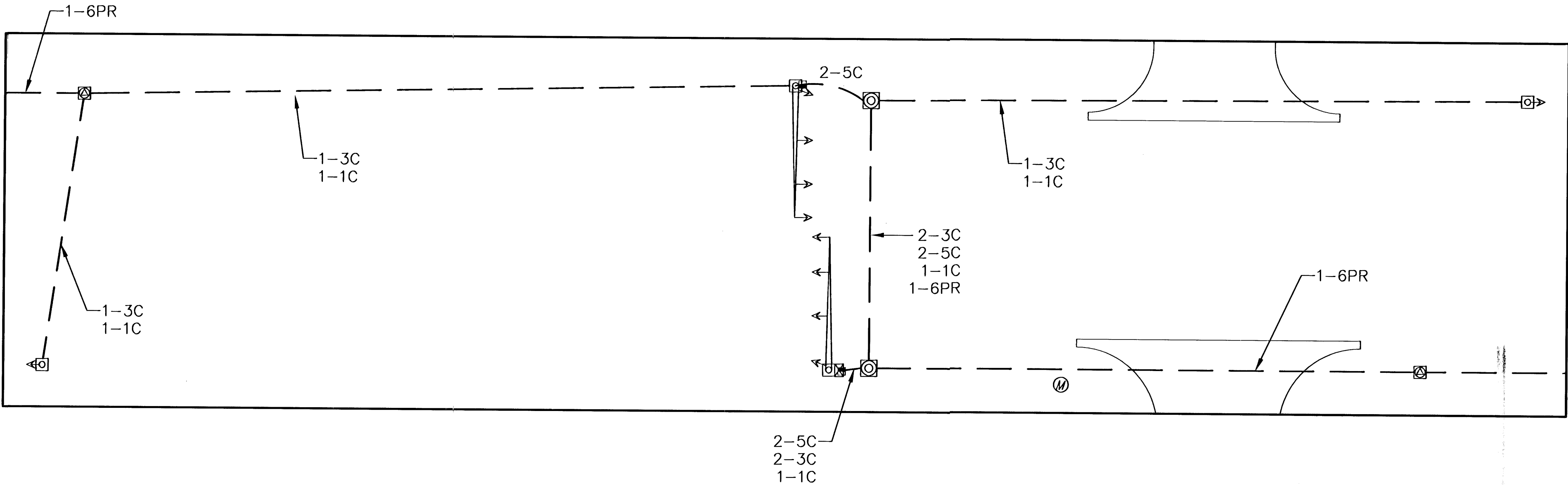


FHWA REGION NO.	STATE	PROJECT NUMBER	FISCAL YEAR	SHEET NUMBER	TOTAL SHEETS
7	KANSAS	CMQ-N022 (901)	2002	39	62

**BILL OF MATERIALS		
ITEM	UNIT	QUANT.
POLE MOUNTED CONTROLLER & CABINET	EACH	1
TRAFFIC SIGNAL HEAD W/MOUNTING HARDWARE	EACH	8
TRAFFIC SIGNAL POLE STEEL	EACH	2
TRAFFIC SIGNAL PEDESTAL ALUMINUM 4.5m	EACH	2
CONCRETE FOOTING - PEDESTAL	EACH	2
CONCRETE FOOTING - POLE	EACH	2
BACK PLATE 5" 3 SECTION	EACH	4
SERVICE BOX	EACH	2
JUNCTION BOX	EACH	14
GROUND ROD & CLAMP	EACH	3
RED L.E.D. KIT	EACH	6
YELLOW L.E.D. KIT	EACH	6
GREEN L.E.D. KIT	EACH	6
ORANGE/WHITE L.E.D. KIT(12" COMBINATION-"HAND/MAN" INDICAT.)	EACH	2
PEDESTRIAN PUSHBUTTON W/SIGN	EACH	2
PEDESTRIAN INDICATOR HEAD WITH MOUNTING HARDWARE	EACH	2
UNDERGROUND SPLICE KIT	EACH	2
COMMUNICATION CABLE 6 PAIR NO. 19 A.W.G.	METER	726
DETECTOR LOOP WIRE NO. 14 A.W.G 1/c (TYPE THHN)	METER	84
LEAD-IN WIRE NO. 6 A.W.G. 1/c (TYPE THHN)	METER	158
MULTI-CONDUCTOR CABLE NO. 14 A.W.G. 5/c	METER	
MULTI-CONDUCTOR CABLE NO. 14 A.W.G. 7/c	METER	440
MULTI-CONDUCTOR CABLE NO. 14 A.W.G. 3/c	METER	
SHIELDED DETECTOR LEAD-IN NO. 16 A.W.G. 2/c	METER	
CONDUIT 19mm	METER	
CONDUIT 50mm	METER	814
CONDUIT 76mm	METER	
STANDARD IC #8 (GROUND)	METER	
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT **	METER	1

**INCLUDES DETECTORS @ B.W.B. AND COMM. SYSTEM



WIRING NOTES

* THE CONTROLLER AND CABINET SHALL INCLUDE THE FOLLOWING:

- MODEL 170 CONTROLLER UNIT COMPLETE WITH WA/KS (53A OR LATEST REVISION) TRAFFIC PROGRAM ON 412B SYSTEM - MEMORY MODULE AND MODEL 400 MODEM
- ONE MODEL 336 CABINET (MEETING CITY OF WICHITA SPECIFICATIONS) COMPLETE WITH ALL ACCESSORIES INCLUDING:
 - 1 - MODEL 210 ECL OR MS CONFLICT MONITOR.
 - 4 - TRANSFER RELAYS
 - 2 - MODEL 204 FLASHER UNITS.
 - 2 - MODEL 242 TWO CHANNEL ISOLATORS
 - 2 - MODEL 200 SWITCH PACKS

THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND INSTALLING THE CONTROLLER, CABINET AND SOFTWARE AND FOR ALL EQUIPMENT NECESSARY FOR THE COMPLETE AND SATISFACTORY OPERATION OF THE TRAFFIC SIGNAL, WHETHER OR NOT SAID EQUIPMENT IS SPECIFICALLY MENTIONED.

THE CONTRACTOR SHALL FURNISH AND INSTALL ALL POWER SUPPLY CABLE AND TRAFFIC SIGNAL CABLE FOR THE COMPLETE OPERATION OF THE TRAFFIC SIGNAL. NO SPLICES WILL BE ALLOWED OUTSIDE POLE BASES, SERVICE BOXES, OR JUNCTION BOXES.

EACH SEPARATE MAST ARM MOUNTED SIGNAL HEAD SHALL HAVE ONE CONTINUOUS RUN OF FIVE-CONDUCTOR CABLE FROM THE POLE BASE TO THE SIGNAL HEAD. A ONE-CONDUCTOR #8 AWG (GREEN) SHALL BE INSTALLED TO CONNECT ALL GROUNDING LUGS IN POLE BASES AND CONTROLLER BASE.

ONE, SEVEN-CONDUCTOR CABLE SHALL BE RUN FROM THE CONTROLLER TO EACH POLE SUPPORTING A MAST ARM-MOUNTED VEHICLE INDICATION. THE FOLLOWING COLOR CODE SHALL BE USED.

WHITE	COMMON
RED	RED BALL
GREEN	GREEN BALL
ORANGE	YELLOW BALL
WHITE/BLACK	DON'T WALK
BLUE	WALK
BLACK	PUSHBUTTON

ONE, FIVE-CONDUCTOR CABLE SHALL BE RUN FROM EACH 3-WAY SIDE-OF-POLE PEDESTRIAN SIGNAL TO THE POLE BASE.

ONE, FIVE-CONDUCTOR CABLE SHALL BE RUN FROM EACH 2-WAY SIDE-OF-POLE PEDESTRIAN SIGNAL TO THE POLE BASE. THE FOLLOWING COLOR CODE SHALL BE USED.

RED	DON'T WALK
GREEN	WALK
WHITE	COMMON
ORANGE	SPARE
BLACK	SPARE

ONE, TWO-CONDUCTOR CABLE SHALL BE RUN FROM PUSHBUTTON TO POLE BASE.

TRAFFIC SIGNAL POLE SUMMARY							
STATION	OFFSET	POLE TYPE	MAST ARM LENGTH	NO. OF SIGNALS ON MAST ARM	BRACKET TYPE	NO. OF SIGNALS ON POLE	BRACKET TYPE
10+126.90	12.690 Lt.	M	7 m	2 - A	3-I	1-A, 1-K	IV
10+129.57	8.680 Rt.	M	8 m	2 - A	3-I	1-A, 1-K	IV
10+182.195	11.835 Lt.	P				FLASHER	III
10+070.195	8.687 Rt.	P				FLASHER	III

POLE TYPES:
M. STANDARD STEEL POLE WITH MAST ARM
P. PEDESTAL

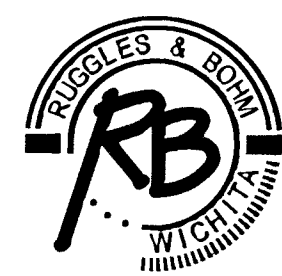
SIGNAL FACE SUMMARY		TYPE A	TYPE K	FLASHER
TYPE	# REQ'D			
A	6	R	Y	Y
K	2	Y	G	Y
FLASHER	2			

- LEGEND:
- Steel Traffic Signal Pole (Joint Use)
 - Traffic Signal Indication
 - Service Box
 - Controller
 - Pedestrian Indication
 - Junction Box
 - Rigid Galvanized Conduit (RGC)
 - Meter Box and Power Disconnect

NO SCALE

SIGNAL TIMING BY
CITY OF WICHITA
PAUL GUNZELMAN
268-4448

Harry Street - I-135 to George Washington Blvd.
SIGNAL WIRING & QUANTITIES
WICHITA, KANSAS



Ruggles & Bohm, P.A.
Engineering, Surveying, Land Planning

924 North Main (316) 264-8008
Wichita, Kansas 67203 (316) 264-4621 fax
www.rbkansas.com E-mail: info@bkansas.com

DRAWING FILE PROJECT NUMBER DATE
SIGNAL_PLAN {Quantity} . Apr. 30, 2004

DESIGN MWS
DRAWN MWS
REVIEW
SHEET 39 OF 62