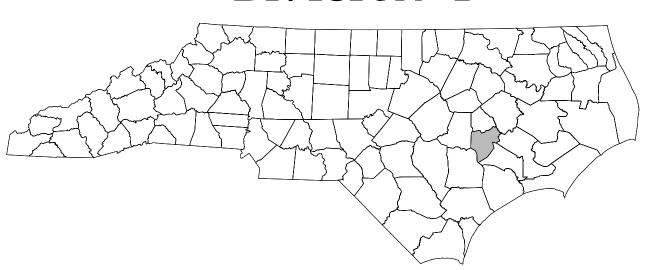
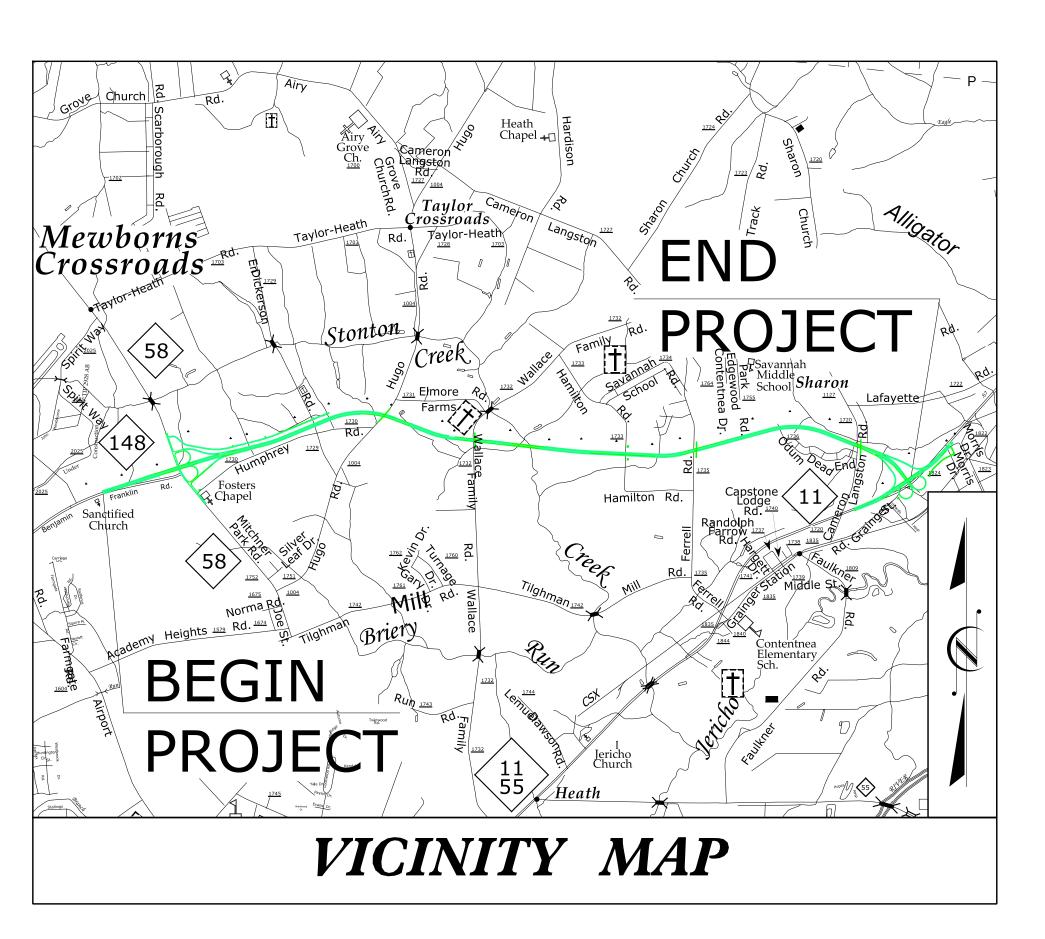
TRANSPORTATION MANAGEMENT PLAN

LENOIR COUNTY

DIVISION 2





SHEET NO.

TITLE

TITLE SHEET, VICINITY MAP AND INDEX APPLICABLE ROADWAY STANDARD DRAWINGS

TEMPORARY PAVEMENT MARKING LEGEND

TMP-1B, TMP-1C

GENERAL NOTES

TMP-1D

WORK ZONE IMPACTS MANAGEMENT STRATEGIES

TMP-2 TEMPORARY BARRIER APPROACH END TREATMENT TMP-2A TO TMP-2D TEMPORARY DETOUR SIGN DESIGNS

TMP-3

PHASING NARRATIVE

PHASE I OVERVIEW

TMP 4A-4N

PHASE I

TMP-4CDET, 4CDET1 DETOUR NC 58

DETOUR HUGO RD. TMP-4EDET

TMP-4FDET TMP-4HDET

DETOUR WALLACE FAMILY FARM RD. DETOUR FERRELL RD.

TMP-4IDET

DETOUR SHARON CHURCH RD.

TMP-5A TO TMP-5F

PHASE II OVERVIEW PHASE II

TMP-5EDET DETOUR NC 11

TMP-6 PHASE III STEPS 1 & 2 OVERVIEW/NC148/NC58 DETOUR TMP-6A TO TMP-6H PHASE III STEPS 1 & 2

TMP-7A TO TMP-7C2 PHASE III STEP 3

PHASE III STEP 3 OVERVIEW

WORK ZONE SAFETY & MOBILITY "from the MOUNTAINS to the COAST"

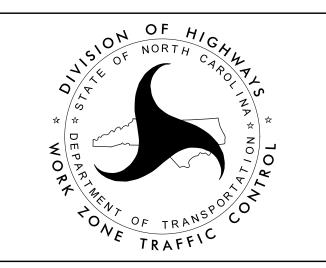
N.C.D.O.T. WORK ZONE TRAFFIC CONTROL 1561 MAIL SERVICE CENTER (MSC) RALEIGH, NC 27699-1561 750 N. GREENFIELD PARKWAY, GARNER, NC 27529 (DELIVERY) PHONE: (919) 773-2800 FAX: (919) 771-2745

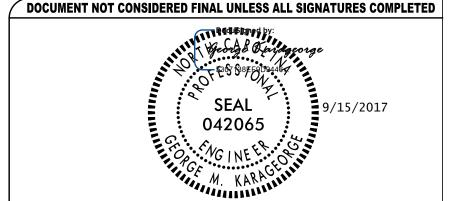
J.E.HUMMER, PE J.S. KITE, PE

M.V. SPRINGER, PE

STATE TRAFFIC MANAGEMENT ENGINEER EASTERN WORK ZONE TRAFFIC CONTROL ENGINEER

TRAFFIC CONTROL PROJECT DESIGN ENGINEER





GEORGE M. KARAGEORGE, PE

Cary, NC 27518 Phone: (919) 463-5488 MBAKERINTL.COM

TMP-1

Michael Baker

INTERNATIONAL 8000 Regency Parkway, Suite 600,

PROFESSIONAL CORPORATION LICENSE NO. F-1084

LEGEND

GENERAL

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" -PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C.,

TITLE

WORK ZONE ADVANCE WARNING SIGNS

WARNING SIGNS FOR BLASTING ZONES

WORK VEHICLE LIGHTING SYSTEMS AND TMA DELINEATION

PAVEMENT MARKINGS - TWO LANE AND MULTILANE ROADWAYS

PAVEMENT MARKINGS - LINE TYPES AND OFFSETS

PAVEMENT MARKINGS - INTERSECTIONS

PAVEMENT MARKINGS - PAINTED ISLANDS

PAVEMENT MARKINGS - LANE REDUCTIONS

PAVEMENT MARKINGS - TURN LANES

PAVEMENT MARKINGS - LANE DROPS

PAVEMENT MARKINGS - BRIDGES

PAVEMENT MARKINGS - EXITS AND ENTRANCE RAMPS

PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES

RAISED PAVEMENT MARKERS - INSTALLATION SPACING

RAISED PAVEMENT MARKERS - (PERMANENT AND TEMPORARY)

GUARDRAIL AND BARRIER DELINEATORS - INSTALLATION SPACING

GUARDRAIL AND BARRIER DELINEATORS - TYPES AND MOUNTING

TRAFFIC CONTROL DESIGN TABLES

STATIONARY WORK ZONE SIGNS

PORTABLE WORK ZONE SIGNS

TEMPORARY CRASH CUSHION

PORTABLE CONCRETE BARRIER

FLASHING ARROW BOARDS

DRUMS

CONES

BARRICADES

FLAGGING DEVICES

SKINNY - DRUM

TEMPORARY LANE CLOSURES

TEMPORARY ROAD CLOSURES

TEMPORARY SHOULDER CLOSURES WORK ZONE VEHICLE ACCESSES

CONSIDERED A PART OF THESE PLANS:

STD. NO.

1101.01

1101.02

1101.03

1101.04

1101.05

1101.06

1101.11

1110.01

1110.02

1115.01

1130.01

1135.01

1145.01

1150.01 1160.01

1165.01

1170.01 1180.01

1205.01

1205.02

1205.03

1205.04

1205.05

1205.06 1205.08

1205.09

1205.12

1205.13

1250.01

1251.01

1261.01

1261.02

DATED JANUARY 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE

---- EXIST. PVMT.

- PROPOSED PVMT.

DIRECTION OF TRAFFIC FLOW

WORK AREAS

PROPOSED ROADWAY

PROPOSED ROADWAY PREVIOUSLY STARTED (ONGOING CONSTRUCTION)





TEMPORARY TRAFFIC CONTROL DEVICES

TYPE III BARRICADE

CONE

① TUBULAR MARKER SKINNY DRUM

CHANGEABLE MESSAGE SIGN (CMS)

FLAGGER

—— AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD)



LAW ENFORCEMENT

TRUCK MOUNTED ATTENUATOR (TMA)

WORK ZONE SIGN-PORTABLE

WORK ZONE SIGN-STATIONARY

WORK ZONE SIGN-STATIONARY OR PORTABLE

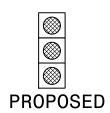
TEMPORARY SHORING

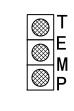
TEMPORARY CRASH CUSHION

PORTABLE CONCRETE BARRIER (PCB)

SIGNALS







TEMPORARY PAVEMENT MARKING LEGEND

	PAIN	NT PAVEN	MENT MARKING LINES
CODE	COLOR	LINE WIDTH	DESCRIPTION
P2	WHITE	24"	STOPBAR
P8	WHITE	4"	MINISKIP 2FT-6FT
PA	WHITE	4"	EDGELINE
РВ	YELLOW	4"	EDGELINE
PC	WHITE	4"	SKIP
PD	WHITE	4"	MINISKIP 3FT-9FT
PE	WHITE	4"	LANELINE
PF	YELLOW	4"	SKIP
PI	YELLOW	4"	DOUBLE CENTER SOLID/SOLID
PN	WHITE	8"	GORELINE
PP	YELLOW	8"	DIAGONAL

PAIN	T PAVEMI	ENT MARKING SYMBOLS & CHARACTERS
CODE	COLOR	DESCRIPTION
† QA	WHITE	LEFT TURN ARROW
P QB	WHITE	RIGHT TURN ARROW
↑ QC	WHITE	STRAIGHT ARROW
₽ QD	WHITE	LEFT/STRAIGHT ARROW
⇔ QE	WHITE	RIGHT/STRAIGHT ARROW

PAVEMENT MARKING LINES

— DOUBLE YELLOW CENTER LINE

— SKIP LINES ----- MINI-SKIP LINES

— SOLID LINES — EXISTING LINES (GRAY)

PAVEMENT MARKING SYMBOLS & CHARACTERS

PROPOSED SYMBOLS

EXISTING SYMBOLS (HOLLOW) ALPHANUMERIC CHARACTERS

TEMPORARY RAISED PAVEMENT MARKERS

CRYSTAL/CRYSTAL

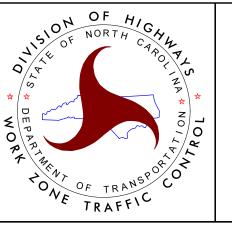
CRYSTAL/RED

YELLOW/YELLOW

Michael Baker INTERNATIONAL 8000 Regency Parkway, Suite 600, Cary, NC 27518

Phone: (919) 463-5488 MBAKERINTL.COM





ROADWAY STANDARD DRAWINGS LEGEND

PROJ. REFERENCE NO.

R-5703

SHEET NO.

TMP-1A

TEMPORARY PAVEMENT MARKING LEGEND

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 NC 58, NC 11 6:00 A.M. - 8:30 A.M. MONDAY THRU FRIDAY

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

ROAD NAME NC 58, NC 11

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 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 6:00 A.M. THURSDAY AND 8:30 A.M. MONDAY.
- 4) FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY TO 8:30 A.M. TUESDAY.
- 5) FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 8:30 A.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 8:30 A.M. THE TUESDAY AFTER INDEPENDENCE DAY.
- 6) FOR LABOR DAY. BETWEEN THE HOURS OF 6:00 A.M. FRIDAY AND 8:30 A.M. TUESDAY.
- 7) FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00 A.M. TUESDAY TO 8:30 A.M. MONDAY.
- 8) FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 8:30 A.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.
- C) TEMPORARY ROAD CLOSURES ARE NOT ALLOWED EXCEPT AT THE SPECIFIC TIMES STATED IN THE PLANS OR DIRECTED BY THE ENGINEER.
- D) NOTE NOT USED. HAULING NOTE REMOVED.
- E) 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.

GENERAL NOTES

PROJ. REFERENCE NO.	SHEET NO.
R-5703	TMP-1B

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.
- G) 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.
- H) 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.

- I) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRANSPORTATION MANAGEMENT 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.
- J) 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.

PAVEMENT EDGE DROP OFF REQUIREMENTS

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

BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.

BACKFILL DROP-OFFS THAT EXCEED 3 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS LESS THAN 45 MPH.

BACKFILL WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER. AT NO EXPENSE TO THE DEPARTMENT.

L) DO NOT EXCEED A DIFFERENCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) 500 FT IN ADVANCE AND A MINIMUM OF ONCE EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

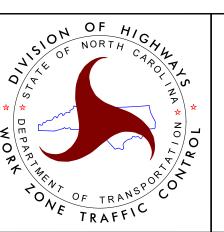
Michael Baker INTERNATIONAL 8000 Regency Parkway, Suite 600, Cary, NC 27518

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SEAL SEAL 042065

11/20/2017

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



GENERAL NOTES

GENERAL NOTES

PROJ. REFERENCE NO. SHEET NO.

R-5703 TMP-1B

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

NC 58, NC 11

6:00 A.M.- 8:30 A.M. MONDAY THRU FRIDAY

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

ROAD NAME NC 58, NC 11

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 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.
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- 5) FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00 A.M. THE DAY
 BEFORE INDEPENDENCE DAY AND 8:30 A.M. THE DAY AFTER INDEPENDENCE DAY.
 IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY; THEN
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 AND 8:30 A.M. THE TUESDAY AFTER INDEPENDENCE DAY.
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- 8) FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 8:30 A.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.
- C) TEMPORARY ROAD CLOSURES ARE NOT ALLOWED EXCEPT AT THE SPECIFIC TIMES STATED IN THE PLANS OR DIRECTED BY THE ENGINEER.
- D) DO NOT CONDUCT SINGLE OR MULTI-VEHICLE HAULING AS FOLLOWS:

ROAD NAME DAY AND TIME RESTRICTIONS

NC 58/NC11/NC148 6:00-8:30 A.M. MONDAY THRU FRIDAY

E) 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.
- G) 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.
- H) 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.

- I) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRANSPORTATION MANAGEMENT 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.
- J) 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.

PAVEMENT EDGE DROP OFF REQUIREMENTS

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

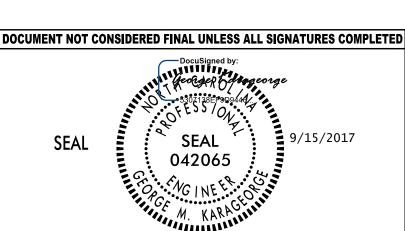
BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.

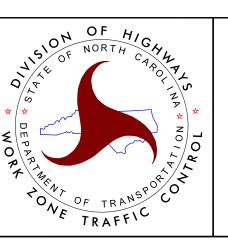
BACKFILL DROP-OFFS THAT EXCEED 3 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS LESS THAN 45 MPH.

BACKFILL WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER. AT NO EXPENSE TO THE DEPARTMENT.

L) DO NOT EXCEED A DIFFERENCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) 500 FT IN ADVANCE AND A MINIMUM OF ONCE EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

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GENERAL NOTES

GENERAL NOTES

PROJ. REFERENCE NO. SHEET NO.

R - 5703 TMP - 1C

TRAFFIC PATTERN ALTERATIONS

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

SIGNING

- N) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- O) PROVIDE SIGNING AND DEVICES REQUIRED FOR ALL ROAD CLOSURES ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRANSPORTATION MANAGEMENT PLANS.

AND

PROVIDE SIGNING REQUIRED FOR ALL OFF-SITE DETOUR ROUTES AS SHOWN IN THE TRANSPORTATION MANAGEMENT PLANS.

P) COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED FOR ROAD CLOSURES WHEN ROAD CLOSURES ARE NOT IN EFFECT.

AND

COVER OR REMOVE ALL SIGNS REQUIRED FOR OFF-SITE DETOURS WHEN DETOURS ARE NOT IN EFFECT.

- 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) WHEN LANE CLOSURES ARE NOT IN EFFECT 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. REFER TO STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SECTIONS 1130 (DRUMS), 1135 (CONES) AND 1180 (SKINNY DRUMS) FOR ADDITIONAL REQUIREMENTS.
- T) PLACE TYPE III BARRICADES WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.

PAVEMENT MARKINGS AND MARKERS

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

ROAD NAME	MARKING	MARKER
NC 11, NC 58, NC 148	PAINT	TEMPORARY RAISED
ALL OTHER ROADS	PAINT	NONE

- 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 (EXISTING AND/OR PROPOSED) MONOLITHIC ISLAND LOCATIONS WITH THE PROPER COLOR PAVEMENT MARKING PRIOR TO (REMOVAL AND/OR INSTALLATION). PLACE (DRUMS, CONES, OR TUBULAR MARKERS) TO DELINEATE ANY (EXISTING AND/OR PROPOSED) MONOLITHIC ISLANDS (AFTER REMOVAL AND/OR BEFORE INSTALLATION).

TRAFFIC BARRIER

Z) INSTALL TEMPORARY BARRIER ACCORDING TO THE TRANSPORTATION MANAGEMENT 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 TRANSPORTATION MANAGEMENT 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 TRANSPORTATION MANAGEMENT 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.

PROTECT THE APPROACH END OF PORTABLE CONCRETE BARRIER AT ALL TIMES DURING THE INSTALLATION AND REMOVAL OF THE BARRIER BY EITHER A TRUCK MOUNTED ATTENUATOR (MAXIMUM 72 HOURS) OR A TEMPORARY CRASH CUSHION.

PROTECT THE APPROACH END OF PORTABLE CONCRETE BARRIER FROM ONCOMING TRAFFIC AT ALL TIMES BY A TEMPORARY CRASH CUSHION UNLESS THE APPROACH END OF 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

MISCELLANEOUS

- AA) USE LAW ENFORCEMENT TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND OR INTERSECTIONS AS SHOWN IN PLANS OR DIRECTED BY THE ENGINEER.
- BB) ALL DIMENSIONING AND STATIONING IN THE TRANSPORTATION MANAGEMENT PLAN IS APPROXIMATE (±). REFER TO ROADWAY AND STRUCTURE DESIGN PLANS FOR EXACT DIMENSIONS AND STATIONING.
- CC) MAINTAIN ACCESS TO ALL DRIVEWAYS.

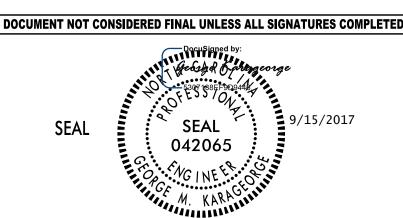
TEMPORARY CLEAR ZONES

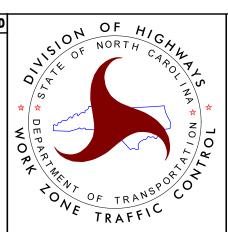
DD) AS A GENERAL GUIDELINE MAINTAIN A 30' TEMPORARY WORK AREA CLEAR ZONE FOR THE DURATION OF THIS PROJECT ON ALL ROADWAYS. DUE TO VARYING FIELD CONDITIONS THIS GUIDELINE MAY BE MODIFIED AS FOLLOWS AND/OR AS DIRECTED BY THE ENGINEER:

WHEN LANE CLOSURES ARE NOT IN EFFECT AND WORK IS NOT BEHIND TEMPORARY CONCRETE BARRIER OR GUARDRAIL THE FOLLOWING CLEAR ZONE REQUIREMENTS SHOULD BE MET:

- -MOVE EQUIPMENT, MATERIALS, STOCKPILES AND OBSTACLES CREATED BY WORK OPERATIONS THAT WERE NOT EXISTING PRIOR TO WORK BEGINNING, TO A MINIMUM OF 30' FROM A TRAVELWAY.
- -MOVE OBSTACLES SUCH AS STOCKPILES AND NON-ACTIVE EQUIPMENT AT LEAST 5' AWAY FROM THE BACK OF TEMPORARY CONCRETE BARRIER. IN GENERAL, IF STORING MATERIALS OR EQUIPMENT BEHIND ANY TYPE OF BARRIER THE DEFLECTION OF THE BARRIER SHOULD BE ACCOUNTED FOR AND ITEMS SHOULD NOT BE STORED IN THAT AREA.
- -EXCAVATIONS OR OTHER IMMOVABLE OBSTRUCTIONS SHALL BE SAFED UP USING METHODS SUCH AS BACK-FILLING, COVERS, DELINEATION, ETC. METHODS USED MUST BE ACCEPTABLE TO THE ENGINEER.

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GENERAL NOTES

WORK ZONE IMPACTS MANAGEMENT STRATEGIES

PROJ. REFERENCE NO. SHEET NO.

R-5703

TMP-1D

TEMP	ORARY TRAFFIC CONTR	ROL (TTC)	TRA	NSPORTATION OPERATIO	NS (TO)		PUBLIC INFORMATION (PI)	
CONTROL STRATEGIES	TRAFFIC CONTROL DEVICES	PROJECT COORDINATION, CONTRACTING AND INNOVATIVE CONSTRUCTION STRATEGIES	DEMAND MANAGEMENT STRATEGIES	CORRIDOR/ NETWORK MANAGEMENT STRATEGIES	WORK ZONE SAFETY MANAGEMENT STRATEGIES	INCIDENT MANAGEMENT AND ENFORCEMENT STRATEGIES	PUBLIC AWARENESS STRATEGIES	MOTORIST INFORMATION STRATEGIES
CONSTRUCTION PHASING	TEMPORARY SIGNS	PROJECT COORDINATION	NONE	NONE	TEMPORARY TRAFFIC BARRIER	COORDINATION WITH MEDIA	BROCHURES AND MAILERS	CHANGEABLE MESSAGE SIGNS (CMS)
FULL ROADWAY CLOSURES	o WARNING	o UTILITIES COORDINATION			CRASH-CUSHIONS	LOCAL DETOUR ROUTES	PRESS RELEASES/MEDIA ALERTS	
LANE SHIFTS	o REGULATORY	o RIGHT-OF-WAY			DELINEATION	INCIDENT/EMERGENCY RESPONSE PLAN	PAID ADVERTISEMENTS	
REDUCED LANE WIDTHS TO MAINTAIN NUMBER OF LANES	o GUIDE/ INFORMATION	COORDINATION			WARNING LIGHTS	DEDICATED (PAID)	PLANNED LANE CLOSURES	
(CONSTRICTION)	CHANGEABLE MESSAGE				CONSTRUCTION SAFETY	POLICE ENFORCEMENT	PLANNED ROAD CLOSURES	
LANE CLOSURES TO PROVIDE WORKER SAFETY	SIGNS (CMS) ARROW BOARDS				SUPERVISORS/ INSPECTORS	COOPERATIVE POLICE ENFORCEMENT	PUBLIC MEETINGS/HEARINGS	
SHOULDER CLOSURES TO PROVIDE WORKER SAFETY	CHANNELIZING DEVICES				ROAD SAFETY		COORDINATION WITH MEDIA/SCHOOLS/ BUSINESSES/EMERGENCY	
ONE-LANE, TWO WAY	TEMPORARY PAVEMENT				AUDITS TEAM MEETINGS		SERVICES	
OPERATION	MARKINGS				PROJECT ON-SITE		WORK ZONE SAFETY HIGHWAY SIGNS	
NIGHT WORK WEEKEND WORK	FLAGGERS UNIFORMED LAW				SAFETY TRAINING		VISUAL INFORMATION	
LANE CLOSURE TIME	ENFORCEMENT OFFICERS						(VIDEOS, SLIDES, PRESENTATIONS) FOR MEETINGS AND WEB	
RESTRICTIONS	LIGHTING DEVICES						WILLTINGS AND WEB	
HAULING RESTRICTIONS								
OFF-SITE DETOURS WITH TIME RESTRICTIONS								

TRAFFIC MANAGEMENT STRATEGIES GENERAL SYNOPSIS

WORK ZONE IMPACTS - MANAGEMENT STRATEGIES ARE IN ACCORDANCE WITH THE FEDERAL PUBLICATION "DEVELOPING AND IMPLEMENTING TRANSPORTATION MANAGEMENT PLANS FOR WORK ZONES" IN THE RULE ON WORK ZONE SAFETY AND MOBILITY 23 CFR 630 SUBPART J.

THE STRATEGIES LISTED ABOVE ARE POTENTIAL ANTICIPATED FOR THIS PROJECT, HOWEVER, SOME MAY BE ADDED AND OTHERS MAY BE OMITTED AS THE PROJECT PROGRESSES DURING CONSTRUCTION.

NCDOT WILL TAKE THE LEAD ROLE ON THE PUBLIC INFORMATION EFFORTS. THE CONTRACTOR SHALL COORDINATE WITH THE DEPARTMENT TO PROMOTE PUBLIC AWARENESS FOR THIS PROJECT. (SEE PROJECT SPECIAL PROVISIONS - PUBLIC INFORMATION SCOPE OF WORK)

THE MAJOR WORK ON THIS PROJECT INCLUDES CONSTRUCTION OF NC 148 ON NEW LOCATION WITH OVERPASSES AT EXISTING ROADWAYS, AND CONSTRUCTION OF NEW INTERCHANGES AT NC 58 AND NC 11.

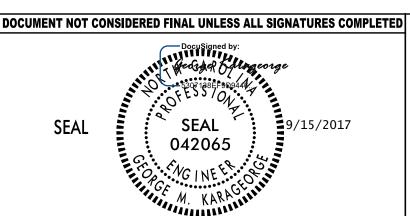
TEMPORARY LANE CLOSURES WILL BE USED FOR DAILY OPERATIONS.

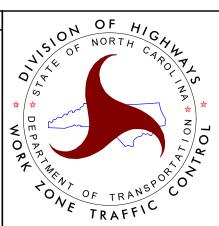
TEMPORARY ROAD CLOSURES WTH OFFSITE DETOURS WILL BE USED DURING ERECTION OF BRIDGE GIRDERS. SPECIAL PROVISIONS FOR INTERMEDIATE CONTRACT TIMES WITH LIQUIDATED DAMAGES WILL BE APPLIED TO THESE CLOSURES.

A TEMPORARY ROAD CLOSURE UNDER TIME RESTRICTION WILL ASO BE USED TO TIE PROPOSED NC 148 TO THE EXISTING ROADWAY AND OPEN THE NEW FACILITY TO TRAFFIC.

REFER TO PHASING NARRATIVE FOR A DETAILED DESCRIPTION.







WORK ZONE
IMPACTS STRATEGIES

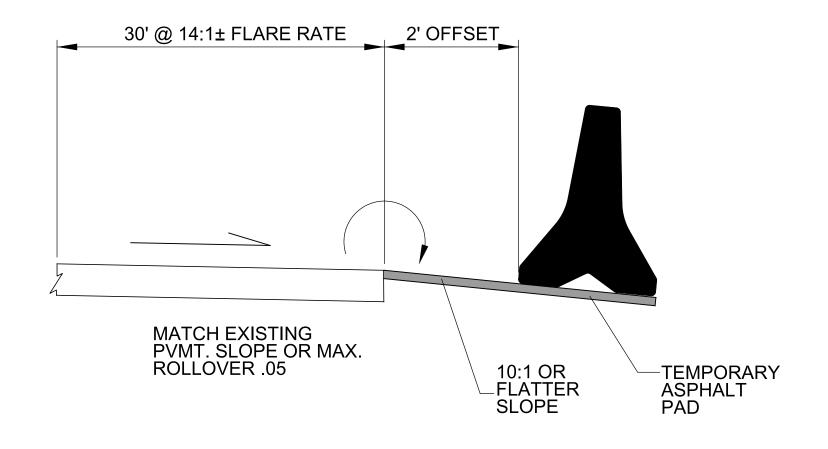
ATTICALIMENTICONTRONICEALME FLAN SHEELSAK-5703 IMP OID WORK ZONE IN F.mackenzie

PROJ. REFERENCE NO. SHEET NO. TMP - 2

TEMPORARY BARRIER APPROACH END TREATMENT

PLAN VIEW 14:1 UNANCHORED BARRIER FLARE RATE (60 MPH) REFER ALSO TO RSD 1101.11 SHEET 3 OF 4 PORTABLE CONCRETE BARRIER BARRIER SECTIONS 1 BARRIER SECTION DIRECTION OF TRAFFIC FLOW

SECTION VIEW

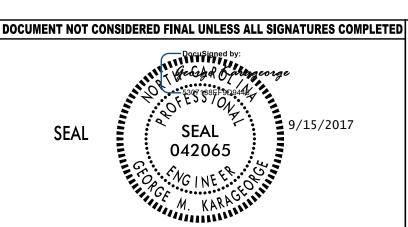


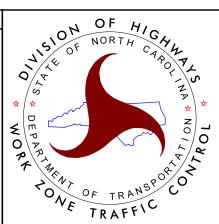
NOTES:

- 1. INSTALL TEMPORARY BARRIER AT AN OFFSET OF 2' FROM THE ADJACENT EDGELINE OF A TRAVEL LANE.
 OFFSET THE APPROACH END AND CRASH CUSHION 4' (PREFFERED) FROM THE EDGE OF A TRAVEL LANE. IN THE
 EVENT A 4' OFFSET CANNOT BE ACHIEVED A LESSER OFFSET MAY BE USED BUT NOT LESS THAN 2'.
- 2. TEMPORARY BARRIER MUST REST ON AN ASPHALT OR CONCRETE SURFACE.
- FURNISH MATERIAL AND INSTALL TEMPORARY ASPHALT PAD FOR BARRIER TO REST ON. ASPHALT PAD SHALL BE PAVED AT A MINIMUM OF A 1" LAYER OF SURFACE COURSE OR AS APPROVED BY THE ENGINEER.
- 4. CONSTRUCT TEMPORARY ASPHALT PAD AS TO MATCH THE CROSS-SLOPE OF THE PAVEMENT THE PAD IS BEING PAVED UP TO, OR PROVIDE FOR A MAXIMUM ROLL-OVER OF .05. PAVE SUFFICIENT ASPHALT SUCH THAT THE ENTIRE BASE OF THE TEMPORARY BARRIER RESTS ON ASPHALT.
- 5. DO NOT PLACE TEMPORARY BARRIER ON A SURFACE WITH A SLOPE STEEPER THAN 10:1.
- THE COST OF THE TEMPORARY ASPHALT PAD WILL BE CONSIDERED INCIDENTAL TO THE COST OF BARRIER. NO SEPARATE PAYMENT WILL BE MADE FOR THE TEMPORARY ASPHALT PAD.



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TEMPORARY BARRIER
APPROACH END TREATMENT
TYPICAL DRAWING

PROJ. REFERENCE NO. SHEET NO.

R-5703 TMP-2A

SIGN NUMBER: BACKG COLOR: Fluorescent Orange COPY COLOR: **Black** TYPE: STATIONARY QUANTITY: SEE PLANS WID HT SYMBOL X Υ SIGN WIDTH: 4'-0" **HEIGHT:** 1'-6" TOTAL AREA: 6.0 Sq.Ft. **BORDER TYPE: INSET RECESS: 0.47**" WIDTH: 0.63" RADII: 1.5"

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 fluorescent orange retroreflective sheeting.

PROJECT ID: R-5703

DESIGN BY:

4'-0"
HUGO RD 6"
6"
6"
8.5" 31" 8.5"

CHECKED BY: GMK

LOCATION:

R=1.5''

BCM

TH=0.63"

IN=0.47"

Spacing Factor is 1 unless specified otherwise

Mar 16, 2017

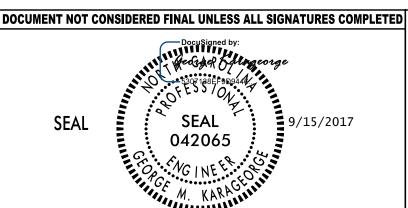
DIV: 2

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TEMPORARY DETOUR SIGN DESIGN HUGO RD.

PROJ. REFERENCE NO. SHEET NO. TMP-2B R-5703

SIGN NUMBER: BACKG COLOR: Fluorescent Orange COPY COLOR: Black TYPE: STATIONARY QUANTITY: SEE PLANS SYMBOL X WID HT SIGN WIDTH: 4'-0" **HEIGHT:** 2'-6" TOTAL AREA: 10.0 Sq.Ft. **BORDER TYPE: INSET RECESS: 0.47**" WIDTH: 0.63" **RADII:** 1.5" 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 fluorescent orange retroreflective sheeting.

Mar 16, 2017 DIV: 2 LOCATION: PROJECT ID: R-5703 4'-0" WALLACE 9 **BORDER** 5.75"36.5"5.75"

CHECKED BY: GMK

R=1.5''

BCM

DESIGN BY:

TH=0.63"

IN=0.47"

Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

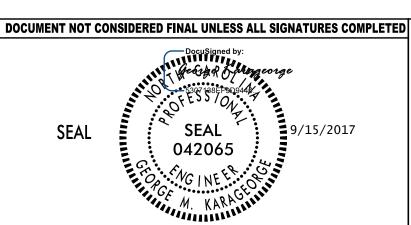
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TEMPORARY DETOUR SIGN DESIGN WALLACE FAMILY RD.

PROJ. REFERENCE NO. SHEET NO. TMP-2C R-5703

BACKG COLOR: Fluorescent Orange SIGN NUMBER: COPY COLOR: Black TYPE: STATIONARY QUANTITY: SEE PLANS WID HT SYMBOL Υ SIGN WIDTH: 4'-6" **HEIGHT:** 1'-6" TOTAL AREA: 6.8 Sq.Ft. **BORDER TYPE: INSET RECESS: 0.47**" WIDTH: 0.63" **RADII:** 1.5" MAT'L: 0.080" (2.0 mm) ALUMINUM

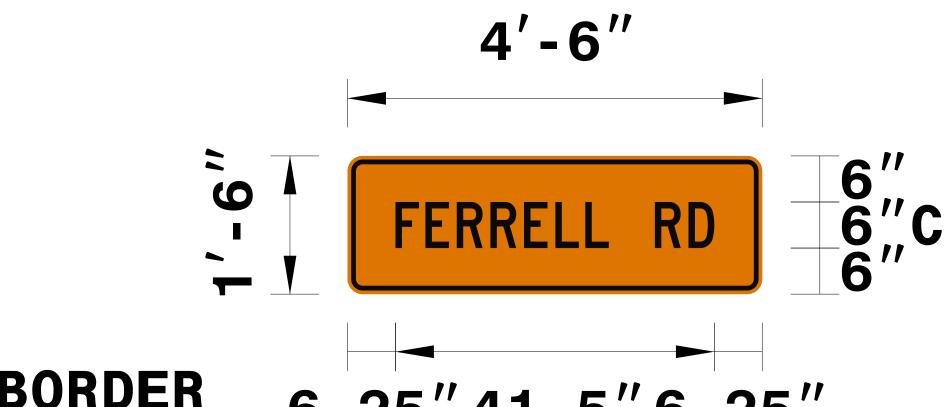
USE NOTES: 1,2

NO. Z BARS:

LENGTH:

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

DESIGN BY: **BCM** CHECKED BY: GMK Mar 16, 2017 LOCATION: DIV: 2 PROJECT ID: R-5703



BORDER

6.25"41.5"6.25"

R=1.5''

TH=0.63''

IN=0.47"

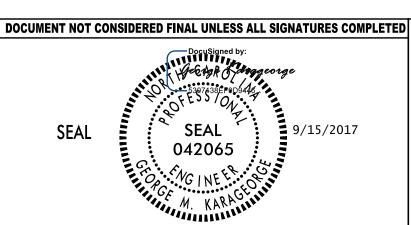
Spacing Factor is 1 unless specified otherwise

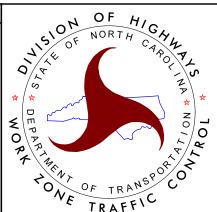
LETTER POSITIONS

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TEMPORARY DETOUR SIGN DESIGN FERRELL RD.

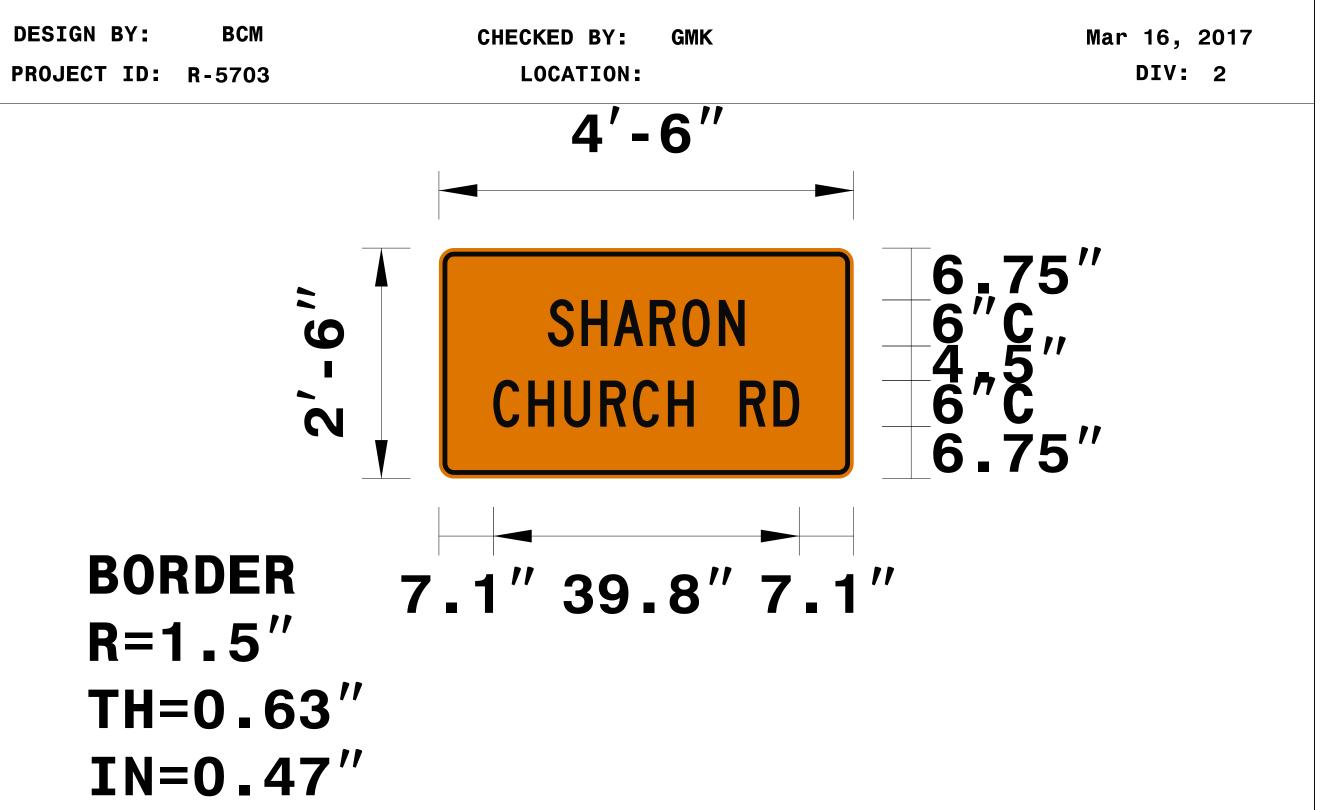
PROJ. REFERENCE NO. SHEET NO.

R-5703 TMP-2D

BACKG COLOR: Fluorescent Orange SIGN NUMBER: COPY COLOR: Black TYPE: STATIONARY QUANTITY: SEE PLANS SYMBOL WID HT SIGN WIDTH: 4'-6" **HEIGHT:** 2'-6" TOTAL AREA: 11.3 Sq.Ft. **BORDER TYPE: INSET RECESS: 0.47**" WIDTH: 0.63" **RADII:** 1.5" MAT'L: 0.080" (2.0 mm) ALUMINUM NO. Z BARS:

USE NOTES: 1,2

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



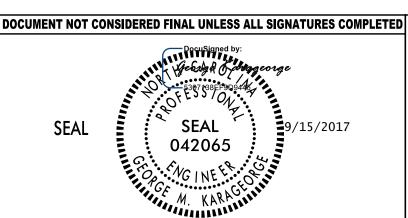
LETTER POSITIONS

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Spacing Factor is 1 unless specified otherwise



TEMPORARY DETOUR SIGN DESIGN SHARON CHURCH RD.

STEP 1:

PRIOR TO ANY CONSTRUCTION OPERATIONS INSTALL WORK ZONE ADVANCE WARNING SIGNS PER ROADWAY STANDARD DRAWING 1101.01 SHEETS 1, 2 AND 3 OF 3.

IMPLEMENT PERMANENT ROAD CLOSURES AND CONSTRUCT TURN-AROUNDS/CUL-DE-SAC FOR THE FOLLOWING LOCATIONS:

- HAMILTON RD -Y5- (TMP-4G)
- GRAINGER STATION RD. (TMP-4K)

WHEN CLOSING THE ROADWAYS LISTED ABOVE, INITIALLY INSTALL TEMPORARY ROAD CLOSURE DEVICES PER RSD 1101.03 SHEET 1/9, LESS ANY SIGNS INDICATING A DETOUR, AND CONSTRUCT CUL-DE-SACS & TURNAROUNDS. INSTALL PERMANENT SIGNS ONCE THEY ARE REQUIRED. AS DIRECTED BY THE ENGINEER.

BEGIN CONSTRUCTION OF THE FOLLOWING:

(TMP 4-4M)

- -L- 60+56.32 364+30
- -L- BRIDGES OVER NC 11 SPANS A (END BENTS #1 & MEDIAN BENTS #1) (TMP-4L)
- CULVERT EXTENSION -L- 67+50 (TMP-4A)
- NC 11 -Y8- 19+76.61 63+00 (TMP 4J-4M)
- NC 58 (-Y1-) WIDENING/WEDGING (TMP-4C,4C1,4C2)
- -Y1LPA-
- -Y1LPD-
- -Y1RPA-
- -Y1RPD-
- -Y8LPC-
- -Y8LPD-
- -Y8RPA-
- -Y8RPB-
- -DR4-
- -Y9- LEFT SIDE UP TO EOP
- PAVE SHOULDERS UNDER BRIDGES ALONG Y3, Y4, Y6, AND Y7 (RSD 1101.02, SH 1 OF 15). REFER TO ROADWAY PLAN TYPICAL SECTIONS.

CONSTRUCT THE FOLLOWING:

• -SERV1- (TMP - 4C1, 4D, 4D.1)

DURING -L- BRIDGE GIRDER ERECTION OPERATIONS OVER EXISTING ROADWAYS, IMPLEMENT TEMPORARY ROAD CLOSURES AS FOLLOWS:

INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES

FOR EACH OF HUGO RD.(Y3), WALLACE FAMILY RD (Y4), FERRELL RD. (Y6), AND SHARON CHURCH RD (Y7) ONE TEMPORARY ROAD CLOSURE WILL BE ALLOWED, FOR A TIME PERIOD OF 168 CONSECUTIVE HOURS FOR THE ERECTION OF THE -L-LINE OVERHEAD BRIDGE GIRDERS. (TMP-4EDET, 4FDET, 4HDET, 4IDET)

FOR NC 58 (Y1) ONE TEMPORARY ROAD CLOSURE WILL BE ALLOWED, FOR A TIME PERIOD OF 59 CONSECUTIVE HOURS BETWEEN THE HOURS OF 7:00 PM FRIDAY TO 6:00 A.M. MONDAY FOR THE ERECTION OF THE -L- LINE OVERHEAD BRIDGE GIRDERS. (TMP- 4CDET, 4CDET1)

DO NOT CLOSE ANY OF THE ABOVE LOCATIONS SIMULTANEOUSLY.

STEP 2: OPENING OF -SERV1- (TMP-4N)

2A: OPEN SERV1 TO TRAFFIC AND SIMULTANEOUSLY CLOSE EN DICKERSON RD. ONCE EN DICKERSON RD. IS CLOSED CONTINUE CONSTRUCTION OF -L- THROUGH THAT AREA.

2B: CLOSE HUMPHREY RD AT NC 58

2C: CONSTRUCT CUL-DE-SAC AT HUMPHREY RD.(RSD 1101.02, SH 1 0F 15)

STEP 3:

COMPLETE THE FOLLOWING BEGUN IN STEP 1:

- -L- BRIDGES OVER NC 11 SPANS A (END BENTS #1 AND MEDIAN BENTS #1)
- NC 11 -Y8- 19+76.61 63+00 (TMP 4J-4M)
- INSTALL TEMPORARY BARRIER ON NC 11 PRIOR TO SHIFTING TRAFFIC TO THE NEW Y8 ALIGNMENT IN PHASE II (TMP-5E)

PHASE II OPENING OF -Y8- NC11

STEP 1:

IN A CONTINUOUS OPERATION, COMPLETE -Y8- TIE-INS TO EXISTING NC 11 SWITCH NC 11 TRAFFIC ONTO THE NEW -Y8- ALIGNMENT AND CLOSE THE EXISTING SECTION OF NC 11 AS FOLLOWS:

USE TEMPORARY LANE CLOSURES PER STD. 1101.02 SHEET 3 OR 6 OF 15 DURING THE TRAFFIC SWITCH AS FOLLOWS:

1A: CLOSE THE EXISTING RIGHT LANE OF NC 11 SB AND PAVE THE RIGHT LANE TIE-INS TYING IN THE PROPOSED NC 11 SB TO THE EXISTING.

1B: SWITCH THE SB LANE CLOSURE AND DIRECT NC 11 SB TRAFFIC IN ONE LANE ONTO THE PROPOSED NC 11 SB RIGHT LANE, CLOSE THE EXISTING SB ROADWAY AND PAVE THE SB LEFT LANE TIE-INS.

1C: WITH NC 11 SB ON THE PROPOSED ROADWAY AND NC 11 NB ON THE EXISTING NB ROADWAY, CLOSE THE LEFT LANE OF NC 11 NB AND PAVE THE LEFT LANE TIE-INS OF THE PROPOSED NB LEFT LANE.

1D: SWITCH THE NB LANE CLOSURE AND DIRECT NC 11 NB TRAFFIC IN ONE LANE INTO THE PROPOSED NC 11 NB LEFT LANE. CLOSE THE EXISTING NB ROADWAY AND PAVE THE NB RIGHT LANE TIE-INS.

1E: REMOVE LANE CLOSURES AND OPEN PROPOSED NC 11 TO A FOUR LANE PATTERN (TMP-5C-5F)

STEP 2:

WITH NC 11 TRAFFIC ON THE NEW -Y8- ALIGNMENT CONSTRUCT THE FOLLOWING:

- -Y1- (NC 58) PAVING 34+00 44+92 (TMP-5B)
- REMOVE EXISTING NC 11 PAVEMENT, COMPLETE EMBANKMENTS(TMP-5D 5F)
- CONSTRUCT -L- 60+56 73+00 (IN EXISTING NC 148 MEDIAN) AS MUCH AS POSSIBLE, UP TO SUBGRADE (TMP-5A)
- -L- 364+30 367+59 (TMP-5E)
- -L- BRIDGES OVER NC 11 CONSTRUCT END BENTS #2 AND COMPLETE BRIDGES (TMP-5E). UTILIZE ROAD CLOSURES WITH OFF SITE DETOUR DURING ERECTION OF GIRDERS (TMP-5F)

INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES

FOR NC 11 (Y8), THREE (3) TEMPORARY ROAD CLOSURE PERIODS WILL BE ALLOWED, BETWEEN THE HOURS OF 11:00 PM TO 5:00 AM, FOR THE ERECTION OF THE -L- LINE BRIDGE GIRDERS OVER NC 11. (TMP-5EDET)

<u>COMPLETE</u> CONSTRUCTION OF ITEMS BEGUN IN PHASE I AND PAVE THRU THE FINAL SURFACE COURSE:

- -L- 78+50 367+59
- -Y1LPA-, -Y1LPD-, -Y1RPA-, -Y1RPD-
- -Y8RPA-, -Y8RPB-, -Y8LPC-, -Y8LPD- (TMP-5D, 5E)

PHASE III OPENING OF -L- NC 148

PROCEED TO OPEN -L- PROPOSED NC 148 AND INTERCHANGES AT NC 58 AND

INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES

PROJ. REFERENCE NO.

