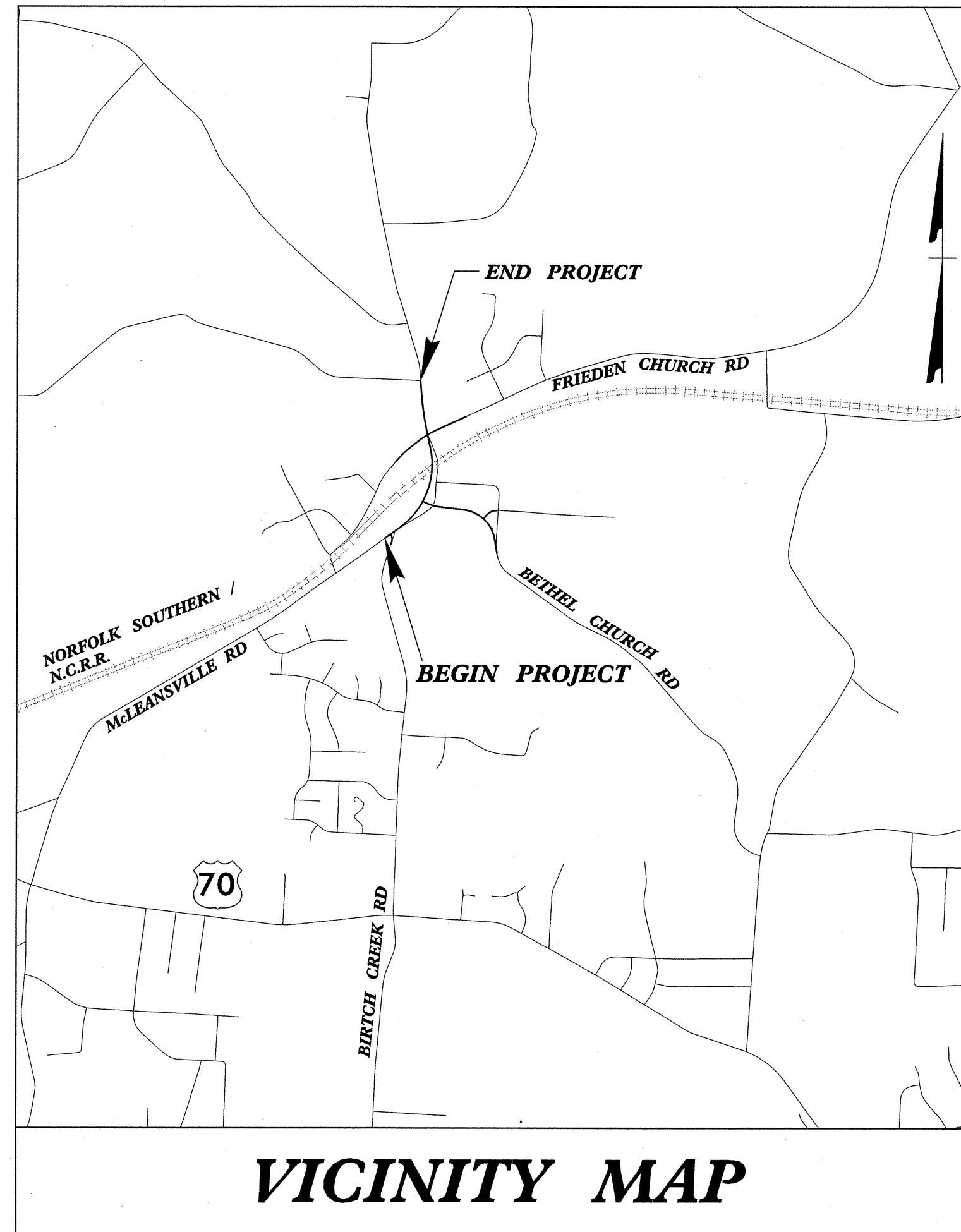
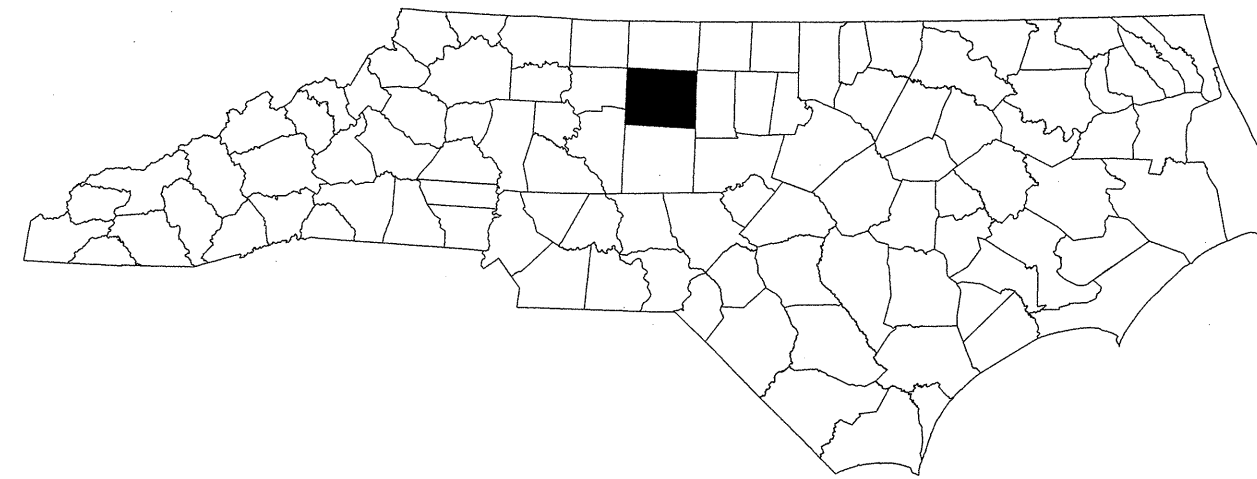


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

GUILFORD COUNTY



VICINITY MAP

SHEET NO.	TITLE
TMP-1	TITLE SHEET, VICINITY MAP, AND INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS AND LEGEND
TMP-2 - TMP-2A	TRANSPORTATION OPERATIONS PLAN
TMP-2B	PORTABLE CONCRETE BARRIER AT TEMPORARY SHORING LOCATIONS
TMP-2C	TEMPORARY SHORING DATA
TMP-3 - TMP-3A	PHASING
TMP-4 - TMP-6	PHASE I DETAILS
TMP-7 - TMP-11	PHASE II DETAILS
TMP-12 - TMP-13	PHASE II DETOURS
TMP-14 - TMP-19	PHASE III DETAILS
TMP-20	PHASE III DETOURS
TMP-21	SIGN DESIGNS

SHEET NO.
TMP-1

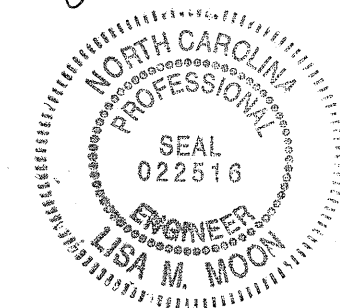
PLAN PREPARED FOR N.C.D.O.T. BY:
ATKINS 1616 EAST MILLBROOK ROAD, SUITE 310
RALEIGH, NORTH CAROLINA 27609
(919) 876-8888 NCBES #F-0326

LISA M. MOON, P.E.
TRAFFIC CONTROL
PROJECT ENGINEER

J. ABRAHAM WILES
TRAFFIC CONTROL
DESIGN ENGINEER

APPROVED: *Lisa M. Moon*
DATE: June 17, 2014

SEAL



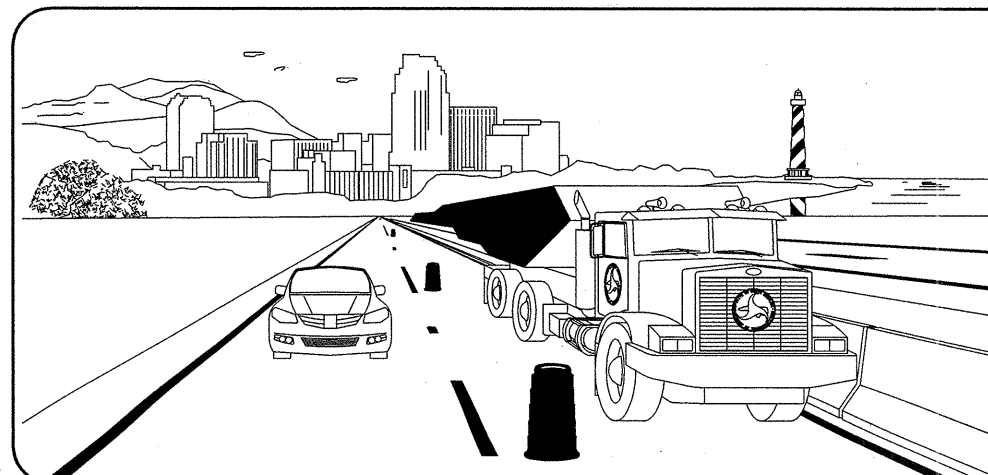
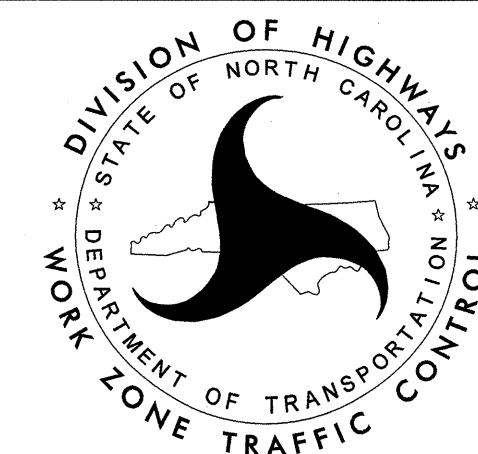
N.C.D.O.T. WORK ZONE TRAFFIC CONTROL
1561 MAIL SERVICE CENTER (MSC) RALEIGH, NC 27699-1561
750 N. GREENFIELD PARKWAY, GARNER, NC 27529 (DELIVERY)
PHONE: (919) 773-2800 FAX: (919) 771-2745

J. STUART BOURNE, P.E. STATE TRAFFIC MANAGEMENT ENGINEER

JOSEPH ISHAK, P.E. CENTRAL WZTC ENGINEER

CENTRAL WZTC PROJECT DESIGN ENGINEER

CENTRAL WZTC DESIGN ENGINEER



TIP PROJECT: P-5204

DCN 653DEL.P15

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

STD. NO.	TITLE
1101.01	WORK ZONE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.06	WARNING SIGNS FOR BLASTING ZONES
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	DRUMS
1135.01	CONES
1145.01	BARRICADES TYPE-III
1150.01	FLAGGING DEVICES
1160.01	TEMPORARY CRASH CUSHION
1165.01	WORK VEHICLE LIGHTING SYSTEMS AND TMA DELINEATION
1170.01	POSITIVE PROTECTION
1180.01	SKINNY - DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO LANE AND MULTILANE ROADWAYS
1205.03	PAVEMENT MARKINGS - EXIT AND ENTRANCE RAMP
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.06	PAVEMENT MARKINGS - LANE DROPS
1205.07	PAVEMENT MARKINGS - PEDESTRIAN CROSSWALKS
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1205.10	PAVEMENT MARKINGS - SCHOOL AREAS
1205.11	PAVEMENT MARKINGS - RAILROAD CROSSINGS
1205.12	PAVEMENT MARKINGS - BRIDGES
1205.13	PAVEMENT MARKINGS - LANE REDUCTIONS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY
1253.01	RAISED PAVEMENT MARKERS - SNOWPLOWABLE
1261.01	GUARDRAIL AND BARRIER DELINEATORS - INSTALLATION SPACING
1261.02	GUARDRAIL AND BARRIER DELINEATORS - TYPES AND MOUNTING
1262.01	GUARDRAIL END DELINEATION
1264.01	OBJECT MARKERS - TYPES
1264.02	OBJECT MARKERS - INSTALLATION
1267.01	FLEXIBLE DELINEATORS - INSTALLATION
1267.02	FLEXIBLE DELINEATORS - SPACING TABLES
1267.03	FLEXIBLE DELINEATORS - INTERCHANGE PLACEMENT

LEGEND

GENERAL

- DIRECTION OF TRAFFIC FLOW
- DIRECTION OF PEDESTRIAN TRAFFIC FLOW
- EXIST. PVMT.
- NORTH ARROW
- PROPOSED PVMT.
- TEMPORARY SHORING (LOCATION PURPOSES ONLY)
- WORK AREA
- REMOVAL
- WEDGING/OVERLAY OF EXIST
- ONGOING CONSTRUCTION

TRAFFIC CONTROL DEVICES

- BARRICADE (TYPE III)
- CONE
- DRUM SKINNY DRUM TUBULAR MARKER
- TEMPORARY CRASH CUSHION
- FLASHING ARROW BOARD (TYPE C)
- FLAGGER
- LAW ENFORCEMENT
- TRUCK MOUNTED ATTENUATOR (T.M.A.)
- CHANGEABLE MESSAGE SIGN (C.M.S.)
- PORTABLE CONCRETE BARRIER (P.C.B.)
- WATER FILLED BARRIER (W.F.B.)
- ORANGE CONSTRUCTION FENCING
- TEMPORARY GUARDRAIL

TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

SIGNALS

- EXISTING
- PROPOSED
- TEMPORARY

TEMPORARY PAVEMENT MARKING

- | | | | |
|------|---|---------------------|----|
| (PA) | WHITE EDGE LINE | PAINT (4") | LF |
| (PD) | 2 FT. WHITE MINISKIP | PAINT (4") | LF |
| (PE) | WHITE LANE LINE | PAINT (4") | LF |
| (PG) | 2 FT. YELLOW MINISKIP | PAINT (4") | LF |
| (PI) | YELLOW DOUBLE CENTER LINE | PAINT (4") | LF |
| (P3) | WHITE LINE, RR CROSSBUCK | PAINT (16") | LF |
| (P4) | WHITE STOP BAR | PAINT (24") | LF |
| (QA) | LEFT TURN ARROW MARKING SYMBOLS | PAINT | EA |
| (QI) | ALPHANUMERIC CHARACTERS | PAINT CHARACTER | EA |
| (MH) | YELLOW & YELLOW, TEMPORARY RAISED PAVEMENT MARKER | | EA |
| (RA) | WHITE EDGE LINE | REMOVABLE TAPE (4") | LF |
| (RI) | YELLOW DOUBLE CENTER LINE | REMOVABLE TAPE (4") | LF |

PAVEMENT MARKINGS

- EXISTING LINES
- TEMPORARY LINES

PAVEMENT MARKERS

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

PAVEMENT MARKING SYMBOLS

- PAVEMENT MARKING SYMBOLS

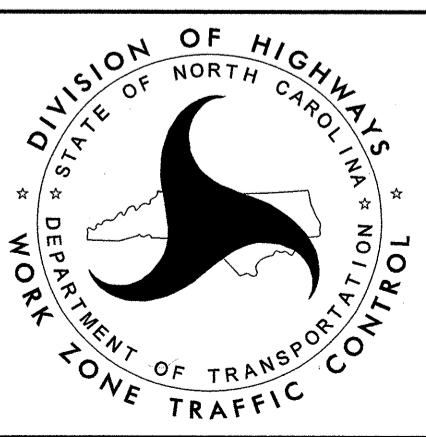
EXISTING PAVEMENT MARKING SYMBOLS

- EXISTING PAVEMENT MARKING SYMBOLS

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ATKINS 1616 EAST MILLBROOK ROAD, SUITE 310
 RALEIGH, NORTH CAROLINA 27609
 (919) 876-8888 NCBES #F-0326

APPROVED: *Lisa M. Moon* DATE: 6-17-19
 SEAL



LIST OF APPLICABLE
 ROADWAY STANDARD
 DRAWINGS AND LEGEND

MANAGEMENT STRATEGIES

PORTIONS OF MCLEANSVILLE ROAD WILL BE CONSTRUCTED UNDER ICTs IN ORDER TO MINIMIZE IMPACT ON THE MCLEANSVILLE ELEMENTARY SCHOOL AND THE MCLEANSVILLE FIRE DEPARTMENT.

MCLEANSVILLE ROAD CONSTRUCTION SUMMARY:

MCLEANSVILLE ROAD WILL BE CONSTRUCTED MAINLY AWAY FROM TRAFFIC, BUT WILL ALSO EMPLOY A COMBINATION OF ON-SITE AND OFF-SITE DETOURS, TEMPORARY PAVEMENT, ROAD CLOSURES, LANE CLOSURES, WEDGING UNDER TRAFFIC, TEMPORARY PORTABLE CONCRETE BARRIER, TEMPORARY GUARDRAIL, SHORING, TEMPORARY GRADES, ICTS AND CONSTRUCTION OVER THE SUMMER TO MINIMIZE NEGATIVE IMPACTS ON MCLEANSVILLE ELEMENTARY SCHOOL.

GENERAL NOTES

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS, AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS OR RESULT IN DUPLICATE OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING, OR REMOVAL OF DEVICES AS DIRECTED BY THE ENGINEER.

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT EXCEPT WHEN OTHERWISE NOTED IN THE PLAN OR DIRECTED BY THE ENGINEER.

TIME RESTRICTIONS

A) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
ANY ROAD	MONDAY THROUGH FRIDAY FROM 7:00 A.M. TO 9:00 A.M.

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

ROAD NAME

ANY ROAD

HOLIDAY

- FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
- FOR NEW YEAR'S, BETWEEN THE HOURS OF 7:00 A.M. DECEMBER 31st TO 9:00 A.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 9:00 A.M. THE FOLLOWING TUESDAY.
- FOR EASTER, BETWEEN THE HOURS OF 7:00 A.M. THURSDAY AND 9:00 A.M. MONDAY.
- FOR MEMORIAL DAY, BETWEEN THE HOURS OF 7:00 A.M. FRIDAY TO 9:00 A.M. TUESDAY.
- FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 7:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 9:00 A.M. THE DAY AFTER INDEPENDENCE DAY.

IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 7:00 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 9:00 A.M. THE TUESDAY AFTER INDEPENDENCE DAY.
- FOR LABOR DAY, BETWEEN THE HOURS OF 7:00 A.M. FRIDAY AND 9:00 A.M. TUESDAY.

7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 7:00 A.M. TUESDAY AND 9:00 A.M. MONDAY.

8. FOR CHRISTMAS, BETWEEN THE HOURS OF 7:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 9:00 A.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

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

LANE AND SHOULDER CLOSURE REQUIREMENTS

D) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.

E) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.

F) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

G) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRANSPORTATION MANAGEMENT PLANS, ROADWAY STANDARD DRAWINGS, OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.

H) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY, RAMP, OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.

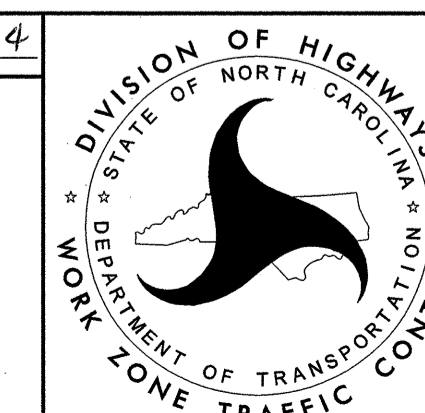
PAVEMENT EDGE DROP OFF REQUIREMENTS

I) 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.

APPROVED: *Lisa M. Moon* DATE: 6-17-14



TRANSPORTATION
OPERATIONS
PLAN

GENERAL NOTES CONTINUED

PAVEMENT EDGE DROP OFF REQUIREMENTS - CONT.

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

TRAFFIC PATTERN ALTERATIONS

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

SIGNING

- L) 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.

- M) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRANSPORTATION MANAGEMENT PLANS.

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

- N) 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.

- O) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

- P) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) AS SHOWN ON PLANS OR 500 FT IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

TRAFFIC BARRIER

- Q) 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.

- R) 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 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: (SEE ALSO RSD 1101.05)

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

- S) WHEN LANE CLOSURES ARE NOT IN EFFECT SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH) EXCEPT, 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY. REFER TO STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SECTIONS 1130 (DRUMS), 1135 (CONES) AND 1180 (SKINNY DRUMS) FOR ADDITIONAL REQUIREMENTS.

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

PAVEMENT MARKINGS AND MARKERS

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

ROAD NAME	MARKING	MARKER
ANY ROAD	PAINT	TEMPORARY RAISED

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

- W) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

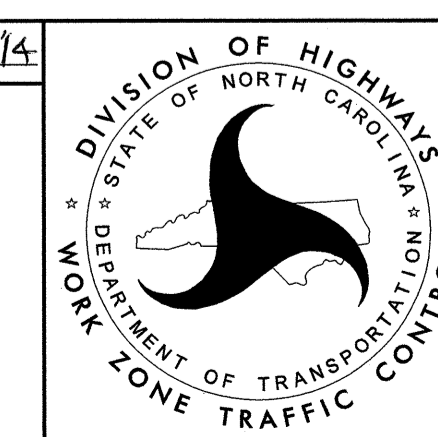
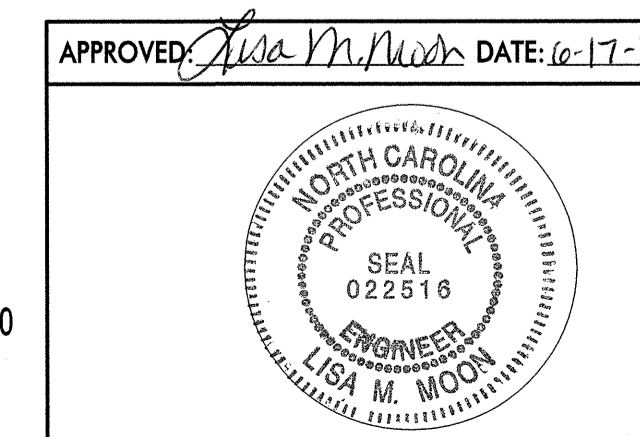
- X) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

LOCAL NOTES

- LN-1 CONSTRUCT TEMPORARY/PERMANENT LATERAL WEDGING BETWEEN NEWLY CONSTRUCTED PAVEMENT AND EXISTING PAVEMENT TO MAINTAIN POSITIVE DRAINAGE OF EXISTING PAVEMENT (I.E., PREVENT PONDING OF WATER) AND PREVENT DROP-OFF BETWEEN NEW AND EXISTING PAVEMENT AS DIRECTED BY THE ENGINEER.

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ATKINS 1616 EAST MILLBROOK ROAD, SUITE 310
 RALEIGH, NORTH CAROLINA 27609
 (919) 876-6888 NCBEES #F-0326



TRANSPORTATION
OPERATIONS
PLAN

TEMPORARY SHORING DATA

TEMPORARY SHORING NO. 1

FOR TEMPORARY SHORING, AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

DESIGN TEMPORARY SHORING FROM STATION 10+00 -S1- TO STATION 10+97 -S1- FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT (γ) = 120 LB/CF
 FRICTION ANGLE (ϕ) = 30 DEGREES
 COHESION (c) = 0 LB/SF
 GROUNDWATER ELEVATION = 723 FT

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF THE TEMPORARY SHORING FROM STATION 10+00 -S1- TO STATION 10+97 -S1-. THE INFORMATION PROVIDED FOR DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 10+00 -S1- TO STATION 10+97 -S1-. SEE STANDARD DRAWING NO. 1801.02 FOR STANDARD TEMPORARY WALLS.

TEMPORARY SHORING NO. 2

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

DESIGN TEMPORARY SHORING FROM STATION 10+00 -S2- TO STATION 12+64 -S2- FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT (γ) = 120 LB/CF
 FRICTION ANGLE (ϕ) = 30 DEGREES
 COHESION (c) = 0 LB/SF
 GROUNDWATER ELEVATION = 723 FT

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF THE TEMPORARY SHORING FROM STATION 10+00 -S2- TO STATION 12+64 -S2-. THE INFORMATION PROVIDED FOR DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 10+00 -S2- TO STATION 12+64 -S2-. SEE STANDARD DRAWING NO. 1801.02 FOR STANDARD TEMPORARY WALLS.

TEMPORARY SHORING NO. 3

FOR TEMPORARY SHORING, AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

DESIGN TEMPORARY SHORING FROM STATION 10+00 -S3- TO STATION 13+96 -S3- FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT (γ) = 120 LB/CF
 FRICTION ANGLE (ϕ) = 30 DEGREES
 COHESION (c) = 0 LB/SF
 GROUNDWATER ELEVATION = 723 FT

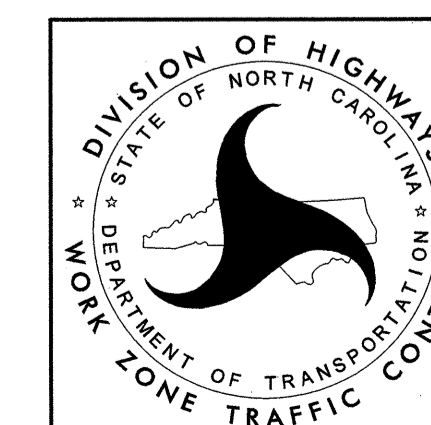
BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

TEMPORARY SHORING NO. 3 - CONTINUED

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF THE TEMPORARY SHORING FROM STATION 10+00 -S3- TO STATION 13+96 -S3-. THE INFORMATION PROVIDED FOR DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 10+00 -S3- TO STATION 13+96 -S3-. SEE STANDARD DRAWING NO. 1801.02 FOR STANDARD TEMPORARY WALLS.

THE TEMPORARY SHORING NOTES SHOWN ON THIS SHEET WERE PROVIDED THROUGH SEALED DOCUMENTS FROM THE GEOTECHNICAL ENGINEERING UNIT. THE DOCUMENTS WERE SUBMITTED TO THE WZTC SECTION ON JUNE 2, 2014 AND SEALED BY PROFESSIONAL ENGINEER, DAVID L. TEAGUE, P.E., LICENSE # 027869.



TEMPORARY SHORING NOTES

PHASING

CONTRACTOR TO MAINTAIN COMMUNICATION WITH PERSONNEL AT EXISTING FIRE STATION AND SCHOOL ON FRIEDEN CHURCH ROAD ABOUT DETOURS AND TEMPORARY CLOSURES THAT AFFECT FRIEDEN CHURCH ROAD, MCLEANSVILLE ROAD AND BETHEL CHURCH ROAD DURING THE LIFE OF THE PROJECT. DETOURS FOR CONSTRUCTION WILL AFFECT EMERGENCY RESPONSE ROUTES AND BUS ROUTES.

PHASE I

THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL EXISTING DRIVEWAYS AS DIRECTED BY THE ENGINEER.

STEP 1: USING RSD 1101.01, SHEET 3 OF 3, INSTALL WORK ZONE ADVANCE WARNING SIGNS.

WHILE MAINTAINING TRAFFIC ON EXISTING -L- (MCLEANSVILLE ROAD), BEGIN CONSTRUCTION, UP TO BUT NOT INCLUDING FINAL SURFACE COURSE, OF THE FOLLOWING AWAY FROM TRAFFIC:

- PROPOSED BRIDGE OVER RAILROAD FROM STA 23+57 +/- TO STA 25+37 +/- [TMP-5]
- PROPOSED -L- (MCLEANSVILLE ROAD) FROM STA 16+58 +/- TO STA 21+30 +/- [TMP-4]
- PROPOSED -Y1- (BETHEL CHURCH ROAD) FROM PROPOSED STA 10+00 +/- (AT PROPOSED MCLEANSVILLE ROAD) TO STA 24+00 +/-, EXCLUDING WORK AT EXISTING MCLEANSVILLE ROAD (STA 10+90 +/- TO STA 12+50 +/-) [TMP-4 & TMP-6]
- PROPOSED -Y3- (HINES ANDREWS ROAD) FROM STA 10+00 +/- TO STA 12+73 +/- [TMP-6]
- PROPOSED -Y4- (BIRCH CREEK ROAD) BETWEEN STA 12+00 +/- TO STA 12+50 +/- [TMP-4]
- -SR1- [TMP-6]

WHILE MAINTAINING TRAFFIC ON EXISTING -L- (MCLEANSVILLE ROAD), USING RSD 1101.02, SHEET 1 OF 15 AS NECESSARY, CONSTRUCT THE FOLLOWING:

- DETOUR 1 [TMP-5]
- DETOUR 2 [TMP-5]
- 4' TEMPORARY PAVEMENT ALONG LEFT EOP:
 - o -L- FROM STA 15+00 +/- TO STA 24+86 +/- [TMP-4 & TMP-5]
 - o -L- FROM STA 25+53 +/- TO STA 27+62 +/- [TMP-5]
- WIDEN UP TO EDGE AND ELEVATION ON -L- (MCLEANSVILLE ROAD) FROM STA 10+00 +/- TO STA 12+50 +/-, LEFT SIDE [TMP-4]
- TEMPORARY TIE BETWEEN -Y4- AT STA 12+50 +/- AND EXISTING MCLEANSVILLE ROAD

AWAY FROM TRAFFIC, AS MUCH AS POSSIBLE, INSTALL TEMPORARY PAVEMENT MARKINGS ALONG DETOURS 1 AND 2 AS SHOWN ON TMP-8 IN PREPARATION FOR THE TRAFFIC SHIFT DESCRIBED IN PHASE I, STEP 2.

