

FOR INDEX OF SHEETS, SEE SHEET NO. 2

FOR LIST OF HIGHWAY STANDARDS, SEE SHEET NO. 2

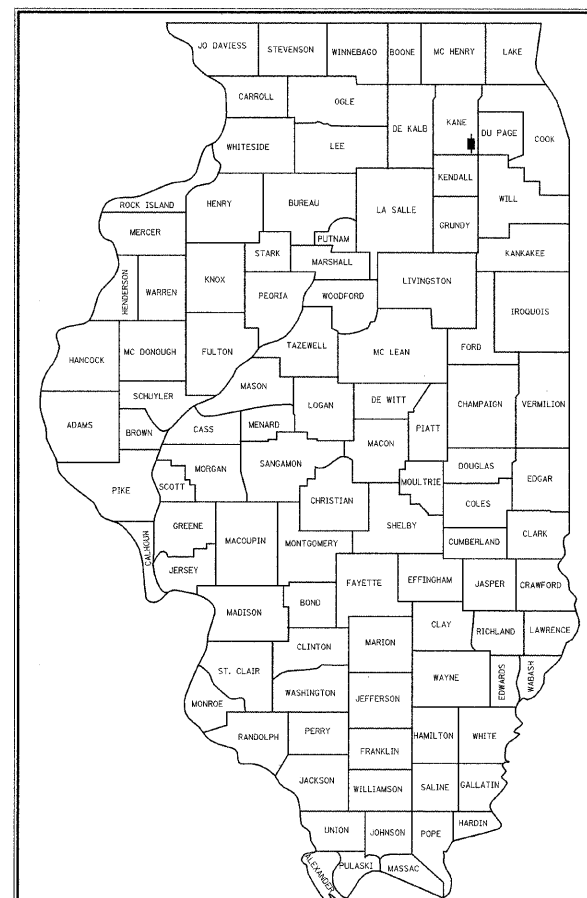
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED
FEDERAL AID HIGHWAY

CONGESTION MITIGATION AIR QUALITY
FAP 360 (FARNSWORTH AVENUE)
FROM EAST NEW YORK STREET TO MOLITOR ROAD
TRAFFIC SIGNAL INTERCONNECT
SECTION 09-00289-00-TL
PROJECT NO. CMM-9003 (612)
KANE COUNTY
JOB NO.: C-91-455-10

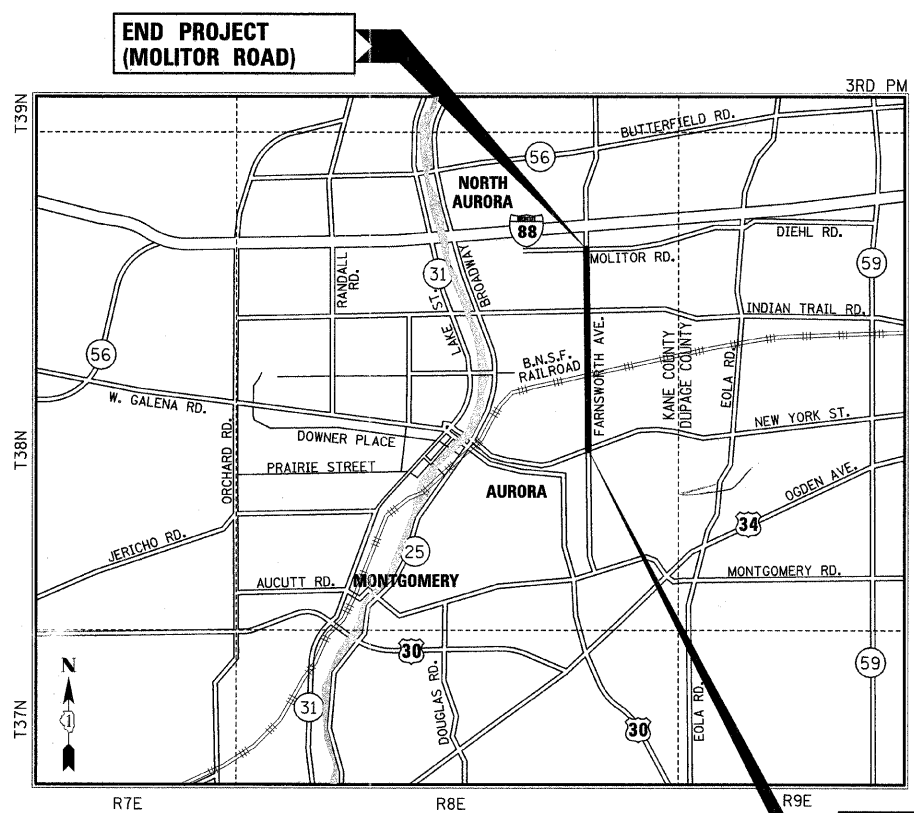
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	09-00289-00-TL	KANE	37	1

CONTRACT NO. 63627



LOCATION OF SECTION INDICATED THIS: - [thick line] -

THIS IMPROVEMENT IS LOCATED
IN THE CITY OF AURORA

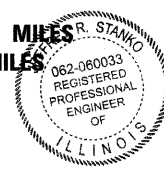


END PROJECT
(MOLITOR ROAD)

BEGIN PROJECT
(EAST NEW YORK STREET)

LOCATION MAP
SCALE : N.T.S

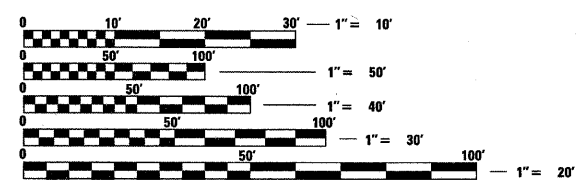
PROJECT GROSS LENGTH = 14,100.00 FEET = 2.67 MILES
PROJECT NET LENGTH = 14,100.00 FEET = 2.67 MILES



JEFFREY R. STANKO, P.E.
NO. 062-060033
EXPIRES: 11/30/2011
HR GREEN, INC.

EXISTING ADT (2010) = 23,400
POSTED / DESIGN SPEED = 30-35 M.P.H.
DESIGN DESIGNATION = MAJOR ARTERIAL

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: 63627

DISTRICT 1 - PROGRAM AND OFFICE ENGINEER CHARLES F. RIDDLE, P.E. (847) 705-4406, SCHAUMBURG

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

APPROVED July 19th 2011
Kenneth Schmitt
CITY OF AURORA, CITY ENGINEER /DIRECTOR OF PUBLIC WORKS

PASSED July 21 2011
Charles Schmitt
DISTRICT 1 ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID
BASED ON LIMITED
REVIEW July 21, 2011
Diane M. O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION 1 ENGINEER

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651 PRAIRIE POINTE, SUITE 201 | YORKVILLE, ILLINOIS 60560
Phone: 630.553.7660 | Toll Free: 800.728.7805 | Fax: 630.553.7646 | HRGreen.com
ILLINOIS PROFESSIONAL DESIGN FIRM #184-001322

PLAN	SURVEYED	PLOTTED	CHECKED	DATE
				BY
NOTE BOOK NO.	RT. OF WAY CHECKED	CADD FILE NAME		

PROFILE	SURVEYED	PLOTTED	CHECKED	DATE
				BY
NOTE BOOK NO.	STRUCTURE NOTATION DPKID			

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LIST OF HIGHWAY STANDARDS

000001 - 06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
424001 - 05	CURB RAMPS FOR SIDEWALKS
701501 - 06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701601 - 07	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701602 - 05	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL TURN LANE
701606 - 07	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701 - 07	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801 - 04	LANE CLOSURE, MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
701901 - 01	TRAFFIC CONTROL DEVICES
720001 - 01	SIGN PANEL MOUNTING DETAILS
720006 - 02	SIGN PANEL ERECTION DETAILS
720016 - 02	MAST ARM MOUNTED STREET NAME SIGNS
805001 - 01	ELECTRICAL SERVICE INSTALLATION DETAILS
814001 - 02	HANDHOLES
814006 - 02	DOUBLE HANDHOLES
825011 - 01	LIGHTING CONTROLLER, PEDESTAL MOUNTED, 240 V
857001 - 01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
862001 - 01	UNINTERRUPTABLE POWER SUPPLY (UPS)
873001 - 02	TRAFFIC SIGNAL GROUNDING & BONDING
877011 - 04	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
878001 - 08	CONCRETE FOUNDATION DETAILS
880006 - 01	TRAFFIC SIGNAL MOUNTING DETAILS
886001 - 01	DETECTOR LOOP INSTALLATIONS
886006 - 01	TYPICAL LAYOUTS FOR DETECTION LOOPS



USER NAME = Mfaller	DESIGNED <i>JRS</i>	REVISED -
	DRAWN <i>JRS</i>	REVISED -
PLOT SCALE =	CHECKED <i>APS</i>	REVISED -
PLOT DATE = 7/1/2011	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

INDEX OF SHEETS / LIST OF HIGHWAY STANDARDS			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	09-00289-00-TL	KANE	37	2
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 63627	

PLAN	DATE	BY
	DATE	BY
SURVEYED	DATE	BY
	DATE	BY
ALIGNED	DATE	BY
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CHECKED	DATE	BY
	DATE	BY
FILE NAME	DATE	BY
	DATE	BY

PROFILE	DATE	BY
	DATE	BY
GRADES	DATE	BY
	DATE	BY
CHECKED	DATE	BY
	DATE	BY
NOTATIONS	DATE	BY
	DATE	BY

CODE NUMBER	PAY ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	E. NEW YORK STREET	LIBERTY STREET	FRONT STREET	SHEFFER ROAD	INDIAN TRAIL	RECKINGER ROAD	MOLITOR ROAD	INTERCONNECT
				0021	0021	0021	0021	0021	0021	0021	0021
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	48							48	
87800200	DRILL EXISTING HANDHOLE	EACH	9								9
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	7							7	
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4							4	
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	5							5	
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8			4		2		2	
88102747	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	17		4	2	4	3	4		
88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	12							12	
88500100	INDUCTIVE LOOP DETECTOR	EACH	52		8	9	10	15	10		
88600100	DETECTOR LOOP, TYPE 1	FOOT	200		40	40	40	40	40		
88700200	LIGHT DETECTOR	EACH	2							2	
88700300	LIGHT DETECTOR AMPLIFIER	EACH	14	2	2	2	2	2	2	2	
88800100	PEDESTRIAN PUSH-BUTTON	EACH	42		8	8	8	8	8	2	
89502215	MODIFY EXISTING CONTROLLER FOUNDATION	EACH	5		1	1	1	1	1		
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	30078		1931	1585	2256.5	2456	1981.5	7259.5	12608
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	6		1	1	1	1	1	1	
89502380	REMOVE EXISTING HANDHOLE	EACH	9							9	
89502382	REMOVE EXISTING DOUBLE HANDHOLE	EACH	1							1	
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	9							9	
X0323924	SYSTEM IMPLEMENTATION, EQUIPMENT INTEGRATION AND SUPPORT	L SUM	1								
X0324256	FIBER OPTIC CABLE SPLICE	EACH	1								1
X0326266	ETHERNET SWITCH	EACH	2						1		1
X0326812	CAT 5 ETHERNET CABLE	FOOT	955		146.5	242.5	197.5	188.5		180	
X0326885	VIDEO DETECTION SYSTEM	EACH	1							1	
X8570000	SMART TRAFFIC MONITORING SYSTEM	L SUM	1								
X8730250	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	266							265.5	
X8803082	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	13			9	4				
X8803084	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	3			1	2				
X8803088	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	5			1	4				
XX007251	INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	5		1	1	1	1		1	
XX007952	TERMINAL SERVER	EACH	1								1
XX007989	SIGNAL HEAD, LED, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	5			1	4				
XX007993	CENTRALIZED SYSTEM FIELD INTEGRATION / SETUP	L SUM	1								1
Z0033056	OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1								1
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1								
XX008565	EVP CONFIRMATION BEACON, LED RETROFIT	EACH	10		2	2	2	2	2		



USER NAME = Mfeller
 PLOT SCALE =
 PLOT DATE = 7/18/2011

DESIGNED JRS
 DRAWN JRS
 CHECKED APS
 DATE -

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

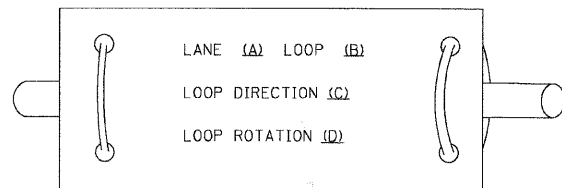
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	09-00289-00-TL	KANE	37	4
FED. ROAD DIST. NO. - (ILLINOIS) FED. AID PROJECT			CONTRACT NO. 63627	

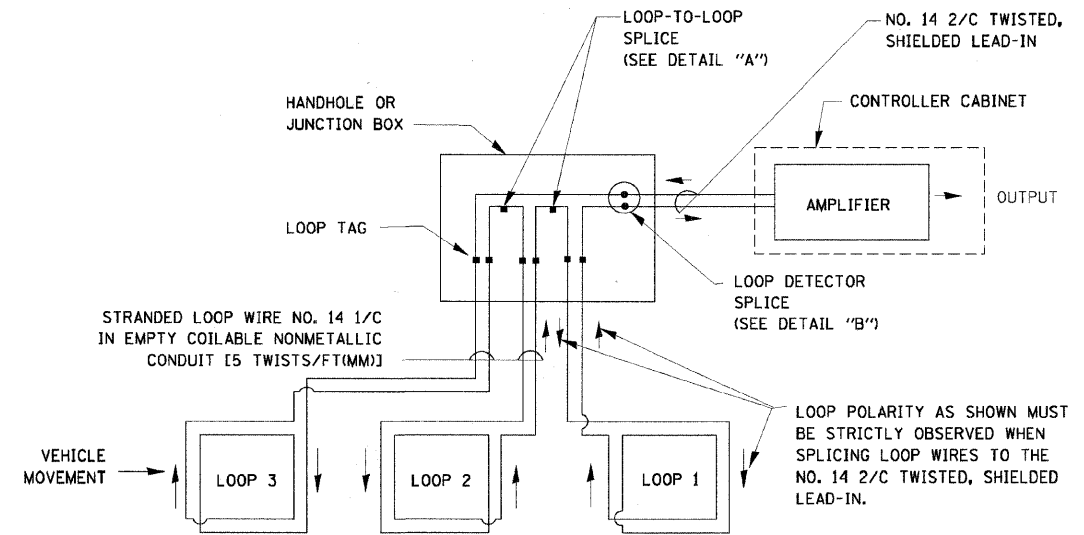
LOOP DETECTOR NOTES

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT 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 DIVESHOLES 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.

LOOP LEAD-IN CABLE TAG

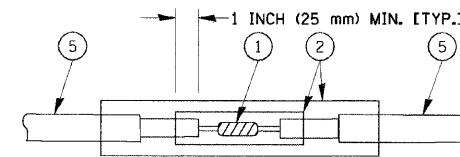


- A. LANE #1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

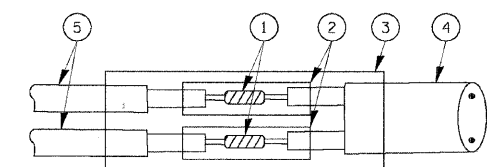


DETECTOR LOOP WIRING SCHEMATIC

- 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.

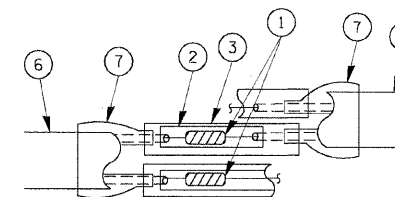


**DETAIL "A"
LOOP-TO-LOOP SPLICE**

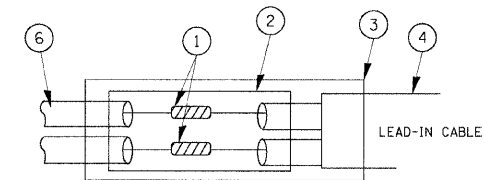


**DETAIL "B"
LOOP-TO-CONTROLLER SPLICE**

TYPE I LOOP



**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.
- 6 PRE-FORMED LOOP
- 7 XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS, TYCO CBR-2 OR APPROVED EQUAL

FILE NAME =	USER NAME = kanthaphixaybo	DESIGNED - DAD	REVISED -
et:\work\NPWIDOT\KANTHAPHIXAYBO\081126	4\streff\c\legend.v7.dgn	DRAWN - BCK	REVISED -
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	PLU1 DATE = 10/6/2009	DATE - 10/28/09	REVISED -

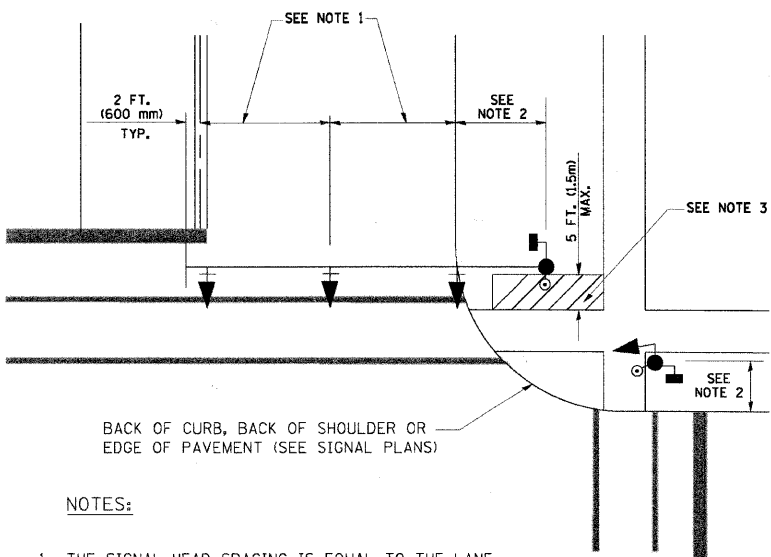
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: SHEET NO. 1 OF 6 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	09-00289-00-TL	KANE	37	5
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 63627	

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST
 MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.

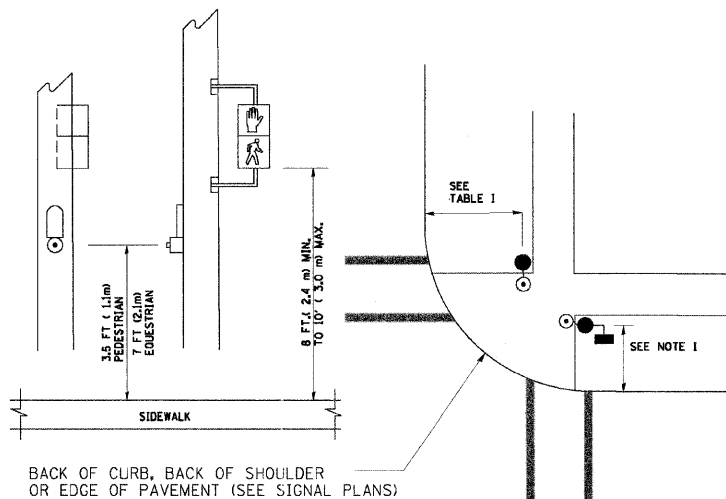


BACK OF CURB, BACK OF SHOULDER OR EDGE OF PAVEMENT (SEE SIGNAL PLANS)

NOTES:

1. THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST

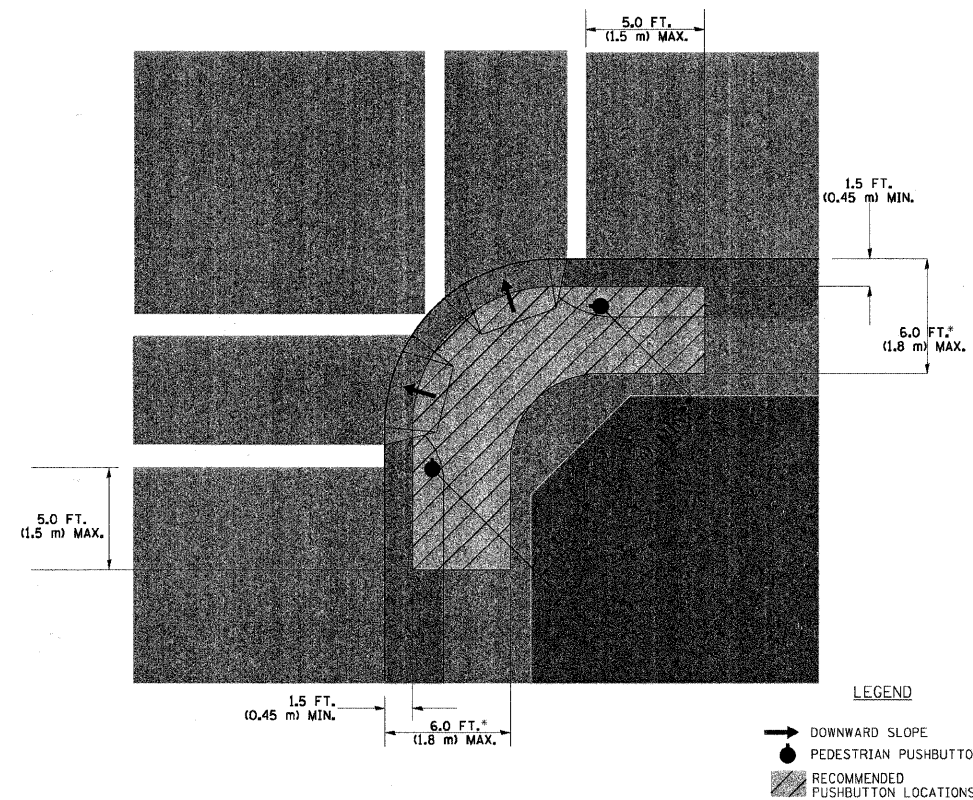


BACK OF CURB, BACK OF SHOULDER OR EDGE OF PAVEMENT (SEE SIGNAL PLANS)

NOTES:

1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

RECOMMENDED PUSHBUTTON LOCATIONS



- WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

NOTES:

