

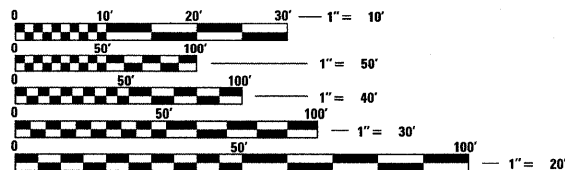
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J.U.L.I.E.  
JOINT UTILITY LOCATING INFORMATION FOR EXCAVATION  
1-800-892-0123 (CALL 48 HOURS IN ADVANCE)



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

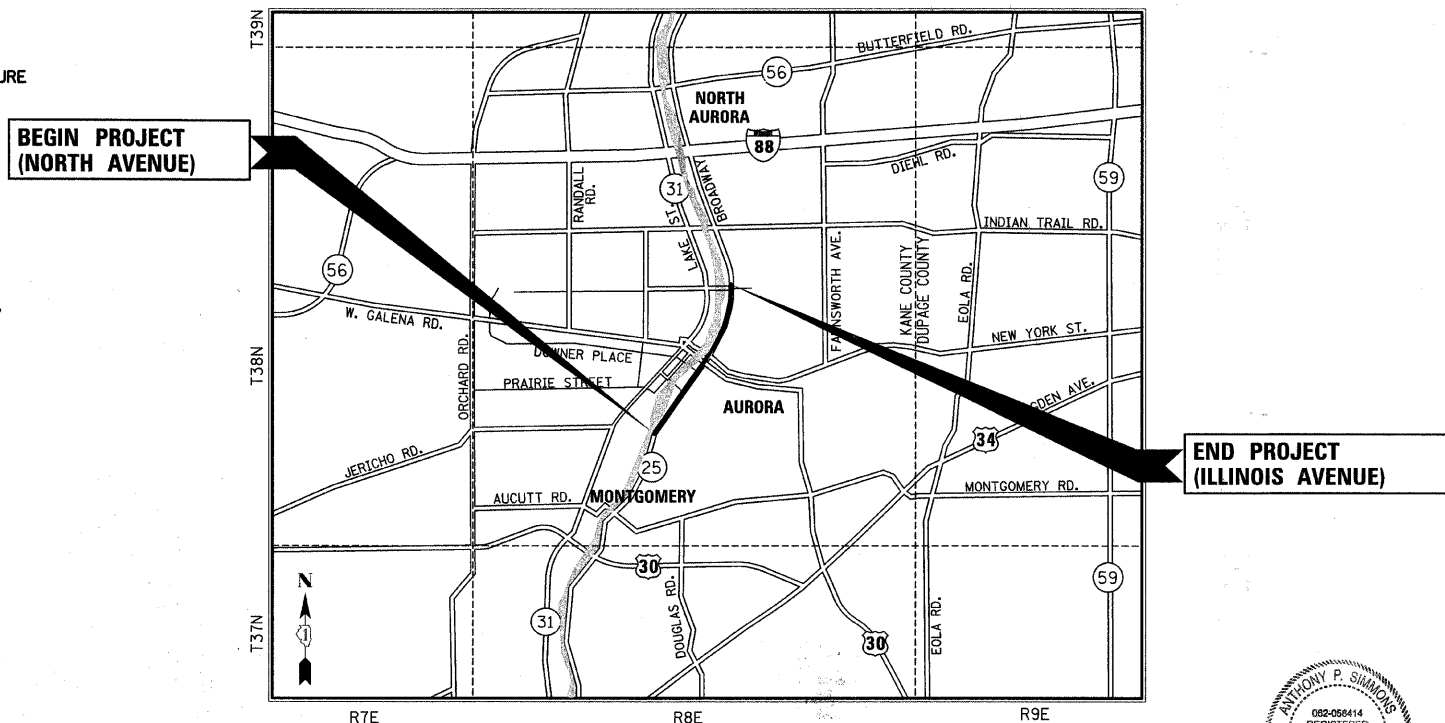
**CONTRACT NO: 63177**

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS**

**PLANS FOR PROPOSED  
TRAFFIC SIGNAL INTERCONNECT**

**CONGESTION MITIGATION AIR QUALITY  
FAU ROUTE 2503 / ILLINOIS ROUTE 25 (BROADWAY AVENUE)  
FROM NORTH AVENUE TO ILLINOIS AVENUE  
SECTION 08-00272-00-TL  
PROJECT NO. CMM-9003 (032)  
KANE COUNTY  
JOB NO.: C-91-410-98**

THIS IMPROVEMENT IS LOCATED  
IN THE CITY OF AURORA



LOCATION MAP  
SCALE : N.T.S

POSTED SPEED = 30 - 35 M.P.H.  
PROJECT GROSS LENGTH = 8,700.00 FEET = 1.65 MILES  
PROJECT NET LENGTH = 8,700.00 FEET = 1.65 MILES



*Anthony P. Simmons*  
ANTHONY P. SIMMONS, P.E.  
NO. 062-058414  
EXPIRES: 11/30/09  
SMITH ENGINEERING CONSULTANTS, INC.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2503	08-00272-00-TL	KANE	40	1

**CONTRACT NO. 63177**



AGENCY RESPONSIBLE FOR LETTING	
APPROVED <u>June 8</u> 20 <u>09</u>	
<i>E. J. Dobb</i> CITY OF AURORA, CITY TRAFFIC ENGINEER	
PASSED <u>July 16</u> 20 <u>09</u>	
<i>Christopher Holt</i> DISTRICT 1 ENGINEER OF LOCAL ROADS & STREETS	
RELEASING FOR BID BASED ON LIMITED REVIEW <u>JULY 16,</u> 20 <u>09</u>	
<i>Diana M. O'Keefe</i> DEPUTY DIRECTOR OF HIGHWAYS, REGION 1 ENGINEER	

Illinois Professional Design Firm # 184-000108

**SEC Group, Inc.**

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DISTRICT 1 - LOCAL ROADS ENGINEER: MARILYN D. SOLOMON (847) 705-4407

**SUMMARY OF QUANTITIES**

CODE NUMBER	PAY ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	Y031 - 1F										
				NORTH AVENUE	BENTON STREET	DOWNER PLACE	GALENA BOULEVARD	NEW YORK STREET	SPRING STREET	TRANSPORTATION CENTER	POST OFFICE	ILLINOIS AVENUE	INTERCONNECT	
*42400300	PORTLAND CEMENT CONCRETE SIDEWALK 6"	SQ FT	423	340							53	30		
*42400800	DETECTABLE WARNINGS	SQ FT	98	61							21	16		
*44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	62	51							11			
*44000600	SIDEWALK REMOVAL	SQ FT	361	278							53	30		
*60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	62	51							11			
67000500	ENGINEER'S FIELD OFFICE, TYPE B	CAL MO	3											
67100100	MOBILIZATION	L SUM	1											
70101800	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM	1											
72000100	SIGN PANEL - TYPE 1	SQ FT	43.9	43.9										
*78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	71										71	
*78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	2016	414						388	384	258	572	
*78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	553	114						99	127	83	130	
*78300100	PAVEMENT MARKING REMOVAL	SQ FT	1948	411						377	445	245	470	
81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	327	327										
81000700	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	286	76						44	102	64		
81001000	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	218	46							128	44		
81018500	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	220	220										
81018600	CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	22	22										
81018900	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	572	178							196	198		
81400100	HANDHOLE	EACH	6	6										
81400300	DOUBLE HANDHOLE	EACH	1	1										
81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	919	515						66	230	108		
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	8			1		1		1			1	
85700205	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)	EACH	2	1										1
85700500	FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	3							1		1		
85900100	TRANSCEIVER	EACH	9											9
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	2630.5	515						536.5	645.5	375.5	558	
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	6880.5	1361.5				133.5		1217.5	1458	968.5	1741.5	
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	4218.5	625						304.5	1195	1750	344	
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	3495.5	1212						82	1596.5	605		
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAR	FOOT	5262.5	1760						843	1203	800	656.5	
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	249	35.5							65.5	104.5	43.5	
87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1										1	
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4	1							2	1		
87502520	TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	3							1	2			
87700140	STEEL MAST ARM ASSEMBLY AND POLE, 20 FT.	EACH	1	1										
87700150	STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.	EACH	1	1										
87700160	STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	1	1										
87700170	STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.	EACH	1									1		
87700180	STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1	1										
87700190	STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1								1			
87700200	STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1									1		
87700210	STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1								1			
87700220	STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1									1		
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	32	4						4	16	8		
87800150	CONCRETE FOUNDATION, TYPE C	FOOT	4	4										

\*SPECIALTY ITEMS

PLAN SURVEYED BY DATE  
 ADJUSTMENT CHECKED  
 RT. OF WAY CHECKED  
 FILE NAME

PROFILE SURVEYED BY DATE  
 ADJUSTMENT CHECKED  
 RT. OF WAY CHECKED  
 STRUCTURE NOTATION CHORD

FILE NAME =	USER NAME = \$USER\$	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUMMARY OF QUANTITIES</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
\$FILEL\$		DRAWN BAH	REVISED -			2503	08-00272-00-TL	KANE	40	2	
PLOT SCALE = \$SCALE\$		CHECKED APS	REVISED -			CONTRACT NO. 63177					
PLOT DATE = 6/8/2009		DATE JAN 16 2009	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

**SUMMARY OF QUANTITIES**

CODE NUMBER	PAY ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	Y031 - 1F										
				NORTH AVENUE	BENTON STREET	DOWNER PLACE	GALENA BOULEVARD	NEW YORK STREET	SPRING STREET	TRANSPORTATION CENTER	POST OFFICE	ILLINOIS AVENUE	INTERCONNECT	
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	107.5	40							27	40.5		
87900200	DRILL EXISTING HANDHOLE	EACH	34							5	18	11		
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	18	4						2	4	6	2	
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1									1		
88030070	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	5							1	4			
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	5	4								1		
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	8	4							2	2		
88030210	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1									1		
88030240	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1									1		
88030330	SIGNAL HEAD, LED, 3-FACE, 2-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1								1			
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	6							2	2	2		
88102747	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	13	4						2	2	1	4	
88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	27	8						2	6	9	2	
88500100	INDUCTIVE LOOP DETECTOR	EACH	18	9						2	3	2	2	
88600100	DETECTOR LOOP, TYPE I	FOOT	1139	859						136	144			
88700200	LIGHT DETECTOR	EACH	12	2						2	3	2	3	
88700300	LIGHT DETECTOR AMPLIFIER	EACH	5	1						1	1	1	1	
88800100	PEDESTRIAN PUSH-BUTTON	EACH	19	4						4	4	3	4	
89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1	1										
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	12347	3756						1862.5	4112	2573	43.5	
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	5	1						1	1	1	1	
89502380	REMOVE EXISTING HANDHOLE	EACH	4	4										
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	23	9						1	6	7		
X0322925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	261											261
X0324007	OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1											1
X0324232	PAINT NEW MAST ARM POLE, UNDER 40 FEET	EACH	9	4							2	3		
X0324847	REMOVE AND REINSTALL LIGHT POLE, SPECIAL	EACH	4		1	1	1	1						
X0325134	WIRELESS INTERCONNECT (COMPLETE)	EACH	1											1
X0325737	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1	1										
X0325810	WIRELESS ETHERNET RADIO	EACH	3		1	1	1							
X8050015	SERVICE INSTALLATION - POLE MOUNTED	EACH	4	1							1	1	1	
X8510300	PAINT TRAFFIC SIGNAL POST	EACH	8	1						1	4	2		
X8620020	UNINTERRUPTABLE POWER SUPPLY	EACH	5	1						1	1	1	1	
X8710020	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT	261											261
X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	2085	440						60	610.5	507	447.5	
X8780110	MODIFY EXISTING TYPE "D" FOUNDATION	EACH	1										1	
XX003584	VIDEO BELDEN 8281 COAXIAL CABLE IN CONDUIT	FOOT	133.5			133.5								
XX005660	ELECTRIC CABLE IN CONDUIT, NO. 20 3C TWISTED SHIELDED	FOOT	2022	275.5		133.5				267	373	403.5	569.5	
XX006923	GROUND EXISTING HANDHOLE FRAME AND COVER	EACH	19								8	5	6	
XX007251	INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1			1								
<del>XX007987</del>	SIGNAL HEAD, LED, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	6							2			4	
<del>XX007988</del>	SIGNAL HEAD, LED, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	6							3			3	
<del>XX008122</del>	SIGNAL HEAD, LED, 4-SECTION, BRACKET MOUNTED, RETROFIT	EACH	3							3				
<del>XX007989</del>	SIGNAL HEAD, LED, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	5							1			4	
<del>XX007990</del>	SIGNAL HEAD, LED, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	5							1			4	

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 RT. OF WAY CHECKED BY DATE  
 NOTE BOOK NO. CAD FILE NAME

PROFILE SURVEYED BY DATE  
 PLOTTED BY DATE  
 CHECKED BY DATE  
 STRUCTURE NOTATION DPKO

**SUMMARY OF QUANTITIES**

CODE NUMBER	PAY ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	Y031 - 1F									
				NORTH AVENUE	BENTON STREET	DOWNER PLACE	GALENA BOULEVARD	NEW YORK STREET	SPRING STREET	TRANSPORTATION CENTER	POST OFFICE	ILLINOIS AVENUE	INTERCONNECT
XX006958	SIGNAL HEAD, LED, 3-FACE, 1-3 SECTION, 1-4 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1							1			
XX007952	TERMINAL SERVER	EACH	1										1
XX007992	ETHERNET SWITCH	EACH	1										1
XX007993	CENTRALIZED SYSTEM FIELD INTEGRATION/SETUP	L SUM	1										1
XX007994	FIBER OPTIC SPLICE	EACH	1										1

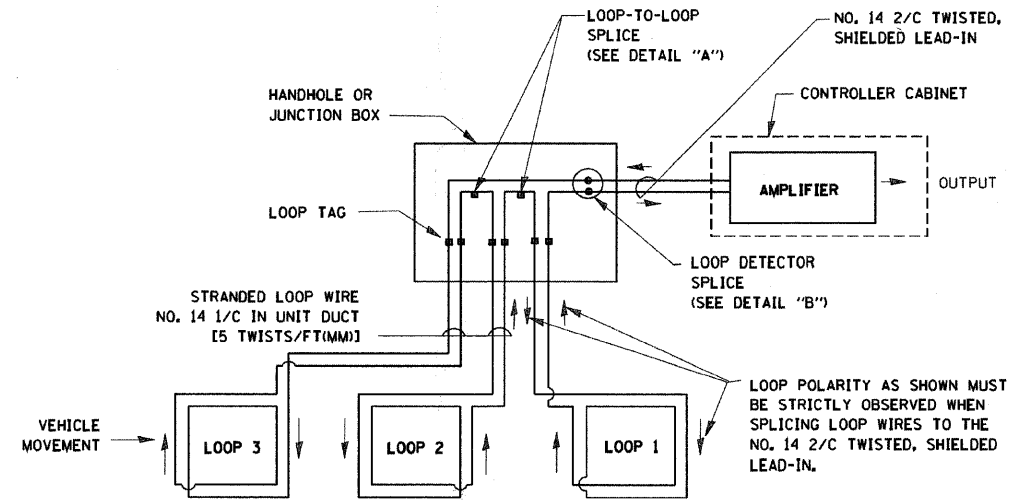
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

**LOOP DETECTOR NOTES**

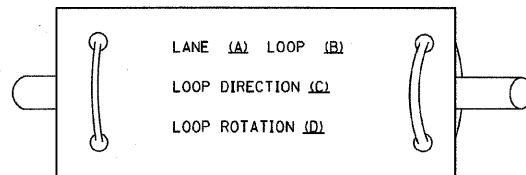
1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE UNIT DUCT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). UNIT DUCT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.



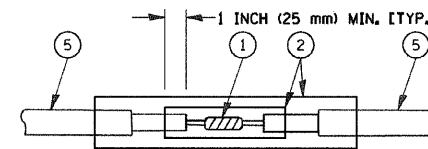
**DETECTOR LOOP WIRING SCHEMATIC**

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.

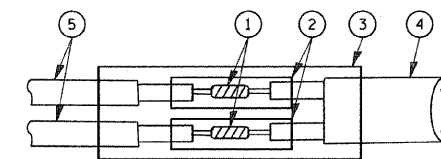
**LOOP LEAD-IN CABLE TAG**



- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



**DETAIL "A"  
LOOP-TO-LOOP SPLICE**



**DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE**

**LOOP DETECTOR SPLICE**

- 1 WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- 2 WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- 3 WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- 4 NO. 14 2/C TWISTED, SHIELDED CABLE.
- 5 LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

REVISIONS	
NAME	DATE
CADD	5/30/00
ADD NOTE NO. 8	11/12/01
BUREAU OF TRAFFIC	1-01-02

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**DISTRICT ONE  
STANDARD TRAFFIC SIGNAL  
DESIGN DETAILS**

SCALE: NONE  
DATE: 2/15/2006

DRAWN BY: RWP  
DESIGNED BY: DAD  
CHECKED BY: DAZ  
SHEET 1 OF 4

TS05

REVISION DATE: 01/01/02

FILE NAME =	USER NAME = #USER#	DESIGNED -	REVISED -
#FILE#		DRAWN <i>BAH</i>	REVISED -
		CHECKED <i>APS</i>	REVISED -
		DATE <i>JAN 16 2009</i>	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>DISTRICT ONE STANDARD TRAFFIC SIGNALS DESIGN DETAILS</b>			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2503	08-00272-00-TL	KANE	40	5
CONTRACT NO. 63177				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PLAN	DATE
BY	
SURVEYED	
PLOTTED	
CHECKED	
BY	
NOTE BOOK NO.	
FILE NAME	

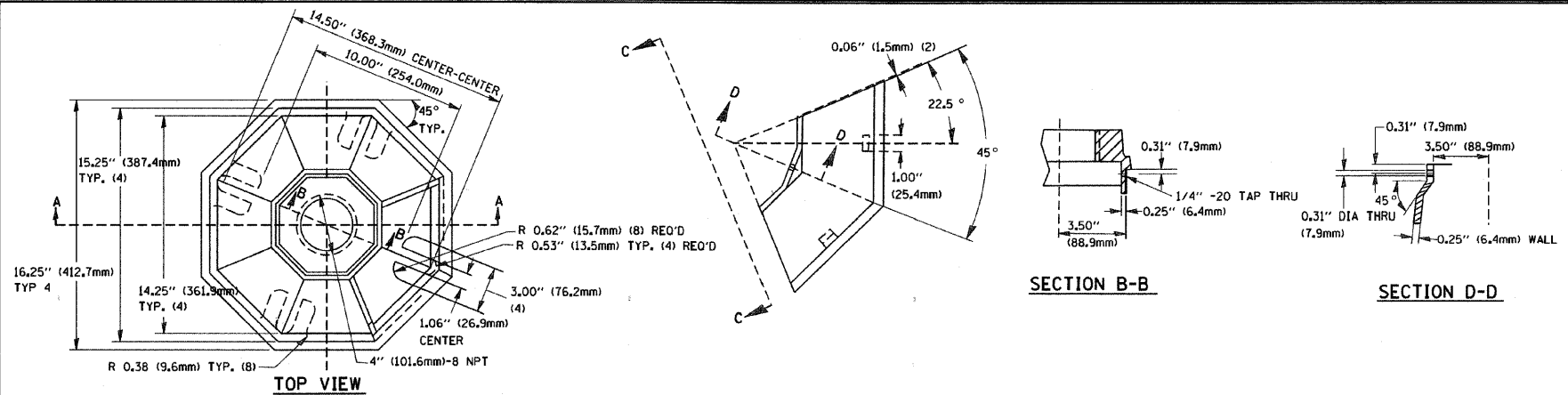
PROFILE	DATE
BY	
SURVEYED	
PLOTTED	
CHECKED	
BY	
NOTE BOOK NO.	
FILE NAME	





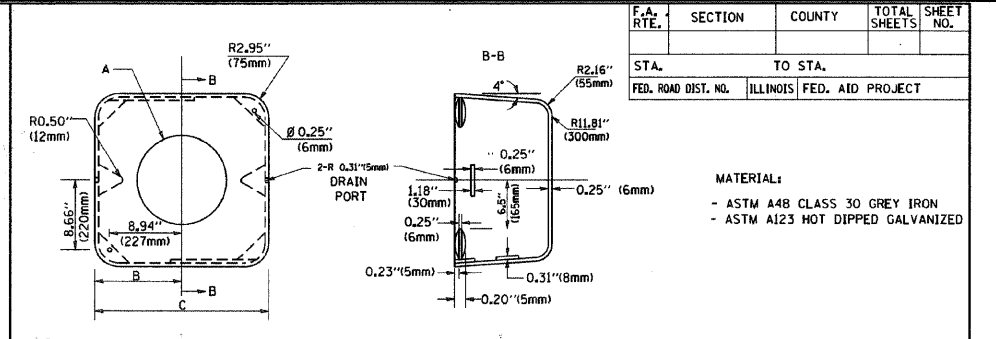


DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 SURVEYED \_\_\_\_\_  
 PLOTTED \_\_\_\_\_  
 CHECKED \_\_\_\_\_  
 RT. OF WAY CHECKED \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 NO. \_\_\_\_\_  
 FILE NAME \_\_\_\_\_



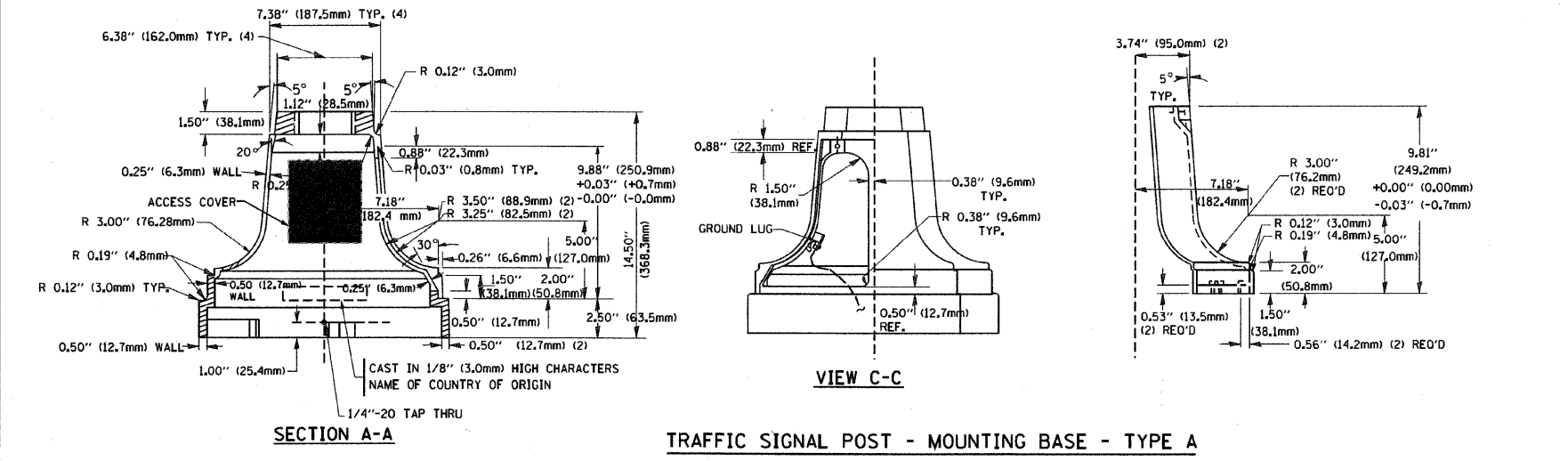
SECTION B-B

SECTION D-D



TYPE	A	B	C	HEIGHT	WEIGHT
I	Ø 10.125" (257.7mm)	9.5" (241.1mm)	19" (483mm)	12" (300mm)	24kg
II	Ø 11.125" (283mm)	10.75" (273mm)	21.5" (546mm)	12" (300mm)	26kg

