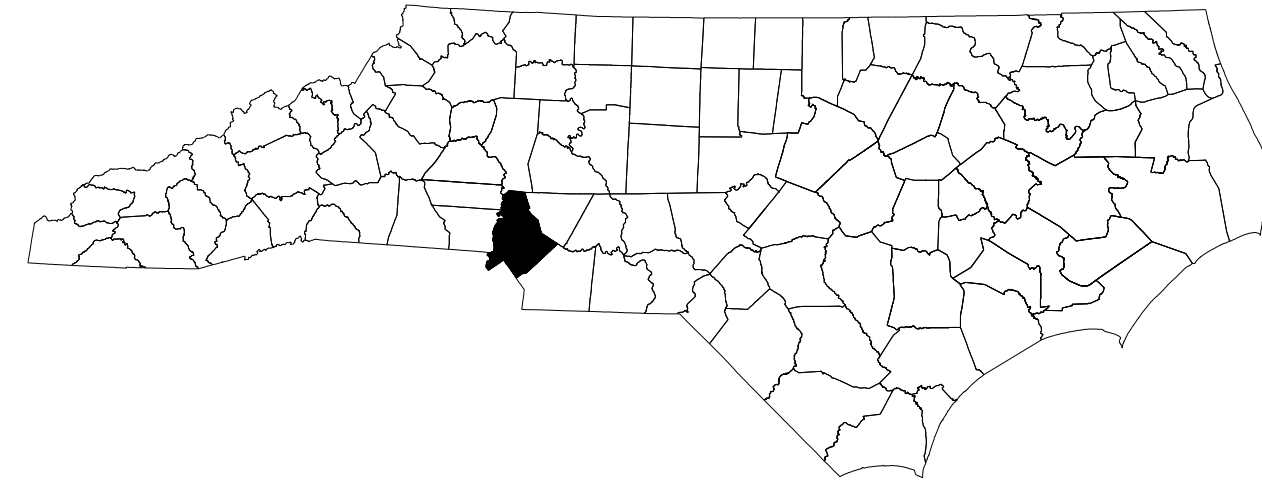


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

MECKLENBURG COUNTY



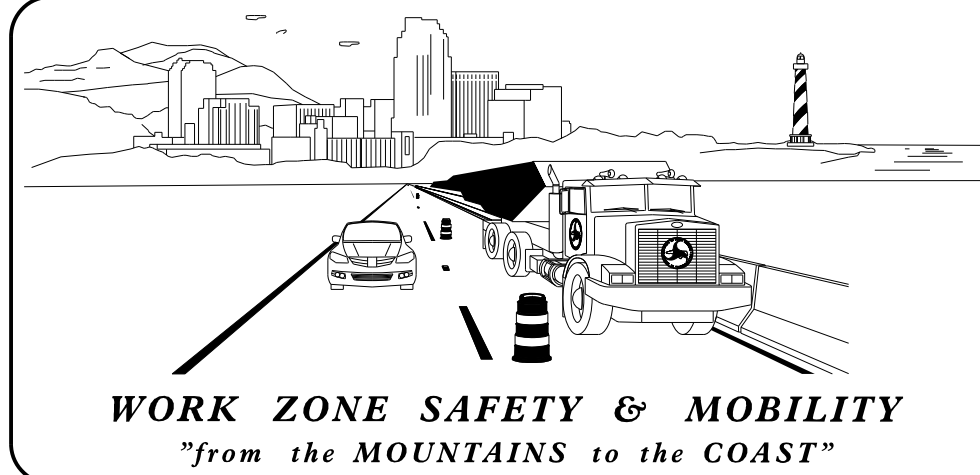
I-85 - MECKLENBURG COUNTY, FROM I-77 TO STATESVILLE AVE. PAVEMENT REHABILITATION.

MAPS 15 THROUGH 19



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	TRANSPORTATION OPERATIONS PLAN: (GENERAL NOTES)
TMP-2	PHASING AND MANAGEMENT STRATEGIES
TMP-2A	TEMPORARY RAMP CLOSURE
TMP-2B	DETOUR SIGN DESIGN
TMP-3	PROJECT LAYOUT
TMP-4	OFFSITE DETOUR- MAP 15 I-85 NORTH
TMP-5	AUXILIARY LANE CLOSURE RAMP DETAIL
TMP-6	OFFSITE DETOUR- MAP 15 I-77 NORTH
TMP-7	OFFSITE DETOUR- MAP 16
TMP-8	OFFSITE DETOUR- MAP 17
TMP-9	OFFSITE DETOUR- MAP 18
TMP-10	MAP 19 RAMP CLOSURE DETAIL
TMP-11	OFFSITE DETOUR- MAP 19

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PLANS PREPARED BY:

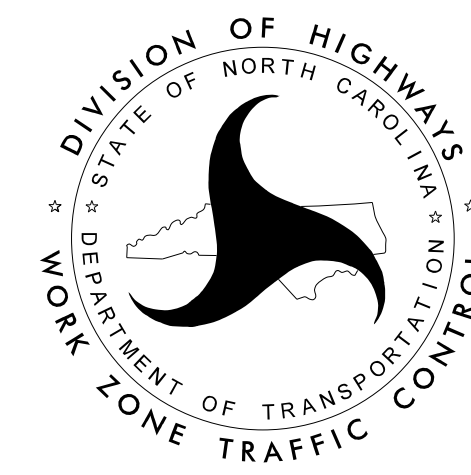
TADEAUS M. KELLY, EIT

JUSTIN D. BEAVER, P.E.

NCDOT CONTACTS:

KENNETH C. THORNEWELL, P.E.
PROJECT ENGINEER

JUSTIN D. BEAVER, P.E.
PROJECT DESIGN ENGINEER

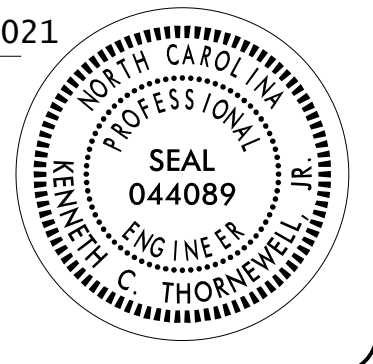


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APPROVED: *Kenneth C. Thornevell, Jr., P.E.*

DATE: 3/8/2021

SEAL



SHEET NO.
TMP-1

I-5905

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 2018 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
1150.01	FLAGGING DEVICES
1160.01	TEMPORARY CRASH CUSHION
1165.01	TRUCK MOUNTED ATTENUATOR
1170.01	PORTABLE CONCRETE BARRIER
1180.01	SKINNY - DRUMS
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO LANE AND MULTILANE ROADWAYS
1205.03	PAVEMENT MARKINGS - EXITS 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
1205.14	PAVEMENT MARKINGS - ROUNDABOUTS
1205.15	PAVEMENT MARKINGS - SUPERSTREETS
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
1264.01	OBJECT MARKERS - TYPES
1264.02	OBJECT MARKERS - INSTALLATION

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

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

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APPROVED: DATE: 1/8/2020			<p style="text-align: center;">ROADWAY STANDARD DRAWINGS & LEGEND</p>
<p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>			

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) EXCEPT AS ALLOWED ELSEWHERE, DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
I-85, INCLUDING OTHER RAMP & LOOPS (ONE LANE) I-77, INCLUDING OTHER RAMP & LOOPS (ONE LANE) STATESVILLE AVE	MONDAY THROUGH SUNDAY 6:00 A.M. TO 9:00 P.M.
I-85 (TWO LANES) I-77 (TWO LANES) I-85/I-77 INTERCHANGE RAMP AND LOOPS	MONDAY THROUGH SUNDAY 5:00 A.M. TO 10:00 P.M.
I-85 (THREE LANES)	MONDAY THROUGH SUNDAY 5:00 A.M. TO 11:00 P.M.

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

ROAD NAME
I-85, INCLUDING RAMP & LOOPS I-77, INCLUDING RAMP & LOOPS STATESVILLE AVE

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 A.M. DECEMBER 31st TO 9:00 P.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 9:00 P.M. THE FOLLOWING TUESDAY.
- FOR EASTER, BETWEEN THE HOURS OF 6:00 A.M. THURSDAY AND 9:00 P.M. MONDAY.
- FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY TO 9:00 P.M. TUESDAY.
- FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 9:00 P.M. THE DAY AFTER INDEPENDENCE DAY.

IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 6:00 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 9:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.
- FOR LABOR DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY AND 9:00 P.M. TUESDAY.
- FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00 A.M. TUESDAY TO 9:00 P.M. MONDAY.
- FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 9:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.
- FOR CAROLINA PANTHERS GAMES, OCCURRING AT THE BANK OF AMERICA STADIUM BETWEEN 3 HOURS BEFORE THE START AND 2 HOURS AFTER THE END OF THE GAME.
- FOR ANY NASCAR RACE AT THE CHARLOTTE MOTOR SPEEDWAY BETWEEN THE HOURS OF 6:00 A.M. THE THURSDAY BEFORE THE FIRST TRACK EVENT AND 9:00 P.M. THE DAY AFTER THE GAME.

C) EXCEPT AS ALLOWED ELSEWHERE, DO NOT CLOSE ROADS AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
I-85 RAMP & LOOPS I-77 RAMP & LOOPS	MONDAY THROUGH SUNDAY 5:00 A.M. TO 10:00 P.M.

D) 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

- E) 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.
- F) 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.
- G) 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.
- H) 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.
- I) 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.
- J) DO NOT INSTALL MORE THAN ONE LANE CLOSURE IN ANY ONE DIRECTION ON I-85.

PAVEMENT EDGE DROP OFF REQUIREMENTS

- K) 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

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

SIGNING

- M) 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.
- N) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.

PROVIDE SIGNING REQUIRED FOR THE OFF-SITE DETOUR ROUTE AS SHOWN IN THE TRAFFIC CONTROL PLANS.
- O) 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.
- P) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

TRAFFIC CONTROL DEVICES

- Q) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.
- R) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES DRUMS PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

PAVEMENT MARKINGS AND MARKERS

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

ROAD NAME	MARKING	MARKER
I-85	PAINT	NONE

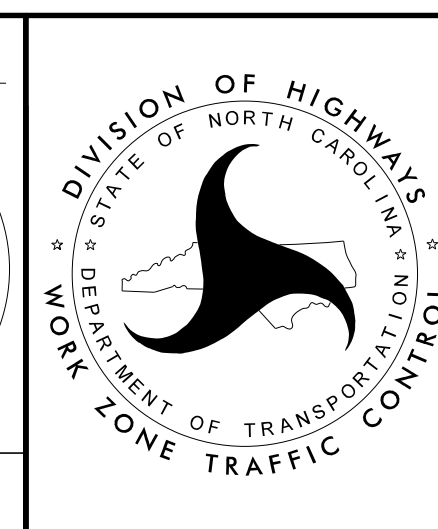
MISCELLANEOUS

- T) LAW ENFORCEMENT SHALL BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS AS DIRECTED BY THE ENGINEER.

APPROVED: *Kenneth C. Thornwell Jr., P.E.*
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DATE: 2/5/2021

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TRANSPORTATION
OPERATIONS
PLAN

PHASING

BEFORE BEGINNING ANY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL INSTALL ALL ADVANCE WARNING SIGNS AND TRAFFIC CONTROL DEVICES. FIELD VERIFY LOCATIONS WITH THE RESIDENT ENGINEER PRIOR TO INSTALLATION.

COMPLETE PAVEMENT WEDGING/ BUILD UP IN SUCH A MANNER THAT NO PONDING OF WATER WILL OCCUR WITHIN THE TRAVEL LANE. MAINTAIN POSITIVE DRAINAGE AND A MAXIMUM OF 0.04 ROLLOVER IN EXISTING TRAVEL LANES.

USE RSD 1101.02 SHEET 4 OF 14 TO CLOSE A SINGLE LANE FOR ALL TIE IN WORK NECESSARY FOR PAVEMENT REHABILITATION.

USE LAW ENFORCEMENT AS NECESSARY TO INITIALLY CLOSE RAMPS, OR AS DIRECTED BY THE ENGINEER.

RAMPS CAN BE CONSTRUCTED IN ANY ORDER, ONE MAP AT A TIME.

FOR ALL OTHER RAMP RESURFACING NOT SPECIFIED IN THIS PHASING, REFERENCE "WORK ZONE TRAFFIC CONTROL FOR INTERSTATE/FREEWAY RESURFACING PROJECTS" SPECIAL PROVISION.

MAP 15, I-77/I-85 OFF RAMPS

PHASE 1

THE CONTRACTOR SHALL COMPLETE THE WORK REQUIRED IN PHASE 1, STEP 1 THROUGH PHASE 1, STEP 3 ON MAP 15, BEGINNING 9:00 P.M. THE FRIDAY THE CONTRACTOR ELECTS TO BEGIN THE WORK. ALL LANES OF TRAFFIC SHALL BE OPEN BY 6:00 A.M. ON THE THIRD MONDAY AFTER THE CONTRACTOR ELECTS TO BEGIN THE WORK. SEE INTERMEDIATE CONTRACT TIMES AND LIQUIDATED DAMAGES.

STEP 1:

USING TMP-4, TMP-5, AND TMP-6, INSTALL TRAFFIC CONTROL DEVICES AND CLOSE OFF RAMP AND AUXILIARY LANE ON I-85 NORTH TO STATESVILLE AVE (-RPC2-), AND CLOSE THE OFF RAMP ON I-77 NORTH TO STATESVILLE AVE (-RPC1-). DETOUR TRAFFIC OFFSITE. COORDINATE WITH THE CITY OF CHARLOTTE TO MODIFY EXISTING SIGNAL AT STATESVILLE AVE (-Y-) INTERSECTION.

STEP 2:

ON MAP 15, CONSTRUCT -RPC2-, UP TO BUT NOT INCLUDING FINAL SURFACE LAYER, UNDER TEMPORARY RAMP CLOSURE. INSTALL TEMPORARY PAVEMENT MARKINGS.

STEP 3:

UPON COMPLETION OF -RPC2- RAMP WORK, REMOVE DETOUR SIGNS AND OTHER TRAFFIC CONTROL DEVICES AND RESTORE TRAFFIC TO NORMAL PATTERNS.

PHASE 2

THE CONTRACTOR SHALL COMPLETE THE WORK REQUIRED IN PHASE 2, STEP 1 THROUGH PHASE 2, STEP 3 ON MAP 15, BEGINNING 9:00 P.M. THE FRIDAY THE CONTRACTOR ELECTS TO BEGIN THE WORK. ALL LANES OF TRAFFIC SHALL BE OPEN BY 6:00 A.M. ON THE SECOND MONDAY AFTER THE CONTRACTOR ELECTS TO BEGIN THE WORK. SEE INTERMEDIATE CONTRACT TIMES AND LIQUIDATED DAMAGES.

STEP 1:

USING TMP-2A AND TMP-6, INSTALL TRAFFIC CONTROL DEVICES TO CLOSE OFF RAMP ON I-77 NORTH TO STATESVILLE AVE (-RPC1-). DETOUR TRAFFIC OFFSITE. OFF RAMP ON I-85 NORTH TO STATESVILLE AVE (-RPC2-) SHALL REMAIN OPEN TO ALL LANES.

