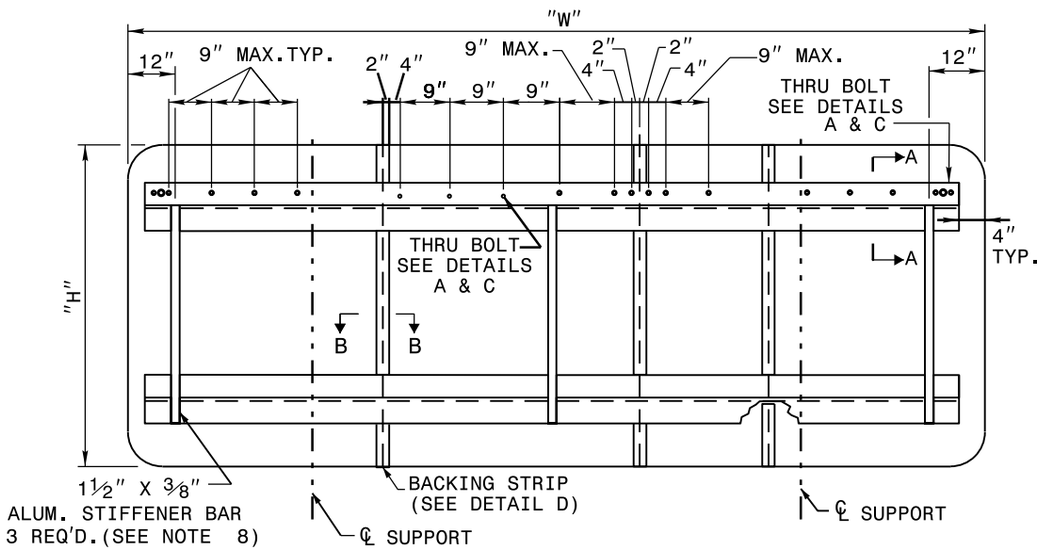
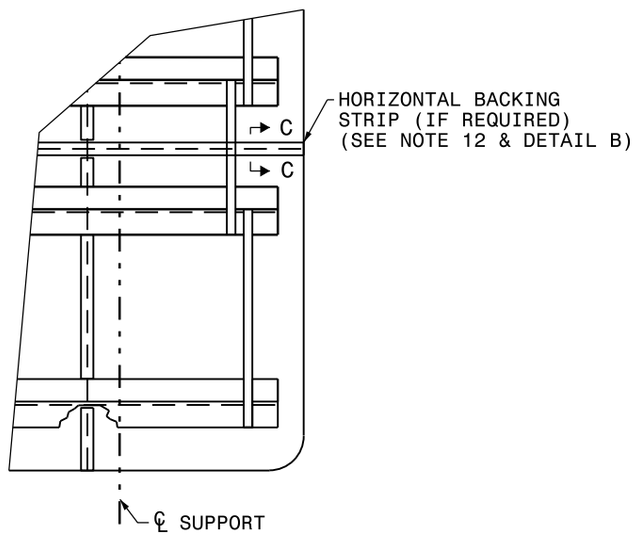
TYPICAL STUD PLACEMENT



HORIZONTAL BACKING STRIP



NOTES:

1. USE THE NUMBER AND SIZE OF SUPPORTS SHOWN ON THE SUPPORT CHART IN PROJECT PLANS.
2. FABRICATE SIGN PANEL SECTIONS WITH SHEETS 4′-0″ WIDE. WHEN FABRICATING SIGNS WHICH ARE NOT MULTIPLES OF 4′-0″ IN WIDTH, DO NOT CUT MORE THAN TWO SHEETS TO LESS THAN 4′-0″ IN WIDTH. THESE PANELS SHALL NOT BE LESS THAN 1′-0″ IN WIDTH.
3. SEE NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES, FOR TYPE OF MATERIAL TO BE USED FOR SIGN PANELS, HANGER ASSEMBLIES, AND SUPPORTS.
4. USE GALVANIZED STEEL FOR BACKING STRIP PLATES AND MOUNTING BOLTS.
5. SEE ROADWAY STANDARD 904.20 WHEN TYPE "B" SECONDARY SIGN MOUNTING IS REQUIRED.
6. DETAILS FOR TYPE "A" SECONDARY SIGNS SHALL BE THE SAME AS FOR TYPE "A" SIGNS.
7. THE VERTICAL DIMENSION BETWEEN PRIMARY AND SECONDARY SIGNS IS TWO (2) INCHES.
8. ADJUST STIFFENERS TO AVOID CONFLICT WITH SUPPORTS.
9. SEE ROADWAY STANDARD 901.70 FOR SUPPORT AND "Z" BAR SPACING.
10. FABRICATE SIGNS TALLER THAN 12′-0″ AS TWO SEPARATE SIGNS WITH A HORIZONTAL SPLICE. LOCATE STRINGERS ON EACH SECTION OF THE SIGN BY THE SIGN STRINGER CHART. (SEE ROADWAY STANDARD 901.70)
11. FABRICATE SIGNS TALLER THAN 12′-0″ BUT SHORTER THAN 14′-6″ WITH A HORIZONTAL SPLICE LOCATED 7′-0″ FROM BOTTOM OF SIGN.
12. FABRICATE SIGNS 14′-6″ TALL AND TALLER WITH A HORIZONTAL SPLICE. LOCATE THE SPLICE AT LEAST HALF OF THE SIGN HEIGHT FROM THE BOTTOM AND AT LEAST 7′-0″ FROM THE TOP.
13. THERE SHALL ONLY BE A ⅛″ GAP BETWEEN THE VERTICAL BACKING STRIP AND THE "Z" BAR.
14. SEE ROADWAY STANDARD 901.80 FOR DETAILS SHOWING SIGN MOUNTING TO SUPPORTS.
15. PLACE NYLON WASHER UNDER HEAD OF ⅜″ THRU BOLTS.
16. FABRICATE EACH SIGN WITH ⅜″ DIA. THRU BOLT, 4″ FROM EACH END OF EACH "Z" BAR THRU SIGN PANEL AND "Z" BAR. SEE DETAILS A & C.
17. FABRICATE EACH SIGN WITH ⅜″ DIA.THRU BOLT CENTERED IN EACH PANEL THRU THE TOP AND BOTTOM "Z" BAR. CENTERED THRU BOLT REQUIRED IN END PANELS GREATER THAN 2′-0″ WIDE. SEE DETAILS A & C.
18. THRU BOLTS WILL HAVE A MINIMUM 1/16″ TO MAXIMUM ⅛″ GAP

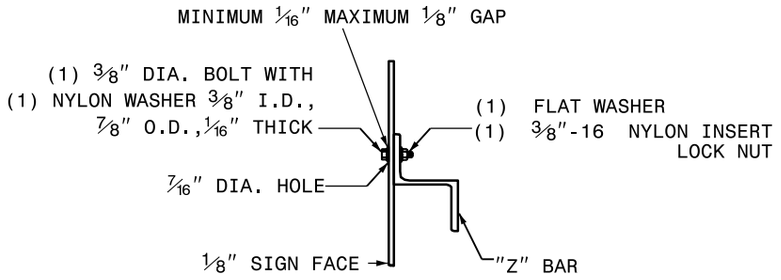
STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-24

ROADWAY STANDARD DRAWING FOR

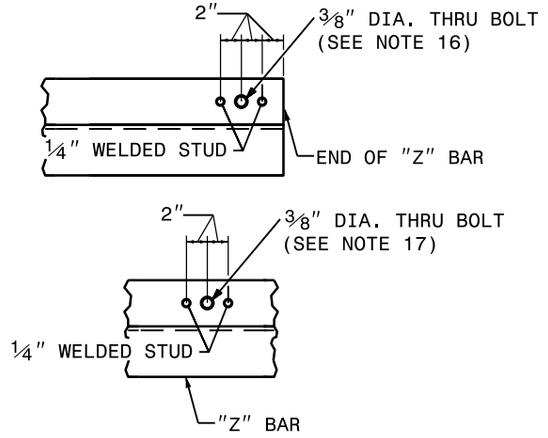
TYPE 'A' SIGNS

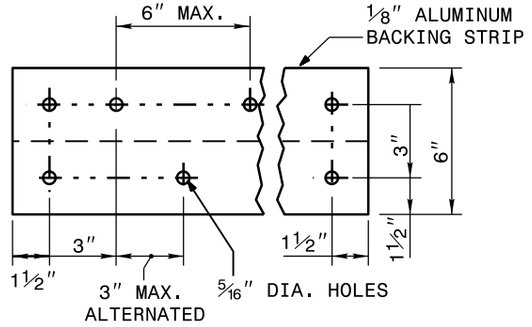
WELDED STUD CONSTRUCTION



DETAIL A

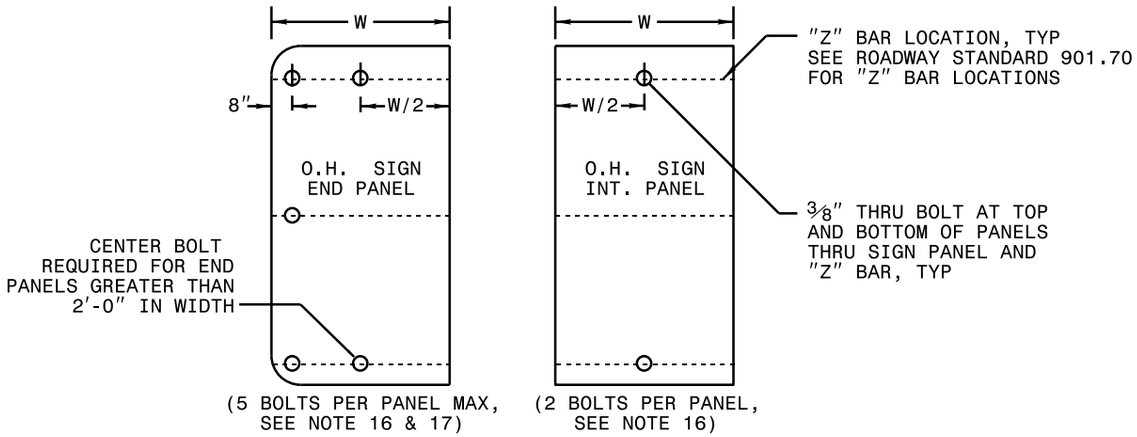
THRU-BOLT CONNECTION





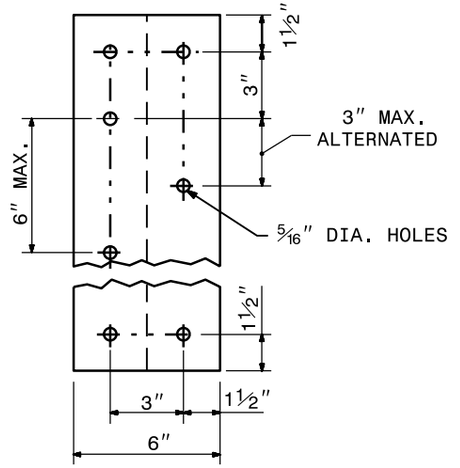
DETAIL B

TYPICAL HORIZ. JOINT HOLE PATTERN



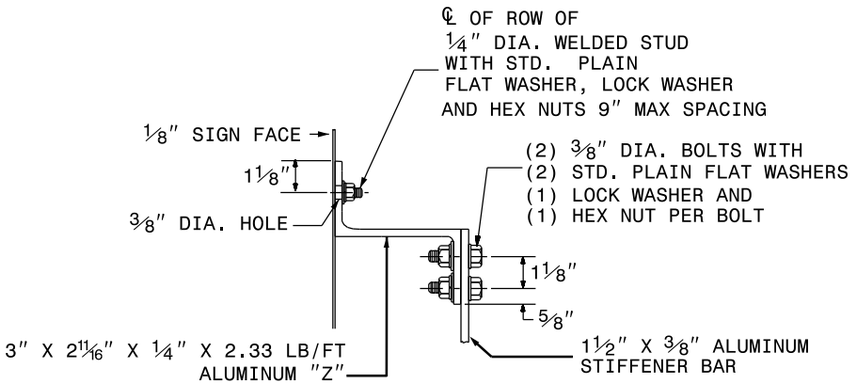
DETAIL C

THRU-BOLT LOCATIONS

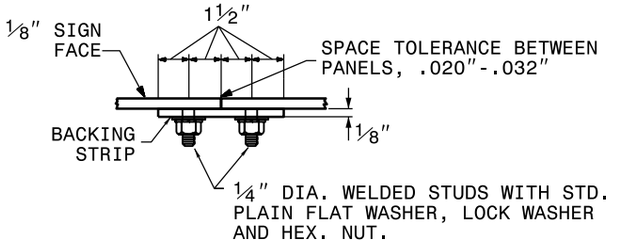


DETAIL D

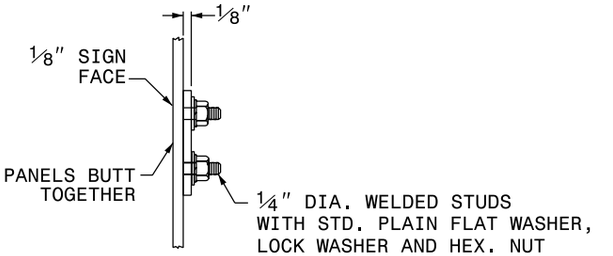
BACKING STRIP HOLE PATTERN



SECTION A-A



SECTION B-B



SECTION C-C

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-24

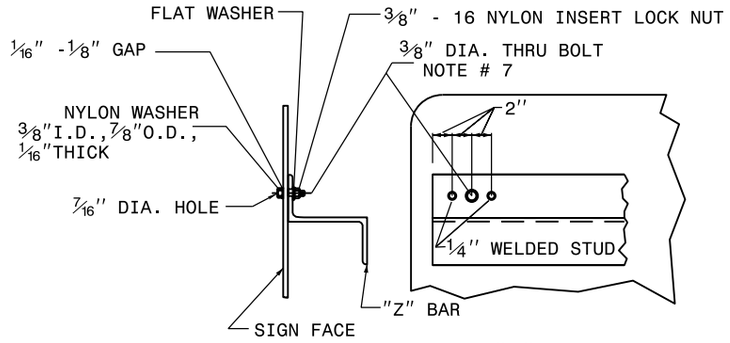
ROADWAY STANDARD DRAWING FOR

TYPE 'A' SIGNS

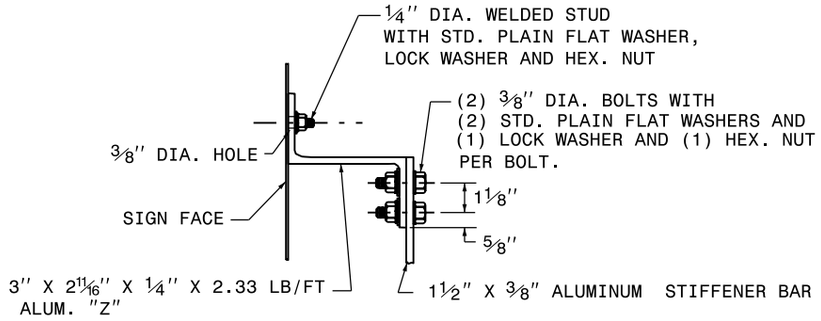
WELDED STUD CONSTRUCTION

SHEET 2 OF 2

901.10

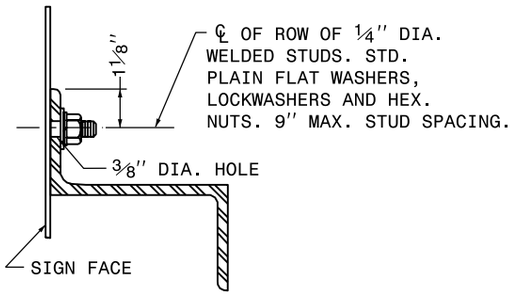


DETAIL "A"

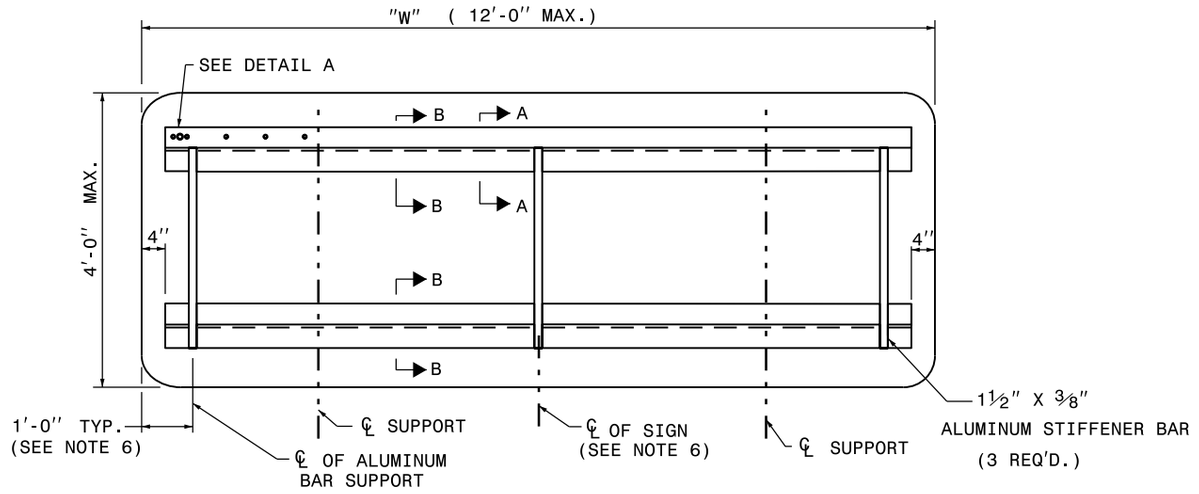


SECTION A-A

STIFFENER DETAIL



SECTION B-B



NOTES:

1. USE NUMBER AND SIZE OF SUPPORTS SHOWN ON SUPPORT CHART IN PROJECT PLAN SHEETS.
2. SEE NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES FOR THE TYPE OF MATERIAL TO BE USED FOR SIGN PANELS, HANGER ASSEMBLIES AND SUPPORTS.
3. FURNISH ALL MOUNTING HARDWARE.
4. USE GALVANIZED STEEL FOR MOUNTING BOLTS.
5. THE VERTICAL DIMENSION BETWEEN PRIMARY AND SECONDARY SIGNS IS TWO (2) INCHES.
6. ADJUST STIFFENERS TO AVOID CONFLICT WITH SUPPORTS.
7. FABRICATE EACH SIGN WITH A 3/8" DIA. BOLT 4" FROM EACH END OF EACH "Z" BAR THRU SIGN PANEL AND "Z" BAR.
8. SEE ROADWAY STANDARD 901.70 FOR SUPPORT AND "Z" BAR SPACING.
9. SEE ROADWAY STANDARD 901.80 FOR DETAILS SHOWING SIGN MOUNTING TO SUPPORTS.
10. PLACE NYLON WASHER UNDER HEAD OF 3/8" THRU BOLT.
11. THRU BOLTS WILL HAVE A MINIMUM 1/16" TO MAXIMUM 1/8" GAP.

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-24

ROADWAY STANDARD DRAWING FOR

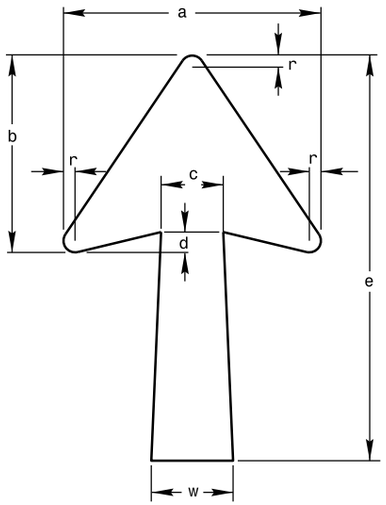
TYPE 'B' SIGNS

WELDED STUD CONSTRUCTION

SHEET 1 OF 1

901.20

DETAIL OF INTERSTATE ARROW



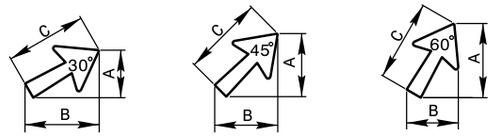
INTERSTATE TYPE "A" ARROW

LETTER SIZE (upper-case)	Arrow Dimensions in Inches						
	a	b	c	d	e	r	w
8"	15.13"	11.56"	3.75"	1.31"	25"	.81"	5"
10"-13.33"	18.25"	14"	4.50"	1.50"	30"	.75"	6"
15"CAPS-20"UC	22.25"	17"	5.38"	1.75"	35"	1"	7.06"

INTERSTATE TYPE "B" ARROW

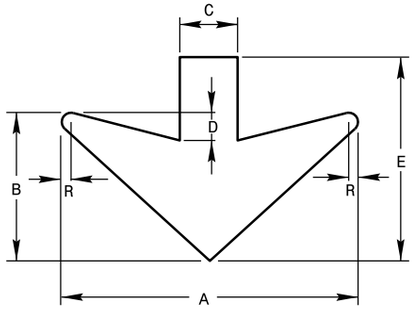
LETTER SIZE (upper-case)	Arrow Dimensions in Inches						
	a	b	c	d	e	r	w
8"	15.13"	11.56"	3.75"	1.31"	17"	.81"	4.31"
10"-13.33"	18.25"	14"	4.50"	1.50"	20"	.75"	5.13"
15"CAPS-20"UC	22.25"	17"	5.38"	1.75"	25"	1"	6.19"

DETAIL OF DIAGONAL INTERSTATE ARROWS FOR TYPE "A" & "B" SIGNS



INTERSTATE TYPE "A" ARROW

ANGLE ∠	ARROW SIZE TYPE "A"	A	B	C
30°	8" CAPS	15.88"	23"	25"
	10.67"-13.33"U.C.10"-12"CAPS	19"	27.50"	30"
	15" CAPS - 20" U.C.	22.38"	32.25"	35"
45°	8" CAPS	19.63"	19.63"	25"
	10.67"-13.33"U.C.10"-12"CAPS	23.50"	23.50"	30"
	15" CAPS - 20" U.C.	27.50"	27.50"	35"
60°	8" CAPS	23"	15.88"	25"
	10.67"-13.33"U.C.10"-12"CAPS	27.50"	19"	30"
	15" CAPS - 20" U.C.	32.25"	22.38"	35"



DETAIL OF DOWN ARROW

DOWN ARROWS

ARROW SIZE	Arrow Dimensions in Inches					
	A	B	C	D	E	R
1/2 "C"	16"	8"	3.25"	1.50"	11"	.50"
2/3 "C"	21.31"	10.69"	4.31"	2"	14.69"	.69"
3/4 "C"	24"	12"	4.88"	2.25"	16.50"	.75"
STANDARD"C"	32"	16"	6.50"	3"	22"	1"

INTERSTATE TYPE "B" ARROW

ANGLE ∠	ARROW SIZE TYPE "B"	A	B	C
30°	8" CAPS	13.25"	15.88"	17"
	10.67"-13.33"U.C.10"-12"CAPS	16"	18.63"	20"
	15" CAPS - 20" U.C.	19.50"	23.25"	25"
45°	8" CAPS	13.75"	13.75"	17"
	10.67"-13.33"U.C.10"-12"CAPS	16.25"	16.25"	20"
	15" CAPS - 20" U.C.	20.13"	20.13"	25"
60°	8" CAPS	15.88"	13.25"	17"
	10.67"-13.33"U.C.10"-12"CAPS	18.63"	16"	20"
	15" CAPS - 20" U.C.	23.25"	19.50"	25"

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

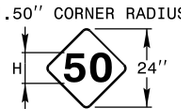
1-24

ROADWAY STANDARD DRAWING FOR

ARROWS AND SHIELDS

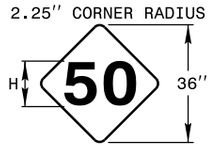
901.50

DETAIL OF STATE SHIELDS



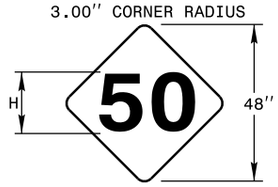
24″ N.C. SHIELDS

NO. DIGITS	LETTER SERIES	LETTER HIGHT "H"
1	"D"	12″
2	"C" OR "D"	10″
3	"C" OR "D"	7″
3	"C" OR "D"	8″



36″ N.C. SHIELDS

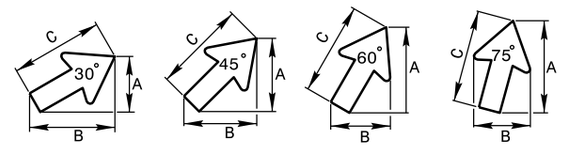
NO. DIGITS	LETTER SERIES	LETTER HIGHT "H"
1	"D"	18″
2	"C" OR "D"	15″
3	"C" OR "D"	12″
3	"D"	10″



48″ N.C. SHIELDS

NO. DIGITS	LETTER SERIES	LETTER HIGHT "H"
1	"D"	24″
2	"D"	20″
2	"D"	18″
3	"C" OR "D"	14″

DETAIL OF DIAGONAL ARROWS FOR TYPE "D" SIGNS



5″ ARROW

ANGLE ∠	A	B	C
30°	4.95″	6.96″	7.5″
45°	5.97″	5.97″	7.5″
60°	6.96″	4.95″	7.5″
75°	7.49″	4.95″	7.5″

6″ ARROW

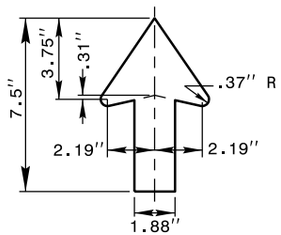
ANGLE ∠	A	B	C
30°	5.94″	8.36″	9″
45°	7.16″	7.16″	9″
60°	8.36″	5.94″	9″
75°	8.98″	5.95″	9″

8″ ARROW

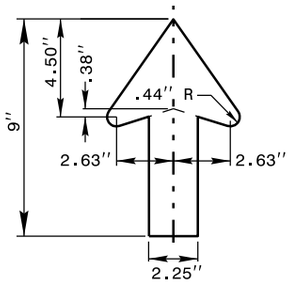
ANGLE ∠	A	B	C
30°	7.83″	11.14″	12″
45°	9.55″	9.55″	12″
60°	11.14″	7.83″	12″
75°	11.98″	7.88″	12″

10″ ARROW

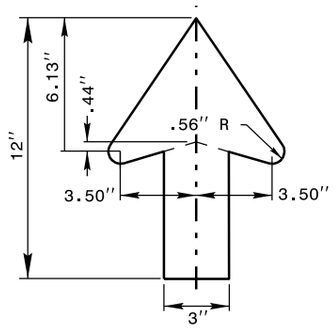
ANGLE ∠	A	B	C
30°	9.79″	13.93″	15″
45°	11.93″	11.93″	15″
60°	13.93″	9.79″	15″
75°	14.97″	9.83″	15″



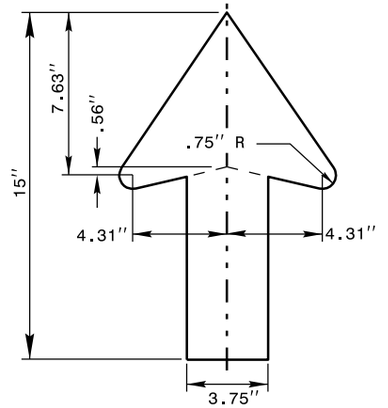
DETAIL OF 5″ ARROW



DETAIL OF 6″ ARROW



DETAIL OF 8″ ARROW



DETAIL OF 10″ ARROW

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

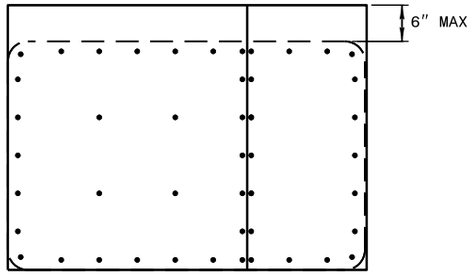
1-24

ROADWAY STANDARD DRAWING FOR

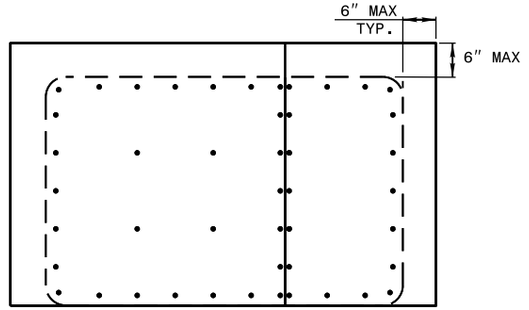
ARROWS AND SHIELDS

SHEET 2 OF 2

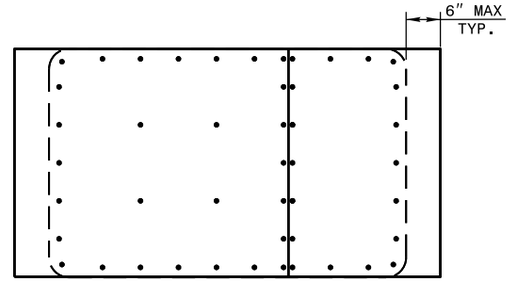
901.50



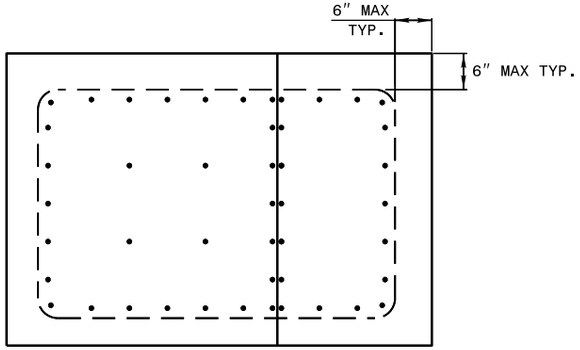
IF OVERLAYING SIGN OVERLAPS SIGN ON TOP ONLY
DETAIL NO.1



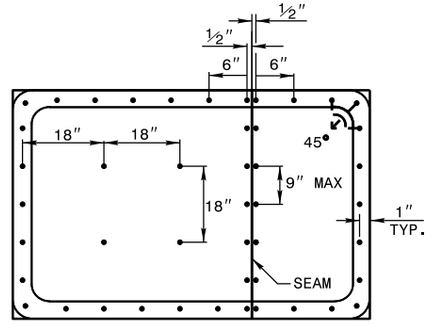
IF OVERLAYING SIGN OVERLAPS SIGN ON TOP AND SIDES
DETAIL NO.2



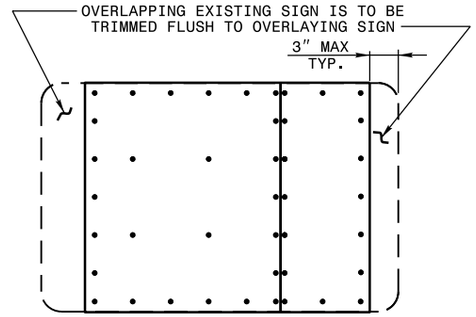
IF OVERLAYING SIGN OVERLAPS SIGN ON TWO SIDES
DETAIL NO.3



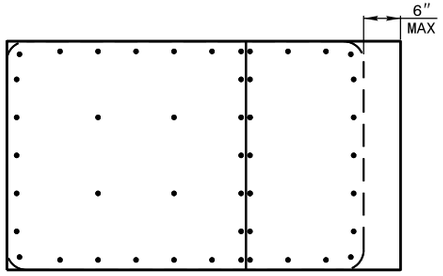
IF OVERLAYING SIGN OVERLAPS SIGN ON FOUR SIDES
DETAIL NO.4



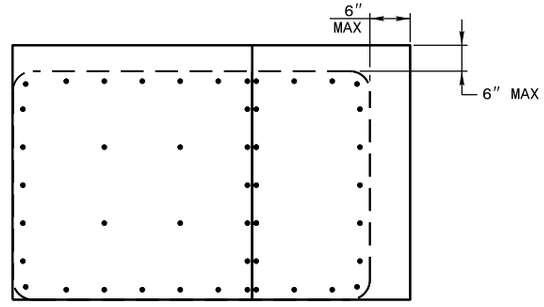
TYPICAL RIVET SPACING FOR OVERLAY SIGNS
DETAIL NO.5



IF EXISTING SIGN OVERLAPS OVERLAYING SIGN
DETAIL NO.6



IF OVERLAYING SIGN OVERLAPS SIGN ON ONE SIDE
DETAIL NO.7



IF OVERLAYING SIGN OVERLAPS SIGN ON TOP AND ONE SIDE
DETAIL NO.8

NOTES:

1. A COMPLETE OVERLAY OF AN EXISTING O.H. SIGN IS NOT PERMISSIBLE

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

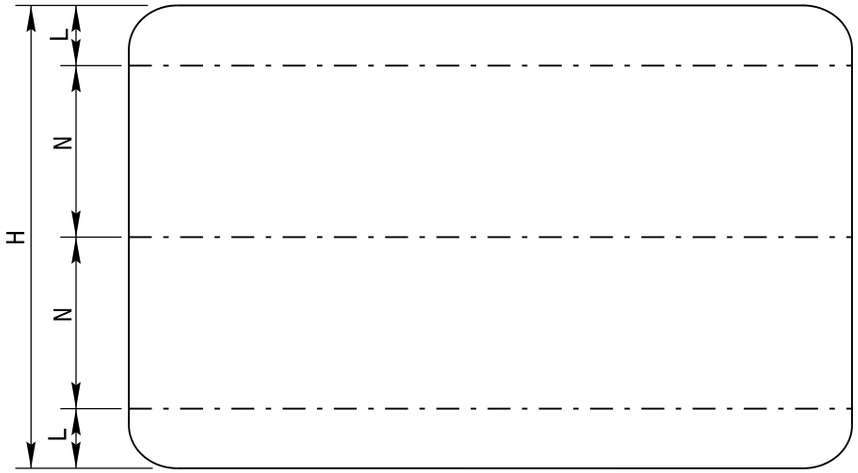
1-24

ROADWAY STANDARD DRAWING FOR

RIVET SPACING FOR OVERLAYED SIGNS

SHEET 1 OF 1

901.60



NOTES:

1. FABRICATE SIGNS TALLER THAN 12′-0″ AS TWO SEPARATE SIGNS WITH A HORIZONTAL SPLICE.
2. FABRICATE SIGNS TALLER THAN 12′-0″ BUT SHORTER THAN 14′-6″ WITH A HORIZONTAL SPLICE LOCATED 7′-0″ FROM BOTTOM OF SIGN.
3. FABRICATE SIGNS TALLER THAN 14′-6″ WITH A HORIZONTAL SPLICE. LOCATE THE SPLICE AT LEAST HALF THE SIGN HEIGHT FROM THE BOTTOM AND AT LEAST 7′-0″ FROM THE TOP.

△ SUPPORT SPACING NOT APPLICABLE TO OVERHEAD SIGNS.

HEIGHT (H)		△ 2 STRINGERS L= .207H N= .586H		△ 3 STRINGERS L= .145H N= .355H		△ 4 STRINGERS L= .107H N= .262H		△ 5 STRINGERS L= .100H N= .200H	
IN.	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.
24	2 - 0	0 - 6	1 - 0						
30	2 - 6	0 - 8	1 - 2						
36	3 - 0	0 - 8	1 - 8						
42	3 - 6	0 - 8.5	2 - 1						
48	4 - 0	0 -10.0	2 - 4						
54	4 - 6	0 -11.0	2 - 8						
60	5 - 0	1 - 0.5	2 -11	0 - 9.0	1 - 9.0				
66	5 - 6	1 - 1.5	3 - 3	0 -10.0	1 -11.0				
72	6 - 0	1 - 3.0	3 - 6	0 -10.5	2 - 1.5				
78	6 - 6	1 - 4.0	3 -10	0 -11.5	2 - 3.5				
84	7 - 0	1 - 5.5	4 - 1	1 - 0.0	2 - 6.0	0 - 9.0	1 -10.0		
90	7 - 6			1 - 1.0	2 - 8.0	0 - 9.0	2 - 0.0		
96	8 - 0			1 - 2.0	2 -10.0	0 -10.5	2 - 1.0		
102	8 - 6			1 - 3.0	3 - 0.0	0 -10.5	2 - 3.0		
108	9 - 0			1 - 3.5	3 - 2.5	1 - 0.0	2 - 4.0		
114	9 - 6			1 - 4.5	3 - 4.5	1 - 0.0	2 - 6.0		
120	10 - 0			1 - 5.5	3 - 6.5	1 - 1.5	2 - 7.0	1 - 0.0	2 - 0.0
126	10 - 6			1 - 6.5	3 - 8.5			1 - 1.0	2 - 1.0
132	11 - 0			1 - 7.0	3 -11.0			1 - 1.0	2 - 2.5
138	11 - 6			1 - 8.0	4 - 1.0			1 - 2.0	2 - 3.5
144	12 - 0			1 - 9.0	4 - 3.0			1 - 2.0	2 - 5.0

STRINGER SPACING

SECTION HEIGHTS FOR SIGNS TALLER THAN 12′ - 0″

HEIGHT	BOTTOM SECTION	HEIGHT	BOTTOM SECTION
14′ - 6″	7′ - 6″	19′ - 6″	10′ - 0″
15′ - 0″	7′ - 6″	20′ - 0″	10′ - 0″
15′ - 6″	8′ - 0″	20′ - 6″	10′ - 6″
16′ - 0″	8′ - 0″	21′ - 0	10′ - 6″
16′ - 6″	8′ - 6″	21′ - 6″	11′ - 0″
17′ - 0″	8′ - 6″	22′ - 0″	11′ - 0″
17′ - 6″	9′ - 0″	22′ - 6″	11′ - 6″
18′ - 0″	9′ - 0″	23′ - 0″	11′ - 6″
18′ - 6″	9′ - 6″	23′ - 6″	12′ - 0″
19′ - 0″	9′ - 6″	24′ - 0″	12′ - 0″

NUMBER OF STRINGERS REQUIRED

0.080 AND 0.125 SIGN FACES

NUMBER OF STRINGERS	MAXIMUM SIGN HEIGHT	
	0.080 FACE	0.125 FACE
2	4′ 6″	7′ 0″
3	7′ 0″	12′ 0″
4	10′ 0″	14′ 0″
5	12′ 0″	14′ 6″
6	14′ 0″	24′ 0″
7	17′ 0″	
8	20′ 0″	
9	22′ 0″	
10	24′ 0″	

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-24

ROADWAY STANDARD DRAWING FOR

SIGN STRINGERS AND SUPPORT SPACING

901.70

WIDTH (W)		△ 2 SUPPORTS P= .207W R= .586W		△ 3 SUPPORTS P= .145W R= .355W		△ 4 SUPPORTS P= .107W R= .262W	
IN.	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.
24	2 - 0	0 - 6 *	1 - 0 *				
30	2 - 6	0 - 8 *	1 - 2 *				
36	3 - 0	0 - 8	1 - 8				
42	3 - 6	0 - 8.5	2 - 1 *				
48	4 - 0	0 -10.0	2 - 4				
54	4 - 6	0 -11.0	2 - 8 *				
60	5 - 0	1 - 0.5	2 -11				
66	5 - 6	1 - 1.5	3 - 3 *				
72	6 - 0	1 - 3.0	3 - 6				
78	6 - 6	1 - 4.0	3 -10 *				
84	7 - 0	1 - 5.5	4 - 1				
90	7 - 6	1 - 6.5	4 - 5 *	1 - 1.0	2 - 8.0		
96	8 - 0	1 - 8.0	4 - 8 *	1 - 2.0	2 -10.0		
102	8 - 6	1 - 9.0	5 - 0	1 - 3.0	3 - 0.0		
108	9 - 0	1 -10.5	5 - 3 *	1 - 3.5	3 - 2.5		
114	9 - 6	1 -11.5	5 - 7	1 - 4.5	3 - 4.5		
120	10 - 0	2 - 1.0	5 -10 *	1 - 5.5	3 - 6.5		
126	10 - 6	2 - 2.0	6 - 2	1 - 6.5	3 - 8.5		
132	11 - 0	2 - 3.5	6 - 5 *	1 - 7.0	3 -11.0		
138	11 - 6	2 - 4.5	6 - 9	1 - 8.0	4 - 1.0		
144	12 - 0	2 - 6.0	7 - 0 *	1 - 9.0	4 - 3.0	1 - 3.0 *	3 - 2.0 *
150	12 - 6	2 - 7.0	7 - 4	1 -10.0	4 - 5.0 *	1 - 4.5 *	3 - 3.0 *
156	13 - 0	2 - 8.5	7 - 7 *	1 -10.5	4 - 7.5	1 - 4.5	3 - 5.0
162	13 - 6	2 - 9.5	7 -11	1 -11.5	4 - 9.5	1 - 6.0 *	3 - 6.0 *
168	14 - 0	2 -11.0	8 - 2 *	2 - 0.5	4 -11.5	1 - 6.0	3 - 8.0
174	14 - 6	3 - 0.0	8 - 6	2 - 1.0	5 - 2.0	1 - 6.0 *	3 -10.0 *
180	15 - 0	3 - 1.5	8 - 9 *	2 - 2.0	5 - 4.0	1 - 7.5	3 -11.0
186	15 - 6	3 - 2.5	9 - 1	2 - 3.0	5 - 6.0	1 - 7.5 *	4 - 1.0 *
192	16 - 0	3 - 3.5	9 - 5 *	2 - 4.0	5 - 8.0	1 - 9.0 *	4 - 2.0 *
198	16 - 6	3 - 5.0	9 - 8	2 - 4.5	5 -10.5	1 - 9.0	4 - 4.0
204	17 - 0	3 - 6.0	10 - 0 *	2 - 5.5	6 - 0.5	1 -10.5 *	4 - 5.0 *

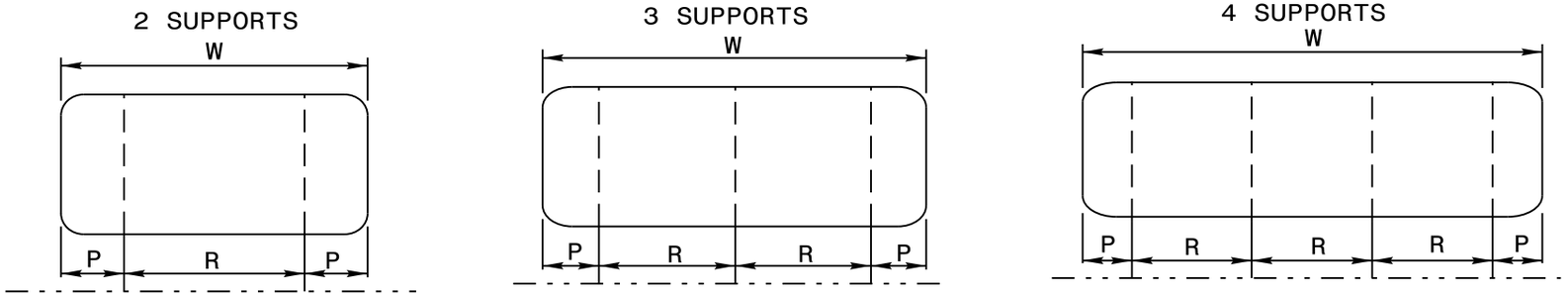
WIDTH (W)		△ 2 SUPPORTS P= .207W R= .586W		△ 3 SUPPORTS P= .145W R= .355W		△ 4 SUPPORTS P= .107W R= .262W	
IN.	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.
210	17 - 6	3 - 7.5	10 - 3	2 - 6.5	6 - 2.5	1 -10.5	4 - 7.0
# 216	18 - 0	3 - 8.5	10 - 7 *	2 - 7.5	6 - 4.5	1 -10.5 *	4 - 9.0 *
222	18 - 6			2 - 8.0	6 - 7.0	2 - 0.0	4 -10.0
228	19 - 0			2 - 9.0	6 - 9.0	2 - 0.0 *	5 - 0.0 *
234	19 - 6			2 -10.0	6 -11.0	2 - 1.5 *	5 - 1.0 *
240	20 - 0			2 -11.0	7 - 1.0	2 - 1.5	5 - 3.0
246	20 - 6			2 -11.5	7 - 3.5	2 - 3.0 *	5 - 4.0 *
252	21 - 0			3 - 0.5	7 - 5.5	2 - 3.0	5 - 6.0
258	21 - 6			3 - 1.5	7 - 7.5	2 - 3.0 *	5 - 8.0 *
264	22 - 0			3 - 2.5	7 - 9.5	2 - 4.5 *	5 - 9.0
270	22 - 6			3 - 3.0	8 - 0.0	2 - 4.5 *	5 -11.0 *
276	23 - 0			3 - 4.0	8 - 2.0	2 - 6.0 *	6 - 0.0 *
282	23 - 6			3 - 5.0	8 - 4.0	2 - 6.0	6 - 2.0
288	24 - 0			3 - 6 0	8 - 6.0	2 - 7.5 *	6 - 3.0 *
294	24 - 6			3 - 6.5	8 - 8.5	2 - 7.5	6 - 5.0
300	25 - 0			3 - 7.5	8 -10.5	2 - 7.5 *	6 - 7.0 *
306	25 - 6			3 - 8.5	9 - 0.5	2 - 9.0 *	6 - 8.0
312	26 - 0			3 - 9.0	9 - 3.0	2 - 9.0 *	6 -10.0 *
318	26 - 6			3 -10.0	9 - 5.0	2 -10.5 *	6 -11.0 *
324	27 - 0			3 -11.0	9 - 7.0	2 -10.5	7 - 1.0
330	27 - 6			4 - 0.0	9 - 9.0	3 - 0.0 *	7 - 2.0 *
336	28 - 0			4 - 0.5	9 -11.5	3 - 0.0	7 - 4.0
342	28 - 6			4 - 1.5	10 - 1.5	3 - 0.0 *	7 - 6.0 *
348	29 - 0			4 - 2.5	10 - 3.5	3 - 1.5 *	7 - 7.0
354	29 - 6			4 - 3.5	10 - 5.5	3 - 1.5 *	7 - 9.0 *
360	30 - 0			4 - 4.0	10 - 8.0	3 - 3.0 *	7 -10.0 *
366	30 - 6			4 - 5.0	10 -10.0	3 - 3.0	8 - 0.0
372	31 - 0			4 - 6.0	11 - 0.0	3 - 4.5 *	8 - 1.0 *
378	31 - 6			4 - 7.0	11 - 2.0	3 - 4.5	8 - 3.0
384	32 - 0			4 - 7.5	11 - 4.5	3 - 4.5 *	8 - 5.0 *

VALUES HAVE BEEN ROUNDED TO NEAREST ½ INCH.

* THESE VALUES HAVE BEEN ADJUSTED TO BALANCE SPACING.

\# MAXIMUM WIDTH FOR 2 SUPPORTS. 250 SQ. FT. MAX. AREA FOR 2 SUPPORTS.

△ SUPPORTS SPACING NOT APPLICABLE TO OVERHEAD SIGNS.



