

2010 Guide Sign Design Manual Changes and Corrections

Last Update: May 14, 2010

Chap	Page	Item	Correction	Action
3	3-5	In the table column >55 mph, 4 or more lanes and in the row Supplemental, Arrow Size	Change to: 6 or 15, 5 or 13 14 head	Print the attached page 3-5 and replace the page in the manual. Or, manually edit in your manual.
3	3-11	Last paragraph, 1 st sentence	Change to “ “The information on arrow dimensions and the corresponding legends is found in table 6 on the next page.”	Print the attached page 3-11 and replace the page in the manual. Or, manually edit in your manual.
3	3-12	Figure Title	At the bottom of the figure, the title is: STRAIGHT ARROWS Table 6: Arrow Selection and Sizes Delete the line “Table 6: Arrow Selection and Sizes”	Print the attached page 3-11 and replace the page in the manual. Or, manually edit in your manual.
3	3-15	New Text	Add new text below Table 7: “Do not abbreviate Cardinal Directions.”	Print the attached page 3-15 and replace the page in the manual. Or, manually edit in your manual.
3	3-18	Add Dimension	For the sample “Glenville” sign, add a dimension the dimension “36” for the US Highway 65 overlay. This can be placed on the right side of the sign in the space between the arrows	Print the attached page 3-18 and replace the page in the manual. Or, manually edit in your manual.
3	3-21	Add text to figure	The right side of the figure labels the axis as “PANEL LENGTH”. Edit to read “PANEL LENGTH (WIDTH)”	Print the attached page 3-21 and replace the page in the manual. Or, manually edit in your manual.
3	3-22	Add text to figure	The right side of the figure labels the axis as “PANEL LENGTH”. Edit to read “PANEL LENGTH (WIDTH)”	Print the attached page 3-22 and replace the page in the manual. Or, manually edit in your manual.
4	4-42	First sentence under bullet list	According to section 3.5, Combination # 4 6, the following object and spacing requirements exist.	Print the attached page 4-42 and replace the page in the manual. Or, manually edit in your manual.

Table 3: Guidelines for Guide Sign (Non-Freeway) Font Size

Sign Type		Speed						
		<45 mph		45-50 mph		>50 mph	55 mph	>55 mph
		2 Lane/ 2 Way	4 or More Lanes	2 Lane/ 2 Way	4 or More Lanes	2 Lane/ 2 Way	4 or More Lanes	4 or More Lanes
GROUND MOUNTED:								
Destination	City/Street Name	6-4.5	8-6	8-6	10.7-8	8-6	10.7-8	13.3-10
	Arrow Size	3 or 13 head	5 or 14 head	5 or 14 head	6 or 15 head	5 or 14 head	6 or 15 head	7 or 16 head
Distance	Cardinal Direction	6	6	6	8	6	8	8
	Route Marker	18 OL	18 OL	18 OL	24 OL	18 OL	24 OL	24 OL
	City/Street Name	6-4.5	6-4.5	6-4.5	8-6	6-4.5	8-6	10.7-8
Junction	Cardinal Direction	8	8	8	8	8	10	10
	Route Marker	24 OL	24 OL	24 OL	24 OL	24 OL	24 OL	24 OL
	Action Message	8	8	8	8	8	10	10
Directional	Cardinal Direction	6	8	8	8	8	8	10
	Route Marker	18 OL	24 OL	24 OL	24 OL	24 OL	24 OL	24 OL
	City/Street Name	6-4.5	8-6	8-6	10.7-8	8-6	10.7-8	13.3-10
	Arrow Size with City/Street Name	3 or 13 head	5 or 14 head	5 or 14 head	6 or 15 head	5 or 14 head	6 or 15 head	7 or 16 head
	Arrow Size Without City/Street Name	3 or 13 head	5 or 14 head	5 or 14 head	5 or 14 head	5 or 14 head	5 or 14 head	6 or 15 head
Supplemental (See Note 5)	Generic	6	6	6	8	6	8	8
	Proper Name	6-4.5	6-4.5	6-4.5	8-6	8-6	8-6	10.7-8, 8-6
	Action Message	5	5	5	6	6	6	8
	Arrow Size	3 or 13 head	3 or 13 head	3 or 13 head	5 or 14 head	5 or 14 head	5 or 14 head	6 or 15, 5 or 14 head
SIGNAL MAST ARM MOUNTED:	Cardinal Direction	8	8	8	8	8	8	8
	Route Marker	24 OL	24 OL	24 OL	24 OL	24 OL	24 OL	24 OL
	City/Street Name	8-6	8-6	8-6	8-6	8-6	8-6	8-6
	Arrow Size	5 or 14 head	5 or 14 head	5 or 14 head	5 or 14 head	5 or 14 head	5 or 14 head	5 or 14 head
OTHER OVERHEADS:	Cardinal Direction	8	8	8	8	8	8	10
	Route Marker	24 OL	24 OL	24 OL	24 OL	24 OL	24 OL	24 OL
	City/Street Name	8-6	8-6	8-6	10.7-8	8-6	10.7-8	13.3-10
	Arrow Size	5 or 14 head	5 or 14 head	5 or 14 head	6 or 15 head	5 or 14 head	6 or 15 head	7 or 16 head