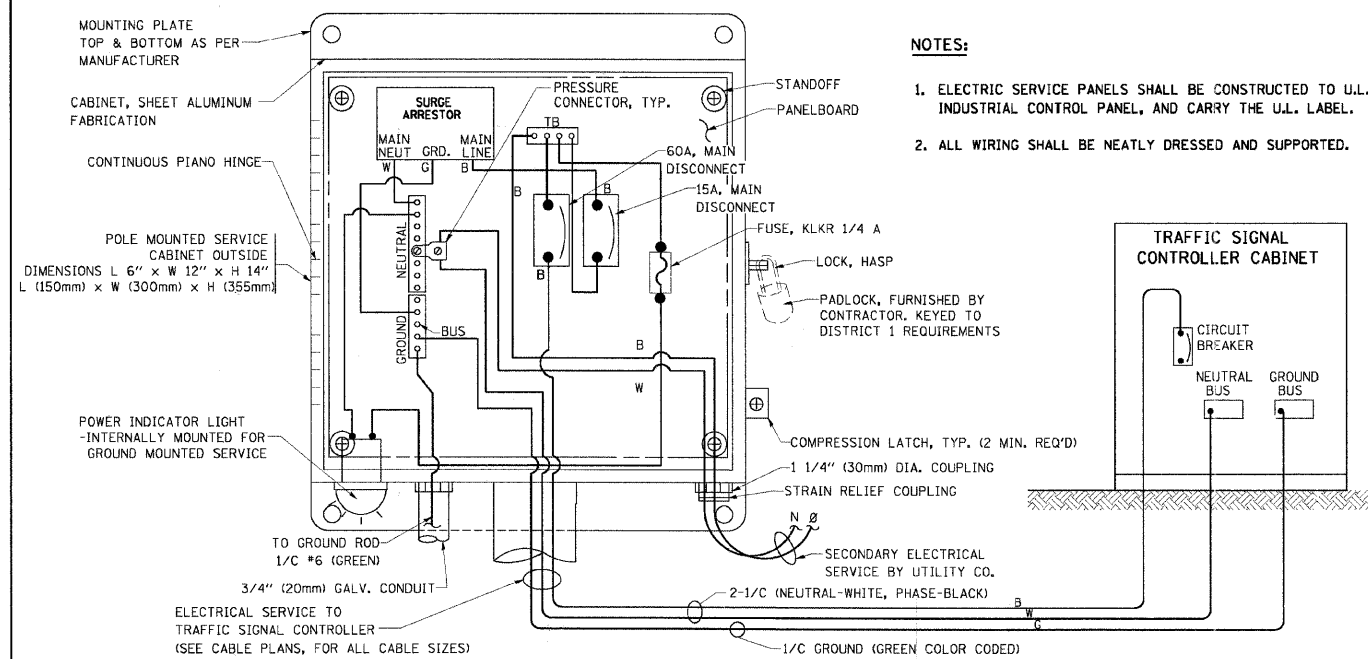
1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

TRAFFIC SIGNAL EQUIPMENT OFFSET

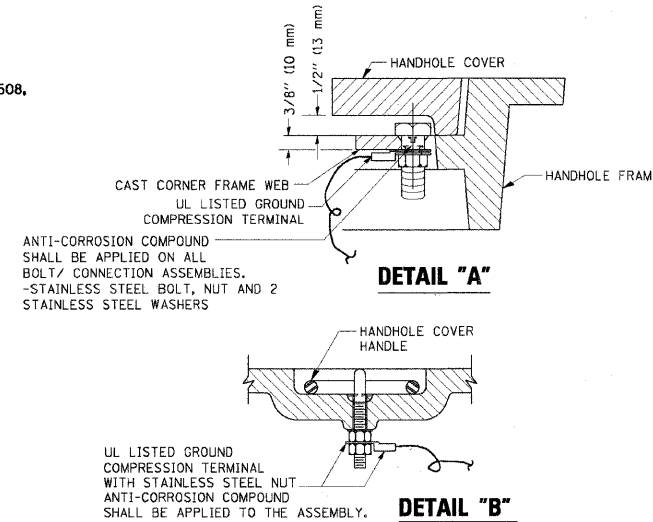
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

NOTES:

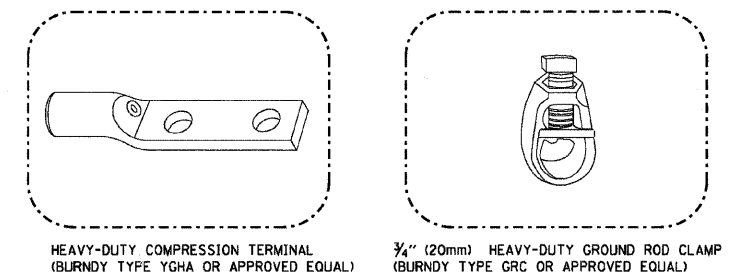
1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TO THE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.



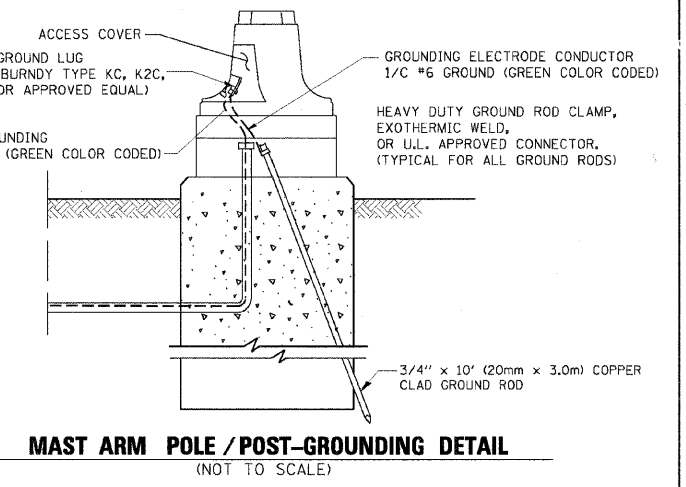
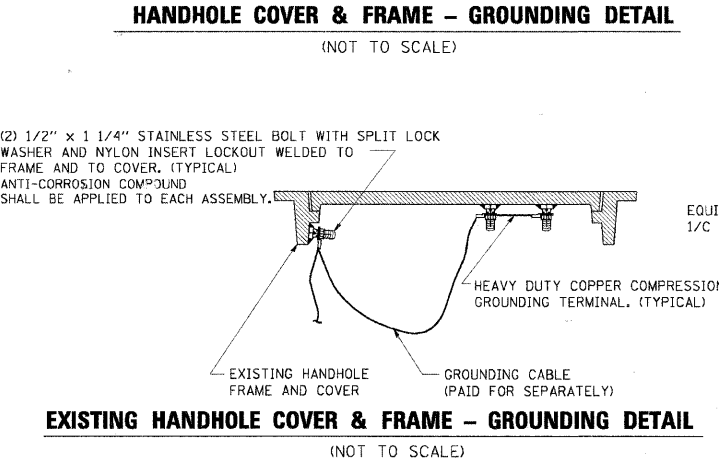
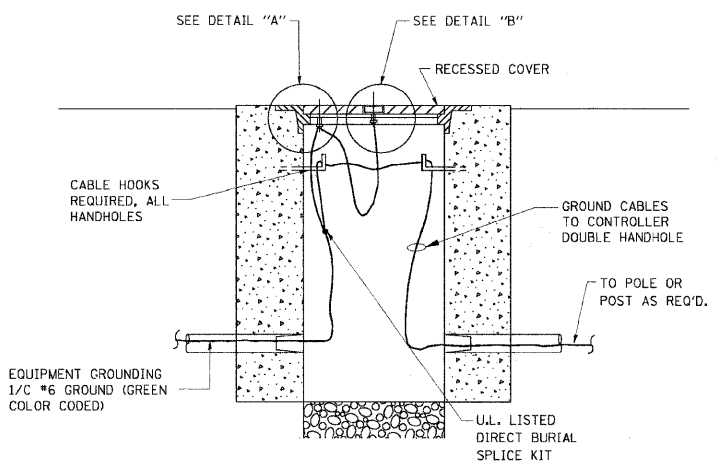
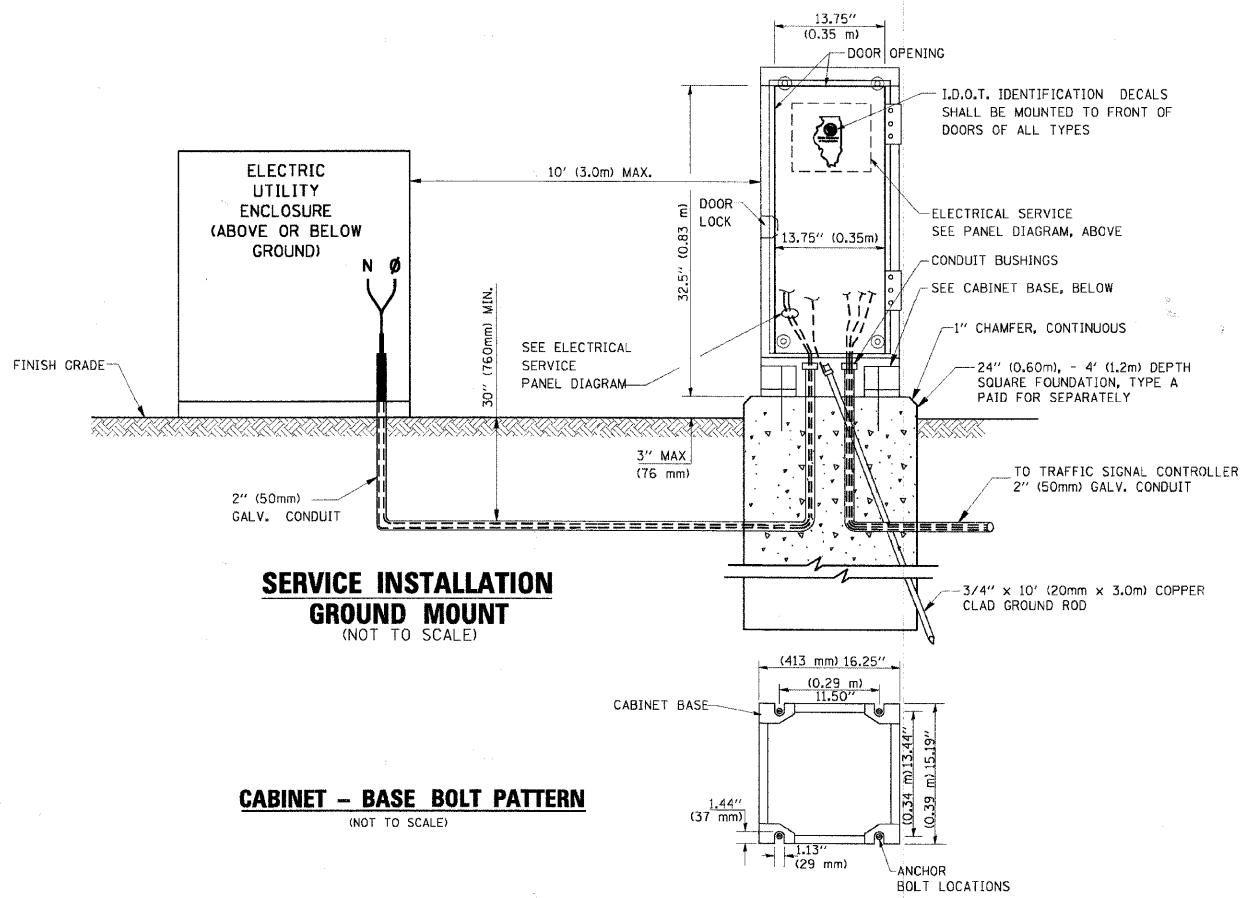
ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
 (NOT TO SCALE)



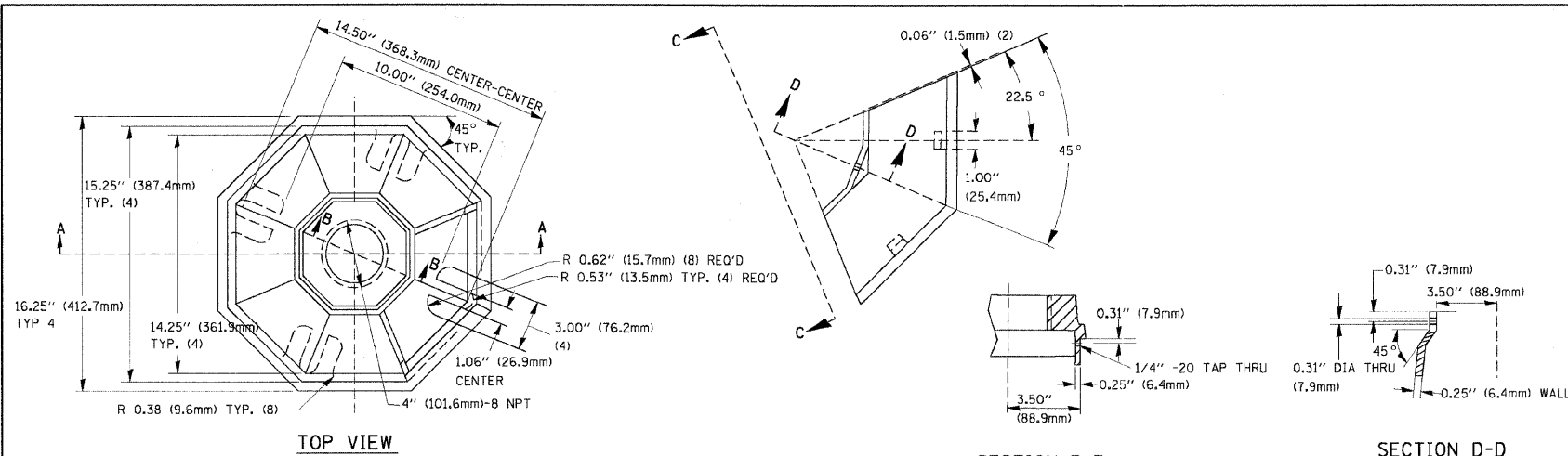
- NOTES:**
- GROUNDING SYSTEM**
1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
 2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
 3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
 4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



- NOTES:**
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
 - GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES. 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES. 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



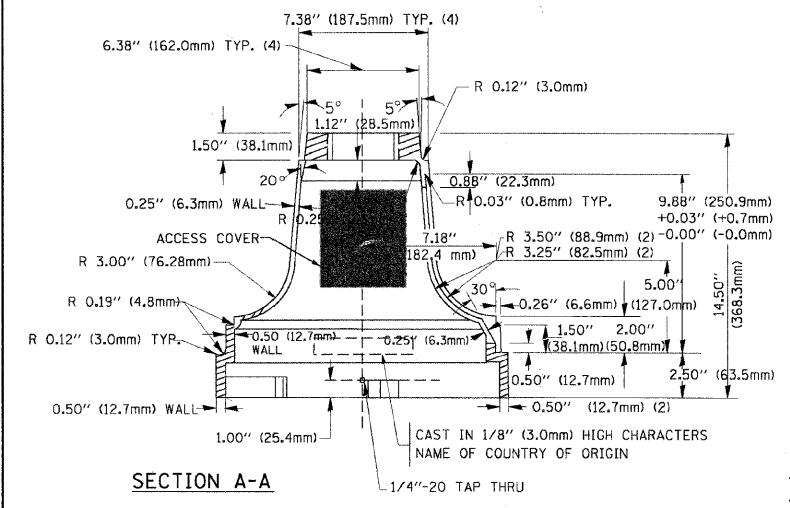
FILE NAME =	USER NAME = kanthaphuaybu	DESIGNED - DAD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwwork\FWIDOT\KANTHAPHUAYBU\d01126	4\traffic.legend.v7.dgn	DRAWN - BCK	REVISED -			360	09-00289-00-TL	KANE	37	7	
PLOT SCALE = 20,0000 / IN.		CHECKED - DAD	REVISED -			CONTRACT NO. 63627					
PLOT DATE = 12/6/2009		DATE - 10/28/09	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					



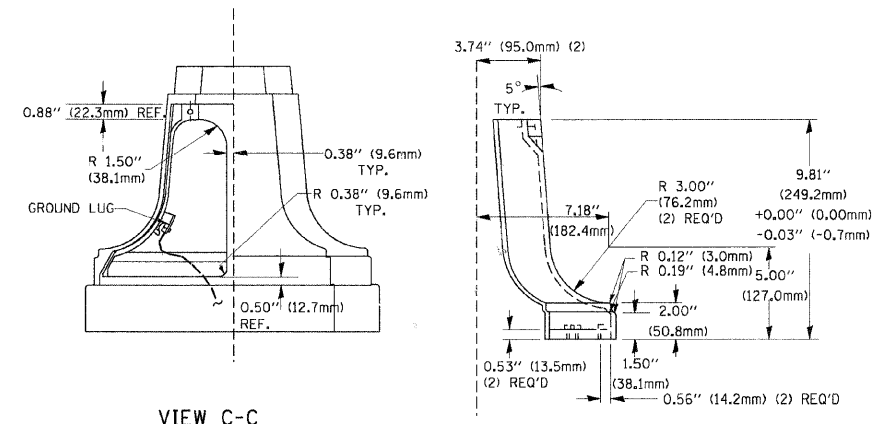
TOP VIEW

SECTION B-B

SECTION D-D

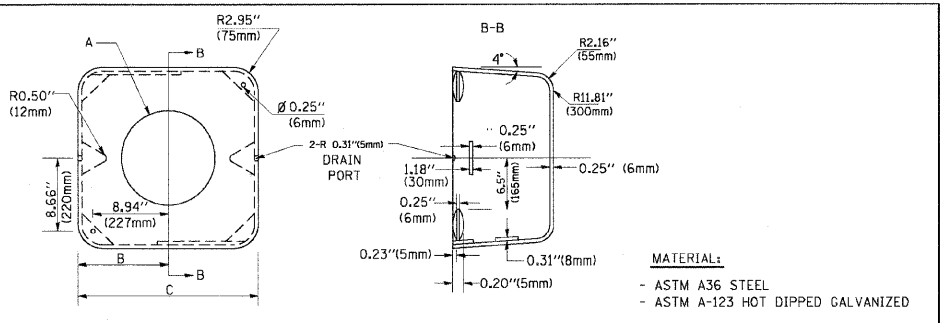


SECTION A-A



VIEW C-C

TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A

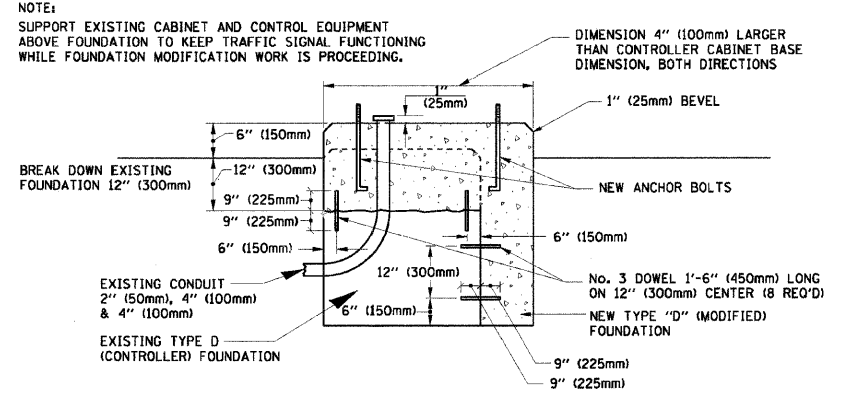


SHROUD

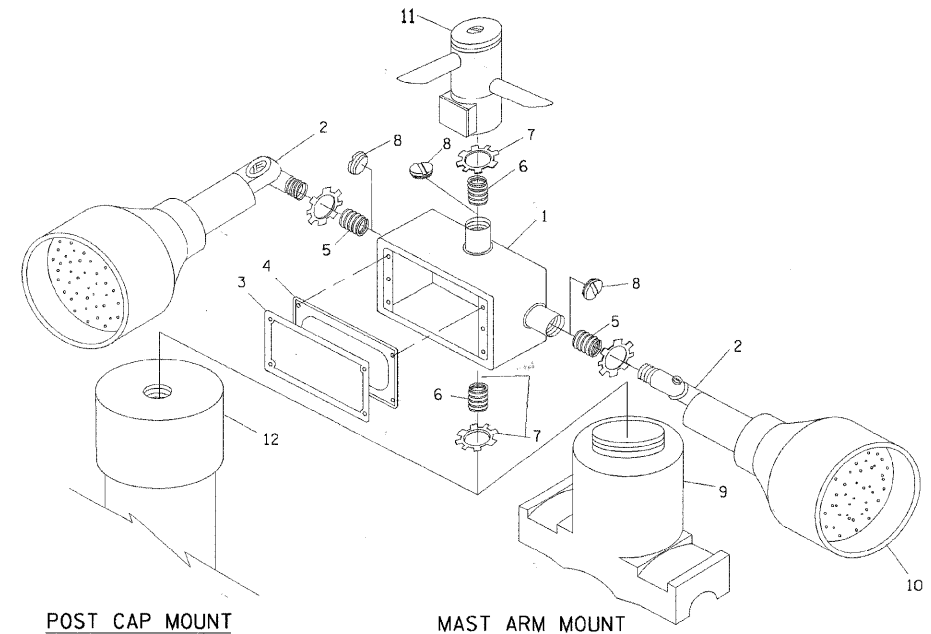
	A	B	C	HEIGHT	WEIGHT
VARIES	9.5\" (241mm)	19\" (483mm)	7\" (178mm) - 12\" (300mm)	7\" (178mm) - 12\" (300mm)	53 lbs (24kg)
VARIES	10.75\" (273mm)	21.5\" (546mm)	7\" (178mm) - 12\" (300mm)	7\" (178mm) - 12\" (300mm)	68 lbs (31 kg)
VARIES	13.0\" (330mm)	26\" (660mm)	7\" (178mm) - 12\" (300mm)	7\" (178mm) - 12\" (300mm)	81 lbs (37 kg)
VARIES	18.5\" (470mm)	37\" (940mm)	7\" (178mm) - 12\" (300mm)	7\" (178mm) - 12\" (300mm)	126 lbs (57 kg)

NOTES:

- DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
- THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
- THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.



MODIFY EXISTING TYPE "D" FOUNDATION



POST CAP MOUNT

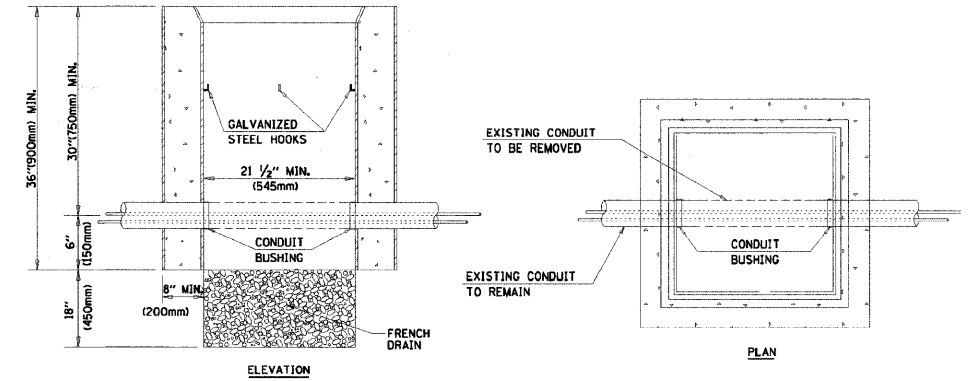
MAST ARM MOUNT

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	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

NOTES:

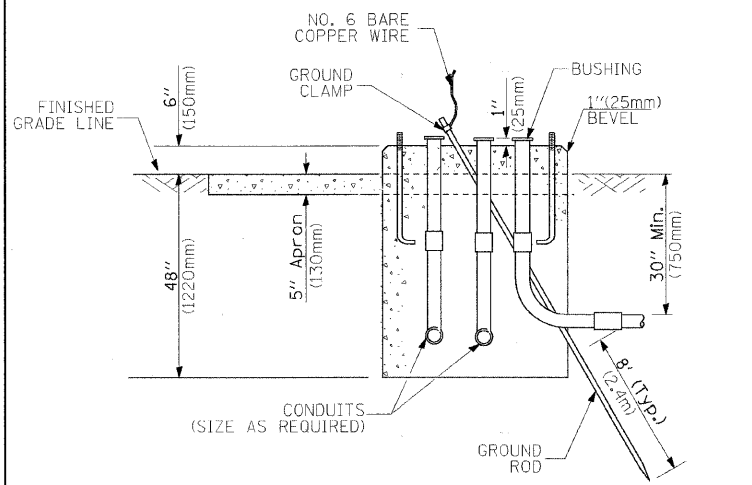
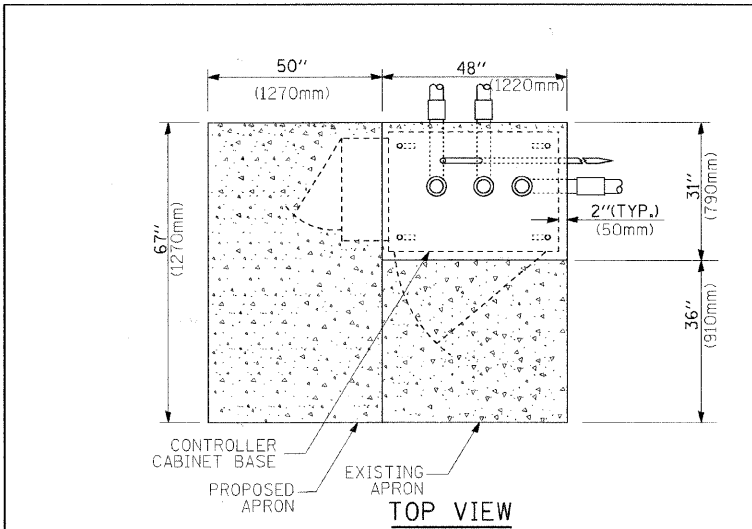
- ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
- ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
- WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION 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.



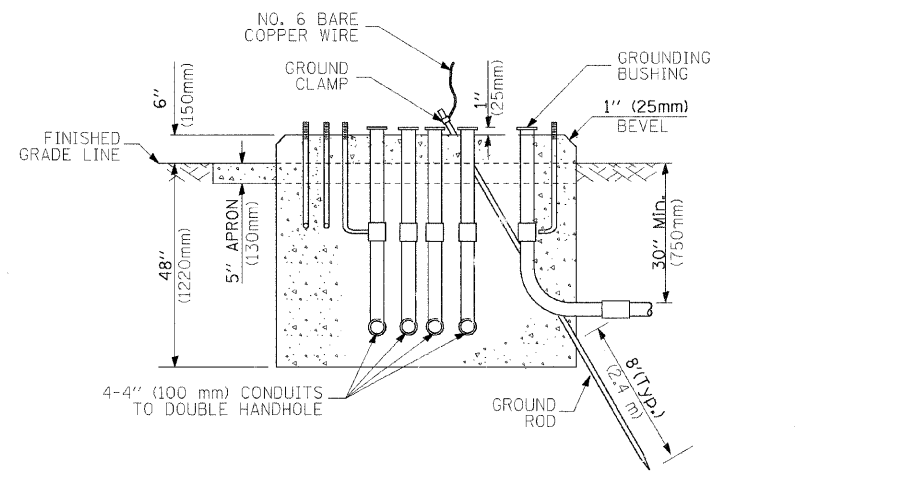
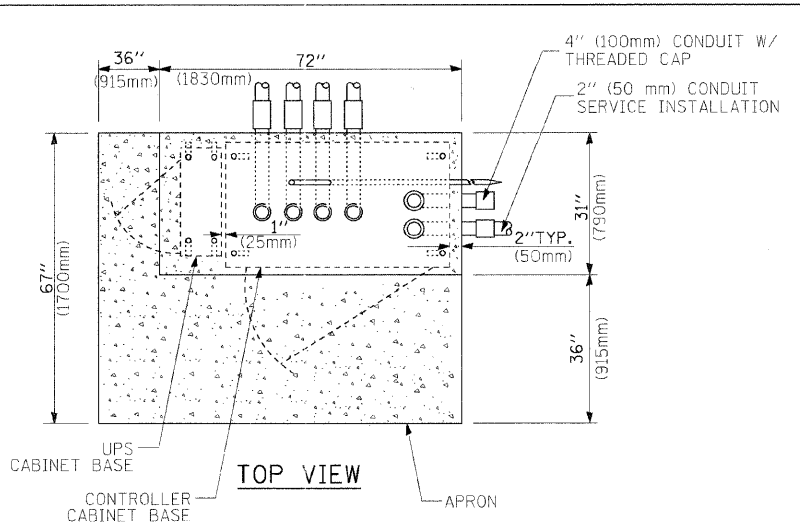
HANDHOLE TO INTERCEPT EXISTING CONDUIT

NOTES:

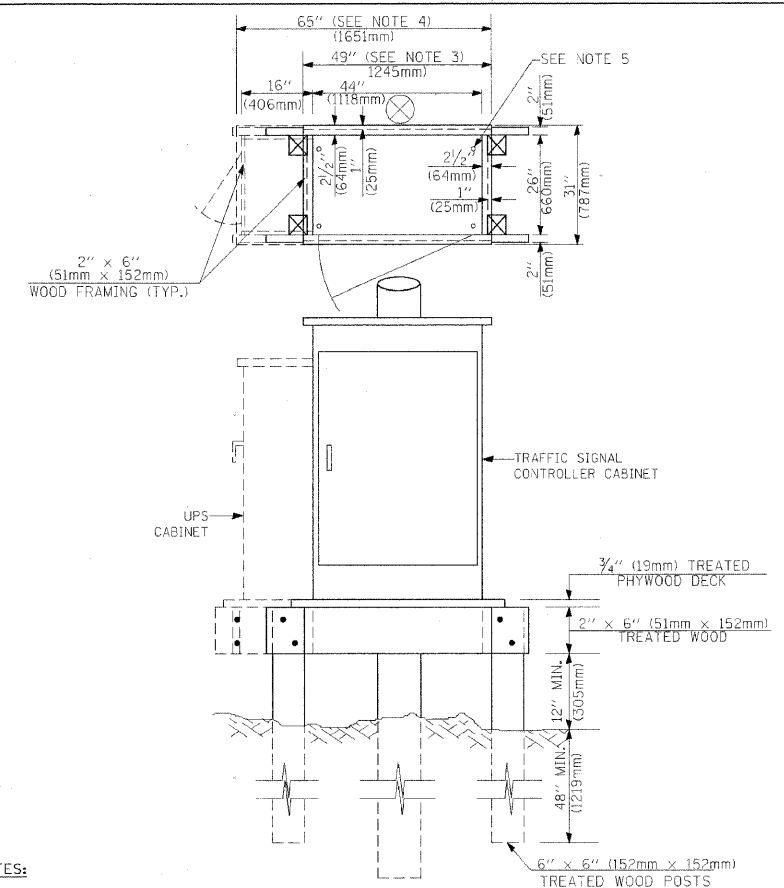
- HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
- REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCIDENTAL TO THE HANDHOLE.



**TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**



**TYPE C
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**



- NOTES:**
1. BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
 2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
 3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
 4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
 5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
 6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

**TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM**

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

CABLE SLACK

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

VERTICAL CABLE LENGTH

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)

DEPTH OF FOUNDATION

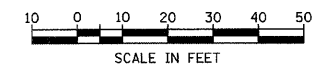
Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

- NOTES:**
1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & Structures should be contacted for a revised design if other conditions are encountered.
 2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
 3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations.
 4. For mast arm assemblies with dual arms refer to state standard 878001.

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

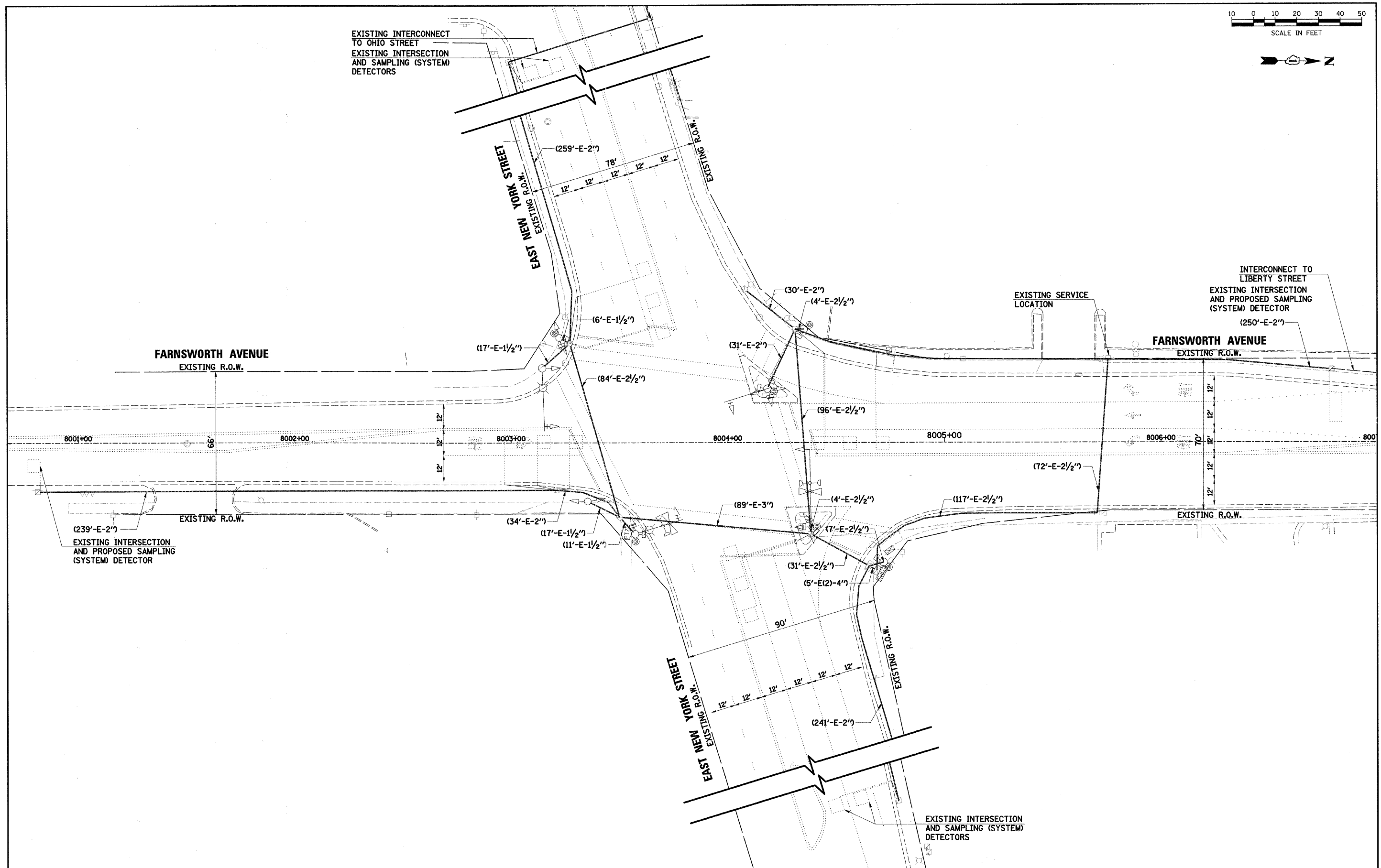
TRAFFIC SIGNAL LEGEND

ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED
CONTROLLER CABINET				EMERGENCY VEHICLE LIGHT DETECTOR				ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE			
RAILROAD CONTROL CABINET				CONFIRMATION BEACON				COAXIAL CABLE			
COMMUNICATIONS CABINET				HANDHOLE				VENDOR CABLE FOR CAMERA			
MASTER CONTROLLER				HEAVY DUTY HANDHOLE				COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED			
MASTER MASTER CONTROLLER				DOUBLE HANDHOLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F			
UNINTERRUPTIBLE POWER SUPPLY				JUNCTION BOX				FIBER OPTIC CABLE NO. 62.5/125, MM12F			
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT				GALVANIZED STEEL CONDUIT IN TRENCH (T) OR PUSHED (P)				FIBER OPTIC CABLE NO. 62.5/125, MM12F			
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT				TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE				FIBER OPTIC CABLE NO. 62.5/125, (NUMBER OF FIBERS & TYPE TO BE NOTED ON PLANS)			
STEEL MAST ARM ASSEMBLY AND POLE				COMMON TRENCH				GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE			
ALUMINUM MAST ARM ASSEMBLY AND POLE				COILABLE NONMETALLIC CONDUIT (EMPTY)				CONTROLLER CABINET AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE				SYSTEM ITEM		S	S	STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA				INTERSECTION ITEM		I	IP	ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED			
SIGNAL POST				REMOVE ITEM	R			STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED			
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM				RELOCATE ITEM	RL			SIGNAL POST AND FOUNDATION TO BE REMOVED			
GUY WIRE				ABANDON ITEM	A			INTERSECTION & SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD				12" (300mm) TRAFFIC SIGNAL SECTION				SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)				12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE				EXISTING INTERSECTION LOOP DETECTOR			
SIGNAL HEAD WITH BACKPLATE				SIGNAL FACE				PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD OPTICALLY PROGRAMMED				SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD				EXISTING PREFORMED INTERSECTION LOOP DETECTOR			
FLASHER INSTALLATION (S DENOTES SOLAR POWER)				12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL				PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
PEDESTRIAN SIGNAL HEAD				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED				PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID				PREFORMED SAMPLING (SYSTEM) DETECTOR			
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR				PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER				RAILROAD SYMBOLS			
ILLUMINATED SIGN "NO LEFT TURN"				RADIO INTERCONNECT				RAILROAD CONTROL CABINET			
ILLUMINATED SIGN "NO RIGHT TURN"				RADIO REPEATER				RAILROAD CANTILEVER MAST ARM			
DETECTOR LOOP, TYPE I				DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED				FLASHING SIGNAL			
PREFORMED DETECTOR LOOP				GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)				CROSSING GATE			
MICROWAVE VEHICLE SENSOR								CROSSBUCK			
VIDEO DETECTION CAMERA											
VIDEO DETECTION ZONE											
PAN, TILT, ZOOM CAMERA											
WIRELESS DETECTOR SENSOR											
WIRELESS ACCESS POINT											



PLAN	SUBMITTED	DATE
	PLOTTED	
	GRADES CHECKED	
	STRUCTURE NOTATION CHECKED	
	NOTE BOOK NO.	
	ADD FILE NAME	

PROFILE	SUBMITTED	DATE
	PLOTTED	
	GRADES CHECKED	
	STRUCTURE NOTATION CHECKED	
	NOTE BOOK NO.	
	ADD FILE NAME	



HRGreen.com
Illinois Professional Design Firm
#194-001322

USER NAME = Mfeiler
PLOT SCALE =
PLOT DATE = 7/1/2011

DESIGNED	JRS	REVISED	-
DRAWN	JRS	REVISED	-
CHECKED	APS	REVISED	-
DATE	-	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

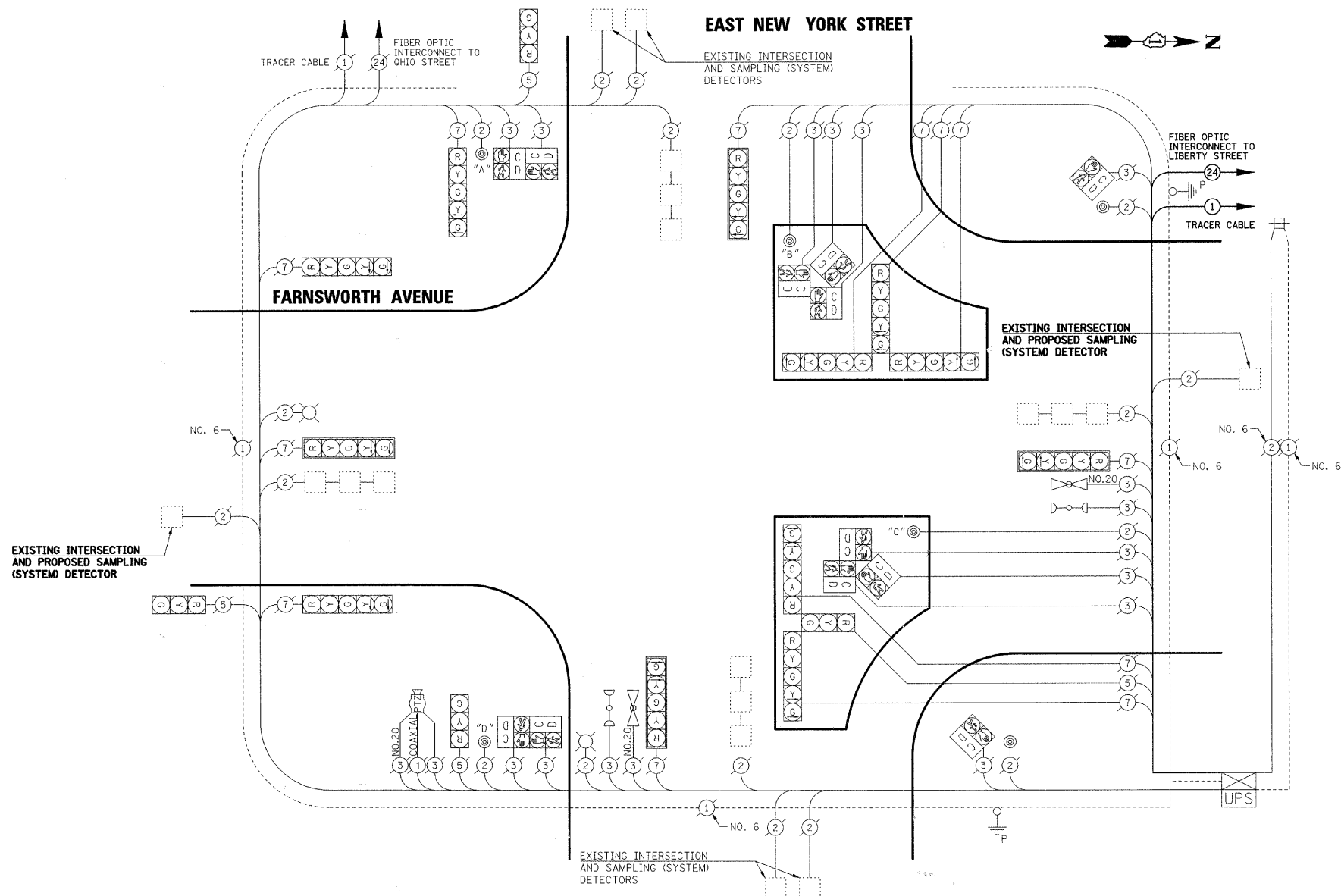
EXISTING TRAFFIC SIGNAL PLAN
EAST NEW YORK STREET

SCALE:	SHEET NO.	OF	SHEETS	STA.	TO	STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	09-00289-00-TL	KANE	37	11
CONTRACT NO.			63627	
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

DATE	
BY	
PLAN	
NO.	
DATE	
BY	
PROFILE	
NO.	
DATE	
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PROFILE	
NO.	

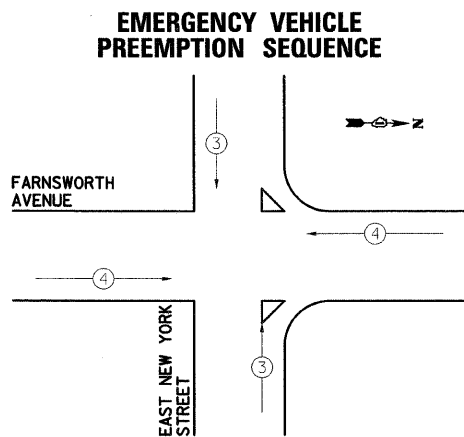
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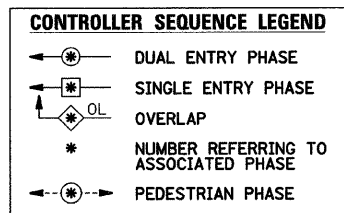
SCHEDULE OF QUANTITIES

PAY ITEM DESCRIPTION	UNIT	E. NEW YORK STREET
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
LIGHT DETECTOR AMPLIFIER	EACH	2

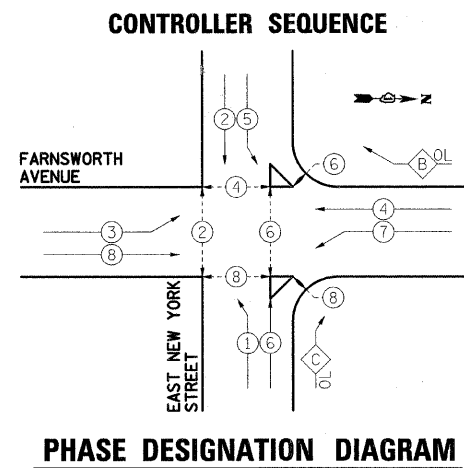
I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				
TYPE	NO. LAMPS	WATTAGE		TOTAL WATTAGE
		INCAND.	LED	
SIGNAL (RED)	16	17	0.50	136
(YELLOW)	16	25	0.25	100
(GREEN)	16	15	0.25	60
ARROW	24	12	0.10	28.8
PED. SIGNAL	12	25	1.00	300
CONTROLLER	1	100	1.00	100
LUMINAIRE	2	250	0.50	250
TOTAL =				974.8
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				



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



OVERLAP PHASE	PERMISSIVE PHASE	PROTECTED PHASE
B	= 4	+ 5
C	= 6	+ 7



THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.



