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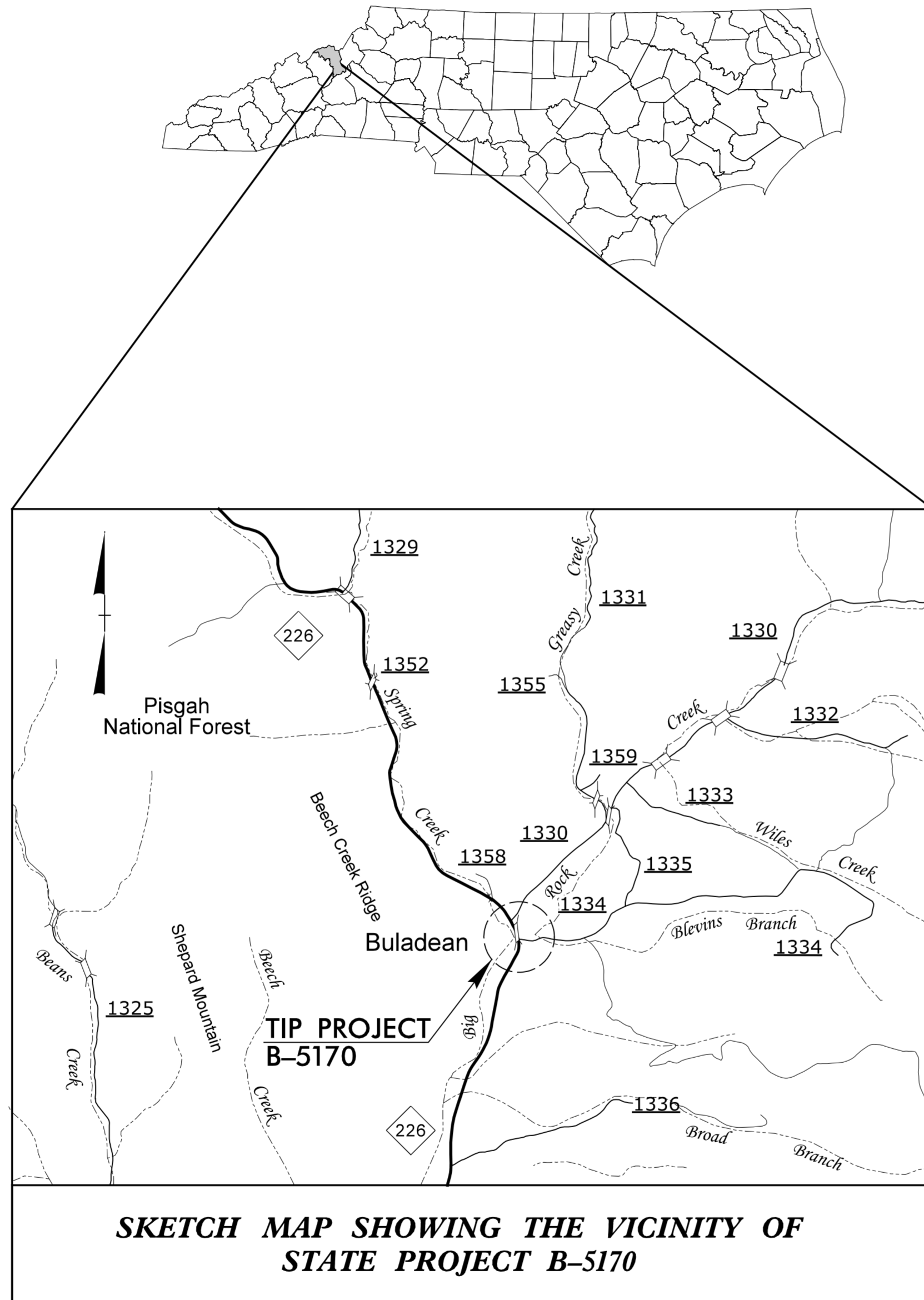
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STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**TRANSPORTATION MANAGEMENT PLAN**

**MITCHELL COUNTY**



**SKETCH MAP SHOWING THE VICINITY OF  
STATE PROJECT B-5170**

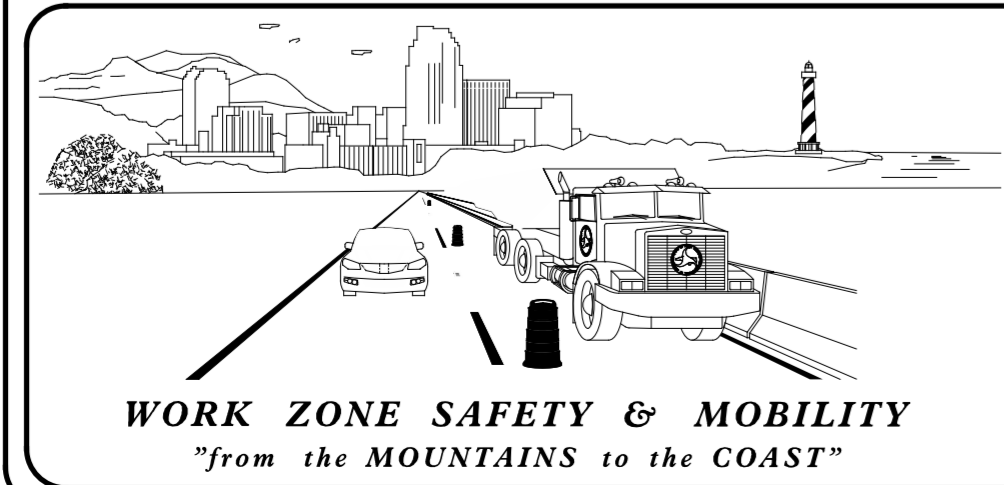
**LOCATION: BRIDGE NO. 29 OVER ROCK CREEK ON NC 226**  
**TYPE OF WORK: GRADING, DRAINAGE, PAVING & STRUCTURE**

SHEET NO.	TITLE
TMP-1	TITLE SHEET, VICINITY MAP AND INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND & TEMPORARY PAVEMENT MARKING SCHEDULE
TMP-2	TRANSPORTATION OPERATION PLAN (GENERAL NOTES, MANAGEMENT STRATEGIES & LOCAL NOTES)
TMP-2A	TEMPORARY SHORING NOTES
TMP-3	PHASING
TMP-4	PHASE I, STEP 2 DETAIL
TMP-5	PHASE I, STEP 3 DETAIL
TMP-6	PHASE II DETAIL
TMP-7	PHASE III DETAIL

PLOT DRIVER: #PLTDRVS\$  
USER: #USER\$  
FILE: #PWVAVAILTPATHDESC#8

PENTABLE: #PENTBLS\$  
TIME: 9:19:01 AM

DATE: 12/5/2017



**PLANS PREPARED BY:**

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PLAN PREPARED BY:

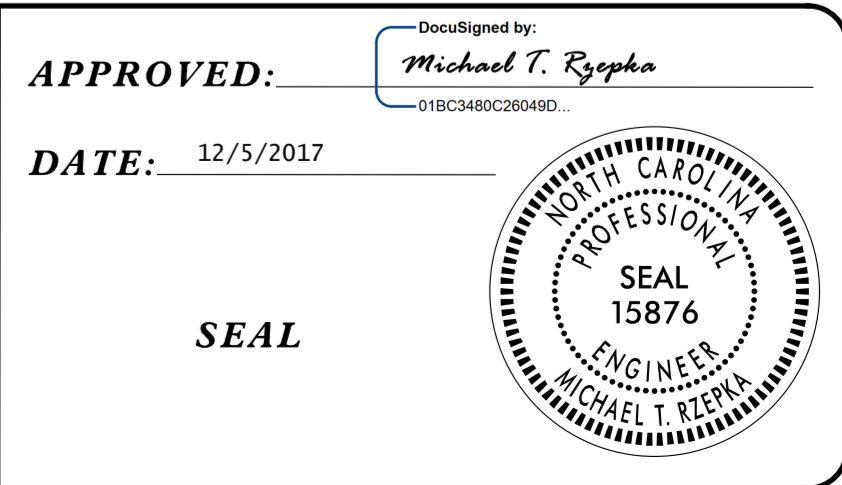
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**APPROVED:** *Michael T. Rzepka*  
018C3480C28049D...

