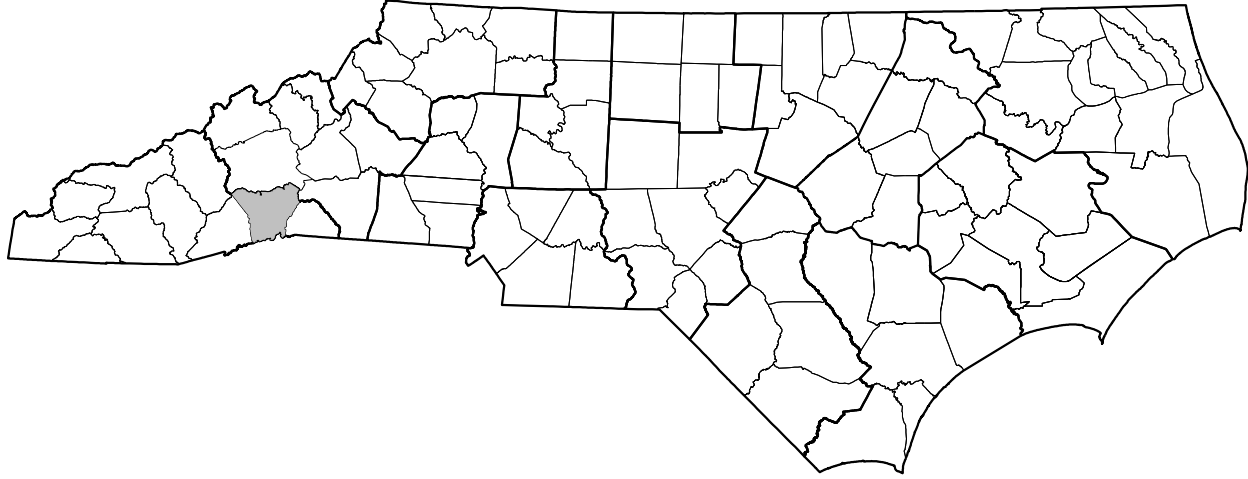


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

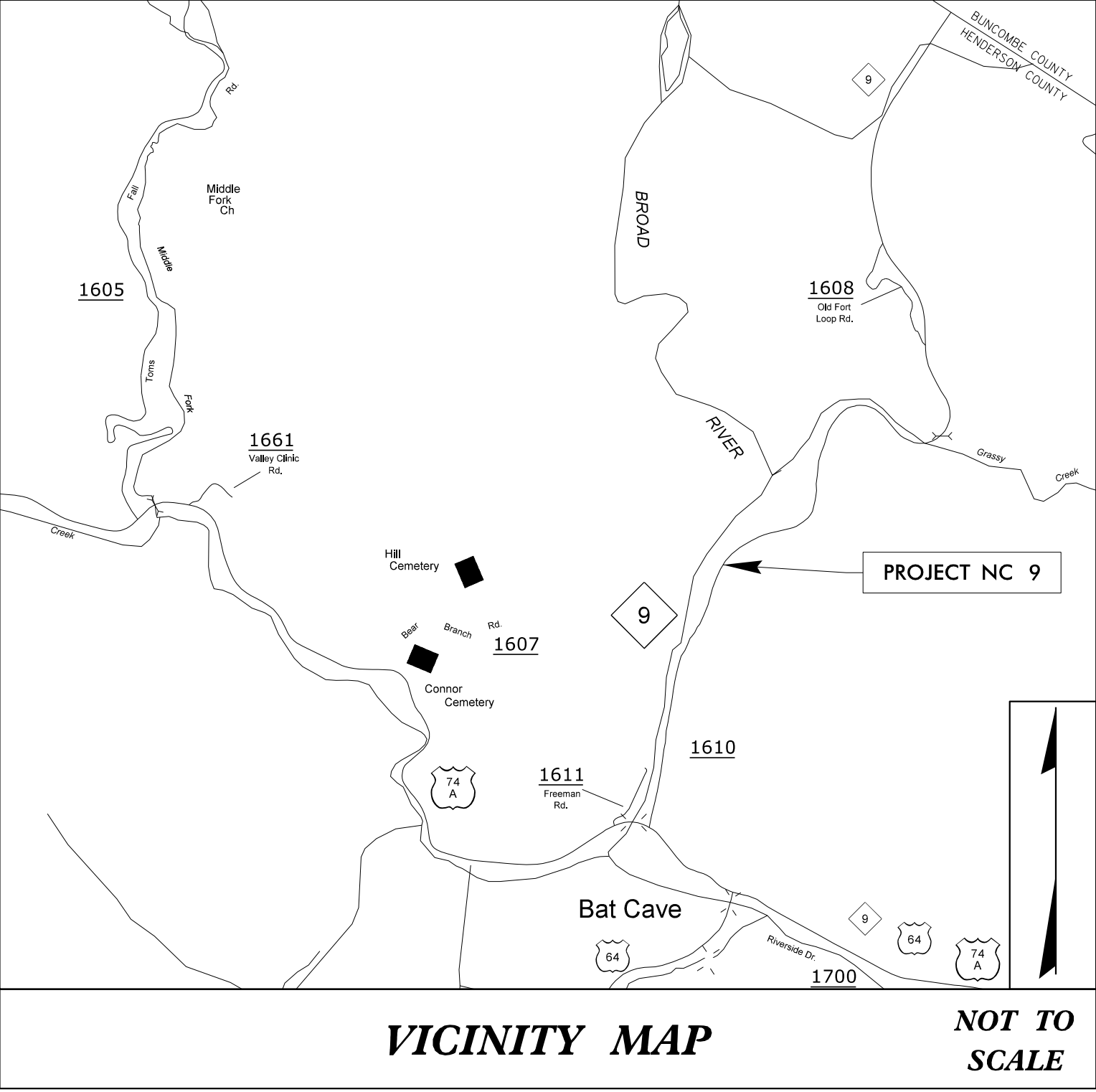
HENDERSON COUNTY

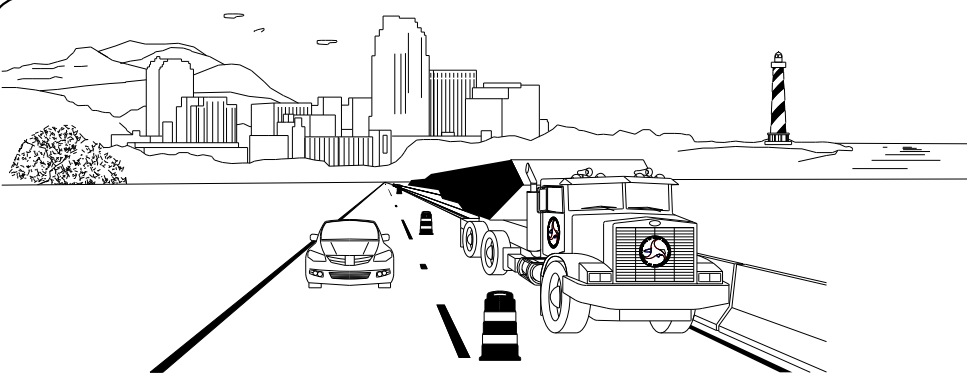
DIVISION 14



LOCATION – NC 9 FROM 2700’ NORTH OF THE
US 74A /NC 9 INTERSECTION TO THE BUNCOMBE COUNTY LINE
(SITES 330 TO 560)

TYPE OF WORK – GRADING, DRAINAGE, PAVING, AND RETAINING WALLS





WORK ZONE SAFETY & MOBILITY
"from the MOUNTAINS to the COAST"

PLANS PREPARED BY:

J. WOOLARD, PE
SENIOR TRANSPORTATION ENGINEER

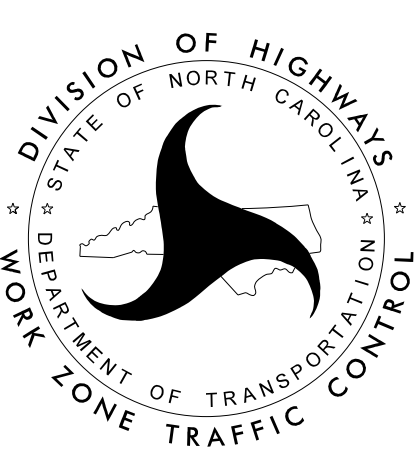
D. RICHARDSON
SENIOR TRANSPORTATION DESIGNER

NCDOT CONTACTS:

Z. CLARK, PE
WESTERN WZTC ENGINEER

S. NAPIT, PE
SENIOR PROJECT DESIGN ENGINEER


J. DEYTON, PE
DIVISION 14 CONTACT



INDEX OF SHEETS

SHEET NO.	TITLE
TMP-1	TITLE SHEET, VICINITY MAP, AND INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, AND LEGEND
TMP-1B	GENERAL NOTES & PHASING
TMP-2	NC 9 -L- REMOVE/REPLACE EXISTING PAVEMENT
TMP-3	NC 9 -L- SITE 560

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Signed by:
J. Woolard
Professional Engineer
6/3/2025

SEAL
19862
J. WOOLARD, PE

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2024 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

DIVISION 11 - WORK ZONE TRAFFIC CONTROL

STD. NO.	TITLE
1101.01	WORK ZONE ADVANCE WARNING SIGNS
1101.02	TEMPORARY LANE 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
1130.01	DRUMS
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1160.01	TEMPORARY CRASH CUSHION

GENERAL

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

	WORK AREA
	PREVIOUSLY STARTED / CONCURRENT CONSTRUCTION
	PAVEMENT REMOVAL

TRAFFIC CONTROL DEVICES

TEMPORARY DEVICES	PREVIOUSLY PLACED	
		BARRICADE (TYPE III)
		CONE
		DRUM
		FLASHING ARROW BOARD
		FLAGGER
		LAW ENFORCEMENT
		TRUCK MOUNTED ATTENUATOR (TMA)
		CHANGEABLE MESSAGE SIGN
		TEMPORARY CRASH CUSHION
		PORTABLE CONCRETE BARRIER

PAVEMENT MARKINGS

TEMPORARY MARKINGS	EXISTING LINES	PREVIOUSLY PLACED	
			WHITE EDGE LINE
			YELLOW EDGE LINE
			BROKEN LANE LINES
			MINISKIP LANE LINES
			DOUBLE YELLOW LINES
			GORELINE
			STOP BAR

PAVEMENT MARKING SYMBOLS

			EXISTING PAVEMENT MARKING SYMBOLS (HOLLOW)
			PAVEMENT MARKING SYMBOLS
			PAVEMENT MARKING ALPHANUMERIC CHARACTERS

SIGNALS

EXISTING	PROPOSED	TEMPORARY

TEMPORARY SIGNING

TEMPORARY SIGNS	PREVIOUSLY PLACED	
		PORTABLE SIGN
		STATIONARY SIGN
		STATIONARY OR PORTABLE SIGN

PAVEMENT MARKERS

	CRYSTAL/CRYSTAL
	CRYSTAL/RED
	YELLOW/YELLOW

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Signed by
J. W. Woolard, Jr.
Professional Engineer
19862
6/3/2025

Woolard, Jr.
19862
6/3/2025

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

ROADWAY STANDARD
DRAWINGS,
AND LEGEND

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 UNDESIREED 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.

LANE AND SHOULDER CLOSURE REQUIREMENTS

A) 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.

B) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 5 FT OF AN OPEN TRAVEL LANE ON AN UNDIVIDED FACILITY, 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 WITHIN 10 FT OF AN OPEN TRAVEL LANE ON A DIVIDED FACILITY, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

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

D) 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

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

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

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

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

WHERE DROP-OFFS EXCEED 2" AND ADEQUATE BACKFILL IS UNATTAINABLE, INSTALL ADVANCE WARNING "NARROW ROAD" SIGNS (W5-1) 100 FT IN ADVANCE AND A MINIMUM OF ONCE EVERY HALF MILE (IN ADDITION TO SKINNY DRUMS INSTALLED AT 50 FT SPACING) THROUGHOUT THE UNEVEN AREA

F) 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 ONCE EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

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

SIGNING

H) 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.

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

PAVEMENT MARKINGS AND MARKERS

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

ROAD NAME	MARKING	MARKER
ALL ROADS	PAINT	TEMP RAISED

K) 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.

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

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

MISCELLANEOUS

N) MAINTAIN VEHICULAR ACCESS TO ALL DRIVEWAYS DURING THE LIFE OF THE CONTRACT, UNLESS OTHERWISE NOTED IN THE PHASING OR DIRECTED BY THE ENGINEER. USE INCIDENTAL STONE WHEN NECESSARY.

O) ALL DIMENSIONS AND STATIONS IN THE TRANSPORTATION MANAGEMENT PLAN AND PHASING ARE APPROXIMATE (+/-); FIELD ADJUST AS NECESSARY OR AS DIRECTED BY THE ENGINEER.

P) IF CONSTRUCTION WARRANTS TRAFFIC TO REMAIN IN A 1 LANE, 2 WAY TRAFFIC PATTERN OVERNIGHT, USE 1101.02, SHEET 17 FOR DEVICE PLACEMENT FOR PORTABLE TEMPORARY SIGNAL OPERATION.

Q) CONTRACTOR SHALL COORDINATE FULL ROAD CLOSURES (IE: IMPASSABLE NOT JUST STATUTORY CLOSED) ON THIS PROJECT WITH ADJACENT PROJECTS US 74 - GERTON TO US 64, US 74 - US 64 TO CHIMNEY ROCK, AND US 64 - US 74 TOWARDS HENDERSONVILLE AS DIRECTED BY THE ENGINEER.

PHASING

PHASE I

STEP 1
USING RSD 1101.01, INSTALL ADVANCE WORK ZONE WARNING SIGNS. INSTALL WORK ZONE DEVICES AS SHOWN ON TMP-3.

STEP 2
USING RSD 1101.02, SHEETS 1 AND 17, CONSTRUCT -L- UP TO, BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE AS FOLLOWS:

SITE 330 FROM 37+00± TO 47+00±
SITE 331 FROM 47+00± TO 57+00±
SITE 332 FROM 57+00± TO 69+00±
SITE 333 FROM 69+00± TO 74+00±
SITE 334 FROM 74+00± TO 91+00±
SITE 560 FROM 91+00± TO 113+77±

IN AREAS OF FULL DEPTH EXISTING PAVEMENT REMOVAL, CONSTRUCT AS SHOWN ON TMP-2.

STEP 3
USING RSD 1101.02, SHEETS 1 AND 17, INSTALL TEMPORARY PAVEMENT MARKINGS AND MARKERS AS NECESSARY.

PHASE II

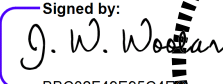
STEP 1
USING RSD 1101.02, SHEETS 1 AND 17, INSTALL FINAL LAYER OF SURFACE COURSE.

STEP 2
USING RSD 1101.02, SHEETS 1 AND 17, INSTALL FINAL PAVEMENT MARKINGS AND MARKERS, SHIFT TRAFFIC TO FINAL PATTERN AND REMOVE ALL TRAFFIC CONTROL DEVICES.

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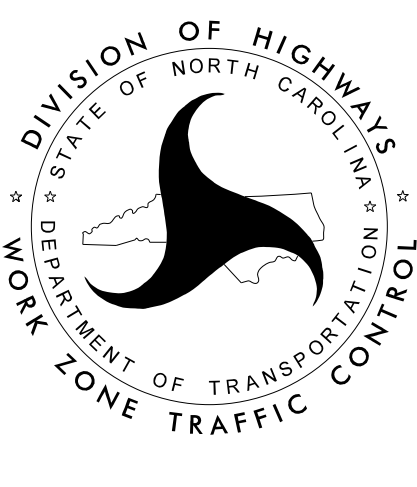
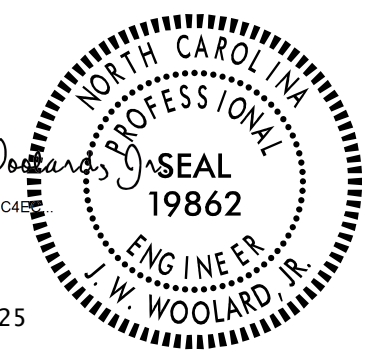


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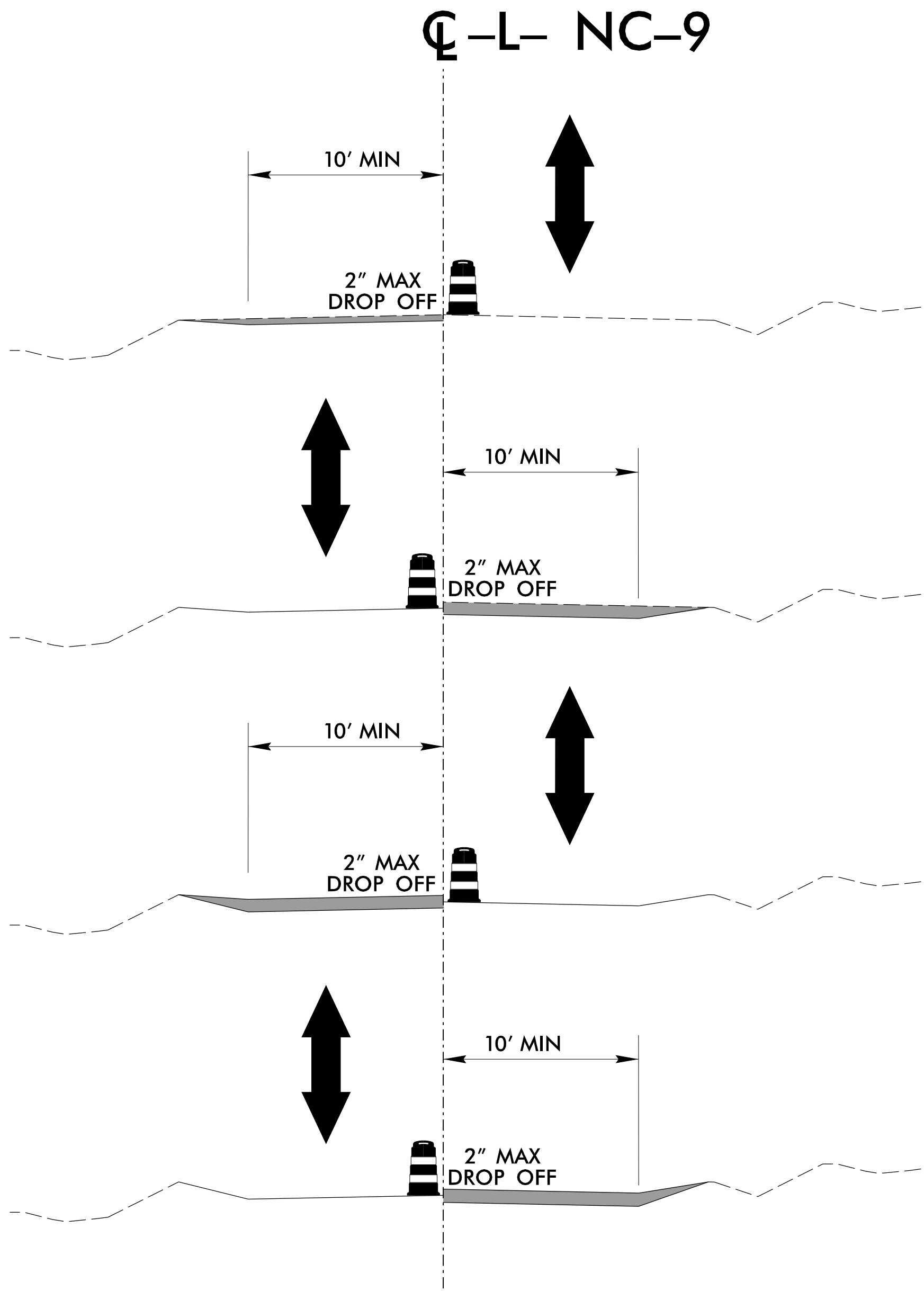
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GENERAL NOTES

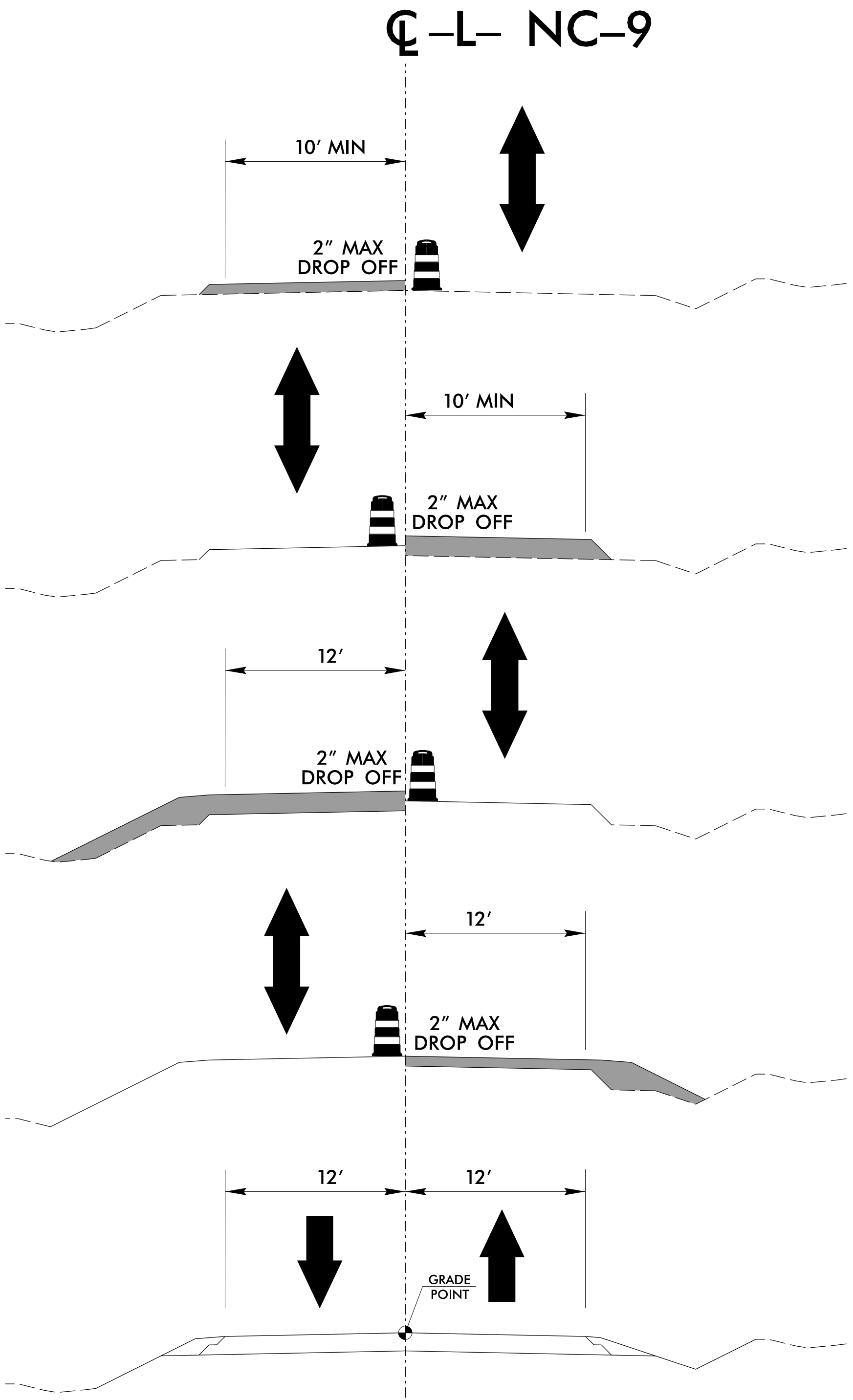
PROJ. REFERENCE NO.	SHEET NO.
NC-9	TMP-2

MILLING/EARTH REMOVAL



CONTINUE WITH THIS METHOD UNTIL DESIRED DEPTH IS ATTAINED

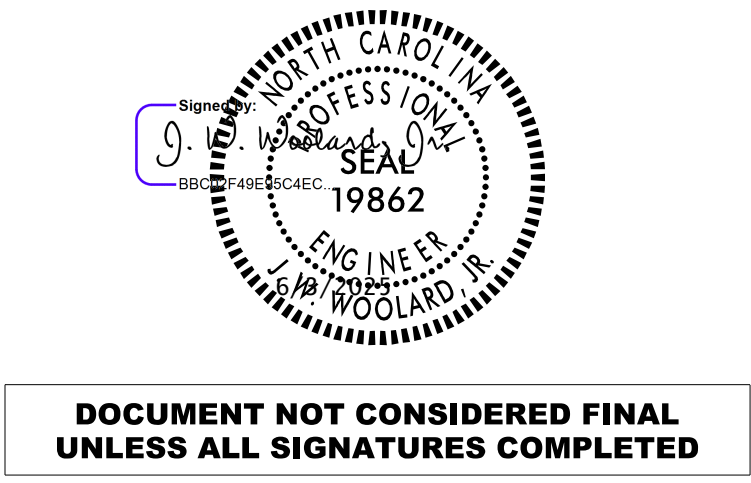
NEW PAVEMENT REPLACEMENT



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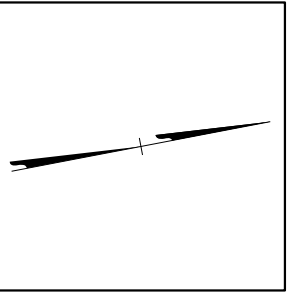


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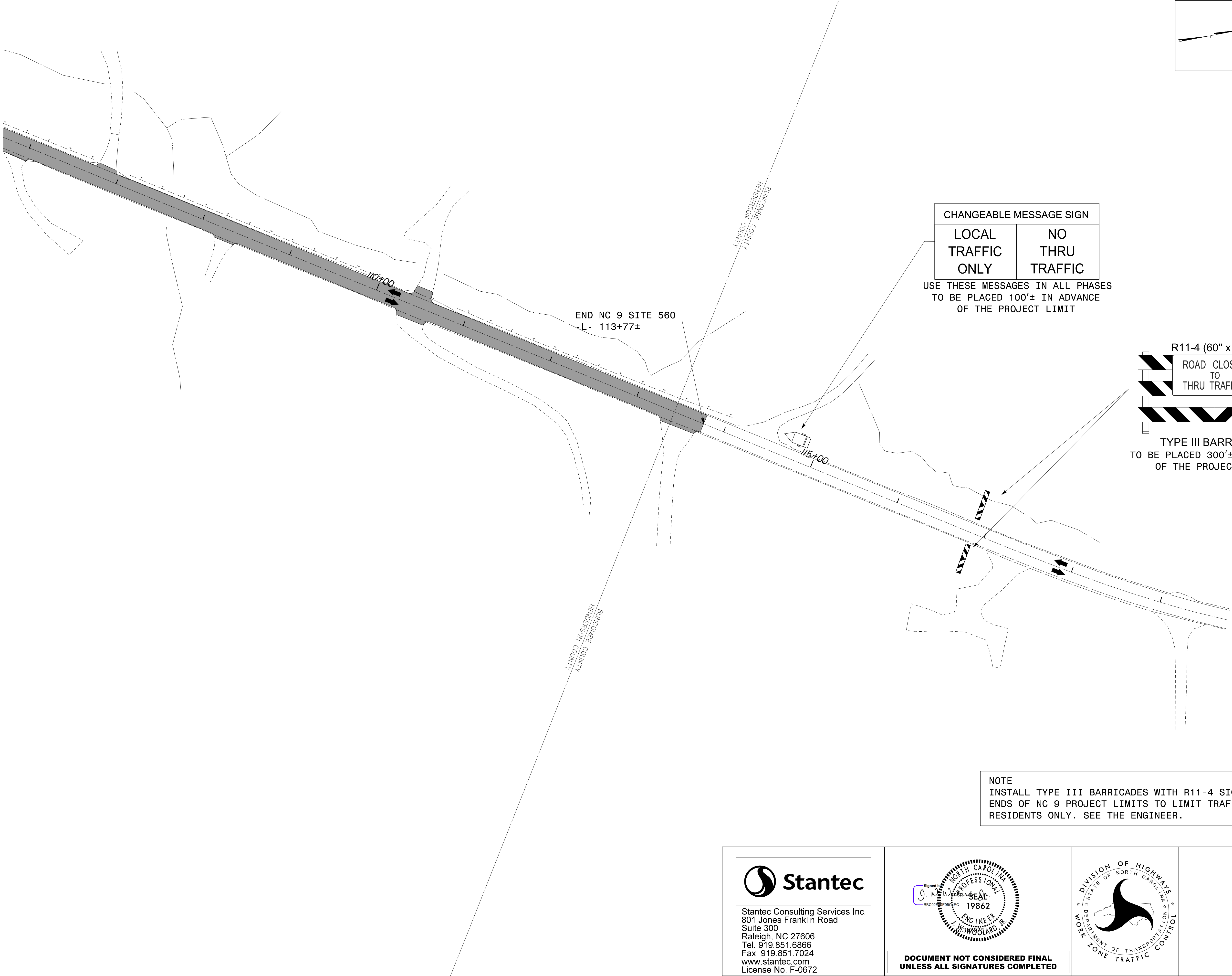


DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
WORK ZONE TRAFFIC CONTROL

NC-9 -L-
REMOVE/REPLACE
EXISTING PAVEMENT



PROJ. REFERENCE NO.	SHEET NO.
NC-9	TMP-3



CHANGEABLE MESSAGE SIGN	
LOCAL TRAFFIC ONLY	NO THRU TRAFFIC

USE THESE MESSAGES IN ALL PHASES
TO BE PLACED 100'± IN ADVANCE
OF THE PROJECT LIMIT



TYPE III BARRICADE
TO BE PLACED 300'± IN ADVANCE
OF THE PROJECT LIMIT

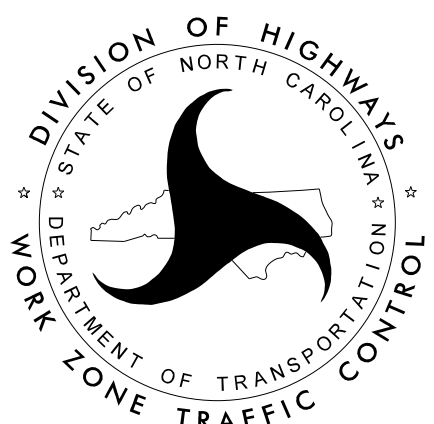
NOTE
INSTALL TYPE III BARRICADES WITH R11-4 SIGNS ON BOTH
ENDS OF NC 9 PROJECT LIMITS TO LIMIT TRAFFIC TO LOCAL
RESIDENTS ONLY. SEE THE ENGINEER.



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NC-9 -L-
SITE 560