

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2578	532B	ILLINOIS	781	1
			CONTRACT NO.	60477

\* 781-3+9 = 788  
 \* 788+5 = 793  
 D-91-397-97

FOR INDEX OF SHEETS, SEE SHEET NO. 2

**HIGHWAY CLASSIFICATION**

**PRINCIPAL ARTERIAL ROUTE :**  
 (FROM ARMY TRAIL ROAD TO LAKE STREET)  
**SUBURBAN MINOR ARTERIAL :**  
 (FROM LAKE STREET TO THE ELGIN-O'HARE EXPRESSWAY)

**DESIGN DESIGNATION**

3500(20) ARTERIAL 14.56 (PCC-20)

**1 OF 2**

**TRAFFIC DATA**

IL RTE 53

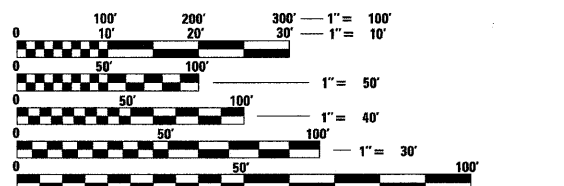
2002 ADT = 14,200 - 28,800  
 2020 ADT = 26,000 - 35,000

POSTED SPEED LIMIT = 40 MPH

DESIGN SPEED = 45 MPH

**PROJECT DESCRIPTION**

THE PROPOSED IMPROVEMENT CONSISTS OF THE WIDENING AND RECONSTRUCTION OF ILLINOIS ROUTE 53 ON THE EXISTING ALIGNMENT, NEW STORM SEWER SYSTEM, NOISE WALLS, DRY LAND BRIDGE, AND TRAFFIC SIGNAL MODERNIZATION.



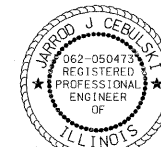
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.  
 JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
 1-800-892-0123 OR 811

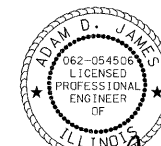
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

**PLANS FOR PROPOSED HIGHWAY**  
 FAP ROUTE 870 / FAU ROUTE 2578 (ILLINOIS ROUTE 53)  
 ARMY TRAIL ROAD TO ELGIN O'HARE EXPRESSWAY  
 ROADWAY RECONSTRUCTION, ADDITIONAL LANES, DRY LAND BRIDGE  
 CONSTRUCTION, TRAFFIC SIGNAL MODERNIZATION AND INTERCONNECT

SECTION 532B  
 PROJECT NO: ACF-0870(012)  
 DUPAGE COUNTY  
 C-91-397-97



*Jarrod J. Cebulski*  
 JARROD J. CEBULSKI, P.E.  
 NO. 062-050473  
 EXP. DATE: 11/30/11



*Adam D. James*  
 ADAM D. JAMES, P.E.  
 NO. 062-054506  
 EXP. DATE: 11/30/11



*Roger Di Giulio*  
 ROGER DI GIULIO, S.E.  
 NO. 062-05197  
 EXP. DATE: 11/30/11



*P.K. Gandhi*  
 P.K. GANDHI, P.E.  
 NO. 062-034993  
 EXP. DATE: 11/30/11



LOCATION OF SECTION INDICATED THUS: -

**PATRICK ENGINEERING**  
 PATRICK ENGINEERING INC.  
 4970 VARSITY DRIVE  
 LISLE, IL 60532  
 patrickengineering.com

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

SUBMITTED *June 14 20 10*  
*Jim O'Neil*  
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER  
*February 4 20 11*  
*Scott E. Stitt, P.E.*  
 ENGINEER OF DESIGN AND ENVIRONMENT  
*February 4 20 11*  
*Christine M. Reed*  
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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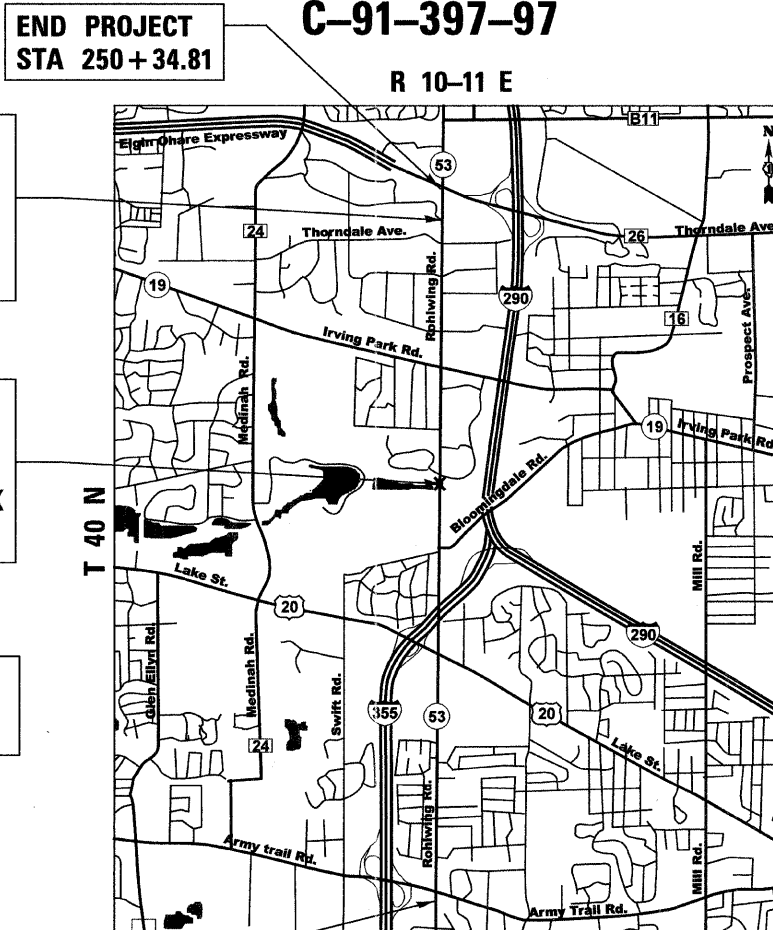
END PROJECT  
 STA 250 + 34.81

DRY LAND BRIDGE  
 CONSTRUCTION:  
 STA. 240 + 30.00  
 STA. 246 + 40.00  
 SN:022-D012

STA. 157 + 28.20  
 STA. 170 + 12.58  
 IL RTE 53 OVER  
 SPRING BROOK CREEK  
 SN:022-0189

PROJECT LOCATED IN  
 THE VILLAGES OF  
 ADDISON AND ITASCA

BEGIN PROJECT  
 STATION 35 + 66.56



LOCATION MAP  
 SCALE  
 1" = 2500'

GROSS LENGTH ILLINOIS RTE 53 = 21,468.25 FEET = 4.1 MILES  
 NET LENGTH ILLINOIS RTE 53 = 21,468.25 FEET = 4.1 MILES

DISTRICT 1 - DESIGN/CONSULTANT SERVICES SECTION/ RAJENDRA SHAH (847) 705-4555

CONTRACT NO. 60477

Rev. 6-8-11





\* SPECIALTY ITEM

SUMMARY OF QUANTITIES			URBAN	CONSTRUCTION CODE																									
CODE NO.	ITEM DESCRIPTION	UNIT	TOTAL	0003	0008	0021																				0021	0040		0043
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	21A	23	24	25	
* 81400100	HANDHOLE	EACH	92			5	7	5	6	8	4	4	5	4	4	4	3	4		7	5	8	9						
* 81400200	HEAVY-DUTY HANDHOLE	EACH	31			1	4	2	2	4	4	2	4	2	2	3						1							
* 81400300	DOUBLE HANDHOLE	EACH	29			1	3	2	1	4	2	2	3	2	2	2	3				1	1							
* 81603090	UNIT DUCT, 600V, 3-1C NO.4, 1/C NO.6 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE	FOOT	18,155																							3,416	14,739		
* 81603115	UNIT DUCT, 600V, 3-1C NO.1, 1/C NO.1 GROUND, (XLP-TYPE USE), 2" DIA. POLYETHYLENE	FOOT	2,373																								2,373		
* 81800290	AERIAL CABLE, 3-1/C NO. 1/0 WITH MESSENGER WIRE	FOOT	2,626																								2,626		
* 81800415	AERIAL CABLE, 4-1/C NO. 6 WITH MESSENGER WIRE	FOOT	2,395																								2,395		
* 81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	89,735			663	804	581	718	1093	573	984	928	670	660	429	371	279			613	543	6574	7426	4842		10,962		
* 82102250	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT	EACH	4																								4		
* 82102400	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 400 WATT	EACH	141																								76	65	
* 83050810	LIGHT POLE, ALUMINUM, 47.5 FT. M.H., 15 FT. MAST ARM	EACH	89																								24	65	
* 83057350	LIGHT POLE, WOOD, 60 FOOT, CLASS 4	EACH	5																								5		
* 83057355	LIGHT POLE, WOOD, 60 FOOT, CLASS 4, WITH 15FT MAST ARM	EACH	32																								32		
* 83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	930																								240	690	
* 83800105	BREAKAWAY DEVICE, TRANSFORMER BASE, 11.5 INCH BOLT CIRCLE	EACH	4																								4		
* 83800205	BREAKAWAY DEVICE, TRANSFORMER BASE, 15 INCH BOLT CIRCLE	EACH	89																								24	65	
* 84100110	REMOVAL OF TEMPORARY LIGHTING UNIT	EACH	41																								41		
* 84200500	REMOVAL OF LIGHTING UNIT, SALVAGE	EACH	42																								42		
* 85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	4																			4							
* 85700205	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	12			1	1	1	1	1	1	1	1	1	1	1						1							
* 85700305	FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL	EACH	2															1					1						
* 86000105	MASTER CONTROLLER (SPECIAL)	EACH	2																					1	1				
* 86400100	TRANSCEIVER-FIBER OPTIC	EACH	14			1	1	1	1	1	1	1	1	1	1	1						1	1						
* 87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	12,511			2516	1232	427	596	1459	1753	1493	1480	1555															
* 87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	25,573			280	4437	1769	1026	2212	1804	1914	2938	1865	1879	1965	930	306			417	1831							
* 87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	32,932			1561	4335	1049	2001	3768	31333	2211	31615	1290	11788	1488	2015	3225			1624	2085							

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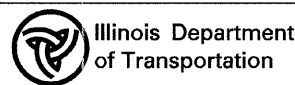
Rev.

PATRICK ENGINEERING INC.  
4970 VARSITY DRIVE  
LISLE, IL 60532  
patrickengineering.com

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CHECKED -  
DATE - 12/3/2010

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REVISED -



ILLINOIS ROUTE 53  
SUMMARY OF QUANTITIES  
SCALE: NA SHEET 500-11 OF 20 STA. TO STA.

F.A. RTE. SECTION COUNTY TOTAL SHEETS SHEET NO.  
2578 532B DUPAGE 781 14  
CONTRACT NO. 60477  
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT











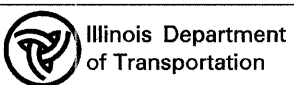
\* SPECIALTY ITEM

SUMMARY OF QUANTITIES		UNIT	URBAN TOTAL	CONSTRUCTION CODE																								
CODE NO.	ITEM DESCRIPTION			0003	0008	0021																					0031	0040
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25		
X7030040	WET REFLECTIVE TEMPORARY TAPE TYPE III, 6 INCH	FOOT	65,013	65,013																								
X7030050	WET REFLECTIVE TEMPORARY TAPE TYPE III, 12 INCH	FOOT	6,497	6,497																								
X7030025	WET REFLECTIVE TEMPORARY TAPE TYPE III - LETTERS AND SYMBOLS	SQ FT	16,038	16,038																								
* 80500010	SERVICE INSTALLATION - GROUND MOUNTED	EACH	1							1																		
* 80500020	SERVICE INSTALLATION - POLE MOUNTED	EACH	13		1	1	1	1	1	1		1	1	1	1					1	1							
* 86200120	UNINTERRUPTIBLE POWER SUPPLY	EACH	15		1	1	1	1	1	1	1	1	1	1	1	1				1	1							
* 87100020	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT	26,825																	14,809	12,016							
* 87301900	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	11,729		586	929	706	756	1179	659	1007	845	667	854	720	770	699			690	662							
* X8730250	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	12,499		280	1270	481	571	1291	356	399	1129	317	343	363	930	306			1772	1071	1620						
X8900040	MODIFY TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	2		1						1																	
Z0001050	AGGREGATE SUBGRADE 12"	SQ YD	246,425	246,425																								
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1																								
Z0018800	DRAINAGE SYSTEM	L SUM	1			1																						
Z0030260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	10	10																								
Z0030330	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE), TEST LEVEL 3	EACH	6	6																								
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1																								
* Z0054400	ROCK FILL	CU YD	219	219																								
Z0067000	STEEL CASINGS 6"	FOOT	125																							125		
<del>Z0076600</del>	<del>TRAINEES</del>	<del>HOUR</del>	<del>7,500</del>	<del>7,500</del>																								
X0327083	ACCESS SHAFT	EACH	3																							3		
X0327084	AUXILIARY VALVE BOX EXTENSION	FOOT	4																							4		
X0327085	CASING PIPE, OPEN CUT, 20" PVC	FOOT	30																							30		
X0327202	CASING PIPE, OPEN CUT, 24" PVC	FOOT	75																							75		
X0327203	CASING PIPE, OPEN CUT, 24" STEEL	FOOT	65																							65		
44201723	CLASS D PATCH, TYPE IV, 6" INCH	SQ YD	1,750																							1,750		
	COMBINATION CONCRETE CURB AND GUTTER	FOOT	60																							60		

Rev. 6-8-11

PATRICK ENGINEERING INC.  
 4970 VARSITY DRIVE  
 LISLE, IL 60532  
 patrickengineering.com

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ILLINOIS ROUTE 53  
 SUMMARY OF QUANTITIES

SCALE: NA SHEET 500-17 OF 20 STA. TO STA.

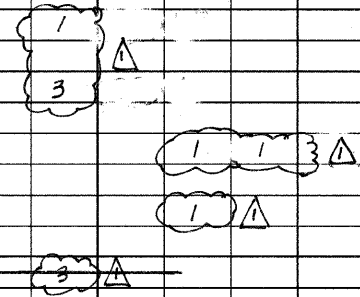
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2578	532B		781	20
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60477				

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\* SPECIALTY ITEM

CODE NO.	ITEM DESCRIPTION	UNIT	URBAN TOTAL	CONSTRUCTION CODE																									
				0003		0008		0021															0031		0040		0043		
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
* A2008468	TREE, ULMUS AMERICANA PRINCETON (PRINCETON AMERICAN ELM), 2" CALIPER, BALLED AND BURLAPPED	EACH	21																					21					
<del>Z0056608</del>	<del>STORM SEWER (WATER MAIN REQUIREMENTS) 12 INCH</del>	<del>FOOT</del>	<del>670</del>																										
Z0056611	STORM SEWER (WATER MAIN REQUIREMENTS) 16 INCH	FOOT	590																										590
<del>Z0056612</del>	<del>STORM SEWER (WATER MAIN REQUIREMENTS) 18 INCH</del>	<del>FOOT</del>	<del>160</del>																										
<del>Z0056616</del>	<del>STORM SEWER (WATER MAIN REQUIREMENTS) 24 INCH</del>	<del>FOOT</del>	<del>500</del>																										
X0327191	WATER MAIN RELOCATION 8"	EACH	4																										4
X0327192	WATER MAIN RELOCATION 12"	EACH	15																										15
XX003531	WATER SERVICE CONNECTION, 1"	EACH	3																										3
XX003532	WATER SERVICE CONNECTION, 1.5"	EACH	7																										7
XX004997	WATER SERVICE CONNECTION, 2"	EACH	8																										8
56200300	WATER SERVICE LINE 1"	FOOT	140																										140
56200500	WATER SERVICE LINE 1 1/2"	FOOT	390																										390
56200700	WATER SERVICE LINE 2"	FOOT	500																										500
31200502	STABILIZED SUBBASE - HOT MIX ASPHALT, 4 1/2"	SQ YD	207,432	207,432																									
42000500	PORTLAND CEMENT CONCRETE PAVEMENT 10 1/4" (JOINTED)	SQ YD	191,097	191,097																									
Z0067300	STEEL CASINGS 12"	FOOT	100																										100
Z0067500	STEEL CASINGS 16"	FOOT	285																										285
* 87702630	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 40 FT. AND 44 FT.	EACH	1																										
* 88024130	OPTICALLY PROGRAMMED SIGNAL HEAD, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	3																										
* 88030012	SIGNAL HEAD, LED, 1-FACE, 1-SECTION, BRACKET MOUNTED	EACH	2																										
* 88030070	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	1																										
* <del>X0140074</del>	<del>GROUNDING EXISTING HANDHOLE FRAME AND COVER</del>	<del>EACH</del>	<del>3</del>																										



Rev. 6-8-11

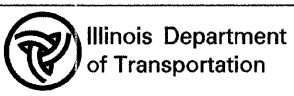
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PATRICK ENGINEERING INC.  
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LISLE, IL 60532  
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DATE - 12/31/2010

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ILLINOIS ROUTE 53  
SUMMARY OF QUANTITIES

SCALE: NA SHEET 500-20 OF 20 STA. TO STA.

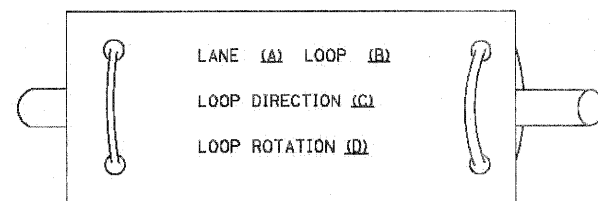
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2578	532B		781	23
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60477	

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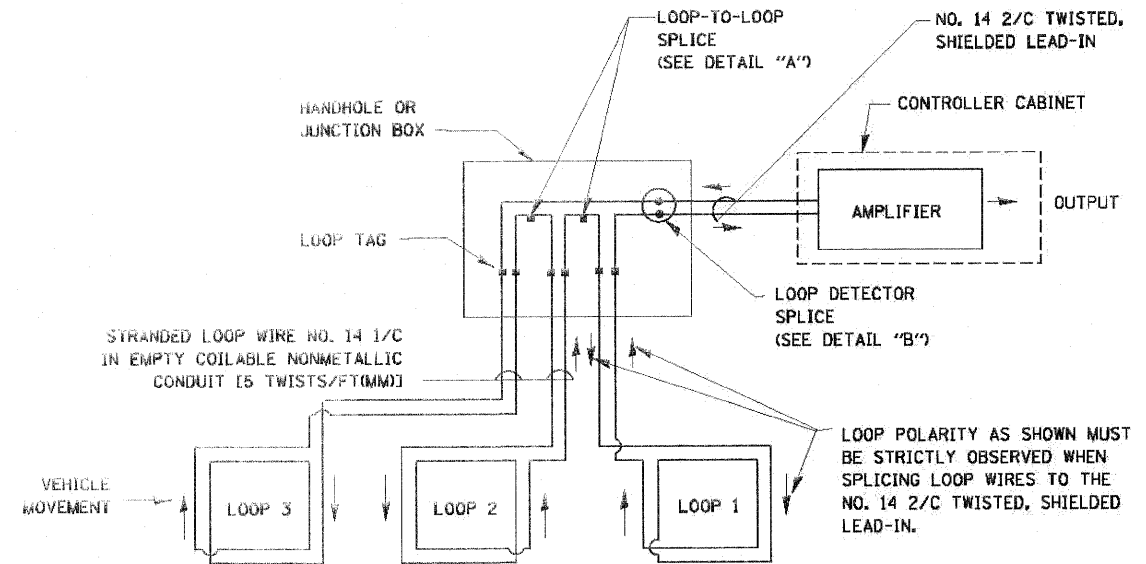
**LOOP DETECTOR NOTES**

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

**LOOP LEAD-IN CABLE TAG**

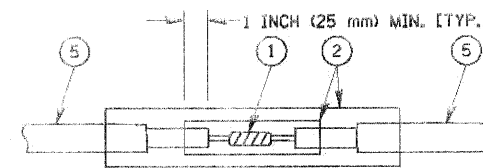


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

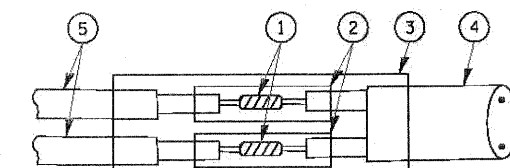


**DETECTOR LOOP WIRING SCHEMATIC**

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

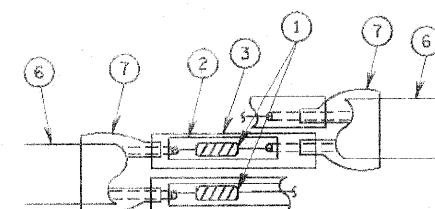


**DETAIL "A" LOOP-TO-LOOP SPLICE**

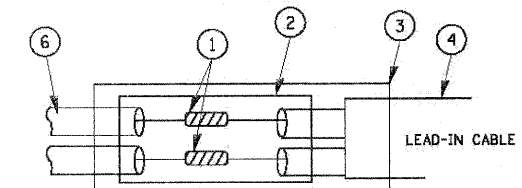


**DETAIL "B" LOOP-TO-CONTROLLER SPLICE**

**TYPE I LOOP**



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



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

**LOOP DETECTOR SPLICE**

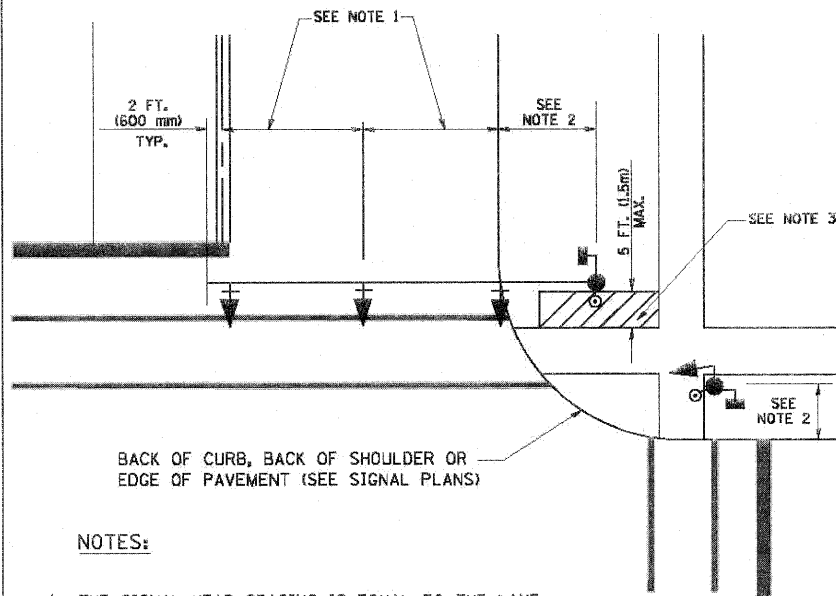
- 1 WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- 2 WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- 3 WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- 4 NO. 14 2/C TWISTED, SHIELDED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

Rev. 6-8-11

FILE NAME =	USER NAME = #USER#	DESIGNED - DAD	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS		F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 425
#FILE#	PLOT SCALE = #SCALE#	DRAWN - BCK	REVISED -		SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. - ILLINOIS	FED. AID PROJECT	CONTRACT NO. 60477	
	PLOT DATE = #DATE#	CHECKED - DAD	REVISED -								
		DATE - 10/28/09	REVISED -								

**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST**

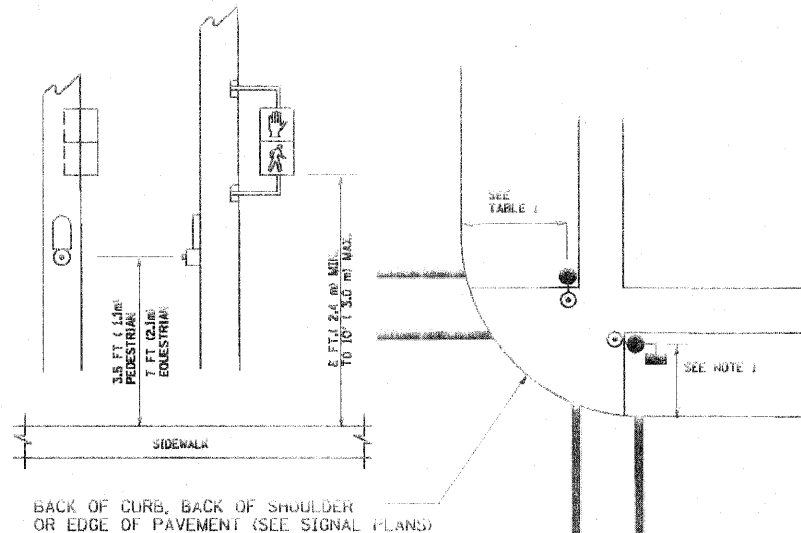
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



**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."

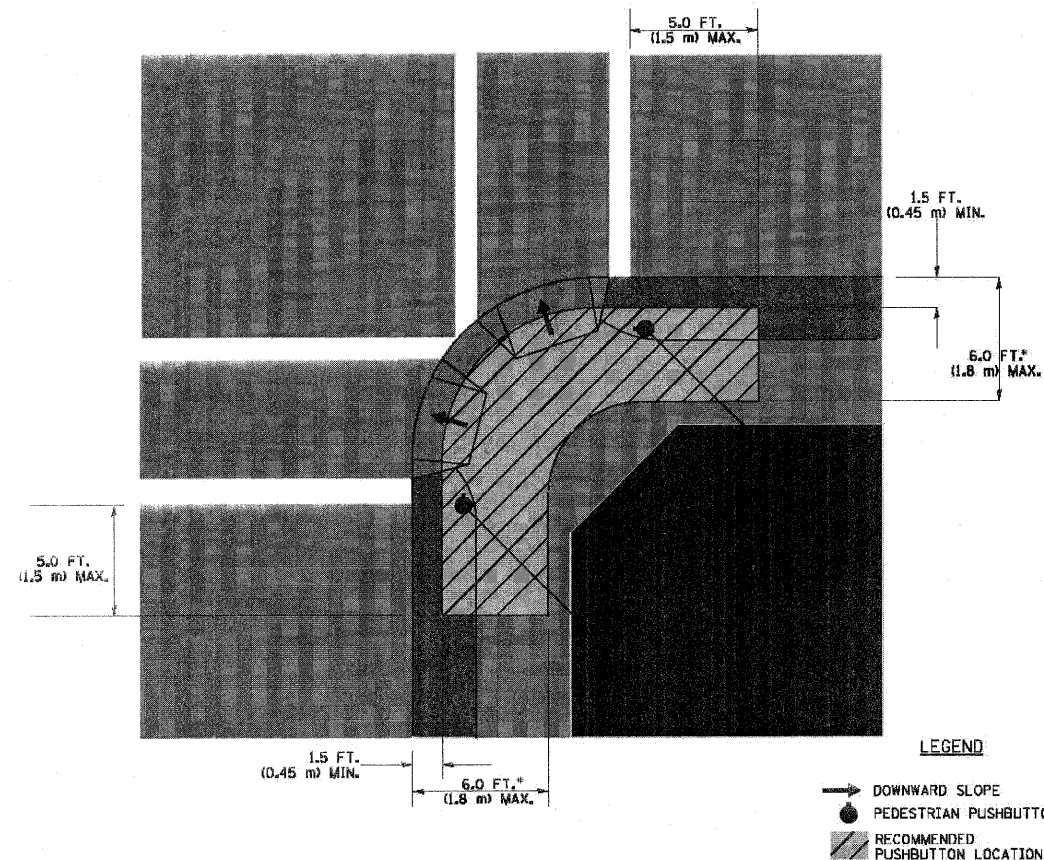
**PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST**



**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.

**NOTES:**

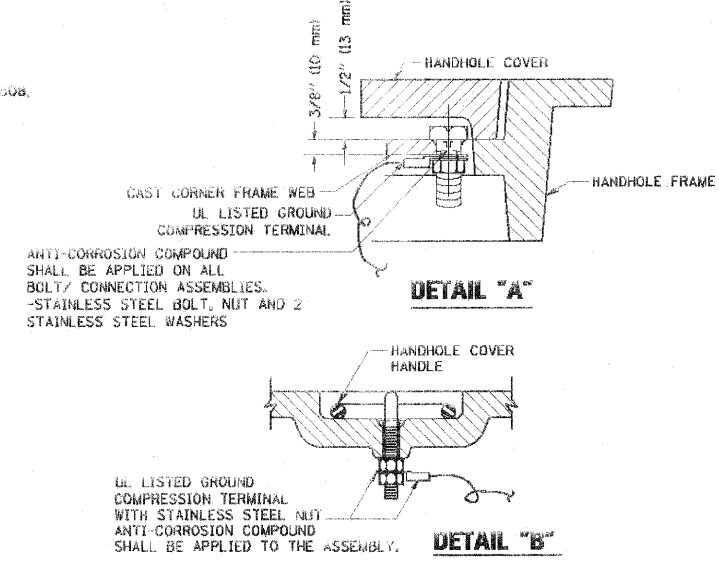
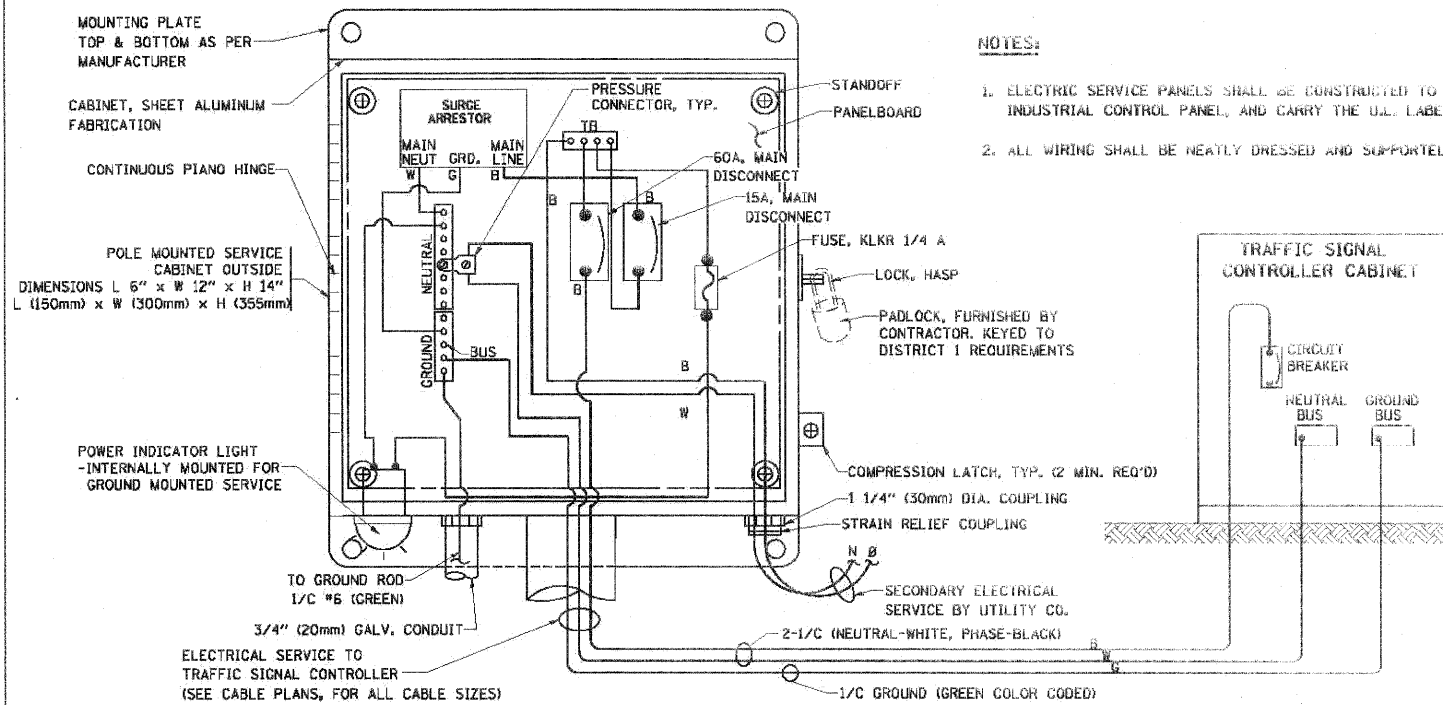
1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM 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**

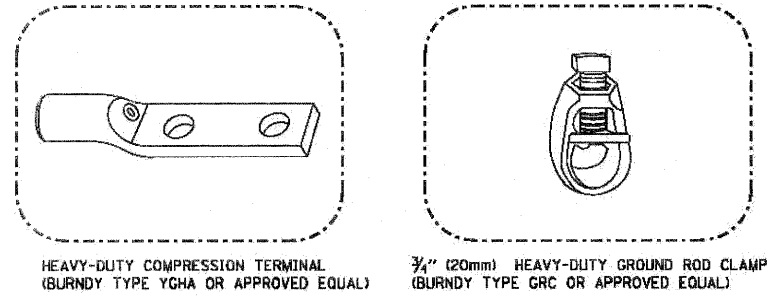
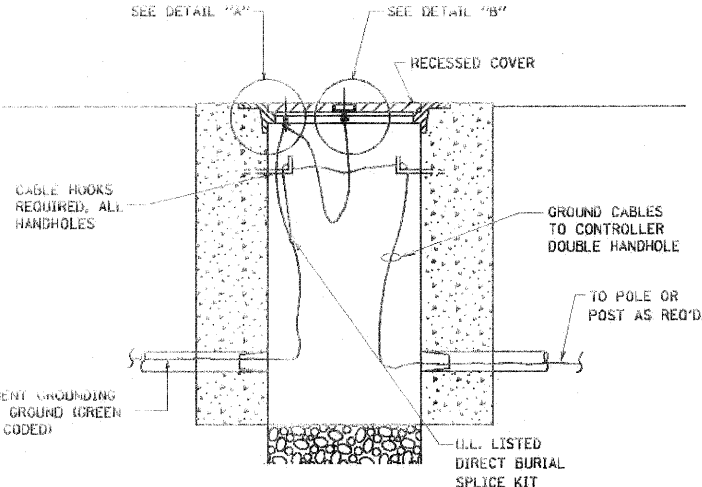
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10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

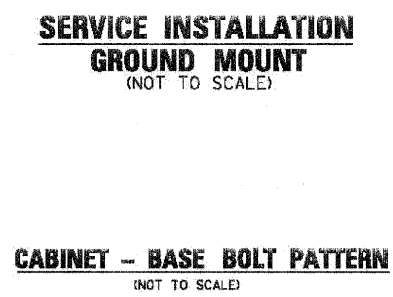
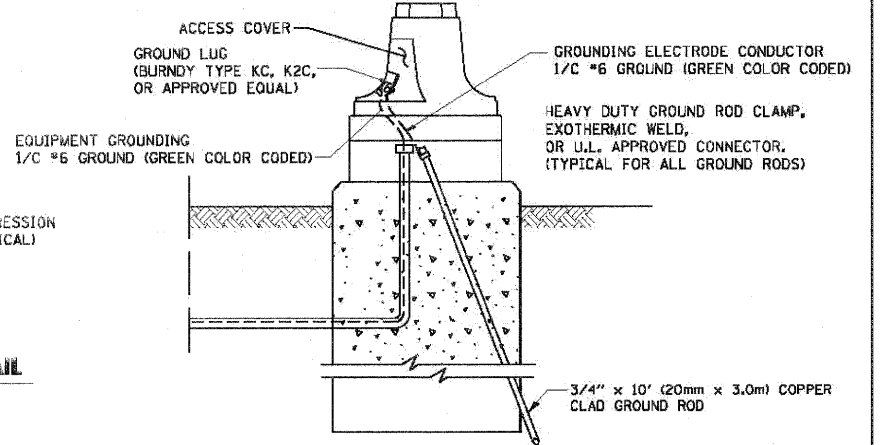
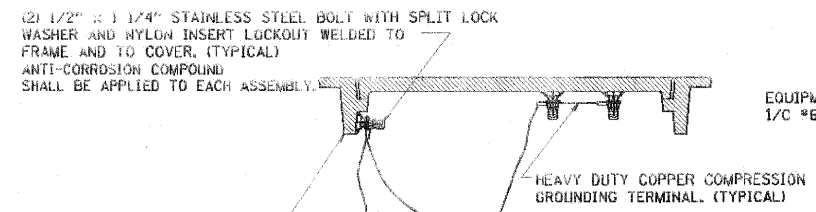
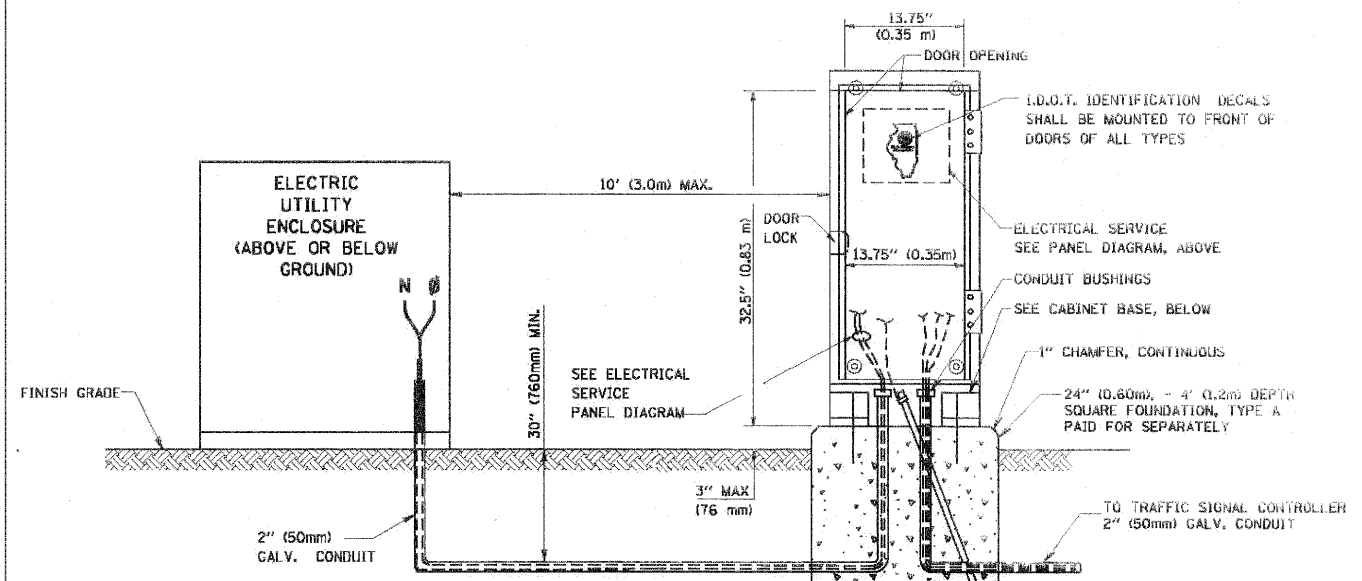
1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM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



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

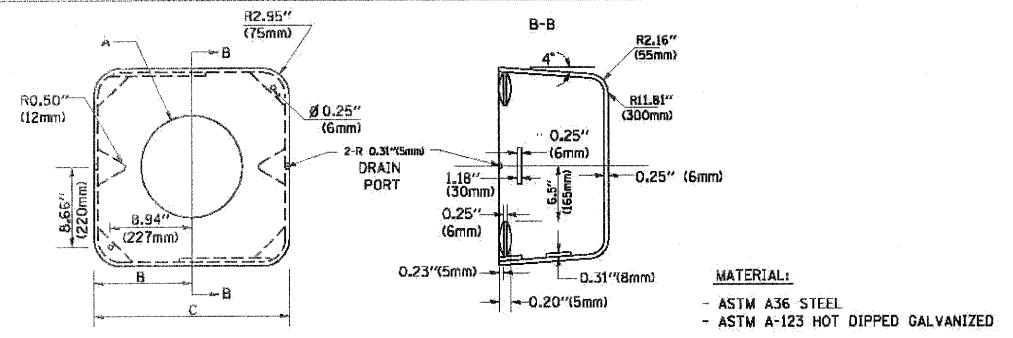
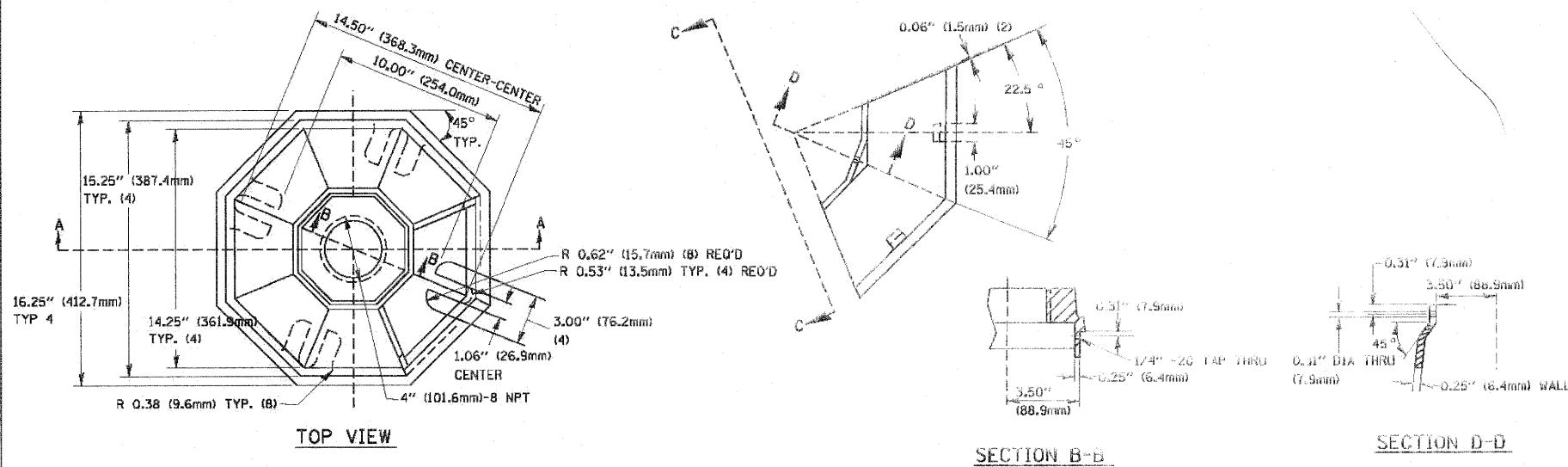


- NOTES:**
- \* ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
  - \* GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES
  - 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES
  - 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES.
  - 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN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



FILE NAME =	USER NAME = #USER#	DESIGNED - DAD	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
#FILE#	PLOT SCALE = \$SCALE#	DRAWN - BCK	REVISED -			2578	532B	DuPage	781	427	
	PLOT DATE = #DATE#	CHECKED - DAD	REVISED -			CONTRACT NO. 60477					
		DATE - 10/28/09	REVISED -			FED. ROAD DIST. NO. ILLINOIS/FED. AID PROJECT					

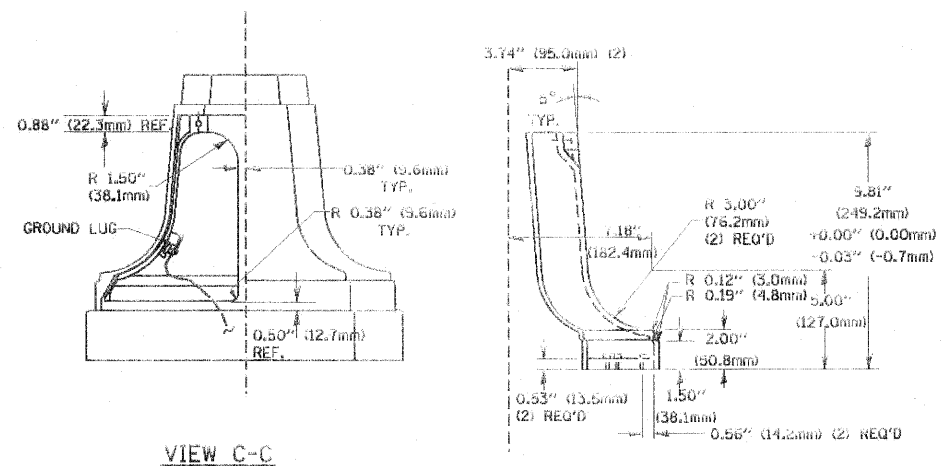
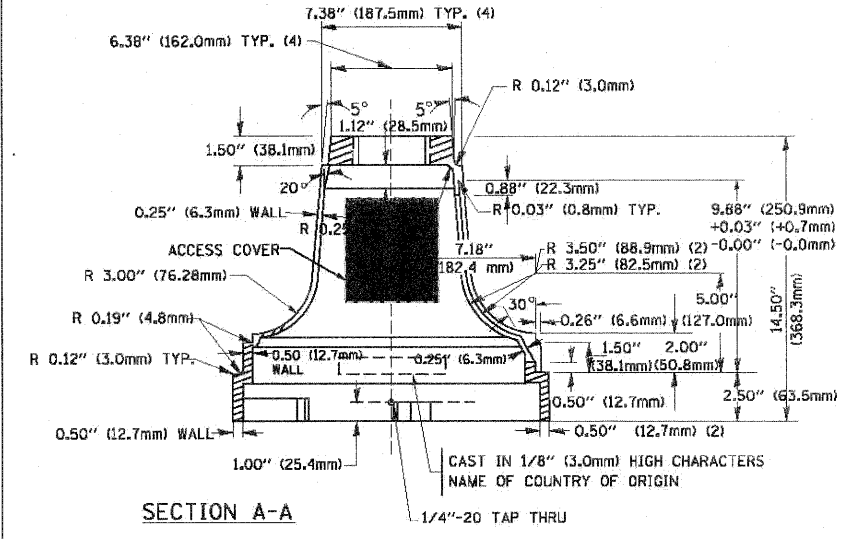
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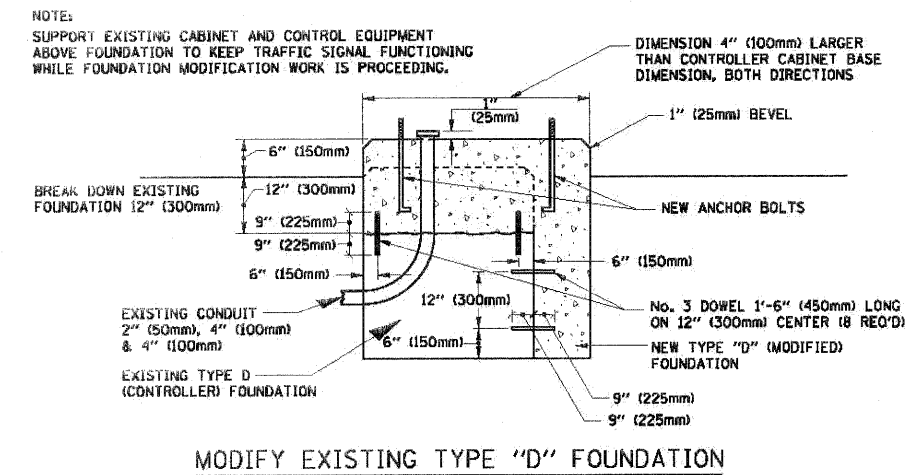
A	B	C	HEIGHT	WEIGHT
VARIABLES	9.5\" (241mm)	19\" (483mm)	7\" (178mm) - 12\" (300mm)	53 lbs (24kg)
VARIABLES	10.75\" (273mm)	21.5\" (546mm)	7\" (178mm) - 12\" (300mm)	68 lbs (31 kg)
VARIABLES	13.0\" (330mm)	26\" (660mm)	7\" (178mm) - 12\" (300mm)	81 lbs (37 kg)
VARIABLES	18.5\" (470mm)	37\" (940mm)	7\"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

**SHROUD**

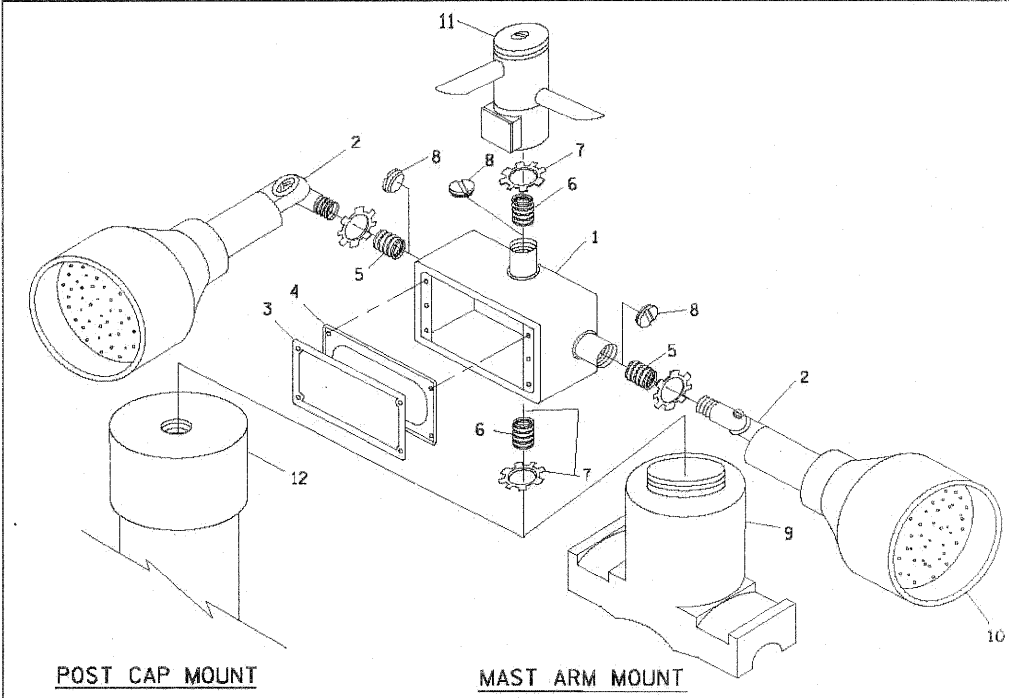
- NOTES:**
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
  2. THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
  3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND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



**TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A**

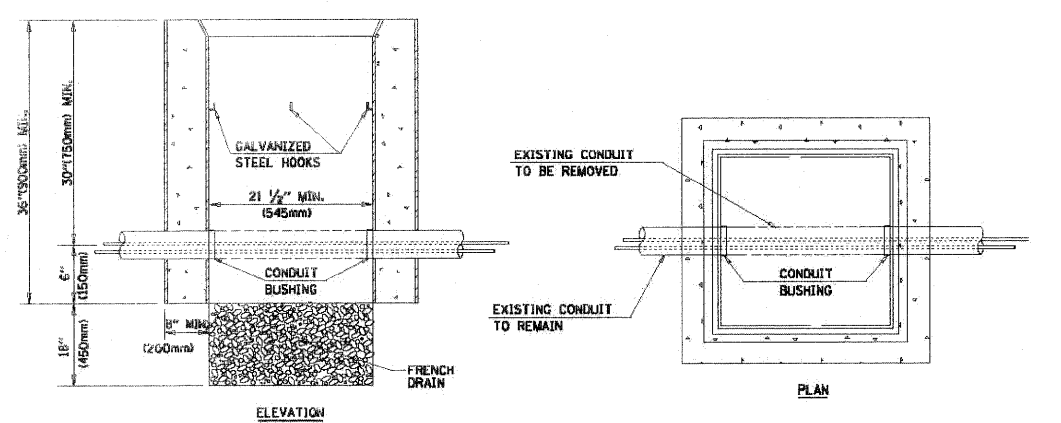


**MODIFY EXISTING TYPE "D" FOUNDATION**



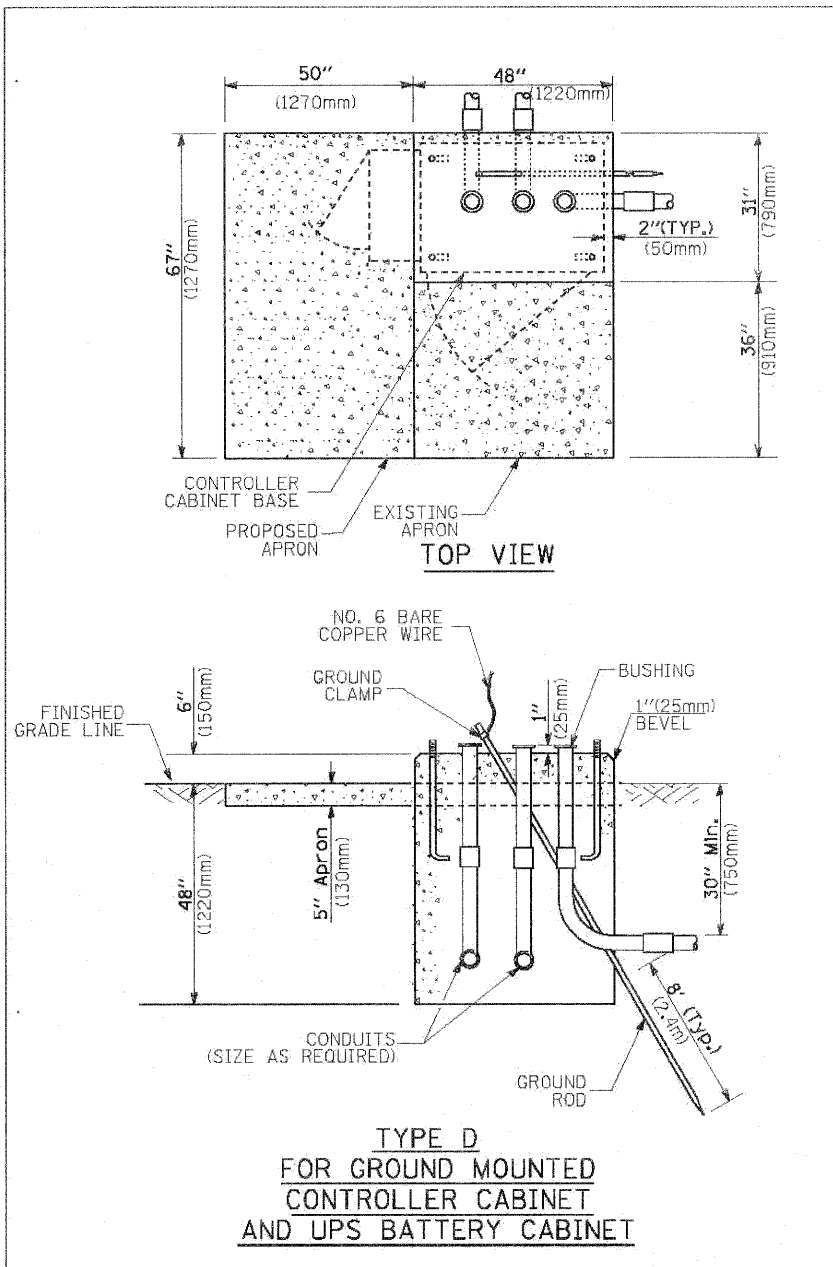
ITEM NO.	IDENTIFICATION
1	OUTLET BOX - GALV. 21 GALIN. (0.000344 CU-FT)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4\" (19 mm) CLOSE NIPPLE
7	3/4\" (19 mm) LOCKNUT
8	3/4\" (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	5 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR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

- NOTES:**
1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
  2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT  
ITEM #2- MULBERRY CON-D-SHADE LAMP SHIELD OR EQUIVALENT  
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
  3. 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.

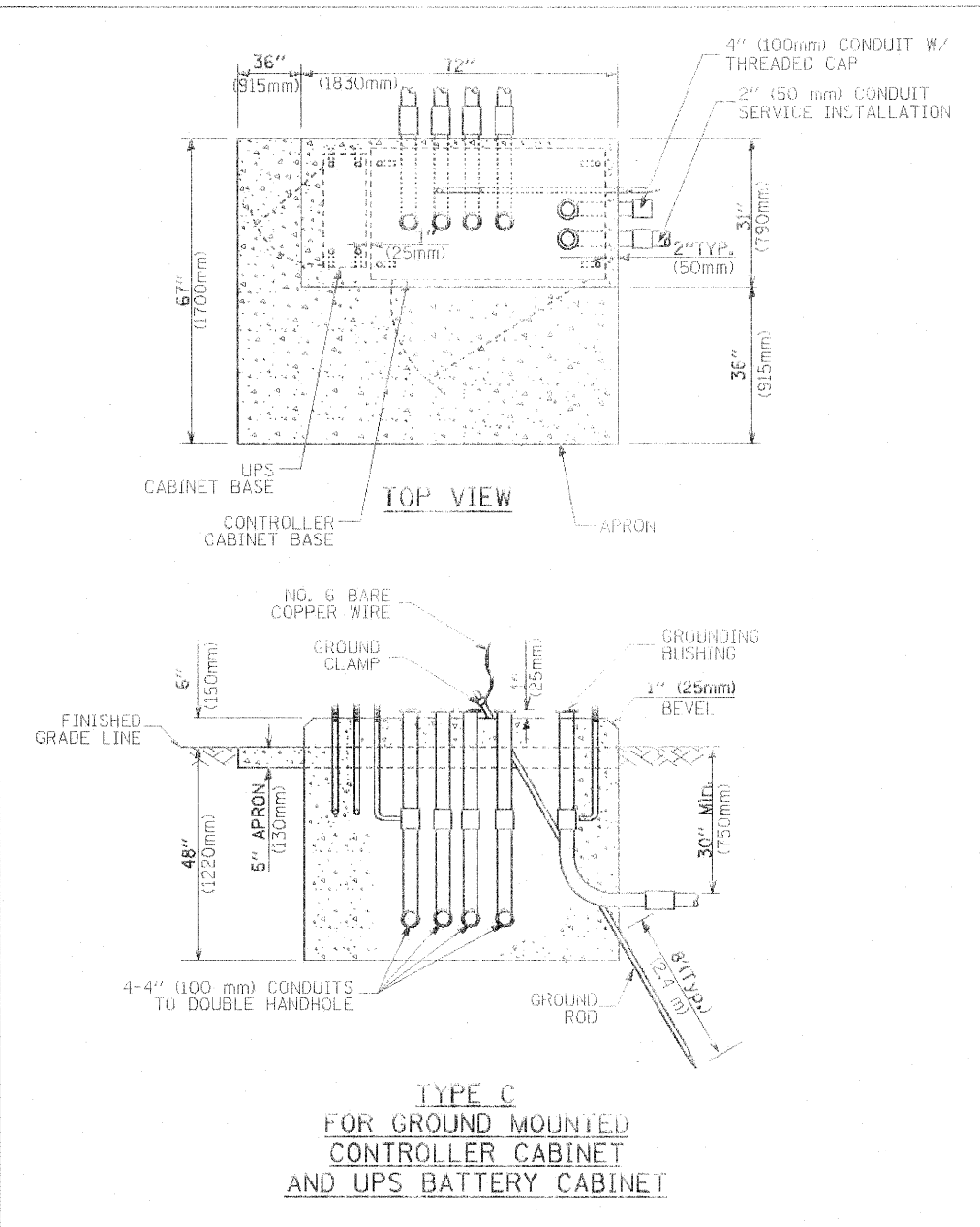


- NOTES:**
1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
  2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCIDENTAL TO THE HANDHOLE.

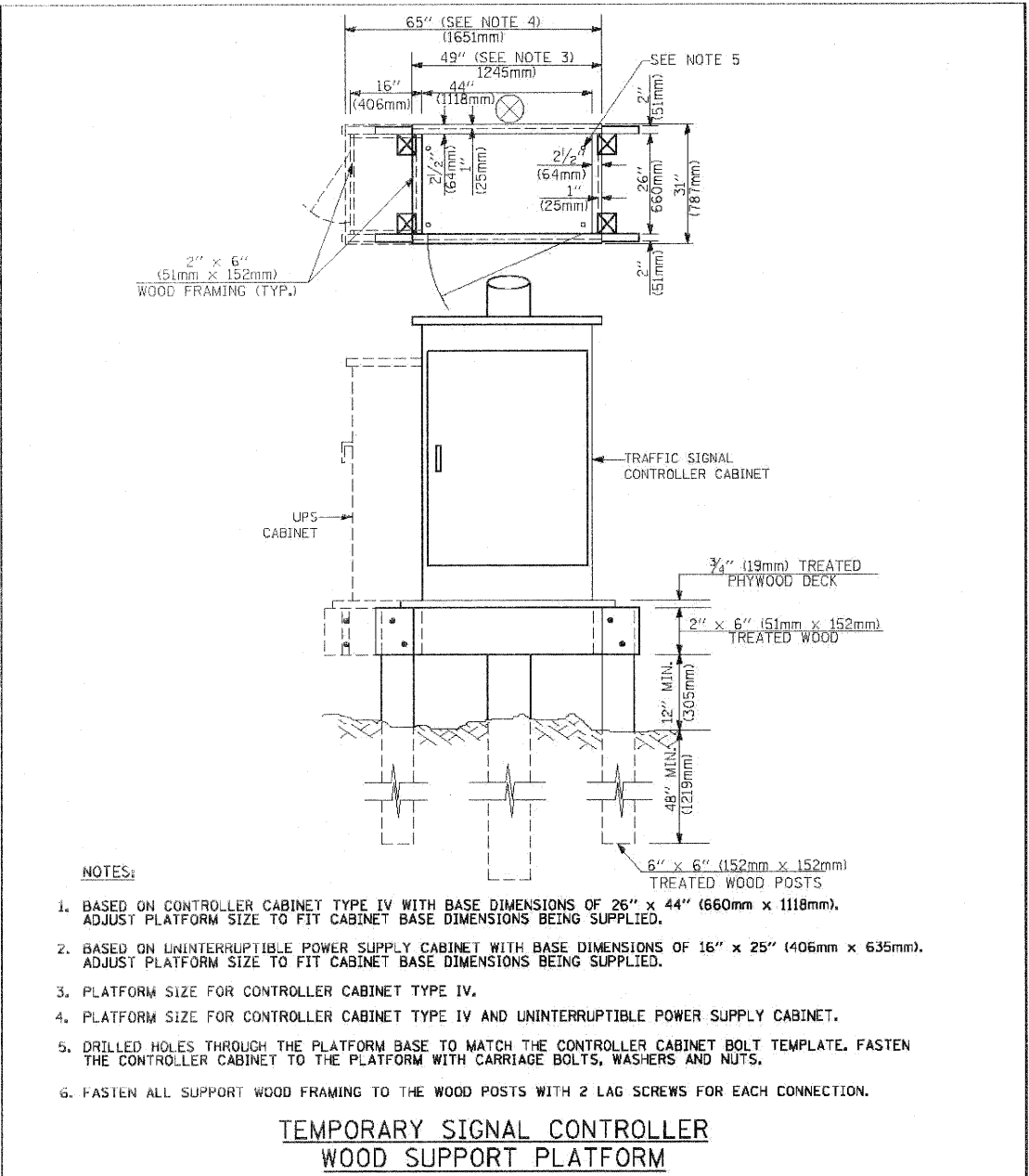
**HANDHOLE TO INTERCEPT EXISTING CONDUIT**



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



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



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

**TEMPORARY SIGNAL CONTROLLER  
WOOD SUPPORT PLATFORM**

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

**CABLE SLACK**

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

**VERTICAL CABLE LENGTH**

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

**DEPTH OF FOUNDATION**

MAST ARM LENGTH	FOUNDATION DEPTH	FOUNDATION DIAMETER	SPIRAL DIAMETER	QUANTITY OF REBARS	SIZE OF REBARS
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 55' (16.8 m) and less than 65' (19.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

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

**DEPTH OF MAST ARM FOUNDATIONS, TYPE E**



# TRAFFIC SIGNAL LEGEND

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

Rev. 6-8-11

**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" (300mm) 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 RAILROAD INTERSECTIONS, AND 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.

AFTER THE PROPOSED TRAFFIC SIGNAL IS INSTALLED AND IN OPERATION, THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACTOR'S BID PRICE.

- 1 EACH CONTROLLER AND CABINET COMPLETE
- 7 EACH SIGNAL HEAD, 1-FACE, 3-SECTION, SPAN WIRE MOUNTED
- 2 EACH SIGNAL HEAD, 1-FACE, 5-SECTION, SPAN WIRE MOUNTED
- 4 EACH WOOD POLE
- 423 FOOT SPAN WIRE
- 423 FOOT TETHER WIRE
- 1 LSUM AERIAL ELECTRIC CABLES
- 3 EACH VIDEO DETECTION CAMERAS
- 1 EACH WIRELESS INTERCONNECT EQUIPMENT

THE FOLLOWING ITEMS SHALL BE RELOCATED TO THE NEW SPAN WIRE LOCATIONS AS SHOWN IN THE PLANS AFTER THE NEW WOOD POLE, SPAN WIRES, TETHER WIRES, AND ELECTRIC CABLES ARE INSTALLED.

- 2 EACH SIGNAL HEAD, 1-FACE, 3-SECTION, SPAN WIRE MOUNTED
- 2 EACH SIGNAL HEAD, 1-FACE, 5-SECTION, SPAN WIRE MOUNTED
- 1 EACH LIGHT DETECTOR WITH CONFIRMATION BEACON

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

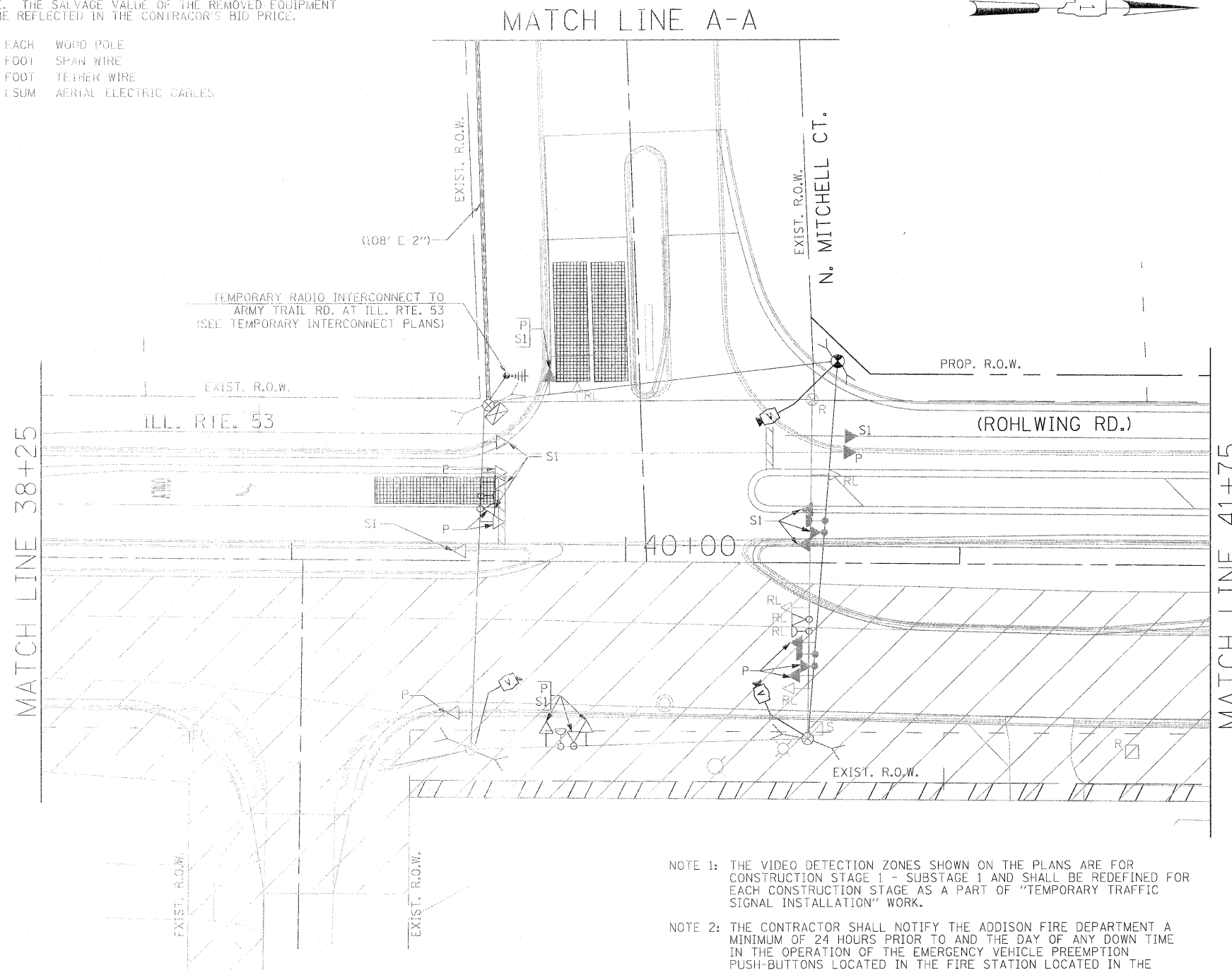
AGENCY: VILLAGE OF ADDISON

CONTACT INFORMATION:  
 RUDY ESPEDIDO  
 VILLAGE OF ADDISON  
 ENGINEERING DEPARTMENT  
 PHONE: (630)693-7533

- 3 EACH LIGHT DETECTOR
- 1 EACH LIGHT DETECTOR AMPLIFIER

FOR TEMPORARY TRAFFIC SIGNAL MODIFICATION, THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACTOR'S BID PRICE.

- 1 EACH WOOD POLE
- 198 FOOT SPAN WIRE
- 198 FOOT TETHER WIRE
- 1 LSUM AERIAL ELECTRIC CABLES



SIGNAL HEAD PLACEMENTS FOR STAGES: PRE-STAGE, AND S1

NOTE 1: THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR CONSTRUCTION STAGE 1 - SUBSTAGE 1 AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.

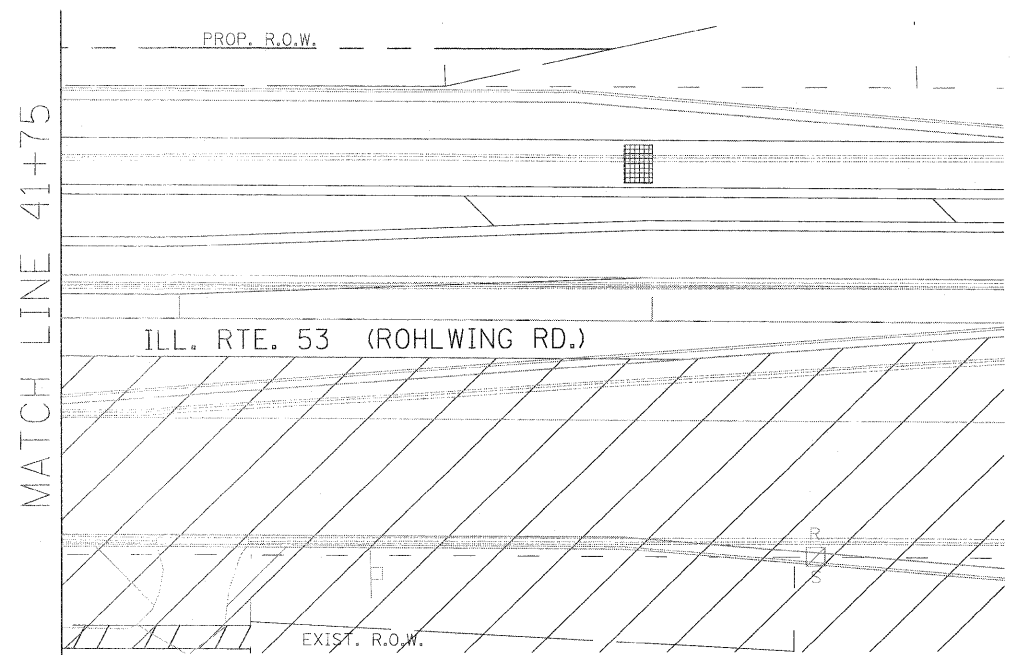
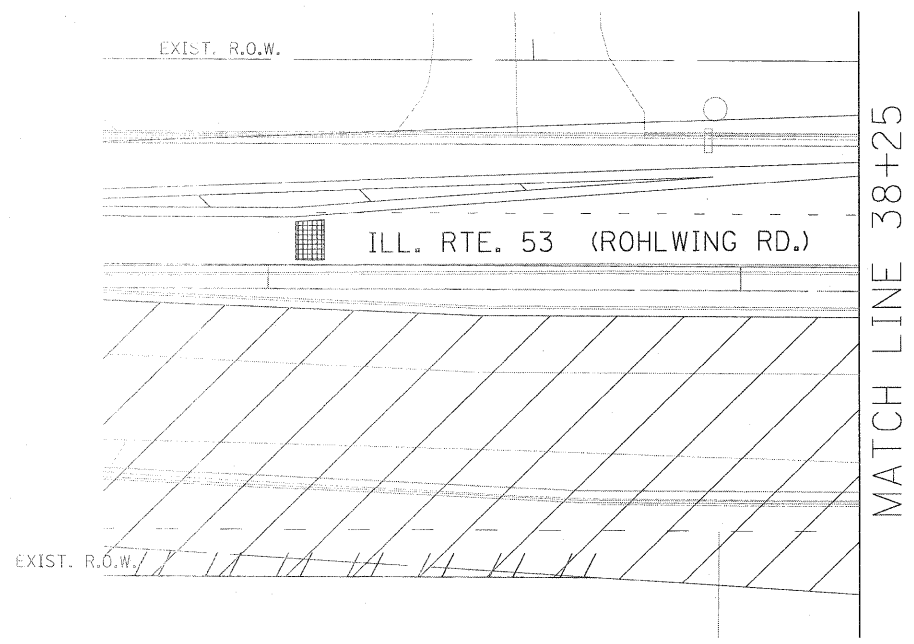
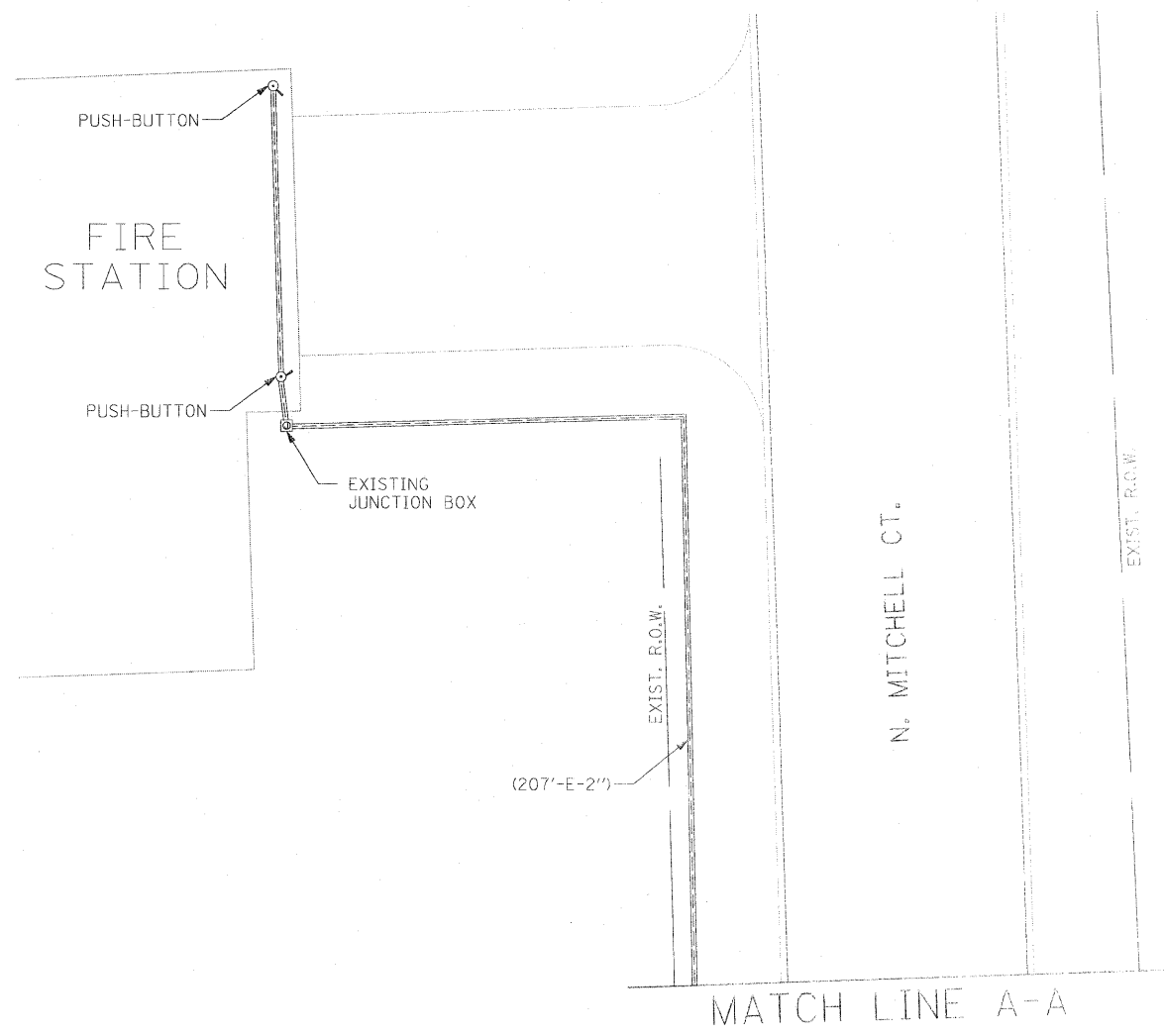
NOTE 2: THE CONTRACTOR SHALL NOTIFY THE ADDISON FIRE DEPARTMENT A MINIMUM OF 24 HOURS PRIOR TO AND THE DAY OF ANY DOWN TIME IN THE OPERATION OF THE EMERGENCY VEHICLE PREEMPTION PUSH-BUTTONS LOCATED IN THE FIRE STATION LOCATED IN THE SOUTHWEST CORNER OF THIS INTERSECTION. THE DOWN TIME SHALL NOT EXCEED 2 HOURS.

AT MITCHELL CT:  
 P = PRE-STAGE  
 S1 = STAGE 1 (NO SUBSTAGES)  
 S2 = STAGE 1 (NO SUBSTAGES)  
 S3 = STAGE 1 (NO SUBSTAGES)

THE EXISTING TEMPORARY TRAFFIC SIGNAL INSTALLATION SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL INSTALLATION IS IN OPERATION. THE MAINTENANCE OF THE EXISTING TEMPORARY TRAFFIC SIGNAL INSTALLATION SHALL BE INCLUDED IN THE PAY ITEM "MODIFY TEMPORARY TRAFFIC SIGNAL INSTALLATION".

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

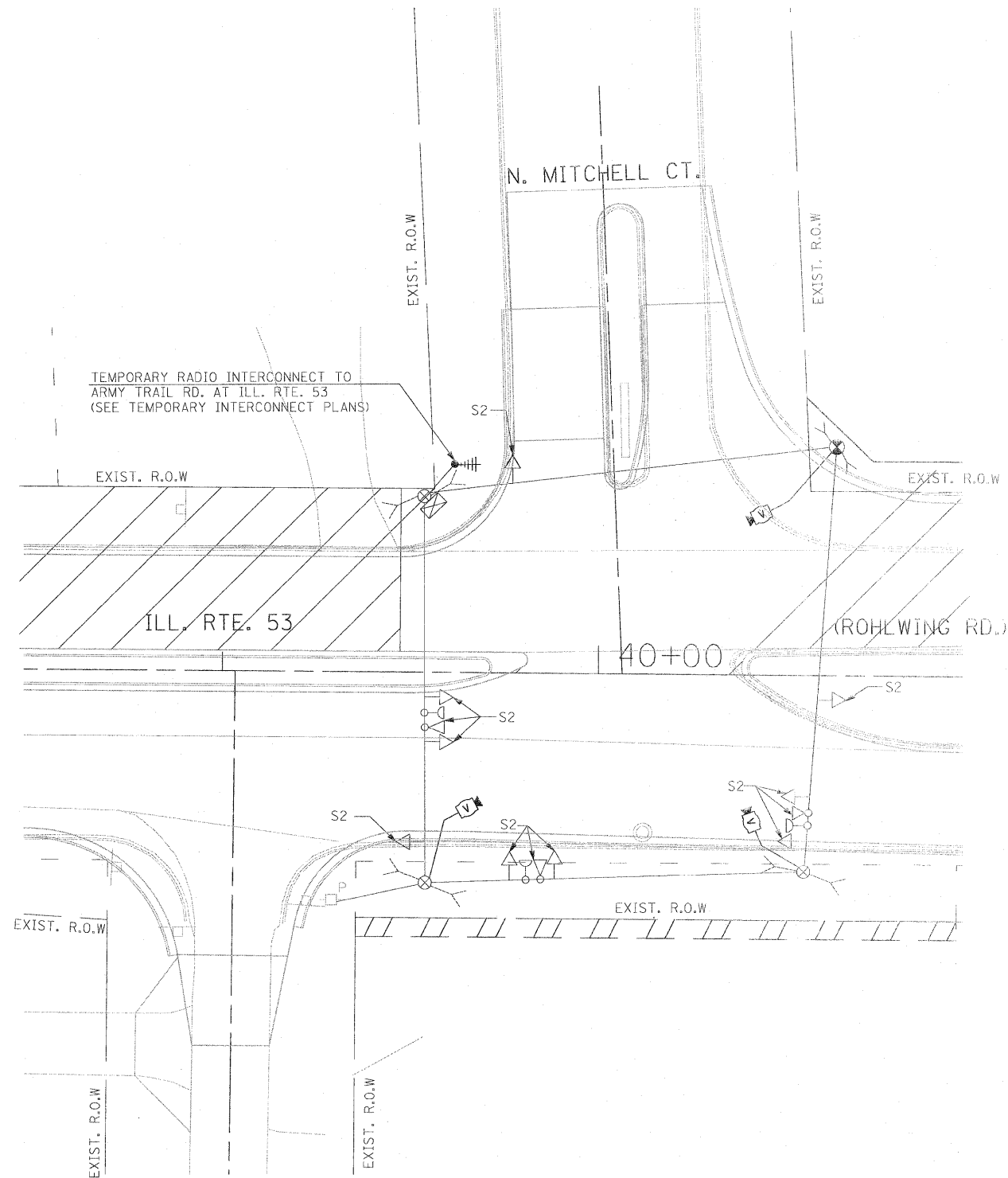
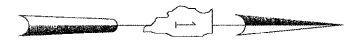
FILE NAME =	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL MODIFICATION AND REMOVAL PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT N. MITCHELL CT. PRE STAGE AND STAGE 1 (SHEET 1 OF 4).</b>				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
#FILE#		DRAWN - MAA, EA	REVISED -		2578	532B	DuPage	781	431				
	PLOT SCALE = #SCALE#	CHECKED - PKG, EA	REVISED -		CONTRACT NO. 60477								
	PLOT DATE = #DATE#	DATE - 5/18/2011	REVISED -		SCALE: 1"=20'	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT					



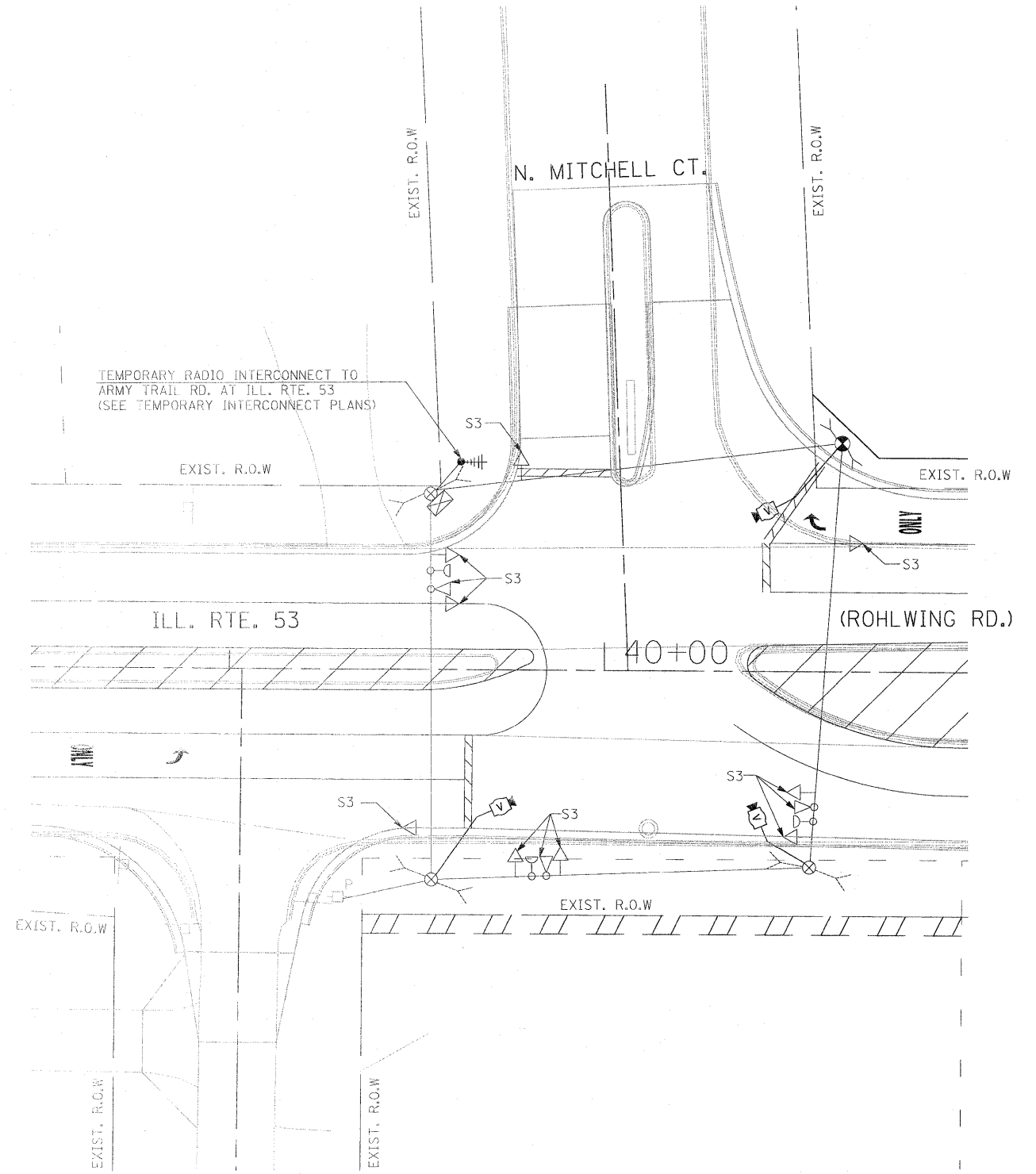
NOTE: THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR CONSTRUCTION STAGE 1 - SUBSTAGE 1 AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.

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

FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL MODIFICATION AND REMOVAL PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT N. MITCHELL CT. PRE STAGE AND STAGE 1 (SHEET 2 OF 4).</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 432
	PLDT SCALE = #SCALE#	DRAWN - MAA, EA	REVISED -		SCALE: 1"=20'	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. - [ILLINOIS] FED. AID PROJECT				
	PLDT DATE = #DATE#	CHECKED - PKG, EA	REVISED -					CONTRACT NO. 60477				
		DATE - 5/18/2011	REVISED -					Rev. 6-8-11				



SIGNAL HEAD PLACEMENTS FOR STAGES: S2.



SIGNAL HEAD PLACEMENTS FOR STAGES: S3

NOTE 1: THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR CONSTRUCTION STAGE 1 - SUBSTAGE 1 AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.

NOTE 2: THE SIGNAL HEAD PLACEMENT FOR N. MITCHELL COURT FOR CONSTRUCTION STAGES S2 AND S3 SHALL BE DETERMINED IN FIELD BY THE CONTRACTOR DEPENDING ON THE CONSTRUCTION STAGING USED BY THE CONTRACTOR FOR N. MITCHELL COURT.

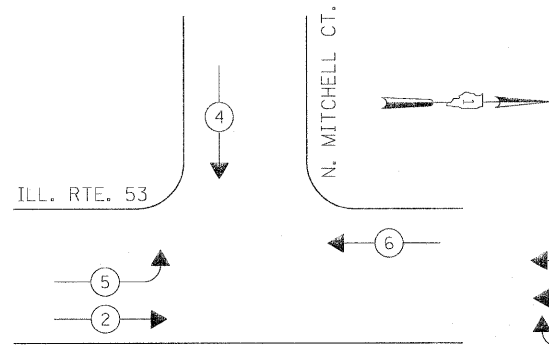
AT MITCHELL CT: P = PRE-STAGE  
S1 = STAGE 1 (NO SUBSTAGES)  
S2 = STAGE 1 (NO SUBSTAGES)  
S3 = STAGE 1 (NO SUBSTAGES)

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

Rev. 6-8-11

FILE NAME = \$FILEL\$	USER NAME = \$USER\$	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL MODIFICATION AND REMOVAL PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT N. MITCHELL CT. STAGE 2, AND STAGE 3 (SHEET 3 OF 4)</b>	F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 433		
	PLOT SCALE = \$SCALE\$	CHECKED - PKG, EA	REVISED -			SCALE: 1"=20'	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. - [ILLINOIS] FED. AID PROJECT			
	PLOT DATE = \$DATE\$	DATE - 5/18/2011	REVISED -									
CONTRACT NO. 60477												

CONTROLLER SEQUENCE



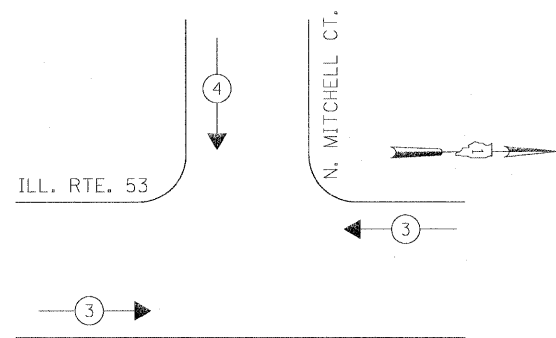
LEGEND

- ← \* → DUAL ENTRY PHASE
- ← \* → SINGLE ENTRY PHASE
- ◊ O.L. OVERLAP
- ← \* → PEDESTRIAN PHASE
- \* NUMBER REFERS TO ASSOCIATED PHASE

TEMPORARY PHASE DESIGNATION DIAGRAM

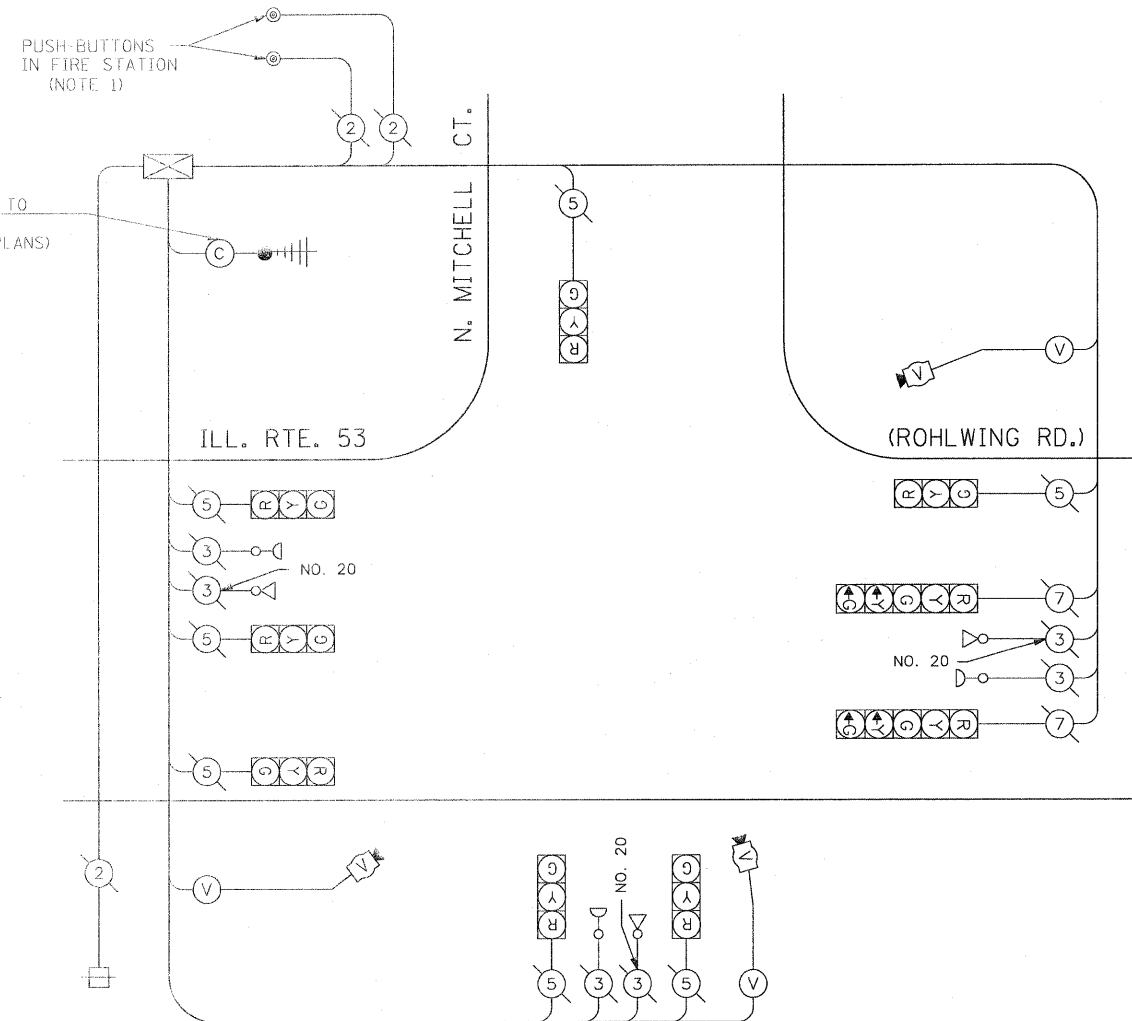
STAGES: PRE-STAGE, S1, S2, S3, AND AFTER PROPOSED ROADWAY GEOMETRICS ARE BUILT

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

STAGES: PRE-STAGE, S1, S2, S3, AND AFTER PROPOSED ROADWAY GEOMETRICS ARE BUILT



TEMPORARY CABLE PLAN

(NOT TO SCALE)

STAGES: PRE-STAGE, S1, S2, S3, AND AFTER PROPOSED ROADWAY GEOMETRICS ARE BUILT

NOTE 1: THE EMERGENCY VEHICLE PREEMPTION FOR THE WEST APPROACH SHALL ALSO BE ACTIVATED VIA PUSH-BUTTONS LOCATED INSIDE THE FIRE STATION PREMISES.

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE		OPERATION	
		INCAND.	LED		
SIGNAL (RED)	9	135	17	0.50	607.5
(YELLOW)	9	135	25	0.25	303.75
(GREEN)	9	135	15	0.25	303.75
ARROW	4	135	12	0.10	54
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN			25	0.05	
VIDEO SYSTEM	1	150		1.00	150
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 1519
VILLAGE OF ADDISON 1 FRIENDSHIP PLAZA ADDISON, ILLINOIS 60101					
ENERGY SUPPLY CONTACT: CURTIS TOPPS PHONE: (630) 691-4356 COMPANY: COMMONWEALTH EDISON					

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM  
TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE  
ILLINOIS ROUTE 53 (ROHLWING RD.) AT N. MITCHELL CT.  
PRE-STAGE, STAGE 1, STAGE 2, AND STAGE 3 (SHEET 4 OF 4).

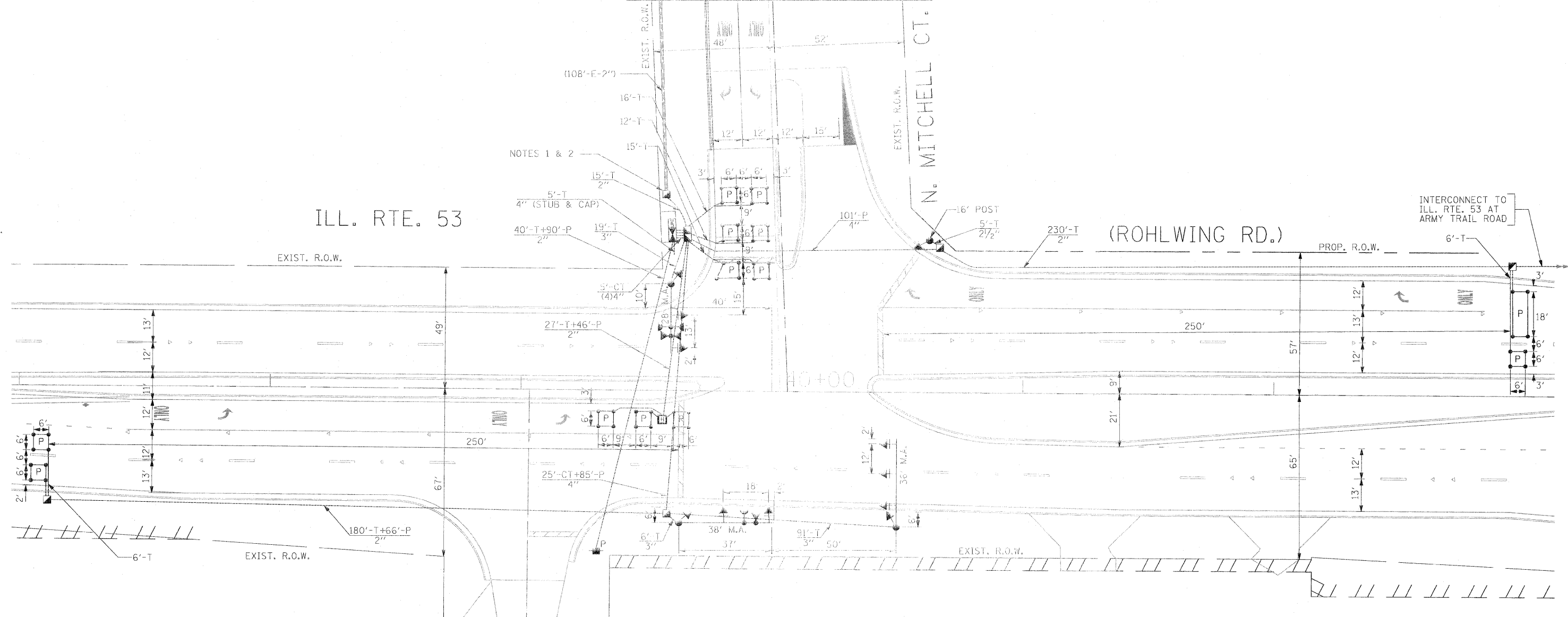
F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 434
SCALE: NONE			CONTRACT NO. 60477	

Rev. 6-8-11



- NOTE 1: THE PROPOSED HANDHOLE SHALL BE CONSTRUCTED TO INTERCEPT THE EXISTING CONDUIT AS SHOWN IN THE PLAN AND AS DIRECTED BY THE ENGINEER.
- NOTE 2: REMOVE TWO EXISTING 2C CABLES FROM EXISTING TEMPORARY CONTROLLER TO THE WEST OF THE PROPOSED HANDHOLE AND REINSTALL IN THE PROPOSED CONDUITS, DOUBLE HANDHOLE, AND TO THE PROPOSED CONTROLLER CABINET (35' ±).
- NOTE 3: THE CONTRACTOR SHALL NOTIFY THE ADDISON FIRE DEPARTMENT A MINIMUM OF 24 HOURS PRIOR TO AND THE DAY OF ANY DOWN TIME IN THE OPERATION OF THE EMERGENCY VEHICLE PREEMPTION PUSH-BUTTONS LOCATED IN THE FIRE STATION LOCATED IN THE SOUTHWEST CORNER OF THIS INTERSECTION. THE DOWN TIME SHALL NOT EXCEED 2 HOURS.

MATCH LINE A-A



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

Rev. 6-8-11

FILE NAME =	USER NAME = #USER#	DESIGNED - PKG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		TRAFFIC SIGNAL INSTALLATION PLAN		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
#FILE#		DRAWN - MAA, EA	REVISED -			ILLINOIS ROUTE 53 (ROHLWING RD.) AT N. MITCHELL CT.		(SHEET 1 OF 2)		2578	532B	DuPage
	PLOT SCALE = #SCALE#	CHECKED - PKG, EA	REVISED -			SCALE: 1"=20'	SHEET NO. OF SHEETS STA.	TO STA.		CONTRACT NO. 60477		
	PLOT DATE = #DATE#	DATE - 5/18/2011	REVISED -							FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT		



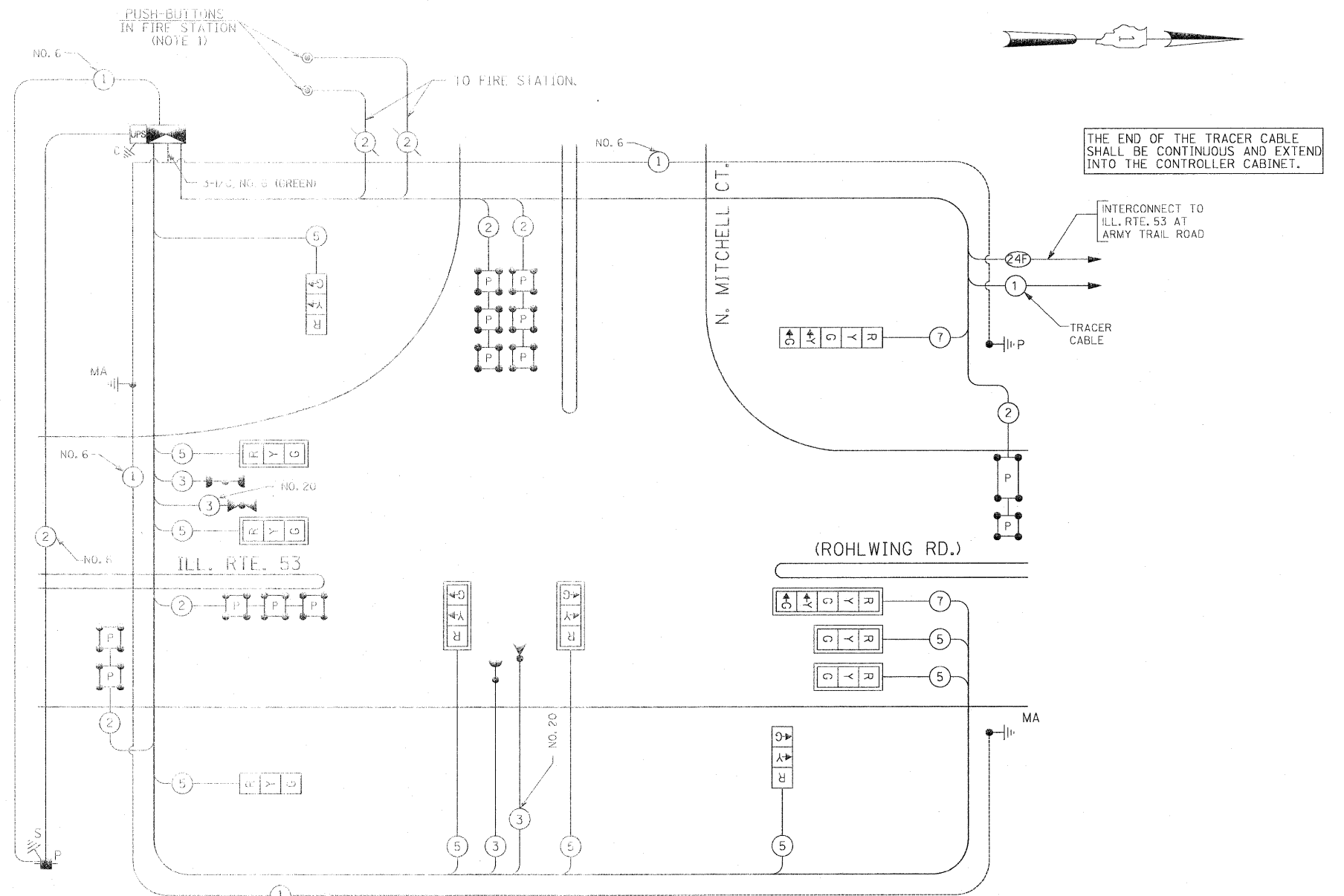
SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
25.5	SQ FT	SIGN PANEL - TYPE 1
492	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
5	FOOT	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL
116	FOOT	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL
50	FOOT	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL
202	FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
186	FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
5	EACH	HANDHOLE
1	EACH	HEAVY-DUTY HANDHOLE
1	EACH	DOUBLE HANDHOLE
663	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	TRANSCEIVER-FIBER OPTIC
280	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
1561	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
440	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
905	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
150	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.
4	FOOT	CONCRETE FOUNDATION, TYPE A
4	FOOT	CONCRETE FOUNDATION, TYPE C
10	FOOT	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER
22	FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
6	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
3	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
7	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
5	EACH	INDUCTIVE LOOP DETECTOR
2	EACH	LIGHT DETECTOR
1	EACH	LIGHT DETECTOR AMPLIFIER
35	FOOT	REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT
2	EACH	REMOVE EXISTING HANDHOLE
1	EACH	REMOVE TEMPORARY TRAFFIC SIGNAL INSTALLATION
472	FOOT	PREFORMED DETECTOR LOOP
1	EACH	TEMPORARY TRAFFIC SIGNAL TIMING
1	EACH	SERVICE INSTALLATION - POLE MOUNTED
1	EACH	UNINTERRUPTIBLE POWER SUPPLY
586	FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
280	FOOT	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED
1	EACH	MODIFY TEMPORARY TRAFFIC SIGNAL INSTALLATION

100% COST TO VILLAGE OF ADDISON

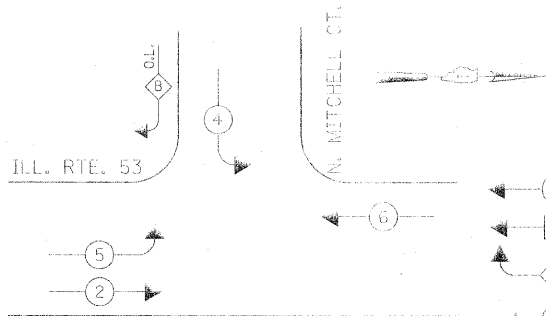
I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE	OPERATION		
SIGNAL (RED)	11	135	17	0.50	93.5
(YELLOW)	11	135	25	0.25	68.75
(GREEN)	11	135	15	0.25	41.25
ARROW	4	135	12	0.10	4.8
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN			25	0.05	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	308.3

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

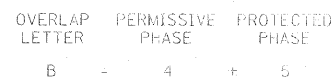


CABLE PLAN (NEXT TO SCALE)

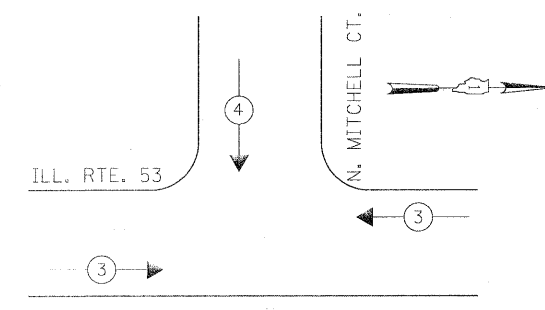
CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE



NOTE: THE EMERGENCY VEHICLE PREEMPTION FOR THE WEST APPROACH SHALL ALSO BE ACTIVATED VIA PUSH-BUTTONS LOCATED INSIDE THE FIRE STATION PREMISES.

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

Rev 6-8-11



**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" (300mm) 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 RAILROAD INTERSECTIONS, AND 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.

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACTOR'S BID PRICE.

- 1 EACH CONTROLLER AND CABINET COMPLETE
- 11 EACH SIGNAL HEAD, 1-FACE, 3-SECTION, MAST ARM MOUNTED
- 1 EACH SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED
- 1 EACH SIGNAL HEAD, 1-FACE, 5-SECTION, BRACKET MOUNTED
- 1 EACH SIGNAL HEAD, 1-FACE, 5-SECTION, MAST ARM MOUNTED
- 2 EACH SIGNAL HEAD, 2-FACE, 3-SECTION, BRACKET MOUNTED
- 1 EACH SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
- 1 EACH SIGNAL HEAD, 3-FACE, 2-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
- 7 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED
- 1 EACH PEDESTRIAN SIGNAL HEAD, 3-FACE, BRACKET MOUNTED
- 12 EACH TRAFFIC SIGNAL BACKPLATE
- 5 EACH TRAFFIC SIGNAL POST
- 4 EACH STEEL MAST ARM ASSEMBLY AND POLE
- 9 EACH PEDESTRIAN PUSH-BUTTON
- 1 EACH SERVICE INSTALLATION

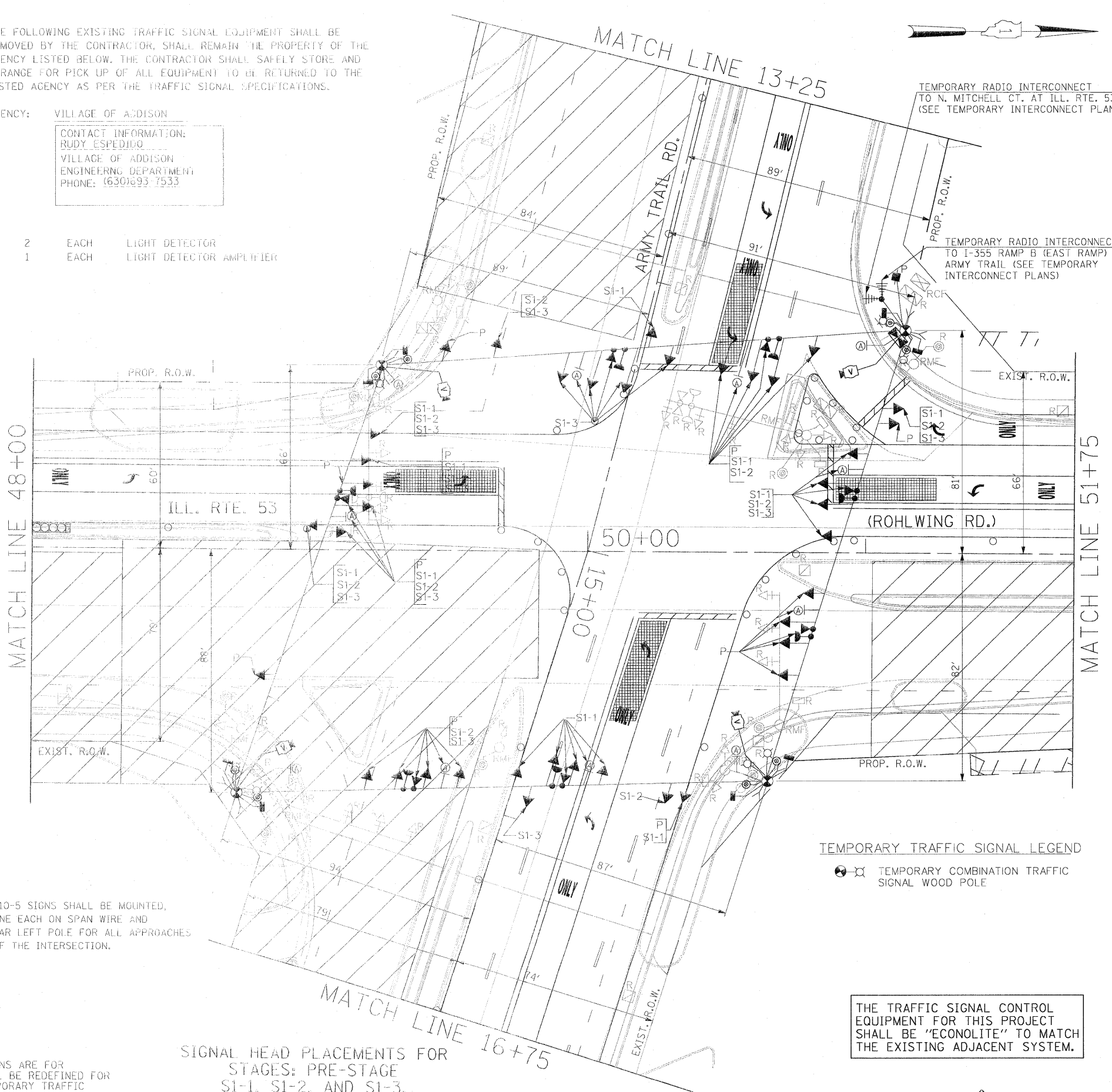
NOTE: THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR CONSTRUCTION STAGE 1 - SUBSTAGE 1 AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: VILLAGE OF ADDISON

CONTACT INFORMATION:  
 RUDY ESPEDINO  
 VILLAGE OF ADDISON  
 ENGINEERING DEPARTMENT  
 PHONE: (630)893-7533

- 2 EACH LIGHT DETECTOR
- 1 EACH LIGHT DETECTOR AMPLIFIER



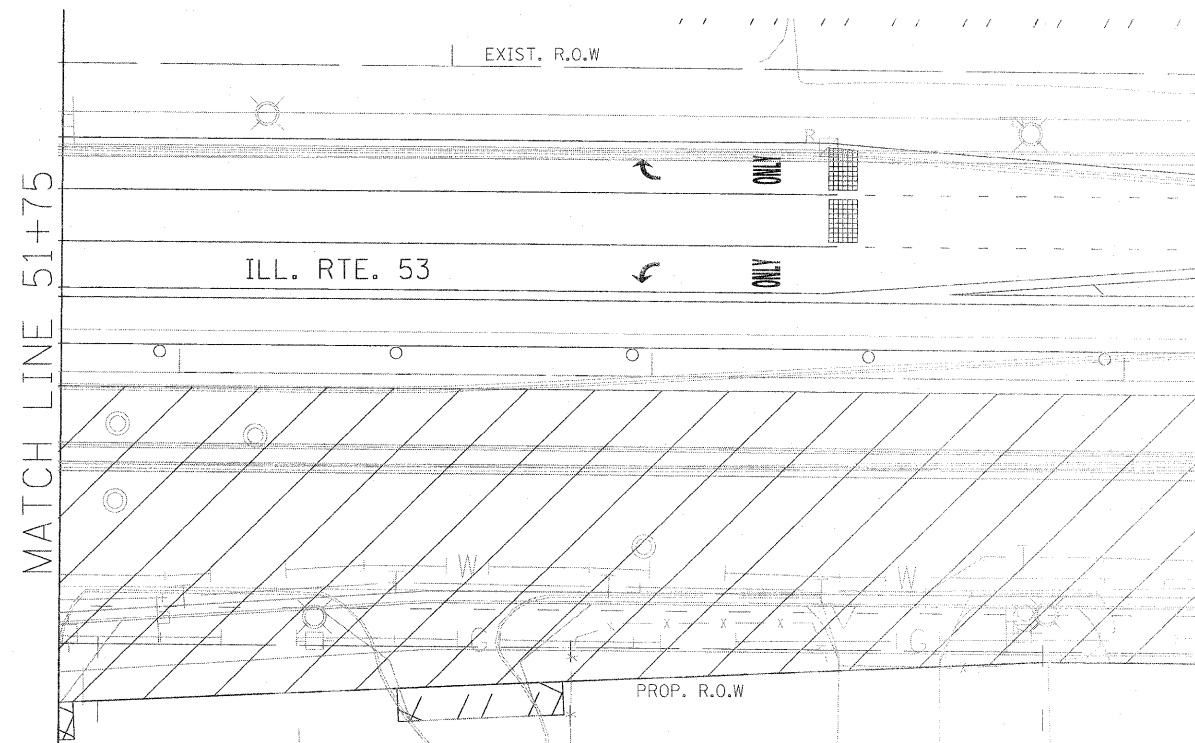
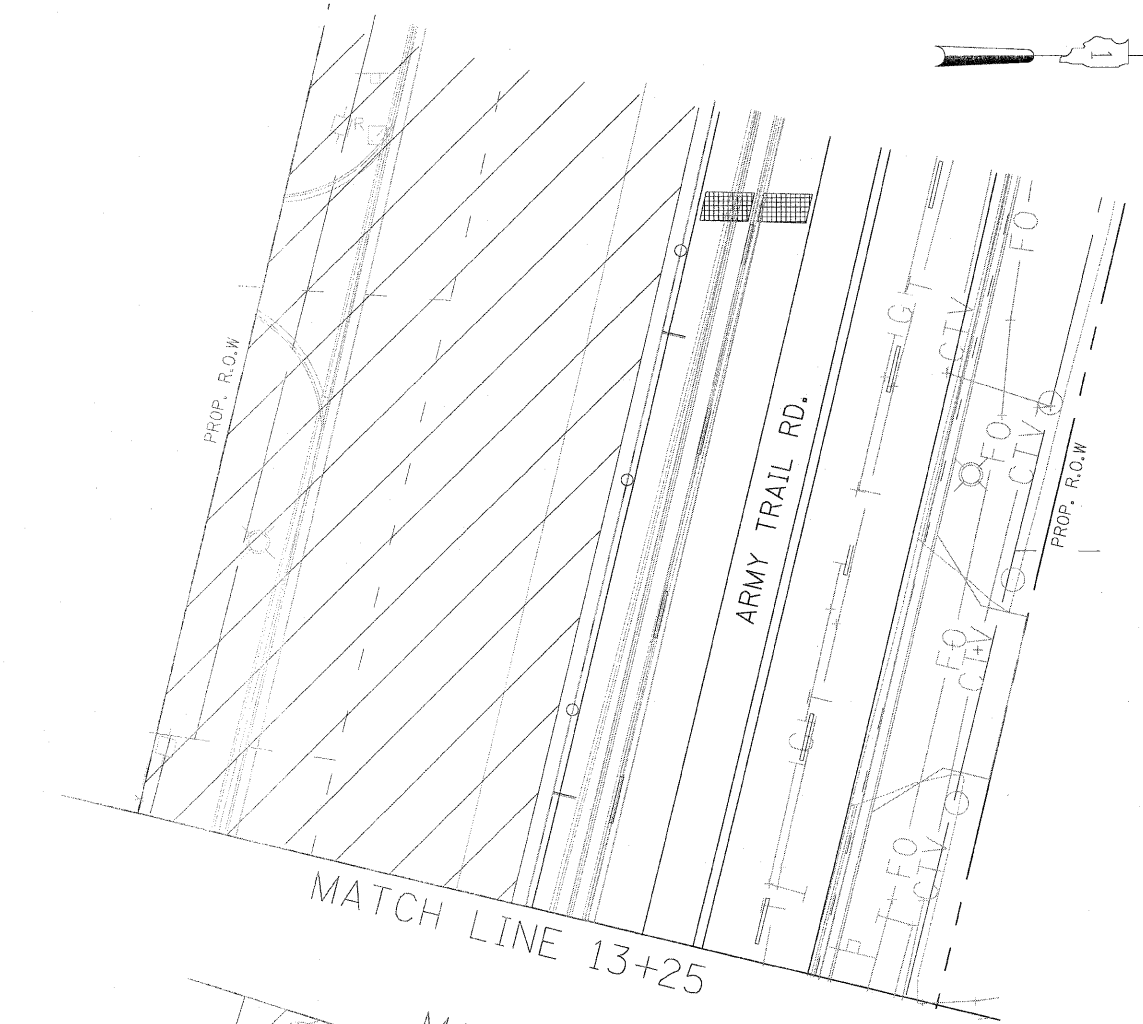
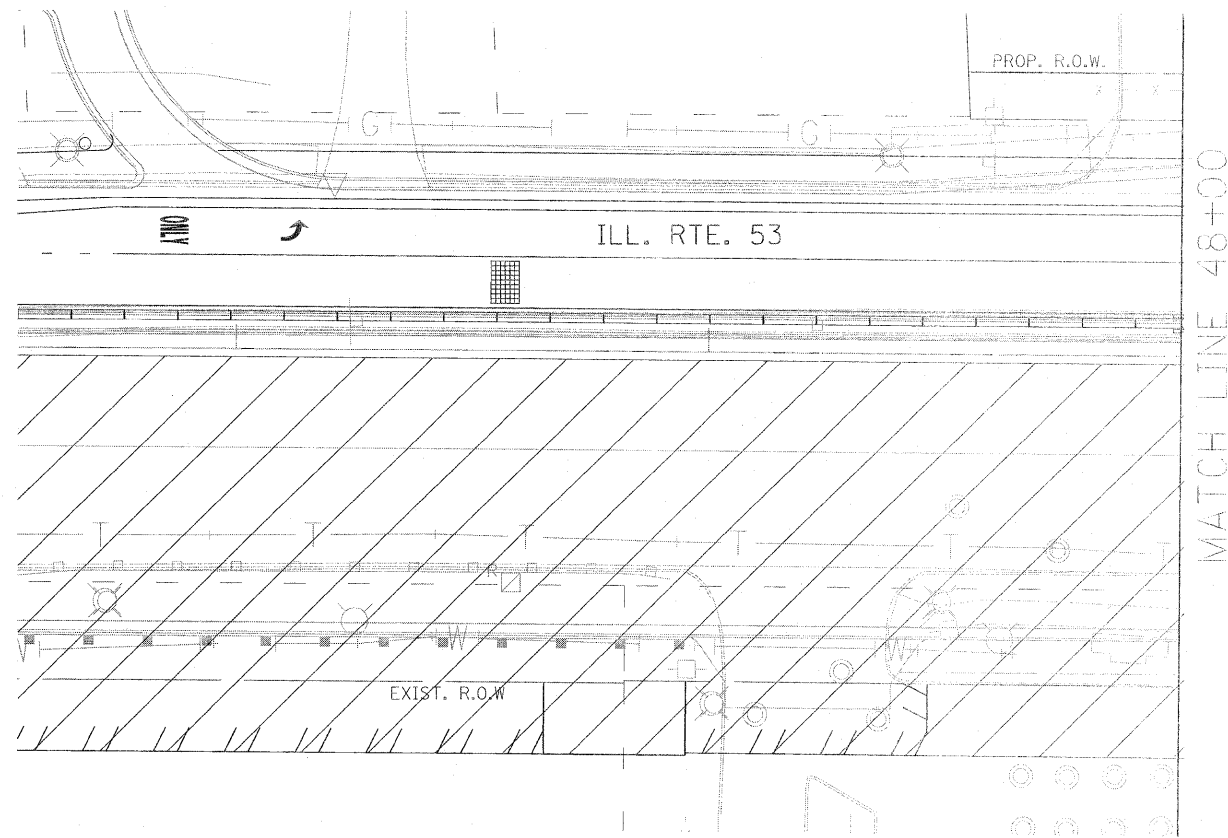
TEMPORARY TRAFFIC SIGNAL LEGEND  

 TEMPORARY COMBINATION TRAFFIC SIGNAL WOOD POLE

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

FILE NAME =	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT ARMY TRAIL RD. PRE STAGE AND STAGE 1 (SHEET 1 OF 5).</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
#FILE#		DRAWN - MAA, EA	REVISED -			2578	5328	DuPage	781	438
		CHECKED - PKG, EA	REVISED -					CONTRACT NO. 60477		
		DATE - 5/18/2011	REVISED -			SCALE: 1"=20'	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT	

Rev. 6-8-11

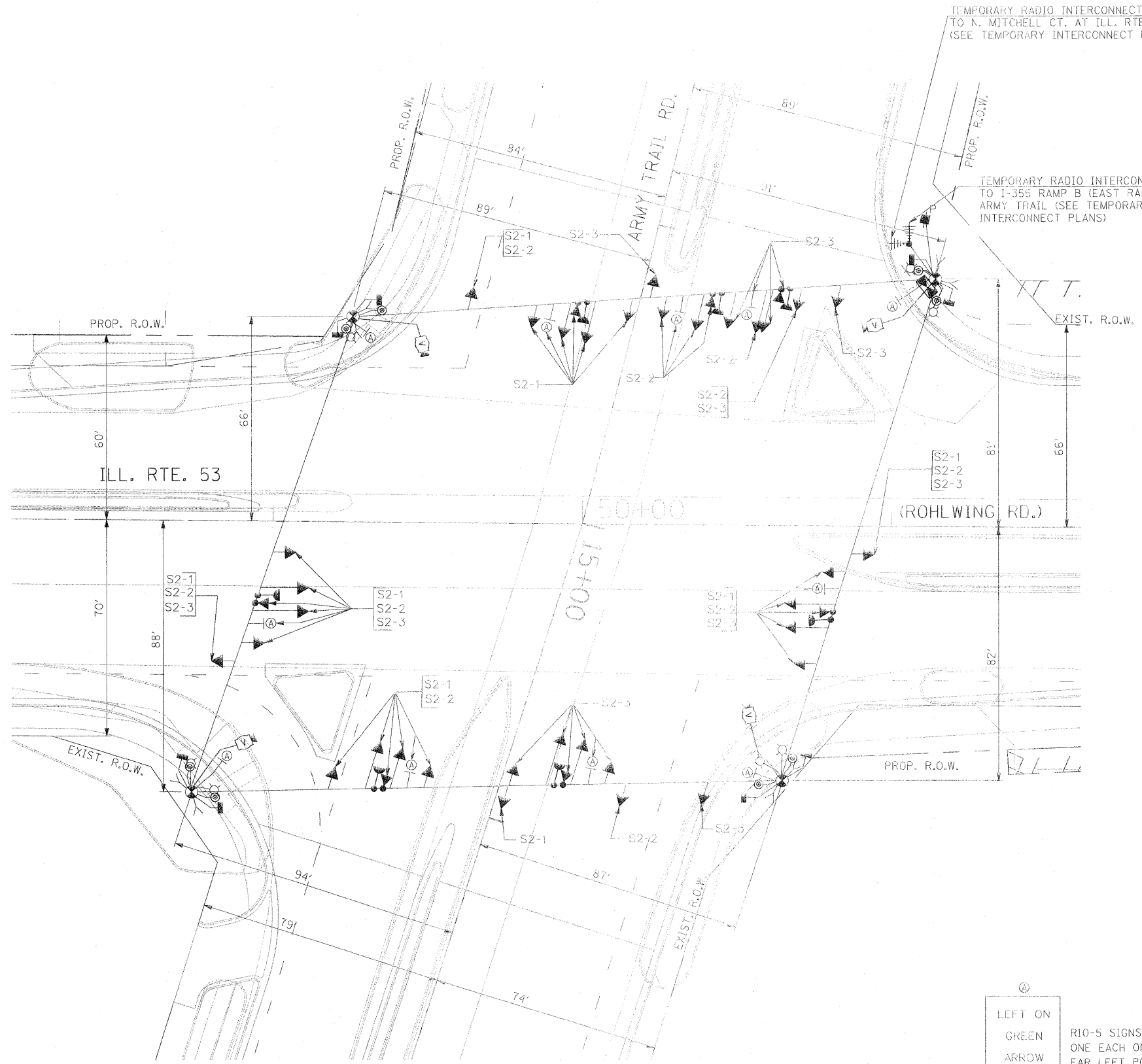


NOTE: THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR CONSTRUCTION STAGE 1 - SUBSTAGE 1 AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.

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

Rev. 6-8-11

FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT ARMY TRAIL RD. PRE STAGE AND STAGE 1 (SHEET 2 OF 5)</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 439
	PLOT SCALE = #SCALE#	DRAWN - MAA, EA	REVISED -		SCALE: 1"=20'	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
	PLOT DATE = #DATE#	CHECKED - PKG, EA	REVISED -					CONTRACT NO. 60477				
		DATE - 5/18/2011	REVISED -									



**TEMPORARY TRAFFIC SIGNAL LEGEND**

⊙ ⊗ TEMPORARY COMBINATION TRAFFIC SIGNAL WOOD POLE

NOTE: THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR CONSTRUCTION STAGE 1 - SUBSTAGE 1 AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.

SIGNAL HEAD PLACEMENTS FOR STAGES: S2-1, S2-2, AND S2-3.

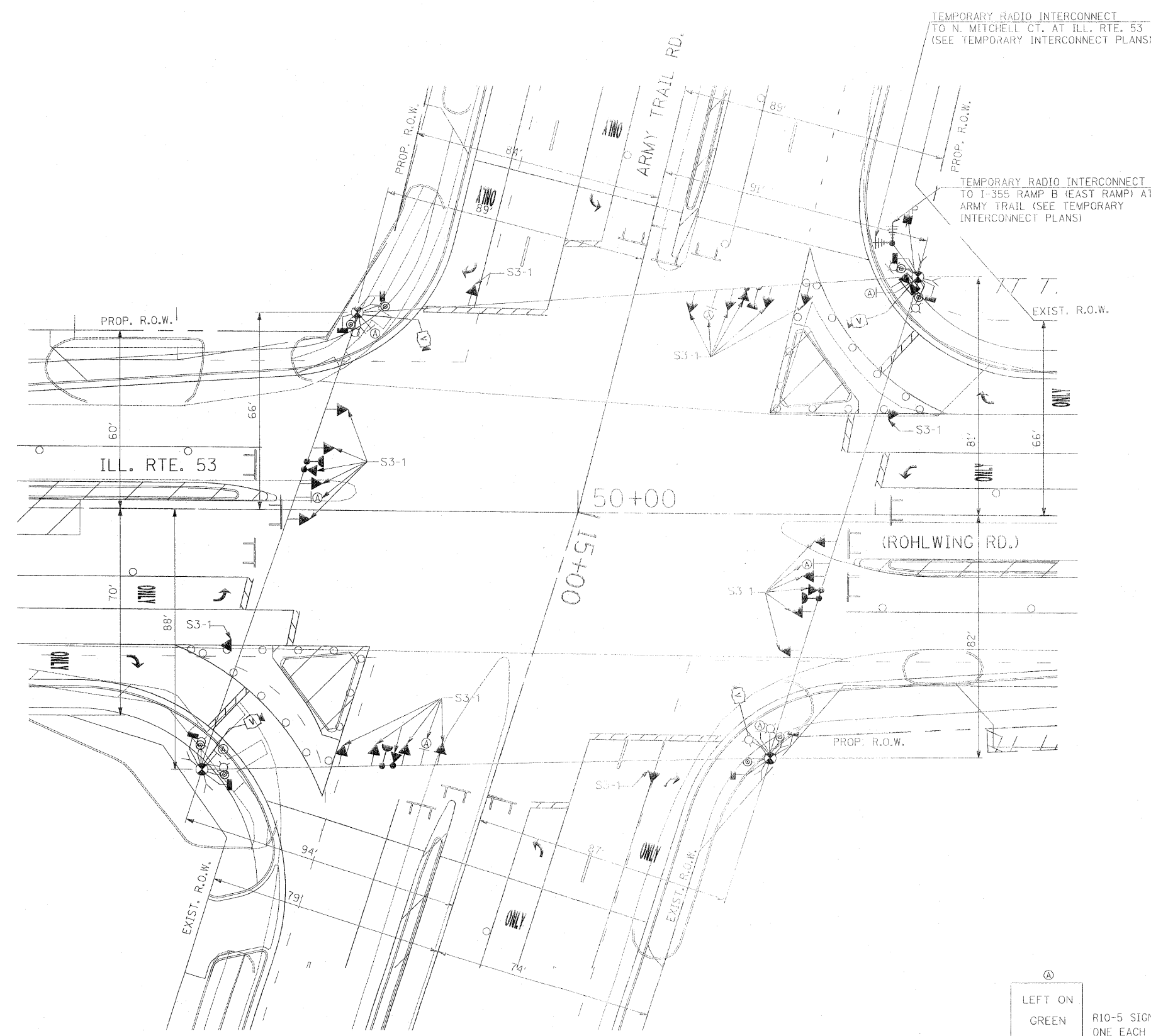
⊙  
LEFT ON  
GREEN  
ARROW  
ONLY  
  
R10-5,  
24" X 30"  
(8 REQUIRED)

R10-5 SIGNS SHALL BE MOUNTED, ONE EACH ON SPAN WIRE AND FAR LEFT POLE FOR ALL APPROACHES OF THE INTERSECTION.

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

Rev. 6-8-11

FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT ARMY TRAIL RD. STAGE 2 (SHEET 3 OF 5)</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 440
	PLOT SCALE = #SCALE#	DRAWN - MAA, EA	REVISED -					CONTRACT NO. 60477				
	CHECKED - PKG, EA	REVISED -										
	PLOT DATE = #DATE#	DATE - 5/18/2011	REVISED -									
					SCALE: 1"=20'	SHEET NO.	OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT		



TEMPORARY TRAFFIC SIGNAL LEGEND

⊗ TEMPORARY COMBINATION TRAFFIC SIGNAL WOOD POLE

NOTE: THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR CONSTRUCTION STAGE 1 - SUBSTAGE 1 AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.

SIGNAL HEAD PLACEMENTS FOR STAGES: S3

⊗  
LEFT ON  
GREEN  
ARROW  
ONLY  
  
R10-5,  
24" X 30"  
(8 REQUIRED)

R10-5 SIGNS SHALL BE MOUNTED, ONE EACH ON SPAN WIRE AND FAR LEFT POLE FOR THE APPROACH WHERE THE R10-5 IS NEEDED.