**DATE:** 12/5/2017

**SEAL**



SHEET NO.  
TMP-1

**TIP PROJECT: B-5170**

## 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 2018 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
1130.01	DRUM
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1170.01	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
1205.12	PAVEMENT MARKINGS - BRIDGES
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY
1261.01	GUARDRAIL AND BARRIER DELINEATORS - INSTALLATION SPACING
1261.02	GUARDRAIL AND BARRIER DELINEATORS - TYPES AND MOUNTING
1262.01	GUARDRAIL END DELINEATION

## LEGEND

### GENERAL

- DIRECTION OF TRAFFIC FLOW
- DIRECTION OF PEDESTRIAN TRAFFIC FLOW
- EXIST. PVMT.
- NORTH ARROW
- PROPOSED PVMT.
- TEMP. SHORING (LOCATION PURPOSES ONLY)

- WORK AREA
- REMOVAL
- RESURFACING/WEDGING

### SIGNALS

- EXISTING
- PROPOSED
- PORTABLE

### 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

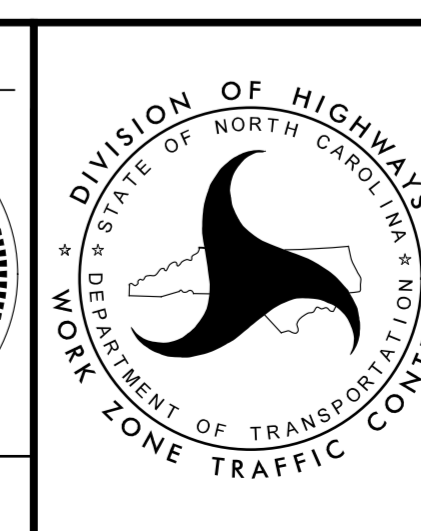
SYMBOL	DESCRIPTION
	COLD APPLIED PLASTIC (24")
C2	WHITE STOPBAR
	PAINT (24")
P2	WHITE STOPBAR
	PAINT (4")
P8	WHITE MINI-SKIP, 2' / 6' SP.
PA	WHITE EDGELINE
PI	DOUBLE YELLOW CENTERLINE
	TEMPORARY RAISED MARKERS
MH	YELLOW & YELLOW

APPROVED:   
DATE: 12/5/2017

SEAL

119C3480C26046D...

SEAL 15876  
MICHAEL T. RZEPKA  
PROFESSIONAL ENGINEER



ROADWAY STANDARD DRAWINGS, LEGEND & TEMPORARY PAVEMENT MARKING SCHEDULE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



## 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.

- A) 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

- B) 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.
- C) 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.
- D) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.  
  
WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO A DIVIDED FACILITY AND WITHIN 10 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.
- E) 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.
- F) 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.
- G) DO NOT INSTALL MORE THAN ONE LANE CLOSURE IN ANY ONE DIRECTION ON NC 226.

### PAVEMENT EDGE DROP OFF REQUIREMENTS

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

### TRAFFIC PATTERN ALTERATIONS

- J) NOTIFY THE ENGINEER THIRTY (30) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

### SIGNING

- K) 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.
- L) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.
- M) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 500 FT IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

### TRAFFIC BARRIER

- N) 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.

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

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

- P) 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 WHEN LANE CLOSURES ARE NOT IN EFFECT. WHEN SKINNY DRUMS ARE ALLOWED REFER TO SECTION 1180 OF STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES OR AS SHOWN IN THE PLANS.
- Q) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.

### PAVEMENT MARKINGS AND MARKERS

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

ROAD NAME	MARKING	MARKER
NC 226	PAINT	TEMPORARY RAISED
SR 1334	PAINT	TEMPORARY RAISED
ALL ROADS	COLD APPLIED PLASTIC AT TEMPORARY STOPBAR LOCATIONS	

- S) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- T) 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.
- U) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

## MANAGEMENT STRATEGIES

THE PROJECT CONSISTS OF REPLACING BRIDGE NO. 29 ON NC 226. DURING CONSTRUCTION, NC 226 TRAFFIC WILL BE PLACED IN A ONE-LANE, TWO-WAY PATTERN ON AN ONSITE DETOUR. ACCESS TO/FROM SR 1334 (BLEVINS BRANCH RD) WILL REMAIN OPEN DURING CONSTRUCTION.

THE TIE-IN CONSTRUCTION, TRAFFIC SHIFTS, AND PLACEMENT OF FINAL SURFACE COURSE AND PAVEMENT MARKINGS WILL BE PERFORMED USING FLAGGER OPERATIONS.

ACCESS FOR LOCAL TRAFFIC, INCLUDING DRIVEWAYS, MUST BE PROVIDED AT ALL TIMES WITHIN THE PROJECT LIMITS.

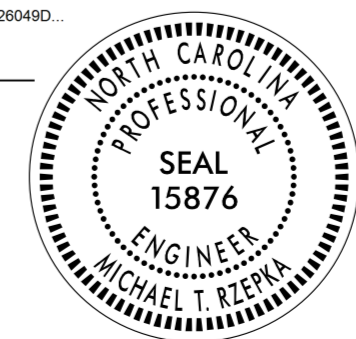

## LOCAL NOTES

- 1) DURING PARTIAL GUARDRAIL INSTALLATION/ REMOVAL, PROTECT EXPOSED END OF GUARDRAIL WITH AN APPROVED TRUCK MOUNTED ATTENUATOR OR CRASH CUSHION.

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TIME: 9:19:03 AM

DATE: 12/5/2017

PLOT DRIVER: \$PLTDV\$  
USER: \$USER\$  
FILE: \$PWVARVAULTPATHDESC\$

APPROVED: <u>Michael T. Rzepka</u> <small>018C3480C280490...</small> DATE: 12/5/2017  SEAL			<h3 style="margin: 0;">TRANSPORTATION OPERATIONS PLAN</h3>
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>			

# TEMPORARY SHORING DATA



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PROJ. REFERENCE NO. B-5170	SHEET NO. TMP-2A
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## NOTES FOR ALL TEMPORARY SHORING

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

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

DESIGN TEMPORARY SHORING FOR THE ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION. INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

THE ASSUMED SOIL PARAMETERS ARE:

UNIT WEIGHT ABOVE WATER TABLE ( $\gamma$ ) = 120 LB/CF  
 UNIT WEIGHT BELOW WATER TABLE ( $\gamma'$ ) = 120 LB/CF  
 FRICTION ANGLE ( $\phi$ ) = 34 DEGREES  
 COHESION (c) = 0 LB/SF

EXCEPT WHERE NOTED OTHERWISE, LIMITED SUBSURFACE INFORMATION IS AVAILABLE.

## NOTES FOR TEMPORARY SHORING No. 1

FROM STATION -L- 15+05±, 26' RT TO STATION -L- 15+26±, 26' RT:

ASSUMED GROUNDWATER ELEVATION = 2760 FT±

AT THE CONTRACTOR'S OPTION, USE A STANDARD SHORING FOR TEMPORARY SHORING FROM STATION -L- 15+05±, 26' RT TO STATION -L- 15+26±, 26' RT. SEE STANDARD DETAIL NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

DO NOT USE A TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -L- 15+05±, 26' RT TO STATION -L- 15+26±, 26' RT.

DRIVEN PILING FOR TEMPORARY SHORING MAY NOT PENETRATE BELOW ELEVATION 2735 FT DUE TO OBSTRUCTIONS, VERY DENSE OR HARD SOIL, BOULDERS, OR WEATHERED OR HARD ROCK. THE PRESENCE OF BOULDERS SHALL NOT BEE CONSIDERED A CHANGED CONDITION.

