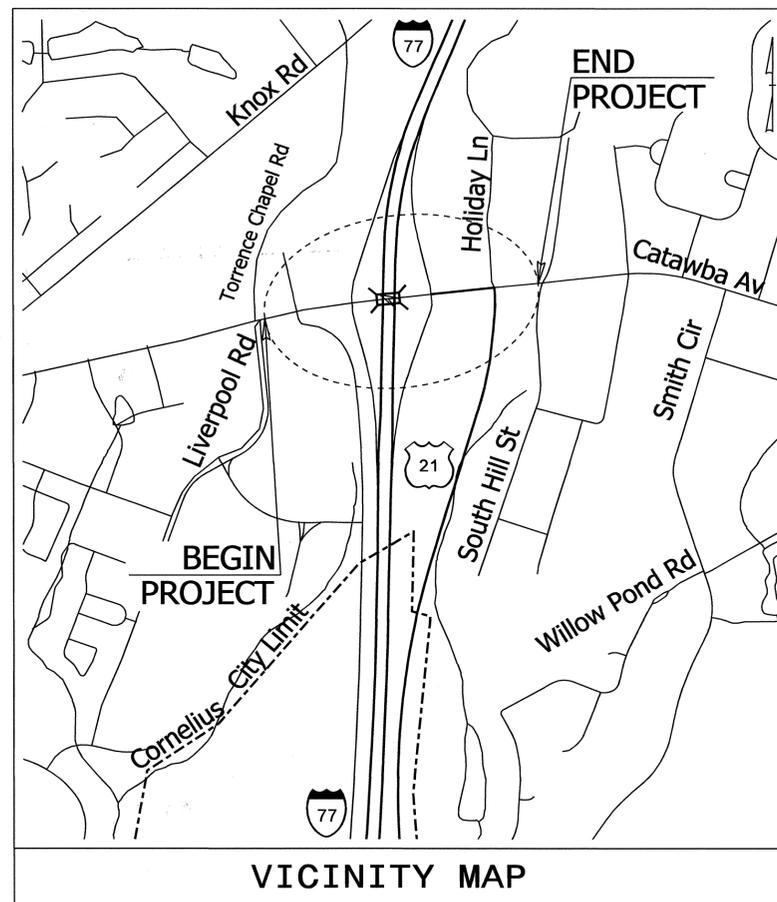
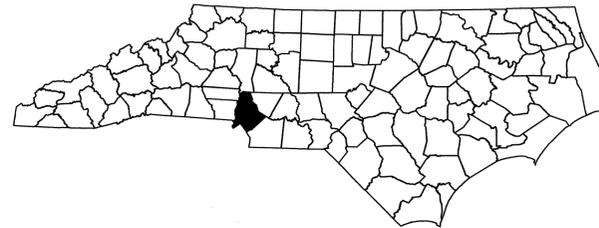


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

MECKLENBURG COUNTY



VICINITY MAP

INDEX OF SHEETS

SHEET NO.	TITLE
TMP-1	TITLE SHEET, AND INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND, AND TEMPORARY PAVEMENT MARKINGS
TMP-1B	TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT STRATEGIES AND GENERAL NOTES)
TMP-1C	GENERAL NOTES (CONT'D)
TMP-2	SPECIAL SIGN DESIGN
TMP-3 & TMP-3A	PHASING
TMP-4, TMP-4A & TMP-4B	PHASE I DETAILS
TMP-5, TMP-5A, TMP-5A1, TMP-5A2 & TMP-5B	PHASE II DETAILS
TMP-6, TMP-6A & TMP-6B	PHASE III DETAILS
TMP-7	PHASE IV DETAILS
TMP-7A	PHASE IV DETAILS CLOSURE OF CATAWBA AVE WITH EXISTING TRAFFIC PATTERN
TMP-7A1	PHASE IV DETAILS CLOSURE OF CATAWBA AVE WITH DDI TRAFFIC PATTERN
TMP-7B	PHASE IV DETAILS
TMP-7C	DETOUR ROUTE
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TMP-9, TMP-9A, TMP-9B, TMP-10, TMP-10A, & TMP-10B	PHASE VI DETAILS

SHEET NO.
TMP-1

I - 4733

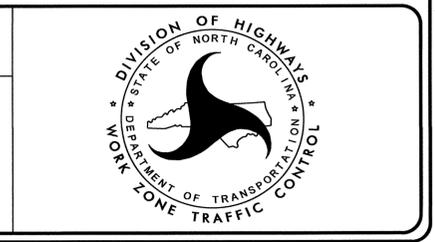
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N.C.D.O.T. WORK ZONE TRAFFIC CONTROL
1561 MAIL SERVICE CENTER (MSC) RALEIGH, NC 27699-1561
750 N. GREENFIELD PARKWAY, GARNER, NC 27529 (DELIVERY)
PHONE: (919) 773-2800 FAX: (919) 771-2745

J. S. BOURNE, P.E. STATE TRAFFIC MANAGEMENT ENGINEER
G. L. GETTIER, P.E. TRAFFIC CONTROL PROJECT ENGINEER
J. W. GILSTRAP TRAFFIC CONTROL PROJECT DESIGN ENGINEER
KEN BROADWELL TRAFFIC CONTROL DESIGN ENGINEER



APPROVED: _____
DATE: _____

SEAL

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.01	WORK ZONE 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
1115.01	FLASHING ARROW BOARDS
1130.01	DRUM
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1165.01	WORK VEHICLE LIGHTING SYSTEM AND TMA DELINEATION
1180.01	SKINNY-DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.06	PAVEMENT MARKINGS - THRU LANE DROPS
1205.07	PAVEMENT MARKINGS - PEDESTRIAN CROSSWALKS
1205.08	PAVEMENT MARKINGS - SYMBOLS & WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - (PERMANENT & TEMPORARY)

LEGEND

GENERAL

- DIRECTION OF TRAFFIC FLOW
- EXIST. PVMT.
- NORTH ARROW
- PROPOSED PVMT.
- WORK AREA
- REMOVAL

TRAFFIC CONTROL DEVICES

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

TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

SIGNALS

- EXISTING
- PROPOSED
- TEMPORARY

PAVEMENT MARKINGS

- EXISTING LINES
- TEMPORARY LINES

PAVEMENT MARKERS

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

PAVEMENT MARKING SYMBOLS

- PAVEMENT MARKING SYMBOLS

TEMPORARY PAVEMENT MARKINGS

- PAINT (4")
- PA WHITE EDGELINE
 - PB YELLOW EDGELINE
 - PC 10' WHITE SKIP
 - PD 3'-9'/SP WHITE MINISKIP
 - PE WHITE SOLID LANE LINE
 - PI YELLOW DOUBLE CENTER

- PAINT (6")
- PK 3'-9'/SP WHITE MINISKIP
 - PJ 10' WHITE SKIP
 - PL WHITE SOLID LANE LINE
 - P6 WHITE EDGELINE
 - P7 YELLOW EDGELINE
 - P8 2'-6'/SP WHITE MINISKIP

- PAINT (8")
- PO WHITE DIAGONAL
 - PP YELLOW DIAGONAL
 - PR WHITE SOLID LANE LINE
 - PN WHITE GORE LINE
 - P8 2'-6'/SP WHITE MINISKIP
 - P13 3'-9'/SP WHITE MINISKIP

- PAINT (12")
- PS WHITE GORE LINE
 - PT WHITE SOLID LANE LINE
 - PU WHITE DIAGONAL
 - PV YELLOW DIAGONAL
 - P14 3'-9'/SP WHITE MINISKIP

- PAINT (24")
- P4 WHITE STOPBAR

- PAINT CHARACTERS/SYMBOLS
- QA LEFT ARROW
 - QB RIGHT ARROW
 - QC STRAIGHT ARROW
 - QD STRAIGHT/LEFT ARROW
 - QE STRAIGHT/RIGHT ARROW
 - QI ALPHANUMERIC CHARACTERS
 - QP MERGE ARROW

- COLD APPLIED PLASTIC TYPE 4 (REMOVABLE TAPE) (4")
- CA WHITE EDGELINE
 - CC 10' WHITE SKIP
 - CD 3'-9'/SP WHITE MINISKIP
 - CE WHITE SOLID LANE LINE

- COLD APPLIED PLASTIC TYPE 4 (REMOVABLE TAPE) (8")
- CR WHITE SOLID LANE LINE

- COLD APPLIED PLASTIC TYPE 4 (REMOVABLE TAPE) CHARACTERS/SYMBOLS
- DA LEFT ARROW
 - DC STRAIGHT ARROW
 - DD COMBO STRAIGHT/LEFT ARROW
 - DI ALPHANUMERIC CHARACTERS

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APPROVED: _____ DATE: _____		ROADWAY STANDARD DRAWINGS, LEGEND AND TEMPORARY PAVEMENT MARKINGS

TRANSPORTATION OPERATIONS

CONSTRUCTION

CONSTRUCT DIVERGING DIAMOND INTERSECTION (DDI) UTILIZING LANE CLOSURES AND OFF-SITE DETOURS.

CONDUCT BRIDGE DECK AND BRIDGE JOINT REHABILITATION UTILIZING LANE CLOSURES.

TMP DESIGN PARAMETERS

THIS PROJECT CONTAINS LANE CLOSURE TIME RESTRICTIONS, IN ADDITION TO HOLIDAYS AND SPECIAL EVENTS (SEE GENERAL NOTES "A" AND "B").

POLICE SHALL BE UTILIZED TO DIRECT TRAFFIC THROUGH INTERSECTIONS.

AN ICT AND OFF-SITE DETOURS WILL BE UTILIZED TO CLOSE CATAWBA AVE (-L-) FOR THE PLACEMENT OF TEMPORARY PAVEMENT MARKINGS/MARKERS AND PLACE TRAFFIC IN THE FINAL DDI PATTERN.

AN ICT WILL BE UTILIZED TO CONSTRUCT MEDIAN BARRIERS FOR CATAWBA AVE (-L-) DDI.

NO PEDESTRIAN DETOURS REQUIRED ON THIS PROJECT. TYPE III BARRICADES/SIGNS WILL BE UTILIZED TO PREVENT PEDESTRIANS FROM USING THE PROPOSED SIDEWALKS UNTIL FINAL SIGNALS AND FINAL PAVEMENT MARKINGS ARE IN PLACE AND OPERATIONAL.

CONTRACTOR SHALL HAVE AVAILABLE FOUR (4) CHANGEABLE MESSAGE SIGNS (CMS) TO BE UTILIZED FOR PUBLIC INFORMATION, TRAVEL ALERTS AND TRAFFIC CONDITIONS AS DIRECTED BY THE ENGINEER. THESE CMS SHALL BE IN ADDITION TO ANY OTHER CMS REQUIRED FOR TRAFFIC CONTROL OPERATIONS DURING CONSTRUCTION.

GENERAL OUTLINE

1. REMOVE EXISTING CONCRETE ISLANDS USING SHORT TERM LANE CLOSURES.
2. PERFORM BRIDGE DECK PRESERVATION WORK USING SHORT TERM LANE CLOSURES.
3. CONSTRUCT WIDENING, DRAINAGE AND MILLING OPERATIONS USING SHORT TERM LANE CLOSURES. INSTALL TEMPORARY SIGNALS.
4. UNDER AN ICT CLOSE CATAWBA AVE (-L-) TO INSTALL TEMPORARY PAVEMENT MARKINGS/MARKERS FOR THE FINAL DDI PATTERN. ACTIVATE TEMPORARY SIGNALS.
5. CONSTRUCT GRASS ISLANDS USING SHORT TERM LANE CLOSURES.
6. BEHIND WATER FILLED BARRIER AND UNDER AN ICT CONSTRUCT MEDIAN CONCRETE ISLANDS, BARRIER AND INSTALL FINAL SIGNALS.
7. INSTALL FINAL LAYER OF SURFACE COURSE AND FINAL PAVEMENT MARKINGS/MARKERS USING SHORT TERM LANE CLOSURES AND ACTIVATE FINAL SIGNALS. REMOVE ALL TRAFFIC CONTROL DEVICES AND OPEN TO THE FINAL TRAFFIC PATTERN.

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GENERAL NOTES

PROJ. REFERENCE NO. I-4733	SHEET NO. TMP-1B
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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 IN EACH DIRECTION AS FOLLOWS:

<u>ROAD NAME</u>	<u>DAY AND TIME RESTRICTIONS</u>
ONE LANE ON CATAWBA AVE (-L-) & ON/OFF RAMP	MONDAY THRU THURSDAY, 6:00AM - 9:00PM FRIDAY, 6:00AM - MIDNIGHT SATURDAY, 8:00AM - MIDNIGHT SUNDAY, 8:00AM - 9:00PM
TWO LANES ON CATAWBA AVE (-L-)	MONDAY THRU FRIDAY, 6:00AM - MIDNIGHT SATURDAY & SUNDAY, 8:00AM - MIDNIGHT
ONE LANE ON I-77	MONDAY THRU FRIDAY, 6:00AM - 9:00PM SATURDAY & SUNDAY, 9:00AM - 9:00PM

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

ROAD NAME

CATAWBA AVE (-L-),
I-77 & ON/OFF RAMP

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 6:00AM DECEMBER 31st TO 9:00PM JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 9:00PM THE FOLLOWING TUESDAY.
3. FOR EASTER, BETWEEN THE HOURS OF 6:00AM THURSDAY AND 9:00PM MONDAY.
4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00AM FRIDAY TO 9:00PM TUESDAY.
5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00AM THE DAY BEFORE INDEPENDENCE DAY AND 9:00PM THE DAY AFTER INDEPENDENCE DAY.

IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 6:00AM THE THURSDAY BEFORE INDEPENDENCE DAY AND 9:00PM THE TUESDAY AFTER INDEPENDENCE DAY.
6. FOR LABOR DAY, BETWEEN THE HOURS OF 6:00AM FRIDAY AND 9:00PM TUESDAY.
7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00AM TUESDAY TO 9:00PM MONDAY.
8. FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00AM THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 9:00PM THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.
9. FOR ANY NASCAR RACING EVENT AT THE CHARLOTTE MOTOR SPEEDWAY, BETWEEN THE HOURS OF 6:00AM THE THURSDAY BEFORE THE WEEKEND OF THE EVENT UNTIL 9:00PM THE FOLLOWING MONDAY AFTER THE EVENT.

- C) DO NOT STOP TRAFFIC AS FOLLOWS:

<u>ROAD NAME</u>	<u>DAY AND TIME RESTRICTIONS</u>	<u>DURATION AND OPERATION</u>
CATAWBA AVE (-L-)	MONDAY THRU THURSDAY, 6:00AM - 10:00PM FRIDAY, 6:00AM - MIDNIGHT SATURDAY, 8:00AM - MIDNIGHT SUNDAY, 8:00AM - 9:00PM	15 MINUTES FOR TRAFFIC OPS AS DIRECTED BY THE ENGINEER

- D) 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

- E) 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.
- F) 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.
- G) 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.

- H) 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.

- I) 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.

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

PAVEMENT EDGE DROP OFF REQUIREMENTS

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

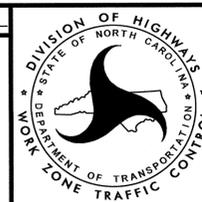
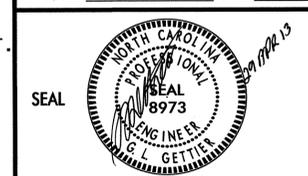
BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.

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

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

- L) DO NOT EXCEED A DIFFERENCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) 200' IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

APPROVED: _____ DATE: _____



**TRANSPORTATION
OPERATIONS AND
GENERAL NOTES**

GENERAL NOTES cont'd

PROJ. REFERENCE NO.	SHEET NO.
I-4733	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 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 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.

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.

U) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES (DRUMS, CONES OR SKINNY DRUMS) PERPENDICULAR TO THE EDGE OF TRAVELWAY ON (250 FT) CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

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

<u>ROAD NAME</u>	<u>MARKING</u>	<u>MARKER</u>
ALL ROADS & EXIST. BRIDGE DECK	PAINT	TEMPORARY RAISED
PROPOSED BRIDGE DECK	COLD APPLIED PLASTIC TYPE 4 (REM. TAPE)	TEMPORARY RAISED

W) 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.

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

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

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

MISCELLANEOUS

AA) LAW ENFORCEMENT SHALL BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS AS DIRECTED BY THE ENGINEER.

BB) ALL CURB RAMP LOCATIONS SHALL BE DERIVED FROM STATIONING SHOWN ON PAVEMENT MARKING PLANS OR AS DIRECTED BY THE ENGINEER IN COORDINATION WITH THE SIGNING AND DELINEATION UNIT.

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APPROVED: _____ DATE: _____		GENERAL NOTES cont'd

PHASING

PHASE I

- STEP 1: - CONTRACTOR SHALL PLACE ADVANCE WORK ZONE WARNING SIGNS ALONG CATAWBA AVE AND I-77 (SEE RSD 1101.01, SHEETS 1 & 3).
- CONTRACTOR SHALL INSTALL FOUR (4) CHANGEABLE MESSAGE SIGNS ON THE PROJECT AS DIRECTED BY THE ENGINEER. THESE CHANGEABLE MESSAGE SIGNS SHALL BE UTILIZED TO INFORM & ALERT THE TRAVELING PUBLIC TO TRAFFIC CONDITIONS AND ARE IN ADDITION TO OTHER CHANGEABLE MESSAGE SIGNS THAT ARE REQUIRED FOR TRAFFIC CONTROL OPERATIONS DURING CONSTRUCTION.
- STEP 2: - CONTRACTOR SHALL, USING RSD 1101.02 SHEET 3 OF 15 AND SHEETS TMP-4, TMP-4A & TMP-4B.
- REMOVE EXISTING CONCRETE ISLANDS, PAVE UP TO THE EDGE & ELEVATION OF EXISTING PAVEMENT AND PLACE TEMPORARY PAVEMENT MARKINGS/MARKERS, DRUMS AND/OR TUBULAR MARKERS TO DELINEATE THE ISLANDS (SEE CONSTRUCTION PLANS AND SHEETS TMP-5, TMP-5A & TMP-5B).

THE CONTRACTOR SHALL WORK IN A CONTINUOUS MANNER TO COMPLETE THE WORK IN PHASE II, STEP 1A THRU STEP 1C IN 3 CONSECUTIVE DAYS (SEE INTERMEDIATE CONTRACT TIME AND SPECIAL PROVISIONS).

