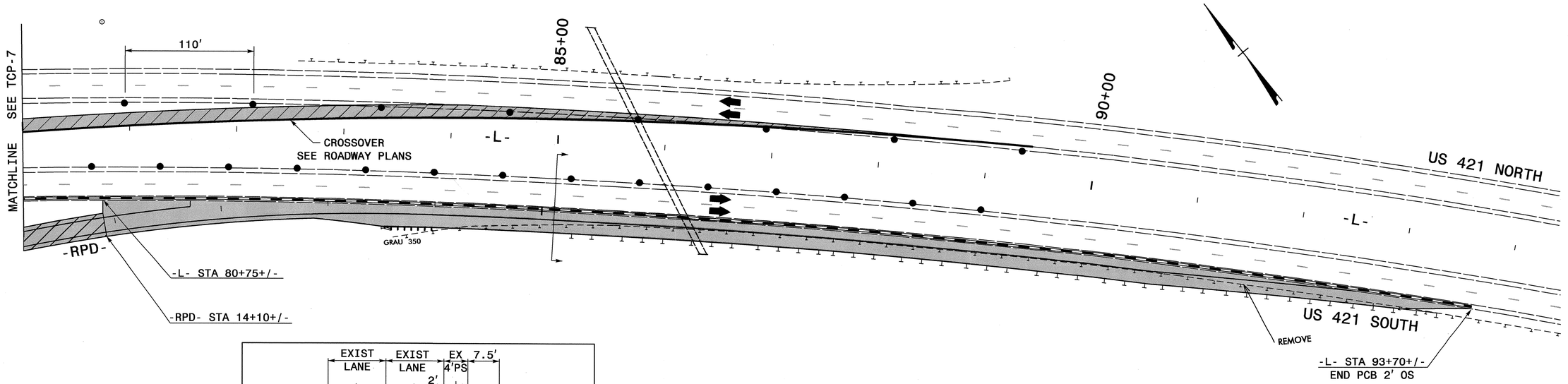
PROJ. REFERENCE NO.	SHEET NO.
R-2612A	TCP-9

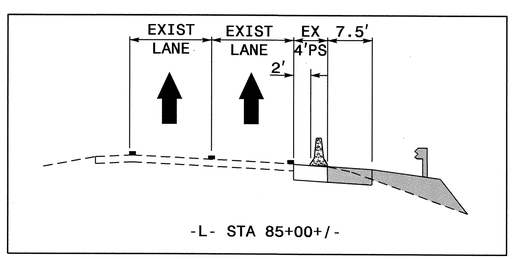


NOTES:
CONTRACTOR MAY CONDUCT LANE CLOSURE FOR PAVED SHOULDER REPLACEMENT FROM 6PM FRIDAY TO 4PM MONDAY PER THE ENGINEER

SEE RSD 1101.02, SHEET 3 FOR TRAFFIC CONTROL SET UP.

PHASE I, STEP 6





PHASE I, STEP 7 & 8

APPROVED: _____ DATE: 8/3/10

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 022104 ENGINEER JOHN S. KITE JR.

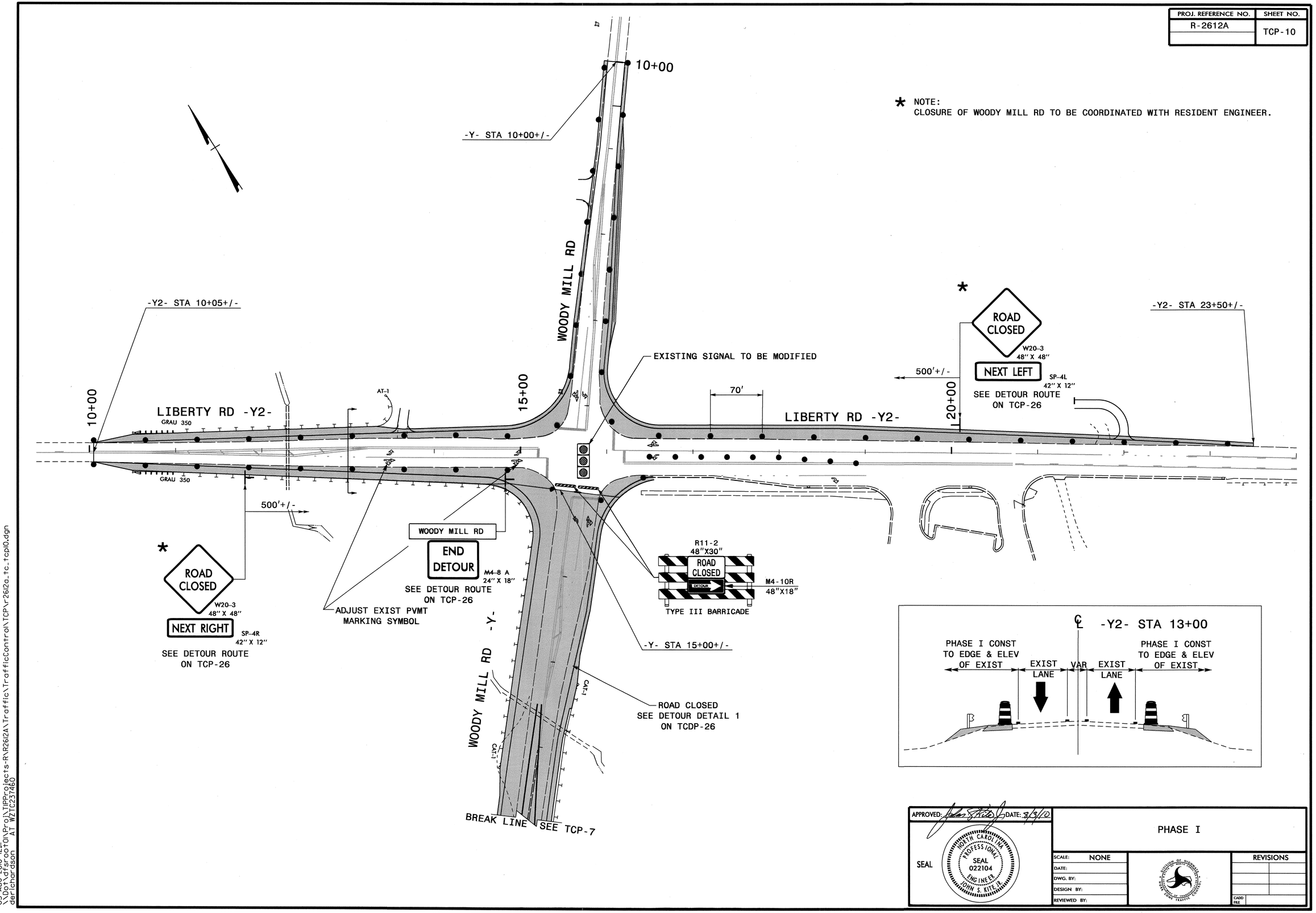
PHASE I

SCALE: NONE	REVISIONS
DATE:	
DWG. BY:	
DESIGN BY:	
REVIEWED BY:	
CADD FILE	

DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH

03-AUG-2010 12:09
V:\Projects\50010\Proj\TIPProjects-R\R2612A\Traffic\TrafficControl\TCP\r2612a_tc_tcp09.dgn
derichardson AT WZTC237480

PROJ. REFERENCE NO.	SHEET NO.
R-2612A	TCP-10



* NOTE:
CLOSURE OF WOODY MILL RD TO BE COORDINATED WITH RESIDENT ENGINEER.

APPROVED: [signature] DATE: 8/3/10

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 022104 ENGINEER JOHN S. KITE JR.

PHASE I

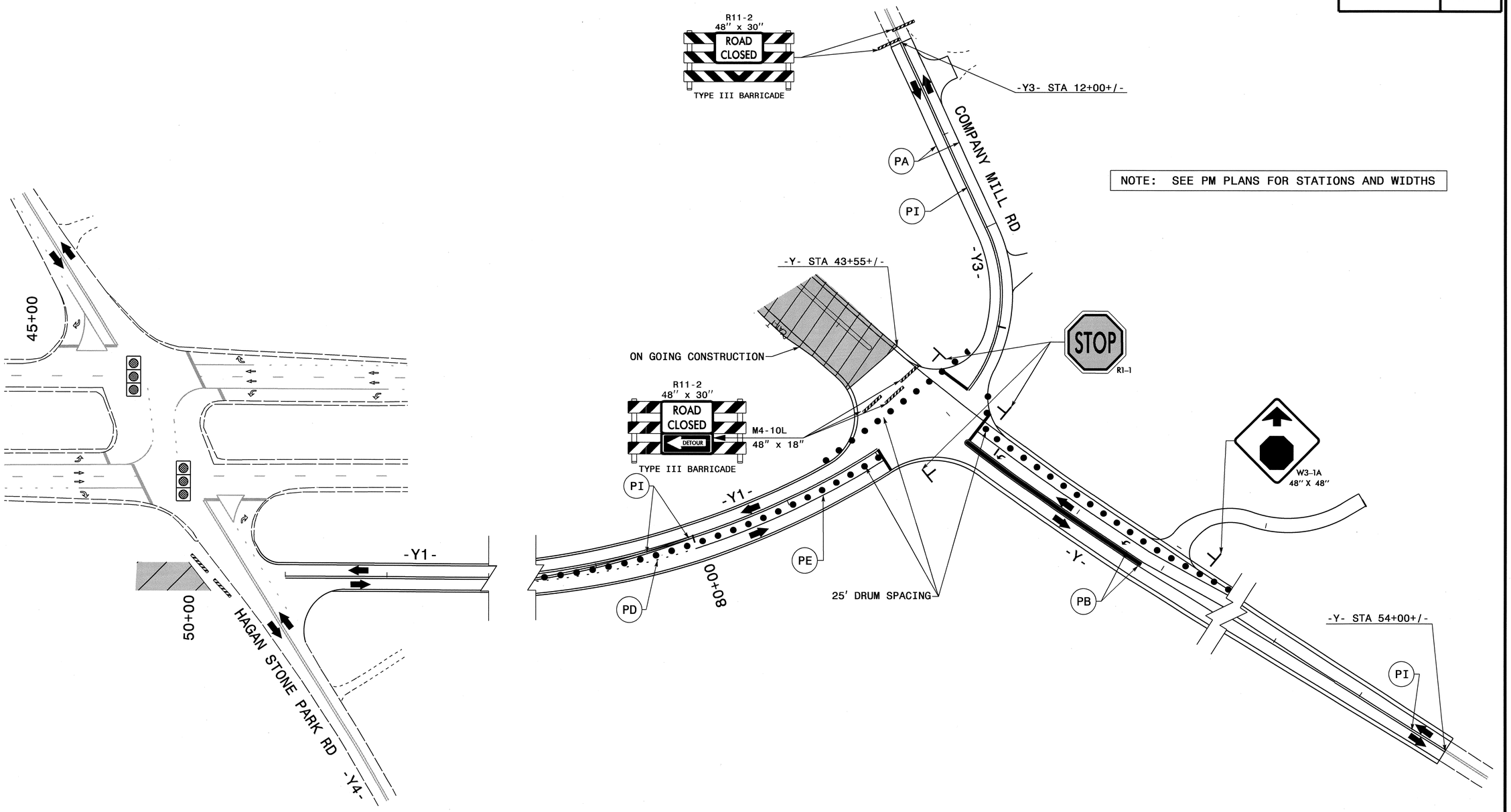
SCALE:	NONE
DATE:	
DWG. BY:	
DESIGN BY:	
REVIEWED BY:	

REVISIONS

CADD FILE

03-AUG-2010 12:11
\\Dot\dfsroot01\Proj\TIPProjects-R\R2612A\Traffic\TrafficControl\TCP\r2612a_tc_tcp10.dgn
derichardson AT WZTC237460

PROJ. REFERENCE NO.	SHEET NO.
R-2612A	TCP-11



NOTE: SEE PM PLANS FOR STATIONS AND WIDTHS

PHASE II, STEP 5

APPROVED: DATE: 8/3/10

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 022104 ENGINEER JOHN S. KITE, JR.

PHASE II

SCALE:	NONE
DATE:	
DWG. BY:	
DESIGN BY:	
REVIEWED BY:	

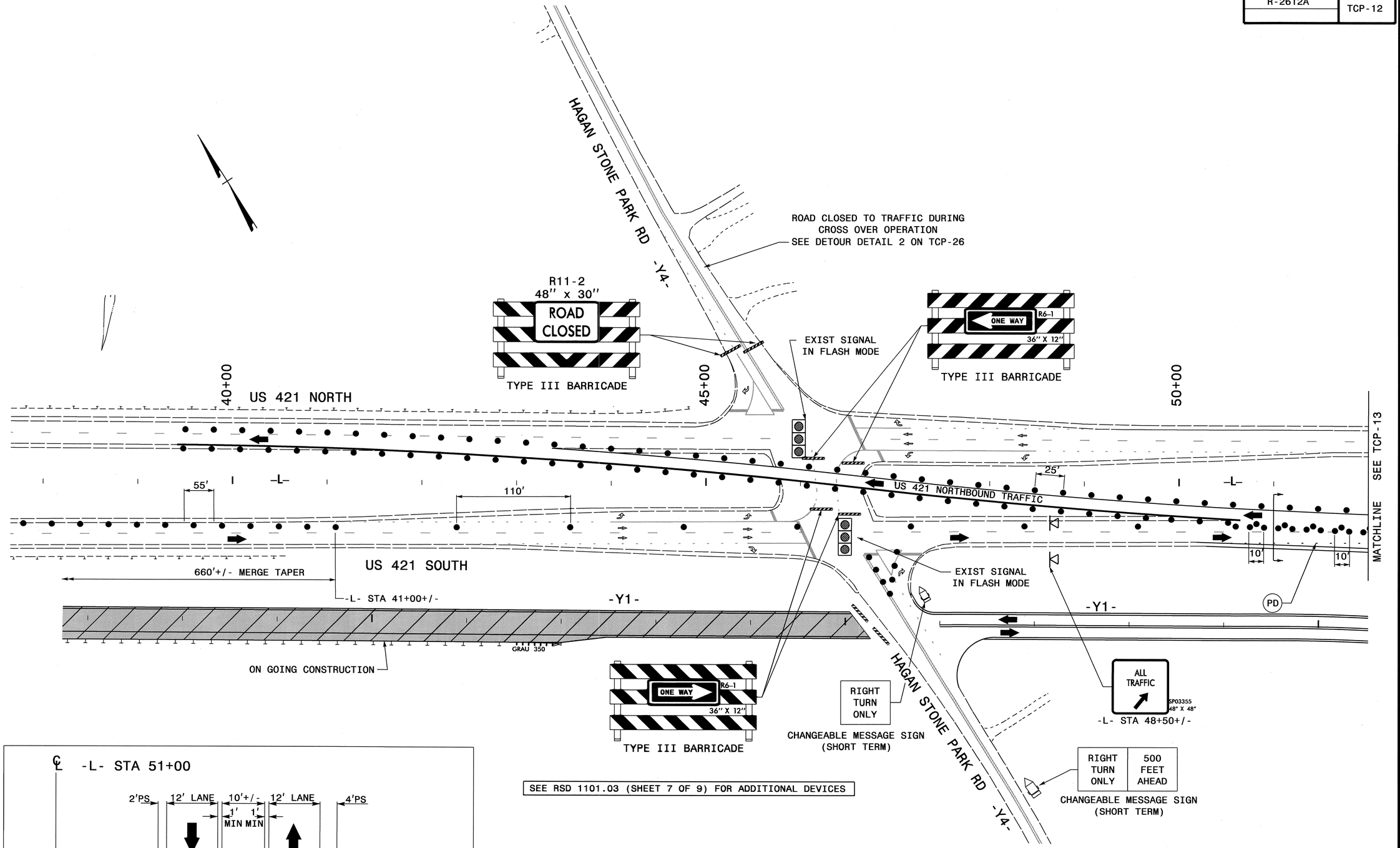
WORK ZONE TRAFFIC CONTROL

REVISIONS

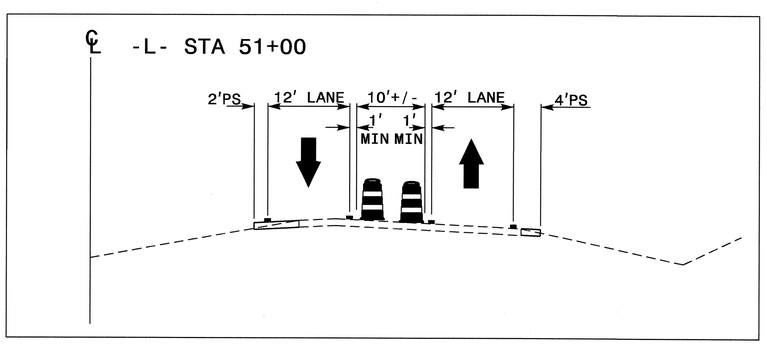
CADD FILE

03-AUG-2010 12:43
\\Dot\dfsroot01\Proj\TIPProjects-R\R2612A\Traffic\TrafficControl\TCP\r2612a_tc_tcp11.dgn
derichardson AT WZTC237460

PROJ. REFERENCE NO.	SHEET NO.
R-2612A	TCP-12



SEE RSD 1101.03 (SHEET 7 OF 9) FOR ADDITIONAL DEVICES



APPROVED: DATE: 8/3/10

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 022104 ENGINEER JOHN S. KITE, JR.

PHASE II
TEMPORARY TRAFFIC PATTERN FOR INSTALLING SPAN A GIRDERS

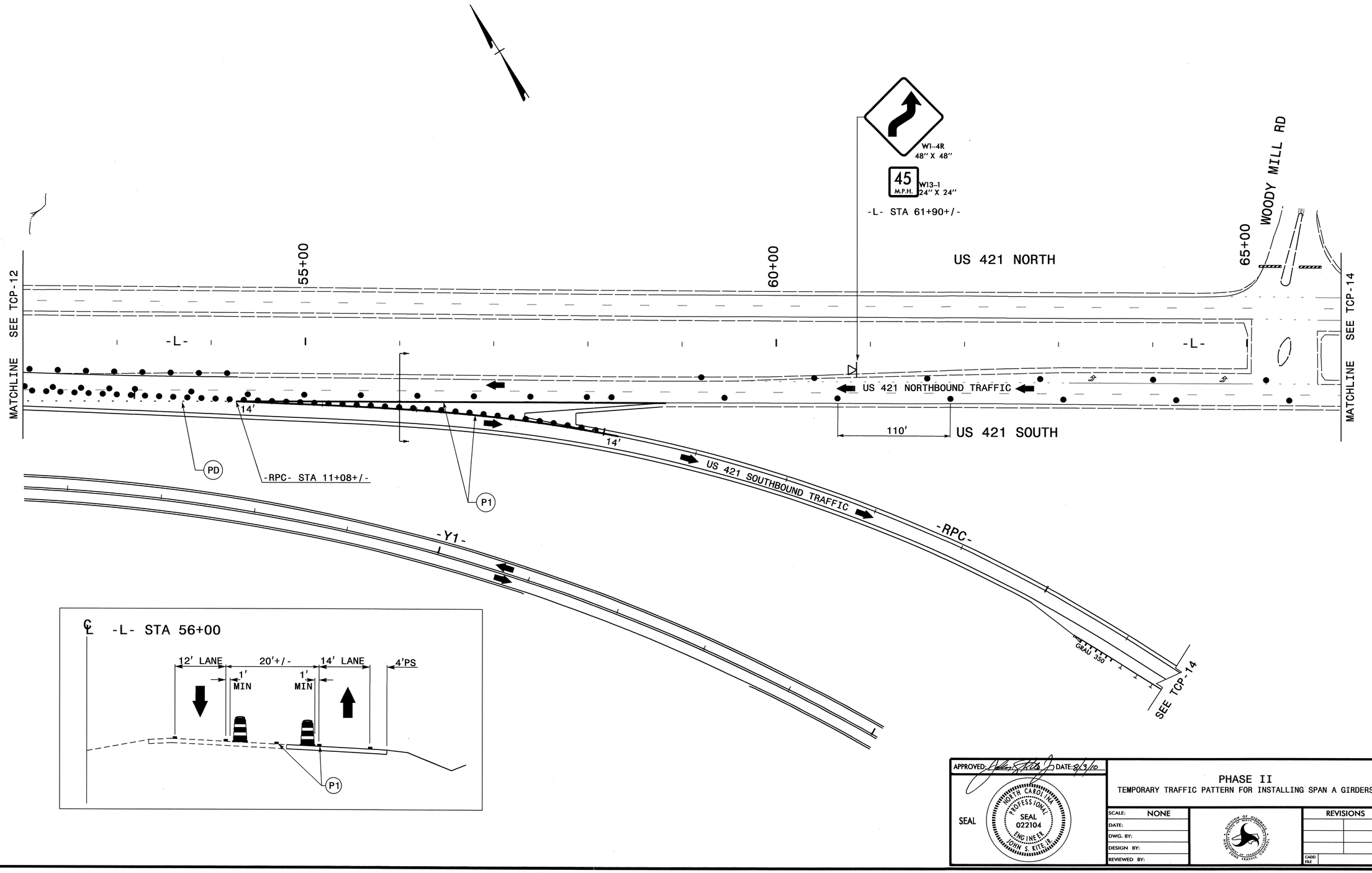
SCALE: NONE
DATE:
DWG. BY:
DESIGN BY:
REVIEWED BY:

REVISIONS

CADD FILE

03-AUG-2010 12:12
\\Dot\dfsroot01\Proj\TIPProjects-R\R2612A\Traffic\TrafficControl\TCP\r2612a_tc_tcp12.dgn
derichardson AT WZTC237460

PROJ. REFERENCE NO.	SHEET NO.
R-2612A	TCP-13



APPROVED: DATE: 8/3/10

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 022104 ENGINEER JOHN S. KITE JR.