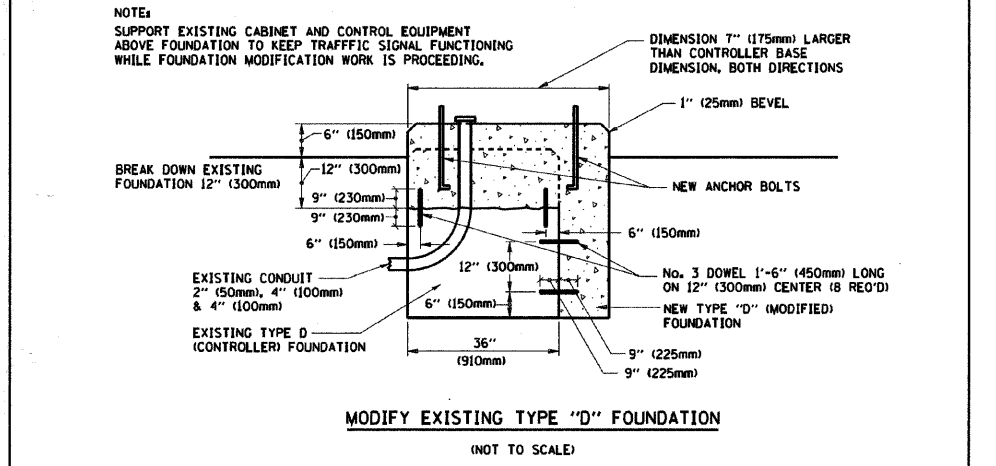
SHROUD DETAIL



SECTION A-A

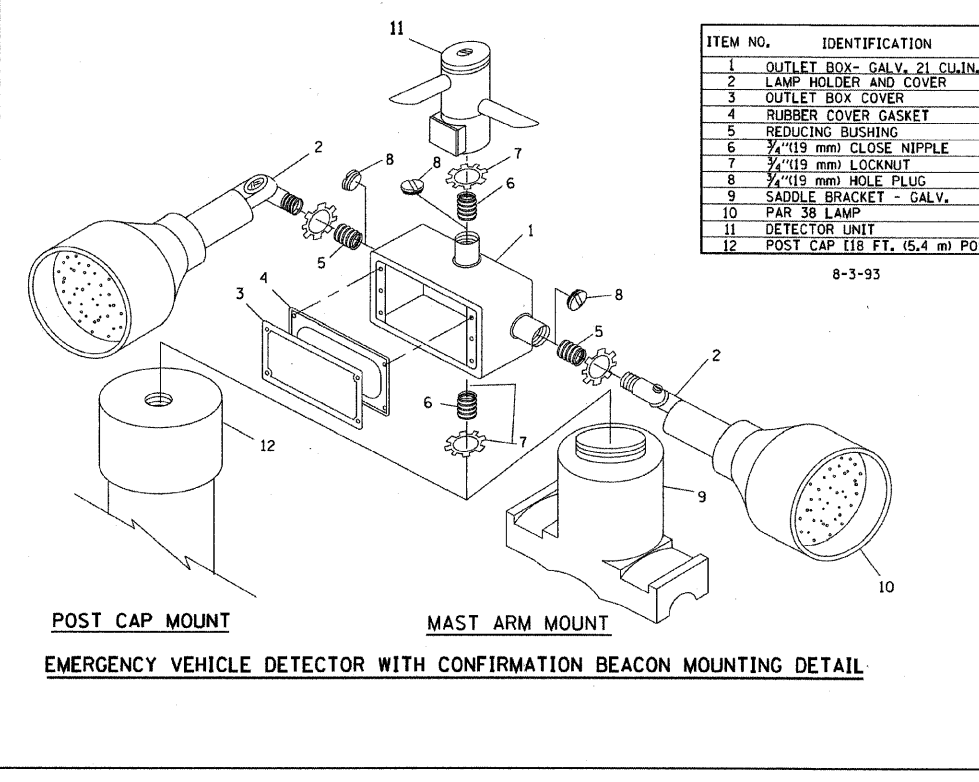
VIEW C-C

TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A



MODIFY EXISTING TYPE "D" FOUNDATION

(NOT TO SCALE)



POST CAP MOUNT

MAST ARM MOUNT

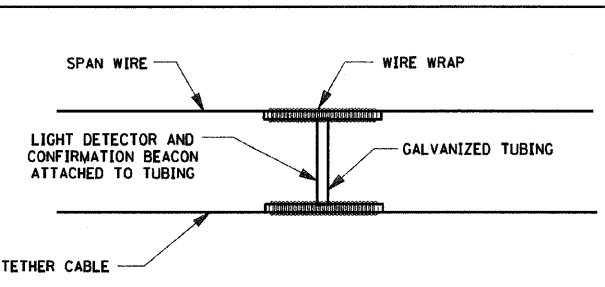
EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

ITEM NO.	IDENTIFICATION
1	OUTLET BOX - GALV. 21 CU.IN. (0.000344 CU.M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4" (19 mm) CLOSE NIPPLE
7	3/4" (19 mm) LOCKNUT
8	3/4" (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	PAR 38 LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

8-3-93

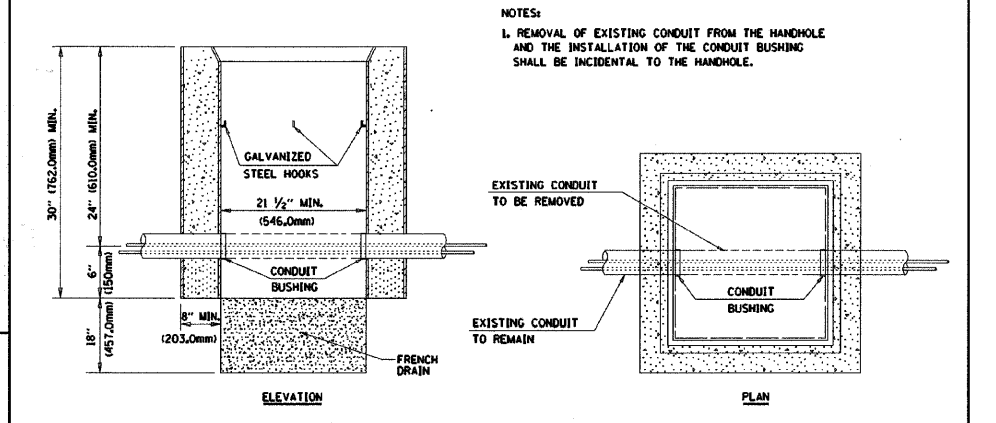
NOTES:

- ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
- ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT  
 ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT  
 ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
- WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4" (19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



LIGHT DETECTOR AND CONFIRMATION BEACON MOUNTING FOR TEMPORARY TRAFFIC SIGNALS

(NOT TO SCALE)



DETAIL HANDHOLE TO INTERCEPT EXISTING CONDUIT

N.T.S.

REVISIONS	
NAME	DATE
BUREAU OF TRAFFIC	5/30/00
BUREAU OF TRAFFIC	3/15/01
BUREAU OF TRAFFIC	11/12/01
BUREAU OF TRAFFIC	1-01-02

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 DISTRICT ONE  
 STANDARD TRAFFIC SIGNAL  
 DESIGN DETAILS

SCALE: NONE  
 DATE: 2/15/2006

DRAWN BY: RWP  
 DESIGNED BY: DAD  
 CHECKED BY: DAZ  
 SHEET 4 OF 4

TS05

REVISION DATE: 01/01/02

FILE NAME = #FILEL\$	USER NAME = \$USER\$	DESIGNED -	REVISED -
		DRAWN BAH	REVISED -
		CHECKED APS	REVISED -
		DATE JAN 16 2009	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

DISTRICT ONE STANDARD TRAFFIC SIGNALS DESIGN DETAILS			
SCALE:	SHEET NO.	OF SHEETS	STA.
			TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2503	08-00272-00-TL	KANE	40	8
CONTRACT NO. 63177				
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

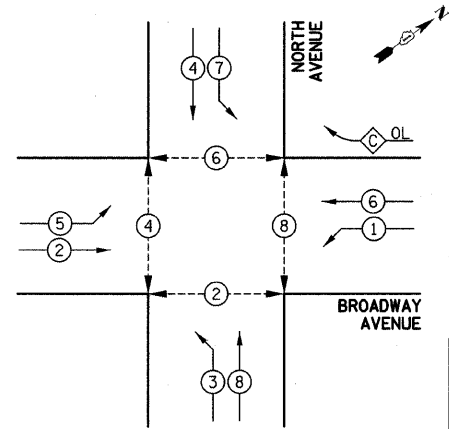




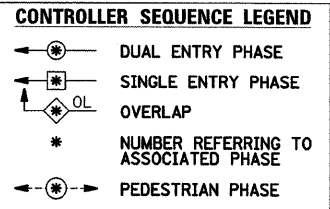
DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 SURVEYED \_\_\_\_\_  
 PLOTTED \_\_\_\_\_  
 CHECKED \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 NO. \_\_\_\_\_

DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 SURVEYED \_\_\_\_\_  
 PLOTTED \_\_\_\_\_  
 CHECKED \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 NO. \_\_\_\_\_

**TEMPORARY CONTROLLER SEQUENCE**

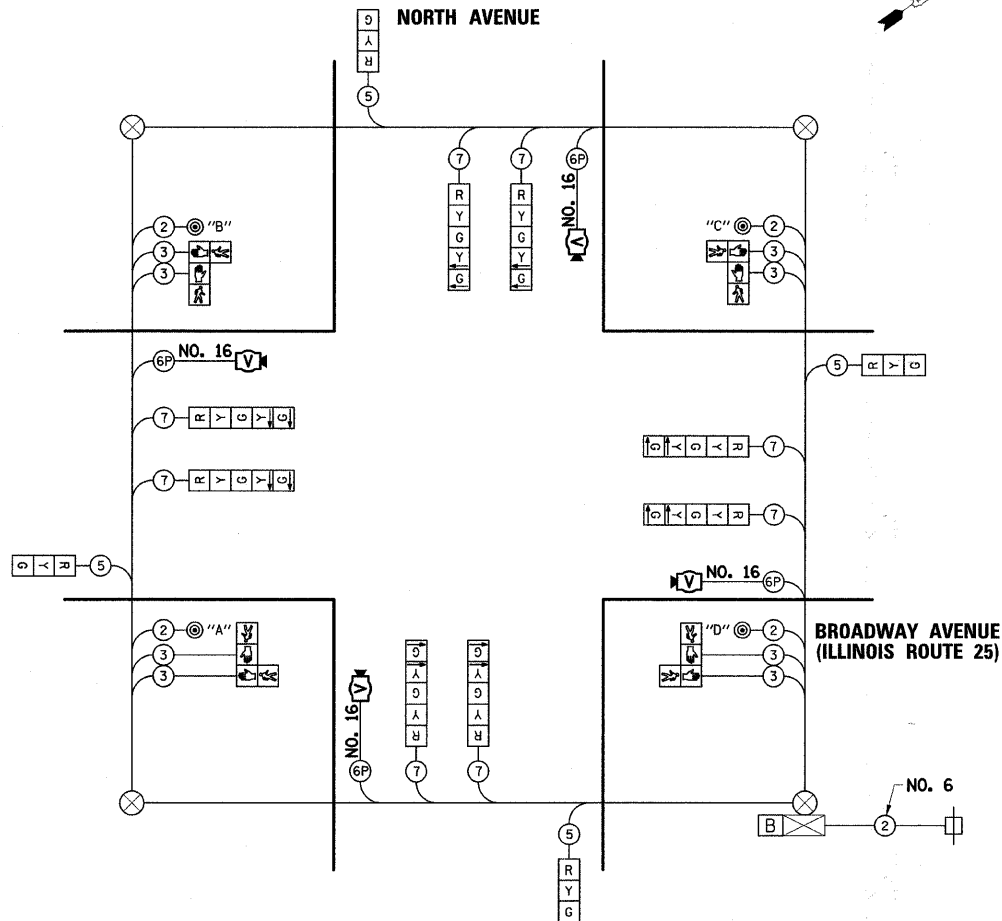


OVERLAP PHASE C = 6 + 7



**TEMPORARY PHASE DESIGNATION DIAGRAM**

PUSHBUTTONS "A" SHALL PLACE A CALL IN PHASES 2 AND 4  
 PUSHBUTTONS "B" SHALL PLACE A CALL IN PHASES 4 AND 6  
 PUSHBUTTONS "C" SHALL PLACE A CALL IN PHASES 6 AND 8  
 PUSHBUTTONS "D" SHALL PLACE A CALL IN PHASES 2 AND 8



**TEMPORARY CABLE DIAGRAM LEGEND**

- ⊕ TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION 12" (300mm)
- ⊗ TEMPORARY CONTROLLER CABINET
- ⊕ TEMPORARY SERVICE INSTALLATION
- ⊙ INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NO. 14 AWG WIRE UNLESS OTHERWISE NOTED.
- ⊕ EMERGENCY VEHICLE LIGHT DETECTOR
- ⊕ CONFIRMATION BEACON
- ⊕ VEHICLE DETECTOR, INDUCTION LOOP
- ⊙ PEDESTRIAN PUSHBUTTON DETECTOR
- ⊕ 12" (300mm) PEDESTRIAN SIGNAL SECTION
- ⊕ VIDEO DETECTION CAMERA
- ⊕ UNINTERRUPTIBLE POWER SUPPLY

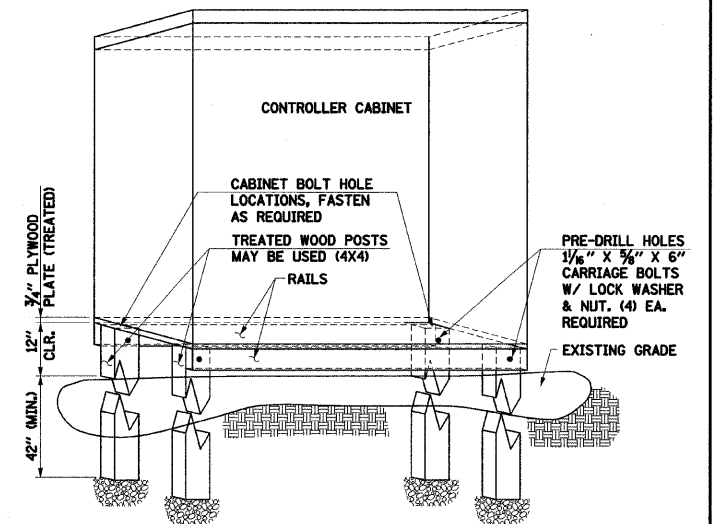
I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		% OPERATION	
		INCAND.	LED		
SIGNAL (RED)	12		17	0.50	102
(YELLOW)	12		25	0.25	75
(GREEN)	12		15	0.25	45
ARROW	16		12	0.10	19.2
PED. SIGNAL	8		25	1.00	200
CONTROLLER	1		100	1.00	100
VIDEO SYSTEM	1		15	1.00	15
UPS	1		25	1.00	25
TOTAL =					581.2

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

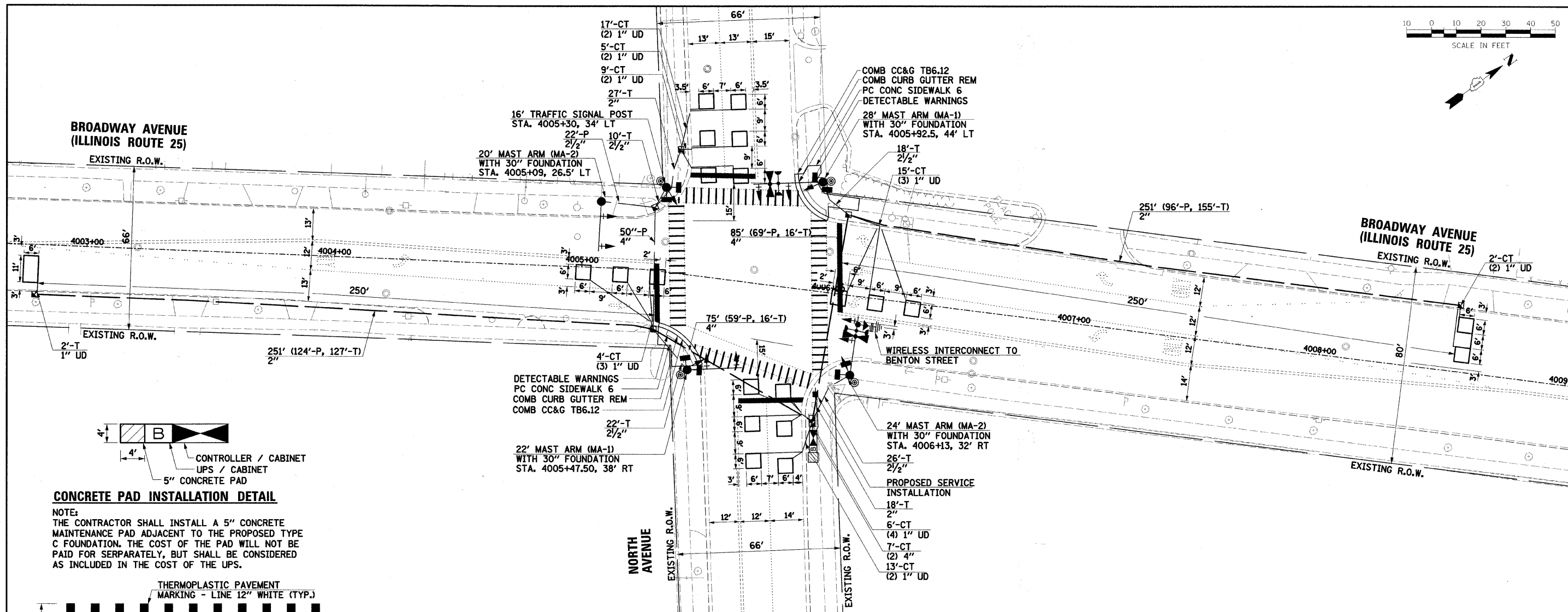
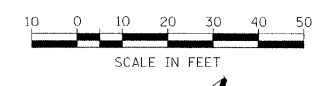
ENERGY SUPPLY CONTACT: MARK SCHERIBEL  
 PHONE: (630) 723-2128  
 COMPANY: COMMONWEALTH EDISON

CONTROLLER CABINET TYPE AND DIMENSIONS VARY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECT CABINET DIMENSIONS PRIOR TO THE CONSTRUCTION OF THE CABINET MOUNTING PLATFORM SHOWN BELOW.

CABINET PLATFORM LEGS AND RAILS SHALL BE CONSTRUCTED OF 2" X 6" TREATED WOOD TO RESIST WEATHERING.



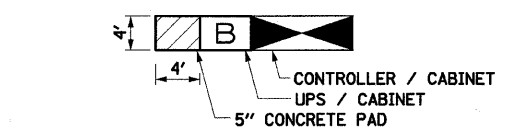
**TEMPORARY SIGNAL CONTROLLER WOOD SUPPORT PLATFORM DETAIL**  
 (NOT TO SCALE)



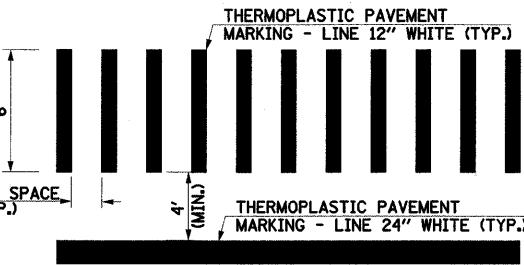
**BROADWAY AVENUE  
(ILLINOIS ROUTE 25)**  
EXISTING R.O.W.

**BROADWAY AVENUE  
(ILLINOIS ROUTE 25)**  
EXISTING R.O.W.

**NORTH AVENUE**  
EXISTING R.O.W.



**CONCRETE PAD INSTALLATION DETAIL**  
NOTE:  
THE CONTRACTOR SHALL INSTALL A 5" CONCRETE MAINTENANCE PAD ADJACENT TO THE PROPOSED TYPE C FOUNDATION. THE COST OF THE PAD WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE COST OF THE UPS.



**TYPICAL STRIPING DETAIL AT CROSSWALKS**

**PROPOSED TRAFFIC SIGNS**

ILLINOIS 25  
M-1100-2424 (2 EACH)  
M6-4-2115 (2 EACH)

LOCATIONS:  
1. WESTBOUND MAST ARM, 3' NORTH OF THE OUTER 5-SECTION SIGNAL HEAD.  
2. EASTBOUND MAST ARM, 3' SOUTH OF THE OUTER 5-SECTION SIGNAL HEAD.

- NOTES:**
1. THE "SYSTEM" ANTENNA SHALL BE MOUNTED ON THE NORTHBOUND MAST ARM, 3' EAST OF THE OUTER 3-SECTION SIGNAL HEAD OR AS DIRECTED BY THE TECHNICIAN INSTALLING THE INTERCONNECT (SEE MOUNTING DETAIL).
  2. ALL PROPOSED TRAFFIC SIGNAL MAST ARMS AND POSTS SHALL BE PAINTED BLACK.

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.

**RESTORATION OF WORK AREA:**  
RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED UNLESS OTHERWISE NOTED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

**TRAFFIC SIGNAL LEGEND**

	PROPOSED	EXISTING		PROPOSED	EXISTING
CONTROLLER			DETECTOR LOOP		
SERVICE INSTALLATION			CAST IRON JUNCTION BOX		
SIGNAL HEAD			EMERGENCY VEHICLE LIGHT DETECTOR		
SIGNAL HEAD WITH BACKPLATE			CONFIRMATION BEACON		
SIGNAL HEAD, PEDESTRIAN			SIGNAL HEAD OPTICALLY PROGRAMMED		
SIGNAL POST			CONDUIT SPLICE		
MAST ARM ASSEMBLY AND POLE, STEEL			WOOD POLE		
MAST ARM ASSEMBLY AND POLE, ALUMINUM			RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE			VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE		
UNIT DUCT	UD		RAILROAD CONTROL CABINET		
COMMON TRENCH	CT		TELEPHONE CONNECTION		
HANDHOLE			ILLUMINATED SIGN "NO LEFT TURN"		
HEAVY DUTY HANDHOLE			ILLUMINATED SIGN "NO RIGHT TURN"		
DOUBLE HANDHOLE			UNINTERRUPTABLE POWER SUPPLY		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)			VIDEO DETECTION CAMERA		
PEDESTRIAN PUSHBUTTON DETECTOR			VIDEO DETECTION AREA		
PAN/TILT/ZOOM CAMERA			WIRELESS ANTENNA		

PLAN	SURVEYED	DATE
	PLOTTED	
	NOTED	
	BY	
	NO. OF	
	FILE	

PROFILE	SURVEYED	DATE
	PLOTTED	
	NOTED	
	BY	
	NO. OF	
	FILE	

FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED -	REVISED -
		DRAWN BAH	REVISED -
		CHECKED APS	REVISED -
		DATE JAN 16 2009	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

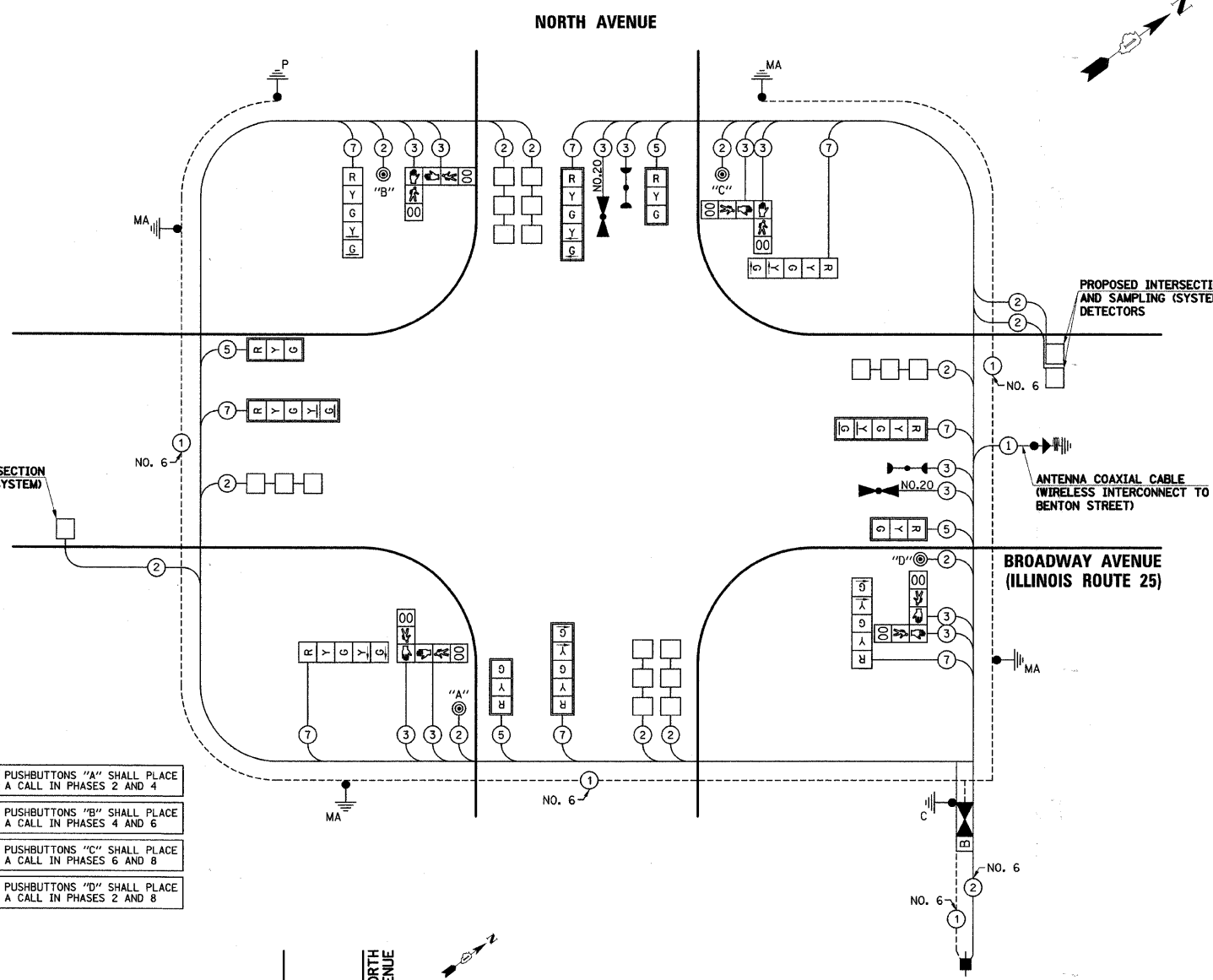
**TRAFFIC SIGNAL MODIFICATION PLAN  
IL ROUTE 25 AT NORTH AVENUE**

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE. 2503	SECTION 08-00272-00-TL	COUNTY KANE	TOTAL SHEETS 40	SHEET NO. 11
CONTRACT NO. 63177				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

**CABLE PLAN LEGEND**

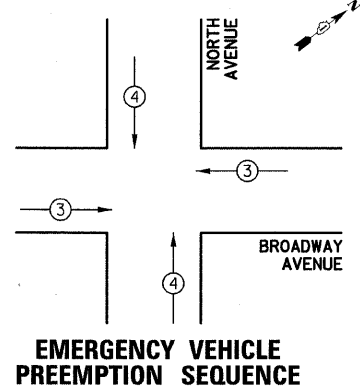
EXISTING	PROPOSED	DESCRIPTION
		8" (200mm) TRAFFIC SIGNAL SECTION
		12" (300mm) TRAFFIC SIGNAL SECTION
		12" (300mm) PEDESTRIAN SIGNAL SECTION
		12" (300mm) PEDESTRIAN SIGNAL SECTION
		CONTROLLER CABINET
		SERVICE INSTALLATION
		TELEPHONE INSTALLATION
		VEHICLE DETECTOR, INDUCTION LOOP
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
		LUMINAIRE
		DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
		GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
		FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F
		SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD.
		RAILROAD CONTROL CABINET
		ILLUMINATED SIGN "NO LEFT TURN"
		ILLUMINATED SIGN "NO RIGHT TURN"
		WIRELESS ANTENNA
		GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)
		GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
		GROUND ROD AT ELECTRIC SERVICE INSTALLATION
		UNINTERRUPTIBLE POWER SUPPLY
		LED STREET NAME SIGN
		VIDEO DETECTION CAMERA
		PAN/TILT/ZOOM CAMERA



**SCHEDULE OF QUANTITIES**

PAY ITEM DESCRIPTION	UNIT	NORTH AVENUE
PORTLAND CEMENT CONCRETE SIDEWALK 6"	SQ FT	340
DETECTABLE WARNINGS	SQ FT	61
COMBINATION CURB AND GUTTER REMOVAL	FOOT	51
SIDEWALK REMOVAL	SQ FT	278
COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	51
SIGN PANEL - TYPE 1	SQ FT	43.9
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	414
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	114
PAVEMENT MARKING REMOVAL	SQ FT	411
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	327
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	76
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	46
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	220
CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	22
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	178
HANDHOLE	EACH	6
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	515
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	515
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1361.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	625
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1212
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1760
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	35.5
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 20 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	40
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	9
DETECTOR LOOP, TYPE I	FOOT	859
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	4
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3756
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	4
REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
PAINT NEW MAST ARM POLE, UNDER 40 FEET	EACH	4
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
PAINT TRAFFIC SIGNAL POST	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	440
ELECTRIC CABLE IN CONDUIT, NO. 20 3C TWISTED SHIELDED	FOOT	275.5

PUSHBUTTONS "A" SHALL PLACE A CALL IN PHASES 2 AND 4  
 PUSHBUTTONS "B" SHALL PLACE A CALL IN PHASES 4 AND 6  
 PUSHBUTTONS "C" SHALL PLACE A CALL IN PHASES 6 AND 8  
 PUSHBUTTONS "D" SHALL PLACE A CALL IN PHASES 2 AND 8

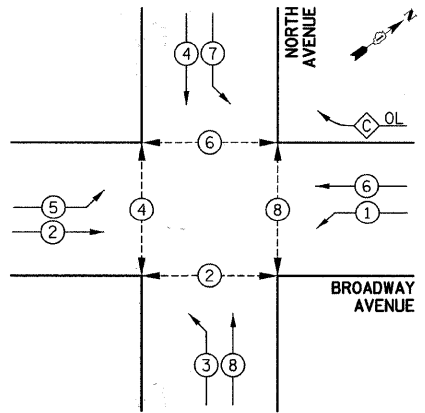


**PROPOSED EMERGENCY VEHICLE PREEMPTORS**

PROPOSED EMERGENCY VEHICLE PREEMPTORS	3	4
MOVEMENT	→	↑

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'+L-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)				

**CONTROLLER SEQUENCE**



OVERLAP PHASE = PERMISSIVE PHASE + PROTECTED PHASE  
 C = 6 + 7

**CONTROLLER SEQUENCE LEGEND**

	DUAL ENTRY PHASE
	SINGLE ENTRY PHASE
	OVERLAP
	NUMBER REFERRING TO ASSOCIATED PHASE
	PEDESTRIAN PHASE

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.