R-5703

SHEET NO.

TMP-3

COMPLETE PHASE III-STEPS 1, 2 AND 3 WITHIN A TIME PERIOD OF 59
CONSECUTIVE HOURS STARTING ON FRIDAY AT 7:00 P.M. AND ENDING THE
FOLLOWING MONDAY AT 6:00 A.M.

STEP 1:

NC 11 AS FOLLOWS:

IMPLEMENT DETOUR AND CLOSE EXISTING NC 148 (TMP-6, 6A-6H).

DEACTIVATE AND BEGIN REMOVAL OF THE SIGNAL AT THE INTERSECTION OF EXISTING NC 148 AND NC58.

STEP 2:

WITH THE EXISTING NC 148- CLOSED AND TRAFFIC OPERATING ON THE DETOUR, COMPLETE THE FOLLOWING ALONG NC 148 -L-:

- CONSTRUCT TIE-IN OF -L- 60+56.32 78+50 THRU THE FINAL SURFACE LAYER (TMP-6F, 6G). MAY BEGIN OBLITERATION OF EXISTING NC 148.
- APPLY PAINT MARKINGS ALONG -L-/RAMPS/LOOPS ON FINAL SURFACE IN THE SAME PATTERN AS THE FINAL MARKINGS SHOWN IN THE PAVEMENT MARKING PLAN.
- COMPLETE PROPOSED SIGNING

HAVE PROPOSED NC 148 -L- AND ALL RAMPS AND LOOPS READY TO BE OPENED IN THE NEXT STEP, INCLUDING PROPOSED SIGNING AND PAINT PAVEMENT MARKINGS. PAVEMENT MARKER INSTALLATION IS NOT REQUIRED AT THIS TIME.

PAINT MAY BE USED AT INITIAL OPENING OF NC 148. FINAL PAVEMENT MARKING AND MARKERS MAY BE PLACED AFTER NC 148 IS OPEN AND ONCE ALL OTHER CONSTRUCTION OPERATIONS ARE COMPLETE AS DIRECTED BY THE ENGINEER.

STEP 3:

-Y1- (NC 58) PAVING 15+50 TO 34+00 (TMP-7C, 7C1, 7C2)

OPEN PROPOSED NC 148 (-L-), AND INTERCHANGES AT NC 58 AND NC 11, INCLUDING ALL RAMPS AND LOOPS. (TMP-7, 7A-7C2)

<u>STEP 4:</u>

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

WITH TRAFFIC ON PROPOSED NC 148 CONSTRUCT THE FOLLOWING:

- COMPLETE REMOVAL OF THE EXISTING NC 148 PAVEMENT
- COMPLETE REMOVAL OF THE EXISTING TRAFFIC SIGNAL AT NC 148/NC 58 (USE RSD 1101.02 SH 1 OF 15)
- APPLY FINAL MARKINGS/MARKERS ON ALL ROADWAYS ON PROJECT. (USE RSD 1101.02 SHEETS 1 AND 3 OF 15) SLOW MOVING OPERATION CARAVANS MAY BE USED AS APPROVED BY THE ENGINEER PER RSD 1101.02 SHEETS 11, 12, 13 OF 15)

UPON COMPLETION OF ALL OPERATIONS REMOVE ALL TRAFFIC CONTROL DEVICES FROM THE PROJECT.

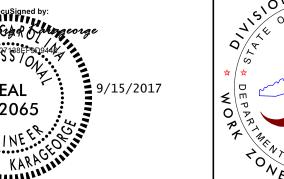
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Cary, NC 27518

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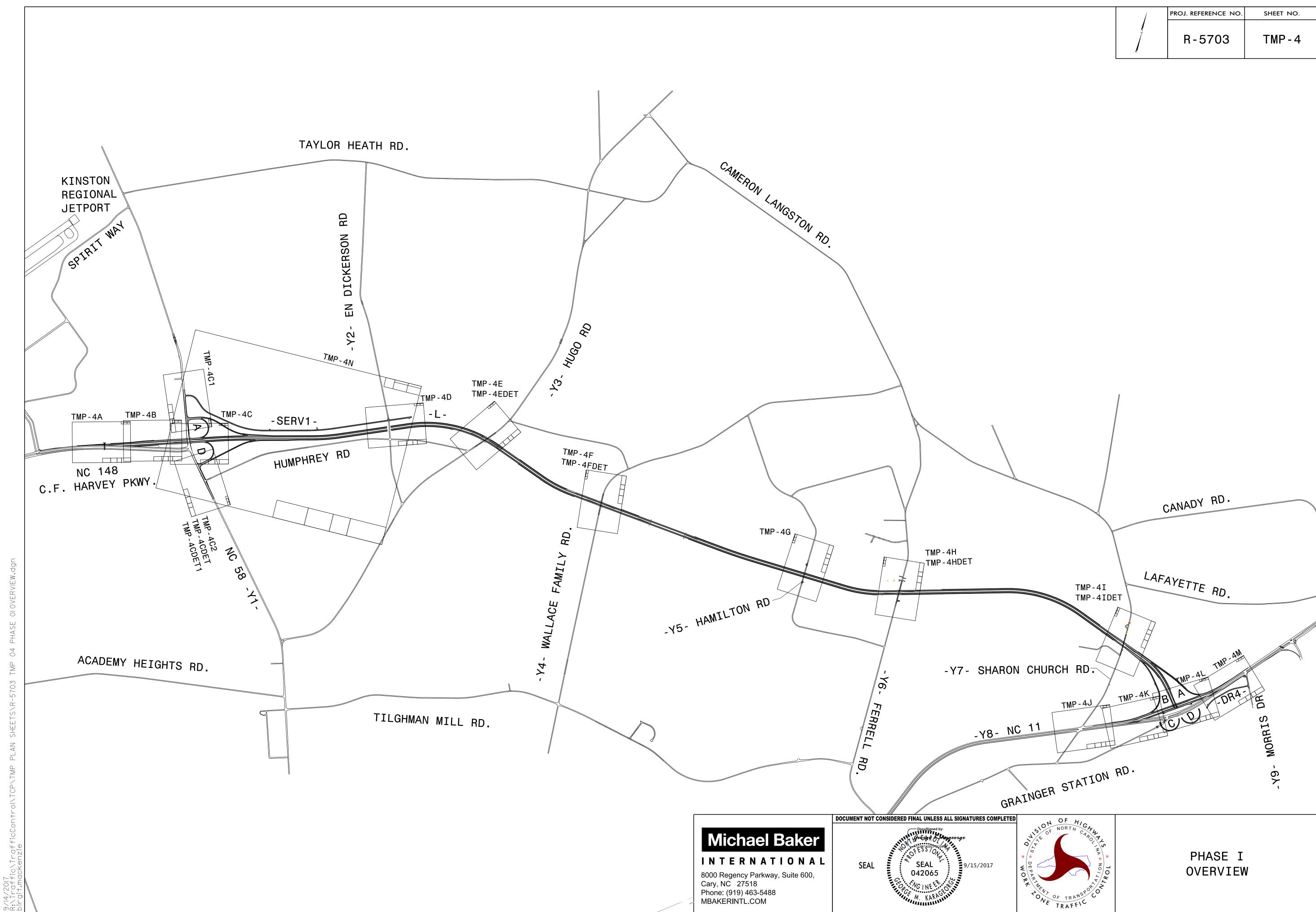
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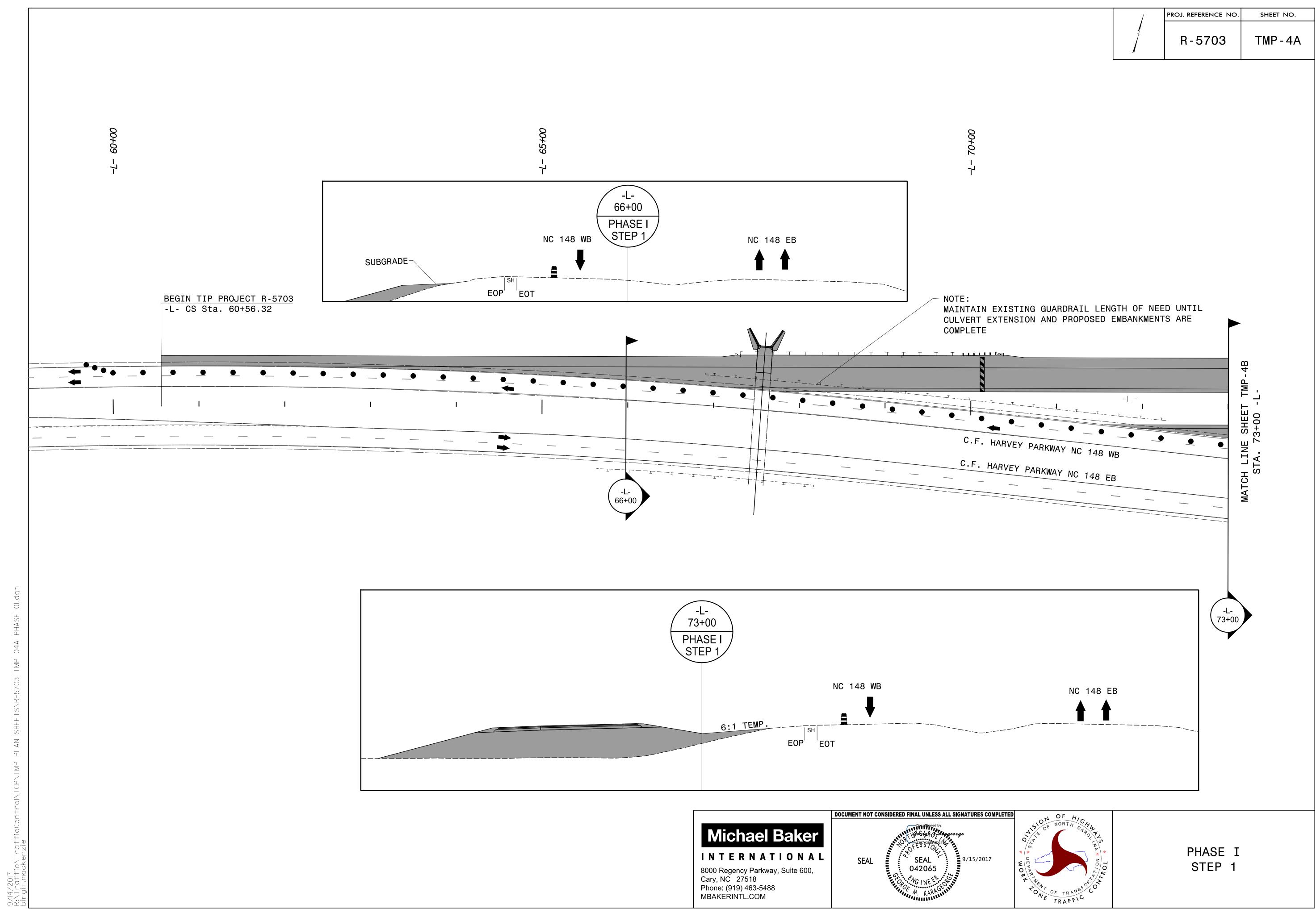
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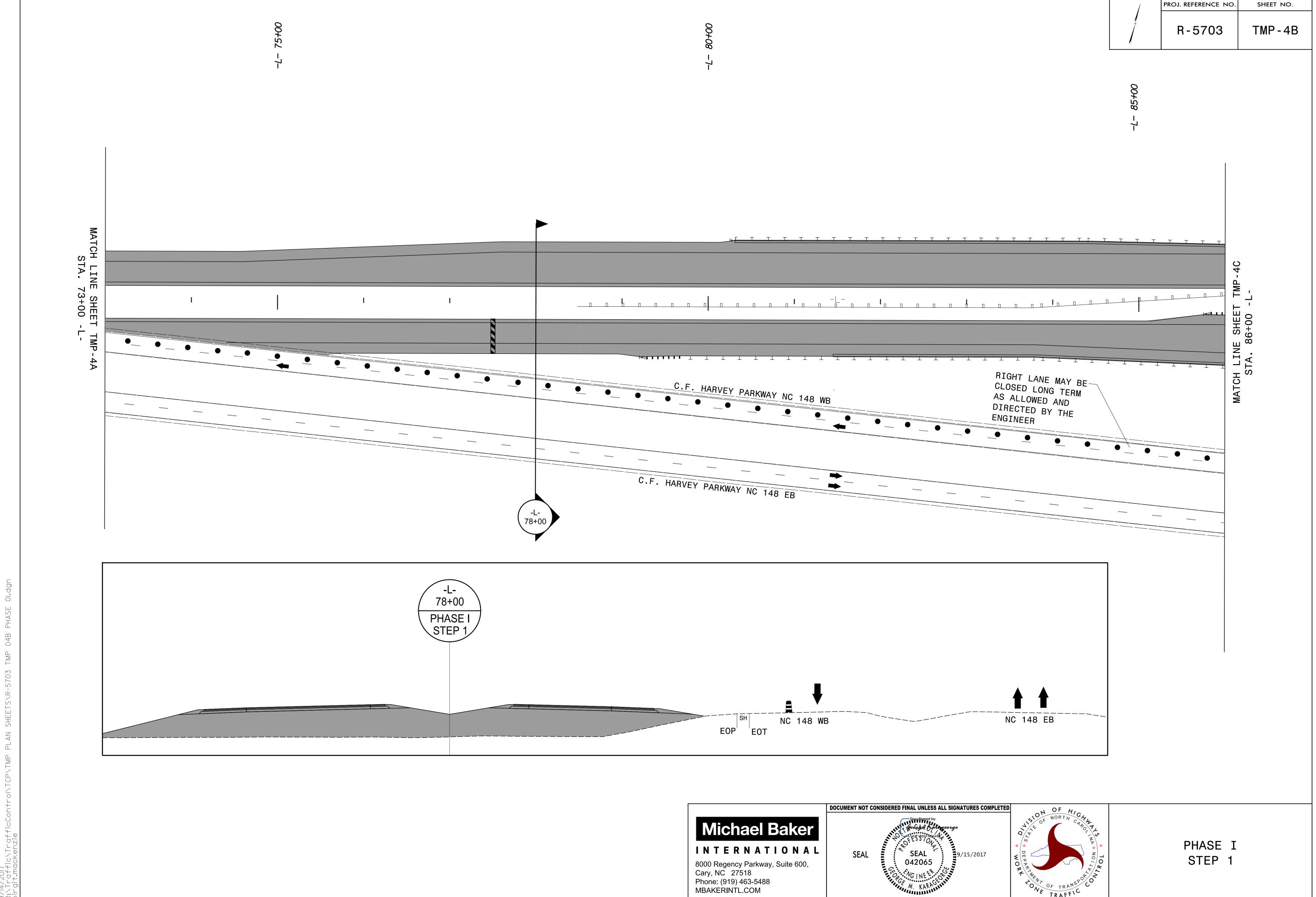




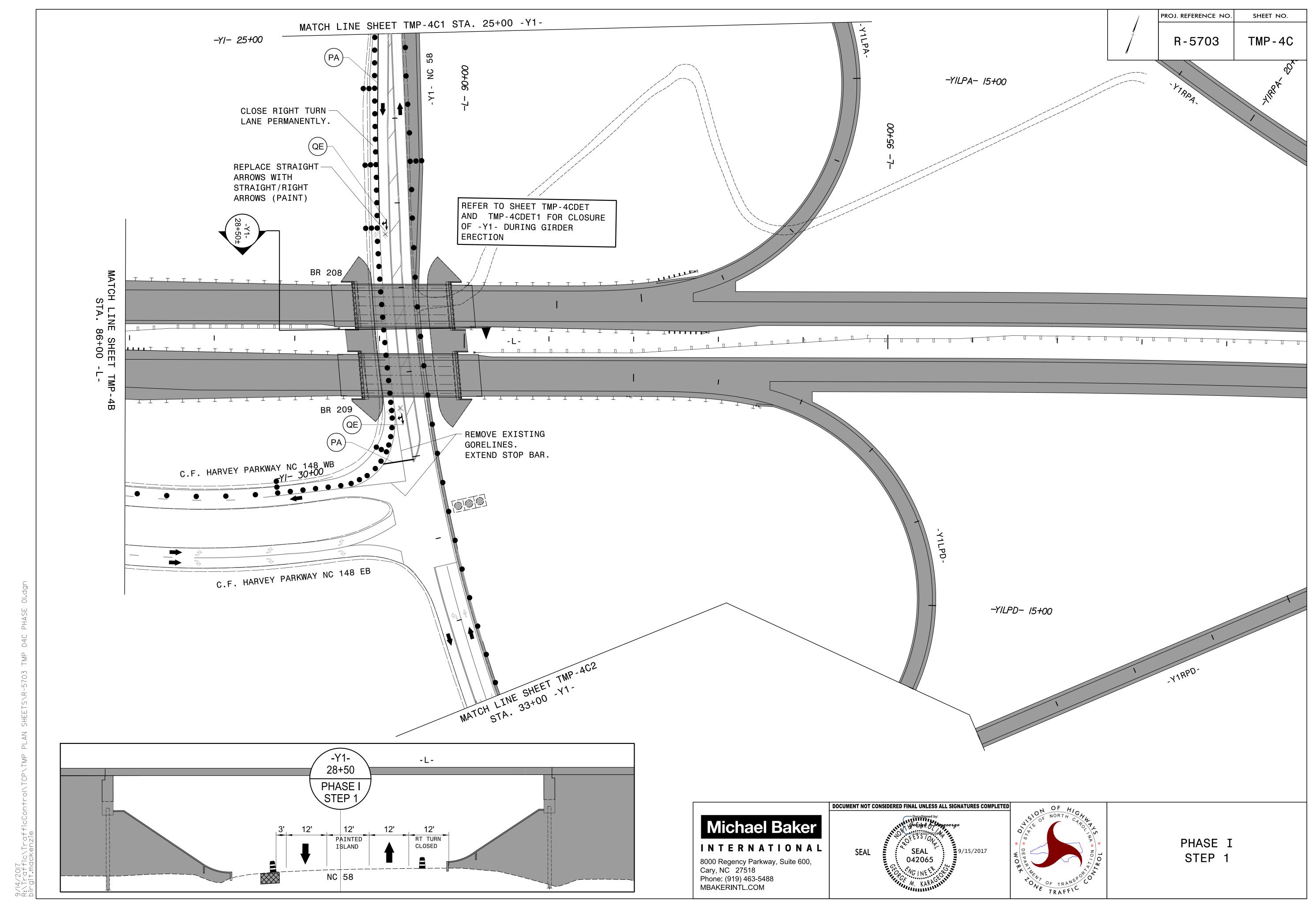
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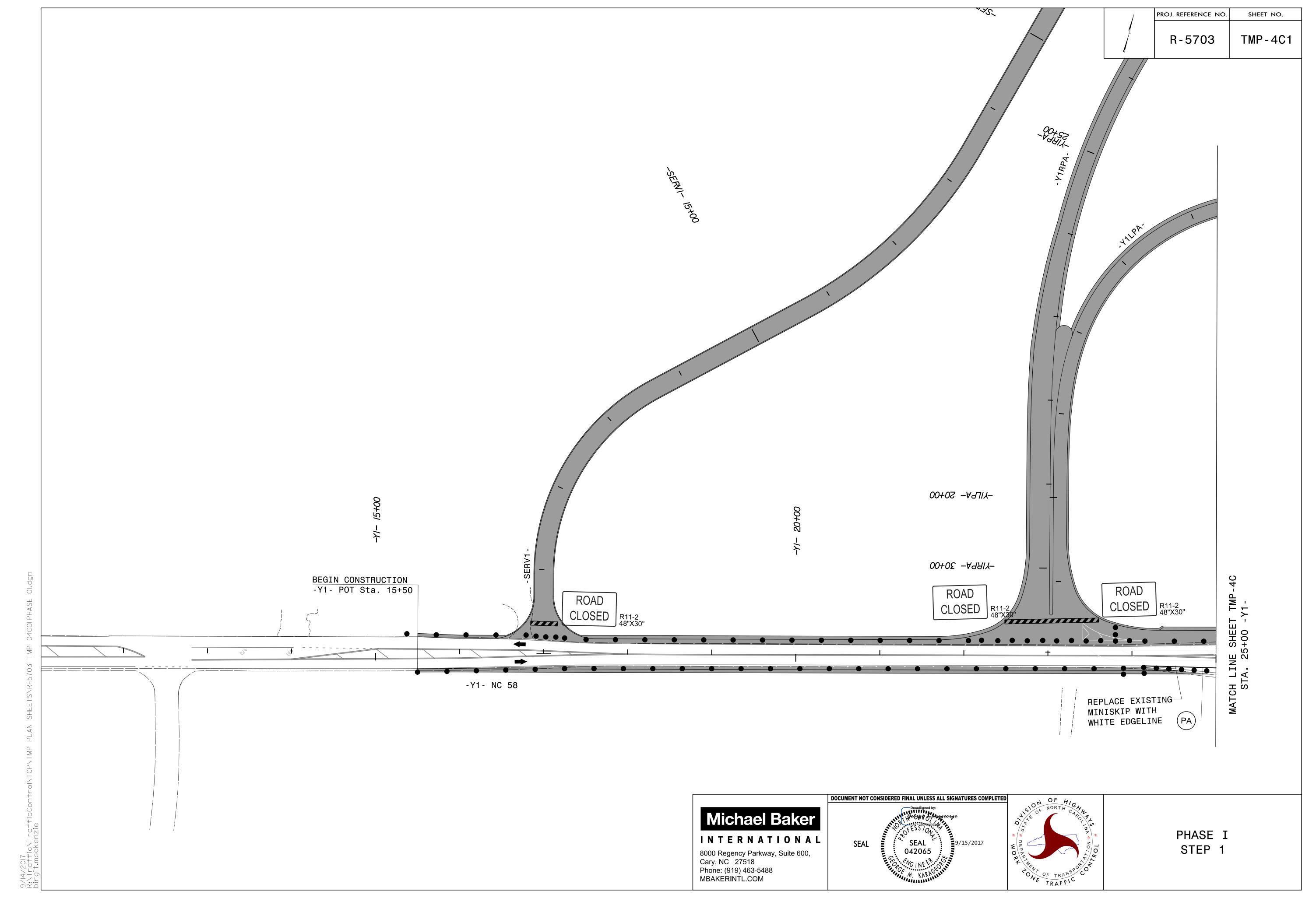