SIGN SUPPORT SPACING

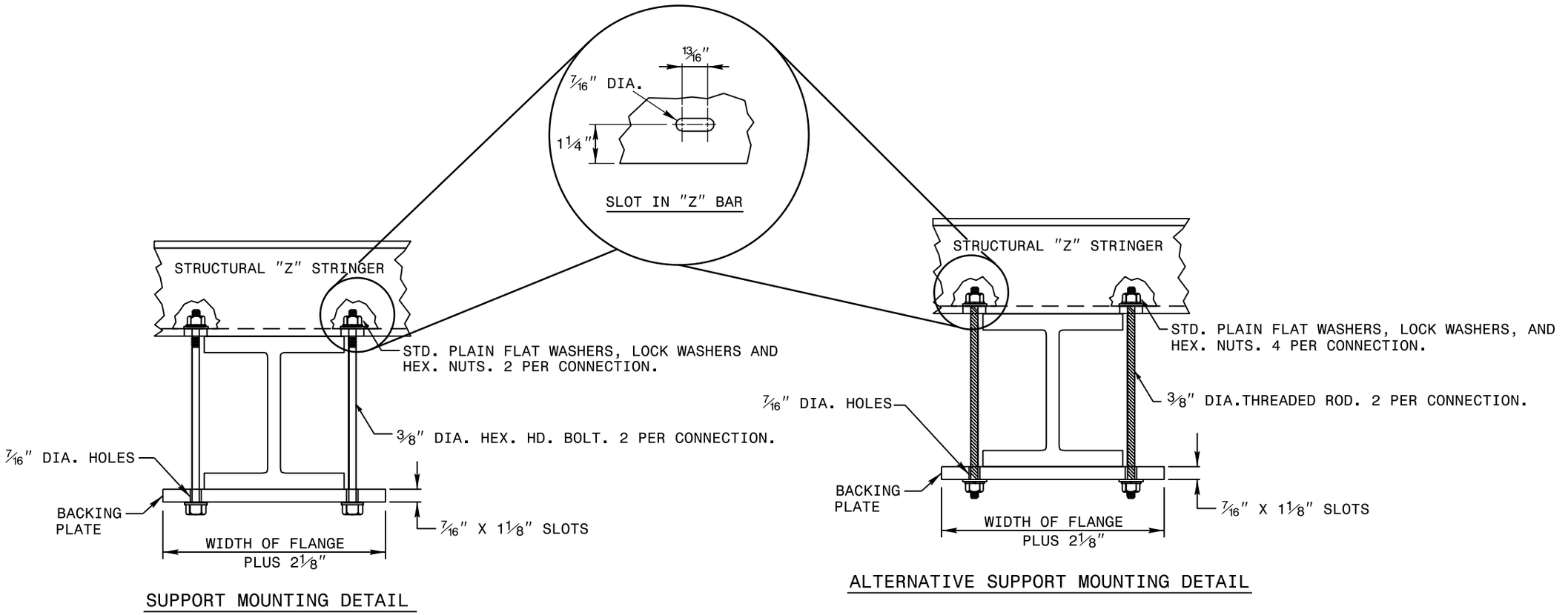
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-24

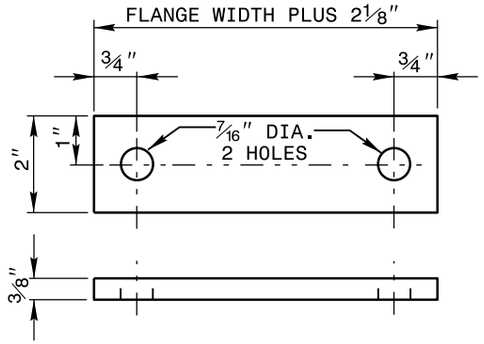
ROADWAY STANDARD DRAWING FOR

SIGN STRINGERS AND SUPPORT SPACING

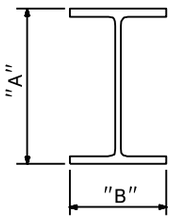
901.70



BACKING PLATE DETAIL



SIGN SUPPORTS SECTION DIMENSIONS



SECTION	A	B
S3 X 5.7	3"	2 3/8"
S4 X 7.7	4"	2 5/8"
W6 X 9	6"	4"
W6 X 12	6"	4"
W6 X 16	6 1/4"	4"
W8 X 18	8 1/8"	5 1/4"
W8 X 21	8 1/4"	5 1/4"
W10 X 22	10 1/8"	5 3/4"
W10 X 26	10 3/8"	5 3/4"
W12 X 26	12 1/4"	6 1/2"
W14 X 30	13 7/8"	6 3/4"
W16 X 31	15 7/8"	5 1/2"
W18 X 35	17 3/4"	6"
W18 X 40	17 7/8"	6"
W21 X 44	20 5/8"	6 1/2"

NOTES:

1. THE SUPPORT MOUNTING DETAIL SHOWS A "W" OR "S" BEAM. THIS DETAIL IS ALSO USED FOR MOUNTING SIGNS TO WOOD OR SQUARE TUBE SUPPORTS.
2. USE A36 STEEL FOR BACKING PLATES GALVANIZED IN ACCORDANCE WITH ASTM A123.
3. SEE NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES FOR TYPE OF MATERIAL TO BE USED FOR SIGN HANGER ASSEMBLIES AND SUPPORTS.
4. USE GALVANIZED STEEL FOR MOUNTING BOLTS AND THREADED RODS IN COMPLIANCE WITH ASTM A307 AND ASTM F2329.

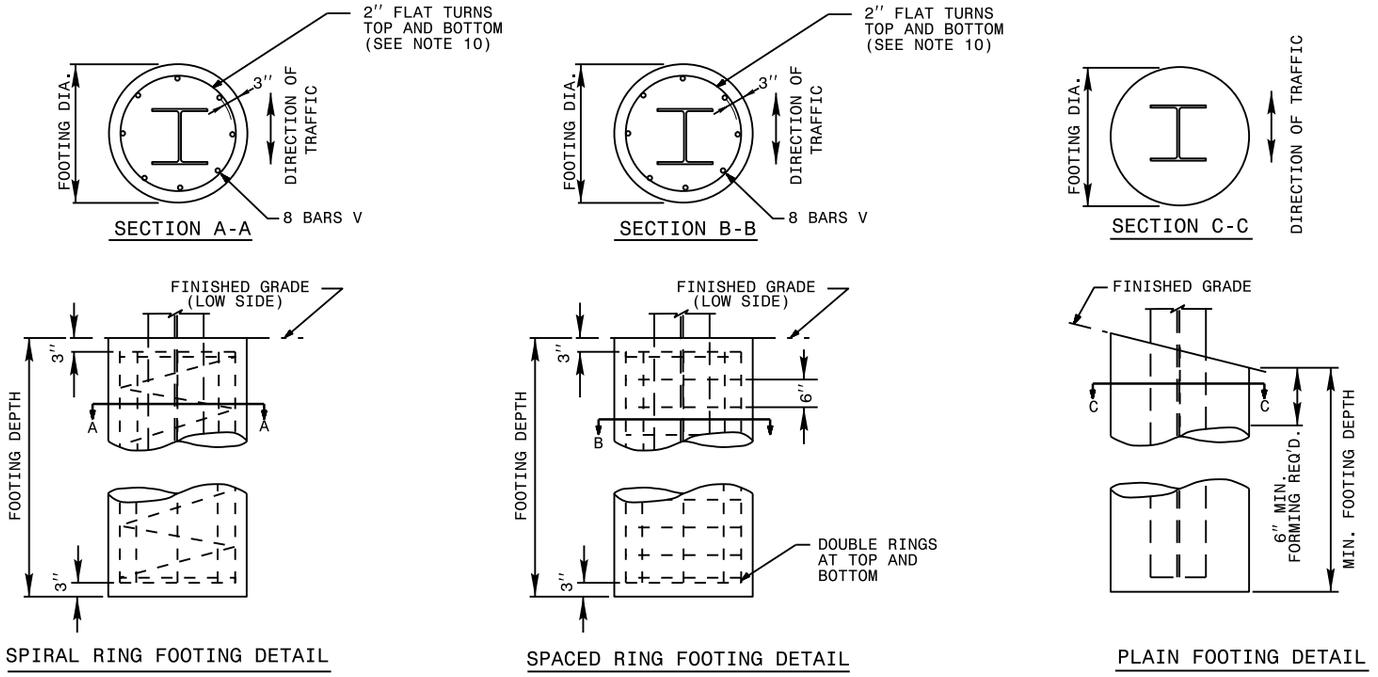
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-24

ROADWAY STANDARD DRAWING FOR

SIGN MOUNTING DETAILS

TYPE A AND TYPE B SIGNS



REINFORCED FOOTINGS DETAILS

FOUNDATION DATA *			
FOOTING DIAMETER	REINFORCEMENT	SPIRAL BAR	SPACED BAR
1′-6″	8 # 6 BARS	#3 BAR, 6″ PITCH	#3 BAR, 6″ SPACE
2′	8 # 7 BARS	#3 BAR, 6″ PITCH	#3 BAR, 6″ SPACE
2′-6″	8 # 9 BARS	#3 BAR, 6″ PITCH	#3 BAR, 6″ SPACE
3′	8 # 11 BARS	#3 BAR, 6″ PITCH	#3 BAR, 6″ SPACE
3′-6″	8 # 12 BARS	#3 BAR, 6″ PITCH	#3 BAR, 6″ SPACE
4′	8 # 14 BARS	#3 BAR, 6″ PITCH	#3 BAR, 6″ SPACE

* FOUNDATION DIMENSIONS ARE SHOWN IN PLANS

NOTES:

1. USE REINFORCED FOOTINGS WITH DIMENSIONS AS SHOWN IN PLANS. WHERE SOLID ROCK IS ENCOUNTERED, THE ENGINEER DIRECTS WHETHER TO PLACE THE FOOTING AT THE PRESCRIBED DEPTH OR EXTEND IT AT LEAST TWO FEET INTO THE ROCK. CONSTRUCT ALL FOOTINGS OF CLASS A CONCRETE.
2. FORM TOP 6″ OF FOOTINGS. ENGINEER APPROVES THE METHOD USED.
3. THE FINAL FLAT TURN OF SPIRAL OR HOOPS NO. 3 OR LARGER PLACED 3″ FROM TOP AND BOTTOM OF FOOTING MAY BE WELDED TO VERTICAL REINFORCING BARS. NO OTHER WELDING WILL BE PERMITTED.
4. SHAPE THE TOPS OF THE FOOTINGS TO CONFORM WITH FINISHED GROUND ELEVATIONS SUCH THAT WATER WILL NOT COLLECT AGAINST THE SUPPORTS.
5. IF THE GROUNDWATER IS ENCOUNTERED AT A DEPTH SHALLOWER THAN 7 FEET, THE SIGN FOUNDATION MUST BE REDESIGNED BASED UPON THE ACTUAL FIELD CONDITIONS. THE FOUNDATION DESIGN DOES NOT APPLY TO VERY SOFT OR LOOSE SOIL, MUCK, WEATHERED ROCK, OR HARD ROCK.

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

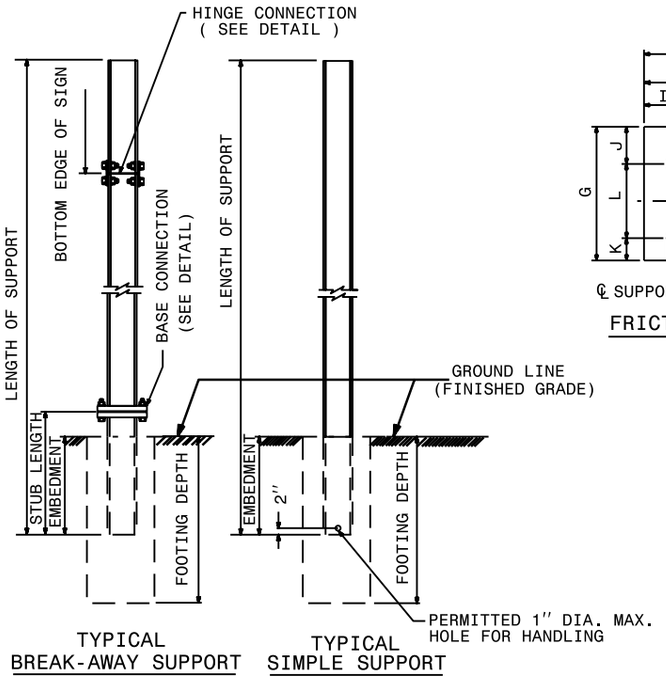
1-24

ROADWAY STANDARD DRAWING FOR

FOUNDATIONS FOR GROUND MOUNTED SIGNS

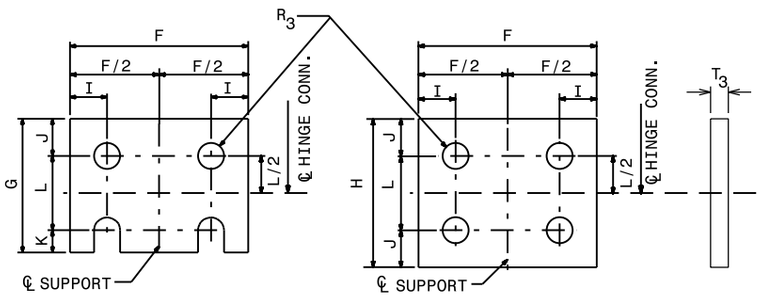
SHEET 1 OF 1

902.10



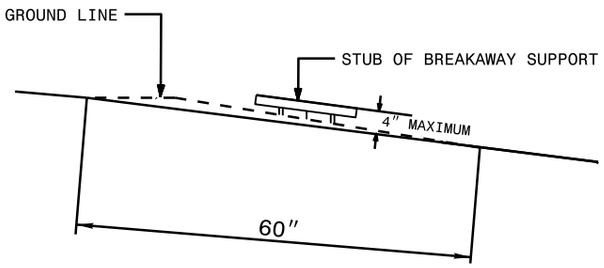
TYPICAL BREAK-AWAY SUPPORT

TYPICAL SIMPLE SUPPORT

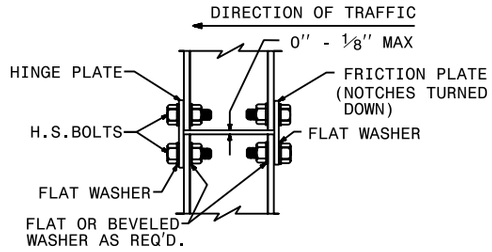


FRICTION ℄ DETAIL

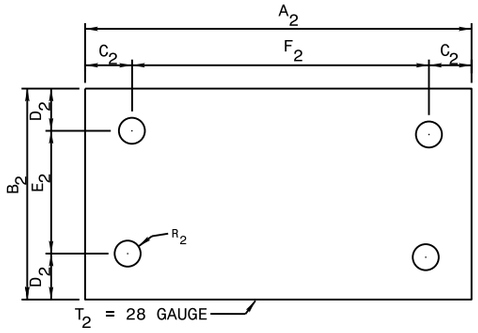
HINGE ℄ DETAIL



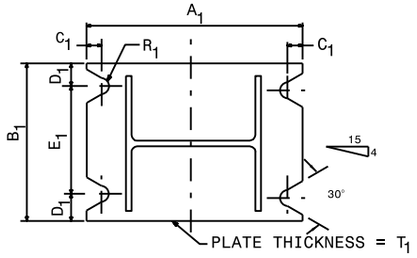
STUB HEIGHT REQUIREMENTS



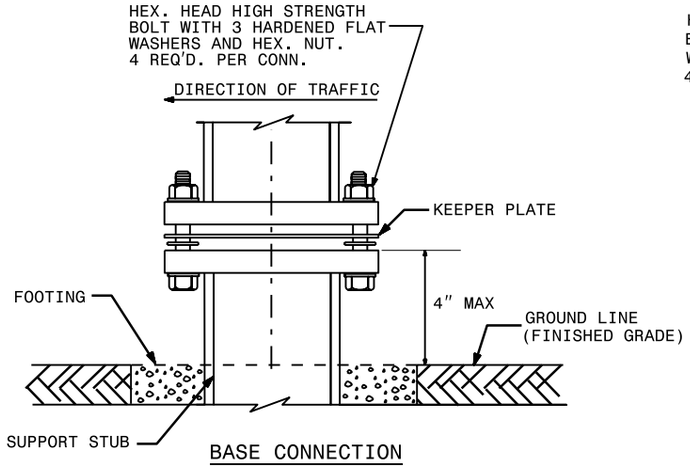
HINGE CONNECTION



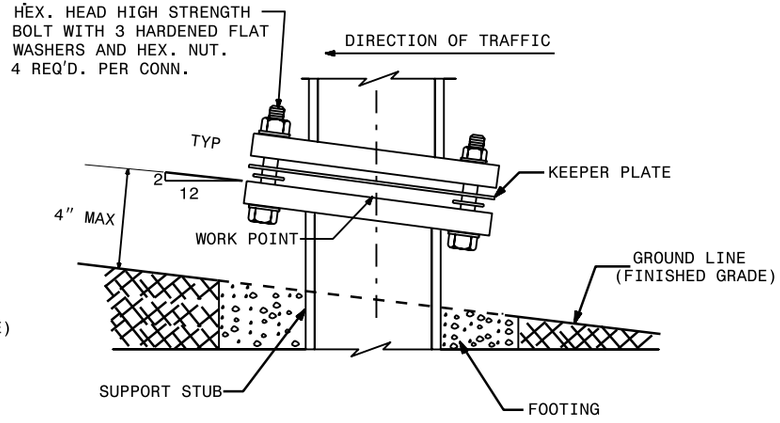
KEEPER PLATE



SLIP BASE PLATE



BASE CONNECTION



BASE CONNECTION

SEE SHEET 2 OF 3 FOR
BASE CONNECTION DATA
HINGE CONNECTION DATA
& FOUNDATION DATA.
SEE SHEET 3 OF 3 FOR
GENERAL NOTES.

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-24

ROADWAY STANDARD DRAWING FOR

GROUND MOUNTED SIGN SUPPORTS

	SLIP BASE PLATE DATA								KEEPER PLATE DATA							HINGE CONNECTION DATA										BREAK AWAY SUPPORT WEIGHT CONSTANT LBS.
BEAM SHAPE	BOLT SIZE	A_1	B_1	C_1	D_1	E_1	T_1	R_1	A_2	B_2	C_2	D_2	E_2	R_2	T_2	BOLT SIZE	F	G	H	I	J	K	L	R_3	T_3	
S3X5.7	½"DIA.X 3¼"	7"	4"	1"	¾"	2½"	1"	9/32"	7"	4"	1"	¾"	2½"	9/32"	28 GAUGE	½"DIA.X1¾"	2¼"	3½"	4"	½"	1"	½"	2"	9/32"	⅜"	18
S4X7.7	½"DIA.X 3¼"	8"	4"	1"	¾"	2½"	1"	9/32"	8"	4"	1"	¾"	2½"	9/32"	28 GAUGE	½"DIA.X1¾"	2⅝"	3½"	4"	½"	1"	½"	2"	9/32"	⅜"	20
W6X9	½"DIA.X 3¼	10"	5"	1"	¾"	3½"	1"	9/32"	10"	5"	1"	¾"	3½"	9/32"	28 GAUGE	½"DIA.X1¾"	4"	3½"	4"	¾"	1"	½"	2"	9/32"	⅜"	32
W6X12	⅝"DIA.X 4"	11"	5"	1¼"	⅞"	3¼"	1¼"	11/32"	11"	5"	1¼"	⅞"	3¼"	11/32"	28 GAUGE	⅝"DIA.X 2"	4"	4"	4½"	¾"	1⅛"	⅝"	2¼"	11/32"	⅜"	39
W6X16	⅝"DIA.X 4½"	12"	6"	1¼"	⅞"	4¼"	1½"	11/32"	12"	6"	1¼"	⅞"	4¼"	11/32"	28 GAUGE	⅝"DIA.X2¼"	4"	4"	4½"	¾"	1⅛"	⅝"	2¼"	11/32"	½"	47
W8X18	⅝"DIA.X 4½"	13½"	6½"	1¼"	⅞"	4¾"	1½"	11/32"	13½"	6½"	1¼"	⅞"	4¾"	11/32"	28 GAUGE	⅝"DIA.X2¼"	5¼"	4"	4½"	1"	1⅛"	⅝"	2¼"	11/32"	½"	70
W8X21	¾"DIA.X 4½"	14"	7"	1½"	1"	5"	1½"	13/32"	14"	7"	1½"	1"	5"	13/32"	28 GAUGE	¾"DIA.X2½"	5¼"	6"	7"	1"	1¾"	¾"	3½"	13/32"	½"	73
W10X22	¾"DIA.X 4½"	16"	8"	1½"	1"	6"	1½"	13/32"	16"	8"	1½"	1"	6"	13/32"	28 GAUGE	¾"DIA.X2½"	5¾"	6"	7"	1"	1¾"	¾"	3½"	13/32"	½"	119
W10X26	¾"DIA.X 5½"	16½"	8"	1½"	1"	6"	1¾"	13/32"	16½"	8"	1½"	1"	6"	13/32"	28 GAUGE	¾"DIA.X2¾"	5¾"	6"	7"	1"	1¾"	¾"	3½"	13/32"	⅝"	140
W12X26	¾"DIA.X 5½"	18½"	9"	1½"	1"	7"	1¾"	13/32"	18½"	9"	1½"	1"	7"	13/32"	28 GAUGE	¾"DIA.X2¾"	6½"	6"	7"	1"	1¾"	¾"	3½"	13/32"	⅝"	176
W14X30	1"DIA.X 6"	22"	9"	2"	1½"	6"	2"	17/32"	22"	9"	2"	1½"	6"	17/32"	28 GAUGE	1"DIA.X 3"	6¾"	7"	8"	1¼"	2"	1"	4"	17/32"	⅝"	205
W16X31	1"DIA.X 6"	24"	9"	2"	1½"	6"	2"	17/32"	24"	9"	2"	1½"	6"	17/32"	28 GAUGE	1"DIA.X 3"	5½"	7"	8"	1¼"	2"	1"	4"	17/32"	¾"	223
W18X35	1"DIA.X 6"	25"	9"	2"	1½"	6"	2"	17/32"	25"	9"	2"	1½"	6"	17/32"	28 GAUGE	1"DIA.X 3"	6"	7"	8"	1¼"	2"	1"	4"	17/32"	¾"	243
W18X40	1"DIA.X 6½"	26"	9"	2"	1½"	6"	2¼"	17/32"	26"	9"	2"	1½"	6"	17/32"	28 GAUGE	1"DIA.X3½"	6"	7"	8"	1¼"	2"	1"	4"	17/32"	⅞"	278
W21X44	1"DIA.X 7"	29"	9"	2"	1½"	6"	2½"	17/32"	29"	9"	2"	1½"	6"	17/32"	28 GAUGE	1"DIA.X3½"	6½"	7"	8"	1¼"	2"	1"	4"	17/32"	⅞"	310

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-24

ROADWAY STANDARD DRAWING FOR

GROUND MOUNTED SIGN SUPPORTS

NOTES:

1. DESIGN CONFORMS WITH THE SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS - AASHTO.
2. USE MATERIALS, FABRICATE AND ERECT SIGNS AND SUPPORTS THAT CONFORM TO THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
3. USE HIGH STRENGTH BOLTS, NUTS AND WASHERS THAT CONFORM TO ASTM A-325 AND THAT ARE GALVANIZED IN ACCORDANCE WITH ASTM F2329 OR B695 CLASS 55.
4. USE BACKING PLATES, SLIP BASE PLATES, FRICTION PLATES, AND HINGE PLATES THAT CONFORM TO ASTM A-36 AND THAT ARE GALVANIZED IN ACCORDANCE WITH ASTM A-123 PRIOR TO GALVANIZING, GRIND SMOOTH ANY METAL PROJECTION BEYOND THE PLATE FACE. KEEPER PLATES SHALL BE MANUFACTURED FROM 28 GAUGE SHEET STEEL THAT CONFORMS TO ASTM A-36 AND IS GALVANIZED IN ACCORDANCE WITH ASTM A-123
5. ASSEMBLE HINGE CONNECTIONS IN THE SHOP. THE SHOP SHALL TIGHTEN BOLTS BY USE OF EITHER A CALIBRATED POWER WRENCH OR A MANUAL TORQUE WRENCH. TIGHTEN EACH HINGE CONNECTION BOLT TO 1/3 PAST SNUG.
6. BASE PLATES DETAILS ARE FOR INSTALLATIONS ON THE RIGHT SHOULDER AND IN GORE AREAS.
7. ASSEMBLE UPPER SUPPORT TO STUB AS SHOWN IN DETAIL. SLIP BASE PLATES SHALL BE FILLET WELDED ONTO SUPPORTS ALL AROUND THE STRUCTURAL SHAPE SO AS TO INSURE NO LOSS OF STRENGTH. ASSEMBLE IN EITHER SHOP OR FIELD. 28 GAUGE KEEPER PLATE IS PLACED BETWEEN SLIP BASE PLATES TO PREVENT BOLT SLIPPING. TIGHTEN BOLTS TO THE FOLLOWING PRESCRIBED TORQUE:

BOLT DIAMETER	TORQUE (LB. FT.)
1/2"	9
3/8"	22
5/8"	37
1"	48

COMPLETELY ASSEMBLE BREAKAWAY SUPPORTS PRIOR TO ERECTION. BREAKAWAY SUPPORT TO BE SET IN ONE PIECE. AFTER SUPPORT HAS BEEN ERECTED AND THE CONCRETE FOOTINGS HAS CURED AT LEAST 48 HOURS, CLEAN CONCRETE FROM BASE CONNECTION BOLTS THEN LOOSEN AND RE TIGHTEN EACH BOLT IN A SYSTEMATIC ORDER TO THE PRESCRIBED TORQUE. DO NOT OVER TIGHTEN. BURR ALL BOLT THREADS OF BASE CONNECTIONS TO PREVENT LOOSENING.

