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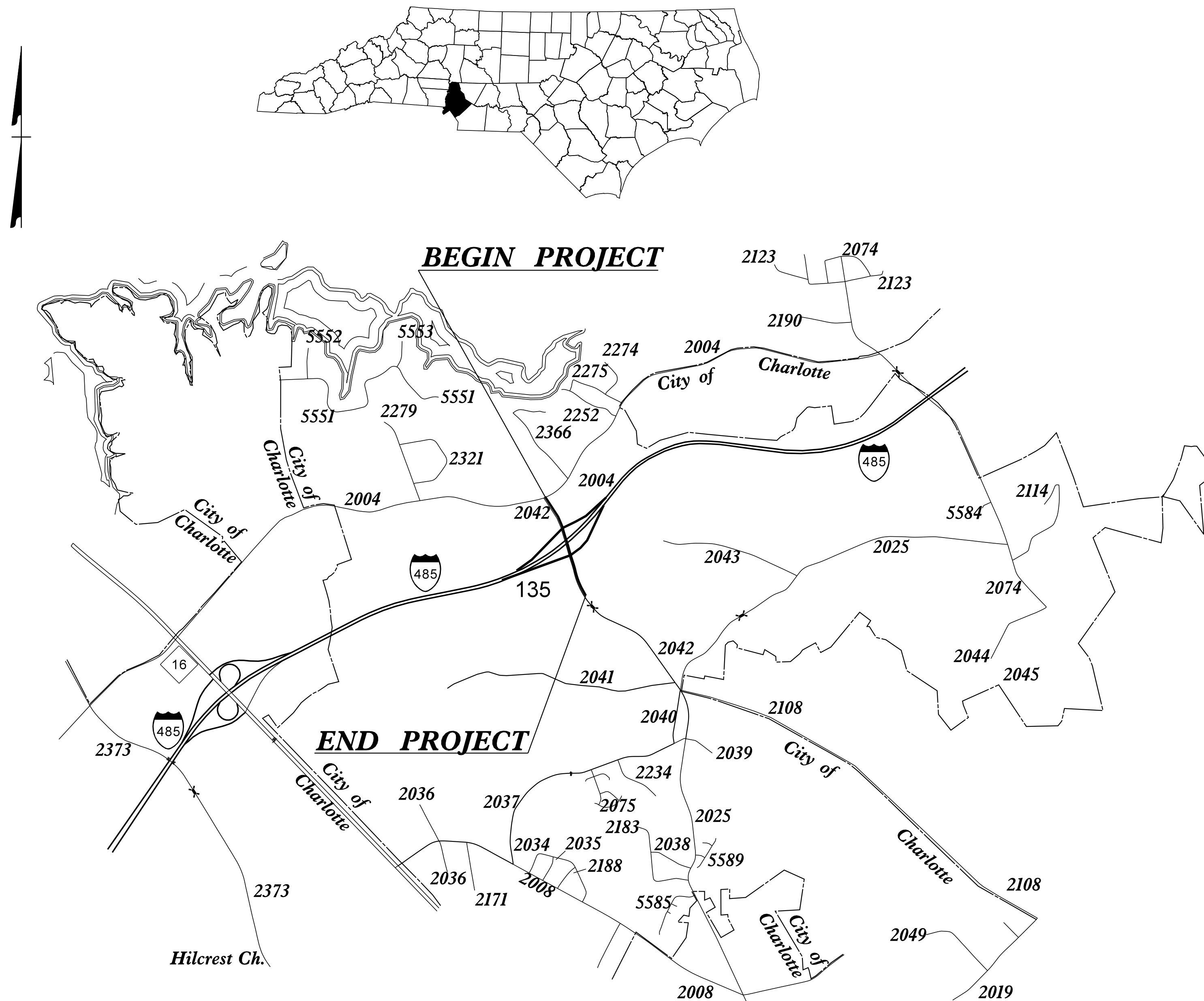
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STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**TRANSPORTATION MANAGEMENT PLAN**

**MECKLENBURG COUNTY**



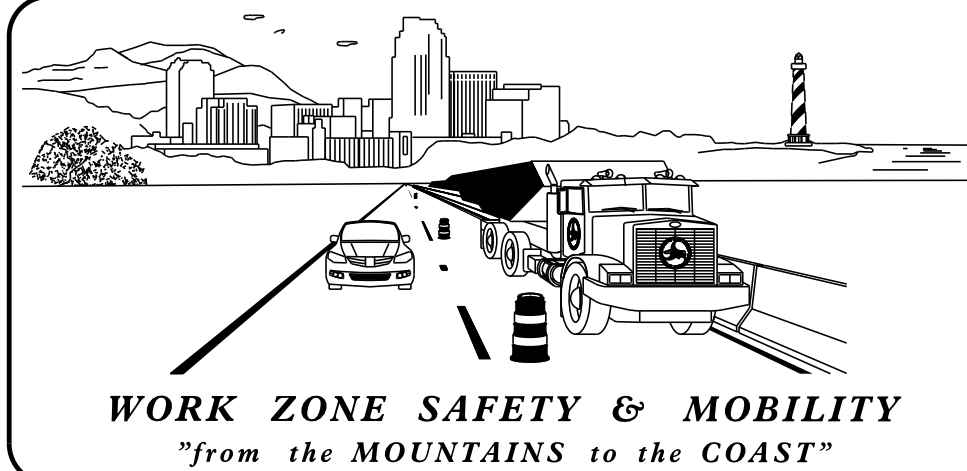
LOCATION: I-485 CHARLOTTE OUTER LOOP INTERCHANGE WITH  
SR 2042 (OAKDALE ROAD)

| SHEET NO.          | TITLE  |
|--------------------|--|
| TMP-1              | TITLE SHEET, VICINITY MAP AND INDEX OF SHEETS  |
| TMP-1A             | LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, AND LEGEND                               |
| TMP-1B AND TMP-1C  | TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT STRATEGIES, GENERAL NOTES AND LOCAL NOTES) |
| TMP-2              | SPECIAL SIGN DESIGN  |
| TMP-3 THRU 3-B     | PHASING  |
| TMP-4 THRU 8       | PHASE I TEMPORARY TRAFFIC CONTROL DETAILS  |
| TMP-9 THRU 11      | PHASE II TEMPORARY TRAFFIC CONTROL DETAILS   |
| TMP-12 AND TMP-12A | OFFSITE SITE DETOUR - OAKDALE ROAD   |
| TMP-13 AND TMP-13A | OFFSITE SITE DETOUR - MT HOLLY - HUNTERSVILLE ROAD AND OAKDALE ROAD                    |
| TMP-14 AND TMP-15  | PHASE III TEMPORARY TRAFFIC CONTROL DETAILS  |

SHEET NO.  
TMP-1

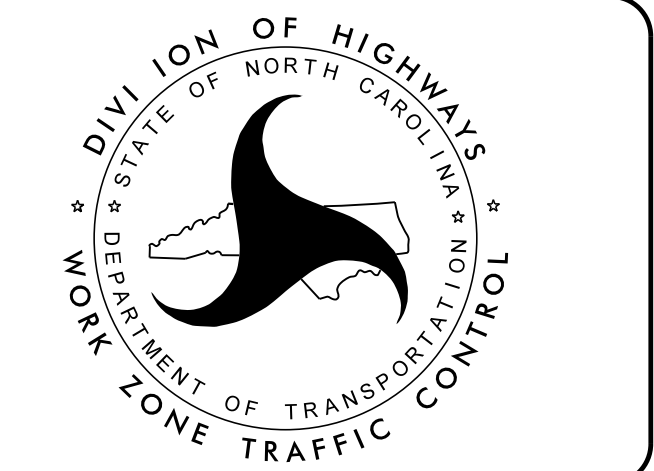
**R-2248G**

**TIP PROJECT:**



**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  
JAY WOOLARD, P.E. TRAFFIC CONTROL PROJECT ENGINEER  
LORI DONALDSON, P.E. TRAFFIC CONTROL PROJECT DESIGN ENGINEER  
TRAFFIC CONTROL DESIGN ENGINEER



**WETHERILL ENGINEERING**  
559 Jones Franklin Rd Suite 164  
Raleigh, N.C. 27606  
License No. F-0377  
Bus: 919 851 8077  
Fax: 919 851 8107

TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN  
CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

**JONATHAN HEFNER, P.E.** PROJECT ENGINEER  
**CHARLES MULLEN** TRAFFIC CONTROL & PAVEMENT MARKING SPECIALIST

APPROVED: \_\_\_\_\_  
DATE: \_\_\_\_\_

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# 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                                     |
| 1160.01  | TEMPORARY CRASH CUSHION                              |
| 1165.01  | WORK VEHICLE LIGHTING SYSTEMS AND TMA DELINEATION    |
| 1170.01  | POSITIVE PROTECTION (PORTABLE CONCRETE BARRIER)      |
| 1180.01  | SKINNY - DRUM  |
| 1205.01  | PAVEMENT MARKINGS - LINE TYPES AND OFFSETS           |
| 1205.02  | PAVEMENT MARKINGS - TWO-LANE AND MULTI-LANE ROADWAYS |
| 1205.04  | PAVEMENT MARKINGS - INTERSECTIONS                    |
| 1205.05  | PAVEMENT MARKINGS - TURN LANES                       |
| 1205.08  | PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES        |
| 1205.09  | PAVEMENT MARKINGS - PAINTED ISLANDS                  |
| 1250.01  | RAISED PAVEMENT MARKERS - INSTALLATION SPACING       |
| 1251.01  | RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY    |

## LEGEND

|                     |           |
|---------------------|-----------|
| PROJ. REFERENCE NO. | SHEET NO. |
| R-2248G             | TMP-1A    |

### GENERAL

- DIRECTION OF TRAFFIC FLOW
- DIRECTION OF PEDESTRIAN TRAFFIC FLOW
- EXIST. PVMT.
- NORTH ARROW
- PROPOSED PVMT.
- TEMP. SHORING (LOCATION PURPOSES ONLY)
- WORK AREA
- REMOVAL
- PROPOSED PAVEMENT WEDGING

### SIGNALS

- EXISTING
- PROPOSED
- TEMPORARY

### PAVEMENT MARKINGS

- EXISTING LINES
- TEMPORARY LINES

### TRAFFIC CONTROL DEVICES

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

### TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

### PAVEMENT MARKERS

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

### PAVEMENT MARKING SYMBOLS

- PAVEMENT MARKING SYMBOLS

### TEMPORARY PAVEMENT MARKING

| ITEM                     | DESCRIPTION                       |
|--------------------------|-----------------------------------|
| PAINT (4")               |                                   |
| PA                       | WHITE EDGELINE                    |
| PB                       | YELLOW EDGELINE                   |
| PD                       | 3FT-9FT WHITE MINI-SKIP           |
| PE                       | WHITE SOLID LANE LINE             |
| PF                       | 10' YELLOW SKIP                   |
| PH                       | YELLOW SINGLE CENTER LINE         |
| PI                       | YELLOW DOUBLE CENTER LINE         |
| PAINT (8")               |                                   |
| PN                       | WHITE GORE LINE                   |
| PAINT (12")              |                                   |
| PV                       | YELLOW DIAGONAL                   |
| P10                      | 3FT-3FT/SP WHITE MINI-SKIP        |
| PAINT (24")              |                                   |
| P2                       | WHITE STOP-BAR                    |
| SYMBOLS PAINT            |                                   |
| QA                       | LEFT TURN ARROW                   |
| QB                       | RIGHT TURN ARROW                  |
| QC                       | STRAIGHT ARROW                    |
| QD                       | COMBO. STRAIGHT/LEFT ARROW        |
| QN                       | 24" YIELD LINE TRIANGLE           |
| QZ                       | FISH-HOOK W/CIRCLE STRAIGHT ARROW |
| TEMPORARY RAISED MARKERS |                                   |
| MH                       | YELLOW/YELLOW                     |
| MI                       | CRYSTAL & RED                     |

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|   |   |                                 |  |                                    |
|---|---|---------------------------------|--|------------------------------------|
| <p>WETHERILL ENGINEERING</p> <p>TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN<br/>CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION</p> | 559 Jones Franklin Rd. Suite 164<br>Raleigh, N.C. 27606<br>License No. F-0377<br>Bus: 919 851 8077<br>Fax: 919 851 8107 | APPROVED: _____ DATE: _____<br> |  | ROADWAY STANDARD DRAWINGS & LEGEND |
|---|---|---------------------------------|--|------------------------------------|

## MANAGEMENT STRATEGIES

### CONSTRUCTION

REPLACE EXISTING TWO & THREE LANE ROADWAYS WITH PROPOSED TWO LANE FACILITY WITH THREE ROUNDABOUTS ON OAKDALE ROAD (-Y3-/SR 2042) AND MT. HOLLY-HUNTERSVILLE ROAD (-Y4A- & -Y4B-/SR 2004) IN CHARLOTTE NORTH CAROLINA.

RE-GRADE AND CONSTRUCT EXISTING RAMPS FOR A PROPOSED INTERCHANGE AT OAKDALE ROAD (-Y3-/SR 2042) AND I-485 (-L-).

### TMP DESIGN PARAMETERS

SHALL FURNISH AND INSTALL THREE (3) CHANGEABLE MESSAGE SIGNS TO BE UTILIZE FOR PUBLIC INFORMATION, TRAVEL ALERTS AND TRAFFIC CONDITIONS AS DIRECTED BY THE ENGINEER.

THIS PROJECT CONTAINS LANE CLOSURE AND HOLIDAY RESTRICITONS.

### GENERAL OUTLINE

1. CONSTRUCT PROPOSED DRIVEWAYS (-DR1- AND -DR2-) AND PROPOSED WIDENING OF OAKDALE ROAD (-Y3-/SR 2042), INCLUDING SECTIONS OF PROPOSED ROUNDABOUTS (-RAB2- & -RAB3-) AND PROPOSED RIGHT SIDE OF MT. HOLLY-HUNTERSVILLE ROAD (-Y4A- & -Y4B-/SR 2004).

BEGIN CONSTRUCTION OF PROPOSED RAMPS TO/FROM I-485 (-L-) AND PROPOSED SIGNAGE ON I-485 (-L-).

2. UNDER AN ICT, UTILIZING OFF-SITE DETOURS CONSTRUCT SECTIONS OF PROPOSED OAKDALE ROAD (-Y3-/SR 2042), PROPOSED ROUNDABOUTS (-RAB2- & -RAB3-) AND PROPOSED MT. HOLLY-HUNTERSVILLE ROAD (-Y4A- & -Y4B-/SR 2004).
3. CONSTRUCT REMAINDER OF PROPOSED OAKDALE ROAD (-Y3-/SR 2042), PROPOSED MT. HOLLY-HUNTERSVILLE ROAD (-Y4A- & -Y4B-/SR 2004) AND PROPOSED ROUNDABOUTS (-RAB1-, -RAB2- & -RAB3-).

WITH APPROVAL OF THE ENGINEER, UNDER AN ICT, UTILIZING OFF-SITE DETOURS CONSTRUCT PROPOSED CURB & GUTTER, CONCRETE APRONS AND MONOLITHIC CONCRETE ISLANDS FOR ROUNDABOUTS (-RAB1-, -RAB2- & -RAB3-).

COMPLETE CONSTRUCTION OF PROPOSED RAMPS TO/FROM I-485 (-L-) AND PROPOSED SIGNAGE ON I-485 (-L-).

4. PAVE FINAL LAYER OF SURFACE COURSE, PLACE FINAL PAVEMENT MARKINGS/ MARKERS AND OPEN TO FINAL TRAFFIC PATTERN.

## GENERAL NOTES / LOCAL NOTES

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   |
|---|---|
| 1. OAKDALE ROAD (-Y3-) AND MT. HOLLY - HUNTERSVILLE ROAD (-Y4-) | MONDAY THROUGH FRIDAY<br>6:00 AM TO 9:00 AM AND<br>4:00 PM TO 6:00 PM |
| 2. I-485 (-L-) ONE OR TWO LANES                                 | MONDAY THROUGH SUNDAY<br>6:00 AM TO 8:00 PM                           |

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

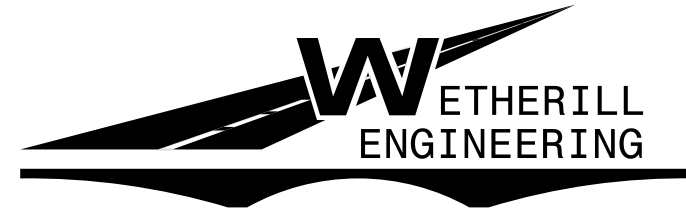


### ROAD NAME

1. I-485 (-L-)

### HOLIDAY

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

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|  <p>559 Jones Franklin Rd. Suite 164<br/>                 Raleigh, N.C. 27606<br/>                 License No. F-0377<br/>                 Bus: 919 851 8077<br/>                 Fax: 919 851 8107</p> | APPROVED: _____ DATE: _____ |  |  | <h1 style="margin: 0;">TRANSPORTATION OPERATIONS PLAN</h1> |
| TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN<br>CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION   |                             |   |   |  |

# GENERAL NOTES / LOCAL NOTES (CONT'D)

| ROAD NAME   | DAY AND TIME RESTRICTIONS   | DURATION AND OPERATION            |
|---|---|-----------------------------------|
| 1. OAKDALE ROAD (-Y3-) AND MT. HOLLY-HUNTERSVILLE ROAD (-Y4-) | MONDAY THROUGH FRIDAY<br>6:00 AM TO 9:00 AM &<br>4:00 PM TO 6:00 PM | 15 MINUTES FOR TRAFFIC OPERATIONS |
| 2. I-485 (-L-)  | NEVER   |                                   |

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.
- 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.

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) 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.

DO NOT INSTALL MORE THAN ONE LANE CLOSURE, IN ANY ONE DIRECTION, ON I-485 (-L-).

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 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) 350 FT IN ADVANCE AND A MINIMUM OF ONCE EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

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.
- R) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 350 FT IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

TRAFFIC BARRIER

S) INSTALL TEMPORARY BARRIER ACCORDING TO THE TRAFFIC CONTROL PLANS A MAXIMUM OF TWO (2) WEEKS PRIOR TO BEGINNING WORK IN ANY LOCATION. ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION, PROCEED IN A CONTINUOUS MANNER TO COMPLETE THE PROPOSED WORK IN THAT LOCATION UNLESS OTHERWISE STATED IN THE TRAFFIC CONTROL PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT PLACE BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE.

ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION AND NO WORK IS PERFORMED BEHIND THE TEMPORARY BARRIER FOR A PERIOD LONGER THAN TWO (2) MONTHS, REMOVE/RESET TEMPORARY BARRIER AT NO COST TO THE DEPARTMENT UNLESS OTHERWISE STATED IN THE TRAFFIC CONTROL PLANS, TEMPORARY BARRIER IS PROTECTING A HAZARD, OR AS DIRECTED BY THE ENGINEER.

INSTALL TEMPORARY BARRIER WITH THE TRAFFIC FLOW, BEGINNING WITH THE UPSTREAM SIDE OF TRAFFIC. REMOVE TEMPORARY BARRIER AGAINST THE TRAFFIC FLOW, BEGINNING WITH THE DOWNSTREAM SIDE OF TRAFFIC.

INSTALL AND SPACE DRUMS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH) TO CLOSE OR KEEP THE SECTION OF THE ROADWAY CLOSED UNTIL THE TEMPORARY BARRIER CAN BE PLACED OR AFTER THE TEMPORARY BARRIER IS REMOVED.

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

PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER FROM ONCOMING TRAFFIC AT ALL TIMES BY A TEMPORARY CRASH CUSHION UNLESS THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER IS OFFSET FROM ONCOMING TRAFFIC AS FOLLOWS OR AS SHOWN IN THE PLANS:

| POSTED SPEED LIMIT | MINIMUM OFFSET |
|--------------------|----------------|
| 40 OR LESS         | 15 FT          |
| 45-50              | 20 FT          |
| 55                 | 25 FT          |
| 60 MPH or HIGHER   | 30 FT          |

TRAFFIC CONTROL DEVICES

- U) 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 RADIUS, 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.
- V) PLACE TYPE III BARRICADES WITH "ROAD CLOSED" SIGN R11-2 ATTACHED OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.
- W) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES (DRUMS, CONES OR SKINNY DRUMS) PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 200 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

PAVEMENT MARKINGS AND MARKERS

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

| ROAD NAME | MARKING | MARKER           |
|-----------|---------|------------------|
| 1. ALL    | PAINT   | TEMPORARY RAISED |

Y) 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.

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

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

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

MISCELLANEOUS

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

DD) 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.

EE) RETURN TRAFFIC TO THE EXISTING PATTERN AT THE END OF EACH WORK PERIOD UNLESS OTHERWISE STATED IN THE PHASING OR DIRECTED BY THE ENGINEER.

COMPLETE ANY PROPOSED OR TEMPORARY WIDENING/PAVEMENT IN SUCH A MANNER THAT PONDING OF WATER SHALL NOT OCCUR IN ANY TRAVEL LANE(S).

PLACE DRUMS ALONG ALL ROADWAYS AND ALL DRIVEWAYS TO KEEP PROPOSED WIDENING CLOSED TO TRAFFIC.

FF) 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'.

- CLOSE THE APPROPRIATE TRAVEL LANE TO TRAFFIC USING ROADWAY STANDARD DRAWING NO. 1101.02 SHEETS 1 & 2 OF 15.
- 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.
- OPEN TRAVEL LANE TO EXISTING TRAFFIC PATTERN BY THE END OF EACH WORK PERIOD.
- WHEN PROPERLY CURED, CLOSE THE APPROPRIATE TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEETS 1 & 2 OF 15. BACKFILL & PAVE, IF REQUIRED, UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT (SEE CONSTRUCTION PLANS).
- OPEN TRAVEL LANE TO EXISTING TRAFFIC PATTERN BY THE END OF THE WORK PERIOD.

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559 Jones Franklin Rd. Suite 164  
Raleigh, N.C. 27606  
License No. F-0377  
Bus: 919 851 8077  
Fax: 919 851 8107

TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN  
CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

## TRANSPORTATION OPERATIONS PLAN

SIGN NUMBER: SP      BACKG COLOR: Fluorescent Orange  
 TYPE: Stationary      COPY COLOR: Black  
 QUANTITY: See Plans  
 SIGN WIDTH: 7'-6"      HEIGHT: 4'-0"  
 TOTAL AREA: 30.0 Sq.Ft.  
 BORDER TYPE: FLUSH  
 RECESS: 0.55"  
 WIDTH: 0.88"  
 RADII: 3"  
 NO. Z BARS: 2  
 LENGTH: 82.0  
 MAT'L: 0.125" (3.2 mm) ALUMINUM

DESIGN BY: CLM      CHECKED BY: SK  
 PROJECT ID: R-2248G      DIV: 10      DATE: Nov 19, 2014

USE NOTES: 1,2  
 1. Legend and border shall be direct applied black non-reflective sheeting.  
 2. Background shall be NC GRADE B fluorescent orange retroreflective sheeting.