STEP 2:

ON MAP 15, CONSTRUCT -RPC1-, UP TO BUT NOT INCLUDING THE FINAL SURFACE LAYER FROM STATION 10+00 TO 21+40. INSTALL TEMPORARY PAVEMENT MARKINGS.

STEP 3:

REMOVE DETOUR SIGNS AND REOPEN ROADWAY.

STEP 4:

CONSTRUCT FINAL SURFACE LAYER FOR -RCP1- AND -RCP2- UNDER NIGHTLY RAMP CLOSURES. INSTALL FINAL PAVEMENT MARKINGS/MARKERS.

MAPS 16, 17 AND 18 RAMPS

STEP 1:

USING TMP-2A AND TMP-7, TMP-8 OR TMP-9, INSTALL TRAFFIC CONTROL DEVICES TO CLOSE RAMPS AND DETOUR TRAFFIC OFFSITE.

STEP 2:

CONSTRUCT MAPS 16, 17, OR 18 UNDER NIGHTLY RAMP CLOSURES FOR EACH RESPECTIVE I-85 RAMP, ONE AT A TIME. INSTALL FINAL PAVEMENT MARKINGS/MARKERS.

STEP 3:

UPON COMPLETION OF MAPS 16, 17, OR 18 PAVEMENT REHABILITATION, REMOVE DETOUR SIGNS AND OTHER TRAFFIC CONTROL DEVICES AND RESTORE TRAFFIC TO NORMAL PATTERNS.

MAP 19, I-85 ON RAMP

THE CONTRACTOR SHALL COMPLETE THE WORK REQUIRED IN STEP 1 THROUGH STEP 3 ON MAP 19, BEGINNING 9:00 P.M. THE FRIDAY THE CONTRACTOR ELECTS TO BEGIN THE WORK. ALL LANES OF TRAFFIC SHALL BE OPEN BY 6:00 A.M. ON THE SECOND MONDAY AFTER THE CONTRACTOR ELECTS TO BEGIN THE WORK. SEE INTERMEDIATE CONTRACT TIMES AND LIQUIDATED DAMAGES.

STEP 1:

USING TMP-2A, INSTALL TRAFFIC CONTROL DEVICES AND CLOSE I-85 SOUTH ON RAMP (-RPD-). USE DRUMS TO CLOSE LEFT TURN LANES ON STATESVILLE AVE (-Y-) AS SHOWN IN TMP-10. DETOUR TRAFFIC OFFSITE.

STEP 2:

ON MAP 19, CONSTRUCT -RPD- UNDER TEMPORARY RAMP CLOSURE, UP TO BUT NOT INCLUDING FINAL SURFACE LAYER. INSTALL TEMPORARY PAVEMENT MARKINGS.

STEP 3:

UPON COMPLETION OF -RPD- PAVEMENT REHABILITATION, REMOVE DETOUR SIGNS AND OTHER TRAFFIC CONTROL DEVICES AND RESTORE TRAFFIC TO NORMAL PATTERN.

STEP 4:

CONSTRUCT FINAL SURFACE COURSE & INSTALL FINAL PAVEMENT MARKINGS AND MARKERS UNDER NIGHTLY RAMP CLOSURE.



MANAGEMENT STRATEGIES

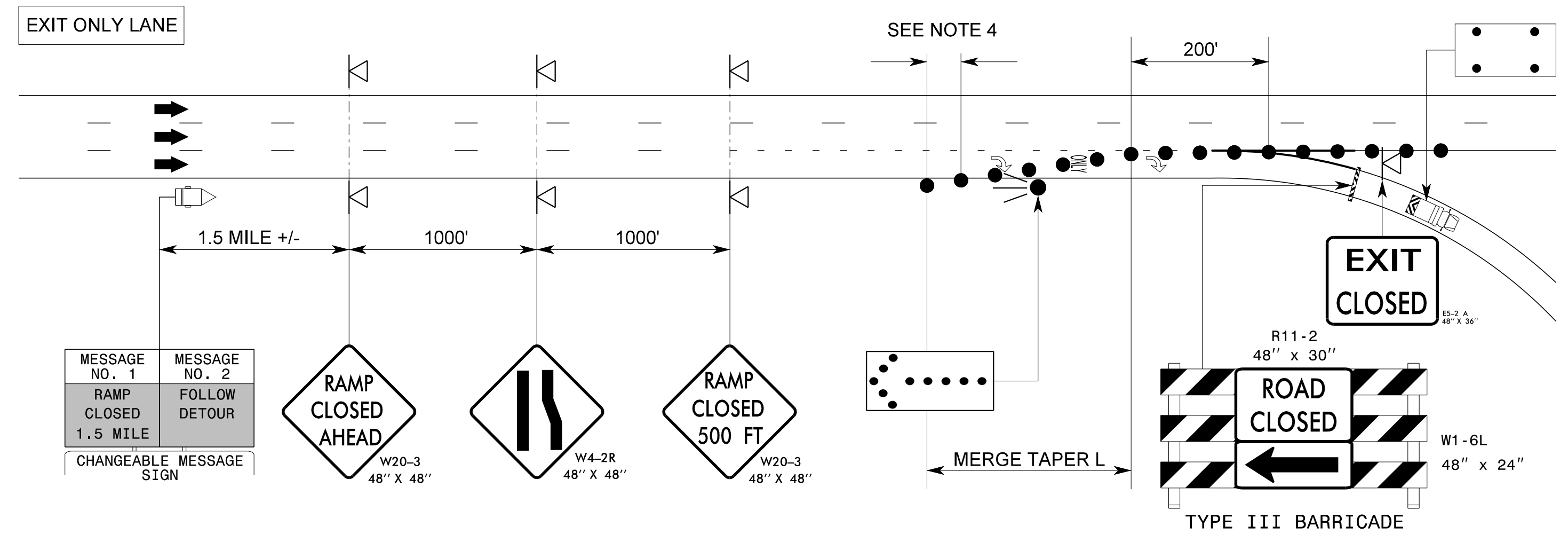
THE FOLLOWING LISTED WORK ZONE STRATEGIES ARE RECOMMENDED FOR INCLUSION WITHIN THIS TRANSPORTATION MANAGEMENT PLAN (TMP).

RECOMMENDED STRATEGIES:

- RAMP CLOSURES / RELOCATION
- OFF-SITE DETOURS / USE OF ALTERNATIVE ROUTES
- TEMPORARY TRAFFIC SIGNALS
- DEDICATED (PAID) LAW ENFORCEMENT

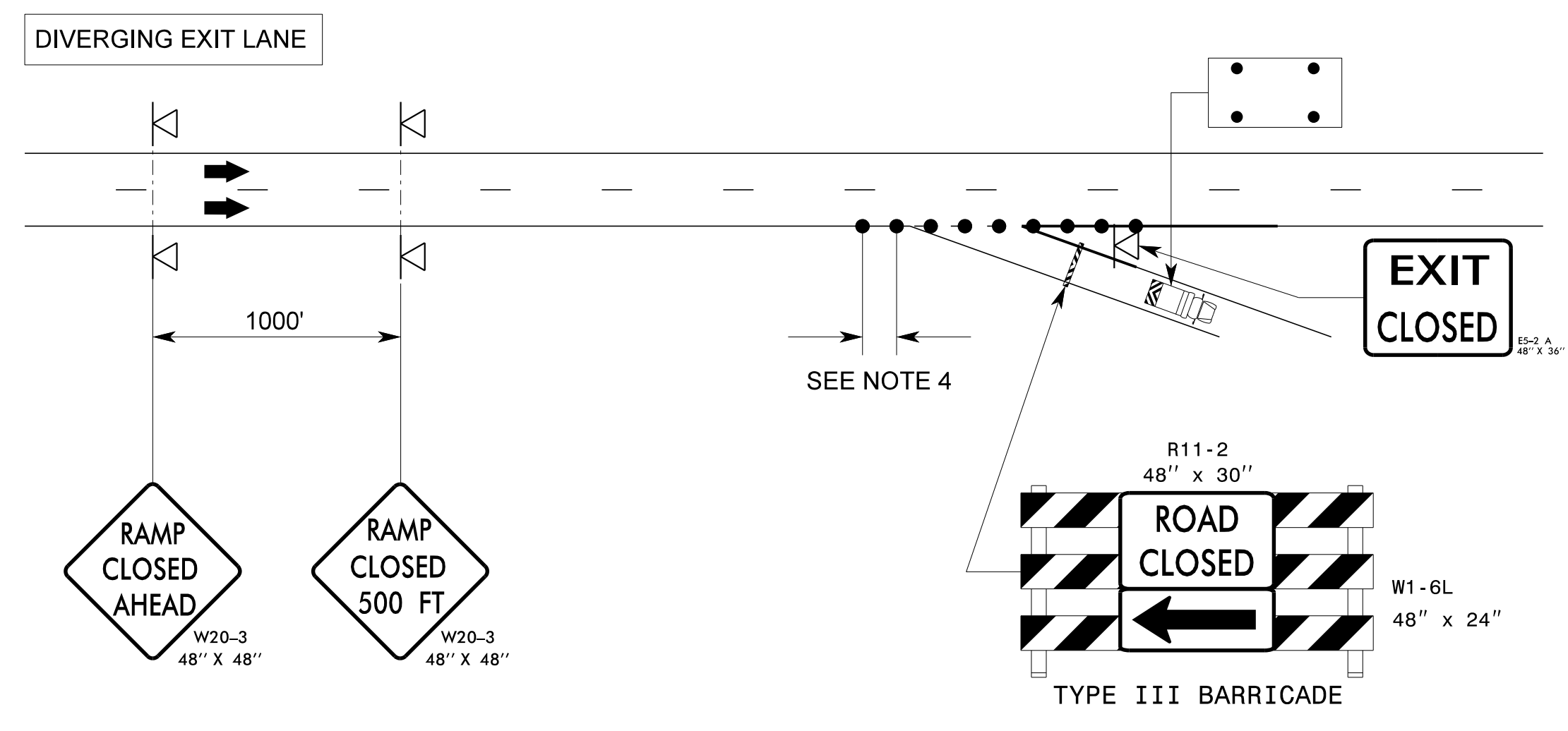
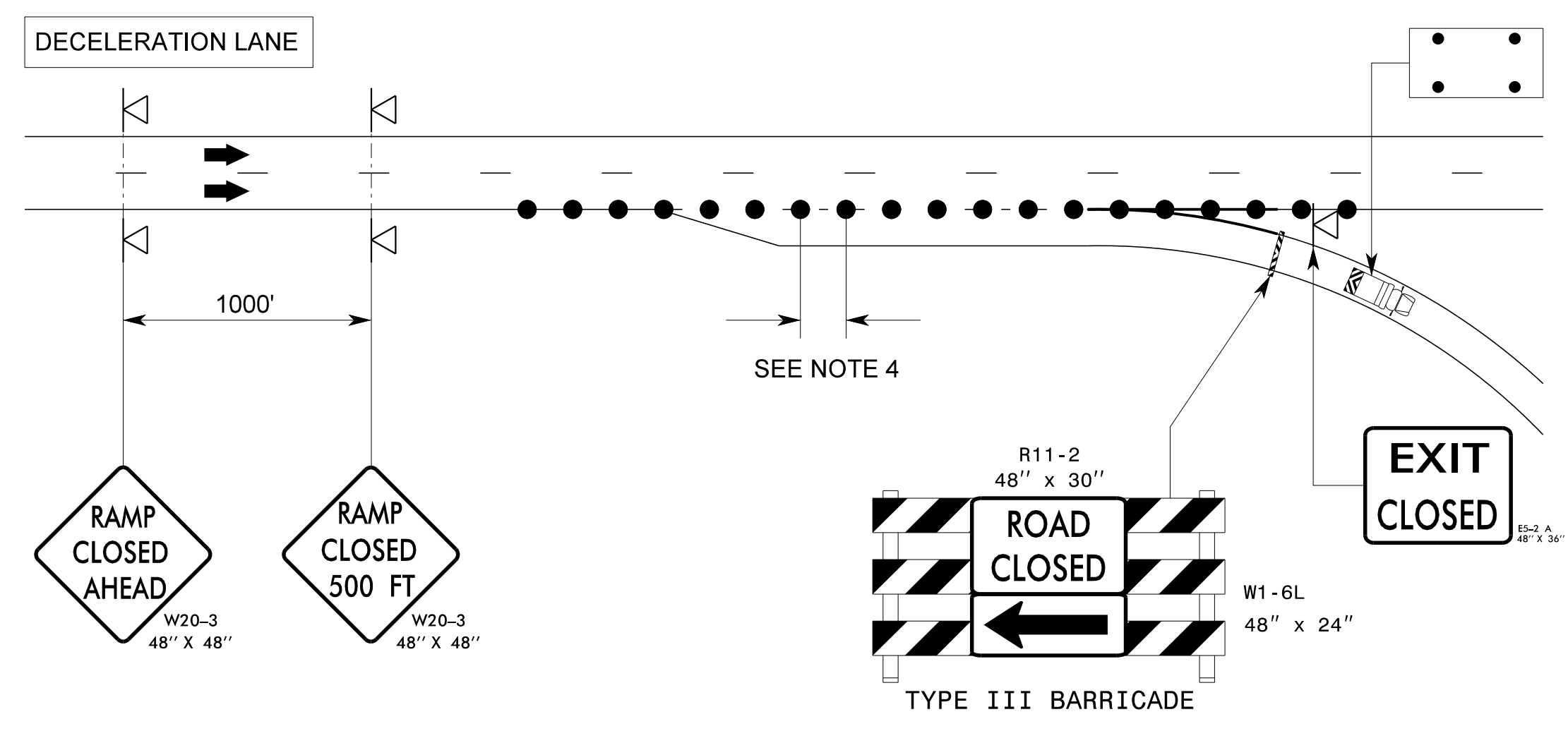
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<p>APPROVED:  DATE: 3/8/2021</p>			<p>PHASING AND MANAGEMENT STRATEGIES</p>
<p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>			



LEGEND

- CHANGEABLE MESSAGE SIGN (CMS)
- PORTABLE SIGN
- FLASHING ARROW BOARD (FAB)
- TRUCK MOUNTED ATTENUATOR (TMA)
- DRUM
- FLASHING ARROW BOARD (96"X48"), CAUTION MODE
- DIRECTION OF TRAFFIC FLOW



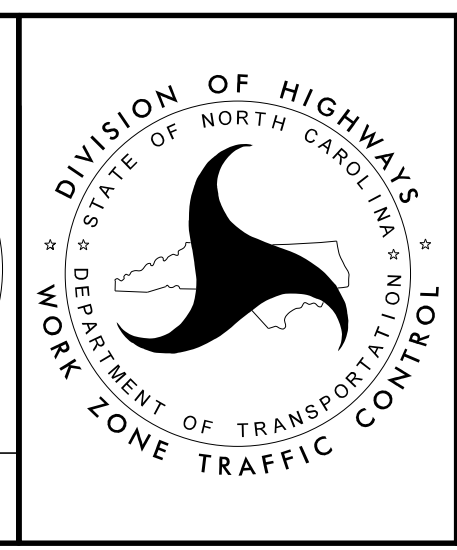
GENERAL NOTES

- 1- USE STATIONARY SIGNS FOR LONG TERM RAMP CLOSURES.
- 2- REFER TO RSD. 1101.11 SHEET 1 OF 4 FOR "L" DISTANCE. IF THE MERGE TAPER "L" DISTANCE CANNOT BE ACHIEVED DUE TO FIELD CONDITIONS, ENGINEER SHALL DETERMINE ACCEPTABLE DISTANCE FOR THE LENGTH OF THE TAPER.
- 3- IF APPLICABLE, INSTALL LANE CLOSURES WITH THE FLOW OF TRAFFIC, BEGINNING ON THE UPSTREAM SIDE OF TRAFFIC. REMOVE LANE CLOSURES AGAINST THE FLOW OF TRAFFIC BEGINNING WITH DEVICES ON THE DOWNSTREAM SIDE OF TRAFFIC.
- 4- PLACE DRUMS IN TAPERS AT THE MAXIMUM SPACING EQUAL IN FEET TO THE POSTED SPEED LIMIT.
- 5- POSITION THE TMA TO MAINTAIN A ROLL-AHEAD DISTANCE AS RECOMMENDED BY THE MANUFACTURER.
- 6- PLACE FLASHING ARROW BOARDS (FAB) ON THE SHOULDER. PLACE THE FAB WITHIN THE TAPER IF SHOULDERS DO NOT EXIST. MEET THE REQUIREMENTS FOR STOPPING SIGHT DISTANCE AT THE FAB LOCATION. IF NEEDED, EXTEND LANE CLOSURES AT THE BUFFER SPACE, SUCH THAT STOPPING SIGHT DISTANCE HAS BEEN MET. (SEE RSD. 1101.11, SHEET 2)
- 7- USE LAW ENFORCEMENT AS NECESSARY FOR THE INITIAL CLOSURE OF RAMPS, OR AS DIRECTED BY THE ENGINEER.
- 8- COVER EXISTING EXIT SIGN LOCATED WITHIN THE GORE.
- 9- LONG TERM RAMP CLOSURES IN EXCESS OF 14 DAYS WILL REQUIRE OVERHEAD GUIDE SIGNS TO BE COVERED WITH EXIT CLOSED SIGN.

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APPROVED: *Kenneth C. Thornwell, Jr., P.E.*
 DATE: 3/8/2021

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TEMPORARY RAMP CLOSURE

SIGN NUMBER: SP200005 TYPE: D QUANTITY: 1 SIGN WIDTH: 2'-6" HEIGHT: 1'-0" TOTAL AREA: 2.5 Sq.Ft. BORDER TYPE: FLUSH RECESS: 0.38" WIDTH: 0.63" RADII: 1.5" NO. Z BARS: LENGTH:	BACKG COLOR: Orange COPY COLOR: Black <table border="1"> <tr> <th>SYMBOL</th> <th>X</th> <th>Y</th> <th>WID</th> <th>HT</th> </tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </table> MAT'L: 0.063" (1.6 mm) ALUMINUM	SYMBOL	X	Y	WID	HT																																														DESIGN BY: J.Navarrete PROJECT ID: I-5905 CHECKED BY: LOCATION: DATE: Jan 14, 2020 DIV: WZTC
SYMBOL	X	Y	WID	HT																																																

USE NOTES: 1,2

- Legend and border(except those that are colored black) shall be direct applied Grade C sheeting.
- Background shall be Grade C reflective sheeting.

BORDER
R=1.5"
TH=0.63"
IN=0.38"

Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

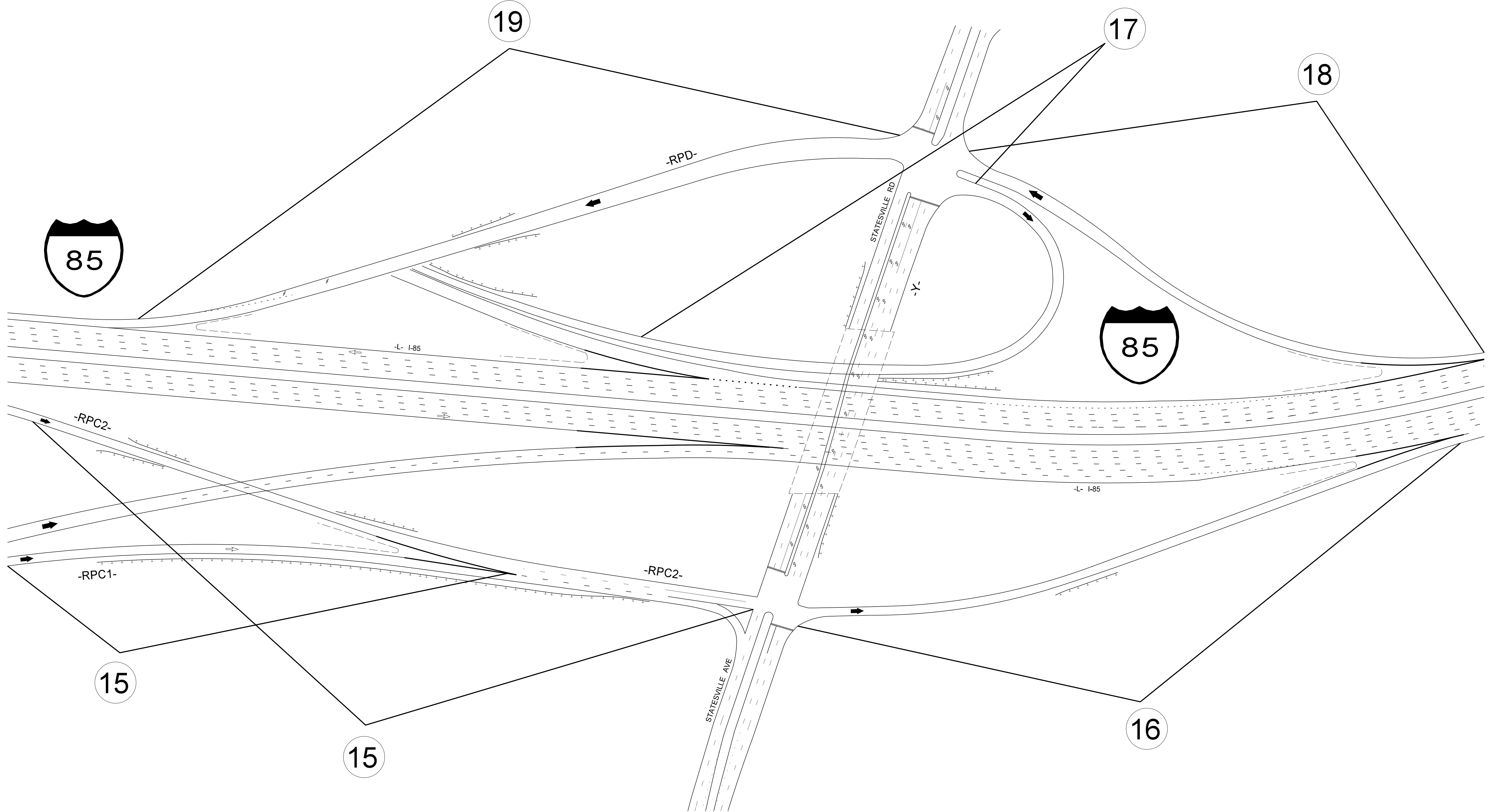
Letter spacings are to start of next letter

	S	T	A	T	E	S	V	I	L	L	E	A	V	E	Series/Size Text Length			
	3.1	1.5	1.3	1.8	1.6	1.4	1.5	1.8	1	1.6	1.6	1.1	3	1.8	1.8	1.1	2.8	B 2000
																		24.1

FILENAME: Special Signs 8 NORTH CAROLINA D.O.T. SIGN DETAIL

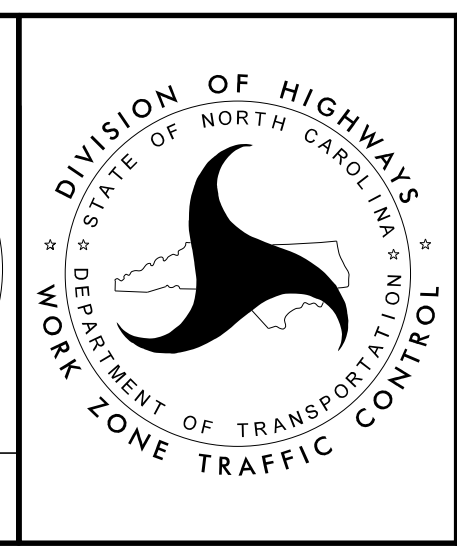
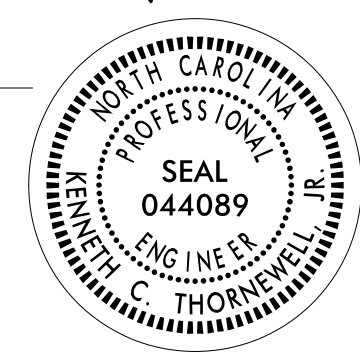
3/9/2021
 \\dot\dfsroot\01NPrj\Store\DivProj\Division\5905\Traffic\TrafficControl\TCP\CGN\I-5905_TC_TMP-2B_SignDesign.dgn
 User: jdbeaver1

APPROVED: <i>Rene B. Roach</i> <small>3EB43060D316431</small> DATE: 3/10/2021 SEAL			SPECIAL SIGN DESIGN
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			



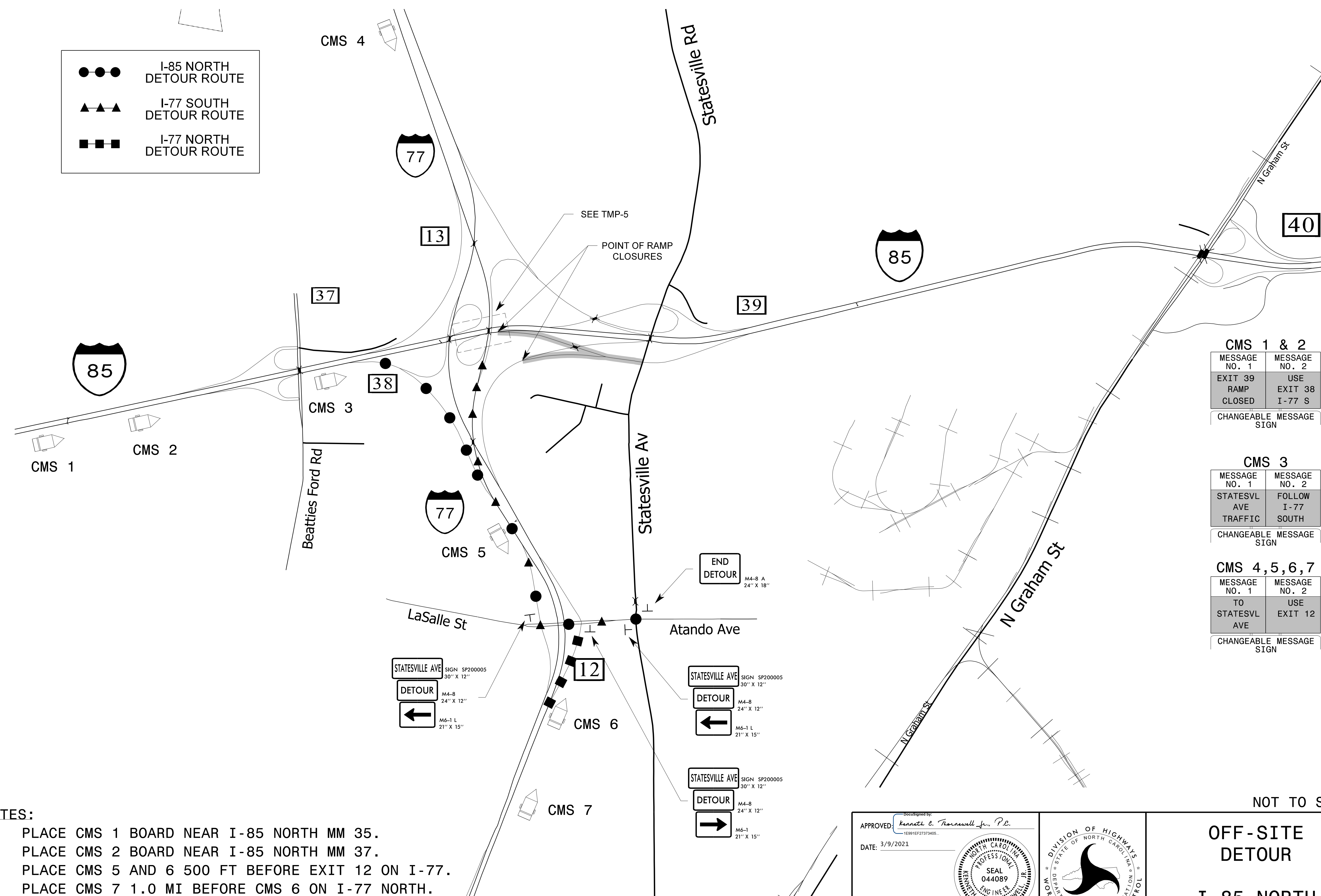
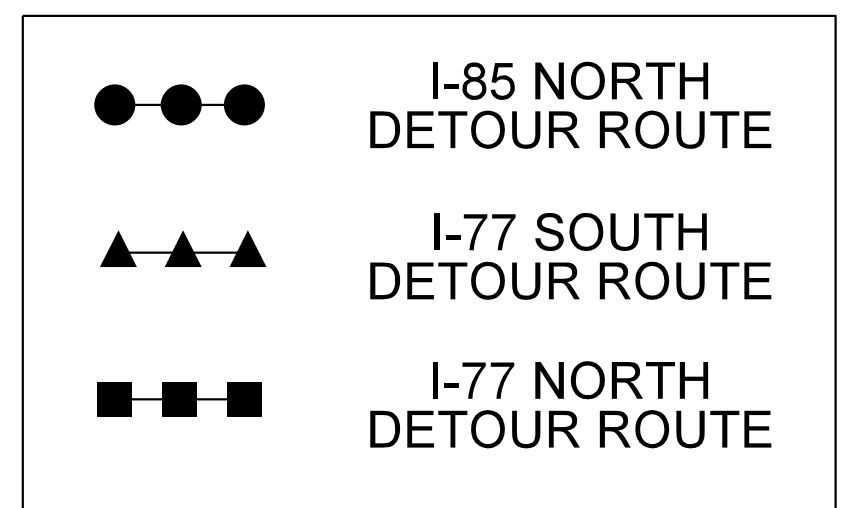
I/8/2020
 \\dot\dfsroot\01\ProjStore\DivProj\Division\5905\TrafficControl\TCP\GNN\I-5905_TC_TMP-3_ProjectLayout.dgn
 User:tmkelyl

APPROVED: *Kenneth C. Thornwell Jr., P.E.*
DocuSigned by: Kenneth C. Thornwell Jr., P.E. 1E091EF27373405
 DATE: 1/8/2020



PROJECT LAYOUT
MAPS 15, 16, 17, 18 & 19

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CMS 1 & 2

MESSAGE NO. 1	MESSAGE NO. 2
EXIT 39 RAMP CLOSED	USE EXIT 38 I-77 S

CHANGEABLE MESSAGE SIGN

CMS 3

MESSAGE NO. 1	MESSAGE NO. 2
STATESVL AVE TRAFFIC	FOLLOW I-77 SOUTH

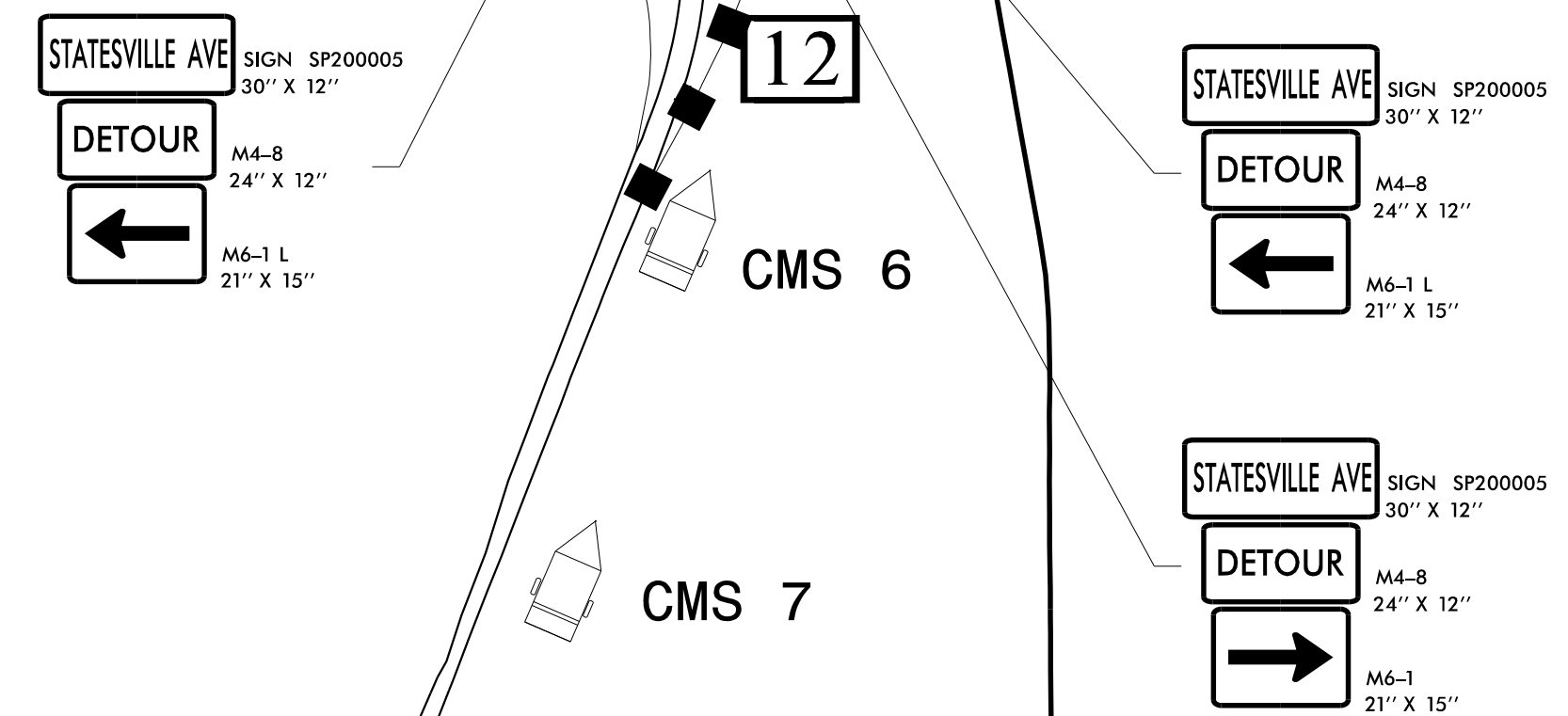
CHANGEABLE MESSAGE SIGN

CMS 4,5,6,7

MESSAGE NO. 1	MESSAGE NO. 2
TO STATESVL AVE	USE EXIT 12

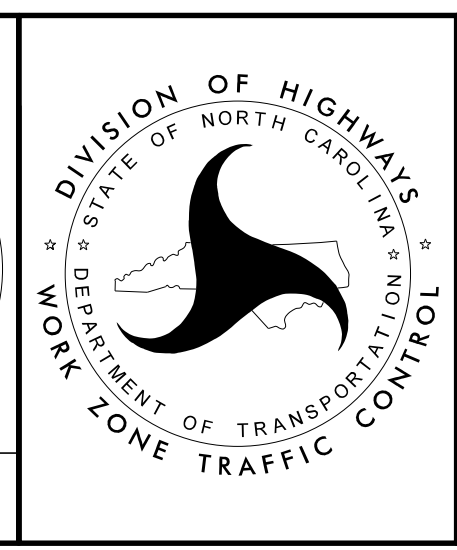
CHANGEABLE MESSAGE SIGN

- NOTES:**
- PLACE CMS 1 BOARD NEAR I-85 NORTH MM 35.
 - PLACE CMS 2 BOARD NEAR I-85 NORTH MM 37.
 - PLACE CMS 5 AND 6 500 FT BEFORE EXIT 12 ON I-77.
 - PLACE CMS 7 1.0 MI BEFORE CMS 6 ON I-77 NORTH.
 - SEE TMP-5 FOR AUXILIARY LANE CLOSURE.



APPROVED: *Kenneth C. Harrell, Jr., P.E.*
 DATE: 3/9/2021

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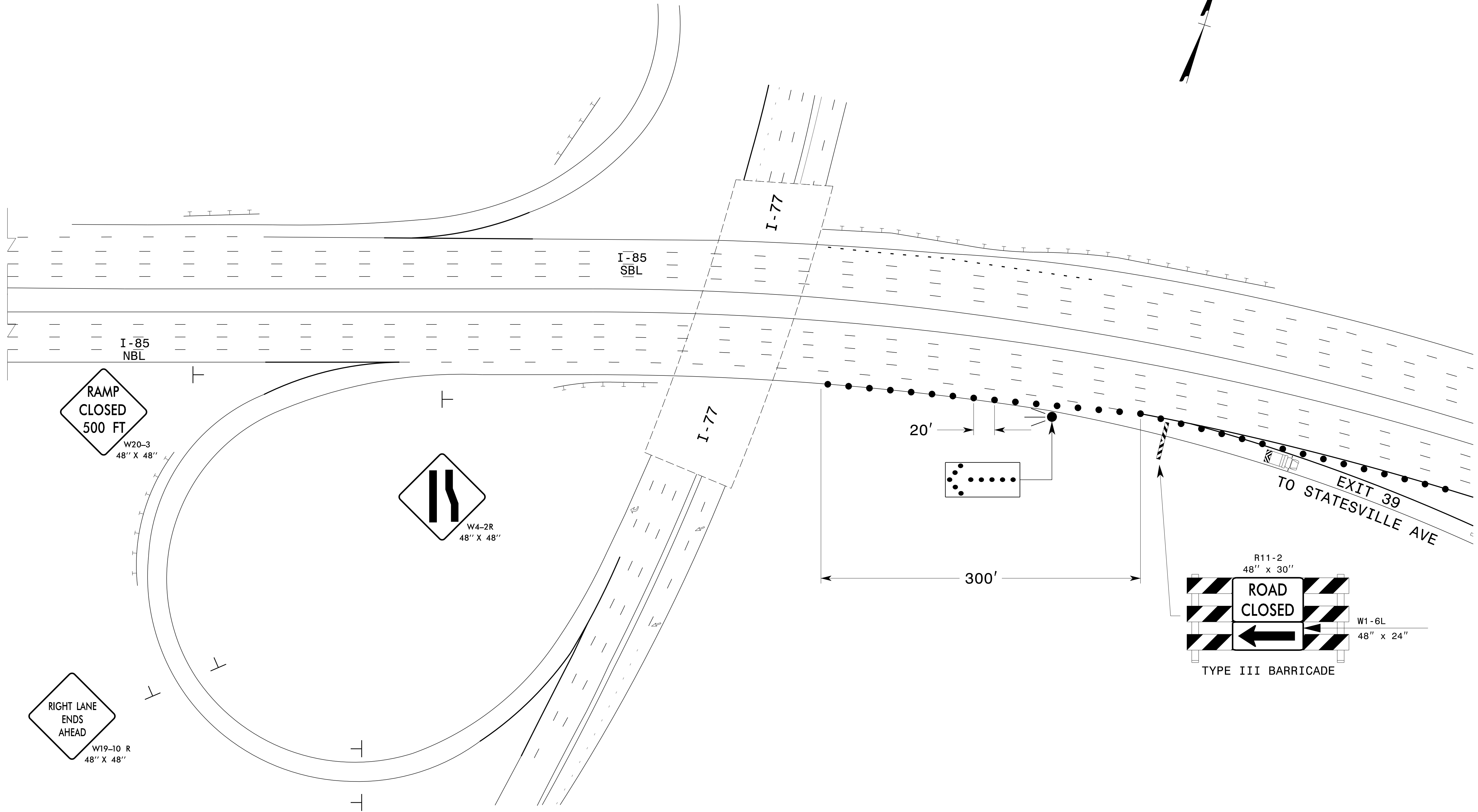


NOT TO SCALE

OFF-SITE DETOUR

I-85 NORTH RAMP - MAP 15

I:\14\2020\DOT\chrisroot\01NProj\Store\Div\Proj\Division\05905\Traffic\TrafficControl\TCP\DCNN\I-5905-TC-TMP-4_I5Ramp-DeTour_85.dgn
 User: jdbeaver1



RAMP
CLOSED
500 FT
W20-3
48" X 48"

W4-2R
48" X 48"

RIGHT LANE
ENDS
AHEAD
W19-10 R
48" X 48"

ROAD
WORK
AHEAD
W20-1
48" X 48"

20'

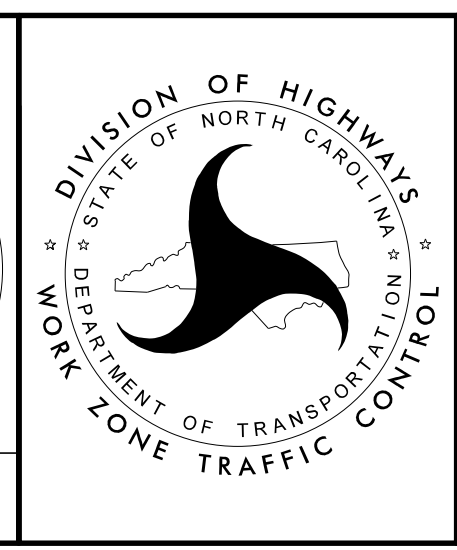
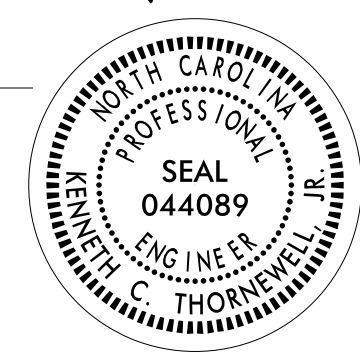
300'

R11-2
48" x 30"
ROAD
CLOSED
W1-6L
48" x 24"
TYPE III BARRICADE

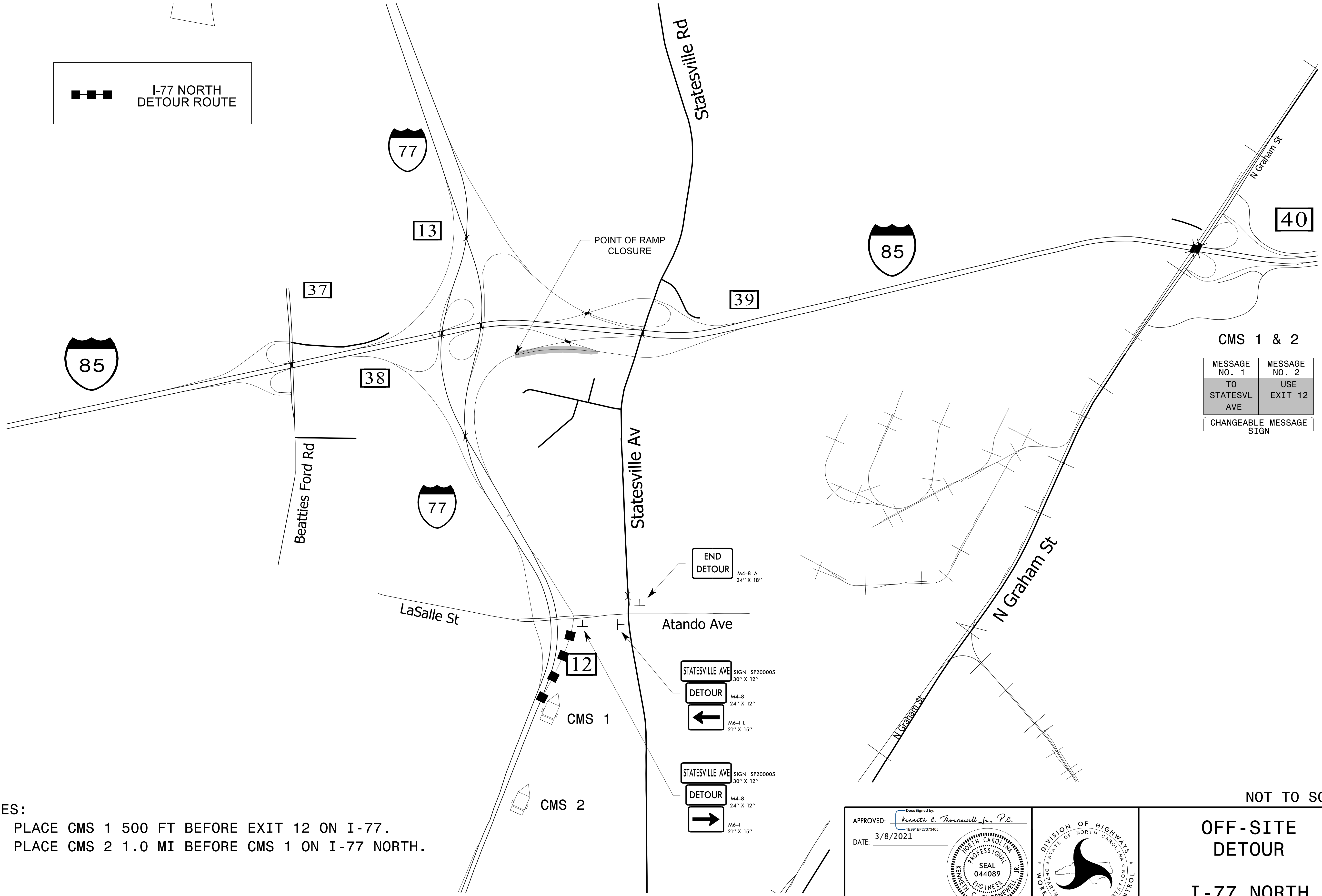
EXIT 39
TO STATESVILLE AVE

I:\8\2020\dot\dfsroot\01NPrj\Store\Div\Proj\Division\5905\TrafficControl\TCP\DCNN\I-5905_TC_TMP-5_AuxiliaryLaneDetail.dgn
 User: jbeaver1

APPROVED: *Kenneth C. Thornwell Jr., P.E.*
 DATE: 1/8/2020
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 UNLESS ALL SIGNATURES COMPLETED



I-77 SOUTH
 EXIT 13A
 AUXILIARY LANE CLOSURE
 RAMP DETAIL



CMS 1 & 2

MESSAGE NO. 1	MESSAGE NO. 2
TO STATESVL AVE	USE EXIT 12
CHANGEABLE MESSAGE SIGN	

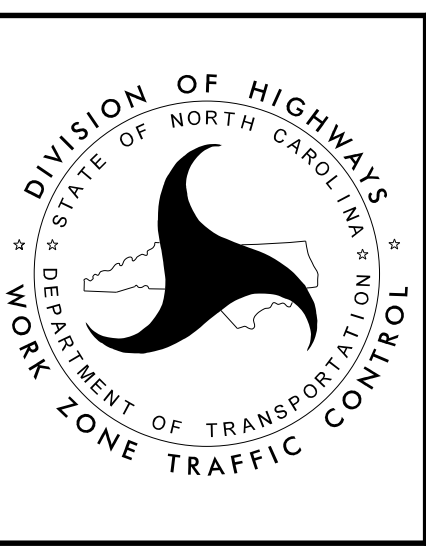
NOTES:

1. PLACE CMS 1 500 FT BEFORE EXIT 12 ON I-77.
2. PLACE CMS 2 1.0 MI BEFORE CMS 1 ON I-77 NORTH.

NOT TO SCALE

APPROVED: *Kenneth C. Thornwell Jr., P.E.*
1E991EP27373405
 DATE: 3/8/2021

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UNLESS ALL SIGNATURES COMPLETED**

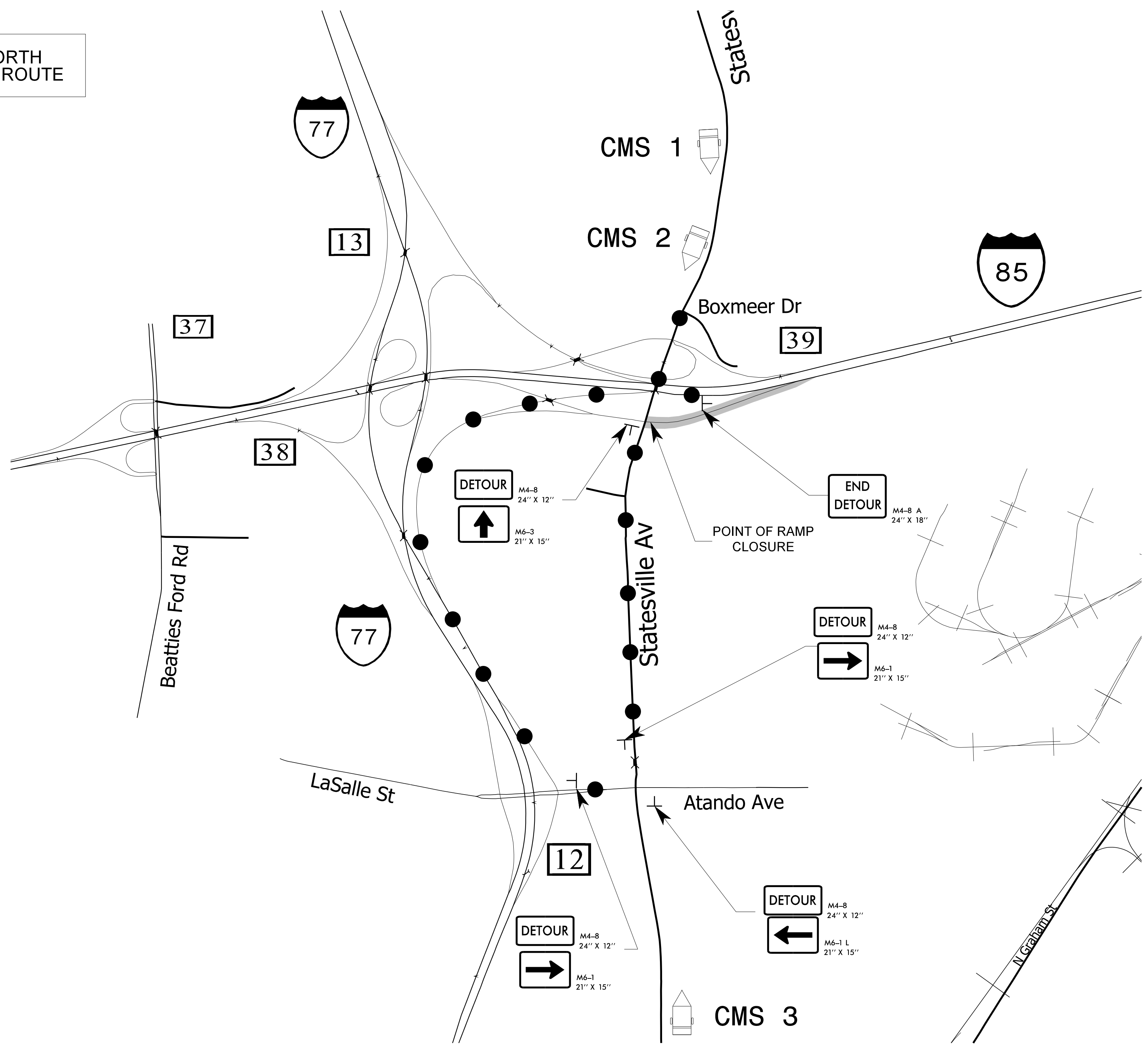


**OFF-SITE
DETOUR**

**I-77 NORTH
RAMP- MAP 15**

I:\14\2020\1401\chfsr\001\NPrj\Store\Div\Proj\Division\5905\Traffic\TrafficControl\TCP\DCNN\I-5905_TC_TMP-6_I5Ramp-Detour_77.dgn
 User: jdbaver1

●●● I-85 NORTH
DETOUR ROUTE



CMS 1

MESSAGE NO. 1	MESSAGE NO. 2
RAMP TO I-85N CLOSED	FOLLOW DETOUR ROUTE

CHANGEABLE MESSAGE SIGN

CMS 2

MESSAGE NO. 1	MESSAGE NO. 2
RAMP TO I-85N CLOSED	TO I-85N KEEP STRAIGHT

CHANGEABLE MESSAGE SIGN

CMS 3

MESSAGE NO. 1	MESSAGE NO. 2
RAMP TO I-85N CLOSED	USE I-77 N

CHANGEABLE MESSAGE SIGN

- NOTES:**
1. PLACE CMS 2 0.5 MILE FROM BOXMEER DR.
 2. PLACE CMS 1 1 MILE FROM CMS 2.
 3. PLACE CMS 3 1 MILE FROM ATANDO AVE.

NOT TO SCALE

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DATE: 1/8/2020

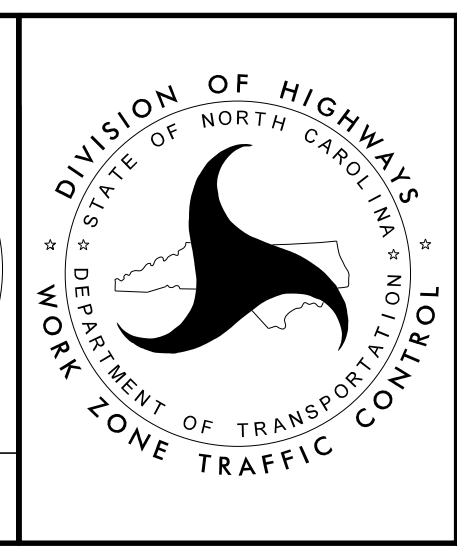
1E091EF27373405

SEAL 044089

ENGINEER

THORNWELL

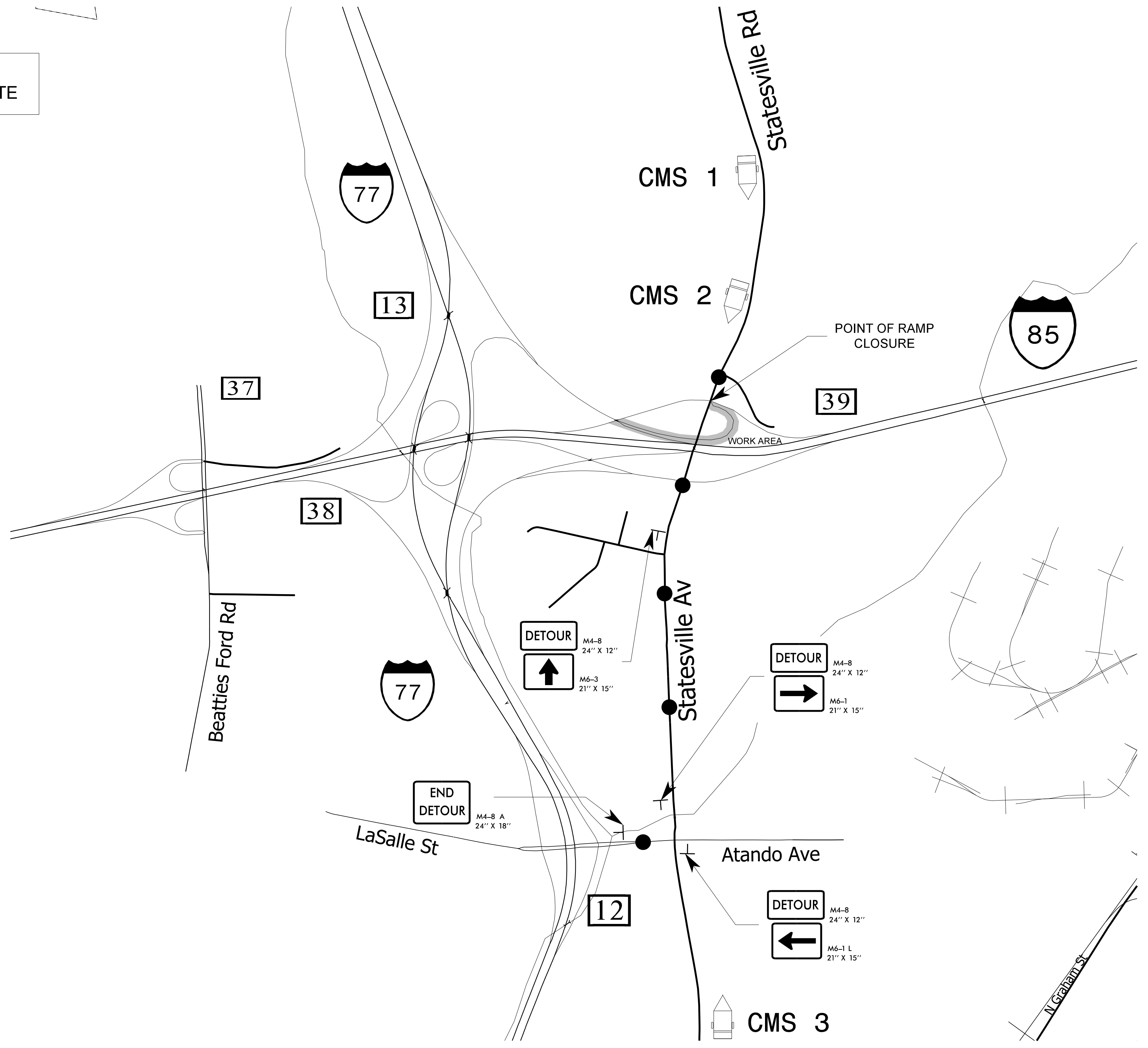
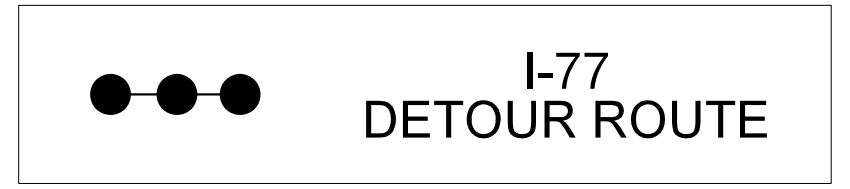
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UNLESS ALL SIGNATURES COMPLETED**



**OFF-SITE
DETOUR**

**I-85 NORTH
RAMP - MAP 16**

I:\8\2020\1\8\2020\dfs\root\01N\Proj\Store\Div\Proj\Division\5905\TrafficControl\TCP\DCNN\5905\TC_TMP-7_16Ramp-Detour.dgn User:tmkelly



CMS 1

MESSAGE NO. 1	MESSAGE NO. 2
RAMP TO I-77 CLOSED	FOLLOW DETOUR 1 MILE

CHANGEABLE MESSAGE SIGN

CMS 2

MESSAGE NO. 1	MESSAGE NO. 2
RAMP TO I-77 CLOSED	TO I-77 KEEP STRAIGHT

CHANGEABLE MESSAGE SIGN

CMS 3

MESSAGE NO. 1	MESSAGE NO. 2
TO I-77	FOLLOW DETOUR 1 MILE

CHANGEABLE MESSAGE SIGN

- NOTES:
1. PLACE CMS 2 0.5 MILE FROM BOXMEER DR.
 2. PLACE CMS 1 1 MILE FROM CMS 2.
 3. PLACE CMS 3 1 MILE FROM ATANDO AVE.

NOT TO SCALE

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1E091EF27373405
 DATE: 1/8/2020

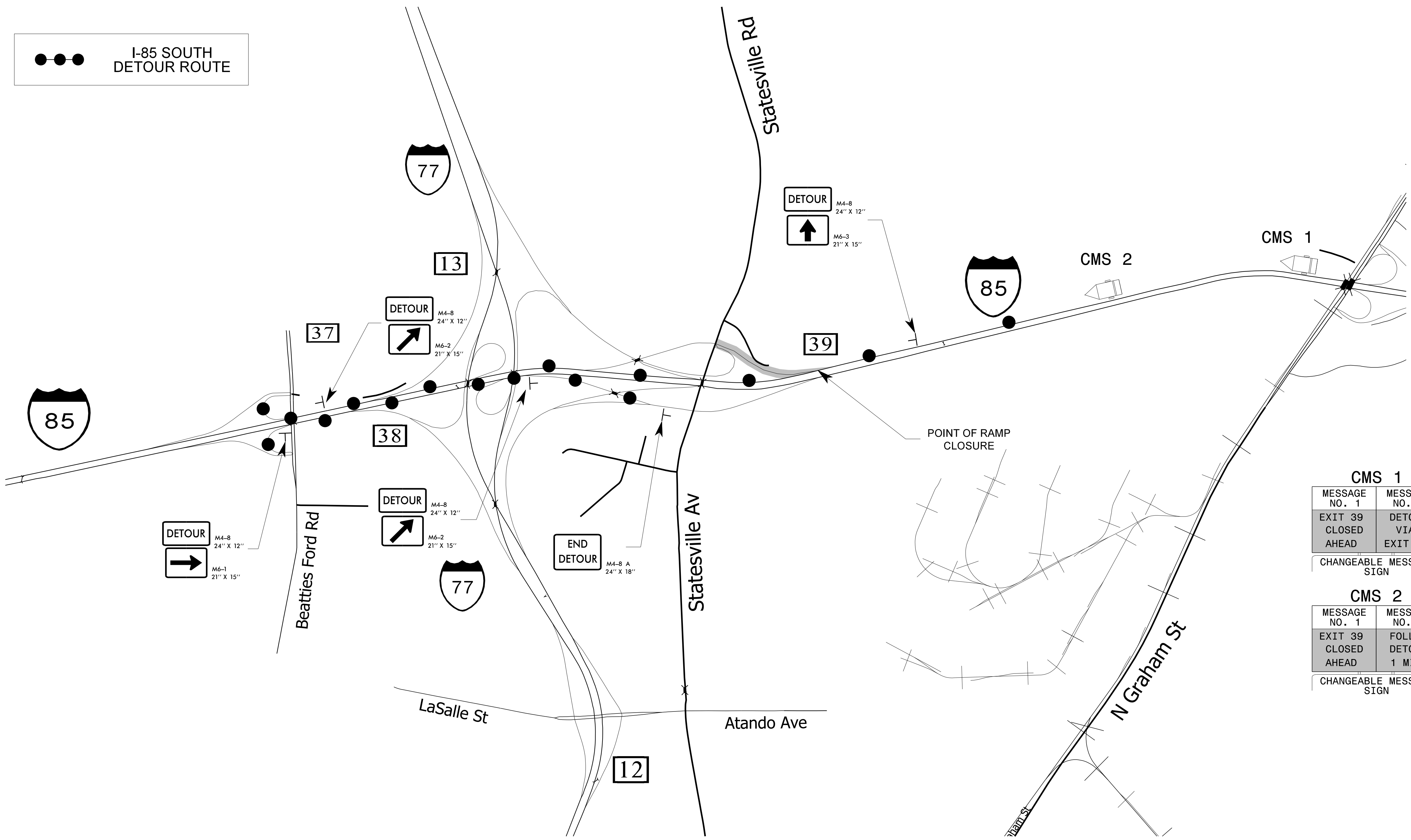
**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**



**OFF-SITE
DETOUR**

**I-77 NORTH
RAMP - MAP 17**

I:\8\2020\1\dot\dfsroot\01NPrj\Store\Div\Proj\Division\5905\TrafficControl\TCP\DCNN\I-5905_TC_TMP-8_I7Ramp-DeTour.dgn
 User: jdbeaver1



CMS 1	
MESSAGE NO. 1	MESSAGE NO. 2
EXIT 39 CLOSED AHEAD	DETOUR VIA EXIT 37
CHANGEABLE MESSAGE SIGN	

CMS 2	
MESSAGE NO. 1	MESSAGE NO. 2
EXIT 39 CLOSED AHEAD	FOLLOW DETOUR 1 MILE
CHANGEABLE MESSAGE SIGN	

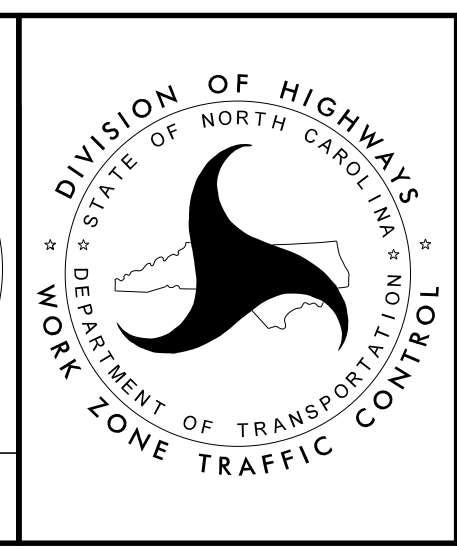
- NOTES:
1. PLACE CMS 2 1 MILE FROM EXIT 39.
 2. PLACE CMS 1 0.25 MILE FROM CMS 2.

I:\8\2020\dot\dfsroot\01NPrj\Store\Div\Proj\Division\5905\TrafficControl\TCP\DCNN\I-5905_TC_TMP-9_I85Ramp-Detour.dgn
 User: jbeaver1

APPROVED: *Kenneth C. Thornwell, P.E.*
 DATE: 1/8/2020

SEAL 044089
 ENGINEER
 KENNETH C. THORNWELL

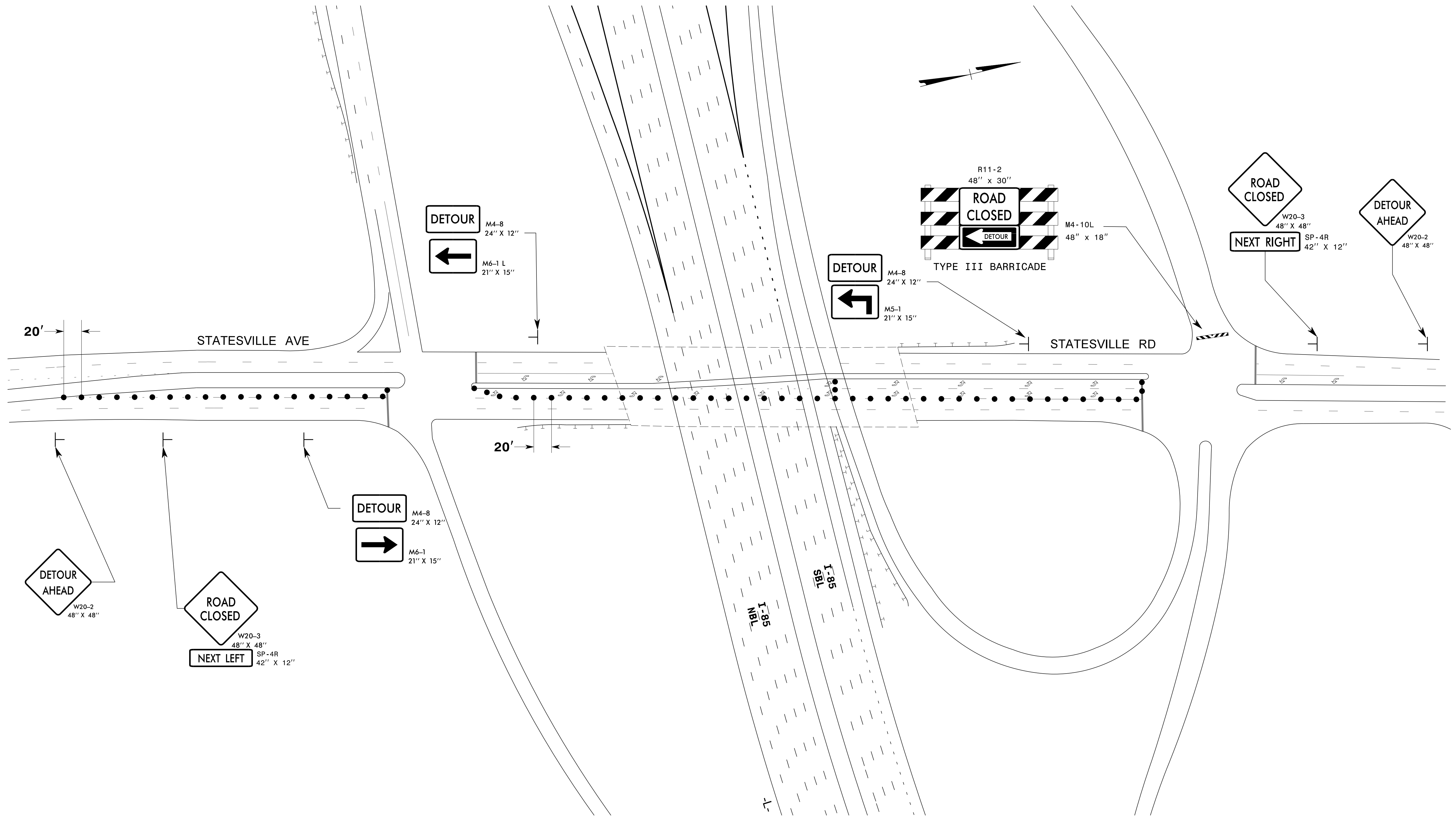
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NOT TO SCALE

**OFF-SITE
 DETOUR**

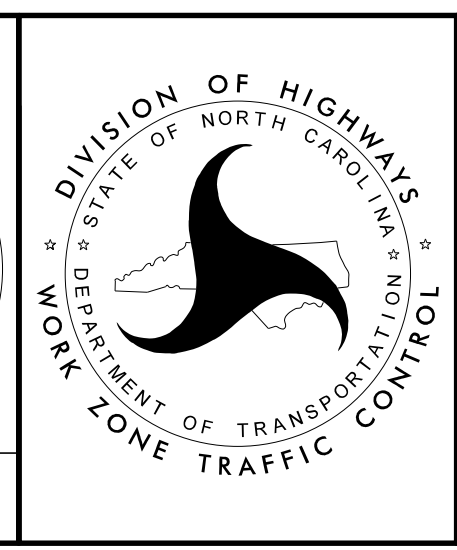
**I-85 SOUTH
 RAMP - MAP 18**



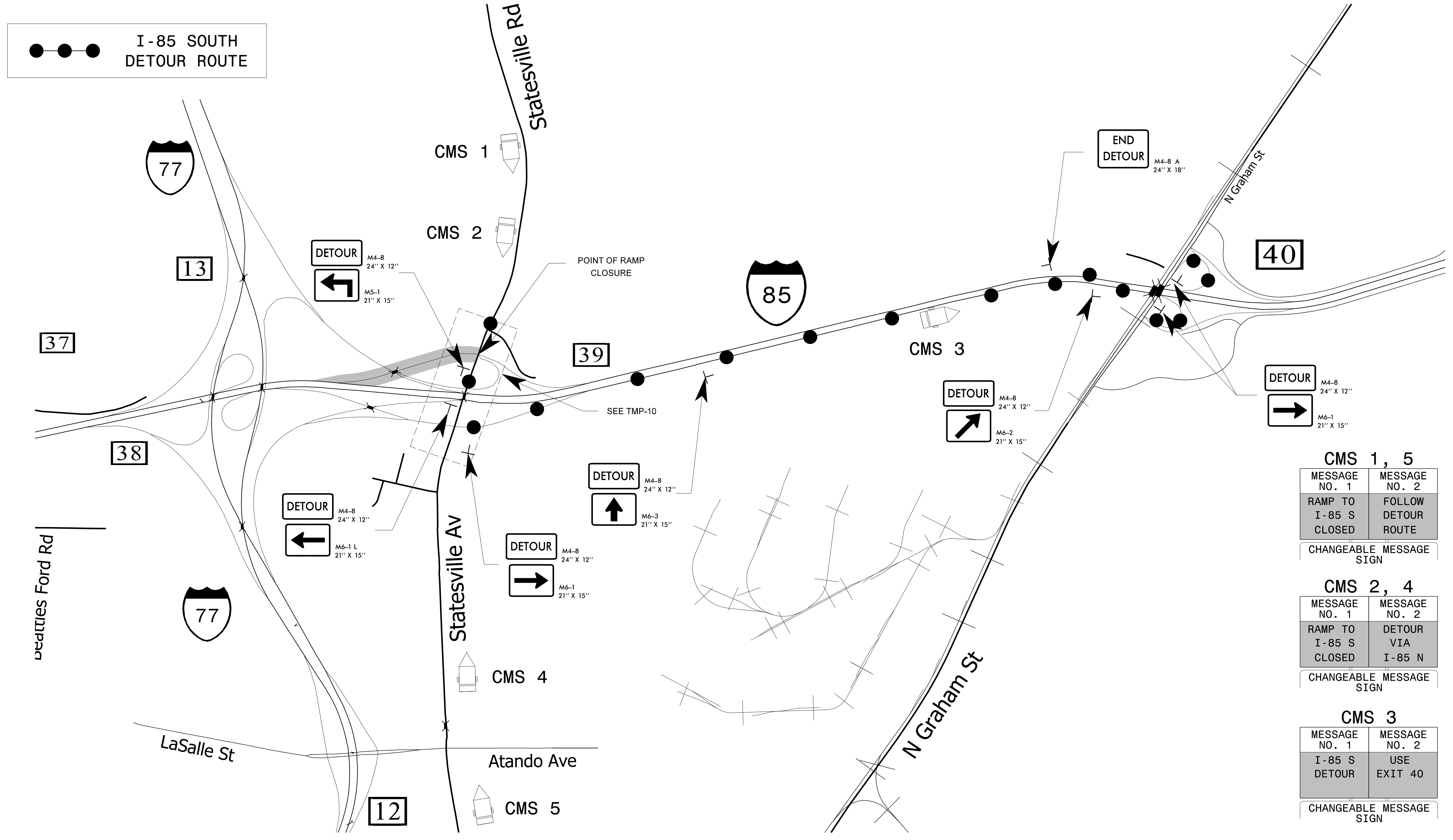
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 User: jdbeaver1

APPROVED: *Kenneth C. Thornwell Jr., P.E.*
1E991EP27373405
 DATE: 3/8/2021

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MAP 19
TURN LANE CLOSURE
DETAIL



CMS 1, 5

MESSAGE NO. 1	MESSAGE NO. 2
RAMP TO I-85 S CLOSED	FOLLOW DETOUR ROUTE

CHANGEABLE MESSAGE SIGN

CMS 2, 4

MESSAGE NO. 1	MESSAGE NO. 2
RAMP TO I-85 S CLOSED	DETOUR VIA I-85 N

CHANGEABLE MESSAGE SIGN

CMS 3

MESSAGE NO. 1	MESSAGE NO. 2
I-85 S DETOUR	USE EXIT 40

CHANGEABLE MESSAGE SIGN

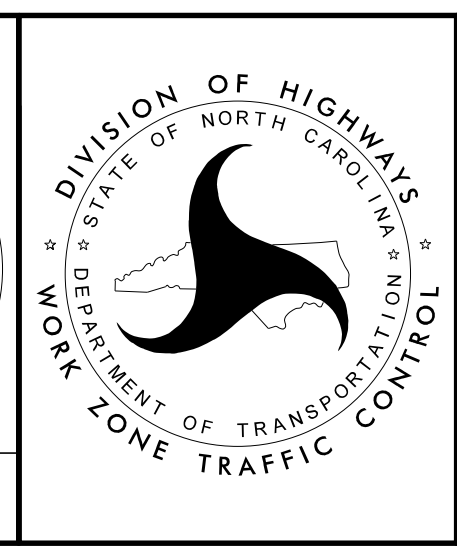
- NOTES:**
1. PLACE CMS 2 0.5 MILE FROM BOXMEER.
 2. PLACE CMS 1 1 MILE FROM CMS 2.
 3. PLACE CMS 3 0.5 MILE FROM EXIT 40.
 4. PLACE CMS 4 0.25 MILE NORTH OF ATANDO AVE.
 5. PLACE CMS 5 0.5 MILE FROM CMS 4

APPROVED: *Kenneth C. Thornwell, Jr., P.E.*
 DATE: 1/8/2020

DocuSigned by:
 Kenneth C. Thornwell, Jr., P.E.
 1E091EF27373405

SEAL
 044089
 ENGINEER
 KENNETH C. THORNWELL, JR., P.E.

DOCUMENT NOT CONSIDERED FINAL
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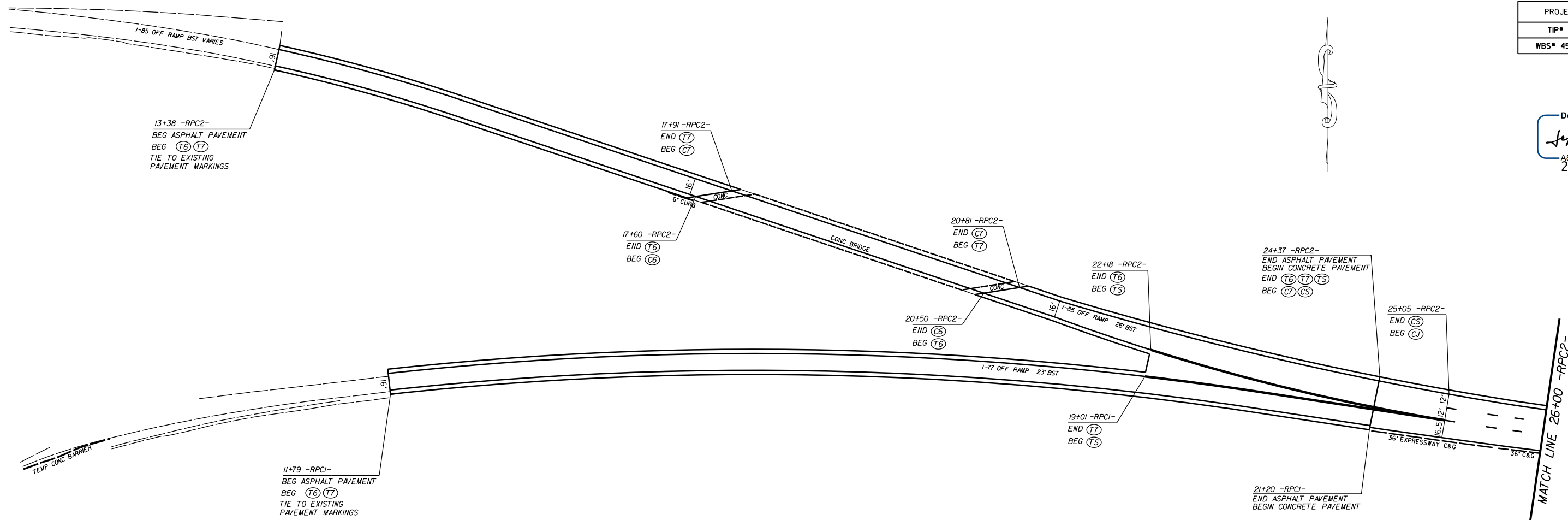


NOT TO SCALE

**OFF-SITE
 DETOUR**

**I-85 SOUTH
 RAMP - MAP 19**

I:\8/2020\dot\dfs\root\01NProj\Store\Div\Proj\Division\5905\TrafficControl\TCP\DCNN\I-5905-TC-TMP-IL19Ramp-DeTour.dgn
 User: jdbeaver1



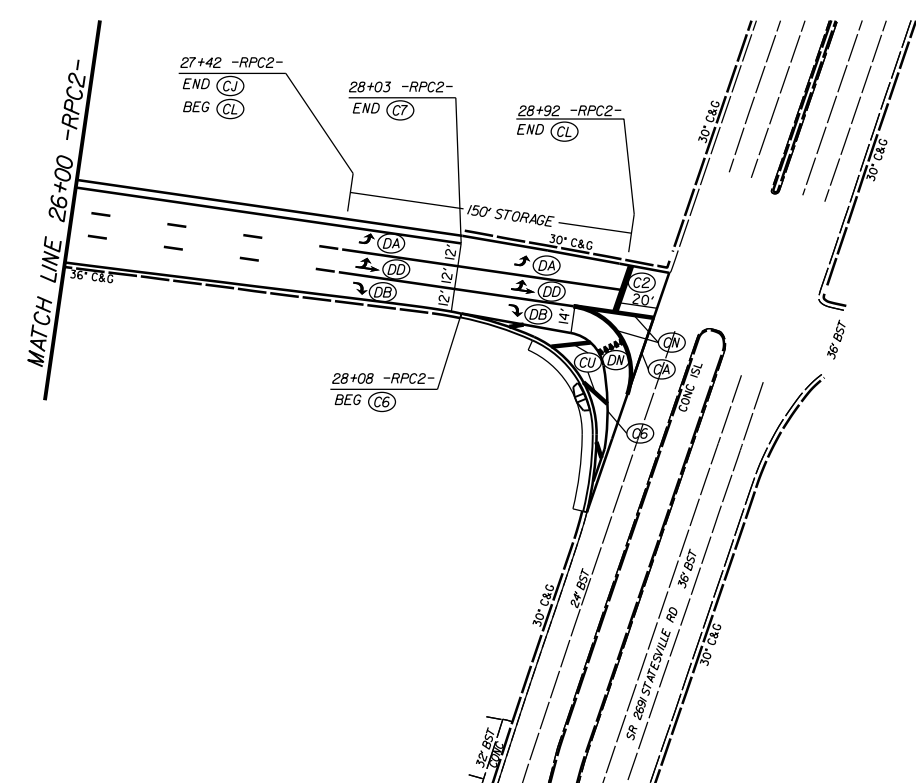
PAVEMENT MARKING SCHEDULE

THERMOPLASTIC MARKING LINES

- | | |
|--|---|
| TA - WHITE EDGELINE (4'.90 MIL) | TU - WHITE DIAGONAL (12'.90 MIL) |
| TB - YELLOW EDGELINE (4'.90 MIL) | TV - YELLOW DIAGONAL (12'.90 MIL) |
| TC - 10FT. WHITE SKIP (4'.90 MIL) | TI - WHITE LINE, RR X (16'.90 MIL) |
| TD - 3FT.-9FT./SP WHITE MINISKIP (4'.90 MIL) | T2 - WHITE STOPBAR (24'.90 MIL) |
| TE - WHITE SOLID LANE LINE (4'.90 MIL) | T3 - WHITE CROSSWALK LINE (24'.90 MIL) |
| TF - 10FT. YELLOW SKIP (4'.90 MIL) | T4 - WHITE RUMBLE STRIP (4'.240 MIL) |
| TH - YELLOW SINGLE CENTER (4'.90 MIL) | T5 - YELLOW RUMBLE STRIP (4'.240 MIL) |
| TI - YELLOW DOUBLE CENTER (4'.90 MIL) | T6 - WHITE EDGELINE (16'.90 MIL) |
| TJ - 10FT. WHITE SKIP (6'.90 MIL) | TT - YELLOW EDGELINE (16'.90 MIL) |
| TK - 3FT.-9FT./SP WHITE MINISKIP (6'.90 MIL) | T8 - 2FT.-6FT./SP WHITE MINISKIP (4'.90 MIL) |
| TL - WHITE SOLID LANE LINE (16'.90 MIL) | T9 - 2FT.-6FT./SP YELLOW MINISKIP (4'.90 MIL) |
| TM - 10FT. YELLOW SKIP (6'.90 MIL) | T10 - 3FT.-3FT./SP WHITE MINISKIP (12'.90 MIL) |
| TN - WHITE GORELINE (8'.90 MIL) | T11 - 2FT.-6FT./SP WHITE MINISKIP (6'.90 MIL) |
| TO - WHITE DIAGONAL (8'.90 MIL) | T12 - 2FT.-6FT./SP YELLOW MINISKIP (6'.90 MIL) |
| TP - YELLOW DIAGONAL (8'.90 MIL) | T13 - 3FT.-9FT./SP WHITE MINISKIP (8'.90 MIL) |
| TQ - WHITE CROSSWALK LINE (8'.90 MIL) | T14 - 3FT.-9FT./SP WHITE MINISKIP (12'.90 MIL) |
| TR - WHITE SOLID LANE LINE (8'.90 MIL) | T15 - YELLOW SINGLE CENTER (6'.90 MIL) |
| TS - WHITE GORELINE (12'.90 MIL) | T16 - YELLOW DOUBLE CENTER (6'.90 MIL) |
| TT - WHITE SOLID LANE LINE (12'.90 MIL) | T17 - 3FT.-3FT./SP WHITE MINISKIP ENTRANCE LINE (8'.90 MIL) |

THERMOPLASTIC MARKING SYMBOLS

- | | |
|--|--|
| UA - LEFT TURN ARROW (90 MIL) | UU - FISH-HOOK STRAIGHT ARROW (90 MIL) |
| UB - RIGHT TURN ARROW (90 MIL) | UV - FISH-HOOK LEFT/STRAIGHT ARROW (90 MIL) |
| UC - STRAIGHT ARROW (90 MIL) | UW - FISH-HOOK RIGHT/STRAIGHT ARROW (90 MIL) |
| UD - COMBO. LEFT/STRAIGHT ARROW (90 MIL) | UX - FISH-HOOK LEFT/RIGHT ARROW (90 MIL) |
| UE - COMBO. RIGHT/STRAIGHT ARROW (90 MIL) | UY - FISH-HOOK LEFT/RIGHT/STRAIGHT ARROW (90 MIL) |
| UF - COMBO. LEFT/RIGHT ARROW (90 MIL) | UZ - FISH-HOOK W/CIRCLE STRAIGHT ARROW (90 MIL) |
| UG - COMBO. LEFT/RIGHT/STRAIGHT ARROW (90 MIL) | |
| UH - HANDICAP PARKING (90 MIL) | YA - FISH-HOOK W/CIRCLE LEFT ARROW (90 MIL) |
| UI - ALPHANUMERIC CHAR. (90 MIL) | YB - FISH-HOOK W/CIRCLE LEFT/STRAIGHT ARROW (90 MIL) |
| UJ - BICYCLE SYMBOL (90 MIL) | YC - FISH-HOOK W/CIRCLE LEFT/RIGHT/STRAIGHT ARROW (90 MIL) |
| UK - BICYCLE STRAIGHT ARROW (90 MIL) | YD - COMBO. LEFT/U-TURN ARROW (90 MIL) |
| UL - BICYCLE CHAR. (90 MIL) | MA - PERMANENT RAISED MARKER (YELLOW & YELLOW) |
| UM - 12" YIELD LINE TRIANGLE (90 MIL) | MB - PERMANENT RAISED MARKER (CRYSTAL & RED) |
| UN - 24" YIELD LINE TRIANGLE (90 MIL) | MC - PERMANENT RAISED MARKER (YELLOW & RED) |
| UO - BICYCLE LEFT ARROW (90 MIL) | MD - PERMANENT RAISED MARKER (YELLOW) |
| UP - MERGE ARROW (90 MIL) | ME - SNOWPLOWABLE MARKER (YELLOW & YELLOW) |
| UQ - RAMP ARROW SYMBOL (90 MIL) | MF - SNOWPLOWABLE MARKER (CRYSTAL & RED) |
| UR - SHARROW (90 MIL) | MG - SNOWPLOWABLE MARKER (YELLOW & RED) |
| US - BICYCLE LOOP DETECTOR (90 MIL) | ML - PERMANENT RAISED MARKER (CRYSTAL & CRYSTAL) |
| UT - U-TURN ARROW (90 MIL) | MO - SNOWPLOWABLE MARKER (CRYSTAL & CRYSTAL) |



COLD APPLIED PLASTIC MARKING LINES

- | | |
|---------------------------------------|---|
| CA - WHITE EDGELINE (4') | CU - WHITE DIAGONAL (12') |
| CB - YELLOW EDGELINE (4') | CV - YELLOW DIAGONAL (12') |
| CC - 10FT. WHITE SKIP (4') | CW - WHITE LINE, RR X (16') |
| CD - 3FT.-9FT./SP WHITE MINISKIP (4') | CX - WHITE STOPBAR (24') |
| CE - WHITE SOLID LANE LINE (4') | CY - WHITE CROSSWALK LINE (24') |
| CF - 10FT. YELLOW SKIP (4') | CZ - WHITE RUMBLE STRIP (4') |
| CH - YELLOW SINGLE CENTER (4') | CA - WHITE RUMBLE STRIP (4') |
| CI - YELLOW DOUBLE CENTER (4') | CB - YELLOW RUMBLE STRIP (4') |
| CJ - 10FT. WHITE SKIP (6') | CC - WHITE EDGELINE (6') |
| CK - 3FT.-9FT./SP WHITE MINISKIP (6') | CD - YELLOW EDGELINE (6') |
| CL - WHITE SOLID LANE LINE (6') | CE - 2FT.-6FT./SP WHITE MINISKIP (4') |
| CM - 10FT. YELLOW SKIP (6') | CF - 2FT.-6FT./SP WHITE MINISKIP (4') |
| CN - WHITE GORELINE (8') | CG - 3FT.-3FT./SP WHITE MINISKIP (12') |
| CO - WHITE DIAGONAL (8') | CH - 2FT.-6FT./SP WHITE MINISKIP (6') |
| CP - YELLOW DIAGONAL (8') | CI - 2FT.-6FT./SP YELLOW MINISKIP (6') |
| CQ - WHITE CROSSWALK LINE (8') | CJ - 3FT.-9FT./SP WHITE MINISKIP (8') |
| CR - WHITE SOLID LANE LINE (8') | CK - 3FT.-9FT./SP WHITE MINISKIP (12') |
| CS - WHITE GORELINE (12') | CL - YELLOW SINGLE CENTER (6') |
| CT - WHITE SOLID LANE LINE (12') | CM - YELLOW DOUBLE CENTER (6') |
| | CN - 3FT.-3FT./SP WHITE MINISKIP ENTRANCE LINE (8') |

