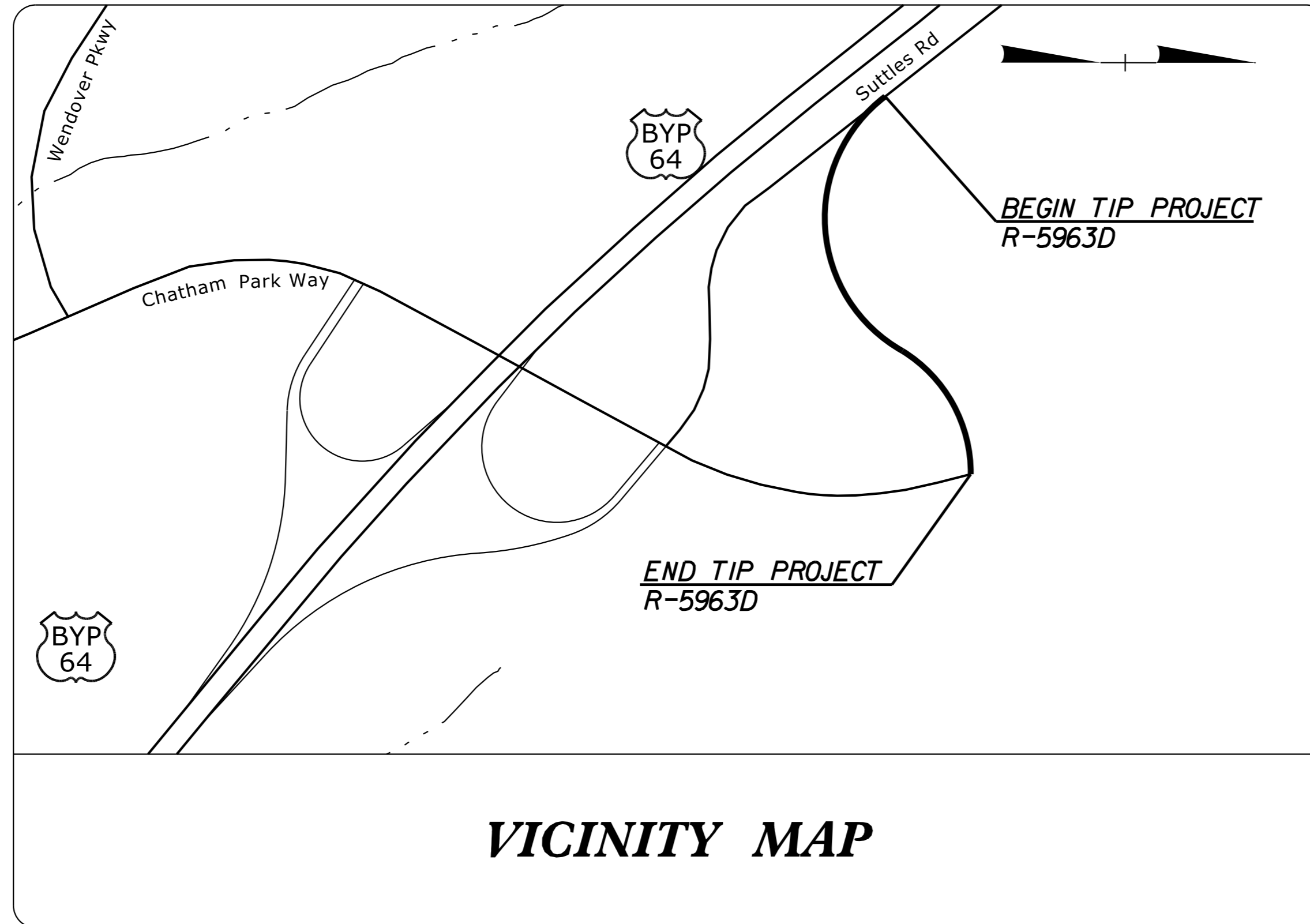
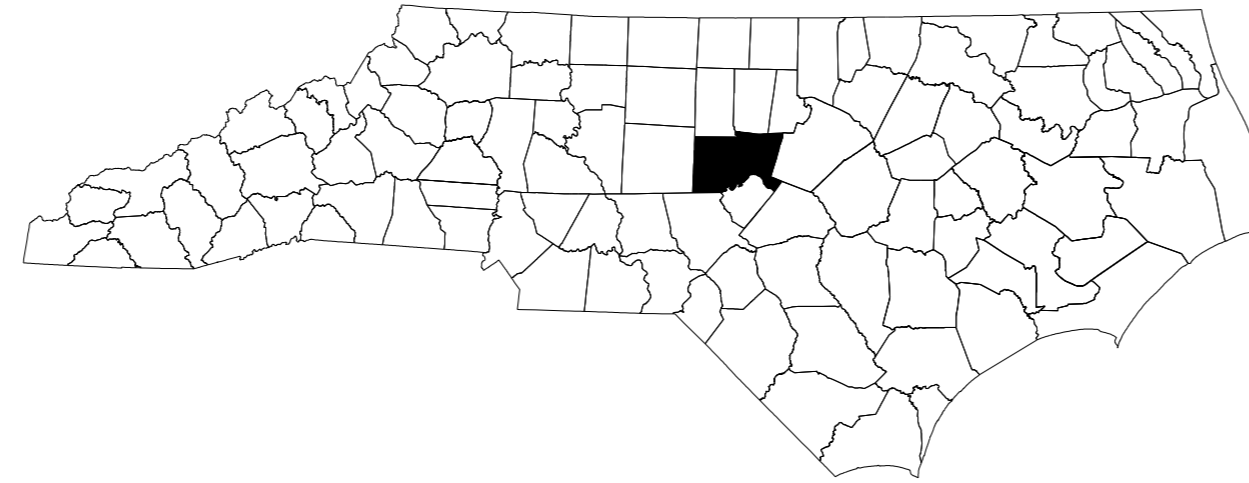


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

CHATHAM COUNTY



VICINITY MAP

INDEX OF SHEETS

<u>SHEET NO.</u>	<u>TITLE</u>
TMP-1	TITLE SHEET, VICINITY MAP, AND INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, AND LEGEND
TMP-1B	TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT STRATEGIES, GENERAL NOTES, AND LOCAL NOTES)
TMP-2	PHASING NOTES
TMP-3	CONSTRUCTION PHASING OVERVIEW - PHASE I
TMP-4	CONSTRUCTION PHASING OVERVIEW - PHASE II
TMP-5	OFFSITE DETOUR SIGNING SHEET
TMP-6	U-TURN PLAQUE SIGN DESIGN

3/1/2024 DATE SUBMITTED

SUBMITTAL:

STAGING CONCEPT

MIDPOINT

PRE-FINAL

FINAL

Kimley»Horn

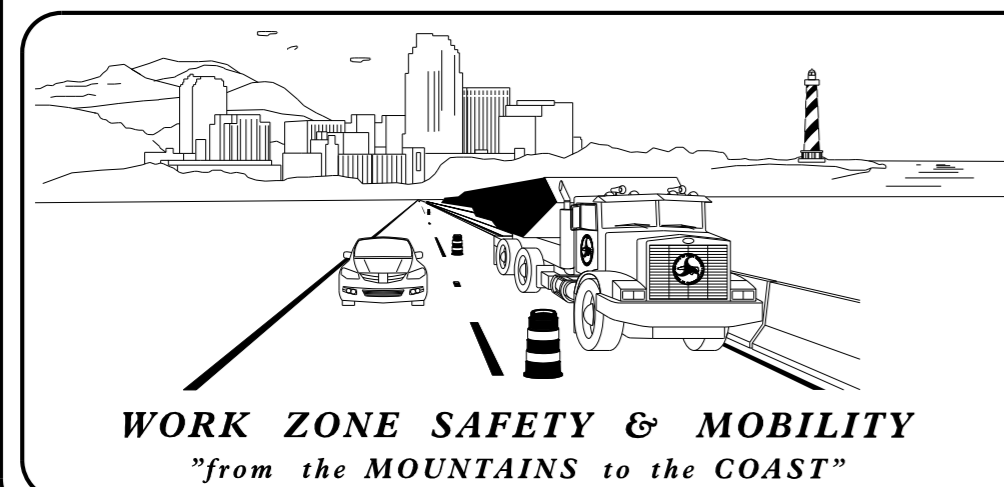
APPROVED: _____

DATE: _____

SEAL

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

K:\RAL_Roadway\01036731 - R-5963D\TrafficControl\CP\R-5963D_tcp_1shdgn 3/1/2024



PLANS PREPARED BY:

EVAN PARROTT, P.E.

TYLER SPRING, P.E.

NCDOT CONTACTS:

JEFFREY L. TEAGUE, P.E.
PROJECT ENGINEER

JEFFREY A. STRODER, P.E.
PROJECT DESIGN ENGINEER



SHEET NO.
TMP-1

R-5963D

TIP PROJECT:

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - 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:

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
1101.11	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
1150.01	FLAGGING DEVICES
1180.01	SKINNY - DRUMS

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

SIGNALS

- EXISTING
- PROPOSED
- TEMPORARY
- 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

K:\RAL_Roadway\01036731 - R -5963D\TrafficControl\CPV-5963D_tcp_tshdgn 3/1/2024

APPROVED: _____ DATE: _____ 		<p style="text-align: center;">ROADWAY STANDARD DRAWINGS & LEGEND</p>
<p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>		

MANAGEMENT STRATEGIES

PROPOSED IMPROVEMENTS ALONG CHATHAM PARKWAY WILL BE CONSTRUCTED WHILE MAINTAINING TRAFFIC AND USING TEMPORARY LANE CLOSURES. NEW LOCATION SUTTLES ROAD WAY WILL BE CONSTRUCTED BEHIND ROAD CLOSURES. SUTTLES ROAD TIE-IN WILL BE PERFORMED USING TEMPORARY ROAD CLOSURES AND OFFSITE DETOUR. LOCAL ACCESS TO WATER TOWER WILL BE MAINTAINED AT ALL POSSIBLE TIMES DURING CONSTRUCTION.

GENERAL NOTES / LOCAL 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:

<u>ROAD NAME</u>	<u>DAY AND TIME RESTRICTIONS</u>
US 64 RAMPS CHATHAM PARK WAY	MONDAY THRU FRIDAY 6:00AM TO 9:00AM AND 4:00PM TO 7:00PM

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

ROAD NAME

US 64 RAMPS
CHATHAM PARK WAY

HOLIDAY

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

IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN BETWEEN THE HOURS OF 6:00AM THE THURSDAY BEFORE INDEPENDENCE DAY AND 7:00PM THE TUESDAY AFTER INDEPENDENCE DAY.
- FOR LABOR DAY, BETWEEN THE HOURS OF 6:00AM FRIDAY AND 7:00PM TUESDAY.
- FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00AM TUESDAY TO 7:00PM MONDAY.
- FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00AM THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 7:00PM THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

TIME RESTRICTIONS (CONT.)

C) DO NOT CLOSE ROADS AS FOLLOWS:

<u>ROAD NAME</u>	<u>DAY AND TIME RESTRICTIONS</u>
US 64 RAMPS CHATHAM PARK WAY	ANYTIME

D) DO NOT STOP TRAFFIC AS FOLLOWS:

<u>ROAD NAME</u>	<u>DAY AND TIME RESTRICTIONS</u>	<u>DURATION AND OPERATION</u>
US 64 RAMPS CHATHAM PARK WAY	MONDAY THRU SUNDAY	15 MINUTES FOR HAULING OPERATIONS

F) 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

- 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.
- 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.
- 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 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.

PAVEMENT EDGE DROP OFF REQUIREMENTS

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

TRAFFIC PATTERN ALTERATIONS

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

SIGNING

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

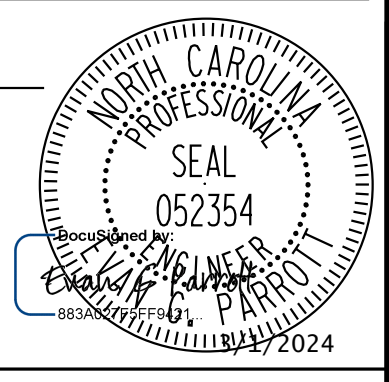
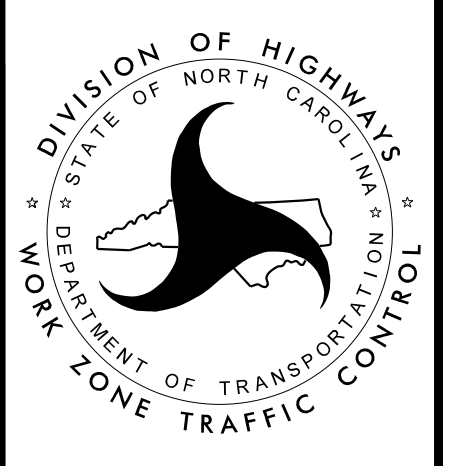
TRAFFIC CONTROL DEVICES

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

LOCAL NOTES

R) MAINTAIN WATER TOWER ACCESS AT ALL TIMES.

K:\RAL_Roadway\01036731 - R-5963D\TrafficControl\CPV-5963D_top_tshdgn 3/11/2024

APPROVED: _____ DATE: _____ SEAL			TRANSPORTATION OPERATIONS PLAN
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

PHASING NOTES

PHASE I

WHILE MAINTAINING TRAFFIC USING RSD 1101.04 FOR SHOULDER CLOSURES AND RSD 1101.02 FOR LANE CLOSURES AS NECESSARY, PERFORM THE FOLLOWING AS SHOWN ON SHEET TMP-3.

**STEP 1:
INSTALL ADVANCE WARNING SIGNS IN ACCORDANCE WITH RSD 1101.01 AND INSTALL TRAFFIC CONTROL DEVICES AS SHOWN ON TMP-3.**

**STEP 2:
AWAY FROM TRAFFIC, CONSTRUCT NEW LOCATION -Y2- SUTTLES ROAD, INCLUDING GRADING, CURB AND GUTTER, MULTIUSE PATH, DRAINAGE, AND PAVING UP TO BUT NOT INCLUDING THE FINAL ASPHALT SURFACE COURSE.**

**STEP 3:
USING TEMPORARY LANE CLOSURES IN ACCORDANCE WITH RSD 1101.02, CONSTRUCT CURB AND GUTTER, MULTIUSE PATH, DRAINAGE, AND PAVEMENT WIDENING FOR PROPOSED TURN LANES ALONG -L- CHATHAM PARK WAY UP TO BUT NOT INCLUDING THE FINAL ASPHALT SURFACE COURSE.**

NOTE: STEPS 2 AND 3 MAY BE PERFORMED CONCURRENTLY

PHASE II

COMPLETE THE WORK ASSOCIATED WITH PHASE II, STEPS 1 & 2 IN 75 CONSECUTIVE CALENDAR DAYS. SEE INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES.

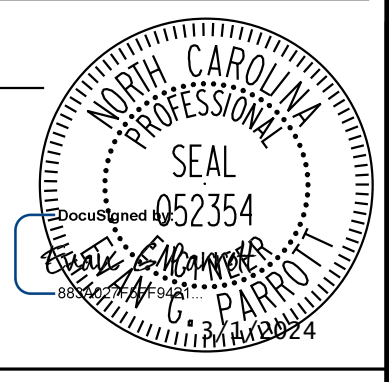
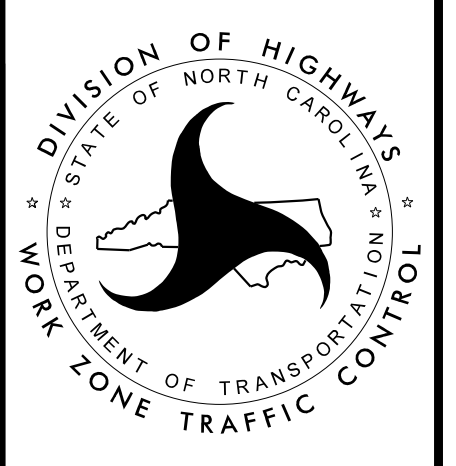
**STEP 1:
INSTALL A TEMPORARY ROAD CLOSURE AND OFFSITE DETOUR ROUTE OF -Y2- SUTTLES ROAD AS SHOWN ON SHEETS TMP-4 AND TMP-5. INSTALL TYPE III BARRICADES WITH SIGN R11-3 ON EITHER SIDE OF EXISTING -Y2- SUTTLES ROAD AT THE INTERSECTION OF SUTTLES ROAD AND GRANT DRIVE. INSTALL TYPE III BARRICADES WITH SIGN R11-2 ACROSS EXISTING -Y2- SUTTLES ROAD AT THE INTERSECTION OF SUTTLES ROAD AND CHATHAM PARK WAY.**

NOTIFY NCDOT, VANCE BLANTON (VANCE.BLANTON@KIMLEY-HORN.COM), AND TIM SMITH (TIM@PRESONTDEV.COM) 30 CALENDAR DAYS BEFORE A ROADWAY IS CLOSED.