USER NAME = MF110r
DESIGNED JRS
DRAWN JRS
CHECKED APS
DATE -
PLOT SCALE =
PLOT DATE = 7/1/2011

DESIGNED JRS
DRAWN JRS
CHECKED APS
DATE -
REVISER -
REVISER -
REVISER -
REVISER -

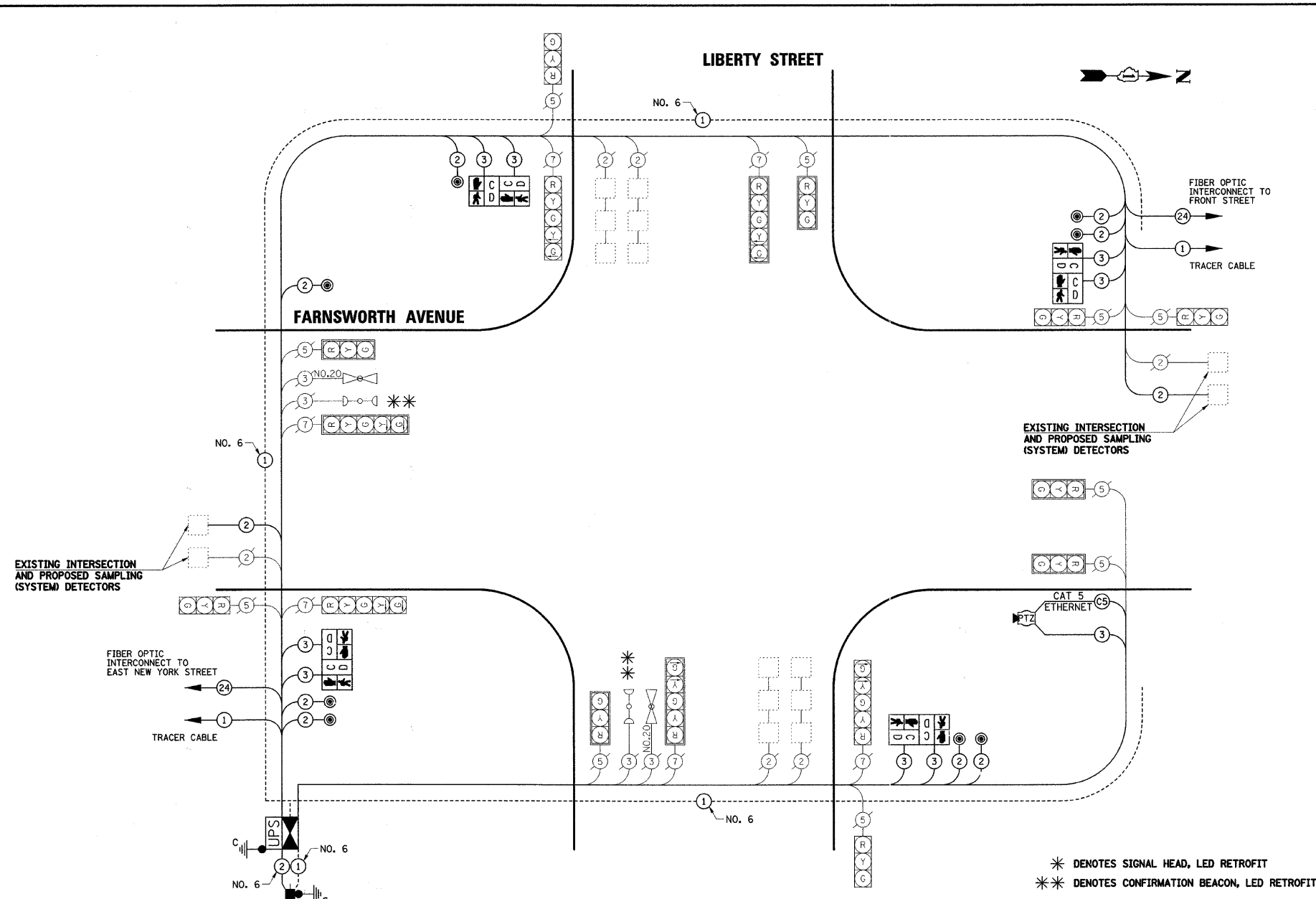
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN AND PHASE DESIGNATION DIAGRAM
EAST NEW YORK STREET
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	09-00289-00-TL	KANE	37	12
CONTRACT NO. 63627				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	DATE
	PLOTTED	BY
	NOTED	
	NOTE BOOK	
	NO. _____	
	ADD FILE NAME	

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



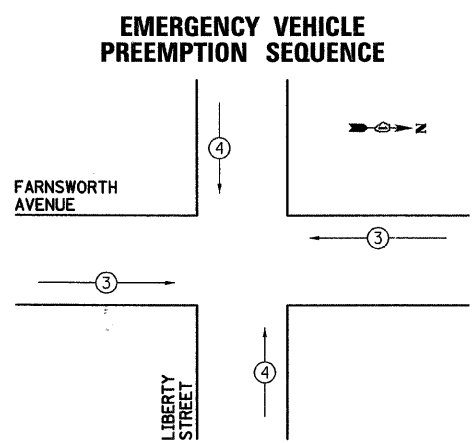
SCHEDULE OF QUANTITIES

PAY ITEM DESCRIPTION	UNIT	LIBERTY STREET
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY	EACH	1
GROUNDING EXISTING HANDHOLE FRAME AND COVER	EACH	6
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1284
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1504.5
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1162
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	49.5
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	542.5
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
INDUCTIVE LOOP DETECTOR	EACH	8
DETECTOR LOOP, TYPE I	FOOT	40
LIGHT DETECTOR AMPLIFIER	EACH	2
PEDESTRIAN PUSH-BUTTON	EACH	8
MODIFY EXISTING CONTROLLER FOUNDATION	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1931
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
CAT 5 ETHERNET CABLE	FOOT	146.5
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1
EVP CONFIRMATION BEACON, LED RETROFIT	EACH	2

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				
TYPE	NO. LAMPS	WATTAGE		TOTAL WATTAGE
		INCAND.	LED	
SIGNAL (RED)	16	17	0.50	136
(YELLOW)	16	25	0.25	100
(GREEN)	16	15	0.25	60
ARROW	12	12	0.10	14.4
PED. SIGNAL	8	25	1.00	200
CONTROLLER	1	100	1.00	100
TOTAL =				610.4

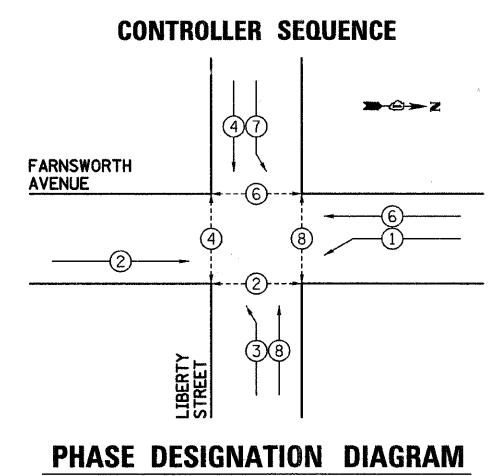
ENERGY COSTS TO: CITY OF AURORA
44 E. DOWNER PLACE
AURORA, ILLINOIS 60507-2067

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



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

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



THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

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



USER NAME = MFeller
DESIGNED JRS
DRAWN JRS
CHECKED APS
DATE -
PLOT SCALE =
PLOT DATE = 7/1/2011

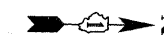
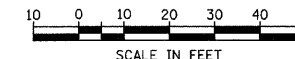
DESIGNED JRS
DRAWN JRS
CHECKED APS
DATE -
REVISED -
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REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN AND
PHASE DESIGNATION DIAGRAM
LIBERTY STREET

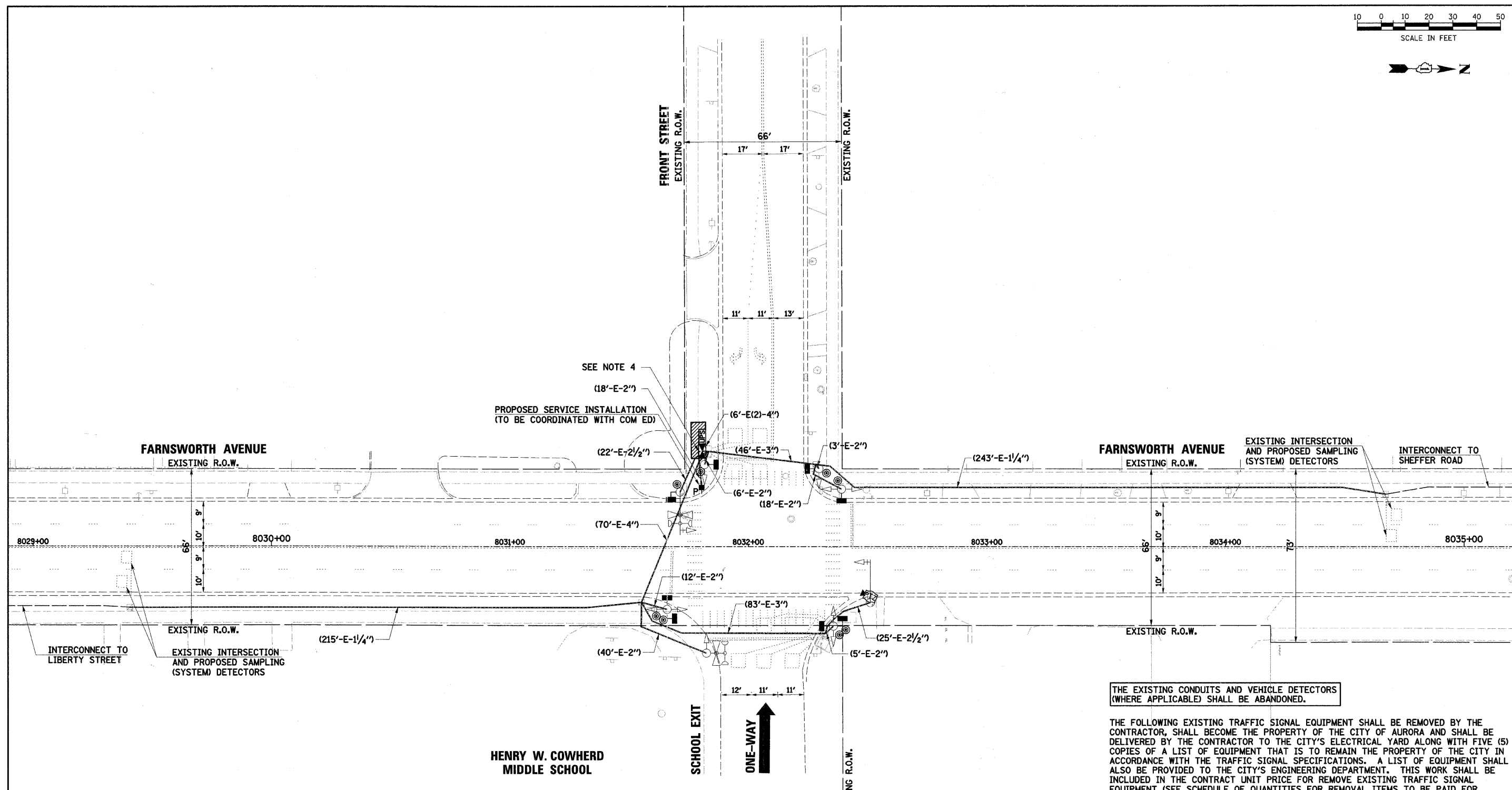
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	09-00289-00-TL	KANE	37	14
CONTRACT NO. 63627				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



DATE	
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NO.	
NO. OF SHEETS	
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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. 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.

- NOTES:**
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL EXISTING TRAFFIC SIGNAL OPERATIONS AT ALL TIMES DURING CONSTRUCTION.
 2. A MINIMUM OF ONE EAST-WEST AND ONE NORTH-SOUTH CROSSWALK SHALL REMAIN OPEN AT ALL TIMES IN ORDER TO MAINTAIN PEDESTRIAN ACCESS.
 3. THE PAN/TILT/ZOOM CAMERA SHALL BE MOUNTED ON THE MAST ARM POLE IN THE NORTHEAST CORNER BELOW THE STREET NAME SIGN.
 4. THE CONTROLLER FOUNDATION SHALL BE MODIFIED TO A CONCRETE FOUNDATION, TYPE C. SEE THE DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS FOR MODIFY EXISTING TYPE "D" FOUNDATION AND TYPE C FOR GROUND MOUNTED CONTROLLER CABINET AND UPS BATTERY CABINET. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR MODIFY EXISTING CONTROLLER FOUNDATION.

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

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL BECOME THE PROPERTY OF THE CITY OF AURORA AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE CITY'S ELECTRICAL YARD ALONG WITH FIVE (5) COPIES OF A LIST OF EQUIPMENT THAT IS TO REMAIN THE PROPERTY OF THE CITY IN ACCORDANCE WITH THE TRAFFIC SIGNAL SPECIFICATIONS. A LIST OF EQUIPMENT SHALL ALSO BE PROVIDED TO THE CITY'S ENGINEERING DEPARTMENT. THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT (SEE SCHEDULE OF QUANTITIES FOR REMOVAL ITEMS TO BE PAID FOR SEPARATELY).

- 8 EACH PEDESTRIAN SIGNAL HEADS
- 5 EACH PEDESTRIAN PUSH BUTTONS
- 1 EACH SERVICE INSTALLATION
- 1 EACH TRAFFIC SIGNAL CABINET (COMPLETE)

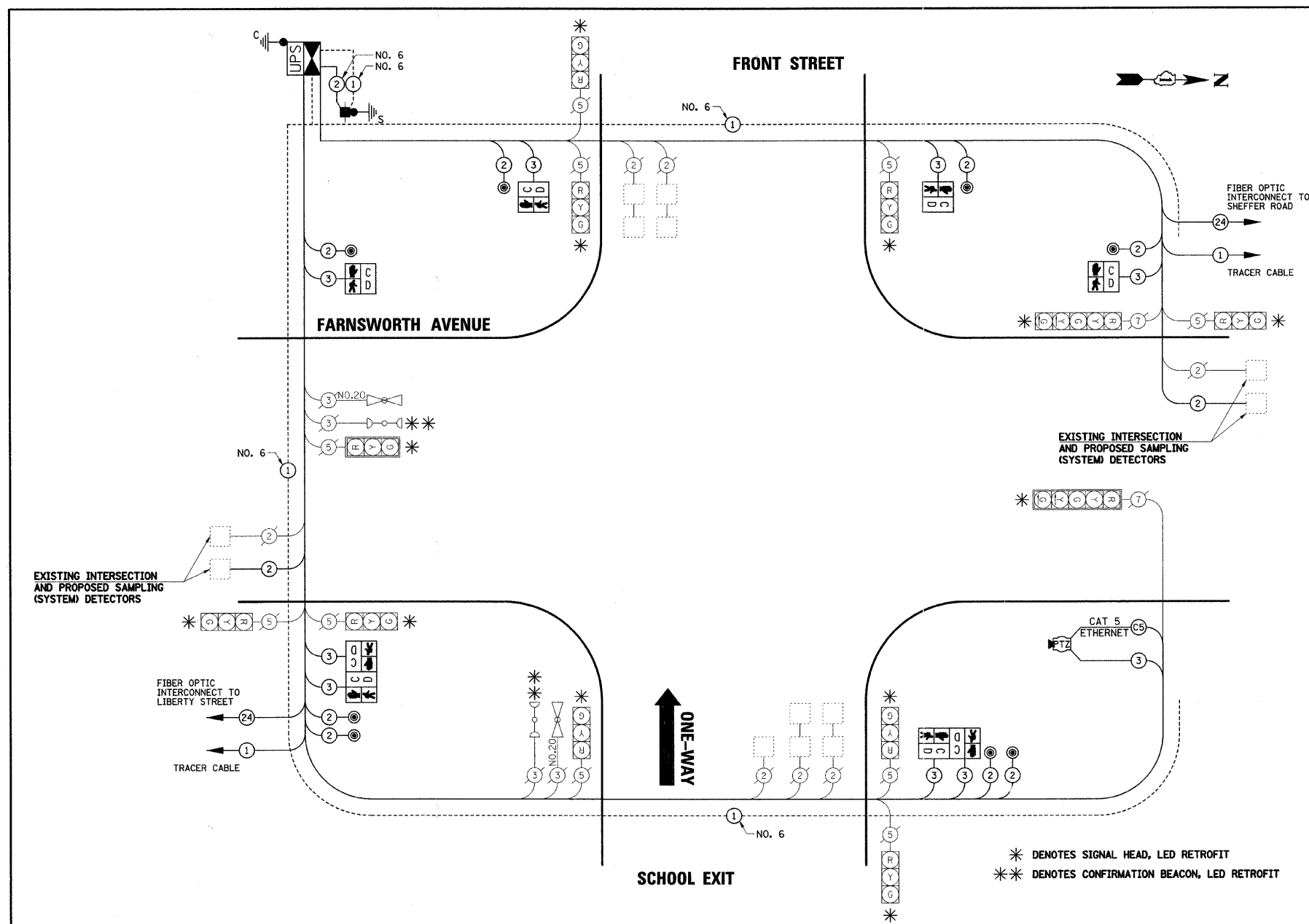
THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL BECOME THE PROPERTY OF THE CITY OF AURORA AND SHALL BE DELIVERED BY THE CONTRACTOR TO EITHER MR. ERIC GALLT (630-256-3237) OR MR. STEVE ZABURUNOV (630-688-8414) ALONG WITH FIVE (5) COPIES OF A LIST OF EQUIPMENT THAT IS TO REMAIN THE PROPERTY OF THE CITY IN ACCORDANCE WITH THE TRAFFIC SIGNAL SPECIFICATIONS. THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

- 1 EACH TRAFFIC SIGNAL CONTROLLER

HRGreen.com Illinois Professional Design Firm # 184-001322	USER NAME = Mfeller	DESIGNED <i>JRS</i>	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODIFICATION PLAN FRONT STREET	F.A.P. RTE. 360	SECTION 09-00289-00-TL	COUNTY KANE	TOTAL SHEETS 37	SHEET NO. 15
	PLOT SCALE =	DRAWN <i>JRS</i>	REVISED -			SCALE:	SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	CONTRACT NO. 63627	
	PLOT DATE = 7/1/2011	CHECKED <i>APS</i>	REVISED -							
		DATE -	REVISED -							

PLAN	SURVEYED	DATE
	PLOTTED	
	NOTE BOOK	
	RET. OF WAY CHECKED	
	CADD FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	
	NOTE BOOK	
	RET. OF WAY CHECKED	
	CADD FILE NAME	



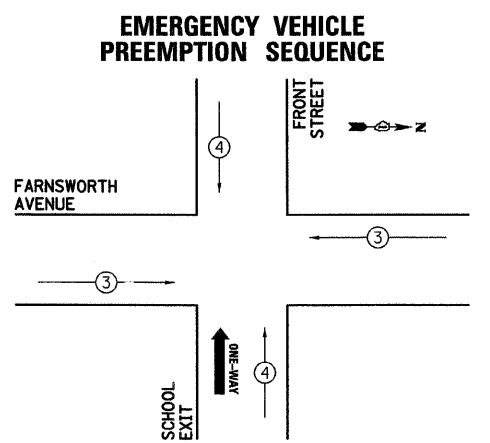
SCHEDULE OF QUANTITIES

PAY ITEM DESCRIPTION	UNIT	FRONT STREET
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY	EACH	1
GROUNDING EXISTING HANDHOLE FRAME AND COVER	EACH	4
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	949
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1247.5
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1047
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	37.5
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	466.5
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
INDUCTIVE LOOP DETECTOR	EACH	9
DETECTOR LOOP, TYPE I	FOOT	40
LIGHT DETECTOR AMPLIFIER	EACH	2
PEDESTRIAN PUSH-BUTTON	EACH	8
MODIFY EXISTING CONTROLLER FOUNDATION	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1585
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
CAT 5 ETHERNET CABLE	FOOT	242.5
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	9
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	1
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1
SIGNAL HEAD, LED, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	1
EVP CONFIRMATION BEACON, LED RETROFIT	EACH	2

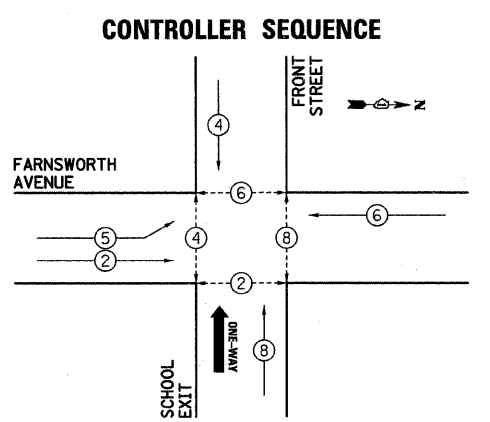
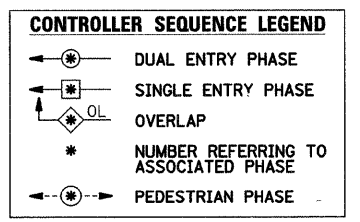
I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				
TYPE	NO. LAMPS	WATTAGE		TOTAL WATTAGE
		INCAND.	LED	
SIGNAL (RED)	12	17	0.50	102
(YELLOW)	12	25	0.25	75
(GREEN)	12	15	0.25	45
ARROW	4	12	0.10	4.8
PED. SIGNAL	8	25	1.00	200
CONTROLLER	1	100	1.00	100
TOTAL =				526.8

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

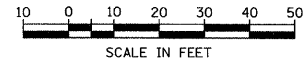


PROPOSED EMERGENCY VEHICLE PREEMPTORS	3	4
MOVEMENT	→	↑



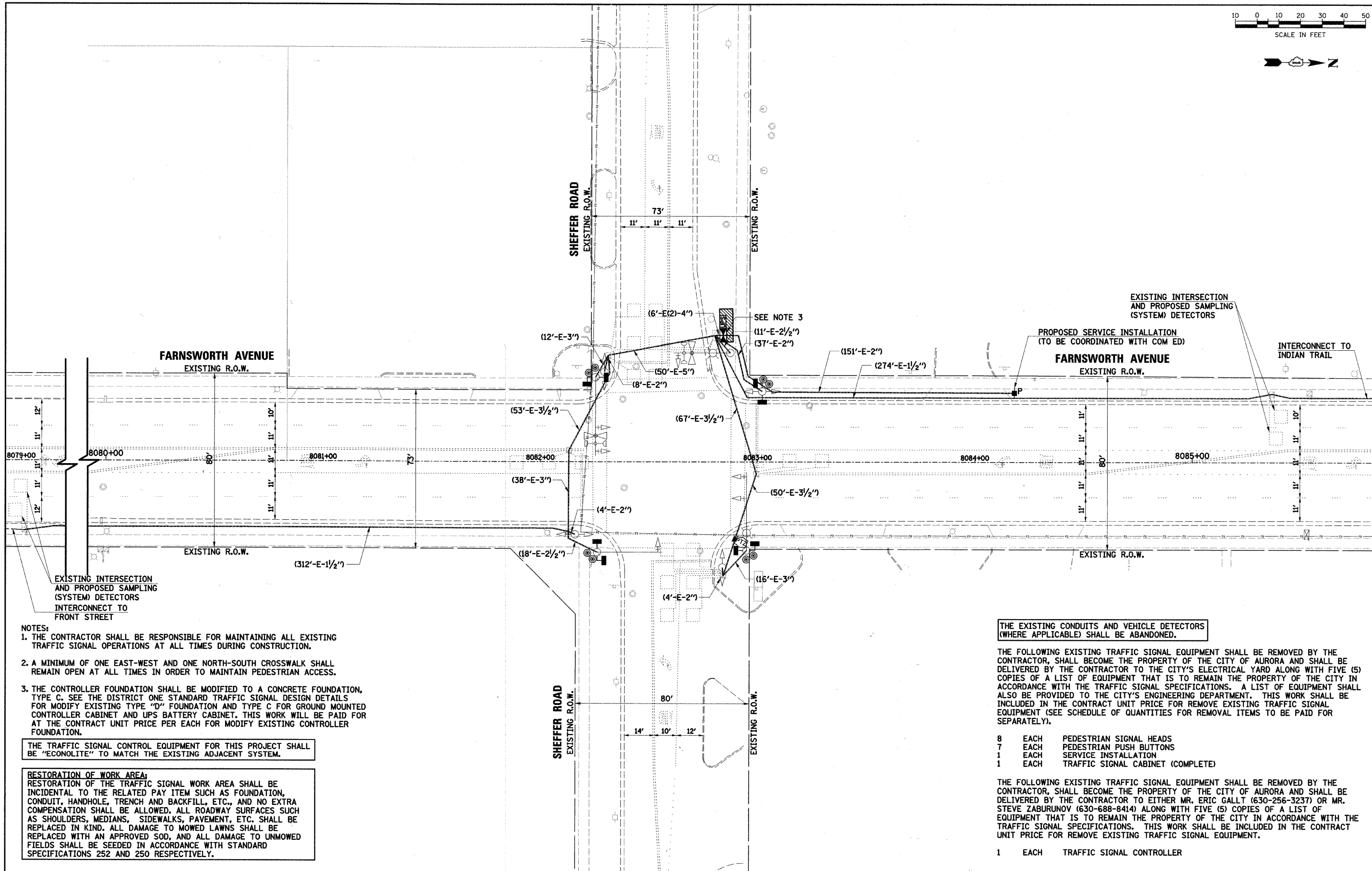
THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

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



DATE	
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APPROVED	
ADJUSTMENT CHECKED	
FIELD FILE NAME	
NO.	
PLAN	
NOTE BOOK	

DATE	
BY	
REVISED	
NOTED	
APPROVED	
ADJUSTMENT CHECKED	
FIELD FILE NAME	
NO.	
PROFILE	
NOTE BOOK	



NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL EXISTING TRAFFIC SIGNAL OPERATIONS AT ALL TIMES DURING CONSTRUCTION.
2. A MINIMUM OF ONE EAST-WEST AND ONE NORTH-SOUTH CROSSWALK SHALL REMAIN OPEN AT ALL TIMES IN ORDER TO MAINTAIN PEDESTRIAN ACCESS.
3. THE CONTROLLER FOUNDATION SHALL BE MODIFIED TO A CONCRETE FOUNDATION, TYPE C. SEE THE DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS FOR MODIFY EXISTING TYPE "D" FOUNDATION AND TYPE C FOR GROUND MOUNTED CONTROLLER CABINET AND UPS BATTERY CABINET. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR MODIFY EXISTING CONTROLLER FOUNDATION.

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. 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.

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

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL BECOME THE PROPERTY OF THE CITY OF AURORA AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE CITY'S ELECTRICAL YARD ALONG WITH FIVE (5) COPIES OF A LIST OF EQUIPMENT THAT IS TO REMAIN THE PROPERTY OF THE CITY IN ACCORDANCE WITH THE TRAFFIC SIGNAL SPECIFICATIONS. A LIST OF EQUIPMENT SHALL ALSO BE PROVIDED TO THE CITY'S ENGINEERING DEPARTMENT. THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT (SEE SCHEDULE OF QUANTITIES FOR REMOVAL ITEMS TO BE PAID FOR SEPARATELY).

- 8 EACH PEDESTRIAN SIGNAL HEADS
- 7 EACH PEDESTRIAN PUSH BUTTONS
- 1 EACH SERVICE INSTALLATION
- 1 EACH TRAFFIC SIGNAL CABINET (COMPLETE)

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL BECOME THE PROPERTY OF THE CITY OF AURORA AND SHALL BE DELIVERED BY THE CONTRACTOR TO EITHER MR. ERIC GALLT (630-256-3237) OR MR. STEVE ZABURUNOV (630-688-8414) ALONG WITH FIVE (5) COPIES OF A LIST OF EQUIPMENT THAT IS TO REMAIN THE PROPERTY OF THE CITY IN ACCORDANCE WITH THE TRAFFIC SIGNAL SPECIFICATIONS. THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

- 1 EACH TRAFFIC SIGNAL CONTROLLER



USER NAME = Mfeller
 PLOT SCALE =
 PLOT DATE = 7/18/2011

DESIGNED *JRS*
 DRAWN *JRS*
 CHECKED *APS*
 DATE

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

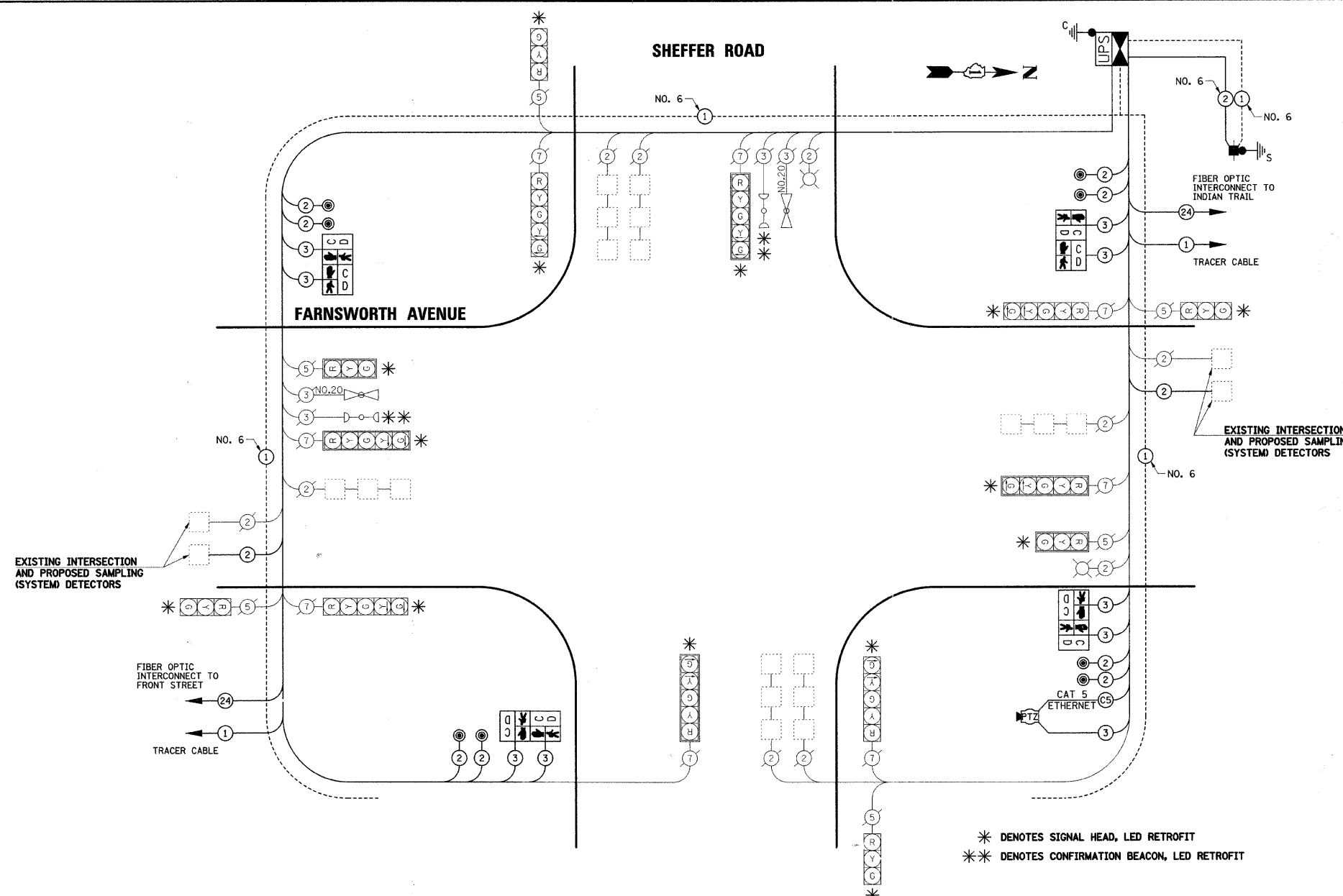
**TRAFFIC SIGNAL MODIFICATION PLAN
 SHEFFER ROAD**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	09-00289-00-TL	KANE	37	17
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 63627	

DATE	
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REVISIONS	
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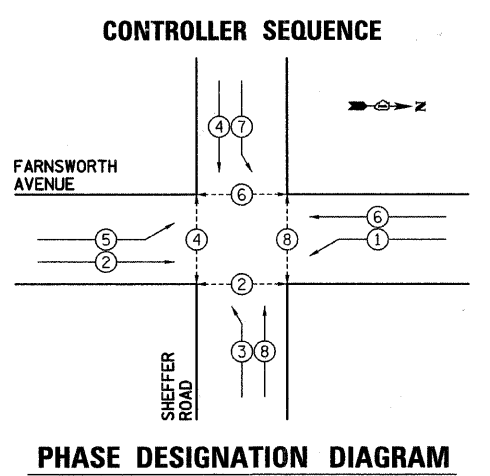
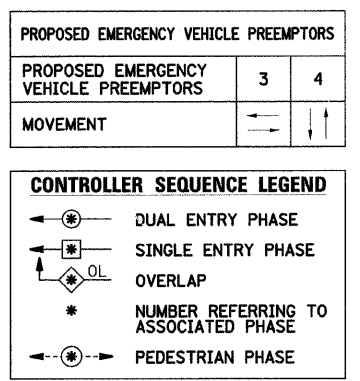
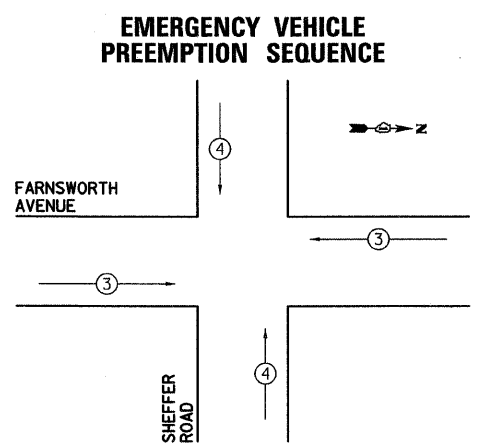
SCHEDULE OF QUANTITIES

PAY ITEM DESCRIPTION	UNIT	SHEFFER ROAD
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY	EACH	1
GROUNDING EXISTING HANDHOLE FRAME AND COVER	EACH	6
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1136
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1389.5
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1206.5
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	170.5
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	660.5
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
INDUCTIVE LOOP DETECTOR	EACH	10
DETECTOR LOOP, TYPE I	FOOT	40
LIGHT DETECTOR AMPLIFIER	EACH	2
PEDESTRIAN PUSH-BUTTON	EACH	8
MODIFY EXISTING CONTROLLER FOUNDATION	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2256.5
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
CAT 5 ETHERNET CABLE	FOOT	197.5
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	4
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1
SIGNAL HEAD, LED, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	4
EVP CONFIRMATION BEACON, LED RETROFIT	EACH	2

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				
TYPE	NO. LAMPS	WATTAGE		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	16	12	0.10	19.2
PED. SIGNAL	8	25	1.00	200
CONTROLLER	1	100	1.00	100
LUMINAIRE	2	250	0.50	250
TOTAL =				828.2

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

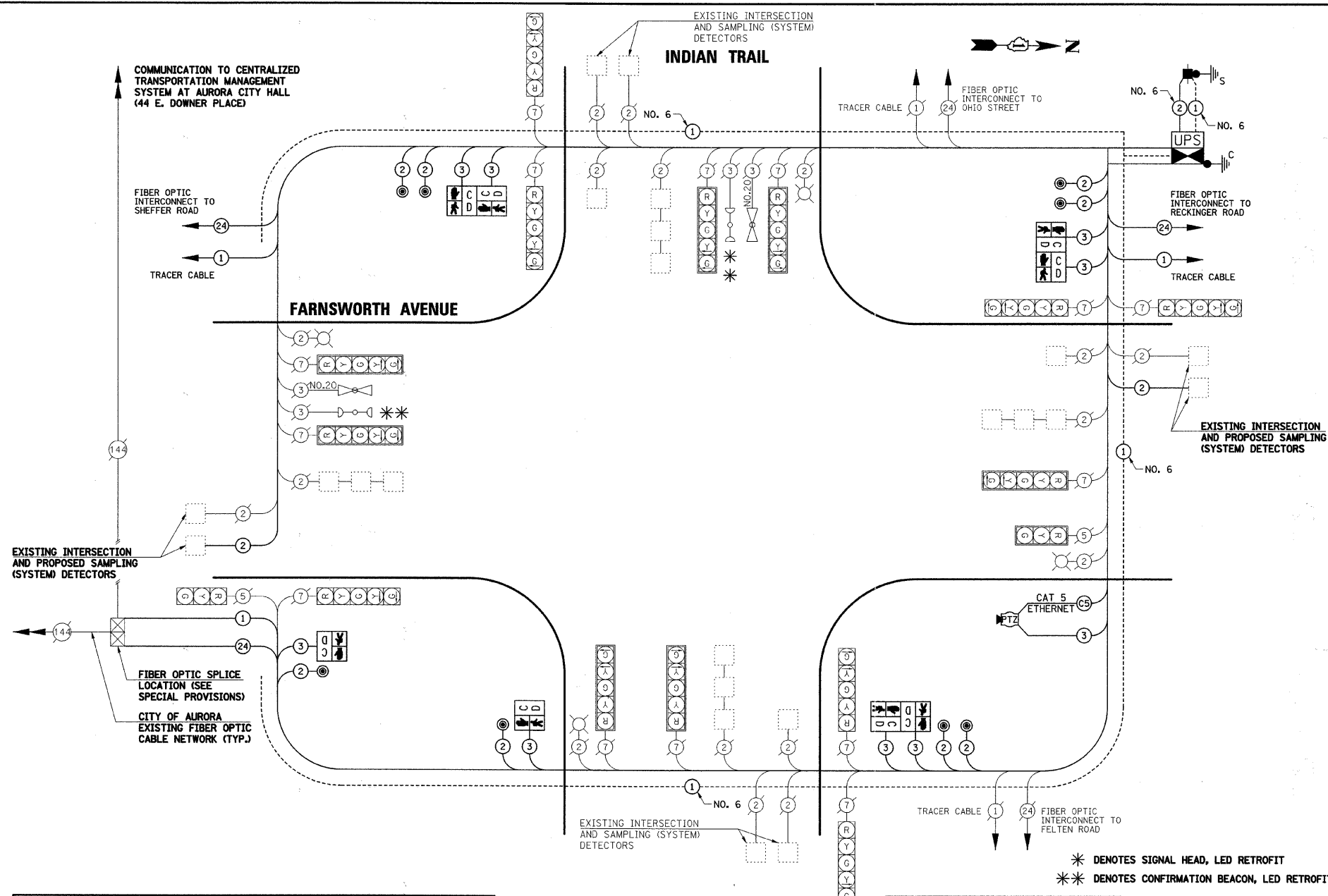


THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

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

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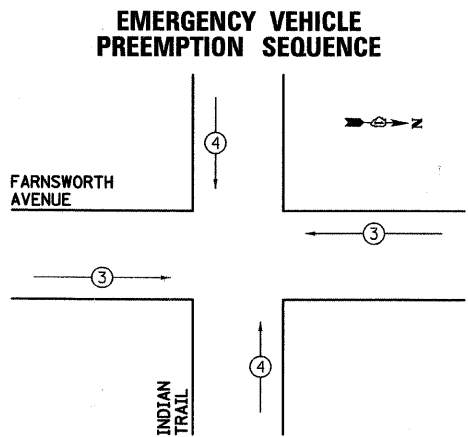
SCHEDULE OF QUANTITIES

PAY ITEM DESCRIPTION	UNIT	INDIAN TRAIL
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY	EACH	1
GROUNDING EXISTING HANDHOLE FRAME AND COVER	EACH	4
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1409
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1653.5
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1151
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	28.5
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	623.5
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	3
INDUCTIVE LOOP DETECTOR	EACH	15
DETECTOR LOOP, TYPE I	FOOT	40
LIGHT DETECTOR AMPLIFIER	EACH	2
PEDESTRIAN PUSH-BUTTON	EACH	8
MODIFY EXISTING CONTROLLER FOUNDATION	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2456
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
CAT 5 ETHERNET CABLE	FOOT	188.5
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1
EVP CONFIRMATION BEACON, LED RETROFIT	EACH	2

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		% OPERATION	
SIGNAL (RED) (YELLOW) (GREEN)	16	17	0.50	136	
	16	25	0.25	100	
	16	15	0.25	60	
ARROW	28	12	0.10	33.6	
PED. SIGNAL	8	25	1.00	200	
CONTROLLER	1	100	1.00	100	
LUMINAIRE	4	250	0.50	500	
TOTAL =				1129.6	

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

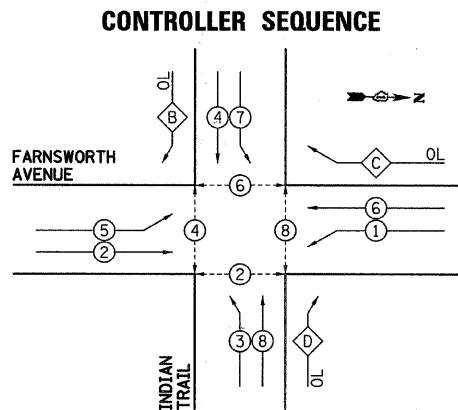
ENERGY SUPPLY CONTACT: MARK SCHERIBEL
PHONE: (630) 723-2128
COMPANY: COMMONWEALTH EDISON



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

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

OVERLAP PHASE	PERMISSIVE PHASE	PROTECTED PHASE
B	= 4	+ 5
C	= 6	+ 7
D	= 8	+ 1



THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

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



USER NAME = Mfaller
DESIGNED JRS
DRAWN JRS
CHECKED APS
DATE -
REVISOR -
REVISION -
REVISION -
REVISION -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

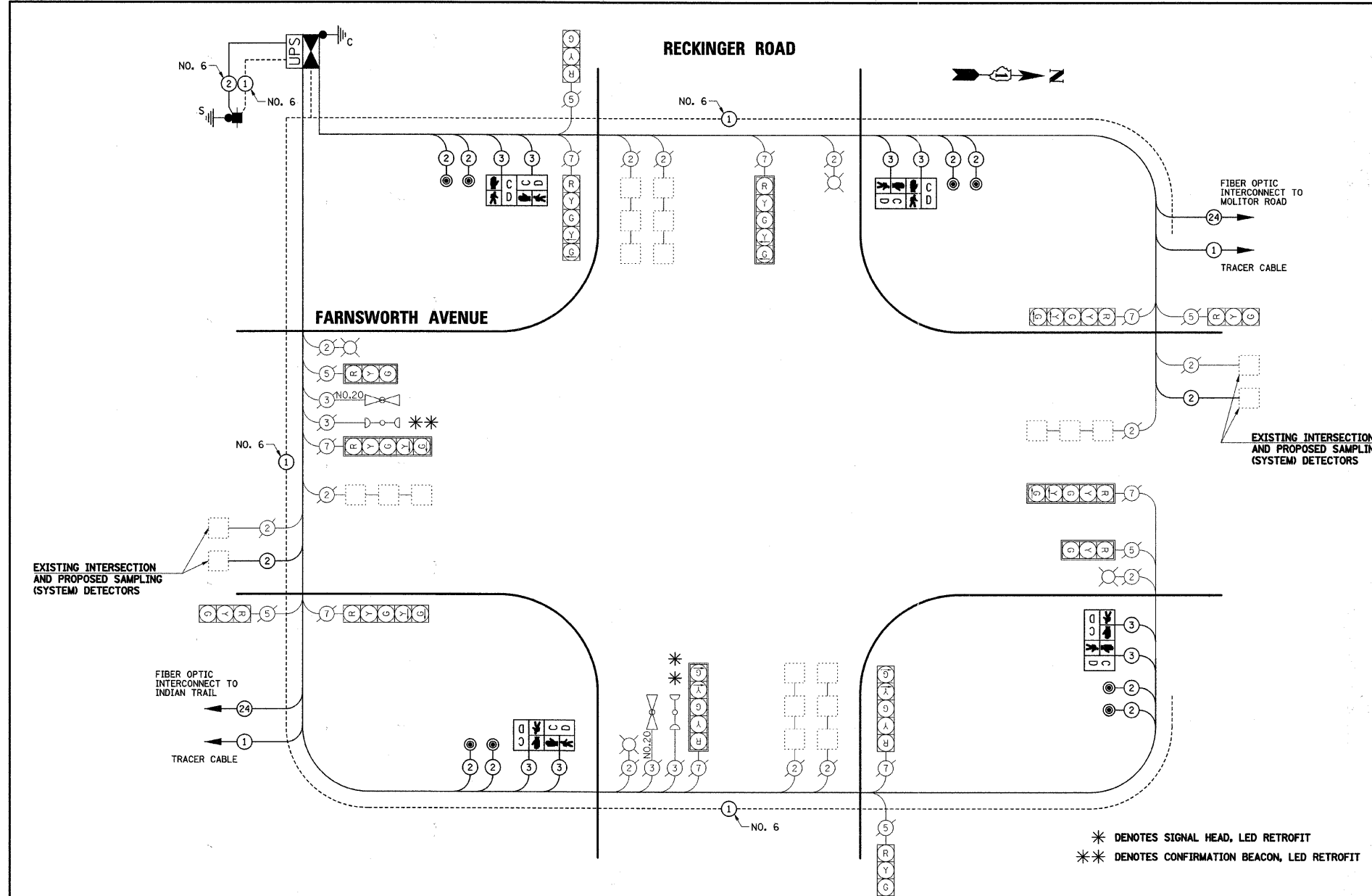
CABLE PLAN AND PHASE DESIGNATION DIAGRAM
INDIAN TRAIL

SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	09-00289-00-TL	KANE	37	21
CONTRACT NO. 63627				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

DATE	
BY	
PLAN	
NO.	
DATE	
BY	
PROFILE	
NO.	