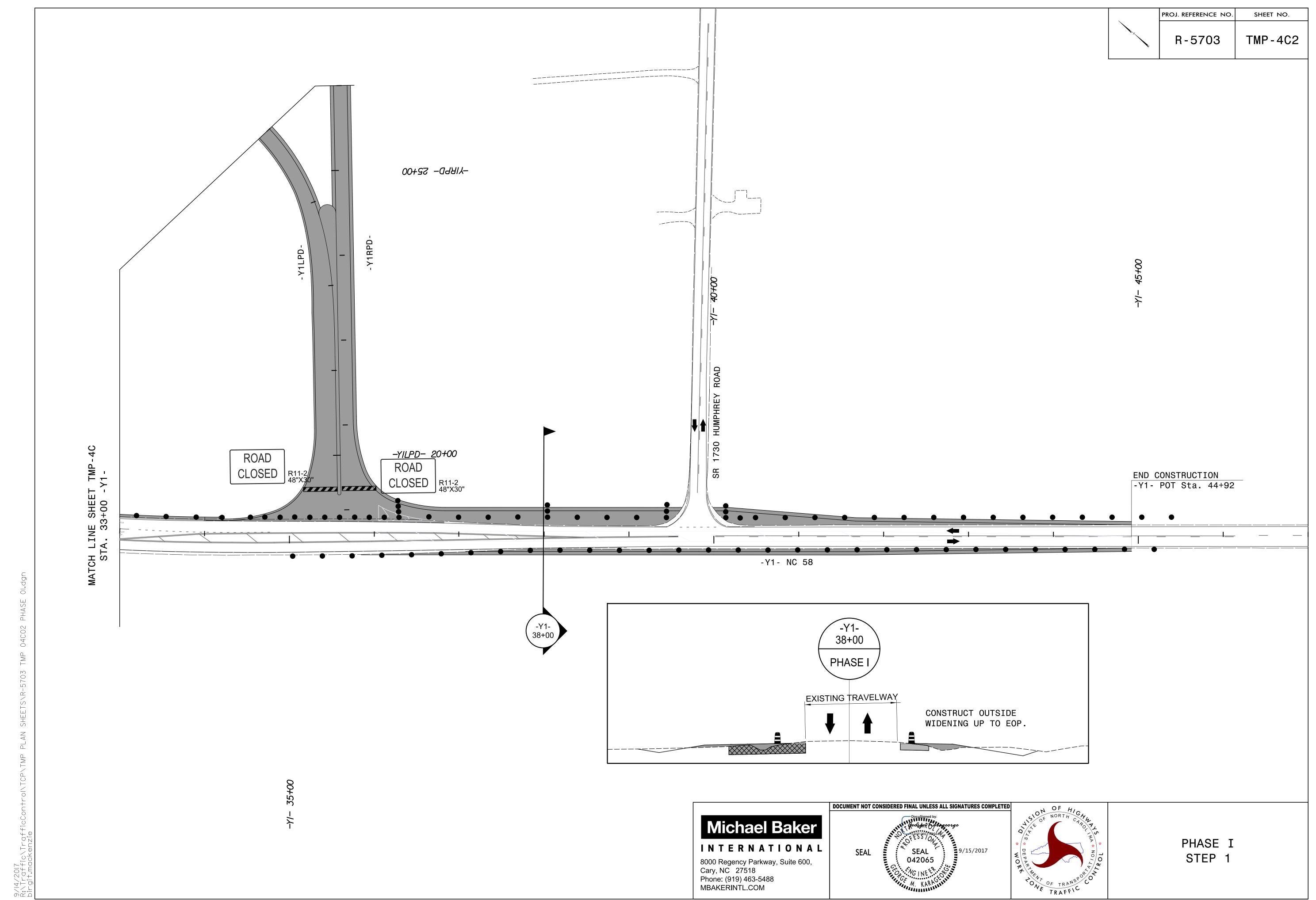


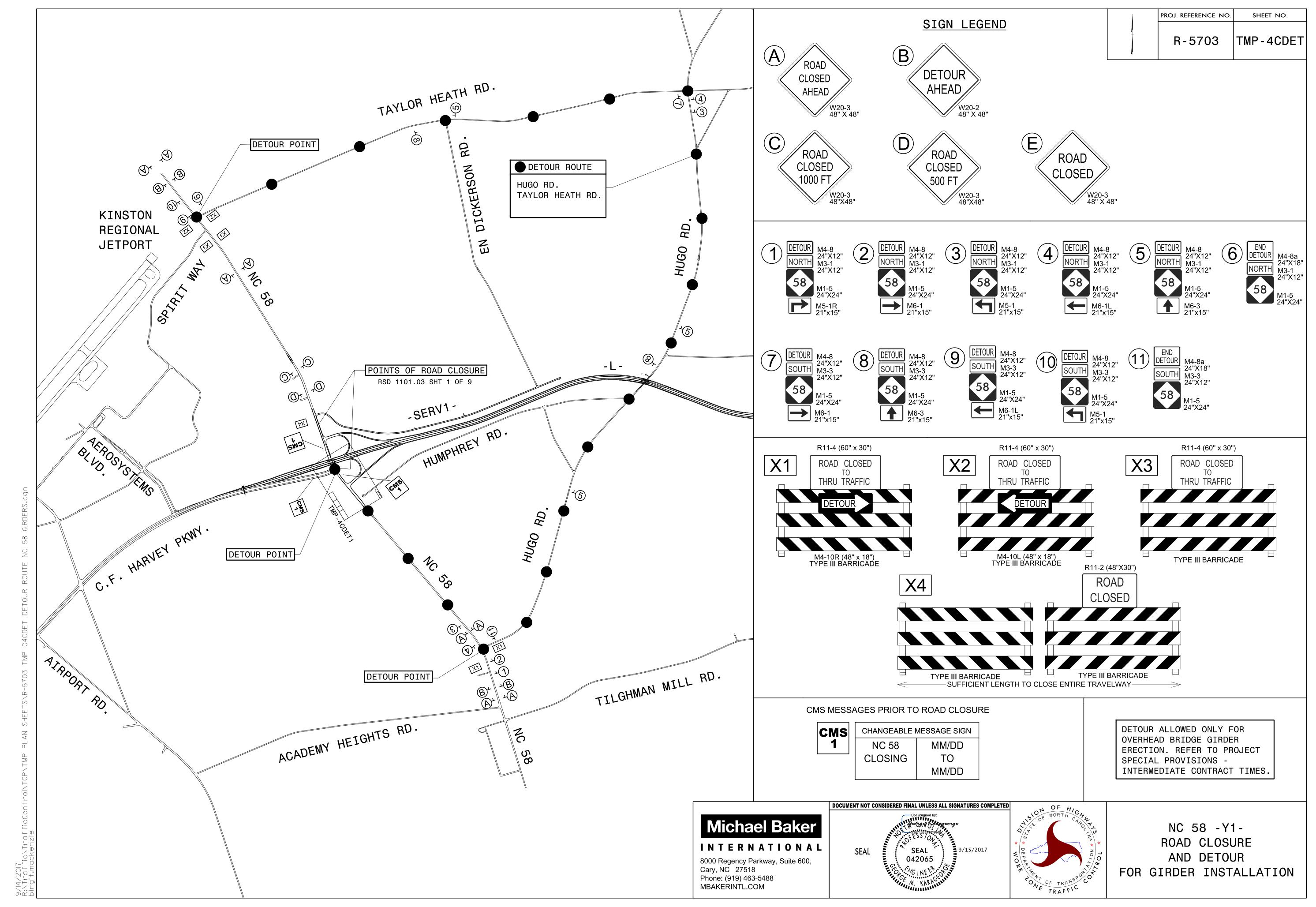


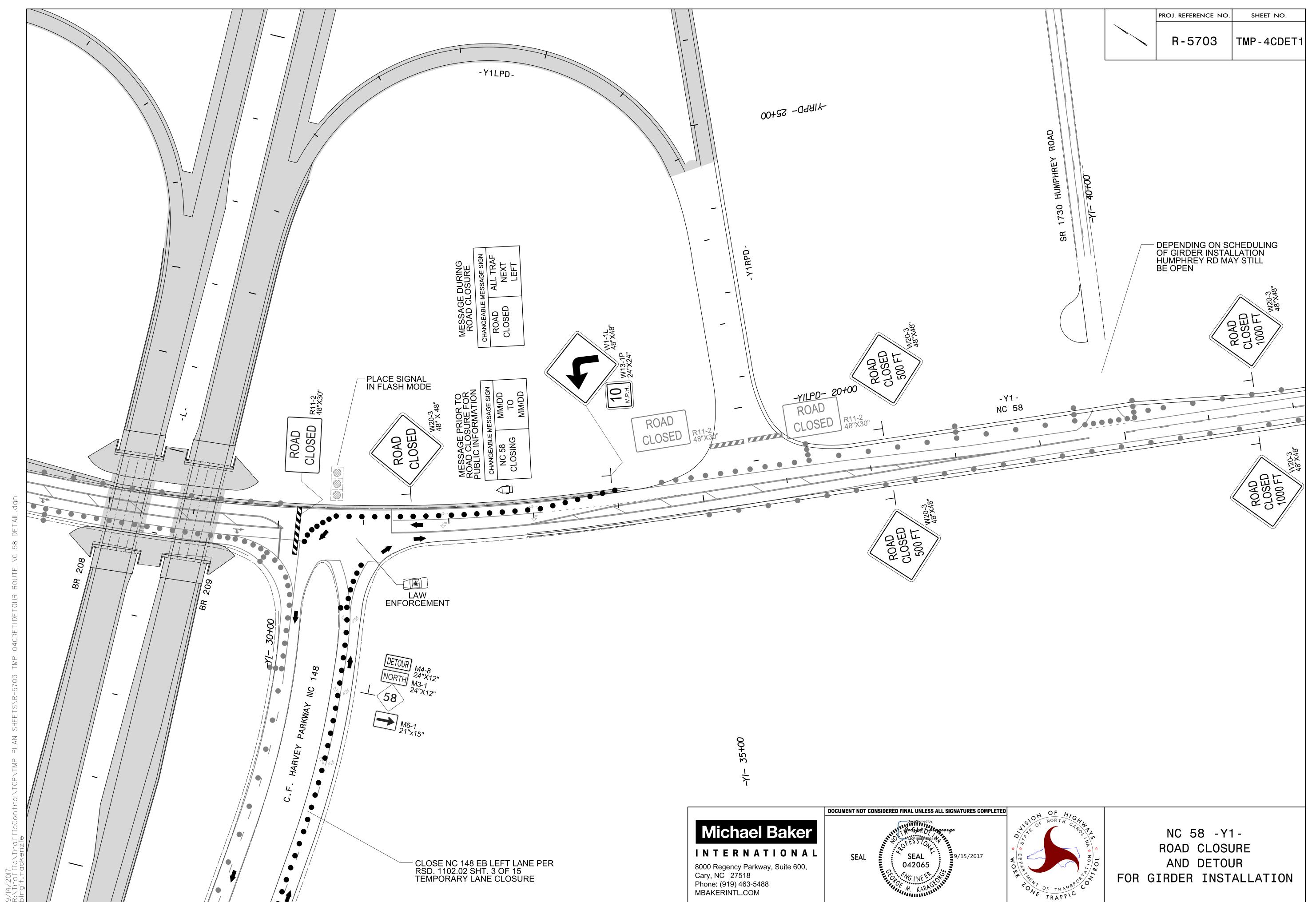
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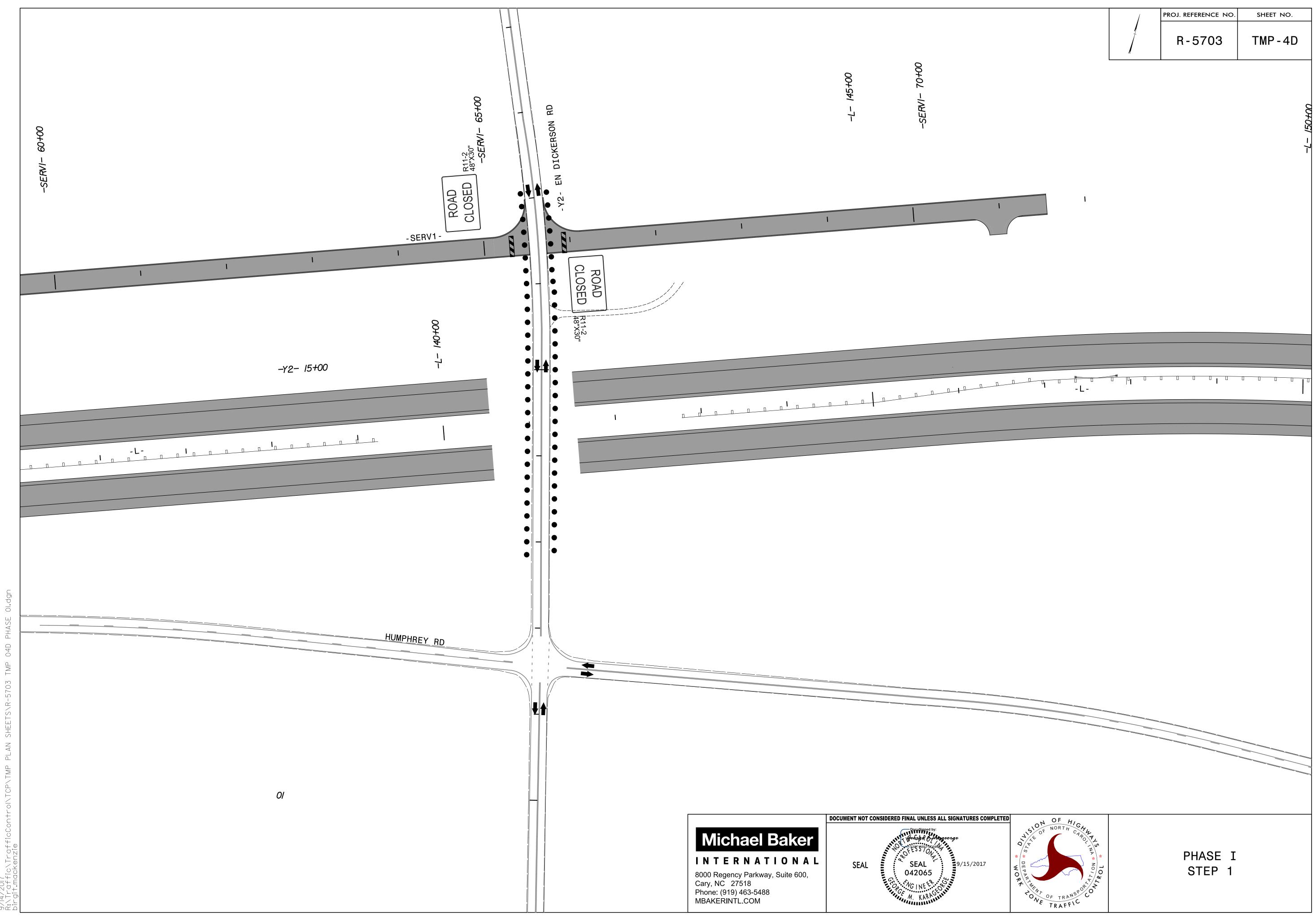






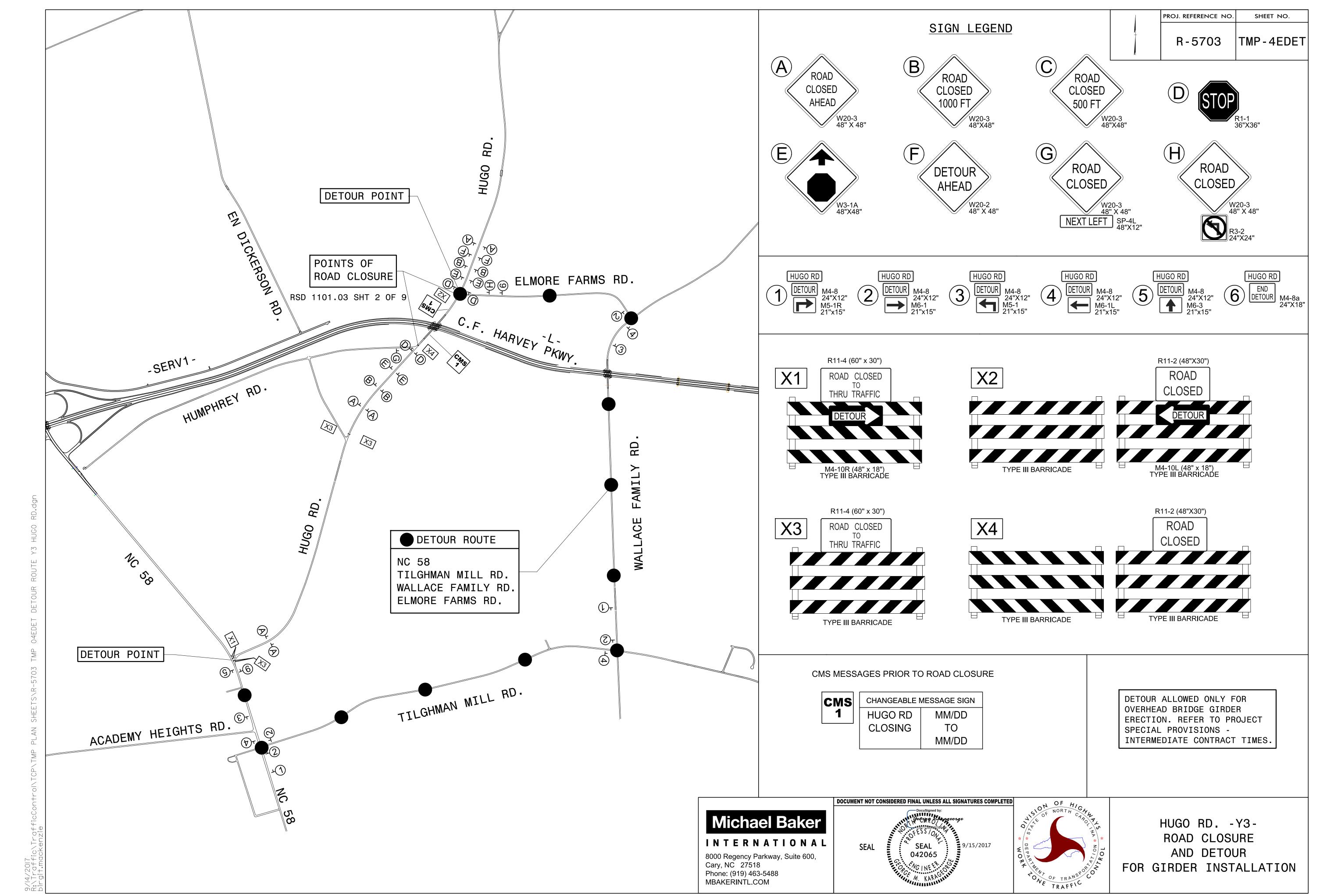






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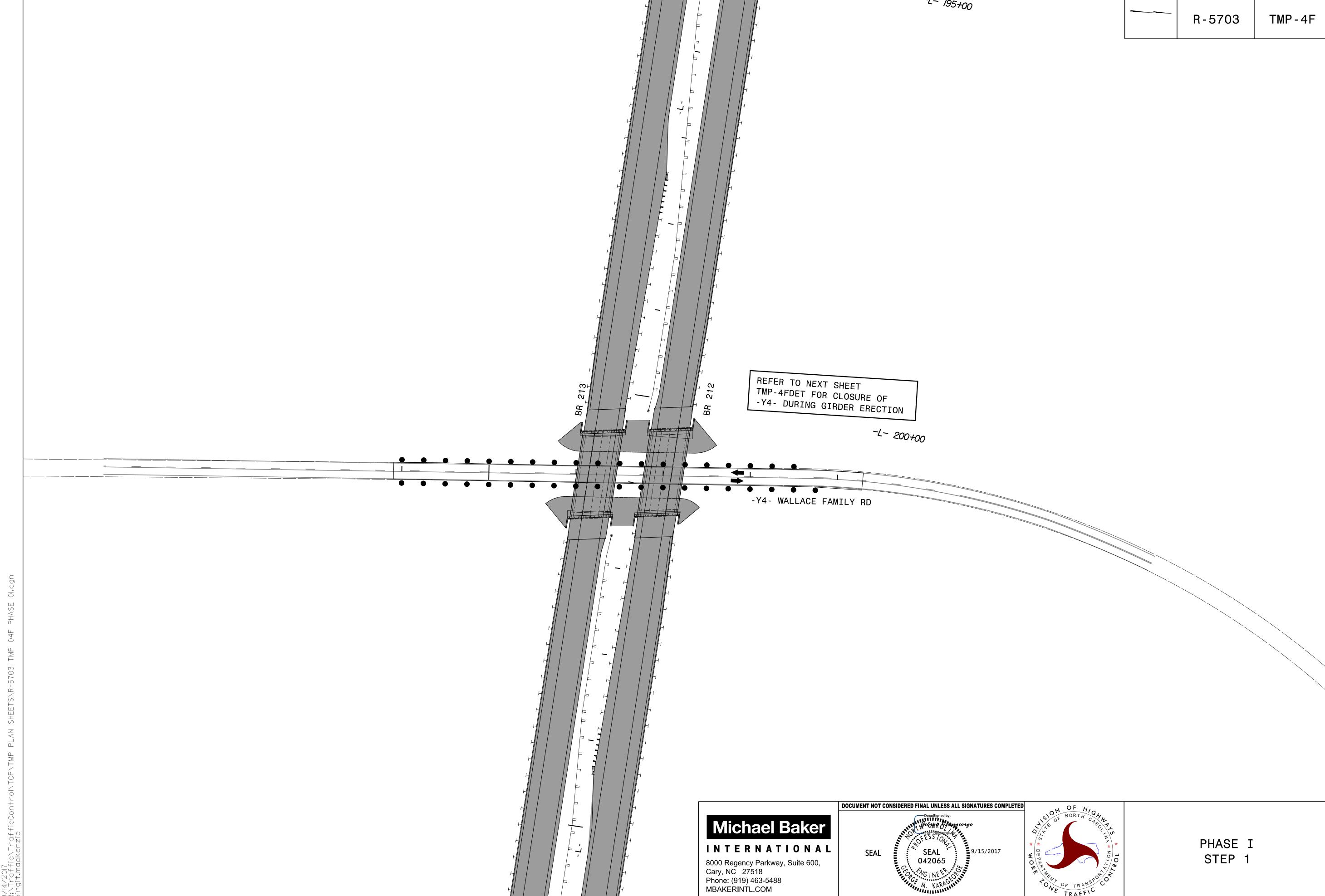


