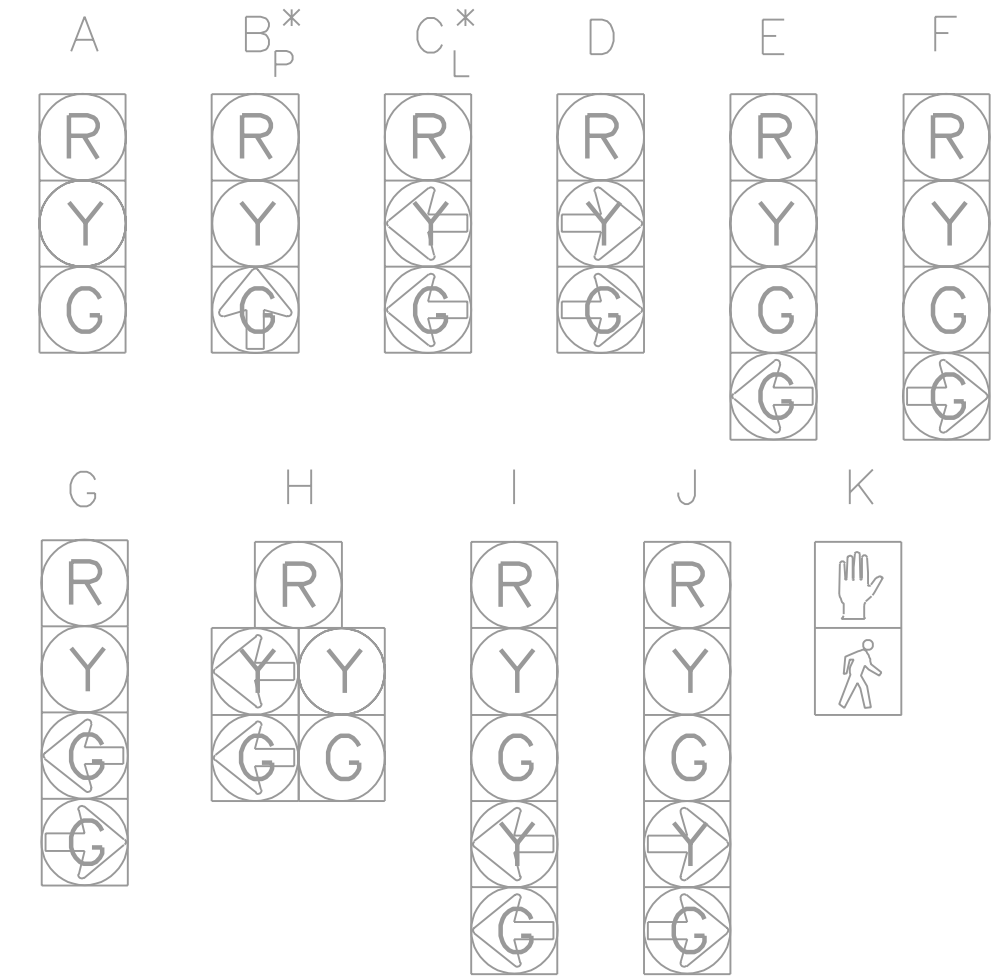


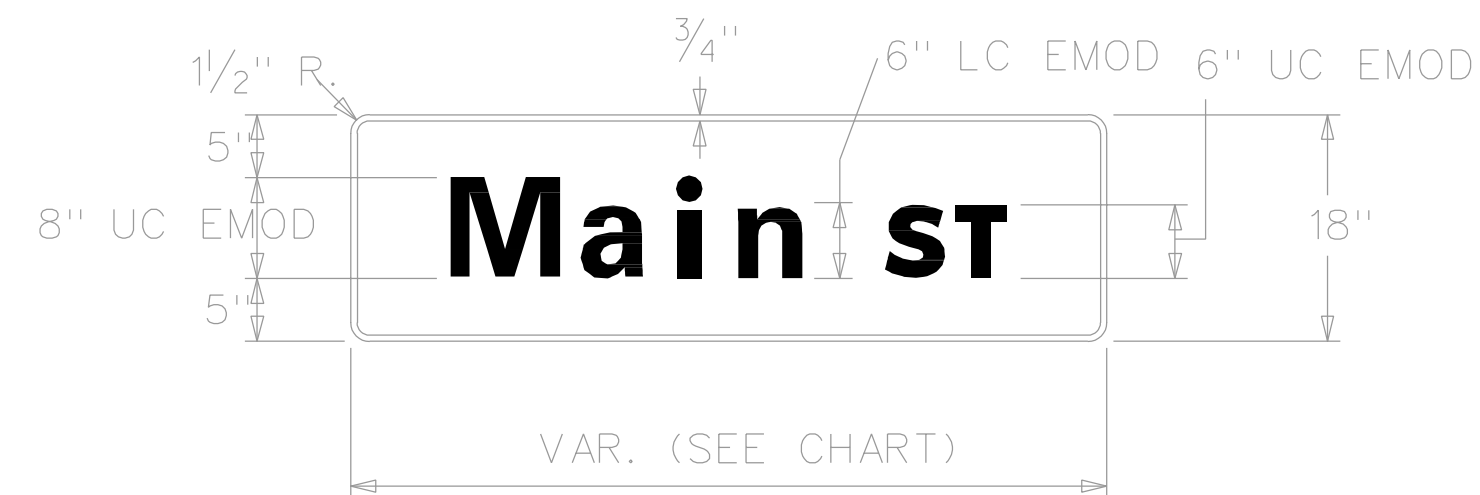
CHART A SIGNAL SUMMARY			
SIGNAL FACE ARRANGEMENT	NO. SECTIONS (PER FACE)	SIGNAL MOUNTING TYPE	QUANTITY
A	3	MAST ARM W/BACKPLATE	8
I	5	MAST ARM W/BACKPLATE	4
		MAST ARM W/BACKPLATE	
A	3	SIDE-OF-POLE	4
K	2	SIDE-OF-POLE	8
		SIDE-OF-POLE	



\* SUBSCRIPT "P" INDICATES PROGRAMMED SIGNALS;  
 -SUBSCRIPT "L" INDICATES L.E.D. LENSES.-  
 ALL LENSES ARE L.E.D.

CHART B TRAFFIC SIGNAL POLES							
POLE HEIGHT	SIGNAL ARM LENGTH	SIGNAL ARM MOUNTING HEIGHT	NO. OF SIGNALS ON ARM	SIGNAL SPACING	LUMINAIRE ARM LENGTH	LUMINAIRE MOUNTING HEIGHT	QUANT.
35 Ft.	40 Ft.	19 Ft.	3	11 Ft.	N/A	35 Ft.	1
35 Ft.	56 Ft.	19 Ft.	3	11 Ft.	N/A	35 Ft.	1
35 Ft.	46 Ft.	19 Ft.	3	11 Ft.	N/A	35 Ft.	1
35 Ft.	52 Ft.	19 Ft.	3	11 Ft.	N/A	35 Ft.	1

CHART C OVERHEAD STREET NAME SIGNS			
SIGN	LEGEND	LENGTH	QUANTITY
	Pawnee Ave.	7'-6"	2
	Meridian Ave.	8'-0"	2



NOTE :  
 THE TRAFFIC SIGNAL SYSTEM SHALL BE COMPLETE AND THE CONTRACTOR SHALL FURNISH AND INSTALL ALL EQUIPMENT AND MATERIALS NECESSARY FOR THE SATISFACTORY OPERATION OF ELECTRICAL APPARATUS AND FOR COMPLETE OPERATION OF THE TRAFFIC SIGNAL SYSTEM WHETHER SPECIFICALLY MENTIONED OR NOT.

### BILL OF MATERIALS

ITEM	QUANT.	UNIT	SPEC. NO.	NOTE
CONTROLLER UNIT	1	EACH	3.2.3.5	
PROGRAM MODULE	1	EACH	3.2.3.6	
CONFLICT MONITOR	1	EACH	3.2.3.7	
FLASHER	2	EACH	3.2.3.8	
LOAD SWITCH		EACH	3.2.3.9	
FLASH TRANSFER RELAY	4	EACH	3.2.3.10	
SURGE PROTECTOR		EACH	3.2.3.11	
DC ISOLATOR	3	EACH	3.2.3.12	
AC ISOLATOR		EACH	3.2.3.13	
DETECTOR, 2-CHANNEL		EACH	3.2.3.14	
DETECTOR, 4-CHANNEL		EACH	3.2.3.14	
POLE MOUNTED CABINET	1	EACH	3.2.3.4	
			3.2.3.4.5	
PAD MOUNTED CABINET		EACH	3.2.3.4	
			3.2.3.4.6	
TRAFFIC SIGNAL HEAD	CHART A	EACH	3.2.4	
SIGNAL HEAD MOUNTING BRACKET	CHART A	EACH	3.2.6	
BACK PLATE	CHART A	EACH	3.2.7	
VEHICLE TRAFFIC SIGNAL LAMP	56	EACH	3.2.5	
PEDESTRIAN TRAFFIC SIGNAL LAMP	16	EACH	3.2.5	
L.E.D. LENS	CHART A	EACH	3.2.4.4	
PEDESTRIAN PUSHBUTTON & SIGN	8	EACH	3.2.8, 3.2.9	
TRAFFIC SIGNAL POLE	CHART B	EACH	3.2.10	
TRAFFIC SIGNAL PEDESTAL ALUMINUM	4	EACH	3.2.11	
TERMINAL BLOCK	4	EACH	3.2.12	
JUNCTION BOX		EACH	3.2.13, 3.2.14	
SERVICE BOX	4	EACH	3.2.15	
LUMINAIRE	4	EACH	3.2.16	
LUMINAIRE LAMP 250 WATT	4	EACH	3.2.17	
PHOTOCELL	4	EACH	3.2.18	
UNFUSED STREET LIGHT CONNECTOR KIT	4	EACH	3.2.19	
FUSED STREET LIGHT CONNECTOR KIT	4	EACH	3.2.20	
OVERHEAD STREET NAME SIGN	CHART C	EACH	3.2.21	
R10-10 SIGN (24" X 30")		EACH	3.2.22	
R10-12 SIGN (24" X 30")	4	EACH	3.2.22	
BLANK OUT SIGN		EACH	3.2.23	
ENTRANCE HEAD		EACH	3.2.24	
SERVICE ENCLOSURE, 40 AMP.	1	EACH	3.2.25	
CIRCUIT BREAKER, TRAFFIC SIGNAL, 30 AMP.	1	EACH	3.2.26	
CIRCUIT BREAKER, LUMINAIRE, 15 AMP.	1	EACH	3.2.26	
GROUND ROD & CLAMP	5	EACH	3.2.27, 3.2.28	
SERVICE WIRE NO. 6 AWG 1/C		LIN FT	3.2.29	
LIGHTING DISTRIBUTION WIRE NO. 8 AWG 1/C		LIN FT	3.2.30	
POLE & BRACKET WIRE NO. 10 AWG 1/C		LIN FT	3.2.31	
GROUND WIRE NO. 6 AWG 1/C	200	LIN FT	3.2.32	
MULTI-CONDUCTOR CABLE NO. 14 AWG 5/C	2,211	LIN FT	3.2.33	
MULTI-CONDUCTOR CABLE NO. 14 AWG 7/C	830	LIN FT	3.2.33	
MULTI-CONDUCTOR CABLE NO. 14 AWG 3/C	765	LIN FT	3.2.33	
VIDEO CABLE (COAX)	765			
SHIELDED DETECTOR LEAD-IN CABLE NO. 14 AWG 2/C	745	LIN FT	3.2.34	
DETECTOR LOOP WIRE NO. 14 AWG 1/C		LIN FT	3.2.35	
LOOP SEALANT	AS REQ'D		3.2.36	
PRE-FORMED LOOP		EACH	3.2.37	
CONDUIT, 1" & FITTINGS		LIN FT	3.2.38	
CONDUIT, 1/2" & FITTINGS		LIN FT	3.2.38	
CONDUIT, 2" & FITTINGS		LIN FT	3.2.38	
CONDUIT, 3" FITTINGS	540	LIN FT	3.2.38	
CONDUIT, 4" & FITTINGS		LIN FT	3.2.38	

BID ITEM		
ITEM	UNIT	QUANTITY
TRAFFIC SIGNAL INSTALLATION (PAWNEE & MERIDIAN)	1	L.S.

ESTIMATED 200 Ft. FOR POWER HOOKUP

-QUANTITIES FOR INFORMATION ONLY-

3				
2				
1				
NO.	DATE	REVISION	BY	APP'D
KANSAS DEPARTMENT OF TRANSPORTATION				
TYPE 170E SYSTEM TRAFFIC SIGNAL QUANTITIES SHEET				
DESIGNED: J.F.F./DETAILED		04/29/03 APP'D		03/26/03
DESIGN CK: G.J.O./DETAIL CK		G.J.O./QUAN. CK		Linda G. Voss, P.E.