

FOR INDEX OF SHEETS, SEE SHEET NO. 2

FOR LIST OF HIGHWAY STANDARDS, SEE SHEET NO. 2

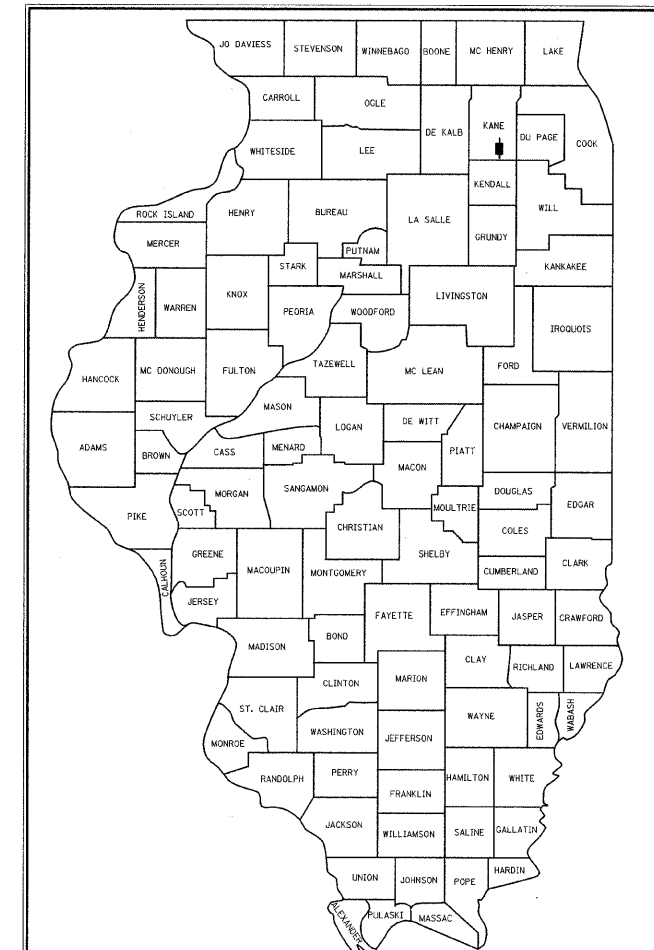
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED
PLANS FOR
TRAFFIC SIGNAL INTERCONNECT

CONGESTION MITIGATION AIR QUALITY
FAU ROUTE 3902 / ILLINOIS ROUTE 31 (LAKE STREET)
FROM GALE STREET TO NORTH OF INDIAN TRAIL
SECTION 05-00258-00-TL
PROJECT NO. CMM-9003 (034)
KANE COUNTY
JOB NO.: C-91-412-08

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	05-00258-00-TL	KANE	6.1	1

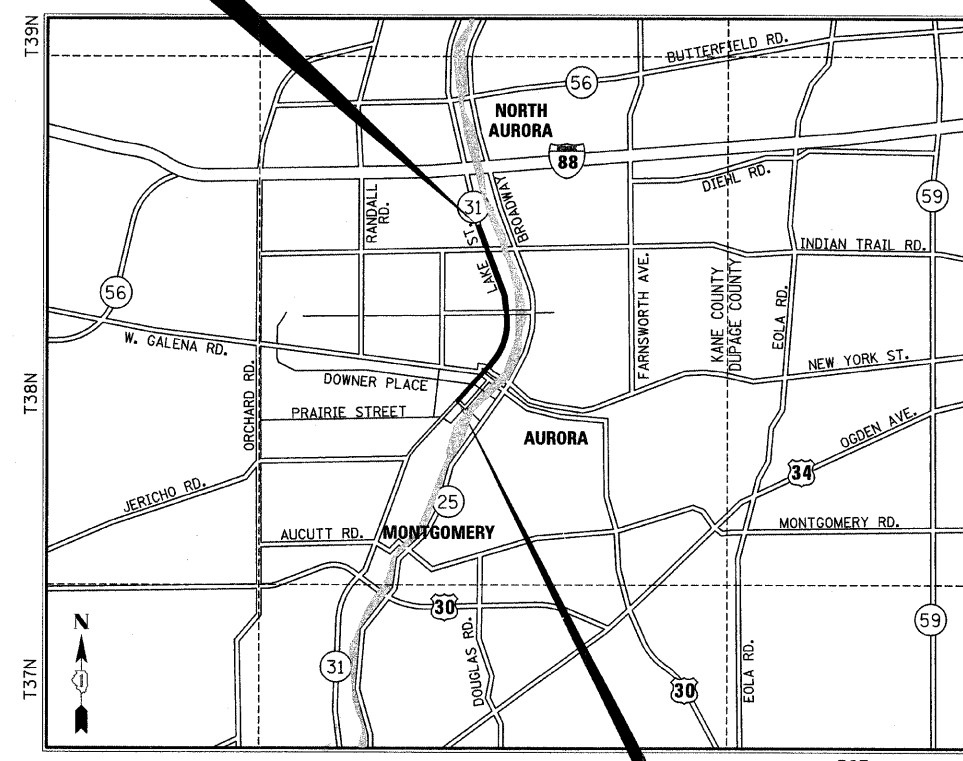
CONTRACT NO. 63251



LOCATION OF SECTION INDICATED THIS: - [black rectangle] -

END PROJECT
(AURORA COMMONS)

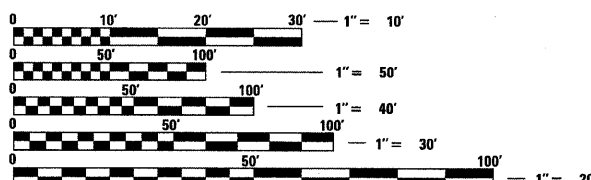
THIS IMPROVEMENT IS LOCATED
IN THE CITY OF AURORA



LOCATION MAP
SCALE : N.T.S

BEGIN PROJECT
(GALE STREET)

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: 63251

EXISTING ADT (2007) = 24,200
POSTED/DESIGN SPEED = 30 - 35 M.P.H.
PROJECT GROSS LENGTH = 12,400.00 FEET = 2.35 MILES
PROJECT NET LENGTH = 12,400.00 FEET = 2.35 MILES
DESIGN DESIGNATION = PRINCIPAL ARTERIAL



Anthony P. Simmons 2/5/2010
ANTHONY P. SIMMONS, P.E.
NO. 062-058414
EXPIRES: 11/30/2011
SEC GROUP, INC.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

APPROVED February 8 2010
E. J. [Signature]
CITY OF AURORA, CITY TRAFFIC ENGINEER

PASSED FEBRUARY 9 2010
C. [Signature]
DISTRICT 1 ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID
BASED ON LIMITED
REVIEW FEBRUARY 9, 2010
Diane M. O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION 1 ENGINEER

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Illinois Professional Design Firm # 184-000108

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Engineering
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Planning
Landscape Architecture

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

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	ALIGNED	
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LIST OF HIGHWAY STANDARDS

- 000001-05 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 424001-05 CURB RAMPS FOR SIDEWALKS
- 442201-03 CLASS C AND D PATCHES
- 606001-04 CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
- 606301-04 PC CONCRETE ISLANDS AND MEDIANS
- 701601-06 URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIUM
- 701701-06 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
- 857001-01 STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
- 862001-01 UNINTERRUPTABLE POWER SUPPLY (UPS)
- 873001-02 TRAFFIC SIGNAL GROUNDING & BONDING
- 877001-04 STEEL MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
- 877011-04 STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
- 878001-08 CONCRETE FOUNDATION DETAILS
- 880001-01 SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION
- 880006-01 TRAFFIC SIGNAL MOUNTING DETAILS
- 886001-01 DETECTOR LOOP INSTALLATIONS

HOT-MIX ASPHALT - MIX SELECTION

MIXTURE TYPE	AIR VOIDS	LIFT THICKNESS
CLASS D PATCHING (HMA BINDER IL-19 mm)	4% @ 70 GYR.	2-1/4" MIN.

- NOTES:
- THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 70-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.
 - FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.

FILE NAME =	USER NAME = .USER.	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS / LIST OF HIGHWAY STANDARDS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
...Trans\fin.dwg\690_2_index.dgn		DRAWN <i>JMR</i>	REVISED -			3902	05-00258-00-TL	KANE	61	2
		CHECKED <i>JRS</i>	REVISED -			CONTRACT NO. 63251				
		DATE -	REVISED -			SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.

SUMMARY OF QUANTITIES

CODE NUMBER	PAY ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	Y031-F												
				GALE STREET	BENTON STREET	DOWNER PLACE	GALENA BOULEVARD	NEW YORK STREET	WEST PARK AVENUE	ILLINOIS AVENUE	NORTHGATE SOUTH	NORTHGATE NORTH	LYON PLACE	INDIAN TRAIL	AURORA COMMONS	INTERCONNECT
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	88		16	16			12	8	8	8	8	4	8	
87800150	CONCRETE FOUNDATION, TYPE C	FOOT	16	4		4			4	4						
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	57						43.5	13.5						
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	85		22	22				41						
87900200	DRILL EXISTING HANDHOLE	EACH	49	6	8	7			6	9	2	2	3	1	2	3
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	39	6	4	4			6	6	2	3	2	4	2	
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	14	2	2	2			2		2	2	2			
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	9	2					2	1				4		
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	21	2					2	6	2	1	2	4	2	
88030210	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2												2	
88030220	SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2							2						
88030240	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	2							2						
88030310	SIGNAL HEAD, LED, 3-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1									1				
88030330	SIGNAL HEAD, LED, 3-FACE, 2-3 SECTION, 1-5 SECTION BRACKET MOUNTED	EACH	7								2	1	2	2		
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	15	4		2				1	2	2	2	2		
88102747	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	22	2	4	3			4	3	1		1	4		
88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	60	8	4	4			8	12	4	4	4	8	4	
88500100	INDUCTIVE LOOP DETECTOR	EACH	26	2	4	2			2	6	2		2	4	2	
88600100	DETECTOR LOOP, TYPE I	FOOT	1046.6	250.2	332.9	63.5				400						
88700200	LIGHT DETECTOR	EACH	22	2	2	2			2	2	2	2	3	2	3	
88700300	LIGHT DETECTOR AMPLIFIER	EACH	10	1	1	1			1	1	1	1	1	1	1	
88800100	PEDESTRIAN PUSH-BUTTON	EACH	62	8	8	8			8	10	4	2	4	8	2	
89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1							1						
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	39882.5	3182.5	1216	2264			4479.5	6853.5	1359.5	1197	1409.5	2402.5	818	14700.5
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	10	1	1	1			1	1	1	1	1	1	1	
89502380	REMOVE EXISTING HANDHOLE	EACH	10		1	2			3	4						
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	41	1	6	6			9	11	2	2	2		2	
X0322925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	14493													14493
X0324007	OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1													1
X0324232	PAINT NEW MAST ARM POLE, UNDER 40 FEET	EACH	6						4	2						
X0324256	FIBER OPTIC CABLE SPLICE	EACH	1													1
X0325141	PAINT NEW MAST ARM POLE, 40 FEET AND OVER	EACH	2							2						
X0325737	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1							1						
X0326269	PEDESTRIAN SIGNAL HEAD, LED, 3-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1							1						
X0402815	ISLAND PAVEMENT REMOVAL AND REPLACEMENT	SQ FT	623							623						
X0500015	SERVICE INSTALLATION - POLE MOUNTED	EACH	10	1	1	1			1	1	1	1	1	1	1	
X0510300	PAINT TRAFFIC SIGNAL POST	EACH	23		4	4			3	4	2	2	2		2	
X0620020	UNINTERRUPTABLE POWER SUPPLY	EACH	10	1	1	1			1	1	1	1	1	1	1	
X0710020	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT	14493													14493
X0730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	5786	492	452.5	586.5			455	781.5	607.5	493.5	530	734	653.5	
X0730250	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	3889	314.5	394	414.5		146.5	253.5	654.5	237	211	462	321	480.5	
X0730410	SIDEWALK REMOVAL AND REPLACEMENT	SQ FT	1129	50					173	225	80	61	540			
X003584	VIDEO BELDEN 8281 COAXIAL CABLE IN CONDUIT	FOOT	521			138.5		146.5		236						
X005937	I.E.D. INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	4		2	2										
X006923	GROUND EXISTING HANDHOLE FRAME AND COVER	EACH	54	5	2	2			3	3	9	7	6	8	9	
X007251	INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	3		1				1	1						
X007952	TERMINAL SERVER	EACH	1													1
X007992	ETHERNET SWITCH	EACH	1													1
X007993	CENTRALIZED SYSTEM FIELD INTEGRATION / SETUP	L SUM	1													1
Z0076600	TRAINEES	HOUR	500													

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STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: _____

SHEET NO. _____ OF _____ SHEETS

STA. _____ TO STA. _____

F.A.I. RTE. 3902

SECTION 05-00258-00-TL

COUNTY KANE

TOTAL SHEETS 61

SHEET NO. 4

CONTRACT NO. 63251

FED. ROAD DIST. NO. _____

ILLINOIS FED. AID PROJECT

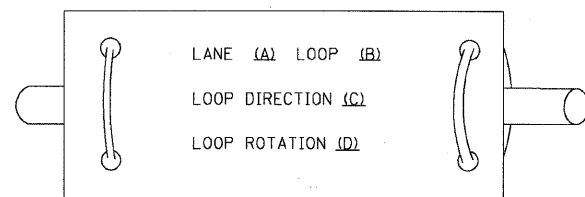
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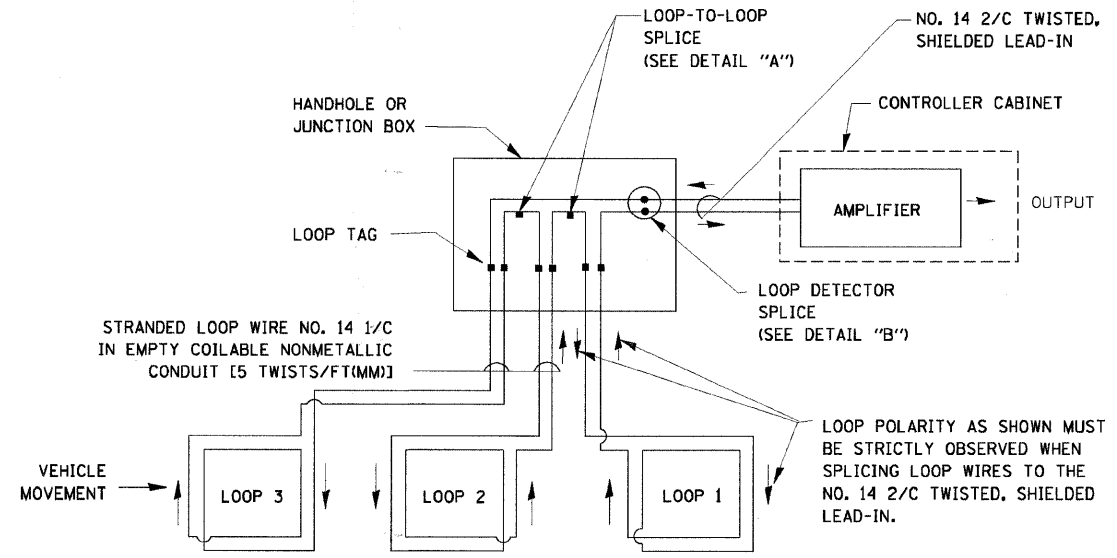
LOOP DETECTOR NOTES

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 DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

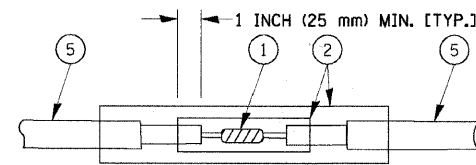


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

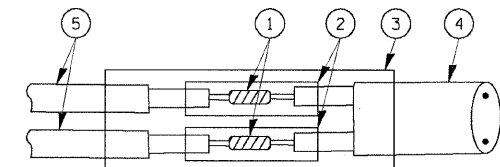


DETECTOR LOOP WIRING SCHEMATIC

- 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.

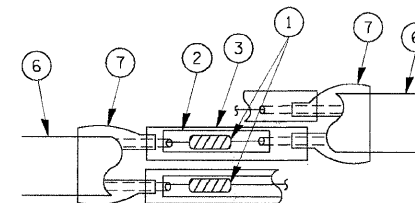


**DETAIL "A"
LOOP-TO-LOOP SPLICE**



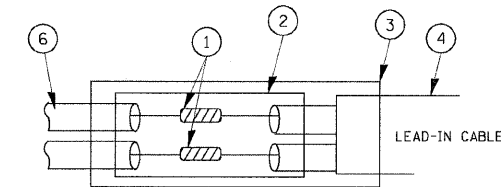
**DETAIL "B"
LOOP-TO-CONTROLLER SPLICE**

TYPE I LOOP



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

PREFORMED LOOP



**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 PREFORMED LOOP
- 7 XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS, TYCO CBR-2 OR APPROVED EQUAL

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
STANDARD TRAFFIC SIGNALS
DESIGN DETAILS**

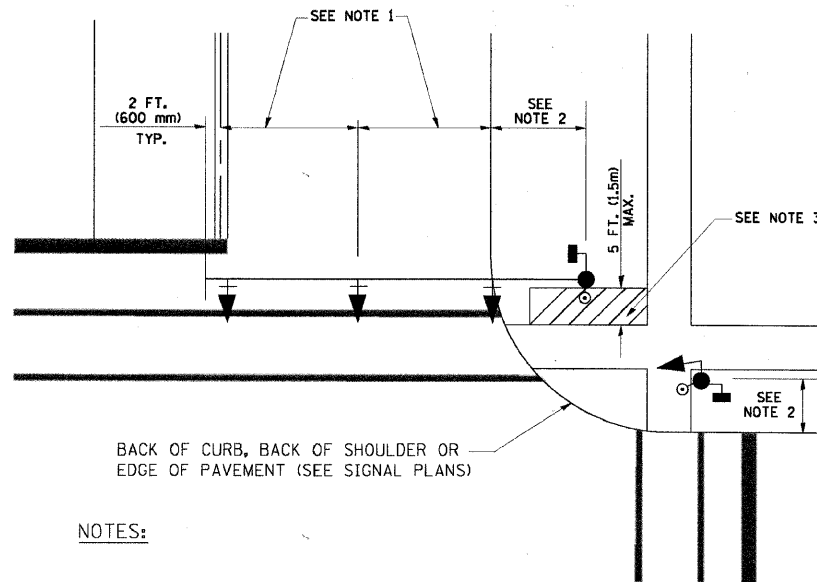
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F.A.U. RTE. 3902	SECTION 05-00258-00-TL	COUNTY KANE	TOTAL SHEETS 61	SHEET NO. 5
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 63251	

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TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

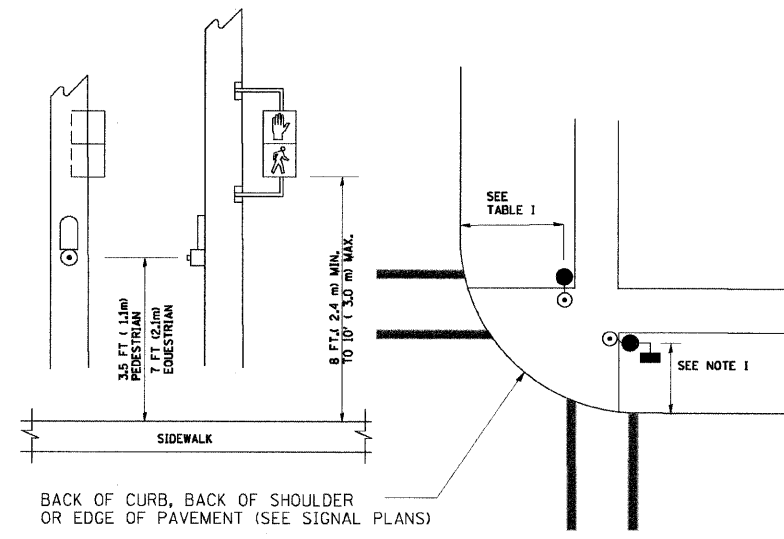
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



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."

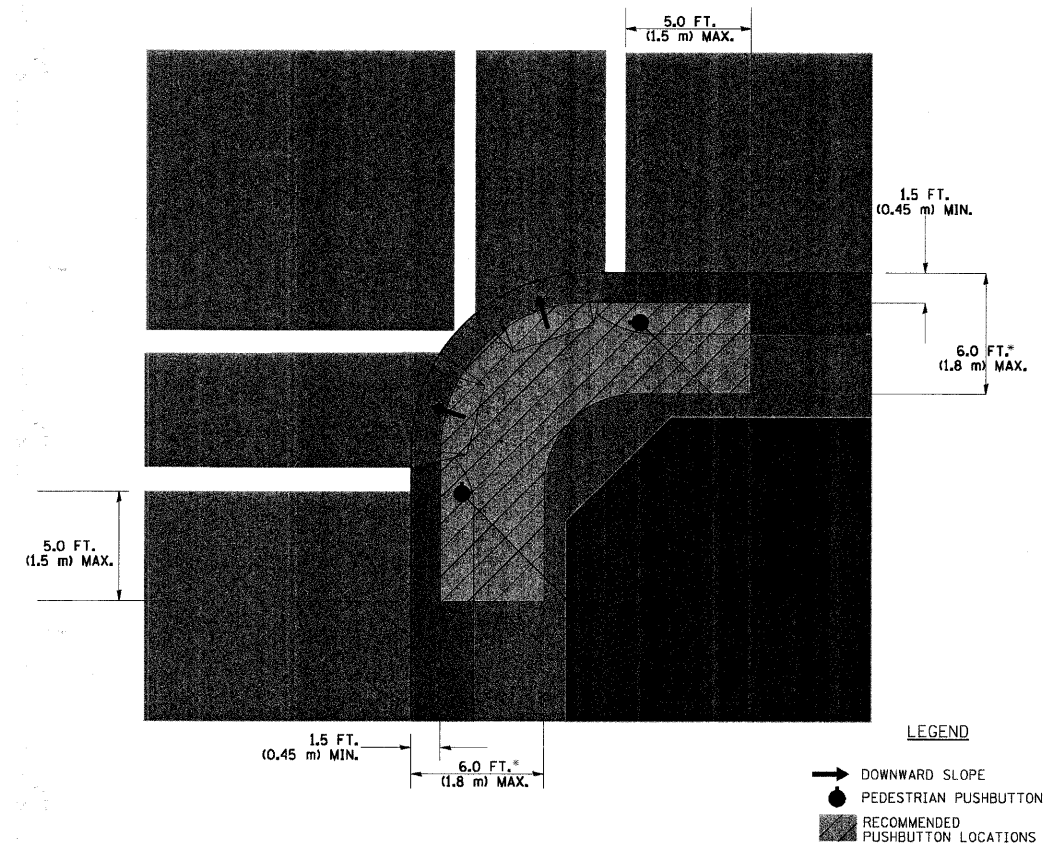
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



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



LEGEND

- DOWNWARD SLOPE
- PEDESTRIAN PUSHBUTTON
- 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.

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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

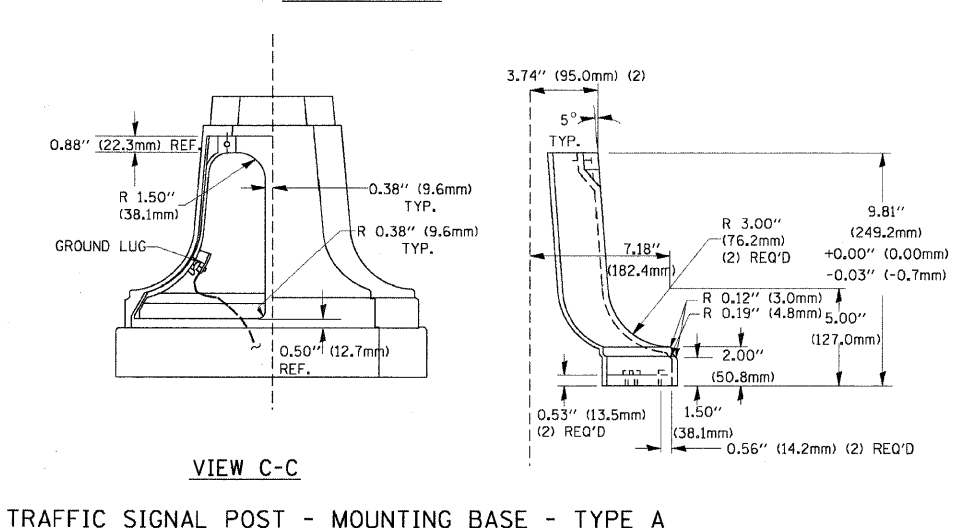
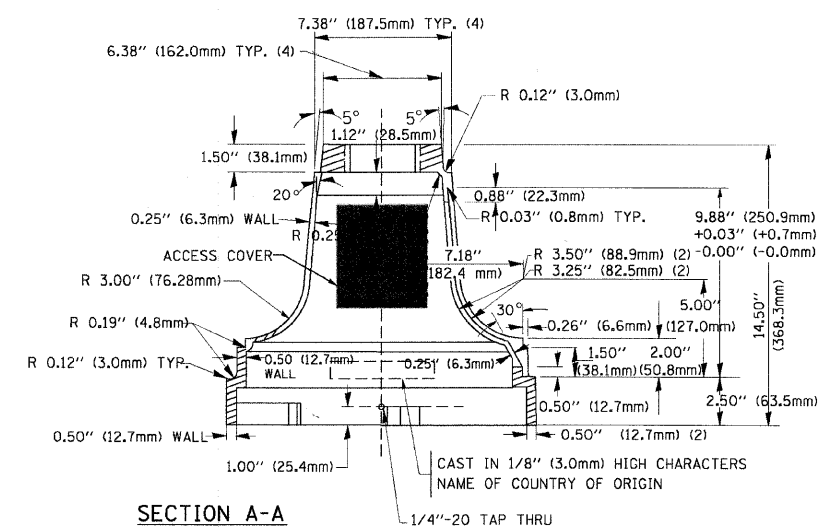
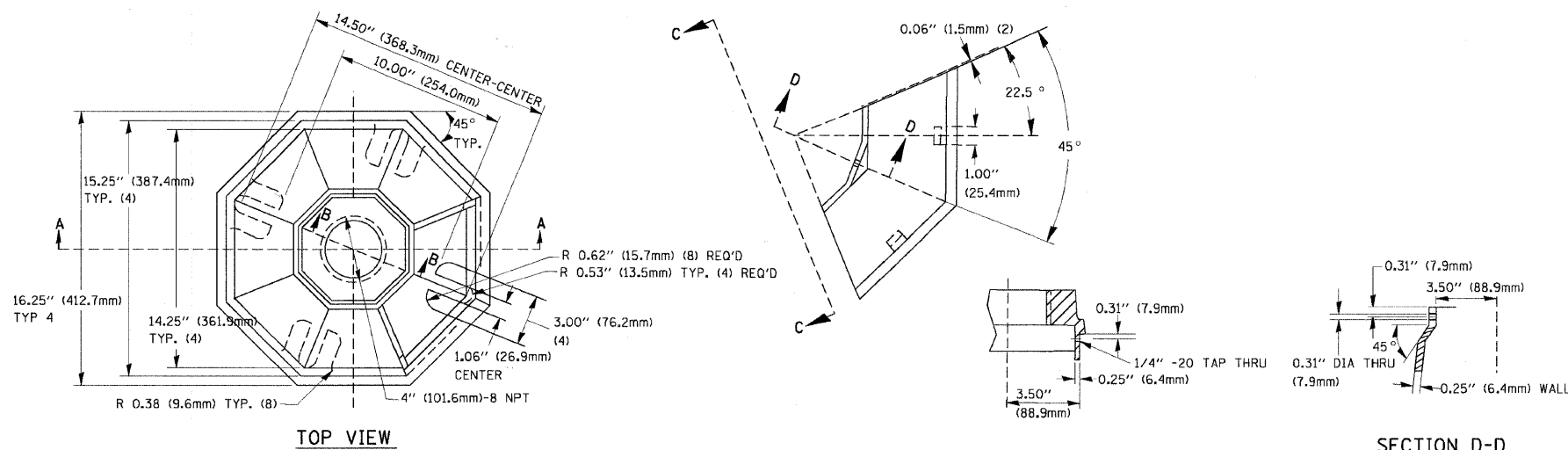
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 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:

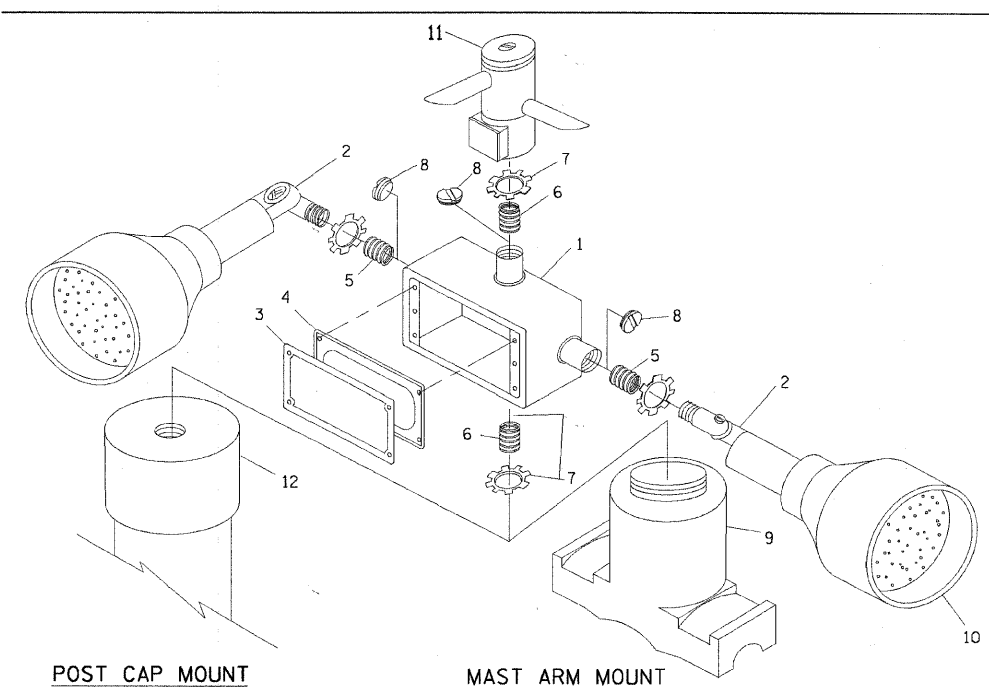
1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM 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.

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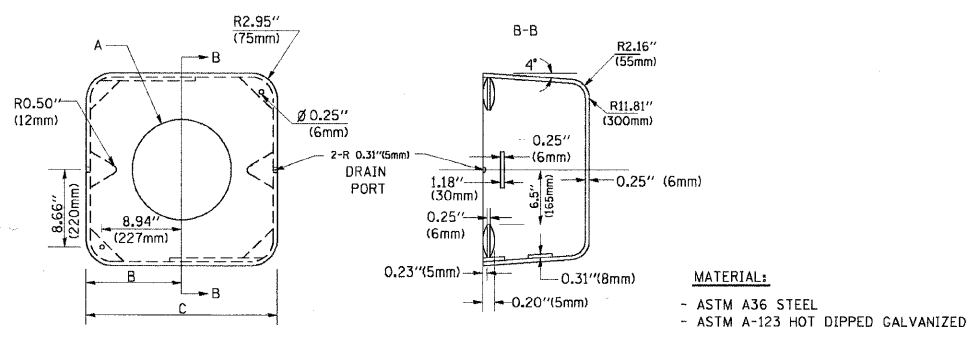


TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A



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.]

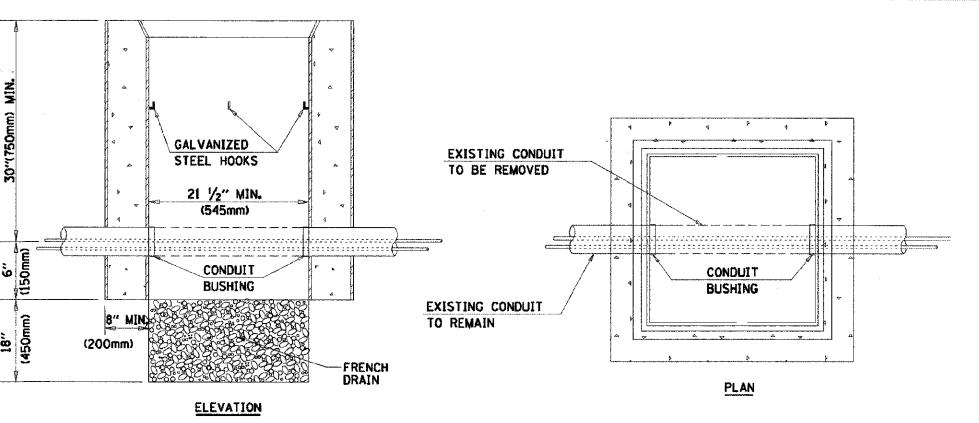
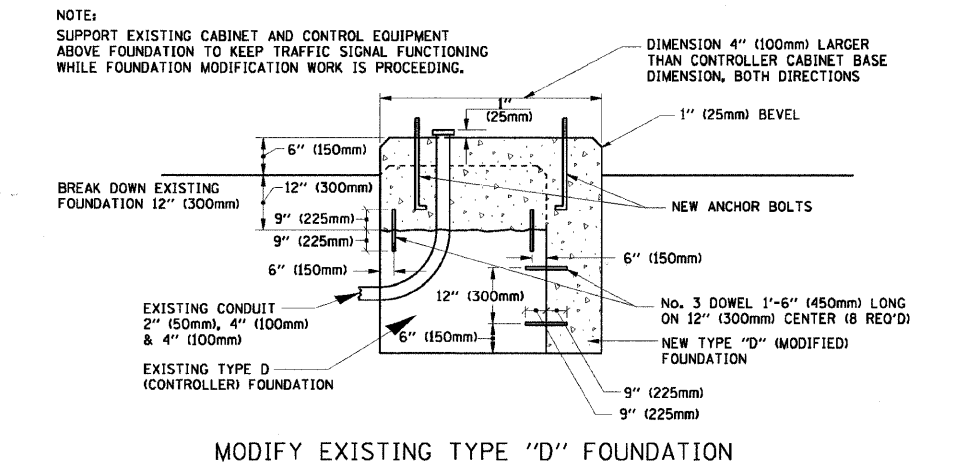
- NOTES:**
- ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
 - ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
 ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
 ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
 - WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED.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



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

SHROUD

- 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.



- 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.