STEP 2: USING RSD 1101.02, SHEET 1 OF 15, COMPLETE CONSTRUCTION OF:

- -Y4- (BIRCH CREEK ROAD) AND -L- (MCLEANSVILLE ROAD) FROM STA 10+00 +/- TO STA 12+50 +/-, UP TO BUT NOT INCLUDING FINAL SURFACE COURSE IN THE FOLLOWING MANNER:
 - o TIE PROPOSED -Y4- TO EXISTING BIRCH CREEK ROAD BETWEEN STA 10+89 +/- TO STA 12+00 +/- . SEE INSET 'A' ON TMP-4.
 - o PLACE TEMPORARY MARKINGS ON -Y4- AS SHOWN ON TMP-04 INSET 'B' AND SHIFT TRAFFIC TO PROPOSED -Y4- ALIGNMENT.
 - o WEDGE -L- BETWEEN STA 10+00 +/- AND STA 12+50 +/- UP TO BUT NOT INCLUDING FINAL SURFACE COURSE AND TIE PROPOSED -L- TO EXISTING MCLEANSVILLE ROAD BY WEDGING ALONG EXISTING MCLEANSVILLE ROAD AS SHOWN ON TMP-04 INSET 'B'. WEDGE PAVEMENT IN A MANNER TO MAINTAINING A SMOOTH DRIVING SURFACE AT THE END OF EACH DAY FOR EACH DIRECTION.
- AFTER WEDGING IS COMPLETE, INSTALL TEMPORARY PAVEMENT ALONG EXISTING MCLEANSVILLE ROAD FROM STA 13+90 +/- TO STA 15+00 +/- .
- USING FLAGGERS AS NEEDED, AND WORKING IN A CONTINUOUS MANNER TO COMPLETE IN A SINGLE WORK PERIOD, SHIFT -L- (MCLEANSVILLE ROAD) AND -Y2- (FRIEDEN CHURCH ROAD) TRAFFIC INTO PHASE II TEMPORARY TRAFFIC PATTERN ON THE ON-SITE DETOURS IN THE FOLLOWING MANNER [SEE TMP-7 & TMP-8 FOR PHASE II TEMPORARY MARKINGS]:

- A. COMPLETE ALL REMAINING TIE-IN WORK ALONG -L- AND -Y2- .
- B. INSTALL REMAINING TEMPORARY PAVEMENT MARKINGS AND SIGNING IN PHASE II PATTERN
- C. SHIFT ALL TRAFFIC INTO PHASE II PATTERN. INSTALL TRAFFIC CONTROL DEVICES FOR PHASE II.
- D. ENSURE ALL TRAFFIC CONTROL DEVICES AND SIGNING ARE CORRECT AND IN PLACE AND OPEN -L-, -Y2-, DETOUR 1 AND DETOUR 2 TO PHASE II PATTERN.

PHASE II

STEP 1: WHILE MAINTAINING TRAFFIC IN THE PHASE II TRAFFIC PATTERN, USING RSD 1101.02, SHEET 1 OF 15 AS NECESSARY, COMPLETE THE FOLLOWING:

- INSTALL PCB WITH CRASH CUSHIONS AS SHOWN ON TMP-7 AND TMP-8.
- INSTALL TEMPORARY GUARDRAIL IN SOUTHWEST QUADRANT OF INTERSECTION OF -L- AT -Y2- .
- INSTALL TEMPORARY SHORING AS SHOWN ON TMP-7 AND TMP-8.
 - o -L- FROM STA 15+00 +/- TO STA 16+40 +/-
 - o -L- FROM STA 21+50 +/- TO STA 23+98 +/-
 - o -L- FROM STA 25 +75 +/- TO STA 29+66 +/-

STEP 2: WHILE MAINTAINING TRAFFIC IN THE PHASE II TRAFFIC PATTERN, USING RSD 1101.02, SHEET 1 OF 15 AS NECESSARY, COMPLETE CONSTRUCTION, UP TO BUT NOT INCLUDING FINAL SURFACE COURSE, OF THE FOLLOWING:

- PROPOSED BRIDGE OVER RAILROAD FROM STA 23+70 +/- TO STA 25+45 +/- -L- [TMP-8]
- PROPOSED -L- (MCLEANSVILLE ROAD) FROM STA 15+75 +/- TO STA 29+50 +/- [TMP-7 & TMP-8]
- PROPOSED -L- (MCLEANSVILLE ROAD) FROM STA 30+80 +/- TO STA 31+40 +/- [TMP-8]
- PROPOSED -Y1- (BETHEL CHURCH ROAD) FROM STA 10+00 +/- TO STA 10+90 +/- [TMP-7]

WHILE MAINTAINING TRAFFIC IN THE PHASE II TRAFFIC PATTERN, CONTINUE CONSTRUCTION, UP TO BUT NOT INCLUDING FINAL SURFACE COURSE, OF THE FOLLOWING AWAY FROM TRAFFIC:

- PROPOSED -Y1- (BETHEL CHURCH ROAD) FROM PROPOSED STA 12+50 +/- TO STA 24+00 +/-
- PROPOSED -Y3- (HINES ANDREWS ROAD) FROM STA 10+00 +/- TO STA 12+73 +/- .
- -SR1-

INSTALL DETOUR SIGNING FOR UPCOMING DETOURS IN STEPS 3 AND 4. COVER UNTIL DETOUR IS NEEDED.

THE CONTRACTOR SHALL COMPLETE THE WORK REQUIRED IN PHASE II STEP 3 WITHIN 10 CONSECUTIVE CALENDAR DAYS. THE DATE OF AVAILABILITY FOR THIS ICT SHALL NOT BE EARLIER THAN JUNE 15TH AND NO LATER THAN JULY 23RD OF ANY YEAR. [SEE INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES]

STEP 3: USING RSD 1101.03, SHEET 2 OF 9, CLOSE -Y2- (FRIEDEN CHURCH ROAD) FROM STA 12+00 +/- TO -L- (MCLEANSVILLE ROAD) AS SHOWN ON TMP-9. DETOUR TRAFFIC AS SHOWN ON TMP-12. AWAY FROM TRAFFIC, CONSTRUCT -Y2- FROM STA 12+00 +/- TO STA 17+02 +/- AND -L- FROM STA 29+50 +/- TO STA 30+80 +/-, UP TO BUT NOT INCLUDING FINAL SURFACE COURSE AS SHOWN ON TMP-9.

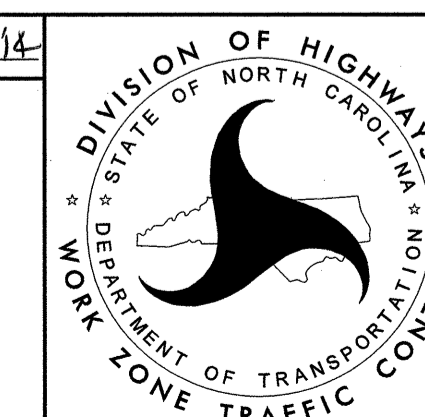
USING RSD 1101.02, SHEET 1 OF 15, TIE PROPOSED -Y2- TO DETOUR 1 BY WEDGING DETOUR 1 AND -Y2- AS SHOWN ON TMP-9. WEDGE IN A MANNER TO MAINTAIN A SMOOTH DRIVING SURFACE AT THE END OF EACH DAY FOR EACH DIRECTION.

AWAY FROM TRAFFIC, INSTALL AS MUCH AS POSSIBLE OF THE TEMPORARY MARKINGS AND SIGNING TO PREPARE FOR TRAFFIC SHIFT. [SEE TMP-10 & TMP-11 FOR TEMPORARY MARKINGS]

USING RSD 1101.03, SHEET 2 OF 9, AND RSD 1101.02, SHEET 1 OF 15, AS NECESSARY, AND WORKING IN A CONTINUOUS MANNER TO COMPLETE IN A SINGLE WORK PERIOD, SHIFT TRAFFIC TO PATTERN FOR STEP 4 AS SHOWN ON TMP-10 AND TMP-11 IN THE FOLLOWING MANNER:

- A. COMPLETE INSTALLATION OF TEMPORARY MARKINGS AND SIGNING FOR NEW TRAFFIC PATTERN
- B. UNCOVER DETOUR SIGNING AND INSTALL TRAFFIC CONTROL DEVICES FOR NEW TRAFFIC PATTERN. CLOSE -L- (MCLEANSVILLE ROAD) BETWEEN -Y4- (BIRCH CREEK ROAD) AND -Y2- (FRIEDEN CHURCH ROAD)
- C. SHIFT TRAFFIC. DETOUR TRAFFIC AS SHOWN ON TMP-13.
- D. ENSURE ALL TRAFFIC CONTROL DEVICES AND SIGNING ARE CORRECT AND IN PLACE AND OPEN -L-, -Y2-, DETOUR 1 AND DETOUR 2 TO STEP 4 PATTERN.
- E. IMMEDIATELY BEGIN STEP 4.

APPROVED: *Lisa M. Noon* DATE: 6-17-14



**PHASING
PHASES I & II**

PHASING

PHASE II (CONTINUED)

THE CONTRACTOR SHALL COMPLETE THE WORK REQUIRED IN PHASE II STEP 4 WITHIN 14 CONSECUTIVE CALENDAR DAYS. [SEE INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES]

STEP 4: AWAY FROM TRAFFIC, CONSTRUCT FROM -L- STA 12+50 +/- TO STA 15+75 +/-, UP TO BUT NOT INCLUDING FINAL SURFACE COURSE AS SHOWN ON TMP-10. MAINTAIN DRIVEWAY NEAR STA 15+00 +/- WITH GRAVEL TIE-IN AS SHOWN ON TMP-10.

AWAY FROM TRAFFIC AND USING RSD 1101.02, SHEET 2 OF 9 AS NECESSARY, BACKFILL AND CONSTRUCT ENOUGH SIDE SLOPE AS SHOWN ON TMP-11 TO BE ABLE TO MAINTAIN TRAFFIC IN PHASE III WITHOUT POSITIVE PROTECTION IN RADIUS BETWEEN -L- AND -Y2- .

AWAY FROM TRAFFIC, INSTALL PCB ALONG -L- BETWEEN STA 26+75 +/- AND STA 29+87 +/-.

AWAY FROM TRAFFIC, INSTALL AS MUCH AS POSSIBLE OF THE TEMPORARY MARKINGS AND SIGNING TO PREPARE FOR UPCOMING TRAFFIC SHIFT.

USING RSD 1101.02, SHEET 1 OF 15, USING FLAGGERS AS NEEDED, AND WORKING IN A CONTINUOUS MANNER TO COMPLETE IN A SINGLE WORK PERIOD, SHIFT TRAFFIC TO PATTERN FOR PHASE III AS SHOWN ON TMP-14 THROUGH TMP-16 IN THE FOLLOWING MANNER:

- A. COMPLETE INSTALLATION OF TEMPORARY MARKINGS AND SIGNING FOR NEW TRAFFIC PATTERN
- B. COVER OR REMOVE DETOUR SIGNING FOR DETOUR OF -L- AND INSTALL TRAFFIC CONTROL DEVICES FOR NEW TRAFFIC PATTERN. REVISED DETOUR FOR -Y1- (BETHEL CHURCH ROAD) AT -L- AS SHOWN ON TMP-20.
- C. SHIFT TRAFFIC
- D. ENSURE ALL TRAFFIC CONTROL DEVICES AND SIGNING ARE CORRECT AND IN PLACE AND OPEN -L-, -Y2-, DETOUR 1 AND DETOUR 2 TO PHASE III PATTERN.

PHASE III

STEP 1: AWAY FROM TRAFFIC, COMPLETE CONSTRUCTION OF -Y1- (BETHEL CHURCH ROAD) FROM STA 10+90 +/- TO STA 24+00 +/- AS SHOWN ON TMP-14 & TMP-16. PLACE TEMPORARY MARKINGS IN FINAL PATTERN.

AWAY FROM TRAFFIC, COMPLETE CONSTRUCTION OF -Y3- (HINES ANDREWS ROAD) FROM STA 10+00 +/- TO STA 12+73 +/- AS SHOWN ON TMP-16. PLACE TEMPORARY MARKINGS IN FINAL PATTERN.

USING RSD 1101.02, SHEET 1 OF 15 AS NECESSARY, COMPLETE CONSTRUCTION OF -SR1-. [TMP-6]

USING RSD 1101.02, SHEET 1 OF 15, AS NECESSARY, CONSTRUCT -Y5- IN 2 STEPS AS SHOWN IN INSETS 'A' AND 'B' ON TMP-14.

BEGIN COMPLETION OF SIDE SLOPE CONSTRUCTION ALONG -L- FROM STA 23+00 +/- TO STA 30+25 +/- AS SHOWN ON TMP-15.

USING RSD 1101.02, SHEETS 1 AND 2 OF 15, WEDGE AND WIDEN -L- FROM STA 31+40 +/- TO STA 36+50 +/- AND -Y2- FROM STA 17+02 +/- TO 23+00 +/-, AND COMPLETE CONSTRUCTION OF -L- BETWEEN STA 30+00 +/- AND STA 31+40 +/-, UP TO BUT NOT INCLUDING FINAL SURFACE COURSE AS SHOWN ON TMP-15.

USING RSD 1101.02, SHEETS 1 AND 2 OF 15, BEGIN TIE-IN WORK ALONG -Y1- BETWEEN STA 24+00 +/- AND STA 26+87 +/- AND -Y3- BETWEEN STA 12+73 +/- AND STA 13+60 +/- . [TMP-16]

AWAY FROM TRAFFIC, INSTALL AND COVER, IF NECESSARY, ALL FINAL SIGNING TO PREPARE FOR FINAL TRAFFIC SHIFT IN NEXT STEP.

STEP 2: USING RSD 1101.02, SHEET 1, USING FLAGGERS AS NEEDED, AND WORKING IN A CONTINUOUS MANNER TO COMPLETE IN A SINGLE WORK PERIOD, COMPLETE THE FOLLOWING WORK TO SHIFT TRAFFIC TO FINAL TRAFFIC PATTERN:

- A. COMPLETE ALL REMAINING TIE-IN WORK ALONG -Y1- BETWEEN STA 24+00 +/- AND STA 26+87 +/- AND -Y3- BETWEEN STA 12+73 +/- AND STA 13+60 +/- . [TMP-16]
- B. INSTALL REMAINING TEMPORARY PAVEMENT MARKINGS IN FINAL PATTERN [TMP-17, TMP-18, & TMP-19]
- C. SHIFT ALL TRAFFIC INTO FINAL PATTERN. INSTALL TRAFFIC CONTROL DEVICES TO CLOSE EXISTING BETHEL CHURCH ROAD BETWEEN -Y1- AND -Y3- .
- D. ENSURE ALL TRAFFIC CONTROL DEVICES AND SIGNING ARE CORRECT AND IN PLACE AND OPEN ALL ROADS TO FINAL PATTERN

STEP 3: AWAY FROM TRAFFIC, COMPLETE SIDE SLOPE CONSTRUCTION AND REMOVE EXISTING PAVEMENT ALONG EXISTING MCLEANSVILLE ROAD. [TMP-17 & TMP-18]

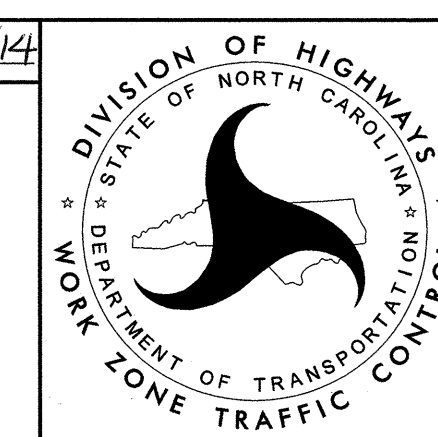
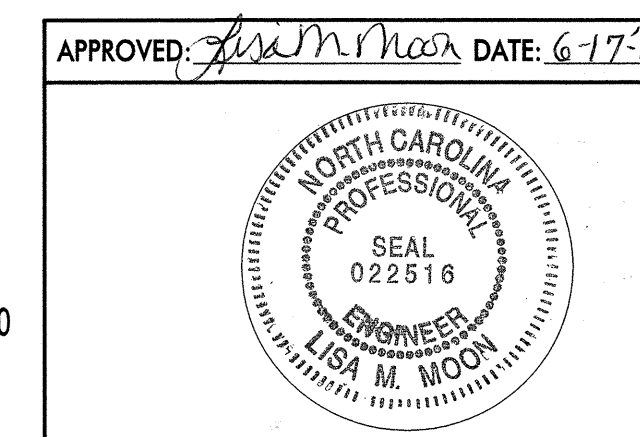
USING RSD 1101.03, SHEET 1 OF 9, FOR APPROACH SIGNING, PERMANENTLY CLOSE HIGHWAY-RAIL CROSSING AT -Y6- CARMON ROAD AS SHOWN ON PLAN SHEET 2G OF THE ROADWAY PLANS. ALSO PERMANENTLY CLOSE PRIVATE CROSSING AS SHOWN ON PLAN SHEET 2F OF THE ROADWAY PLANS.

AWAY FROM TRAFFIC, REMOVE EXISTING BETHEL CHURCH ROAD PAVEMENT BETWEEN -Y1- AND HINE ANDREWS ROAD. [TMP-19]

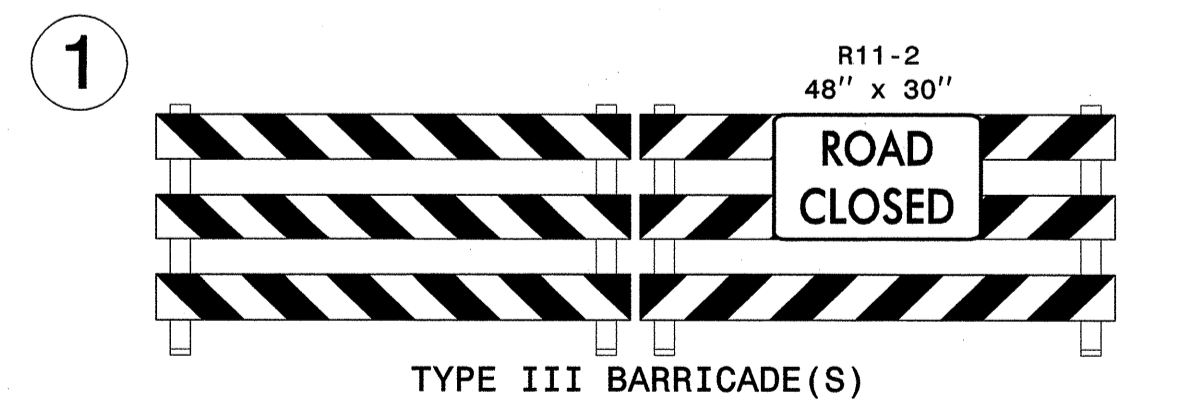
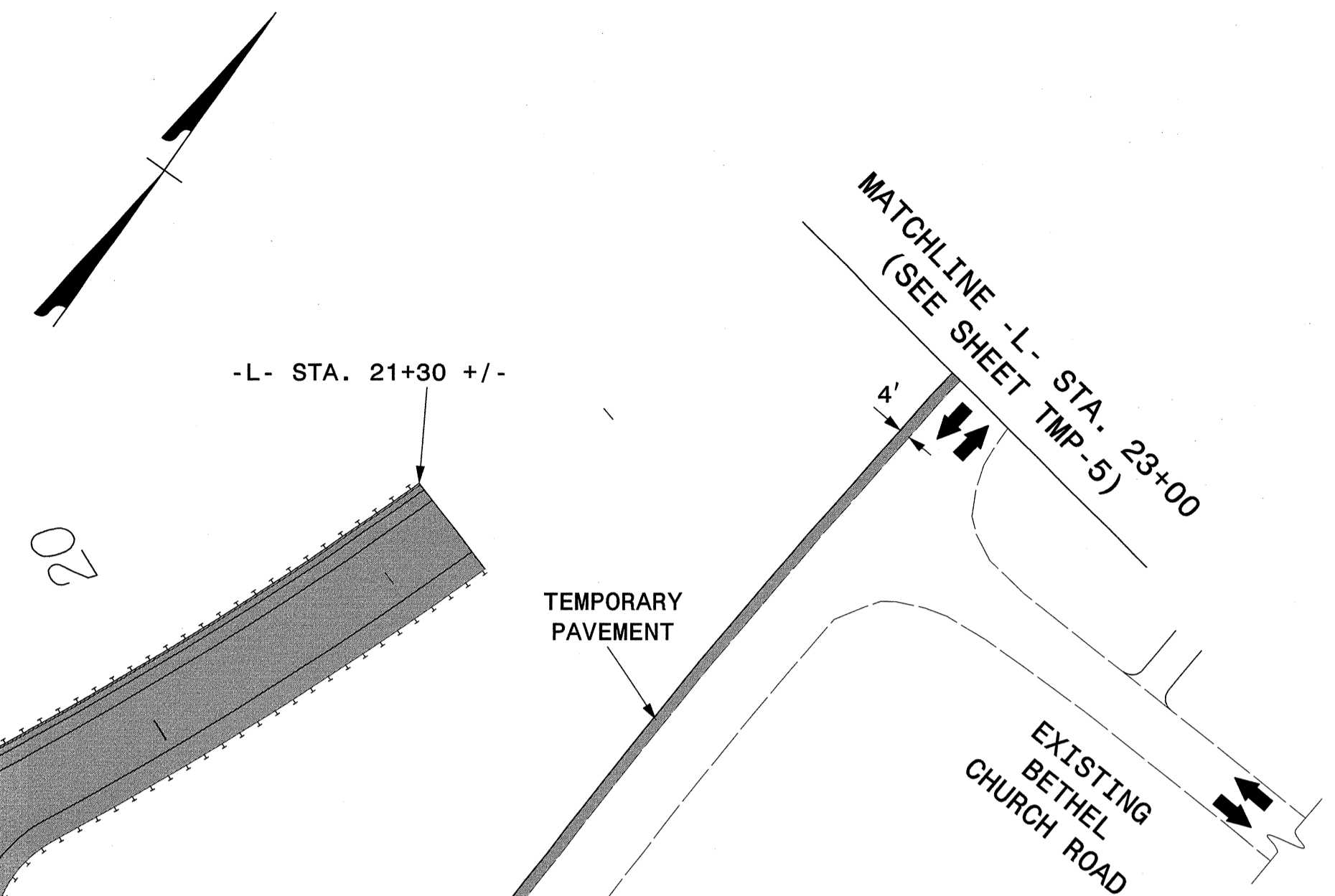
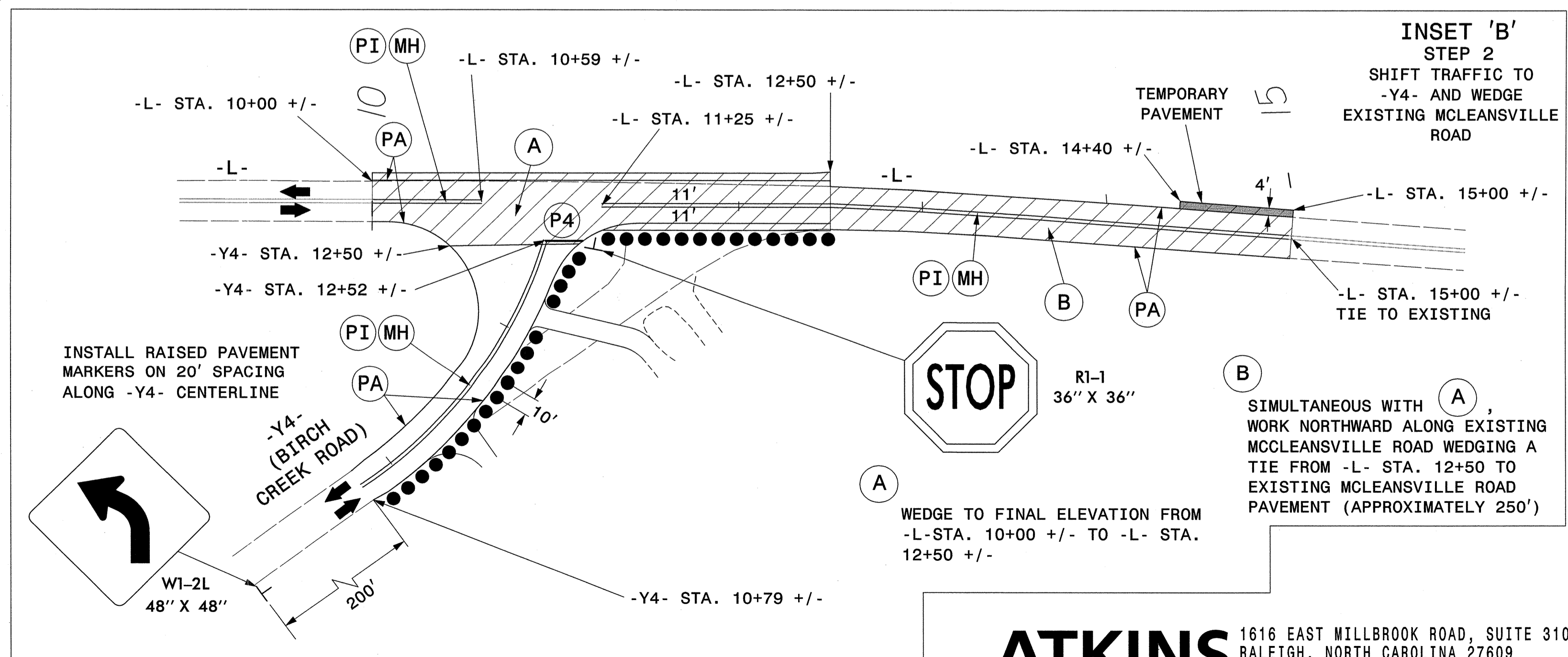
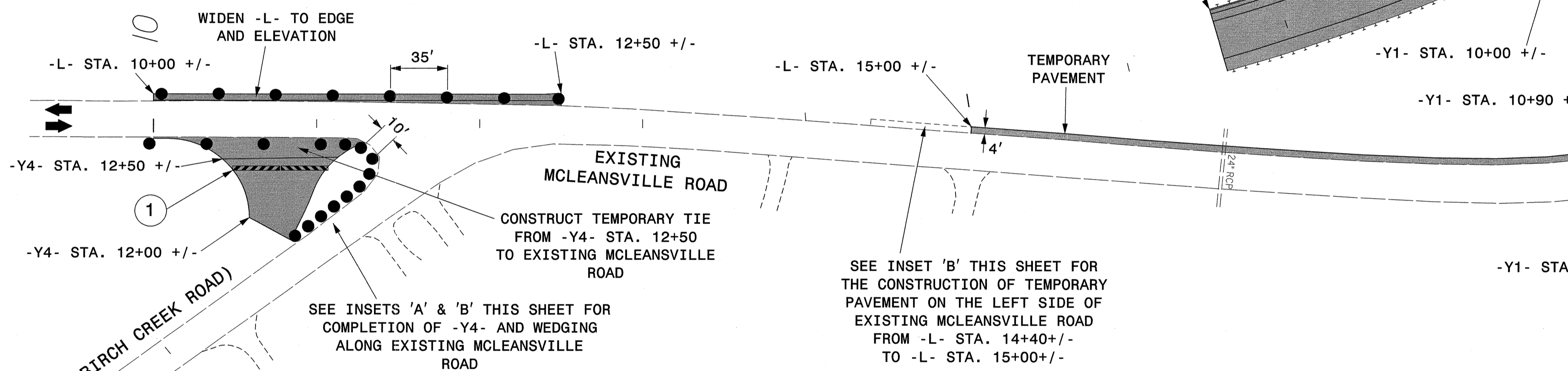
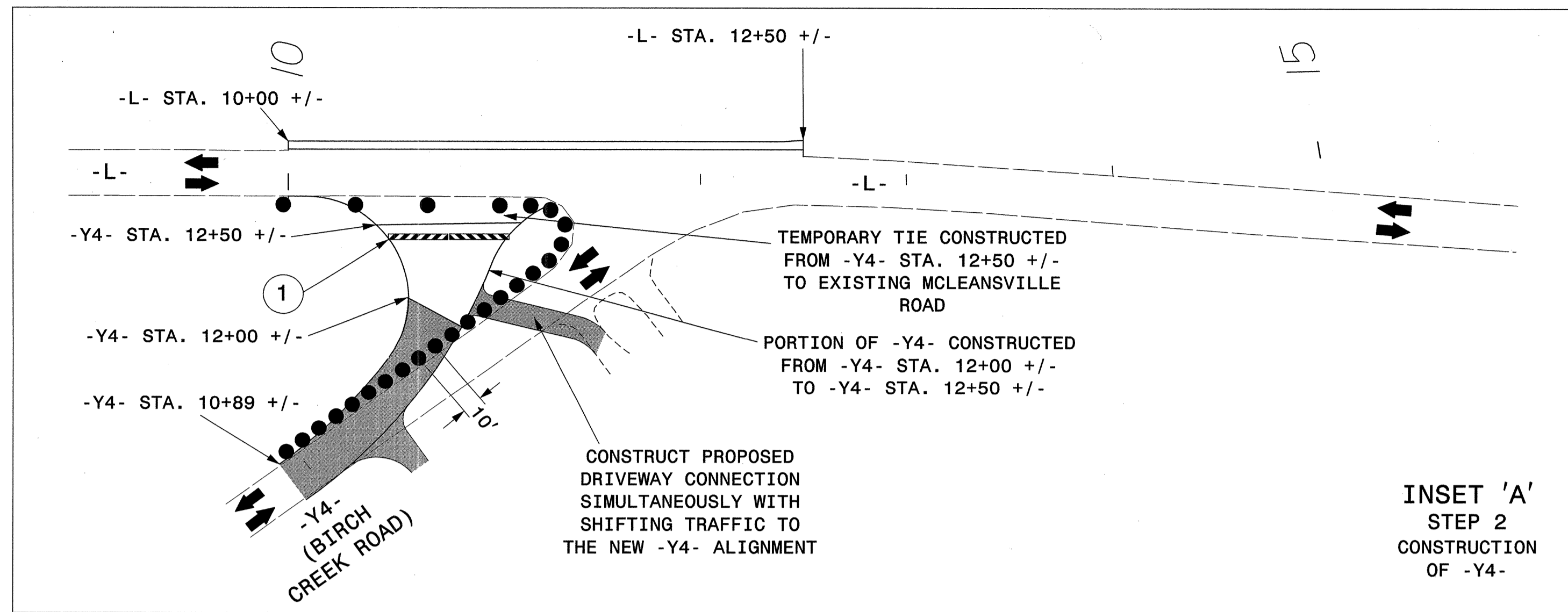
USING RSD 1101.02, SHEETS 1 AND 2 OF 15, USE FLAGGERS TO COMPLETE FINAL SURFACE COURSE AND INSTALL FINAL PAVEMENT MARKINGS.

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 RALEIGH, NORTH CAROLINA 27609
 (919) 876-6888 NCBEES #F-0326

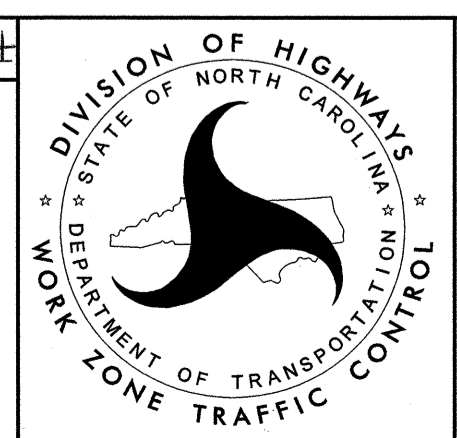


**PHASING
 PHASES II & III**



APPROVED: *Lisa M. Moon* DATE: 6-17-14

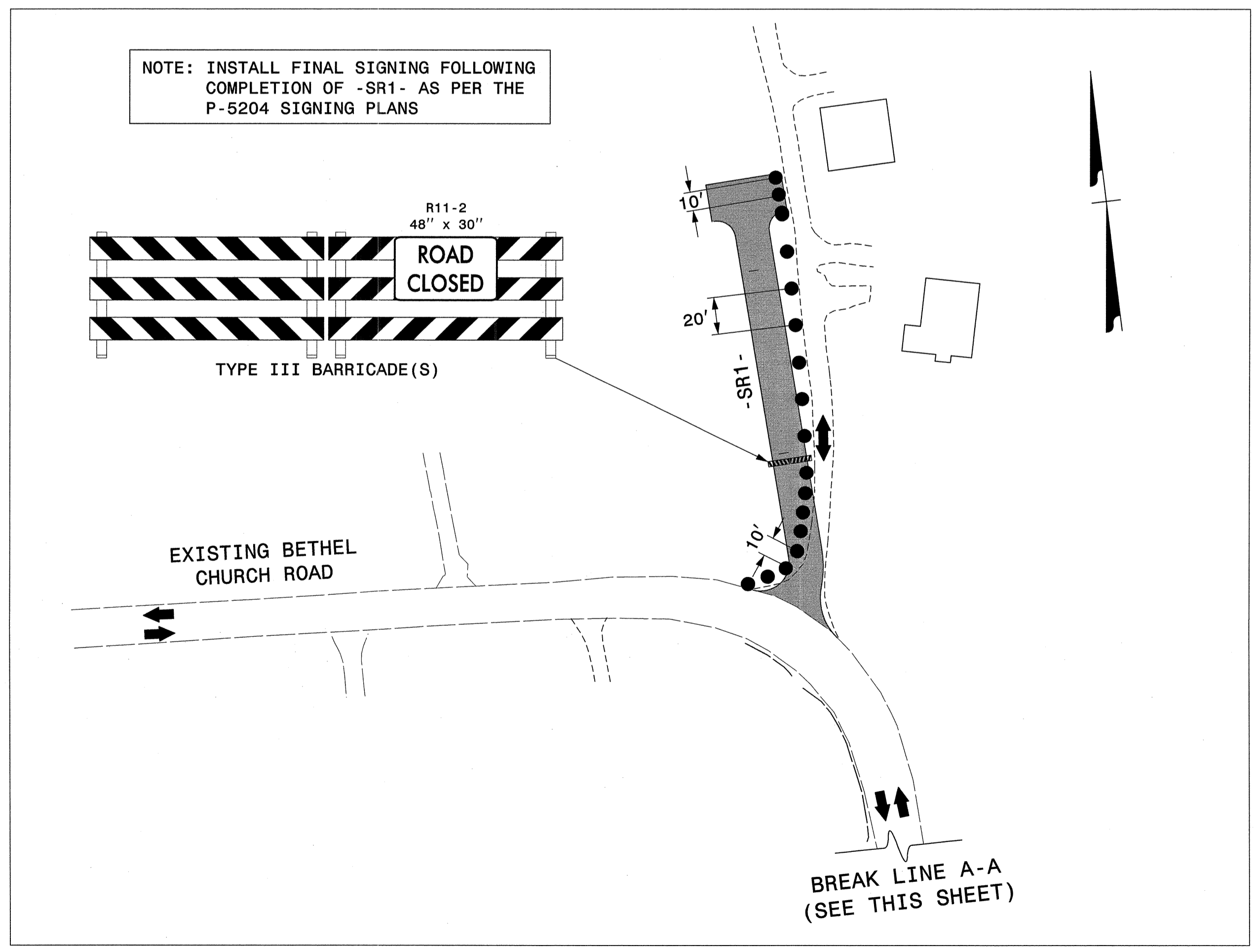
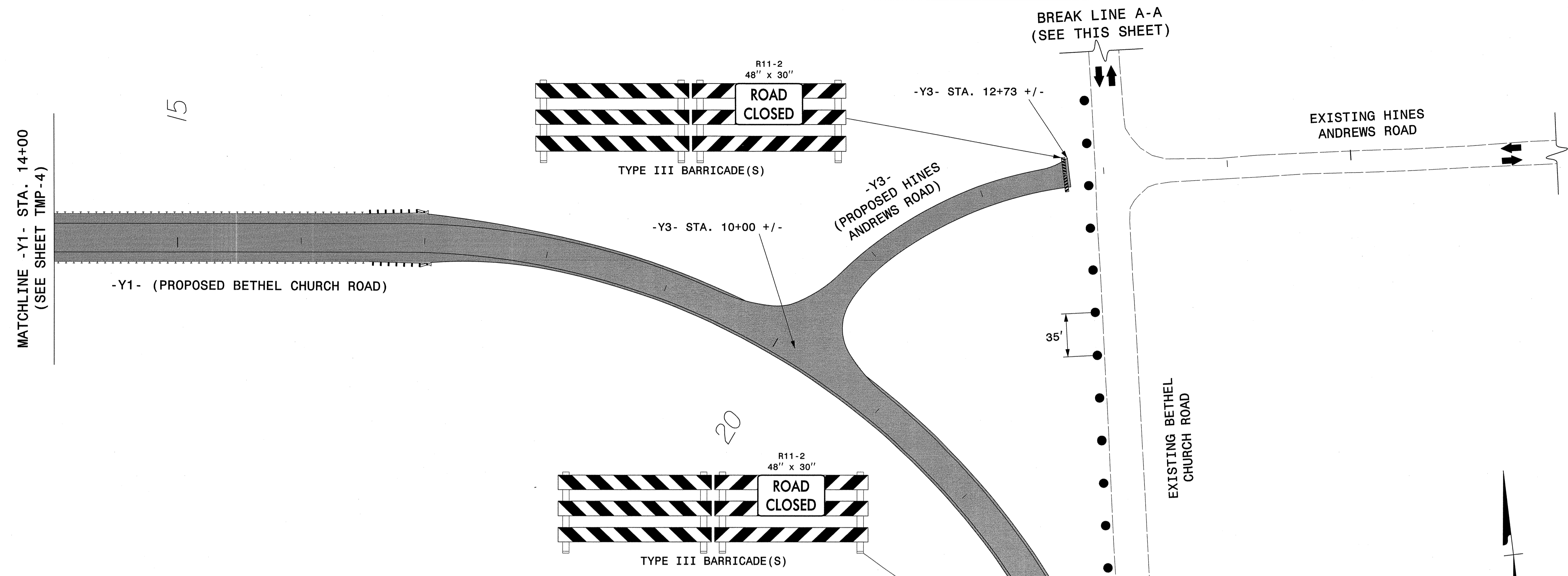
PROFESSIONAL ENGINEER
SEAL 022516
LISA M. MOON



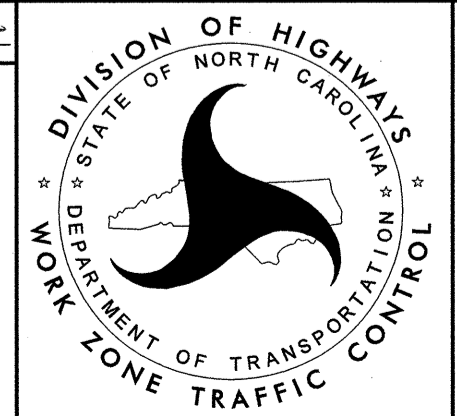
PHASE I DETAIL
-L-
(MCLEANSVILLE RD),
-Y1- & -Y4-

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 310
RALEIGH, NORTH CAROLINA 27609
(919) 876-6888 NCBEES #F-0326

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APPROVED: *Lisa M. Moon* DATE: 6-17-14



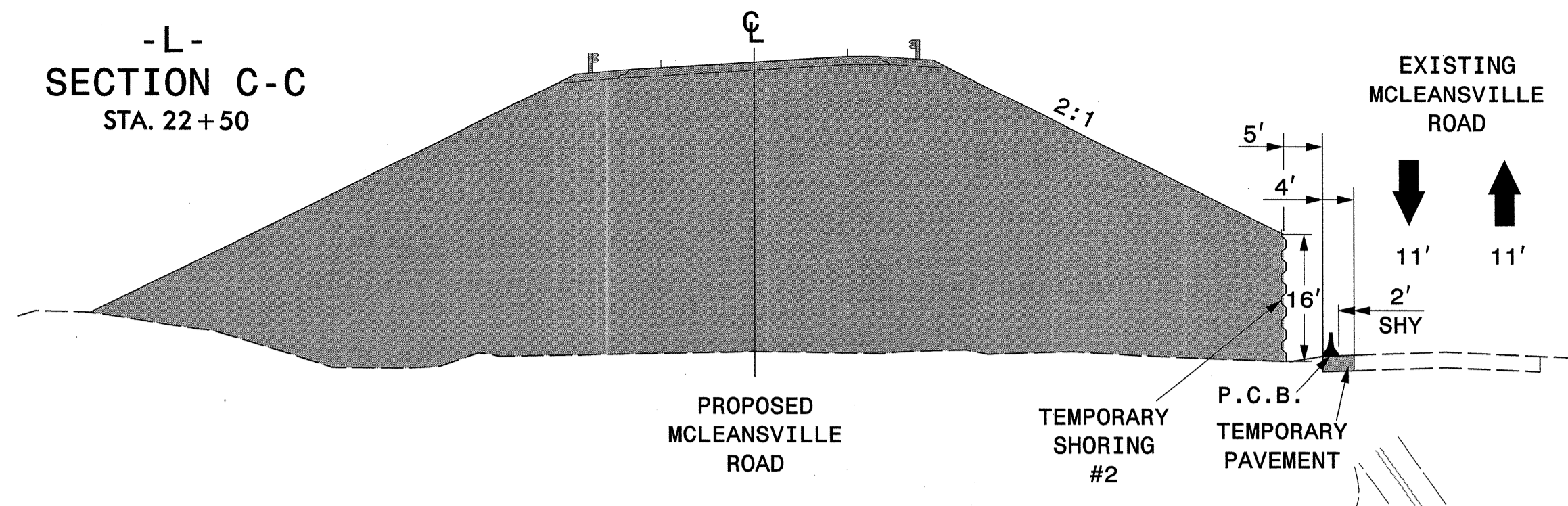
PHASE I DETAIL
-Y1-, -Y3- & -SR1-

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RALEIGH, NORTH CAROLINA 27609
(919) 876-6888 NCBEES #F-0326

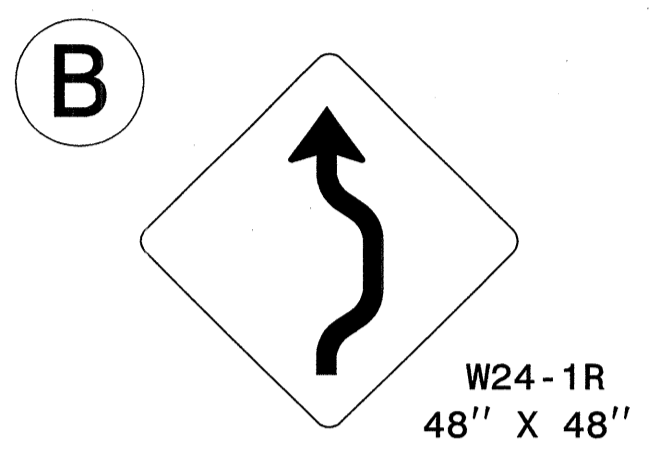
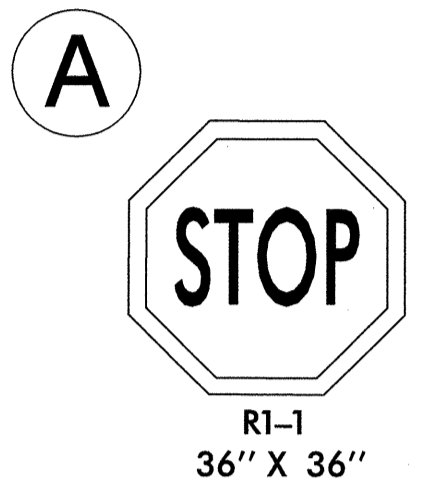
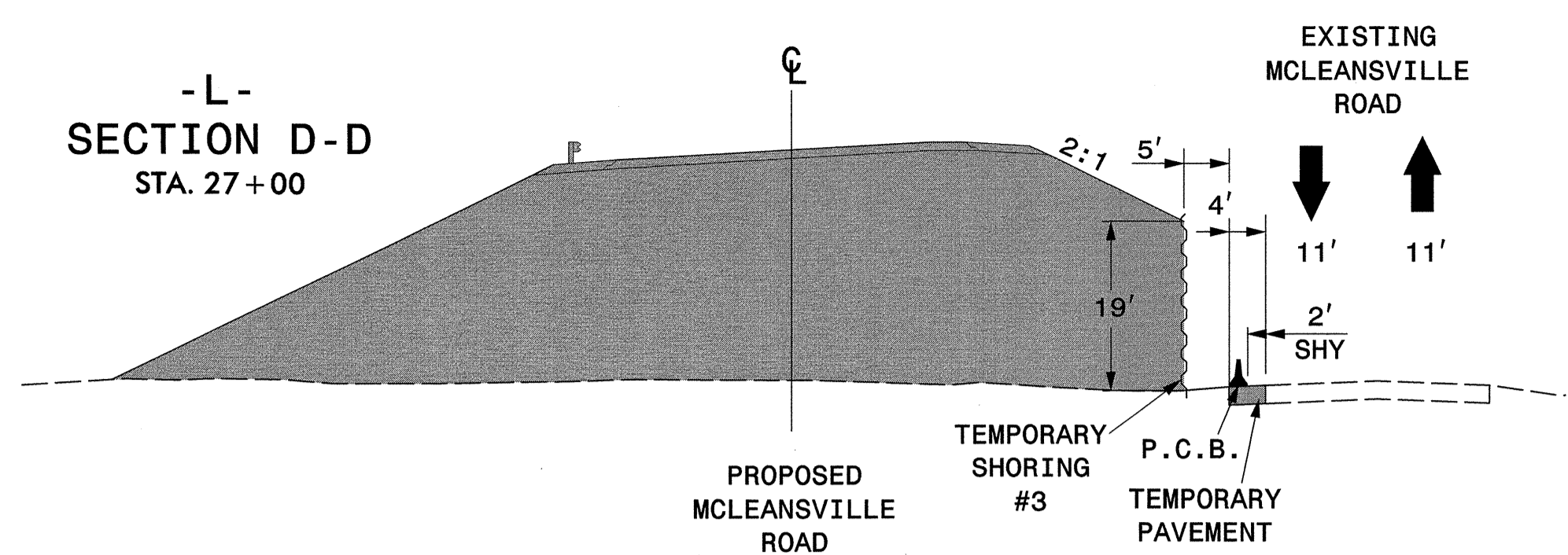
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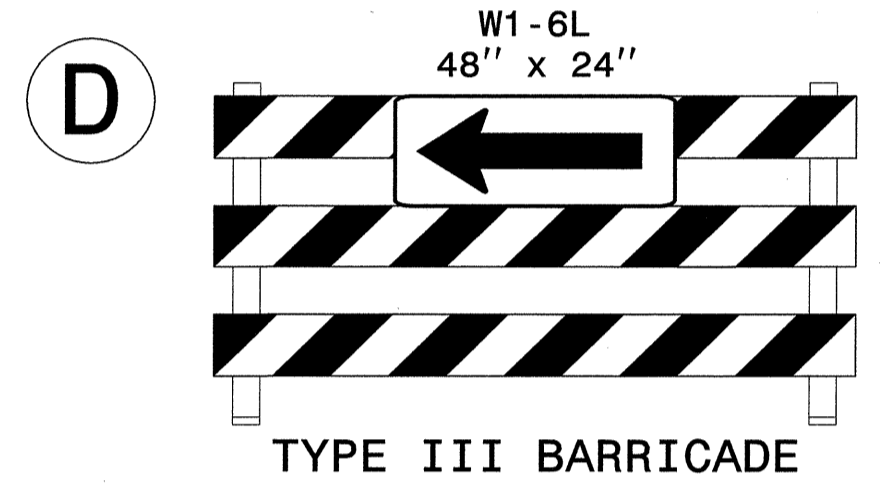
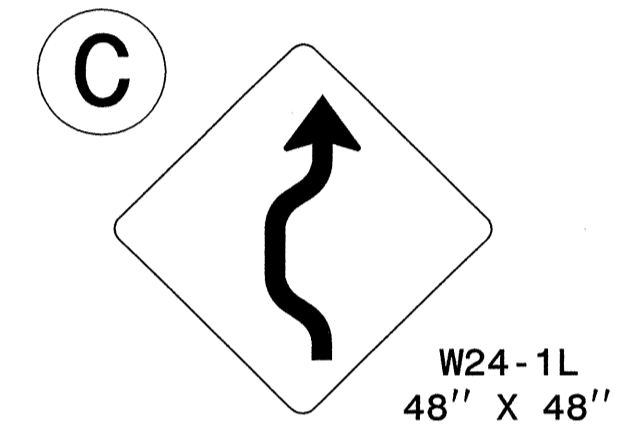
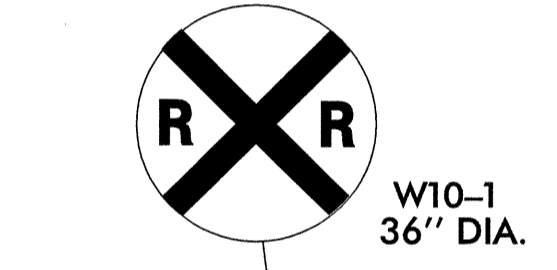
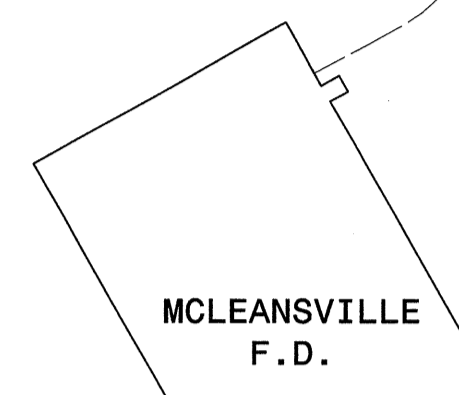
-L-
SECTION C-C
STA. 22+50



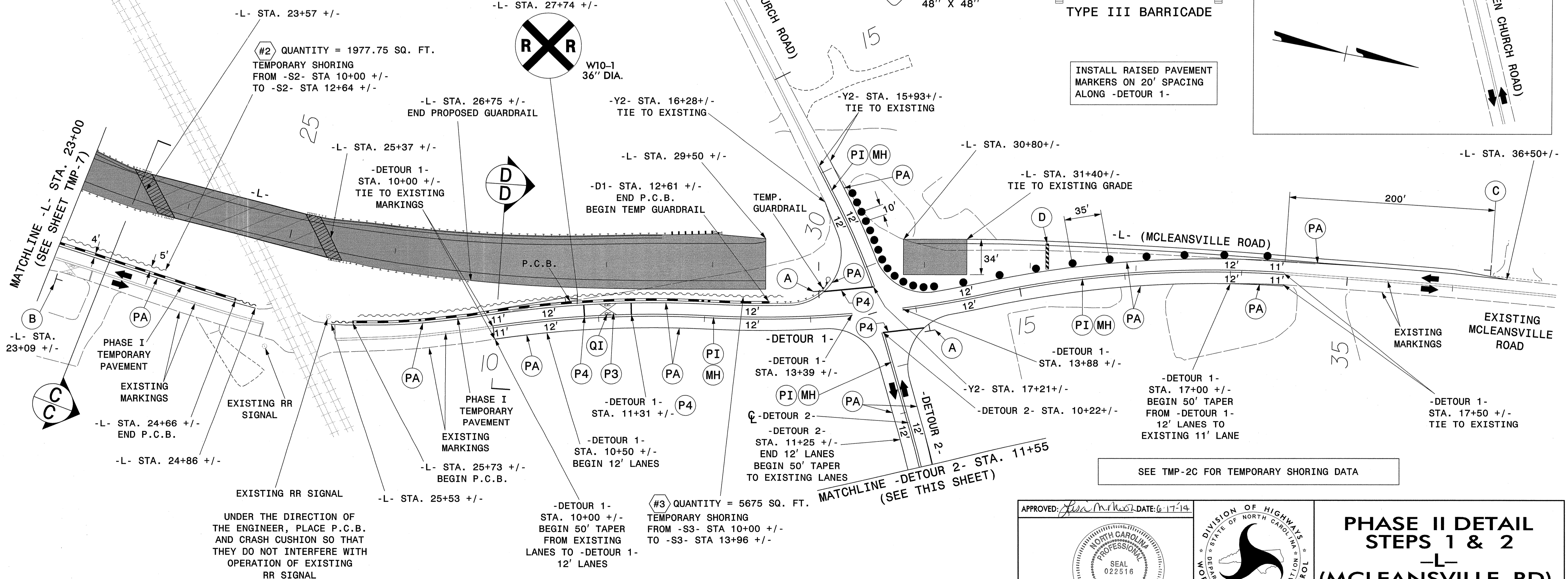
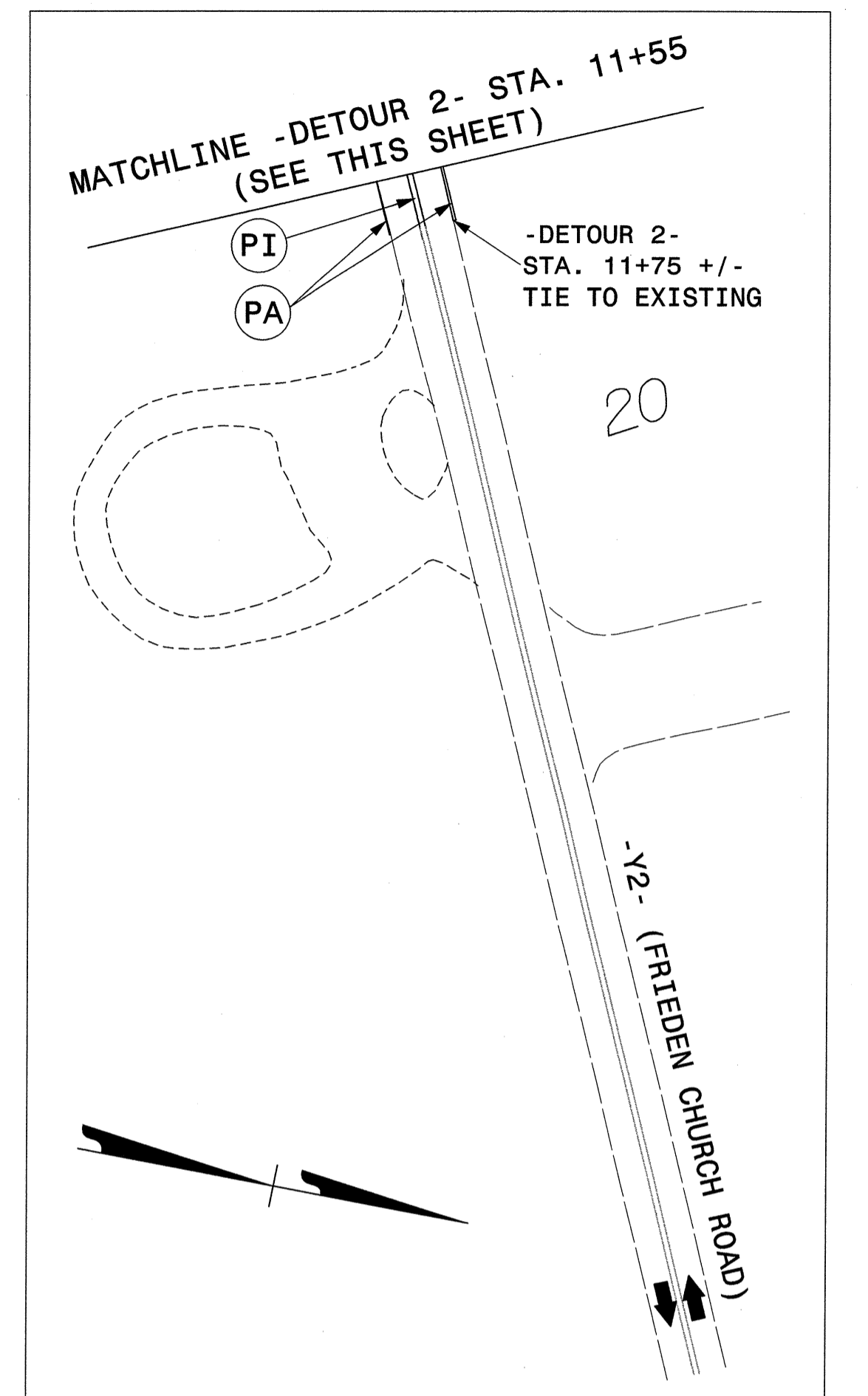
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SECTION D-D
STA. 27+00



SEE ROADWAY PLANS, SUMMARY OF GUARDRAIL SHEET 3-B, FOR TEMPORARY GUARDRAIL INFORMATION



INSTALL RAISED PAVEMENT MARKERS ON 20' SPACING ALONG -DETOUR 1-



SEE TMP-2C FOR TEMPORARY SHORING DATA

APPROVED: *[Signature]* DATE: 6-17-14

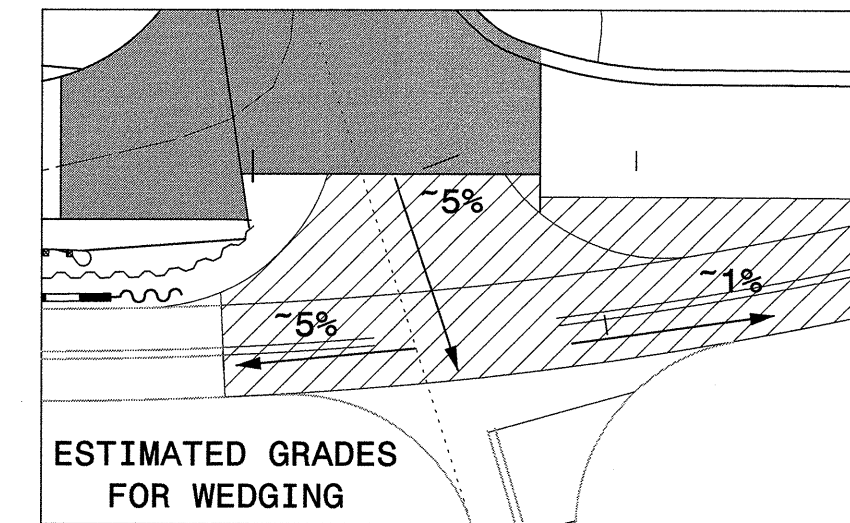
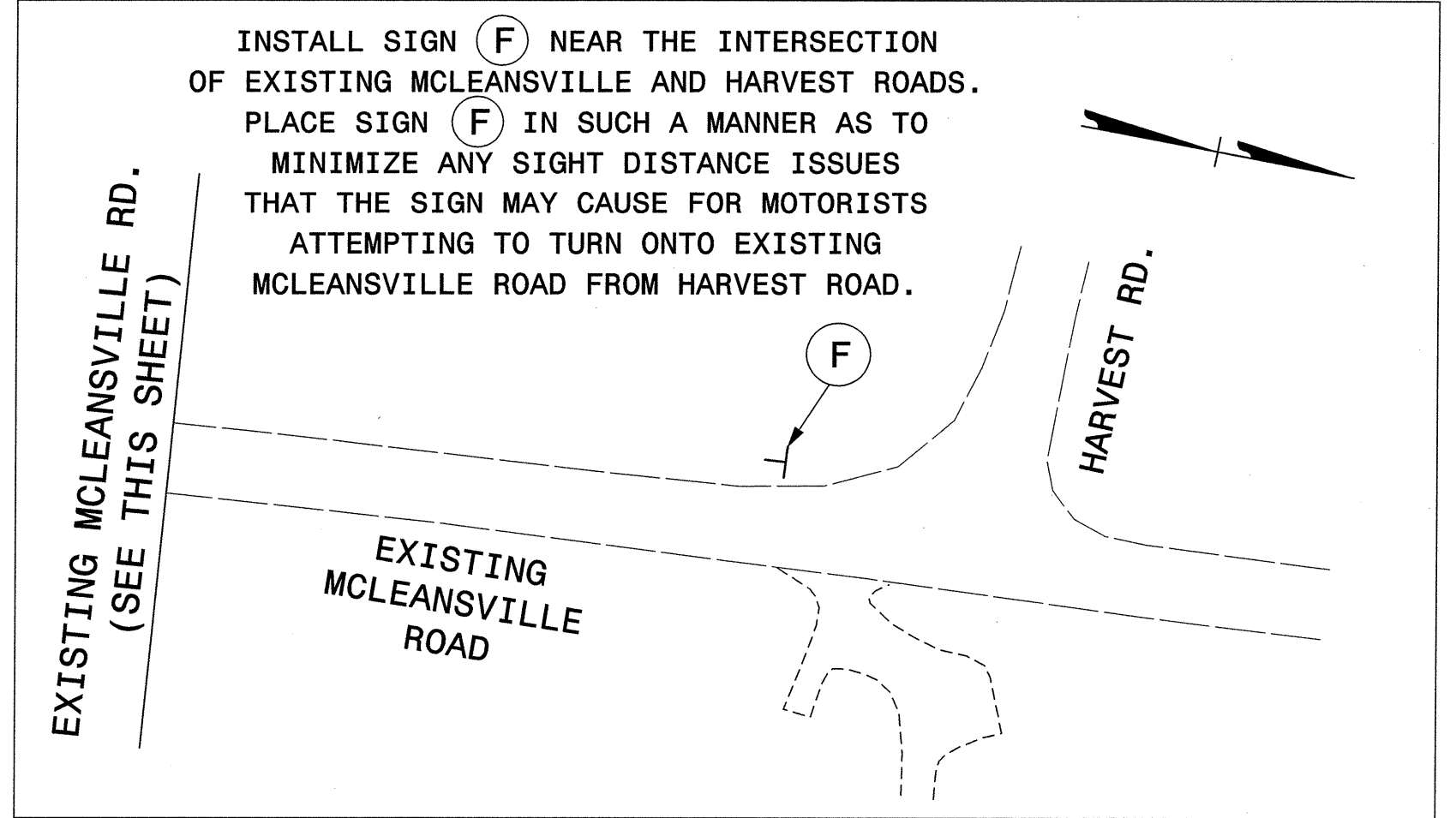
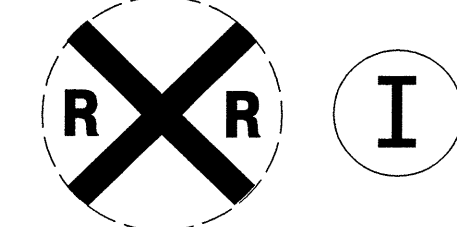
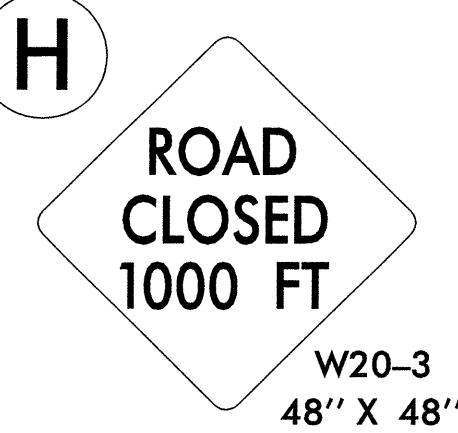
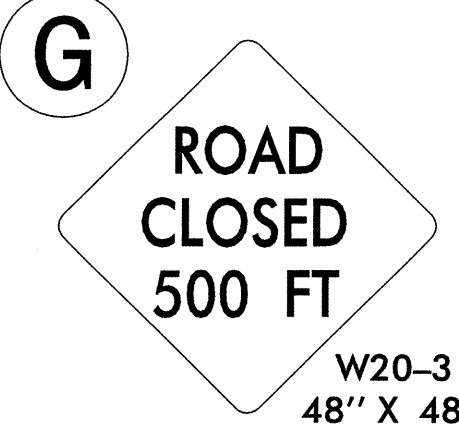
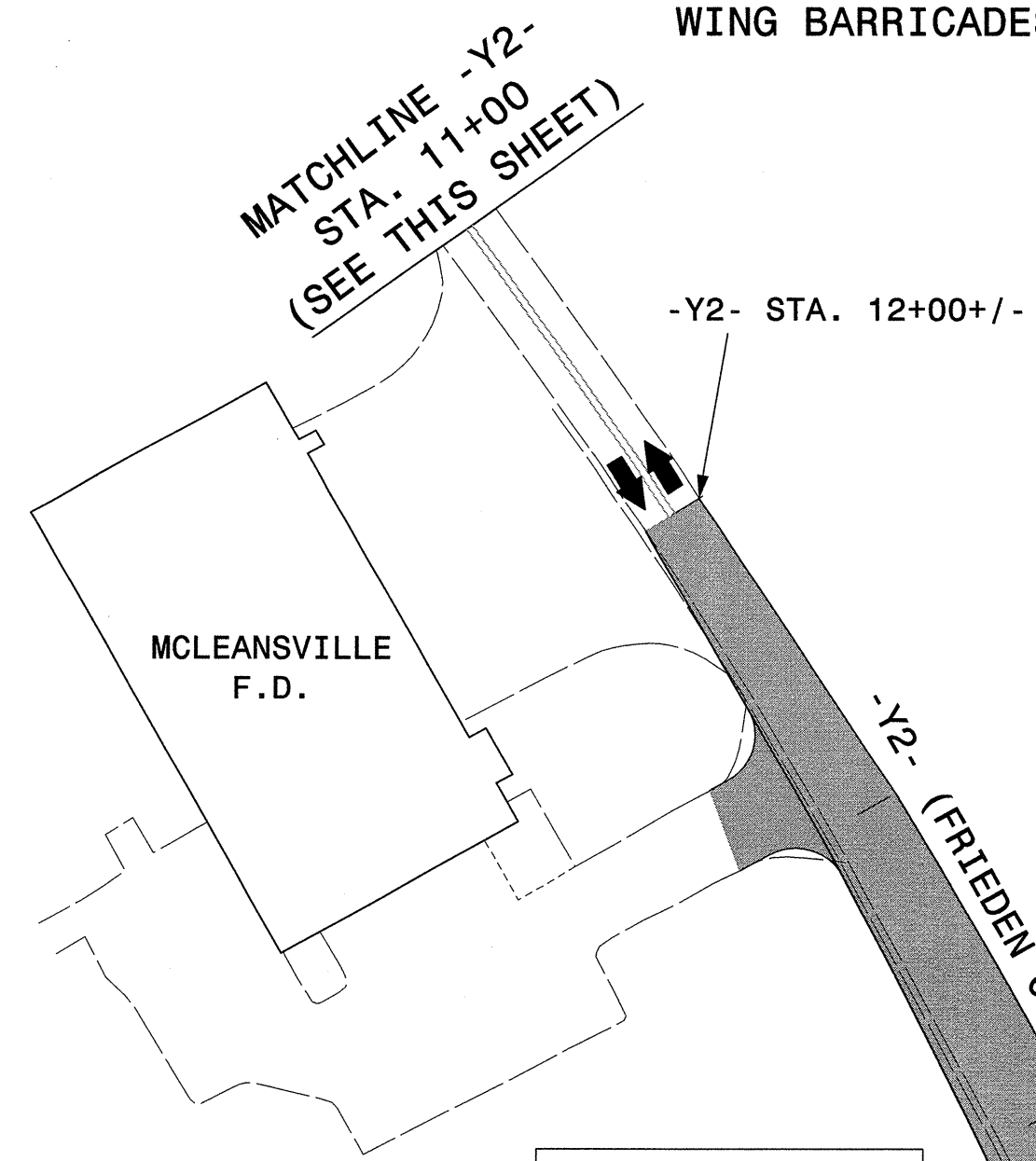
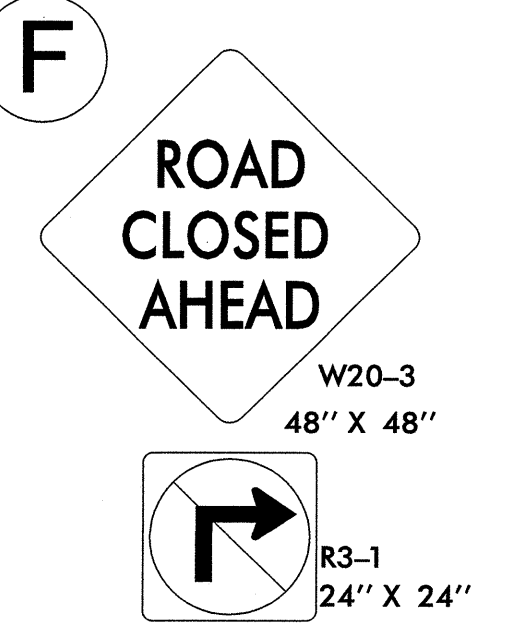
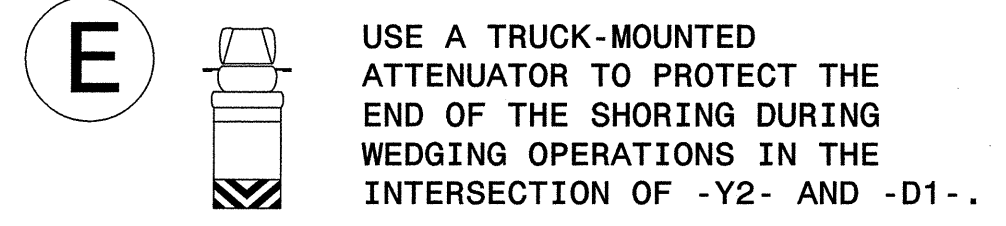
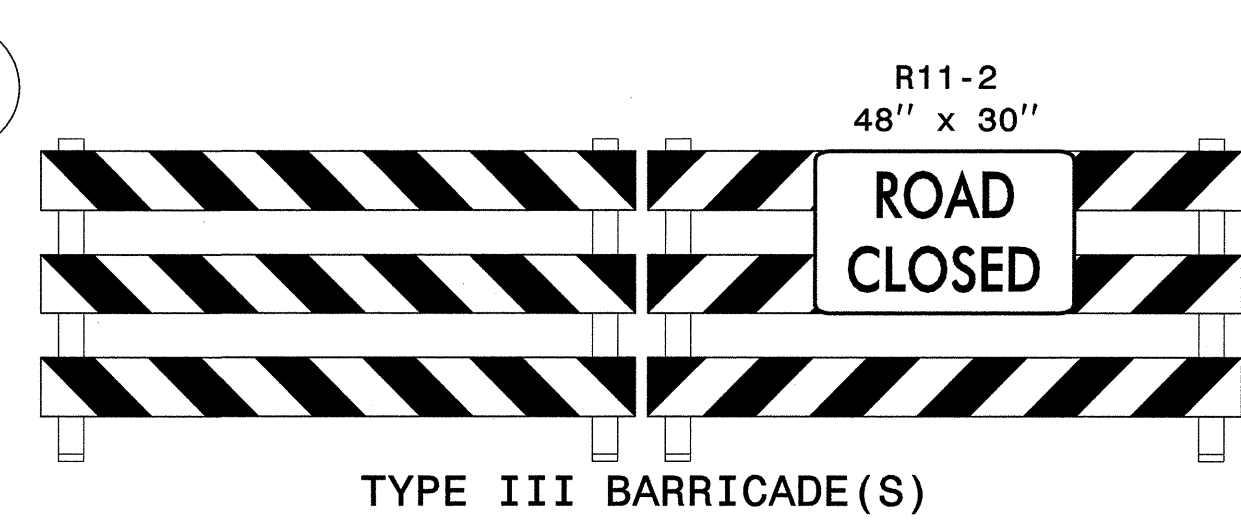
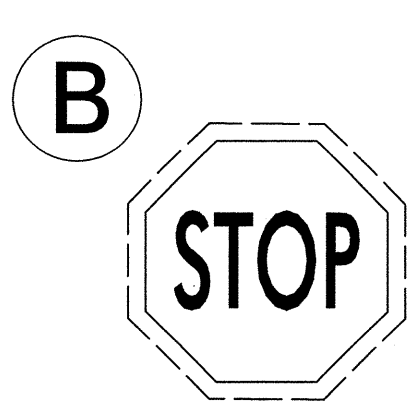
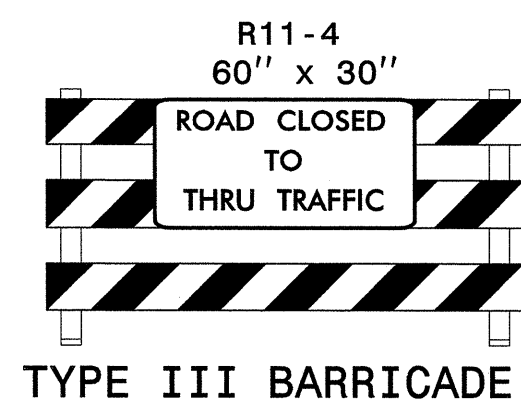
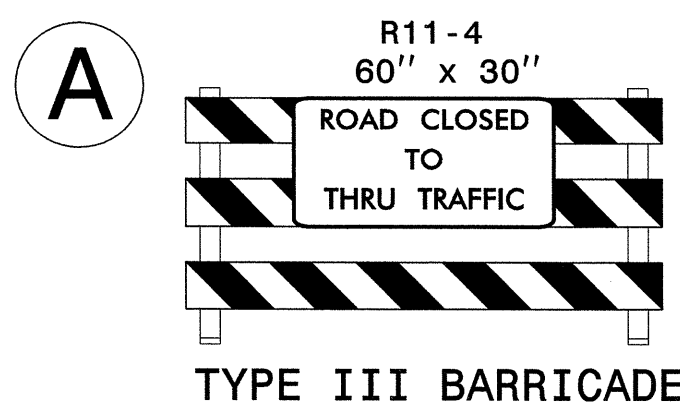
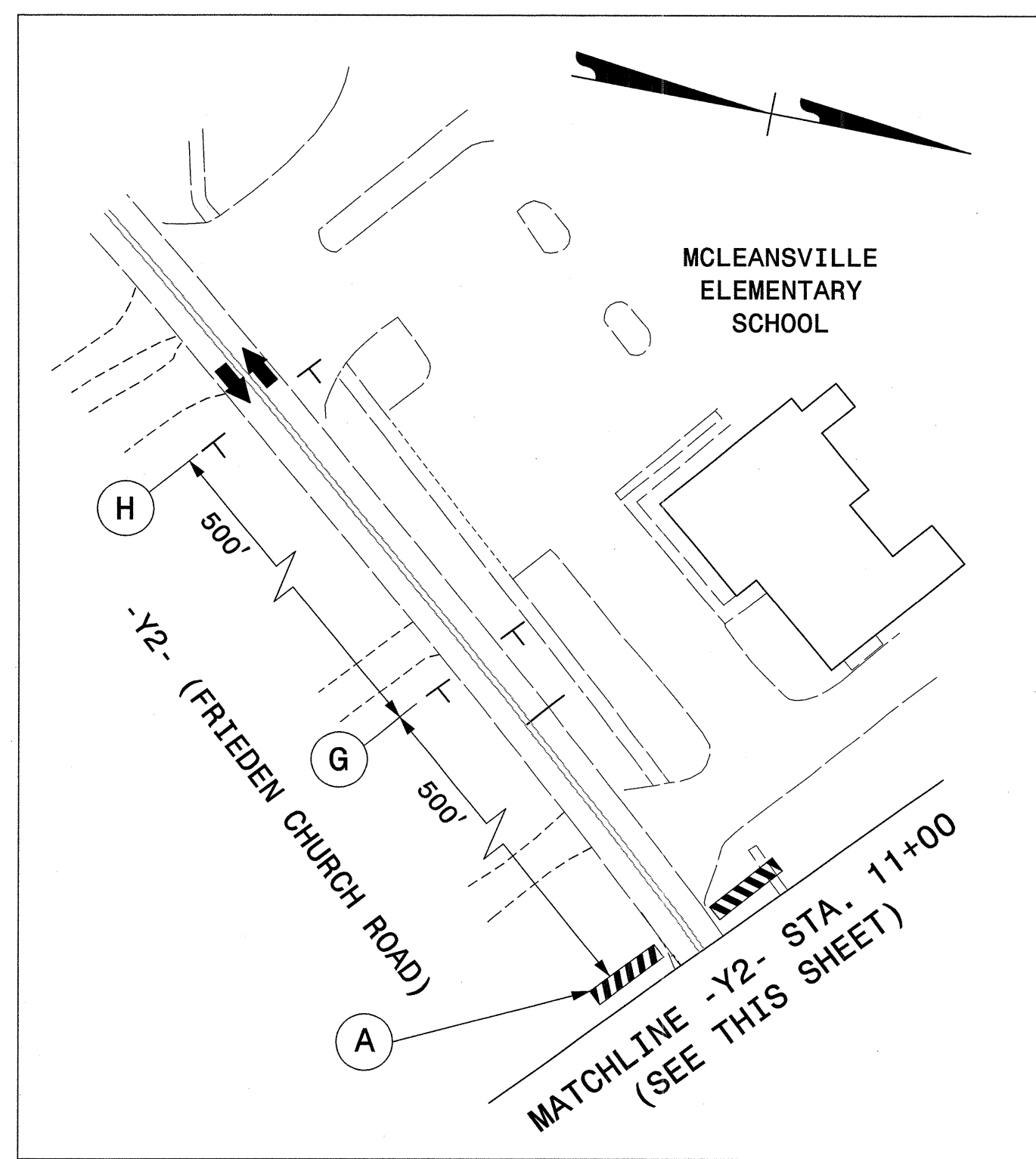
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
WORK ZONE TRAFFIC CONTROL

**PHASE II DETAIL
STEPS 1 & 2**
-L-
**(MCLEANSVILLE RD),
& -Y2-**

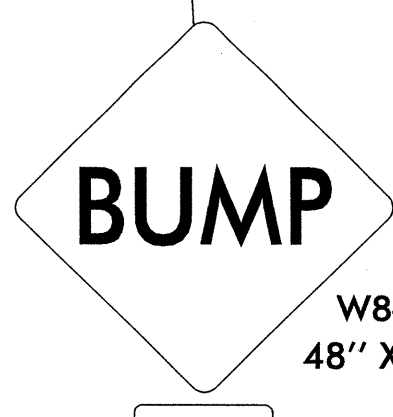
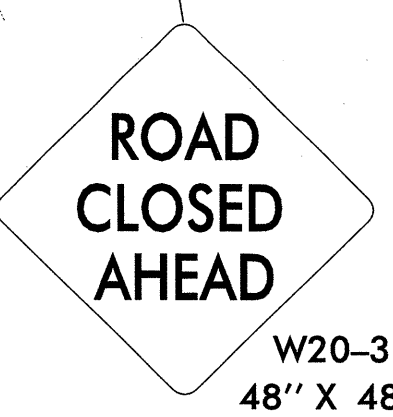
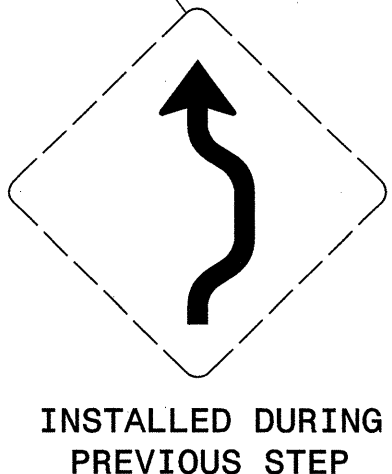
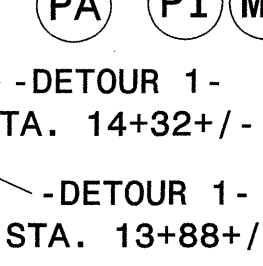
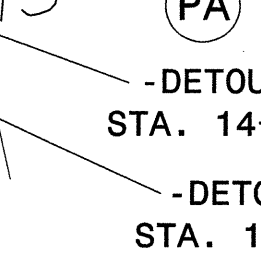
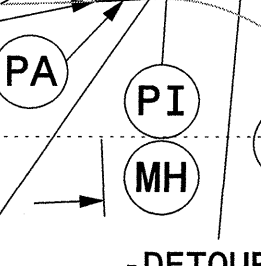
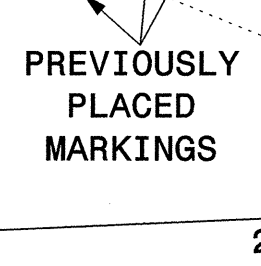
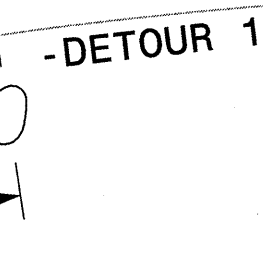
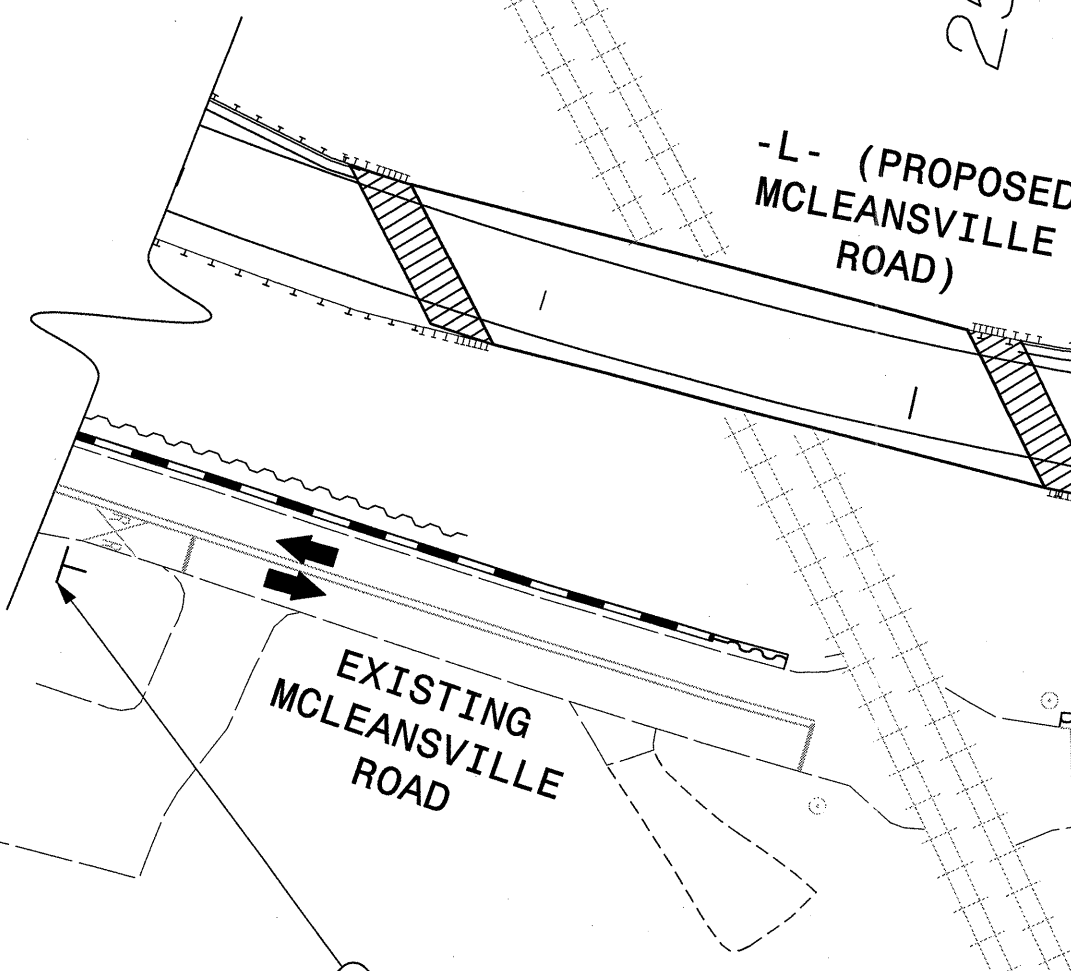
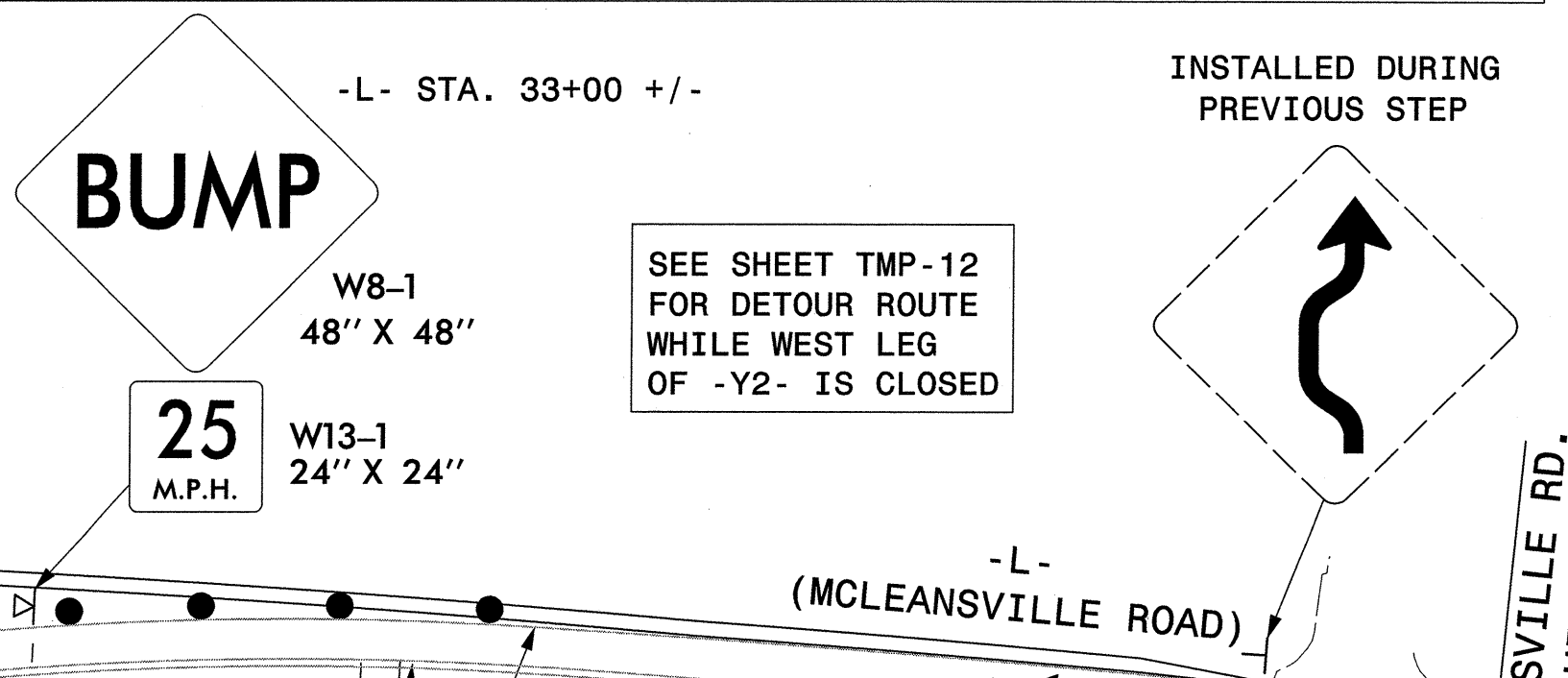
ATKINS
1616 EAST MILLBROOK ROAD, SUITE 310
RALEIGH, NORTH CAROLINA 27609
(919) 876-6888 NCBEE #F-0326

17-JUN-2014 10:01 C:\Users\pdp\OneDrive\Production\Trans\NC\DOT\McLeansville\TrafficControl\TCP\TMP\Plans\Option 2\PS204_LC_TMP_08.dgn

DCK 05/20/14



USE FLAGGERS TO MAINTAIN PROPERTY OWNER INGRESS AND EGRESS ALONG THE WEST LEG OF FRIEDEN CHURCH ROAD DURING ICT WORK.

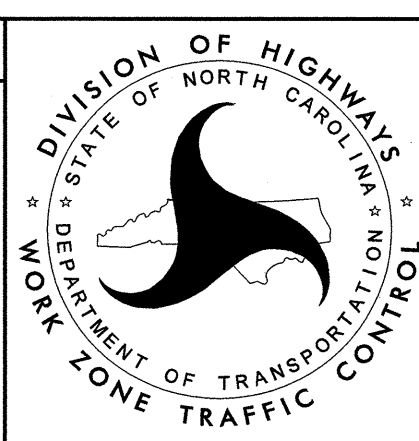
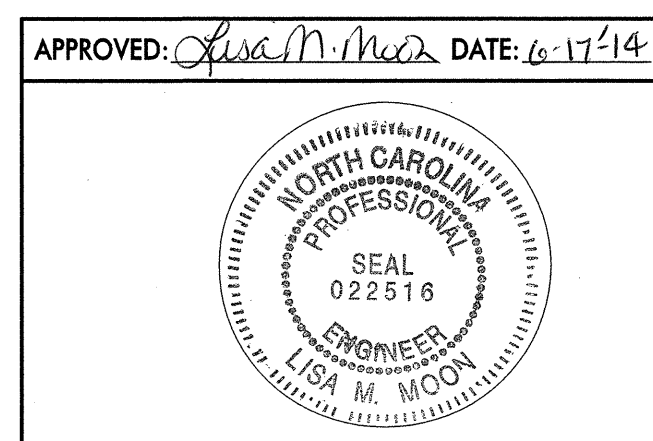


REFER TO RSD 1101.03, SHEET 2 OF 9, FOR PLACEMENT OF SIGNING IN ADVANCE OF THE -Y2- CLOSURE AT -DETOUR 1-

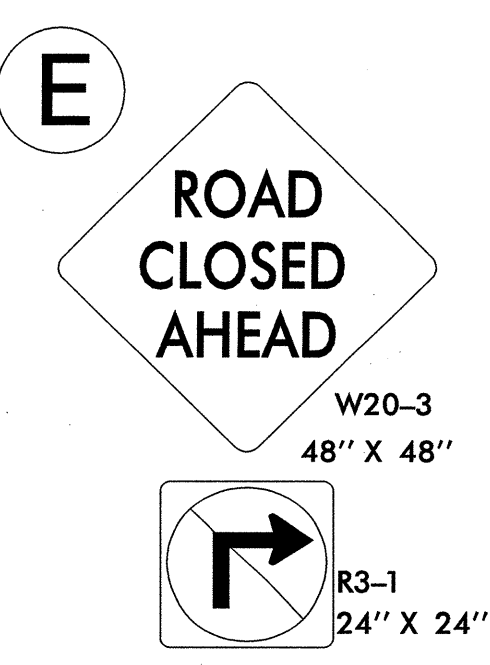
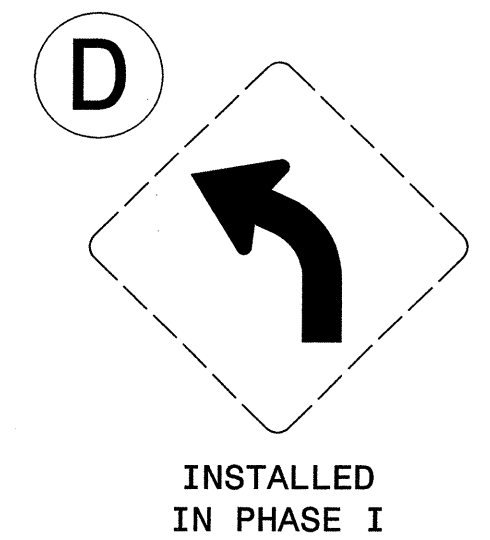
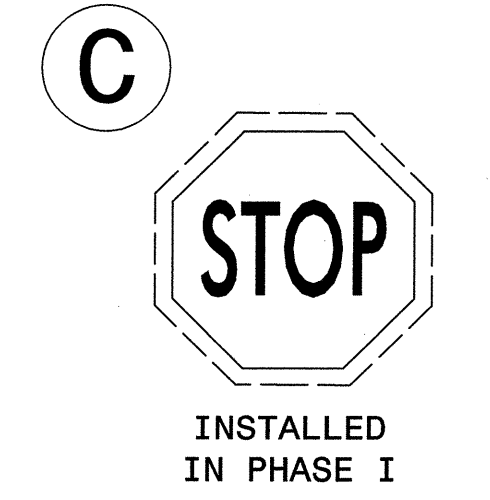
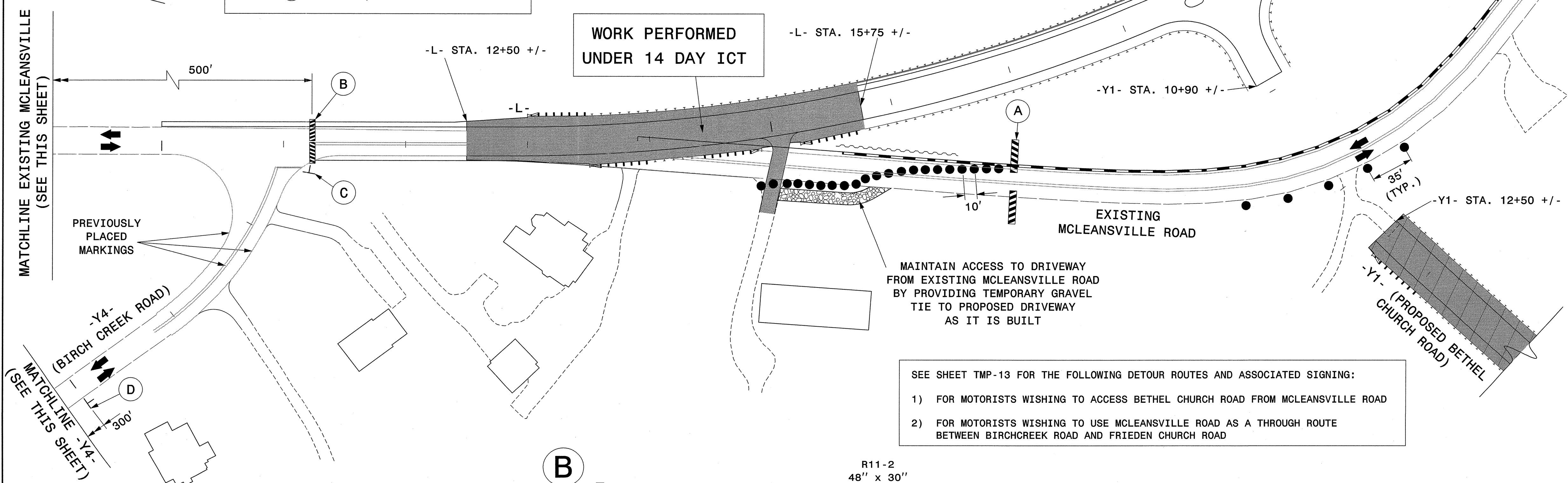
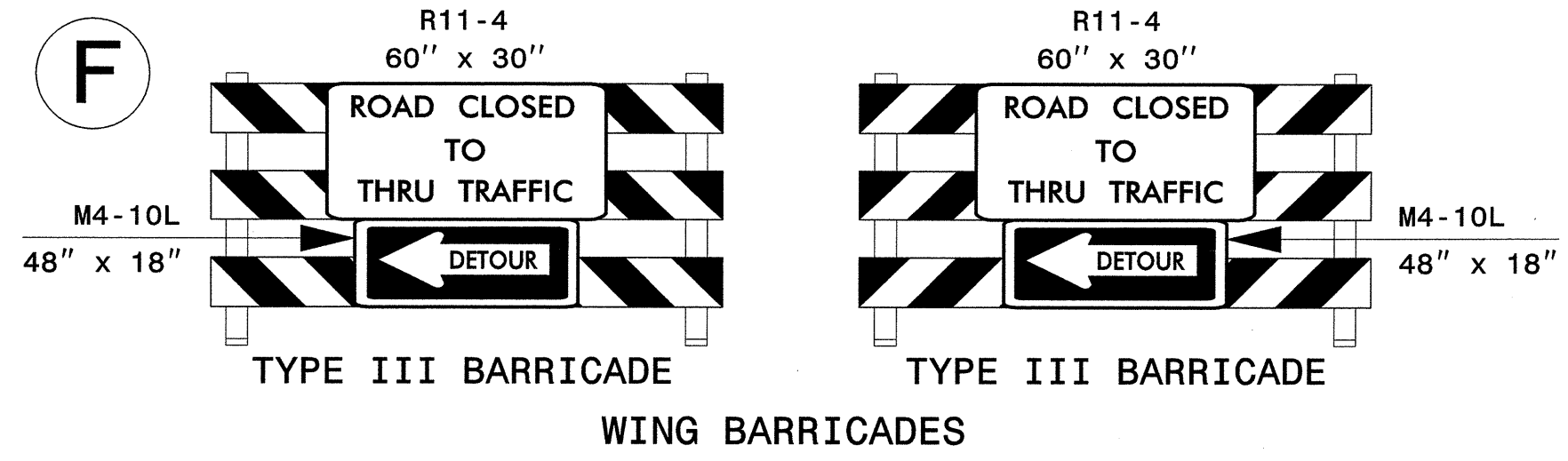
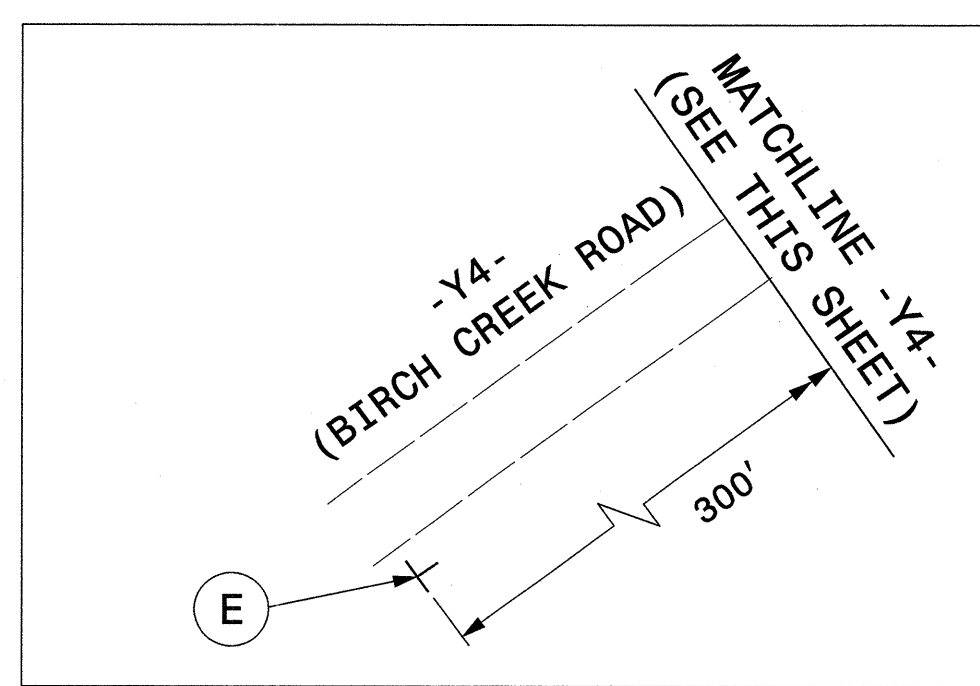
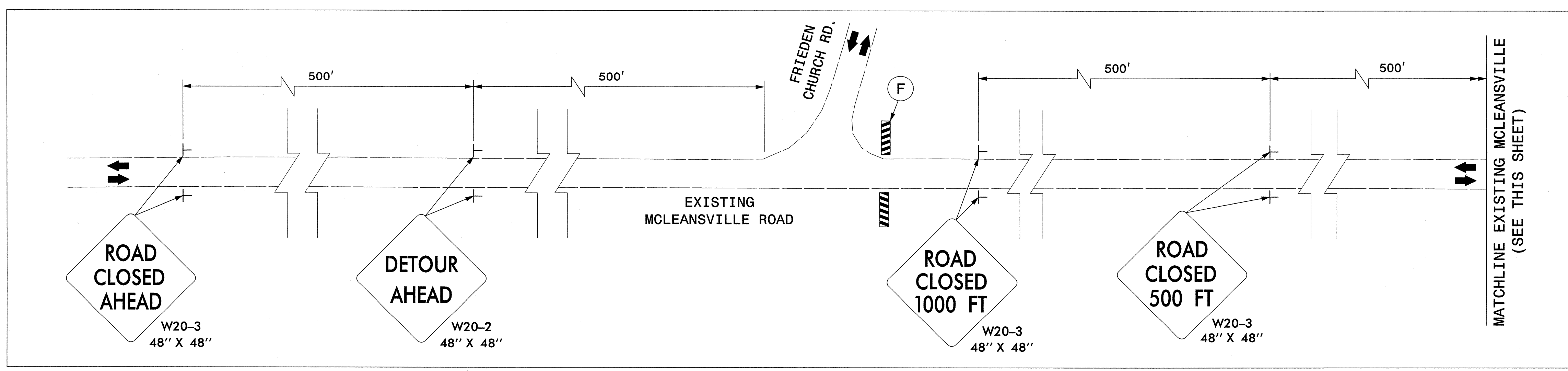
INSTALL RAISED PAVEMENT MARKERS ON 20' SPACING ALONG -DETOUR 1- CENTERLINE

17-JUN-2014 10:01
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wile054 AT DUS29040

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 310
RALEIGH, NORTH CAROLINA 27609
(919) 876-6888 NCBEES #F-0326

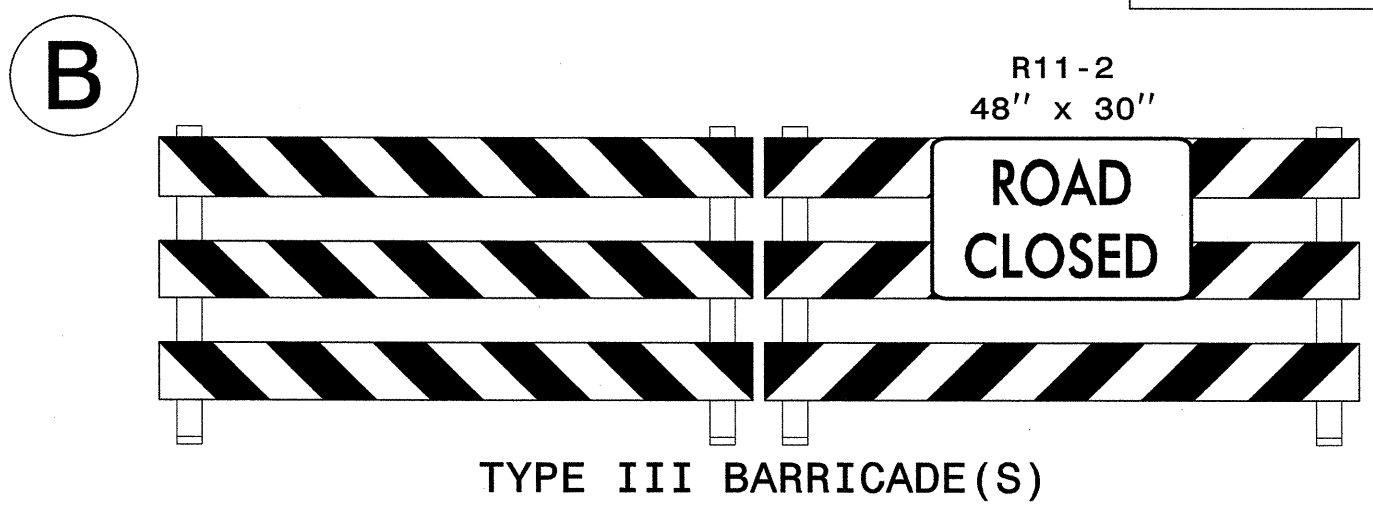
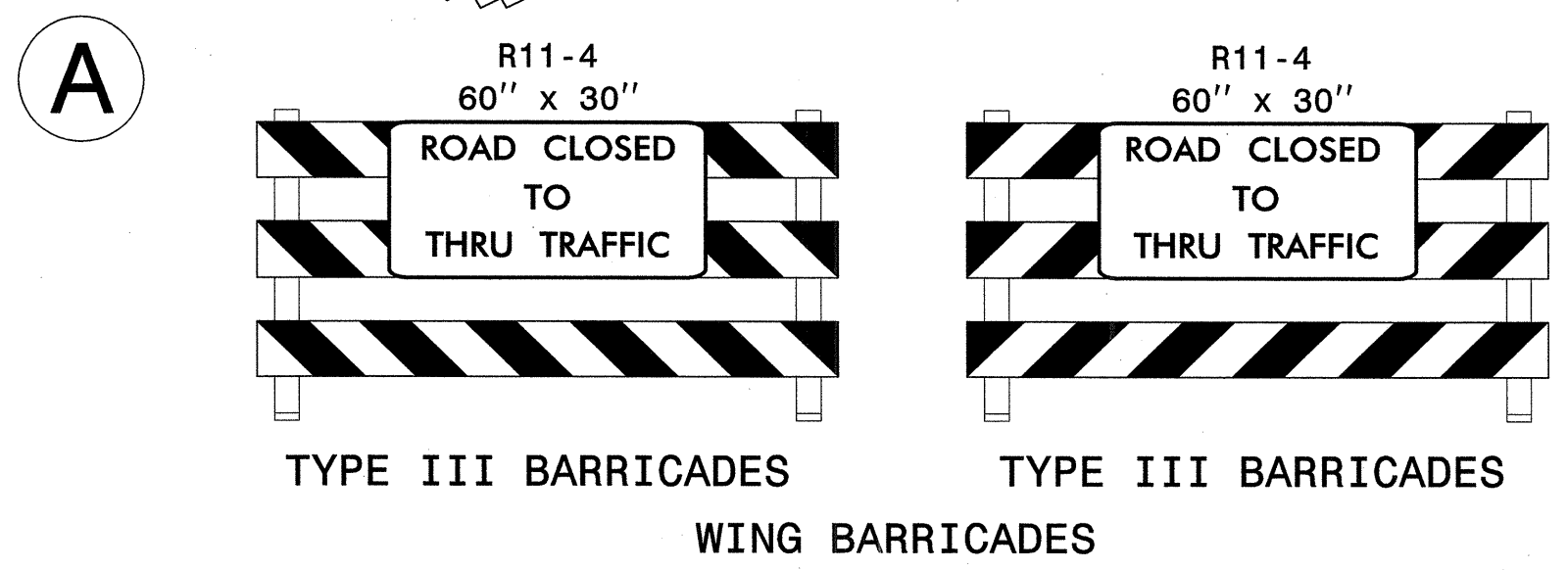


**PHASE II DETAIL
STEP 3
-L-
(McLEANSVILLE RD),
& -Y2-**

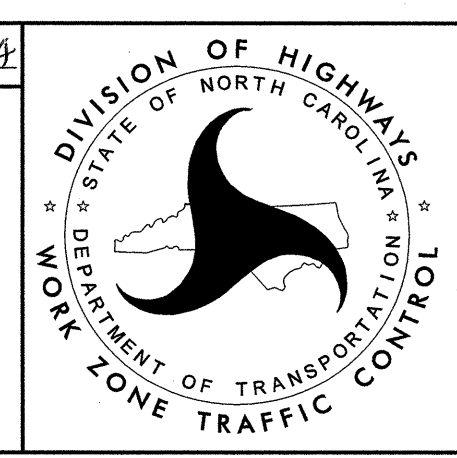


SEE SHEET TMP-13 FOR THE FOLLOWING DETOUR ROUTES AND ASSOCIATED SIGNING:

- 1) FOR MOTORISTS WISHING TO ACCESS BETHEL CHURCH ROAD FROM MCLEANSVILLE ROAD
- 2) FOR MOTORISTS WISHING TO USE MCLEANSVILLE ROAD AS A THROUGH ROUTE BETWEEN BIRCHCREEK ROAD AND FRIEDEN CHURCH ROAD



APPROVED: *Lisa M. Moon* DATE: 6-17-14
 NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL 022516
 LISA M. MOON



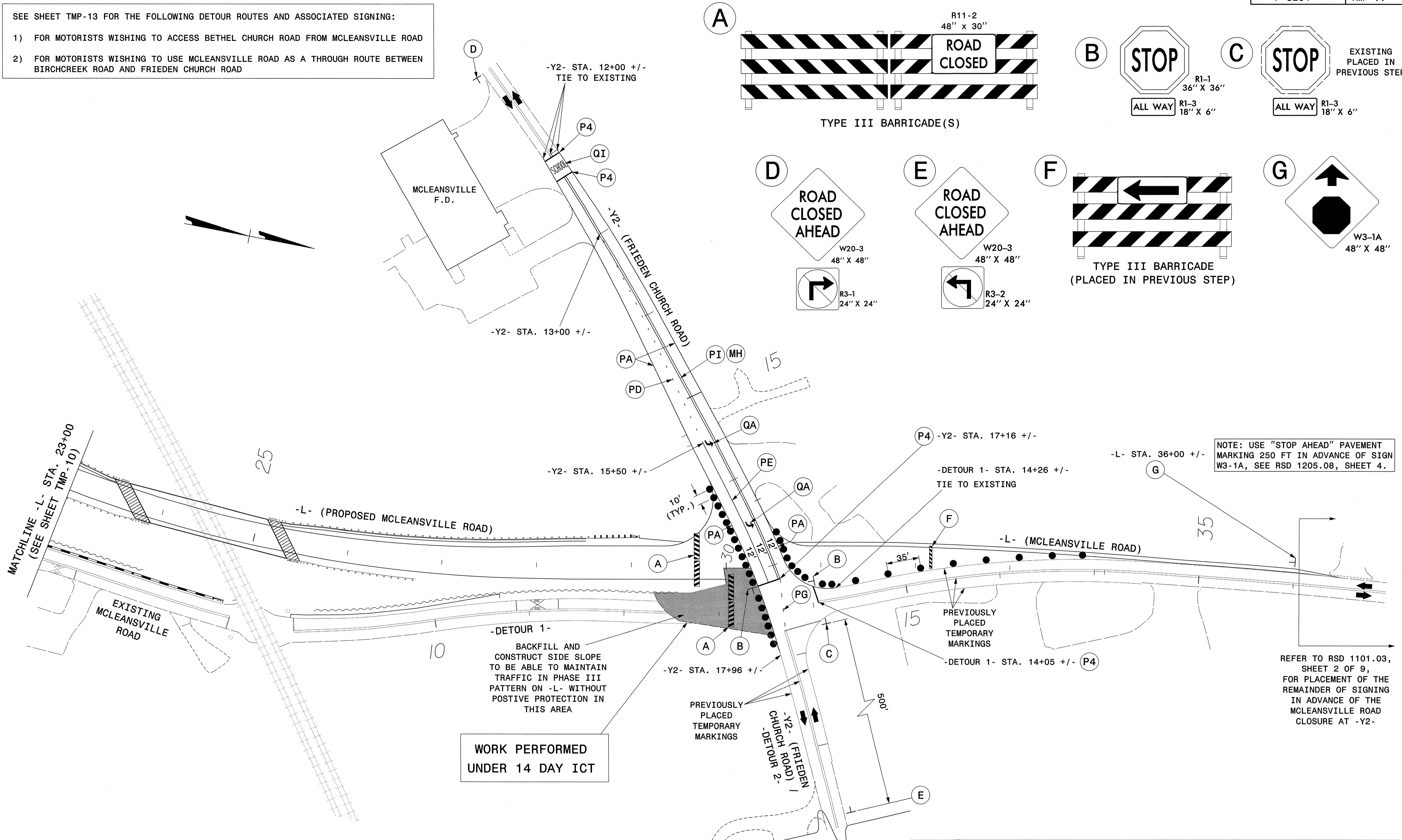
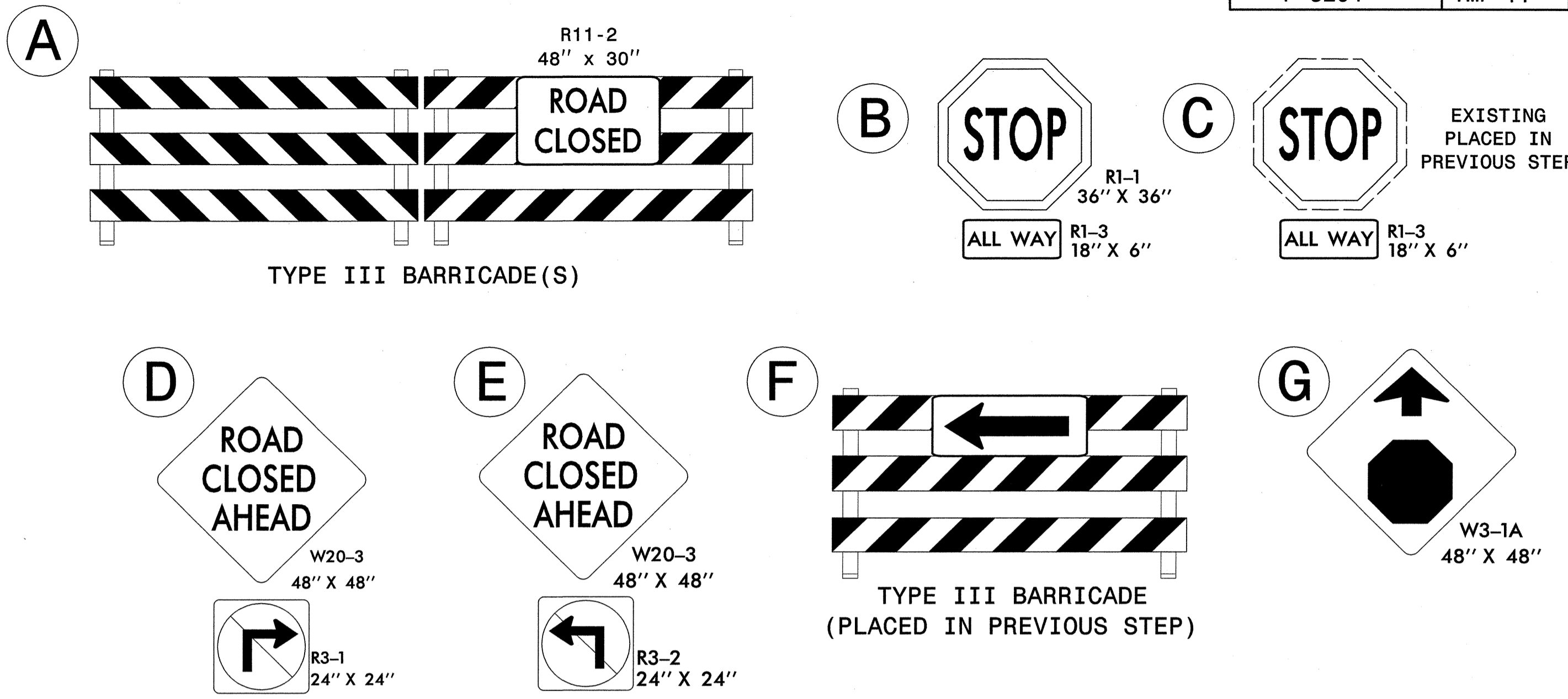
**PHASE II DETAIL
 STEP 4
 -L-
 (MCLEANSVILLE RD),
 -Y1- & -Y4-**

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 310
 RALEIGH, NORTH CAROLINA 27609
 (919) 876-6888 NCBEES #F-0326

17-JUN-2014 10:01
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SEE SHEET TMP-13 FOR THE FOLLOWING DETOUR ROUTES AND ASSOCIATED SIGNING:

- FOR MOTORISTS WISHING TO ACCESS BETHEL CHURCH ROAD FROM MCLEANSVILLE ROAD
- FOR MOTORISTS WISHING TO USE MCLEANSVILLE ROAD AS A THROUGH ROUTE BETWEEN BIRCHCREEK ROAD AND FRIEDEN CHURCH ROAD



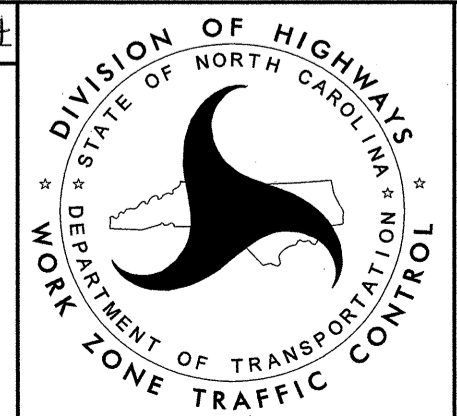
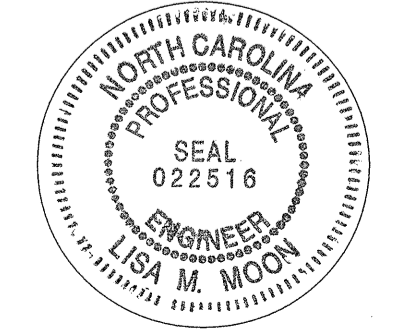
NOTE: USE "STOP AHEAD" PAVEMENT MARKING 250 FT IN ADVANCE OF SIGN W3-1A, SEE RSD 1205.08, SHEET 4.

REFER TO RSD 1101.03, SHEET 2 OF 9, FOR PLACEMENT OF THE REMAINDER OF THE SIGNING IN ADVANCE OF THE MCLEANSVILLE ROAD CLOSURE AT -Y2-

WORK PERFORMED UNDER 14 DAY ICT

-DETOUR 1-
BACKFILL AND CONSTRUCT SIDE SLOPE TO BE ABLE TO MAINTAIN TRAFFIC IN PHASE III PATTERN ON -L- WITHOUT POSTIVE PROTECTION IN THIS AREA

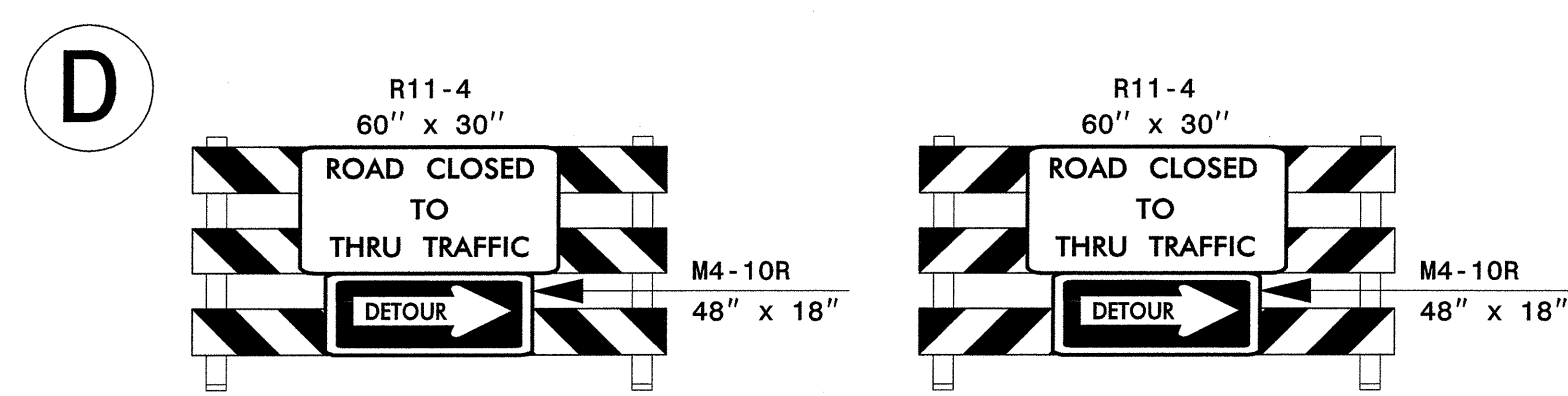
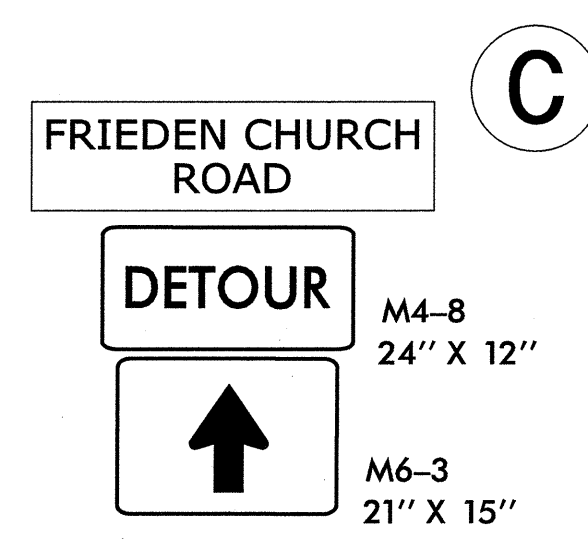
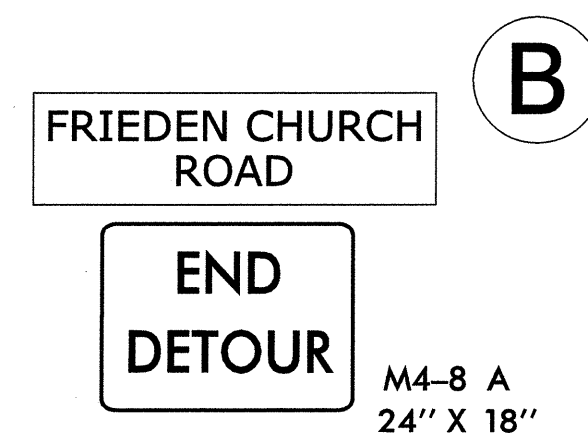
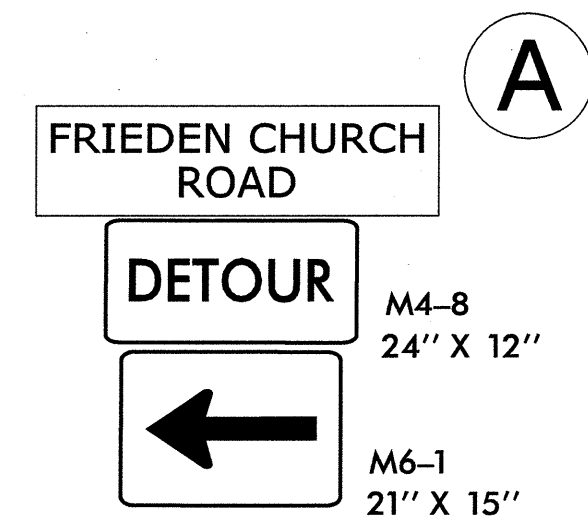
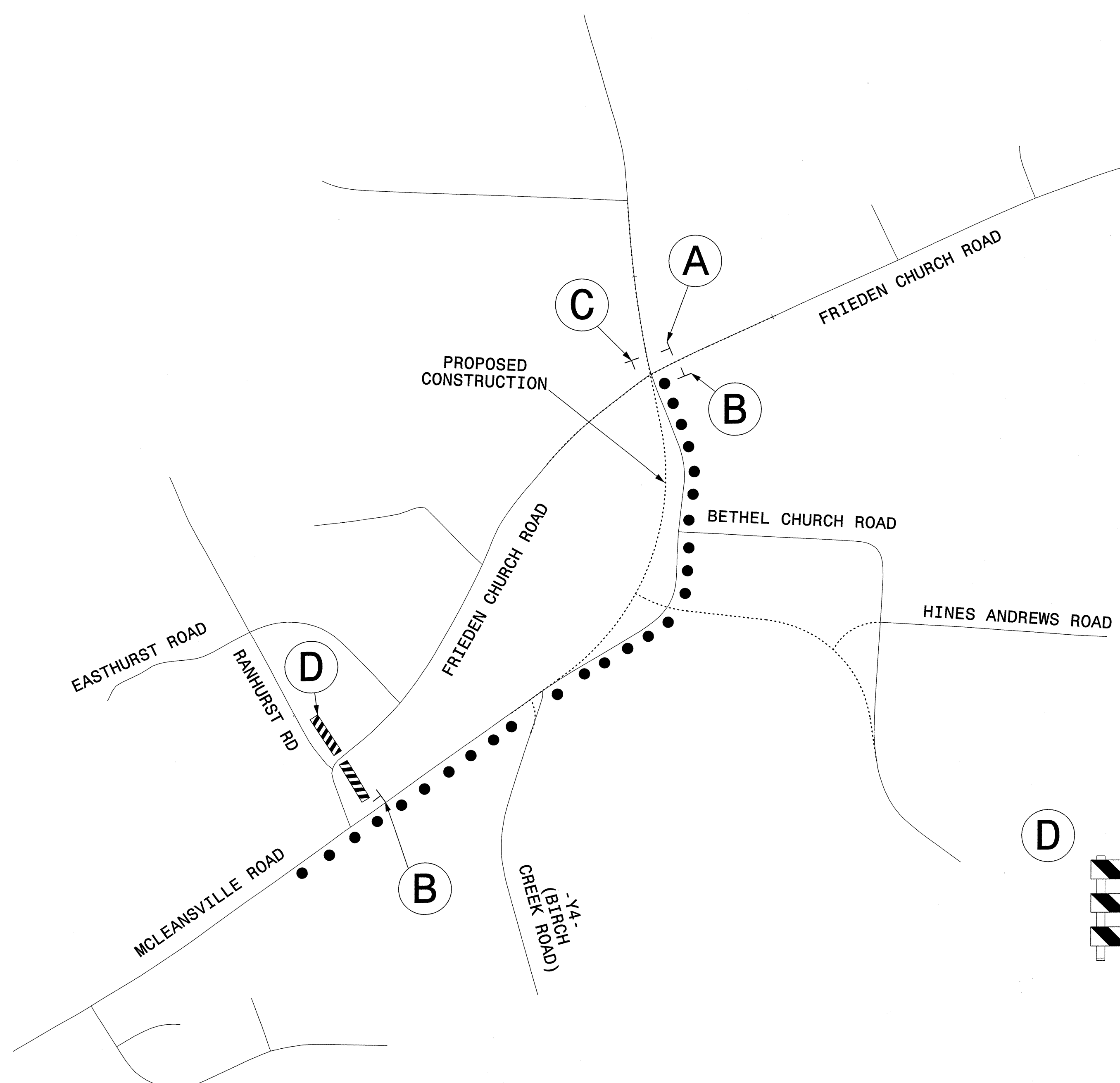
APPROVED: *Lisa M. Moon* DATE: 6-17-14



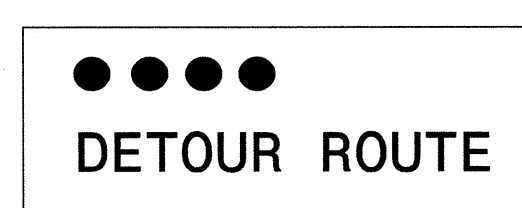
**PHASE II DETAIL
STEP 4
-L-
(MCLEANSVILLE RD),
& -Y2-**

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 wlee094 AT DUS22040

DCN 855DEL.P5

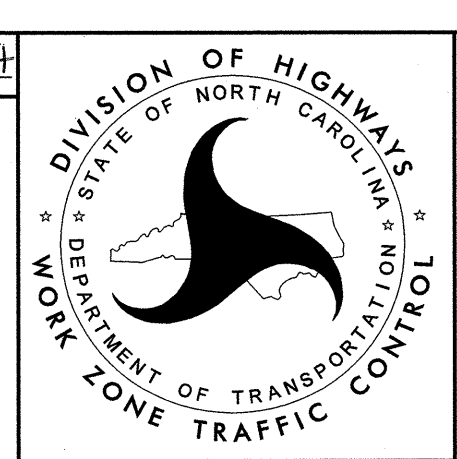
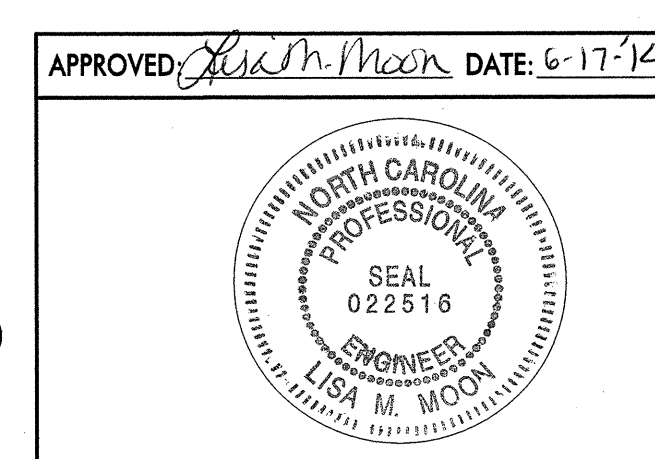


TYPE III WING BARRICADES



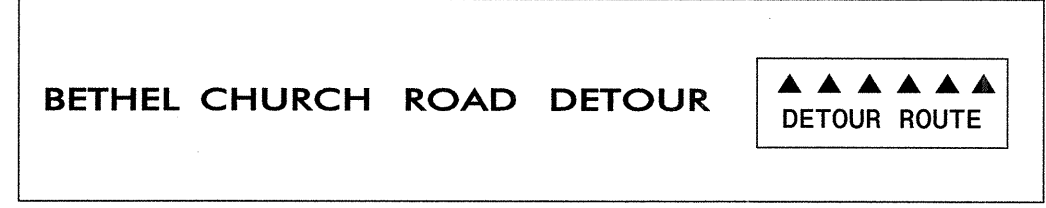
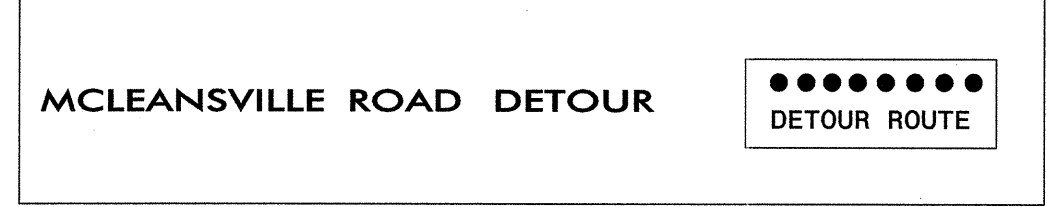
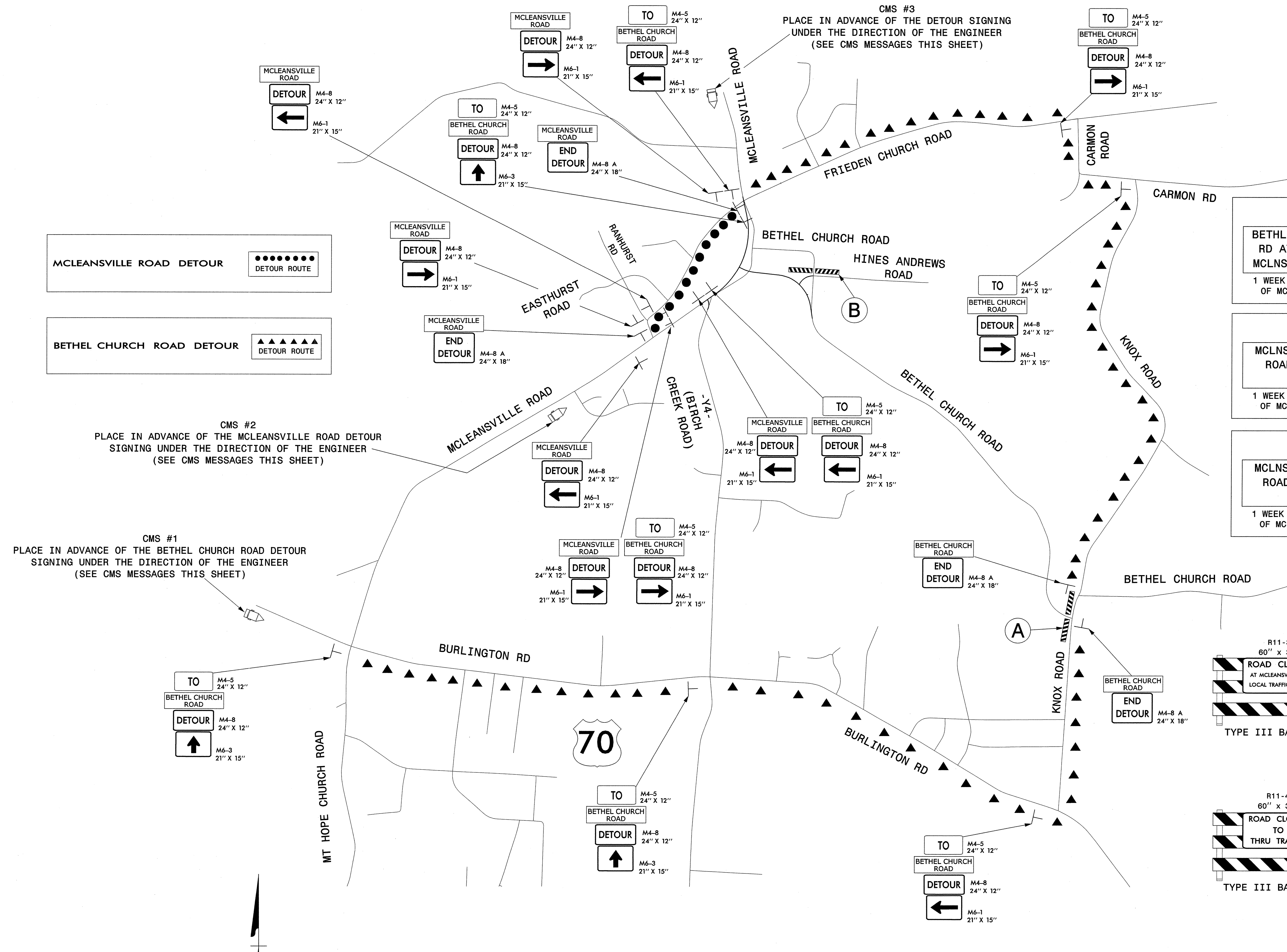
**PHASE I
CLOSURE OF
WEST LEG OF
FRIEDEN CHURCH ROAD
AT
MCLEANSVILLE ROAD
(SEE TMP-9)**

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 310
RALEIGH, NORTH CAROLINA 27609
(919) 876-6888 NCBEES #F-0326



**PHASE II
DETOURS**

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wile054 AT DUS230/40



CMS #2
PLACE IN ADVANCE OF THE MCLEANSVILLE ROAD DETOUR
SIGNING UNDER THE DIRECTION OF THE ENGINEER
(SEE CMS MESSAGES THIS SHEET)

CMS #1
PLACE IN ADVANCE OF THE BETHEL CHURCH ROAD DETOUR
SIGNING UNDER THE DIRECTION OF THE ENGINEER
(SEE CMS MESSAGES THIS SHEET)

CMS #3
PLACE IN ADVANCE OF THE DETOUR SIGNING
UNDER THE DIRECTION OF THE ENGINEER
(SEE CMS MESSAGES THIS SHEET)

MESSAGES FOR CMS #1

BETHL C RD AT MCLNSVL	WILL CLOSE MM/DD	BETHL C RD AT MCLNSVL	CLOSED FOLLOW DETOUR
-----------------------------	------------------------	-----------------------------	----------------------------

1 WEEK PRIOR TO CLOSURE
OF MCLEANSVILLE ROAD

DURING CLOSURE OF
MCLEANSVILLE ROAD

MESSAGES FOR CMS #2

MCLNSVL ROAD	WILL CLOSE MM/DD	MCLNSVL ROAD	CLOSED FOLLOW DETOUR
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1 WEEK PRIOR TO CLOSURE
OF MCLEANSVILLE ROAD

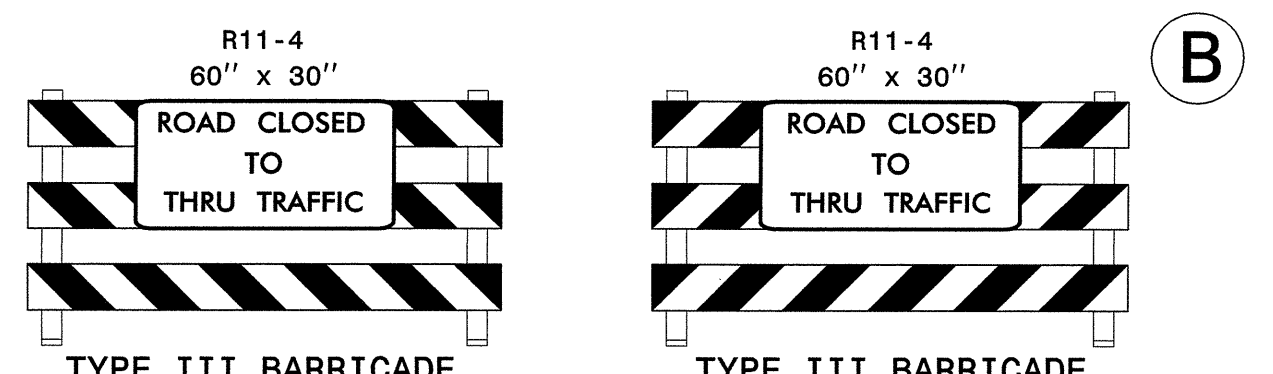
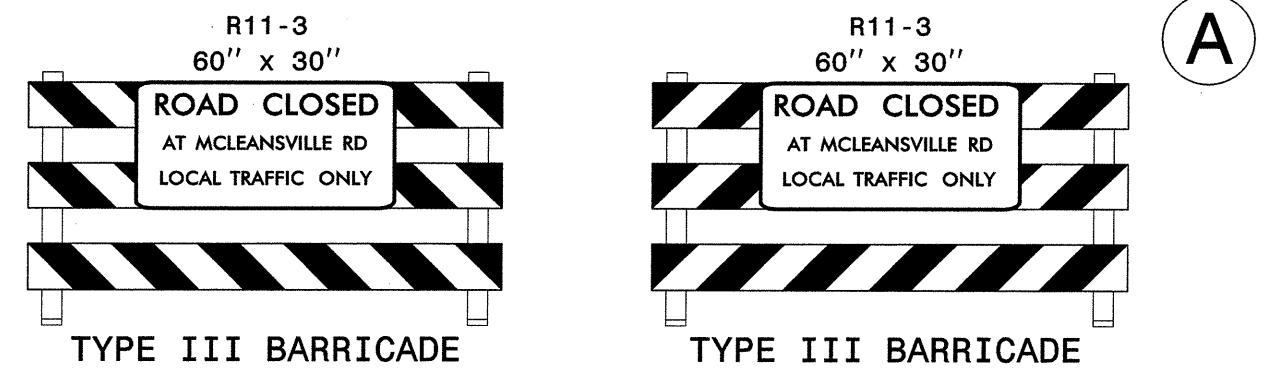
DURING CLOSURE OF
MCLEANSVILLE ROAD

MESSAGES FOR CMS #3

MCLNSVL ROAD	WILL CLOSE MM/DD	ROAD CLOSED AHEAD	STOP XXX FT AHEAD
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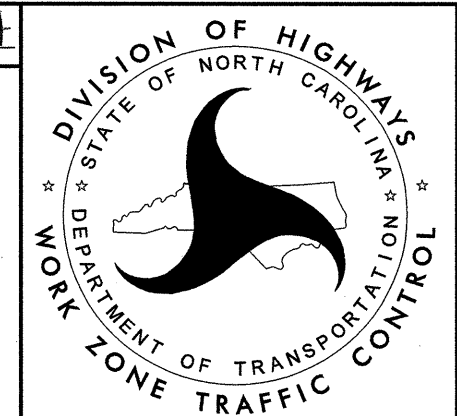
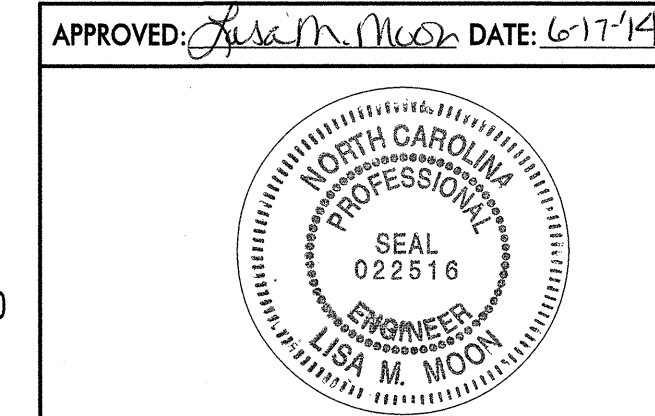
1 WEEK PRIOR TO CLOSURE
OF MCLEANSVILLE ROAD

DURING CLOSURE OF
MCLEANSVILLE ROAD

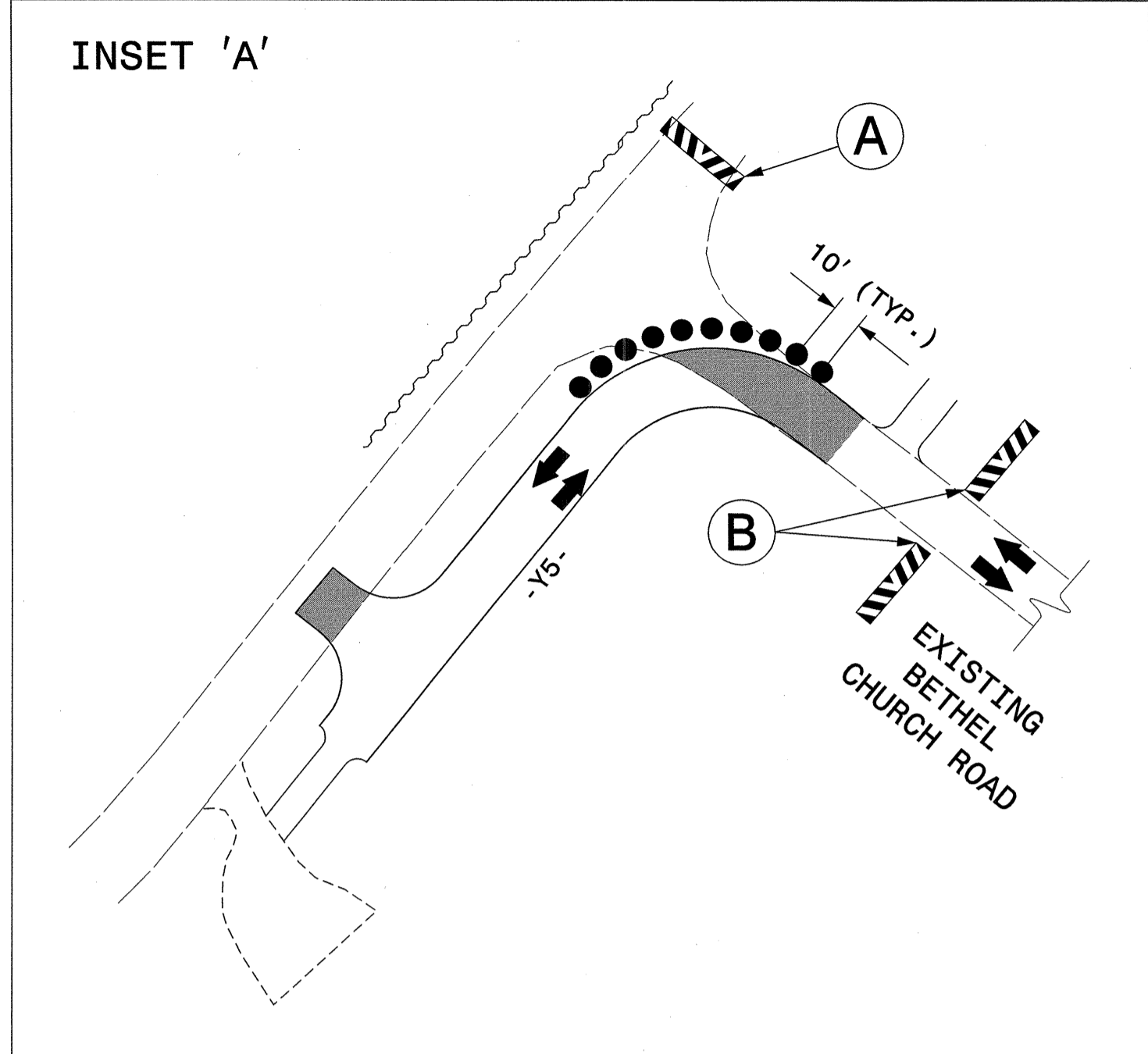


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ATKINS 1616 EAST MILLBROOK ROAD, SUITE 310
 RALEIGH, NORTH CAROLINA 27609
 (919) 876-6888 NCBEES #F-0326



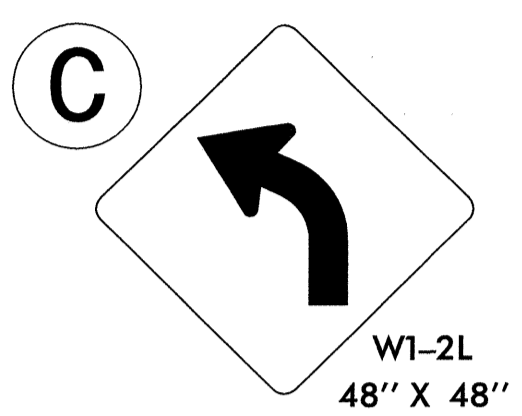
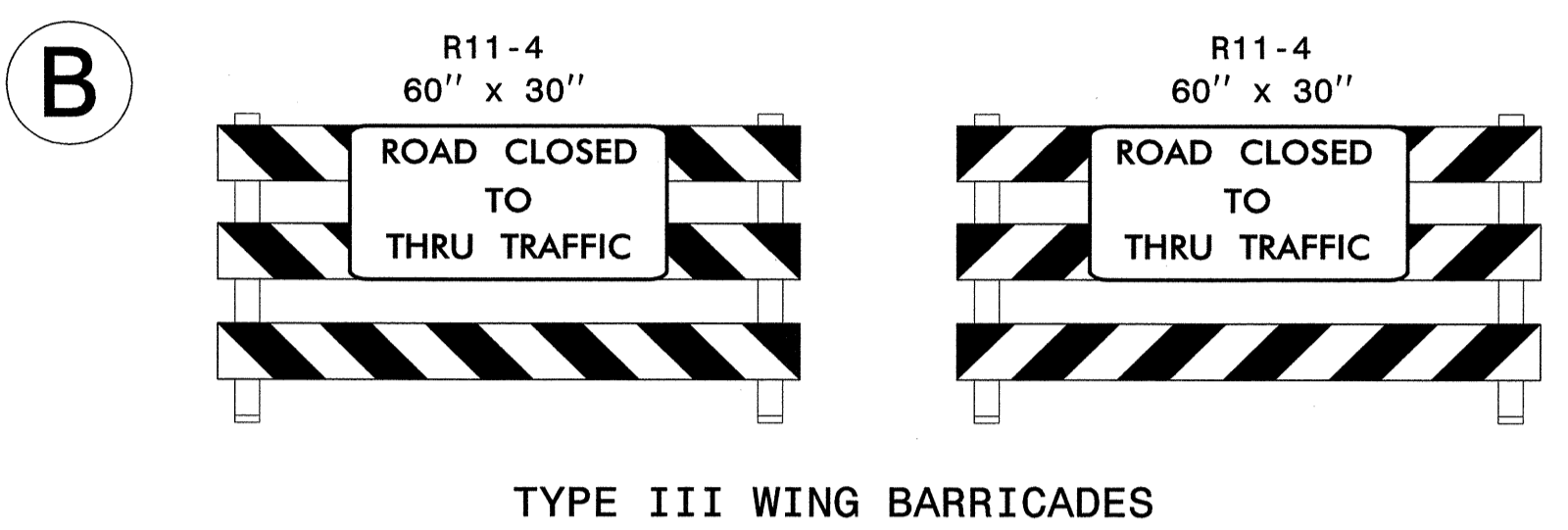
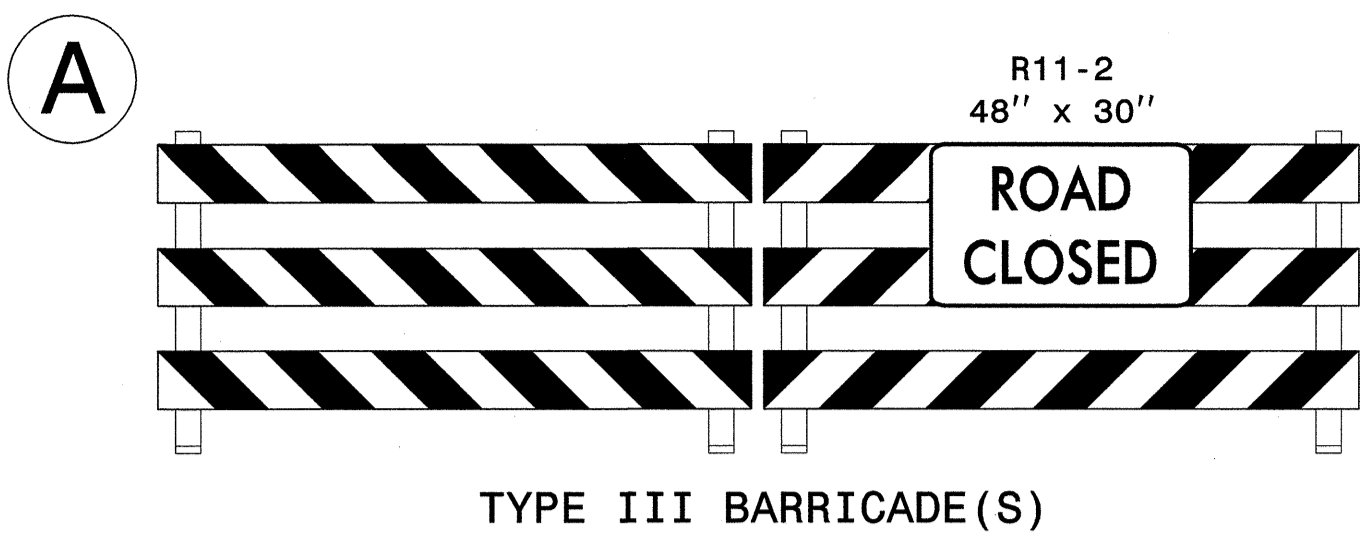
**PHASE II
 DETOURS**



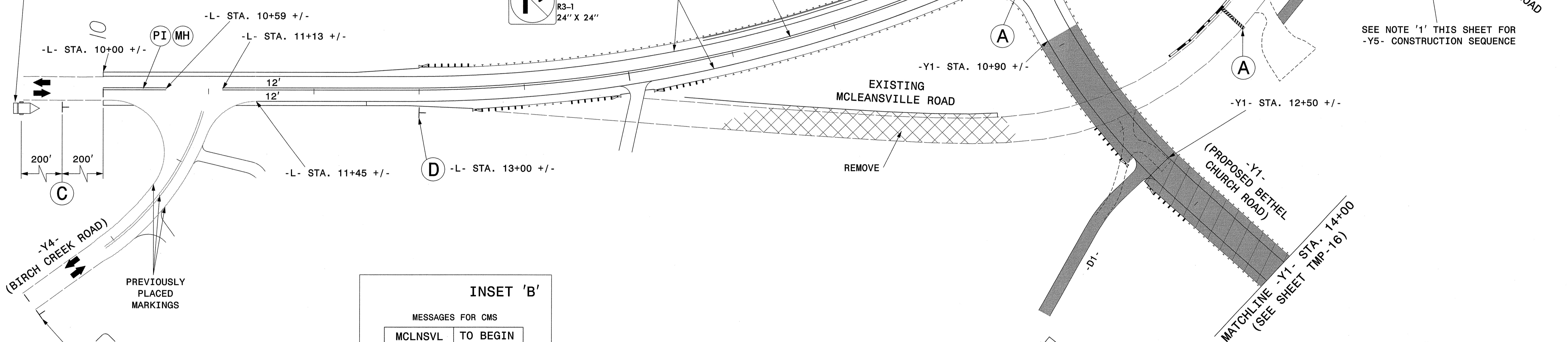
CONSTRUCT -Y5- IN STAGES:

- 1) CONSTRUCT AS MUCH OF -Y5- AS POSSIBLE AWAY FROM TRAFFIC AS SHOWN IN THE BELOW DETAIL.
- 2) UPON COMPLETION OF THAT CONSTRUCTION, SHIFT TRAFFIC TO NEWLY COMPLETED -Y5-. USE RSD 1101.02, SHEET 1 OF 15, TO CONSTRUCT REMAINDER AS SHOWN IN INSET 'A' THIS SHEET.

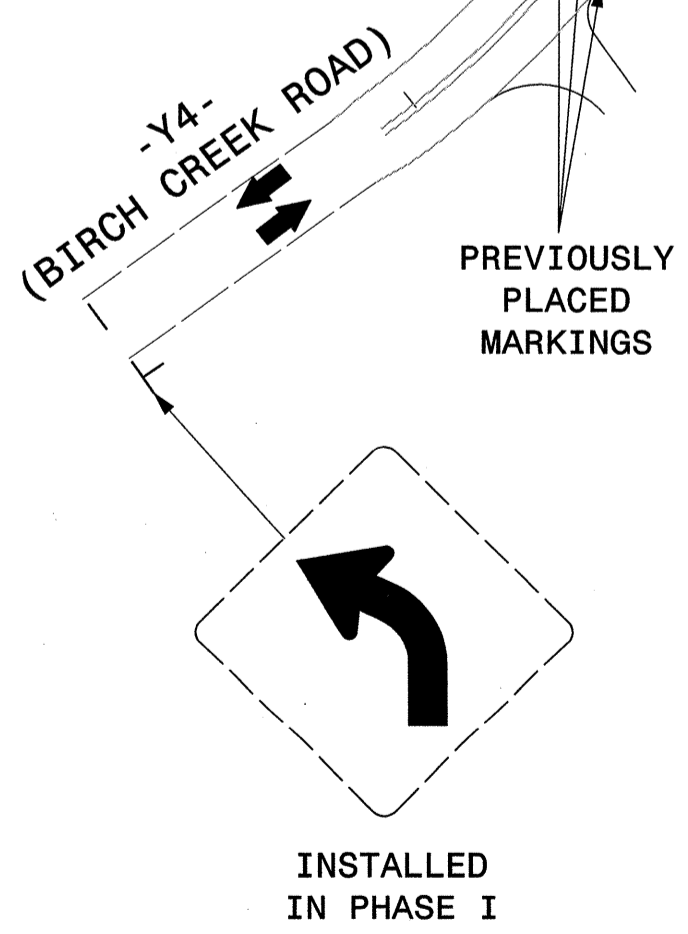
NOTE '1'



SEE INSET 'B' THIS SHEET FOR CMS MESSAGES



SEE NOTE '1' THIS SHEET FOR -Y5- CONSTRUCTION SEQUENCE



INSET 'B'

MESSAGES FOR CMS

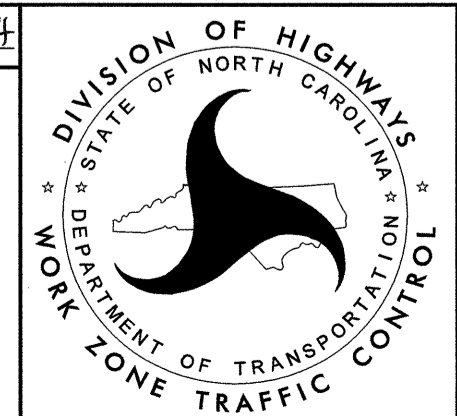
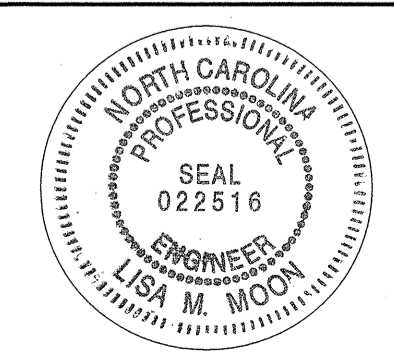
MCLNSVL TRAFFIC SHIFT	TO BEGIN MM/DD
-----------------------	----------------

FOR 1 WEEK PRIOR TO TRAFFIC SHIFT TO RECENTLY CONSTRUCTED -L-

TRAFFIC SHIFT AHEAD	USE CAUTION
---------------------	-------------

FOR 1 WEEK AFTER TRAFFIC SHIFT TO RECENTLY CONSTRUCTED -L-

APPROVED: [Signature] DATE: 6-17-14

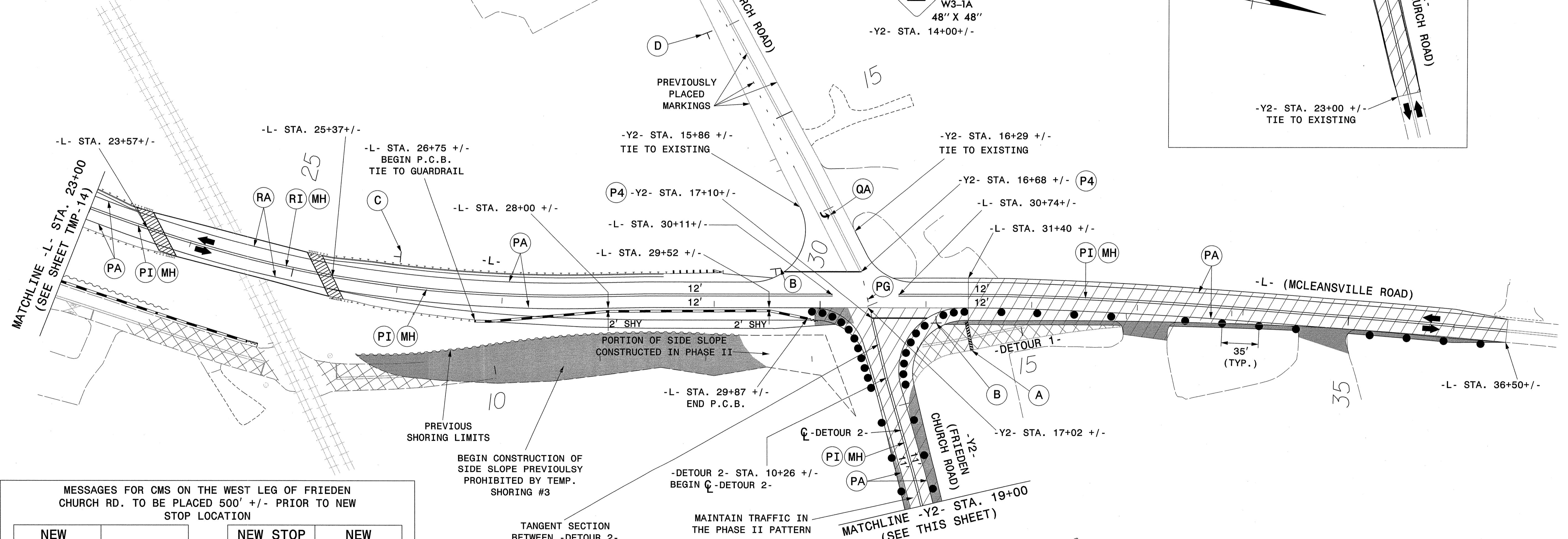
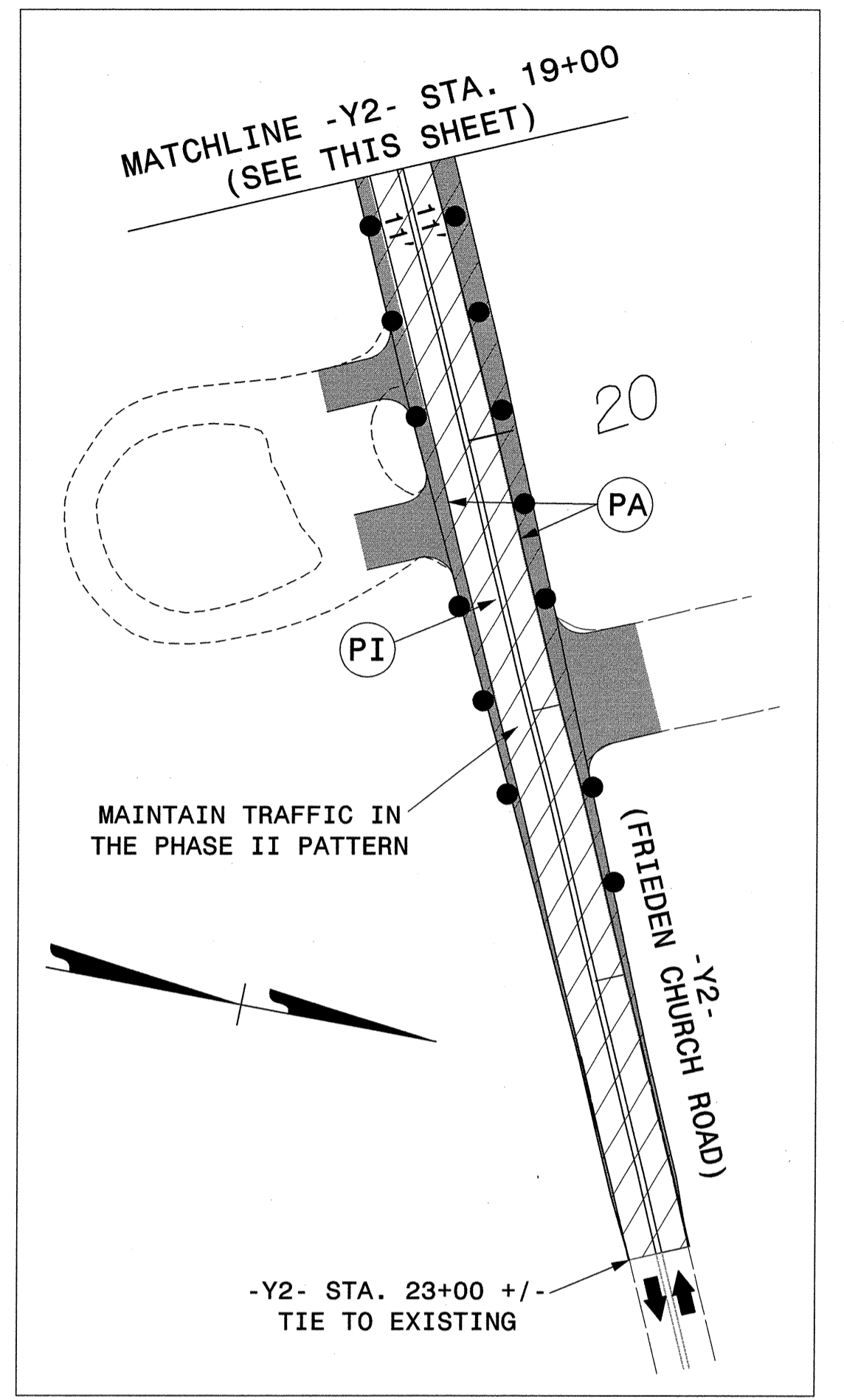
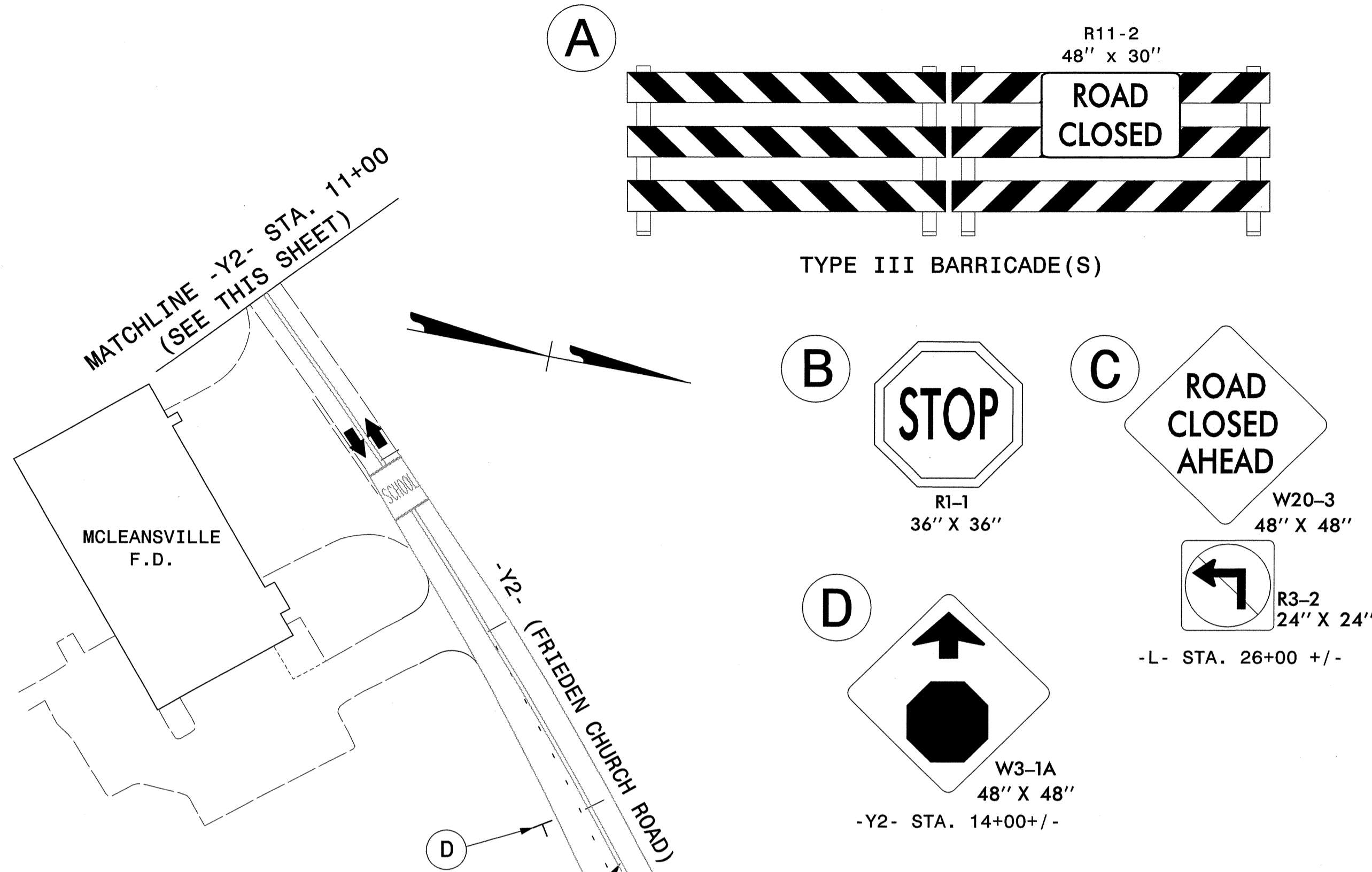
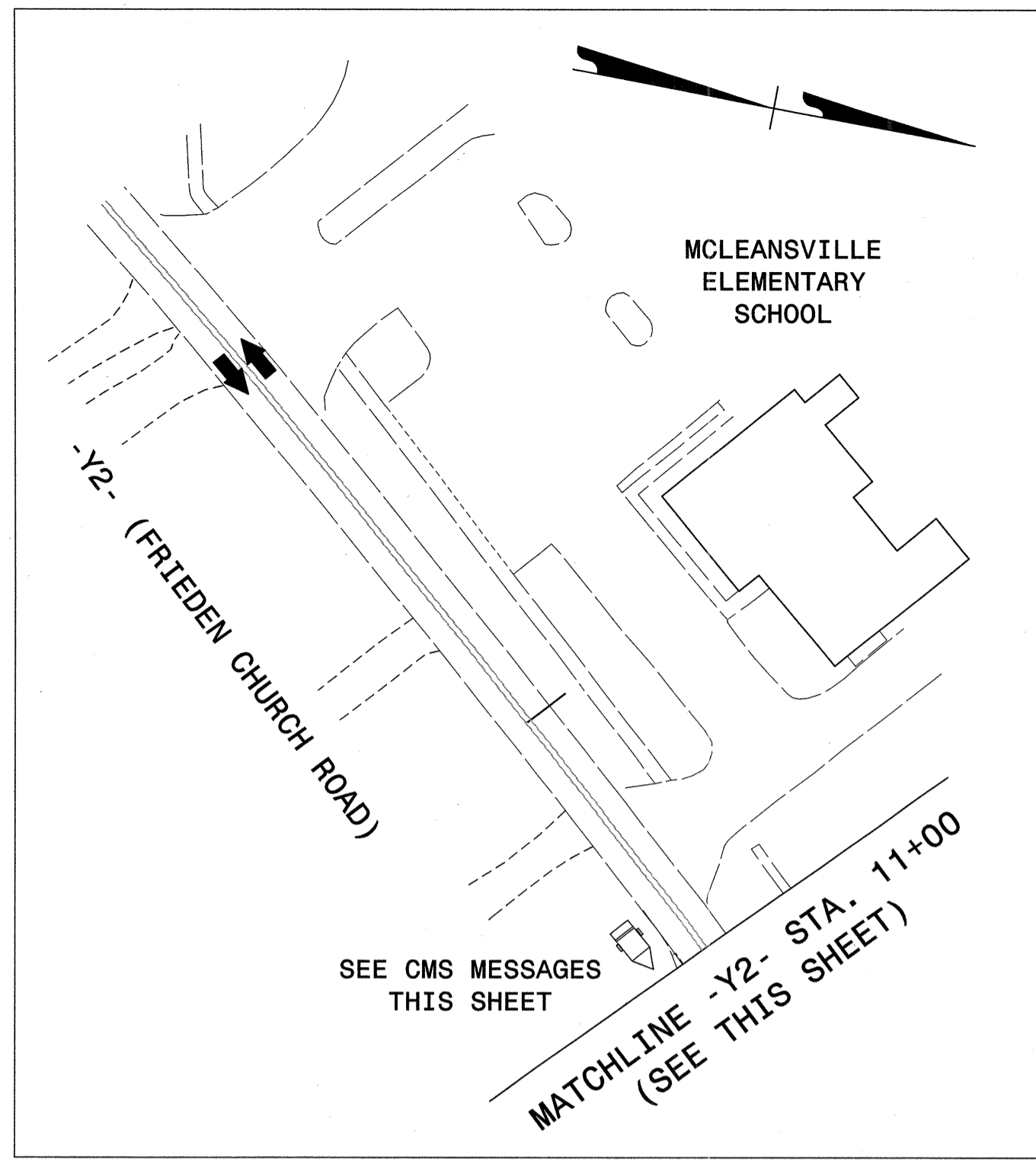


PHASE III DETAIL
-L-
(MCLEANSVILLE RD),
-Y1- & -Y4-

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 310
 RALEIGH, NORTH CAROLINA 27609
 (919) 876-6888 NCBEES #F-0326

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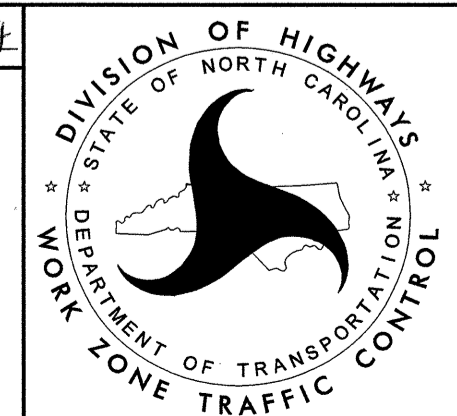
DWG - RSTDELE_P15



MESSAGES FOR CMS ON THE WEST LEG OF FRIEDEN CHURCH RD. TO BE PLACED 500' +/- PRIOR TO NEW STOP LOCATION

NEW TRAFFIC PATTERN	BEGIN MM/DD	NEW STOP LOCATION 500 FT	NEW TRAFFIC PATTERN
1 WEEK PRIOR TO SHIFT		CMS TO BE PLACED 500' +/- IN ADVANCE OF THE NEW STOP SIGN LOCATION FOR 1 WEEK AFTER TRAFFIC SHIFT OR PER ENGINEER	

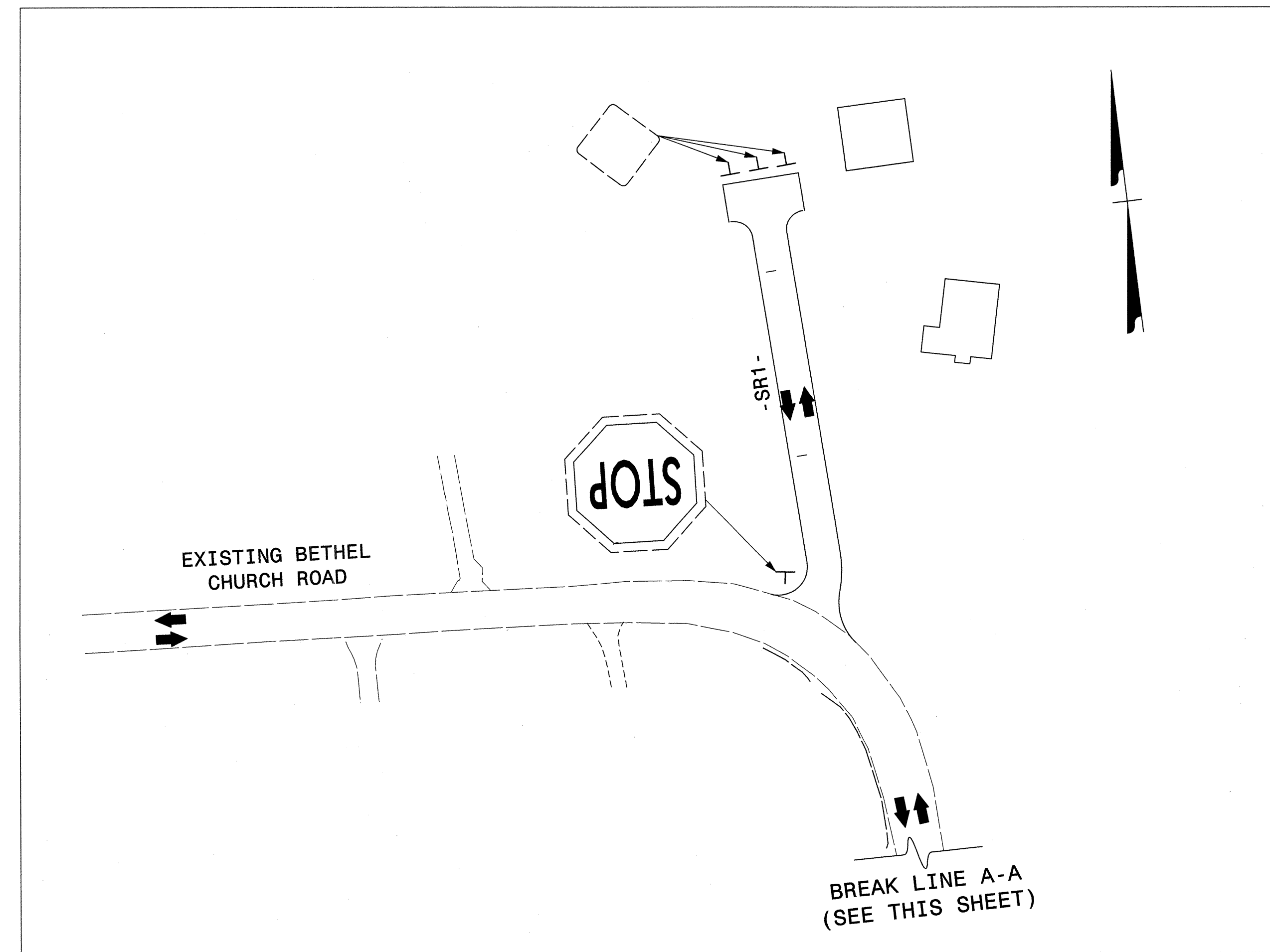
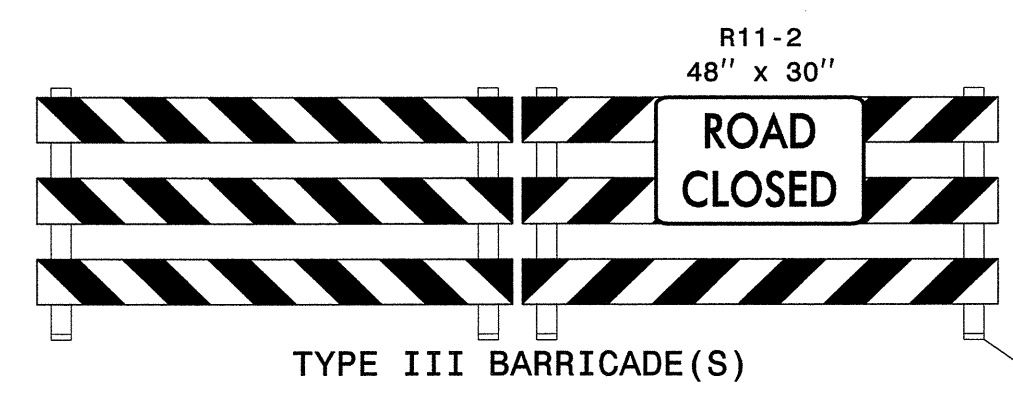
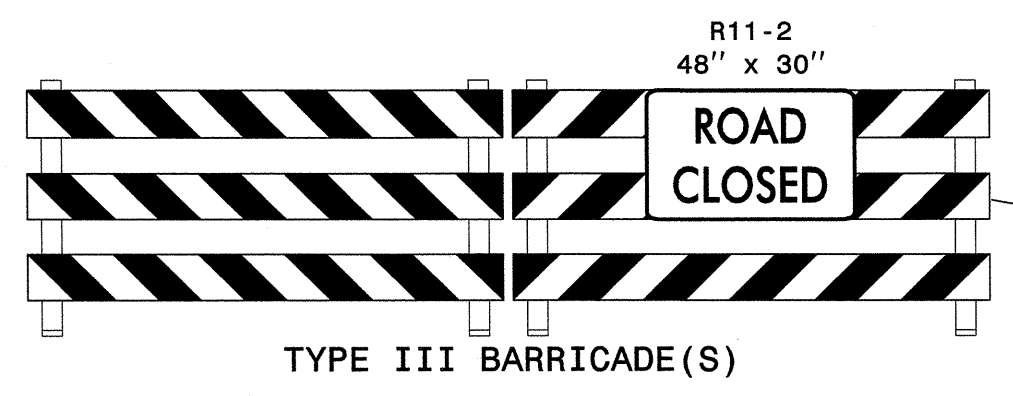
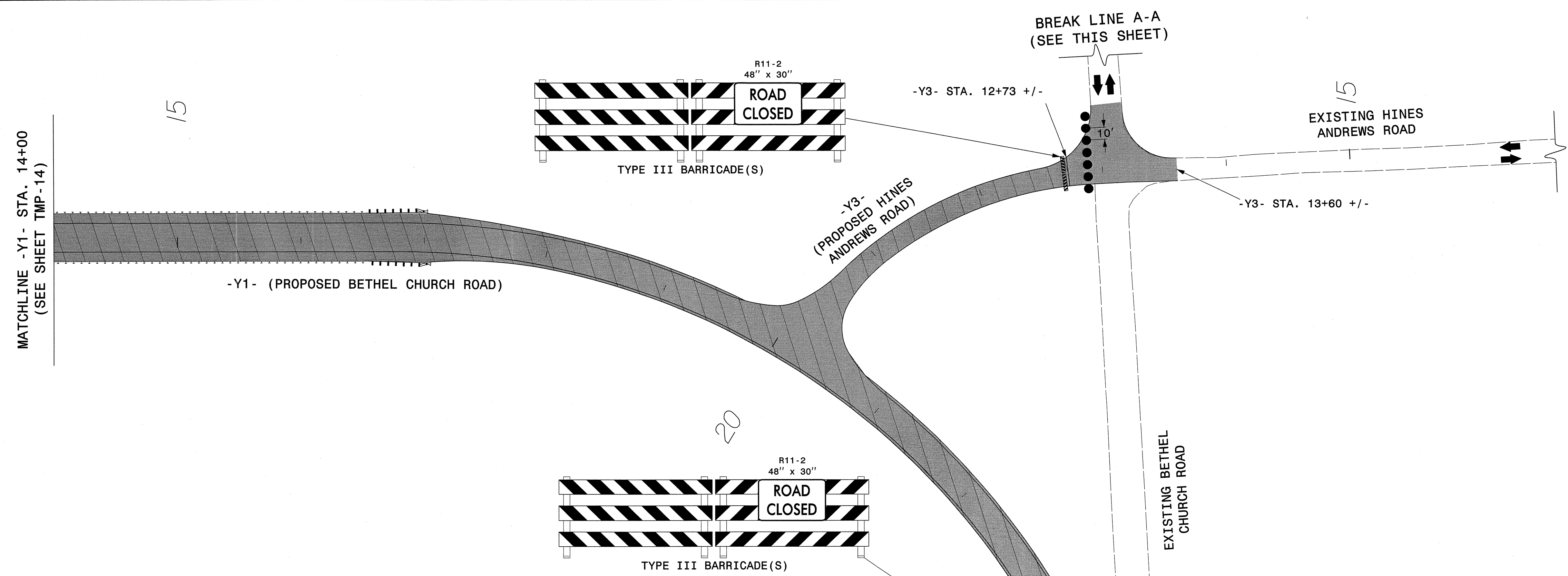
APPROVED: *[Signature]* DATE: 6-17-14



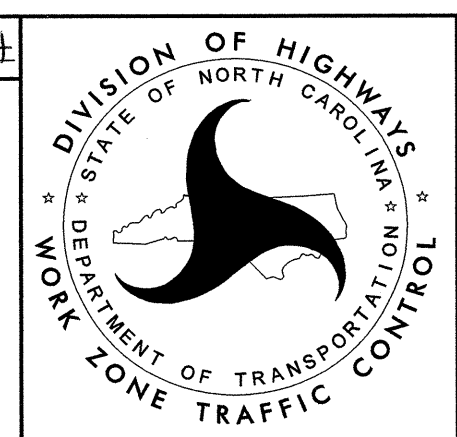
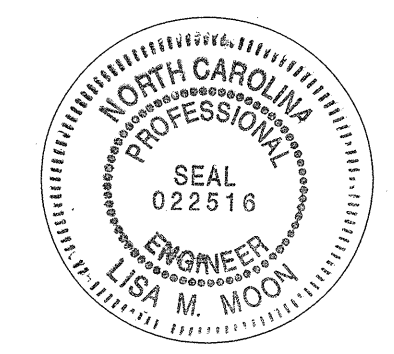
PHASE III DETAIL
-L-
(MCLEANSVILLE RD),
& -Y2-

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 310
RALEIGH, NORTH CAROLINA 27609
(919) 876-6888 NCBEES #F-0326

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APPROVED: *[Signature]* DATE: 6/17/14