NOTE: THE CONTRACTOR HAS THE OPTION TO CONSTRUCT BOTH PROPOSED APPROACH SLAB WIDENING AREAS IN EACH DIRECTION OF CATAWBA AVE. (-L-) SIMULTANEOUSLY OR SEPARATE AS APPROVED BY THE ENGINEER. IF BOTH PROPOSED APPROACH SLAB WIDENING AREAS ARE CONSTRUCTED SIMULTANEOUSLY IN BOTH DIRECTIONS OF CATAWBA AVE. (-L-), THEN ALL WORK MUST BE COMPLETED WITHIN THE ICT OF 3 CONSECUTIVE DAYS. IF BOTH PROPOSED APPROACH SLAB WIDENING AREAS ARE CONSTRUCTED SEPARATELY, ONE DIRECTION OF CATAWBA AVE. (-L-), THEN THE CONTRACTOR SHALL HAVE AN ICT OF 3 CONSECUTIVE DAYS FOR EACH DIRECTION.

PHASE II

- STEP 1: - CONSTRUCTION OF PROPOSED APPROACH SLAB WIDENING.
- A. - CONTRACTOR SHALL, USING RSD 1101.02 SHEET 3 OF 15 AND SHEETS TMP-6, TMP-6A & TMP-6B, CLOSE THE OUTSIDE LANE(S) OF CATAWBA AVE. (-L-) AND PLACE TRAFFIC INTO A TEMPORARY ONE-LANE PATTERN.
 - B. - CONSTRUCT BOTH PROPOSED APPROACH SLAB WIDENING AREAS (SEE CONSTRUCTION PLANS).
- NOTE: WITH APPROVAL OF THE ENGINEER THE CONTRACTOR MAY, DURING THE ABOVE LANE CLOSURE(S), BEGIN CONSTRUCTION OF PROPOSED WIDENING OF CATAWBA AVE. (-L-) AS SHOWN ON SHEETS TMP-6, TMP-6A & TMP-6B (SEE CONSTRUCTION PLANS).
- C. - OPEN CATAWBA AVE. (-L-) TO EXISTING TRAFFIC PATTERN.
 - D. - IF REQUIRED, REPEAT PHASE II, STEP 1A THRU 1C FOR THE OTHER DIRECTION OF CATAWBA AVE. (-L-).

PERFORM BRIDGE DECK REHABILITATION AS SHOWN IN THE CONTRACT AND CONSTRUCTION PLANS IN ACCORDANCE WITH THE "NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES - JANUARY 2012"

NOTE: CONTRACTOR SHALL PERFORM BRIDGE DECK REHABILITATION BY CLOSING TWO ADJACENT LANES OF TRAFFIC ON CATAWBA AVE. (-L-) AS STATED BELOW. THE ORDER OF THE TWO LANE CLOSURE (WORK AREA) IS AT THE DISCRETION OF THE CONTRACTOR WITH APPROVAL FROM THE ENGINEER.

- STEP 2: - PLACE SIGNALS AT THE TWO RAMP INTERSECTIONS IN RED FLASHING MODE, UTILIZE LAW ENFORCEMENT TO DIRECT TRAFFIC THROUGH INTERSECTIONS AND CLOSE TWO EXISTING ADJACENT LANES (SEE TMP SHEETS LISTED BELOW) ON CATAWBA AVE. (-L-). PERFORM BRIDGE DECK REHABILITATION WORK AS REQUIRED. AT THE END OF EACH WORK PERIOD RETURN SIGNALS TO NORMAL OPERATIONS, REMOVE TRAFFIC CONTROL DEVICES AND REOPEN CATAWBA AVE. (-L-) TO EXISTING TRAFFIC PATTERN. REPEAT UNTIL ALL REQUIRED WORK IN THE SELECTED WORK AREA IS COMPLETE.
- OUTSIDE TWO LANES EB CATAWBA AVE.: SEE SHEETS TMP-5, TMP-5A & TMP-5B.
 - OUTSIDE TWO LANES WB CATAWBA AVE.: SEE SHEETS TMP-5, TMP-5A1 & TMP-5B.
 - CENTER TWO LANES ON CATAWBA AVE.: SEE SHEETS TMP-5, TMP-5A2 & TMP-5B.

NOTE: IF THERE IS A POSSIBILITY OF "BRIDGE DECK BLOW THROUGH" DURING BRIDGE DECK REHABILITATION OPERATIONS, THE CONTRACTOR SHALL CLOSE THE APPROPRIATE LANE(S) ON I-77 USING RSD 1101.02, SHEET 4 OF 15.

NOTE: WITH APPROVAL OF THE ENGINEER THE CONTRACTOR MAY, DURING THE ABOVE LANE CLOSURES, BEGIN CONSTRUCTION OF PROPOSED WIDENING, DRAINAGE, SIDEWALKS, INSTALLATION OF SIGNAL SYSTEMS (SEE SIGNAL PLANS FOR PROPOSED/TEMPORARY/REVISED), PROPOSED/TEMPORARY SIGNAGE (SEE SIGNING PLANS) AND EXISTING PAVEMENT MILLING OPERATIONS, UP TO, BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE (SEE CONSTRUCTION PLANS).

PHASE III

THE FOLLOWING NOTES ARE APPLICABLE FOR PHASE III.

- NOTE: CONTRACTOR SHALL CONSTRUCT ALL PAVEMENT TO MAINTAIN DRAINAGE AND NOT POND WATER IN THE TRAFFIC LANES.
- NOTE: CONTRACTOR SHALL PLACE TRAFFIC BACK INTO THE EXISTING PATTERN AT THE END OF EACH WORK PERIOD.
- NOTE: CONTRACTOR SHALL PLACE DRUMS AT ALL -Y- LINES AND DRIVEWAYS TO KEEP PROPOSED WIDENING CLOSED TO TRAFFIC.
- NOTE: CONTRACTOR SHALL INSTALL TYPE III BARRICADES WITH SIDEWALK CLOSED SIGNS (R9-9) TO CLOSE EXISTING SIDEWALKS (SEE SHEETS TMP-6 & TMP-6A).
- NOTE: WHEN CONSTRUCTING DRAINAGE STRUCTURES ADJACENT TO TRAFFIC, INSTALL TEMPORARY STEEL PLATES, AS DIRECTED BY THE ENGINEER. MAY WORK EACH LOCATION INDEPENDENTLY OR CONCURRENTLY, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. WORK IN A CONTINUOUS MANNER TO PERFORM THE WORK IN THE FOLLOWING SEQUENCE, IN STEPS "A" THRU "E".
- A: CLOSE THE APPROPRIATE TRAVEL LANE TO TRAFFIC USING ROADWAY STANDARD DRAWING NO. 1101.02 SHEETS 1, 2, 3, 7 & 9 OF 15.
 - B: CONSTRUCT PROPOSED STRUCTURE OR INSTALL PRE-CAST DRAINAGE STRUCTURE AS SHOWN IN THE CONSTRUCTION PLANS AND COVER WITH STEEL PLATES TO PROTECT STRUCTURE DURING CURING.
 - C: OPEN TRAVEL LANE TO EXISTING TRAFFIC PATTERN BY THE END OF EACH WORK PERIOD.
 - D: WHEN PROPERLY CURED, CLOSE THE APPROPRIATE TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEETS 1, 2, 3, 7 & 9 OF 15. BACKFILL & PAVE, IF REQUIRED, UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT (SEE CONSTRUCTION PLANS).
 - E: OPEN TRAVEL LANE TO EXISTING TRAFFIC PATTERN BY THE END OF THE WORK PERIOD.

- STEP 1: - CONTRACTOR, USING RSD 1101.02 SHEETS 1, 2, 3, 7 & 9 OF 15 AND SHEETS TMP-6, TMP-6A & TMP-6B:

- CONSTRUCT PROPOSED WIDENING, UTILIZING PAVING/WEDGING OPERATIONS OVER EXISTING, TO MAINTAIN EXISTING TRAFFIC PATTERN, UP TO, BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE (SEE CONSTRUCTIONS PLANS).

- CONSTRUCT PROPOSED DRAINAGE (INCLUDING AS MUCH OF THE PROPOSED CURB & GUTTER AS POSSIBLE) AND PROPOSED GUARDRAIL (SEE CONSTRUCTION PLANS).

NOTE: AS DIRECTED BY THE ENGINEER, INSTALL WATER FILLED BARRIER WITH RIGHT SHOULDER CLOSED SIGNS (SEE RSD 1101.04, CENTER DETAIL) WHEN INSTALLING PROPOSED DRAINAGE LEFT OF STA. 14+00 +/- -RPA- (SEE CONSTRUCTION PLANS).

- CONDUCT MILLING & PAVING OPERATIONS UP TO, BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE OR UP TO THE EDGE & ELEVATION OF THE EXISTING PAVEMENT (SEE CONSTRUCTION PLANS).

- CONSTRUCT/INSTALL TEMPORARY SIGNALS (BUT DO NOT ACTIVATE) FOR THE PROPOSED DIVERGING DIAMOND INTERCHANGE (DDI) TRAFFIC PATTERN IN PHASE IV (SEE SIGNAL PLANS).

- CONSTRUCT/INSTALL TEMPORARY/PROPOSED SIGNAGE FOR THE PROPOSED DDI TRAFFIC PATTERN PHASE IV (SEE SIGNING PLANS).

- MAY BEGIN CONSTRUCTION OF PROPOSED SIDEWALKS AND INSTALL ADDITIONAL TYPE III BARRICADES WITH SIDEWALK CLOSED SIGNS (R9-9) TO KEEP PROPOSED SIDEWALKS CLOSED UNTIL THE ENTIRE PROJECT HAS BEEN COMPLETED AND OPEN TO FINAL TRAFFIC PATTERN PHASE VII (SEE CONSTRUCTION PLANS).

- MAY BEGIN CONSTRUCTION/INSTALLATION OF PROPOSED/REVISED SIGNAL SYSTEMS (SEE SIGNAL PLANS) AND PROPOSED SIGNAGE (SEE SIGNING PLANS) FOR PROPOSED DDI INTERSECTIONS AND THE INTERSECTION AT CATAWBA AVE. (-L-) & US 21 (-Y1-).

THE CONTRACTOR SHALL WORK IN A CONTINUOUS MANNER TO COMPLETE THE WORK IN PHASE IV, STEPS 1 THRU STEP 3 FROM MIDNIGHT FRIDAY TO 8:00 A.M. THE FOLLOWING SUNDAY (SEE INTERMEDIATE CONTRACT TIME AND SPECIAL PROVISIONS).

PRIOR TO CLOSING CATAWBA AVE. (-L-) THE CONTRACTOR SHALL INSTALL CHANGEABLE MESSAGES SIGNS ON I-77 AND DISPLAY APPROPRIATE MESSAGES AS SHOWN ON SHEET TMP-7C. IN ADDITION, THE CONTRACTOR SHALL DISPLAY APPROPRIATE MESSAGES ON CHANGEABLE MESSAGE SIGNS ON CATAWBA AVE. AS SHOWN ON SHEETS TMP-7 & TMP-7B.

PHASE IV

- STEP 1: - CONTRACTOR SHALL, USING SHEETS TMP-7, TMP-7A, TMP-7A1, TMP-7B & TMP-7C, CLOSE CATAWBA AVE. (-L-) BETWEEN THE TWO EXISTING INTERSECTIONS WITH I-77.

NOTE: CONTRACTOR SHALL MAINTAIN ONE RIGHT TURN LANE FROM CATAWBA AVE. (-L-) TO BOTH ON-RAMPS TO I-77 AND ONE RIGHT TURN LANE FROM BOTH OFF-RAMPS OF I-77 TO CATAWBA AVE. (-L-) AT ALL TIMES.

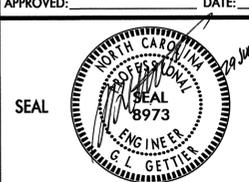
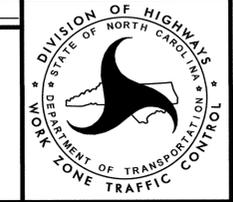
NOTE: AS THE TEMPORARY PAVEMENT MARKINGS & MARKERS ARE PLACED/INSTALLED THE CONTRACTOR SHALL MOVE THE TYPE III BARRICADES WITH SIGNS ATTACHED AND PORTABLE SIGNS (SEE TMP-7A1) TO MAINTAIN THE RIGHT TURN LANE MOVEMENTS AS STATED ABOVE.

- STEP 2: - CONTRACTOR SHALL PLACE TEMPORARY PAVEMENT MARKINGS & TEMPORARY RAISED PAVEMENT MARKERS FOR THE PROPOSED DDI TRAFFIC PATTERN (SEE FINAL PAVEMENT MARKING PLAN AND SHEETS TMP-7, TMP-7A1 & TMP-7B).

NOTE: TEMPORARY PAVEMENT MARKINGS/TEMPORARY RAISED PAVEMENT MARKERS SHALL MATCH GEOMETRY, LINE TYPE AND LINE WIDTHS AS SHOWN IN THE FINAL PAVEMENT MARKING PLAN. APPLY PAINT ON ASPHALT SURFACES AND COLD APPLIED PLASTIC TYPE 4 (REMOVEABLE TAPE) ON BRIDGE DECK. SEE SHEET TMP-1A FOR TEMPORARY PAVEMENT MARKING SCHEDULE.

- STEP 3: - CONTRACTOR SHALL ACTIVATE TEMPORARY SIGNALS, CHANGE MESSAGE ON CHANGEABLE MESSAGE SIGNS ON CATAWBA AVE. (SEE SHEETS TMP-7 & TMP-7B) AND OPEN TO THE FINAL DDI TRAFFIC PATTERN (SEE FINAL PAVEMENT MARKING PLAN).

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PHASING cont'd

PHASE V

NOTE: CONTRACTOR SHALL PLACE TRAFFIC BACK INTO THE EXISTING PATTERN AT THE END OF EACH WORK PERIOD.

STEP 1: - CONTRACTOR, USING SHEETS TMP-8, TMP-8A & TMP-8B:

- SHALL CONSTRUCT PROPOSED GRASS ISLANDS, INCLUDING CURB & GUTTER AND SIDEWALKS. IN ADDITION INSTALL/CONSTRUCT PROPOSED SIGNAL POLES & ASSOCIATED SIGNAL EQUIPMENT AND PROPOSED SIGNS IN THE GRASS ISLAND AREAS (SEE CONSTRUCTION PLANS, SIGNAL PLANS AND SIGNING PLANS).
- SHALL CONSTRUCT REMAINDER OF PROPOSED OUTSIDE WIDENING (SEE CONSTRUCTION PLANS).
- MAY CONTINUE CONSTRUCTION OF PROPOSED OUTSIDE SIDEWALKS AND INSTALL ADDITIONAL TYPE III BARRICADES WITH SIDEWALK CLOSED SIGNS (R9-9) TO KEEP PROPOSED SIDEWALKS CLOSED UNTIL THE ENTIRE PROJECT HAS BEEN COMPLETED AND OPEN TO FINAL TRAFFIC PATTERN PHASE VII (SEE CONSTRUCTION PLANS).

THE CONTRACTOR SHALL WORK IN A CONTINUOUS MANNER TO COMPLETE THE WORK IN PHASE VI, STEP 1 THRU STEP 3C IN 120 CONSECUTIVE DAYS (SEE INTERMEDIATE CONTRACT TIME AND SPECIAL PROVISIONS).

THE CONTRACTOR SHALL WORK IN A CONTINUOUS MANNER TO COMPLETE THE WORK IN PHASE VI, STEP 1 THRU STEP 2B IN 28 CONSECUTIVE DAYS (SEE INTERMEDIATE CONTRACT TIME AND SPECIAL PROVISIONS).

PHASE VI

STEP 1: - CONTRACTOR SHALL, USING SHEETS TMP-9, TMP-9A & TMP-9B, PLACE CATAWBA AVE. INTO A ONE-LANE TRAFFIC PATTERN IN EACH DIRECTION.

NOTE: INSTALL DRUMS IN PLACE OF WATER FILLED BARRIER UNTIL BARRIER IS INSTALLED.

CONTRACTOR SHALL WORK PHASE VI, STEP 2 AND STEP 3 SIMULTANEOUSLY, AS DIRECTED BY THE ENGINEER.

STEP 2: - CONSTRUCTION OF PROPOSED RAISED MEDIAN CONCRETE ISLANDS.

- A. - CONTRACTOR SHALL CONSTRUCT PROPOSED RAISED MEDIAN CONCRETE ISLANDS FROM BEGINNING OF PROJECT TO STA. 19+05 +/- -L- AND FROM STA. 26+75 +/- -L- TO END OF PROJECT (SEE CONSTRUCTION PLANS AND SHEETS TMP-9, TMP-9A & TMP-9B).
- CONTRACTOR SHALL INSTALL/CONSTRUCT PROPOSED SIGNALS AND PROPOSED SIGNS IN THE RAISED MEDIAN CONCRETE ISLAND AREAS (SEE SIGNAL PLANS AND SIGNING PLANS).
- B. - CONTRACTOR SHALL PLACE TEMPORARY PAVEMENT MARKINGS & TEMPORARY RAISED PAVEMENT MARKERS IN THE NEWLY COMPLETED PROPOSED RAISED MEDIAN CONCRETE ISLAND AREAS (SEE FINAL PAVEMENT MARKING PLAN) AND OPEN TO TEMPORARY TRAFFIC PATTERN AS SHOWN ON SHEETS TMP-10, TMP-10A & TMP-10B.

NOTE: TEMPORARY PAVEMENT MARKINGS/TEMPORARY RAISED PAVEMENT MARKERS SHALL MATCH GEOMETRY, LINE TYPE AND LINE WIDTHS AS SHOWN IN THE FINAL PAVEMENT MARKING PLAN. APPLY PAINT ON ASPHALT SURFACES AND COLD APPLIED PLASTIC TYPE 4 (REMOVEABLE TAPE) ON BRIDGE DECK. SEE SHEET TMP-1A FOR TEMPORARY PAVEMENT MARKING SCHEDULE.

STEP 3: - CONSTRUCTION OF PROPOSED MEDIAN PEDESTRIAN SIDEWALK/ISLAND & BARRIER BETWEEN THE TWO PROPOSED DDI SIGNALIZED INTERSECTIONS.

