BILL OF MATERIALS (FOR INFORMATION ONLY)

ITEM	UNIT	QUANTITY
TRAFFIC SIGNAL POLE STEEL W/MASTARM (JOINT USE)	EACH	2
TRAFFIC SIGNAL POLE STEEL W/MASTARM (STD. POLE)	EACH	2
TRAFFIC SIGNAL POLE ALUMINUM (10')	EACH	–
CONCRETE CONTROLLER PAD	EACH	1
CONCRETE FOOTING – POLE	EACH	4
CONCRETE FOOTING – PEDESTAL POLE	EACH	–
SERVICE BOX – 36 IN. DIA.	EACH	4
GROUND ROD & CLAMP	EACH	6
CONDUIT CLAMP	EACH	AS NEEDED
PEDESTRIAN SIGNAL LAMP L.E.D. (12" COMBINATION)	EACH	8
L.E.D. UNIT	EACH	52
BACK PLATE FOR SIGNAL HEAD (TYPE A)	EACH	10
BACK PLATE FOR SIGNAL HEAD (TYPE I)	EACH	2
ENTRANCE HEAD	EACH	1
CIRCUIT BREAKER & BOX	EACH	1
TRAFFIC SIGNAL HEAD – 12" (TYPE A) W/MOUNTING BRACKET	EACH	14
TRAFFIC SIGNAL HEAD – 12" (TYPE I) W/MOUNTING BRACKET	EACH	2
PEDESTRIAN SIGNAL – 12" (TYPE K) W/MOUNTING BRACKET	EACH	8
PEDESTRIAN PUSHBUTTON W/SIGN	EACH	8
PAD MOUNTED CABINET & CONTROLLER SYSTEM–TYPE 170(SEE NOTE)	EACH	1
LEAD–IN WIRE NO. 6 AWG 1/c (TYPE THHN)	LIN. FT.	235
MULTI–CONDUCTOR CABLE NO. 14 AWG 5/c	LIN. FT.	695
MULTI–CONDUCTOR CABLE NO. 14 AWG 7/c	LIN. FT.	1810
STANDARD 1/c #8 (TYPE THHN)(GROUND)	LIN. FT.	955
PVC CONDUIT 1"	LIN. FT.	–
PVC CONDUIT 2"	LIN. FT.	200
RG CONDUIT 1–1/2"	LIN. FT.	92
RG CONDUIT 2"	LIN. FT.	22
RG CONDUIT 3"	LIN. FT.	575
VIDEO DETECTION CAMERA AND MOUNTING HARDWARE (RISER BRACKETS)	EACH	4
VIDEO DETECTION PROCESSOR UNIT (ITERIS VANTAGE PLUS OR APPROVED EQUAL)	EACH	1
VIDEO POWER CABLE NO. 16 AWG 3/C	LIN. FT.	835
VIDEO CABLE 75 OHM COAXIAL (BELDON #8281)	LIN. FT.	835
VIDEO SYSTEM PROGRAMMING UNIT	EACH	1
TV MONITOR	EACH	1
STREET NAME SIGNS W/MOUNTING HARDWARE	EACH	2
LEFT TURN YIELD ON GREEN (R10–12) W/MOUNTING HARDWARE	EACH	2

TYPE 170 TRAFFIC CONTROLLER SYSTEM TO INCLUDE:

ONE (1) MODEL 170 CONTROLLER UNIT COMPLETE WITH 412B2 SYSTEM MEMORY MODULE CAPABLE OF SUPPORTING WAPITI MICRO SYSTEM W4IKS (56 OR LATEST REVISION) TRAFFIC PROGRAM ON 27256 EPROM.

ONE (1) MODEL 332 CABINET COMPLETE WITH ALL ACCESSORIES INCLUDING FOUR (4) MODEL 430 TRANSFER RELAYS, TWO (2) MODEL 204 FLASHER UNITS AND ONE (1) MODEL 210PC ECL OR MS CONFLICT MONITOR.

THREE (3) MODEL 242 TWO CHANNEL ISOLATORS.

TWELVE (12) MODEL 200 SWITCH PACKS.

ONE (1) SURGE PROTECTOR

NOTE: THE CONTRACTOR SHALL SUPPLY AND INSTALL ALL NECESSARY MATERIAL AND EQUIPMENT FOR THE COMPLETE INSTALLATION AND OPERATION OF THE TRAFFIC SIGNAL WHETHER SPECIFICALLY MENTIONED OR NOT.

NOTE:
ALL POLES, MASTARMS AND THE CONTROLLER CABINET SHALL BE POWDER COATED BLACK

TRAFFIC SIGNAL POLE SUMMARY

STATION	TYPE	ARM LENGTH	SIGNALS ON ARM	X_1 X_2 X_3	OTHER EQUIP. ON ARM	SIGNALS ON POLE
9+46, Rt.	A	48'	4–D	11.5 11 11.5	C, G	1–D, 2–E
8+41, Rt.	A	39'	2–D	10	F, G	1–D, 2–E
8+38, Lt.	B	55'	4–D	11.5 11 11.5	C, G	1–D, 2–E
9+46, Lt.	B	38'	2–D	9.5	F, G	1–D, 2–E

A JOINT USE STEEL POLE WITH MAST ARM
B STANDARD STEEL POLE WITH MAST ARM
C PROTECTED TURN SIGN
D TRAFFIC SIGNAL
E PEDESTRIAN SIGNAL WITH PUSH BUTTON
F STREET NAME SIGN
G VIDEO DETECTION CAMERA
H PEDESTAL POLE (10' ALUMINUM)

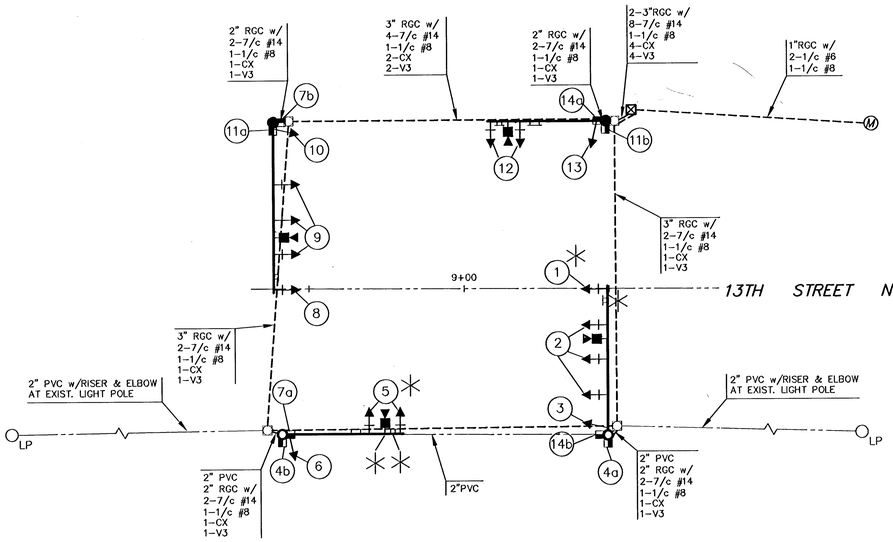
STREET NAME SIGN SUMMARY

LEGEND	QUANTITY
13th St	2
TOTAL	2

Letters shall be series "E Modified".

LEGEND

- Steel Traffic Signal Pole (Joint use)
- Steel Traffic Signal Pole (Std. Pole)
- Pedestal Pole (10' Aluminum)
- Traffic Signal Indication (Type A) w/Back Plate
- Mast Arm Suspended Traffic Signal
- Video Detection Camera
- Service Box
- Controller
- Pedestrian Indication
- Junction Box
- Rigid Galvanized Conduit (RGC)
- PVC Conduit
- Meter Box and Power Disconnect
- Overhead Street Name Sign
- Overhead Sign R10–12 (Lt. Yield on Green)
- CX Video Coax Cable (75 OHM)
- V3 Video Power Cable (#16 AWG 3/c)

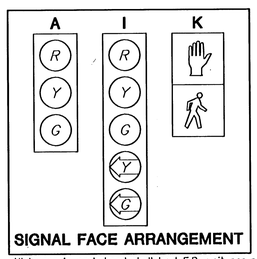




SCALE 1"=20'

TRAFFIC SIGNAL HEAD SUMMARY

SIGNAL NO.	TYPE	SIZE	MOUNTING BRACKET	QUANTITY
1	I	5–12"	TYPE I	1
2	A	3–12"	TYPE I	3
3	A	3–12"	TYPE III	1
4a,b	K	2–12"	TYPE II	2
5	A	3–12"	TYPE I	2
6	A	3–12"	TYPE I	1
7a,b	K	2–12"	TYPE II	2
8	I	5–12"	TYPE I	1
9	A	3–12"	TYPE I	3
10	A	3–12"	TYPE III	1
11a,b	K	2–12"	TYPE II	2
12	A	3–12"	TYPE I	2
13	A	3–12"	TYPE III	1
14a,b	K	2–12"	TYPE II	2



SIGNAL FACE ARRANGEMENT

All lenses in each head shall be L.E.D. unit per note.

RECAPITULATION OF TRAFFIC SIGNAL QUANTITIES

BID ITEM	QUANTITY	UNIT
TRAFFIC SIGNAL INSTALLATION (13th & GATEWAY CENTER)	1	L.S.

✳ INDICATES SIGNAL OR SIGN TO BE TEMPORARILY SACKED. COST SUBSIDIARY TO TRAFFIC SIGNAL INSTALLATION.

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MKEC ENGINEERING CONSULTANTS
411 N. WEBB ROAD
WICHITA, KS. 67206
316 - 684 - 9600

GATEWAY CENTER ADDITION
PROJECT NAME

WIRING PLAN
SHEET TITLE

DESIGN BY:	DRAWN BY:	CHECKED BY:
DFL	KKL	GJA

DATE	JOB NO.	SHEET/OF
APRIL 2004	98158SG2	3 / 8