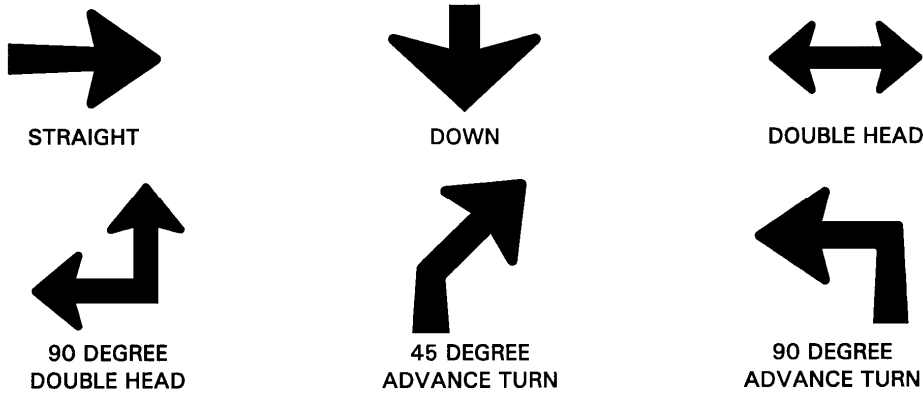
Notes:

OL = Overlay

- Letter fonts are E Modified unless otherwise noted.
- In urban areas there may be limited horizontal space in which to place a sign. It is then permissible to reduce the size of the letters of a sign by one step (i.e. 6-4.5 to 4-3). D Modified cardinal directions may be used on mast arm signs if load restrictions exist.
- These minimum and recommended sizes are shown in inches.
- For signing on freeway and expressway ramps use the sizes shown under the speed >50 mph, 2 lane/2 way heading.
- When a sign includes both destination and supplemental information, and letter sizes stipulated above are different for each, upsize the supplemental legend to the destination legend size.

3.8 Arrows

Arrows for guide signs are divided into several types:



Straight arrows can be installed at different angles, from 0 to 180 degrees, with 0 degrees designated right, 90 degrees straight up, and 180 degrees left.

Specifically, 60 degree arrows are used for exit ramps, and 45 degree arrows for exit loops.

Down arrows can also be installed at different angles, but are used only on overhead signs where they can be centered directly over a specific lane.

The 90 degree double head, 45 degree advance turn, and 90 degree advance turn arrows are designated left or right.

Advance turn arrows may be used where there is confusion as to where the actual signed turn is. Their use should be kept to a minimum.

When more than one arrow is used on a sign, the arrows, with corresponding legends, are to be placed in the order specified below:



These alignments override route marker placements.

The information on arrow dimensions and the corresponding legends is found on the next page. The legend size can be matched to the appropriate arrow size by using that table.