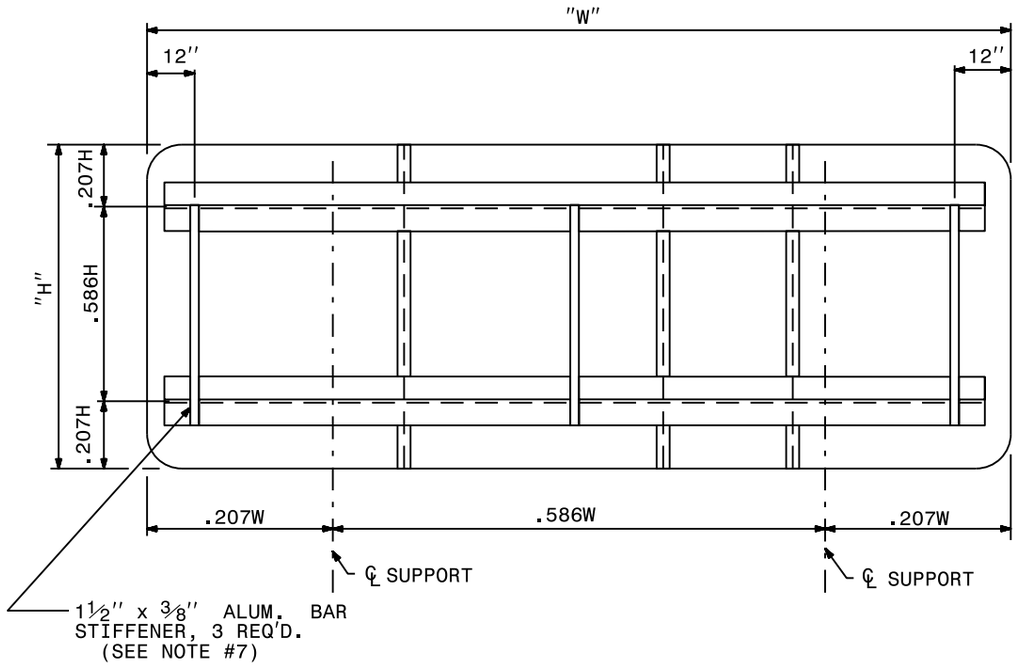
8. ELIMINATE HINGE CONNECTION FOR ALL SINGLE SUPPORT SIGNS.
9. DETAIL IS FOR ONE DIRECTION BREAKAWAY. WHEN PLANS REQUIRE A TWO DIRECTION BREAKAWAY, TWO FRICTION PLATES SHALL BE USED IN LIEU OF ONE FRICTION PLATE AND ONE HINGE PLATE.

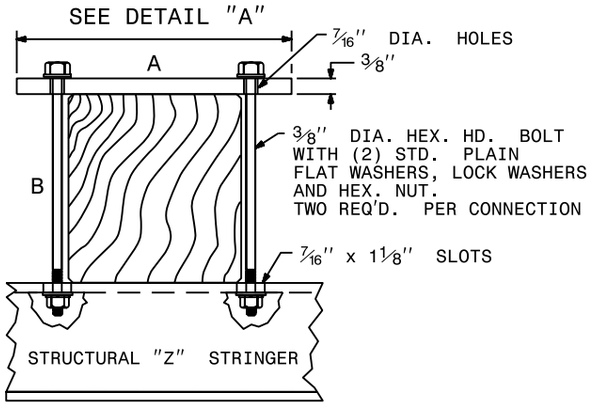
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-24

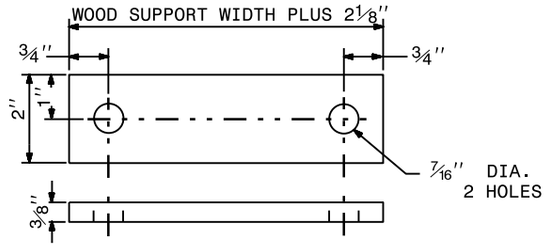
ROADWAY STANDARD DRAWING FOR

GROUND MOUNTED SIGN SUPPORTS



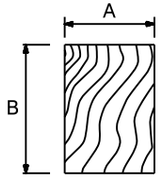


WOOD SUPPORT
MOUNTING DETAIL

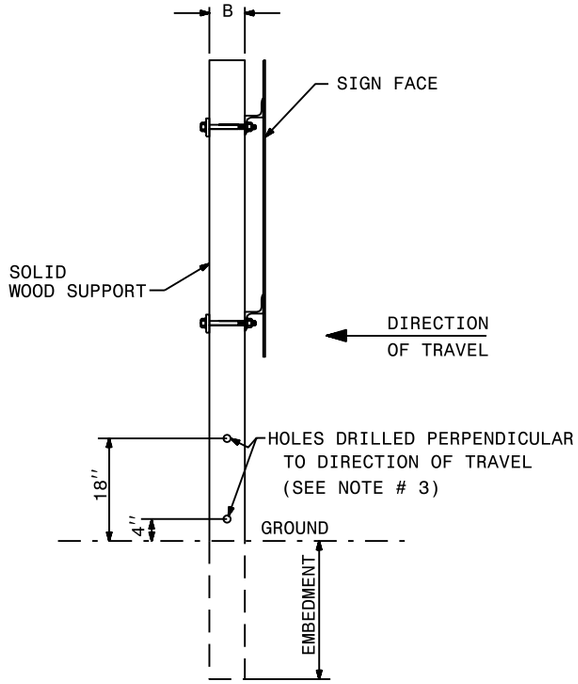


DETAIL "A"

SUPPORT SIZE AND DRILLED HOLE SIZE



	A	B	HOLE SIZE	EMBEDMENT
	4.0"	4.0"	N/A	3.5 FT.
	4.0"	6.0"	1.5"	4.5 FT.
	6.0"	6.0"	2.0"	5.25 FT.
	6.0"	8.0"	3.0"	6.0 FT.
	8.0"	8.0"	N/A	6.5 FT.
M	8.0"	8.0"	SEE DETAIL	6.5 FT.
L	8.0"	15.0"		6.5 FT.



DETAIL "B"

NOTES:

1. USE THE SIZE, NUMBER, LENGTH AND TYPE OF SUPPORTS SHOWN IN THE PLANS. USE WOOD SUPPORTS THAT CONFORM TO SECTION 1082 OF THE NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
2. MOUNT ALL WOOD SUPPORTS THAT DO NOT HAVE DRILLED HOLES BEHIND GUARDRAIL, EXCEPT THE 4" X 4" WOOD SUPPORTS.
3. FOR WOOD SUPPORTS, DRILL THE BOTTOM HOLE 4" ABOVE THE GROUND AND THE TOP HOLE 18" ABOVE THE GROUND (SEE DETAIL "B"). SEE CHART FOR SUPPORT SIZES AND DRILLED HOLE SIZES. DRILL HOLES PERPENDICULAR TO THE DIRECTION OF TRAVEL. DUAL SUPPORTS MUST BE AT LEAST 7 FEET APART.
4. LOCATE ALL WOOD SUPPORTS THAT ARE 8" X 8" EITHER BEHIND GUARDRAIL OR LOCATED SO THAT THE SUPPORTS COULD NOT BE HIT BY TRAFFIC.
5. FURNISH ALL MOUNTING HARDWARE.
6. USE GALVANIZED STEEL BACKING PLATES AND MOUNTING BOLTS.
7. ADJUST STIFFENERS TO AVOID CONFLICTS WITH SUPPORTS.
8. DRILL HOLES IN THE CENTER OF THE SUPPORTS
9. IF SIGN ASSEMBLIES REQUIRE MORE THAN TWO WOOD SUPPORTS, THE SUPPORTS SHALL BE PLACED A MINIMUM OF 4 FT. BETWEEN SUPPORTS. NO MORE THAN TWO SUPPORTS SHALL FALL WITHIN 7 FT. PATH, OR THE SIGN ASSEMBLY MUST BE PLACED BEHIND BARRIER PROTECTION.

1-24

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR

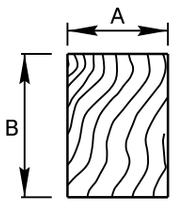
WOOD SIGN SUPPORT

SHEET 1 OF 2

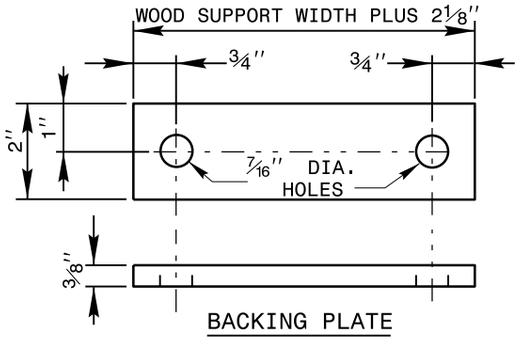
903.20

ATTACHMENT METHODS

SUPPORT SIZE AND DRILLED HOLE SIZE



A	B	HOLE SIZE	EMBEDMENT
4.0″	4.0″	N/A	3.5 FT.
4.0″	6.0″	1.5″	4.5 FT.



NOTES:

1. 4″ X 4″ WOOD SUPPORTS ARE ACCEPTABLE UNDRILLED, AND CAN BE USED AT ANY LOCATION WITHOUT GUARDRAIL PROTECTION.
2. 4″ X 6″ WOOD SUPPORTS MUST BE USED WITH GUARDRAIL PROTECTION OR DRILLED TO MAKE THEM BREAKAWAY.(DRILLED WITH 1½″ HOLES, PERPENDICULAR TO THE DIRECTION OF TRAVEL, LOCATED 4″ AND 18″ ABOVE THE GROUND)
3. USE "U" CHANNEL SUPPORTS FOR CROSS -BRACING SIGNS SUPPORTED BY DUAL WOOD SUPPORTS.

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

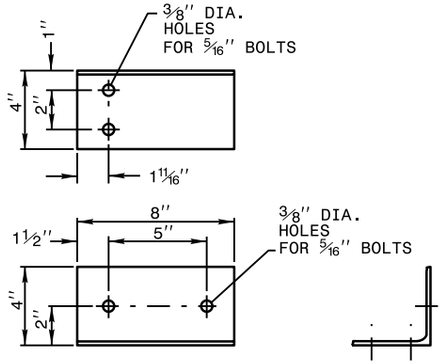
1-24

ROADWAY STANDARD DRAWING FOR

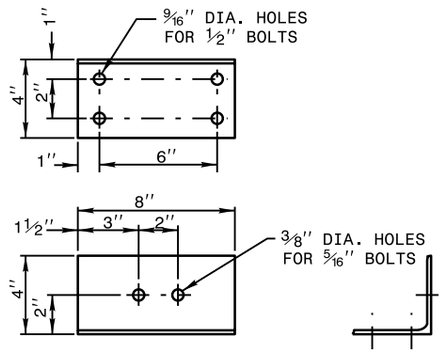
MOUNTING OF TYPE 'D', 'E', AND 'F' SIGNS ON WOOD SUPPORTS

SHEET 2 OF 2

903.20



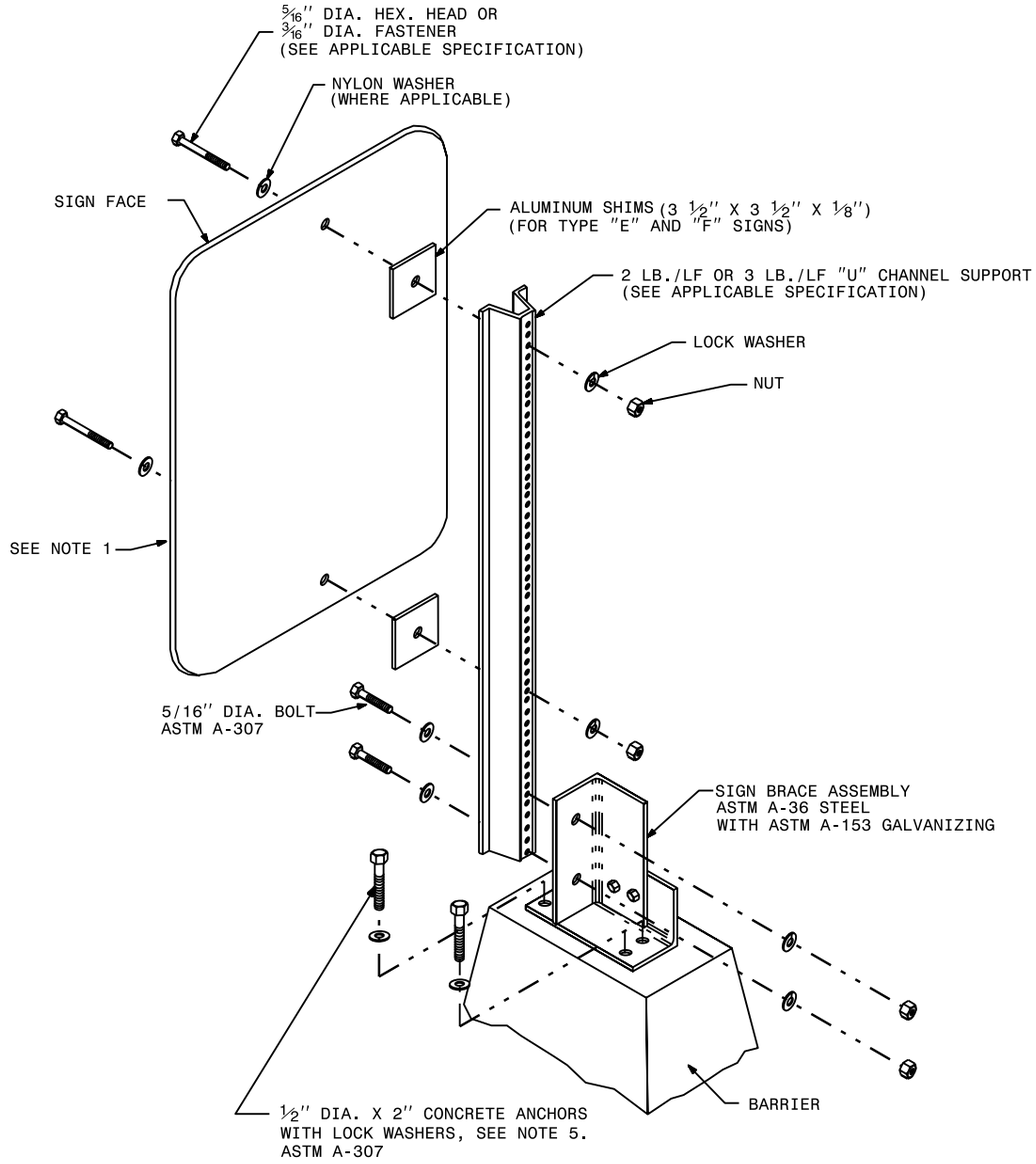
VERTICAL BRACE
4"x4"x1/4" ANGLE



HORIZONTAL BRACE
4"x4"x 5/16" ANGLE

NOTES:

1. MAXIMUM SIGN SIZE IS 9.0 SQUARE FEET IN MAXIMUM WIND VELOCITY OF 80 MPH.
2. ERECT TYPE "E" AND "F" SIGNS WITH THE SAME SPECIFICATIONS AS "TYPICAL INSTALLATION OF SIGNS MOUNTED ON "U" CHANNEL SUPPORTS.
3. ERECT MILE MARKERS WITH THE SAME SPECIFICATIONS AS "MILEPOST DETAILS AND PLACEMENT". SEE ROADWAY STANDARD NUMBER 904.40.
4. APPLICABLE SECTIONS OF THE NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SHALL BE IN EFFECT.
5. ATTACH THE BRACE TO THE BARRIER BY MEANS OF 1/2" DIAMETER, 2" LONG CONCRETE ANCHORS WITH LOCK WASHERS. USE CONCRETE ANCHORS THAT ARE STAINLESS STEEL OR GALVANIZED IN ACCORDANCE WITH ASTM A-152. INSTALL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.



STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

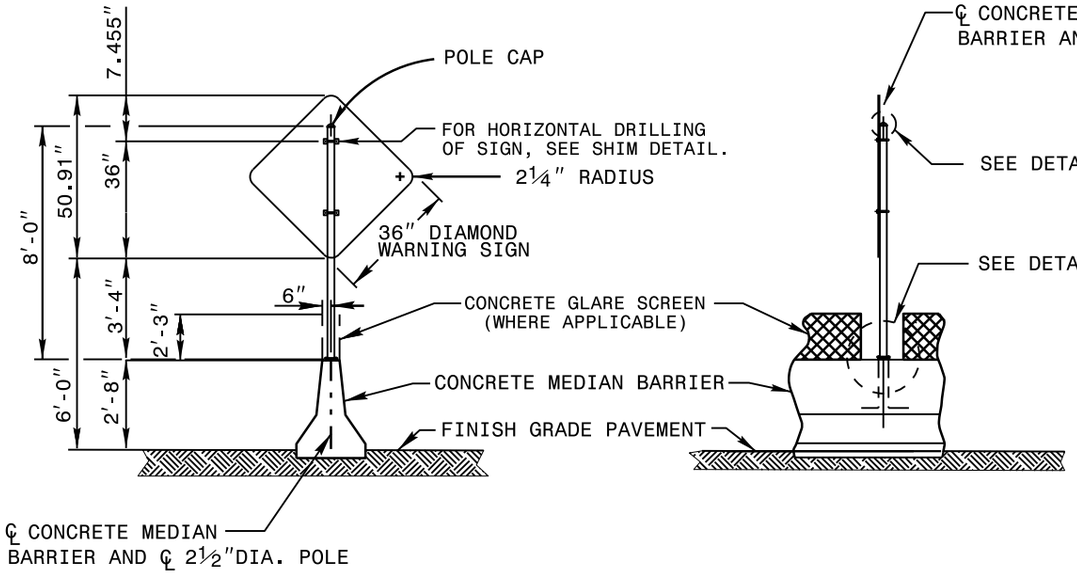
1-24

ROADWAY STANDARD DRAWING FOR

BARRIER SIGN SUPPORT ASSEMBLY

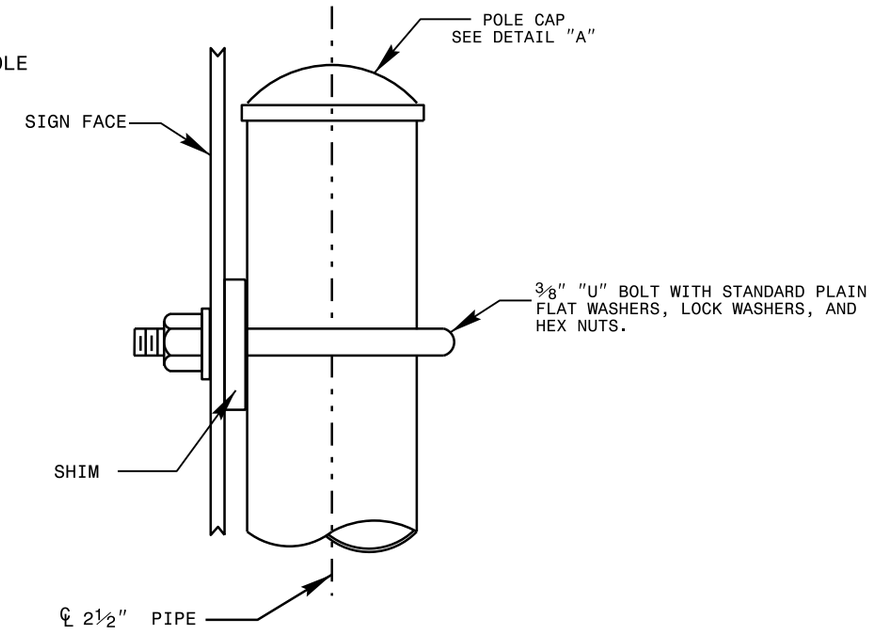
SHEET 1 OF 1

903.30

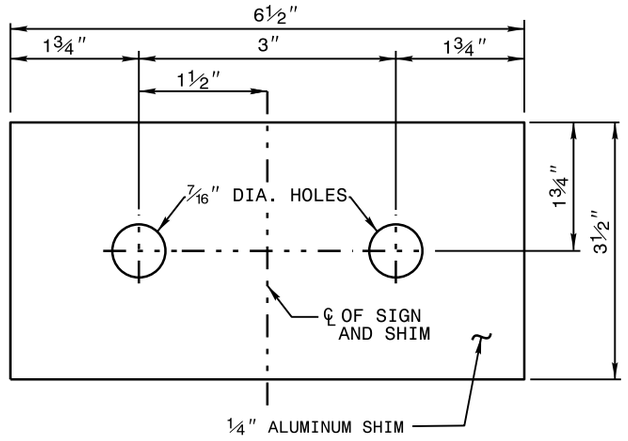


ELEVATION OF
REAR VIEW OF WARNING SIGN

ELEVATION OF
SIDE VIEW OF WARNING SIGN



PIPE SUPPORT



ALUMINUM SHIM DETAIL

NOTES:

1. FURNISH ONE SET OF SIGN SUPPORTS FOR EACH SIGN.
2. SEE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION SIGN SPECIFICATION SUPPLEMENT FOR THE TYPE OF MATERIAL TO BE USED FOR SIGN SUPPORTS.
3. FURNISH ALL MOUNTING HARDWARE.
4. THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION WILL FURNISH SIGNS.
5. WELD IN ACCORDANCE WITH THE AWS D1.1 STRUCTURAL WELDING CODE - STEEL.
6. USE ASTM A-36 STEEL GALVANIZED "U" BOLTS AND NUTS IN ACCORDANCE WITH ASTM A-153.
7. USE ASTM A-36 ANCHOR BOLTS, GALVANIZED IN ACCORDANCE WITH ASTM A-153. OVERALL LENGTH OF ANCHOR BOLTS IS 27". ANCHOR BOLT PROJECTION, EMBEDMENT, AND HOOK TO BE AS SHOWN ON PLANS.
   OR,
   USE 5#8" x 7-5/8" DRILLED ADHESIVE ANCHOR GALVANIZED TO ASTM A-153. EACH ANCHOR SHALL BE PROVIDED WITH TWO (2) NUTS, ONE (1) FLAT WASHER, AND ONE (1) LOCK WASHER.

