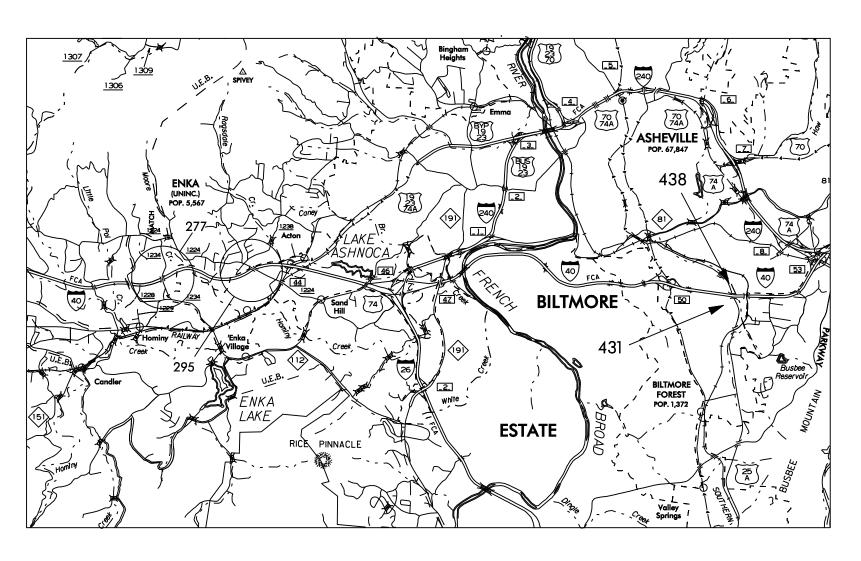


STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

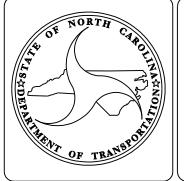
BUNCOMBE COUNTY

STATE	STATE PROJECT REPERENCE NO.		SHEET	TOTAL SHEETS
N.C.	B	-4700AP	1	1
STATE	PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	
36	727.1.1	BRNHS-000S(504)	P.E.	
36727.3.40		BRNHS-000S(370)	CONST	
<u> </u>				

LOCATION: SR 1234, SR 1224, I 40, ACROSS I 40, US 25A
TYPE OF WORK: BRIDGE PRESERVATION: CLEANING & PAINTING OF
BRIDGES #277, #295, #431, & #438 IN BUNCOMBE COUNTY.







DESIGN DATA

PROJECT LENGTH

LENGTH STRUCTURE PROJECT = 9.00 MILES

Prepared in the Office of:

BRIDGE MANAGEMENT UNIT

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

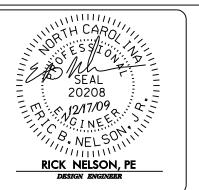
2006 STANDARD SPECIFICATIONS

LETTING DATE:
FEBRUARY 25, 2010

DAN HOLDERMAN, PE

STATE BRIDGE
MANAGEMENT ENGINEER

MIKE SUMMERS



STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

PLAN FOR PROPOSED TRAFFIC CONTROL

BUNCOMBE COUNTY

LOCATION: BRIDGE NO.S 431, 438, 277, AND 295.

TYPE OF WORK: TRAFFIC CONTROL FOR BRIDGE PAINTING

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" -PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JULY 2006 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.02 1101.04 1101.11	TEMPORARY LANE CLOSURES TEMPORARY SHOULDER CLOSURES TRAFFIC CONTROL DESIGN TABLES
1110.02 1115.01	PORTABLE WORK ZONE SIGNS FLASHING ARROW PANELS
1130.01 1135.01	DRUMS CONES
1150.01 1165.01 1180.01	FLAGGING DEVICES TRUCK MOUNTED IMPACT ATTENUATOR SKINNY-DRUM

INDEX OF SHEETS

SHEET NO.	TITLE
TCP-1	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND, AND INDEX OF SHEETS
TCP-2	GENERAL NOTES
TCP-3	VICINITY MAP AND PROJECT PHASING
TCP-4	DETAIL FOR RIGHT AND LEFT LANE CLOSURES ON I-40
TCP-5	DETAIL FOR CLOSURE OF TWO LANES ON I-40.
TCP-6	DETAIL FOR TREATMENT OF RIGHT LANE CLOSURES IN THE VICINITY OF AN ENTRANCE RAMP
TCP-7	DETAIL FOR RIGHT LANE CLOSURES ON US 25 ALT. SWEETEN CREEK RD.
TCP-8	DETAIL FOR LEFT LANE CLOSURES ON US 25 ALT. SWEETEN CREEK RD.

LEGEND

GENERAL

DIRECTION OF TRAFFIC FLOW

STATE PROJECT REFERENCE NO.

B-4700AP

SHEET NO.

TCP-1

NORTH ARROW



WORK AREA

TRAFFIC CONTROL DEVICES

TYPE III BARRICADE

▲ CONE

● DRUM ◎ SKINNY DRUM

FLASHING ARROW PANEL (TYPE C)

- STATIONARY SIGN

PORTABLE SIGN

STATIONARY OR PORTABLE SIGN

- PORTABLE CONCRETE BARRIER

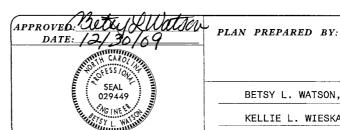
TEMPORARY CRASH CUSHION

CHANGEABLE MESSAGE SIGN

TRUCK MOUNTED IMPACT ATTENUATOR (TMIA)

POLICE

■ FLAGGER





BETSY L. WATSON, PE

KELLIE L. WIESKAMP, EI

TRAFFIC CONTROL ENGINEER

TRAFFIC CONTROL DESIGNER

PROJECT REFERENCE NO. SHEET NO. B-4700AP TCP-2

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

LANE CLOSURE TIME RESTRICTIONS

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

ROAD NAME

DAY AND TIME RESTRICTIONS

ALL ROADS

6:00 A.M.-7:00 P.M. MONDAY-FRIDAY

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 7:00 P.M. DECEMBER 31st TO 6:00 A.M. JANUARY 2nd. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 6:00 A.M. THE FOLLOWING TUESDAY.
- 3) FOR EASTER, BETWEEN THE HOURS OF 7:00 P.M. THURSDAY AND 6:00 A.M. MONDAY.
- 4) FOR MEMORIAL DAY, BETWEEN THE HOURS OF 7:00 P.M. FRIDAY TO 6:00 A.M. TUESDAY.
- 5) FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 7:00 P.M. THE DAY BEFORE INDEPENDENCE DAY AND 6:00 A.M. THE DAY AFTER INDEPENDENCE DAY. IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY; THEN BETWEEN THE HOURS OF 7:00 P.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 6:00 A.M. THE TUESDAY AFTER INDEPENDENCE DAY.
- 6) FOR LABOR DAY, BETWEEN THE HOURS OF 7:00 P.M. FRIDAY AND 6:00 A.M. TUESDAY.
- 7) FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 7:00 P.M. TUESDAY TO 6:00 A.M. MONDAY.
- 8) FOR CHRISTMAS, BETWEEN THE HOURS OF 7:00 P.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 6:00 A.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.
- 9) FOR THE BELE CHERE FESTIVAL, BETWEEN THE HOURS OF 7:00 P.M. THE WEDNESDAY BEFORE THE FESTIVAL AND 6:00 A.M. THE WEDNESDAY AFTER THE FESTIVAL.

