PROJ. REFERENCE NO.	SHEET NO.
HB-0003	TMP-02D

LANE 1
LANE 2

Ⓐ
MATCHLINE (SEE BELOW)

Q7 Q6 Q5 Q4 Q3 Q2 Q1
M5 M4 M3 M2 M1 Z3 Z2* Z1*

±1 MILE OR AS DIRECTED BY THE ENGINEER

±5.5 MILES TO TAPER

±1 MILE   ±1/2 MILE   ±1/2 MILE   ±1/4 MILE   ±1/4 MILE   ±1/4 MILE   ±1/4 MILE   ±1/2 MILE   ±1/2 MILE   ±1/2 MILE   1/3 L   MERGE   TAPER L

±3 MILES TO TAPER

ROAD WORK AHEAD
W20-1
48" X 48"

BEGIN ROAD WORK
SP-11299
48" X 48"

CHANGEABLE MESSAGE SIGN

FREE FLOW	MESSAGE NO. 1	MESSAGE NO. 2
	RIGHT LANE CLOSED	1 MILE AHEAD

CHANGEABLE MESSAGE SIGN

CONGESTED	MESSAGE NO. 1	MESSAGE NO. 2
	USE BOTH LANES	TO MERGE POINT

CHANGEABLE MESSAGE SIGN

FREE FLOW	MESSAGE NO. 1	MESSAGE NO. 2
	RIGHT LANE CLOSED	←

CONGESTED	MESSAGE NO. 1	MESSAGE NO. 2
	USE BOTH LANES	TO MERGE POINT

CHANGEABLE MESSAGE SIGN

FREE FLOW	MESSAGE NO. 1	MESSAGE NO. 2
	←	(DARK)

CONGESTED	MESSAGE NO. 1	MESSAGE NO. 2
	MERGE HERE	TAKE TURNS

CHANGEABLE MESSAGE SIGN

RIGHT LANE WORK AREA

Ⓐ MATCHLINE (SEE ABOVE)

→ SEE TMP SHEETS

SEE NOTE 8   BUFFER SPACE   TMA SPACE SEE NOTE 5   WORK AREA   200'

CONNECTED LANE CLOSURE DEVICE
END OF LANE CLOSURE

LEFT LANE WORK AREA
(IF APPLICABLE)

Ⓐ Ⓑ   MATCHLINE (SEE ABOVE)

→ SEE TMP SHEETS

L (MIN)   L   BUFFER SPACE   TMA SPACE SEE NOTE 5   WORK AREA   200'

W1-4R
48" X 48"

CONNECTED LANE CLOSURE DEVICE
END OF LANE CLOSURE

Ⓐ 6" WHITE EDGELINE
Ⓑ 6" YELLOW EDGELINE

GENERAL NOTES

1- PLACE DRUMS IN TAPERS AT THE MAXIMUM SPACING EQUAL IN FEET TO THE POSTED SPEED LIMIT. PLACE DRUMS ALONG THE WORK AREA AT THE MAXIMUM SPACING EQUAL TO 2 TIMES THE POSTED SPEED LIMIT.

2- REFER TO RSD. 1101.11, SHEETS 1 & 2, FOR "L" DISTANCE AND BUFFER SPACE.

3- REFER TO RSD. 1101.02, SHEETS 9 & 10, FOR TREATMENT OF LANE CLOSURES THRU INTERCHANGES.

4- INSTALL LANE CLOSURES WITH THE FLOW OF TRAFFIC, BEGINNING WITH DEVICES ON THE UPSTREAM SIDE OF TRAFFIC. REMOVE LANE CLOSURES AGAINST THE FLOW OF TRAFFIC, BEGINNING WITH DEVICES ON THE DOWNSTREAM SIDE OF TRAFFIC.

5- POSITION THE TMAS TO MAINTAIN A ROLL-AHEAD DISTANCE AS RECOMMENDED BY THE MANUFACTURER AND CONTINUOUSLY ADVANCE TMAS AS WORK PROGRESSES. USE TMAS AS REQUIRED TO SHIELD WORKERS FROM ERRANT VEHICLES AND TRAFFIC FROM POTENTIAL HAZARDS IN THE WORK AREA.

6- REMOVE OR COVER EXISTING ADVANCED WARNING SIGNS PREVIOUSLY INSTALLED USING RSD 1101.01, SHEET 2 OF 3.

7- IN THE EVENT OF A SYSTEM MALFUNCTION, IMMEDIATELY INSTALL WORK ZONE SIGNS ACCORDING TO RSD 1101.3, SHEET 4. SIGNAGE SHOULD REMAIN IN PLACE UNTIL SYSTEM OPERATION IS FULLY RESTORED.

8- IF A LEFT LANE WORK AREA WILL BE NEEDED AT ANY TIME DURING THE PROJECT, USE 2L. IF NO LEFT LANE WORK AREA IS NEEDED, OMIT THIS SPACE.

9- REMOVE ANY CONFLICTING PAVEMENT MARKINGS & MARKERS.

LEGEND

- SPEED SENSOR Q#(1-7)
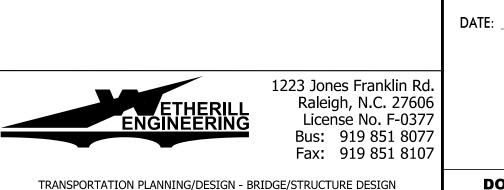- PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS)
    - M#(1-5) = MAINLINE
    - Z#(1-3) = ZIPPER MERGE
    - *Z1 & Z2 SHALL BE FULL MATRIX
- CONNECTED LANE CLOSURE DEVICE
- DRUM
- TRUCK MOUNTED ATTENUATOR (TMA)
- STATIONARY SIGN

APPROVED: Lawrence H. Green

DATE: 4/8/2024

NORTH CAROLINA PROFESSIONAL ENGINEER
SEAL 028137
LAWRENCE H. GREEN

DIVISION OF HIGHWAYS — STATE OF NORTH CAROLINA — DEPARTMENT OF TRANSPORTATION — WORK ZONE TRAFFIC CONTROL

DYNAMIC ZIPPER MERGE SYSTEM LAYOUT

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

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED