FHWA REG NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	SHEETS
7	KANSAS	472-83084	2000	27	58

BILL OF MATERIALS (FOR INFORMATION ONLY)

ITEM	UNIT	QUANTITY
TRAFFIC SIGNAL POLE STEEL W/ MAST ARM	EACH	2
TRAFFIC SIGNAL PEDESTAL	EACH	2
CONCRETE BASE - POLE	EACH	2
CONCRETE BASE - PEDESTAL	EACH	2
SERVICE BOX - 36 IN. DIA.	EACH	2
GROUND ROD & CLAMP	EACH	5
TRAFFIC SIGNAL LAMP 135 WATT	EACH	22
TRAFFIC SIGNAL LAMP 60 WATT	EACH	4
ENTRANCE HEAD	EACH	1
CIRCUIT BREAKER & BOX	EACH	1
TRAFFIC SIGNAL HEAD - 12" (TYPE A) W/MOUNTING BRACKET	EACH	6
PEDESTRIAN SIGNAL HEAD - 12" (TYPE K) W/MOUNTING BRACKET	EACH	2
FLASHER SIGNAL HEAD - 8" W/MOUNTING BRACKET	EACH	2
PEDESTRIAN PUSHBUTTON W/SIGN	EACH	2
POLE MOUNTED CABINET & CONTROLLER SYSTEM-TYPE 170(SEE NOTE)	EACH	1
LEAD-IN WIRE NO. 6 AWG 1/c (TYPE THHN)	LIN. FT.	90
MULTI-CONDUCTOR CABLE NO. 14 AWG 5/c	LIN. FT.	405
MULTI-CONDUCTOR CABLE NO. 14 AWG 3/c	LIN. FT.	390
CONDUIT 1"	LIN. FT.	45
CONDUIT 1-1/4"	LIN. FT.	265
CONDUIT 2"	LIN. FT.	100
STANDARD 1C #8 (TYPE THHN)(GROUND)	LIN. FT.	508
SCHOOL CROSSING SIGN (S2-1) W/MOUNTING HARDWARE	EACH	2
SCHOOL SPEED LIMIT SIGN (S5-1) W/MOUNTING HARDWARE	EACH	2
END SCHOOL ZONE SIGN (S5-2) 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 (LATEST REVISION) TRAFFIC PROGRAM ON 27256 EPROM.

ONE (1) MODEL 336 CABINET COMPLETE WITH ALL ACCESSORIES INCLUDING FOUR (4) MODEL 430 TRANSFER RELAYS, TWO (2) MODEL 204 FLASHER UNITS AND ONE (1) MODEL 210MS OR ECL CONFLICT MONITOR.

TWO (2) MODEL 242 TWO CHANNEL ISOLATORS.

TWO (2) MODEL 200 SWITCH PACKS.

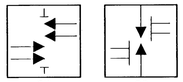
NOTE: THE CONTRACTOR SHALL SUPPLY AND INSTALL ALL NECESSARY MATERIAL AND EQUIPMENT FOR THE COMPLETE INSTALLATION AND OPERATION OF THE TRAFFIC SIGNAL WHETHER SPECIFICALLY MENTIONED OR NOT.

CROSSWALK SIGNAL HEAD SUMMARY

SIGNAL NO.	TYPE	SIZE	MOUNTING BRACKET	QUANTITY
1	A	3-12"	TYPE I	4
2	A	3-12"	ASSEMBLY G*	2
3	K	2-9"	ASSEMBLY G*	2
4	A.W.F.	2-8"	ASSEMBLY H	2

* ONE ASSEMBLY G BRACKET WILL SUPPORT 1 EACH OF TYPE A AND TYPE K HEADS.

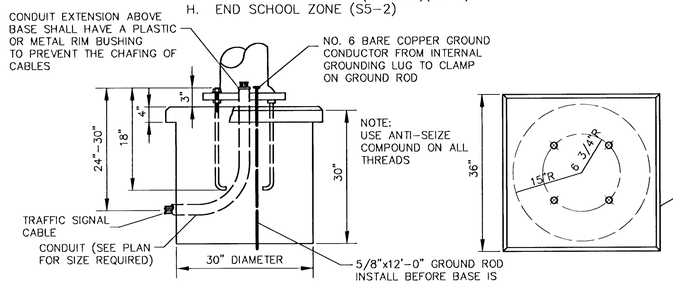
SIGNAL PHASING



CROSSWALK SIGNAL POLE SUMMARY

STATION	TYPE	ARM LENGTH	SIGNALS ON ARM	SIGNALS/EQUIP. ON POLE	SIGNS ON POLE
38+33 R	A				1-G 1-H
38+90 L	B	26'-0"	2-D	1-D, 1-E, 1-C	1-F
39+00 R	B	26'-0"	2-D	1-D, 1-E	1-F
40+18 L	A				1-G 1-H

A. STANDARD 10' POLE (ALUMINUM)
B. STANDARD STEEL POLE WITH MAST ARM
C. CONTROLLER WITH CABINET
D. TRAFFIC SIGNAL
E. PEDESTRIAN SIGNAL WITH PUSH BUTTON
F. SCHOOL CROSSING (S2-1)
G. SCHOOL SPEED LIMIT (20 MPH)(S5-1)
H. END SCHOOL ZONE (S5-2)



CONCRETE BASE DETAILS
ADVANCE WARNING FLASHER

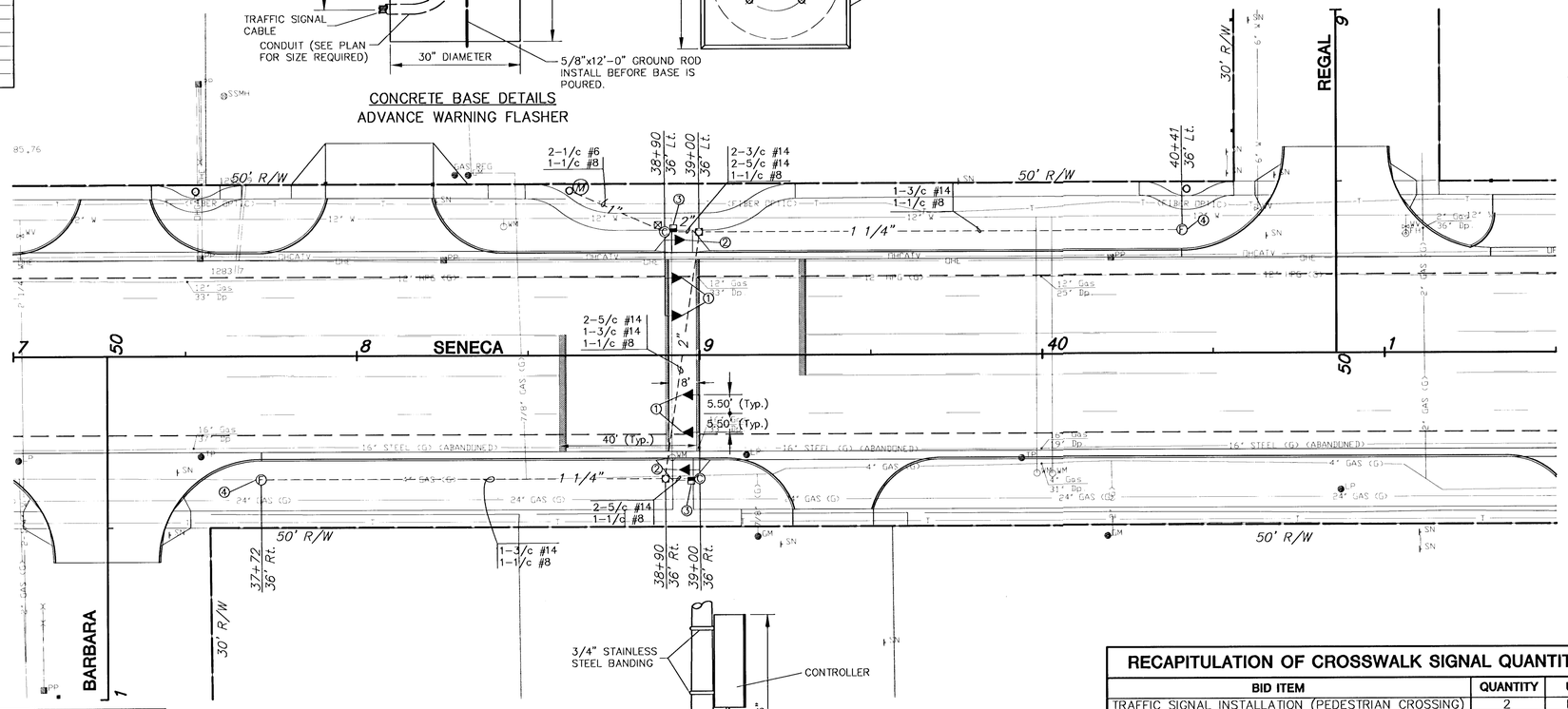
GENERAL NOTES

1. CONDUIT SHALL BE JACKED OR BORED IF NOT INSTALLED BEFORE PLACING OF NEW PAVEMENT.
2. PLACEMENT OF SERVICE/JUNCTION BOXES, CONDUIT RUNS AND CONTROLLER ARE TYPICAL AND MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER TO FACILITATE INSTALLATION.
3. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES WHICH MAY BE AFFECTED BY THE INSTALLATION OF TRAFFIC SIGNALIZATION PRIOR TO ANY CONSTRUCTION.
4. KG&E POWER POLE STA. 38+62.2, 48' LT. INSTALL METER AND POWER DISCONNECT. SEE POWER POLE DETAILS. ADDRESS: 2909 S. SENECA.
5. CONTRACTOR TO PROVIDE EITHER SCHOOL CROSSWALK SIGNAL OR ADULT CROSSING GUARD FOR SCHOOL CHILDREN CROSSING PROTECTION DURING SCHOOL CHILDREN CROSSING TIME PERIODS. CONTACT ENGINEER FOR APPLICABLE SCHOOL CHILDREN CROSSING TIME PERIODS.
6. EXISTING SIGNAL APPURTENANCES, EXCEPT AS OTHERWISE NOTED ON THE PLANS, SHALL BE REMOVED BY CONTRACTOR AND TAKEN TO THE CITY YARD. NOTIFY TRAFFIC MAINTENANCE (268-4033) 14 DAYS PRIOR TO START OF CONSTRUCTION.

LEGEND

- (F) Advance Flasher on Signal Pedestal with Signs S5-1, & S5-2
- (C) Crosswalk Signal Pole, Mast Arm, and Signs S2-1
- ▶ Traffic Signal (Type A), 12" on Pole
- ☐ Service Box
- ☒ Controller
- ◨ Pedestrian Indication, 12"
- ◁ Junction Box
- ---- Rigid Galvanized Conduit (RGC)
- (M) Meter Box and Power Disconnect

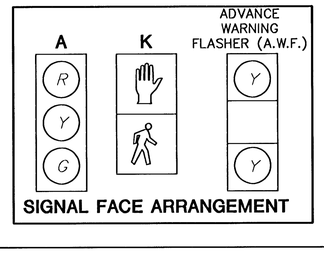
Scale: 1" = 20'



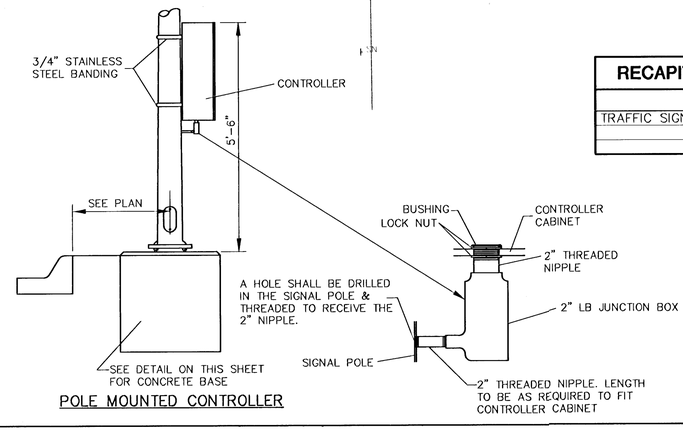
TYPE 170 CONTROLLER SETTINGS

INTERVAL		"WAPITI PROGRAM" PHASE 1 WBLT	2 EB	3 SBLT	4 NB	5 —	6 WB	7 NBLT	8 SB
MAX	0		30		30				
MAX 2	1		30		30				
WALK	2		8						
FL. DW.	3		20						
MAX INIT.	4		28		30				
MIN GREEN	5		28		30				
TBR	6				10				
TTR	7				10				
	8								
PASSAGE	9								
MIN GAP	a								
ADD ACT	b								
YELLOW	c		3.0		4.0				
RED CLR.	d				1.5				
RED REV.	e								
WALK II	f								

NORMAL DISPLAY TIME CLOCK	FEATURES	1	2	3	4	5	6	7	8
0 YEAR	VEH RECALL				X				
1 MONTH	PED RECALL								
2 DAY/MONTH	RED LOCK								
3 DAY/WEEK	YEL LOCK	X		X					
4 HOUR	ø PERMIT	X		X					
5 MINUTE	PED PHASES	X							
6 SECOND	LEAD PHASES	X		X		X		X	
7	DBL ENTRY								
8	SEQUENTIAL								
9	START UP YEL								
a	OVERLAP A								
b	OVERLAP B								
c	OVERLAP C								
d	OVERLAP D								
e	EXCLUSIVE								
f	SIM GAP								



SIGNAL FACE ARRANGEMENT



POLE MOUNTED CONTROLLER

RECAPITULATION OF CROSSWALK SIGNAL QUANTITIES

BID ITEM	QUANTITY	UNIT
TRAFFIC SIGNAL INSTALLATION (PEDESTRIAN CROSSING)	2	EACH

KANSAS DEPARTMENT OF TRANSPORTATION

SENECA STREET
CROSSWALK SIGNALIZATION PLAN
STA. 39+00

PROJECT NO. 472-83084 SEDGWICK CO.

MID-KANSAS ENGINEERING CONSULTANTS, INC.
WICHITA, KANSAS

DESIGNED BY:	DCH	CHECKED BY:	DCH
DRAWN BY:	WNJ	DATE: MAY 1, 2000	SHEET 27 OF 58

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