**PHASE DESIGNATION DIAGRAM**

**I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	12		17	0.50	102
(YELLOW)	12		25	0.25	75
(GREEN)	12		15	0.25	45
ARROW	16		12	0.10	19.2
PED. SIGNAL	8		25	1.00	200
CONTROLLER	1		100	1.00	100
UPS	1		25	1.00	25
<b>TOTAL =</b>					<b>566.2</b>

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

FILE NAME =	USER NAME = #USER#	DESIGNED -	REVISED -
#FILE#		DRAWN BAH	REVISED -
		CHECKED APS	REVISED -
		DATE JAN 16 2009	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

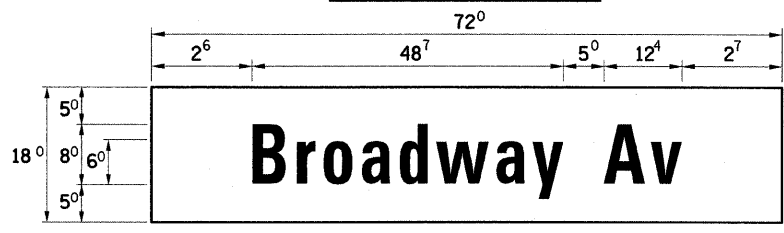
CABLE PLAN AND  
 PHASE DESIGNATION DIAGRAM  
 IL ROUTE 25 AT NORTH AVENUE

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2503	08-00272-00-TL	KANE	40	12
CONTRACT NO. 63177				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

EXAMPLE, 2 <sup>③</sup> DENOTES 3/8"

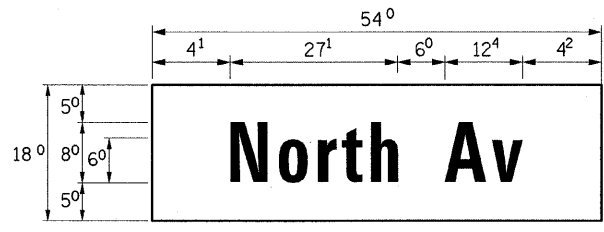
PANEL SIGN DESIGN TYPE 1



**Broadway Av**

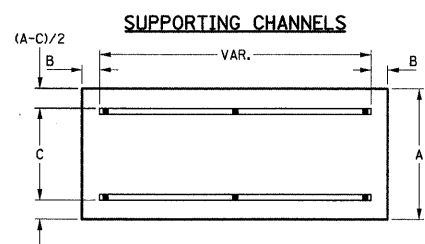
MA-1  
9.00 Sq. Ft each  
2 Required  
Design Series D

PANEL SIGN DESIGN TYPE 1



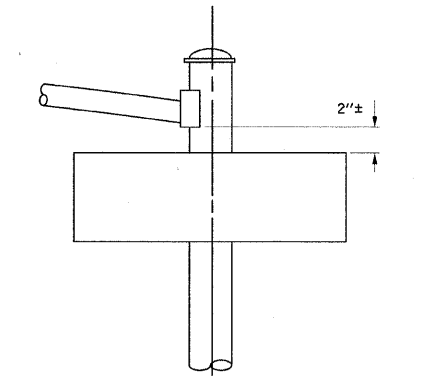
**North Av**

MA-2  
6.75 Sq. Ft each  
2 Required  
Design Series D

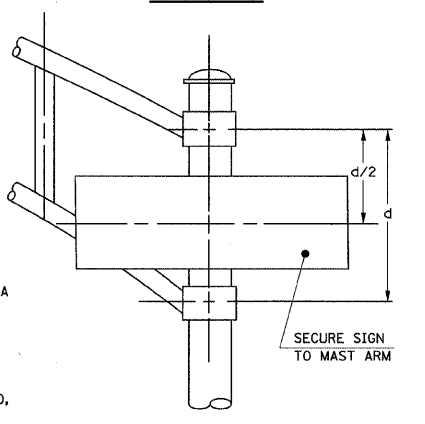


A	B	C
18"	2"	12"
30"	2"	22"

SIGNIFIX ALUMINUM CHANNEL FRAMING SYSTEM shall be used. See Note #5



SINGLE ARM



DUAL ARM

Upper Case To Lower Case Spacing Chart 8-6 Inch Series "C & D"

SERIES	SECOND LETTER															
	a c d e		b h i k l		f w		j		s t		v y		x		z	
	g o q	m n p r u														
A W X	12	14	14	15	12	14	06	10	11	14	06	10	11	12	12	14
B	14	15	20	21	14	15	11	12	14	15	12	14	12	14	16	17
C E G	14	15	20	21	12	14	06	10	12	14	12	14	14	15	14	15
D O Q R	14	15	20	21	14	15	06	10	12	14	12	14	14	15	14	15
F	05	06	14	15	06	10	05	06	06	10	06	10	06	10	11	12
H I M N	20	21	22	24	20	21	14	15	16	17	16	17	20	21	20	21
J U	20	21	20	21	16	17	14	15	16	17	16	17	16	17	20	21
K L	11	12	16	17	11	12	05	06	11	12	11	12	11	12	12	14
P	12	14	14	15	12	14	05	06	11	12	11	12	12	14	12	14
S	12	14	16	17	12	14	06	10	12	14	12	14	12	14	12	14
T	11	12	16	17	06	10	06	10	11	12	11	12	11	12	12	14
V	06	10	14	15	11	12	06	10	12	14	12	14	12	14	12	14
Y	05	06	14	15	06	10	05	06	05	07	05	06	06	10	11	12
Z	16	17	22	24	16	17	12	14	16	17	16	17	16	17	20	21

Lower Case To Lower Case Spacing Chart 6 Inch Series "C & D"

SERIES	SECOND LETTER															
	a c d e		b h i k l		f w		j		s t		v y		x		z	
	g o q	m n p r u														
a d h g i j	16	17	22	24	16	17	12	14	14	15	14	15	16	17	16	17
l m n q u																
b f k o p s	12	14	16	17	11	12	05	06	11	12	11	12	12	14	12	14
c e	12	14	16	17	12	14	06	10	12	14	12	14	12	14	12	14
r	06	10	12	14	06	10	03	03	05	06	05	06	06	10	06	10
t z	12	14	16	17	12	14	06	10	11	12	11	12	12	14	12	14
v y	11	12	14	15	11	12	05	06	06	10	06	10	11	12	11	12
w	11	12	14	15	11	12	05	06	11	12	11	12	11	12	12	14
x	12	14	16	17	11	12	05	06	11	12	11	12	11	12	12	14

Number To Number Spacing Chart 8 Inch Series "C & D"

SERIES	SECOND LETTER																			
	0		1		2		3		4		5		6		7		8		9	
0 9	16	17	16	17	14	15	12	14	14	15	14	15	16	17	12	14	16	17	16	17
1	20	21	20	21	20	21	16	17	14	15	20	21	20	21	14	15	20	21	20	21
2 3 4	14	15	14	15	14	15	12	14	12	14	14	15	14	15	11	12	16	17	14	15
5	14	15	14	15	14	15	11	12	11	12	14	15	14	15	11	12	14	15	14	15
6	16	17	14	15	14	15	12	15	12	14	14	15	14	15	11	12	14	15	14	15
7	12	14	12	14	14	15	12	15	05	06	12	14	14	15	11	12	14	15	12	14
8	16	17	16	17	14	15	12	15	12	14	14	15	16	17	12	14	16	17	14	15

LETTERS	6 INCH UPPER CASE LETTERS		8 INCH UPPER CASE LETTERS		LETTERS	6 INCH LOWER CASE LETTERS	
	SERIES		SERIES			SERIES	
	C	D	C	D		C	D
A	3 <sup>6</sup>	5 <sup>0</sup>	5 <sup>0</sup>	6 <sup>5</sup>	a	3 <sup>5</sup>	4 <sup>2</sup>
B	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	b	3 <sup>5</sup>	4 <sup>2</sup>
C	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	c	3 <sup>5</sup>	4 <sup>1</sup>
D	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	d	3 <sup>5</sup>	4 <sup>2</sup>
E	3 <sup>0</sup>	3 <sup>5</sup>	4 <sup>0</sup>	4 <sup>7</sup>	e	3 <sup>5</sup>	4 <sup>2</sup>
F	3 <sup>0</sup>	3 <sup>5</sup>	4 <sup>0</sup>	4 <sup>7</sup>	f	2 <sup>3</sup>	2 <sup>6</sup>
G	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	g	3 <sup>5</sup>	4 <sup>2</sup>
H	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	h	3 <sup>5</sup>	4 <sup>2</sup>
I	0 <sup>7</sup>	0 <sup>7</sup>	1 <sup>1</sup>	1 <sup>2</sup>	i	1 <sup>1</sup>	1 <sup>1</sup>
J	3 <sup>0</sup>	3 <sup>6</sup>	4 <sup>0</sup>	5 <sup>0</sup>	j	2 <sup>0</sup>	2 <sup>2</sup>
K	3 <sup>2</sup>	4 <sup>1</sup>	4 <sup>3</sup>	5 <sup>4</sup>	k	3 <sup>5</sup>	4 <sup>2</sup>
L	3 <sup>0</sup>	3 <sup>5</sup>	4 <sup>0</sup>	4 <sup>7</sup>	l	1 <sup>1</sup>	1 <sup>1</sup>
M	3 <sup>7</sup>	4 <sup>5</sup>	5 <sup>1</sup>	6 <sup>1</sup>	m	6 <sup>0</sup>	7 <sup>0</sup>
N	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	n	3 <sup>5</sup>	4 <sup>2</sup>
O	3 <sup>4</sup>	4 <sup>2</sup>	4 <sup>5</sup>	5 <sup>5</sup>	o	3 <sup>6</sup>	4 <sup>3</sup>
P	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	p	3 <sup>5</sup>	4 <sup>2</sup>
Q	3 <sup>4</sup>	4 <sup>2</sup>	4 <sup>5</sup>	5 <sup>5</sup>	q	3 <sup>5</sup>	4 <sup>2</sup>
R	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	r	2 <sup>6</sup>	3 <sup>2</sup>
S	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	s	3 <sup>6</sup>	4 <sup>2</sup>
T	3 <sup>0</sup>	3 <sup>5</sup>	4 <sup>0</sup>	4 <sup>7</sup>	t	2 <sup>7</sup>	3 <sup>2</sup>
U	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	u	3 <sup>5</sup>	4 <sup>2</sup>
V	3 <sup>5</sup>	4 <sup>4</sup>	4 <sup>7</sup>	6 <sup>0</sup>	v	4 <sup>2</sup>	4 <sup>7</sup>
W	4 <sup>4</sup>	5 <sup>2</sup>	6 <sup>0</sup>	7 <sup>0</sup>	w	5 <sup>5</sup>	6 <sup>4</sup>
X	3 <sup>4</sup>	4 <sup>0</sup>	4 <sup>5</sup>	5 <sup>3</sup>	x	4 <sup>4</sup>	5 <sup>1</sup>
Y	3 <sup>6</sup>	5 <sup>0</sup>	5 <sup>0</sup>	6 <sup>6</sup>	y	4 <sup>6</sup>	5 <sup>3</sup>
Z	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	z	3 <sup>6</sup>	4 <sup>3</sup>

NUMBER	6 INCH SERIES		8 INCH SERIES	
	C	D	C	D
1	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	2 <sup>0</sup>
2	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
3	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
4	3 <sup>5</sup>	4 <sup>3</sup>	4 <sup>7</sup>	5 <sup>7</sup>
5	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
6	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
7	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
8	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
9	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
0	3 <sup>4</sup>	4 <sup>2</sup>	4 <sup>5</sup>	5 <sup>5</sup>

GENERAL NOTES

- WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 2374 THROUGH 2377, AS APPLICABLE, PLUS A 2'-6" BY 6'-0" SIGN PANEL MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
- ALL SIGNS SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND, TYPE A SHEETING.
- THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED 6'-0"
- ALL BORDERS SHALL BE 3/4" WIDE AND CORNER RADIUS SHALL BE 2/4".
- SIGNIFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS.

LOCAL SUPPLIERS OF THE SIGNIFIX ALUMINUM CHANNEL FRAMING SYSTEM ARE:

- A.K.T. CORPORATION, SCHAUMBURG, IL.
- AMERICAN FABRICATION CO., CHICAGO HEIGHTS, IL.
- TUCKER COMPANY, INC., WAUWATOSA, WI.
- WESTERN TRAFFIC CONTROL, INC., CICERO, IL.

PARTS LISTING:

SIGN CHANNEL	PART 3HPN053 (MED. CHANNEL)
SIGN SCREWS	1/4" X 14 X 1" H.W.H. #3
	SELF TAPPING WITH NEOPREAN WASHER
BRACKETS	PART #HPN034 (UNIVERSAL)
	CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BACKET OF THE ABOVE PRODUCT.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

MAST ARM MOUNTED  
STREET NAME SIGNS  
IL ROUTE 25 AT NORTH AVENUE

F.A.U. RTE. 2503	SECTION 08-00272-00-TL	COUNTY KANE	TOTAL SHEETS 40	SHEET NO. 13
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 63177	

FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED -	REVISED -
		DRAWN BAH	REVISED -
		CHECKED APS	REVISED -
		DATE JAN 16 2009	REVISED -

PLAN	DATE
SURVEYED	
PLOTTED	
NOTED	
NOTE BOOK	
NO.	

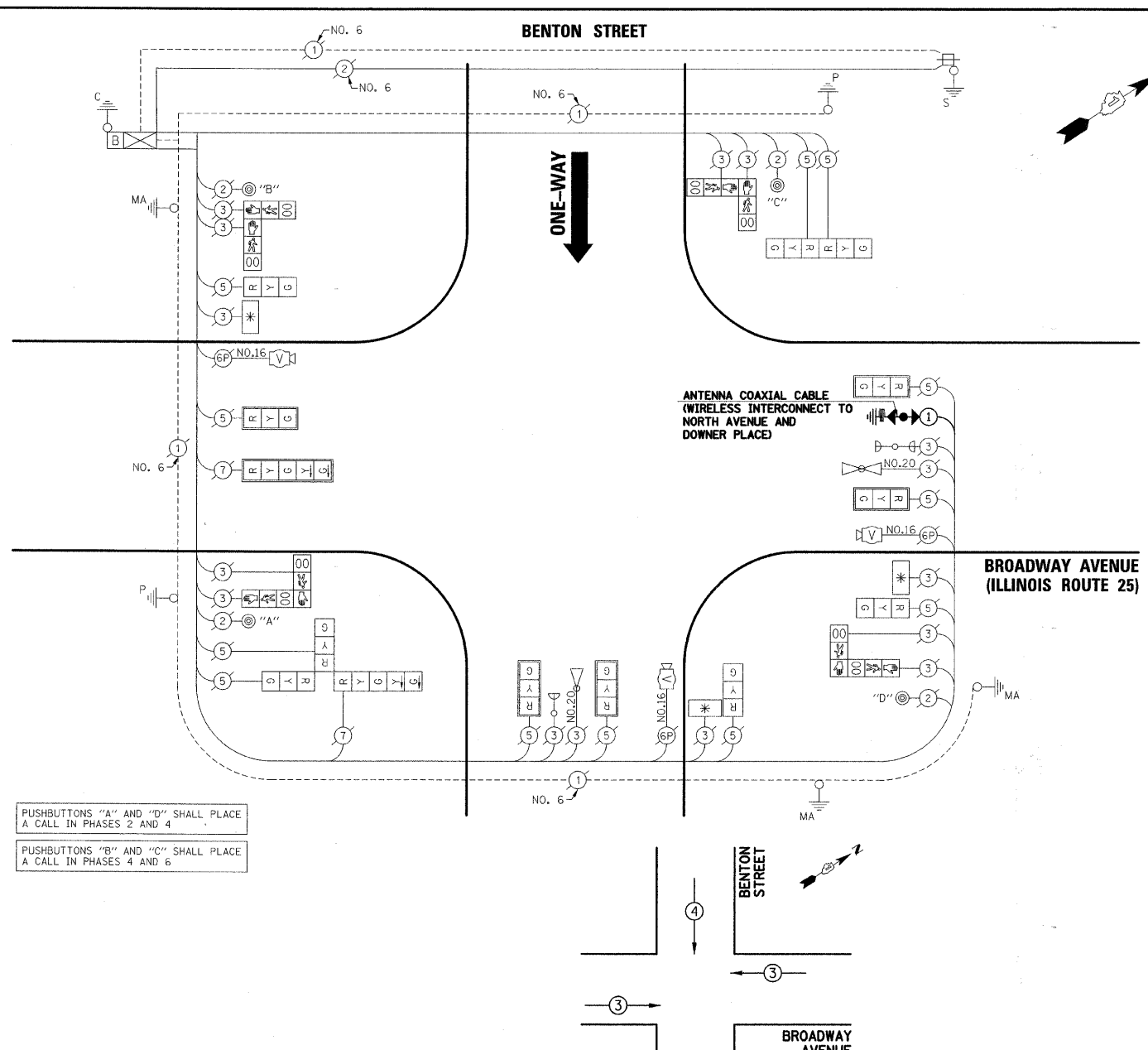
PROFILE	DATE
SURVEYED	
PLOTTED	
NOTED	
NOTE BOOK	
NO.	





**CABLE PLAN LEGEND**

EXISTING	PROPOSED	DESCRIPTION
		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. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
		GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
		FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F
		SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD.
		RAILROAD CONTROL CABINET
		ILLUMINATED SIGN "NO LEFT TURN"
		ILLUMINATED SIGN "NO RIGHT TURN"
		WIRELESS ANTENNA
		GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)
		GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
		GROUND ROD AT ELECTRIC SERVICE INSTALLATION
		UNINTERRUPTIBLE POWER SUPPLY
		LED STREET NAME SIGN
		VIDEO DETECTION CAMERA
		PAN/TILT/ZOOM CAMERA



PUSHBUTTONS "A" AND "D" SHALL PLACE  
A CALL IN PHASES 2 AND 4

PUSHBUTTONS "B" AND "C" SHALL PLACE  
A CALL IN PHASES 4 AND 6

**SCHEDULE OF QUANTITIES**

PAY ITEM DESCRIPTION	UNIT	BENTON STREET
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE AND REINSTALL LIGHT POLE, SPECIAL	EACH	1
WIRELESS ETHERNET RADIO	EACH	1

DATE	BY	SERIALIZED	DATE
		PLOTTED	DATE
		NOTED	DATE
		FILED	DATE

DATE	BY	STRUCTURE	NOTATION
		NO.	
		NO.	
		NO.	

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	14	17	0.50		119
(YELLOW)	14	25	0.25		87.5
(GREEN)	14	15	0.25		52.5
ARROW	4	12	0.10		4.8
PED. SIGNAL	8	25	1.00		200
CONTROLLER	1	100	1.00		100
LPS	1	25	1.00		25
LED SIGN	3	60	0.50		90
LUMINAIRE	3	250	0.50		375
VIDEO SYSTEM	1	15	1.00		15
TOTAL =					1068.8

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

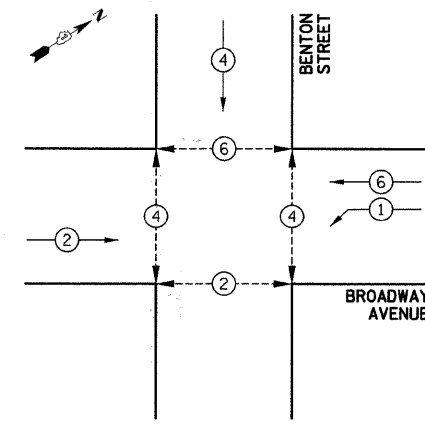
ENERGY SUPPLY CONTACT: MARK SCHERIBEL  
PHONE: (630) 723-2128  
COMPANY: COMMONWEALTH EDISON

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)				

**EMERGENCY VEHICLE PREEMPTION SEQUENCE**

PROPOSED EMERGENCY VEHICLE PREEMPTORS	
PROPOSED EMERGENCY VEHICLE PREEMPTORS	3 4
MOVEMENT	← →

**CONTROLLER SEQUENCE**



**CONTROLLER SEQUENCE LEGEND**

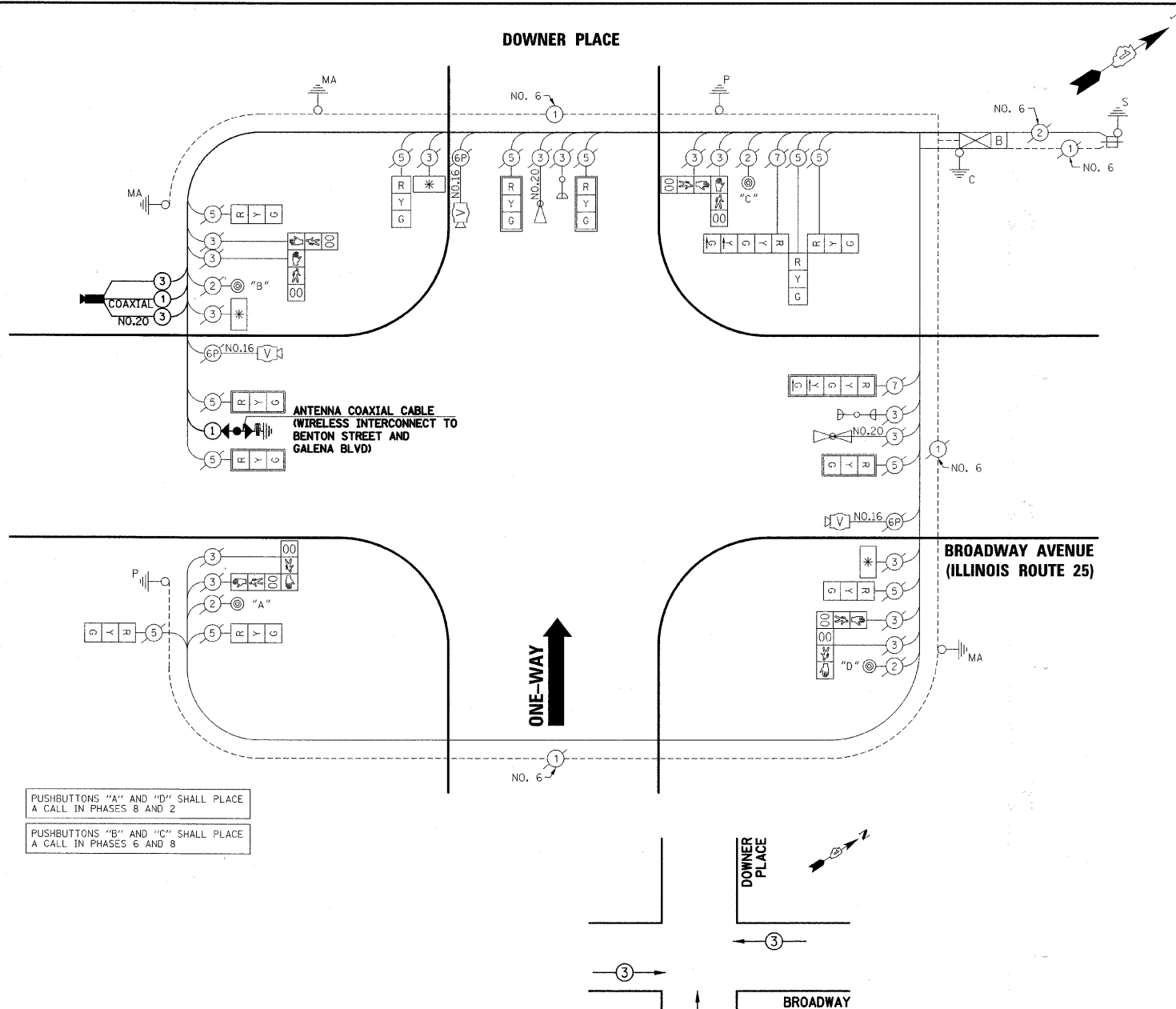
- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- OVERLAP
- NUMBER REFERRING TO ASSOCIATED PHASE
- PEDESTRIAN PHASE