DATE	
BY	
PROFILE	
NO.	



SCHEDULE OF QUANTITIES

PAY ITEM DESCRIPTION	UNIT	RECKINGER ROAD
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY	EACH	1
GROUNDING EXISTING HANDHOLE FRAME AND COVER	EACH	8
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1280
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1336
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1155.5
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	25.5
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	547.5
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
INDUCTIVE LOOP DETECTOR	EACH	10
DETECTOR LOOP, TYPE I	FOOT	40
LIGHT DETECTOR AMPLIFIER	EACH	2
PEDESTRIAN PUSH-BUTTON	EACH	8
MODIFY EXISTING CONTROLLER FOUNDATION	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1981.5
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
ETHERNET SWITCH	EACH	1
EVP CONFIRMATION BEACON, LED RETROFIT	EACH	2

EXISTING INTERSECTION AND PROPOSED SAMPLING (SYSTEM) DETECTORS

FIBER OPTIC INTERCONNECT TO INDIAN TRAIL
TRACER CABLE

EXISTING INTERSECTION AND PROPOSED SAMPLING (SYSTEM) DETECTORS

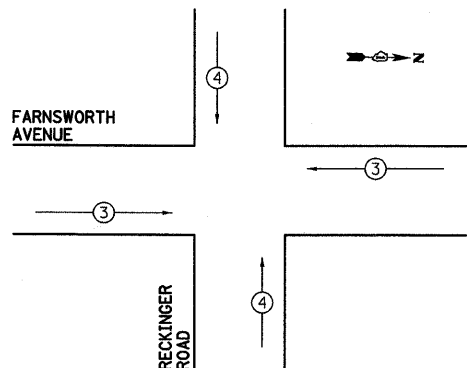
* DENOTES SIGNAL HEAD, LED RETROFIT
** DENOTES CONFIRMATION BEACON, LED RETROFIT

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	16	12	0.10		19.2
PED. SIGNAL	8	25	1.00		200
CONTROLLER	1	100	1.00		100
LUMINAIRE	4	250	0.50		500
				TOTAL =	1078.2

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

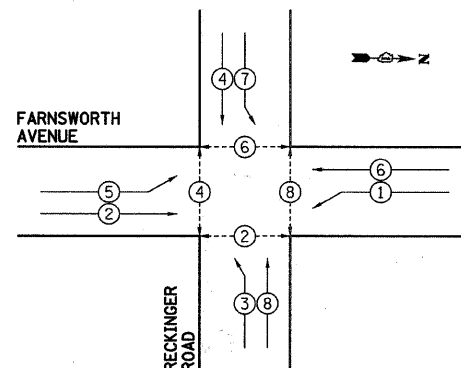
EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

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

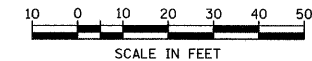
CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

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



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

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL BECOME THE PROPERTY OF THE CITY OF AURORA AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE CITY'S ELECTRICAL YARD ALONG WITH FIVE (5) COPIES OF A LIST OF EQUIPMENT THAT IS TO REMAIN THE PROPERTY OF THE CITY IN ACCORDANCE WITH THE TRAFFIC SIGNAL SPECIFICATIONS. A LIST OF EQUIPMENT SHALL ALSO BE PROVIDED TO THE CITY'S ENGINEERING DEPARTMENT. THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT (SEE SCHEDULE OF QUANTITIES FOR REMOVAL ITEMS TO BE PAID FOR SEPARATELY).

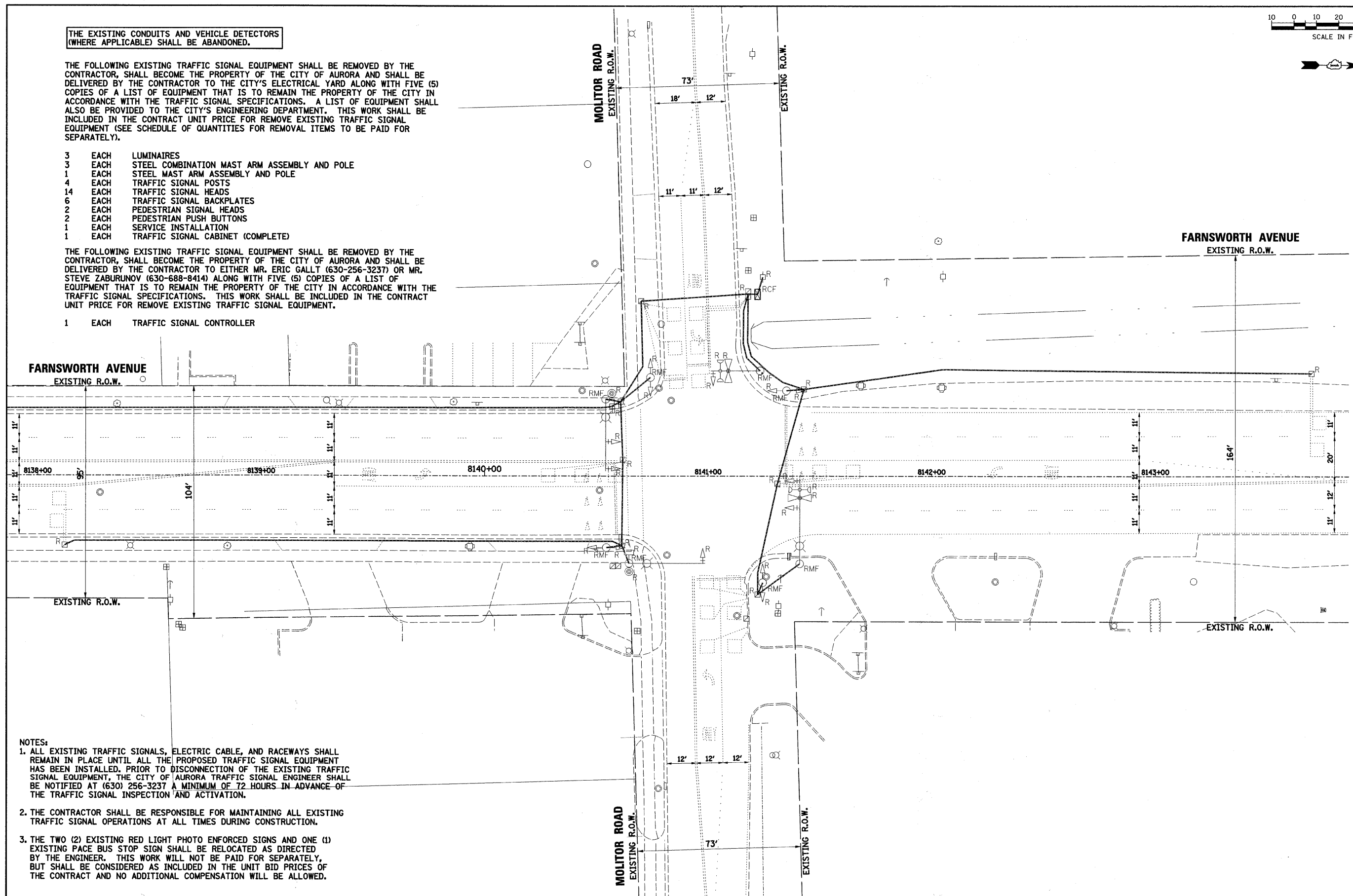
- 3 EACH LUMINAIRES
- 3 EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE
- 1 EACH STEEL MAST ARM ASSEMBLY AND POLE
- 4 EACH TRAFFIC SIGNAL POSTS
- 14 EACH TRAFFIC SIGNAL HEADS
- 6 EACH TRAFFIC SIGNAL BACKPLATES
- 2 EACH PEDESTRIAN SIGNAL HEADS
- 2 EACH PEDESTRIAN PUSH BUTTONS
- 1 EACH SERVICE INSTALLATION
- 1 EACH TRAFFIC SIGNAL CABINET (COMPLETE)

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL BECOME THE PROPERTY OF THE CITY OF AURORA AND SHALL BE DELIVERED BY THE CONTRACTOR TO EITHER MR. ERIC GALLT (630-256-3237) OR MR. STEVE ZABURUNOV (630-688-8414) ALONG WITH FIVE (5) COPIES OF A LIST OF EQUIPMENT THAT IS TO REMAIN THE PROPERTY OF THE CITY IN ACCORDANCE WITH THE TRAFFIC SIGNAL SPECIFICATIONS. THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

- 1 EACH TRAFFIC SIGNAL CONTROLLER

PLAN	SURVEYED	DATE
	PLOTTED	
	CHECKED	
	BY	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	
	CHECKED	
	BY	
	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 CITY OF AURORA TRAFFIC SIGNAL ENGINEER SHALL BE NOTIFIED AT (630) 256-3237 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.
3. THE TWO (2) EXISTING RED LIGHT PHOTO ENFORCED SIGNS AND ONE (1) EXISTING PACE BUS STOP SIGN SHALL BE RELOCATED AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.



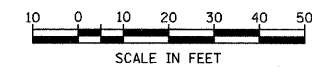
USER NAME = Mfaller	DESIGNED <i>JRS</i>	REVISED -
	DRAWN <i>JRS</i>	REVISED -
PLOT SCALE =	CHECKED <i>APS</i>	REVISED -
PLOT DATE = 7/1/2011	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**EXISTING TRAFFIC SIGNAL EQUIPMENT TO BE REMOVED
MOLITOR ROAD**

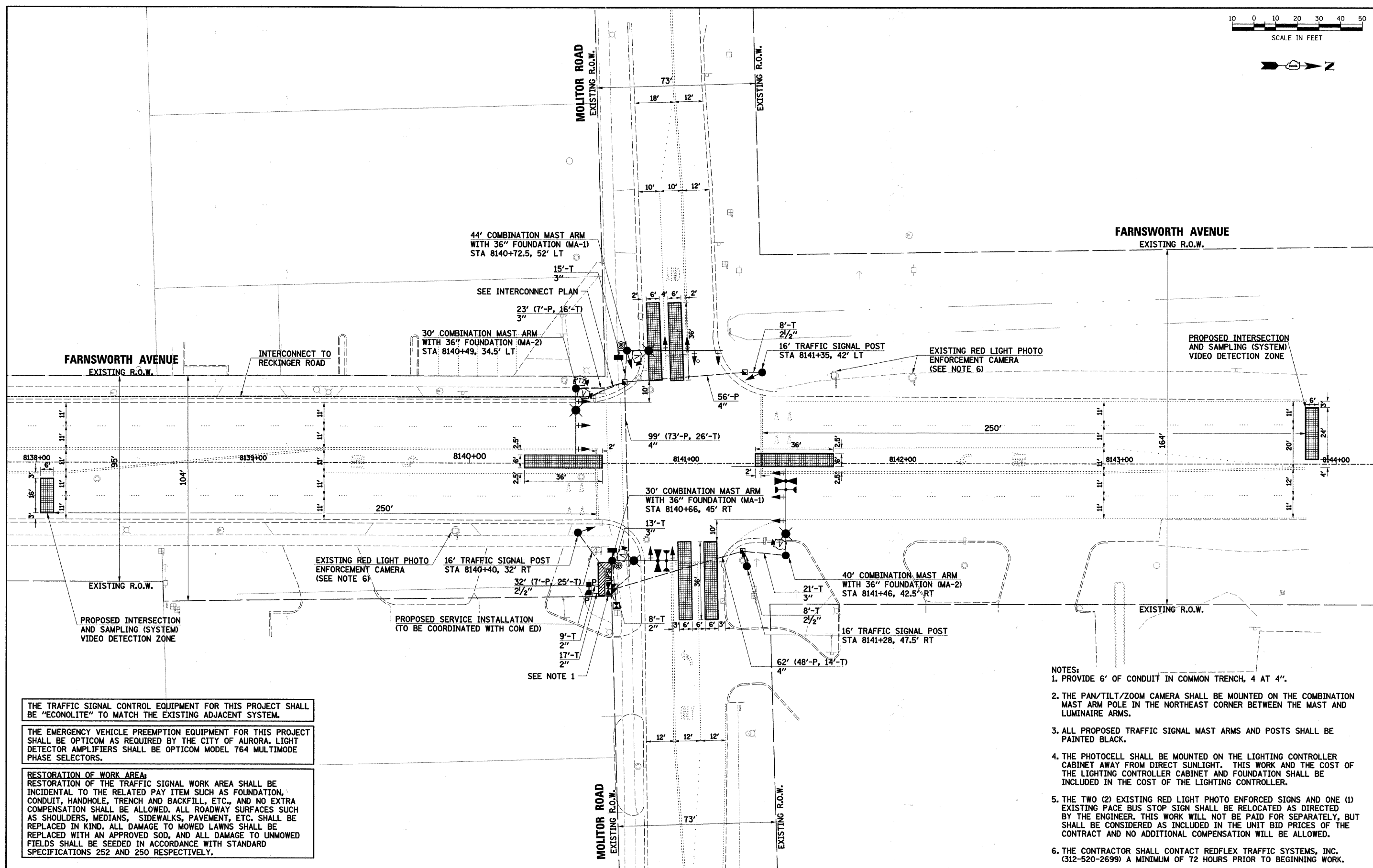
SCALE:	SHEET NO.	OF	SHEETS	STA.	TO	STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	09-00289-00-TL	KANE	37	24
CONTRACT NO. 63627				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



PLAN	SURVEYED	DATE
	PLOTTED	
	CHECKED	
	BY	
	NO.	
	FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	
	CHECKED	
	BY	
	NO.	
	FILE NAME	



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. LIGHT DETECTOR AMPLIFIERS SHALL BE OPTICOM MODEL 764 MULTIMODE PHASE SELECTORS.

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. 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.

- NOTES:
1. PROVIDE 6' OF CONDUIT IN COMMON TRENCH, 4 AT 4".
 2. THE PAN/TILT/ZOOM CAMERA SHALL BE MOUNTED ON THE COMBINATION MAST ARM POLE IN THE NORTHEAST CORNER BETWEEN THE MAST AND LUMINAIRE ARMS.
 3. ALL PROPOSED TRAFFIC SIGNAL MAST ARMS AND POSTS SHALL BE PAINTED BLACK.
 4. THE PHOTOCCELL SHALL BE MOUNTED ON THE LIGHTING CONTROLLER CABINET AWAY FROM DIRECT SUNLIGHT. THIS WORK AND THE COST OF THE LIGHTING CONTROLLER CABINET AND FOUNDATION SHALL BE INCLUDED IN THE COST OF THE LIGHTING CONTROLLER.
 5. THE TWO (2) EXISTING RED LIGHT PHOTO ENFORCED SIGNS AND ONE (1) EXISTING PACE BUS STOP SIGN SHALL BE RELOCATED AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
 6. THE CONTRACTOR SHALL CONTACT REDFLEX TRAFFIC SYSTEMS, INC. (312-520-2699) A MINIMUM OF 72 HOURS PRIOR TO BEGINNING WORK.

HRGreen.com Illinois Professional Design Firm #154-001322	USER NAME = Mfaller	DESIGNED <i>JRS</i>	REVISED -
	PLOT SCALE =	DRAWN <i>JRS</i>	REVISED -
	PLOT DATE = 7/1/2011	CHECKED <i>APS</i>	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

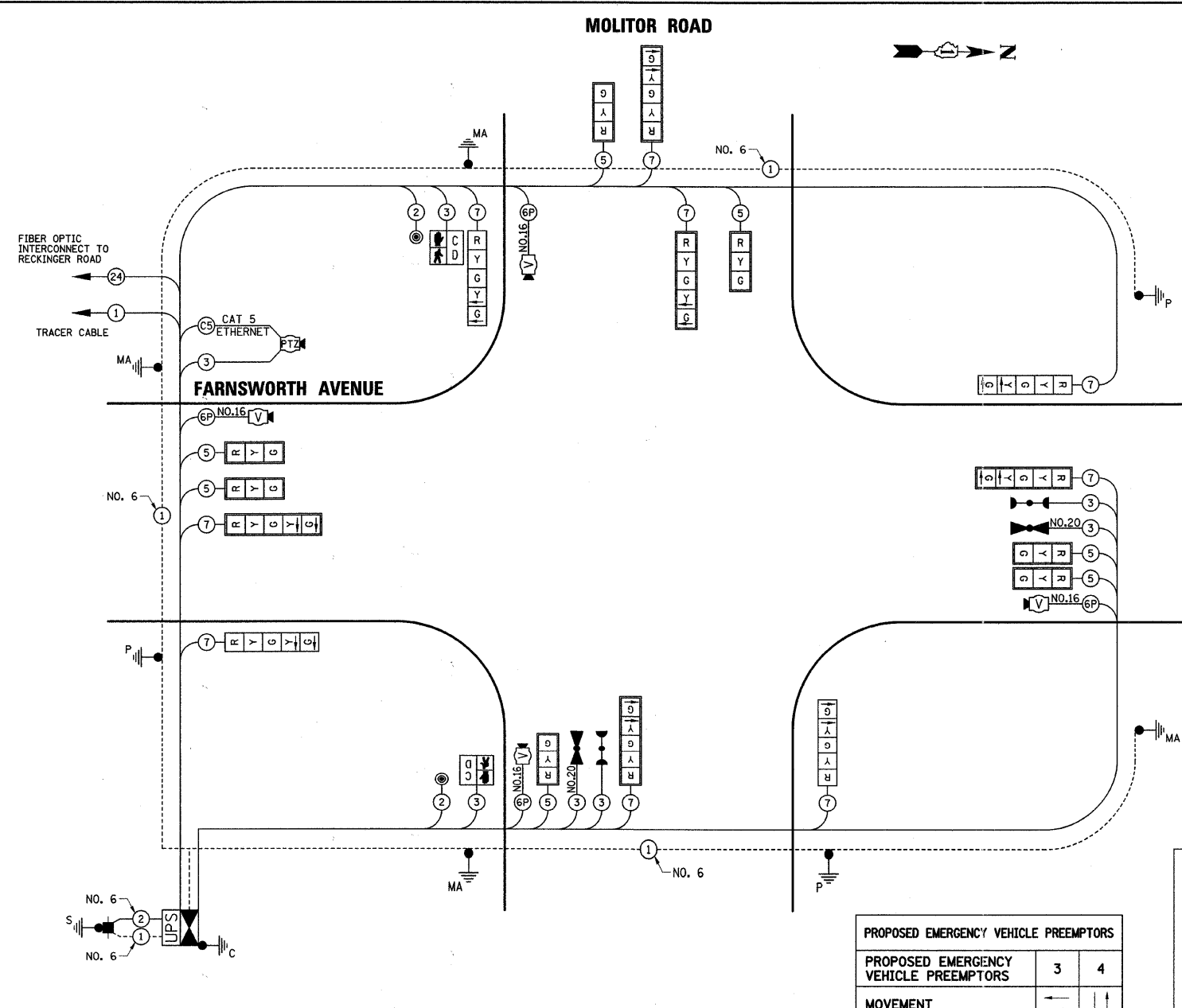
**TRAFFIC SIGNAL INSTALLATION PLAN
MOLITOR ROAD**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	09-00289-00-TL	KANE	37	25
FED. ROAD DIST. NO.				ILLINOIS FED. AID PROJECT
CONTRACT NO. 63627				

DATE	
BY	
PLAN	
NO.	
DATE	
BY	
PROFILE	
NO.	
DATE	
BY	
PROFILE	
NO.	

DATE	
BY	
PROFILE	
NO.	
DATE	
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PROFILE	
NO.	

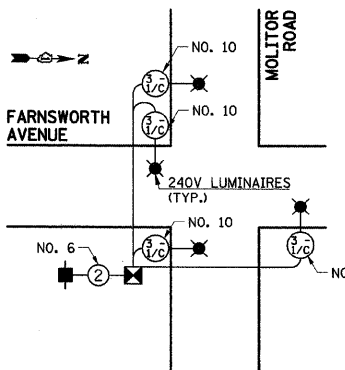


I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	16	17	0.50	136	
(YELLOW)	16	25	0.25	100	
(GREEN)	16	15	0.25	60	
ARROW	18	12	0.10	21.6	
PED. SIGNAL	2	25	1.00	50	
CONTROLLER	1	100	1.00	100	
VIDEO SYSTEM	1	15	1.00	15	
LUMINAIRE	4	250	0.50	500	
TOTAL =				982.6	

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

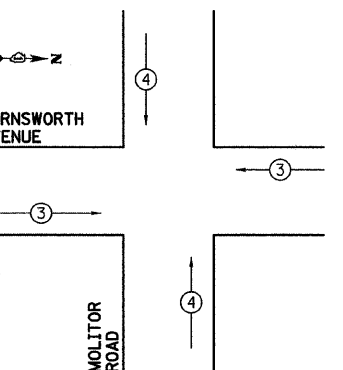
ENERGY SUPPLY CONTACT: MARK SCHERIBEL
PHONE: (630) 723-2128
COMPANY: COMMONWEALTH EDISON

LIGHTING CABLE PLAN



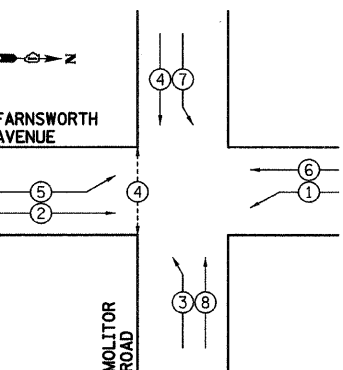
PROPOSED EMERGENCY VEHICLE PREEMPTORS	
MOVEMENT	3 4
← →	← →
↑ ↓	↑ ↓

EMERGENCY VEHICLE PREEMPTION SEQUENCE

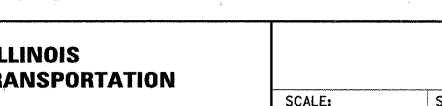


CONTROLLER SEQUENCE LEGEND	
← ⊙ →	DUAL ENTRY PHASE
← ⊙	SINGLE ENTRY PHASE
← ⊙ OL	OVERLAP
*	NUMBER REFERRING TO ASSOCIATED PHASE
← ⊙ →	PEDESTRIAN PHASE

CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM



SCHEDULE OF QUANTITIES

SIGN PANEL - TYPE 1	SQ FT	16
SIGN PANEL - TYPE 2	SQ FT	21
ELECTRIC SERVICE INSTALLATION	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	34
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	41
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	66
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	64
CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	7
CONDUIT PUSHED, 3" DIA., GALVANIZED STEEL	FOOT	7
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	177
HANDHOLE	EACH	3
DOUBLE HANDHOLE	EACH	1
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 10	FOOT	705.5
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	186
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT	EACH	4
LIGHTING CONTROLLER, PEDESTAL MOUNTED, 240VOLT, 60AMP	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PAINT NEW TRAFFIC SIGNAL POST	EACH	3
PAINT NEW COMBINATION MAST ARM AND POLE, UNDER 40 FOOT	EACH	2
PAINT NEW COMBINATION MAST ARM AND POLE, OVER 40 FOOT	EACH	2
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL UNINTERRUPTABLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	202.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	662
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1173.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1438.5
ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 16 6 PAIR	FOOT	705.5
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	65
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	509
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	3
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 30 FT.	EACH	2
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 40 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 44 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	12
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	48
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	7
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	5
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	12
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	2
PEDESTRIAN PUSH-BUTTON	EACH	2
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	7259.5
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	9
REMOVE EXISTING DOUBLE HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
CAT 5 ETHERNET CABLE	FOOT	180
VIDEO DETECTION SYSTEM	EACH	1
ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	265.5
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1

THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

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. LIGHT DETECTOR AMPLIFIERS SHALL BE OPTICOM MODEL 764 MULTIMODE PHASE SELECTORS.



USER NAME = Mfeller
DESIGNED JRS
DRAWN JRS
CHECKED APS
DATE -
PLOT SCALE =
PLOT DATE = 7/1/2011

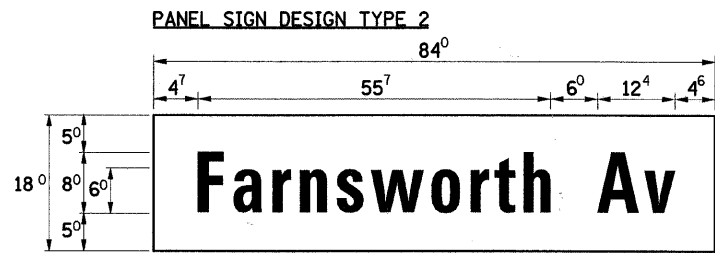
REVISIONS:
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

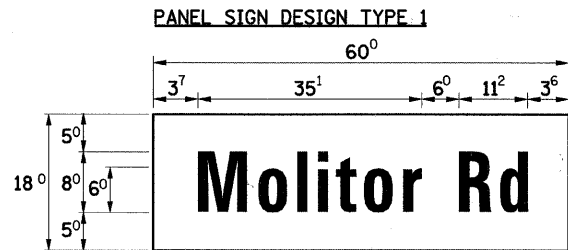
CABLE PLAN AND
PHASE DESIGNATION DIAGRAM
MOLITOR ROAD

F.A.P. RTE. 360	SECTION 09-00289-00-TL	COUNTY KANE	TOTAL SHEETS 37	SHEET NO. 26
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 63627	

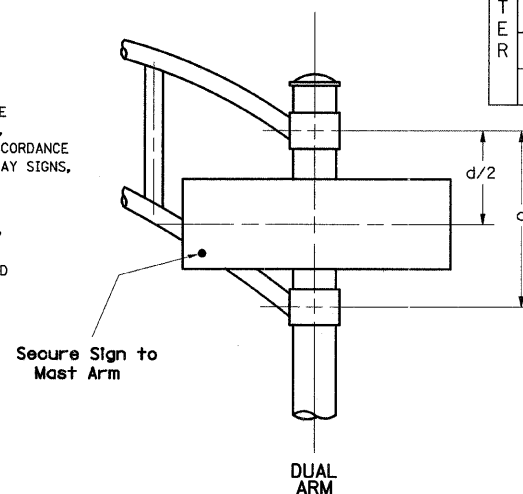
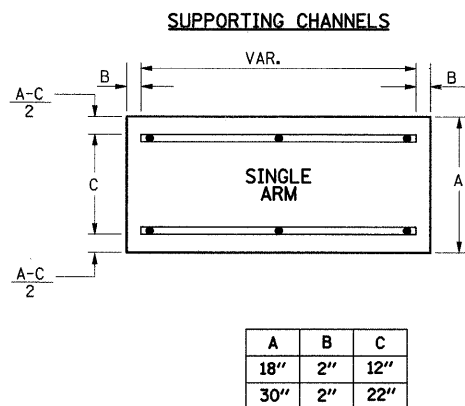
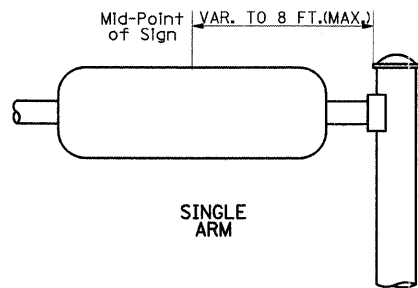
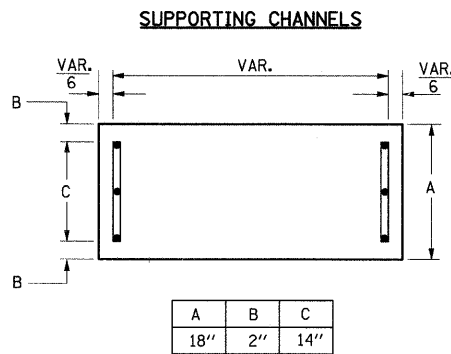
SCALE: SHEET NO. OF SHEETS STA. TO STA.



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



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



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

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

FIRST LETTER	SECOND LETTER															
	a c d e		b h i k l		f w		j		s t		v y		x		z	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
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"

FIRST LETTER	SECOND LETTER															
	a c d e		b h i k l		f w		j		s t		v y		x		z	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
ad 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"

FIRST LETTER	SECOND LETTER																			
	0		1		2		3		4		5		6		7		8		9	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
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

EXAMPLE, 2 3/8 DENOTES 3/8"

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

NUMBER	6 INCH SERIES		8 INCH SERIES	
	C	D	C	D
1	1 ²	1 ⁴	1 ⁵	2 ⁰
2	3 ²	4 ⁰	4 ³	5 ³
3	3 ²	4 ⁰	4 ³	5 ³
4	3 ⁵	4 ³	4 ⁷	5 ⁷
5	3 ²	4 ⁰	4 ³	5 ³
6	3 ²	4 ⁰	4 ³	5 ³
7	3 ²	4 ⁰	4 ³	5 ³
8	3 ²	4 ⁰	4 ³	5 ³
9	3 ²	4 ⁰	4 ³	5 ³
0	3 ⁴	4 ²	4 ⁵	5 ⁵

GENERAL NOTES

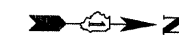
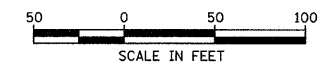
- WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE 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 8'-0".
 - ALL BORDERS SHALL BE 3/4" WIDE AND CORNER RADIUS SHALL BE 2-1/4".
 - SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS. LOCAL SUPPLIERS OF THE SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM ARE:
 * J.O. HERBERT CO. MIDLOTHIAN, VA.
 * WESTERN REMAC INC. WOODRIDGE, IL.
- PARTS LISTING:**
 SIGN CHANNEL PART #HPN053 (MED. CHANNEL)
 SIGN SCREWS 1/4" x 14 x 1" H.W.H. #3
 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.

FILE NAME =	USER NAME = Mfeller	DESIGNED - DAG/BCK	REVISED - DAG 10/28/09
\\hrgyines\data\070590.28\Cad\Trans\Shets\690_B.sig\07d_molitor.dgn		DRAWN - BCK	REVISED -
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PLOT DATE = 7/1/2011		DATE - 03-15-09	REVISED -

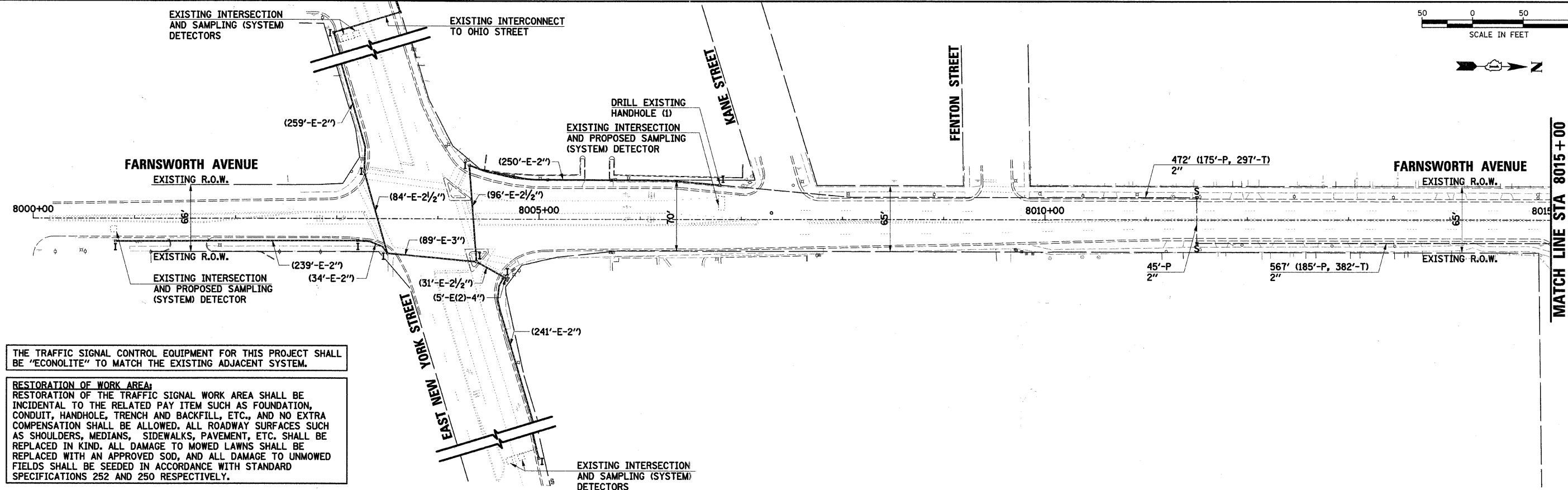
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

DISTRICT ONE	
MAST ARM MOUNTED STREET NAME SIGNS	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE. 360	SECTION 09-00289-00-TL	COUNTY KANE	TOTAL SHEETS 37	SHEET NO. 27
TS-02			CONTRACT NO. 63627	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



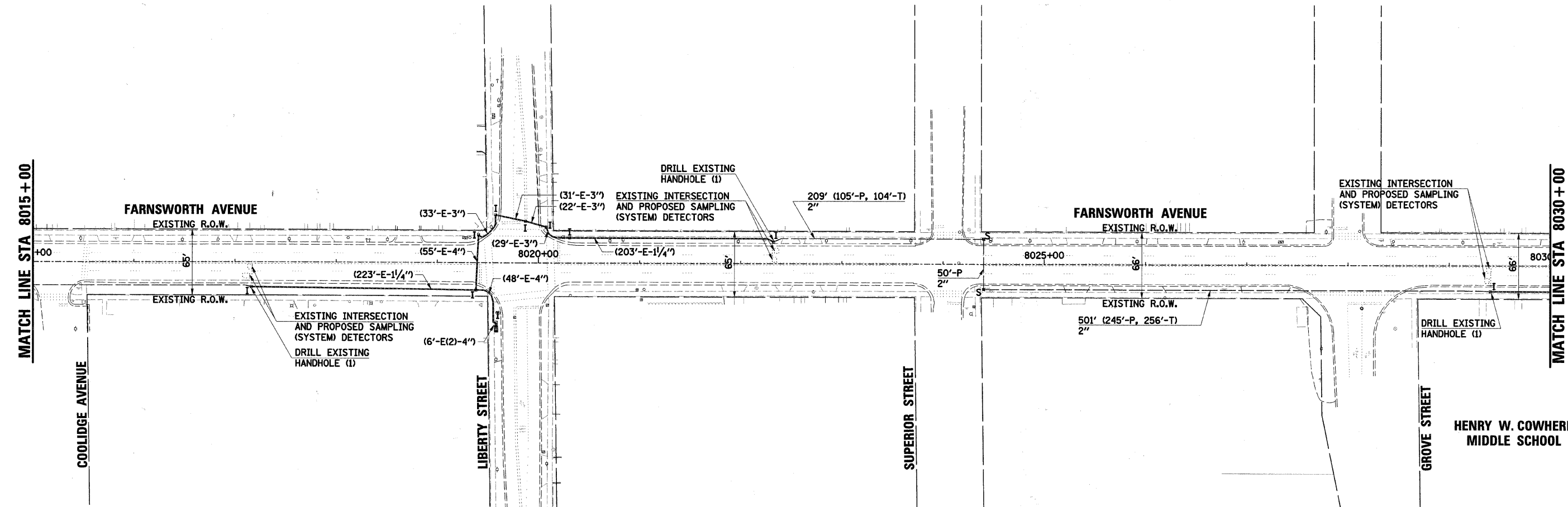
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THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

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. 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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USER NAME = Mfeller	DESIGNED <i>JRS</i>	REVISED -
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

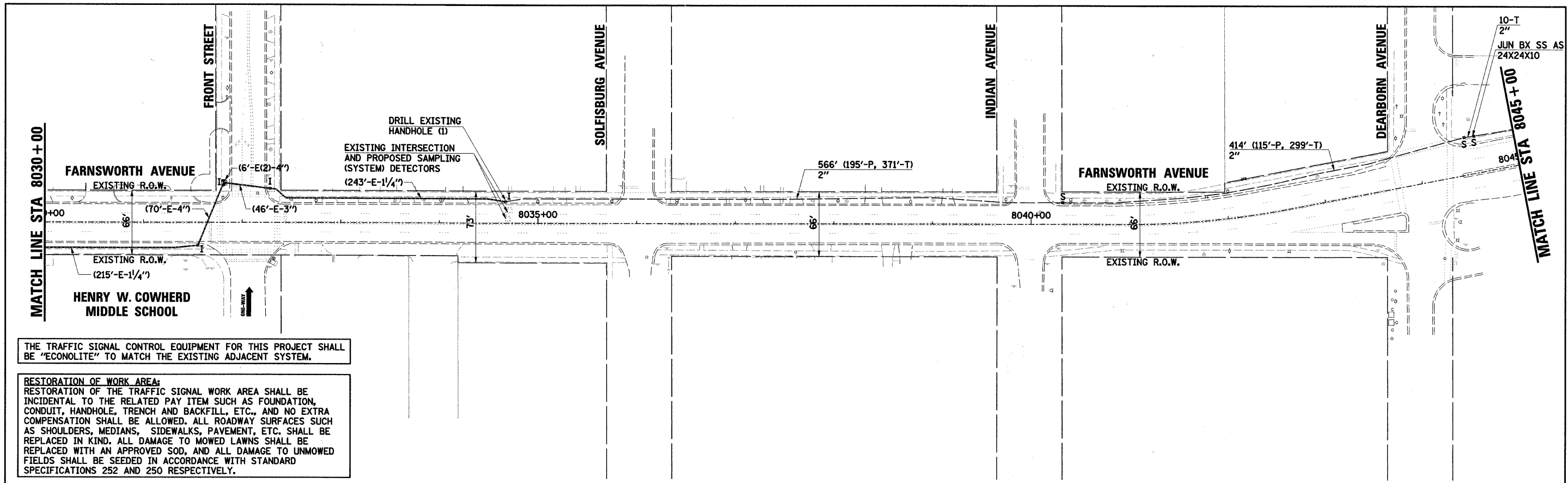
INTERCONNECT PLAN
 SHEET 1 OF 5

SCALE:	SHEET NO.	OF	SHEETS	STA.	TO	STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	09-00289-00-TL	KANE	37	28
CONTRACT NO. 63627				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

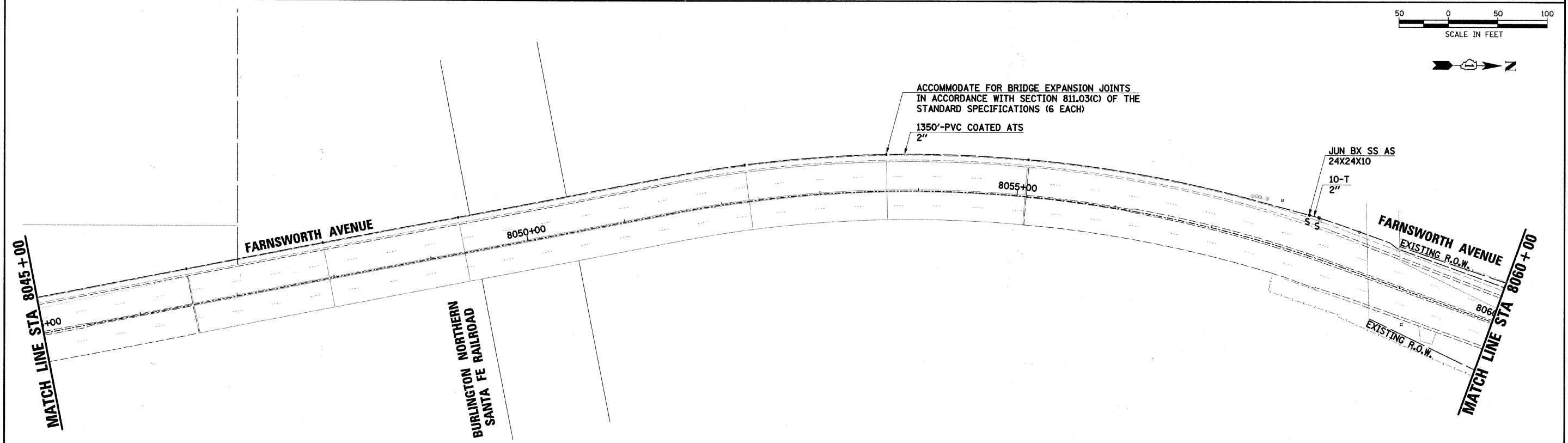
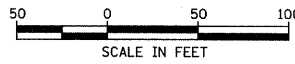
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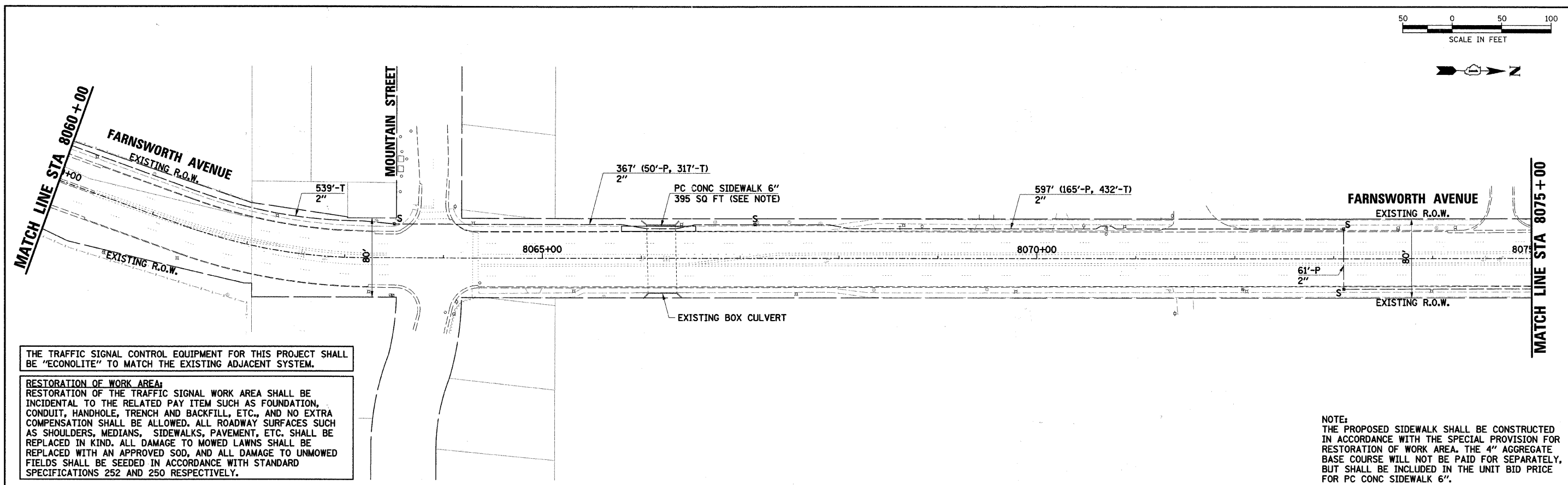
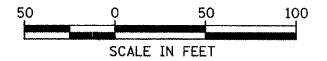
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

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. 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 SEEDDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.



NOTE:
 THE CONDUIT ATTACHED TO STRUCTURE SHALL BE ATTACHED TO THE OUTSIDE FACE OF THE CONCRETE PARAPET.

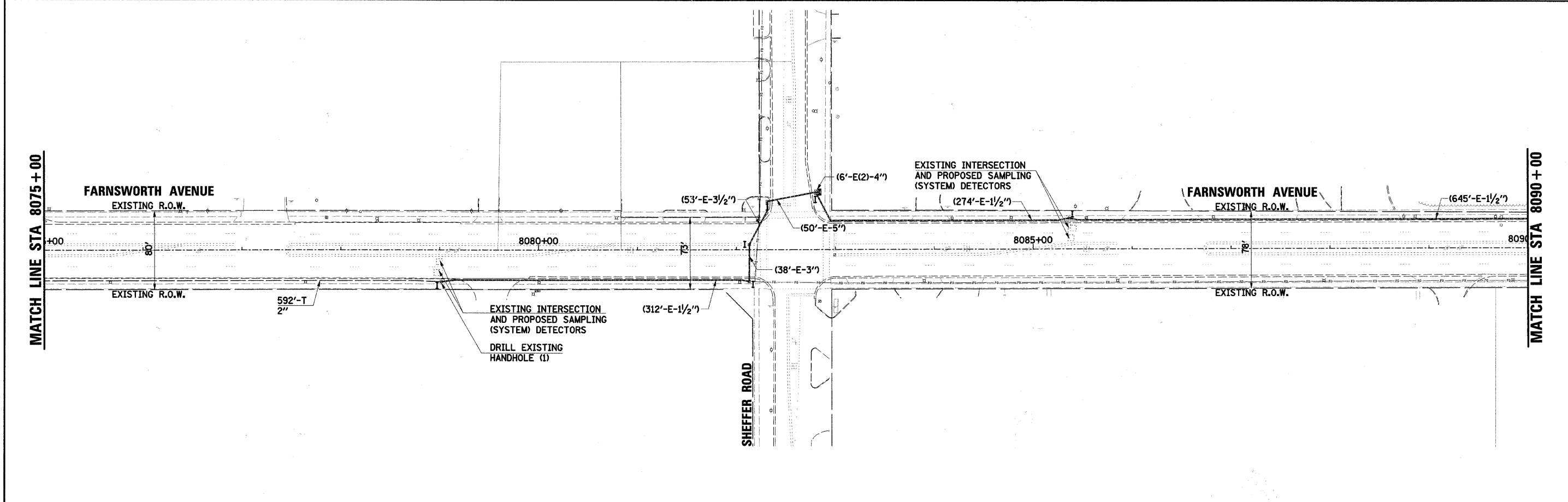
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	SCALE: SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					



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

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NOTE:
 THE PROPOSED SIDEWALK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIAL PROVISION FOR RESTORATION OF WORK AREA. THE 4" AGGREGATE BASE COURSE WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE UNIT BID PRICE FOR PC CONC SIDEWALK 6".



PLAN

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PROFILE

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USER NAME =	Mfeller
DESIGNED	JRS
DRAWN	JRS
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PLOT SCALE =	
PLOT DATE =	7/18/2011

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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

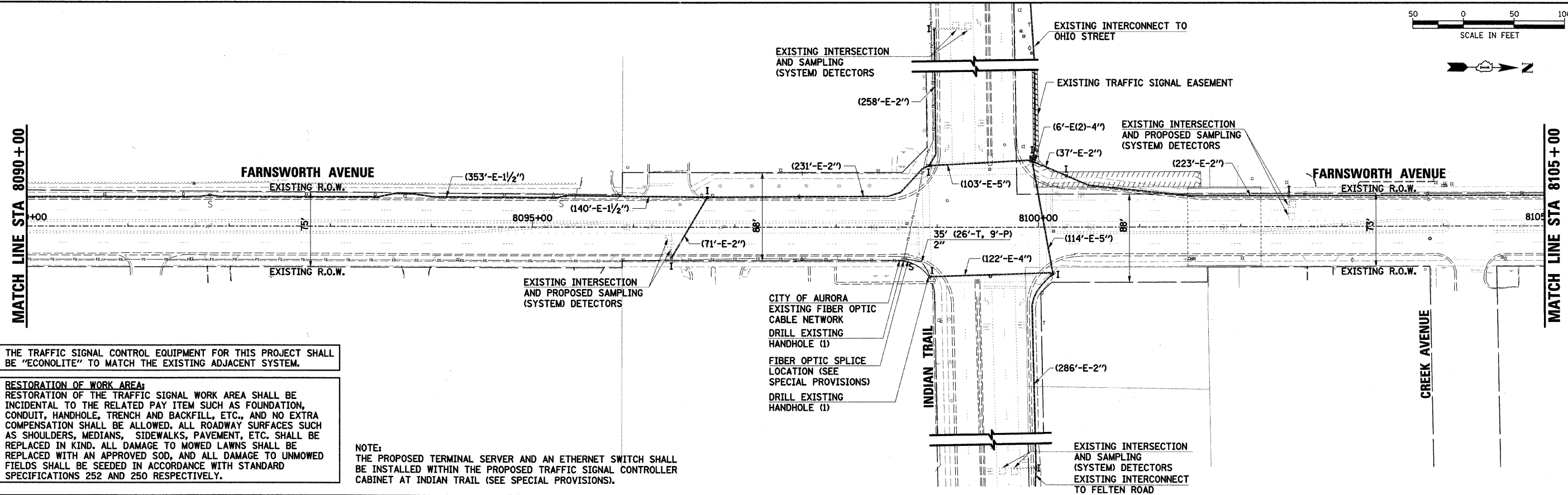
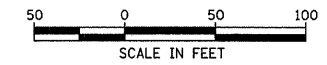
INTERCONNECT PLAN
 SHEET 3 OF 5

SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	09-00289-00-TL	KANE	37	30
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT			CONTRACT NO. 63627	

DATE	
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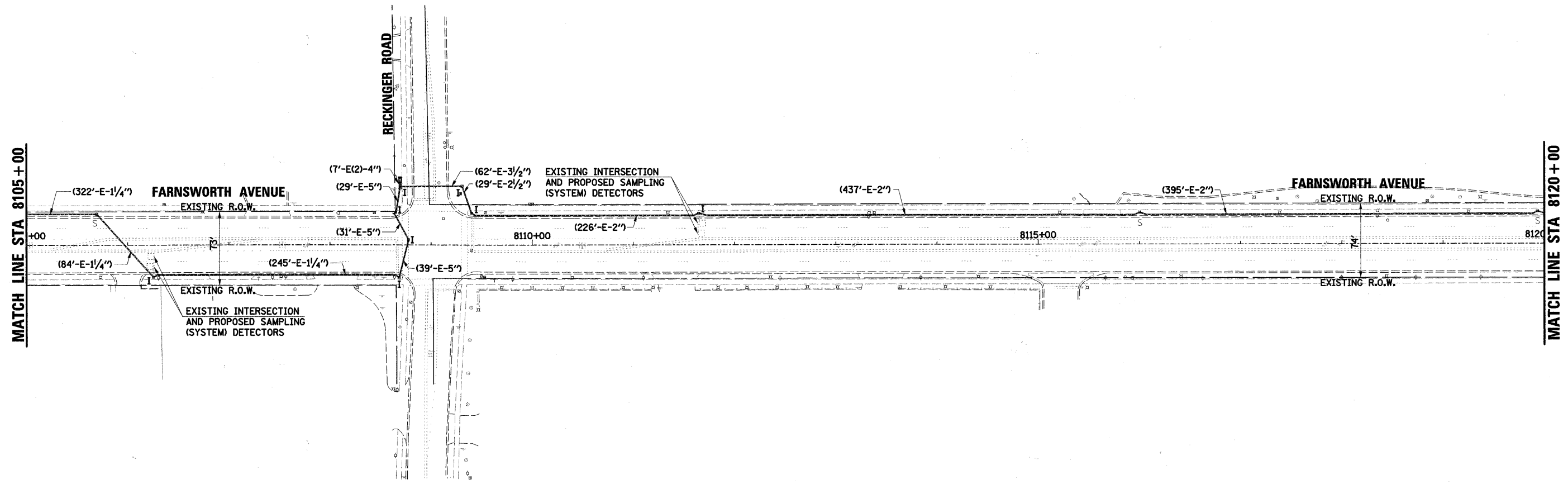


THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

RESTORATION OF WORK AREA:
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NOTE:
 THE PROPOSED TERMINAL SERVER AND AN ETHERNET SWITCH SHALL BE INSTALLED WITHIN THE PROPOSED TRAFFIC SIGNAL CONTROLLER CABINET AT INDIAN TRAIL (SEE SPECIAL PROVISIONS).

CITY OF AURORA
 EXISTING FIBER OPTIC
 CABLE NETWORK
 DRILL EXISTING
 HANDHOLE (1)
 FIBER OPTIC SPLICE
 LOCATION (SEE
 SPECIAL PROVISIONS)
 DRILL EXISTING
 HANDHOLE (1)



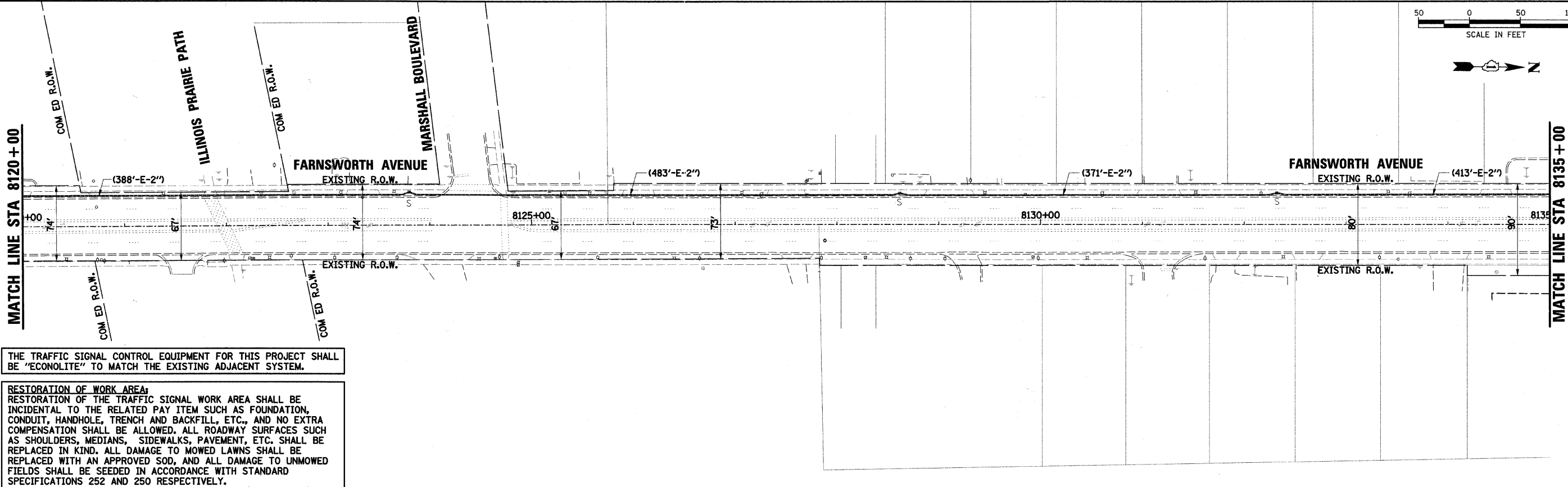
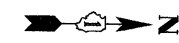
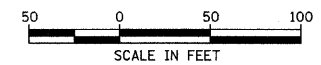
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PLOT DATE =	7/1/2011				

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
 SHEET 4 OF 5

SCALE:	SHEET NO.	OF	SHEETS	STA.	TO	STA.
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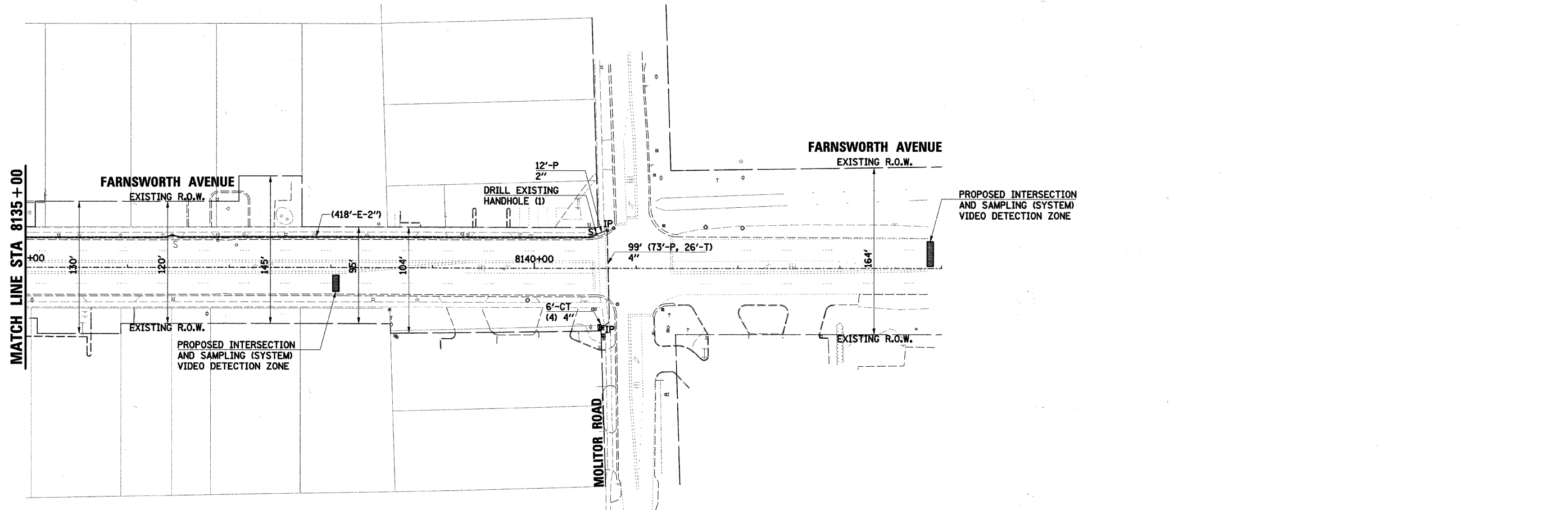
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	09-00289-00-TL	KANE	37	31
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 63627	



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

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USER NAME = Mfeller
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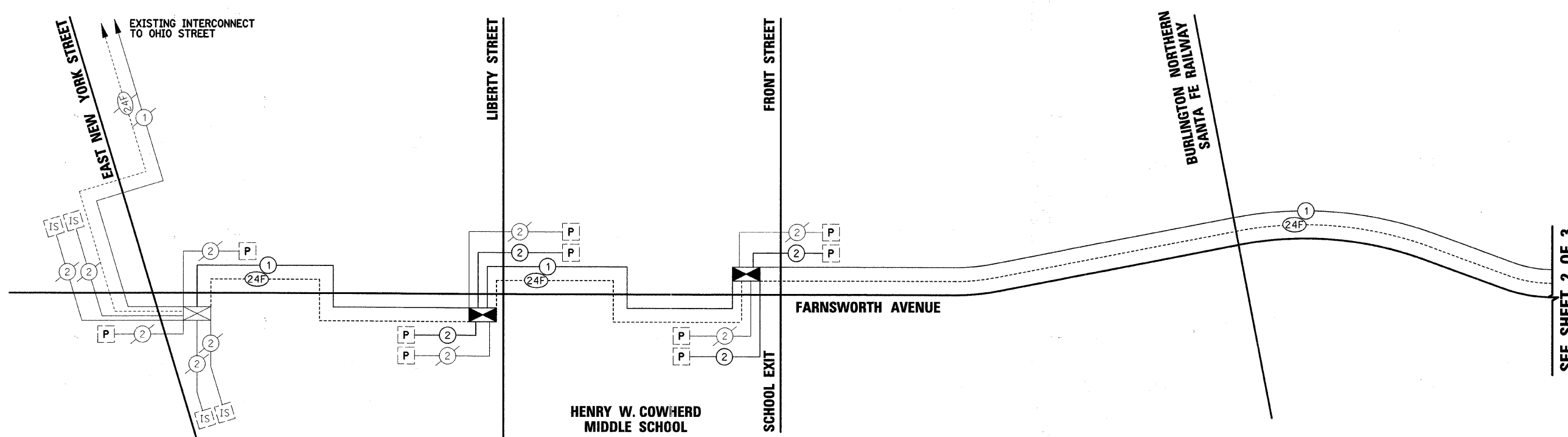
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
 SHEET 5 OF 5

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	09-00289-00-TL	KANE	37	32
CONTRACT NO. 63627				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



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SCHEDULE OF QUANTITIES

PAY ITEM DESCRIPTION	UNIT	INTERCONNECT
PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH	SQ FT	395
SIDEWALK REMOVAL	SQ FT	395
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	3635
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	1412
CONDUIT ATTACHED TO STRUCTURE, 2" DIA., PVC COATED GALVANIZED STEEL	FOOT	1350
JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 24" X 24" X 10"	EACH	2
HANDHOLE	EACH	11
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	3635
TRANSCIVER - FIBER OPTIC	EACH	6
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT	15681.5
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	15681.5
DRILL EXISTING HANDHOLE	EACH	9
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	12608
FIBER OPTIC CABLE SPLICE	EACH	1
ETHERNET SWITCH	EACH	1
TERMINAL SERVER	EACH	1
CENTRALIZED SYSTEM FIELD INTEGRATION / SETUP	L SUM	1
OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1

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



USER NAME = Mfaller	DESIGNED <i>JRS</i>	REVISED -
	DRAWN <i>JRS</i>	REVISED -
PLOT SCALE #	CHECKED <i>APS</i>	REVISED -
PLOT DATE = 7/1/2011	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

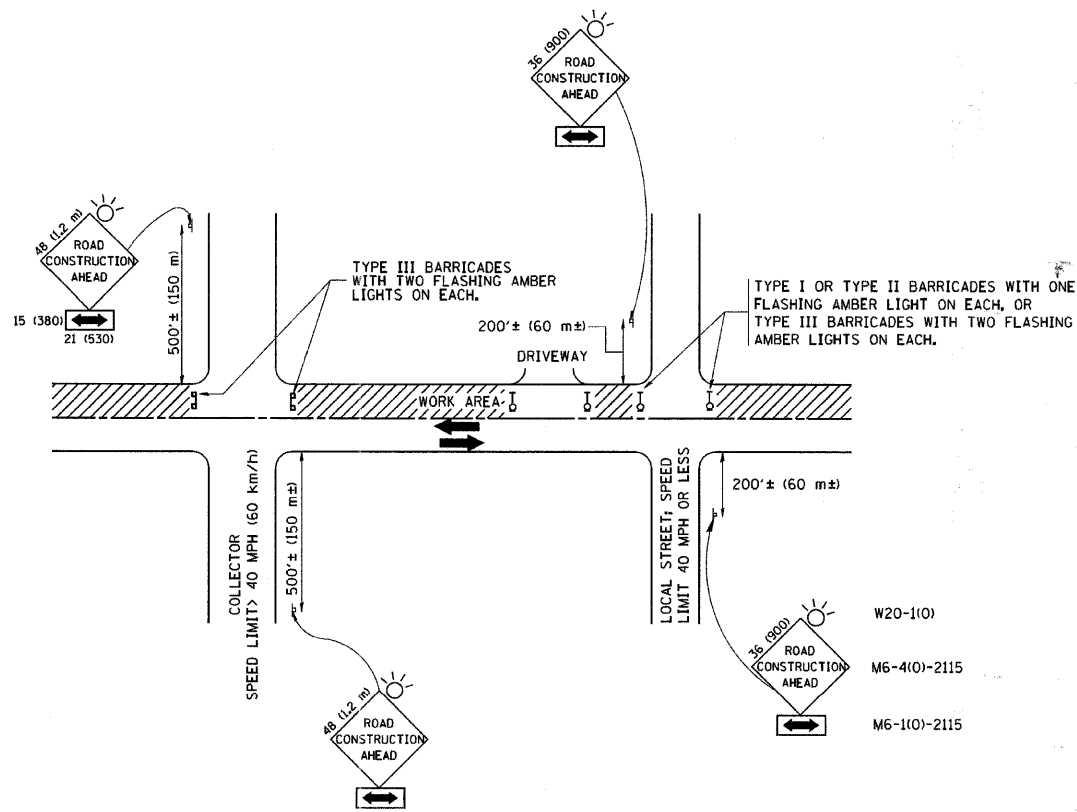
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	09-00289-00-TL	KANE	37	33
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 63627	

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STRUCTURE NOTATION		DATE	



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

a) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.

b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.

2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

a) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.

b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.

3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.

D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in millimeters (inches) unless otherwise shown.



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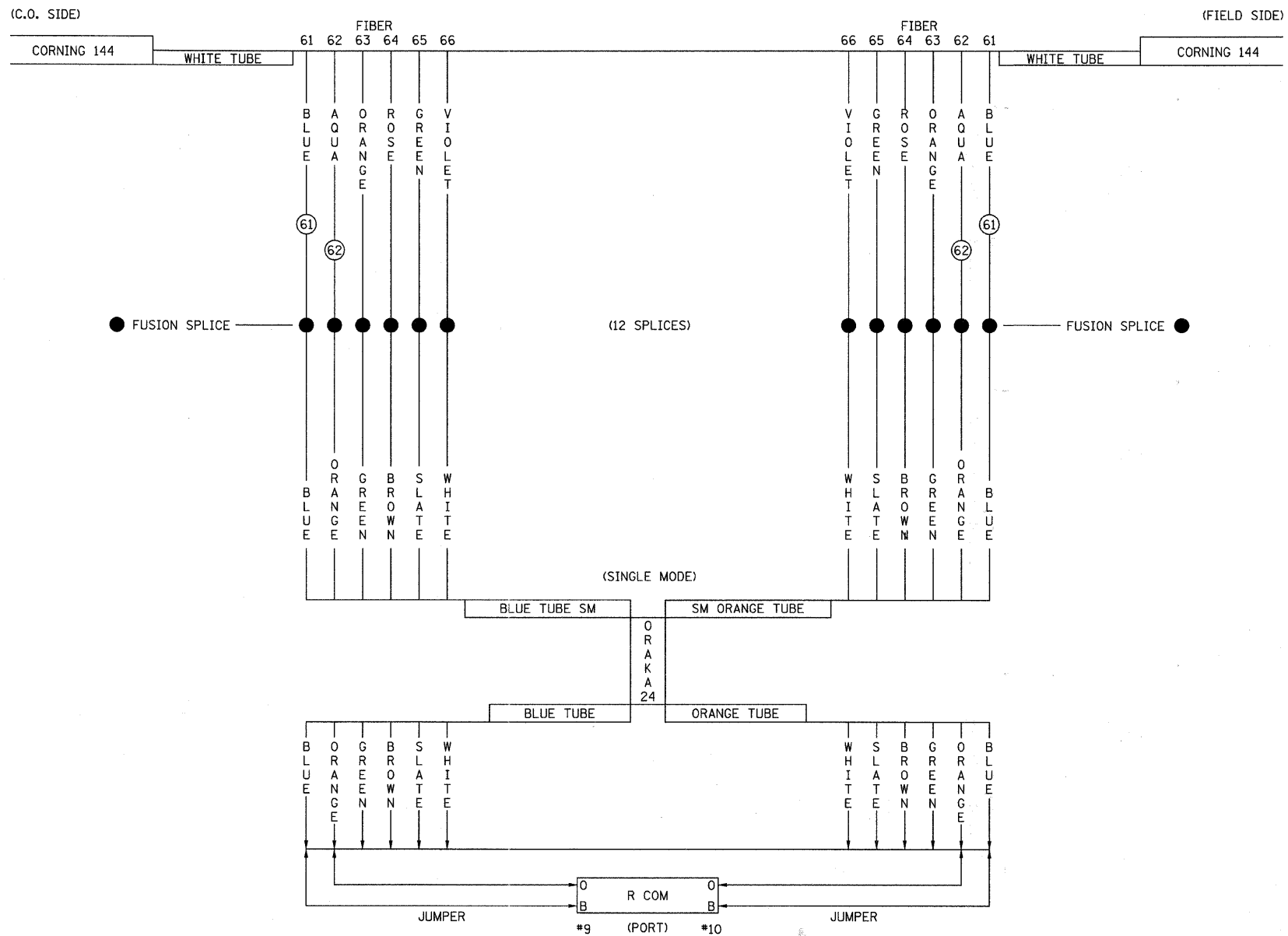
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION DETAIL
FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	09-00289-00-TL	KANE	37	36
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 63627	

TRAFFIC SIGNAL - FIBER 'T' SPLICE



- 1 EACH: TYCO FOSC 450 B CLOSURE
- INCLUDED IN STD. 450 B6:
- 1 EACH: STD. 6 TRAY
- 1 EACH: 6-HOLE PORT
- 1 EACH: TRACER GROUND LUG

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USER NAME = MFuller
PLOT SCALE =
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

FIBER OPTIC SPLICE DETAIL			
SCALE:	SHEET NO. OF SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	09-00289-00-TL	KANE	37	37
CONTRACT NO. 63627				
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				