PLOTTED: Friday, August 23, 2019 @ 03:54PM

BILL OF MATERIALS (For Information Only)

ITEM	UNIT	QUANT.
POLE MOUNTED CONTROLLER & CABINET	EACH	1
TRAFFIC SIGNAL HEAD (SEE CHART A) W/MOUNTING HARDWARE	EACH	16
TRAFFIC SIGNAL POLE (SEE CHART B) STEEL	EACH	2
PEDESTAL POLE (SEE CHART B)(15' ALUMINUM)	EACH	2
CONCRETE FOOTING - POLE	EACH	4
CONDUIT ELBOW 90 2"	EACH	AS NEEDED
CONDUIT ELBOW 90 3"	EACH	AS NEEDED
SERVICE BOX	EACH	2
GROUND ROD & CLAMP	EACH	6
TRAFFIC SIGNAL LAMP RED LED KIT	EACH	4
TRAFFIC SIGNAL LAMP YELLOW LED KIT	EACH	6
TRAFFIC SIGNAL LAMP GREEN LED KIT	EACH	4
TRAFFIC SIGNAL LAMP LED (12" COMBINATION)	EACH	2
BACKPLATE W/ RETROREFLECTIVE TAPE ALONG THE OUTSIDE FOR SIGNAL HEAD (TYPE A)	EACH	2
ENTRANCE HEAD	EACH	1
CIRCUIT BREAKER & BOX 125 AMP	EACH	1
PEDESTRIAN PUSHBUTTON W/SIGN	EACH	2
LEAD-IN-WIRE NO. 6 A.W.G. 1/C	LIN. FT.	210
NO. 8 A.W.G. 1/C (GROUND)	LIN. FT.	510
MULTI-CONDUCTOR CABLE NO. 14 A.W.G. 3/C	LIN. FT.	378
MULTI-CONDUCTOR CABLE NO. 14 A.W.G. 2/C	LIN. FT.	7
MULTI-CONDUCTOR CABLE NO. 14 A.W.G. 5/C	LIN. FT.	69
MULTI-CONDUCTOR CABLE NO. 14 A.W.G. 7/C	LIN. FT.	178
CONDUIT 1" RGC	LIN. FT.	55
CONDUIT 1.5" RGC	LIN. FT.	6
CONDUIT 2" RGC	LIN. FT.	287
CONDUIT 3" RGC	LIN. FT.	47

TRAFFIC SIGNAL POLE SUMMARY (CHART B)

POLE NO.	STATION	TYPE	ARM LENGTH	SIGNALS ON ARM	SIGNALS/EQUIPMENT ON POLE	SIGNS ON POLE
11	77+54.4, 23.3' RT.	C			1-I	1-G, 1-H
12	78+91.4, 22.6' LT.	B	13'	1-E	1-C, 1-E, 1-F	
13	79+04.4, 22.5' RT.	B	13'	1-E	1-E, 1-F	
14	80+08.4, 23.4' LT.	C			1-I	1-G, 1-H

A - Joint Use Steel Pole with Mast Arm
B - Standard Steel Pole with Mast Arm
C - Pedestal Pole (15' Aluminum)
D - Controller with Cabinet
E - Traffic Signal
F - Pedestrian Signal with Push Button
G - School Speed Limit Sign (20 MPH)(S5-2)
H - End School Zone Sign (S5-2)
I - Flashing School Beacon

RECAPITULATION OF TRAFFIC SIGNAL QUANTITIES

BID ITEM	QUANTITY	UNIT
TRAFFIC SIGNALIZATION, PEDESTRIAN	1	L.S.
TRAFFIC SIGNALIZATION, PEDESTRIAN (TEMPORARY)	1	L.S.

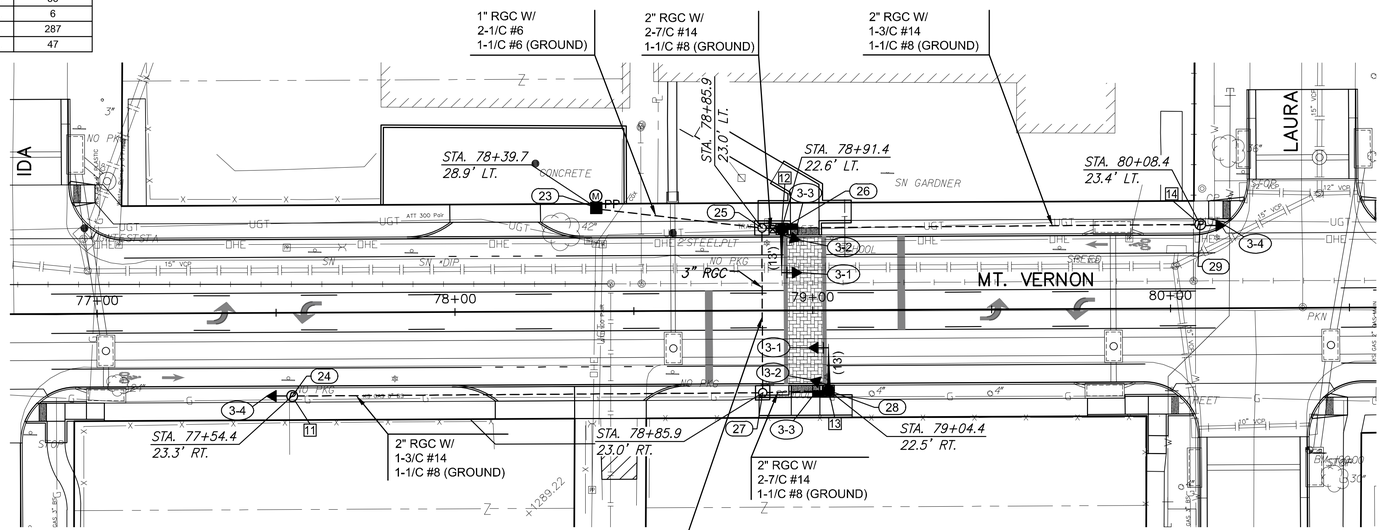
GENERAL NOTES

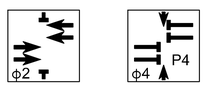
1. CONDUIT SHALL BE JACKED, BORED OR DIRECTIONAL DRILLED UNDER EXISTING PAVEMENT AND UNDER NEW PAVEMENT THAT HAS BEEN PLACED PRIOR TO CONDUIT INSTALLATION.
2. PLACEMENT OF SERVICE/JUNCTION BOXES, CONDUIT RUNS AND CONTROLLER ARE TYPICAL AND MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER TO FACILITATE INSTALLATION.
3. THE CONTRACTOR SHALL CONTACT UTILITY COMPANIES WHICH MAY BE AFFECTED BY THE INSTALLATION OF TRAFFIC SIGNALIZATION PRIOR TO ANY CONSTRUCTION.
4. WESTAR POWER POLE BASELINE STA. 78+39.7, 28.9' LT. INSTALL METER AND POWER DISCONNECT.
5. CONTRACTOR SHALL INSTALL A 1" RIGID GALVANIZED CONDUIT FROM THE POLE LOCATED AT STA. 78+39.7, 28.9' LT. TO THE TRAFFIC SIGNAL CONTROLLER LOCATED AT STA. 78+91.4, 22.6' LT. TO CARRY THE METERED CONDUCTOR FROM THE METER TO THE TRAFFIC SIGNAL CONTROLLER.
6. DURING CONSTRUCTION, THE CONTRACTOR SHALL INSTALL AND OPERATE A TEMPORARY TRAFFIC SIGNAL AT THE CROSSWALK LOCATION OR PROVIDE FLAG PERSONS DURING SCHOOL CROSSING PERIODS. THE CONTRACTOR SHALL PREPARE PLANS FOR TEMPORARY TRAFFIC SIGNALS IN CONSULTATION WITH THE TRAFFIC ENGINEER AND IN CONFORMANCE WITH THE CONTRACTOR'S TRAFFIC CONTROL PLAN. NOTIFY CITY OF WICHITA TRAFFIC MAINTENANCE 7-DAYS PRIOR TO SIGNAL TURN-ON.
7. SEE SIGNAL POLE DETAILS FOR ADDITIONAL TRAFFIC SIGNAL STRUCTURES REQUIREMENT.
8. SEE PAVEMENT MARKING PLAN FOR PAVEMENT MARKING LAY-OUT.

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	87 N-0660-01	2019	125	198

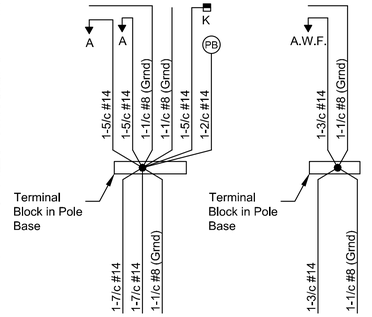
LEGEND

- STEEL TRAFFIC SIGNAL POLE (JOINT USE)
- STEEL TRAFFIC SIGNAL POLE (STD. POLE)
- (P) ALUMINUM TRAFFIC SIGNAL POLE (PEDESTAL)
- TRAFFIC SIGNAL INDICATION (TYPE A) W/BACKPLATE
- TRAFFIC SIGNAL INDICATION (TYPE C) W/BACKPLATE
- MAST ARM SUSPENDED TRAFFIC SIGNAL
- SERVICE BOX
- PEDESTRIAN INDICATION
- 1 POLE NUMBER
- 3-1 SIGNAL NUMBER
- RIGID GALVANIZED CONDUIT (RGC)
- PP POWER POLE
- (M) METER BOX AND POWER DISCONNECT
- POLE MOUNTED CONTROLLER
- (1) BUBBLE POINT #

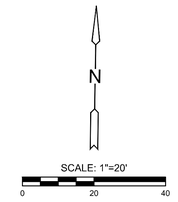




MT. VERNON
SIGNAL PHASING



Pole 12 AND 13 | Pole 11 AND 14



TYPE 2070 CONTROLLER SETTINGS

"WAPITI PROGRAM"

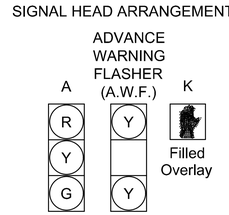
INTERVAL		PHASE 1 WBLT	2 EB	3 SBLT	4 NB	5 EBLT	6 WB	7 NBLT	8 SB
MAX	0		30				30		
MAX 2	1		30				30		
WALK	2		7		10		7		10
FL. DW.	3		20		15		20		15
MAX INIT.	4		10		10		10		10
MIN GREEN	5		8				8		
TBR	6		10				10		
TTR	7		10				10		
	8								
PASSAGE	9		2.0				2.0		
MIN GAP	a		1.0				1.0		
ADD ACT	b		2.5				2.5		
YELLOW	c		4.0				4.0		
RED CLR.	d		1.5				1.5		
RED REV.	e		0.0				0.0		
WALK II	f		0.0				0.0		

NORMAL DISPLAY

TIME CLOCK		FEATURES	1	2	3	4	5	6	7	8
0	YEAR	VEH RECALL				X				X
1	MONTH	PED RECALL								
2	DAY/MONTH	RED LOCK								
3	DAY/WEEK	YEL LOCK		X		X		X		X
4	HOUR	Ø PERMIT	X	X	X	X	X	X	X	X
5	MINUTE	PED PHASES		X		X		X		X
6	SECOND	LEAD PHASES	X		X		X		X	
7		DBL ENTRY								
8		SEQUENTIAL								
9		START UP YEL								
a		OVERLAP A								
b		OVERLAP B								
c		OVERLAP C								
d		OVERLAP D								
e		EXCLUSIVE								
f		SIM GAP								

LTT-2

SIGNAL HEAD ARRANGEMENT



12" LED LENSES - VEHICULAR AND PEDESTRIAN

TRAFFIC SIGNAL HEAD SUMMARY (CHART A)

SIGNAL NO.	TYPE	SIZE	MOUNTING BRACKET	QUANTITY
3-1	A	3-12"	TYPE I	2
3-2	A	3-12"	TYPE IV*	2
3-3	K	1-12"	TYPE IV*	2
3-4	A.W.F.	3-12	TYPE V	2

* ONE TYPE IV BRACKET WILL SUPPORT 1 TYPE A AND 1 TYPE K SIGNAL HEAD.
ALL SIGNAL HEADS TO BE L.E.D.

SIGNAL POINTS

Point #	Station/Offset	Northing	Easting	Desc.
23	78+39.7/28.9' LT.	1675349.142	1652811.424	PP
24	77+54.4/23.3' RT.	1675295.082	1652727.330	POLE #11
25	78+85.9/23.0' LT.	1675344.302	1652857.782	SB #12
26	78+91.4/22.6' LT.	1675344.057	1652863.287	POLE #12
27	78+85.9/23.0' RT.	1675298.314	1652858.808	SB #13
28	79+04.4/22.5' RT.	1675299.244	1652877.293	POLE #13
29	80+08.4/23.4' LT.	1675347.449	1652980.240	POLE #14

MKEC
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STREET IMPROVEMENTS FOR

MT. VERNON IMPROVEMENTS

BROADWAY TO SOUTHEAST BLVD.

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PEDESTRIAN SIGNAL PLAN-STA. 79+00

PROJECT NO.	87 N-0660-01
DATE	8/19/2019
SCALE	1"=20'

DESIGNED	DRAWN	CHECKED
JRA	WNJ	JRA

NO.	REVISION	DATE

SHEET NO.
125 OF 198

Sh. No. 125

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