

APPENDIX D

– STANDARD HIGHWAY

SIGNS ALPHABET –

Intentionally blank.

Sign Design Manual (TEM 295-2)

General

The English version of the Standard Highway Signs Alphabet from FHWA is undergoing a revision. In the 1966 version of the Standard Alphabets should be used.

Spacing tables for the Series B, C, D and E alphabets are provided herein. These tables provide letter and numeral widths for several standard letter heights. In addition, the recommended dimension for the space between any combination of letters or numerals may be obtained through a two-step process described in the table. This space is the distance measured horizontally between the extreme right edge of the preceding letter and the extreme left edge of the following letter. No part of these letters may extend into this space.

The width of a word or name may be determined by adding the sum of the letter widths to the sum of the spaces between the letters.

Since the Series A alphabet is no longer acceptable for use in highway signs, it is not included in this set of tables.

Intentionally blank.

SERIES B

To determine the proper space between letters or numerals, obtain the code number from TABLE I or II and enter TABLE VI for that code number to the desired letter or numeral height.

TABLE I				TABLE IV							
Letter to Letter Code Numbers				Width of Letter							
Preceding Letter	B, D, E, F, H, I, K, L, M, N, P, R, U	C, G, O, Q, S, X, Z	A, J, T, V, W, Y	Letter Height in inches							
				4"	5"	6"	8"	10"	12"	18"	
A	2	2	4	A	2.12	2.66	3.19	4.25	5.31	6.38	9.56
B	1	2	2	B	1.69	2.11	2.53	3.38	4.22	5.06	7.59
C	2	2	3	C	1.69	2.11	2.53	3.38	4.22	5.06	7.59
D	1	2	2	D	1.69	2.11	2.53	3.38	4.22	5.06	7.59
E	2	2	3	E	1.50	1.88	2.25	3.00	3.75	4.50	6.75
F	2	2	3	F	1.50	1.88	2.25	3.00	3.75	4.50	6.75
G	1	2	2	G	1.69	2.11	2.53	3.38	4.22	5.06	7.59
H	1	1	2	H	1.69	2.11	2.53	3.38	4.22	5.06	7.59
I	1	1	2	I	0.50	0.62	0.75	1.00	1.25	1.50	2.25
J	1	1	2	J	1.75	2.19	2.62	3.50	4.38	5.25	7.88
K	2	2	3	K	1.75	2.19	2.62	3.50	4.38	5.25	7.88
L	2	2	4	L	1.50	1.88	2.25	3.00	3.75	4.50	6.75
M	1	1	2	M	1.94	2.42	2.91	3.88	4.84	5.81	8.72
N	1	1	2	N	1.69	2.11	2.53	3.38	4.22	5.06	7.59
O	1	2	2	O	1.81	2.27	2.72	3.62	4.53	5.44	8.16
P	1	2	2	P	1.69	2.11	2.53	3.38	4.22	5.06	7.59
Q	1	2	2	Q	1.81	2.27	2.72	3.62	4.53	5.44	8.16
R	1	2	2	R	1.69	2.11	2.53	3.38	4.22	5.06	7.59
S	1	2	2	S	1.69	2.11	2.53	3.38	4.22	5.06	7.59
T	2	2	4	T	1.50	1.88	2.25	3.00	3.75	4.50	6.75
U	1	1	2	U	1.69	2.11	2.53	3.38	4.22	5.06	7.59
V	2	2	4	V	1.84	2.30	2.77	3.69	4.61	5.53	8.31
W	2	2	4	W	2.50	3.12	3.75	5.00	6.25	7.50	11.25
X	2	2	3	X	1.84	2.30	2.77	3.69	4.61	5.53	8.31
Y	2	2	4	Y	2.12	2.66	3.19	4.25	5.31	6.38	9.56
Z	2	2	3	Z	1.69	2.11	2.53	3.38	4.22	5.06	7.59

Sign Design Manual (TEM 295-2)

