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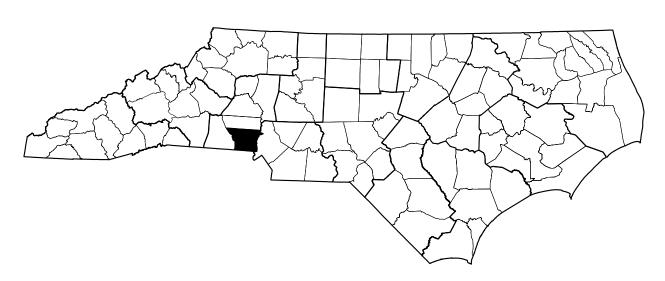
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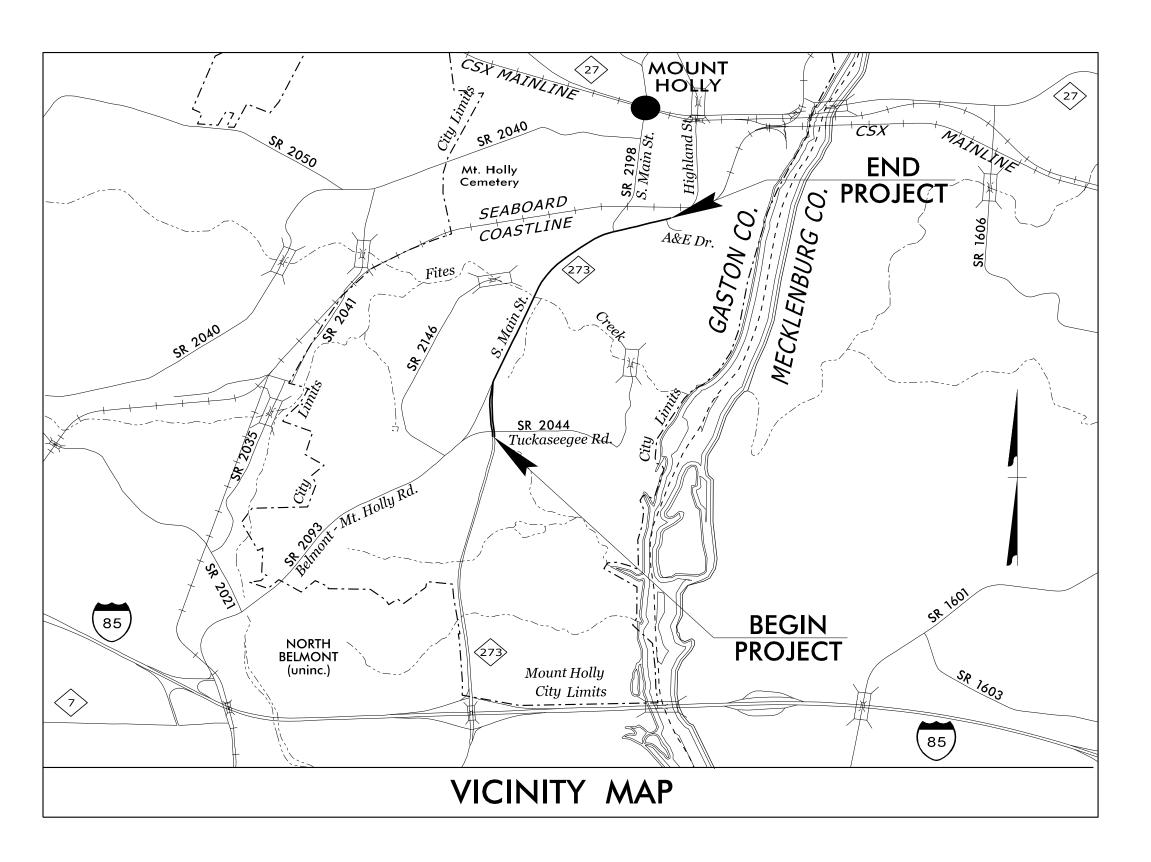
# TRANSPORTATION MANAGEMENT PLAN

# GASTON COUNTY

**DIVISION** 12



MOUNT HOLLY – NC 273 (SOUTH MAIN STREET) FROM TUCKASEEGEE ROAD AT BEATTY DRIVE TO HIGHLAND STREET AT A&E DRIVE



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

N.C.D.O.T. WORK ZONE TRAFFIC CONTROL

1561 MAIL SERVICE CENTER (MSC) RALEIGH, NC 27699-1561

750 N. GREENFIELD PARKWAY, GARNER, NC 27529 (DELIVERY)

PHONE: (919) 773-2800 FAX: (919) 771-2745

TRAFFIC CONTROL DESIGN ENGINEER

J. S. BOURNE, P.E. STATE TRAFFIC MANAGEMENT ENGINEER

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R. M. GARRETT TRAFFIC CONTROL PROJECT DESIGN ENGINEER

NORTH CARPOLLAR AND CONTRACTOR

# INDEX OF SHEETS

TITLE

SHEET NO.

TMP-1 TITLE SHEET, VICINITY MAP, AND INDEX OF SHEETS

TMP-1A LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, AND LEGEND

TMP-1B,1C GENERAL NOTES

TMP-2 PORTABLE CONCRETE BARRIER AT TEMPORARY SHORING LOCATIONS

TMP-2A,2B TEMPORARY SHORING NOTES

TMP-2C PORTABLE CONCRETE BARRIER APPROACH END TREATMENT

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TMP-7,7A-7C PHASE III

SHEET NO.

**TMP-1** 



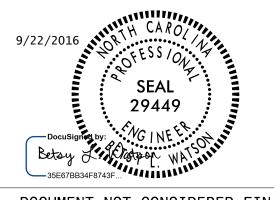
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BETSY L. WATSON, PE

SENIOR TRANSPORTATION ENGINEER

K. READ GENTRY

TRANSPORTATION DESIGNER



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# LEGEND

### PROJ. REFERENCE NO. SHEET NO. U-3633 TMP-1A

# 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 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.01	WORK ZONE ADVANCE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.05	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	WORK VEHICLE LIGHTING SYSTEMS AND TMA DELINEATION
1170.01	PORTABLE CONCRETE BARRIER
1180.01	SKINNY - DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO LANE AND MULTILANE ROADWAYS
1261.01	GUARDRAIL AND BARRIER DELINEATORS - INSTALLATION SPACING
1261.02	GUARDRAIL AND BARRIER DELINEATORS - TYPES AND MOUNTING

# MANAGEMENT STRATEGIES

CONSTRUCTION OF NC 273 WILL BE ACCOMPLISHED BY CONSTRUCTING THE NEW ROADWAY IN HALF SECTIONS WITH TRAFFIC MAINTAINED ON THE OPPOSITE SIDE. TEMPORARY LANE CLOSURES WITH PEAK HOUR RESTRICTIONS WILL BE UTILIZED.

TEMPORARY ROAD CLOSURES WITH OFFSITE DETOURS WILL BE UTILIZED FOR SUNSET DRIVE AND EAST CATAWBA DRIVE.

# TRAFFIC CONTROL DEVICES

**PREVIOUSLY** TEMPORARY **DEVICES PLACED** 

BARRICADE (TYPE III) 

CONE

FLASHING ARROW BOARD FLAGGER

LAW ENFORCEMENT

TRUCK MOUNTED ATTENUATOR (TMA)

CHANGEABLE MESSAGE SIGN TEMPORARY CRASH CUSHION  $\sim$ 

PORTABLE CONCRETE BARRIER

# PAVEMENT MARKINGS

———— EXISTING LINES

**PREVIOUSLY** TEMPORARY **PLACED** MARKINGS

**GENERAL** 

——— EXIST. PVMT.

NORTH ARROW

----- PROPOSED PVMT.

WORK AREA

PAVEMENT REMOVAL

TEMPORARY PAVEMENT

TEMPORARY ASPHALT PAD

SKIP LINES - - - - - - - MINISKIP LINES DOUBLE YELLOW LINES

———— EDGE LINE

DIRECTION OF TRAFFIC FLOW

TEMP. SHORING (LOCATION PURPOSES ONLY)

PREVIOUSLY STARTED / CONCURRENT CONSTRUCTION

STOP BAR

GORELINE

# PAVEMENT MARKING SYMBOLS

EXISTING PAVEMENT MARKING SYMBOLS (HOLLOW)

**PREVIOUSLY TEMPORARY PLACED** SYMBOLS

PAVEMENT MARKING SYMBOLS

PAVEMENT MARKING ALPHANUMERIC CHARACTERS

# TEMPORARY SIGNING

TEMPORARY <u>PREVIOUSLY</u> **PLACED** SIGNS

PORTABLE SIGN STATIONARY SIGN

SIGNALS

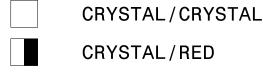
**TEMPORARY** EXISTING

# TEMPORARY PAVEMENT MARKING SCHEDULE

SYMBOL DESCIPTION 24" WHITE STOP BAR, PAINT 4" WHITE 2FT-6FT MINISKIP, PAINT 4" WHITE EDGE LINE, PAINT 4" YELLOW EDGE LINE, PAINT 4" WHITE 10FT SKIP LINE, PAINT 4" WHITE 3FT-9FT MINISKIP, PAINT 4" WHITE SOLID LANE LINE, PAINT 4" YELLOW DOUBLE CENTER LINE, PAINT 8" WHITE GORE LINE, PAINT 8" WHITE DIAGONAL, PAINT

8" YELLOW DIAGONAL, PAINT

# PAVEMENT MARKERS



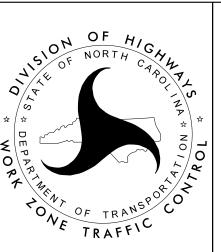
YELLOW/YELLOW



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ROADWAY STANDARD DRAWINGS, AND LEGEND

# GENERAL NOTES

PROJ. REFERENCE NO. SHEET NO. TMP - 1B

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:

ROAD NAME

DAY AND TIME RESTRICTIONS

ALL ROADS

6:00 A.M.-9:00 A.M. MONDAY THRU FRIDAY 3:00 P.M.-7:00 P.M. MONDAY THRU FRIDAY

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

ROAD NAME ALL ROADS

# HOLIDAY

- 1) FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
- 2) FOR NEW YEAR'S, BETWEEN THE HOURS OF 6:00 A.M. DECEMBER 31ST TO 7:00 P.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 7:00 P.M. THE FOLLOWING TUESDAY.
- 3) FOR EASTER, BETWEEN THE HOURS OF 6:00 A.M. THURSDAY AND 7:00 P.M. MONDAY.
- 4) FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY TO 7:00 P.M. TUESDAY.
- 5) FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 7:00 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 7:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.
- 6) FOR LABOR DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY AND 7:00 P.M. TUESDAY.
- 7) FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00 A.M. TUESDAY TO 7:00 P.M. MONDAY.
- 8) FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 7:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.
- 9) FOR ANY NASCAR RACE AT THE CHARLOTTE MOTOR SPEEDWAY, BETWEEN THE HOURS OF 6:00 A.M. THE WEDNESDAY BEFORE THE FIRST TRACK EVENT UNTIL 9:00 P.M. THE DAY AFTER THE LAST TRACK EVENT.
- C) DO NOT STOP TRAFFIC AS FOLLOWS:

ROAD NAME

DAY AND TIME

RESTRICTIONS

6:00 A.M.-11:00 P.M.

DURATION AND
OPERATION
15 MIN INTERVAL
OVERHEAD SIGNAL

D) DO NOT CONDUCT SINGLE VEHICLE HAULING AS FOLLOWS; INGRESS AND EGRESS FROM RAMPS (WILL OR WILL NOT) BE ALLOWED:

**ROAD NAME** 

DAY AND TIME RESTRICTIONS

ALL ROADS

6:00 A.M.-9:00 A.M. MONDAY THRU FRIDAY 3:00 P.M.-7:00 P.M. MONDAY THRU FRIDAY

E) DO NOT CONDUCT MULTI-VEHICLE HAULING AS FOLLOWS; INGRESS AND EGRESS FROM RAMPS (WILL OR WILL NOT) BE ALLOWED:

ROAD NAME

DAY AND TIME RESTRICTIONS

ALL ROADS

6:00 A.M.-9:00 A.M. MONDAY THRU FRIDAY 3:00 P.M.-7:00 P.M. MONDAY THRU FRIDAY

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

- G) 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.
- H) 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.
- I) 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.

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

L) 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) 500 FT IN ADVANCE AND A MINIMUM OF ONCE EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

### TRAFFIC PATTERN ALTERATIONS

N) NOTIFY THE ENGINEER TWENTY ONE (21) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

### SIGNING

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

## TRAFFIC BARRIER

INSTALL TEMPORARY BARRIER ACCORDING TO THE TRANSPORTATION MANAGEMENT PLANS A MAXIMUM OF TWO (2) WEEKS PRIOR TO BEGINNING WORK IN ANY LOCATION. ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION PROCEED IN A CONTINUOUS MANNER TO COMPLETE THE PROPOSED WORK IN THAT LOCATION UNLESS OTHERWISE STATED IN THE TRANSPORTATION MANAGEMENT PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT PLACE BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE.

ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION AND NO WORK IS PERFORMED BEHIND THE TEMPORARY BARRIER FOR A PERIOD LONGER THAN TWO(2) MONTHS, REMOVE/RESET TEMPORARY BARRIER AT NO COST TO THE DEPARTMENT UNLESS OTHERWISE STATED IN THE TRANSPORTATION MANAGEMENT PLANS, TEMPORARY BARRIER IS PROTECTING A HAZARD, OR AS DIRECTED BY THE ENGINEER.

INSTALL TEMPORARY BARRIER WITH THE TRAFFIC FLOW BEGINNING WITH THE UPSTREAM SIDE OF TRAFFIC. REMOVE TEMPORARY BARRIER AGAINST THE TRAFFIC FLOW BEGINNING WITH THE DOWNSTREAM SIDE OF TRAFFIC.

INSTALL AND SPACE DRUMS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH) TO CLOSE OR KEEP THE SECTION OF THE ROADWAY CLOSED UNTIL THE TEMPORARY BARRIER CAN BE PLACED OR AFTER THE TEMPORARY BARRIER IS REMOVED.

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

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

POSTED SPEED LIMIT

MINIMUM OFFSET

40 OR LESS 45-50 15 FT 20 FT

60 MPH or HIGHER

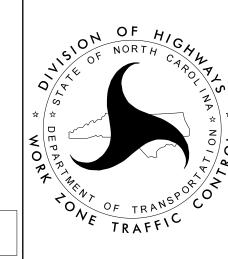
25 FT 30 FT



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GENERAL NOTES

GENERAL NOTES

PROJ. REFERENCE NO. SHEET NO. TMP - 1C

# 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.
- T) PLACE TYPE III BARRICADES WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.
- U) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES (DRUMS, CONES OR SKINNY DRUMS) PERPENDICULAR TO THE EDGE OF TRAVELWAY ON (XXX FT) CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

## PAVEMENT MARKINGS AND MARKERS

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

ROAD NAME	MARKING	MARKER

ALL ROADS PAINT TEMPORARY RAISED

- W) 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.
- X) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- Y) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.
- Z) TRACE THE (EXISTING AND/OR PROPOSED) MONOLITHIC ISLAND LOCATIONS WITH THE PROPER COLOR PAVEMENT MARKING PRIOR TO (REMOVAL AND/OR INSTALLATION). PLACE (DRUMS, CONES, OR TUBULAR MARKERS) TO DELINEATE ANY (EXISTING AND/OR PROPOSED) MONOLITHIC ISLANDS (AFTER REMOVAL AND/OR BEFORE INSTALLATION).

### MISCELLANEOUS

- AA) USE LAW ENFORCEMENT TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND OR INTERSECTIONS AS SHOWN IN PLANS OR DIRECTED BY THE ENGINEER.
- BB) ALL CURB RAMP LOCATIONS SHALL BE DERIVED FROM STATIONING SHOWN ON PAVEMENT MARKING PLANS OR AS DIRECTED BY THE ENGINEER IN COORDINATION WITH THE SIGNING AND DELINEATION UNIT.
- CC) CONTRACTOR SHALL MAINTAIN SIDEWALK ACCESS AT ALL TIMES AS STATED IN THE PHASING. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE TEMPORARY SIDEWALKS (CONCRETE, ASPHALT, OR OTHER SUITABLE MATERIAL AS APPROVED BY THE ENGINEER) AT ALL LOCATIONS WHERE THE OPEN PEDESTRIAN TRAVELWAY HAS BEEN REMOVED FOR CONSTRUCTION OPERATIONS (UTILITIES, DRAINAGE, ETC.).
- DD) 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.
- EE) ALL DIMENSIONS AND STATIONS IN THE TRANSPORTATION MANAGEMENT PLAN AND PHASING ARE APPROXIMATE (+/-); FIELD ADJUST AS NECESSARY OR AS DIRECTED BY THE ENGINEER.
- F) COMPLETE ANY PROPOSED OR TEMPORARY WIDENING IN SUCH A MANNER THAT PONDING OF WATER WILL NOT OCCUR IN THE TRAVEL LANE.
- G) ENSURE THE OVERSIZE/OVERWEIGHT PERMIT UNIT (919) 662-4320 HAS BEEN ADVISED OF THE ONGOING TRAFFIC OPERATIONS THROUGH THE DIVISION OFFICE.
- HH) MAINTAIN EXISTING GUARDRAIL UNTIL PROPOSED FILL SLOPES ARE COMPLETED TO THE POINT THAT FIELD CONDITIONS NO LONGER MEET GUARDRAIL WARRANTS AS DIRECTED BY THE ENGINEER.
- MAINTAIN ALL EXISTING SIGNING ON PROJECT (WARNING, REGULATORY AND GUIDE SIGNS). WHERE CONSTRUCTION AFFECTS THE LOCATION OF A SIGN, RELOCATE AS NECESSARY, OR INSTALL REPLACEMENT SUCH THAT THE FUNCTION OF THE SIGN IS MAINTAINED AT ALL TIMES. DURING RELOCATION OF STOP SIGNS PROVIDE FLAGGERS WITH "FLAGGER AHEAD" (W20-7a) AND "BE PREPARED TO STOP" (W3-4) SIGNS AS NECESSARY TO MAINTAIN INTERSECTION TRAFFIC.
- JJ) ENSURE THE CITY OF MOUNT HOLLY FIRE DEPARTMENT (704)822-2927 AND GASTON COUNTY SCHOOLS (704)866-6100 ARE NOTIFIED 30 DAYS PRIOR TO CHANGES IN TRAFFIC PATTERNS.

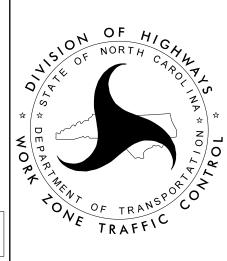


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GENERAL NOTES

# FIGURE A

NOTE: WALL OR SHORING HEIGHT = A - B

# **NOTES**

1- REFER TO THE TRAFFIC CONTROL PLANS FOR TEMPORARY SHORING LOCATIONS AND NOTES.

**REINFORCED ZONE** 

- 2- REFER TO THE "TEMPORARY SHORING" PROJECT SPECIAL PROVISION FOR INFORMATION ABOUT TEMPORARY SHORING AND PORTABLE CONCRETE BARRIER (PCB).
- 3- PCB IS REQUIRED IF TEMPORARY SHORING IS LOCATED WITHIN THE CLEAR ZONE IN ACCORDANCE WITH THE AASHTO ROADSIDE DESIGN GUIDE. DO NOT PLACE BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE.

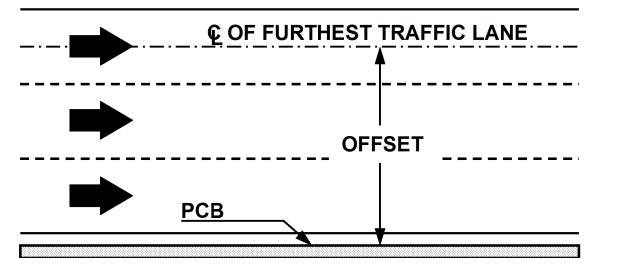
  (CONTACT NCDOT PAVEMENT MANAGEMENT UNIT FOR APPLICABLE PAVEMENT DESIGN).
- 4- BASED ON THE CLEAR DISTANCE, OFFSET, DESIGN SPEED AND PAVEMENT TYPE, CHOOSE AN UNANCHORED OR ANCHORED PCB FROM THE TABLE SHOWN IN FIGURE B. CLEAR DISTANCE IS DEFINED AS SHOWN IN FIGURE A AND OFFSET IS DEFINED AS SHOWN IN FIGURE B.
- 5- AT THE CONTRACTOR'S OPTION OR IF THE MINIMUM REQUIRED CLEAR DISTANCE IS NOT AVAILABLE, SET PCB NEXT TO AND UP AGAINST THE TRAFFIC SIDE OF THE TEMPORARY SHORING EXCEPT FOR BARRIER ABOVE TEMPORARY WALLS. PCB WITH THE MINIMUM REQUIRED CLEAR DISTANCE IS REQUIRED ABOVE TEMPORARY WALLS.
- 6- USE NCDOT PORTABLE CONCRETE BARRIER (PCB) IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1170.01 AND SECTION 1170 OF THE STANDARD SPECIFICATIONS.
- 7- PCB REQUIREMENTS FOR TEMPORARY WALLS APPLY TO TEMPORARY MECHANICALLY STABILIZED EARTH (MSE) WALLS AND TEMPORARY SOIL NAIL WALLS.
- 8- SET PCB WITH A MINIMUM HORIZONTAL DISTANCE OF 2 FT BETWEEN THE FRONT FACE OF THE BARRIER AND THE EDGE OF THE NEAREST TRAFFIC LANE AS SHOWN IN FIGURE A UNLESS OTHERWISE SHOWN IN THE PLANS AND OR AS APPROVED BY THE ENGINEER.
- 9- FOR PCB ABOVE AND BEHIND TEMPORARY WALLS, PROVIDE A MINIMUM DISTANCE OF 3 FT BETWEEN THE EDGE OF PAVEMENT AND THE WALL FACE AS SHOWN IN FIGURE A. IF THESE MINIMUM REQUIRED DISTANCES ARE NOT AVAILABLE, CONTACT THE ENGINEER.
- 10- TABLE SHOWN IN FIGURE B IS BASED ON NCDOT RESEARCH PROJECT NO. 2005-010 WITH VEHICLE TYPE USED FOR NCHRP 350 CRASH TESTS. BARRIER DEFLECTIONS AND RESULTING MINIMUM REQUIRED CLEAR DISTANCES MIGHT VARY SIGNIFICANTLY FOR LARGER HEAVIER VEHICLES, RUNS OF BARRIER LESS THAN 200 FT IN LENGTH AND WET OR DRY PAVEMENT.

PROJ. REFERENCE NO.	SHEET NO.
U-3633	TMP-2

# MINIMUM REOUIRED CLEAR DISTANCE, inches

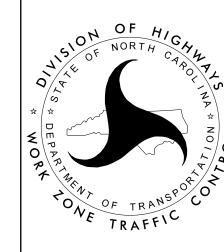
Barrier	Pavement	Offset *	_			ed, mph		
Type	Type	ft	<30	31-40	41-50	51-60	61-70	71-80
		<8	24	26	29	32	36	40
		8-14	26	28	31	35	38	42
		14-20	27	29	34	36	39	43
		20-26	28	31	35	38	40	44
	Asphalt	26-32	29	32	36	39	42	45
	rispitate	32-38	30	34	38	41	43	46
<b>A</b>		38-44	31	34	41	43	45	48
PCB		44-50	31	35	41	43	46	49
		50-56	32	36	42	44	47	50
re		>56	32	36	42	45	47	51
Unanchored		<8	17	18	21	22	25	26
ne		8-14	19	20	23	25	26	29
na		14-20	22	22	24	26	28	31
		20-26	23	24	26	27	30	34
	Concrete	26-32	24	25	27	28	32	35
		32-38	24	26	27	30	33	36
		38-44	25	26	28	30	34	37
		44-50	26	26	28	32	35	37
		50-56	26	26	28	32	35	38
		>56	26	27	29	32	36	38
Anchored PCB	Asphalt	All Offsets		24 f	or All D	esign Sp	eeds	
Anchored PCB	Concrete (including bridge approach slabs)	All Offsets		12 f	or All D	esign Sp	eeds	

\* See Figure Below



# FIGURE B

DETAIL PROVIDED BY NCDOT



PORTABLE CONCRETE
BARRIER AT
TEMPORARY SHORING
LOCATIONS

ROJ. REFERENCE NO.	SHEET NO.
U-3633	TMP-2A

# Shoring Location No. 1

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

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

DESIGN TEMPORARY SHORING FROM STATION 10+60± -DR1-, 50 FT (LT), TO STATION 11+70± -DR1-, 15 FT (RT), FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT ( $\gamma$ ) = 120 LB/CF FRICTION ANGLE ( $\varphi$ ) = 30 DEGREES COHESION (c) = 0 LB/SF GROUNDWATER ELEVATION = N/A FT

NO SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 10+60± -DR1-, 50 FT (LT), TO STATION 11+70± -DR1-, 15 FT (RT). THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 10+60±-DR1-, 50 FT (LT), TO STATION 11+70±-DR1-, 15 FT (RT). SEE STANDARD DETAIL NO. 1801.02 FOR STANDARD TEMPORARY WALLS.