- A. - CONTRACTOR SHALL INSTALL WATER FILLED BARRIER AS SHOWN ON SHEET TMP-9A.
- B. - CONSTRUCT PROPOSED MEDIAN PEDESTRIAN SIDEWALK/ISLAND & BARRIER BETWEEN THE TWO PROPOSED DDI SIGNALIZED INTERSECTIONS (SEE CONSTRUCTION PLANS AND SHEET TMP-9A).
- INSTALL/CONSTRUCTION PROPOSED SIGNAL POLES & ASSOCIATED SIGNAL EQUIPMENT AND PROPOSED SIGNS IN MEDIAN PEDESTRIAN SIDEWALK/ISLAND AREA (SEE SIGNAL PLANS AND SIGNING PLANS).
- C. - CONTRACTOR SHALL PLACE TEMPORARY PAVEMENT MARKINGS & TEMPORARY RAISED PAVEMENT MARKERS IN THE NEWLY COMPLETED PROPOSED MEDIAN PEDESTRIAN SIDEWALK/ISLAND AREA AND OPEN CATAWBA AVE. (-L-) AND BOTH SIGNALIZED INTERSECTIONS TO THE FINAL DDI TRAFFIC PATTERN (SEE SIGNAL PLANS AND FINAL PAVEMENT MARKING PLANS).

NOTE: TEMPORARY PAVEMENT MARKINGS/TEMPORARY RAISED PAVEMENT MARKERS SHALL MATCH GEOMETRY, LINE TYPE AND LINE WIDTHS AS SHOWN IN THE FINAL PAVEMENT MARKING PLAN. APPLY PAINT ON ASPHALT SURFACES AND COLD APPLIED PLASTIC TYPE 4 (REMOVEABLE TAPE) ON BRIDGE DECK. SEE SHEET TMP-1A FOR TEMPORARY PAVEMENT MARKING SCHEDULE.

STEP 4: - CONTRACTOR SHALL, USING RSD 1101.02 SHEETS 1, 2, & 3 OF 15:

- COMPLETE CONSTRUCTION/INSTALLATION OF PROPOSED SIGNAL SYSTEM AT THE INTERSECTION OF CATAWBA AVE. (-L-) & US 21 (-Y1-) AND OPEN TO FINAL TRAFFIC PATTERN (SEE SIGNAL PLANS).
- COMPLETE CONSTRUCTION OF PROPOSED SIDEWALKS AND INSTALL ADDITIONAL TYPE III BARRICADES WITH SIDEWALK CLOSED SIGNS (R9-9) TO KEEP PROPOSED SIDEWALKS CLOSED UNTIL THE ENTIRE PROJECT HAS BEEN COMPLETED AND OPEN TO FINAL TRAFFIC PATTERN IN PHASE VII (SEE CONSTRUCTION PLANS).

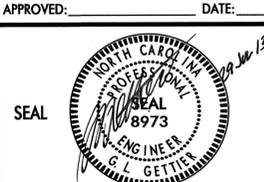
PHASE VII

NOTE: CONTRACTOR SHALL PLACE TRAFFIC BACK INTO THE EXISTING PATTERN AT THE END OF EACH WORK PERIOD.

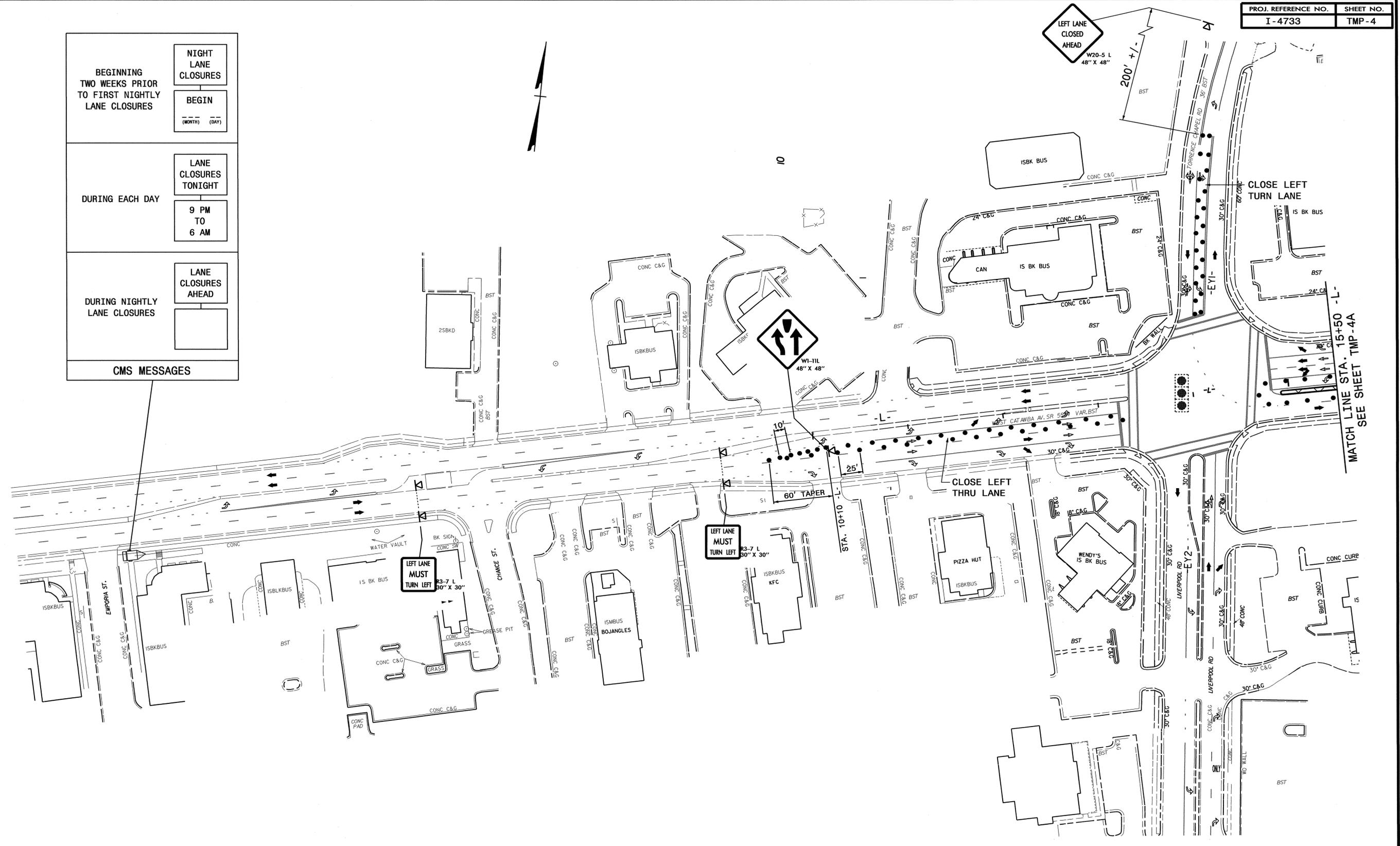
STEP 1: - CONTRACTOR SHALL, USING RSD 1101.02 SHEETS 1, 2, 3 & 5 OF 15 AND/OR SHEETS TMP-9, TMP-9A (USE DRUMS IN PLACE OF WATER FILLED BARRIER) & TMP-9B, PAVE THE FINAL LAYER OF SURFACE COURSE, PLACE THE FINAL PAVEMENT MARKINGS, INSTALL FINAL PAVEMENT MARKERS AND OPEN TO FINAL TRAFFIC PATTERN, INCLUDING PROPOSED SIDEWALKS (SEE CONSTRUCTION PLANS AND FINAL PAVEMENT MARKING PLANS).

STEP 2: - REMOVE ALL TRAFFIC CONTROL DEVICES.

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BEGINNING TWO WEEKS PRIOR TO FIRST NIGHTLY LANE CLOSURES	NIGHT LANE CLOSURES BEGIN (MONTH) (DAY)
DURING EACH DAY	LANE CLOSURES TONIGHT 9 PM TO 6 AM
DURING NIGHTLY LANE CLOSURES	LANE CLOSURES AHEAD
CMS MESSAGES	



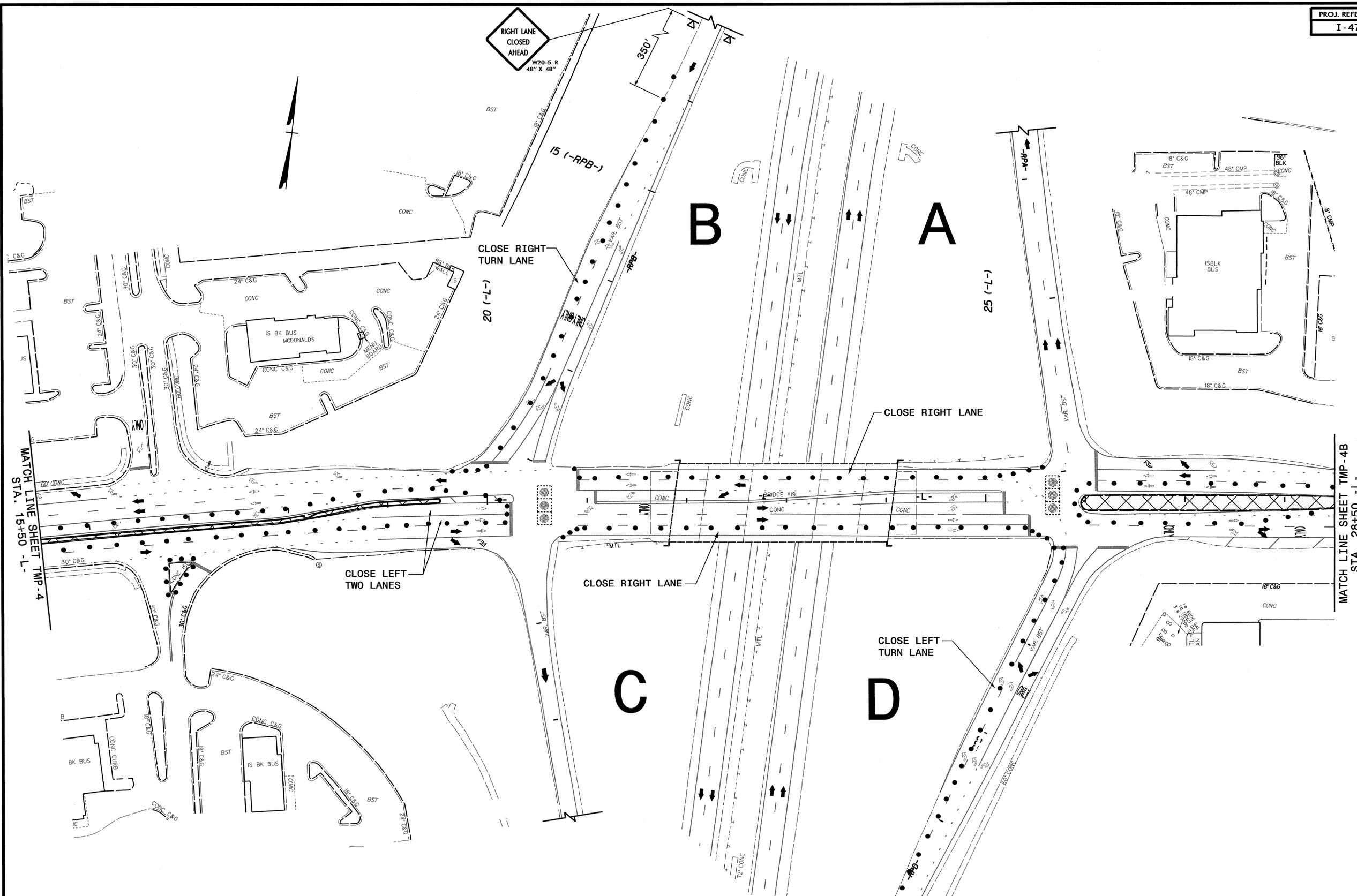
NOTES
1. SEE SHEET TMP-1A FOR TEMPORARY PAVEMENT MARKING SCHEDULE.

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SEAL

PHASE I DETAILS

26-APR-2013 07:42
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 kbroodwell AT TE266004



MATCH LINE SHEET TMP-4
STA. 15+50 -L-

MATCH LINE SHEET TMP-4B
STA. 28+50 -L-

NOTES
1. SEE SHEET TMP-1A FOR TEMPORARY PAVEMENT MARKING SCHEDULE.

LEFT LANE
CLOSED
AHEAD
W20-5 L
48" X 48"

RIGHT LANE
CLOSED
AHEAD
W20-5 R
48" X 48"

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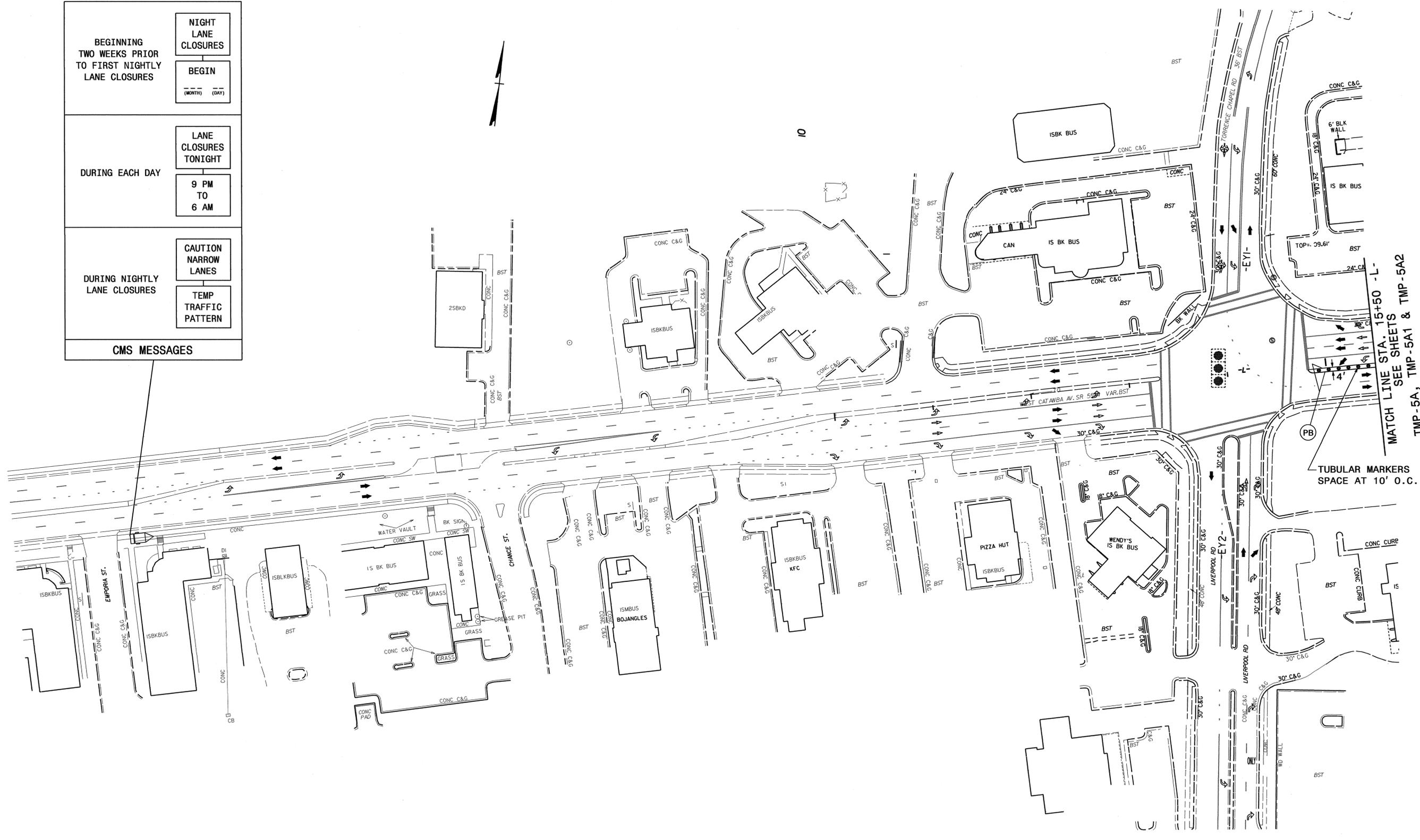
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Rbradwell AT 1E266004

BEGINNING TWO WEEKS PRIOR TO FIRST NIGHTLY LANE CLOSURES	NIGHT LANE CLOSURES BEGIN (MONTH) (DAY)
DURING EACH DAY	LANE CLOSURES TONIGHT 9 PM TO 6 AM
DURING NIGHTLY LANE CLOSURES	CAUTION NARROW LANES TEMP TRAFFIC PATTERN
CMS MESSAGES	



MATCH LINE STA. 15+50 - L-
SEE SHEETS
TMP-5A, TMP-5A1 & TMP-5A2

TUBULAR MARKERS
SPACE AT 10' O.C.

