## STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

		. 11
STATE PROJECT REFERENCE NO.	SHEET NO.	
R-619EI	TCP-1	

# PLAN FOR PROPOSED TRAFFIC CONTROL

# TRANSYLVANIA COUNTY

## ROADWAY STANDARD DRAWINGS

## INDEX OF SHEETS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" -DAT

ADWAY DESIGN UNIT-N.C. DEPARTME	NT OF TRANSPORTATION-RALEIGH, N.C.,	
TED JANUARY 2006 ARE APPLICABLE	TO THIS PROJECT AND BY REFERENCE HEREBY ARE	
NSIDERED A PART OF THESE PLANS:		
STD NO	TITLE	

31D. NO.	
1101.01	WORK ZONE ADVANCE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.06	WARNING SIGNS FOR BLASTING AREAS
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS-MOUNTING HEIGHT & LATERIAL CLEARANCE
1110.02	PORTABLE WORK ZONE SIGNS-MOUNTING HEIGHT & LATERAL CLEARANCE
1130.01	DRUM
1135.01	CONES
1145.01	BARRICADES-TYPE III
1150.01	FLAGGING DEVICES
1165.01	TRUCK MOUNTED IMPACT ATTENUATOR-DELINEATION
1261.01	GUARDRAIL AND BARRIER DELINEATOR SPACING
1261.02	GUARDRAIL AND BARRIER DELINEATOR TYPES
1262.01	GUARDRAIL END DELINEATION
1264.01	OBJECT MARKERS
1264.02	PLACEMENT OF OBJECT MARKERS

SHEET NO.	TITLE
TCP-1	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND AND INDEX OF SHEETS
TCP-2	PROJECT NOTES

TCP-3 **PHASING** TCP-4 TO TCP-7 PHASE I TCP-8 TO TCP-9 PHASE II TCP-9 TO TCP-11 PHASE III TCP-12 DETOUR AND BARRICAD LOCATIONS FOR TEMPORARY ROAD CLOSURE WORK ZONE ADVANCE WARNING SIGNS **TCP-13** TCP-14 TYPICAL DETOUR SECTIONS

## **LEGEND**

#### **GENERAL**

DIRECTION OF TRAFFIC FLOW

- PROPOSED PVMT. ----- EXIST. PVMT.

**WORK AREA** 

REMOVAL OF EXISTING PAVEMENT

#### TRAFFIC CONTROL DEVICES

T TYPE I BARRICADE

TYPE III BARRICADE

**CONE** 

SKINNY DRUM

FLASHING ARROW PANEL (TYPE C)

— STATIONARY SIGN

PORTABLE SIGN

STATIONARY OR PORTABLE SIGN

WARNING FLAGS

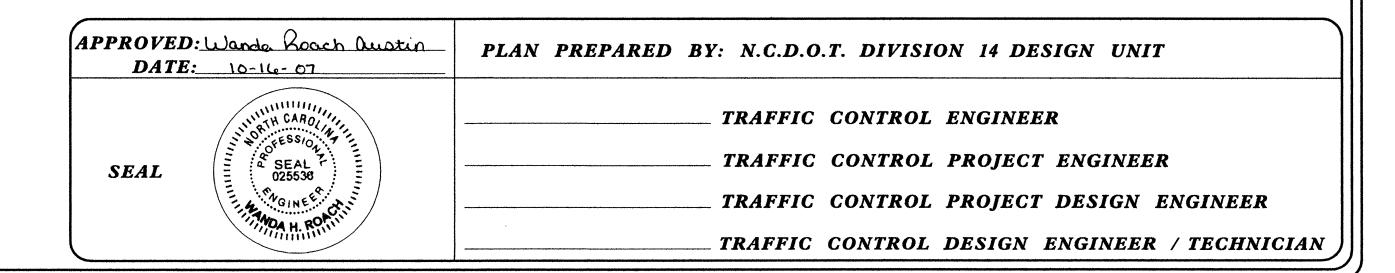
---- CRASH CUSHION

CHANGEABLE MESSAGE SIGN

TRUCK MOUNTED IMPACT ATTENUATOR (TMIA)

POLICE

- FLAGGER



## PROJECT NOTES

PROJ. REFERENCE NO. SHEET NO. R-619EI TCP-2

## 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

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

ROAD NAME NC 281

HOLIDAY

I. FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES.AS DIRECTED BY THE ENGINEER.

2. FOR NEW YEAR'S. BETWEEN THE HOURS OF 5:00 P.M. DECEMBER 31st TO 8:00 A.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 8:00 A.M. THE FOLLOWING TUESDAY.

3. FOR EASTER, BETWEEN THE HOURS OF 5:00 P.M.THURSDAY AND 8:00 A.M. MONDAY.

4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 5:00 P.M. FRIDAY TO 8:00 A.M. TUESDAY.

5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 5:00 P.M.THE DAY BEFORE INDEPENDENCE DAY AND 8:00 A.M.THE DAY AFTER INDEPENDENCE DAY.

IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 5:00 P.M.THE THURSDAY BEFORE INDEPENDENCE DAY AND 8:00 A.M.THE TUESDAY AFTER INDEPENDENCE DAY.

6. FOR LABOR DAY, BETWEEN THE HOURS OF 5:00 P.M. FRIDAY AND 8:00 A.M. TUESDAY.

7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 5:00 P.M.TUESDAY TO 8:00 A.M. MONDAY.

8. FOR CHRISTMAS. BETWEEN THE HOURS OF 5:00 P.M.THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 8:00 A.M.THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

LANE AND SHOULDER CLOSURE REQUIREMENTS

- A) 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.
- B) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN 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.
- C) 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.

ROADWAY EDGE DROP OFF REQUIREMENTS

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

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.

#### SIGNING

- A) 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.
- B) STATE FORCES WILL BE RESPONSIBLE FOR PERMANENT SIGNING.
- C) PROVIDE DETOUR SIGNING WITHIN AND OFF THE PROJECT LIMITS.
- D) COVER OR REMOVE ALL DETOUR SIGNS WITHIN AND OFF THE PROJECT LIMITS WHEN A DETOUR IS NOT IN OPERATION.
- E) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

#### TRAFFIC CONTROL DEVICES

- A) SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER 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.
- B) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN RII-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.

APPROVED: Wande H. Quot DATE: 11-27-07

## PROJECT NOTES

NONE JUNE 07 WHR WHR REVIEWED BY: PW



PROJ. REFERENCE NO.	SHEET NO.
R-619EI	TCP-3
	107-3

### NOTE: MAINTAIN LOCAL TRAFFIC WITHIN THE PROJECT LIMITS THROUGHOUT THE DURATION OF THE PROJECT.

## PHASE /

STEP 1)	INSTALL WORK ZONE ADVANCE WARNING SIGNS AS SHOWN ON SHEET TCP-13.
STEP 2)	USING ROADWAY STANDARD DRAWING 1101.02 SHEET 1 OF 7, BEGIN WIDENING
	FROM -LREV- STA.102+50 +/- TO STA.113+55 +/
STEP 3)	CONSTRUCT CHANNEL CHANGE FROM -LREV- STA.113+55 +/- TO STA.114+50 +/.
STEP 4)	USING DETOUR AS SHOWN ON SHEET TCP-12, CLOSE NC 281TO ALL TRAFFIC FROM STA 113+55 +/- TO STA 215+00 +/
STEP 5)	CONSTRUCT NEW ALIGNMENTS AND WIDEN AS INDICATED ON ROADWAY PLANS TO STA 157+00

#### PHASE //

STEP I)	INSTALL GUARDRAIL FROM -LREV- STA.102+50 TO STA.157+00 AS INDICATED ON GUARDRAIL SUMMARY SHEET
STEP 2)	OPEN ROAD TO TRAFFIC FROM STA 113+55 TO 157+00.
STEP 3)	CONSTRUCT NEW ALIGNMENTS AND WIDEN AS INDICATED ON ROADWAY PLANS TO STA 182+00

## PHASE III

STEP 1)	INSTALL GUARDRAIL FROM -LREV- STA.157+00 TO STA.182+00 AS INDICATED ON GUARDRAIL SUMMARY SHEET
STEP 2)	OPEN ROAD TO TRAFFIC FROM STALREV- 157+00 TO STA.182+00
STEP 3)	CONSTRUCT NEW ALIGNMENT AND WIDEN AS INDICATED ON ROADWAY PLANS
STEP 4)	INSTALL GUARDRAIL FROM -LREV- STA.182+00 TO STA.215+00

AS INDICATED ON GUARDRAIL SUMMARY SHEET

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SCALE: NONE

DATE: JUNE 07

DWG. BY: WHR

DESIGN BY: WHR

REVIEWED BY: PW

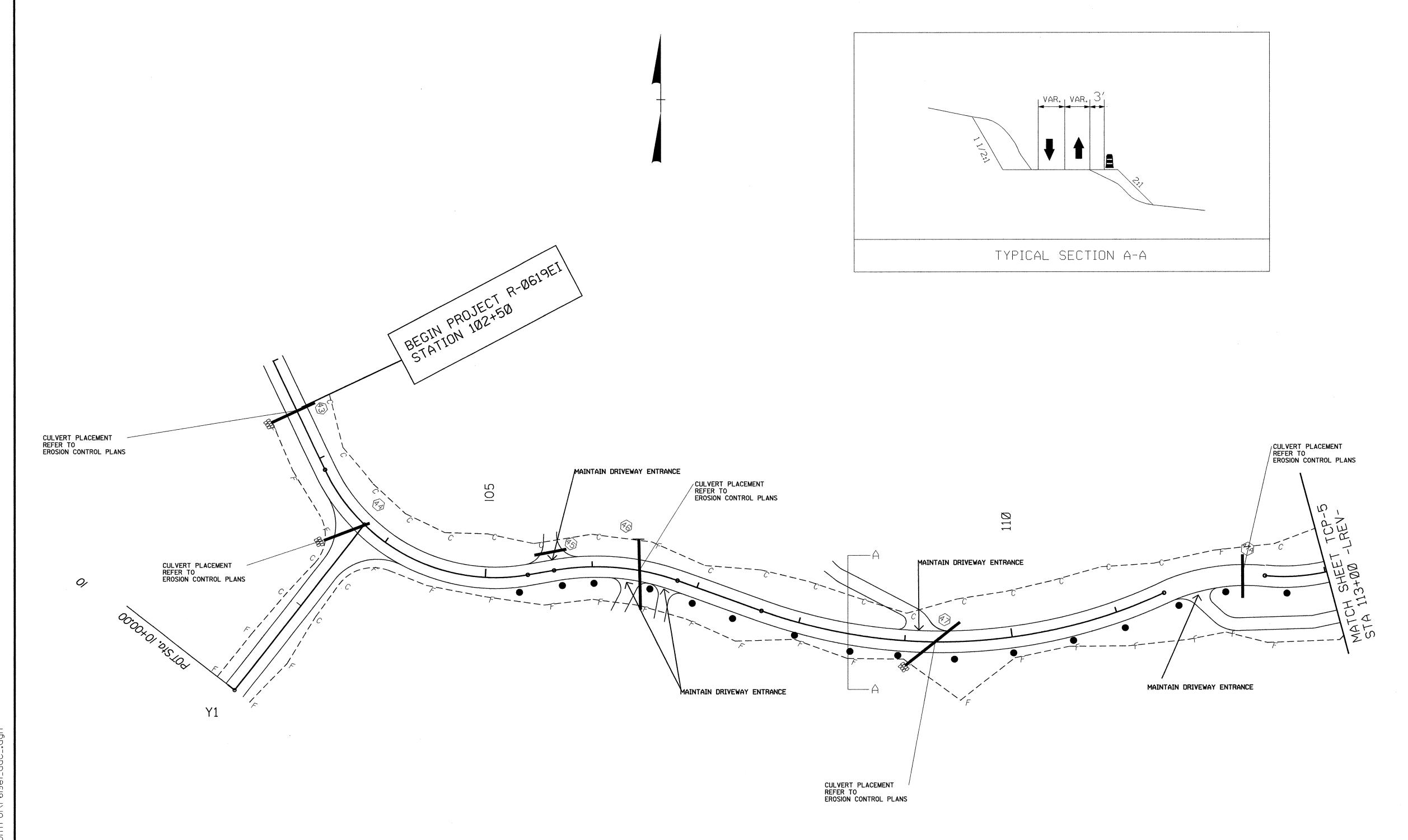
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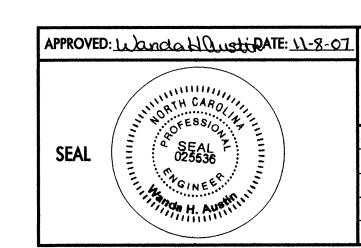
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PROJ. REFERENCE NO.	SHEET NO.
R-619 EI	TCP-4
	101-4