# Shoring Location No. 2

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

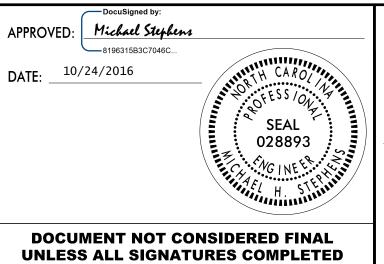
BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

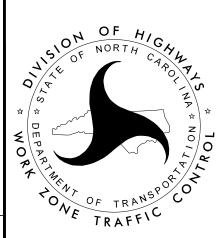
DESIGN TEMPORARY SHORING FROM STATION 11+00± -DR2-, 40 FT (LT), TO STATION 11+50± -DR2-, 0 FT (LT), FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT ( $\gamma$ ) = 120 LB/CF FRICTION ANGLE ( $\varphi$ ) = 30 DEGREES COHESION (c) = 0 LB/SF GROUNDWATER ELEVATION = N/A FT

NO SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 11+00± -DR2-, 40 FT (LT), TO STATION 11+50± -DR2-, 0 FT (LT). THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 11+00±-DR2-, 40 FT (LT), TO STATION 11+50±-DR2-, 0 FT (LT). SEE STANDARD DETAIL NO. 1801.02 FOR STANDARD TEMPORARY WALLS.





TEMPORARY SHORING NOTES

PROJ. REFERENCE NO. SHEET NO. U-3633 TMP-2B

# Shoring Location Nos. 3, 3A, and 3B

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

TEMPORARY SHORING IS REQUIRED FOR THE PIPE INSTALLATION FROM STATION 13+48± -Y6-, 29 FT (RT), TO STATION 13+53± -Y6-, 6 FT (LT), FROM STATION 13+69± -Y6-, 26 FT (RT), TO STATION 13+73± -Y6-, 6 FT (LT) AND FROM STATION 13+53± -Y6-, 6 FT (LT), TO STATION 13+73± -Y6-, 6 FT (LT).

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

DESIGN TEMPORARY SHORING FROM STATION 13+48± -Y6-, 29 FT (RT), TO STATION 13+53± -Y6-, 6 FT (LT), FROM STATION 13+69± -Y6-, 26 FT (RT), TO STATION 13+73± -Y6-, 6 FT (LT) AND FROM STATION 13+53± -Y6-, 6 FT (LT), TO STATION 13+73± -Y6-, 6 FT (LT), FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT ( $\gamma$ ) = 120 LB/CF FRICTION ANGLE ( $\phi$ ) = 30 DEGREES COHESION (c) = 0 LB/SF GROUNDWATER ELEVATION = N/A FT

NO SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 13+48±-Y6-, 29 FT (RT), TO STATION 13+53±-Y6-, 6 FT (LT), FROM STATION 13+69±-Y6-, 26 FT (RT), TO STATION 13+73±-Y6-, 6 FT (LT) AND FROM STATION 13+53±-Y6-, 6 FT (LT), TO STATION 13+73±-Y6-, 6 FT (LT). THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

# Shoring Location Nos. 4, 4A, and 4B

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

TEMPORARY SHORING IS REQUIRED FOR THE PIPE INSTALLATION FROM STATION  $13+53\pm$  -Y6-, 4 FT (LT), TO STATION  $13+73\pm$  -Y6-, 4 FT (LT), FROM STATION  $13+53\pm$  -Y6-, 4 FT (LT), TO STATION  $13+57\pm$  -Y6-, 33 FT (LT) AND FROM STATION  $13+73\pm$  -Y6-, 4 FT (LT), TO STATION  $13+78\pm$  -Y6-, 36 FT (LT).

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

DESIGN TEMPORARY SHORING FROM STATION 13+73± -Y6-, 4 FT (LT), FROM STATION 13+53± -Y6-, 4 FT (LT), TO STATION 13+57± -Y6-, 33 FT (LT) AND FROM STATION 13+73± -Y6-, 4 FT (LT), TO STATION 13+78± -Y6-, 36 FT (LT), FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT ( $\gamma$ ) = 120 LB/CF FRICTION ANGLE ( $\varphi$ ) = 30 DEGREES COHESION (c) = 0 LB/SF GROUNDWATER ELEVATION = N/A FT

NO SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 13+73± -Y6-, 4 FT (LT), FROM STATION 13+53± -Y6-, 4 FT (LT), TO STATION 13+57± -Y6-, 33 FT (LT) AND FROM STATION 13+73± -Y6-, 4 FT (LT), TO STATION 13+78± -Y6-, 36 FT (LT). THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

DocuSigned by:

Michael Stephens

8196315B3C7046C...

DATE: 10/24/2016

SEAL 028893

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H STEPHENS

DOCUSIGNED BY:

Michael Stephens

8196315B3C7046C...

SEAL 028893

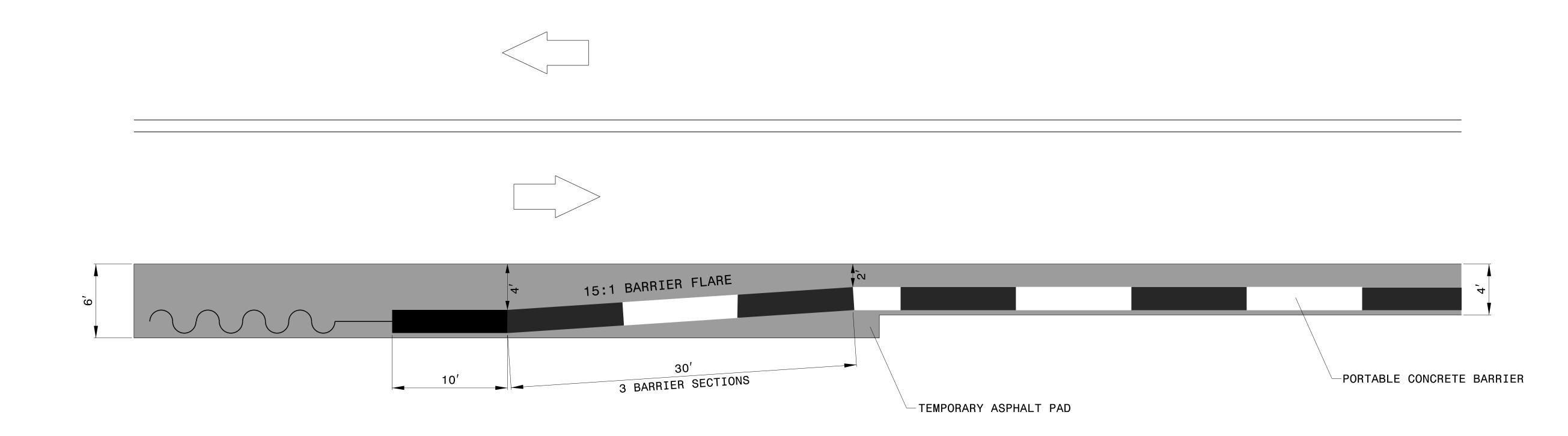
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TEMPORARY SHORING NOTES

PROJ. REFERENCE NO. SHEET NO. TMP - 2C

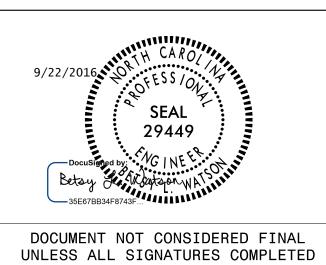
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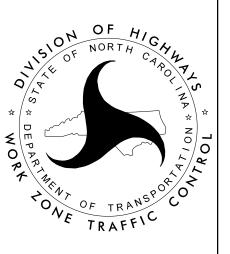


# NOTES:

1. ONLY USE AT THE LOCATIONS REFERENCED IN THE PLANS.



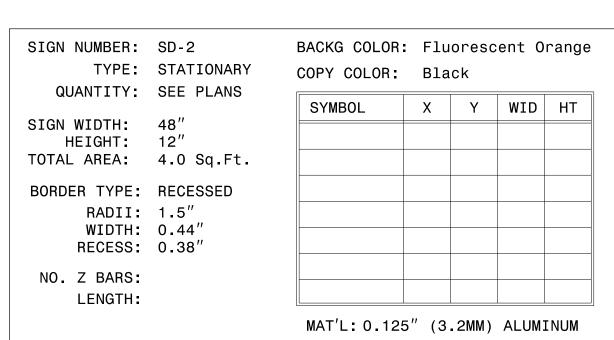




PORTABLE CONCRETE BARRIER
APPROACH END TREATMENT

PROJ. REFERENCE NO. SHEET NO. TCP-2D

SIGN NUMBER: SD-1 BACKG COLOR: Fluorescent Orange DESIGN BY: RRH CHECKED BY: GMK DATE: Jul 19, 2016 TYPE: STATIONARY COPY COLOR: Black PROJECT ID: U-3633 DIV: 12 QUANTITY: SEE PLANS SYMBOL X Y WID HT SIGN WIDTH: 36" HEIGHT: 12" TOTAL AREA: 3.0 Sq.Ft. BORDER TYPE: RECESSED RADII: 1.5" WIDTH: 0.44" RECESS: 0.38" NO Z BARS: LENGTH: MAT'L: 0.080" (2.0MM) ALUMINUM 3" USE NOTES BORDER R=1.5" 1. Legend and border shall be direct applied black non-reflective sheeting. TH=0.44" 2. Background shall be NC GRADE B Fluorescent Orange IN=0.38" retroreflective sheeting. Spacing Factor is 1 unless specified otherwise LETTER POSITIONS Series/Size Letter spacings are to start of next letter Text Length C 2000 3 3.7 3.9 3.7 3.7 3 2.6 3 3.8 2.8 3 30

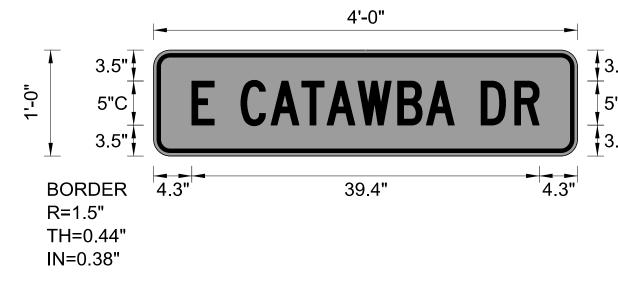


USE NOTES

- Legend and border shall be direct applied black non-reflective sheeting.
- 2. Background shall be NC GRADE B Fluorescent Orange retroreflective sheeting.

PROJECT ID: U-3633 DIV: 12 DATE: Jul 19, 2016

CHECKED BY: GMK



Spacing Factor is 1 unless specified otherwise

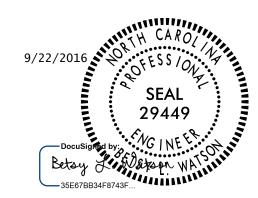
LETTER POSITIONS

					Lett	er	spac	ings	s ar	e to	st	art	of next	letter		Series/Size Text Length
	Е		С	Α	Т	Α	W	В	Α		D	R				C 2000
4.3	2.6	3	3.4	3.5	2.9	3.5	4.5	3.3	3.2	3	3.8	2.8	4.3			39.4

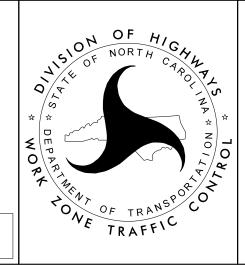
DESIGN BY: RRH



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SPECIAL SIGN DESIGN

U-3633	TCP-2F
PROJ. REFERENCE NO.	SHEET NO.

SIGN NUMBER: SD-3 TYPE: STATIONARY QUANTITY: SEE PLANS

SIGN WIDTH: 36" HEIGHT: 12" TOTAL AREA: 3.0 Sq.Ft. BORDER TYPE: RECESSED RADII: 1.5"

WIDTH: 0.44" RECESS: 0.38" NO. Z BARS: LENGTH:

BACKG COLOR: Fluorescent Orange COPY COLOR: Black

SYMBOL	Х	Υ	WID	HT

MAT'L: 0.080" (2.0MM) ALUMINUM

### USE NOTES

- 1. Legend and border shall be direct applied black non-reflective sheeting.
- 2. Background shall be NC GRADE B Fluorescent Orange retroreflective sheeting.

CHECKED BY: GMK DESIGN BY: RRH DATE: Jul 27, 2016 PROJECT ID: U-3633 DIV: 12 3'-0" 4.55" BORDER 4.55" 27.1" R=1.5" TH=0.44" IN=0.38"

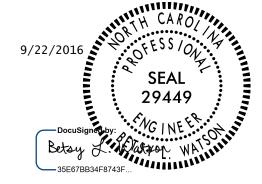
Spacing Factor is 1 unless specified otherwise

# LETTER POSITIONS

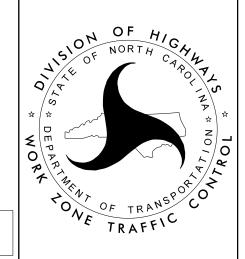
Series/Size Text Length		r	Tette	of next	art	st	e to	ar	ings	spac	ter	Leti					
C 2000								Т	S		N	I	Α	М		S	
27.1							4.5	2.6	3.3	3	2.8	1.8	3.9	4	3	2.8	4.5



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SPECIAL SIGN DESIGN

PROJ. REFERENCE NO. SHEET NO. TMP-3

PRIOR TO ANY WORK OPERATIONS, INSTALL WORK ZONE ADVANCE WARNING SIGNS PER ROADWAY STANDARD DRAWING 1101.01, SHEET 3 OF 3.

FOR STEPS 1 AND 2 USE TEMPORARY LANE CLOSURES PER ROADWAY STANDARD DRAWING 1101.02, SHEET 1 OF 15, AS REQUIRED.

STEP 1:

REVISE PAVEMENT MARKINGS AND SIGNAL TO CONVERT NC 273 NB RIGHT THROUGH LANE TO A RIGHT TURN ONLY LANE AT THE INTERSECTION OF -L- AND -Y- TUCKASEEGEE RD (TMP-4 AND SIGNAL PLANS).

STEP 2:

BEGIN CONSTRUCTION OF WIDENING AND SIDEWALKS:

-L- STA. 18+65-59+00 (RIGHT SIDE)
MAINTAIN ACCESS FOR -Y6- FOREST HILLS DR., AS WELL AS DRIVEWAYS
STA. 50+75± TO 51+25± AND 58+00± TO 58+20± BY EITHER OMITTING A
SECTION OF MEDIAN CURB AND GUTTER AS NECESSARY OR BY USING
INCIDENTAL STONE OR PLATES.
-L- STA. 47+00-49+50 (LEFT SIDE BULB)
-Y1- LOWE ST. (TMP-4A)

-Y1- LOWE SI. (IMP-4A)
-Y4- SUNSET DR. (TMP-4B)

-Y5- EAST CATAWBA DR. (TMP-4B)

-Y6- FOREST HILLS DR. (TMP-4B)

CONSTRUCT THE FOLLOWING:

-L- STA. 59+00-91+00 (RIGHT AND LEFT SIDES)

-Y- TUCKASEEGEE RD.(TMP-4)

-Y8- (TMP-4D)

-Y9- CARY AVE. (TMP-49)

-Y10- NUTALL DR. (TMP-4D)
-Y11- RANKIN AVE/TUCKASEEGEE RD. (TMP-4E)

-Y12- SOUTH MAIN ST.(TMP-4E)

-Y14B- FIRE DEPT. DR. (TMP-4)

-Y15- ROSE ST. (TMP-4)

-DR1- (TMP-4C)
-DR2- (TMP-4C)

-Y6- TEMPORARY PAVEMENT (TMP-4B)

BEGIN CONSTRUCTION OF CULVERT EXTENSION AT -L- 54+50 AS FOLLOWS:

CONSTRUCT TEMPORARY ASPHALT PADS AND INSTALL PORTABLE CONCRETE BARRIER, AT CULVERT EXTENSION AREA. BEHIND PCB BEGIN CULVERT CONSTRUCTION. (TMP-4C)

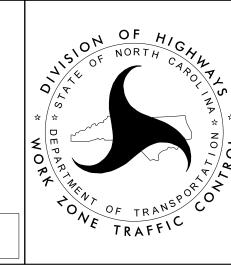


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PHASE I

# PHASE IA (TMP 5 SERIES SHEETS)

PROJ. REFERENCE NO. SHEET NO. TMP - 3A

USING TEMPORARY LANE CLOSURES PER ROADWAY STANDARD DRAWING 1101.02, SHEET 1 OF 15 PERFORM THE FOLLOWING:

STEP 1:

ALONG TUCKASEEGEE RD (-Y-) INSTALL PROPOSED CONCRETE MEDIAN ISLAND AND PAVE UP TO BUT NOT INCLUDING THE FINAL SURFACE LAYER. INSTALL TEMPORARY PAVEMENT MARKINGS IN THE FINAL PAVEMENT MARKING PATTERN AND REVISE TRAFFIC SIGNAL. (TMP-5 - TMP-5A AND SIGNAL PLANS)

STEP 2:

CLOSE THE INTERSECTION AT -L- NC 273 AND -Y2- OLD NC 273. (TMP-5A)

STEP 3:

REMOVE ISLANDS ALONG -L- NC 273 (20+00-33+00) AND REPAIR PAVEMENT. (TMP-5 - TMP-5A)



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PHASE IA

USING TEMPORARY LANE CLOSURES PER ROADWAY STANDARD DRAWING 1101.02, SHEET 1 AND 3 OF 15 AS REQUIRED PERFORM THE FOLLOWING:

### STEP 1:

REVISE PAVEMENT MARKINGS -L- STA. 19+00-41+50 AND SHIFT NC 273 NB TRAFFIC TO THE LEFT SIDE OF -L- (TMP-6,6A,6B).

STEPS 2 THROUGH 6 MAY BE PERFORMED IN ANY ORDER.
STEPS 4 (-Y4- CLOSURE) AND 5 (-Y5- CLOSURE) SHALL NOT BE
PERFORMED AT THE SAME TIME.

### STEP 2:

COMPLETE CONSTRUCTION OF -L- RIGHT SIDE AND -Y- LINES, UP TO BUT NOT INCLUDING THE FINAL SURFACE LAYER.

-L- STA. 18+65-59+00 (RIGHT SIDE)

MAINTAIN ACCESS FOR -Y1- LOWE ST., -Y4- SUNSET DR., -Y6- FOREST HILLS DR., -Y7- STONERIDGE DR., -DR1-, AS WELL AS DRIVEWAYS STA. 23+50± TO 23+75±, 24+50± TO 24+75±, 25+25± TO 25+50±, 29+00± TO 29+25±, 46+60± TO 46+95, 57+50± TO 57+75±, AND 58+00± TO 58+25± BY EITHER OMITTING A SECTION OF MEDIAN CURB AND GUTTER AS NECESSARY OR BY USING INCIDENTAL STONE OR PLATES.

-Y1- LOWE ST. (TMP-6)

# STEP 3:

INSTALL TEMPORARY CONCRETE BARRIER AND SHORING FOR -Y6- AND SHIFT TRAFFIC INTO ONE LANE TWO WAY PATTERN WITH TEMPORARY PORTABLE SIGNALS, USING THE TEMPORARY PAVEMENT CONSTRUCTED IN PHASE 1(TMP-6A). CONSTRUCT FIRST SECTION OF 54" PIPE.

# INTERMEDIATE CONTRACT TIME SPECIAL PROVISION

COMPLETE THE WORK REQUIRED OF PHASE 2 STEP 4, -Y4- SUNSET DR WITHIN A PERIOD OF 7 CONSECUTIVE CALENDAR DAYS AFTER AND INCLUDING THE DATE -Y4- IS CLOSED TO TRAFFIC.

# STEP 4:

USING THE ROAD CLOSURE AND DETOUR SHOWN ON SHEET TMP-6A.1
CONSTRUCT -Y4- SUNSET DR., INCLUDING PAVING AND WEDGING. ONCE
COMPLETE REMOVE DETOUR AND ALL TRAFFIC CONTROL DEVICES AND
REOPEN TO TRAFFIC.

# INTERMEDIATE CONTRACT TIME SPECIAL PROVISION

COMPLETE THE WORK REQUIRED OF PHASE 2 STEP 5, -Y5- EAST CATAWBA DR WITHIN A PERIOD OF 7 CONSECUTIVE CALENDAR DAYS AFTER AND INCLUDING THE DATE -Y5- IS CLOSED TO TRAFFIC.

### STEP 5:

USING THE ROAD CLOSURE AND DETOUR SHOWN ON SHEET TMP-6A.2 CONSTRUCT -Y5- EAST CATAWBA, INCLUDING GRADING AND PAVING AND WEDGING. ONCE COMPLETE REMOVE DETOUR AND ALL TRAFFIC CONTROL DEVICES AND REOPEN TO TRAFFIC.

# STEP 6:

COMPLETE CONSTRUCTION OF THE CULVERT EXTENSION AT -L- 54+20. (TMP-6B)

## STEP 7:

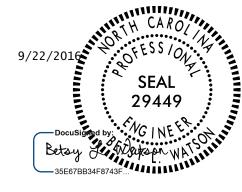
PAVE UP TO BUT NOT INCLUDING THE FINAL SURFACE LAYER, INSTALL MARKINGS AND REVISE TRAFFIC SIGNALS AS FOLLOWS:

```
-NC 273 -L- (59+00-91+00)
-CAREY AVE. -Y9- (TMP-6C)
-Y8- (TMP-6C)
-NUTALL DR. -Y10- (TMP-6C)
-RANKIN AVE./TUCKASEEGEE RD. -Y11- (TMP-6D)
-S. MAIN ST. -Y12- (TMP-6D)
```

NOTE: ALL PAVEMENT MARKINGS NORTH OF STA. 67+50± ARE TEMPORARY PAINT IN THE SAME PATTERN AS THE FINAL MARKINGS. REFER TO PROPOSED PAVEMENT MARKING PLAN.



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PHASE II

# PHASE III (TMP 7 SERIES SHEETS)

PROJ. REFERENCE NO. SHEET NO. TMP - 3C

STEP 1:

USING TEMPORARY LANE CLOSURES PER ROADWAY STANDARD DRAWING 1101.02, SHEET 1 OF 15 PERFORM THE FOLLOWING:

CLOSE S. MAIN STREET EXIT RAMP (TMP-7) REVISE PAVEMENT MARKINGS AND SIGNALS AND SHIFT TRAFFIC TO THE RIGHT SIDE OF -L- (TMP-7,7A-7C).

STEP 2:

CONSTRUCT THE FOLLOWING UP TO BUT NOT INCLUDING THE FINAL SURFACE LAYER:

- -L- STA. 18+65-59+00 (LEFT SIDE)/SIDEWALKS
  MAINTAIN ACCESS FOR -Y7- STONERIDGE DR., AS WELL AS DRIVEWAYS
  STA. 30+30± TO 30+50±, 32+00± TO 32+20±, 39+00± TO 39+20±,
  40+50± TO 41+25±, 57+10± TO 57+40±, AND 58+10± TO 58+40± BY
  EITHER OMITTING A SECTION OF MEDIAN CURB AND GUTTER AS NECESSARY
  OR BY USING INCIDENTAL STONE OR PLATES.
- -Y2- OLD NC 273 (TMP-7)
- -Y5- WEST CATAWBA DR. (TMP-7A)
- -Y7- STONE RIDGE DR. (TMP-7A)

BEGIN CONSTRUCTION OF MONOLITHIC CONCRETE MEDIAN ISLANDS THAT DO NOT INTERFERE WITH TRAFFIC AND ACCESSIBILITY.

RESET BARRIER ON -Y6- AND REVISE ONE LANE TWO WAY TRAFFIC PATTERN. REMOVE TEMPORARY PAVEMENT AND COMPLETE 54" PIPE CONSTRUCTION AND -Y6- LEFT SIDE. (TMP-7A)

STEP 3:

USING TEMPORARY LANE CLOSURES PER ROADWAY STANDARD DRAWING 1101.02, SHEET 1 AND 3 OF 15, IN A CONTINUOUS OPERATION SHIFT NC 273 SB TRAFFIC TO THE PROPOSED NC 273 SB SIDE OF THE ROADWAY IN ONE OUTSIDE LANE.

STEP 4:

WITH NC 273 TRAFFIC ON THE OUTSIDE LANES, COMPLETE MONOLITHIC CONCRETE MEDIAN ISLANDS AND ANY REMAINING MEDIAN WORK AND REMAINING MEDIAN CURB AND GUTTER.

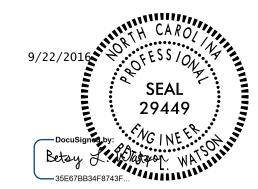
STEP 5:

USING TEMPORARY LANE CLOSURES PER ROADWAY STANDARD DRAWING 1101.02, SHEET 3 OR 6 OF 15, PAVE THE FINAL SURFACE LAYER, PLACE FINAL PAVEMENT MARKINGS, REMOVE ALL TC DEVICES, ACTIVATE FINAL SIGNALS AND OPEN NC 273 AND Y LINES TO FINAL PATTERN.



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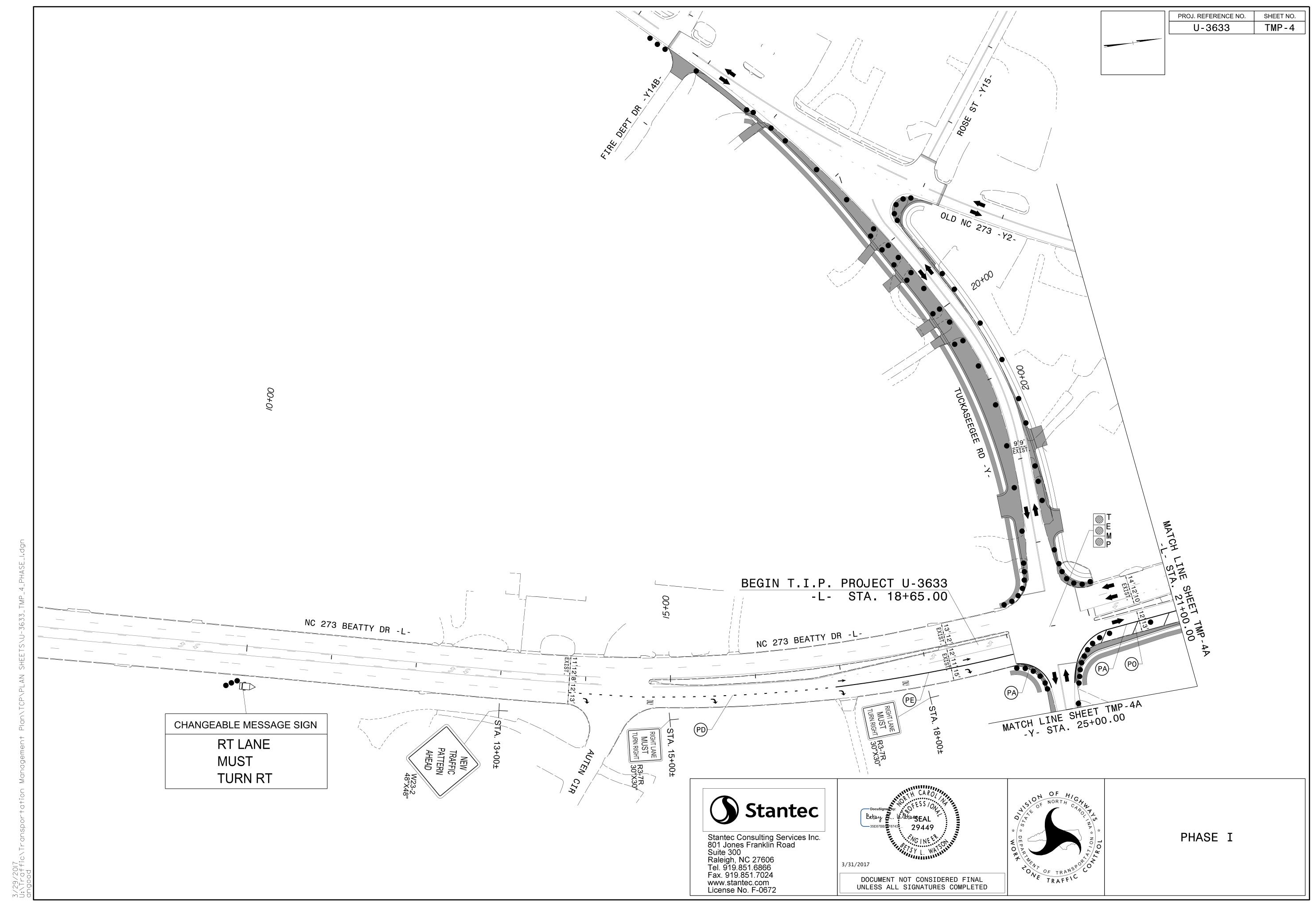
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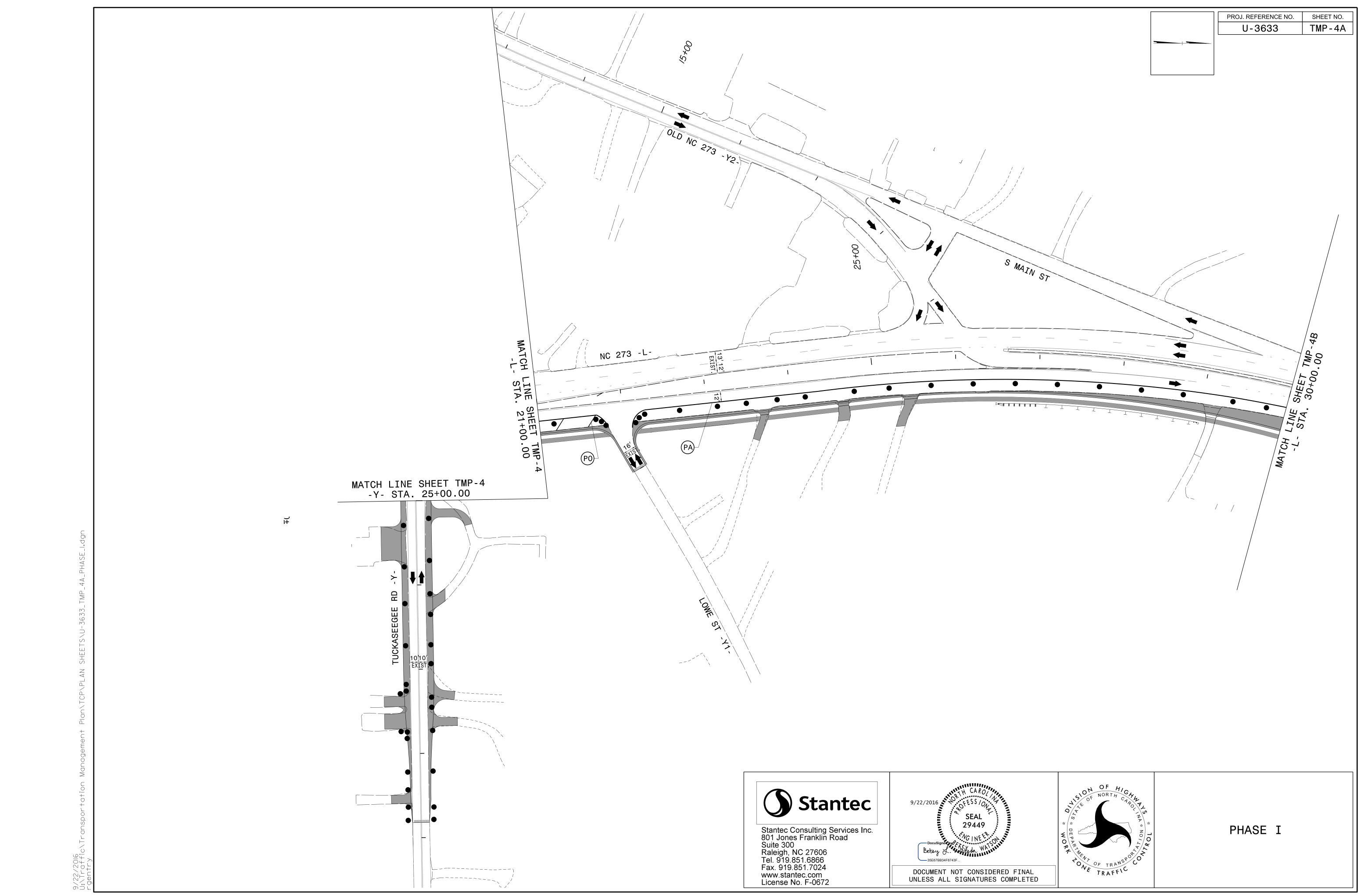


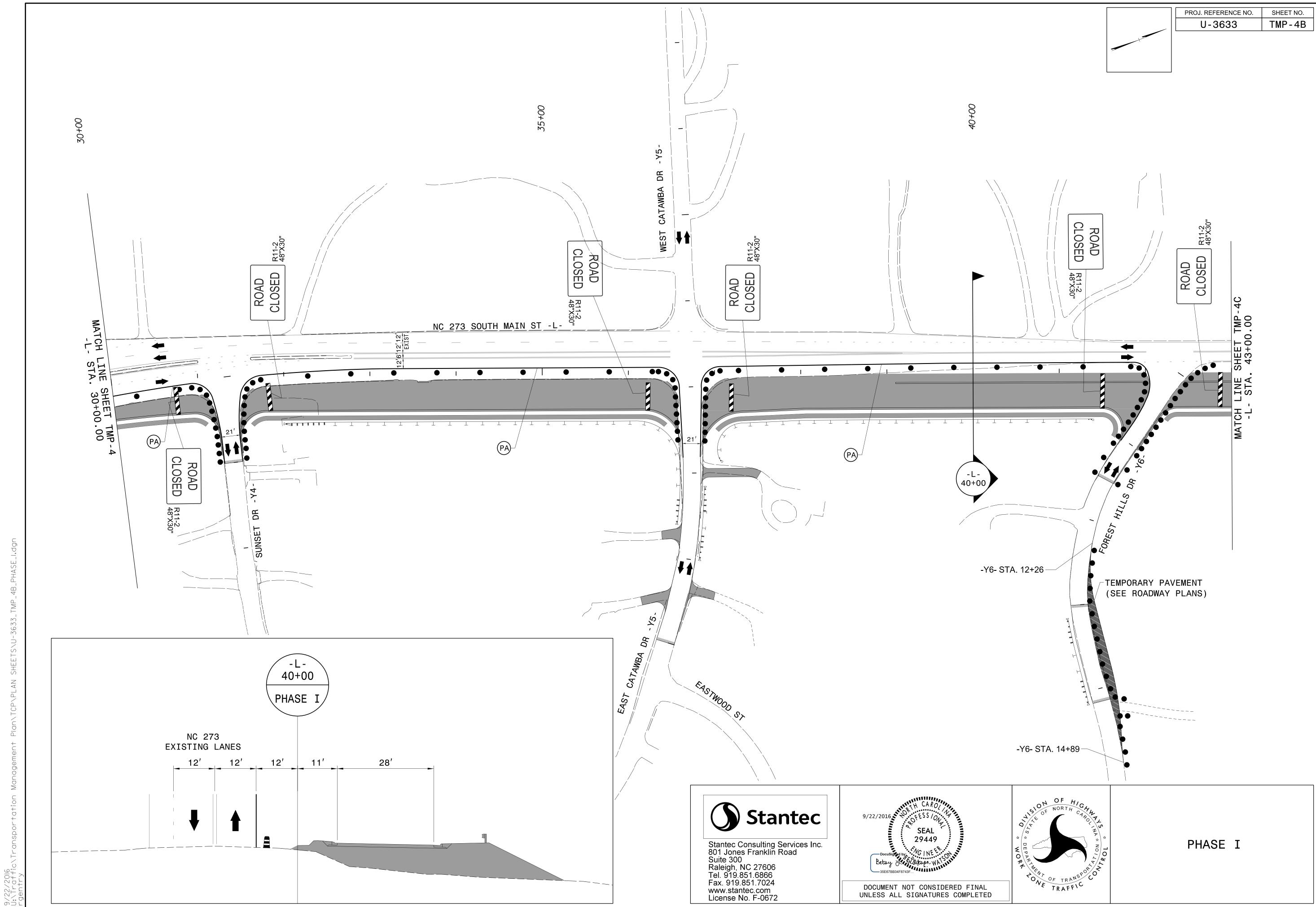
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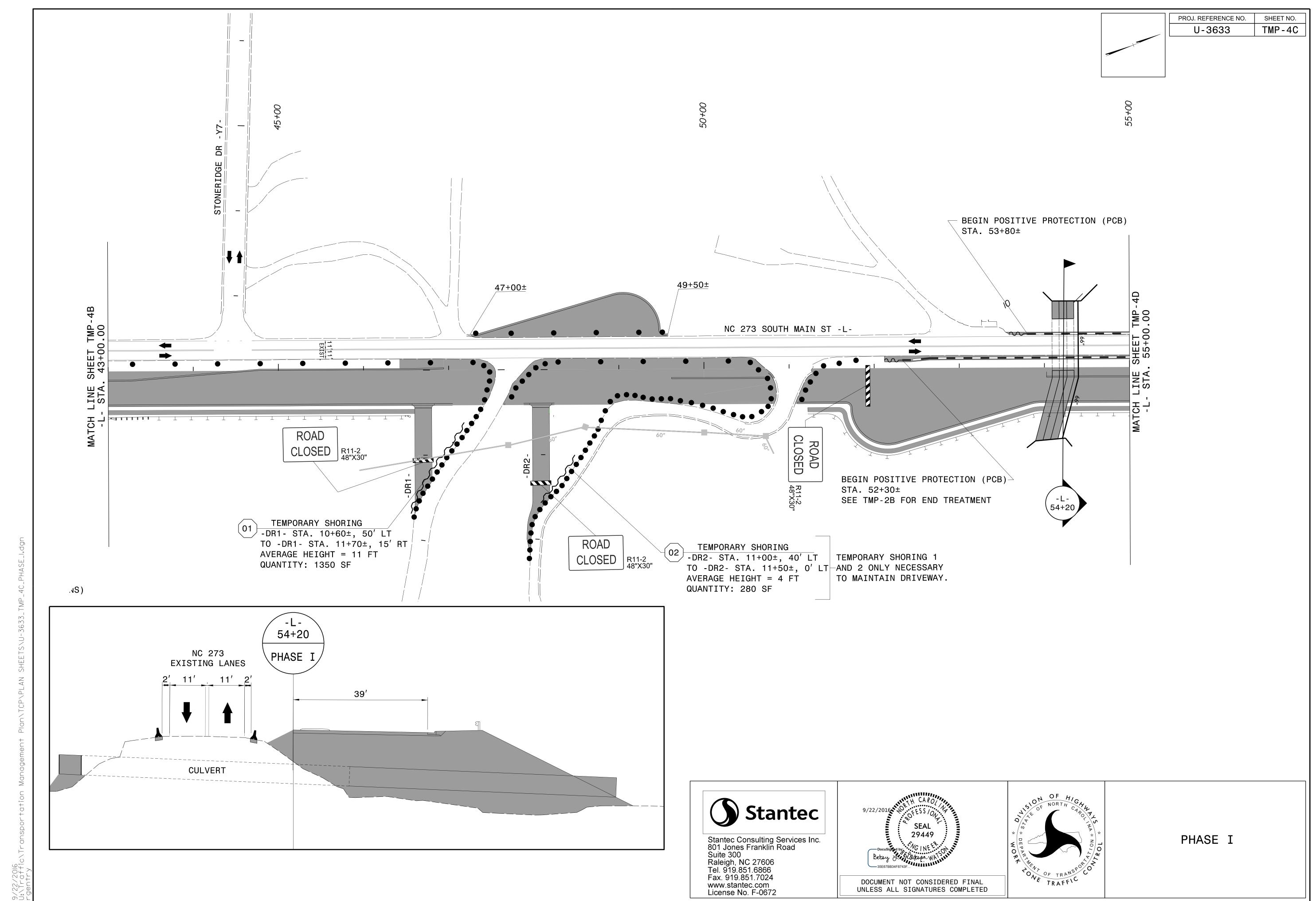


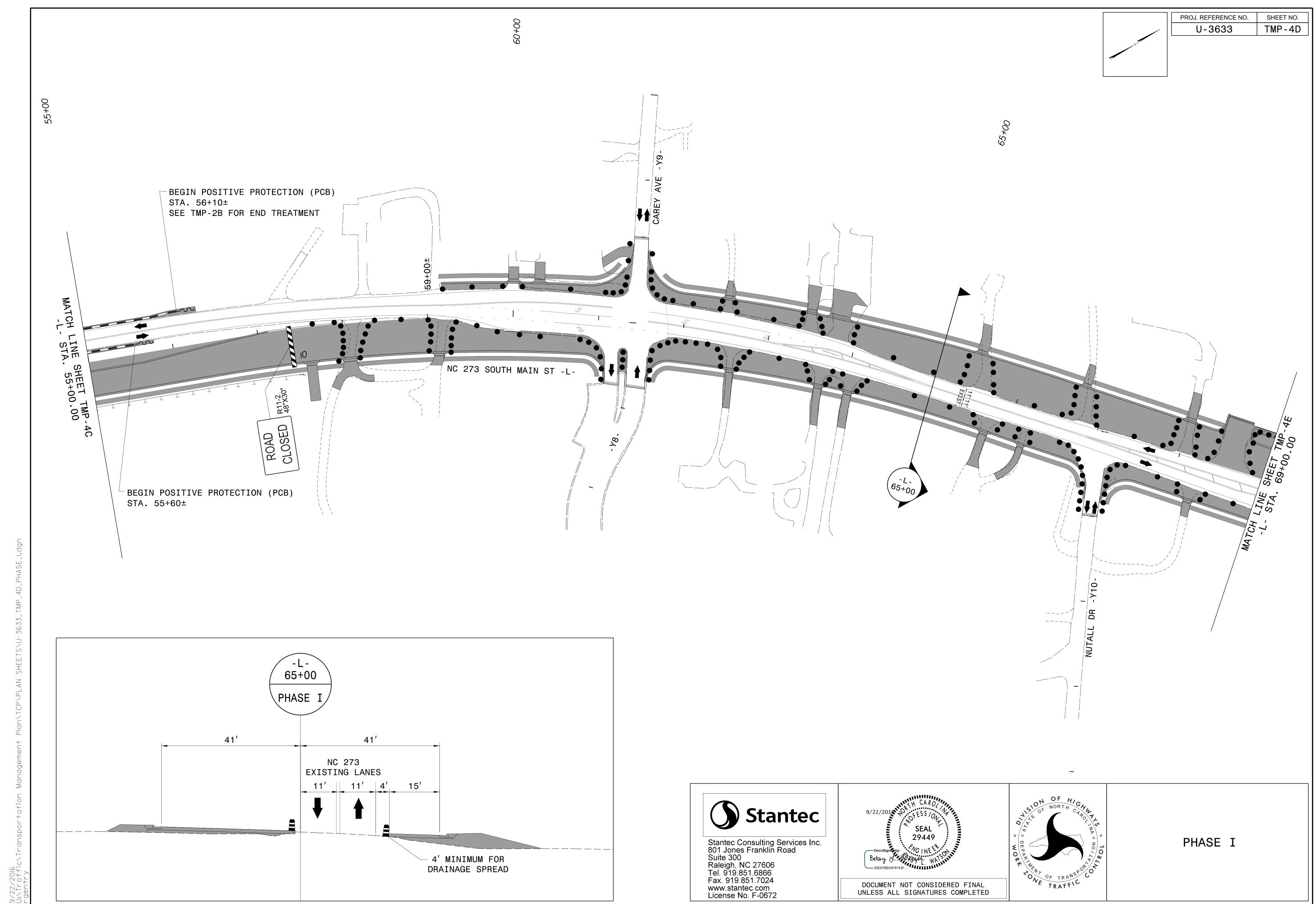
PHASE III

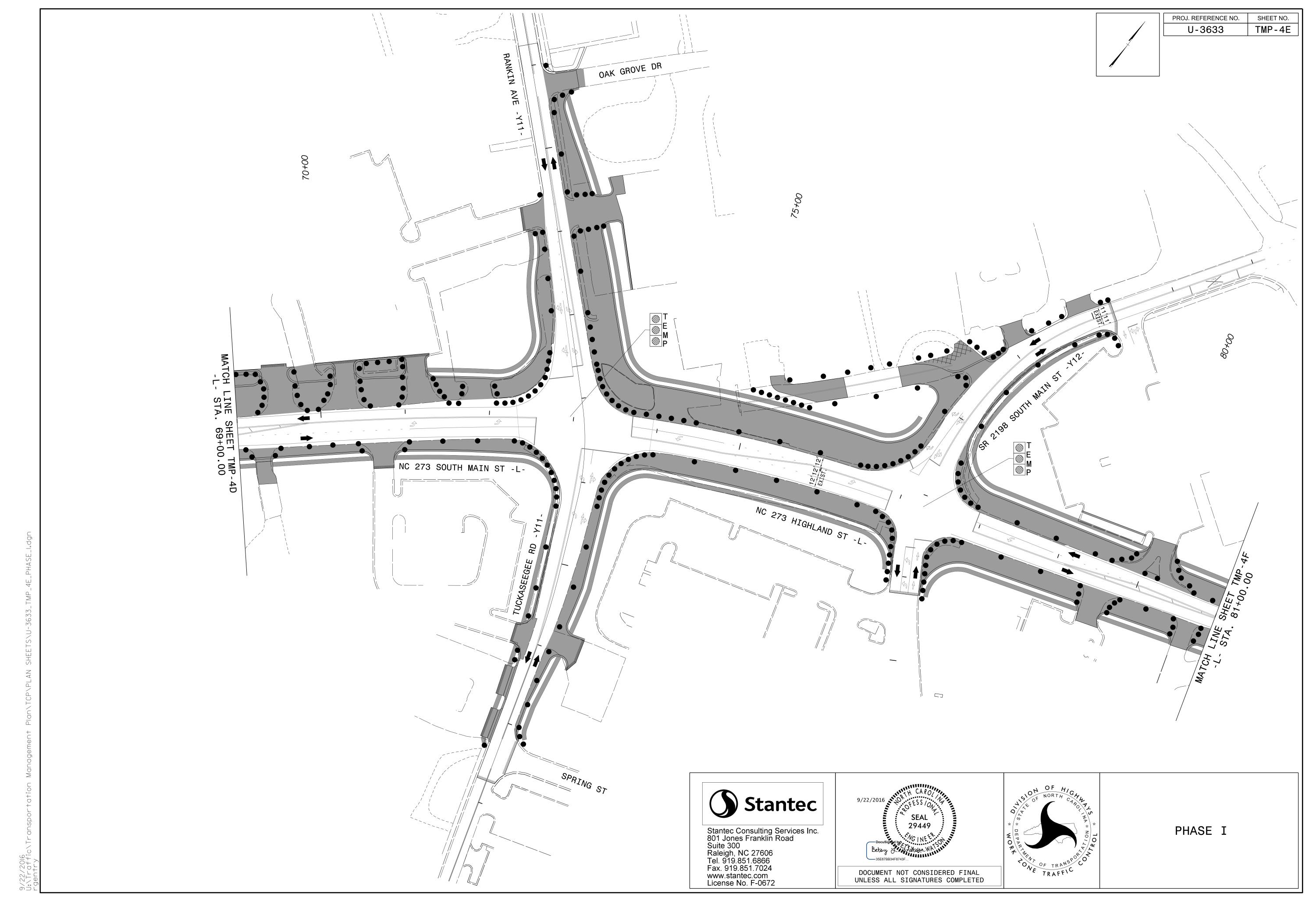


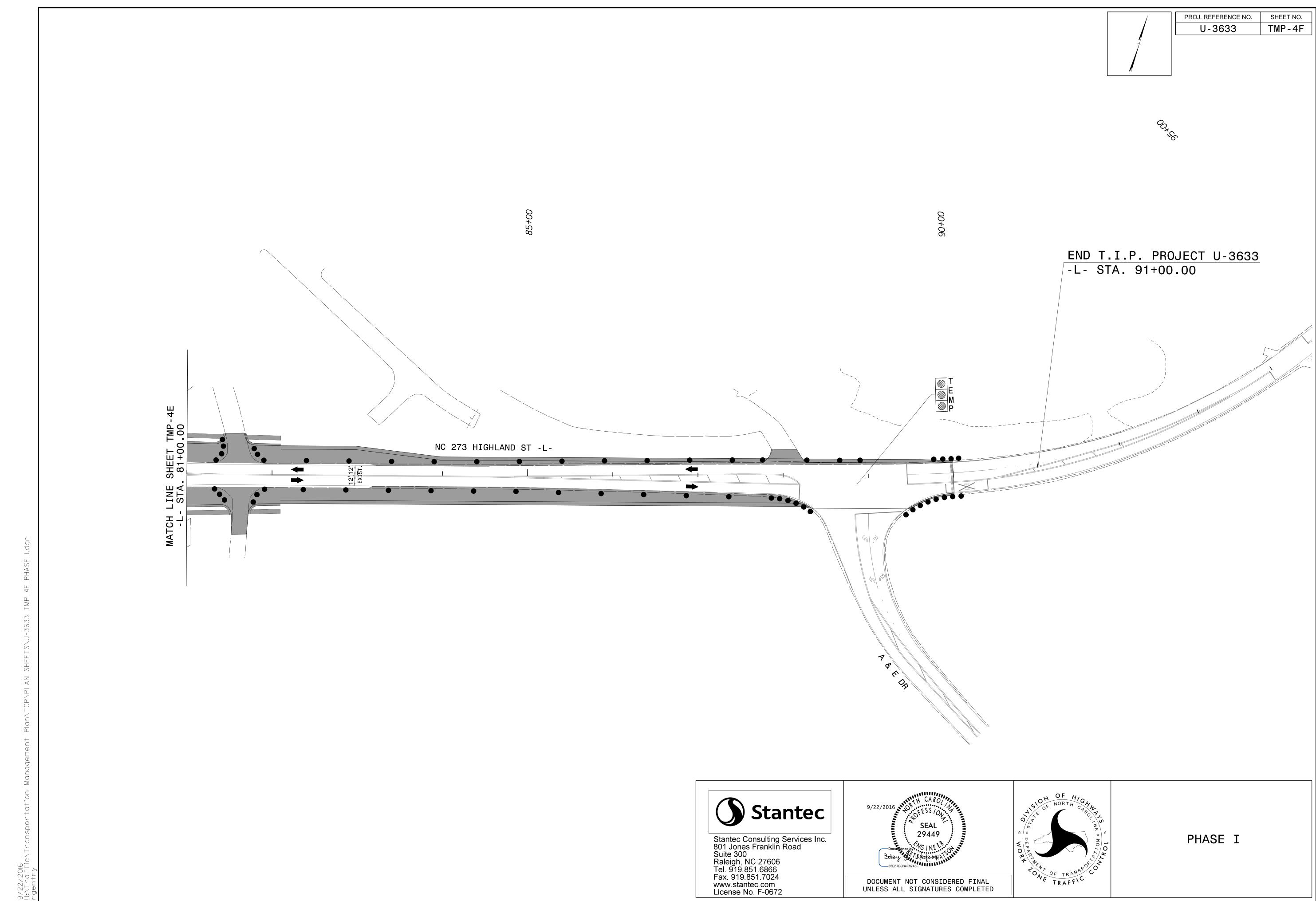






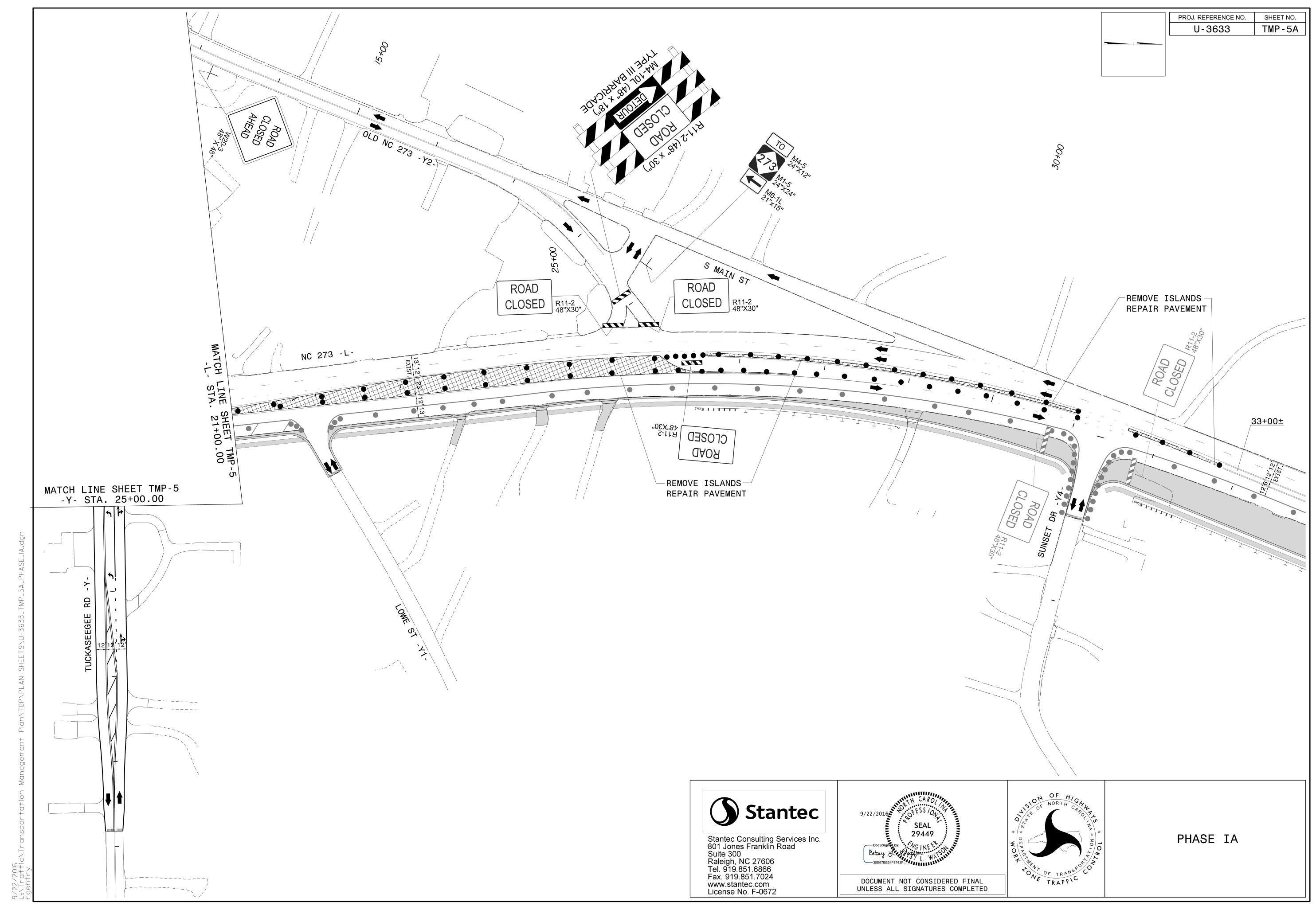


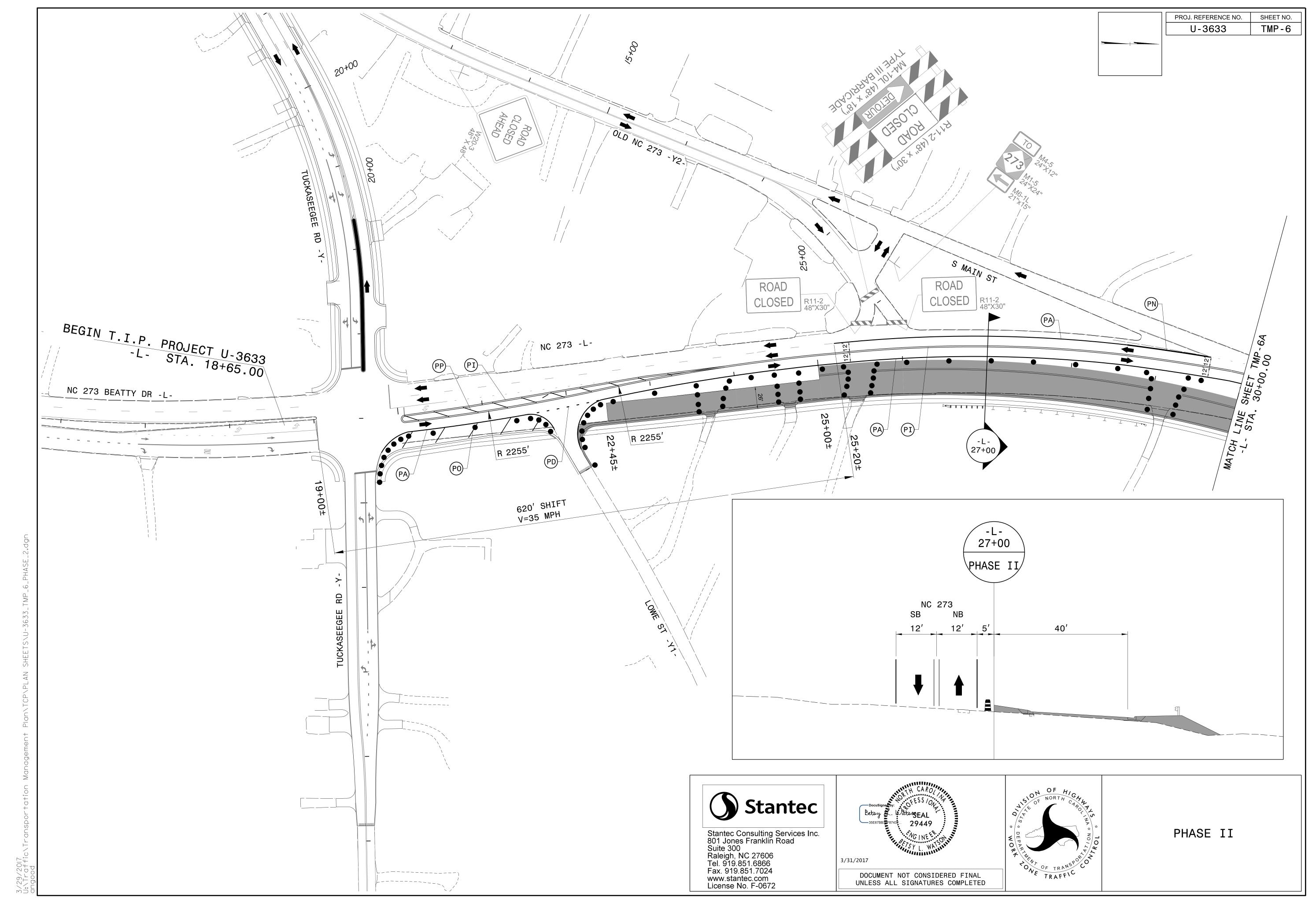


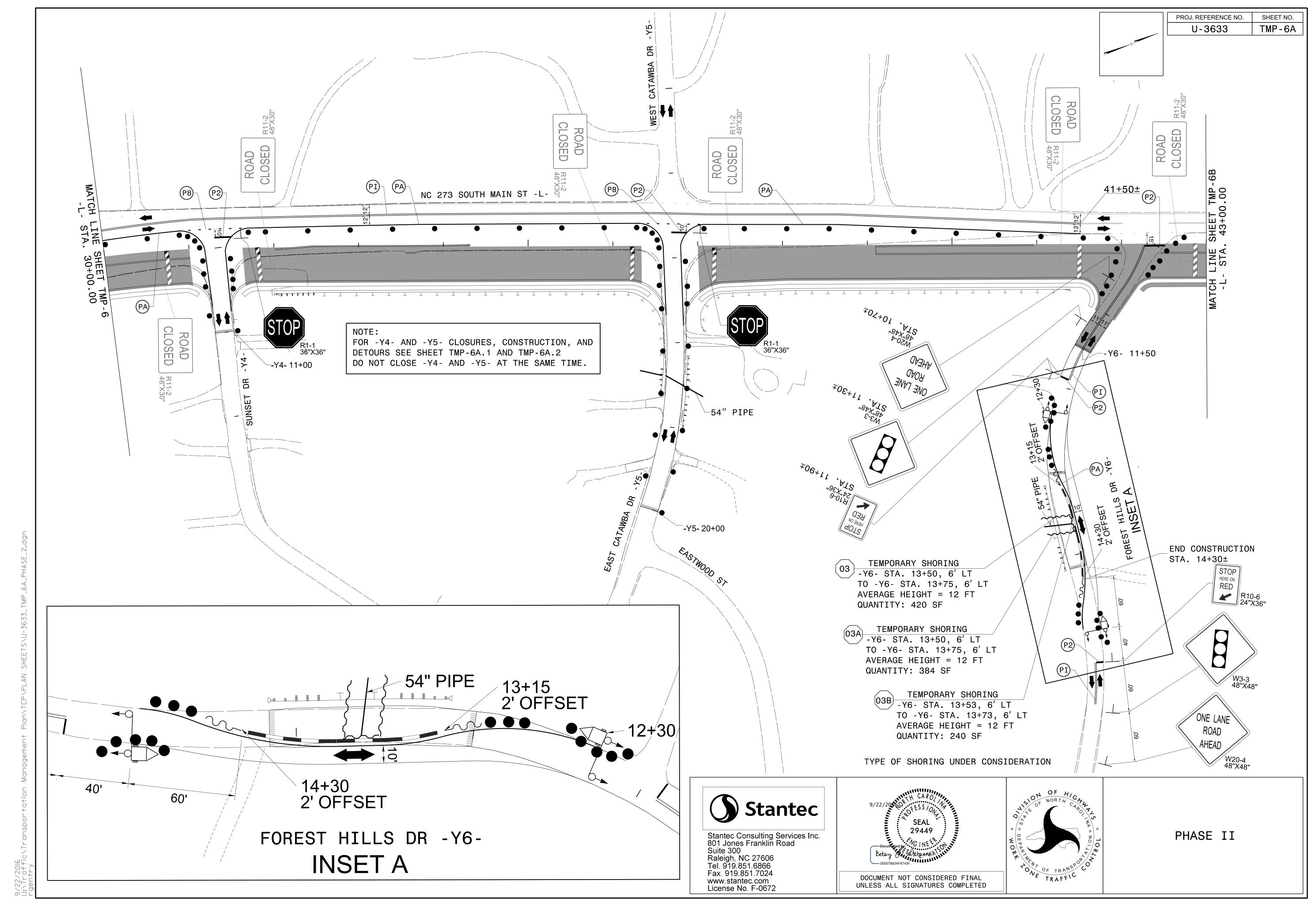


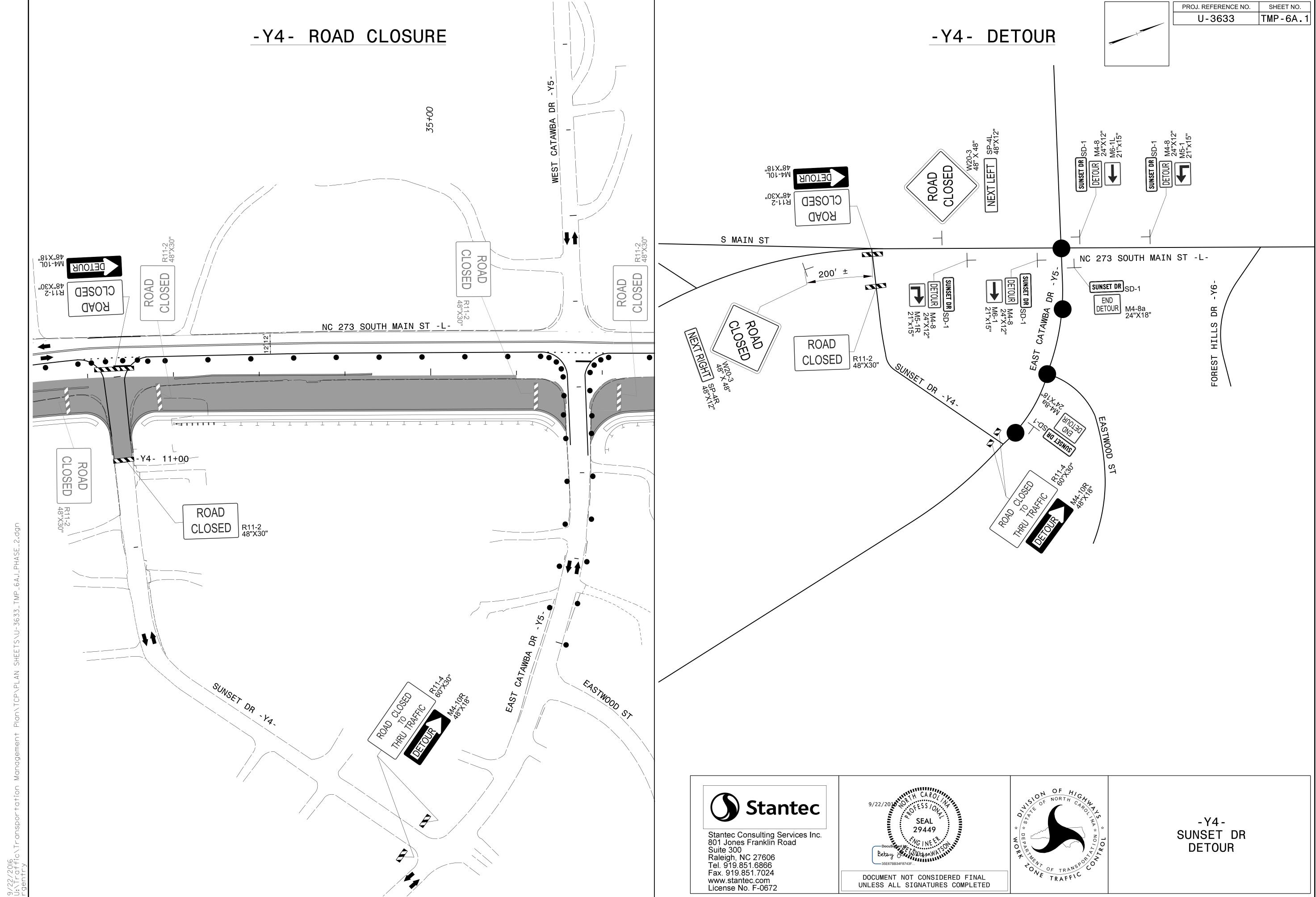
3/31/2017

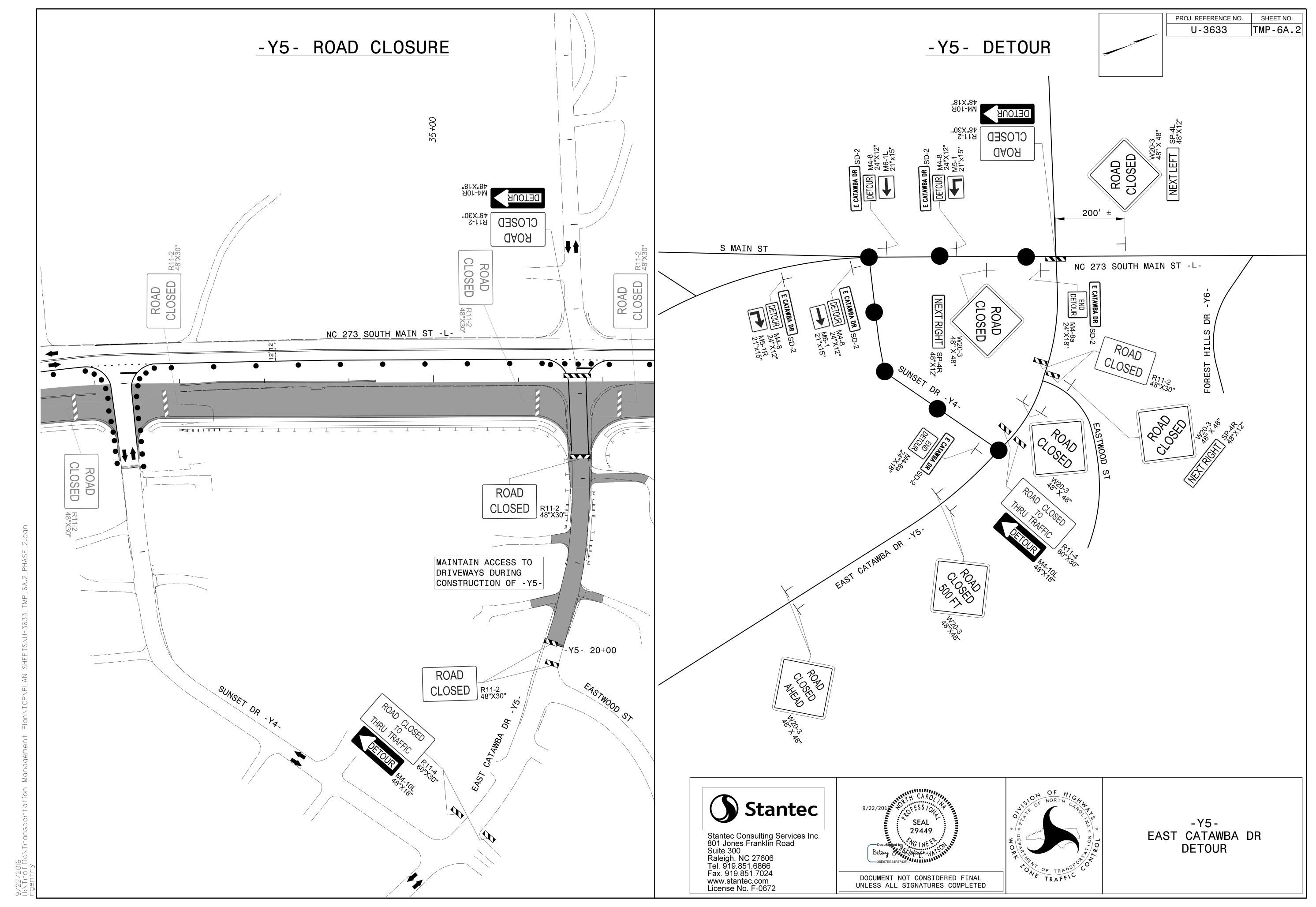