Panel Style: Temp\_Oversize\_Detour\_6 in.ssi  
 M.U.T.C.D.: 2009 Edition  
 Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

| Letter spacings are to start of next letter |     |     |     |     |     |     |     |     |      |     |  |  | Series/Size |
|---|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|--|--|-------------|
|   |     |     |     |     |     |     |     |     |      |     |  |  | Text Length |
| M   | T   | H   | O   | L   | L   | Y   |     |     |      |     |  |  | D 2000      |
| 11.5  | 9.3 | 6.2 | 10  | 9   | 9.3 | 7.7 | 6.8 | 8.6 | 11.6 |     |  |  | 66.9        |
| H   | U   | N   | T   | E   | R   | S   |     |     |      |     |  |  | D 2000      |
| 9.8   | 9.2 | 9.2 | 8.3 | 7.7 | 7.9 | 7.8 | 6.8 | 10  | 3.5  | 9.8 |  |  | 70.4        |
| V   | I   | L   | L   | E   | R   | D   |     |     |      |     |  |  | D 2000      |
| 15  | 9.1 | 4   | 7.7 | 7.7 | 6.2 | 10  | 8.5 | 6.8 | 15   |     |  |  | 60          |

FILENAME: Guidesign6      NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: SP      BACKG COLOR: Fluorescent Orange  
 TYPE: Stationary      COPY COLOR: Black  
 QUANTITY: See Plans  
 SIGN WIDTH: 3'-0"      HEIGHT: 2'-0"  
 TOTAL AREA: 6.0 Sq.Ft.  
 BORDER TYPE: FLUSH  
 RECESS: 0.38"  
 WIDTH: 0.44"  
 RADII: 1.5"  
 NO. Z BARS: 2  
 LENGTH: 82.0  
 MAT'L: 0.125" (3.2 mm) ALUMINUM

DESIGN BY: CLM      CHECKED BY: SK  
 PROJECT ID: R-2248G      DIV: 10      DATE: Nov 19, 2014

USE NOTES: 1,2  
 1. Legend and border shall be direct applied black non-reflective sheeting.  
 2. Background shall be NC GRADE B fluorescent orange retroreflective sheeting.

BORDER R=1.5" TH=0.44" IN=0.38"

Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

| Letter spacings are to start of next letter |     |     |     |     |     |     |     |     |     |     |  |  | Series/Size |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|-------------|
|   |     |     |     |     |     |     |     |     |     |     |  |  | Text Length |
| M   | t   | H   | o   | l   | l   | y   |     |     |     |     |  |  | D 2000      |
| 5.9   | 4.6 | 2   | 2.5 | 4.3 | 3.8 | 1.8 | 1.4 | 3.8 | 5.9 |     |  |  | 24.2        |
| H   | u   | n   | t   | e   | r   | s   |     |     |     |     |  |  | D 2000      |
| 4.7   | 4.4 | 4   | 3.4 | 2.3 | 3.7 | 2.2 | 2.3 | 2.5 | 1.8 | 4.7 |  |  | 26.7        |
| v   | i   | l   | l   | e   | r   | d   |     |     |     |     |  |  | D 2000      |
| 7.1   | 4.1 | 1.8 | 1.8 | 1.6 | 2.9 | 2.5 | 4   | 3   | 7.1 |     |  |  | 21.8        |

FILENAME: Guidesign6      NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: SP10132      BACKG COLOR: Fluorescent Orange  
 TYPE: Stationary      COPY COLOR: Black  
 QUANTITY: See Plans  
 SIGN WIDTH: 48"      HEIGHT: 48"  
 TOTAL AREA: 30.6 Sq.Ft.  
 BORDER TYPE: INSET  
 RECESS: 0.5"  
 WIDTH: 0.75"  
 RADII: 1.38"  
 NO. Z BARS: 2  
 LENGTH: 82.0  
 MAT'L: 0.080" (2.0 mm) ALUMINUM

DESIGN BY: CLM      CHECKED BY: SK  
 PROJECT ID: R-2248G      DIV: 10      DATE: Nov 19, 2014

USE NOTES: 1,2  
 1. Legend and border shall be direct applied black non-reflective sheeting.  
 2. Background shall be Type VII, VIII, or IX (prismatic) fluorescent orange retroreflective sheeting.

Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

| Letter spacings are to start of next letter |     |     |     |     |     |     |     |     |      |     |     |     | Series/Size |
|---|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-------------|
|   |     |     |     |     |     |     |     |     |      |     |     |     | Text Length |
| C   | O   | N   | S   | T   | R   | U   | C   | T   | I    | O   | N   |     | C 2000      |
| 10.6  | 4.1 | 4.4 | 4.1 | 3.7 | 3.6 | 4.1 | 4.2 | 3.9 | 3.6  | 1.7 | 4.4 | 3.4 | 45.2        |
| E   | N   | T   | R   | A   | N   | C   | E   |     |      |     |     |     | C 2000      |
| 16.7  | 4.1 | 4.2 | 3.9 | 3.9 | 4.7 | 4.6 | 4.6 | 3.1 | 16.7 |     |     |     | 32.0        |

FILENAME: Guidesign6      NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: SP      BACKG COLOR: Fluorescent Orange  
 TYPE: Stationary      COPY COLOR: Black  
 QUANTITY: See Plans  
 SIGN WIDTH: 3'-6"      HEIGHT: 1'-0"  
 TOTAL AREA: 3.5 Sq.Ft.  
 BORDER TYPE: FLUSH  
 RECESS: 0.38"  
 WIDTH: 0.38"  
 RADII: 1.88"  
 NO. Z BARS: 2  
 LENGTH: 82.0  
 MAT'L: 0.125" (3.2 mm) ALUMINUM

DESIGN BY: CLM      CHECKED BY: SK  
 PROJECT ID: R-2248G      DIV: 10      DATE: Nov 19, 2014

USE NOTES: 1,2  
 1. Legend and border shall be direct applied black non-reflective sheeting.  
 2. Background shall be NC GRADE B fluorescent orange retroreflective sheeting.

BORDER R=1.88" TH=0.38" IN=0.38"

Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

| Letter spacings are to start of next letter |     |     |     |     |     |     |     |     |   |   |     |  | Series/Size |
|---|-----|-----|-----|-----|-----|-----|-----|-----|---|---|-----|--|-------------|
|   |     |     |     |     |     |     |     |     |   |   |     |  | Text Length |
| O   | a   | k   | d   | a   | l   | e   | R   | d   |   |   |     |  | D 2000      |
| 4.4   | 4.3 | 3.8 | 3.6 | 3.8 | 3.8 | 1.6 | 2.9 | 2.5 | 4 | 3 | 4.4 |  | 33.3        |

FILENAME: Guidesign6      NORTH CAROLINA D.O.T. SIGN DETAIL

2/3/2015 9:24:56 AM P:\2014\14101R-2248G\TrafficControl\TCP\R2248G\_TC\_TCP\_PSH\_02.dgn

**WEATHERILL ENGINEERING**

TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN  
 CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

559 Jones Franklin Rd. Suite 164  
 Raleigh, N.C. 27606  
 License No. F-0377  
 Bus: 919 851 8077  
 Fax: 919 851 8107

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

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

**SPECIAL SIGN DESIGN**

PHASE I

- STEP 1: - INSTALL WORK ZONE ADVANCE WARNING SIGNS ALONG OAKDALE ROAD (-Y3-/SR 2042), MT. HOLLY-HUNTERSVILLE ROAD (-Y4A- & -Y4B-/SR 2004), I-485 (-L-) AND GLENN TEAGUE ROAD (SEE ROADWAY STANDARD DRAWING 1101.01, SHEETS 1 & 3).
- INSTALL TYPE III BARRICADES AT THE EXISTING INTERSECTIONS OF PROPOSED RAMPS & OAKDALE ROAD (-Y3-/SR 2042) AND IN THE GORE AREAS OF THE ON/OFF RAMPS OF I-485 (-L-) AS SHOWN ON SHEETS TMP-5, TMP-7 & TMP-8.

NOTE: REMOVE EXISTING PORTABLE CONCRETE BARRIER (PCB) & EXISTING TUBULAR MARKERS AND INSTALL DRUMS ON ALL EXISTING ACCELERATION/DECELERATION LANES TO KEEP THEM CLOSED DURING CONSTRUCTION. DISPOSE OF THE ABOVE ITEMS AS DIRECTED BY THE ENGINEER. NO SEPARATE PAYMENT SHALL BE MADE FOR THE REMOVAL & DISPOSAL OF THE ABOVE ITEMS AND ALL SUCH WORK SHALL BE CONSIDERED AS INCIDENTAL TO THE OTHER TRAFFIC CONTROL ITEMS LISTED IN THE CONTRACT.

- AS DIRECTED BY THE ENGINEER INSTALL THREE (3) CHANGEABLE MESSAGE SIGNS, ONE ON EACH OF THE THREE APPROACHES TO THE INTERSECTION OF OAKDALE ROAD (-Y3-/SR 2042) AND MT. HOLLY-HUNTERSVILLE ROAD (-Y4A- & -Y4B-/SR 2004). 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: - USING ROADWAY STANDARD DRAWING 1101.02 SHEETS 1 & 2 OF 15, PLACE TEMPORARY PAVEMENT MARKING/MARKERS FOR A TWO-LANE, TWO-WAY TRAFFIC PATTERN ON EXISTING OAKDALE ROAD (-Y3-/SR 2042) FROM STA. 15+00 +/- -Y3- TO STA. 31+25 +/- -Y3- AND MAINTAIN EXISTING TRAFFIC PATTERN & LEFT TURN LANE ON REMAINDER OF OAKDALE ROAD (-Y3-/SR 2042) FROM INTERSECTION WITH MT. HOLLY-HUNTERSVILLE ROAD (-Y4A- & -Y4B-/SR 2004) TO STA. 15+50 +/- -Y3- (SEE SHEETS TMP-4 & TMP-5).

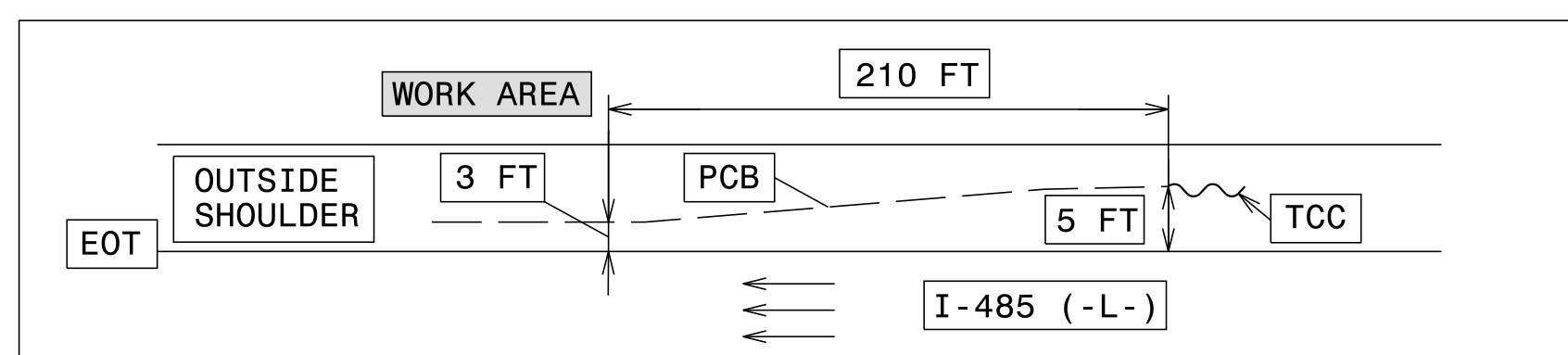
NOTE: AS DIRECTED BY THE ENGINEER, MAY BEGIN CONSTRUCTION IN PHASE I, STEP 3 ONCE TRAFFIC HAS BEEN SHIFTED TO THE TEMPORARY PATTERN ON EXISTING OAKDALE ROAD (-Y3-/SR 2042) FROM STA. 15+00 +/- -Y3- TO STA. 31+25 +/- -Y3-.

- USING ROADWAY STANDARD DRAWING 1101.02 SHEETS 4 & 8 OF 15, BEGIN CONSTRUCTION OF THE FOLLOWING (SEE CONSTRUCTION PLANS AND SIGNING PLANS):

- PROPOSED RAMPS [-RPA-, -RPB-, -RPC- & -RPD- (INCLUDING GRADING, DRAINAGE AND CURB & GUTTER)], UP TO, AND INCLUDING THE FINAL LAYER OF SURFACE COURSE (SEE SHEETS TMP-5, TMP-7 & TMP-8).

NOTE: AS DIRECTED BY THE ENGINEER MAY UTILIZING THE PROPOSED ON/OFF RAMPS FROM I-485 (-L-) TO OAKDALE ROAD (-Y3-/SR 2042) AS HAUL ROADS. CONTRACTOR SHALL INSTALL CHANGEABLE MESSAGE SIGNS AND CONSTRUCTION SIGNAGE AS SHOWN ON SHEETS TMP-7 & TMP-8 TO ALERT THE TRAVELLING PUBLIC OF CONSTRUCTION VEHICLES ENTERING & EXITING I-485 (-L-).

- PROPOSED SIGNING STRUCTURES AND PROPOSED SIGNS ON I-485 (-L-). PROPOSED SIGNING STRUCTURES THAT ARE WITHIN 30 FEET OF AN OPEN TRAVEL LANE AND NOT PROTECTED BY EITHER EXISTING GUARDRAIL OR CONCRETE BARRIER, THE CONTRACTOR SHALL INSTALL PROPOSED GUARDRAIL PRIOR TO BEGINNING CONSTRUCTION. IF INSTALLATION OF PROPOSED GUARDRAIL IS NOT FEASIBLE THE CONTRACTOR SHALL PLACE PORTABLE CONCRETE BARRIER (PCB), TEMPORARY CRASH CUSHION (TTC) & SHOULDER CLOSED SIGNS AS SHOWN ON ROADWAY STANDARD DRAWING 1101.04, SHEET 1 OF 1 AND THE FOLLOWING DETAIL.



- STEP 3: - USING ROADWAY STANDARD DRAWING 1101.02 SHEETS 1 & 2 OF 15, CONSTRUCT THE FOLLOWING (SEE CONSTRUCTION PLANS):

- PROPOSED DRIVEWAYS -DR1- AND -DR2-, UTILIZING TEMPORARY TIE-INS TO EXISTING MT. HOLLY-HUNTERSVILLE ROAD (-Y4B-/SR 2004) & OAKDALE ROAD (-Y3-/SR 2042) AS DIRECTED BY THE ENGINEER AND OPEN TO TRAFFIC (SEE SHEET TCP-4).

NOTE: ELEVATION OF PROPOSED DRIVEWAYS' TIE-INS WILL HAVE TO BE ADJUSTED DURING CONSTRUCTION OF PROPOSED MT. HOLLY-HUNTERSVILLE ROAD (-Y4B-/SR 2004) AND OAKDALE ROAD (-Y3-/SR 2042).

- PROPOSED OAKDALE ROAD (-Y3-/SR 2042):

- PROPOSED WIDENING, AS MUCH AS POSSIBLE (UTILIZING TEMPORARY 2:1 SLOPES AS REQUIRED), RIGHT & LEFT SIDES OF OAKDALE ROAD (-Y3-/SR 2042) (INCLUDING GRADING, DRIVEWAYS, DRAINAGE AND CURB & GUTTER), PROPOSED -RAB2- AND PROPOSED -RAB3-, UP TO, BUT INCLUDING THE FINAL LAYER OF SURFACE COURSE (SEE SHEETS TMP-4 & TMP-5).

---- MAY BEGIN CONSTRUCTION OF PROPOSED SIDEWALKS AS DIRECTED BY THE ENGINEER.

- CONDUCT WEDGING & PAVING OPERATIONS ON EXISTING OAKDALE ROAD (-Y3-/SR 2042) IN AREAS AS SHOWN ON SHEETS TMP-4 & TMP-5 AND FLATHER WEDGING DOWN TO MAKE A SMOOTH TRANSITION TO EXISTING. PLACE TEMPORARY PAVEMENT MARKINGS/MARKERS FOR EXISTING/TEMPORARY TRAFFIC PATTERN.

- PROPOSED WIDENING, AS MUCH AS POSSIBLE (UTILIZING TEMPORARY 2:1 SLOPES AND/OR PAVING/WEDGING OPERATIONS ON/OVER EXISTING AS REQUIRED), RIGHT SIDE OF MT. HOLLY-HUNTERSVILLE ROAD (-Y4A- & -Y4B-/SR 2004) (INCLUDING GRADING, DRIVEWAYS, DRAINAGE AND CURB & GUTTER), UP TO, BUT NOT INCLUDING THE FINAL LAYER (SEE SHEET TMP-4).

PHASE II

- STEP 1: - AS DIRECTED BY THE ENGINEER UTILIZE THE THREE (3) CHANGEABLE MESSAGE SIGNS FROM PHASE I, STEP 1, ONE ON EACH OF THE THREE APPROACHES TO THE INTERSECTION OF OAKDALE ROAD (-Y3-/SR 2042) AND MT. HOLLY-HUNTERSVILLE ROAD (-Y4A- & -Y4B-/SR 2004) DISPLAY THE FOLLOWING MESSAGES AT THE APPROPRIATE TIME FRAMES PRIOR TO CLOSING THE ROADWAYS TO TRAFFIC. (NOTE: THESE THREE (3) CHANGEABLE MESSAGE SIGNS ARE IN ADDITION TO THE CHANGEABLE MESSAGE SIGNS SHOWN FOR THE OFF-SITE DETOURS ON SHEETS TMP-12 AND TMP-13. MAY UTILIZE/DEVELOP OTHER MESSAGES AS APPROVED BY THE ENGINEER.):

TEN (10) DAYS PRIOR TO CLOSURE:

|                                  |                                  |
|----------------------------------|----------------------------------|
| OAKDALE ROAD TO CLOSE            | MT HOLLY ROAD TO CLOSE           |
| (MONTH) (DATE) TO (MONTH) (DATE) | (MONTH) (DATE) TO (MONTH) (DATE) |

DURING CLOSURE:

|                      |                      |
|----------------------|----------------------|
| OAKDALE ROAD CLOSED  | MT HOLLY ROAD CLOSED |
| UNTIL 5:00 AM MONDAY | UNTIL 5:00 AM MONDAY |

OR

TWO (2) DAYS PRIOR TO CLOSURE:

|                               |                               |
|-------------------------------|-------------------------------|
| OAKDALE ROAD TO CLOSE         | MT HOLLY ROAD TO CLOSE        |
| FRIDAY (MONTH) (DATE) AT 8 PM | FRIDAY (MONTH) (DATE) AT 8 PM |

|                     |                      |
|---------------------|----------------------|
| OAKDALE ROAD CLOSED | MT HOLLY ROAD CLOSED |
| FOLLOW DETOUR       | FOLLOW DETOUR        |

AFTER CLOSURE OR IF CLOSURE IS CANCELLED:

|                   |                    |
|-------------------|--------------------|
| OAKDALE ROAD OPEN | MT HOLLY ROAD OPEN |
|-------------------|--------------------|

DAY OF CLOSURE:

|                       |                        |
|-----------------------|------------------------|
| OAKDALE ROAD TO CLOSE | MT HOLLY ROAD TO CLOSE |
| TONIGHT AT 8:00 PM    | TONIGHT AT 8:00 PM     |

2/4/2015 1:07:05 PM P:\2014\1101.01.R-2248G\TrafficControl\TCP\R2248G.TC.TCP\_PSH\_03.dgn

**WETHERILL ENGINEERING**  
 559 Jones Franklin Rd. Suite 164  
 Raleigh, N.C. 27606  
 License No. F-0377  
 Bus: 919 851 8077  
 Fax: 919 851 8107

TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN  
 CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

SEAL

**PHASING TYPICAL SECTIONS**

NOTE: CLOSURE OF MT. HOLLY-HUNTERSVILLE ROAD (-Y4A- & -Y4B-/SR 2004) AND/OR OAKDALE ROAD (-Y3-/SR 2042) SHALL BE COORDINATED WITH AND APPROVED BY THE ENGINEER.

OAKDALE ROAD (-Y3-/SR 2042) SHALL BE CLOSED WHEN MT. HOLLY-HUNTERSVILLE ROAD (-Y4A- & -Y4B-/SR 2004) IS CLOSED.

WORK IN A CONTINUOUS MANNER TO COMPLETE THE WORK IN PHASE II, STEP 2A THROUGH STEP 2C FROM 8:00 PM FRIDAY TO 5:00 AM MONDAY. REPEAT WEEKEND ROAD CLOSURE, AS DIRECTED BY THE ENGINEER, TO COMPLETE PHASE II, STEP 2A THROUGH STEP 2C. (SEE INTERMEDIATE CONTRACT TIME AND SPECIAL PROVISIONS).

STEP 2: - CONSTRUCT PROPOSED MT. HOLLY-HUNTERSVILLE ROAD (-Y4A- & -Y4B-/SR 2004) AS FLOWINGS:

A. USING ROADWAY STANDARD DRAWING NO. 1101.03, SHEET 1 OF 9, AND SHEET TMP-13 CLOSE MT. HOLLY-HUNTERSVILLE ROAD (-Y4A- & -Y4B-/SR 2004) AND OAKDALE ROAD (-Y3-/SR 2042) TO TRAFFIC.

NOTE: MAINTAIN ACCESS TO ALL HOUSES AS APPROVED BY THE ENGINEER.

B. USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 1 OF 15, AS REQUIRED, CONDUCT PAVING & WEDGING OPERATIONS TO CONSTRUCT PROPOSED MT. HOLLY-HUNTERSVILLE ROAD (-Y4A- & -Y4B-/SR 2004) WIDENING, UP TO, BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE (SEE CONSTRUCTION PLANS AND SHEETS TMP-9 AND TYPICAL SECTIONS J-J & K-K ON TMP-11).

NOTE: AS DIRECTED BY THE ENGINEER, MAY CONDUCT CONSTRUCTION OPERATIONS ON PROPOSED OAKDALE ROAD (-Y3-/SR 2042) AS STATED IN PHASE II, STEPS 3B AND 3C.

C. USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 1 OF 15, AS REQUIRED, PLACE TEMPORARY PAVEMENT MARKINGS/MARKERS, INSTALL WATER FILLED BARRIER AND OPEN MT. HOLLY-HUNTERSVILLE ROAD (-Y4A- & -Y4B-/SR 2004) TO THE TEMPORARY TWO-LANE, TWO-WAY TRAFFIC PATTERN AS SHOWN ON SHEET TMP-9 AND OPEN OAKDALE ROAD (SR 2042/-Y3-) TO TRAFFIC.

WORK IN A CONTINUOUS MANNER TO COMPLETE THE WORK IN PHASE II, STEP 3A THROUGH STEP 3C FROM 8:00 PM FRIDAY TO 5:00 AM MONDAY. REPEAT WEEKEND ROAD CLOSURE, AS DIRECTED BY THE ENGINEER, TO COMPLETE PHASE II, STEP 3A THROUGH STEP 3C. (SEE INTERMEDIATE CONTRACT TIME AND SPECIAL PROVISIONS).

STEP 3: - CONSTRUCT PROPOSED OAKDALE ROAD (SR 2042/-Y3-) AS FLOWINGS:

A. USING ROADWAY STANDARD DRAWINGS NO. 1101.03, SHEETS 1 & 2 OF 9 AND SHEETS TMP-12, CLOSE OAKDALE ROAD (-Y3-/SR 2042) TO TRAFFIC.

NOTE: MAINTAIN ACCESS TO ALL HOUSES AS APPROVED BY THE ENGINEER.

B. USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEETS 1 & 2 OF 15, AS REQUIRED, CONSTRUCT PROPOSED OAKDALE ROAD (-Y3-/SR 2042) & BOTH ROUNDABOUTS (-RAB2- & -RAB3-) (INCLUDING PROPOSED DRAINAGE AND INSTALL TEMPORARY SIGNAGE), UP TO, BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE FOR THE TEMPORARY TRAFFIC PATTERN AS SHOWN ON SHEET TMP-10 (SEE CONSTRUCTION PLANS).

C. USING ROADWAY STANDARD DRAWING 1101.02 SHEETS 1 & 2 OF 15, AS REQUIRED, PLACE TEMPORARY PAVEMENT MARKINGS/MARKERS FOR THE TEMPORARY TRAFFIC PATTERN ON OAKDALE ROAD (-Y3-/SR 2042) AS SHOWN ON SHEET TMP-10, THREE (3) LANE TRAFFIC PATTERN FROM THE INTERSECTION WITH MT. HOLLY-HUNTERSVILLE ROAD (-Y4A- & -Y4B-/SR 2004) TO STA. 16+50 +/- -Y3- AND OPEN TO TRAFFIC.

NOTE: INSTALL DRUMS AND TYPE III BARRICADES TO KEEP PROPOSED RAMPS CLOSED TO TRAFFIC (SEE SHEET TMP-10).

PHASE III

MAY WORK PHASE III, STEP 1 AND/OR STEP 2 SIMULTANEOUSLY OR INDEPENDENTLY.

AS DIRECTED BY THE ENGINEER, MAY WORK PHASE III, STEP 1A AND STEP 1B IN ANY COMBINATION TO CONSTRUCT PROPOSED OAKDALE ROAD (-Y3-/SR 2042).

STEP 1: - CONSTRUCT REMAINDER OF PROPOSED OAKDALE ROAD (-Y3-/SR 2042):

A. USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEETS 1 & 2 OF 15:

- CONSTRUCT PROPOSED OAKDALE ROAD (-Y3-/SR 2042) AND BOTH ROUNDABOUTS (-RAB2- & -RAB3-) (INCLUDING PROPOSED DRAINAGE, PROPOSED CURB & GUTTER, CONCRETE APRONS, MONOLITHIC CONCRETE ISLANDS, PROPOSED SIDEWALKS AND INSTALL & COVER PROPOSED SIGNAGE, UP TO, BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE (SEE CONSTRUCTION PLANS, SIGNING PLANS AND SHEET TMP-15).

- PLACE TEMPORARY PAVEMENT MARKINGS/MARKERS FOR THE FINAL TRAFFIC PATTERN ON PROPOSED OAKDALE ROAD (-Y3-/SR 2042) AND OPEN TO TEMPORARY TRAFFIC PATTERN (SEE FINAL PAVEMENT MARKING PLANS AND SHEET TMP-15).

NOTE: INSTALL DRUMS & TYPE III BARRICADES TO KEEP PROPOSED RAMPS AND PORTIONS OF BOTH ROUNDABOUTS (-RAB2- & -RAB3-) CLOSED TO TRAFFIC (SEE SHEET TMP-15).

NOTE: WITH THE APPROVAL & CONCURRENCE OF THE ENGINEER, OAKDALE ROAD (-Y3-/SR 2042) MAY BE CLOSED TO CONSTRUCT PROPOSED CURB & GUTTER, CONCRETE APRONS & MONOLITHIC CONCRETE ISLANDS FOR BOTH ROUNDABOUTS (-RAB2- & -RAB3-) AS STATED IN PHASE III, STEP 1B.

PRIOR TO CLOSING OAKDALE ROAD (-Y3-/SR 2042) UTILIZE CHANGEABLE MESSAGE SIGNS AND MESSAGES AS STATED IN PHASE II, STEP 1.

WORK IN A CONTINUOUS MANNER TO COMPLETE THE WORK IN PHASE III, STEP 1B1 THROUGH STEP 1B2 FROM 8:00 PM FRIDAY TO 5:00 AM MONDAY. REPEAT WEEKEND ROAD CLOSURE, AS DIRECTED BY THE ENGINEER, TO COMPLETE PHASE III, STEP 1B1 THROUGH STEP 1B2. (SEE INTERMEDIATE CONTRACT TIME AND SPECIAL PROVISIONS).

B. CLOSE OAKDALE ROAD (SR 2042/-Y3-):

1. USING ROADWAY STANDARD DRAWINGS NO. 1101.03, SHEETS 1 & 2 OF 9 AND SHEETS TMP-12, CLOSE OAKDALE ROAD (-Y3-/SR 2042) TO TRAFFIC.

NOTE: MAINTAIN ACCESS TO ALL HOUSES AS APPROVED BY THE ENGINEER.

2. USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEETS 1 & 2 OF 15, AS REQUIRED:

- CONSTRUCT REMAINDER OF PROPOSED CURB & GUTTER, CONCRETE APRONS & MONOLITHIC CONCRETE ISLANDS FOR BOTH ROUNDABOUTS (-RAB2- & -RAB3-) (SEE CONSTRUCTION PLANS AND TMP-15).

- PLACE TEMPORARY PAVEMENT MARKINGS/MARKERS FOR THE FINAL TRAFFIC PATTERN ON PROPOSED OAKDALE ROAD (-Y3-/SR 2042) AND OPEN TO TEMPORARY TRAFFIC PATTERN (SEE FINAL PAVEMENT MARKING PLANS AND SHEET TMP-15).

NOTE: INSTALL DRUMS & TYPE III BARRICADES TO KEEP PROPOSED RAMPS AND PORTIONS OF BOTH ROUNDABOUTS (-RAB2- & -RAB3-) CLOSED TO TRAFFIC (SEE SHEET TMP-15).

AS DIRECTED BY THE ENGINEER, MAY WORK PHASE III, STEP 2A AND STEP 2B IN ANY COMBINATION TO CONSTRUCT PROPOSED MT. HOLLY-HUNTERSVILLE ROAD (-Y4A- & -Y4B-/SR 2004).

STEP 2: - CONSTRUCT REMAINDER OF PROPOSED MT. HOLLY-HUNTERSVILLE ROAD (-Y4A- & -Y4B-/SR 2004):

A. USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 1 OF 15:


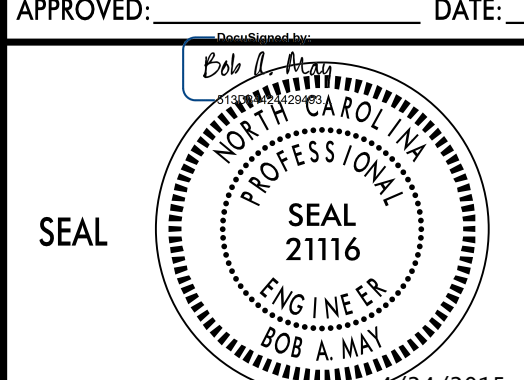
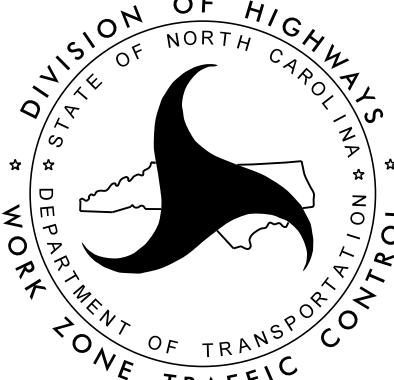
- CONSTRUCT PROPOSED MT. HOLLY-HUNTERSVILLE ROAD (-Y4A- & -Y4B-/SR 2004) WIDENING (INCLUDING PROPOSED DRAINAGE AND PROPOSED CURB & GUTTER), UP TO, BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE FROM STA. 11+50 +/- -Y4A- TO STA. 21+10 +/- -Y4B- AS SHOWN ON SHEETS TMP-9 AND TYPICAL SECTIONS L-L, M-M & N-N ON TMP-11 (SEE CONSTRUCTION PLANS).

NOTE: AS DIRECTED BY THE ENGINEER THE WATER FILLED BARRIER MAY BE REMOVED AND REPLACED WITH DRUMS TO MAINTAIN TEMPORARY TRAFFIC PATTERN AS SHOWN ON SHEET TMP-9.

- CONSTRUCT PROPOSED MT. HOLLY-HUNTERSVILLE ROAD (-Y4A- & -Y4B-/SR 2004) AND ROUNDABOUT (-RAB1-) (INCLUDING PROPOSED DRAINAGE, PROPOSED CURB & GUTTER, CONCRETE APRONS, MONOLITHIC CONCRETE ISLANDS AND INSTALL PROPOSED SIGNAGE), UP TO, BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE (SEE CONSTRUCTION PLANS, SIGNING PLANS AND SHEET TMP-14).

- PLACE TEMPORARY PAVEMENT MARKINGS/MARKERS FOR THE FINAL TRAFFIC PATTERN ON PROPOSED MT. HOLLY-HUNTERSVILLE ROAD (-Y4A- & -Y4B-/SR 2004) AND OPEN TO FINAL TRAFFIC PATTERN (SEE FINAL PAVEMENT

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|   |  |   |   |
|---|--|---|---|
|  <p>599 Jones Franklin Rd. Suite 164<br/>Raleigh, N.C. 27606<br/>License No. F-0377<br/>Bus: 919 851 8077<br/>Fax: 919 851 8107</p> <p>TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN<br/>CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION</p> | APPROVED: _____ DATE: _____<br> |  | <p style="text-align: center; font-size: 24pt; font-weight: bold;">PHASING<br/>TYPICAL SECTIONS</p> |
|   | <p style="text-align: center;">SEAL</p>  |   |   |



NOTE: WITH THE APPROVAL & CONCURRENCE OF THE ENGINEER, MT. HOLLY-HUNTERSVILLE ROAD (-Y4A- & -Y4B-/SR 2004) MAY BE CLOSED TO CONSTRUCT PROPOSED CURB & GUTTER, CONCRETE APRONS & MONOLITHIC CONCRETE ISLANDS FOR ROUNDABOUT (-RAB1-) AS STATED IN PHASE III, STEP 2B.

OAKDALE ROAD (-Y3-/SR 2042) SHALL BE CLOSED WHEN MT. HOLLY-HUNTERSVILLE ROAD (-Y4A- & -Y4B-/SR 2004) IS CLOSED.

PRIOR TO CLOSING MT. HOLLY-HUNTERSVILLE ROAD (-Y4A- & -Y4B-/SR 2004) AND OAKDALE ROAD (-Y3-/SR 2042) UTILIZE CHANGEABLE MESSAGE SIGNS & MESSAGES AS STATED IN PHASE II, STEP 1.

WORK IN A CONTINUOUS MANNER TO COMPLETE THE WORK IN PHASE III, STEP 2B1 THROUGH STEP 2B2 FROM 8:00 PM FRIDAY TO 5:00 AM MONDAY. REPEAT WEEKEND ROAD CLOSURE, AS DIRECTED BY THE ENGINEER, TO COMPLETE PHASE III, STEP 2B1 THROUGH STEP 2B2. (SEE INTERMEDIATE CONTRACT TIME AND SPECIAL PROVISIONS).

B. CLOSE MT. HOLLY-HUNTERSVILLE ROAD (-Y4A- & -Y4B-/SR 2004) AND OAKDALE ROAD (-Y3-/SR 2042):

1. USING ROADWAY STANDARD DRAWING NO. 1101.03, SHEET 1 OF 9, AND SHEET TMP-13 CLOSE MT. HOLLY-HUNTERSVILLE ROAD (-Y4A- & -Y4B-/SR 2004) AND OAKDALE ROAD (-Y3-/SR 2042) TO TRAFFIC.

NOTE: MAINTAIN ACCESS TO ALL HOUSES AS APPROVED BY THE ENGINEER.

NOTE: AS APPROVED BY THE ENGINEER MAY CONDUCT CONSTRUCTION OPERATIONS ON PROPOSED OAKDALE ROAD (-Y3-/SR 2042) AS STATED IN PHASE III, STEP 1B2.

2. USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 1 OF 15, AS REQUIRED:

- CONSTRUCT REMAINDER OF PROPOSED CURB & GUTTER, CONCRETE APRONS & MONOLITHIC CONCRETE ISLANDS FOR ROUNDABOUT (-RAB1-) (SEE CONSTRUCTION PLANS AND TMP-14).
- PLACE TEMPORARY PAVEMENT MARKINGS/MARKERS FOR THE FINAL TRAFFIC PATTERN ON PROPOSED MT. HOLLY-HUNTERSVILLE ROAD (-Y4A- & -Y4B-/SR 2004), OPEN TO FINAL TRAFFIC PATTERN AND OPEN OAKDALE ROAD (SR 2042/-Y3-) TO TRAFFIC (SEE FINAL PAVEMENT MARKING PLANS AND SHEET TMP-14).

STEP 3: - USING ROADWAY STANDARD DRAWING 1101.02 SHEETS 4 & 8 OF 15, COMPLETE CONSTRUCTION OF THE FOLLOWING BEGUN IN PHASE 1, STEP 2 (SEE CONSTRUCTION PLANS AND SIGNING PLANS):

- PROPOSED RAMPS [-RPA-, -RPB-, -RPC- & -RPD- (INCLUDING GRADING, DRAINAGE AND CURB & GUTTER)], UP TO, AND INCLUDING THE FINAL LAYER OF SURFACE COURSE (SEE SHEETS TMP-5, TMP-7 & TMP-8).
- PROPOSED SIGNING STRUCTURES & SIGNS AND INSTALL NEW SIGNS ON EXISTING STRUCTURES ON I-485 (L).

NOTE: KEEP PROPOSED SIGNS COVERED UNTIL INTERCHANGE IS OPEN TO FINAL TRAFFIC PATTERN.

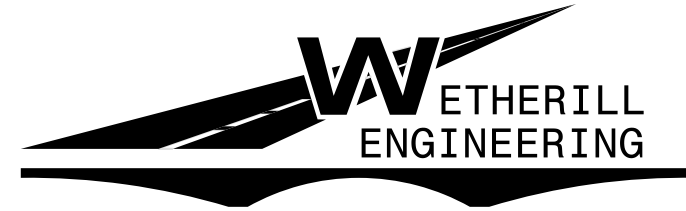
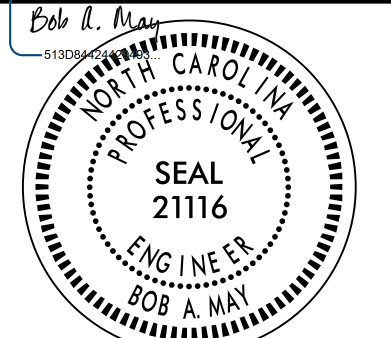

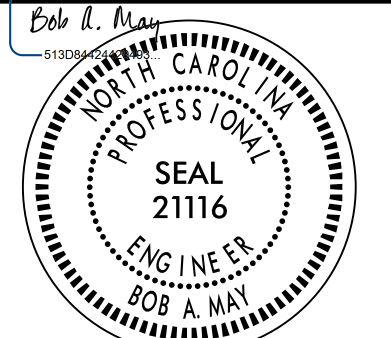
PHASE IV

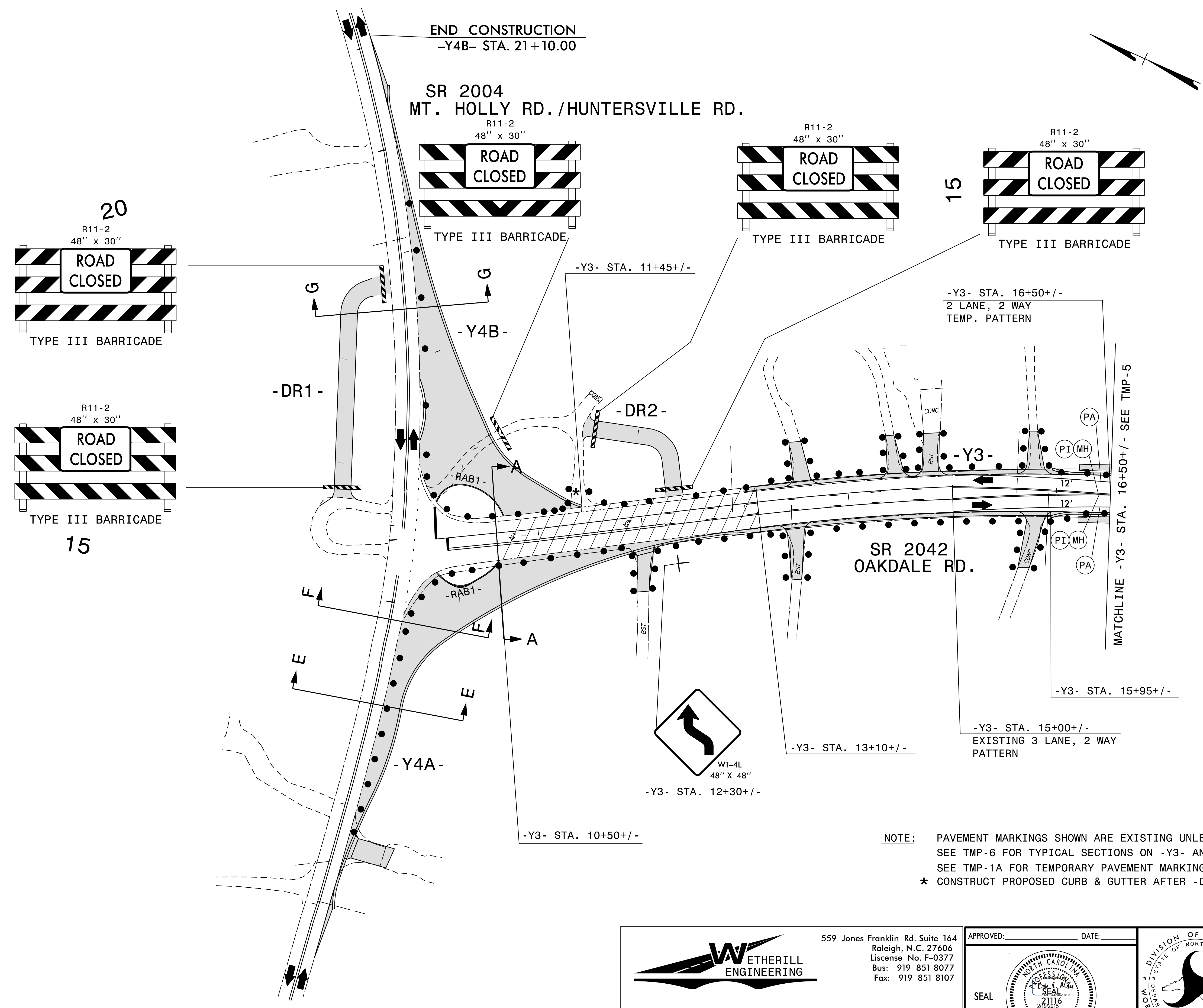
STEP 1: - USING ROADWAY STANDARD DRAWING 1101.02 SHEETS 1, 2, 4 & 8 OF 15, AS REQUIRED:

- PAVE THE FINAL LAYER OF SURFACE COURSE ON PROPOSED OAKDALE ROAD (-Y3-/SR 2042) AND PROPOSED MT. HOLLY-HUNTERSVILLE ROAD (-Y4A- & -Y4B-/SR 2004) (SEE CONSTRUCTION PLANS).
- PLACE FINAL PAVEMENT MARKINGS, INSTALL FINAL PAVEMENT MARKERS ON PROPOSED OAKDALE ROAD (-Y3-/SR 2042), PROPOSED MT. HOLLY-HUNTERSVILLE ROAD (-Y4A- & -Y4B-/SR 2004) AND PROPOSED RAMPS [-RPA-, -RPB-, -RPC- & -RPD- (INCLUDING ALL EXISTING ACCELERATION/DECELERATION LANES)] (SEE FINAL PAVEMENT MARKING PLANS).
- UNCOVER PROPOSED SIGNAGE ON I-485 (-L-) & OAKDALE ROAD (-Y3-/SR 2042) AND OPEN ENTIRE PROJECT TO FINAL TRAFFIC PATTERN (SEE CONSTRUCTION PLANS AND FINAL PAVEMENT MARKING PLANS).

STEP 2: - REMOVE ALL TEMPORARY TRAFFIC CONTROL DEVICES.