LANE AND SHOULDER CLOSURE REQUIREMENTS

- C) 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.
- D) 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.
- E) 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 1101.02, SHEET 1 OF 9 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 SHEET TCP-4 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

- F) 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.
- G) 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.
- H) DO NOT INSTALL MORE THAN 2 MILES OF LANE CLOSURES ON I-40 OR US 25 ALT. MEASURED FROM THE BEGINNING OF THE MERGE TAPER TO THE END OF THE LANE CLOSURE.
- DO NOT INSTALL MORE THAN 2 SIMULTANEOUS LANE CLOSURES IN ANY ONE DIRECTION ON I-40 OR US 25 ALT.
- J) PROVIDE A MINIMUM OF 1 MILE BETWEEN LANE CLOSURES, MEASURED FROM THE END OF ONE CLOSURE TO THE FIRST SIGN OF THE NEXT LANE CLOSURE.

TRAFFIC PATTERN ALTERATIONS

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

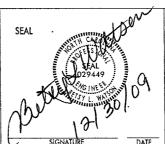
SIGNING

L) ENSURE ALL SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

MISCELLANEOUS

- M) LAW ENFORCEMENT MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS AS DIRECTED BY THE ENGINEER.
- N) DO NOT PERFORM WORK FROM THE ROADWAY ON TOP OF THE STRUCTURE.
- O) ENSURE THE OVERSIZE/OVERWEIGHT PERMIT UNIT (919) 733-4740 HAS BEEN ADVISED OF THE ONGOING TRAFFIC OPERATIONS THROUGH THE DIVISION OFFICE.





PROJECT NOTES GENERAL NOTES

SCALE: NONE

DATE: DEC. 2009

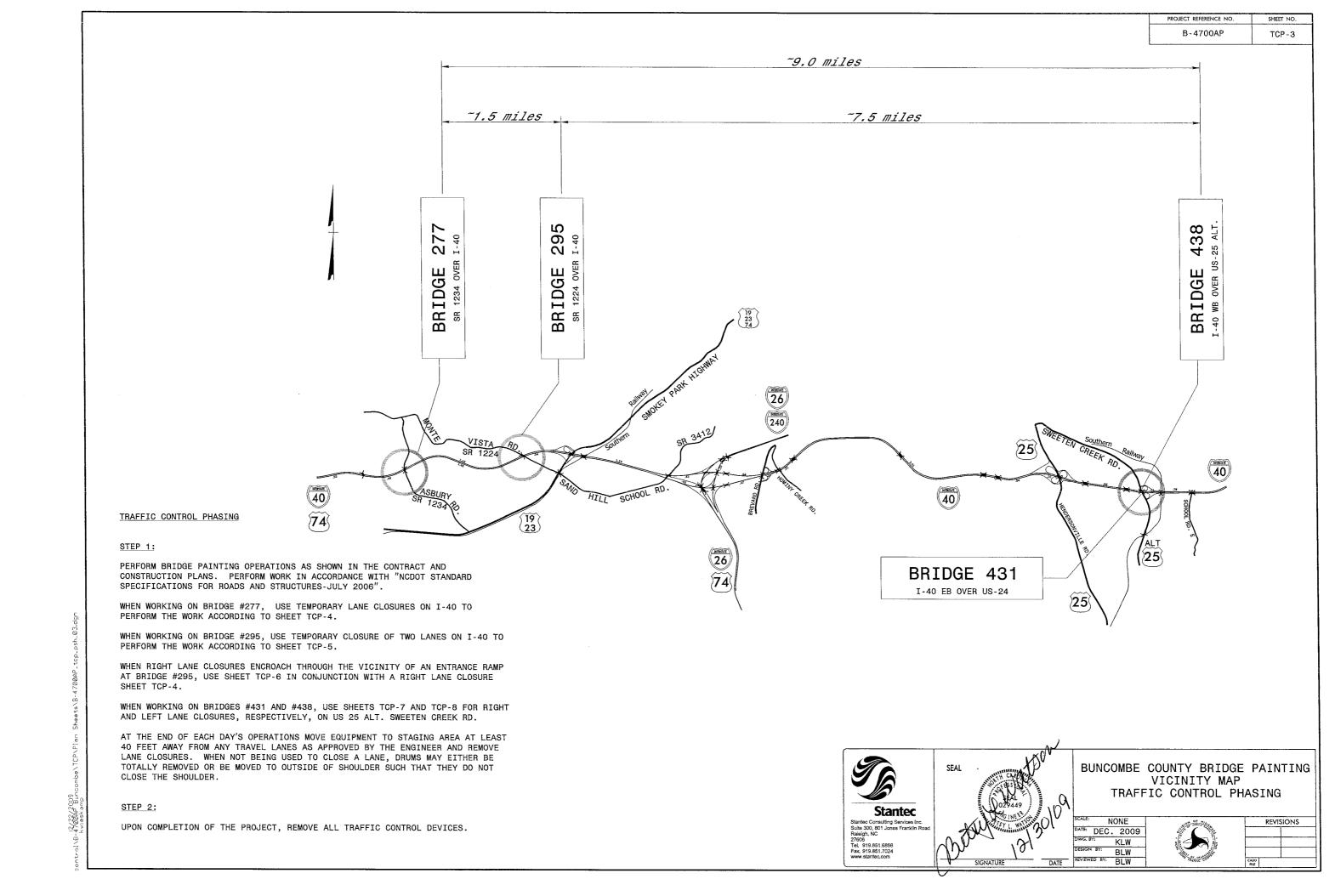
OWG. BY: KLW

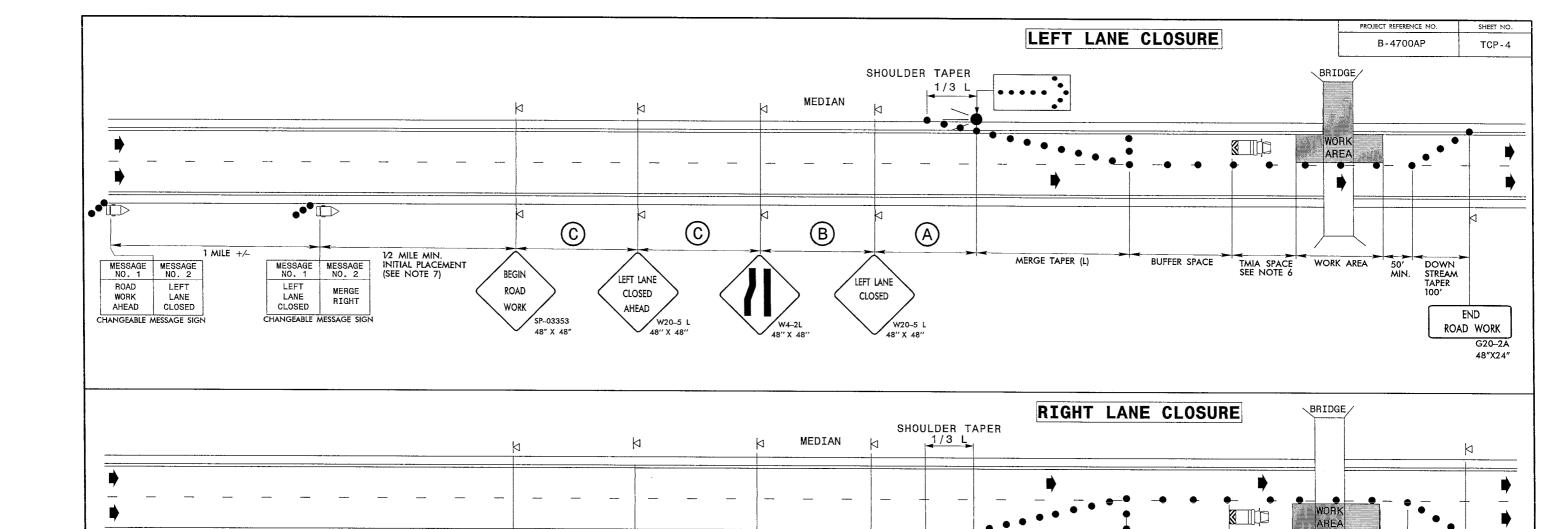
DESIGN BY: BLW

REVIEWED BY: BLW

REVISIONS

|2/27/2009 | ControlNB-4700AF Buncombe\TCP\Plan Sheets\B-4700AF_tcp_psh | kwieskamp