TABLE II				TABLE V							
Numeral to Numeral Code Number				Width of Numerals (in inches)							
Preceding Numeral	1, 5	2, 3, 6, 8, 9, 0	4, 7		4"	5"	6"	8"	10"	12"	18"
1	1	1	2	1	0.81	1.02	1.22	1.62	2.03	2.44	3.66
2	1	2	2	2	1.69	2.11	2.53	3.38	4.22	5.06	7.59
3	1	2	2	3	1.69	2.11	2.53	3.38	4.22	5.06	7.59
4	2	2	4	4	1.94	2.42	2.91	3.88	4.84	5.81	8.72
5	1	2	2	5	1.69	2.11	2.53	3.38	4.22	5.06	7.59
6	1	2	2	6	1.69	2.11	2.53	3.38	4.22	5.06	7.59
7	2	2	4	7	1.69	2.11	2.53	3.38	4.22	5.06	7.59
8	1	2	2	8	1.69	2.11	2.53	3.38	4.22	5.06	7.59
9	1	2	2	9	1.69	2.11	2.53	3.38	4.22	5.06	7.59
0	1	2	2	0	1.81	2.27	2.72	3.62	4.53	5.44	8.16

TABLE III		TABLE VI							
Width of Stroke		Space in inches measured horizontally from the extreme right edge of the preceding letter to the extreme left edge of the following letter (number).							
Letter Height	Stroke Width (inches)	Code Number	4"	5"	6"	8"	10"	12"	18"
4"	0.50	1	0.75	0.94	1.13	1.50	1.88	2.25	3.37
5"	0.62								
6"	0.75	2	0.60	0.75	0.90	1.20	1.50	1.80	2.70
8"	1.00								
10"	1.25	3	0.40	0.50	0.60	0.80	1.00	1.20	1.80
12"	1.50								
18"	2.25	4	0.20	0.25	0.30	0.40	0.50	0.60	0.90

SERIES C

To determine the proper space between letters or numerals, obtain the code number from TABLE I or II and enter TABLE VI for that code number to the desired letter or numeral height.

TABLE I				TABLE IV							
Letter to Letter Code Numbers				Width of Letter							
Preceding Letter	B, D, E, F, H, I, K, L, M, N, P, R, U	C, G, O, Q, S, X, Z	A, J, T, V, W, Y	Letter Height in inches							
					4"	5"	6"	8"	10"	12"	18"
A	2	2	4	A	2.50	3.12	3.75	5.00	6.25	7.50	11.25
B	1	2	2	B	2.19	2.73	3.28	4.38	5.47	6.56	9.84
C	2	2	3	C	2.19	2.73	3.28	4.38	5.47	6.56	9.84
D	1	2	2	D	2.19	2.73	3.28	4.38	5.47	6.56	9.84
E	2	2	3	E	2.00	2.50	3.00	4.00	5.00	6.00	9.00
F	2	2	3	F	2.00	2.50	3.00	4.00	5.00	6.00	9.00
G	1	2	2	G	2.19	2.73	3.28	4.38	5.47	6.56	9.84
H	1	1	2	H	2.19	2.73	3.28	4.38	5.47	6.56	9.84
I	1	1	2	I	0.59	0.70	0.84	1.12	1.41	1.69	2.53
J	1	1	2	J	2.00	2.50	3.00	4.00	5.00	6.00	9.00
K	2	2	3	K	2.19	2.73	3.28	4.38	5.47	6.56	9.84
L	2	2	4	L	2.00	2.50	3.00	4.00	5.00	6.00	9.00
M	1	1	2	M	2.59	3.23	3.89	5.19	6.48	7.78	11.67
N	1	1	2	N	2.19	2.73	3.28	4.38	5.47	6.56	9.84
O	1	2	2	O	2.31	2.89	3.47	4.62	5.78	6.94	10.41
P	1	2	2	P	2.19	2.73	3.28	4.38	5.47	6.56	9.84
Q	1	2	2	Q	2.31	2.89	3.47	4.62	5.78	6.94	10.41
R	1	2	2	R	2.19	2.73	3.28	4.38	5.47	6.56	9.84
S	1	2	2	S	2.19	2.73	3.28	4.38	5.47	6.56	9.84
T	2	2	4	T	2.00	2.50	3.00	4.00	5.00	6.00	9.00
U	1	1	2	U	2.19	2.73	3.28	4.38	5.47	6.56	9.84
V	2	2	4	V	2.44	3.05	3.66	4.88	6.09	7.31	10.97
W	2	2	4	W	3.00	3.75	4.50	6.00	7.50	9.00	13.50
X	2	2	3	X	2.34	2.92	3.52	4.69	5.86	7.03	10.56
Y	2	2	4	Y	2.50	3.12	3.75	5.00	6.26	7.50	11.25
Z	2	2	3	Z	2.19	2.73	3.28	4.38	5.47	6.56	9.84

Sign Design Manual (TEM 295-2)

TABLE II				TABLE V							
Numeral to Numeral Code Number				Width of Numerals (in inches)							
Preceding Numeral	1, 5	2, 3, 6, 8, 9, 0	4, 7		4"	5"	6"	8"	10"	12"	18"
1	1	1	2	1	0.81	1.02	1.22	1.62	2.03	2.44	3.66
2	1	2	2	2	2.19	2.73	3.28	4.38	5.47	6.56	9.84
3	1	2	2	3	2.19	2.73	3.28	4.38	5.47	6.56	9.84
4	2	2	4	4	2.44	3.05	3.66	4.88	6.09	7.31	10.97
5	1	2	2	5	2.19	2.73	3.28	4.38	5.47	6.56	9.84
6	1	2	2	6	2.19	2.73	3.28	4.38	5.47	6.56	9.84
7	2	2	4	7	2.19	2.73	3.28	4.38	5.47	6.56	9.84
8	1	2	2	8	2.19	2.73	3.28	4.38	5.47	6.56	9.84
9	1	2	2	9	2.19	2.73	3.28	4.38	5.47	6.56	9.84
0	1	2	2	0	2.31	2.89	3.47	4.52	5.78	6.94	10.41

TABLE III		TABLE VI							
Width of Stroke		Space in inches measured horizontally from the extreme right edge of the preceding letter to the extreme left edge of the following letter (number).							
Letter Height	Stroke Width (inches)	Code Number	4"	5"	6"	8"	10"	12"	18"
4"	0.56	1	0.84	1.05	1.26	1.68	2.11	2.53	3.79
5"	0.70								
6"	0.84	2	0.67	0.84	1.01	1.34	1.69	2.03	3.04
8"	1.12								
10"	1.41	3	0.45	0.56	0.68	0.90	1.12	1.36	2.04
12"	1.69								
18"	2.53	4	0.22	0.28	0.34	0.44	0.56	0.68	1.02

SERIES D

To determine the proper space between letters or numerals, obtain the code number from TABLE I or II and enter TABLE VI for that code number to the desired letter or numeral height.

TABLE I				TABLE IV							
Letter to Letter Code Numbers				Width of Letter							
Preceding Letter	B, D, E, F, H, I, K, L, M, N, P, R, U	C, G, O, Q, S, X, Z	A, J, T, V, W, Y	Letter Height in inches							
					4"	5"	6"	8"	10"	12"	18"
A	2	2	4	A	3.34	4.19	5.02	6.69	8.36	10.03	15.06
B	1	2	2	B	2.69	3.36	4.03	5.38	6.72	8.06	12.09
C	2	2	3	C	2.69	3.36	4.03	5.38	6.72	8.06	12.09
D	1	2	2	D	2.69	3.36	4.03	5.38	6.72	8.06	12.09
E	2	2	3	E	2.44	3.05	3.66	4.88	6.09	7.31	10.97
F	2	2	3	F	2.44	3.05	3.66	4.88	6.09	7.31	10.97
G	1	2	2	G	2.69	3.36	4.03	5.38	6.72	8.06	12.09
H	1	1	2	H	2.69	3.36	4.03	5.38	6.72	8.06	12.09
I	1	1	2	I	0.62	0.78	0.94	1.25	1.56	1.88	2.81
J	1	1	2	J	2.50	3.12	3.75	5.00	6.25	7.50	11.25
K	2	2	3	K	2.75	3.44	4.12	5.50	6.88	8.25	12.38
L	2	2	4	L	2.44	3.05	3.66	4.88	6.09	7.31	10.97
M	1	1	2	M	3.09	3.86	4.64	6.19	7.73	9.28	13.94
N	1	1	2	N	2.69	3.36	4.03	5.38	6.72	8.06	12.09
O	1	2	2	O	2.81	3.50	4.22	5.62	7.03	8.44	12.66
P	1	2	2	P	2.69	3.36	4.03	5.38	6.72	8.06	12.09
Q	1	2	2	Q	2.81	3.50	4.22	5.62	7.03	8.44	12.66
R	1	2	2	R	2.69	3.36	4.03	5.38	6.72	8.06	12.09
S	1	2	2	S	2.69	3.36	4.03	5.38	6.72	8.06	12.09
T	2	2	4	T	2.44	3.05	3.66	4.88	6.09	7.31	10.97
U	1	1	2	U	2.69	3.36	4.03	5.38	6.72	8.06	12.09
V	2	2	4	V	3.00	3.75	4.50	6.00	7.50	9.00	13.50
W	2	2	4	W	3.50	4.38	5.25	7.00	8.75	10.50	15.75
X	2	2	3	X	2.69	3.36	4.03	5.38	6.72	8.06	12.09
Y	2	2	4	Y	3.38	4.22	5.06	6.75	8.44	10.12	15.19
Z	2	2	3	Z	2.69	3.36	4.03	5.38	6.72	8.06	12.09

