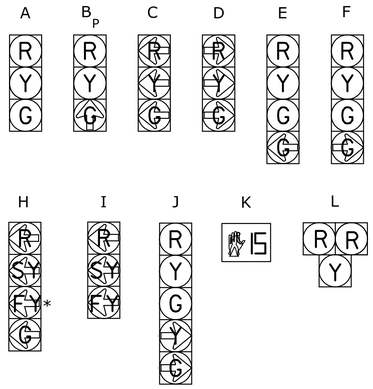
CHART A SIGNAL SUMMARY

SIGNAL FACE ARRANGEMENT	NO. SECTIONS (PER FACE)	SIGNAL MOUNTING TYPE	QUANTITY
A	3	MAST ARM W/BACKPLATE	5
H	4	MAST ARM W/BACKPLATE	4
J	5	MAST ARM W/BACKPLATE	3
A	3	SIDE-OF-POLE	1
J	5	SIDE-OF-POLE	3



NOTES:
1) * SHALL NOT BE DISPLAYED WHEN OPERATING IN THE PROTECTED ONLY MODE.
2) ALL LENSES ARE L.E.D. UNLESS OTHERWISE NOTED.
3) ALL LENSES ARE 12" UNLESS OTHERWISE NOTED.
4) ALL PEDESTRIAN SIGNAL HEADS SHALL BE COUNTDOWN.
5) SUBSCRIPT "P" INDICATES PROGRAMMED SIGNALS.

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	QUANT.
(1)	35.0'	56.0'	19.0'	4	15.1', 28.4', 42.4', 55.4'	15.0'	40.0'	1
(2)	35.0'	50.0'	19.0'	3	25.0', 37.3', 49.2'	15.0'	40.0'	1
(3)	35.0'	40.0'	19.0'	3	12.4', 25.4', 38.4'	15.0'	40.0'	1
(4)	35.0'	48.0'	19.0'	2	33.7', 45.7'	15.0'	40.0'	1

CHART C OVERHEAD STREET NAME SIGNS

SIGN	LEGEND	LENGTH	QUANTITY
1	45th St, 3100 E	72"	1
2	45th St, 3200 E	72"	1
3	Hillside Ave, 4500 N	96"	1
4	Hillside Ave, 4600 N	96"	1

KR10-12

BILL OF MATERIALS
- FOR INFORMATION ONLY -

ITEM	QUANT.	UNIT	NOTE
CONTROLLER UNIT	1	EACH	CALTRANS APPROVED 2070 LX
MALFUNCTION MANAGEMENT UNIT	1	EACH	CITY PROVIDED - CONTRACTOR INSTALLED
SURGE PROTECTOR	1	EACH	
LOAD SWITCH	8	EACH	
FLASHER	2	EACH	
FLASH TRANSFER RELAY	4	EACH	
DETECTOR, 2-CHANNEL	17	EACH	
DETECTOR, 4-CHANNEL	-	EACH	
POLE MOUNTED CABINET (336)	-	EACH	
PAD MOUNTED CABINET (332)	1	EACH	
TRAFFIC SIGNAL HEAD	CHART A	EACH	
SIGNAL HEAD MOUNTING BRACKET	CHART A	EACH	
BACK PLATE	CHART A	EACH	SEE NOTE 6
VEHICLE TRAFFIC SIGNAL LAMP	64	EACH	
PEDESTRIAN TRAFFIC SIGNAL LAMP	-	EACH	
L.E.D. LENS	CHART A	EACH	
PEDESTRIAN PUSHBUTTON & SIGN (R10-3E; 9"x15")	-	EACH	
TRAFFIC SIGNAL POLE	CHART B	EACH	
TRAFFIC SIGNAL PEDESTAL ALUMINUM	-	EACH	
TERMINAL BLOCK	4	EACH	
JUNCTION BOX	2	EACH	
SERVICE BOX	5	EACH	
LUMINAIRE ARM	4	EACH	WESTAR INSTALLED
LUMINAIRE LED WESTAR 250 WATT EQUIVALENT	-	EACH	WESTAR PROVIDED & INSTALLED
PHOTOCELL	-	EACH	WESTAR PROVIDED & INSTALLED
UNFUSED STREET LIGHT CONNECTOR KIT	4	EACH	
FUSED STREET LIGHT CONNECTOR KIT	4	EACH	
OVERHEAD STREET NAME SIGN	CHART C	EACH	
KR10-12 SIGN (30" X 36")	4	EACH	
R10-12 SIGN (24" X 30")	-	EACH	
BLANK OUT SIGN	-	EACH	
ENTRANCE HEAD	1	EACH	
SERVICE ENCLOSURE, 125 AMP. COMMERCIAL	1	EACH	
CIRCUIT BREAKER, TRAFFIC SIGNAL, 50 AMP.	1	EACH	
CIRCUIT BREAKER, AUXILIARY 15 AMP.	1	EACH	
SURGE ARRESTOR CA 302R	1	EACH	
GROUND ROD & CLAMP	13	EACH	EACH POLE, JUNCTION BOX, GROUND BOX AND CONTROLLER CABINET SHALL HAVE IT'S OWN GROUND ROD.
SERVICE WIRE NO. 3 AWG 1/C	445	LIN FT	
LIGHTING DISTRIBUTION WIRE NO. 8 AWG 1/C	1865	LIN FT	
POLE & BRACKET WIRE NO. 10 AWG 1/C	420	LIN FT	
GROUND WIRE NO. 6 AWG 1/C	1785	LIN FT	
MULTI-CONDUCTOR CABLE NO. 14 AWG 5/C	460	LIN FT	
MULTI-CONDUCTOR CABLE NO. 14 AWG 7/C	1350	LIN FT	
MULTI-CONDUCTOR CABLE NO. 14 AWG 2/C	-	LIN FT	
RADAR	1290	LIN FT	
SHIELDED DETECTOR LEAD-IN CABLE NO. 14 AWG 2/C	660	LIN FT	
DETECTOR LOOP WIRE NO. 14 AWG 1/C	445	LIN FT	
LOOP SEALANT	AS REQ'D		
PRE-FORMED LOOP	2	EACH	
CONDUIT, 3/4" & FITTINGS	46	LIN FT	
CONDUIT, 1 1/4" & FITTINGS	178	LIN FT	
CONDUIT, 2" & FITTINGS	690	LIN FT	
CONDUIT, 3" & FITTINGS	650	LIN FT	
RADAR DETECTION SYSTEM	1	LSUM	

NOTES:

1. QUANTITIES SHOWN ARE FOR 45TH STREET AND HILLSIDE SIGNAL.
2. CONDUIT SHALL BE BORED UNDER EXISTING PAVEMENT OR OPEN CUT & PATCHED IN AREAS NOT BEING REPLACED (WHERE APPLICABLE).
3. 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.
4. THE SUPPLIED CONFLICT MONITORS SUPPLIED SHALL BE 2010 ECL-IP CONFLICT MONITORS AND SHALL MEET THE REQUIREMENTS OUTLINED IN CALTRANS TEES 2002 (LATEST VERSION).
5. ALL EQUIPMENT SHALL BE PAINTED BLACK.
6. ALL BACK PLATES SHALL BE EQUIPPED WITH A 2" RETRO-REFLECTIVE YELLOW BORDER MEETING ASTM D-4956 TYPE IX SHEETING SPECIFICATIONS.
7. TWO COMPLETE SPARE RADAR DETECTION UNITS (2 UNITS OF BOTH MATRIX AND ADVANCE DETECTORS) CABINET EQUIPMENT AND RACK SHALL BE PROVIDED IN ADDITION TO THE UNITS LISTED ON THE PLANS.
8. RADAR UNITS FOR STOP BAR DETECTION WILL BE WAVETRONIX MATRIX UNITS. RADAR UNITS FOR ADVANCE DETECTION WILL BE WAVETRONIX ADVANCE UNITS.

BID ITEM

ITEM	UNIT	QUANTITY
TRAFFIC SIGNALIZATION	L.S.	L.S.

- FOR INFORMATION ONLY -

TranSystems
245 NORTH WACO
SUITE 222
WICHITA, KS 67202
PHONE: 316-303-3000
FAX: 316-303-0156

CONSULTANTS:

45TH & HILLSIDE
INTERSECTION IMPROVEMENT
WICHITA, KANSAS

CITY OF WICHITA

REVISIONS:

MARK	DATE	DESCRIPTION

PROJ NO: 87 N-0616-01
SCALE: N.T.S.
DATE: 10/9/2017
DESIGNED BY: CCB
DRAWN BY: CCB
CHECKED BY: SGE

SHEET TITLE:
TRAFFIC SIGNAL QUANTITIES

SHEET NO.
105
SHEET 105 OF 166

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IF THIS DRAWING IS LESS THAN 22" X 36" IT IS A REDUCED SIZE DRAWING