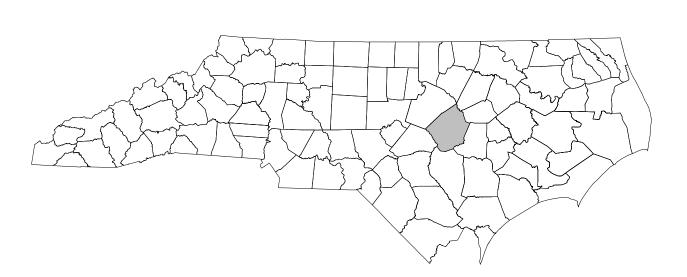
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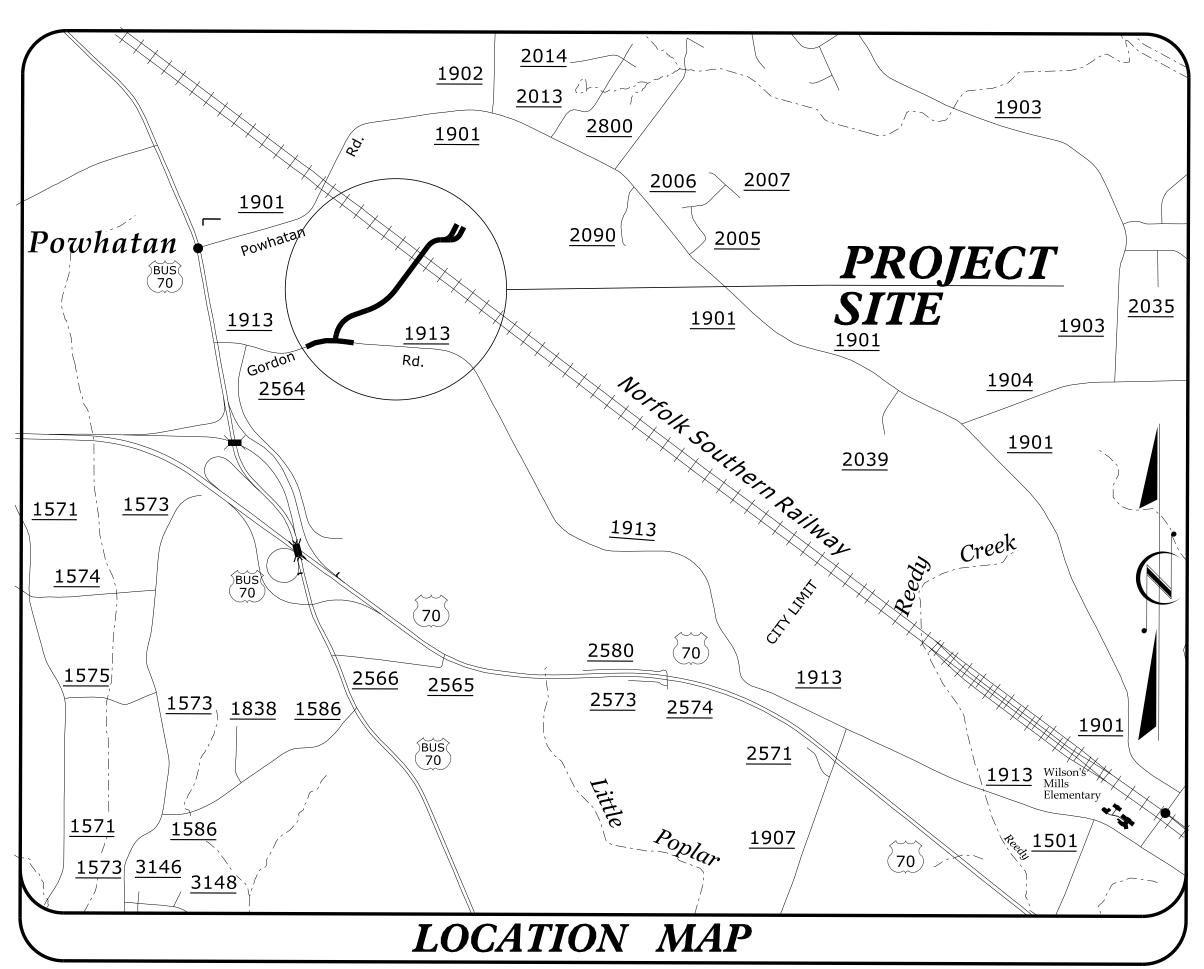
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TRANSPORTATION MANAGEMENT PLAN