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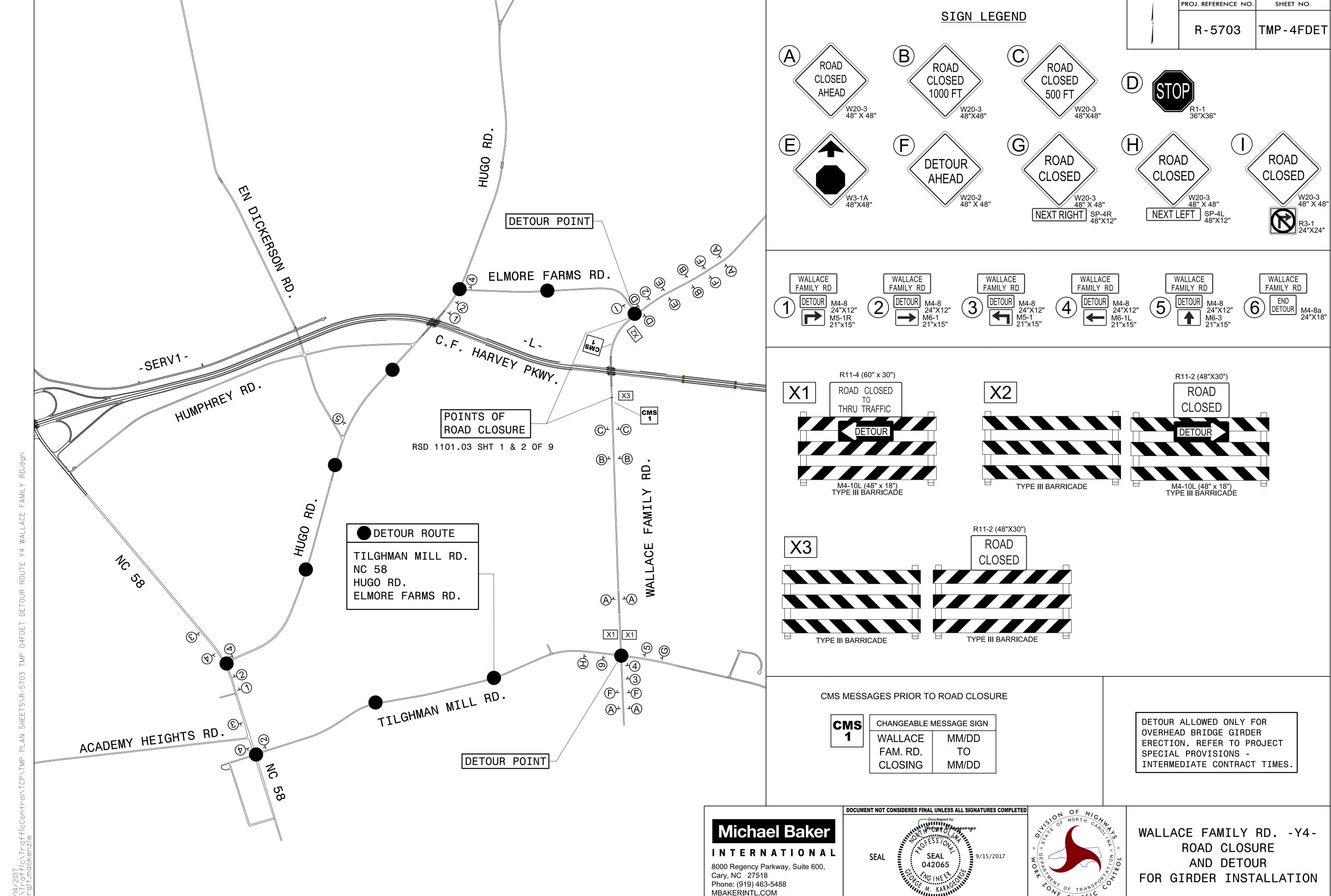
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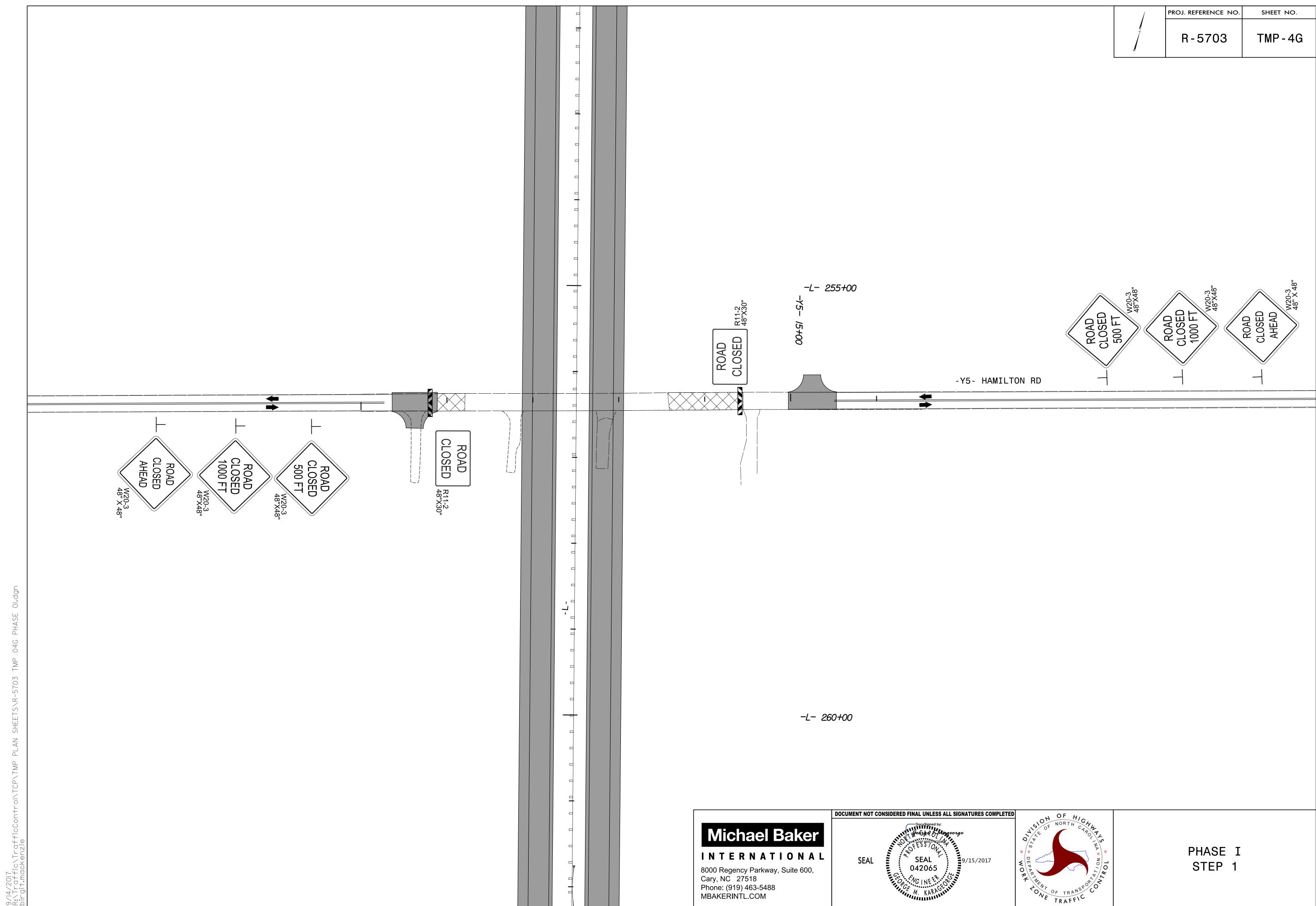
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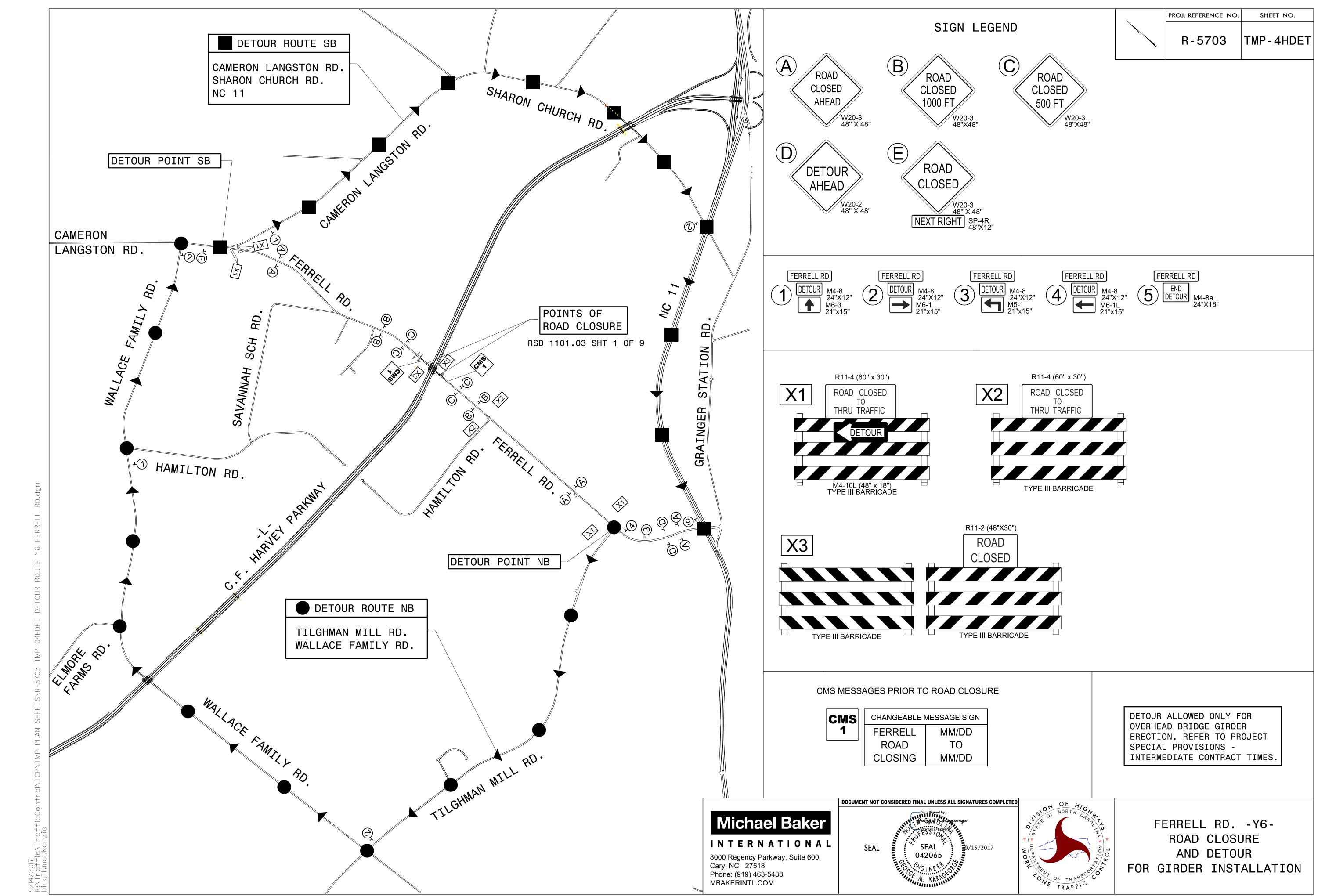
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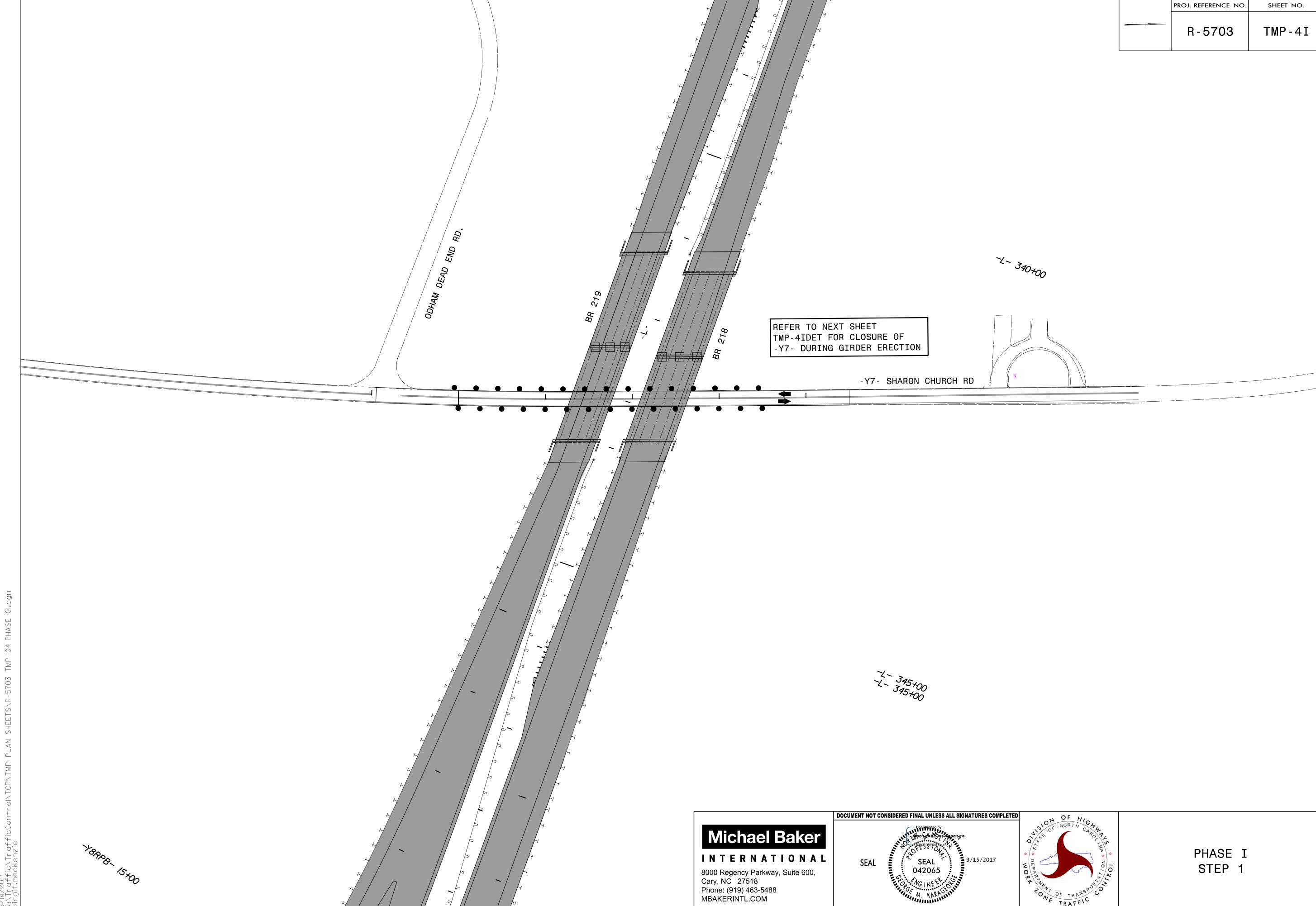


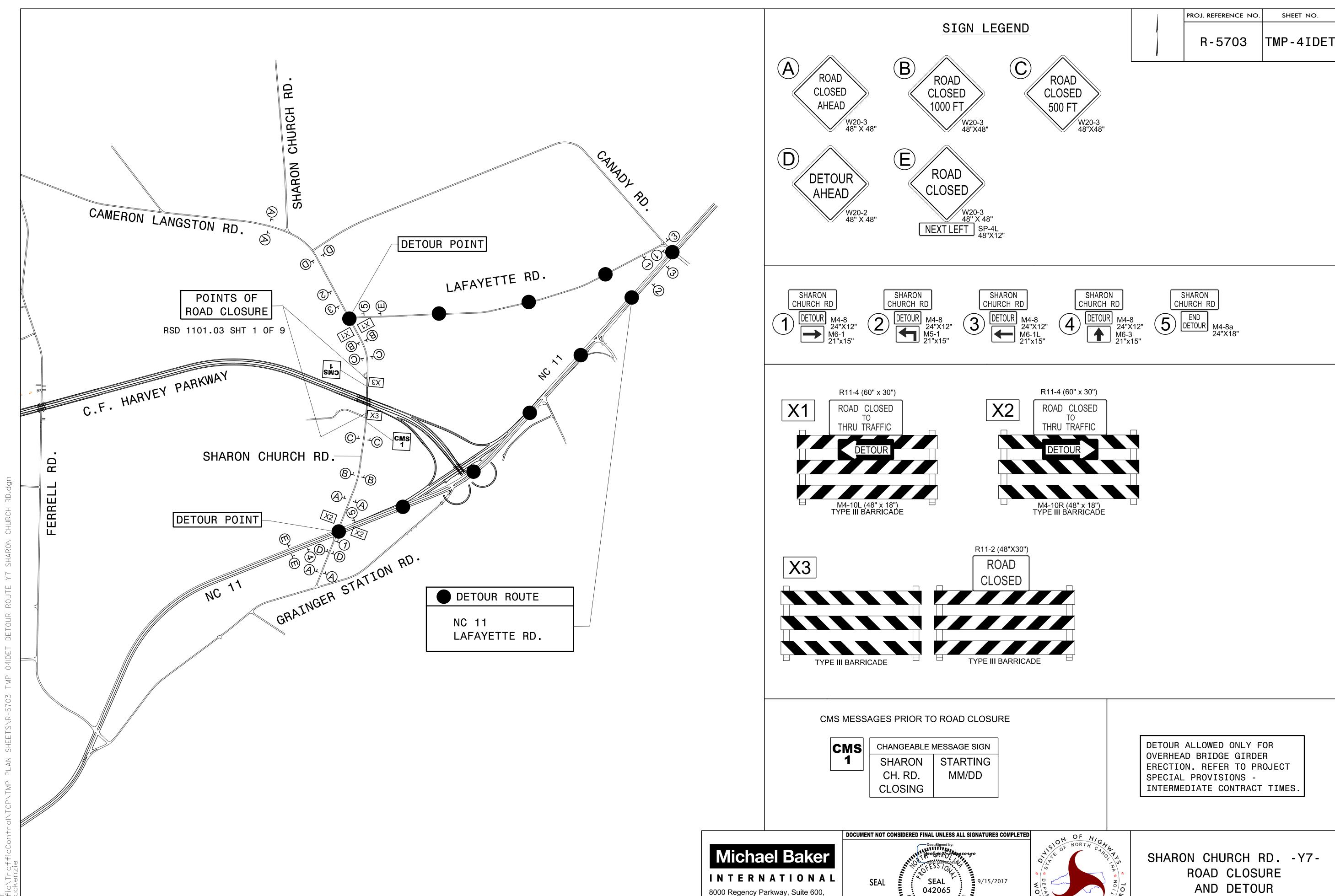


STEP 1



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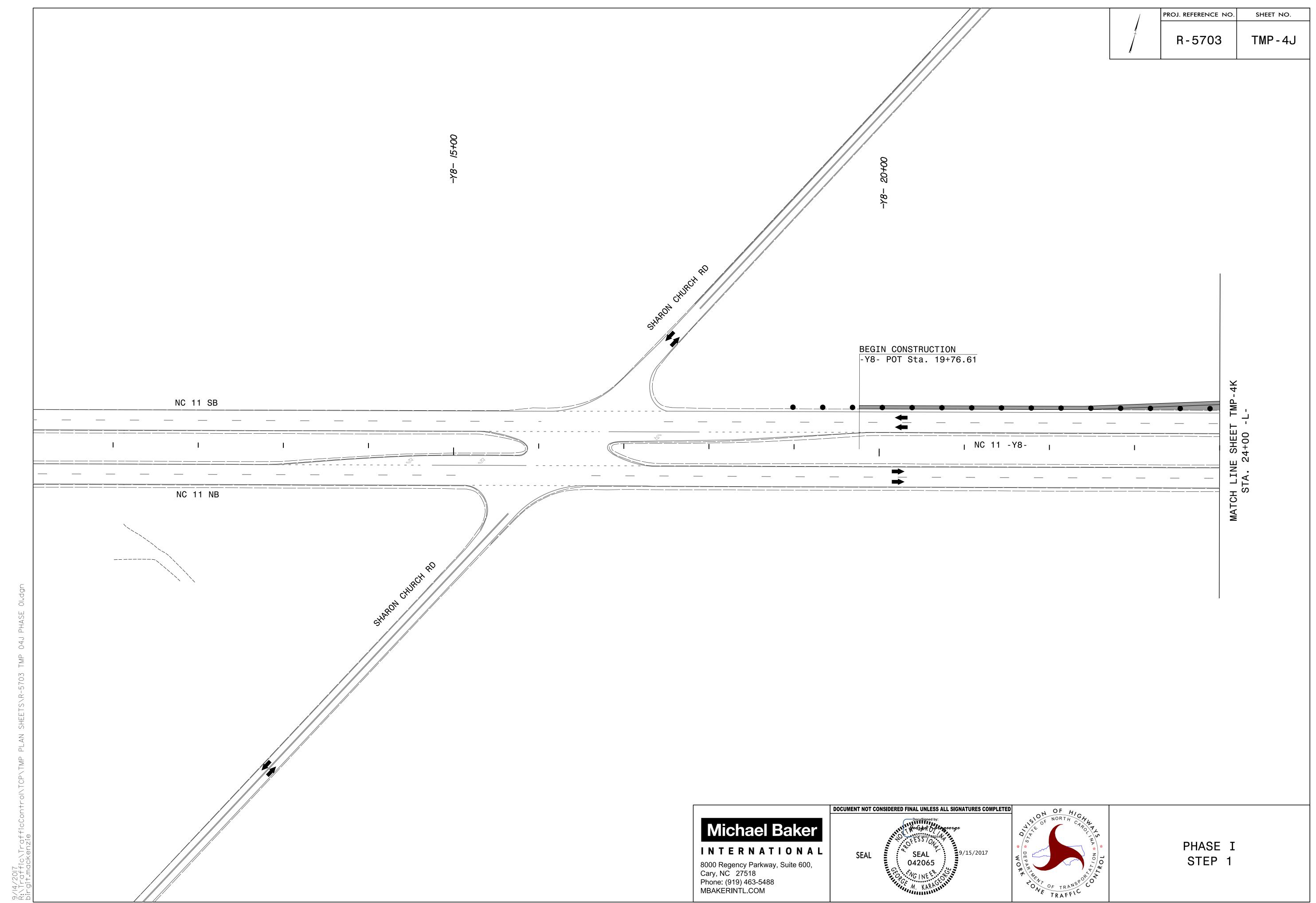


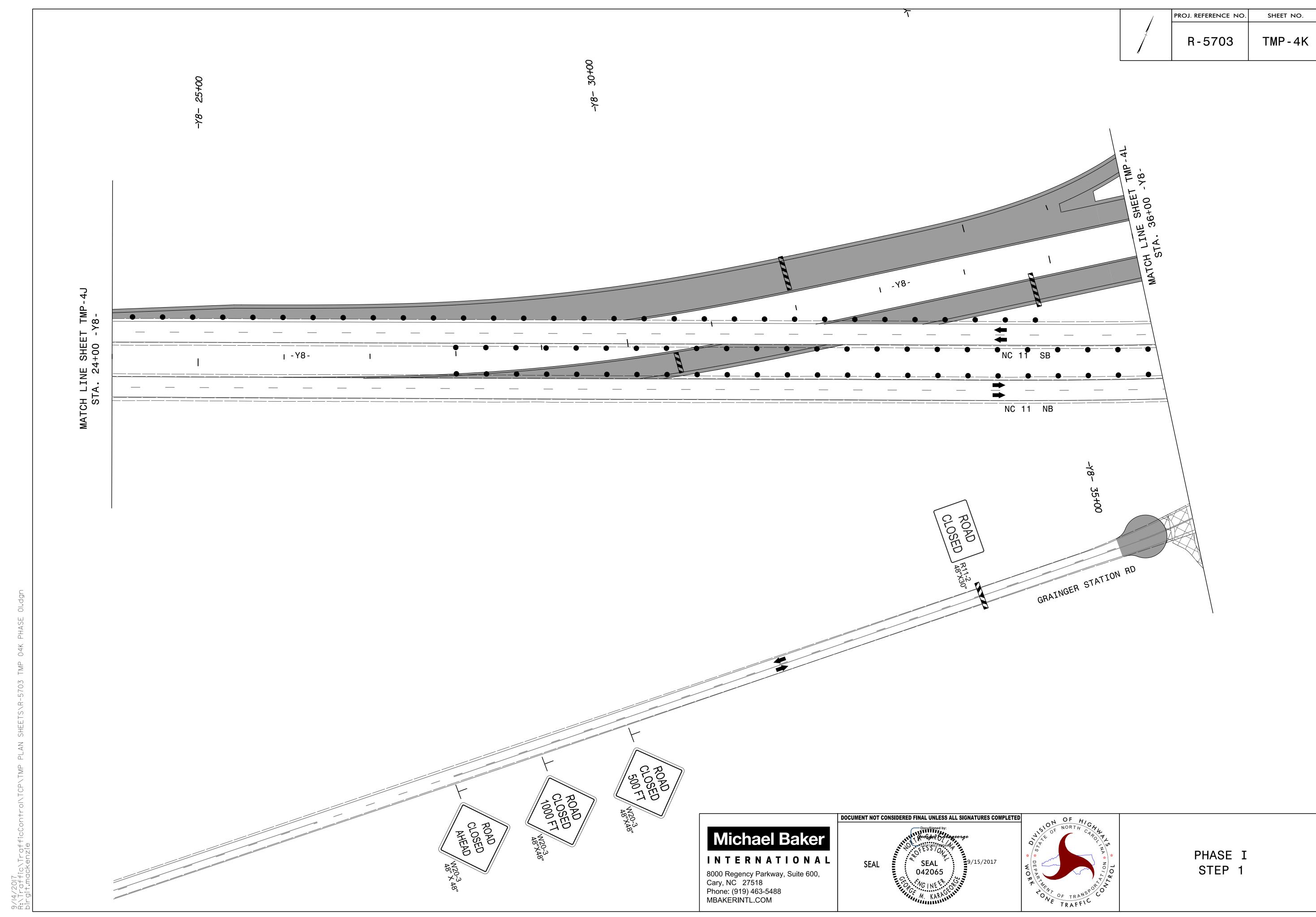


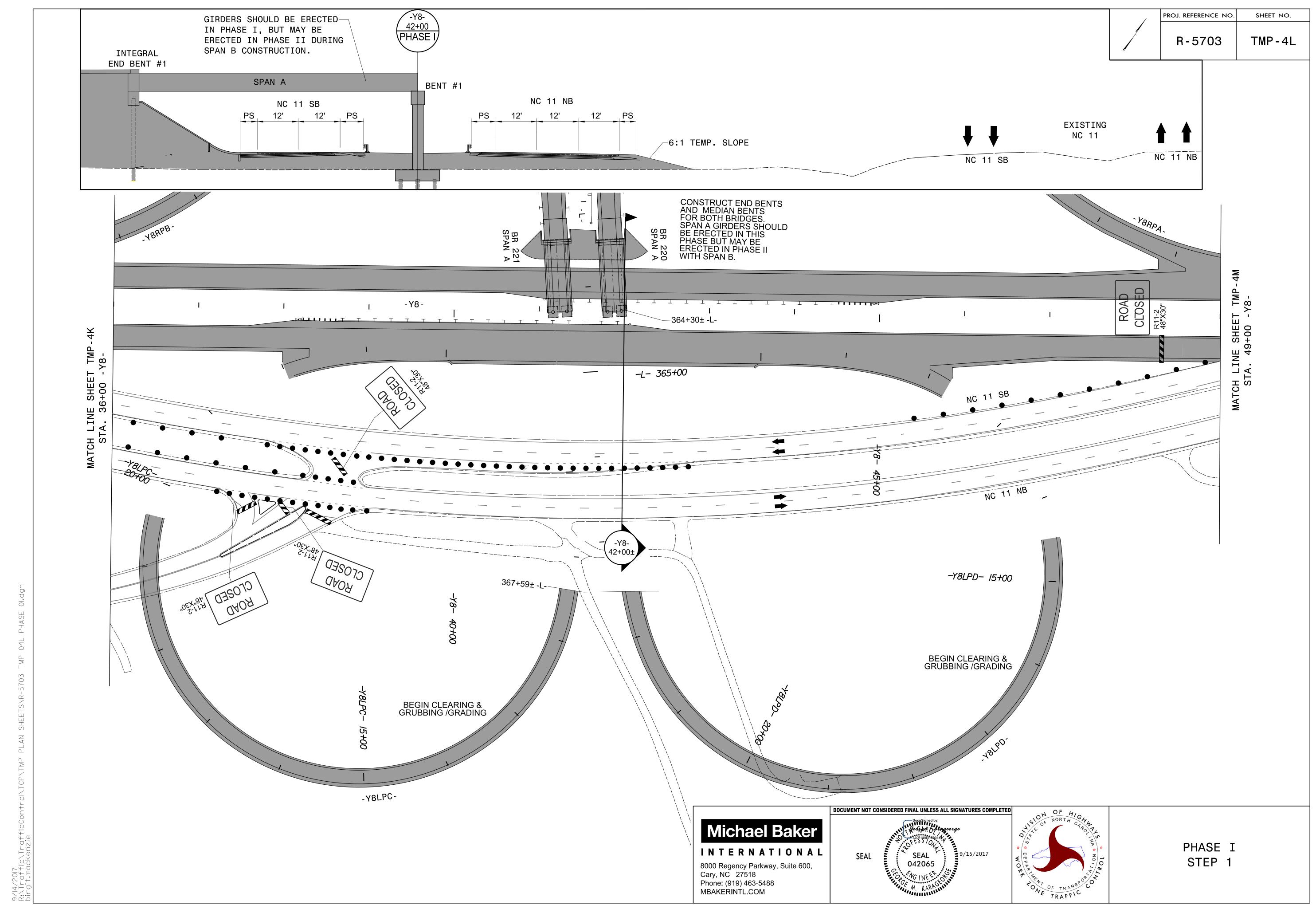
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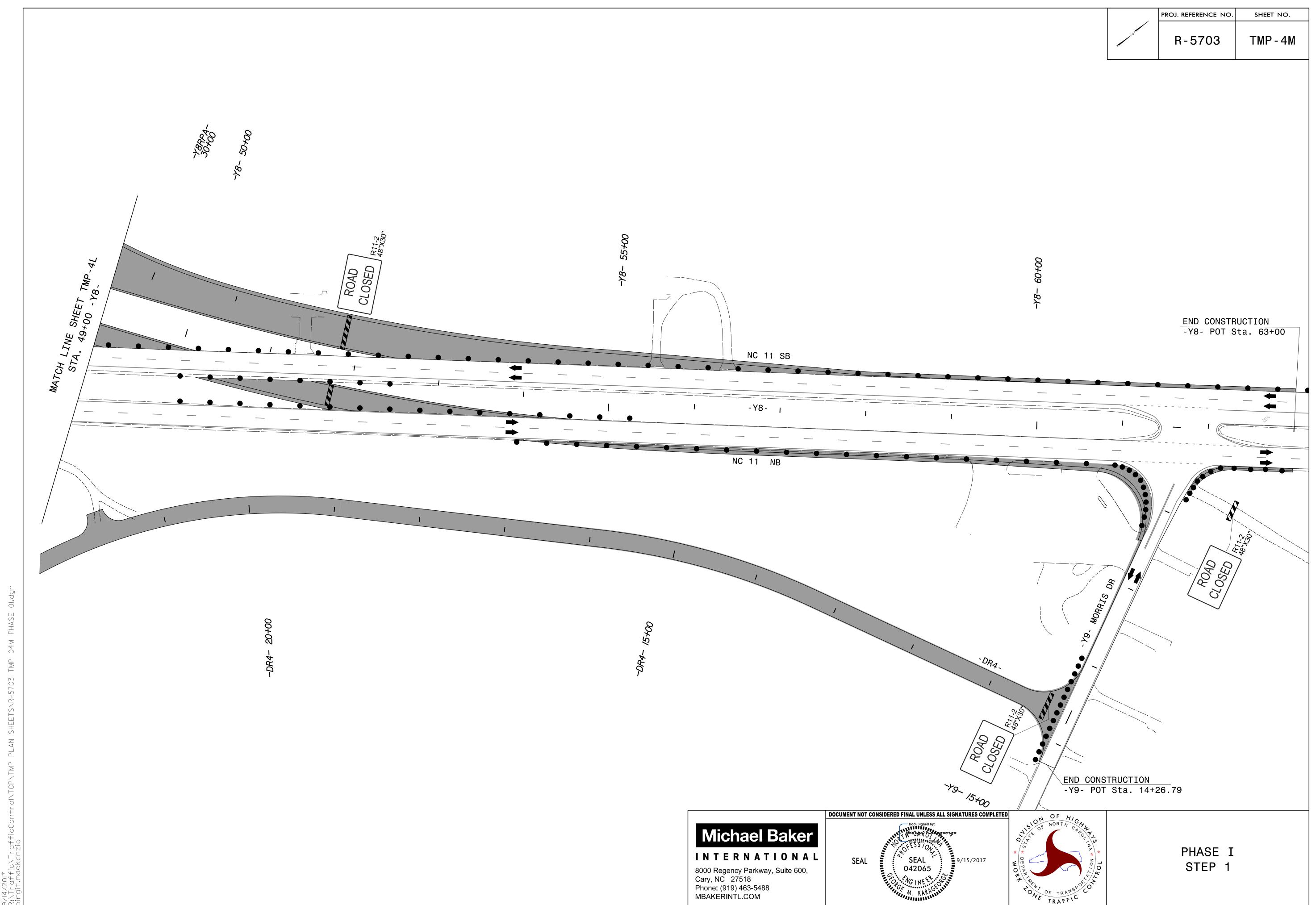
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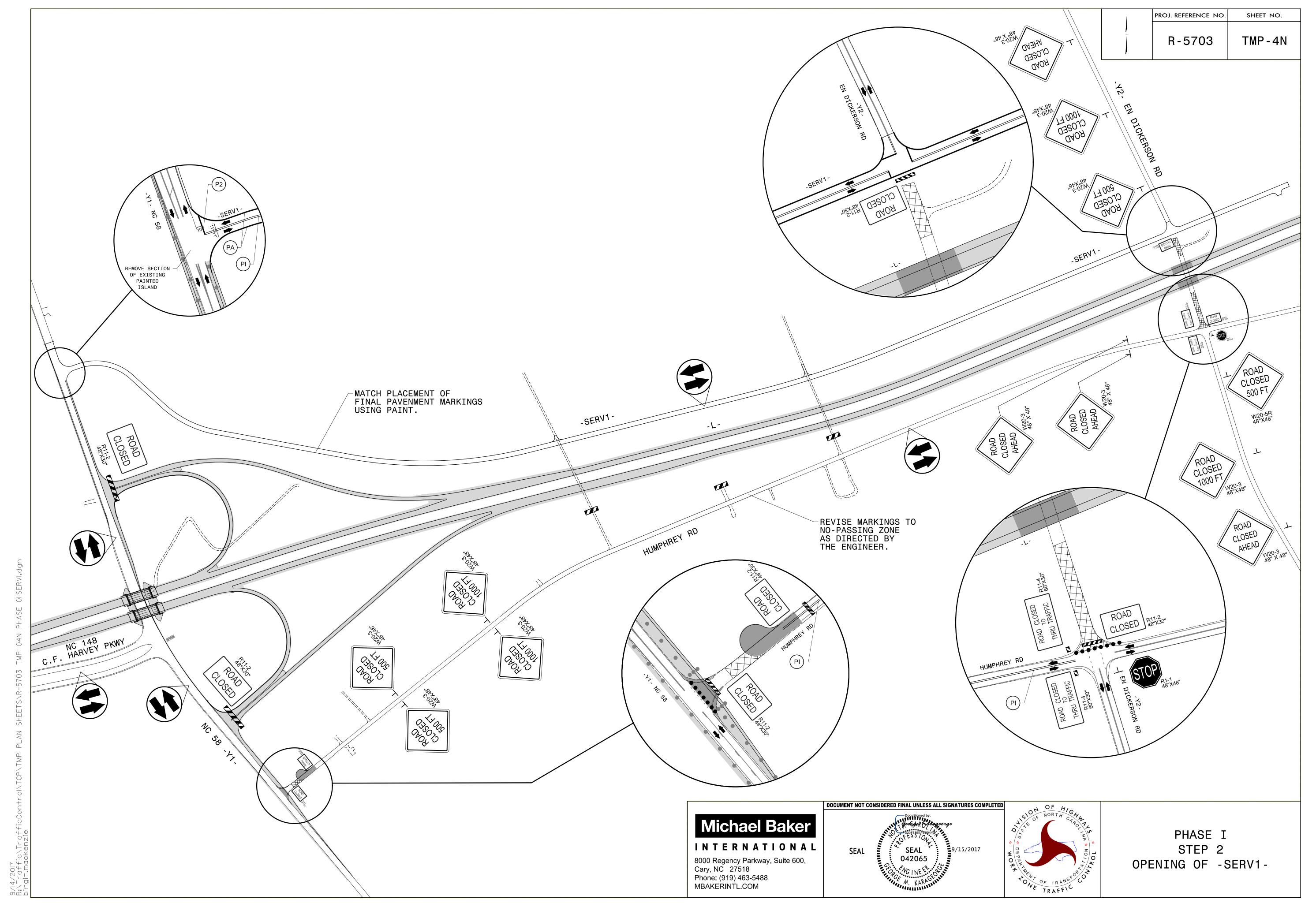


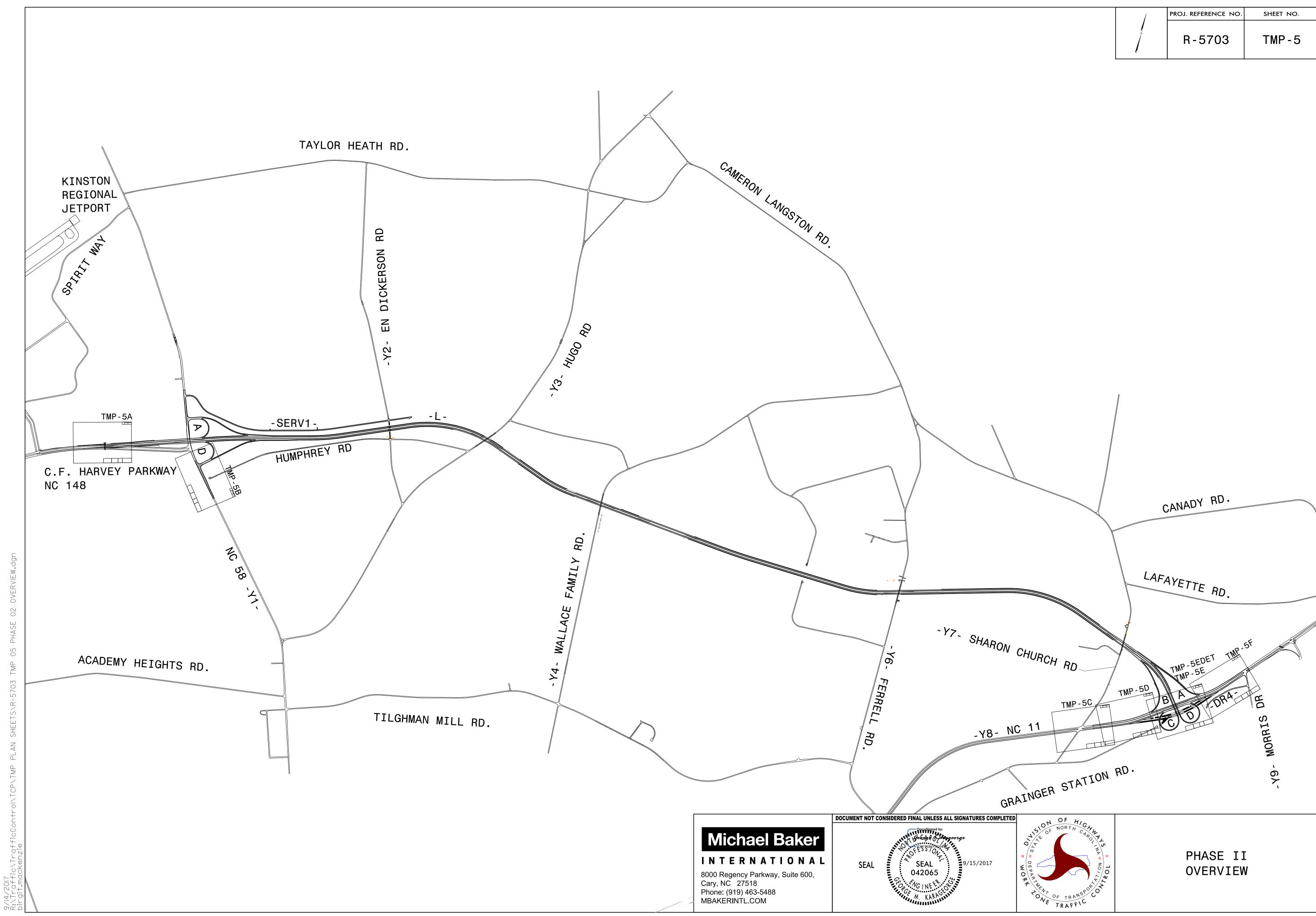




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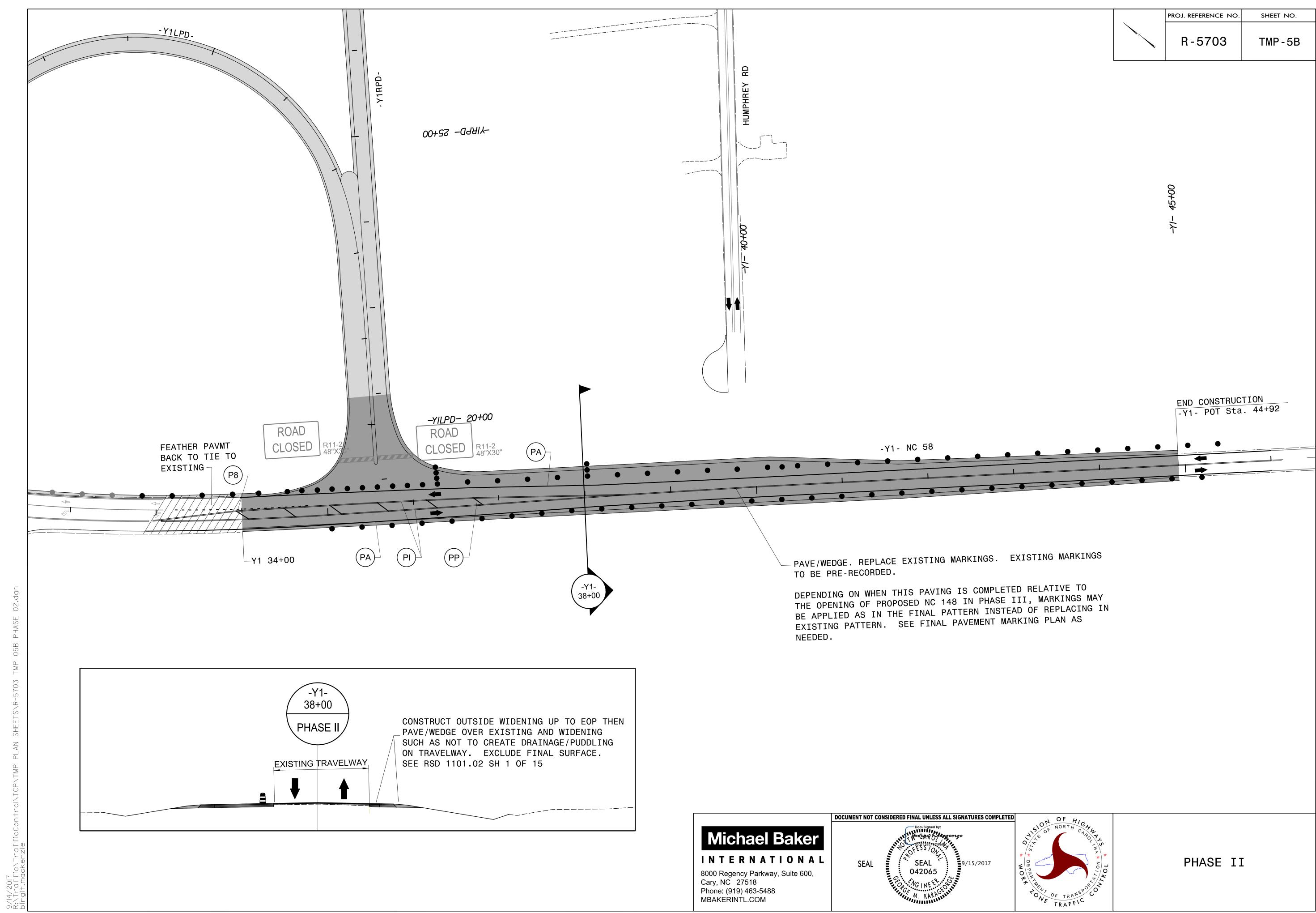