IT MAY BE PREFERRED TO USE A TEMPORARY SOIL NAIL WALL FOR TEMPORARY SHORING. FOR TEMPORARY SOIL NAIL WALLS, SEE TEMPORARY SOIL NAIL WALLS PROVISION.

## NOTES FOR TEMPORARY SHORING No. 2

FROM STATION -L- 15+79±, 26' RT TO STATION -L- 16+04±, 26' RT:

ASSUMED GROUNDWATER ELEVATION = 2760 FT±

AT THE CONTRACTOR'S OPTION, USE A STANDARD SHORING FOR TEMPORARY SHORING FROM STATION -L- 15+79±, 26' RT TO STATION -L- 16+04±, 26' RT. SEE STANDARD DETAIL NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

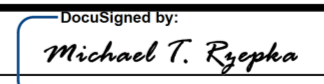
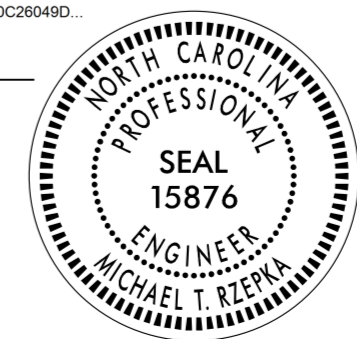

DO NOT USE A TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -L- 15+79±, 26' RT TO STATION -L- 16+04±, 26' RT.

DRIVEN PILING FOR TEMPORARY SHORING MAY NOT PENETRATE BELOW ELEVATION 2757 FT DUE TO OBSTRUCTIONS, VERY DENSE OR HARD SOIL, BOULDERS, OR WEATHERED OR HARD ROCK. THE PRESENCE OF BOULDERS SHALL NOT BEE CONSIDERED A CHANGED CONDITION.

IT MAY BE PREFERRED TO USE A TEMPORARY SOIL NAIL WALL FOR TEMPORARY SHORING. FOR TEMPORARY SOIL NAIL WALLS, SEE TEMPORARY SOIL NAIL WALLS PROVISION.

THE TEMPORARY SHORING NOTES SHOWN ON THIS SHEET WERE PROVIDED THROUGH SEALED DOCUMENTS FROM THE GEOTECHNICAL ENGINEERING UNIT. THE DOCUMENT WAS DATED AND SEALED ON 10/4/2017 BY A PROFESSIONAL ENGINEER, SHIPING YANG, LICENSE # 031361.

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 USER: \$USER\$  
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 TIME: 9:19:14 AM

APPROVED:  DATE: 12/5/2017 SEAL			TEMPORARY SHORING NOTES
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>			



# PHASING



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PROJ. REFERENCE NO.	SHEET NO.
B-5170	TMP-3

NOTES: - 'RSD' REFERS TO NCDOT ROADWAY STANDARD DRAWINGS  
- ASPHALT CONSTRUCTION IN PHASE I THROUGH III, STEP 2 ARE UP TO, BUT NOT INCLUDING, THE FINAL LAYER OF SURFACE COURSE.

### PHASE I

**STEP 1**  
INSTALL WORK ZONE ADVANCE WARNING SIGNS ON NC 226 AND SR 1334 (BLEVINS BRANCH ROAD) (SEE RSD 1101.01, SHEET 3 OF 3).

**STEP 2**  
USING RSD 1101.02 (SHEET 1 OF 14), PERFORM THE FOLLOWING (SEE SHEET TMP-4):

- PLACE TEMPORARY PAVEMENT MARKINGS AND MARKERS TO NARROW EXISTING SR 1334 AT NC 226
- CONSTRUCT TEMPORARY PAVEMENT FOR PLACEMENT OF PCB ALONG SR 1334
- INSTALL PORTABLE CONCRETE BARRIER (ANCHORED) ALONG EXISTING SR 1334 AND TIE TO EXISTING BRIDGE

USING RSD 1101.02 (SHEET 1 OF 14) AND/OR BEHIND BARRIER, CONSTRUCT THE FOLLOWING (SEE SHEET TMP-4):

- LDET- TEMPORARY STRUCTURE
- LDET- STA 10+00± TO STA 15+42±
- Y1- FROM -LDET- TO -Y1- STA 12+11± (WIDENING)
- TEMPORARY PAVEMENT TIE FROM EXISTING NC 226 TO -LDET-

PERFORM PHASE I, STEP 3 THROUGH PHASE II, STEP 1 IN A CONTINUOUS MANNER TO COMPLETE GUARDRAIL INSTALLATION.

**STEP 3**  
USING RSD 1101.02 (SHEET 1 OF 14), PERFORM THE FOLLOWING (SEE SHEET TMP-5):

- PLACE TEMPORARY PAVEMENT MARKINGS AND MARKERS AND SHIFT TRAFFIC ONTO -Y1- ALIGNMENT, PROVIDING TEMPORARY TIE TO EXISTING NC 226
- REMOVE PORTABLE CONCRETE BARRIER AND CRASH CUSHION
- BEGIN INSTALLATION OF GUARDRAIL AT TEMPORARY BRIDGE THAT DOES NOT CONFLICT WITH PHASE I TRAFFIC PATTERN (SEE LOCAL NOTE 1).

NOTE: COMPLETE CONSTRUCTION OF PHASE II WITH TRAFFIC IN A ONE-LANE/TWO-WAY PATTERN CONTROLLED BY FLAGGING OR PORTABLE SIGNALS.

### PHASE II

**STEP 1**  
USING RSD 1101.02 (SHEET 1 OF 14) AND FLAGGING, INSTALL PORTABLE SIGNALS AND SIGNS, CHANNELIZATION, AND STOP BARS. REMOVE CONFLICTING DOUBLE YELLOW CENTERLINE AND WHITE EDGELINES ACROSS -LDET-. COVER EXISTING STOP SIGN. PLACE TRAFFIC IN A ONE-LANE/TWO-WAY PATTERN ON -LDET- AND ACTIVATE PORTABLE SIGNALS (SEE SHEET TMP-6).

USING RSD 1101.02 (SHEET 1 OF 14) AND FLAGGING, COMPLETE INSTALLATION OF GUARDRAIL AT TEMPORARY BRIDGE (SEE LOCAL NOTE 1).

**STEP 2**  
BEHIND GUARDRAIL OR USING RSD 1101.02 (SHEET 1 OF 14), CONSTRUCT THE FOLLOWING (SEE SHEET TMP-6):

- PROPOSED BRIDGE (WITH TEMPORARY SHORING INSTALLATION)
- L- STA 12+90± TO STA 13+68± (WIDENING LEFT)
  - L- STA 13+68± TO STA 14+75± (WEDGING AND WIDENING LEFT & RIGHT)
  - L- STA 14+75± TO STA 16+50± (FULL DEPTH PAVEMENT)
  - L- STA 16+50± TO STA 17+28± (WEDGING AND WIDENING LEFT & RIGHT)
  - L- STA 17+28± TO STA 19+00± (WIDENING LEFT)

AWAY FROM TRAFFIC, BEGIN INSTALLATION OF PROPOSED GUARDRAIL THAT DOES NOT CONFLICT WITH PHASE II TRAFFIC PATTERN (SEE LOCAL NOTE 1).