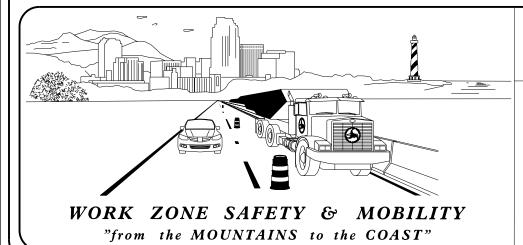
JOHNSTON COUNTY





LOCATION: NOVO NORDISK ACCESS ROAD FROM SR 1913 (GORDON ROAD) TO PROPOSED NOVO NORDISK SITE

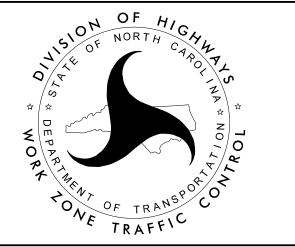
TYPE OF WORK: GRADING, DRAINAGE, PAVING AND STRUCTURE



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

J. S. BOURNE, P.E. STATE TRAFFIC MANAGEMENT ENGINEER J. S. KITE, P.E. TRAFFIC CONTROL PROJECT ENGINEER DON A. PARKER, P.E. TRAFFIC CONTROL PROJECT DESIGN ENGINEER

TRAFFIC CONTROL DESIGN ENGINEER



INDEX OF SHEETS

SHEET NO.

TITLE

TITLE SHEET, VICINITY MAP AND INDEX OF SHEETS LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS,

AND LEGEND

TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT STRATEGIES, GENERAL NOTES AND LOCAL NOTES) TMP-1B THRU

SPECIAL SIGN DESIGN(S) TMP-2

DETOUR GORDON RD. (-Y1REV-) TMP-2A

PHASING TMP-3

PHASE I DETAILS TMP-4 THRU

TMP-5

PHASE I, STEP 3 DETAIL TMP-6

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APPROVED: PLAN PREPARED FOR NCDOT BY: GREG S. PURVIS, P.E. PROJECT ENGINEER <u>JESSE W. GILSTRAP</u> TRAFFIC CONTROL ENGINEER 8/24/2016 SCOTT L. KENNEDY TRAFFIC CONTROL ENGINEER

TMP-1

691

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN 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 1101.02	WORK ZONE ADVANCE WARNING SIGNS TEMPORARY LANE CLOSURES
1101.03 1101.04 1101.05	TEMPORARY ROAD CLOSURES TEMPORARY SHOULDER CLOSURES WORK ZONE VEHICLE ACCESSES
1101.11 1110.01 1110.02	TRAFFIC CONTROL DESIGN TABLES STATIONARY WORK ZONE SIGNS PORTABLE WORK ZONE SIGNS
1130.01 1135.01 1145.01	DRUM CONES BARRICADES
1150.01 1180.01	FLAGGING DEVICES SKINNY-DRUM
1205.01 1205.02 1250.01 1251.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS PAVEMENT MARKINGS - TWO-LANE AND MULTI-LANE ROADWAYS RAISED PAVEMENT MARKERS - INSTALLATION SPACING RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY

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

ON GOING CONSTRUCTION

TEMPORARY PAVEMENT

PAVEMENT WEDGING

SIGNALS

EXISTING





PAVEMENT MARKINGS

——EXISTING LINES ——TEMPORARY LINES

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

PAVEMENT MARKING SYMBOLS

PAVEMENT MARKING SYMBOLS

TEMPORARY PAVEMENT MARKING

PAINT (4") PA WHITE EDGELINE PI YELLOW DOUBLE CENTER

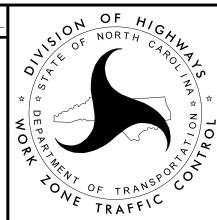
TEMPORARY RAISED MARKERS MH YELLOW & YELLOW

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APPROVED: Greg S. Puphis SEAL 8/24/2016



ROADWAY STANDARD DRAWINGS & LEGEND

1223 Jones Franklin Rd.

TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

MANAGEMENT STRATEGIES

CONSTRUCTION

CONSTRUCT NEW TWO-LANE, TWO-WAY ROADWAY (-L-) ON NEW LOCATION WITH PROPOSED INTERSECTION AT GORDON ROAD (-Y1REV-/SR 1913).

TMP DESIGN PARAMETERS

CONSTRUCT PROPOSED -L- AWAY FROM TRAFFIC AND CONSTRUCT PROPOSED GORDON ROAD (-Y1REV-) UTILIZING LANE CLOSURES. UNDER AN ICT CLOSE GORDON ROAD (-Y1REV-) AND INSTALL PROPOSED 54" RCP.

GENERAL NOTES / LOCAL NOTES

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS, OR RESULT IN DUPLICATE, OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING OR REMOVAL OF DEVICES, AS DIRECTED BY THE ENGINEER.

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT EXCEPT WHEN OTHERWISE NOTED IN THE PLAN OR DIRECTED BY THE ENGINEER.

TIME RESTRICTIONS

A) DO NOT 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

- B) 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.
- C) 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.
- D) 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.

- E) 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.
- F) 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.

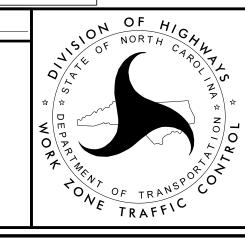
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G) PROVIDE TRAFFIC CONTROL FOR APPROPRIATE LANE CLOSURES FOR SURVEYING DONE BY THE DEPARTMENT.



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MANAGEMENT STRATEGIES AND GENERAL NOTES/ LOCAL NOTES

TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

PROJ. REFERENCE NO.	SHEET NO.
R-5769	TMP-1C

GENERAL NOTES / LOCAL NOTES (CONT)

PAVEMENT EDGE DROP OFF REQUIREMENTS

H) 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 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.

I) 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

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

SIGNING

- K) 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.
- L) 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.

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.

- N) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.
- O) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 500 FT IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

TRAFFIC CONTROL DEVICES

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

PAVEMENT MARKINGS AND MARKERS

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

ROAD NAME MARKING MARKER

1. GORDON ROAD PAINT TEMPORARY RAISED

- S) 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.
- TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

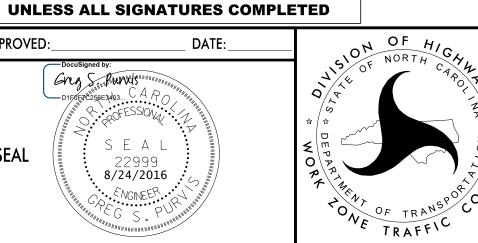
MISCELLANEOUS

V) MAINTAIN CONTINUOUS AND SAFE VEHICULAR ACCESS TO NEW BETHEL BAPTIST CHURCH.