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DATE: JULY 07

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DESIGN BY: WHR

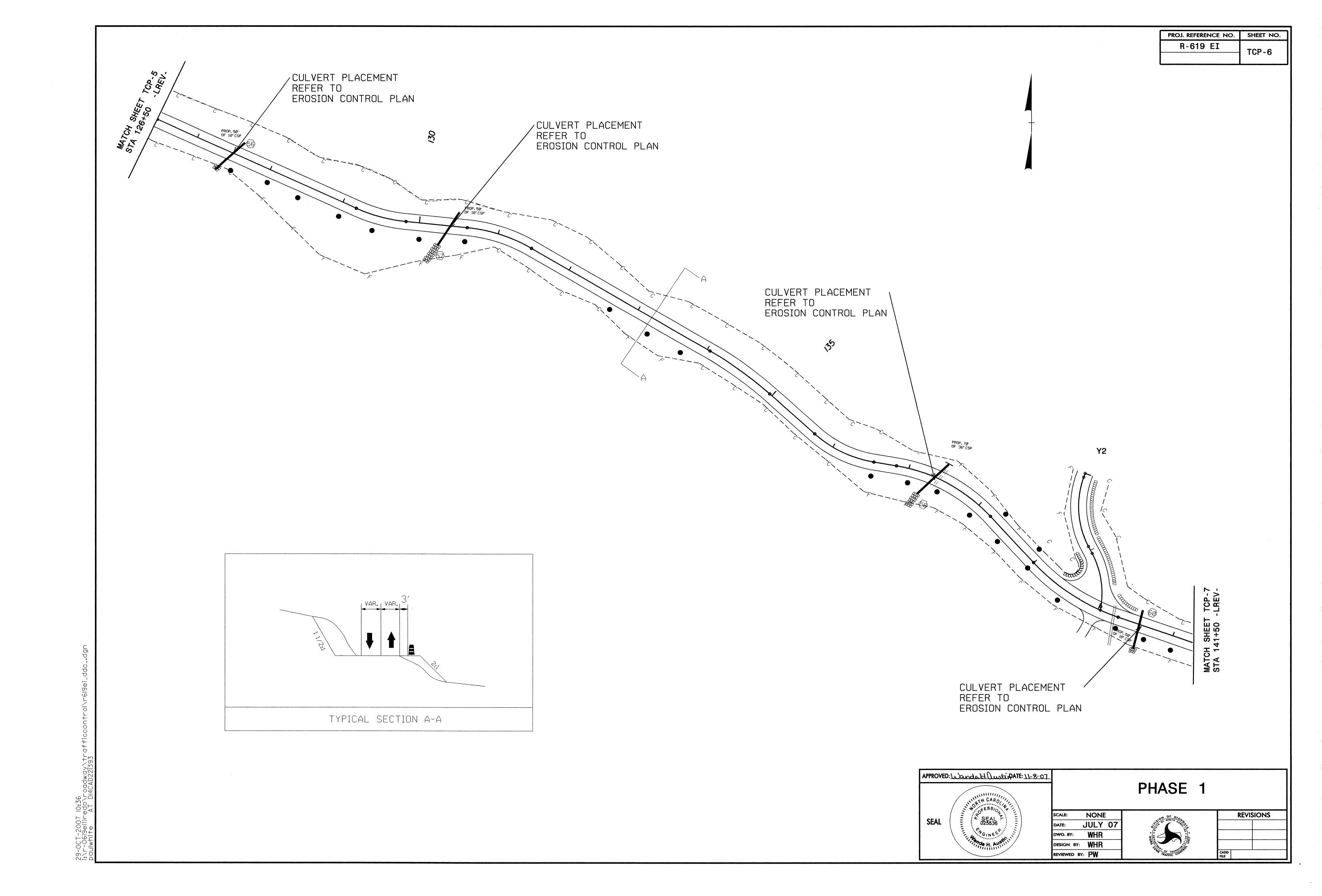
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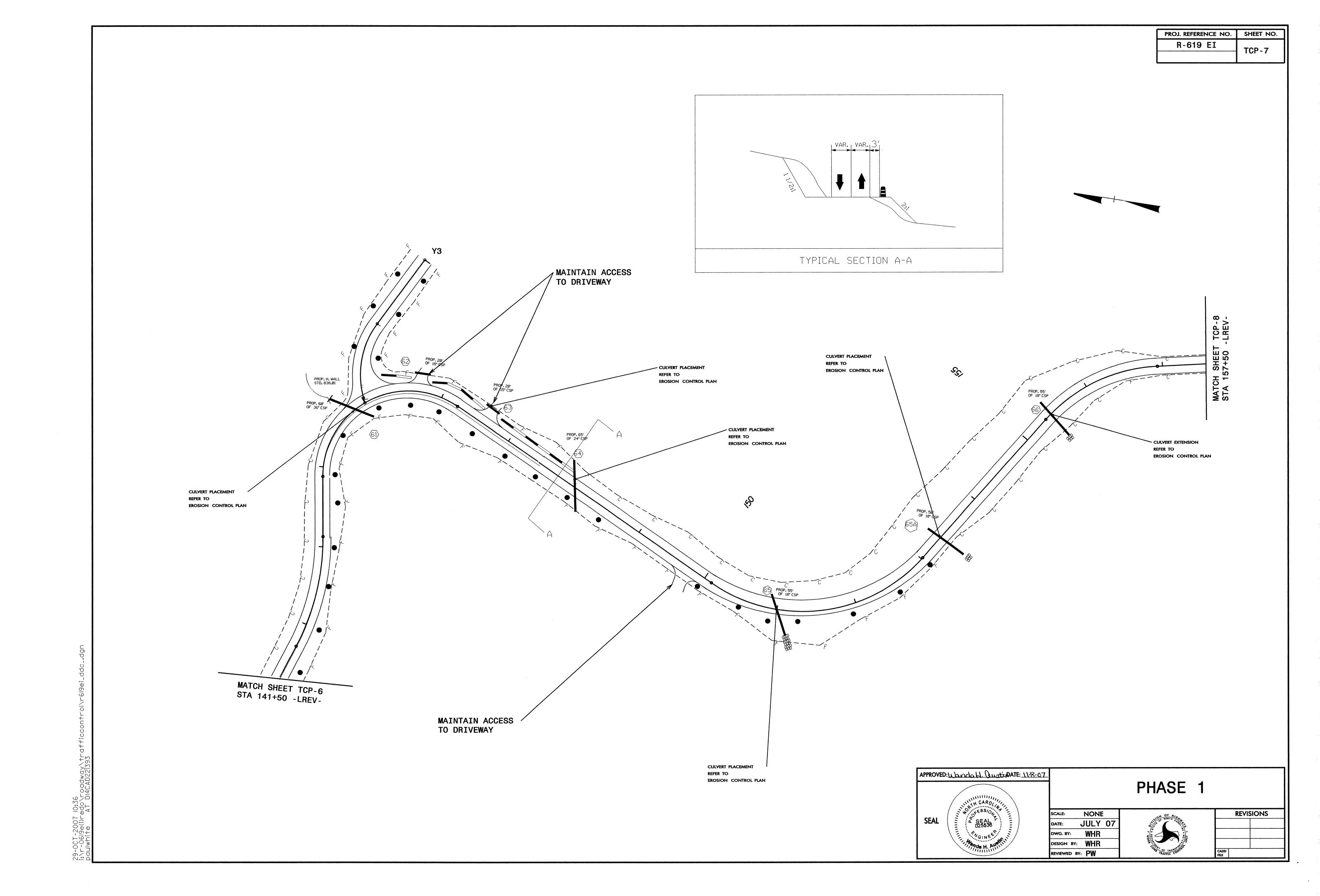
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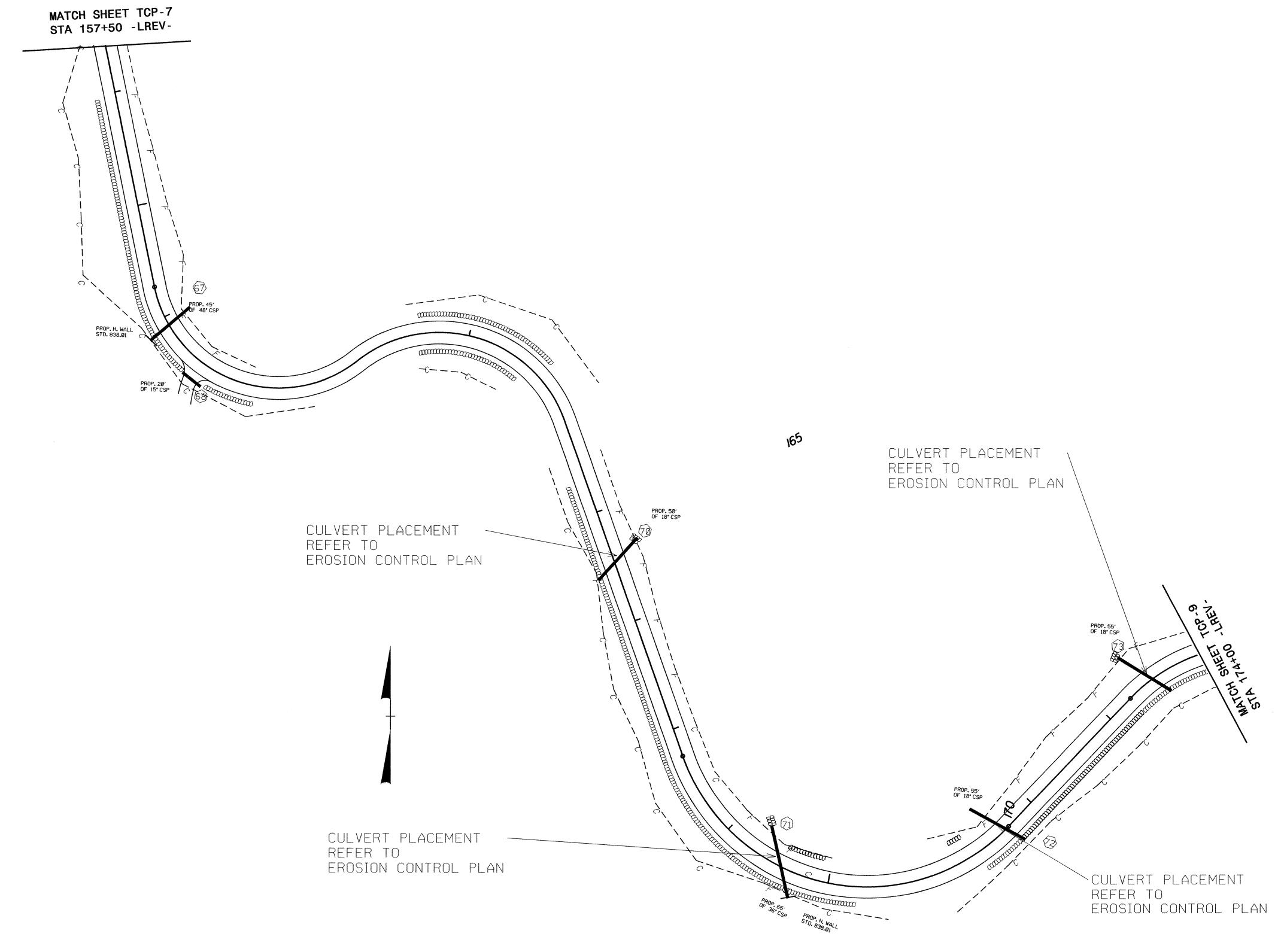
PROJ. REFERENCE NO. SHEET NO. R-619 EI TCP-5 CULVER PLACEMENT REFER TO EROSION CONTROL PLAN CULVERT PLACEMENT REFER TO EROSION CONTROL PLAN PROP. 75' OF 8' 2" X 5' 9" CSP ARCH WITH HEADWALL CULVERT PLACEMENT
REFER TO
EROSION CONTROL PLAN CULVERT PLACEMENT REFER TO EROSION CONTROL PLAN MAINTAIN ACCESS / TO DRIVEWAY APPROVED: Wanda H Quotin DATE: 11-8-07 TYPICAL SECTION A-A PHASE 1 REVISIONS NONE DATE: DWG. BY: JULY 07 WHR

