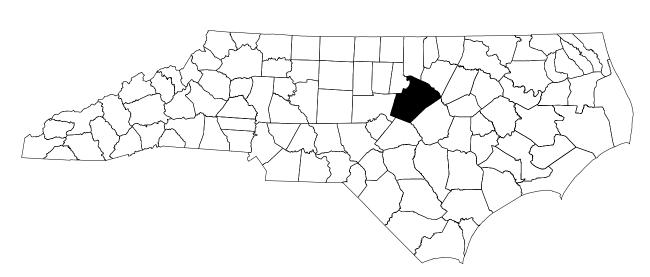
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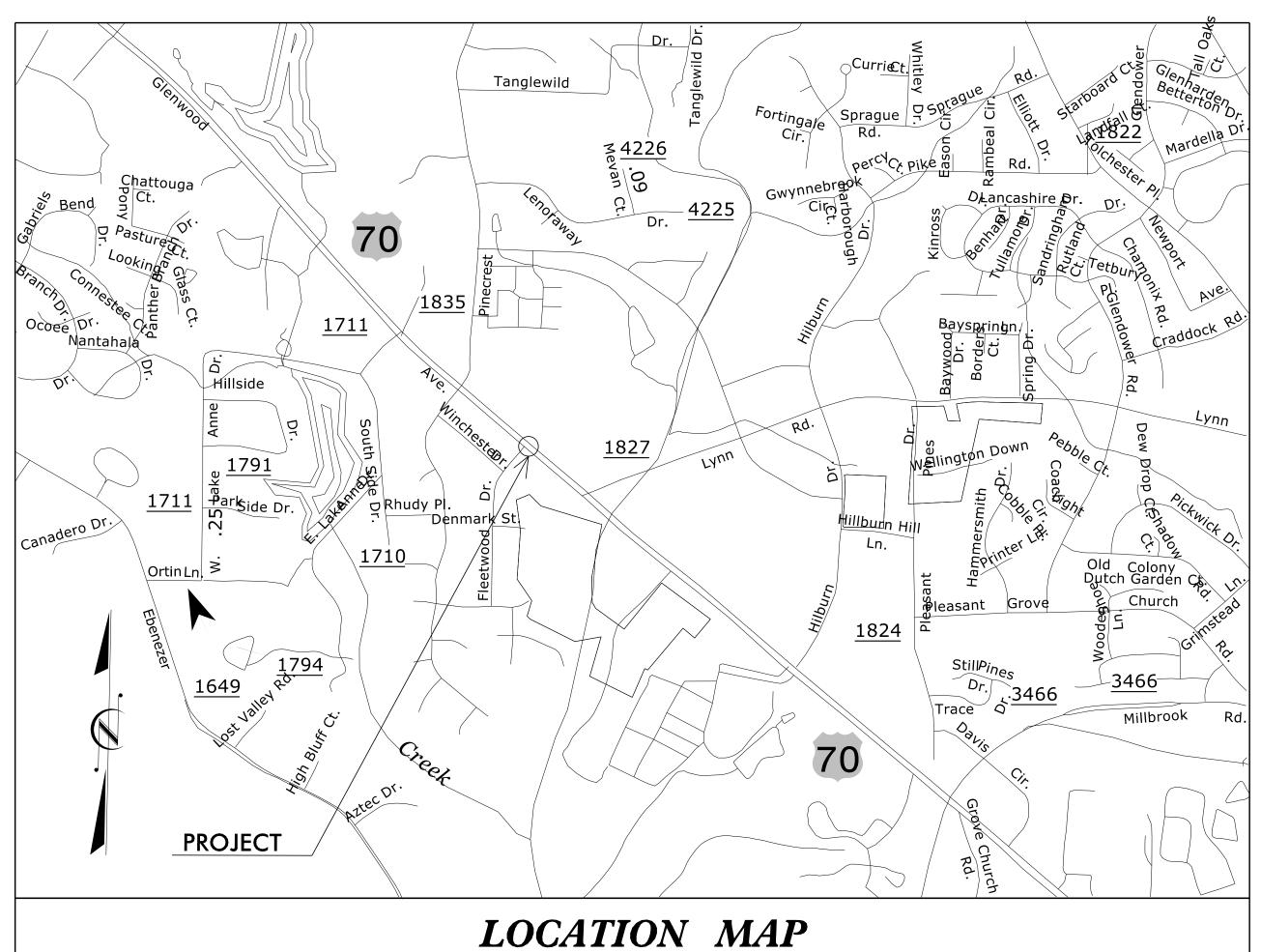
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TRANSPORTATION MANAGEMENT PLAN

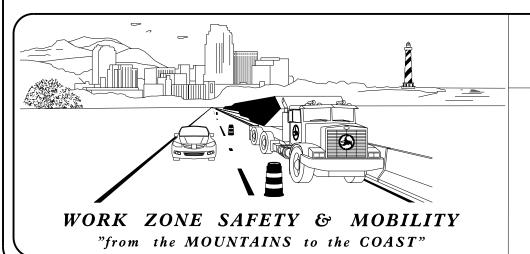
WAKE COUNTY





LOCATION: US 70 WEST OF LYNN ROAD IN RALEIGH

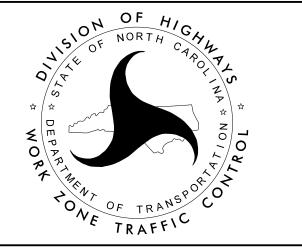
TYPE OF WORK: DRAINAGE



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. E. HUMMER, P.E. STATE TRAFFIC MANAGEMENT ENGINEER J. S. KITE, P.E. STATE WORK ZONE ENGINEER

TBD TRAFFIC CONTROL PROJECT DESIGN ENGINEER TBD TRAFFIC CONTROL DESIGN ENGINEER



INDEX OF SHEETS

SHEET NO.

TITLE

TMP-1 TITLE SHEET, VICINITY MAP AND INDEX OF SHEETS LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, TMP-1A

PHASING AND GENERAL NOTES

US 70 WB DETAIL

TMP-3 US 70 EB PCB PLACEMENT DETAIL

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PLAN PREPARED FOR NCDOT BY:

GREG S. PURVIS, P.E.

APPROVED: Gry S. Purvis

PROJECT ENGINEER <u>JESSE W. GILSTRAP</u> TRAFFIC CONTROL ENGINEER

SEAL SCOTT L. KENNEDY TRAFFIC CONTROL ENGINEER

DATE: 12/3/2018 S E A L TMP-1

109201 15005.

PROJ. REFERENCE NO. 15005.1092017 TMP-1A

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 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

<u>11122</u>	STD.	NO.	TITLE
	STD.	NO -	TITLE

1101 01	WORK ZONE ARVANOE WARNING GIONG			
1101.01	WORK ZONE ADVANCE WARNING SIGNS			
1101.02	TEMPORARY LANE CLOSURES			
1101.04	TEMPORARY SHOULDER CLOSURES			
1101.05	WORK ZONE VEHICLE ACCESSES			
1101.11	TRAFFIC CONTROL DESIGN TABLES			
1110.01	STATIONARY WORK ZONE SIGNS			
1110.02	PORTABLE WORK ZONE SIGNS			
1115.01	FLASHING ARROW BOARDS			
1130.01	DRUMS			
1145.01	BARRICADES			
1160.01	TEMPORARY CRASH CUSHION			
1165.01	TRUCK MOUNTED ATTENUATOR			
1170.01	PORTABLE CONCRETE BARRIER			
1180.01	SKINNY DRUMS			
1261.01	GUARDRAIL AND BARRIER DELINEATORS - INSTALLATION SPACING			
1261.02	GUARDRAIL AND BARRIER DELINEATORS - TYPES AND MOUNTING			
1262.01	GUARDRAIL END DELINEATION			

LEGEND

TRAFFIC CONTROL DEVICES **GENERAL** DIRECTION OF TRAFFIC FLOW BARRICADE (TYPE III) PEDESTRIAN BARRICADE DIRECTION OF PEDESTRIAN TRAFFIC FLOW ----- EXIST. PVMT. DRUM SKINNY DRUM O TUBULAR MARKER ─────── NORTH ARROW TEMPORARY CRASH CUSHION FLASHING ARROW BOARD —— PROPOSED PVMT. FLAGGER TEMP. SHORING (LOCATION PURPOSES ONLY) LAW ENFORCEMENT WORK AREA TRUCK MOUNTED ATTENUATOR (TMA) CHANGEABLE MESSAGE SIGN WORK AREA TEMPORARY SIGNING ON GOING CONSTRUCTION O PORTABLE SIGN ── STATIONARY SIGN REMOVAL STATIONARY OR PORTABLE SIGN PAVEMENT MARKERS SIGNALS CRYSTAL/CRYSTAL CRYSTAL/RED EXISTING

TEMPORARY PAVEMENT MARKING

N/A

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PAVEMENT MARKINGS

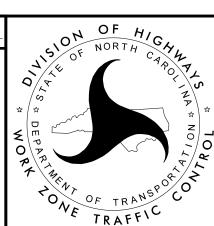
——EXISTING LINES

——TEMPORARY LINES



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APPROVED: Gry S. Purvis DATE: 12/3/2018 SEAL SEAL 22999



YELLOW/YELLOW

PAVEMENT MARKING SYMBOLS

PAVEMENT MARKING SYMBOLS

ROADWAY STANDARD DRAWINGS, TEMPORARY PAVEMENT MARKING SCHEDULE & LEGEND

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

PROJ. REFERENCE NO. SHEET NO. 15005.1092017 TMP-1B

PHASING

NOTE: BEFORE BEGINNING CONSTRUCTION THE CONTRACTOR SHALL PLACE WORK ZONE ADVANCE WARNING SIGNS ALONG US 70, LYNN ROAD AND ALL OTHER -Y- LINES (SEE ROADWAY STANDARD DRAWINGS NO. 1101.01, SHEET 2 OF 3).

PHASE I

- STEP 1: USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEETS 3 & 9 OF 14 AND/OR DETAIL ON SHEET TMP-2. AS APPROVED BY THE ENGINEER:
 - -- INSTALL TEMPORARY GUARDRAIL ALONG THE OUTSIDE SHOULDER & MEDIAN SHOULDER OF US 70 WESTBOUND AND OUTSIDE SHOULDER OF US 70 EASTBOUND AS SHOWN IN THE ROADWAY PLANS.

CONTRACTOR MAY WORK PHASE I, STEP 2 AND STEP 3 SIMULTANEOUSLY.

- STEP 2: UTILIZING TRENCHLESS OPERATIONS CONSTRUCT/INSTALL PROPOSED DRAINAGE UNDER US 70 AS SHOWN IN THE ROADWAY PLANS.
 - NOTE: FOR ALL CONSTRUCTION OPERATIONS ALONG US 70 NOT PROTECT BY GUARDRAIL OR BARRIER USE ROADWAY STANDARD DRAWING NO. 1101.02, SHEETS 3 & 9 OF 14, AS APPROVED BY THE **ENGINEER:**
- STEP 3: USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 3 OF 14:
 - A. INSTALL PORTABLE CONCRETE BARRIER (PCB) WITH 2' SHY DISTANCE ALONG THE EXISTING MINI-SKIP LINE OF THE TAPER FOR DUAL LEFT TURN LANES ON US 70 EASTBOUND (SEE SHEET TMP-3).
 - B. CONSTRUCT PROPOSED DROP INLET IN THE MEDIAN AND ADDITIONAL DRAINAGE REQUIREMENTS AS SHOWN IN THE ROADWAY PLANS.
 - C. REMOVE PORTABLE CONCRETE BARRIER AND OPEN DUAL LEFT TURN LANES/TAPER TO TRAFFIC.
- STEP 4: USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEETS 3 & 9 OF 14 AND/OR DETAIL ON SHEET TMP-2, AS APPROVED BY THE ENGINEER:
 - -- REMOVE TEMPORARY GUARDRAIL ALONG THE OUTSIDE SHOULDER & MEDIAN SHOULDER OF US 70 WESTBOUND AND OUTSIDE SHOULDER OF US 70 EASTBOUND INSTALLED IN PHASE I, STEP 1.
- STEP 5: REMOVE ALL TRAFFIC CONTROL DEVICES FROM THE PROJECT.

