PHASING

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

MAINTAIN VEHICULAR ACCESS TO ALL RESIDENCES AND BUSINESSES DURING THE LIFE OF THE CONTRACT, UNLESS OTHERWISE NOTED IN THE PHASING PLANS OR DIRECTED BY THE RESIDENT ENGINEER.

COMPLETE ANY PROPOSED OR TEMPORARY WIDENING IN SUCH A MANNER THAT NO PONDING OF WATER WILL OCCUR WITHIN THE TRAVEL LANE.

WHEN USING LANE CLOSURES (RSD 1101.02), RETURN TRAFFIC TO EXISTING AND/OR TEMPORARY TRAFFIC PATTERN UPON ACTIVITIES COMPLETION, UNLESS OTHERWISE NOTED IN THE PHASING PLANS.

WHEN PHASING STATES TO USE LANE CLOSURES, REFER TO THE FOLLOWING FOR ALL EXISTING AND PROPOSED ROADS:

- -ALL TWO-LANE/TWO-WAY FACILITIES SEE RSD 1101.02 SHEET 1 OF 14
- -ALL 3-LANE OR 5-LANE ROADWAYS SEE RSD 1101.02 SHEET 2 OF 14
- -ALL MULTI-LANE FACILITIES POSTED < 60 MPH SEE RSD 1101.02 SHEET 3 OF 14
- -ALL MULTI-LANE FACILITIES POSTED ≥ 60 MPH SEE RSD 1101.02 SHEET 4 OF 14
- -ALL ENTRANCE AND EXIT RAMPS SEE RSD 1101.02 SHEETS 9 AND 10 OF 14

COMPLETE PAVING UP TO, BUT NOT INCLUDING, THE FINAL LAYER OF SURFACE COURSE UNTIL STATED TO PLACE FINAL LAYER IN THE PHASING PLANS.

WHEN WEDGING OVER EXISTING PAVEMENT, WEDGE TO PROPOSED ELEVATION (LESS THE FINAL LAYER OF SURFACE COURSE), OR WEDGE AS NEEDED TO MAINTAIN TRAFFIC. MAINTAIN POSITIVE DRAINAGE AND MAINTAIN A MAXIMUM 0.04 ROLLOVER IN BOTH EXISTING AND/OR TEMPORARY TRAVEL LANES.

REPLACE MARKINGS AND RETURN TRAFFIC TO THE CURRENT TRAFFIC PATTERN AT THE END OF EACH WORK PERIOD UNLESS OTHERWISE NOTED IN THE PHASING OR DIRECTED BY THE ENGINEER.

FOR ALL SHOULDER CLOSURES, SEE RSD 1101.04. WHEN PORTABLE CONCRETE BARRIER (PCB) IS PRESENT ON SHOULDERS. PLACE SHOULDER CLOSURE SIGNS & DEVICES IN ADVANCE OF PCB.

WHEN MEDIAN WORK REQUIRES REMOVAL OF CROSSOVER PROTECTION FOR THAT SIDE OF TRAFFIC, REPLACE WITH PORTABLE CONCRETE BARRIER OR OTHER APPROVED POSITIVE PROTECTION A MINIMUM OF TWO FEET OFF TRAVEL LANE.

UTILIZE SLOTTED PORTABLE CONCRETE BARRIER (PCB) TO FACILITATE TEMPORARY

PHASE 1

(SEE TMP-4 THRU TMP-15)

STEP 1:

BEHIND EXISTING GUARDRAIL AND USING LANE CLOSURES, CONSTRUCT TEMPORARY WIDENING (-DETO1 PH1 RUN-) ALONG THE OUTSIDE OF EXISTING EB US 23/74.

NOTE: STEP 2 AND STEP 2A MAY BE PERFORMED SIMULTANEOUSLY.

STEP 2:

USING LANE CLOSURES, CONSTRUCT TEMPORARY WIDENING ALONG THE MEDIAN OF EXISTING EB US 23/74 BETWEEN -L- STA 28+00± TO STA 39+39±.

USING LANE CLOSURES, PLACE TEMPORARY MARKINGS AND MARKERS AND SHIFT EB US 23/74 TRAFFIC TO -DETO1 PH1 RUN-.

WORK IN A CONTINUOUS MANNER TO COMPLETE WORK IN PHASE 1, STEP 2A IN 21 CONSECUTIVE DAYS.

(SEE INTERMEDIATE CONTRACT TIMES AND LIQUIDATED DAMAGES)

STEP 2A:

AWAY FROM TRAFFIC COMPLETE THE FOLLOWING:

- A) CLOSE EXISTING NB US 19 ACCESS TO EB US 23/74. DETOUR RAMP TRAFFIC OFFSITE.
- B) CONSTRUCT DETO1 WB- AND DETO1 Y1RT- TEMPORARY PAVEMENTS.
- C) PLACE TEMPORARY MARKINGS AND MARKERS AND SHIFT EB US 23/74 TRAFFIC TO -DETO1 WB- AND REOPEN NB US 19 (-DET Y1RT-) ACCESS TO EB US 23/74 (SEE PHASE 1, STEP 3 DETAILS).

PHASE 1

(CONTINUED)

STEP 3:

USING LANE CLOSURES. PLACE TEMPORARY MARKINGS AND MARKERS AND SHIFT EB US 23/74 TRAFFIC TO TEMPORARY MEDIAN WIDENING OF EXISTING EB US 23/74 BETWEEN -L- STA 28+02± TO STA 39+56±.

USING LANE CLOSURES, INSTALL PORTABLE CONCRETE BARRIER (PCB). BEHIND BARRIER AND TEMPORARY GUARDRAIL, CONSTRUCT THE FOLLOWING:

- -Y1RT- BRIDGE END BENT #2 WITH PROPOSED WALLS
- -Y1RT- FROM -Y1RT- BRIDGE TO BRIDGE WIDENING OVER RAILROAD (INCLUDING TEMPORARY WIDENING AND WALL ALONG INSIDE OF -Y1RT-)
- EXISTING EB BRIDGE WIDENING OVER RAILROAD
- - DET01 EB- FROM -L RT- STA 18+60± TO -Y1RT-(TEMPORARY SHORING REQUIRED)

PHASE 2

(SEE TMP-16 THRU TMP-28C)

WORK IN A CONTINUOUS MANNER TO COMPLETE WORK IN PHASE 2, STEPS 1 & 1A IN 7 CONSECUTIVE DAYS. (SEE INTERMEDIATE CONTRACT TIMES AND LIQUIDATED DAMAGES)

STEP 1:

USING LANE CLOSURES AND BEHIND BARRIER, COMPLETE THE FOLLOWING:

- A) CLOSE NB US 19 RAMP ACCESS
- B) PLACE TEMPORARY MARKINGS AND MARKERS AND SHIFT EB US 23/74 TRAFFIC TO -DETO1 EB-, -Y1RT- AND -DETO1 EB EXT- ALIGNMENTS.
- C) CONSTRUCT/WEDGE NB US 19 RAMP TIE TO SHIFTED EB US 23/74 TRAFFIC $(APPROX. -L- STA 58+50\pm TO STA 67+64\pm).$

STEP 1A:

PLACE TEMPORARY MARKINGS AND MARKERS AND OPEN NB US 19 RAMP TIE TO SHIFTED EB US 23/74 TRAFFIC

STEP 1B:

AWAY FROM TRAFFIC, CONSTRUCT MEDIAN BENT OF -Y1RT- BRIDGE, HANG GIRDERS BETWEEN MEDIAN BENT AND END BENT #2 (NO TRAFFIC BENEATH).

USING LANE CLOSURES, CONSTRUCT -DETO1 WB- CROSSOVERS AT -L- STA 19+00± AND STA 74+00±. AND -Y1LTXRP- FOR STEP 2 PATTERNS.

WORK IN A CONTINUOUS MANNER TO COMPLETE WORK IN PHASE 2, STEPS 2, 2A, & 2B IN 240 CONSECUTIVE DAYS.

(SEE INTERMEDIATE CONTRACT TIMES AND LIQUIDATED DAMAGES)

STEP 2:

USING LANE CLOSURES, COMPLETE THE FOLLOWING:

- A) CLOSE NB US 19 RAMP ACCESS TO EB US 23/74 TRAFFIC. INSTALL PCB FOR WB TRAFFIC PATTERN.
- B) PLACE TEMPORARY MARKINGS AND MARKERS AND SHIFT WB US 23/74 TRAFFIC TO EXISTING EB US 23/74 LANES VIA CROSSOVERS AT -L- STA 19+00± AND STA 74+00± (-DET01 WB-). OPEN SB US 19 RAMP ACCESS VIA -Y1LTXRP-.
- C) CLOSE EXISTING PEDESTRIAN MULTI-USE PATH (MUP).

STEP 2A:

BEHIND BARRIER AND AWAY FROM TRAFFIC, CONSTRUCT THE FOLLOWING PROPOSED:

- -Y1RT- STA 13+08± TO STA 17+00± WEDGING AND WIDENING OF EXISTING, INCLUDING PROPOSED WALL ALONG MUP.
- -Y1RT- STA 17+00± TO -Y1RT- BRIDGE.
- -Y1RT- BRIDGE END BENT #1, CENTER BENT AND GIRDER FIELD SECTIONS 1 & 2 (SEE STRUCTURE PLANS).

COMPLETE DECK WORK OF -Y1RT- BRIDGE BETWEEN MEDIAN BENT AND END BENT #2 WESTBOUND LANES WITH MEDIAN BARRIER.

PHASE 2

(CONTINUED)

STEP 2B:

USING LANE CLOSURES AND AWAY FROM TRAFFIC. PLACE TEMPORARY MARKINGS AND MARKERS AND REMOVE CONFLICTING PCB.

OPEN NB US 19 RAMP ACCESS (-Y1RT-) TO PHASE 2 EB US 23/74 TRAFFIC PATTERN (AS SHOWN IN PHASE 3, STEP 1).

SHEET NO.

TMP-3

PROJ. REFERENCE NO.

B-3186 / B-5898

HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116

EXISTING MUP REMAINS TEMPORARILY CLOSED.

NOTE: PHASE 2, STEP 3 WORK MAY BE PERFORMED CONCURRENTLY WITH PHASE 2, STEPS 2A & 2B.

STEP 3:

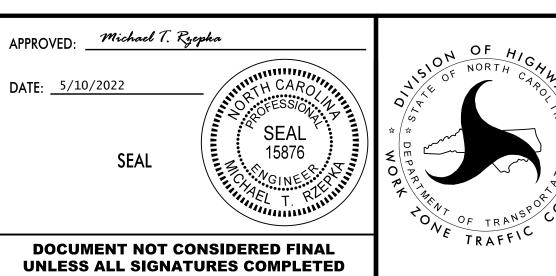
NOTE: CONSTRUCT AFFECTED SEGMENT OF WB LANES AND -Y1LT- BELOW IN COORDINATION WITH US 19 SB RAMP CLOSURE (STEP 3A) FROM -DETO1 WB- TRAFFIC PATTERN. STEP 3A CLOSURE CAN OCCUR AT ANY POINT DURING WB CONSTRUCTION. THE TEMPORARY EXIT (-Y1LTXRP-) CAN BE REOPENED TO NEW WB LANES AND -Y1LT-UNTIL ALL OF THE WB LANES ARE COMPLETED IN STEP 3.

AWAY FROM TRAFFIC, CONSTRUCT THE FOLLOWING PROPOSED:

- LEFT SIDE OF BRIDGE (WB DIRECTION & MEDIAN BARRIER) OVER RICHLAND CREEK.
- WB BRIDGE WIDENING OVER NS RR, INCLUDING EXISTING BRIDGE REHAB.
- L LT- STA 15+00± TO STA 33+80± WEDGING AND WIDENING OF EXISTING, INCLUDING TEMPORARY PAVEMENT WIDENING ALONG OUTSIDE (OMIT EXPRESSWAY GUTTER).
- -L LT- STA 33+80± TO WB PORTION OF BRIDGE, INCLUDING TEMPORARY PAVEMENT WIDENING ALONG OUTSIDE (OMIT EXPRESSWAY GUTTER) (SHORING REQUIRED WEST OF RICHLAND CREEK BRIDGE).
- - L LT- FROM WB PORTION OF BRIDGE OVER RICHLAND CREEK TO -L LT- STA 52+00±.
- -L LT- STA 65+00± TO STA 80+64± WEDGING AND WIDENING OF EXISTING AND WALL.

AWAY FROM TRAFFIC, MAY BEGIN CONSRTUCTION OF RETAINING WALL -RW4- AND ADJACENT PAVEMENT FROM -Y1LT- STA 14+10± TO -L LT- STA 65+00±.

AWAY FROM TRAFFIC, AND BEHIND BARRIER, INSTALL AS MUCH PHASE 3 MEDIAN PCB AS POSSIBLE (PROTECT APPROACH END(S) WITH CRASH CUSHION(S) AS NEEDED). PLACE TEMPORARY PAVEMENT MARKINGS AND MARKERS FOR PHASE 3 TRAFFIC PATTERN. PROPOSED WB MEDIAN GUARDRAIL INSTALLED REQUIRES TEMPORARY LAPPING FOR EB TRAFFIC IN PHASE 3.



TEMPORARY TRAFFIC CONTROL PHASING