B

N4-2R

RIGHT LANE

CLOSED

(A)

W20-5 R

MERGE TAPER (L)

BUFFER SPACE

SEE SHEET TCP-6 WHEN IN

VICINITY OF ENTRANCE RAMP

(C)

RIGHT LANE

CLOSED

AHEAD

W20-5 R

NOTES

CHANGEABLE MESSAGE SIGN

MESSAGE NO. 1

ROAD

MESSAGE NO. 2

RIGHT

LANE

CLOSED

1. USE THIS DRAWING FOR LANE CLOSURES ALONG I-40 ASSOCIATED WITH BRIDGE NO. 277.

1/2 MILE MIN. INITIAL PLACEMENT

(SEE NOTE 7)

•••

CHANGEABLE MESSAGE SIGN

MESSAGE NO. 2

MERGE

LEFT

MESSAGE NO. 1

RIGHT

LANE

CLOSED

1 MILE +/-

2. PLACE ARROW PANELS ON THE SHOULDER (PAVED OR UNPAVED). PLACE ARROW PANELS WITHIN THE TAPER IF SHOULDERS DO NOT EXIST.
MEET THE REQUIREMENTS FOR STOPPING SIGHT DISTANCE AT THE ARROW PANEL LOCATION. IF NEEDED, EXTEND LANE CLOSURES
AT THE BUFFER SPACE, SUCH THAT STOPPING SIGHT DISTANCE TO THE ARROW PANEL IS MET. (SEE STD. 1101.11 SHEET 2).

BEGIN

ROAD

WORK

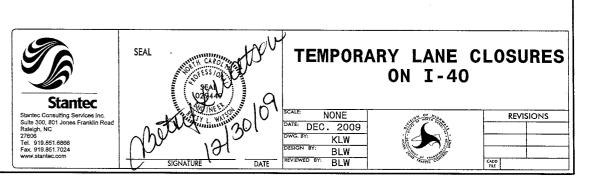
- 3. PLACE DRUMS IN TAPERS AT THE MAXIMUM SPACING EQUAL IN FEET TO THE POSTED SPEED LIMIT. PLACE DRUMS ALONG THE BUFFER SPACE AND WORK AREA AT THE MAXIMUM SPACING EQUAL IN FEET TO 2 TIMES THE POSTED SPEED LIMIT.
- 4. REFER TO STD. 1101.11 SHEETS 1 & 4, FOR "L" DISTANCE AND SIGN SPACING.
- 5. INSTALL LANE CLOSURES WITH THE TRAFFIC FLOW, BEGINNING WITH DEVICES ON THE UPSTREAM SIDE OF TRAFFIC. REMOVE LANE CLOSURES AGAINST THE TRAFFIC FLOW, BEGINNING WITH DEVICES ON THE DOWNSTREAM SIDE OF TRAFFIC.
- 6. TMIA'S ARE REQUIRED ONLY WHEN A BUFFER SPACE CANNOT BE ATTAINED, OR WHEN DIRECTED BY THE ENGINEER OR THE PLANS. WHEN USED, POSITION THE TMIA TO MAINTAIN A ROLL-AHEAD DISTANCE AS RECOMMENDED BY THE MANUFACTURER.

(C)

SP-03353

48" X 48"

7. PLACE CHANGEABLE MESSAGE SIGN (CMS) ON THE OUTSIDE OF THE TRAVELWAY AS DIRECTED BY THE ENGINEER. PLACE CMS APPROXIMATELY 1/2 MILE IN ADVANCE OF THE W20-5 SIGNS. IF TRAFFIC BACKS UP TO WHERE THE CMS IS INITIALLY PLACED, RELOCATE CMS 1/2 MILE FROM ANTICIPATED BACKUP. CONTINUE TO MONITOR TRAFFIC AND MOVE CMS APPROXIMATELY 1/2 MILE IN CONJUCTION WITH ANTICIPATED BACKUP.