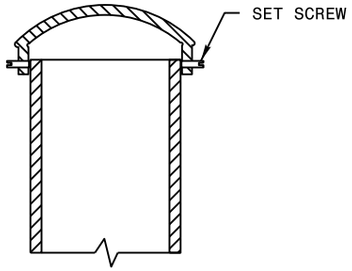
STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-24

ROADWAY STANDARD DRAWING FOR

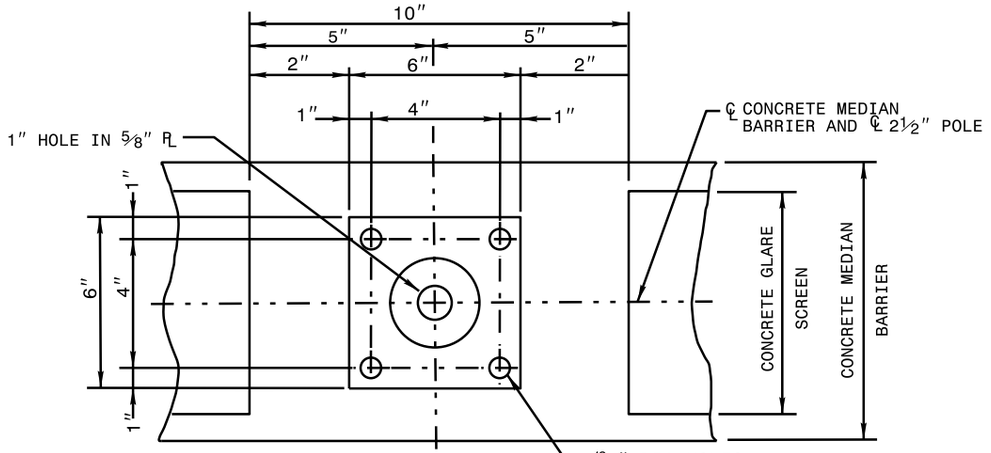
MEDIAN BARRIER SIGN SUPPORT AND ANCHORAGE

903.40

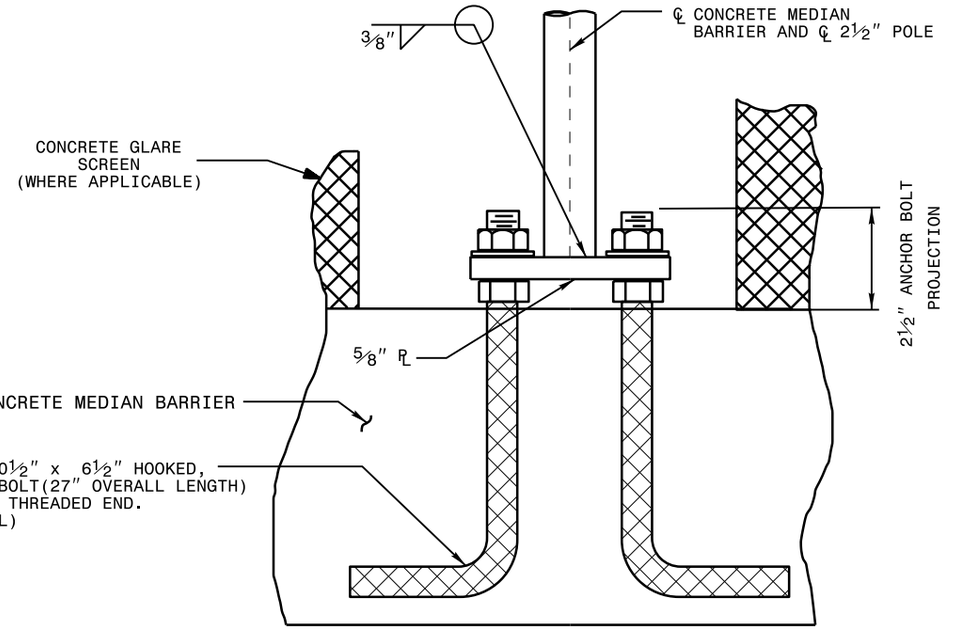


DETAIL "A"

FURNISH ALL TUBE OR PIPE SUPPORTS WITH A CAP. USE EITHER GALVANIZED STEEL OR A CAST ALUMINUM CAP TO MATCH THE MATERIAL OF THE POLE. USE FOUR SET SCREWS FOR ATTACHMENT TO SUPPORT.



PLAN VIEW



DETAIL "B"
WITH ANCHOR BOLT DETAIL

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

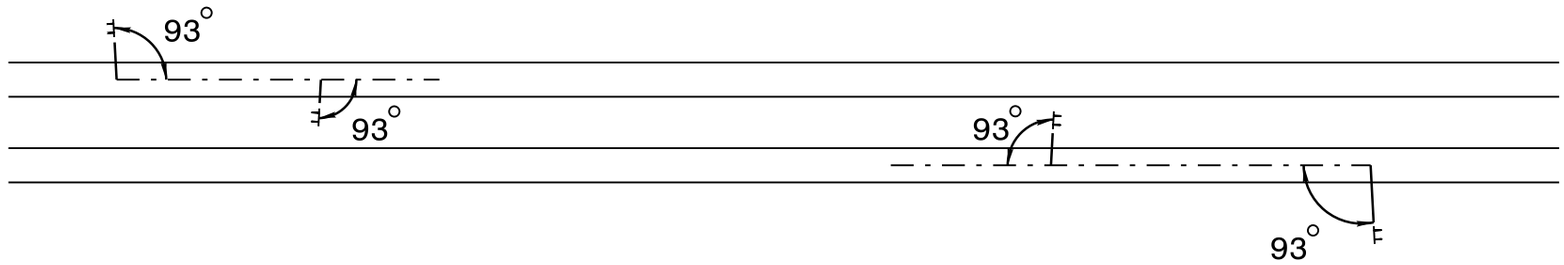
1-24

ROADWAY STANDARD DRAWING FOR

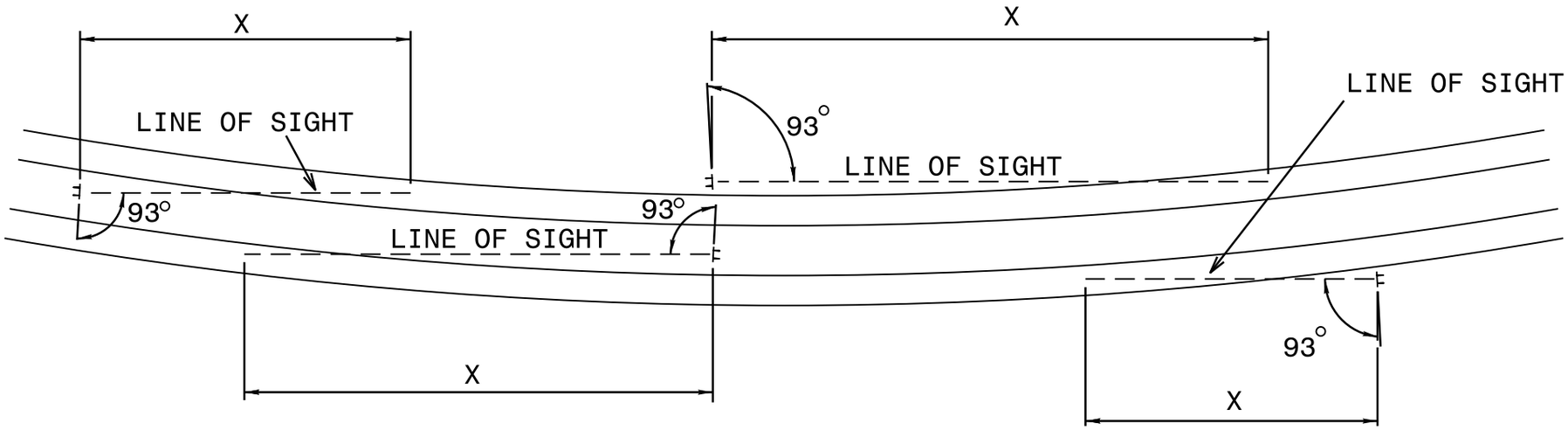
MEDIAN BARRIER SIGN SUPPORT AND ANCHORAGE

SHEET 2 OF 2

903.40



X = (60 FT. PER IN.) (HEIGHT OF LOWER CASE LETTER IN INCHES)
IF SIGN HAS NO LOWER CASE LETTERS, USE HEIGHT OF
UPPER CASE OR CAPITAL LETTERS IN MAJOR LINE OF COPY.



STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

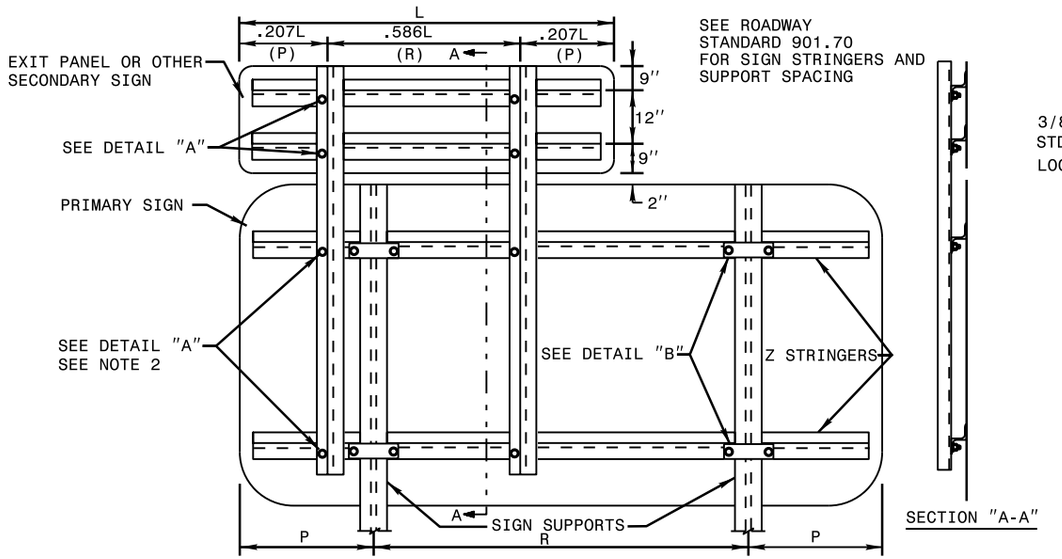
1-24

ROADWAY STANDARD DRAWING FOR

ORIENTATION OF GROUND MOUNTED SIGNS

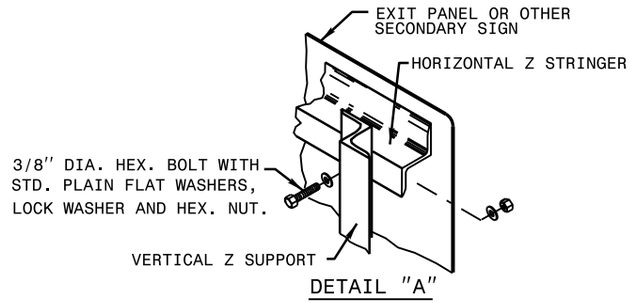
SHEET 1 OF 1

904.10



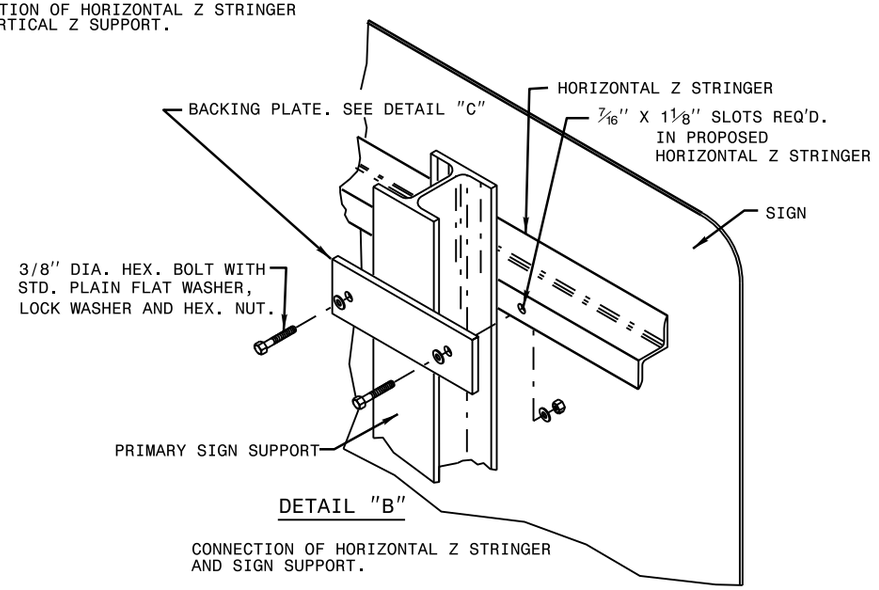
ATTACHMENT METHOD ONE RIGHT (1-R) OR ONE LEFT (1-L)

(EXIT PANEL OR OTHER SECONDARY SIGN ATTACHED TO VERTICAL Z SUPPORTS)



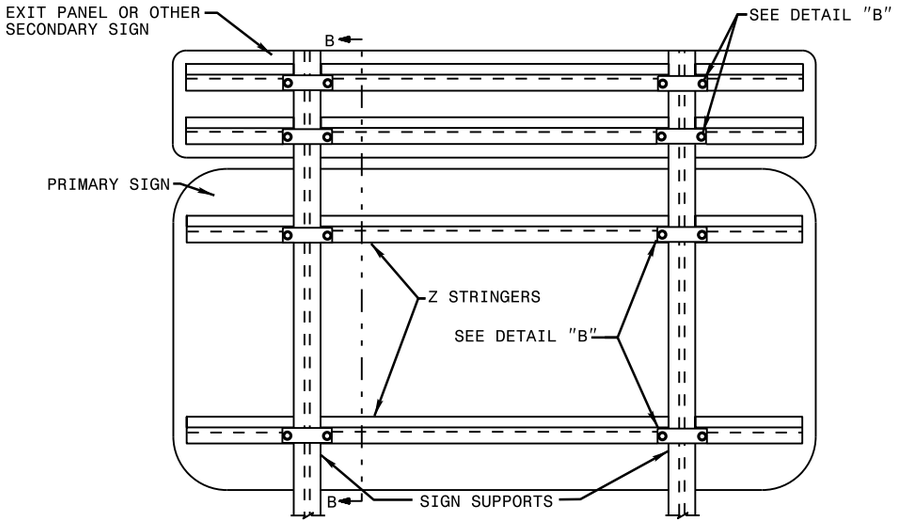
DETAIL "A"

CONNECTION OF HORIZONTAL Z STRINGER AND VERTICAL Z SUPPORT.



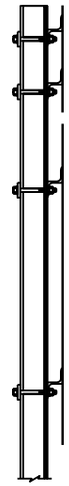
DETAIL "B"

CONNECTION OF HORIZONTAL Z STRINGER AND SIGN SUPPORT.

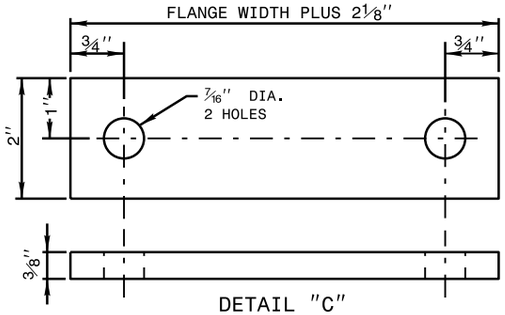


ATTACHMENT METHOD TWO (II)

(EXIT PANEL OR OTHER SECONDARY SIGN ATTACHED TO PRIMARY SIGN SUPPORTS)



SECTION "B-B"



DETAIL "C"
BACKING PLATE

NOTES:

1. FABRICATE VERTICAL AND HORIZONTAL Z'S OF ALUM. Z 3'' X 2 11/16 X 1/4'' X 2.33 LB/FT.
2. ATTACH VERTICAL Z SUPPORT TO TOP TWO HORIZONTAL STRINGERS ON BACK OF PRIMARY SIGN.
3. DO NOT PERMIT SLOTS IN HORIZONTAL STRINGERS FOR ATTACHMENT OF VERTICAL Z SUPPORTS.

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

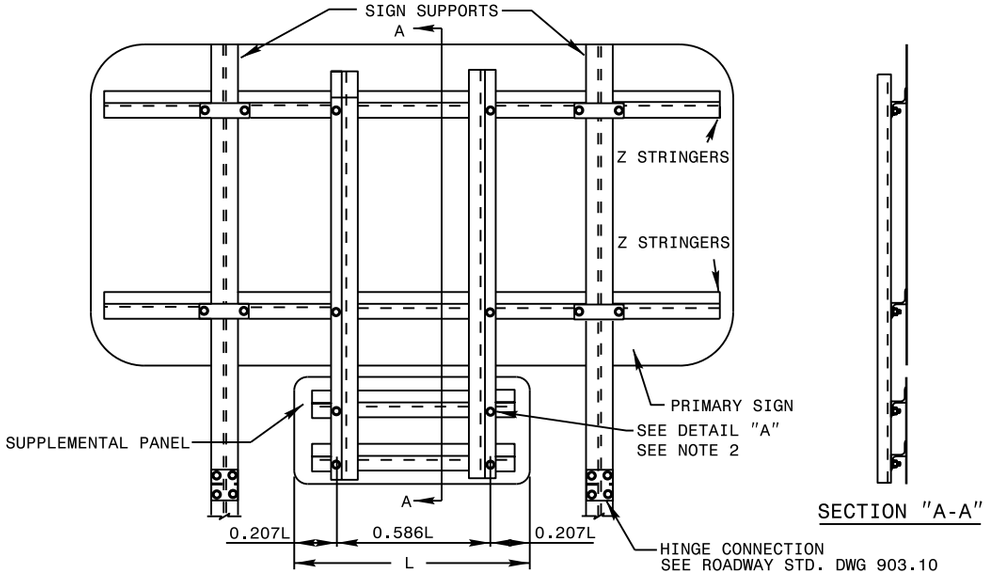
1-24

ROADWAY STANDARD DRAWING FOR

SECONDARY SIGN MOUNTING

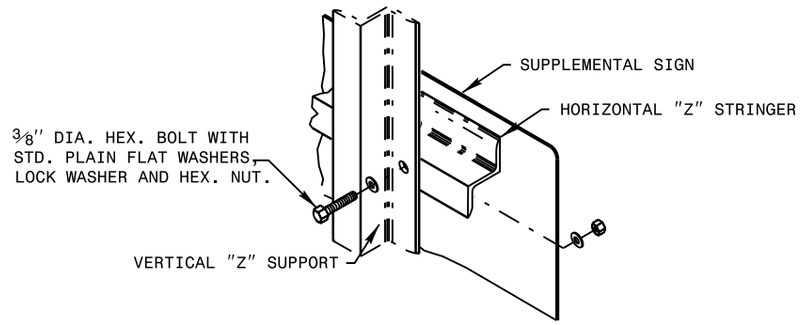
SHEET 1 OF 1

904.20



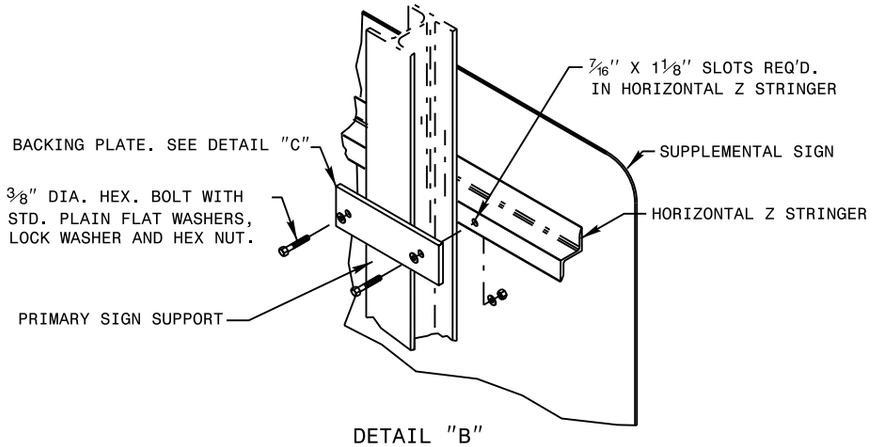
SECTION "A-A"

MOUNTING METHOD I



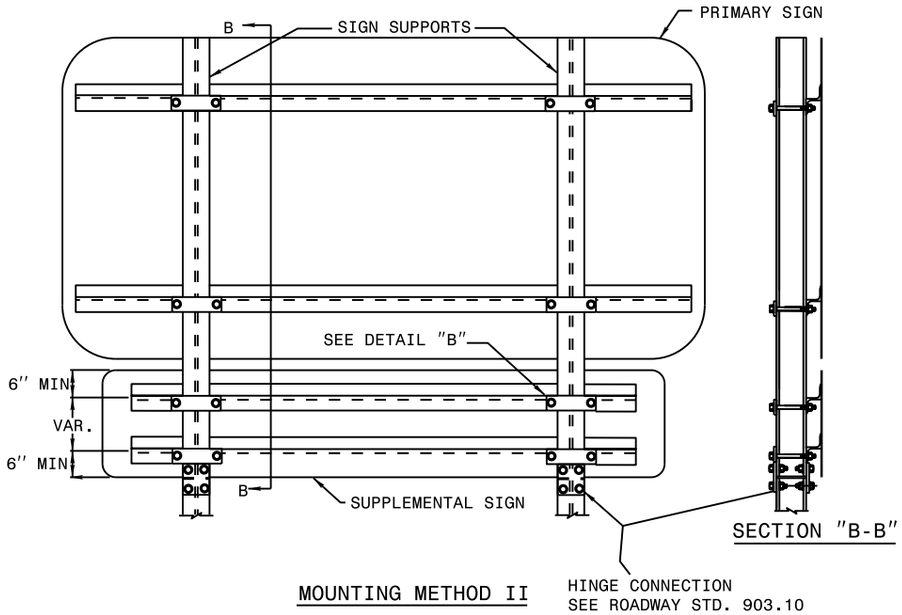
DETAIL "A"

CONNECTION OF HORIZONTAL "Z" STRINGER
AND VERTICAL "Z" SUPPORT.



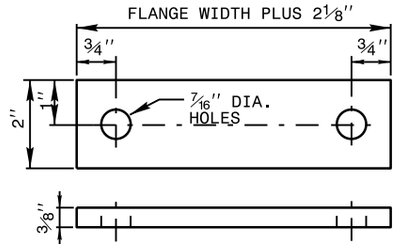
DETAIL "B"

CONNECTION OF HORIZONTAL "Z" STRINGER



SECTION "B-B"

MOUNTING METHOD II



DETAIL "C"

BACKING PLATE

NOTES:

1. FABRICATE VERTICAL AND HORIZONTAL "Z'S" OF ALUM. Z 3"x 2-11/16" x 1/4" x 2.33 LB/FT.
2. ATTACH VERTICAL "Z" SUPPORT TO BOTTOM TWO HORIZONTAL STRINGERS ON BACK OF PRIMARY SIGN.
3. SLOTS ARE NOT ALLOWED IN HORIZONTAL STRINGERS FOR ATTACHMENT OF VERTICAL "Z" SUPPORTS.
4. THE HINGE CONNECTION IS LOCATED AT THE BOTTOM OF THE SUPPLEMENTAL PANEL FOR BREAKAWAY SUPPORTS.