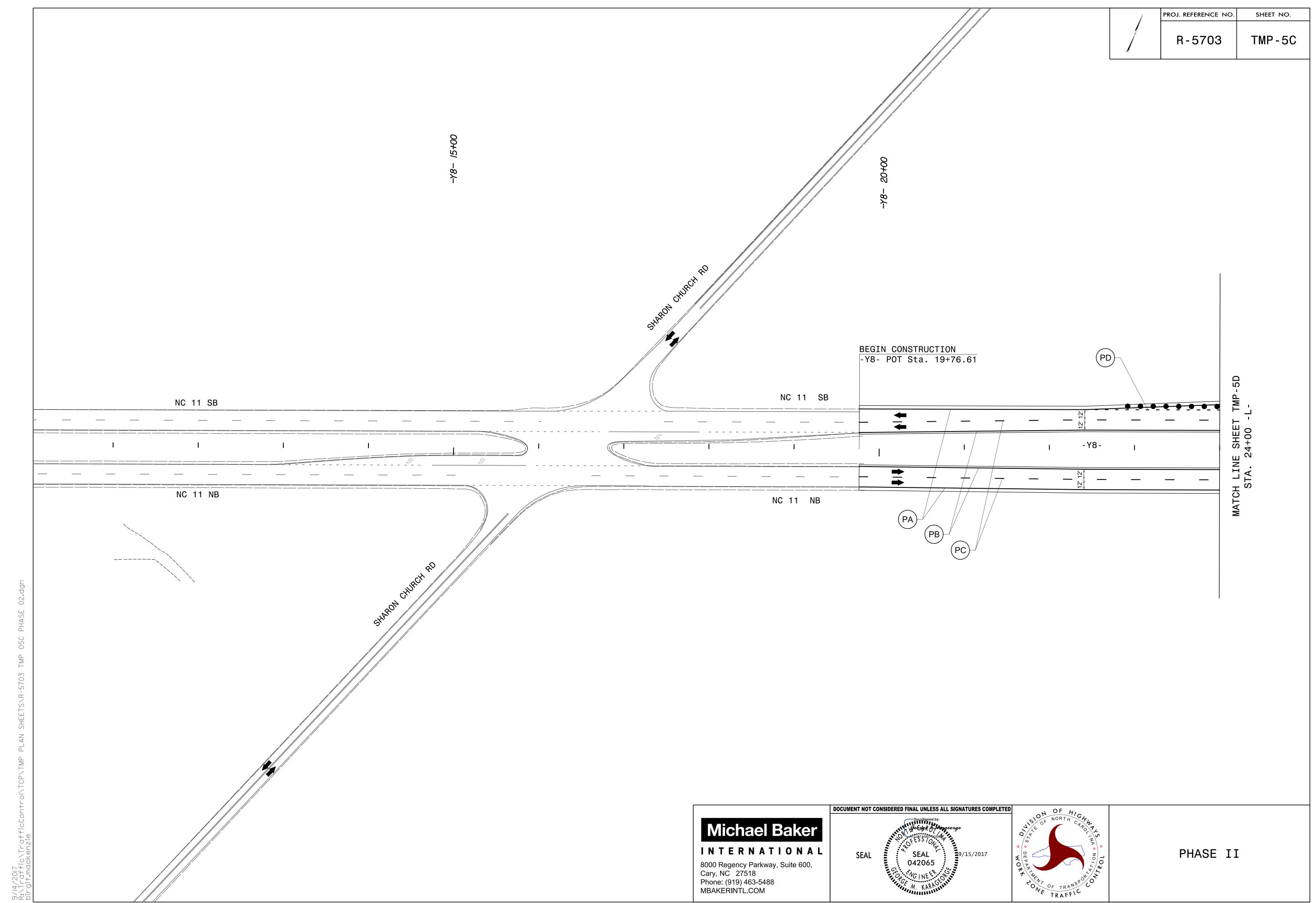


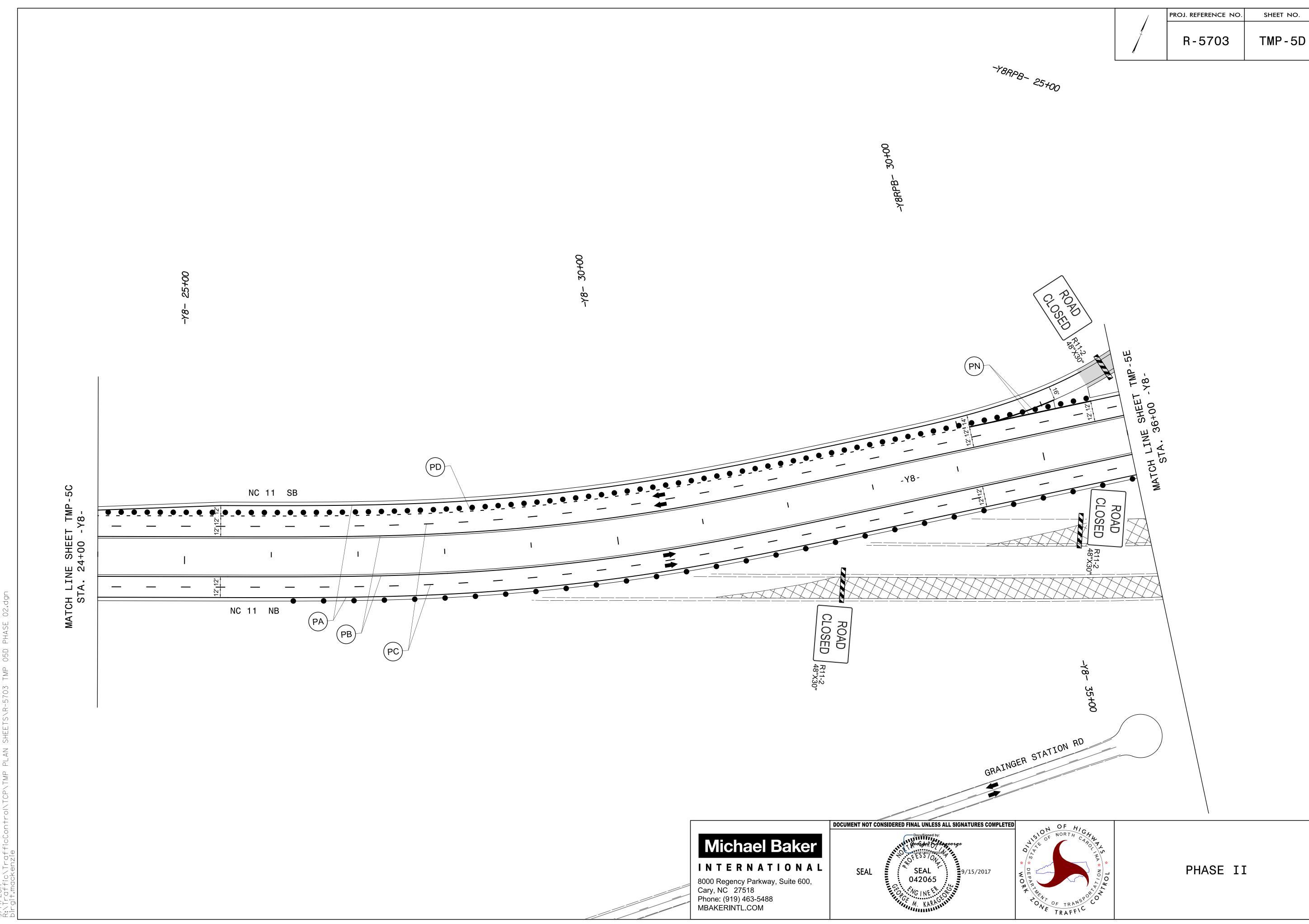


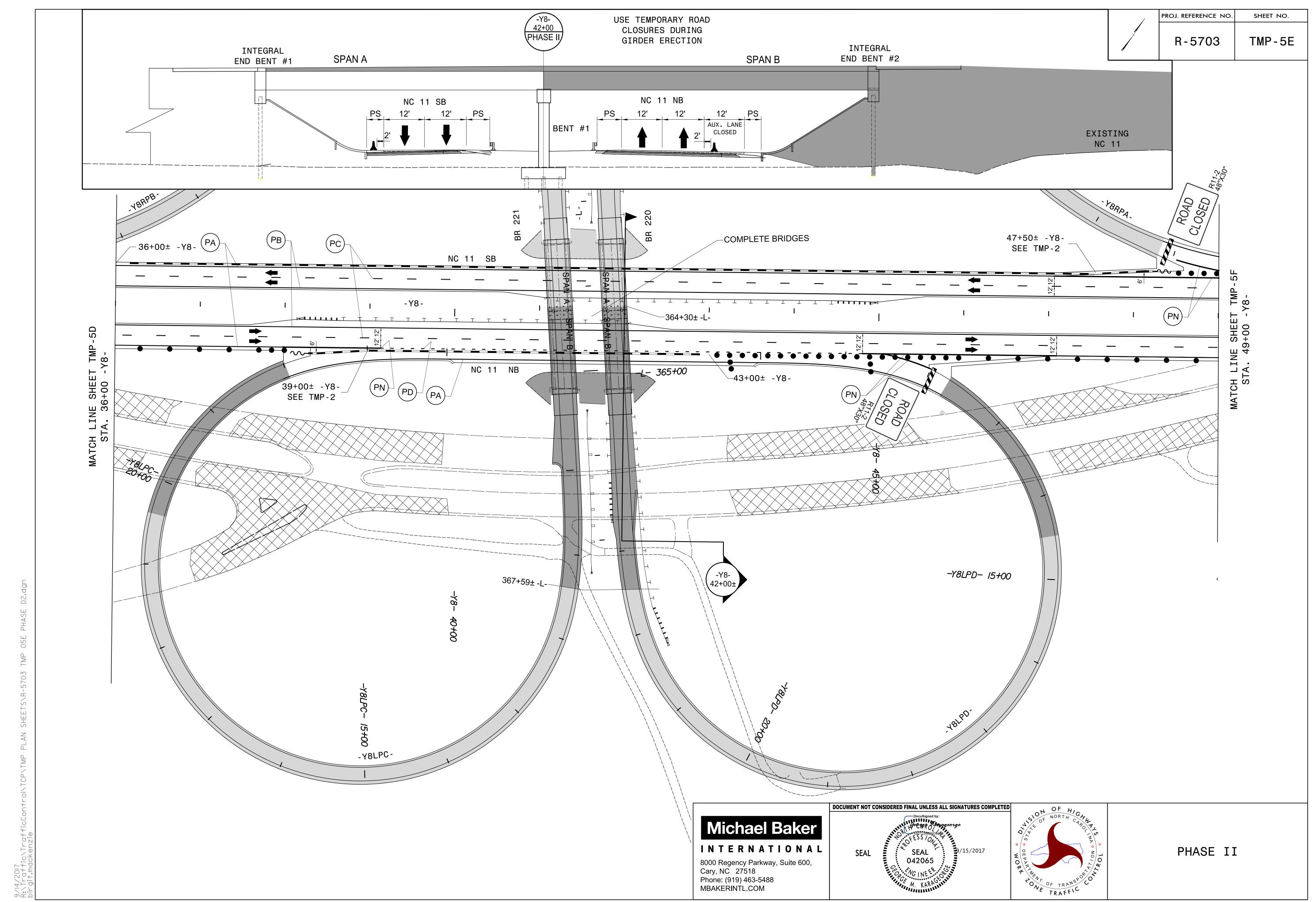
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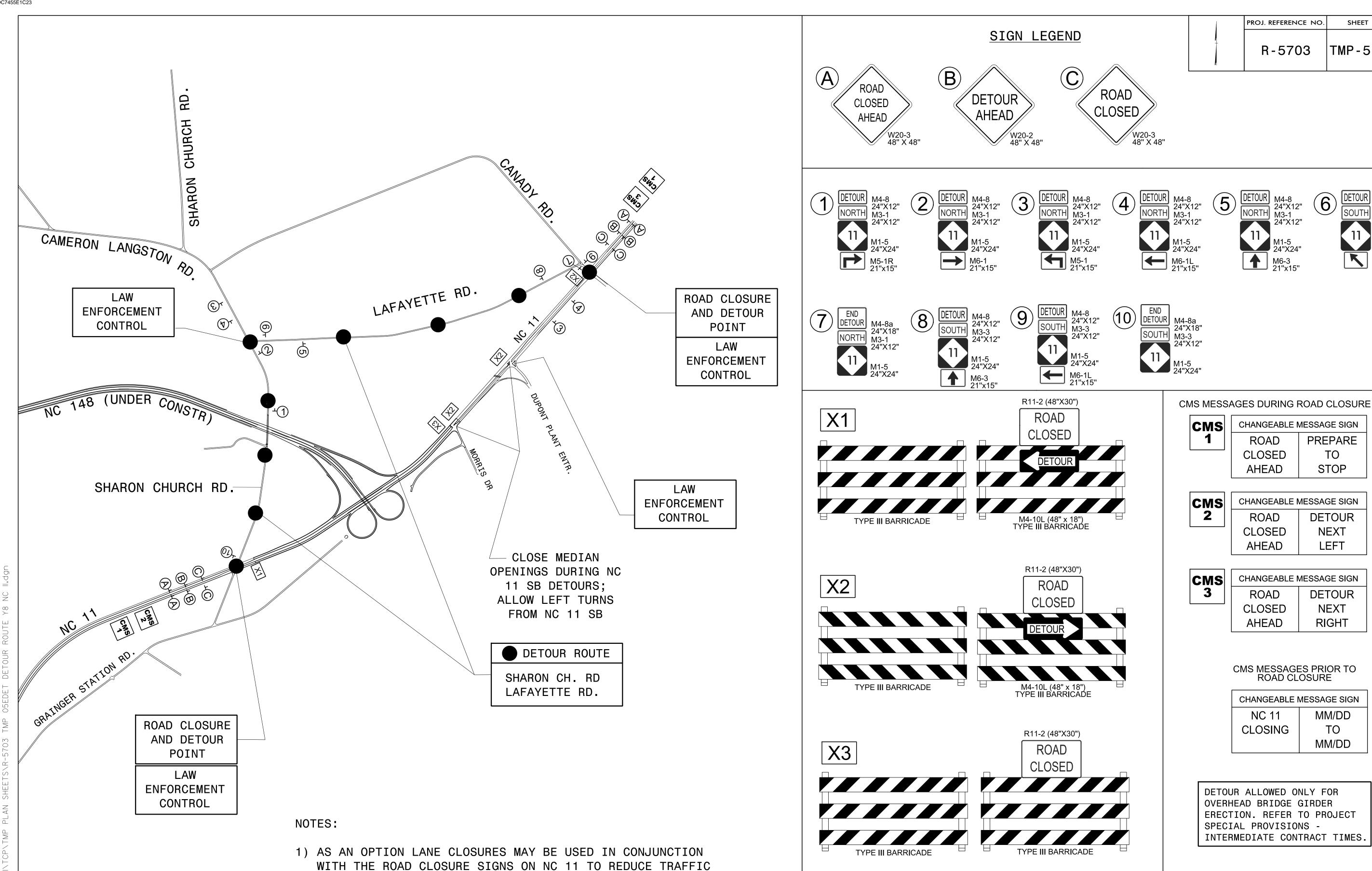
PROJ. REFERENCE NO. SHEET NO. TMP-5A R-5703 PHASE II SUBGRADE SUBGRADE-NC 148 WB NC 148 EB BEGIN TIP PROJECT R-5703 -L- CS Sta. 60+56.32 C.F. HARVEY PARKWAY NC 148 EB \ 73+00 - L -DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED Michael Baker INTERNATIONAL PHASE II 9/15/2017 SEAL 6 042065 SEAL 8000 Regency Parkway, Suite 600, Cary, NC 27518 Phone: (919) 463-5488 MBAKERINTL.COM











TO ONE LANE IN APPROACH TO ROAD CLOSURE POINTS.

2) DO NOT IMPLEMENT THIS ROAD CLOSURE SIMULTANEOUSLY

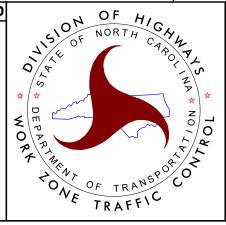
WITH ANY OTHER ROAD CLOSURES.

REFER TO RDWY. STD. DWG. 1101.02 SHEET 4 OF 15.

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NC 11. -Y8-ROAD CLOSURE AND DETOUR FOR GIRDER INSTALLATION

CLOSED STOP AHEAD

AHEAD

ROAD

CHANGEABLE MESSAGE SIGN ROAD DETOUR CLOSED NEXT

CHANGEABLE MESSAGE SIGN

PREPARE

LEFT

PROJ. REFERENCE NO.

R-5703

DETOUR M4-8 24"X12" M3-1 24"X12"

SHEET NO.

TMP-5EDET

DETOUR M4-8 24"X12" M3-3

i 24"X12"

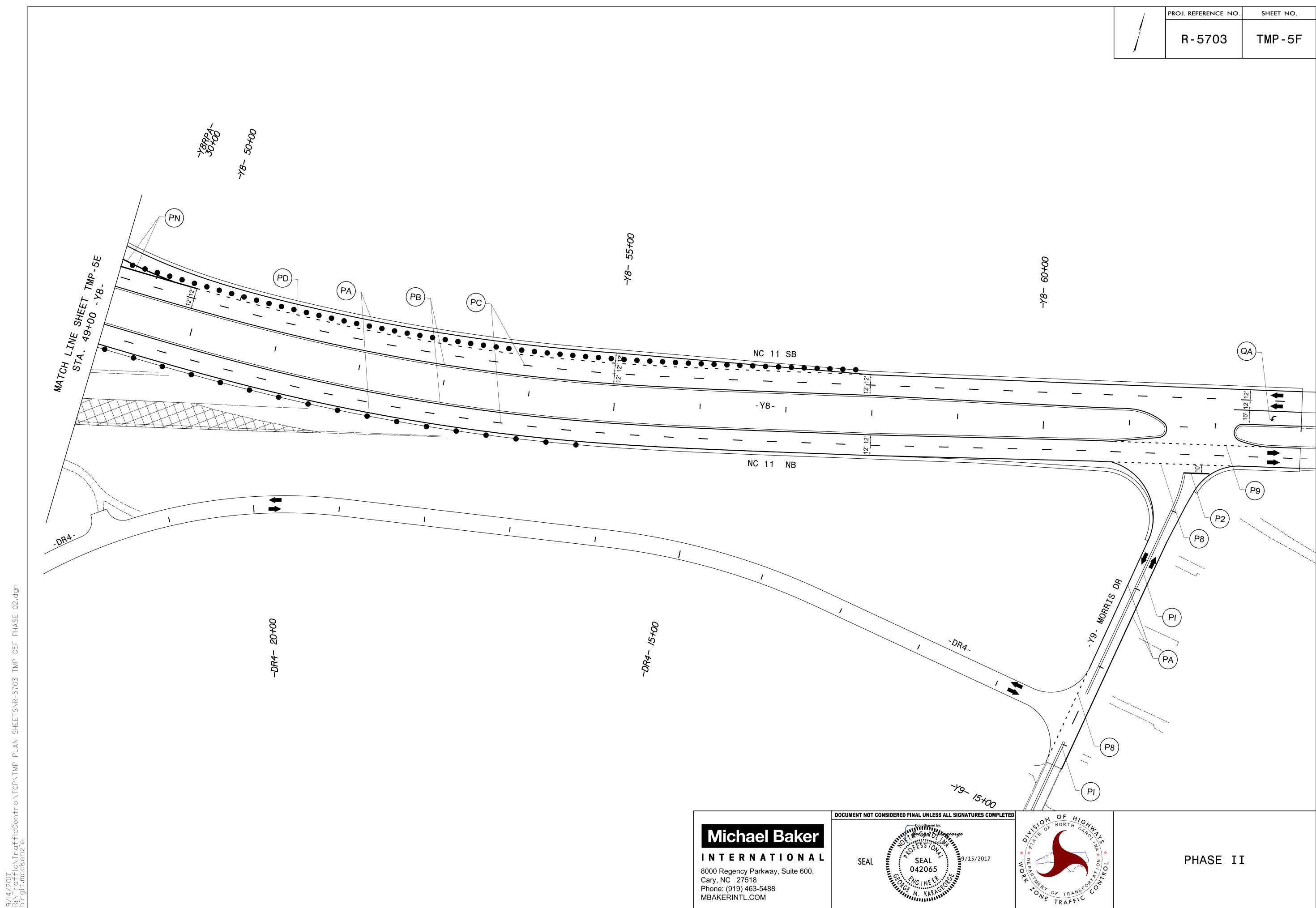
CHANGEABLE MESSAGE SIGN ROAD **DETOUR** CLOSED NEXT AHEAD **RIGHT**

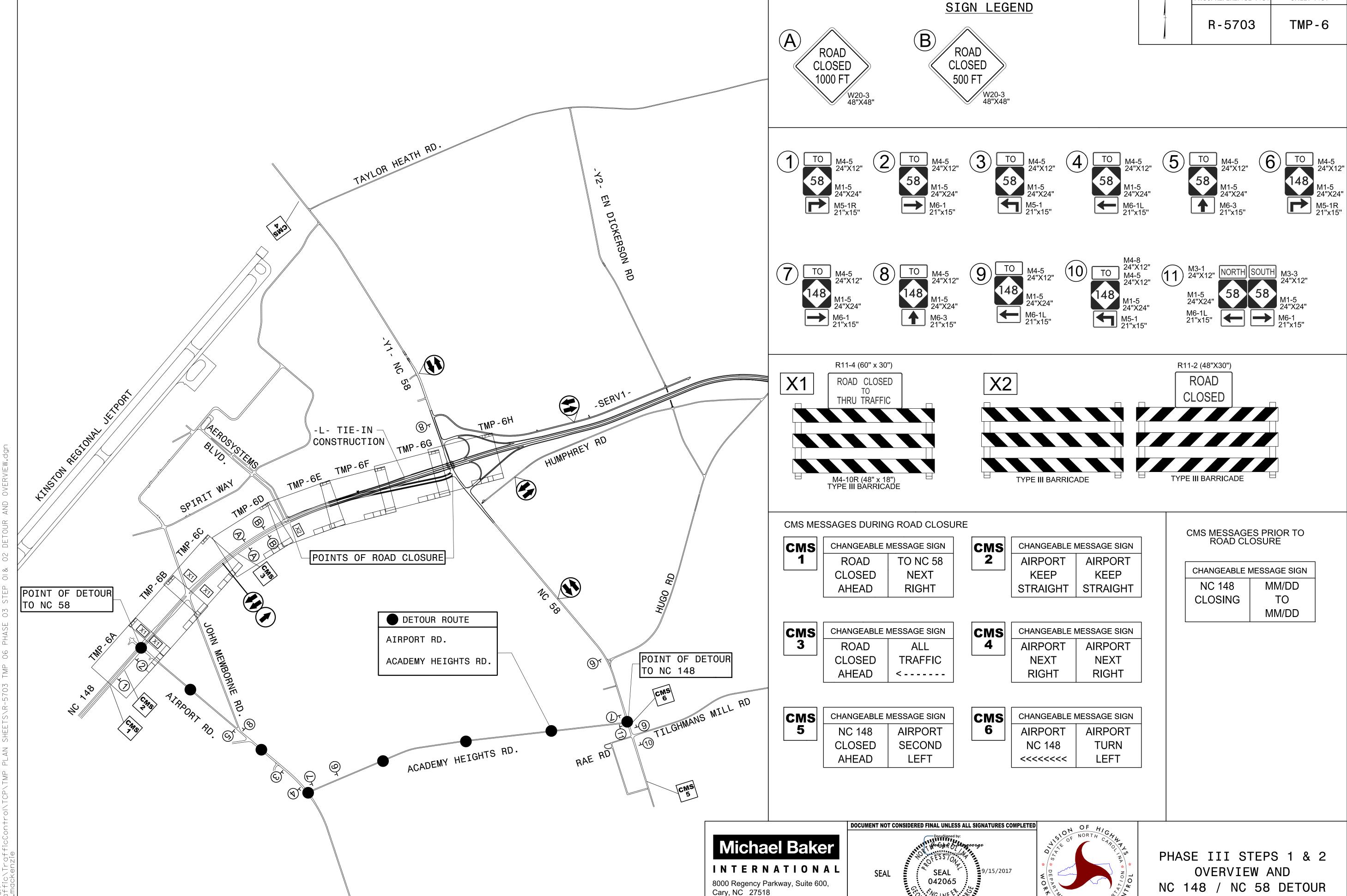
CMS MESSAGES PRIOR TO ROAD CLOSURE

CHANGEABLE MESSAGE SIGN NC 11 MM/DD **CLOSING** MM/DD

DETOUR ALLOWED ONLY FOR OVERHEAD BRIDGE GIRDER ERECTION. REFER TO PROJECT SPECIAL PROVISIONS -INTERMEDIATE CONTRACT TIMES.

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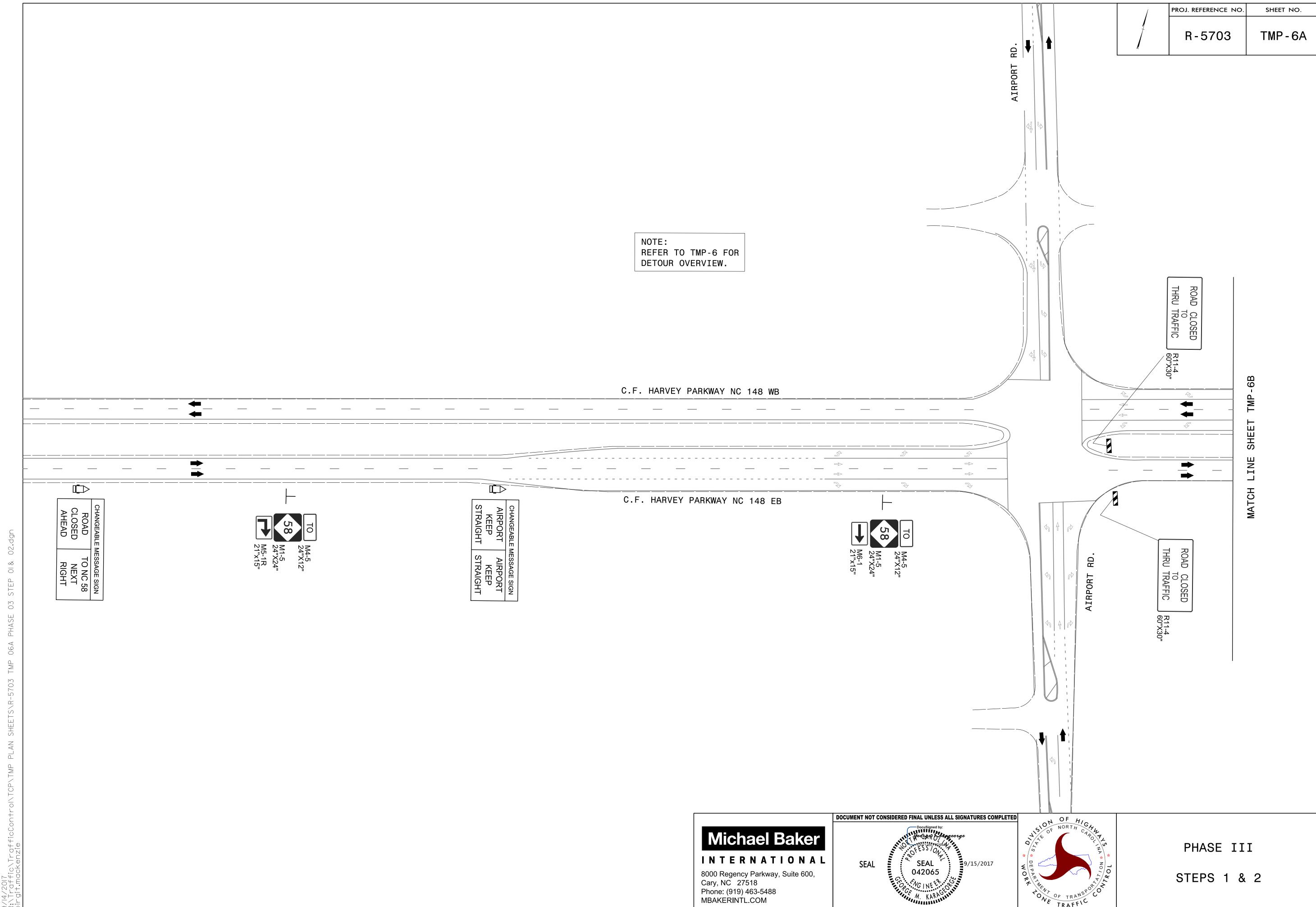




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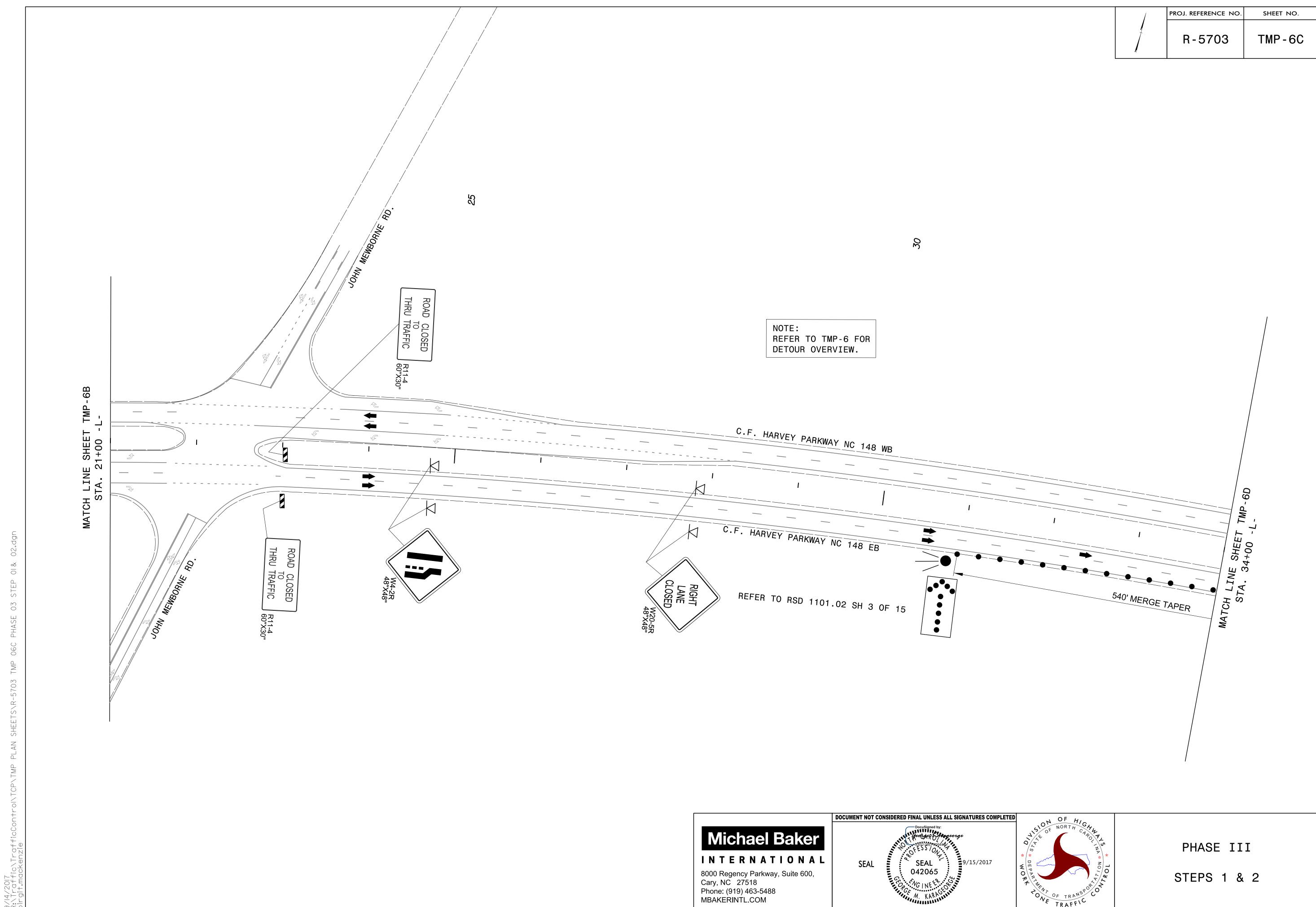
SHEET NO.

9/14/2017



PROJ. REFERENCE NO. SHEET NO. TMP-6B R-5703 NOTE: REFER TO TMP-6 FOR DETOUR OVERVIEW. C.F. HARVEY PARKWAY NC 148 EB PHASE 03 STEP 01& DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED Michael Baker PHASE III INTERNATIONAL SEAL 6 042065 SEAL 9/15/2017 STEPS 1 & 2 8000 Regency Parkway, Suite 600, Cary, NC 27518 Phone: (919) 463-5488 MBAKERINTL.COM

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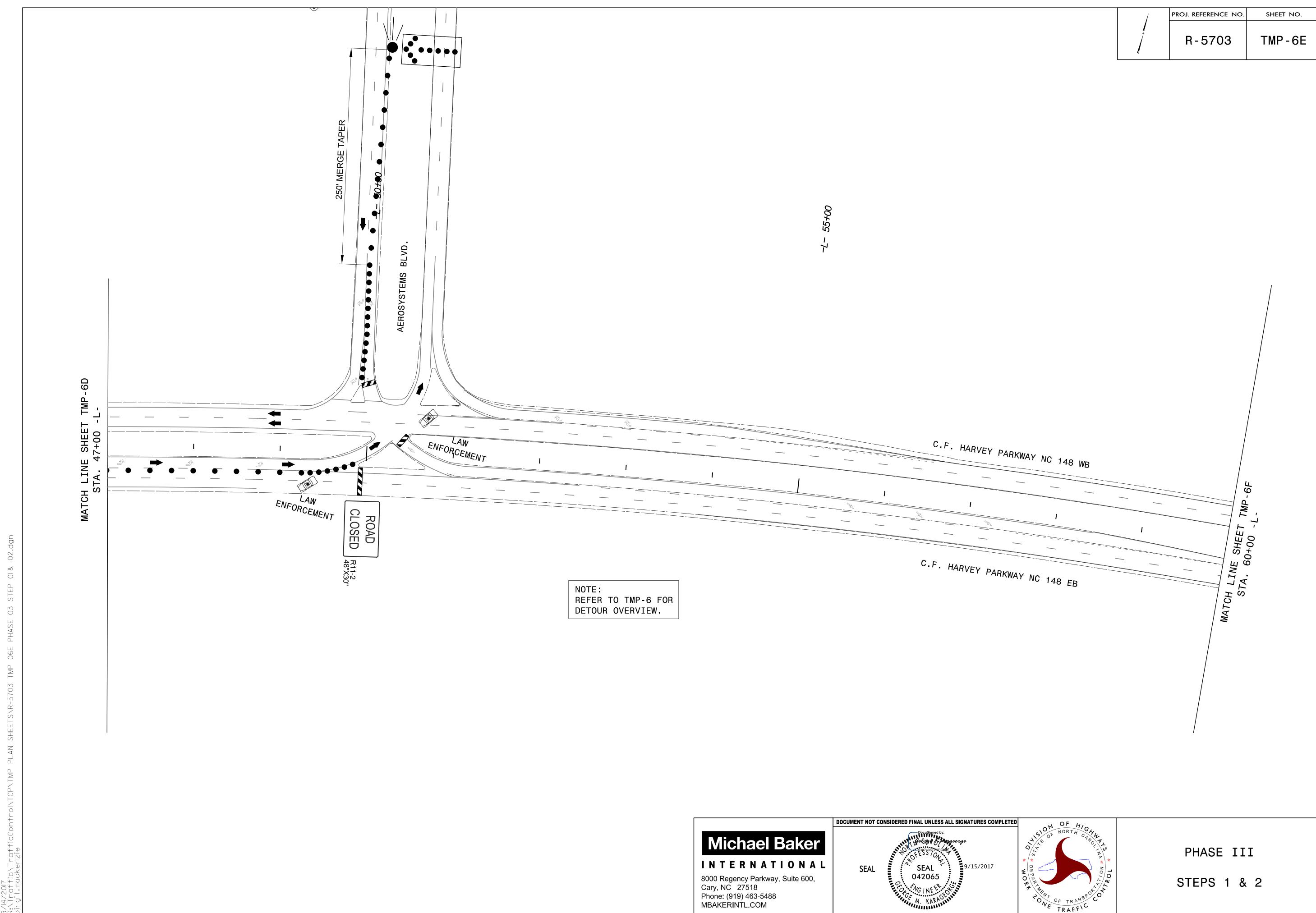
PROJ. REFERENCE NO. SHEET NO. R-5703 TMP-6D 9 C.F. HARVEY PARKWAY NC 148 WB 540' MERGE TAPER C.F. HARVEY PARKWAY NC 148 EB CHANGEABL ROAD CLOSED AHEAD 270' SHIFT TAPER NOTE: REFER TO TMP-6 FOR DETOUR OVERVIEW. DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED Michael Baker PHASE III INTERNATIONAL SEAL **=**9/15/2017

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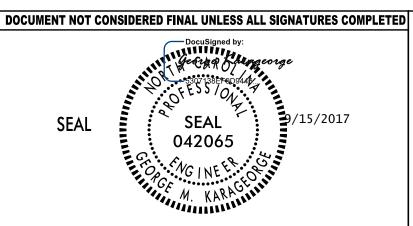
STEPS 1 & 2



PROJ. REFERENCE NO. SHEET NO. TMP-6F R-5703 BEGIN TIP PROJECT R-5703 -L- CS Sta. 60+56.32 EXISTING PAVEMENT REMOVAL C.F. HARVEY PARKWAY NC 148 WB TMP-6E-L-MATCH LINE SHEET STA, 60+00 -C.F. HARVEY PARKWAY NC 148 EB NOTE: REFER TO TMP-6 FOR DETOUR OVERVIEW.

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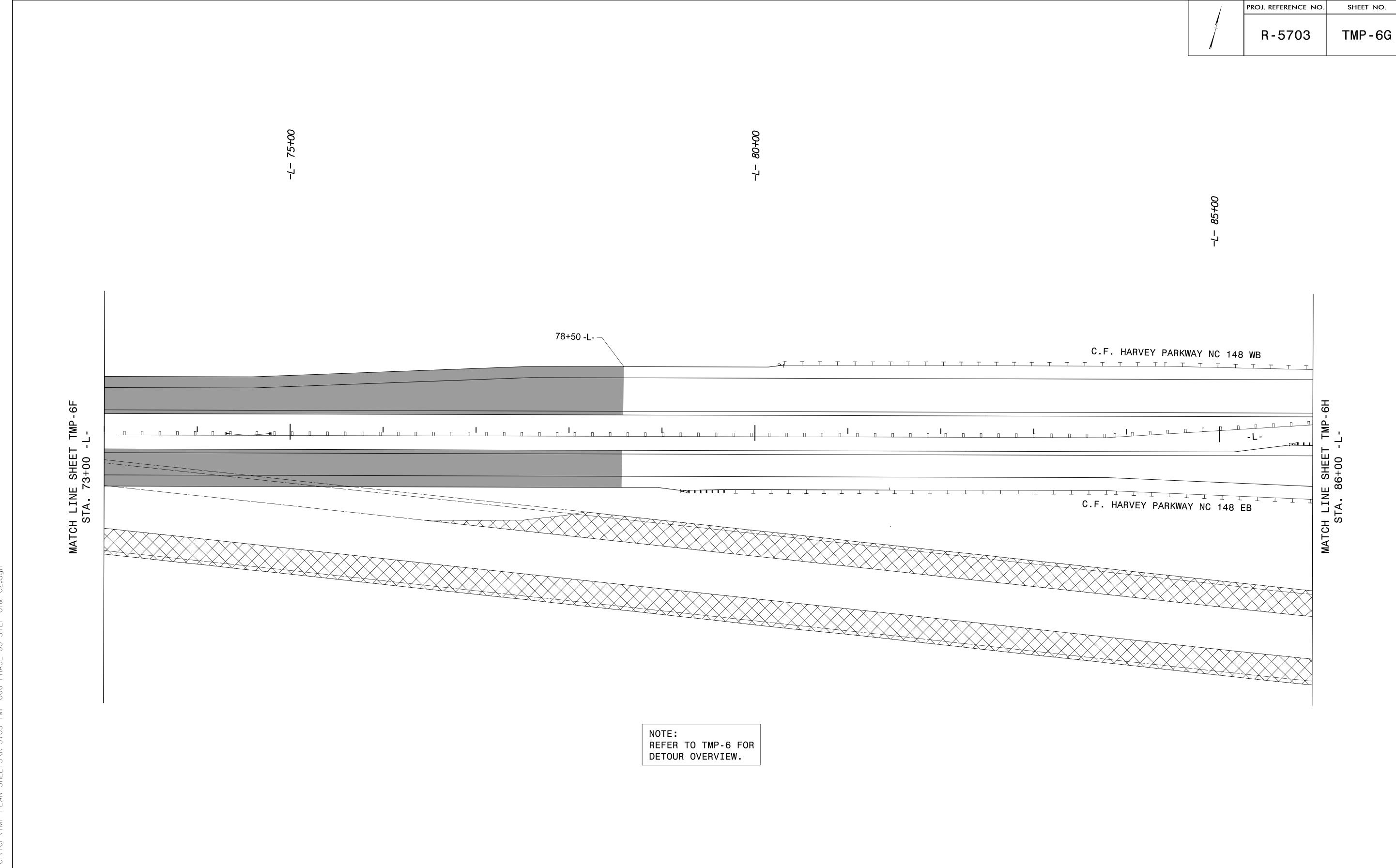
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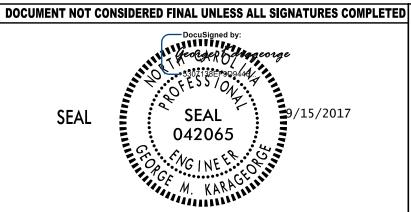
PHASE III

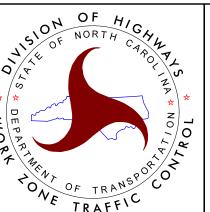
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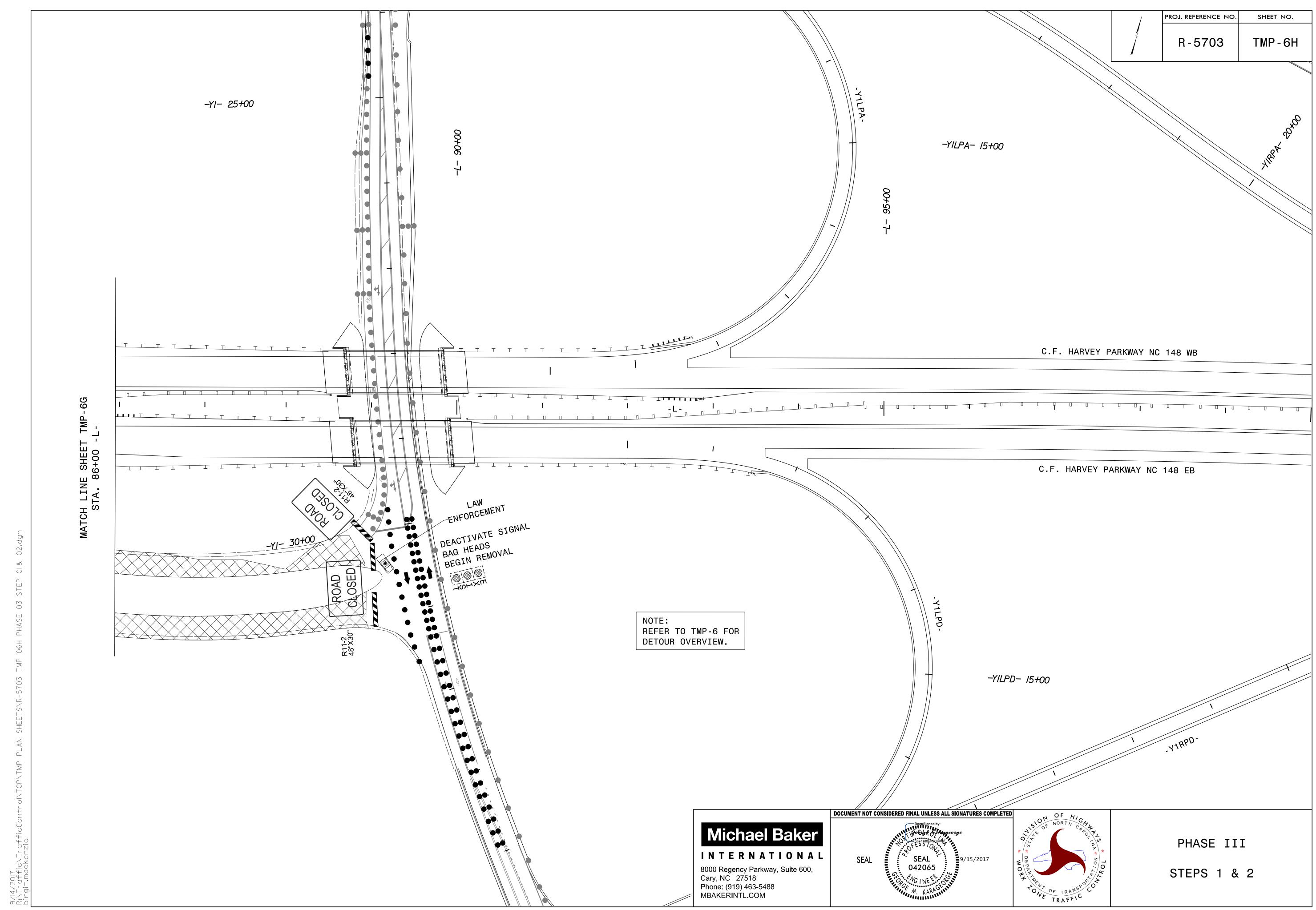
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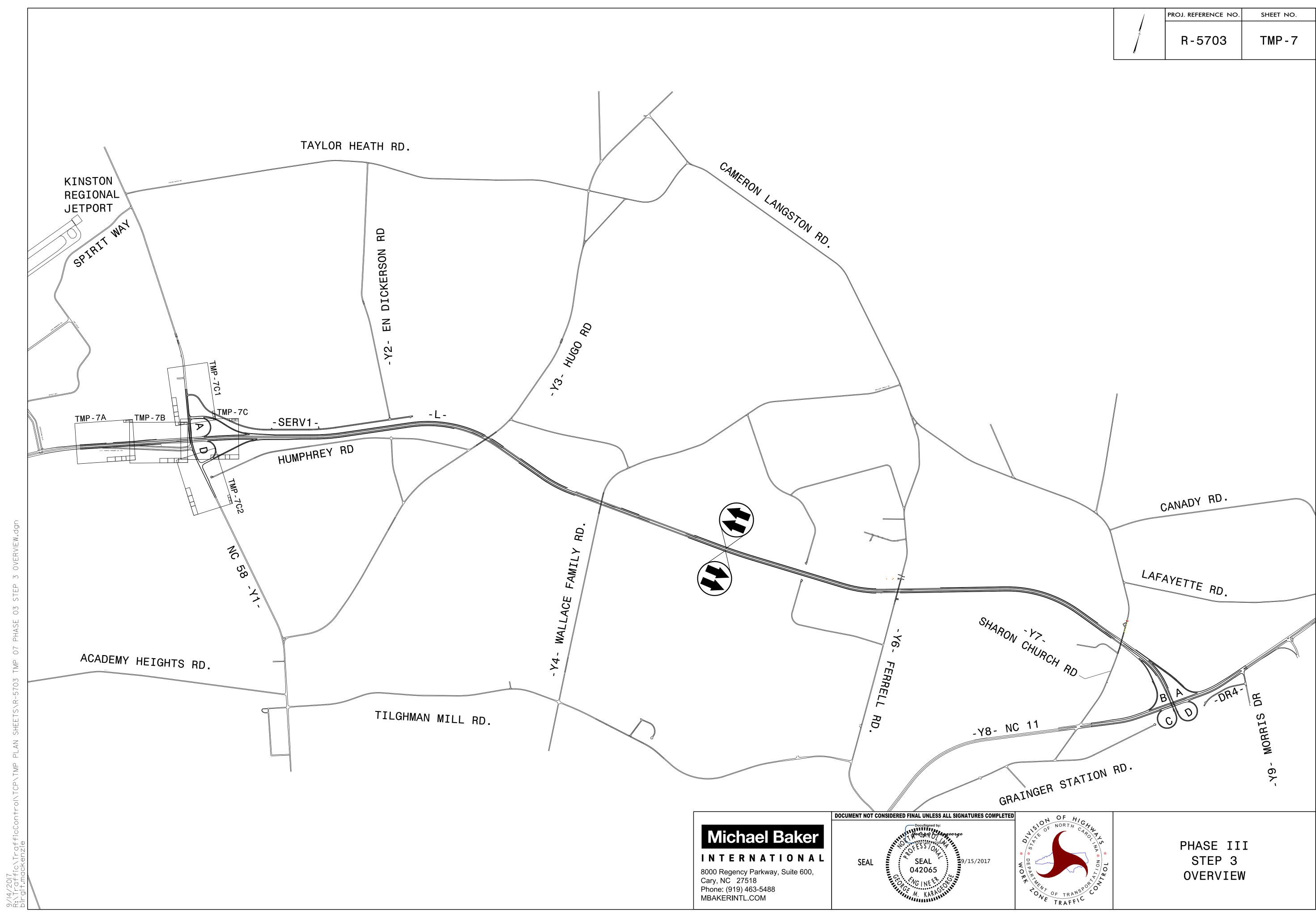


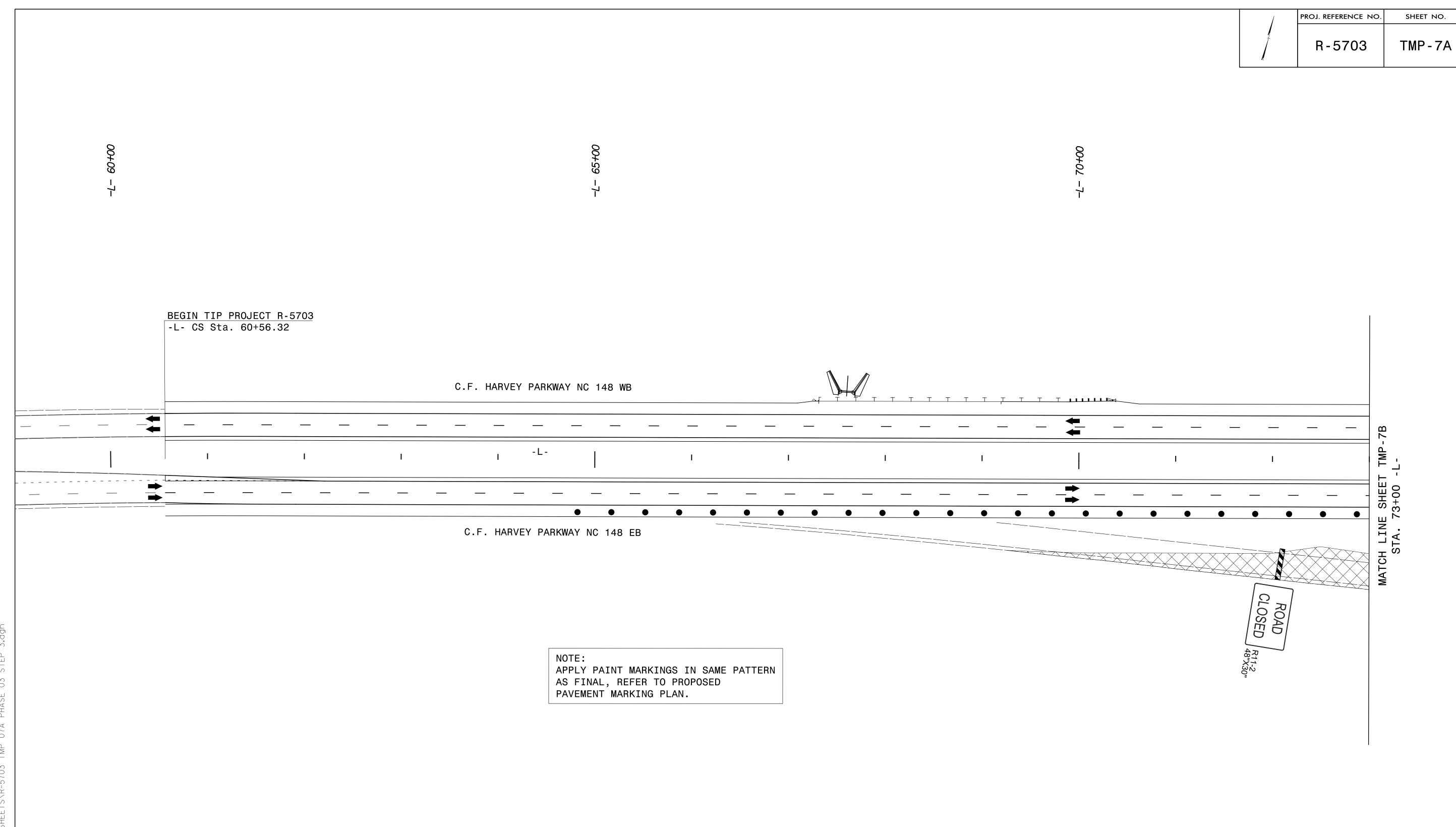


PHASE III

STEPS 1 & 2



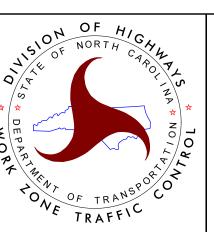




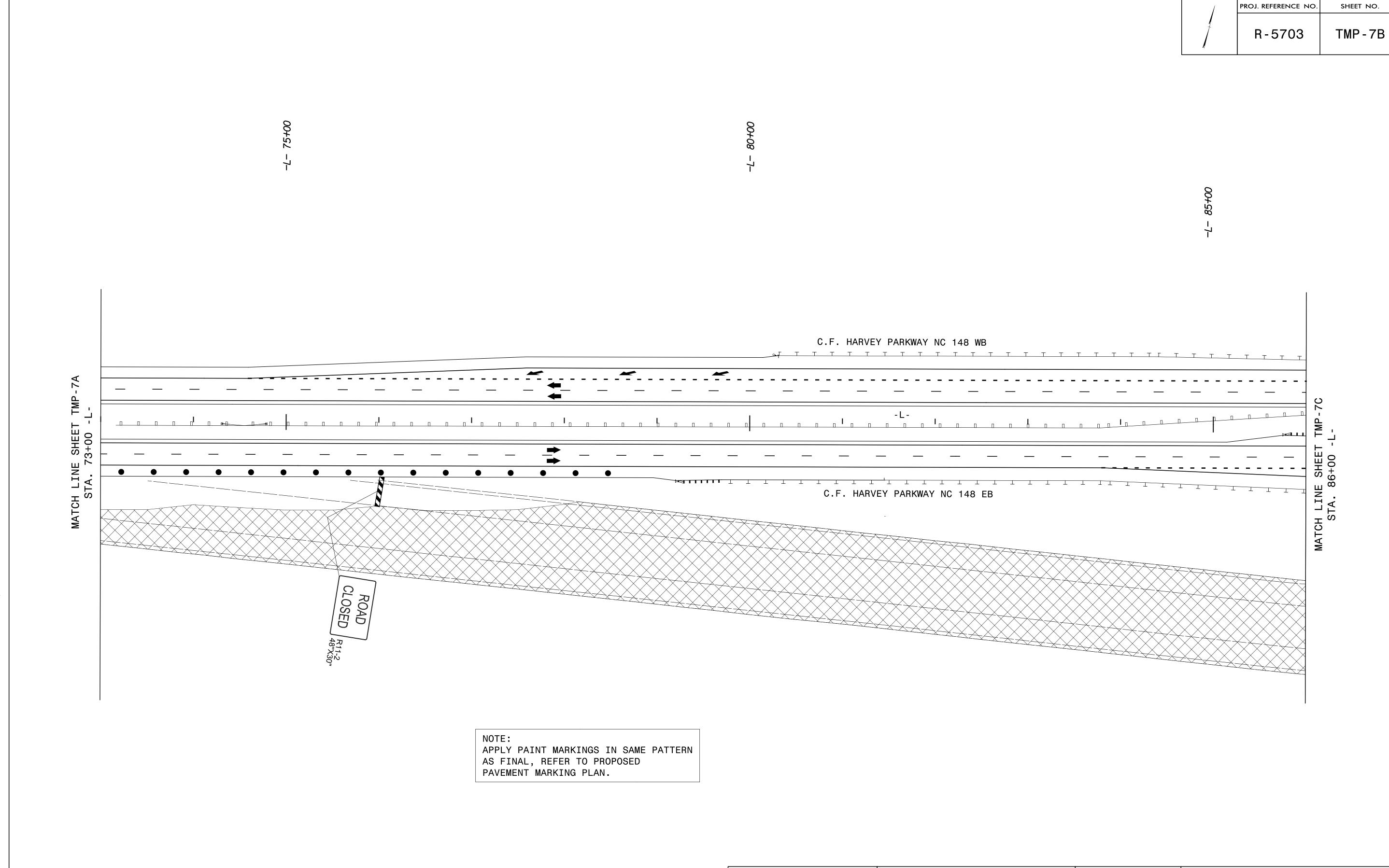


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PHASE III STEP 3



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PHASE III STEP 3