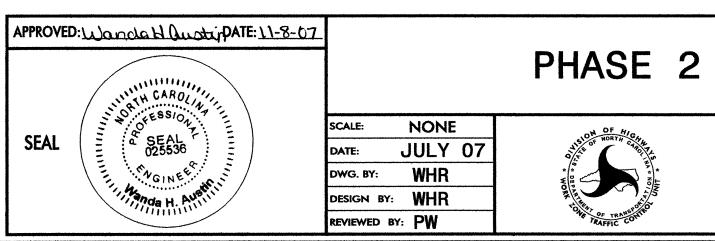
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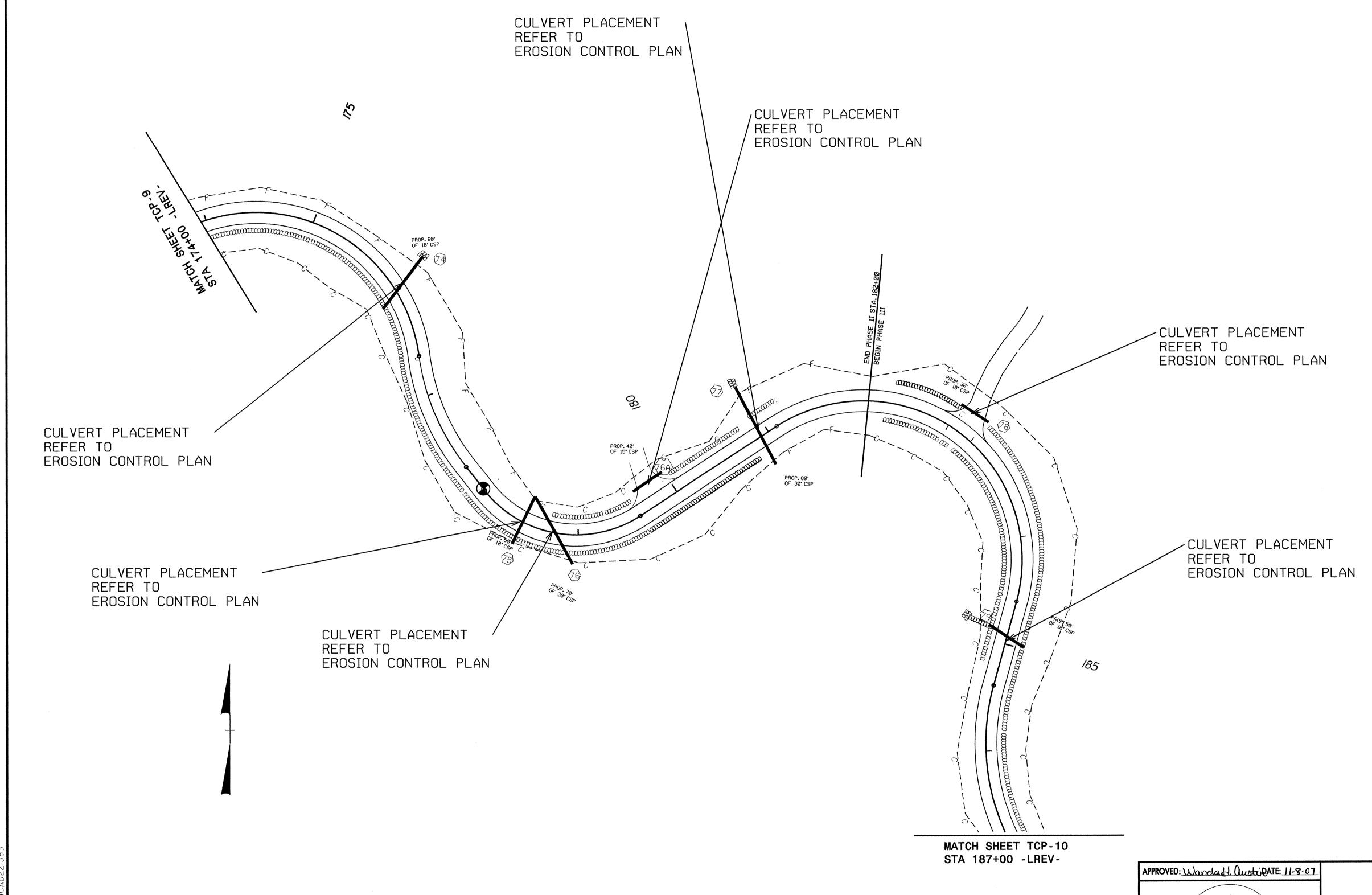