### PHASE III

**STEP 1**  
USING 1101.02 (SHEET 1 OF 14) AND FLAGGING, COMPLETE THE FOLLOWING IN A CONTINUOUS MANNER (SEE SHEET TMP-7):

- A) PLACE TEMPORARY PAVEMENT MARKINGS AND MARKERS AWAY FROM TRAFFIC ON -L- FOR PHASE III TRAFFIC PATTERN
- B) REMOVE TEMPORARY GUARDRAIL THAT CONFLICTS WITH PHASE III -Y1- TRAFFIC PATTERN (SEE LOCAL NOTE 1)
- C) TIE TEMPORARY MARKINGS TO EXISTING AND SHIFT NC 226 TRAFFIC TO -L-
- D) REMOVE STOP BARS, SIGNALS AND RELATED SIGNS
- E) PLACE TEMPORARY MARKINGS ON -Y- AND OPEN ACCESS TO -L-

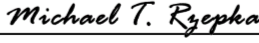
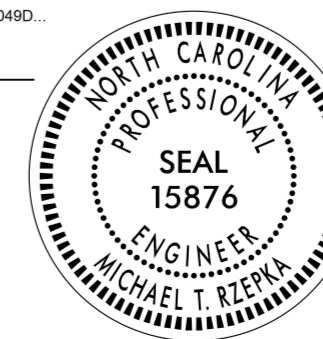

**STEP 2**  
USING RSD 1101.02 (SHEET 1 OF 14) AND FLAGGING, CONSTRUCT THE FOLLOWING (SEE SHEET TMP-7):

- REMOVE -LDET- AND TEMPORARY STRUCTURE
- COMPLETE INSTALLATION OF PROPOSED GUARDRAIL
- WEDGE/RESURFACE -L- STA 12+90± TO STA 13+91± AND FROM STA 16+94± TO STA 19+00±
- GRADE FINAL SHOULDERS ON -L- AND -Y1-

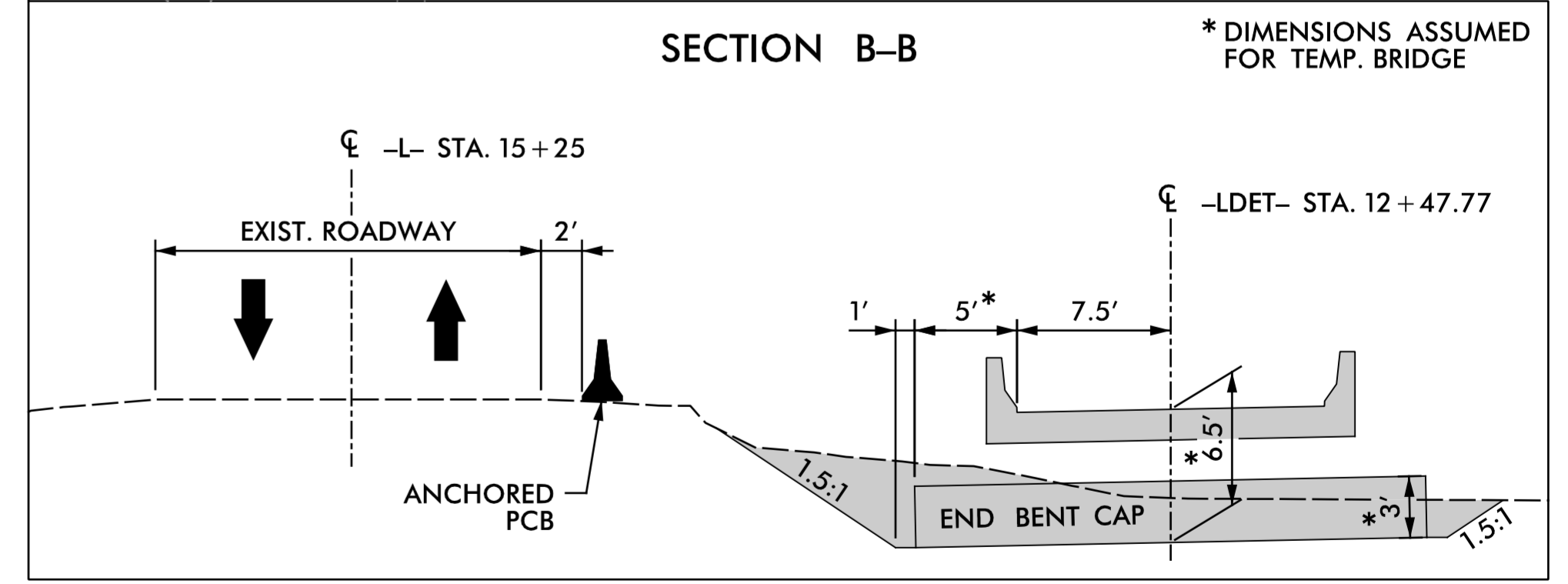
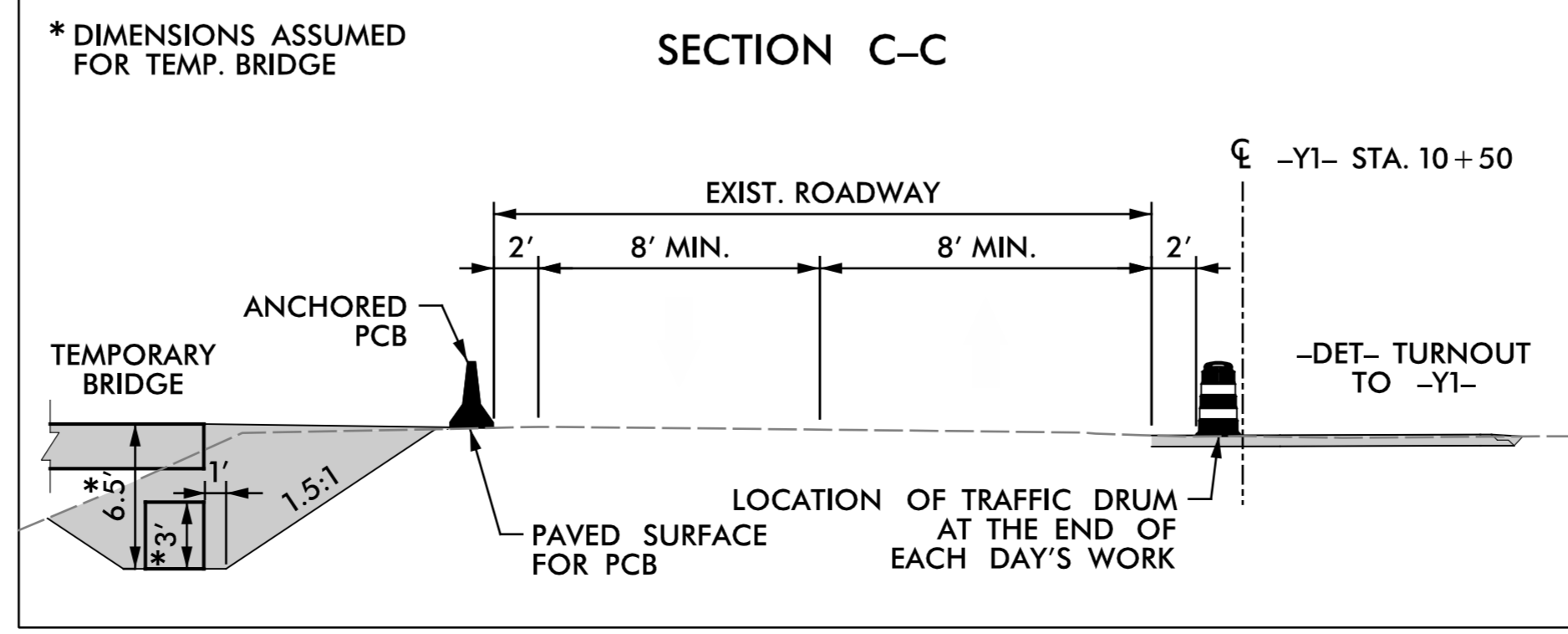
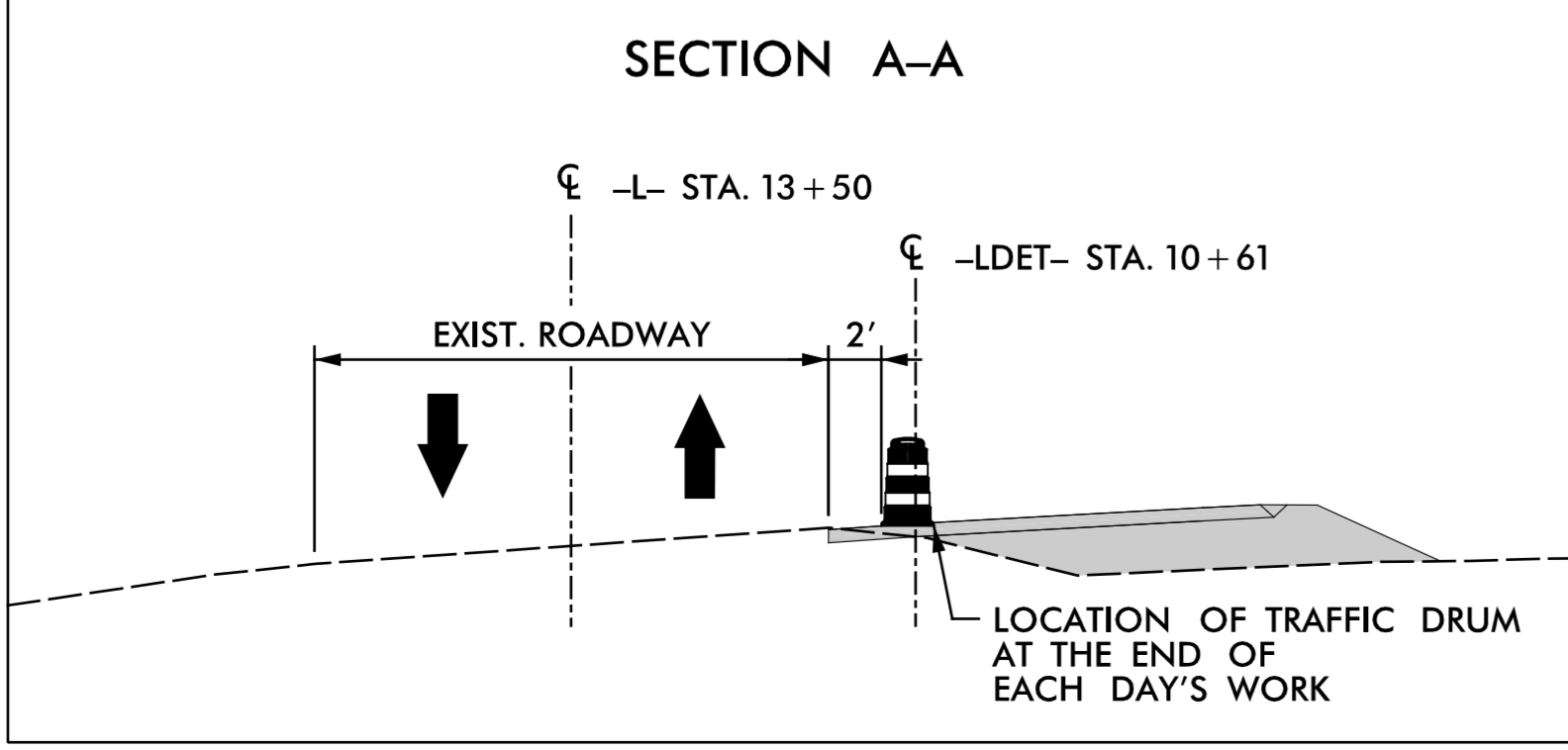
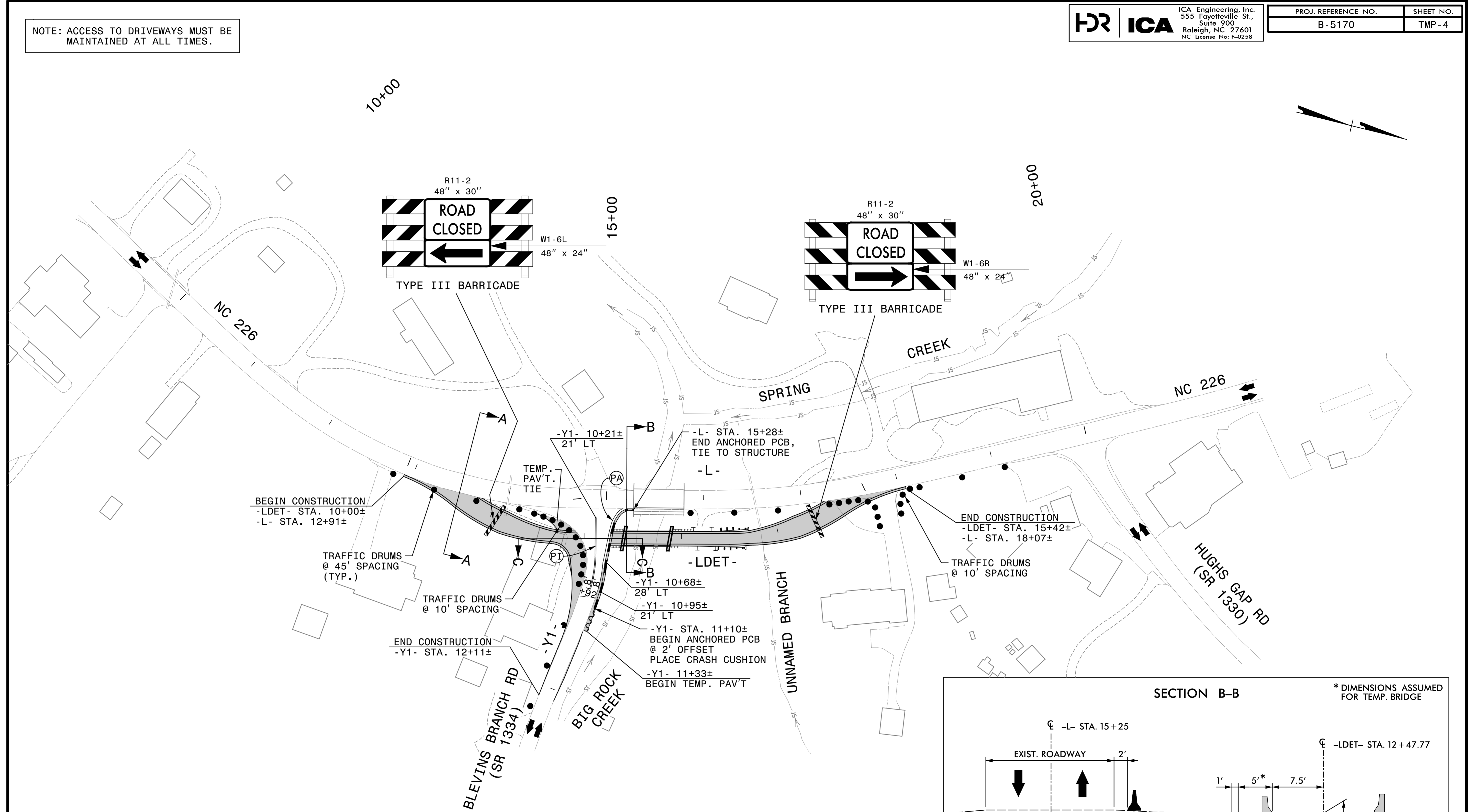
**STEP 3**  
USING RSD 1101.02 (SHEET 1 OF 14), PAVE FINAL LAYER OF SURFACE COURSE ON -L- AND -Y1-, AND PLACE FINAL PAVEMENT MARKINGS AND MARKERS (SEE FINAL PAVEMENT MARKING PLANS).

**STEP 4**  
REMOVE REMAINING TRAFFIC CONTROL DEVICES.

PLOT DRIVER: \$PLTDVYS\$  
USER: \$USER\$  
FILE: \$PWVAVAU\TPATHDESC\$  
DATE: 12/5/2017  
TIME: 9:19:20 AM

<p>APPROVED:  DATE: 12/5/2017</p> <p>SEAL</p> 		<p style="text-align: center; font-size: 2em;">PHASING</p>
<p><b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b></p>		

NOTE: ACCESS TO DRIVEWAYS MUST BE MAINTAINED AT ALL TIMES.



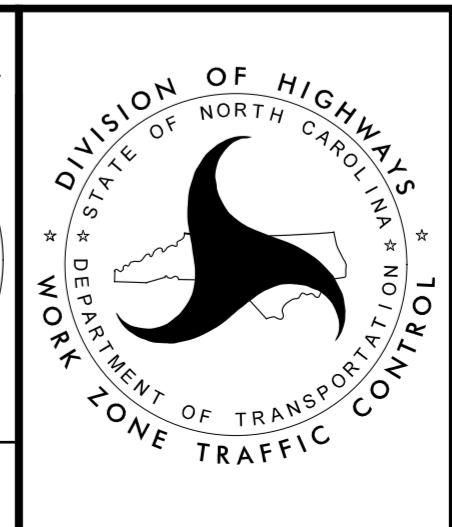
PLOT DRIVER: \$PLTDVRS\$  
USER: \$USER\$  
FILE: \$PWAVRVAULTPATHDESC\$

PENTABLE: \$PENTBLS\$  
DATE: 12/19/2017  
TIME: 8:49:44 AM

APPROVED: *Michael T. Rzepka*  
DATE: 12/19/2017

SEAL

PROFESSIONAL SEAL 15876  
MICHAEL T. RZEPKA

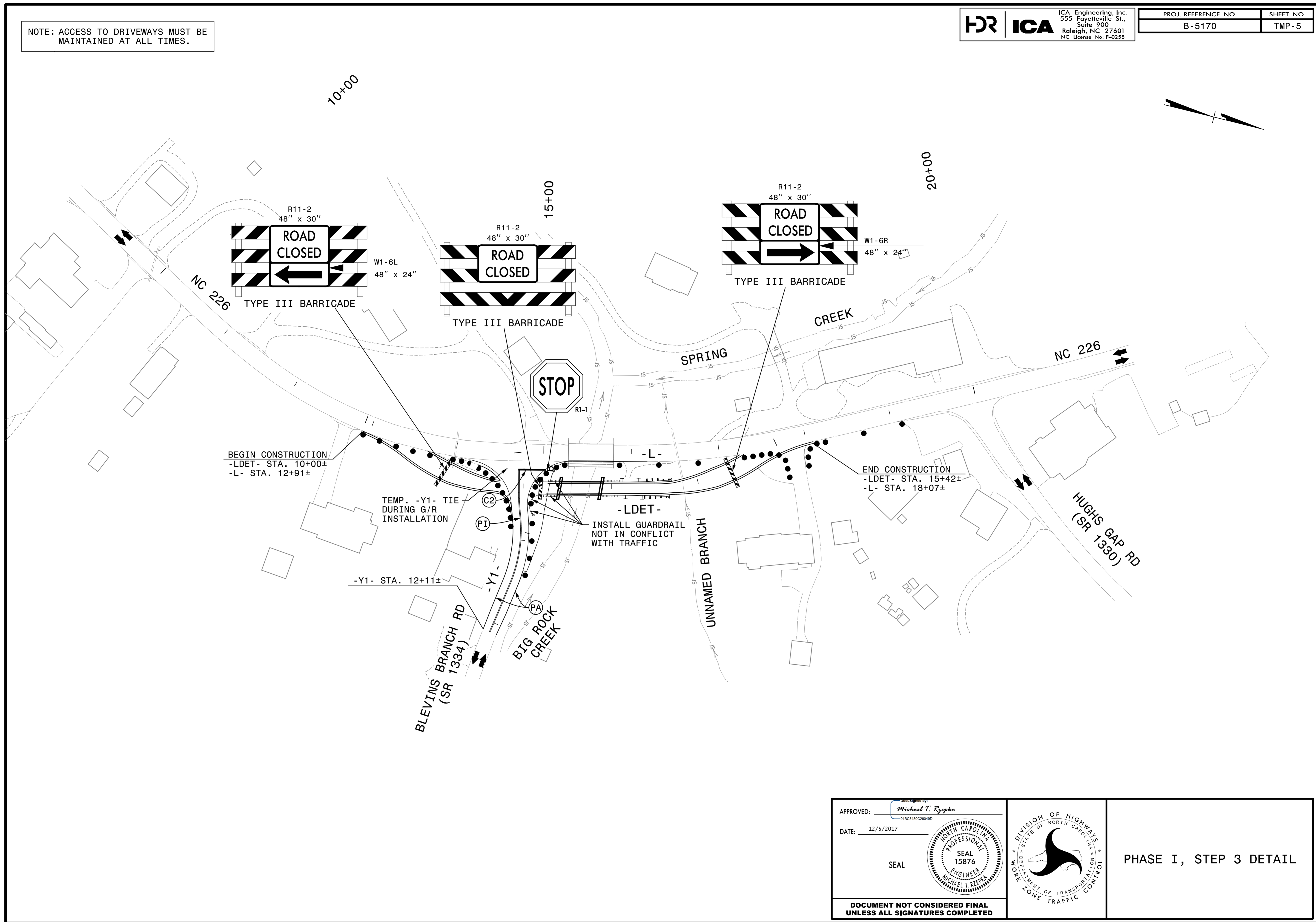


PHASE I, STEP 2 DETAIL

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



NOTE: ACCESS TO DRIVEWAYS MUST BE MAINTAINED AT ALL TIMES.



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USER: \$USER\$  
TIME: 9:19:33 AM