PHASE II
TEMPORARY TRAFFIC PATTERN FOR INSTALLING SPAN A GIRDERS

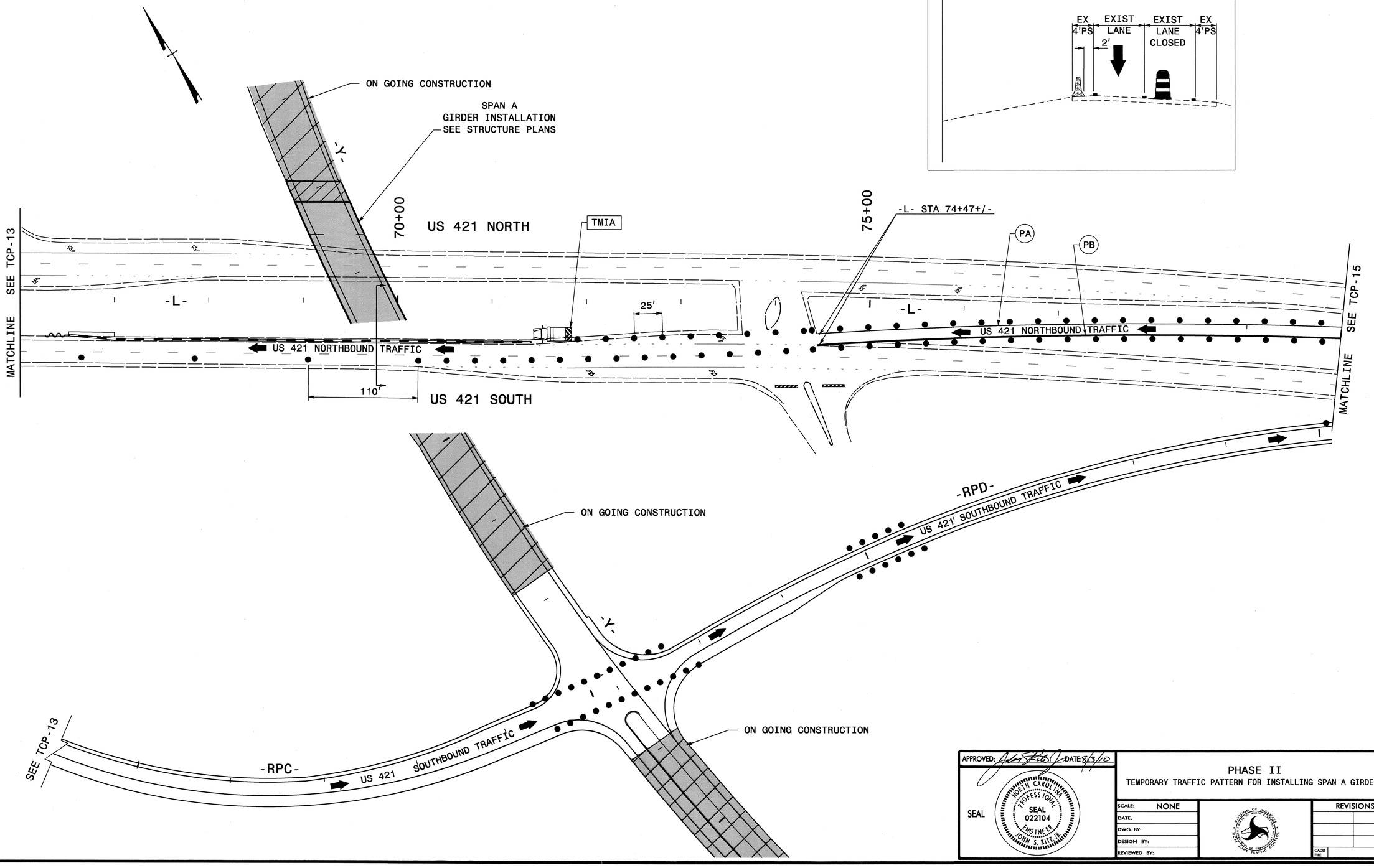
SCALE:	NONE
DATE:	
DWG. BY:	
DESIGN BY:	
REVIEWED BY:	

REVISIONS

CADD FILE

03-AUG-2010 12:13
N:\Projects\TIPProj\TIPProjects-R\R2612A\Traffic\TrafficControl\TCPs\r2612a_tc_tcp13.dgn
dericharcson ALT WZTC237460

PROJ. REFERENCE NO.	SHEET NO.
R-2612A	TCP-14



APPROVED: [signature] DATE: 8/3/10

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 022104 ENGINEER JOHN S. KITE, JR.

PHASE II

TEMPORARY TRAFFIC PATTERN FOR INSTALLING SPAN A GIRDERS

SCALE:	NONE
DATE:	
DWG. BY:	
DESIGN BY:	
REVIEWED BY:	

REVISIONS

CADD FILE

03-AUG-2010 12:14
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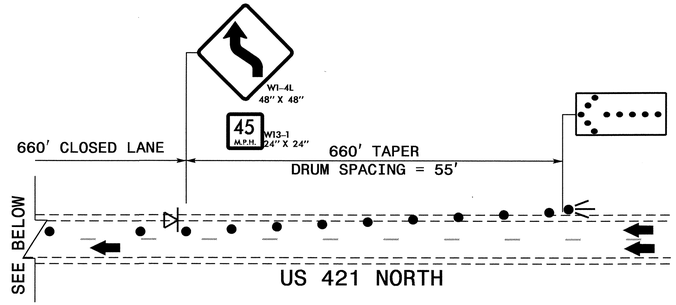
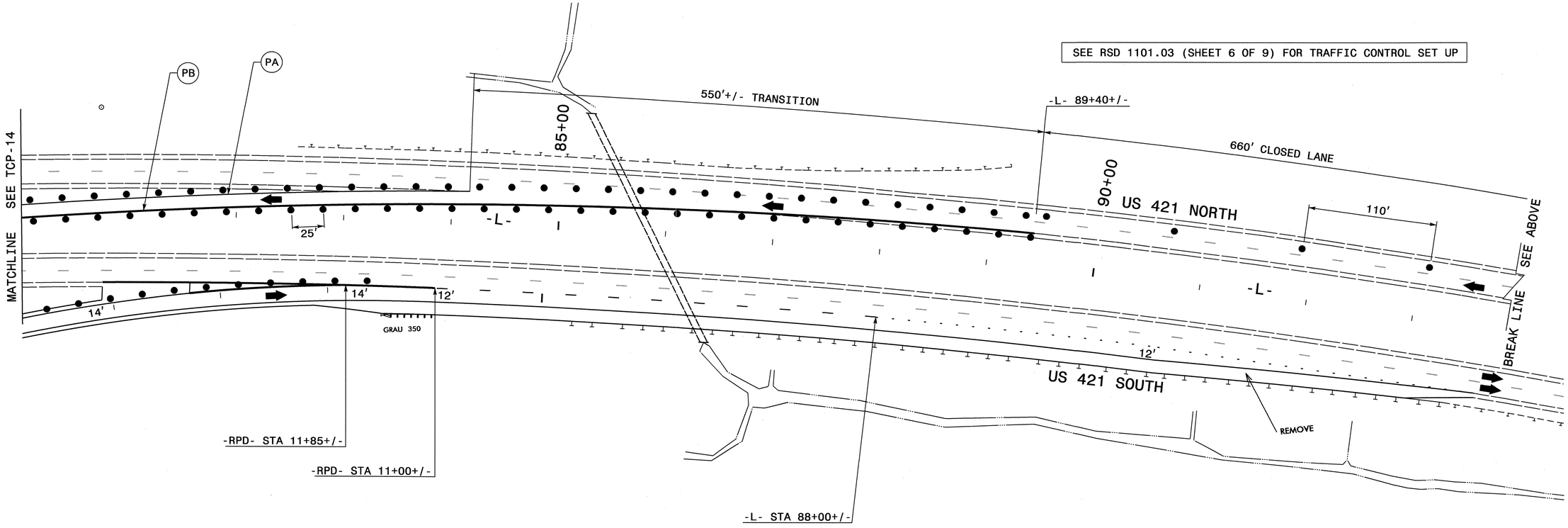
derichardson AT WZTC237460

PROJ. REFERENCE NO.	SHEET NO.
R-2612A	TCP-15



SEE RSD 1101.03 (SHEET 6 OF 9) FOR TRAFFIC CONTROL SET UP



APPROVED: DATE: 8/5/10

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 022104 ENGINEER JOHN S KITE JR

PHASE II

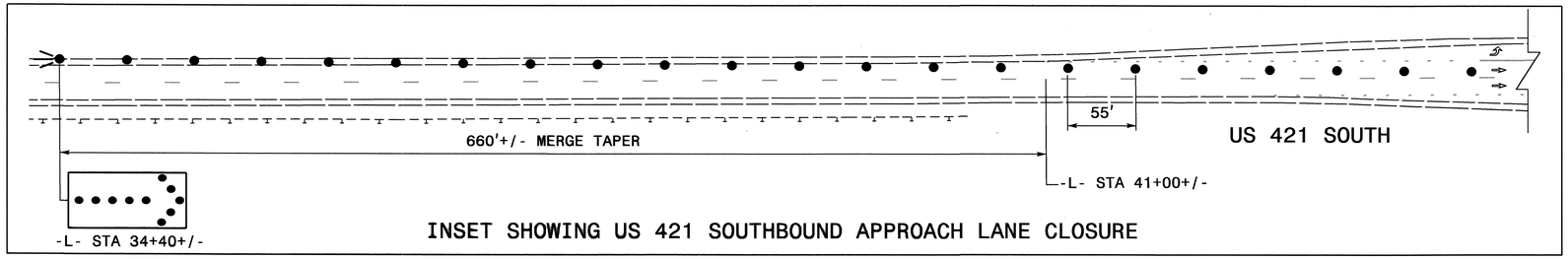
TEMPORARY TRAFFIC PATTERN FOR INSTALLING SPAN A GIRDERS

SCALE:	NONE
DATE:	
DWG. BY:	
DESIGN BY:	
REVIEWED BY:	

REVISIONS	
CADD FILE	

02-AUG-2010 13:14
\\Dot-dfs-do10\Proj\TIPProjects-R\R2612A\Traffic\TrafficControl\TCPVr2612a_tc_tcpl5.dgn
derichardson AT WZTC237460

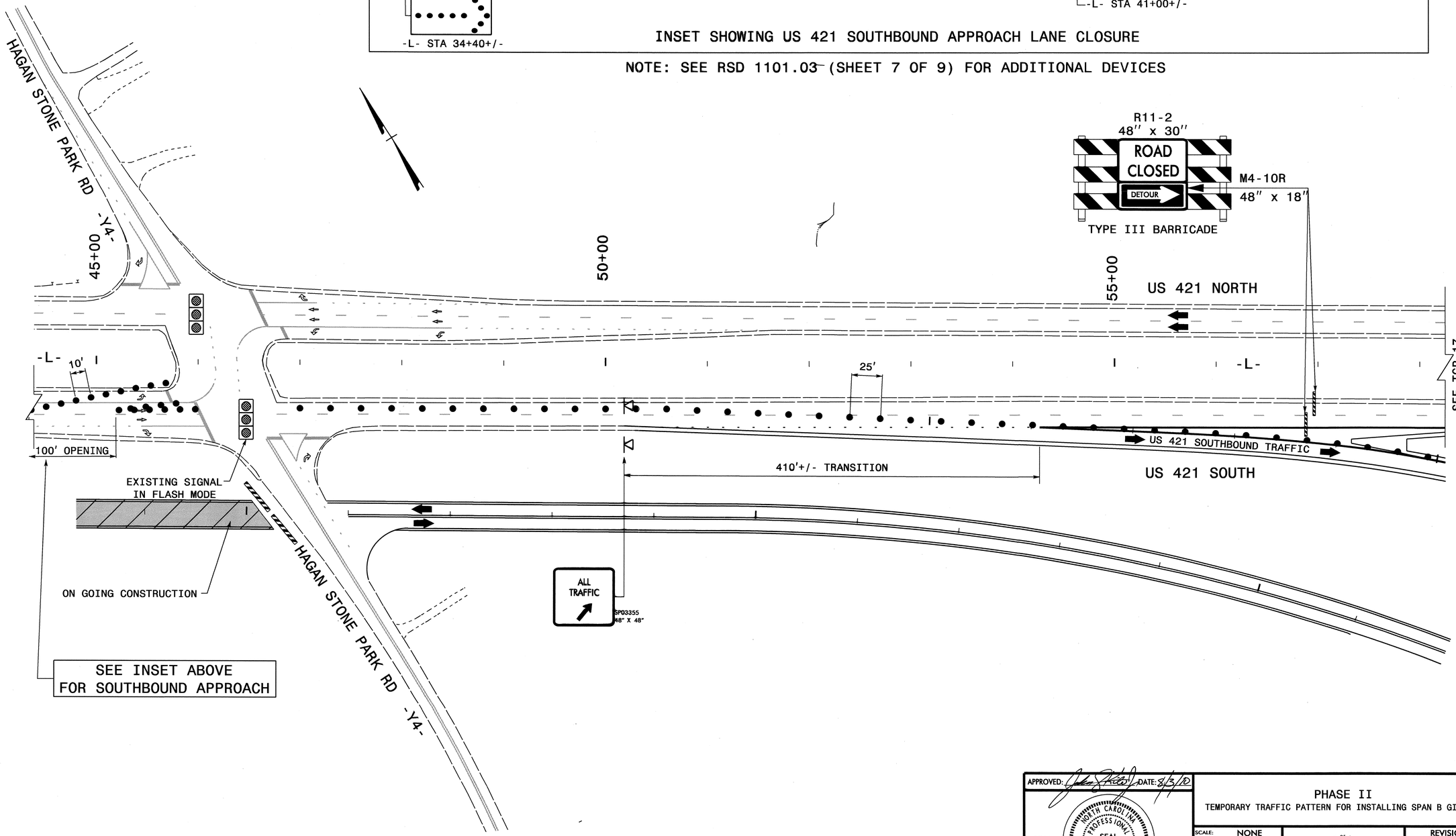
PROJ. REFERENCE NO.	SHEET NO.
R-2612A	TCP-16



INSET SHOWING US 421 SOUTHBOUND APPROACH LANE CLOSURE

NOTE: SEE RSD 1101.03 (SHEET 7 OF 9) FOR ADDITIONAL DEVICES

TYPE III BARRICADE



APPROVED: _____ DATE: 8/3/10

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 022104 ENGINEER JOHN S. KITE JR.

PHASE II

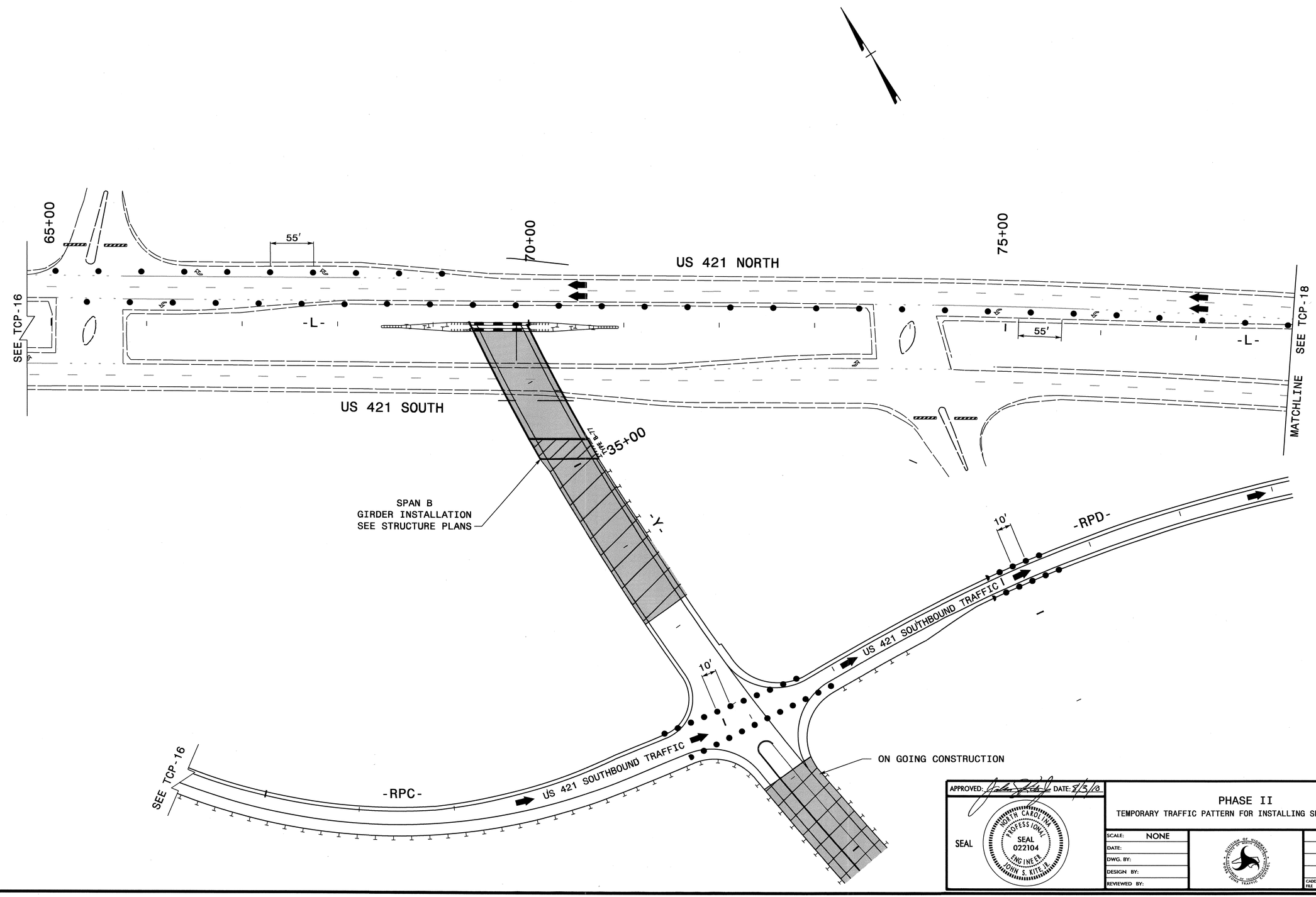
TEMPORARY TRAFFIC PATTERN FOR INSTALLING SPAN B GIRDERS

SCALE:	NONE
DATE:	
DWG. BY:	
DESIGN BY:	
REVIEWED BY:	

REVISIONS	
CADD FILE	

03-AUG-2010 12:15
V:\Projects\60070\Proj\TIPProjects-RVR2612A\Traffic\TrafficControl\TCP\r2612a_tc_tcpl6.dgn
derichardson AT WZTC237460

PROJ. REFERENCE NO.	SHEET NO.
R-2612A	TCP-17



APPROVED: [signature] DATE: 8/3/10

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 022104 ENGINEER JOHN S. KITE, JR.

PHASE II

TEMPORARY TRAFFIC PATTERN FOR INSTALLING SPAN B GIRDERS

SCALE:	NONE
DATE:	
DWG. BY:	
DESIGN BY:	
REVIEWED BY:	

REVISIONS

CADD FILE

03-AUG-2010 12:21
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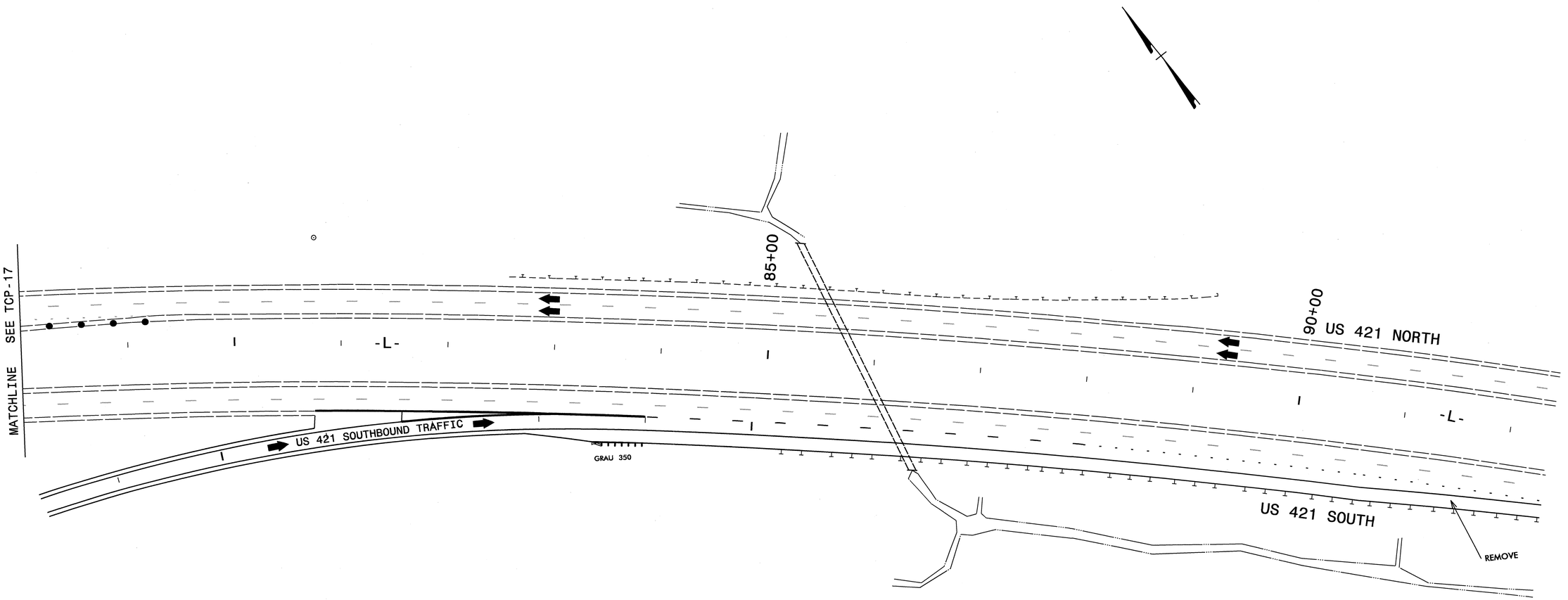
derichardson AT WZTC237460

PROJ. REFERENCE NO.	SHEET NO.
R-2612A	TCP-18



APPROVED: [signature] DATE: 8/3/10

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 022104 ENGINEER JOHN S. KITE, III

PHASE II

TEMPORARY TRAFFIC PATTERN FOR INSTALLING SPAN B GIRDERS

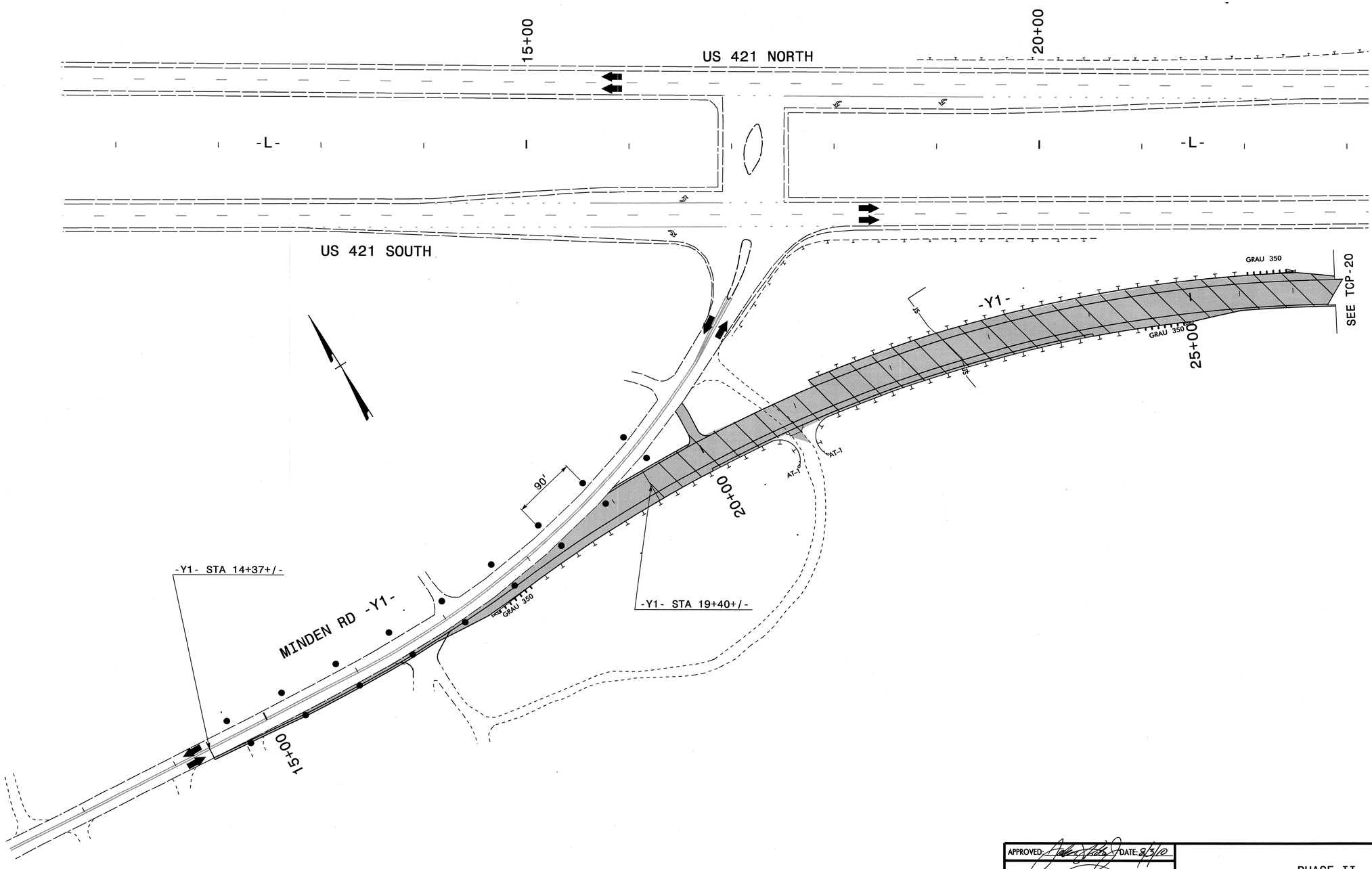
SCALE:	NONE
DATE:	
DWG. BY:	
DESIGN BY:	
REVIEWED BY:	

DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH TRAFFIC

REVISIONS	
CADD FILE	

02-AUG-2010 13:13
\\Dot\dfsroot01\Proj\TIPProjects-R\R2612A\Traffic\TrafficControl\TCP\r2612a_tc_tcpl8.dgn
derichardson AT WZTC237460

PROJ. REFERENCE NO.	SHEET NO.
R-2612A	TCP-19



02-AUG-2010 13:12
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derichardson AT WZTC237460

APPROVED: DATE: 8/3/10

SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 022104 JOHN S. KITE, III

PHASE II

SCALE:	NONE
DATE:	
DWG. BY:	
DESIGN BY:	
REVIEWED BY:	

WORK ZONE TRAFFIC CONTROL

REVISIONS	
CADD FILE	

PROJ. REFERENCE NO.	SHEET NO.
R-2612A	TCP-20

HAGAN STONE PARK RD -Y4-

ROAD CLOSED TO TRAFFIC DURING
PAVED SHOULDER REPLACEMENT
SEE DETOUR DETAIL 2 ON TCP-26

-L- STA 41+30+/-

GRAU 350

45+00

US 421 NORTH

50+00

110'

-RPB- STA 14+00+/-

-RPB-

-L-

-L-

SEE TCP-21

US 421 SOUTH

RAMP C (CLOSED)

-Y1-

-Y1-

SEE TCP-16

GRAU 350

45+00

50+00

55+00

-Y1- STA 50+15+/-

-Y1- STA 50+43+/-

HAGAN STONE PARK RD -Y4-

APPROVED: _____ DATE: 8/3/10

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 022104 ENGINEER JOHN S. KITE, JR.

PHASE II

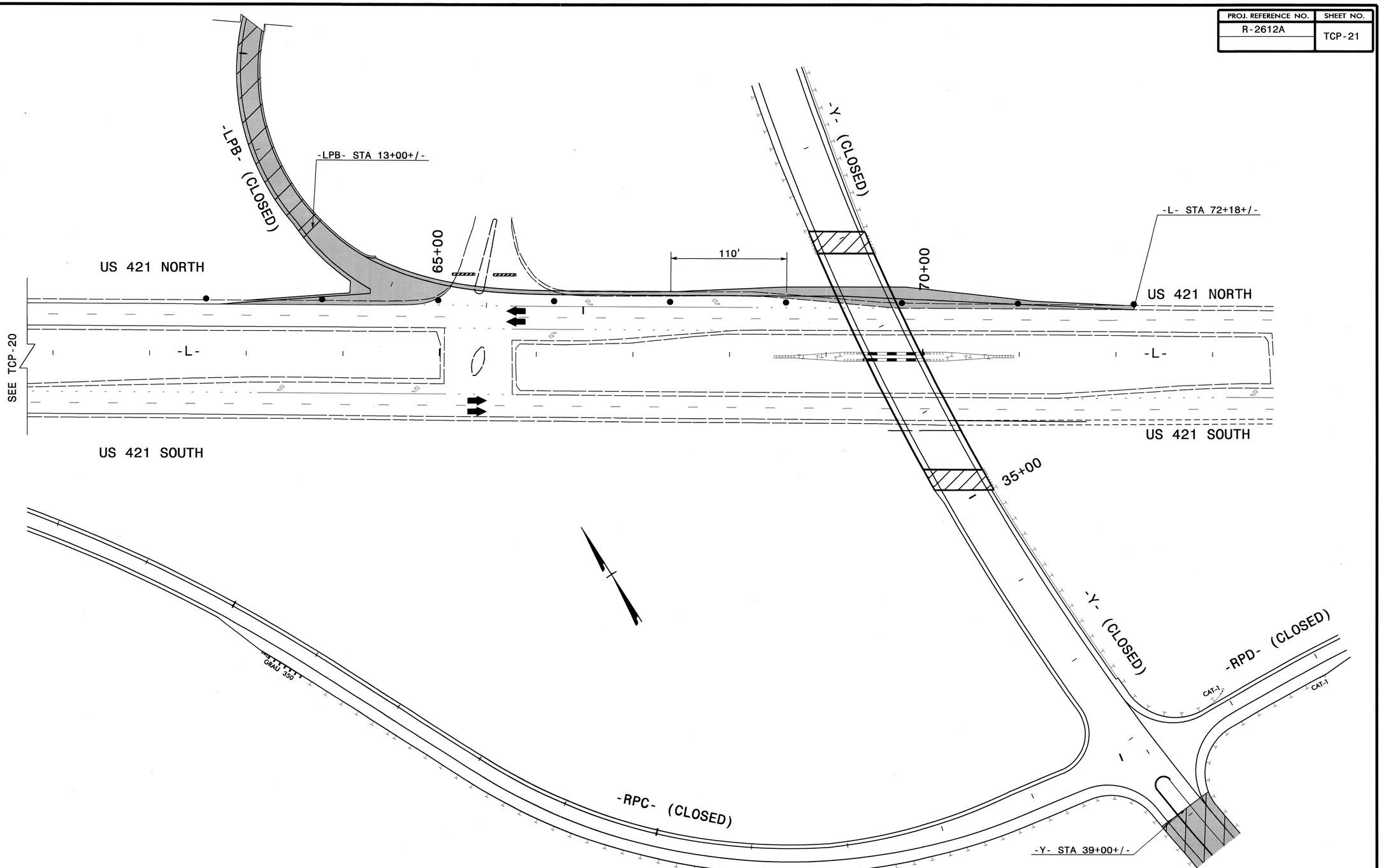
SCALE:	NONE
DATE:	
DWG. BY:	
DESIGN BY:	
REVIEWED BY:	

REVISIONS

CADD FILE

03-AUG-2010 12:24
V:\Projects\50101\Proj\TIPProjects-R\R2612A\Traffic\TrafficControl\TCP\r2612a_tc_tcp20.dgn
derlchardson AT WZTC237460

PROJ. REFERENCE NO.	SHEET NO.
R-2612A	TCP-21



APPROVED: [signature] DATE: 8/3/10

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 022104 ENGINEER JOHN S. KITE, JR.

PHASE II

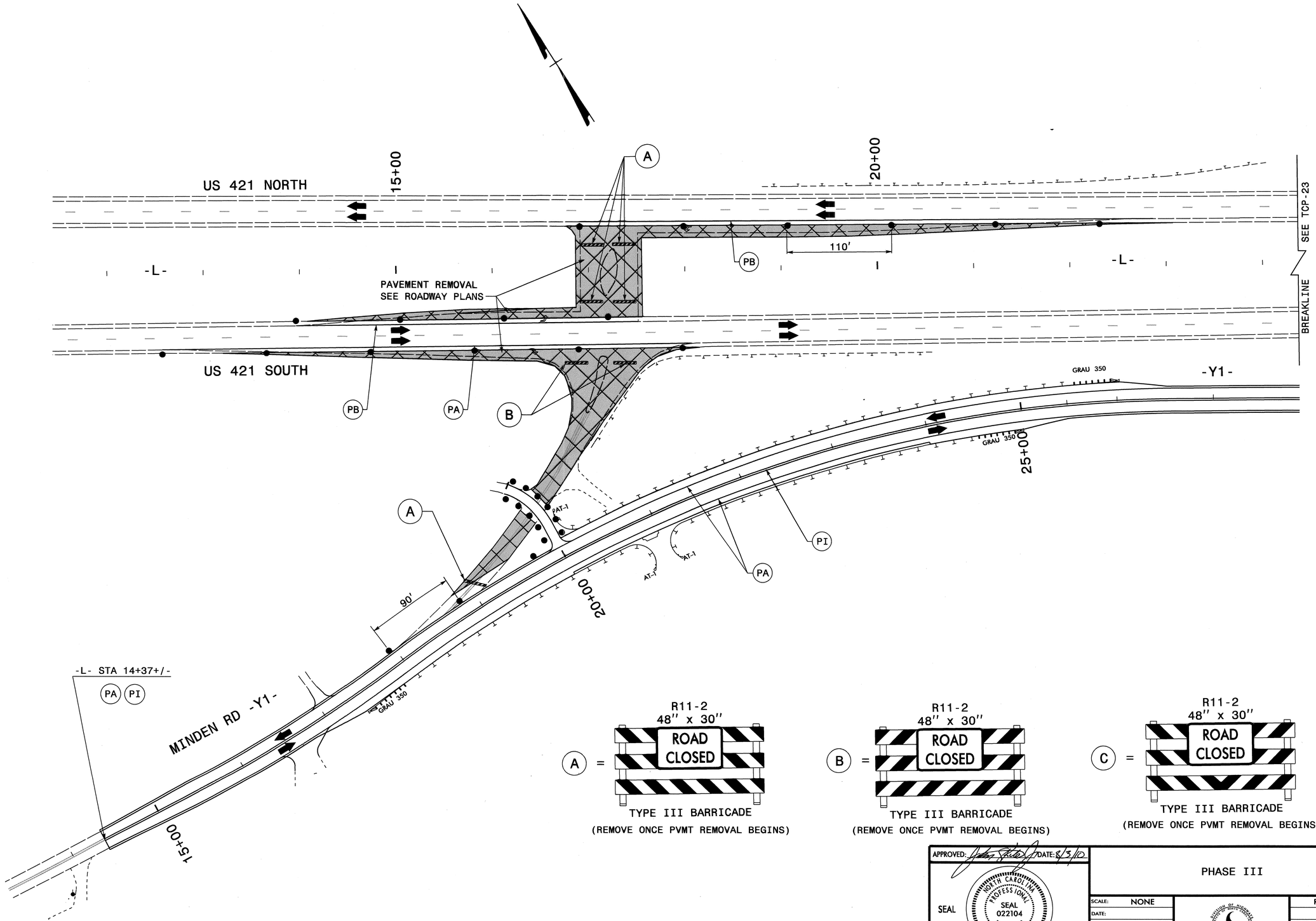
SCALE:	NONE
DATE:	
DWG. BY:	
DESIGN BY:	
REVIEWED BY:	

REVISIONS

CADD FILE

03-AUG-2010 12:24
\\dot\dfsroot01\Proj\TIPProjects-R\R2612A\Traffic\TrafficControl\TCP\r2612a_tc_tcp21.dgn
derichardson AT WZTC237460

PROJ. REFERENCE NO.	SHEET NO.
R-2612A	TCP-22



A = R11-2 48" x 30" ROAD CLOSED
TYPE III BARRICADE
(REMOVE ONCE PVMT REMOVAL BEGINS)

B = R11-2 48" x 30" ROAD CLOSED
TYPE III BARRICADE
(REMOVE ONCE PVMT REMOVAL BEGINS)

C = R11-2 48" x 30" ROAD CLOSED
TYPE III BARRICADE
(REMOVE ONCE PVMT REMOVAL BEGINS)

APPROVED: _____ DATE: 8/3/10

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 022104 ENGINEER JOHN S. KITE JR.

PHASE III

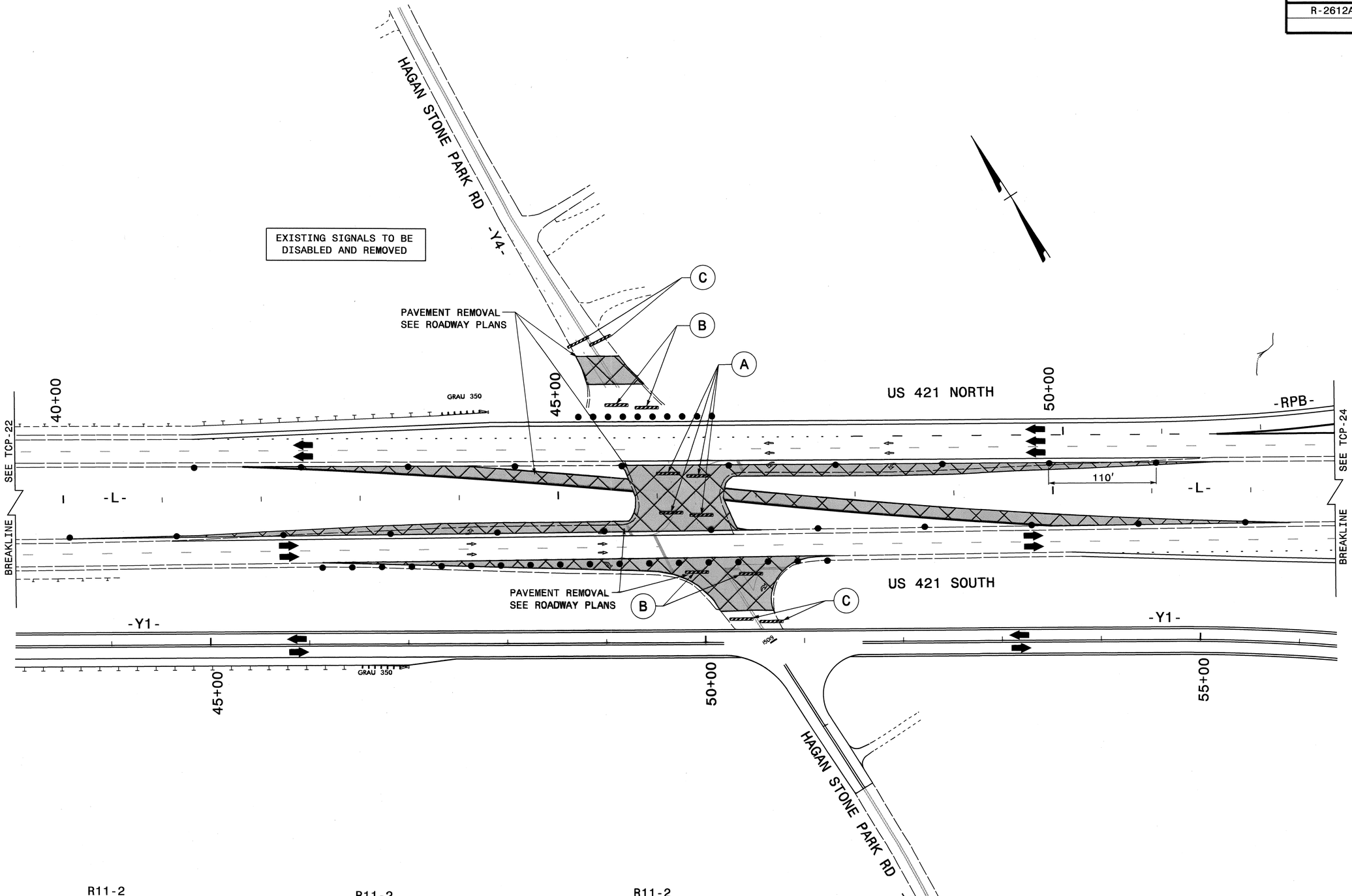
SCALE:	NONE
DATE:	
DWG. BY:	
DESIGN BY:	
REVIEWED BY:	

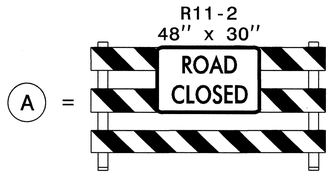
REVISIONS

CADD FILE

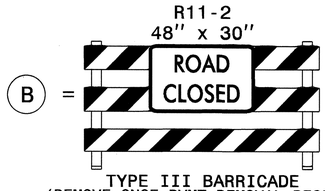
03-AUG-2010 12:23
\\DotNdfsr00101\Proj\TIPProjects-RVR2612A\Traffic\TrafficControl\TCPVr2612a_tc_tcp22.dgn
derichardson AT WZTC237460

PROJ. REFERENCE NO.	SHEET NO.
R-2612A	TCP-23

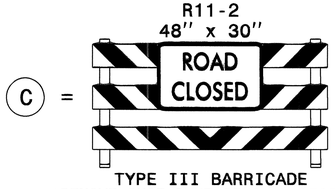




TYPE III BARRICADE
(REMOVE ONCE PVMT REMOVAL BEGINS)



TYPE III BARRICADE
(REMOVE ONCE PVMT REMOVAL BEGINS)



TYPE III BARRICADE
(REMOVE ONCE PVMT REMOVAL BEGINS)

APPROVED: DATE: 8/3/10

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 022104 ENGINEER JOHN S. KITE, JR.

PHASE III

SCALE: NONE
DATE:
DWG. BY:
DESIGN BY:
REVIEWED BY:

REVISIONS

CADD FILE

03-AUG-2010 12:23
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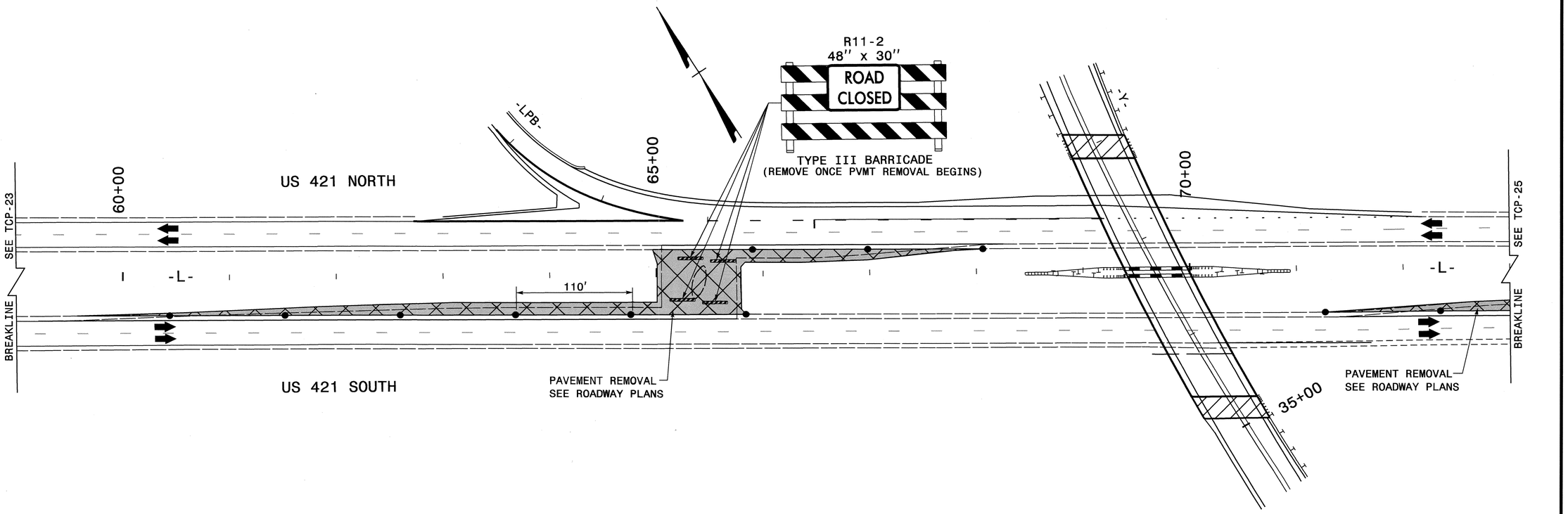
derichardson AT WZTC237460

PROJ. REFERENCE NO.	SHEET NO.
R-2612A	TCP-24



APPROVED: _____ DATE: 8/3/10

SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 022104 JOHN S. KITE JR.

PHASE III

SCALE:	NONE
DATE:	
DWG. BY:	
DESIGN BY:	
REVIEWED BY:	

REVISIONS	
CADD FILE	

03-AUG-2010 12:23
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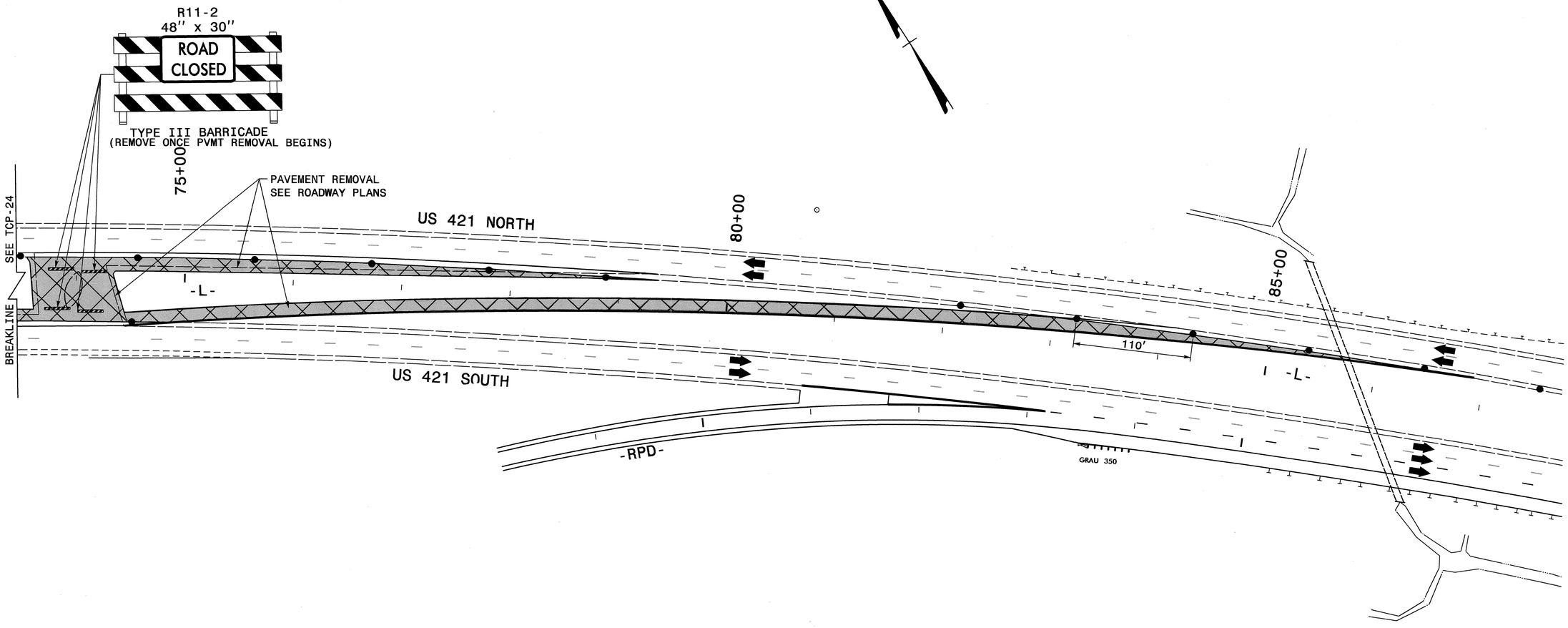
dsrichardson AT WZTC237460

PROJ. REFERENCE NO.	SHEET NO.
R-2612A	TCP-25



APPROVED: [signature] DATE: 8/3/10

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 022104 ENGINEER JOHN S. KITE, JR.

PHASE III

SCALE:	NONE
DATE:	
DWG. BY:	
DESIGN BY:	
REVIEWED BY:	

REVISIONS

CADD FILE

03-AUG-2010 12:22
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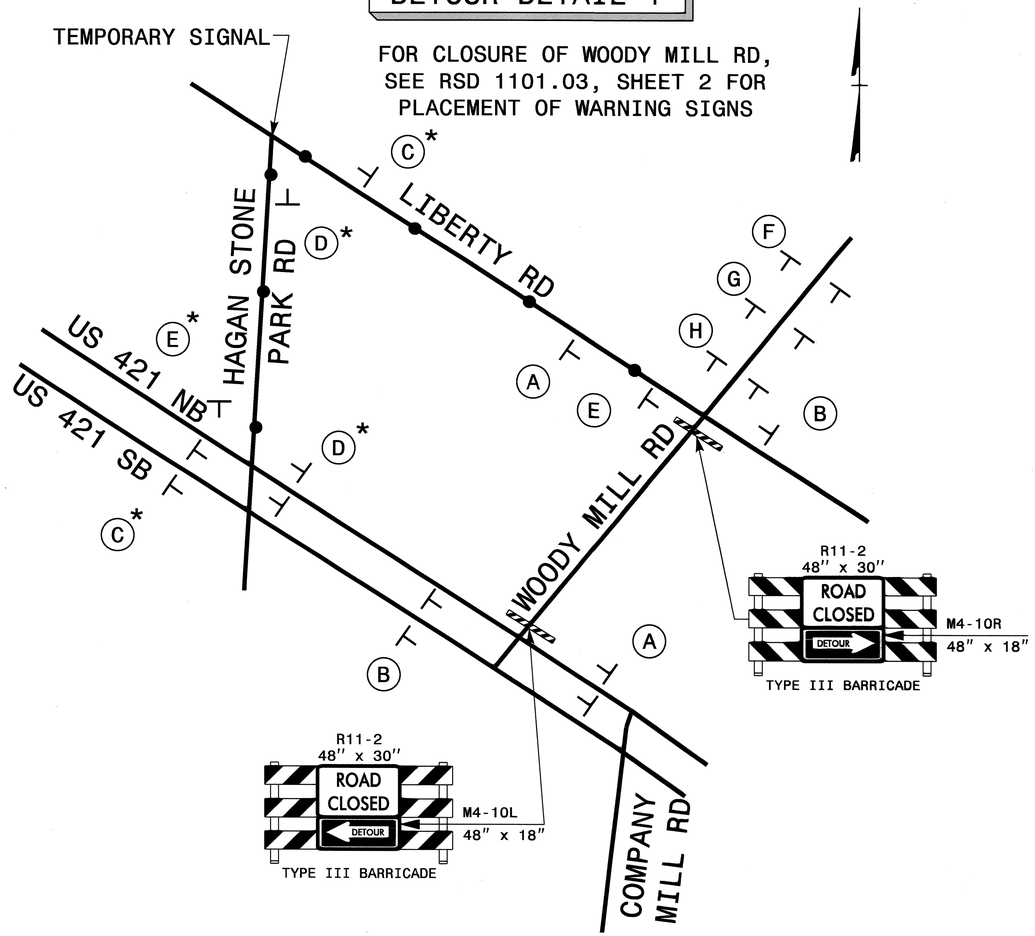
derichardson AT WZTC237460

PROJ. REFERENCE NO.	SHEET NO.
R-2612A	TCP-26

DETOUR DETAIL 1

FOR CLOSURE OF WOODY MILL RD,
SEE RSD 1101.03, SHEET 2 FOR
PLACEMENT OF WARNING SIGNS

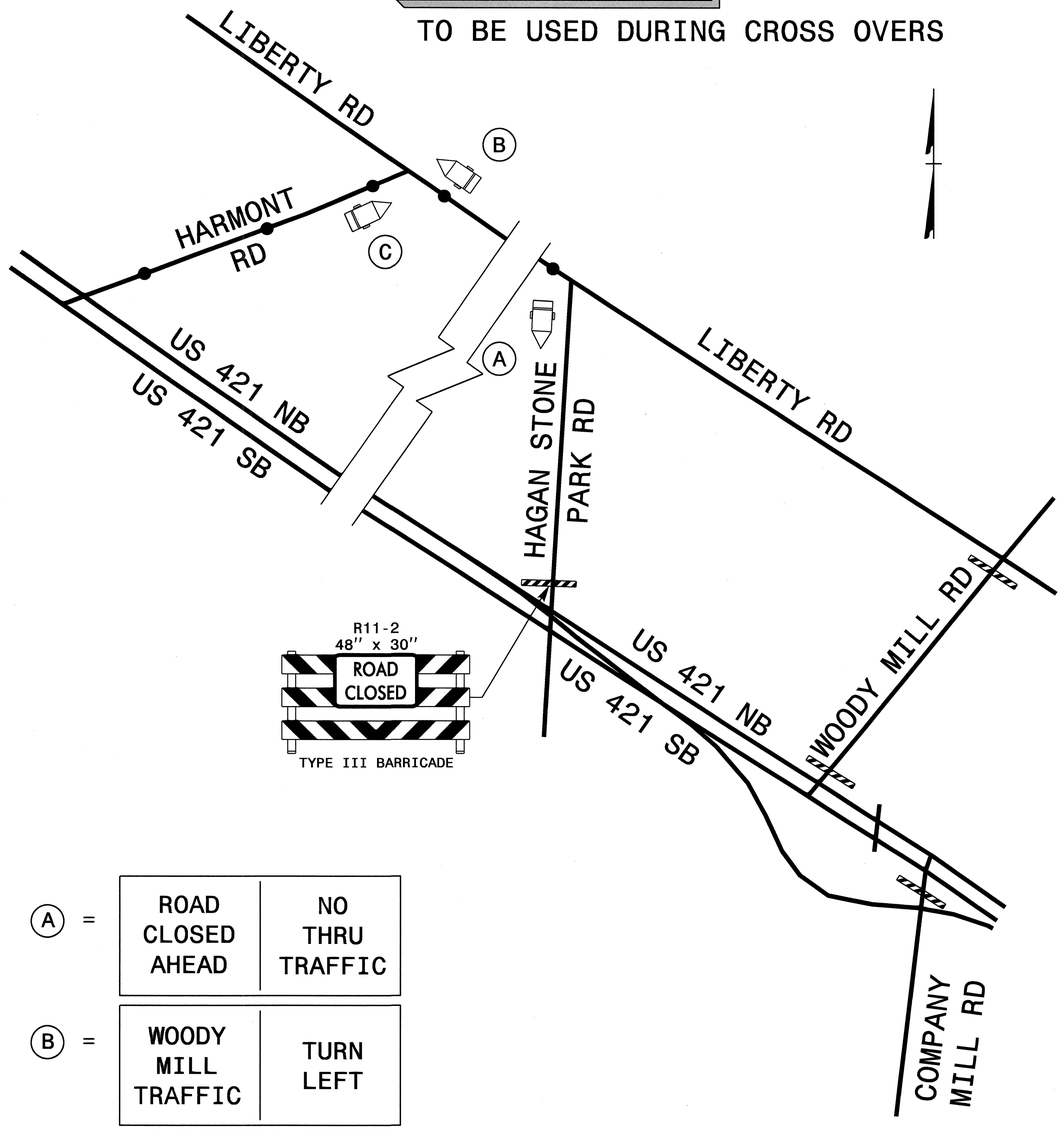


A =	ROAD CLOSED AHEAD W20-3 48" X 48"	B =	ROAD CLOSED W20-3 48" X 48" NEXT LEFT SP-4L 42" X 12"
	NEXT RIGHT SP-4R 42" X 12"		
C =	WOODY MILL RD SEE SD-1 DETOUR M4-8 24" X 12" M6-1 L 21" X 15"	D =	WOODY MILL RD SEE SD-1 DETOUR M4-8 24" X 12" M6-1 21" X 15"
E =	WOODY MILL RD SEE SD-1 END DETOUR M4-8 A 24" X 18"		
F =	ROAD CLOSED AHEAD W20-3 48" X 48"	G =	DETOUR AHEAD W20-2 48" X 48"
H =	ROAD CLOSED 1000 FT W20-3 48" X 48"		

* INDICATES SIGN IS TO BE COVERED DURING DETOUR DETAIL 2 APPLICATION

DETOUR DETAIL 2

TO BE USED DURING CROSS OVERS



A =	ROAD CLOSED AHEAD	NO THRU TRAFFIC
B =	WOODY MILL TRAFFIC	TURN LEFT
C =	WOODY MILL TRAFFIC	TURN RIGHT

APPROVED: DATE: 5/5/10

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 022104 ENGINEER JOHN S. KITE JR.

DETOUR DETAILS

SCALE:	NONE
DATE:	
DWG. BY:	
DESIGN BY:	
REVIEWED BY:	

REVISIONS

CADD FILE

03-AUG-2010 12:25
V:\Documentation\Proj\TIPProjects-R\R2612A\TrafficTrafficControl\TCPs\r2612a_tc_6 (detours).dgn
dericharcson ALT WZTC237460

PROJ. REFERENCE NO.	SHEET NO.
R-2612A	TCP-27

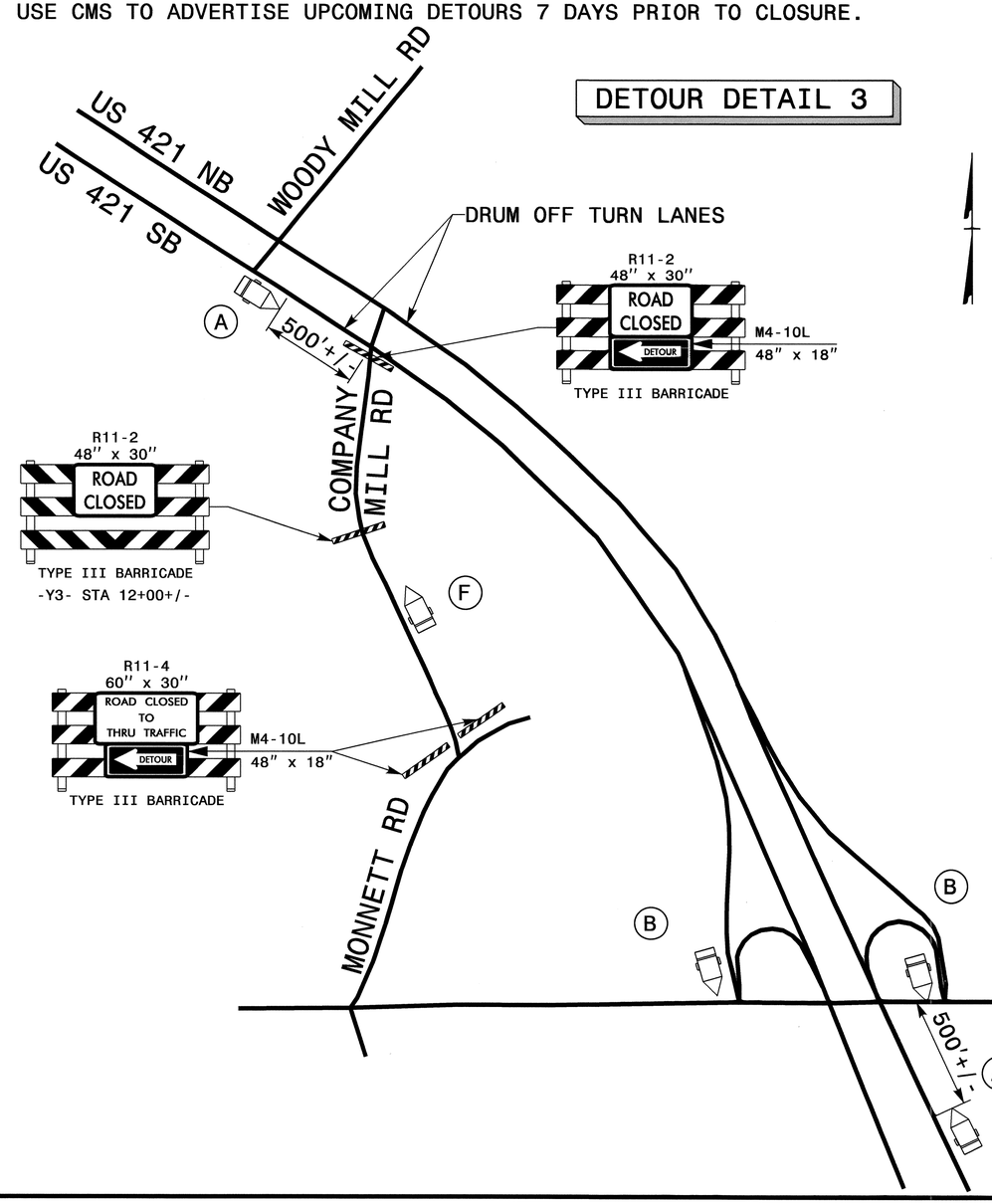
(A) =	COMPANY MILL RD CLOSED	USE NC 62	(B) =	COMPANY MILL RD DETOUR	TURN RIGHT	(C) =	COMPANY MILL RD CLOSED	USE HAGAN STONE RD	(D) =	COMPANY MILL RD CLOSED	USE HAGAN STONE RD	(E) =	COMPANY MILL RD DETOUR	TURN LEFT	(F) =	COMPANY MILL RD CLOSED	500' AHEAD

NOTE:

ALL CMS BOARDS ARE TO BE PAID FOR AS CHANGEABLE MESSAGE SIGNS SHORT TERM.

USE CMS TO ADVERTISE UPCOMING DETOURS 7 DAYS PRIOR TO CLOSURE.

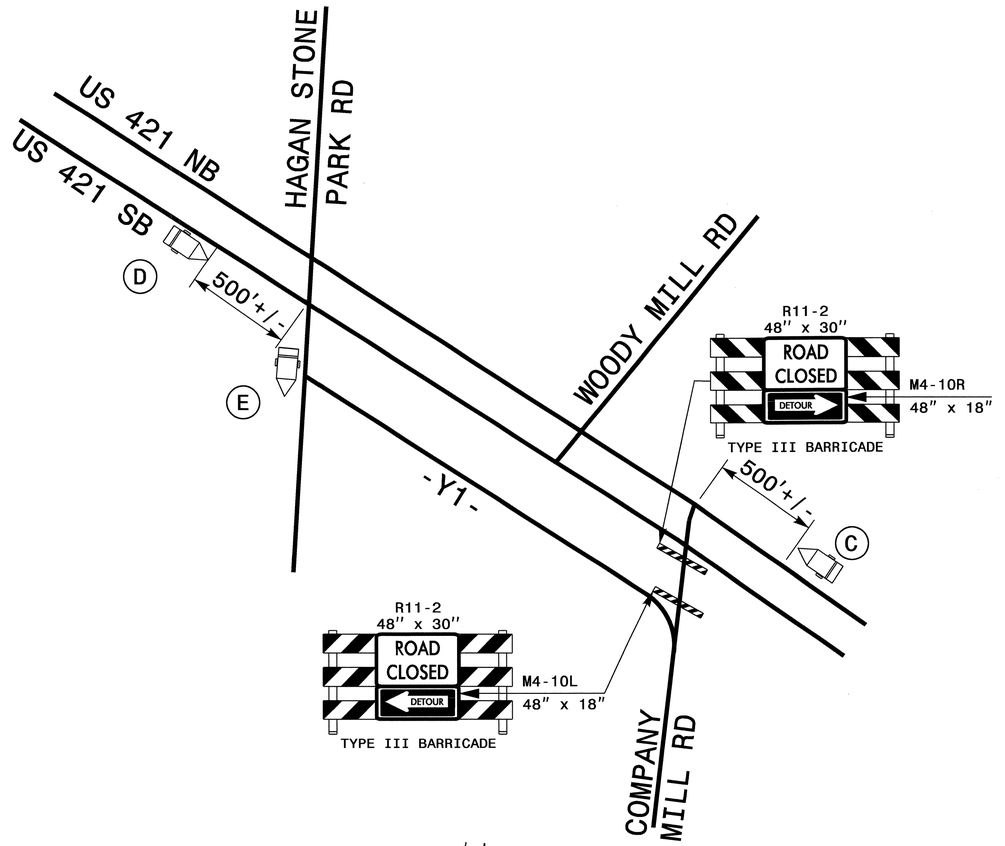
DETOUR DETAIL 3



DETOUR DETAIL 4

NOTE:

REMOVE CMS BOARDS 7 DAYS AFTER TRAFFIC SHIFT



APPROVED: DATE: 8/3/10

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 022104 ENGINEER JOHN S. KITE, JR.

DETOUR DETAILS

SCALE:	NONE
DATE:	
DWG. BY:	
DESIGN BY:	
REVIEWED BY:	

WORK ZONE TRAFFIC CONTROL

REVISIONS

CADD FILE

03-AUG-2010 09:03
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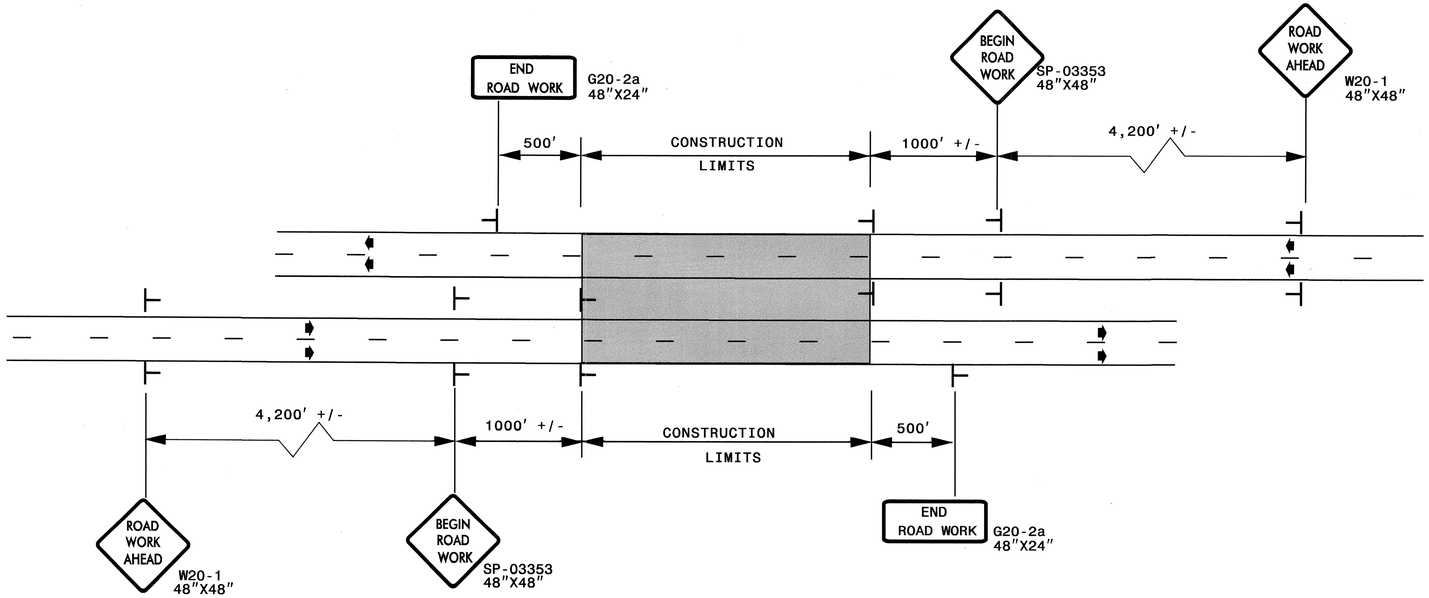
derichardson AT WZTC237460

ADVANCED WORK ZONE WARNING SIGNING FOR FREEWAYS (4 LANES OR GREATER)

PROJ. REFERENCE NO.	SHEET NO.
R-2612A	TCP-28

DETAIL A

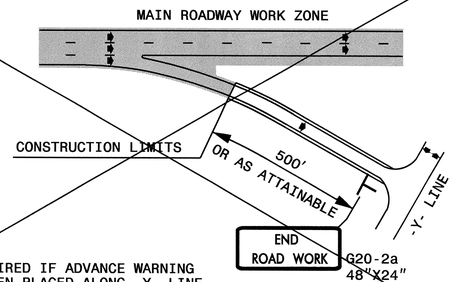


LEGEND
- ⊢ STATIONARY SIGN
- ➧ DIRECTION OF TRAFFIC FLOW

* USE THE "$250 SPEEDING PENALTY" SIGN, SPEED LIMIT SIGN, AND ORANGE PANEL; ONLY WHEN A "$250 SPEEDING PENALTY" ORDINANCE HAS BEEN ISSUED BY THE REGIONAL TRAFFIC ENGINEER.

DETAIL B

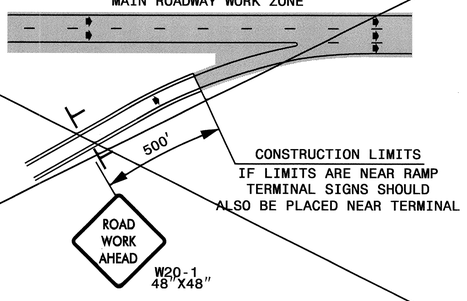
EXIT RAMPS



NOTE: SIGN NOT REQUIRED IF ADVANCE WARNING SIGNS HAVE BEEN PLACED ALONG -Y- LINE THAT RAMP INTERSECTS. IF CONSTRUCTION LIMITS ARE AT END OF RAMP, PLACE SIGN AT END OF RAMP.

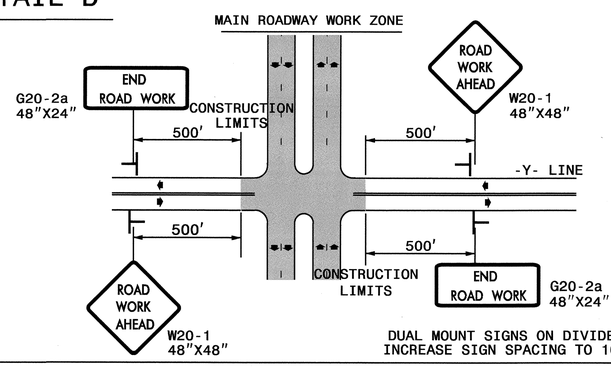
DETAIL C

ENTRANCE RAMPS



DETAIL D

-Y- LINES



DUAL MOUNT SIGNS ON DIVIDED HIGHWAYS AND INCREASE SIGN SPACING TO 1000'+/-.

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.

APPROVED: [signature] DATE: 7/3/10

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 022104 ENGINEER JOHN S. KITE JR.

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

ADVANCED WORK ZONE WARNING SIGNS FOR FREEWAYS (4 LANES OR GREATER)

02-AUG-2010 14:09
\\Dot\dfsroot01\Proj\TIPProjects-R\R2612A\Traffic\TrafficControl\TCP\r2612a_tc_btcp.dgn
derichardson AT WZTC237460