PROJ. REFERENCE NO. SHEET NO.

R-619 EI

TCP-9



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PHASE 2 & 3

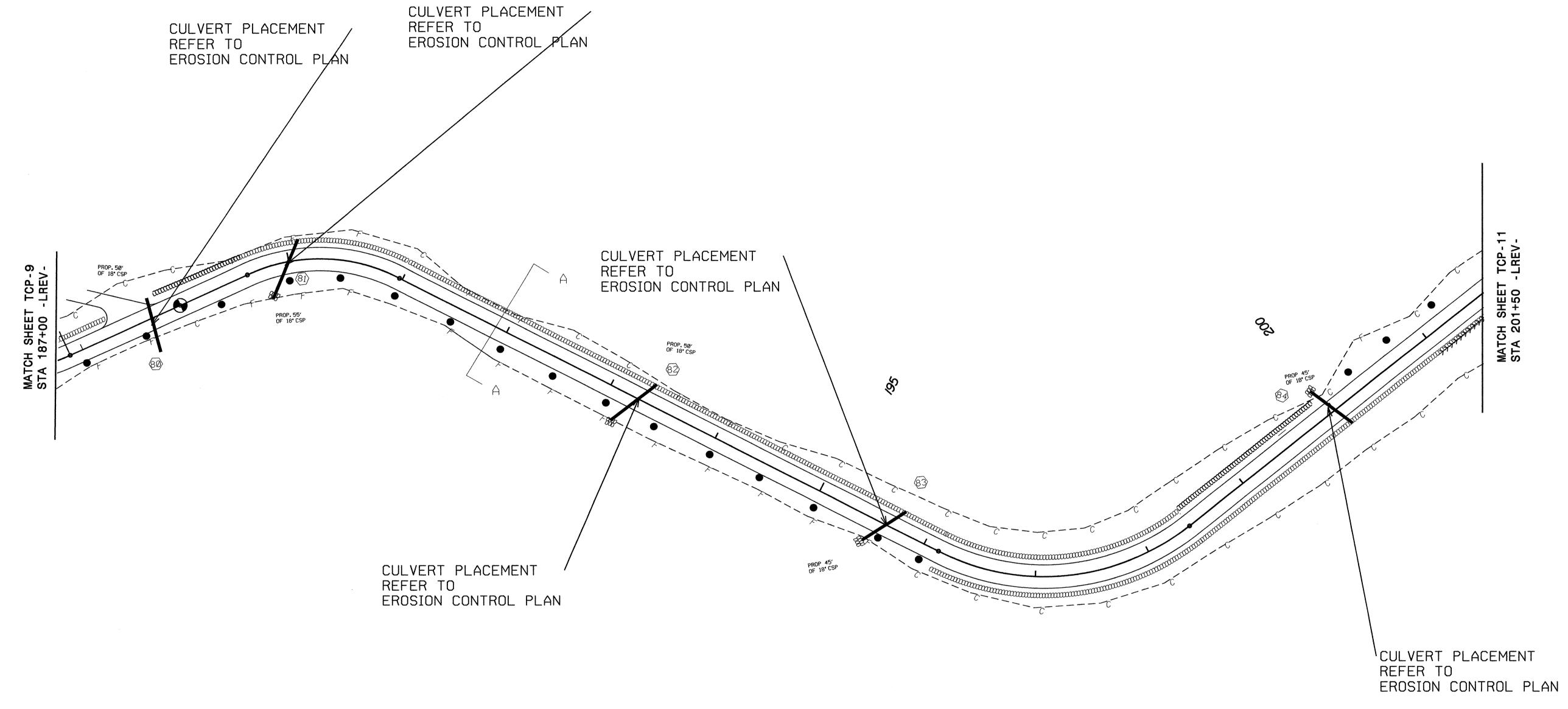
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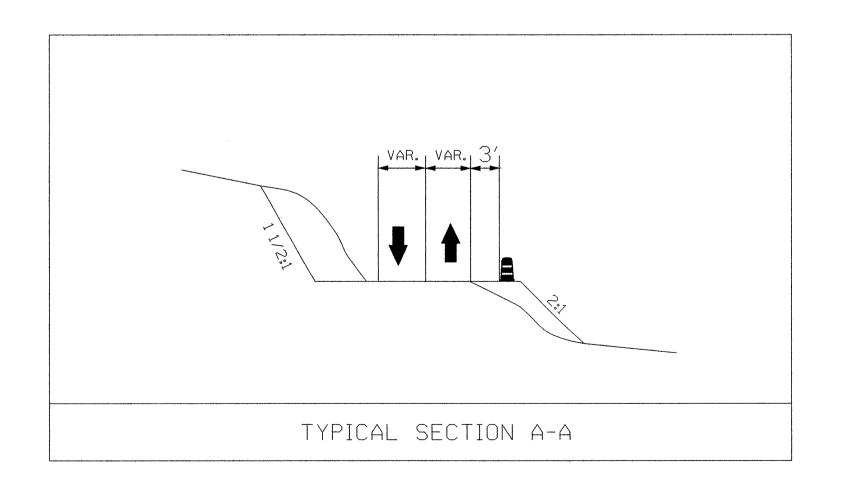
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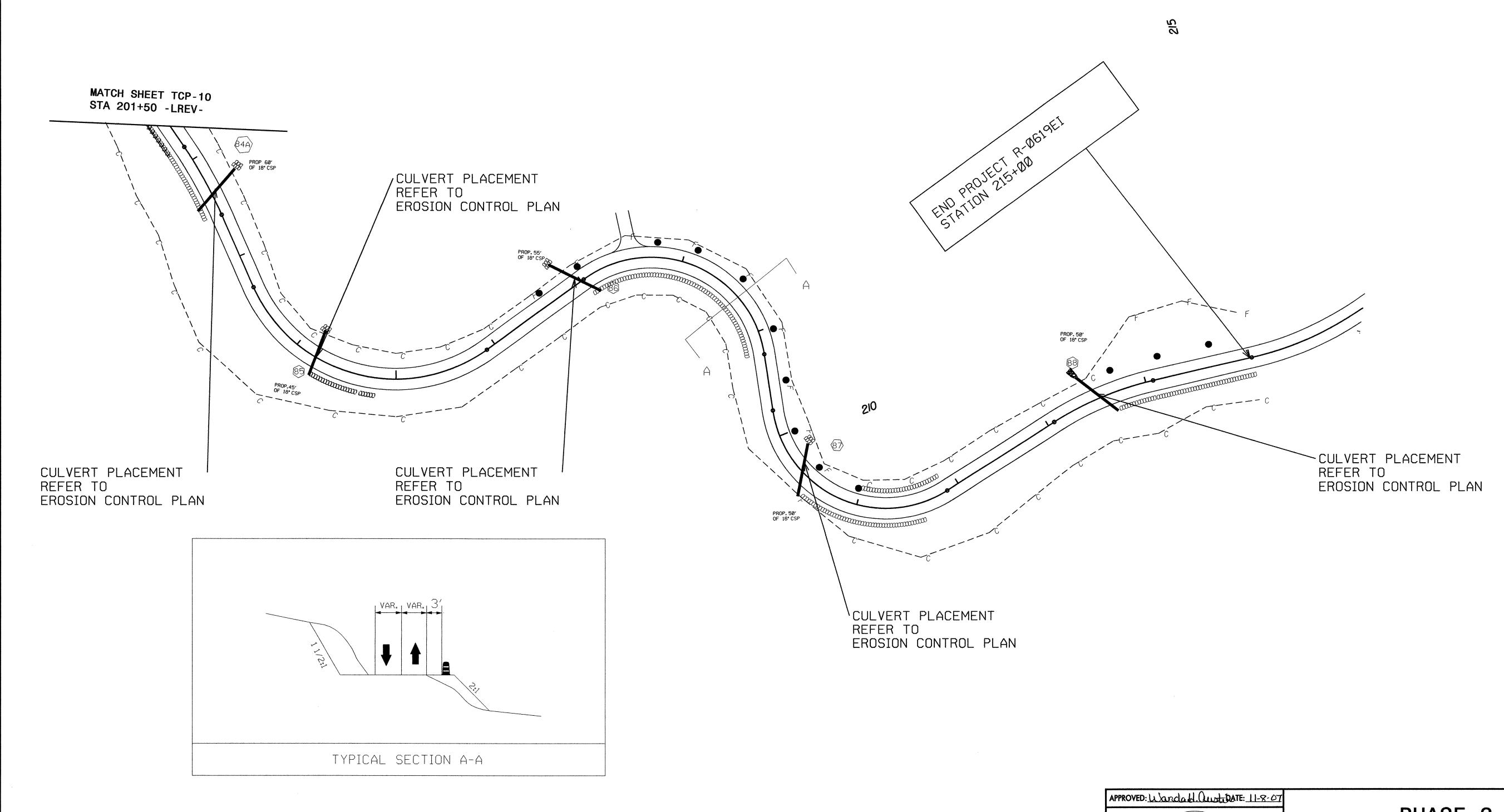
