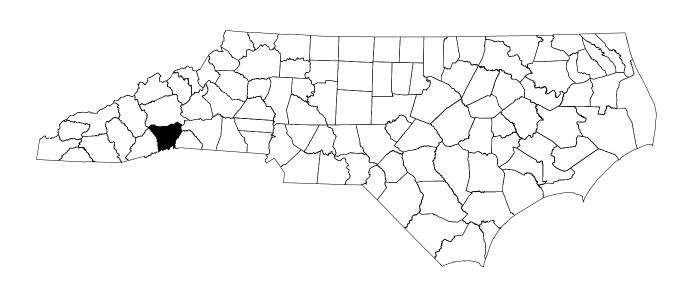
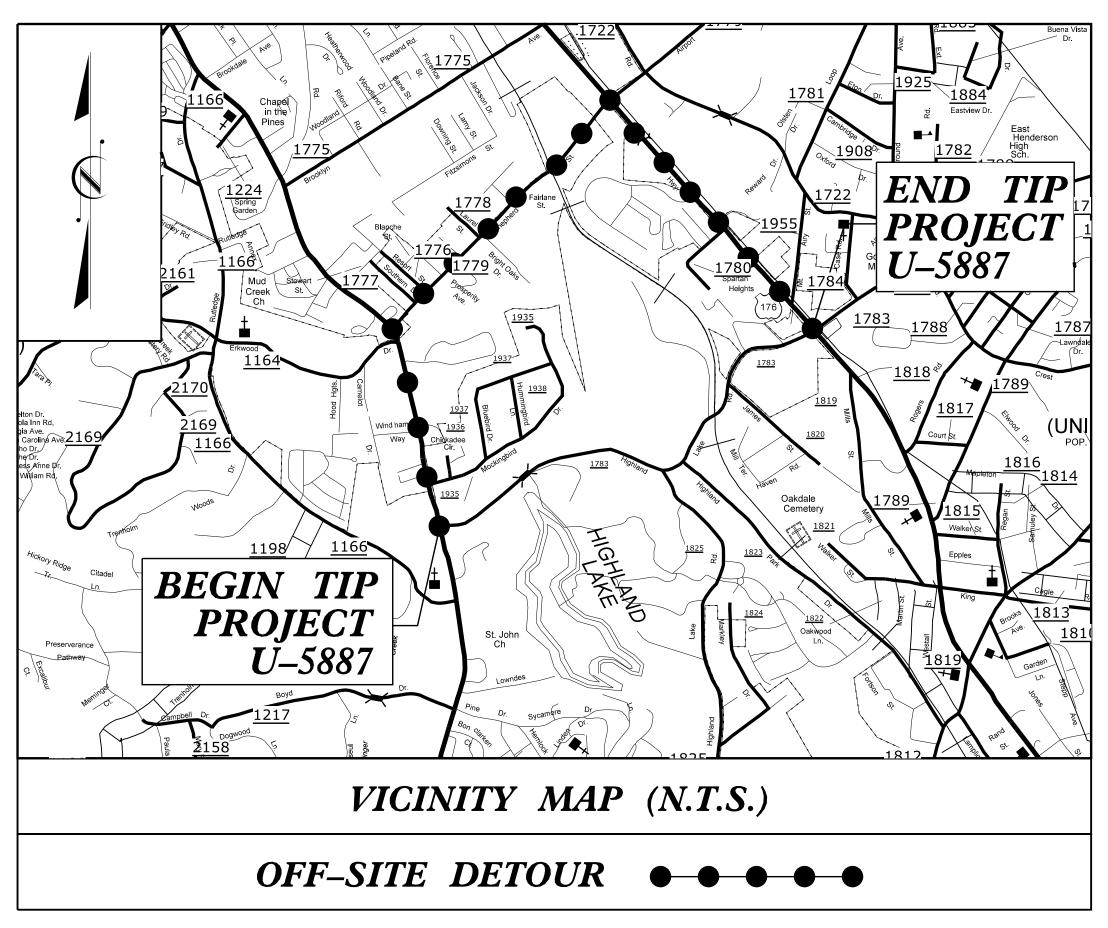
STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

HENDERSON COUNTY





LOCATION: SR 1783 (NORTH HIGHLAND LAKE ROAD) FROM NC225 TO WEST OF US 176

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

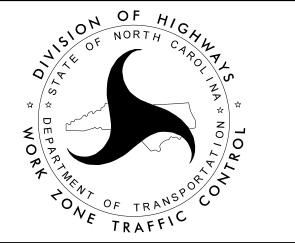
PLANS PREPARED BY:

REECE SCHULER, PE, PLS PROJECT ENGINEER

CHRIS MARTELL PROJECT DESIGN ENGINEER NCDOT CONTACTS:

BARRY MOSTELLER PROJECT ENGINEER

PROJECT DESIGN ENGINEER



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



■ North Carolina

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☐ Boone, NC

828 • 355 • 9933 APPROVED: Rua M. Schuler ☐ Tri-Cities, TN DATE:_____ 423 • 467 • 8401 ☐ Knoxville, TN 865 • 546 • 5800 □ Spartanburg,S(

SHEET NO.

TMP-1

800

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

11	01.01	WORK ZONE WARNING SIGNS											
11	01.02	TEMPORARY LANE CLOSURES											
11	01.03	TEMPORARY ROAD CLOSURES											
11	01.04	TEMPORARY SHOULDER CLOSURES											
11	01.05	WORK ZONE VEHICLE ACCESSES											
11	01.11	TRAFFIC CONTROL DESIGN TABLES											
11	10.01	STATIONARY WORK ZONE SIGNS											
11	10.02	PORTABLE WORK ZONE SIGNS											
11	15.01	FLASHING ARROW BOARDS											
11	30.01	DRUMS											
11	35.01	CONES											
11	45.01	BARRICADES											
11	50.01	FLAGGING DEVICES											
11	80.01	SKINNY - DRUMS											
12	05.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS											
12	05.02	PAVEMENT MARKINGS - TWO LANE AND MULTILANE ROADWAYS											
12	05.03	PAVEMENT MARKINGS - EXITS AND ENTRANCE RAMPS											
12	05.04	PAVEMENT MARKINGS - INTERSECTIONS											
12	05.05	PAVEMENT MARKINGS - TURN LANES											
12	05.07	PAVEMENT MARKINGS - PEDESTRIAN CROSSWALKS											
12	05.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES											
	05.09	PAVEMENT MARKINGS - PAINTED ISLANDS											
	205.11	PAVEMENT MARKINGS - RAILROAD CROSSINGS											
	05.12	PAVEMENT MARKINGS - BRIDGES											
	61.01	GUARDRAIL AND BARRIER DELINEATORS - INSTALLATION SPACING											
12	61.02	GUARDRAIL AND BARRIER DELINEATORS - TYPES AND MOUNTING											
12	62.01	GUARDRAIL END DELINEATION											

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

WEDGING

SIGNALS

Р1

P2

P46

P60

EXISTING

○ PROPOSED

PAVEMENT MARKINGS

——EXISTING LINES ——TEMPORARY LINES

TEMPORARY

TRAFFIC CONTROL DEVICES

BARRICADE (TYPE III)

DRUM SKINNY DRUM O TUBULAR MARKER

TEMPORARY CRASH CUSHION

FLASHING ARROW BOARD

FLAGGER

LAW ENFORCEMENT

TRUCK MOUNTED ATTENUATOR (TMA)

CHANGEABLE MESSAGE SIGN

TEMPORARY SIGNING

O PORTABLE SIGN

─ STATIONARY SIGN

STATIONARY OR PORTABLE SIGN

PAVEMENT MARKERS

CRYSTAL/CRYSTAL

CRYSTAL/RED

YELLOW/YELLOW

TEMPORARY PAVEMENT MARKING

DESCRIPTION SYMBOL

PAVEMENT MARKING LINES

4" PAINT

WHITE EDGELINE

WHITE SOLID LANE LINE

3 FT. - 9 FT./SP WHITE MINISKIP Ρ4

2 FT. - 6 FT./SP WHITE MINISKIP YELLOW EDGELINE P10

P11 YELLOW SINGLE CENTER 10 FT. YELLOW SKIP

P12 P13 YELLOW DOUBLE CENTER

8" PAINT

WHITE CROSSWALK LINE

16" PAINT

WHITE LINE, RR X

24" PAINT

P74

WHITE STOPBAR

PAVEMENT MARKING SYMBOLS

P70 P71 P72 SYMBOL DESCRIPTION

PAVEMENT MARKING SYMBOLS & CHARACTERS

LEFT TURN ARROW P71 RIGHT TURN ARROW STRAIGHT ARROW

COMBO RIGHT/STRAIGHT ARROW P74

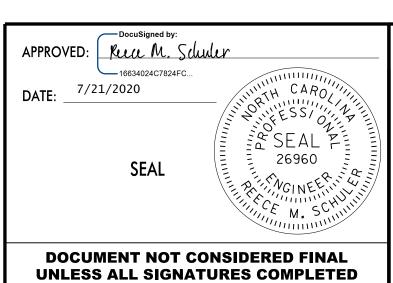
PAVEMENT MARKERS (NOT SHOWN ON PLANS)

TEMPORARY RAISED

CRYSTAL & RED YELLOW & YELLOW

FOR EACH PAINT PAVEMENT MARKING ITEM,

REFER TO GENERAL NOTES FOR NUMBER OF APPLICATIONS.



ROADWAY STANDARD DRAWINGS & LEGEND

SHEET NO. PROJ. REFERENCE NO. TMP-1B U-5887

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) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

ROAD NAME

DAY AND TIME RESTRICTIONS

ALL ROADS

MONDAY THRU FRIDAY. 6:00 AM TO 9:00 AM 4:00 PM TO 7:00 PM

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.

C) DO NOT STOP TRAFFIC AS FOLLOWS:

DAY AND TIME RESTRICTIONS ROAD NAME

DURATION AND OPERATION

ALL ROADS

6:00 AM TO 7:00 PM

MONDAY THRU SUNDAY. 30 MIN., TIE-INS, PM PLACEMENT TRAFFIC SHFITS

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.
- 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.

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 OPENED TRAVEL LANE THAT HAS AN EDGE OF PAVEMENT 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) IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

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

SIGNING

- L) 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.
- 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.

N) 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.