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

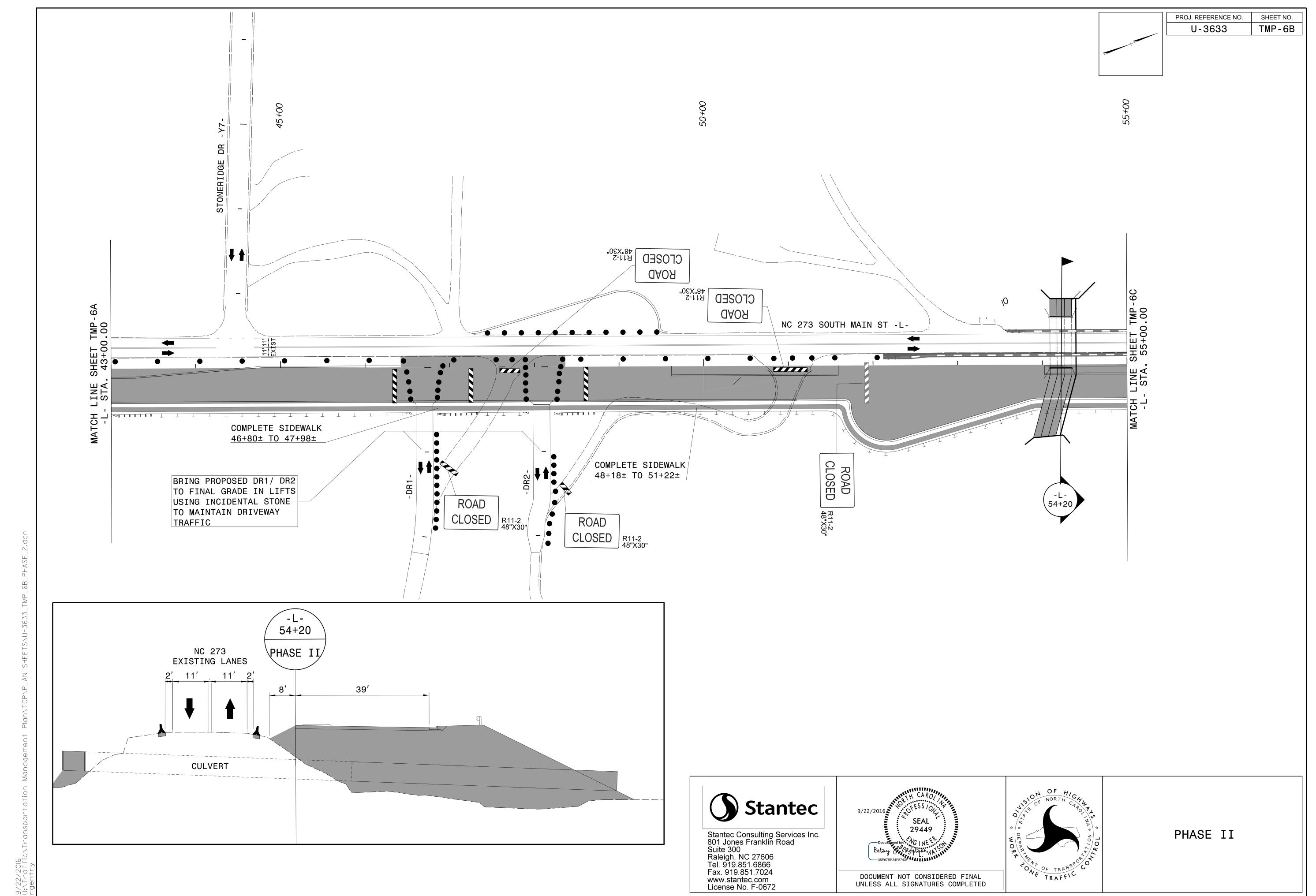


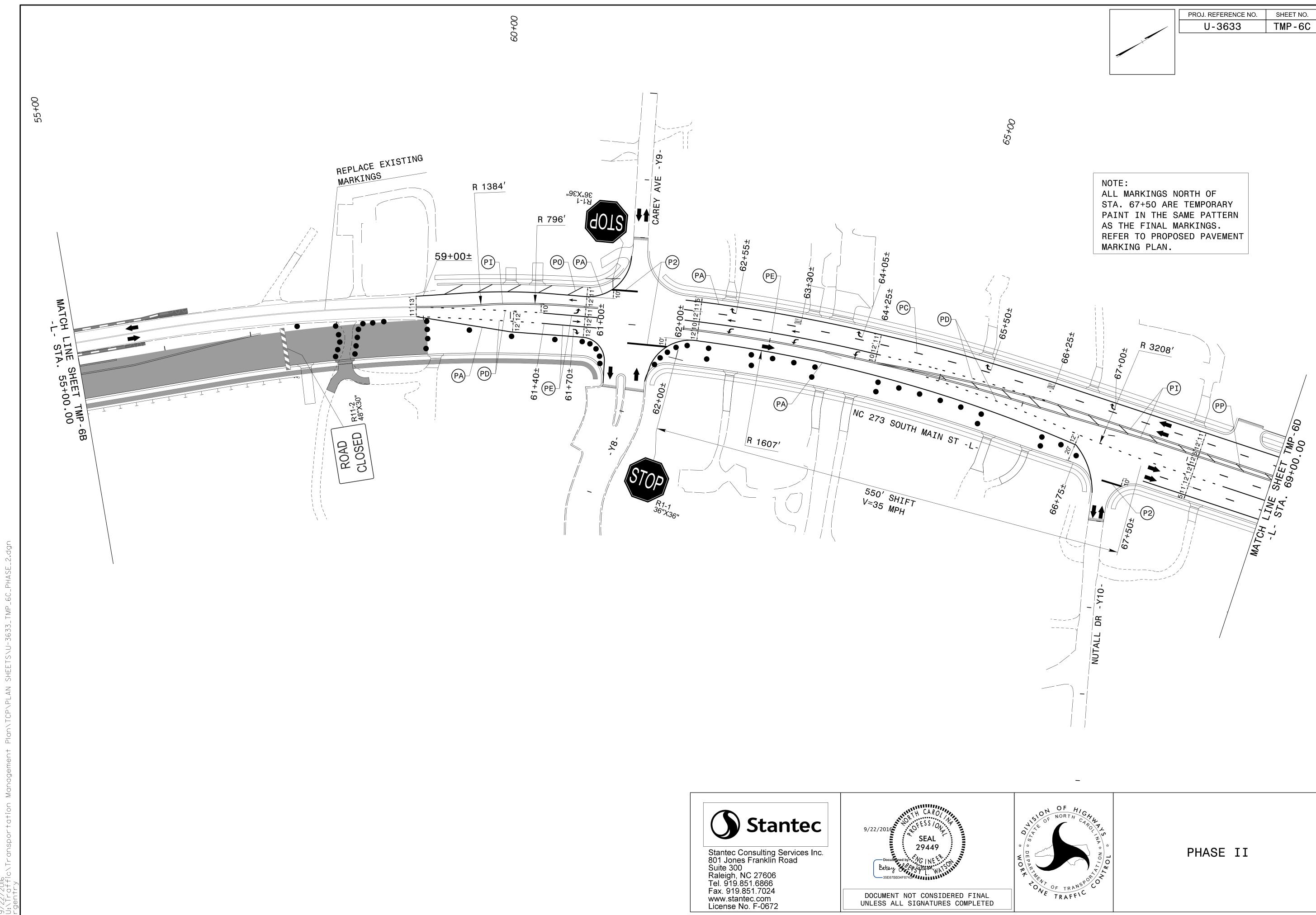












9/22/2016