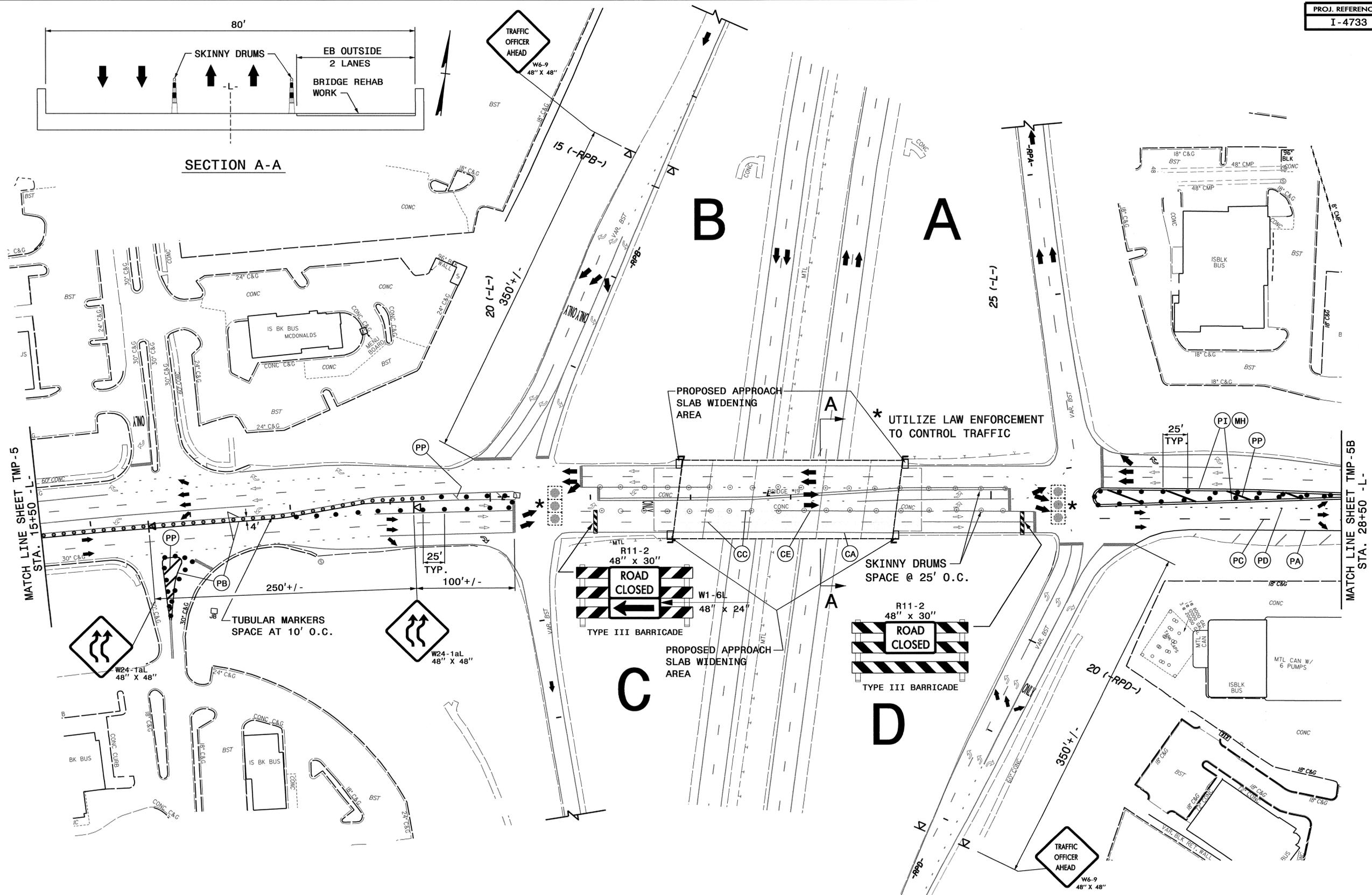
NOTES
1. SEE SHEET TMP-10 FOR SUGGESTED CMS MESSAGES.

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PHASE II DETAILS

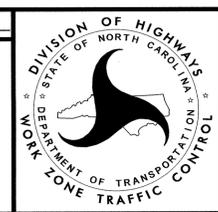
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NOTES
 1. SEE SHEET TMP-1A FOR TEMPORARY PAVEMENT MARKING SCHEDULE.

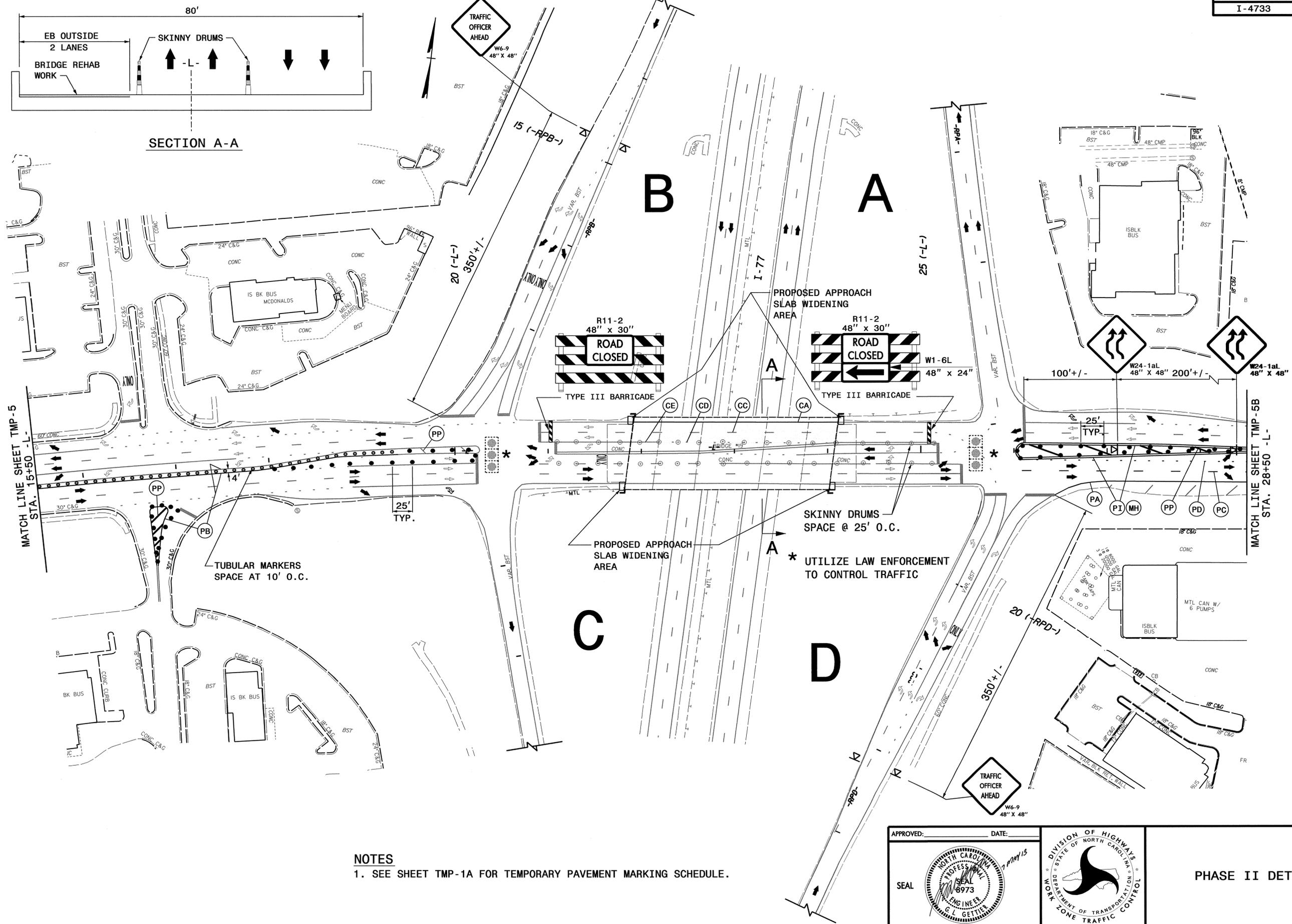
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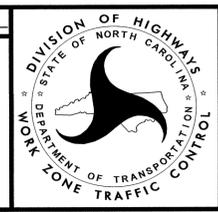
MATCH LINE SHEET TMP-5
STA. 15+50 -L-

MATCH LINE SHEET TMP-5B
STA. 28+50 -L-

NOTES
1. SEE SHEET TMP-1A FOR TEMPORARY PAVEMENT MARKING SCHEDULE.

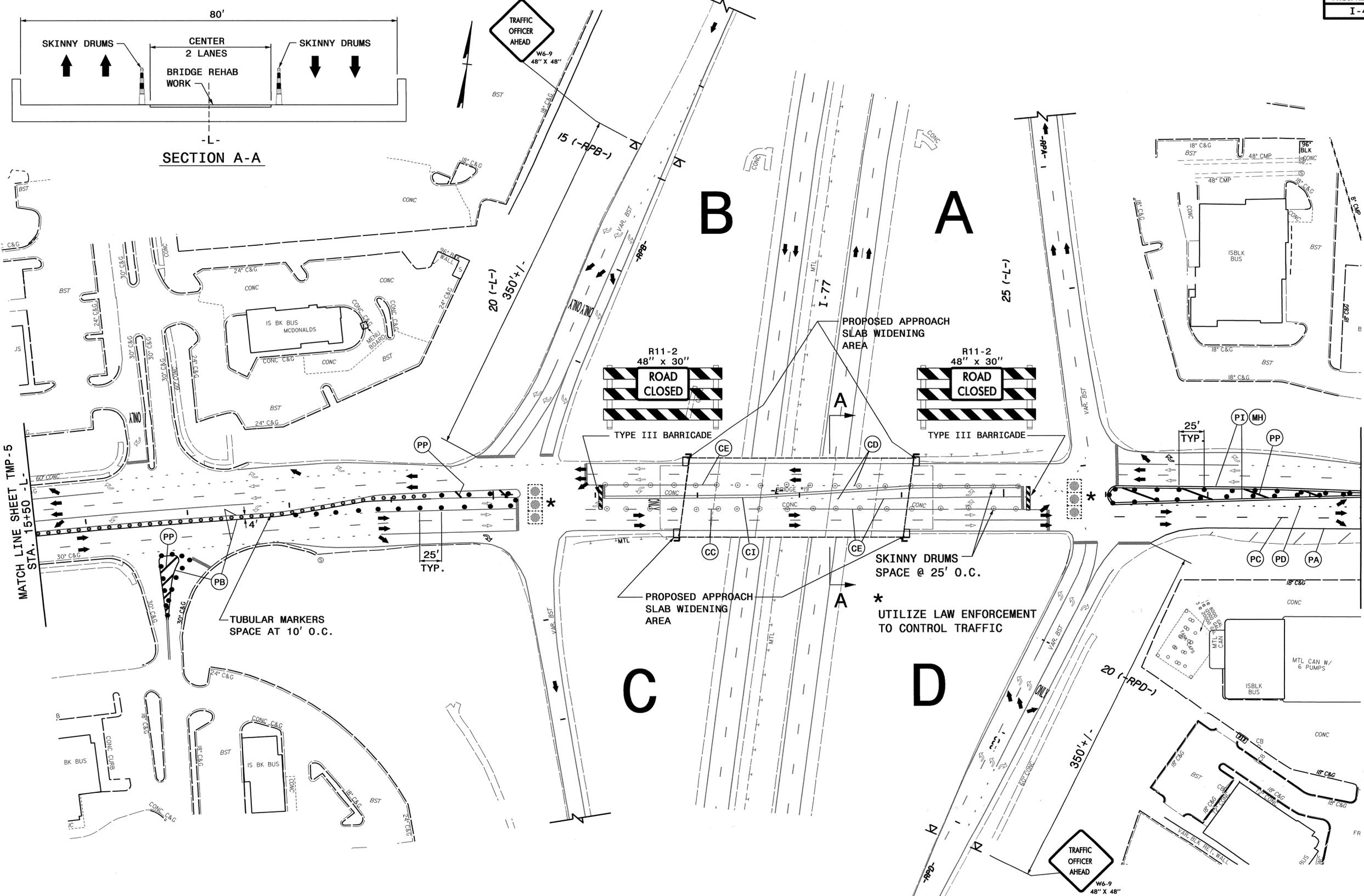
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 SEAL
 G. L. GETTLER
 ENGINEER
 NO. 8973
 STATE OF NORTH CAROLINA



PHASE II DETAILS

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 kbroodwell AT TE266004



MATCH LINE SHEET TMP-5
STA. 15+50 -L-

MATCH LINE SHEET TMP-5B
STA. 28+50 -L-

-L-
SECTION A-A

NOTES

1. SEE SHEET TMP-1A FOR TEMPORARY PAVEMENT MARKING SCHEDULE.

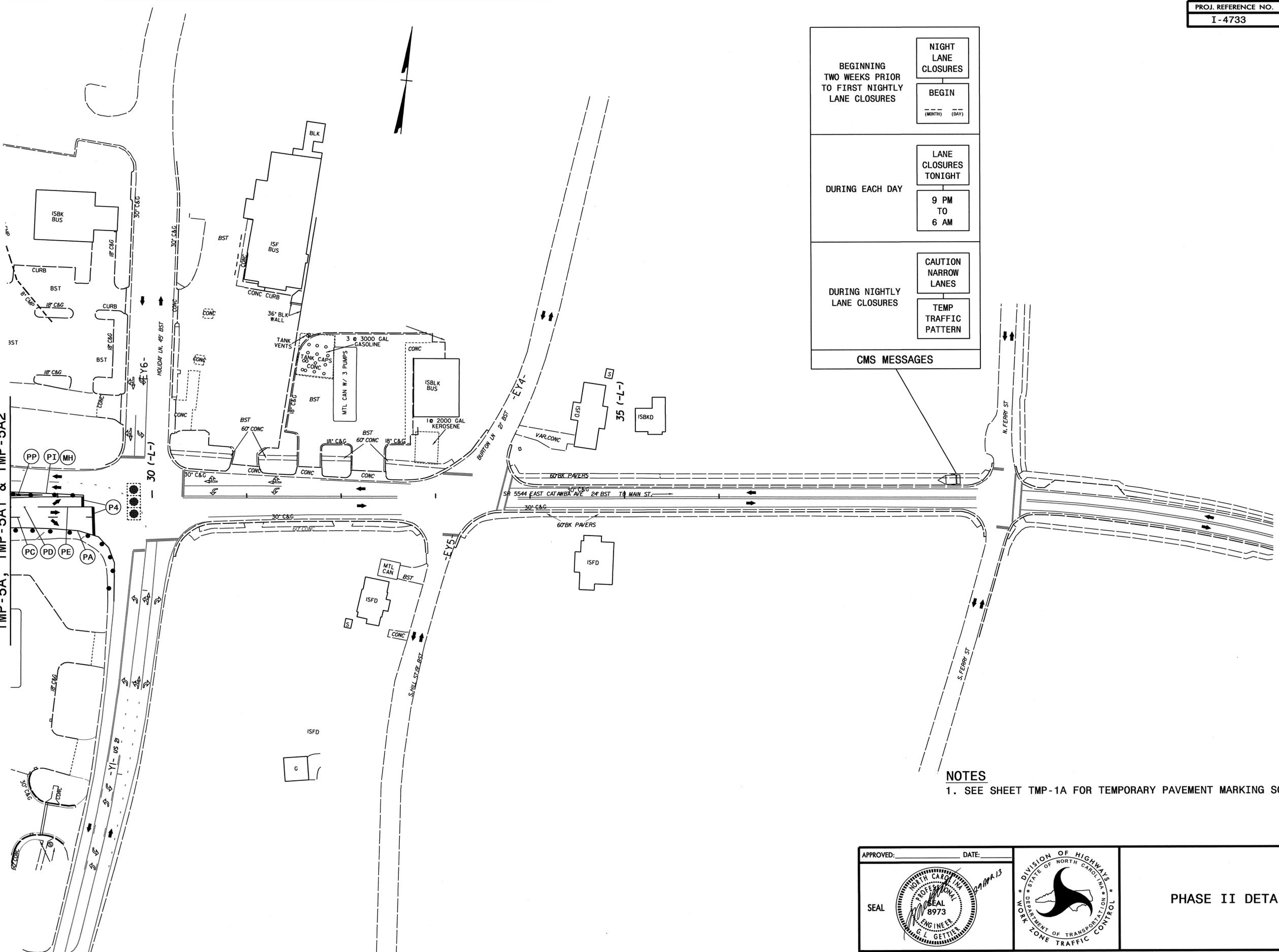
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MATCH LINE STA. 28+50 -L-
SEE SHEETS
TMP-5A, TMP-5A1 & TMP-5A2



BEGINNING TWO WEEKS PRIOR TO FIRST NIGHTLY LANE CLOSURES	NIGHT LANE CLOSURES BEGIN (MONTH) (DAY)
DURING EACH DAY	LANE CLOSURES TONIGHT 9 PM TO 6 AM
DURING NIGHTLY LANE CLOSURES	CAUTION NARROW LANES TEMP TRAFFIC PATTERN
CMS MESSAGES	

NOTES
1. SEE SHEET TMP-1A FOR TEMPORARY PAVEMENT MARKING SCHEDULE.

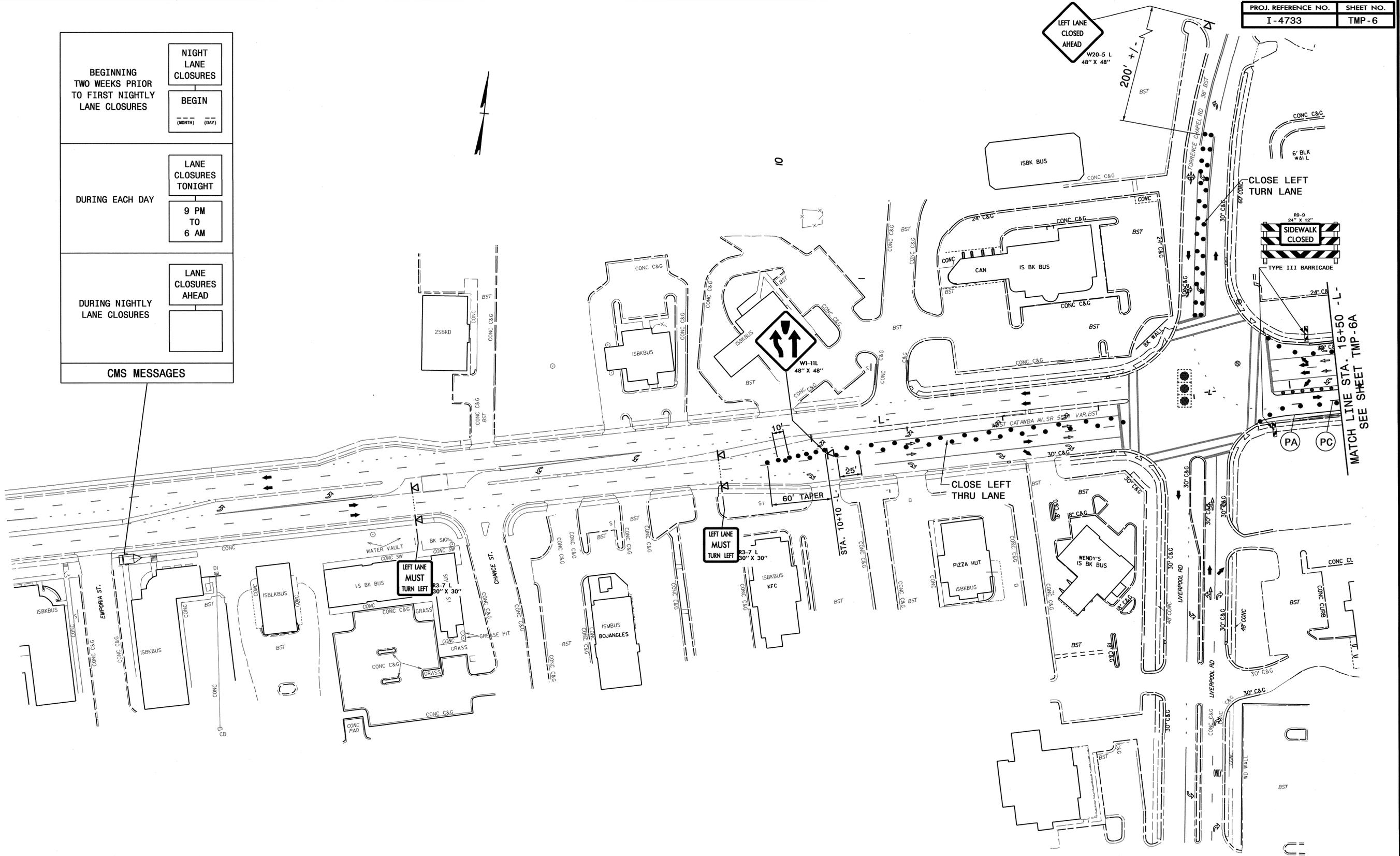
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kbroodwell AT 1E266004

APPROVED: _____ DATE: _____
SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 8973
E. L. GETTNER



PHASE II DETAILS

BEGINNING TWO WEEKS PRIOR TO FIRST NIGHTLY LANE CLOSURES	NIGHT LANE CLOSURES
	BEGIN
	(MONTH) (DAY)
DURING EACH DAY	LANE CLOSURES TONIGHT
	9 PM TO 6 AM
DURING NIGHTLY LANE CLOSURES	LANE CLOSURES AHEAD
CMS MESSAGES	



NOTES
 1. SEE SHEET TMP-1A FOR TEMPORARY PAVEMENT MARKING SCHEDULE.

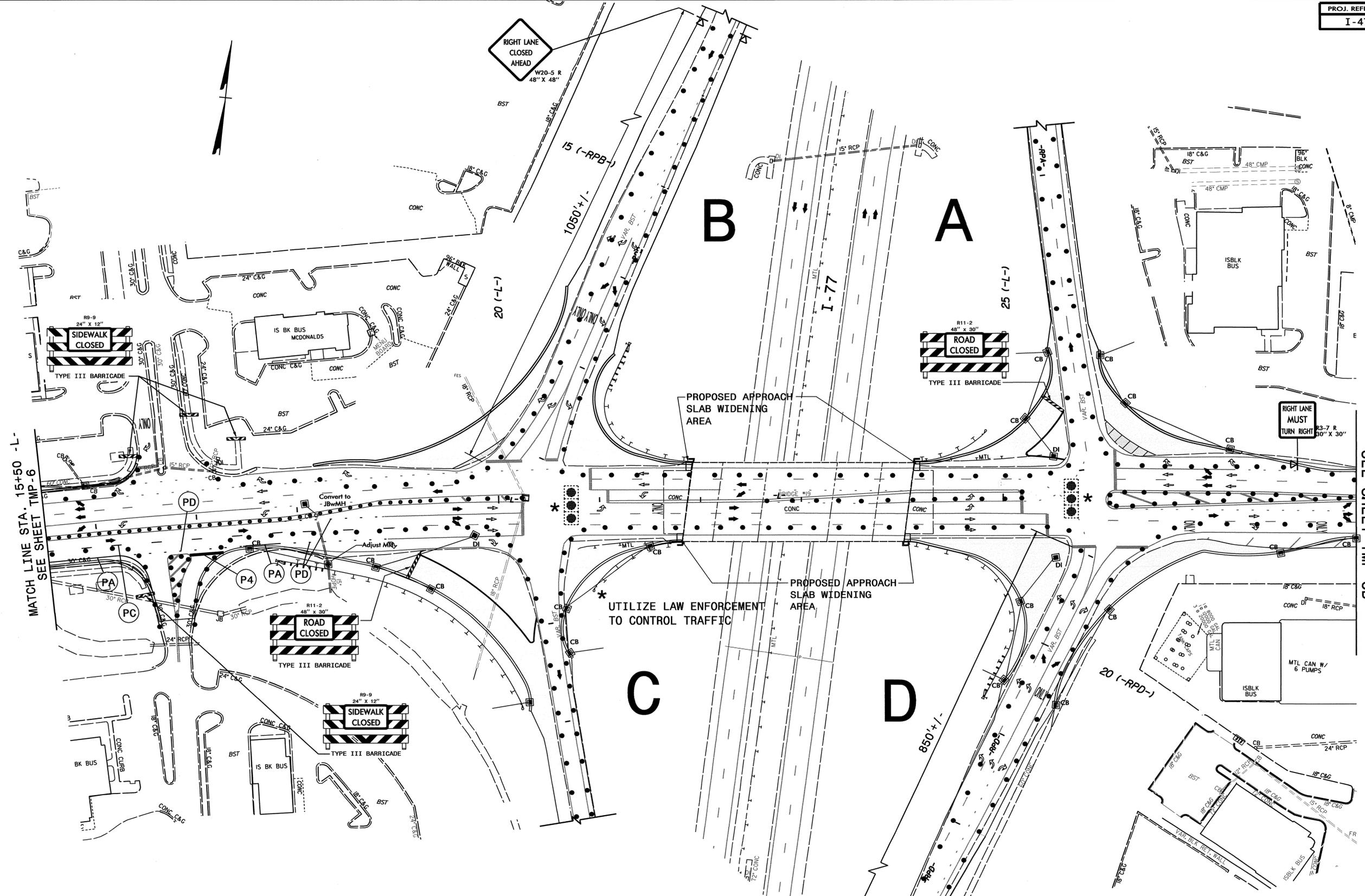
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PHASE III DETAILS

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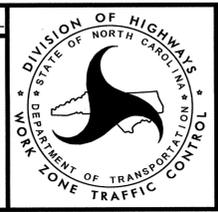
MATCH LINE STA. 15+50 -L-
SEE SHEET TMP-6

MATCH LINE STA. 28+50 -L-
SEE SHEET TMP-6B

NOTES
1. SEE SHEET TMP-1A FOR TEMPORARY PAVEMENT MARKING SCHEDULE.

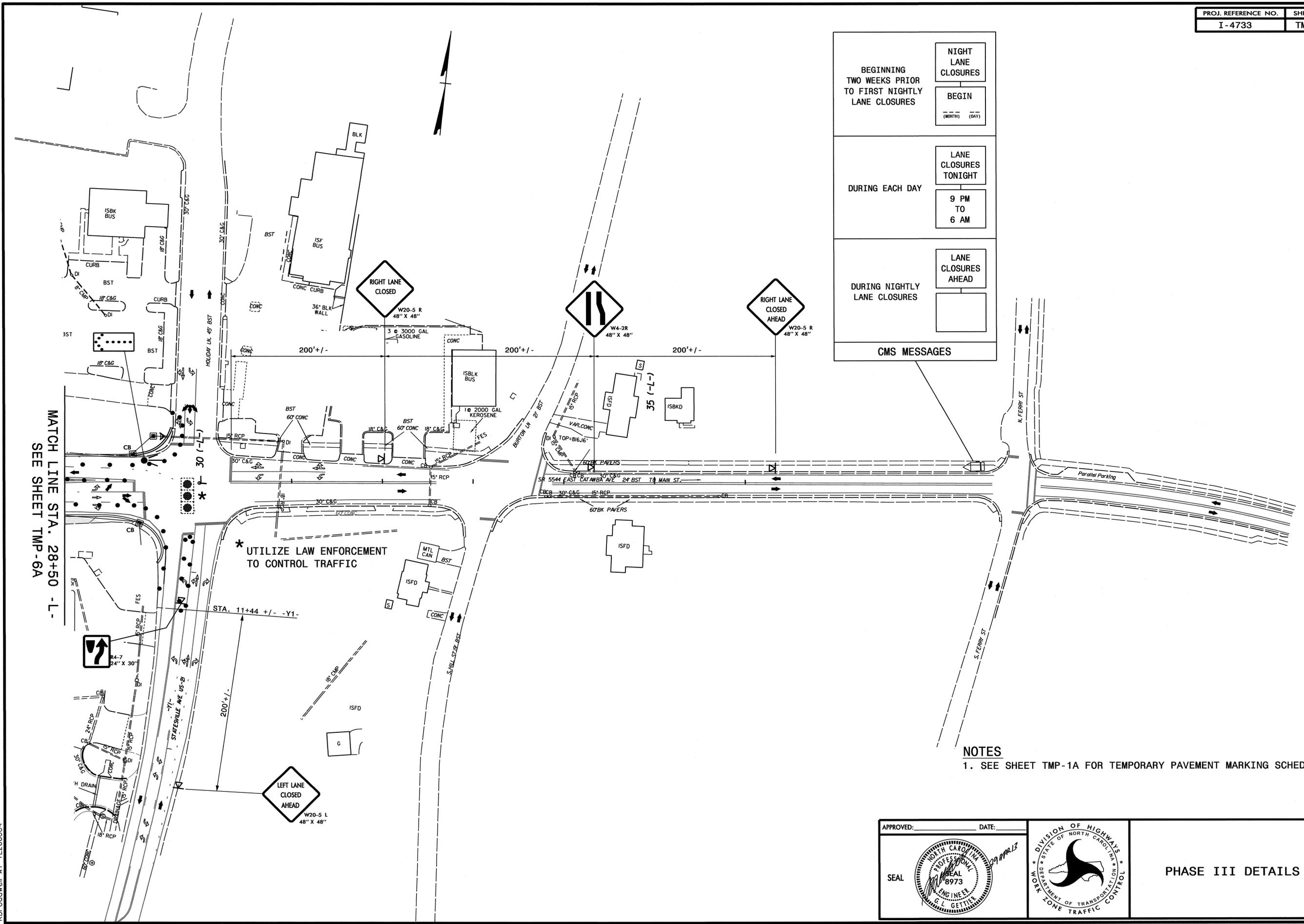
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BEGINNING TWO WEEKS PRIOR TO FIRST NIGHTLY LANE CLOSURES	NIGHT LANE CLOSURES
	BEGIN (MORNING) (DAY)
DURING EACH DAY	LANE CLOSURES TONIGHT
	9 PM TO 6 AM
DURING NIGHTLY LANE CLOSURES	LANE CLOSURES AHEAD
	CMS MESSAGES

NOTES
1. SEE SHEET TMP-1A FOR TEMPORARY PAVEMENT MARKING SCHEDULE.

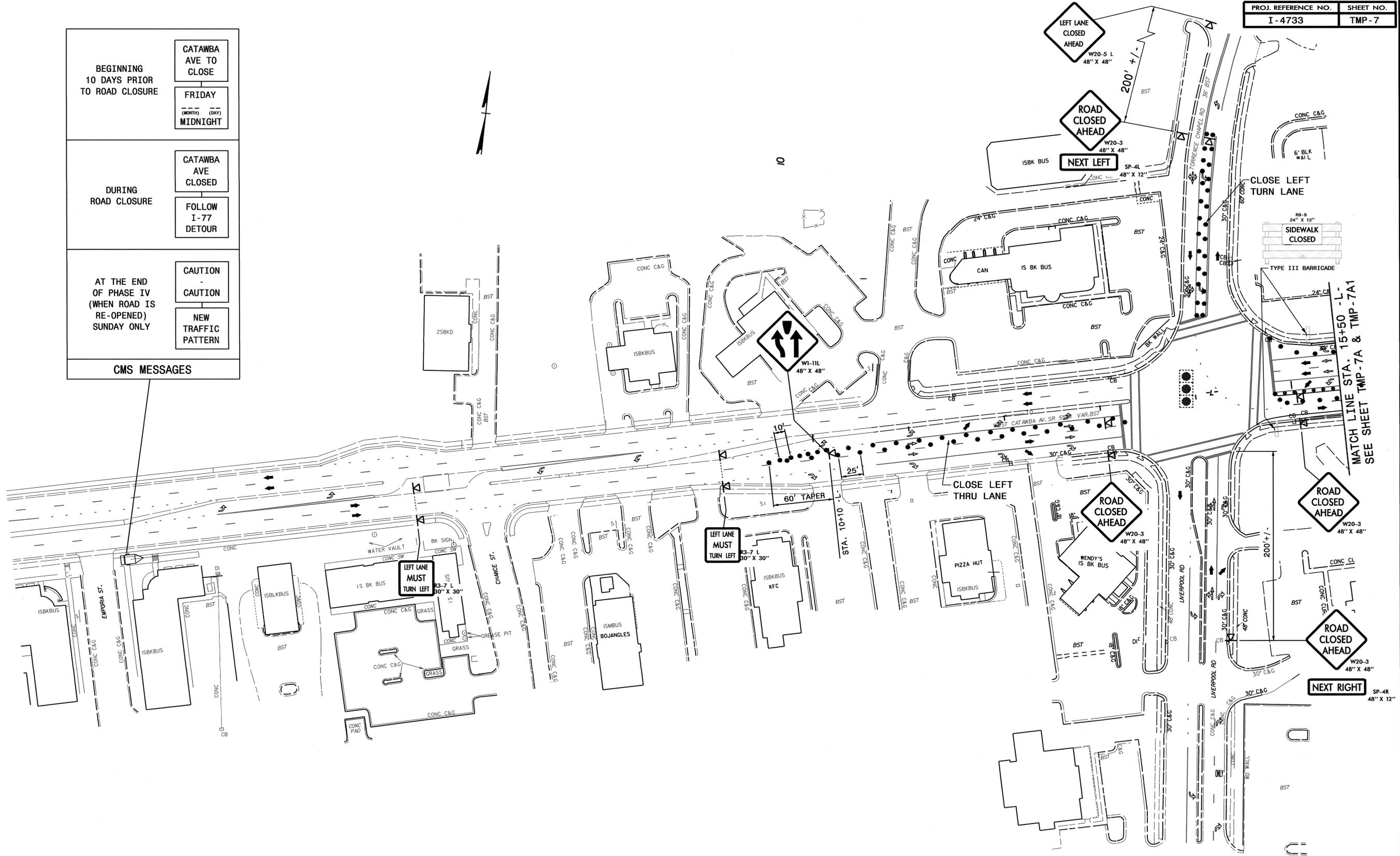
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Kbroodwell AT 1E266004

APPROVED: _____ DATE: _____

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PHASE III DETAILS

BEGINNING 10 DAYS PRIOR TO ROAD CLOSURE	CATAWBA AVE TO CLOSE
	FRIDAY (NORTH) (DAY) MIDNIGHT
DURING ROAD CLOSURE	CATAWBA AVE CLOSED
	FOLLOW I-77 DETOUR
AT THE END OF PHASE IV (WHEN ROAD IS RE-OPENED) SUNDAY ONLY	CAUTION - CAUTION
	NEW TRAFFIC PATTERN
CMS MESSAGES	



NOTES
1. SEE SHEET TMP-1A FOR TEMPORARY PAVEMENT MARKING SCHEDULE.

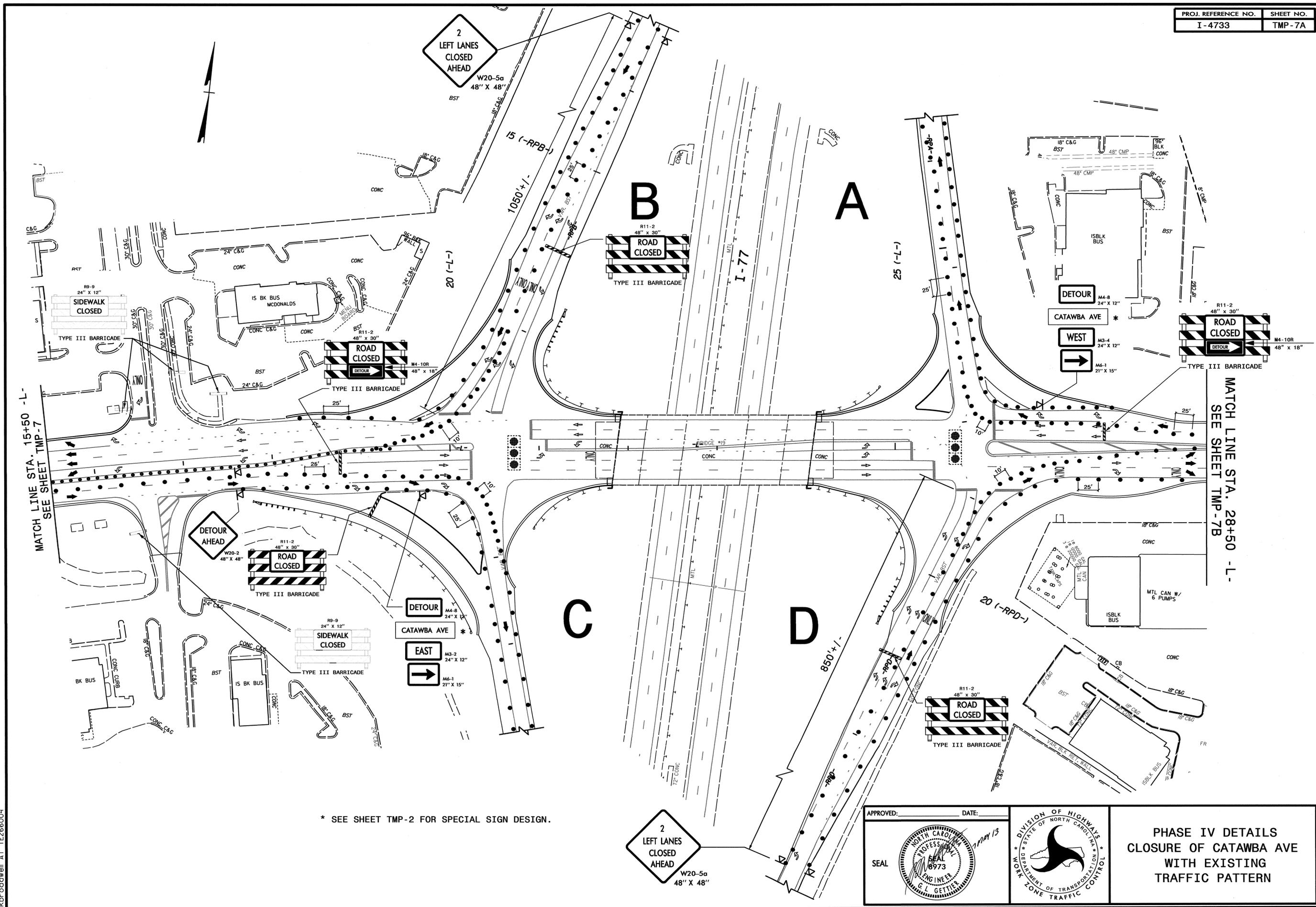
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SEAL



PHASE IV DETAILS

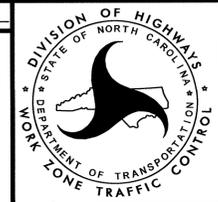
26-APR-2013 08:27
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 kbroodwell AT 1E266004



* SEE SHEET TMP-2 FOR SPECIAL SIGN DESIGN.