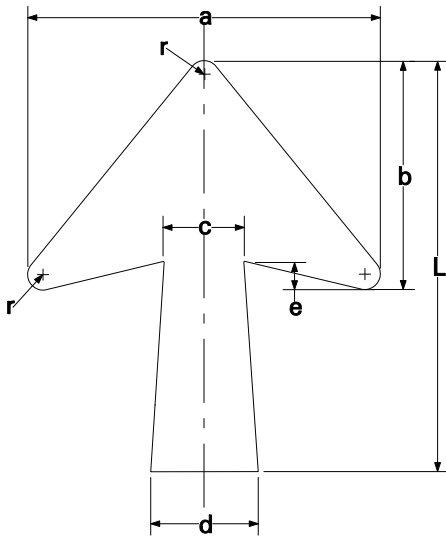


TABLE 1 - SHORT SHAFT ARROWS

Head	Matching Letter Size	Standard Length L	Dimensions in Inches					
			a	b	c	d	e	r
1	4", 4.3"	6"	5.58	3.63	1.28	1.72	.47	.26
2	5"	8"	7.06	4.60	1.61	2.18	.56	.32
3	6", 6-4.5"	10"	8.35	5.44	1.91	2.58	.67	.38
4			9.75	6.35	2.23	3.02	.78	.44
5	8", 8-6"	13"	11.16	7.27	2.55	3.44	.89	.51
6	10", 10.67-8"	17"	15.09	9.83	3.45	4.65	1.21	.69
7	10", 12", 13.33-10"	20"	17.72	11.54	4.05	5.47	1.42	.81
8	16-12"	25"	21.88	14.25	5.00	6.75	1.75	1.00

NOTES:

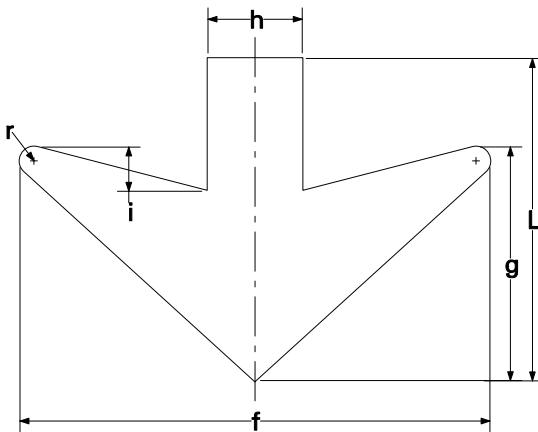
1. Arrow Code: First number specifies the head to be used. Second number specifies the length L. Thus, a 5-13 arrow has head #5 and length 13".
2. For each legend size there is a corresponding short shaft and long shaft arrow.

TABLE 2 - LONG SHAFT ARROWS

Head	Matching Letter Size	Standard Length L	Dimensions in Inches					
			a	b	c	d	e	r
11	4", 4.3"	9"	5.70	4.36	1.38	1.83	.45	.26
12	5"	12"	7.18	5.48	1.74	2.30	.56	.32
13	6", 6-4.5"	14"	8.56	6.54	2.07	2.74	.67	.38
14	8", 8-6"	18"	11.41	8.72	2.76	3.66	.90	.51
15	10", 10.67-8"	24"	15.14	11.56	3.66	4.85	1.19	.68
16	10", 12", 13.33-10"	29"	18.24	13.93	4.41	5.84	1.43	.82
17	16-12", 20-15"	36"	22.25	17.00	5.38	7.13	1.75	1.00
17		42"	22.25	17.00	5.38	8.39	1.75	1.00
18		36"	26.18	20.00	6.33	7.13	2.06	1.18
18		42"	26.18	20.00	6.33	8.39	2.06	1.18

OVERHEAD SIGNS ONLY

Arrow	Letter and Overlay Size	Dimensions in Inches					
		f	g	h	i	L	r
16"	13.33-10", 10" & less	24.0	12.0	4.88	2.25	16.5	.75
22"	16-12", 12" & greater	32.0	16.0	6.5	3.0	22.0	1.00



ARROW SELECTION:

Adjacent to one line of legend - use Table 1 for vertical, horizontal, or diagonal arrow.

Adjacent to two or more lines of legend - use Table 2 for vertical or diagonal arrow; Table 1 for horizontal arrow.

Beneath one or more lines of legend - use Table 2 for horizontal or diagonal arrow ≤ 45°; Table 1 for vertical or diagonal arrow > 45°.

ALL FREEWAY SIGNS & EXPRESSWAY INTERCHANGE SIGNS - use Table 2.

ARROW SIZE:

Arrow head numbers determine which straight arrow corresponds with which advance turn, double head, and double head 90° arrows and legend.

For example, a 5-13 arrow and a 5-24 double head arrow (both have #5 heads) would be appropriate arrows to use with an 8-6" legend.

APPROVED
9/1/73

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1/1/03

STRAIGHT ARROWS



PAGE NUMBER
102

3.10 Abbreviations

The only approved abbreviations are listed in the following table.

Table 7: List of Abbreviations

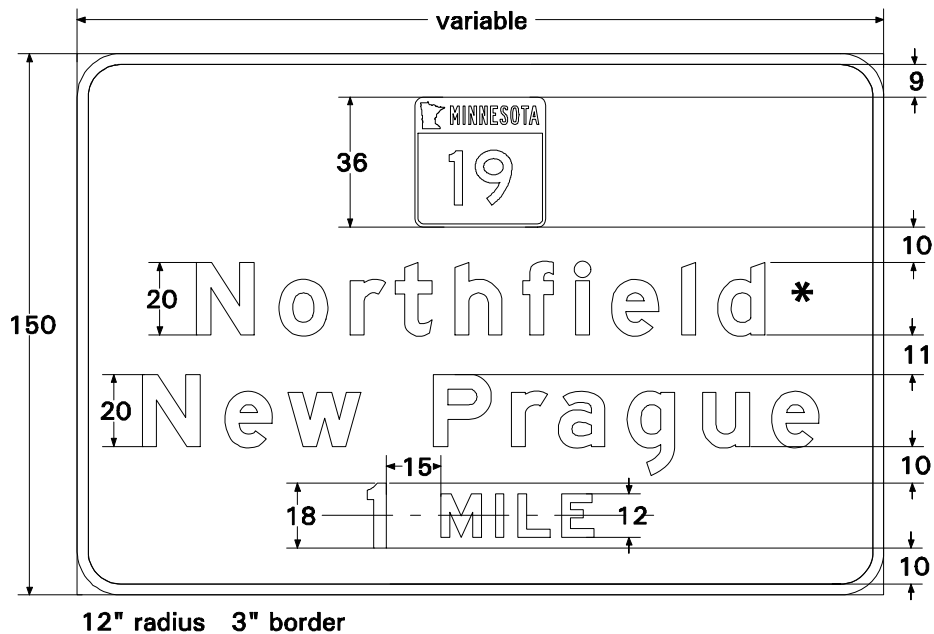
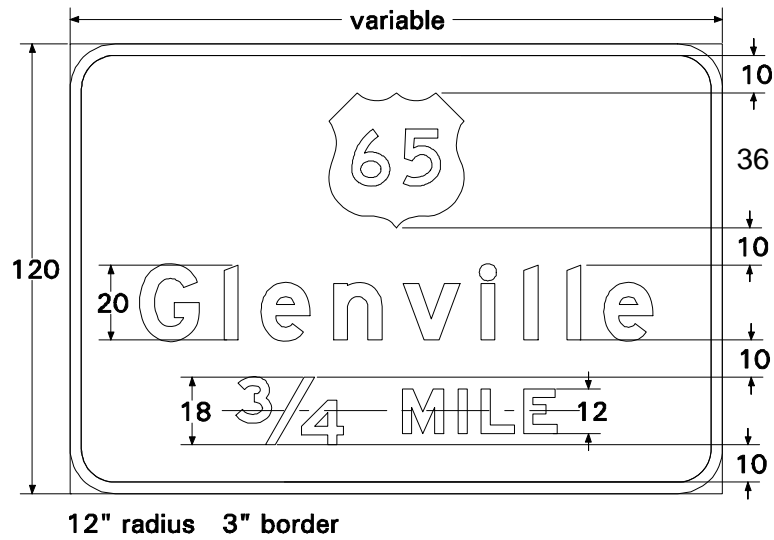
Full Word	Abbreviation	Full Word	Abbreviation
Alternate	ALT	Lane	Ln
Avenue	Ave	Mile	MI
Boulevard	Blvd	North	N
Center	Cntr	Parkway	Pkwy
Circle	Cir	Pedestrian	PED
Court	Ct	Place	Pl
Drive	Dr	Road	Rd
East	E	South	S
Expressway	Expwy	Square	Sq
Feet	FT	Street	St
Freeway	Fwy	Trail	Tr
Highway	Hwy	University	Univ
Junction	JCT	West	W

Do not abbreviate Cardinal directions.

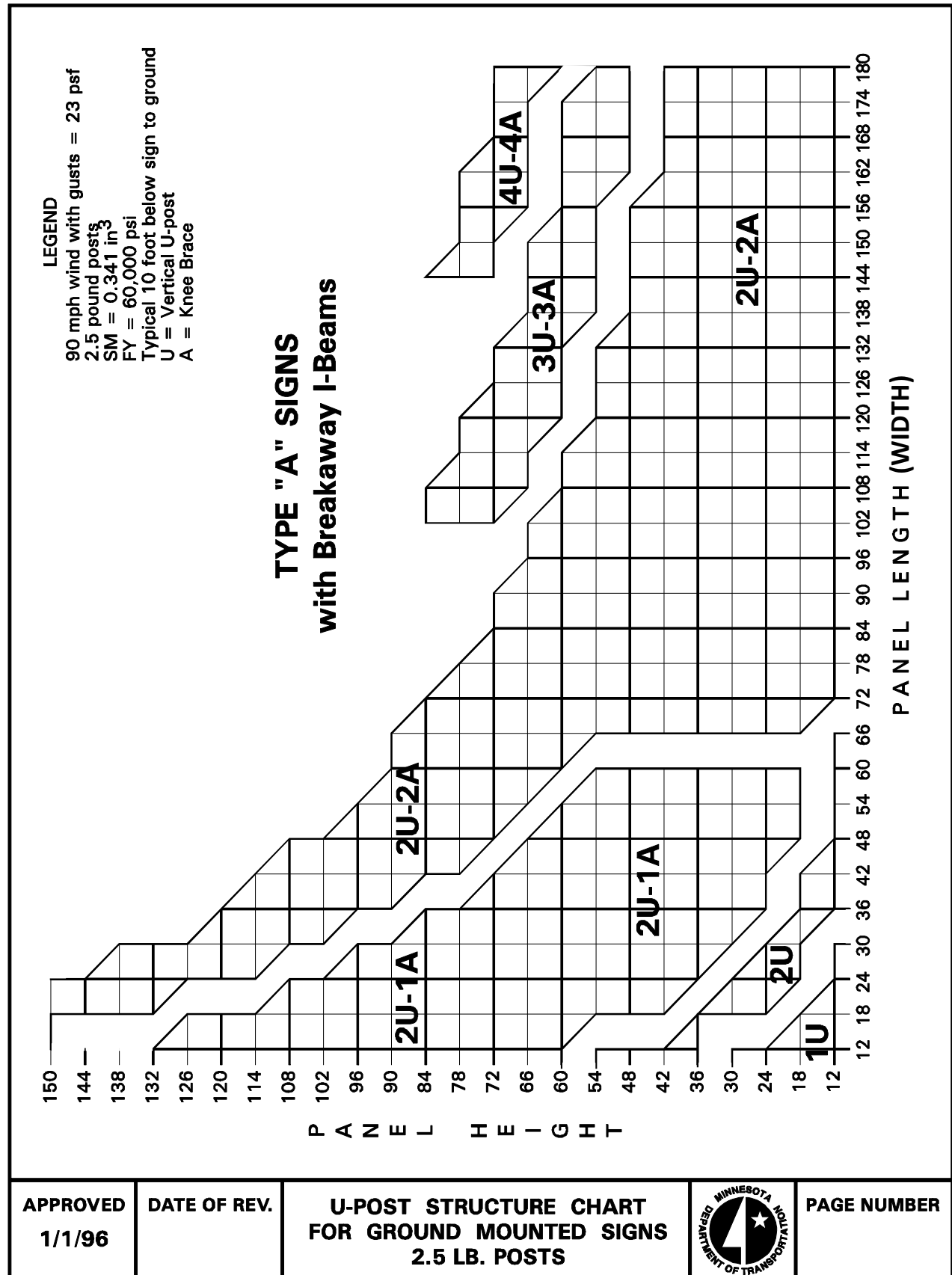
3.12 Typical Freeway Signs

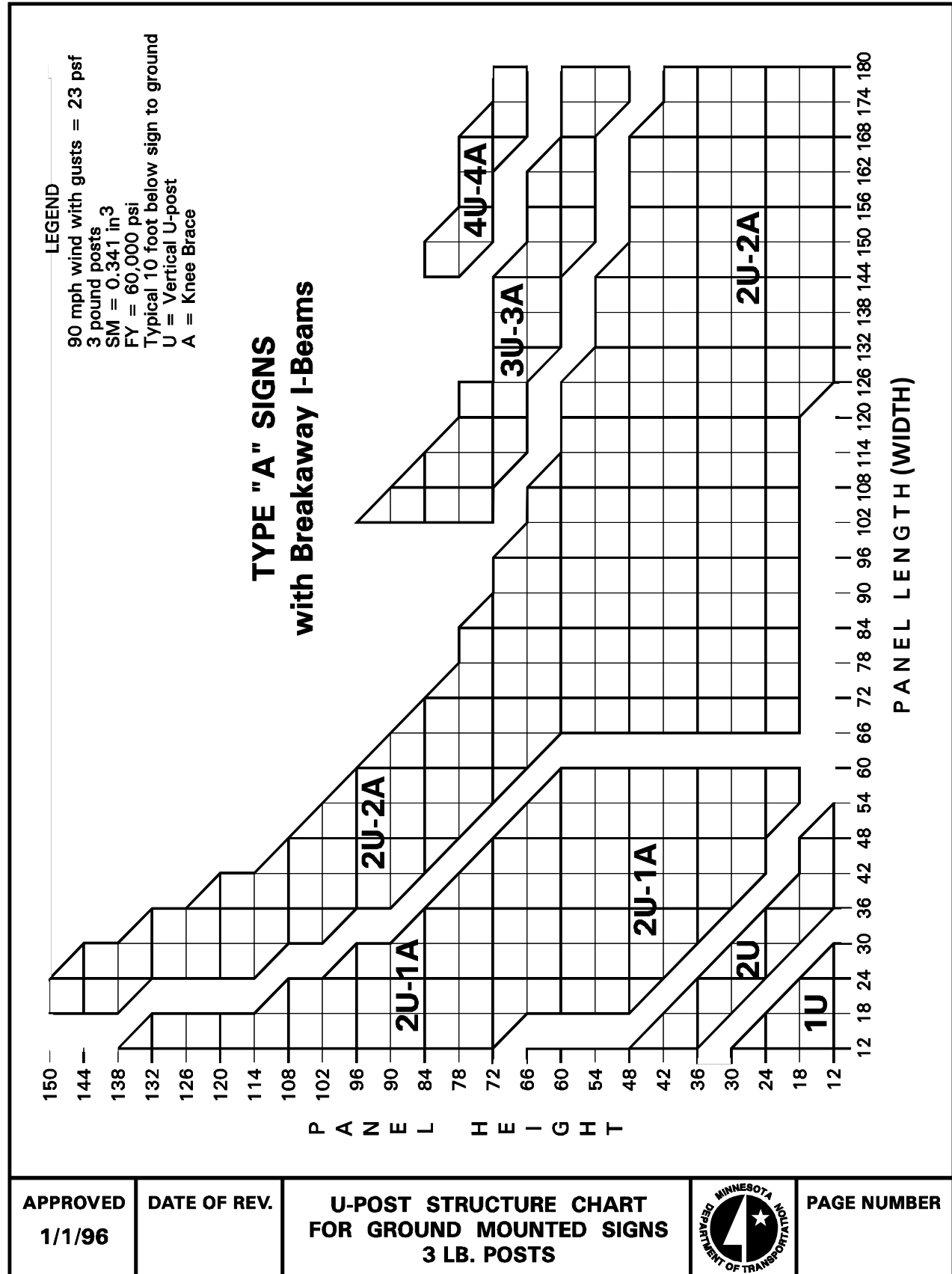
3.12.1 Freeway Advance Guide Type A Signs

There are two formats to this classification, one or two city names. The border shall be three inches wide due to the use of 20-15" legend (complies with Table 2, Note 1). The spacing is standardized, as follows:



* City names shall appear in the same order as those on the ramp destination guide sign.





4.10.1 Example #8, Three Line Distance Sign (Freeway Overhead) Calculations

Vertical Size of Panel and Line Spacing

Given:

- 3 rows of objects, 3 route markers
- Route marker (**Table 4**) = 24 OL, based on Freeway application
- Font size (**Table 4**) = 13.3-10, based on Freeway application
- Follow **Table 5** in section 3.5 for the spacing requirements (this is a standard sign application)

According to section 3.5, Combination # 6, the following object and spacing requirements exist

From top to bottom:

2"-top border

7" space

24"-route marker

6" space

24"-route marker

7.7" space

13.3" text

10" space

2"-bottom border

Vertical panel size is 96"

Horizontal Size of Panel and Spacing

The left horizontal spaces for the left aligned components and the right horizontal spaces for the right aligned components will be set equally to 13". Excess amounts on the right and left are added to the horizontal space between left and right legend columns. A minimum of 24" space is required between a destination and its corresponding mileage, while a minimum of 20" horizontal space is maintained between the longest destination line and the longest mileage.

Key Placement Issues

- Mileage entered as separate objects so they can be justified
- Text is left justified and distances are right justified
- Route Markers are middle justified on text
- Follow standard vertical spacing tables