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|   | SEAL<br>                        |   |   |



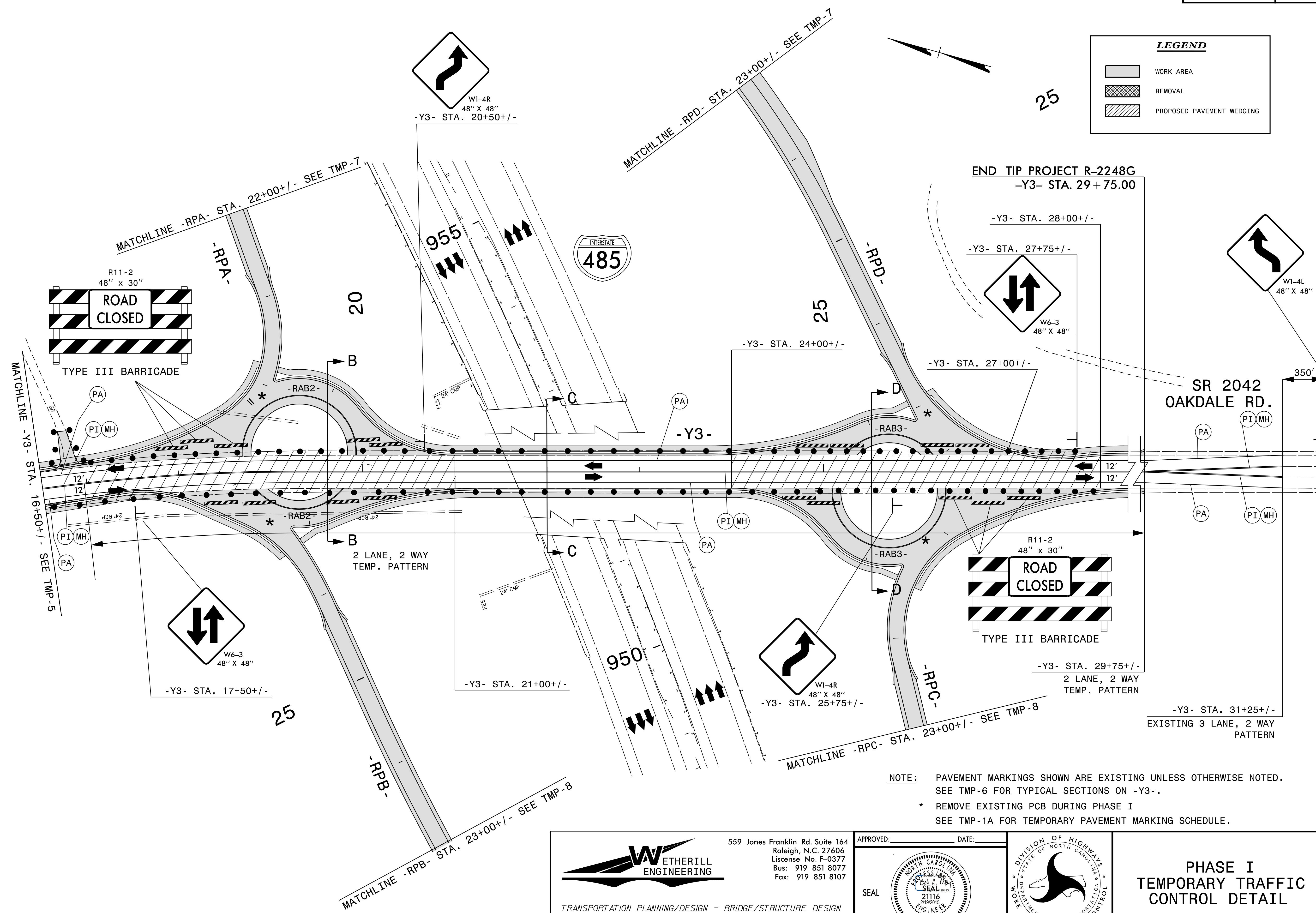
NOTE: PAVEMENT MARKINGS SHOWN ARE EXISTING UNLESS OTHERWISE NOTED.  
 SEE TMP-6 FOR TYPICAL SECTIONS ON -Y3- AND -Y4A-/-Y4B-.  
 SEE TMP-1A FOR TEMPORARY PAVEMENT MARKING SCHEDULE.  
 \* CONSTRUCT PROPOSED CURB & GUTTER AFTER -DR2- IS OPEN TO TRAFFIC.

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|   |                             |  |   |

**LEGEND**

- WORK AREA
- REMOVAL
- PROPOSED PAVEMENT WEDGING



**NOTE:** PAVEMENT MARKINGS SHOWN ARE EXISTING UNLESS OTHERWISE NOTED. SEE TMP-6 FOR TYPICAL SECTIONS ON -Y3-.

\* REMOVE EXISTING PCB DURING PHASE I  
SEE TMP-1A FOR TEMPORARY PAVEMENT MARKING SCHEDULE.

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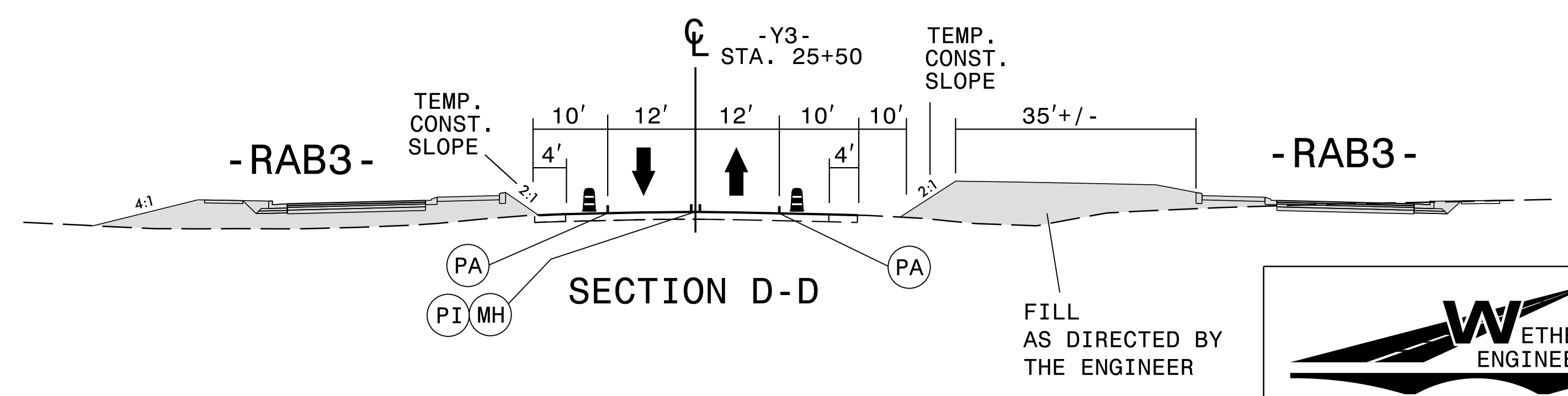
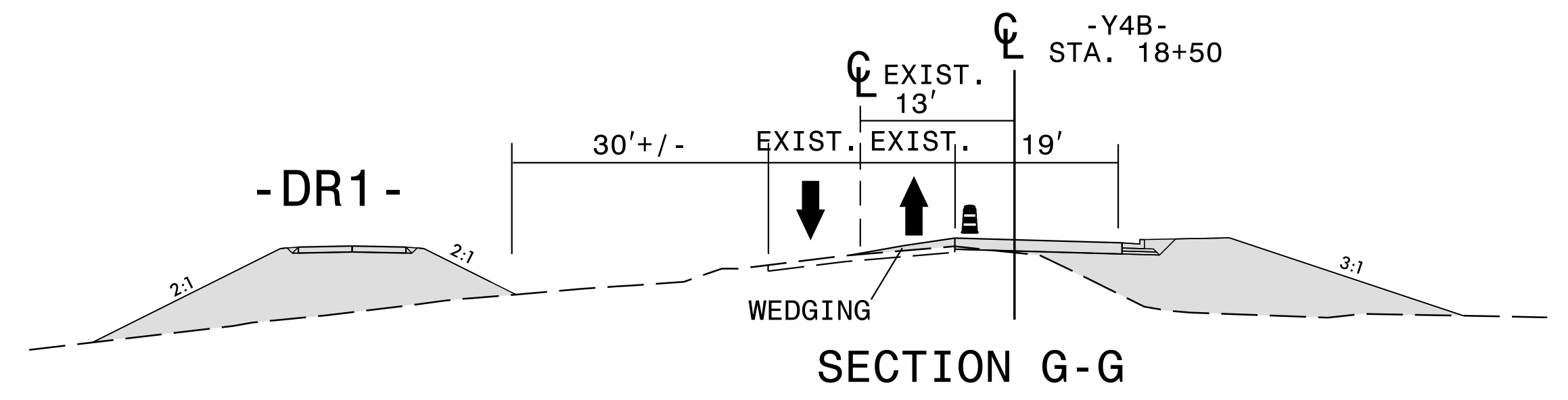
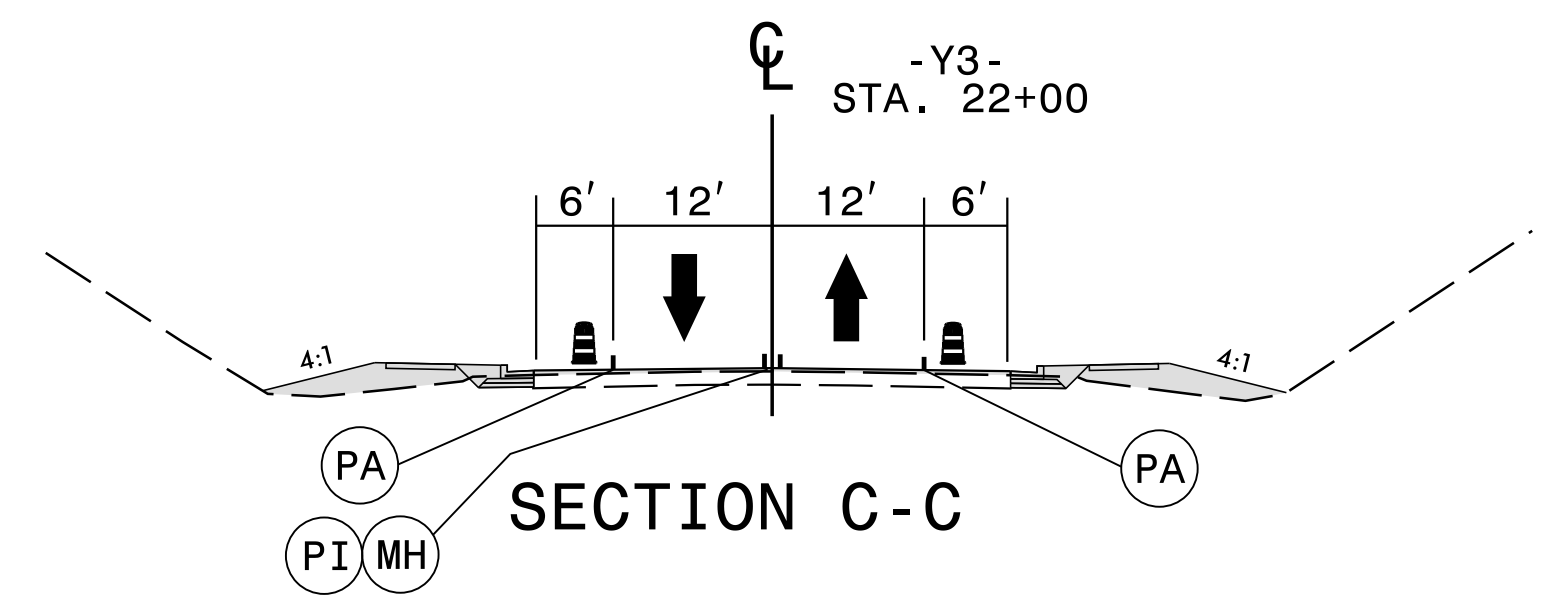
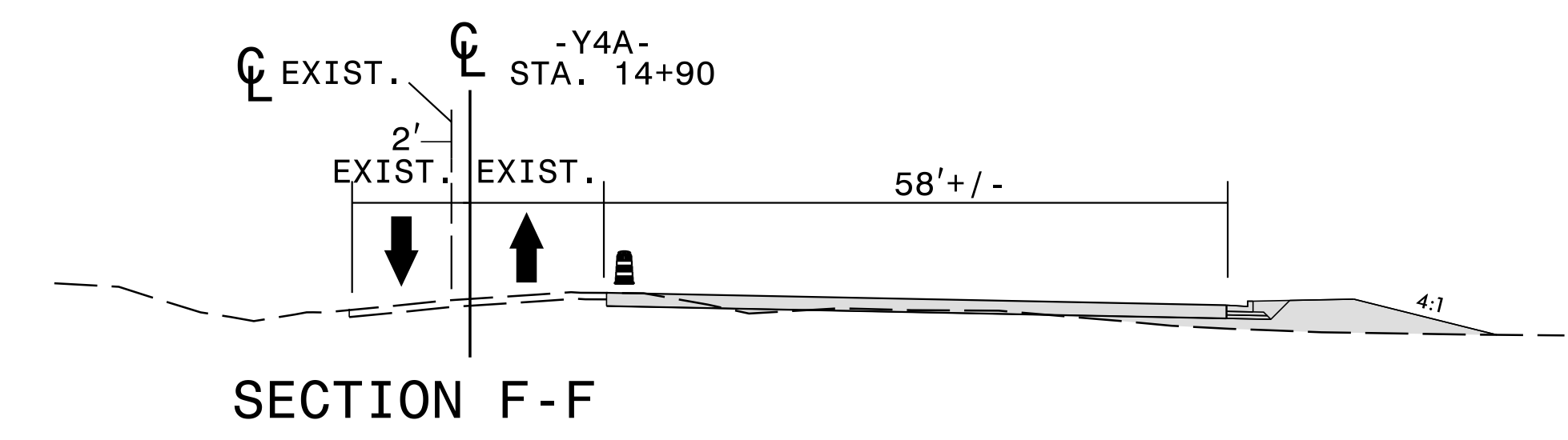
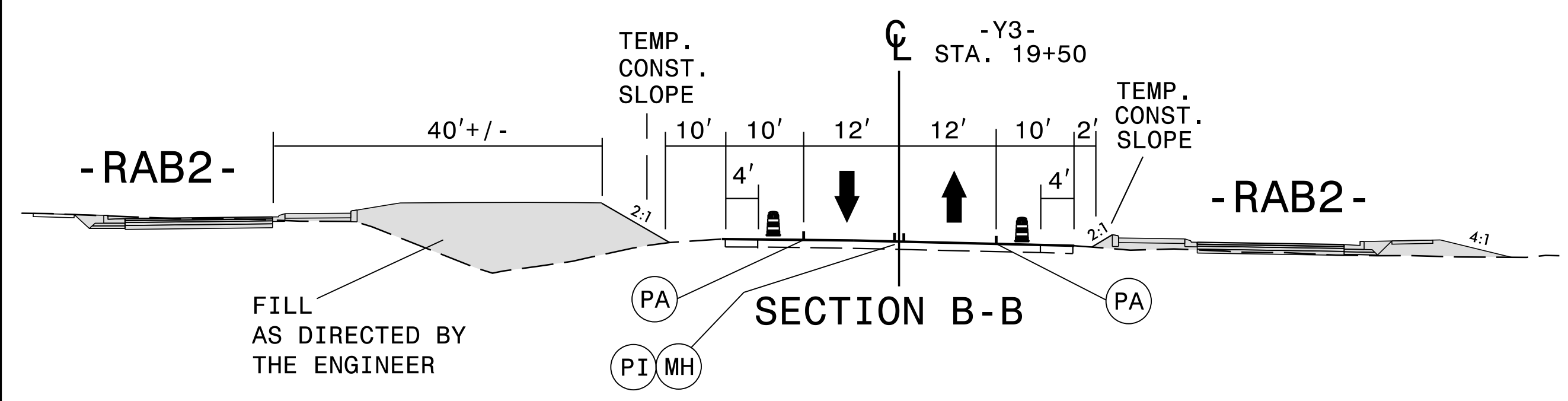
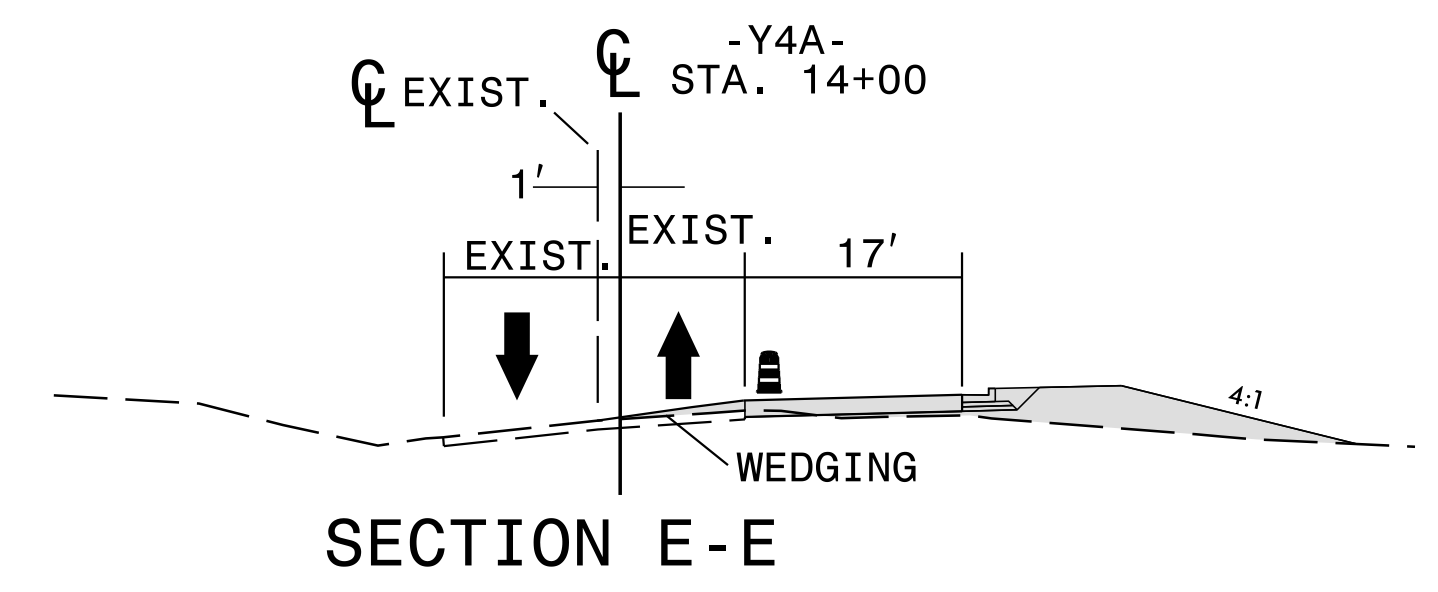
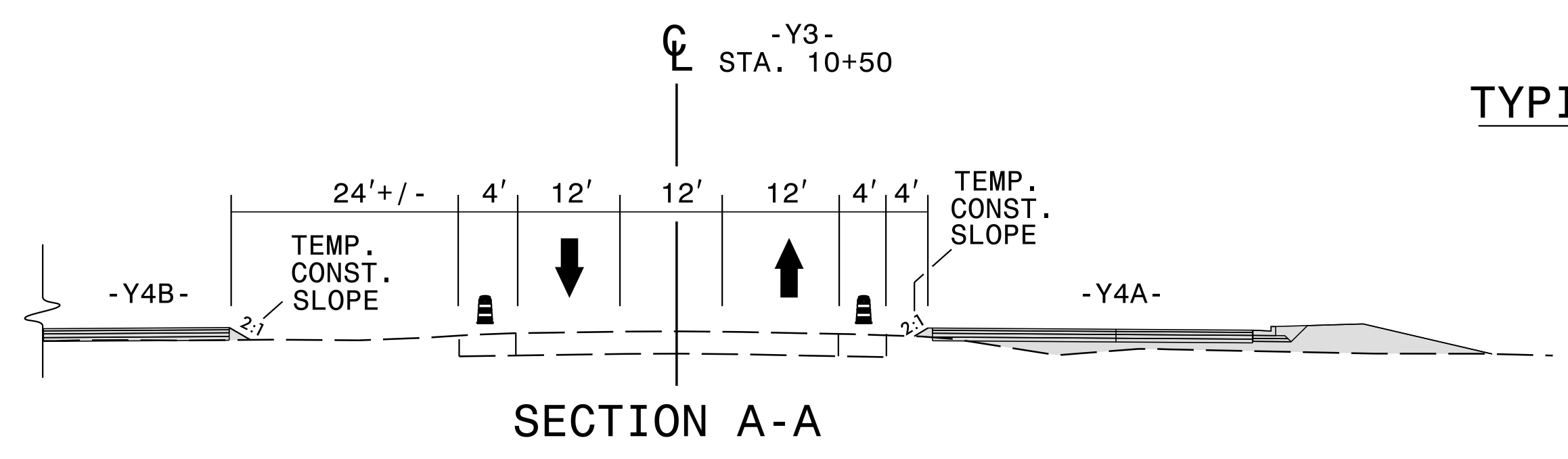
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 CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

SEAL

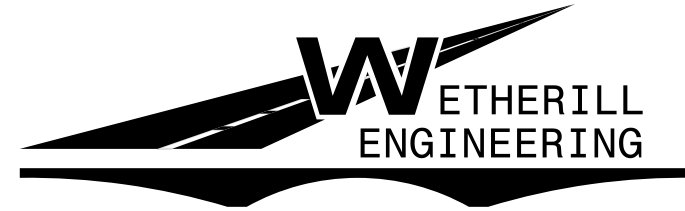
**PHASE I  
 TEMPORARY TRAFFIC  
 CONTROL DETAIL**

### TYPICAL SECTIONS



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


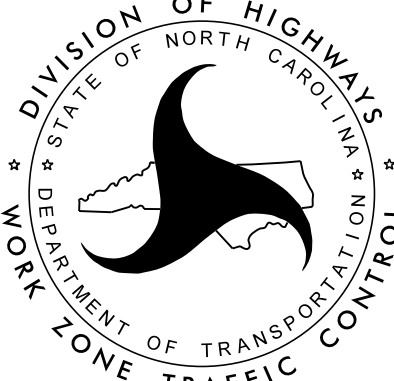
2/3/2015 9:32:46 AM  
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TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN  
 CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

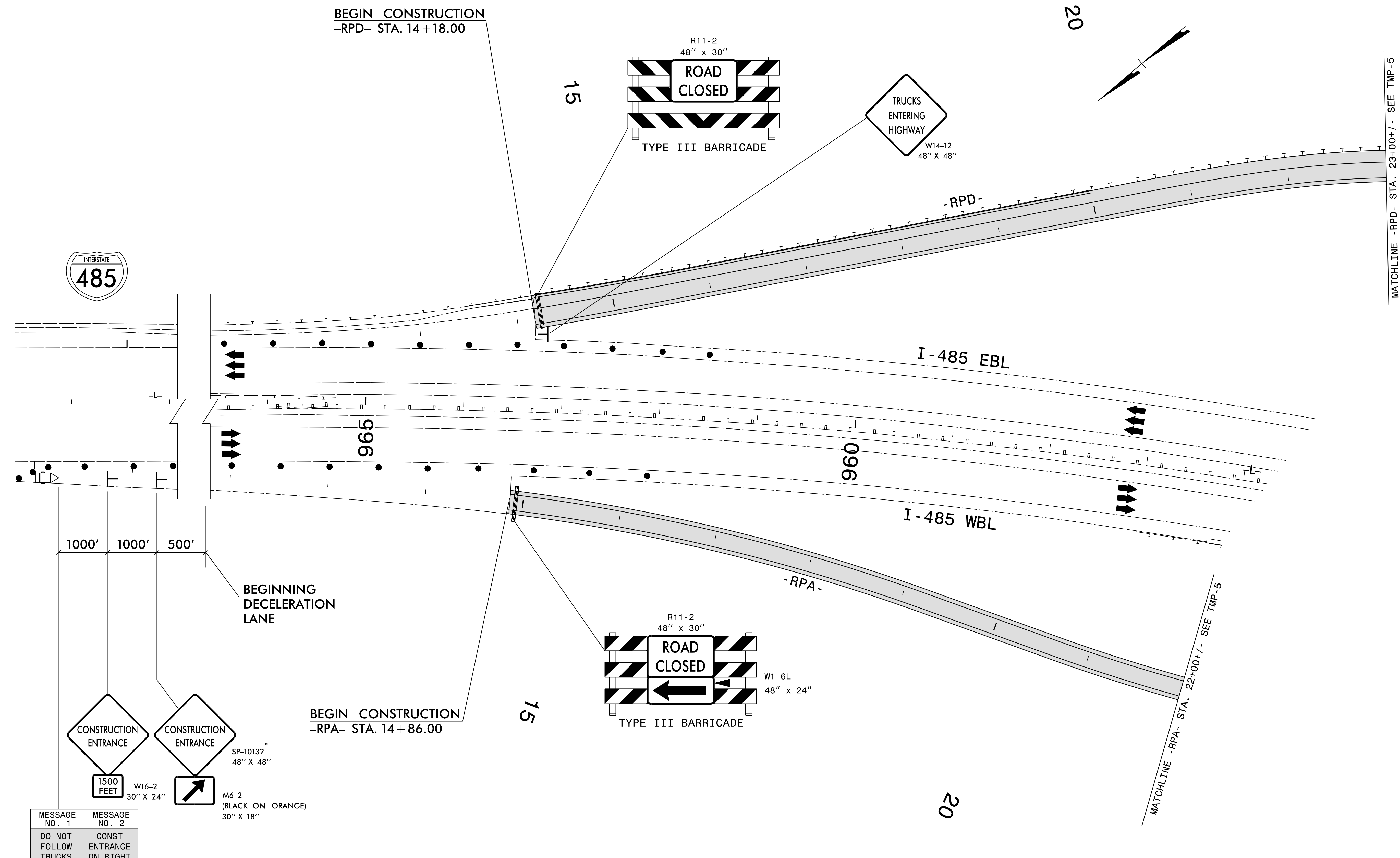
APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

SEAL

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

PHASING  
TYPICAL SECTIONS



|                         |                         |
|-------------------------|-------------------------|
| MESSAGE NO. 1           | MESSAGE NO. 2           |
| DO NOT FOLLOW TRUCKS    | CONST ENTRANCE ON RIGHT |
| CHANGEABLE MESSAGE SIGN |                         |

NOTE: REMOVE EXISTING TUBULAR MARKERS IN EXIT RAMP AREA DURING PHASE I.

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 TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN  
 CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

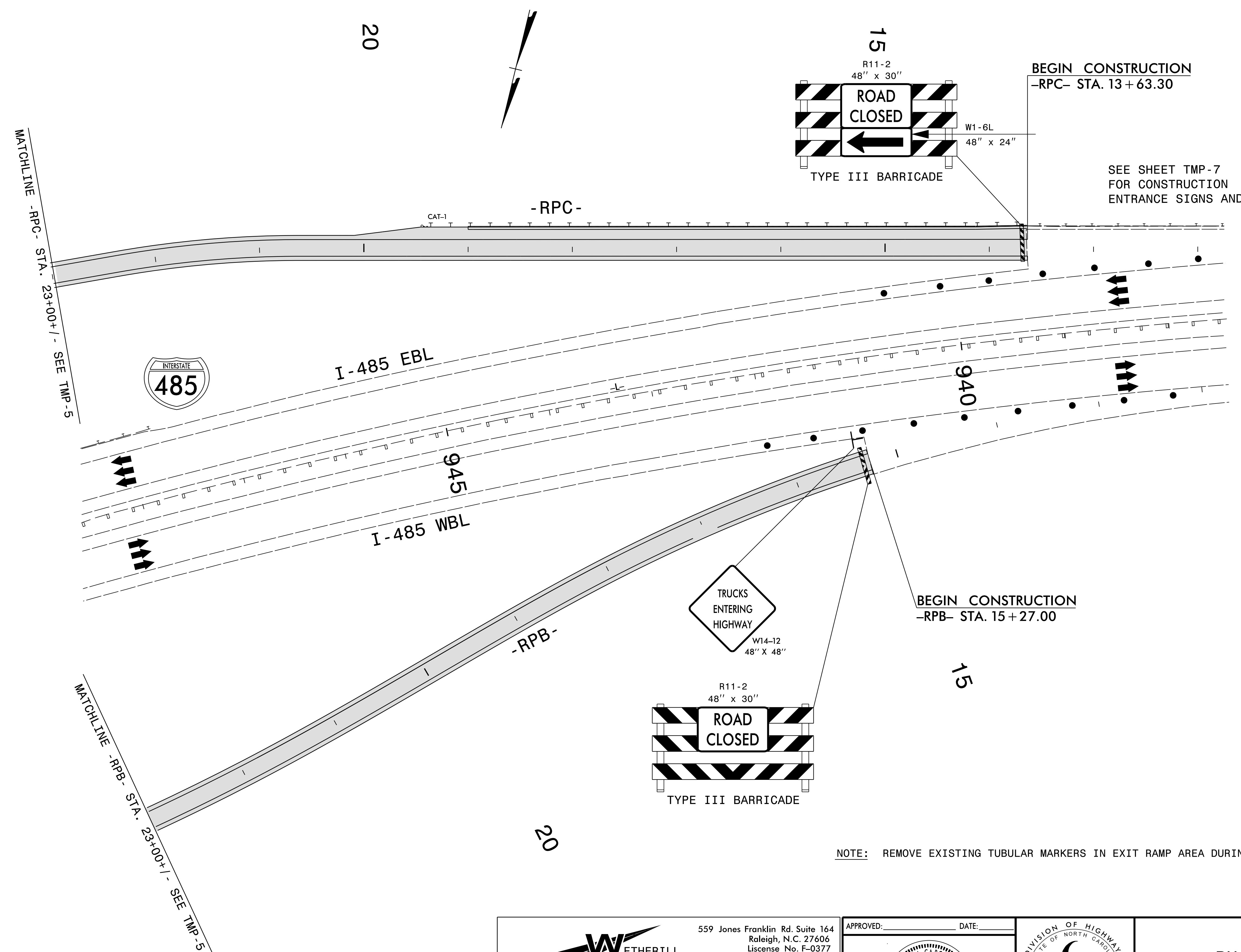
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APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

SEAL

**PHASE I  
 TEMPORARY TRAFFIC  
 CONTROL DETAIL**

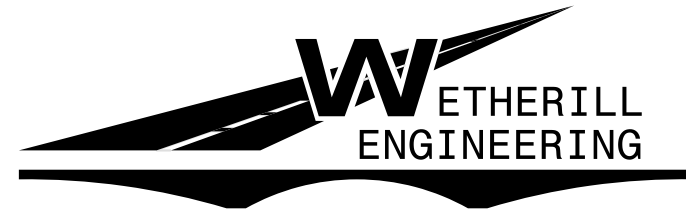
2/3/2015 9:34:08 AM P:\2014\110101R-2248G\TrafficControl\TCP\R2248G.TC.TCP\_PSH-07.dgn



SEE SHEET TMP-7  
FOR CONSTRUCTION  
ENTRANCE SIGNS AND CMS.


NOTE: REMOVE EXISTING TUBULAR MARKERS IN EXIT RAMP AREA DURING PHASE I.

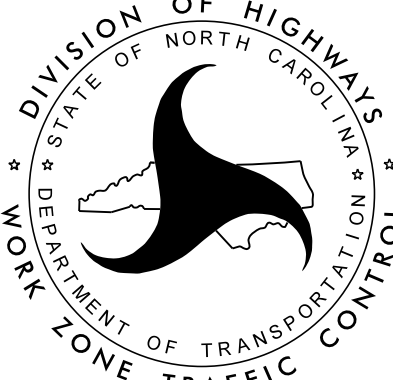
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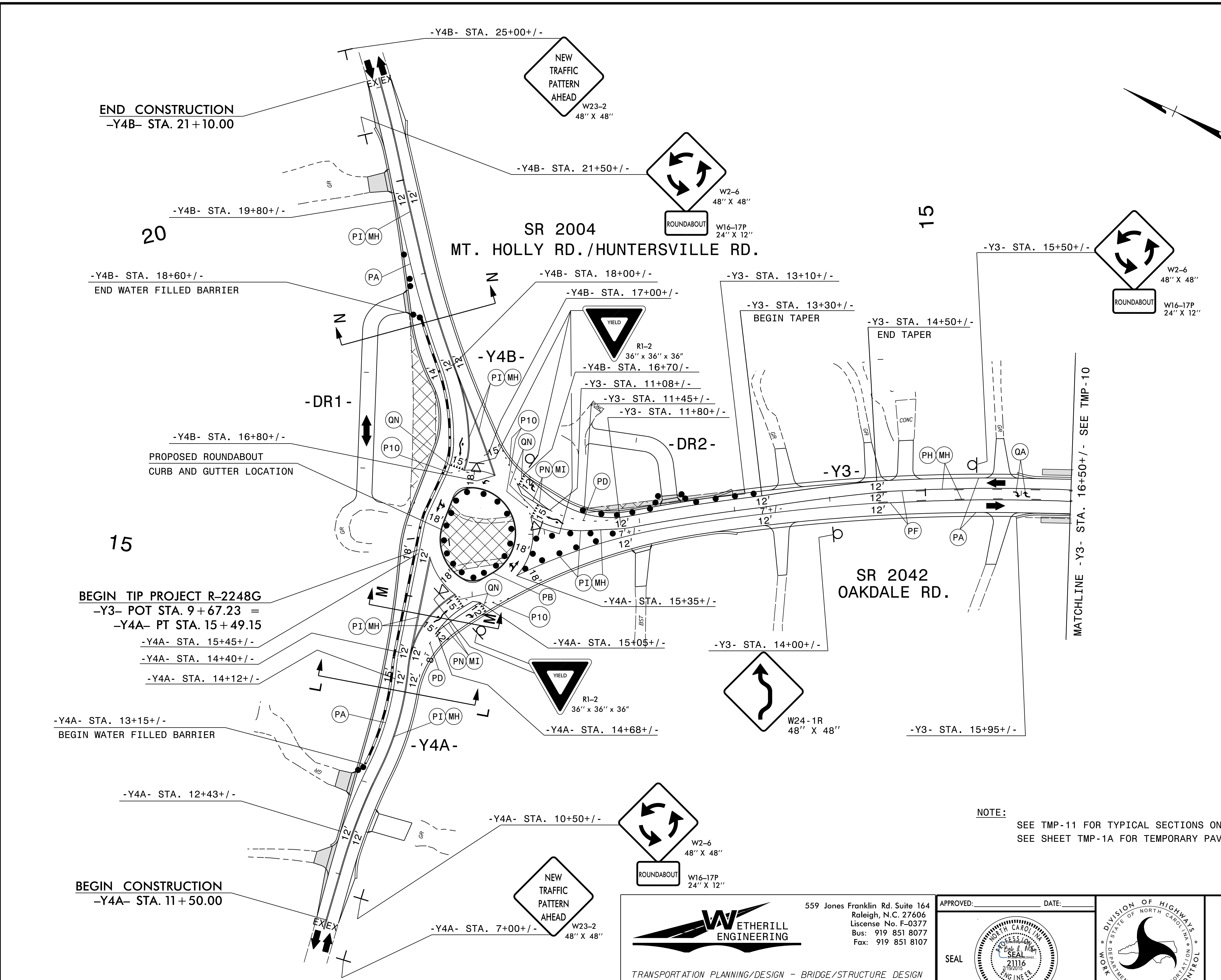
TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN  
 CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_




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

**PHASE I  
TEMPORARY TRAFFIC  
CONTROL DETAIL**



END CONSTRUCTION  
-Y4B- STA. 21+10.00

-Y4B- STA. 19+80+/-  
-Y4B- STA. 18+60+/-  
END WATER FILLED BARRIER

BEGIN TIP PROJECT R-2248G  
-Y3- POT STA. 9+67.23 =  
-Y4A- PT STA. 15+49.15  
-Y4A- STA. 15+45+/-  
-Y4A- STA. 14+40+/-  
-Y4A- STA. 14+12+/-

-Y4A- STA. 13+15+/-  
BEGIN WATER FILLED BARRIER

BEGIN CONSTRUCTION  
-Y4A- STA. 11+50.00

NOTE:  
SEE TMP-11 FOR TYPICAL SECTIONS ON -Y3-, -Y4A-/-Y4B-.  
SEE SHEET TMP-1A FOR TEMPORARY PAVEMENT MARKING SCHEDULE.

2/4/2015 12:50:08 PM  
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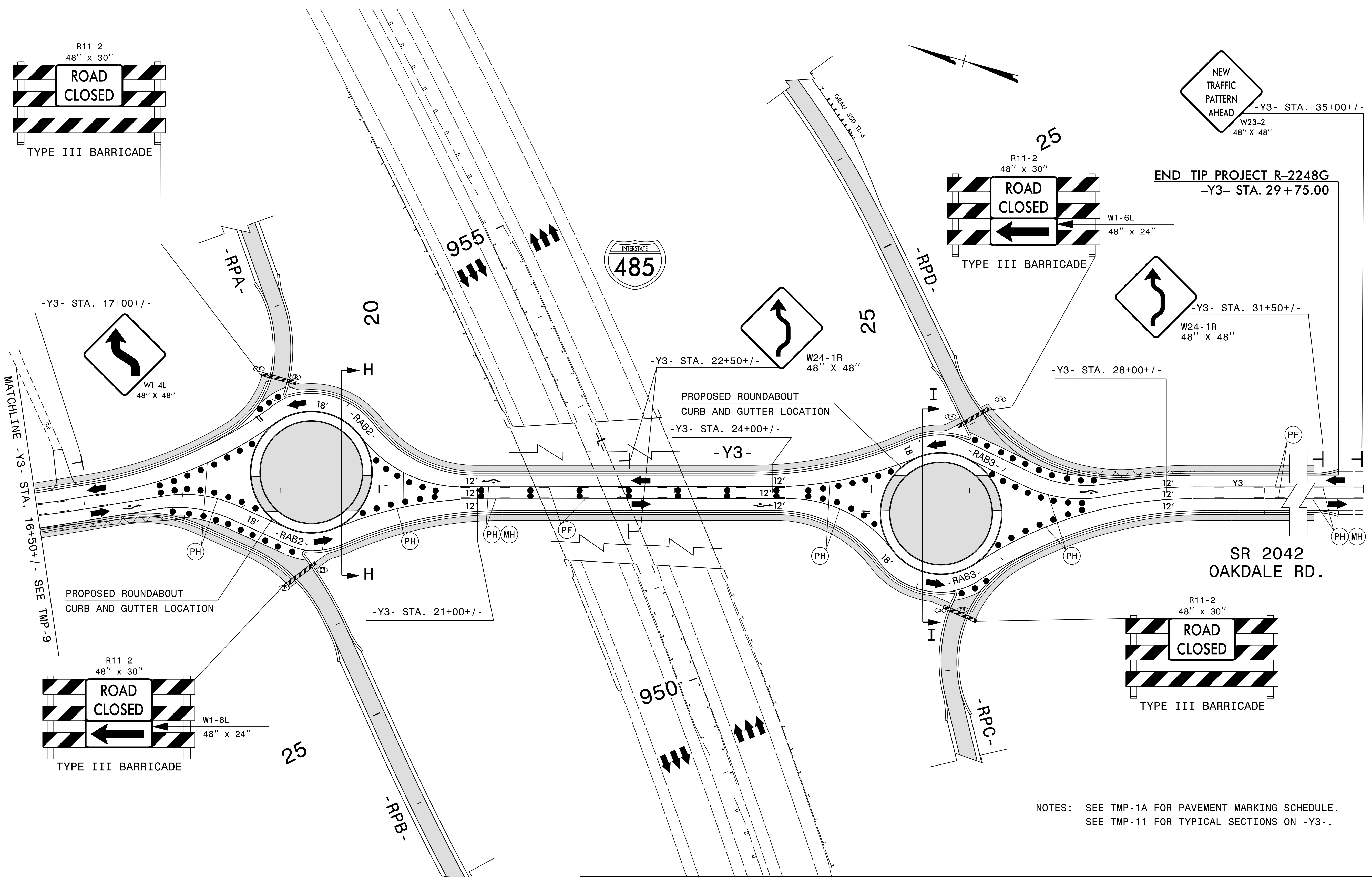
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TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN  
CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

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**PHASE II  
TEMPORARY TRAFFIC  
CONTROL DETAIL**



NOTES: SEE TMP-1A FOR PAVEMENT MARKING SCHEDULE.  
SEE TMP-11 FOR TYPICAL SECTIONS ON -Y3-.

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TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN  
 CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

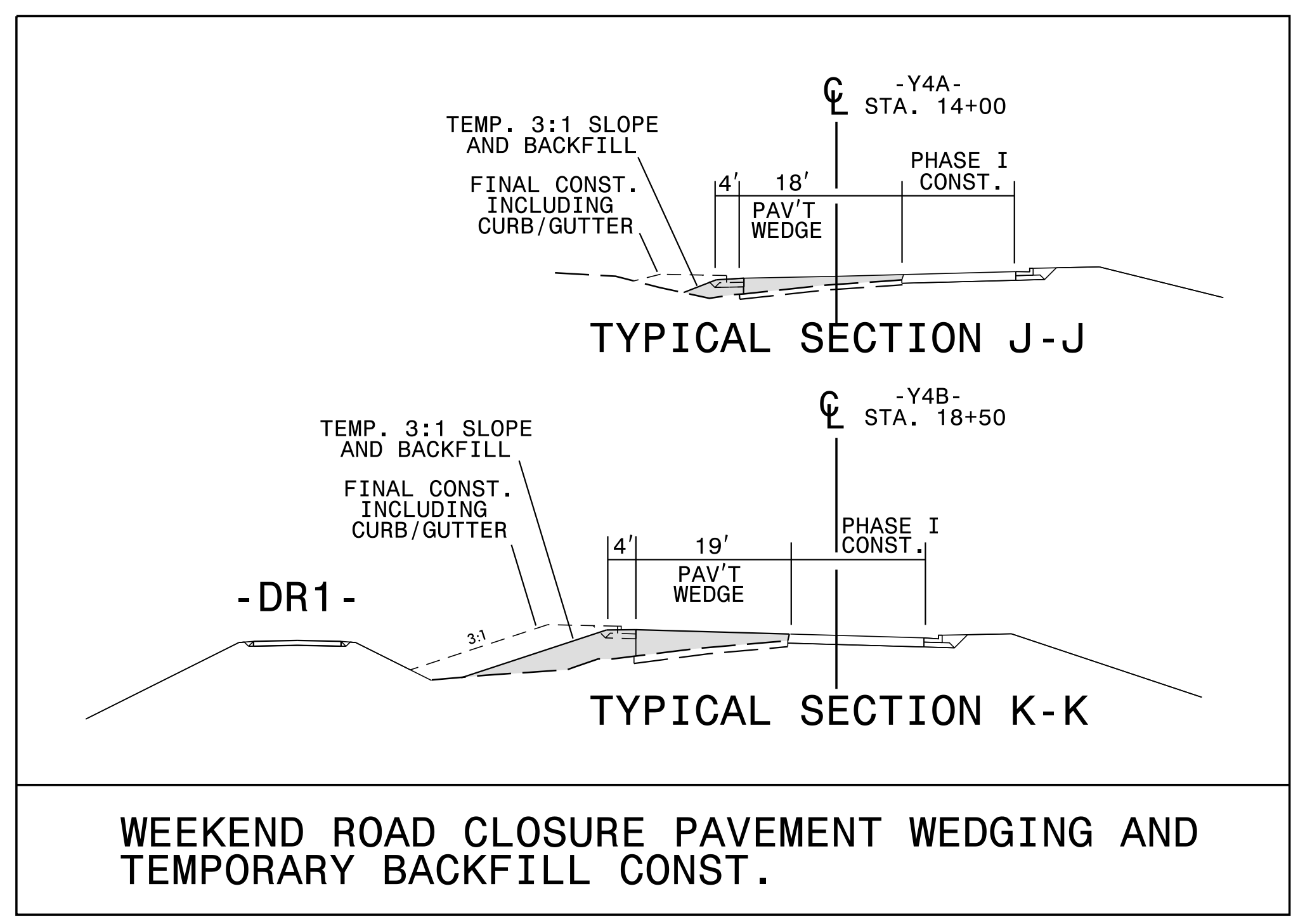
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SEAL

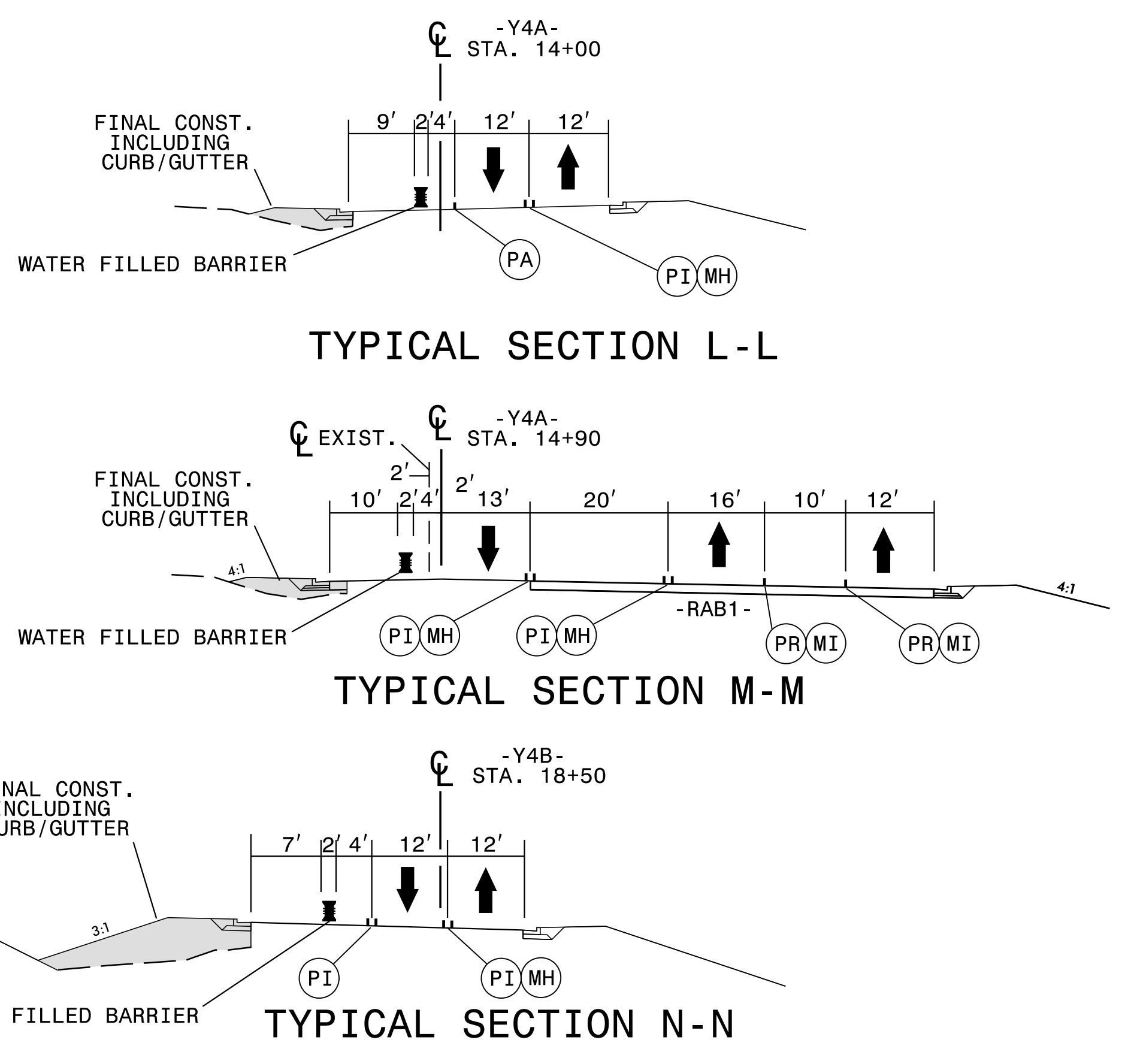
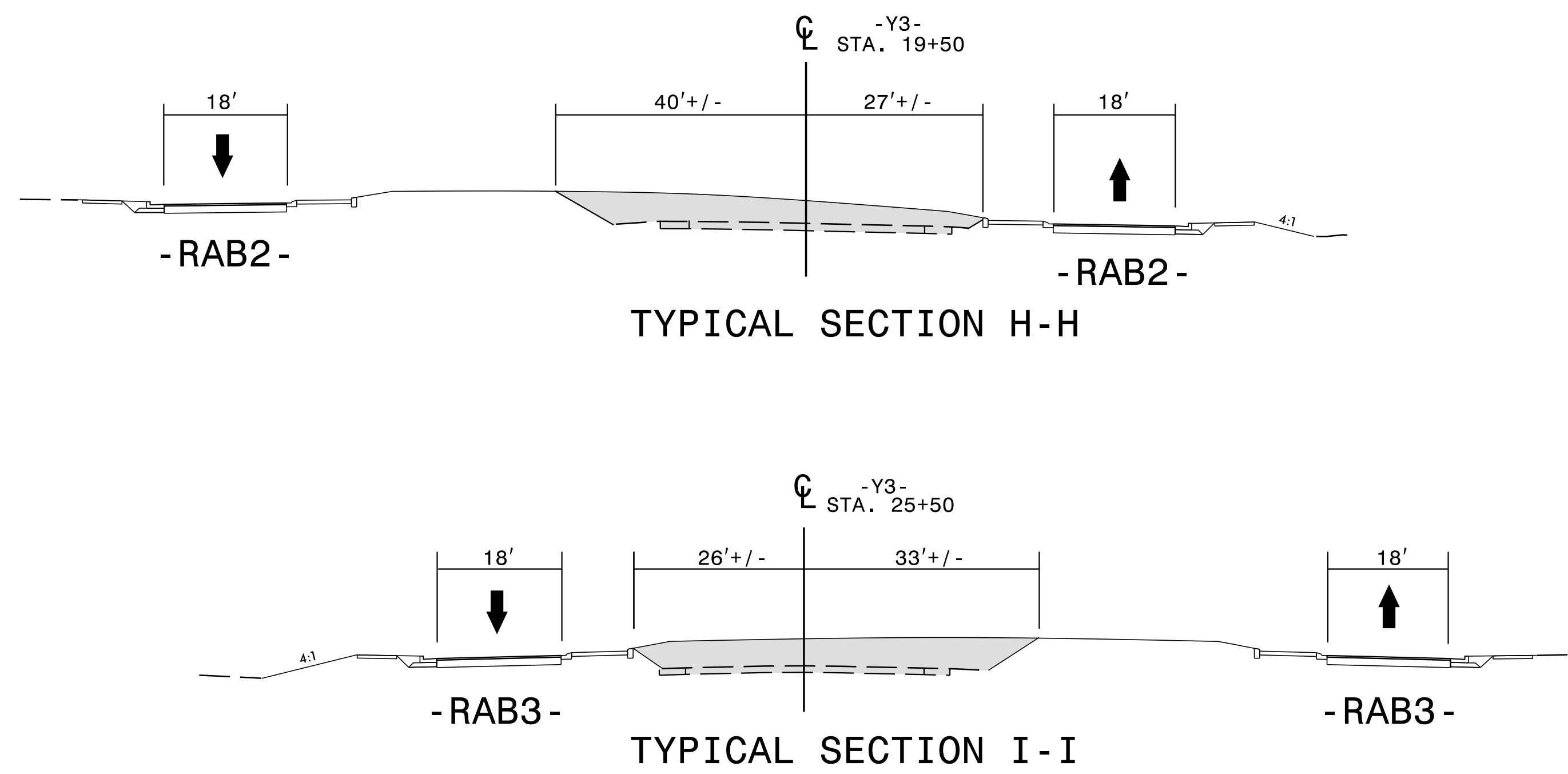
**PHASE II  
 TEMPORARY TRAFFIC  
 CONTROL DETAIL**



**-Y4A- & -Y4B- TYPICAL SECTIONS**



**-Y3- TYPICAL SECTIONS**



2/3/2015 9:44:02 AM P:\2014\410.01R-2248G\TrafficControl\TCP\R2248G\_TC\_TCP\_PSH.ll.dgn

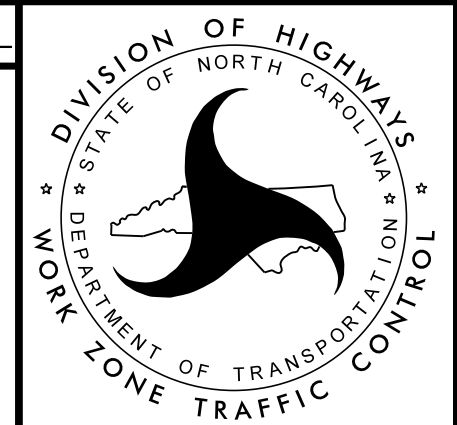
NOTES: SEE TMP-1A FOR PAVEMENT MARKING SCHEDULE.



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TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN  
 CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_



**PHASE II  
 TEMPORARY TRAFFIC  
 CONTROL DETAIL**

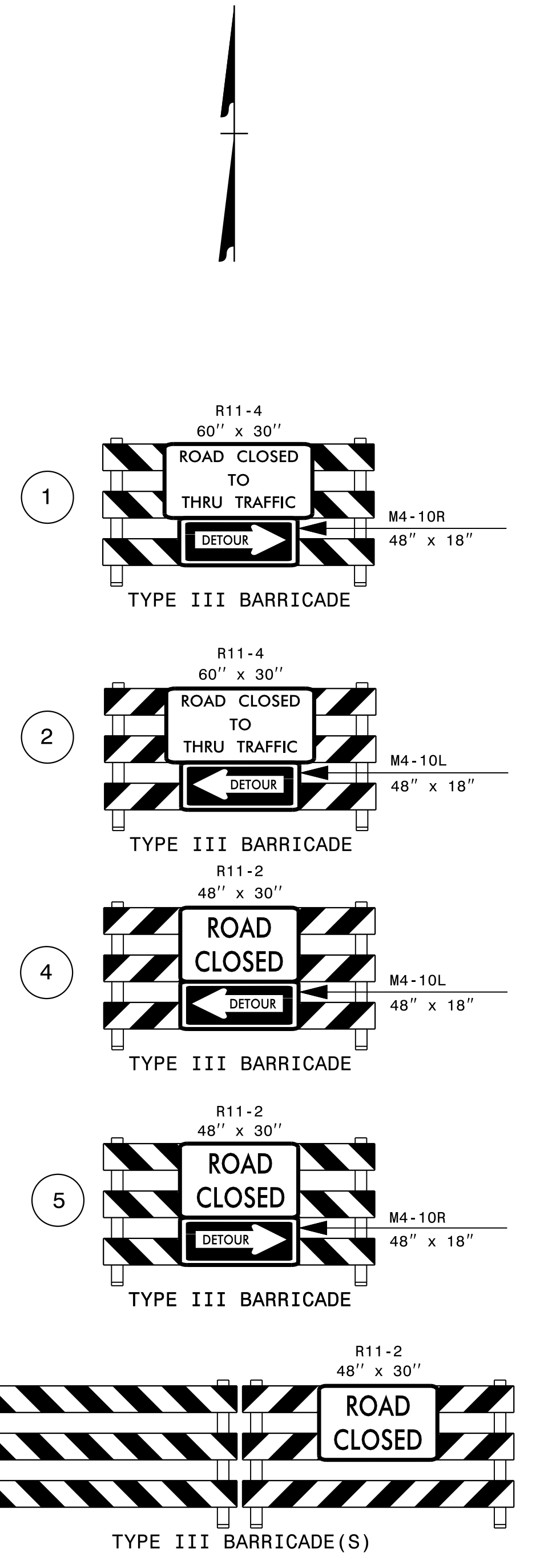
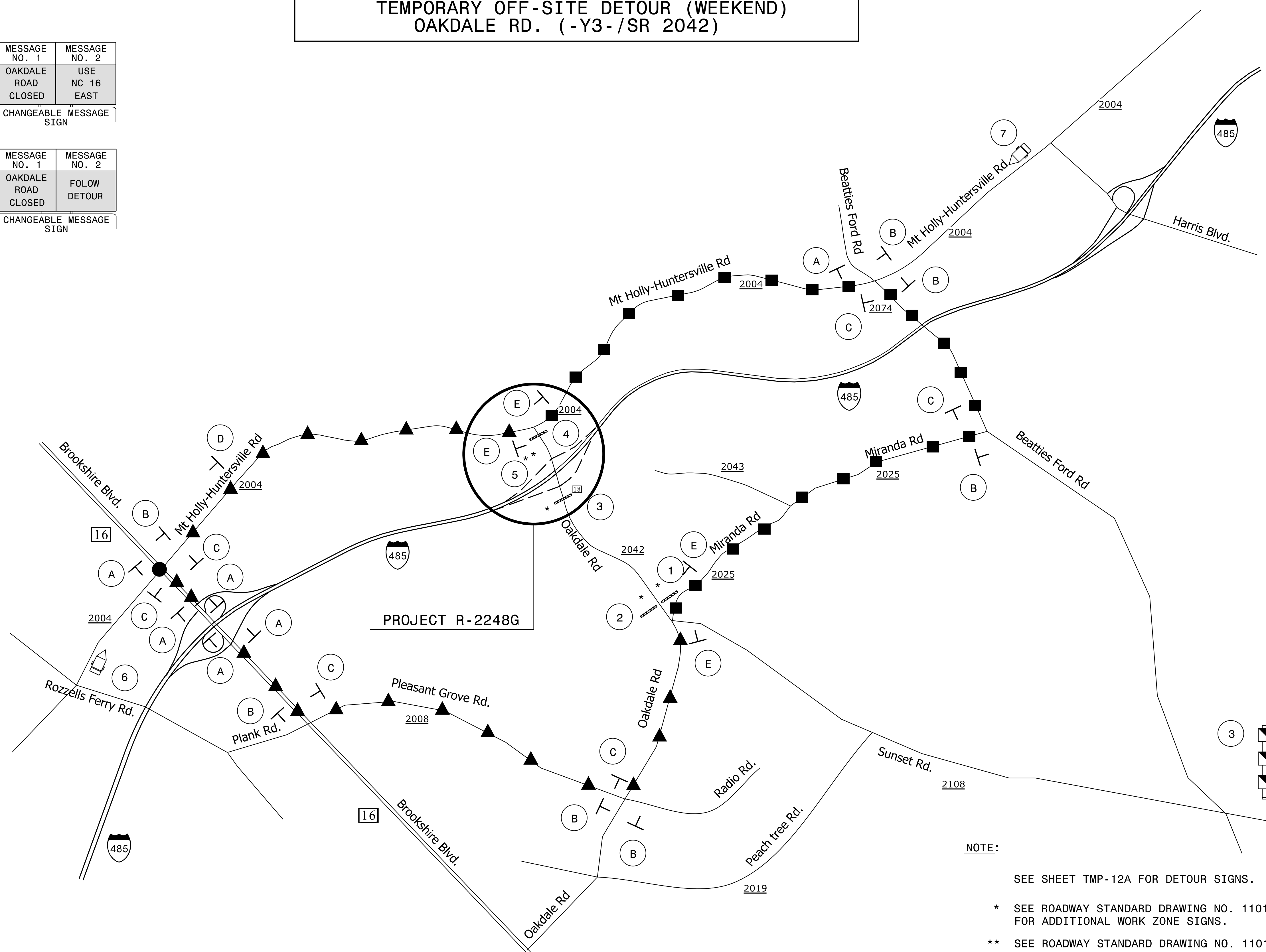
### TEMPORARY OFF-SITE DETOUR (WEEKEND) OAKDALE RD. (-Y3-/SR 2042)

|   |                     |                |
|---|---------------------|----------------|
| 6 | MESSAGE NO. 1       | MESSAGE NO. 2  |
|   | OAKDALE ROAD CLOSED | USE NC 16 EAST |

CHANGEABLE MESSAGE SIGN

|   |                     |               |
|---|---------------------|---------------|
| 7 | MESSAGE NO. 1       | MESSAGE NO. 2 |
|   | OAKDALE ROAD CLOSED | FOLLOW DETOUR |

CHANGEABLE MESSAGE SIGN

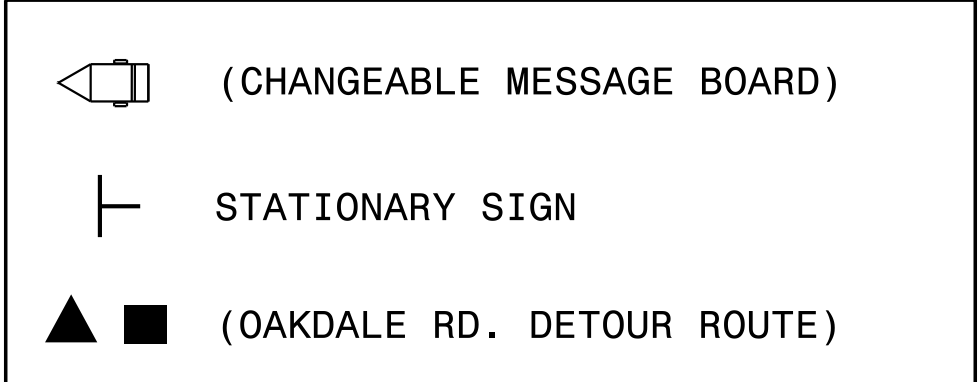


**NOTE:**

SEE SHEET TMP-12A FOR DETOUR SIGNS.

\* SEE ROADWAY STANDARD DRAWING NO. 1101.03, SHEET 1 OF 9 FOR ADDITIONAL WORK ZONE SIGNS.

\*\* SEE ROADWAY STANDARD DRAWING NO. 1101.03, SHEET 2 OF 9 FOR ADDITIONAL WORK ZONE SIGNS.