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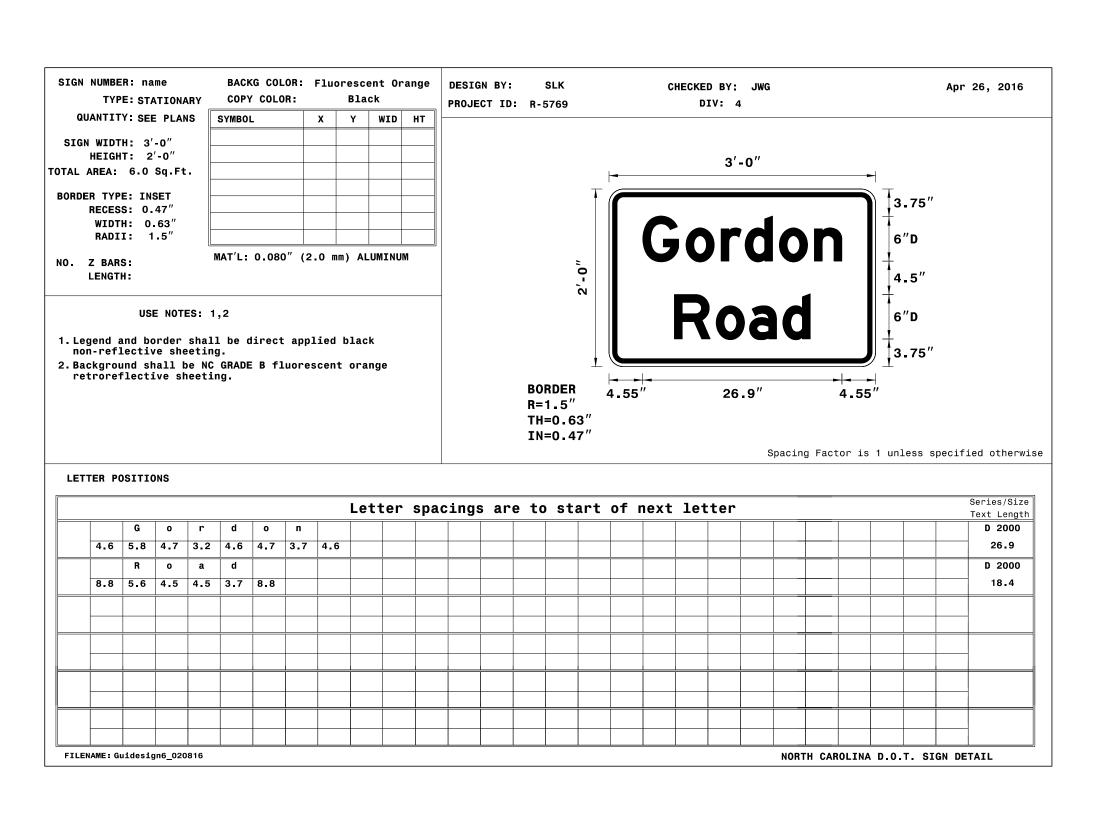
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GENERAL NOTES/ LOCAL NOTES