**PHASE DESIGNATION DIAGRAM**



**CABLE PLAN LEGEND**

EXISTING	PROPOSED	DESCRIPTION
		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. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
		GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
		FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MMI2F SMI2F
		SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD.
		RAILROAD CONTROL CABINET
		ILLUMINATED SIGN "NO LEFT TURN"
		ILLUMINATED SIGN "NO RIGHT TURN"
		WIRELESS ANTENNA
		GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)
		GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
		GROUND ROD AT ELECTRIC SERVICE INSTALLATION
		UNINTERRUPTIBLE POWER SUPPLY
		LED STREET NAME SIGN
		VIDEO DETECTION CAMERA
		PAN/TILT/ZOOM CAMERA



**SCHEDULE OF QUANTITIES**

PAY ITEM DESCRIPTION	UNIT	DOWNER PLACE
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	133.5
REMOVE AND REINSTALL LIGHT POLE, SPECIAL	EACH	1
WIRELESS ETHERNET RADIO	EACH	1
VIDEO BELDEN 8281 COAXIAL CABLE IN CONDUIT	FOOT	133.5
ELECTRIC CABLE IN CONDUIT, NO. 20 3C TWISTED SHIELDED	FOOT	133.5
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1

DATE	BY
DATE	BY

DATE	BY
DATE	BY

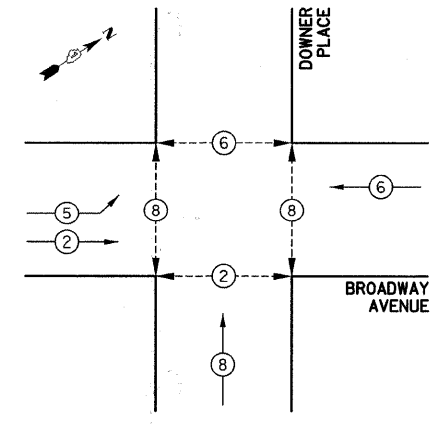
I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE	% OPERATION		
SIGNAL (RED)	14	17	0.50	119	
(YELLOW)	14	25	0.25	87.5	
(GREEN)	14	15	0.25	52.5	
ARROW	4	12	0.10	4.8	
PED. SIGNAL	8	25	1.00	200	
CONTROLLER	1	100	1.00	100	
LPS	1	25	1.00	25	
LED SIGN	3	60	0.50	90	
LUMINAIRE	3	250	0.50	375	
VIDEO SYSTEM	1	15	1.00	15	
TOTAL =				1068.8	

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'+L-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)				

**EMERGENCY VEHICLE PREEMPTION SEQUENCE**

PROPOSED EMERGENCY VEHICLE PREEMPTORS	3	4
MOVEMENT	←	↑

**CONTROLLER SEQUENCE**

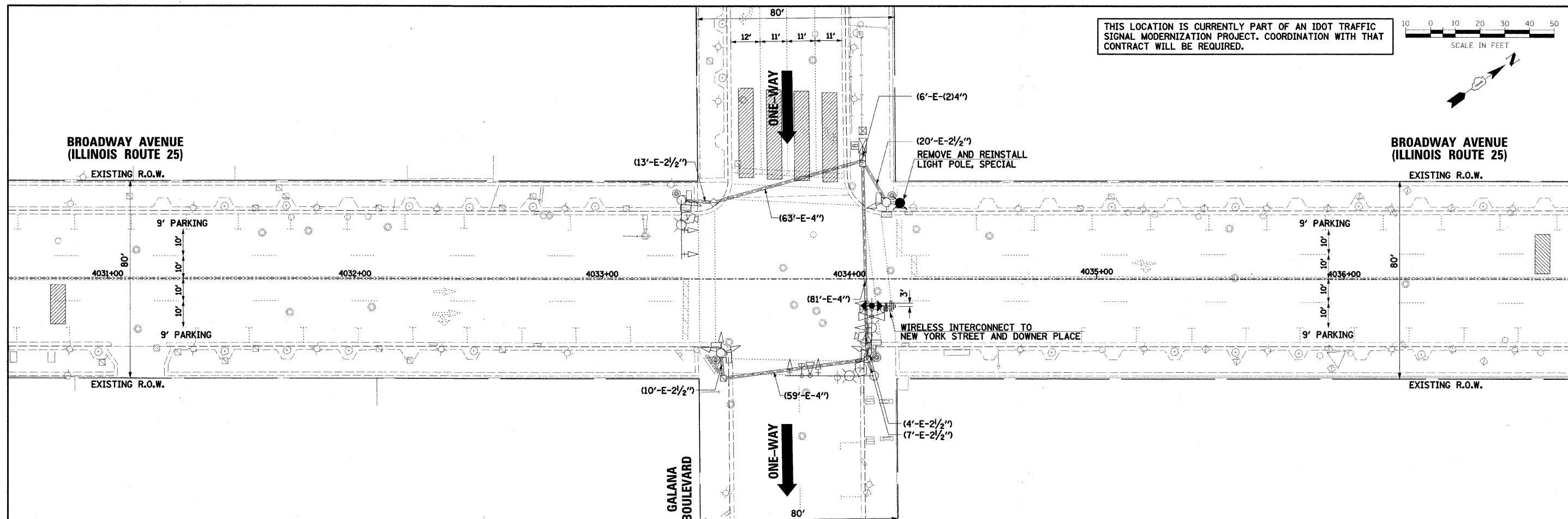


**PHASE DESIGNATION DIAGRAM**

CONTROLLER SEQUENCE LEGEND	
	DUAL ENTRY PHASE
	SINGLE ENTRY PHASE
	OVERLAP
	NUMBER REFERRING TO ASSOCIATED PHASE
	PEDESTRIAN PHASE

PLAN	DATE
SURVEYED	
ALIGNED	
NOTED	
BY	
NO.	

PROFILE	DATE
SURVEYED	
ALIGNED	
NOTED	
BY	
NO.	



NOTE:  
THE "SYSTEM" ANTENNA SHALL BE MOUNTED ON THE NORTHBOUND MAST ARM, 3' EAST OF THE OUTER 3-SECTION SIGNAL HEAD OR AS DIRECTED BY THE TECHNICIAN INSTALLING THE INTERCONNECT (SEE MOUNTING DETAIL).

**TRAFFIC SIGNAL LEGEND**

	PROPOSED	EXISTING		PROPOSED	EXISTING
CONTROLLER			DETECTOR LOOP		
SERVICE INSTALLATION			CAST IRON JUNCTION BOX		
SIGNAL HEAD			EMERGENCY VEHICLE LIGHT DETECTOR		
SIGNAL HEAD WITH BACKPLATE			CONFIRMATION BEACON		
SIGNAL HEAD, PEDESTRIAN			SIGNAL HEAD OPTICALLY PROGRAMMED		
SIGNAL POST			CONDUIT SPLICE		
MAST ARM ASSEMBLY AND POLE, STEEL			WOOD POLE		
MAST ARM ASSEMBLY AND POLE, ALUMINUM			RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE			VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE		
UNIT DUCT	UD		RAILROAD CONTROL CABINET		
COMMON TRENCH	CT		TELEPHONE CONNECTION		
HANDHOLE			ILLUMINATED SIGN "NO LEFT TURN"		
HEAVY DUTY HANDHOLE			ILLUMINATED SIGN "NO RIGHT TURN"		
DOUBLE HANDHOLE			UNINTERRUPTABLE POWER SUPPLY		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)			VIDEO DETECTION CAMERA		
PEDESTRIAN PUSHBUTTON DETECTOR			VIDEO DETECTION AREA		
PAN/TILT/ZOOM CAMERA			WIRELESS ANTENNA		

FILE NAME #	USER NAME # USER#	DESIGNED -	REVISED -
#FILE#		DRAWN BAH	REVISED -
		CHECKED APS	REVISED -
		DATE JAN 16 2009	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODIFICATION PLAN  
IL ROUTE 25 AT GALENA BOULEVARD**

SCALE: SHEET NO. OF SHEETS STA. TO STA.

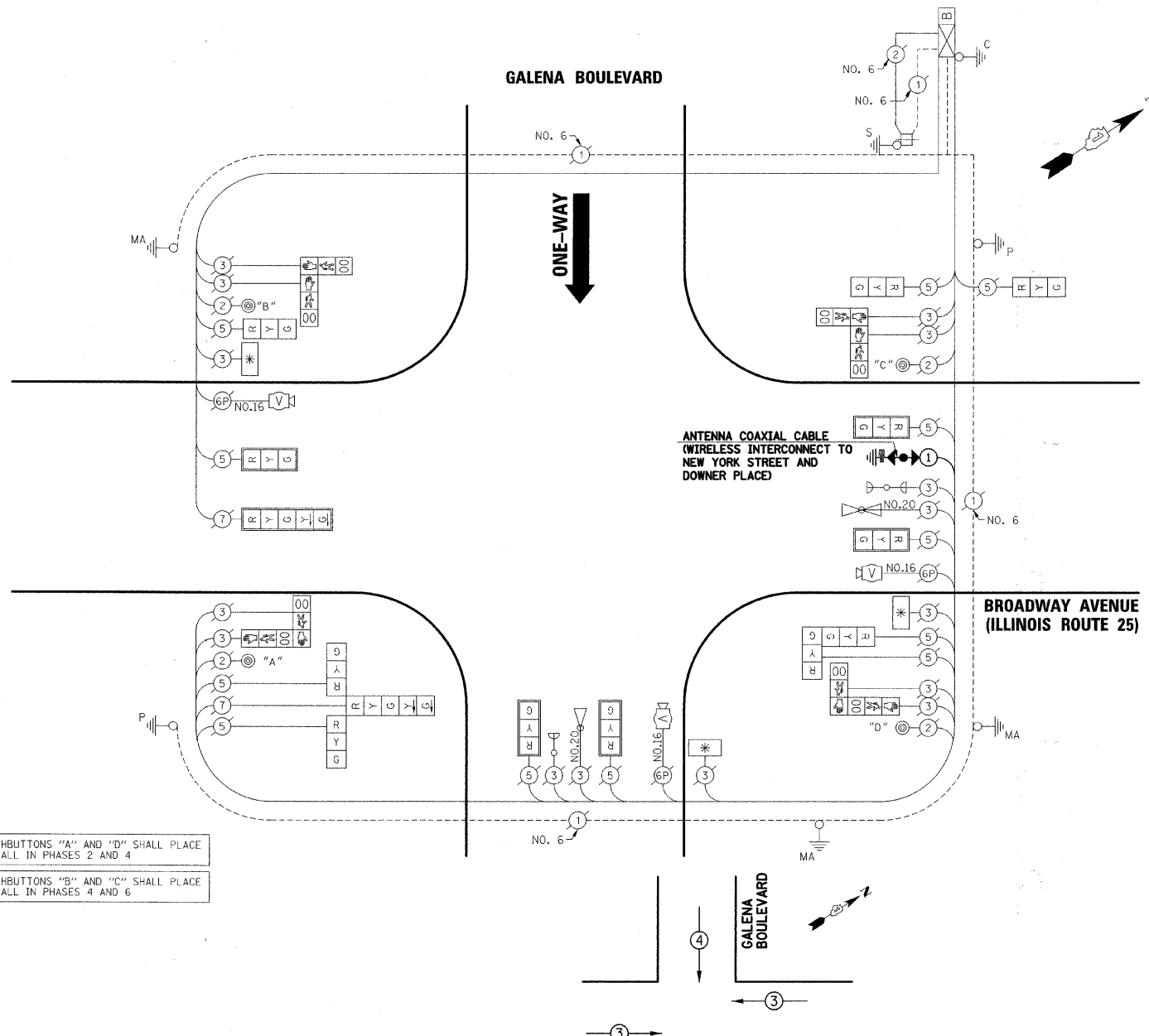
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2503	08-00272-00-TL	KANE	40	18
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 63177	

**CABLE PLAN LEGEND**

EXISTING	PROPOSED	DESCRIPTION
		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. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
		GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
		FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SMI2F
		SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD.
		RAILROAD CONTROL CABINET
		ILLUMINATED SIGN 'NO LEFT TURN'
		ILLUMINATED SIGN 'NO RIGHT TURN'
		WIRELESS ANTENNA
		GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)
		GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
		GROUND ROD AT ELECTRIC SERVICE INSTALLATION
		UNINTERRUPTIBLE POWER SUPPLY
		LED STREET NAME SIGN
		VIDEO DETECTION CAMERA
		PAN/TILT/ZOOM CAMERA

**SCHEDULE OF QUANTITIES**

PAY ITEM DESCRIPTION	UNIT	GALENA BOULEVARD
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE AND REINSTALL LIGHT POLE, SPECIAL	EACH	1
WIRELESS ETHERNET RADIO	EACH	1

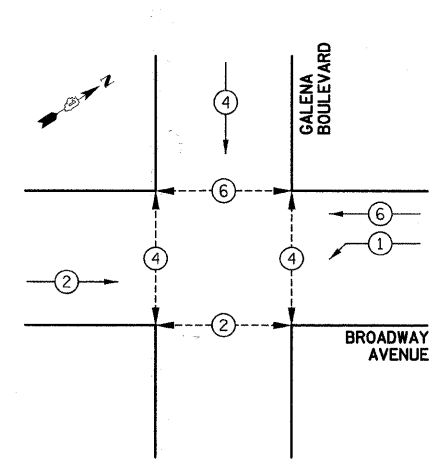


PUSHBUTTONS "A" AND "D" SHALL PLACE A CALL IN PHASES 2 AND 4  
 PUSHBUTTONS "B" AND "C" SHALL PLACE A CALL IN PHASES 4 AND 6

**EMERGENCY VEHICLE PREEMPTION SEQUENCE**

PROPOSED EMERGENCY VEHICLE PREEMPTORS	MOVEMENT
PROPOSED EMERGENCY VEHICLE PREEMPTORS	3 4
MOVEMENT	← →

**CONTROLLER SEQUENCE**



**CONTROLLER SEQUENCE LEGEND**

- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- OVERLAP
- NUMBER REFERRING TO ASSOCIATED PHASE
- PEDESTRIAN PHASE

**PHASE DESIGNATION DIAGRAM**

**I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS**

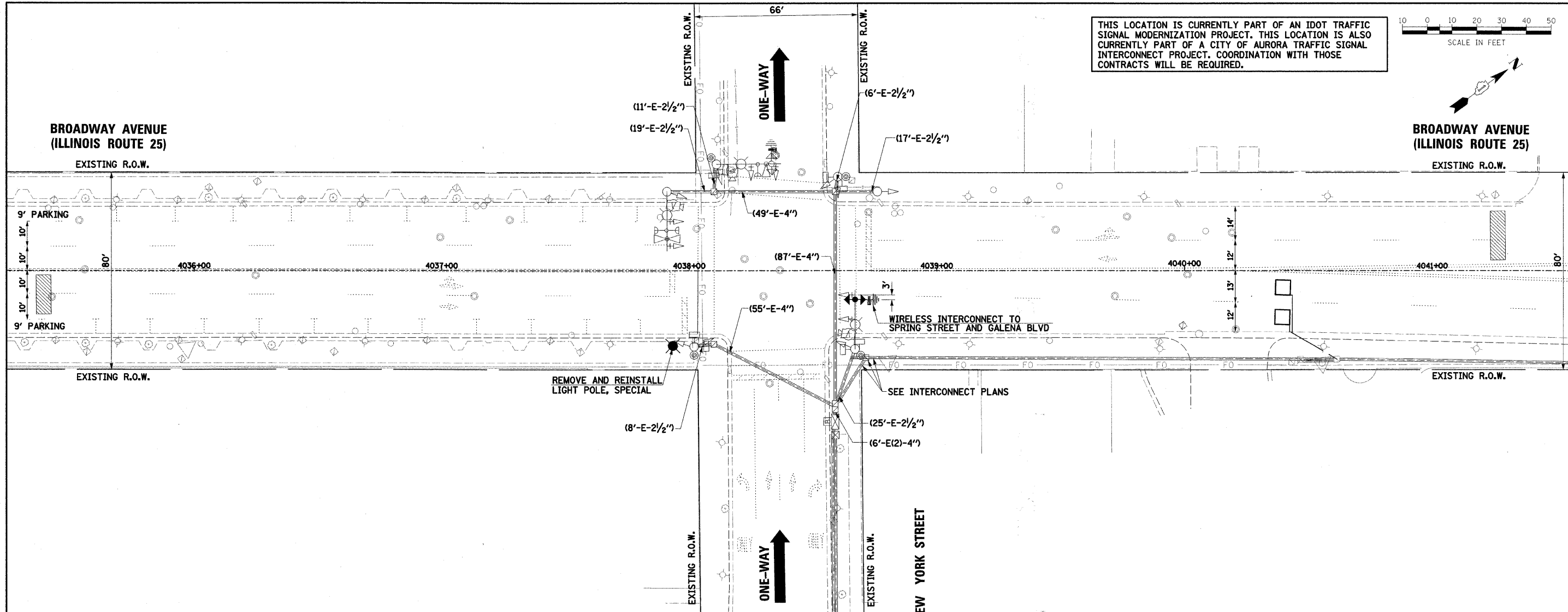
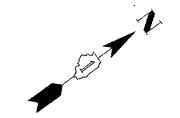
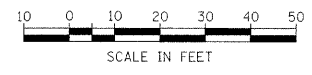
TYPE	NO. LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	14	17	0.50	119	
(YELLOW)	14	25	0.25	87.5	
(GREEN)	14	15	0.25	52.5	
ARROW	4	12	0.10	4.8	
PED. SIGNAL	8	25	1.00	200	
CONTROLLER	1	100	1.00	100	
UPS	1	25	1.00	25	
LED SIGN	3	60	0.50	90	
LUMINAIRE	3	250	0.50	375	
VIDEO SYSTEM	1	15	1.00	15	
TOTAL =					1068.8

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

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'+L-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)				

THIS LOCATION IS CURRENTLY PART OF AN IDOT TRAFFIC SIGNAL MODERNIZATION PROJECT. THIS LOCATION IS ALSO CURRENTLY PART OF A CITY OF AURORA TRAFFIC SIGNAL INTERCONNECT PROJECT. COORDINATION WITH THOSE CONTRACTS WILL BE REQUIRED.



PLAN	DATE
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	
DATE	

PROFILE	DATE
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	
DATE	

**TRAFFIC SIGNAL LEGEND**

	PROPOSED	EXISTING		PROPOSED	EXISTING
CONTROLLER			DETECTOR LOOP		
SERVICE INSTALLATION			CAST IRON JUNCTION BOX		
SIGNAL HEAD			EMERGENCY VEHICLE LIGHT DETECTOR		
SIGNAL HEAD WITH BACKPLATE			CONFIRMATION BEACON		
SIGNAL HEAD, PEDESTRIAN			SIGNAL HEAD OPTICALLY PROGRAMMED		
SIGNAL POST			CONDUIT SPLICE		
MAST ARM ASSEMBLY AND POLE, STEEL			WOOD POLE		
MAST ARM ASSEMBLY AND POLE, ALUMINUM			RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE			VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE		
UNIT DUCT	UD		RAILROAD CONTROL CABINET		
COMMON TRENCH	CT		TELEPHONE CONNECTION		
HANDHOLE			ILLUMINATED SIGN "NO LEFT TURN"		
HEAVY DUTY HANDHOLE			ILLUMINATED SIGN "NO RIGHT TURN"		
DOUBLE HANDHOLE			UNINTERRUPTIBLE POWER SUPPLY		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)			VIDEO DETECTION CAMERA		
PEDESTRIAN PUSHBUTTON DETECTOR			VIDEO DETECTION AREA		
PAN/TILT/ZOOM CAMERA			WIRELESS ANTENNA		

NOTE:  
THE "SYSTEM" ANTENNA SHALL BE MOUNTED ON THE NORTHBOUND MAST ARM, 3' EAST OF THE OUTER 3-SECTION SIGNAL HEAD OR AS DIRECTED BY THE TECHNICIAN INSTALLING THE INTERCONNECT (SEE MOUNTING DETAIL).

FILE NAME =	USER NAME = #USER#	DESIGNED -	REVISED -
#FILE#		DRAWN BAH	REVISED -
	PLOT SCALE = #SCALE#	CHECKED APS	REVISED -
	PLOT DATE = 6/8/2009	DATE JAN 16 2009	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

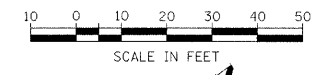
**TRAFFIC SIGNAL MODIFICATION PLAN  
ILL ROUTE 25 AT NEW YORK STREET**

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2503	08-00272-00-TL	KANE	40	20
CONTRACT NO. 63177				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				





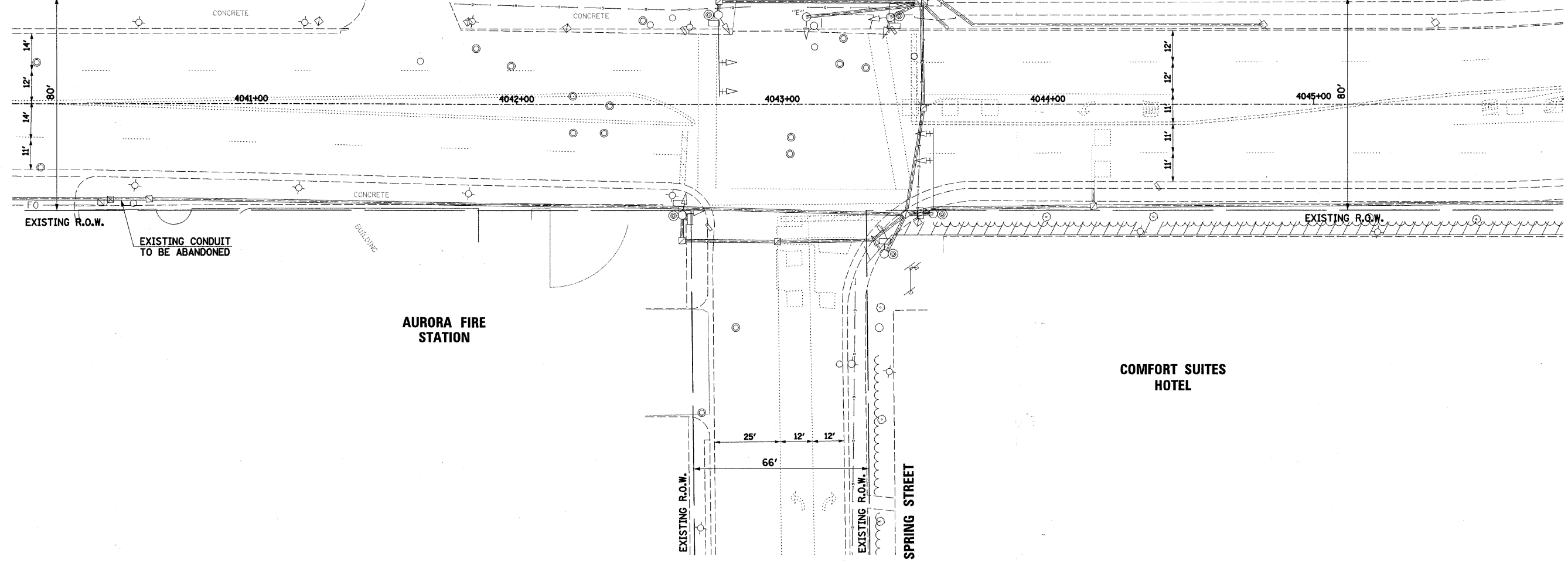


AURORA TOWNSHIP

ONE-WAY

BROADWAY AVENUE  
(ILLINOIS ROUTE 25)  
EXISTING R.O.W.

BROADWAY AVENUE  
(ILLINOIS ROUTE 25)  
EXISTING R.O.W.



