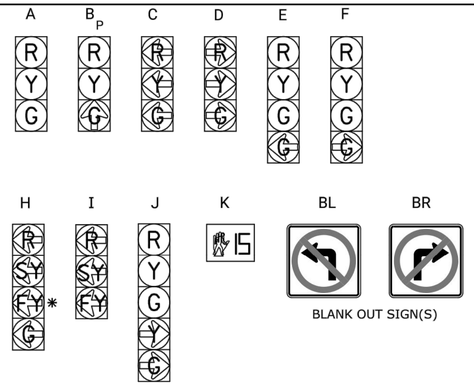
NOTE TO DESIGNER: Mast arm lengths shall be in 6' increments (18' to 60'). If a longer mast arm is required, signal pole foundation design calculations must be submitted to the City of Wichita for review. The pad mounted 332L cabinet is typically used unless approved otherwise by City of Wichita Traffic Engineer. 5-Sections heads for left turn phase must be approved by the City of Wichita Traffic Engineer.

CHART A SIGNAL SUMMARY

Signal Face Arrangement	No. Sections (Per Face)	Signal Mounting Type	Quantity
		Mast Arm w/ Backplate	
		Mast Arm w/ Backplate	
		Mast Arm w/ Backplate	
J	5	Side-of-Pole	1
		Side-of-Pole	
		Side-of-Pole	



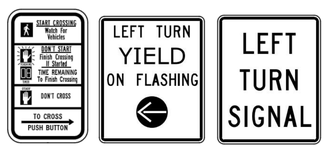
NOTES:
1. *SHALL NOT BE DISPLAYED WHEN OPERATING IN THE PROTECTED ONLY MODE.
2. ALL LENSES ARE L.E.D. UNLESS OTHERWISE NOTED.
3. SUBSCRIPT "P" INDICATED PROGRAMMED SIGNALS.
4. ALL LENSES SHALL BE 12" DIA. UNLESS OTHERWISE NOTED. PESDESTRIAN DISPLAY (K) SHALL BE RECTANGULAR WITH A WIDTH OF 18" AND HEIGHT OF 16".
5. BLANK OUT SIGN SIZE SHALL MEET MUTCD REQUIREMENTS FOR APPLICABLE STATIC VERSION OF THE SIGN.

CHART B TRAFFIC SIGNAL POLES

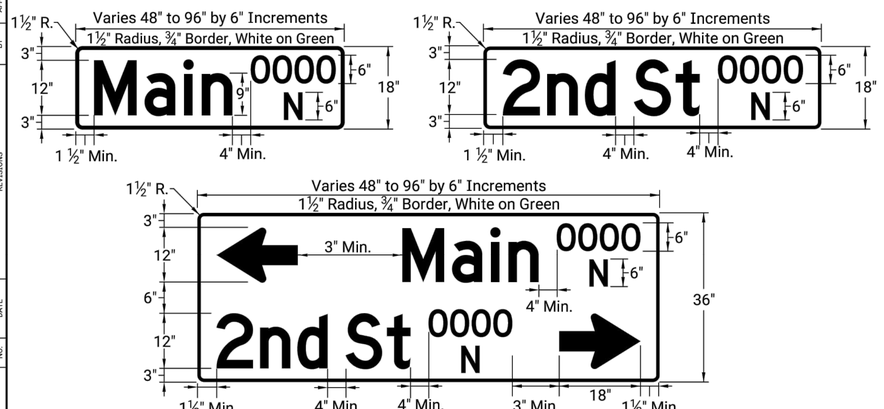
Pole Height	Signal Arm Length	Signal Arm Mounting Height	No. of Signals on Arm	Signal Spacing	Luminaire Arm Length	Luminaire Mounting Height	Quantity

CHART C OVERHEAD STREET NAME SIGNS

Sign	Legend	Length	Quantity



R10-3e R10-FYA R10-10



USE FONT SERIES D. SHEETING SHALL BE ASTM TYPE XI SHEETING. SEE SPECIFICATION 703.8

BILL OF MATERIALS
-Quantities for Information Only-

Item	Quantity	Unit	Spec. No.	Note
CONTROLLER UNIT		EACH	703.2.1	
CONFLICT MONITOR		EACH	703.2.2	
LOAD SWITCH		EACH	703.2.3	
FLASHER		EACH	703.2.4	
FLASH TRANSFER RELAY		EACH	703.2.5	
SURGE PROTECTOR		EACH	703.2.6	
DC ISOLATOR		EACH	703.2.7	
AC ISOLATOR		EACH	703.2.8	
GPS CLOCK		EACH	703.2.9	
POWER STRIP		EACH	703.2.11	
LOOP DETECTOR (2 or 4 CHANNEL)		EACH	703.2.10	
POLE MOUNTED CABINET (336L)		EACH	703.2.11	
PAD MOUNTED CABINET (332L)		EACH	703.2.11	
PAD MOUNTED CABINET (342) (DOUBLE)		EACH	703.2.11	
BATTERY BACKUP (BBS/UPS)		EACH	703.2.14	
VIDEO DETECTION DEVICE & HARDWARE		EACH	703.3.1	
RADAR DETECTION DEVICE & HARDWARE		EACH	703.3.2	
TRAFFIC SIGNAL HEAD	CHART A	EACH	703.4.1	
SIGNAL HEAD MOUNTING BRACKET	CHART A	EACH	703.4.2	
RETROREFLECTIVE BACKPLATE	CHART A	EACH	703.4.3	
VEHICLE TRAFFIC SIGNAL LED MODULES	5	EACH	703.4.4	
PEDESTRIAN TRAFFIC SIGNAL LED MODULES		EACH	703.4.5	
APS PUSHBUTTON SYSTEM & SIGN (R10-3E, 9"x15")		EACH	703.4.6	
TRAFFIC SIGNAL POLE	CHART B	EACH	703.5.1	
TRAFFIC SIGNAL PEDESTAL (ALUMINUM)		EACH	703.5.2	
APS PUSHBUTTON STATION (ALUMINUM)		EACH	703.5.3	
SERVICE BOX		EACH	703.6	
LUMINAIRE ARM		EACH	703.7.1	POWER COMPANY PROVIDED & INSTALLED
LED LUMINAIRE		EACH	703.7.2	POWER COMPANY PROVIDED & INSTALLED
PHOTOCELL		EACH	703.7.3	POWER COMPANY PROVIDED & INSTALLED
UNFUSED STREET LIGHT CONNECTOR KIT		EACH	703.7.4	
FUSED STREET LIGHT CONNECTOR KIT		EACH	703.7.5	
OVERHEAD STREET NAME SIGN	CHART C	EACH	703.8.1	
R10-10 SIGN (30" X 36")		EACH	703.8.2	
R10-FYA SIGN (30" X 36")		EACH	703.8.2	
BLANK OUT SIGN (36" X 36")		EACH	703.8.3	
ENTRANCE HEAD		EACH	703.9.2	
SERVICE ENCLOSURE, AMP.		EACH	703.9.3	
CIRCUIT BREAKER, TRAFFIC SIGNAL, AMP.		EACH	703.9.4	
CIRCUIT BREAKER, LUMINAIRE, AMP.		EACH	703.9.4	
SURGE ARRESTER CA 302R		EACH	703.9.5	
POWER SERVICE CONTROLLER CABINET		EACH	703.9.6	
GROUND ROD & CLAMP		EACH	703.10	
SERVICE WIRE NO. __ AWG 1/C		LIN FT	703.11.1	
LIGHTING DISTRIBUTION WIRE NO. __ AWG 1/C		LIN FT	703.11.2	
POLE & BRACKET WIRE NO. 10 AWG 1/C		LIN FT	703.11.3	
GROUND WIRE NO. 6 AWG 1/C BARE SOLID		LIN FT	703.11.4	
TRACER WIRE NO. 12 AWG (BLUE)		LIN FT	703.11.5	
TRACER WIRE CONNECTOR		EACH	703.11.6	
MULTI-CONDUCTOR CABLE NO. 14 AWG 7/C	175	LIN FT	703.11.7	
MULTI-CONDUCTOR CABLE NO. 14 AWG /C		LIN FT	703.11.7	
DETECTION CABLE		LIN FT	703.11.9	
PRE-FORMED LOOP		EACH	703.11.10	
ETHERNET CABLE (CAT6)		LIN FT	703.11.11	
CONDUIT, 2" & FITTINGS		LIN FT	703.12	
CONDUIT, 3" & FITTINGS		LIN FT	703.12	
CONDUIT, __" & FITTINGS		LIN FT	703.12	

NOTES:

1. QUANTITIES SHOWN ARE FOR W. 37TH ST. N. AND N. RIDGE ROAD SIGNAL.
2. REFER TO CITY OF WICHITA PART 700 TRAFFIC SIGNALIZATION SPECIFICATIONS.

BID ITEM

ITEM	QUANTITY	UNIT
Traffic Signal	LSUM	LSUM

1. THE TRAFFIC SIGNAL SYSTEM SHALL BE COMPLETE AND THE CONTRACTOR SHALL FURNISH AND INSTALL ALL EQUIPMENT AND MATERIALS NECESSARY FOR THE SATISFACTORY OPERATION OF ELECTRICAL APPARATUS AND FOR COMPLETE OPERATION OF THE TRAFFIC SIGNAL SYSTEM WHETHER SPECIFICALLY MENTIONED OR NOT.

NO.	DATE	REVISIONS	BY	APP'D
3				
2				
1				

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

TRAFFIC SIGNAL QUANTITY SHEET

TRAFFIC ENGINEER: MIKE ARMOUR, P.E. APP'D 01/27/22

PROJECT NUMBER	ORG NUMBER	DATE
472-2023-085940	40109523	07-31-24

CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
(316) 268-4501

SHEET: 20 OF 35

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