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-24

ROADWAY STANDARD DRAWING FOR

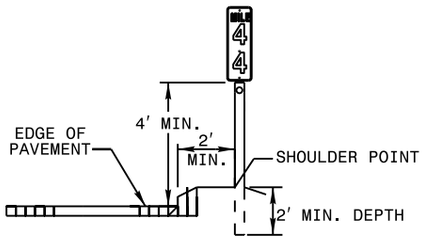
SUPPLEMENTAL SIGN MOUNTING

SHEET 1 OF 1

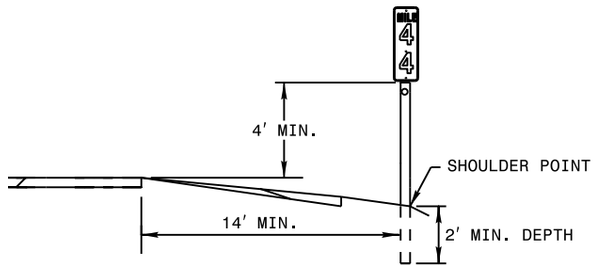
904.30

MILEPOST PLACEMENT

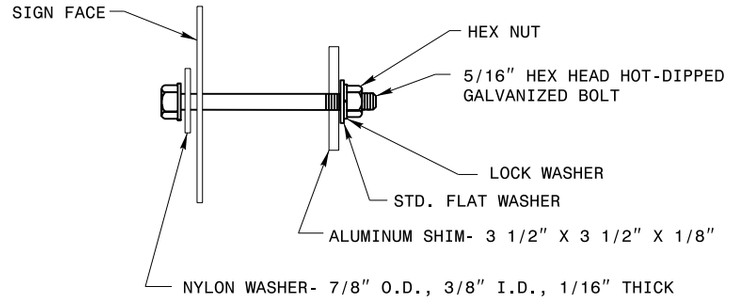
ROADWAY WITH CURB



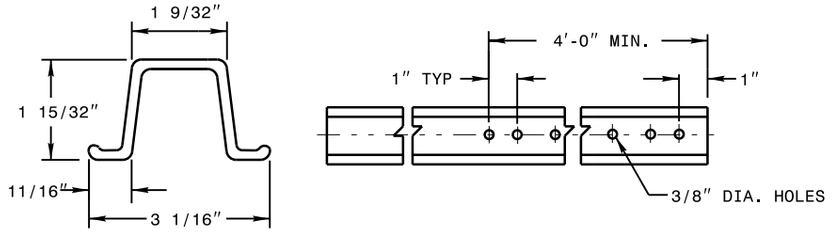
ROADWAY WITH PAVED SHOULDER



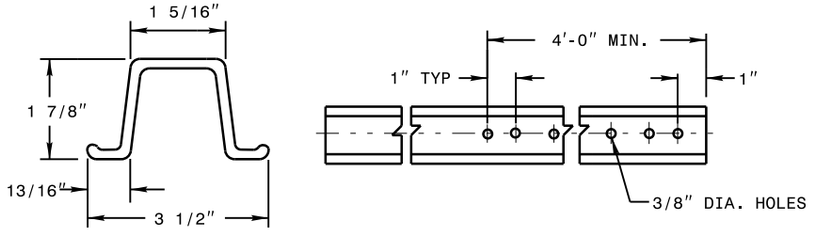
FASTENER



SUPPORT DETAILS



2-LB U-CHANNEL



3-LB U-CHANNEL

NOTES:

1. A MILEPOST SIGN SHALL CONSIST OF ONE (1) 12″ X 24″, 12″ X 36″ OR 12″ X 48″ SIGN PANEL. AN ENHANCED REFERENCE LOCATION SIGN SHALL CONSIST OF ONE (1) 18″ X 54″ SIGN PANEL. AN INTERMEDIATE ENHANCED REFERENCE LOCATION SIGN SHALL CONSIST OF ONE (1) 18″ X 60″ SIGN PANEL.

2. FABRICATE SIGNS FROM .080″ SHEET ALUMINUM. EACH SIGN SHALL HAVE WHITE STUCK-ON MESSAGE AND BORDER ON GREEN BACKGROUND. MESSAGE, BORDER AND BACKGROUND TO BE REFLECTORIZED.

3. MILEPOST LOCATION SIGNS REQUIRE ONE (1) 2-LB GALVANIZED STEEL U-CHANNEL SUPPORT AND ENHANCED REFERENCE LOCATION SIGNS REQUIRE ONE (1) 3-LB GALVANIZED STEEL U-CHANNEL SUPPORT. THE SUPPORT'S LENGTH MUST MEET THE REQUIREMENTS SHOWN IN THESE STANDARDS.

4. SUPPORTS SHALL BE DRIVEN. THE TOP OF SUPPORT SHALL NOT PROJECT ABOVE THE TOP OF SIGN.

5. ATTACH EACH SIGN TO THE WIDE FACE (FLANGES) OF THE SUPPORT BY MEANS OF THE FOLLOWING COMBINATION- 5/16″ HEX HEAD BOLT, NYLON WASHER, SHIM, FLAT WASHER, LOCK WASHER, HEX NUT. FULL CONTACT BETWEEN THE SIGN AND THE SUPPORT SHALL BE ACHIEVED. NO BUCKLING OF THE SIGN WILL BE PERMITTED.

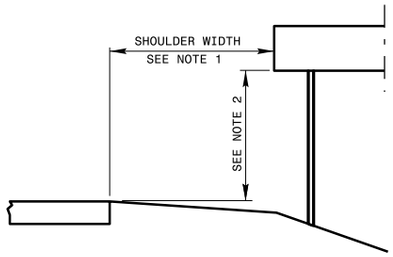
6. PLACE MILEPOST SIGNS AT THE SHOULDER POINT UNLESS THE ENGINEER DIRECTS OTHERWISE.

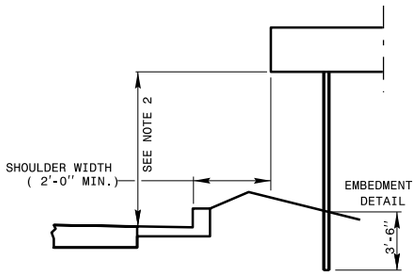
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-24

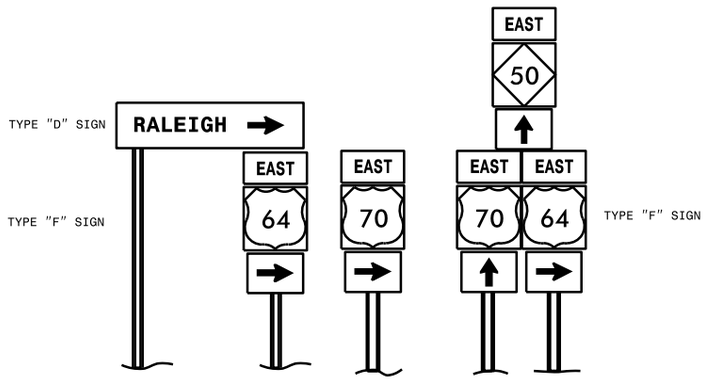
ROADWAY STANDARD DRAWING FOR

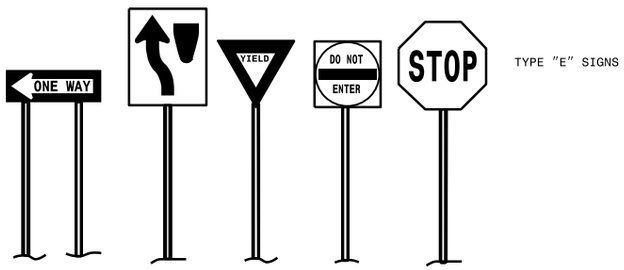
MILEPOST AND PLACEMENT



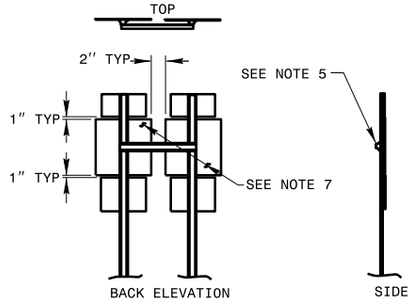


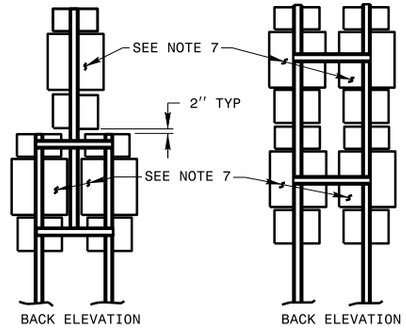
HORIZONTAL AND VERTICAL CLEARANCES



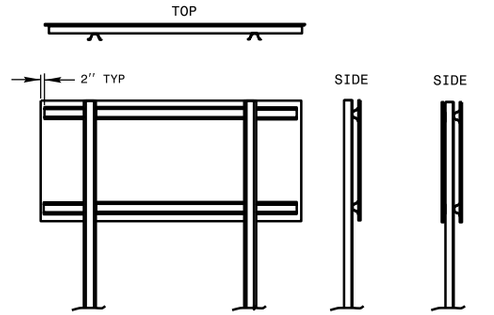


TYPICAL SIGN SHAPES AND COMBINATIONS





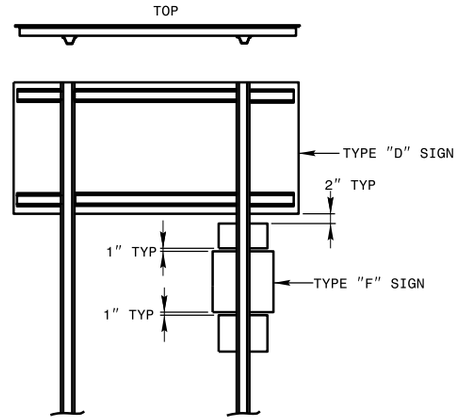
FRAMING AND CROSS-BRACING DETAILS
TYPE "F" SIGNS



TYPE "D" & "E" SIGN
CROSS BRACING

BACK-TO-BACK
MOUNT

FRAMING AND CROSS BRACE DETAILS
FOR COMBINATION TYPE "D" & "E" SIGNS
WIDE SIDE OF CROSS BRACE GOES TO BACK OF SIGN



FRAMING AND CROSS BRACE DETAILS
FOR COMBINATION TYPE "D" & "F" SIGNS
WIDE SIDE OF FLANGE TO BACK OF "F" SIGN

NOTES:

1. ERECT TYPE "D", "E", AND "F" SIGNS ON FREEWAYS WITH THE NEAR EDGE OF THE SIGN 20 FT. FROM THE TRAVEL LANE. ERECT ALL OTHER "D", "E", AND "F" SIGNS WITH THE NEAR EDGE OF THE SIGN AT THE EDGE OF THE SHOULDER BREAK (6 FT. MINIMUM CLEARANCE, 12 FT. DESIRABLE, FROM THE EDGE OF TRAVEL LANE), OR AS DIMENSIONED ON PLAN SHEETS.
2. ERECT TYPE "D", "E", AND "F" SIGNS WITH THE BOTTOM OF SIGN ASSEMBLY AT LEAST 7 FT. ABOVE THE EDGE OF THE TRAVEL LANE ON ROADS WITH 2 OR MORE LANES IN THE SAME DIRECTION AND AT LEAST 5 FT. ON OTHER ROUTES. THE VERTICAL CLEARANCE IS 7 FT. WHERE REQUIRED FOR PEDESTRIAN TRAFFIC AND/OR PARKED VEHICLES.
3. THE VERTICAL DIMENSION BETWEEN MOUNTING HOLE CENTERS ON ALL TYPES "D", "E", AND "F" SIGNS IS 30" MAXIMUM. THE VERTICAL AND HORIZONTAL DIMENSIONS BETWEEN MOUNTING HOLES IS TO THE WHOLE INCH. EACH SIGN PANEL HAS A MINIMUM OF 2 BOLTS PER SUPPORT.
4. ATTACH SIGN W/ $\frac{5}{16}$" HEX HEAD BOLT, NYLON WASHER, SHIM, FLAT WASHER, LOCK WASHER, HEX .NUT NO BUCKLING OF THE SIGN WILL BE PERMITTED. SEE ASSEMBLY DETAIL SHEET# 2 OF 904.50.
5. FURNISH AND INSTALL CROSS-BRACING AS SHOWN IN DETAIL. PAINT ENDS OF CROSS BRACES W/ APPROVED. ZINC PAINT
6. INSTALL SUPPORT AND CROSS-BRACING WITH THE WIDE SIDE OF THE FLANGE TOWARD THE BACK OF SIGN(S) FOR COMBINATION TYPE "D" AND "F" SIGNS.
7. THE SHIELD HEIGHTS IN THESE ASSEMBLIES CAN NOT BE LARGER THAN 24".
8. IF SIGN ASSEMBLIES REQUIRE MORE THAN TWO U-CHANNEL SUPPORTS, THE SUPPORTS SHALL BE PLACED A MINIMUM OF 4 FT. BETWEEN SUPPORTS. NO MORE THAN TWO SUPPORTS SHALL FALL WITHIN 7 FT. PATH, OR THE SIGN ASSEMBLY MUST BE PLACED BEHIND BARRIER PROTECTION.

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

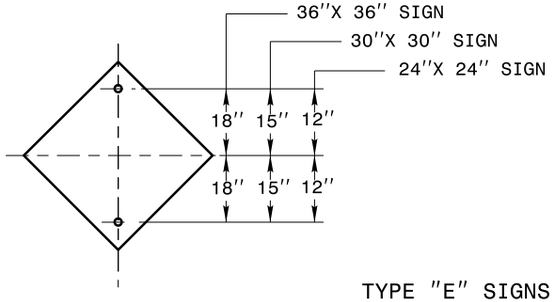
1-24

ROADWAY STANDARD DRAWING FOR

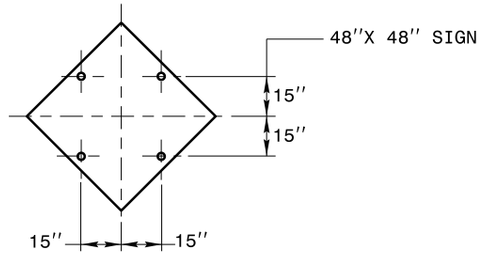
MOUNTING OF TYPE 'D','E' AND 'F' SIGNS ON 'U' CHANNEL SUPPORTS

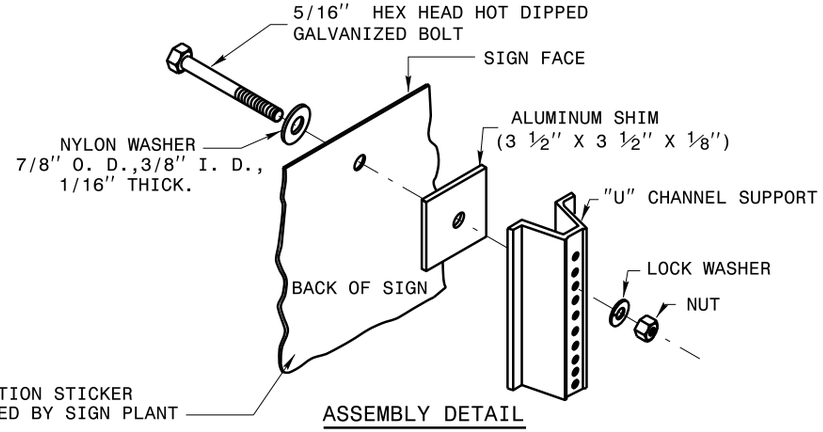
SHEET 1 OF 2

904.50

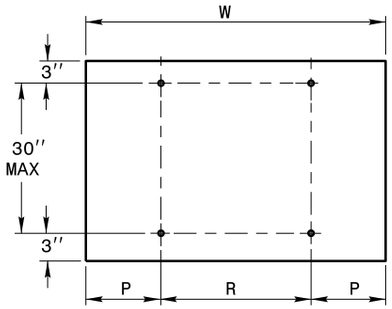


TYPE "E" SIGNS

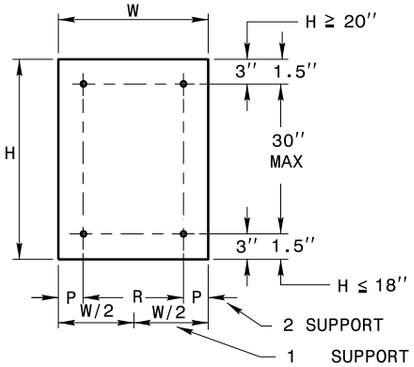




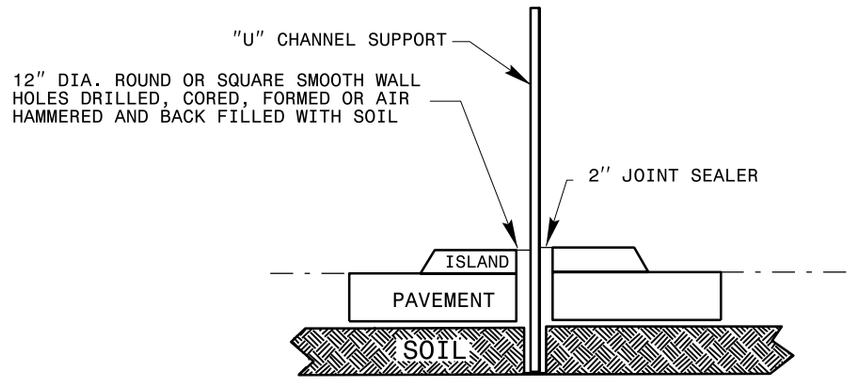
ASSEMBLY DETAIL



TYPE "D" SIGNS



TYPE "E" AND "F" SIGNS



DETAIL FOR INSTALLATION OF CHANNEL SUPPORT IN CONCRETE

	NO. SUPPORTS		
	2	3 *	4 *
P	.207W	.145W	.107W
R	.586W	.355W	.262W

UNITS ON ATTACHED SHEET

* MINIMUM 4 FT. BETWEEN CHANNEL SUPPORTS

HOLE PUNCHING DETAIL

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-24

ROADWAY STANDARD DRAWING FOR

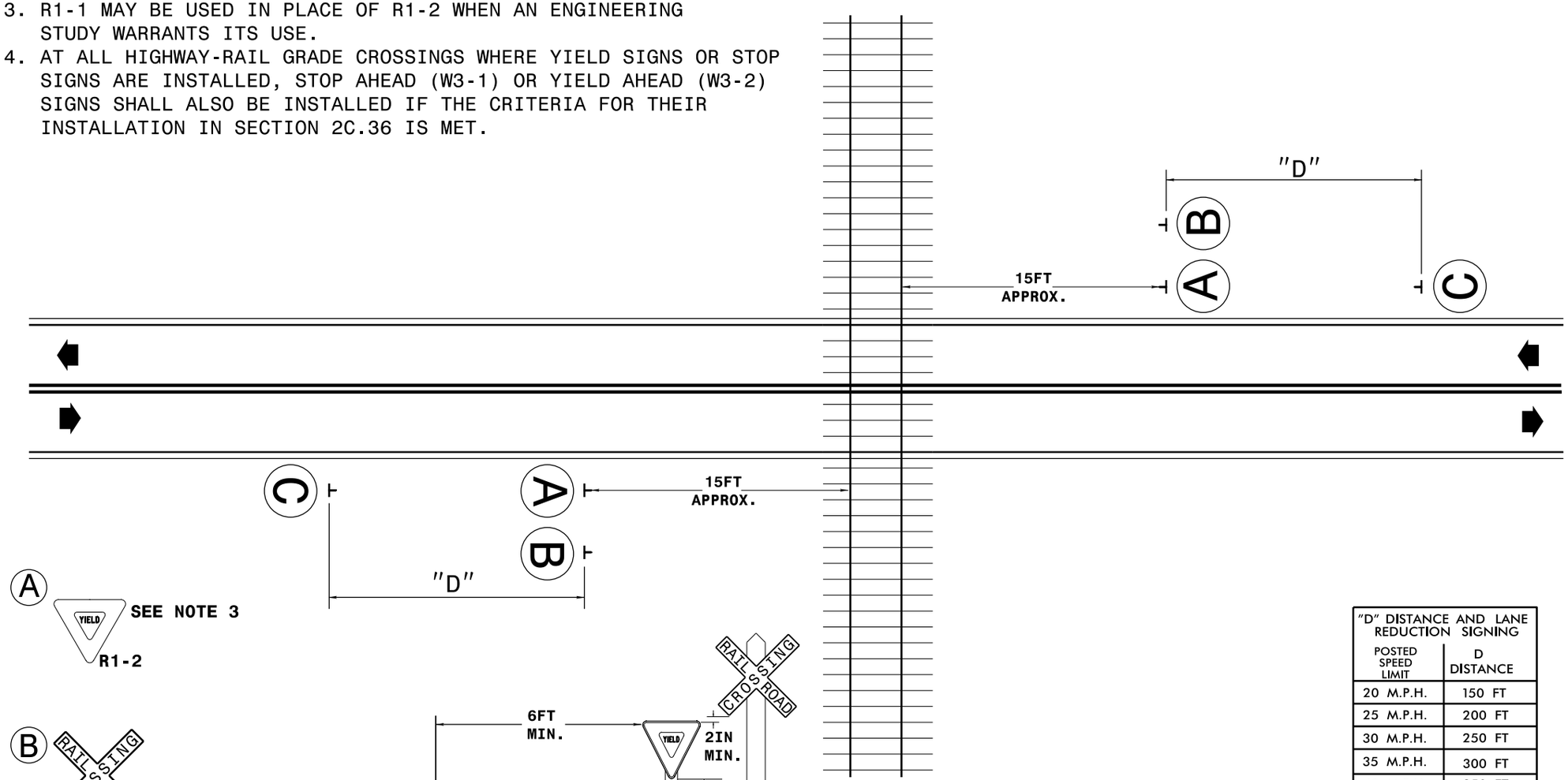
MOUNTING OF TYPE 'D', 'E' AND 'F' SIGNS ON 'U' CHANNEL SUPPORTS

SHEET 2 OF 2

904.50

NOTES:

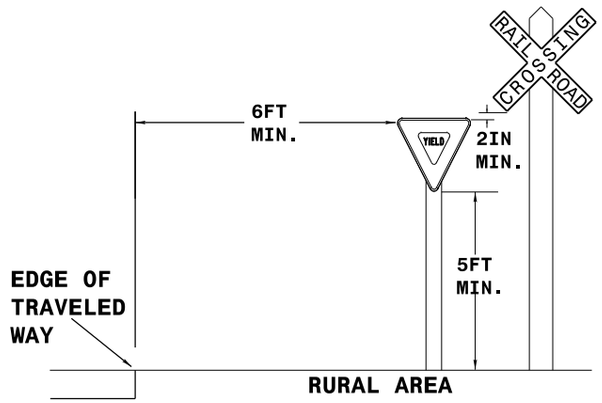
1. USE TABLES 2B-1, 2C-2 AND 7B-1 IN MUTCD FOR SIGN SIZES.
2. WHEN GEOMETRY DOES NOT PERMIT THE USE OF ALL REQUIRED SIGNS AN ENGINEERING STUDY WILL DETERMINE APPROPRIATE SIGNING.
3. R1-1 MAY BE USED IN PLACE OF R1-2 WHEN AN ENGINEERING STUDY WARRANTS ITS USE.
4. AT ALL HIGHWAY-RAIL GRADE CROSSINGS WHERE YIELD SIGNS OR STOP SIGNS ARE INSTALLED, STOP AHEAD (W3-1) OR YIELD AHEAD (W3-2) SIGNS SHALL ALSO BE INSTALLED IF THE CRITERIA FOR THEIR INSTALLATION IN SECTION 2C.36 IS MET.



