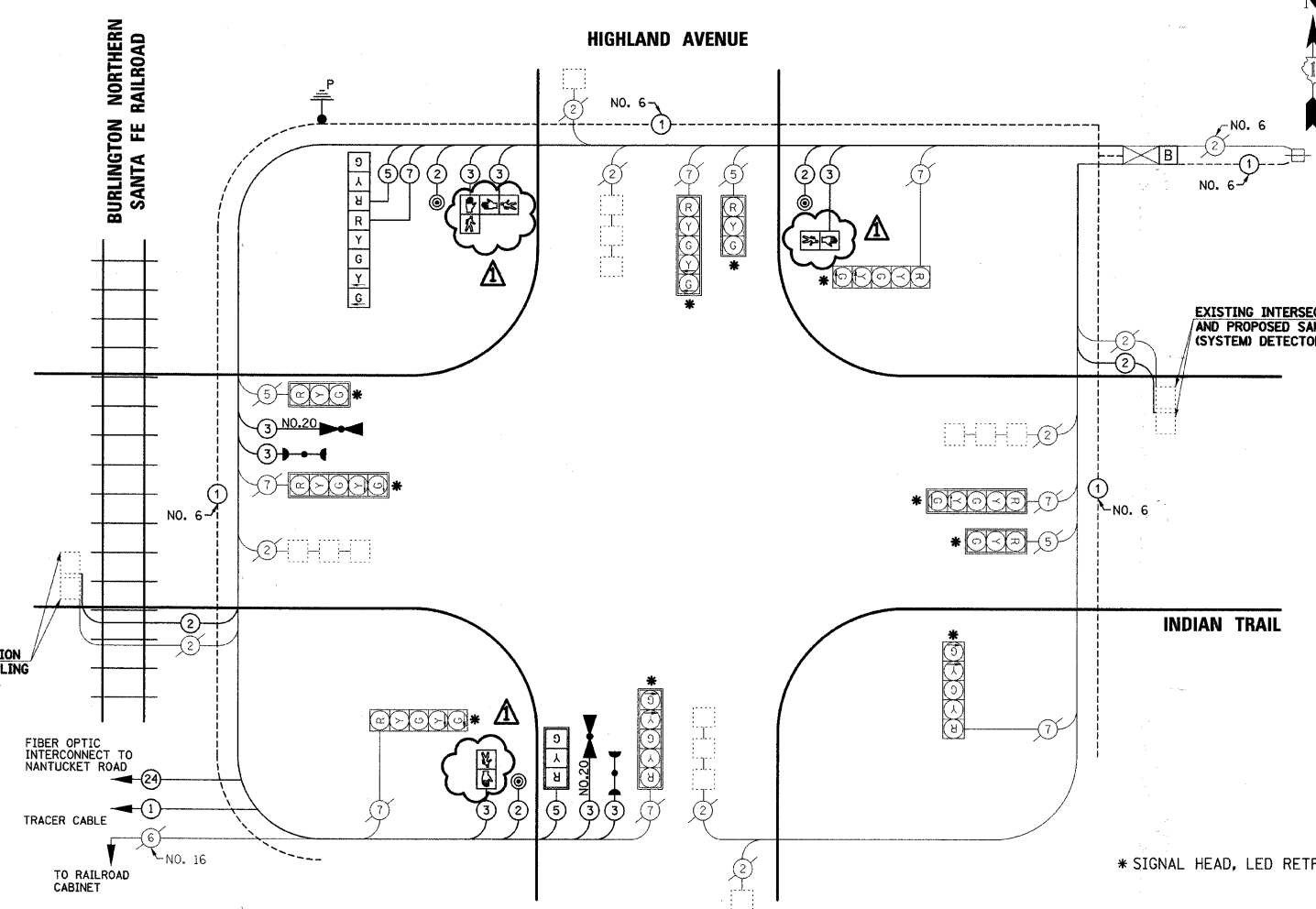


**CABLE PLAN LEGEND**

- |                 |                 |   |
|-----------------|-----------------|---|
| <b>EXISTING</b> | <b>PROPOSED</b> |   |
|                 |                 | 8" (200mm) TRAFFIC SIGNAL SECTION   |
|                 |                 | 12" (300mm) TRAFFIC SIGNAL SECTION  |
|                 |                 | 12" (300mm) PEDESTRIAN SIGNAL SECTION   |
|                 |                 | 12" (300mm) PEDESTRIAN SIGNAL SECTION   |
|                 |                 | CONTROLLER CABINET  |
|                 |                 | SERVICE INSTALLATION  |
|                 |                 | TELEPHONE INSTALLATION  |
|                 |                 | VEHICLE DETECTOR, INDUCTION LOOP  |
|                 |                 | MAGNETIC DETECTOR   |
|                 |                 | EMERGENCY VEHICLE LIGHT DETECTOR  |
|                 |                 | CONFIRMATION BEACON   |
|                 |                 | PUSHBUTTON DETECTOR   |
|                 |                 | LUMINAIRE   |
|                 |                 | DENOTES NUMBER OF CONDUCTORS.<br>ALL CABLE NO. 14 EXCEPT AS INDICATED.<br>ALL LOOP DETECTOR CABLE TO BE SHIELDED. |
|                 |                 | GROUND CABLE IN CONDUIT<br>NO. 6 SOLID COPPER (GREEN)   |
|                 |                 | FIBER OPTIC CABLE IN CONDUIT<br>NO. 62.5/125 2-MM12F SMI2F  |
|                 |                 | SIGNAL FACE WITH BACKPLATE.<br>"P" INDICATES PROGRAMMED HEAD.   |
|                 |                 | RAILROAD CONTROL CABINET  |
|                 |                 | ILLUMINATED SIGN<br>"NO LEFT TURN"  |
|                 |                 | ILLUMINATED SIGN<br>"NO RIGHT TURN"   |
|                 |                 | WIRELESS ANTENNA  |
|                 |                 | GROUND ROD AT HANDHOLE (H),<br>DOUBLE HANDHOLE (H), OR CONTROLLER (C)   |
|                 |                 | GROUND ROD AT POST (P)<br>OR MAST ARM POLE (MA)   |
|                 |                 | GROUND ROD AT ELECTRIC<br>SERVICE INSTALLATION  |
|                 |                 | UNINTERRUPTIBLE POWER SUPPLY  |
|                 |                 | LED STREET NAME SIGN  |
|                 |                 | VIDEO DETECTION CAMERA  |
|                 |                 | PAN/TILT/ZOOM CAMERA  |



**SCHEDULE OF QUANTITIES**

PAY ITEM DESCRIPTION	UNIT	HIGHLAND AVENUE
CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	24
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	433
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1079.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	429
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	181.5
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	729.5
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
DRILL EXISTING HANDHOLE	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	2
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	3
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1361.5
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	1
PAINT TRAFFIC SIGNAL POST	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	508
ELECTRIC CABLE IN CONDUIT, NO. 20 3/C TWISTED SHIELDED	FOOT	464
GROUND EXISTING HANDHOLE FRAME AND COVER	EACH	8
RAILROAD PROTECTIVE LIABILITY INSURANCE	L.SUM	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	3

\* SIGNAL HEAD, LED RETROFIT

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	13		17	0.50	110.5
(YELLOW)	13		25	0.25	81.3
(GREEN)	13		15	0.25	48.8
ARROW	16		12	0.10	19.2
PED. SIGNAL	4		25	1.00	100
CONTROLLER	1		100	1.00	100
UPS	1		25	1.00	25
<b>TOTAL =</b>					<b>484.8</b>

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
C - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'-H-2=
D - CONTROLLER	4 (1.2)	SIGNAL POST	2 (1.0)		(6m+L-0.6m)
E - M.A. LENGTH		CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
<30'	30" (900mm)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
<40'	30" (750mm)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
<40'	36" (900mm)	GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
<50'	36" (900mm)			POST MOUNTED	6 (1.8)
>50'	36" (900mm)				

ENERGY COSTS TO: CITY OF AURORA  
44 E. DOWNER PLACE  
AURORA, ILLINOIS 60507-2067

ENERGY SUPPLY CONTACT: MARK SCHERIBEL  
PHONE: (630) 723-2128  
COMPANY: COMMONWEALTH EDISON

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE OPTICOM AS REQUIRED BY THE CITY OF AURORA.

DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
DESIGNED: \_\_\_\_\_  
DRAWN: \_\_\_\_\_  
CHECKED: \_\_\_\_\_  
DATE: \_\_\_\_\_

DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
SURVEYED: \_\_\_\_\_  
PLOTTED: \_\_\_\_\_  
GRADES CHECKED: \_\_\_\_\_  
STRUCTURE NOTATIONS CHECKED: \_\_\_\_\_

FILE NAME = ... \sheets\690\_6\_sig\_05a\_high.dgn  
USER NAME = .USER.  
DESIGNED -  
DRAWN BAH  
CHECKED APS  
DATE -  
REVISED AS PER ICC COMMENTS 08/18/09  
REVISED -  
REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CABLE PLAN  
HIGHLAND AVENUE  
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE. 1503 SECTION 08-00271-00-TL COUNTY KANE TOTAL SHEETS 30 SHEET NO. 24 CONTRACT NO. 63246  
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT