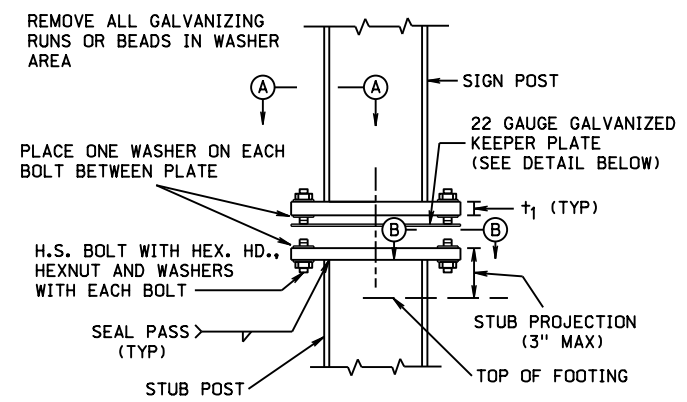
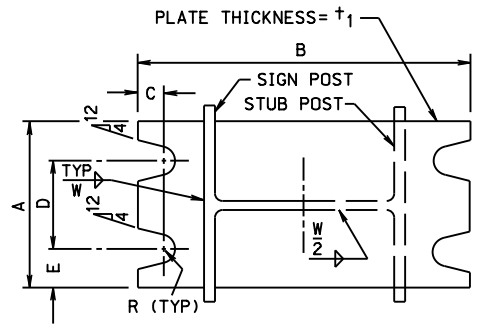


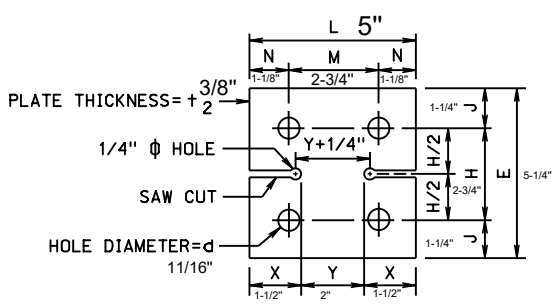
TRAFFIC ENGINEERING DIVISION



**SIGN POST & STUB POST ELEVATION**

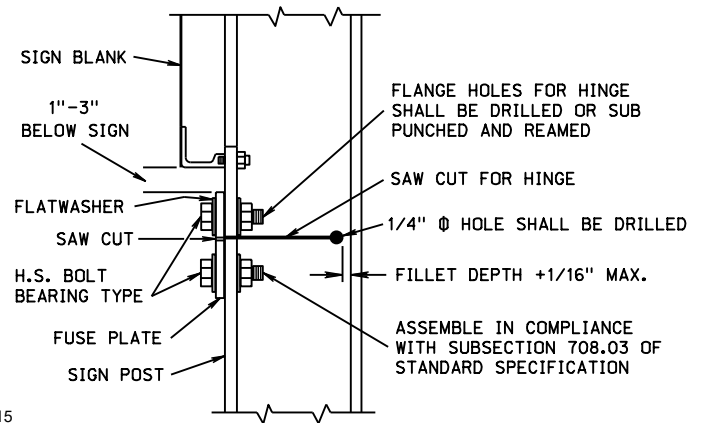


**SECTION A-A SECTION B-B**

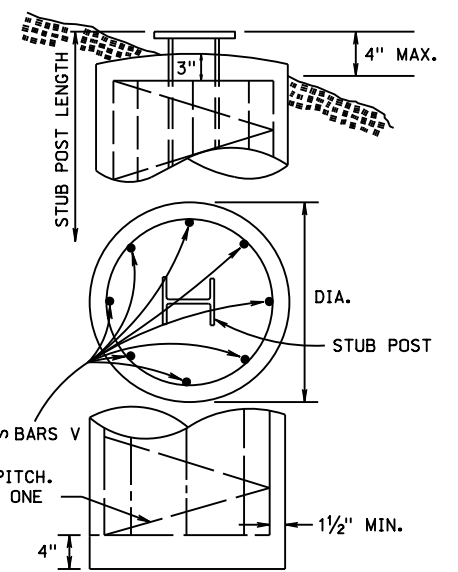


**FUSE LINK PLATE DETAIL** for w6 x 15

USE H.S. BOLTS WITH HEX. HD. & HEX. NUT, ONE FLAT WASHER UNDER EACH BOLT HEAD AND UNDER EACH NUT.

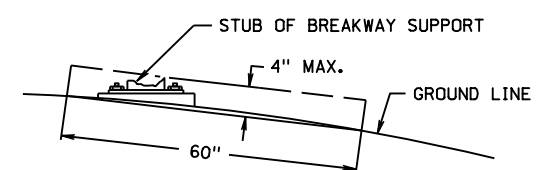


**FUSE LINK PLATE INSTALLED**



**FOOTING DETAIL**

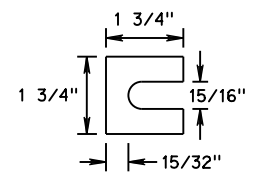
NO. 2 PLAIN SPIRAL @ 6" PITCH. THREE FLAT TURNS TOP AND ONE FLAT TURN BOTTOM.



**BREAKWAY SUPPORT STUB HEIGHT MEASUREMENT**

STUB POST BASE CONNECTION TABLE												
SIGN AREA SQ. FT.	POST NO.	W SHAPES	BOLT SIZE, LENGTH & MAX. TORQUE	A	B	C	D	E	T <sub>1</sub>	W	R	* CONNECTION WT. IN LBS.
0-85	I	W6 x 15	3/4" x 3-1/4"	6	10 1/4	3/4"	3 1/2	1 1/4	1	5/16	13/32	88
86-120	II	W8 x 18	80 FT.-LB.	6	12 1/2	3/4"	3 1/2	1 1/4	1	5/16	13/32	105
121-170	III	W8 x 24	7/8" x 4" 100 FT.-LB.	8	13 1/8	7/8"	4	2	1 1/4	3/8	15/32	164
171-225	IV	W8 x 31		184								
OVER 225	V	W8 x 48		238								

\* INCLUDES WEIGHTS OF 2 BASE CONNECTION PLATES, BOLTS, WASHERS, STUB POST, FUSE PLATE AND WELDING. WEIGHT OF POST, ABOVE BASE CONNECTION, SHALL BE COMPUTED AND ADDED FOR EACH LOCATION.

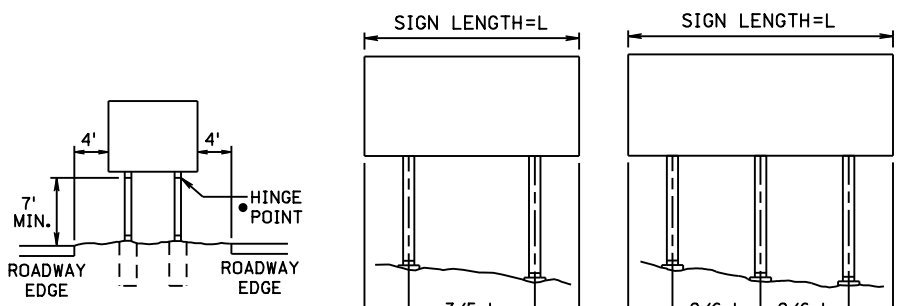


**SHIM DETAIL**

FURNISH 2 @ .012" ± THICK AND 2 @ .032" ± THICK SHIMS PER POST. SHIMS SHALL BE FABRICATED FROM BRASS SHIM STOCK OR STRIP CONFORMING TO A.S.T.M.-B36.

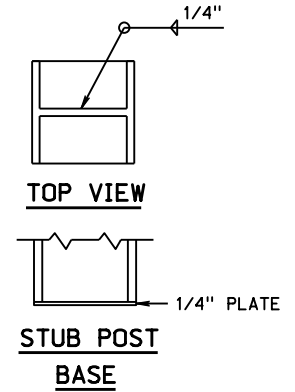
POST NO.	FUSE LINK PLATE TABLE										BOLT		PLATE
	E	H	J	L	M	N	X	Y	d	t	DIA.	MIN. LENGTH	wt. in lbs.
I	5 1/4	2 3/4	1 1/4	5	2 3/4	1 1/8	2 1/16	7/8	11/16	3/8	5/8	2 1/4	2.54
II	5 1/4	2 3/4	1 1/4	5	2 3/4	1 1/8	2 1/16	7/8	11/16	3/8	5/8	2 1/4	2.54
III	6 1/2	3 1/2	1 1/2	6 1/2	3 1/2	1 1/2	2	2 1/2	15/16	1/2	7/8	2 3/4	5.63
IV	6 1/2	3 1/2	1 1/2	6 1/2	3 1/2	1 1/2	2	2 1/2	15/16	1/2	7/8	3	5.63
V	6 1/2	3 1/2	1 1/2	6 1/2	3 1/2	1 1/2	2	2 1/2	15/16	1/2	7/8	3	5.63

IF MINIMUM BOLT LENGTHS AS SHOWN IN TABLE ARE NOT AVAILABLE, USE NEXT LONGER STANDARD BOLT LENGTH.



**EXIT SIGNS AT GORE AREA**

**POST SPACING**



**FOR ALL W SHAPES**

FUSE PLATE BOLT TENSION		
BOLT SIZE	REQUIRED MIN. BOLT TENSION (lbs.)	EQUIVALENT TENSION
1/2	12,050	*
5/8	19,200	*
3/4	28,400	*
7/8	39,250	*
1	51,500	*

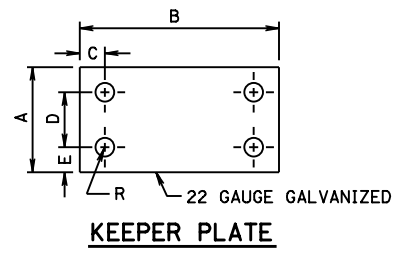
\* SEE NOTE 9

**GENERAL NOTES**

- THE FABRICATION OF THE SUPPORTS INVOLVING SUCH OPERATIONS AS CUTTING, DRILLING, WELDING AND CLEANING SHALL BE IN ACCORDANCE WITH SECTION 708. MILL TEST REPORTS SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO FABRICATION.
- SIGNS SHALL BE ERECTED SO THE SIGN FACE IS TRULY VERTICAL AND AT A 93° ANGLE (AS SHOWN), WHEN THE SIGN IS 15' OR LESS FROM THE EDGE OF THE PAVEMENT. WHEN THE SIGN IS MORE THAN 15' FROM THE PAVEMENT EDGE, THE SIGN SHOULD BE PLACED NOT LESS THAN 90° TO THE DIRECTION OF TRAFFIC.
- THE FOOTINGS ARE DESIGNED IN CYLINDRICAL SHAPE FOR USE WITH POWER EQUIPMENT, WHERE CONDITIONS PERMIT. CONCRETE MAY BE POURED AGAINST SOIL WITHOUT FORMING, EXCEPT FROM A MINIMUM OF 6" UNDER EXPOSED LOW SIDE (AS SHOWN) TO THE TOP OF THE FOOTING.
- ALL CONCRETE SHALL BE CLASS "47B".
- ALL STRUCTURAL STEEL SHALL COMPLY WITH ASTM-A36 OR EQUAL AND SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM-A123.
- ALL BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED HIGH STRENGTH STEEL COMPLYING WITH ASTM-A325.
- THE SAW CUT FOR THE HINGE SHOULD BE MADE ON THE JOB SITE TO AVOID DEFORMATION OF THE PRE-CUT POST IN SHIPPING. IF THE CONTRACTOR ELECTS TO SAW CUT FOR THE HINGE BEFORE GALVANIZING THE POST, THE POST SHALL BE CAREFULLY INSPECTED AT THE JOB SITE AND ANY DEFORMATION OF THE POST SHALL BE CAUSE OF REJECTING THE POST. IF THE SAW CUT IS FILLED WITH GALVANIZING MATERIAL, ON ARRIVAL AT THE JOB SITE, THE CONTRACTOR SHALL BE REQUIRED TO REMOVE THE GALVANIZING FROM THE CUT. WHEN THE SAW CUT IS MADE AT THE JOB SITE, THE SAW CUT SHALL BE TREATED WITH A ZINC DUST-OXIDE PRIMER OR ZINC RICH PAINT COMPLYING WITH SECTION 1077.
- ALL POSTS WITHIN A 7-FOOT PATH SHOULD NOT WEIGH MORE THAN 45 POUNDS PER FOOT AND THE TOTAL WEIGHT BELOW THE HINGE, BUT ABOVE THE SHEAR PLATE OF THE BREAKAWAY BASE, SHOULD NOT EXCEED 600 POUNDS.
- FUSE PLATE BOLTS MUST BE TIGHTENED BY THE TURN-OF-NUT METHOD. SEE TABLE 708.04 FOR PROPER NUT ROTATION. ASSEMBLE IN COMPLIANCE WITH SUBSECTION 708.03.
- SIGN POSTS SHALL BE CUT OFF FLUSH WITH THE TOP OF THE SIGN.

**PROCEDURE FOR ASSEMBLY OF BASE CONNECTION**

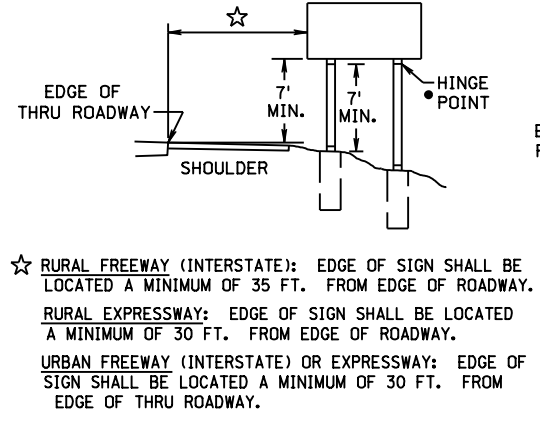
- ASSEMBLE POST TO STUB WITH BOLTS, WITH ONE FLAT WASHER ON EACH BOLT BETWEEN PLATES.
- SHIM AS REQUIRED TO PLUMB POST.
- TIGHTEN ALL BOLTS THE MAXIMUM POSSIBLE WITH 12" TO 15" WRENCH TO BED WASHERS AND SHIMS AND TO CLEAN BOLT THREADS; THEN LOOSEN EACH BOLT IN TURN AND RETIGHTEN IN A SYSTEMATIC ORDER. THIS PROCEDURE SHALL BE REPEATED UNTIL ALL BOLTS HAVE BEEN PROPERLY TENSIONED BY THE TURN-OF-NUT METHOD (SEE NOTE 9).
- BURR THREAD AT JUNCTION WITH NUT, USING A CENTER PUNCH TO PREVENT NUT LOOSENING.



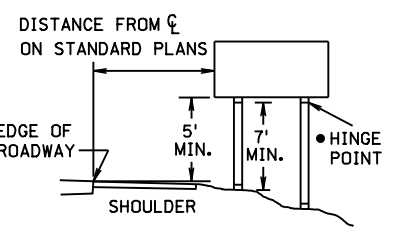
**KEEPER PLATE**

FOOTING TABLE						
POST NO.	STUB POST LENGTH	STUB POST PROJECTION	DIA.	DEPTH	CU. YDS. OF CONC.	VERTICAL REBAR SIZE
I	3'-0"	3"	24"	4'-6"	.52	#4
II	3'-0"	3"	30"	4'-6"	.82	#4
III	3'-0"	3"	30"	5'-0"	.91	#5
IV	3'-0"	3"	36"	5'-6"	1.44	#5
V	3'-0"	3"	36"	5'-6"	1.44	#5

NOTE: SEE STUB POST BASE CONNECTION TABLE FOR DIMENSIONS. ALL TABLE DIMENSIONS IN INCHES EXCEPT AS INDICATED.

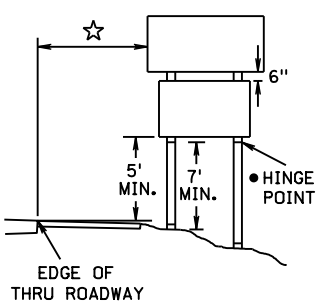


**SIGNS LOCATED ADJACENT TO ROADWAY**

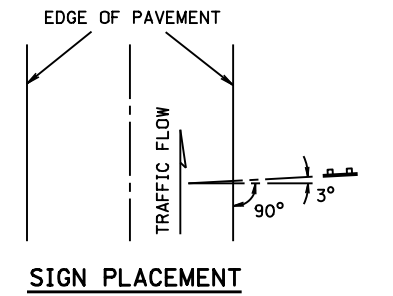


**RAMP SIGNS LOCATED OFF INTERSTATE**

• THE HINGE POINT SHOULD BE AT LEAST 7 FEET ABOVE THE GROUND. NO SUPPLEMENTARY SIGN SHALL BE PLACED BELOW THE HINGES.



**SUPPLEMENTARY SIGN MOUNTING**



**SIGN PLACEMENT**

NEBRASKA DEPARTMENT OF TRANSPORTATION  
TRAFFIC ENGINEERING DIVISION

**SIGN DESIGN DETAILS**

DESIGNED	KSF	BREAK-A-WAY TYPE POST	1/1
REVIEWED		DETAILS FOR TYPE "B" & "C" SIGNS	
APPROVED	DATE DRAWN	TRAFFIC ENGINEER	DATE



Computer: NDOTTRAFFIC8

User: dor32291

Date: 27-AUG-2018 09:20

File: ydet011.dgn  
Scale: 1:200