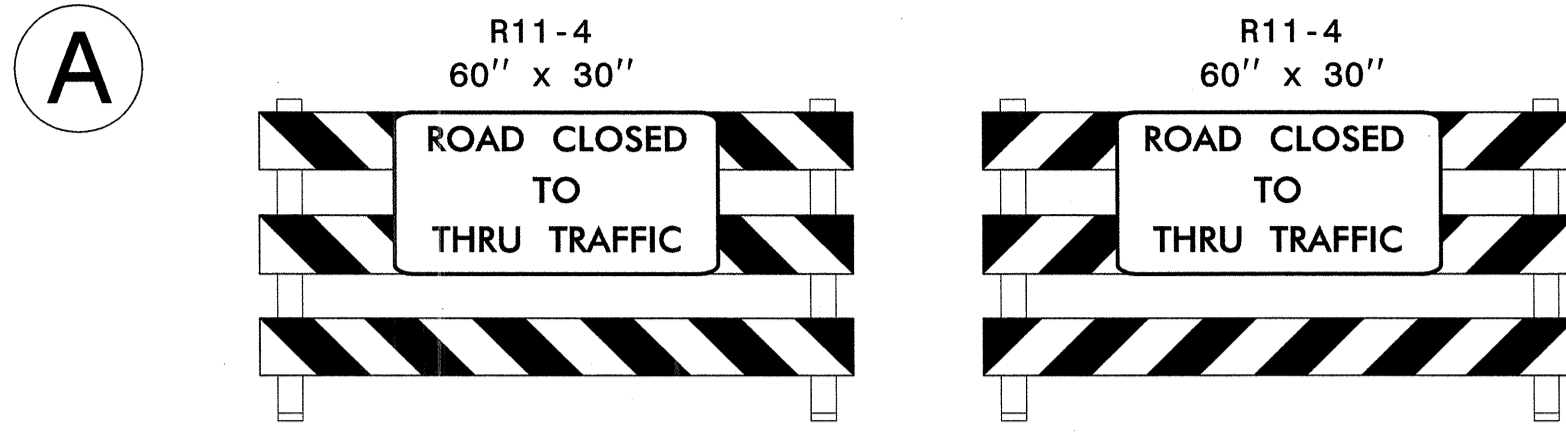


**PHASE III DETAIL
-Y1- & -Y3-**

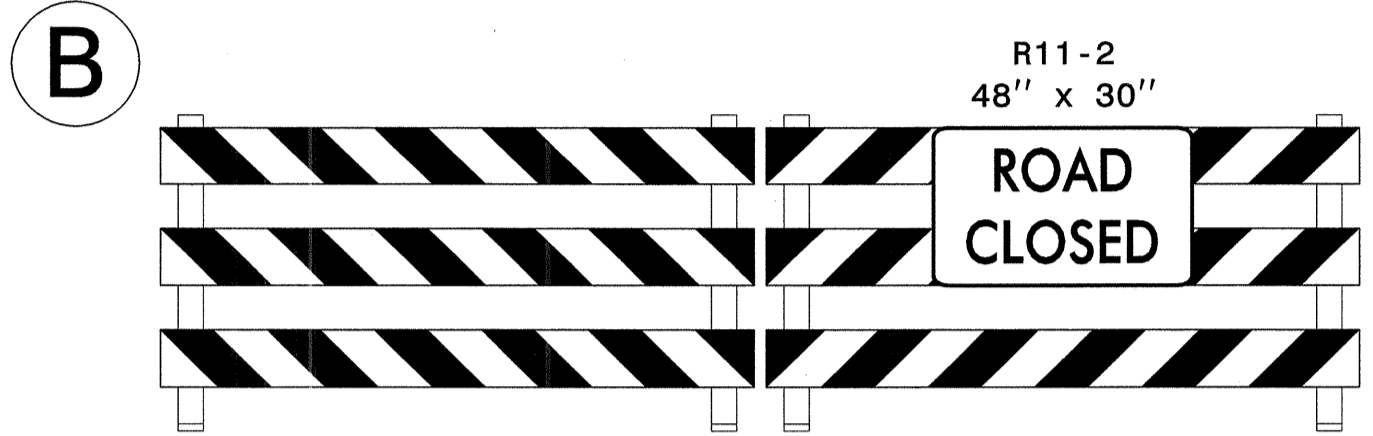
ATKINS 1616 EAST MILLBROOK ROAD, SUITE 310
RALEIGH, NORTH CAROLINA 27609
(919) 876-6888 NCBEES #F-0326

17-JUN-2014 10:01
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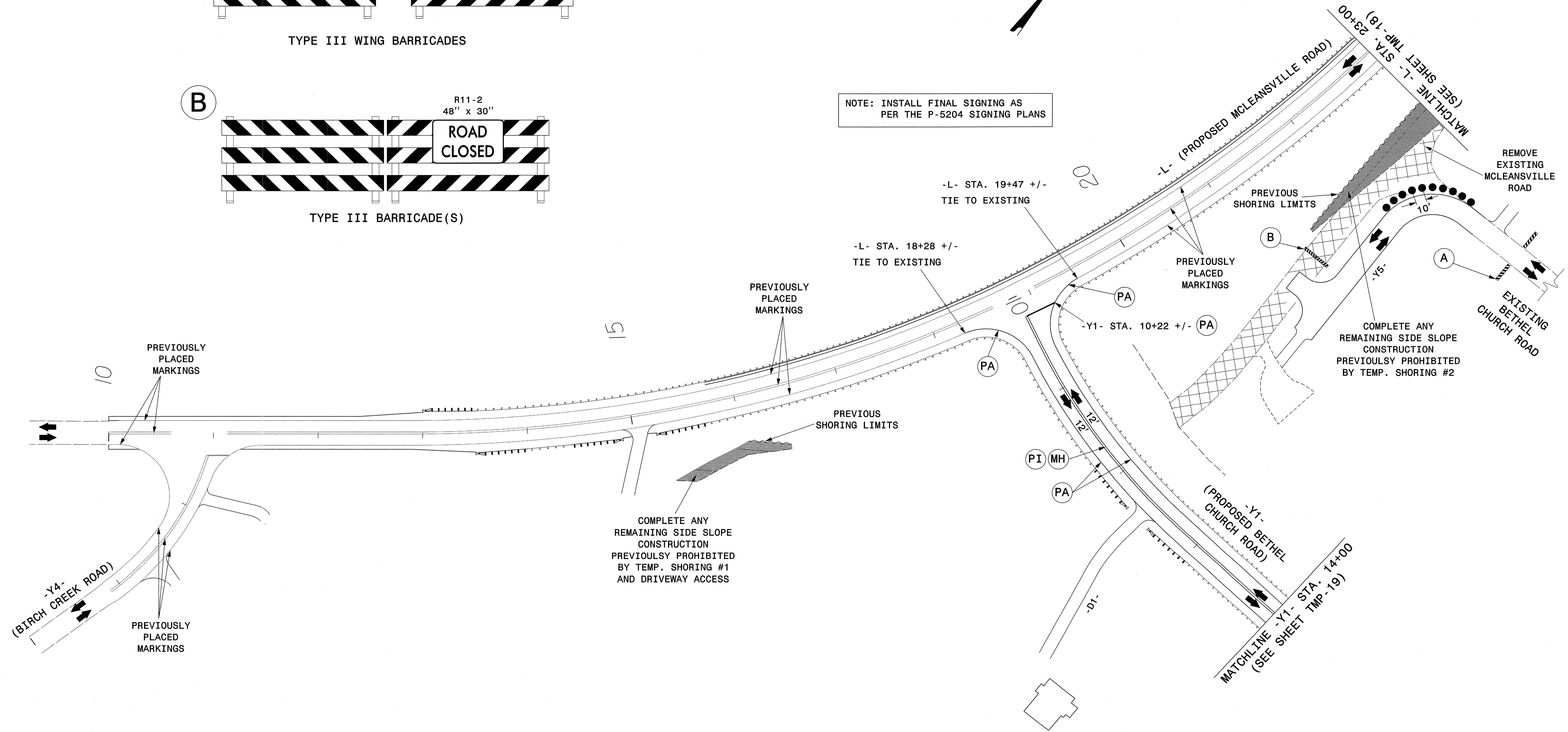


TYPE III WING BARRICADES

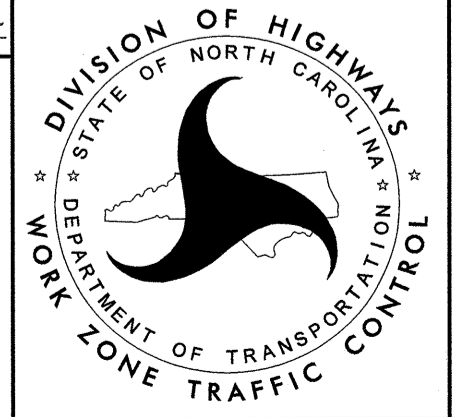


TYPE III BARRICADE(S)

NOTE: INSTALL FINAL SIGNING AS PER THE P-5204 SIGNING PLANS



APPROVED: *[Signature]* DATE: 07-17-14



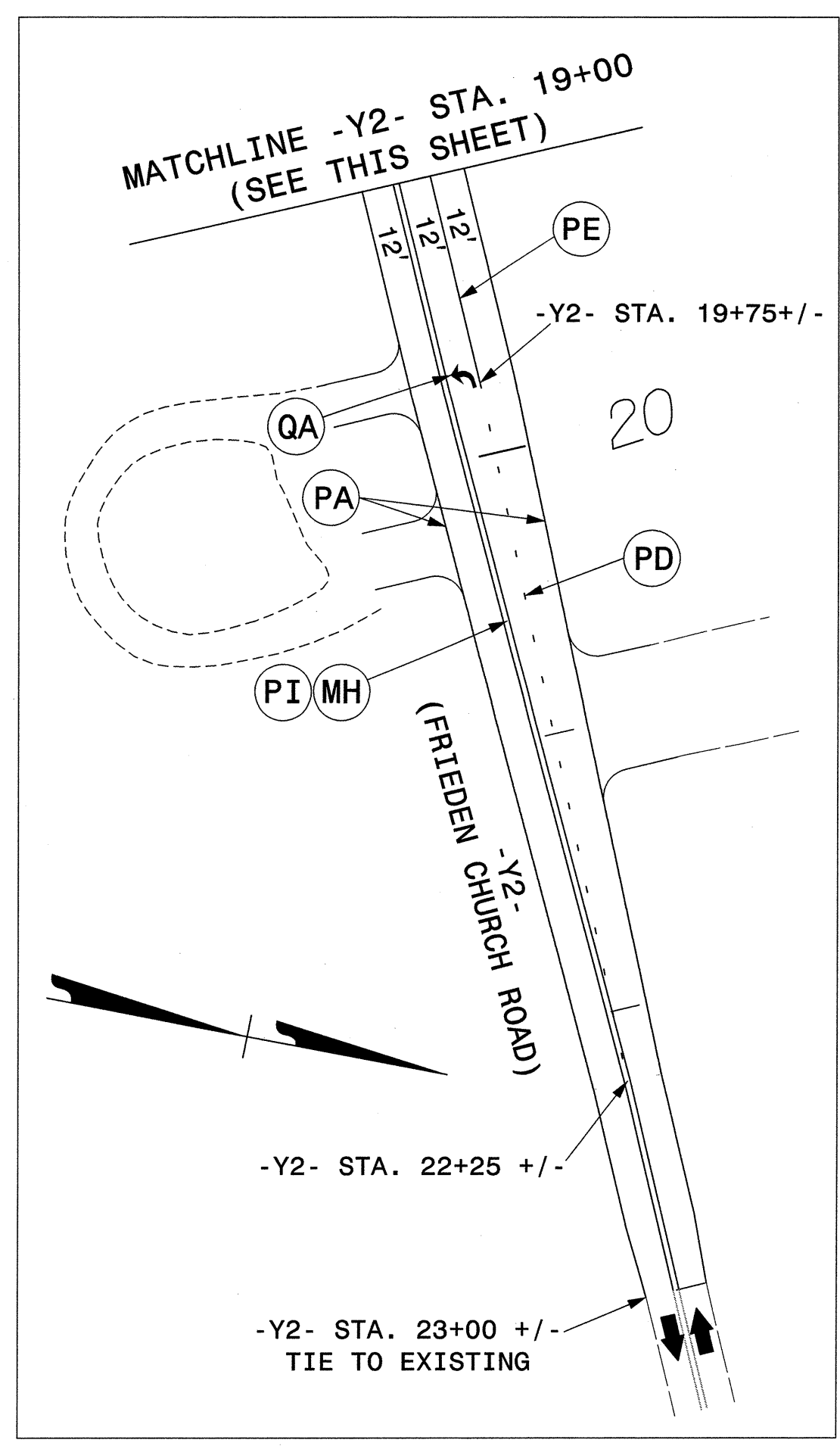
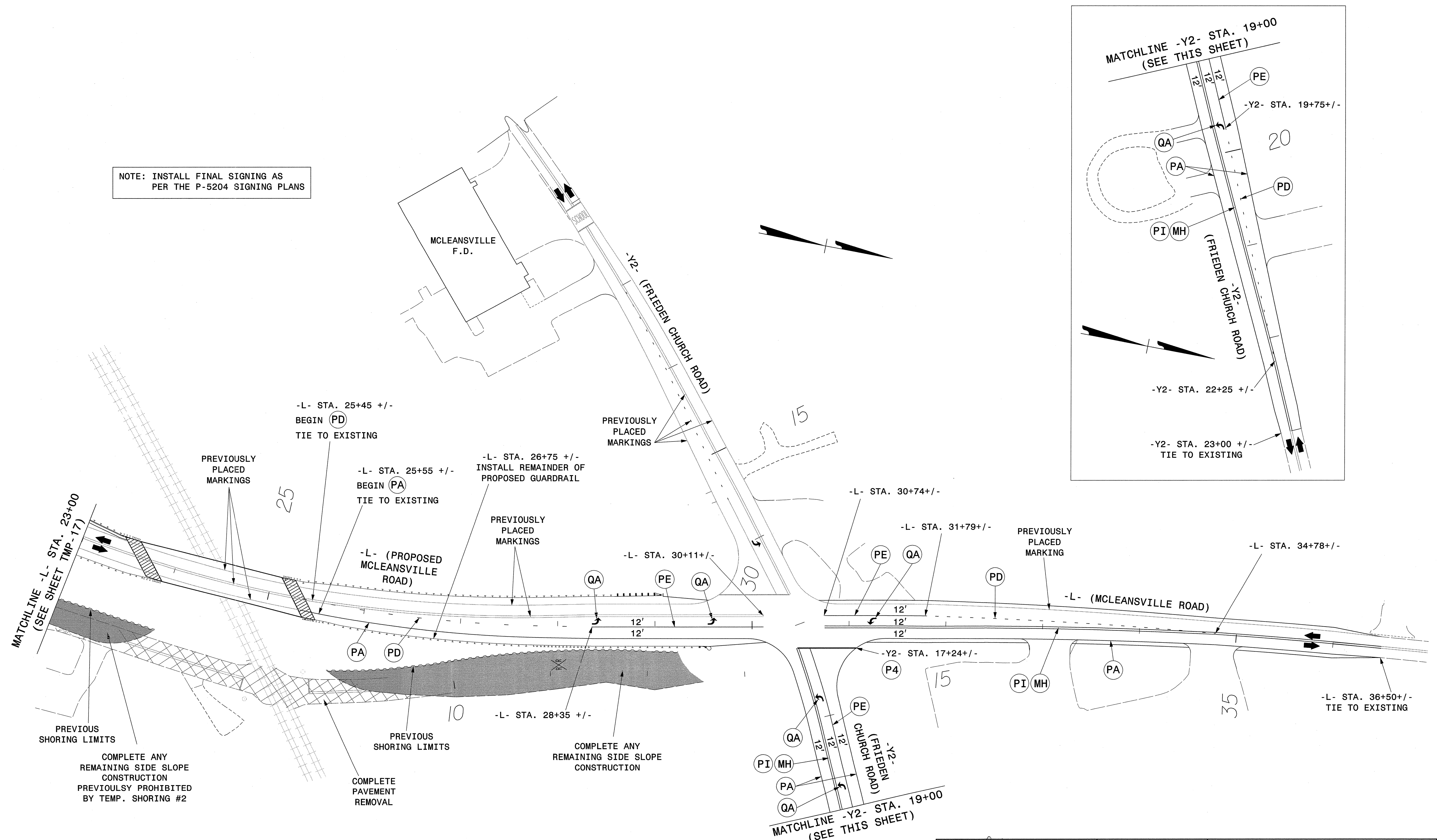
PHASE III DETAIL
 -L-
 (MCLEANSVILLE RD),
 -Y1- & -Y4-

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 310
 RALEIGH, NORTH CAROLINA 27609
 (919) 876-6888 NCBEES #F-0326

I7-JUN-2014 10:01
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DCN 03SD02.P5

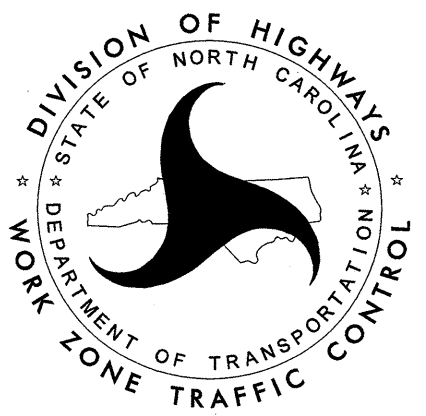
NOTE: INSTALL FINAL SIGNING AS PER THE P-5204 SIGNING PLANS



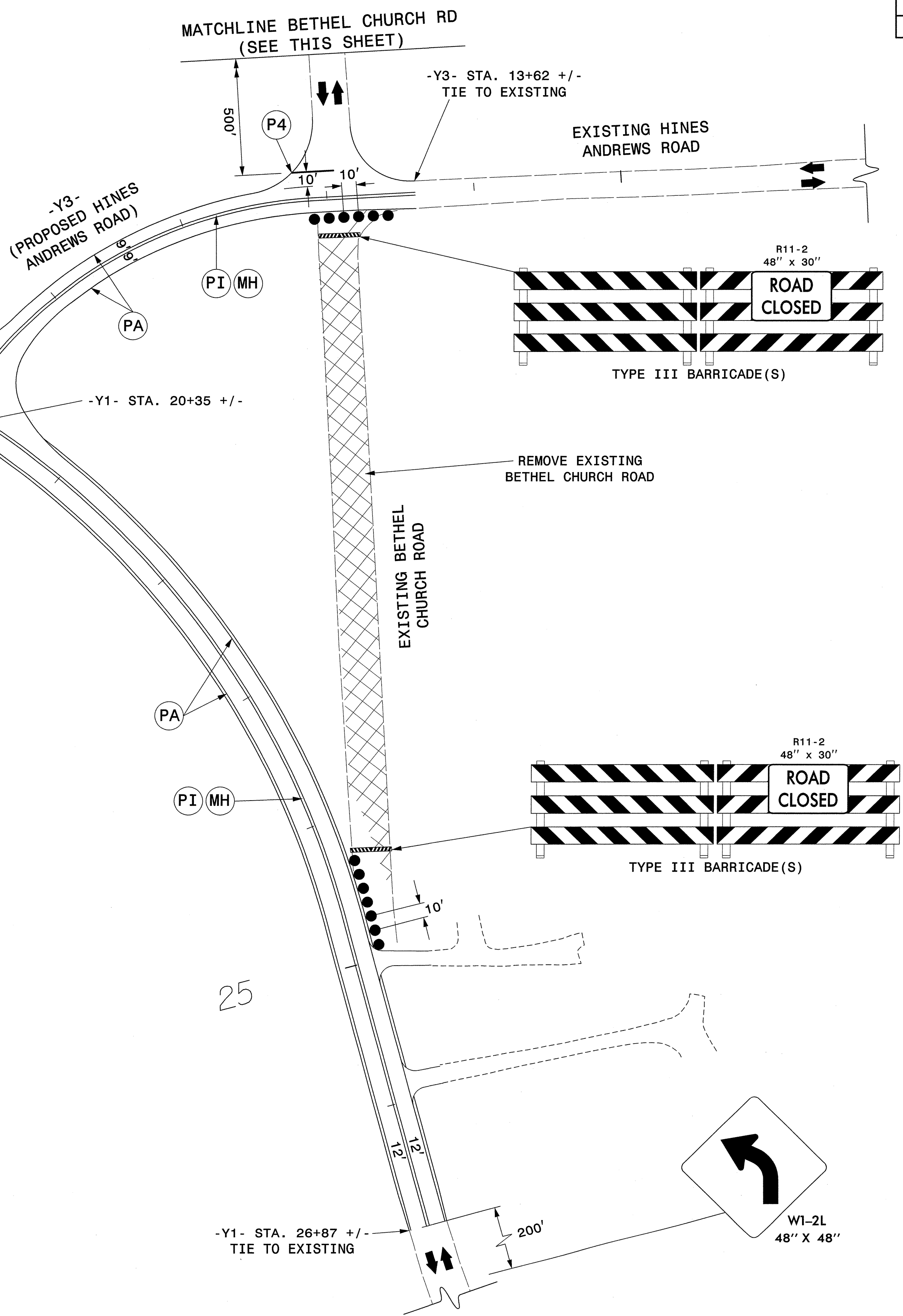
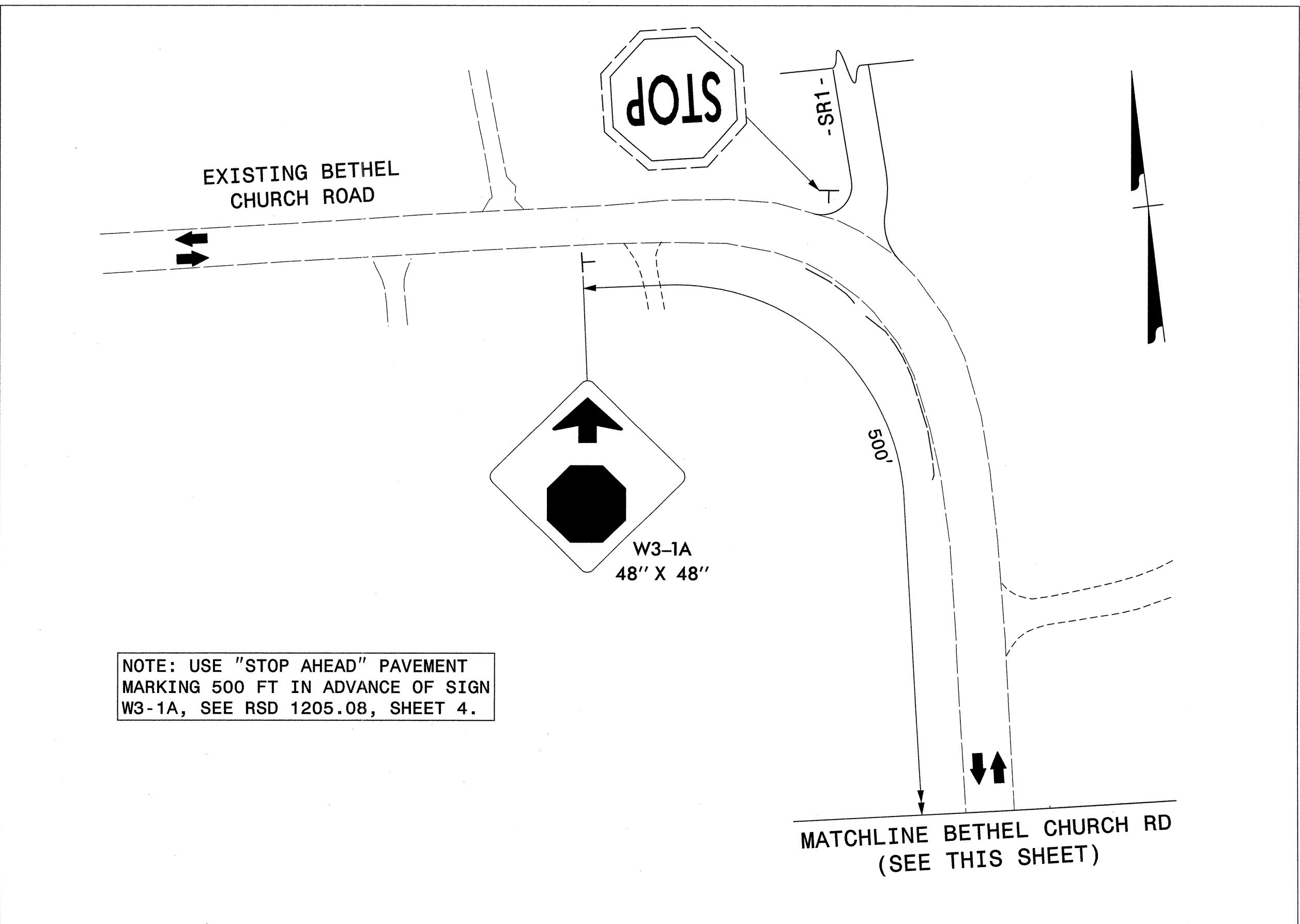
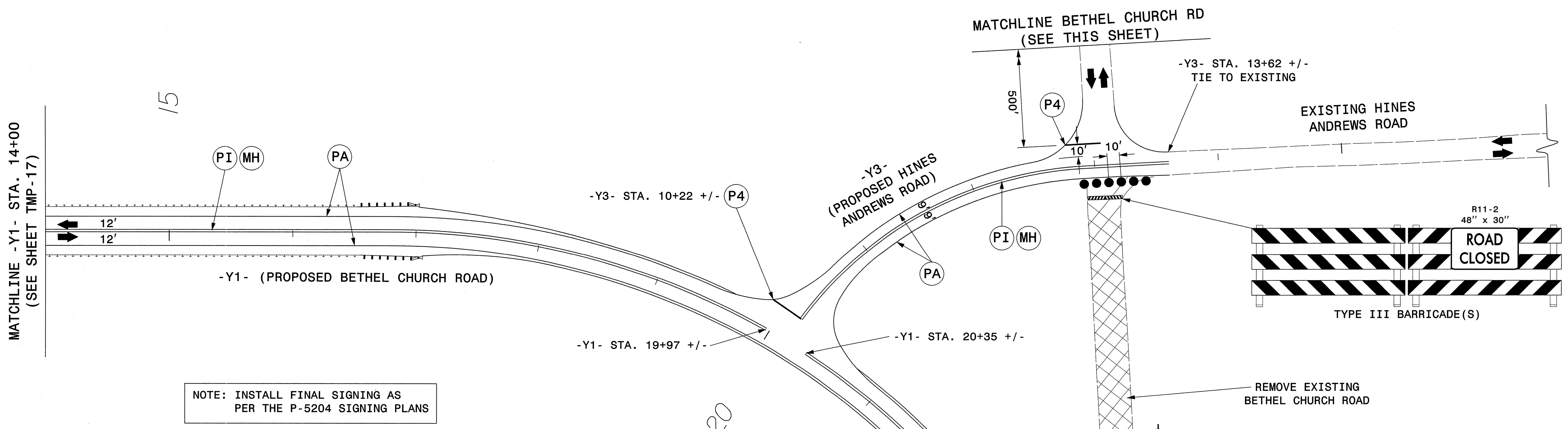
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 wile054 - AT - DUS29040

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 310
 RALEIGH, NORTH CAROLINA 27609
 (919) 876-6888 NCBES #F-0326

APPROVED: *Lisa M. Moon* DATE: 6-17-14


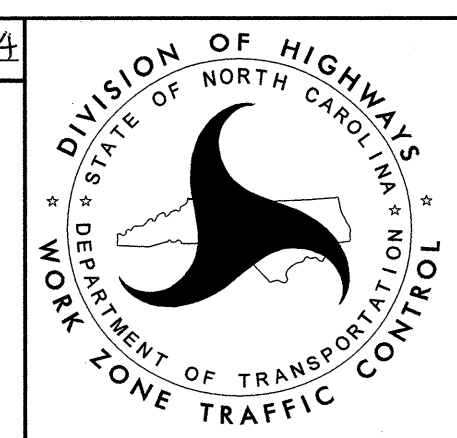
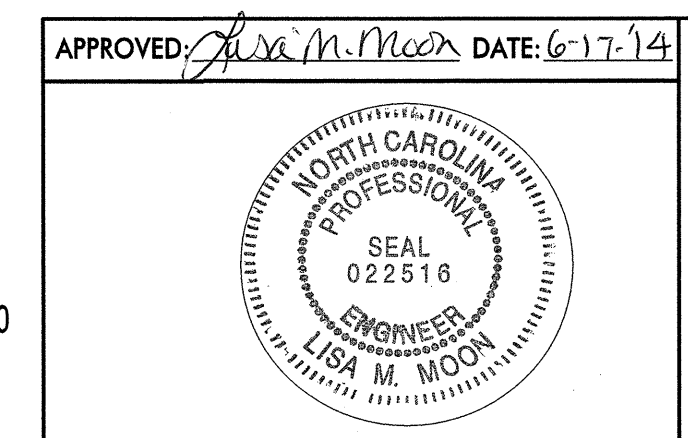


PHASE III DETAIL
 -L-
 (MCLEANSVILLE RD),
 & -Y2-



17-JUN-2014 10:01
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 wile2054 - AT DUS29040

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 310
 RALEIGH, NORTH CAROLINA 27609
 (919) 876-6888 NCBEES #F-0326



PHASE III DETAIL
-Y1- & -Y3-

DGN: 08SIDEL.PLS

SIGN NUMBER: SP 01 TYPE: STATIONARY QUANTITY: SEE PLANS SIGN WIDTH: 5'-0" HEIGHT: 2'-0" TOTAL AREA: 10.0 Sq.Ft. BORDER TYPE: INSET RECESS: 0.38" WIDTH: 0.63" RADII: 1.5" NO. Z BARS: LENGTH:	BACKG COLOR: Fluorescent Orange COPY COLOR: Black SYMBOL	DESIGN BY: M Thigpen PROJECT ID: P-5204	CHECKED BY: L Moon DIV: 7	DATE: May 29, 2014
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Spacing Factor is .9 between letters

Letter spacings are to start of next letter															Series/Size Text Length	
B	E	T	H	E	L	C	H	U	R	C	H					C 2000 52.7
R	O	A	D													C 2000 16.6

FILENAME: Guidesign_English_0-2-13 NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: SP 02 TYPE: STATIONARY QUANTITY: SEE PLANS SIGN WIDTH: 4'-6" HEIGHT: 2'-0" TOTAL AREA: 9.0 Sq.Ft. BORDER TYPE: INSET RECESS: 0.38" WIDTH: 0.63" RADII: 1.5" NO. Z BARS: LENGTH:	BACKG COLOR: Fluorescent Orange COPY COLOR: Black SYMBOL	DESIGN BY: M Thigpen PROJECT ID: P-5204	CHECKED BY: L Moon DIV: 7	DATE: May 29, 2014
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Spacing Factor is .9 between letters

Letter spacings are to start of next letter															Series/Size Text Length	
M	C	L	E	A	N	S	V	I	L	L	E					C 2000 46.8
R	O	A	D													C 2000 16.6

FILENAME: Guidesign_English_0-2-13 NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: SP 03 TYPE: STATIONARY QUANTITY: SEE PLANS SIGN WIDTH: 5'-0" HEIGHT: 2'-0" TOTAL AREA: 10.0 Sq.Ft. BORDER TYPE: INSET RECESS: 0.38" WIDTH: 0.63" RADII: 1.5" NO. Z BARS: LENGTH:	BACKG COLOR: Fluorescent Orange COPY COLOR: Black SYMBOL	DESIGN BY: M Thigpen PROJECT ID: P-5204	CHECKED BY: L Moon DIV: 7	DATE: May 29, 2014
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Spacing Factor is .85 between letters

Letter spacings are to start of next letter															Series/Size Text Length	
F	R	I	E	D	E	N	C	H	U	R	C	H				C 2000 53.8
R	O	A	D													C 2000 16.6

FILENAME: Guidesign_English_0-2-13 NORTH CAROLINA D.O.T. SIGN DETAIL

17-JUN-2014 10:01 0:\Tran\sp01\Production\Trans\WCD01\McLeansville\TrafficControl\TCP\TMP Plans\Option 2\PS204_1_TC_TMP 21.dgn wile2054 AT: DUS29040

APPROVED: <i>Lisa M. Moon</i> DATE: 6-17-14			SIGN DESIGNS
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