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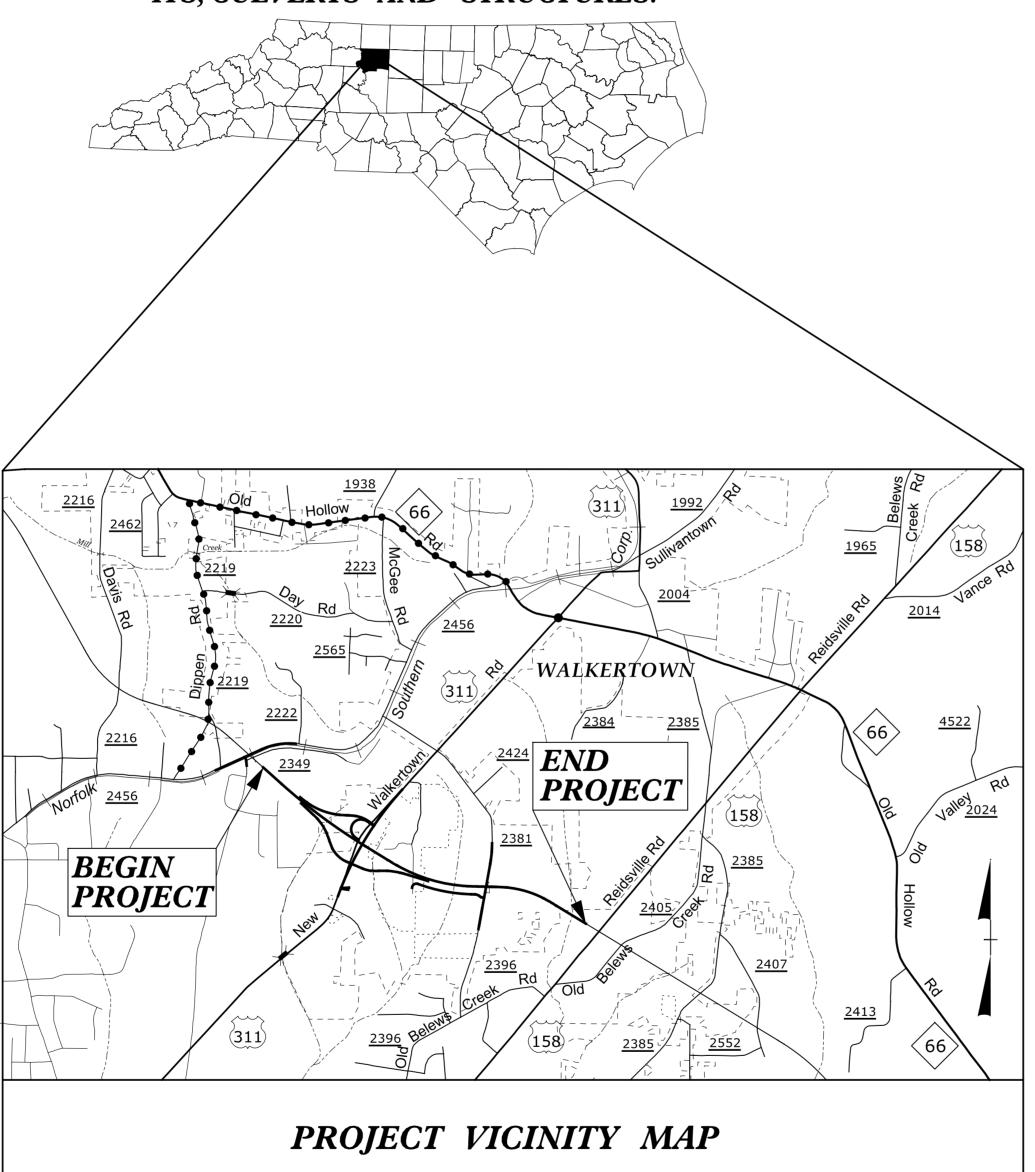
### STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

# TRANSPORTATION MANAGEMENT PLAN

# FORSYTH COUNTY

LOCATION: WINSTON – SALEM NORTHERN BELTWAY (EASTERN SECTION) FROM US 311 TO US 158 (FUTURE I-74)

TYPE OF WORK: WIDENING, GRADING, PAVING, DRAINAGE, SIGNING, SIGNALS, ITS, CULVERTS AND STRUCTURES.





# ICA Engineering, Inc. 5121 Kingdom Way, Suite 100 Raleigh, NC 27607 NC License No: F–0258

SHEET NO.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

## Michael T. Rzepka APPROVED: *DATE:* 7/5/2017 SEAL

N.C.D.O.T. WORK ZONE TRAFFIC CONTROL

A. LYUDMIRSKAYA TRAFFIC CONTROL DESIGN ENGINEER

TITLE TITLE SHEET AND INDEX OF SHEETS

INDEX OF SHEETS

LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND & TEMPORARY PAVEMENT MARKING SCHEDULE

TRANSPORTATION OPERATION PLAN (GENERAL NOTES, MANAGMENT STRATEGIES, LOCAL NOTES)

DETOUR PLAN OLD WALKERTOWN RD (SR 2456) CLOSURE TMP-2A TMP-2B OLD WALKERTOWN RD DETOUR SIGNING DETAIL

TMP-2C ROAD CLOSURE SIGNS AND DETOUR SIGNS

SPECIAL SIGN DESIGN TMP-2D TMP-3 PHASING

SHEET NO.

TMP - 1

TMP-1A

TMP-2

TMP-4 THRU 9 PHASE I DETAILS TMP-10 THRU 13 PHASE II DETAILS TMP-14 THRU 19 PHASE III DETAILS

PHASE III PERMANENT BARRICADE LOCATIONS TMP-20

#### 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 JANUARY 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

#### TITLE STD. NO.

SID. NO.	-
1101.01	WORK ZONE ADVANCE 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
1130.01	DRUM
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1180.01	SKINNY-DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO-LANE AND MULTI-LANE ROADWAYS
1205.12	PAVEMENT MARKINGS - BRIDGES
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY
1261.01	GUARDRAIL AND BARRIER DELINEATORS - INSTALLATION SPACING
1261.02	GUARDRAIL AND BARRIER DELINEATORS - TYPES AND MOUNTING
1261.03	GUARDRAIL END DELINEATION



TEMPORARY PAVEMENT MARKING

SYMBOL

DESCRIPTION

PAINT (4")

PAINT (24')

WHITE STOP BAR

YELLOW & YELLOW

WHITE EDGELINE

YELLOW EDGELINE

DOUBLE YELLOW CENTERLINE

TEMPORARY RAISED MARKERS

PROJ. REFERENCE NO. SHEET NO. U-2579C TMP-1A

#### **LEGEND**

#### **GENERAL**

DIRECTION OF TRAFFIC FLOW

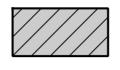
DIRECTION OF PEDESTRIAN TRAFFIC FLOW

----- EXIST. PVMT.

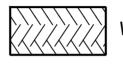
NORTH ARROW

PROPOSED PVMT.

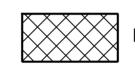
WORK AREA



CONTINUING CONSTRUCTION



WEDGING



#### TRAFFIC CONTROL DEVICES

BARRICADE (TYPE III) 

DRUM ● SKINNY DRUM ◎ TUBULAR MARKER

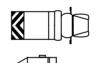
TEMPORARY CRASH CUSHION



FLASHING ARROW PANEL (TYPE C)



LAW ENFORCEMENT



TRUCK MOUNTED IMPACT ATTENUATOR (TMIA)

CHANGEABLE MESSAGE SIGN

#### TEMPORARY SIGNING

PORTABLE SIGN

— STATIONARY SIGN

STATIONARY OR PORTABLE SIGN

#### SIGNALS







#### PAVEMENT MARKINGS

——EXISTING LINES ——TEMPORARY LINES

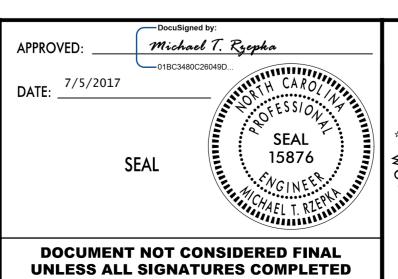
#### PAVEMENT MARKERS

CRYSTAL/CRYSTAL CRYSTAL/RED

YELLOW/YELLOW

#### PAVEMENT MARKING SYMBOLS

PAVEMENT MARKING SYMBOLS





ROADWAY STANDARD DRAWINGS, LEGEND & TEMPORARY PAVEMENT MARKING SCHEDULE

#### MANAGEMENT STRATEGIES

THE FOLLOWING LISTED STRATEGIES DERIVE FROM DETAILED DESIGN LEVEL ASSESSMENTS OF THE WORK ZONE IMPACTS CONDUCTED DURING THE DEVELOPMENTAL STAGES OF THIS TRANSPORTATION MANAGEMENT PLAN (TMP).

RECOMMENDED MANAGEMENT STRATEGIES RELATIVE TO THIS TMP ARE AS FOLLOWS:

#### US 311(-Y1-):

TRAFFIC WILL BE MAINTAINED ON EXISTING US 311 AND A TEMPORARY ONSITE DETOUR UTILIZING LANE CLOSURES AND FLAGGING AS NECESSARY.

#### WILLISTON ROAD(-Y2-):

TRAFFIC WILL BE MAINTAINED ON EXISTING WILLISTON ROAD AND A TEMPORARY ONSITE DETOUR UTILIZING LANE CLOSURES AND FLAGGING AS NECESSARY.

#### OLD WALKERTOWN ROAD (-Y3-) AND NORTHAMPTON DRIVE 9-Y4-):

OLD WALKERTOWN ROAD WILL BE CLOSED TO TRAFFIC WITHIN THE PROJECT LIMITS FOR CONSTRUCTION. TRAFFIC WILL USE AN OFFSITE DETOUR CONSISTING OF SR 2219 (DIPPEN ROAD) AND NC 66. NORTHAMPTON DRIVE ACCESS TO OLD WALKERTOWN ROAD WILL BE CLOSED DURING THE SAME PERIOD.

#### LOCAL NOTES

- 1) MAINTAIN DRIVE ACCESS TO PROPERTIES DURING CONSTRUCTION AT ALL TIMES.
- 2) COORDINATE OPENING OF -L- AND RAMPS/LOOPS BETWEEN US 311 AND US 158. USE RED AND WHITE STRIPES FOR PERMANENT BARRICADES TO KEEP CLOSED NEWLY CONSTRUCTED -L- WEST OF PROPOSED -Y1- (US 311) AND RAMPS -Y1RPB- AND -Y1RPC-.
- 3) COORDINATE WITH THE DIVISION TRAFFIC ENGINEER AND THE REGIONAL TRAFFIC ENGINEER FOR SIGNAL ACTIVATION ON US 311 (-Y1-) AT RAMP B (-Y1RPB-)/LOOP B (-Y1LPB-) AND RAMP C (-Y1RPC-)/ RAMP D (-Y1RPD-) INTERSECTIONS.

#### 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

WHEN SCHOOL IS IN SESSION, 6:00 AM - 9:00 AM, US 311 (-Y1-) 3:00 PM - 6:00 PM WILLISTON RD. (-Y2-) WHEN SCHOOL IS IN SESSION, 6:00 AM - 9:00 AM, 3:00 PM - 6:00 PM

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

#### ROAD NAME

US 311 (-Y1-) WILLISTON RD. (-Y2-)

#### 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 6:00 A.M. DECEMBER 31st TO 6:00 P.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY. SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 6:00 P.M. THE FOLLOWING TUESDAY.