EXISTING CONDUIT  
TO BE ABANDONED

REMOVE EXISTING  
CONTROLLER

AURORA FIRE  
STATION

COMFORT SUITES  
HOTEL

EXISTING R.O.W.  
66'  
25' 12' 12'

PLAN	SURVEYED	DATE
	PLOTTED	BY
	CHECKED	
	REVISIONS	
	NO. OF WAYS CHECKED	
	ADD. FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	CHECKED	
	REVISIONS	
	NO. OF WAYS CHECKED	
	ADD. FILE NAME	

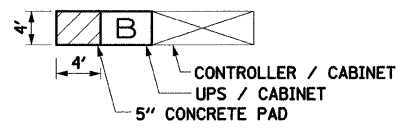
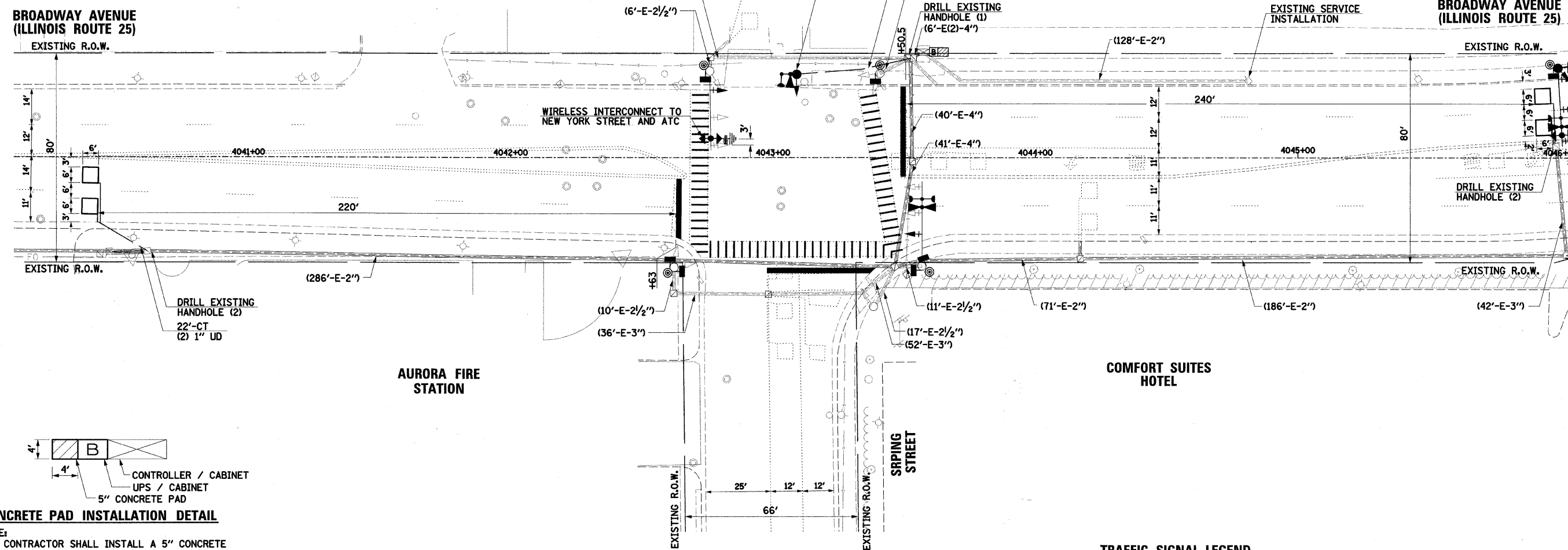
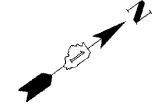
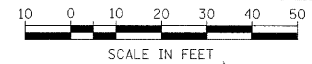
**EXISTING EQUIPMENT TO BE REMOVED LEGEND**

- EXISTING SIGNAL HEAD TO BE REMOVED
- EXISTING SERVICE INSTALLATION TO BE REMOVED
- EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
- EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
- EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED
- EXISTING HANDHOLE TO BE REMOVED
- EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- EXISTING PEDESTRIAN PUSHBUTTON TO BE REMOVED
- EMERGENCY VEHICLE LIGHT DETECTOR TO BE REMOVED
- CONFIRMATION BEACON TO BE REMOVED
- EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED
- EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY HIM OUTSIDE THE RIGHT-OF-WAY AT HIS EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE. THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT (SEE SCHEDULE OF QUANTITIES FOR REMOVAL ITEMS TO BE PAID FOR SEPERATELY).

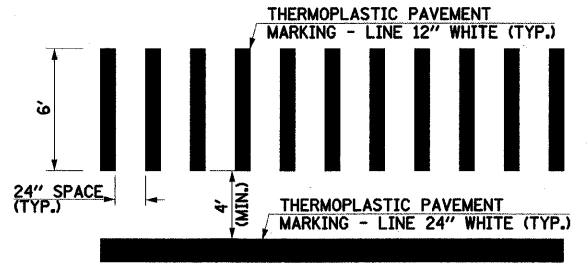
- 1 EACH TRAFFIC SIGNAL CONTROLLER
- 1 EACH TRAFFIC SIGNAL POST
- 1 EACH TRAFFIC SIGNAL HEAD
- 6 EACH PEDESTRIAN SIGNAL HEADS
- 5 EACH PEDESTRIAN PUSH BUTTONS

FILE NAME =	USER NAME = \$USER\$	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>EXISTING TRAFFIC SIGNAL EQUIPMENT TO BE REMOVED IL ROUTE 25 AT SPRING STREET</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
#FILEL#		DRAWN BAH	REVISED -			2503	08-00272-00-TL	KANE	40	22	
		CHECKED APS	REVISED -			CONTRACT NO. 63177					
		DATE JAN 16 2009	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					
						SCALE:	SHEET NO.	OF	SHEETS	STA.	TO



**CONCRETE PAD INSTALLATION DETAIL**

**NOTE:**  
THE CONTRACTOR SHALL INSTALL A 5" CONCRETE MAINTENANCE PAD ADJACENT TO THE EXISTING CONTROLLER FOUNDATION. THE COST OF THE PAD WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE COST OF THE UPS.



**TYPICAL STRIPING DETAIL AT CROSSWALKS**

**NOTES:**  
1. THE "SYSTEM" ANTENNA SHALL BE MOUNTED ON THE SOUTHBOUND MAST ARM, 3' WEST OF THE OUTER 5-SECTION SIGNAL HEAD OR AS DIRECTED BY THE TECHNICIAN INSTALLING THE INTERCONNECT (SEE MOUNTING DETAIL).  
2. THE PROPOSED TRAFFIC SIGNAL POST SHALL BE PAINTED TO MATCH THE EXISTING TRAFFIC SIGNAL EQUIPMENT TO THE SATISFACTION OF THE ENGINEER.

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.

**RESTORATION OF WORK AREA:**  
RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED UNLESS OTHERWISE NOTED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

**TRAFFIC SIGNAL LEGEND**

	PROPOSED	EXISTING		PROPOSED	EXISTING
CONTROLLER			DETECTOR LOOP		
SERVICE INSTALLATION			CAST IRON JUNCTION BOX		
SIGNAL HEAD			EMERGENCY VEHICLE LIGHT DETECTOR		
SIGNAL HEAD WITH BACKPLATE			CONFIRMATION BEACON		
SIGNAL HEAD, PEDESTRIAN			SIGNAL HEAD OPTICALLY PROGRAMMED		
SIGNAL POST			CONDUIT SPLICE		
MAST ARM ASSEMBLY AND POLE, STEEL			WOOD POLE		
MAST ARM ASSEMBLY AND POLE, ALUMINUM			RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE			VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE		
UNIT DUCT	UD		RAILROAD CONTROL CABINET		
COMMON TRENCH	CT		TELEPHONE CONNECTION		
HANDHOLE			ILLUMINATED SIGN "NO LEFT TURN"		
HEAVY DUTY HANDHOLE			ILLUMINATED SIGN "NO RIGHT TURN"		
DOUBLE HANDHOLE			UNINTERRUPTABLE POWER SUPPLY		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)			VIDEO DETECTION CAMERA		
PEDESTRIAN PUSHBUTTON DETECTOR			VIDEO DETECTION AREA		
PAN/TILT/ZOOM CAMERA			WIRELESS ANTENNA		

PLAN	DATE
BY	
CHECKED	
DATE	
NO.	

PROFILE	DATE
BY	
CHECKED	
DATE	
NO.	

FILE NAME =	USER NAME = #USER#	DESIGNED -	REVISED -
#FILE#		DRAWN BAH	REVISED -
	PLOT SCALE = #SCALE#	CHECKED APS	REVISED -
	PLOT DATE = 6/8/2009	DATE JAN 16 2009	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

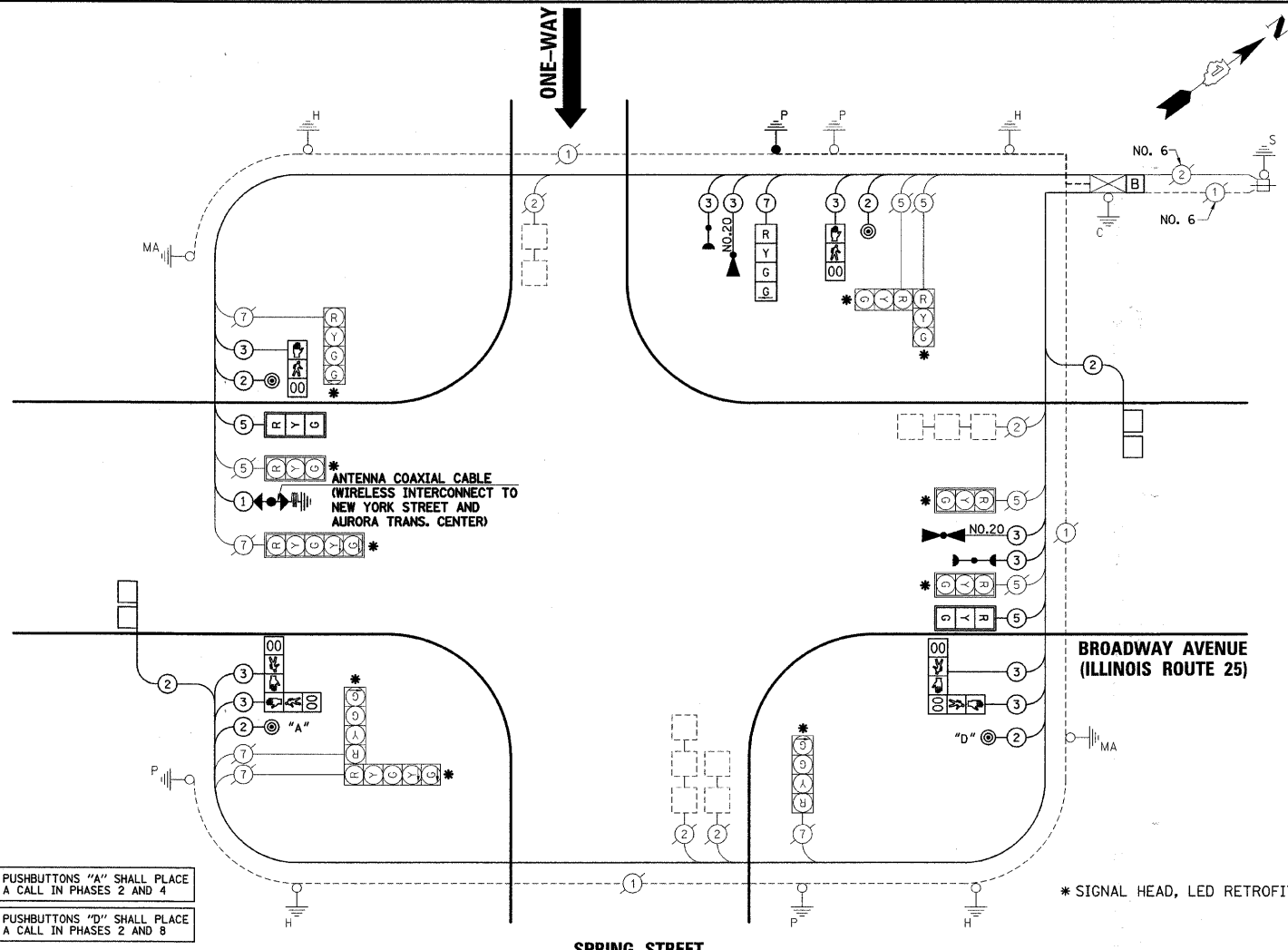
**TRAFFIC SIGNAL MODIFICATION PLAN  
IL ROUTE 25 AT SPRING STREET**

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2503	08-00272-00-TL	KANE	40	23
CONTRACT NO. 63177				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

**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 SM12F  |
|                 |                 | 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  |



PUSHBUTTONS "A" SHALL PLACE  
A CALL IN PHASES 2 AND 4

PUSHBUTTONS "D" SHALL PLACE  
A CALL IN PHASES 2 AND 8

\* SIGNAL HEAD, LED RETROFIT

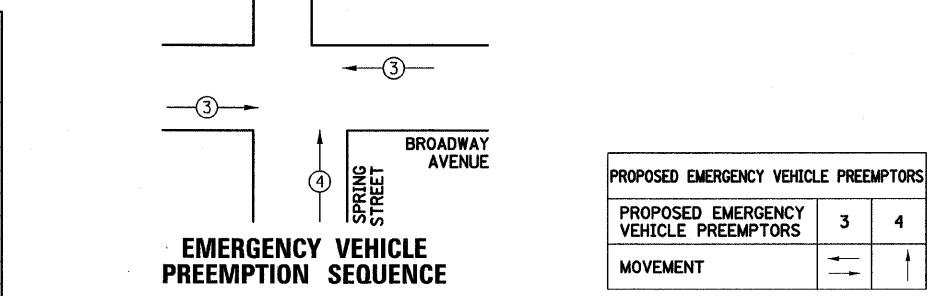
**SCHEDULE OF QUANTITIES**

PAY ITEM DESCRIPTION	UNIT	SPRING STREET
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	388
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	99
PAVEMENT MARKING REMOVAL	SQ. FT.	377
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	44
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	66
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	536.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1217.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	304.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	82
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	843
TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
DRILL EXISTING HANDHOLE	EACH	5
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	2
INDUCTIVE LOOP DETECTOR	EACH	2
DETECTOR LOOP, TYPE I	FOOT	136
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	4
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1862.5
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	60
ELECTRIC CABLE IN CONDUIT, NO. 20 3C TWISTED SHIELDED	FOOT	267
SIGNAL HEAD, LED, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	3
SIGNAL HEAD, LED, 4-SECTION, BRACKET MOUNTED, RETROFIT	EACH	3
SIGNAL HEAD, LED, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	1
SIGNAL HEAD, LED, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	1

DATE	BY	DATE	BY

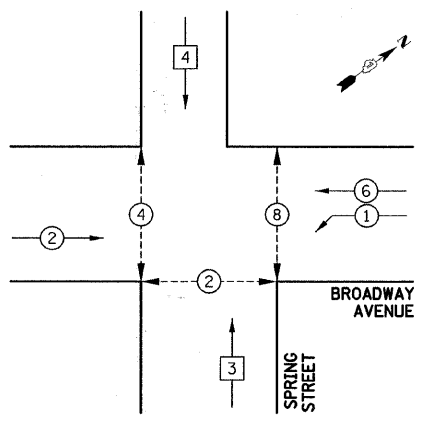
DATE	BY	DATE	BY

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	8		12	0.10	9.6
PED. SIGNAL	6		25	1.00	150
CONTROLLER	1		100	1.00	100
UPS	1		25	1.00	25
TOTAL =					525.2



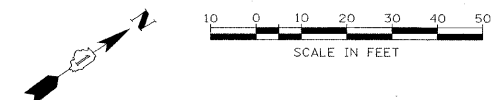
FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
C - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'±L-2=
D - CONTROLLER	4 (1.2)	SIGNAL POST	2 (1.0)		(6m±L-0.6m)
E - M.A. LENGTH		CONTROLLER CAB.	1 (0.5)	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)				

**CONTROLLER SEQUENCE**



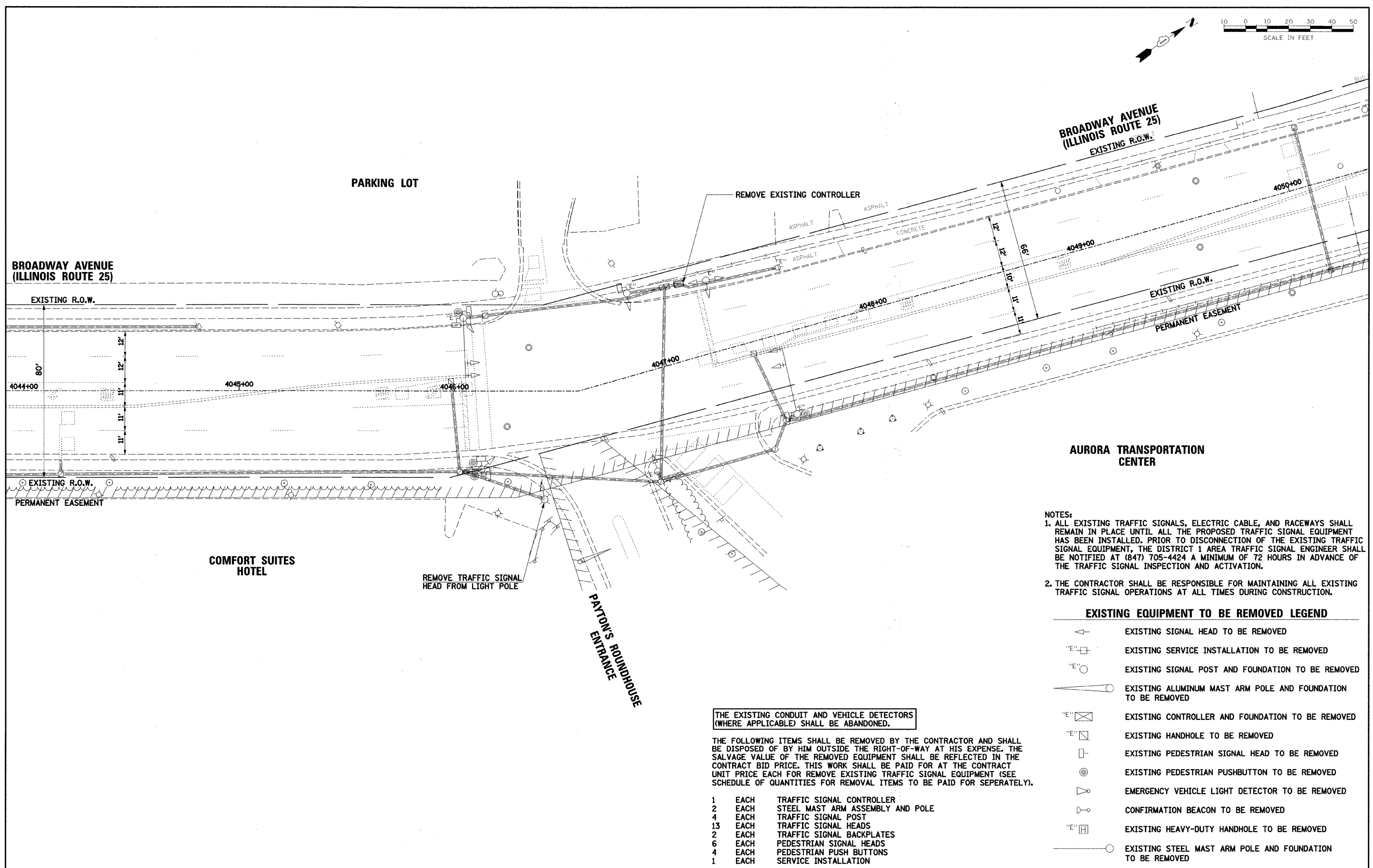
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

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



PLAN	SURVEYED	DATE
	PLOTTED	BY
	CHECKED	
	REVISIONS	
	FILE NAME	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	CHECKED	
	REVISIONS	
	FILE NAME	
	NO.	



- NOTES:**
1. ALL EXISTING TRAFFIC SIGNALS, ELECTRIC CABLE, AND RACEWAYS SHALL REMAIN IN PLACE UNTIL ALL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT HAS BEEN INSTALLED. PRIOR TO DISCONNECTION OF THE EXISTING TRAFFIC SIGNAL EQUIPMENT, THE DISTRICT 1 AREA TRAFFIC SIGNAL ENGINEER SHALL BE NOTIFIED AT (847) 705-4424 A MINIMUM OF 72 HOURS IN ADVANCE OF THE TRAFFIC SIGNAL INSPECTION AND ACTIVATION.
  2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL EXISTING TRAFFIC SIGNAL OPERATIONS AT ALL TIMES DURING CONSTRUCTION.

**EXISTING EQUIPMENT TO BE REMOVED LEGEND**

- EXISTING SIGNAL HEAD TO BE REMOVED
- EXISTING SERVICE INSTALLATION TO BE REMOVED
- EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
- EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
- EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED
- EXISTING HANDHOLE TO BE REMOVED
- EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- EXISTING PEDESTRIAN PUSHBUTTON TO BE REMOVED
- EMERGENCY VEHICLE LIGHT DETECTOR TO BE REMOVED
- CONFIRMATION BEACON TO BE REMOVED
- EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED
- EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED

THE EXISTING CONDUIT AND VEHICLE DETECTORS (WHERE APPLICABLE) SHALL BE ABANDONED.

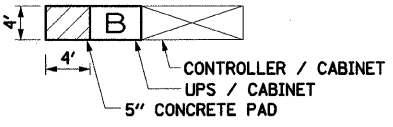
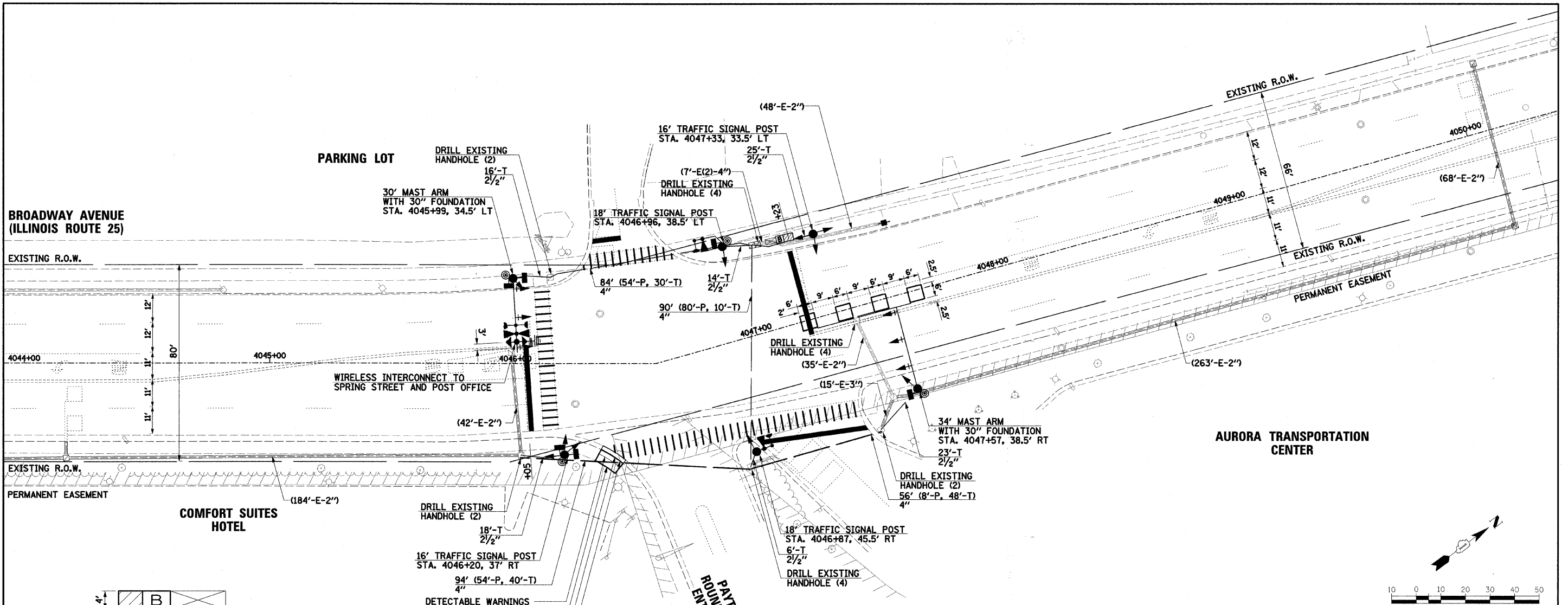
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY HIM OUTSIDE THE RIGHT-OF-WAY AT HIS EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE. THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT (SEE SCHEDULE OF QUANTITIES FOR REMOVAL ITEMS TO BE PAID FOR SEPERATELY).

- 1 EACH TRAFFIC SIGNAL CONTROLLER
- 2 EACH STEEL MAST ARM ASSEMBLY AND POLE
- 4 EACH TRAFFIC SIGNAL POST
- 13 EACH TRAFFIC SIGNAL HEADS
- 2 EACH TRAFFIC SIGNAL BACKPLATES
- 6 EACH PEDESTRIAN SIGNAL HEADS
- 4 EACH PEDESTRIAN PUSH BUTTONS
- 1 EACH SERVICE INSTALLATION

FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>EXISTING TRAFFIC SIGNAL EQUIPMENT TO BE REMOVED IL ROUTE 25 AT AURORA TRANSPORTATION CENTER</b>	F.A.U. RTE. 2503	SECTION 08-00272-00-TL	COUNTY KANE	TOTAL SHEETS 40	SHEET NO. 25	
	PLOT SCALE = #SCALE#	DRAWN BAH	REVISED -			CONTRACT NO. 63177					
	PLOT DATE = 6/8/2009	CHECKED APS	REVISED -								
		DATE JAN 16 2009	REVISED -								

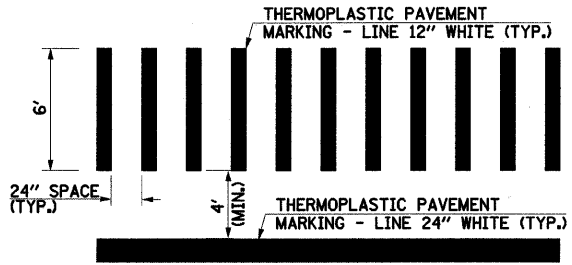
PLAN  
 SERVED BY: DATE: \_\_\_\_\_  
 PLOTTED BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_  
 NOTE BOOK NO.: \_\_\_\_\_  
 ADD FILE NAME: \_\_\_\_\_

PROFILE  
 SERVED BY: DATE: \_\_\_\_\_  
 PLOTTED BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_  
 NOTE BOOK NO.: \_\_\_\_\_  
 STRUCTURE NOTATION: CHFD



**CONCRETE PAD INSTALLATION DETAIL**

NOTE:  
 THE CONTRACTOR SHALL INSTALL A 5" CONCRETE MAINTENANCE PAD ADJACENT TO THE EXISTING CONTROLLER FOUNDATION. THE COST OF THE PAD WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE COST OF THE UPS.



