STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	1	165

FEDERAL AID PROJ. NO. HSIP-A043 (315)

SIGNING & DELINEATION

INDEX OF SHEETS

SEE SHEET NO. 2

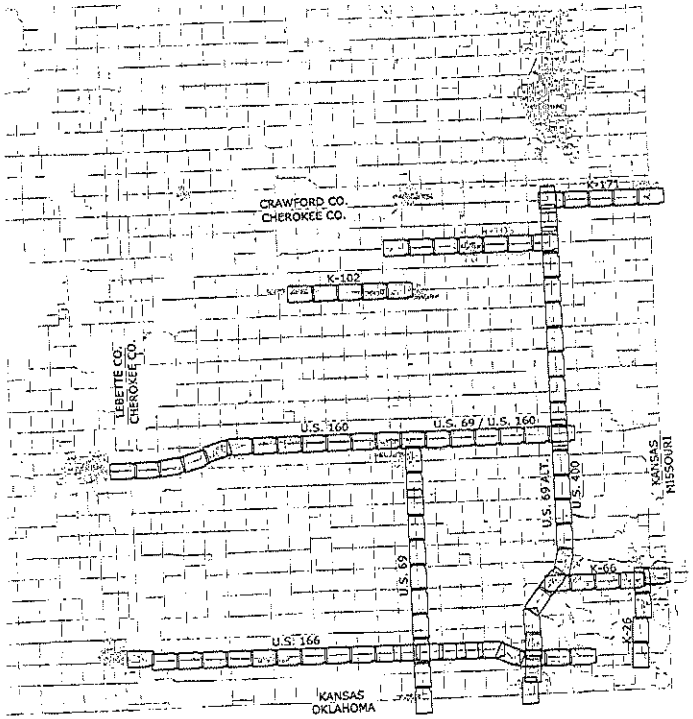
STATE OF KANSAS

DEPARTMENT OF TRANSPORTATION

SIGNING AND DELINEATION

STATE HIGHWAY

FEDERAL AID PROJECT



PROJECT NUMBER	KA-4113-03
GROSS LENGTH OF PROJECT	119.136 MILES
EXCEPTIONS	N/A
ADDITIONS	N/A
NET LENGTH OF PROJECT	119.136 MILES

PREPARED & SUBMITTED BY

HNTB

OVERLAND PARK, KANSAS

RYAN K. RODRIGUES LICENSED 10848 KANSAS PROFESSIONAL ENGINEER

ENGINEER

6/24/16

DATE

Approved _____ Date

State Transportation Engineer

By:

Chief, Bureau of Transportation Safety & Technology

KANSAS DEPARTMENT OF TRANSPORTATION

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	2	165

SYMBOL KEY

- REMOVE SIGN
- REMOVE POST
- REMOVE FOOTING
- REMOVE SIGN & POST
- REMOVE POST & FOOTING
- REMOVE SIGN, POST, & FOOTING
- MOUNT ON WOOD POST IN CONCRETE FOOTING
- MOUNT ON WOOD POST IN SOIL
- MOUNT ON STEEL BEAM BREAKAWAY POST
- MOUNT ON STEEL U-POST
- MOUNT ON PSST POST
- MOUNT ON PSST POST WITH COUPLER
- MOUNT ON PSST POST WITH COUPLER AND FOOTING
- MOUNT ON EXISTING POST
- MOUNT ON VERTICAL SUPPORT
- SHOULDER MOUNTED INSTALLATION
- OFFSET MOUNTED INSTALLATION
- EXISTING SIGN
- EXISTING SIGN TO BE OVERLAID
- SIGN IS NOT PART OF PROJECT
- TYPE 'A' DELINEATOR (RIGID)
- TYPE 'B' DELINEATOR (RIGID)
- TYPE 'A' DELINEATOR (FLEXIBLE)
- TYPE 'B' DELINEATOR (FLEXIBLE)
- TYPE 2 OBJECT MARKER
- TYPE 3 OBJECT MARKER

GENERAL NOTES

IN ORDER TO EXPEDITE THE COMPLETION OF THE PROJECT FOR TRAFFIC SERVICE, THE SIGNING AND DELINEATOR WORK SHALL BE SEQUENCED WITH ANY OTHER CONTRACT WORK SUCH THAT THE PHASES OF CONSTRUCTION MAY PROCEED AND BE COMPLETED AT THE SAME TIME.

NEW SIGNS ERECTED ON THE PROJECT WHICH ARE IN CONFLICT WITH EXISTING SIGNING ARE TO BE COMPLETELY COVERED UNTIL THE EXISTING SIGNS ARE REMOVED OR THE NEW SIGNING IS APPLICABLE. THE EXISTING SIGNS THAT ARE BEING REPLACED, REMOVED, OR DO NOT FOLLOW THE CURRENT MUTCD SIGNING STANDARDS ARE TO BE REMOVED WHEN THE PROJECT IS COMPLETED OR AS DETERMINED BY THE ENGINEER.

THE CONTRACTOR SHALL EXERCISE CAUTION AT ALL TIMES WHEN INSTALLING SIGN SUPPORTS IN AND AROUND AREAS WHERE UTILITIES EXIST, EITHER UNDERGROUND OR OVERHEAD, AND WILL BE HELD RESPONSIBLE FOR ANY DAMAGE INCURRED TO THE SYSTEM. THE INSTALLATION OF SIGN SUPPORTS SHALL INCLUDE THE EXCAVATION, DRILLING, OR DRIVING THE SUPPORT FOOTING AND THE ERECTION OF THE SIGN SUPPORT. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN WORKING AROUND ANY EXISTING SIGNS THAT ARE TO REMAIN AND WILL BE HELD RESPONSIBLE FOR ANY DAMAGE TO THE SIGNS, SUPPORTS, OR FOOTINGS. THE CONTRACTOR SHALL EXERCISE CARE WHEN WORKING AROUND SHRUBBERY WHILE REMOVING OR INSTALLING SIGNS OR SIGN SUPPORTS.

AN EXISTING SIGN POST INSTALLATION SHALL BE PLUMB AND THE COMPACTION OF THE BACKFILL SOIL SHALL COMPLY WITH THE SPECIFICATIONS AFTER THE REMOVAL AND RESETTING OF A SIGN, THE REMOVAL AND REPLACEMENT OF A SIGN, OR THE INSTALLATION OF A NEW SIGN.

THE CONTRACTOR SHALL PROVIDE MOUNTING BOLTS THAT ARE OF A LENGTH THAT DOES NOT EXTEND MORE THAN A NOMINAL 1 INCH BEYOND THE SIGN POST. THE CONTRACTOR SHALL NOT MAKE ANY FIELD MODIFICATIONS TO THE MOUNTING BOLT PRIOR TO OR AFTER THE SIGN IS INSTALLED.

SPECIFIC SERVICE, LOGO, SIGNS THAT ARE TO BE REMOVED SHALL HAVE THE BUSINESS LOGO PLAQUES REMOVED AND TRANSPORTED TO LOCATION DETERMINED BY KDOT, AT WHICH TIME THE PLAQUES BECOME THE PROPERTY OF KDOT. THE CONTRACTOR WILL BE ASSESSED A REPLACEMENT COST FOR ANY DAMAGE TO A BUSINESS LOGO PLAQUE PRIOR TO THE PLAQUE BECOMING THE PROPERTY OF KDOT.

THE MATERIALS AND FABRICATION FOR SIGNING AND DELINEATION WORK SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR STATE ROAD AND BRIDGE CONSTRUCTION (2015 EDITION) AND SPECIAL PROVISIONS.

INDEX OF SHEETS

2	SIGNING INDEX, SYMBOLS, & GENERAL NOTES
3	POST SPACING & SIGN ANGLE DETAILS
4	HEIGHT & LATERAL DISTANCE FOR ERECTION
5	POSITIONING OF DELINEATORS AND OBJECT MARKERS (TYPE 2& 3)
6	DESIGN & MOUNTING DETAILS FOR DELINEATORS
7	DESIGN & MOUNTING DETAILS FOR OBJECT MARKERS (TYPE 2 & 3)
8	POSITION DETAILS FOR CHEVRON (W1-8) SIGNS
9-108	PLAN SHEETS (INSTALLATIONS)
109-120	QUANTITIES SHEETS (INSTALLATIONS)
121	SUMMARY SHEET (INSTALLATIONS & REMOVALS)
122	RECAPITULATION SHEET
123-125	STANDARD STRUCTURAL SIGN SUPPORTS (WOOD & STEEL POSTS)
126	MOUNTING OF SIGNS ON WOOD POSTS
127	MOUNTING OF SIGNS ABOVE TURN ASSEMBLIES
128	MOUNTING OF FLAT SHEET SIGNS ON STEEL I-BEAM POSTS
129	MOUNTING OF REINFORCED PANEL SIGNS ON I-BEAM POSTS
130-132	DETAILS FOR FLAT SHEET SIGN BLANKS
133-134	DETAILS FOR PROCESSED SIGNS
135-137	DETAILS FOR REINFORCED PANELS
138-140	DETAILS FOR GUIDE SIGN LEGEND
141-163	DETAILS FOR GUIDE SIGNS
164-165	DETAILED SIGN SPECIFICATIONS

NO.	DATE	REVISIONS	BY	APP'D
1	7/1/03	Changed General Notes and Index Page Date	DJ.L.	D.R.

KANSAS DEPARTMENT OF TRANSPORTATION

SIGNING SYMBOL KEY
GENERAL NOTES
AND INDEX

7/1/03

FINAL APPROVAL 7/1/2003 APP'D STEVEN A. RUSTING
DESIGNED D.R.DETMER W.S.R. DIVISION OF PLANS STANDARD
DRAWN D.R.DETMER D.R.D. DIVISION OF PLANS STANDARD

2

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	109	165

QUANTITIES SHEET

SIGNS TO BE INSTALLED ON PROJECT

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT per sign	TYPE OF SIGN: FLAT SHEET TOTAL SQ FT	TYPE OF SIGN: REINFORCED PANEL SQ FT per sign	TYPE OF SIGN: REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
2	KRM1	6" x 6"	0.25	0.50			Reference Marker 1; See Sheet No. 177
2	KRM2	6" x 6"	0.25	0.50			Reference Marker 2; See Sheet No. 177
2	KRM3	6" x 6"	0.25	0.50			Reference Marker 3; See Sheet No. 177
6	M1-4	30" x 24"	5.00	30.00			"US-160"
6	M1-4	30" x 24"	5.00	30.00			"US-400"
8	M1-5	24" x 24"	4.00	32.00			"K-26"
3	M1-5	24" x 24"	4.00	12.00			"K-66"
2	M2-1	21" x 15"	2.19	4.38			"JCT"
3	M3-1	24" x 12"	2.00	6.00			"NORTH"
2	M3-2	24" x 12"	2.00	4.00			"EAST"
1	M3-3	24" x 12"	2.00	2.00			"SOUTH"
2	M3-4	24" x 12"	2.00	4.00			"WEST"
2	M4-6	24" x 12"	2.00	4.00			"END"
1	M6-1L	21" x 15"	2.19	2.19			Left arrow
2	M6-1R	21" x 15"	2.19	4.38			Right arrow
4	M6-3	21" x 15"	2.19	8.75			Straight arrow
2	M6-4	21" x 15"	2.19	4.38			Double arrow
29	R1-1	36" x 36"	7.46	216.34			"STOP"
1	R1-3P	18" x 6"	0.75	0.75			"ALL WAY"
3	R2-1	24" x 30"	5.00	15.00			"Speed Limit 60"
4	R2-1	24" x 30"	5.00	20.00			"Speed Limit 45"
5	R2-1	24" x 30"	5.00	25.00			"Speed Limit 35"
1	W1-4R	30" x 30"	6.25	6.25			Horizontal curve ahead
1	W2-1	30" x 30"	6.25	6.25			Intersection Warning
3	W3-1	36" x 36"	9.00	27.00			Stop Ahead
1	W3-5	36" x 36"	9.00	9.00			"30 MPH Speed Zone Ahead"
2	W3-5	36" x 36"	9.00	18.00			"45 MPH Speed Zone Ahead"
1	W7-1	30" x 30"	6.25	6.25			"HIR"
1	W13-3	24" x 30"	5.00	5.00			"Ramp 30 MPH"
4	W14-3	48" x 48" x 36"	5.56	22.25			"NO PASSING ZONE"
		TOTAL		526.66			

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT per sign	TYPE OF SIGN: FLAT SHEET TOTAL SQ FT	TYPE OF SIGN: REINFORCED PANEL SQ FT per sign	TYPE OF SIGN: REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
1	D2-1	60" x 18"	7.50	7.50			SEE SHEET NO. 141 RP 0.672
1	D1-2	7'-6" x 2'-6"			18.75	18.75	SEE SHEET NO. 141 RP 0.155
		Contractor to use 2-4x6 Wood (Reinforced Panel)					
		Posts per Installation Location					
1	KI-92	48" x 24"	8.00	8.00			SEE SHEET NO. 141 RP 2.343
1	D2-2	60" x 30"	12.50	12.50			SEE SHEET NO. 141 RP 2.343
		Contractor to use 2-4x6 Wood (Flat Sheet)					
		Posts per Installation Location					
		TOTAL		28.00		18.75	

NOTE:
SEE STANDARD PLAN SHEET TE590
FOR DETAILED SPECIFICATIONS.

THIS QUANTITY SHEET FOR USE WITH
HIGH PERFORMANCE SIGNING PROJECTS

NO.	DATE	REVISIONS	BY	APP'D
1	3/17/16	Current Revision	R.S.R.	M.D.F.

KANSAS DEPARTMENT OF TRANSPORTATION
QUANTITIES SHEET
HIGH PERFORMANCE
SIGN INSTALLATIONS
K-26

TE433hp

FINAL APPROVAL | APP'D
DESIGNED | DETAILED | QUANTITIES | TRACED
DESIGN EX. | DETAIL EX. | QUAN. EX. | TRACE EX.

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	RA-4113-03	2016	110	105

QUANTITIES SHEET

SIGNS TO BE INSTALLED ON PROJECT

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT per sign	TYPE OF SIGN: FLAT SHEET TOTAL SQ FT	TYPE OF SIGN: REINFORCED PANEL SQ FT per sign	TYPE OF SIGN: REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
1	K17-1	72" x 30"	15.00	15.00			"Welcome to KANSAS"
1	K013-5	30" x 36"	7.50	7.50			"TRAVEL INFO CALL 511"
1	K037-3	36" x 24"	6.00	6.00			"HISTORICAL MARKER 1 MILE"; See Sheet No. 177
1	K3-1	60" x 36"	15.00	15.00			"Leaving KANSAS Come Again"
1	KR12-4	84" x 36"	21.00	21.00			"MOTO CARRIER PERMIT INFORMATION"
1	KR16-1	24" x 30"	5.00	5.00			Buckle up
1	KR16-1A	24" x 18"	3.00	3.00			"BUCKLE UP KANSAS LAW"
2	KR4-3a	24" x 30"	5.00	10.00			"KEEP RIGHT EXCEPT TO PASS"; See Sheet No. 177
1	KR7-1L	24" x 30"	5.00	5.00			"NO PARKING ANY TIME"
1	KR7-1R	24" x 30"	5.00	5.00			"NO PARKING ANY TIME"
2	KRM1	6" x 6"	0.25	0.50			Reference Marker 1; See Sheet No. 177
2	KRM2	6" x 6"	0.25	0.50			Reference Marker 2; See Sheet No. 177
2	KRM3	6" x 6"	0.25	0.50			Reference Marker 3; See Sheet No. 177
2	KRM4	6" x 6"	0.25	0.50			Reference Marker 4; See Sheet No. 177
1	KW16-12P	36" x 18"	4.50	4.50			"ROUNDABOUT AHEAD"
2	M1-4	30" x 24"	5.00	10.00			"US-400"
2	M1-4	24" x 24"	4.00	8.00			"US-69"
6	M1-5	24" x 24"	4.00	24.00			"K-96"
3	M1-5	24" x 24"	4.00	12.00			"K-26"
2	M2-1	21" x 15"	2.19	4.38			"JCT"
3	M3-2	24" x 12"	2.00	6.00			"EAST"
1	M3-4	24" x 12"	2.00	2.00			"WEST"
2	M4-1a	24" x 12"	2.00	4.00			"ALT"
1	M6-1L	21" x 15"	2.19	2.19			Left arrow
1	M6-1R	21" x 15"	2.19	2.19			Right arrow
2	M6-3	21" x 15"	2.19	4.38			Straight arrow
1	M6-4	21" x 15"	2.19	2.19			Double arrow
35	R1-1	36" x 36"	7.46	261.10			"STOP"
3	R1-2	36" x 36" x 36"	3.90	11.69			"YIELD"
1	R2-1	24" x 30"	5.00	5.00			"Speed Limit 45"
5	R2-1	30" x 36"	7.50	37.50			"Speed Limit 45"
6	R2-1	30" x 36"	7.50	45.00			"Speed Limit 65"
6	R2-1	30" x 36"	7.50	45.00			"Speed Limit 50"
6	R2-1	30" x 36"	7.50	45.00			"Speed Limit 35"
2	R2-1	30" x 36"	7.50	15.00			"Speed Limit 40"
4	R4-7	24" x 30"	5.00	20.00			Keep right
51	R5-1	30" x 30"	6.25	318.75			"DO NOT ENTER"
1	R5-1	36" x 36"	9.00	9.00			"DO NOT ENTER"
17	R6-1L	36" x 12"	3.00	51.00			"ONE WAY"
10	R6-1R	36" x 12"	3.00	30.00			"ONE WAY"
8	R6-3	30" x 24"	5.00	40.00			"DIVIDED HIGHWAY"
1	W1-8L	48" x 24"	8.00	8.00			Left arrow
1	W1-8R	48" x 24"	8.00	8.00			Right arrow
1	W2-6	30" x 30"	6.25	6.25			Roundabout symbol
2	W3-1	36" x 36"	9.00	18.00			Stop Ahead
1	W3-2	36" x 36"	9.00	9.00			Yield ahead
4	W3-3	36" x 36"	9.00	36.00			Stop light ahead
1	W3-5	36" x 36"	9.00	9.00			"40 MPH Speed Zone Ahead"
1	W3-5	36" x 36"	9.00	9.00			"45 MPH Speed Zone Ahead"
1	W3-5	36" x 36"	9.00	9.00			"50 MPH Speed Zone Ahead"
1	W4-2R	36" x 36"	9.00	9.00			Lane ends
2	W6-1	36" x 36"	9.00	18.00			Divided highway
		TOTAL		1,253.81			

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT per sign	TYPE OF SIGN: FLAT SHEET TOTAL SQ FT	TYPE OF SIGN: REINFORCED PANEL SQ FT per sign	TYPE OF SIGN: REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
2	W6-2	36" x 36"	9.00	18.00			Divided highway ends
4	W10-1	36" Dia.	7.07	28.27			Railroad Grade Crossing Advance Warning
2	W11-8	36" x 36"	9.00	18.00			Emergency vehicle
1	W13-1	18" x 18"	2.25	2.25			"25 MPH Advisory Speed"
		TOTAL		66.52			

NOTE:
SEE STANDARD PLAN SHEET TE590
FOR DETAILED SPECIFICATIONS.

THIS QUANTITY SHEET FOR USE WITH
HIGH PERFORMANCE SIGNING PROJECTS

NO.	DATE	REVISIONS	BY	APP'D
1	10/17/0	Current Revisions	R.S.A.	M.D.F.

KANSAS DEPARTMENT OF TRANSPORTATION
QUANTITIES SHEET
HIGH PERFORMANCE
SIGN INSTALLATIONS
K-66

TE433hp

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	111	165

QUANTITIES SHEET

SIGNS TO BE INSTALLED ON PROJECT

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT per sign	TYPE OF SIGN: FLAT SHEET TOTAL SQ FT	TYPE OF SIGN: REINFORCED PANEL SQ FT per sign	TYPE OF SIGN: REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
1	D2-2	72" x 30"	15.00	15.00			Galena Joplin MO 7 — SEE SHEET NO. 142 — RP -0.424
		Contractor to use 2-4x6 Wood (Flat Sheet) Posts per Installation Location					
2	K1-6a	48" x 24"	8.00	16.00			Riverton — RP -0.303 — SEE SHEET NO. 142 — RP 0.293
		Contractor to use 2-4x6 Wood (Flat Sheet) Posts for RP -0.303 Installation					
1	D2-1	7'-6" x 1'-6"			11.25	11.25	Rotary Entrance — SEE SHEET NO. 142 — RP -0.199
1	D1-1	84" x 30"	17.50	17.50			Riverton High School — SEE SHEET NO. 143 — RP -0.087
		Contractor to use 2-4x6 Wood (Flat Sheet) Posts per Installation Location					
1	D1-1	84" x 30"	17.50	17.50			Riverton High School — SEE SHEET NO. 143 — RP 0.190
		Contractor to use 2-4x6 Wood (Flat Sheet) Posts per Installation Location					
2	K1-3	48" x 24"	8.00	16.00			Carthage — RP 0.410 — SEE SHEET NO. 147 — RP 0.597
2	K1-92	36" x 24"	6.00	12.00			Carthage — RP 3.013 — SEE SHEET NO. 142 — RP 4.910
		Contractor to use 2-4x6 Wood (Flat Sheet) Posts per Installation Location					
2	Special	24" x 18"	3.00	6.00			Joplin — RP 3.370 — SEE SHEET NO. 142 — RP 3.549
		Contractor to use 1-4x6 Wood (Flat Sheet) Posts for RP 3.370 Installation					
1	D1-1	72" x 18"	9.00	9.00			U.S. 69 Alt — SEE SHEET NO. 143 — RP 3.030
		Contractor to use 2-4x6 Wood (Flat Sheet) Posts per Installation Location					
1	D1-1	11'-6" x 1'-6"			12.75	12.75	Four States Drive — SEE SHEET NO. 143 — RP 4.701
		TOTAL		109.00		24.00	

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT per sign	TYPE OF SIGN: FLAT SHEET TOTAL SQ FT	TYPE OF SIGN: REINFORCED PANEL SQ FT per sign	TYPE OF SIGN: REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
		TOTAL					

NOTE:
SEE STANDARD PLAN SHEET TE590
FOR DETAILED SPECIFICATIONS.

THIS QUANTITY SHEET FOR USE WITH
HIGH PERFORMANCE SIGNING PROJECTS

NO.	DATE	REVISIONS	BY	APPD
1	3/1/13	CLAIMANT RANGES	R.S.A.	M.D.F.

KANSAS DEPARTMENT OF TRANSPORTATION
QUANTITIES SHEET
HIGH PERFORMANCE
SIGN INSTALLATIONS
K-66

TE433hp

FORM APPROVAL | APPD | DESIGNED | DETAILED | REVISITED | TRACED | DESIGN CK. | DETAIL CK. | REVIS. CK. | TRACE CK.

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	112	165

QUANTITIES SHEET

SIGNS TO BE INSTALLED ON PROJECT

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT per sign	FLAT SHEET TOTAL SQ FT	REINFORCED PANEL SQ FT per sign	REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
2	D9-3a	24" x 24"	4.00	8.00			Camping
1	KD12-5	30" x 36"	7.50	7.50			"TRAVEL INFO CALL 511"
1	KD9-8L	24" x 6"	1.00	1.00			Left arrow
1	KD9-8R	24" x 6"	1.00	1.00			Right arrow
1	K3-1	60" x 36"	15.00	15.00			"Leaving KANSAS Come Again"
1	KR13-4	84" x 36"	21.00	21.00			"MOTO CARRIER PERMIT INFORMATION"
1	KR16-1	24" x 30"	5.00	5.00			Buckle up
1	KR16-1a	24" x 18"	3.00	3.00			"BUCKLE UP KANSAS LAW"
4	KRM0	6" x 6"	0.25	1.00			Reference Marker 0; See Sheet No. 177
20	KRM1	6" x 6"	0.25	5.00			Reference Marker 1; See Sheet No. 177
26	KRM2	6" x 6"	0.25	6.50			Reference Marker 2; See Sheet No. 177
6	KRM3	6" x 6"	0.25	1.50			Reference Marker 3; See Sheet No. 177
4	KRM4	6" x 6"	0.25	1.00			Reference Marker 4; See Sheet No. 177
4	KRM5	6" x 6"	0.25	1.00			Reference Marker 5; See Sheet No. 177
4	KRM6	6" x 6"	0.25	1.00			Reference Marker 6; See Sheet No. 177
4	KRM7	6" x 6"	0.25	1.00			Reference Marker 7; See Sheet No. 177
4	KRM8	6" x 6"	0.25	1.00			Reference Marker 8; See Sheet No. 177
4	KRM9	6" x 6"	0.25	1.00			Reference Marker 9; See Sheet No. 177
38	M1-4	24" x 24"	4.00	152.00			"US-69"
29	M1-4	30" x 24"	5.00	145.00			"US-160"
2	M1-4	30" x 24"	5.00	10.00			"US-166"
21	M1-4	30" x 24"	5.00	105.00			"US-400"
6	M1-5	24" x 24"	4.00	24.00			"K-7"
4	M1-5	30" x 24"	5.00	20.00			"K-103"
2	M1-5	30" x 24"	5.00	10.00			"K-171"
7	M3-1	21" x 15"	2.19	15.31			"JCT"
10	M3-1	24" x 12"	2.00	20.00			"NORTH"
16	M3-2	24" x 12"	2.00	32.00			"EAST"
11	M3-3	24" x 12"	2.00	22.00			"SOUTH"
15	M3-4	24" x 12"	2.00	30.00			"WEST"
6	M4-1a	24" x 12"	2.00	12.00			"ALT"
1	M4-6	24" x 12"	2.00	2.00			"END"
2	M5-1L	21" x 15"	2.19	4.38			Advance left turn arrow
2	M5-1R	21" x 15"	2.19	4.38			Advance right turn arrow
4	M6-1L	21" x 15"	2.19	8.75			Left arrow
2	M6-1R	21" x 15"	2.19	4.38			Right arrow
3	M6-2R	21" x 15"	2.19	6.56			Diagonal right arrow
12	M6-3	21" x 15"	2.19	26.25			Straight arrow
4	M6-4	21" x 15"	2.19	8.76			Double arrow
1	M6-6L	21" x 15"	2.19	2.19			Straight and left arrow
37	R1-1	30" x 30"	7.46	276.02			"STOP"
8	R1-1	48" x 48"	13.25	106.00			"STOP"
2	R1-2	36" x 36" x 36"	3.99	7.79			"YIELD"
2	R12-1	24" x 30"	5.00	10.00			"WEIGHT LIMIT 30 TONS"
4	R1-3P	18" x 6"	0.75	3.00			"ALL WAY"
8	R1-3P	30" x 12"	2.50	20.00			"ALL WAY"
13	R2-1	24" x 30"	5.00	65.00			"Speed Limit 65"
2	R2-1	24" x 30"	5.00	10.00			"Speed Limit 55"
3	R2-1	24" x 30"	5.00	15.00			"Speed Limit 55"
7	R4-7	24" x 30"	5.00	35.00			Keep right
8	R5-1	30" x 30"	6.25	50.00			"DO NOT ENTER"
5	R5-1L	36" x 12"	3.00	15.00			"ONE WAY"
5	R6-1R	36" x 12"	3.00	15.00			"ONE WAY"
		TOTAL		1,374.26			

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT per sign	FLAT SHEET TOTAL SQ FT	REINFORCED PANEL SQ FT per sign	REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
1	W1-8L	30" x 30"	6.25	6.25			Horizontal curve ahead
22	W3-1	36" x 36"	9.00	198.00			Stop Ahead
2	W3-1	48" x 48"	16.00	32.00			Stop Ahead
2	W3-5	36" x 36"	9.00	18.00			"45 MPH Speed Zone Ahead"
1	W3-5	36" x 36"	9.00	9.00			"55 MPH Speed Zone Ahead"
2	W4-2R	36" x 36"	9.00	18.00			Lane ends
5	W6-3	36" x 36"	9.00	45.00			Twoway traffic
1	W10-1	36" Dia.	7.07	7.07			Railroad Grade Crossing Advance Warning
4	W12-1	30" x 30"	6.25	25.00			Double down arrow
1	W1-2L	30" x 30"	6.25	6.25			Horizontal curve ahead (left)
36	W14-3	48" x 48" x 36"	5.56	200.25			"NO PASSING ZONE"
		TOTAL		564.82			

NOTE:
SEE STANDARD PLAN SHEET TES90
FOR DETAILED SPECIFICATIONS.

THIS QUANTITY SHEET FOR USE WITH
HIGH PERFORMANCE SIGNING PROJECTS

NO.	DATE	REVISIONS	BY	APPD
1	5/11/16	CURRENT PROGRAM	M.S.B.	M.P.P.

KANSAS DEPARTMENT OF TRANSPORTATION
QUANTITIES SHEET
HIGH PERFORMANCE
SIGN INSTALLATIONS
U.S. 69

TE433hp

TYPE APPROVAL | APPD | DESIGNED | DETAILED | QUANTITIES | TRACED | DESIGN EN. | PLAN EN. | DRAW EN. | TRACE EN.

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STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	113	165

QUANTITIES SHEET

SIGNS TO BE INSTALLED ON PROJECT

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT per sign	FLAT SHEET TOTAL SQ FT	REINFORCED PANEL SQ FT per sign	REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
2	K1-97	40" x 24"	6.00	16.00			
		Contractor to use 2-4x6 Wood (Flat Sheet)					SEE SHEET NO. 144 RP 0.035 RP 30.407
		Posts per Installation Location					
1	D2-1	72" x 18"	9.00	9.00			
							SEE SHEET NO. 144 RP 2.013
1	D1-3	8'-0" x 3'-6"			28.00	28.00	
		Contractor to use 2-4x6 Wood (Reinforced Panel)					SEE SHEET NO. 144 RP 2.102
		Posts per Installation Location					
2	K1-92	60" x 24"	10.00	20.00			
							SEE SHEET NO. 144 RP 11.479 RP 12.216
1	D3-3	72" x 30"	15.00	15.00			
							SEE SHEET NO. 145 RP 11.508
1	D1-3	72" x 42"	21.00	21.00			
		Contractor to use 2-4x6 Wood (Flat Sheet)					SEE SHEET NO. 145 RP 17.300
		Posts per Installation Location					
1	D1-3	72" x 42"	21.00	21.00			
							SEE SHEET NO. 146 RP 12.446
1	D3-2	84" x 30"	17.50	17.50			
		Contractor to use 2-4x6 Wood (Flat Sheet)					SEE SHEET NO. 146 RP 12.744
		Posts per Installation Location					
1	KD7-Special	7'-6" x 4'-0"			30.00	30.00	
							SEE SHEET NO. 146 RP 13.417
1	D2-2	72" x 30"	15.00	15.00			
		Contractor to use 2-4x6 Wood (Flat Sheet)					SEE SHEET NO. 147 RP 19.245
		Posts per Installation Location					
1	D1-3	7'-6" x 3'-6"			26.25	26.25	
		Contractor to use 2-4x6 Wood (Reinforced Panel)					SEE SHEET NO. 147 RP 19.290
		Posts per Installation Location					
		TOTAL		134.50		84.25	

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT per sign	FLAT SHEET TOTAL SQ FT	REINFORCED PANEL SQ FT per sign	REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
1	D2-2	72" x 30"	15.00	15.00			
		Contractor to use 2-4x6 Wood (Reinforced Panel)					SEE SHEET NO. 147 RP 19.651
		Posts per Installation Location					
1	KD7-2a	72" x 36"	18.00	18.00			
							SEE SHEET NO. 148 RP 20.279
1	KD7-2a	72" x 36"	18.00	18.00			
							SEE SHEET NO. 148 RP 20.416
1	KD1-1b	72" x 24	12.00	12.00			
							SEE SHEET NO. 149 RP 22.231
1	KD1-1b	72" x 24"	12.00	12.00			
							SEE SHEET NO. 149 RP 22.451
1	KD1-1h	72" x 24"	12.00	12.00			
							SEE SHEET NO. 149 RP 26.292
1	KD1-1h	72" x 24"	12.00	12.00			
							SEE SHEET NO. 149 RP 26.491
1	D1-2	72" x 20"	15.00	15.00			
							SEE SHEET NO. 150 RP 28.338
1	D2-1	60" x 18"	7.50	7.50			
							SEE SHEET NO. 148 RP 28.527
1	D1-3	7'-6" x 3'-6"			26.25	26.25	
							SEE SHEET NO. 150 RP 28.537
1	D1-3	72" x 42"	21.00	21.00			
		Contractor to use 2-4x6 Wood (Reinforced Panel)					SEE SHEET NO. 150 RP 30.360
		Posts per Installation Location					
		TOTAL		142.50		26.25	

NOTE:
SEE STANDARD PLAN SHEET TE590
FOR DETAILED SPECIFICATIONS.

THIS QUANTITY SHEET FOR USE WITH
HIGH PERFORMANCE SIGNING PROJECTS

NO.	DATE	REVISIONS	BY	APPD
1	5/11/16	Current Revision	R.E.H.	M.D.F.

KANSAS DEPARTMENT OF TRANSPORTATION
QUANTITIES SHEET
HIGH PERFORMANCE
SIGN INSTALLATIONS
U.S. 69

TE433hp

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	114	165

QUANTITIES SHEET

SIGNS TO BE INSTALLED ON PROJECT

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT per sign	FLAT SHEET TOTAL SQ FT	REINFORCED PANEL SQ FT per sign	REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
1		72" x 30"	15.00	15.00			"Welcome to KANSAS"
1		30" x 36"	7.50	7.50			"TRAVEL INFO CALL 511"
1		60" x 36"	15.00	15.00			"Leaving KANSAS Come Again"
1		84" x 36"	21.00	21.00			"MOTO CARRIER PERMIT INFORMATION"
1		24" x 30"	5.00	5.00			Buckle up
1		24" x 18"	3.00	3.00			"BUCKLE UP KANSAS LAW"
13		24" x 36"	6.00	78.00			"NO PARKING ANY TIME" double arrow
2		24" x 36"	6.00	12.00			"NO PARKING ANY TIME" left arrow
2		24" x 36"	6.00	12.00			"NO PARKING ANY TIME" right arrow
7		6" x 6"	0.25	0.50			Reference Marker 0; See Sheet No. 177
12		6" x 6"	0.25	3.00			Reference Marker 1; See Sheet No. 177
4		6" x 6"	0.25	1.00			Reference Marker 2; See Sheet No. 177
4		6" x 6"	0.25	1.00			Reference Marker 3; See Sheet No. 177
2		6" x 6"	0.25	0.50			Reference Marker 4; See Sheet No. 177
2		6" x 6"	0.25	0.50			Reference Marker 5; See Sheet No. 177
2		6" x 6"	0.25	0.50			Reference Marker 6; See Sheet No. 177
2		6" x 6"	0.25	0.50			Reference Marker 7; See Sheet No. 177
2		6" x 6"	0.25	0.50			Reference Marker 8; See Sheet No. 177
2		6" x 6"	0.25	0.50			Reference Marker 9; See Sheet No. 177
2		6" x 6"	0.25	0.50			"ROUNDABOUT AHEAD"
2		36" x 18"	4.50	9.00			
28		24" x 24"	4.00	112.00			"US-69"
3		30" x 24"	5.00	15.00			"US-160"
2		30" x 24"	5.00	10.00			"US-160"
21		30" x 24"	5.00	105.00			"US-400"
5		24" x 24"	4.00	20.00			"K-68"
4		21" x 15"	2.19	8.75			"ACT"
8		24" x 12"	2.00	16.00			"NORTH"
9		24" x 12"	2.00	18.00			"EAST"
10		24" x 12"	2.00	20.00			"SOUTH"
6		24" x 12"	2.00	12.00			"WEST"
25		24" x 12"	2.00	50.00			"ALT"
2		23" x 15"	2.19	4.38			Advance left turn arrow
2		23" x 15"	2.19	4.38			Left arrow
2		23" x 15"	2.19	4.38			Right arrow
4		23" x 15"	2.19	8.75			Diagonal right arrow
9		23" x 15"	2.19	19.89			Straight arrow
2		23" x 15"	2.19	4.38			Double arrow
1		23" x 15"	2.19	2.19			Straight and right arrow
4		18" x 18"	2.25	9.00			Object marker (red)
69		36" x 36"	7.46	514.74			"STOP"
2		48" x 48"	13.25	26.50			"STOP"
10		36" x 36" x 36"	3.90	38.97			"YIELD"
1		18" x 6"	0.75	0.75			"ALL WAY"
1		30" x 12"	2.50	2.50			"ALL WAY"
13		24" x 30"	5.00	65.00			"Speed Limit 65"
2		24" x 30"	5.00	10.00			"Speed Limit 55"
13		24" x 30"	5.00	65.00			"Speed Limit 45"
14		24" x 30"	5.00	70.00			"Speed Limit 35"
1		24" x 30"	5.00	5.00			"Speed limit 30"
2		30" x 30"	6.25	12.50			"RIGHT LANE MUST TURN RIGHT"
4		24" x 30"	5.00	20.00			Keep right
5		30" x 30"	6.25	31.25			"DO NOT ENTER"
1		36" x 12"	3.00	3.00			"ONE WAY"
		TOTAL		1,495.09			

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT per sign	FLAT SHEET TOTAL SQ FT	REINFORCED PANEL SQ FT per sign	REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
5		36" x 12"	3.00	15.00			"ONE WAY"
4		30" x 24"	5.00	20.00			Roundabout directional chevron (2)
1		48" x 24"	8.00	8.00			Double arrow
2		36" x 36"	9.00	18.00			Roundabout symbol
13		36" x 36"	9.00	117.00			Stop Ahead
3		36" x 36"	9.00	27.00			Yield Ahead
4		36" x 36"	9.00	36.00			"45 MPH Speed Zone Ahead"
1		36" x 36"	9.00	9.00			"55 MPH Speed Zone Ahead"
1		36" x 36"	9.00	9.00			Lane ends
2		36" Dia.	7.07	14.14			Railroad Grade Crossing Advance Warning
2		18" x 18"	2.25	4.50			"25 MPH Advisory Speed"
19		48" x 48" x 36"	5.56	105.69			"NO PASSING ZONE"
		TOTAL		383.32			

NOTE:
SEE STANDARD PLAN SHEET TE590
FOR DETAILED SPECIFICATIONS.

THIS QUANTITY SHEET FOR USE WITH
HIGH PERFORMANCE SIGNING PROJECTS

NO.	DATE	REVISIONS	BY	APPD
1	3/17/16	Current Revision	R.L.R.	M.D.F.

KANSAS DEPARTMENT OF TRANSPORTATION
QUANTITIES SHEET
HIGH PERFORMANCE
SIGN INSTALLATIONS
U.S. 69 ALTERNATE

TE433hp

FINAL APPROVAL | APPD. | DESIGNED | DETAILED | QUANTITIES | TRACED | DESIGN EN. | DETAIL EN. | QUAN. EN. | TRACE EN.

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	115	165

QUANTITIES SHEET

SIGNS TO BE INSTALLED ON PROJECT

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT per sign	FLAT SHEET TOTAL SQ FT	REINFORCED PANEL SQ FT per sign	REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
1	D2-1	72" x 18"	9.00	9.00			Miami Oak 18 — SEE SHEET NO. 151 — RP 0.900
1	D2-2	72" x 30"	15.00	15.00			K-66 Pittsburg 27 — SEE SHEET NO. 152 — RP 2.556
1	D1-2	7'-6" x 2'-6"			18.75	18.75	Baxter Springs High School — SEE SHEET NO. 151 — RP 2.738
		Contractor to use 2-4x6 Wood (Reinforced Panel) Posts per Installation Location					
1	D1-2	7'-6" x 2'-6"			18.75	18.75	Baxter Springs High School — SEE SHEET NO. 151 — RP 2.833
		Contractor to use 2-4x6 Wood (Reinforced Panel) Posts per Installation Location					
1	D1-3	72" x 42"	21.00	21.00			Pittsburg Parsons 1-1/4 — SEE SHEET NO. 153 — RP 3.902
1	D2-1	84" x 18"	10.50	10.50			Baxter Springs 1 — SEE SHEET NO. 151 — RP 3.944
1	D1-2	7'-6" x 2'-6"			18.75	18.75	Baxter Springs 1-1/4 — SEE SHEET NO. 152 — RP 4.060
1	D2-3	72" x 42"	21.00	21.00			K-66 Pittsburg 25 Parsons 49 — SEE SHEET NO. 153 — RP 4.259
1	D2-2	7'-6" x 2'-6"			18.75	18.75	Baxter Springs 3 1-1/4 — SEE SHEET NO. 152 — RP 5.647
		Contractor to use 2-4x6 Wood (Reinforced Panel) Posts per Installation Location					
1	D2-3	8'-0" x 3'-6"			28.00	28.00	US 69 & US 160 Pittsburg 23 Parsons 47 — SEE SHEET NO. 154 — RP 5.929
		Contractor to use 2-4x6 Wood (Flat Sheet) Posts per Installation Location					
		TOTAL		76.50		103.00	

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT per sign	FLAT SHEET TOTAL SQ FT	REINFORCED PANEL SQ FT per sign	REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
1	KD1-1b	60" x 24"	10.00	10.00			[illegible] — SEE SHEET NO. 154 — RP 6.746
		Contractor to use 2-4x6 Wood (Flat Sheet) Posts per Installation Location					
2	KI-96	48" x 24"	8.00	16.00			[illegible] — SEE SHEET NO. 154 — RP 12.675 RP 13.174
		TOTAL		26.00		.00	

NOTE:
SEE STANDARD PLAN SHEET TE590
FOR DETAILED SPECIFICATIONS.

THIS QUANTITY SHEET FOR USE WITH
HIGH PERFORMANCE SIGNING PROJECTS

NO.	DATE	REVISIONS	BY	APP'D
1	3/17/16	Current Release	R.L.B.	M.D.P.

KANSAS DEPARTMENT OF TRANSPORTATION
QUANTITIES SHEET
HIGH PERFORMANCE
SIGN INSTALLATIONS
U.S. 69 ALTERNATE

TE433hp

FORM APPROVAL | APP'D
DESIGNED | DETAILED | QUANTITIES | TRACED
DESIGN CK. | DETAIL CK. | DRAWN CK. | TRACE CK.

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	116	165

QUANTITIES SHEET

SIGNS TO BE INSTALLED ON PROJECT

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT per sign	TYPE OF SIGN: FLAT SHEET TOTAL SQ FT	TYPE OF SIGN: REINFORCED PANEL SQ FT per sign	TYPE OF SIGN: REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
2	KRM1	6" x 6"	0.25	0.50			Reference Marker 1; See Sheet No. 177
2	KRM2	6" x 6"	0.25	0.50			Reference Marker 2; See Sheet No. 177
2	KRM3	6" x 6"	0.25	0.50			Reference Marker 3; See Sheet No. 177
2	KRM4	6" x 6"	0.25	0.50			Reference Marker 4; See Sheet No. 177
2	KRM5	6" x 6"	0.25	0.50			Reference Marker 5; See Sheet No. 177
2	M1-5	24" x 24"	4.00	8.00			"K-7"
6	M1-5	30" x 24"	5.00	30.00			"K-102"
1	M2-1	21" x 15"	2.19	2.19			"EAST"
2	M3-2	24" x 12"	2.00	4.00			"WEST"
2	M3-4	24" x 12"	2.00	4.00			"END"
2	M4-6	24" x 12"	2.00	4.00			Double arrow
1	M6-1	21" x 15"	2.19	2.19			
18	R1-1	36" x 36"	7.46	134.28			"STOP"
1	R1-1	48" x 48"	13.25	13.25			"STOP"
3	R2-1	24" x 30"	5.00	15.00			"Speed Limit 55"
10	R2-1	24" x 30"	5.00	50.00			"Speed Limit 45"
5	W3-1	36" x 36"	9.00	45.00			Stop Ahead
1	W3-5	36" x 36"	9.00	9.00			"45 MPH Speed Zone Ahead"
2	W10-1	36" Dia.	7.07	14.14			Railroad Grade Crossing Advance Warning
12	W14-3	40" x 40" x 36"	5.56	66.75			"NO PASSING ZONE"
		TOTAL		404.29			

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT per sign	TYPE OF SIGN: FLAT SHEET TOTAL SQ FT	TYPE OF SIGN: REINFORCED PANEL SQ FT per sign	TYPE OF SIGN: REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
1	D1-2	77" x 30"	15.00	15.00			SEE SHEET NO. 155 NP 5.000
		TOTAL		15.00			

NOTE:
SEE STANDARD PLAN SHEET TE590
FOR DETAILED SPECIFICATIONS.

THIS QUANTITY SHEET FOR USE WITH
HIGH PERFORMANCE SIGNING PROJECTS

NO.	DATE	REVISIONS	BY	APPD
1	5/2/16	Quantity Revision	R.L.A.	M.G.P.

KANSAS DEPARTMENT OF TRANSPORTATION

QUANTITIES SHEET
HIGH PERFORMANCE
SIGN INSTALLATIONS
K-102

TE433hp

FINAL APPROVAL | APPR. | DESIGNED | DETAILED | QUANTITIES | TRACED | DESIGN EN. | DESIGN EN. | DRAWN EN. | CHECK EN.

Plotted on Monday, June 13, 2016
Pat Burton
Plot Scale: 100
Workspace: C:\SBMDefault\Workspace\
Workspace: C:\SBMDefault\Workspace\

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	117	165

QUANTITIES SHEET

SIGNS TO BE INSTALLED ON PROJECT

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT per sign	TYPE OF SIGN: FLAT SHEET TOTAL SQ FT	TYPE OF SIGN: REINFORCED PANEL SQ FT per sign	TYPE OF SIGN: REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
2	KRM1	6" x 6"	0.25	0.50			Reference Marker 1; See Sheet No. 177
2	KRM2	6" x 6"	0.25	0.50			Reference Marker 2; See Sheet No. 177
2	KRM3	6" x 6"	0.25	0.50			Reference Marker 3; See Sheet No. 177
2	KRM4	6" x 6"	0.25	0.50			Reference Marker 4; See Sheet No. 177
2	KRM5	6" x 6"	0.25	0.50			Reference Marker 5; See Sheet No. 177
2	KRM6	6" x 6"	0.25	0.50			Reference Marker 6; See Sheet No. 177
2	M1-4	24" x 24"	4.00	8.00			"US-69"
2	M1-4	30" x 24"	5.00	10.00			"US-169"
2	M1-4	30" x 24"	5.00	10.00			"US-400"
2	M1-5	24" x 24"	4.00	8.00			"K-7"
10	M1-5	30" x 24"	5.00	50.00			"K-103"
2	M2-1	21" x 15"	2.19	4.38			"JCT"
4	M3-2	24" x 12"	2.00	8.00			"EAST"
4	M3-4	24" x 12"	2.00	8.00			"WEST"
2	M6-5	24" x 12"	2.00	4.00			"END"
2	M6-6	21" x 15"	2.19	4.38			Double arrow
35	R1-1	36" x 36"	7.46	261.10			"STOP"
1	R1-1	48" x 48"	13.25	13.25			"STOP"
4	R2-1	24" x 30"	5.00	20.00			"Speed Limit 60"
7	R2-1	24" x 30"	5.00	35.00			"Speed Limit 50"
8	R2-1	24" x 30"	5.00	40.00			"Speed Limit 30"
2	R2-1	24" x 30"	5.00	10.00			"Speed Limit 20"
9	W3-1	36" x 36"	9.00	81.00			Stop Ahead
2	W3-5	36" x 36"	9.00	18.00			"30 MPH Speed Zone Ahead"
2	W3-5	36" x 36"	9.00	18.00			"50 MPH Speed Zone Ahead"
2	W10-1	36" Dia.	7.07	14.14			Railroad Grade Crossing Advance Warning
2	W13-1	18" x 18"	2.25	4.50			"45 MPH Advisory Speed"
16	W14-3	48" x 48" x 36"	5.56	88.00			"NO PASSING ZONE"
		TOTAL		721.74			

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT per sign	TYPE OF SIGN: FLAT SHEET TOTAL SQ FT	TYPE OF SIGN: REINFORCED PANEL SQ FT per sign	TYPE OF SIGN: REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
1	D2-2	48" x 30"	10.00	10.00			SEE SHEET NO. 156 RP 0.055
1	D1-2	72" x 30"	15.00	15.00			SEE SHEET NO. 156 RP 0.083
1	KD1-19	72" x 24"	12.00	12.00			SEE SHEET NO. 156 RP 0.073
1	KD1-19	72" x 24"	12.00	12.00			SEE SHEET NO. 156 RP 1.042
2	K1-92	48" x 24"	8.00	16.00			SEE SHEET NO. 157 RP 2.463 RP 4.000
1	D1-2	7'-6" x 2'-6"			18.75	18.75	SEE SHEET NO. 157 RP 0.071
1	D2-2	48" x 30"	10.00	10.00			SEE SHEET NO. 157 RP 0.071
		TOTAL		75.00		18.75	

NOTE:
SEE STANDARD PLAN SHEET TE590
FOR DETAILED SPECIFICATIONS.

THIS QUANTITY SHEET FOR USE WITH
HIGH PERFORMANCE SIGNING PROJECTS

NO.	DATE	REVISIONS	BY	APP'D
1	5/11/16	Current Revision	K.S.A.	K.D.P.

QUANTITIES SHEET
HIGH PERFORMANCE
SIGN INSTALLATIONS
K-103

TE433hp

FINAL APPROVAL | APP'D | DESIGNED | DETAILED | QUANTITIES | TRACED | DESIGN CK. | DETAIL CK. | DESIGN CK. | TRACE CK.

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	118	165

QUANTITIES SHEET

SIGNS TO BE INSTALLED ON PROJECT

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT per sign	TYPE OF SIGN: FLAT SHEET TOTAL SQ FT	TYPE OF SIGN: REINFORCED PANEL SQ FT per sign	TYPE OF SIGN: REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
2	I-5	24" x 24"	4.00	8.00			Airport
1	K1-9L	24" x 6"	1.00	1.00			Left arrow
1	K1-9R	24" x 6"	1.00	1.00			Right arrow
2	KRM0	6" x 6"	0.25	0.50			Reference Marker 0; See Sheet No. 177
2	KRM1	6" x 6"	0.25	0.50			Reference Marker 1; See Sheet No. 177
2	KRM2	6" x 6"	0.25	0.50			Reference Marker 2; See Sheet No. 177
2	KRM3	6" x 6"	0.25	0.50			Reference Marker 3; See Sheet No. 177
44	KRM4	6" x 6"	0.25	11.00			Reference Marker 4; See Sheet No. 177
20	KRM5	6" x 6"	0.25	5.00			Reference Marker 5; See Sheet No. 177
4	KRM6	6" x 6"	0.25	1.00			Reference Marker 6; See Sheet No. 177
4	KRM7	6" x 6"	0.25	1.00			Reference Marker 7; See Sheet No. 177
2	KRM8	6" x 6"	0.25	0.50			Reference Marker 8; See Sheet No. 177
2	KRM9	6" x 6"	0.25	0.50			Reference Marker 9; See Sheet No. 177
3	M1-4	24" x 24"	4.00	12.00			"US-69"
11	M1-4	30" x 24"	5.00	55.00			"US-160"
3	M1-5	24" x 24"	4.00	12.00			"K-7"
1	M2-1	21" x 15"	2.19	2.19			"JCT"
5	M3-2	24" x 12"	2.00	10.00			"EAST"
1	M3-3	24" x 12"	2.00	2.00			"SOUTH"
6	M3-4	24" x 12"	2.00	12.00			"WEST"
1	M6-1L	21" x 15"	2.19	2.19			Left arrow
1	M6-3	21" x 15"	2.19	2.19			Straight arrow
2	M6-4	21" x 15"	2.19	4.38			Double arrow
1	M6-6R	21" x 15"	2.19	2.19			Straight and right arrow
33	R1-1	36" x 36"	7.46	246.18			"STOP"
1	R1-1	48" x 48"	13.25	13.25			"STOP"
7	R1-2	36" x 36" x 36"	3.90	27.28			"YIELD"
1	R1-3P	30" x 12"	2.50	2.50			"ALL WAY"
11	R2-1	24" x 30"	5.00	55.00			"Speed Limit 65"
9	R2-1	24" x 30"	5.00	45.00			"Speed Limit 55"
1	R5-1	30" x 30"	6.25	6.25			"DO NOT ENTER"
16	W3-1	36" x 36"	9.00	144.00			Stop Ahead
3	W3-5	36" x 36"	9.00	27.00			"55 MPH Speed Zone Ahead"
15	W10-1	36" Dia.	7.07	106.03			Railroad Grade Crossing Advance Warning
7	W10-3L	36" x 36"	9.00	63.00			T-intersection Railroad Crossing Warning (left)
7	W10-3R	36" x 36"	9.00	63.00			T-intersection Railroad Crossing Warning (right)
2	W11-8	36" x 36"	9.00	18.00			Emergency vehicle
9	W14-3	48" x 48" x 36"	5.56	50.06			"NO PASSING ZONE"
		TOTAL		1,013.68			

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT per sign	TYPE OF SIGN: FLAT SHEET TOTAL SQ FT	TYPE OF SIGN: REINFORCED PANEL SQ FT per sign	TYPE OF SIGN: REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
1	K1-97	48" x 24"	8.00	8.00			SEE SHEET NO. 158 RP 443.655
		Contractor to use 2-4x6 Wood (Flat Sheet)					
		Posts per Installation Location					
1	K1-97	48" x 24"	8.00	8.00			SEE SHEET NO. 158 RP 443.673
		Contractor to use 2-4x6 Wood (Flat Sheet)					
		Posts per Installation Location					
2	K1-3	48" x 24"	8.00	16.00			RP 444.269 SEE SHEET NO. 158 RP 444.360
2	K1-96	48" x 24"	8.00	16.00			RP 447.843 SEE SHEET NO. 158 RP 448.237
1	KD7-2a	60" x 24"	10.00	10.00			SEE SHEET NO. 158 RP 449.998
1	KD7-2a	60" x 24"	10.00	10.00			SEE SHEET NO. 159 RP 450.257
1	K1-92	48" x 24"	8.00	8.00			SEE SHEET NO. 159 RP 456.143
1	D2-2	84" x 30"	17.50	17.50			SEE SHEET NO. 159 RP 456.184
1	D1-3	72" x 42"	21.00	21.00			SEE SHEET NO. 159 RP 457.221
		Contractor to use 2-4x6 Wood (Flat Sheet)					
		Posts per Installation Location					
		TOTAL		114.50			

NOTE:
SEE STANDARD PLAN SHEET TE590
FOR DETAILED SPECIFICATIONS.

THIS QUANTITY SHEET FOR USE WITH
HIGH PERFORMANCE SIGNING PROJECTS

NO.	DATE	REVISIONS	BY	APPD
1	5/17/16	CURRENT REVISION	M.S.R.	M.D.F.

KANSAS DEPARTMENT OF TRANSPORTATION
QUANTITIES SHEET
HIGH PERFORMANCE
SIGN INSTALLATIONS
U.S. 160

TE433hp

FINAL APPROVAL		APPD.	
DESIGNED	DETAILED	QUANTITIES	TRACED
DESIGN CK.	DETAIL CK.	QUAN. CK.	TRACE CK.

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	119	165

QUANTITIES SHEET

SIGNS TO BE INSTALLED ON PROJECT

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT per sign	FLAT SHEET TOTAL SQ FT	REINFORCED PANEL SQ FT per sign	REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
2	I-5	24" x 24"	4.00	8.00			Airport
1	KI-0L	24" x 6"	1.00	1.00			Left arrow
1	KI-0R	24" x 6"	1.00	1.00			Right arrow
10	KR12-5	24" x 36"	6.00	60.00			"WEIGHT LIMIT" - 8,12, 16; See Sheet No. 177
2	KR12-5	24" x 36"	6.00	12.00			"WEIGHT LIMIT" - 25,30, 40; See Sheet No. 177
4	KRM0	6" x 6"	0.25	1.00			Reference Marker 0; See Sheet No. 177
46	KRM1	6" x 6"	0.25	11.50			Reference Marker 1; See Sheet No. 177
4	KRM2	6" x 6"	0.25	1.00			Reference Marker 2; See Sheet No. 177
8	KRM3	6" x 6"	0.25	2.00			Reference Marker 3; See Sheet No. 177
24	KRM4	6" x 6"	0.25	6.00			Reference Marker 4; See Sheet No. 177
22	KRM5	6" x 6"	0.25	5.50			Reference Marker 5; See Sheet No. 177
4	KRM6	6" x 6"	0.25	1.00			Reference Marker 6; See Sheet No. 177
4	KRM7	6" x 6"	0.25	1.00			Reference Marker 7; See Sheet No. 177
6	KRM8	6" x 6"	0.25	1.50			Reference Marker 8; See Sheet No. 177
4	KRM9	6" x 6"	0.25	1.00			Reference Marker 9; See Sheet No. 177
8	M1-4	24" x 24"	4.00	32.00			"US-69"
19	M1-4	30" x 24"	5.00	95.00			"US-166"
2	M1-4	30" x 24"	5.00	10.00			"US-400"
4	M1-5	24" x 24"	4.00	16.00			"K-7"
5	M2-1	21" x 15"	2.19	10.94			"CT"
6	M3-2	24" x 12"	2.00	12.00			"EAST"
8	M3-4	24" x 12"	2.00	16.00			"WEST"
4	M4-1a	24" x 12"	2.00	8.00			"ALT"
5	M6-3	21" x 15"	2.19	10.94			Straight arrow
4	M6-4	21" x 15"	2.19	8.76			Double arrow
1	M6-6L	21" x 15"	2.19	2.19			Straight and left arrow
64	R1-1	36" x 36"	7.46	477.44			"STOP"
2	R1-1	48" x 48"	13.25	26.50			"STOP"
1	R3-2	36" x 36" x 36"	3.90	3.90			"YIELD"
2	R1-3P	18" x 6"	0.75	1.50			"ALL WAY"
2	R1-3P	30" x 12"	2.50	5.00			"ALL WAY"
11	R2-1	24" x 30"	5.00	55.00			"Speed Limit 65"
2	R2-1	24" x 30"	5.00	10.00			"Speed Limit 55"
5	R2-1	24" x 30"	5.00	25.00			"Speed Limit 50"
7	R2-1	24" x 30"	5.00	35.00			"Speed Limit 35"
2	R2-1	24" x 30"	5.00	10.00			"Speed Limit 30"
12	R4-7	24" x 30"	5.00	60.00			Keep right
5	R5-1	30" x 30"	6.25	31.25			"DO NOT ENTER"
3	R6-1L	36" x 12"	3.00	9.00			"ONE WAY"
1	R6-1R	36" x 12"	3.00	3.00			"ONE WAY"
13	W3-1	36" x 36"	9.00	117.00			Stop Ahead
2	W3-1	48" x 48"	16.00	32.00			Stop Ahead
2	W3-5	36" x 36"	9.00	18.00			"35 MPH Speed Zone Ahead"
1	W3-5	36" x 36"	9.00	9.00			"50 MPH Speed Zone Ahead"
2	W3-5	36" x 36"	9.00	18.00			"55 MPH Speed Zone Ahead"
1	W4-2R	36" x 36"	9.00	9.00			Lane ends
4	W6-3	36" x 36"	9.00	36.00			Two-way traffic
2	W10-1	36" Dia.	7.07	14.14			Railroad Grade Crossing Advance Warning
1	W12-1	30" x 30"	6.25	6.25			Double down arrow
23	W14-3	48" x 48" x 36"	5.56	127.94			"NO PASSING ZONE"
		TOTAL		1,475.23			

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT per sign	FLAT SHEET TOTAL SQ FT	REINFORCED PANEL SQ FT per sign	REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
1	KI-97	48" x 24"	8.00	8.00			Chanute 7
		Contractor to use 2-4x6 Wood (Flat Sheet)					SEE SHEET NO. 160
		Posts per Installation Location					
1	KI-97	48" x 24"	8.00	8.00			Iola 7
							SEE SHEET NO. 160
1	D2-2	72" x 30"	15.00	15.00			Chanute 14 Coffeyville 44
							SEE SHEET NO. 160
1	D1-3	7'-6" x 3'-6"			26.25	26.25	Parker Sylvan Columbus Miami OK
		Contractor to use 2-4x6 Wood (Reinforced Panel)					
		Posts per Installation Location					SEE SHEET NO. 160
1	D1-3	72" x 42"	21.00	21.00			Chanute Miami Columbus
		Contractor to use 2-4x6 Wood (Flat Sheet)					
		Posts per Installation Location					SEE SHEET NO. 161
1	D2-1	7'-6" x 1'-6"			11.25	11.25	
							EXIT 80 MILES
		Contractor to use 2-4x6 Wood (Reinforced Panel)					
		Posts per Installation Location					SEE SHEET NO. 161
1	D2-2	72" x 30"	15.00	15.00			Parker 20 Paola 36
							SEE SHEET NO. 161
2	KI-3	48" x 24"	8.00	16.00			Lyons
		Contractor to use 2-4x6 Wood (Flat Sheet)					
		Posts per Installation Location					SEE SHEET NO. 162
1	D2-1	48" x 18"	6.00	6.00			
							SEE SHEET NO. 162
		Contractor to use 2-4x6 Wood (Flat Sheet)					
		Posts per Installation Location					
1	D1-2	72" x 30"	15.00	15.00			Salina 7 Ellsworth 14
		Contractor to use 2-4x6 Wood (Flat Sheet)					SEE SHEET NO. 162
		Posts per Installation Location					
		TOTAL		184.00		37.50	

NOTE:
SEE STANDARD PLAN SHEET TE590
FOR DETAILED SPECIFICATIONS.

THIS QUANTITY SHEET FOR USE WITH
HIGH PERFORMANCE SIGNING PROJECTS

NO.	DATE	REVISIONS	BY	APP'D
1	3/11/15	Current Revision	R.A.B.	M.D.F.

KANSAS DEPARTMENT OF TRANSPORTATION
QUANTITIES SHEET
HIGH PERFORMANCE
SIGN INSTALLATIONS
U.S. 166

TE433hp

FINAL APPROVAL | APP'D | DESIGNED | DETAILED | QUANTITIES | TRACED | DESIGN CK. | DETAIL CK. | QUANTITY CK. | TRACE CK.

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	120	165

QUANTITIES SHEET

SIGNS TO BE INSTALLED ON PROJECT

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT per sign	FLAT SHEET TOTAL SQ FT	REINFORCED PANEL SQ FT per sign	REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
1	KD12-5	30" x 36"	7.50	7.50			"TRAVEL INFO CALL 511"
1	KR12-6	84" x 36"	21.00	21.00			"MOTO CARRIER PERMIT INFORMATION"
1	KR16-1	24" x 30"	5.00	5.00			Buckle up
1	KR16-1a	24" x 18"	3.00	3.00			"BUCKLE UP KANSAS LAW"
2	KRM1	6" x 6"	0.25	0.50			Reference Marker 1; See Sheet No. 177
2	KRM2	6" x 6"	0.25	0.50			Reference Marker 2; See Sheet No. 177
2	KRM3	6" x 6"	0.25	0.50			Reference Marker 3; See Sheet No. 177
2	KRM4	6" x 6"	0.25	0.50			Reference Marker 4; See Sheet No. 177
2	KRM5	6" x 6"	0.25	0.50			Reference Marker 5; See Sheet No. 177
3	M1-4	24" x 24"	4.00	12.00			"US-69"
3	M1-4	30" x 24"	5.00	15.00			"US-160"
3	M1-4	30" x 24"	5.00	15.00			"US-400"
8	M1-5	30" x 24"	5.00	40.00			"K-171"
1	M2-1	21" x 15"	2.19	2.19			"KCT"
1	M3-1	24" x 12"	2.00	2.00			"NORTH"
5	M3-2	24" x 12"	2.00	10.00			"EAST"
1	M3-3	24" x 12"	2.00	2.00			"SOUTH"
4	M3-4	24" x 12"	2.00	8.00			"WEST"
1	M4-6	24" x 12"	2.00	2.00			"END"
2	M6-1L	21" x 15"	2.19	4.38			Left arrow
1	M6-1R	21" x 15"	2.19	2.19			Right arrow
1	M6-2R	21" x 15"	2.19	2.19			Diagonal right arrow
2	M6-3	21" x 15"	2.19	4.38			Straight arrow
1	M6-4	21" x 15"	2.19	2.19			Double arrow
12	R1-1	36" x 36"	7.46	89.52			"STOP"
1	R1-1	48" x 48"	12.25	12.25			"STOP"
1	R1-2P	30" x 12"	2.50	2.50			"ALL WAY"
4	R2-1	24" x 30"	5.00	20.00			"Speed Limit 65"
1	R5-1	30" x 30"	6.25	6.25			"DO NOT ENTER"
1	R6-1L	36" x 12"	3.00	3.00			"ONE WAY"
1	R6-1R	36" x 12"	3.00	3.00			"ONE WAY"
5	W3-1	36" x 36"	9.00	45.00			Stop Ahead
1	W4-2L	36" x 36"	9.00	9.00			Lane ends
1	W6-3	36" x 36"	9.00	9.00			Two-way traffic
1	W12-1	30" x 30"	6.25	6.25			Double down arrow
7	W14-3	48" x 48" x 36"	5.56	38.94			"NO PASSING ZONE"
		TOTAL		408.21			

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT per sign	FLAT SHEET TOTAL SQ FT	REINFORCED PANEL SQ FT per sign	REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
1	D1-3	72" x 42"	21.00	21.00			SEE SHEET NO. 163 RP 0.046
1	D7-1	72" x 18"	9.00	9.00			SEE SHEET NO. 163 RP 0.077
1	D1-1	60" x 18"	7.50	7.50			SEE SHEET NO. 163 RP 4.510
1	D1-1	60" x 18"	7.50	7.50			SEE SHEET NO. 163 RP 4.608
1	D1-2	8'-6" x 2'-6"			21.25	21.25	SEE SHEET NO. 163 RP 4.799
		Contractor to use 2-4x6 Wood (Reinforced Panel) Posts per Installation Location					
		TOTAL		45.00		21.25	

NOTE:
SEE STANDARD PLAN SHEET TE590
FOR DETAILED SPECIFICATIONS.

THIS QUANTITY SHEET FOR USE WITH
HIGH PERFORMANCE SIGNING PROJECTS

NO.	DATE	REVISIONS	BY	APPD
1	5/17/16	Current Revision	R.V.A.	M.D.F.

KANSAS DEPARTMENT OF TRANSPORTATION

QUANTITIES SHEET
HIGH PERFORMANCE
SIGN INSTALLATIONS
K-171

TE433hp

FIRM APPROVAL | APPD. | DESIGNED DE SAUSO | DRAWN LTKA | TRACED | CHECKED DE SAUSO | QUAN. EST. | TRACE EST.

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4112-03	2016	121	165

SUMMARY OF QUANTITIES

SIGNS

TYPE	NUMBER	SQUARE FEET
FLAT SHEET	2,198	10,557
REINFORCED PANEL	16	334
OVERLAY		

DELINEATORS

TYPE	FLEXIBLE DELINEATOR		RIGID DELINEATOR	
	TYPE I ANCHOR	TYPE III ANCHOR	"U" POST	BRACKET MOUNT
TYPE 'A' WHITE				
TYPE 'A' YELLOW				
TYPE 'B' WHITE				
TYPE 'B' YELLOW				
TYPE 'A' WHITE (BACK TO BACK)				
TYPE 'A' YELLOW (BACK TO BACK)				

POSTS AND ALUMINUM BEAMS

	4" x 6" POST				"U" POST		GALVANIZED STEEL BEAM POST						PERFORATED SQUARE STEEL TUBE (PSST)			
	WOOD		STEEL				W6x9		W10x12		W10x22					
	FLAT SHEET SIGN	REINFORCED PANEL SIGN	STRUCTURAL TUBING	312.25 ALUMINUM BEAM	2 LBS/FT	3 LBS/FT	A36 STEEL	A572 STEEL (ALT)	A36 STEEL	A572 STEEL (ALT)	A36 STEEL	A572 STEEL (ALT)	1-3/4"	2"	2-1/4"	2-1/2"
NUMBER	81	20			2	1										
FEET	1,180	272			13	10										

OBJECT MARKERS

TYPE	NUMBER
TYPE 2 ("U" POST)	
TYPE 3 ("U" POST)	

POST FOOTINGS AND PSST COUPLERS

	CONCRETE FOOTING (DIA.)					PERFORATED SQUARE STEEL TUBE (PSST)					
	WOOD	A36 STEEL		A572 STEEL (ALT)		PERFORATED SQUARE STEEL TUBE FOOTING				COUPLER	COUPLER WITH FOOTING
	18"	24"	30"	24"	30"	1-3/4"	2"	2-1/4"	2-1/2"		
NUMBER	9										
FEET	27										

SIGN STRUCTURES

TYPE	NEW	MODIFIED
OVERHEAD STRUCTURE		
CANTILEVER STRUCTURE		
BUTTERFLY STRUCTURE		
BRIDGE MOUNT ATTACHMENT		
MAST ARM SIGN SUPPORT		

REMOVALS

TYPE	NUMBER
SIGNS	25
POSTS	5
FOOTINGS	4
SIGN STRUCTURES	

BASE PLATES AND STUB POSTS

	W6x9		W10x12		W10x22	
	A36 STEEL	A572 STEEL (ALT)	A36 STEEL	A572 STEEL (ALT)	A36 STEEL	A572 STEEL (ALT)
BREAKAWAY BASES						
BASE PLATE (TOP)						
STUB POST WITH BASE PLATE						
NON-BREAKAWAY BASES						
BASE PLATE						

NUMBER & LENGTHS OF POSTS & ALUMINUM BEAMS (INFORMATION ONLY)

LENGTH OF POST OR BEAM	4" x 6" POST				"U" POST		GALVANIZED STEEL BEAM POST						PERFORATED SQUARE STEEL TUBE (PSST)			
	WOOD		STEEL				W6x9		W10x12		W10x22					
	FLAT SHEET SIGN	REINFORCED PANEL SIGN	STRUCTURAL TUBING	312.25 ALUMINUM BEAM	2 LBS/FT	3 LBS/FT	A36 STEEL	A572 STEEL (ALT)	A36 STEEL	A572 STEEL (ALT)	A36 STEEL	A572 STEEL (ALT)	1-3/4"	2"	2-1/4"	2-1/2"
2.1' - 4'																
4.1' - 6'					1											
6.1' - 8'					1											
8.1' - 10'						1										
10.1' - 12'	2	1														
12.1' - 14'	40	14														
14.1' - 16'	10	5														
16.1' - 18'	22															
18.1' - 20'	6															
20.1' - 22'	1															
22.1' - 24'																
24.1' - 26'																
26.1' - 28'																
28.1' - 30'																
30.1' - 32'																

NO.	DATE	REVISIONS	BY	APPD
1	7/1/03	Revised Tables	DAG	DR

KANSAS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES FOR INSTALLATIONS AND REMOVALS

TE439 7/1/03

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	122	165

RECAPITULATION OF SIGNING & DELINEATION BID ITEMS

BID ITEMS	APPROXIMATE QUANTITIES		UNITS
SIGN (FLAT SHEET) (HIGH PERFORMANCE)	10,557		SQUARE FOOT
SIGN (REINFORCED PANEL) (HIGH PERFORMANCE)	334		SQUARE FOOT
SIGN (OVERLAY) (HIGH PERFORMANCE)			SQUARE FOOT
SIGN POST (4" x 6" WOOD) (FLAT SHEET SIGN)	1,180		LINEAR FOOT
SIGN POST (4" x 6" WOOD) (REINFORCED PANEL SIGN)	272		LINEAR FOOT
SIGN POST (2 LB/FT "U" STEEL)	13		LINEAR FOOT
SIGN POST (3 LB/FT "U" STEEL)	10		LINEAR FOOT
SIGN POST (1-3/4" PERFORATED SQUARE STEEL TUBE)			LINEAR FOOT
SIGN POST (2" PERFORATED SQUARE STEEL TUBE)			LINEAR FOOT
SIGN POST (2-1/4" PERFORATED SQUARE STEEL TUBE)			LINEAR FOOT
SIGN POST (2-1/2" PERFORATED SQUARE STEEL TUBE)			LINEAR FOOT
SIGN POST (4" X 6" STRUCTURAL STEEL)			LINEAR FOOT
SIGN POST (3 I 2.25 ALUMINUM)			LINEAR FOOT
	A36	A572(ALT)	
SIGN POST (W6X9 STEEL BEAM)			LINEAR FOOT
SIGN POST (W10X12 STEEL BEAM)			LINEAR FOOT
SIGN POST (W10X22 STEEL BEAM)			LINEAR FOOT
SIGN POST STUB WITH BREAKAWAY BASE PLATE (W6X9)			EACH
SIGN POST STUB WITH BREAKAWAY BASE PLATE (W10X12)			EACH
SIGN POST STUB WITH BREAKAWAY BASE PLATE (W10X22)			EACH
SIGN POST BREAKAWAY BASE PLATE (W6X9)			EACH
SIGN POST BREAKAWAY BASE PLATE (W10X12)			EACH
SIGN POST BREAKAWAY BASE PLATE (W10X22)			EACH
SIGN POST FOOTING (24" Dia. CONCRETE)(STEEL BEAM POST)			LINEAR FOOT
SIGN POST FOOTING (30" Dia. CONCRETE)(STEEL BEAM POST)			LINEAR FOOT
SIGN POST FOOTING (18" Dia. CONCRETE)(WOOD POST)	27		LINEAR FOOT
SIGN POST FOOTING (1-3/4" PERFORATED SQUARE STEEL TUBE)			EACH
SIGN POST FOOTING (2" PERFORATED SQUARE STEEL TUBE)			EACH
SIGN POST FOOTING (2-1/4" PERFORATED SQUARE STEEL TUBE)			EACH
SIGN POST FOOTING (2-1/2" PERFORATED SQUARE STEEL TUBE)			EACH
SIGN POST FOOTING (SIGN POST SQUARE COUPLER) (2-1/4")			EACH
SIGN POST SQUARE COUPLER (2-1/4")			
SIGNING OBJECT MARKER (TYPE 2)			EACH
SIGNING OBJECT MARKER (TYPE 3)			EACH
SIGNING DELINEATOR (TYPE A)(WHITE RIGID, "U" POST)			EACH
SIGNING DELINEATOR (TYPE A)(YELLOW RIGID, "U" POST)			EACH
SIGNING DELINEATOR (TYPE B)(WHITE RIGID, "U" POST)			EACH
SIGNING DELINEATOR (TYPE B)(YELLOW RIGID, "U" POST)			EACH
SIGNING DELINEATOR (TYPE A)(WHITE FLEXIBLE)(TYPE I ANCHOR)			EACH
SIGNING DELINEATOR (TYPE A)(YELLOW FLEXIBLE)(TYPE I ANCHOR)			EACH
SIGNING DELINEATOR (TYPE B)(WHITE FLEXIBLE)(TYPE I ANCHOR)			EACH
SIGNING DELINEATOR (TYPE B)(YELLOW FLEXIBLE)(TYPE I ANCHOR)			EACH
SIGNING DELINEATOR (TYPE A)(WHITE FLEXIBLE)(TYPE 3 ANCHOR)			EACH
SIGNING DELINEATOR (TYPE A)(YELLOW FLEXIBLE)(TYPE 3 ANCHOR)			EACH
SIGNING DELINEATOR (TYPE B)(WHITE FLEXIBLE)(TYPE 3 ANCHOR)			EACH
SIGNING DELINEATOR (TYPE B)(YELLOW FLEXIBLE)(TYPE 3 ANCHOR)			EACH

BID ITEMS	APPROXIMATE QUANTITIES	UNITS
CONTRACTOR CONSTRUCTION STAKING	LUMP SUM	LUMP SUM
MOBILIZATION	LUMP SUM	LUMP SUM
REMOVAL OF EXISTING STRUCTURES	LUMP SUM	LUMP SUM

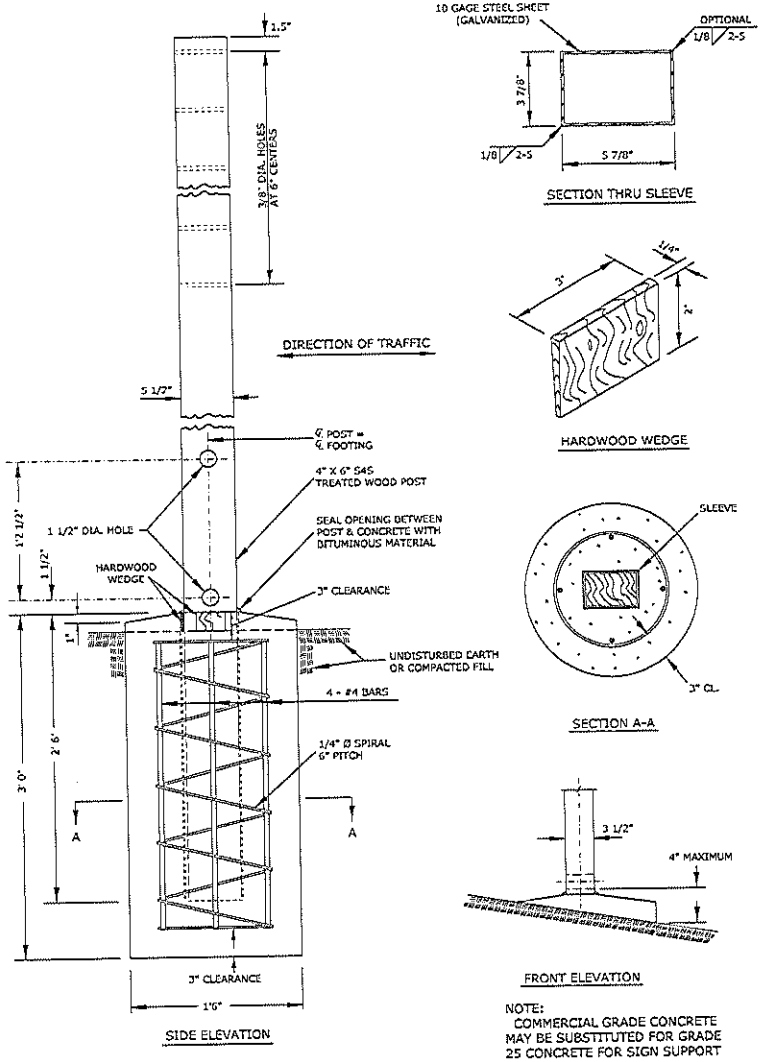
NOTE:
THE QUANTITIES FOR STEEL BEAM POSTS, STUB POSTS, BASE PLATES, AND FOOTINGS IN THE CONTRACT ARE FOR A36 STEEL. WHEN FURNISHING A572 ALTERNATE STEEL BEAM POSTS, STUB POSTS, BASE PLATES, AND FOOTINGS, PAYMENT FOR THESE ITEMS WILL BE BASED ON THE A36 STEEL UNIT PRICES INCLUDED IN THE CONTRACT.

NO.	DATE	REVISIONS	BY	APPD
1	7/23/09	Changed BID ITEMS as per Typ. Sheet 12/09	SJ	

KANSAS DEPARTMENT OF TRANSPORTATION
RECAPITULATION OF SIGNING & DELINEATION BID ITEMS

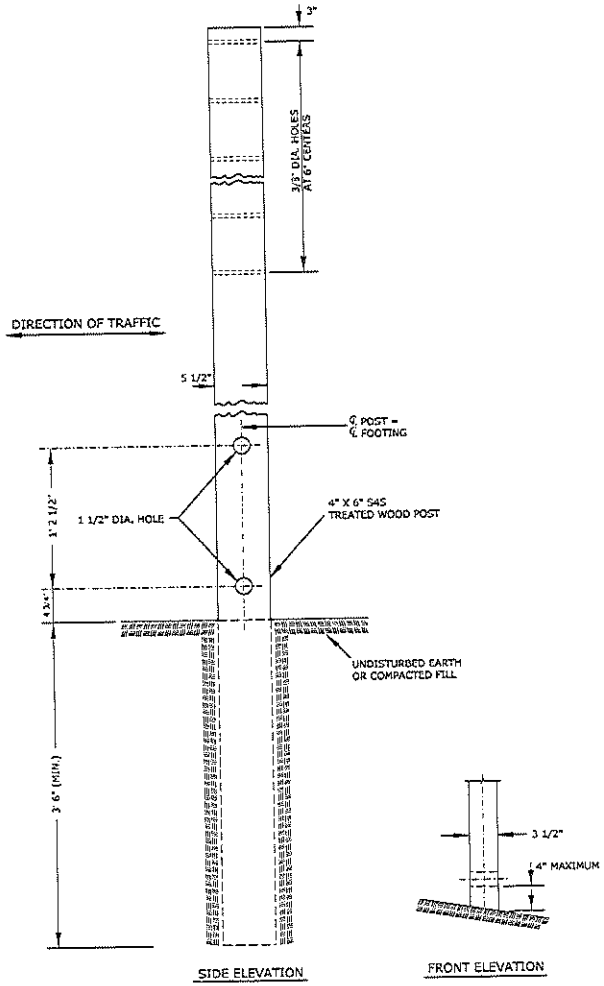
TE450 7/1/03

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	123	165



NOTE:
COMMERCIAL GRADE CONCRETE MAY BE SUBSTITUTED FOR GRADE 25 CONCRETE FOR SIGN SUPPORT FOOTINGS.

WOOD POST IN CONCRETE FOOTING



WOOD POST IN SOIL

GENERAL NOTES

DESIGN CONFORMS WITH ASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS 2002". FOUNDATION DESIGN CONFORMS WITH "DESIGN PROCEDURE COMPARED TO FULL-SCALE TESTS OF DRILLED SHAFT FOOTINGS", TEXAS TRANSPORTATION INSTITUTE, FEBRUARY 1970.

THE POST SLEEVE SHALL BE FORMED FROM STEEL SHEET WHICH WAS PRODUCED TO MEET THE REQUIREMENTS OF ASTM A653M AND ZINC COATED TO MEET THE REQUIREMENTS OF COATING DESIGNATION A123. IT IS PERMISSIBLE TO CLOSE THE BOTTOM OF THE SLEEVE WITH A METAL PLATE. BASIS OF ACCEPTANCE SHALL BE VISUAL INSPECTION OF THE FINISHED SLEEVE AND DETERMINATION OF ZINC THICKNESS BY MAGNETIC GAGE.

ALL SIGN MOUNTING HOLES IN THE WOOD POSTS SHALL BE DRILLED PRIOR TO TREATING.

BREAKAWAY HOLES AND FIELD CUTS SHALL BE TREATED IN ACCORDANCE WITH THE PRESERVATIVE TREATMENT SPECIFICATIONS.

PRIOR TO SEALING THE OPENING BETWEEN THE WOOD POST AND THE TOP OF THE CONCRETE FOOTING, PLACE TWO HARDWOOD WEDGES INTO THE OPENING ON TWO ADJACENT SIDES OF POST AND FORCE DOWN TO WITHIN 3/8" OF TOP OF FOOTING.

NOTE TO THE ENGINEER:
THE INTENT OF THE "ROADSIDE DESIGN GUIDE" AND THESE PLANS IS TO HAVE A 4" OR LESS PROJECTION ABOVE THE GROUND LINE AFTER IMPACT.

ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED.

NO.	DATE	REVISIONS	BY	APP'D

KANSAS DEPARTMENT OF TRANSPORTATION

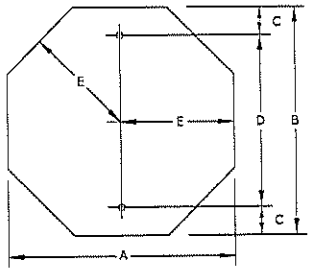
DETAILS FOR WOOD POSTS

TE460 7/1/03

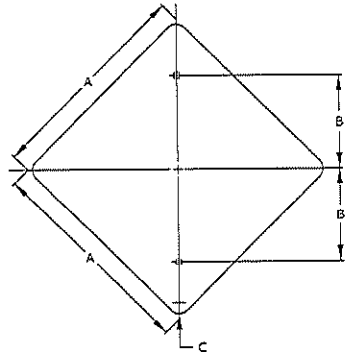
FINAL APPROVAL	7/22/2003 APP'D	Steven L. Dickens	
DESIGNED	S.R.G./BOWLING	A.A.R./BOWLING	REVISED
DESIGN CK.	S.A.R./BOWLING CO.	B.R.G./BOWLING K.C.	CHKD. CK.

123

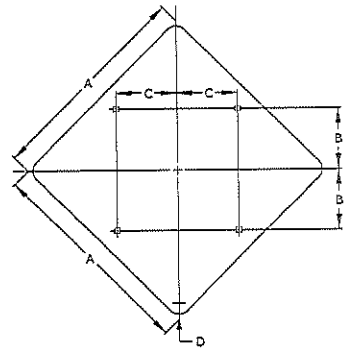
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	130	165



SIGN SIZE	A	B	C	D	E	T	AREA
30 X 30	30	30	3	24	15	0.080	5.18
36 X 36	36	36	6	24	18	0.080	7.46



	SIGN SIZE	A	B	C	T	AREA
1	5 X 5	5	2 1/2	3/8	0.040	0.17
	18 X 18	18	6	1 1/2	0.080	2.25
	24 X 24	24	12	1 1/2	0.080	4.00
	30 X 30	30	12	1 7/8	0.080	6.25
2	36 X 36	36	18	2 1/4	0.080	9.00



SIGN SIZE	A	B	C	D	T	AREA
48 X 48	48	12	15	3	2 1/2	16.00

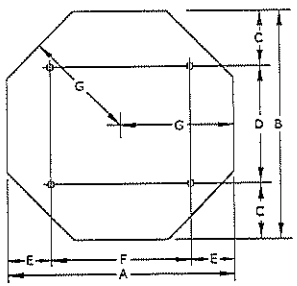
NOTE:
ALL HOLES ARE 3/8 " SQUARE UNLESS OTHERWISE NOTED.

THE DIMENSION "T" IS THE THICKNESS OF THE ALUMINUM BLANK.

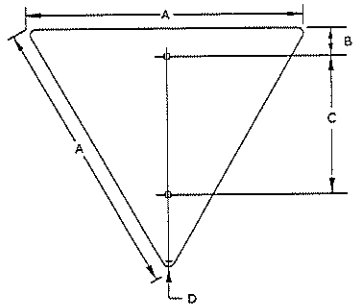
ALL DIMENSIONS ARE IN INCHES.

1 HOLES SHALL BE 5/16 " DIAMETER.

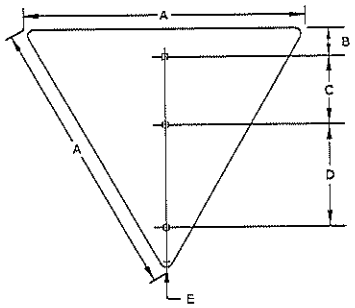
2 CENTER HOLE IS REQUIRED.



SIGN SIZE	A	B	C	D	E	F	G	T	AREA
48 X 48	48	48	12	24	9	30	24	2 1/2	13.25



SIGN SIZE	A	B	C	D	T	AREA
36 X 36	36	3	18	2	0.080	3.90



SIGN SIZE	A	B	C	D	E	T	AREA
48 X 48	48	3	12	18	3	0.080	6.93
60 X 60	60	3	18	18	4	0.100	10.83

ALL DIMENSIONS ARE IN INCHES.

NO.	DATE	REVISIONS	BY	APPD

KANSAS DEPARTMENT OF TRANSPORTATION

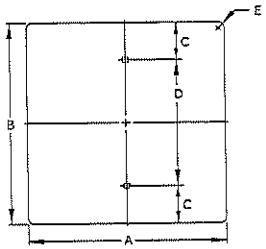
SIGN BLANK DETAILS FOR FLAT SHEET SIGNS

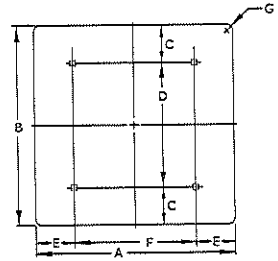
TE503 7/1/03

LINK APPROVAL 5/22/2003 APPD. STANDARD A. BURTON
DESIGNED D.G.GORTNER A.A.P. QUANTITIES STAKED
DRAWN BY S.A.BRACTON D.R.G. QUANTITIES STAKED BY

130

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	131	165





SIGN SIZE	A	B	C	D	E	T	AREA
① 3 X 8	3	8	1	6	3/8	0.040	0.17
6 X 12	6	12	3	6	3/8	0.040	0.50
12 X 6	12	6	1 1/2	3	3/8	0.063	0.50
12 X 18	12	18	3	12	1 1/2	0.063	1.50
12 X 24	12	24	3	18	1 1/2	0.080	2.00
12 X 36	12	36	6	24	1 1/2	0.080	3.00
12 X 48	12	48	6	36	1 1/2	0.080	4.00
15 X 15	15	15	1 1/2	12	1 1/2	0.063	1.56
18 X 6	18	6	1 1/2	3	1 1/2	0.063	0.75
18 X 12	18	12	3	6	1 1/2	0.063	1.50
18 X 18	18	18	3	12	1 1/2	0.063	2.25
18 X 24	18	24	3	18	1 1/2	0.080	3.00
21 X 15	21	15	1 1/2	12	1 1/2	0.080	2.19
24 X 6	24	6	1 1/2	3	1 1/2	0.080	1.00
24 X 12	24	12	3	6	1 1/2	0.080	2.00
24 X 18	24	18	3	12	1 1/2	0.080	3.00
24 X 24	24	24	3	18	1 1/2	0.080	4.00
24 X 30	24	30	3	24	1 1/2	0.080	5.00
24 X 36	24	36	6	24	1 1/2	0.080	6.00
30 X 15	30	15	1 1/2	12	1 1/2	0.080	3.13
30 X 18	30	18	3	12	1 1/2	0.080	3.75
30 X 24	30	24	3	18	1 1/2	0.080	5.00
30 X 30	30	30	3	24	1 1/2	0.080	6.25
30 X 36	30	36	6	24	1 1/2	0.080	7.50
36 X 12	36	12	3	6	1 1/2	0.080	3.00
36 X 18	36	18	3	12	1 1/2	0.080	4.50
36 X 24	36	24	3	18	1 1/2	0.080	6.00
36 X 30	36	30	3	24	1 1/2	0.080	7.50
36 X 36	36	36	6	24	2	0.080	9.00

SIGN SIZE	A	B	C	D	E	F	G	T	AREA
36 X 12	36	12	3	6	6	24	1 1/2	0.080	3.00
36 X 18	36	18	6	12	6	30	1 1/2	0.080	4.50
36 X 24	36	24	6	12	6	24	1 1/2	0.080	6.00
36 X 30	36	30	6	18	6	30	1 1/2	0.080	7.50
36 X 36	36	36	6	24	6	24	1 1/2	0.080	9.00
36 X 42	36	42	6	30	6	30	1 1/2	0.080	10.50
48 X 12	48	12	3	6	9	30	1 1/2	0.080	4.00
48 X 18	48	18	3	12	9	30	1 1/2	0.080	6.00
48 X 24	48	24	6	12	9	30	2	0.080	8.00
48 X 30	48	30	6	18	9	30	0	0.100	10.00
48 X 36	48	36	6	24	9	30	0	0.100	12.00
48 X 42	48	42	6	30	9	30	0	0.100	14.00
48 X 48	48	48	9	30	9	30	0	0.100	16.00
② 48 X 72	48	72	15	42	9	30	0	0.100	24.00
② 48 X 96	48	96	21	54	9	30	0	0.100	32.00
54 X 36	54	36	6	30	12	30	0	0.100	13.50
54 X 42	54	42	6	30	12	30	0	0.100	15.75
60 X 12	60	12	3	6	12	36	0	0.100	5.00
60 X 18	60	18	3	12	12	36	0	0.100	7.50

SIGN SIZE	A	B	C	D	E	F	G	T	AREA
60 X 24	60	24	6	12	12	36	0	0.100	10.00
60 X 30	60	30	6	18	12	36	0	0.100	12.50
60 X 36	60	36	6	24	12	36	0	0.100	15.00
60 X 42	60	42	6	30	12	36	0	0.100	17.50
60 X 48	60	48	9	30	12	36	0	0.100	20.00
60 X 60	60	60	12	36	12	36	0	0.100	25.00
72 X 12	72	12	3	6	15	42	0	0.100	6.00
72 X 18	72	18	3	12	15	42	0	0.100	9.00
72 X 24	72	24	6	12	15	42	0	0.100	12.00
72 X 30	72	30	6	18	15	36	0	0.100	15.00
72 X 36	72	36	6	24	15	42	0	0.100	18.00
72 X 42	72	42	6	30	15	42	0	0.100	21.00
72 X 48	72	48	9	30	15	42	0	0.100	24.00
84 X 18	84	18	6	12	15	48	0	0.100	10.50
84 X 30	84	30	6	18	18	48	0	0.100	17.50
84 X 36	84	36	6	24	18	48	0	0.100	21.00
84 X 42	84	42	6	30	18	48	0	0.100	24.50
84 X 48	84	48	9	30	18	48	0	0.100	28.00

NOTE:
ALL HOLES ARE 3/8 " SQUARE, UNLESS OTHERWISE NOTED.

THE DIMENSION "T" IS THE THICKNESS OF THE ALUMINUM BLANK.

① HOLES SHALL BE 5/16 " DIAMETER.

② DIMENSION "D" REQUIRES A CENTER HOLE.

ALL DIMENSIONS ARE IN INCHES.

NO.	DATE	REVISIONS	BY	APPD

KANSAS DEPARTMENT OF TRANSPORTATION

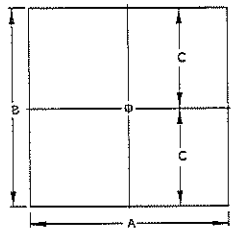
SIGN BLANK DETAILS FOR FLAT SHEET SIGNS

TE506 7/1/03

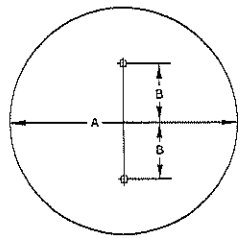
FINAL APPROVAL	7/22/2003	APPD	Stewart A. Rockey		
DESIGNED	D.B.W. DETASSIS	A.A.R.	DRAWN	T.E.S.	TRACED
DESIGN CH.	S.A. BURTON, P.E.	D.B.W.	DRAWN CH.		TRACED CH.

131

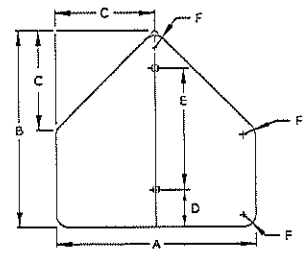
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	132	165



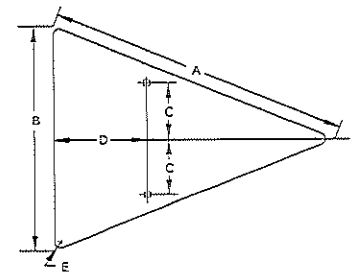
SIGN SIZE	A	B	C	T	AREA
6 X 6	6	6	3	0.063	0.25



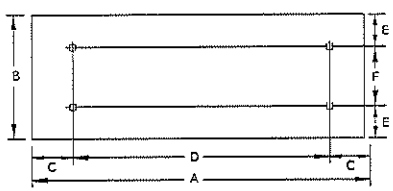
SIGN SIZE	A	B	T	AREA
36 DIA	36	12	0.080	7.07



SIGN SIZE	A	B	C	D	E	F	T	AREA
30 X 30	30	30	15	3	24	48	0.080	4.69
36 X 36	36	36	18	6	24	2 1/4	0.080	6.75

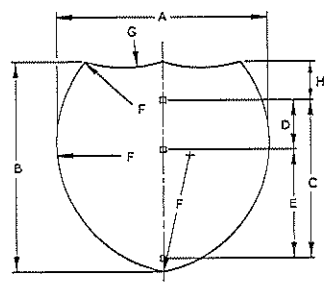


SIGN SIZE	A	B	C	D	E	T	AREA
48 X 36	48	36	9	14 3/4	2 1/4	0.125	5.56



SIGN SIZE	A	B	C	D*	E	F	T	AREA
102 X 18	102	18	3	13 HOLES @ 8" SPACING	3	12	0.100	12.75

* 3/8" DIA. HOLES



INDEPENDENT USE

DIMENSIONS										
SIZE	A	B	C	D	E	F	G	H	T	AREA
24 X 24	24	24	18	-	-	15	15	3	0.080	3.20
36 X 36	36	36	30	12	18	22.5	22.5	3	0.080	7.20
30 X 24	30	24	18	-	-	17	24	3	0.080	3.99
45 X 36	45	36	30	12	18	25.5	36	3	0.100	8.99

NOTES:
ALL HOLES ARE 3/8 " SQUARE, UNLESS OTHERWISE NOTED.
THE DIMENSION "T" IS THE THICKNESS OF THE ALUMINUM BLANK.

ALL DIMENSIONS ARE IN INCHES.

NO.	DATE	REVISIONS	BY	APPD

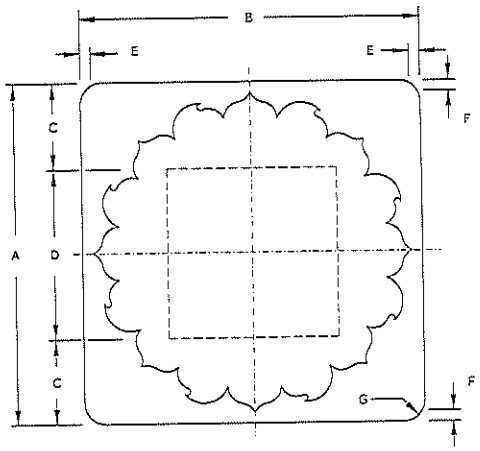
KANSAS DEPARTMENT OF TRANSPORTATION

SIGN BLANK DETAILS FOR FLAT SHEET SIGNS

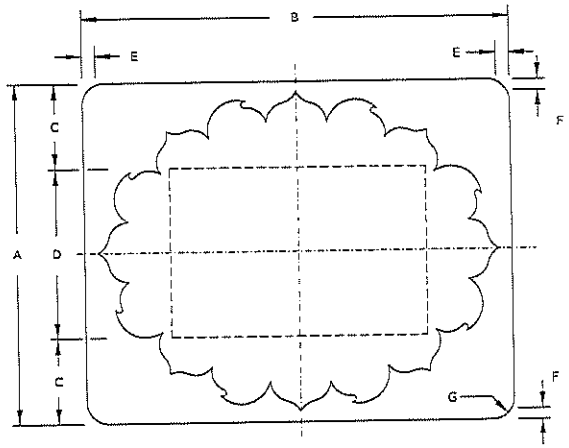
TE509 7/1/03

FINAL APPROVAL 7/01/2003 APPD. STANDARD PLAN NO.
DESIGNED DRAWN SPACES
DESIGN CK. DRAWN CK. SPACES CK.

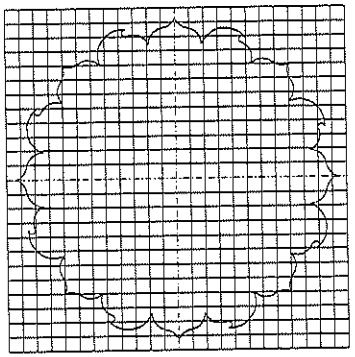
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	133	165

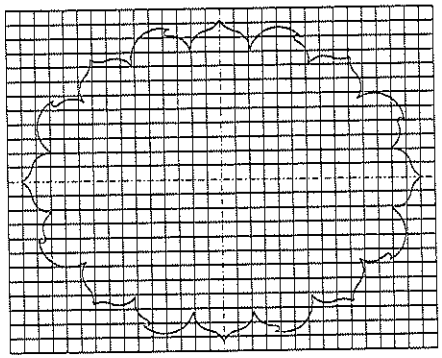


1 OR 2 DIGITS



3 DIGITS





COLORS
BACKGROUND AROUND SUNFLOWER - BLACK
SUNFLOWER - YELLOW
NUMERALS - BLACK

SIZE	A	B	C	D	E	F	G
24 X 24	24	24	6	12	0.75	0.75	1.5
30 X 24	24	30	6	12	1	0.75	1.5

ALL DIMENSIONS IN INCHES.

NOTE:
SEE PLAN, QUANTITY, OR SIGN DESIGN LAYOUT SHEETS FOR NUMERALS TO BE USED. THE NUMERALS SHALL BE SERIES "D" LEGEND. OPTICALLY SPACE NUMERALS ABOUT VERTICAL CENTERLINE.

SEE STANDARD PLAN SHEET TE590 FOR DETAILED SPECIFICATIONS.

ALL DIMENSIONS ARE IN INCHES.

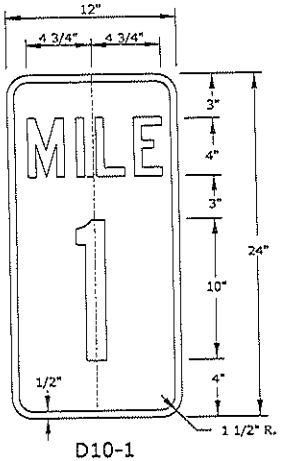
NO.	DATE	REVISIONS	BY	APPD.

KANSAS DEPARTMENT OF TRANSPORTATION

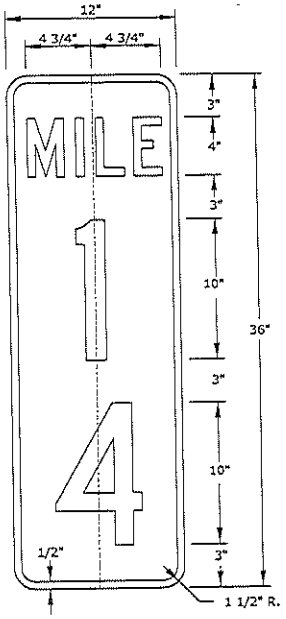
PROCESSED SIGN DETAILS
KANSAS ROUTE MARKERS

TE515 7/1/03

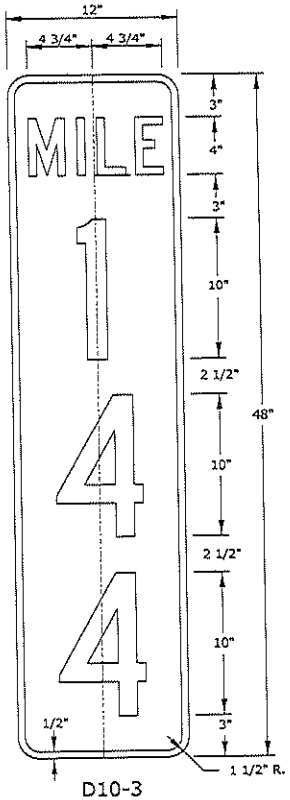
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	134	165



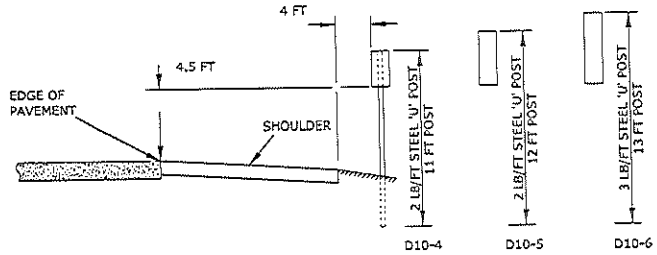
D10-1
12" X 24"



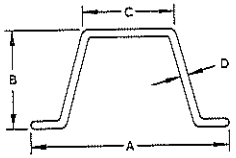
D10-2
12" X 36"



D10-3
12" X 48"



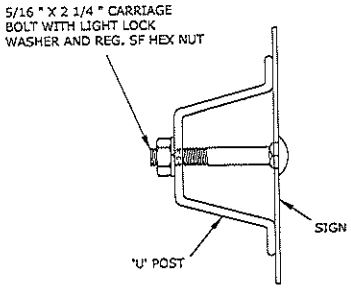
MOUNTING HEIGHT, OFFSET, & POST LENGTHS



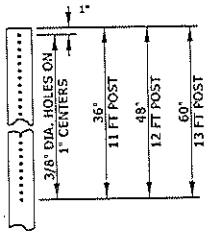
DIM.	2 LB/FT	3 LB/FT
A	3 1/8	3 1/2
B	1 17/32	1 3/4
C	1 1/4	1 5/8
D	1/8	9/64

(DIMENSIONS ARE NOMINAL)
(IN)

'U' POST DIMENSION DETAILS



'U' POST MOUNTING DETAILS



'U' POST
PUNCHING DETAILS

MILEPOST NUMBER	STATION	LT.	RT.

* STATION ADJUSTED.

GENERAL NOTES:
COLORS:
LEGEND AND BORDER - WHITE (REFLECTIVE)
BACKGROUND - GREEN (REFLECTIVE)

ALL LEGEND SHALL BE SERIES 'C'.
THE NUMERALS SHALL BE OPTICALLY CENTERED ABOUT THE VERTICAL CENTERLINE.
THE LONGITUDINAL ADJUSTMENT OF THE MILEPOST SIGN FROM THE PLAN STATION SHALL NOT EXCEED 50 FT.
MILEPOST SIGNS SHALL BE ELIMINATED IF THE SIGN CANNOT BE INSTALLED AT A PLAN STATION SHOWN AS ADJUSTED.
WHEN THE MILEPOST SIGN IS INSTALLED BEHIND GUARD FENCE, THE POST SHALL NOT BE LOCATED CLOSER THAN 5 FT FROM THE FACE OF THE GUARD FENCE. MILEPOST SIGNS LOCATED BETWEEN 100 FT IN ADVANCE OF AND 50 FT BEYOND THE NOSE OF THE GUARD FENCE SHALL BE ELIMINATED.

SEE STANDARD PLAN SHEET TE590 FOR DETAILED SPECIFICATIONS

ALL DIMENSIONS ARE IN INCHES.

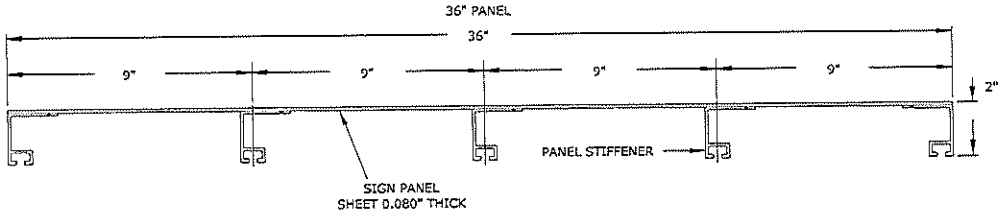
NO.	DATE	REVISIONS	BY	APPD

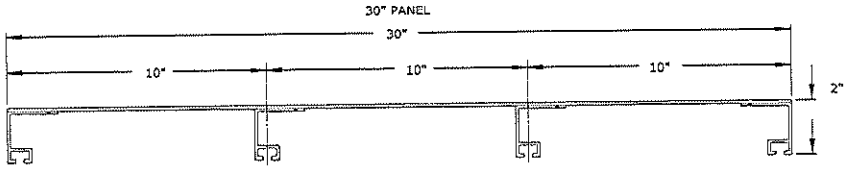
KANSAS DEPARTMENT OF TRANSPORTATION
PROCESSED SIGN DETAILS
DESIGN, MOUNTING, & POSITIONING
OF MILEPOST (D10-4, 5 & 6) SIGN

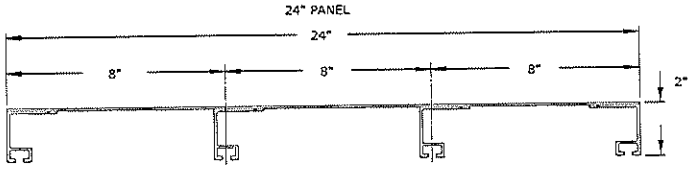
7/1/03

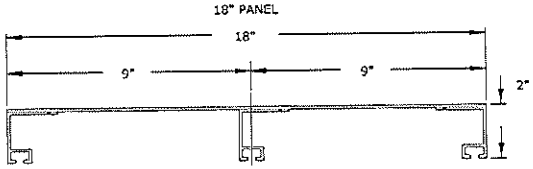
134

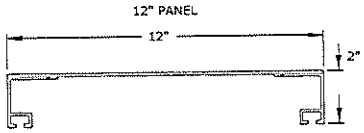
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	135	165



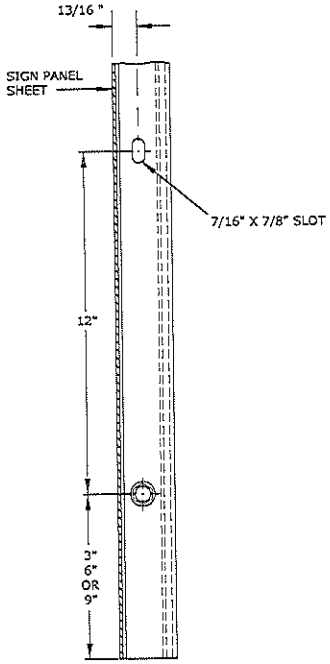




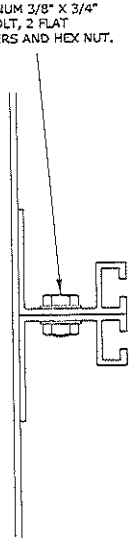




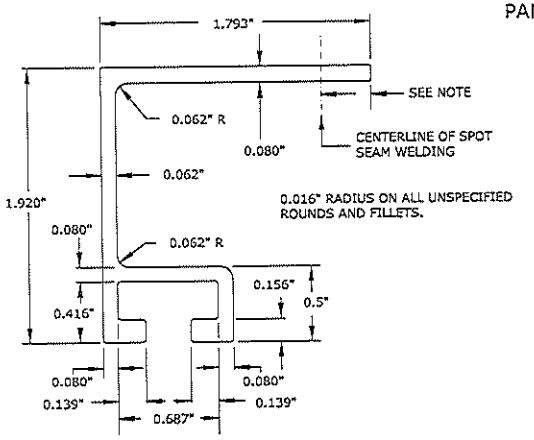
STRUCTURAL SIGN PANEL WIDTHS



PANEL CONNECTOR SLOTS



PANEL CONNECTIONS



PANEL STIFFENER

NOTE:
SIGN PANEL STIFFENERS SHALL BE ATTACHED TO SIGN PANEL USING INTERMITTENT SEAM WELDING WITH SPOT ON 8" CENTERS THE LENGTH OF THE STIFFENER AND A MINIMUM OF 1/2" FROM THE EDGE OF THE STIFFENER.

ALL DIMENSIONS ARE IN INCHES.

NO.	DATE	REVISIONS	BY	APPD

KANSAS DEPARTMENT OF TRANSPORTATION

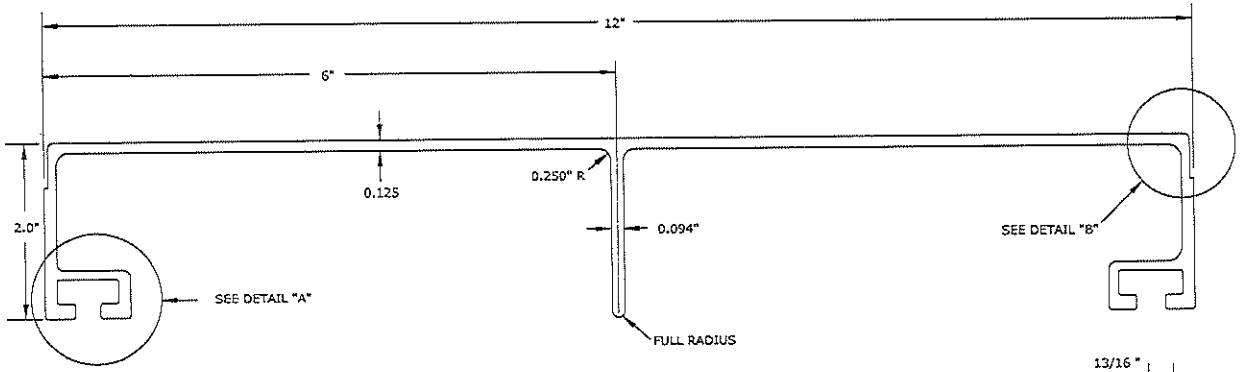
REINFORCED PANEL DETAILS
EXTRUSHEET FABRICATION

TE551 7/1/03

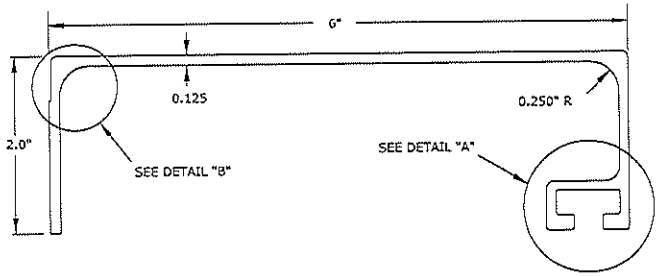
FINAL APPROVAL	12/12/2003	APPD	Steven A. Hayden		
DESIGNED	DEB/DEVARED	N.A.S./QUINTERS		DRAWN	
REVIEWED BY	C.A.BURTON	D.B.G./GRAHAM		TRACED BY	

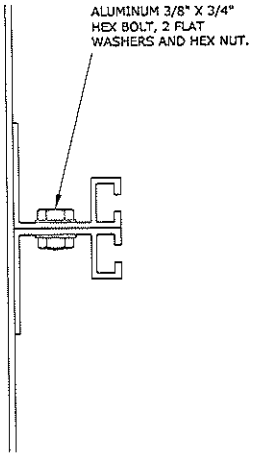
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	136	165

12" PANEL

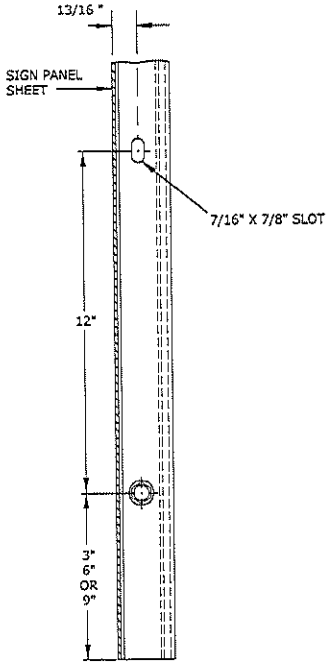


6" PANEL

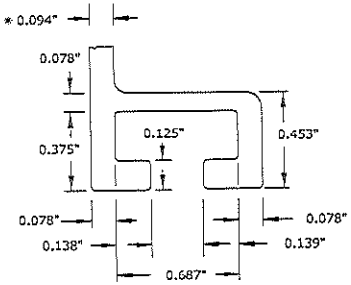




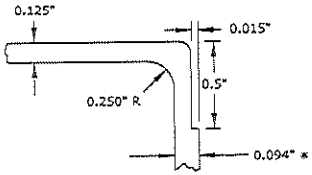
PANEL CONNECTIONS



PANEL CONNECTOR
SLOTS



DETAIL "A"



DETAIL "B"

0.031" RADIUS ON ALL
UNSPECIFIED ROUNDS
AND FILLETS.

* 0.078" FOR 6" PANEL

NOTE:
FOR EXTRUDED PANEL SIGNS WITH AN OVERALL HEIGHT IN INTERVALS OF 6", USE THE 6" PANEL AT THE TOP OR BOTTOM OF THE SIGN. ALL OTHER PANELS ARE TO BE THE 12" PANEL.

ALL DIMENSIONS ARE IN INCHES.

NO.	DATE	REVISIONS	BY	APP'D

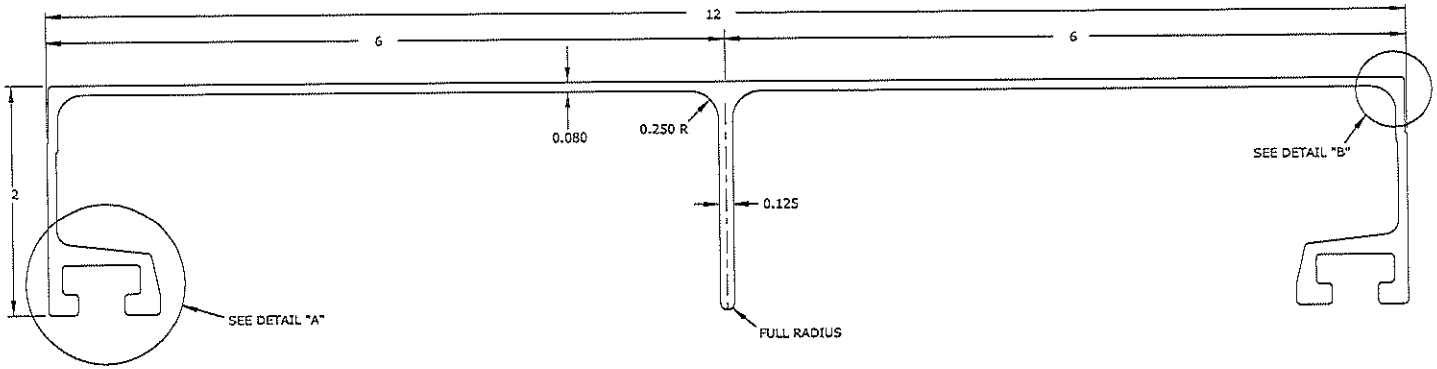
KANSAS DEPARTMENT OF TRANSPORTATION
REINFORCED PANEL DETAILS
EXTRUDED FABRICATION 0.125"
1 OF 2

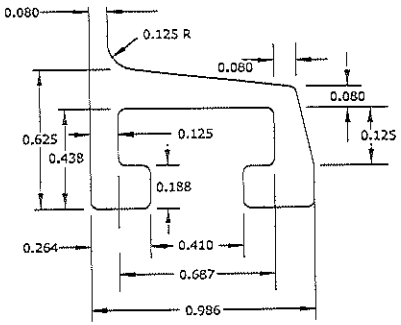
TE554 7/1/03

FHWA APPROVAL 7/22/2003 APPD
DESIGNED U.D.G. DETAILED S.A.M. QUANTITIES TRACED
DESIGN CK. C.A.B. DETAIL CK. U.D.G. DESIGN CK. TRACE CK.

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4713-03	2016	137	165

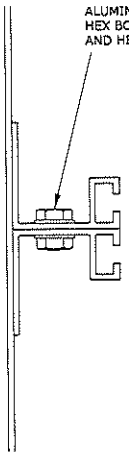
12" PANEL



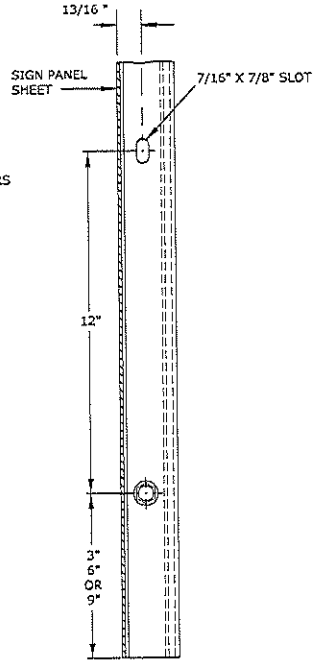


NOTE:
.016" RADIUS ON ALL UNSPECIFIED ROUNDS AND FILLETS.

DETAIL "A"

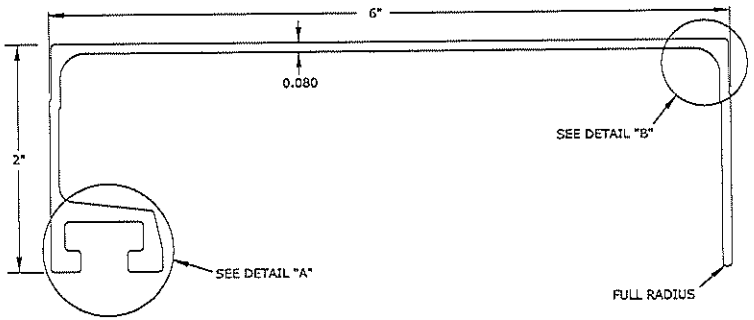


PANEL CONNECTIONS

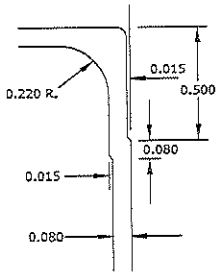


PANEL CONNECTOR SLOTS

6" PANEL



FOR EXTRUDED PANEL SIGNS WITH AN OVERALL HEIGHT IN INTERVALS OF 6", USE THE 6" PANEL AT THE TOP OR BOTTOM OF THE SIGN. ALL OTHER PANELS ARE TO BE THE 12" PANEL.



DETAIL "B"

ALL DIMENSIONS IN INCHES

NO.	DATE	REVISIONS	BY	APPR.

KANSAS DEPARTMENT OF TRANSPORTATION

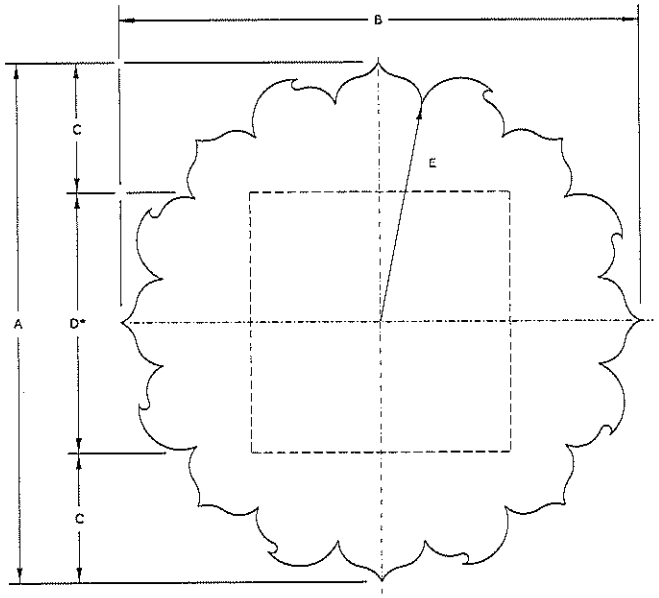
REINFORCED PANEL DETAILS
EXTRUDED FABRICATION .080"
2 OF 2

TE555 7/1/03

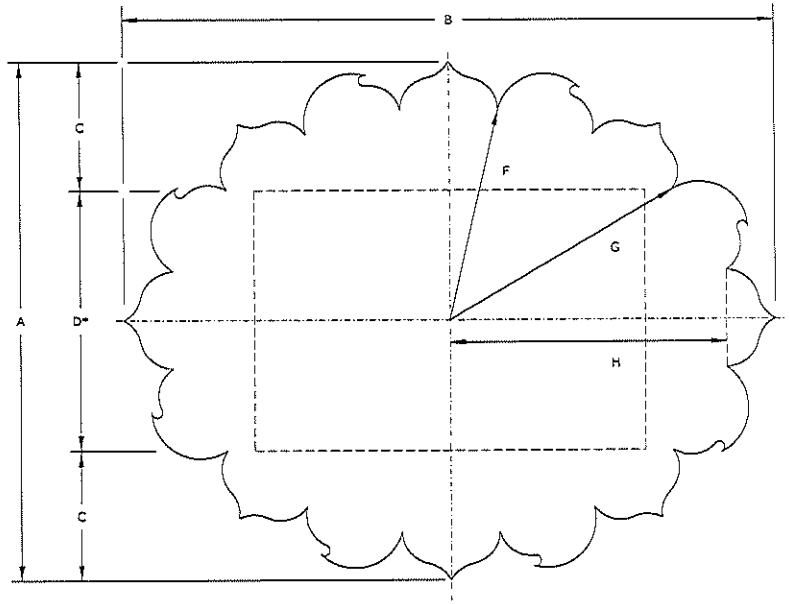
FINAL APPROVAL 7/1/2003 APPD. Lawrence A. Buckner
DESIGNED BUREAU OF LAND P.A.R. TRANSITVES STAGE
DRAFTED BUREAU OF LAND D.B.G. / DAVIS S.K. STAGE

137

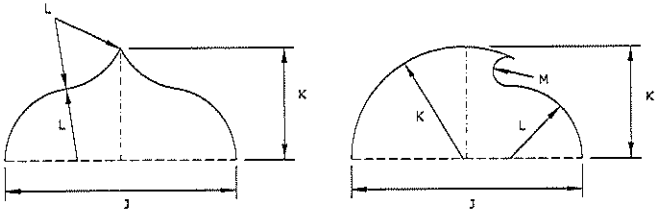
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	138	165



1 OR 2 DIGITS



3 DIGITS



PETALS

SIZE	A	B	C	D*	E	F	G	H	J	K	L	M
24" X 24"	24	24	1/4	12 D	10 1/4	-	-	-	4	1 7/8	1 1/4	1/4
36" X 36"	36	36	9	18 D	15 3/8	-	-	-	1/4	3	1 7/8	3/8
30" X 24"	24	36	1/4	12 D	-	10	12	12 3/4	4 1/2	2 1/4	1 1/2	1/4
45" X 36"	36	45	9	18 D	-	15	18	19	6 3/4	3 3/8	2 1/4	3/8

ALL DIMENSIONS IN INCHES.
D* - NUMERALS OPTICALLY SPACED ABOUT VERTICAL CENTERLINE

COLORS:
BACKGROUND - YELLOW
LEGEND - BLACK

ALL DIMENSIONS ARE IN INCHES.

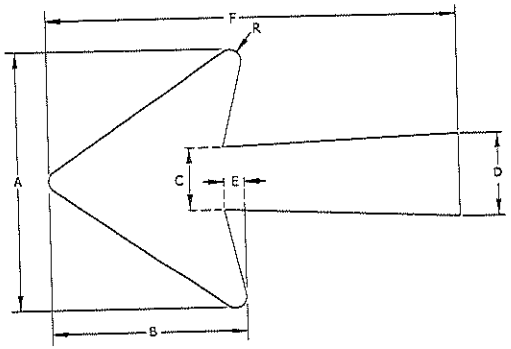
NO.	DATE	REVISION	BY	APPD

KANSAS DEPARTMENT OF TRANSPORTATION
GUIDE SIGN
LEGEND DETAILS
KANSAS ROUTE SHIELDS

TE557 7/1/03

FINAL APPROVAL 3/22/2003 APPD. SIGNING & MARKING
DESIGNED R.L.K./R.T.V./R.D.P. R.L.K./R.D.P./R.T.V. TRACED
DESIGN CK. L.A.B./D.T.M./S.V. D.D.A./D.L.M./J.K. TRACE CK.

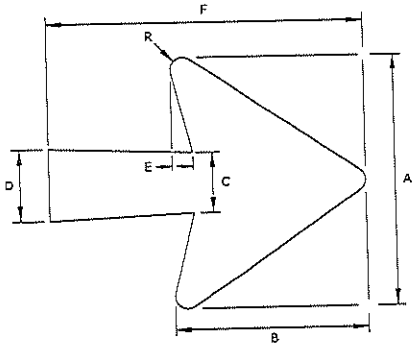
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	139	165



ARROW DIMENSIONS (INCHES)

	A	B	C	D	E	F	R
10.67" U.C.	15⅝	11 9/16	3¾	5	1 9/16	24¼	13/16
13.33" U.C.	18¼	14	4½	6	1½	29¼	¾
16" U.C.	22¼	17	5⅜	7⅛	1¾	35⅝	1

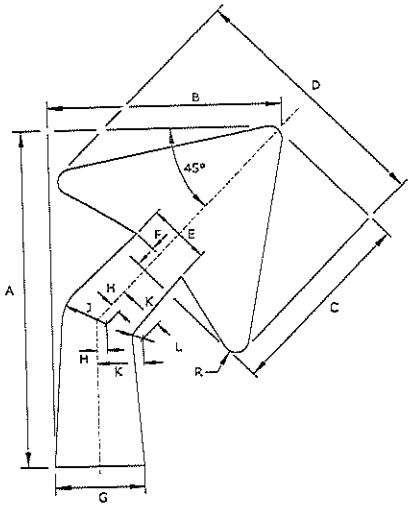
TYPE "A" ARROW



ARROW DIMENSIONS (INCHES)

	A	B	C	D	E	F	R
10.67" U.C.	11⅜	8 11/16	2¾	3¼	15/16	14¼	9/16

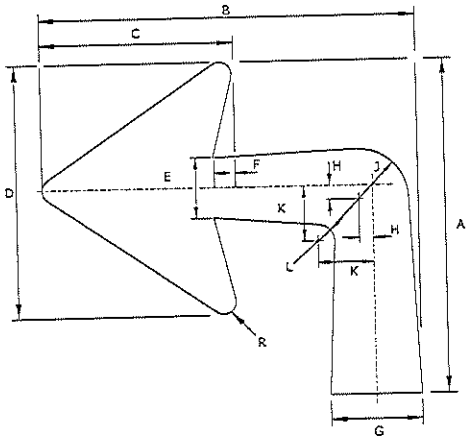
TYPE "B" ARROW



ARROW DIMENSIONS (INCHES)

	A	B	C	D	E	F	G	H	J	K	L	R
10.67" U.C.	15⅛	10¾	8 11/16	11⅜	2¾	1 5/16	4	7/16	2	2 5/16	½	9/16
13.33" U.C.	18¼	13	10⅞	14¼	3½	1 7/16	4½	9/16	2½	2 9/16	⅝	11/16
16" U.C.	22¼	15⅝	13	17	4⅛	1 7/16	5¼	⅝	3	3⅛	¾	⅞

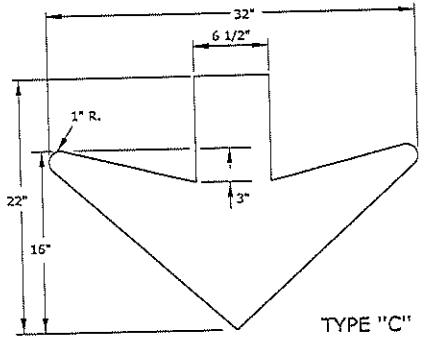
ADVANCE TURN (45°)



ARROW DIMENSIONS (INCHES)

	A	B	C	D	E	F	G	H	J	K	L	R
10.67" U.C.	15⅛	17	8 11/16	11⅜	2¾	1 5/16	4⅜	⅝	2⅛	2½	¼	9/16
13.33" U.C.	18¼	20½	10⅞	14¼	3½	1 7/16	5⅛	⅞	2⅞	2⅞	1	11/16
16" U.C.	22¼	25	13	17	4⅛	1 7/16	6⅛	¾	3¼	3¼	1¼	⅞

ADVANCE TURN (90°)



TYPE "C"

NOTE:
USE TYPE 'A' ARROWS ON INTERSTATE AND EXPRESSWAY WITH INTERCHANGES. USE TYPE 'B' ARROWS ON THE MAINLINE OF EXPRESSWAYS WITH AT-GRADE INTERSECTIONS.
SEE STANDARD PLAN SHEET TE590 FOR DETAILED SPECIFICATIONS.

ALL DIMENSIONS ARE IN INCHES.

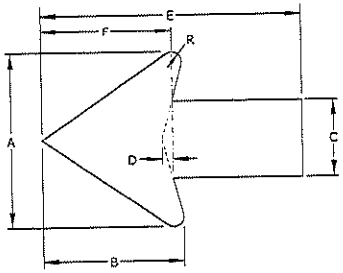
NO.	DATE	REVISIONS	BY	APPD

KANSAS DEPARTMENT OF TRANSPORTATION

GUIDE SIGN
LEGEND DETAILS
ARROWS

TE560 7/1/03

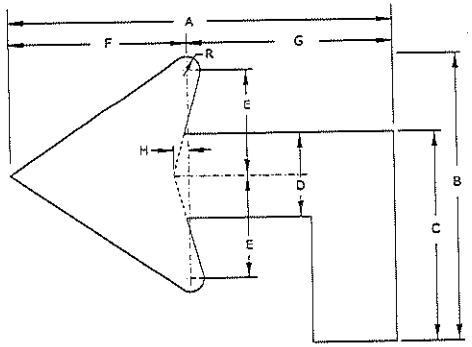
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	140	165



ARROW DIMENSIONS (INCHES)

LETTER HEIGHT	A	B	C	D	E	F	R
4"	4	3¼	1½	7/32	6	3	5/16
6"	6	4 7/11	2¼	3/16	9	4½	7/16
8"	8	6½	3	7/16	12	6	⅜

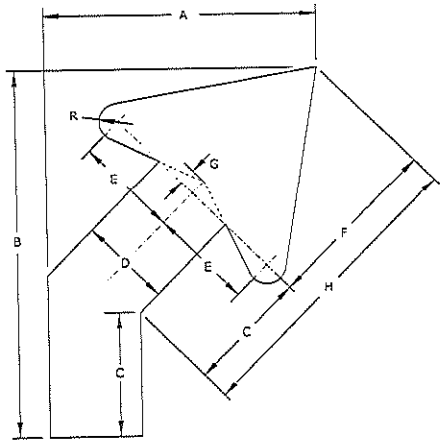
STANDARD ARROW



ARROW DIMENSIONS (INCHES)

LETTER HEIGHT	A	B	C	D	E	F	G	H	R
6"	10 10/11	7½	5⅝	2¼	2 9/16	4½	5⅝	5/16	7/16
8"	13½	10	7½	3	3 3/11	6	7½	7/16	⅝

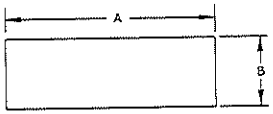
ADVANCE TURN (90°)



ARROW DIMENSIONS (INCHES)

LETTER HEIGHT	A	B	C	D	E	F	G	H	R
6"	6¾	9	3	2¼	65	4¼	5/16	7½	7/16
8"	9	12	3 15/16	3	3 3/11	6	11	10	⅝

ADVANCE TURN (45°)



HYPHEN
DIMENSIONS (INCHES)

LETTER HEIGHT	A	B
6"	3	1
8"	4½	1½
10.67"	6	2
13.33"	7½	2½
16"	9	3

HYPHEN

NOTE:
SEE STANDARD PLAN SHEET TE590 FOR DETAILED SPECIFICATIONS.

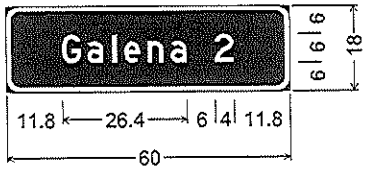
ALL DIMENSIONS ARE IN INCHES.

NO.	DATE	REVISIONS	BY	APP'D

KANSAS DEPARTMENT OF TRANSPORTATION
GUIDE SIGN
LEGEND DETAILS
ARROWS AND HYPHENS

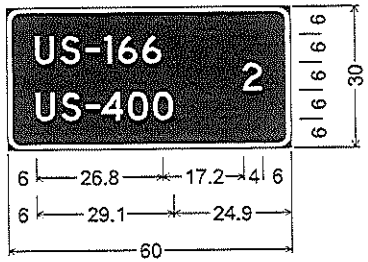
TE563 7/1/03

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	141	165



D2-1;
3.0" Radius, 1.0" Border, White on Green;
[Galena] D; [2] D;
Table of distances between letter and object lefts.

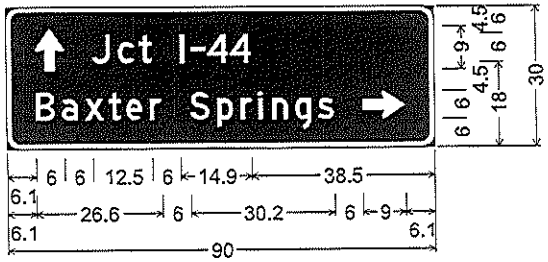
	G	a	l	e	n	a	2	
11.8	5.4	5.3	2.5	4.9	4.9	9.4	4.0	11.8



D2-2;
3.0" Radius, 1.0" Border, White on Green;
[US-166] D; [US-400] D;
[2] D;
Table of distances between letter and object lefts.

	U	S	-	1	6	6	2	
6.0	5.4	5.2	4.1	2.9	5.1	21.3	4.0	6.0

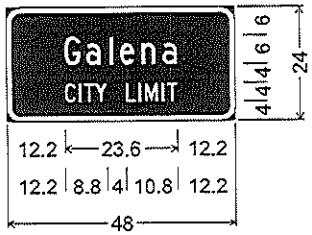
	U	S	-	4	0	0		
6.0	5.4	5.2	3.4	5.5	5.3	4.3	24.9	



D1-2;
3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 90°;
[Jct I-44] D; [Baxter Springs] D;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

	↑	J	c	t	l	-	4	4	
6.1	12.0	5.5	4.4	8.6	2.3	3.4	4.8	4.4	38.5

	B	a	x	t	e	r	S	p	r	i	n	g	s	→		
6.1	5.5	4.8	5.0	3.8	4.9	8.6	5.6	4.9	3.8	2.9	4.9	4.7	9.4	9.0	6.1	



KI-92;
3.0" Radius, 1.0" Border, White on Green;
[Galena] C;
[CITY LIMIT] C;
Table of distances between letter and object lefts.

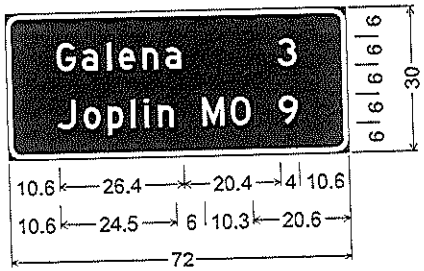
	G	a	l	e	n	a		
12.2	4.6	4.8	2.3	4.5	4.5	2.9	12.2	

	C	I	T	Y	L	I	M	I	T		
12.2	2.9	1.2	2.2	6.5	2.7	1.4	3.5	1.2	2.0	12.2	

KANSAS DEPARTMENT OF TRANSPORTATION

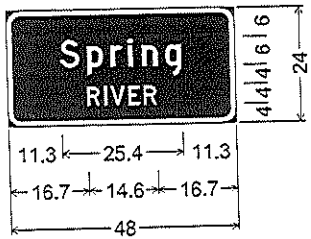
SIGN LAYOUT DETAILS
K-26

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	142	165



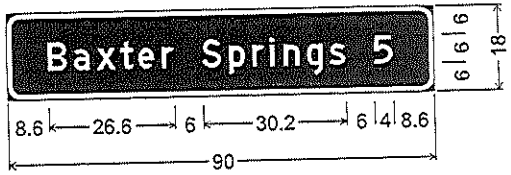
D2-2;
3.0" Radius, 1.0" Border, White on Green;
[Galena] D; [3] D;
[Joplin MO] D; [9] D;
Table of distances between letter and object lefts.

10.6	G 5.4	a 5.3	l 2.5	e 4.9	n 4.9	a 23.8	3 4.0	10.6		
10.6	J 5.4	o 5.1	p 4.9	l 2.9	i 2.9	n 9.3	M 6.1	O 10.2	9 4.0	10.6



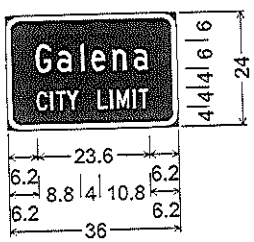
KI-3;
3.0" Radius, 1.0" Border, White on Green;
[Spring] D;
[RIVER] D;
Table of distances between letter and object lefts.

11.3	S 5.6	p 5.0	r 3.7	i 2.9	n 4.9	g 3.3	11.3
16.7	R 3.6	I 1.4	V 3.7	E 3.2	R 2.7	16.7	



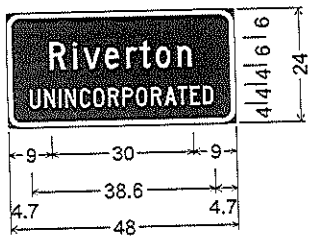
D2-1;
3.0" Radius, 1.0" Border, White on Green;
[Baxter Springs] D; [5] D;
Table of distances between letter and object lefts.

8.6	B 5.5	a 4.8	x 5.0	t 3.8	e 4.9	r 8.6	S 5.6	p 4.9	r 3.8	i 2.8	n 5.0	g 4.7	s 9.4	5 4.0	8.6



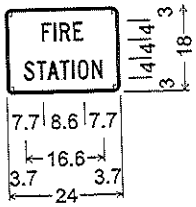
KI-92;
3.0" Radius, 1.0" Border, White on Green;
[Galena] C;
[CITY LIMIT] C;
Table of distances between letter and object lefts.

6.2	G 4.6	a 4.8	l 2.3	e 4.5	n 4.5	a 2.9	6.2			
6.2	C 2.9	I 1.2	T 2.2	Y 6.5	L 2.7	I 1.4	M 3.5	I 1.2	T 2.0	6.2



KI-96;
3.0" Radius, 1.0" Border, White on Green;
[Riverton] C;
[UNINCORPORATED] C;
Table of distances between letter and object lefts.

9.0	R 5.0	i 2.2	v 4.5	e 4.5	r 2.8	t 3.4	o 4.6	n 3.0	9.0								
4.7	U 3.0	N 3.0	I 1.4	N 3.1	C 2.8	O 3.2	R 3.0	P 2.9	O 3.1	R 2.9	A 2.7	T 2.7	E 2.7	D 2.1	4.7		



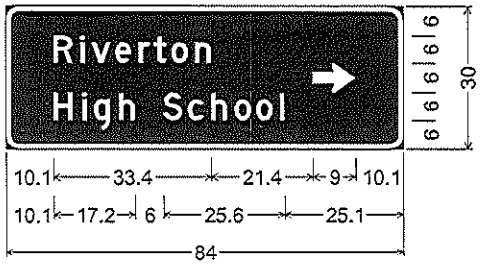
Special;
1.5" Radius, 0.8" Border, Black on Yellow;
[FIRE] C 80% spacing;
[STATION] C 80% spacing;
Table of distances between letter and object lefts.

7.7	F 2.5	I 1.3	R 2.8	E 2.0	7.7				
3.7	S 2.8	T 2.1	A 2.7	T 2.6	I 1.2	O 3.0	N 2.2	3.7	

KANSAS DEPARTMENT OF TRANSPORTATION

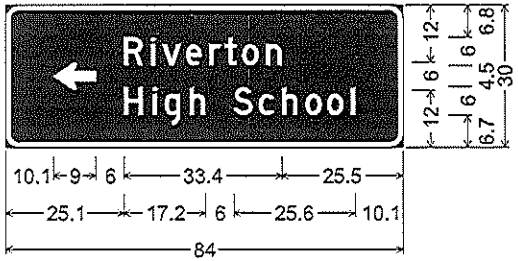
SIGN LAYOUT DETAILS
K-66

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	143	165



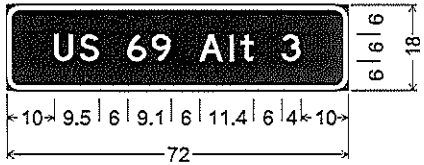
D1-1;
3.0" Radius, 1.0" Border, White on Green;
[Riverton] D; [High School] D;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

	R	i	v	e	r	t	o	n	→		
10.1	5.7	2.4	5.0	4.9	3.2	3.8	5.0	24.8	9.0	10.1	
	H	i	g	h	S	c	h	o	o	l	
10.1	6.1	2.5	5.3	9.3	5.2	5.0	4.9	4.6	5.0	0.9	25.1



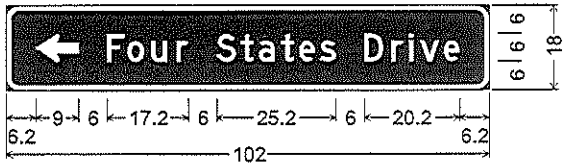
D1-1;
3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Riverton] D; [High School] D;
Table of distances between letter and object lefts.

	←	R	i	v	e	r	t	o	n		
10.1	15.0	5.7	2.4	5.0	4.9	3.2	3.8	5.0	3.4	25.5	
	H	i	g	h	S	c	h	o	o	l	
25.1	6.1	2.5	5.3	9.3	5.2	5.0	4.9	4.6	5.0	0.9	10.1



D2-1;
3.0" Radius, 1.0" Border, White on Green;
[US 69 Alt] D; [3] D;
Table of distances between letter and object lefts.

	U	S	6	9	A	l	t	3	
10.0	5.4	10.1	5.1	10.0	6.4	2.4	8.6	4.0	10.0



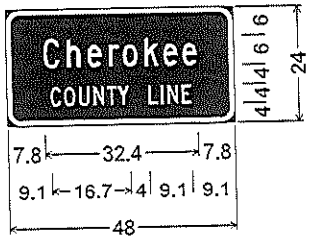
D1-1;
3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Four States Drive] D;
Table of distances between letter and object lefts.

	←	F	o	u	r	S	t	a	t	e	s	D	r	i	v	e		
6.2	15.0	4.3	5.1	5.3	8.5	5.1	3.8	4.8	3.7	4.4	9.4	5.7	3.7	2.4	5.0	3.4	6.2	

KANSAS DEPARTMENT OF TRANSPORTATION

SIGN LAYOUT DETAILS
K-66

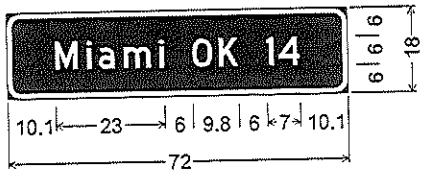
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	144	165



KI-97;
3.0" Radius, 1.0" Border, White on Green;
[Cherokee] C;
[COUNTY LINE] C;
Table of distances between letter and object lefts.

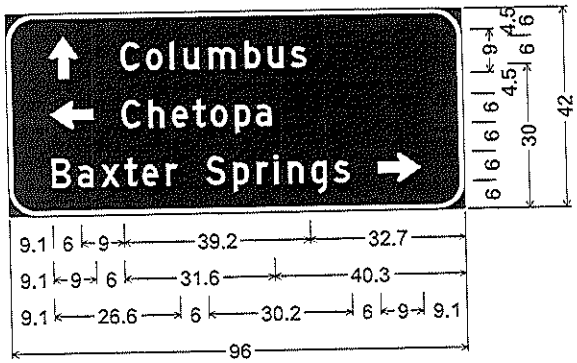
7.8	C 4.9	h 4.4	e 4.5	r 3.0	o 4.6	k 4.0	e 4.1	e 2.9	7.8	

9.1	C 2.9	O 3.1	U 3.1	N 2.8	T 2.3	Y 6.5	L 2.6	I 1.4	N 3.1	E 2.0	9.1



D2-1;
3.0" Radius, 1.0" Border, White on Green;
[Miami OK] D; [14] D;
Table of distances between letter and object lefts.

10.1	M 6.7	i 2.5	a 5.3	m 7.6	i 6.9	O 5.7	K 10.1	1 2.6	4 4.4	10.1

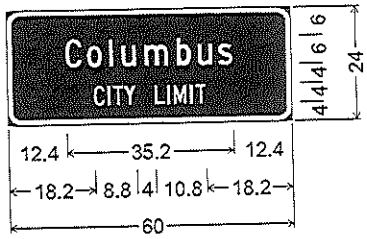


D1-3;
6.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 90°;
[Columbus] D;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Chetopa] D; [Baxter Springs] D;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

9.1	↑ 15.0	C 5.4	o 5.0	l 2.9	u 5.3	m 7.6	b 4.9	u 4.8	s 3.3	32.7	

9.1	← 15.0	C 5.7	h 4.9	e 4.4	t 3.8	o 5.0	p 4.5	a 3.3	40.3	

9.1	B 5.5	a 4.9	x 4.9	t 3.8	e 4.9	r 8.6	S 5.6	p 5.0	r 3.7	i 2.9	n 4.9	g 4.8	s 9.3	→ 9.0	9.1



KI-92;
3.0" Radius, 1.0" Border, White on Green;
[Columbus] C;
[CITY LIMIT] C;
Table of distances between letter and object lefts.

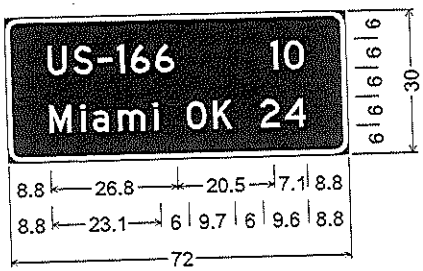
12.4	C 4.6	o 4.5	l 2.8	u 4.8	m 6.8	b 4.5	u 4.3	s 2.9	12.4	

18.2	C 2.9	I 1.2	T 2.2	Y 6.5	L 2.7	I 1.4	M 3.5	I 1.2	T 2.0	18.2	

KANSAS DEPARTMENT OF TRANSPORTATION

SIGN LAYOUT DETAILS
U.S. 69

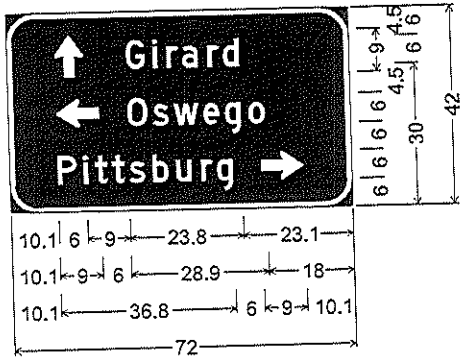
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	145	165



D2-2;
3.0" Radius, 1.0" Border, White on Green;
[US-166] D; [10] D;
[Miami OK] D; [24] D;
Table of distances between letter and object lefts.

8.8	U 5.5	S 5.1	- 4.2	1 2.8	6 5.2	6 24.5	1 2.8	0 4.3	8.8

8.8	M 6.7	i 2.5	a 5.3	m 7.6	i 7.0	O 5.6	K 10.1	2 5.2	4 4.4	8.8



D1-3;
6.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 90°;
[Girard] D;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Oswego] D; [Pittsburg] D;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

10.1	↑ 15.0	G 5.7	i 2.9	r 3.3	a 5.3	r 3.3	d 3.3	23.1	

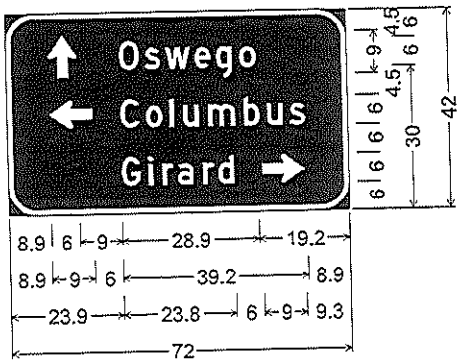
10.1	← 15.0	O 5.4	s 4.4	w 6.2	e 4.5	g 4.9	o 3.5	18.0	

10.1	P 5.4	i 2.4	t 3.6	t 3.7	s 4.9	b 4.9	u 5.3	r 3.3	g 9.3	→ 9.0	10.1

KANSAS DEPARTMENT OF TRANSPORTATION

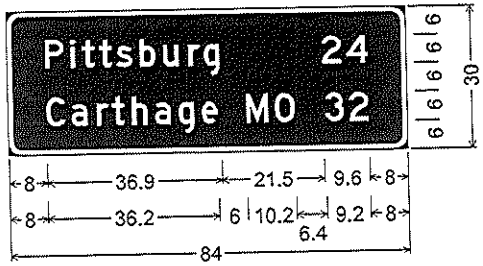
SIGN LAYOUT DETAILS
U.S. 69

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	140	165



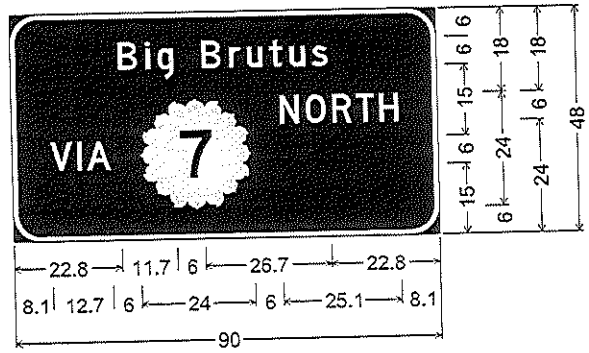
D1-3;
6.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 90°;
[Oswego] D;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Columbus] D; [Girard] D;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

8.9	↑ 15.0	O 5.4	s 4.4	w 6.2	e 4.6	g 4.9	o 3.4	19.2		
8.9	← 15.0	C 5.4	o 5.0	l 2.9	u 5.3	m 7.6	b 4.9	u 4.8	s 3.3	8.9
23.9	G 5.7	i 2.9	r 3.3	a 5.3	r 3.3	d 9.3	→ 9.0	9.3		



D2-2;
3.0" Radius, 1.0" Border, White on Green;
[Pittsburg] D; [24] D;
[Carthage MO] D; [32] D;
Table of distances between letter and object lefts.

8.0	P 5.5	i 2.3	t 3.7	t 3.6	s 4.9	b 4.9	u 5.3	r 3.3	g 24.9	2 5.2	4 4.4	8.0		
8.0	C 5.4	a 5.3	r 3.2	t 4.2	h 4.9	a 4.9	g 4.9	e 9.4	M 6.0	O 10.6	3 5.2	2 4.0	8.0	



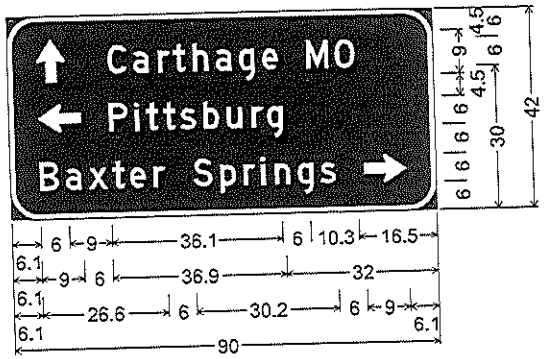
KD7-Special;
6.0" Radius, 1.0" Border, White on Brown;
[Big Brutus] D; [VIA] D; [NORTH] D;
Table of distances between letter and object lefts.

22.8	B 5.9	i 2.5	g 9.3	B 5.9	r 3.7	u 4.8	t 4.2	u 4.8	s 3.3	22.8	
8.1	V 5.7	I 2.0	A 11.0	7 30.0	N 5.5	O 5.6	R 5.2	T 4.7	H 4.1	8.1	

KANSAS DEPARTMENT OF TRANSPORTATION

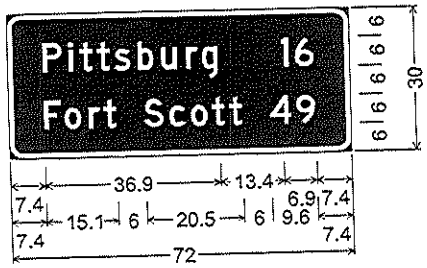
SIGN LAYOUT DETAILS
U.S. 69

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	147	165



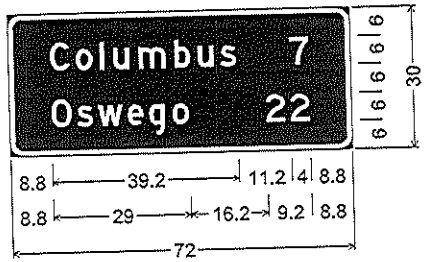
D1-3;
6.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 90°;
[Carthage MO] D;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Pittsburg] D; [Baxter Springs] D;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

6.1	↑ 15.0	C 5.4	a 5.3	r 3.2	t 4.2	h 4.9	a 4.9	g 4.9	e 9.3	M 6.1	O 4.2	16.5				
6.1	← 15.0	P 5.5	i 2.3	t 3.7	t 3.6	s 4.9	b 4.9	u 5.3	r 3.3	g 3.4	32.0					
6.1	B 5.5	a 4.9	x 4.9	t 3.8	e 4.9	r 8.6	S 5.7	p 4.9	r 3.7	i 2.9	n 4.9	g 4.8	s 9.3	→ 9.0	6.1	



D2-2;
3.0" Radius, 1.0" Border, White on Green;
[Pittsburg] D; [16] D;
[Fort Scott] D; [49] D;
Table of distances between letter and object lefts.

7.4	P 5.5	i 2.3	t 3.7	t 3.6	s 4.9	b 4.9	u 5.3	r 3.3	g 16.8	1 2.9	6 4.0	7.4	
7.4	F 4.3	o 5.1	r 3.1	t 8.6	S 5.3	c 4.5	o 4.5	t 3.6	t 8.6	4 5.6	9 4.0	7.4	



D2-2;
3.0" Radius, 1.0" Border, White on Green;
[Columbus] D; [7] D; [Oswego] D;
[22] D;
Table of distances between letter and object lefts.

8.8	C 5.4	o 5.0	l 2.9	u 5.3	m 7.6	b 4.9	u 4.8	s 14.5	7 4.0	8.8	
8.8	O 5.4	s 4.4	w 6.2	e 4.6	g 4.9	o 19.7	2 5.2	2 4.0	8.8		

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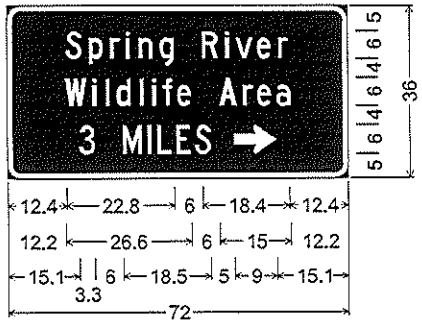
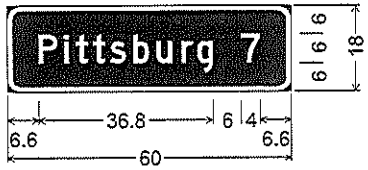
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	148	165



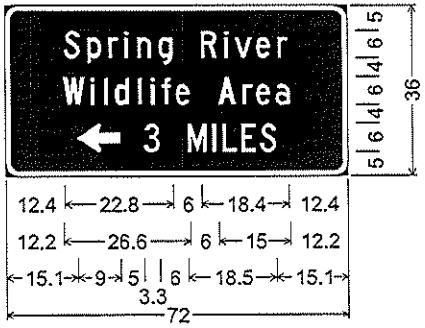
KD7-2a;
3.0" Radius, 1.0" Border, White on Brown;
[Spring River] C;
[Wildlife Area] C; [3 MILES] C;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

12.4	S 4.9	p 4.4	r 3.4	i 2.7	n 4.5	g 8.9	R 5.0	i 2.2	v 4.5	e 4.5	r 2.2	12.4	
12.2	W 5.8	i 2.7	i 2.3	d 4.9	i 2.7	i 2.3	f 3.0	e 8.9	A 5.1	r 2.9	e 4.1	a 2.9	12.2
15.1	3 9.3	M 5.1	I 2.1	L 4.0	E 4.0	S 8.3	→ 9.0	15.1					



D2-1;
3.0" Radius, 1.0" Border, White on Green;
[Pittsburg] D; [7] D;
Table of distances between letter and object lefts.

6.6	P 5.4	i 2.4	t 3.6	t 3.7	s 4.9	b 4.9	u 5.3	r 3.3	g 9.3	7 4.0	6.6



KD7-2a;
3.0" Radius, 1.0" Border, White on Brown;
[Spring River] C;
[Wildlife Area] C;
Standard Arrow Custom 9.0" X 6.0" 180°;
[3 MILES] C;
Table of distances between letter and object lefts.

12.4	S 4.9	p 4.4	r 3.4	i 2.7	n 4.5	g 8.9	R 5.0	i 2.2	v 4.5	e 4.5	r 2.2	12.4	
12.2	W 5.8	i 2.7	i 2.3	d 4.9	i 2.7	i 2.3	f 3.0	e 8.9	A 5.1	r 2.9	e 4.1	a 2.9	12.2
15.1	← 14.0	3 9.3	M 5.1	I 2.1	L 4.0	E 4.0	S 3.3	15.1					

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SIGN LAYOUT DETAILS
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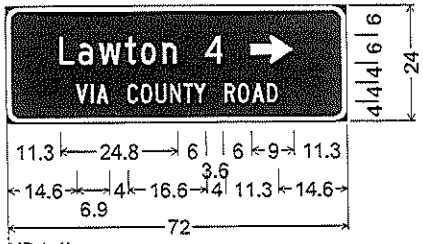
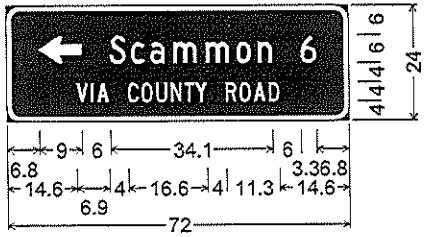
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	149	165



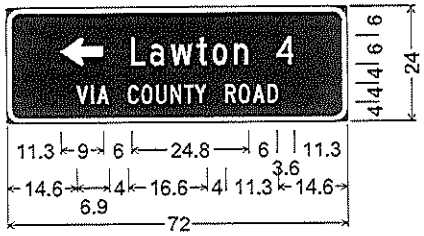
KD1-1b;
3.0" Radius, 1.0" Border, White on Green;
[Lawton 4] C;
Standard Arrow Custom 9.0" X 6.0" 0°;
[VIA COUNTY ROAD] C;
Table of distances between letter and object lefts.

11.3	L 4.0	a 4.4	w 5.4	t 3.4	o 4.6	n 9.0	4 9.6	➔ 9.0	11.3						
14.6	V 3.2	I 1.2	A 6.5	C 2.9	O 3.1	U 3.0	N 2.9	T 2.2	Y 6.5	R 2.9	O 3.0	A 3.2	D 2.2	14.6	



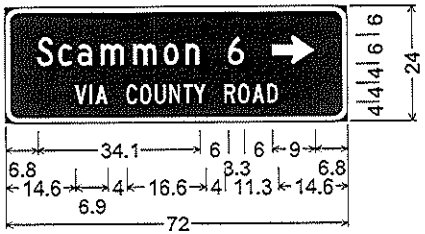
KD1-1b;
3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Scammon 6] C;
[VIA COUNTY ROAD] C;
Table of distances between letter and object lefts.

6.8	← 15.0	S 4.4	c 4.1	a 4.8	m 6.9	m 6.4	o 4.6	n 8.9	6 3.3	6.8					
14.6	V 3.2	I 1.2	A 6.5	C 2.9	O 3.1	U 3.0	N 2.9	T 2.2	Y 6.5	R 2.9	O 3.0	A 3.2	D 2.2	14.6	



KD1-1b;
3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Lawton 4] C;
[VIA COUNTY ROAD] C;
Table of distances between letter and object lefts.

11.3	← 15.0	L 4.0	a 4.4	w 5.4	t 3.4	o 4.6	n 9.0	4 3.6	11.3						
14.6	V 3.2	I 1.2	A 6.5	C 2.9	O 3.1	U 3.0	N 2.9	T 2.2	Y 6.5	R 2.9	O 3.0	A 3.2	D 2.2	14.6	



KD1-1b;
3.0" Radius, 1.0" Border, White on Green;
[Scammon 6] C;
Standard Arrow Custom 9.0" X 6.0" 0°;
[VIA COUNTY ROAD] C;
Table of distances between letter and object lefts.

6.8	S 4.4	c 4.1	a 4.8	m 6.9	m 6.4	o 4.6	n 8.9	6 9.3	➔ 9.0	6.8					
14.6	V 3.2	I 1.2	A 6.5	C 2.9	O 3.1	U 3.0	N 2.9	T 2.2	Y 6.5	R 2.9	O 3.0	A 3.2	D 2.2	14.6	

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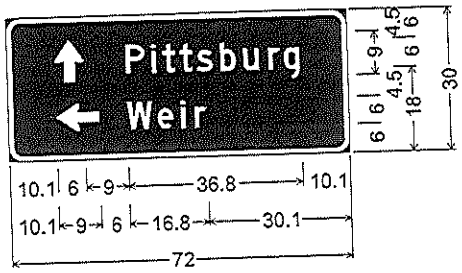
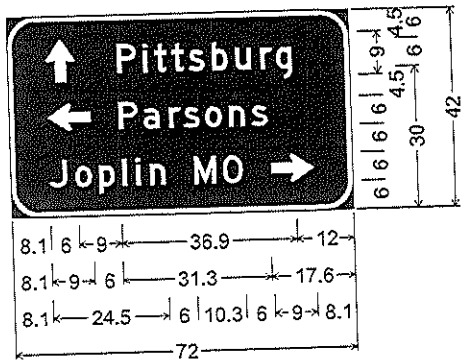
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	150	165



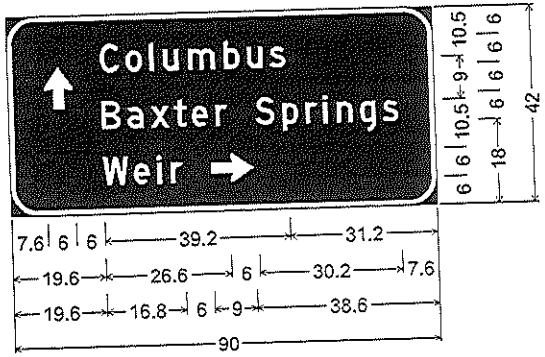
D1-2;
3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 90°;
[Pittsburg] D;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Weir] D;
Table of distances between letter and object lefts.

10.1	↑ 15.0	P 5.4	i 2.4	t 3.6	t 3.7	s 4.9	b 4.9	u 5.3	r 3.3	g 3.3	10.1
10.1	← 15.0	W 6.4	e 5.0	i 2.8	r 2.6	30.1					



D1-3;
6.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 90°;
[Pittsburg] D;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Parsons] D; [Joplin MO] D;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

8.1	↑ 15.0	P 5.5	i 2.3	t 3.7	t 3.6	s 4.9	b 4.9	u 5.3	r 3.3	g 3.4	12.0	
8.1	← 15.0	P 5.3	a 5.3	r 3.1	s 4.5	o 5.0	n 4.8	s 3.3	17.6			
8.1	J 5.5	o 5.0	p 4.9	l 2.9	i 2.9	n 9.3	M 6.1	O 10.2	→ 9.0	8.1		



D1-3;
6.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 90°;
[Columbus] D; [Baxter Springs] D;
[Weir] D;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

7.6	↑ 12.0	C 5.4	o 5.0	l 2.9	u 5.3	m 7.6	b 4.9	u 4.8	s 3.3	31.2					
19.6	B 5.5	a 4.8	x 5.0	t 3.8	e 4.9	r 8.6	S 5.6	p 4.9	r 3.8	i 2.9	n 4.9	g 4.7	s 3.4	7.6	
19.6	W 6.4	e 5.0	i 2.9	r 8.5	→ 9.0	38.6									

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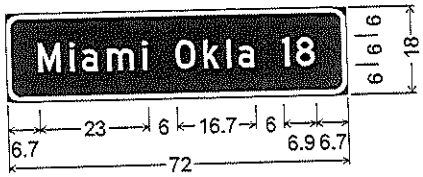
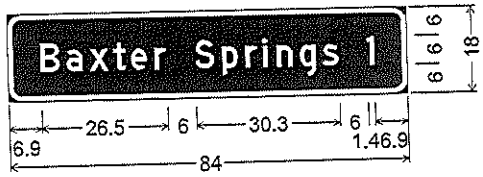
SIGN LAYOUT DETAILS
U.S. 69

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	151	165



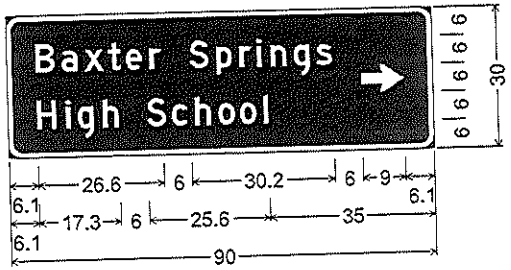
D2-1;
3.0" Radius, 1.0" Border, White on Green;
[Miami Okla] D; [18] D;
Table of distances between letter and object lefts.

6.7	M 6.7	i 2.5	a 5.3	m 7.6	i 6.9	O 6.0	k 4.9	l 2.5	a 9.3	l 2.9	8 4.0	6.7



D2-1;
3.0" Radius, 1.0" Border, White on Green;
[Baxter Springs] D; [1] D;
Table of distances between letter and object lefts.

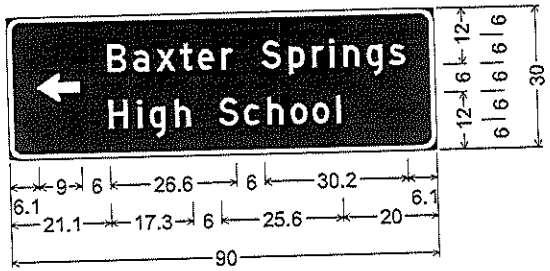
6.9	B 5.5	a 4.8	x 5.0	t 3.8	e 4.9	r 8.5	S 5.7	p 4.9	r 3.7	i 2.9	n 4.9	g 4.8	s 9.4	l 1.4	6.9



D1-2;
3.0" Radius, 1.0" Border, White on Green;
[Baxter Springs] D; [High School] D;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

6.1	B 5.5	a 4.8	x 5.0	t 3.8	e 4.9	r 8.6	S 5.6	p 4.9	r 3.8	i 2.9	n 4.9	g 4.7	s 9.4	9.0	6.1

6.1	H 6.1	i 2.5	g 5.3	h 9.4	S 5.2	c 4.9	h 4.9	o 4.6	o 5.1	l 0.9	35.0



D1-2;
3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Baxter Springs] D; [High School] D;
Table of distances between letter and object lefts.

6.1	← 15.0	B 5.5	a 4.8	x 5.0	t 3.8	e 4.9	r 8.6	S 5.6	p 4.9	r 3.8	i 2.9	n 4.9	g 4.7	s 3.4	6.1

21.1	H 6.1	i 2.5	g 5.3	h 9.4	S 5.2	c 4.9	h 4.9	o 4.6	o 5.1	l 0.9	20.0

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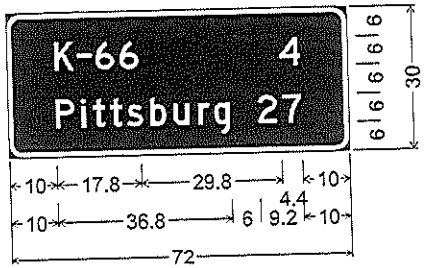
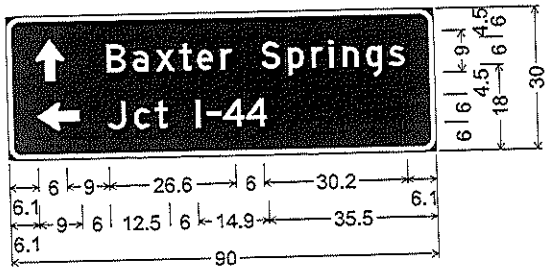
U.S. 69 ALTERNATE

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	152	165



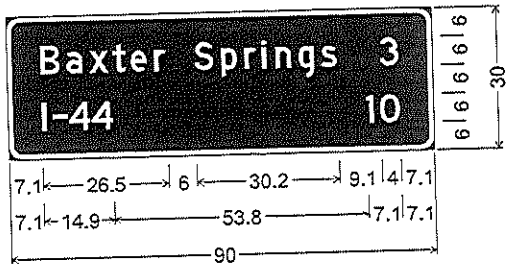
D2-2;
3.0" Radius, 1.0" Border, White on Green;
[K-66] D; [4] D; [Pittsburg] D;
[27] D;
Table of distances between letter and object lefts.

10.0	K 4.9	- 3.7	6 5.2	6 33.8	4 4.4	10.0						
10.0	P 5.4	i 2.4	t 3.6	t 3.7	s 4.9	b 4.9	u 5.3	r 3.3	g 9.3	2 5.2	7 4.0	10.0



D1-2;
3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 90°;
[Baxter Springs] D;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Jct I-44] D;
Table of distances between letter and object lefts.

6.1	↑ 15.0	B 5.5	a 4.8	x 5.0	t 3.8	e 4.9	r 8.6	S 5.6	p 4.9	r 3.8	i 2.9	n 4.9	g 4.7	s 3.4	6.1	
6.1	← 15.0	J 5.5	c 4.4	t 8.6	i 2.3	- 3.4	4 4.8	4 4.4	35.5							



D2-2;
3.0" Radius, 1.0" Border, White on Green;
[Baxter Springs] D; [3] D; [I-44] D;
[10] D;
Table of distances between letter and object lefts.

7.1	B 5.4	a 4.9	x 5.0	t 3.7	e 5.0	r 8.5	S 5.7	p 4.9	r 3.7	i 2.9	n 4.9	g 4.8	s 12.4	3 4.0	7.1	
7.1	I 2.3	- 3.4	4 4.8	4 58.2	1 2.9	0 4.2	7.1									

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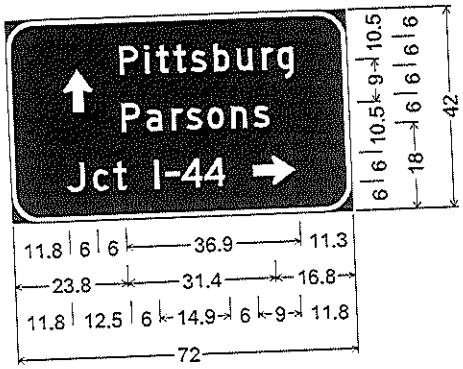
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	153	165

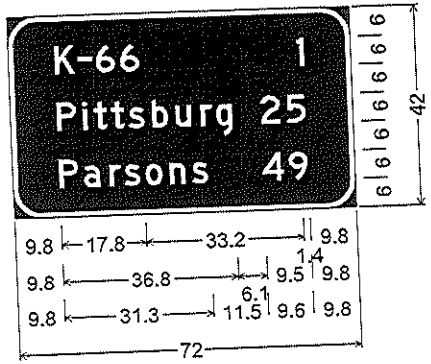


D1-3;
6.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 90°;
[Pittsburg] D; [Parsons] D;
[Jct I-44] D;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

11.8	↑ 12.0	P 5.5	i 2.3	t 3.7	t 3.6	s 4.9	b 4.9	u 5.3	r 3.3	g 3.4	11.3	

23.8	P 5.3	a 5.3	r 3.1	s 4.5	o 5.0	n 4.8	s 3.4	16.8

11.8	J 5.5	c 4.4	t 8.6	I 2.3	- 3.4	4 4.8	4 10.4	→ 9.0	11.8



D2-3;
6.0" Radius, 1.0" Border, White on Green;
[K-66] D; [1] D; [Pittsburg] D;
[25] D; [Parsons] D; [49] D;
Table of distances between letter and object lefts.

9.8	K 4.9	- 3.7	6 5.2	6 37.2	1 1.4	9.8

9.8	P 5.4	i 2.4	t 3.7	t 3.6	s 4.9	b 4.9	u 5.3	r 3.3	g 9.4	2 5.5	5 4.0	9.8

9.8	P 5.2	a 5.3	r 3.2	s 4.5	o 5.0	n 4.8	s 14.8	4 5.6	9 4.0	9.8

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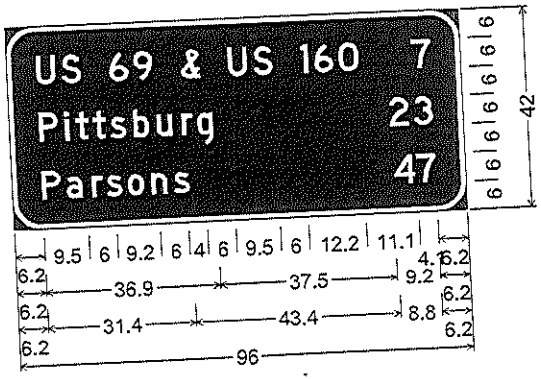
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	154	165



D2-3

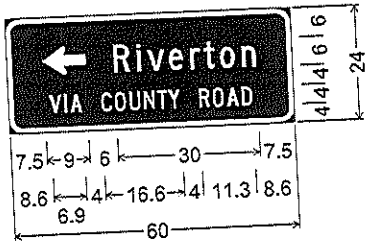
6.0" Radius, 1.0" Border, White on Green;

[US 69 & US 160] D; [7] D; [Pittsburg] D;

[23] D; [Parsons] D; [47] D;

Table of distances between letter and object lefts.

6.2	U 5.5	S 10.0	6 5.2	9 10.0	& 10.0	U 5.4	S 10.1	1 2.8	6 5.2	0 15.3	7 4.1	6.2
6.2	P 5.5	i 2.4	t 3.6	t 3.6	s 4.9	b 5.0	u 5.3	r 3.2	g 40.9	2 5.1	3 4.1	6.2
6.2	P 5.3	a 5.3	r 3.2	s 4.4	o 5.1	n 4.7	s 46.8	4 4.7	7 4.1	6.2		



KD1-1b;

3.0" Radius, 1.0" Border, White on Green;

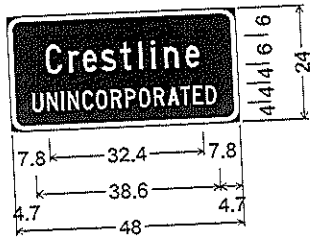
Standard Arrow Custom 9.0" X 6.0" 180°;

[Riverton] C;

[VIA COUNTY ROAD] C;

Table of distances between letter and object lefts.

7.5	15.0	R 5.0	i 2.2	v 4.5	e 4.5	r 2.8	t 3.4	o 4.6	n 3.0	7.5					
8.6	V 3.2	I 1.2	A 6.5	C 2.9	O 3.1	U 3.0	N 2.9	T 2.2	Y 6.5	R 2.9	O 3.0	A 3.2	D 2.2	8.6	



KI-96;

3.0" Radius, 1.0" Border, White on Green;

[Crestline] C;

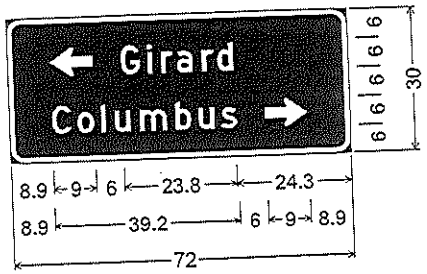
[UNINCORPORATED] C;

Table of distances between letter and object lefts.

7.8	C 4.9	r 2.9	e 4.0	s 3.9	t 3.9	l 2.7	i 2.7	n 4.5	e 2.9	7.8						
4.7	U 3.0	N 3.0	I 1.4	N 3.1	C 2.8	O 3.2	R 3.0	P 2.9	O 3.1	R 2.9	A 2.7	T 2.7	E 2.7	D 2.1	4.7	

KANSAS DEPARTMENT OF TRANSPORTATION

SIGN LAYOUT DETAILS
U.S. 69 ALTERNATE



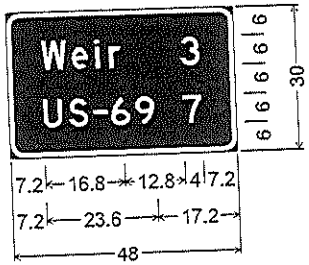
D1-2;
3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Girard] D; [Columbus] D;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

8.9	← 15.0	G 5.7	i 2.9	r 3.3	a 5.3	r 3.3	d 3.3	24.3			
8.9	C 5.4	o 5.0	l 2.9	u 5.3	m 7.6	b 4.9	u 4.8	s 9.3	→ 9.0	8.9	

KANSAS DEPARTMENT OF TRANSPORTATION

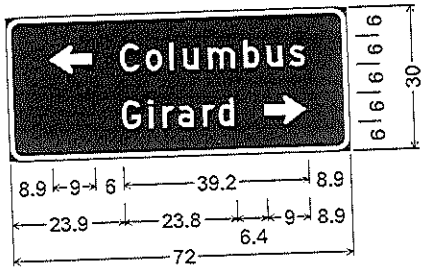
SIGN LAYOUT DETAILS
K-102

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	156	165



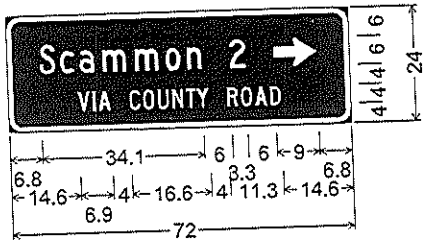
D2-2;
3.0" Radius, 1.0" Border, White on Green;
[Weir] D; [3] D;
[US-69] D; [7] D;
Table of distances between letter and object lefts.

7.2	W 6.5	e 4.9	i 2.9	r 15.3	3 4.0	7.2
7.2	U 5.5	S 5.1	- 3.8	6 5.1	9 10.1	7 4.0	7.2



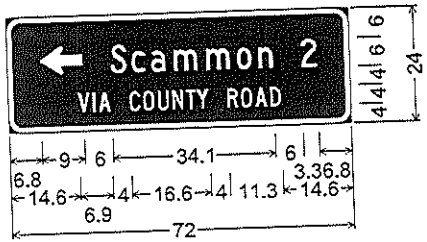
D1-2;
3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Columbus] D; [Girard] D;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

8.9	← 15.0	C 5.4	o 5.0	l 2.9	u 5.3	m 7.6	b 4.9	u 4.8	s 3.3	8.9
23.9	G 5.7	i 2.9	r 3.3	a 5.3	r 3.3	d 9.7	→ 9.0	8.9



KD1-1b;
3.0" Radius, 1.0" Border, White on Green;
[Scammon 2] C;
Standard Arrow Custom 9.0" X 6.0" 0°;
[VIA COUNTY ROAD] C;
Table of distances between letter and object lefts.

6.8	S 4.4	c 4.1	a 4.8	m 6.9	m 6.4	o 4.6	n 8.9	2 9.3	→ 9.0	6.8
14.6	V 3.2	I 1.2	A 6.5	C 2.9	O 3.1	U 3.0	N 2.9	T 2.2	Y 6.5	R 2.9	O 3.0	A 3.2	D 2.2	14.6



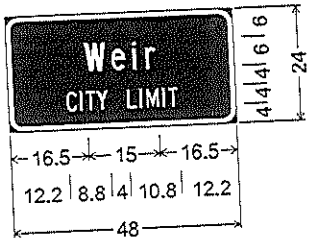
KD1-1b;
3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Scammon 2] C;
[VIA COUNTY ROAD] C;
Table of distances between letter and object lefts.

6.8	← 15.0	S 4.4	c 4.1	a 4.8	m 6.9	m 6.4	o 4.6	n 8.9	2 3.3	6.8
14.6	V 3.2	I 1.2	A 6.5	C 2.9	O 3.1	U 3.0	N 2.9	T 2.2	Y 6.5	R 2.9	O 3.0	A 3.2	D 2.2	14.6

KANSAS DEPARTMENT OF TRANSPORTATION

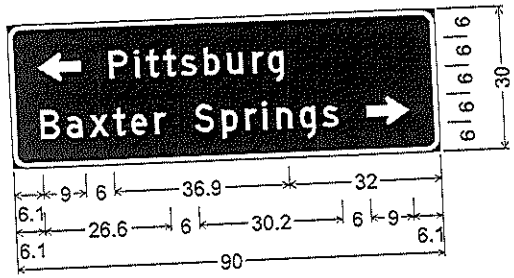
SIGN LAYOUT DETAILS
K-103

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	157	165



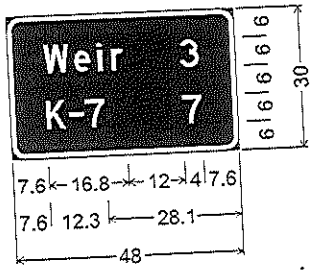
KI-92;
3.0" Radius, 1.0" Border, White on Green;
[Weir] C;
[CITY LIMIT] C;
Table of distances between letter and object lefts.

16.5	W 5.6	e 4.5	i 2.7	r 2.2	16.5						
12.2	C 2.9	I 1.2	T 2.2	Y 6.5	L 2.7	I 1.4	M 3.5	I 1.2	T 2.0	12.2	



D1-2;
3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Pittsburg] D; [Baxter Springs] D;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

6.1	← 15.0	P 5.5	i 2.3	t 3.7	t 3.6	s 4.9	b 4.9	u 5.3	r 3.3	g 3.4	32.0							
6.1	B 5.5	a 4.8	x 5.0	t 3.8	e 4.9	r 8.6	S 5.6	p 4.9	r 3.8	i 2.9	n 4.9	g 4.7	s 9.4	→ 9.0	6.1			



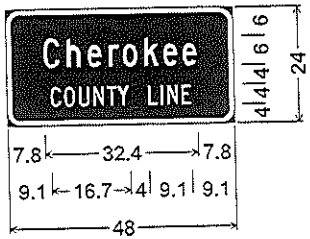
D2-2 ;
3.0" Radius, 1.0" Border, White on Green;
[Weir] D; [3] D;
[K-7] D; [7] D;
Table of distances between letter and object lefts.

7.6	W 6.4	e 5.0	i 2.9	r 14.5	3 4.0	7.6
7.6	K 4.9	- 3.3	7 20.6	7 4.0	7.6	

KANSAS DEPARTMENT OF TRANSPORTATION

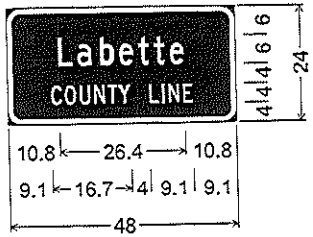
SIGN LAYOUT DETAILS
K-103

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	158	165



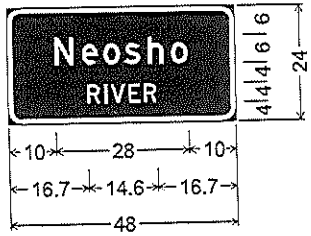
KI-97;
3.0" Radius, 1.0" Border, White on Green;
[Cherokee] C;
[COUNTY LINE] C;
Table of distances between letter and object lefts.

7.8	C 4.9	h 4.4	e 4.5	r 3.0	o 4.6	k 4.0	e 4.1	e 2.9	7.8	
9.1	C 2.9	O 3.1	U 3.1	N 2.8	T 2.3	Y 6.5	L 2.6	I 1.4	N 3.1	E 2.0	9.1



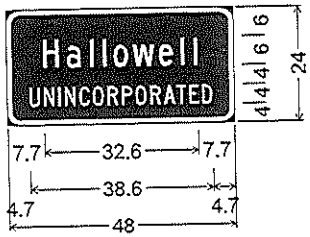
KI-97;
3.0" Radius, 1.0" Border, White on Green;
[Labette] C;
[COUNTY LINE] C;
Table of distances between letter and object lefts.

10.8	L 4.0	a 4.8	b 4.0	e 4.0	t 3.3	t 3.4	e 2.9	10.8		
9.1	C 2.9	O 3.1	U 3.1	N 2.8	T 2.3	Y 6.5	L 2.6	I 1.4	N 3.1	E 2.0	9.1



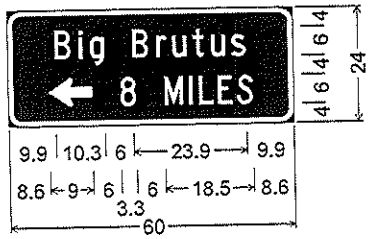
KI-3;
3.0" Radius, 1.0" Border, White on Green;
[Neosho] D;
[RIVER] D;
Table of distances between letter and object lefts.

10.0	N 5.7	e 4.6	o 4.4	s 5.0	h 4.9	o 3.4	10.0
16.7	R 3.6	I 1.4	V 3.7	E 3.2	R 2.7	16.7	



KI-96;
3.0" Radius, 1.0" Border, White on Green;
[Hallowell] C;
[UNINCORPORATED] C;
Table of distances between letter and object lefts.

7.7	H 5.0	a 4.8	l 2.7	l 2.4	o 4.0	w 5.6	e 4.5	l 2.8	l 0.8	7.7						
4.7	U 3.0	N 3.0	I 1.4	N 3.1	C 2.8	O 3.2	R 3.0	P 2.9	O 3.1	R 2.9	A 2.7	T 2.7	E 2.7	D 2.1	4.7	



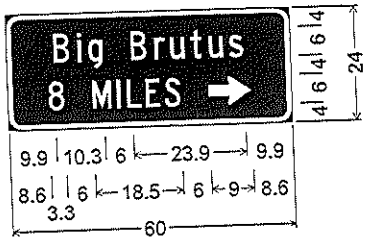
KD7-2a;
3.0" Radius, 1.0" Border, White on Brown;
[Big Brutus] C;
Standard Arrow Custom 9.0" X 6.0" 180°;
[8 MILES] C;
Table of distances between letter and object lefts.

9.9	B 5.1	i 2.3	g 8.9	B 5.1	r 3.4	u 4.3	t 3.8	u 4.4	s 2.9	9.9	
8.6	← 15.0	8 9.3	M 5.1	I 2.1	L 4.0	E 4.0	S 3.3	8.6			

KANSAS DEPARTMENT OF TRANSPORTATION

SIGN LAYOUT DETAILS
U.S. 160

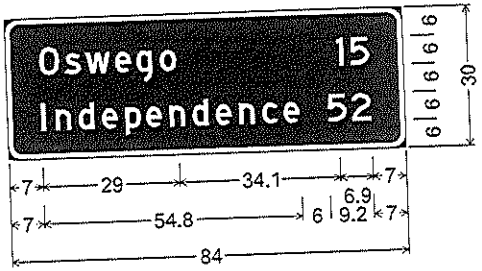
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	159	165



KD7-2a;
3.0" Radius, 1.0" Border, White on Brown;
[Big Brutus] C;
[8 MILES] C;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

9.9	B 5.1	i 2.3	g 8.9	B 5.1	r 3.4	u 4.3	t 3.8	u 4.4	s 2.9	9.9

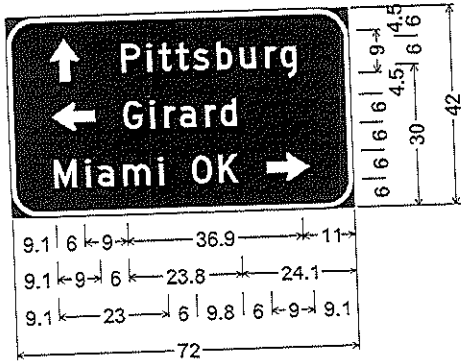
8.6	8 9.3	M 5.1	I 2.1	L 4.0	E 4.0	S 9.3	→ 9.0	8.6



D2-2;
3.0" Radius, 1.0" Border, White on Green;
[Oswego] D; [15] D;
[Independence] D; [52] D;
Table of distances between letter and object lefts.

7.0	O 5.5	s 4.3	w 6.3	e 4.5	g 4.9	o 37.6	1 2.8	5 4.1	7.0	

7.0	I 3.1	n 4.9	d 4.9	e 4.9	p 4.5	e 4.9	n 4.9	d 4.9	e 5.0	n 4.9	c 4.5	e 9.4	5 5.1	2 4.1	7.0

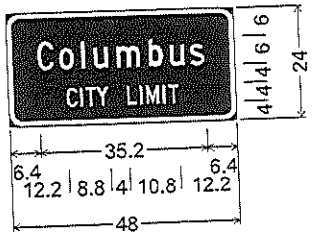


D1-3;
6.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 90°;
[Pittsburg] D;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Girard] D; [Miami OK] D;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

9.1	↑ 15.0	P 5.5	i 2.3	t 3.7	t 3.6	s 4.9	b 4.9	u 5.3	r 3.3	g 3.4	11.0

9.1	← 15.0	G 5.7	I 2.9	r 3.3	a 5.3	r 3.3	d 3.3	24.1

9.1	M 6.7	i 2.5	a 5.3	m 7.6	i 6.9	O 5.7	K 10.1	→ 9.0	9.1



KI-92;
3.0" Radius, 1.0" Border, White on Green;
[Columbus] C;
[CITY LIMIT] C;
Table of distances between letter and object lefts.

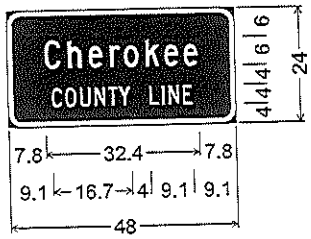
6.4	C 4.6	o 4.5	l 2.8	u 4.8	m 6.8	b 4.5	u 4.3	s 2.9	6.4	

12.2	C 2.9	I 1.2	T 2.2	Y 6.5	L 2.7	I 1.4	M 3.5	I 1.2	T 2.0	12.2

KANSAS DEPARTMENT OF TRANSPORTATION

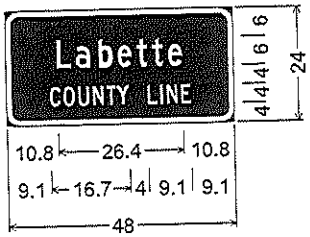
SIGN LAYOUT DETAILS
U.S. 160

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	160	165



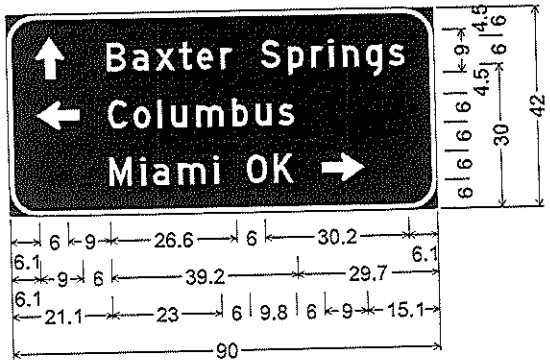
KI-97;
3.0" Radius, 1.0" Border, White on Green;
[Cherokee] C;
[COUNTY LINE] C;
Table of distances between letter and object lefts.

7.8	C 4.9	h 4.4	e 4.5	r 3.0	o 4.6	k 4.0	e 4.1	e 2.9	7.8		
9.1	C 2.9	O 3.1	U 3.1	N 2.8	T 2.3	Y 6.5	L 2.6	I 1.4	N 3.1	E 2.0	9.1



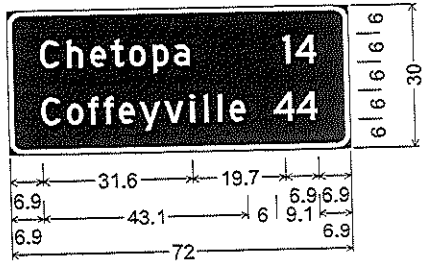
KI-97;
3.0" Radius, 1.0" Border, White on Green;
[Labette] C;
[COUNTY LINE] C;
Table of distances between letter and object lefts.

10.8	L 4.0	a 4.8	b 4.0	e 4.0	t 3.3	t 3.4	e 2.9	10.8			
9.1	C 2.9	O 3.1	U 3.1	N 2.8	T 2.3	Y 6.5	L 2.6	I 1.4	N 3.1	E 2.0	9.1



D1-3;
6.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 90°;
[Baxter Springs] D;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Columbus] D; [Miami OK] D;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

6.1	↑ 15.0	B 5.5	a 4.8	x 5.0	t 3.8	e 4.9	r 8.6	s 5.6	p 4.9	r 3.8	i 2.9	n 4.9	g 4.7	s 3.4	6.1	
6.1	← 15.0	C 5.4	o 5.0	l 2.9	u 5.3	m 7.6	b 4.9	u 4.8	s 3.3	29.7						
21.1	M 6.7	i 2.5	a 5.3	m 7.6	i 6.9	O 5.7	K 10.1	→ 9.0	15.1							



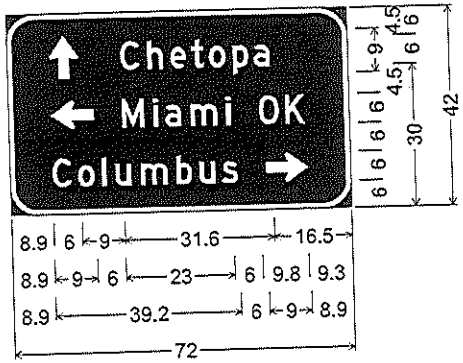
D2-2;
3.0" Radius, 1.0" Border, White on Green;
[Chetopa] D; [14] D;
[Coffeyville] D; [44] D;
Table of distances between letter and object lefts.

6.9	C 5.7	h 4.9	e 4.4	t 3.7	o 5.1	p 4.4	a 23.1	1 2.5	4 4.4	6.9						
6.9	C 5.3	o 4.6	f 3.2	f 3.2	e 4.5	y 5.2	v 5.4	i 2.9	l 2.9	l 2.5	e 9.4	4 4.7	4 4.4	6.9		

KANSAS DEPARTMENT OF TRANSPORTATION

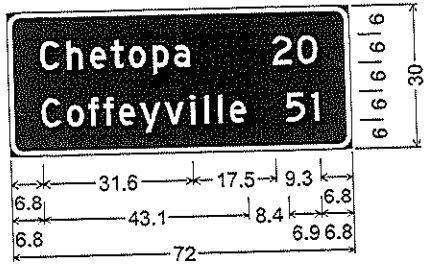
SIGN LAYOUT DETAILS
U.S. 166

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	161	165



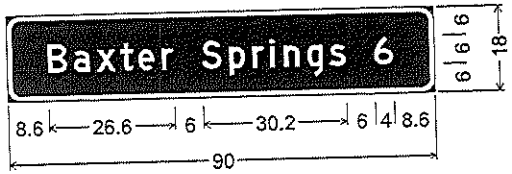
D1-3;
6.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 90°;
[Chetopa] D;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Miami OK] D; [Columbus] D;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

8.9	↑ 15.0	C 5.7	h 4.9	e 4.4	t 3.8	o 5.0	p 4.5	a 3.3	16.5	
8.9	← 15.0	M 6.7	i 2.5	a 5.3	m 7.6	i 6.9	O 5.6	K 4.2	9.3	
8.9	C 5.4	o 5.0	l 2.9	u 5.3	m 7.6	b 4.9	u 4.8	s 9.3	→ 9.0	8.9



D2-2;
3.0" Radius, 1.0" Border, White on Green;
[Chetopa] D; [20] D;
[Coffeyville] D; [51] D;
Table of distances between letter and object lefts.

6.8	C 5.7	h 4.9	e 4.4	t 3.7	o 5.1	p 4.4	a 20.9	2 5.1	0 4.2	6.8					
6.8	C 5.3	o 4.6	f 3.2	f 3.2	e 4.5	y 5.2	v 5.4	i 2.9	l 2.9	l 2.5	e 11.8	5 5.5	l 1.4	6.8	



D2-1;
3.0" Radius, 1.0" Border, White on Green;
[Baxter Springs] D; [6] D;
Table of distances between letter and object lefts.

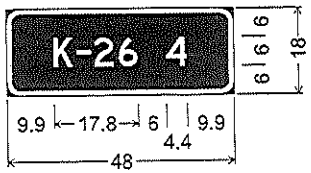
8.6	B 5.5	a 4.8	x 5.0	t 3.8	e 4.9	r 8.6	S 5.6	p 4.9	r 3.8	i 2.8	n 5.0	g 4.7	s 9.4	6 4.0	8.6	

KANSAS DEPARTMENT OF TRANSPORTATION

SIGN LAYOUT DETAILS
U.S. 166

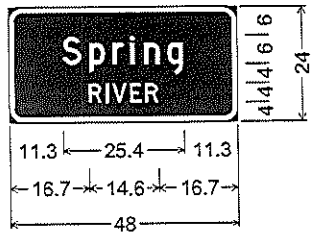
161

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	162	165



D2-1;
3.0" Radius, 1.0" Border, White on Green;
[K-26] D; [4] D;
Table of distances between letter and object lefts.

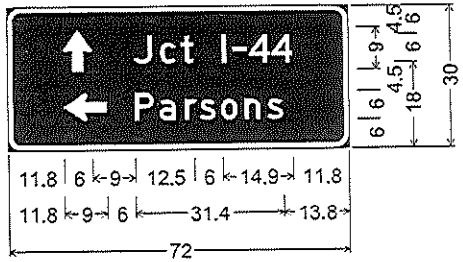
9.9	K 4.9	- 3.7	2 5.2	6 10.0	4 4.4	9.9



KI-3;
3.0" Radius, 1.0" Border, White on Green;
[Spring] D;
[RIVER] D;
Table of distances between letter and object lefts.

11.3	S 5.6	p 5.0	r 3.7	i 2.9	n 4.9	g 3.3	11.3

16.7	R 3.6	I 1.4	V 3.7	E 3.2	R 2.7	16.7



D1-2;
3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 90°;
[Jct I-44] D;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Parsons] D;
Table of distances between letter and object lefts.

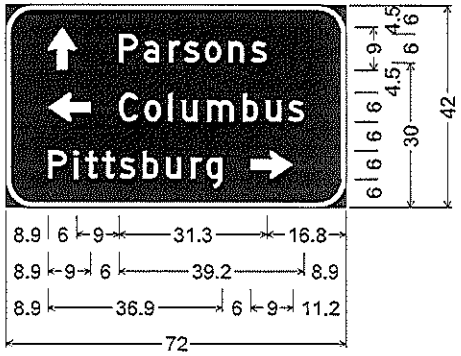
11.8	↑ 15.0	J 5.5	c 4.4	t 8.6	I 2.3	- 3.4	4 4.8	4 4.4	11.8

11.8	← 15.0	P 5.3	a 5.3	r 3.1	s 4.5	o 5.0	n 4.8	s 3.4	13.8

KANSAS DEPARTMENT OF TRANSPORTATION

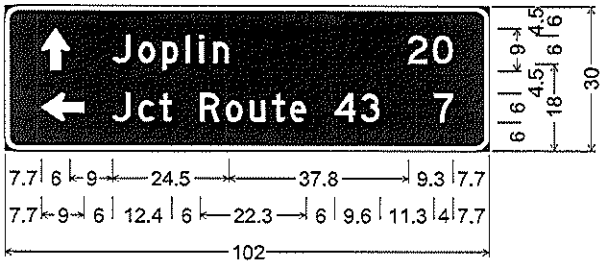
SIGN LAYOUT DETAILS
U.S. 166

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	163	165



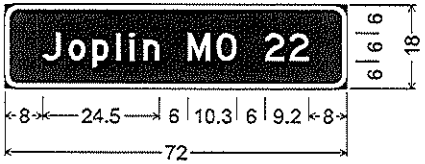
D1-3;
6.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 90°;
[Parsons] D;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Columbus] D; [Pittsburg] D;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

8.9	↑ 15.0	P 5.2	a 5.3	r 3.2	s 4.5	o 5.0	n 4.8	s 3.3	16.8	
8.9	← 15.0	C 5.4	o 5.0	l 2.9	u 5.3	m 7.6	b 4.9	u 4.8	s 3.3	8.9
8.9	P 5.5	i 2.3	t 3.7	t 3.6	s 4.9	b 4.9	u 5.3	r 3.3	g 9.4	→ 9.0	11.2



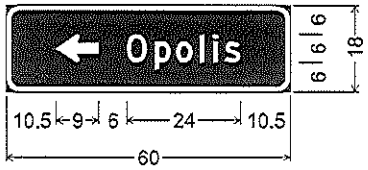
D1-2;
3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 90°;
[Joplin] D; [20] D;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Jct Route 43] D; [7] D;
Table of distances between letter and object lefts.

7.7	↑ 15.0	J 5.4	o 5.1	p 4.9	l 2.9	i 2.9	n 41.1	2 5.1	0 4.2	7.7	
7.7	← 15.0	J 5.4	c 4.4	t 8.6	R 5.4	o 5.0	u 4.8	t 3.8	e 9.3	4 5.5	3 15.4	7 4.0	7.7



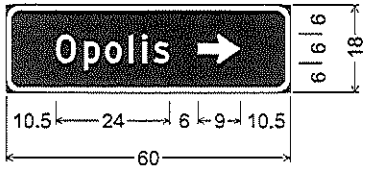
D2-1;
3.0" Radius, 1.0" Border, White on Green;
[Joplin MO] D; [22] D;
Table of distances between letter and object lefts.

8.0	J 5.5	o 5.0	p 4.9	l 2.9	i 2.9	n 9.3	M 6.1	O 10.2	2 5.2	2 4.0	8.0



D1-1;
3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Opolis] D;
Table of distances between letter and object lefts.

10.5	← 15.0	O 5.9	p 4.5	o 5.0	l 2.9	i 2.4	s 3.3	10.5



D1-1;
3.0" Radius, 1.0" Border, White on Green;
[Opolis] D;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

10.5	O 5.9	p 4.5	o 5.0	l 2.9	i 2.4	s 9.3	→ 9.0	10.5

KANSAS DEPARTMENT OF TRANSPORTATION

SIGN LAYOUT DETAILS
K-171

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	164	165

DETAILED SPECIFICATIONS FOR FLAT SHEET SIGNS

ALL NEW FLAT SHEET SIGN BLANKS SHALL BE OF THE ALUMINUM ALLOY AND THICKNESS SHOWN ON THE FLAT SHEET BLANK DETAIL SHEETS.

FLAT SHEET BLANKS SHALL BE USED FOR SIGNS THAT ARE LESS THAN OR EQUAL TO 7'-0" IN LENGTH AND/OR LESS THAN OR EQUAL TO 4'-0" IN HEIGHT. FLAT SHEET BLANKS SHALL ALSO BE USED FOR SIGNS THAT ARE 4'-0" IN LENGTH AND LESS THAN OR EQUAL TO 8'-0" IN HEIGHT.

THE DESIGN DETAILS FOR SIGNS (COLOR, LETTER HEIGHT, AND LETTER SERIES) SHALL BE AS SHOWN IN THE 'STANDARD HIGHWAY SIGNS' MANUAL (2004 EDITION), UNLESS OTHER DETAILS ARE SHOWN IN THE PLANS.

ALL SIGN FACES WITH BLUE, GREEN, RED, YELLOW, FLUORESCENT YELLOW GREEN, BROWN, OR WHITE BACKGROUND SHALL BE COVERED WITH TYPE IV HIGH INTENSITY RETROREFLECTIVE SHEETING.

THE TYPE OF ADHESIVE USED FOR RETROREFLECTIVE SHEETING OR LETTERING FILM SHALL BE HEAT ACTIVATED OR PRESSURE SENSITIVE.

THE SIGN FACES SHALL BE DIRECT SCREEN PROCESS, REVERSE SCREEN PROCESS, OR DIRECT APPLIED LEGEND.

DETAILED SPECIFICATIONS FOR STRUCTURAL EXTRUDED PANEL SIGNS

ALL NEW REINFORCED SIGN PANELS SHALL BE OF THE FABRICATION, ALUMINUM ALLOY, AND THICKNESS SHOWN ON THE REINFORCED PANEL DETAIL SHEETS. IF EXTRUSHEET FABRICATED SIGN PANELS ARE USED, THEY SHALL BE OF THE LENGTH, WIDTH AND IN THE POSITION SHOWN. IF EXTRUSHEET FABRICATED PANEL DIMENSIONS ARE NOT SHOWN, A LINE OF LEGEND SHOULD BE PLACED ENTIRELY ON ONE PANEL. IF EXTRUDED FABRICATED SIGN PANELS ARE USED, EITHER 1'-0" OR 6" PANELS SHALL BE USED. THE 1'-0" PANELS SHALL BE USED ONLY AT THE TOP OR BOTTOM OF SIGNS.

REINFORCED PANELS SHALL BE USED FOR SIGNS THAT ARE GREATER THAN 7'-0" IN LENGTH OR GREATER THAN 4'-0" IN HEIGHT.

ALL SIGN FACES SHALL BE COVERED WITH TYPE IV HIGH INTENSITY RETROREFLECTIVE SHEETING.

THE RETROREFLECTIVE SHEETING USED FOR THE DIRECT APPLIED LEGEND, AND DIRECT APPLIED BORDERS SHALL BE TYPE IV HIGH INTENSITY RETROREFLECTIVE SHEETING.

THE TYPE OF ADHESIVE USED FOR RETROREFLECTIVE SHEETING OR LETTERING FILM SHALL BE HEAT ACTIVATED OR PRESSURE SENSITIVE.

LETTERS AND NUMBERS ON REINFORCED PANEL SIGNS ARE MODIFIED SERIES "E" UNLESS OTHERWISE SHOWN.

SPACING TABLE DIMENSIONS ARE IN INCHES.

NO.	DATE	REVISIONS	BY	APPD
1	7/23/10	Changed Names and Sheeting Type	D.D.C.	D.D.

KANSAS DEPARTMENT OF TRANSPORTATION

DETAILS SPECIFICATIONS FOR REINFORCED SIGN PANELS AND FLAT SHEET SIGNS

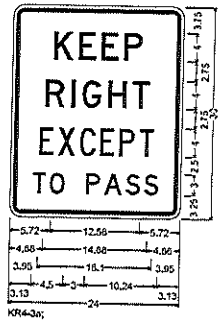
TE590 7/1/03

FINAL APPROVAL 7/23/2010 APP'D Steven A. Buckley

REVIEWED DAVID DETAILS J.D.D. DAVID HOWELL TRACED

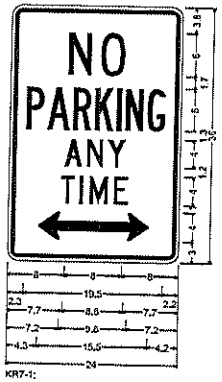
DESIGN CK. CHARLES W. CL. J.D.D. DAVID CK. TRACE CK.

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-03	2016	165	165



KR4-3a;
1.50" Radius, 0.63" Border, 0.38" Indent, Black on White;
[KEEP] D; [RIGHT] D;
[EXCEPT] C; [TO PASS] D;
Table of distances between letter and object lefts.

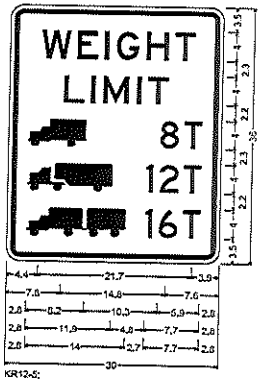
5.72	K 3.60	E 3.19	E 3.18	P 2.69	5.72		
4.66	R 3.62	I 1.56	G 3.63	H 3.44	T 2.43	4.66	
3.95	E 2.66	X 3.02	C 2.86	E 2.58	P 2.80	T 2.00	3.95
3.13	T 2.39	O 5.11	P 2.58	A 3.07	S 2.58	S 2.01	3.13



KR7-1;
1.5" Radius, 0.6" Border, 0.4" Indent, Red on White;
[NO] C;
[PARKING] B specified length;
[ANY] C; [TIME] C;
Double Headed Arrow Custom - 15.5" 0";
Table of distances between letter and object lefts.

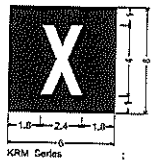
8.0	N 4.5	O 3.5	8.0					
2.3	P 2.9	A 3.8	R 3.1	K 3.0	I 1.3	N 3.0	G 2.6	2.2
7.7	A 3.2	N 2.9	Y 2.5	7.7				
7.2	T 2.7	I 1.4	M 3.5	E 2.0	7.2			
4.3	— 15.4	4.3						

NOTE: See plan or quantity sheet for arrow direction and sign designation:
KR7-1 - double headed arrow
KR-1R - arrow pointing to the right
KR-1L - arrow pointing to the left.



KR12-5;
1.0" Radius, 0.8" Border, 0.5" Indent, Black on White;
[WEIGHT] E; [LIMIT] E 103% spacing;
Symbol RG190; [8T] D; Symbol RG193;
[12T] D; Symbol RG196; [16T] D;
Table of distances between letter and object lefts.

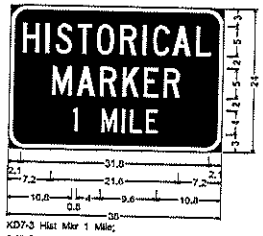
4.4	W 5.0	E 3.8	I 1.7	G 4.2	H 4.0	T 3.0	3.9
7.6	L 3.8	I 1.8	M 4.7	I 1.5	T 3.0	7.6	
2.8	— 18.5	8 3.5	T 2.4	7.8			
2.8	— 16.7	1 1.9	2 3.4	T 2.4	2.8		
2.8	— 16.7	1 1.9	8 3.4	T 2.4	2.8		



KRM Series ;
No border, None on Green;
[X] White C;
Table of distances between letter and object lefts.

1.8	X 2.4	1.8

NOTE: See plan or quantity sheet for number and sign designation.



KD7-3 Hist Mkr 1 Mile;
3.0" Radius, 0.7" Border, White on Brown;
[HISTORICAL] C; [MARKER] C;
[1 MILE] C;
Table of letter and object lefts.

H 2.1	I 5.9	S 7.7	T 11.3	O 14.6	R 18.5	I 22.3	C 24.1	A 27.4	L 31.4	
M 7.2	A 11.3	R 15.3	K 19.1	E 22.7	R 26.0					
I 10.8	M 15.6	I 19.1	L 20.5	E 23.2						

KANSAS DEPARTMENT OF TRANSPORTATION

TYPICAL DESIGN DETAILS
FOR
KR, KRM & KD7 SERIES SIGNS

APPD. DESIGNED | DETAILED | DESIGN CK. | DETAIL CK.