Sign Design Manual (TEM 295-2)

TABLE II				TABLE V							
Numeral to Numeral Code Number				Width of Numerals (in inches)							
Preceding Numeral	1, 5	2, 3, 6, 8, 9, 0	4, 7		4"	5"	6"	8"	10"	12"	18"
1	1	1	2	1	0.97	1.20	1.45	1.94	2.42	2.91	4.38
2	1	2	2	2	2.69	3.36	4.03	5.38	6.72	8.06	12.09
3	1	2	2	3	2.69	3.36	4.03	5.38	6.72	8.06	12.09
4	2	2	4	4	2.94	3.67	4.41	5.88	7.34	8.81	13.22
5	1	2	2	5	2.69	3.36	4.03	5.38	6.72	8.06	12.09
6	1	2	2	6	2.69	3.36	4.03	5.38	6.72	8.06	12.09
7	2	2	4	7	2.69	3.36	4.03	5.38	6.72	8.06	12.09
8	1	2	2	8	2.69	3.36	4.03	5.38	6.72	8.06	12.09
9	1	2	2	9	2.69	3.36	4.03	5.38	6.72	8.06	12.09
0	1	2	2	0	2.81	3.50	4.22	5.62	7.03	8.44	12.66

TABLE III		TABLE VI							
Width of Stroke		Space in inches measured horizontally from the extreme right edge of the preceding letter to the extreme left edge of the following letter (number).							
Letter Height	Stroke Width (inches)	Code Number	4"	5"	6"	8"	10"	12"	18"
4"	0.62	1	0.94	1.17	1.41	1.88	2.34	2.81	4.22
5"	0.78								
6"	0.94	2	0.75	0.94	1.12	1.50	1.88	2.25	3.38
8"	1.25								
10"	1.56	3	0.50	0.62	0.75	1.00	1.25	1.50	2.25
12"	1.88								
18"	2.81	4	0.25	0.31	0.38	0.50	0.62	0.75	1.12

SERIES E

To determine the proper space between letters or numerals, obtain the code number from TABLE I or II and enter TABLE VI for that code number to the desired letter or numeral height.

