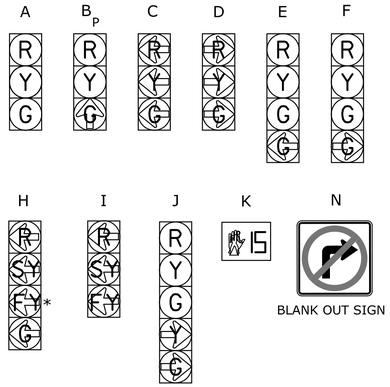
CHART A SIGNAL SUMMARY

SIGNAL FACE ARRANGEMENT	NO. SECTIONS (PER FACE)	SIGNAL MOUNTING TYPE	QUANTITY
A	3	MAST ARM W/BACKPLATE	6
H	4	MAST ARM W/BACKPLATE	2
N	1	MAST ARM	1
A	3	SIDE-OF-POLE	5
K	1	SIDE-OF-POLE	4



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" INDICATES PROGRAMMED SIGNALS.

CHART B TRAFFIC SIGNAL POLES

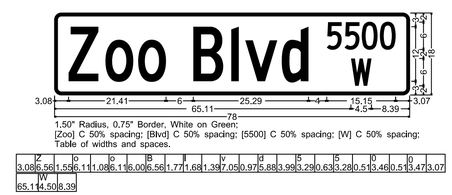
	POLE HEIGHT	SIGNAL ARM LENGTH	SIGNAL ARM MOUNTING HEIGHT	NO. OF SIGNALS ON ARM	SIGNAL SPACING	LUMINAIRE ARM LENGTH	LUMINAIRE MOUNTING HEIGHT	QUANT.
(1)	35.0'	20.0'	19.0'	1	14.3'	15.0'	40.0'	1
(2)	35.0'	60.0'	19.0'	4	**22.0', 34.0', 46.0', 58.0'	15.0'	40.0'	1
(3)	35.0'	48.0'	19.0'	1	45.3'	15.0'	40.0'	1
(4)	35.0'	60.0'	19.0'	3	37.5', 49.5', 60.0'	15.0'	40.0'	1

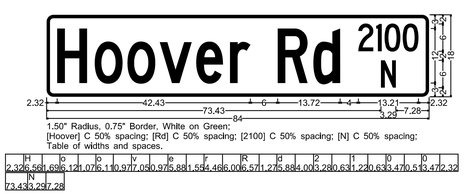
**BLANK OUT SIGN

CHART C OVERHEAD STREET NAME SIGNS

SIGN	LEGEND	LENGTH	QUANTITY
1	ZOO BLVD.	78"	2
2	HOOVER RD.	84"	2

OVERHEAD STREET NAME SIGN DETAIL





R10-3e

R10-12 (SPECIAL)

R9-5

BILL OF MATERIALS
- FOR INFORMATION ONLY -

ITEM	QUANT.	UNIT	NOTE
CONTROLLER UNIT	1	EACH	
MALFUNCTION MANAGEMENT UNIT	1	EACH	
SURGE PROTECTOR	1	EACH	
LOAD SWITCH	10	EACH	
FLASHER	2	EACH	
FLASH TRANSFER RELAY	4	EACH	
DETECTOR, 2-CHANNEL	-	EACH	
DETECTOR, 4-CHANNEL	-	EACH	
POLE MOUNTED CABINET (336)	-	EACH	
PAD MOUNTED CABINET (332)	1	EACH	CITY PROVIDED, CONTRACTOR INSTALLED
BATTERY BACKUP SYSTEM (BBS/UPS)	1	EACH	
VIDEO DETECTION CAMERA	-	EACH	
RADAR DETECTION DEVICE	6	EACH	SEE NOTE 7
TRAFFIC SIGNAL HEAD	CHART A	EACH	
SIGNAL HEAD MOUNTING BRACKET	CHART A	EACH	
BACKPLATE	CHART A	EACH	SEE NOTE 6
VEHICLE TRAFFIC SIGNAL LED MODULES	41	EACH	
PEDESTRIAN TRAFFIC SIGNAL LED MODULES	4	EACH	
BLANK OUT SIGN	1	EACH	SEE NOTE 9
APS PUSHBUTTON SYSTEM & SIGN (R10-3E; 9"x15")	4	EACH	CITY PROVIDED, CONTRACTOR INSTALLED
TRAFFIC SIGNAL POLE	CHART B	EACH	CITY PROVIDED, CONTRACTOR INSTALLED
TRAFFIC SIGNAL PEDESTAL ALUMINUM	1	EACH	CITY PROVIDED, CONTRACTOR INSTALLED
APS PUSHBUTTON STATION	1	EACH	CITY PROVIDED, CONTRACTOR INSTALLED
TERMINAL BLOCK	-	EACH	
JUNCTION BOX	-	EACH	
SERVICE BOX	5	EACH	
LUMINAIRE ARM	4	EACH	CITY PROVIDED, CONTRACTOR INSTALLED
LUMINAIRE LED WESTAR 250 WATT EQUIVALENT	4	EACH	EVERGY PROVIDED & INSTALLED
PHOTOCELL	4	EACH	EVERGY PROVIDED & INSTALLED
UNFUSED STREET LIGHT CONNECTOR KIT	4	EACH	
FUSED STREET LIGHT CONNECTOR KIT	4	EACH	
OVERHEAD STREET NAME SIGN	CHART C	EACH	
R10-10 SIGN (30" X 36")	-	EACH	
R10-12 (SPECIAL) SIGN (30" X 36")	2	EACH	
R9-5 SIGN (12" X 18")	4	EACH	
ENTRANCE HEAD	-	EACH	
SERVICE ENCLOSURE, 125 AMP. COMMERCIAL	1	EACH	SEE SHEET 24
CIRCUIT BREAKER, TRAFFIC SIGNAL, 50 AMP.	1	EACH	
CIRCUIT BREAKER, LUMINAIRE, 15 AMP.	1	EACH	LOCATE IN SERVICE BOX #5
SURGE ARRESTER CA 302R	1	EACH	
GROUND ROD & CLAMP	13	EACH	
SERVICE WIRE NO. 6 AWG 1/C	95	LIN FT	
LIGHTING DISTRIBUTION WIRE NO. 8 AWG 1/C	1415	LIN FT	
POLE & BRACKET WIRE NO. 10 AWG 1/C	420	LIN FT	
GROUND WIRE NO. 6 AWG 1/C	1600	LIN FT	
MULTI-CONDUCTOR CABLE NO. 14 AWG 3/C	410	LIN FT	
MULTI-CONDUCTOR CABLE NO. 14 AWG 4/C	165	LIN FT	
MULTI-CONDUCTOR CABLE NO. 14 AWG 5/C	-	LIN FT	
MULTI-CONDUCTOR CABLE NO. 14 AWG 7/C	2350	LIN FT	
RADAR	1325	LIN FT	
PREEMPT CABLE	345	LIN FT	
CONDUIT, 1" & FITTINGS	-	LIN FT	
CONDUIT, 2" & FITTINGS	830	LIN FT	
CONDUIT, 3" & FITTINGS	550	LIN FT	

NOTES:

1. QUANTITIES SHOWN ARE FOR ZOO BLVD & HOOVER ROAD SIGNAL.
2. THE TRAFFIC SIGNAL SYSTEM SHALL BE COMPLETE AND THE CONTRACTOR SHALL FURNISH AND INSTALL ALL EQUIPMENT AND MATERIALS NECESSARY FOR THE SATISFACTORY OPERATION OF THE TRAFFIC SIGNAL SYSTEM WHETHER SPECIFICALLY MENTIONED OR NOT.
3. THE CONFLICT MONITORS SHALL BE 2010 ECL-IP CONFLICT MONITORS AND SHALL MEET THE REQUIREMENTS OUTLINED IN CALTRANS TEES 2002 (LATEST VERSION).
4. ALL POLES SHALL BE PAINTED BLACK MEETING CITY OF WICHITA REQUIREMENTS. THIS INCLUDES A HOT-DIP GALVANIZED BASE COAT, POLYAMIDOAMINE OR POLAMIDE EPOXY PRIME COAT, AND ALIPHATIC ACRYLIC POLYURETHANE WITH UV PACKAGE FINISH COAT.SIGNAL CABINET AND POWER ENCLOSURE SHALL BE NATURAL ALUMINUM.
5. ACCESSIBLE PEDESTRIAN SIGNALS (APS) SHALL BE UTILIZED AND INCLUDE ALL MOUNTING ASSEMBLY AND HARDWARE. UNITS SHALL MEET STANDARDS FOUND IN THE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND INCLUDE BOTH AUDIBLE AND VIBROTACTILE WALK INDICATIONS. SEE TRAFFIC SIGNAL SPECIFICATIONS FOR ADDITIONAL DETAILS.
6. ALL BACK PLATES SHALL BE EQUIPPED WITH A 2" RETRO-REFLECTIVE YELLOW BORDER MEETING ASTM D-4956 TYPE IX SHEETING SPECIFICATIONS.
7. RADAR UNITS FOR STOP BAR DETECTION SHALL BE WAVETRONIX MATRIX UNITS. RADAR UNITS FOR ADVANCED DETECTION SHALL BE WAVETRONIX ADVANCE UNITS.
8. EACH NEW POLE, PEDESTAL, AND PUSHBUTTON STATION SHALL EACH BE GROUNDED WITH A SEPARATE GROUND ROD. GROUND WIRE SHALL BE CONNECTED TO EACH ROD, FORMING A CONTINUOUS GROUND CIRCUIT.
9. A SEPARATE LOAD SWITCH SHALL BE USED TO CONTROL EACH BLANK OUT SIGN. THE BLANK OUT SIGN SHALL COMPLY WITH MUTCD SECTION 2L.01.05.
10. TRAFFIC SIGNAL STRUCTURES SHALL BE DESIGNED IN ACCORDANCE WITH THE LOADING & ALLOWABLE STRESS REQUIREMENTS OF THE 2013 AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS", LATEST EDITION.
11. SIGNAL POLES, MAST ARMS, LUMINAIRE ARMS, PEDESTAL POLES, APS PUSHBUTTONS, AND CONTROLLER CABINET WILL BE CITY PROVIDED AND CONTRACTOR INSTALLED. FOR MORE INFORMATION, SEE SHEET 2

BID ITEM

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

-QUANTITIES FOR INFORMATION ONLY-

TranSystems
245 NORTH WACO
SUITE 222
WICHITA, KANSAS 67202
PHONE: 316-303-3000
FAX: 316-462-5629

CONSULTANTS:

REVISIONS:

MARK	DATE	DESCRIPTION

HOOVER ROAD MULTI-USE PATH & TRAFFIC SIGNAL
ZOO BLVD. TO 29TH STREET NORTH
WICHITA, KANSAS

CITY OF WICHITA

PROJ NO: 472-85394
SCALE: N/A
DATE: 9/30/2020
DESIGNED BY: MCG
DRAWN BY: MCG
CHECKED BY: CCB

SHEET TITLE:
TRAFFIC SIGNAL QUANTITIES

SHEET NO.
21
SHEET 21 OF 44

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