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R-5769	TMP-2

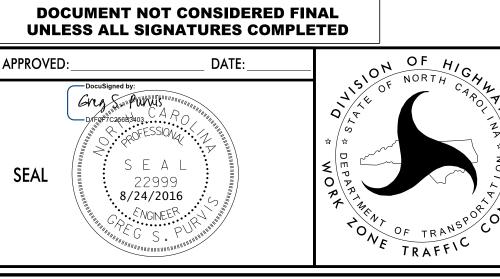


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ENGINEERING

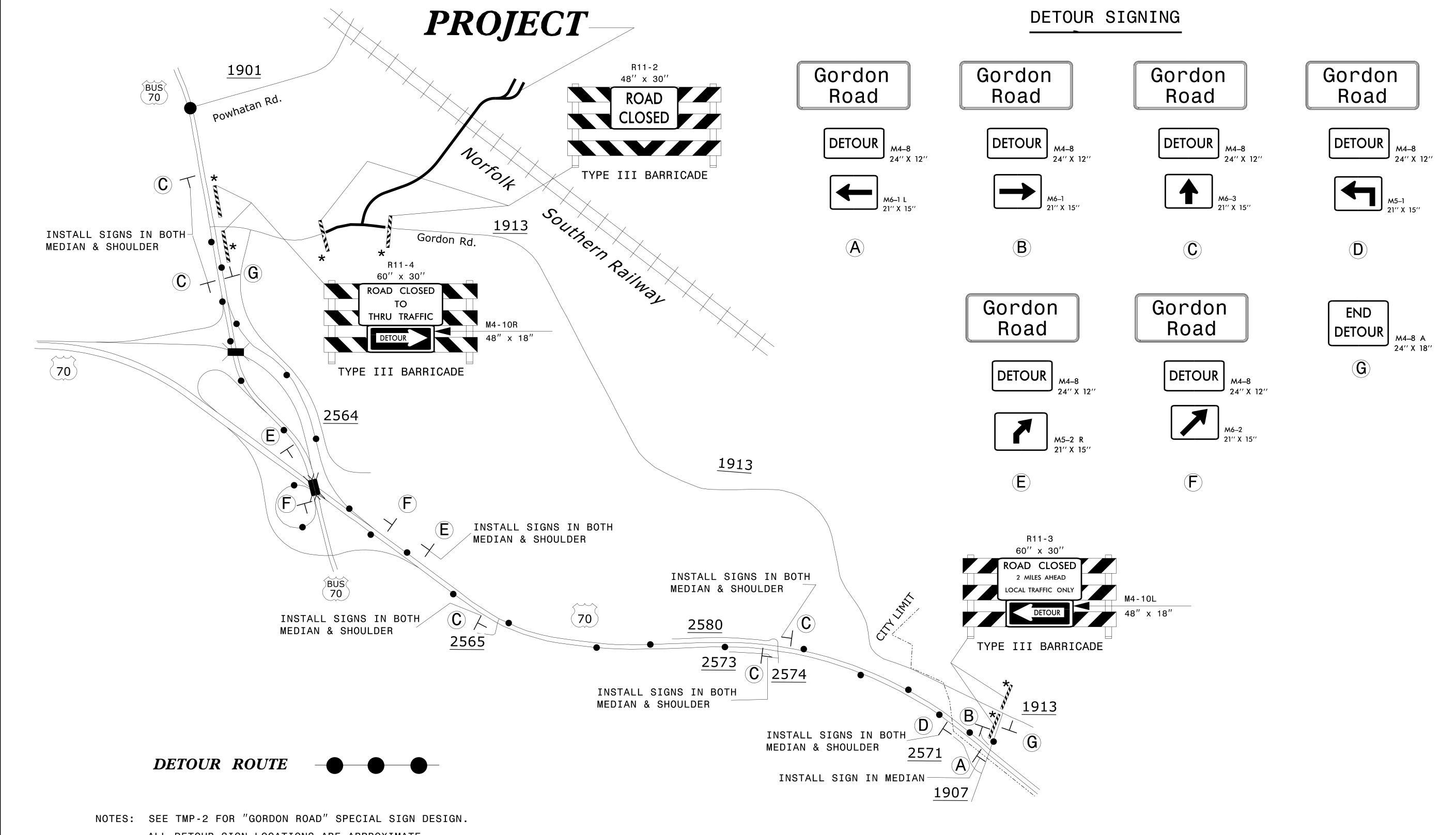
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CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION



SPECIAL SIGN DESIGN(S)

PROJ. REFERENCE NO. SHEET NO. R-5769 TMP-2A



ALL DETOUR SIGN LOCATIONS ARE APPROXIMATE.

★ SEE RSD 1101.03, SHEET 1 OF 9, FOR TYPE III BARRICADE LOCATION WITH ATTACHED SIGNING & ADDITIONAL SIGNING FOR ROAD CLOSURE.

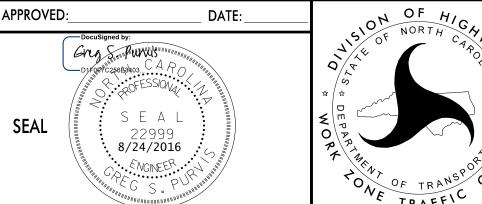
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DETOUR
GORDON RD. (-Y1REV-)

PHASING

NOTE: BEFORE BEGINNING CONSTRUCTION THE CONTRACTOR SHALL:

- INSTALL ADVANCE WORK ZONE WARNING SIGNS ALONG GORDON ROAD (-Y1REV-) AND STATEFORD DRIVE (SEE ROADWAY STANDARD DRAWING NO. 1101.01, SHEET 3 OF 3).

PHASE I

CONTRACTOR MAY WORK PHASE I, STEP 1 AND STEP 2 SIMULTANEOUSLY.

- STEP 1: AWAY FROM TRAFFIC BEGIN CONSTRUCTION OF PROPOSED -L- (INCLUDING PROPOSED BRIDGE), UP TO, BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE FROM STA. 10+17 +/- -L- TO STA 43+57 +/- -L- & STA. 10+00 +/- -L1- TO STA. 15+07 +/- -L1- (SEE ROADWAY PLANS AND SHEETS TMP-4 & TMP-5).
 - USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 1 OF 15, AS REQUIRED, BEGIN CONSTRUCTION OF PROPOSED WIDENING OF GORDON ROAD (-Y1REV-) UP TO THE EDGE & ELEVATION OF THE EXISTING FROM STA. 10+50 +/- -Y1REV- TO STA. 23+17 +/- -Y1REV- (SEE ROADWAY PLANS AND SHEET TMP-4).

CONTRACTOR SHALL WORK IN A CONTINUOUS MANNER TO COMPLETE THE WORK IN PHASE I, STEP 2A THRU 2C IN 5 CONSECUTIVE DAYS (SEE INTERMEDIATE CONTRACT TIME AND SPECIAL PROVISIONS).

- STEP 2: INSTALLATION OF PROPOSED 54" RCP AT STA. 20+55 +/- -Y1REV-.
 - A. USING ROADWAY STANDARD DRAWING NO. 1101.03, SHEET 1 OF 9, & SHEET TMP-2A, CLOSE GORDON ROAD (-Y1REV-) AND PLACE TRAFFIC ON OFF-SITE DETOUR.
 - B. INSTALL PROPOSED 54" RCP (NOT INCLUDING WING WALLS) AND CONSTRUCT PROPOSED GORDON ROAD (-Y1REV-) UP TO THE EDGE & ELEVATION OF THE EXISTING FOR THE EXISTING TRAFFIC PATTERN (SEE ROADWAY PLANS).
 - C. PLACE TEMPORARY PAVEMENT MARKINGS IN THE EXISTING TWO-LANE, TWO-WAY TRAFFIC PATTERN AND OPEN GORDON ROAD (-Y1REV-) TO TRAFFIC.

- STEP 3: COMPLETE CONSTRUCTION OF PROPOSED -L- (INCLUDING PROPOSED BRIDGE), UP TO, BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE BEGUN IN PHASE I, STEP 1.
 - COMPLETE CONSTRUCTION OF PROPOSED WIDENING OF GORDON ROAD (-Y1REV-) BEGUN IN PHASE I, STEP 1 AND USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 1 OF 15, AS REQUIRED:
 - -- UTILIZING PAVING & WEDGING OPERATIONS, CONSTRUCT PROPOSED GORDON ROAD (-Y1REV-) UP TO, BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE FROM STA. 10+50 +/- -Y1REV- TO STA. 23+17 +/- -Y1REV-, PLACE TEMPORARY PAVEMENT MARKINGS IN THE EXISTING TWO-LANE, TWO-WAY TRAFFIC PATTERN AND OPEN TO TRAFFIC (SEE ROADWAY PLANS AND SHEETS TMP-6).
 - -- CONSTRUCT PROPOSED WING WALLS FOR 54" RCP AT STA. 20+55 +/- -Y1REV-.

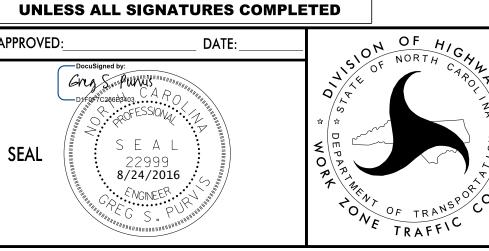
PHASE II

- STEP 1: USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 1 OF 15, AS REQUIRED:
 - -- PAVE THE FINAL LAYER OF SURFACE COURSE ON PROPOSED -L- FROM STA. 10+17 +/- -L- TO STA 43+57 +/- -L- & STA. 10+00 +/- -L1-TO STA. 15+08 +/- -L1- AND PROPOSED GORDON ROAD (-Y1REV-) FROM STA. 10+50 +/- -Y1REV- TO STA. 23+17 +/- -Y1REV- (SEE ROADWAY PLANS).
 - -- PLACE FINAL PAVEMENT MARKINGS & INSTALL FINAL PAVEMENT MARKERS ON PROPOSED -L- & PROPOSED GORDON ROAD (-Y1REV-) AND OPEN TO FINAL TRAFFIC PATTERN (SEE FINAL PAVEMENT MARKING PLANS).
- STEP 2: REMOVE ALL TEMPORARY TRAFFIC CONTROL DEVICES.



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PHASING