- O) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.
- P) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 200 FT IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

TRAFFIC BARRIER

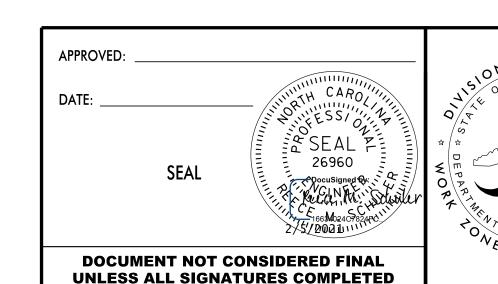
Q) PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER AT ALL TIMES DURING THE INSTALLATION AND REMOVAL OF THE BARRIER BY EITHER A TRUCK MOUNTED ATTENUATOR (MAXIMUM 72 HOURS) OR A TEMPORARY CRASH CUSHION.

PROTECT THE APPROACH END OF MOVABLE/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: (SEE ALSO 1101.05)

POSTED SPEED LIMIT	MINIMUM OFFSET
40 OR LESS	15 FT
45 - 50	20 FT
55	25 FT
60 MPH or HIGHER	30 FT

TRAFFIC CONTROL DEVICES

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



TRANSPORTATION **OPERATIONS** PLAN

GENERAL NOTES / LOCAL NOTES

PAVEMENT MARKINGS AND MARKERS

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

ROAD NAME MARKING MARKER

ALL ROADS PAINT NONE

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

MISCELLANEOUS

- Z) LAW ENFORCEMENT SHALL BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS AS DIRECTED BY THE ENGINEER.
- AA) IN THE EVENT A TIE-IN CANNOT BE MADE IN ONE DAY'S TIME, BRING THE TIE-IN AREA TO AN APPROPRIATE ROADWAY ELEVATION AS DETERMINED BY THE ENGINEER. PLACE BLACK ON ORANGE "LOOSE GRAVEL" SIGNS (W8-7) AND BLACK ON ORANGE "PAVEMENT ENDS" SIGNS (W8-3) 200 FT AND 200 FT RESPECTIVELY IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS TO DELINEATE THE EDGE OF ROADWAY ALONG UNPAVED AREAS.
- 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.).

LOCAL NOTES:

- 1) EMERGENCY VEHICLE ACCESS MUST BE MAINTAINED AT ALL TIMES.
- 2) NOTIFY THE HENDERSON COUNTY SCHOOL BOARD 30 DAYS BEFORE ANY LANE CLOSURES.

MANAGEMENT STRATEGIES

PROJ. REFERENCE NO. SHEET NO. U-5887 TMP-1C

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

RECOMMENDED STRATEGIES:

TRAFFIC MANAGEMENT STRATEGIES:
LANE SHIFTS OR CLOSURES
NIGHT WORK
PEDESTRIAN / BICYCLE ACCOMMODATIONS
OFF-SITE DETOURS / USE OF ALTERNATIVE ROUTES

Docusigned by:

Rea M. Schuler

DATE: 7/21/2020

SEAL

SEAL

DOCUSIGNED by:

Rea M. Schuler

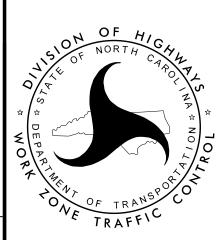
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TRANSPORTATION
OPERATIONS
PLAN

Transportation/31335-U6 U-368//Irattic/Iratticcontroi/Icrouse8/_IMP_IB 8||

/21/2020 :\Asheville\trans

PHASING

ROJ. REFERENCE NO.	SHEET NO.
U-5887	TMP-2

PHASE I

STEP 1: - ERECT WORK ZONE ADVANCED WARNING SIGNS USING RSD NO. 1101.01, SHEET 3 OF 3.

NOTE: STEPS 2 THRU 4 SHALL BE PERFORMED USING NIGHTLY LANE CLOSURES, FLAGGERS AS NECESSARY, AND LAW ENFORCEMENT. WORK CAN ONLY BE PERFORMED MONDAY-THURSDAY, FROM 10:00 P.M. TO 5:59 A.M, EIGHT (8) CONSECUTIVE HOURS PER DAY. ALL TRAFFIC DEVICES AND SIGNS SHALL BE REMOVED AND STORED IN A SAFE LOCATION, AND ALL EXCAVATION WITHIN THE TRAVEL WAY SHALL BE COVERED WITH STEEL PLATES BY 6:00 A.M.

STEP 2: - USING ROADWAY STANDARD DRAWINGS (RSD) NO. 1101.02, SHEETS 3 & 7 OF 14,
BEGIN WATER LINE INSTALLATION AS SHOWN ON TMP-3B AND UTILITIES CONSTRUCTION
PLANS.

NOTE: IN THE EVENT AN EXCAVATION WITHIN THE TRAVEL WAY NEEDS TO REMAIN OPEN FOR FURTHER WORK, COVER WITH STEEL PLATES BEFORE DIRECTING TRAFIC TO EXISTING TRAFFIC PATTERN, OTHERWISE, FILL EXCAVATION AND REPAIR PAVEMENT AS SHOWN ON THE ROADWAY PLANS.

STEP 3: - USING RSD NO. 1101.02, SHEETS 3 & 7 OF 14, REMOVE, AS NECESSARY, EXISTING PAVEMENT MARKINGS, AND PLACE PAVEMENT MARKINGS AND MARKERS AS NEEDED.

- USING RSD NO. 1101.02, SHEETS 3 & 7 OF 14, CONTINUE WATER LINE INSTALLATION AS SHOWN ON TMP-3C AND UTILITIES CONSTRUCTION PLANS.

NOTE: IN THE EVENT AN EXCAVATION WITHIN THE TRAVEL WAY NEEDS TO REMAIN OPEN FOR FURTHER WORK, COVER WITH STEEL PLATES BEFORE DIRECTING TRAFIC TO EXISTING TRAFFIC PATTERN, OTHERWISE, FILL EXCAVATION, REPAIR PAVEMENT AND REPLACE ALL DAMAGED/REMOVED PAVEMENT MARKINGS.

STEP 4: - USING RSD NO. 1101.02, SHEETS 3 & 7 OF 14, REMOVE STEEL PLATES AND FILL EXCAVATION, REPAIR PAVEMENT AND REPLACE ALL DAMAGED/REMOVED PAVEMENT MARKINGS AND MARKERS PER RSD 1205.01, 1205.02, 1205.04, 1205.05, 1205.07, 1205.08, 1205.09, 1250.01 AND 1251.01.

NOTE: STEP 5 SHALL BE COMPLETED IN A CONTINUOUS OPERATION.

STEP 5: - USING RSD NO. 1101.02, SHEET 1 OF 14, AND FLAGGERS AS NECESSARY, PERFORM THE FOLLOWING ON -L- SR 1783 (NORTH HIGHLAND LAKE RD.) AND ALL -Y- ROADS:

- REMOVE, AS NECESSARY, EXISTING PAVEMENT MARKINGS, AND PLACE TEMPORARY PAVEMENT MARKINGS.

- BEGIN ROAD WIDENING UP TO, BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE

- BEGIN PROPOSED SIDEWALK AND MULTI-USE PATH CONSTRUCTION. SEE SHEETS TMP-4 THRU TMP-8.

NOTE: INSTALL PEDESTRIAN BARRICADES AND SIGNS, CLOSE PROPOSED SIDEWALKS AND MAINTAIN PEDESTRIAN TRAFFIC AS DIRECTED BY THE ENGINEER (SEE SHEETS TMP-6 THRU TMP-8). DO NOT MAINTAIN PEDESTRIAN TRAFFIC DURING THE CONSTRUCTION OF PROPOSED SIDEWALK FROM -L- STA. 11+25 +/- TO -L- STA. 13+30 +/-, AND DURING THE CONSTRUCTION OF -PATH1- (SEE SHEETS TMP-4 AND TMP-5).

- BEGIN PROPOSED DRAINAGE STRUCTURE AND DITCH CONSTRUCTION AND PIPE INSTALLATION. SEE ROADWAY PLANS.

NOTE: CONSTRUCT DRAINAGE STRUCTURES 0613, 0702, 0707, 0714, AND 0715 TO TEMPORARY ELEVATION AND COVER WITH STEEL PLATES. SEE SHEETS TMP-4 THRU TMP-8.

STEP 6: - INSTALL AND COVER OFF-SITE DETOUR NO.1 SIGNS (SEE SHEET TMP-2B AND SHEET TMP-3).

PHASE II

WORK IN A CONTINUOUS MANNER TO COMPLETE THE WORK REQUIRED IN PHASE II, STEPS 1 THRU 6, FOR 150 DAYS OR AS DIRECTED BY THE ENGINEER. SEE INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES.

- STEP 1: USING RSD 1101.03, SHEET 1 OF 9, UNCOVER OFF-SITE DETOUR NO. 1 SIGNS, PLACE TYPE III BARRICADES AND CLOSE -L- SR 1783 (N. HIGHLAND LAKE RD.) AND DIRECT SR 1783 TRAFFIC TO OFF-SITE DETOUR. SEE SHEET TMP-3.
- STEP 2: RELOCATE, AS NECESSARY PEDESTRIAN BARRICADES AND SIGNS. SEE SHEETS TMP-9 THRU
 TMP-13.
- STEP 3: AWAY FROM TRAFFIC, CONSTRUCT TEMPORARY SHORING NO. 01 AND PROPOSED CULVERT

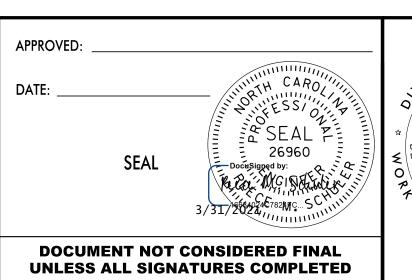
 NEAR -L- STA. 22+45 +/-. SEE SHEETS TMP-2C, TMP-3, TMP-10 AND STRUCTURE PLANS.
- STEP 4: RELOCATE OFF-SITE DETOUR NO. 1 SIGNS AND BARRICADES AS SHOWN ON OFF-SITE DETOUR NO. 2. SEE SHEET TMP-3A.
- STEP 5: AWAY FROM TRAFFIC, CONSTRUCT PROPOSED CULVERT NEAR -L- STA. 40+83 +/-. SEE SHEET TMP-3A AND STRUCTURE PLANS.
- STEP 6: REMOVE ALL TYPE III BARRICADES AND OFF-SITE DETOUR SIGNS.

NOTE: STEP 7 SHALL BE COMPLETED IN A CONTINUOUS OPERATION.