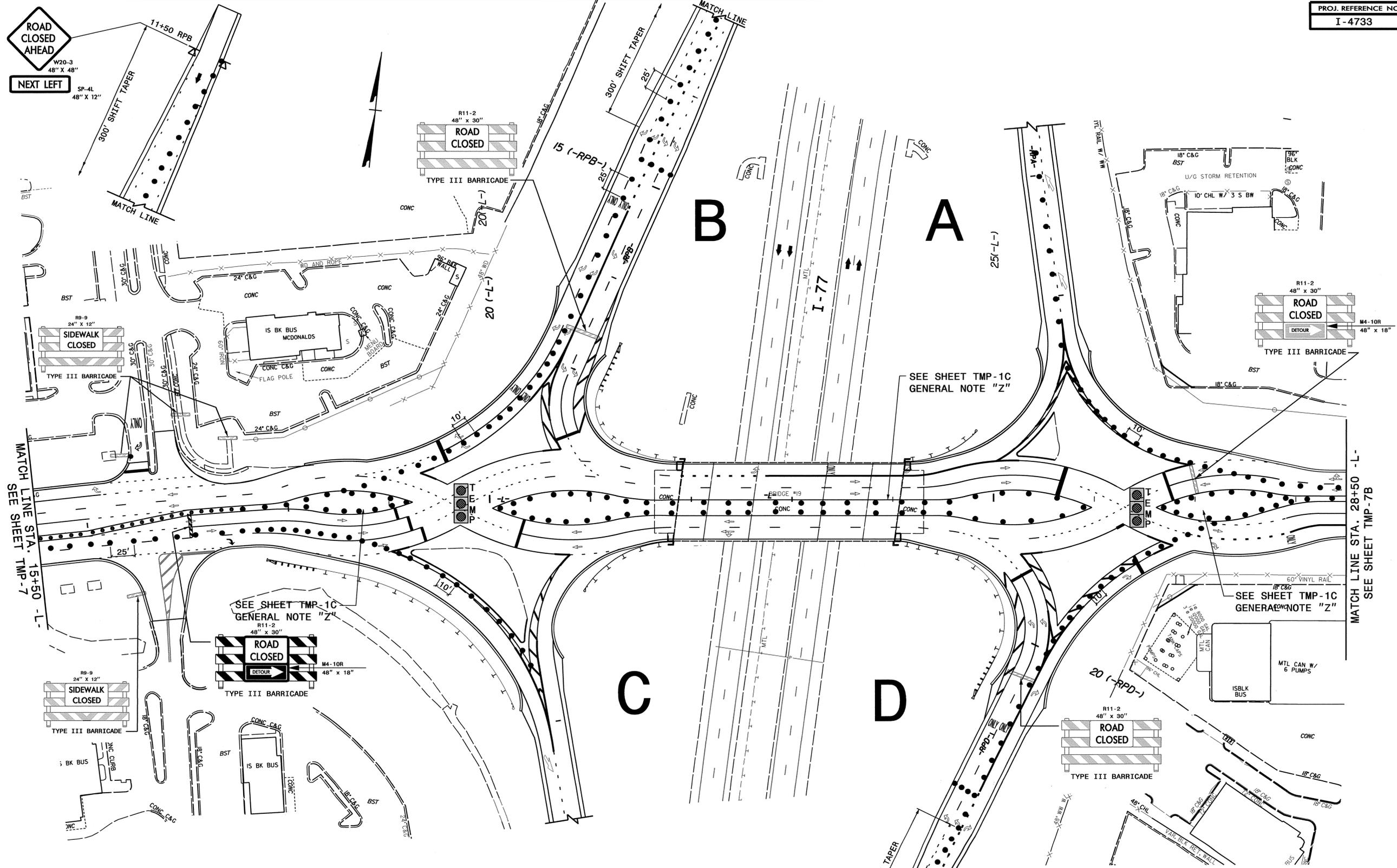
APPROVED: _____ DATE: 7/24/13

SEAL



**PHASE IV DETAILS
CLOSURE OF CATAWBA AVE
WITH EXISTING
TRAFFIC PATTERN**

03-MAY-2013 10:26
 \\dot\dfsroot\01\Proj\TIP\Projects\I4733\TrafficControl\TCP\I-4733_TMP_07A.dgn
 kbroadwell AT T2266004



NOTES

1. SEE THE FINAL PAVEMENT MARKING PLANS FOR TEMPORARY PAVEMENT MARKING GEOMETRY, LINE TYPES AND LINE WIDTHS, USING PAINT ON ASPHALT SURFACES AND COLD APPLIED PLASTIC TYPE 4 (REMOVEABLE TAPE) ON THE BRIDGE. SEE SHEET TMP-1A FOR THE TEMPORARY PAVEMENT MARKING SCHEDULE.



APPROVED: _____ DATE: _____

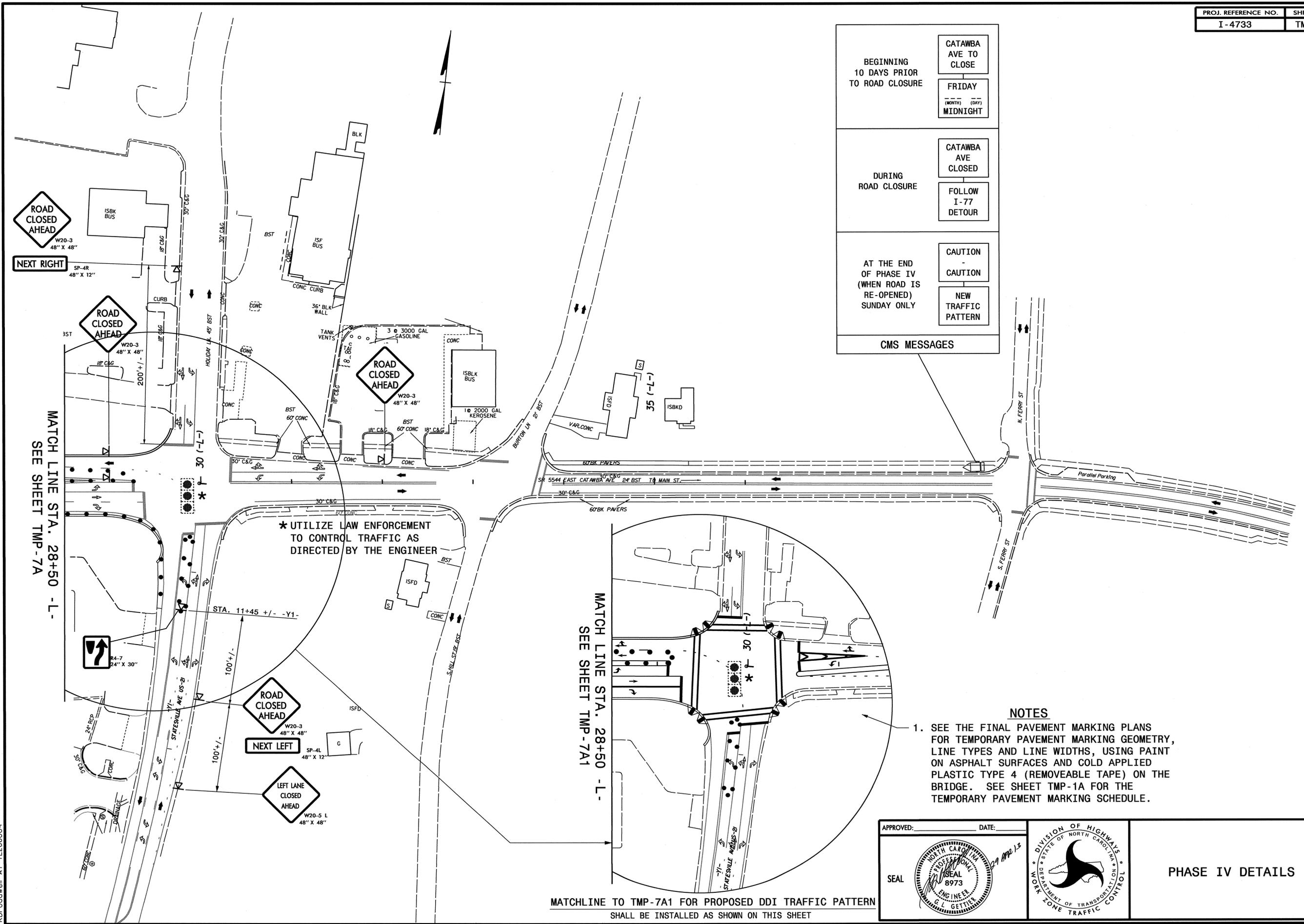
SEAL



PHASE IV DETAILS
CLOSURE OF CATAWBA AVE
WITH DDI TRAFFIC PATTERN

03-MAY-2013 14:22
 \\dot\dfs\001\Pro\TIPProjects\I-4733\TrafficControl\CP1-4733-TMP-07A1.dgn
 kbroodwell AT 1E266004

BEGINNING 10 DAYS PRIOR TO ROAD CLOSURE	CATAWBA AVE TO CLOSE FRIDAY (NORTH) (DAY) MIDNIGHT
DURING ROAD CLOSURE	CATAWBA AVE CLOSED FOLLOW I-77 DETOUR
AT THE END OF PHASE IV (WHEN ROAD IS RE-OPENED) SUNDAY ONLY	CAUTION - CAUTION NEW TRAFFIC PATTERN
CMS MESSAGES	



MATCH LINE STA. 28+50 -L-
SEE SHEET TMP-7A

MATCH LINE STA. 28+50 -L-
SEE SHEET TMP-7A1

★ UTILIZE LAW ENFORCEMENT
TO CONTROL TRAFFIC AS
DIRECTED BY THE ENGINEER

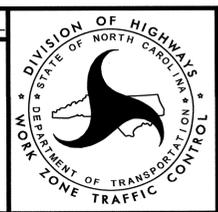
- NOTES**
- SEE THE FINAL PAVEMENT MARKING PLANS FOR TEMPORARY PAVEMENT MARKING GEOMETRY, LINE TYPES AND LINE WIDTHS, USING PAINT ON ASPHALT SURFACES AND COLD APPLIED PLASTIC TYPE 4 (REMOVEABLE TAPE) ON THE BRIDGE. SEE SHEET TMP-1A FOR THE TEMPORARY PAVEMENT MARKING SCHEDULE.

MATCHLINE TO TMP-7A1 FOR PROPOSED DDI TRAFFIC PATTERN
SHALL BE INSTALLED AS SHOWN ON THIS SHEET

26-APR-2013 08:33
\\dot\dfsroot\01\Proj\TIPProjects\4733\TrafficTrafficControl\CP\1-4733_TMP-07B.dgn
kbradwell AT 12266004

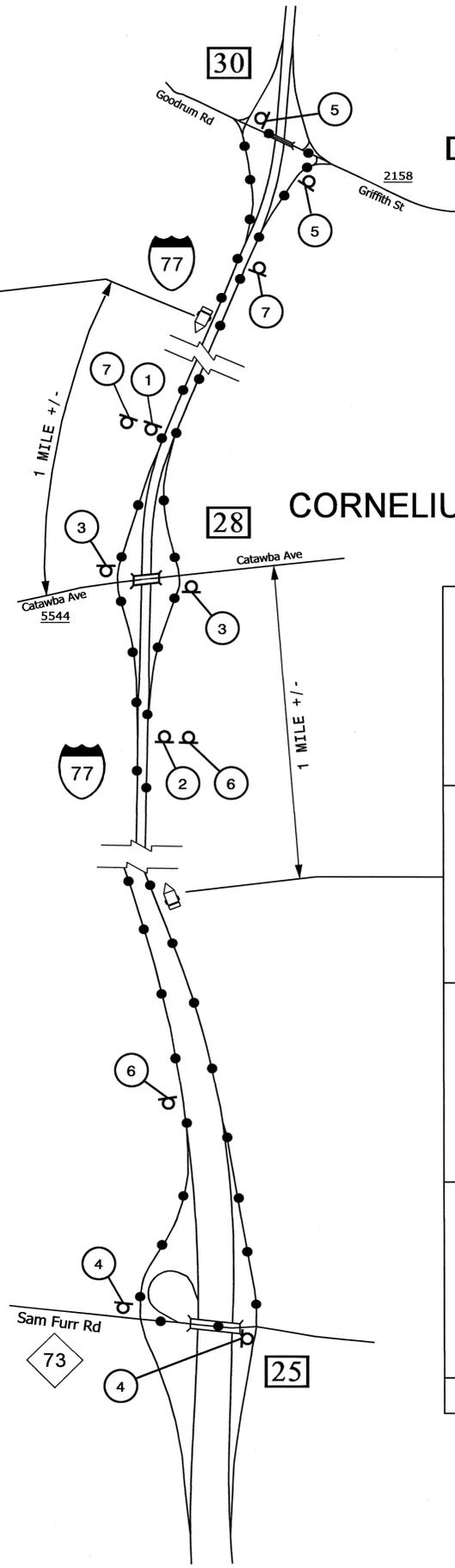
APPROVED: _____ DATE: _____

SEAL



PHASE IV DETAILS

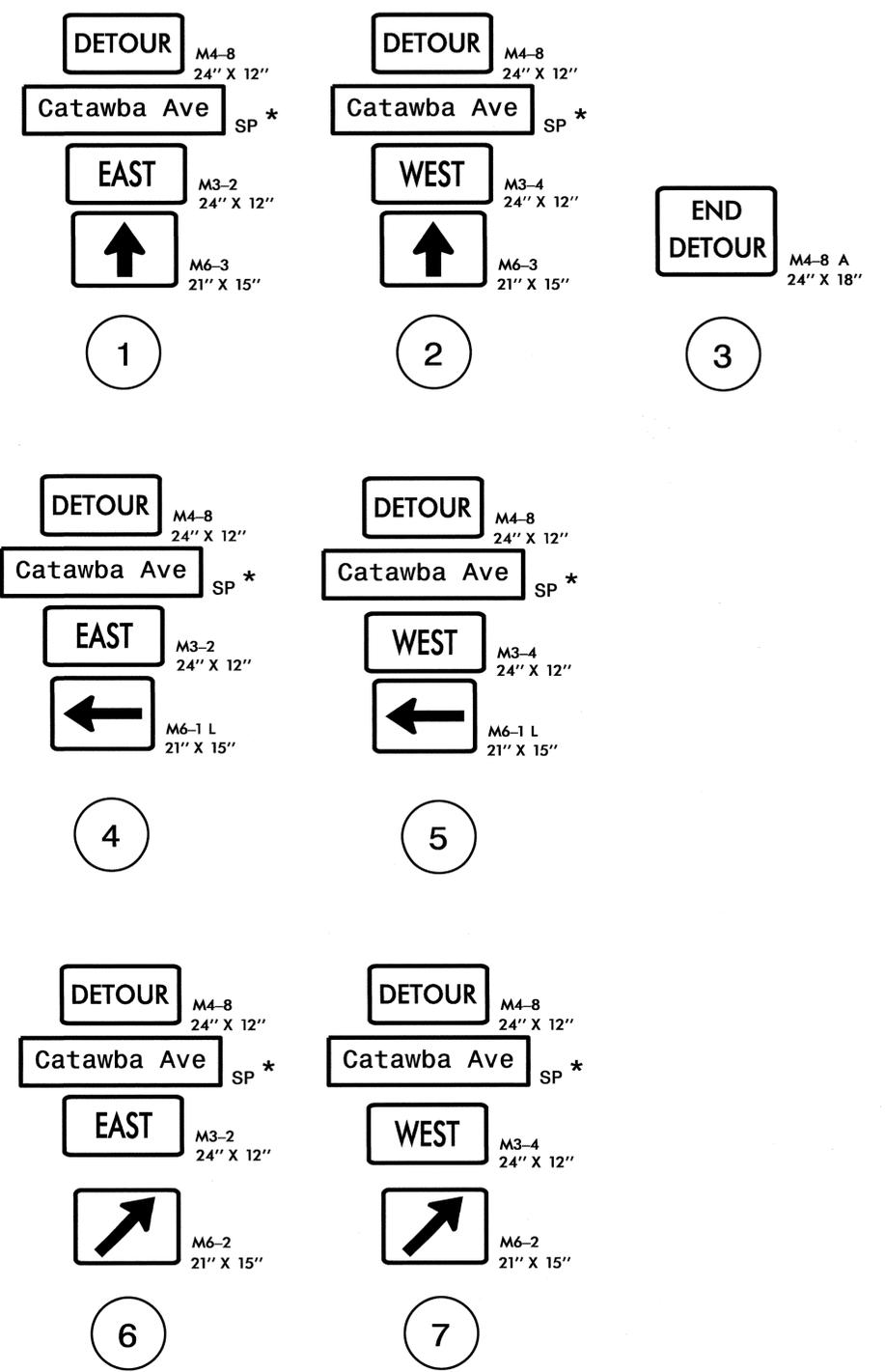
BEGINNING 10 DAYS PRIOR TO ROAD CLOSURE	CATAWBA AVE TO CLOSE
	FRIDAY
	(MONTH) (DAY)
	MIDNIGHT
BEGINNING THE SUNDAY BEFORE ROAD CLOSURE	CATAWBA AVE TO CLOSE
	FRIDAY AT MIDNIGHT
BEGINNING 6 AM THE DAY OF ROAD CLOSURE UNTIL MIDNIGHT	CATAWBA AVE TO CLOSE
	TONIGHT AT MIDNIGHT
DURING ROAD CLOSURE	CATAWBA AVE EAST CLOSED
	USE EXIT 25
CMS MESSAGES	



DAVIDSON

CORNELIUS

BEGINNING 10 DAYS PRIOR TO ROAD CLOSURE	CATAWBA AVE TO CLOSE
	FRIDAY
	(MONTH) (DAY)
	MIDNIGHT
BEGINNING THE SUNDAY BEFORE ROAD CLOSURE	CATAWBA AVE TO CLOSE
	FRIDAY AT MIDNIGHT
BEGINNING 6 AM THE DAY OF ROAD CLOSURE UNTIL MIDNIGHT	CATAWBA AVE TO CLOSE
	TONIGHT AT MIDNIGHT
DURING ROAD CLOSURE	CATAWBA AVE WEST CLOSED
	USE EXIT 30
CMS MESSAGES	

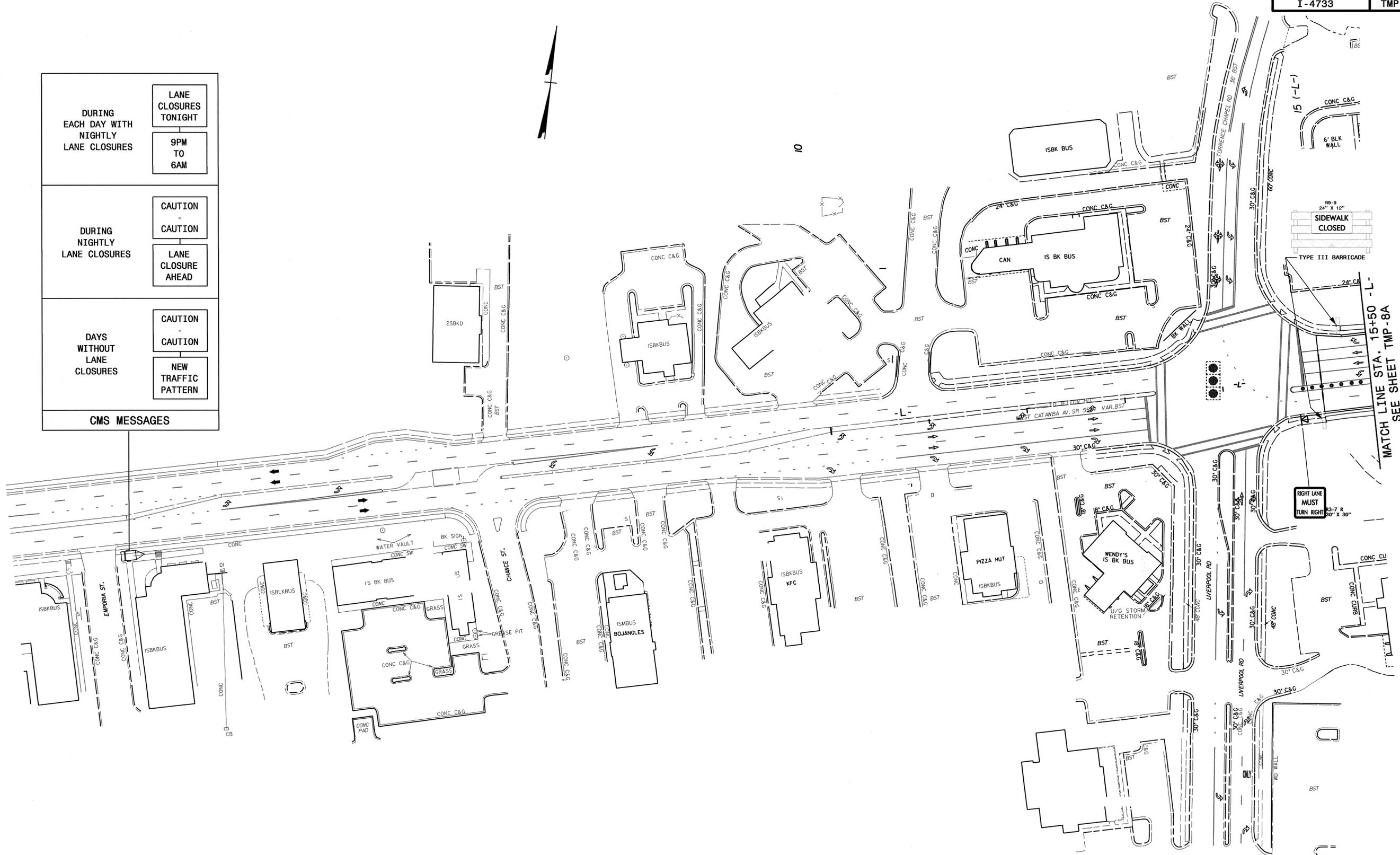


* SEE SHEET TMP-2 FOR SPECIAL SIGN DESIGN DETAIL.

26-APR-2013 08:35
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 kbroodwell AT TE266004

APPROVED: _____ DATE: _____		DETOUR ROUTE

DURING EACH DAY WITH NIGHTLY LANE CLOSURES	LANE CLOSURES TONIGHT 9PM TO 6AM
DURING NIGHTLY LANE CLOSURES	CAUTION CAUTION LANE CLOSURE AHEAD
DAYS WITHOUT LANE CLOSURES	CAUTION CAUTION NEW TRAFFIC PATTERN
CMS MESSAGES	



NOTES
1. SEE SHEET TMP-1A FOR TEMPORARY PAVEMENT MARKING SCHEDULE.

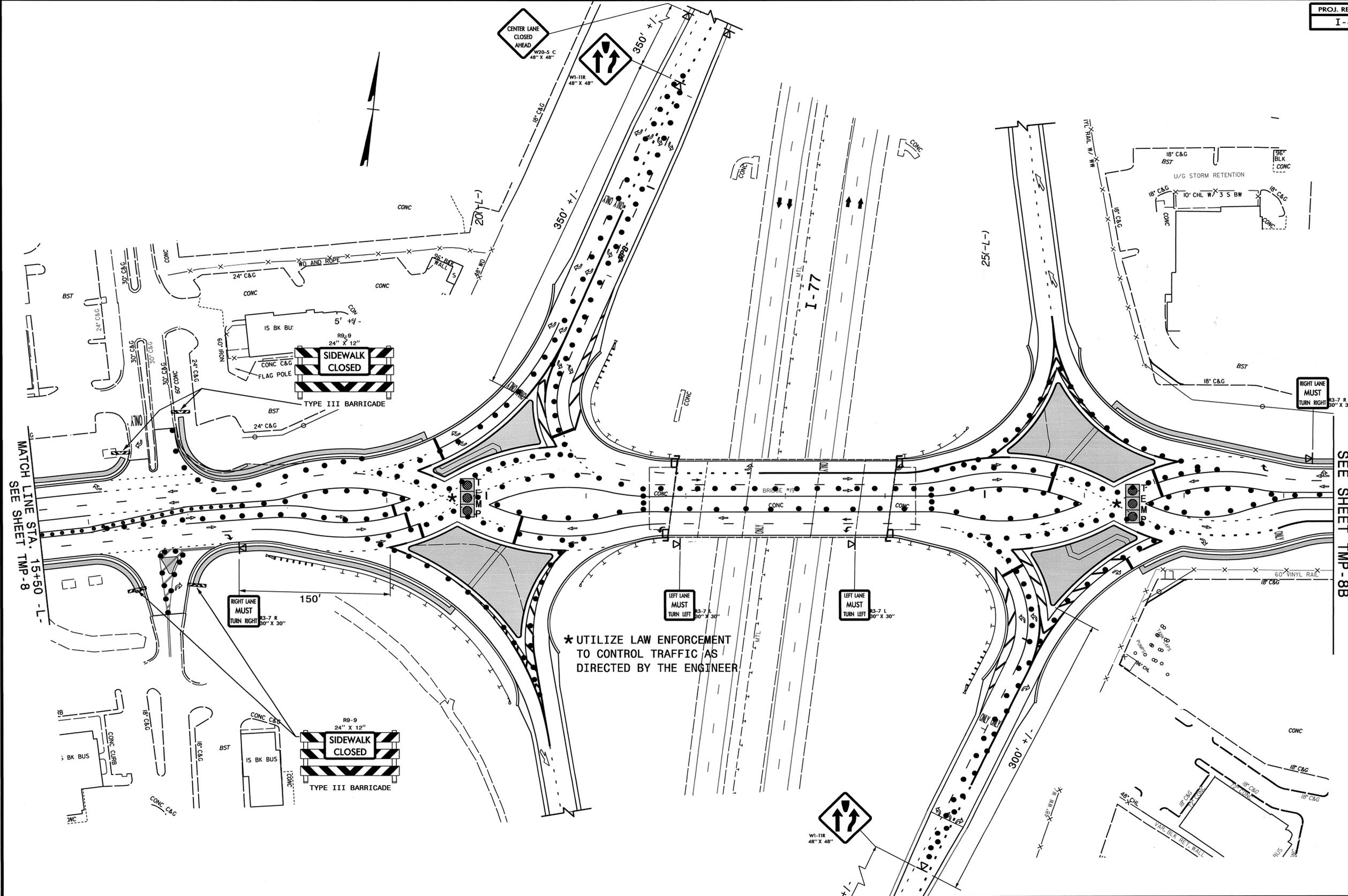
APPROVED: _____ DATE: _____

SEAL



PHASE V DETAILS

26-APR-2013 08:46
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 Kbroodwell AT TE266004



NOTES
 1. SEE SHEET TMP-1A FOR TEMPORARY PAVEMENT MARKING SCHEDULE.

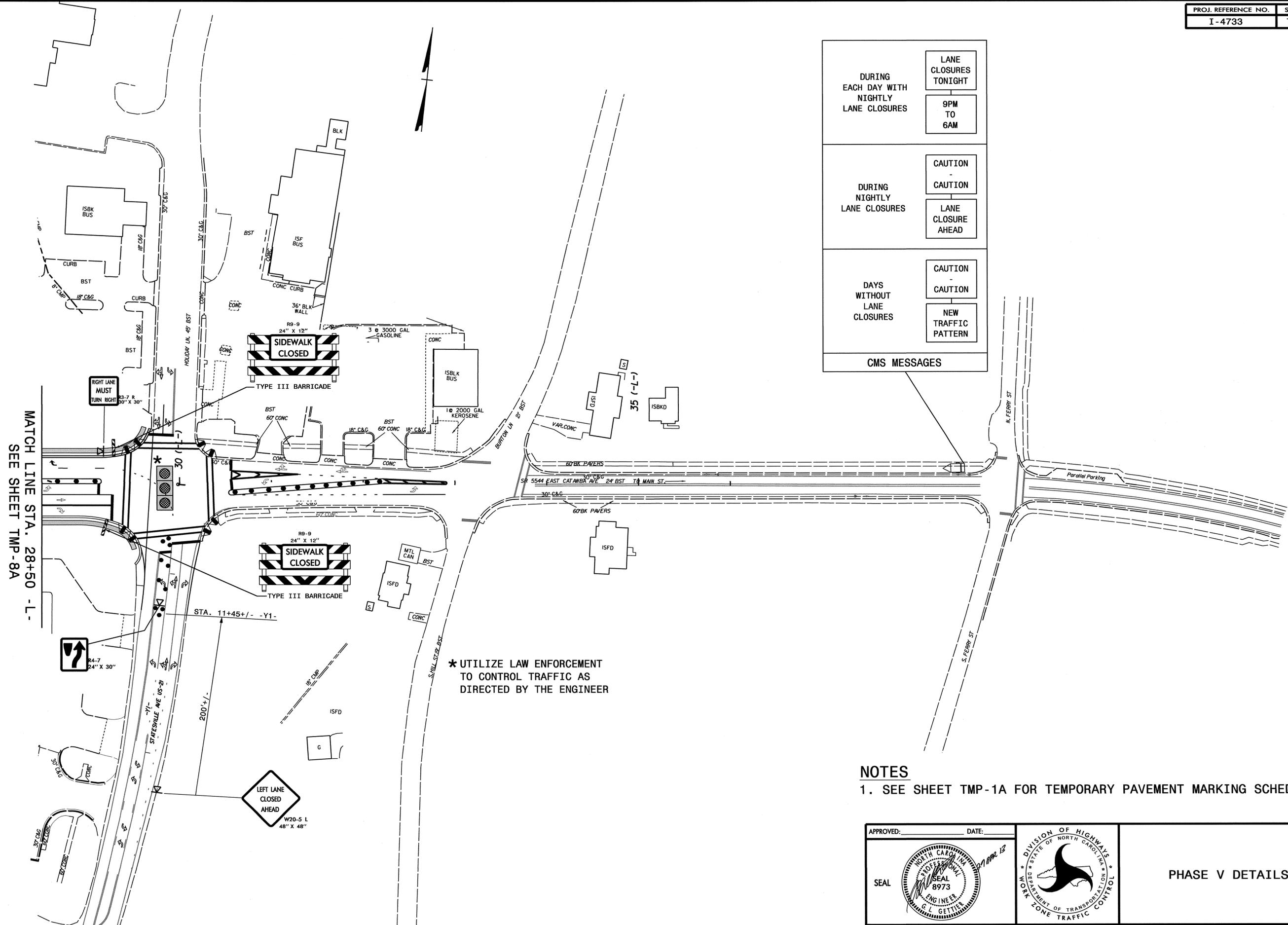
APPROVED: _____ DATE: _____
 SEAL

 G.L. GETTLER
 ENGINEER
 No. 8973



PHASE V DETAILS

03-MAY-2013 11:24
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 KBR\odgwell AT 11266004



DURING EACH DAY WITH NIGHTLY LANE CLOSURES	LANE CLOSURES TONIGHT 9PM TO 6AM
DURING NIGHTLY LANE CLOSURES	CAUTION - CAUTION LANE CLOSURE AHEAD
DAYS WITHOUT LANE CLOSURES	CAUTION - CAUTION NEW TRAFFIC PATTERN
CMS MESSAGES	

* UTILIZE LAW ENFORCEMENT TO CONTROL TRAFFIC AS DIRECTED BY THE ENGINEER

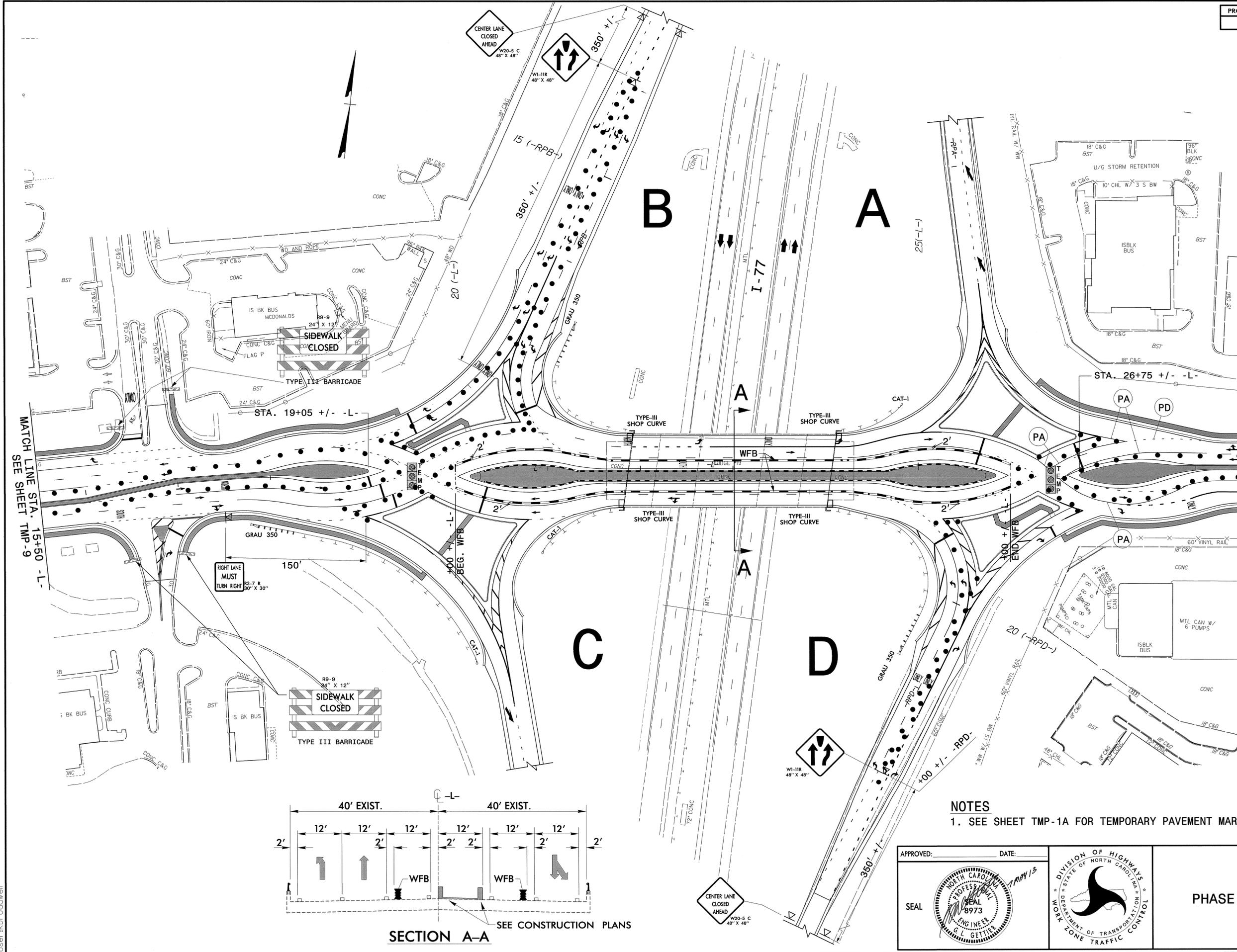
NOTES
1. SEE SHEET TMP-1A FOR TEMPORARY PAVEMENT MARKING SCHEDULE.