TMIA SPACE

WORK AREA

DOWN

STREAM

TAPER 100'

> G20-2A 48"X24"

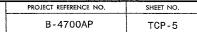
END

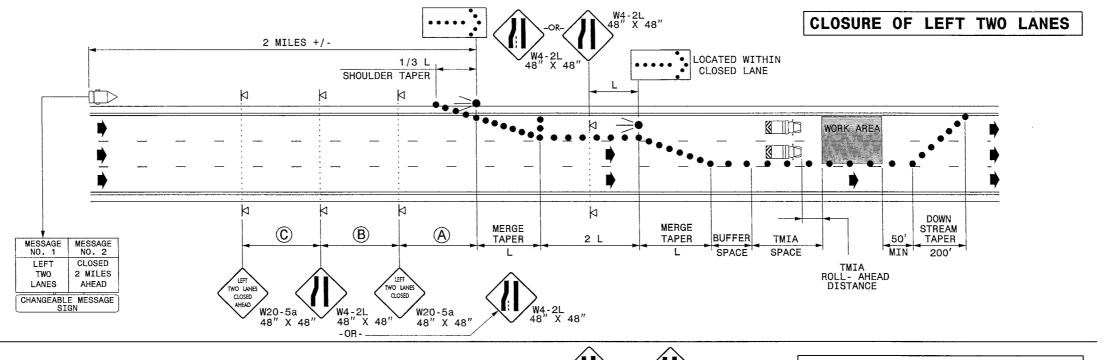
ROAD WORK

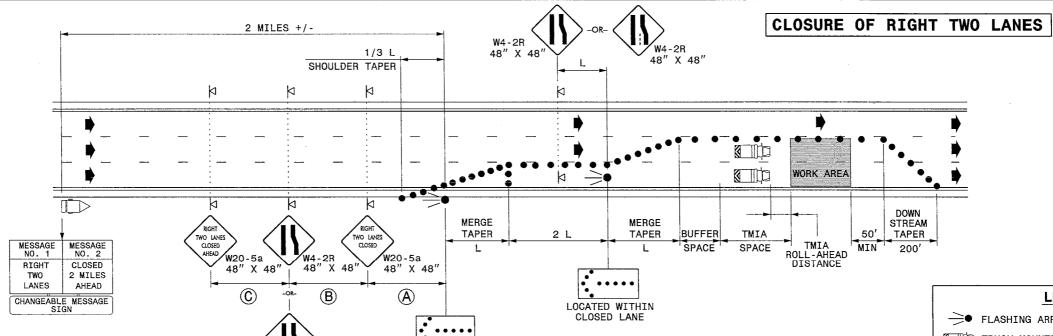
50'

MIN.

rolNB-4/00AP Buncombe\lCPNPlan Sheets\B-4/00AP_tcp_psh_04.d; kwleskamp







W4-2R 48" X 48"

GENERAL NOTES

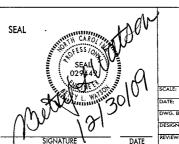
- 1.USE THIS DRAWING FOR LANE CLOSURES ALONG I-40 ASSOCIATED WITH BRIDGE NO. 295.
- 2. REFER TO NOTES ON SHEET TCP-4.

12/22/20 -4/00AF | Kwieskam 3. REFER TO SHEET TCP-6 FOR TREATMENT OF LANE CLOSURES THROUGH INTERCHANGES.