- STEP 7: USING RSD NO. 1101.02, SHEET 1 OF 14, AND FLAGGERS AS NECESSARY, PERFORM THE FOLLOWING ON -L- SR 1783 (NORTH HIGHLAND LAKE RD.) AND ALL -Y- ROADS:
 - MILL AND WEDGE EXISTING ROADWAY UP TO, BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.
 - REMOVE, AS NECESSARY, EXISTING PAVEMENT MARKINGS, AND PLACE TEMPORARY PAVEMENT MARKINGS AS SHOWN ON SHEETS TMP-9 THRU TMP-13.
 - COMPLETE ROAD WIDENING UP TO, BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.
 - COMPLETE PROPOSED SIDEWALK AND MULTI-USE PATH CONSTRUCTION. SEE SHEETS TMP-9 THRU TMP-13.

NOTE: INSTALL PEDESTRIAN BARRICADES AND SIGNS, CLOSE PROPOSED SIDEWALKS AND MAINTAIN PEDESTRIAN TRAFFIC AS DIRECTED BY THE ENGINEER. SEE SHEETS TMP-9 THRU TMP-13.

- COMPLETE PROPOSED DRAINAGE STRUCTURE AND DITCH CONSTRUCTION AND PIPE INSTALLATION. SEE ROADWAY PLANS.
- STEP 8: REMOVE ALL PEDESTRIAN BARRICADES AND SIGNS AND OPEN SIDEWALKS AND MULTI-USE PATH TO PEDESTRIAN TRAFFIC.





TEMPORARY TRAFFIC CONTROL PHASING

PHASING

PHASE III

NOTE: STEP 1 SHALL BE COMPLETED IN A CONTINUOUS OPERATION.

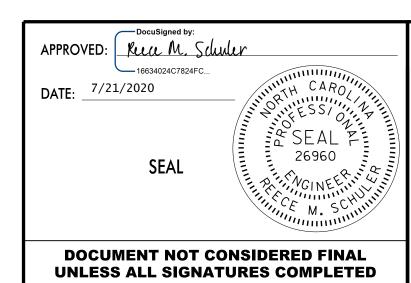
STEP 1: - USING RSD NO. 1101.02, SHEETS 1 OF 14, AND FLAGGERS AS NECESSARY, PERFORM THE FOLLOWING:

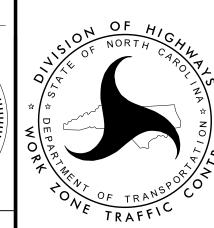
- REMOVE CONFLICTING EXISTING PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKINGS, AS NEEDED.

- DELINEATE WITH SKINNY DRUMS AND INSTALL PROPOSED MONOLITHIC CONCRETE ISLANDS PER THE ROADWAY PLANS. SEE SHEETS TMP-16 AND TMP-17.

STEP 2: - USING RSD NO. 1101.02, SHEET 1 OF 14, AND FLAGGERS AS NECESSARY, PLACE THE FINAL LAYER OF SURFACE COURSE AND FINAL PAVEMENT MARKINGS (PAINT) ON THE ENTIRE PROJECT. SEE SHEETS TMP-14 THRU TMP-18, ROADWAY AND PAVEMENT MARKING PLANS.

STEP 3: - ONCE ALL CONSTRUCTION IS COMPLETE, REMOVE ALL SIGNS AND DEVICES, AND OPEN
-L- SR 1783 (NORTH HIGHLAND LAKE RD.) AND ALL -Y- ROADS TO THEIR FINAL TRAFFIC PATTERN.





TEMPORARY TRAFFIC CONTROL PHASING

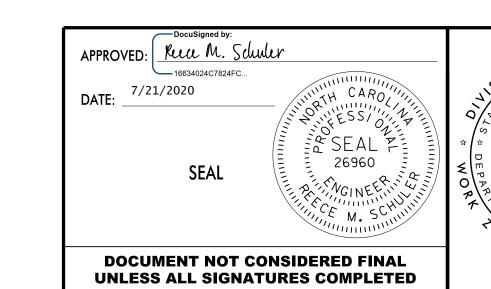
PROJ. REFERENCE NO. SHEET NO. U-5887 TMP-2B

BACKG. COLOR: Orange CHK BY: LDB SIGN NUMR: I-1 DESIGN BY: CGM TYPE: D Ground COPY COLOR: Black PROJECT ID: U-5887 DIV: 14 DATE: January 16, 2020 QUANTITY: See Plans SIGN WIDTH: 3'-6" HEIGHT: 2'-0" TOTAL AREA: 7.0 Sq. Ft. SYMBOL WID HT X | Y | MAT'L: 0.063 in.(1.6 mm) ALUMINUM 3'-6" **BORDER TYPE:** INSET RECESS: 0.38" WIDTH: 0.63" **RADII:** 1.5" N HIGHLAND NO. Z BARS: LENGTH: in. USE NOTES: 1,2 1. Legend and border shall be direct applied 3.95" black non-reflective sheeting. 2. Background shall be NC grade B fluoresent **BORDER** orange retroreflective sheeting. R=1.5''TH=0.63" IN=0.38"

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8.8	2.8	4	3.6	2.5	5	3.8	2.7	8.8															24.4

Spacing Factor is 1 unless specified otherwise

FILENAME: SPECIAL_SIGN_DESIGN



SPECIAL SIGN DESIGN

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PROJ. REFERENCE NO.	SHEET NO.
U-5887	TMP-2C

TEMPORARY SHORING NOTES

TEMPORARY SHORING LOCATION (01) (SEE SHEET TMP-10)

FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

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

DESIGN TEMPORARY SHORING FROM -L- STA. 22+62 +/-, 7.0 FT (RT), TO -L- STA. 22+71 +/-, 41.5 FT (RT), FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT (ϕ) = 130 PCF FRICTION ANGLE (γ) = 40 DEGREES COHESION (c) = 0 PSF GROUNDWATER ELEVATION = 2097 FT

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM 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 -L- STA. 22+62 +/-, 7.0 FT (RT), TO -L- STA. 22+71 +/-, 41.5 FT (RT). SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.02 FOR STANDARD TEMPORARY WALLS.

Docusigned by:

Rea M. Schuler

16634024C7824FC...

DATE:

7/21/2020

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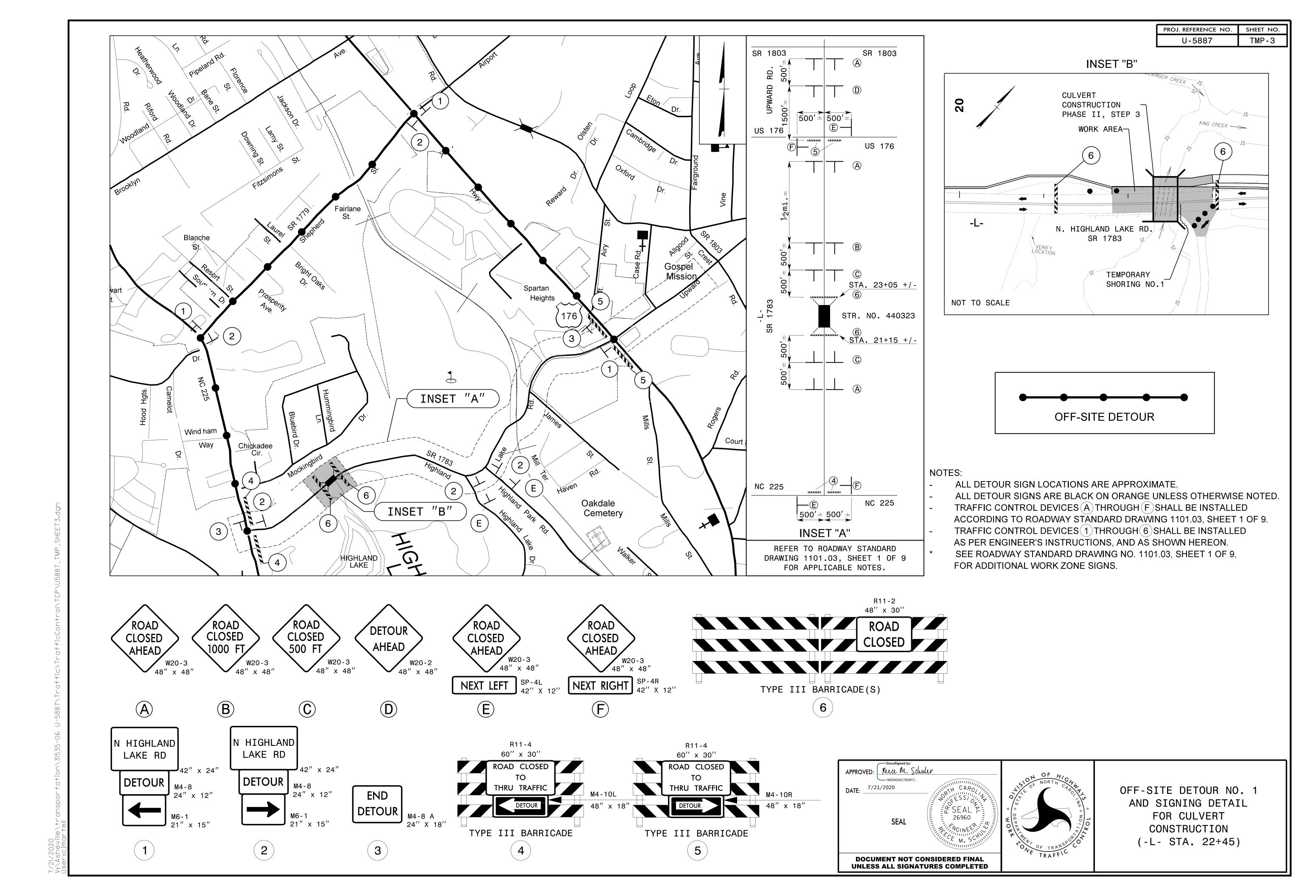
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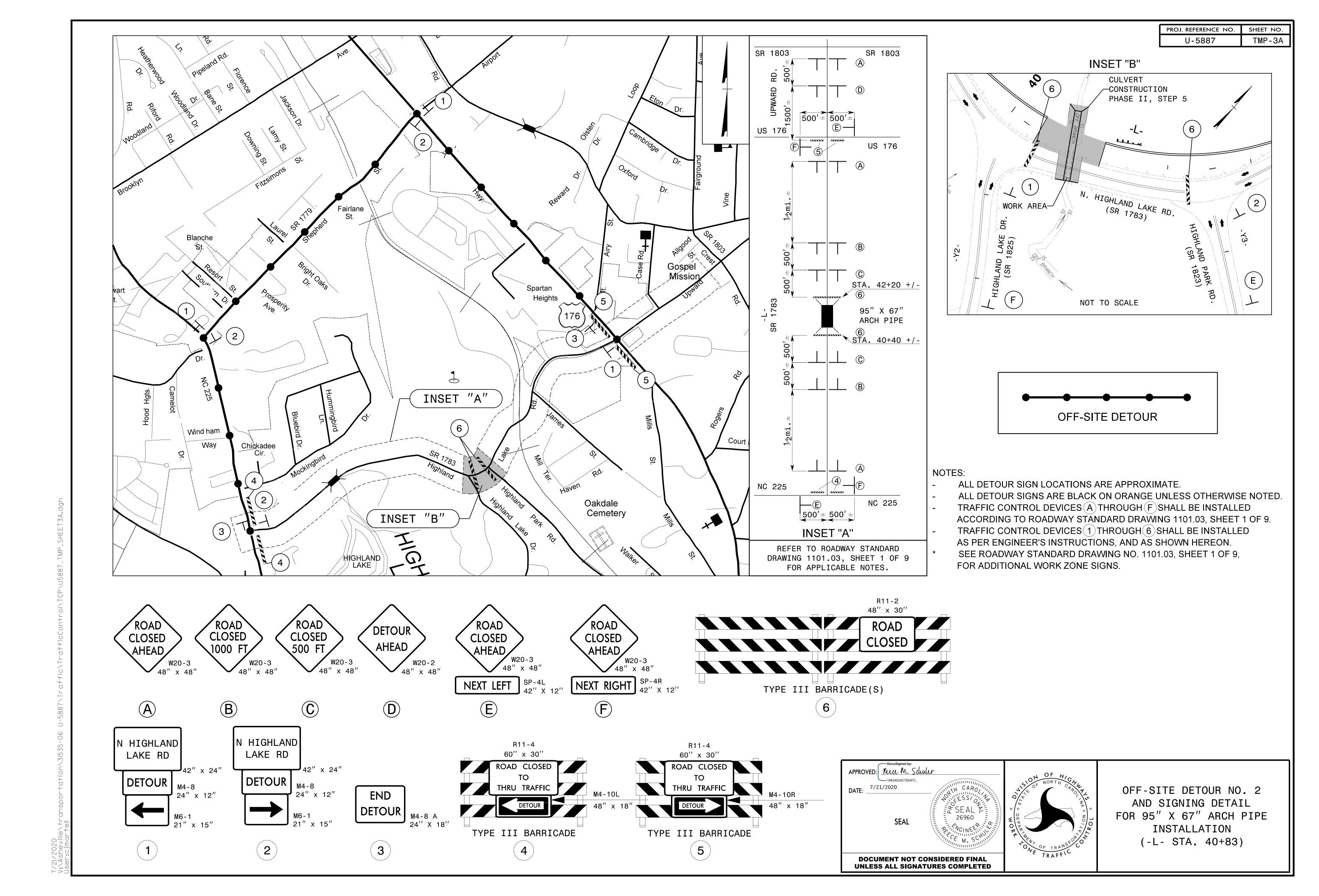
OF HIGHWAY
OF NORTH CARAMAN
OF TRAFFIC
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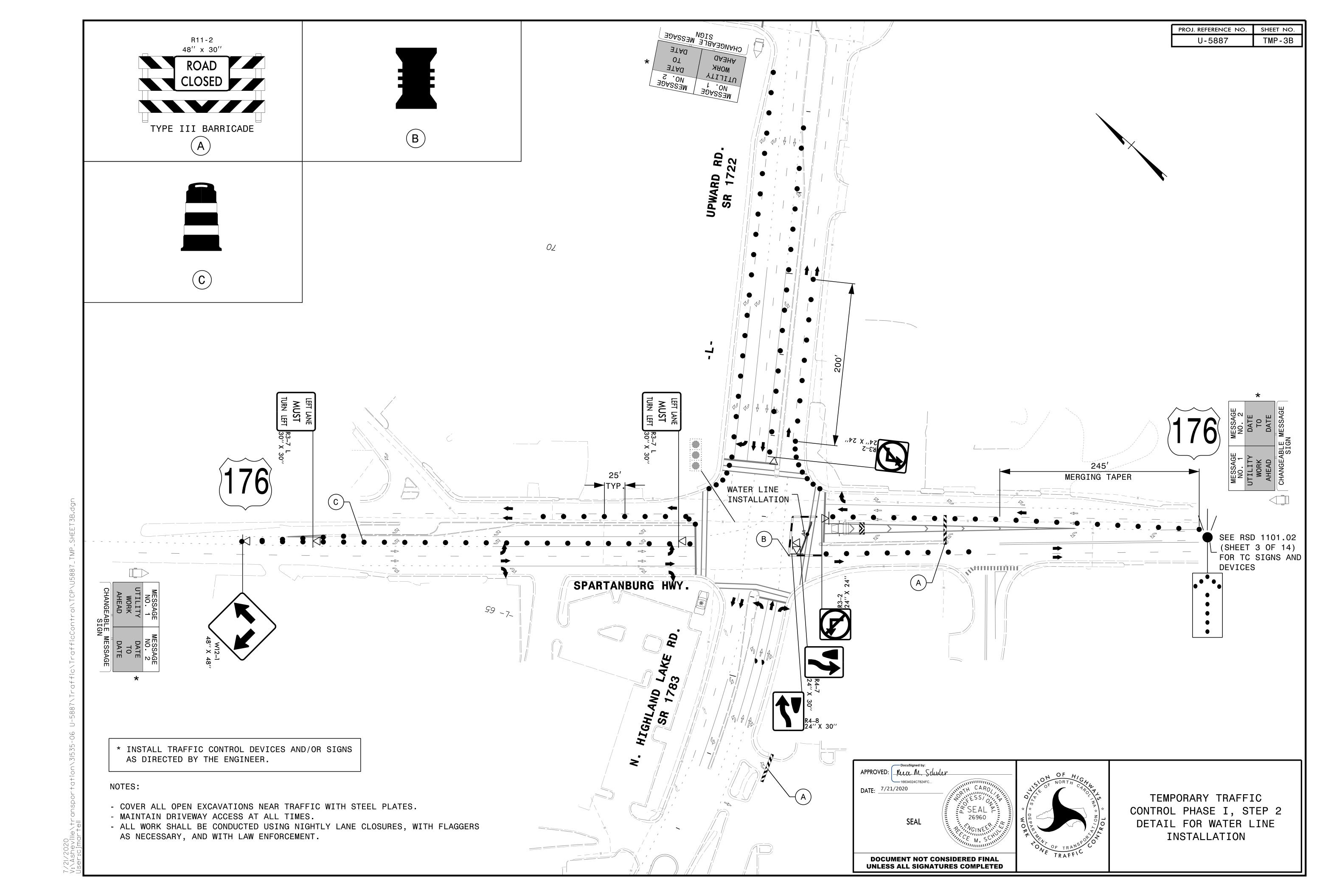
TEMPORARY SHORING NOTES

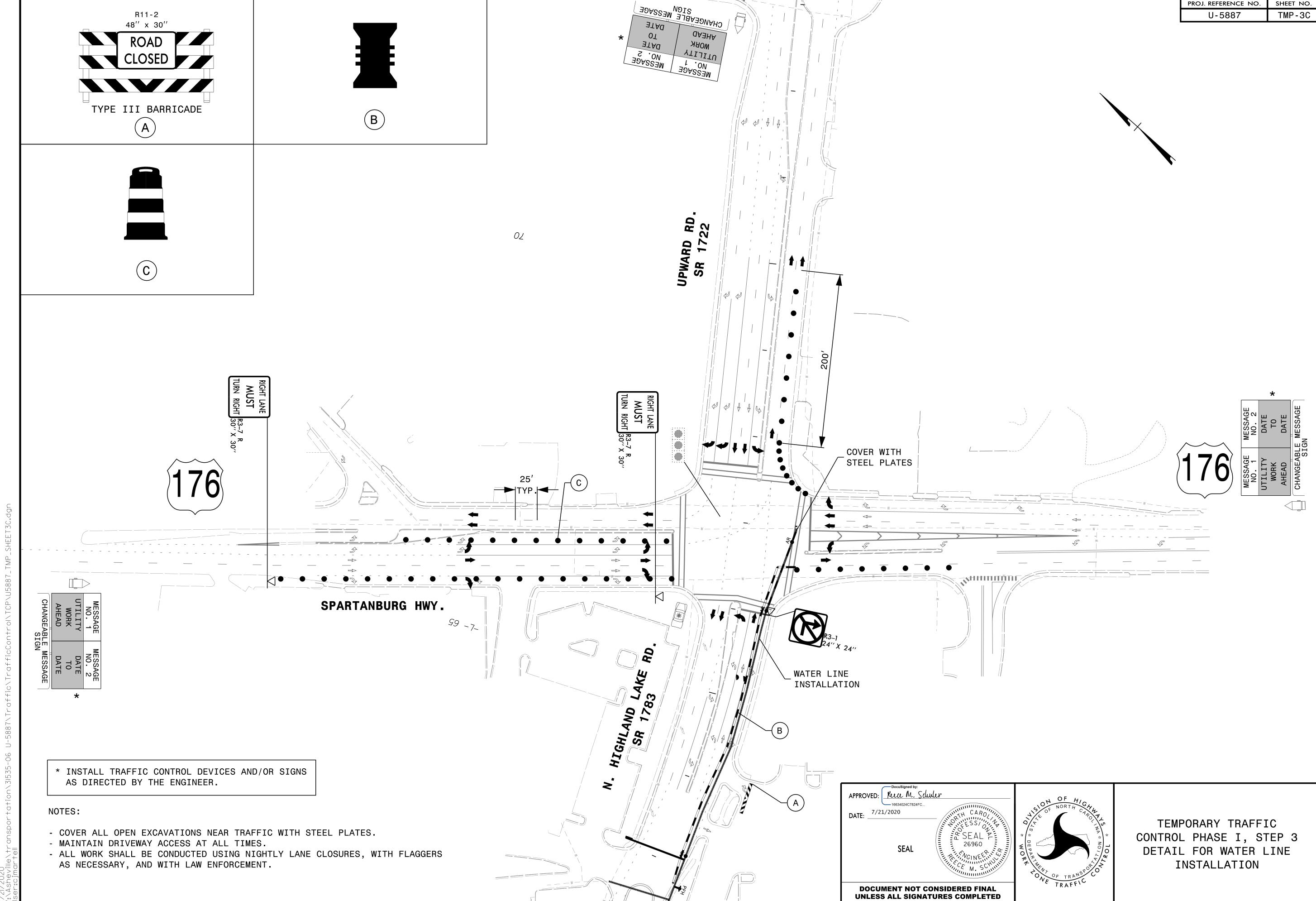
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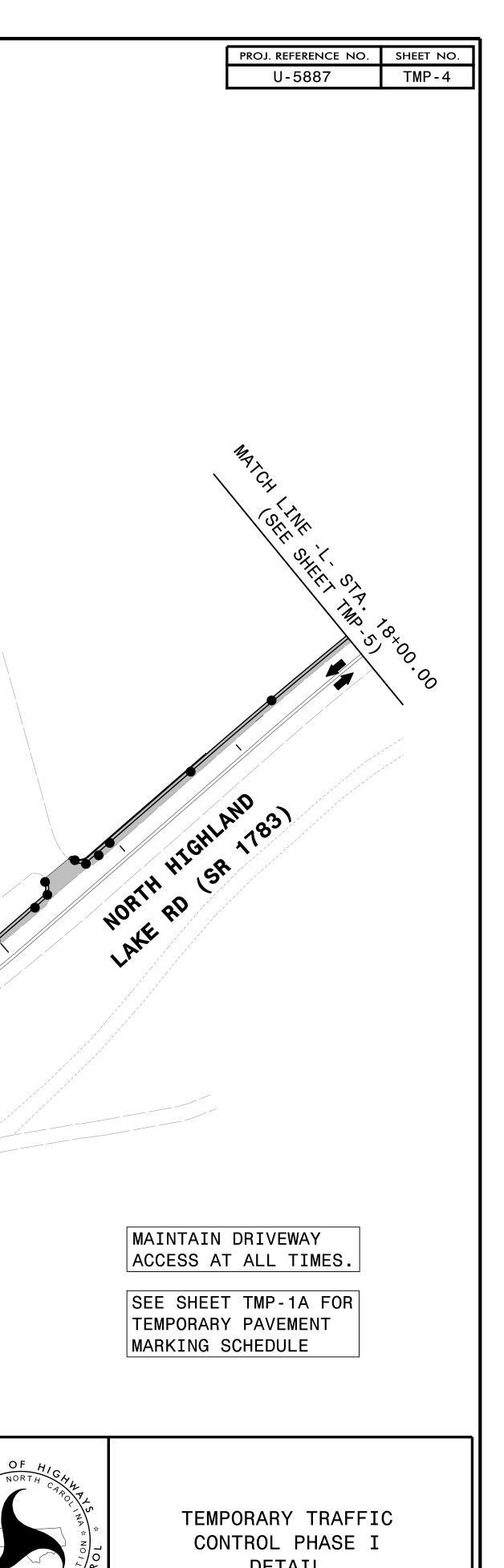
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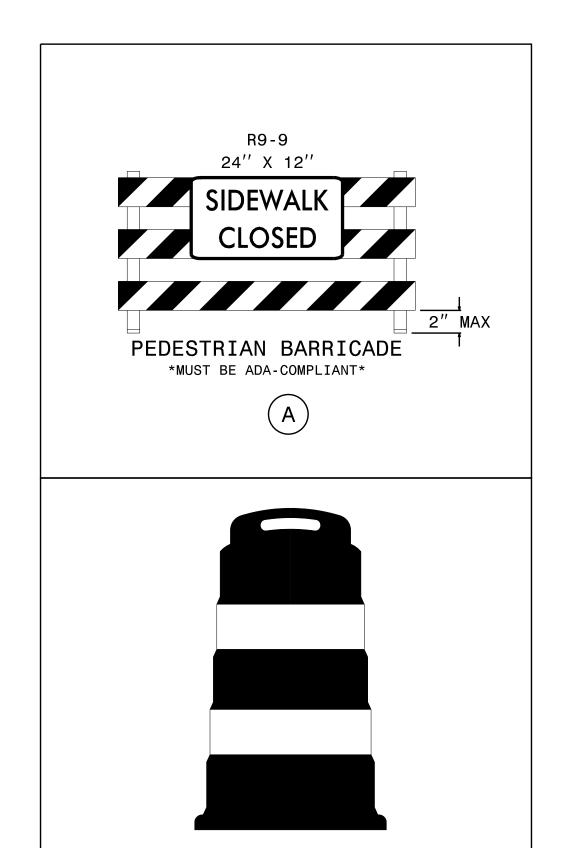


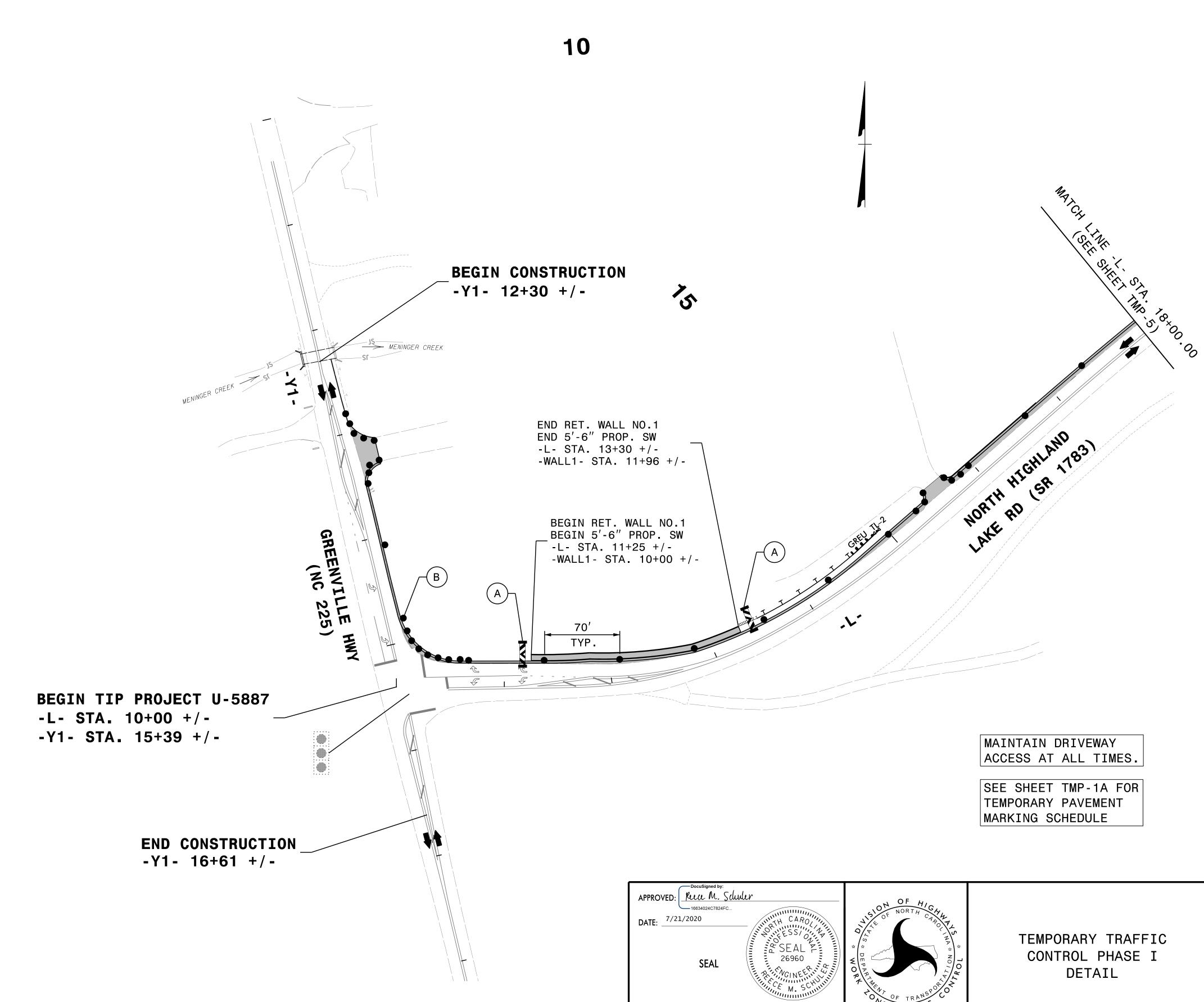




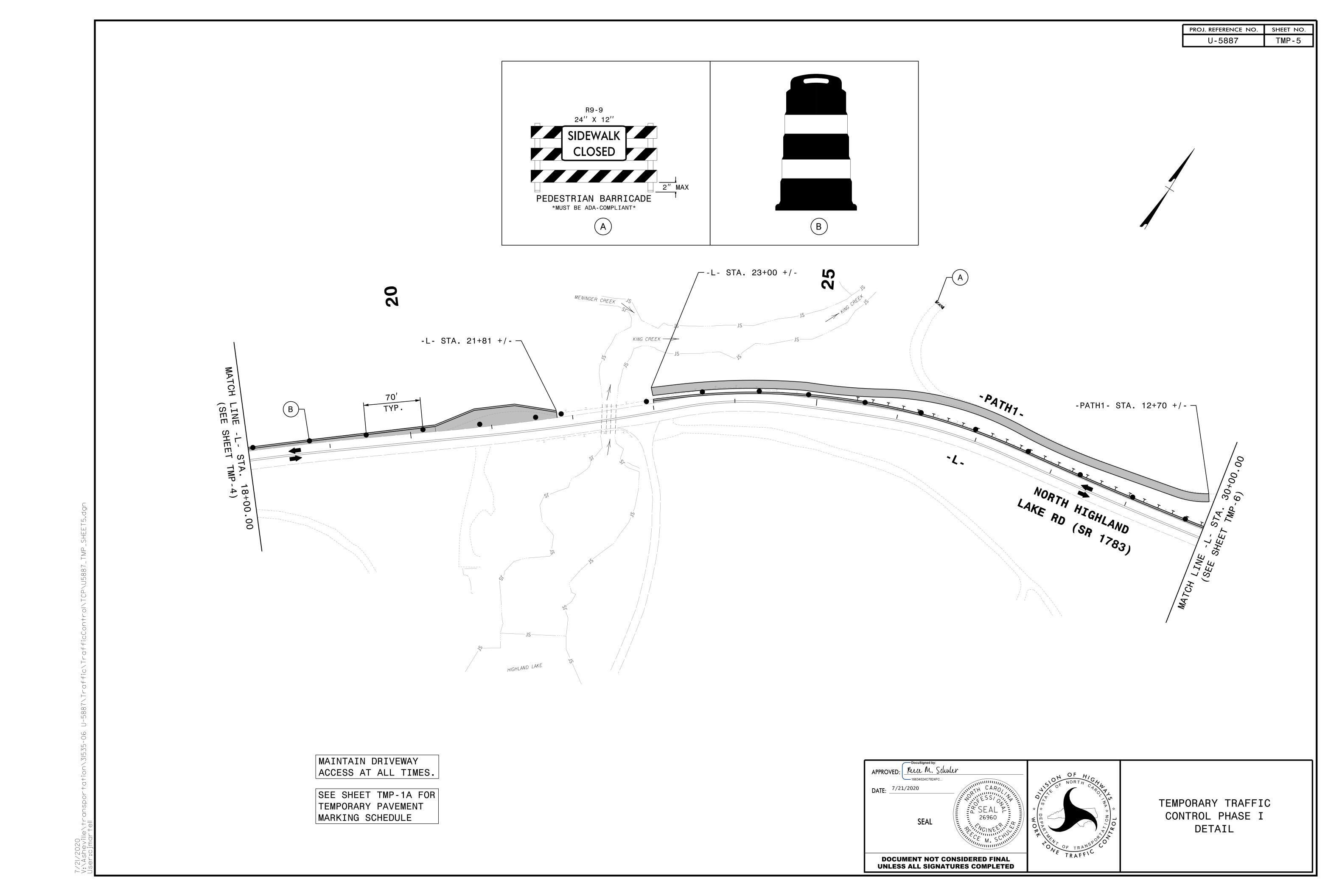








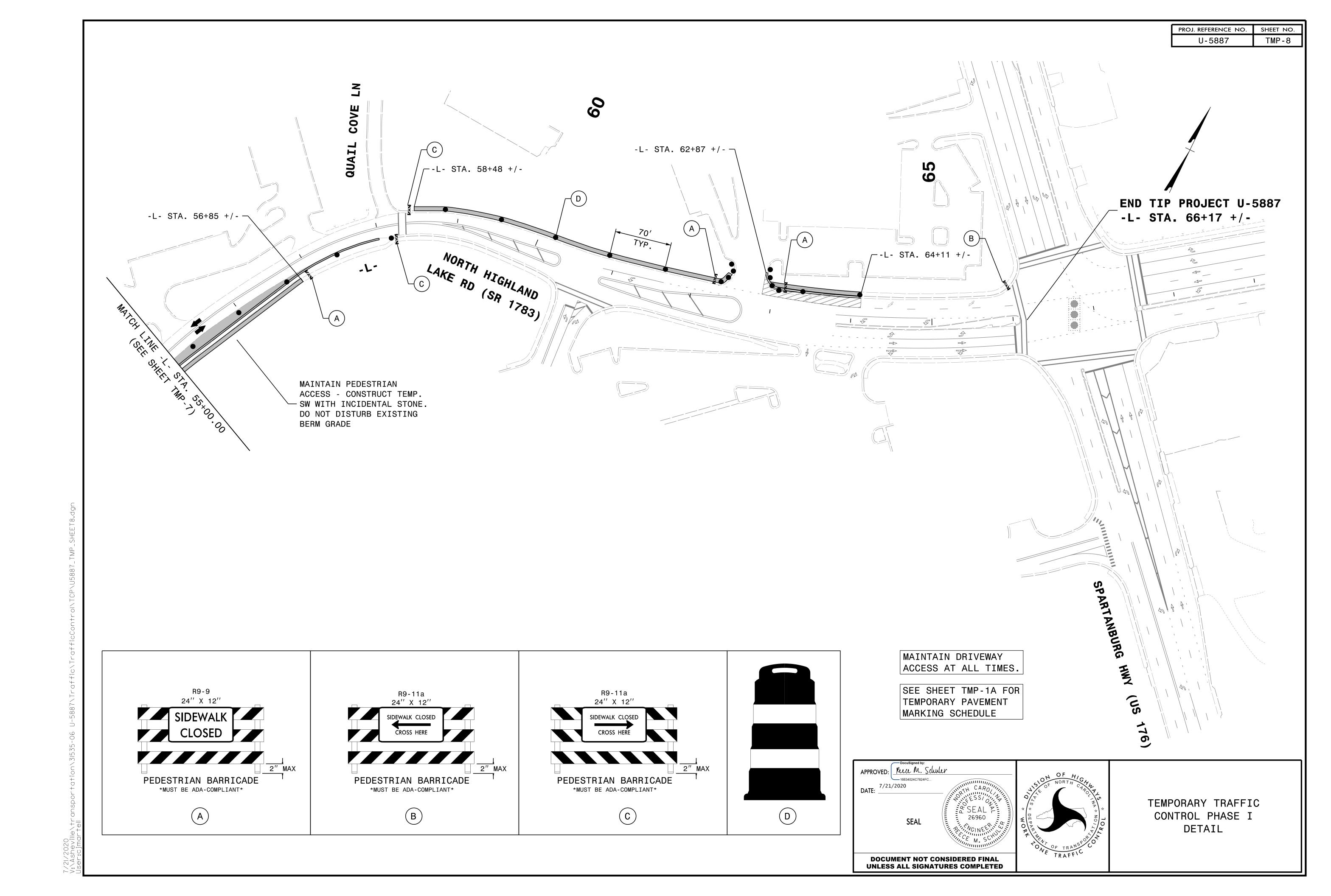
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



PROJ. REFERENCE NO. U-5887 TMP-6 MAINTAIN PEDESTRIAN ACCESS - CONSTRUCT TEMP. -SW WITH INCIDENTAL STONE. -PATH2- STA. 10+00 +/- — __-L- STA. 41+20 +/--L- STA. 40+40 +/- — -L-LAKE RD HIGHLAND (SR 1783) END CONSTRUCTION -Y2- STA. 11+18 +/-2" MAX MAINTAIN DRIVEWAY APPROVED: <u>Keee M. Schuler</u> ACCESS AT ALL TIMES. PEDESTRIAN BARRICADE
MUST BE ADA-COMPLIANT SEE SHEET TMP-1A FOR TEMPORARY TRAFFIC TEMPORARY PAVEMENT MARKING SCHEDULE CONTROL PHASE I DETAIL DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PROJ. REFERENCE NO. U-5887 TMP-7 50 45 BEGIN CONSTRUCTION
-Y6- STA. 11+60 +/--PATH2--L- STA. 54+22 +/--Y5-NORTH HIGHLAND LAKE RD (SR 1783) 0707 STEEL PLATE MAINTAIN PEDESTRIAN ACCESS - CONSTRUCT TEMP. 1820) └─ SW WITH INCIDENTAL STONE DO NOT DISTURB EXISTING STEEL 0714 BERM GRADE (SR HIGHLAND PARK (SR 1823) ST END CONSTRUCTION -Y7- STA. 11+00 +/-END CONSTRUCTION -Y3- STA. STA. 11+49 +/-MAINTAIN DRIVEWAY ACCESS AT ALL TIMES. SEE SHEET TMP-1A FOR TEMPORARY PAVEMENT SIDEWALK MARKING SCHEDULE CLOSED 2" MAX APPROVED: PEDESTRIAN BARRICADE DATE: *MUST BE ADA-COMPLIANT* TEMPORARY TRAFFIC CONTROL PHASE I DETAIL DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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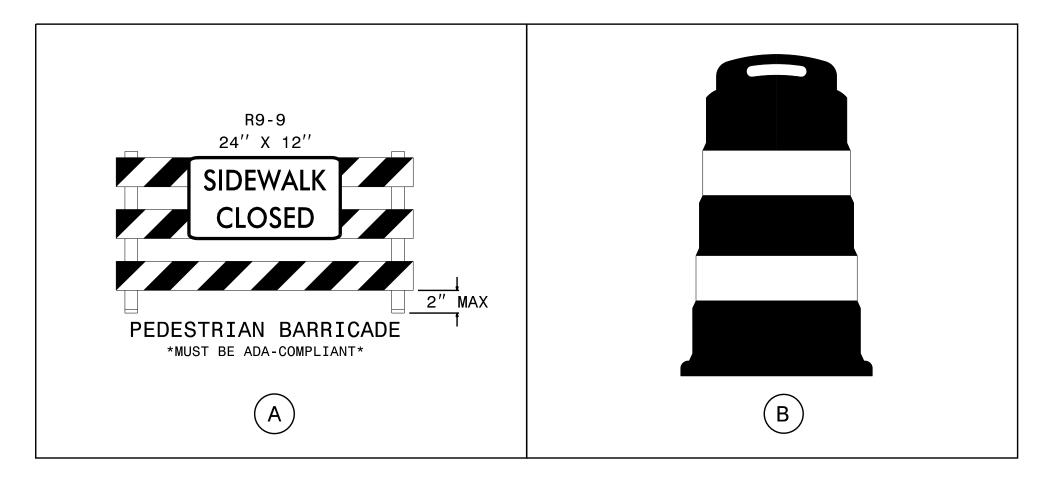
BEGIN CONSTRUCTION -Y1- 12+30 +/-BEGIN TIP PROJECT U-5887 -L- STA. 10+00 +/--Y1- STA. 15+39 +/-MAINTAIN DRIVEWAY ACCESS AT ALL TIMES. SEE SHEET TMP-1A FOR TEMPORARY PAVEMENT MARKING SCHEDULE END CONSTRUCTION _ -Y1- 16+61 +/-APPROVED: Ruce M. Schuler
16634024C7824FC... TEMPORARY TRAFFIC CONTROL PHASE II DETAIL

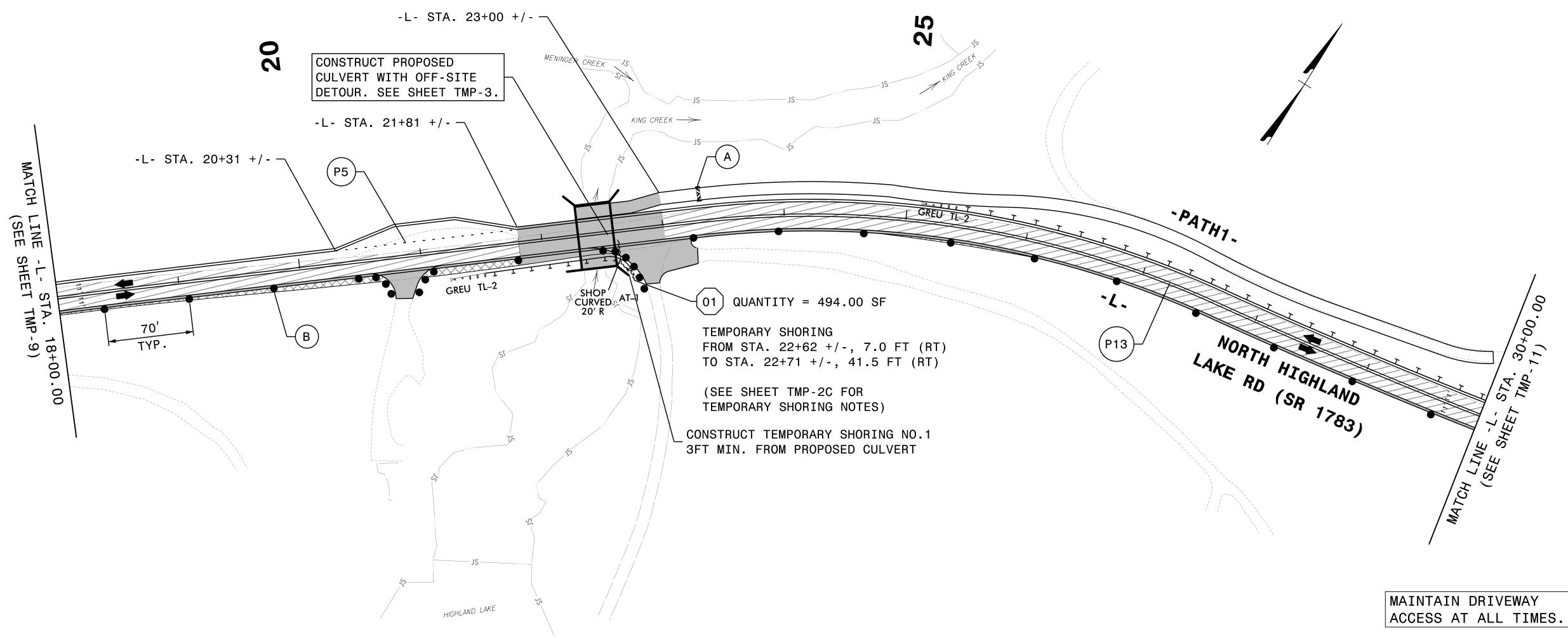
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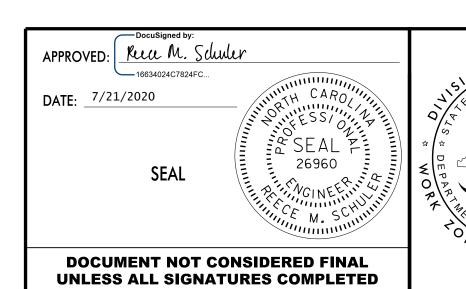
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PROJ. REFERENCE NO. U-5887 TMP-10

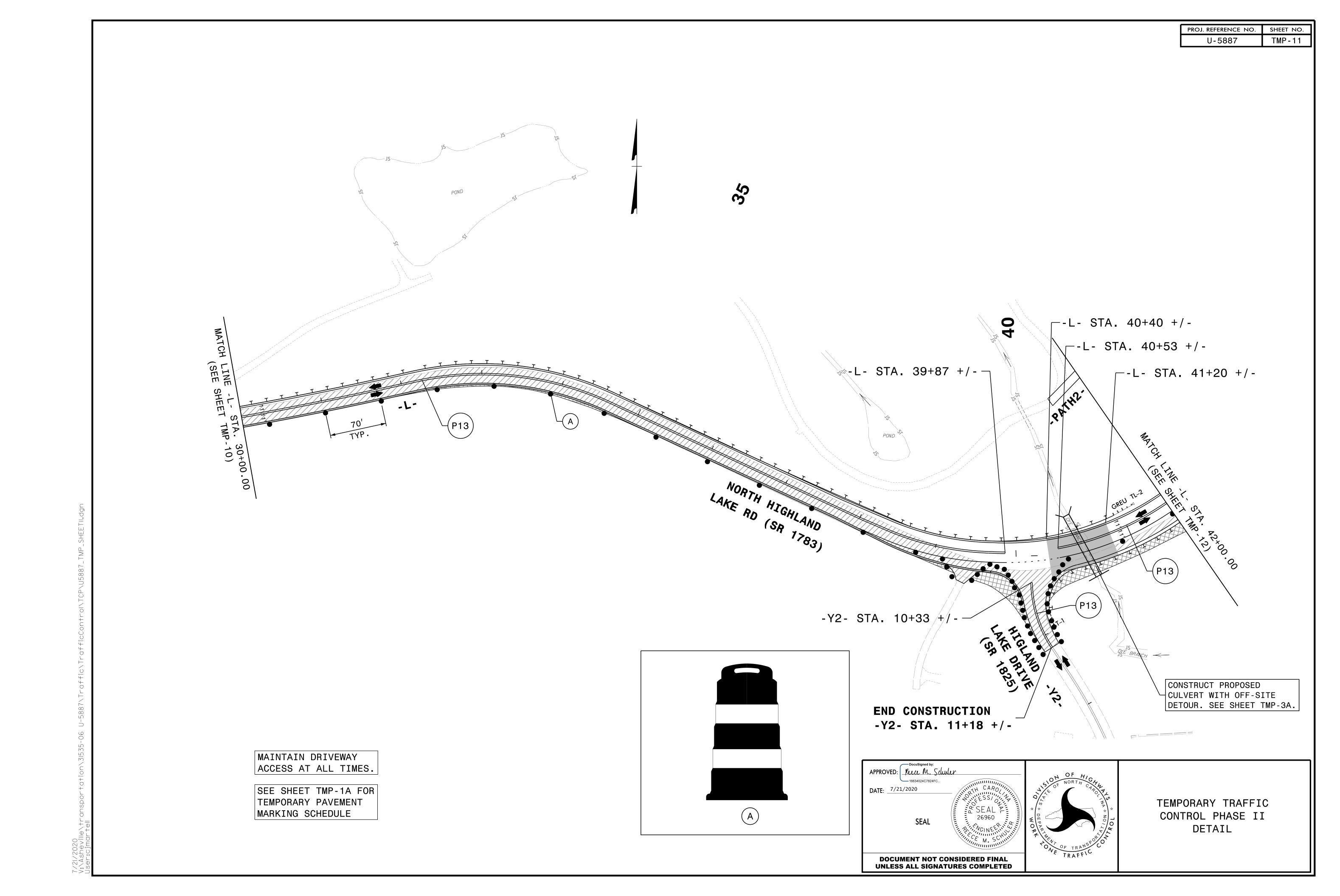




SEE SHEET TMP-1A FOR TEMPORARY PAVEMENT MARKING SCHEDULE



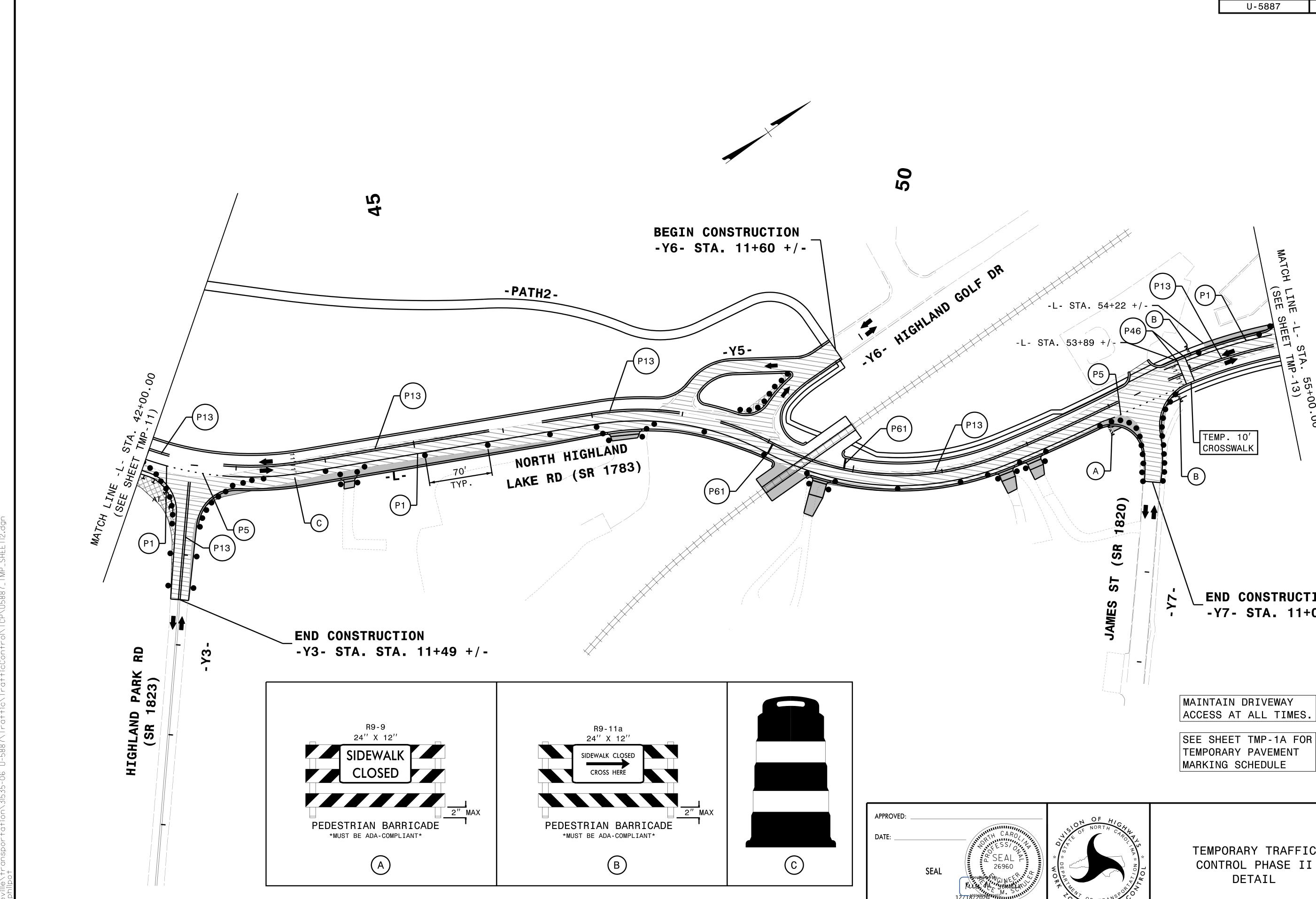
TEMPORARY TRAFFIC CONTROL PHASE II DETAIL

