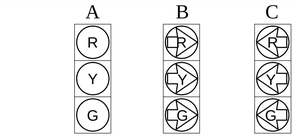
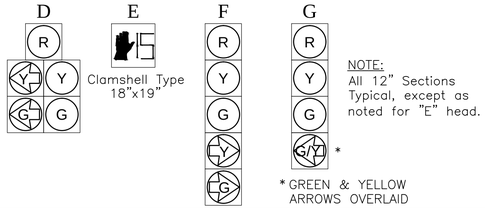
CHART A - SIGNAL SUMMARY

LOCATION	NO. WAYS	NO. SECTIONS PER FACE	SIGNAL FACE ARRANGEMENT	MOUNTING TYPE	QUANTITY



NOTE:
All 12" Sections Typical



NOTE:
All 12" Sections Typical, except as noted for "E" head.

* GREEN & YELLOW ARROWS OVERLAID

CHART B - TRAFFIC SIGNAL POLES

SHAFT SIZE	ARM SIZE	NO. OF SIGNALS ON ARM	SIGNAL SPACING	LUMINAIRE SUPPORT ARM SIZE	LUMINAIRE MOUNTING HEIGHT
				20' (STD)	35' (STD)
				20' (STD)	35' (STD)
				20' (STD)	35' (STD)
				20' (STD)	35' (STD)

ITEM / UNIT / QUAN / BILL OF MATERIALS

ITEM	UNIT	QUAN	BILL OF MATERIALS
332 PAD MOUNTED CABINET	EA		++
333SD–ITS PAD MOUNTED CABINET w/UPS	EA		++
(SHA 1210) LIGHTING ARRESTER	EA		++
2070 CONTROLLER WITH OASIS SOFTWARE	EA		⊛
CONFLICT MONITOR (EDI 2010 ECL)	EA		⊛
LOAD SWITCH	EA		⊛
FLASHER UNIT	EA		⊛
FLASH TRANSFER RELAY	EA		⊛
2 CHANNEL DC ISOLATION MODULE	EA		⊛
TRAFFIC SIGNAL HEAD (see chart A) W/MOUNTED HDW.	EA		
LED RED INDICATION	EA		
LED YELLOW INDICATION	EA		
LED GREEN INDICATION	EA		
LED GREEN/YELLOW ARROW INDICATION (OVERLAID)	EA		
LED RED HAND & WHITE WALK (PERSON) SYMBOL & HOUSING	EA		
TRAFFIC SIGNAL POLE (see chart B) STEEL	EA		
10' ALUMINUM PEDESTAL POLE	EA		
15' ALUMINUM PEDESTAL POLE	EA		
CONCRETE CONTROLLER PAD	EA		
CONCRETE FOOTING – PEDESTRIAN POLE	EA		
36" CONCRETE FOOTING – POLE	EA		
42" CONCRETE FOOTING – POLE	EA		
BACK PLATE 5in. 3 SECTION	EA		
BACK PLATE 5in. 4 SECTION	EA		
TERMINAL BLOCK (SUPPLIED BY CONTRACTOR)	EA		
JUNCTION BOX WITH POLYCARBONATE LID	EA		
SERVICE BOX WITH STEEL LID	EA		
WEATHER PROOF CIRCUIT BREAKER BOX	EA		
CIRCUIT BREAKER FOR SIGNAL (50 AMP)	EA		
CIRCUIT BREAKER FOR LUMINAIRES (20AMP)	EA		
SET OF POLYCARBONATE SIDE MOUNT BRACKETS	EA		
GROUND ROD & CLAMP	EA		
3/4 STAINLESS STEEL BANDING & BUCKLES	EA	AS REQ	
MULTI–CONDUCTOR CABLE # 14 AWG 5/c IMSA 20–1	LF		
MULTI–CONDUCTOR CABLE # 14 AWG 7/c IMSA 20–1	LF		
MULTI–CONDUCTOR CABLE # 14 AWG 9/c IMSA 20–1	LF		
MULTI–CONDUCTOR CABLE # 14 AWG 20/c IMSA 20–1	LF		
250 WATT HIGH PRESSURE SODIUM COBRA HEAD LUMINAIRE	EA		
LUMINAIRE WIRE #10 AWG 2/c W/Ground	LF		
CONDUIT CLAMP	EA	AS REQ	
CONDUIT ELBOW 90 deg.	EA	AS REQ	
CONDUIT 1.5 in. GALVANIZED CONDUIT – METER TO CONTROLLER	LF		
CONDUIT 1.5 in. HDPE – (RIBBED INSIDE)	LF		
CONDUIT 2 in. HDPE – (RIBBED INSIDE)	LF		
CONDUIT 3 in. HDPE – (RIBBED INSIDE)	LF		
POWER WIRE #6 USE	LF		
POWER WIRE (BARE) #6 AWG 1/c (GROUND)	LF		
PUSH BUTTON STATION (SIGN, BUTTON, AUDIBLE)	EA		
PUSHBUTTON WIRE #14 AWG 2/c	LF		
ALUMINUM CONDUIT MARKERS	EA		
PULL STRING (IN MAIN CONDUIT RUNS)	LF		●
MAST ARM ADJUSTABLE BRACKETS FOR STREET NAME SIGN	EA		
STREET NAME SIGN (SEE STREET NAME DETAIL SHEET)	EA		
MODEL 9525A–LD–ST FIBER OPTIC MODEM (DATA)	EA		⊛
VEHICLE VIDEO DETECTION SYSTEM	EA		
MOUNTING KIT FOR CAMERA	EA		
VIDEO CAMERA CABLE – 1000 FOOT ROLL –	LF	1	✡
OPTELECOM 9231 DT/SM–ST–1315	EA		⊛
OPTELECOM 9231 DR/SM–ST–1513	EA		⊛
OPTELECOM 9003–2	EA		⊛
OPTELECOM 9996 BLANK COVER PANEL	EA		⊛
OPTELECOM 9010 PS	EA		⊛
KYLAND SICOM 3170 ETHERNET SWITCH w/ 2 RJ45 GBIC CONNECTORS	EA	1	
PROJECT SIGN – TYPE A	EA	1	SEE NOTE
R10–10 (30x36)	EA	4	

NOTE:
The contractor shall supply and install all necessary materials and equipment for the complete installation and operation of the traffic signal system whether specifically mentioned or not.

The contractor shall be responsible for the complete wiring and labeling of intersection

A common ground using #6 bare copper wire shall be supplied and physically connected by the contractor from each pole ground rod (power source pole ground rod included) to the ground rod.

The contractor shall be a licensed electrical contractor of Topeka and shall obtain a "WILL CALL PERMIT" from the City of Topeka Building Inspection division prior to construction. A copy of the "WILL CALL PERMIT" shall be forwarded to the Engineer by the contractor. The Building Inspection Division may be reached at 368–3905. Request for electrical inspection shall be made one day before it is needed. A licensed journeyman electrician is required to perform the actual service connection and is required to be on the job site at the time of field inspection. An Excavation permit will be required from the Permit Section at 368–3704.
The established address for this project (and controller) is:

\- _____ -

PROJECT SIGNING:

The contractor will be required to install one type A sign at the intersection. The contractor can obtain the sign from All Signs Company for $229. The bid will include the cost of the sign, the installation and maintenance. See city detail sheet DT–019 for mounting details.

✡ CABLE SHALL BE CONTINUOUS FROM EACH CAMERA TO THE CONTROLLER
++ = SUPPLIED BY THE CITY, INSTALLED BY THE CONTRACTOR ASSISTED BY THE SUPPLIER
⊛ = SUPPLIED AND INSTALLED BY THE CITY OF TOPEKA
● = PULLED IN AFTER SIGNAL WIRE HAS BEEN PULLED

NO.	DATE:	REVISION	BY:	APP'D
6			KAP	LGV
5			KAP	LGV
4			KAP	LGV
4			KAP	LGV
3	03–18–13	UPDATE PROJECT SIGNING NOTE	KAP	LGV
2	02–21–12	ADD KYLAND SICOM 3170 SWITCH	KAP	LGV
1	10–04–10	ADD 1.5" GALVANIZED STEEL CONDUIT	KAP	LGV

APP'D BY: Linda Lloyd

TOPEKA Public Works
ENGINEERING
620 SE MADISON STREET - 2nd FLR. ♦ TOPEKA, KS 66607
Phone: (785) 368-3842 ♦ Fax: (785) 368-3881

STANDARD DETAILS

BILL OF MATERIALS

DATE: _____
PAGE: ____ OF ____
DRAWING: DT–101
PROJ. _____