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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
 STANDARD TRAFFIC SIGNALS
 DESIGN DETAILS

F.A.U. RTE. 3902
 SECTION 05-00258-00-TL
 COUNTY KANE
 TOTAL SHEETS 61
 SHEET NO. 8
 CONTRACT NO. 63251
 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

TRAFFIC SIGNAL LEGEND

PLAN	DATE
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NOTED BY	
CHECKED BY	
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PROFILE	DATE
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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 SM12F			
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT				GALVANIZED STEEL CONDUIT IN TRENCH (T) OR PUSHED (P)				FIBER OPTIC CABLE NO. 62.5/125, (NUMBER OF FIBERS & TYPE TO BE NOTED ON PLANS)			
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT				TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE				GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE			
STEEL MAST ARM ASSEMBLY AND POLE				COMMON TRENCH				CONTROLLER CABINET AND FOUNDATION TO BE REMOVED			
ALUMINUM MAST ARM ASSEMBLY AND POLE				COILABLE NONMETALLIC CONDUIT (EMPTY)				STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE				SYSTEM ITEM				ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA				INTERSECTION ITEM				STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED			
SIGNAL POST				REMOVE ITEM				SIGNAL POST AND FOUNDATION TO BE REMOVED			
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM				RELOCATE ITEM				INTERSECTION & SAMPLING (SYSTEM) DETECTOR			
GUY WIRE				ABANDON ITEM				SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD				12" (300mm) TRAFFIC SIGNAL SECTION				EXISTING INTERSECTION LOOP DETECTOR			
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)				12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE				PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD WITH BACKPLATE				SIGNAL FACE				EXISTING PREFORMED INTERSECTION LOOP DETECTOR			
SIGNAL HEAD OPTICALLY PROGRAMMED				SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD				PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
FLASHER INSTALLATION (S DENOTES SOLAR POWER)				12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL				PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
PEDESTRIAN SIGNAL HEAD				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED				PREFORMED SAMPLING (SYSTEM) DETECTOR			
PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID				RAILROAD SYMBOLS			
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR				PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER				RAILROAD CONTROL CABINET			
ILLUMINATED SIGN "NO LEFT TURN"				RADIO INTERCONNECT				RAILROAD CANTILEVER MAST ARM			
ILLUMINATED SIGN "NO RIGHT TURN"				RADIO REPEATER				FLASHING SIGNAL			
DETECTOR LOOP, TYPE I				DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED				CROSSING GATE			
PREFORMED DETECTOR LOOP				GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)				CROSSBUCK			
MICROWAVE VEHICLE SENSOR											
VIDEO DETECTION CAMERA											
VIDEO DETECTION ZONE											
PAN, TILT, ZOOM CAMERA											
WIRELESS DETECTOR SENSOR											
WIRELESS ACCESS POINT											

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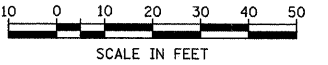
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
STANDARD TRAFFIC SIGNALS
DESIGN DETAILS**

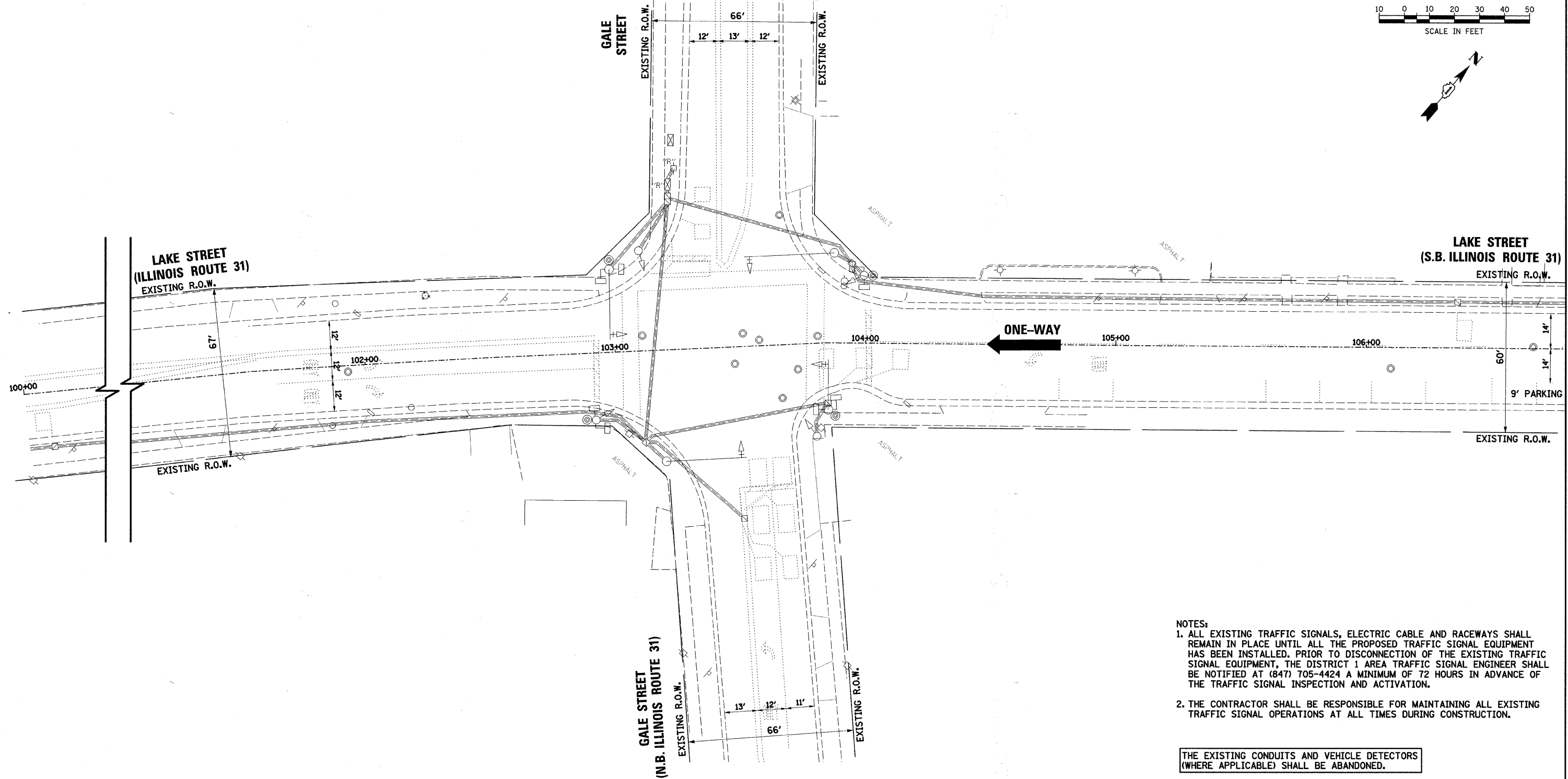
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CONTRACT NO. 63251				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

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



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

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

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

- 8 EACH TRAFFIC SIGNAL HEADS
- 4 EACH TRAFFIC SIGNAL BACKPLATES
- 8 EACH PEDESTRIAN SIGNAL HEADS
- 4 EACH PEDESTRIAN PUSH BUTTONS
- 1 EACH SERVICE INSTALLATION

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 MAINTENANCE FACILITY DESIGNATED BY THE CITY. THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

- 1 EACH TRAFFIC SIGNAL CONTROLLER AND CABINET (COMPLETE)

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CHECKED *JRS*
DATE -

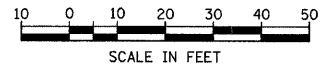
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EXISTING TRAFFIC SIGNAL EQUIPMENT TO BE REMOVED
GALE STREET**

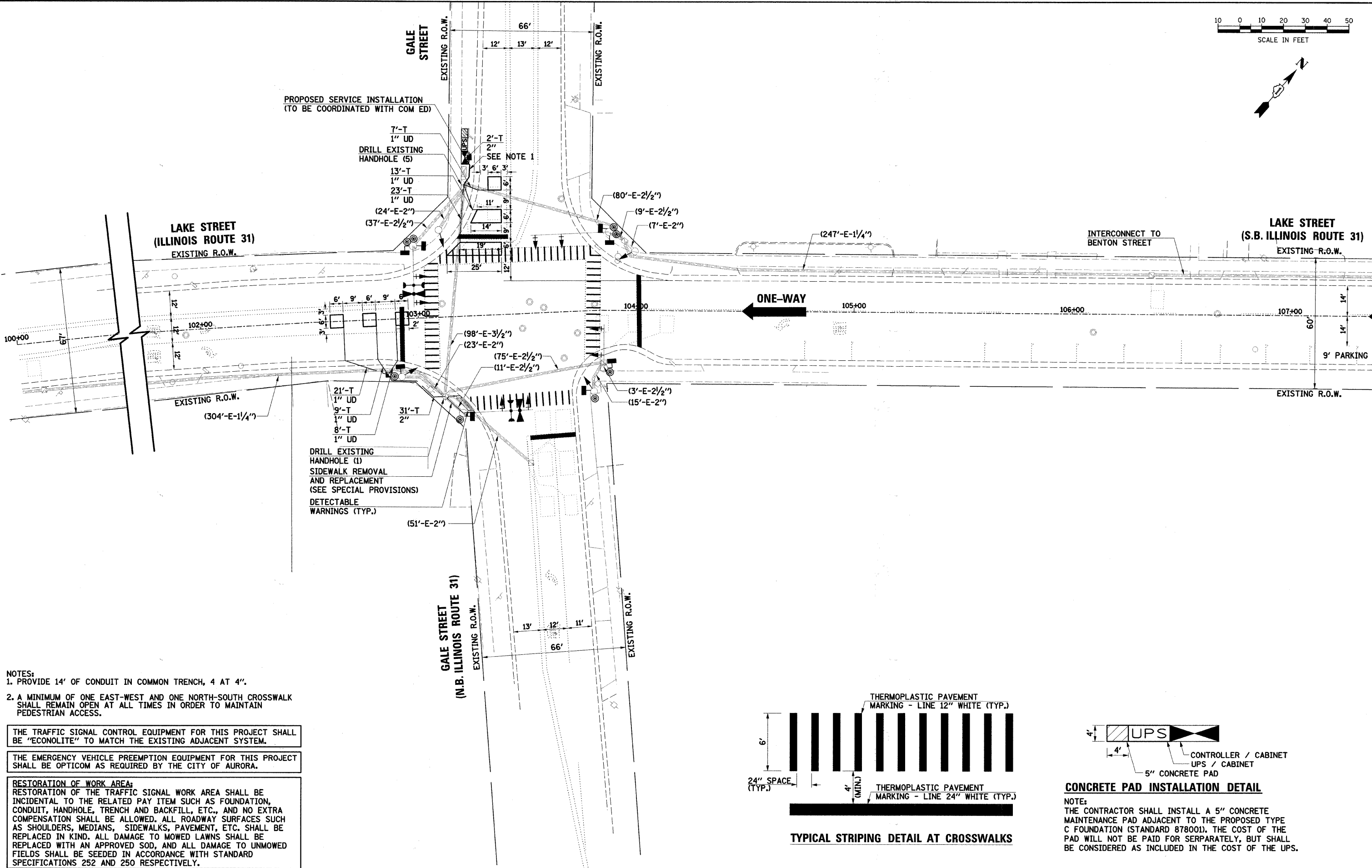
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	05-00258-00-TL	KANE	61	11
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
CONTRACT NO.			63251	

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



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BY	
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APPROVED	
ALIGNMENT CHECKED	
CONSTRUCTION CHECKED	
PLAN FILE NAME	
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DATE	
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REVIEWED	
APPROVED	
GRADES CHECKED	
REVISIONS CHECKED	
STRUCTURE NOTATIONS CHECKED	
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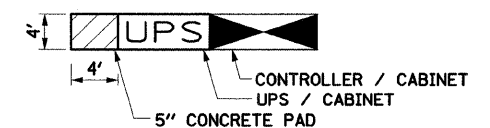
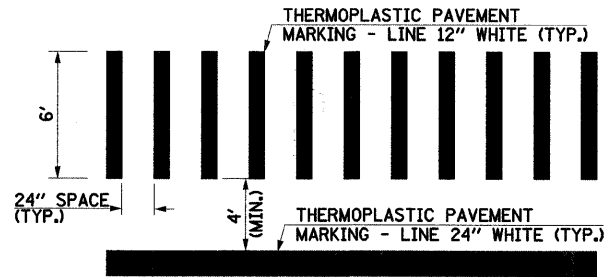


- NOTES:
1. PROVIDE 14' OF CONDUIT IN COMMON TRENCH, 4 AT 4".
 2. A MINIMUM OF ONE EAST-WEST AND ONE NORTH-SOUTH CROSSWALK SHALL REMAIN OPEN AT ALL TIMES IN ORDER TO MAINTAIN PEDESTRIAN ACCESS.

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

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

RESTORATION OF WORK AREA:
RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. 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.

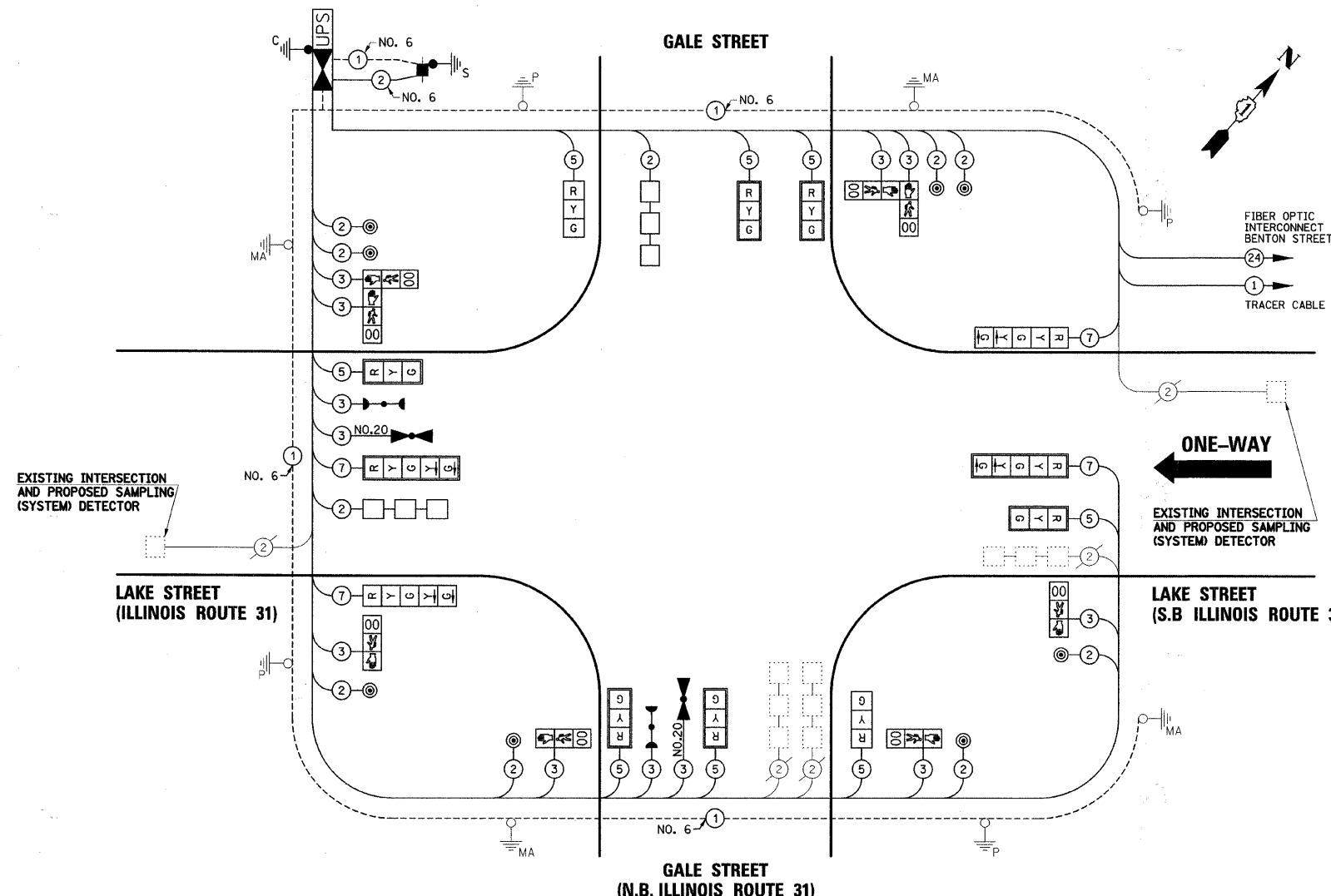


NOTE:
THE CONTRACTOR SHALL INSTALL A 5" CONCRETE MAINTENANCE PAD ADJACENT TO THE PROPOSED TYPE C FOUNDATION (STANDARD 878001). THE COST OF THE PAD WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE COST OF THE UPS.

FILE NAME = ...\\fin.dwg\690.2.sig\1b.gale.dgn	USER NAME = .USER.	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODIFICATION PLAN GALE STREET	F.A.U. RTE. 3902	SECTION 05-00258-00-TL	COUNTY KANE	TOTAL SHEETS 61	SHEET NO. 12		
PLOT SCALE = #SCALE#	CHECKED JRS	DESIGNED JMR	REVISED -			SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	CONTRACT NO. 63251			
PLOT DATE = 3/11/2010	DATE -	CHECKED JRS	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT						
		DATE -	REVISED -									

PLAN	SURVEYED	DATE
	ALIGNMENT CHECKED	
	PL. OF WAY CHECKED	
	RAID FILE NAME	
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PROFILE	SURVEYED	DATE
	GRADES CHECKED	
	BLM. NOTED	
	STRUCTURE NOTATIONS OK'D	
	NO.	



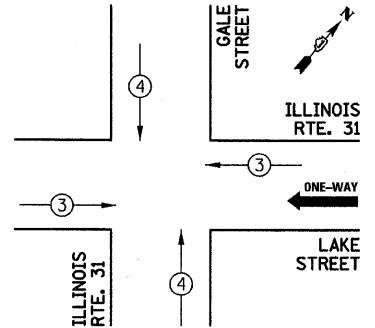
SCHEDULE OF QUANTITIES

PAY ITEM DESCRIPTION	UNIT	GALE STREET
DETECTABLE WARNINGS	SQ FT	16
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	427
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	105
PAVEMENT MARKING REMOVAL	SQ FT	364
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	33
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	56
HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	128
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1210
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1576.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1407
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	689
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	202
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	19.5
CONCRETE FOUNDATION, TYPE C	FOOT	4
DRILL EXISTING HANDHOLE	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
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
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	2
DETECTOR LOOP, TYPE I	FOOT	250.2
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	8
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3182.5
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNINTERRUPTABLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	492
ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	314.5
SIDEWALK REMOVAL AND REPLACEMENT	SQ FT	50
GROUND EXISTING HANDHOLE FRAME AND COVER	EACH	5

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	12		17	0.50	102
(YELLOW)	12		25	0.25	75
(GREEN)	12		15	0.25	45
ARROW	8		12	0.10	9.6
PED. SIGNAL	8		25	1.00	200
CONTROLLER	1		100	1.00	100
UPS	1		25	1.00	25
TOTAL =					556.6

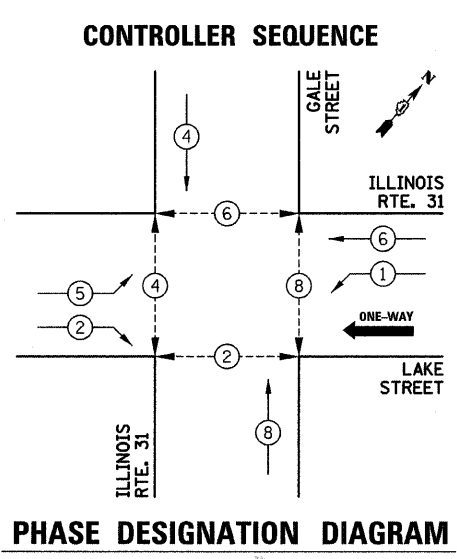
ENERGY COSTS TO: CITY OF AURORA
 44 E. DOWNER PLACE
 AURORA, ILLINOIS 60507-2067

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



EMERGENCY VEHICLE PREEMPTION SEQUENCE

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



CONTROLLER SEQUENCE LEGEND

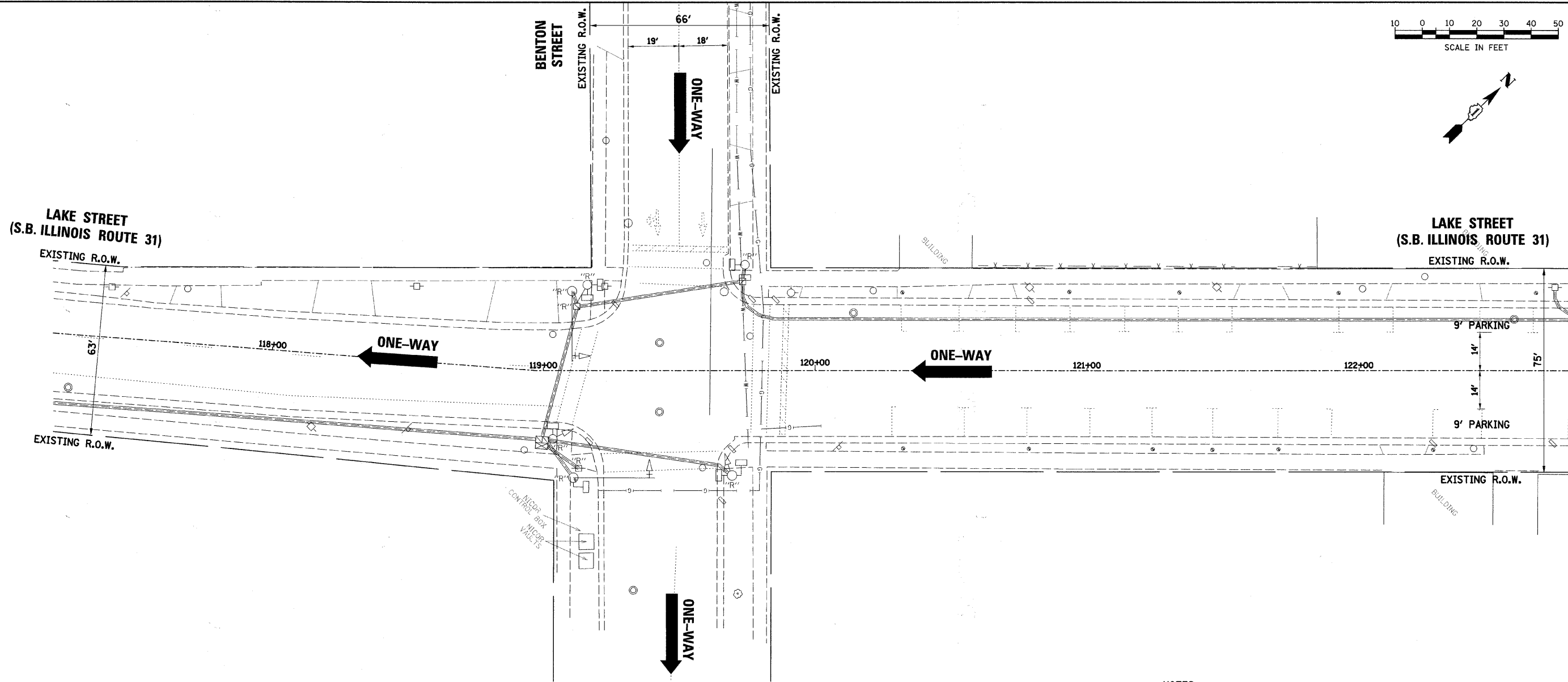
- ←*→ DUAL ENTRY PHASE
- ←* SINGLE ENTRY PHASE
- ←* OL OVERLAP
- * NUMBER REFERRING TO ASSOCIATED PHASE
- ←*→ PEDESTRIAN PHASE

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

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

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

PROFILE	SURVEYED	DATE
NOTE BOOK	GRADES CHECKED	
NO.	BY	
	STRUCTURE NOTATIONS CHECKED	



NOTES:

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

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

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

- | | | |
|---|------|-----------------------------------|
| 2 | EACH | STEEL MAST ARM ASSEMBLY AND POLES |
| 4 | EACH | TRAFFIC SIGNAL POSTS |
| 4 | EACH | TRAFFIC SIGNAL HEADS |
| 2 | EACH | TRAFFIC SIGNAL BACKPLATES |
| 8 | EACH | PEDESTRIAN SIGNAL HEADS |
| 1 | EACH | SERVICE INSTALLATION |

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 MAINTENANCE FACILITY DESIGNATED BY THE CITY. THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

- | | | |
|---|------|---------------------------|
| 1 | EACH | TRAFFIC SIGNAL CONTROLLER |
|---|------|---------------------------|

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CHECKED *JRS*
DATE -

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DRAWN *JMR*
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

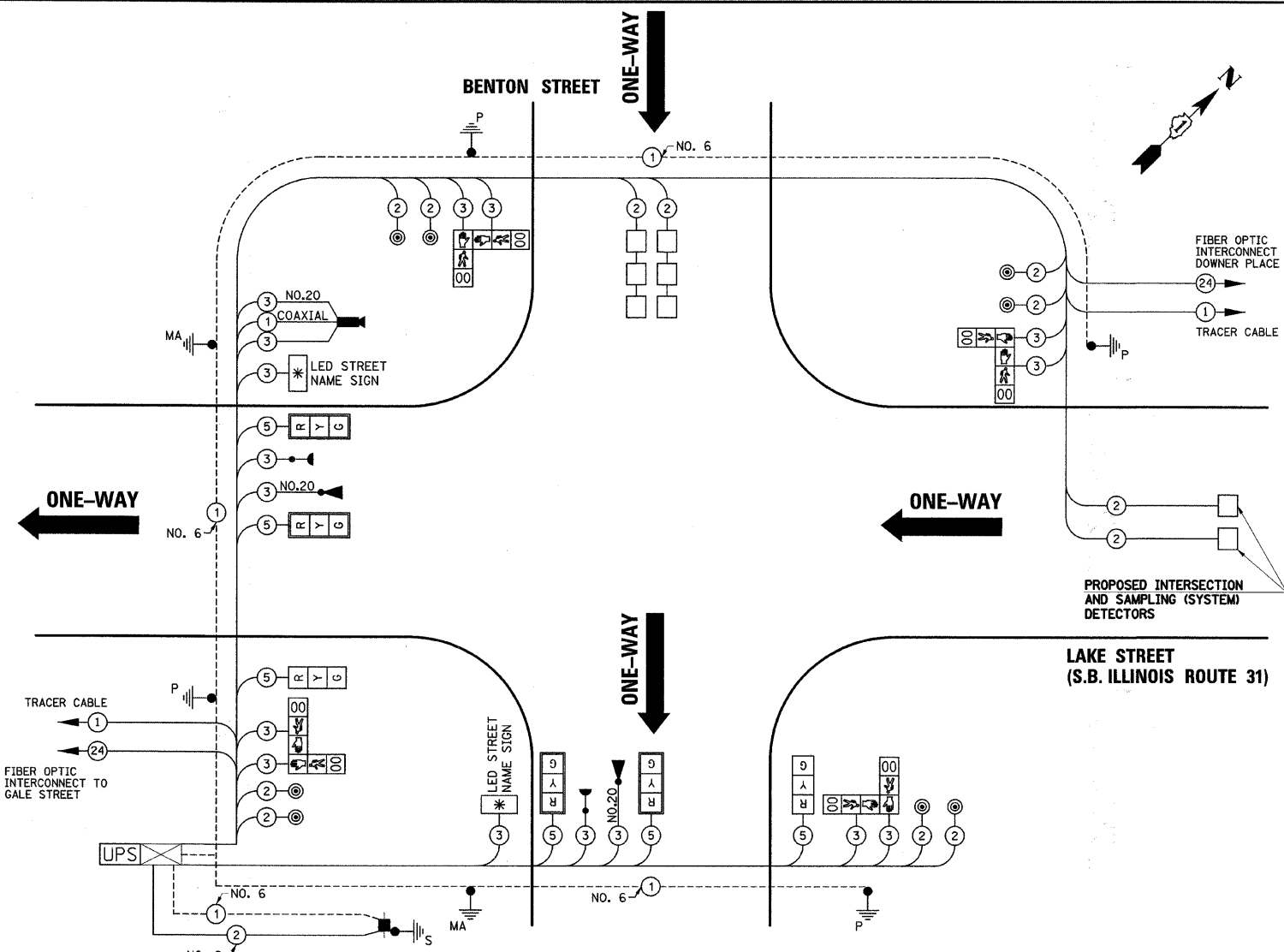
EXISTING TRAFFIC SIGNAL EQUIPMENT TO BE REMOVED
BENTON STREET

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	05-00258-00-TL	KANE	61	14
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 63251	

DATE	
BY	
SURVEYED	
ALIGNED	
RT. OF WAY CHECKED	
NO. 6	
PLAN	
NOTE BOOK	
NO.	

DATE	
BY	
SURVEYED	
GRADES CHECKED	
B.M. NOTED	
STRUCTURE NOTATIONS CHECKED	
PROFILE	
NOTE BOOK	
NO.	



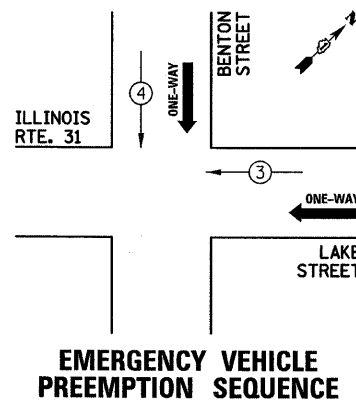
SCHEDULE OF QUANTITIES

PAY ITEM DESCRIPTION	UNIT	BENTON STREET
SIGN PANEL - TYPE 1	SQ FT	27.2
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	324
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	86
PAVEMENT MARKING REMOVAL	SQ FT	330
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	217
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	126
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	120
CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	30
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	184
HANDHOLE	EACH	3
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	404
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	854
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1525.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	854.5
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1026
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	84
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	2
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 30 FT. (SPECIAL)	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 38 FT. (SPECIAL)	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	16
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	22
DRILL EXISTING HANDHOLE	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	4
INDUCTIVE LOOP DETECTOR	EACH	4
DETECTOR LOOP, TYPE I	FOOT	332.9
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	8
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1216
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	6
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
PAINT TRAFFIC SIGNAL POST	EACH	4
UNINTERRUPTABLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	452.5
ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	394
VIDEO BELDEN 8281 COAXIAL CABLE IN CONDUIT	FOOT	138.5
L.E.D. INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	2
GROUND EXISTING HANDHOLE FRAME AND COVER	EACH	2
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1

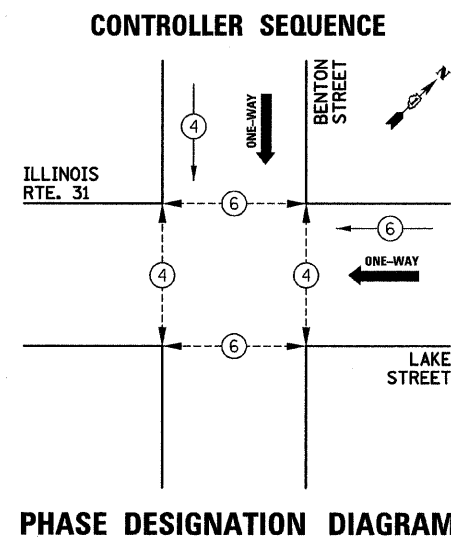
I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	6		17	0.50	51
(YELLOW)	6		25	0.25	37.5
(GREEN)	6		15	0.25	22.5
ARROW			12	0.10	
PED. SIGNAL	8		25	1.00	200
CONTROLLER	1		100	1.00	100
UPS	1		25	1.00	25
LED SIGN	2		60	0.50	60
TOTAL =					496

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



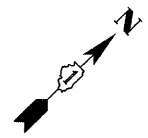
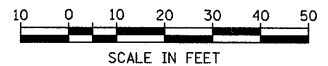
PROPOSED EMERGENCY VEHICLE PREEMPTORS		
PROPOSED EMERGENCY VEHICLE PREEMPTORS	3	4
MOVEMENT	←	↓



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

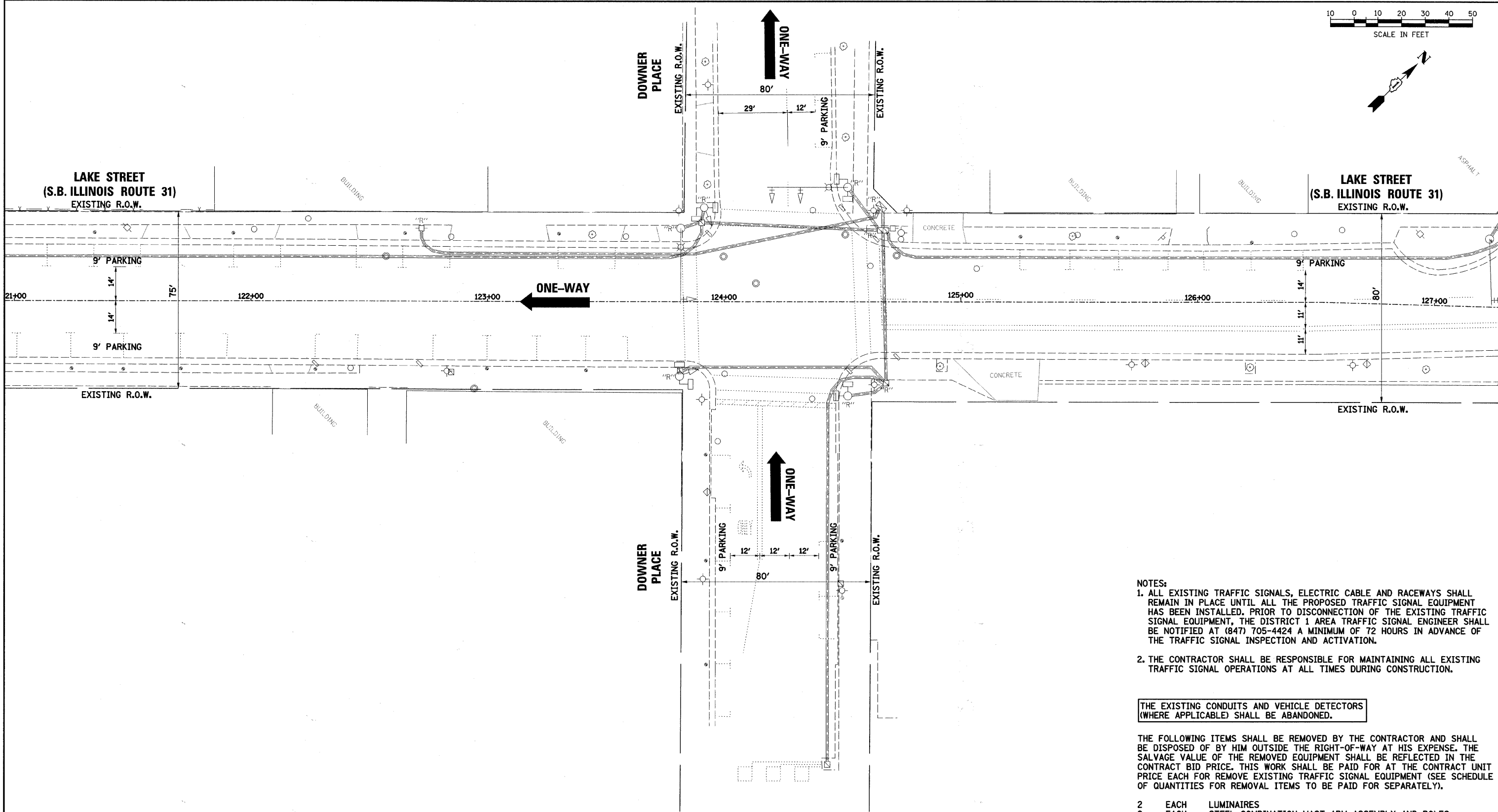
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

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



PLAN	SURVEYED	DATE
	ALIGNED	
NOTE BOOK NO.	PT. OF WAY CHECKED	
	PAID FILE NAME	

PROFILE	SURVEYED	DATE
	GRADES CHECKED	
NOTE BOOK NO.	STRUCTURE NOTATIONS CH'RD	



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

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- | | | |
|---|------|---|
| 2 | EACH | LUMINAIRES |
| 2 | EACH | STEEL COMBINATION MAST ARM ASSEMBLY AND POLES |
| 3 | EACH | TRAFFIC SIGNAL POSTS |
| 5 | EACH | TRAFFIC SIGNAL HEADS |
| 3 | EACH | TRAFFIC SIGNAL BACKPLATES |
| 8 | EACH | PEDESTRIAN SIGNAL HEADS |
| 1 | EACH | SERVICE INSTALLATION |

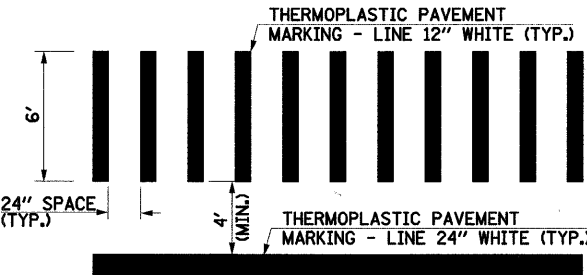
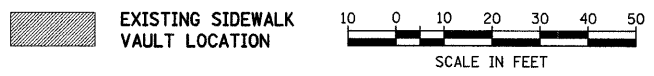
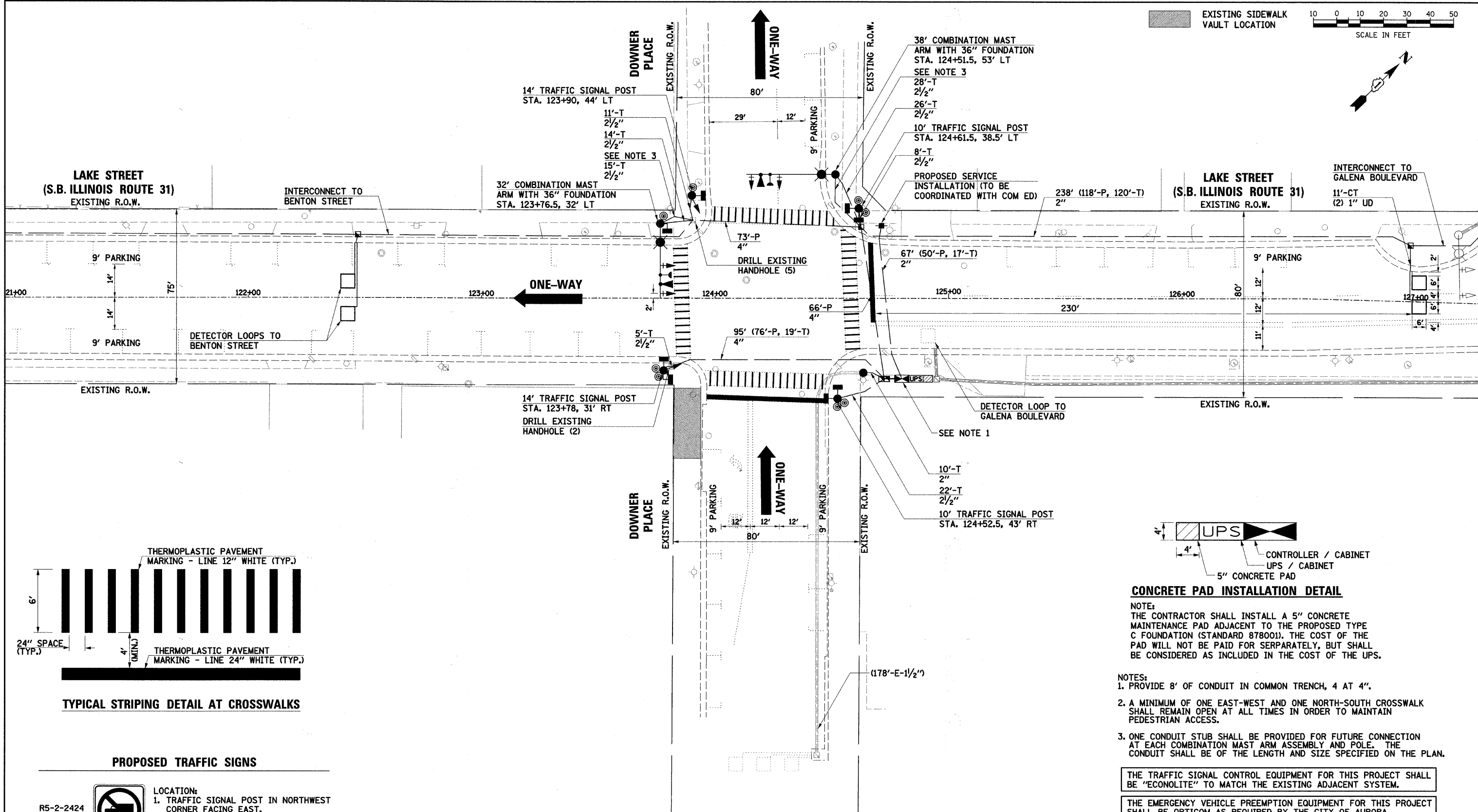
THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL BECOME THE PROPERTY OF THE CITY OF AURORA AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE MAINTENANCE FACILITY DESIGNATED BY THE CITY. THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

- | | | |
|---|------|--|
| 1 | EACH | TRAFFIC SIGNAL CONTROLLER AND CABINET (COMPLETE) |
|---|------|--|

FILE NAME = ...690_2.s1g83a_downer.dgn	USER NAME = .USER_	DESIGNED - DRAWN <i>JMR</i>	REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING TRAFFIC SIGNAL EQUIPMENT TO BE REMOVED DOWNER PLACE	F.A.U. RTE. 3902	SECTION 05-00258-00-TL	COUNTY KANE	TOTAL SHEETS 61	SHEET NO. 17	
PLOT SCALE = #SCALE#	CHECKED <i>JRS</i>	REVISED -	REVISED -			SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	CONTRACT NO. 63251		
PLOT DATE = 3/11/2010	DATE -	REVISED -	REVISED -						FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		

PLAN	SURVEYED	DATE
	ALIGNED	
	NOTED	
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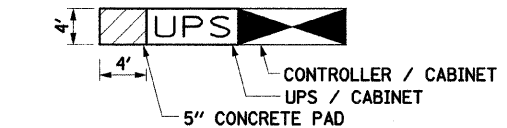
PROFILE	SURVEYED	DATE
	GRADES	
	NOTED	
	BY	
	NO.	