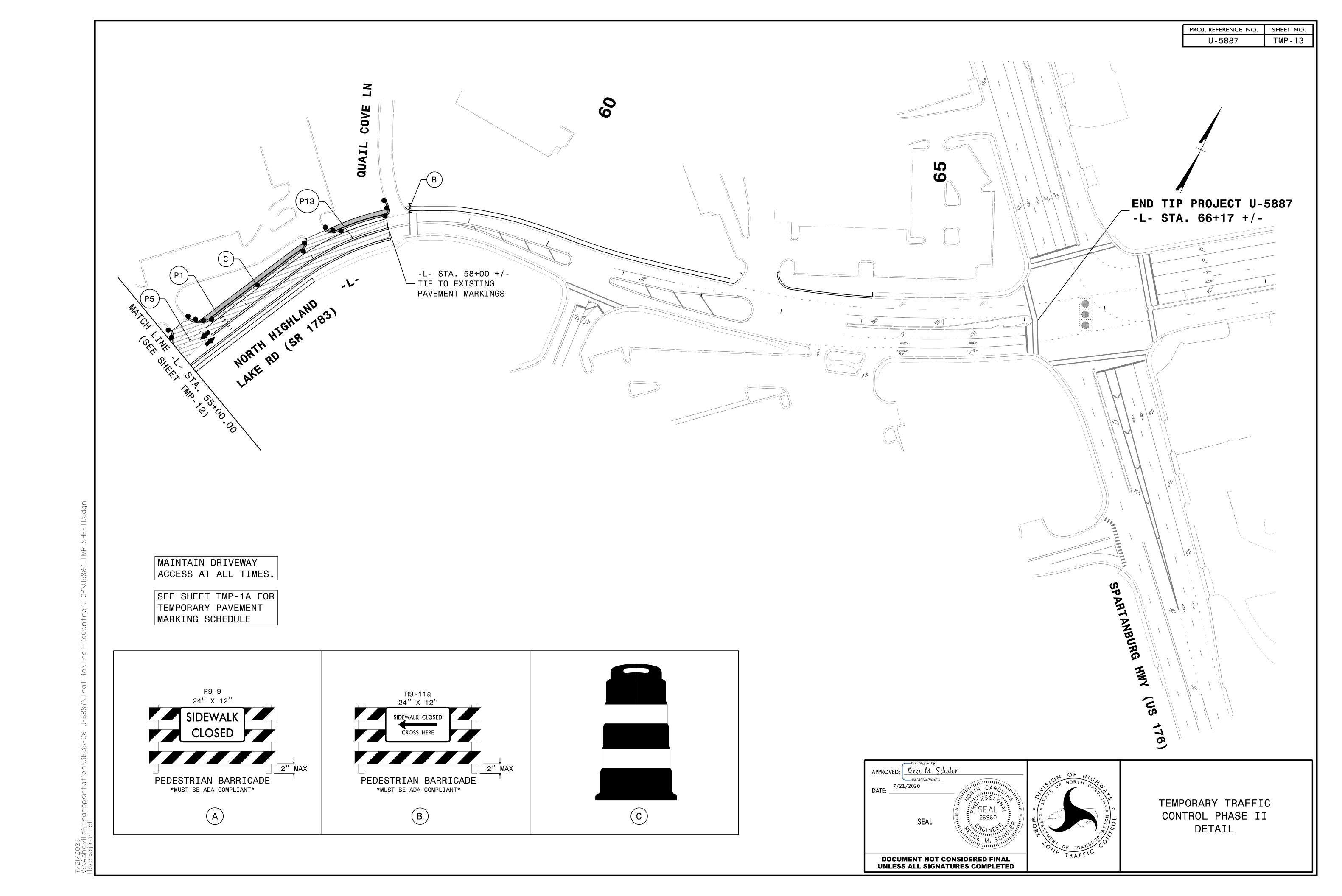


PROJ. REFERENCE NO. U-5887 TMP-12 TEMP. 10' CROSSWALK END CONSTRUCTION -Y7- STA. 11+00 +/-MAINTAIN DRIVEWAY ACCESS AT ALL TIMES. SEE SHEET TMP-1A FOR TEMPORARY PAVEMENT MARKING SCHEDULE TEMPORARY TRAFFIC

DETAIL

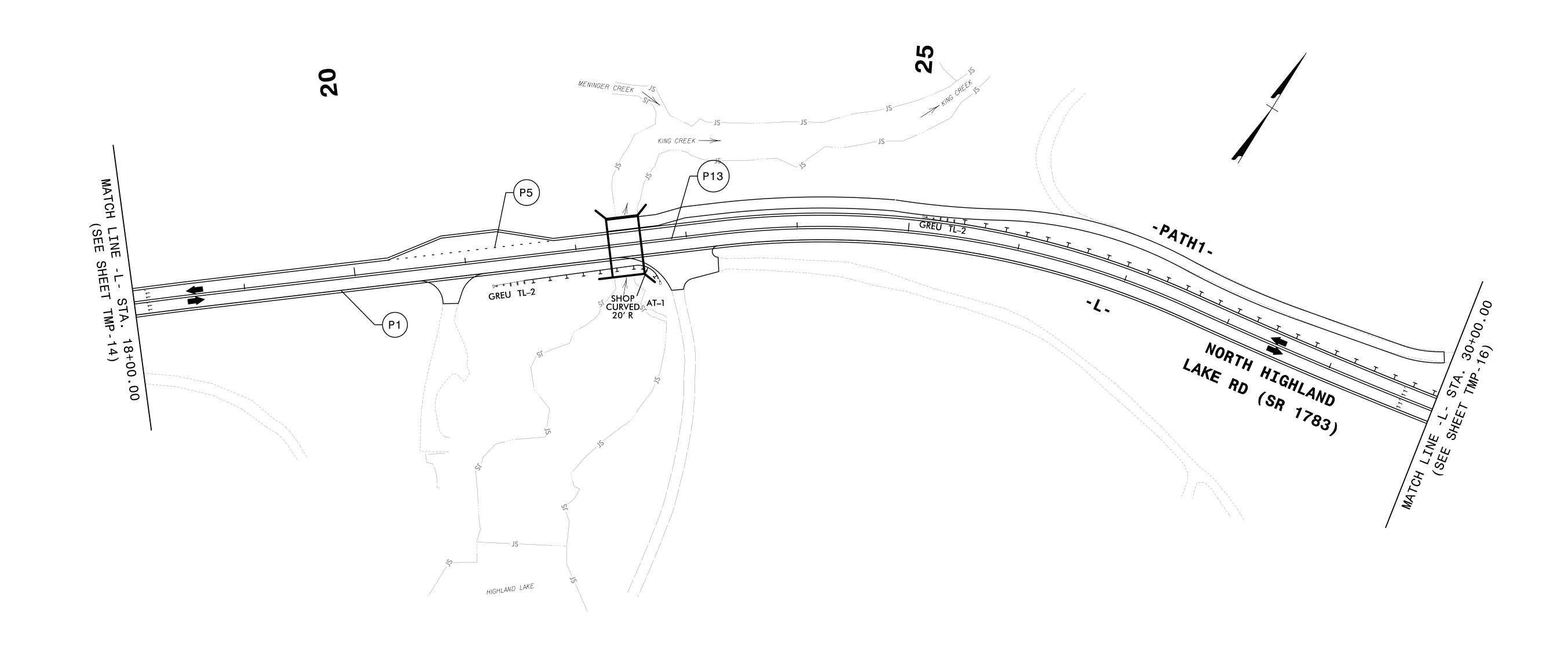
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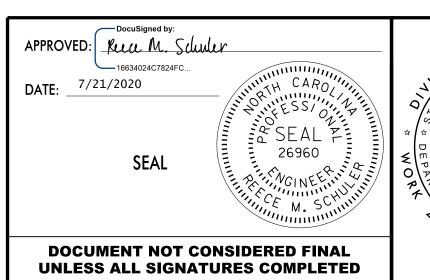
10 **BEGIN CONSTRUCTION** TIE TO EXISTING PAVEMENT MARKINGS -Y1- STA. 12+30 +/-**•** BEGIN TIP PROJECT U-5887 -L- STA. 10+00 +/--Y1- STA. 15+39 +/-MAINTAIN DRIVEWAY ACCESS AT ALL TIMES. SEE FINAL PAVEMENT MARKING PLANS FOR TEMPORARY PAVEMENT MARKING STATIONING, UNLESS SPECIFIED ON THE PLANS SEE SHEET TMP-1A FOR TEMPORARY PAVEMENT MARKING SCHEDULE END CONSTRUCTION TIE TO EXISTING PAVEMENT MARKINGS -Y1- STA. 16+61 +/-APPROVED: Rece M. Schuler DATE: _____ TEMPORARY TRAFFIC CONTROL PHASE III DETAIL DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PROJ. REFERENCE NO. SHEET NO. U-5887 TMP-15



MAINTAIN DRIVEWAY ACCESS AT ALL TIMES.

SEE SHEET TMP-1A FOR TEMPORARY PAVEMENT MARKING SCHEDULE SEE FINAL PAVEMENT MARKING PLANS FOR TEMPORARY PAVEMENT MARKING STATIONING, UNLESS SPECIFIED ON THE PLANS



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TEMPORARY TRAFFIC CONTROL PHASE III DETAIL

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PROJ. REFERENCE NO. U-5887 TMP-16 MAINTAIN DRIVEWAY ACCESS AT ALL TIMES. SEE SHEET TMP-1A FOR TEMPORARY PAVEMENT MARKING SCHEDULE 40 SEE FINAL PAVEMENT MARKING PLANS FOR TEMPORARY PAVEMENT MARKING STATIONING, UNLESS SPECIFIED ON THE PLANS LAKE RD (SR 1783) END CONSTRUCTION TIE TO EXISTING PAVEMENT MARKINGS -Y2- STA. 11+18 +/-APPROVED: Rue M. Schuler
16634024C7824FC... TEMPORARY TRAFFIC CONTROL PHASE III DETAIL DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PROJ. REFERENCE NO. U-5887 TMP-17 50 45 **BEGIN CONSTRUCTION** -Y6- STA. 11+60 +/--PATH2--Y5-NORTH HIGHLAND LAKE RD (SR 1783) RXR SYMBOL (TEMP. PM) RXR SYMBOL J (P60) (P13) 1820) (SR END CONSTRUCTION -Y7- STA. 11+00 +/-**END CONSTRUCTION** RD TIE TO EXISTING HIGHLAND PARK (SR 1823) PAVEMENT MARKINGS -Y3- STA. STA. 11+49 +/-MAINTAIN DRIVEWAY ACCESS AT ALL TIMES. SEE FINAL PAVEMENT MARKING PLANS FOR TEMPORARY PAVEMENT MARKING STATIONING, UNLESS SPECIFIED ON THE PLANS SEE SHEET TMP-1A FOR TEMPORARY PAVEMENT MARKING SCHEDULE APPROVED: Rue M. Schuler
16634024C7824FC... TEMPORARY TRAFFIC CONTROL PHASE III DETAIL DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