TABLE I				TABLE IV							
Letter to Letter Code Numbers				Width of Letter							
Preceding Letter	B, D, E, F, H, I, K, L, M, N, P, R, U	C, G, O, Q, S, X, Z	A, J, T, V, W, Y	Letter Height in inches							
					4"	5"	6"	8"	10"	12"	18"
A	2	2	4	A	4.00	5.00	6.00	8.00	10.00	12.00	18.00
B	1	2	2	B	3.19	3.98	4.78	6.38	7.97	9.56	14.34
C	2	2	3	C	3.19	3.98	4.78	6.38	7.97	9.56	14.34
D	1	2	2	D	3.19	3.98	4.78	6.38	7.97	9.56	14.34
E	2	2	3	E	2.94	3.67	4.41	5.88	7.34	8.81	13.22
F	2	2	3	F	2.94	3.67	4.41	5.88	7.34	8.81	13.22
G	1	2	2	G	3.19	3.98	4.78	6.38	7.97	9.56	14.34
H	1	1	2	H	3.19	3.98	4.78	6.38	7.97	9.56	14.34
I	1	1	2	I	0.69	0.86	1.03	1.38	1.72	2.06	3.09
J	1	1	2	J	3.00	3.75	4.50	6.00	7.50	9.00	13.50
K	2	2	3	K	3.25	4.06	4.88	6.50	8.12	9.75	14.62
L	2	2	4	L	2.94	3.67	4.41	5.88	7.34	8.81	13.22
M	1	1	2	M	3.69	4.61	5.53	7.38	9.22	11.06	16.59
N	1	1	2	N	3.19	3.98	4.78	6.38	7.97	9.56	14.34
O	1	2	2	O	3.31	4.14	4.97	6.62	8.28	9.94	14.91
P	1	2	2	P	3.19	3.98	4.78	6.38	7.97	9.56	14.34
Q	1	2	2	Q	3.31	4.14	4.97	6.62	8.28	9.94	14.91
R	1	2	2	R	3.19	3.98	4.78	6.38	7.97	9.56	14.34
S	1	2	2	S	3.19	3.98	4.78	6.38	7.97	9.56	14.34
T	2	2	4	T	2.94	3.67	4.41	5.88	7.34	8.81	13.22
U	1	1	2	U	3.19	3.98	4.78	6.38	7.97	9.56	14.34
V	2	2	4	V	3.62	4.53	5.44	7.25	9.06	10.88	16.31
W	2	2	4	W	4.19	5.23	6.28	8.38	10.47	12.56	18.84
X	2	2	3	X	3.44	4.30	5.16	6.88	8.59	10.31	15.47
Y	2	2	4	Y	4.00	5.00	6.00	8.00	10.00	12.00	18.00
Z	2	2	3	Z	3.19	3.98	4.78	6.38	7.97	9.56	14.34

Sign Design Manual (TEM 295-2)

TABLE II				TABLE V							
Numeral to Numeral Code Number				Width of Numerals (in inches)							
Preceding Numeral	1, 5	2, 3, 6, 8, 9, 0	4, 7		4"	5"	6"	8"	10"	12"	18"
1	1	1	2	1	1.19	1.48	1.78	2.38	2.97	3.56	5.34
2	1	2	2	2	3.19	3.98	4.78	6.38	7.97	9.56	14.34
3	1	2	2	3	3.19	3.98	4.78	6.38	7.97	9.56	14.34
4	2	2	4	4	3.69	4.61	5.53	7.38	9.22	11.06	16.59
5	1	2	2	5	3.19	3.98	4.78	6.38	7.97	9.56	14.34
6	1	2	2	6	3.19	3.98	4.78	6.38	7.97	9.56	14.34
7	2	2	4	7	3.19	3.98	4.78	6.38	7.97	9.56	14.34
8	1	2	2	8	3.19	3.98	4.78	6.38	7.97	9.56	14.34
9	1	2	2	9	3.19	3.98	4.78	6.38	7.97	9.56	14.34
0	1	2	2	0	3.31	4.14	4.97	6.62	8.28	9.94	14.91

TABLE III		TABLE VI							
Width of Stroke		Space in inches measured horizontally from the extreme right edge of the preceding letter to the extreme left edge of the following letter (number).							
Letter Height	Stroke Width (inches)	Code Number	4"	5"	6"	8"	10"	12"	18"
4"	0.69	1	1.03	1.29	1.55	2.05	2.58	3.09	4.64
5"	0.86								
6"	1.03	2	0.82	1.03	1.24	1.65	2.06	2.48	3.71
8"	1.38								
10"	1.72	3	0.55	0.69	0.82	1.10	1.37	1.65	2.47
12"	2.06								
18"	3.09	4	0.28	0.34	0.41	0.55	0.68	0.82	1.24