GENERAL NOTES / LOCAL NOTES

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

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

TIME RESTRICTIONS

A) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

ROAD NAME DAY AND TIME RESTRICTIONS

1. US 70 6:00 AM TO 7:00 PM, MONDAY THROUGH SUNDAY

2. LYNN ROAD 6:00 AM TO 7:00 PM, MONDAY THROUGH SUNDAY

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

ROAD NAME

1. US 70

HOLIDAY

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

IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN BETWEEN THE HOURS OF 6:00 AM THE THURSDAY BEFORE INDEPENDENCE DAY AND 7:00 PM THE TUESDAY AFTER INDEPENDENCE

- 6. FOR LABOR DAY, BETWEEN THE HOURS OF 6:00 AM FRIDAY AND 7:00 PM TUESDAY.
- 7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00 AM TUESDAY TO 7:00 PM MONDAY.
- 8. FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 AM THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 7:00 PM THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

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PHASING AND GENERAL NOTES

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

PROJ. REFERENCE NO. SHEET NO. 15005.1092017 TMP-1C

GENERAL NOTES / LOCAL NOTES (CONT)

C) 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

- D) 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.
- E) 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.
- F) 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.

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

TRAFFIC PATTERN ALTERATIONS

J) NOTIFY THE ENGINEER THIRTY (30) 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) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

TRAFFIC BARRIER

M) INSTALL TEMPORARY BARRIER ACCORDING TO THE TRAFFIC CONTROL 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 TRAFFIC CONTROL 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 TRAFFIC CONTROL 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.

N) 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:

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

O) 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) AND 1180 (SKINNY DRUMS) FOR ADDITIONAL REQUIREMENTS.

MISCELLANEOUS

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

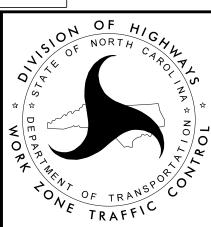
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ENGINEERING

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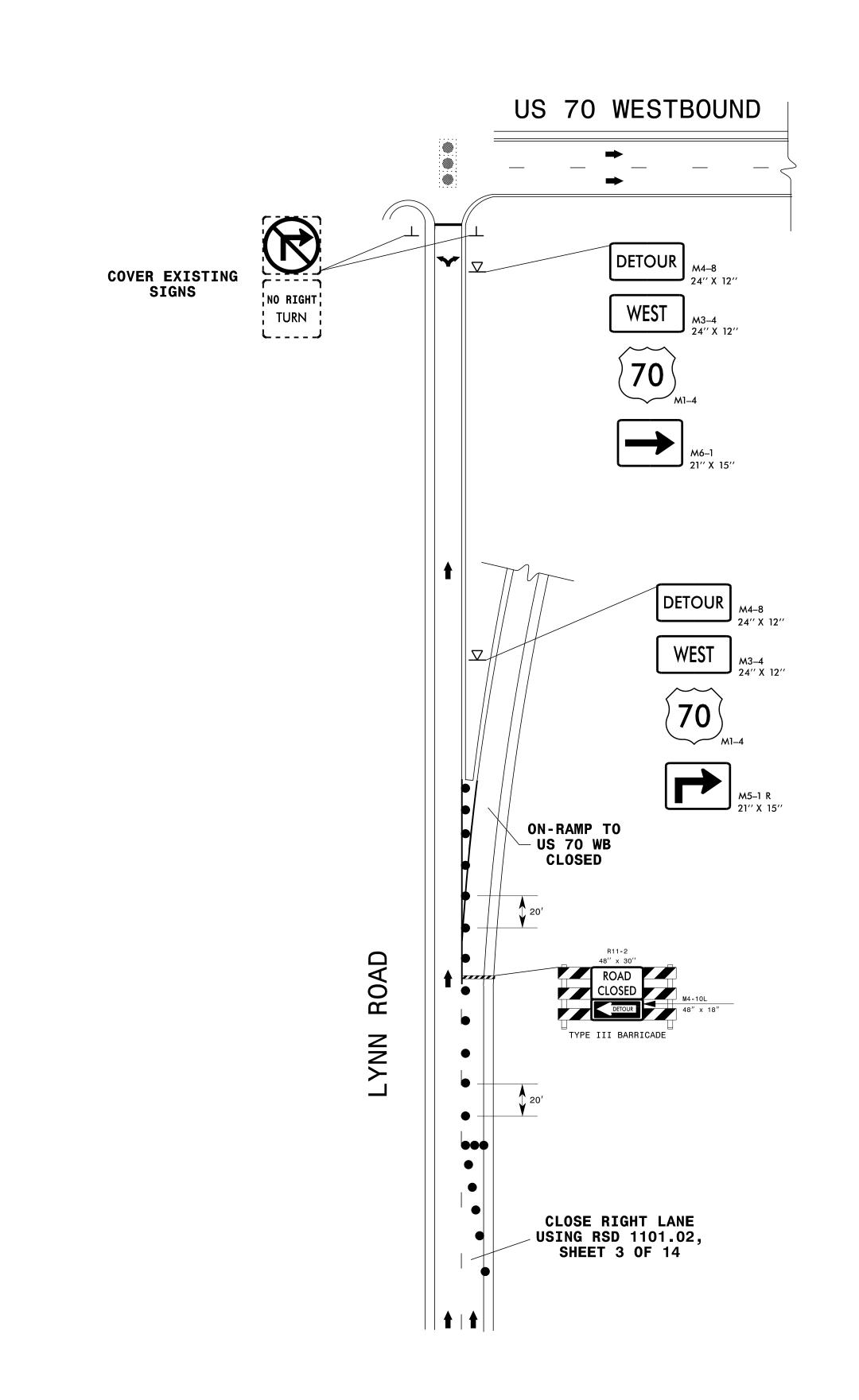
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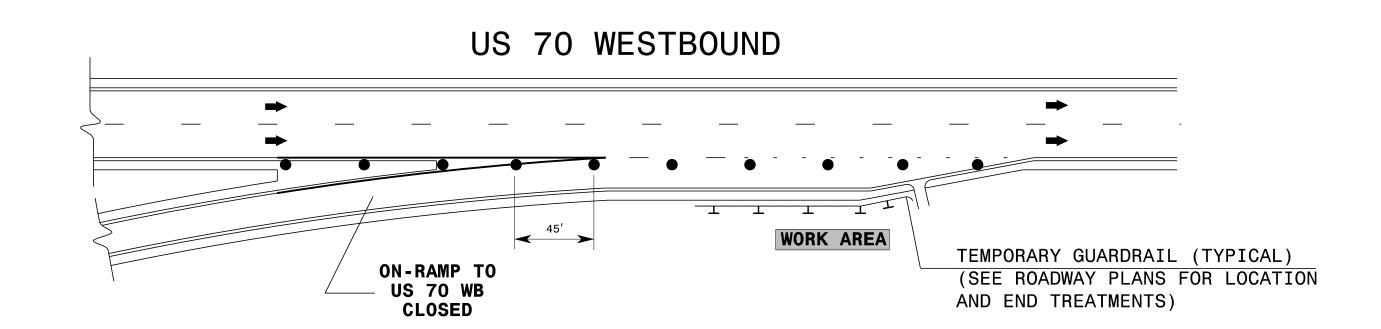
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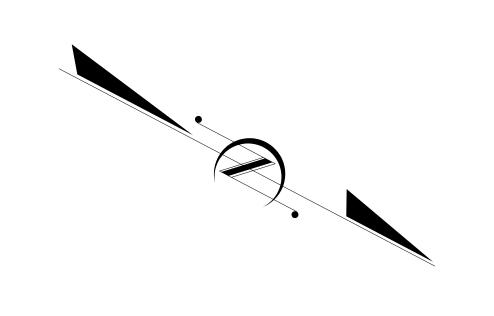


GENERAL NOTES

PROJ. REFERENCE NO. SHEET NO. 15005.1092017 TMP-2







NOTES: ALL DETOUR SIGN LOCATIONS ARE APPROXIMATE.