**STEP 2:
AWAY FROM TRAFFIC, CONSTRUCT REMAINING IMPROVEMETS ALONG -Y2- SUTTLES ROAD AND -L- CHATHAM PARK WAY, INCLUDING GRADING, CURB AND GUTTER, MULTIUSE PATH DRAINAGE, AND PAVING UP TO BUT NOT INCLUDING THE FINAL ASPHALT SURFACE COURSE.**

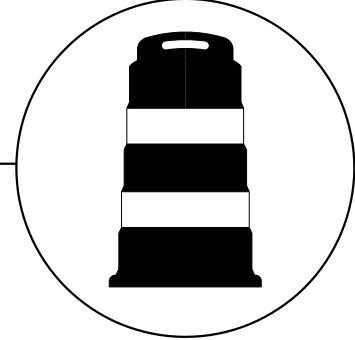
**STEP 3:
PLACE FINAL SURFACE COURSE ALONG -L- CHATHAM PARK WAY AND -Y2- SUTTLES ROAD, FINAL PAVEMENT MARKINGS AND MARKERS, AND PERMANENT SIGNAGE ALONG NEW ROADWAYS. REMOVE ALL TRAFFIC CONTROL DEVICES AND OPEN ALL LANES TO TRAFFIC.**

K:\RAL_Roadway\01036731 - R - 5963D\TrafficControl\CPV-5963D_top.tshdgn
3/11/2024

APPROVED: _____ DATE: _____ <div style="text-align: center; margin-top: 20px;">  <p>SEAL</p> </div>		<p>PHASING NOTES</p>
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		

NAD 83 / NA 2011

BEGIN TIP PROJECT R-5963D
-Y2- Sta. 11+80.00



BUILD RCP AND INVERT OF BOX 0404 IN PHASE I
BRING TOP OF BOX TO FINAL ELEVATION IN PHASE II

-Y1-
US 64

15" RCP-IV

EX042

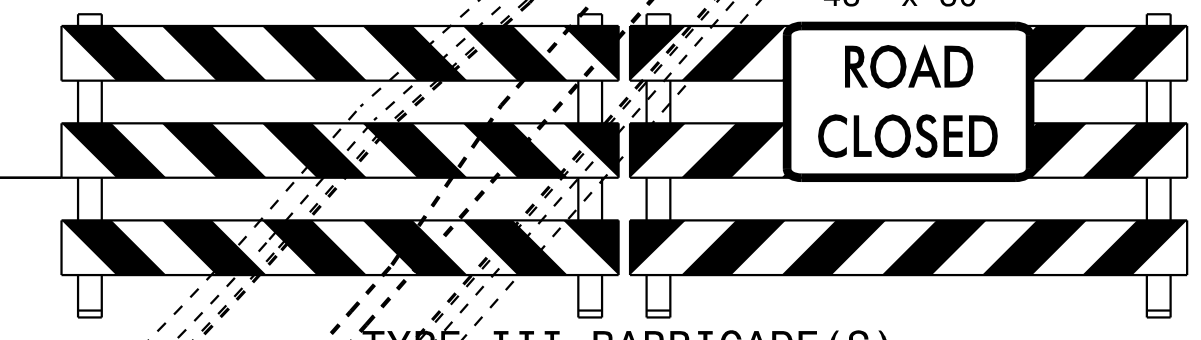
0401

0404

SUTLES ROAD

MAINTAIN WATER TOWER ACCESS
AT ALL TIMES DURING CONSTRUCTION

CHATHAM PARK WAY



TYPE III BARRICADE(S)

R11-2
48" x 30"

END CONSTRUCTION
-Y2- Sta. 251+99.41

BEGIN CONSTRUCTION
-Y2- Sta. 241+27.00

CHATHAM PARK WAY

24" RCP-IV

0516



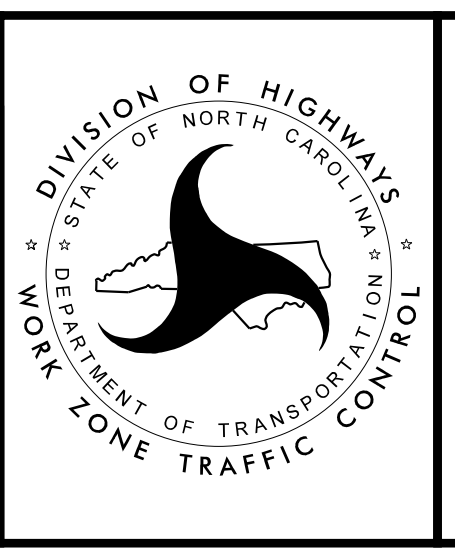
WORK AREA

NOTE: INSTALL CROSS PIPES 24" AND SMALLER USING RSD 1101.02 SHEETS 1 & 2 AS NEEDED (TYP.)

APPROVED: _____
DATE: _____

SEAL

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

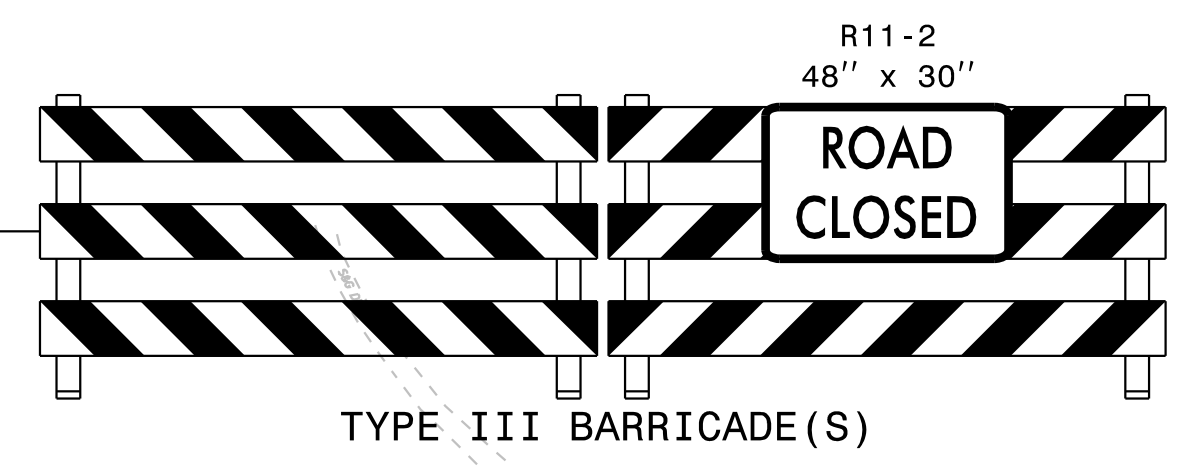


DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
TRUCK ZONE TRAFFIC CONTROL

CONSTRUCTION
PHASING OVERVIEW
PHASE I

K:\RAL_Roadway\01036731 - R-5963D\TrafficControl\CP\CP-R-5963D_tcp_imp3.dgn
3/11/2024

NAD 83 / NA 2011



BEGIN TIP PROJECT R-5963D
-Y2- Sta. 11+80.00

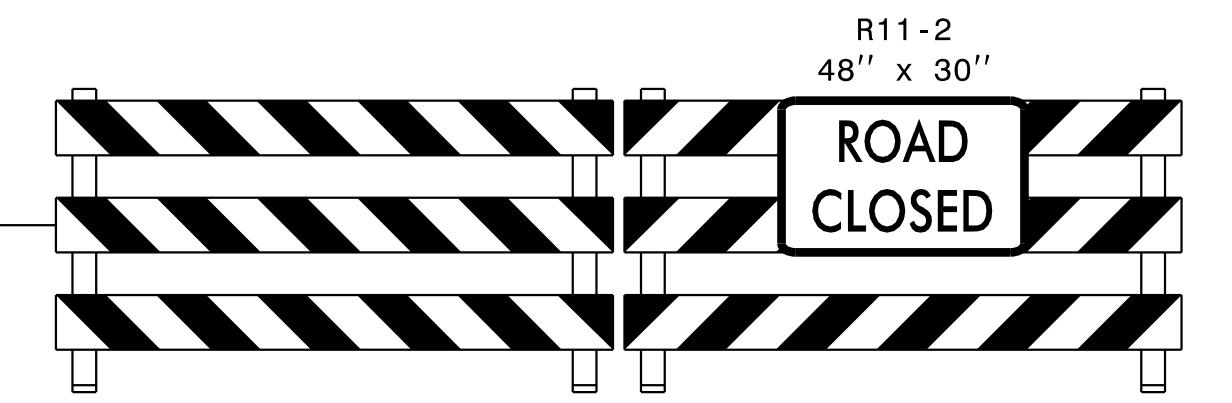
BRING TOP OF BOX 0404 TO FINAL ELEVATION IN PHASE II