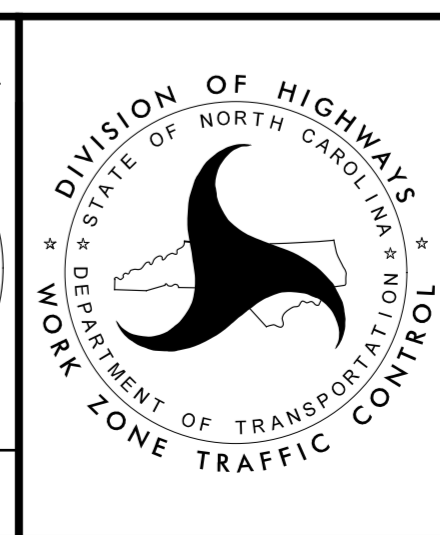
DATE: 12/5/2017

PLOT DRIVER: \$PLTDV\$  
USER: \$USER\$  
FILE: \$PWVARVAULTPATHDESC\$

APPROVED: *Michael T. Rzepka*  
DATE: 12/5/2017

SEAL

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED



PHASE I, STEP 3 DETAIL

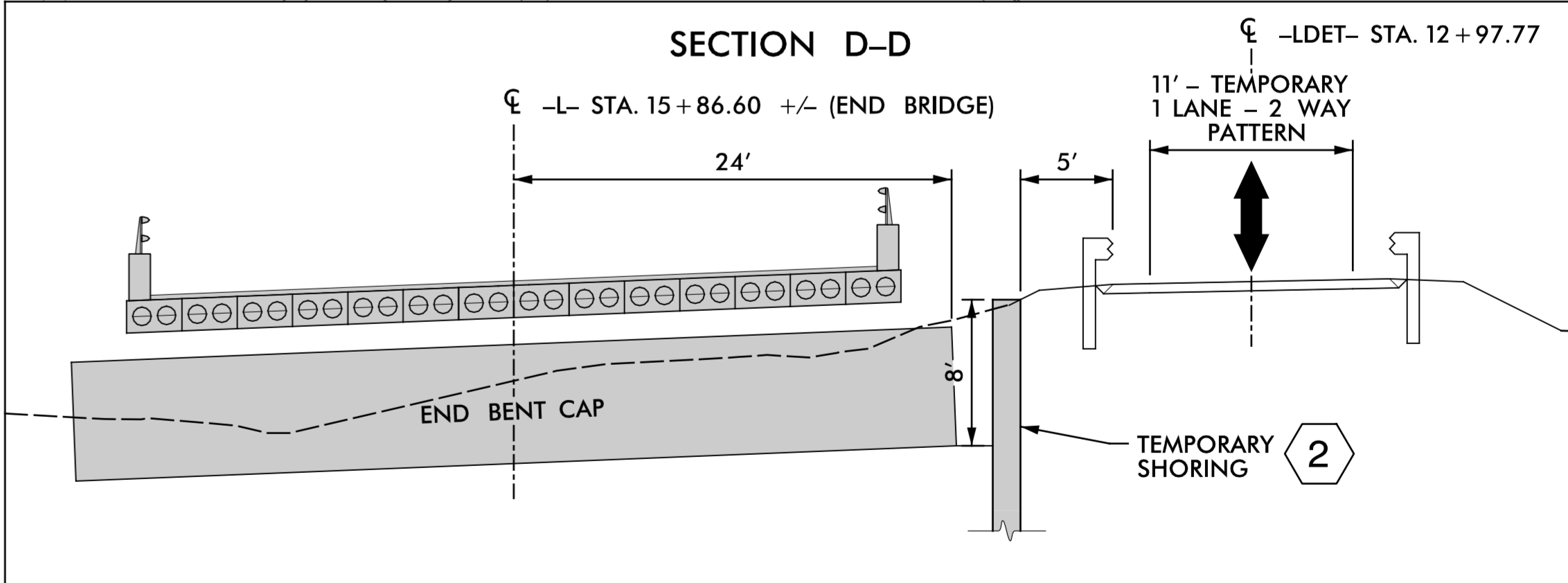
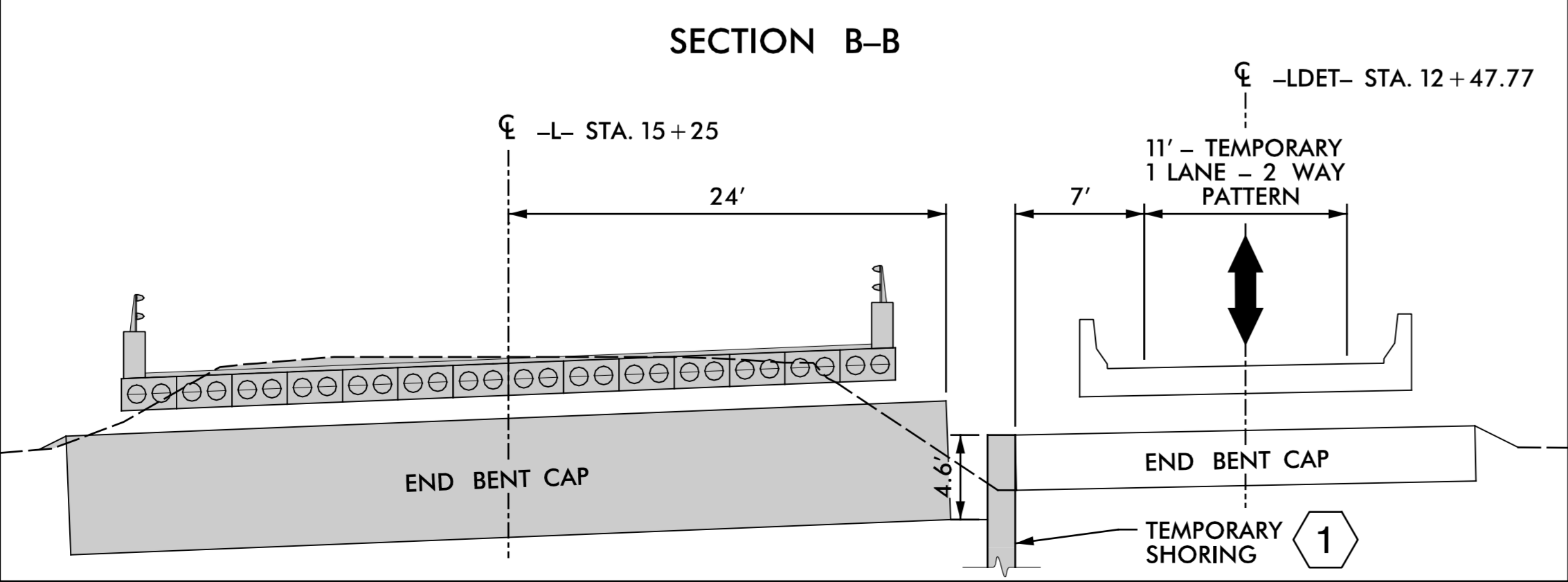
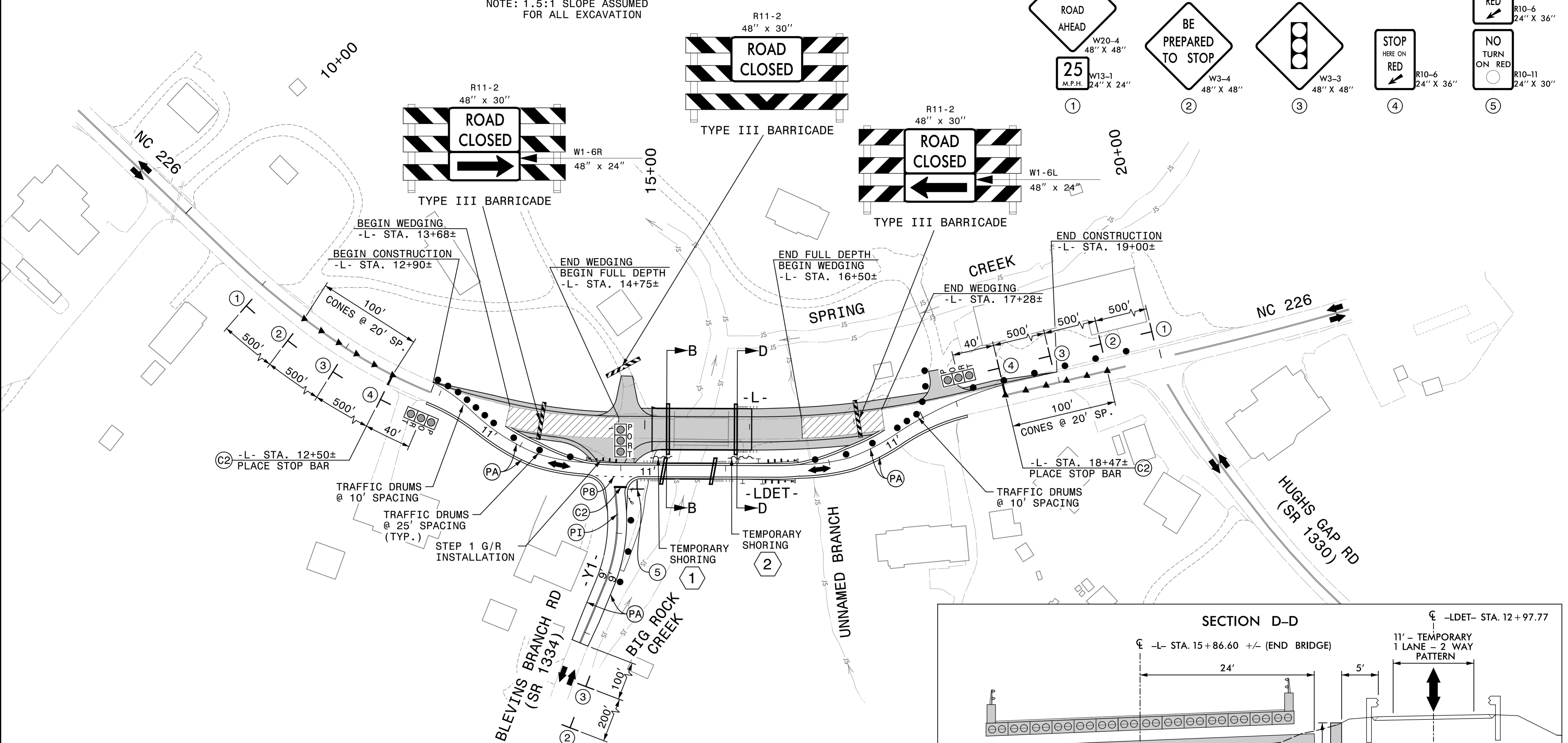


NOTE: ACCESS TO DRIVEWAYS MUST BE MAINTAINED AT ALL TIMES.

TEMPORARY SHORING No. 1  
 QUANTITY = 99 SQ. FT.  
 FROM -L- STA. 15+05±, 0.0' HT, 26.0' RT  
 TO -L- STA. 15+17±, 4.7' HT, 26.0' RT  
 TO -L- STA. 15+23±, 4.7' HT, 26.0' RT  
 TO -L- STA. 15+26±, 0.0' HT, 26.0' RT

TEMPORARY SHORING No. 2  
 QUANTITY = 200 SQ. FT.  
 FROM -L- STA. 15+79±, 0.0' HT, 26.0' RT  
 TO -L- STA. 15+86±, 8.0' HT, 26.0' RT  
 TO -L- STA. 15+90±, 8.0' HT, 26.0' RT  
 TO -L- STA. 16+04±, 0.0' HT, 26.0' RT

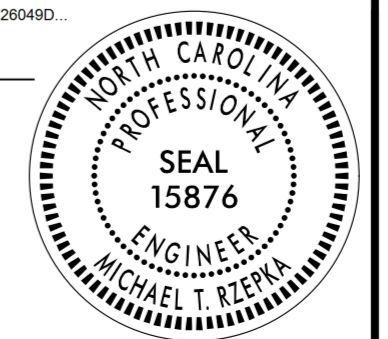
NOTE: 1.5:1 SLOPE ASSUMED FOR ALL EXCAVATION



PLOT DRIVER: \$PLTDVYS\$  
 USER: \$USER\$  
 FILE: \$PWVARVAULTPATHDESC\$

DATE: 12/5/2017  
 TIME: 9:19:37 AM

APPROVED: *Michael T. Rzepka*  
 DATE: 12/5/2017  
 SEAL



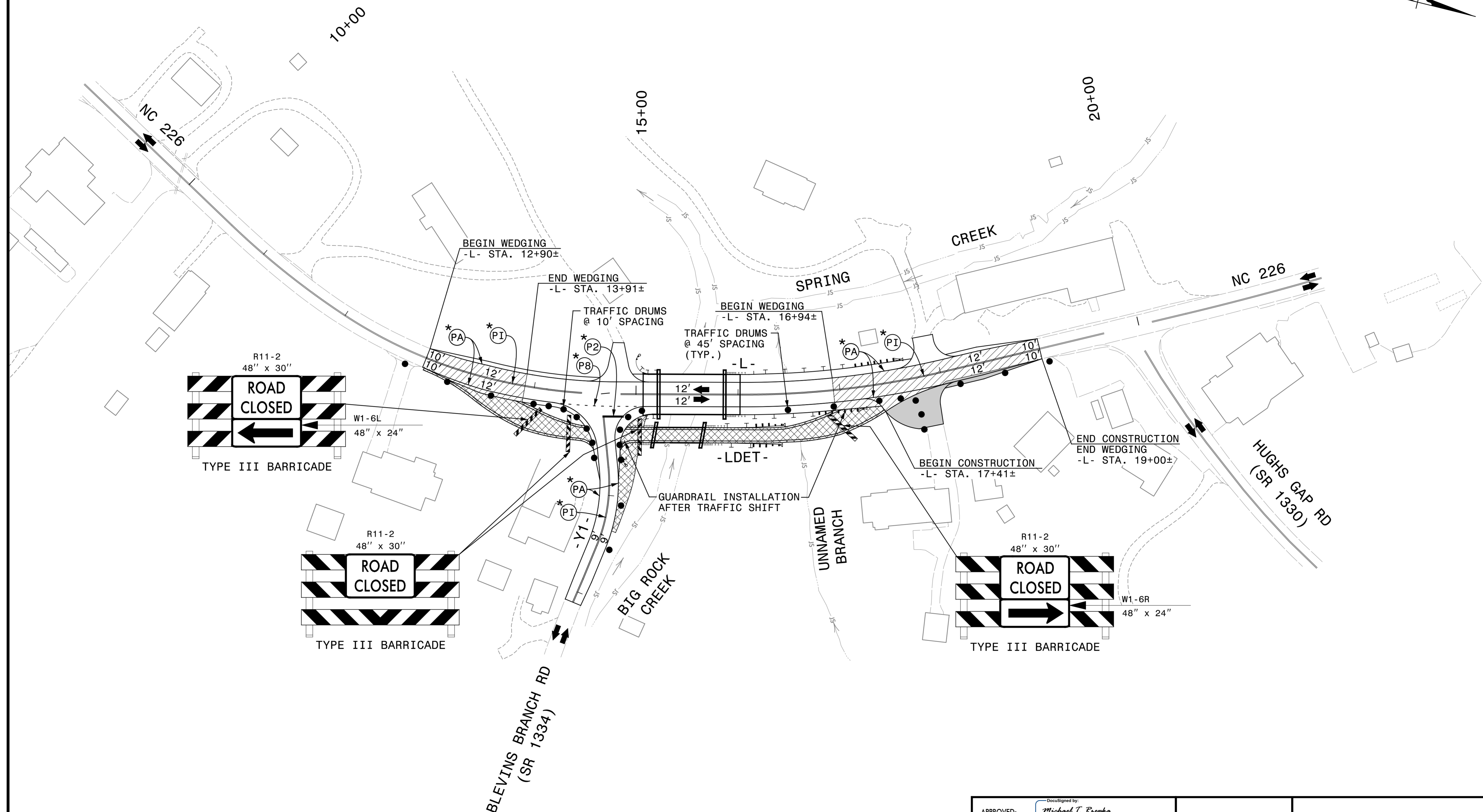
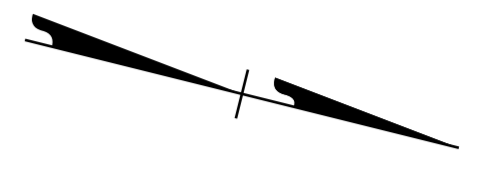
PHASE II DETAIL

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



NOTES: ACCESS TO DRIVEWAYS MUST BE MAINTAINED AT ALL TIMES.

\*PLACE TEMPORARY MARKINGS IN THE FINAL PATTERN ON -L- AND -Y1- AS SHOWN IN THE FINAL PAVEMENT MARKING PLANS



PLOT DRIVER: \$PLTDVRS\$  
 USER: \$USER\$  
 FILE: \$PWVARVAULTPATHDESC\$

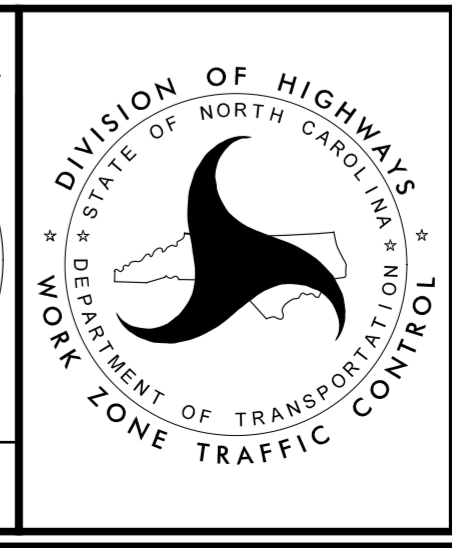
PENTABLE: \$PENTBLS\$  
 TIME: 9:19:42 AM

DATE: 12/5/2017

APPROVED: *Michael T. Rzepka*  
DocuSigned by:  
Michael T. Rzepka  
018C3480C28048D...

DATE: 12/5/2017

SEAL



PHASE III DETAIL

DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED