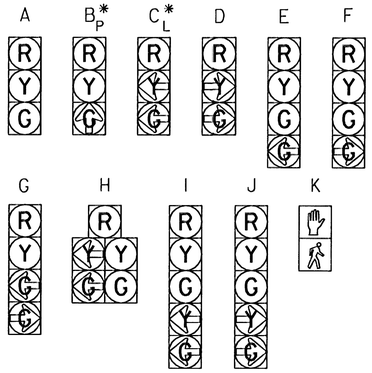
FHWA REGION NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS	87 N-0092-01	1999	35	75

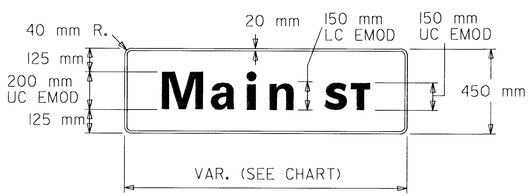
CHART A SIGNAL SUMMARY			
SIGNAL FACE ARRANGEMENT	NO. SECTIONS (PER FACE)	SIGNAL MOUNTING TYPE	QUANTITY
A	3	MAST ARM W/BACKPLATE	8
I	5	MAST ARM W/BACKPLATE	4
		MAST ARM W/BACKPLATE	
A	3	SIDE-OF-POLE	4
K	2	SIDE-OF-POLE	8
		SIDE-OF-POLE	



* SUBSCRIPT "P" INDICATES PROGRAMMED SIGNALS;
SUBSCRIPT "L" INDICATES L.E.D. RED LENS.

CHART B TRAFFIC SIGNAL POLES								
POLE DESIG.	POLE HEIGHT	SIGNAL ARM LENGTH	SIGNAL ARM MOUNTING HEIGHT	NO. OF SIGNALS ON ARM	SIGNAL SPACING	LUMINAIRE ARM LENGTH	LUMINAIRE MOUNTING HEIGHT	QUANT.
P1	11 m	12 m	5.8 m	3	12 - 9.5 - 6.1	2 m	12.2 m	1
P2	11 m	17 m	5.8 m	3	17 - 14 - 11	2 m	12.2 m	1
P3	11 m	16 m	5.8 m	3	16 - 13.1 - 9.8	2 m	12.2 m	1
P4	11 m	16 m	5.8 m	3	16 - 12.8 - 9.4	2 m	12.2 m	1

CHART C OVERHEAD STREET NAME SIGNS			
SIGN	LEGEND	LENGTH	QUANTITY
	Oliver		2
	Pawnee		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		NOTE
CONTROLLER UNIT 170 E	1	EACH		W/ 400 MODEM
PROGRAM MODULE 470 IB	1	EACH		
CONFLICT MONITOR	1	EACH		
FLASHER	2	EACH		
LOAD SWITCH	12	EACH		
FLASH TRANSFER RELAY	4	EACH		
SURGE PROTECTOR	1	EACH		
DC ISOLATOR	3	EACH		
AC ISOLATOR		EACH		
DETECTOR, 2-CHANNEL C 800	12	EACH		
DETECTOR, 4-CHANNEL		EACH		
POLE MOUNTED CABINET		EACH		
PAD MOUNTED CABINET	1	EACH		
DIAL UP MODEM (HAYES COMPATIBLE)	1	EACH		
STAND ALONE MODEL 400 MODEM (HAYES COMPATIBLE)	1	EACH		
TRAFFIC SIGNAL HEAD	CHART A	EACH		
SIGNAL HEAD MOUNTING BRACKET	CHART A	EACH		
BACK PLATE	CHART A	EACH		
VEHICLE TRAFFIC SIGNAL LAMP	64	EACH		
PEDESTRIAN TRAFFIC SIGNAL LAMP	16	EACH		
PEDESTRIAN PUSHBUTTON & SIGN	8	EACH		
TRAFFIC SIGNAL POLE	CHART B	EACH		
TRAFFIC SIGNAL PEDESTAL ALUMINUM		EACH		
TERMINAL BLOCK		EACH		
JUNCTION BOX	12	EACH		
SERVICE BOX	4	EACH		
LUMINAIRE		EACH		
LUMINAIRE LAMP WATT		EACH		
PHOTOCELL		EACH		
UNFUSED STREET LIGHT CONNECTOR KIT		EACH		
FUSED STREET LIGHT CONNECTOR KIT		EACH		
OVERHEAD STREET NAME SIGN	CHART C	EACH		
R10-10 SIGN (600 mm X 750 mm)		EACH		
R10-12 SIGN (600 mm X 750 mm)	4	EACH		
BLANK OUT SIGN		EACH		
ENTRANCE HEAD	1	EACH		
SERVICE ENCLOSURE, AMP.	1	EACH		
CIRCUIT BREAKER, TRAFFIC SIGNAL, AMP.	1	EACH		
CIRCUIT BREAKER, LUMINAIRE, AMP.		EACH		
GROUND ROD & CLAMP	6	EACH		
SERVICE WIRE NO. 6 AWG 1/C	45	METER		
LIGHTING DISTRIBUTION WIRE NO. 4 AWG 2/C	195	METER		
POLE & BRACKET WIRE NO. 10 AWG 1/C		METER		
GROUND WIRE NO. 8 AWG 1/C	165	METER		
MULTI-CONDUCTOR CABLE NO. 14 AWG 5/C	60	METER		
MULTI-CONDUCTOR CABLE NO. 14 AWG 7/C	650	METER		
MULTI-CONDUCTOR CABLE NO. 14 AWG /C		METER		
COMMUNICATION CABLE NO. 19 AWG 6 PR	240			
SHIELDED DETECTOR LEAD-IN CABLE NO. 14 AWG 2/C	1150	METER		
DETECTOR LOOP WIRE NO. 14 AWG 1/C	1370	METER		
LOOP SEALANT	AS REQ'D			
PRE-FORMED LOOP		EACH		
SPLICE KIT	2	EACH		
CONDUIT, 25 mm & FITTINGS	160	METER		
CONDUIT, 40 mm & FITTINGS	115	METER		
CONDUIT, 50 mm & FITTINGS	90	METER		
CONDUIT, 75 mm & FITTINGS	160	METER		
CONDUIT, 100 mm & FITTINGS		METER		

-QUANTITIES FOR INFORMATION ONLY-

To be bid as "Traffic Signalization - Lump Sum"

NO.	DATE		BY	APP'D
3				
2				
1				

KANSAS DEPARTMENT OF TRANSPORTATION

TYPE 170E SYSTEM
TRAFFIC SIGNAL QUANTITIES SHEET

TE130BS1 04/28/98

FHWA APPROVAL	05/18/98		APP'D	Linda G. Voss, P.E.	
DESIGNED	J.F.F.	DETAILED	J.F.F.	QUANTITIES	TRACED
DESIGN CK.	D.A.C.	DETAIL CK.	D.A.C.	QUAN. CK.	TRACE CK.

Plotted By : J. Olson
Plot File : /182\TE130bsi
Plot Date : 5-31-00
Thacher Bldg., 4th Floor