-Y1-
US 64

SUTLES ROAD

MAINTAIN WATER TOWER ACCESS
AT ALL TIMES DURING CONSTRUCTION

CHATHAM PARK WAY

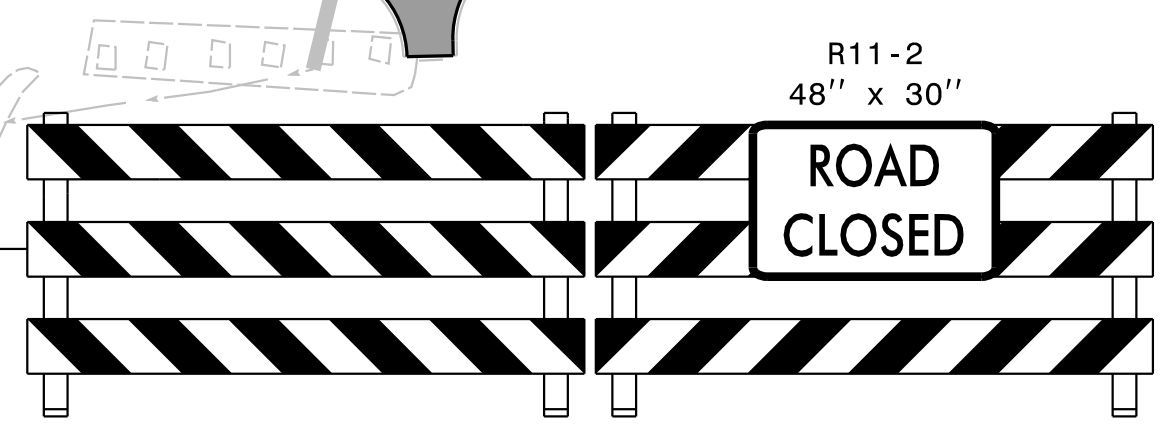


TYPE III BARRICADE(S)
TO REMAIN ON PROJECT

WORK AREA

PAVEMENT REMOVAL

CHATHAM PARK WAY

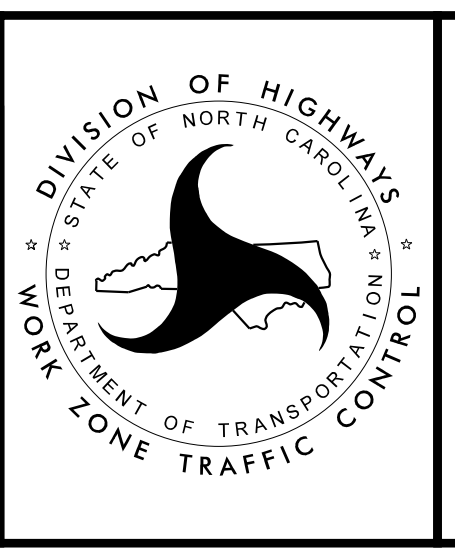


APPROVED: _____

DATE: _____

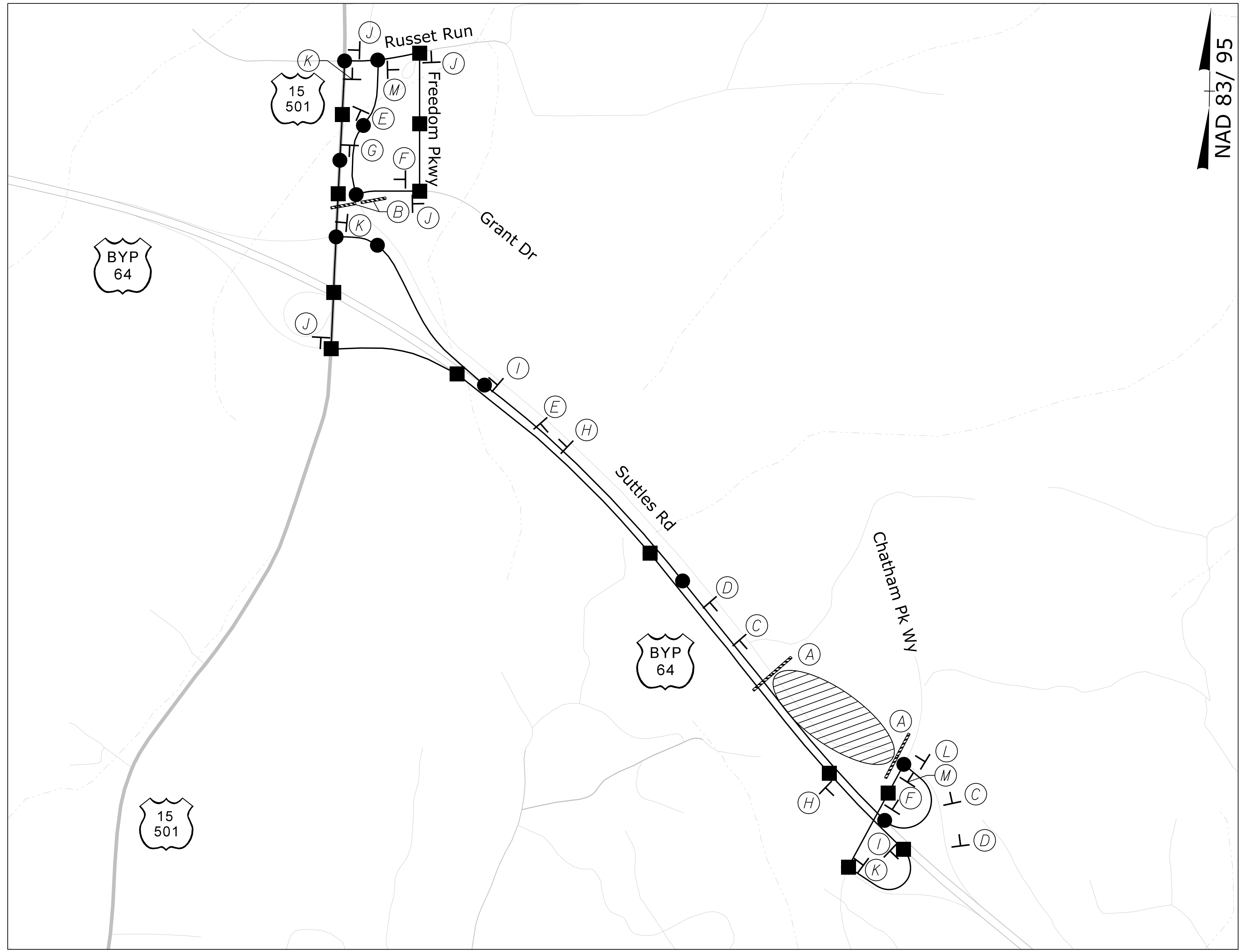
SEAL

**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**



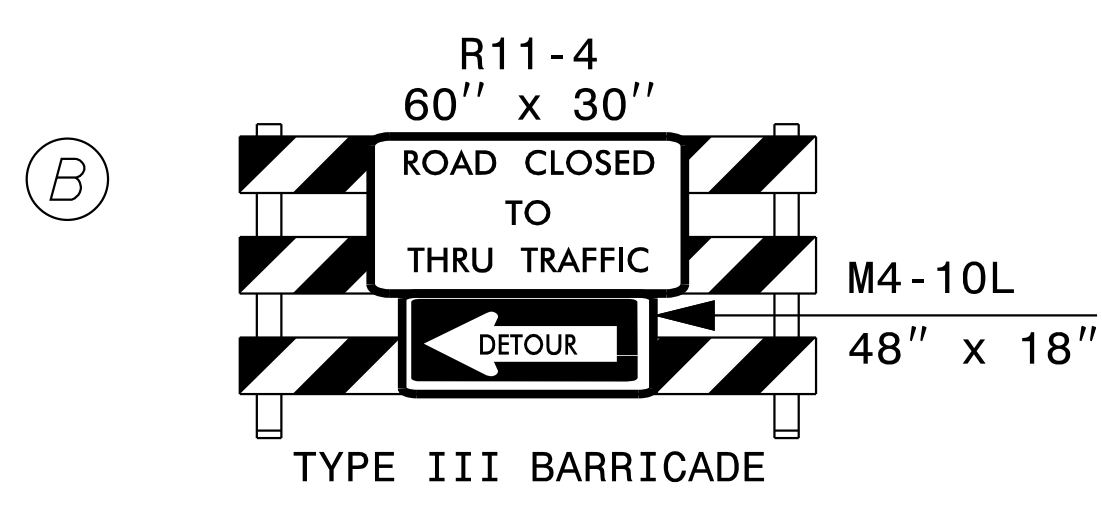
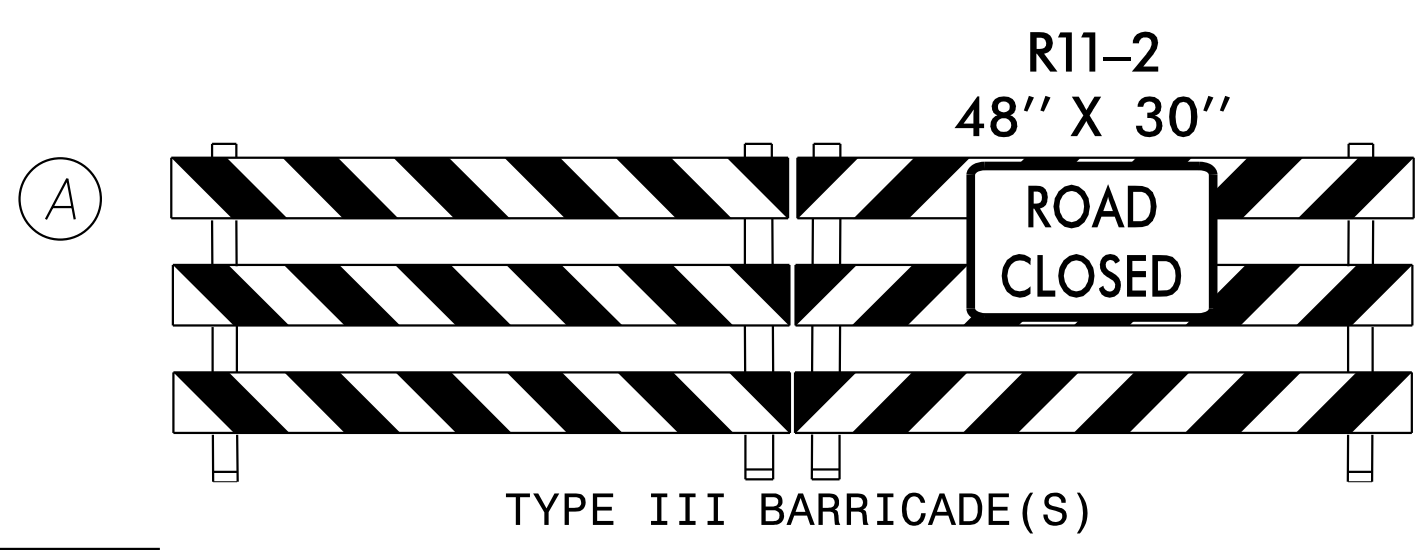
**CONSTRUCTION
PHASING OVERVIEW
PHASE II**

K:\RAL_Roadway\01036731 - R-5963D\TrafficControl\CP\CP-R-5963D_tcp_imp4.dgn
3/11/2024



NAD 83/95

- (C) W20-3B 48" X 48"
- (D) W20-3C 48" X 48"
- (E) W20-3A 48" X 48"
- (F) W20-3A 48" X 48"
- (G) W20-2 48" X 48"
- (H) M4-8 24" X 12"
 M5-2 R 21" X 15"
- (I) M4-8 24" X 12"
 M6-2 21" X 15"
- (J) M4-8 24" X 12"
 M6-1 L 21" X 15"
- (K) M4-8 24" X 12"
 M6-1 21" X 15"
- (L) M4-8 24" X 12"
 U-TURN PLAQUE 21" X 21"
- (M) M4-8 A 24" X 18"



LEGEND

- WORK AREA
- WB DETOUR ROUTE
- EB DETOUR ROUTE
- STATIONARY SIGN

NOTE:
REFER TO RSD 1101.03 SHEETS 1 & 2 OF 9 FOR ADVANCE WARNING SIGNAGE AND BARRICADE PLACEMENT

APPROVED: _____

DATE: _____

SEAL

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

OFFSITE DETOUR SIGNING SHEET

3/11/2024 K:\RAL_Roadway\01036731 - R - 5963D\TrafficControl\CP\R - 5963D_top_imp5.dgn

SIGN NUMR:
 TYPE: F Ground
 QUANTITY: 1


BACKG. COLOR: White
 COPY COLOR: Black

DESIGN BY:
 PROJECT ID: R-5963D

CHK BY:
 DIV: 8

STD #:
 DATE: 3/1/2024

N. C. DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 TRANSPORTATION MOBILITY & SAFETY
 SIGNING & DELINEATION UNIT



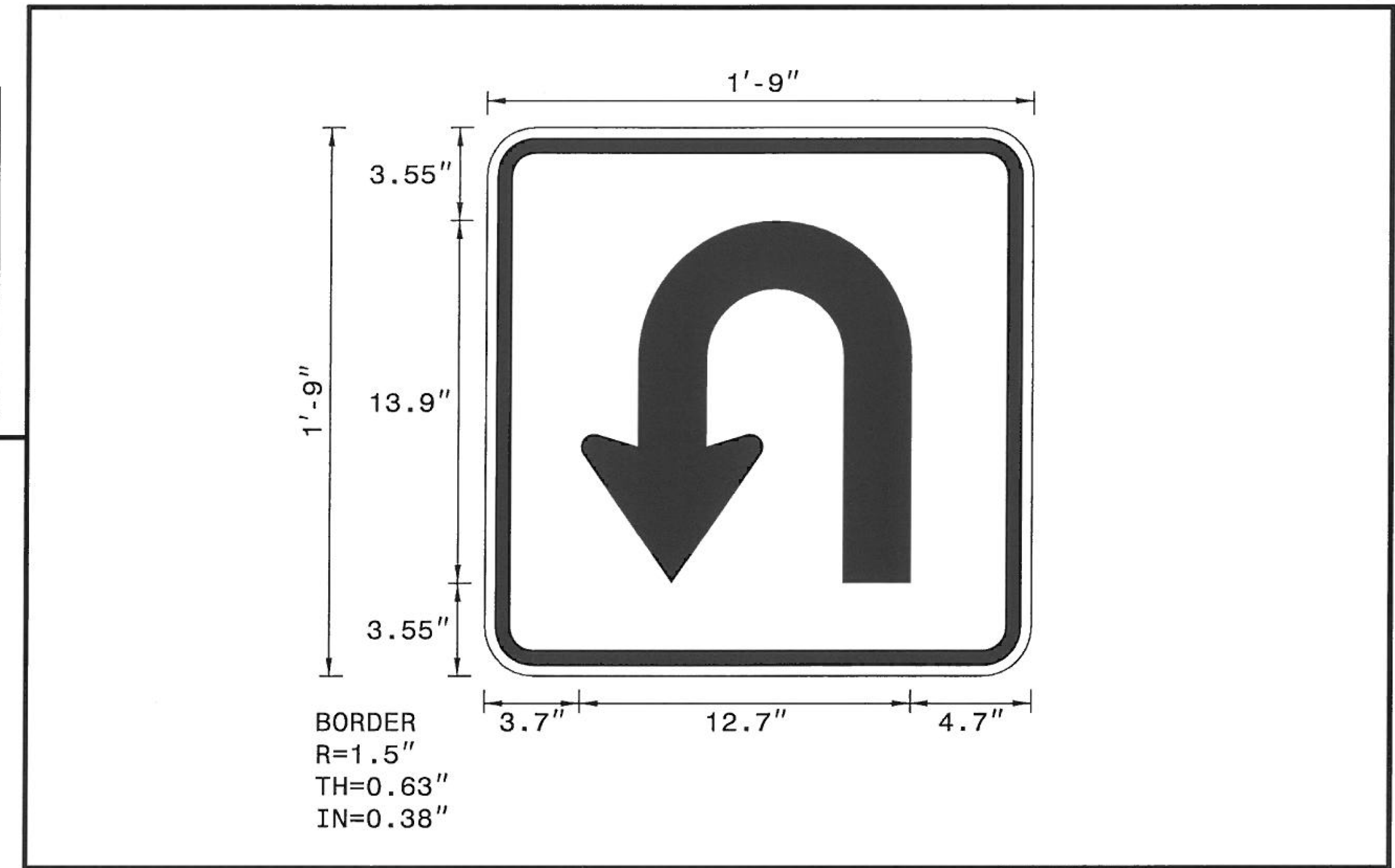
SIGN WIDTH: 1'-9"
 HEIGHT: 1'-9"
 TOTAL AREA: 3.1 Sq.Ft.