- 3. FOR EASTER, BETWEEN THE HOURS OF 6:00 A.M. THURSDAY AND 6:00 P.M. MONDAY.
- 4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY TO 6:00 P.M. TUESDAY.
- 5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 6:00 P.M. THE DAY AFTER INDEPENDENCE DAY.

IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 6:00 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 6:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.

- 6. FOR LABOR DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY AND 6:00 P.M. TUESDAY.
- 7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00 A.M. TUESDAY TO 6:00 P.M. MONDAY.
- 8. FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 6:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.
- C) DO NOT CONDUCT SINGLE VEHICLE HAULING AS FOLLOWS:

**ROAD NAME** 

DAY AND TIME RESTRICTIONS

US 311 (-Y1-) WHEN SCHOOL IS IN SESSION, 6:00 AM - 9:00 AM, 3:00 PM - 6:00 PM WILLISTON RD. (-Y2-) WHEN SCHOOL IS IN SESSION, 6:00 AM - 9:00 AM, 3:00 PM - 6:00 PM

DO NOT CONDUCT MULTI-VEHICLE HAULING AS FOLLOWS:

ROAD NAME

DAY AND TIME RESTRICTIONS

US 311 (-Y1-) WHEN SCHOOL IS IN SESSION, 6:00 AM - 9:00 AM, 3:00 PM - 6:00 PM WILLISTON RD. (-Y2-) WHEN SCHOOL IS IN SESSION, 6:00 AM - 9:00 AM, 3:00 PM - 6:00 PM

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

- F) 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.
- 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.
- 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.

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

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Raleigh, NC 27607 NC License No: F-0258

PROJ. REFERENCE NO. SHEET NO. TMP-2 U-2579C

#### PAVEMENT EDGE DROP OFF REQUIREMENTS

L) 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.

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

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

#### SIGNING

- O) 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
- 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.

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.

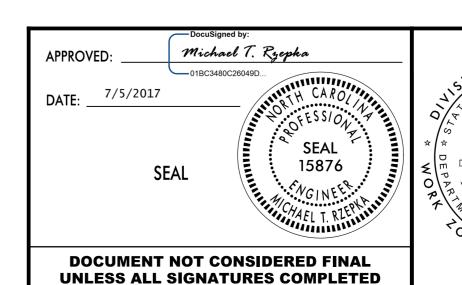
- ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.
- DO NOT INSTALL MORE THAN ONE LANE CLOSURE IN ANY ONE DIRECTION ON US 311 AND WILLISTON ROAD.
- INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE

#### PAVEMENT MARKINGS AND MARKERS

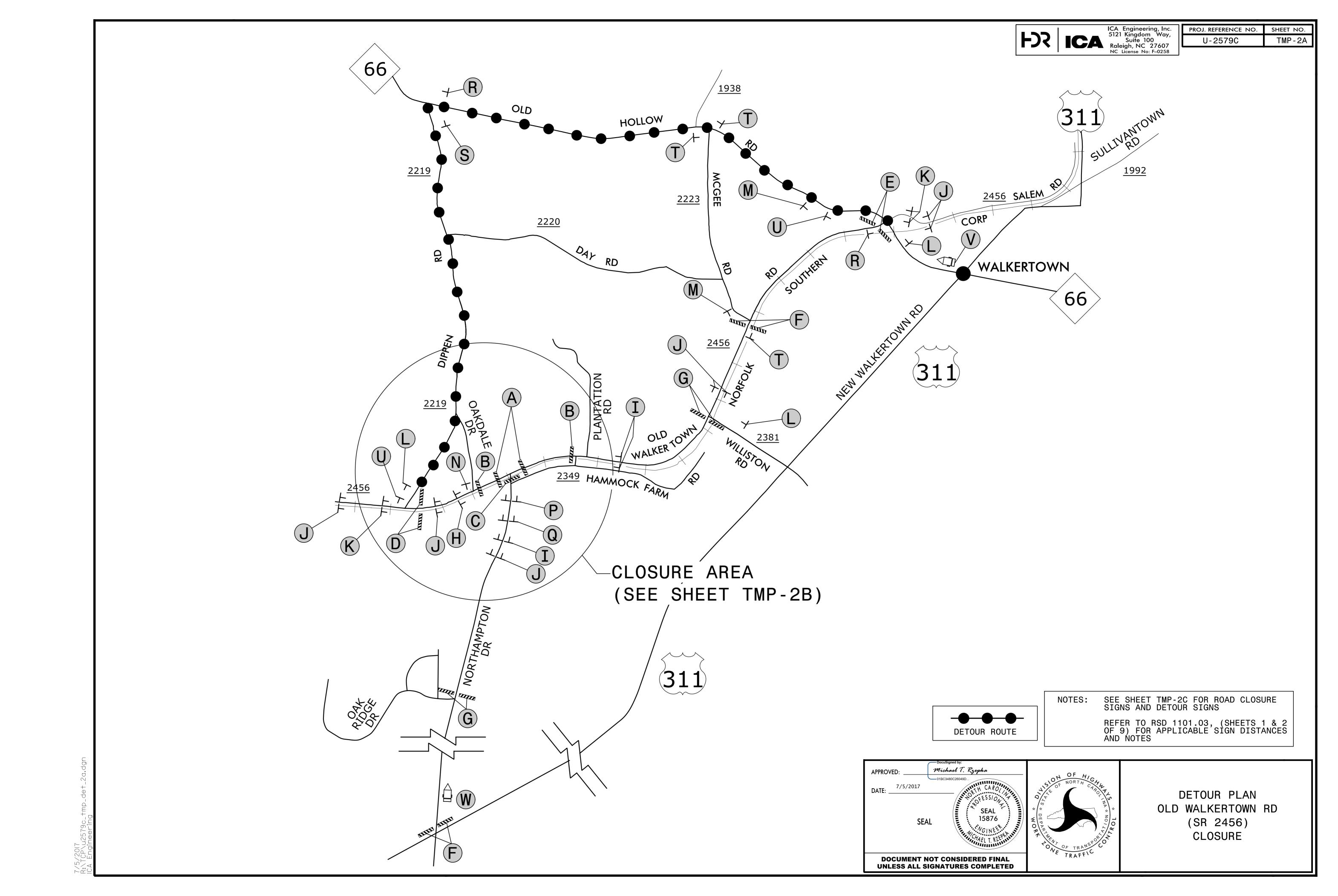
U) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:

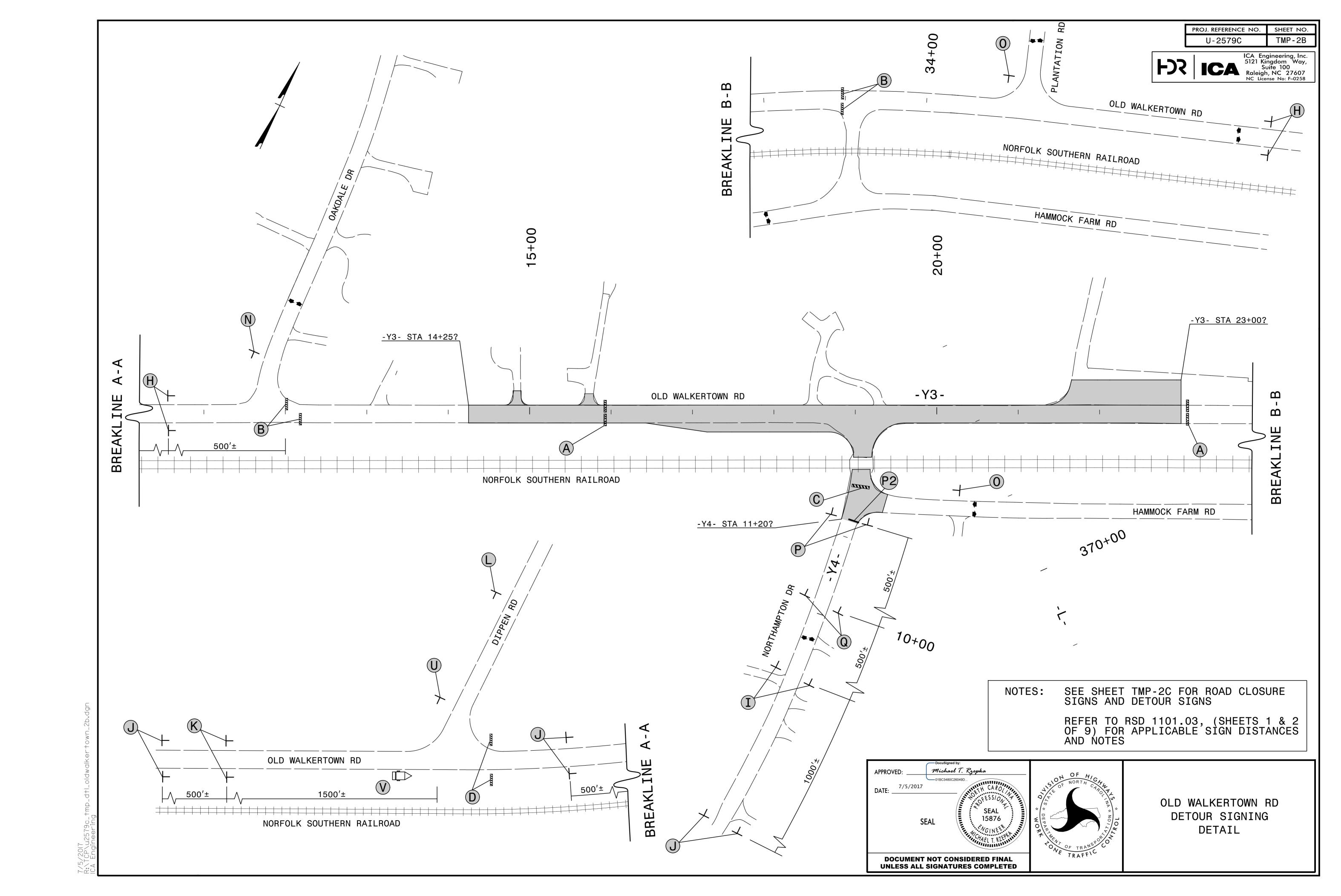
ROAD NAME MARKING MARKER US 311 (-Y1-) TEMPORARY RAISED PAINT WILLISTON ROAD (-Y2-) TEMPORARY RAISED PAINT

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

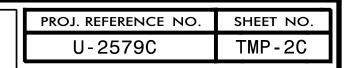


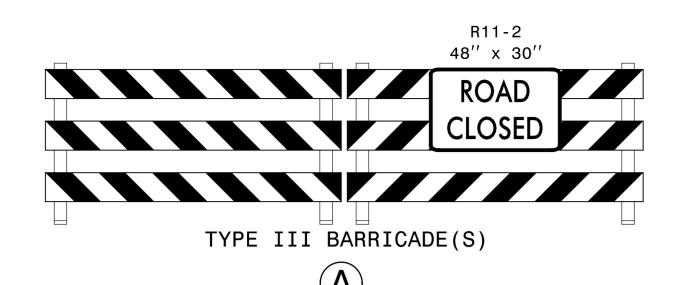
TRANSPORTATION **OPERATIONS** PLAN

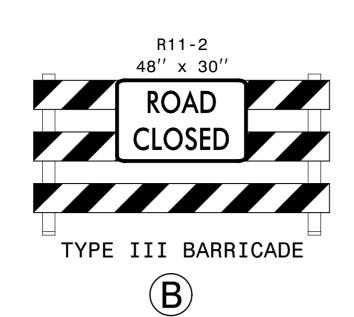


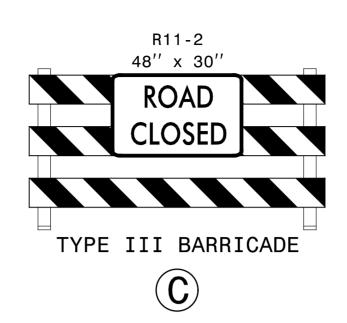


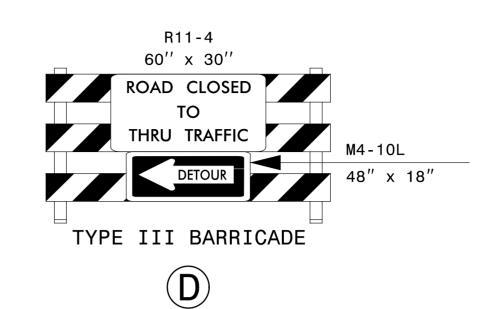


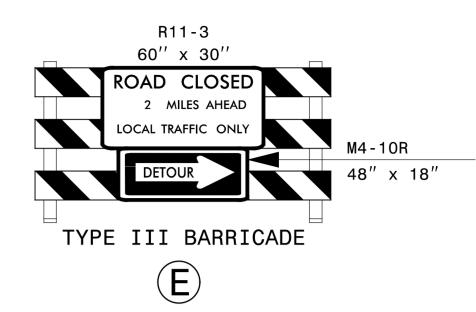




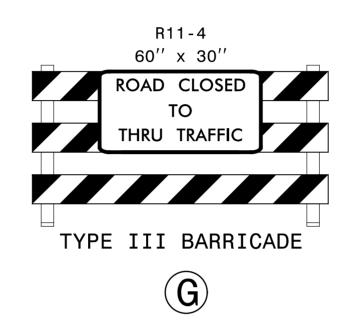










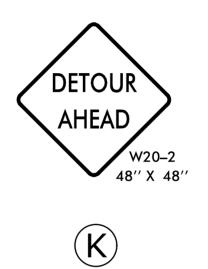


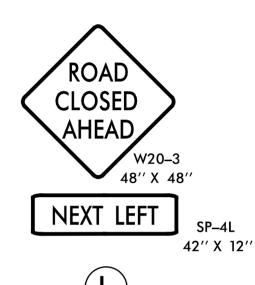


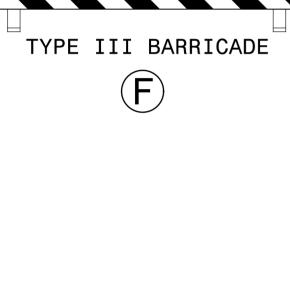
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ROAD

CLOSED

AHEAD

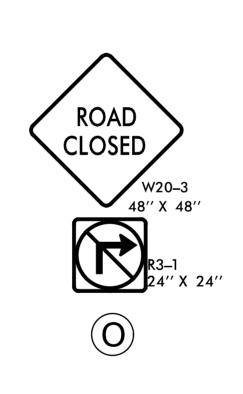
NEXT RIGHT

 $\bigcirc$ 

W20-3 48" X 48"

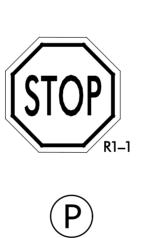
42" X 12"





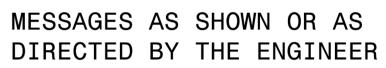
42" X 36"

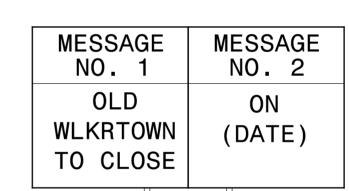
M4–8 24'' X 12''





42" X 36"





MESSAGE NO. 1	MESSAGE NO. 2
ACCESS	TO CLOSE
TO OLD	ON
WLKRTOWN	(DATE)

CHANGEABLE MESSAGE SIGN

CHANGEABLE MESSAGE SIGN

(W)

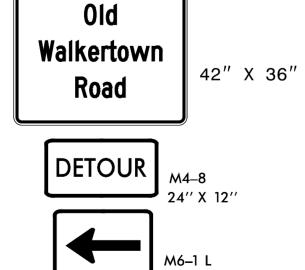
(V)

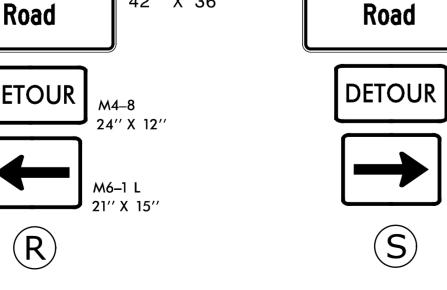
ACTIVATE CMS 7 DAYS PRIOR TO ROAD CLOSURE

REMOVE CMS AFTER ROAD CLOSURE

DELINEATE WITH DRUMS

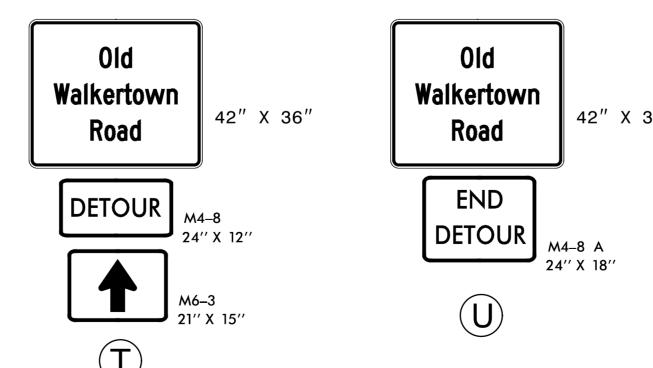




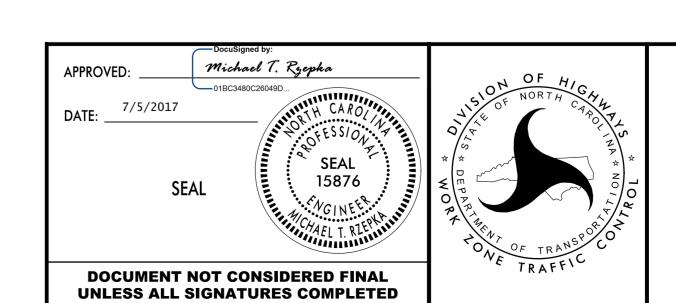


Old

Walkertown



SEE SHEET TMP-2D FOR SPECIAL SIGN DESIGN NOTE:



ROAD CLOSURE SIGNS AND DETOUR SIGNS

FOR ICA Engineering, Inc. 5121 Kingdom Way, Suite 100 Raleigh, NC 27607 NC License No: F-0258

PROJ. REFERENCE NO. SHEET NO. U-2579C TMP-2D

SIGN NUMBER:Old Walkertown BACKG COLOR: Fluorescent Orange
TYPE: STATIONARY COPY COLOR: Black

SYMBOL

QUANTITY: SEE PLANS

SIGN WIDTH: 3'-6"
HEIGHT: 3'-0"
TOTAL AREA: 10.5 Sq.Ft.

BORDER TYPE: INSET
RECESS: 0.47"
WIDTH: 0.63"
RADII: 1.5"

WID HT

Υ

NO. Z BARS: LENGTH: MAT'L: 0.080" (2.0 mm) ALUMINUM

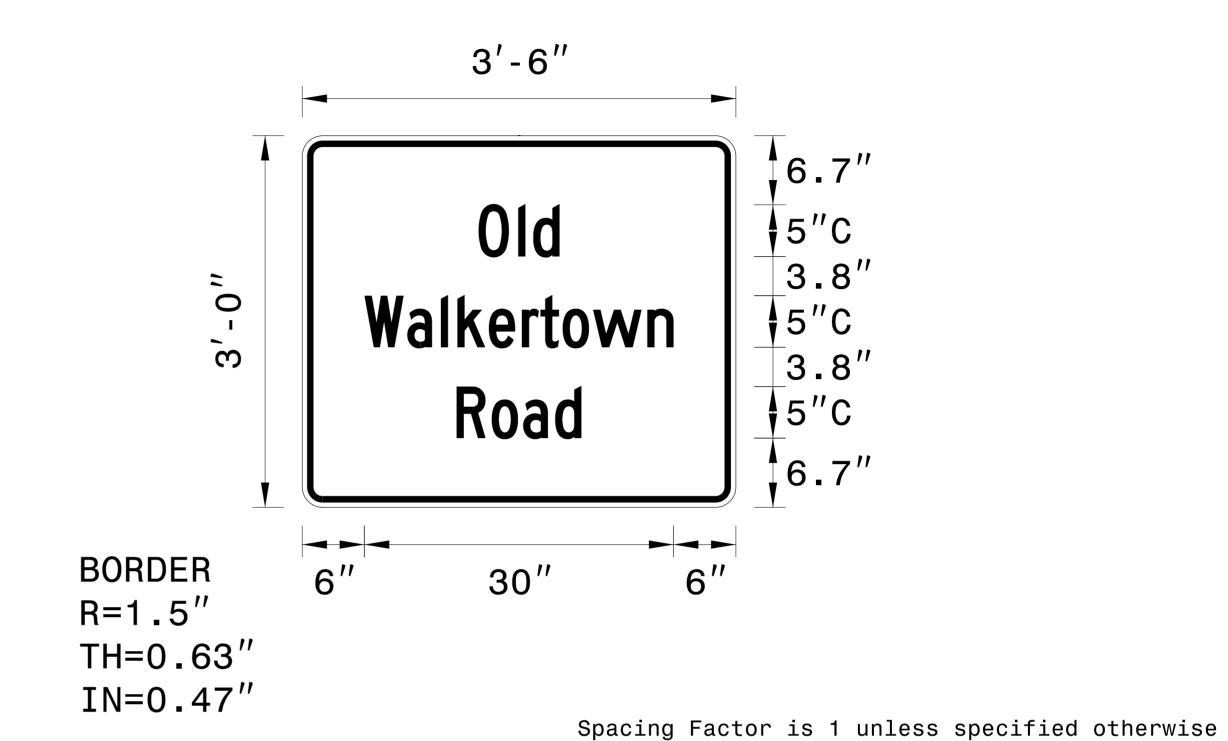
USE NOTES: 1,2

- Legend and border shall be direct applied black non-reflective sheeting.
- 2. Background shall be NC GRADE B fluoresent orange retroreflective sheeting.

DESIGN BY: mtr
PROJECT ID: U-2579C

CHECKED BY:
DIV: 9

DATE: Apr 04, 2017



LETTER POSITIONS

								Let	ter	spac	cings	are	to st	tart	of next	letter		Series Text L
	0	1	d															C 2
17.1	3.9	1.4	2.6	17.1														7.
	W	а	1	k	е	r	t	0	W	n								C 2
6	4.2	3.3	1.6	3.1	3.2	1.8	2.1	3	5.3	2.6	6						+	3
	R	0	а	d														C 2
15	3.4	3.1	3.1	2.6	14.9													12

APPROVED:

Michael T. Rzepka

O18C3480C26049D...

SEAL

SEAL

SEAL

15876

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

SPECIAL SIGN DESIGN

Engineering

PROJ. REFERENCE NO. SHEET NO. TMP-3

#### NOTES:

- RSD REFERS TO ROADWAY STANDARD DRAWING.
- UNLESS OTHERWISE SPECIFIED, CONSTRUCTION FOR PHASE I THROUGH PHASE III, STEP 2 IS UP TO, BUT NOT INCLUDING, THE FINAL LAYER OF SURFACE COURSE.
- CONSTRUCTION ON US 311 (-Y1-) AND WILLISTON ROAD (-Y2-) MAY BE PERFORMED INDEPENDENTLY OF ONE ANOTHER.
- CONSTRUCTION OF OLD WALKERTOWN ROAD (-Y3-) AND NORTHAMPTON DRIVE (-Y4-) TIE (PHASE I, STEP 3) MAY BE PERFORMED INDEPENDENTLY OF THE CONSTRUCTION ON US 311 (-Y1-) AND WILLISTON ROAD (-Y2-).

#### PHASE I

#### STEP 1

INSTALL ALL ADVANCE WORK ZONE WARNING SIGNS ON -Y1- (US 311) AND -Y2- (WILLISTON RD) ACCORDING TO RSD 1101.01 (SHEET 3 OF 3).

#### STEP 2

USING RSD 1101.02 (SHEET 1 OF 15) AND AWAY FROM TRAFFIC, BEGIN . CONSTRUCTION OF THE FOLLOWING (SEE LOCAL NOTE 1)(SEE SHEETS TMP-4 THRU TMP-6 & TMP-9 AND ROADWAY PLANS):

- -L- STA 373+00± TO -L- STA 385+00± (GRADING ONLY)
- -L- STA 385+00± TO -L- STA 406+50±
- -L- STA 408+50± TO -L- STA 424+50±
- -L- STA 426+50± TO -L- STA 446+00±
- -L- STA 449+25± TO -L- STA 478+00±
- -Y1- STA 11+00± TO -Y1- STA 23+40± (RIGHT SIDE WIDENING, UP TO EDGE AND ELEV. OF EXISTING)
- -Y1- STA 23+40± TO -Y1- STA 34+00± (INCLUDING STRUCTURE)
- -Y1RPB- STA 10+00± TO -Y1RPB- STA 31+20±
- -Y1LPB- STA 11+00± TO -Y1LPB- STA 20+50±
- -Y1RPC- STA 10+00± TO -Y1RPC- STA 20+30±
- -Y1RPD- STA 10+00± TO -Y1RPD- STA 14+10±
- -Y1RPD- STA 16+10± TO -Y1RPD- STA 32+50±
- -Y2- STA 10+00± TO -Y2- STA 15+00± (WEDGING & WIDENING, LEFT & RIGHT SIDES)
- SHSA-- INSTALLATION OF SIGNAL FRAMEWORK AT -Y1- INTERCHANGE.

USING RSD 1101.02 (SHEET 1 OF 15) AND AWAY FROM TRAFFIC, CONSTRUCT THE FOLLOWING UP TO AND INCLUDING THE FINAL LAYER OF SURFACE COURSE (SEE LOCAL NOTE 1) (SEE SHEETS TMP-6 THRU 9):

- -Y1DET- STA 15+95± TO -Y1DET- STA 18+46± (WIDENING UP TO EDGE &
- ELEV. OF EXIST.)
- -Y1DET- STA 18+46± TO -Y1DET- STA 30+60±
- -Y1DET- STA 30+60± TO -Y1DET- STA 33+50± (WIDENING UP TO EDGE & ELEV. OF EXIST.)
- -Y2DET- STA 15+00± TO -Y2DET- STA 16+60± (WIDENING UP TO EDGE & ELEV. OF EXIST.)
- -Y2DET- STA 16+60± TO -Y2DET- STA 26+43±
- -Y2DET- STA 26+43± TO -Y2DET- STA 28+00± (WIDENING UP TO EDGE & ELEV. OF EXIST.)

AWAY FROM TRAFFIC, BEGIN INSTALLATION OF ITS (SEE ITS PLANS).

INSTALL DETOUR SIGNS FOR -Y3- DETOUR AND COVER. INSTALL AND ACTIVATE CMS BOARDS 7 DAYS BEFORE CLOSING OLD WALKERTOWN ROAD (-Y3-). (SEE SHEETS TMP-2A THRU 2D).

COMPLETE THE WORK REQUIRED IN PHASE I, STEP 3 IN THIRTY (30) CONSECUTIVE CALENDAR DAYS (SEE INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES).

#### STEP 3

UNCOVER OFFSITE DETOUR SIGNS INSTALLED IN STEP 2 (SEE SHEETS TMP-2A & 2B). USING RSD 1101.03 (SHEET 1 OF 9), CLOSE -Y3- FROM -Y2- STA 12+00± TO -Y2- STA 33+00± AND -Y4- ACCESS TO -Y3- (SEE SHEET TMP-2B).

AWAY FROM TRAFFIC, CONSTRUCT -Y3- STA 14+25± TO STA 23+00± AND -Y4- STA 11+20± TO -Y3-, INCLUDING THE FINAL LAYER OF SURFACE COURSE (SEE SHEET TMP-2B).

PLACE PERMANENT MARKINGS AND MARKERS PER FINAL SIGNING AND DELINEATION PLANS AND OPEN -Y3- & -Y4- TO TRAFFIC. REMOVE OFFSITE DETOUR SIGNS AND DEVICES.

#### PHASE II

#### STEP 1

USING RSD 1101.02 (SHEET 1 OF 15), WEDGE PAVEMENT TIE TO -Y1DET-, PLACE TEMPORARY MARKINGS AND MARKERS ON -Y1DET- AND TIE TO EXISTING, AND SHIFT TRAFFIC ONTO -Y1DET-. CLOSE EXISTING US 311 ROADWAY AT DETOUR LIMITS TO TRAFFIC (SEE SHEETS TMP-10 & 11).

USING RSD 1101.02 (SHEET 1 OF 15), WEDGE PAVEMENT TIE TO -Y2DET-, PLACE TEMPORARY MARKINGS AND MARKERS ON -Y2DET- AND TIE TO EXISTING, AND SHIFT TRAFFIC ONTO -Y2DET-. CLOSE EXISTING WILLISTON ROAD AT DETOUR LIMITS TO TRAFFIC (SEE SHEETS TMP-12 & 13).

#### STEP 2

AWAY FROM TRAFFIC, CONSTRUCT -Y2- STRUCTURE (SEE SHEET TMP-13).

AWAY FROM TRAFFIC AND USING RSD 1101.02 (SHEET 1 OF 15), CONSTRUCT THE FOLLOWING (SEE LOCAL NOTE 1) (SEE SHEETS TMP-10 THRU 13):

- -Y1- STA 34+00±T0 -Y1- STA 49+25±
- -Y2- STA 15+00± TO -Y2- STA 26+50±

COMPLETE CONSTRUCTION OF -Y1- AND -SRSA- BEGUN IN PHASE I.

#### PHASE III

COMPLETE THE WORK REQUIRED IN PHASE III, STEP 1A IN ONE WEEKEND FROM 6:00PM FRIDAY TO 6:00AM THE FOLLOWING MONDAY (SEE INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES).

#### STEP 1A

USING RSD 1101.02 (SHEET 1 OF 15), PLACE TEMPORARY MARKINGS AND MARKERS ON -Y1- AND TIE TO EXISTING MARKINGS. SHIFT TRAFFIC TO -Y1- IN THE TEMPORARY PATTERN SHOWN (SEE SHEETS TMP-14 THRU 17). CLOSE -Y1DET-TO TRAFFIC.

COMPLETE THE WORK REQUIRED IN PHASE III, STEP 1B IN ONE WEEKEND FROM 6:00PM FRIDAY TO 6:00AM THE FOLLOWING MONDAY (SEE INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES).

#### STEP 1B

USING RSD 1101.02 (SHEET 1 OF 15), PLACE TEMPORARY MARKINGS AND MARKERS ON -Y2- AND TIE TO EXISTING MARKINGS. SHIFT TRAFFIC TO FINAL PATTERN ON -Y2- AND CLOSE -Y2DET- TO TRAFFIC (SEE SHEETS TMP-18 & 19). OPEN -SRSA-. CLOSE EXISTING DILLON FARM ROAD AT -L-.

#### STEP 2

USING RSD 1101.02 (SHEET 1 OF 15), CONSTRUCT -Y1- STA 11+00± TO -Y1- STA 23+40± (LEFT SIDE WIDENING, SHOULDER WORK, PAVEMENT REMOVAL AND WEDGING OF -Y1-)(SEE SHEETS TMP-14 THRU 17).

AWAY FROM TRAFFIC AND USING RSD 1101.02 (SHEET 1 OF 15), REMOVE -Y1DET- AND -Y2DET- (SEE SHEETS TMP-14 THRU 19).

AWAY FROM TRAFFIC AND USING RSD 1101.02 (SHEET 1 OF 15), CONSTRUCT REMAINING SECTIONS OF THE FOLLOWING:

- -L- STA 406+50± TO -L- STA 408+50±
- -L- STA 424+50± TO -L- STA 426+50±
- -L- STA 446+00± TO -L- STA 449+25±
  -Y1RPB- STA 31+20± TO -Y1RPB- STA 32+80±
- -Y1LPB- STA 20+50± TO -Y1LPB- STA 22+10±
- -Y1RPC- STA 32+00± TO -Y1RPC- STA 33+00±
- -Y1RPD- STA 14+10± TO -Y1RPD- STA 16+10±
- TURNAROUND ON EXISTING DILLON FARM ROAD

COMPLETE THE CONSTRUCTION OF -L-, -Y1RPB-, -Y1LPB-, -Y1RPC-, -Y1RPD- BEGUN IN PHASE I, INCLUDING SIGNAL FRAMEWORK AT -Y1-INTERCHANGE.

COMPLETE INSTALLATION OF ITS.

#### STEP 3

AT -Y1- LOCATION, USING RSD 1101.02 (SHEET 1 OF 15), COMPLETE THE FOLLOWING:

- CONSTRUCT MONOLITHIC ISLANDS ON -Y1- (SEE ROADWAY PLANS)
- PLACE FINAL LAYER OF SURFACE COURSE ON -Y1-.
- PLACE FINAL PAVEMENT MARKINGS AND MARKERS ON -Y1- PER FINAL PAVEMENT MARKING PLANS AND SHIFT TRAFFIC TO FINAL PATTERN.

AT -Y2- LOCATION, USING RSD 1101.02 (SHEET 1 OF 15), COMPLETE THE FOLLOWING:

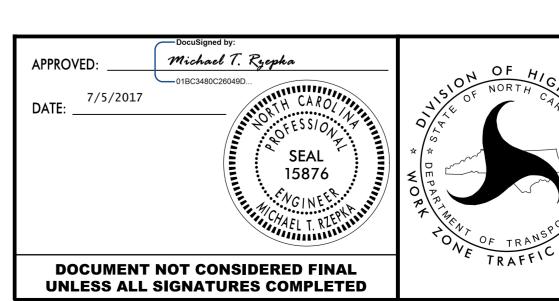
- PLACE FINAL LAYER OF SURFACE COURSE ON -Y2-.
- PLACE FINAL PAVEMENT MARKINGS AND MARKERS PER FINAL PAVEMENT MARKING PLANS.

ON -L- AND -Y1- RAMPS & LOOPS, AWAY FROM TRAFFIC COMPLETE THE FOLLOWING:

- PLACE FINAL LAYER OF SURFACE COURSE ON -Y1- RAMPS AND LOOPS.
- PLACE FINAL PAVEMENT MARKINGS AND MARKERS PER FINAL PAVEMENT MARKING PLANS.
- OPEN -L- FROM -Y1- TO US 158, -Y1LPB- AND -Y1RPD- TO FINAL PATTERN.
  -L- WEST OF -Y1-, -Y1RPB- AND -Y1RPC- TO REMAIN CLOSED (SEE SHEET TMP-20 AND LOCAL NOTES 2 & 3).
- INSTALL SIGNING OVERLAYS ON OVERHEAD SIGNS AT MAINLINE AND US 421 INTERCHANGE, USING RSD 1101.02 (SHEETS 4 & 10) (SEE SIGNING PLANS FOR SIGN LOCATIONS).

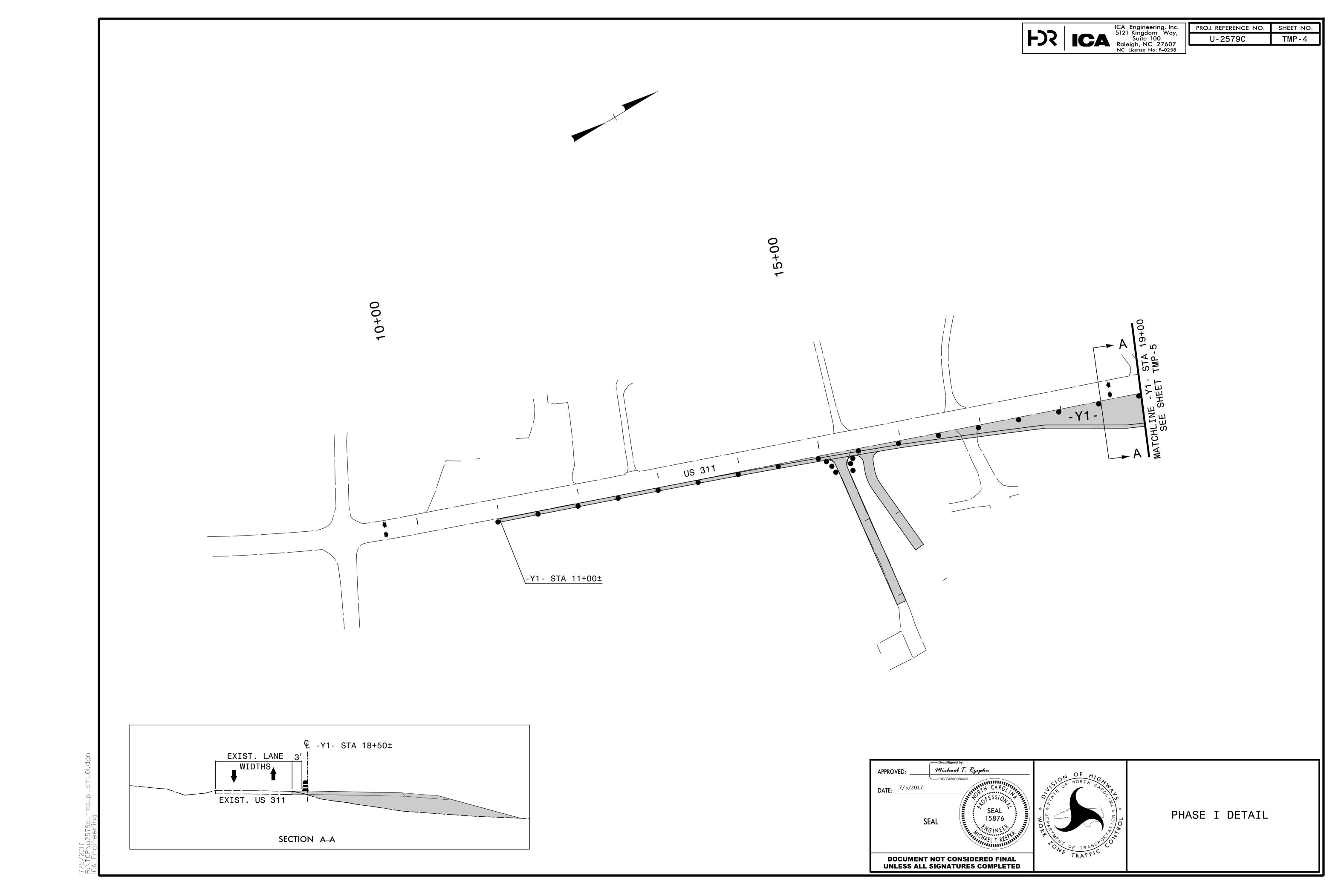
#### STEP 4

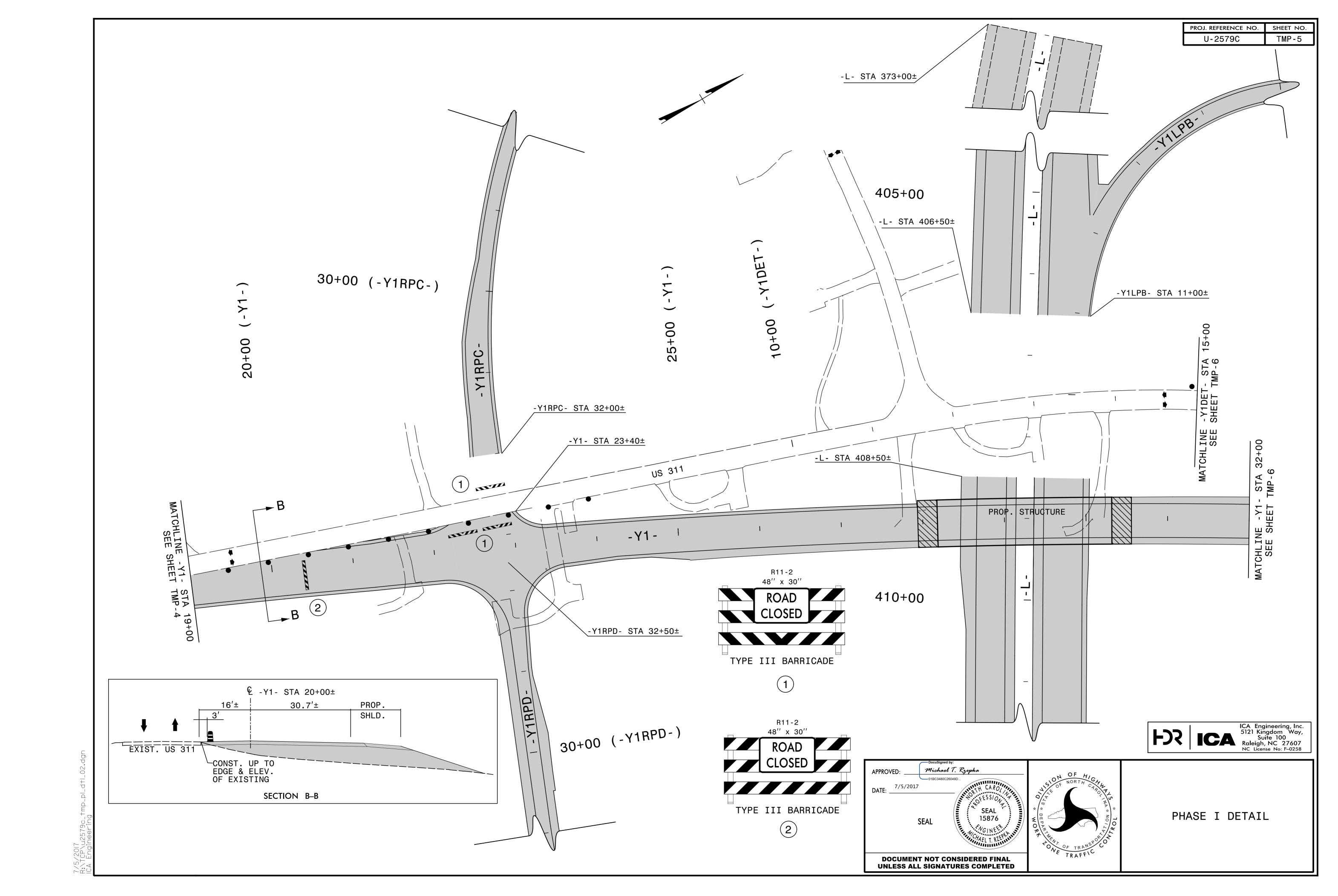
REMOVE ALL TEMPORARY TRAFFIC CONTROL DEVICES.

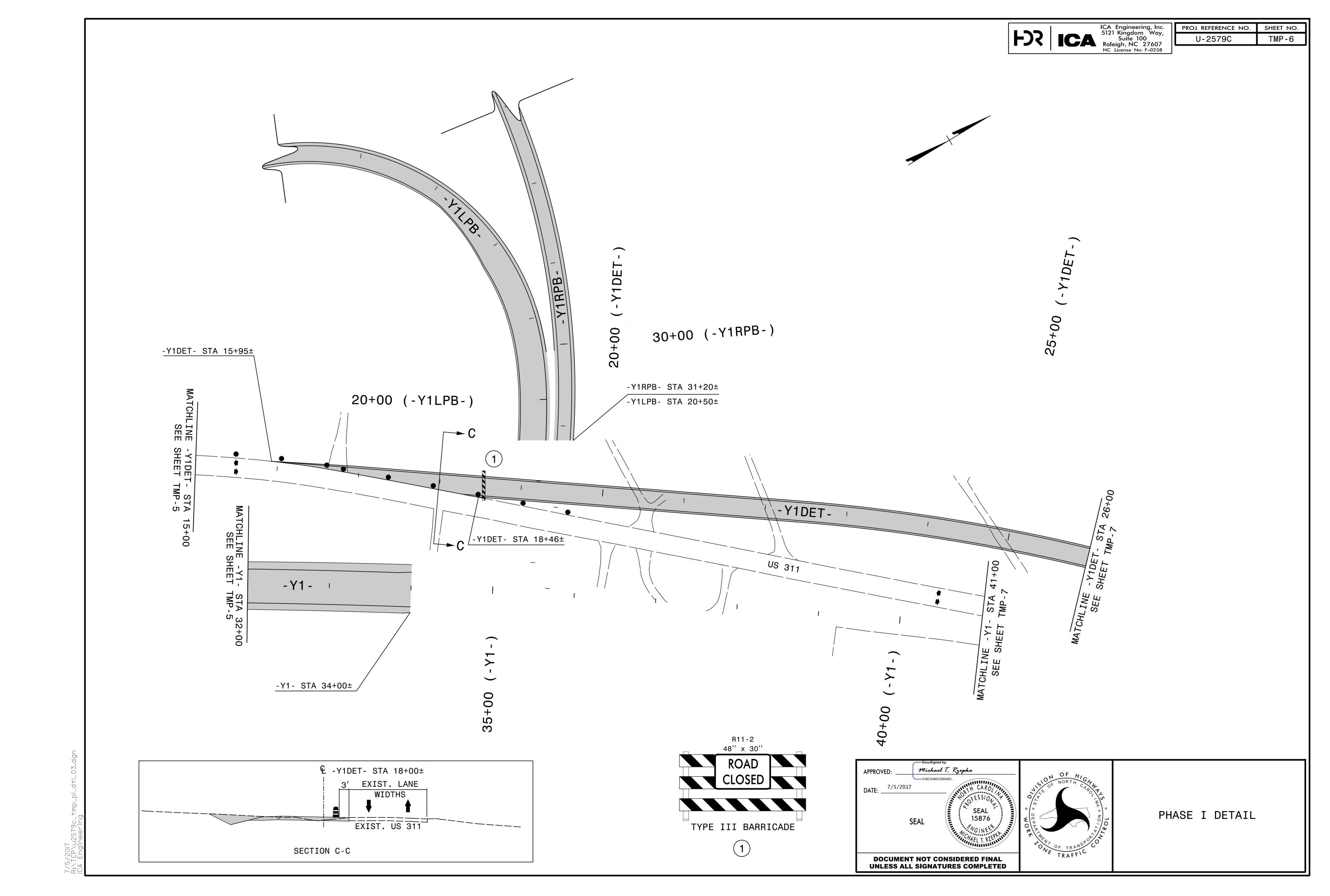


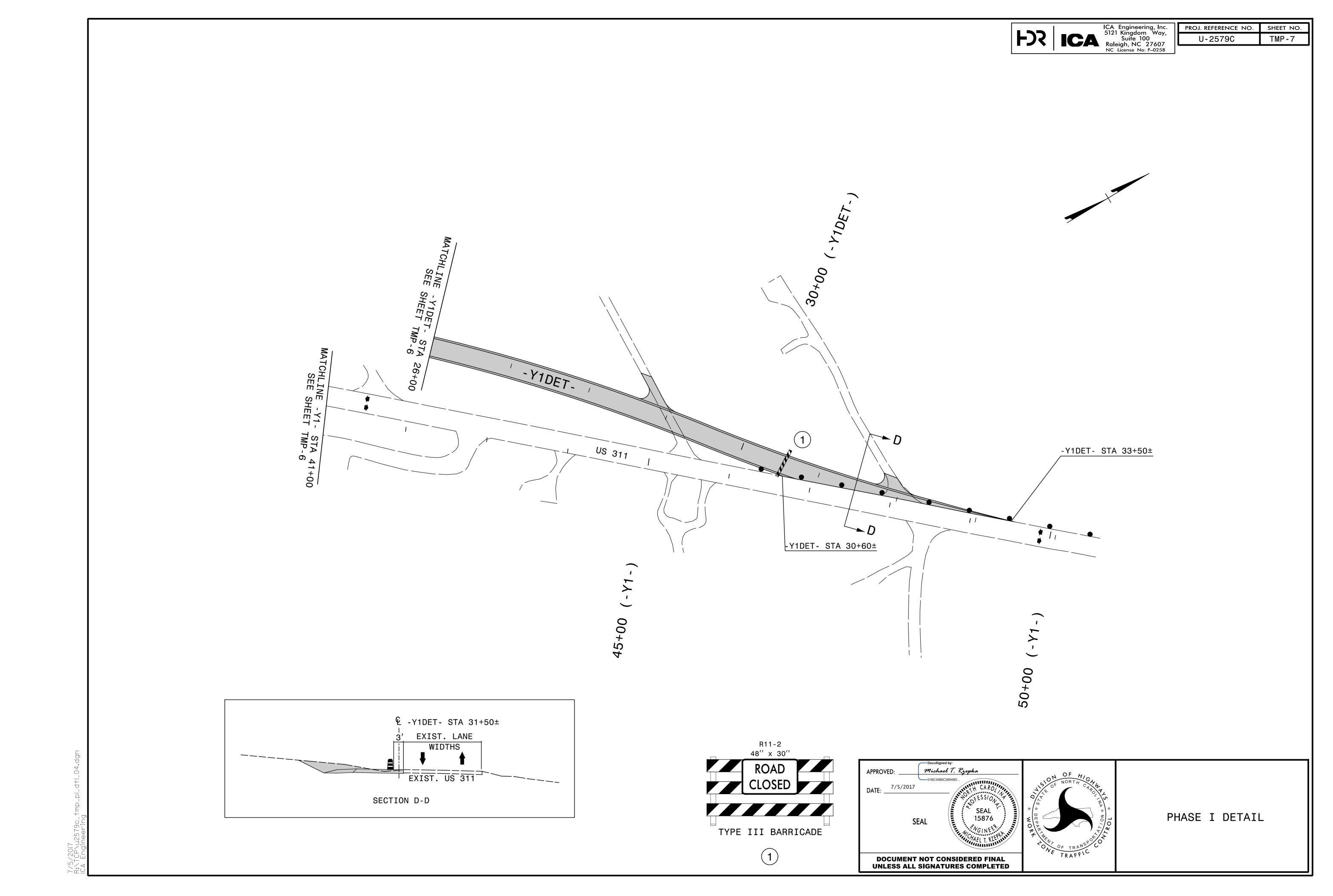
PHASING

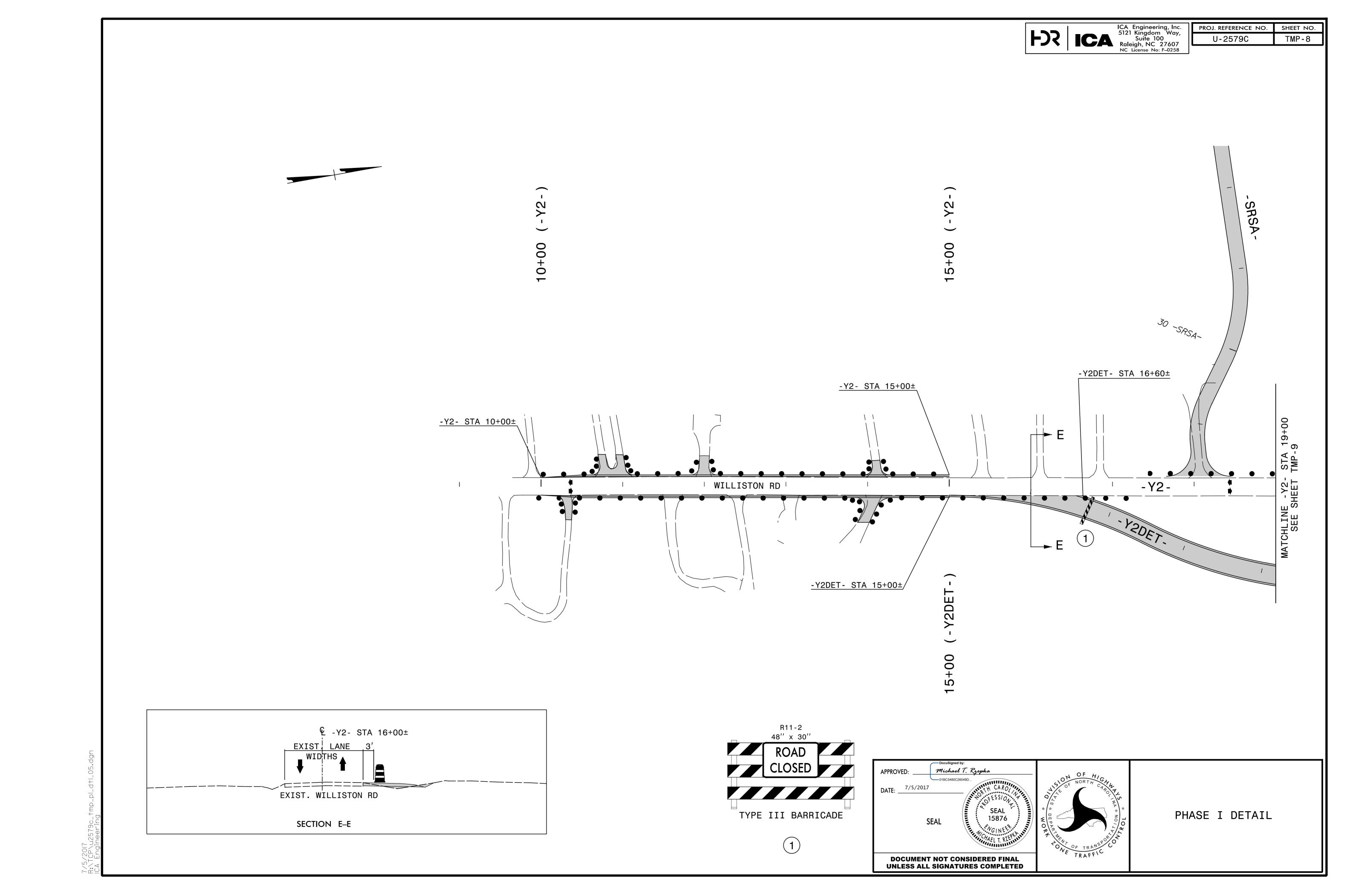
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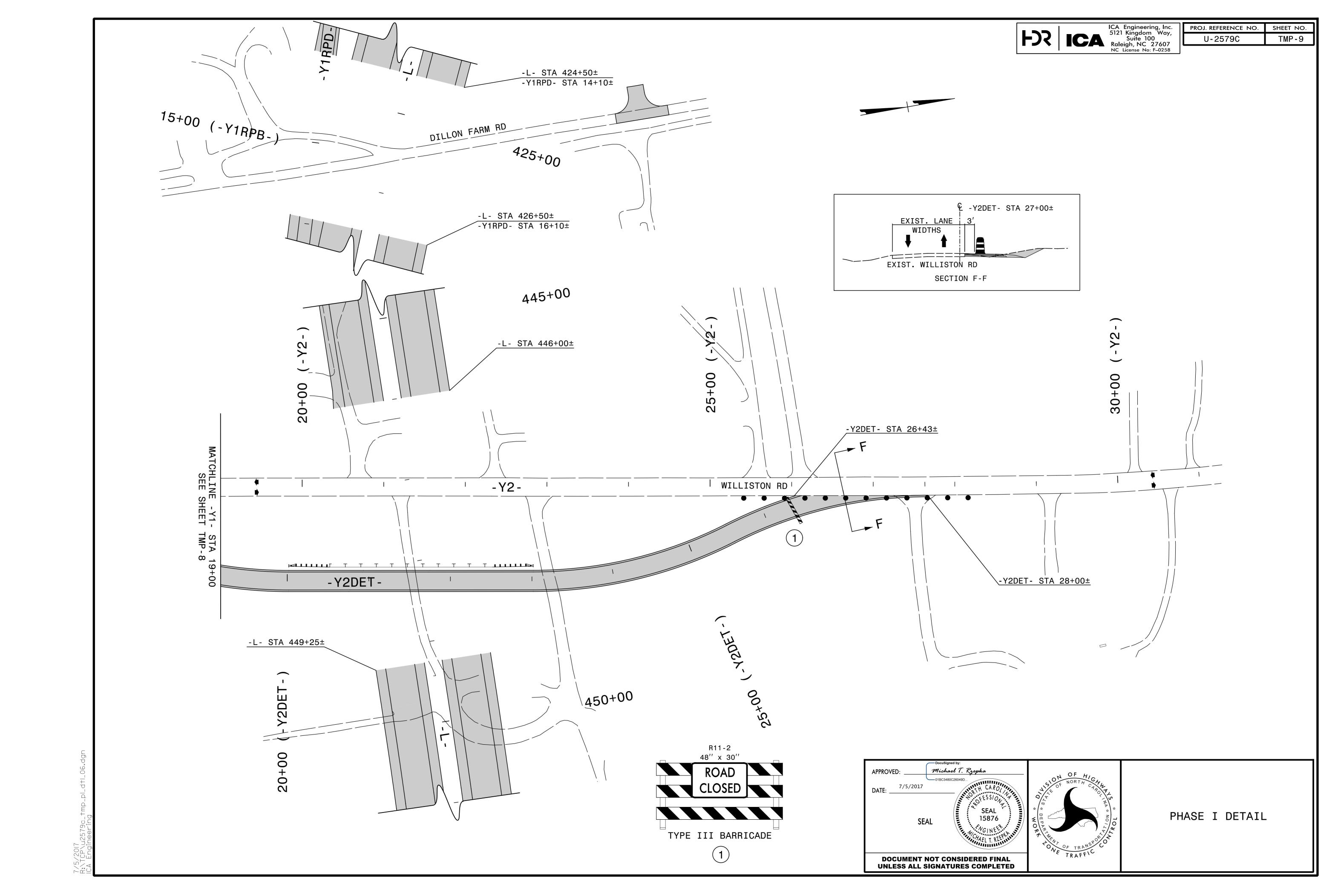