LEGEND

- FLASHING ARROW PANEL (TYPE C)
- TRUCK MOUNTED IMPACT ATTENUATOR (TMIA)
 - DRUM
 - PORTABLE SIGN
- CHANGEABLE MESSAGE SIGN (CMS)
- DIRECTION OF TRAFFIC FLOW





TEMPORARY CLOSURE OF TWO LANES ON I-40

SCALE: NONE

DATE: DEC. 2009

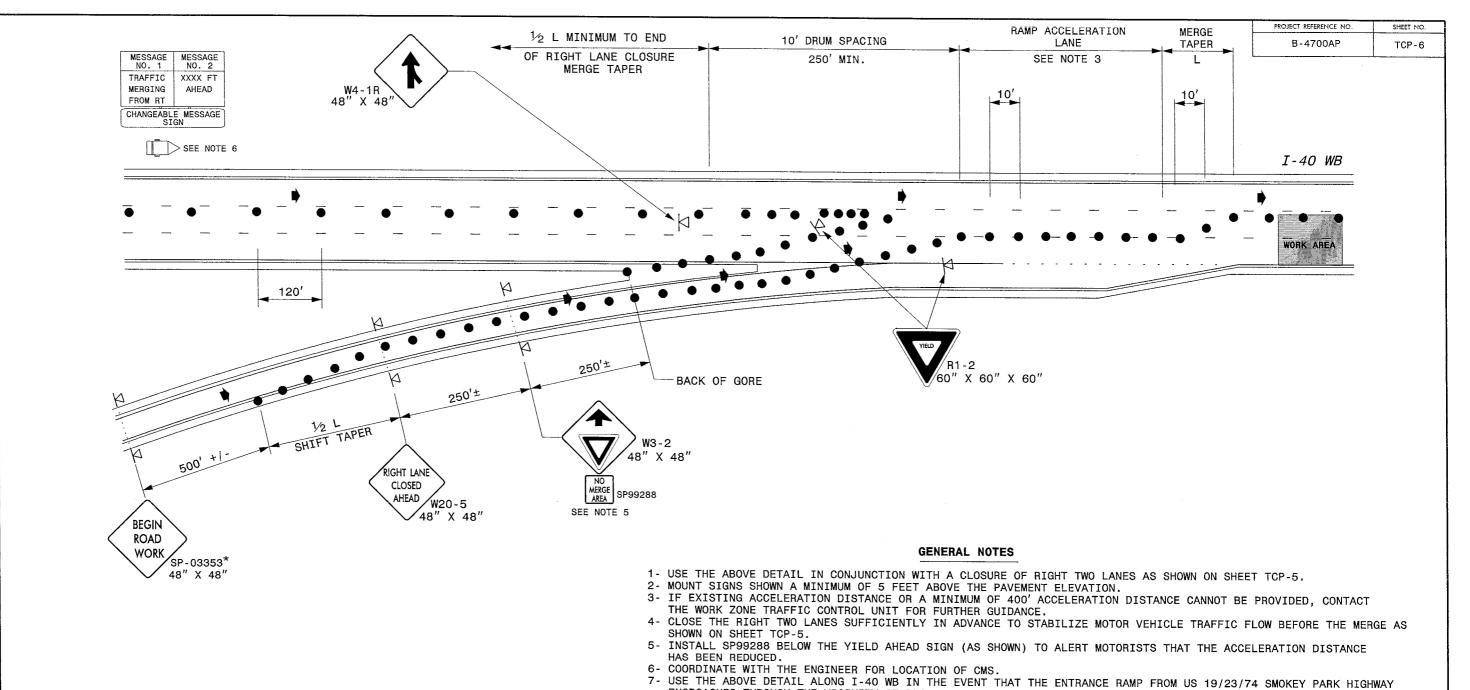
DWG, BY: KLW

DESIGN BY: BLW

REVIEWED BY: BLW

PRAFFIC COM	

REVISIONS



LEGEND

CHANGEABLE MESSAGE SIGN (CMS)

- DRUM
- ⋈ PORTABLE SIGN
- DIRECTION OF TRAFFIC FLOW



ENCROACHES THROUGH THE VICINITY OF RIGHT LANE CLOSURES AT BRIDGE #295.

TYPICAL RIGHT LANE CLOSURE THROUGH VICINITY OF **ENTRANCE RAMP**

NONE DATE: DEC. 2009 KLW BLW REVIEWED BY: BLW