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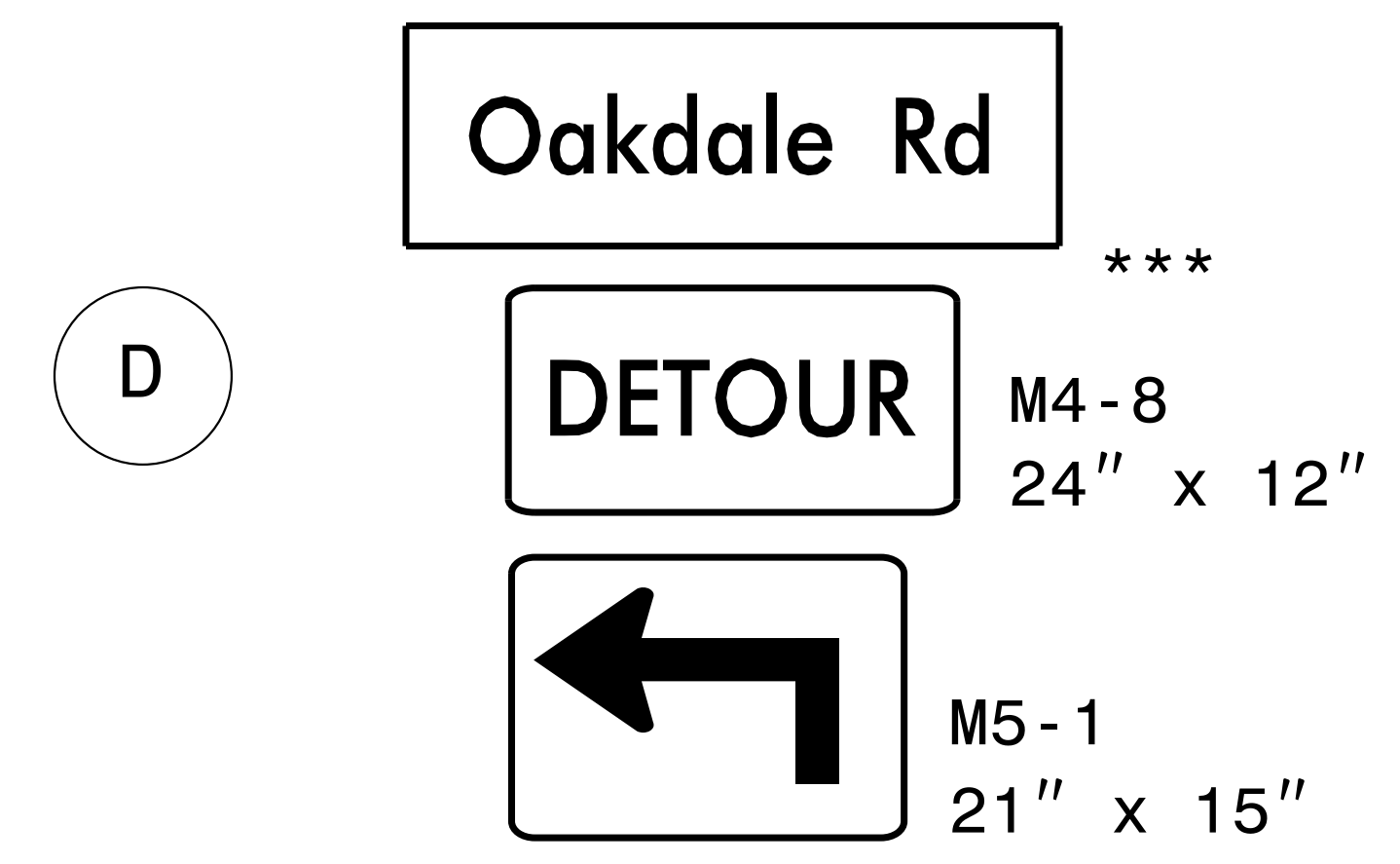
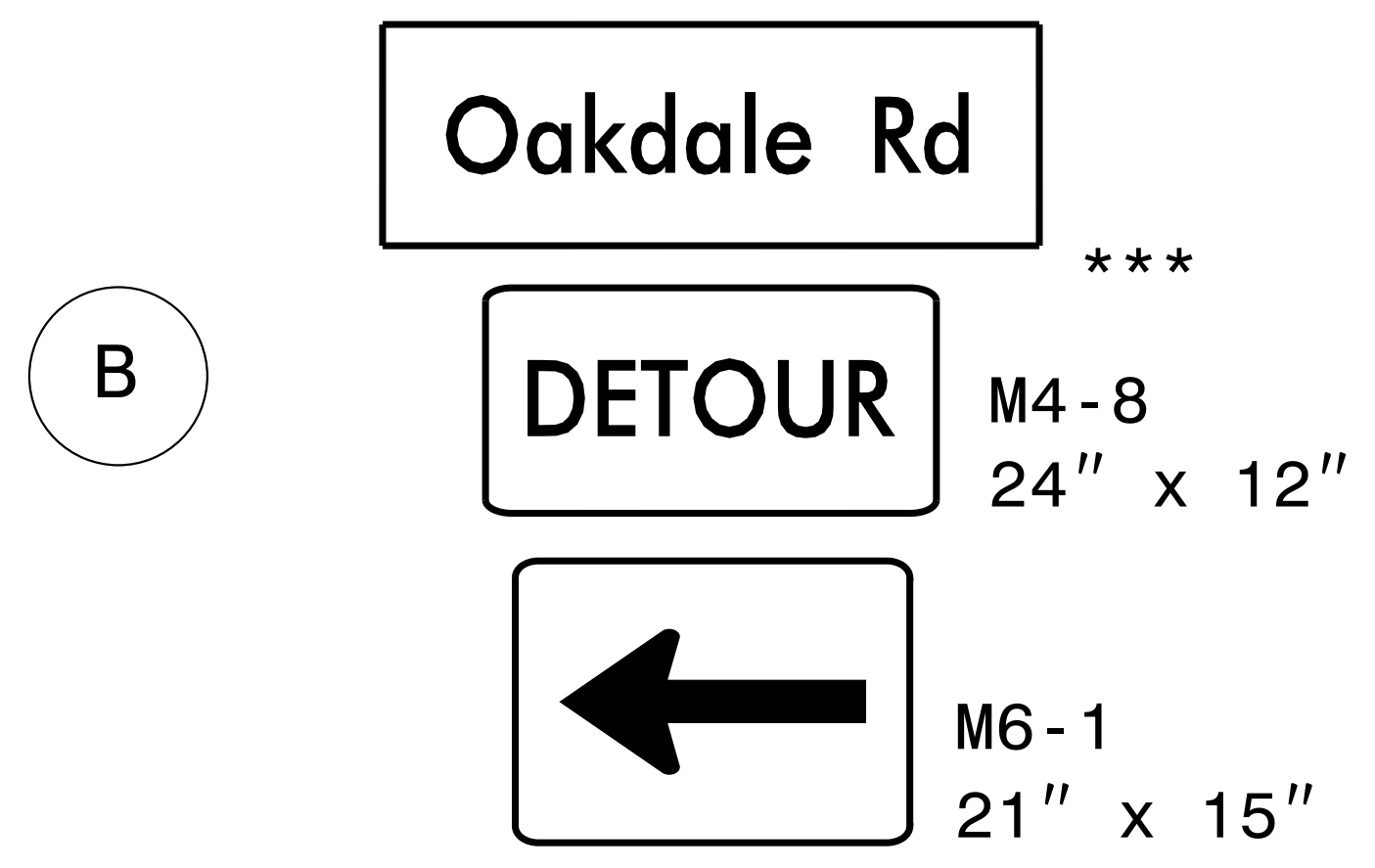
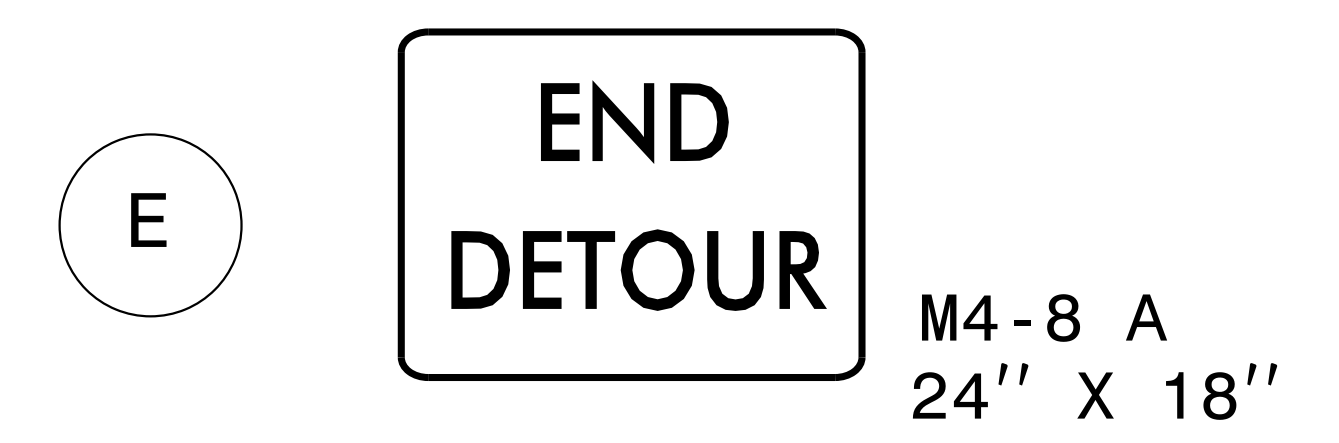
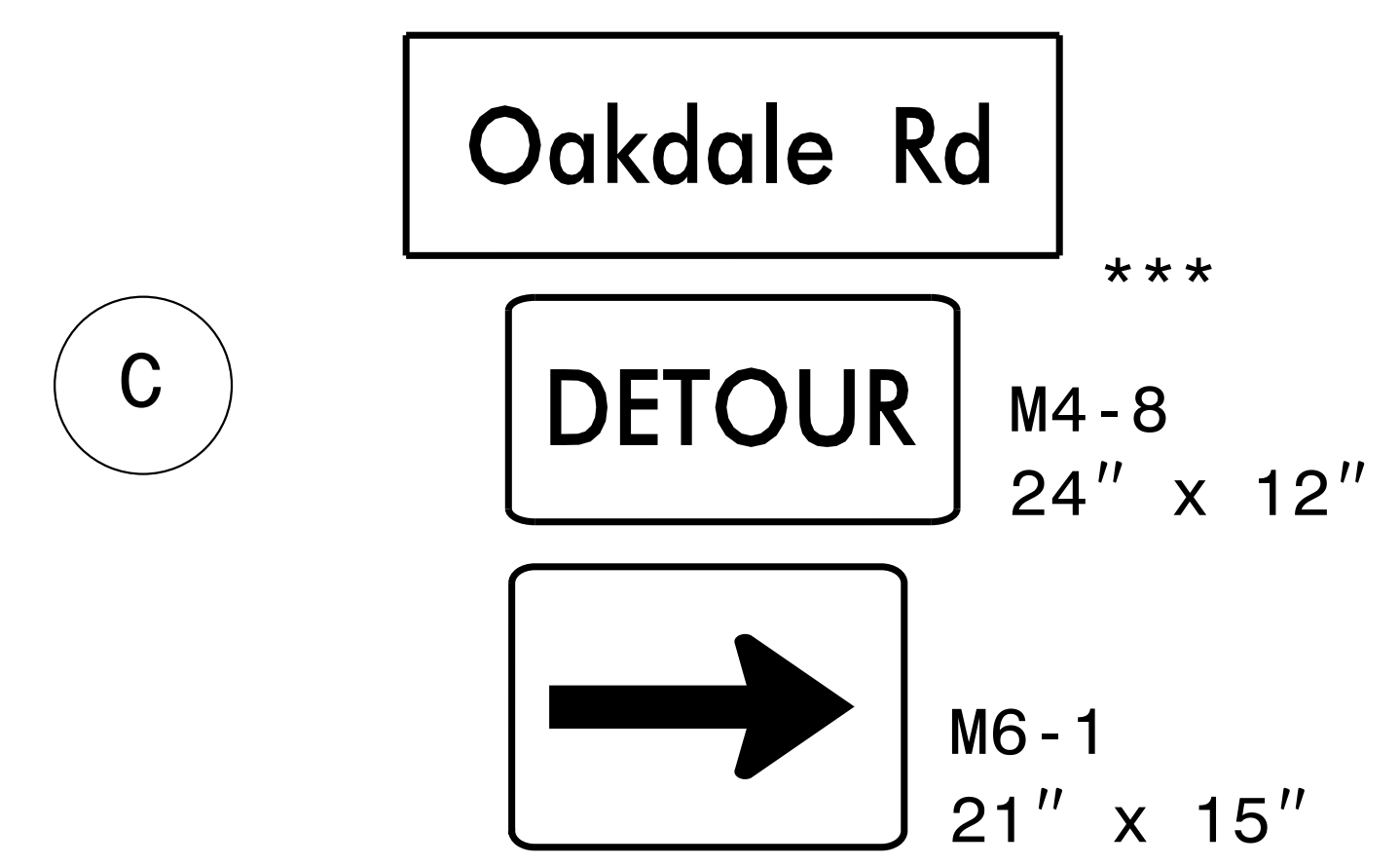
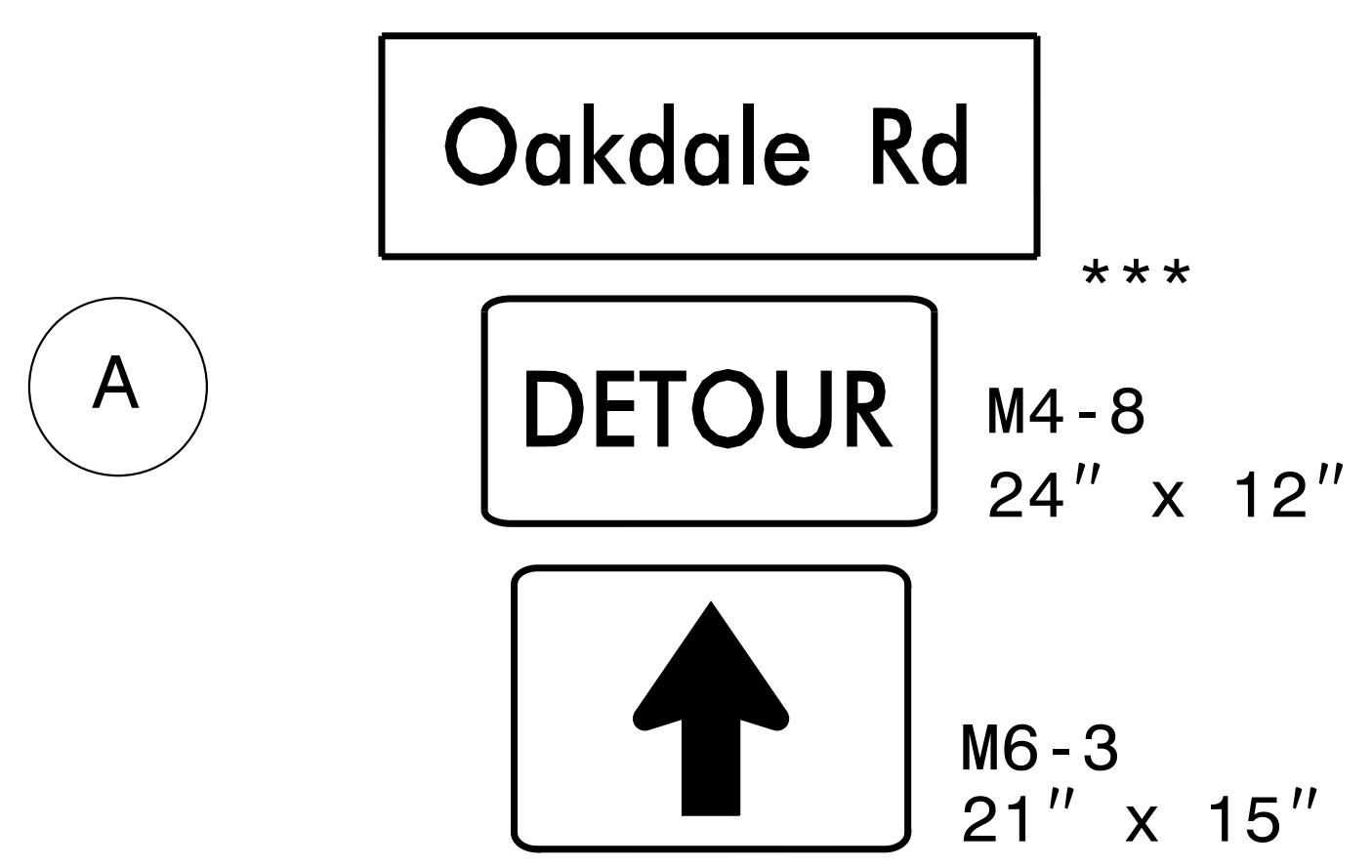
TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN  
CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

SEAL

## OFF-SITE DETOUR OAKDALE ROAD

2/3/2015 9:47:24 AM  
 P:\2014\110101R-2248G\TrafficControl\TCP\R2248G.TC.TCP\_PSH-12.dgn



NOTE:  
\*\*\* SEE SHEET TMP-2 FOR SIGN DESIGN

2/3/2015 9:48:34 AM  
 P:\2014\110.01R-2248G\TrafficControl\TCP\R2248G\_TC\_TCP\_PSH12A.dgn

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TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN  
 CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

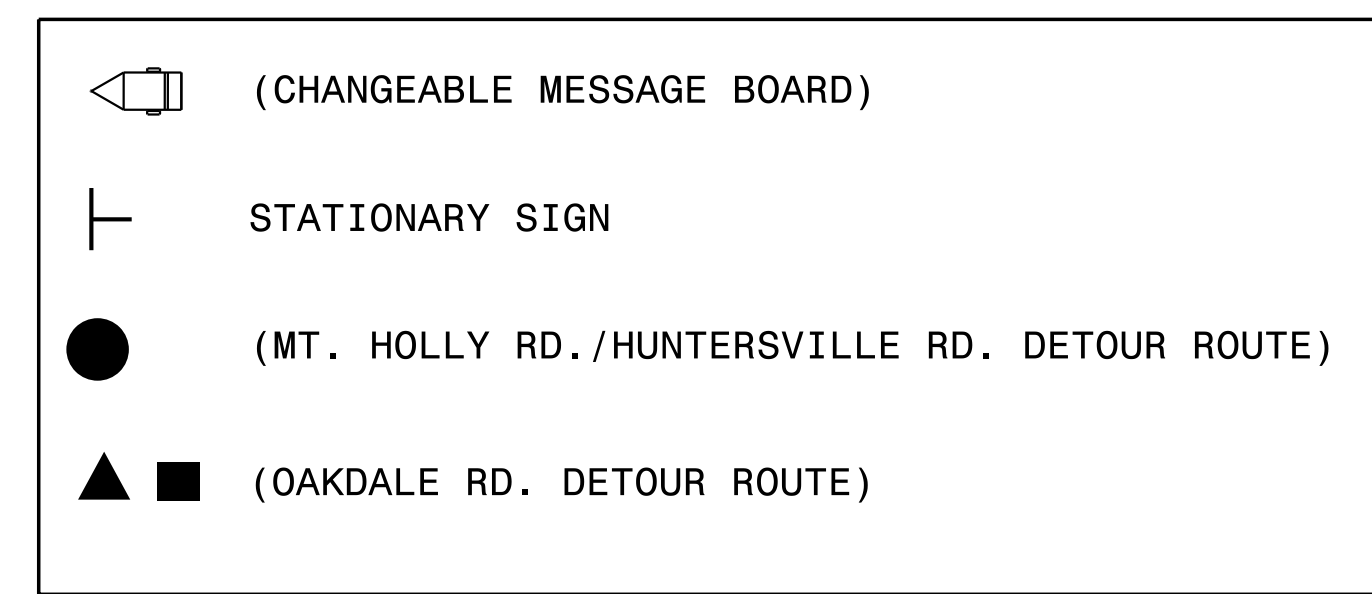
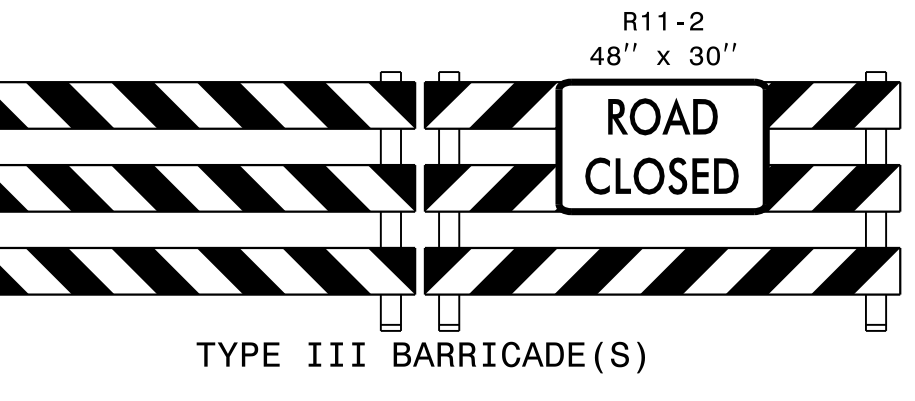
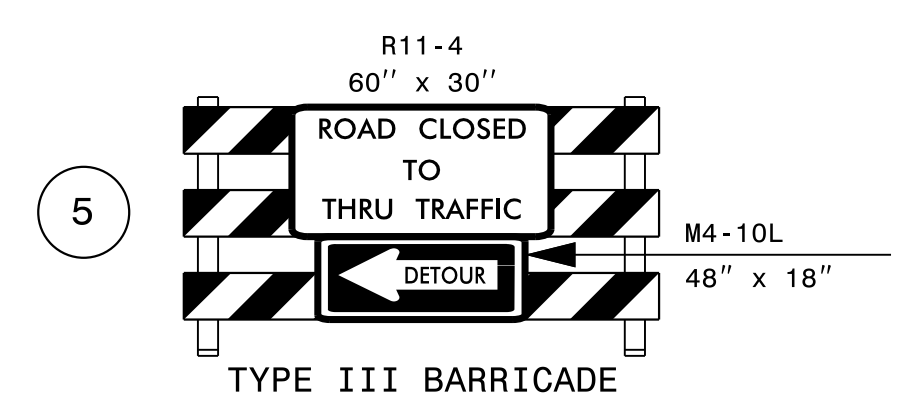
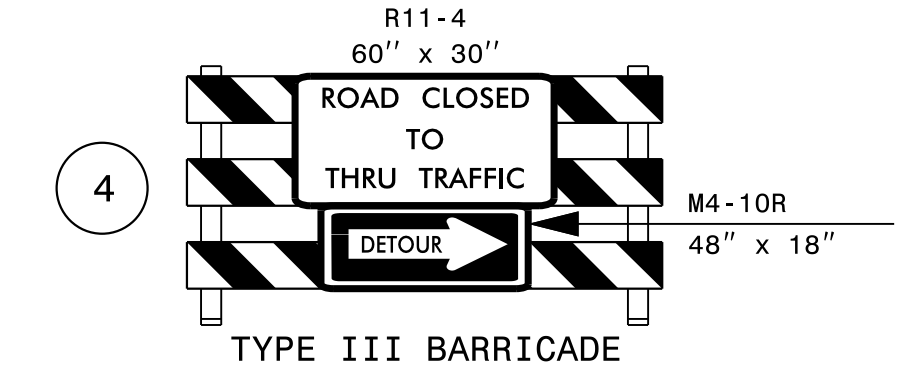
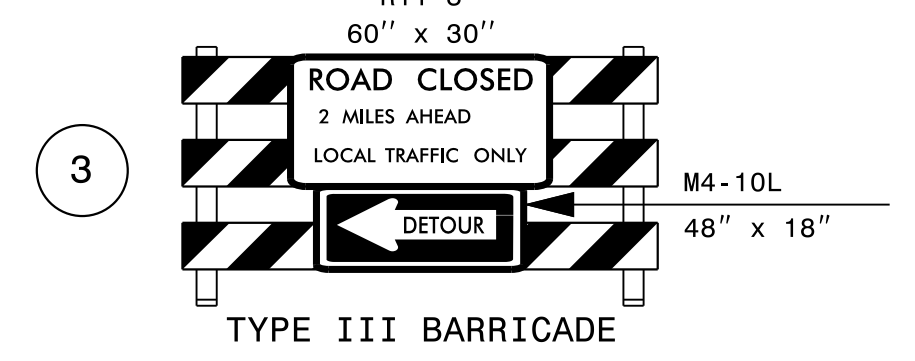
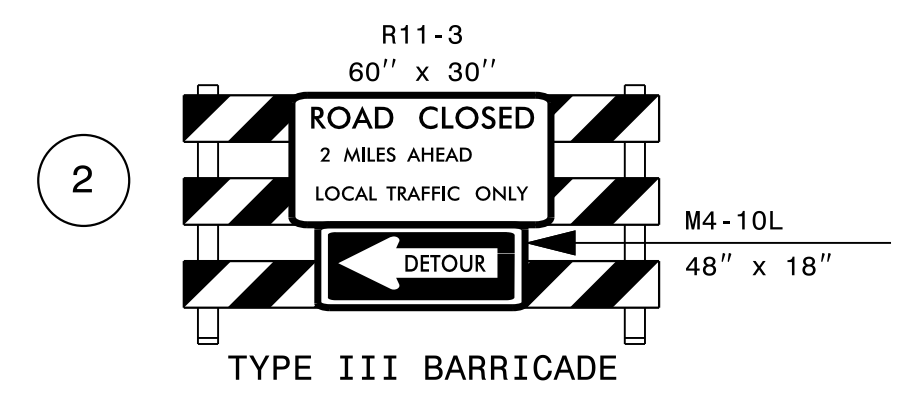
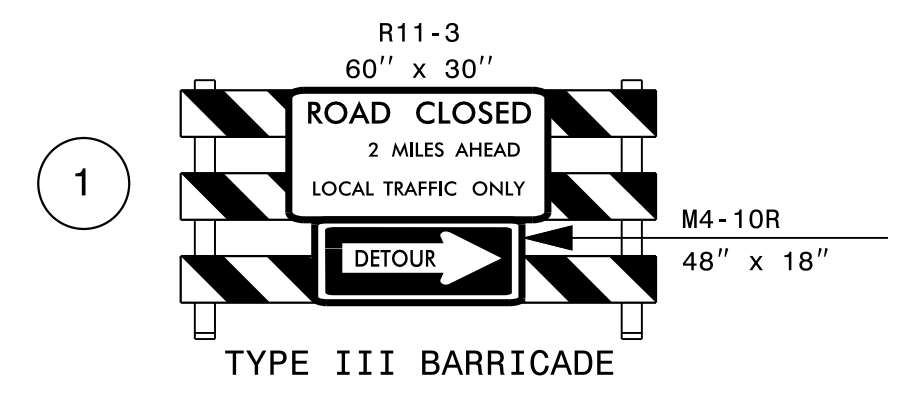
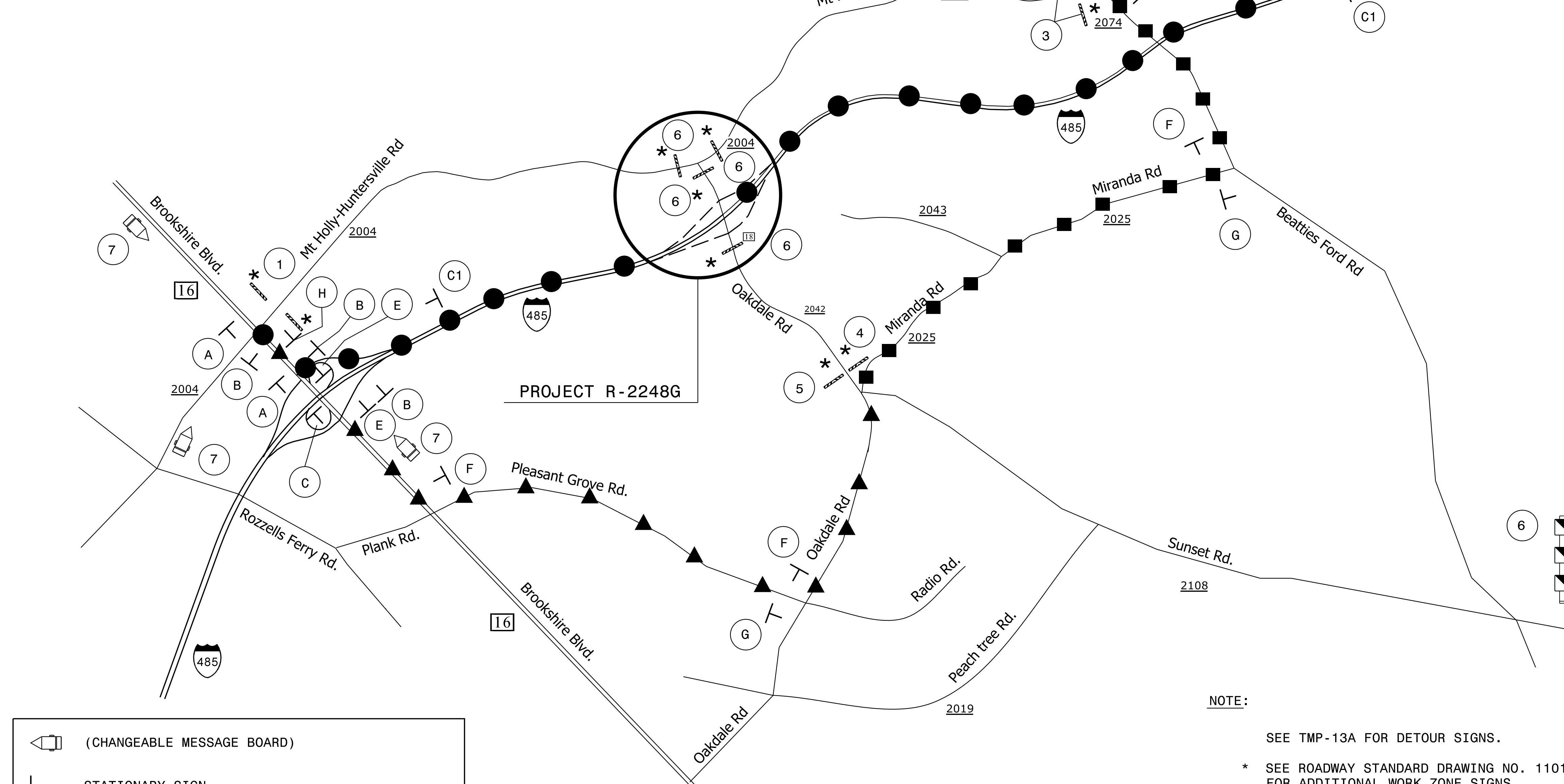
SEAL

**OFF-SITE  
DETOUR SIGNS  
OAKDALE ROAD**

**TEMPORARY OFF-SITE DETOUR (WEEKEND)**  
**MT. HOLLY RD. / HUNTERSVILLE RD. (-Y4A- & -Y4B- /SR 2004)**  
**AND OAKDALE RD. (-Y3- /SR 2042)**

|                         |                           |                    |
|-------------------------|---------------------------|--------------------|
| 7                       | MESSAGE NO. 1             | MESSAGE NO. 2      |
|                         | MT HOLLY HUNTERS-VILLE RD | CLOSED USE I-485 N |
| CHANGEABLE MESSAGE SIGN |                           |                    |

|                         |                           |                    |
|-------------------------|---------------------------|--------------------|
| 8                       | MESSAGE NO. 1             | MESSAGE NO. 2      |
|                         | MT HOLLY HUNTERS-VILLE RD | CLOSED USE I-485 S |
| CHANGEABLE MESSAGE SIGN |                           |                    |



**NOTE:**  
 SEE TMP-13A FOR DETOUR SIGNS.  
 \* SEE ROADWAY STANDARD DRAWING NO. 1101.03, SHEET 1 OF 9 FOR ADDITIONAL WORK ZONE SIGNS.

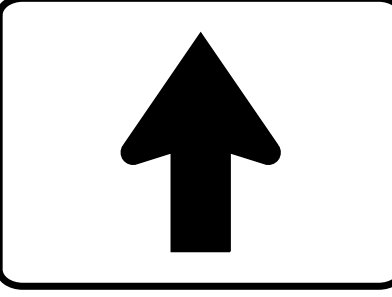
2/3/2015 2:22:19 PM P:\2014\110101R-2248G\TrafficControl\TCP\R2248G.TC.TCP\_PSH\_L3.dgn

|  |   |                                 |  |  |
|--|---|---------------------------------|--|--|
| <p><b>WEATHERILL ENGINEERING</b></p> <p>TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN<br/>                 CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION</p> | 559 Jones Franklin Rd. Suite 164<br>Raleigh, N.C. 27606<br>License No. F-0377<br>Bus: 919 851 8077<br>Fax: 919 851 8107 | APPROVED: _____ DATE: _____<br> |  | <p align="center"><b>OFF-SITE<br/>                 DETOUR<br/>                 MT. HOLLY -<br/>                 HUNTERSVILLE RD.<br/>                 AND OAKDALE ROAD</b></p> |
|--|---|---------------------------------|--|--|

**A**

Mt Holly Hunters - ville Rd \*\*

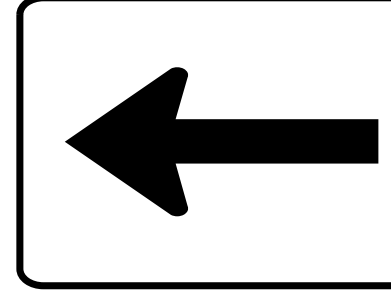
**DETOUR** M4-8 24" x 12"

 M6-3 21" x 15"

**D**

Mt Holly Hunters - ville Rd \*\*

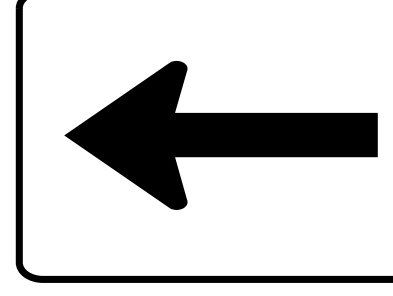
**DETOUR** M4-8 24" x 12"

 M6-1 21" x 15"

**G**

Oakdale Rd \*\*

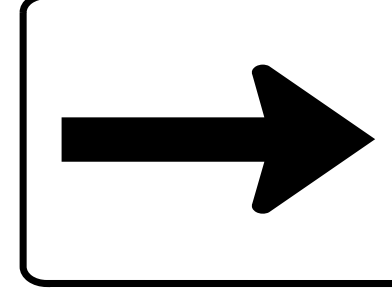
**DETOUR** M4-8 24" x 12"

 M6-1 21" x 15"

**B**

Mt Holly Hunters - ville Rd \*\*

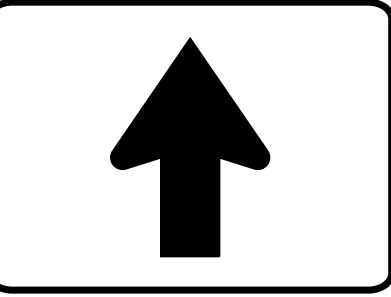
**DETOUR** M4-8 24" x 12"

 M6-1 21" x 15"

**E**

Oakdale Rd \*\*

**DETOUR** M4-8 24" x 12"

 M6-1 21" x 15"

**H**

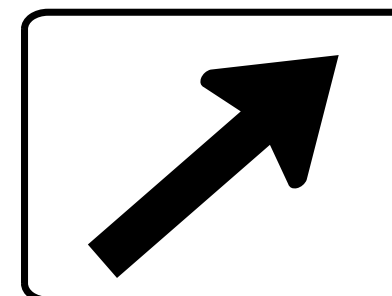
**END DETOUR** M4-8 A 24" X 18"

**MT HOLLY HUNTERS - VILLE RD** \*\*

**C**

Mt Holly Hunters - ville Rd \*\*

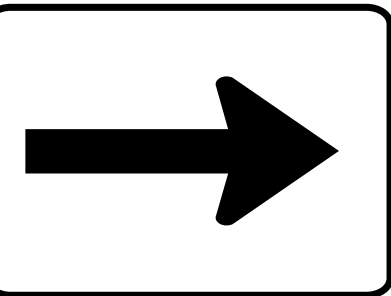
**DETOUR** M4-8 24" x 12"

 M6-2 21" x 15"

**F**

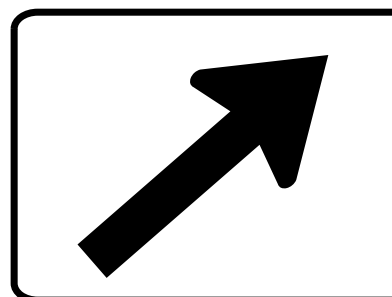
Oakdale Rd \*\*

**DETOUR** M4-8 24" x 12"

 M6-1 21" x 15"

**C1**

**DETOUR** M4-8 24" x 12"

 M6-2 21" x 15"

**NOTE:**  
\*\* SEE SHEET TMP-2 FOR OFF-SITE DETOUR SIGNS.

2/3/2015 9:50:17 AM P:\2014\110101R-2248G\TrafficControl\TCP\R2248G\_TC\_TCP\_PSHL13A.dgn

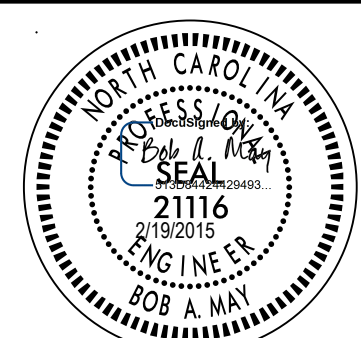
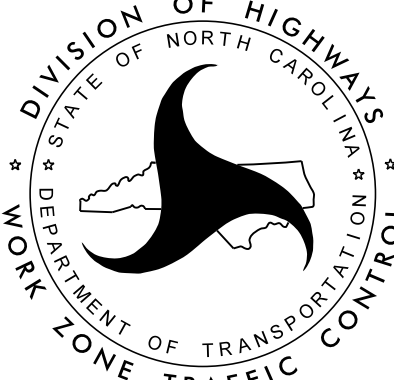
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APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

SEAL

**OFF-SITE DETOUR SIGNS  
MT. HOLLY-HUNTERSVILLE RD.**

END CONSTRUCTION  
-Y4B- STA. 21+10.00

20

SR 2004  
MT. HOLLY RD./HUNTERSVILLE RD.

-Y4B-

-DR1-

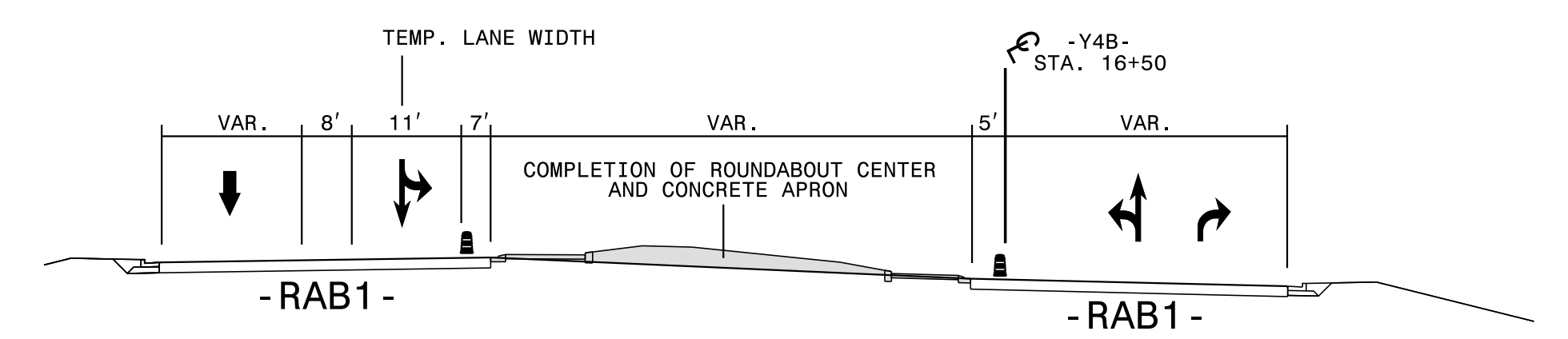
15

BEGIN TIP PROJECT R-2248G  
-Y3- POT STA. 9+67.23 =  
-Y4A- PT STA. 15+49.15

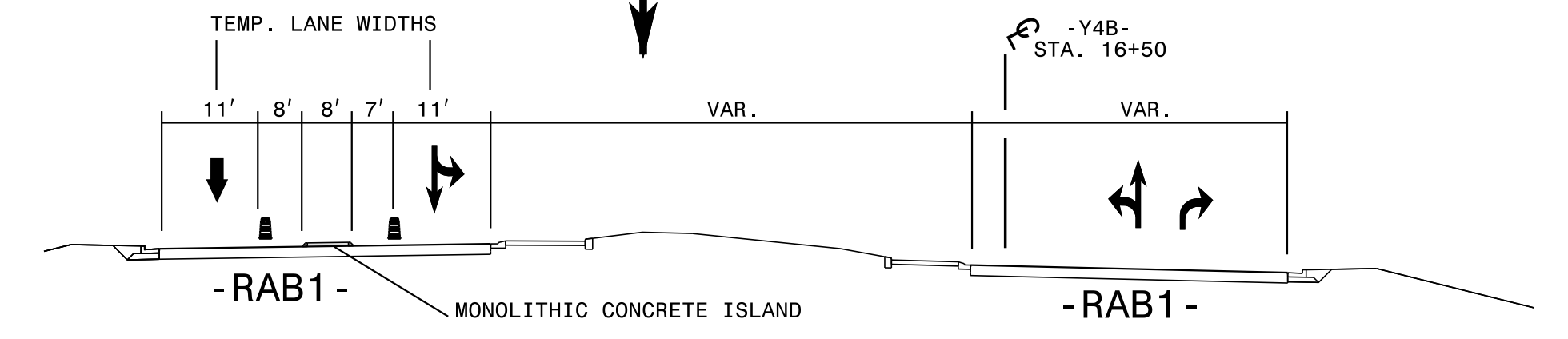
-Y4A-

BEGIN CONSTRUCTION  
-Y4A- STA. 11+50.00

-Y4B- TYPICAL SECTION



TYPICAL SECTION P-P

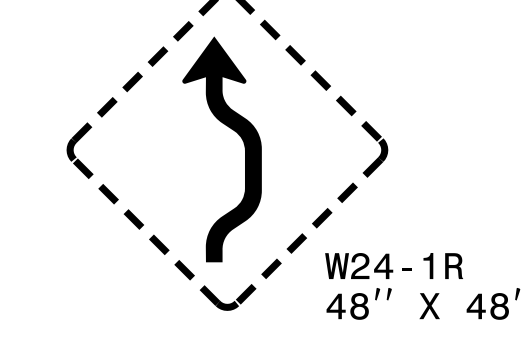


TYPICAL SECTION Q-Q

15

SR 2042  
OAKDALE RD.

-Y3- STA. 14+00+/-



MATCHLINE -Y3- STA. 16+50+/- SEE TMP-15

NOTE:

SEE SIGNING PLANS FOR ROUNDABOUT PERMANENT SIGNING.  
USE FINAL PAVEMENT MARKING PLANS FOR TEMPORARY PAVEMENT MARKINGS (PAINT).

2/3/2015 5:45:56 PM P:\2014\110101R-2248G\TrafficControl\TCP\R2248G.TC.TCP\_PSH\_14.dgn

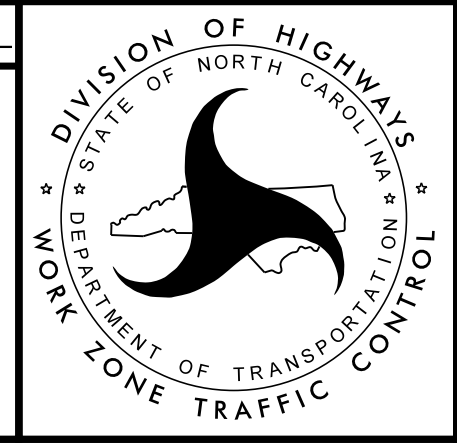


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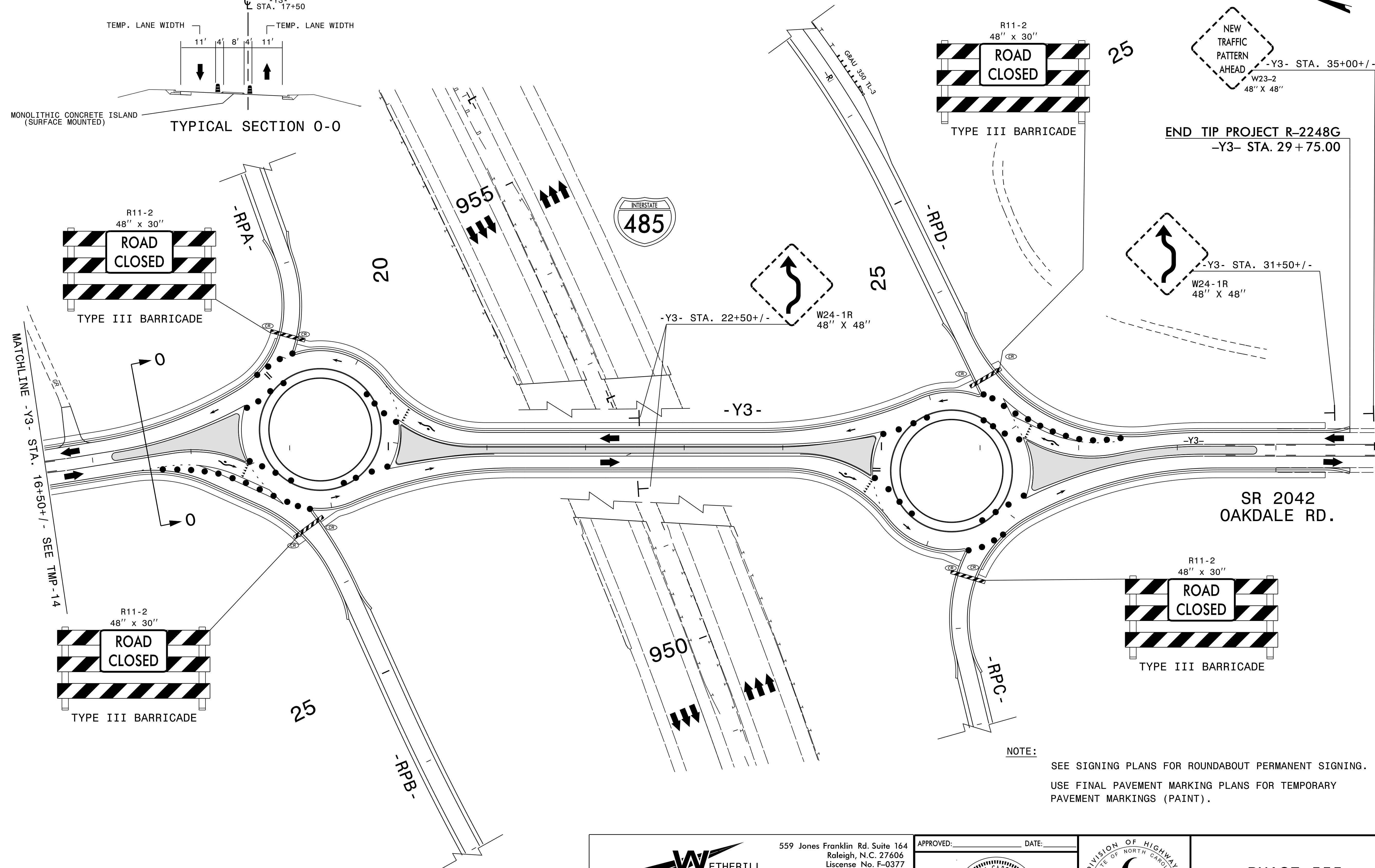
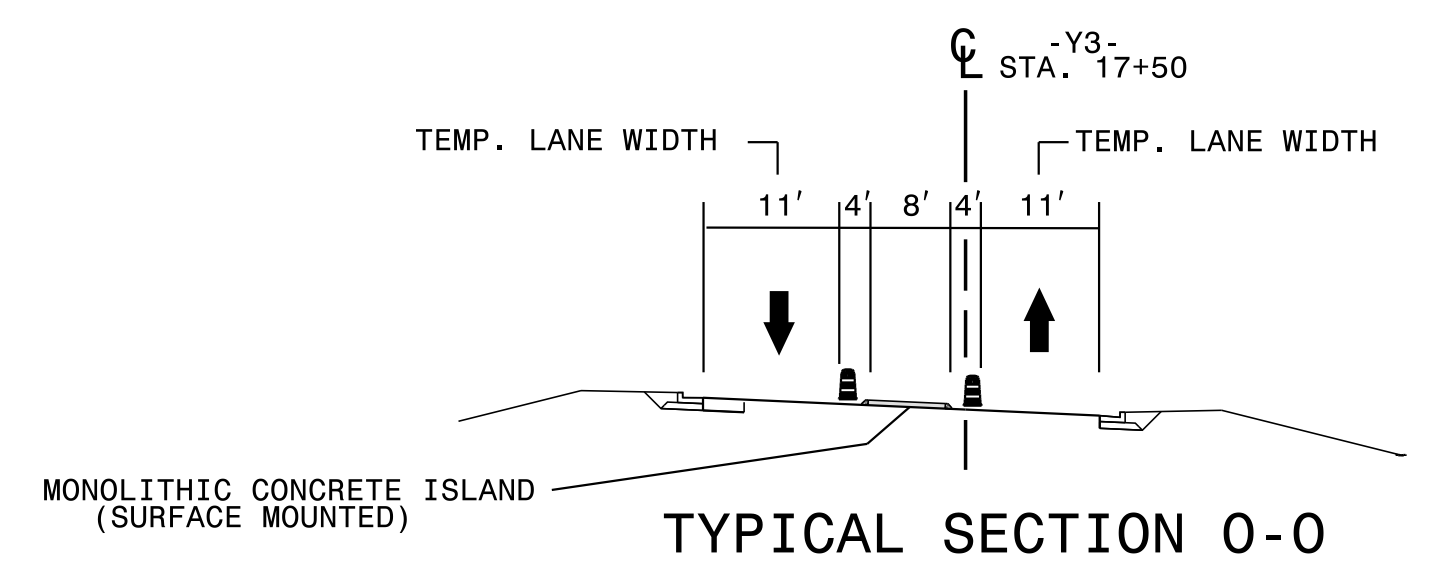
APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

SEAL



PHASE III  
TEMPORARY TRAFFIC  
CONTROL DETAIL

-Y3- TYPICAL SECTION



END TIP PROJECT R-2248G  
-Y3- STA. 29+75.00

NOTE:

SEE SIGNING PLANS FOR ROUNDABOUT PERMANENT SIGNING.

USE FINAL PAVEMENT MARKING PLANS FOR TEMPORARY PAVEMENT MARKINGS (PAINT).

2/4/2015 7:35:46 AM  
 P:\2014\410.01R-2248G\TrafficControl\TCP\R2248G.TC.TCP\_PSH\_L5.dgn

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APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

SEAL

**PHASE III  
TEMPORARY TRAFFIC  
CONTROL DETAIL**