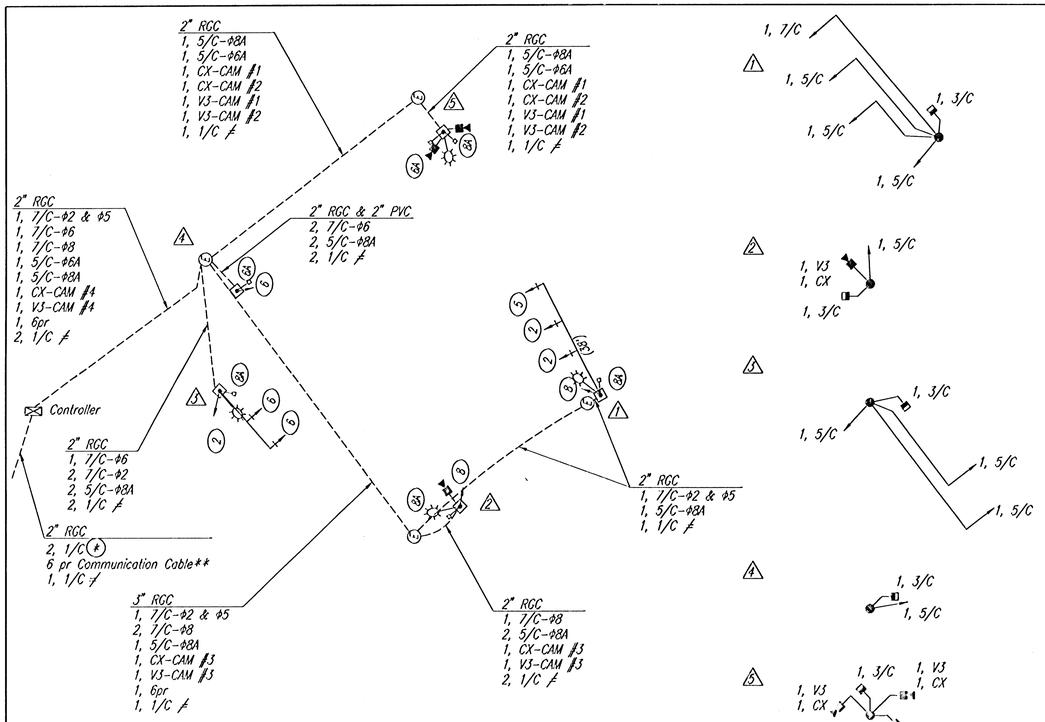


** Pull existing 6pr Communication Cable between existing Controller and Ped Signal at Indian Center entrance. Re-route to new Controller via 2" RGC along west side of Seneca Street.

≠ #8AWG Equipment Ground (Green)

(#) Power Supply

V3 Video Power Cable

CX Video Coax Cable

All splices to be in pole base, no splices permitted within servce box.

NOTE: Permanent pavement marking shall be accomplished with patterned cold plastic pavement marking material as specified in KDOT Sec. 2204, 1990 Ed..

Pavement marking shall not be paid for separately, but shall be considered subsidiary to "Traffic Signal Installation."

TRAFFIC SIGNAL POLE SUMMARY

POLE NO.	TYPE①	ARM LENGTH	NO.OF SIGNALS ON ARM	BRACKET TYPE	X1	X2	X3	NO.OF SIGNALS ON POLE	BRACKET TYPE	NO.OF PUSH BUTTONS ON POLE	REMARKS
1	C	38	3	I	38	25	15	2	II	1	
2	D	–	–	–	–			2	II	1	
3	C	24	2	I	24	12		2	II	1	
4	A	–	–	–	–			2	II	1	
5	D	–	–	–	–			2	II	2	

① A-15'Pedestal (Alum.)
B-20'Steel with Mast Arm(s)
C-35'Steel (Joint Use) with Mast Arm(s)
D-35'Steel without Mast Arm

POLE WIRING DIAGRAMS

NOTE: Each push button shall be connected to the terminal block with 1, 2/c cable.

Top Coat Finish for Traffic Signal Poles
All visually exposed exterior surfaces shall be coated with a urethane or triglycidyl isocyanurate (TGIC) polyester powder to a minimum dry film thickness (DFT) of 2.0 mils. Prior to application of the top coat, the surface shall be mechanically etched and pre-heated to 450 degrees F for a minimum of one hour. The coating shall be electro-statically applied and cured at a minimum temperature of 400 degrees F. The finished color for the poles shall be black and approved by the Engineer prior to application on the basis of color chip submittals.

Special Finish for Traffic Signal Equipment
The traffic signal controller cabinet, mounting brackets, signal head backs, sign backs, meter box, disconnect box, and miscellaneous hardware shall be shop painted with an aerosol lacquor celulose ester to match the traffic signal pole color. The Contractor shall submit two copies of the proposed coating system to the Engineer for approval prior to application. In addition to the requirements stipulated in the Standard Specifications, banding material shall be coated with ethylene-vinly-alcohol (EVA) copolymer. The color shall be black.

NOTE:
The contractor shall supply and install all necessary materials and equipment for the complete installation and operation of the traffic signal system whether specifically mentioned or not.

DETECTOR SUMMARY

CAMERA NO.	DETECTION ZONE	MODE	SIZE (LxW)	PHASE CALLED	PHASE EXTENDED	UNIT EXTENSION	DELAY/ STRETCH TIMER	INITIAL SETTING (SEC.)
1	D2-1	PULSE	6x6	2	2	1.0	S	1.0
1	D2-2	PULSE	6x6	2	2	1.0	S	1.0
1	D2-3	PULSE	6x6	2	2	1.0	S	1.0
1	D2-4	PULSE	6x6	2	2	1.0	S	1.0
1	D2-5	PRESENCE	6x60	2	2	0.5	—	—
1	D2-6	PRESENCE	6x60	2	2	0.5	—	—
1	D5-1	PRESENCE	6x60	5	5	0.5	—	—
2	D6-1	PULSE	6x6	6	6	1.0	S	1.0
2	D6-2	PULSE	6x6	6	6	1.0	S	1.0
2	D6-3	PULSE	6x6	6	6	1.0	S	1.0
2	D6-4	PULSE	6x6	6	6	1.0	S	1.0
2	D6-5	PRESENCE	6x60	6	6	0.5	—	—
2	D6-6	PRESENCE	6X60	6	6	0.5	—	—
3	D8-1	PRESENCE	6X30	8	8	0.5	—	—
3	D8-2	PRESENCE	6X30	8	8	0.5	—	—

BILL OF MATERIALS

ITEM	UNIT	QUANTITY
PAD MOUNTED CONTROLLER & CABINENT	EACH	1
TRAFFIC SIGNAL HEAD W/MOUNTING HARDWARE	EACH	14
TRAFFIC SIGNAL POLE STEEL (35')(JU)	EACH	2
TRAFFIC SIGNAL POLE (JOINT USE) STEEL (35') W/ MAST ARM	EACH	2
TRAFFIC SIGNAL PEDESTAL (15')	EACH	1
CONCRETE CONTROLLER PAD	EACH	1
CONCRETE FOOTING - PEDESTAL	EACH	1
CONCRETE FOOTING - POLE	EACH	4
CONDUIT ELBOW 90° 2"	EACH	AS REQ'D
CONDUIT ELBOW 90° 3"	EACH	AS REQ'D
BACK PLATE 5" 3 SECTION	EACH	4
BACK PLATE 5" 5 SECTION	EACH	1
TERMINAL BLOCK	EACH	–
SERVICE BOX	EACH	4
JUNCTION BOX (PRE-FAB)	EACH	–
GROUND ROD & CLAMP	EACH	7
TRAFFIC SIGNAL LAMP 135 WATT	EACH	30
RED LED	EACH	8
ENTRANCE HEAD	EACH	1
CIRCUIT BREAKER & BOX 50 AMP.	EACH	1
SURGE ARRESTOR - A.C.SERVICE	EACH	–
SURGE ARRESTOR - DETECTOR	EACH	–
PEDESTRIAN PUSHBUTTON W/SIGN	EACH	6
6 PR. COMMUNICATION CABLE	LIN.FT.	400**
DETECTOR LOOP WIRE NO. 14 AWG 1/c	LIN.FT.	–
LEAD-IN WIRE NO.6 AWG 1/c	LIN.FT.	1000
MULTI-CONDUCTOR CABLE NO.14 AWG 7/c	LIN.FT.	950
MULTI-CONDUCTOR CABLE NO.14 AWG 5/c	LIN.FT.	1100
MULTI-CONDUCTOR CABLE NO.14 AWG 3/c	LIN.FT.	100
SHEILDED DETECTOR LEAD-IN NO.14 AWG 2/c	LIN.FT.	–
CONDUIT 3/4"(RGC)	LIN.FT.	–
CONDUIT 1"(RGC)	LIN.FT.	50
CONDUIT 2"(PVC)	LIN.FT.	770
CONDUIT 2"(RGC)	LIN.FT.	520
CONDUIT 3"(RGC)	LIN.FT.	350
#8 AWG GROUND (GREEN)	LIN.FT.	1100
STREET NAME SIGN (MAST ARM MOUNTED)	EACH	2
STREET NAME SIGN (POLE MOUNTED)	EACH	2
VIDEO DETECTION CAMERA (VANTAGE OZ2), MOUNTING HARDWARE	EACH	3
VIDEO DETECTION UNIT (VANTAGE EDGE MODULE)	EACH	3
VIDEO POWER CABLE #16 A.W.G. 3/C	LIN.FT.	800
VIDEO CABLE 75 OHM COAXIAL (BELDON #8281 OR APPROVED EQUAL)	LIN.FT.	800
TV MONITOR	EACH	1

-QUANTITIES FOR INFORMATION ONLY-

SERVICE BOX SUMMARY

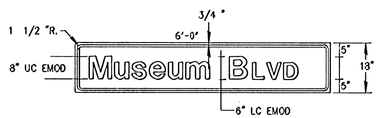
STATION	DIST.-SIDE
10+44	40.7' RT.
11+24.25	43' RT'
78+55	35' LT.
78+55	45' RT.

SUMMARY OF TRAFFIC SIGNAL HEADS

NUMBER	TYPE	SIZE	QUANTITY
2	A	12"	3
5	I	12"	1
6	A	12"	2
8	A	12"	1
6A	K	12"	2
8A	K	12"	4
TOTAL			13

OVERHEAD STREET NAME SIGNS

LEGEND	LENGTH	QUANTITY
Museum BLVD	6'-0"	2



RECAPITULATION OF TRAFFIC SIGNAL QUANTITIES

ITEM	UNIT	QUANTITY
TRAFFIC SIGNAL INSTALLATION (Seneca and Central)	LUMP SUM	LUMP SUM

REV.	DATE	DESCRIPTION

HELLMUTH, OBATA & KASSEBAUM, INC.
DALLAS, TEXAS

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
WICHITA, KANSAS

BRAD J. GOLDBERG
DALLAS, TEXAS

MUSEUM DISTRICT ROADWAY AND PEDESTRIAN IMPROVEMENTS
WICHITA, KANSAS

TRAFFIC SIGNAL MODIFICATION CENTRAL/STACKMAN

PROJECT NO.	ISSUE DATE	SCALE	SHEET
		NO SCALE	TS-2

PLAN: SURVEYED / CONTENT CHECKED / CONTENT CHECKED / RT OF WAY CHECKED
NOTE BOOK NO.

DSNR: DEP OPER: DEP SCALE: 1=20.00
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