**TYPICAL STRIPING DETAIL AT CROSSWALKS**

- NOTES:  
 1. THE "SYSTEM" ANTENNA SHALL BE MOUNTED ON THE SOUTHBOUND MAST ARM, 3' WEST OF THE OUTER 5-SECTION SIGNAL HEAD OR AS DIRECTED BY THE TECHNICIAN INSTALLING THE INTERCONNECT (SEE MOUNTING DETAIL).  
 2. ALL PROPOSED TRAFFIC SIGNAL MAST ARMS AND POSTS SHALL BE PAINTED BLACK.

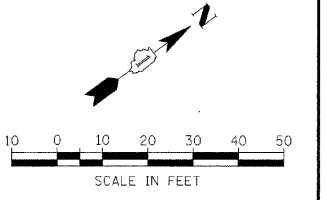
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

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

**RESTORATION OF WORK AREA:**  
 RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED UNLESS OTHERWISE NOTED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

**TRAFFIC SIGNAL LEGEND**

	PROPOSED	EXISTING		PROPOSED	EXISTING
CONTROLLER			DETECTOR LOOP		
SERVICE INSTALLATION			CAST IRON JUNCTION BOX		
SIGNAL HEAD			EMERGENCY VEHICLE LIGHT DETECTOR		
SIGNAL HEAD WITH BACKPLATE			CONFIRMATION BEACON		
SIGNAL HEAD, PEDESTRIAN			SIGNAL HEAD OPTICALLY PROGRAMMED		
SIGNAL POST			CONDUIT SPLICE		
MAST ARM ASSEMBLY AND POLE, STEEL			WOOD POLE		
MAST ARM ASSEMBLY AND POLE, ALUMINUM			RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE			VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE		
UNIT DUCT	UD		RAILROAD CONTROL CABINET		
COMMON TRENCH	CT		TELEPHONE CONNECTION		
HANDHOLE			ILLUMINATED SIGN "NO LEFT TURN"		
HEAVY DUTY HANDHOLE			ILLUMINATED SIGN "NO RIGHT TURN"		
DOUBLE HANDHOLE			UNINTERRUPTABLE POWER SUPPLY		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)			VIDEO DETECTION CAMERA		
PEDESTRIAN PUSHBUTTON DETECTOR			VIDEO DETECTION AREA		
PAN/TILT/ZOOM CAMERA			WIRELESS ANTENNA		



FILE NAME = #FILEL#	USER NAME = #USER#	DESIGNED - BAH	REVISED -
		CHECKED - APS	REVISED -
		DATE - JAN 16 2009	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

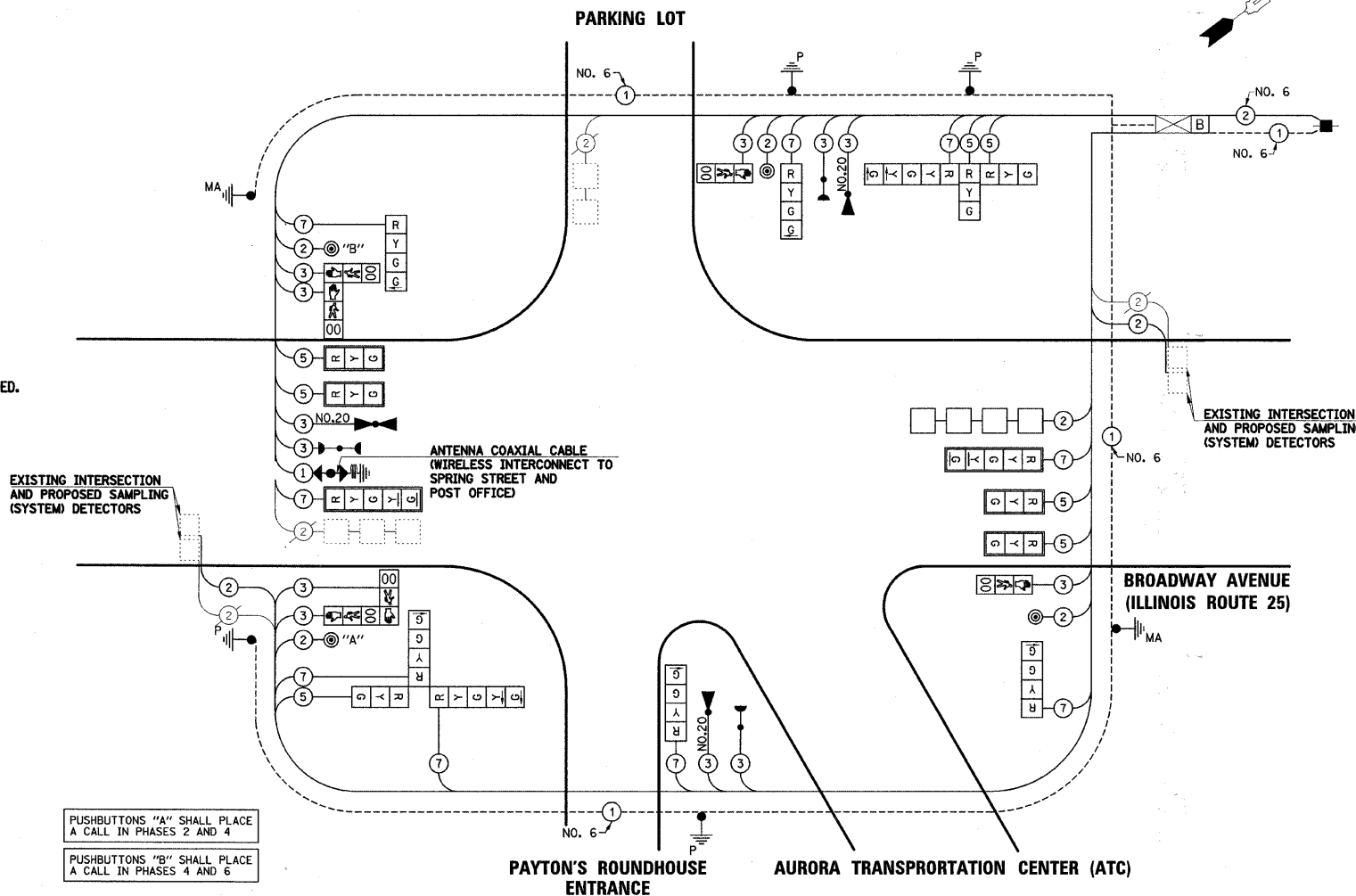
TRAFFIC SIGNAL MODIFICATION PLAN  
 IL ROUTE 25 AT AURORA TRANSPORTATION CENTER

F.A.U. RTE. 2503	SECTION 08-00272-00-TL	COUNTY KANE	TOTAL SHEETS 40	SHEET NO. 26
CONTRACT NO. 63177				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



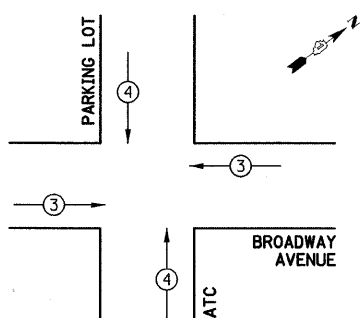
**CABLE PLAN LEGEND**

- |                 |                 |   |
|-----------------|-----------------|---|
| <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 SM12F  |
|                 |                 | 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  |



PUSHBUTTONS "A" SHALL PLACE  
A CALL IN PHASES 2 AND 4

PUSHBUTTONS "B" SHALL PLACE  
A CALL IN PHASES 4 AND 6



**EMERGENCY VEHICLE  
PREEMPTION SEQUENCE**

PROPOSED EMERGENCY VEHICLE PREEMPTORS		
PROPOSED EMERGENCY VEHICLE PREEMPTORS	3	4
MOVEMENT	←	↑

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'+L-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)				

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	16		17	0.50	136
(YELLOW)	16		25	0.25	100
(GREEN)	16		15	0.25	60
ARROW	13		12	0.10	15.6
PED. SIGNAL	6		25	1.00	150
CONTROLLER	1		100	1.00	100
UPS	1		25	1.00	25
<b>TOTAL =</b>					<b>586.6</b>

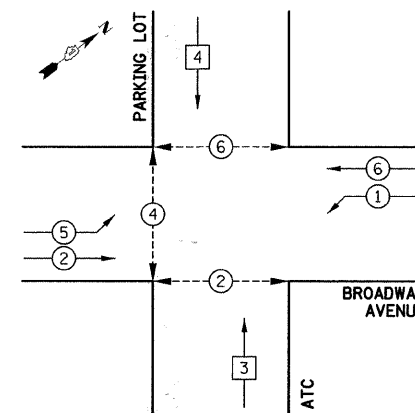
ENERGY COSTS TO: CITY OF AURORA  
44 E. DOWNER PLACE  
AURORA, ILLINOIS 60507-2067

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

**SCHEDULE OF QUANTITIES**

PAY ITEM DESCRIPTION	UNIT	TRANSPORTATION CENTER
PORTLAND CEMENT CONCRETE SIDEWALK 6"	SQ FT	53
DETECTABLE WARNINGS	SQ FT	21
COMBINATION CURB AND GUTTER REMOVAL	FOOT	11
SIDEWALK REMOVAL	SQ FT	53
COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	11
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	384
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	127
PAVEMENT MARKING REMOVAL	SQ FT	445
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	102
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	128
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	196
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	230
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	645.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1458
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1195
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1596.5
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1203
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	65.5
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	16
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	27
DRILL EXISTING HANDHOLE	EACH	18
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 3-FACE, 2-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	6
INDUCTIVE LOOP DETECTOR	EACH	3
DETECTOR LOOP, TYPE I	FOOT	144
LIGHT DETECTOR	EACH	3
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	4
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	4112
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	6
PAINT NEW MAST ARM POLE, UNDER 40 FEET	EACH	2
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
PAINT TRAFFIC SIGNAL POST	EACH	4
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	610.5
ELECTRIC CABLE IN CONDUIT, NO. 20 3C TWISTED SHIELDED	FOOT	373
GROUND EXISTING HANDHOLE FRAME AND COVER	EACH	8
SIGNAL HEAD, LED, 3-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1

**CONTROLLER SEQUENCE**



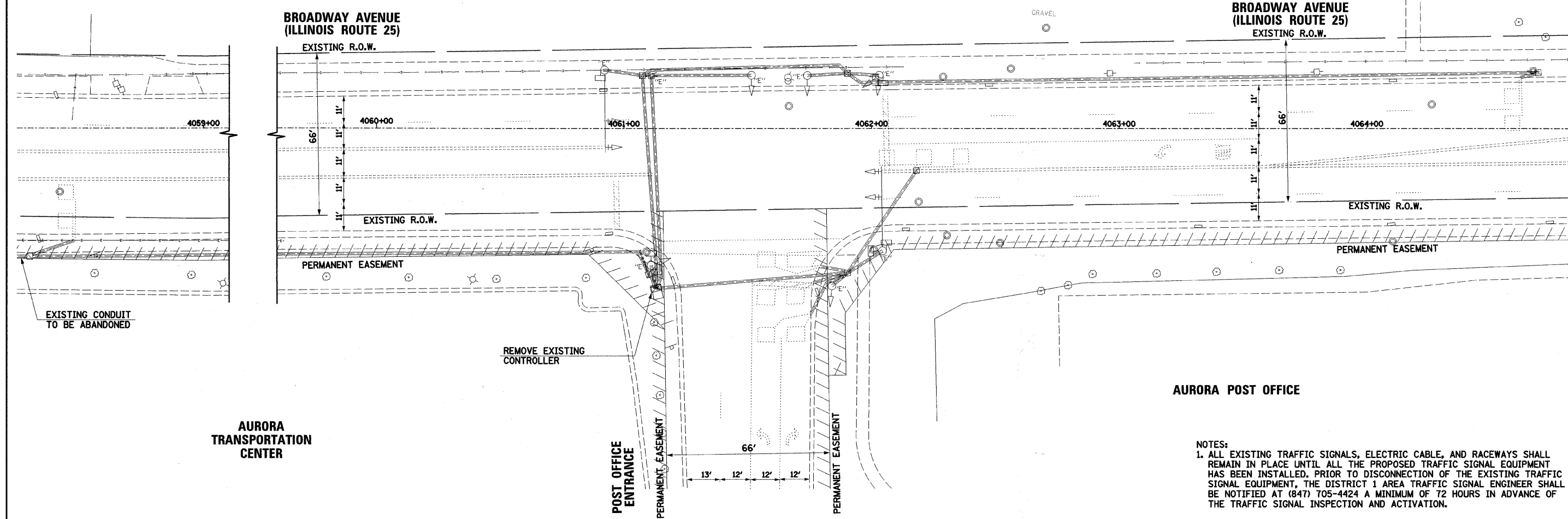
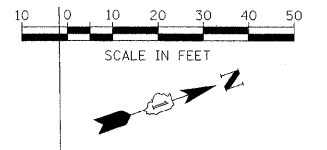
**CONTROLLER SEQUENCE LEGEND**

- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- OVERLAP
- NUMBER REFERRING TO ASSOCIATED PHASE
- PEDESTRIAN PHASE

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.

**PHASE DESIGNATION DIAGRAM**



- NOTES:**
- ALL EXISTING TRAFFIC SIGNALS, ELECTRIC CABLE, AND RACEWAYS SHALL REMAIN IN PLACE UNTIL ALL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT HAS BEEN INSTALLED. PRIOR TO DISCONNECTION OF THE EXISTING TRAFFIC SIGNAL EQUIPMENT, THE DISTRICT 1 AREA TRAFFIC SIGNAL ENGINEER SHALL BE NOTIFIED AT (847) 705-4424 A MINIMUM OF 72 HOURS IN ADVANCE OF THE TRAFFIC SIGNAL INSPECTION AND ACTIVATION.
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL EXISTING TRAFFIC SIGNAL OPERATIONS AT ALL TIMES DURING CONSTRUCTION.

**EXISTING EQUIPMENT TO BE REMOVED LEGEND**

	EXISTING SIGNAL HEAD TO BE REMOVED
	EXISTING SERVICE INSTALLATION TO BE REMOVED
	EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
	EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
	EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED
	EXISTING HANDHOLE TO BE REMOVED
	EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
	EXISTING PEDESTRIAN PUSHBUTTON TO BE REMOVED
	EMERGENCY VEHICLE LIGHT DETECTOR TO BE REMOVED
	CONFIRMATION BEACON TO BE REMOVED
	EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED
	EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED

- THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY HIM OUTSIDE THE RIGHT-OF-WAY AT HIS EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE. THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT (SEE SCHEDULE OF QUANTITIES FOR REMOVAL ITEMS TO BE PAID FOR SEPERATELY).
- |    |      |                                  |
|----|------|----------------------------------|
| 1  | EACH | TRAFFIC SIGNAL CONTROLLER        |
| 2  | EACH | STEEL MAST ARM ASSEMBLY AND POLE |
| 5  | EACH | TRAFFIC SIGNAL POST              |
| 10 | EACH | TRAFFIC SIGNAL HEADS             |
| 4  | EACH | TRAFFIC SIGNAL BACKPLATES        |
| 6  | EACH | PEDESTRIAN SIGNAL HEADS          |
| 1  | EACH | SERVICE INSTALLATION             |

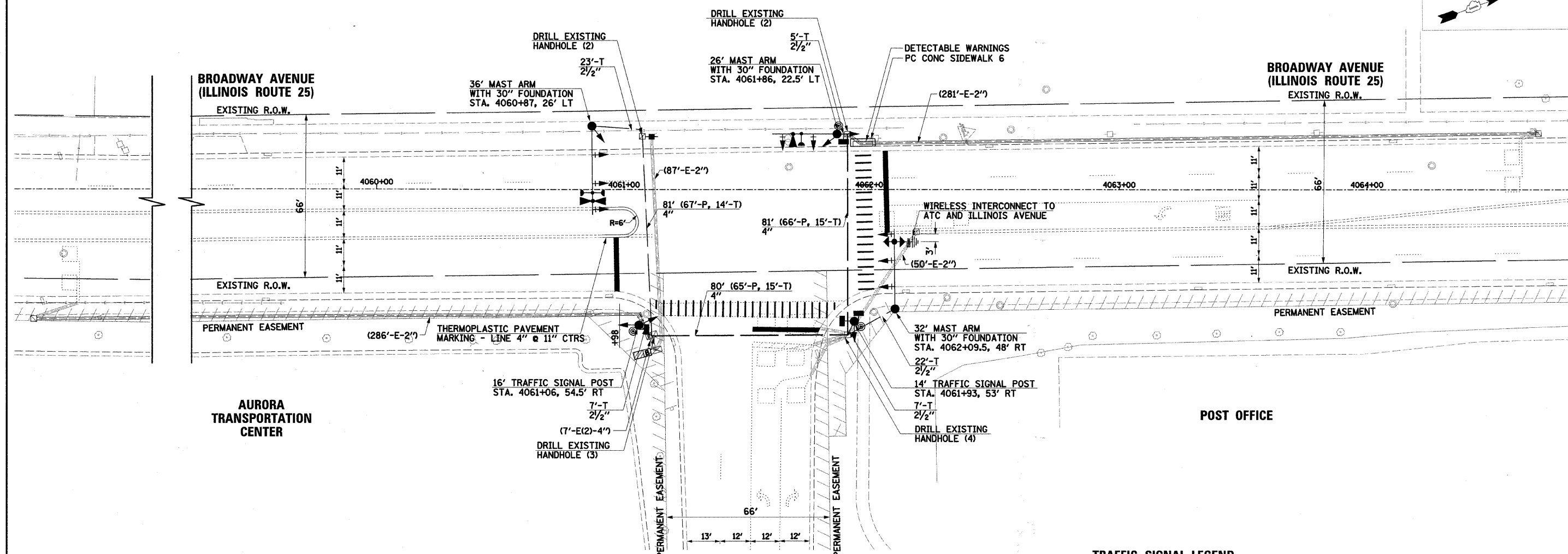
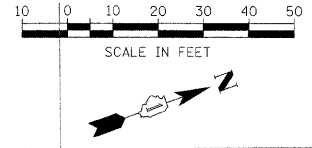
PLAN

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PROFILE

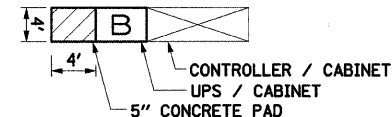
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STRUCTURE NOTATION	

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		DRAWN BAH	REVISD -			CONTRACT NO. 63177					
		CHECKED APS	REVISD -								
		DATE JAN 16 2009	REVISD -								
PLOT SCALE = #SCALE#		PLOT DATE = 6/8/2009		SCALE:		SHEET NO. OF SHEETS		STA. TO STA.		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

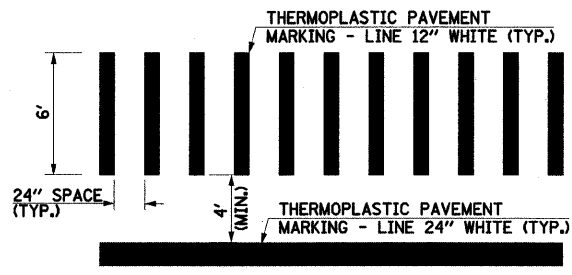


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 BY: \_\_\_\_\_  
 PLAN SERVED BY: \_\_\_\_\_  
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 NOTE BOOK NO.: \_\_\_\_\_  
 FILE NAME: \_\_\_\_\_

DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 PROFILE SERVED BY: \_\_\_\_\_  
 PLOTTED BY: \_\_\_\_\_  
 NOTE BOOK NO.: \_\_\_\_\_  
 FILE NAME: \_\_\_\_\_



**CONCRETE PAD INSTALLATION DETAIL**  
 NOTE:  
 THE CONTRACTOR SHALL INSTALL A 5" CONCRETE MAINTENANCE PAD ADJACENT TO THE EXISTING CONTROLLER FOUNDATION. THE COST OF THE PAD WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE COST OF THE UPS.



**TYPICAL STRIPING DETAIL AT CROSSWALKS**

- NOTES:**
1. THE "SYSTEM" ANTENNA SHALL BE MOUNTED ON THE NORTHBOUND MAST ARM, 3' EAST OF THE OUTER 3-SECTION SIGNAL HEAD OR AS DIRECTED BY THE TECHNICIAN INSTALLING THE INTERCONNECT (SEE MOUNTING DETAIL).
  2. ALL PROPOSED TRAFFIC SIGNAL MAST ARMS AND POSTS SHALL BE PAINTED BLACK.

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.

**RESTORATION OF WORK AREA:**  
 RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED UNLESS OTHERWISE NOTED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

**TRAFFIC SIGNAL LEGEND**

	PROPOSED	EXISTING		PROPOSED	EXISTING
CONTROLLER			DETECTOR LOOP		
SERVICE INSTALLATION			CAST IRON JUNCTION BOX		
SIGNAL HEAD			EMERGENCY VEHICLE LIGHT DETECTOR		
SIGNAL HEAD WITH BACKPLATE			CONFIRMATION BEACON		
SIGNAL HEAD, PEDESTRIAN			SIGNAL HEAD OPTICALLY PROGRAMMED		
SIGNAL POST			CONDUIT SPLICE		
MAST ARM ASSEMBLY AND POLE, STEEL			WOOD POLE		
MAST ARM ASSEMBLY AND POLE, ALUMINUM			RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE			VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE		
UNIT DUCT	UD		RAILROAD CONTROL CABINET		
COMMON TRENCH	CT		TELEPHONE CONNECTION		
HANDHOLE			ILLUMINATED SIGN "NO LEFT TURN"		
HEAVY DUTY HANDHOLE			ILLUMINATED SIGN "NO RIGHT TURN"		
DOUBLE HANDHOLE			UNINTERRUPTABLE POWER SUPPLY		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)			VIDEO DETECTION CAMERA		
PEDESTRIAN PUSHBUTTON DETECTOR			VIDEO DETECTION AREA		
PAN/TILT/ZOOM CAMERA			WIRELESS ANTENNA		

FILE NAME =	USER NAME = #USER#	DESIGNED -	REVISED -
#FILEL#		DRAWN BAH	REVISED -
	PLOT SCALE = #SCALE#	CHECKED APS	REVISED -
	PLOT DATE = 6/8/2009	DATE JAN 16 2009	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODIFICATION PLAN  
 IL ROUTE 25 AT POST OFFICE**

SCALE: SHEET NO. OF SHEETS STA. TO STA.

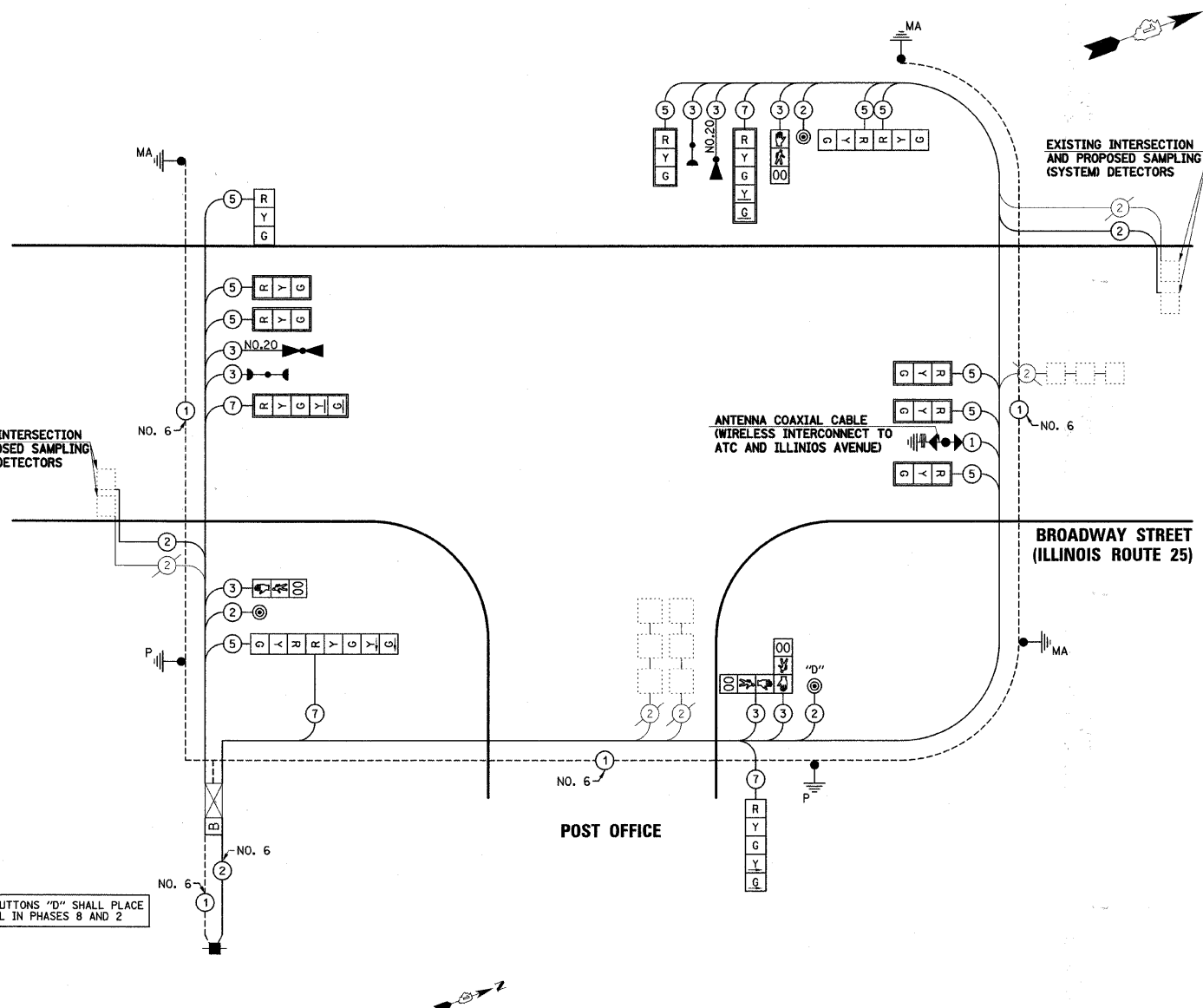
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2503	08-00272-00-TL	KANE	40	29
CONTRACT NO. 63177				
FED. ROAD DIST. NO. ILLINOIS/FED. AID PROJECT				

**CABLE PLAN LEGEND**

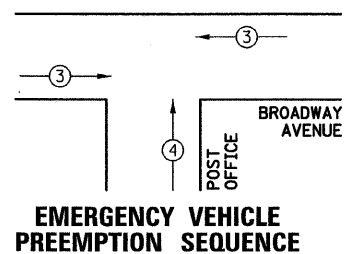
EXISTING	PROPOSED	
		8" (200mm) TRAFFIC SIGNAL SECTION
		12" (300mm) TRAFFIC SIGNAL SECTION
		12" (300mm) PEDESTRIAN SIGNAL SECTION
		12" (300mm) PEDESTRIAN SIGNAL SECTION
		CONTROLLER CABINET
		SERVICE INSTALLATION
		TELEPHONE INSTALLATION
		VEHICLE DETECTOR, INDUCTION LOOP
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
		LUMINAIRE
		DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
		GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
		FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F
		SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD.
		RAILROAD CONTROL CABINET
		ILLUMINATED SIGN "NO LEFT TURN"
		ILLUMINATED SIGN "NO RIGHT TURN"
		WIRELESS ANTENNA
		GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)
		GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
		GROUND ROD AT ELECTRIC SERVICE INSTALLATION
		UNINTERRUPTIBLE POWER SUPPLY
		LED STREET NAME SIGN
		VIDEO DETECTION CAMERA
		PAN/TILT/ZOOM CAMERA

**SCHEDULE OF QUANTITIES**

PAV ITEM DESCRIPTION	UNIT	POST OFFICE
PORTLAND CEMENT CONCRETE SIDEWALK 6"	SQ FT	30
DETECTABLE WARNINGS	SQ FT	16
SIDEWALK REMOVAL	SQ FT	30
THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	71
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	258
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	83
PAVEMENT MARKING REMOVAL	SQ FT	245
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	64
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	44
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	198
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	108
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	375.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	988.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1750
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	605
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	800
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	104.5
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	8
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	40.5
DRILL EXISTING HANDHOLE	EACH	11
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET 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 WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	9
INDUCTIVE LOOP DETECTOR	EACH	2
LIGHT DETECTOR	EACH	3
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	3
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	257.3
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	7
PAINT NEW MAST ARM POLE, UNDER 40 FEET	EACH	3
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
PAINT TRAFFIC SIGNAL POST	EACH	2
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	507
ELECTRIC CABLE IN CONDUIT, NO. 20 3C TWISTED SHIELDED	FOOT	403.5
GROUND EXISTING HANDHOLE FRAME AND COVER	EACH	5



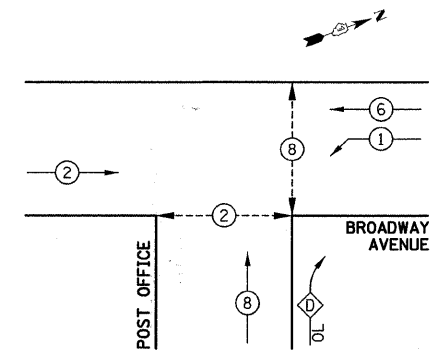
I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	14		17	0.50	119
(YELLOW)	14		25	0.25	87.5
(GREEN)	14		15	0.25	52.5
ARROW	8		12	0.10	9.6
PED. SIGNAL	4		25	1.00	100
CONTROLLER	1		100	1.00	100
UPS	1		25	1.00	25
				TOTAL =	493.6



PROPOSED EMERGENCY VEHICLE PREEMPTORS		
PROPOSED EMERGENCY VEHICLE PREEMPTORS	3	4
MOVEMENT	←	↑

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)				

**CONTROLLER SEQUENCE**

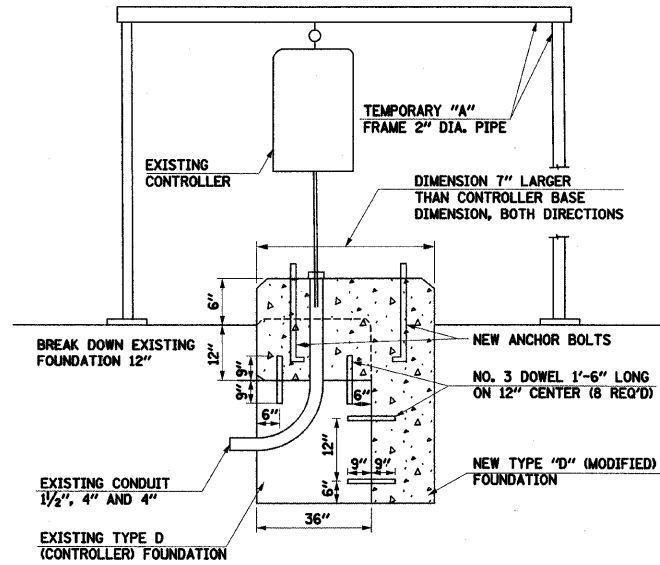
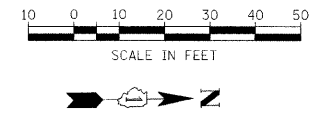


OVERLAP PHASE	PERMISSIVE PHASE	PROTECTED PHASE
D	=	8 + 1

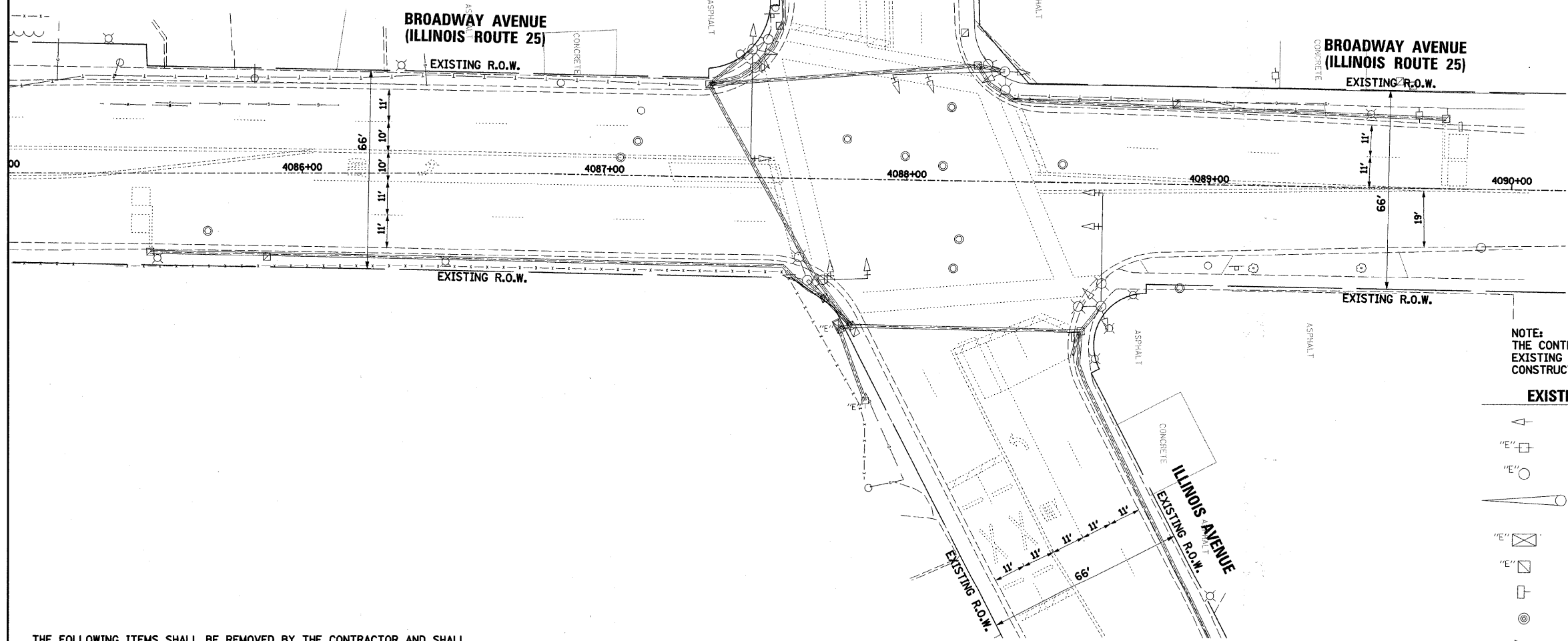
CONTROLLER SEQUENCE LEGEND	
	DUAL ENTRY PHASE
	SINGLE ENTRY PHASE
	OVERLAP
	NUMBER REFERRING TO ASSOCIATED PHASE
	PEDESTRIAN PHASE

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.



**CONTROLLER FOUNDATION MODIFICATION**



**NOTE:**  
THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL EXISTING TRAFFIC SIGNAL OPERATIONS AT ALL TIMES DURING CONSTRUCTION.

**EXISTING EQUIPMENT TO BE REMOVED LEGEND**

- EXISTING SIGNAL HEAD TO BE REMOVED
- EXISTING SERVICE INSTALLATION TO BE REMOVED
- EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
- EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
- EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED
- EXISTING HANDHOLE TO BE REMOVED
- EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- EXISTING PEDESTRIAN PUSHBUTTON TO BE REMOVED
- EMERGENCY VEHICLE LIGHT DETECTOR TO BE REMOVED
- CONFIRMATION BEACON TO BE REMOVED
- EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED
- EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY HIM OUTSIDE THE RIGHT-OF-WAY AT HIS EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE. THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT (SEE SCHEDULE OF QUANTITIES FOR REMOVAL ITEMS TO BE PAID FOR SEPERATELY).

- 1 EACH TRAFFIC SIGNAL CONTROLLER AND CABINET (COMPLETE)
- 1 EACH SERVICE INSTALLATION

PLAN	BY _____	DATE _____
	REVISIONS	
	NO.	
	DATE	
	BY	
	REVISIONS	
	NO.	
	DATE	
	BY	

PROFILE	BY _____	DATE _____
	REVISIONS	
	NO.	
	DATE	
	BY	
	REVISIONS	
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	DATE	
	BY	

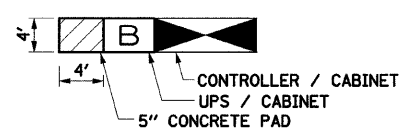
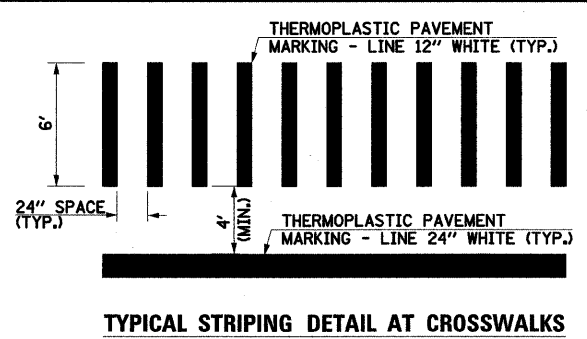
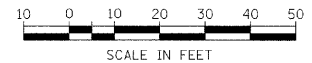
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		CHECKED <i>APS</i>	REVISED -
		DATE <i>JAN 16 2009</i>	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EXISTING TRAFFIC SIGNAL EQUIPMENT TO BE REMOVED  
IL ROUTE 25 AT ILLINOIS AVENUE**

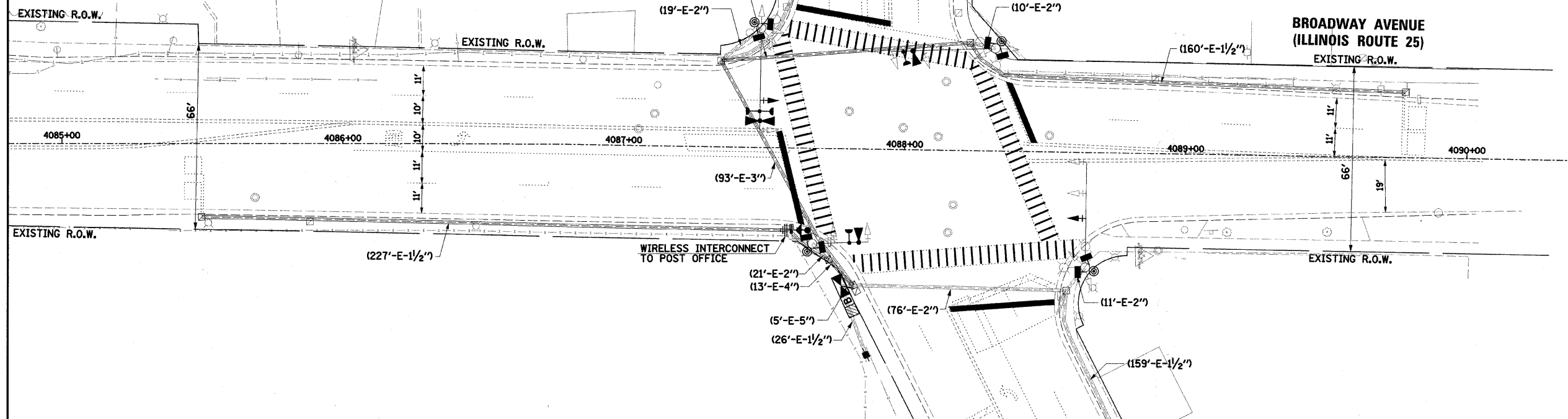
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2503	08-00272-00-TL	KANE	40	31
CONTRACT NO. 63177				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

SCALE: SHEET NO. OF SHEETS STA. TO STA.



**CONCRETE PAD INSTALLATION DETAIL**  
 NOTE:  
 THE CONTRACTOR SHALL INSTALL A 5" CONCRETE MAINTENANCE PAD ADJACENT TO THE MODIFIED FOUNDATION. THE COST OF THE PAD WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE COST OF THE UPS.

**BROADWAY AVENUE (ILLINOIS ROUTE 25)**



**TRAFFIC SIGNAL LEGEND**

	PROPOSED	EXISTING		PROPOSED	EXISTING
CONTROLLER	[Symbol]	[Symbol]	DETECTOR LOOP	[Symbol]	[Symbol]
SERVICE INSTALLATION	[Symbol]	[Symbol]	CAST IRON JUNCTION BOX	[Symbol]	[Symbol]
SIGNAL HEAD	[Symbol]	[Symbol]	EMERGENCY VEHICLE LIGHT DETECTOR	[Symbol]	[Symbol]
SIGNAL HEAD WITH BACKPLATE	[Symbol]	[Symbol]	CONFIRMATION BEACON	[Symbol]	[Symbol]
SIGNAL HEAD, PEDESTRIAN	[Symbol]	[Symbol]	SIGNAL HEAD OPTICALLY PROGRAMMED	[Symbol]	[Symbol]
SIGNAL POST	[Symbol]	[Symbol]	CONDUIT SPLICE	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, STEEL	[Symbol]	[Symbol]	WOOD POLE	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, ALUMINUM	[Symbol]	[Symbol]	RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II	[Symbol]	[Symbol]
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE	[Symbol]	[Symbol]	VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE	[Symbol]	[Symbol]
UNIT DUCT	UD	[Symbol]	RAILROAD CONTROL CABINET	[Symbol]	[Symbol]
COMMON TRENCH	CT	[Symbol]	TELEPHONE CONNECTION	[Symbol]	[Symbol]
HANDHOLE	[Symbol]	[Symbol]	ILLUMINATED SIGN "NO LEFT TURN"	[Symbol]	[Symbol]
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]	ILLUMINATED SIGN "NO RIGHT TURN"	[Symbol]	[Symbol]
DOUBLE HANDHOLE	[Symbol]	[Symbol]	UNINTERRUPTABLE POWER SUPPLY	[Symbol]	[Symbol]
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)	[Symbol]	[Symbol]	VIDEO DETECTION CAMERA	[Symbol]	[Symbol]
PEDESTRIAN PUSHBUTTON DETECTOR	[Symbol]	[Symbol]	VIDEO DETECTION AREA	[Symbol]	[Symbol]
PAN/TILT/ZOOM CAMERA	[Symbol]	[Symbol]	WIRELESS ANTENNA	[Symbol]	[Symbol]

NOTE:  
 THE "SYSTEM" ANTENNA SHALL BE MOUNTED ON THE SOUTHERMOST COMBINATION LUMINAIRE ARM IN THE SOUTHEAST CORNER OR AS DIRECTED BY THE TECHNICIAN INSTALLING THE INTERCONNECT (SEE MOUNTING DETAIL).

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.

**RESTORATION OF WORK AREA:**  
 RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED UNLESS OTHERWISE NOTED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

PLAN	SURVEYED	DATE
	PLOTTED	
	NOTED	
	BY	
	NO. OF WAY CHECKED	
	ADD FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	
	NOTED	
	BY	
	NO. OF WAY CHECKED	
	STRUCTURE NOTATIONS CHECKED	

FILE NAME =	USER NAME = #USER#	DESIGNED -	REVISED -
#FILE#		DRAWN <i>BAH</i>	REVISED -
	PLOT SCALE = #SCALE#	CHECKED <i>APS</i>	REVISED -
	PLOT DATE = 6/8/2009	DATE <i>JAN 16 2009</i>	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODIFICATION PLAN  
IL ROUTE 25 AT ILLINOIS AVENUE**

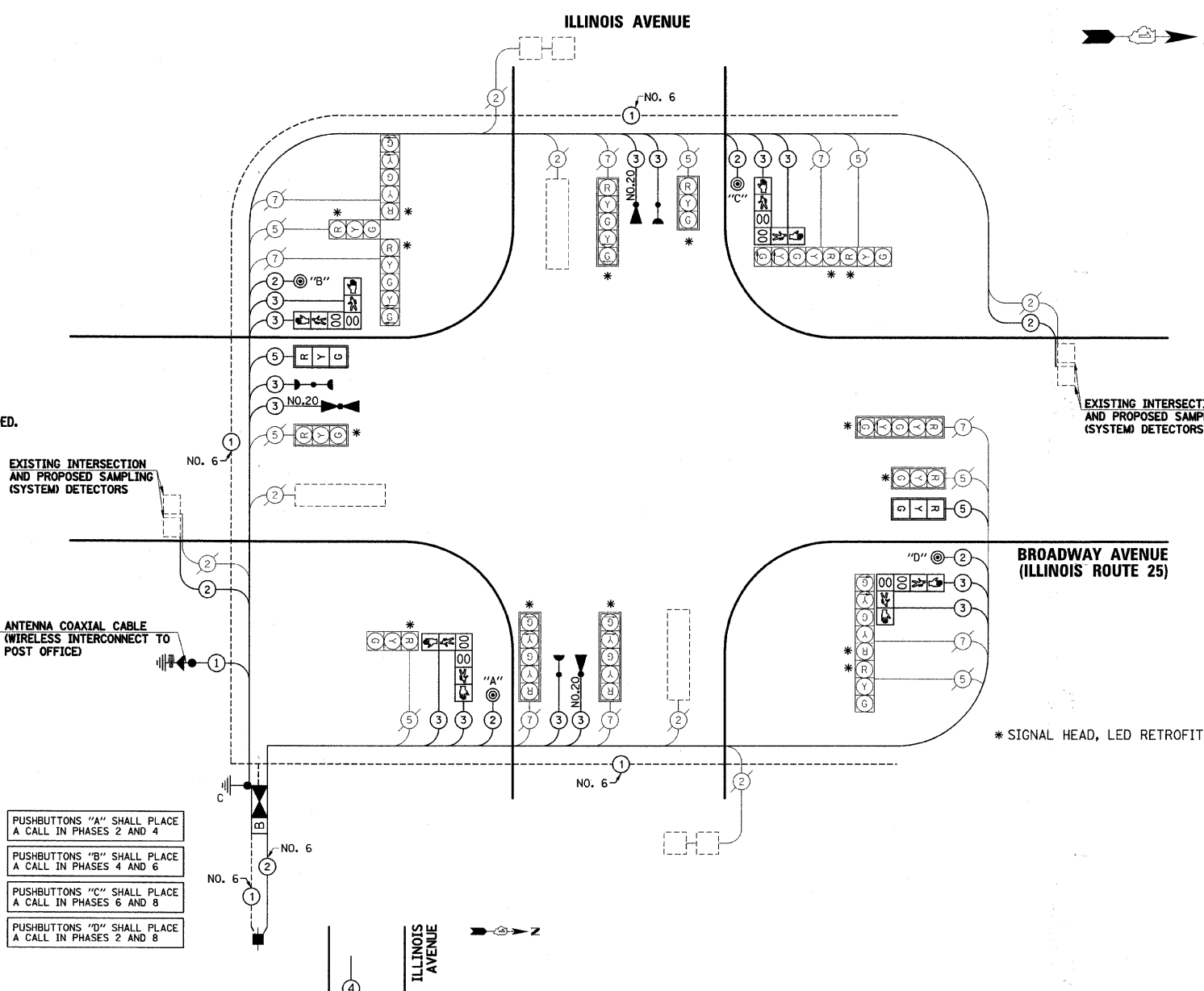
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2503	08-00272-00-TL	KANE	40	32
CONTRACT NO. 63177				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

SCALE: SHEET NO. OF SHEETS STA. TO STA.



**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	ILLINOIS AVENUE
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	572
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	130
PAVEMENT MARKING REMOVAL	SQ FT	470
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	558
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1741.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	344
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	656.5
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	43.5
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	2
INDUCTIVE LOOP DETECTOR	EACH	2
LIGHT DETECTOR	EACH	3
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	4
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	43.5
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	447.5
MODIFY EXISTING TYPE "D" FOUNDATION	EACH	1
ELECTRIC CABLE IN CONDUIT, NO. 20 3C TWISTED SHIELDED	FOOT	569.5
GROUND EXISTING HANDHOLE FRAME AND COVER	EACH	6
SIGNAL HEAD, LED, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	4
SIGNAL HEAD, LED, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	3
SIGNAL HEAD, LED, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	4
SIGNAL HEAD, LED, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	4

DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 PLOTTED: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_  
 RT. OF WAY CHECKED: \_\_\_\_\_  
 FILE NAME: \_\_\_\_\_

DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 PLOTTED: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_  
 STRUCTURE NOTATIONS: \_\_\_\_\_

**I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	17		17	0.50	144.5
(YELLOW)	17		25	0.25	106.3
(GREEN)	17		15	0.25	63.8
ARROW	18		12	0.10	21.6
PED. SIGNAL	8		25	1.00	200
CONTROLLER	1		100	1.00	100
UPS	1		25	1.00	25
<b>TOTAL =</b>					<b>661.2</b>

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

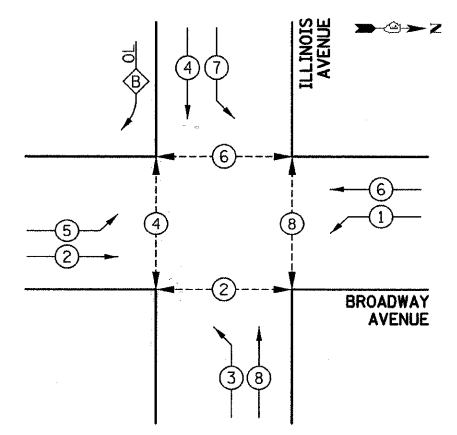
**EMERGENCY VEHICLE PREEMPTION SEQUENCE**

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' HL - 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)				

**PROPOSED EMERGENCY VEHICLE PREEMPTORS**

PROPOSED EMERGENCY VEHICLE PREEMPTORS	MOVEMENT
3	4
	← →

**CONTROLLER SEQUENCE**



OVERLAP PHASE = PERMISSIVE PHASE + PROTECTED PHASE  
 B = 4 + 5

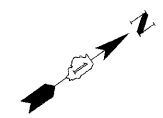
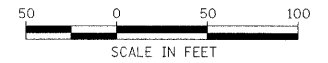
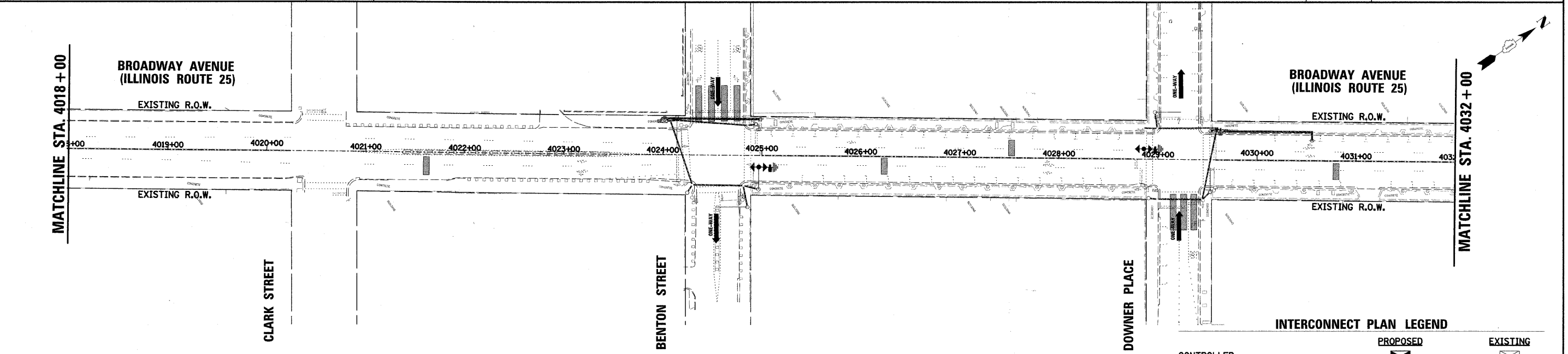
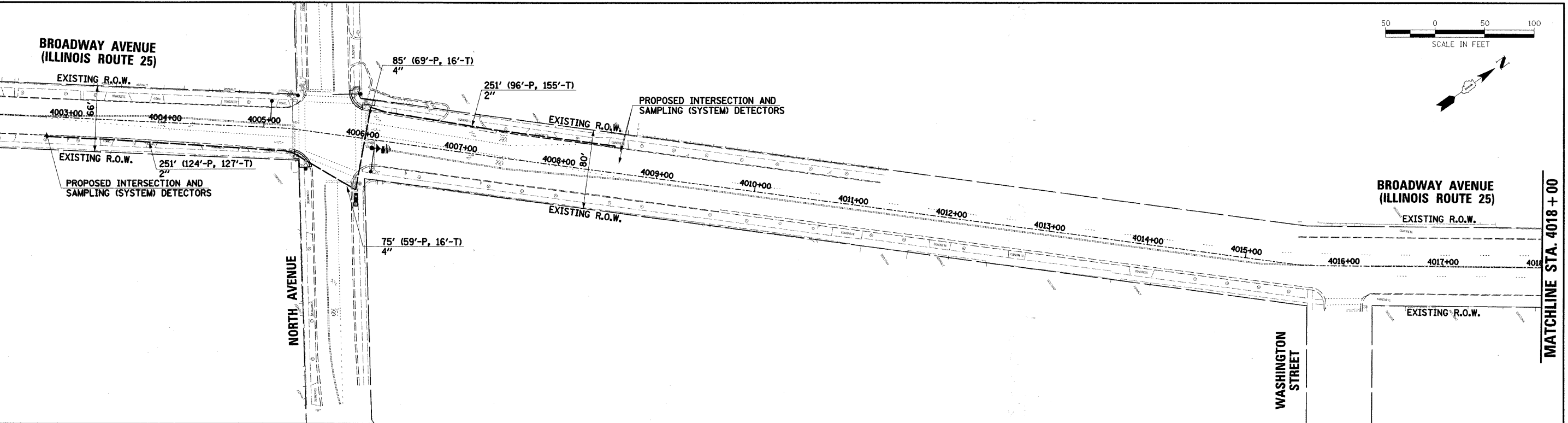
**CONTROLLER SEQUENCE LEGEND**

	DUAL ENTRY PHASE
	SINGLE ENTRY PHASE
	OVERLAP
	NUMBER REFERRING TO ASSOCIATED PHASE
	PEDESTRIAN PHASE

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.

**PHASE DESIGNATION DIAGRAM**



PLAN	SERIALIZED	DATE
NOTE BOOK NO.	PLOTTED	BY
	RT. OF WAY CHECKED	
	CONTRACT FILE NAME	

PROFILE	SERIALIZED	DATE
NOTE BOOK NO.	PLOTTED	BY
	RT. OF WAY CHECKED	
	STRUCTURE NOTATIONS CHKD	

**INTERCONNECT PLAN LEGEND**

	PROPOSED	EXISTING
CONTROLLER		
HANDHOLE		
DOUBLE HANDHOLE		
HEAVY-DUTY HANDHOLE		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)		
DETECTOR LOOP		
UNIT DUCT	UD	
SYSTEM	S	
INTERSECTION	IP	I
MAST ARM ASSEMBLY AND POLE, STEEL		
WIRELESS ANTENNA		
VIDEO DETECTION ZONE		

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

**RESTORATION OF WORK AREA:**  
 RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED UNLESS OTHERWISE NOTED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

FILE NAME =	USER NAME = #USER#	DESIGNED -	REVISED -
#FILE#		DRAWN BAH	REVISED -
		CHECKED APS	REVISED -
		DATE JAN 16 2009	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**INTERCONNECT PLAN  
 (SHEET 1 OF 3)**

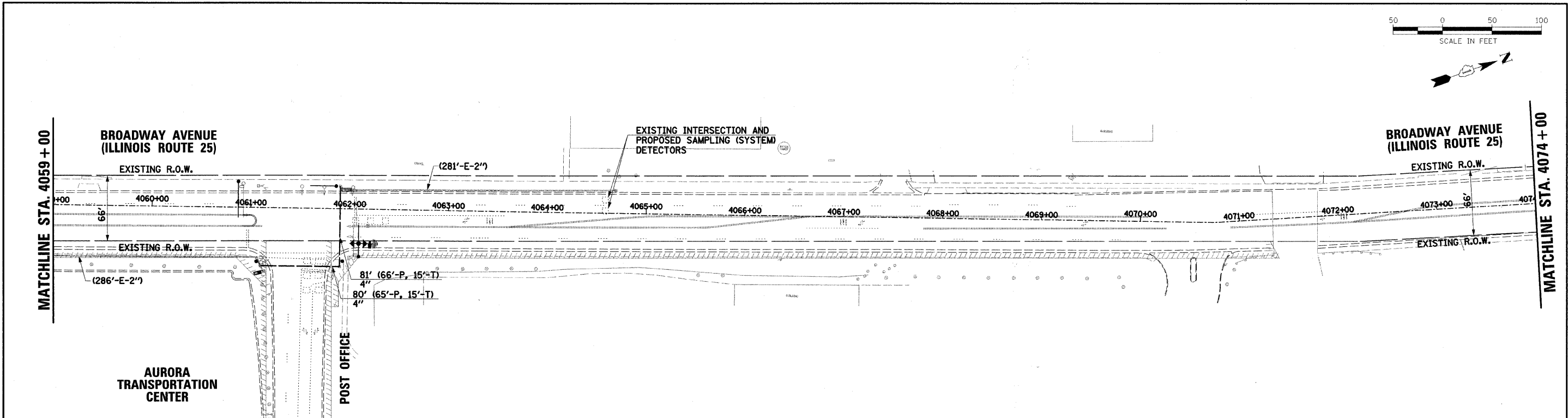
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2503	08-00272-00-TL	KANE	40	34
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 63177	

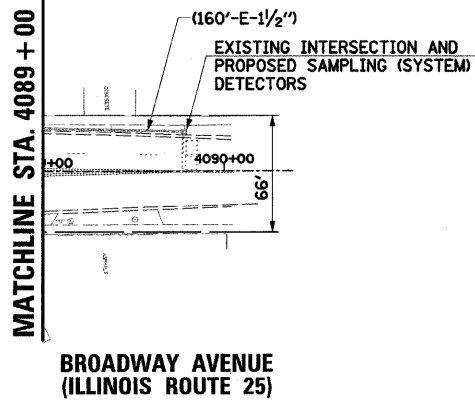
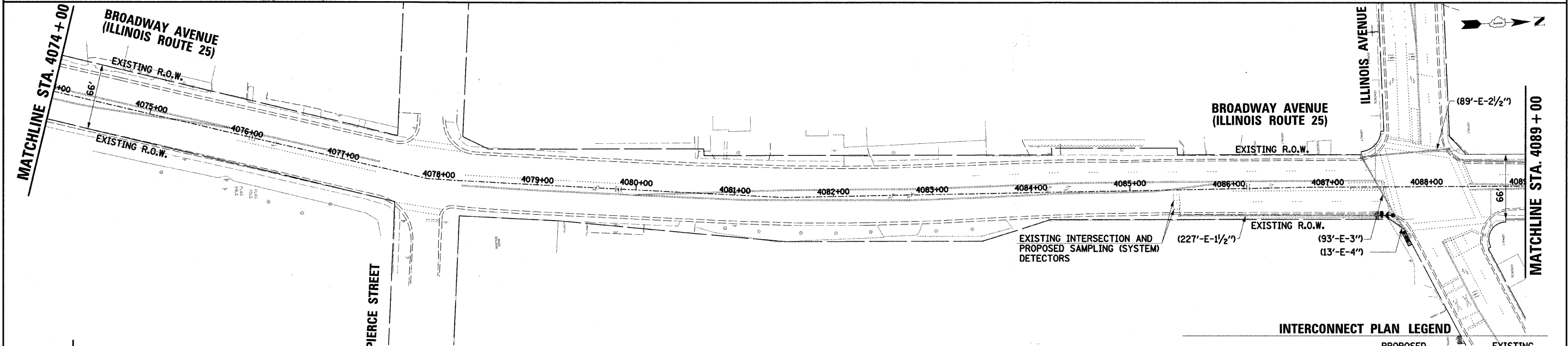




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	ADD FILE NAME	



PROFILE	SURVEYED	DATE
	PLOTTED	
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	BY	
	NO. OF WAYS CHECKED	
	STRUCTURE NOTATIONS CRPD	



**INTERCONNECT PLAN LEGEND**

	PROPOSED	EXISTING
CONTROLLER		
HANDHOLE		
DOUBLE HANDHOLE		
HEAVY-DUTY HANDHOLE		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)		
DETECTOR LOOP		
UNIT DUCT	UD	
SYSTEM	S	
INTERSECTION	IP	I
MAST ARM ASSEMBLY AND POLE, STEEL		
WIRELESS ANTENNA		
VIDEO DETECTION ZONE		

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

**RESTORATION OF WORK AREA:**  
 RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED UNLESS OTHERWISE NOTED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

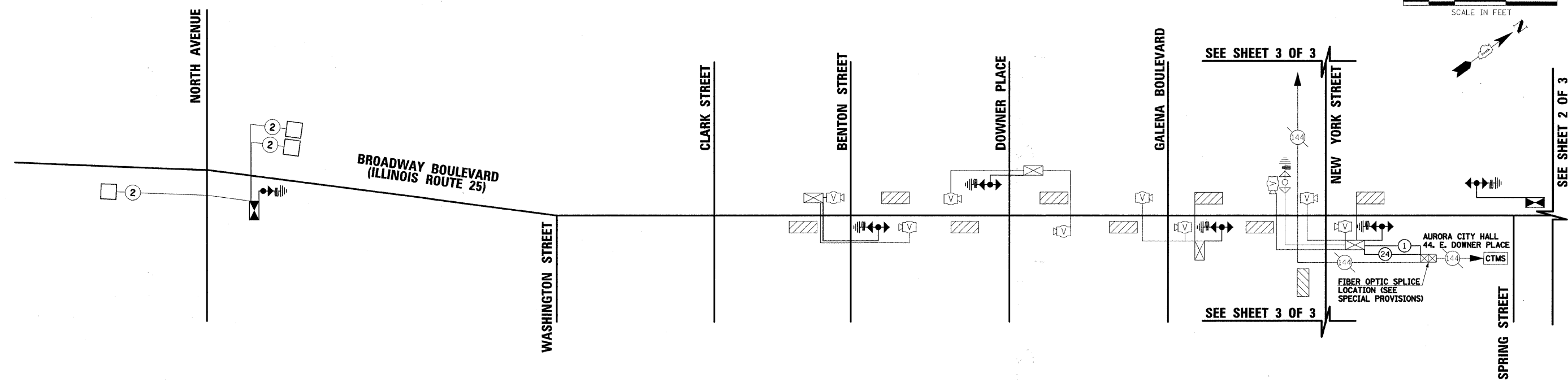
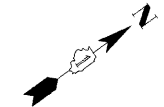
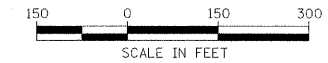
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	PLOT DATE = 6/8/2009	DATE JAN 16 2009	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**INTERCONNECT PLAN  
 (SHEET 3 OF 3)**

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2503	08-00272-00-TL	KANE	40	36
CONTRACT NO. 63177				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



PLAN	SURVEYED	DATE
	PLOTTED	
	NOTED	
	BY	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	
	NOTED	
	BY	
	NO.	

**INTERCONNECT SCHEMATIC LEGEND**

- |  |   |  |   |
|--|---|--|---|
|  | EXISTING INTERSECTION CONTROLLER                              |  | EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F          |
|  | PROPOSED INTERSECTION CONTROLLER                              |  | PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F          |
|  | EXISTING MASTER CONTROLLER                                    |  | EXISTING INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE          |
|  | PROPOSED MASTER CONTROLLER                                    |  | PROPOSED INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE          |
|  | MASTER MASTER CONTROLLER                                      |  | EXISTING INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED             |
|  | EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTORS           |  | PROPOSED INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED             |
|  | PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS           |  | EXISTING LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED                        |
|  | EXISTING INTERSECTION LOOP DETECTORS                          |  | PROPOSED LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED                        |
|  | EXISTING SAMPLING (SYSTEM) DETECTORS                          |  | EXISTING ELECTRIC CABLE 1/C (AS SPECIFIED)                                |
|  | PROPOSED SAMPLING (SYSTEM) DETECTORS                          |  | PROPOSED ELECTRIC CABLE 1/C (AS SPECIFIED)                                |
|  | EXISTING SAMPLING (SYSTEM) DETECTORS                          |  | EXISTING TELEPHONE CONNECTION   |
|  | EXISTING SAMPLING (SYSTEM) DETECTORS                          |  | PROPOSED TELEPHONE CONNECTION   |
|  | EXISTING PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS |  | EXISTING VIDEO DETECTION CAMERA   |
|  | PROPOSED PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS |  | PROPOSED VIDEO DETECTION CAMERA   |
|  | EXISTING SAMPLING (SYSTEM) PREFORMED DETECTORS                |  | EXISTING INTERSECTION AND PROPOSED SAMPLING (SYSTEM) VIDEO DETECTION ZONE |
|  | PROPOSED SAMPLING (SYSTEM) PREFORMED DETECTORS                |  | PROPOSED SAMPLING (SYSTEM) VIDEO DETECTION ZONE                           |
|  | PROPOSED CENTRALIZED TRANSPORTATION MANAGEMENT SYSTEM         |  | EXISTING WIRELESS ANTENNA   |
|  | PROPOSED WIRELESS ANTENNA                                     |  |   |

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

**INTERCONNECT SCHEDULE OF QUANTITIES**

PAY ITEM DESCRIPTION	UNIT	INTERCONNECT
TRANSCIVER	EACH	9
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	261
OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1
WIRELESS INTERCONNECT (COMPLETE)	EACH	1
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT	261
TERMINAL SERVER	EACH	1
ETHERNET SWITCH	EACH	1
CENTRALIZED SYSTEM FIELD INTEGRATION/SETUP	L SUM	1
FIBER OPTIC SPLICE	EACH	1

FILE NAME =	USER NAME = #USER#	DESIGNED -	REVISED -
#FILE#		DRAWN BAH	REVISED -
	PLOT SCALE = #SCALE#	CHECKED APS	REVISED -
	PLOT DATE = 6/8/2009	DATE JAN 16 2009	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

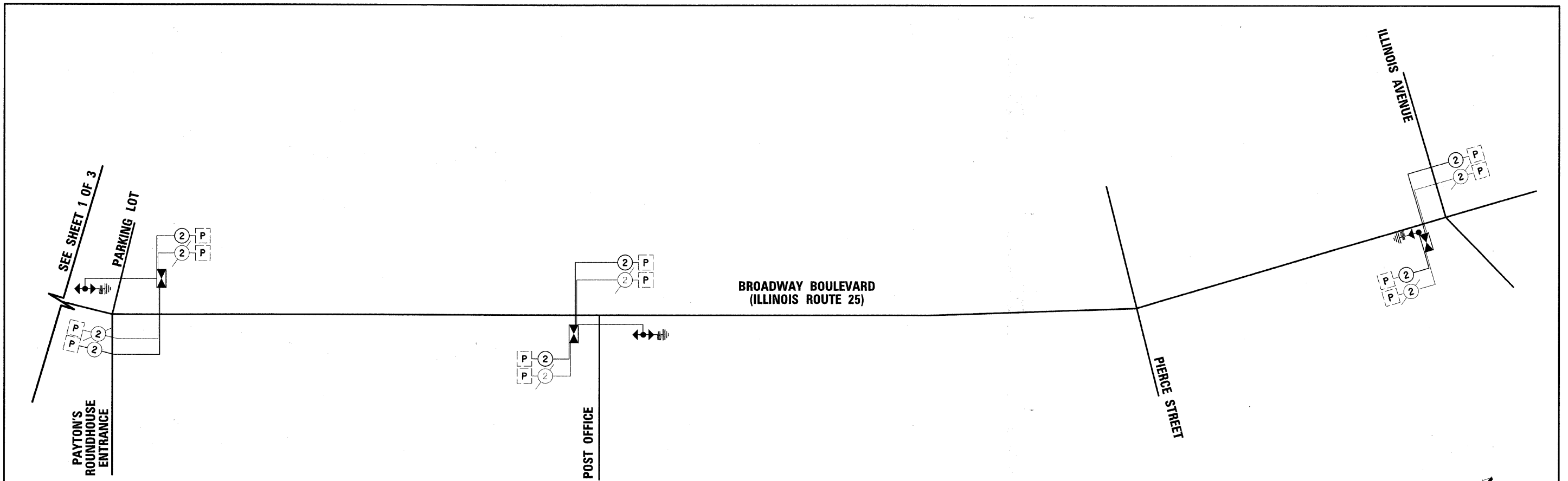
**INTERCONNECT SCHEMATIC  
SHEET 1 OF 3**

SCALE: \_\_\_\_\_ SHEET NO. \_\_\_\_\_ OF \_\_\_\_\_ SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2503	08-00272-00-TL	KANE	40	37
CONTRACT NO. 63177				
FED. ROAD DIST. NO. _____ ILLINOIS FED. AID PROJECT				

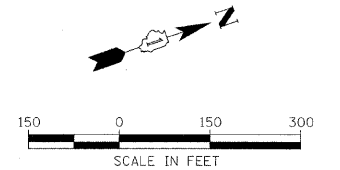
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	NO. _____	
	BY _____	
	DATE _____	
	FILE NAME _____	

PROFILE	SURVEYED	DATE
	PLOTTED	
	NOTE BOOK	
	NO. _____	
	BY _____	
	DATE _____	
	FILE NAME _____	



**INTERCONNECT SCHEMATIC LEGEND**

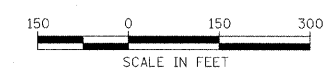
	EXISTING INTERSECTION CONTROLLER		EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F
	PROPOSED INTERSECTION CONTROLLER		PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F
	EXISTING MASTER CONTROLLER		EXISTING INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE
	PROPOSED MASTER CONTROLLER		PROPOSED INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE
	MASTER MASTER CONTROLLER		EXISTING INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED
	EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTORS		PROPOSED INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED
	PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS		EXISTING LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED
	EXISTING INTERSECTION LOOP DETECTORS		PROPOSED LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED
	PROPOSED SAMPLING (SYSTEM) DETECTORS		EXISTING ELECTRIC CABLE 1/C (AS SPECIFIED)
	EXISTING SAMPLING (SYSTEM) DETECTORS		PROPOSED ELECTRIC CABLE 1/C (AS SPECIFIED)
	PROPOSED SAMPLING (SYSTEM) DETECTORS		EXISTING TELEPHONE CONNECTION
	EXISTING SAMPLING (SYSTEM) DETECTORS PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS		PROPOSED TELEPHONE CONNECTION
	EXISTING SAMPLING (SYSTEM) DETECTORS PROPOSED SAMPLING (SYSTEM) DETECTORS		EXISTING VIDEO DETECTION CAMERA
	EXISTING PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS		PROPOSED VIDEO DETECTION CAMERA
	PROPOSED PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS		EXISTING INTERSECTION AND PROPOSED SAMPLING (SYSTEM) VIDEO DETECTION ZONE
	EXISTING SAMPLING (SYSTEM) PREFORMED DETECTORS		PROPOSED SAMPLING (SYSTEM) VIDEO DETECTION ZONE
	PROPOSED SAMPLING (SYSTEM) PREFORMED DETECTORS		EXISTING WIRELESS ANTENNA
	PROPOSED CENTRALIZED TRANSPORTATION MANAGEMENT SYSTEM		
	PROPOSED WIRELESS ANTENNA		



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

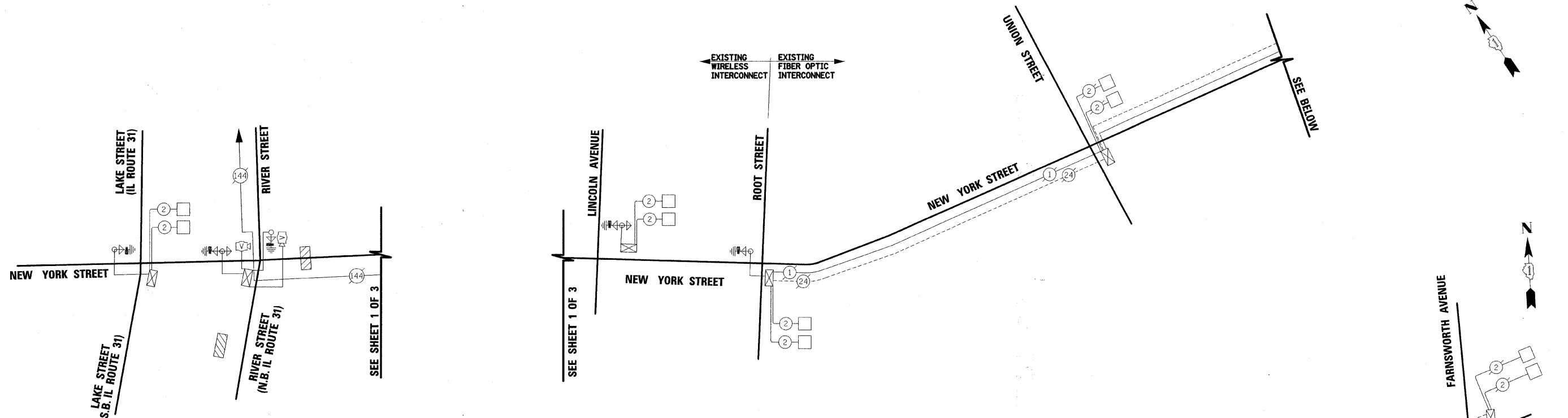
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	PLLOT DATE = 6/8/2009	DATE JAN 16 2009	REVISED -			SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT		





PLAN	SURVEYED	DATE
	PLOTTED	BY
	CHECKED	
	REVISIONS	
	NO. OF WAYS CHECKED	
	CADD FILE NAME	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	CHECKED	
	REVISIONS	
	NO. OF WAYS CHECKED	
	CADD FILE NAME	
	NO.	



**INTERCONNECT SCHEMATIC LEGEND**

- |  |  |  |   |
|--|--|--|---|
|  | EXISTING INTERSECTION CONTROLLER   |  | EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F          |
|  | PROPOSED INTERSECTION CONTROLLER   |  | PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F          |
|  | EXISTING MASTER CONTROLLER   |  | EXISTING INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE          |
|  | PROPOSED MASTER CONTROLLER   |  | PROPOSED INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE          |
|  | MASTER MASTER CONTROLLER   |  | EXISTING INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED             |
|  | EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTORS                                      |  | PROPOSED INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED             |
|  | PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS                                      |  | EXISTING INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED             |
|  | EXISTING INTERSECTION LOOP DETECTORS   |  | PROPOSED INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED             |
|  | PROPOSED INTERSECTION LOOP DETECTORS   |  | EXISTING LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED                        |
|  | EXISTING SAMPLING (SYSTEM) DETECTORS   |  | PROPOSED LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED                        |
|  | PROPOSED SAMPLING (SYSTEM) DETECTORS   |  | EXISTING LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED                        |
|  | EXISTING SAMPLING (SYSTEM) DETECTORS PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS |  | EXISTING ELECTRIC CABLE 1/C (AS SPECIFIED)                                |
|  | EXISTING SAMPLING (SYSTEM) DETECTORS PROPOSED SAMPLING (SYSTEM) DETECTORS                |  | PROPOSED ELECTRIC CABLE 1/C (AS SPECIFIED)                                |
|  | EXISTING PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS                            |  | EXISTING TELEPHONE CONNECTION   |
|  | PROPOSED PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS                            |  | PROPOSED TELEPHONE CONNECTION   |
|  | EXISTING SAMPLING (SYSTEM) DETECTORS PREFORMED DETECTORS                                 |  | EXISTING VIDEO DETECTION CAMERA   |
|  | PROPOSED SAMPLING (SYSTEM) PREFORMED DETECTORS   |  | PROPOSED VIDEO DETECTION CAMERA   |
|  | PROPOSED CENTRALIZED TRANSPORTATION MANAGEMENT SYSTEM                                    |  | EXISTING INTERSECTION AND PROPOSED SAMPLING (SYSTEM) VIDEO DETECTION ZONE |
|  | PROPOSED WIRELESS ANTENNA  |  | PROPOSED SAMPLING (SYSTEM) VIDEO DETECTION ZONE                           |
|  | EXISTING WIRELESS ANTENNA  |  | EXISTING WIRELESS ANTENNA   |

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

FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>INTERCONNECT SCHEMATIC SHEET 3 OF 3</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN <i>BAH</i>	REVISED -			2503	08-00272-00-TL	KANE	40	39	
		CHECKED <i>APS</i>	REVISED -			CONTRACT NO. 63177					
		DATE <i>JAN 16 2009</i>	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