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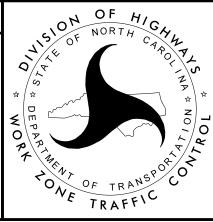


TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN

CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

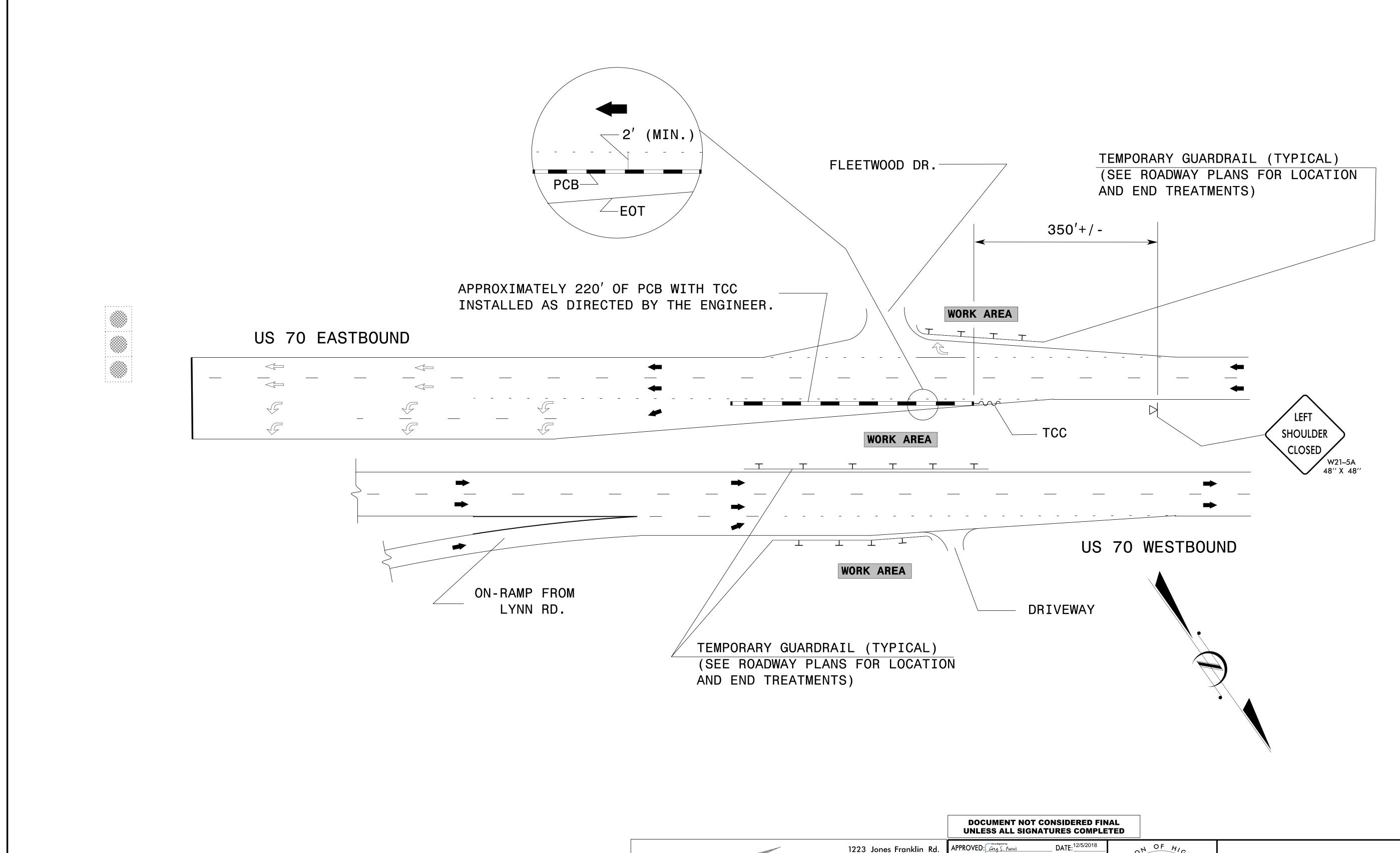
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SEAL



US 70 WB DETAIL

PROJ. REFERENCE NO. SHEET NO 15005.1092017 TMP-3

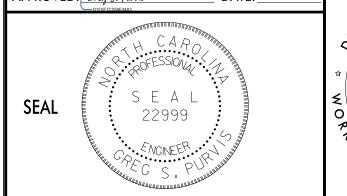




TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN

CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

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US 70 EB PCB PLACEMENT DETAIL