TYPICAL STRIPING DETAIL AT CROSSWALKS

PROPOSED TRAFFIC SIGNS

- R5-2-2424 (1 EACH) LOCATION: 1. TRAFFIC SIGNAL POST IN NORTHWEST CORNER FACING EAST.
- R6-2-2430 (2 EACH) LOCATIONS: 1. SOUTHBOUND MAST ARM, 3' WEST OF THE OUTER 3-SECTION SIGNAL HEAD. 2. TRAFFIC SIGNAL POST IN SOUTHEAST CORNER FACING NORTH.



CONCRETE PAD INSTALLATION DETAIL

NOTE: THE CONTRACTOR SHALL INSTALL A 5" CONCRETE MAINTENANCE PAD ADJACENT TO THE PROPOSED TYPE C FOUNDATION (STANDARD 878001). THE COST OF THE PAD WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE COST OF THE UPS.

- NOTES:
- PROVIDE 8' OF CONDUIT IN COMMON TRENCH, 4 AT 4".
 - A MINIMUM OF ONE EAST-WEST AND ONE NORTH-SOUTH CROSSWALK SHALL REMAIN OPEN AT ALL TIMES IN ORDER TO MAINTAIN PEDESTRIAN ACCESS.
 - ONE CONDUIT STUB SHALL BE PROVIDED FOR FUTURE CONNECTION AT EACH COMBINATION MAST ARM ASSEMBLY AND POLE. THE CONDUIT SHALL BE OF THE LENGTH AND SIZE SPECIFIED ON THE PLAN.

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

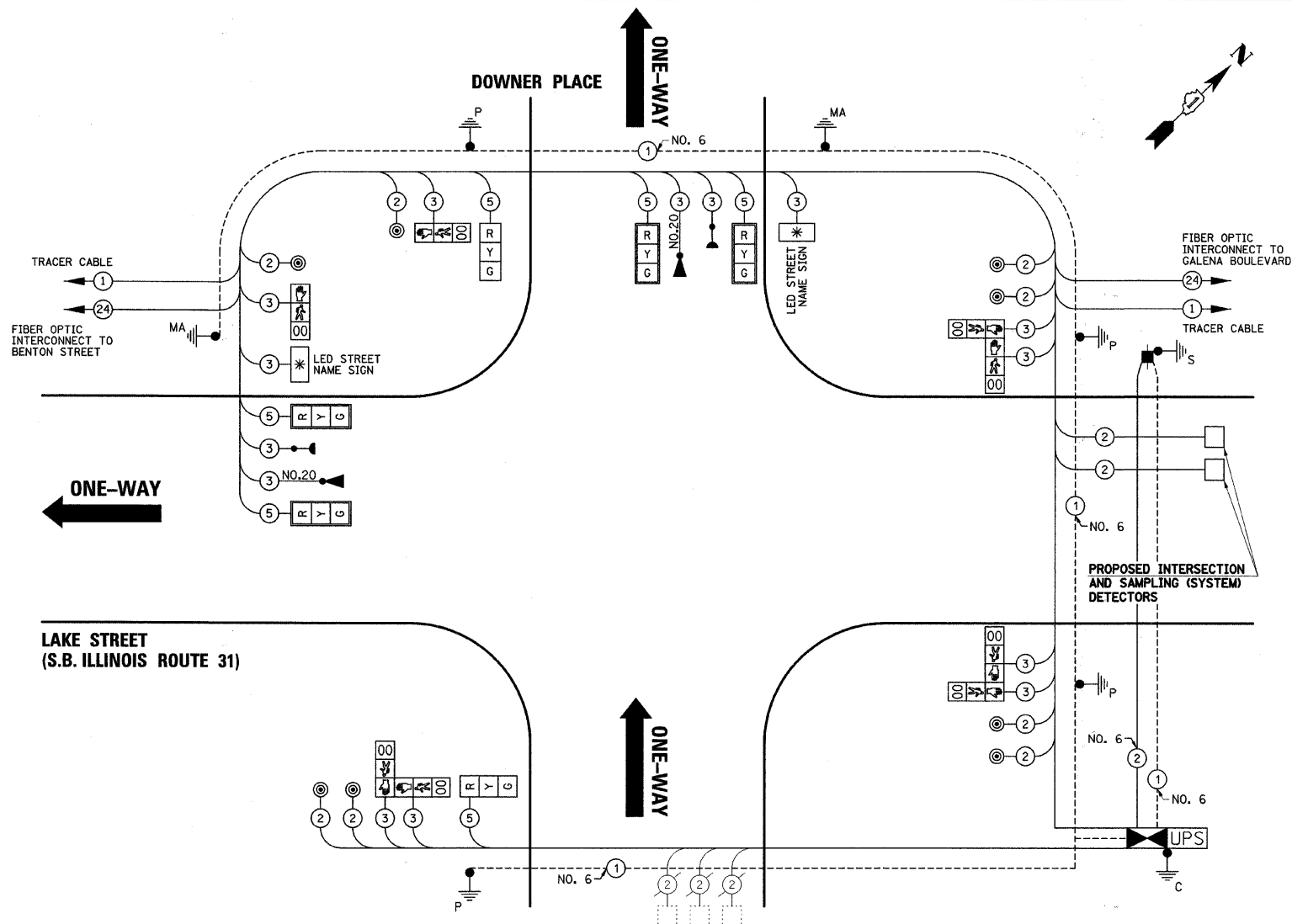
THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE OPTICOM AS REQUIRED BY THE CITY OF AURORA.

RESTORATION OF WORK AREA: RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. 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 SEED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

FILE NAME = ...1690.2.sig03b1.downer.dgn	USER NAME = .USER.	DESIGNED - DRAWN <i>JMR</i>	REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODIFICATION PLAN DOWNER PLACE			F.A.U. RTE. 3902	SECTION 05-00258-00-TL	COUNTY KANE	TOTAL SHEETS 61	SHEET NO. 18
	PLOT SCALE = #SCALE#	CHECKED <i>JRS</i>	REVISED -		SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.	CONTRACT NO. 63251		
	PLOT DATE = 3/11/2010	DATE -	REVISED -									
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT												

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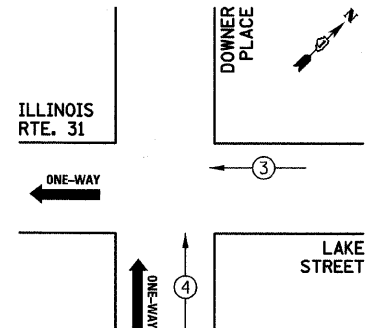
SCHEDULE OF QUANTITIES

PAY ITEM DESCRIPTION	UNIT	DOWNER PLACE
SIGN PANEL - TYPE 1	SQ FT	14
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	408
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	86
PAVEMENT MARKING REMOVAL	SQ FT	376
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	177
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	129
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	51
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	218
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	215
HANDHOLE	EACH	2
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	344
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1057
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1857
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 6C	FOOT	1154.5
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	682
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	174
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	2
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 32 FT. (SPECIAL)	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 38 FT. (SPECIAL)	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	16
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	22
DRILL EXISTING HANDHOLE	EACH	7
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
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
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	4
INDUCTIVE LOOP DETECTOR	EACH	2
DETECTOR LOOP, TYPE I	FOOT	63.5
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	8
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2264
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	2
REMOVE EXISTING CONCRETE FOUNDATION	EACH	6
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
PAINT TRAFFIC SIGNAL POST	EACH	4
UNINTERRUPTABLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	586.5
ELECTRIC CABLE IN CONDUIT NO. 20 3C, TWISTED, SHIELDED	FOOT	414.5
L.E.D. INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	2
GROUND EXISTING HANDHOLE FRAME AND COVER	EACH	2

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	6		17	0.50	51
(YELLOW)	6		25	0.25	37.5
(GREEN)	6		15	0.25	22.5
ARROW			12	0.10	
PED. SIGNAL	8		25	1.00	200
CONTROLLER	1		100	1.00	100
UPS	1		25	1.00	25
LED SIGN	2		60	0.50	60
TOTAL =					496

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

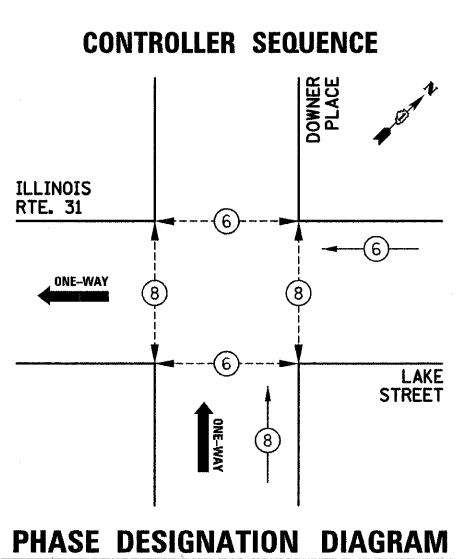
ENERGY SUPPLY CONTACT: MARK SCHERIBEL
 PHONE: (630) 723-2128
 COMPANY: COMMONWEALTH EDISON



EMERGENCY VEHICLE PREEMPTION SEQUENCE

PROPOSED EMERGENCY VEHICLE PREEMPTORS

PROPOSED EMERGENCY VEHICLE PREEMPTORS	3	4
MOVEMENT	←	↑



CONTROLLER SEQUENCE LEGEND

- ← ⊙ → DUAL ENTRY PHASE
- ← ⊙ SINGLE ENTRY PHASE
- ← ⊙ OL OVERLAP
- * NUMBER REFERRING TO ASSOCIATED PHASE
- ← ⊙ → PEDESTRIAN PHASE

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

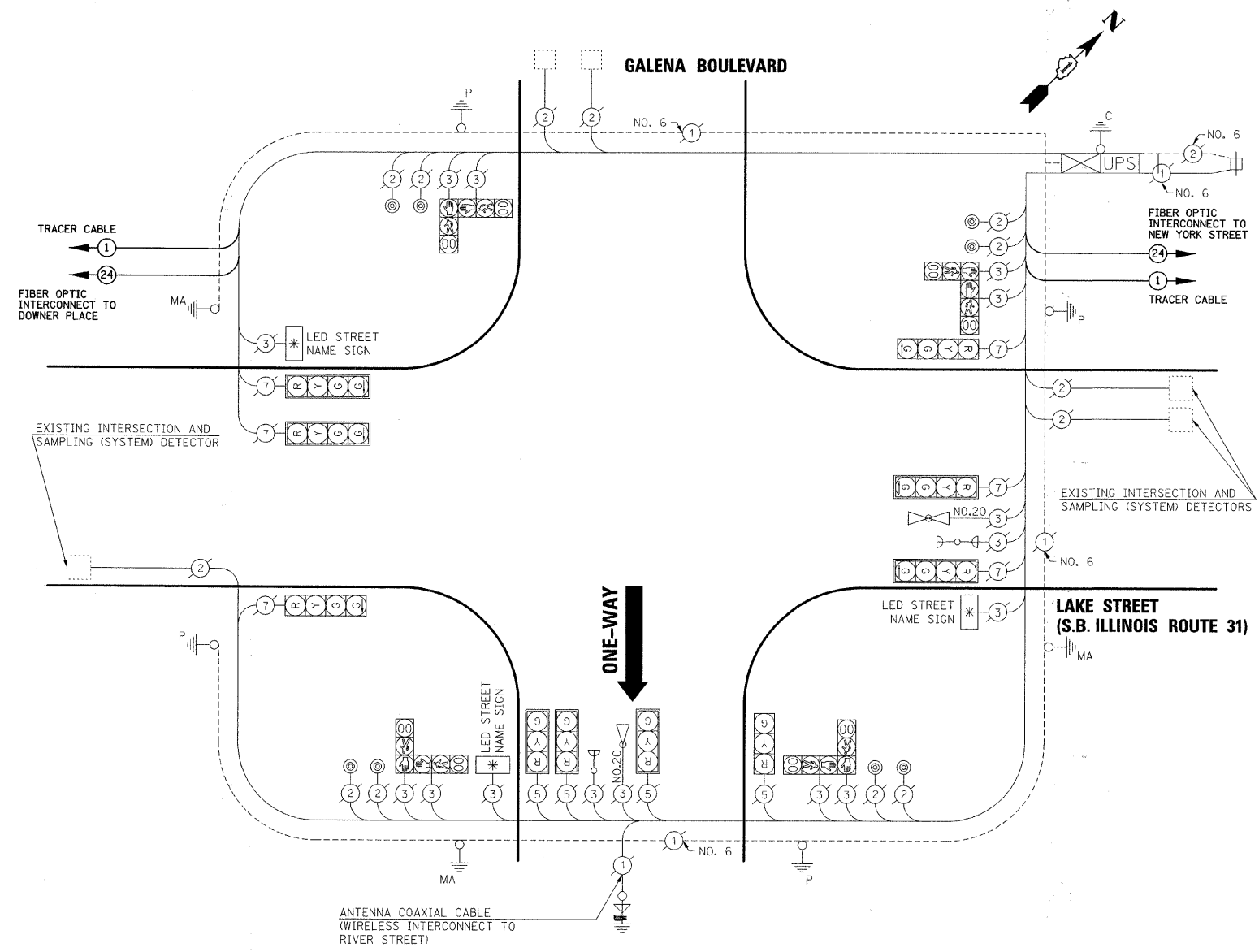
THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE OPTICOM AS REQUIRED BY THE CITY OF AURORA.

DATE	
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SCHEDULE OF QUANTITIES

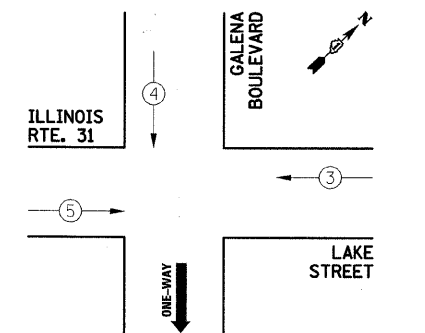
PAY ITEM DESCRIPTION	UNIT	GALENA BOULEVARD
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1



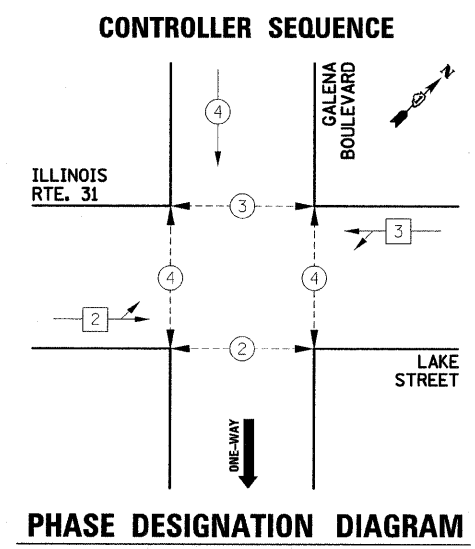
I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	10		17	0.50	85
(YELLOW)	10		25	0.25	62.5
(GREEN)	10		15	0.25	37.5
ARROW	6		12	0.10	7.2
PED. SIGNAL	8		25	1.00	200
CONTROLLER	1		100	1.00	100
UPS	1		25	1.00	25
LED SIGN	3		60	0.50	90
TOTAL =					607.2

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



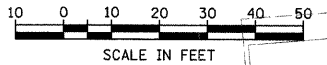
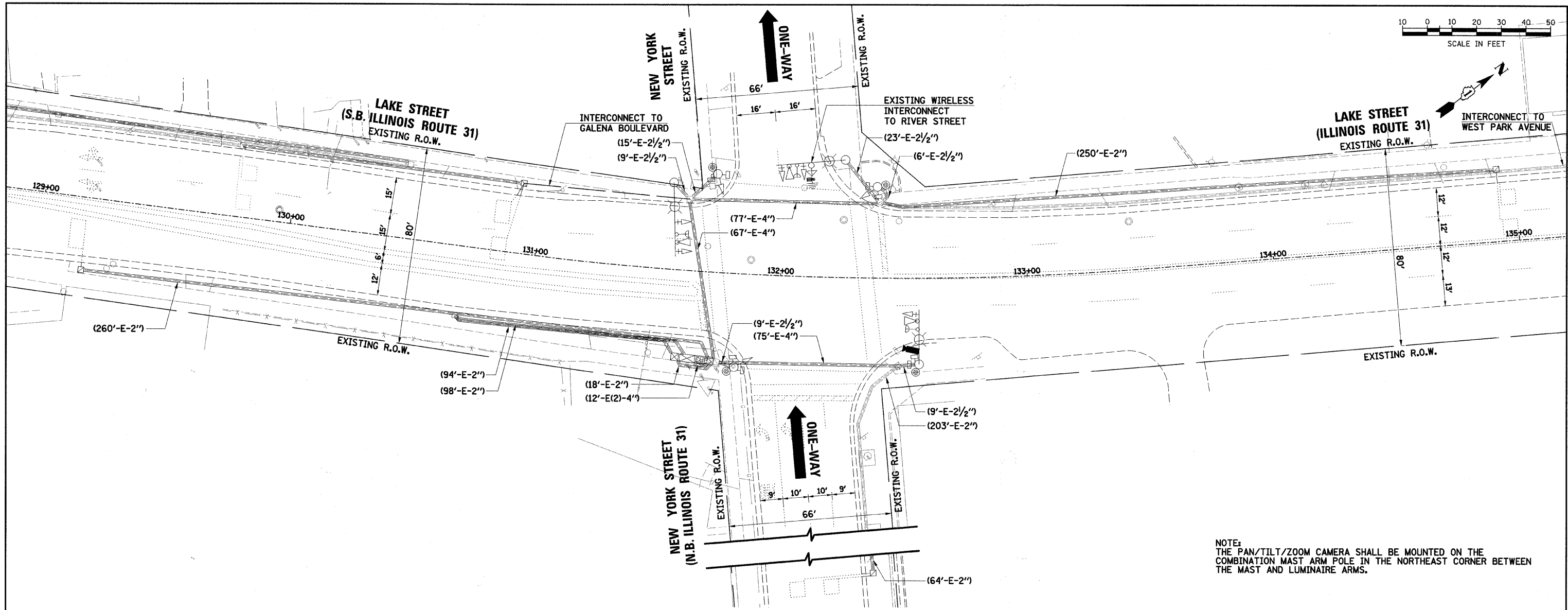
EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTORS	3	4 5
MOVEMENT	←	↓ →



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

PLAN	DATE
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PROFILE	DATE
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NOTE:
 THE PAN/TILT/ZOOM CAMERA SHALL BE MOUNTED ON THE COMBINATION MAST ARM POLE IN THE NORTHEAST CORNER BETWEEN THE MAST AND LUMINAIRE ARMS.

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 DRAWN *JMR*
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

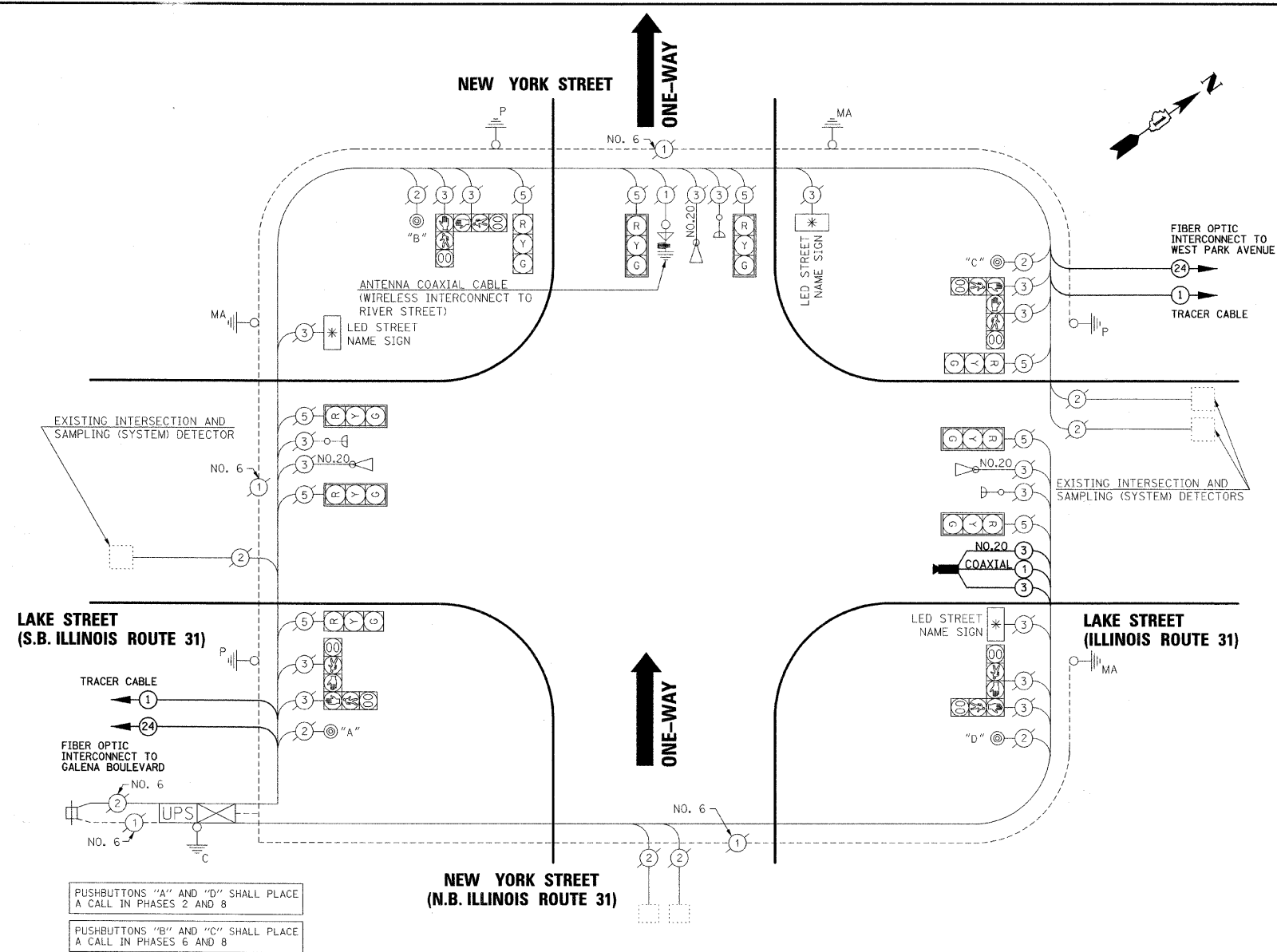
**EXISTING TRAFFIC SIGNAL AND MODIFICATION PLAN
 NEW YORK STREET**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	05-00258-00-TL	KANE	61	22
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 63251	

PLAN	SURVEYED	DATE
	PLOTTED	
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	NO. OF WAYS CHECKED	
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PROFILE	SURVEYED	DATE
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	STRUCTURE NOTATION'S CPWD	
	NO.	

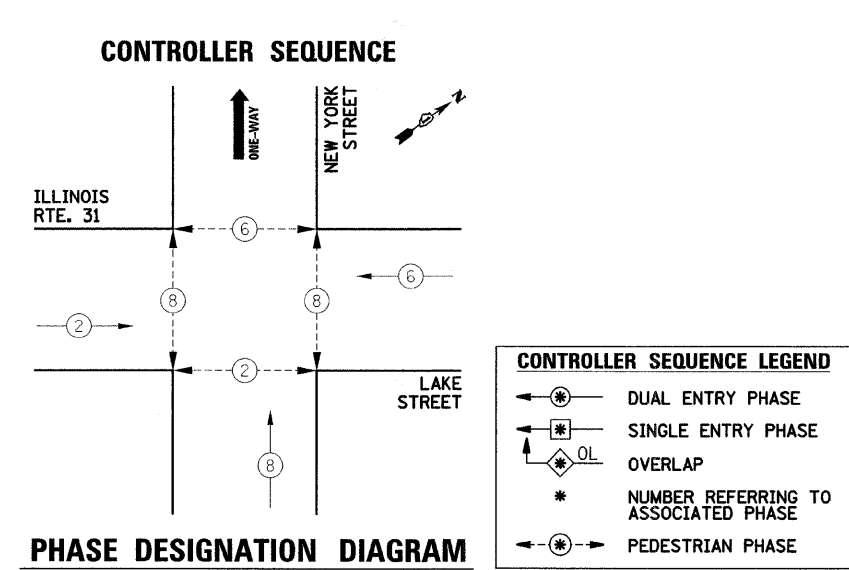
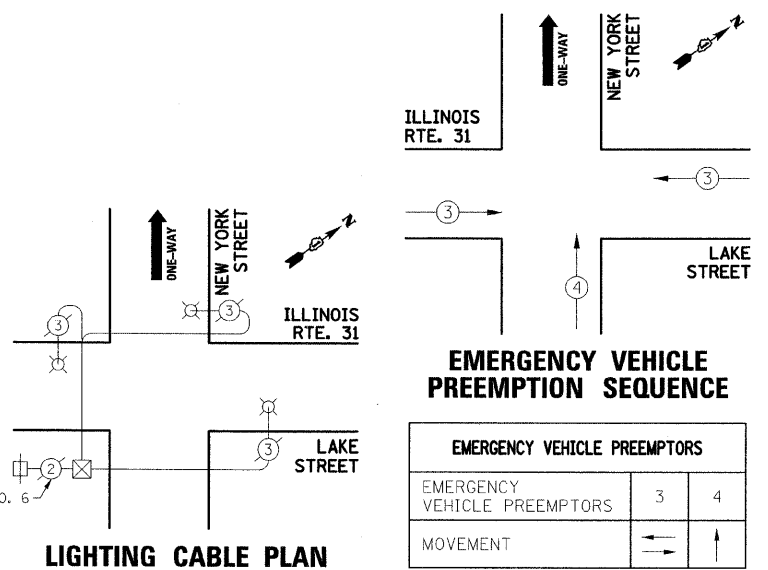


PUSHBUTTONS "A" AND "D" SHALL PLACE A CALL IN PHASES 2 AND 8
 PUSHBUTTONS "B" AND "C" SHALL PLACE A CALL IN PHASES 6 AND 8

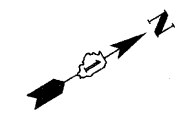
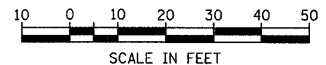
SCHEDULE OF QUANTITIES

PAY ITEM DESCRIPTION	UNIT	NEW YORK STREET
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	146.5
ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	146.5
VIDEO BELDEN 8281 COAXIAL CABLE IN CONDUIT	FOOT	146.5
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		% OPERATION	
SIGNAL (RED) (YELLOW) (GREEN)	9	17		0.50	76.5
	9	25		0.25	56.3
	9	15		0.25	33.8
ARROW			12	0.10	
PED. SIGNAL	8		25	1.00	200
CONTROLLER	1		100	1.00	100
UPS	1		25	1.00	25
LED SIGN	3		60	0.50	90
LUMINAIRE	3		250	0.50	375
TOTAL =					956.6
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			

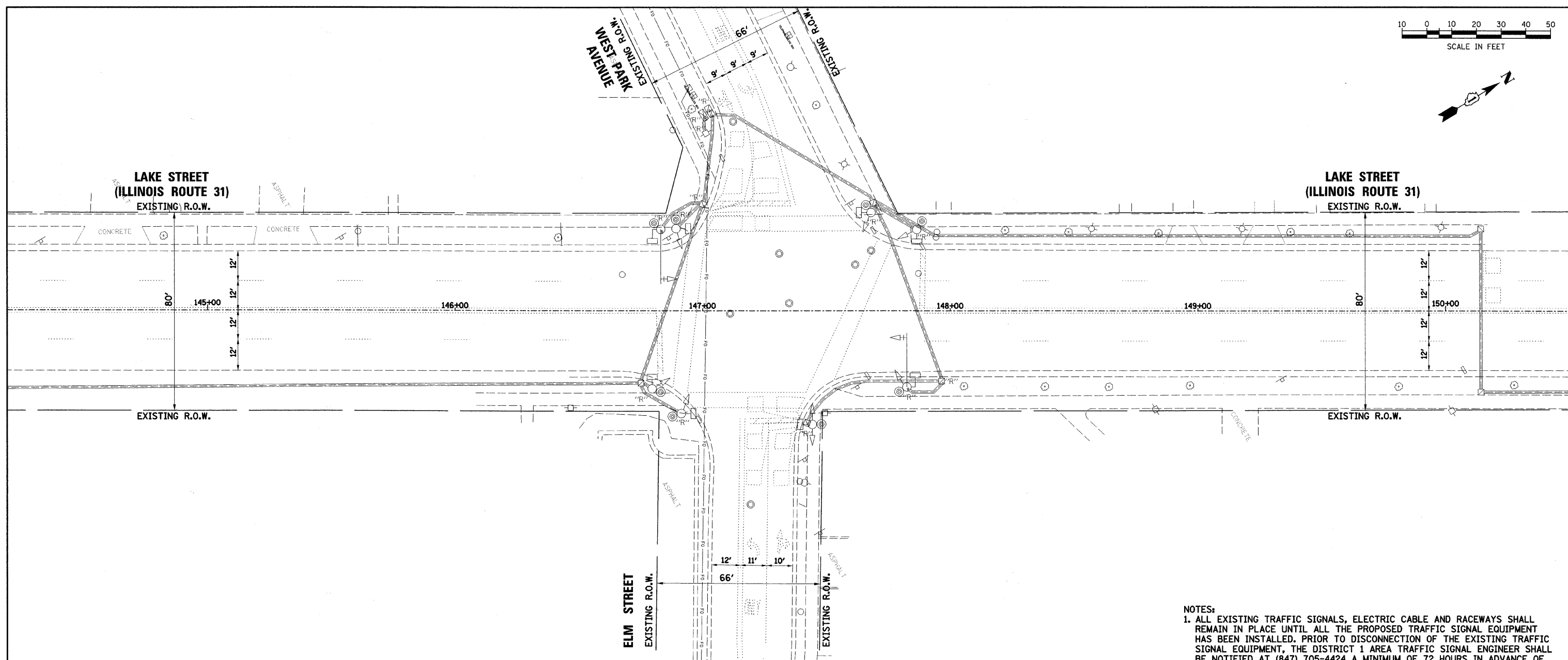


EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTORS	3 4
MOVEMENT	← → ↑



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	BY	
	NO. OF WAY CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NO.	