COLD APPLIED PLASTIC MARKING SYMBOLS

- | | |
|---------------------------------------|---|
| DA - LEFT TURN ARROW | DJ - FISH-HOOK STRAIGHT ARROW |
| DB - RIGHT TURN ARROW | DK - FISH-HOOK LEFT/STRAIGHT ARROW |
| DC - STRAIGHT ARROW | DL - FISH-HOOK RIGHT/STRAIGHT ARROW |
| DD - COMBO. LEFT/STRAIGHT ARROW | DM - FISH-HOOK LEFT/RIGHT ARROW |
| DE - COMBO. RIGHT/STRAIGHT ARROW | DN - FISH-HOOK LEFT/RIGHT/STRAIGHT ARROW |
| DF - COMBO. LEFT/RIGHT ARROW | DO - FISH-HOOK LEFT/RIGHT/STRAIGHT ARROW |
| DG - COMBO. LEFT/RIGHT/STRAIGHT ARROW | DX - FISH-HOOK W/CIRCLE LEFT ARROW |
| DH - HANDICAP PARKING | DY - FISH-HOOK W/CIRCLE LEFT/STRAIGHT ARROW |
| DI - ALPHANUMERIC CHAR. | DZ - FISH-HOOK W/CIRCLE LEFT/RIGHT/STRAIGHT ARROW |
| DJ - BICYCLE SYMBOL | XA - FISH-HOOK W/CIRCLE LEFT ARROW |
| DK - BICYCLE STRAIGHT ARROW | XB - FISH-HOOK W/CIRCLE LEFT/STRAIGHT ARROW |
| DL - BICYCLE CHAR. | XC - FISH-HOOK W/CIRCLE LEFT/RIGHT/STRAIGHT ARROW |
| DM - 12" YIELD LINE TRIANGLE | XD - COMBO. LEFT/U-TURN ARROW |
| DN - 24" YIELD LINE TRIANGLE | |
| DO - BICYCLE LEFT ARROW | |
| DP - MERGE ARROW | |
| DQ - RAMP ARROW SYMBOL | |
| DR - SHARROW | |
| DS - BICYCLE LOOP DETECTOR | |
| DT - U-TURN ARROW | |

NOTES:
 -USE TYPE 2 - PERMANENT HIGH PERFORMANCE TAPE (STANDARD 1205-6)
 -WHITE TAPE SHALL HAVE A CONTRASTING BLACK BORDER

I-85 PAVEMENT PRESERVATION
 MECKLENBURG COUNTY

SCALE	1"=50'		REVISIONS
DATE	1-2020		
DWG. BY	TBL		
DESIGN BY	TBL		
APPROVED	JHE		

PAVEMENT MARKING SCHEDULE

THERMOPLASTIC MARKING LINES

- TA - WHITE EDGELINE (4',.90 MIL)
- TB - YELLOW EDGELINE (4',.90 MIL)
- TC - 10FT. WHITE SKIP (4',.90 MIL)
- TD - 3FT.-9FT./SP WHITE MINISKIP (4',.90 MIL)
- TE - WHITE SOLID LANE LINE (4',.90 MIL)
- TF - 10FT. YELLOW SKIP (4',.90 MIL)
- TH - YELLOW SINGLE CENTER (4',.90 MIL)
- TJ - YELLOW DOUBLE CENTER (4',.90 MIL)
- TK - 10FT. WHITE SKIP (6',.90 MIL)
- TL - 3FT.-9FT./SP WHITE MINISKIP (6',.90 MIL)
- TM - WHITE SOLID LANE LINE (6',.90 MIL)
- TN - 10FT. YELLOW SKIP (6',.90 MIL)
- TO - WHITE GORELINE (8',.90 MIL)
- TP - WHITE DIAGONAL (8',.90 MIL)
- TQ - YELLOW DIAGONAL (8',.90 MIL)
- TR - WHITE CROSSWALK LINE (8',.90 MIL)
- TS - WHITE SOLID LANE LINE (8',.90 MIL)
- TT - WHITE GORELINE (12',.90 MIL)
- TU - WHITE DIAGONAL (12',.90 MIL)
- TV - YELLOW DIAGONAL (12',.90 MIL)
- TI - WHITE LINE, RR X (16',.90 MIL)
- T2 - WHITE STOPBAR (24',.90 MIL)
- T3 - WHITE CROSSWALK LINE (24',.90 MIL)
- T4 - WHITE RUMBLE STRIP (4',.240 MIL)
- T5 - YELLOW RUMBLE STRIP (4',.240 MIL)
- T6 - WHITE EDGELINE (6',.90 MIL)
- T7 - YELLOW EDGELINE (6',.90 MIL)
- T8 - 2FT.-6FT./SP WHITE MINISKIP (4',.90 MIL)
- T9 - 2FT.-6FT./SP YELLOW MINISKIP (4',.90 MIL)
- T10 - 3FT.-3FT./SP WHITE MINISKIP (12',.90 MIL)
- T11 - 2FT.-6FT./SP WHITE MINISKIP (6',.90 MIL)
- T12 - 2FT.-6FT./SP YELLOW MINISKIP (6',.90 MIL)
- T13 - 3FT.-9FT./SP WHITE MINISKIP (8',.90 MIL)
- T14 - 3FT.-9FT./SP WHITE MINISKIP (12',.90 MIL)
- T15 - YELLOW SINGLE CENTER (6',.90 MIL)
- T16 - YELLOW DOUBLE CENTER (6',.90 MIL)
- T17 - 3FT.-3FT./SP WHITE MINISKIP ENTRANCE LINE (8',.90 MIL)

THERMOPLASTIC MARKING SYMBOLS

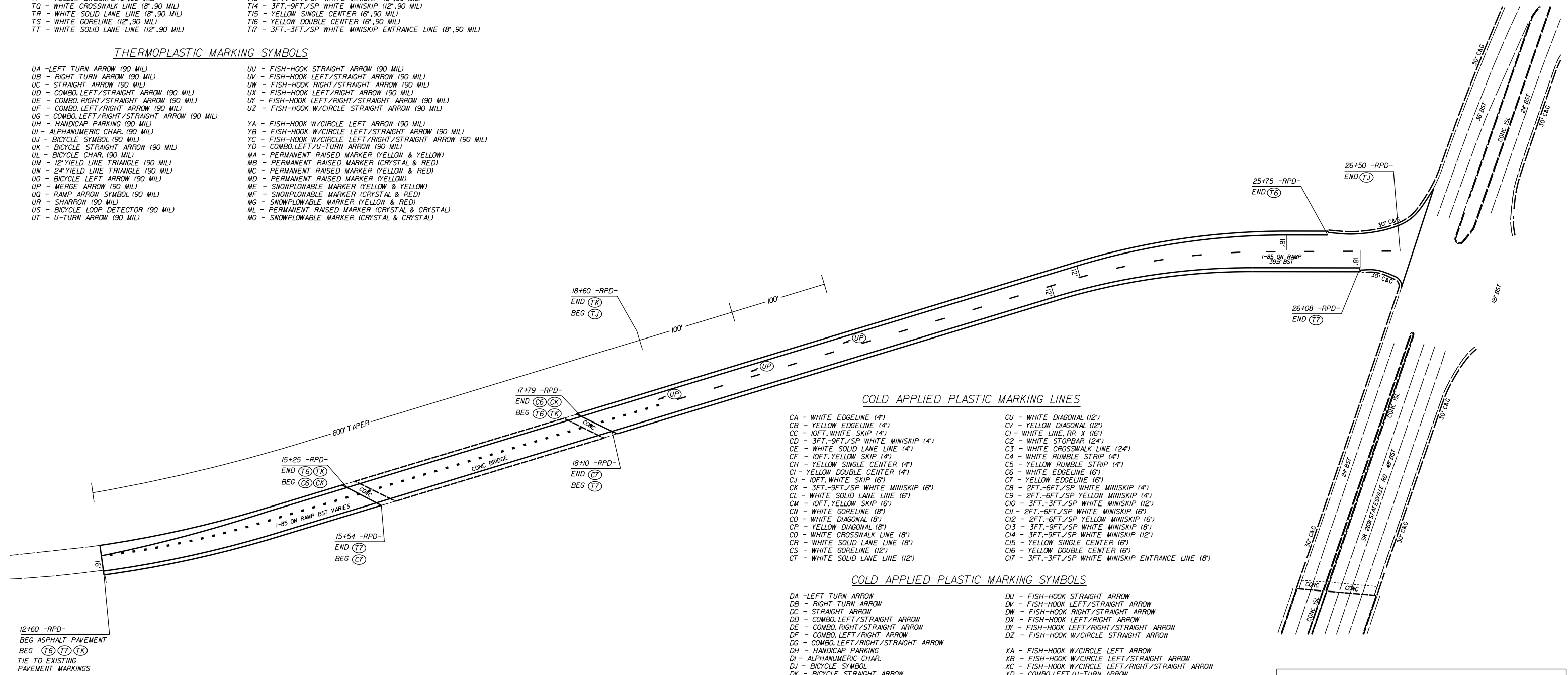
- UA - LEFT TURN ARROW (90 MIL)
- UB - RIGHT TURN ARROW (90 MIL)
- UC - STRAIGHT ARROW (90 MIL)
- UD - COMBO. LEFT/STRAIGHT ARROW (90 MIL)
- UE - COMBO. RIGHT/STRAIGHT ARROW (90 MIL)
- UF - COMBO. LEFT/RIGHT ARROW (90 MIL)
- UG - COMBO. LEFT/RIGHT/STRAIGHT ARROW (90 MIL)
- UH - HANDICAP PARKING (90 MIL)
- UI - ALPHANUMERIC CHAR. (90 MIL)
- UJ - BICYCLE SYMBOL (90 MIL)
- UK - BICYCLE STRAIGHT ARROW (90 MIL)
- UL - BICYCLE CHAR. (90 MIL)
- UM - 12" YIELD LINE TRIANGLE (90 MIL)
- UN - 24" YIELD LINE TRIANGLE (90 MIL)
- UO - BICYCLE LEFT ARROW (90 MIL)
- UP - MERGE ARROW (90 MIL)
- UR - RAMP ARROW SYMBOL (90 MIL)
- US - SHARROW (90 MIL)
- UT - BICYCLE LOOP DETECTOR (90 MIL)
- UV - FISH-HOOK STRAIGHT ARROW (90 MIL)
- UW - FISH-HOOK LEFT/STRAIGHT ARROW (90 MIL)
- UX - FISH-HOOK RIGHT/STRAIGHT ARROW (90 MIL)
- UY - FISH-HOOK LEFT/RIGHT/STRAIGHT ARROW (90 MIL)
- UZ - FISH-HOOK W/CIRCLE STRAIGHT ARROW (90 MIL)
- YA - FISH-HOOK W/CIRCLE LEFT ARROW (90 MIL)
- YB - FISH-HOOK W/CIRCLE LEFT/STRAIGHT ARROW (90 MIL)
- YC - FISH-HOOK W/CIRCLE LEFT/RIGHT/STRAIGHT ARROW (90 MIL)
- YD - COMBO. LEFT/U-TURN ARROW (90 MIL)
- MA - PERMANENT RAISED MARKER (YELLOW & YELLOW)
- MB - PERMANENT RAISED MARKER (CRYSTAL & RED)
- MC - PERMANENT RAISED MARKER (YELLOW & RED)
- MD - PERMANENT RAISED MARKER (YELLOW)
- ME - SNOWPLOWABLE MARKER (YELLOW & YELLOW)
- MF - SNOWPLOWABLE MARKER (CRYSTAL & RED)
- MG - SNOWPLOWABLE MARKER (YELLOW & RED)
- ML - PERMANENT RAISED MARKER (CRYSTAL & CRYSTAL)
- MO - SNOWPLOWABLE MARKER (CRYSTAL & CRYSTAL)

PROJECT NO.	SHEET NO.
TIP# I-5905	PMP-2
WBS# 45888.3.GVI	

ROADWAY DESIGN ENGINEER

SEAL

2/27/2020



COLD APPLIED PLASTIC MARKING LINES

- CA - WHITE EDGELINE (4')
- CB - YELLOW EDGELINE (4')
- CC - 10FT. WHITE SKIP (4')
- CD - 3FT.-9FT./SP WHITE MINISKIP (4')
- CE - WHITE SOLID LANE LINE (4')
- CF - 10FT. YELLOW SKIP (4')
- CH - YELLOW SINGLE CENTER (4')
- CI - YELLOW DOUBLE CENTER (4')
- CJ - 10FT. WHITE SKIP (6')
- CK - 3FT.-9FT./SP WHITE MINISKIP (6')
- CL - WHITE SOLID LANE LINE (6')
- CM - 10FT. YELLOW SKIP (6')
- CN - WHITE GORELINE (8')
- CO - WHITE DIAGONAL (8')
- CP - YELLOW DIAGONAL (8')
- CQ - WHITE CROSSWALK LINE (8')
- CR - WHITE SOLID LANE LINE (8')
- CS - WHITE GORELINE (12')
- CT - WHITE SOLID LANE LINE (12')
- CU - WHITE DIAGONAL (12')
- CV - YELLOW DIAGONAL (12')
- CI - WHITE LINE, RR X (16')
- C2 - WHITE STOPBAR (24')
- C3 - WHITE CROSSWALK LINE (24')
- C4 - WHITE RUMBLE STRIP (4')
- C5 - YELLOW RUMBLE STRIP (4')
- C6 - WHITE EDGELINE (6')
- C7 - YELLOW EDGELINE (6')
- C8 - 2FT.-6FT./SP WHITE MINISKIP (4')
- C9 - 2FT.-6FT./SP YELLOW MINISKIP (4')
- C10 - 3FT.-3FT./SP WHITE MINISKIP (12')
- C11 - 2FT.-6FT./SP WHITE MINISKIP (6')
- C12 - 2FT.-6FT./SP YELLOW MINISKIP (6')
- C13 - 3FT.-9FT./SP WHITE MINISKIP (8')
- C14 - 3FT.-9FT./SP WHITE MINISKIP (12')
- C15 - YELLOW SINGLE CENTER (6')
- C16 - YELLOW DOUBLE CENTER (6')
- C17 - 3FT.-3FT./SP WHITE MINISKIP ENTRANCE LINE (8')

COLD APPLIED PLASTIC MARKING SYMBOLS

- DA - LEFT TURN ARROW
- DB - RIGHT TURN ARROW
- DC - STRAIGHT ARROW
- DD - COMBO. LEFT/STRAIGHT ARROW
- DE - COMBO. RIGHT/STRAIGHT ARROW
- DF - COMBO. LEFT/RIGHT ARROW
- DG - COMBO. LEFT/RIGHT/STRAIGHT ARROW
- DH - HANDICAP PARKING
- DI - ALPHANUMERIC CHAR.
- DJ - BICYCLE SYMBOL
- DK - BICYCLE STRAIGHT ARROW
- DL - BICYCLE CHAR.
- DM - 12" YIELD LINE TRIANGLE
- DN - 24" YIELD LINE TRIANGLE
- DO - BICYCLE LEFT ARROW
- DP - MERGE ARROW
- DQ - RAMP ARROW SYMBOL
- DR - SHARROW
- DS - BICYCLE LOOP DETECTOR
- DT - U-TURN ARROW
- DU - FISH-HOOK STRAIGHT ARROW
- DV - FISH-HOOK LEFT/STRAIGHT ARROW
- DW - FISH-HOOK RIGHT/STRAIGHT ARROW
- DX - FISH-HOOK LEFT/RIGHT ARROW
- DY - FISH-HOOK LEFT/RIGHT/STRAIGHT ARROW
- DZ - FISH-HOOK W/CIRCLE STRAIGHT ARROW
- XA - FISH-HOOK W/CIRCLE LEFT ARROW
- XB - FISH-HOOK W/CIRCLE LEFT/STRAIGHT ARROW
- XC - FISH-HOOK W/CIRCLE LEFT/RIGHT/STRAIGHT ARROW
- XD - COMBO. LEFT/U-TURN ARROW

NOTES:
 -USE TYPE 2 - PERMANENT HIGH PERFORMANCE TAPE (STANDARD 1205-6)
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