CHART A SIGNAL INVENTORY

NO. WAYS	NO. SECTIONS (Per Face)	SIGNAL FACE ARRANGEMENT	MOUNTING TYPE	QUANTITY
1	3	A	RIGID MAST ARM	4
1	2	L	VERTICAL BRACKET	2
1	3	A	VERTICAL BRACKET	2
1	3	H	VERTICAL BRACKET	2

CHART B TRAFFIC SIGNAL POLES

STATION, DIST. - SIDE	ARM SIZE	HEIGHT	NO. OF SIGNALS ON ARM	SIGNAL SPACING	TYPE
90+41.50, 34.50 Rt		15'	1		PEDESTAL
91+82.50, 40.00 Lt	30'		2	11'	
91+91.50, 38.00 Rt	30'		2	11'	
93+32.50, 40.00 Lt		15'	1		PEDESTAL

CHART C

CONDUIT SIZE	TRENCHED	PUSHED
1 1/4"	290'	
2"	35'	
3"	80'	

SERVICE BOX SUMMARY

STATION	DIST. - SIDE
91+91.50	38' Rt

LEGEND

- Signal Pole
- Pedestrian Indicator
- Traffic Signal
- Controller
- New Service Box
- 3/4" conduit
- 1 1/4" conduit
- 2" conduit
- 3" conduit

WHEN FLASHING
S4-4
24" X 10"
(White)

END SCHOOL ZONE
S5-2
24" X 30"
(White)

TYPICAL SCHOOL SIGNING

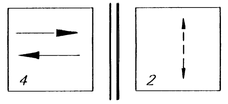
SCHOOL
S4-3
24" X 8"
(Yellow)

SPEED LIMIT 20
R2-1
24" X 30"
(White)

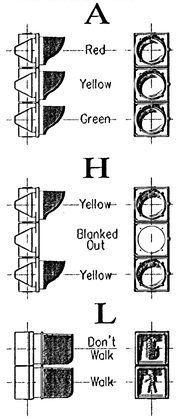
S1-1
30" X 30"
(Fluorescent Yellow-Green)

W16-7
24" X 12"
(Fluorescent Yellow-Green)

PHASE DIAGRAM



TYPICAL TRAFFIC SIGNAL HEADS



GENERAL NOTES

1. SIGNAL TIMING BY THE CITY OF WICHITA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND INSTALLING THE CONTROLLER, CABINET, CONCRETE BASE, AND FOR ALL EQUIPMENT NECESSARY FOR THE COMPLETE AND SATISFACTORY OPERATION OF THE TRAFFIC SIGNAL, WHETHER SAID EQUIPMENT IS SPECIFICALLY MENTIONED OR NOT.
2. LENGTHS GIVEN ARE TO CENTERLINE OF POLE/BOX AND DO NOT INCLUDE LENGTHS FOR ELBOWS AND RISERS.
3. SIGNAL HEADS, PEDESTRIAN SIGNALS, TRAFFIC SIGNS & ETC. INCLUDE ALL BRACKETS, HARDWARE & OTHER INCIDENTALS NECESSARY FOR INSTALLATION.
4. SEE CITY OF WICHITA STANDARD SPECIFICATIONS FOR ADDITIONAL WIRING NOTES.
5. ALL SIGNS HAVE MICRO-PRISMATIC SHEETING.
6. SCHOOL CROSSWALK SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.

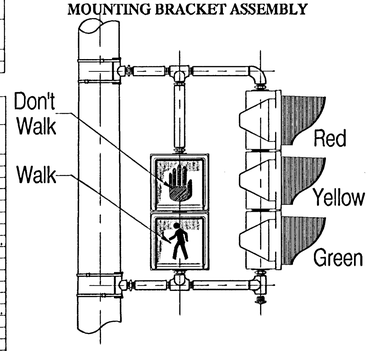
BILL OF MATERIALS

ITEM	UNIT	QUANTITY
POLE MOUNTED CNTRLR. & CABINET W/ 170 CNTRLR.	EACH	1
TRAFFIC SIGNAL HEAD (SEE CHART A) W/ MOUNTING HARDWARE (12")	EACH	10
TRAFFIC SIGNAL POLE (SEE CHART B) STEEL	EACH	2
ASSEMBLY 'B' BRACKET (SIDE OF POLE)	EACH	4
ASSEMBLY 'H' BRACKET (SIDE OF POLE)	EACH	4
CONCRETE FOOTING - POLE	EACH	2
CONDUIT ELBOW 90°	EACH	As Req'd.
PEDESTAL POLE	EACH	2
CONCRETE FOOTING - PEDESTAL	EACH	2
SERVICE BOX	EACH	2
GROUND ROD & CLAMP	EACH	5
CONDUIT CLAMP	EACH	As Req'd.
TRAFFIC SIGNAL LAMP (LED)	EACH	22
ENTRANCE HEAD	EACH	1
CIRCUIT BREAKER & BOX	EACH	1
PEDESTRIAN SIGNAL HEAD (12" COMBINATION) (LED)	EACH	2
PEDESTRIAN PUSHBUTTON W/SIGN	EACH	2
LEAD-IN WIRE No. 6 A.W.G. 1/C (TYPE THNN)	feet	35.5
MULTI-CONDUCTOR CABLE No. 14 A.W.G. 5/C	feet	372
MULTI-CONDUCTOR CABLE No. 14 A.W.G. 7/C	feet	100
CONDUIT 1 1/4" (SEE CHART C)	feet	290
CONDUIT 2" (SEE CHART C)	feet	35
CONDUIT 3" (SEE CHART C)	feet	80
STANDARD 1C #8 (GROUND)	feet	406
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT **	L.S.	1 **

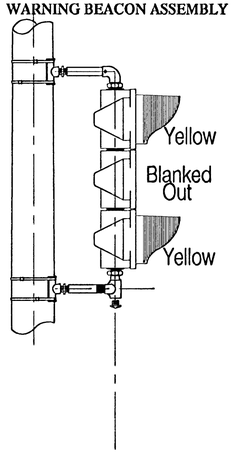
Type 170 Controller System to include:

1. *Model 170E controller unit complete with W4IKS (Latest Revisions) traffic program on 41232 system memory*
2. *One (1) Model 336W Cabinet complete with all accessories & shall include:*
   - *A. One (1) Model 210ECL or 210MS Conflict module. Monitor with software.*
   - *B. Four (4) Model 430 Transfer Relays.*
   - *C. Two (2) Model 204 Flashing Units.*
   - *D. Two (2) Model 200 Switch Packs.*
   - *E. Four (2) Model 242 DC Isolators.*
   - *F. One (1) Surge Arrester.*

TYPE III SIDE-OF-POLE MOUNTING BRACKET ASSEMBLY

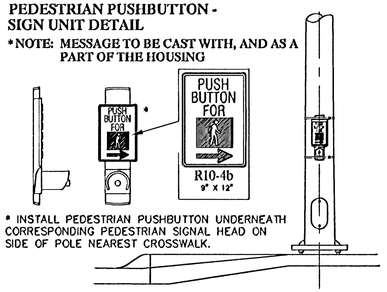


SIDE OF POLE ADVANCE WARNING BEACON ASSEMBLY



PEDESTRIAN PUSHBUTTON - SIGN UNIT DETAIL

*NOTE: MESSAGE TO BE CAST WITH, AND AS A PART OF THE HOUSING

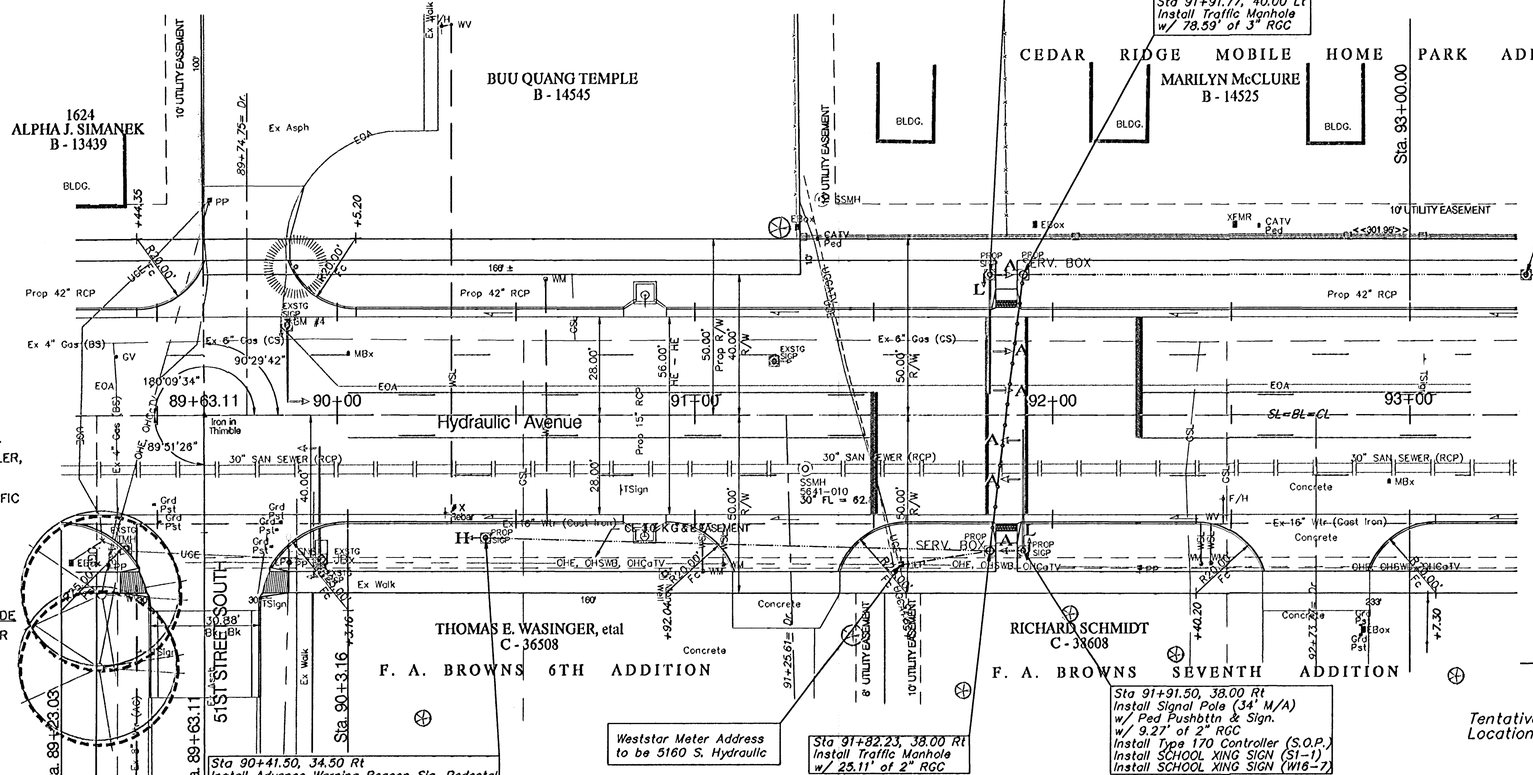


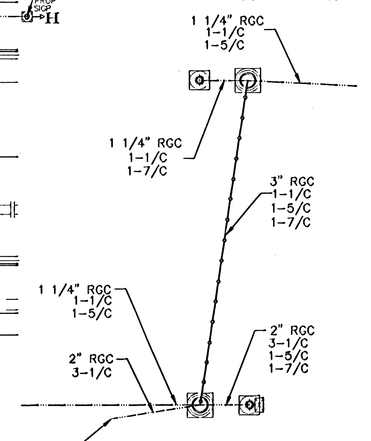
* INSTALL PEDESTRIAN PUSHBUTTON UNDERNEATH CORRESPONDING PEDESTRIAN SIGNAL HEAD ON SIDE OF POLE NEAREST CROSSWALK.

FHWA REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS	87 N-0303-01	2003	87	143

RECAPITULATION OF TRAFFIC SIGNAL INSTALLATION

BID ITEM	QUANTITY	UNIT
CROSSWALK SIGNAL INSTALLATION (HYDRAULIC & 51St St. SOUTH)	1 (LUMP SUM)	L.S.





WIRING DIAGRAM

NOTE: A single conductor stranded No. 8 Green Wire shall carry the equipment ground from the grounding lug of all signal poles to the controller cabinet and the power disconnect box.

PROJECT NUMBER	SHEET NAME	ENGINEERING DIRECTORY
472-83902	xwlksig	F:\Eng\Hydraulic_phx2\Traffic

DESIGN	DRAWN	APPROVED	DATE	SCALE	BAUGHMAN NO
JFB	TCA	JFB/KK	March 04	1"=20'	99-09-E451

STREET & SWS IMPROVEMENTS
CROSSWALK SIGNALIZATION
between 50th Street South and 51st Street South
HYDRAULIC AVE PAVING - SOUTH OF 52nd STREET SOUTH TO 47th STREET SOUTH

BAUGHMAN COMPANY, P.A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

SHEET 87 OF 143