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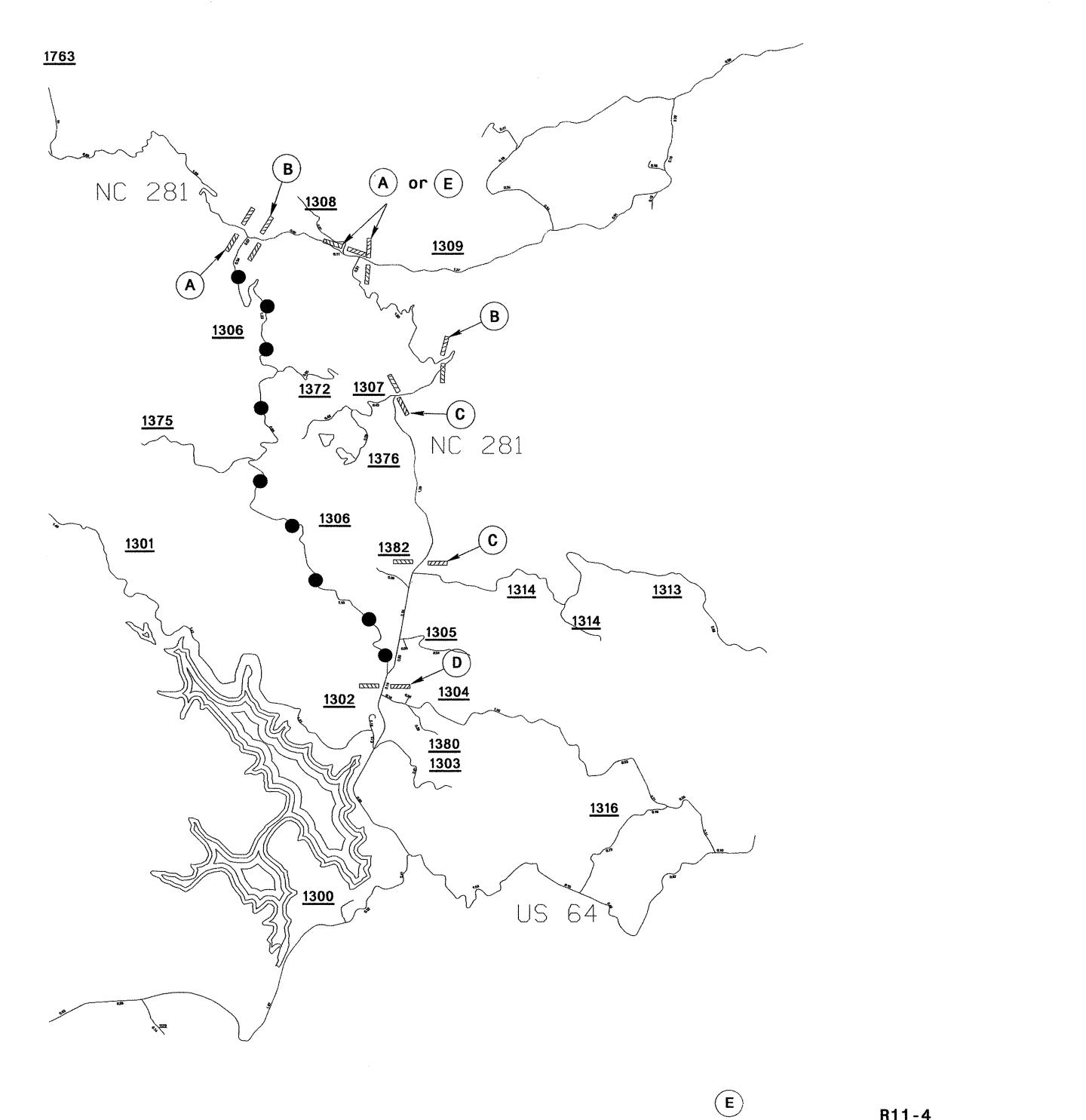
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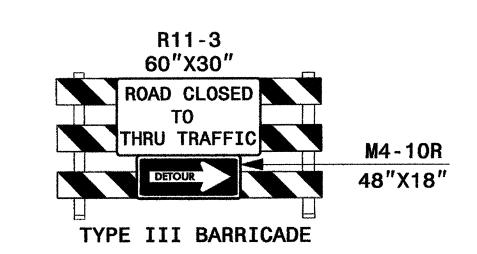
PHASE 3	)
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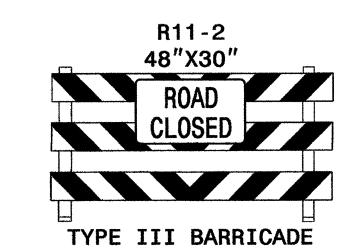


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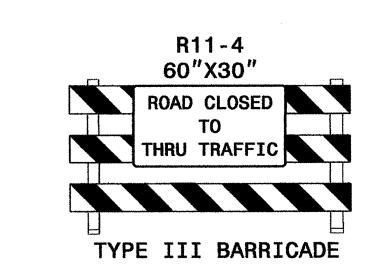
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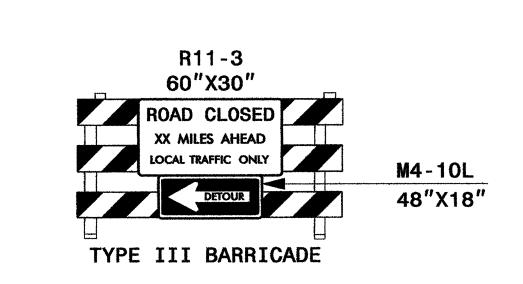


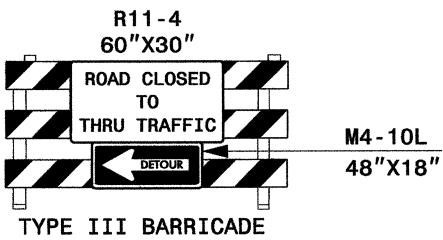
\*PHASE I PLACE AT WORK AREA

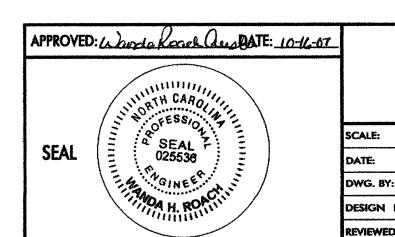
PHASE II & III PLACE AT STA.

157+00 AND 182+00









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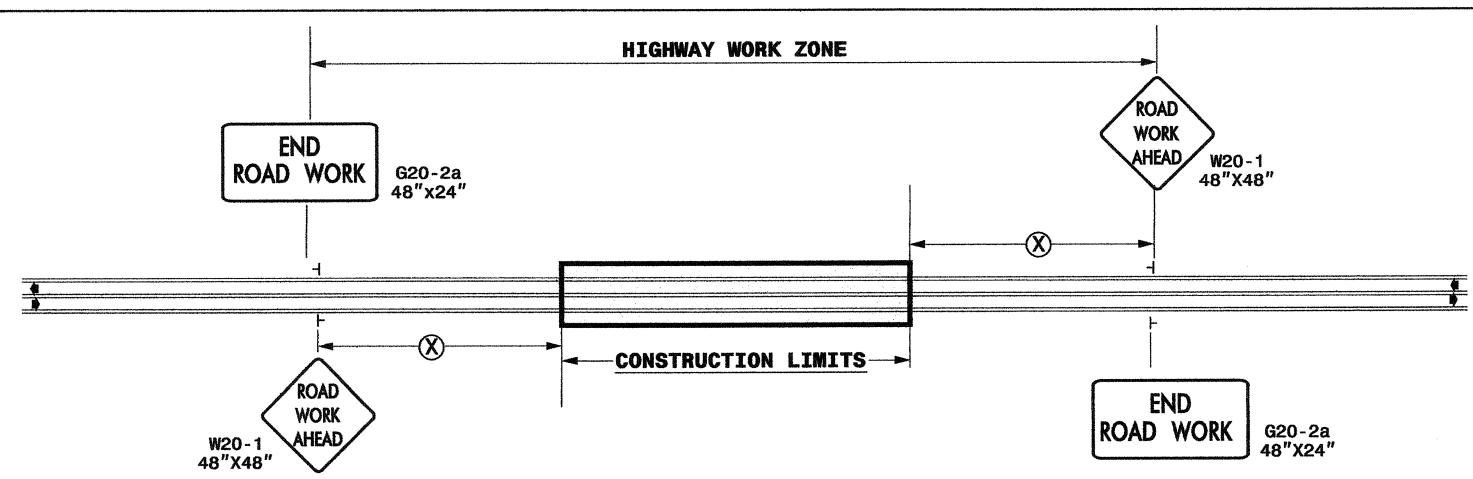
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TWO-WAY UNDIVIDED \*\* (L-LINES)

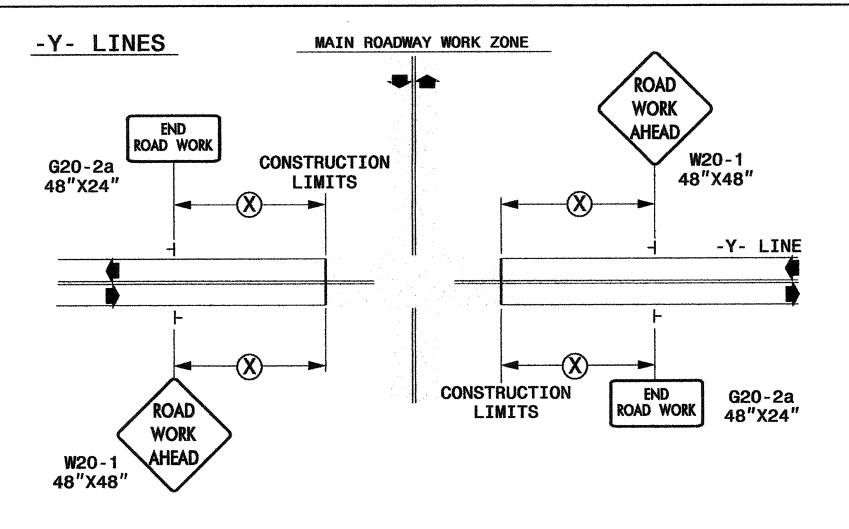


	RECOMMENDED MINIMUM SIGN SPACING
POSTED SPEED LIMIT (M.P.H.)	⊗
≤ 50	500′
≥ 55	1000′

**PORTATION** CAROLINA

NORTH O ₽ O STATE DEPT

ROADWAYS INTERSECTING ALONG 2 WAY UNDIVIDED WORK ZONE (Y-LINES)