MAT'L: 0.063 " ALUMINUM

BORDER TYPE: RECESSED
 RECESS: 0.38"
 WIDTH: 0.63"
 RADII: 1.5"

NO. Z BARS:
 LENGTH:

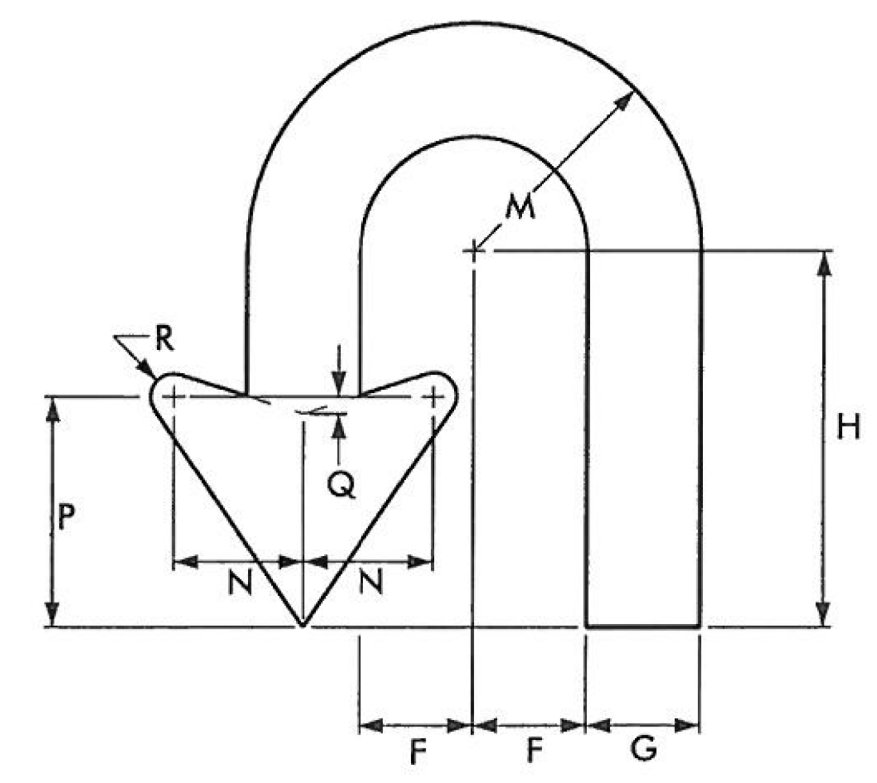
SYMBOL	X	Y	WID	HT
u arrow	3.7	3.5	12.7	13.9



NOTES:

1. Legend and border shall be direct applied Non-reflective sheeting.
2. Background shall be Grade C reflective sheeting.

Arrow Details



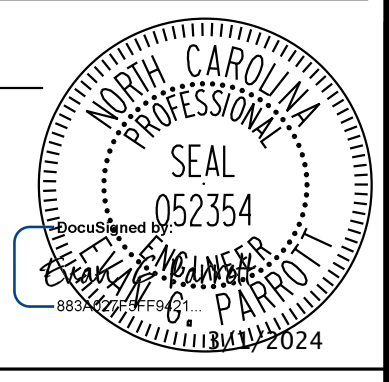
ARROW DIMENSIONS (INCHES)	F	G	H	M	N	P	Q	R
	2.625	2.625	8.659	5.25	3	5.25	0.375	0.5

Spacing Factor is 1 unless specified otherwise
 FILENAME: GSENG

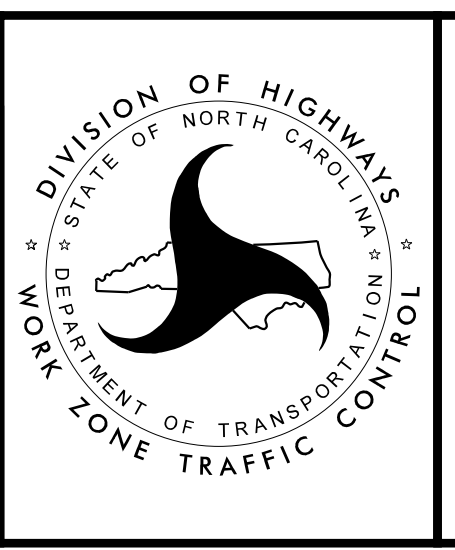
K:\RAL_Roadway\01036731 - R-5963D\TrafficControl\CPV-5963D_tcp_tmp6.dgn 3/1/2024

APPROVED: _____
 DATE: _____

SEAL



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



U-TURN PLAQUE
 SIGN DESIGN