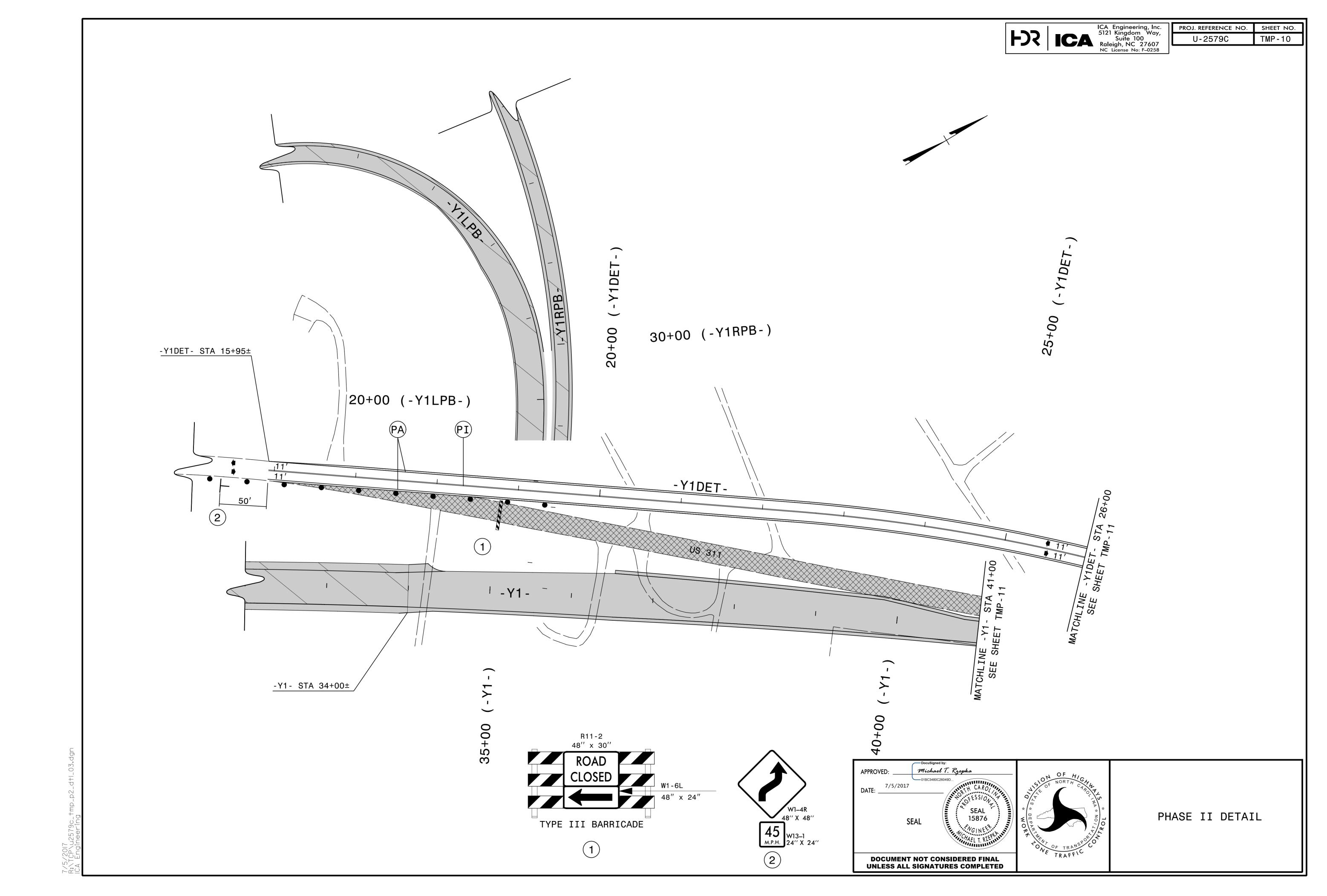






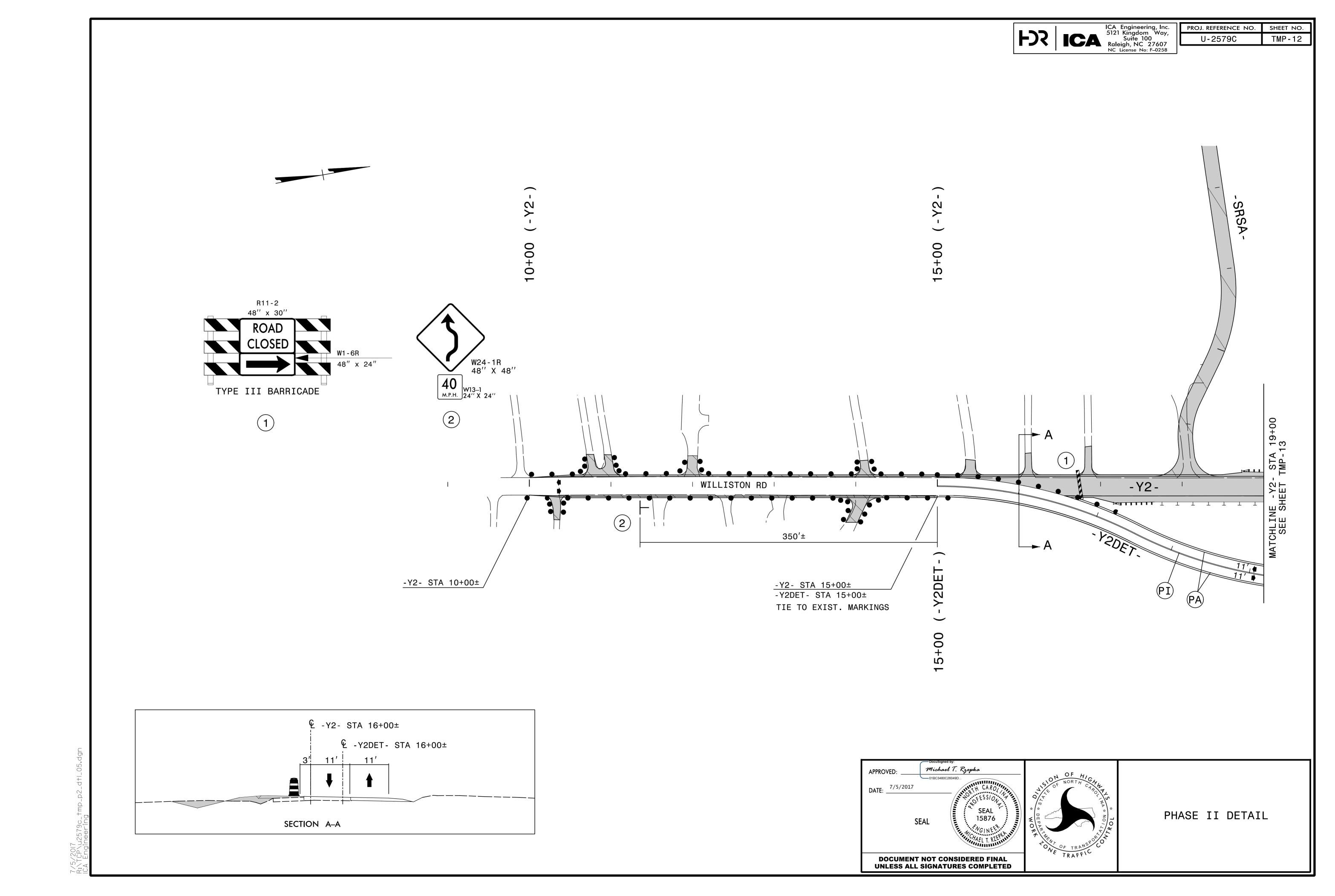


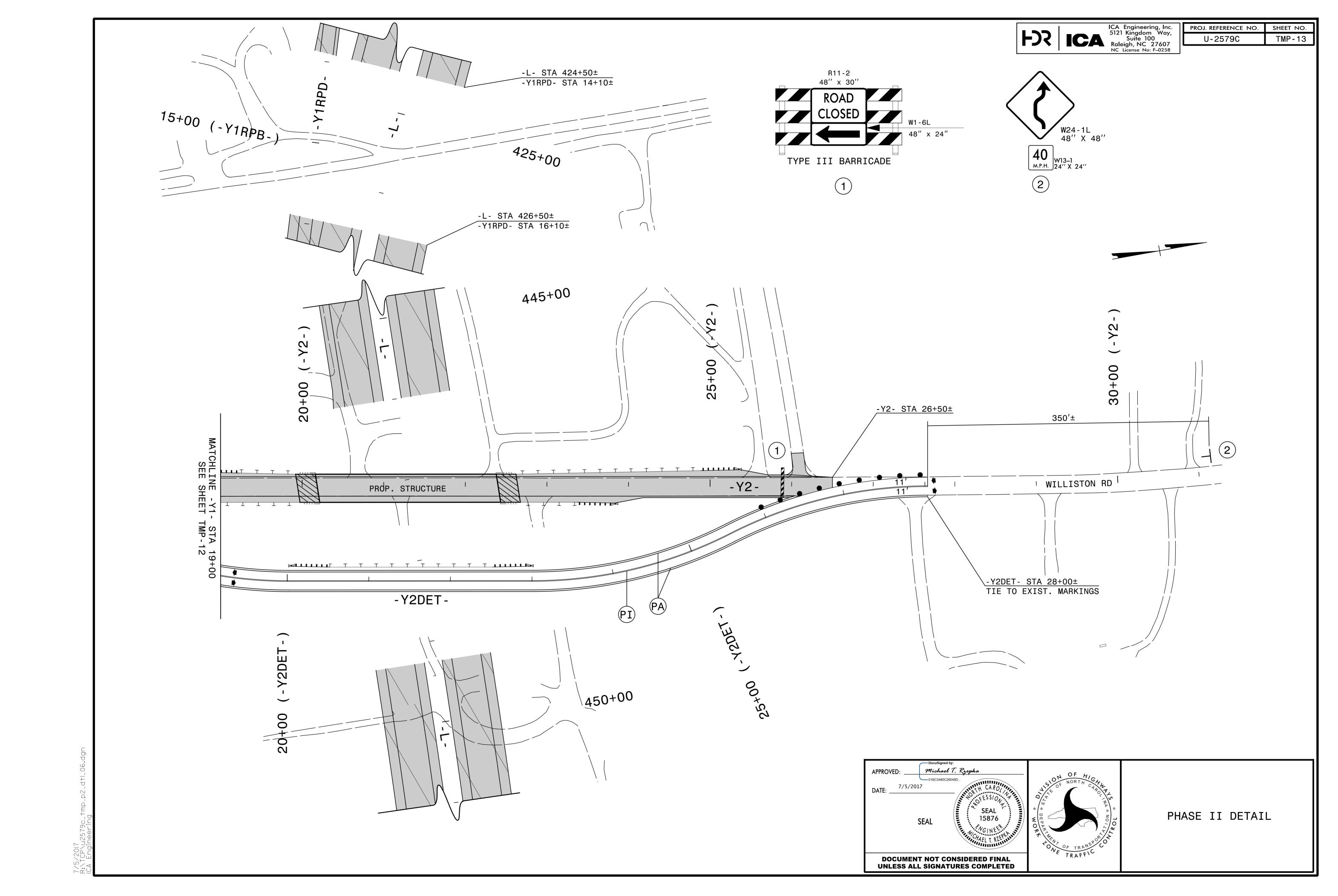


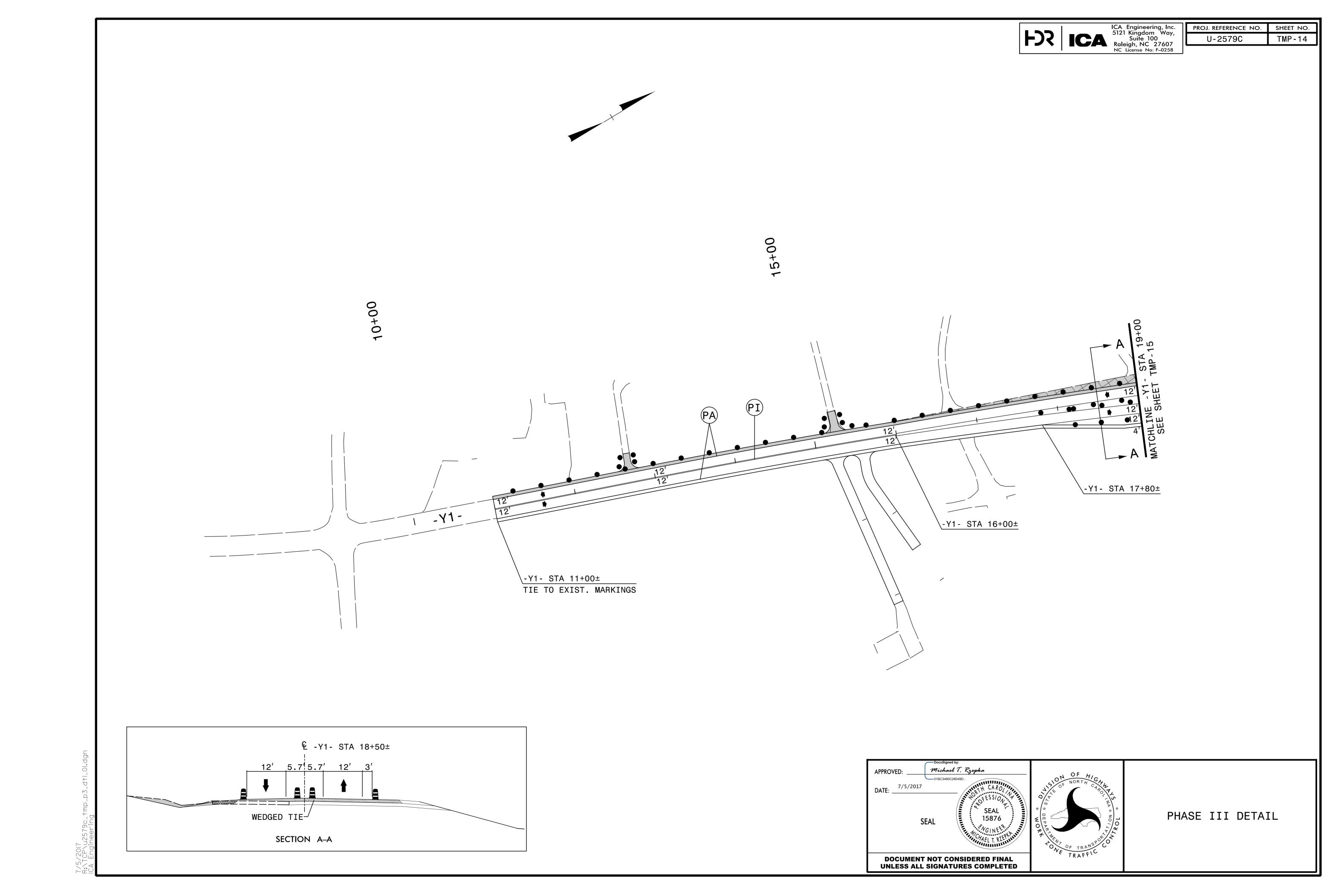


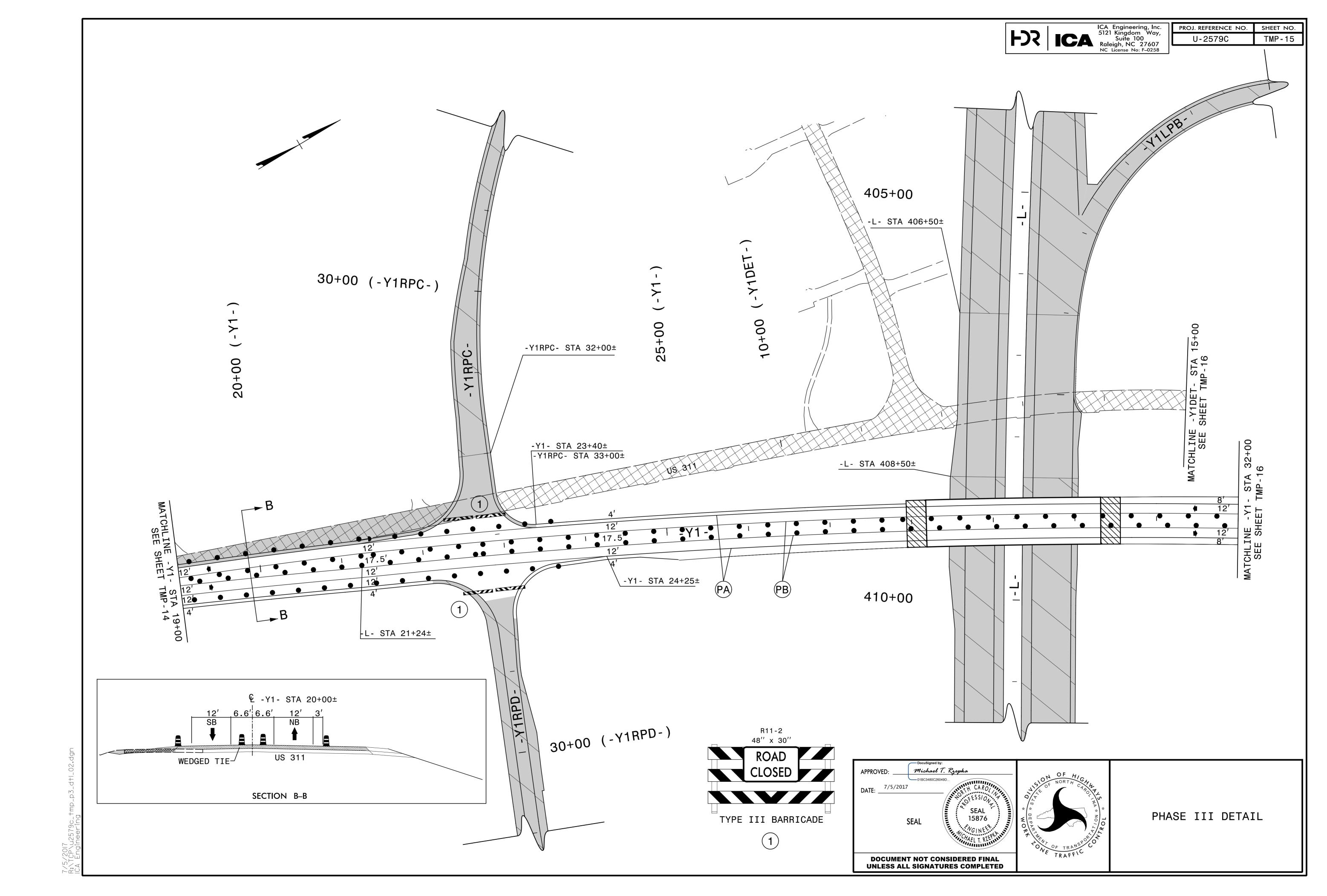
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NC License No: F-0258 PROJ. REFERENCE NO. TMP-11 U-2579C 30+00 - STA 41+00 TMP-10 -Y1DET- STA 33+50± -Y1- STA 49+25±/ DocuSigned by:

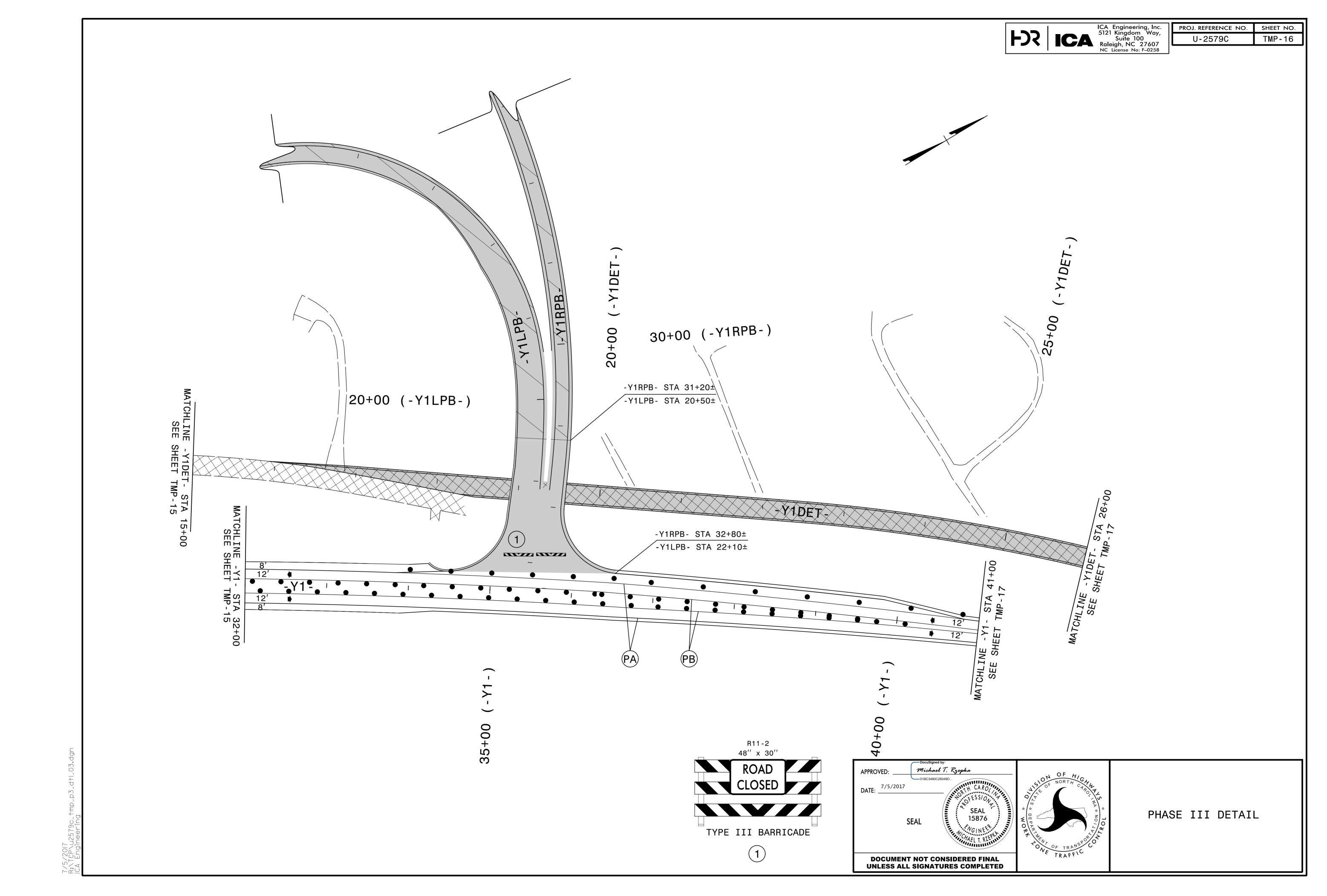
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