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

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

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

- 2 EACH STEEL MAST ARM ASSEMBLY AND POLES
- 6 EACH TRAFFIC SIGNAL POSTS
- 10 EACH TRAFFIC SIGNAL HEADS
- 2 EACH TRAFFIC SIGNAL BACKPLATES
- 8 EACH PEDESTRIAN SIGNAL HEADS
- 8 EACH PEDESTRIAN PUSH BUTTONS
- 1 EACH SERVICE INSTALLATION

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 MAINTENANCE FACILITY DESIGNATED BY THE CITY. THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

- 1 EACH TRAFFIC SIGNAL CONTROLLER AND CABINET (COMPLETE)

FILE NAME =
... \698_2.sig86a_west park.dgn

USER NAME = _USER_
PLOT SCALE = *SCALE*
PLOT DATE = 3/11/2010

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DATE -

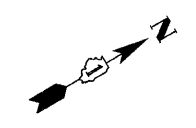
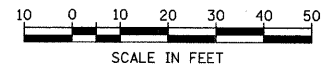
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REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EXISTING TRAFFIC SIGNAL EQUIPMENT TO BE REMOVED
WEST PARK AVENUE / ELM STREET**

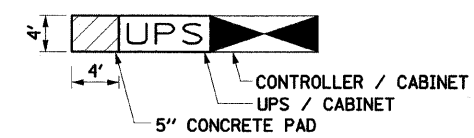
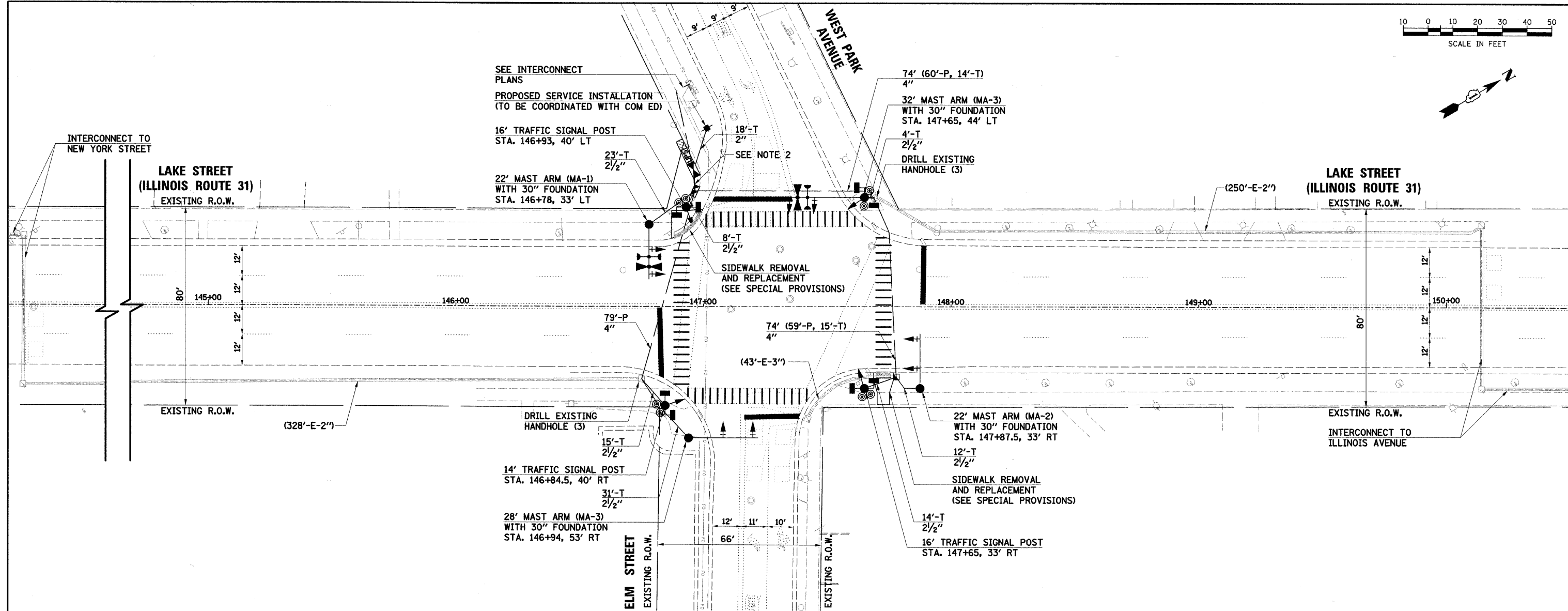
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	05-00258-00-TL	KANE	61	24
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 63251	



PLAN	SURVEYED	DATE
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	NO. OF MAY CHECKED	
	CADD FILE NAME	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	
	CHECKED	
	BY	
	NO. OF MAY CHECKED	
	STRUCTURE NOTATIONS CIPID	
	NO.	



CONCRETE PAD INSTALLATION DETAIL

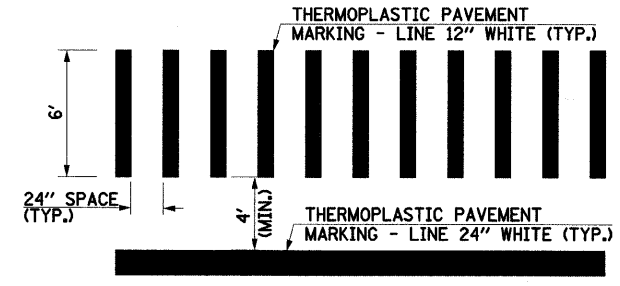
NOTE:
THE CONTRACTOR SHALL INSTALL A 5" CONCRETE MAINTENANCE PAD ADJACENT TO THE PROPOSED TYPE C FOUNDATION (STANDARD 878001). THE COST OF THE PAD WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE COST OF THE UPS.

- NOTES:**
1. A MINIMUM OF ONE EAST-WEST AND ONE NORTH-SOUTH CROSSWALK SHALL REMAIN OPEN AT ALL TIMES IN ORDER TO MAINTAIN PEDESTRIAN ACCESS.
 2. PROVIDE 9' OF CONDUIT IN COMMON TRENCH, 4 AT 4".

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

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

RESTORATION OF WORK AREA:
RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. 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.

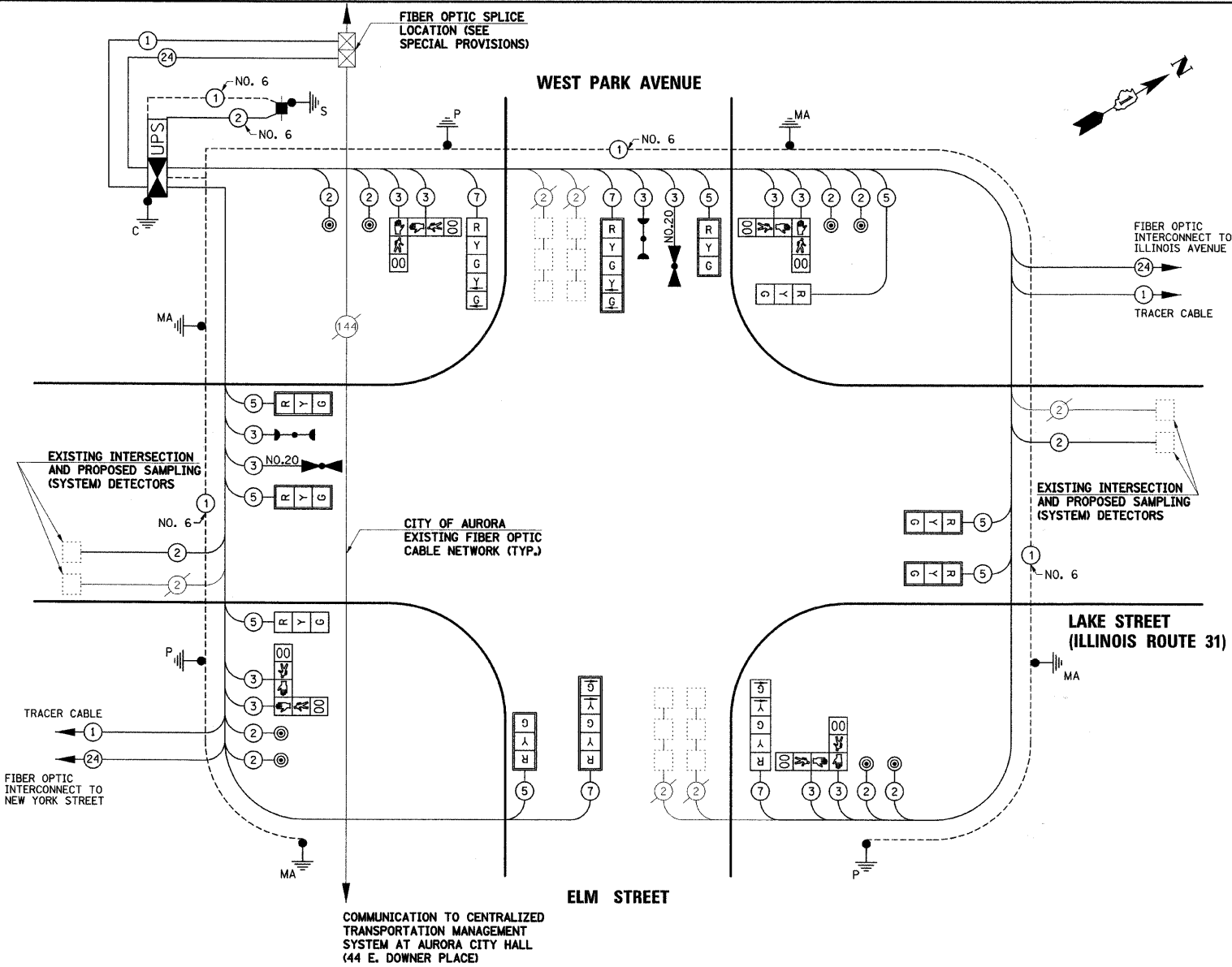


TYPICAL STRIPING DETAIL AT CROSSWALKS

FILE NAME = ...698_2.sig06b_west park.dgn	USER NAME = _USER_	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODIFICATION PLAN WEST PARK AVENUE / ELM STREET	F.A.U. RTE. 3902	SECTION 05-00258-00-TL	COUNTY KANE	TOTAL SHEETS 61	SHEET NO. 25	CONTRACT NO. 63251	
PLOT SCALE = #SCALE#	CHECKED <i>JRS</i>	REVISED -	REVISED -			SCALE#	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT		
PLOT DATE = 3/11/2010	DATE -	REVISED -	REVISED -									

PLAN	SURVEYED	DATE
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	FILE NAME	



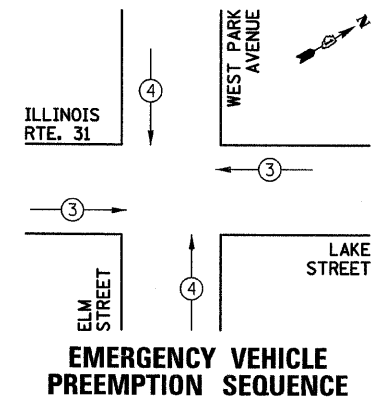
SCHEDULE OF QUANTITIES

PAY ITEM DESCRIPTION	UNIT	WEST PARK AVENUE
DETECTABLE WARNINGS	SQ FT	32
SIGN PANEL - TYPE 1	SQ FT	25.5
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	456
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	109
PAVEMENT MARKING REMOVAL	SQ FT	448
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	18
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	107
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	65
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	198
HANDHOLE	EACH	1
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	163
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1008
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1317.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1240
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	618
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	807
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	35.5
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	12
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	43.5
DRILL EXISTING HANDHOLE	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	2
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	8
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	4479.5
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	3
REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
PAINT NEW MAST ARM POLE, UNDER 40 FEET	EACH	4
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
PAINT TRAFFIC SIGNAL POST	EACH	3
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	455
ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	253.5
SIDEWALK REMOVAL AND REPLACEMENT	SQ FT	173
GROUND EXISTING HANDHOLE FRAME AND COVER	EACH	3

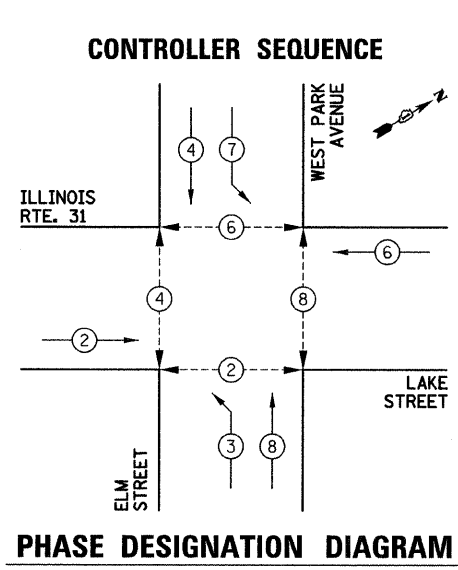
I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		% OPERATION	
SIGNAL (RED)	12	INCAND.	17	0.50	102
		LED	25	0.25	75
		(GREEN)	15	0.25	45
ARROW	8		12	0.10	9.6
PED. SIGNAL	8		25	1.00	200
CONTROLLER	1		100	1.00	100
UPS	1		25	1.00	25
TOTAL =					556.6

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
* 1	NUMBER REFERRING TO ASSOCIATED PHASE
← ⊙ →	PEDESTRIAN PHASE

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

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

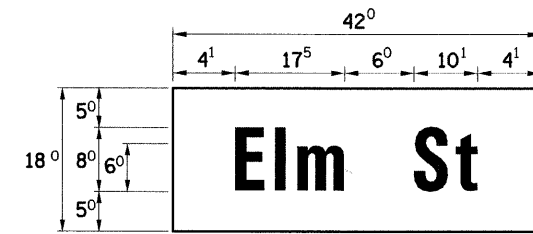
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 NOTE BOOK NO. _____
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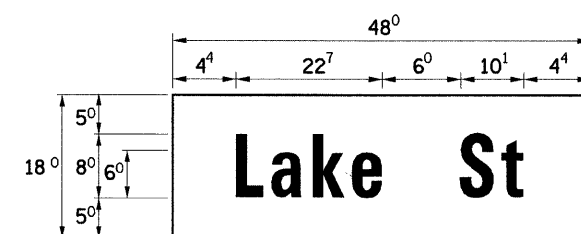
PANEL SIGN DESIGN TYPE 1



MA-1
 8.25 Sq. Ft each
 1 Required
 Design Series C



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



MA-3
 6.00 Sq. Ft each
 2 Required
 Design Series D

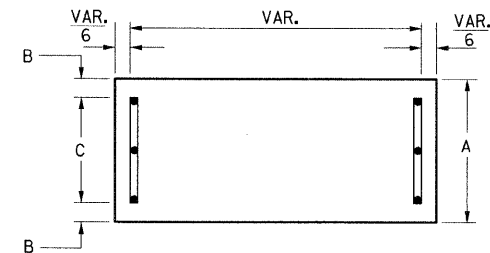
GENERAL NOTES

- 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:

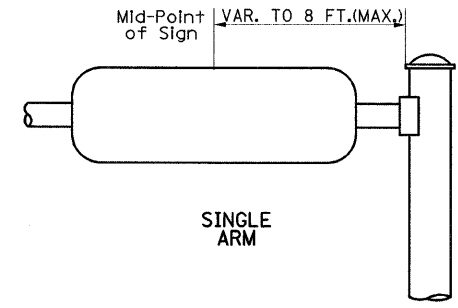
* J.O. HERBERT CO. MIDLOTHIAN, VA. * WESTERN REMAC INC. WOODRIDGE, IL.

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.

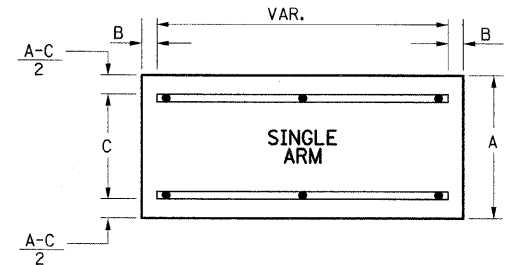
SUPPORTING CHANNELS



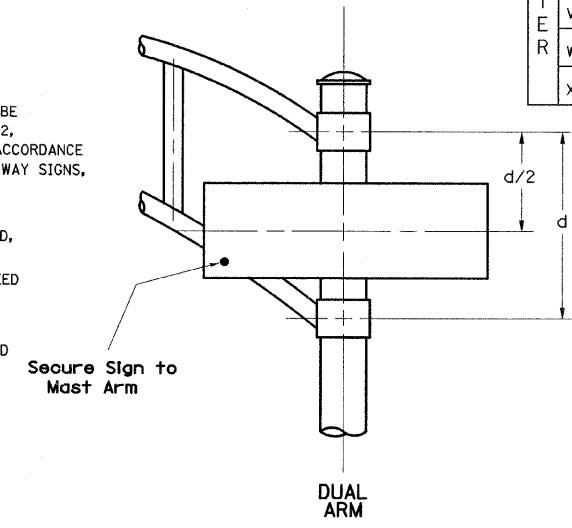
A	B	C
18"	2"	14"



SUPPORTING CHANNELS



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



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

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

EXAMPLE, 2 ③ DENOTES 3/8"

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"

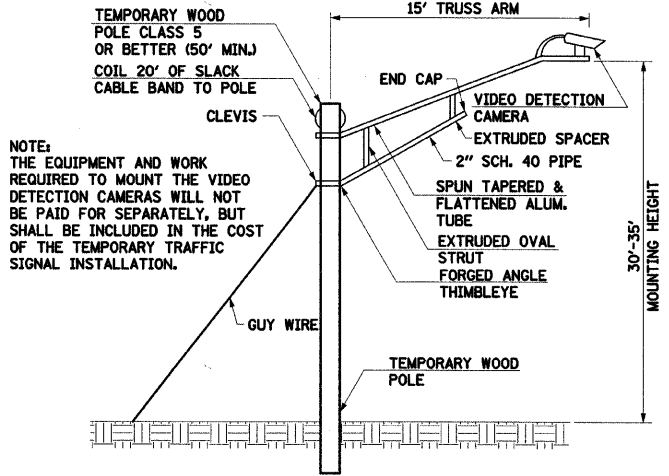
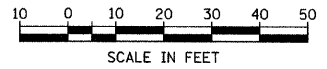
FIRST LETTER	SECOND LETTER															
	a c d e		b h i k l		f w		j		s t		v y		x		z	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
ad h g l j	16	17	22	24	16	17	12	14	14	15	14	15	16	17	16	17
im n q u																
b f k o p s	12	14	16	17	11	12	05	06	11	12	11	12	12	14	12	14
c e	12	14	16	17	12	14	06	10	12	14	12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

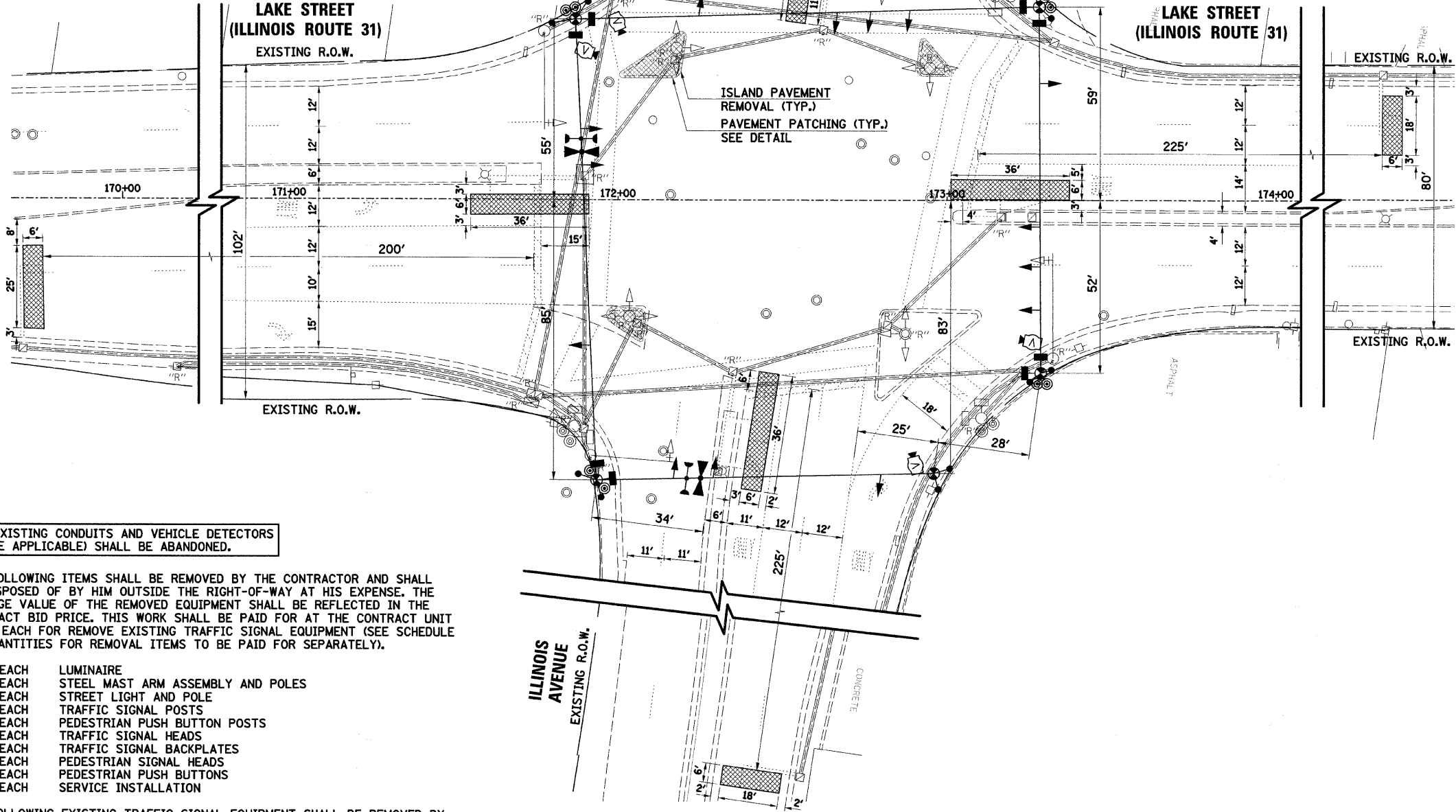
LETTERS	6 INCH UPPER CASE LETTERS		8 INCH UPPER CASE LETTERS		LETTERS	6 INCH LOWER CASE LETTERS	
	SERIES		SERIES			SERIES	
	C	D	C	D		C	D
A	36	50	50	65	a	35	42
B	32	40	43	53	b	35	42
C	32	40	43	53	c	35	41
D	32	40	43	53	d	35	42
E	30	35	40	47	e	35	42
F	30	35	40	47	f	23	26
G	32	40	43	53	g	35	42
H	32	40	43	53	h	35	42
I	07	07	11	12	i	11	11
J	30	36	40	50	j	20	22
K	32	41	43	54	k	35	42
L	30	35	40	47	l	11	11
M	37	45	51	61	m	60	70
N	32	40	43	53	n	35	42
O	34	42	45	55	o	36	43
P	32	40	43	53	p	35	42
Q	34	42	45	55	q	35	42
R	32	40	43	53	r	26	32
S	32	40	43	53	s	36	42
T	30	35	40	47	t	27	32
U	32	40	43	53	u	35	42
V	35	44	47	60	v	42	47
W	44	52	60	70	w	55	64
X	34	40	45	53	x	44	51
Y	36	50	50	66	y	46	53
Z	32	40	43	53	z	36	43

NUMBER	6 INCH SERIES		8 INCH SERIES	
	C	D	C	D
	1	12	14	15
2	32	40	43	53
3	32	40	43	53
4	35	43	47	57
5	32	40	43	53
6	32	40	43	53
7	32	40	43	53
8	32	40	43	53
9	32	40	43	53
0	34	42	45	55



NOTE:
THE EQUIPMENT AND WORK
REQUIRED TO MOUNT THE VIDEO
DETECTION CAMERAS WILL NOT
BE PAID FOR SEPARATELY, BUT
SHALL BE INCLUDED IN THE COST
OF THE TEMPORARY TRAFFIC
SIGNAL INSTALLATION.

**TEMPORARY VIDEO DETECTION CAMERA
MOUNTING DETAIL**



NOTES FOR TEMPORARY TRAFFIC SIGNALS

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE LED AND 12" DIAMETER. HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. PEDESTRIAN SIGNALS SHALL INCLUDE SOLID INTERNATIONAL SYMBOLS. PEDESTRIAN SIGNALS WITH COUNTDOWN TIMERS SHALL BE USED WHEN THE EXISTING INSTALLATION UTILIZES COUNTDOWN TYPE OR AS DIRECTED BY THE ENGINEER. COUNTDOWN TYPE PEDESTRIAN SIGNALS ARE NOT TO BE INSTALLED AT A RAILROAD INTERSECTION. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
7. UNINTERRUPTIBLE POWER SUPPLY (UPS) SYSTEMS SHALL BE INSTALLED AND MADE OPERATIONAL AT TEMPORARY TRAFFIC SIGNAL INSTALLATIONS WHERE UPS IS INSTALLED AT THE EXISTING TRAFFIC SIGNAL, TEMPORARY TRAFFIC SIGNALS AT INTERSECTIONS WITH FIRE STATION ACTUATED EMERGENCY VEHICLE PRE-EMPTION, OR WHEN INDICATED ON THE PLANS.
8. TRAFFIC SIGNAL MANAGEMENT SYSTEMS SHALL BE MAINTAINED IN OPERATION AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. REQUIRED EQUIPMENT SHALL BE AS SHOWN ON THE PLANS AND THE CONTRACTOR SHALL PLACE THE EQUIPMENT IN OPERATION TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE TRAFFIC SIGNAL MANAGEMENT SYSTEM.
9. DETECTION AT TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED FOR ALL APPROACHES OF THE INTERSECTION UNLESS INDICATED OTHERWISE ON THE PLANS. THE DETECTION SYSTEM MUST MEET THE SPECIFICATIONS OF DISTRICT 1 AND THE CONTRACTOR SHALL PLACE THE DETECTORS INTO OPERATION TO THE SATISFACTION OF THE ENGINEER.
10. WHEN PAN, TILT, ZOOM CAMERAS ARE INSTALLED AT THE EXISTING INTERSECTION OR ARE CALLED FOR IN THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THE CAMERAS TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE CAMERAS.
11. ALL LABOR AND MATERIAL REQUIRED TO COMPLY WITH THESE REQUIREMENTS SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR TEMPORARY TRAFFIC SIGNAL INSTALLATION.

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

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

- | | | |
|----|------|-----------------------------------|
| 2 | EACH | LUMINAIRE |
| 4 | EACH | STEEL MAST ARM ASSEMBLY AND POLES |
| 1 | EACH | STREET LIGHT AND POLE |
| 3 | EACH | TRAFFIC SIGNAL POSTS |
| 3 | EACH | PEDESTRIAN PUSH BUTTON POSTS |
| 16 | EACH | TRAFFIC SIGNAL HEADS |
| 4 | EACH | TRAFFIC SIGNAL BACKPLATES |
| 8 | EACH | PEDESTRIAN SIGNAL HEADS |
| 8 | EACH | PEDESTRIAN PUSH BUTTONS |
| 1 | EACH | SERVICE INSTALLATION |

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 MAINTENANCE FACILITY DESIGNATED BY THE CITY. THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

- | | | |
|---|------|--|
| 1 | EACH | TRAFFIC SIGNAL CONTROLLER AND CABINET (COMPLETE) |
|---|------|--|

PLAN	SURVEYED	BY	DATE
	PLOTTED		
	CHECKED		
	BY		
	DATE		

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	DATE		

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CHECKED JRS
DATE -

DESIGNED -
REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY TRAFFIC SIGNAL INSTALLATION AND
EXISTING TRAFFIC SIGNAL EQUIPMENT TO BE REMOVED
ILLINOIS AVENUE**

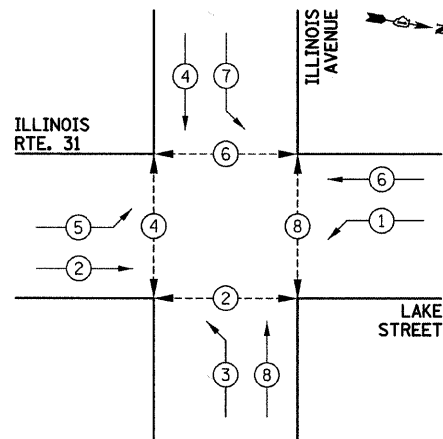
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3902	05-00258-00-TL	KANE	61	28
CONTRACT NO.				63251
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

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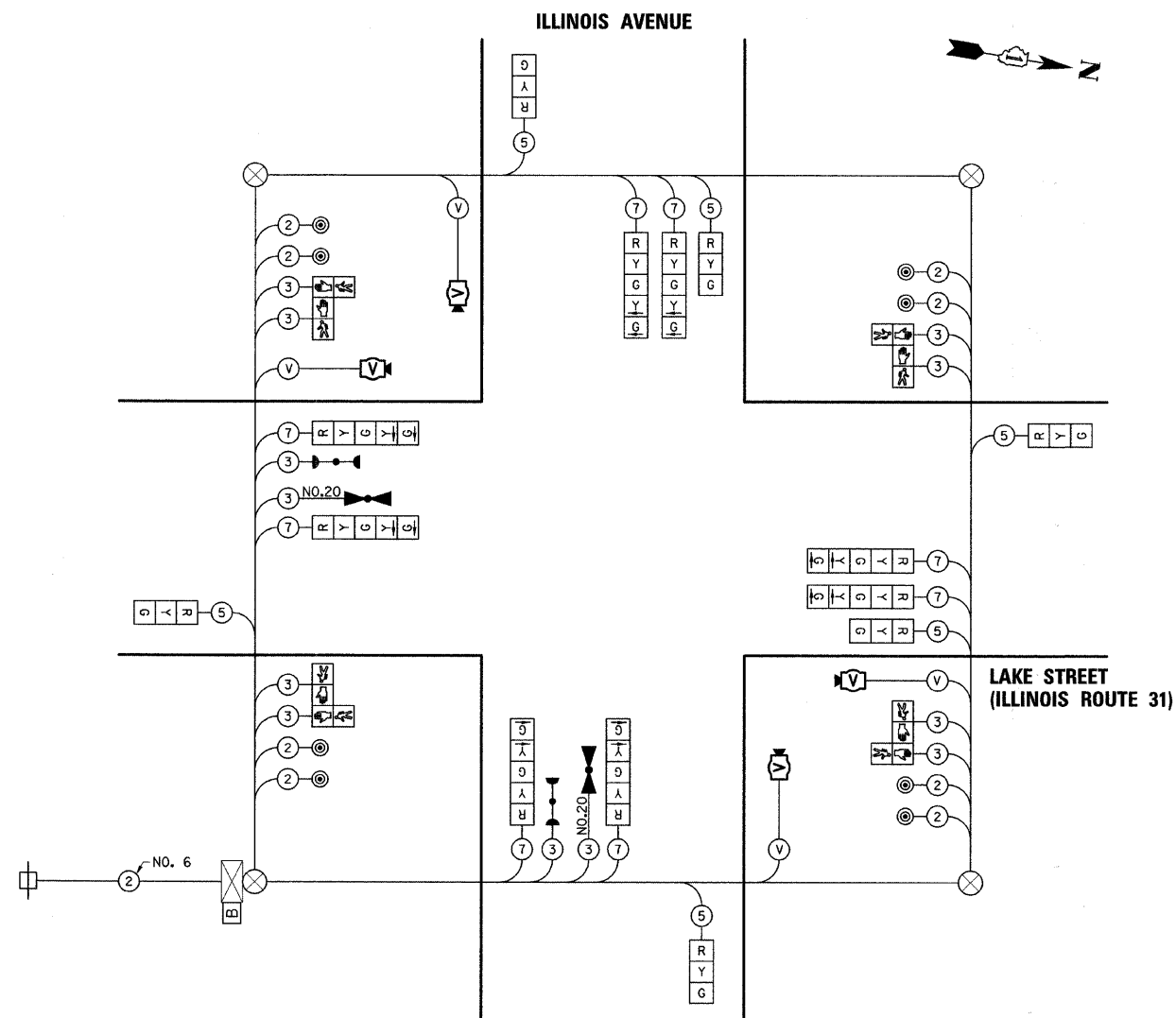
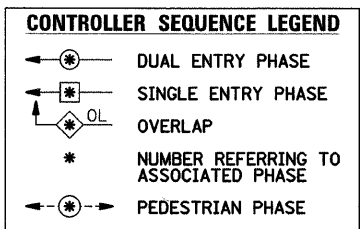
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	NOTE BOOK	
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	STRUCTURE NOTATIONS CHKD	

CONTROLLER SEQUENCE



TEMPORARY PHASE DESIGNATION DIAGRAM



I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		% OPERATION	
		INCAND.	LED		
SIGNAL (RED)	14		17	0.50	119
(YELLOW)	14		25	0.25	87.5
(GREEN)	14		15	0.25	52.5
ARROW	24		12	0.10	28.8
PED. SIGNAL	8		25	1.00	200
CONTROLLER	1		100	1.00	100
VIDEO SYSTEM	1		15	1.00	15
UPS	1		25	1.00	25
TOTAL =					627.8

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

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CHECKED JRS
DATE -

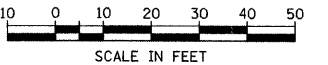
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REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY TRAFFIC SIGNAL
CABLE PLAN AND PHASE DESIGNATION DIAGRAM
ILLINOIS AVENUE**

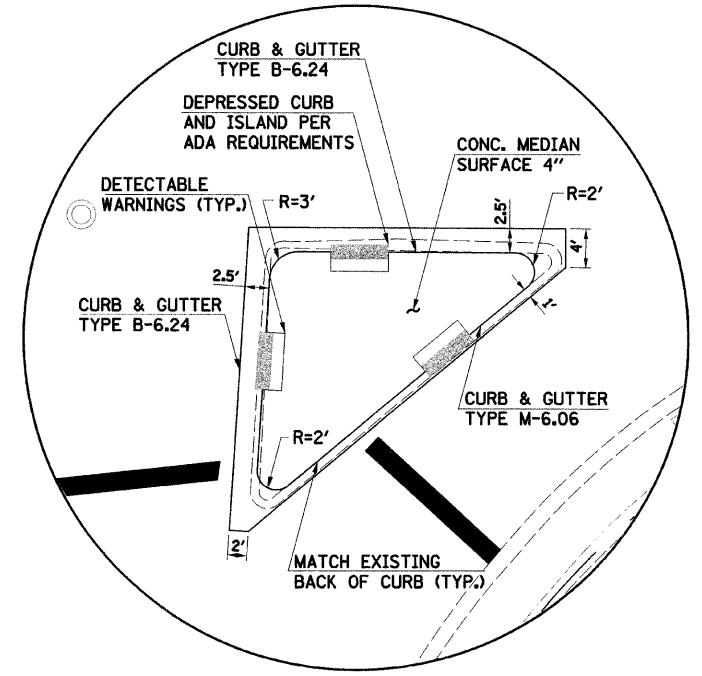
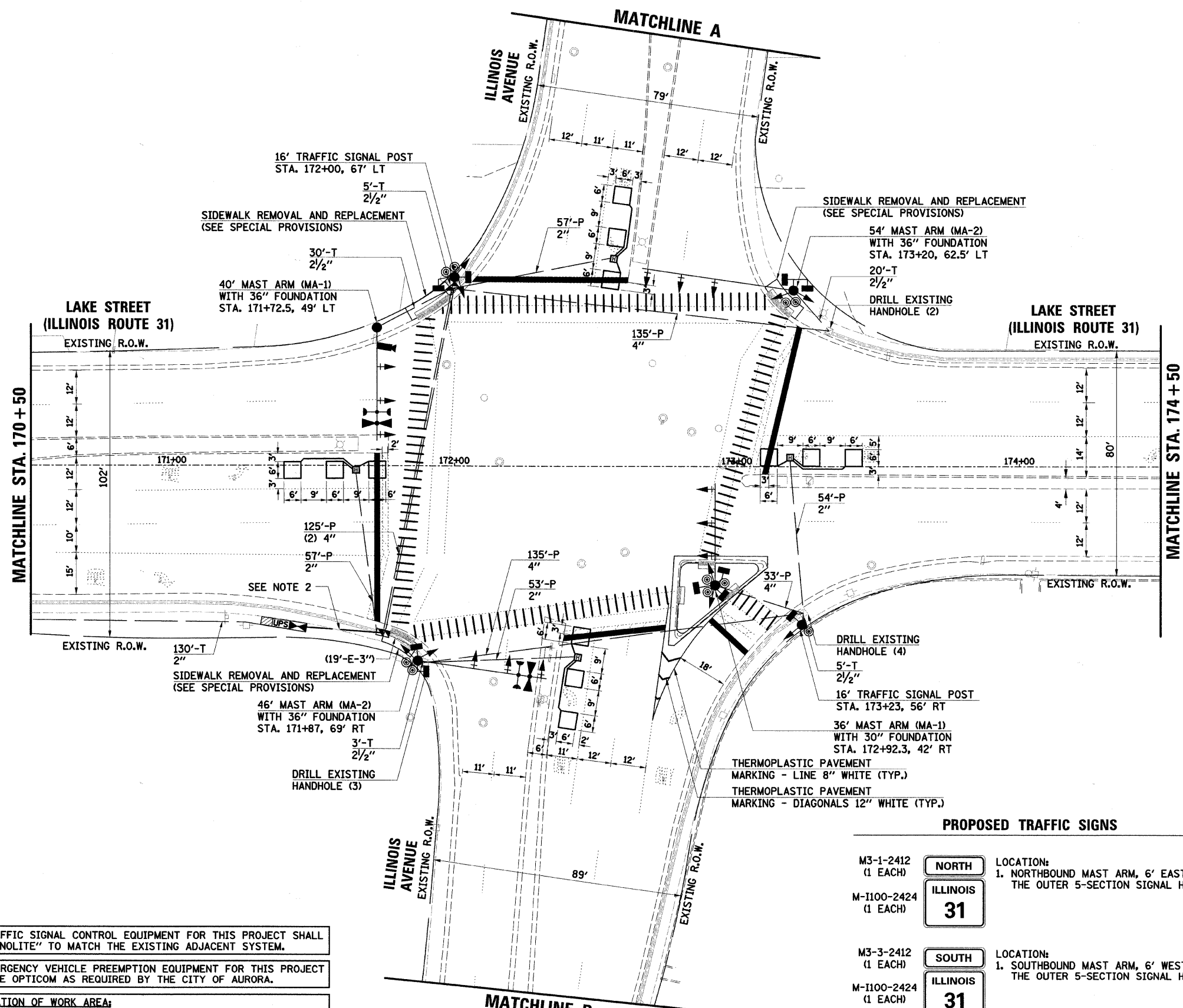
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.J. RTE. 3902	SECTION 05-00258-00-TL	COUNTY KANE	TOTAL SHEETS 61	SHEET NO. 29
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 63251	



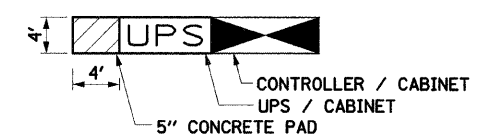
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	NO.		



NE ISLAND DETAIL

NOTE:
SEE SPECIAL PROVISIONS FOR ISLAND PAVEMENT REMOVAL AND REPLACEMENT.

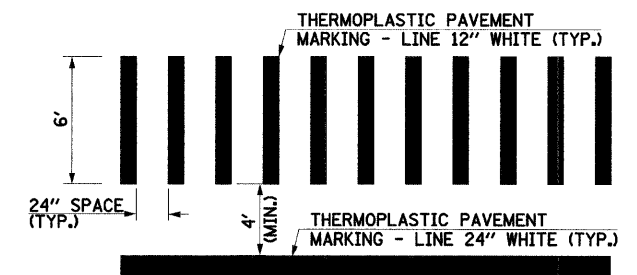


CONCRETE PAD INSTALLATION DETAIL

NOTE:
THE CONTRACTOR SHALL INSTALL A 5" CONCRETE MAINTENANCE PAD ADJACENT TO THE PROPOSED TYPE C FOUNDATION (STANDARD 878001). THE COST OF THE PAD WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE COST OF THE UPS.

PROPOSED TRAFFIC SIGNS

- | | | |
|-------------------------|--|--|
| M3-1-2412
(1 EACH) | | LOCATION:
1. NORTHBOUND MAST ARM, 6' EAST OF THE OUTER 5-SECTION SIGNAL HEAD. |
| M-1100-2424
(1 EACH) | | |
| M3-3-2412
(1 EACH) | | LOCATION:
1. SOUTHBOUND MAST ARM, 6' WEST OF THE OUTER 5-SECTION SIGNAL HEAD. |
| M-1100-2424
(1 EACH) | | |
| M-1100-2424
(2 EACH) | | LOCATION:
1. EASTBOUND MAST ARM, 6' SOUTH OF THE OUTER 5-SECTION SIGNAL HEAD. |
| M6-4-2115
(2 EACH) | | 2. WESTBOUND MAST ARM, 6' NORTH OF THE OUTER 5-SECTION SIGNAL HEAD. |



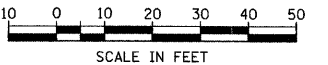
TYPICAL STRIPING DETAIL AT CROSSWALKS

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

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

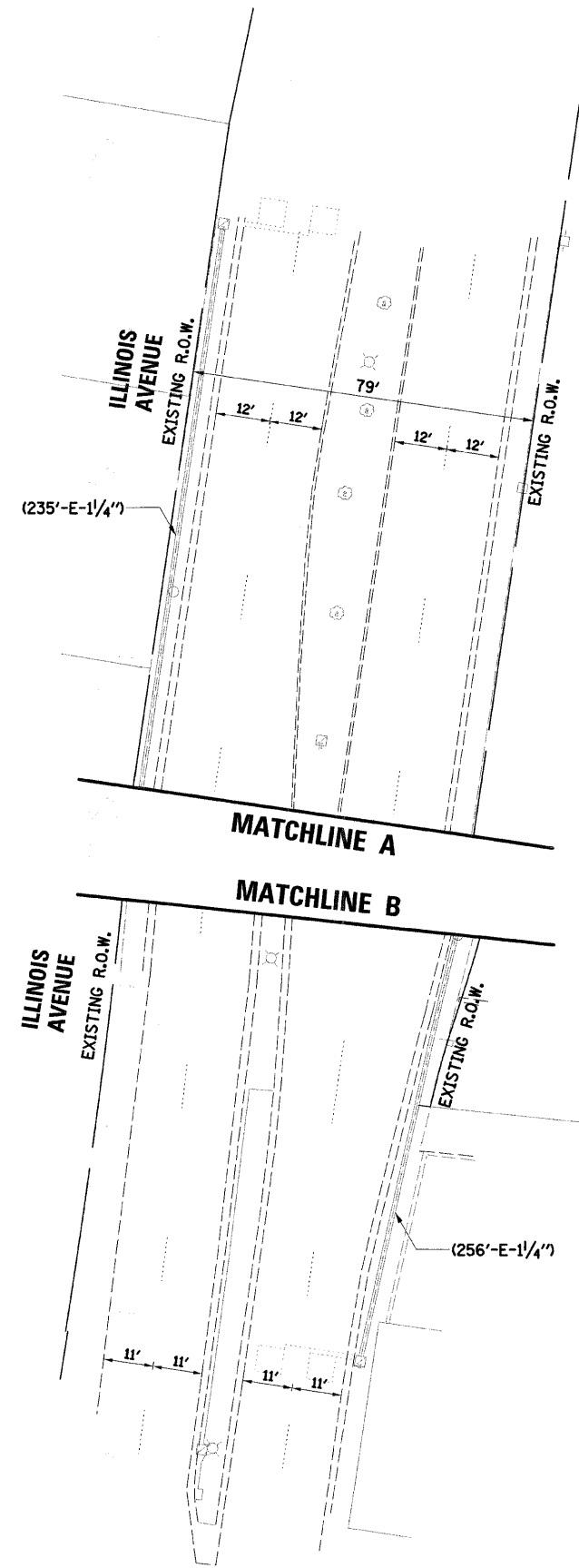
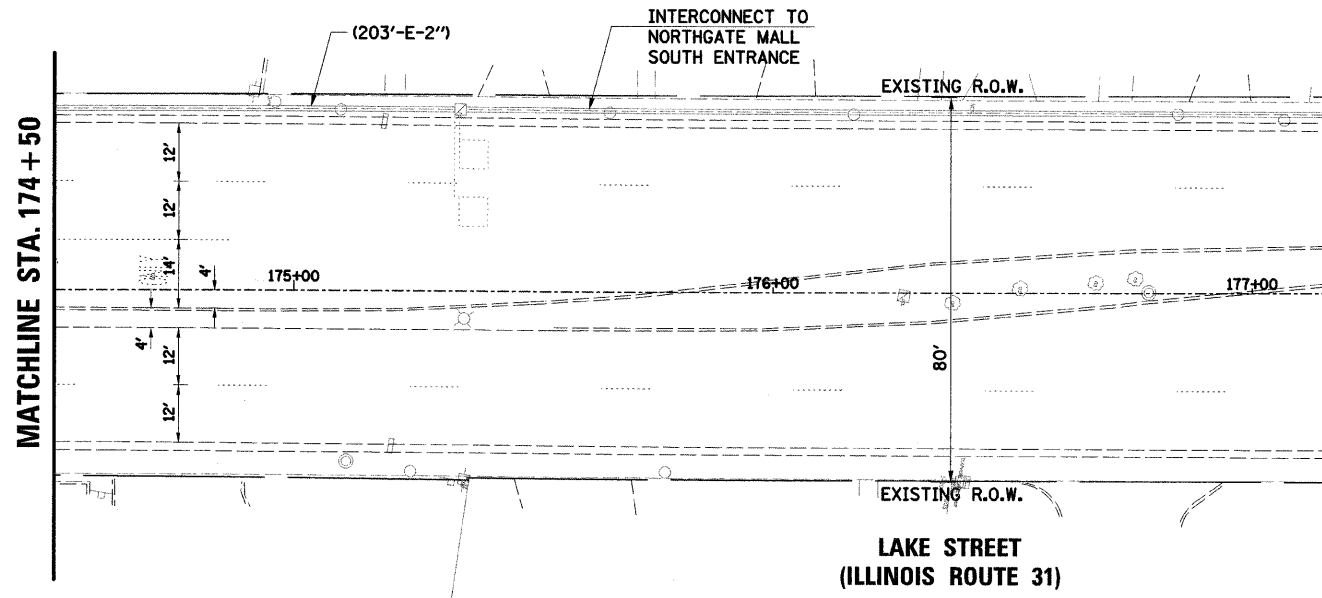
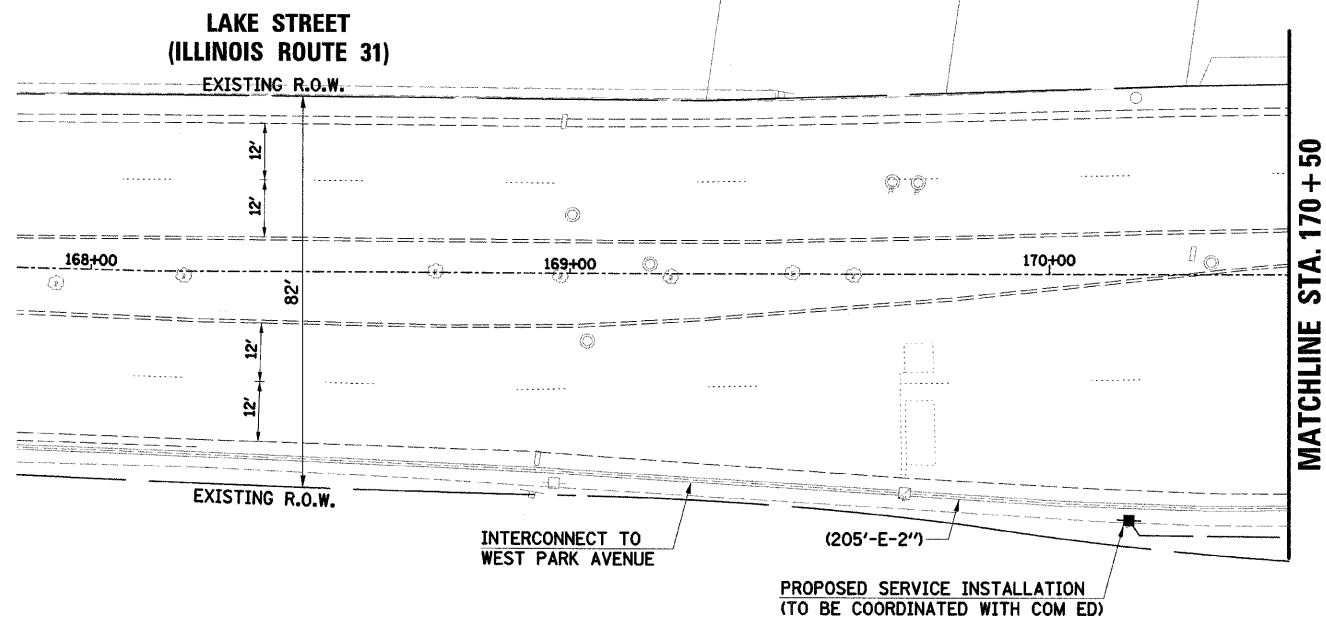
RESTORATION OF WORK AREA:
RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL 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. A MINIMUM OF ONE EAST-WEST AND ONE NORTH-SOUTH CROSSWALK SHALL REMAIN OPEN AT ALL TIMES IN ORDER TO MAINTAIN PEDESTRIAN ACCESS.
 2. PROVIDE 31' OF CONDUIT IN COMMON TRENCH, 4 AT 4".
 3. THE PAN/TILT/ZOOM CAMERA SHALL BE MOUNTED ON THE MAST ARM POLE IN THE SOUTHWEST CORNER BELOW THE STREET NAME SIGN.



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	PLOTTED		
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	RT. OF WAY CHECKED		
	PAID FILE NAME		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	CHECKED		
	STRUCTURE NOTATIONS CHECKED		

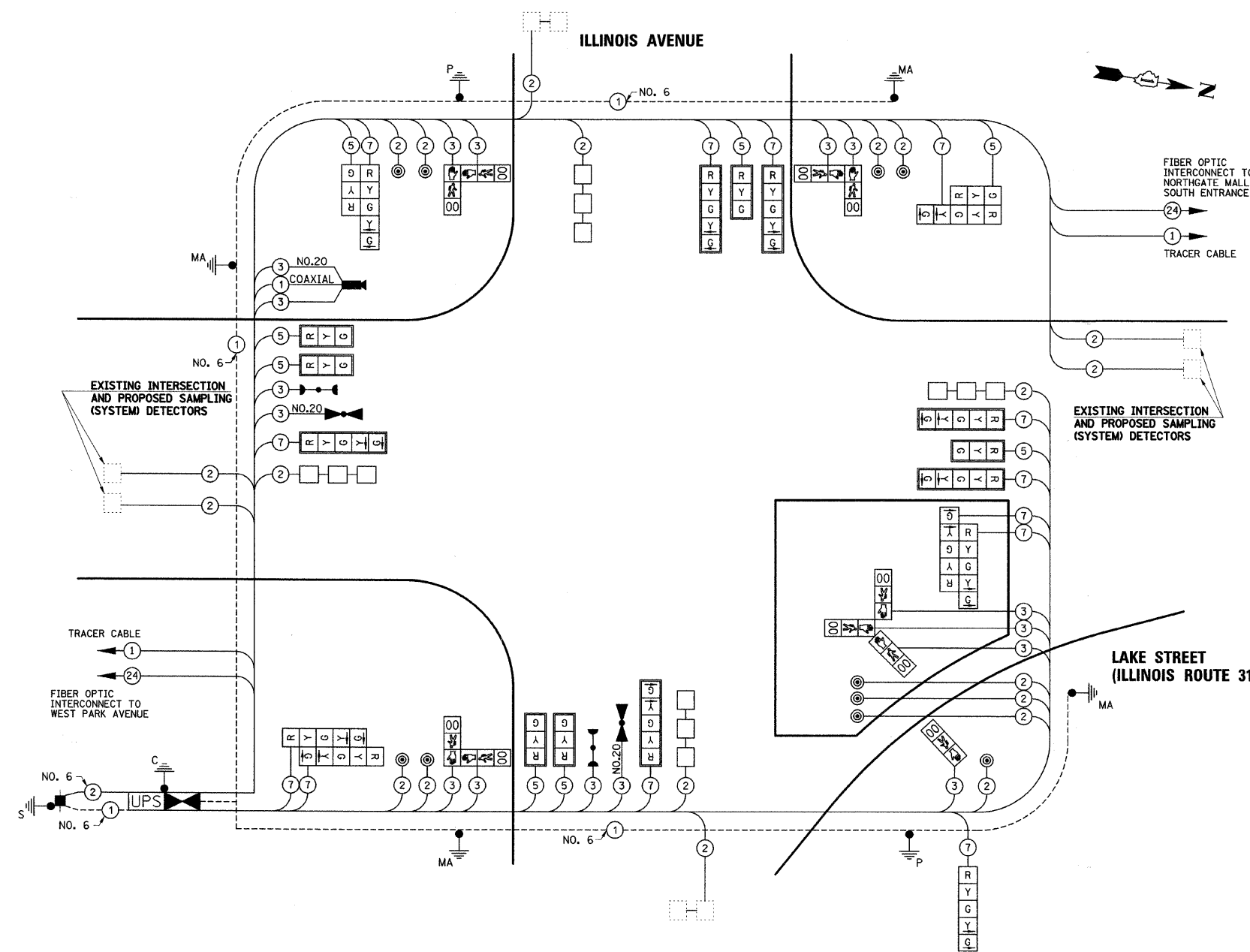


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FILE NAME = ...690_2...sig07b2...illinois.dgn	USER NAME = _USER_	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN ILLINOIS AVENUE SHEET 2 OF 2	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
PLOT SCALE = #SCALE#	CHECKED <i>JRS</i>	REVISOR	REVISED -			3902	05-00258-00-TL	KANE	61	31	
PLOT DATE = 3/11/2010	DATE -	REVISOR	REVISED -			CONTRACT NO. 63251		ILLINOIS FED. AID PROJECT			
						SCALE:	SHEET NO. OF SHEETS	STA. TO STA.			

SCHEDULE OF QUANTITIES

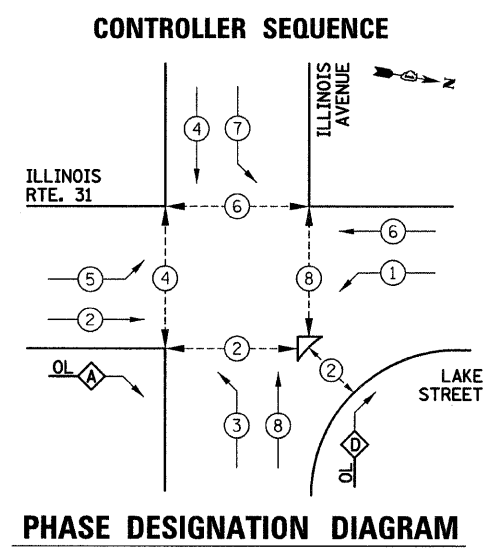
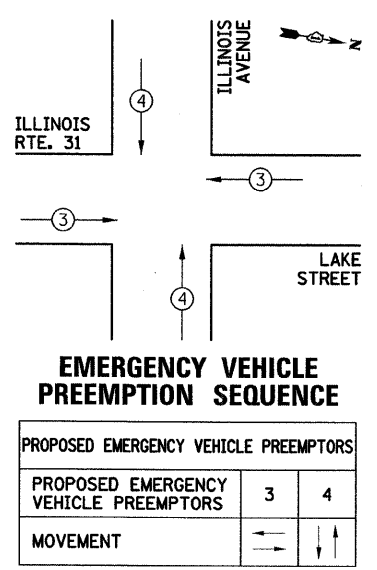
PAY ITEM DESCRIPTION	UNIT	ILLINOIS AVENUE
DETECTABLE WARNINGS	SQ FT	98
ISLAND PAVEMENT REMOVAL	SQ YD	46
CLASS D PATCHES, TYPE II, 12 INCH	SQ YD	24
CLASS D PATCHES, TYPE III, 12 INCH	SQ YD	22
SIGN PANEL - TYPE 1	SQ FT	51
THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	92
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	850
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	224
PAVEMENT MARKING REMOVAL	SQ FT	969
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	130
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	63
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	124
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	221
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	553
DOUBLE HANDHOLE	EACH	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	224
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	2274
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2999
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2035
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	3096
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	2380
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	148
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 54 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	8
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	14
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	41
DRILL EXISTING HANDHOLE	EACH	9
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	3
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	12
INDUCTIVE LOOP DETECTOR	EACH	6
DETECTOR LOOP, TYPE I	FOOT	400
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	10
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	6854
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	4
REMOVE EXISTING CONCRETE FOUNDATION	EACH	11
PAINT NEW MAST ARM POLE, UNDER 40 FEET	EACH	2
PAINT NEW MAST ARM POLE, 40 FEET AND OVER	EACH	2
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 3-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1
ISLAND PAVEMENT REMOVAL AND REPLACEMENT	SQ FT	623
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
PAINT TRAFFIC SIGNAL POST	EACH	4
UNINTERRUPTABLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	782
ELECTRIC CABLE IN CONDUIT, NO. 20 3C, 125 INCH, SHIELDED	FOOT	999
SIDEWALK REMOVAL AND REPLACEMENT	SQ FT	225
VIDEO BELDEN 8281 COAXIAL CABLE IN CONDUIT	FOOT	236
GROUND EXISTING HANDHOLE FRAME AND COVER	EACH	3
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1



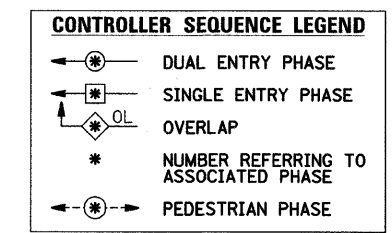
I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	21	17	0.50		178.5
(YELLOW)	21	25	0.25		131.3
(GREEN)	21	15	0.25		78.8
ARROW	26	12	0.10		31.2
PED. SIGNAL	10	25	1.00		250
CONTROLLER	1	100	1.00		100
UPS	1	25	1.00		25
TOTAL =					794.8

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



OVERLAP PHASE	PERMISSIVE PHASE	PROTECTED PHASE
A =	2 +	3
D =	8 +	1

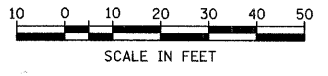


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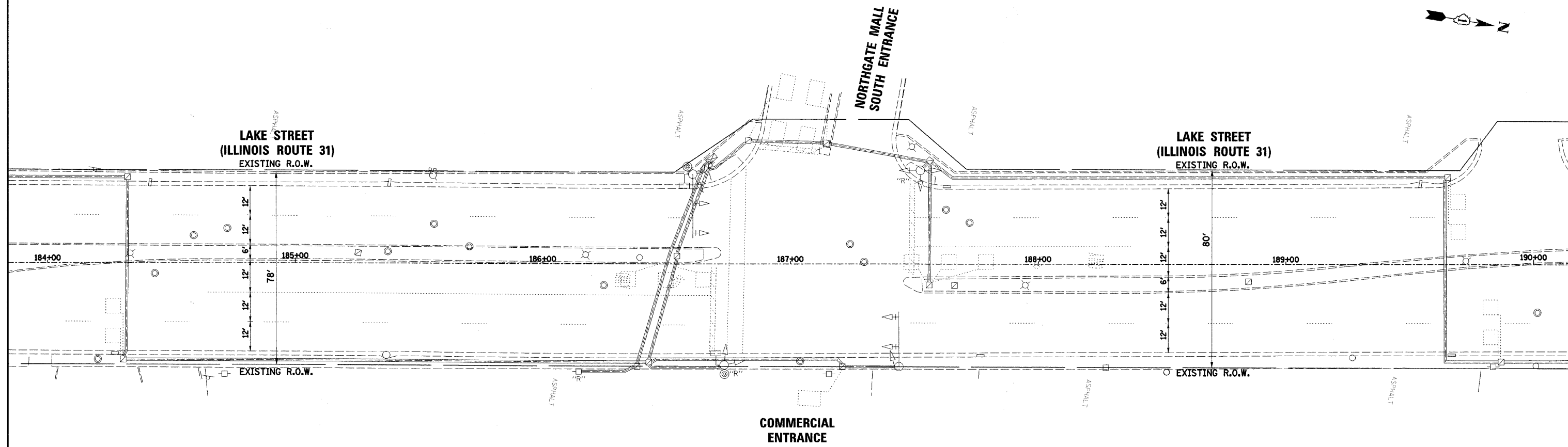
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	NOTE BOOK NO.		
	FILE NAME		



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

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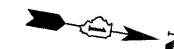
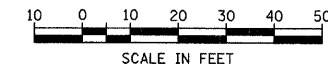
- 1 EACH TRAFFIC SIGNAL CONTROLLER

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	PLOT DATE = 3/11/2010	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

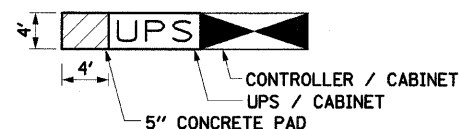
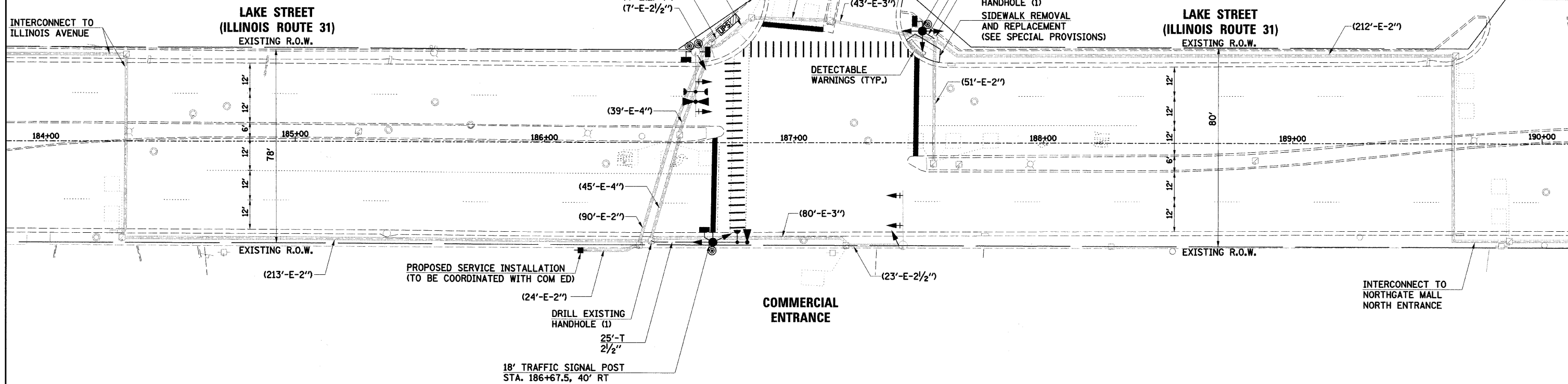
**EXISTING TRAFFIC SIGNAL EQUIPMENT TO BE REMOVED
NORTHGATE MALL SOUTH ENTRANCE**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	05-00258-00-TL	KANE	61	34
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
SCALE:			CONTRACT NO. 63251	
SHEET NO. OF SHEETS			STA. TO STA.	



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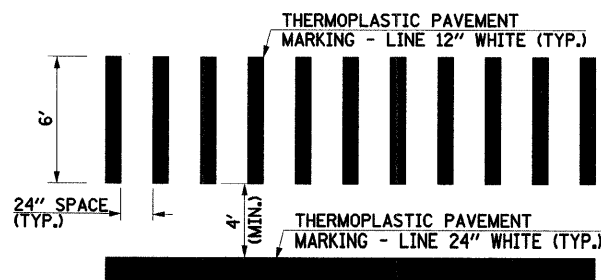
CONCRETE PAD INSTALLATION DETAIL

NOTE:
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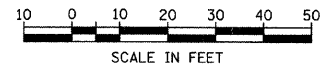
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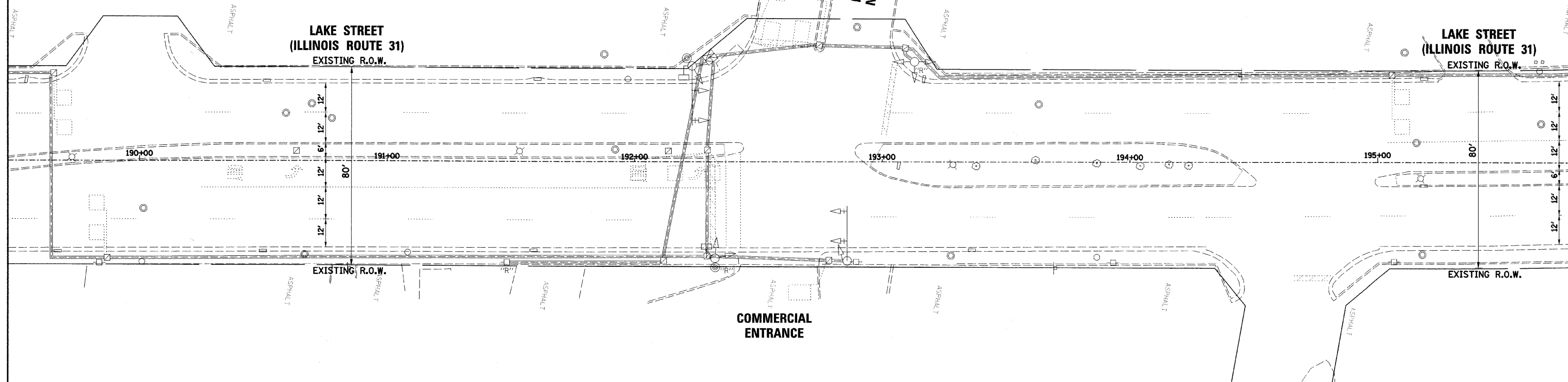
TYPICAL STRIPING DETAIL AT CROSSWALKS

FILE NAME = ...\\690.2.sig08b.com access *1.dgn	USER NAME = _USER_	DESIGNED - DRAWN <i>JMR</i>	REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODIFICATION PLAN NORTHGATE MALL SOUTH ENTRANCE	F.A.U. RTE. 3902	SECTION 05-00258-00-TL	COUNTY KANE	TOTAL SHEETS 61	SHEET NO. 35	CONTRACT NO. 63251
PLOT SCALE = #SCALE#	CHECKED <i>JRS</i>	REVISIED -	REVISIED -			SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	
PLOT DATE = 3/11/2010	DATE -	REVISIED -	REVISIED -								



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	DATE		
	NOTE BOOK NO.		
	STRUCTURE NOTATIONS CPFD		



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- 2 EACH PEDESTRIAN PUSH BUTTONS
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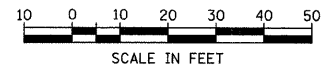
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		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EXISTING TRAFFIC SIGNAL EQUIPMENT TO BE REMOVED
NORTHGATE MALL NORTH ENTRANCE**

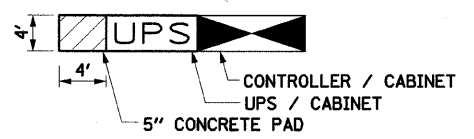
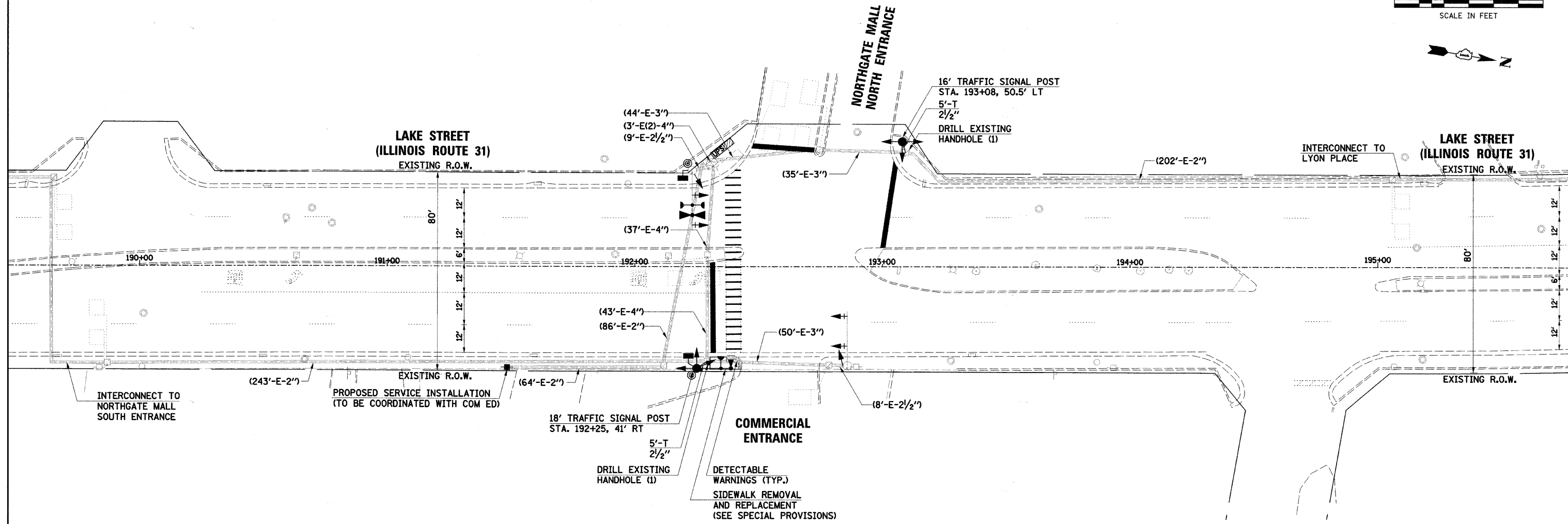
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	05-00258-00-TL	KANE	61	37
CONTRACT NO.			63251	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

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



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	NO. OF WAY CHECKED	
	STRUCTURE NOTATIONS	
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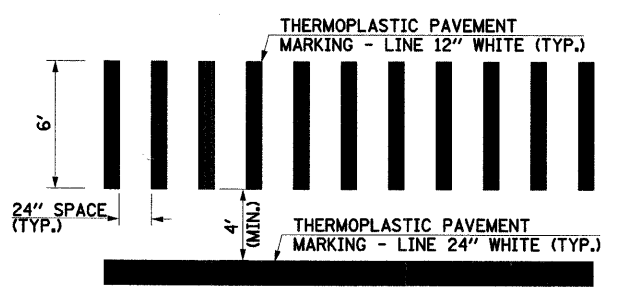
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TYPICAL STRIPING DETAIL AT CROSSWALKS

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PLOT DATE = 3/11/2010

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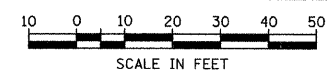
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODIFICATION PLAN
NORTHGATE MALL NORTH ENTRANCE**

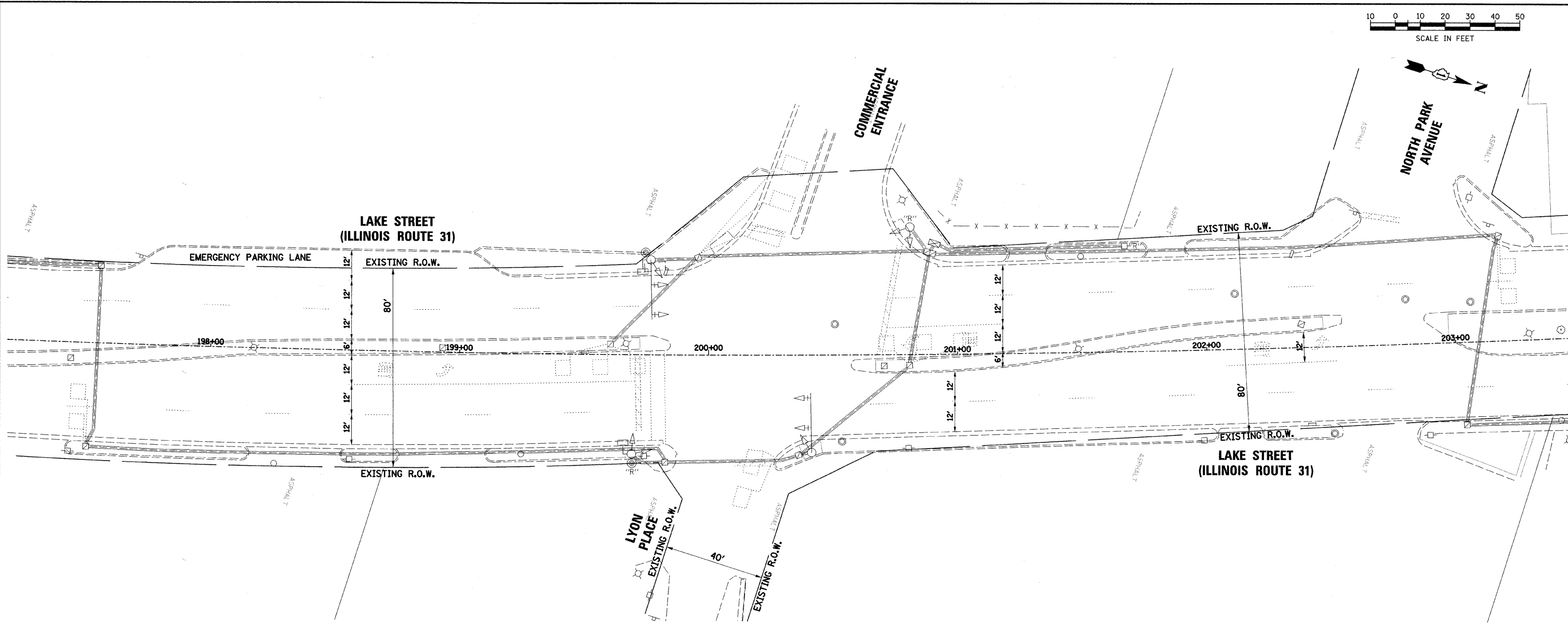
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	05-00258-00-TL	KANE	61	38
CONTRACT NO. 63251				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



PLAN	SURVEYED	DATE
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PROFILE	SURVEYED	DATE
	PLOTTED	
	CHECKED	
	BY	
	NO.	
	FILE NAME	



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

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

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

- 2 EACH TRAFFIC SIGNAL POSTS
- 10 EACH TRAFFIC SIGNAL HEADS
- 4 EACH TRAFFIC SIGNAL BACKPLATES
- 2 EACH PEDESTRIAN SIGNAL HEADS
- 2 EACH PEDESTRIAN PUSH BUTTONS
- 1 EACH SERVICE INSTALLATION

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 MAINTENANCE FACILITY DESIGNATED BY THE CITY. THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

- 1 EACH TRAFFIC SIGNAL CONTROLLER

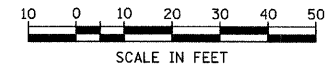
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		CHECKED <i>JRS</i>	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EXISTING TRAFFIC SIGNAL EQUIPMENT TO BE REMOVED
LYON PLACE**

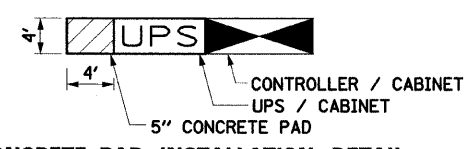
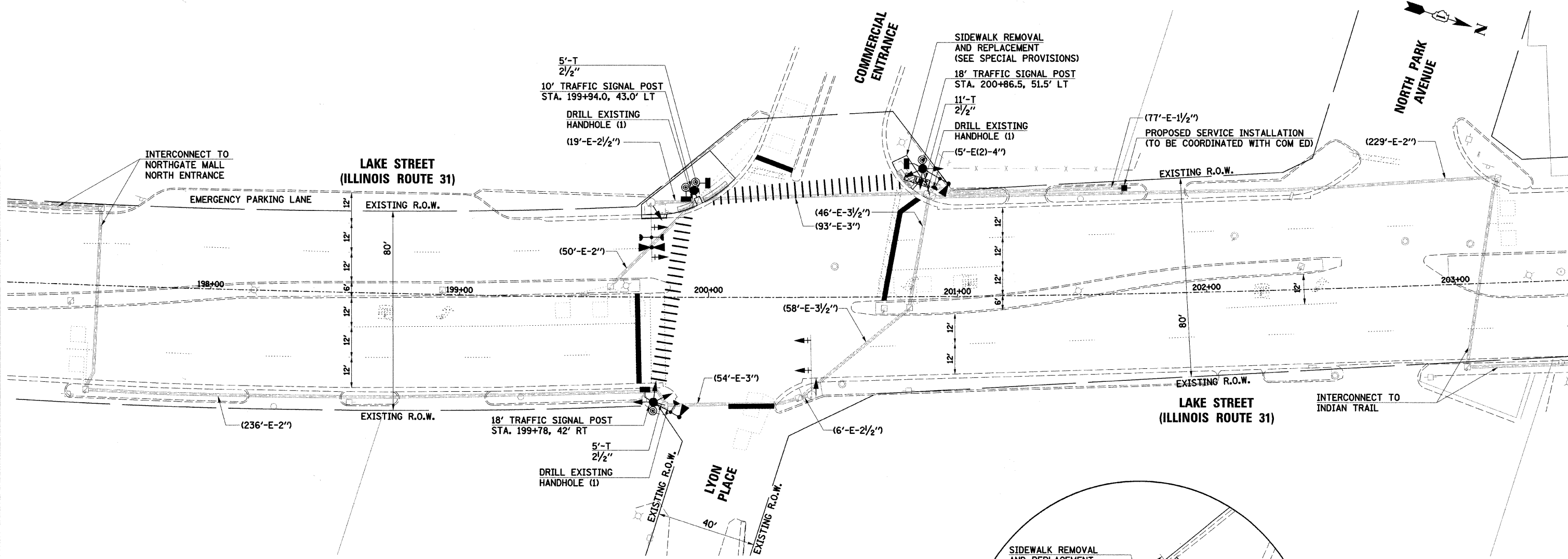
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	05-00258-00-TL	KANE	61	40
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 63251	

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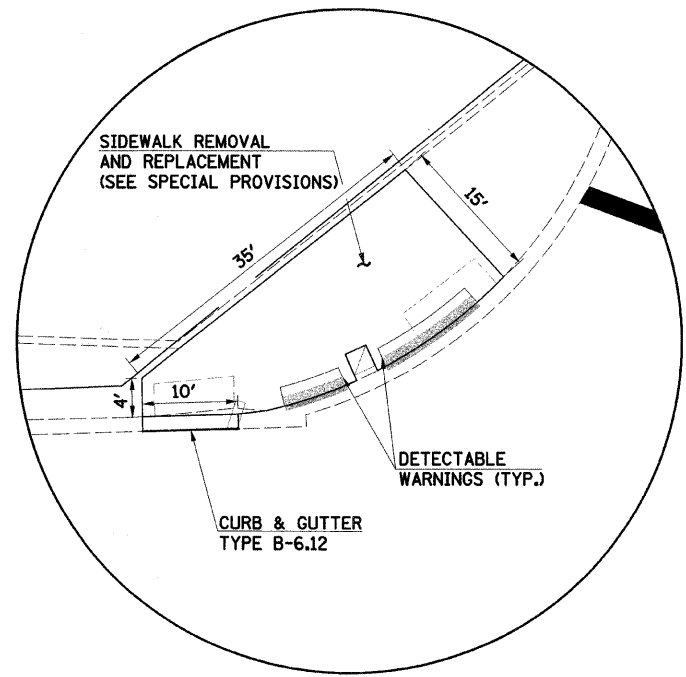
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	FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	
	CHECKED	
	BY	
	NO.	
	FILE NAME	



CONCRETE PAD INSTALLATION DETAIL

NOTE:
THE CONTRACTOR SHALL INSTALL A 5" CONCRETE MAINTENANCE PAD ADJACENT TO THE PROPOSED TYPE C FOUNDATION (STANDARD 878001). THE COST OF THE PAD WILL NOT BE PAID FOR SERPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE COST OF THE UPS.



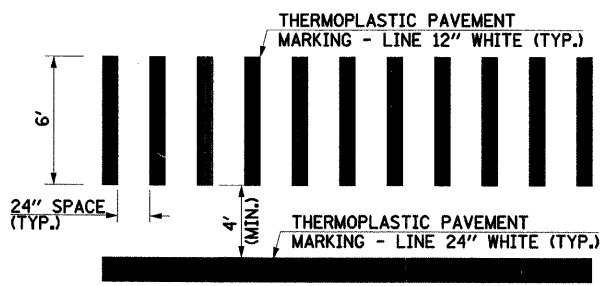
SW CORNER DETAIL

NOTE:
CURB & GUTTER REMOVAL SHALL BE PROVIDED AS NECESSARY.

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

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

RESTORATION OF WORK AREA:
RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. 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.



TYPICAL STRIPING DETAIL AT CROSSWALKS

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CHECKED *JRS*
DATE -

REVISED -
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REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

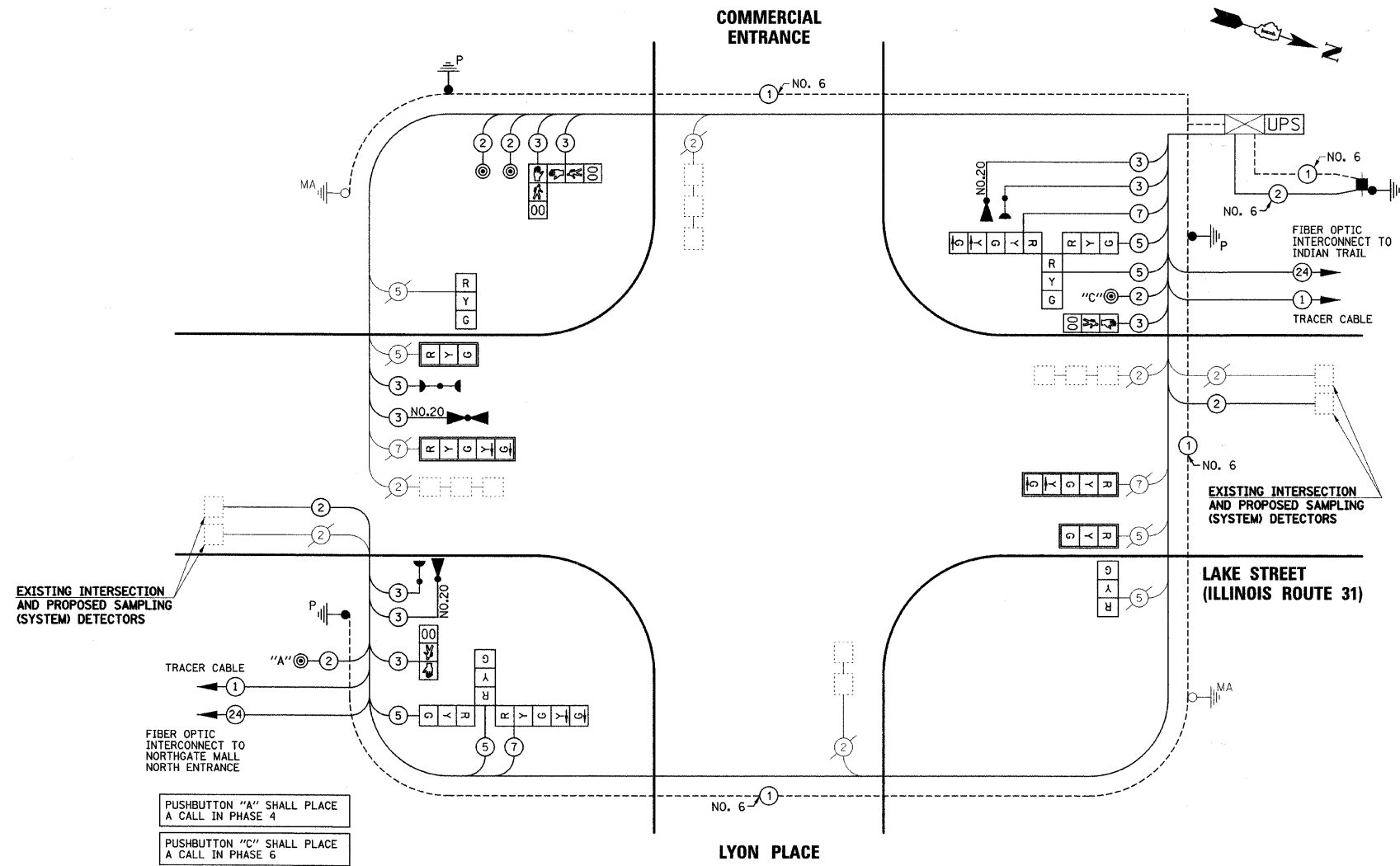
**TRAFFIC SIGNAL MODIFICATION PLAN
LYON PLACE**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	05-00258-00-TL	KANE	61	41
CONTRACT NO. 63251				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	DATE
	PLOTTED	
	CHECKED	
	BY	
	NO.	
	DATE	

PROFILE	SURVEYED	DATE
	PLOTTED	
	CHECKED	
	BY	
	NO.	
	DATE	



PUSHBUTTON "A" SHALL PLACE A CALL IN PHASE 4
 PUSHBUTTON "C" SHALL PLACE A CALL IN PHASE 6

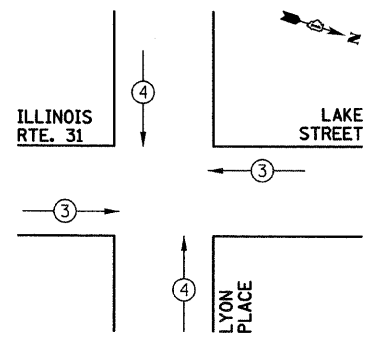
SCHEDULE OF QUANTITIES

PAY ITEM DESCRIPTION	UNIT	LYON PLACE
DETECTABLE WARNINGS	SQ FT	42
COMBINATION CURB AND GUTTER REMOVAL	FOOT	10
COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	10
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	281
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	117
PAVEMENT MARKING REMOVAL	SQ FT	263
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	21
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	21
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	522.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1012.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	535
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	267.5
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	697.5
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	94.5
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	2
CONCRETE FOUNDATION, TYPE A	FOOT	8
DRILL EXISTING HANDHOLE	EACH	3
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 3-FACE, 2-3 SECTION, 1-5 SECTION BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	4
INDUCTIVE LOOP DETECTOR	EACH	2
LIGHT DETECTOR	EACH	3
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	4
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1409.5
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	2
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
PAINT TRAFFIC SIGNAL POST	EACH	2
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	530
ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	462
SIDEWALK REMOVAL AND REPLACEMENT	SQ FT	540
GROUND EXISTING HANDHOLE FRAME AND COVER	EACH	6

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		% OPERATION	
SIGNAL (RED)	12	INCAND.	17	0.50	102
		LED	25	0.25	75
		(GREEN)	15	0.25	45
ARROW	8		12	0.10	9.6
PED. SIGNAL	4		25	1.00	100
CONTROLLER	1		100	1.00	100
UPS	1		25	1.00	25
TOTAL =					456.6

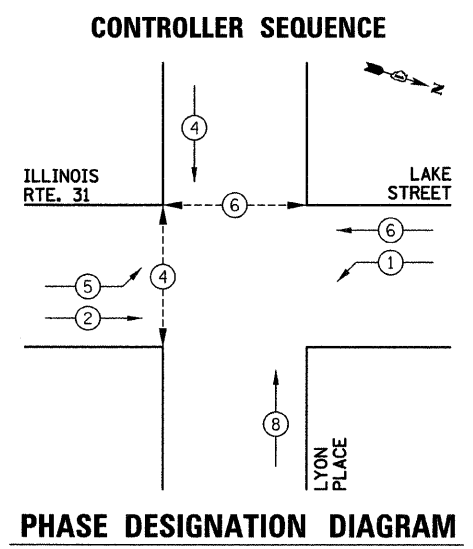
ENERGY COSTS TO: CITY OF AURORA
 44 E. DOWNER PLACE
 AURORA, ILLINOIS 60507-2067

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

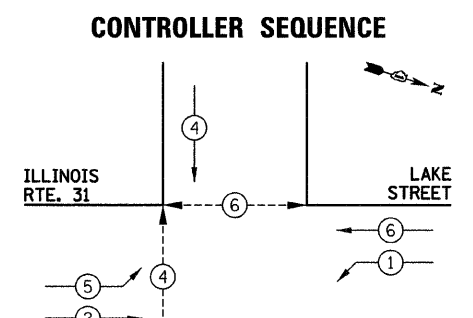


EMERGENCY VEHICLE PREEMPTION SEQUENCE

PROPOSED EMERGENCY VEHICLE PREEMPTORS	3	4
MOVEMENT	← →	↑ ↓



PHASE DESIGNATION DIAGRAM



CONTROLLER SEQUENCE LEGEND

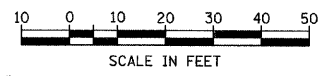
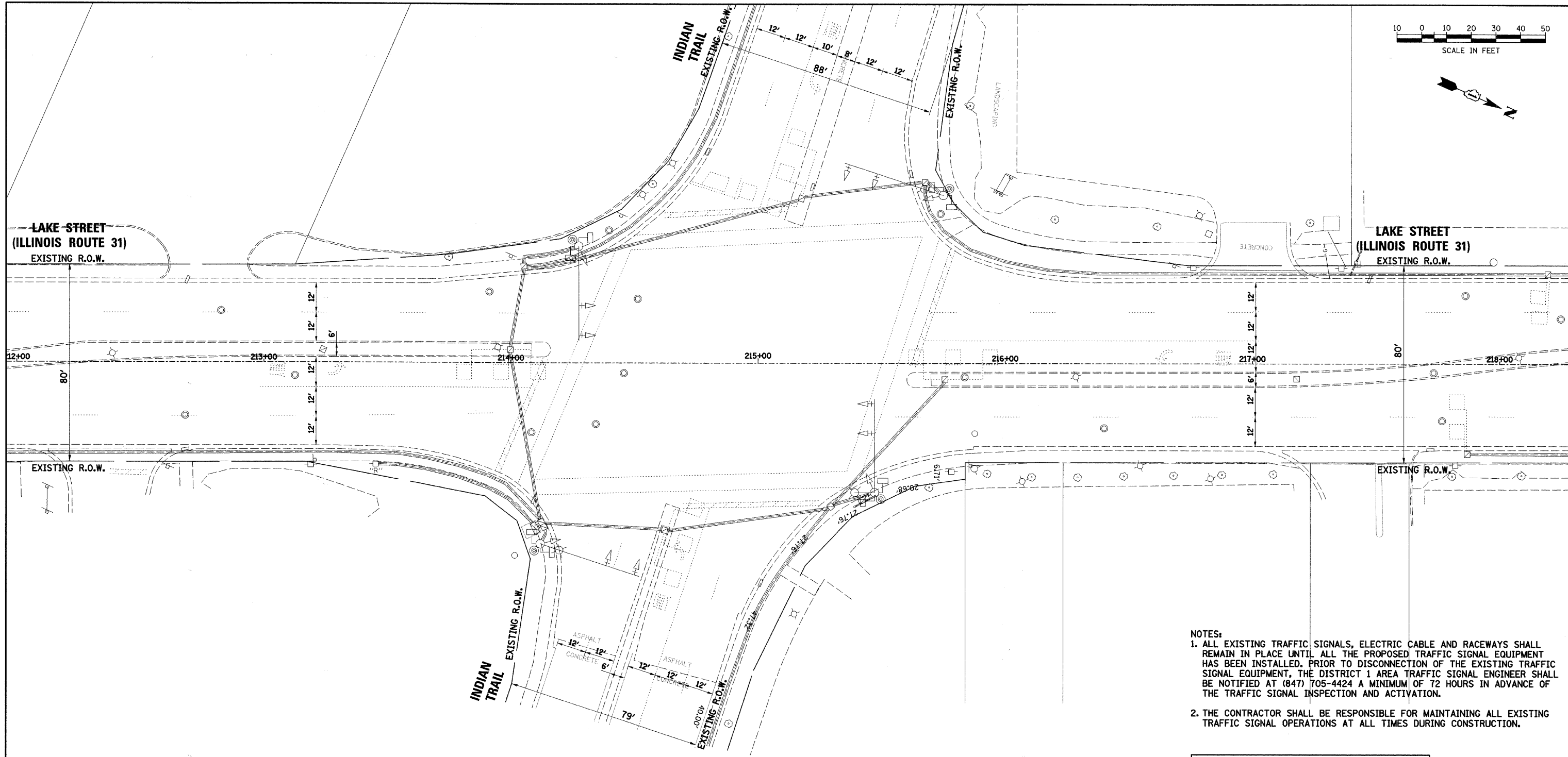
- ← ⊕ → DUAL ENTRY PHASE
- ← ⊕ * → SINGLE ENTRY PHASE
- ← ⊕ OL → OVERLAP
- * NUMBER REFERRING TO ASSOCIATED PHASE
- ← ⊕ → PEDESTRIAN PHASE

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

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

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

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	NOTE BOOK		
	NO.		
	STRUCTURE NOTATIONS		



- NOTES:**
1. ALL EXISTING TRAFFIC SIGNALS, ELECTRIC CABLE AND RACEWAYS SHALL REMAIN IN PLACE UNTIL ALL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT HAS BEEN INSTALLED. PRIOR TO DISCONNECTION OF THE EXISTING TRAFFIC SIGNAL EQUIPMENT, THE DISTRICT 1 AREA TRAFFIC SIGNAL ENGINEER SHALL BE NOTIFIED AT (847) 705-4424 A MINIMUM OF 72 HOURS IN ADVANCE OF THE TRAFFIC SIGNAL INSPECTION AND ACTIVATION.
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THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY HIM OUTSIDE THE RIGHT-OF-WAY AT HIS EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE. THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT (SEE SCHEDULE OF QUANTITIES FOR REMOVAL ITEMS TO BE PAID FOR SEPARATELY).

12	EACH	TRAFFIC SIGNAL HEADS
8	EACH	TRAFFIC SIGNAL BACKPLATES
8	EACH	PEDESTRIAN SIGNAL HEADS
4	EACH	PEDESTRIAN PUSH BUTTONS
1	EACH	SERVICE INSTALLATION

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 MAINTENANCE FACILITY DESIGNATED BY THE CITY. THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

1	EACH	TRAFFIC SIGNAL CONTROLLER
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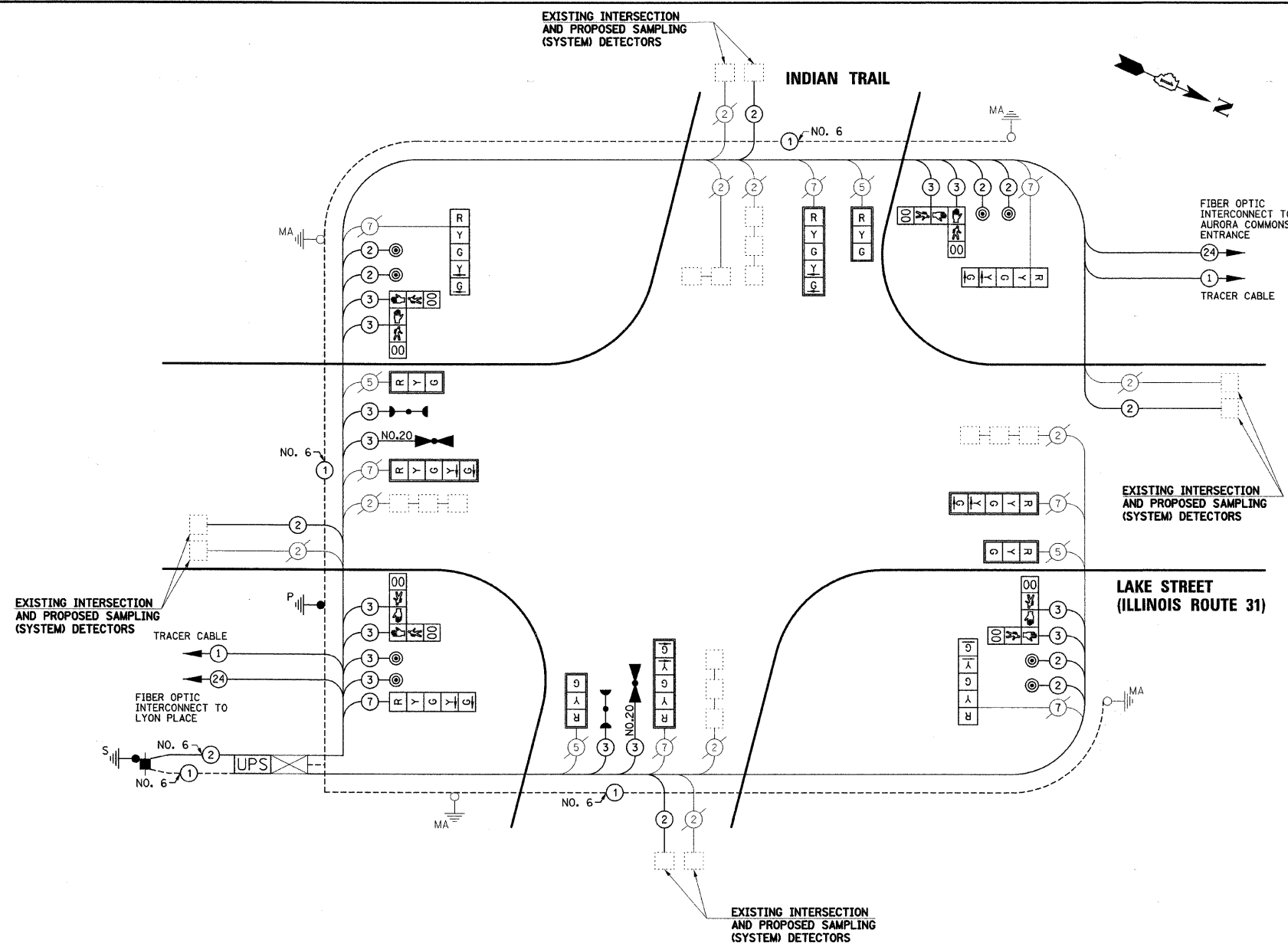
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EXISTING TRAFFIC SIGNAL EQUIPMENT TO BE REMOVED
INDIAN TRAIL**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	05-00258-00-TL	KANE	61	43
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
SCALE:			SHEET NO. OF SHEETS STA. TO STA.	
			CONTRACT NO. 63251	

PLAN	SURVEYED	DATE
	PLOTTED	
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	BY	
	NO.	
	DATE	

PROFILE	SURVEYED	DATE
	PLOTTED	
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	NO.	
	DATE	



SCHEDULE OF QUANTITIES

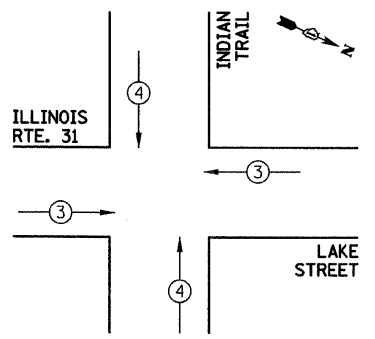
PAY ITEM DESCRIPTION	UNIT	INDIAN TRAIL
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	925
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	218
PAVEMENT MARKING REMOVAL	SQ FT	868
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	18
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	18
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1494
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1871
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	55
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1699
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	87
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
DRILL EXISTING HANDHOLE	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	4
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	8
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2403
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	734
ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	321
GROUND EXISTING HANDHOLE FRAME AND COVER	EACH	8

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

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

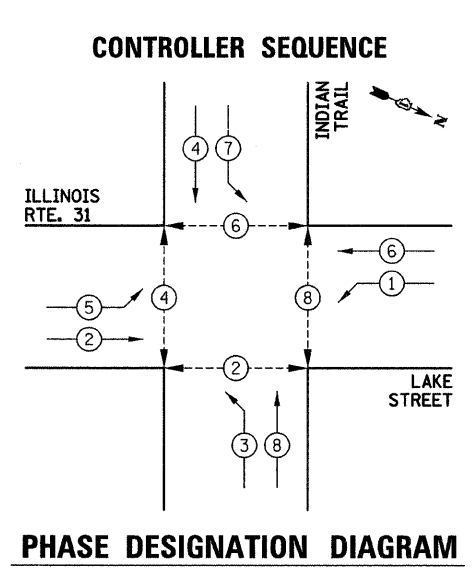
ENERGY COSTS TO: CITY OF AURORA
44 E. DOWNER PLACE
AURORA, ILLINOIS 60507-2067

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



EMERGENCY VEHICLE PREEMPTION SEQUENCE

PROPOSED EMERGENCY VEHICLE PREEMPTORS	3	4
MOVEMENT	← →	↑ ↓

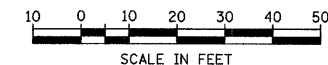


CONTROLLER SEQUENCE LEGEND

- ← ⊙ → DUAL ENTRY PHASE
- ← ⊙ SINGLE ENTRY PHASE
- ← ⊙ OL OVERLAP
- * NUMBER REFERRING TO ASSOCIATED PHASE
- ← ⊙ → PEDESTRIAN PHASE

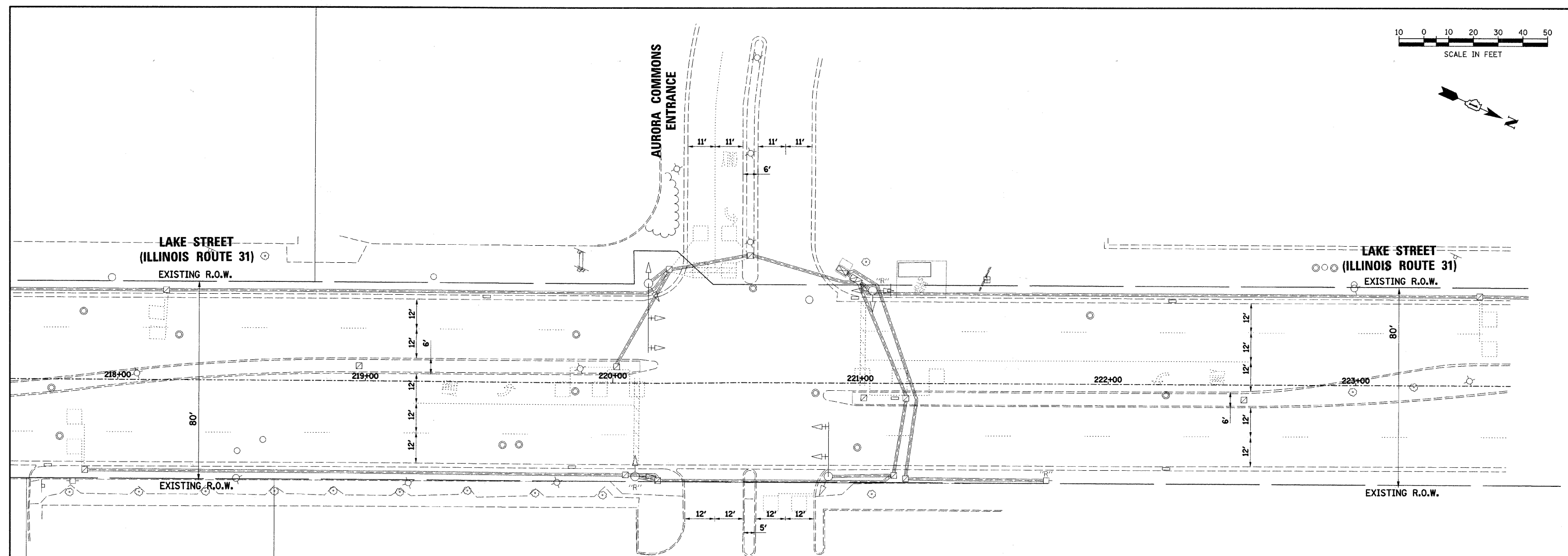
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

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



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

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	NOTE BOOK		
	NO.		
	STRUCTURE NOTATIONS CHECKED		



COMMERCIAL ENTRANCE

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

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

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

- 2 EACH TRAFFIC SIGNAL POSTS
- 12 EACH TRAFFIC SIGNAL HEADS
- 4 EACH TRAFFIC SIGNAL BACKPLATES
- 1 EACH SERVICE INSTALLATION

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 MAINTENANCE FACILITY DESIGNATED BY THE CITY. THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

- 1 EACH TRAFFIC SIGNAL CONTROLLER

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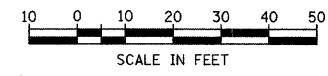
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EXISTING TRAFFIC SIGNAL EQUIPMENT TO BE REMOVED
AURORA COMMONS ENTRANCE**

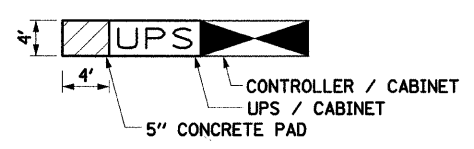
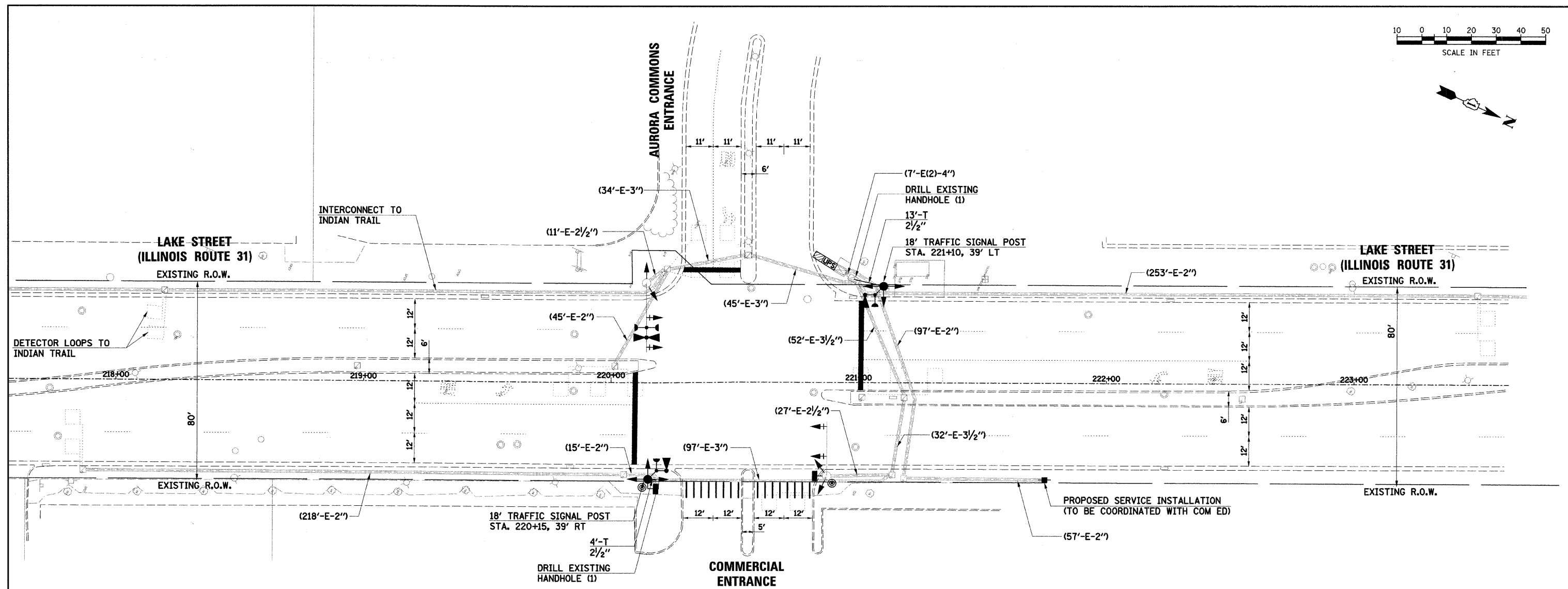
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	05-00258-00-TL	KANE	61	47
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 63251	



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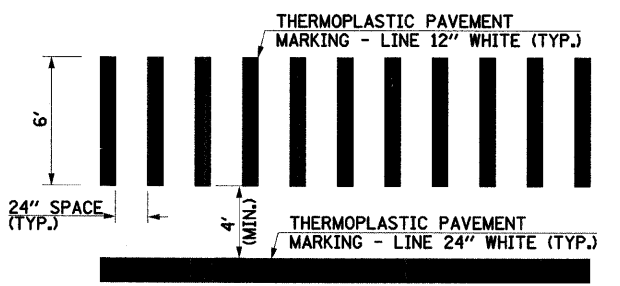
CONCRETE PAD INSTALLATION DETAIL

NOTE:
 THE CONTRACTOR SHALL INSTALL A 5' CONCRETE MAINTENANCE PAD ADJACENT TO THE PROPOSED TYPE C FOUNDATION (STANDARD 878001). THE COST OF THE PAD WILL NOT BE PAID FOR SERPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE COST OF THE UPS.

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

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

RESTORATION OF WORK AREA:
 RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. 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.

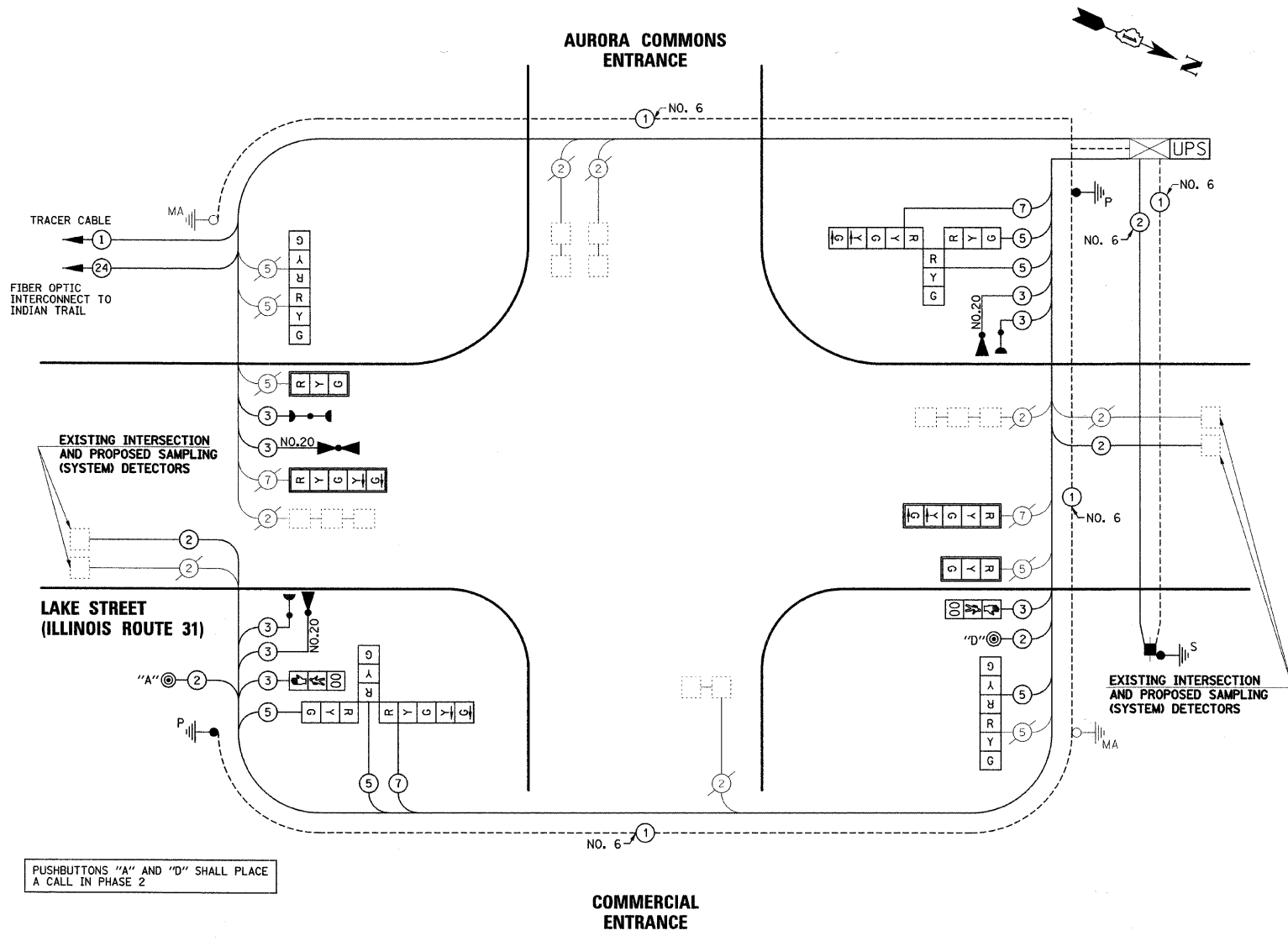


TYPICAL STRIPING DETAIL AT CROSSWALKS

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PLOT SCALE = #SCALE#	CHECKED <i>JRS</i>	REVISED -	REVISED -			SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	CONTRACT NO. 63251			
PLOT DATE = 3/11/2010	DATE -	REVISED -	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT						

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SCHEDULE OF QUANTITIES

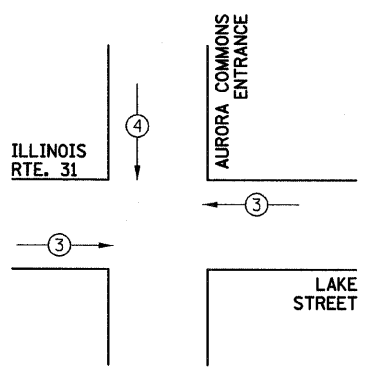
PAY ITEM DESCRIPTION	UNIT	AURORA COMMONS
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	96
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	98
PAVEMENT MARKING REMOVAL	SQ FT	183
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	17
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	17
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	392.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	887
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	754
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	295.5
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	752
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	178
TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	2
CONCRETE FOUNDATION, TYPE A	FOOT	8
DRILL EXISTING HANDHOLE	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 3-FACE, 2-3 SECTION, 1-5 SECTION BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	4
INDUCTIVE LOOP DETECTOR	EACH	2
LIGHT DETECTOR	EACH	3
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	2
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	818
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	2
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
PAINT TRAFFIC SIGNAL POST	EACH	2
UNINTERRUPTABLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	653.5
ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	480.5

PUSHBUTTONS "A" AND "D" SHALL PLACE A CALL IN PHASE 2

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		% OPERATION	
		INCAND.	LED		
SIGNAL (RED)	14	17		0.50	119
(YELLOW)	14		25	0.25	87.5
(GREEN)	14		15	0.25	52.5
ARROW	8		12	0.10	9.6
PED. SIGNAL	2		25	1.00	50
CONTROLLER	1		100	1.00	100
UPS	1		25	1.00	25
TOTAL =					443.6

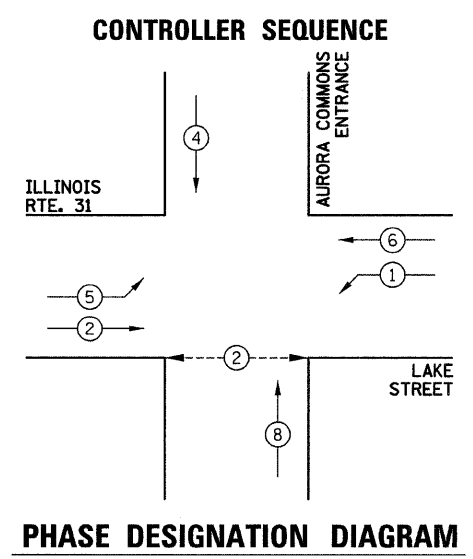
ENERGY COSTS TO: CITY OF AURORA
44 E. DOWNER PLACE
AURORA, ILLINOIS 60507-2067

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



EMERGENCY VEHICLE PREEMPTION SEQUENCE

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



CONTROLLER SEQUENCE LEGEND

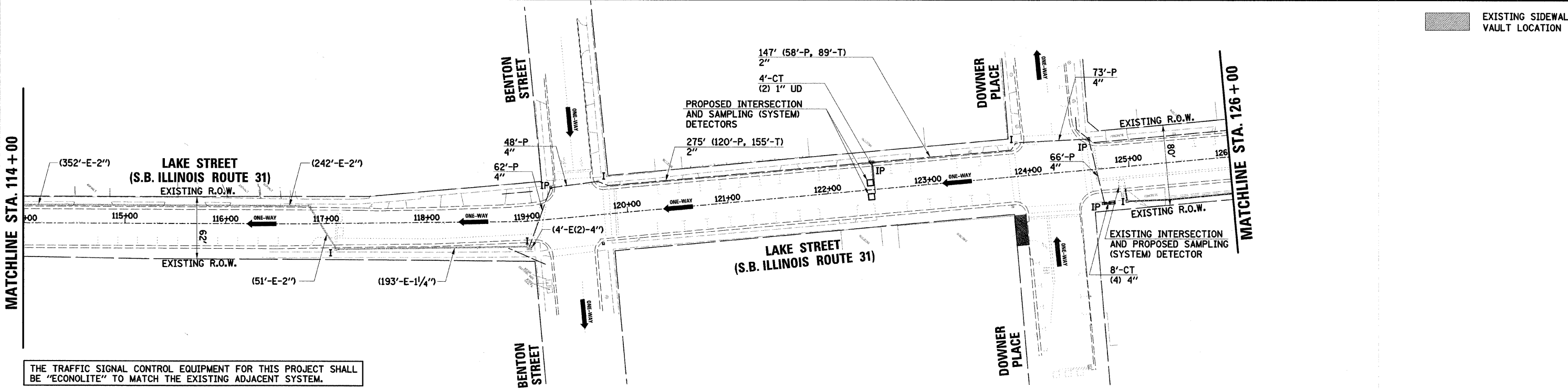
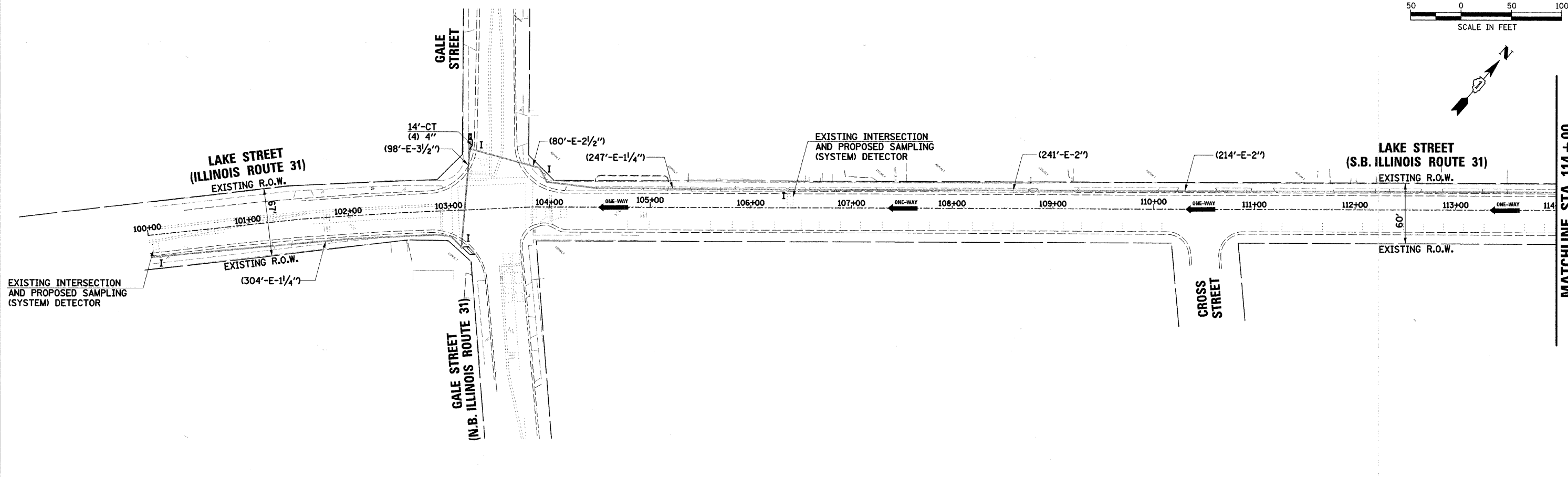
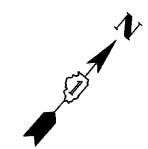
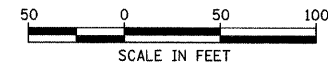
- ← ⊕ → DUAL ENTRY PHASE
- ← ⊛ → SINGLE ENTRY PHASE
- ← ⊙ OL → OVERLAP
- * NUMBER REFERRING TO ASSOCIATED PHASE
- ← ⊕ → PEDESTRIAN PHASE

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.

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EXISTING SIDEWALK
VAULT LOCATION

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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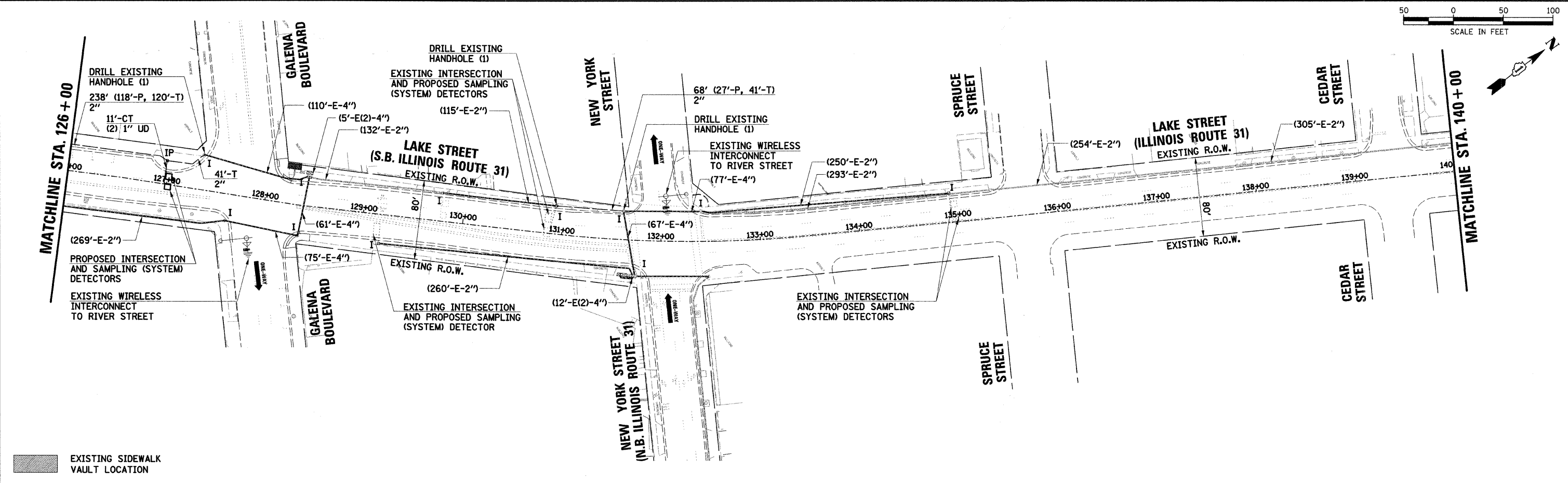
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
SHEET 1 OF 5

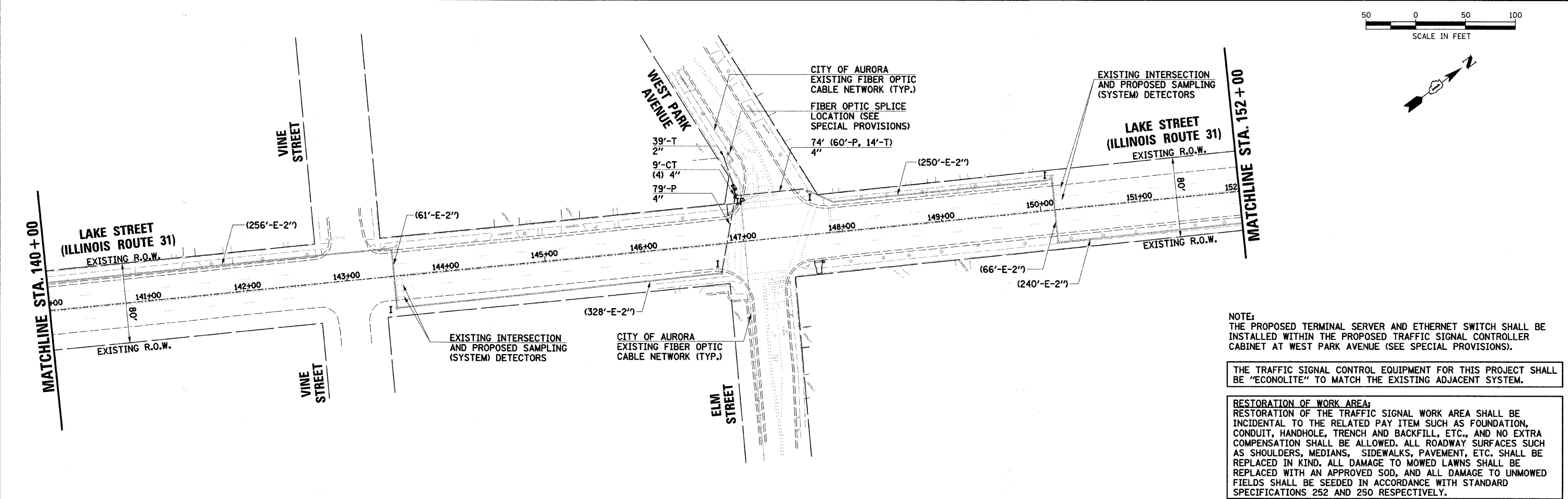
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3902	05-00258-00-TL	KANE	61	50
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
CONTRACT NO.			63251	

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

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NOTE:
THE PROPOSED TERMINAL SERVER AND ETHERNET SWITCH SHALL BE INSTALLED WITHIN THE PROPOSED TRAFFIC SIGNAL CONTROLLER CABINET AT WEST PARK AVENUE (SEE SPECIAL PROVISIONS).

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

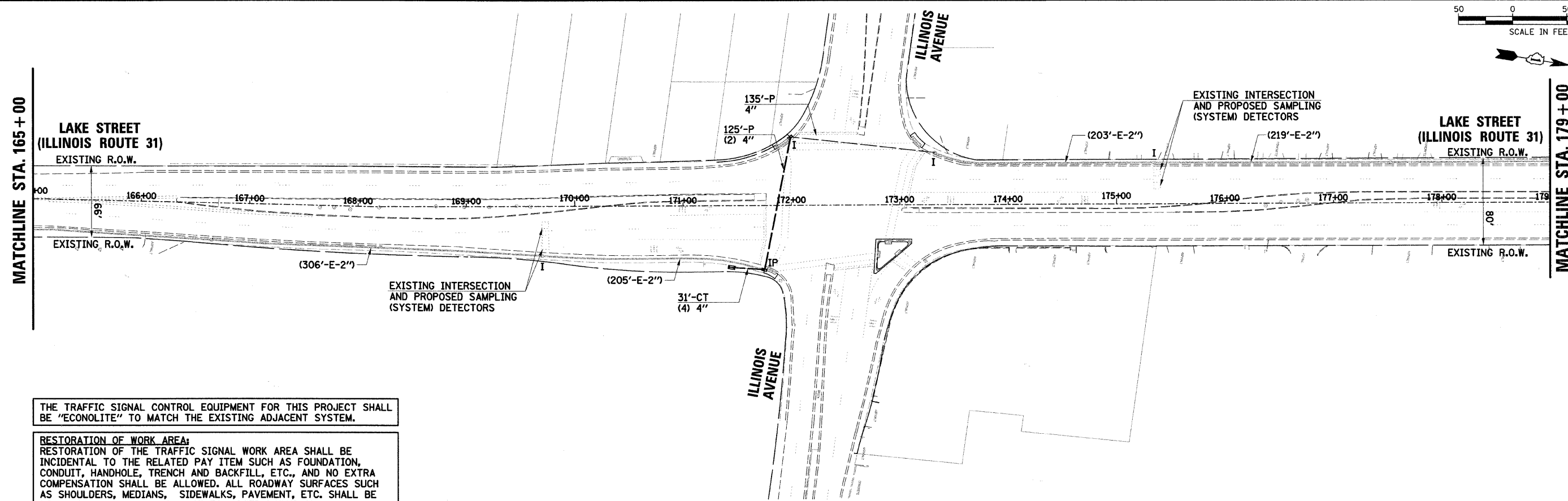
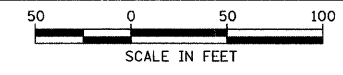
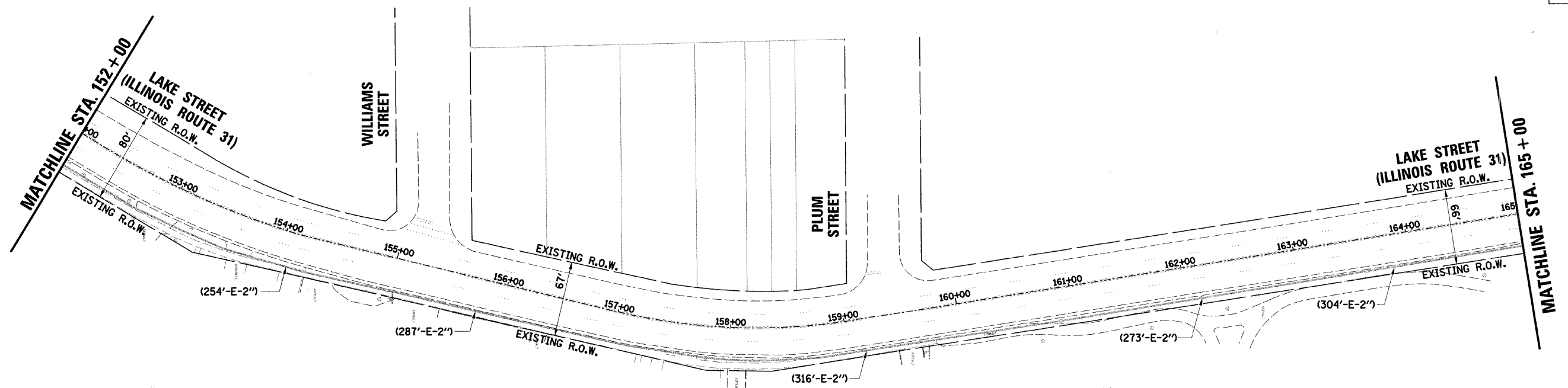
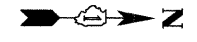
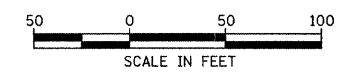
**INTERCONNECT PLAN
SHEET 2 OF 5**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	05-00258-00-TL	KANE	61	51
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 63251	

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	GRADES CHECKED	
	STRUCTURE NOTATIONS CHK'D	
	NO. _____	



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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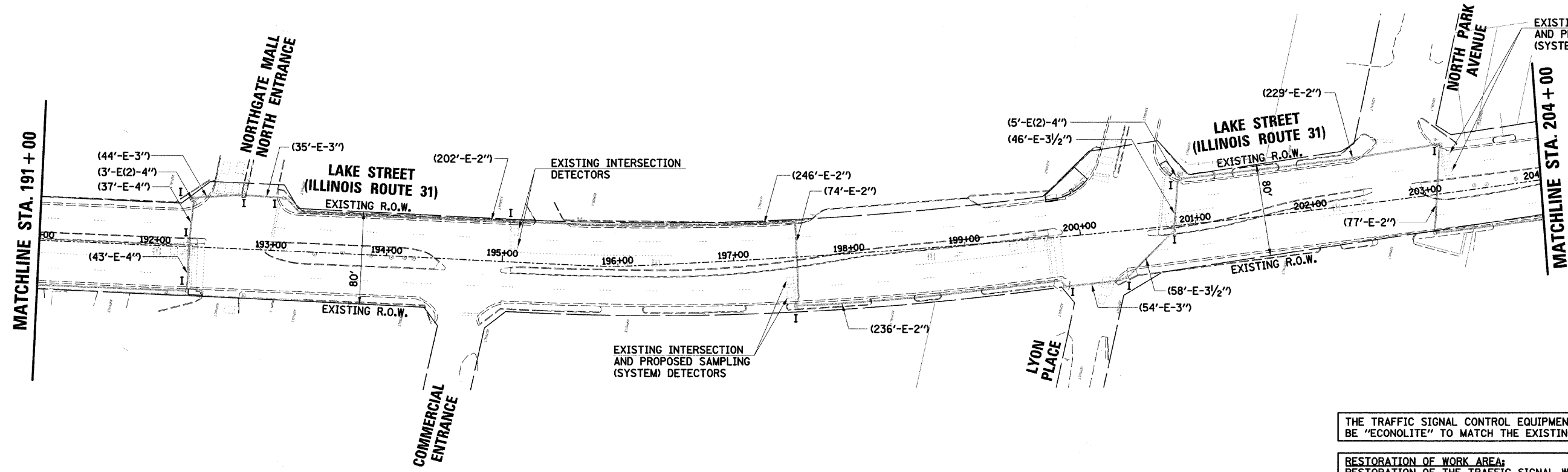
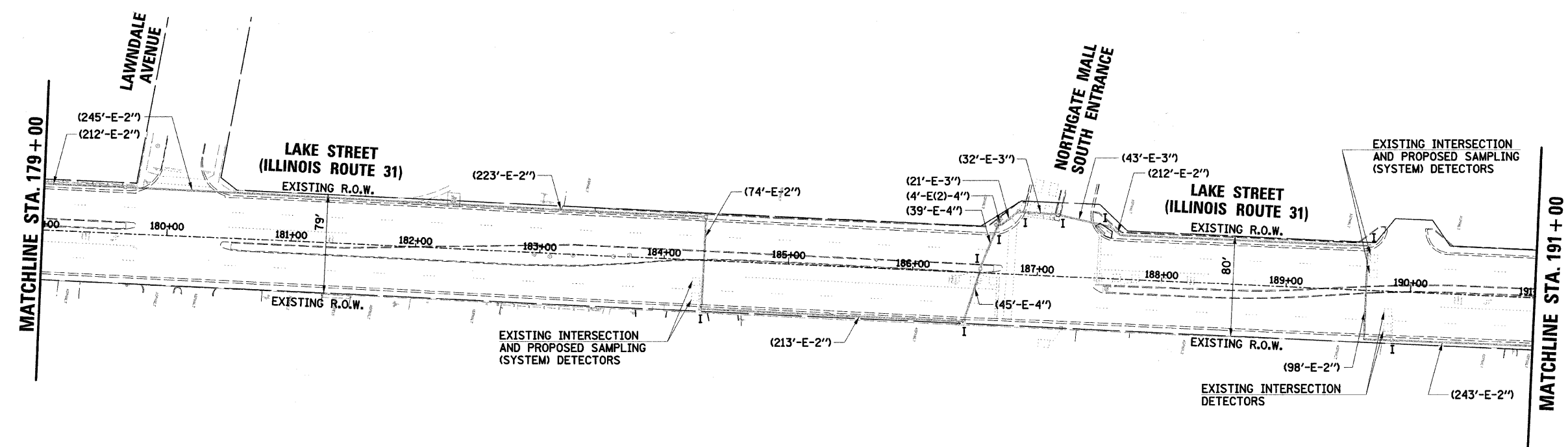
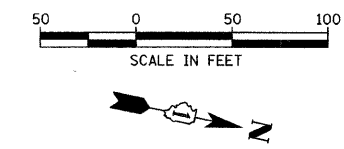
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**INTERCONNECT PLAN
 SHEET 3 OF 5**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	05-00258-00-TL	KANE	61	52
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 63251	



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

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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

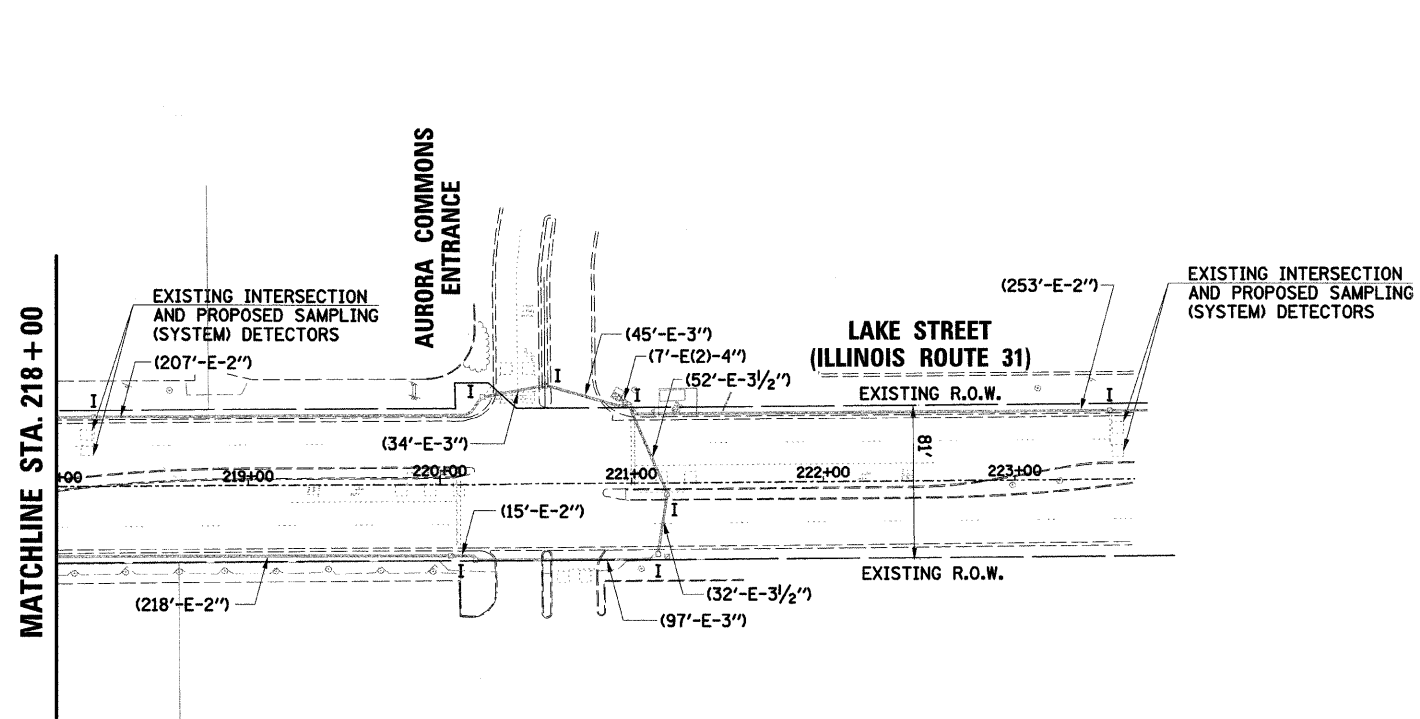
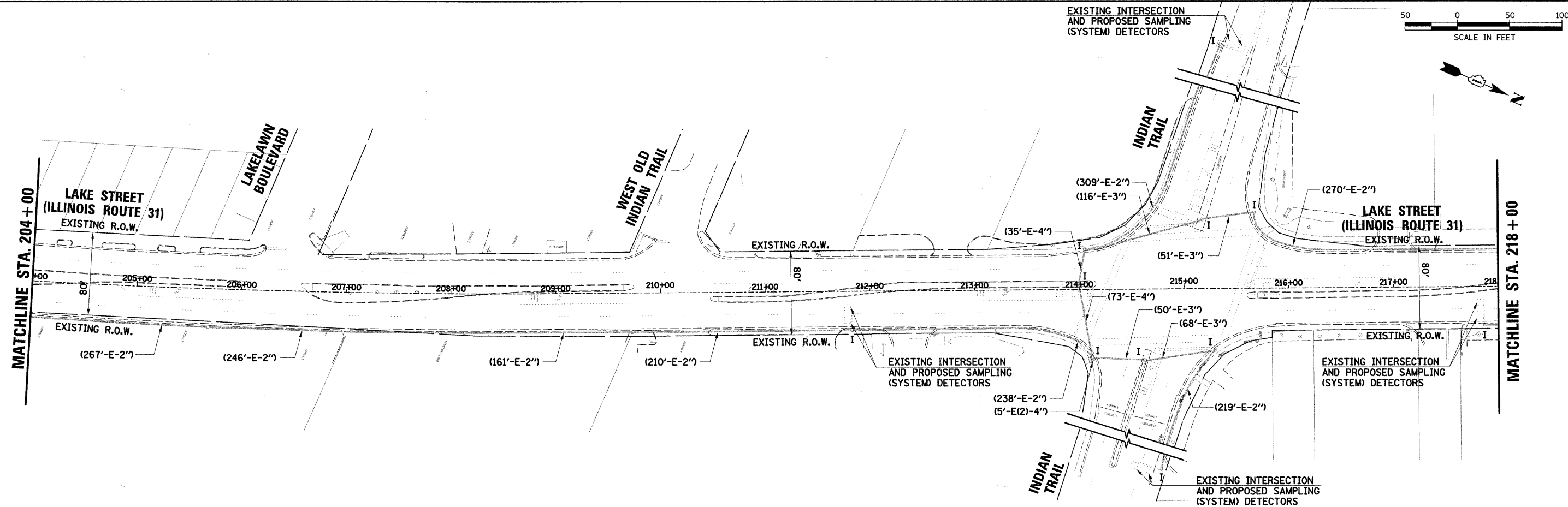
**INTERCONNECT PLAN
 SHEET 4 OF 5**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	05-00258-00-TL	KANE	61	53
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 63251	

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	STRUCTURE NOTATIONS CHECKED		
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

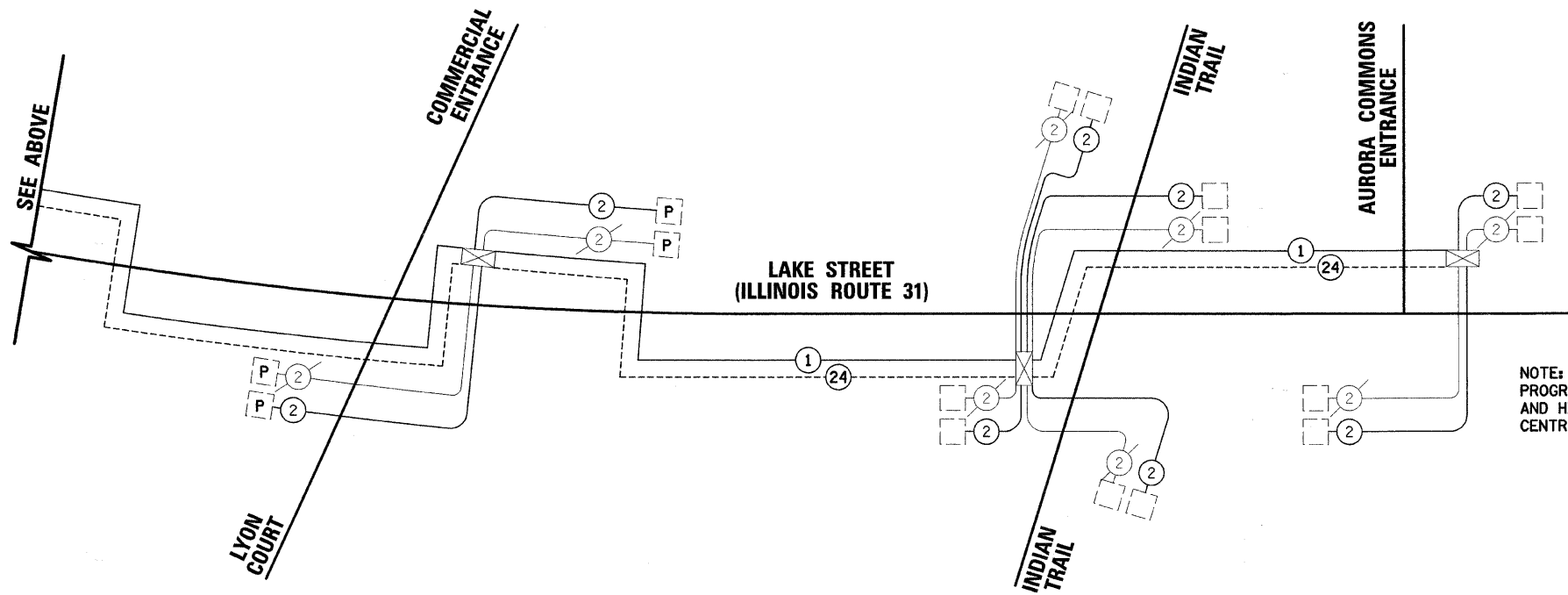
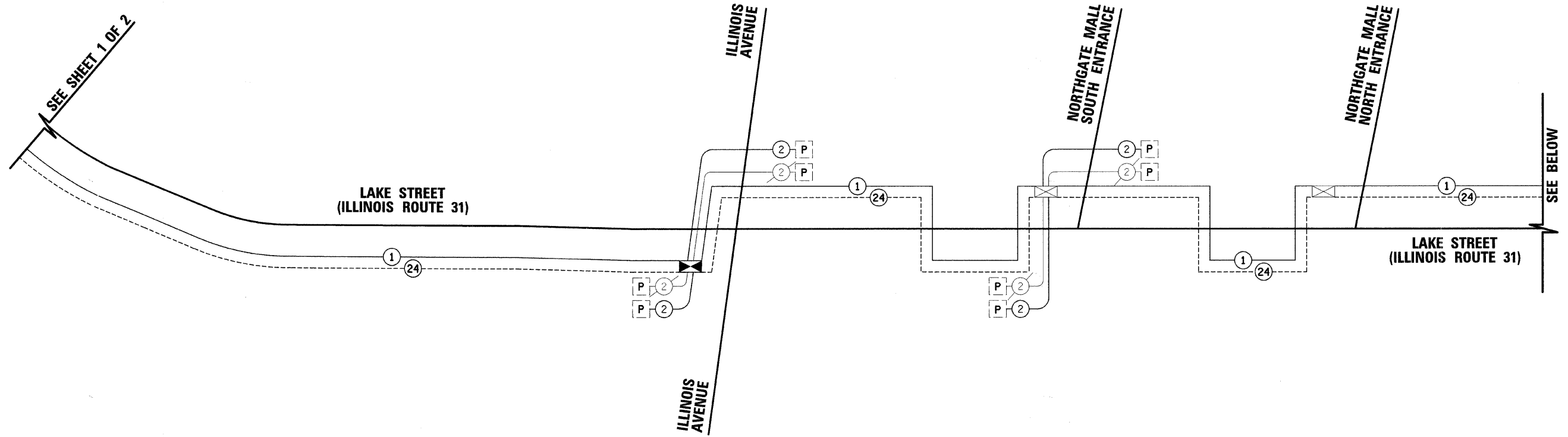
INTERCONNECT PLAN
 SHEET 5 OF 5

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	05-00258-00-TL	KANE	61	54
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 63251	

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	STRUCTURE NOTATIONS CHECKED	
	CADD FILE NAME	
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NOTE:
PROGRESSION ALONG INDIAN TRAIL, BETWEEN LAKE STREET
AND HIGHLAND AVENUE, SHALL BE OBTAINED VIA THE
CENTRALIZED TRANSPORTATION MANAGEMENT SYSTEM.

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

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

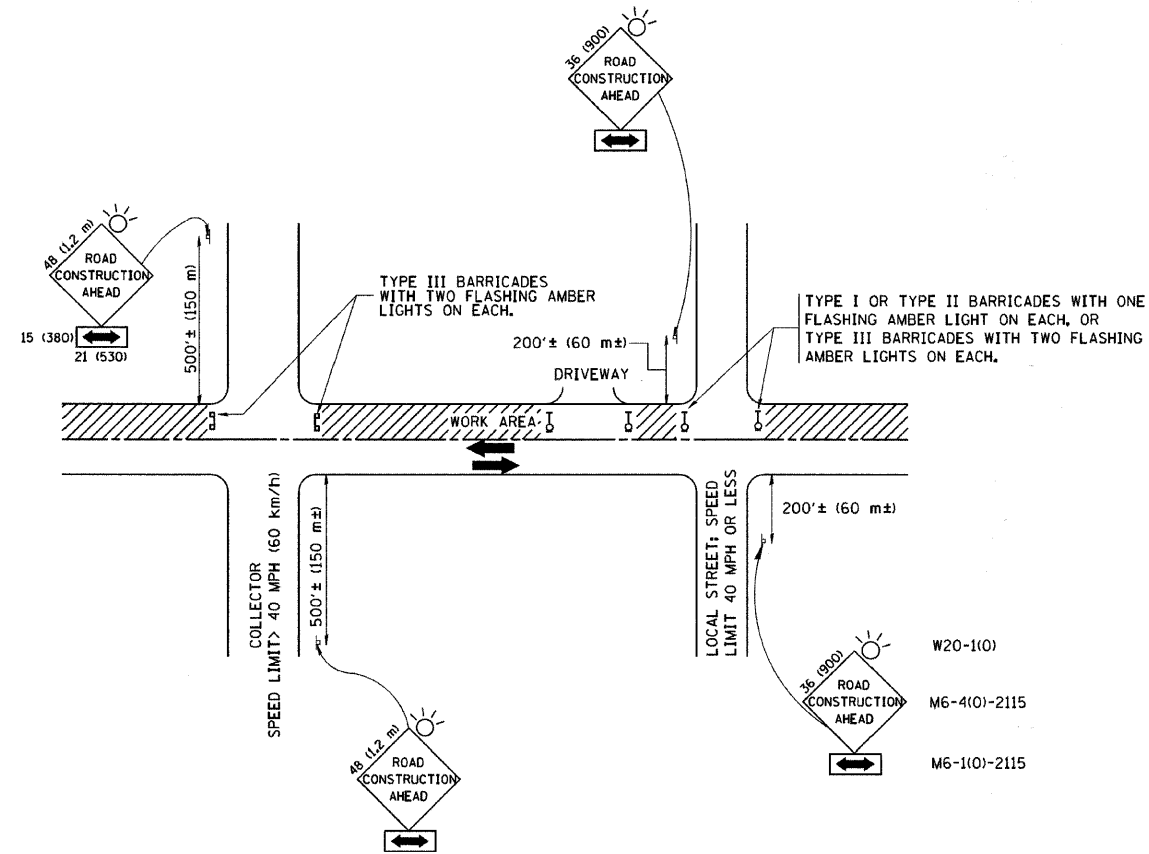
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SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	05-00258-00-TL	KANE	61	56
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
			CONTRACT NO. 63251	

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	STRUCTURE NOTATIONS		



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.

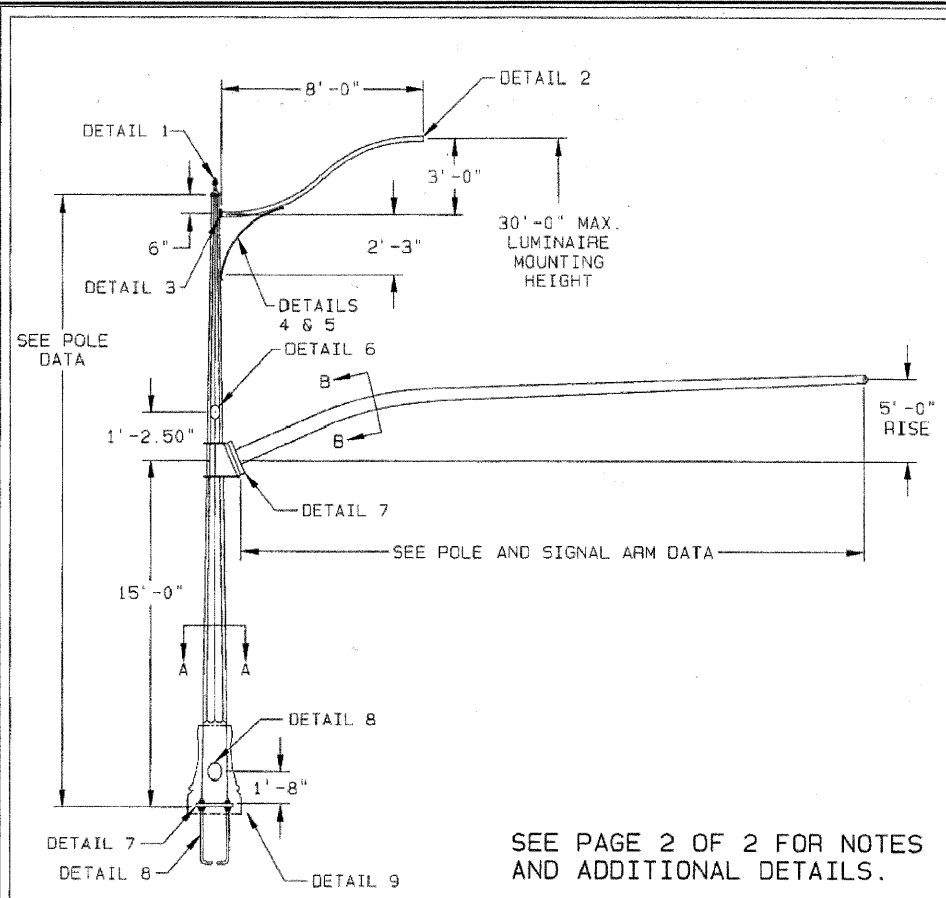
D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

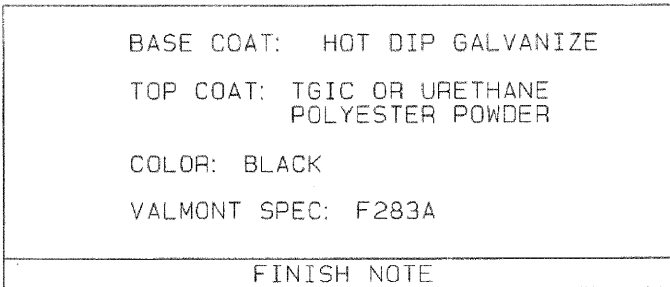
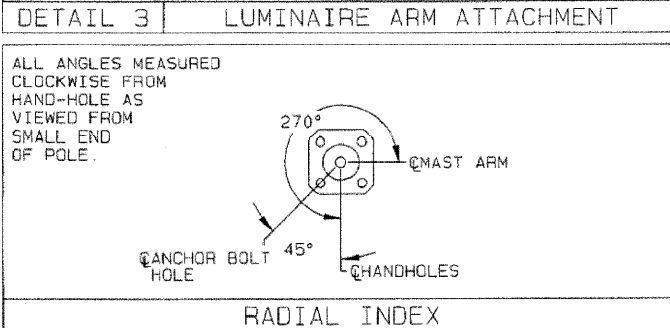
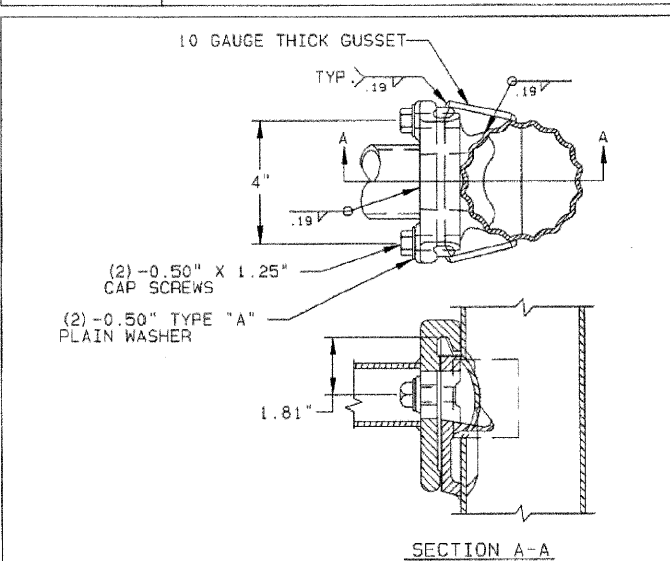
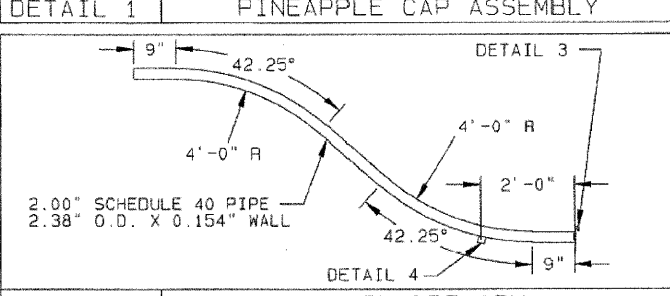
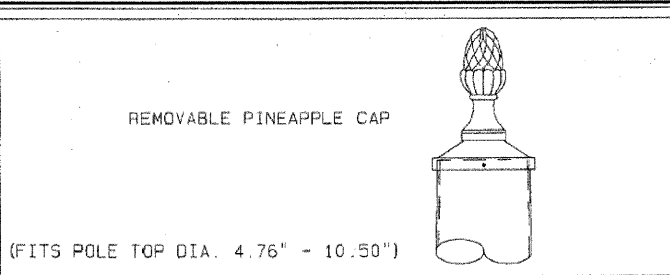
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...Trans\Fin.dwg\698_2.dwt.dgn		DRAWN JMR	REVISED -			3902	05-00258-00-TL	KANE	61	57	
		CHECKED JRS	REVISED -			SCALE: SHEET NO. OF SHEETS STA. TO STA.		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		CONTRACT NO. 63251	
		DATE -	REVISED -								

DATE: _____
 BY: _____
 SURVEYED _____
 PLOTTED _____
 GRADES CHECKED _____
 NOTE BOOK _____
 NO. _____
 CADD FILE NAME _____

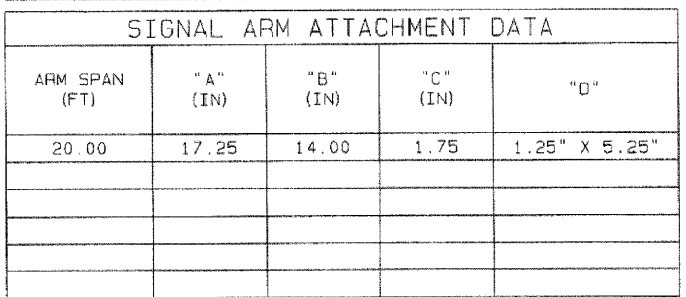
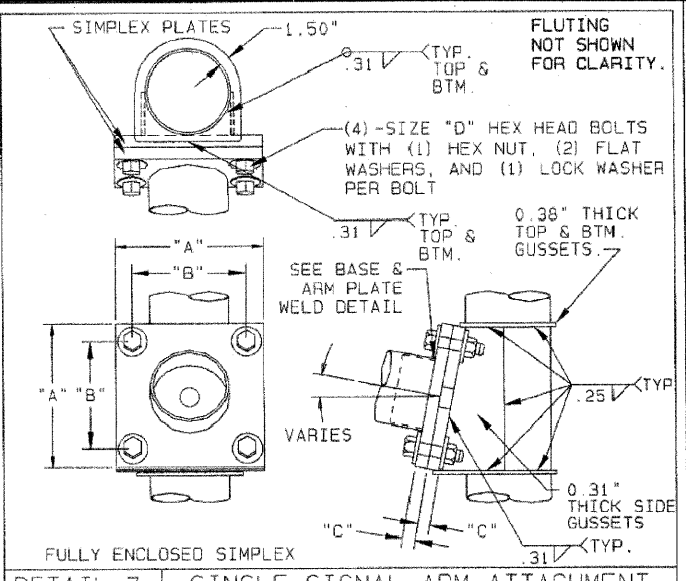
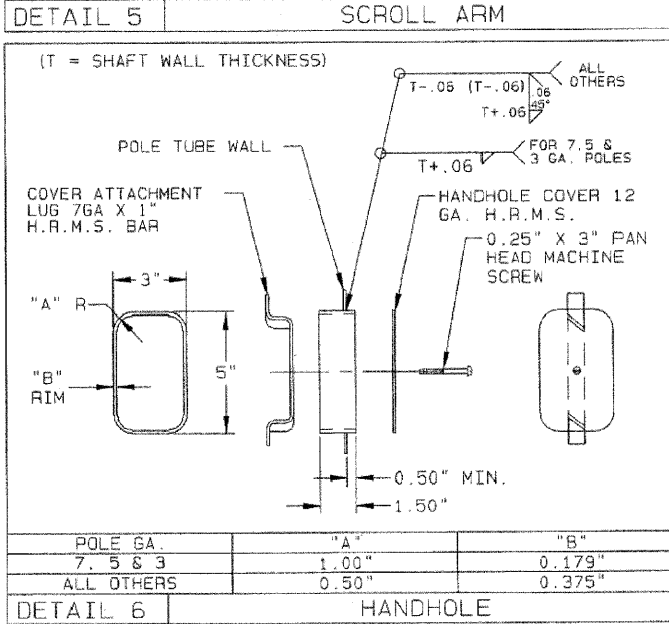
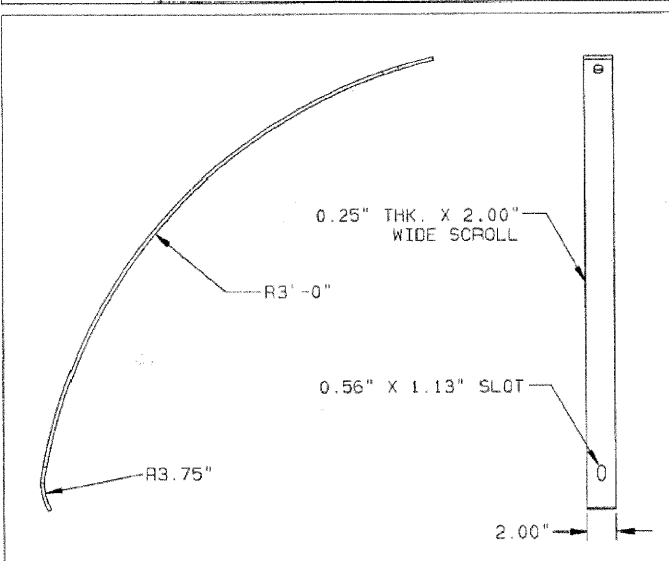
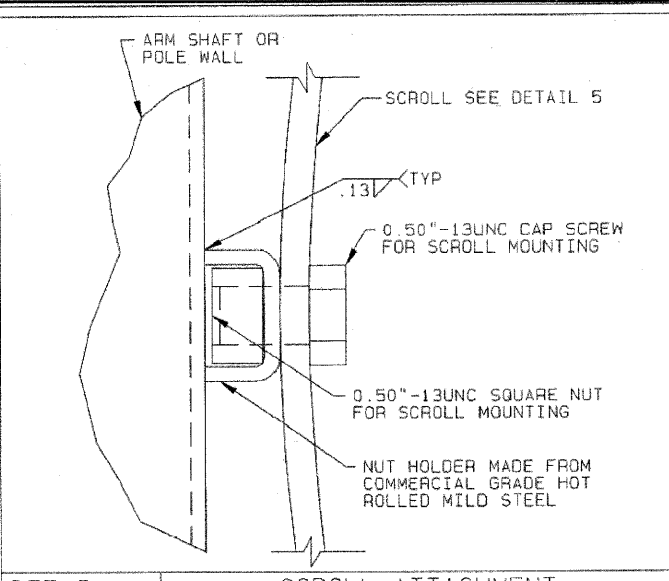
DATE: _____
 BY: _____
 SURVEYED _____
 PLOTTED _____
 GRADES CHECKED _____
 NOTE BOOK _____
 NO. _____
 STRUCTURE NOTATIONS QUID _____



SEE PAGE 2 OF 2 FOR NOTES AND ADDITIONAL DETAILS.



ALL ANGLES MEASURED CLOCKWISE FROM HAND-HOLE AS VIEWED FROM SMALL END OF POLE.
 270°
 45°
 ANCHOR BOLT HOLE
 HANDHOLES
 RADIAL INDEX
 BASE COAT: HOT DIP GALVANIZE
 TOP COAT: TGIC OR URETHANE POLYESTER POWDER
 COLOR: BLACK
 VALMONT SPEC: F283A
 FINISH NOTE



VALMONT INDUSTRIES, INC. RESERVES THE RIGHT TO INSTALL VARIOUS, ENGINEER APPROVED, MATERIAL HANGING ACCOMMODATIONS TO FACILITATE THE MANUFACTURING PROCESS.
 VALLEY, NE 68064
 (402) 359-2201

REV	DATE	DESCRIPTION
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...Trans\Fin_dwg\698_2.det82.dgn		DRAWN JMR
	PLOT SCALE = #SCALE#	CHECKED JRS
	PLOT DATE = 3/11/2010	DATE -

REV	DATE	DESCRIPTION
SOLD TO:		
SHIP TO:		
P.O. #:		
AGENT: LIGHTING SOLUTIONS		
REVISED -		
REVISED -		
REVISED -		
REVISED -		

JOB
 TITLE TRAFFIC SIGNAL STRUCTURES

POLE GA.	"A"	"B"
7.5 & 3	1.00"	0.179"
ALL OTHERS	0.50"	0.375"

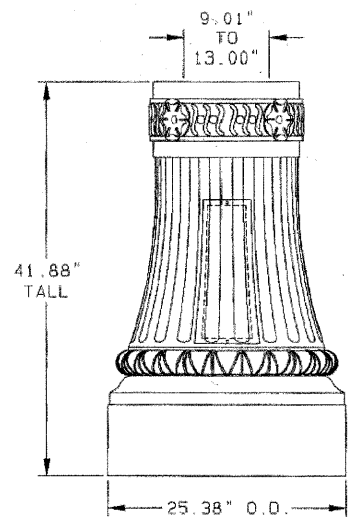
ORDER NUMBER: 42203-07	PAGE NUMBER: 1 OF 2
DRAWING NUMBER: IL4220307	REV
F.A.U. RTE. 3902	SECTION 05-00258-00-TL
COUNTY KANE	TOTAL SHEETS 61
SHEET NO. 58	CONTRACT NO. 63251
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

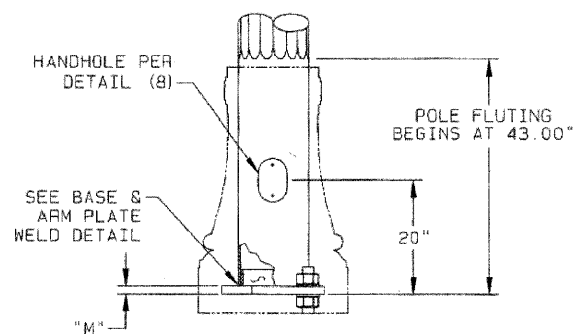
MISCELLANEOUS DETAILS

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

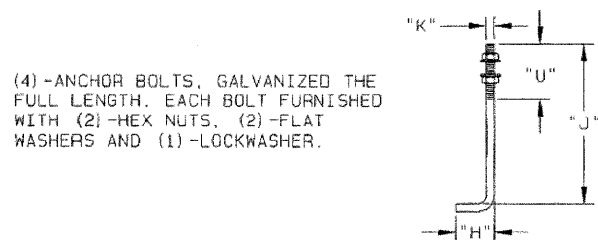
PLAN	SURVEYED	DATE
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	BY	
	NO.	



DETAIL 9 HN25AB DECORATIVE BASE



DETAIL 10 HN25AB POLE BASE



DETAIL 11 ANCHOR BOLT

NOTES:

- POLE AND ARM SHAFTS 13.00" AND SMALLER--CONFORMS TO ASTM DESIGNATION: A595 GR. A WITH 55,000 P.S.I. MINIMUM YIELD STRENGTH. LINEAR TAPER-0.14"/FT. POLE AND ARM SHAFTS LARGER THAN 13.00"--CONFORMS TO ASTM DESIGNATION: M-223 A572 GR. 65 WITH A 65,000 P.S.I. MINIMUM YIELD STRENGTH. LINEAR TAPER-0.14"/FT. BASE PLATE AND SIMPLEX PLATES--CONFORM TO AASHTO M-183 (ASTM: A36).
- ANCHOR BOLTS--ALL STRUCTURES: ASTM F1554 GR. 55 55,000 P.S.I. MINIMUM YIELD STRENGTH. (AASHTO M314).
- TRAFFIC SIGNAL ARM END CAP SECURED IN PLACE WITH 3 STAINLESS STEEL SET SCREWS. (TRAFFIC SIGNAL ARM END CAP PROVIDED WITH (2) ADDITIONAL STAINLESS STEEL HEX BOLTS).
- ALL NON-STAINLESS THREADED FASTENERS TO BE HOT DIP GALVANIZED TO ASTM DESIGNATION: A153 (AASHTO M232).
- SIMPLEX CONNECTING BOLTS--ASTM DESIGNATION: A325 (M164) GALVANIZED TO ASTM DESIGNATION: A153 LUBRICATE THREADS IN FIELD IF NECESSARY BEFORE INSTALLATION.
- ALL VEHICULAR AND/OR PEDESTRIAN SIGNAL LIGHTS AND NECESSARY HARDWARE FOR ATTACHMENT TO BE FIELD LOCATED AND FURNISHED BY OTHERS.
- POLES AND ARMS TO BE GALVANIZED TO ASTM DESIGNATION: A123 (AASHTO M111). ACCESSORIES TO BE HOT DIP GALVANIZED TO ASTM DESIGNATION: A153 (AASHTO M232).
- ACCESS HOLES IN ARMS AT SIGNALS TO BE FIELD DRILLED BY CONTRACTOR--LOCATED AS SHOWN IN PLANS.
- LUMINAIRE ARM SHAFT CONFORMS TO 2" SCHEDULE 40 PIPE W/ 36,000 PSI MIN. YIELD STRENGTH.
- SHAFT GAUGE OR THICKNESS ARE AS FOLLOWS: 1 1/2" GA. = 0.1196", 1 3/4" GA. = 0.1793", 2" GA. = 0.2092", 2 1/2" GA. = 0.2391", AND 3" SCHED. 40 PIPE = 0.154".

LOADING AND ALLOWABLE STRESS CRITERIA: 1994 AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR SIGNS, LUMINAIRES AND TRAFFIC SIGNALS".

STATE OF ILLINOIS

GENERAL NOTES

PROFILE	SURVEYED	DATE
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	BY	
	NO.	

POLE AND SIGNAL ARM DATA - OPTION 1

POLE TUBE			POLE BASE					ANCHOR BOLT			SIGNAL ARM TUBE			MAXIMUM LUMINAIRE ARM SPAN (FT)	
BASE DIA. (IN)	TOP DIA. (IN)	LENGTH (FT)	GAUGE OR THK. (IN)	SQUARE "S" (IN)	BOLT CIRCLE "Y" (IN)	THK. "M" (IN)	HOLE / SLOT "Z" (IN)	DIA. "K" (IN)	LENGTH "J" (IN)	HOOK "H" (IN)	THREAD LENGTH "U" (IN)	FIXED END DIA. (IN)	GAUGE OR THICK (IN)	SPAN (FT)	
12.50	8.65	27.50	5	17.00	17.00	1.50	1.75	1.50	54.00	6.00	8.00	9.00	7	20.00	8.00

POLE AND SIGNAL ARM DATA - OPTION 2

POLE TUBE			POLE BASE					ANCHOR BOLT			SIGNAL ARM TUBE			MAXIMUM LUMINAIRE ARM SPAN (FT)	
BASE DIA. (IN)	TOP DIA. (IN)	LENGTH (FT)	GAUGE OR THK. (IN)	SQUARE "S" (IN)	BOLT CIRCLE "Y" (IN)	THK. "M" (IN)	HOLE / SLOT "Z" (IN)	DIA. "K" (IN)	LENGTH "J" (IN)	HOOK "H" (IN)	THREAD LENGTH "U" (IN)	FIXED END DIA. (IN)	GAUGE OR THICK (IN)	SPAN (FT)	
12.50	8.65	27.50	5	17.00	17.00	1.50	1.75	1.50	54.00	6.00	8.00	8.00	7	20.00	8.00

JOB
TITLE TRAFFIC SIGNAL STRUCTURES

VALMONT INDUSTRIES, INC. RESERVES THE RIGHT TO INSTALL VARIOUS, ENGINEER APPROVED, MATERIAL HANGING ACCOMMODATIONS TO FACILITATE THE MANUFACTURING PROCESS.

valmont
Valley, NE 68064
(402) 359-2201

ORDER NUMBER: 42203-07
PAGE NUMBER: 2 OF 2
DRAWING NUMBER: IL4220307
REV

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

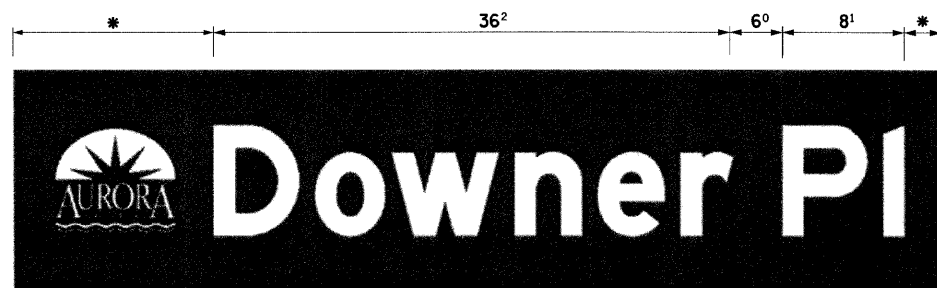
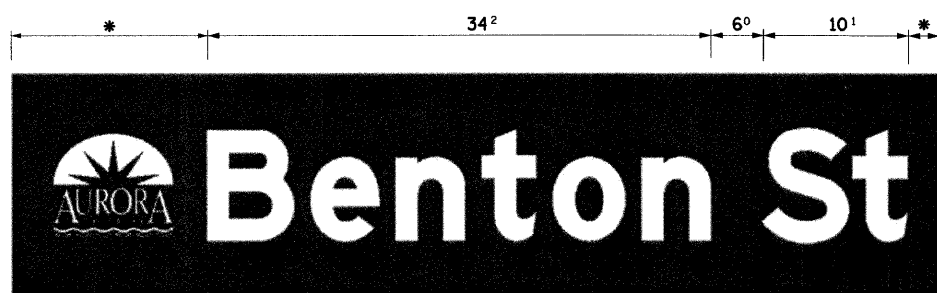
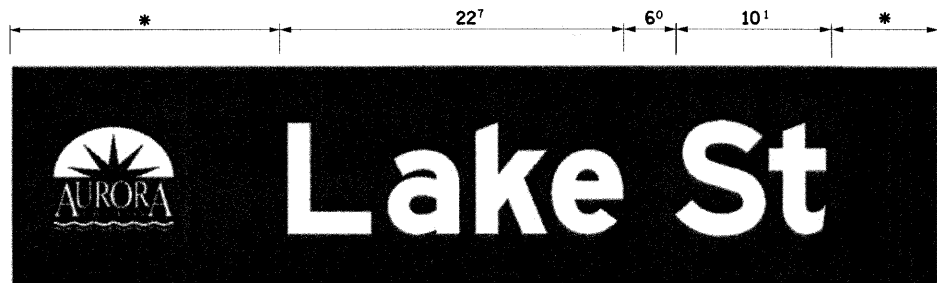
MISCELLANEOUS DETAILS

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

F.A.U. RTE. 3902	SECTION 05-00258-00-TL	COUNTY KANE	TOTAL SHEETS 61	SHEET NO. 59
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 63251	

PLAN	
DATE	
BY	
NO.	
FILE NAME	
REVISIONS	
DATE	
BY	
NO.	
FILE NAME	
REVISIONS	
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FILE NAME	

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FILE NAME	
REVISIONS	
DATE	
BY	
NO.	
FILE NAME	
REVISIONS	
DATE	
BY	
NO.	
FILE NAME	



* PER MANUFACTURERS SPECIFICATIONS FOR THE CITY OF AURORA.

LED STREET NAME SIGNS (CLEARVIEW FONT – DESIGN SERIES "D")

NOTE:
THESE SIGNS SHALL BE INSTALLED AT THE LOCATIONS INDICATED IN THE PLANS.
SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.

**UPPER CASE TO LOWER CASE
SPACING CHART 8-6 INCH SERIES "C & D"**

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

**LOWER CASE TO LOWER CASE
SPACING CHART 6 INCH SERIES "C & D"**

FIRST LETTER	SECOND LETTER																	
			a c d e		b h k l		f w		j		s t		v y		x		z	
			g o q		m n p r u													
	SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	
a d h g i j	1 ⁶	1 ⁷	2 ²	2 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ⁶	1 ⁷		
l m n q u	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ¹	1 ²	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴	1 ²	1 ⁴		
b f k o p s	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ²	1 ⁴	1 ²	1 ⁴	1 ²	1 ⁴	1 ²	1 ⁴		
c e	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ²	1 ⁴	1 ²	1 ⁴	1 ²	1 ⁴	1 ²	1 ⁴		
r	0 ⁶	1 ⁰	1 ²	1 ⁴	0 ⁶	1 ⁰	0 ³	0 ³	0 ⁵	0 ⁶	0 ⁵	0 ⁶	0 ⁶	1 ⁰	0 ⁶	1 ⁰		
t z	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴	1 ²	1 ⁴		
v y	1 ¹	1 ²	1 ⁴	1 ⁵	1 ¹	1 ²	0 ⁵	0 ⁶	0 ⁶	1 ⁰	0 ⁶	1 ⁰	1 ¹	1 ²	1 ¹	1 ²		
w	1 ¹	1 ²	1 ⁴	1 ⁵	1 ¹	1 ²	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴		
x	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ¹	1 ²	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴		

**NUMBER TO NUMBER
SPACING CHART 8 INCH SERIES "C & D"**

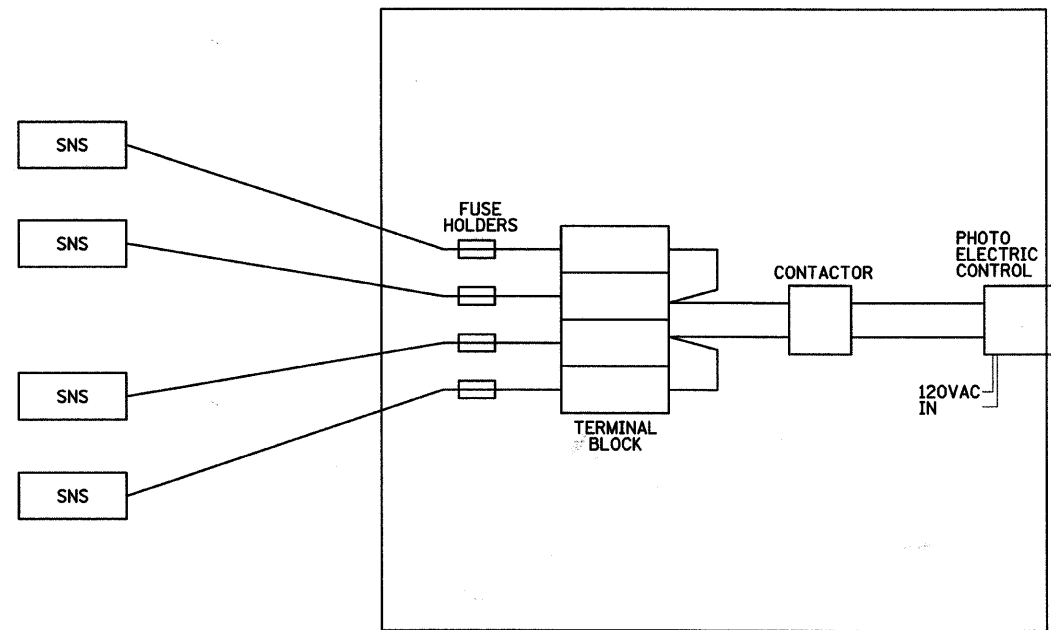
FIRST NUMBER	SECOND LETTER																					
			0		1		2		3		4		5		6		7		8		9	
	SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	
0 9	1 ⁶	1 ⁷	1 ⁶	1 ⁷	1 ⁴	1 ⁵	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ⁶	1 ⁷		
1	2 ⁰	2 ¹	2 ⁰	2 ¹	2 ⁰	2 ¹	1 ⁶	1 ⁷	1 ⁴	1 ⁵	2 ⁰	2 ¹	2 ⁰	2 ¹	1 ⁴	1 ⁵	2 ⁰	2 ¹	2 ⁰	2 ¹		
2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

LETTERS	6 INCH UPPER CASE LETTERS		8 INCH UPPER CASE LETTERS		LETTERS	6 INCH LOWER CASE LETTERS	
	SERIES		SERIES			SERIES	
	C	D	C	D		C	D
A	3 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

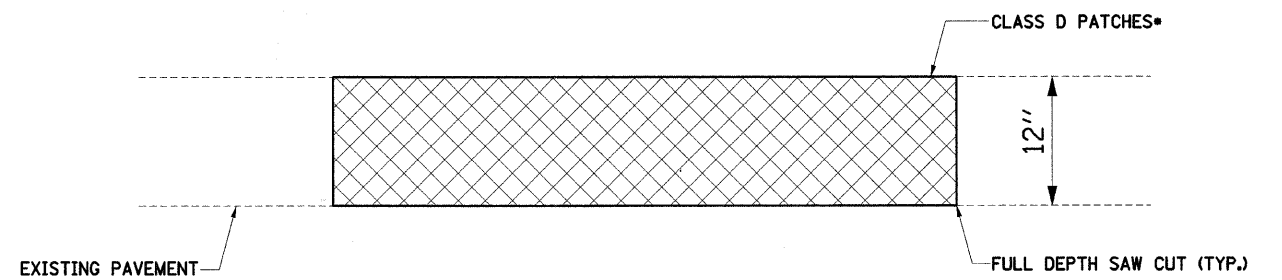
NUMBER	6 INCH SERIES		8 INCH SERIES	
	C	D	C	D
	1	1 ²	1 ⁴	1 ⁵
2	3 ²	4 ⁰	4 ³	5 ³
3	3 ²	4 ⁰	4 ³	5 ³
4	3 ⁵	4 ³	4 ⁷	5 ⁷
5	3 ²	4 ⁰	4 ³	5 ³
6	3 ²	4 ⁰	4 ³	5 ³
7	3 ²	4 ⁰	4 ³	5 ³
8	3 ²	4 ⁰	4 ³	5 ³
9	3 ²	4 ⁰	4 ³	5 ³
0	3 ⁴	4 ²	4 ⁵	5 ⁵

PLAN	SURVEYED	DATE
NOTE BOOK	PLOTTED	BY
NO.	GRADES CHECKED	
	STRUCTURE NOTATIONS CHFD	
	NO.	

PROFILE	SURVEYED	DATE
NOTE BOOK	PLOTTED	BY
NO.	GRADES CHECKED	
	STRUCTURE NOTATIONS CHFD	
	NO.	



LED STREET NAME SIGNS - PHOTOCCELL WIRING DETAIL



PAVEMENT PATCHING

* THE PATCH SHALL CONSIST OF THE FOLLOWING:
 1 1/2" HOT-MIX ASPHALT SURFACE COURSE, MIX "D" N70
 10 1/2" HOT-MIX ASPHALT ASPHALT BINDER COURSE, IL-19.0, N70
 4" SUB-BASE GRANULAR MATERIAL, TYPE B

NOTE:
 THE SAW CUT AND AGGREGATE SUBBASE
 SHALL NOT BE PAID FOR SEPARATELY,
 BUT SHALL BE INCLUDED IN THE COST
 OF THE PATCH.

FILE NAME =	USER NAME = _USER_	DESIGNED -	REVISED -
...Trans\Fin.dwg\690.2.det05.dgn		DRAWN <i>JMR</i>	REVISED -
		CHECKED <i>JRS</i>	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

MISCELLANEOUS DETAILS

SCALE:	SHEET NO.	OF	SHEETS	STA.	TO	STA.
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3902	05-00258-00-TL	KANE	61	61
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 63251	