A — SEE NOTE 3
R1-2

B
R15-1

C — SEE NOTE 4
W3-2



"D" DISTANCE AND LANE REDUCTION SIGNING	
POSTED SPEED LIMIT	D DISTANCE
20 M.P.H.	150 FT
25 M.P.H.	200 FT
30 M.P.H.	250 FT
35 M.P.H.	300 FT
40 M.P.H.	350 FT
45 M.P.H.	400 FT

LEGEND
STATIONARY SIGN
DIRECTION OF TRAFFIC FLOW

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-24

ROADWAY STANDARD DRAWING FOR

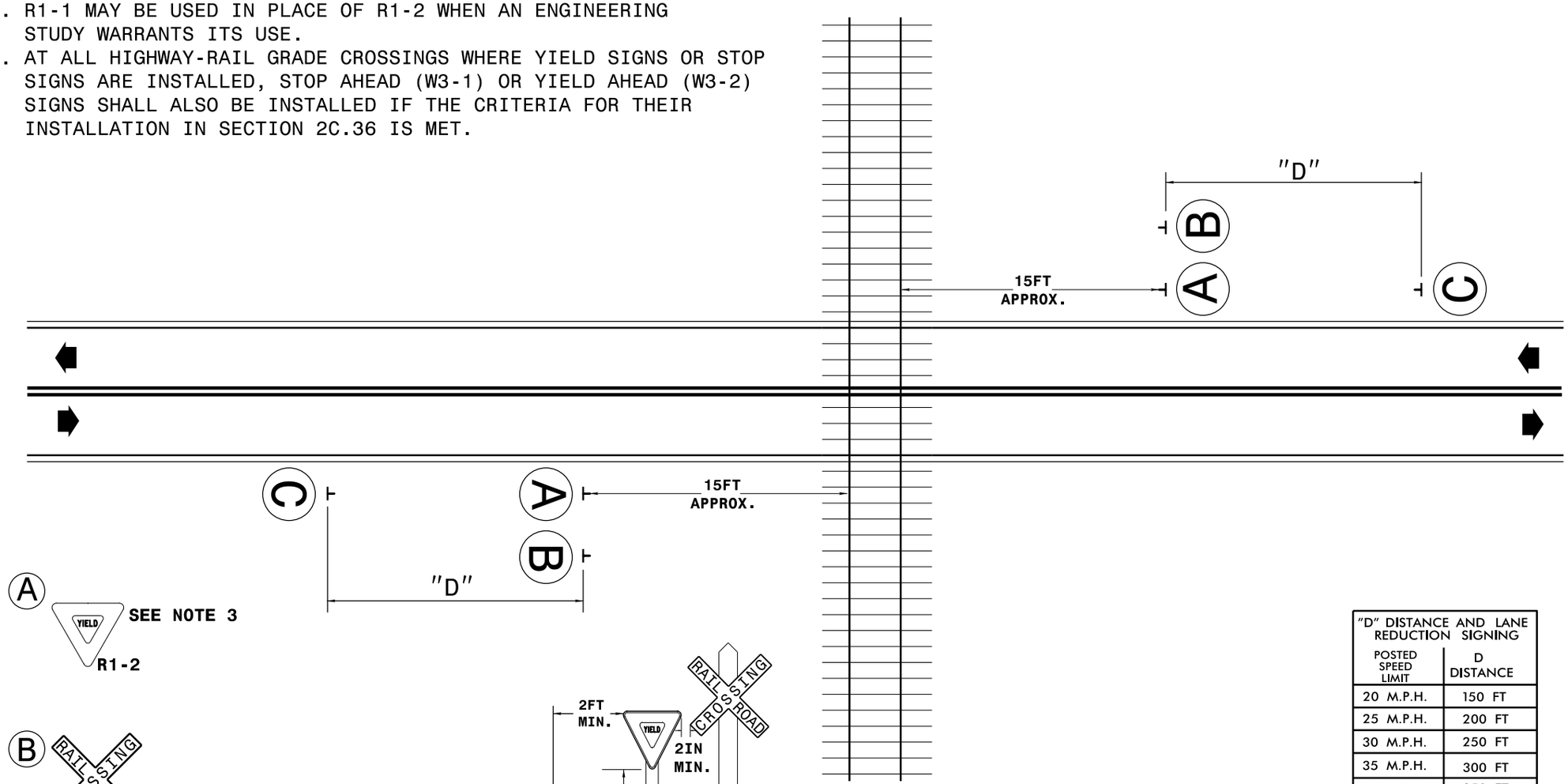
HIGHWAY-RAIL GRADE CROSSINGS (RURAL DISTRICT)

SHEET 1 OF 2

910.10

NOTES:

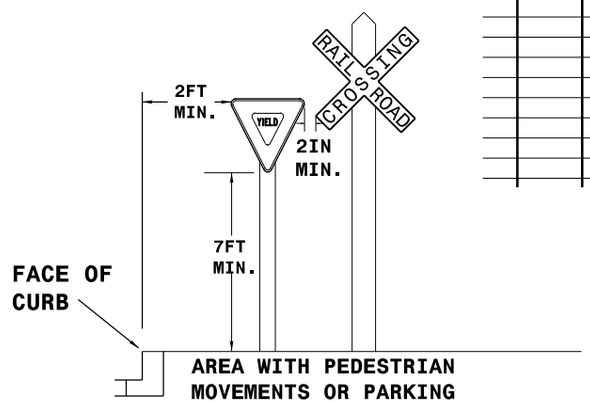
1. USE TABLES 2B-1, 2C-2 AND 7B-1 IN MUTCD FOR SIGN SIZES.
2. WHEN GEOMETRY DOES NOT PERMIT THE USE OF ALL REQUIRED SIGNS AN ENGINEERING STUDY WILL DETERMINE APPROPRIATE SIGNING.
3. R1-1 MAY BE USED IN PLACE OF R1-2 WHEN AN ENGINEERING STUDY WARRANTS ITS USE.
4. AT ALL HIGHWAY-RAIL GRADE CROSSINGS WHERE YIELD SIGNS OR STOP SIGNS ARE INSTALLED, STOP AHEAD (W3-1) OR YIELD AHEAD (W3-2) SIGNS SHALL ALSO BE INSTALLED IF THE CRITERIA FOR THEIR INSTALLATION IN SECTION 2C.36 IS MET.



A — YIELD — SEE NOTE 3
R1-2

B — RAIL ROAD CROSSING
R15-1

C — SEE NOTE 4
W3-2



"D" DISTANCE AND LANE REDUCTION SIGNING

POSTED SPEED LIMIT	D DISTANCE
20 M.P.H.	150 FT
25 M.P.H.	200 FT
30 M.P.H.	250 FT
35 M.P.H.	300 FT
40 M.P.H.	350 FT
45 M.P.H.	400 FT

LEGEND

- STATIONARY SIGN
- DIRECTION OF TRAFFIC FLOW

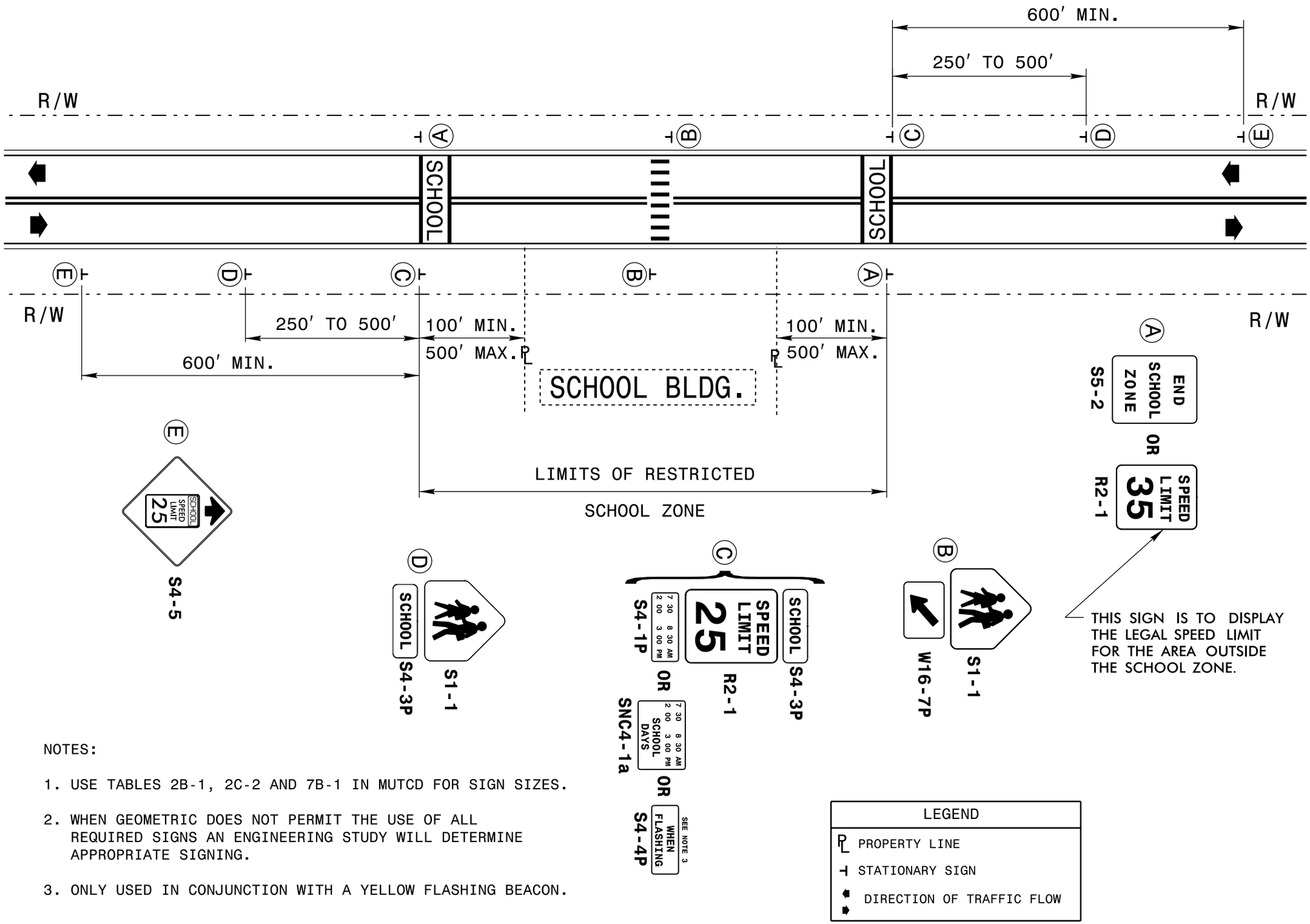
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-24

ROADWAY STANDARD DRAWING FOR

HIGHWAY-RAIL GRADE CROSSINGS (BUSINESS OR RESIDENCE DISTRICT)

910.10



NOTES:

1. USE TABLES 2B-1, 2C-2 AND 7B-1 IN MUTCD FOR SIGN SIZES.
2. WHEN GEOMETRIC DOES NOT PERMIT THE USE OF ALL REQUIRED SIGNS AN ENGINEERING STUDY WILL DETERMINE APPROPRIATE SIGNING.
3. ONLY USED IN CONJUNCTION WITH A YELLOW FLASHING BEACON.

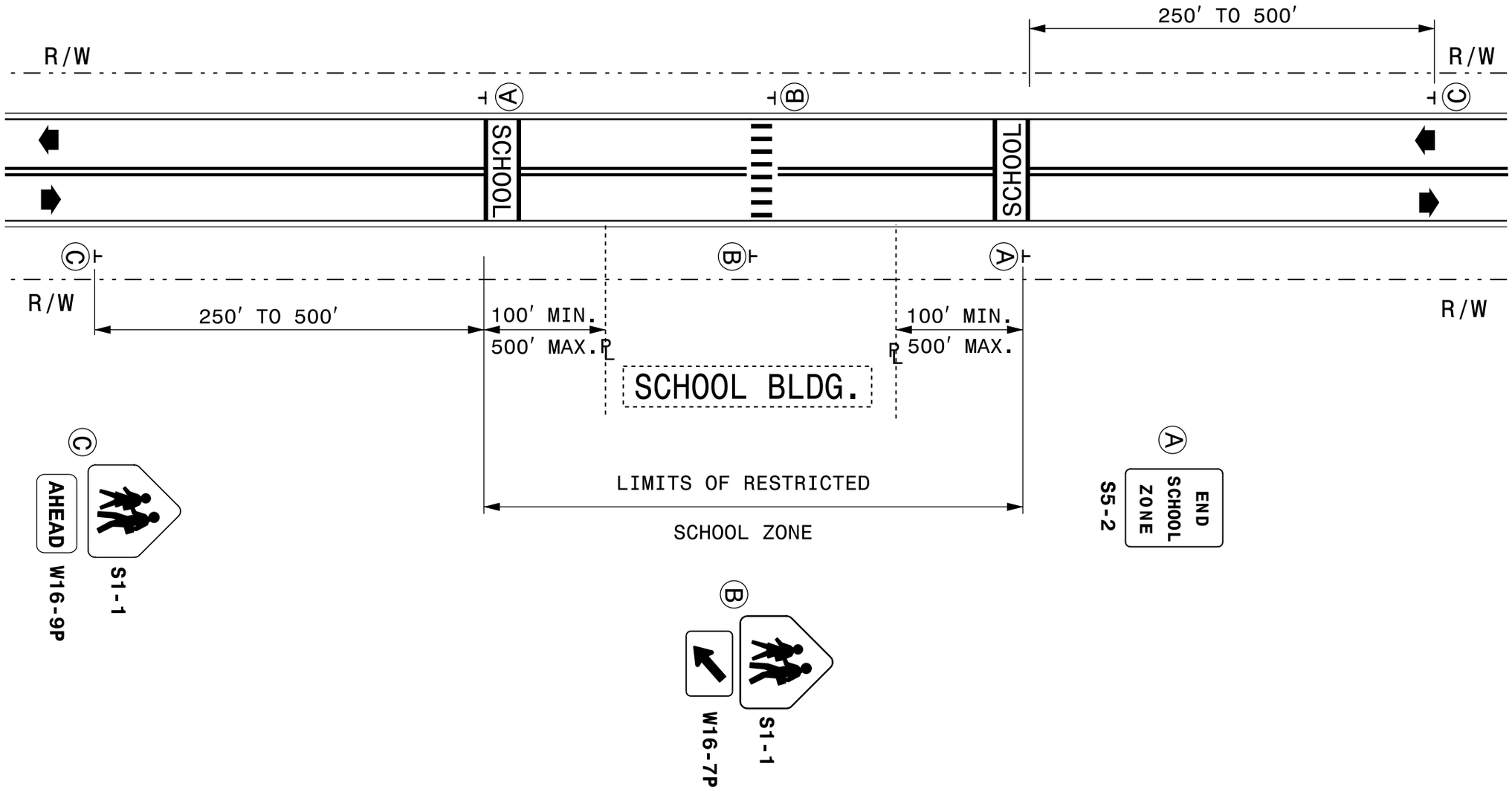
LEGEND
PL PROPERTY LINE
STATIONARY SIGN
DIRECTION OF TRAFFIC FLOW

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-24

ROADWAY STANDARD DRAWING FOR

SIGNING SCHOOL ZONE WITH MARKED CROSSWALK WHERE SPEED REDUCTION IS REQUIRED



NOTES:

1. USE TABLES 2B-1, 2C-2 AND 7B-1 IN MUTCD FOR SIGN SIZES.

2. WHEN GEOMETRIC DOES NOT PERMIT THE USE OF ALL REQUIRED SIGNS AN ENGINEERING STUDY WILL DETERMINE APPROPRIATE SIGNING.

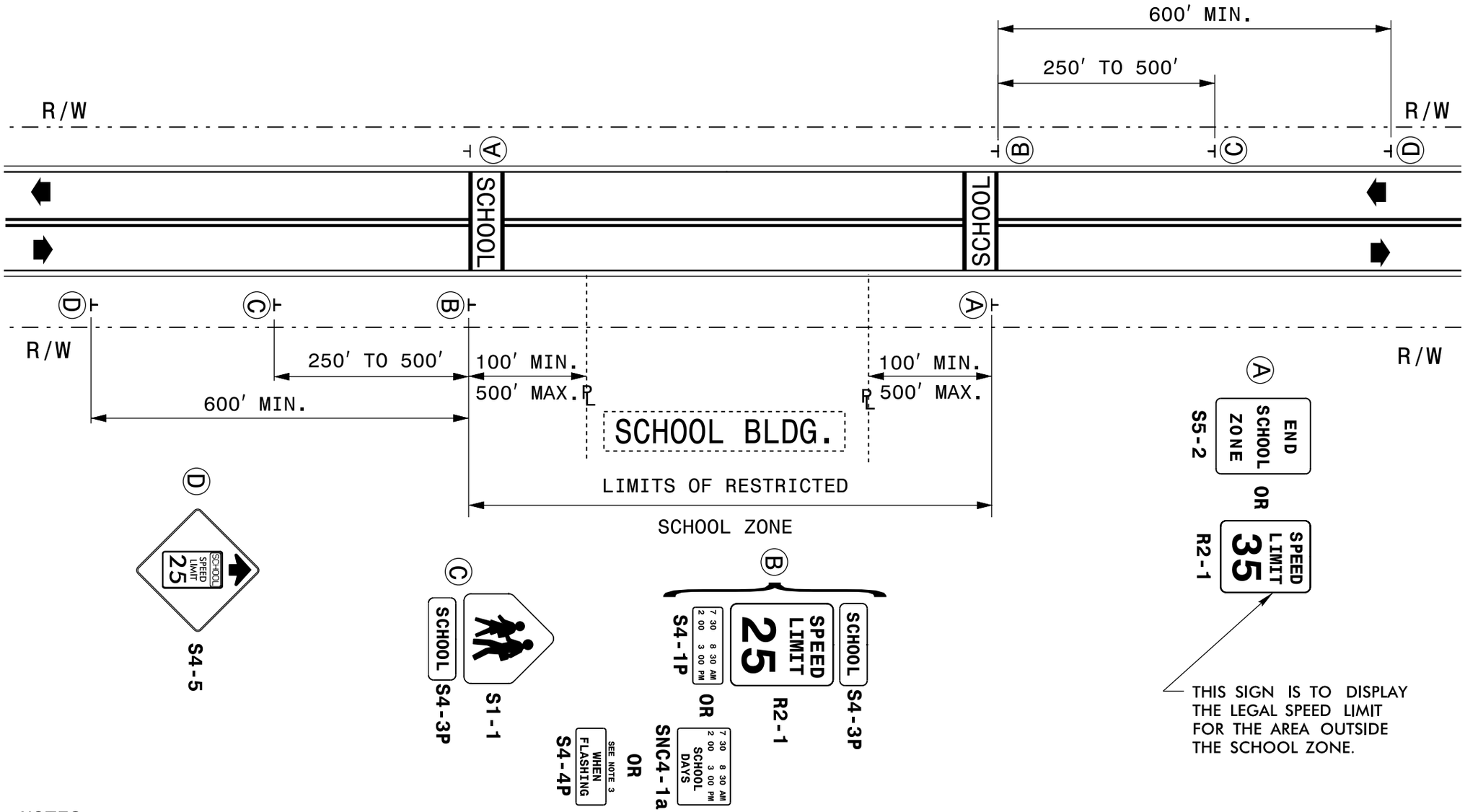
LEGEND
PL PROPERTY LINE
STATIONARY SIGN
DIRECTION OF TRAFFIC FLOW

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-24

ROADWAY STANDARD DRAWING FOR

SIGNING SCHOOL ZONE WITH MARKED CROSSWALK WHERE SPEED REDUCTION IS NOT REQUIRED



NOTES:

1. USE TABLES 2B-1, 2C-2 AND 7B-1 IN MUTCD FOR SIGN SIZES.

2. WHEN GEOMETRIC DOES NOT PERMIT THE USE OF ALL REQUIRED SIGNS AN ENGINEERING STUDY WILL DETERMINE APPROPRIATE SIGNING.

3. ONLY USED IN CONJUNCTION WITH A YELLOW FLASHING BEACON.

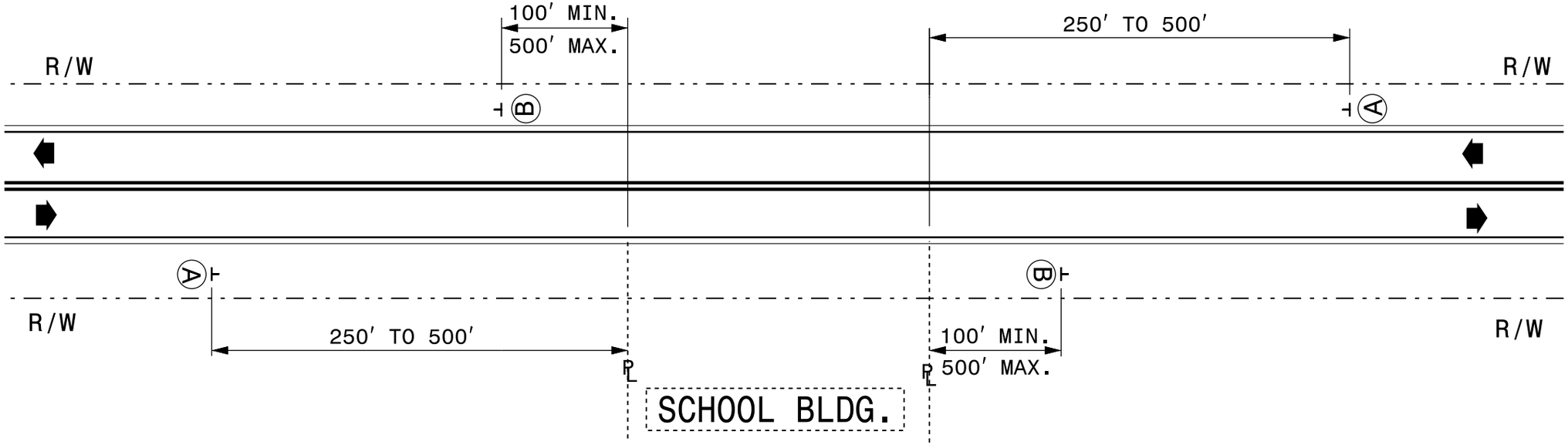
LEGEND
PL PROPERTY LINE
STATIONARY SIGN
DIRECTION OF TRAFFIC FLOW

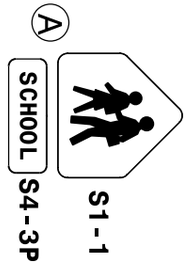
STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

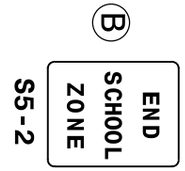
1-24

ROADWAY STANDARD DRAWING FOR

SIGNING SCHOOL ZONE WITHOUT MARKED CROSSWALK WHERE SPEED REDUCTION IS REQUIRED







NOTES:

1. USE TABLES 2B-1, 2C-2 AND 7B-1 IN MUTCD FOR SIGN SIZES.

2. WHEN GEOMETRIC DOES NOT PERMIT THE USE OF ALL REQUIRED SIGNS AN ENGINEERING STUDY WILL DETERMINE APPROPRIATE SIGNING.

LEGEND
PL PROPERTY LINE
⊣ STATIONARY SIGN
DIRECTION OF TRAFFIC FLOW

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

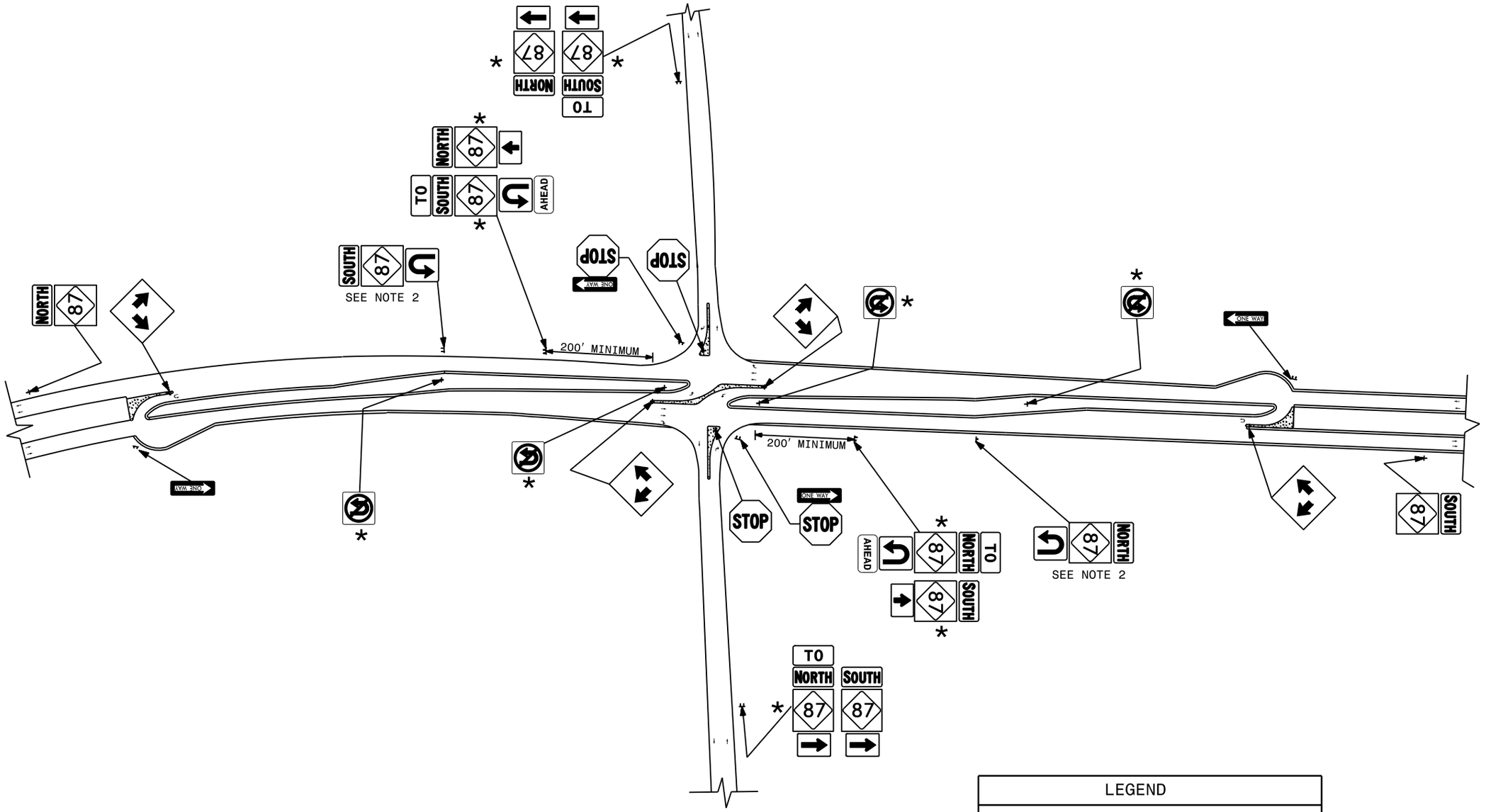
1-24

ROADWAY STANDARD DRAWING FOR

SIGNING SCHOOL ZONE

SHEET 4 OF 4

910.20



NOTES:

1. IF MEDIAN STOP SIGN IS USED, LOCATE SIGN SO THAT IT DOES NOT OBSTRUCT THE VIEW OF THE MOTORIST WHEN LOOKING LEFT.

2. TYPICALLY LOCATED NEAR BEGINNING OF TAPER.

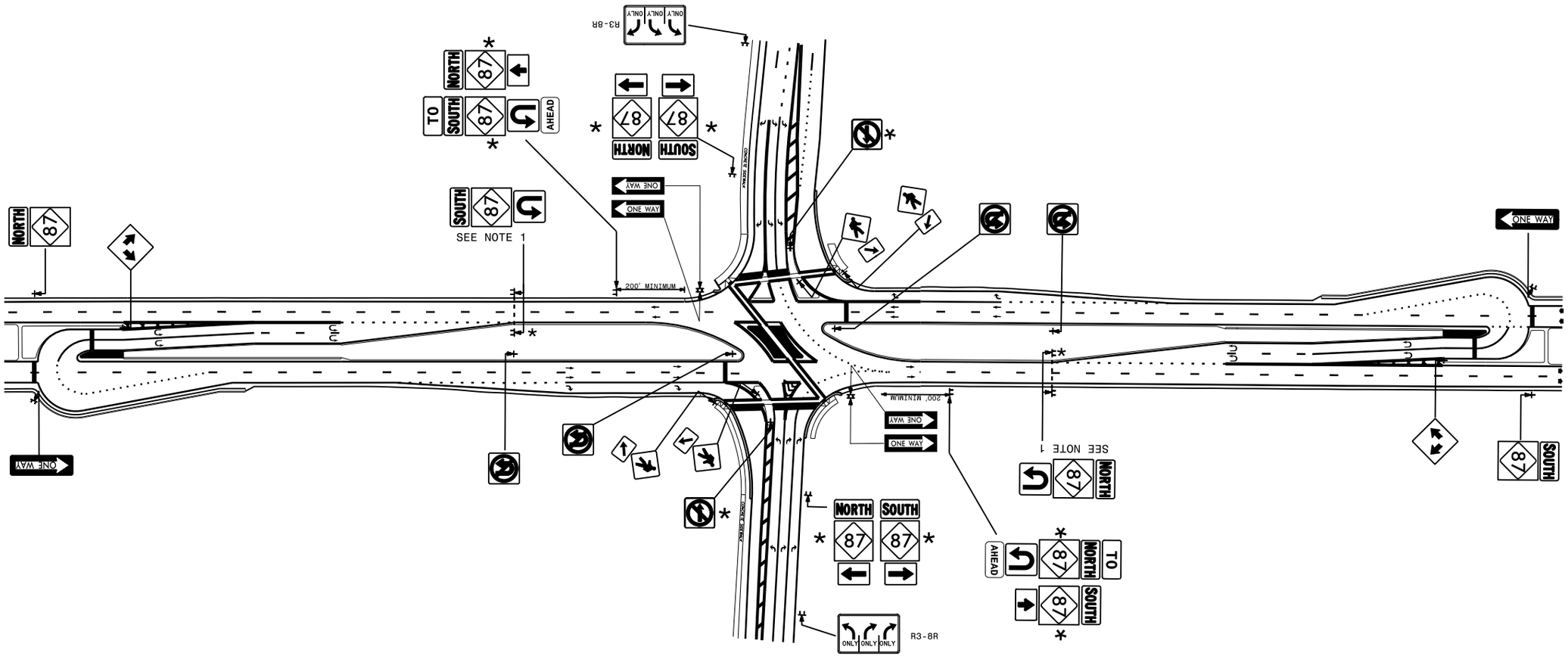
STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-24

ROADWAY STANDARD DRAWING FOR

SIGNING UNSIGNALIZED REDUCED CONFLICT INTERSECTION

910.30



NOTES:

1. TYPICALLY LOCATED NEAR BEGINNING OF TAPER.
2. OPTIONAL SIGNS ARE TO BE INSTALLED AT THE DISCRETION OF THE DIVISION ENGINEER.
3. ALL SIGNS SHALL BE FIELD LOCATED BY THE ENGINEER.
4. FOR REGULATORY SIGN AND PLAQUE SIZES USE TABLE 2B-1 IN MUTCD.

LEGEND
* OPTIONAL
⊣ STATIONARY SIGN ON ONE SUPPORT
⊣⊢ STATIONARY SIGN ON TWO SUPPORTS

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

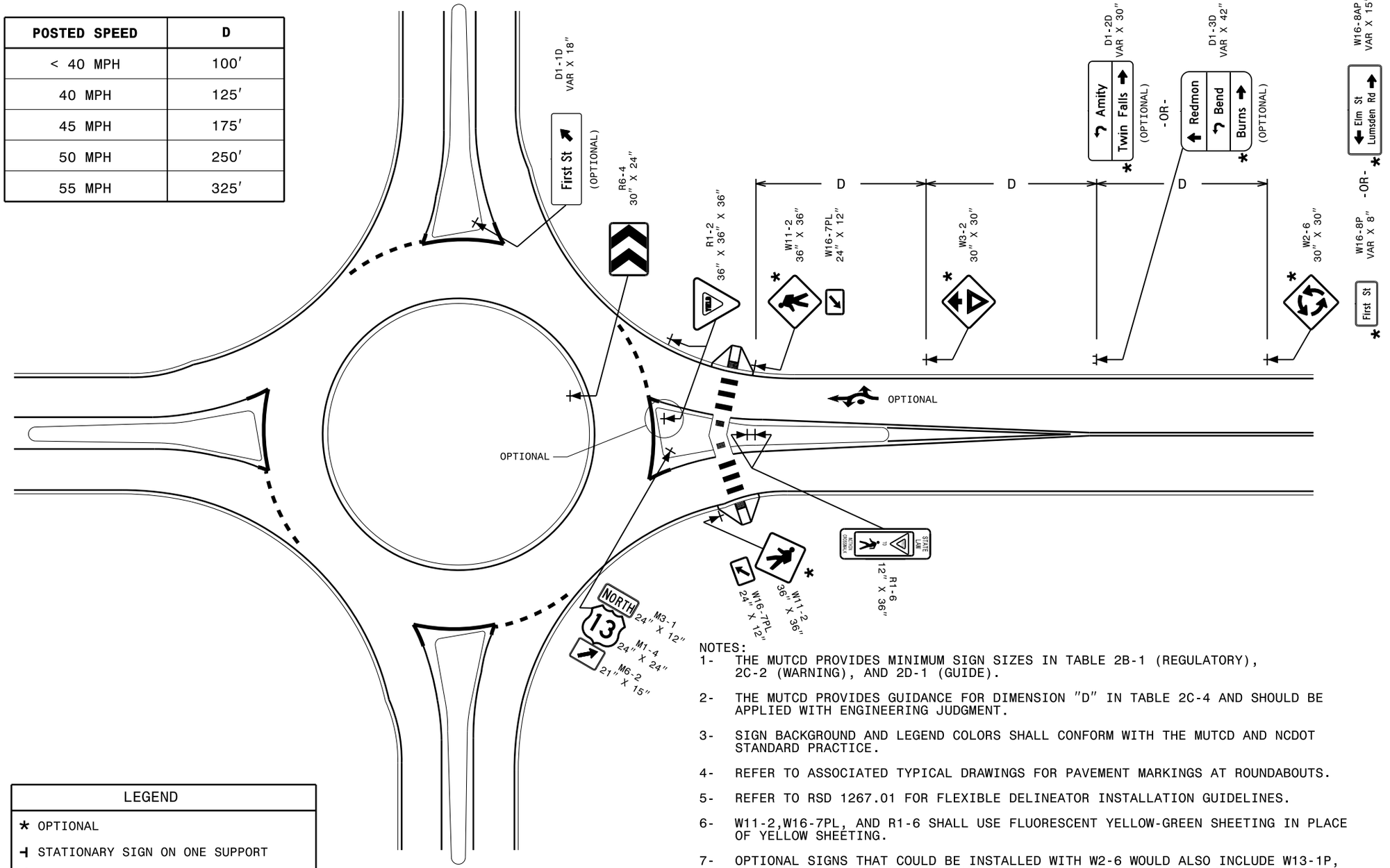
1-24

ROADWAY STANDARD DRAWING FOR

SIGNING SIGNALIZED
REDUCED CONFLICT INTERSECTION
LEFT OUT / DUAL U-TURN

910.30

POSTED SPEED	D
< 40 MPH	100′
40 MPH	125′
45 MPH	175′
50 MPH	250′
55 MPH	325′



LEGEND
* OPTIONAL
⊣ STATIONARY SIGN ON ONE SUPPORT
⊣⊢ STATIONARY SIGN ON TWO SUPPORTS

NOTES:

1- THE MUTCD PROVIDES MINIMUM SIGN SIZES IN TABLE 2B-1 (REGULATORY), 2C-2 (WARNING), AND 2D-1 (GUIDE).

2- THE MUTCD PROVIDES GUIDANCE FOR DIMENSION "D" IN TABLE 2C-4 AND SHOULD BE APPLIED WITH ENGINEERING JUDGMENT.

3- SIGN BACKGROUND AND LEGEND COLORS SHALL CONFORM WITH THE MUTCD AND NCDOT STANDARD PRACTICE.

4- REFER TO ASSOCIATED TYPICAL DRAWINGS FOR PAVEMENT MARKINGS AT ROUNDABOUTS.

5- REFER TO RSD 1267.01 FOR FLEXIBLE DELINEATOR INSTALLATION GUIDELINES.

6- W11-2,W16-7PL, AND R1-6 SHALL USE FLUORESCENT YELLOW-GREEN SHEETING IN PLACE OF YELLOW SHEETING.

7- OPTIONAL SIGNS THAT COULD BE INSTALLED WITH W2-6 WOULD ALSO INCLUDE W13-1P, W16-17P AND W16-12P. OPTIONAL SIGNS SHALL BE INSTALLED AT THE DISCRETION OF THE ENGINEER.

8- RIGHT SIDE SUPPORT-MOUNTED YIELD SIGNS SHALL BE ANGLED TO FORM AN EXTENSION OF THE YIELD LINE.

9- OPTION: IN RURAL AND/OR HIGHER SPEED LOCATIONS UPSIZE 30″ X 30″ TO 36″ X 36.″

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

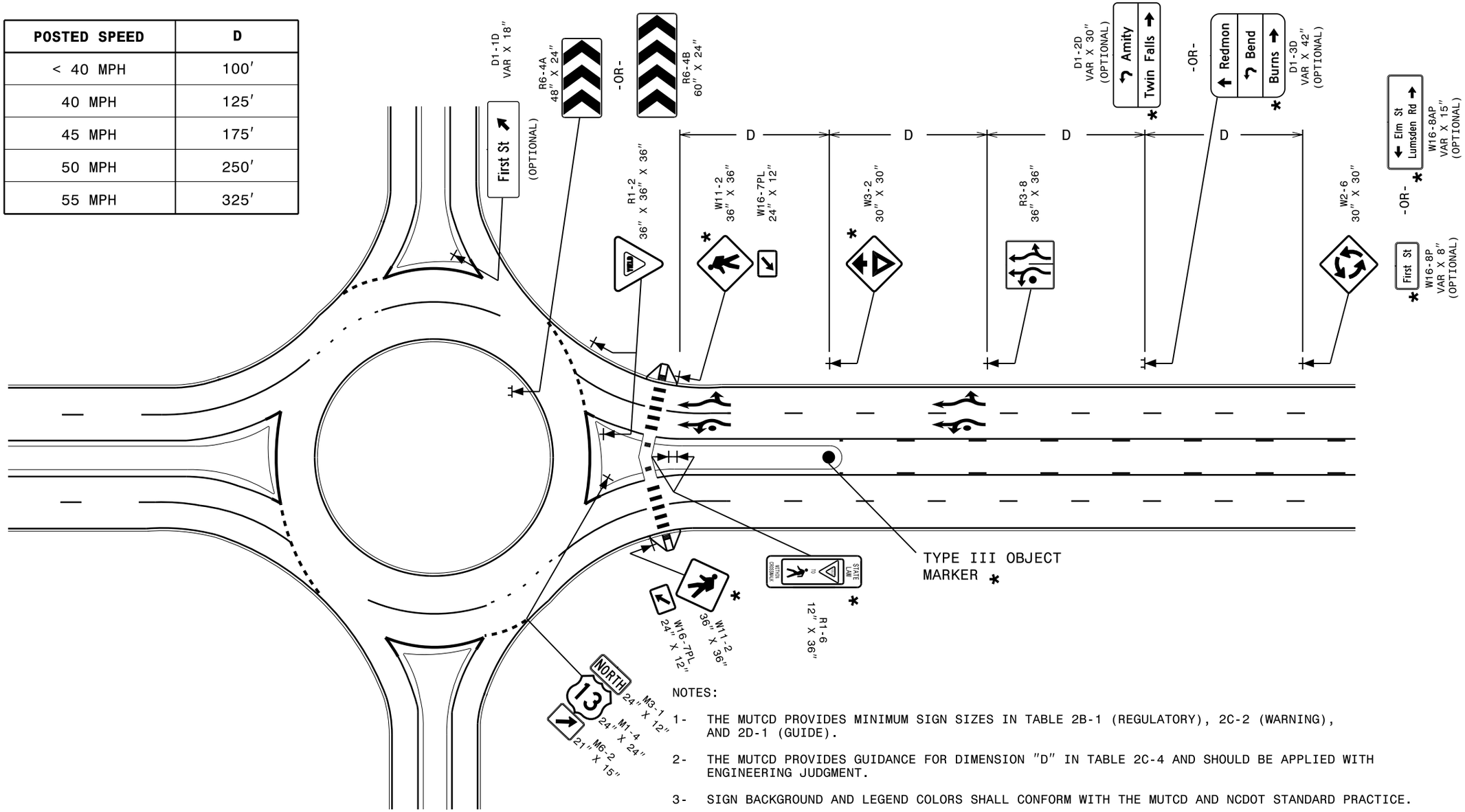
1-24

ROADWAY STANDARD DRAWING FOR

SINGLE LANE ROUNDABOUT SIGNING, WITH PEDESTRIANS

910.40

POSTED SPEED	D
< 40 MPH	100′
40 MPH	125′
45 MPH	175′
50 MPH	250′
55 MPH	325′



LEGEND
* OPTIONAL
⊣ STATIONARY SIGN ON ONE SUPPORT
⊥ STATIONARY SIGN ON TWO SUPPORTS

NOTES:

1- THE MUTCD PROVIDES MINIMUM SIGN SIZES IN TABLE 2B-1 (REGULATORY), 2C-2 (WARNING), AND 2D-1 (GUIDE).

2- THE MUTCD PROVIDES GUIDANCE FOR DIMENSION "D" IN TABLE 2C-4 AND SHOULD BE APPLIED WITH ENGINEERING JUDGMENT.

3- SIGN BACKGROUND AND LEGEND COLORS SHALL CONFORM WITH THE MUTCD AND NCDOT STANDARD PRACTICE.

4- REFER TO ASSOCIATED TYPICAL DRAWINGS FOR PAVEMENT MARKINGS AT ROUNDABOUTS.

5- REFER TO RSD 1267.01 FOR FLEXIBLE DELINEATOR INSTALLATION GUIDELINES.

6- W11-2, W16-7PL, AND R1-6 SHALL USE FLUORESCENT YELLOW-GREEN SHEETING IN PLACE OF YELLOW SHEETING.

7- OPTIONAL SIGNS THAT COULD BE INSTALLED WITH W2-6 WOULD ALSO INCLUDE W13-1P, W16-17P AND W16-12P. OPTIONAL SIGNS SHALL BE INSTALLED AT THE DISCRETION OF THE ENGINEER.

8- RIGHT SIDE SUPPORT-MOUNTED YIELD SIGNS SHALL BE ANGLED TO FORM AN EXTENSION OF THE YIELD LINE.

9- ADVANCE LANE CONTROL ARROW MARKINGS SHALL MATCH THE LANE CONTROLS DEPICTED IN R3-8 SIGN WHICH SHALL MATCH THE LANE CONTROLS OF THE ROUNDABOUT AND SHALL UTILIZE FISHHOOK ARROWS.

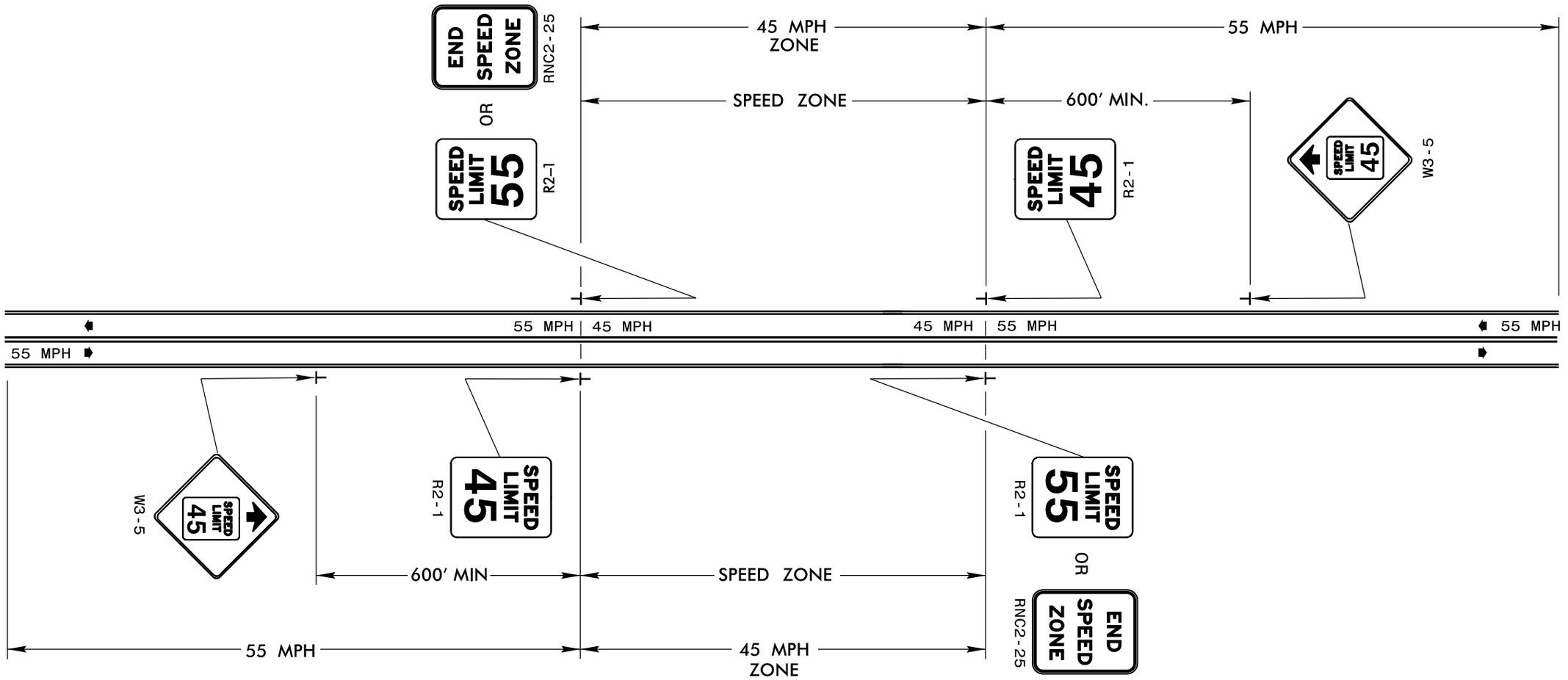
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-24

ROADWAY STANDARD DRAWING FOR

TWO LANE ROUNDABOUT SIGNING, WITH PEDESTRIANS

910.40



NOTES:

1. USE TABLES 2B-1 AND 2C-2 IN MUTCD FOR SIGN SIZES.

2. SIGNS INDICATING A REDUCTION IN SPEED LIMIT SHALL BE DUAL MOUNTED ON MULTILANE DIVIDED FACILITIES WITH MEDIANS.

3. REDUCED SPEED LIMIT AHEAD (W3-5) SIGN SHALL BE INSTALLED AT LEAST 600 FEET IN ADVANCE OF THE BEGINNING OF THE SPEED ZONE, INDICATING A CHANGE IN THE SPEED LIMIT.

LEGEND
⊣ STATIONARY SIGN
⬅➡ DIRECTION OF TRAFFIC FLOW

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-24

ROADWAY STANDARD DRAWING FOR

SIGNING FOR SPEED REDUCTION ZONE

SHEET 1 OF 1

910.50