#### **GENERAL NOTES**

- USE FLUORESCENT ORANGE SHEETING (TYPE VII OR HIGHER) ON ALL ADVANCED WORK ZONE SIGNS.
- DO NOT INSTALL ADVANCE WARNING SIGNS MORE THAN 3 DAYS PRIOR TO BEGINNING OF WORK.
- SIGNS SHOWN ARE REQUIRED FOR WORK ZONES THAT WILL REMAIN IN EFFECT OVERNIGHT. FOR SHORT-TERM DAILY MAINTENANCE TYPE OPERATIONS, THIS SIGNING APPLICATION IS OPTIONAL; MAY USE ONLY APPLICABLE ROADWAY STANDARD DRAWINGS INSTEAD. HOWEVER, IF THIS SIGNING APPLICATION IS USED, SIGNS MAY BE PORTABLE MOUNTED.
- ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE, FIELD ADJUST AS NECESSARY OR AS DIRECTED.
- USE 3LB STEEL U-CHANNEL POST OR 4" X 4" WOOD POST FOR ALL WORK ZONE SIGNS. 3LB STEEL U-CHANNEL POSTS MUST MEET THE REQUIREMENTS OF STANDARD SPECIFICATION SECTION 1094-1(B), MAY BE GALVANIZED STEEL, OR MAY BE PAINTED GREEN BY THE POST MANUFACTURER. SQUARE STEEL TUBING POSTS HAVING EQUIVALENT STRENGTH OF THE 3 LB STEEL U-CHANNEL POST ARE ALSO ACCEPTABLE FOR USE. ERECT SIGNS PER ROADWAY STANDARD DRAWING 1110.01. PAYMENT FOR WOOD POSTS, 3LB STEEL U-CHANNEL AND SQUARE STEEL TUBING POSTS WITH SIGNS WILL BE MADE ACCORDING TO STANDARD SPECIFICATION "WORK ZONE SIGNS" SECTION 1110.
- WHEN NECESSARY, USE SPLICING IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1110.01. REMOVE ENTIRE POST WHEN REMOVING SIGNS WITH SPLICED POSTS.
- DO NOT BACK BRACE SIGN SUPPORTS.
- \*\* TWO-WAY UNDIVIDED ADVANCE WARNING SIGN CONFIGURATION MAY BE USED ON URBAN MULTI-LANE FACILITIES WHERE CONDITIONS LIMIT THE USE OF DUAL MOUNTED SIGNS AS DETERMINED BY THE ENGINEER.

#### **LEGEND**

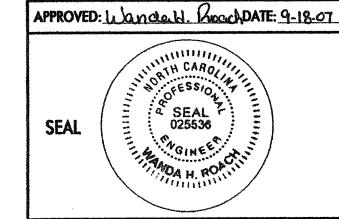
- STATIONARY SIGN

■ DIRECTION OF TRAFFIC FLOW

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REVIEWED BY:

SHEET 1 OF 1



DETAIL	_ DRAV	VING	FOR	TWO-V	VAY
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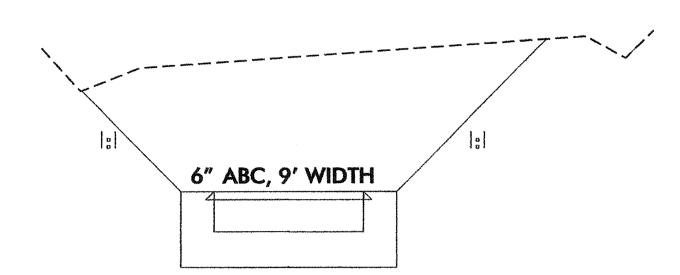
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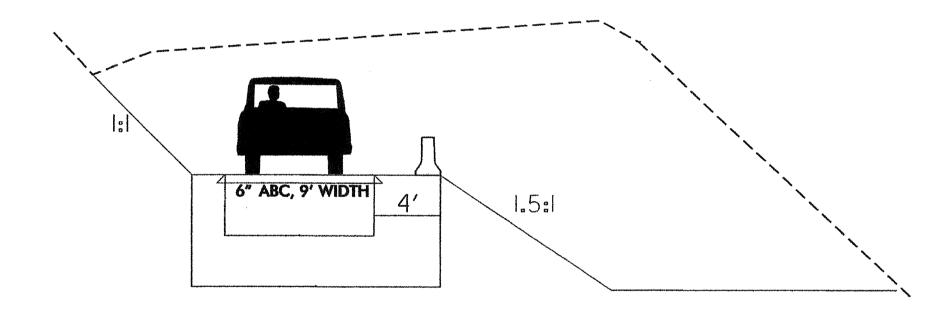
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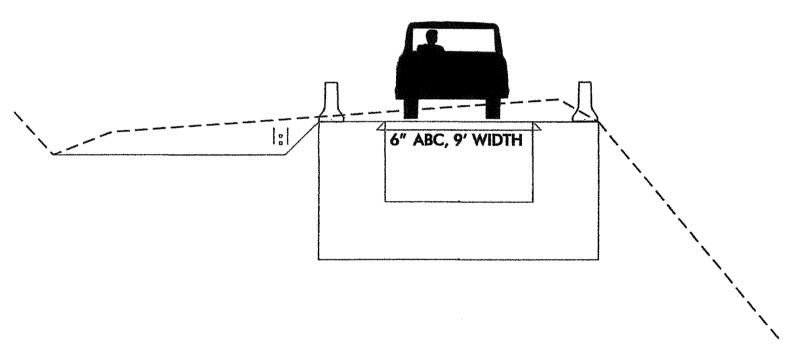
1. MINIMUM SECTION OF 2-LANE DETOUR



2. MINIMUM CROSS SECTION OF 1-LANE DETOUR



3. MINIMUM CROSS SECTION OF 1-LANE DETOUR



4. MINIMUM CROSS SECTION OF 1-LANE DETOUR

\_\_\_\_\_ EXISTING GRADE

INTERMEDIATE GRADE

APPROVED: Wandow H. Macapate: 9-18-07

TYPICAL DETOUR SECTIONS

SEP 07