APPROVED: _____ DATE: _____

SEAL

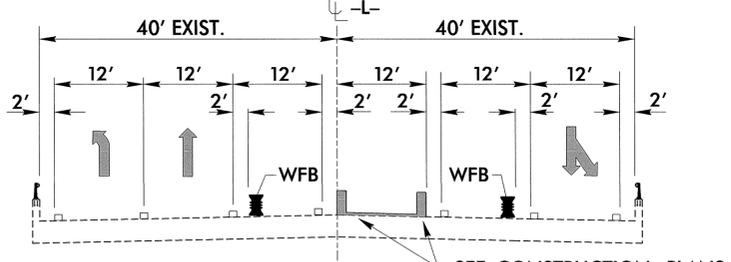
PHASE V DETAILS

26-APR-2013 08:47 \\dot\dfsroot\01\Proj\TIPProjects\I4733\TrafficControl\TCPN\I-4733-TMP-08B.dgn kbroodwell AT 1E266004



MATCH LINE STA. 15+50 -L-
SEE SHEET TMP-9

MATCH LINE STA. 28+50 -L-
SEE SHEET TMP-9B

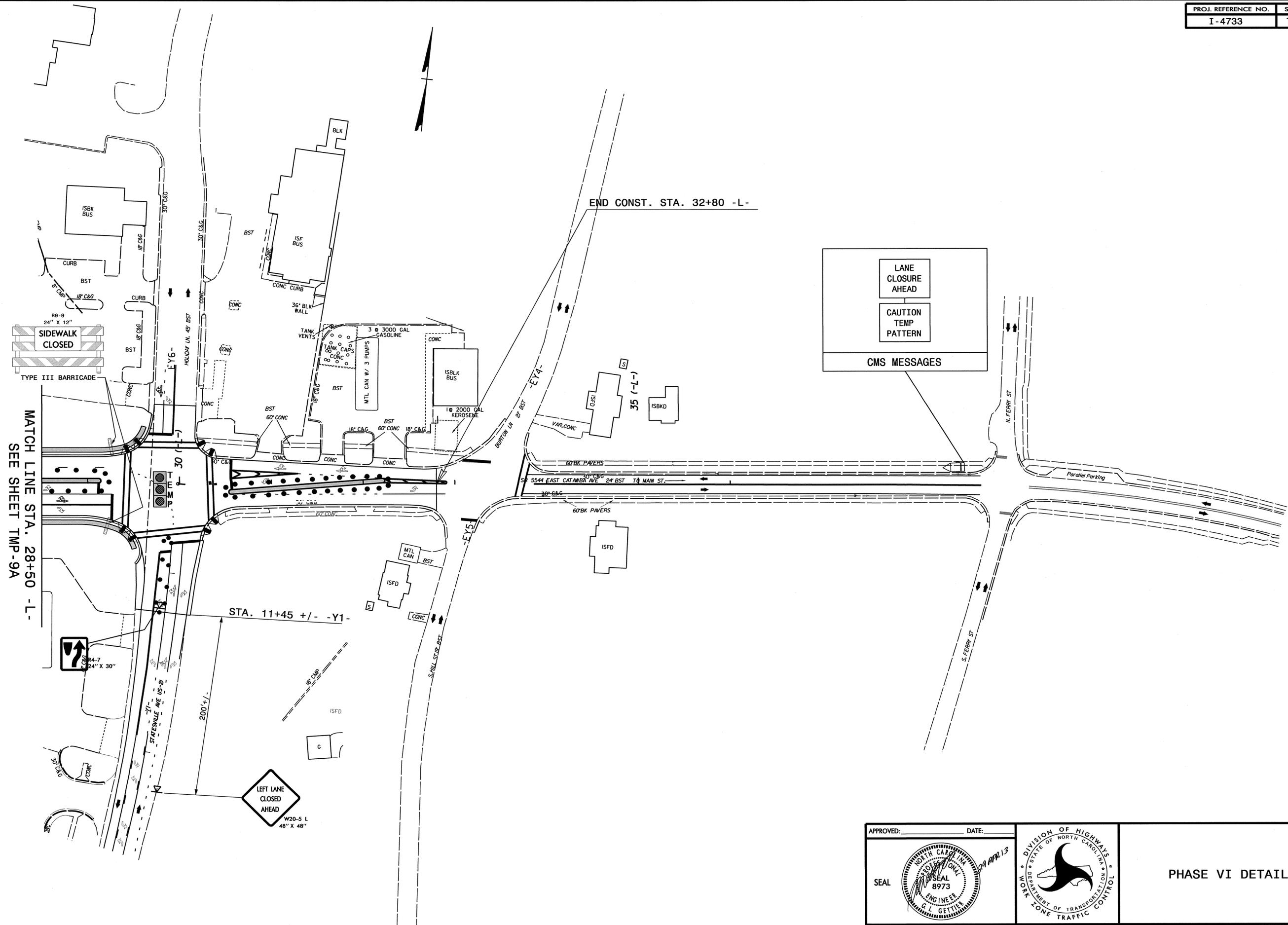


SECTION A-A
SEE CONSTRUCTION PLANS

- NOTES**
- SEE SHEET TMP-1A FOR TEMPORARY PAVEMENT MARKING SCHEDULE.

APPROVED:	DATE:		<p>PHASE VI DETAILS</p>

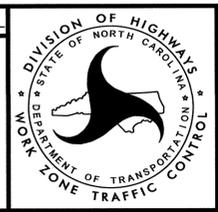
5/3/2013
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User: kbrodwell



26-APR-2013 09:24
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 kbroodwell AT 1E266004

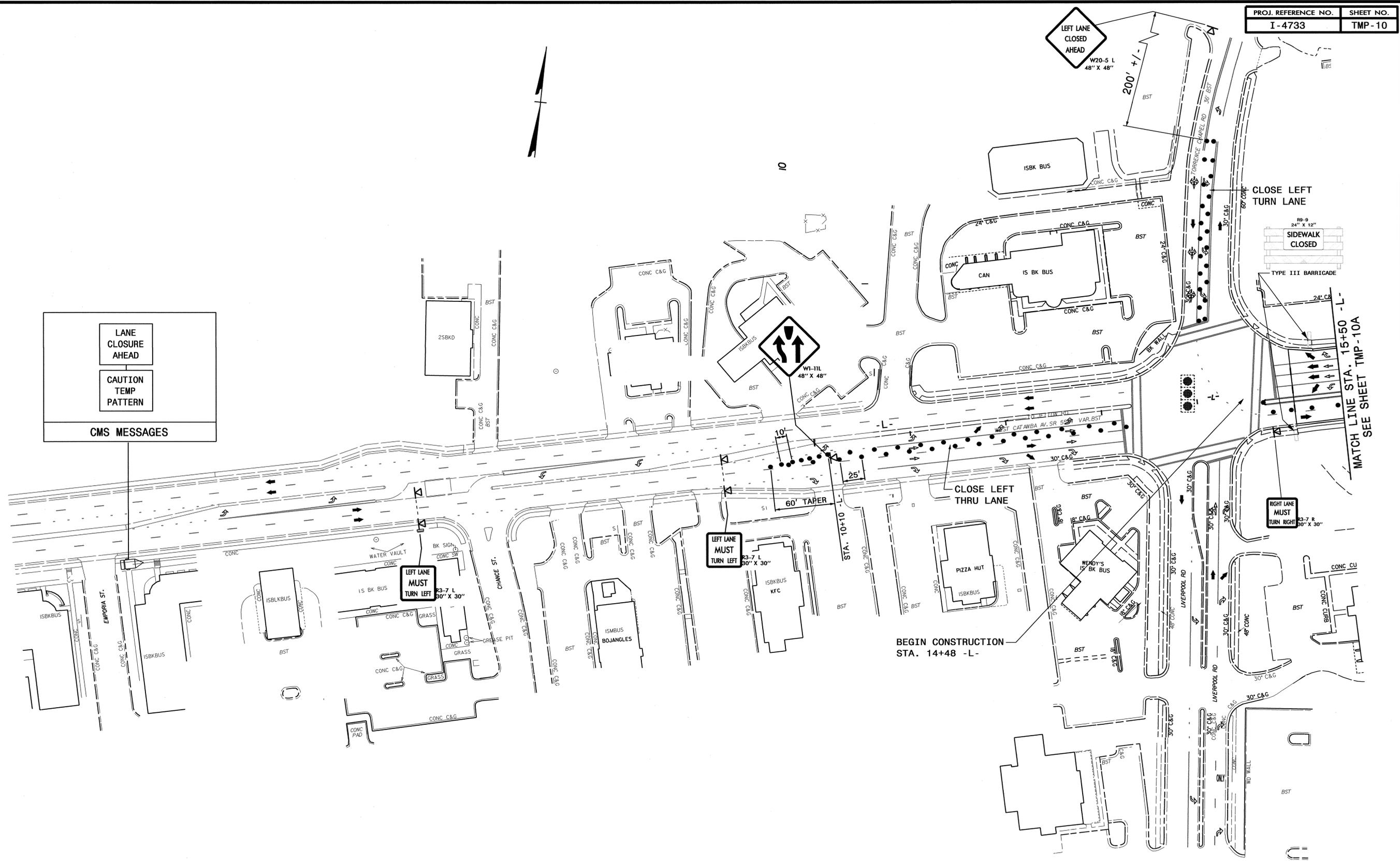
APPROVED: _____ DATE: _____

SEAL



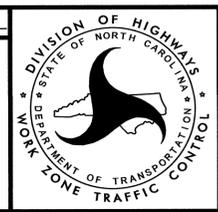
PHASE VI DETAILS

LANE CLOSURE AHEAD
CAUTION TEMP PATTERN
CMS MESSAGES



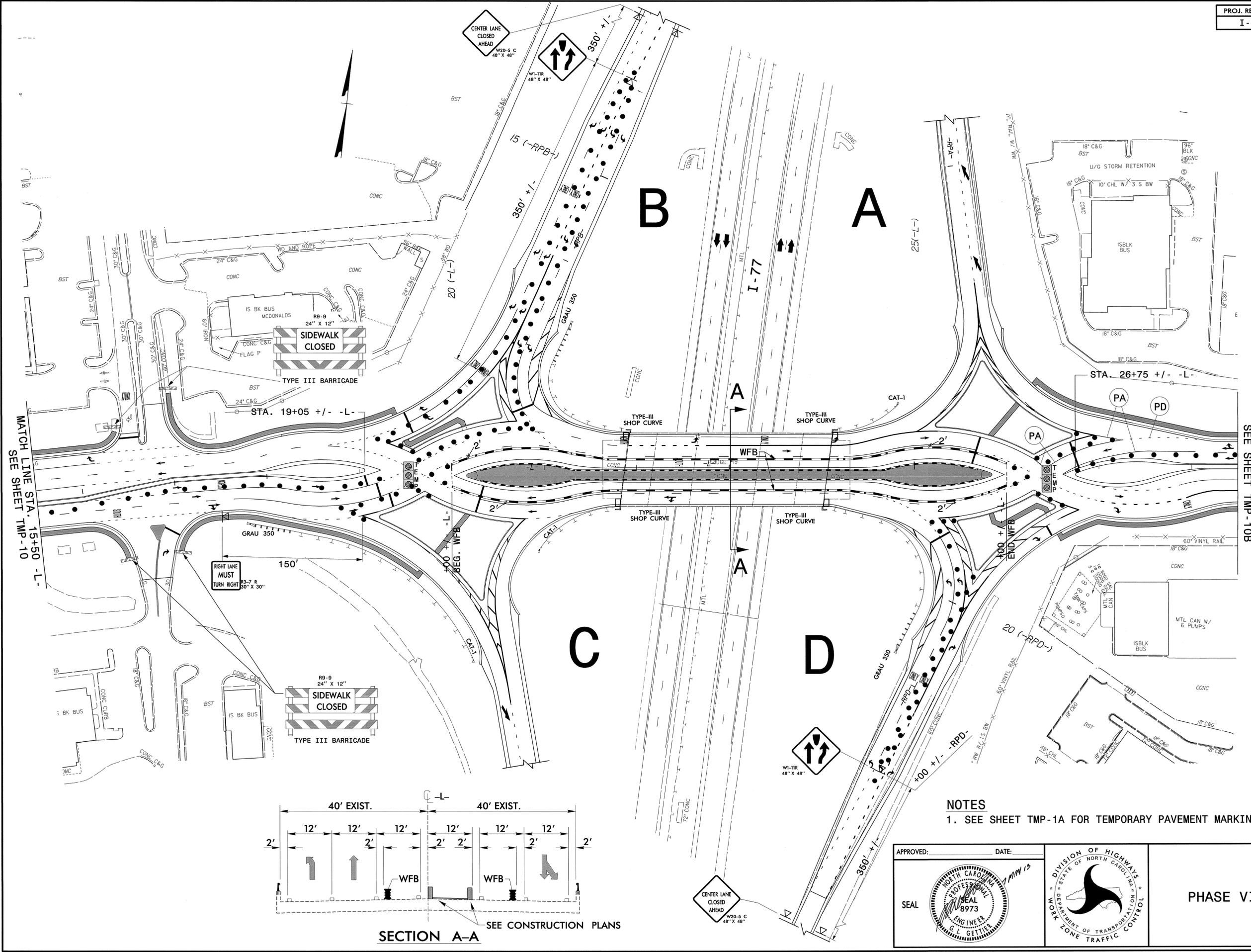
NOTES
1. SEE SHEET TMP-1A FOR TEMPORARY PAVEMENT MARKING SCHEDULE.

APPROVED: _____ DATE: _____
SEAL
G. L. GETTIER
ENGINEER
8973



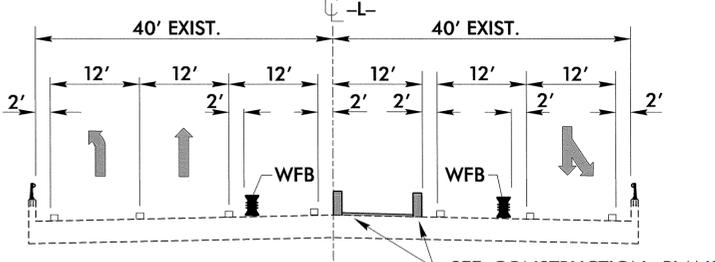
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26-APR-2013 09:27
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kbroodwell AT TE266004



MATCH LINE STA. 15+50 -L-
SEE SHEET TMP-10

MATCH LINE STA. 28+50 -L-
SEE SHEET TMP-10B



SECTION A-A SEE CONSTRUCTION PLANS

NOTES
1. SEE SHEET TMP-1A FOR TEMPORARY PAVEMENT MARKING SCHEDULE.

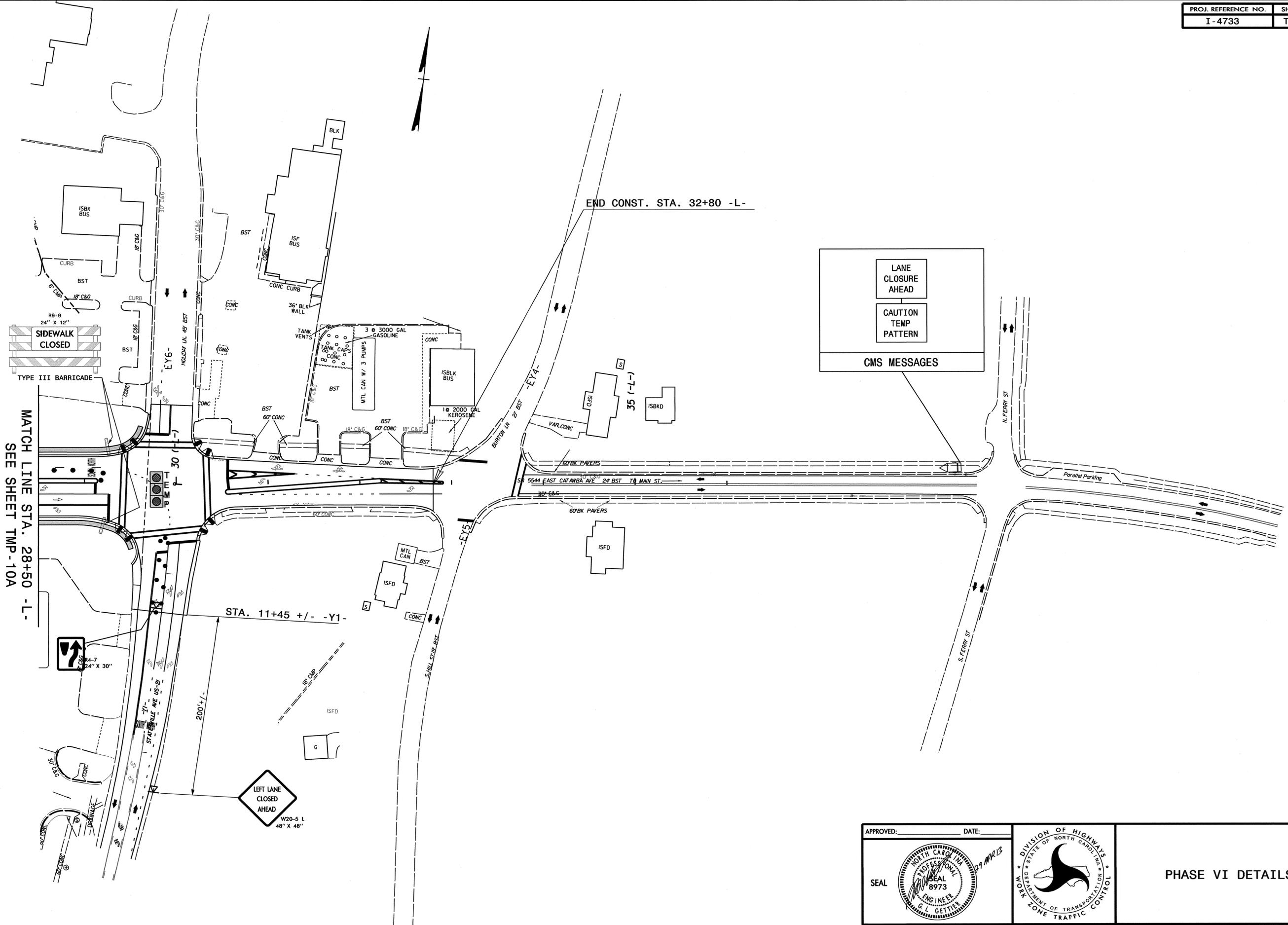
APPROVED: _____ DATE: _____

SEAL



PHASE VI DETAILS

5/3/2013
 S:\Projects\I-4733\TrafficControl\CPN-I-4733-TMP-10A.dgn
 User: kdpodwell



MATCH LINE STA. 28+50 -L-
SEE SHEET TMP-10A

END CONST. STA. 32+80 -L-

LANE CLOSURE AHEAD
CAUTION TEMP PATTERN
CMS MESSAGES

STA. 11+45 +/- -Y1-

LEFT LANE CLOSED AHEAD
W20-S L
48" X 48"

APPROVED: _____ DATE: _____

SEAL



PHASE VI DETAILS

26-APR-2013 09:22
C:\Users\jg101\Projects\I-4733\TrafficControl\CPN-I-4733-TMP-10B.dgn
KorCoadwell AT 12266004