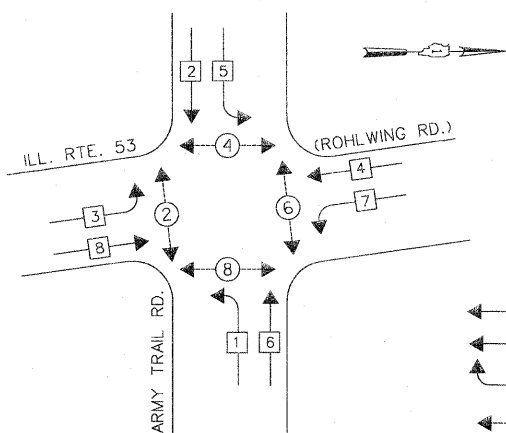
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT ARMY TRAIL RD. STAGE 3 (SHEET 4 OF 5)</b>	F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 441	
	PLOT SCALE = #SCALE#	DRAWN - MAA, EA	REVISED -			SCALE: 1"=20'	SHEET NO. OF SHEETS STA. TO STA.	CONTRACT NO. 60477		ILLINOIS FED. AID PROJECT	
	PLOT DATE = #DATE#	CHECKED - PKG, EA	REVISED -								
		DATE - 5/18/2011	REVISED -								

Rev. 6-8-11



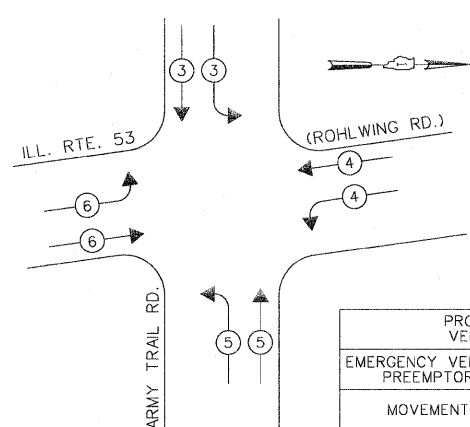
**CONTROLLER SEQUENCE**



- LEGEND**
- ← \* → DUAL ENTRY PHASE
  - ← \* → SINGLE ENTRY PHASE
  - ← \* O.L. → OVERLAP
  - ← \* → PEDESTRIAN PHASE
  - \* NUMBER REFERS TO ASSOCIATED PHASE

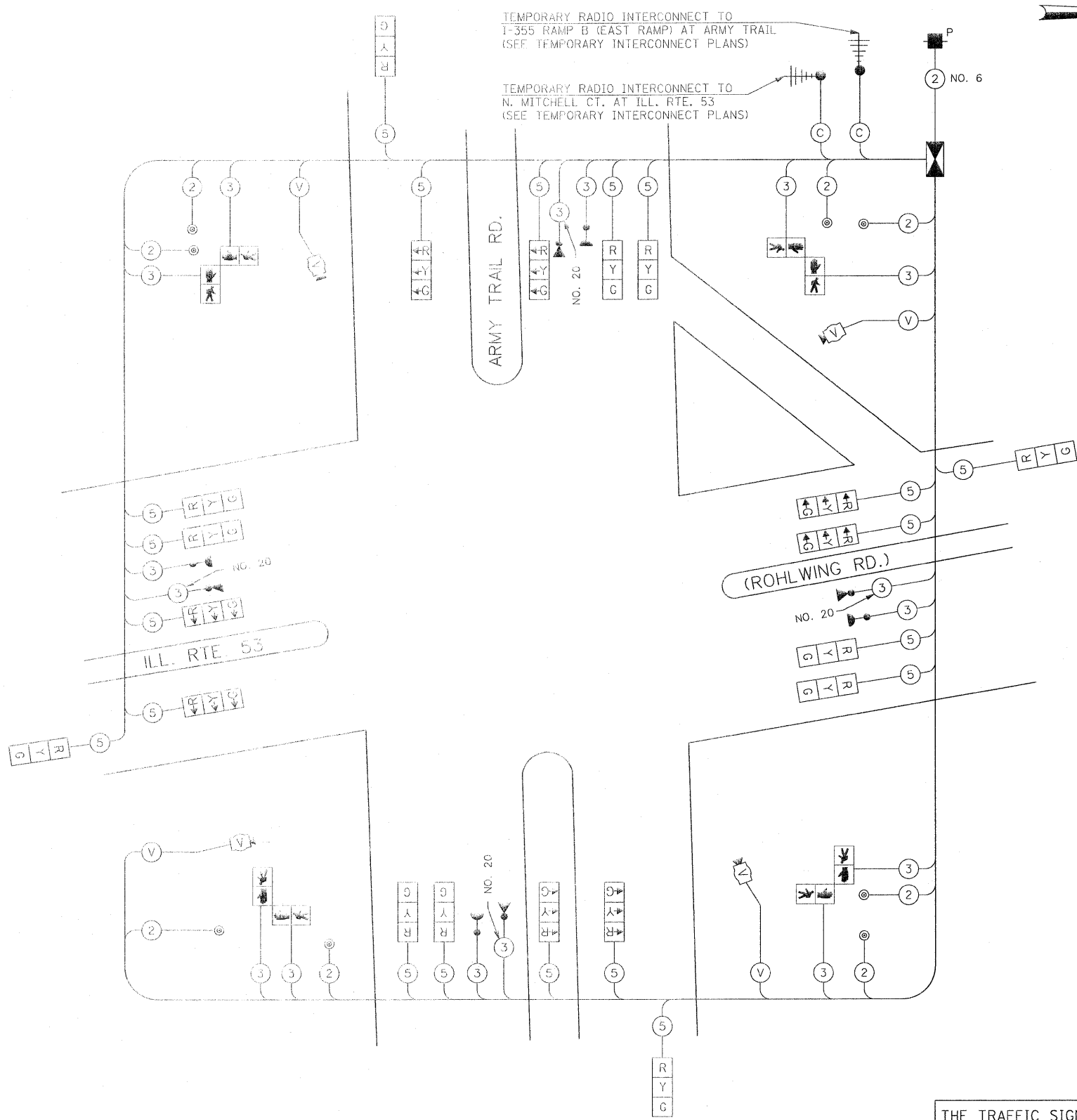
**TEMPORARY PHASE DESIGNATION DIAGRAM**  
 STAGES: PRE-STAGE, S1-1 AND AFTER PROPOSED ROADWAY GEOMETRICS ARE BUILT

**EMERGENCY VEHICLE PREEMPTION SEQUENCE**



PROPOSED EMERGENCY VEHICLE PREEMPTIONS				
EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	↓	↘	↑	↗

STAGES: PRE-STAGE, S1-1 AND AFTER PROPOSED ROADWAY GEOMETRICS ARE BUILT



**TEMPORARY CABLE PLAN**

(NOT TO SCALE)

STAGES: PRE-STAGE, S1-1, S1-2, S1-3, S2-1, S2-2, S2-3, S3, AND AFTER PROPOSED ROADWAY GEOMETRICS ARE BUILT

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE	OPERATION		
SIGNAL (RED)	20	135	17	0.50	170
(YELLOW)	20	135	25	0.25	125
(GREEN)	20	135	15	0.25	75
ARROW		135	12	0.10	
FED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN			25	0.05	
VIDEO SYSTEM	1	150		1.00	150
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	820

VILLAGE OF ADDISON  
 1 FRIENDSHIP PLAZA  
 ADDISON, ILLINOIS 60101

ENERGY SUPPLY CONTACT: CURTIS TOPPS  
 PHONE: (630) 691-4356  
 COMPANY: COMMONWEALTH EDISON

FILE NAME =	USER NAME = #USER#	DESIGNED - PKG	REVISED -
#FILE#		DRAWN - MAA, EA	REVISED -
	PLOT SCALE = #SCALE#	CHECKED - PKG, EA	REVISED -
	PLOT DATE = #DATE#	DATE - 5/18/2011	REVISED -

STATE OF ILLINOIS	TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM, TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE	F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 442
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STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.

CONTRACT NO. 60477						
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Rev. 6-8-11



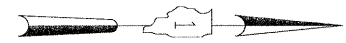
**TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION**  
 (FOR STAGE 1, SUB STAGES 2,3, STAGE 2, SUB STAGES 1,2,3 AND STAGE 3) WITH LEAD-LAG OPERATION FOR ILL. RTE. 53 ONLY)

CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	1		1		1		5			5	10		10	15			15			15			20		20	24		24		24							
EMERGENCY VEHICLE PRE-EMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	1M	1N	1P	1Q	1R	1S	1T	1U	1V	1W	1X	1Y	1Z	1AA	1BB	1CC	1DD	1EE	1FF	1GG	1HH	1JJ	1KK	1LL	1MM	
CHANGE TO EMERGENCY VEHICLE PRE-EMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1B	2	1D	3,5	1F	4	1H	1J	2,3 5	4	1M	1N	3,4 5	2	1R	1S	2	1U	1V	3,5	1X	1Y	4	1AA	1BB	2,3 4	5	1EE	1FF	2,4	1HH	1JJ	3	1LL	1MM	5	
ARMY TRAIL ROAD NEAR RIGHT AND TWO FAR RIGHT SPAN WIRE SIGNAL	E/B	R	R	R	R	R	R	R	R	R	G	Y	R	G	G	G	G	G	Y	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
ARMY TRAIL ROAD TWO FAR LEFT SPAN WIRE SIGNALS WITH LEFT TURN ARROWS	E/B	←G	←G	←Y	←R	←Y	←R	←R	←R	←R	←G	←Y	←R	←G	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R
ARMY TRAIL ROAD NEAR RIGHT AND TWO FAR RIGHT SPAN WIRE SIGNAL	W/B	R	R	R	R	R	G	Y	R	G	R	R	R	R	G	Y	R	G	Y	R	G	G	G	R	R	R	R	R	R	R	R	R	R	R	R	R	R
ARMY TRAIL ROAD TWO FAR LEFT SPAN WIRE SIGNALS WITH LEFT TURN ARROWS	W/B	←Y	←R	←Y	←R	←G	←G	←G	←Y	←R	←G	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R
ILLINOIS ROUTE 53 (ROHLWING ROAD) NEAR RIGHT AND TWO FAR RIGHT SPAN WIRE SIGNALS	N/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	G	G	Y	R	G	Y	R	G	G	G
ILLINOIS ROUTE 53 (ROHLWING ROAD) TWO FAR LEFT SPAN WIRE SIGNALS WITH LEFT TURN ARROWS	N/B	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R
ILLINOIS ROUTE 53 (ROHLWING ROAD) NEAR RIGHT AND TWO FAR RIGHT SPAN WIRE SIGNALS	S/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
ILLINOIS ROUTE 53 (ROHLWING ROAD) TWO FAR LEFT SPAN WIRE SIGNALS WITH LEFT TURN ARROWS	S/B	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R
PEDESTRIAN SIGNALS - CROSSING ILLINOIS ROUTE 53 (ROHLWING RD) ON NORTH SIDE OF ARMY TRAIL ROAD		H	H	H	H	H	H	FH	H	H	FH	H	H	H	FH	H	H	FH	H	H	FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H
PEDESTRIAN SIGNALS - CROSSING ILLINOIS ROUTE 53 (ROHLWING RD) ON SOUTH SIDE OF ARMY TRAIL ROAD		H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H
PEDESTRIAN SIGNALS - CROSSING ARMY TRAIL ROAD ON EAST SIDE OF ILLINOIS ROUTE 53 (ROHLWING RD)		H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	FH	H	H	FH	FH	H	H	FH	H	H	FH	H	H	
PEDESTRIAN SIGNALS - CROSSING ARMY TRAIL ROAD ON WEST SIDE OF ILLINOIS ROUTE 53 (ROHLWING RD)		H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	

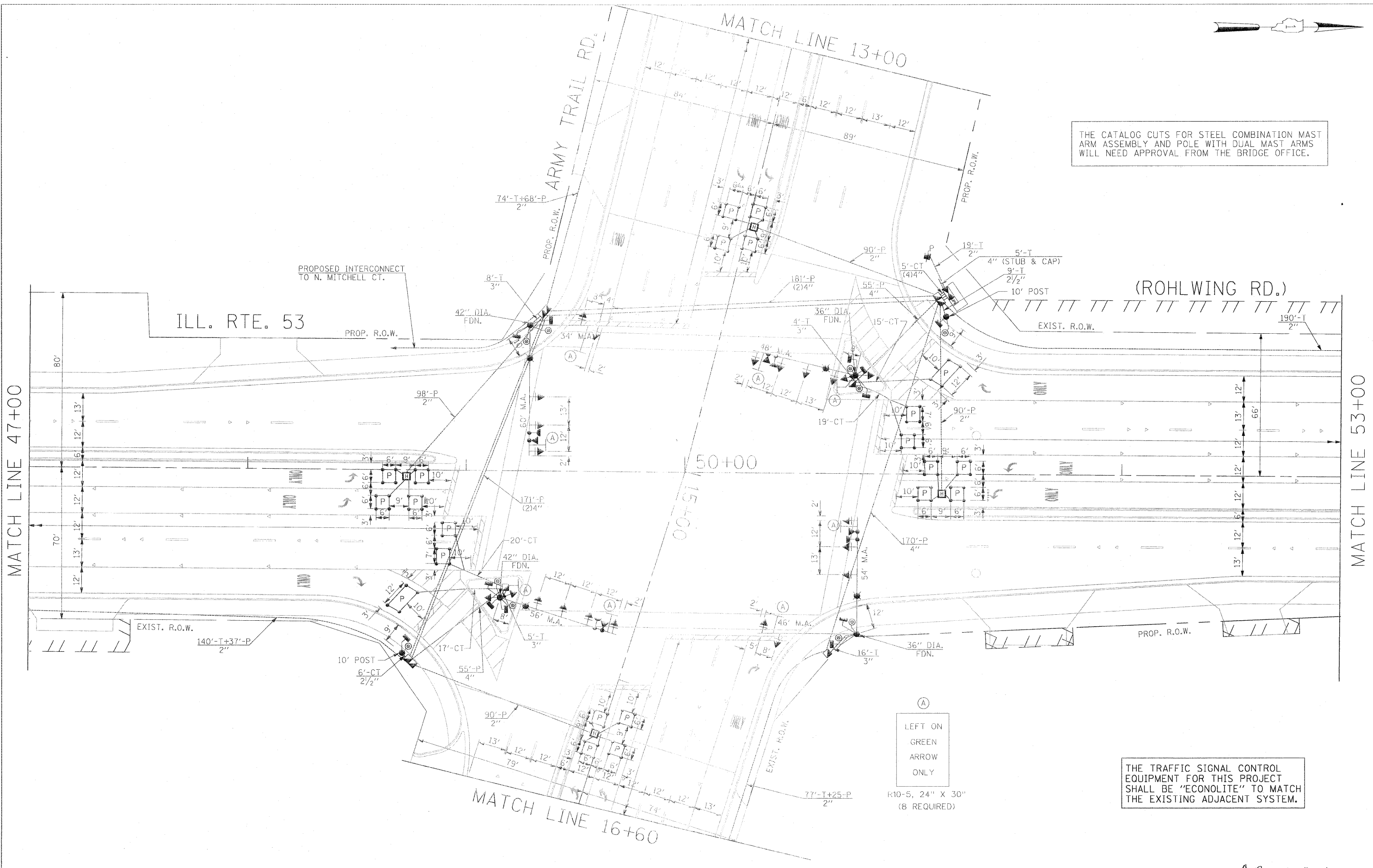
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	29		29		PREEMPTOR NUMBER 3	PREEMPTOR NUMBER 4	PREEMPTOR NUMBER 5	PREEMPTOR NUMBER 6	CLEAR TO NORMAL SEQUENCE
	INN	1PP	1QQ	1RR	2	3	4	5	
CHANGE TO EMERGENCY VEHICLE PRE-EMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1PP	1QQ	2,4 5	3					
ARMY TRAIL ROAD NEAR RIGHT AND TWO FAR RIGHT SPAN WIRE SIGNAL	E/B	R	R	R	G	R	R	R	◇
ARMY TRAIL ROAD TWO FAR LEFT SPAN WIRE SIGNALS WITH LEFT TURN ARROWS	E/B	←R	←R	←R	←R	←G	←R	←R	◇
ARMY TRAIL ROAD NEAR RIGHT AND TWO FAR RIGHT SPAN WIRE SIGNAL	W/B	R	R	R	R	R	G	R	◇
ARMY TRAIL ROAD TWO FAR LEFT SPAN WIRE SIGNALS WITH LEFT TURN ARROWS	W/B	←R	←R	←R	←R	←R	←G	←R	◇
ILLINOIS ROUTE 53 (ROHLWING ROAD) NEAR RIGHT AND TWO FAR RIGHT SPAN WIRE SIGNALS	N/B	R	R	R	R	R	R	G	◇
ILLINOIS ROUTE 53 (ROHLWING ROAD) TWO FAR LEFT SPAN WIRE SIGNALS WITH LEFT TURN ARROWS	N/B	←R	←R	←R	←R	←R	←R	←G	◇
ILLINOIS ROUTE 53 (ROHLWING ROAD) NEAR RIGHT AND TWO FAR RIGHT SPAN WIRE SIGNALS	S/B	G	Y	R	G	R	G	R	◇
ILLINOIS ROUTE 53 (ROHLWING ROAD) TWO FAR LEFT SPAN WIRE SIGNALS WITH LEFT TURN ARROWS	S/B	←G	←Y	←R	←G	←R	←G	←R	◇
PEDESTRIAN SIGNALS - CROSSING ILLINOIS ROUTE 53 (ROHLWING RD) ON NORTH SIDE OF ARMY TRAIL ROAD		H	H	H	H	H	H	H	◇
PEDESTRIAN SIGNALS - CROSSING ILLINOIS ROUTE 53 (ROHLWING RD) ON SOUTH SIDE OF ARMY TRAIL ROAD		H	H	H	H	H	H	H	◇
PEDESTRIAN SIGNALS - CROSSING ARMY TRAIL ROAD ON EAST SIDE OF ILLINOIS ROUTE 53 (ROHLWING RD)		H	H	H	H	H	H	H	◇
PEDESTRIAN SIGNALS - CROSSING ARMY TRAIL ROAD ON WEST SIDE OF ILLINOIS ROUTE 53 (ROHLWING RD)		FH	H	H	FH	H	H	H	◇

◇ EMERGENCY VEHICLE SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION OR PROPER CLEARANCE INTERVAL TO DISPLAY A DIFFERENT EMERGENCY VEHICLE INTERVAL AFTER EMERGENCY VEHICLE INTERVAL 2, 3, 4, OR 5 IS TERMINATED.

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



THE CATALOG CUTS FOR STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS WILL NEED APPROVAL FROM THE BRIDGE OFFICE.



(A)  
LEFT ON  
GREEN  
ARROW  
ONLY  
R10-5, 24" X 30"  
(8 REQUIRED)

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

FILE NAME =	USER NAME = #USER#	DESIGNED - PKG	REVISED -
#FILE#		DRAWN - MAA, EA	REVISED -
	PLOT SCALE = #SCALE#	CHECKED - PKG, EA	REVISED -
	PLOT DATE = #DATE#	DATE - 5/18/2011	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

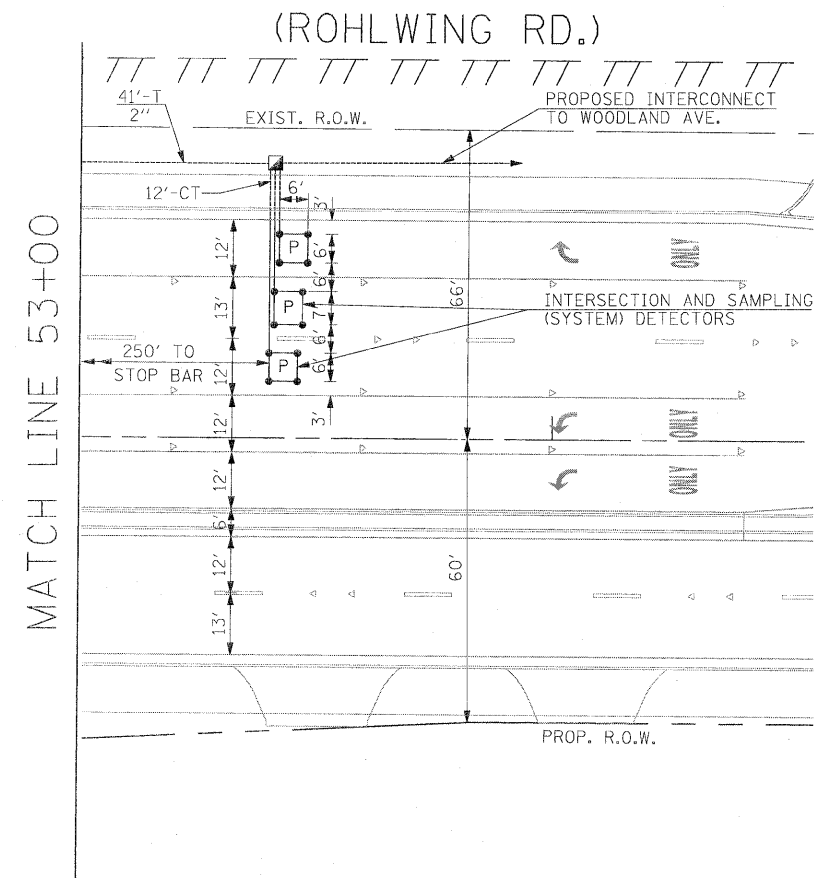
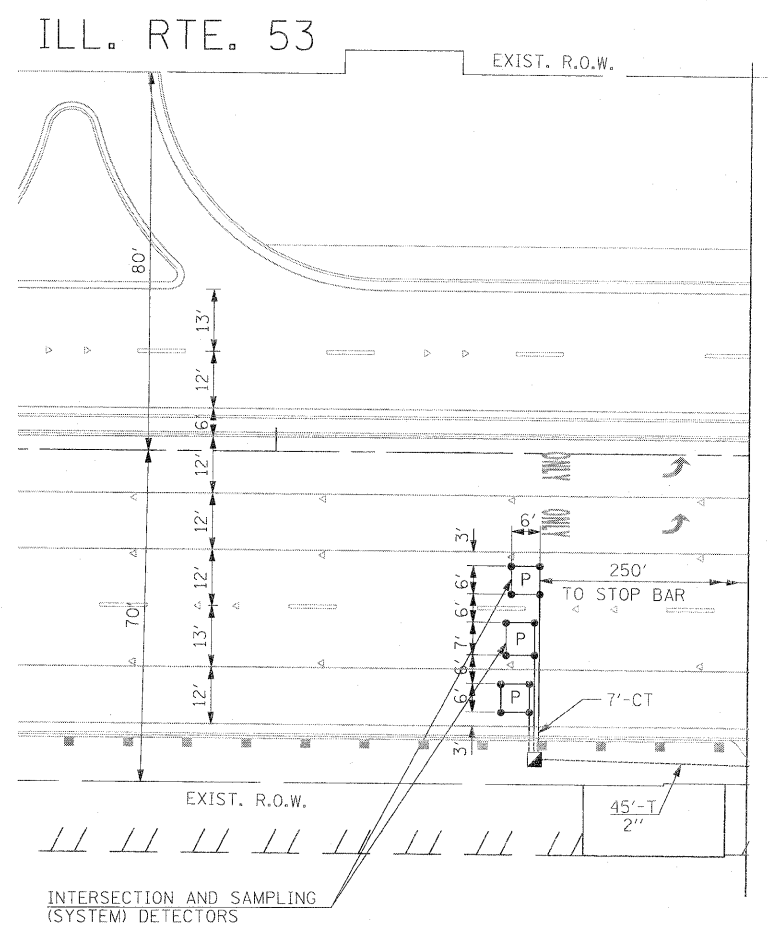
TRAFFIC SIGNAL INSTALLATION PLAN  
ILLINOIS ROUTE 53 (ROHLWING RD.) AT ARMY TRAIL RD.  
(SHEET 1 OF 2)

SCALE: 1"=20' SHEET NO. OF SHEETS STA. TO STA.

Rev. 6-8-11

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2578	532B	DuPage	781	445
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60477	





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

FILE NAME =	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC SIGNAL INSTALLATION PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT ARMY TRAIL RD. (SHEET 2 OF 2)</b>				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
#FILE#		DRAWN - MAA, EA	REVISED -		SCALE: 1"=20'	SHEET NO.	OF	SHEETS	STA.	TO STA.	25/78	532B	DuPage	781	446
		CHECKED - PKG, EA	REVISED -												
		DATE - 5/18/2011	REVISED -												

Rev. 6-8-11

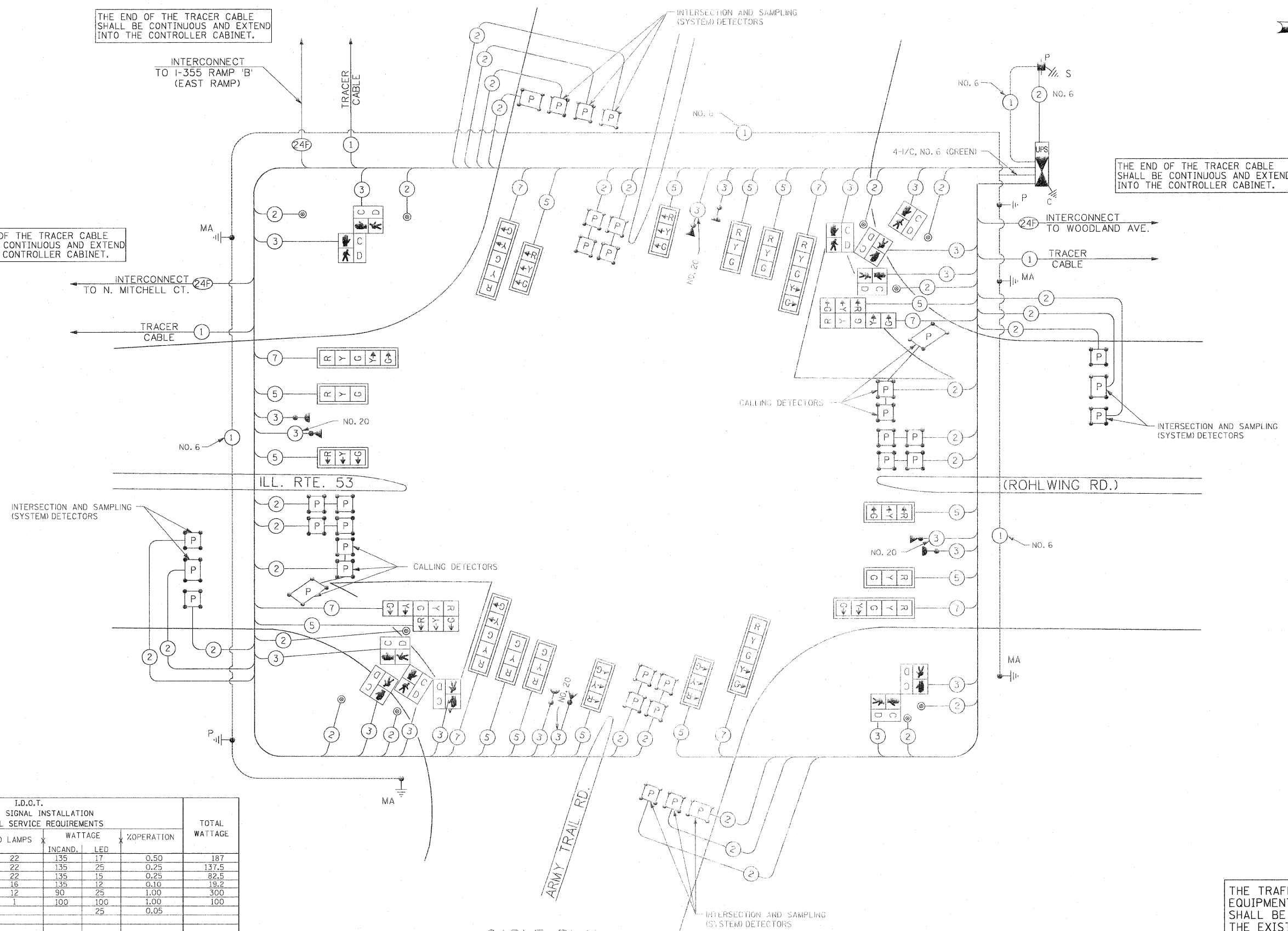
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT

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

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

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

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



CABLE PLAN  
(NOT TO SCALE)

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE		%OPERATION	
SIGNAL (RED)	22	135	17	0.50	187
(YELLOW)	22	135	25	0.25	137.5
(GREEN)	22	135	15	0.25	82.5
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	12	90	25	1.00	300
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN			25	0.05	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	826.2
VILLAGE OF ADDISON 1 FRIENDSHIP PLAZA ADDISON, ILLINOIS 60101					
ENERGY SUPPLY CONTACT: CURTIS TOPPS					
PHONE: (630) 691-4356					
COMPANY: COMMONWEALTH EDISON					

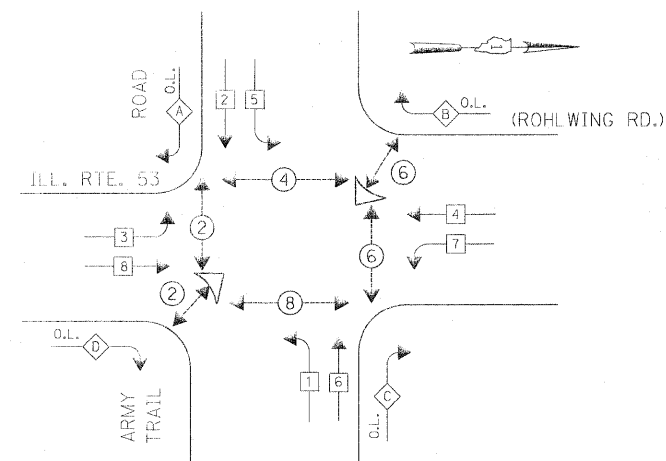
Rev. 6-8-11

SCHEDULE OF QUANTITIES

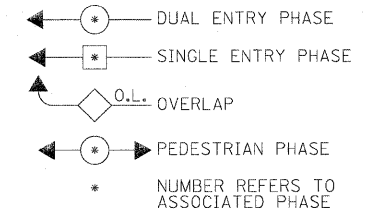
QUANTITY	UNIT	ITEM
55	SQ FT	SIGN PANEL - TYPE 1
19.5	SQ FT	SIGN PANEL - TYPE 2
752	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
15	FOOT	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL
33	FOOT	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL
25	FOOT	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL
618	FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
984	FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
7	EACH	HANDHOLE
4	EACH	HEAVY-DUTY HANDHOLE
3	EACH	DOUBLE HANDHOLE
804	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	TRANSCEIVER-FIBER OPTIC
2516	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
4437	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
4335	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
2291	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
8666	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
39	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.
1	EACH	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 48 FT.
1	EACH	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 56 FT.
1	EACH	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 54 FT. AND 46 FT.
1	EACH	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 60 FT. AND 34 FT.
8	FOOT	CONCRETE FOUNDATION, TYPE A
4	FOOT	CONCRETE FOUNDATION, TYPE C
29	FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
43	FOOT	CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER
12	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED
6	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED
2	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 3-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
18	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
23	EACH	INDUCTIVE LOOP DETECTOR
4	EACH	LIGHT DETECTOR
1	EACH	LIGHT DETECTOR AMPLIFIER
10	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
15	EACH	REMOVE EXISTING HANDHOLE
10	EACH	REMOVE EXISTING CONCRETE FOUNDATION
1331	FOOT	PREFORMED DETECTOR LOOP
1	EACH	TEMPORARY TRAFFIC SIGNAL TIMING
1	EACH	SERVICE INSTALLATION - POLE MOUNTED
1	EACH	UNINTERRUPTIBLE POWER SUPPLY
929	FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
1270	FOOT	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED

\* 100% COST TO VILLAGE OF ADDISON

CONTROLLER SEQUENCE



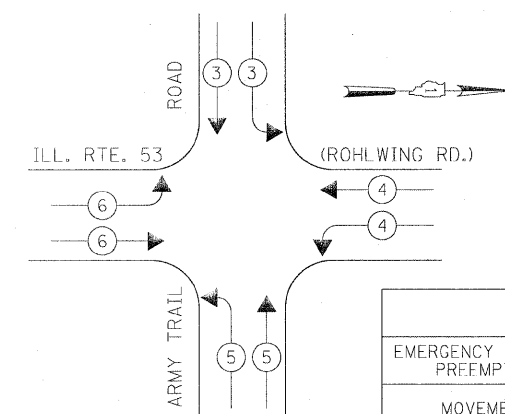
LEGEND



PHASE DESIGNATION DIAGRAM

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3
B	= 4	+ 5
C	= 6	+ 7
D	= 8	+ 1

EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

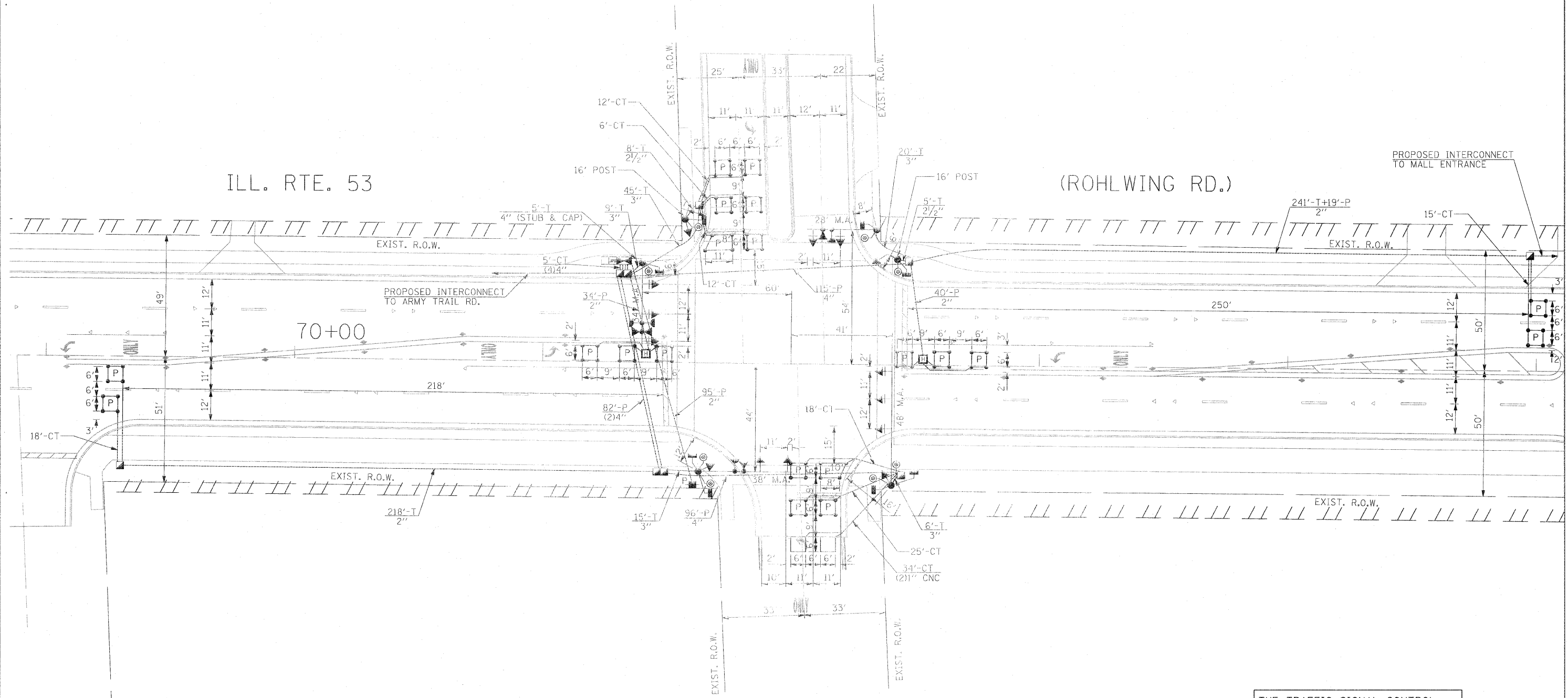
Rev. 6-8-11



WOODLAND AVE.

ILL. RTE. 53

(ROHLWING RD.)



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

FILE NAME =		USER NAME = #USER#		DESIGNED - PKG		REVISED -		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION			TRAFFIC SIGNAL INSTALLATION PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT WOODLAND AVE.				F.A.P. RTE.		SECTION		COUNTY		TOTAL SHEETS		SHEET NO.	
#FILEL#				DRAWN - MAA, EA		REVISED -									SCALE: 1"=20'		SHEET NO. OF SHEETS STA.		TO STA.		2578		532B	
		PLOT SCALE = #SCALE#		CHECKED - PKG, EA		REVISED -													CONTRACT NO. 60477					
		PLOT DATE = #DATE#		DATE - 5/18/2011		REVISED -													FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

Rev. 6-8-11

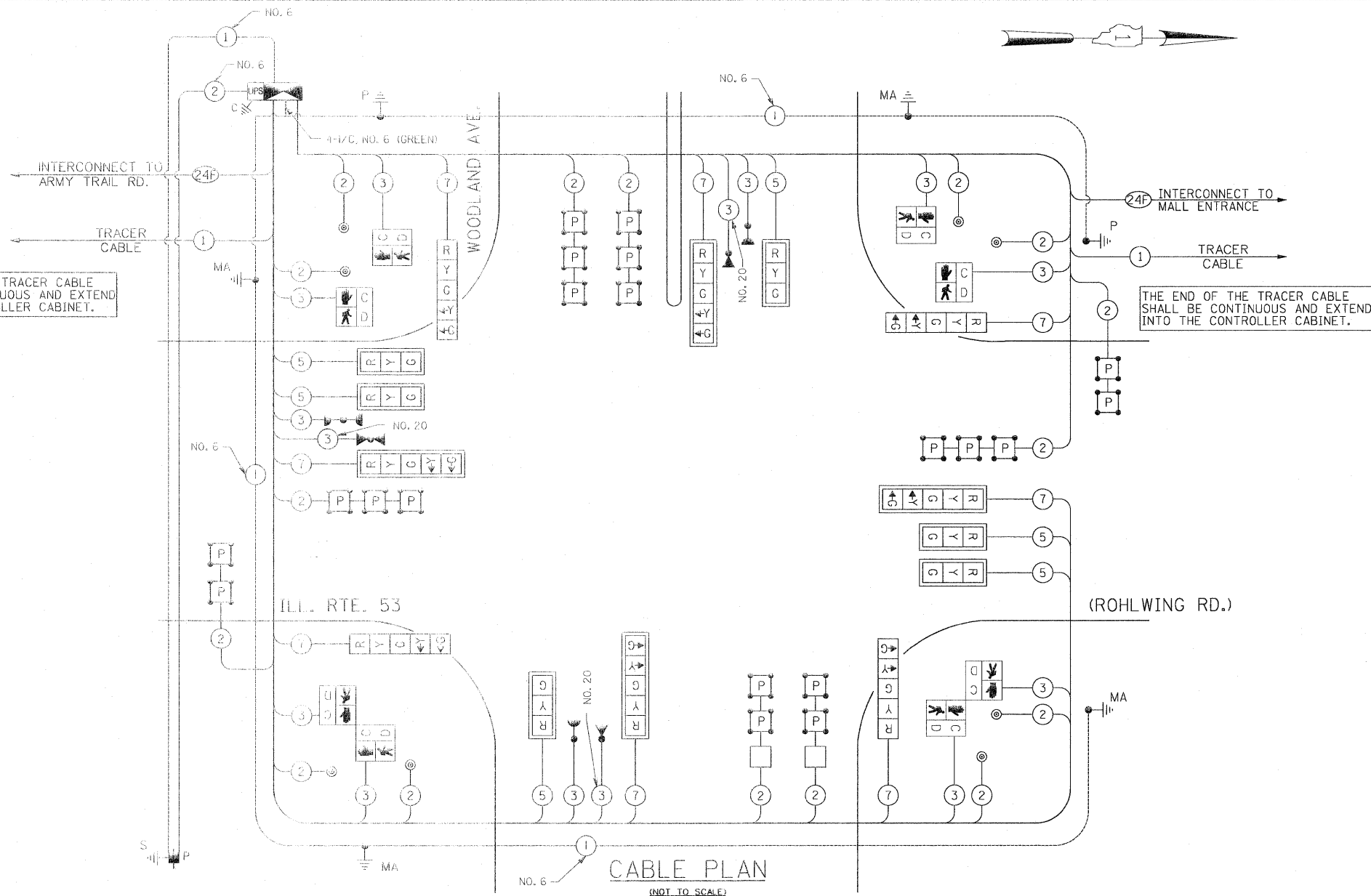
SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
33	SO FT	SIGN PANEL - TYPE 1
459	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
13	FOOT	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL
95	FOOT	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL
25	FOOT	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL
188	FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
375	FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
5	EACH	HANDHOLE
2	EACH	HEAVY-DUTY HANDHOLE
2	EACH	DOUBLE HANDHOLE
581	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	TRANSCEIVER-FIBER OPTIC
1232	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
1769	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
1094	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
1460	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
1600	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
115	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.
8	FOOT	CONCRETE FOUNDATION, TYPE A
4	FOOT	CONCRETE FOUNDATION, TYPE C
10	FOOT	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER
35	FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
6	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED
4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED
4	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
10	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
8	EACH	INDUCTIVE LOOP DETECTOR
64	FOOT	DETECTOR LOOP, TYPE 1
3	EACH	LIGHT DETECTOR
1	EACH	LIGHT DETECTOR AMPLIFIER
8	EACH	PEDESTRIAN PUSH-BUTTON
667	FOOT	PERFORMED DETECTOR LOOP
1	EACH	SERVICE INSTALLATION - POLE MOUNTED
1	EACH	UNINTERRUPTIBLE POWER SUPPLY
706	FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
481	FOOT	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED

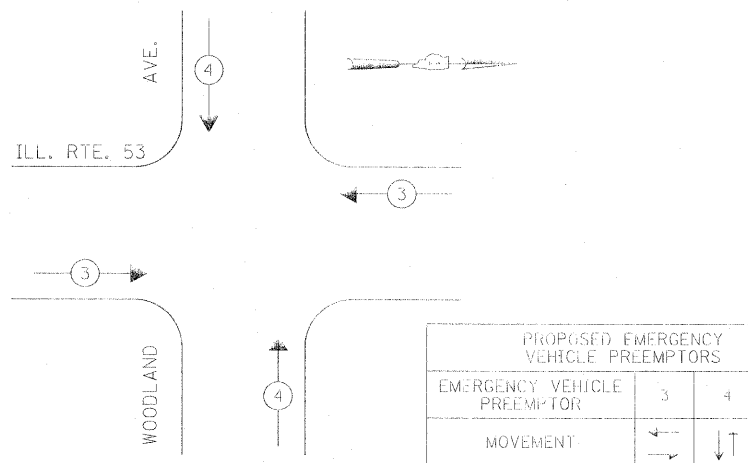
\* 100% COST TO VILLAGE OF ADDISON

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

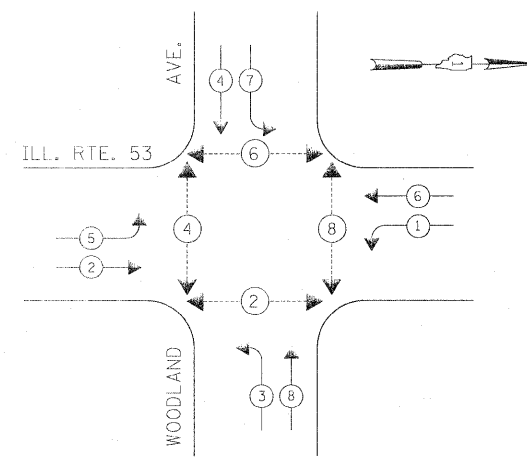
THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.



EMERGENCY VEHICLE PREEMPTION SEQUENCE



CONTROLLER SEQUENCE



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

LEGEND

- ◉ \* — DUAL ENTRY PHASE
- ◉ \* — SINGLE ENTRY PHASE
- ◉ O.L. — OVERLAP
- ◉ \* — PEDESTRIAN PHASE
- \* — NUMBER REFERS TO ASSOCIATED PHASE

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	135	17	0.50	119
(YELLOW)	14	135	25	0.25	87.5
(GREEN)	14	135	15	0.25	52.5
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN			25	0.05	
FLASHER				0.50	
TOTAL =					578.2

ENERGY COSTS TO: VILLAGE OF ADDISON  
1 FRIENDSHIP PLAZA  
ADDISON, ILLINOIS 60101

ENERGY SUPPLY CONTACT: CURTIS TOPPS  
PHONE: (630) 691-4356  
COMPANY: COMMONWEALTH EDISON

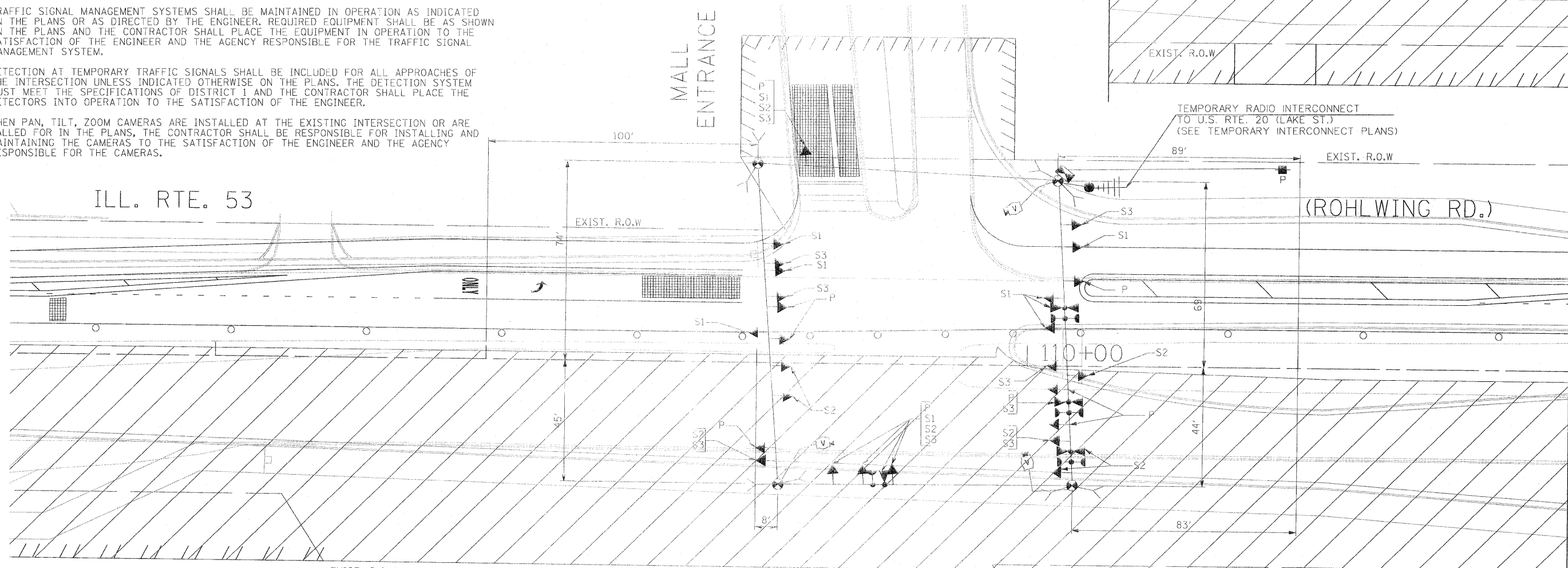
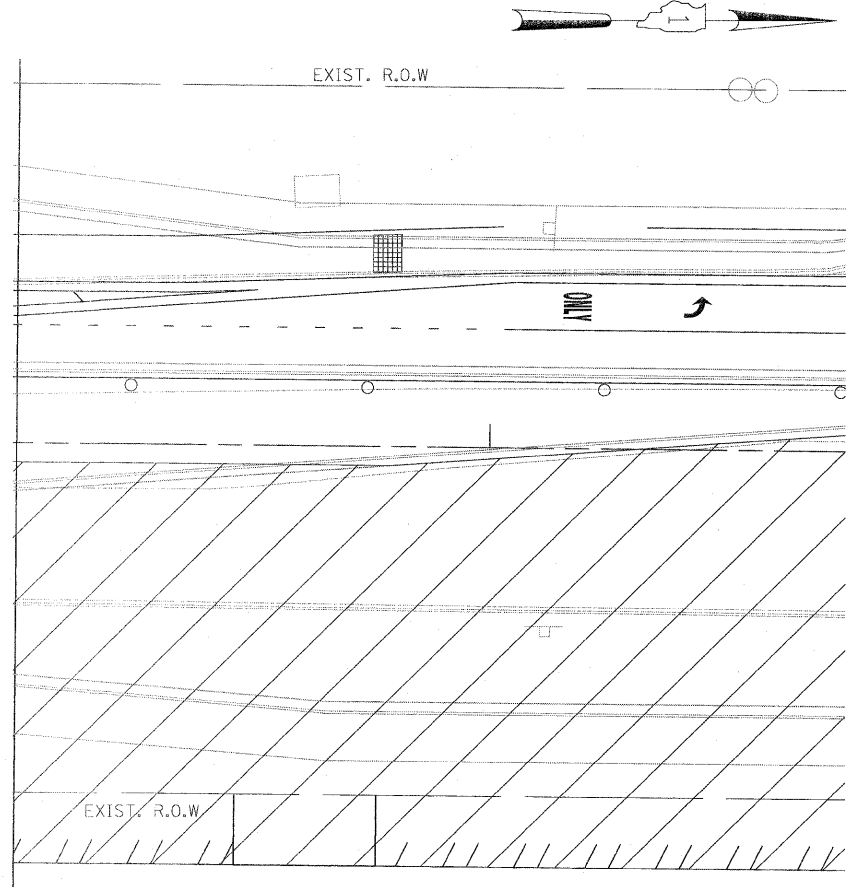
NOTES FOR TEMPORARY TRAFFIC SIGNALS

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" (300mm) 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 RAILROAD INTERSECTIONS, AND 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.

NOTE 1: THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR CONSTRUCTION STAGE 1 - SUBSTAGE 1 AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.

NOTE 2: THE SIGNAL HEAD PLACEMENT FOR MALL ENTRANCE FOR CONSTRUCTION STAGES S2 AND S3 SHALL BE DETERMINED IN FIELD BY THE CONTRACTOR DEPENDING ON THE CONSTRUCTION STAGING USED BY THE CONTRACTOR FOR MALL ENTRANCE.

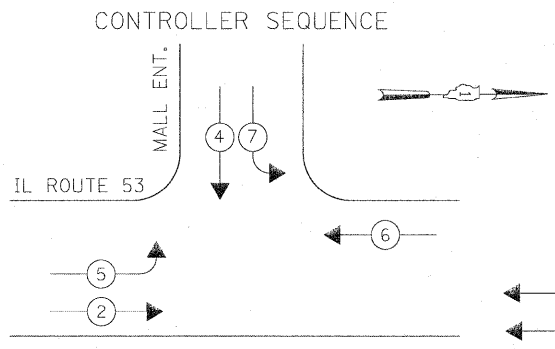
MATCH LINE STA. 112+00



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

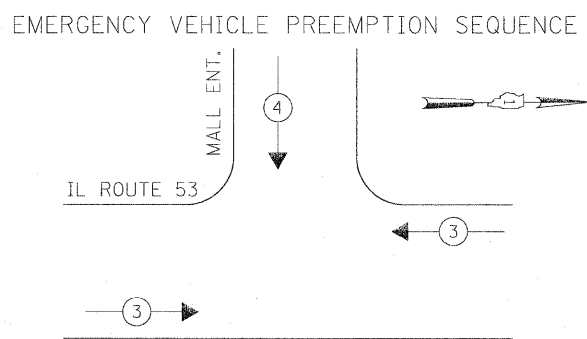
AT MALL ENTRANCE: S1 = STAGE 1 (NO SUBSTAGES)  
S2 = STAGE 1 (NO SUBSTAGES)  
S3 = STAGE 1 (NO SUBSTAGES)

FILE NAME =	USER NAME = #IJSFR#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT MALL ENTRANCE PHASE STAGE, STAGE 1, STAGE 2, AND STAGE 3 (SHEET 1 OF 2)</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 451
#FILE#	PLOT SCALE = #SCALE#	DRAWN - MAA, EA	REVISED -		SCALE: 1"=20'	SHEET NO. OF SHEETS STA. TO STA.	CONTRACT NO. 60477					
	PLOT DATE = #DATE#	CHECKED - PKG, EA	REVISED -				FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT					
		DATE - 5/18/2011	REVISED -				Rev. 6-B-11					



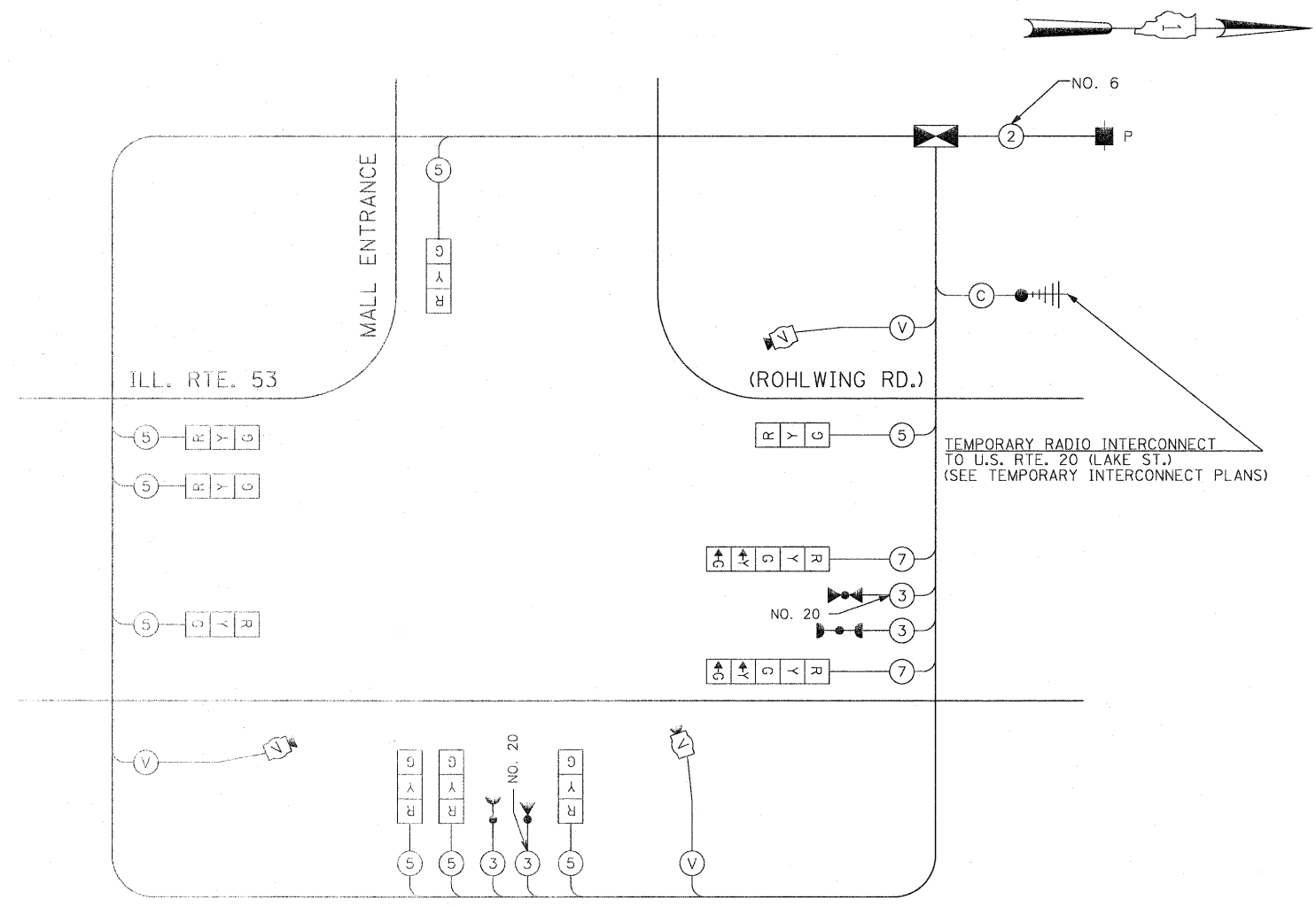
- LEGEND**
- ⊛ DUAL ENTRY PHASE
  - ⊠ SINGLE ENTRY PHASE
  - ◊ O.L. OVERLAP
  - ⊠ PEDESTRIAN PHASE
  - \* NUMBER REFERS TO ASSOCIATED PHASE

**PHASE DESIGNATION DIAGRAM**  
 STAGES: PRE-STAGE, STAGE 1, STAGE 2, STAGE 3, AND AFTER PROPOSED ROADWAY GEOMETRICS ARE BUILT



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

STAGES: PRE-STAGE, STAGE 1, STAGE 2, STAGE 3, AND AFTER PROPOSED ROADWAY GEOMETRICS ARE BUILT



**TEMPORARY CABLE PLAN**

(NOT TO SCALE)  
 PRE-STAGE, STAGE 1, STAGE 2, STAGE 3,  
 AND AFTER PROPOSED ROADWAY GEOMETRICS ARE BUILT

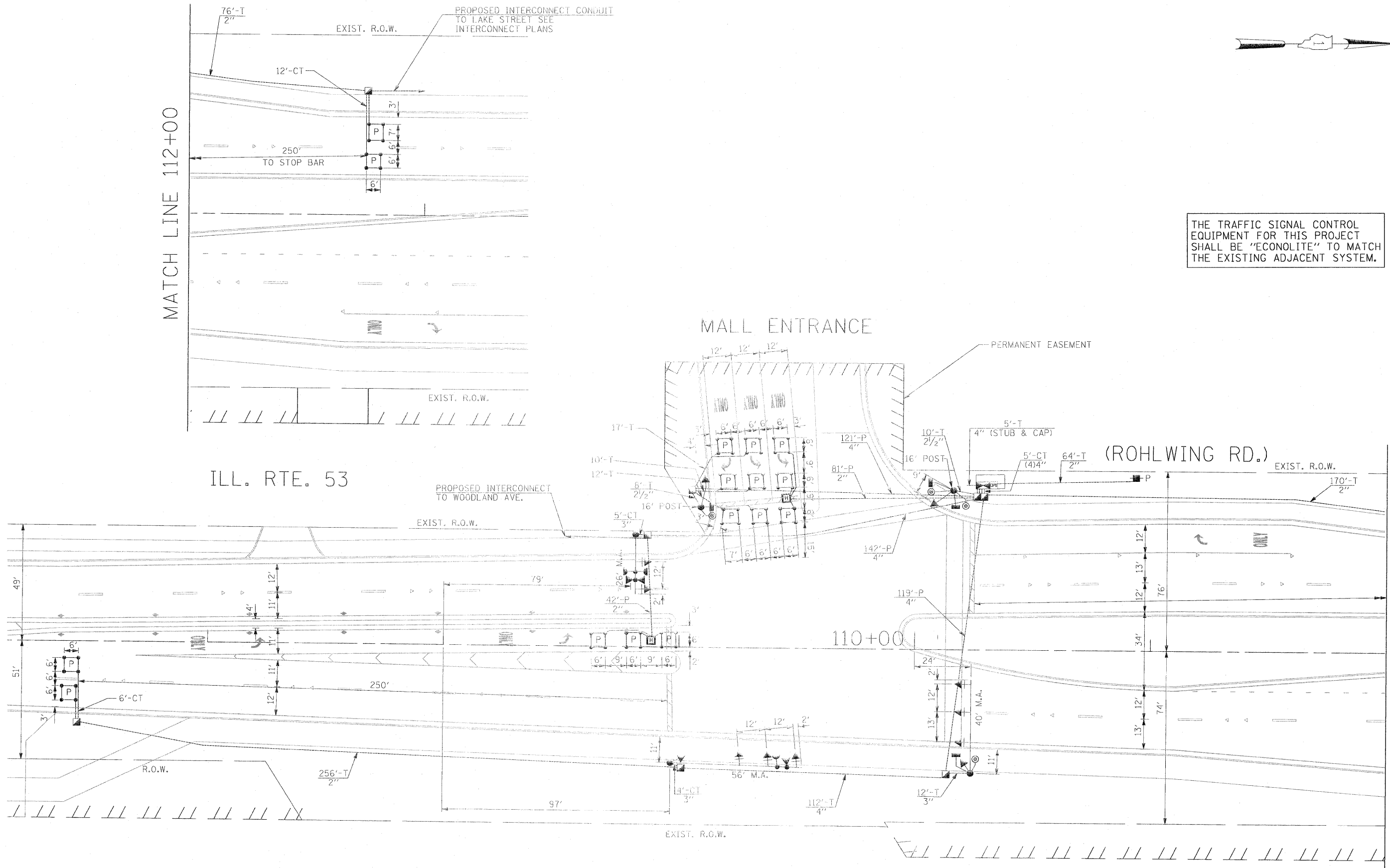
I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE		%OPERATION	
		INCAND.	LED		
SIGNAL (RED)	10	135	17	0.50	85
(YELLOW)	10	135	25	0.25	62.5
(GREEN)	10	135	15	0.25	37.5
ARROW	4	135	12	0.10	4.8
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN			25	0.05	
VIDEO SYSTEM	1	150		1.00	150
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 439.8
VILLAGE OF ADDISON 1 FRIENDSHIP PLAZA ADDISON, ILLINOIS 60101					
ENERGY SUPPLY CONTACT: CURTIS TOPPS PHONE: (630) 691-4356 COMPANY: COMMONWEALTH EDISON					

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



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

MATCH LINE 112+00



MATCH LINE 112+00

FILE NAME = #FILEL#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC SIGNAL INSTALLATION PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT MALL ENTRANCE</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 453
	PLOT SCALE = #SCALE#	DRAWN - MAA, EA	REVISED -		SCALE: 1"=20'	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		CONTRACT NO. 60477		
	PLOT DATE = #DATE#	CHECKED - PKG, EA	REVISED -									
		DATE - 5/18/2011	REVISED -									

Rev. 6-8-11

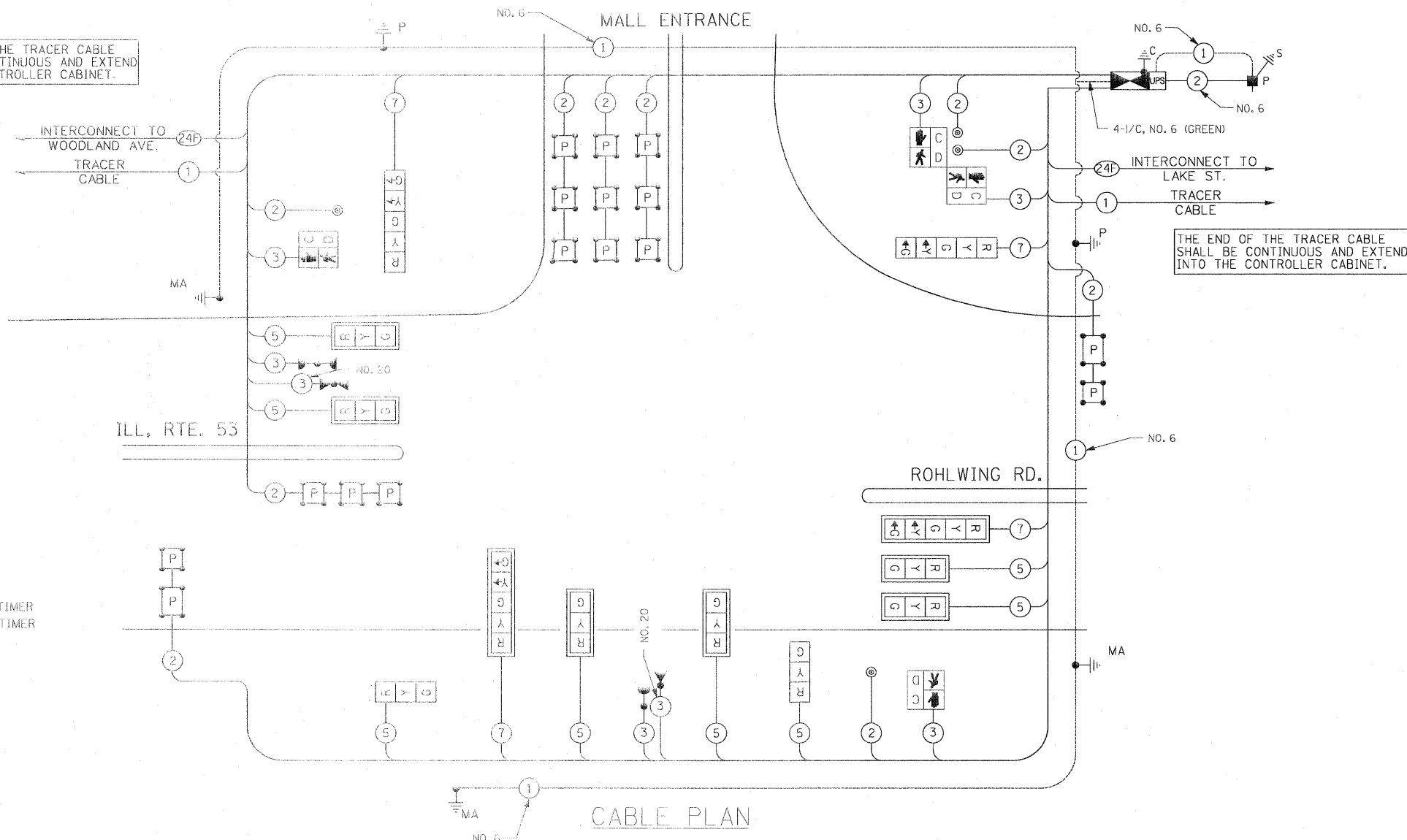


SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
7.5	SQ FT	SIGN PANEL - TYPE 1
19.5	SQ FT	SIGN PANEL - TYPE 2
566	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
18	FOOT	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL
21	FOOT	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL
137	FOOT	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL
123	FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
382	FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
6	EACH	HANDHOLE
2	EACH	HEAVY-DUTY HANDHOLE
1	EACH	DOUBLE HANDHOLE
718	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	TRANSCEIVER-FIBER OPTIC
427	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
1026	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
2001	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
775	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
1434	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
84	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 56 FT.
8	FOOT	CONCRETE FOUNDATION, TYPE A
4	FOOT	CONCRETE FOUNDATION, TYPE C
10	FOOT	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER
13	FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
21	FOOT	CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER
6	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED
2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED
2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
1	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
8	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
6	EACH	INDUCTIVE LOOP DETECTOR
2	EACH	LIGHT DETECTOR
1	EACH	LIGHT DETECTOR AMPLIFIER
4	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
521	FOOT	PREFORMED DETECTOR LOOP
1	EACH	TEMPORARY TRAFFIC SIGNAL TIMING
1	EACH	SERVICE INSTALLATION - POLE MOUNTED
1	EACH	UNINTERRUPTIBLE POWER SUPPLY
756	FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
571	FOOT	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED

\* 100% COST TO VILLAGE OF ADDISON

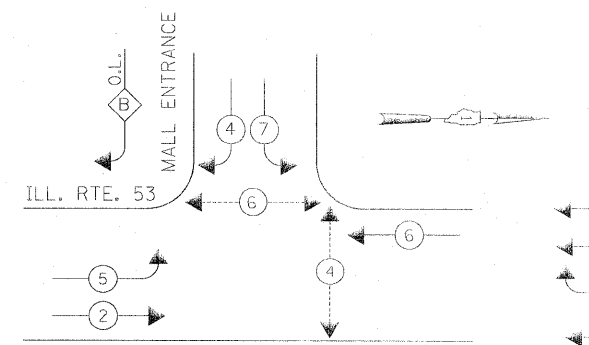
THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.



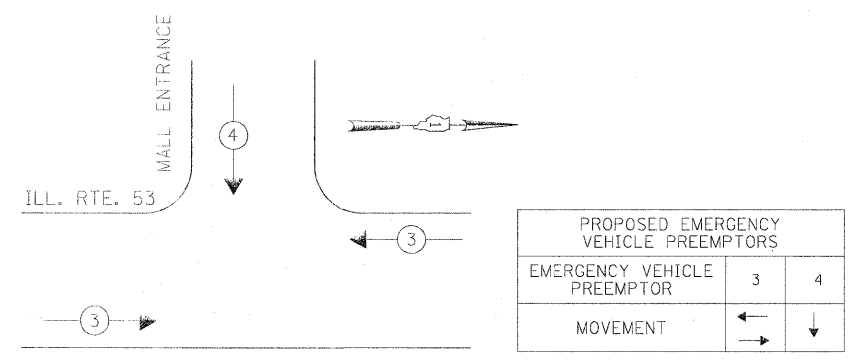
THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

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

CONTROLLER SEQUENCE



EMERGENCY VEHICLE PREEMPTION SEQUENCE



I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE	%OPERATION		
		INCAND.	LED		
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	4	90	25	1.00	100
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN			25	0.05	
FLASHER				0.50	
ENERGY COSTS TO: VILLAGE OF ADDISON					TOTAL = 431.6
ENERGY SUPPLY CONTACT: CURTIS TOPPS					
PHONE: (630) 691-4356					
COMPANY: COMMONWEALTH EDISON					

**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" (300mm) 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 RAILROAD INTERSECTIONS, AND 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.

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGH-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACTOR'S BID PRICE.

- 1 EACH CONTROLLER AND CABINET COMPLETE
- 4 EACH SIGNAL HEAD, 1-FACE, 3-SECTION, MAST ARM MOUNTED
- 6 EACH SIGNAL HEAD, 1-FACE, 5-SECTION, MAST ARM MOUNTED
- 1 EACH SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
- 3 EACH SIGNAL HEAD, 2-FACE, 5-SECTION, BRACKET MOUNTED
- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED
- 2 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE, BRACKET MOUNTED
- 2 EACH PEDESTRIAN SIGNAL HEAD, 3-FACE, BRACKET MOUNTED
- 10 EACH TRAFFIC SIGNAL BACKPLATE
- 4 EACH TRAFFIC SIGNAL POST
- 4 EACH STEEL MAST ARM ASSEMBLY AND POLE
- 6 EACH PEDESTRIAN PUSH-BUTTON
- 1 EACH SERVICE INSTALLATION

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

- AGENCY: VILLAGE OF ADDISON
- CONTACT INFORMATION:  
 RUDY ESPEDIDO  
 VILLAGE OF ADDISON  
 ENGINEERING DEPARTMENT  
 PHONE: (630)693-7533
- 2 EACH LIGHT DETECTOR
  - 1 EACH LIGHT DETECTOR AMPLIFIER

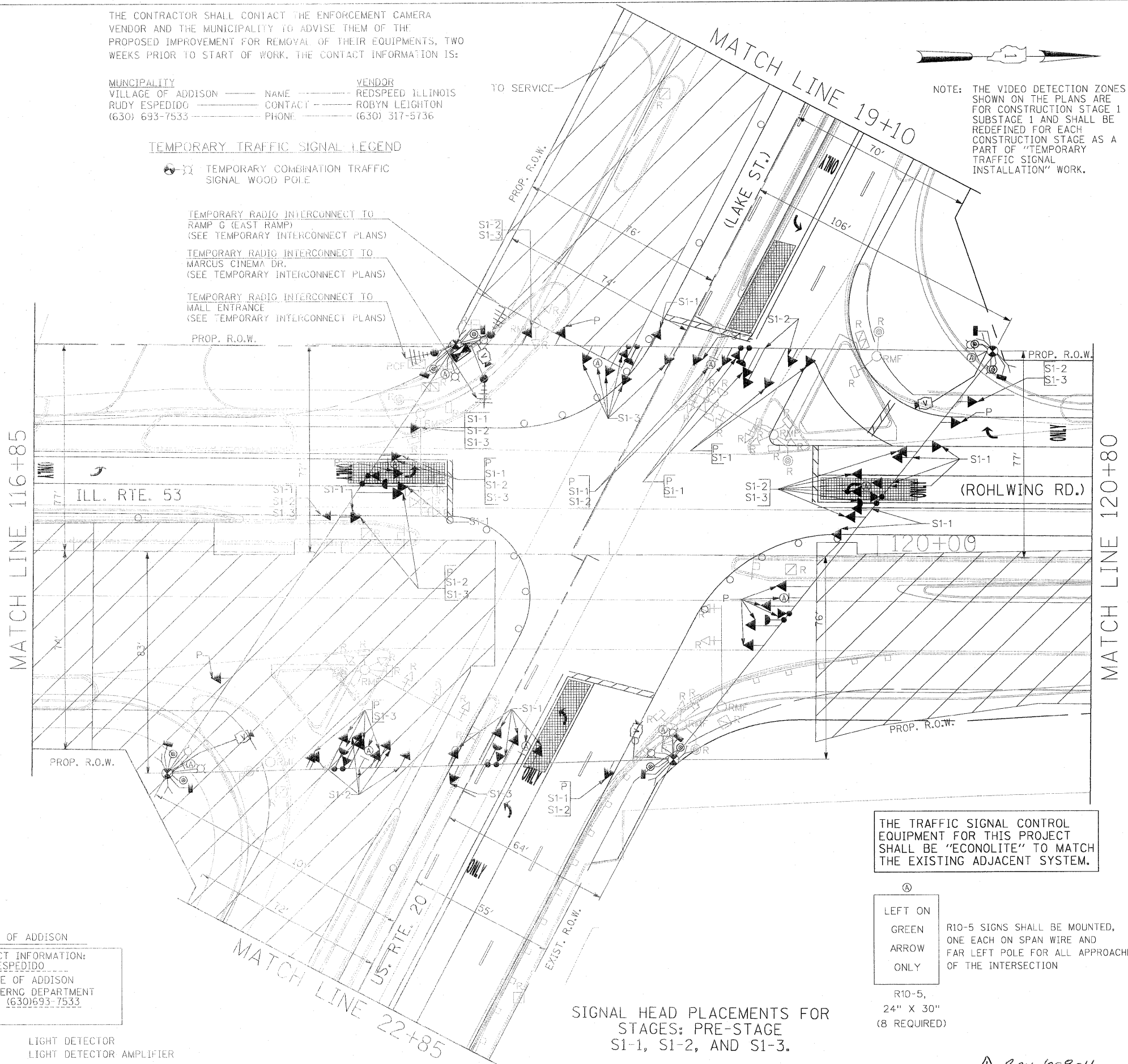
THE CONTRACTOR SHALL CONTACT THE ENFORCEMENT CAMERA VENDOR AND THE MUNICIPALITY TO ADVISE THEM OF THE PROPOSED IMPROVEMENT FOR REMOVAL OF THEIR EQUIPMENTS, TWO WEEKS PRIOR TO START OF WORK. THE CONTACT INFORMATION IS:

MUNICIPALITY: VILLAGE OF ADDISON  
 NAME: RUDY ESPEDIDO  
 CONTACT: (630) 693-7533

VENDOR: REDSPEED ILLINOIS  
 NAME: ROBYN LEIGHTON  
 CONTACT: (630) 317-5736

**TEMPORARY TRAFFIC SIGNAL LEGEND**

- ⊙ TEMPORARY COMBINATION TRAFFIC SIGNAL WOOD POLE
- TEMPORARY RADIO INTERCONNECT TO RAMP G (EAST RAMP) (SEE TEMPORARY INTERCONNECT PLANS)
- TEMPORARY RADIO INTERCONNECT TO MARCUS CINEMA DR. (SEE TEMPORARY INTERCONNECT PLANS)
- TEMPORARY RADIO INTERCONNECT TO MALL ENTRANCE (SEE TEMPORARY INTERCONNECT PLANS)



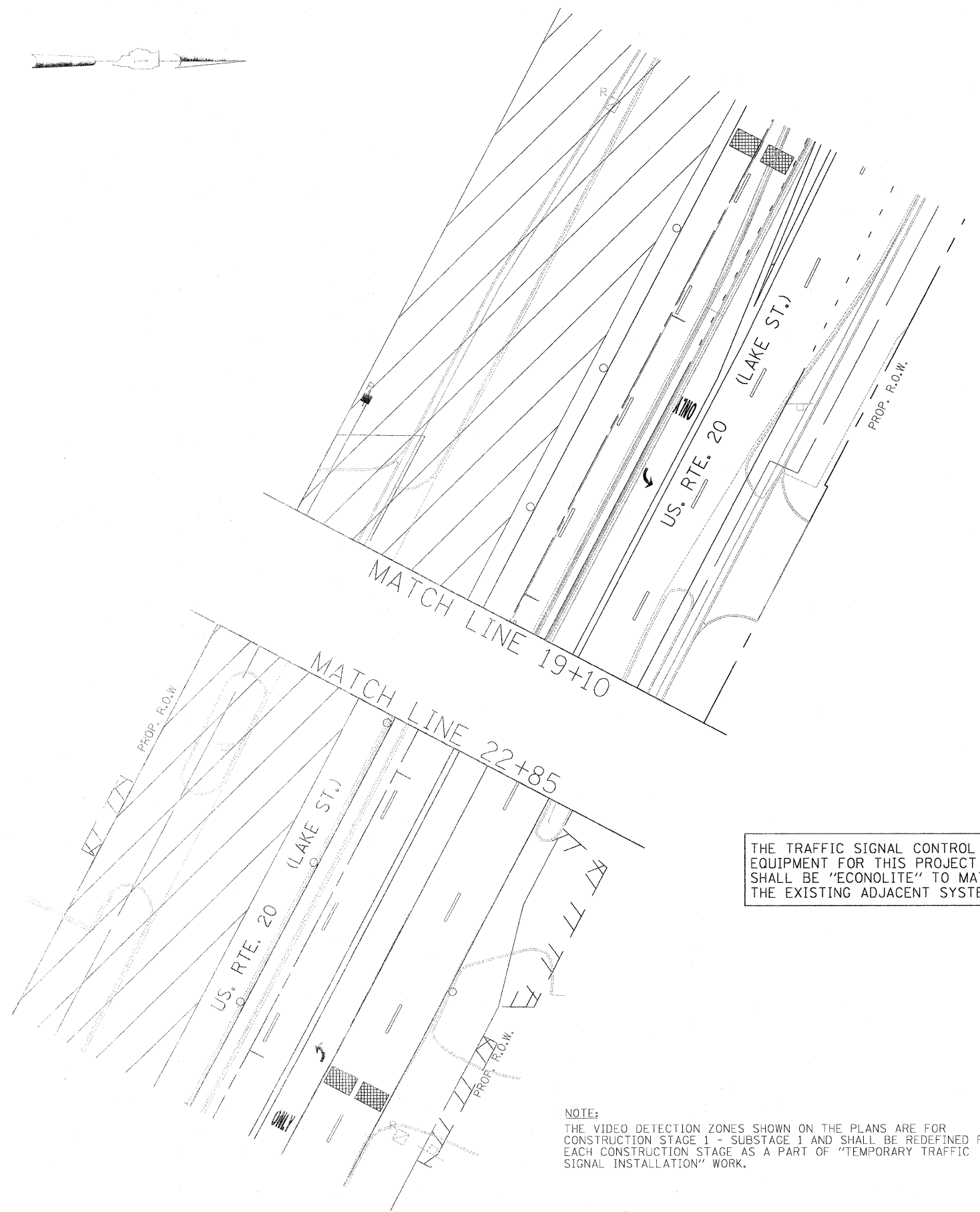
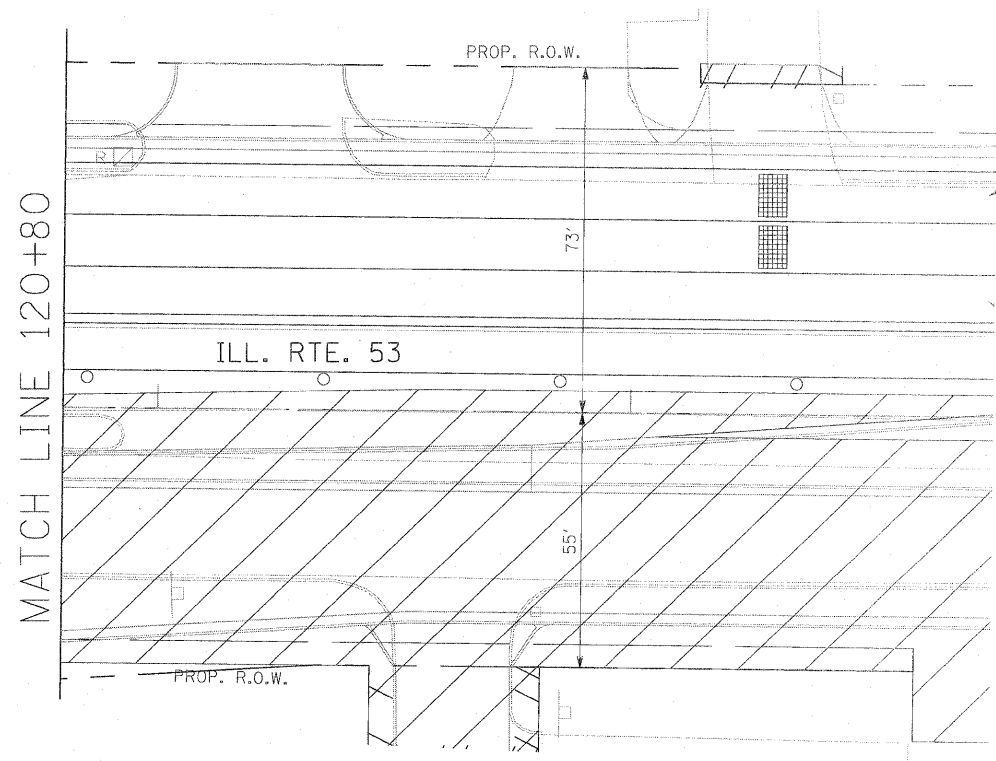
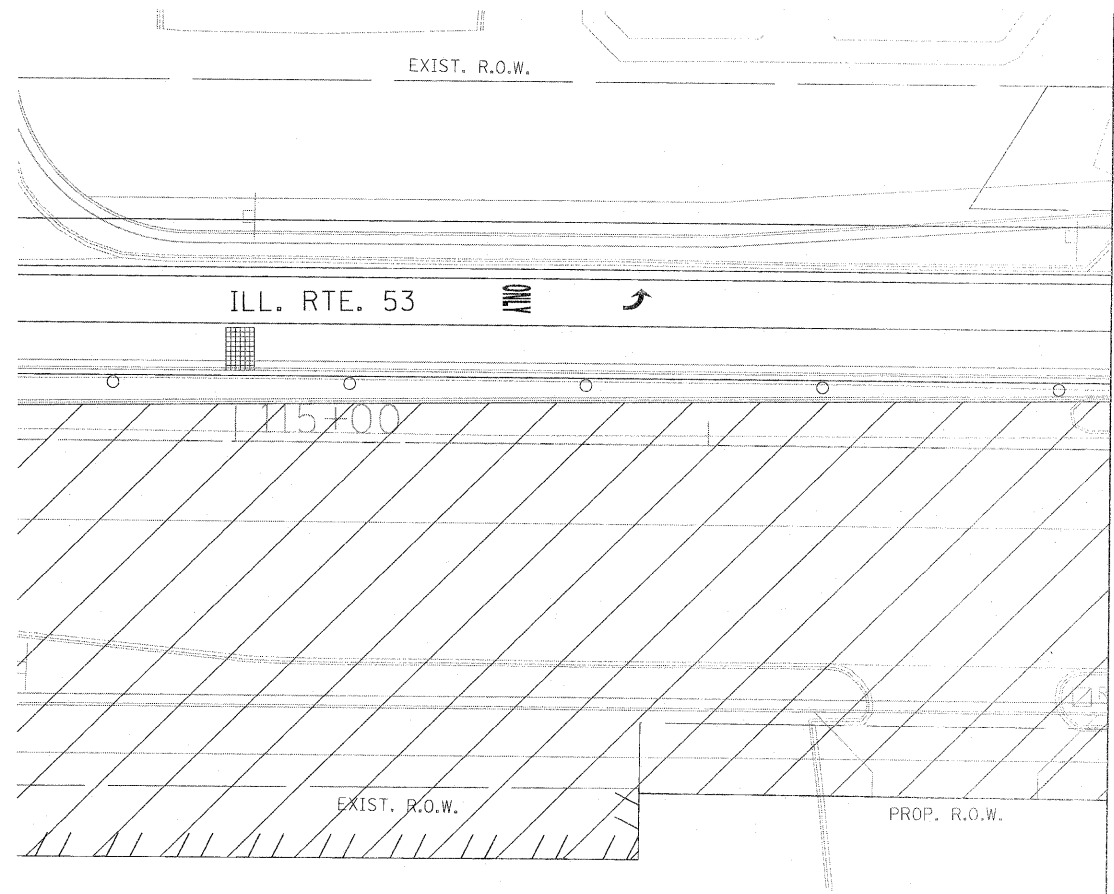
NOTE: THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR CONSTRUCTION STAGE 1 - SUBSTAGE 1 AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.

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

- ⊙ LEFT ON
  - GREEN
  - ARROW
  - ONLY
- R10-5,  
 24" X 30"  
 (8 REQUIRED)
- R10-5 SIGNS SHALL BE MOUNTED, ONE EACH ON SPAN WIRE AND FAR LEFT POLE FOR ALL APPROACHES OF THE INTERSECTION

SIGNAL HEAD PLACEMENTS FOR STAGES: PRE-STAGE S1-1, S1-2, AND S1-3.

FILE NAME =	USER NAME = #USER#	DESIGNED - PKG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN ILLINOIS ROUTE 53 (ROHLING RD.) AT U.S. ROUTE 20 (LAKE ST.) PRE STAGE AND STAGE 1 (SHEET 1 OF 6).	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
#FILE#		DRAWN - MAA, EA	REVISED -			2578	532B	DuPage	781	455	
		CHECKED - PKG, EA	REVISED -			CONTRACT NO. 60477					
		DATE - 5/18/2011	REVISED -			FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT					



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

NOTE:  
THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR CONSTRUCTION STAGE 1 - SUBSTAGE 1 AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.

FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT U.S. ROUTE 20 (LAKE ST.) PRE STAGE AND STAGE 1 (SHEET 2 OF 6)</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 456
	PLOT SCALE = #SCALE#	DRAWN - MAA, EA	REVISED -		SCALE: 1"=20'	SHEET NO.	OF	SHEETS	STA.	TO STA.	CONTRACT NO. 60477	
	PLOT DATE = #DATE#	CHECKED - PKG, EA	REVISED -								ILLINOIS FED. AID PROJECT	
		DATE - 5/18/2011	REVISED -								Rev. 6-8-11	

TEMPORARY TRAFFIC SIGNAL LEGEND

⊙ TEMPORARY COMBINATION TRAFFIC SIGNAL WOOD POLE



NOTE: THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR CONSTRUCTION STAGE 1 - SUBSTAGE 1 AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.

Ⓐ  
LEFT ON GREEN ARROW ONLY  
R10-5, 24" X 30" (8 REQUIRED)

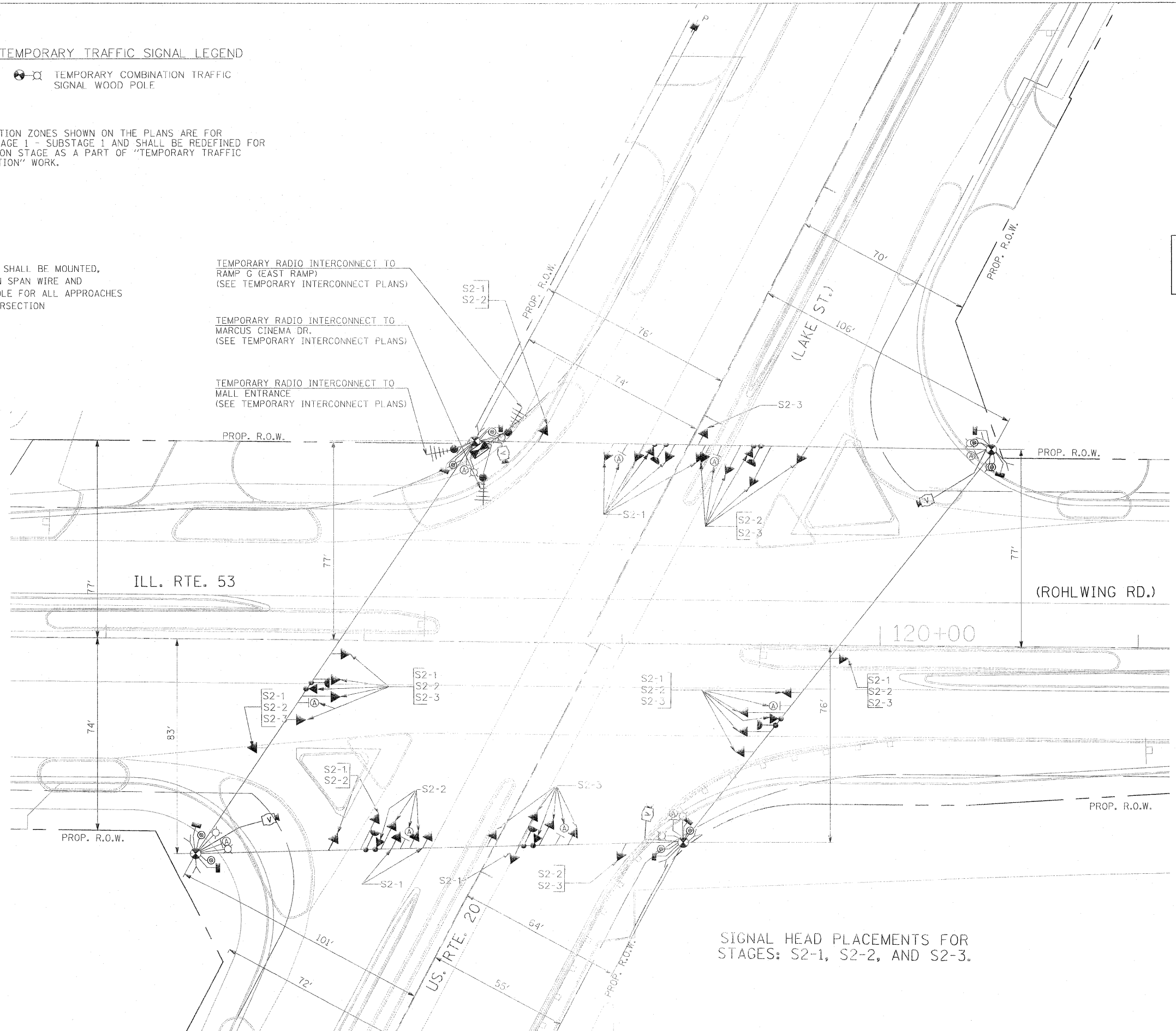
R10-5 SIGNS SHALL BE MOUNTED, ONE EACH ON SPAN WIRE AND FAR LEFT POLE FOR ALL APPROACHES OF THE INTERSECTION

TEMPORARY RADIO INTERCONNECT TO RAMP G (EAST RAMP) (SEE TEMPORARY INTERCONNECT PLANS)  
S2-1  
S2-2

TEMPORARY RADIO INTERCONNECT TO MARCUS CINEMA DR. (SEE TEMPORARY INTERCONNECT PLANS)

TEMPORARY RADIO INTERCONNECT TO MALL ENTRANCE (SEE TEMPORARY INTERCONNECT PLANS)

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



SIGNAL HEAD PLACEMENTS FOR STAGES: S2-1, S2-2, AND S2-3.

FILE NAME =	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT U.S. ROUTE 20 (LAKE ST.) STAGE 2 (SHEET 3 OF 6)</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 457
#FILE#		DRAWN - MAA, EA	REVISED -		SCALE: 1"=20'	SHEET NO. OF SHEETS STA.	TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		CONTRACT NO. 60477		
		CHECKED - PKG, EA	REVISED -									
		DATE - 5/18/2011	REVISED -									

Rev. 6-8-11

TEMPORARY TRAFFIC SIGNAL LEGEND

⊙ ⊗ TEMPORARY COMBINATION TRAFFIC SIGNAL WOOD POLE



NOTE: THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR CONSTRUCTION STAGE 1 - SUBSTAGE 1 AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.

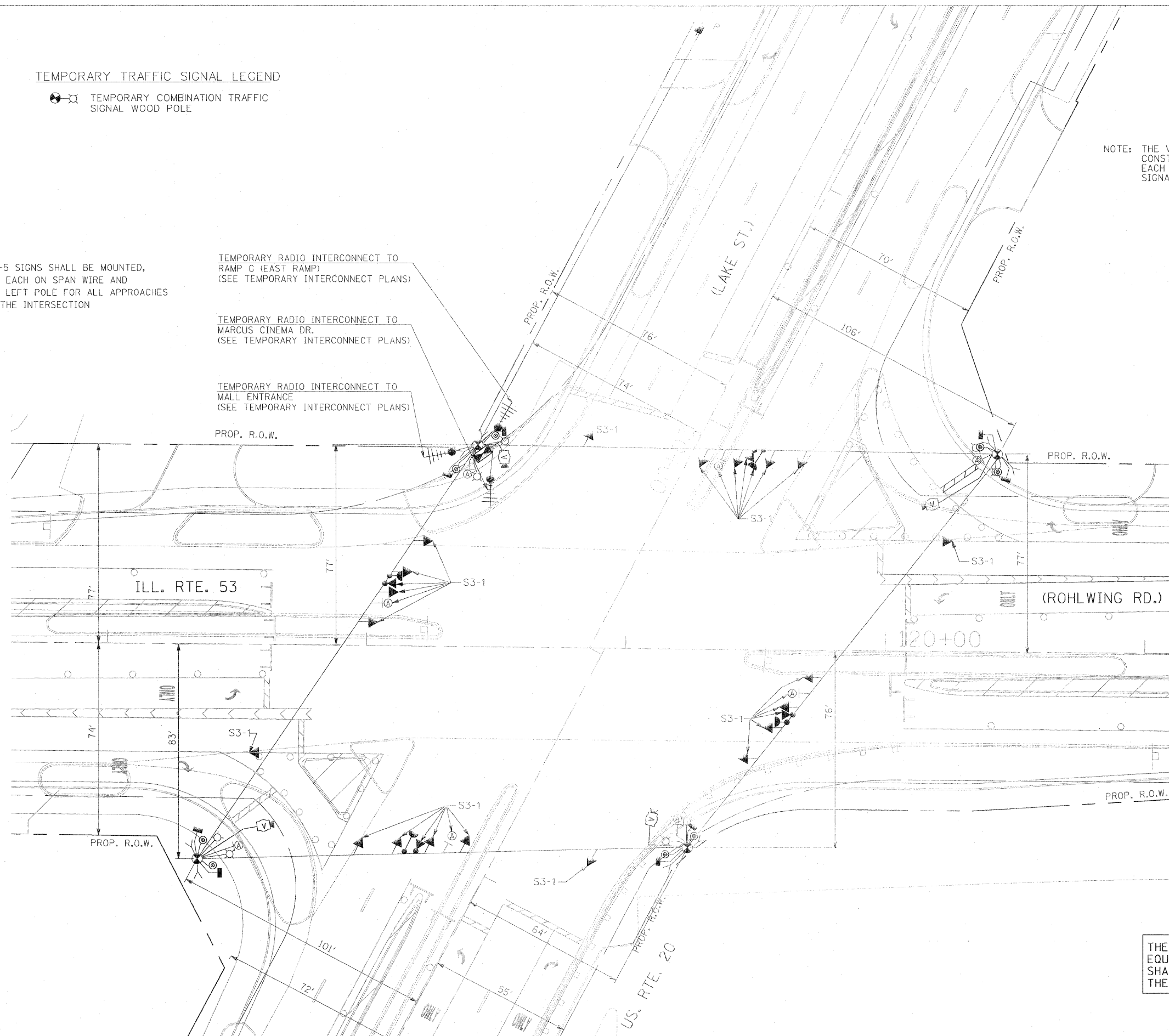
Ⓐ  
LEFT ON  
GREEN  
ARROW  
ONLY  
  
R10-5,  
24" X 30"  
(8 REQUIRED)

R10-5 SIGNS SHALL BE MOUNTED, ONE EACH ON SPAN WIRE AND FAR LEFT POLE FOR ALL APPROACHES OF THE INTERSECTION

TEMPORARY RADIO INTERCONNECT TO RAMP G (EAST RAMP) (SEE TEMPORARY INTERCONNECT PLANS)

TEMPORARY RADIO INTERCONNECT TO MARCUS CINEMA DR. (SEE TEMPORARY INTERCONNECT PLANS)

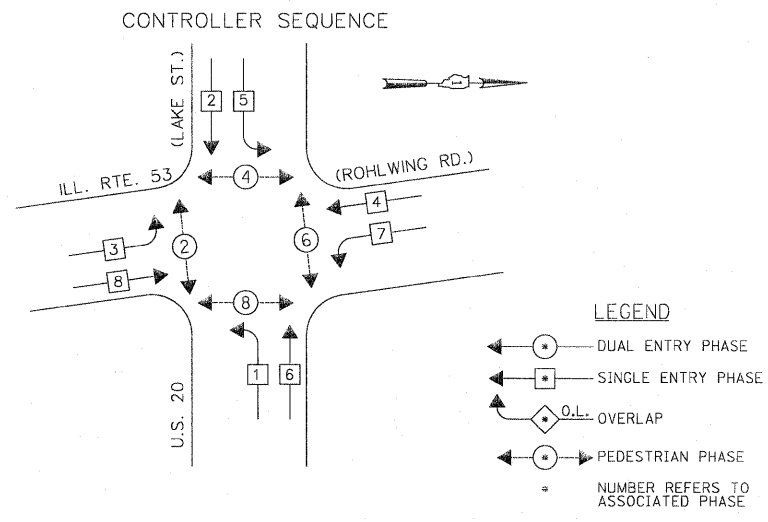
TEMPORARY RADIO INTERCONNECT TO MALL ENTRANCE (SEE TEMPORARY INTERCONNECT PLANS)



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

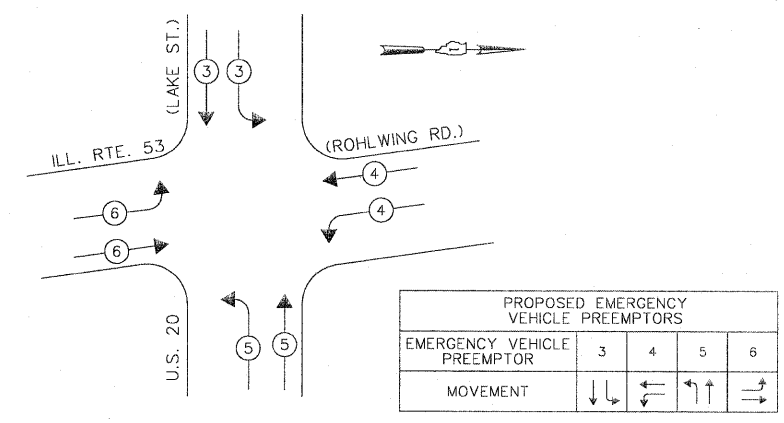
Rev. 6-8-11

FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT U.S. ROUTE 20 (LAKE ST.) STAGE 3 (SHEET 4 OF 6)</b>		F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 458	
	PLOT SCALE = #SCALE#	DRAWN - MAA, EA	REVISED -		SCALE: 1"=20'	SHEET NO. OF	SHEETS	STA. TO STA.	CONTRACT NO. 60477			
	PLOT DATE = #DATE#	CHECKED - PKG, EA	REVISED -						FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT			
		DATE - 5/18/2011	REVISED -									



**TEMPORARY PHASE DESIGNATION DIAGRAM**  
 STAGES: PRE-STAGE, S1-1, S2-3, S3,  
 AND AFTER PROPOSED ROADWAY GEOMETRICS ARE BUILT

**EMERGENCY VEHICLE PREEMPTION SEQUENCE**

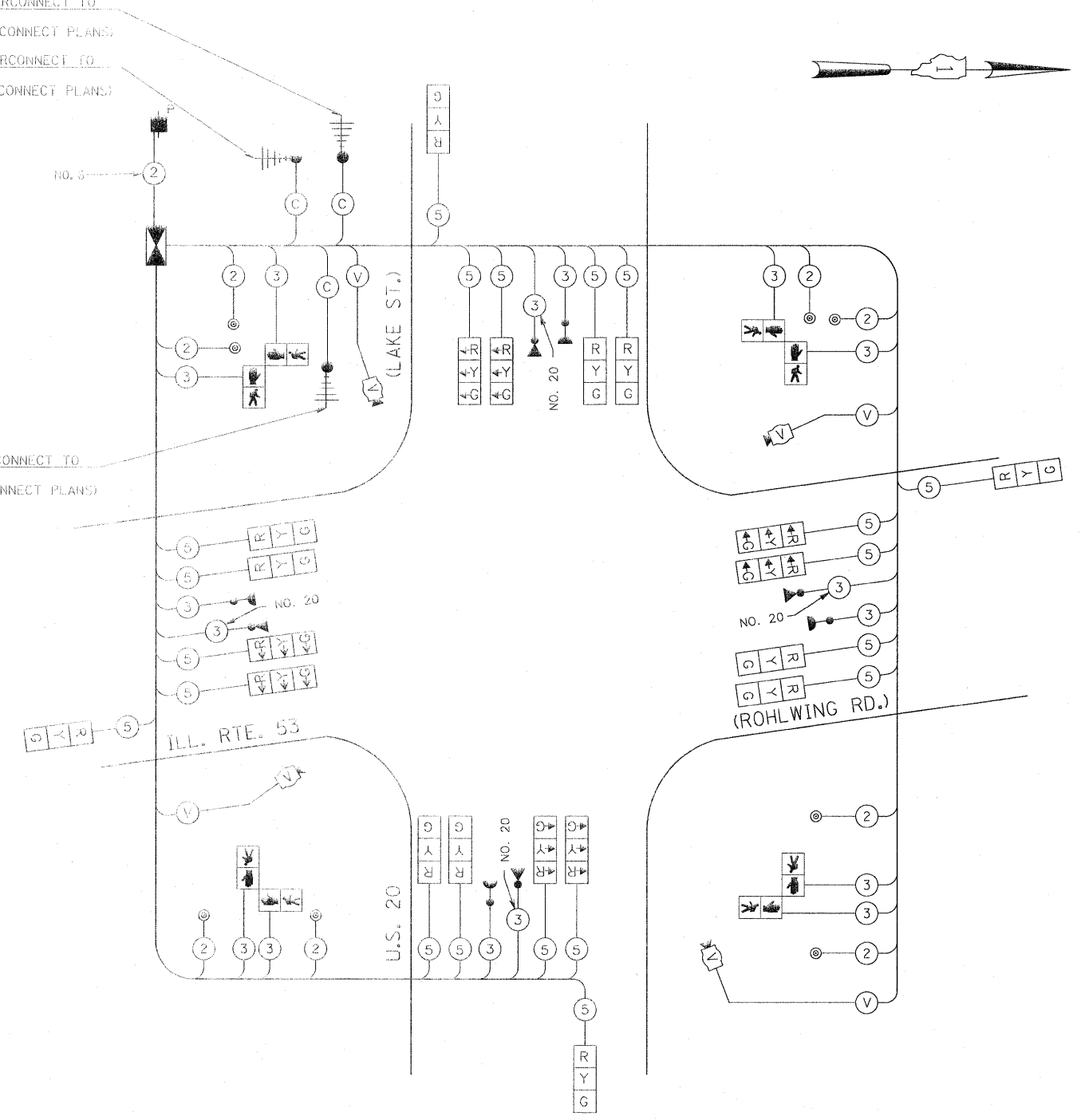


STAGES: PRE-STAGE, S1-1, S2-3, S3,  
 AND AFTER PROPOSED ROADWAY GEOMETRICS ARE BUILT

TEMPORARY RADIO INTERCONNECT TO RAMP G (EAST RAMP)  
 (SEE TEMPORARY INTERCONNECT PLANS)

TEMPORARY RADIO INTERCONNECT TO MALL ENTRANCE  
 (SEE TEMPORARY INTERCONNECT PLANS)

TEMPORARY RADIO INTERCONNECT TO MARCUS CINEMA DR.  
 (SEE TEMPORARY INTERCONNECT PLANS)



**TEMPORARY CABLE PLAN**

(NOT TO SCALE)

STAGES: PRE-STAGE, S1-1, S1-2, S1-3, S2-1, S2-2, S2-3, S3, AND AFTER PROPOSED ROADWAY GEOMETRICS ARE BUILT

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE		%OPERATION	
		INCAND.	LED		
SIGNAL (RED)	20	135	17	0.50	170
(YELLOW)	20	135	25	0.25	125
(GREEN)	20	135	15	0.25	75
ARROW		135	12	0.10	
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN			25	0.05	
VIDEO SYSTEM	1	150		1.00	150
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 620

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 201 WEST CENTER COURT  
 SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY CONTACT: CURTIS TOPPS  
 PHONE: (630) 691-4356  
 COMPANY: COMMONWEALTH EDISON

TEMPORARY SEQUENCE OF OPERATION (FOR STAGE 1, SUB STAGES 2,3 AND STAGE 2, SUB STAGES 1,2  
WITH LEAD-LAG OPERATION FOR US RTE. 20 AND ILL. RTE. 53)

MOVEMENT	P 2 5		P 2 P				P 1 6 P				3 8 P				P 4 P				P 4 P				F L A S H																					
	2+5		2+6				1+6				3+8				4+8				4+7																									
INTERVAL	1	2	3A	3B	4A	4B	5	6	7A	7B	8A	8B	9A	9B	10	11	12A	12B	13A	13B	14	15	16A	16B	17A	17B	18	19	20A	20B	21A	21B	22A	22B	23	24	25A	25B	26A	26B				
CHANGE TO	∅	∅	1+6 3+8 4+7 4+8		2+6				1+6		2+5		3+8 4+7 4+8				2+5 3+8 4+7 4+8		2+6		∅	∅	1+6 2+5 2+6 4+7		4+8				4+7		3+8		1+6 2+5 2+6				1+6 2+5 2+6 3+8		4+8					
US ROUTE 20 (LAKE STREET) NEAR RIGHT AND TWO FAR RIGHT SPAN WIRE SIGNAL	E/B	G	G	Y	R	G	G	G	G	Y	R	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R		
US ROUTE 20 (LAKE STREET) TWO FAR LEFT SPAN WIRE SIGNALS WITH LEFT TURN ARROWS	E/B	←G	←G	←Y	←R	←Y	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	
US ROUTE 20 (LAKE STREET) NEAR RIGHT AND TWO FAR RIGHT SPAN WIRE SIGNAL	W/B	R	R	R	R	R	R	G	G	G	G	Y	R	Y	R	G	G	Y	R	G	G	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
US ROUTE 20 (LAKE STREET) TWO FAR LEFT SPAN WIRE SIGNALS WITH LEFT TURN ARROWS	W/B	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R
ILLINOIS ROUTE 53 (ROHLWING ROAD) NEAR RIGHT AND TWO FAR RIGHT SPAN WIRE SIGNALS	N/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	Y	R	G	G	G	G	Y	R	G	G	Y	R	R	R	R	R	R	R	R	R	
ILLINOIS ROUTE 53 (ROHLWING ROAD) TWO FAR LEFT SPAN WIRE SIGNALS WITH LEFT TURN ARROWS	N/B	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←G	←G	←Y	←R	←Y	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	
ILLINOIS ROUTE 53 (ROHLWING ROAD) NEAR RIGHT AND TWO FAR RIGHT SPAN WIRE SIGNALS	S/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	G	Y	R	Y	R	G	G	Y	R	G	G	R	R
ILLINOIS ROUTE 53 (ROHLWING ROAD) TWO FAR LEFT SPAN WIRE SIGNALS WITH LEFT TURN ARROWS	S/B	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	
PEDESTRIAN SIGNALS - CROSSING ILLINOIS ROUTE 53 (ROHLWING RD) ON NORTH SIDE OF US ROUTE 20 (LAKE STREET)		H	H	H	H	H	H	P	FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	DARK
PEDESTRIAN SIGNALS - CROSSING ILLINOIS ROUTE 53 (ROHLWING RD) ON SOUTH SIDE OF US ROUTE 20 (LAKE STREET)		*P	**FH	H	H	H	H	*P	**FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	DARK	
PEDESTRIAN SIGNALS - CROSSING US ROUTE 20 (LAKE STREET) ON EAST SIDE OF ILLINOIS ROUTE 53 (ROHLWING RD)		H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	DARK	
PEDESTRIAN SIGNALS - CROSSING US ROUTE 20 (LAKE STREET) ON WEST SIDE OF ILLINOIS ROUTE 53 (ROHLWING RD)		H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	DARK	

P = ILLUMINATED PERSON = WALK  
 FH = ILLUMINATED FLASHING HAND = FLASHING DON'T WALK  
 H = ILLUMINATED SOLID HAND = DON'T WALK  
 PHASE 2 + 6 SHALL BE PLACED ON RECALL.

- TO APPEAR ONLY UPON PUSHBUTTON ACTUATION.
- \*\* FLASHING " [ ] " IS TO TERMINATE AT THE COMPLETION OF THE PEDESTRIAN INTERVAL CLEARANCE.
- ∅ THIS " [ ] " OR FLASHING " [ ] " INTERVAL MAY FINISH TIMING IN THE BI-DIRECTIONAL STRAIGHT THROUGH MOVEMENT IF THE LEFT ARROW TIME IS NOT SUFFICIENT TO COMPLETE " [ ] " OR FLASHING " [ ] " INTERVALS. " [ ] " AND FLASHING " [ ] " TIMINGS TO BE SET ONLY ON THE PHASES WHERE " [ ] " AND FLASHING " [ ] " ARE INDICATED IN THE SEQUENCE OF OPERATION.

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

Rev. 6-8-11





MATCH LINE B



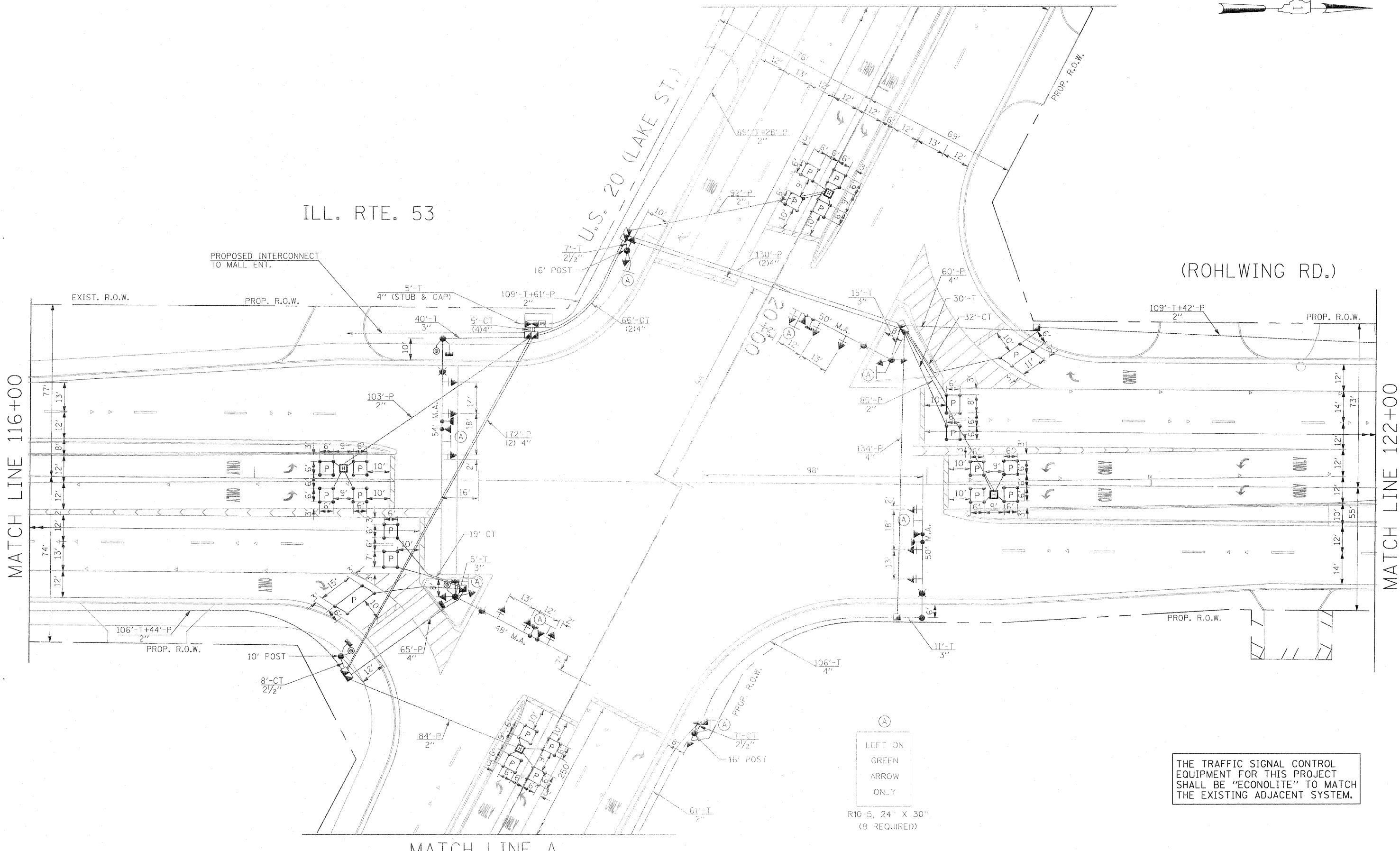
ILL. RTE. 53

U.S. 20 (LAKE ST.)

(ROHLWING RD.)

MATCH LINE 116+00

MATCH LINE 122+00



MATCH LINE A

(A)  
 LEFT ON  
 GREEN  
 ARROW  
 ONLY  
 R10-5, 24" X 30"  
 (8 REQUIRED)

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

Rev. 6-8-11

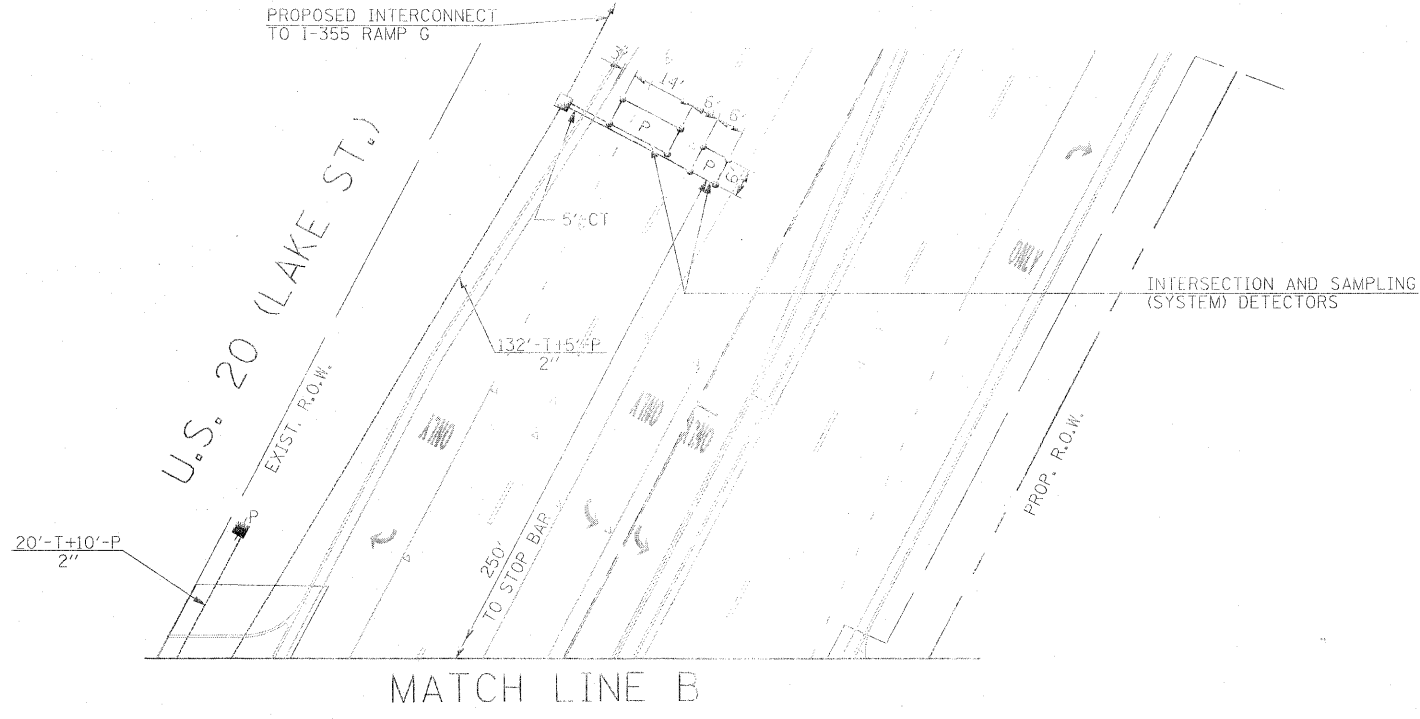
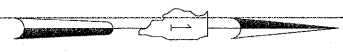
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	PLOT DATE = #DATE#	DATE - 5/18/2011	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL INSTALLATION PLAN  
ILLINOIS ROUTE 53 (ROHLWING RD.) AT U.S. 20 (LAKE ST.)  
(SHEET 1 OF 2)

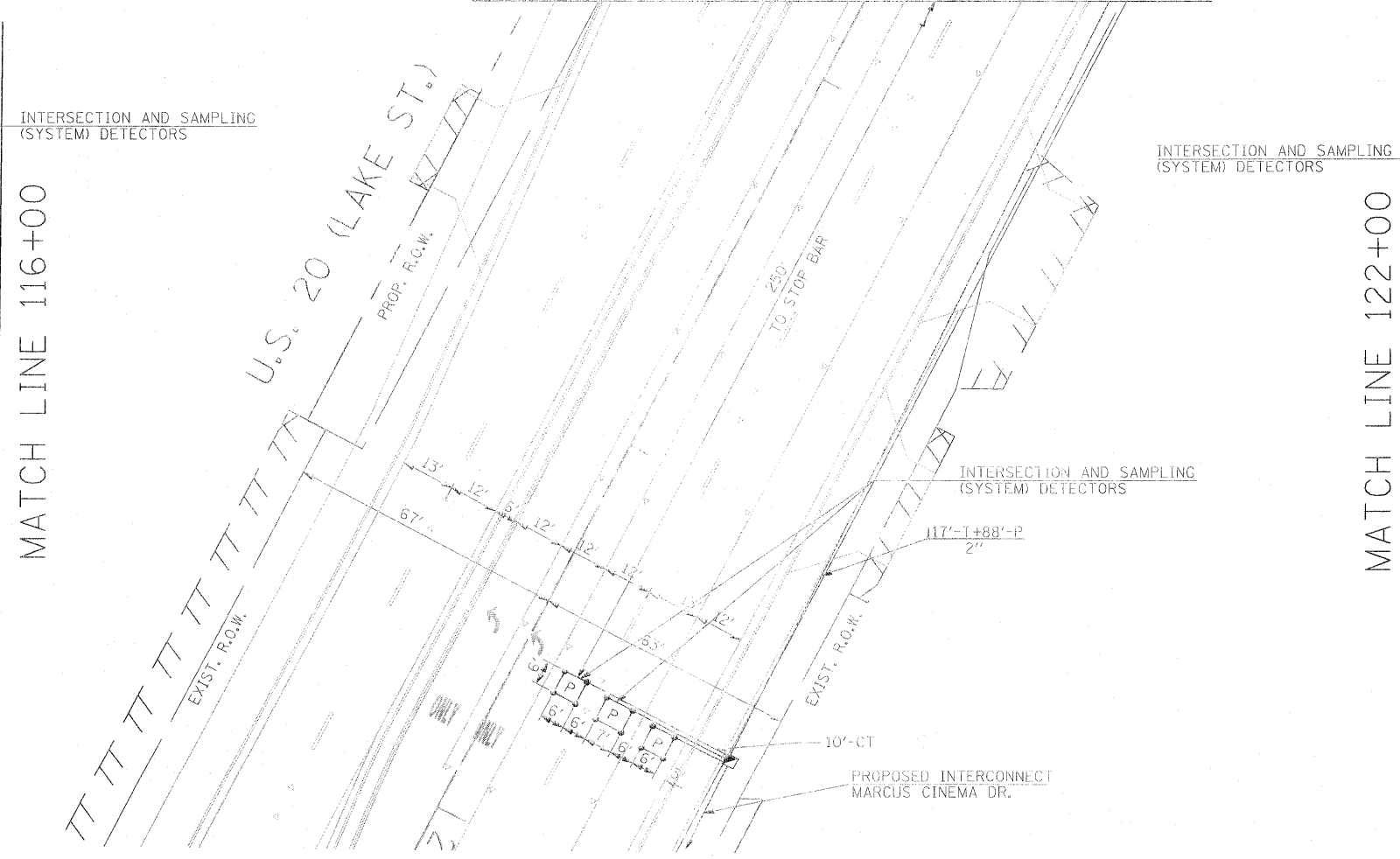
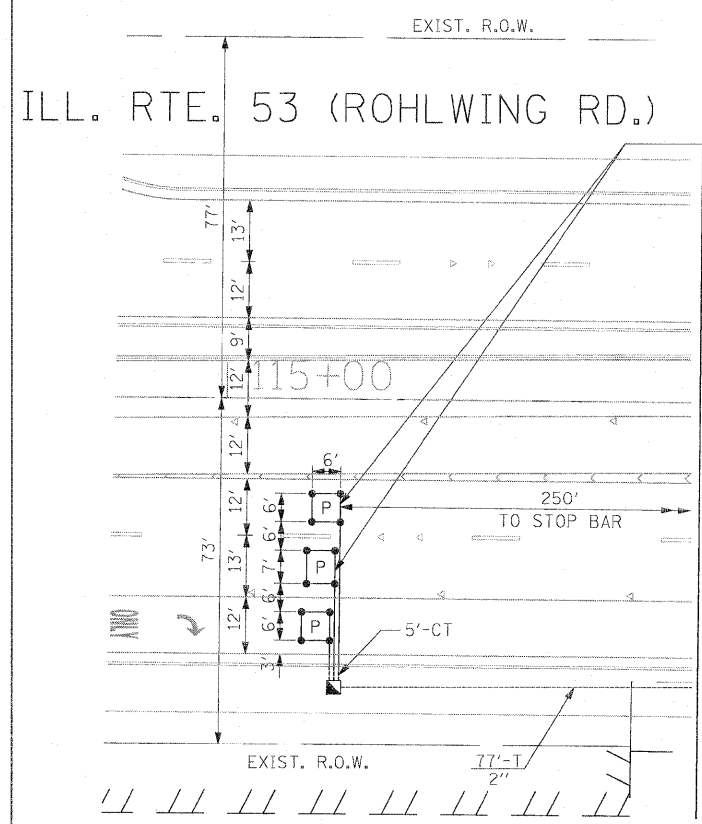
SCALE: 1"=20' SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2578	532B	DuPage	781	162
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60477	

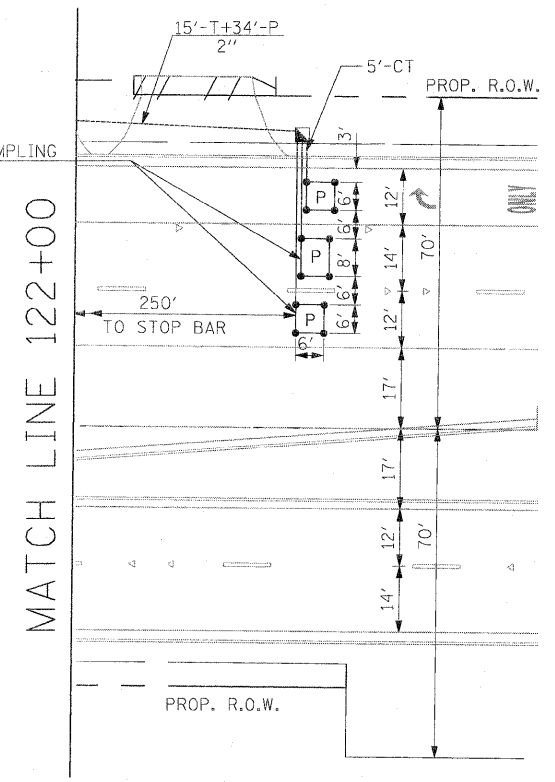


THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

MATCH LINE A



ILL. RTE. 53 (ROHLWING RD.)



FILE NAME =	USER NAME = *USER*	DESIGNED - PKG	REVISED -
*FILE#		DRAWN - MAA, EA	REVISED -
	PLOT SCALE = *SCALE*	CHECKED - PKG, EA	REVISED -
	PLOT DATE = *DATE*	DATE - 5/18/2011	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL INSTALLATION PLAN  
ILLINOIS ROUTE 53 (ROHLWING RD.) AT U.S. 20 (LAKE ST.)  
(SHEET 2 OF 2)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2578	532B	DuPage	781	463
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60477	

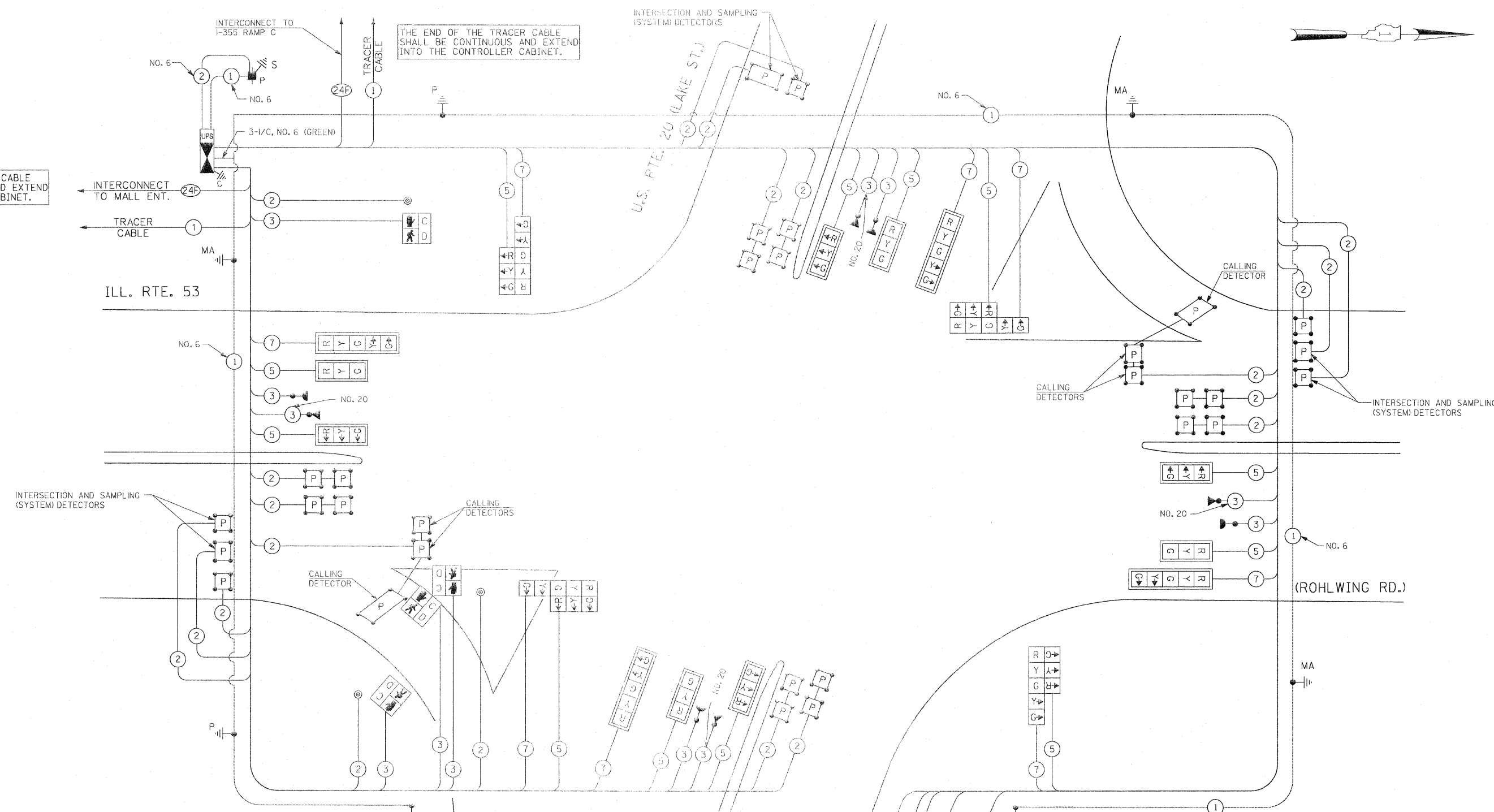
Rev. 6-8-11

SCALE: 1"=20' SHEET NO. OF SHEETS STA. TO STA.

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

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

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



CABLE PLAN  
(NOT TO SCALE)

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE		OPERATION	
SIGNAL (RED)	20	INCAND.	LED	0.50	170
(YELLOW)	20	135	25	0.25	125
(GREEN)	20	135	15	0.25	75
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	4	90	25	1.00	100
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN			25	0.05	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	589.2

ILLINOIS DEPARTMENT OF TRANSPORTATION  
201 WEST CENTER COURT  
SCHAUMBURG, ILLINOIS 60196-1096  
ENERGY SUPPLY CONTACT: CURTIS TOPPS  
PHONE: (630) 691-4356  
COMPANY: COMMONWEALTH EDISON

FILE NAME =	USER NAME = #USER#	DESIGNED - PKG	REVISED -
#FILE#		DRAWN - MAA, EA	REVISED -
	PLOT SCALE = #SCALE#	CHECKED - PKG, EA	REVISED -
	PLOT DATE = #DATE#	DATE - 5/18/2011	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL CABLE PLAN  
ILLINOIS ROUTE 53 (ROHLWING RD.) AT U.S. 20 (LAKE ST.) (SHEET 1 OF 2)  
SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2578	532B	DuPage	781	464
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60477	

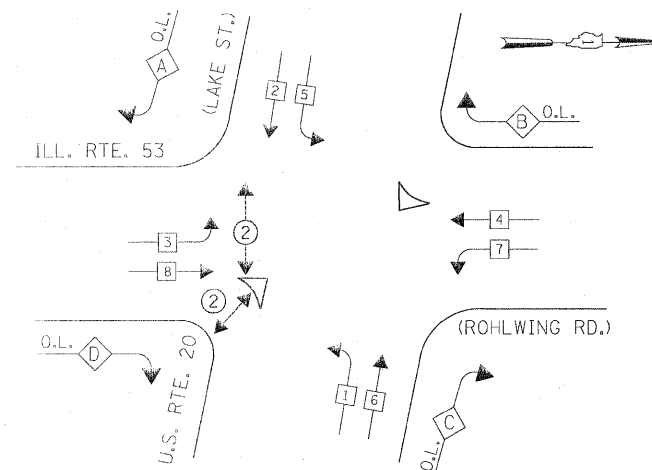
Rev. 6-8-11

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
55	SQ FT	SIGN PANEL - TYPE 1
27.5	SQ FT	SIGN PANEL - TYPE 2
835	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
22	FOOT	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL
71	FOOT	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL
263	FOOT	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL
676	FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
863	FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
8	EACH	HANDHOLE
4	EACH	HEAVY-DUTY HANDHOLE
4	EACH	DOUBLE HANDHOLE
1095	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	TRANSCEIVER-FIBER OPTIC
596	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
2212	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
3768	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
2416	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
8187	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
220	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
1	EACH	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 48 FT.
2	EACH	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 50 FT.
1	EACH	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 54 FT.
12	FOOT	CONCRETE FOUNDATION, TYPE A
4	FOOT	CONCRETE FOUNDATION, TYPE C
58	FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
8	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED
4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED
4	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
1	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
12	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
21	EACH	INDUCTIVE LOOP DETECTOR
4	EACH	LIGHT DETECTOR
1	EACH	LIGHT DETECTOR AMPLIFIER
3	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
12	EACH	REMOVE EXISTING HANDHOLE
9	EACH	REMOVE EXISTING CONCRETE FOUNDATION
1233	FOOT	PREFORMED DETECTOR LOOP
1	EACH	TEMPORARY TRAFFIC SIGNAL TIMING
1	EACH	SERVICE INSTALLATION - POLE MOUNTED
1	EACH	UNINTERRUPTIBLE POWER SUPPLY
1179	FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
1291	FOOT	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED

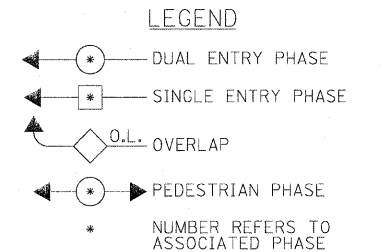
\* 100% COST TO VILLAGE OF ADDISON

CONTROLLER SEQUENCE

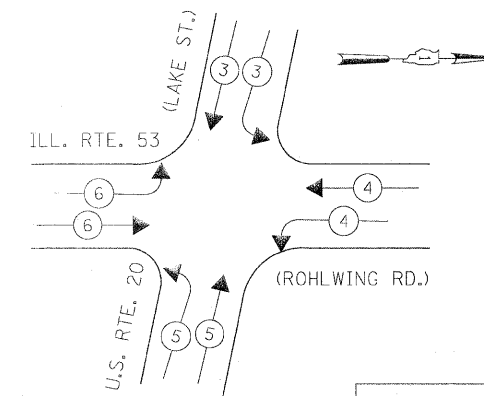


PHASE DESIGNATION DIAGRAM

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2 + 3	
B	= 4 + 5	
C	= 6 + 7	
D	= 8 + 1	



EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	↓	↖	↗	→

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

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PHASE DESIGNATION DIAGRAM  
EMERGENCY VEHICLE PREEMPTION SEQUENCE  
SCHEDULE OF QUANTITIES  
ILLINOIS ROUTE 53 (ROHLWING RD.) AT U.S. 20 (LAKE ST.) SHEET 2 OF 2.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2578	532B	DuPage	781	465

CONTRACT NO. 60477

SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.

Rev. 6-B-11

FILE NAME =	USER NAME = #USER#	DESIGNED - PKG	REVISED -
#FILEL#		DRAWN - MAA, EA	REVISED -
	PLOT SCALE = #SCALE#	CHECKED - PKG, EA	REVISED -
	PLOT DATE = #DATE#	DATE - 5/18/2011	REVISED -

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" (300mm) 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 RAILROAD INTERSECTIONS, AND 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.

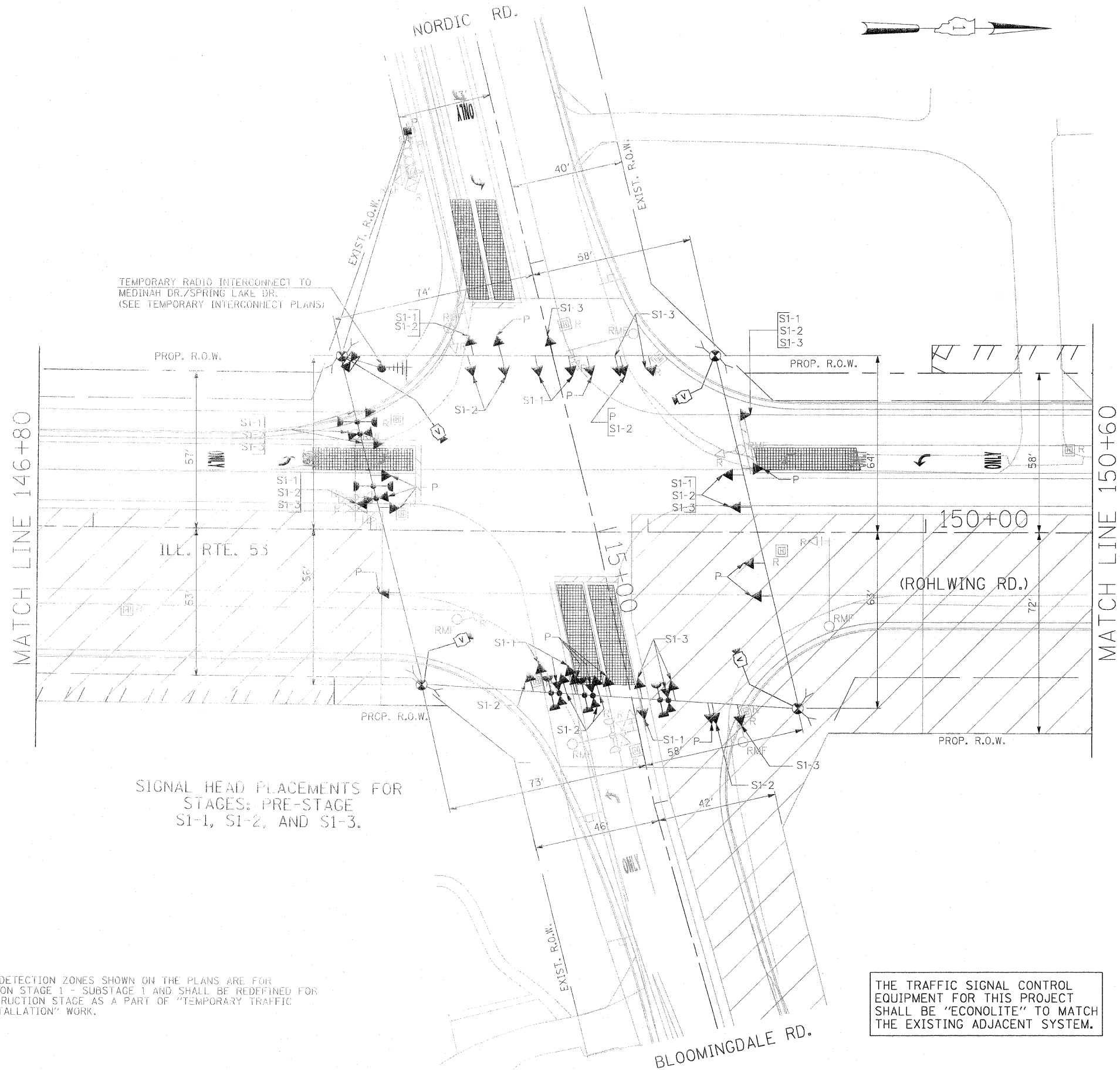
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACTOR'S BID PRICE.

- 1 EACH CONTROLLER AND CABINET COMPLETE
- 4 EACH SIGNAL HEAD, 1-FACE 5-SECTION, BRACKET MOUNTED
- 4 EACH SIGNAL HEAD, 1-FACE 5-SECTION, MAST ARM MOUNTED
- 4 EACH TRAFFIC SIGNAL BACKPLATE
- 4 EACH TRAFFIC SIGNAL POST
- 4 EACH STEEL MAST ARM ASSEMBLY AND POLE
- 1 EACH SERVICE INSTALLATION

THE CONTRACTOR SHALL RELOCATE THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM EQUIPMENTS TO THE NEW TRAFFIC SIGNAL INSTALLATION AT ILL. RTE. 53 (ROHLWING RD.) & NORDIC RD. / BLOOMINGDALE RD.

NOTE: THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR CONSTRUCTION STAGE 1 - SUBSTAGE 1 AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.

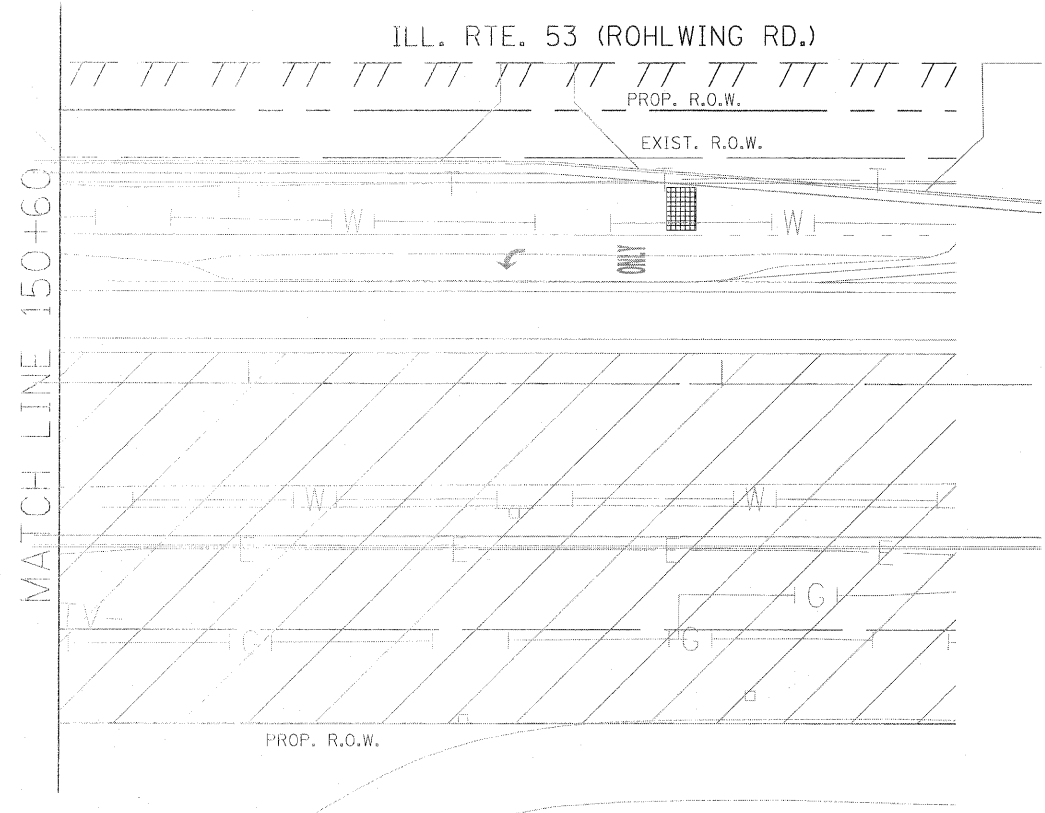
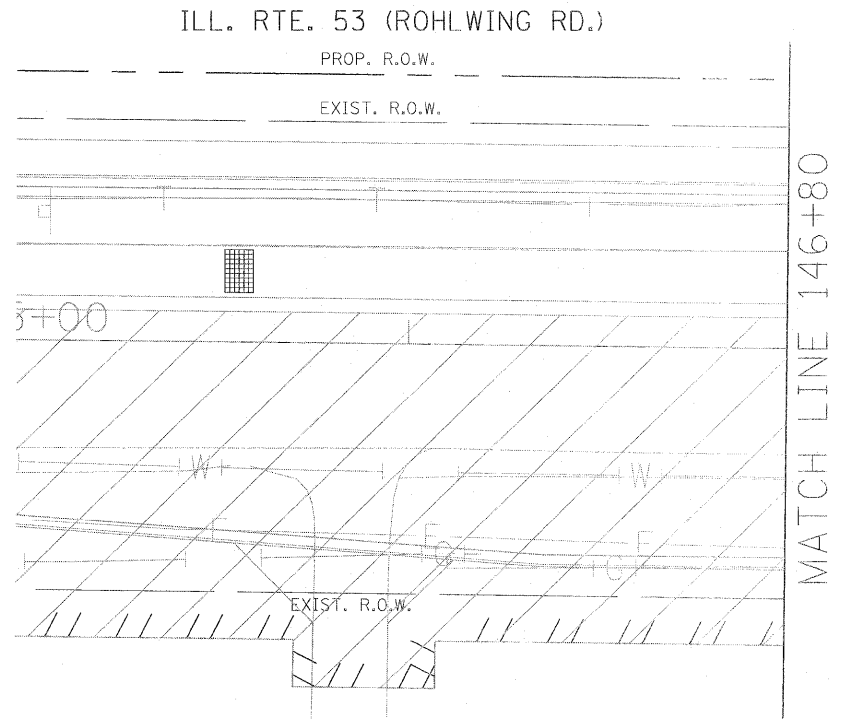
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.



SIGNAL HEAD PLACEMENTS FOR STAGES: PRE-STAGE S1-1, S1-2, AND S1-3.

Rev. 6-8-11

FILE NAME =	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT NORDIC RD./BLOOMINGDALE RD. PRE STAGE AND STAGE 1 (SHEET 1 OF 4).</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
#FILE#		DRAWN - MAA, EA	REVISED -			2578	532B	DuPage	781	466	
		CHECKED - PKG, EA	REVISED -			CONTRACT NO. 60477					
		DATE - 5/18/2011	REVISED -			FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT					
				SCALE: 1"=20'		SHEET NO. OF SHEETS		STA. TO STA.			

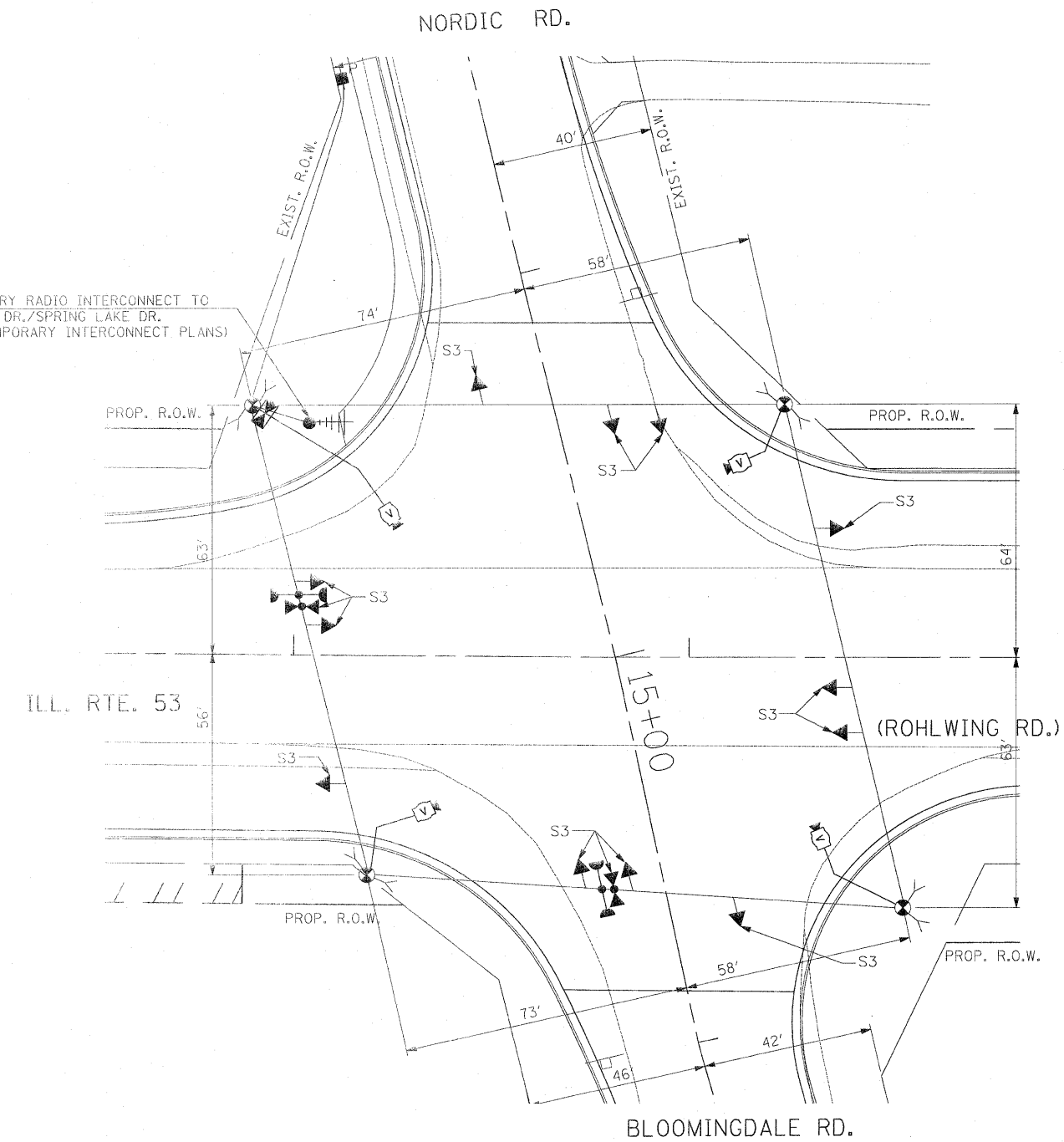
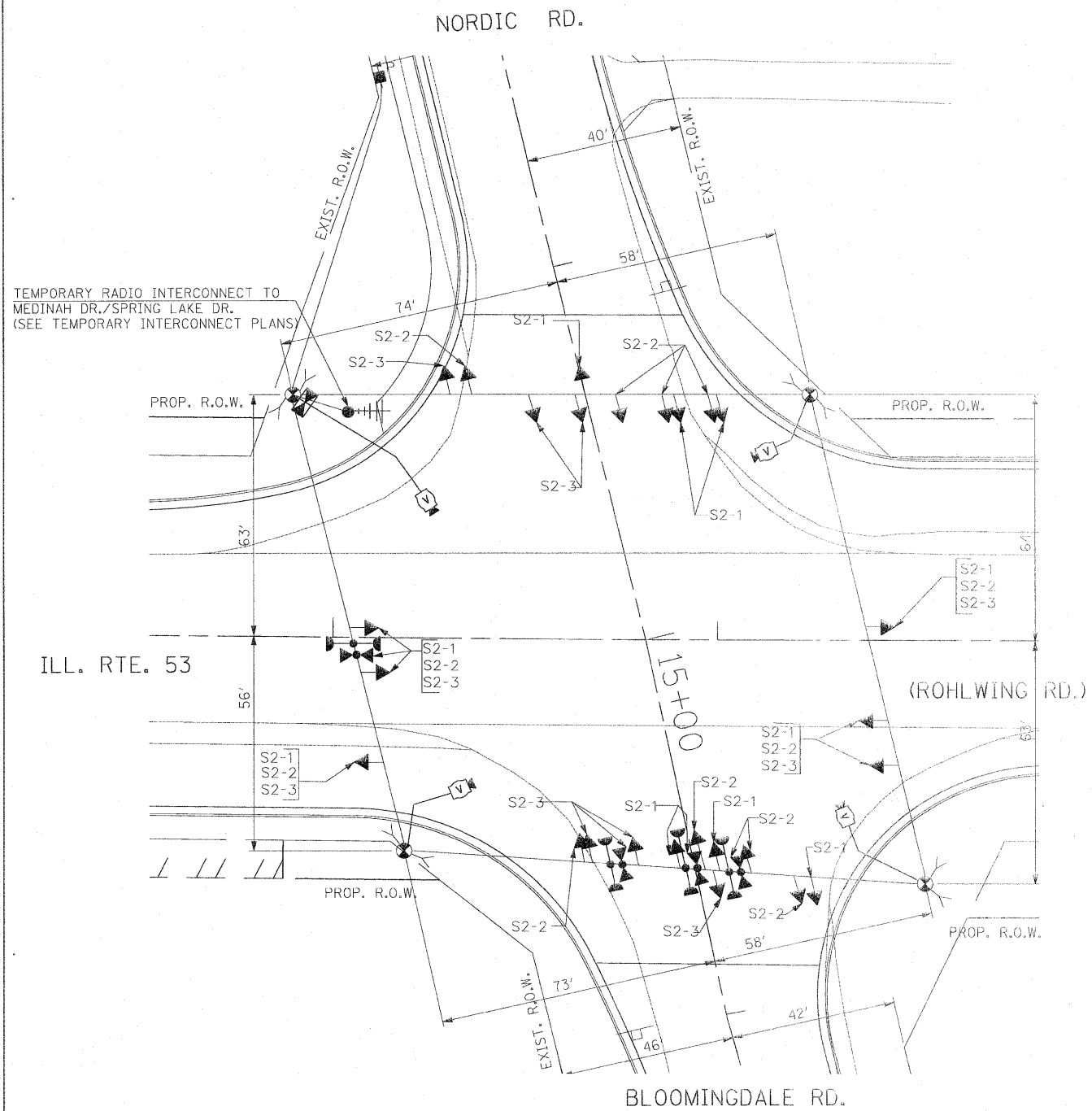


NOTE: THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR CONSTRUCTION STAGE 1 - SUBSTAGE 1 AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.

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

Rev. 6-8-11

FILE NAME = *FILEL*	USER NAME = *USER*	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT NORDIC RD./BLOOMINGDALE RD. PRE STAGE AND STAGE 1 (SHEET 2 OF 4)</b>			F.A.P. RTE. 2578	SECTION 5328	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 467
	PLOT SCALE = *SCALE*	DRAWN - MAA, EA	REVISED -		SCALE: 1"=20'	SHEET NO. OF	SHEETS	STA.	TO STA.	CONTRACT NO. 60477		
	PLOT DATE = *DATE*	CHECKED - PKG, EA	REVISED -							ILLINOIS FED. AID PROJECT		
		DATE - 5/18/2011	REVISED -									



TEMPORARY RADIO INTERCONNECT TO MEDINAH DR./SPRING LAKE DR. (SEE TEMPORARY INTERCONNECT PLANS)

TEMPORARY RADIO INTERCONNECT TO MEDINAH DR./SPRING LAKE DR. (SEE TEMPORARY INTERCONNECT PLANS)

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

SIGNAL HEAD PLACEMENTS FOR STAGES: S2-1, S2-2, AND S2-3.

NOTE: THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR CONSTRUCTION STAGE 1 - SUBSTAGE 1 AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.

SIGNAL HEAD PLACEMENTS FOR STAGE: S3

FILE NAME =	USER NAME = #USER#	DESIGNED - PKG	REVISED
#FILE#		DRAWN - MAA, EA	REVISED -
	PLOT SCALE = #SCALE#	CHECKED - PKG, EA	REVISED -
	PLOT DATE = #DATE#	DATE - 5/18/2011	REVISED -

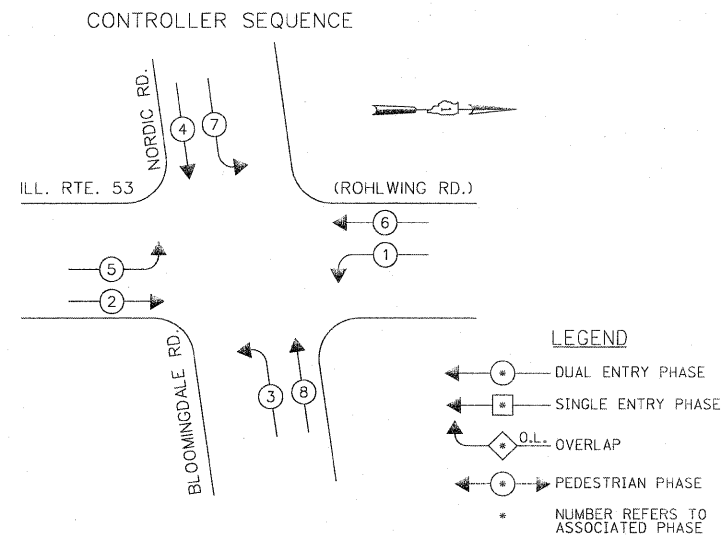
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN			
ILLINOIS ROUTE 53 (ROHLWING RD.) AT NORDIC RD./BLOOMINGDALE RD. STAGE 2 AND STAGE 3 (SHEET 3 OF 4)			
SCALE: 1"=20'	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2578	532B	DuPage	781	468
FED. ROAD DIST. NO. - ILLINOIS			FED. AID PROJECT	
CONTRACT NO. 60477				

Rev. 6-8-11

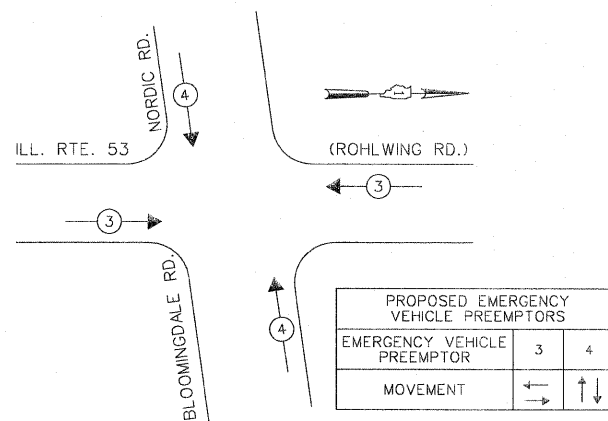
TEMPORARY RADIO INTERCONNECT TO  
MEDINAH DR./SPRING LAKE DR.  
(SEE TEMPORARY INTERCONNECT PLANS)



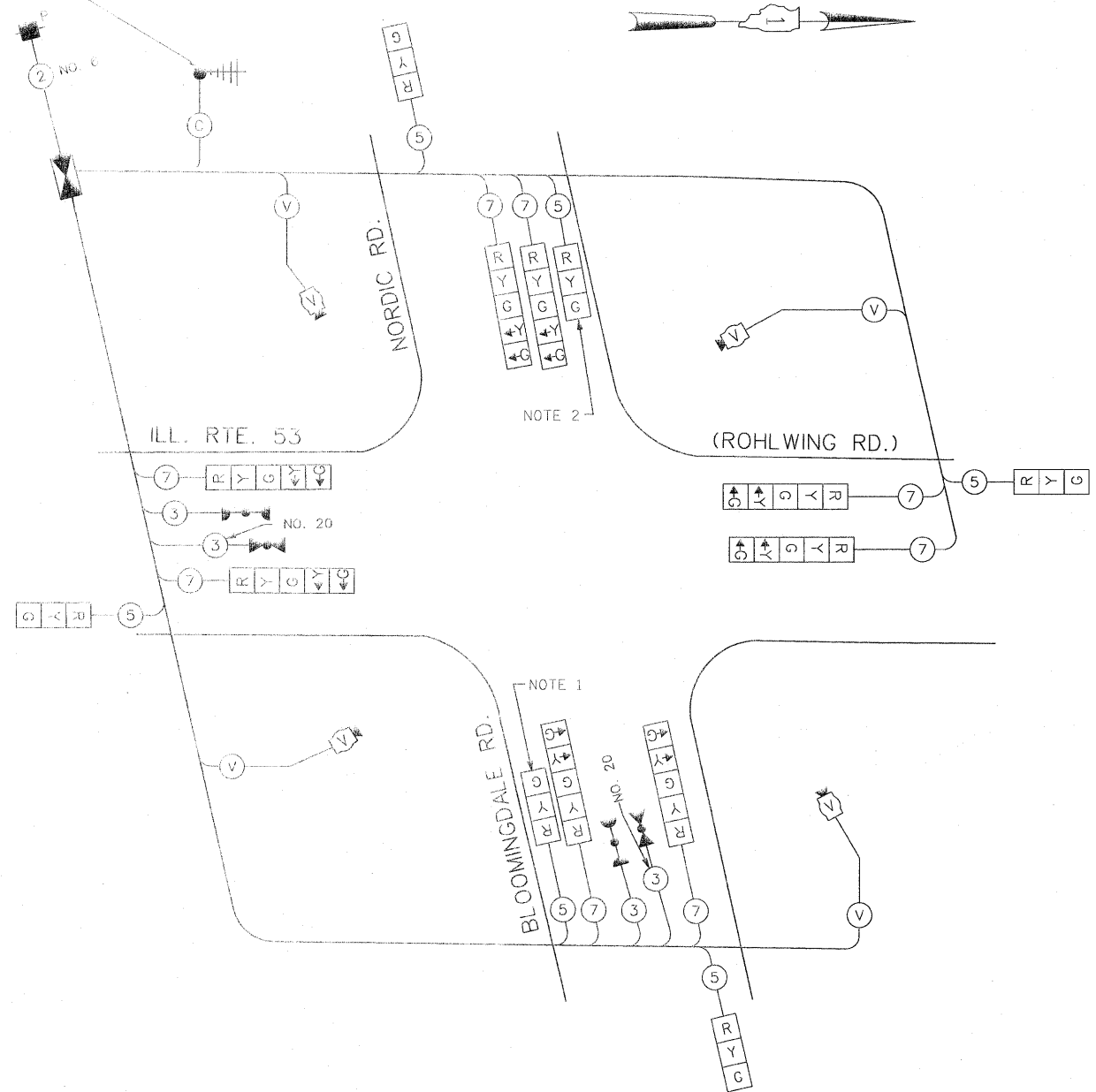
**TEMPORARY PHASE DESIGNATION DIAGRAM**

STAGES: PRE-STAGE, S1-1, S1-2, S1-3, S2-1, S2-2, S2-3, S3, AND AFTER PROPOSED ROADWAY GEOMETRICS ARE BUILT

**EMERGENCY VEHICLE PREEMPTION SEQUENCE**



STAGES: PRE-STAGE, S1-1, S1-2, S1-3, S2-1, S2-2, S2-3, S3, AND AFTER PROPOSED ROADWAY GEOMETRICS ARE BUILT



**TEMPORARY CABLE PLAN**

(NOT TO SCALE)

STAGES: PRE-STAGE, S1-1, S1-2, S1-3, S2-1, S2-2, S2-3, S3, AND AFTER PROPOSED ROADWAY GEOMETRICS ARE BUILT

NOTE 1: THE 3-SECTION SIGNAL HEAD MOUNTED ON THE FAR-SIDE SPAN WIRE FOR EASTBOUND DIRECTION OF TRAFFIC IS NEEDED DURING CONSTRUCTION STAGE S2-2. IN ALL OTHER STAGES THIS 3-SECTION SIGNAL HEAD SHALL BE DISCONNECTED AND BAGGED.

NOTE 2: THE 3-SECTION SIGNAL HEAD MOUNTED ON THE FAR-SIDE SPAN WIRE FOR WESTBOUND DIRECTION OF TRAFFIC IS NEEDED DURING CONSTRUCTION STAGE S1-2. IN ALL OTHER STAGES THIS 3-SECTION SIGNAL HEAD SHALL BE DISCONNECTED AND BAGGED.

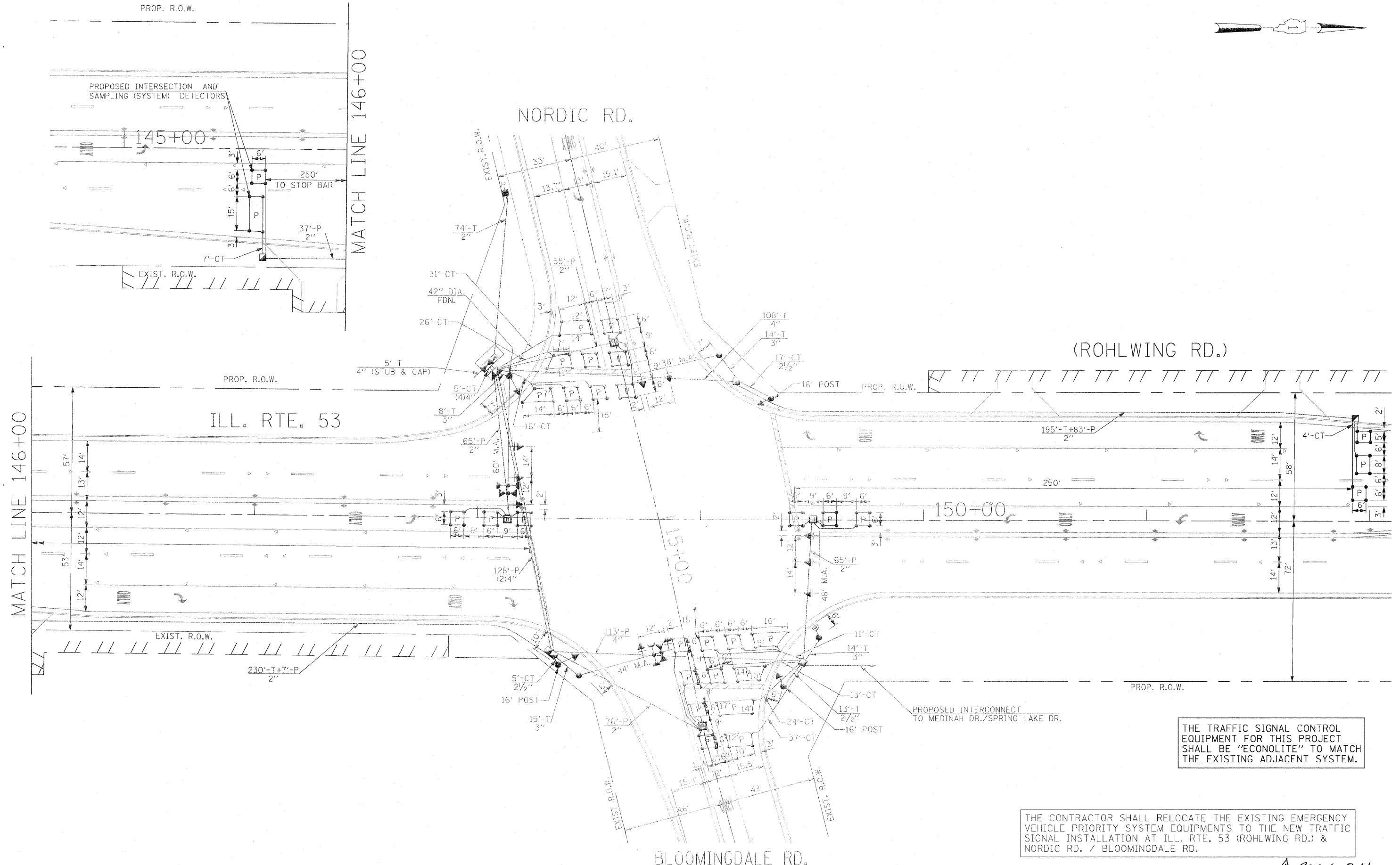
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE		%OPERATION	
		INCAND.	LED		
SIGNAL (RED)	14	135	17	0.50	119
(YELLOW)	14	135	25	0.25	87.5
(GREEN)	14	135	15	0.25	52.5
ARROW	16	135	12	0.10	19.2
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN			25	0.05	
VIDEO SYSTEM	1	150		1.00	150
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 528.2

VILLAGE OF ITASCA  
550 WEST IRVING PARK ROAD  
ITASCA, ILLINOIS 60143-1795

ENERGY SUPPLY CONTACT: CURTIIS TOPPS  
PHONE: (630) 691-4356  
COMPANY: COMMONWEALTH EDISON





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

THE CONTRACTOR SHALL RELOCATE THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM EQUIPMENTS TO THE NEW TRAFFIC SIGNAL INSTALLATION AT ILL. RTE. 53 (ROHLWING RD.) & NORDIC RD. / BLOOMINGDALE RD.

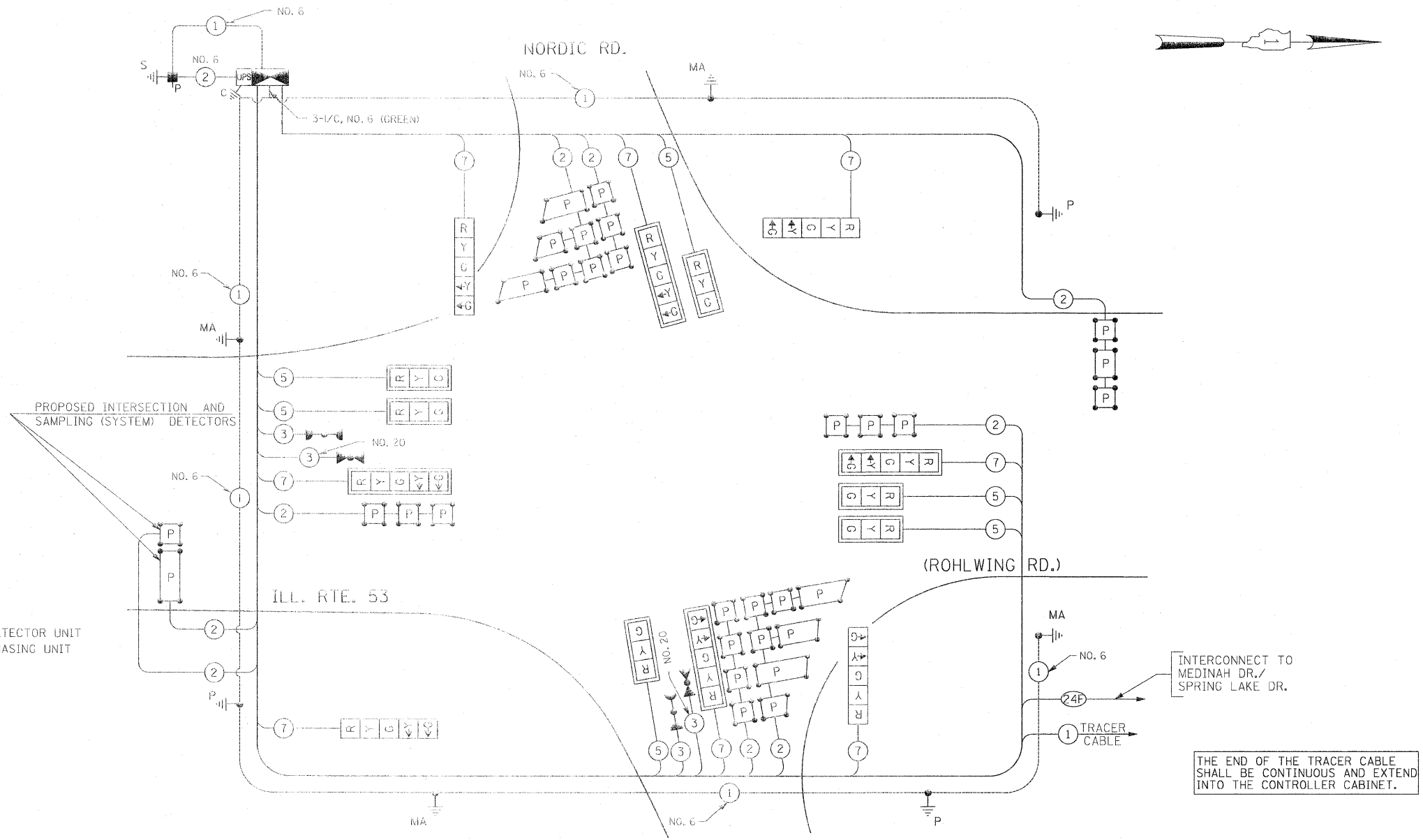
Rev. 6-B-11

FILE NAME = #FILEL#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC SIGNAL INSTALLATION PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT NORDIC RD./BLOOMINGDALE RD.</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 470
	PLOT SCALE = #SCALE#	DRAWN - MAA, EA	REVISED -		SCALE: 1"=20'	SHEET NO.	OF	SHEETS	STA.	TO STA.	CONTRACT NO. 60477	
	PLOT DATE = #DATE#	CHECKED - PKG, EA	REVISED -								ILLINOIS FED. AID PROJECT	
		DATE - 5/18/2011	REVISED -									

SCHEDULE OF QUANTITIES

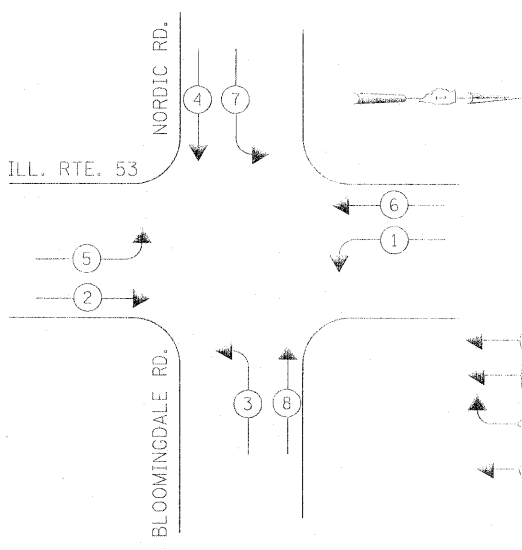
QUANTITY	UNIT	ITEM
30	50 FT	SIGN PANEL - TYPE 1
25	50 FT	SIGN PANEL - TYPE 2
499	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
35	FOOT	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL
51	FOOT	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL
25	FOOT	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL
388	FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
477	FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
4	EACH	HANDHOLE
4	EACH	HEAVY-DUTY HANDHOLE
2	EACH	DOUBLE HANDHOLE
573	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	TRANSCEIVER-FIBER OPTIC
1804	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
1333	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
1675	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
2394	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
93	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C
3	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 60 FT.
12	FOOT	CONCRETE FOUNDATION, TYPE A
4	FOOT	CONCRETE FOUNDATION, TYPE C
37	FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
21	FOOT	CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER
6	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED
4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED
10	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
9	EACH	INDUCTIVE LOOP DETECTOR
1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
2	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT
1	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
11	EACH	REMOVE EXISTING HANDHOLE
9	EACH	REMOVE EXISTING CONCRETE FOUNDATION
1224	FOOT	PREFORMED DETECTOR LOOP
1	EACH	TEMPORARY TRAFFIC SIGNAL TIMING
1	EACH	SERVICE INSTALLATION - POLE MOUNTED
1	EACH	UNINTERRUPTIBLE POWER SUPPLY
659	FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
356	FOOT	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED

\* 100% COST TO VILLAGE OF ITASCA

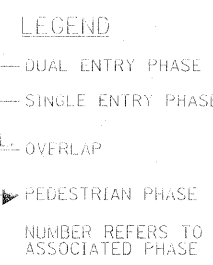


THE CONTRACTOR SHALL RELOCATE THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM EQUIPMENTS TO THE NEW TRAFFIC SIGNAL INSTALLATION AT ILL. RTE. 53 (ROHLWING RD.) & NORDIC RD. / BLOOMINGDALE RD.

CONTROLLER SEQUENCE

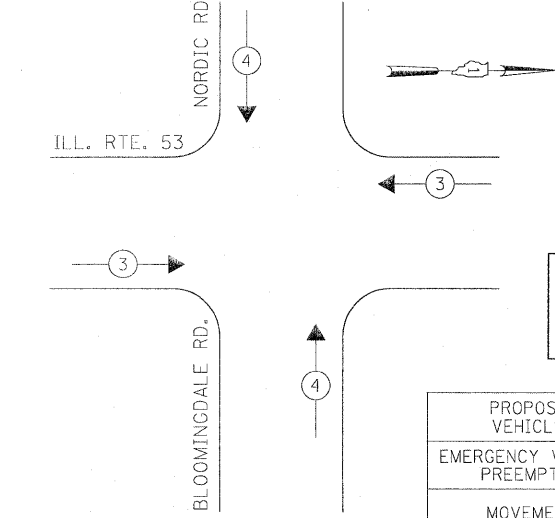


BLOOMINGDALE RD. CABLE PLAN (NOT TO SCALE)



PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE		%OPERATION	
SIGNAL (RED)	14	135	17	0.50	119
(YELLOW)	14	135	25	0.25	87.5
(GREEN)	14	135	15	0.25	52.5
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	1	90	25	1.00	90
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN			25	0.05	12.5
FLASHER				0.50	0.50
ENERGY COSTS TO:					TOTAL = 378.2

VILLAGE OF ITASCA  
550 WEST IRVING PARK ROAD  
ITASCA, ILLINOIS 60143-1795

ENERGY SUPPLY CONTACT: CURTIS TOPPS  
PHONE: (630) 691-4356  
COMPANY: COMMONWEALTH EDISON

**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" (300mm) 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 RAILROAD INTERSECTIONS, AND 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.

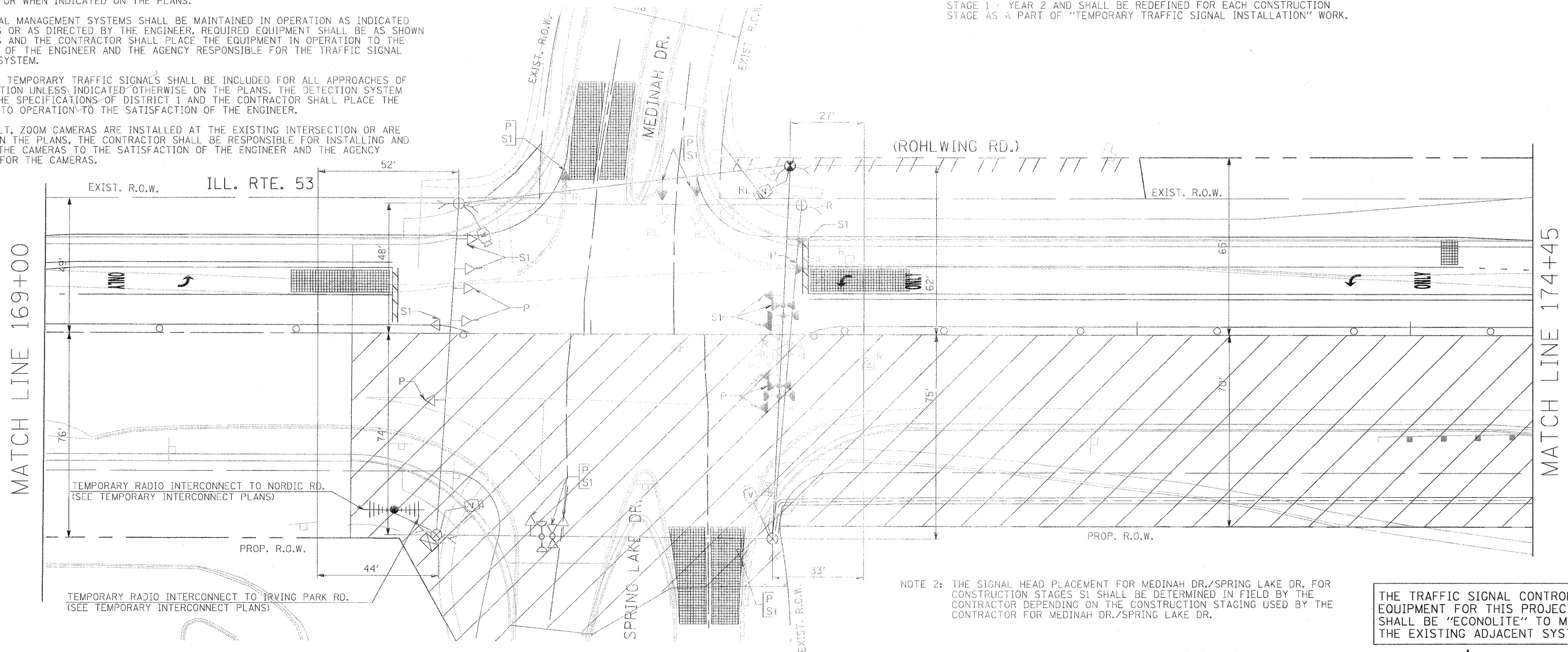


THE CONTRACTOR SHALL RELOCATE THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM EQUIPMENTS TO THE NEW TRAFFIC SIGNAL INSTALLATION AT ILL. RTE. 53 (ROHLWING RD.) & MEDINAH DR./SPRING LAKE DR.

FOR TEMPORARY TRAFFIC SIGNAL MODIFICATION, THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACTOR'S BID PRICE.

- 1 EACH WOOD POLE
- 245 FOOT SPAN WIRE
- 245 FOOT TETHER WIRE
- 1 LSUM AERIAL ELECTRIC CABLES

NOTE 1: THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR CONSTRUCTION STAGE 1 - YEAR 2 AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.

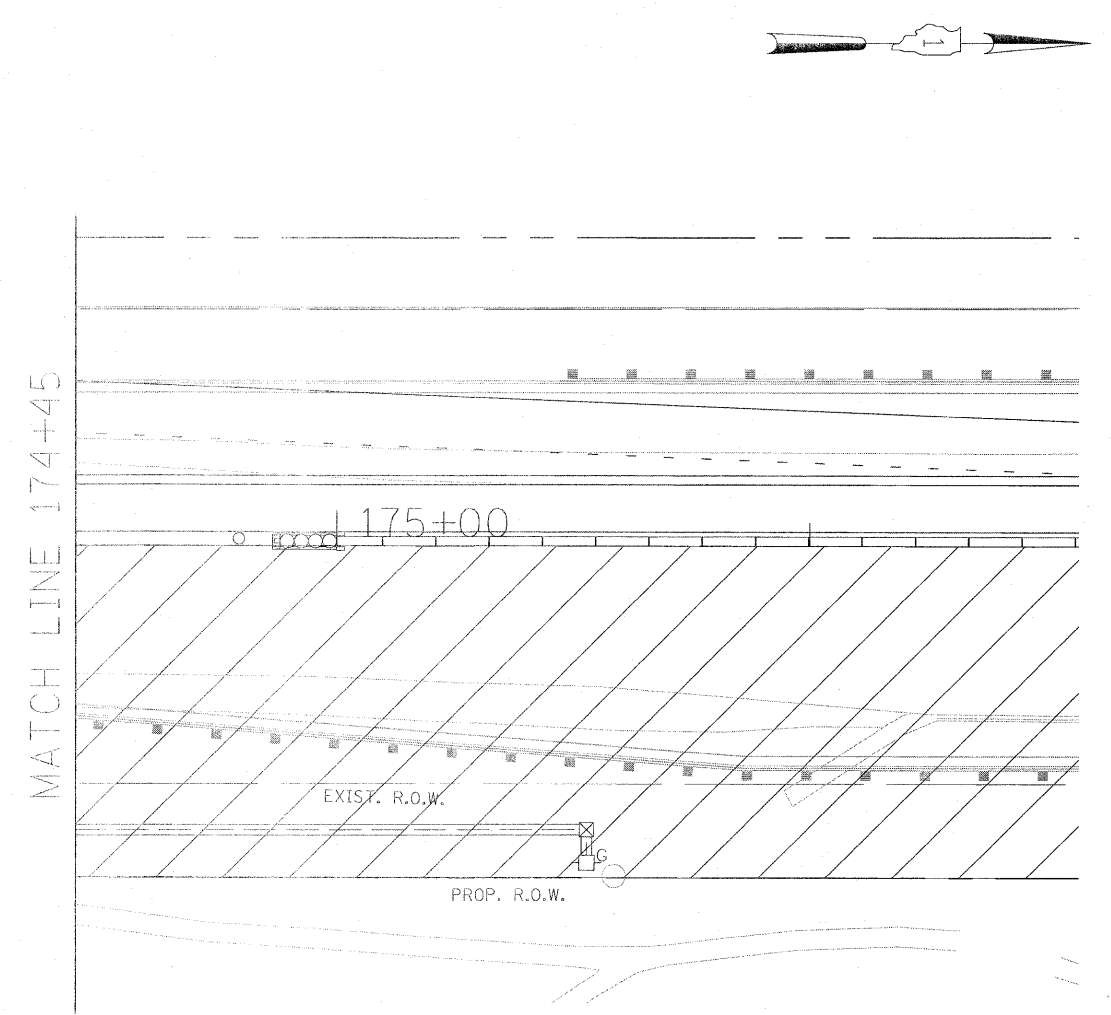
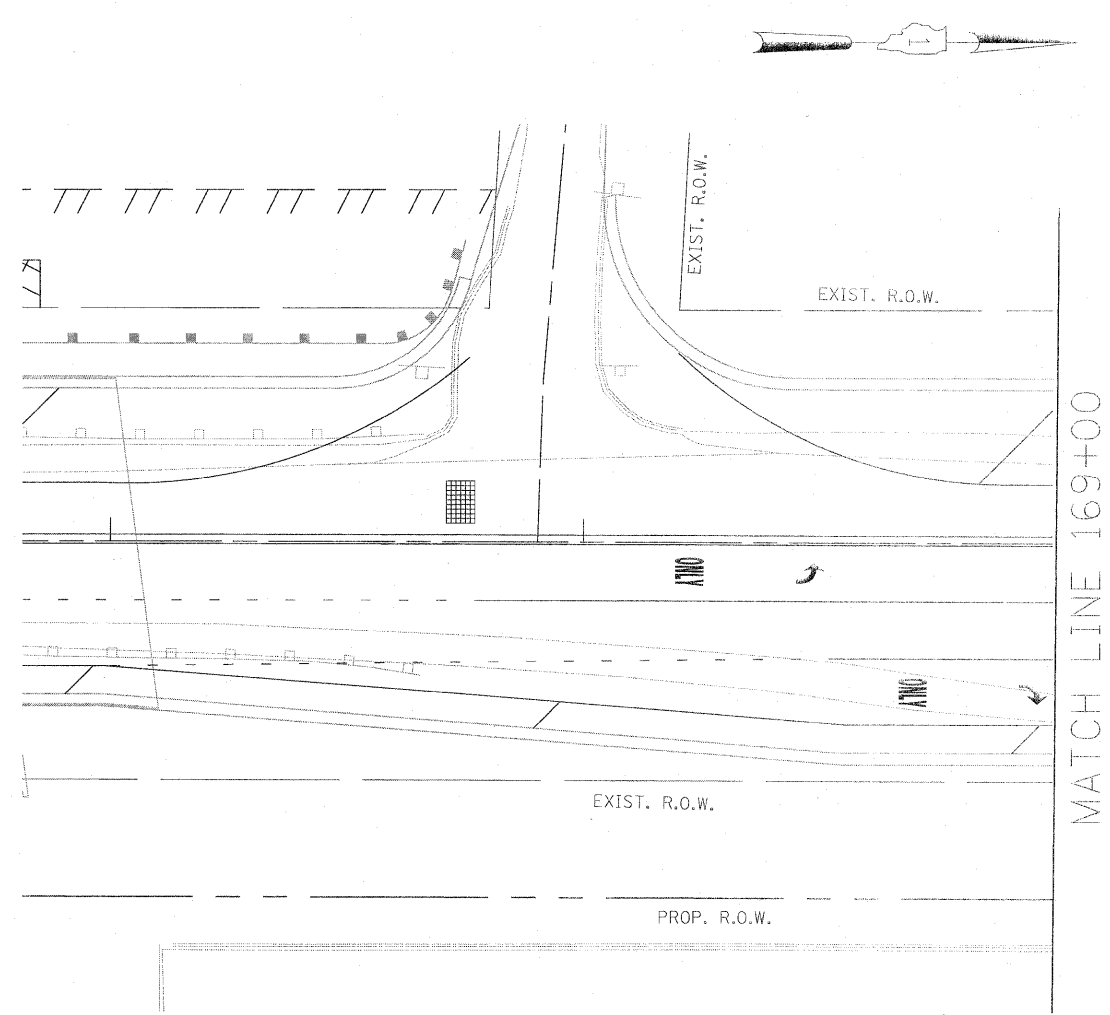


NOTE 2: THE SIGNAL HEAD PLACEMENT FOR MEDINAH DR./SPRING LAKE DR. FOR CONSTRUCTION STAGES S1 SHALL BE DETERMINED IN FIELD BY THE CONTRACTOR DEPENDING ON THE CONSTRUCTION STAGING USED BY THE CONTRACTOR FOR MEDINAH DR./SPRING LAKE DR.

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

Rev. 6-8-11

FILE NAME =	USER NAME = #USER#	DESIGNFD - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>EXISTING TEMPORARY TRAFFIC SIGNAL MODIFICATION PLAN, AND REMOVAL PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT MEDINAH DR./SPRING LAKE DR. PRE-STAGE AND STAGE 1 (SHEET 1 OF 4)</b>		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
#FILE#		DRAWN - MAA, EA	REVISED -		2578	532B	DuPage	781	472		
		CHECKED - PKG, EA	REVISED -		CONTRACT NO. 60477						
		DATE - 5/18/2011	REVISED -		ILLINOIS FED. AID PROJECT						
				1"=20' SCALE	SHEET NO.	OF SHEETS	STA.	TO STA.			



MATCH LINE 169+00

MATCH LINE 174+45

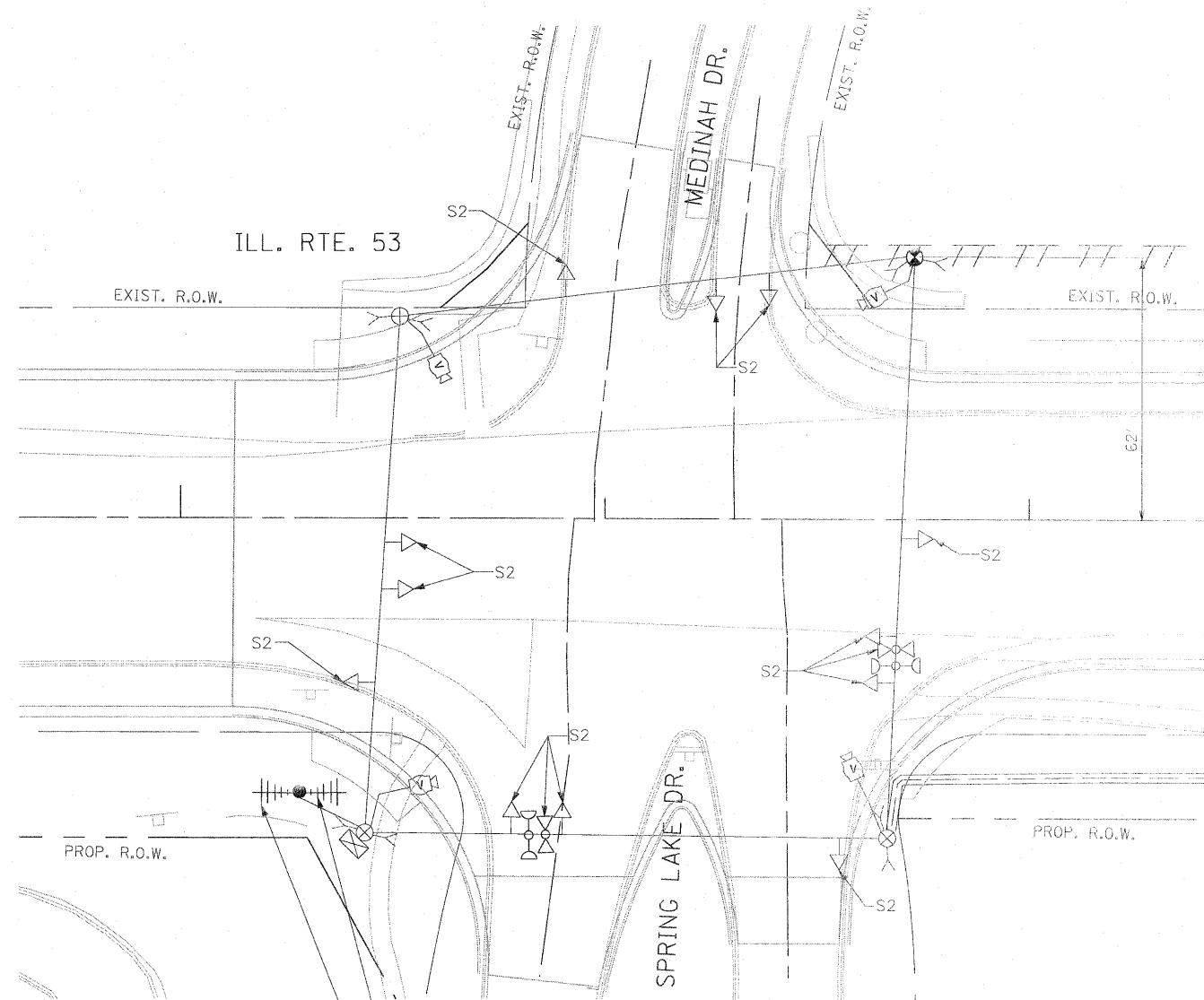
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		CHECKED - PKG, EA	REVISED -
		DATE - 5/18/2011	REVISED -
	PLOT SCALE = #SCALE#		
	PLOT DATE = #DATE#		

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EXISTING TEMPORARY TRAFFIC SIGNAL, MODIFICATION PLAN, AND REMOVAL PLAN  
ILLINOIS ROUTE 53 (ROHLWING RD.) AT MEDINAH DR./SPRING LAKE DR.  
PRE-STAGE AND STAGE 1 (SHEET 2 OF 4)**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2578	532B	DuPage	781	472A
FED. ROAD DIST. NO. - ILLINOIS			FED. AID PROJECT	
			CONTRACT NO. 60477	

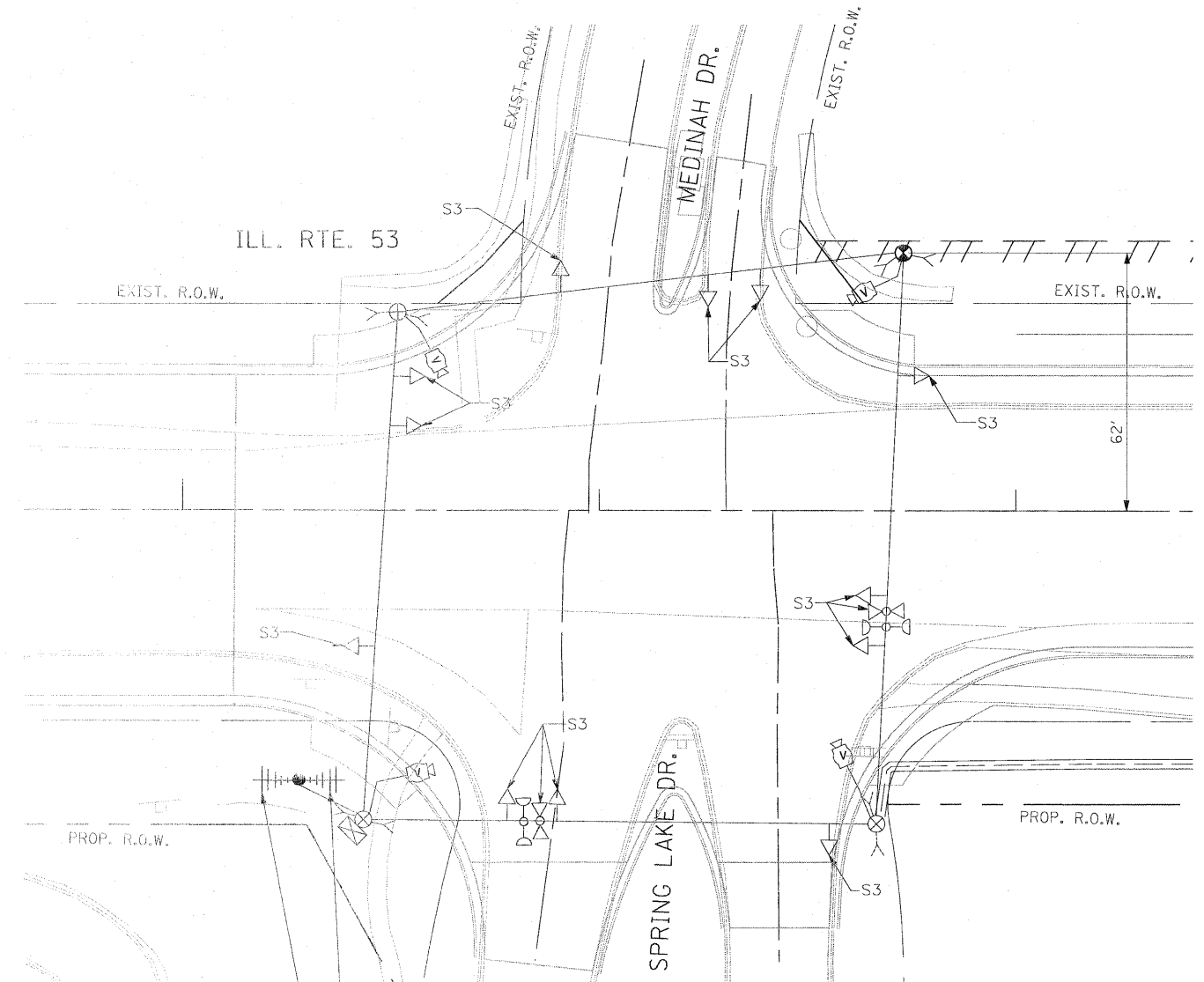
Δ Rev. 6-8-11



SIGNAL HEAD PLACEMENTS FOR  
STAGE: S2

TEMPORARY RADIO INTERCONNECT TO NORDIC RD.  
(SEE TEMPORARY INTERCONNECT PLANS)

TEMPORARY RADIO INTERCONNECT TO IRVING PARK RD.  
(SEE TEMPORARY INTERCONNECT PLANS)



SIGNAL HEAD PLACEMENTS FOR  
STAGE: S3

TEMPORARY RADIO INTERCONNECT TO NORDIC RD.  
(SEE TEMPORARY INTERCONNECT PLANS)

TEMPORARY RADIO INTERCONNECT TO IRVING PARK RD.  
(SEE TEMPORARY INTERCONNECT PLANS)

NOTE 1: THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR CONSTRUCTION STAGE 1 - YEAR 2 AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.

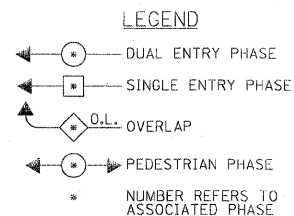
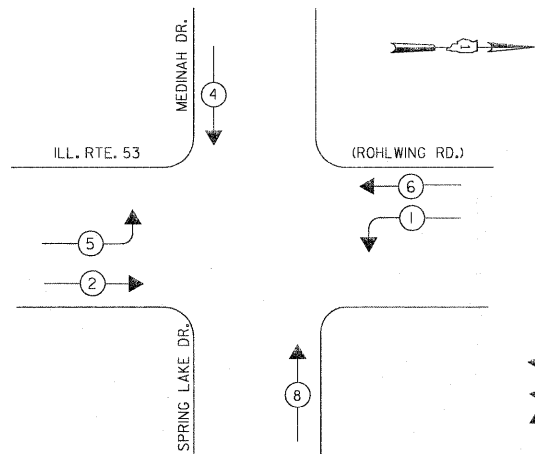
NOTE 2: THE SIGNAL HEAD PLACEMENT FOR MEDINAH/SPRING LAKE DRIVE FOR CONSTRUCTION STAGES S2 AND S3 SHALL BE DETERMINED IN FIELD BY THE CONTRACTOR DEPENDING ON THE CONSTRUCTION STAGING USED BY THE CONTRACTOR FOR MEDINAH/SPRING LAKE DRIVE.

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

Rev. 6-8-11

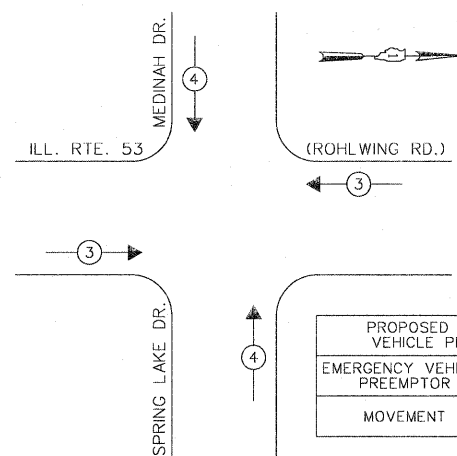
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PLOT SCALE = #SCALE#	CHECKED - PKG, EA	REVISED -	SCALE: 1"=20'			SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	CONTRACT NO. 60477		
PLOT DATE = #DATE#	DATE - 5/18/2011	REVISED -								

CONTROLLER SEQUENCE



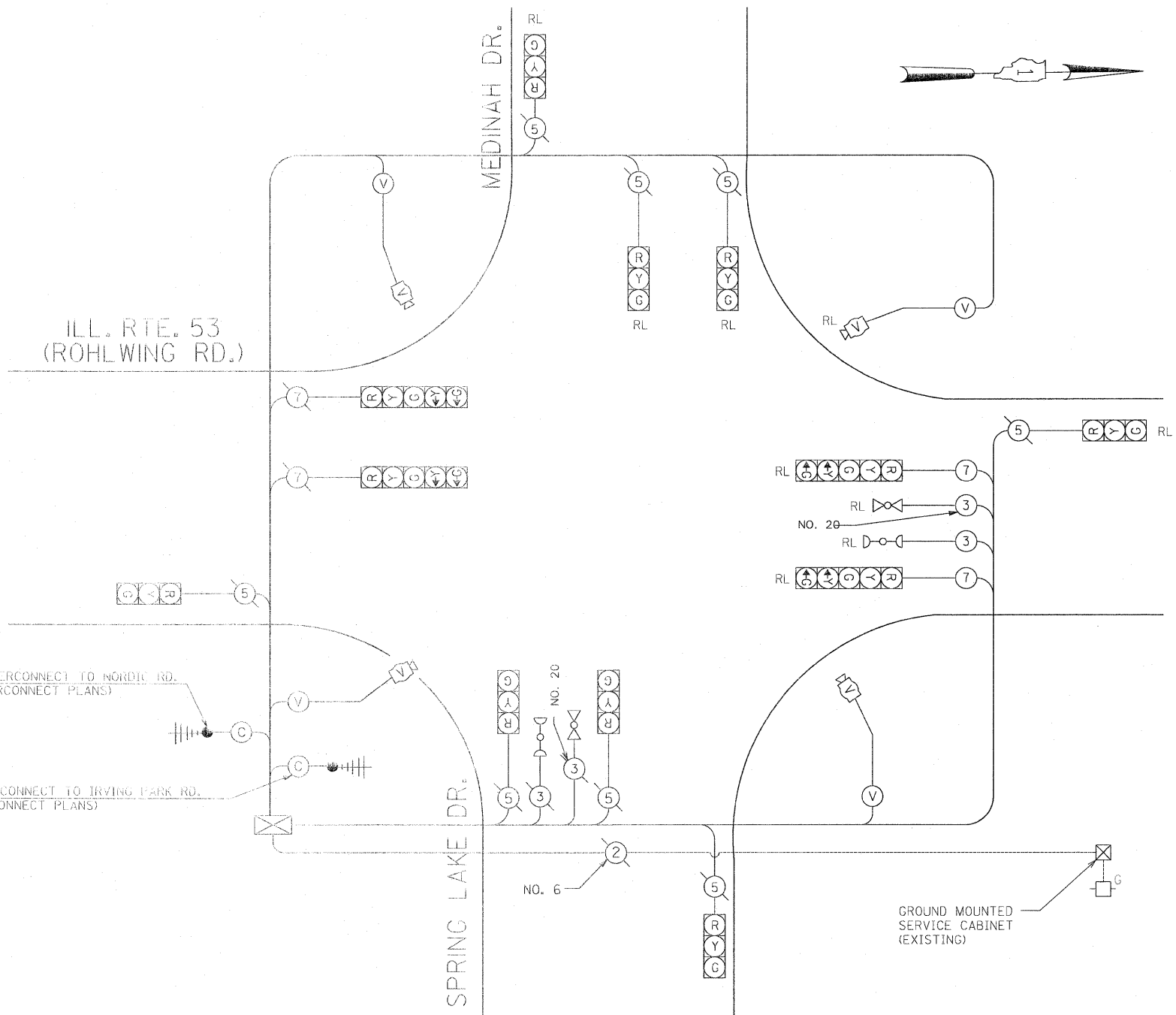
TEMPORARY PHASE DESIGNATION DIAGRAM  
STAGES: PRE-STAGE, S1, S2, AND S3

EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

STAGES: PRE-STAGE, S1, S2, AND S3



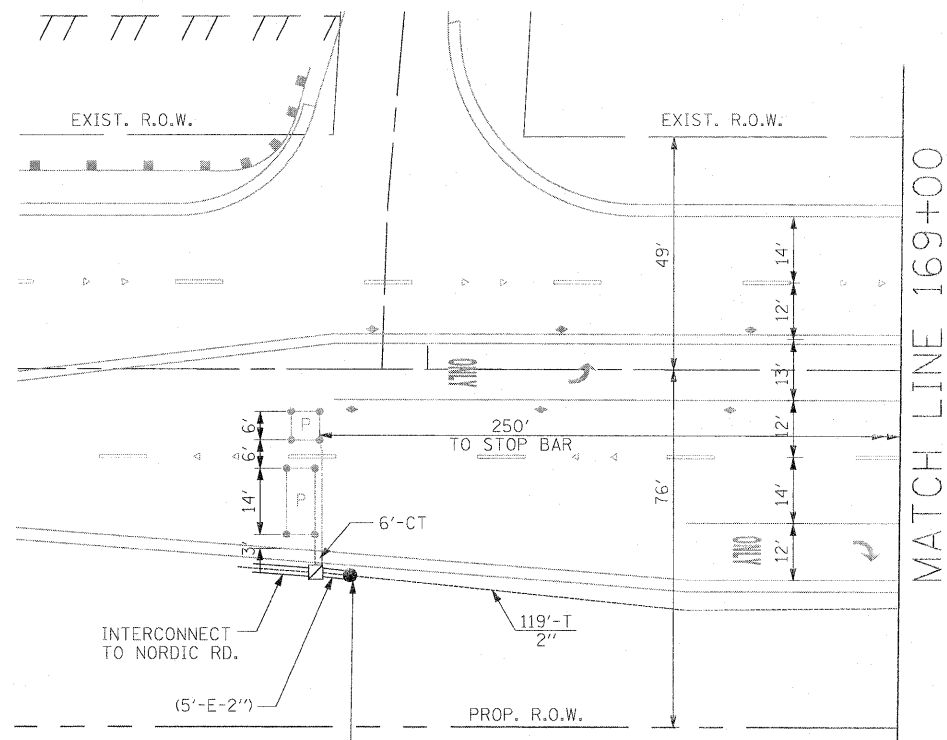
TEMPORARY CABLE PLAN

(NOT TO SCALE)

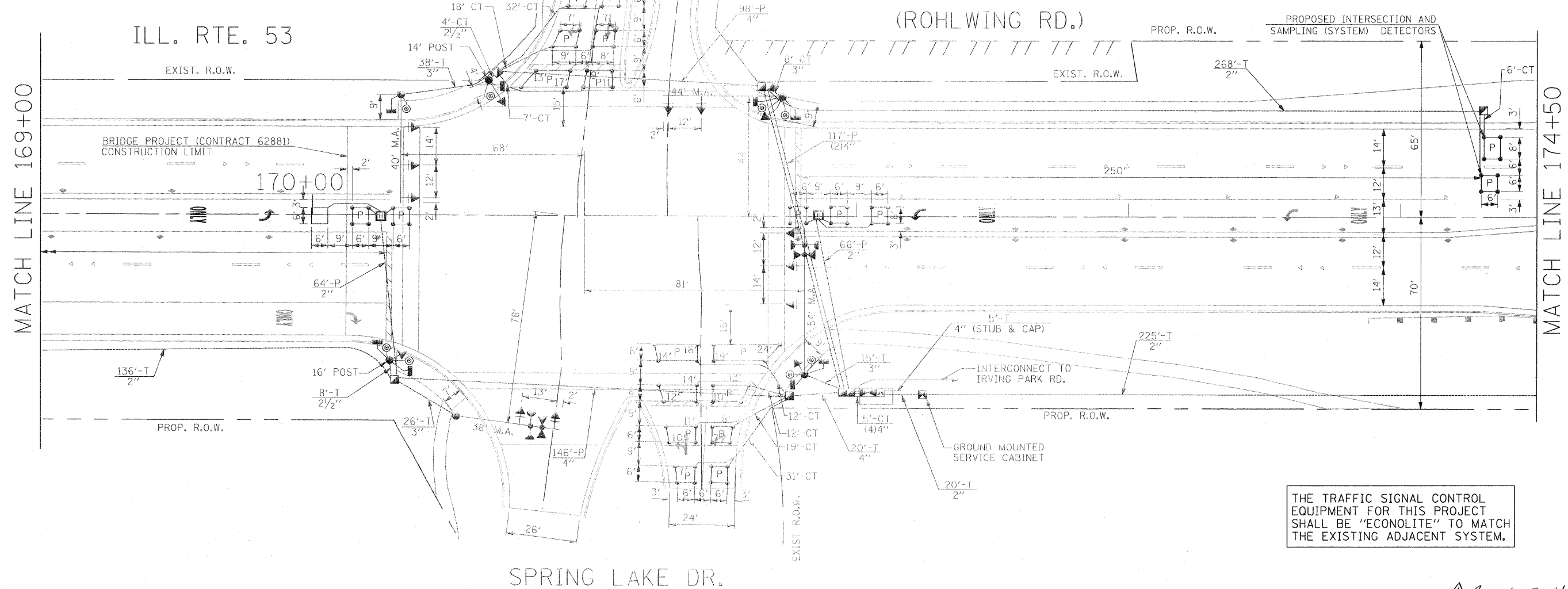
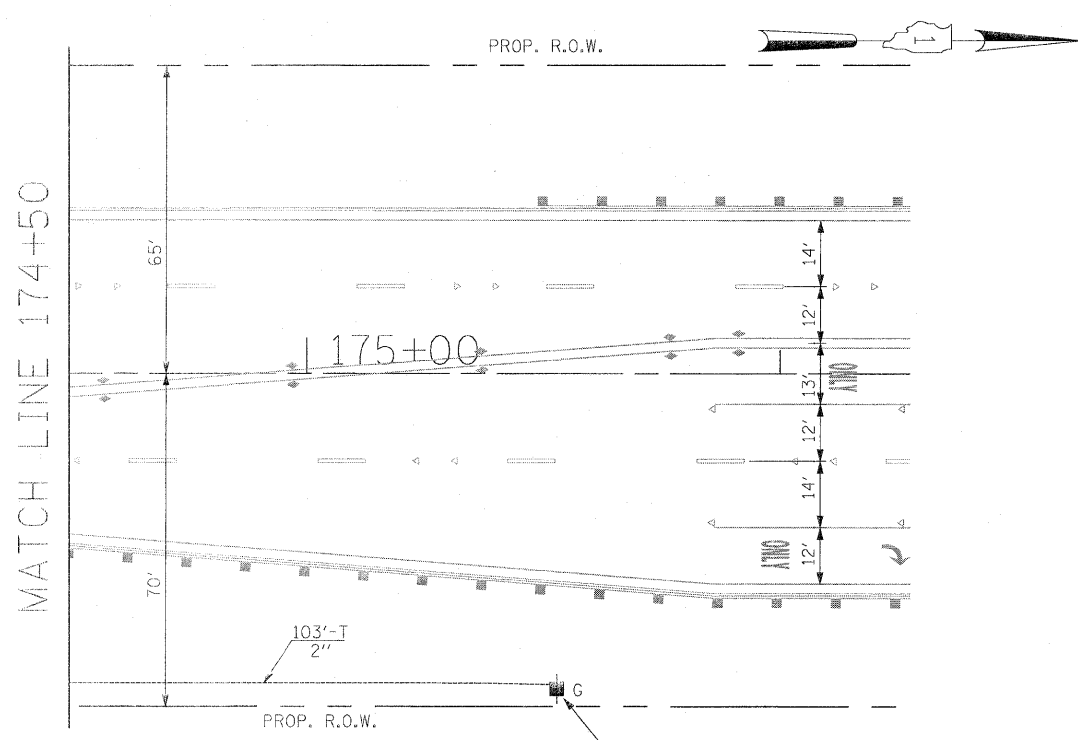
I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO LAMPS	WATTAGE		%OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	8	135	12	0.10	9.6
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		25		0.05	
VIDEO SYSTEM	1	150		1.00	150
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL =
VILLAGE OF ITASCA 550 WEST IRVING PARK ROAD ITASCA, ILLINOIS 60143-1795					481.6
ENERGY SUPPLY CONTACT: CURTIS TOPPS PHONE: (630) 691-4356 COMPANY: COMMONWEALTH EDISON					

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

Rev. 6-8-11



THE CONTRACTOR SHALL RELOCATE THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM EQUIPMENTS TO THE NEW TRAFFIC SIGNAL INSTALLATION AT ILL. RTE. 53 (ROHLWING RD.) & MEDINAH DR./SPRING LAKE DR.



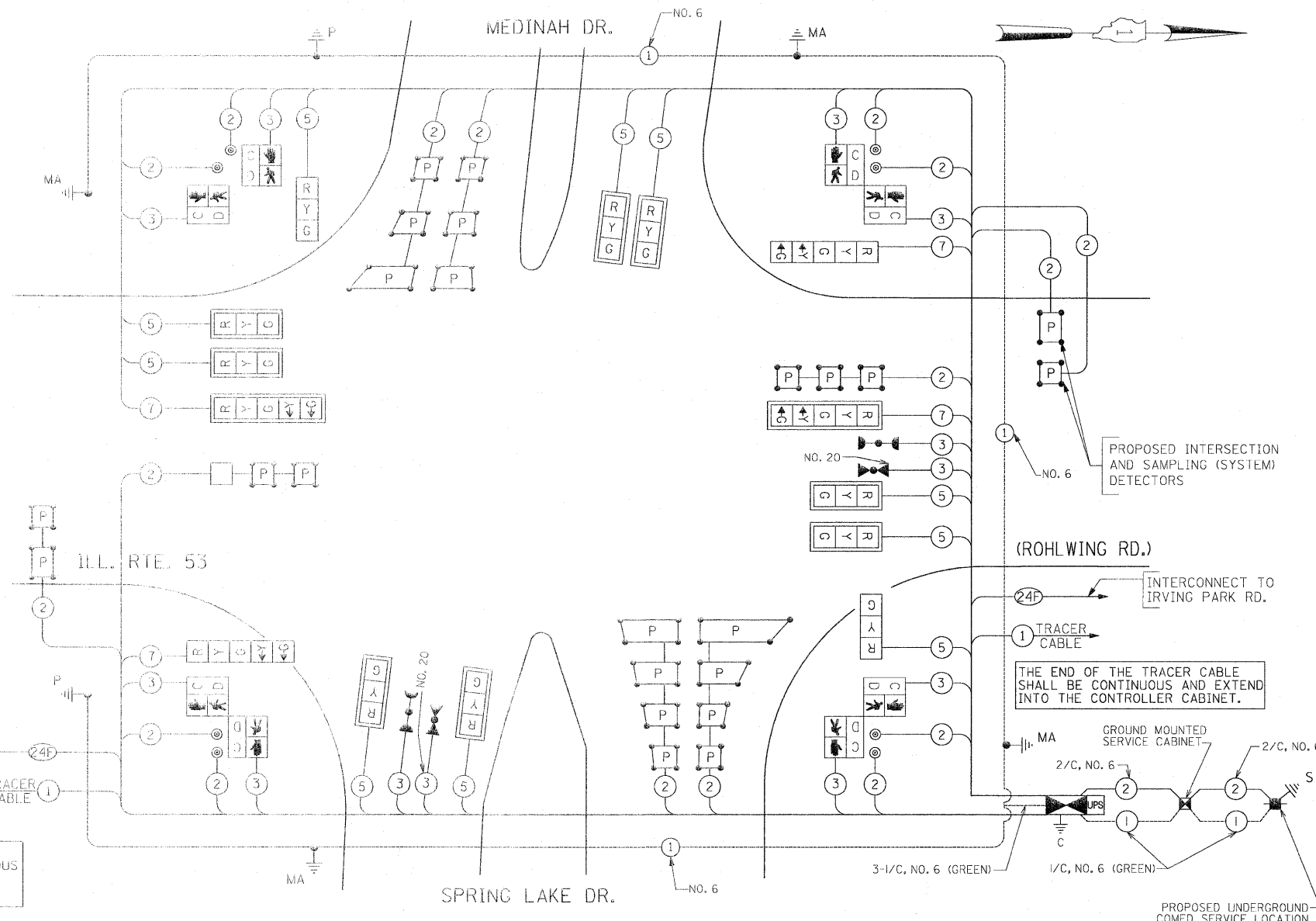
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = #FILEL#	USER NAME = #USER#	DESIGNED - PKG	REVISD -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC SIGNAL INSTALLATION PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT MEDINAH DR./SPRING LAKE DR.</b>			F.A.P. RTE. 2578	SECTION 5328	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 475
	PLOT SCALE = #SCALE#	DRAWN - MAA, EA	REVISD -		SCALE: 1"=20'	SHEET NO.	OF	SHEETS	STA.	TO STA.	CONTRACT NO. 60477	
	PLOT DATE = #DATE#	CHECKED - PKG, EA	REVISD -								ILLINOIS FED. AID PROJECT	
		DATE - 5/18/2011	REVISD -								Rev. 6-8-11	

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
31.5	SQ FT	SIGN PANEL - TYPE 1
27.5	SQ FT	SIGN PANEL - TYPE 2
871	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
12	FOOT	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL
87	FOOT	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL
45	FOOT	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL
130	FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
478	FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
4	EACH	HANDHOLE
2	EACH	HEAVY-DUTY HANDHOLE
2	EACH	DOUBLE HANDHOLE
984	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	TRANSCEIVER-FIBER OPTIC
1459	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
1914	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
2211	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
879	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
2296	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
398	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 54 FT.
8	FOOT	CONCRETE FOUNDATION, TYPE A
4	FOOT	CONCRETE FOUNDATION, TYPE C
52	FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
8	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED
2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
2	EACH	SIGNAL HEAD, LED, 1-FACE, 5 SECTION, BRACKET MOUNTED
2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED
4	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
10	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
9	EACH	INDUCTIVE LOOP DETECTOR
44	FOOT	DETECTOR LOOP, TYPE 1
8	EACH	PEDESTRIAN PUSH-BUTTON
2	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT
1	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
3	EACH	REMOVE EXISTING HANDHOLE
1	EACH	REMOVE TEMPORARY TRAFFIC SIGNAL INSTALLATION
868	FOOT	PREFORMED DETECTOR LOOP
1	EACH	TEMPORARY TRAFFIC SIGNAL TIMING
1	EACH	SERVICE INSTALLATION - GROUND MOUNTED
1	EACH	UNINTERRUPTIBLE POWER SUPPLY
1007	FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
399	FOOT	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED
1	EACH	MODIFY TEMPORARY TRAFFIC SIGNAL INSTALLATION

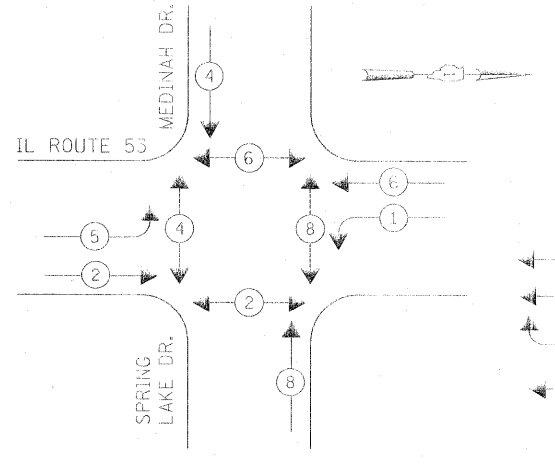
\* 100% COST TO VILLAGE OF ITASCA



CABLE PLAN  
(NOT TO SCALE)

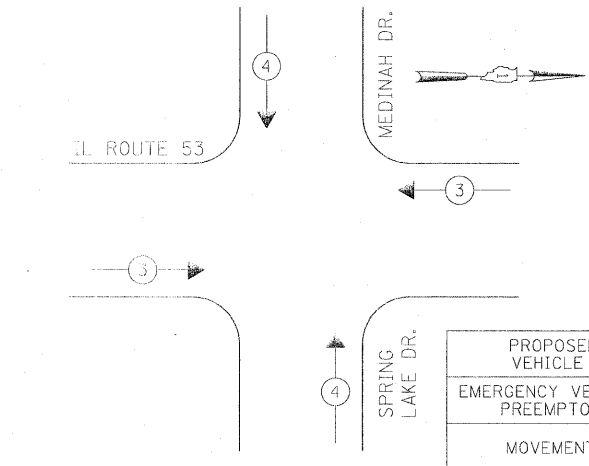
THE CONTRACTOR SHALL RELOCATE THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM EQUIPMENTS TO THE NEW TRAFFIC SIGNAL INSTALLATION AT ILL. RTE. 53 (ROHLWING RD.) & MEDINAH DR./SPRING LAKE DR.

CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE		%OPERATION	
		INCAND.	LED		
SIGNAL (RED)	14	135	17	0.50	119.0
(YELLOW)	14	135	25	0.25	87.5
(GREEN)	14	135	15	0.25	52.5
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN			25	0.05	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 568.6

VILLAGE OF ITASCA  
550 WEST IRVING PARK ROAD  
ITASCA, ILLINOIS 60143-1795

ENERGY SUPPLY CONTACT: CURTIS TOPPS  
PHONE: (630) 691-4356  
COMPANY: COMMONWEALTH EDISON



NOTES FOR TEMPORARY TRAFFIC SIGNALS

MATCH LINE "B"



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" (300mm) 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 RAILROAD INTERSECTIONS, AND 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.

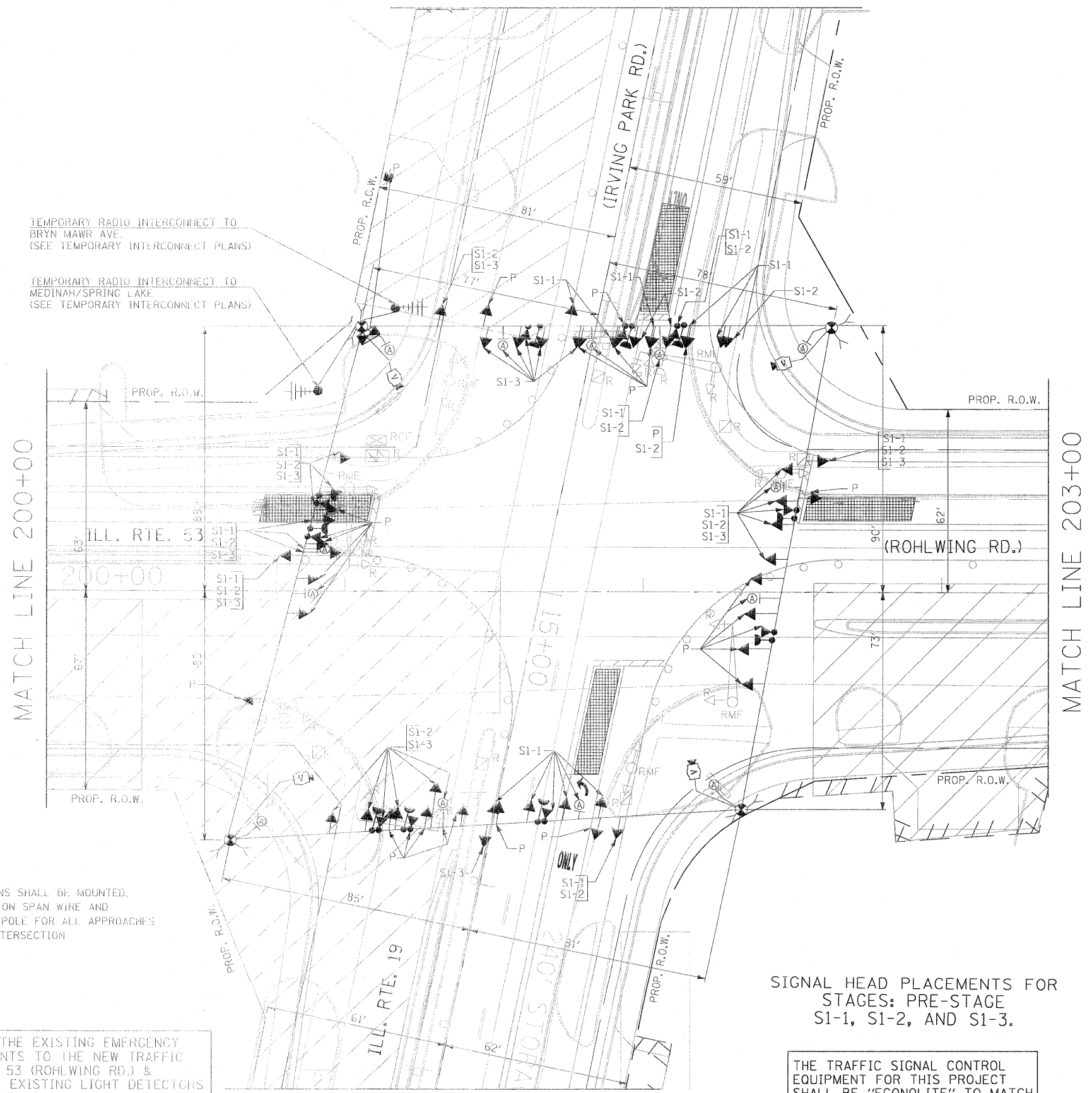
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACTOR'S BID PRICE.

- 1 EACH CONTROLLER AND CABINET COMPLETE
- 2 EACH SIGNAL HEAD, 1-FACE 3-SECTION, BRACKET MOUNTED
- 2 EACH SIGNAL HEAD, 1-FACE 5-SECTION, BRACKET MOUNTED
- 4 EACH SIGNAL HEAD, 1-FACE 5-SECTION, MAST ARM MOUNTED
- 2 EACH SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
- 2 EACH SIGNAL HEAD, 2-FACE 5-SECTION, BRACKET MOUNTED
- 4 EACH TRAFFIC SIGNAL BACKPLATE
- 4 EACH TRAFFIC SIGNAL POST
- 1 EACH STEEL MAST ARM ASSEMBLY AND POLE
- 3 EACH ALUMINUM MAST ARM ASSEMBLY AND POLE
- 1 EACH SERVICE INSTALLATION

NOTE: THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR CONSTRUCTION STAGE 1 - SUBSTAGE 1 AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.

Ⓐ  
LEFT ON  
GREEN  
ARROW  
ONLY  
R10-5,  
24" X 30"  
(8 REQUIRED)  
R10-5 SIGNS SHALL BE MOUNTED,  
ONE EACH ON SPAN WIRE AND  
FAR LEFT POLE FOR ALL APPROACHES  
OF THE INTERSECTION

THE CONTRACTOR SHALL RELOCATE THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM EQUIPMENTS TO THE NEW TRAFFIC SIGNAL INSTALLATION AT ILL. RTE. 53 (ROHLWING RD.) & ILL. RTE. 19 (IRVING PARK RD.) THE EXISTING LIGHT DETECTORS ARE SEPARATED AND SHALL BE DIVIDED, INCLUDING THE CONFIRMATION BEACONS, FOR MOUNTING AS PROPOSED IN THE PLANS FOR NEW SIGNAL PHASING.



SIGNAL HEAD PLACEMENTS FOR STAGES: PRE-STAGE S1-1, S1-2, AND S1-3.

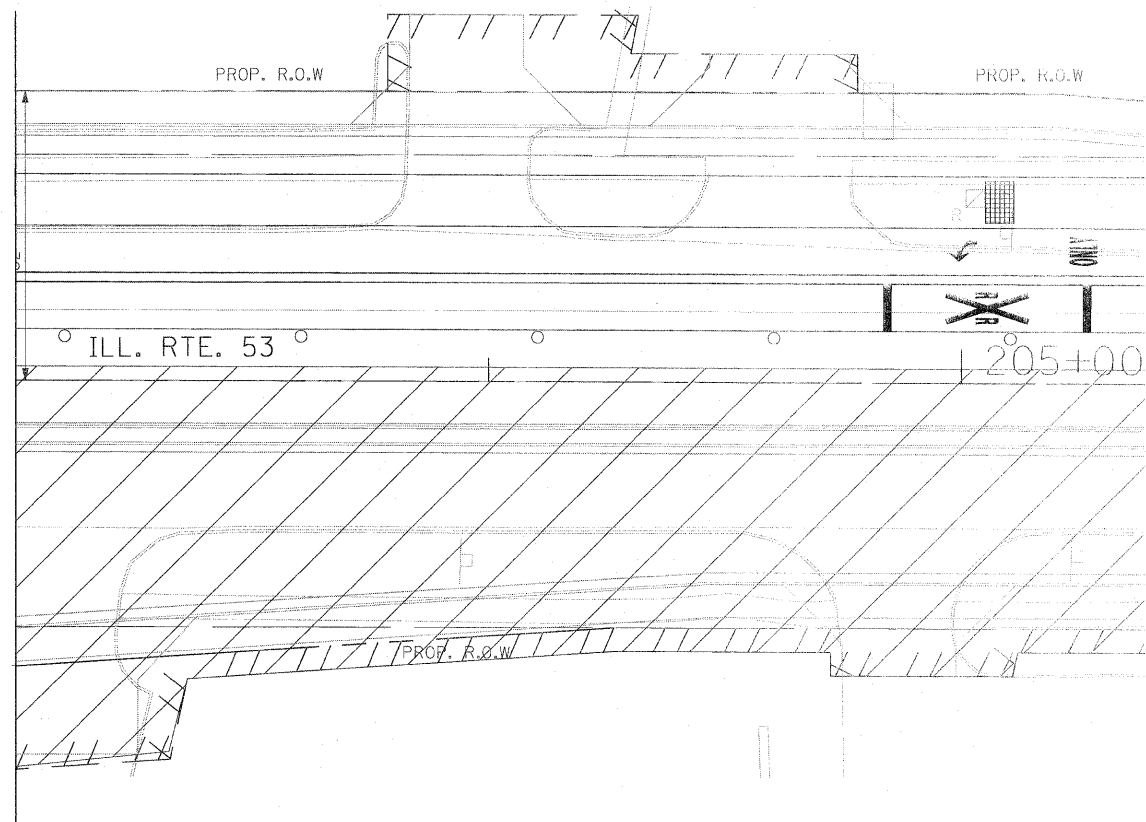
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

Rev. 6-8-11

FILE NAME =	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT ILL. RTE 19 (IRVING PARK RD.) PRE STAGE AND STAGE 1 (SHEET 1 OF 5)</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
#FILE#		DRAWN - MAA, EA	REVISED -			2578	532B	DuPage	781	477
		CHECKED - PKG, EA	REVISED -			CONTRACT NO. 60477				
		DATE - 5/18/2011	REVISED -	SCALE:	SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				

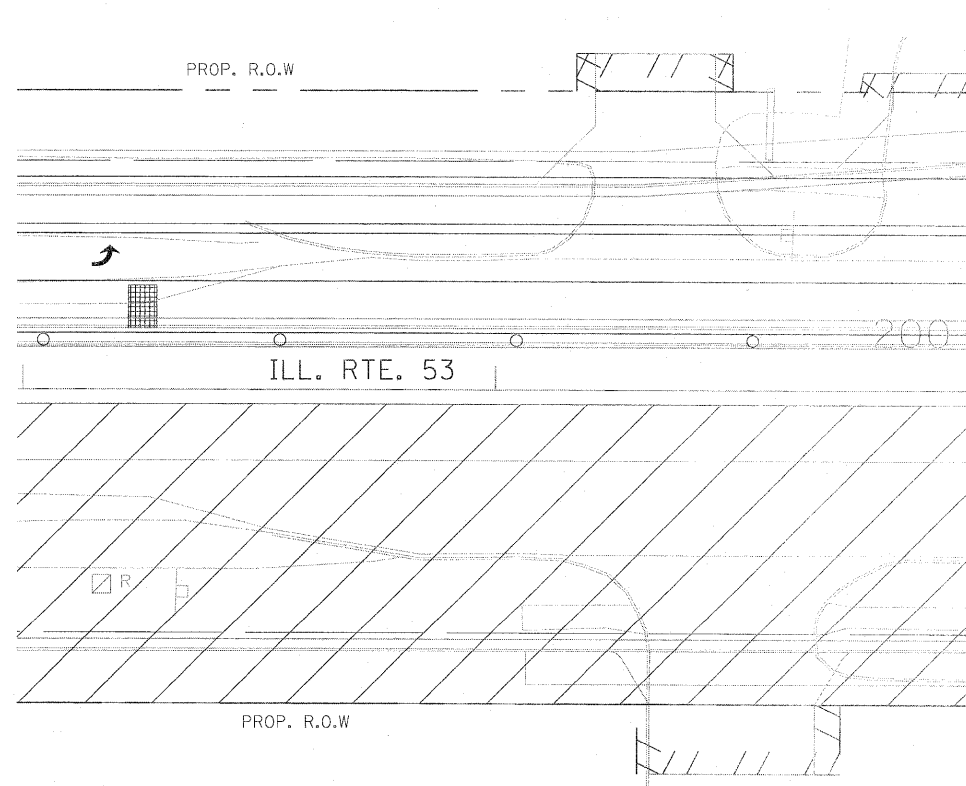


MATCH LINE 203+00



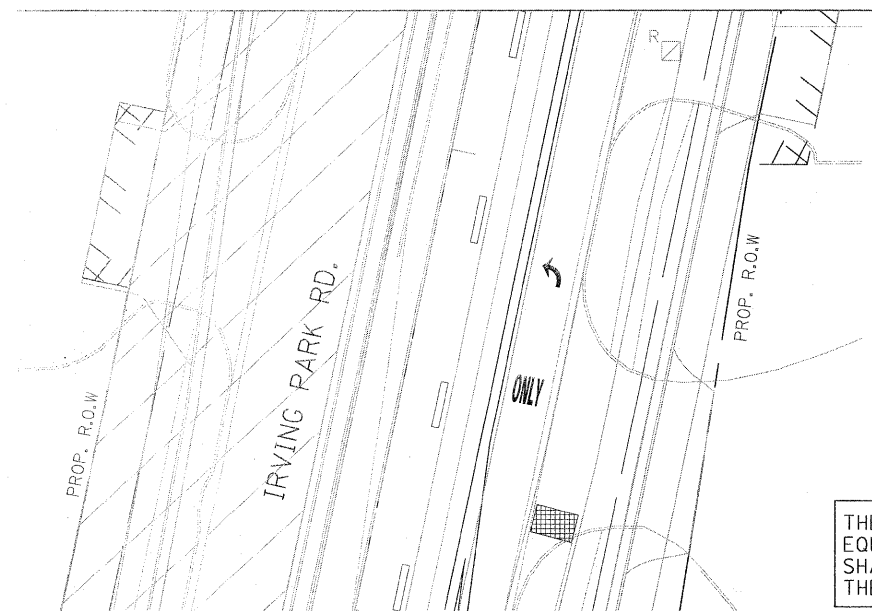
MATCH LINE "B"

NOTE: THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR PRE-CONSTRUCTION STAGE (EXISTING GEOMETRICS) AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.



MATCH LINE 200+00

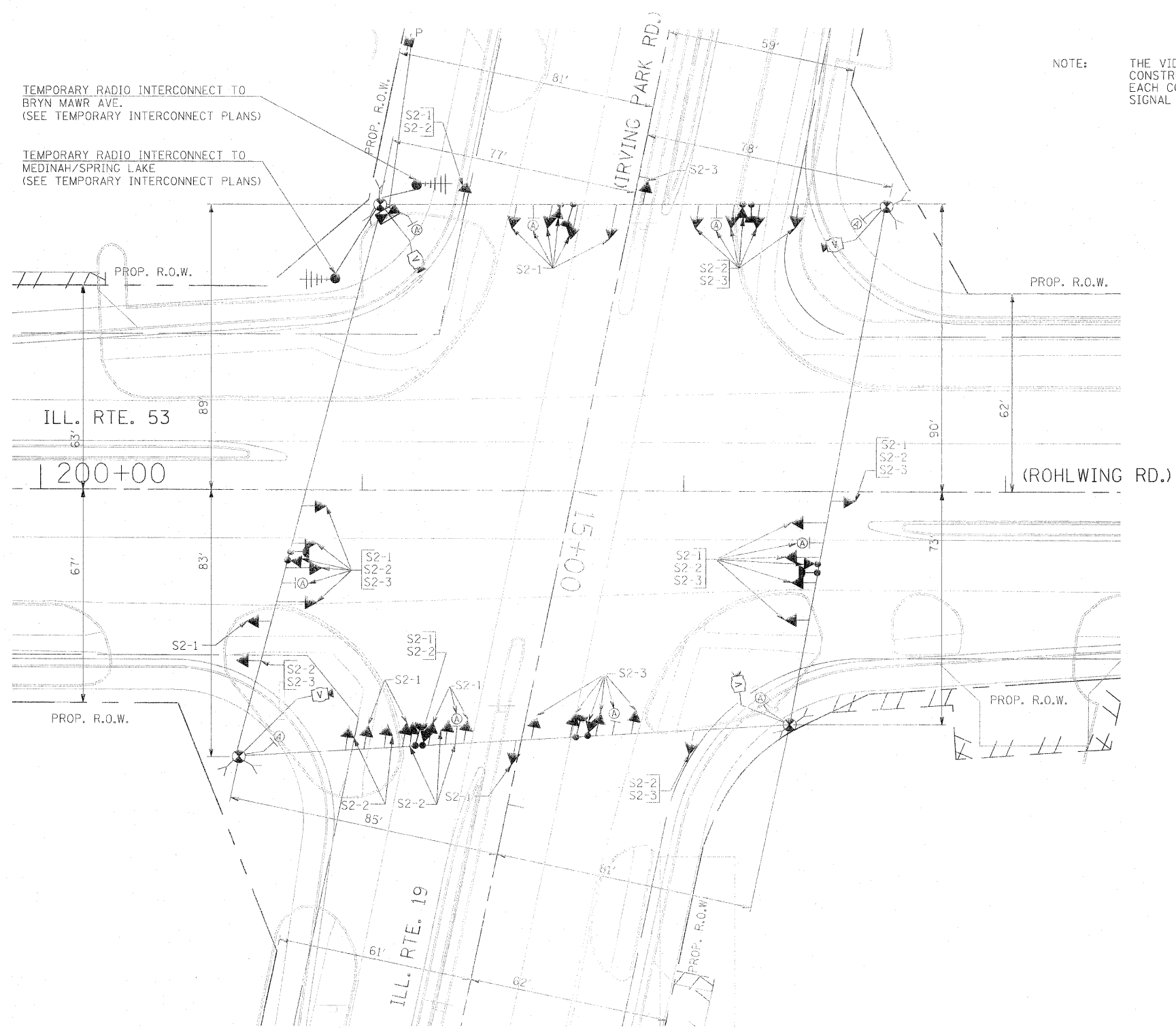
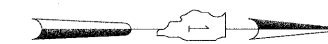
MATCH LINE "A"



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

Rev. 6-B-11

FILE NAME = #FILEL#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT ILL. RTE. 19 (IRVING PARK RD.) PRE STAGE AND STAGE 1 (SHEET 2 OF 5)</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 478
	PLOT SCALE = #SCALE#	DRAWN - MAA, EA	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	CONTRACT NO. 60477	
	PLOT DATE = #DATE#	CHECKED - PKG, EA	REVISED -		FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT						
		DATE - 5/18/2011	REVISED -									



NOTE: THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR CONSTRUCTION STAGE 1 - SUBSTAGE 1 AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.

Ⓐ  
LEFT ON GREEN ARROW ONLY  
R10-5 SIGNS SHALL BE MOUNTED, ONE EACH ON SPAN WIRE AND FAR LEFT POLE FOR ALL APPROACHES OF THE INTERSECTION  
R10-5, 24" X 30" (8 REQUIRED)

SIGNAL HEAD PLACEMENTS FOR STAGES: S2-1, S2-2, AND S2-3.

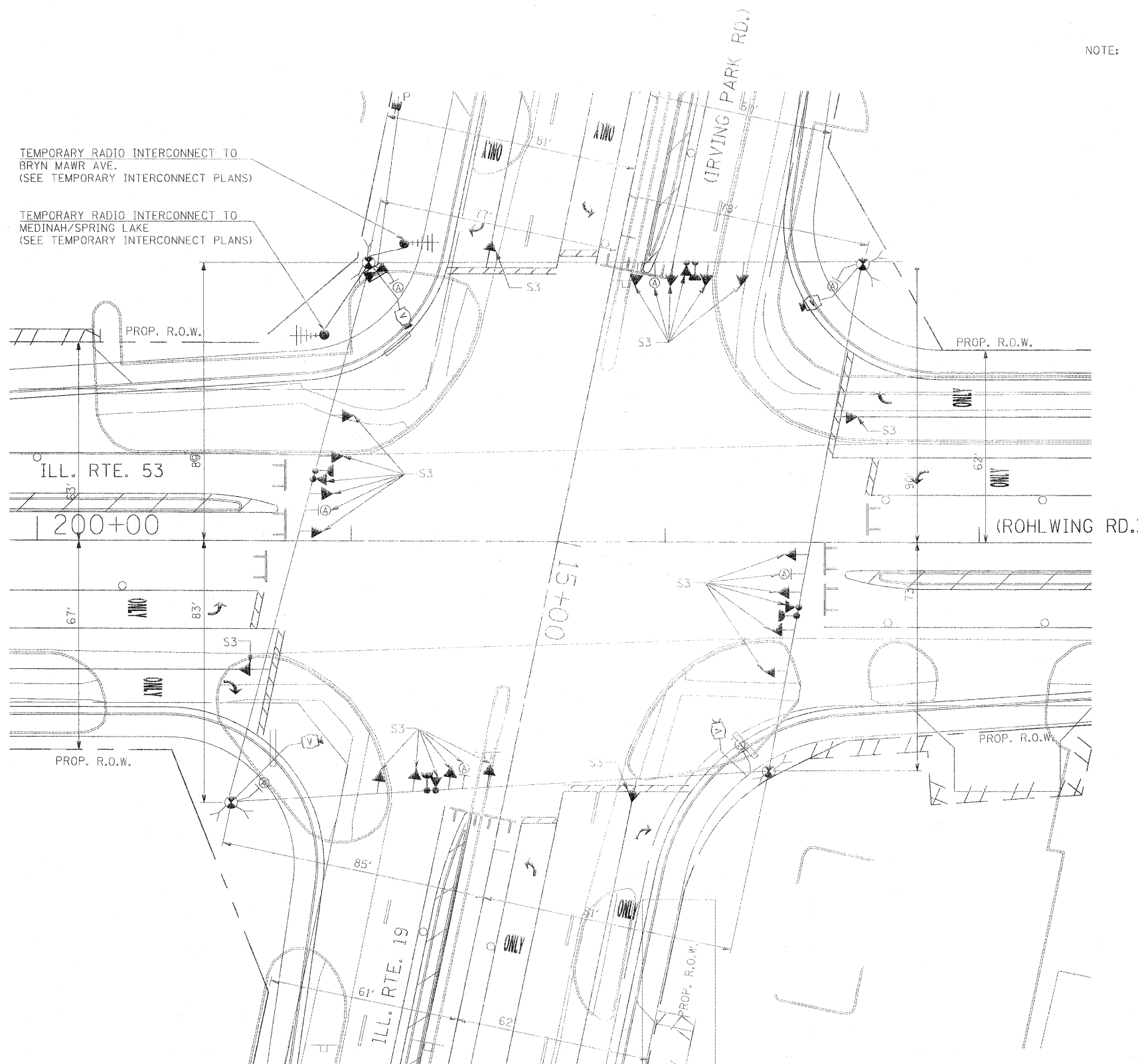
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

Rev. 6-8-11

FILE NAME = #FILEL#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT ILL. RTE. 19 (IRVING PARK RD.) STAGE 2 (SHEET 3 OF 5)</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 479
	PLOT SCALE = #SCALE#	DRAWN - MAA, EA	REVISED -		SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.	CONTRACT NO. 60477		
	PLOT DATE = #DATE#	CHECKED - PKG, EA	REVISED -							ILLINOIS FED. AID PROJECT		
		DATE - 5/18/2011	REVISED -									



NOTE: THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR CONSTRUCTION STAGE 1 - SUBSTAGE 1 AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.



SIGNAL HEAD PLACEMENTS FOR STAGE 3

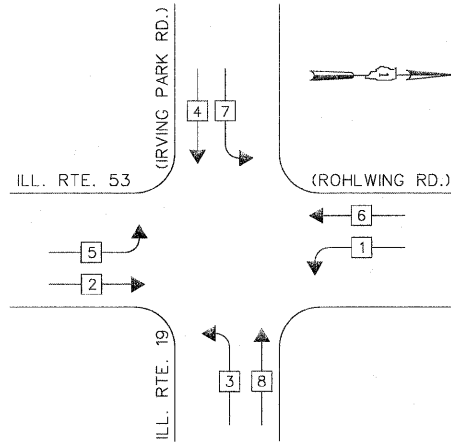
Ⓐ  
 LEFT ON  
 GREEN  
 ARROW  
 ONLY  
 R10-5, 24" X 30" (8 REQUIRED)  
 R10-5 SIGNS SHALL BE MOUNTED, ONE EACH ON SPAN WIRE AND FAR LEFT POLE FOR ALL APPROACHES OF THE INTERSECTION

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

Rev. 6-8-11

FILE NAME = *FILEL*	USER NAME = *USER*	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT ILL. RTE. 19 (IRVING PARK RD.) STAGE 3 (SHEET 4 OF 5)</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 480
	PLOT SCALE = *SCALE*	DRAWN - MAA, EA	REVISED -		SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				
	PLOT DATE = *DATE*	CHECKED - PKG, EA	REVISED -					CONTRACT NO. 60477				
		DATE - 5/18/2011	REVISED -									

CONTROLLER SEQUENCE

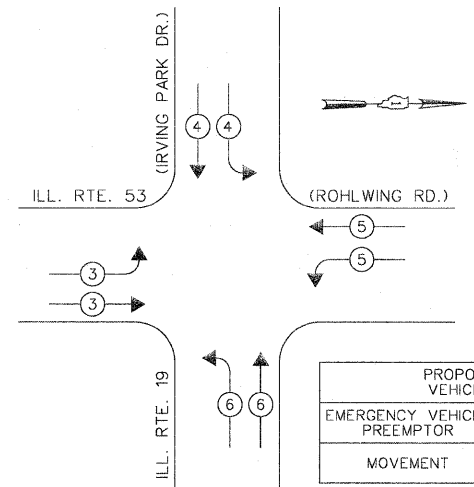


- LEGEND**
- ⊙ DUAL ENTRY PHASE
  - ⊠ SINGLE ENTRY PHASE
  - ⊙ O.L. OVERLAP
  - ⊙ PEDESTRIAN PHASE
  - \* NUMBER REFERS TO ASSOCIATED PHASE

TEMPORARY PHASE DESIGNATION DIAGRAM

STAGES: PRE-STAGE, S1-1, S2-3, S3, AND AFTER PROPOSED ROADWAY GEOMETRICS ARE BUILT

EMERGENCY VEHICLE PREEMPTION SEQUENCE

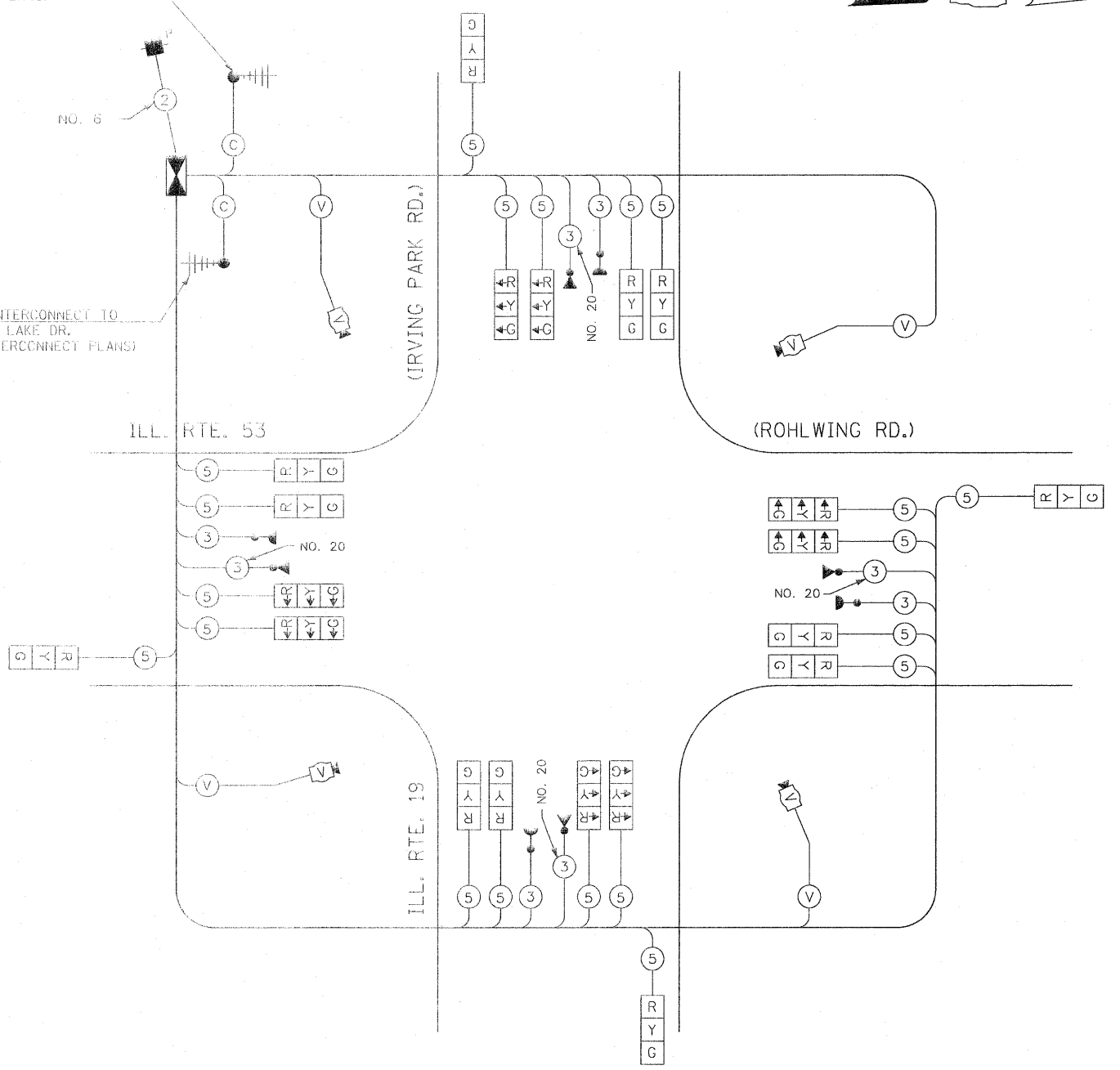


PROPOSED EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	→	↓	←	↑

STAGES: PRE-STAGE, S1-1, S2-3, S3, AND AFTER PROPOSED ROADWAY GEOMETRICS ARE BUILT

TEMPORARY RADIO INTERCONNECT TO BRYN MAWR AVE. (SEE TEMPORARY INTERCONNECT PLANS)

TEMPORARY RADIO INTERCONNECT TO MEDINAH DR./SPRING LAKE DR. (SEE TEMPORARY INTERCONNECT PLANS)



TEMPORARY CABLE PLAN

(NOT TO SCALE)

STAGES: PRE-STAGE, S1-1, S1-2, S1-3, S2-1, S2-2, S2-3, S3, AND AFTER PROPOSED ROADWAY GEOMETRICS ARE BUILT

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE		OPERATION	
		INCAND.	LED		
SIGNAL (RED)	20	135	17	0.50	170
(YELLOW)	20	135	25	0.25	125
(GREEN)	20	135	15	0.25	75
ARROW		135	12	0.10	
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		25		0.05	
VIDEO SYSTEM	1	150		1.00	150
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	620

VILLAGE OF ITASCA  
550 WEST IRVING PARK ROAD  
ITASCA, ILLINOIS 60143-1795

ENERGY SUPPLY CONTACT: CURTIS TOPPS  
PHONE: (630) 691-4356  
COMPANY: COMMONWEALTH EDISON

Rev. 6-8-11

TEMPORARY SEQUENCE OF OPERATION (FOR STAGE 1, SUB STAGES 2,3 AND STAGE 2, SUB STAGES 1,2 WITH LEAD-LAG OPERATION FOR ILL. RTE. 19 AND ILL. RTE. 53)

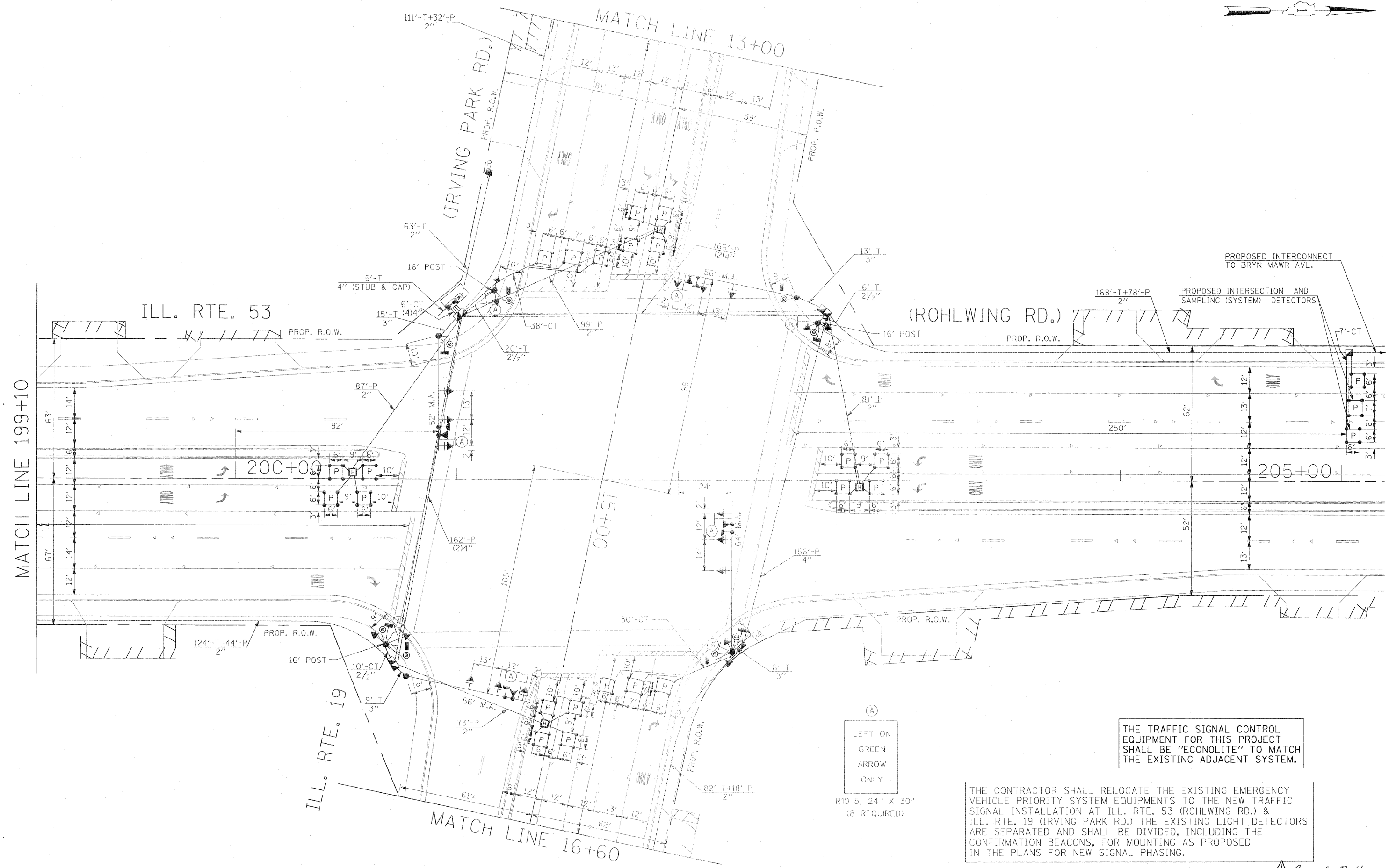
MOVEMENT																																														FLASH
PHASE	2+5					2+6					1+6					4+7					4+8					3+8																				
INTERVAL	1	2A	2B	3A	3B	4	5A	5B	6A	6B	7A	7B	8	9A	9B	10A	10B	11	12A	12B	13A	13B	14	15A	15B	16A	16B	17A	17B	18	19A	19B	20A	20B												
CHANGE TO		1+6 3+8 4+7 4+8		2+6			1+6		2+5		3+8 4+7 4+8			2+5 3+8 4+7 4+8		2+6			1+6 2+5 2+6 3+8		4+8			4+7		3+8		1+6 2+5 2+6			1+6 2+5 2+6 4+7		4+8													
ILLINOIS ROUTE 19 (IRVING PARK ROAD) NEAR RIGHT AND TWO FAR RIGHT SPAN WIRE SIGNAL	E/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	G	G	G	G	G	Y	R	Y	R	R	R	R	R	R											
ILLINOIS ROUTE 19 (IRVING PARK ROAD) TWO FAR LEFT SPAN WIRE SIGNALS WITH LEFT TURN ARROWS	E/B	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←G	←Y	←R	←Y	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R											
ILLINOIS ROUTE 19 (IRVING PARK ROAD) NEAR RIGHT AND TWO FAR RIGHT SPAN WIRE SIGNAL	W/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	G	G	Y	R	G	Y	R	R	R											
ILLINOIS ROUTE 19 (IRVING PARK ROAD) TWO FAR LEFT SPAN WIRE SIGNALS WITH LEFT TURN ARROWS	W/B	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R											
ILLINOIS ROUTE 53 (ROHLWING ROAD) NEAR RIGHT AND TWO FAR RIGHT SPAN WIRE SIGNALS	N/B	G	Y	R	G	G	G	Y	R	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R											
ILLINOIS ROUTE 53 (ROHLWING ROAD) TWO FAR LEFT SPAN WIRE SIGNALS WITH LEFT TURN ARROWS	N/B	←G	←Y	←R	←Y	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R											
ILLINOIS ROUTE 53 (ROHLWING ROAD) NEAR RIGHT AND TWO FAR RIGHT SPAN WIRE SIGNALS	S/B	R	R	R	R	R	G	G	C	Y	R	Y	R	G	Y	R	G	G	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R											
ILLINOIS ROUTE 53 (ROHLWING ROAD) TWO FAR LEFT SPAN WIRE SIGNALS WITH LEFT TURN ARROWS	S/B	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←G	←Y	←R	←Y	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R											

PHASE 2 + 6 SHALL BE PLACED ON RECALL.

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

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Ⓐ  
LEFT ON  
GREEN  
ARROW  
ONLY  
R10-5, 24" X 30"  
(8 REQUIRED)

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

THE CONTRACTOR SHALL RELOCATE THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM EQUIPMENTS TO THE NEW TRAFFIC SIGNAL INSTALLATION AT ILL. RTE. 53 (ROHLWING RD.) & ILL. RTE. 19 (IRVING PARK RD.) THE EXISTING LIGHT DETECTORS ARE SEPARATED AND SHALL BE DIVIDED, INCLUDING THE CONFIRMATION BEACONS, FOR MOUNTING AS PROPOSED IN THE PLANS FOR NEW SIGNAL PHASING.

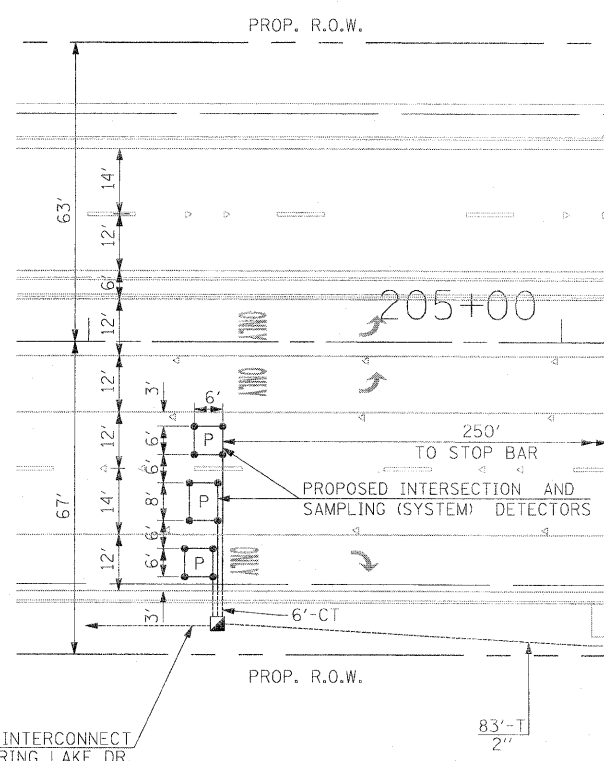
Rev. 6-8-11

FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC SIGNAL INSTALLATION PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT ILL. RTE. 19 (IRVING PARK RD.) (SHEET 1 OF 2)</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 484
	PLOT SCALE = #SCALE#	DRAWN - MAA, EA	REVISED -		SCALE: 1"=20'	SHEET NO. OF	SHEETS	STA.	TO STA.	CONTRACT NO. 60477		
	PLOT DATE = #DATE#	CHECKED - PKG, EA	REVISED -							ILLINOIS FED. AID PROJECT		
		DATE - 5/18/2011	REVISED -									

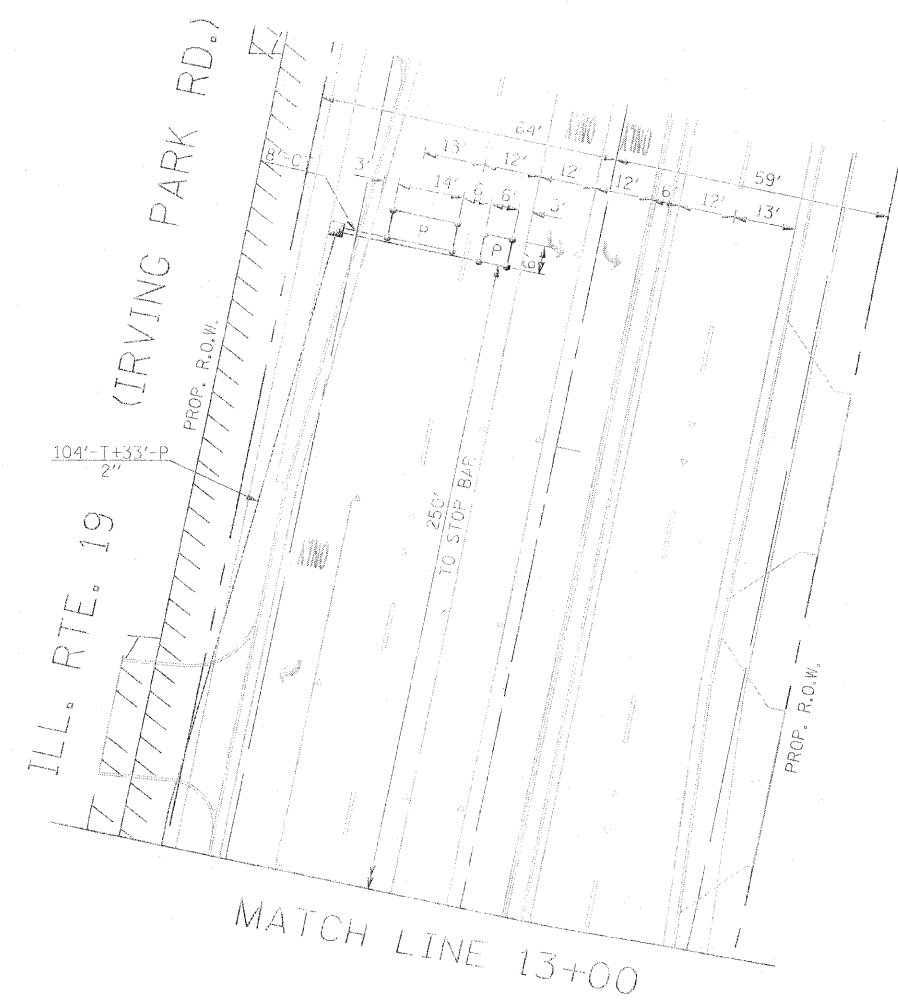




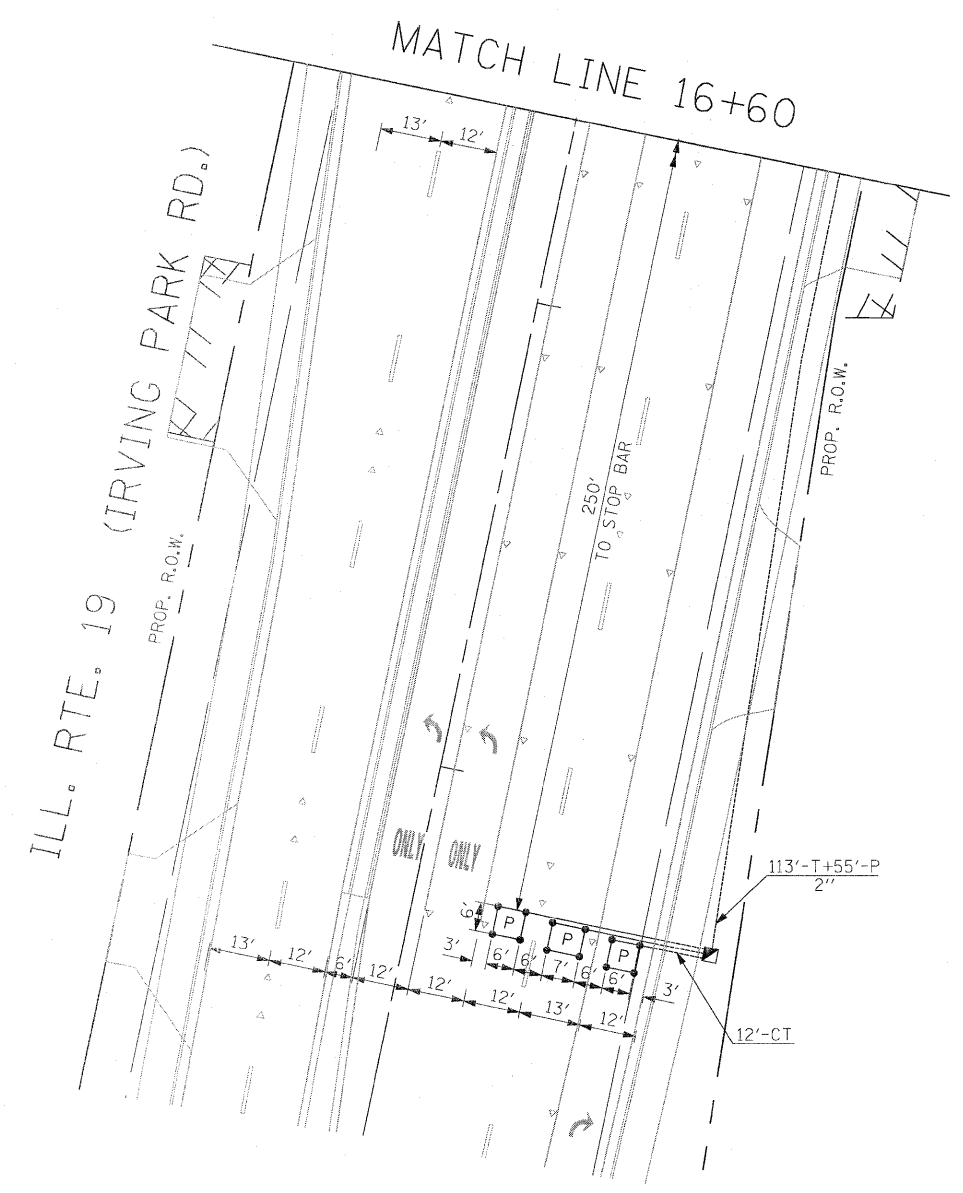
ILL. RTE. 53 (ROHLWING RD.)



MATCH LINE 199+10



MATCH LINE 13+00

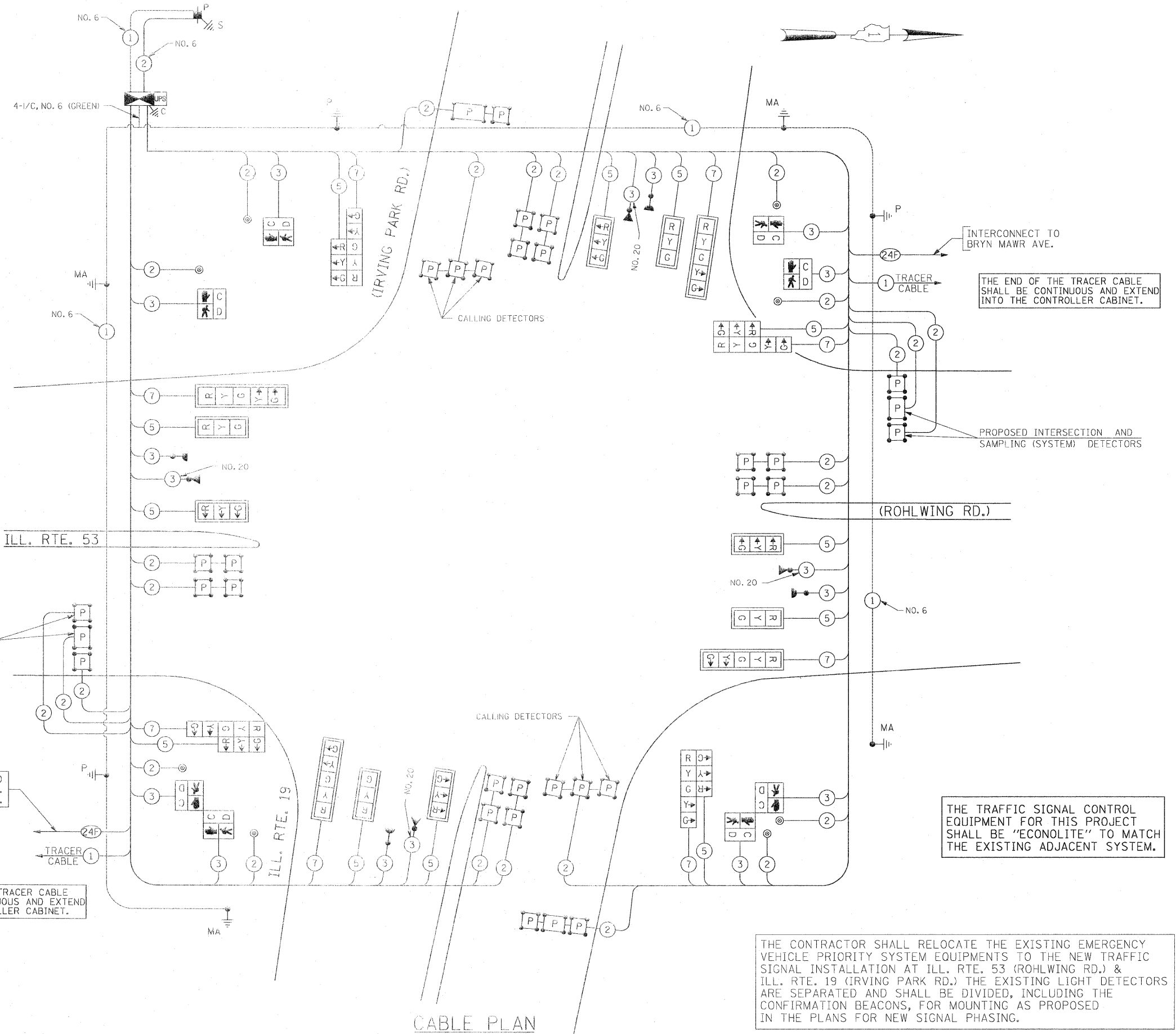


MATCH LINE 16+60

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

Rev. 6-8-11

FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL INSTALLATION PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT ILL. RTE. 19 (IRVING PARK RD.) (SHEET 2 OF 2)			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 485
	PLOT SCALE = #SCALE#	DRAWN - MAA, EA	REVISED -		SCALE: 1"=20'	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		CONTRACT NO. 60477		
PLOT DATE = #DATE#	DATE - 5/18/2011	CHECKED - PKG, EA	REVISED -									



INTERCONNECT TO  
BRYN MAWR AVE.

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

PROPOSED INTERSECTION AND  
SAMPLING (SYSTEM) DETECTORS

PROPOSED INTERSECTION AND  
SAMPLING (SYSTEM) DETECTORS

INTERCONNECT TO  
MEDINAH DR.  
/SPRING LAKE DR.

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

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

THE CONTRACTOR SHALL RELOCATE THE EXISTING EMERGENCY  
VEHICLE PRIORITY SYSTEM EQUIPMENTS TO THE NEW TRAFFIC  
SIGNAL INSTALLATION AT ILL. RTE. 53 (ROHLWING RD.) &  
ILL. RTE. 19 (IRVING PARK RD.) THE EXISTING LIGHT DETECTORS  
ARE SEPARATED AND SHALL BE DIVIDED, INCLUDING THE  
CONFIRMATION BEACONS, FOR MOUNTING AS PROPOSED  
IN THE PLANS FOR NEW SIGNAL PHASING.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE		%OPERATION	
		INCAND.	LED		
SIGNAL (RED)	20	135	17	0.50	170
(YELLOW)	20	135	25	0.25	125
(GREEN)	20	135	15	0.25	75
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN			25	0.05	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	689.2
VILLAGE OF ITASCA 550 WEST IRVING PARK ROAD ITASCA, ILLINOIS 60143-1795					
ENERGY SUPPLY CONTACT: CURTIS TOPPS PHONE: (630) 691-4356 COMPANY: COMMONWEALTH EDISON					

CABLE PLAN  
(NOT TO SCALE)

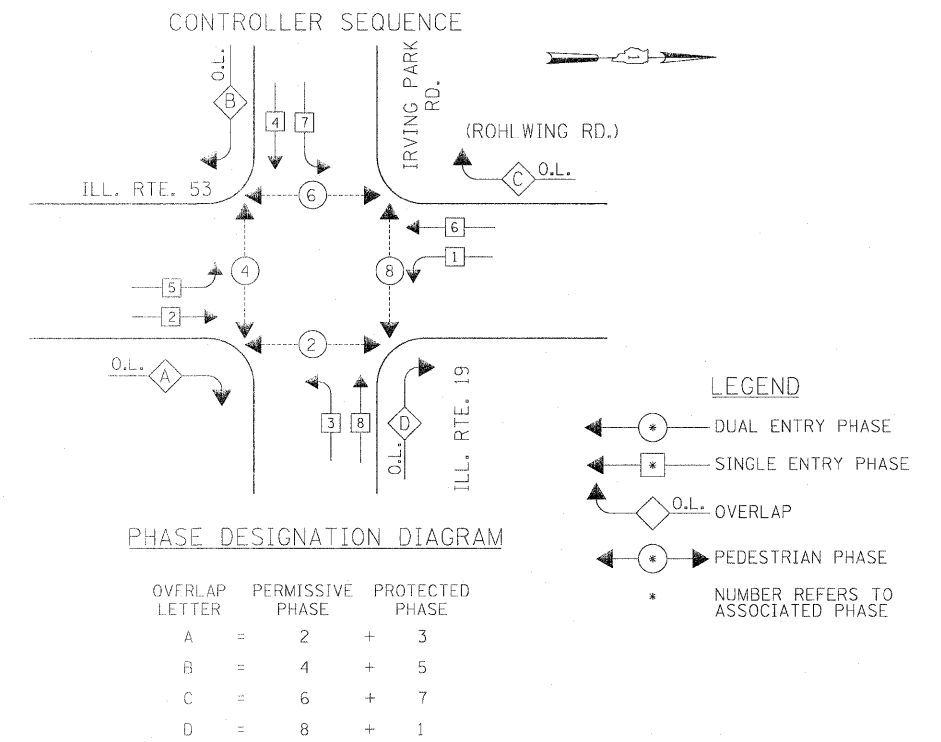
SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
55	SQ FT	SIGN PANEL - TYPE 1
35	SQ FT	SIGN PANEL - TYPE 2
848	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
36	FOOT	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL
43	FOOT	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL
29	FOOT	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL
600	FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
812	FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
5	EACH	HANDHOLE
4	EACH	HEAVY-DUTY HANDHOLE
3	EACH	DOUBLE HANDHOLE
928	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	TRANSCEIVER-FIBER OPTIC
1753	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
2938	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
3161	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
1955	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
5699	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
83	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C
3	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 52 FT.
2	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 56 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 64 FT.
12	FOOT	CONCRETE FOUNDATION, TYPE A
4	FOOT	CONCRETE FOUNDATION, TYPE C
15	FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
63	FOOT	CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER
8	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED
4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED
4	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
4	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
12	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
18	EACH	INDUCTIVE LOOP DETECTOR
8	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
4	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT
1	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
11	EACH	REMOVE EXISTING HANDHOLE
9	EACH	REMOVE EXISTING CONCRETE FOUNDATION
1195	FOOT	PREFORMED DETECTOR LOOP
1	EACH	TEMPORARY TRAFFIC SIGNAL TIMING
1	EACH	SERVICE INSTALLATION - POLE MOUNTED
1	EACH	UNINTERRUPTIBLE POWER SUPPLY
845	FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
1129	FOOT	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED

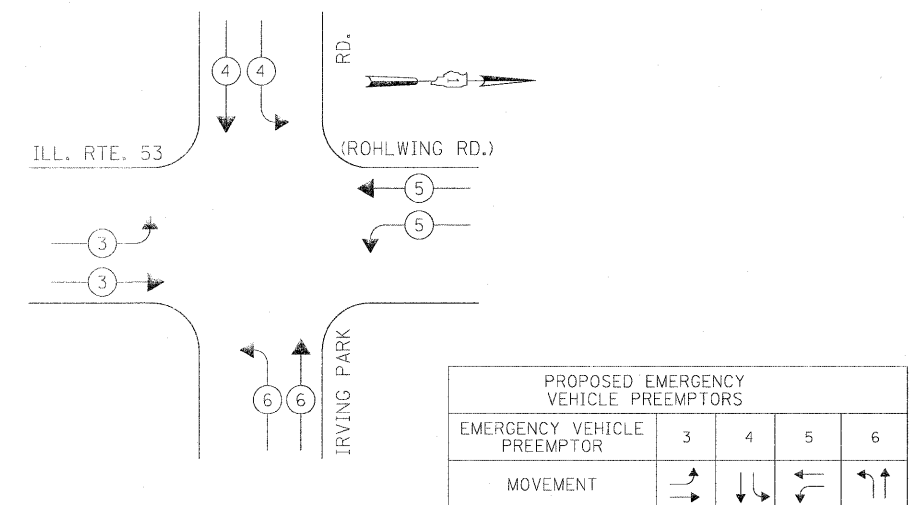
\* 100% COST TO VILLAGE OF ADDISON

THE CONTRACTOR SHALL RELOCATE THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM EQUIPMENTS TO THE NEW TRAFFIC SIGNAL INSTALLATION AT ILL. RTE. 53 (ROHLWING RD.) & ILL. RTE. 19 (IRVING PARK RD.) THE EXISTING LIGHT DETECTORS ARE SEPARATED AND SHALL BE DIVIDED, INCLUDING THE CONFIRMATION BEACONS, FOR MOUNTING AS PROPOSED IN THE PLANS FOR NEW SIGNAL PHASING.

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



EMERGENCY VEHICLE PREEMPTION SEQUENCE



Rev. 6-8-11

**NOTES FOR TEMPORARY TRAFFIC SIGNALS**



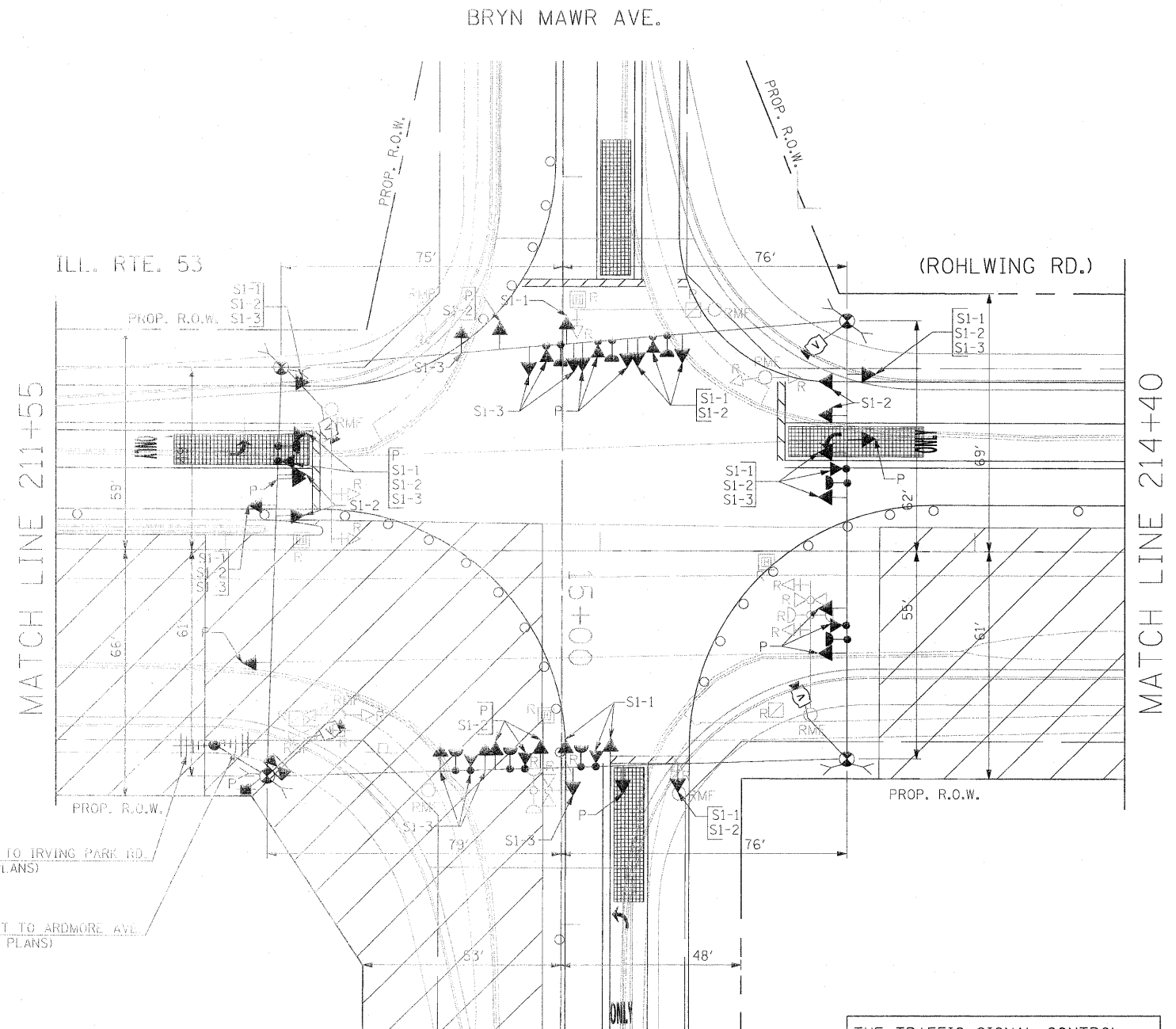
1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. 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" (300mm) 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 RAILROAD INTERSECTIONS, AND 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.

NOTE: THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR CONSTRUCTION STAGE 1 - SUBSTAGE 1 AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACTOR'S BID PRICE.

- 1 EACH CONTROLLER AND CABINET COMPLETE
- 2 EACH SIGNAL HEAD, 1-FACE 3-SECTION, MAST ARM MOUNTED
- 2 EACH SIGNAL HEAD, 1-FACE 5-SECTION, BRACKET MOUNTED
- 4 EACH SIGNAL HEAD, 1-FACE 5-SECTION, MAST ARM MOUNTED
- 2 EACH SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
- 6 EACH TRAFFIC SIGNAL BACKPLATE
- 4 EACH TRAFFIC SIGNAL POST
- 4 EACH STEEL MAST ARM ASSEMBLY AND POLE
- 1 EACH SERVICE INSTALLATION

THE CONTRACTOR SHALL RELOCATE THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM EQUIPMENTS TO THE NEW TRAFFIC SIGNAL INSTALLATION AT ILL. RTE. 53 (ROHLWING RD.) & BRYN MAWR AVE.



TEMPORARY RADIO INTERCONNECT TO IRVING PARK RD.  
(SEE TEMPORARY INTERCONNECT PLANS)

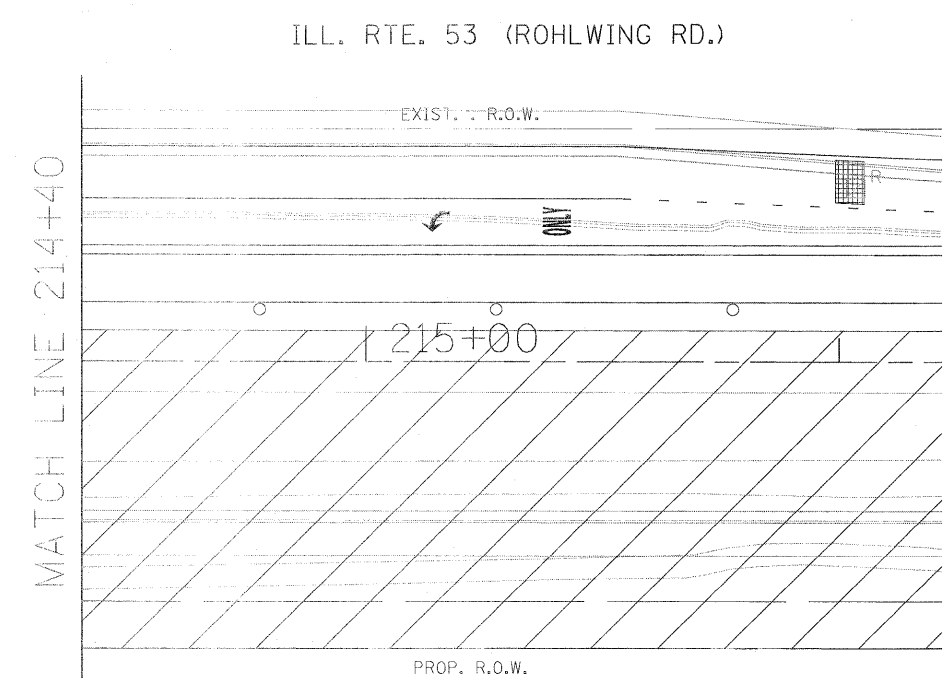
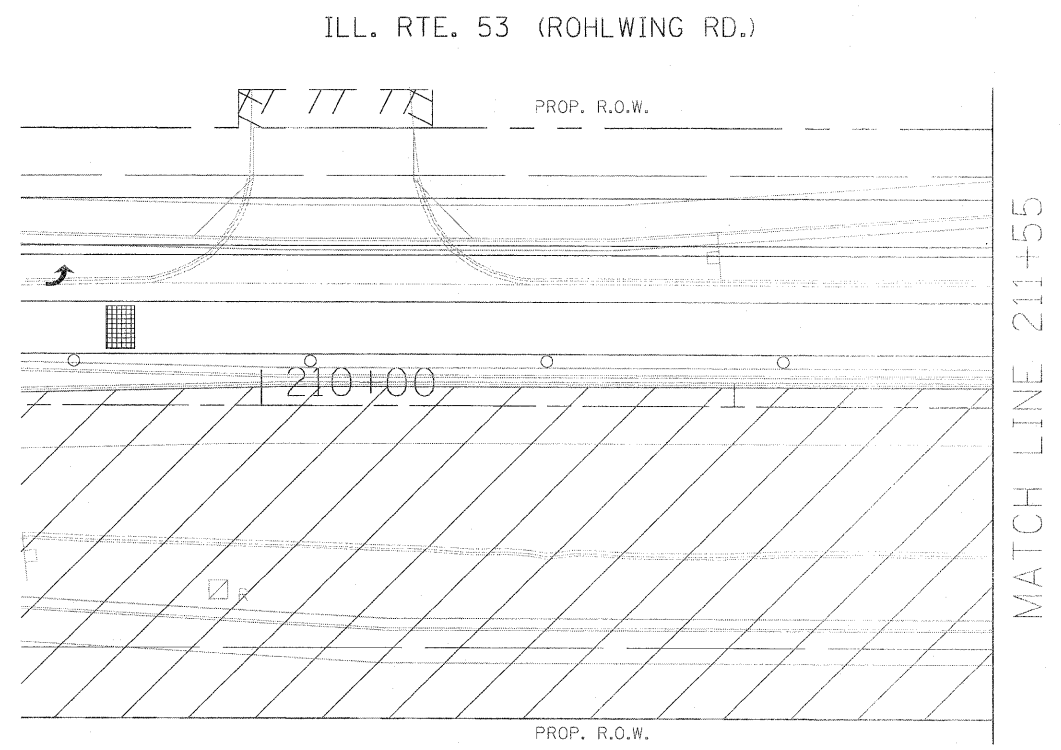
TEMPORARY RADIO INTERCONNECT TO ARDMORE AVE.  
(SEE TEMPORARY INTERCONNECT PLANS)

SIGNAL HEAD PLACEMENTS FOR STAGES: PRE-STAGE S1-1, S1-2, AND S1-3.

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

FILE NAME = \$FILEL\$	USER NAME = \$USER\$	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT BRYN MAWR AVE. PRE STAGE AND STAGE 1 (SHEET 1 OF 4).</b>				F.A.P. RTE. 2578	SECTION 532B	COUNTY	TOTAL SHEETS 781	SHEET NO. 488
	PLOT SCALE = \$SCALE\$	CHECKED - PKG, EA	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	FED. DIST. NO.	ILLINOIS	FED. AID PROJECT
	PLOT DATE = \$DATE\$	DATE - 5/18/2011	REVISED -								CONTRACT NO. 60477		

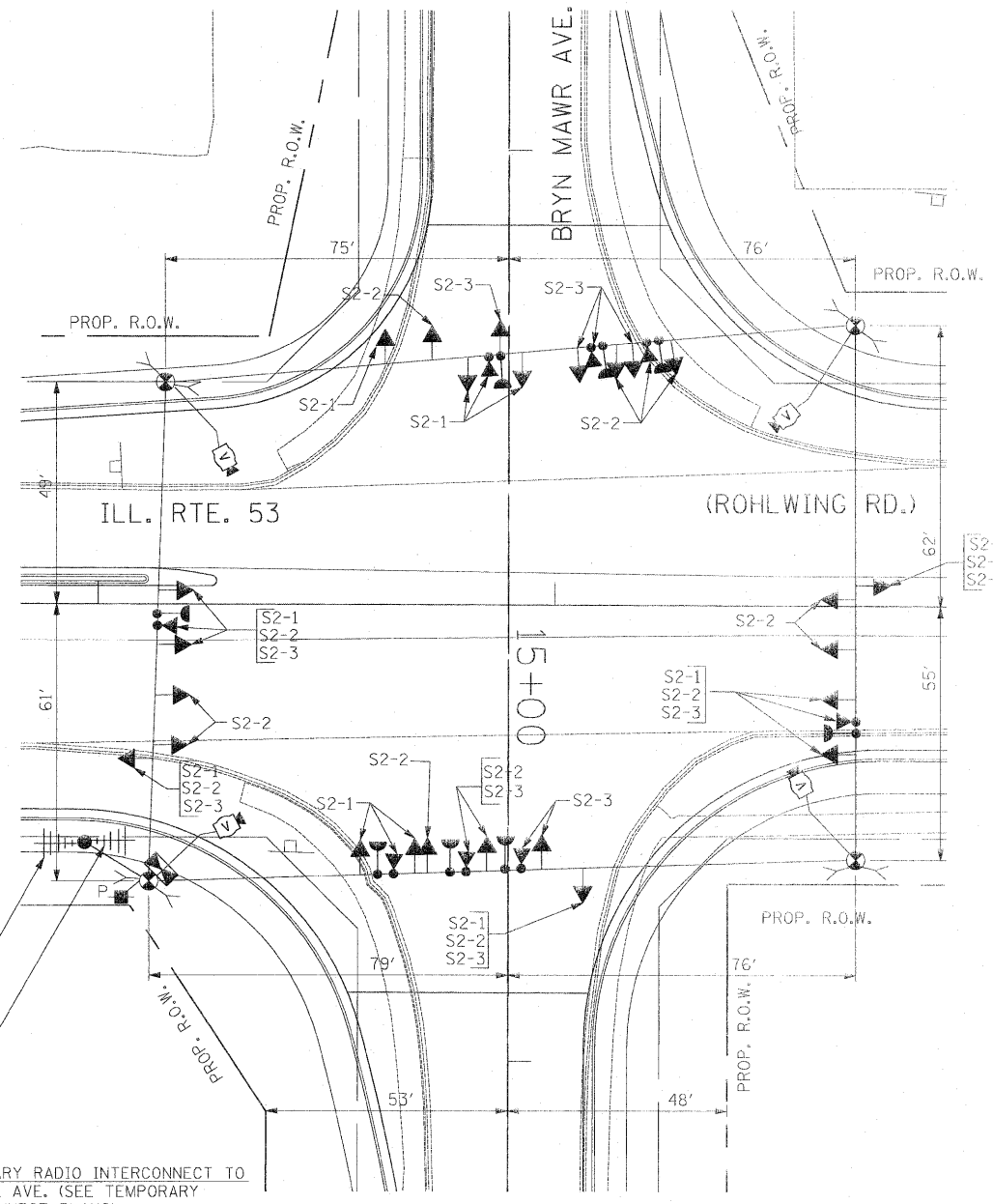
Rev. 6-B-11



NOTE: THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR CONSTRUCTION STAGE 1 - SUBSTAGE 1 AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.

FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT BRYN MAWR AVE. PRE STAGE AND STAGE 1 (SHEET 2 OF 4)</b>	F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 489	
	PLOT SCALE = #SCALE#	DRAWN - MAA, EA	REVISED -			SCALE:	SHEET NO. OF SHEETS STA.	FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT			
	PLOT DATE = #DATE#	CHECKED - PKG, EA	REVISED -			1"=20' TO STA.					
		DATE - 5/18/2011	REVISED -			CONTRACT NO. 60477					

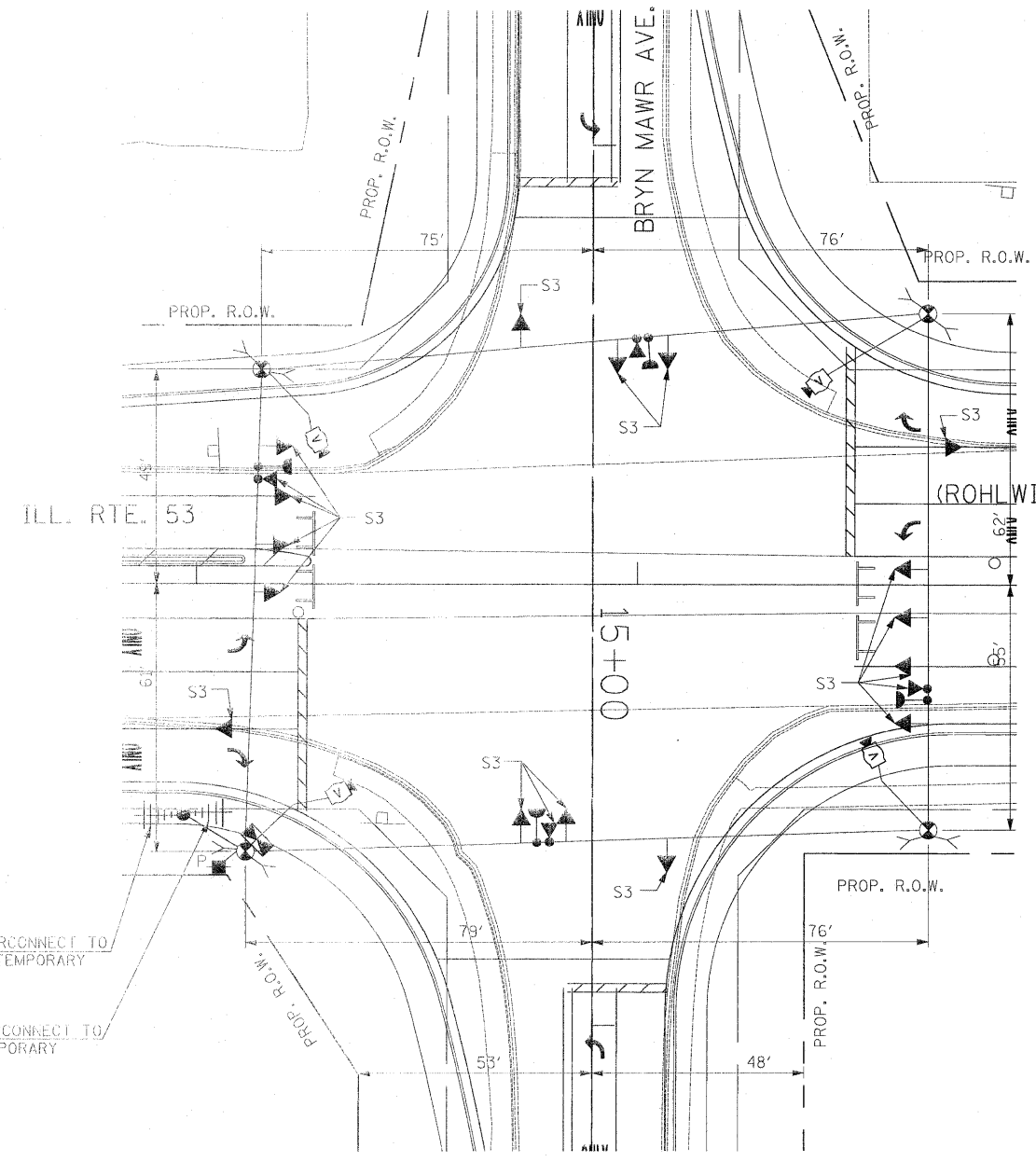
Rev. 6-8-11



SIGNAL HEAD PLACEMENTS FOR STAGES: S2-1, S2-2, AND S2-3.

TEMPORARY RADIO INTERCONNECT TO IRVING PARK RD. (SEE TEMPORARY INTERCONNECT PLANS)

TEMPORARY RADIO INTERCONNECT TO ARDMORE AVE. (SEE TEMPORARY INTERCONNECT PLANS)



SIGNAL HEAD PLACEMENTS FOR STAGE S3

TEMPORARY RADIO INTERCONNECT TO IRVING PARK RD. (SEE TEMPORARY INTERCONNECT PLANS)

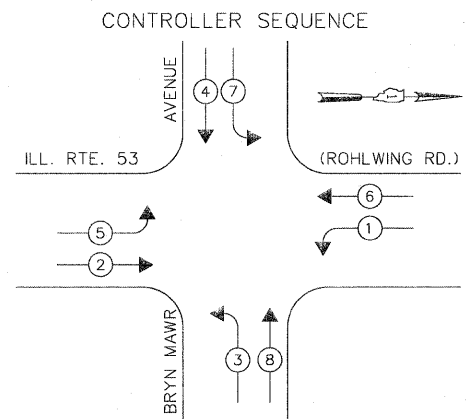
TEMPORARY RADIO INTERCONNECT TO ARDMORE AVE. (SEE TEMPORARY INTERCONNECT PLANS)

NOTE: THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR CONSTRUCTION STAGE 1 - SUBSTAGE 1 AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.

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

FILE NAME = #FILEL#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT BRYN MAWR AVE. STAGE 2 AND STAGE 3 (SHEET 3 OF 4).</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 490
	PLOT SCALE = #SCALE#	DRAWN - MAA, EA	REVISED -		SCALE: 1"=20'	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. -	ILLINOIS FED. AID PROJECT	CONTRACT NO. 60477		
	PLOT DATE = #DATE#	CHECKED - PKG, EA	REVISED -									
		DATE - 5/18/2011	REVISED -									

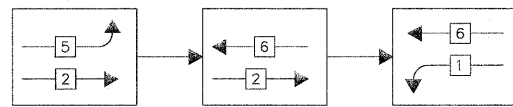
Rev 6-8-11



TEMPORARY PHASE DESIGNATION DIAGRAM

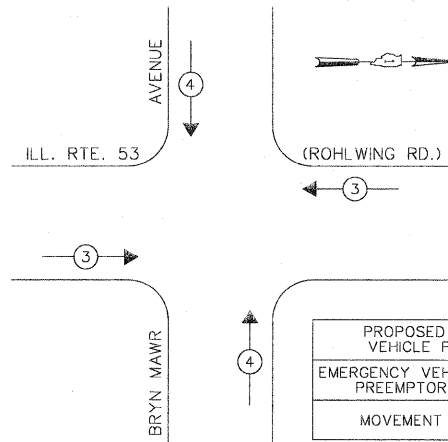
STAGES: PRE-STAGE, S1-1, S1-2, S1-3, S2-1, S2-2, S3, AND AFTER PROPOSED GEOMETRICS ARE BUILT

FOR PHASES 1, 2, 5, & 6 IN THE PHASE DESIGNATION DIAGRAM SHOWN ABOVE, THE FOLLOWING PHASE SEQUENCE SHALL BE FOLLOWED FOR STAGES S1-2, S2-2, AND S3.



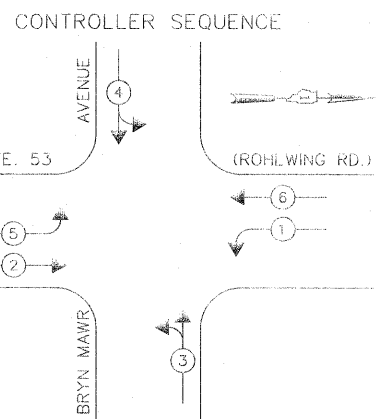
PHASES 3, 4, 7 & 8 SHALL FOLLOW THE STANDARD SEQUENCE IN ACCORDANCE WITH STATE STANDARD 857001

EMERGENCY VEHICLE PREEMPTION SEQUENCE



STAGES: PRE-STAGE, S1-1, S1-3, S2-1, S2-3, AND AFTER PROPOSED GEOMETRICS ARE BUILT

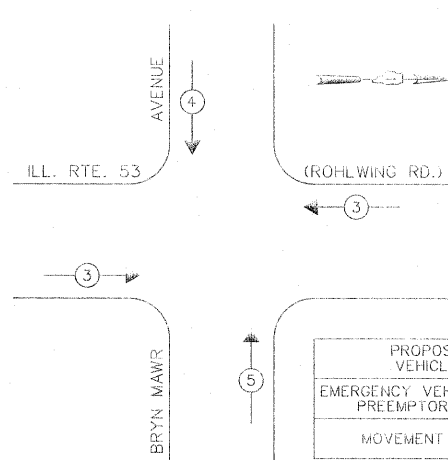
PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	←	↑



TEMPORARY PHASE DESIGNATION DIAGRAM

STAGES: STAGE 2 - SUBSTAGE 3

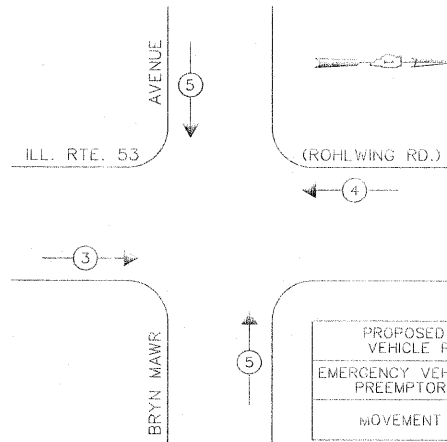
EMERGENCY VEHICLE PREEMPTION SEQUENCE



STAGES: STAGE 2 - SUBSTAGE 3

PROPOSED EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	←	↓	↑

EMERGENCY VEHICLE PREEMPTION SEQUENCE

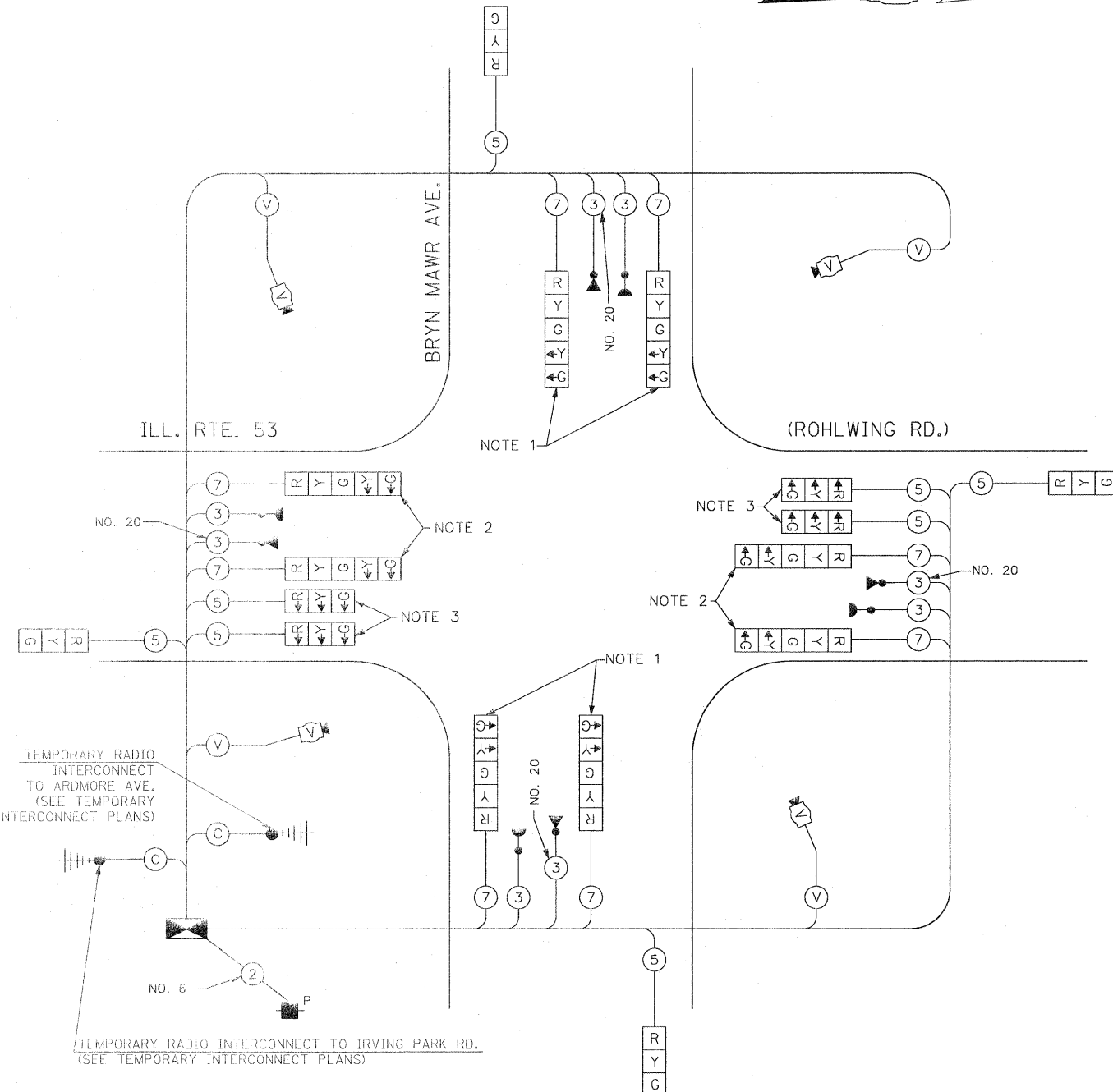


STAGES: S1-2, S2-2, AND S3

PROPOSED EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	←	←	↓

TEMPORARY RADIO INTERCONNECT TO ARDMORE AVE. (SEE TEMPORARY INTERCONNECT PLANS)

TEMPORARY RADIO INTERCONNECT TO IRVING PARK RD. (SEE TEMPORARY INTERCONNECT PLANS)



TEMPORARY CABLE PLAN

(NOT TO SCALE)

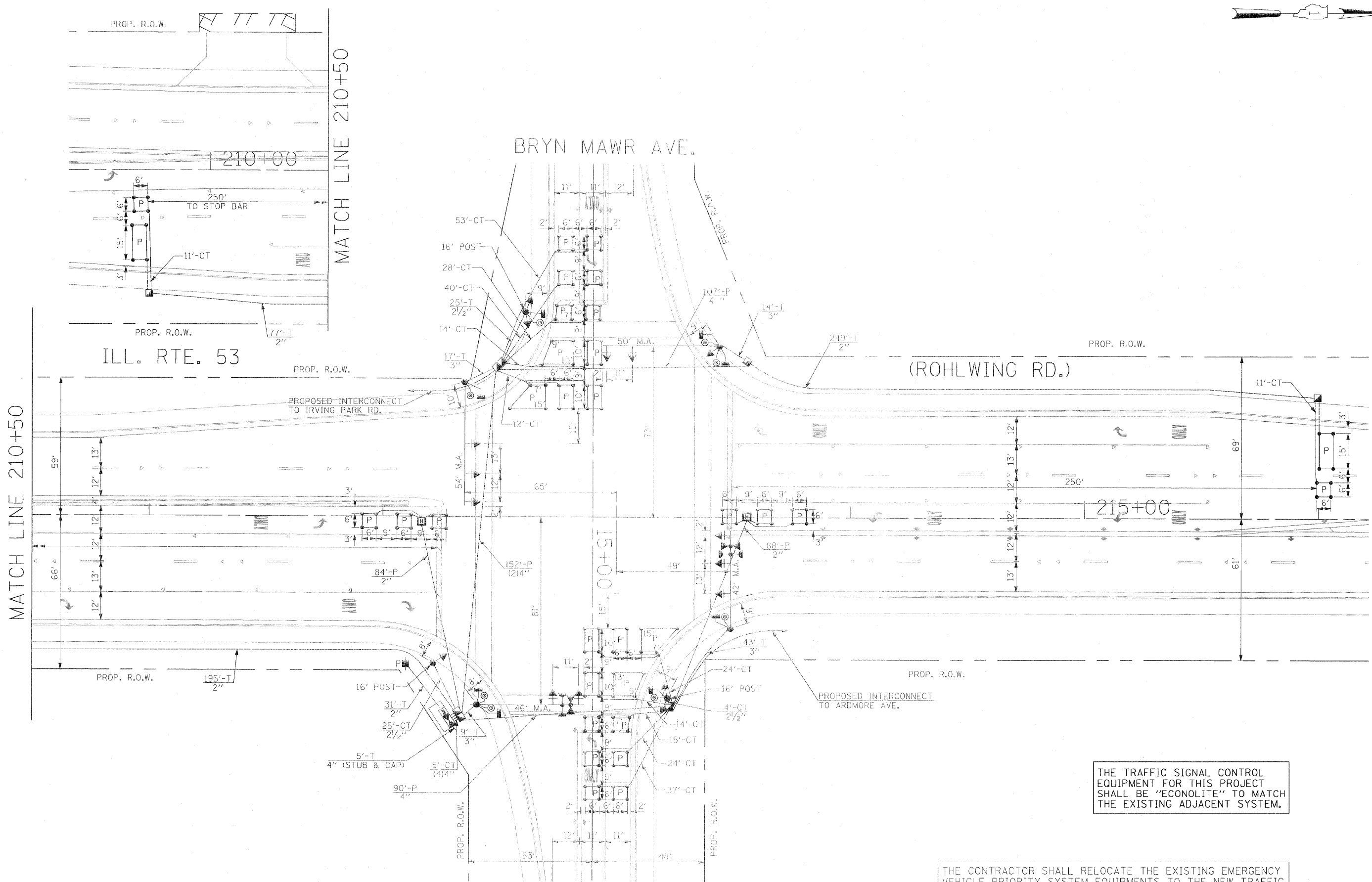
STAGES: PRE-STAGE, S1-1, S1-2, S1-3, S2-1, S2-2, S2-3, S3, AND AFTER PROPOSED GEOMETRICS ARE BUILT

- NOTE 1: THE LEFT TURN YELLOW ARROW INDICATION SECTIONS FOR BRYN MAWR AVENUE SHALL BE DISCONNECTED AND BAGGED DURING CONSTRUCTION STAGE 2 - SUBSTAGE 3.
- NOTE 2: THE GREEN AND YELLOW LEFT TURN ARROW INDICATION SECTIONS IN THE 5-SECTION SIGNAL HEADS FOR THE NORTHBOUND AND SOUTHBOUND DIRECTIONS OF TRAFFIC SHALL BE DISCONNECTED AND BAGGED DURING CONSTRUCTION STAGES S1-2, S2-2, AND S3.
- NOTE 3: THE 3-SECTION SIGNAL HEADS WITH ALL LEFT TURN ARROW INDICATIONS SHALL BE NEEDED ONLY DURING CONSTRUCTION STAGES S1-2, S2-2, AND S3. THEY WILL BE DISCONNECTED AND BAGGED DURING OTHER CONSTRUCTION STAGES.

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

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I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE		%OPERATION	
		INCAND.	LED		
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	1	90	25	1.00	115
CONTROLLER	1	100	100	1.00	200
ILLUM. SIGN	1	25		0.05	25
VIDEO SYSTEM	1	150		1.00	150
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 491.2
VILLAGE OF ITASCA 550 WEST IRVING PARK ROAD ITASCA, ILLINOIS 60143-1795					
ENERGY SUPPLY CONTACT: CURTIS TOPPS PHONE: (630) 691-4356 COMPANY: COMMONWEALTH EDISON					



THE CONTRACTOR SHALL RELOCATE THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM EQUIPMENTS TO THE NEW TRAFFIC SIGNAL INSTALLATION AT ILL. RTE. 53 (ROHLWING RD.) & BRYN MAWR AVE.

Rev. 6-8-11

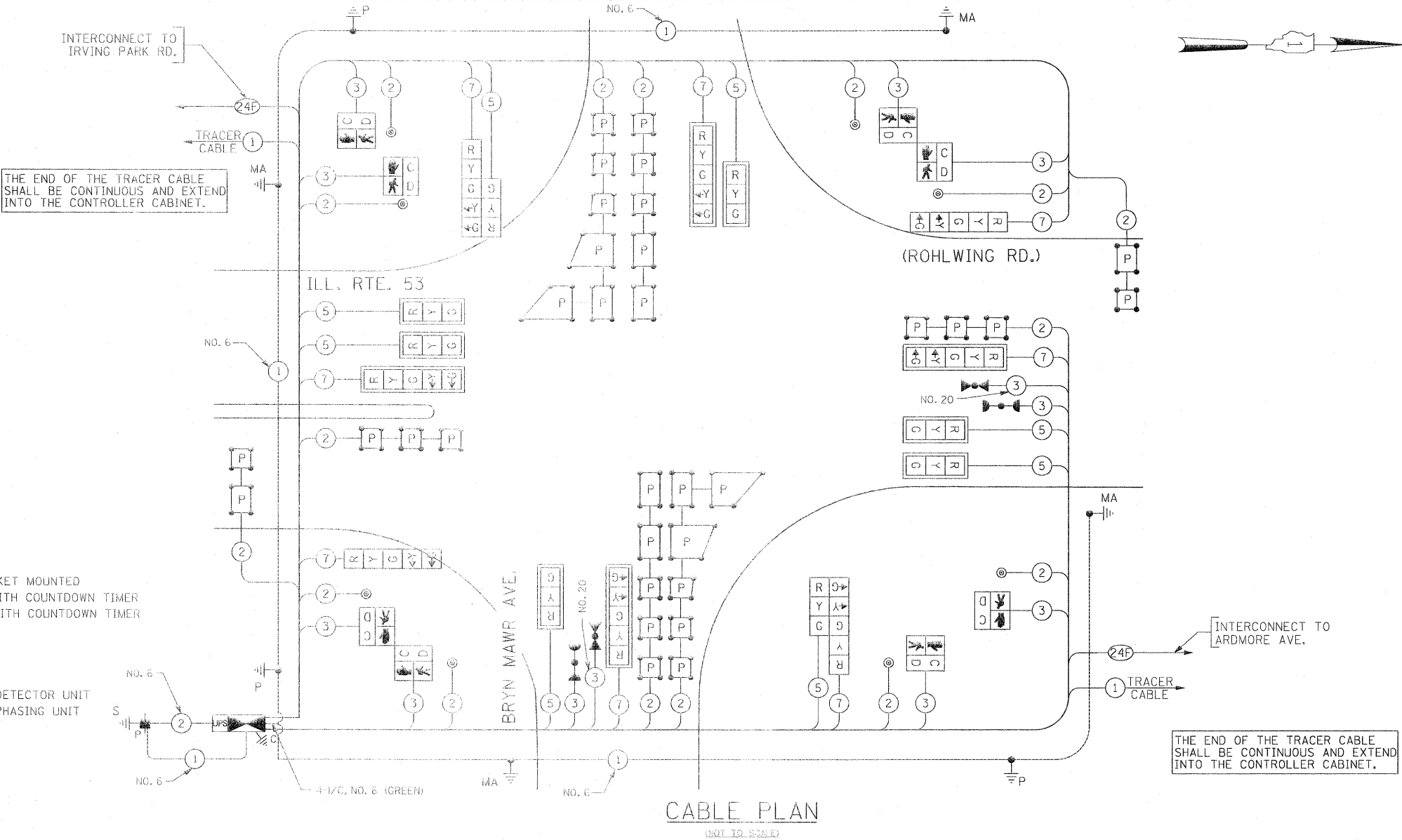
FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED - PKG	REVISD -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC SIGNAL INSTALLATION PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT BRYN MAWR AVE.</b>			F.A.P. RTE. 2578	SECTION 5328	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 492
	PLOT SCALE = #SCALE#	DRAWN - MAA, EA	REVISD -		SCALE: 1"=20'	SHEET NO.	OF	SHEETS	STA.	TO STA.	CONTRACT NO. 60477	
	PLOT DATE = #DATE#	CHECKED - PKG, EA	REVISD -								ILLINOIS FED. AID PROJECT	
		DATE - 5/18/2011	REVISD -								ILLINOIS FED. AID PROJECT	



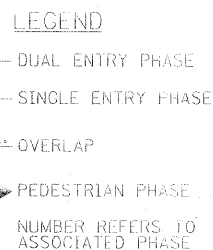
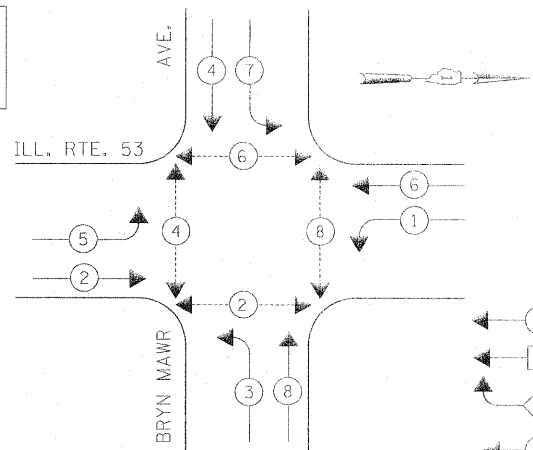
SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
15	SQ FT	SIGN PANEL - TYPE 1
22.5	SQ FT	SIGN PANEL - TYPE 2
552	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
54	FOOT	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL
83	FOOT	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL
25	FOOT	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL
172	FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
501	FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
4	EACH	HANDHOLE
2	EACH	HEAVY-DUTY HANDHOLE
2	EACH	DOUBLE HANDHOLE
670	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	TRANSCEIVER-FIBER OPTIC
1493	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
1865	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
1790	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
1780	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
1797	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
51	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C
3	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 54 FT.
12	FOOT	CONCRETE FOUNDATION, TYPE A
4	FOOT	CONCRETE FOUNDATION, TYPE C
56	FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
6	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED
2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED
2	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
4	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
10	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
8	EACH	INDUCTIVE LOOP DETECTOR
8	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
2	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT
1	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
10	EACH	REMOVE EXISTING HANDHOLE
9	EACH	REMOVE EXISTING CONCRETE FOUNDATION
1290	FOOT	PREFORMED DETECTOR LOOP
1	EACH	TEMPORARY TRAFFIC SIGNAL TIMING
1	EACH	SERVICE INSTALLATION - POLE MOUNTED
1	EACH	UNINTERRUPTIBLE POWER SUPPLY
667	FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
317	FOOT	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED

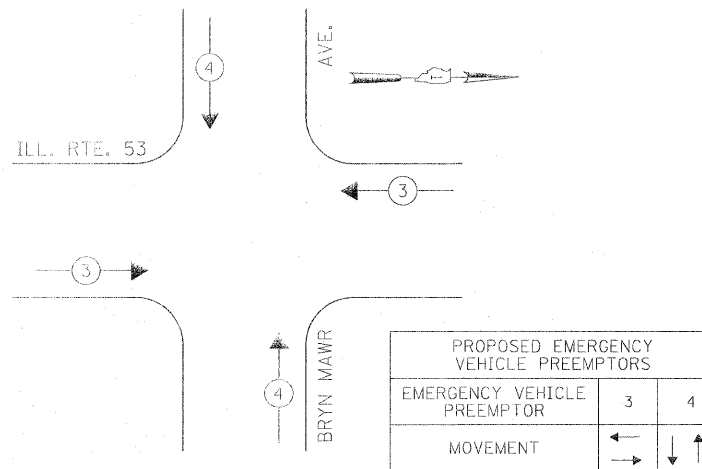
• 100% COST TO VILLAGE OF ITASCA



CONTROLLER SEQUENCE



EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

THE CONTRACTOR SHALL RELOCATE THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM EQUIPMENTS TO THE NEW TRAFFIC SIGNAL INSTALLATION AT ILL. RTE. 53 (ROHLWING RD.) & BRYN MAWR AVE.

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

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE		%OPERATION	
		INCAND.	LED		
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	16	135	15	0.25	60
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN			25	0.05	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 615.2
VILLAGE OF ITASCA 550 WEST IRVING PARK ROAD ITASCA, ILLINOIS 60143-1795					
ENERGY SUPPLY CONTACT: CURTIS TOPPS PHONE: (630) 691-4356 COMPANY: COMMONWEALTH EDISON					

NOTES FOR TEMPORARY TRAFFIC SIGNALS

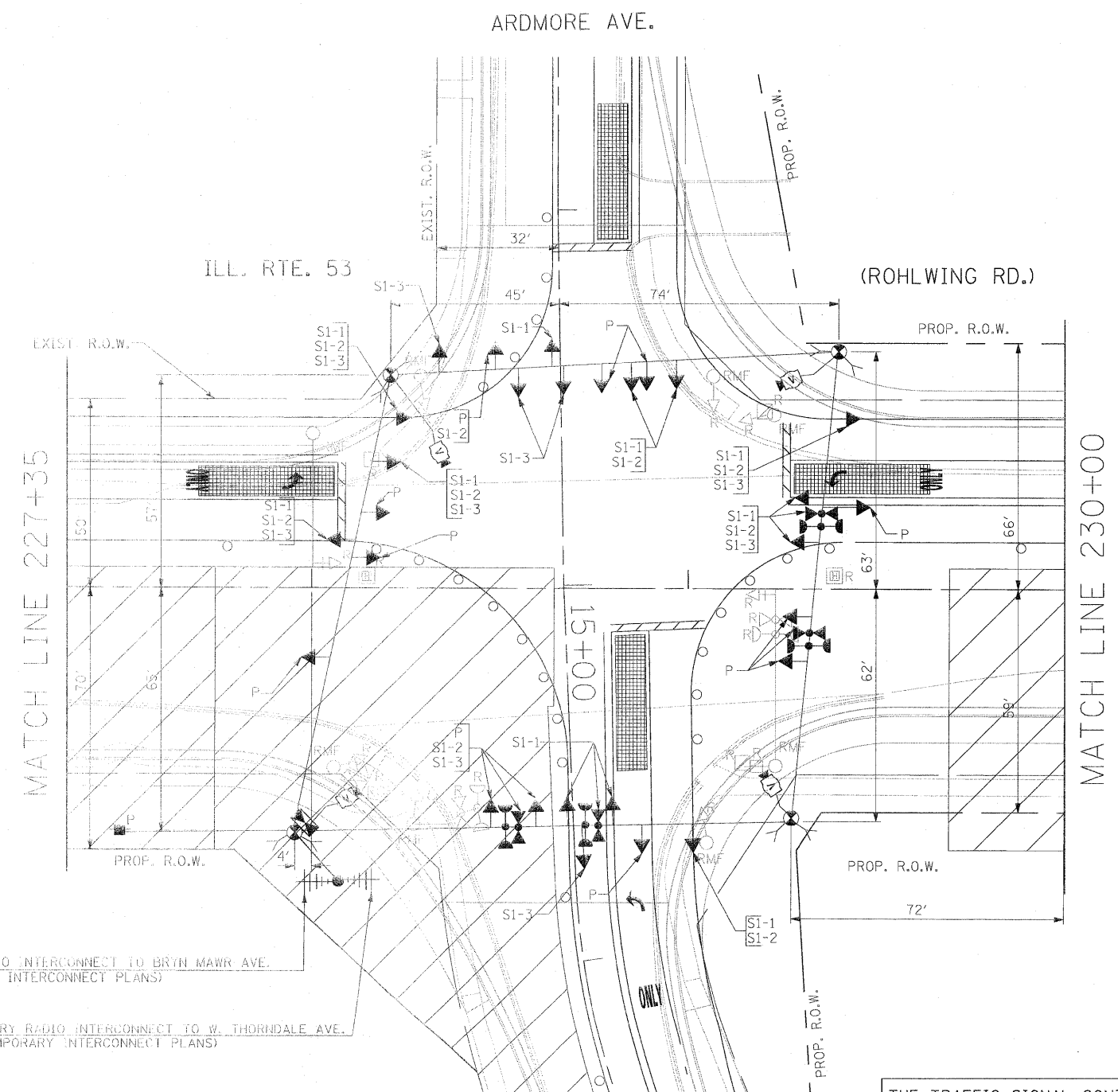
1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. 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" (300mm) 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 RAILROAD INTERSECTIONS, AND 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.

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGH-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACTOR'S BID PRICE.

- 1 EACH CONTROLLER AND CABINET COMPLETE
- 4 EACH SIGNAL HEAD, 1-FACE 3-SECTION, BRACKET MOUNTED
- 2 EACH SIGNAL HEAD, 1-FACE 5-SECTION, BRACKET MOUNTED
- 2 EACH SIGNAL HEAD, 1-FACE 5-SECTION, MAST ARM MOUNTED
- 2 EACH TRAFFIC SIGNAL BACKPLATE
- 6 EACH TRAFFIC SIGNAL POST
- 2 EACH STEEL MAST ARM ASSEMBLY AND POLE
- 1 EACH SERVICE INSTALLATION

THE CONTRACTOR SHALL RELOCATE THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM EQUIPMENTS TO THE NEW TRAFFIC SIGNAL INSTALLATION AT ILL. RTE. 53 (ROHLWING RD.) & ARDMORE AVE.

NOTE: THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR CONSTRUCTION STAGE 1 - SUBSTAGE 1 AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.



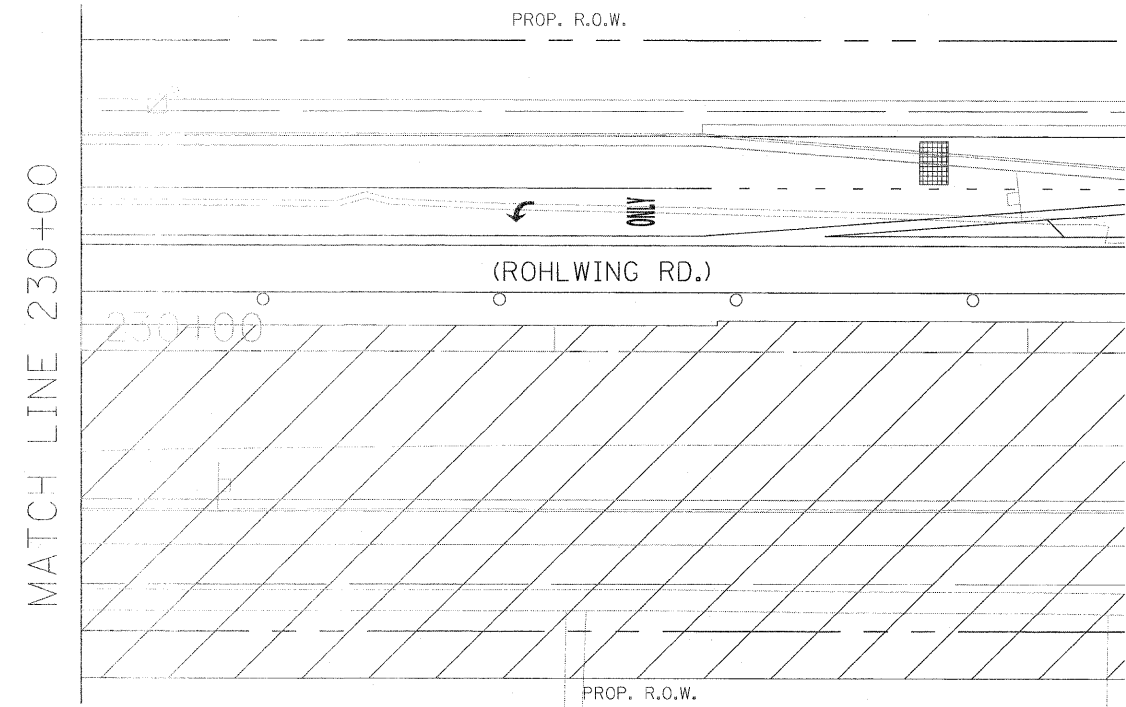
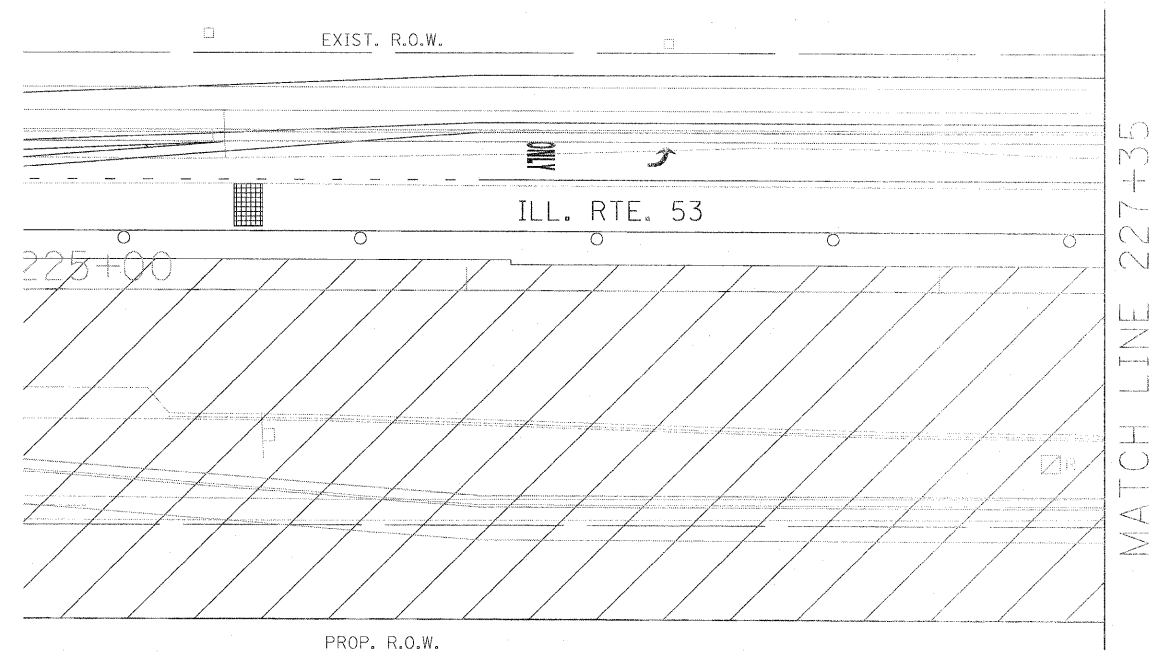
TEMPORARY RADIO INTERCONNECT TO BRYN MAWR AVE. (SEE TEMPORARY INTERCONNECT PLANS)

TEMPORARY RADIO INTERCONNECT TO W. THORNDALE AVE. (SEE TEMPORARY INTERCONNECT PLANS)

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

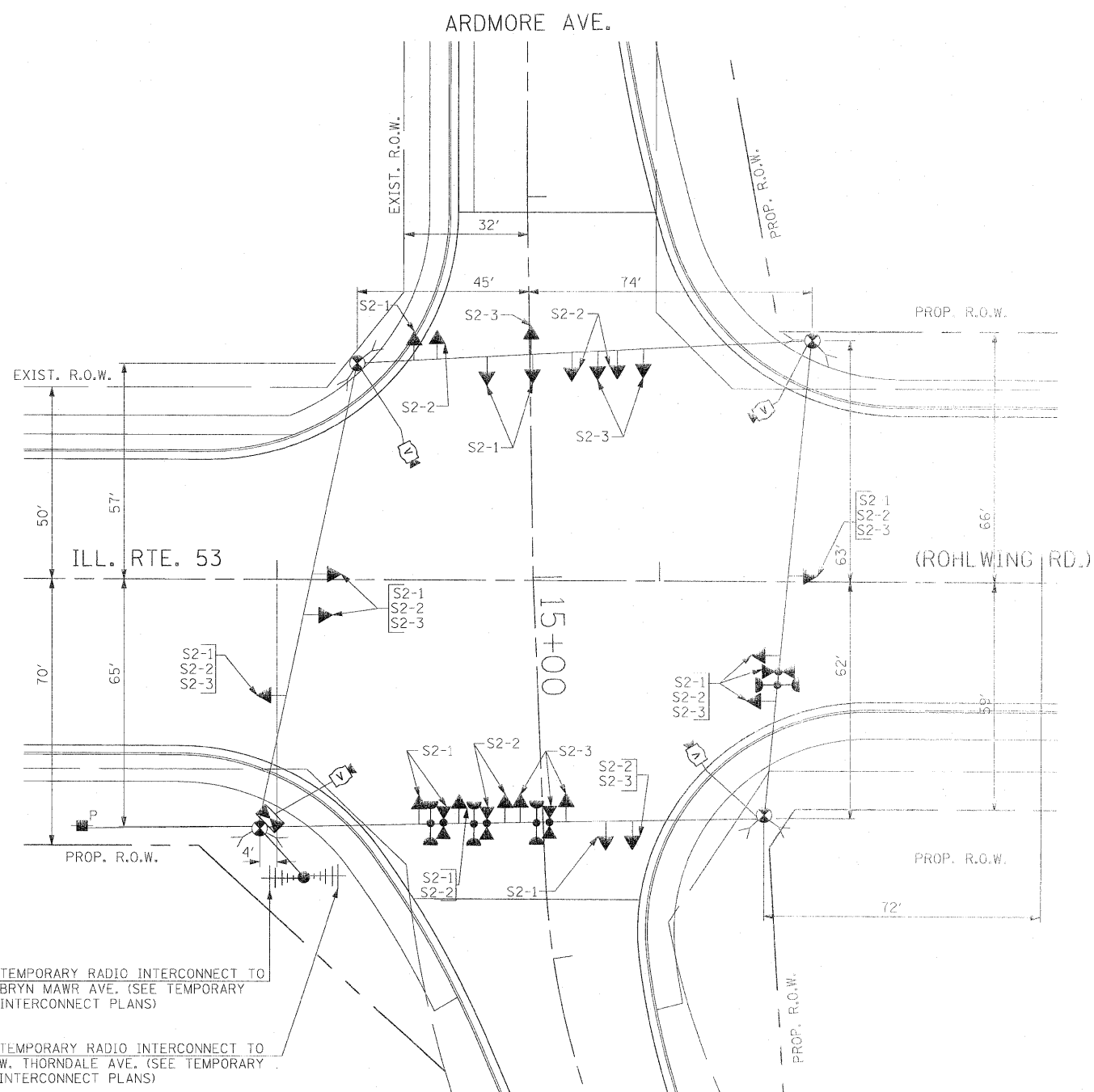
Rev. 6-8-11

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PLOT SCALE = #SCALE#	CHECKED - PKG, EA	REVISED -	SCALE: 1"=20'			SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		CONTRACT NO. 60477	
PLOT DATE = #DATE#	DATE - 5/18/2011	REVISED -									

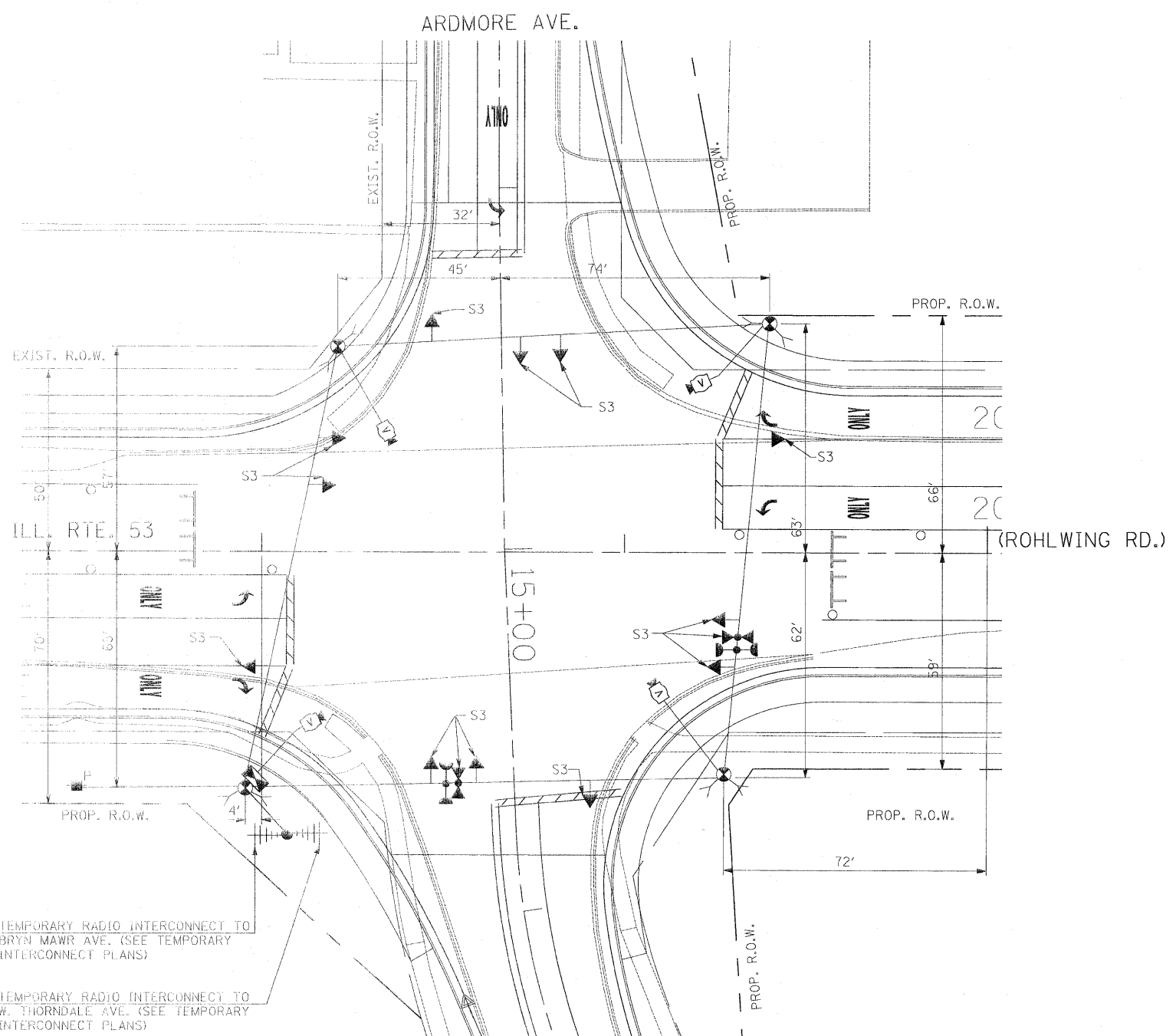


FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT ARDMORE AVE. PRE STAGE AND STAGE 1 (SHEET 2 OF 4).</b>	F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 495	
	PLOT SCALE = #SCALE#	CHECKED - PKG, EA	REVISED -			SCALE: 1"=20'	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT		
	PLOT DATE = #DATE#	DATE - 5/18/2011	REVISED -						CONTRACT NO. 60477		

Rev. 6-8-11



SIGNAL HEAD PLACEMENTS FOR STAGES: S2-1, S2-2, AND S2-3.



SIGNAL HEAD PLACEMENTS FOR STAGES S3

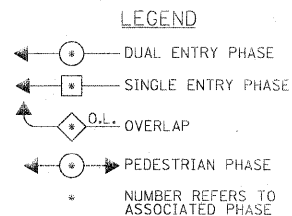
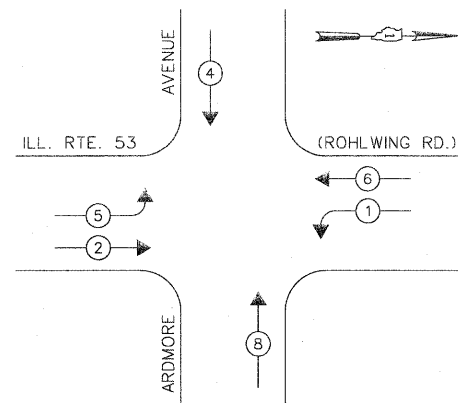
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

TEMPORARY RADIO INTERCONNECT TO BRYN MAWR AVE. (SEE TEMPORARY INTERCONNECT PLANS)  
 TEMPORARY RADIO INTERCONNECT TO W. THORNDALE AVE. (SEE TEMPORARY INTERCONNECT PLANS)

TEMPORARY RADIO INTERCONNECT TO BRYN MAWR AVE. (SEE TEMPORARY INTERCONNECT PLANS)  
 TEMPORARY RADIO INTERCONNECT TO W. THORNDALE AVE. (SEE TEMPORARY INTERCONNECT PLANS)

FILE NAME = #FILEL#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT ARDMORE AVE. STAGE 2 AND STAGE 3 (SHEET 3 OF 4).</b>	F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 496		
PLOT SCALE = #SCALE#	DRAWN - MAA, EA	CHECKED - PKG, EA	REVISED -			SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			
PLOT DATE = #DATE#	DATE - 5/18/2011	REVISOR -	REVISOR -			CONTRACT NO. 60477						
Rev. 6-8-11												

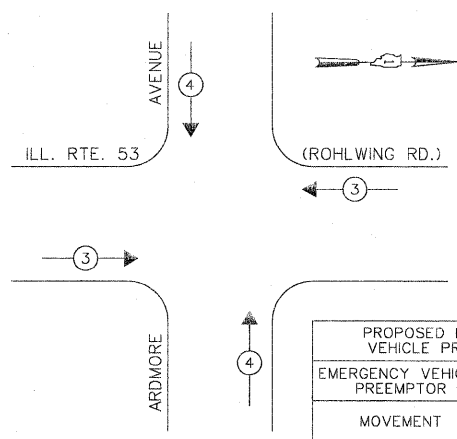
CONTROLLER SEQUENCE



TEMPORARY PHASE DESIGNATION DIAGRAM

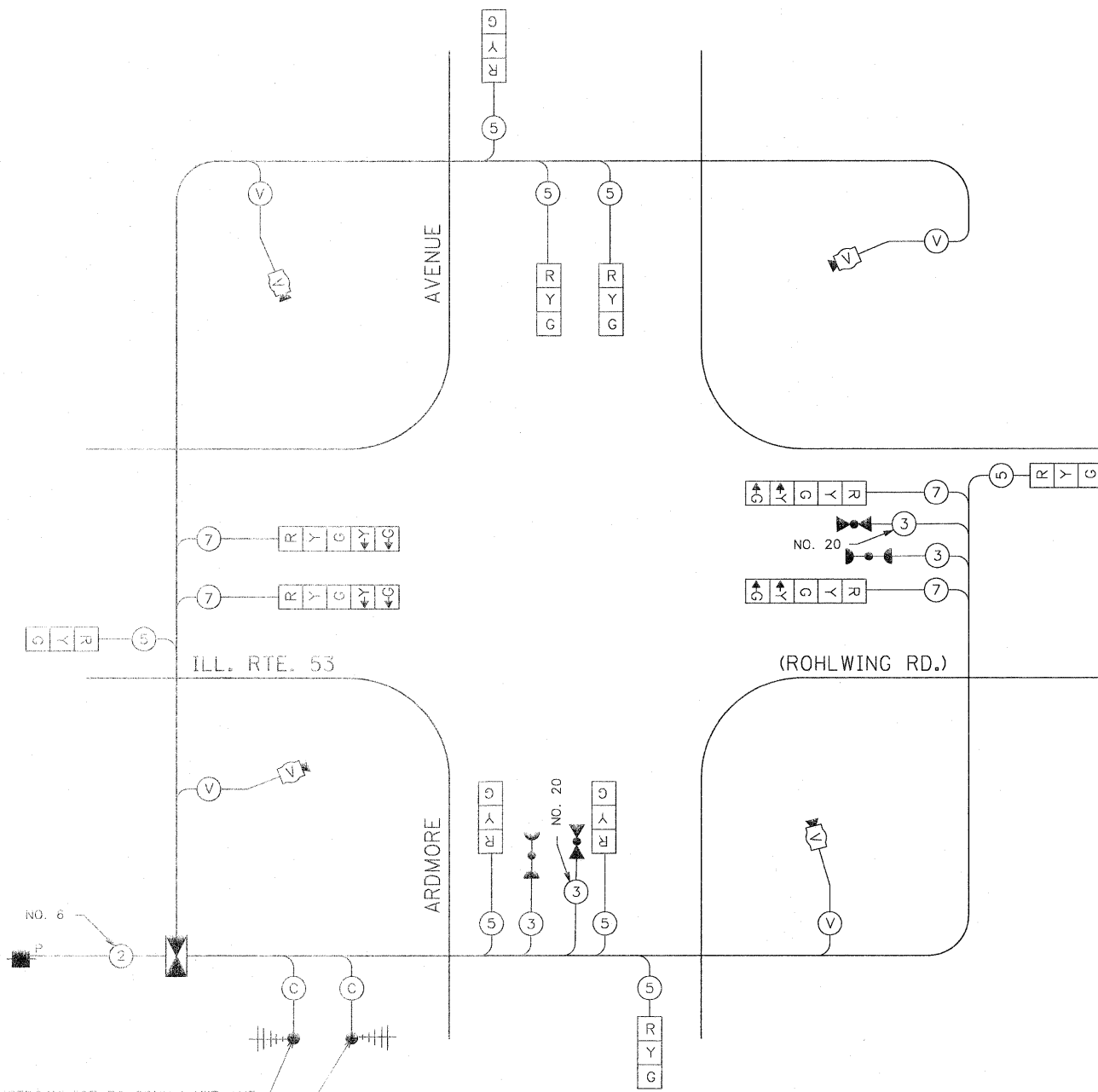
STAGES: PRE-STAGE, S1-1, S1-2, S1-3, S2-1, S2-2, S2-3, S3, AND AFTER PROPOSED GEOMETRICS ARE BUILT

EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

STAGES: PRE-STAGE, S1-1, S1-2, S1-3, S2-1, S2-2, S2-3, S3, AND AFTER PROPOSED GEOMETRICS ARE BUILT



TEMPORARY RADIO INTERCONNECT TO BRYN MAWR AVE.  
(SEE TEMPORARY INTERCONNECT PLANS)

TEMPORARY RADIO INTERCONNECT TO W. THORNDALE AVE.  
(SEE TEMPORARY INTERCONNECT PLANS)

TEMPORARY CABLE PLAN

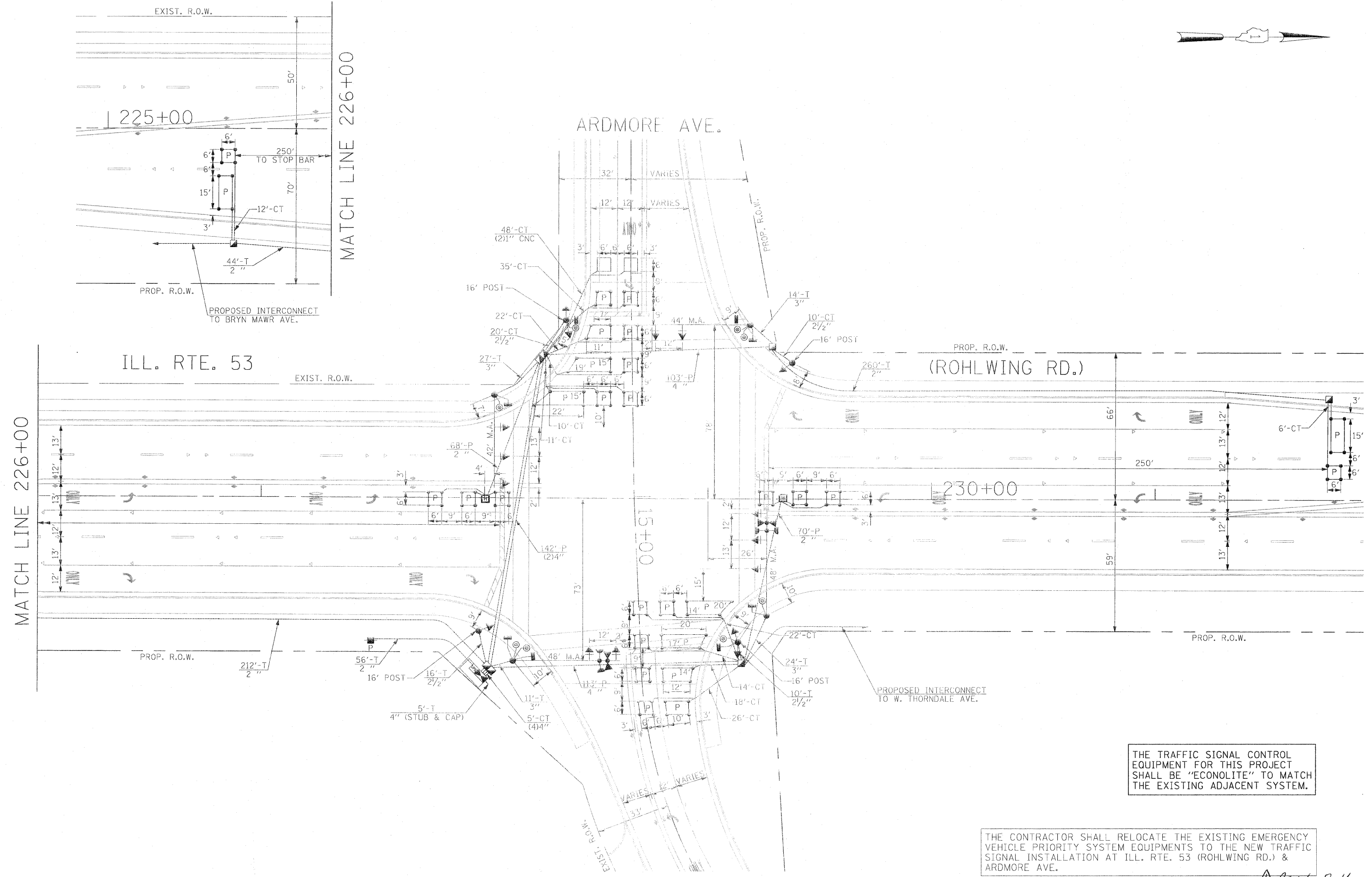
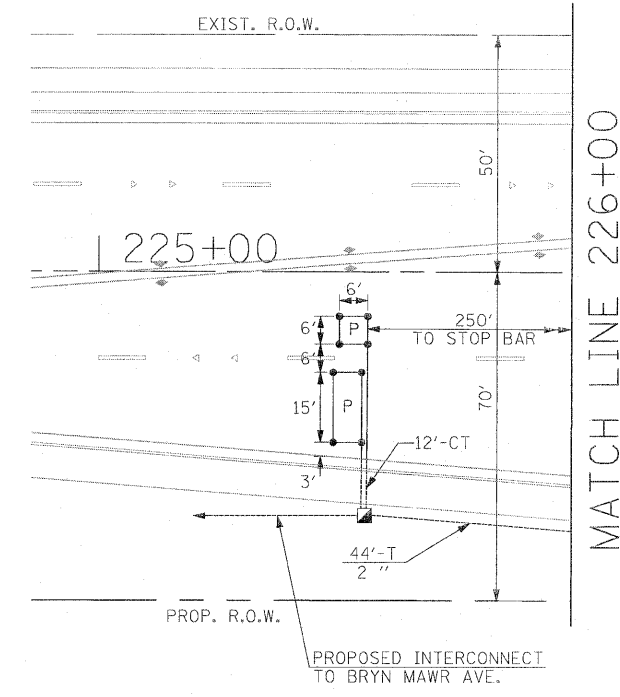
(NOT TO SCALE)  
STAGES: PRE-STAGE, S1-1, S1-2, S1-3, S2-1, S2-2, S2-3, S3, AND AFTER PROPOSED GEOMETRICS ARE BUILT

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE		%OPERATION	
		INCAND.	LED		
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	8	135	12	0.10	9.6
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		25		0.05	
VIDEO SYSTEM	1	150		1.00	150
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 481.6

VILLAGE OF ITASCA  
550 WEST IRVING PARK ROAD  
ITASCA, ILLINOIS 60143-1795

ENERGY SUPPLY CONTACT: CURTIS TOPPS  
PHONE: (630) 691-4356  
COMPANY: COMMONWEALTH EDISON



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

THE CONTRACTOR SHALL RELOCATE THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM EQUIPMENTS TO THE NEW TRAFFIC SIGNAL INSTALLATION AT ILL. RTE. 53 (ROHLWING RD.) & ARDMORE AVE.

Rev to 8-11

FILE NAME = #FILEL#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC SIGNAL INSTALLATION PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT ARDMORE AVE.</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 498
	PLOT SCALE = #SCALE#	CHECKED - PKG, EA	REVISED -		SCALE: 1"=20'	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				
	PLOT DATE = #DATE#	DATE - 5/18/2011	REVISED -		CONTRACT NO. 60477							

SCHEDULE OF QUANTITIES			
QUANTITY	UNIT	ITEM	
33	SO FT	SIGN PANEL - TYPE 1	
572	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	
46	FOOT	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	
78	FOOT	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	
25	FOOT	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	
144	FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	
500	FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	
4	EACH	HANDHOLE	
2	EACH	HEAVY-DUTY HANDHOLE	
2	EACH	DOUBLE HANDHOLE	
660	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK	
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	
1	EACH	TRANSCEIVER-FIBER OPTIC	
1480	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	
1879	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	
1788	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	
1750	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	
1954	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	
76	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	
4	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.	
2	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	
16	FOOT	CONCRETE FOUNDATION, TYPE A	
4	FOOT	CONCRETE FOUNDATION, TYPE C	
52	FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	
6	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	
2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	
4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	
2	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, BRACKET MOUNTED	
4	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	
2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	
10	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	
8	EACH	INDUCTIVE LOOP DETECTOR	
66	FOOT	DETECTOR LOOP, TYPE 1	
8	EACH	PEDESTRIAN PUSH-BUTTON	
1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION	
2	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	
1	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	
8	EACH	REMOVE EXISTING HANDHOLE	
9	EACH	REMOVE EXISTING CONCRETE FOUNDATION	
1220	FOOT	PREFORMED DETECTOR LOOP	
1	EACH	TEMPORARY TRAFFIC SIGNAL TIMING	
1	EACH	SERVICE INSTALLATION - POLE MOUNTED	
1	EACH	UNINTERRUPTIBLE POWER SUPPLY	
854	FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	
343	FOOT	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	

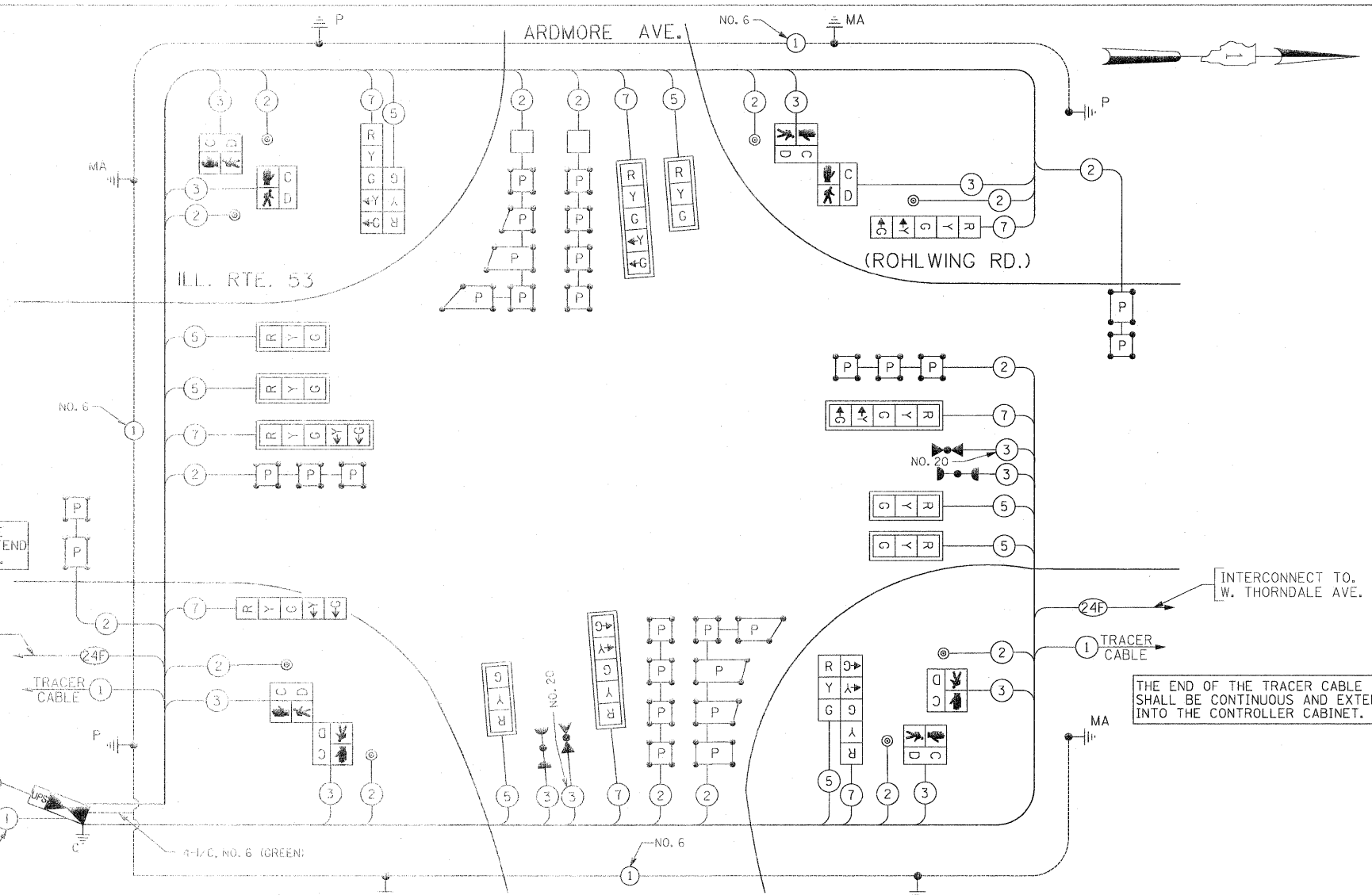
• 100% COST TO VILLAGE OF ITASCA

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

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

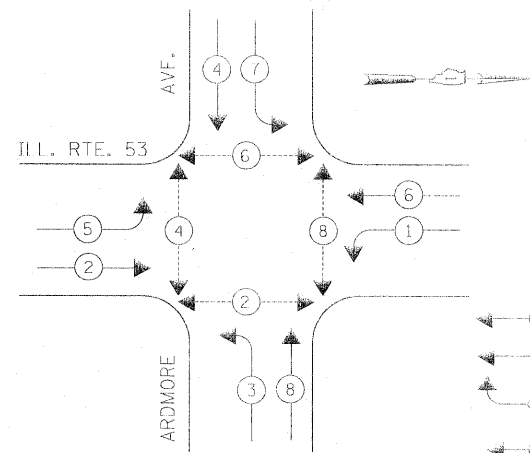
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

THE CONTRACTOR SHALL RELOCATE THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM EQUIPMENTS TO THE NEW TRAFFIC SIGNAL INSTALLATION AT ILL. RTE. 53 (ROHLWING RD.) & ARDMORE AVE.



CONTROLLER SEQUENCE

EMERGENCY VEHICLE PREEMPTION SEQUENCE



- LEGEND
- ◁ \* ▷ DUAL ENTRY PHASE
  - ◁ \* SINGLE ENTRY PHASE
  - ◁ \* ▷ O.L. OVERLAP
  - ◁ \* ▷ PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE		%OPERATION	
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	16	135	15	0.25	60
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN			25	0.05	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	615.2

VILLAGE OF ITASCA  
550 WEST IRVING PARK ROAD  
ITASCA, ILLINOIS 60143-1795

ENERGY SUPPLY CONTACT: CURTIS TOPPS  
PHONE: (630) 691-4356  
COMPANY: COMMONWEALTH EDISON

FILE NAME =	USER NAME = #USER#	DESIGNED - PKG	REVISED -
#FILE#		DRAWN - MAA, EA	REVISED -
	PLOT SCALE = #SCALE#	CHECKED - PKG, EA	REVISED -
	PLOT DATE = #DATE#	DATE - 5/18/2011	REVISED -

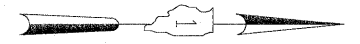
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM,  
EMERGENCY VEHICLE PREEMPTION SEQUENCE, SCHEDULE OF QUANTITIES  
ILLINOIS ROUTE 53 (ROHLWING RD.) AT ARDMORE AVE.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2578	532B	DuPage	781	499
FED. ROAD DIST. NO. - ILLINOIS			CONTRACT NO. 60477	

Rev. 6-8-11

NOTES FOR TEMPORARY TRAFFIC SIGNALS



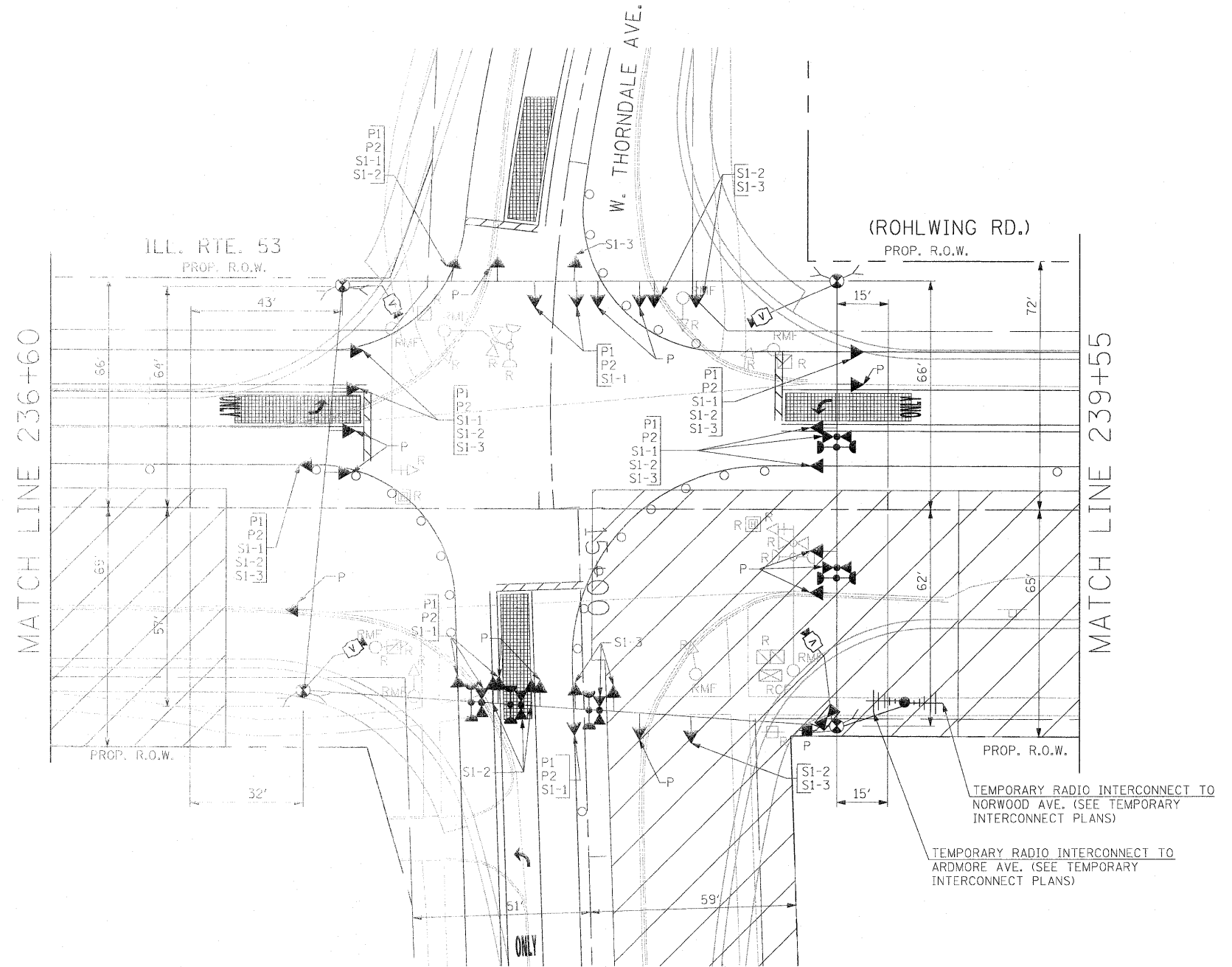
1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. 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" (300mm) 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 RAILROAD INTERSECTIONS, AND 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.

NOTE: THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR CONSTRUCTION STAGE 1 - SUBSTAGE 1 AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGH-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACTOR'S BID PRICE.

- 1 EACH CONTROLLER AND CABINET COMPLETE
- 4 EACH SIGNAL HEAD, 1-FACE 3-SECTION, BRACKET MOUNTED
- 2 EACH SIGNAL HEAD, 1-FACE 5-SECTION, BRACKET MOUNTED
- 2 EACH SIGNAL HEAD, 1-FACE 5-SECTION, MAST ARM MOUNTED
- 2 EACH TRAFFIC SIGNAL BACKPLATE
- 6 EACH TRAFFIC SIGNAL POST
- 2 EACH STEEL MAST ARM ASSEMBLY AND POLE
- 1 EACH SERVICE INSTALLATION

THE CONTRACTOR SHALL RELOCATE THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM EQUIPMENTS TO THE NEW TRAFFIC SIGNAL INSTALLATION AT ILL. RTE. 53 (ROHLWING RD.) & W. THORNDALE AVE.



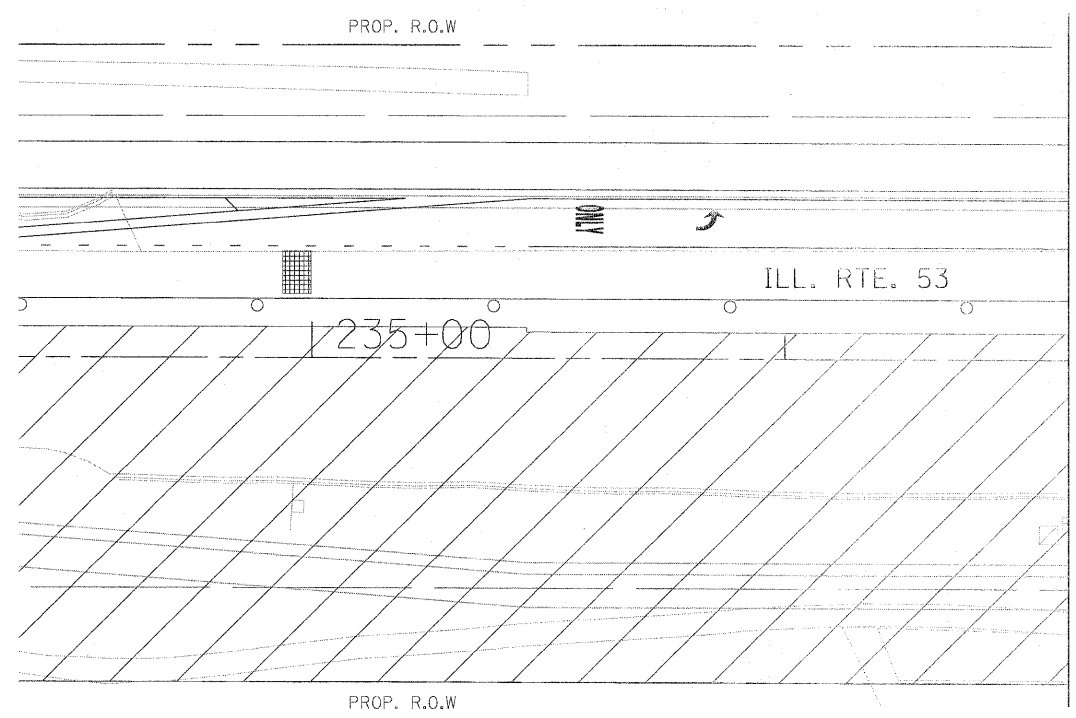
SIGNAL HEAD PLACEMENTS FOR STAGES: PRE-STAGE S1-1, S1-2, AND S1-3.

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

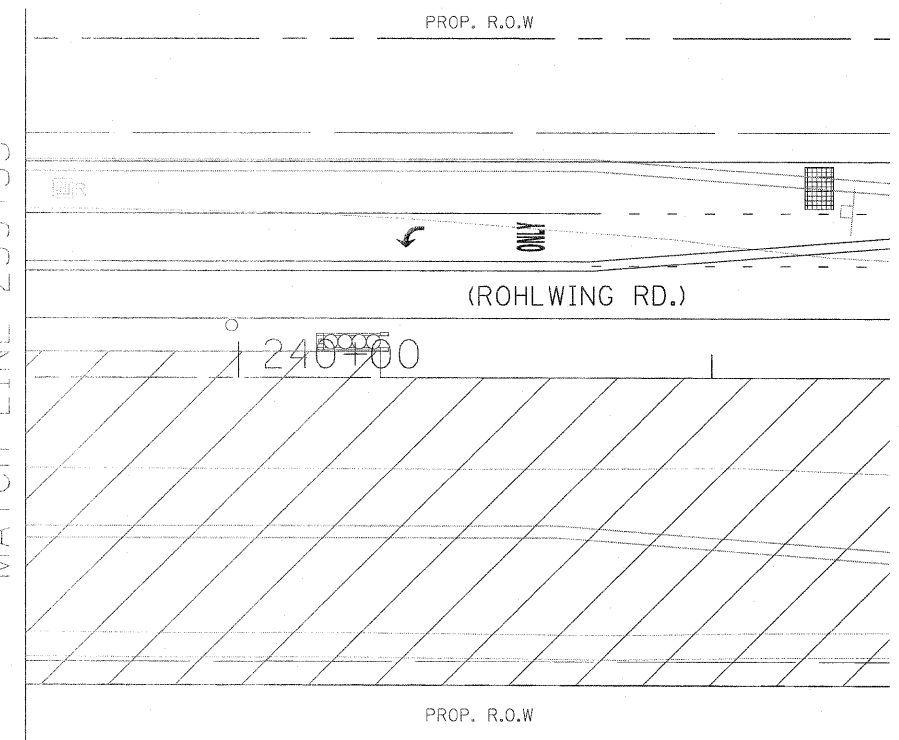
FILE NAME =	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT W. THORNDALE AVE. PRE STAGE AND STAGE 1 (SHEET 1 OF 4)</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
#FILE#		DRAWN - MAA, EA	REVISED -			2578	532B	DuPage	781	500
		CHECKED - PKG, EA	REVISED -			CONTRACT NO. 60477				
		DATE - 5/18/2011	REVISED -	SCALE: 1"=20'	SHEET NO. OF SHEETS STA.	FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				

Rev. 6-8-11





MATCH LINE 236+60

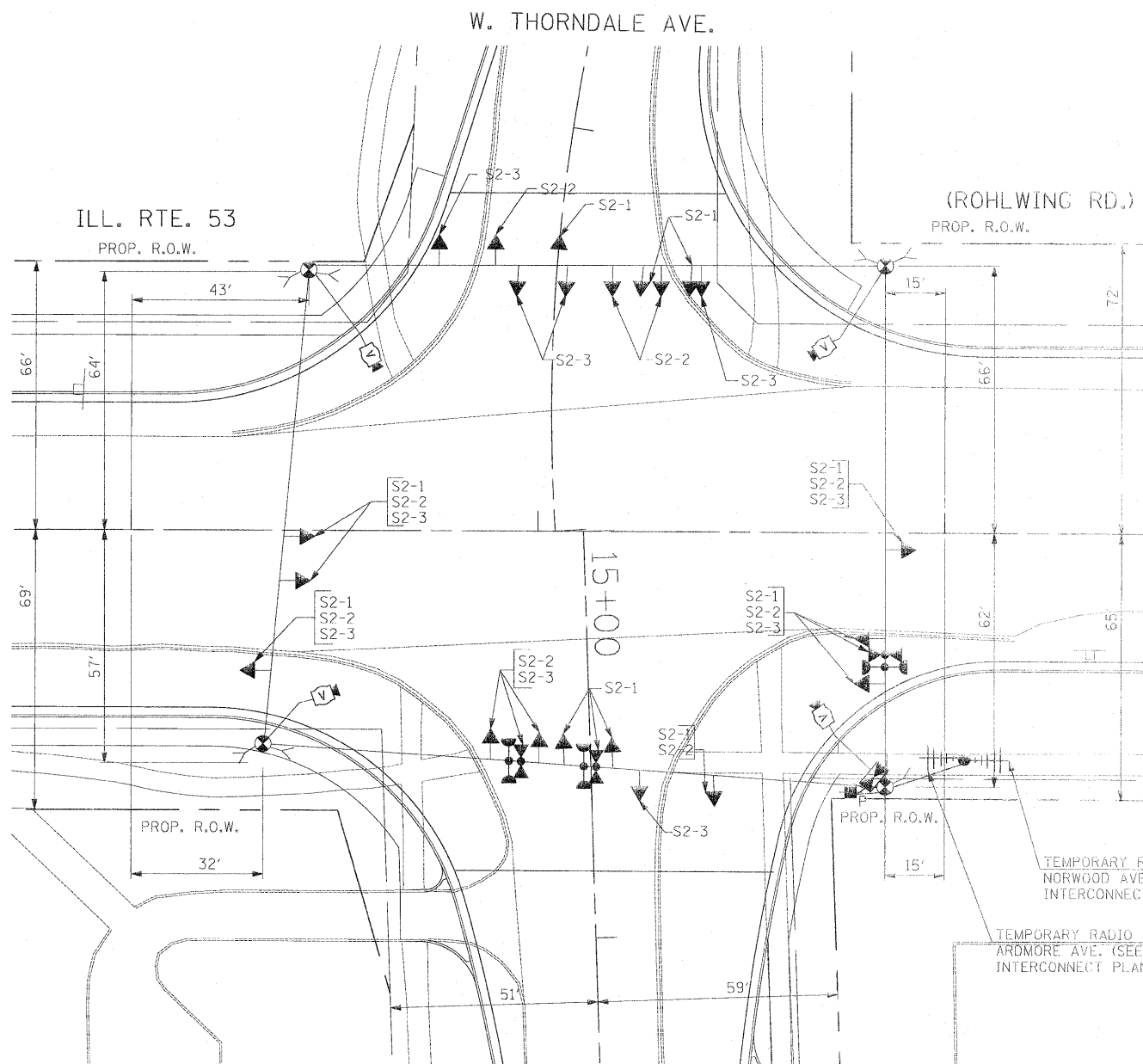


MATCH LINE 239+55

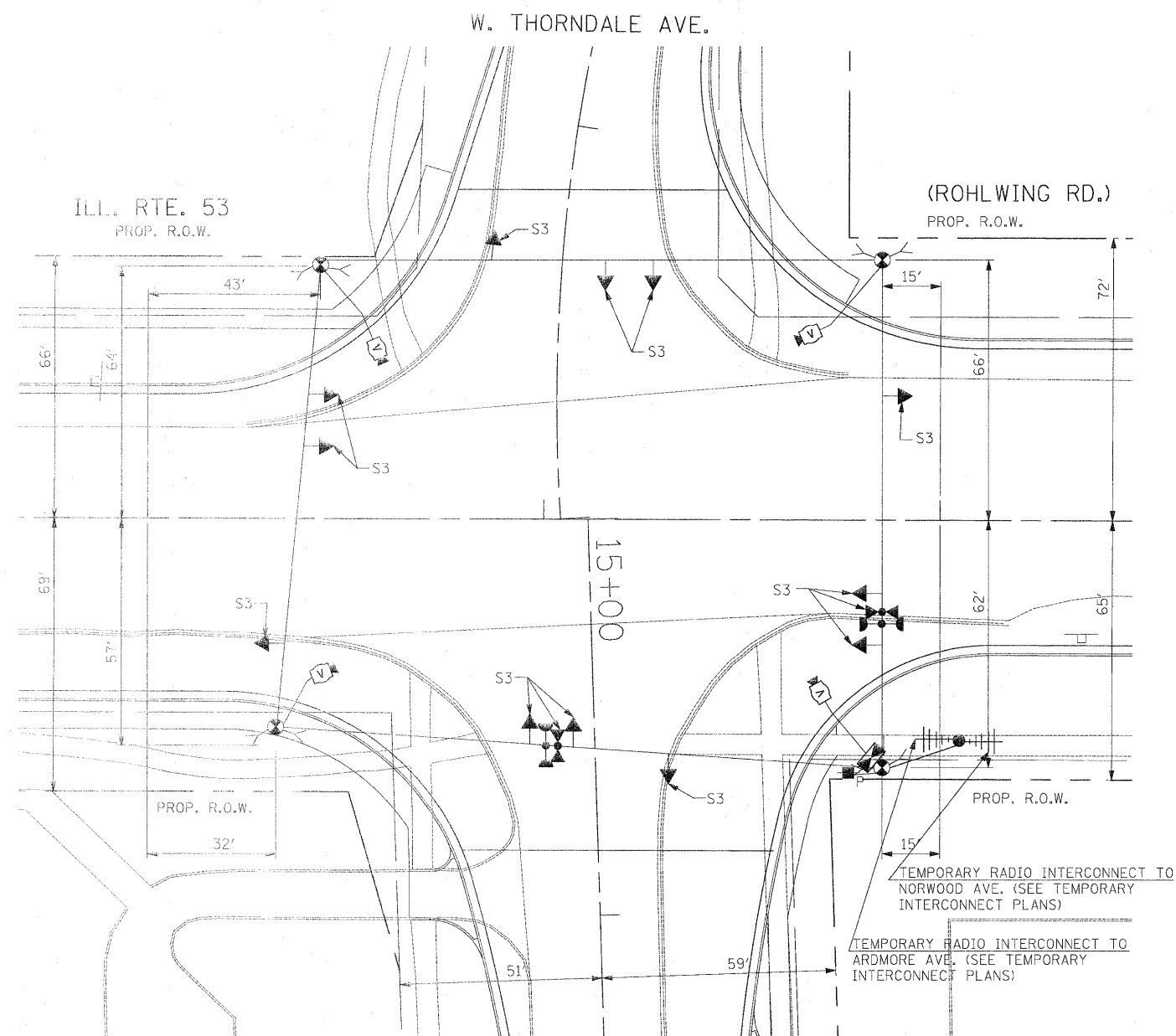
FILE NAME = *FILEL*	USER NAME = *USER*	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT W. THORNDALE AVE. PRE STAGE AND STAGE 1 (SHEET 2 OF 4).</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 501
	PLOT SCALE = *SCALE*	CHECKED - PKG, EA	REVISED -					CONTRACT NO. 60477				
PLOT DATE = *DATE*	DATE - 5/18/2011	REVISED -	SCALE: 1"=20'		SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					
Rev. 6-8-11												



NOTE: THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR CONSTRUCTION STAGE 1 - SUBSTAGE 1 AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.



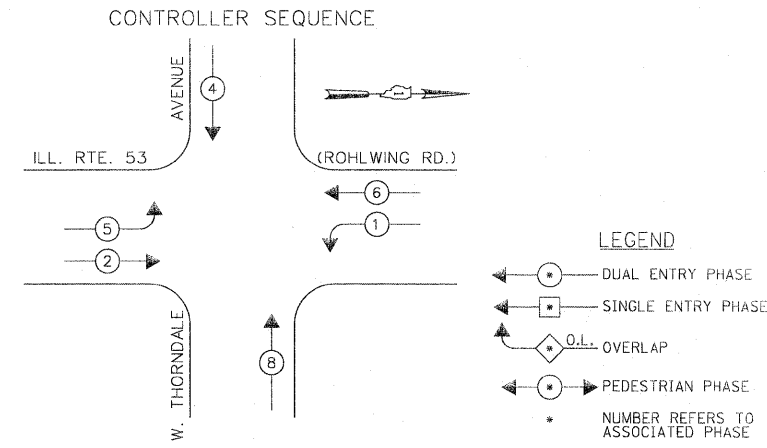
SIGNAL HEAD PLACEMENTS FOR STAGES: S2-1, S2-2, AND S2-3.



SIGNAL HEAD PLACEMENTS FOR STAGE 3

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

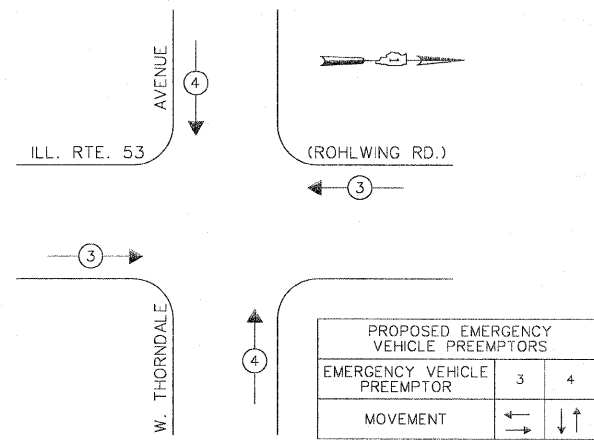
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PLOT SCALE = #SCALE#	CHECKED - PKG, EA	REVISED -	SCALE: 1"=20'			SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT			
PLOT DATE = #DATE#	DATE - 5/18/2011	REVISED -	CONTRACT NO. 60477								
Rev. 6-8-11											



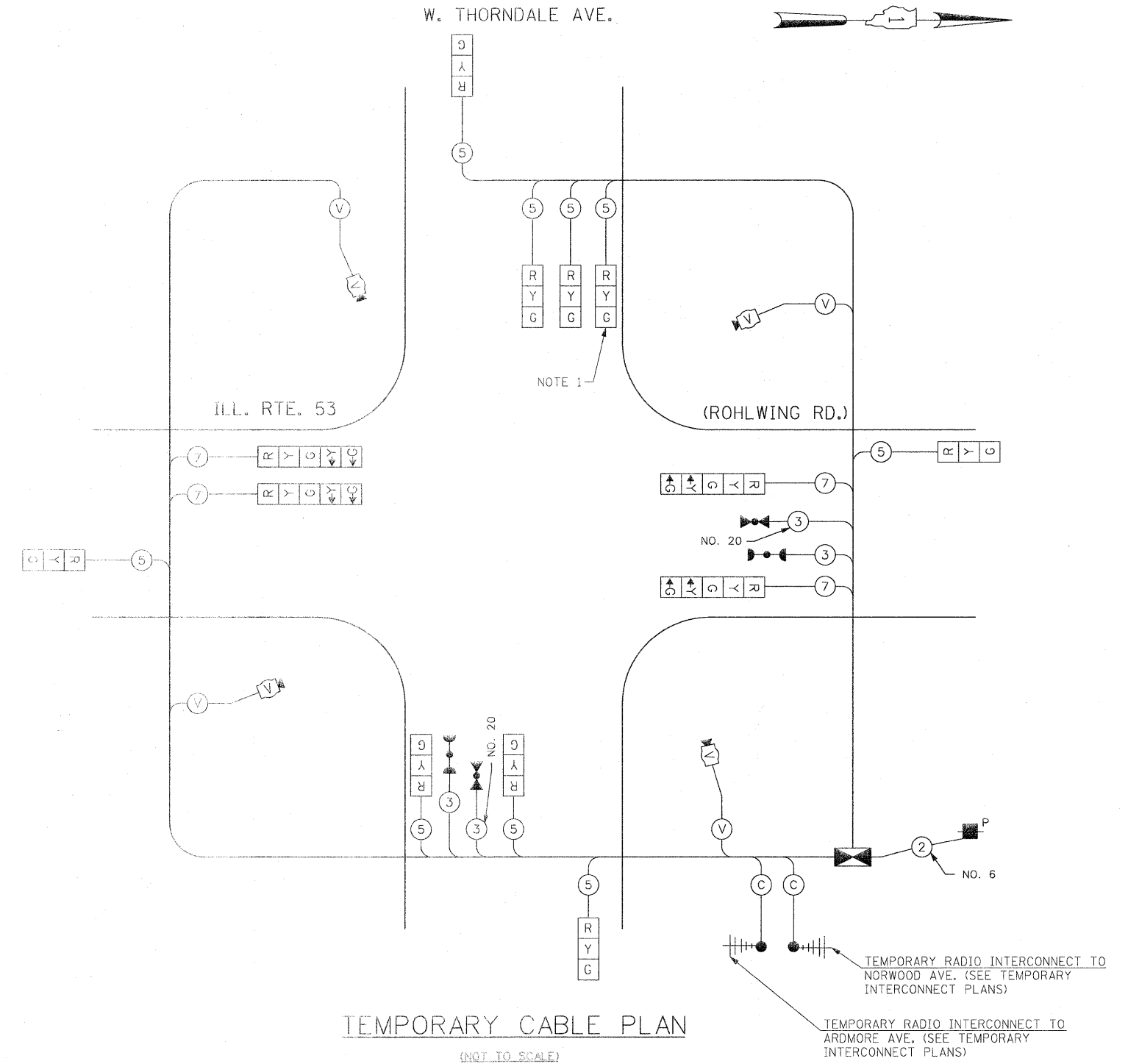
**TEMPORARY PHASE DESIGNATION DIAGRAM**

STAGES: PRE-STAGE, S1-1, S1-2, S1-3, S2-1, S2-2, S2-3, S3, AND AFTER PROPOSED GEOMETRICS ARE BUILT

**EMERGENCY VEHICLE PREEMPTION SEQUENCE**



STAGES: PRE-STAGE, S1-1, S1-2, S1-3, S2-1, S2-2, S2-3, S3, AND AFTER PROPOSED GEOMETRICS ARE BUILT



**TEMPORARY CABLE PLAN**

(NOT TO SCALE)

STAGES: PRE-STAGE, S1-1, S1-2, S1-3, S2-1, S2-2, S2-3, S3, AND AFTER PROPOSED GEOMETRICS ARE BUILT

NOTE 1: THE 3-SECTION SIGNAL HEADS WITH CIRCULAR RED, YELLOW, AND GREEN INDICATIONS SHOWN WITH NOTE 1 FOR THE WESTBOUND DIRECTION OF TRAFFIC ARE NEEDED ONLY DURING STAGE 2 SUBSTAGE 3 CONSTRUCTION ONLY AND SHALL NOT BE USED IN ANY OTHER CONSTRUCTION STAGES, AND SHALL BE BAGGED AND DISCONNECTED DURING OTHER CONSTRUCTION STAGES.

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

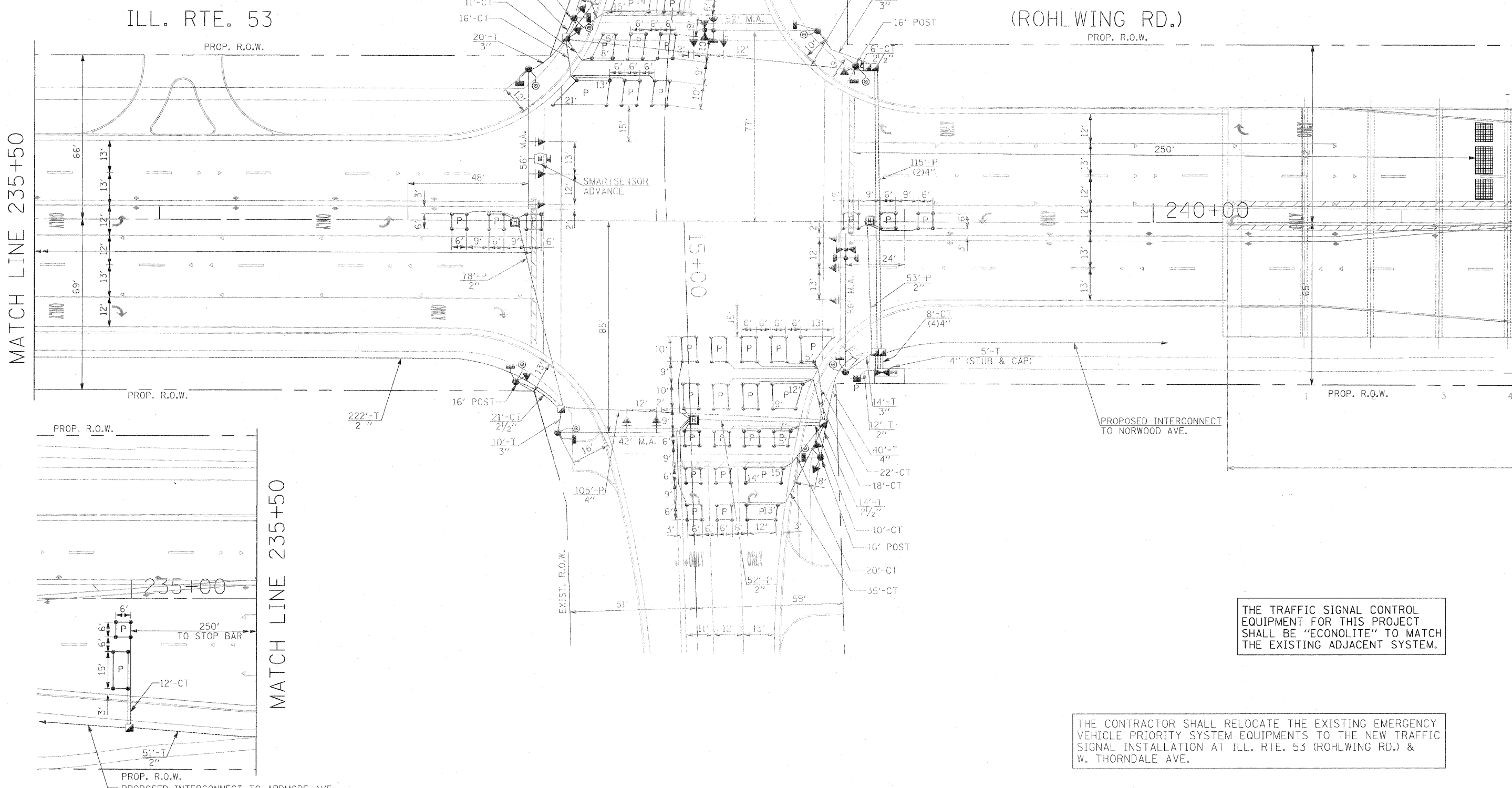
I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE		%OPERATION	
		INCAND.	LED		
SIGNAL (RED)	13	135	17	0.50	110.5
(YELLOW)	13	135	25	0.25	81.25
(GREEN)	13	135	15	0.25	48.75
ARROW	8	135	12	0.10	9.6
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN			25	0.05	
VIDEO SYSTEM	1	150		1.00	150
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 500.1

VILLAGE OF ITASCA  
550 WEST IRVING PARK ROAD  
ITASCA, ILLINOIS 60143-1795

ENERGY SUPPLY CONTACT: CURTIS TOPPS  
PHONE: (630) 691-4356  
COMPANY: COMMONWEALTH EDISON

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W. THORNDALE AVE.



MATCH LINE 235+50

MATCH LINE 235+50

ILL. RTE. 53

(ROHLWING RD.)

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

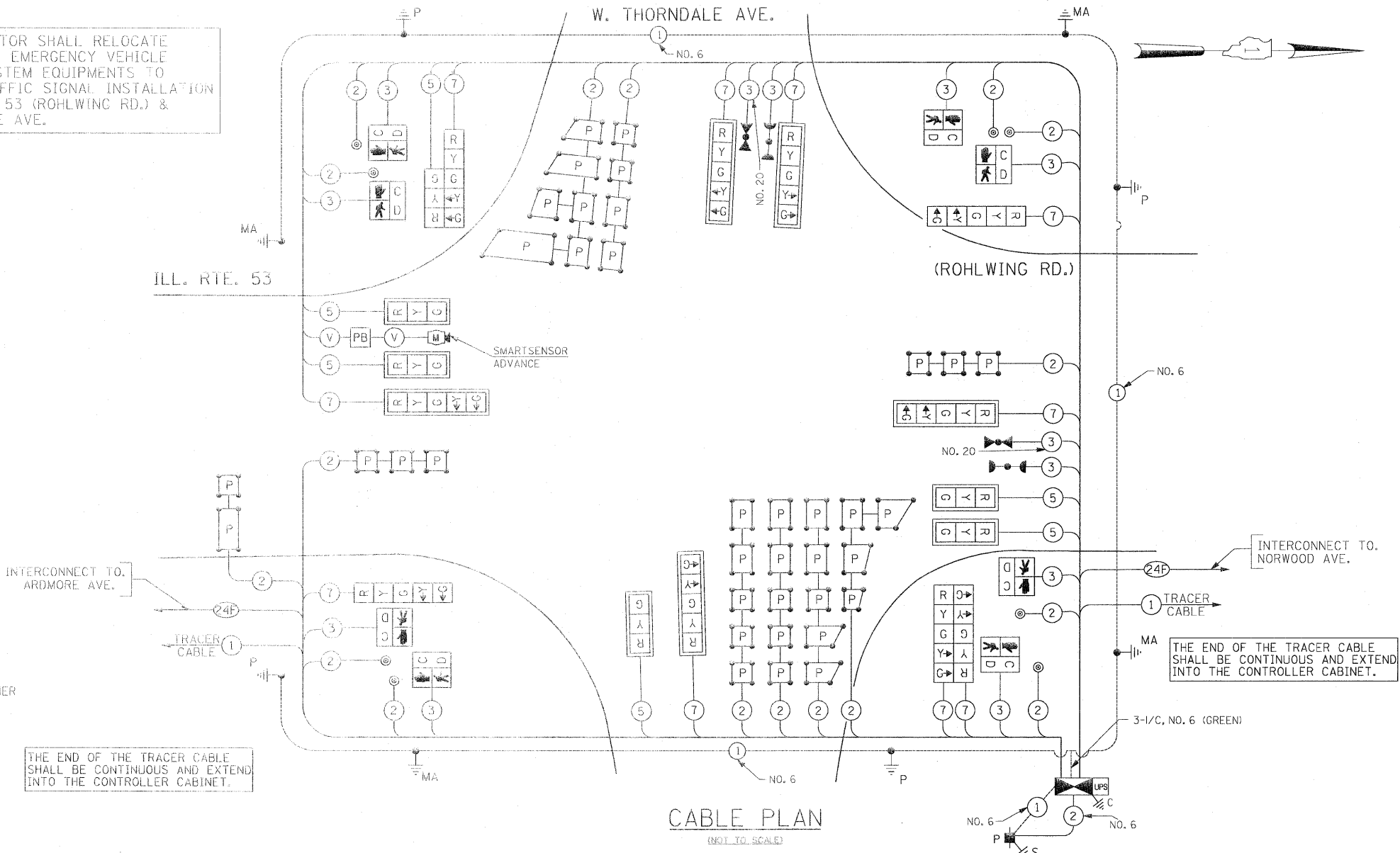
THE CONTRACTOR SHALL RELOCATE THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM EQUIPMENTS TO THE NEW TRAFFIC SIGNAL INSTALLATION AT ILL. RTE. 53 (ROHLWING RD.) & W. THORNDALE AVE.

FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL INSTALLATION PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT W. THORNDALE AVE.			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 504
	PLOT SCALE = #SCALE#	DRAWN - MAA, EA	REVISED -		SCALE: 1"=20'	SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	CONTRACT NO. 60477				
PLOT DATE = #DATE#	DATE - 5/18/2011	CHECKED - PKG, EA	REVISED -									

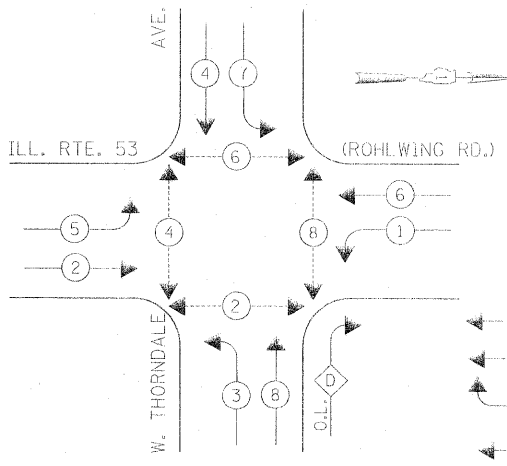
Rev. 6-8-11

SCHEDULE OF QUANTITIES		
QUANTITY	UNIT	ITEM
15	SQ FT	SIGN PANEL - TYPE 1
22.5	SQ FT	SIGN PANEL - TYPE 2
284	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
50	FOOT	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL
112	FOOT	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL
37	FOOT	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL
183	FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
458	FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
4	EACH	HANDHOLE
3	EACH	HEAVY-DUTY HANDHOLE
2	EACH	DOUBLE HANDHOLE
429	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	TRANSCEIVER-FIBER OPTIC
1555	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
1965	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
1488	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
2185	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
1740	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
28	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C
4	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 52 FT.
2	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 56 FT.
16	FOOT	CONCRETE FOUNDATION, TYPE A
4	FOOT	CONCRETE FOUNDATION, TYPE C
28	FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
42	FOOT	CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER
5	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
5	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
8	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
10	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
9	EACH	INDUCTIVE LOOP DETECTOR
8	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
2	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT
1	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
8	EACH	REMOVE EXISTING HANDHOLE
9	EACH	REMOVE EXISTING CONCRETE FOUNDATION
1719	FOOT	PREFORMED DETECTOR LOOP
1	EACH	TEMPORARY TRAFFIC SIGNAL TIMING
1	EACH	SERVICE INSTALLATION - POLE MOUNTED
1	EACH	UNINTERRUPTIBLE POWER SUPPLY
770	FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
363	FOOT	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED
1	EACH	MICROWAVE VEHICLE SENSOR (SMARTSENSOR ADVANCE)
* 100% COST TO VILLAGE OF ITASCA		

THE CONTRACTOR SHALL RELOCATE THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM EQUIPMENTS TO THE NEW TRAFFIC SIGNAL INSTALLATION AT ILL. RTE. 53 (ROHLWING RD.) & W. THORNDALE AVE.

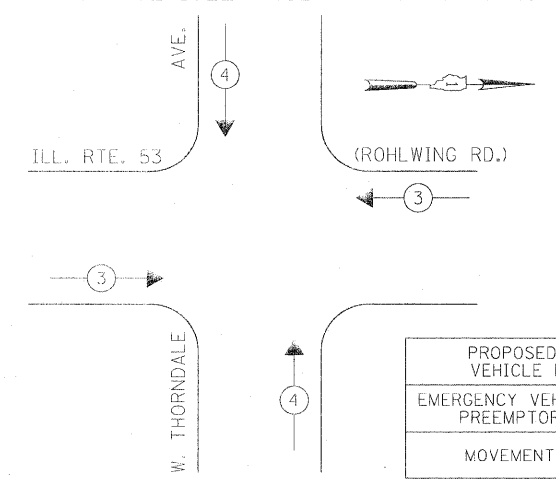


CONTROLLER SEQUENCE



OVERLAP LETTER PERMISSIVE PHASE PROTECTED PHASE  
 D = 8 + 1

EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE		OPERATION	
SIGNAL (RED)	15	135	17	0.50	127.5
	15	135	25	0.25	93.75
	15	135	15	0.25	56.25
ARROW	20	135	12	0.10	24
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN			25	0.05	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	601.5

VILLAGE OF ITASCA  
 550 WEST IRVING PARK ROAD  
 ITASCA, ILLINOIS 60143-1795  
 ENERGY SUPPLY CONTACT: CURTIS TOPPS  
 PHONE: (630) 691-4356  
 COMPANY: COMMONWEALTH EDISON

FILE NAME =	USER NAME = #USER#	DESIGNED - PKG	REVISED -
#FILE#		DRAWN - MAA, EA	REVISED -
	PLOT SCALE = #SCALE#	CHECKED - PKG, EA	REVISED -
	PLOT DATE = #DATE#	DATE - 5/18/2011	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM,  
 EMERGENCY VEHICLE PREEMPTION SEQUENCE, SCHEDULE OF QUANTITIES  
 ILLINOIS ROUTE 53 (ROHLWING RD.) AT W. THORNDALE AVE.

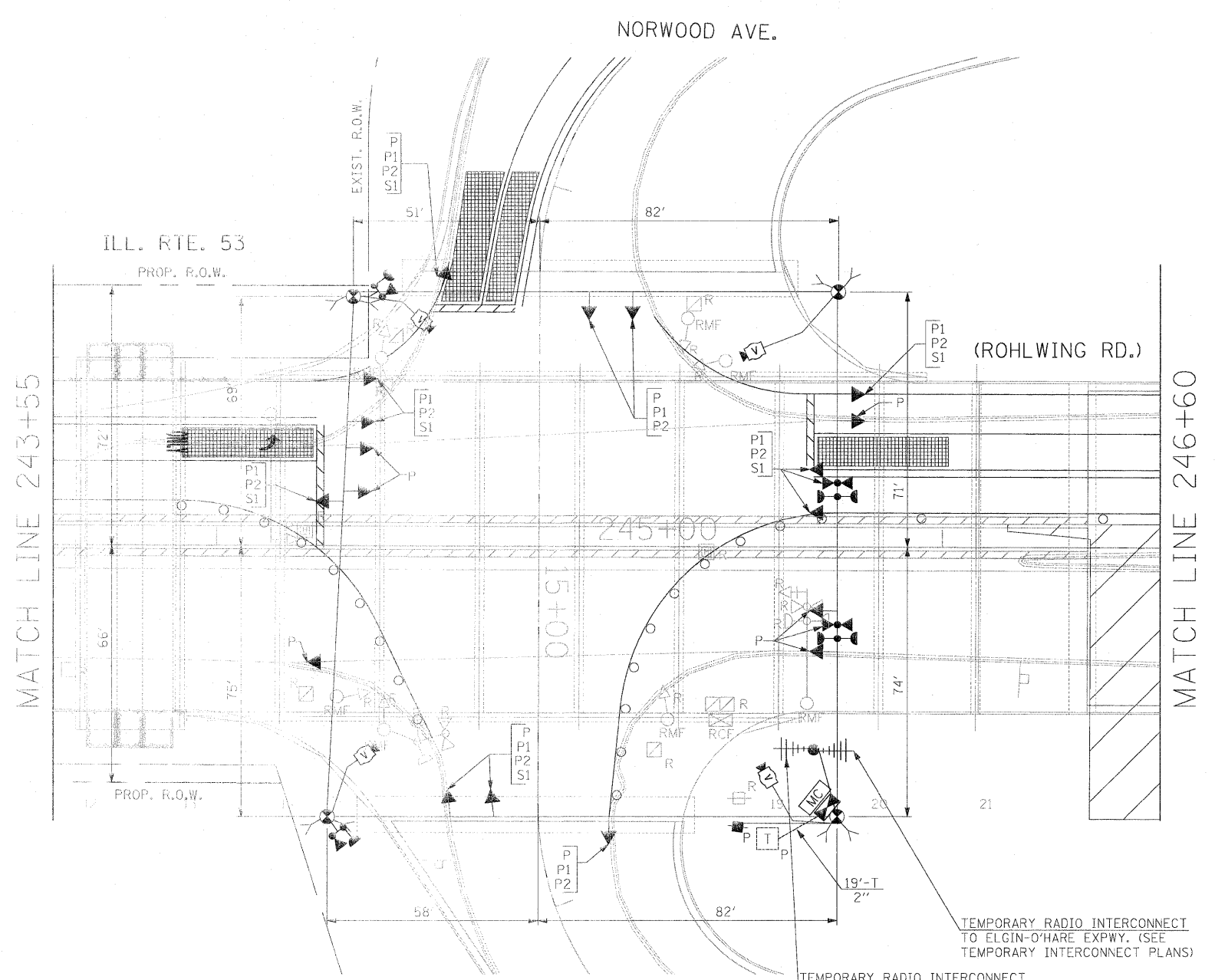
F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 505
FED. ROAD DIST. NO. ILLINOIS		CONTRACT NO. 60477		

Rev 6-8-11

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" (300mm) 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 RAILROAD INTERSECTIONS, AND 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.



THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACTOR'S BID PRICE.

- 1 EACH CONTROLLER AND CABINET COMPLETE
- 3 EACH SIGNAL HEAD, 1-FACE 3-SECTION, BRACKET MOUNTED
- 2 EACH SIGNAL HEAD, 1-FACE 5-SECTION, MAST ARM MOUNTED
- 1 EACH SIGNAL HEAD, 2-FACE, 3-SECTION, BRACKET MOUNTED
- 2 EACH SIGNAL HEAD, 1-FACE 5-SECTION, BRACKET MOUNTED
- 2 EACH TRAFFIC SIGNAL BACKPLATE
- 6 EACH TRAFFIC SIGNAL POST
- 2 EACH STEEL MAST ARM ASSEMBLY AND POLE
- 1 EACH SERVICE INSTALLATION
- 1 EACH MASTER CONTROLLER

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

THE CONTRACTOR SHALL RELOCATE THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM EQUIPMENTS TO THE NEW TRAFFIC SIGNAL INSTALLATION AT ILL. RTE. 53 (ROHLWING RD.) & NORWOOD AVE. ONE OF THE EXISTING LIGHT DETECTORS WHICH IS ALREADY SEPARATED SHALL BE DIVIDED, INCLUDING THE CONFIRMATION BEACON, FOR MOUNTING AS PROPOSED IN THE PLANS.

SIGNAL HEAD PLACEMENTS FOR STAGES: PRE-STAGE, P1, P2, AND S1.

NOTE 1: THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR CONSTRUCTION PRESTAGE - SUBSTAGE 1 AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.

NOTE 2: THE EAST LEG IS CLOSED TO TRAFFIC DURING CONSTRUCTION STAGE S1. THEREFORE, THE SIGNAL HEADS PLACEMENT FOR WESTBOUND TRAFFIC IS NOT SHOWN FOR STAGE S1.

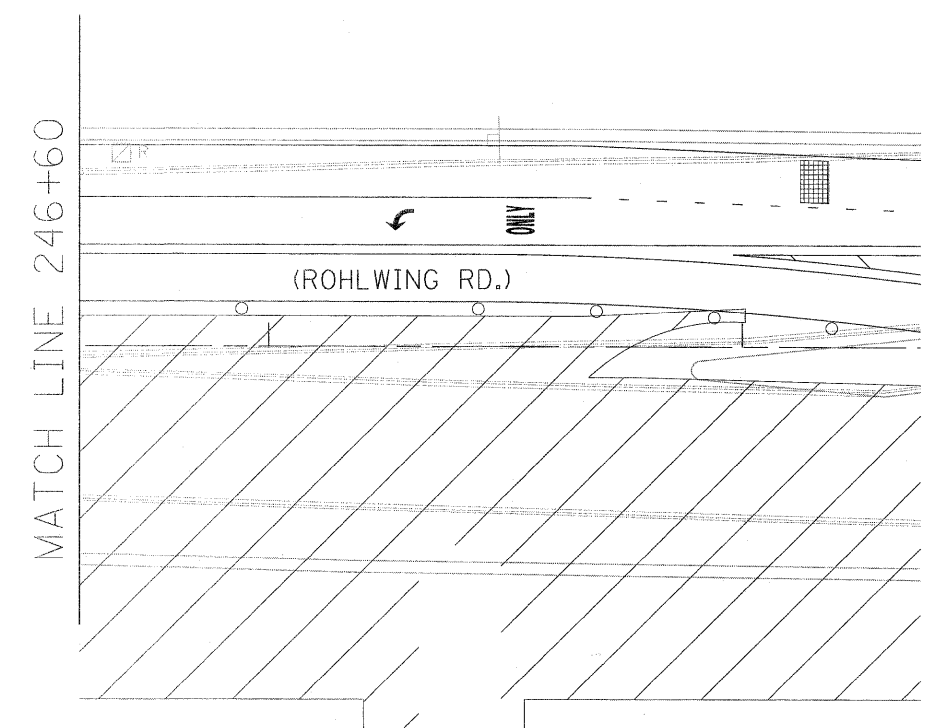
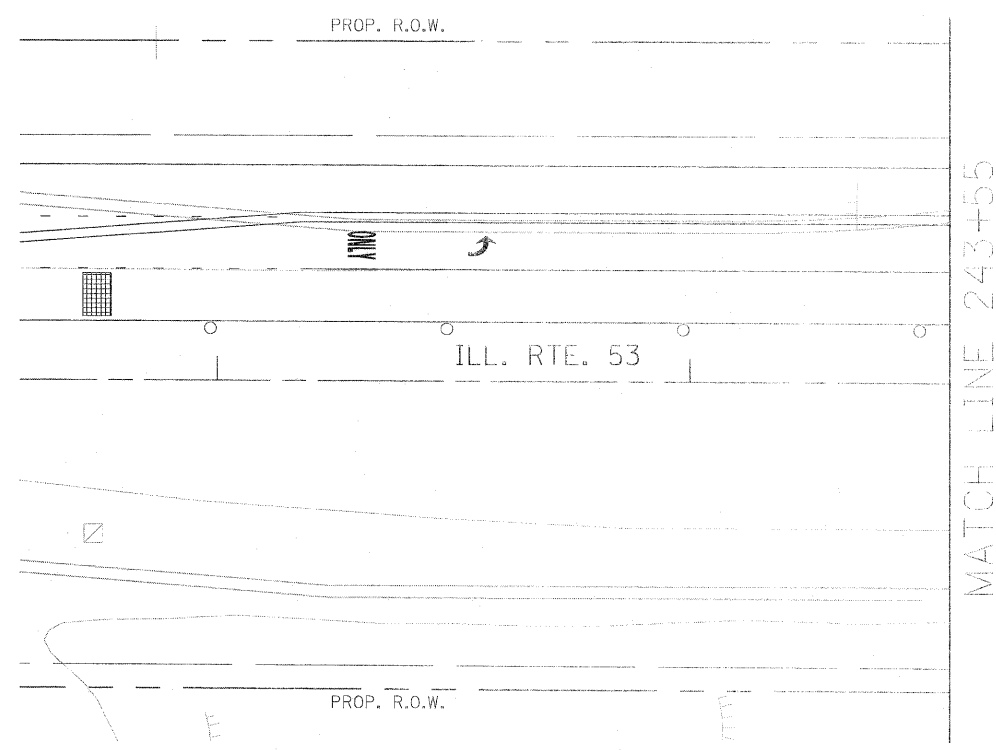
TEMPORARY RADIO INTERCONNECT TO ELGIN-O'HARE EXPWY. (SEE TEMPORARY INTERCONNECT PLANS)

TEMPORARY RADIO INTERCONNECT TO W.THORNDALE AVE. (SEE TEMPORARY INTERCONNECT PLANS)

FILE NAME =	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT NORWOOD AVE. PRE STAGE, PRE STAGE SUBSTAGE 1, PRE STAGE SUBSTAGE 2, AND STAGE 1 (SHEET 1 OF 4).</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
#FILE#		DRAWN - MAA, EA	REVISED -		SCALE: 1"=20'	SHEET NO. OF SHEETS STA.	TO STA.	2578	532B	DuPage	781	506	
		CHECKED - PKG, EA	REVISED -										
		DATE - 5/18/2011	REVISED -										

Rev. 6-8-11

CONTRACT NO. 60477



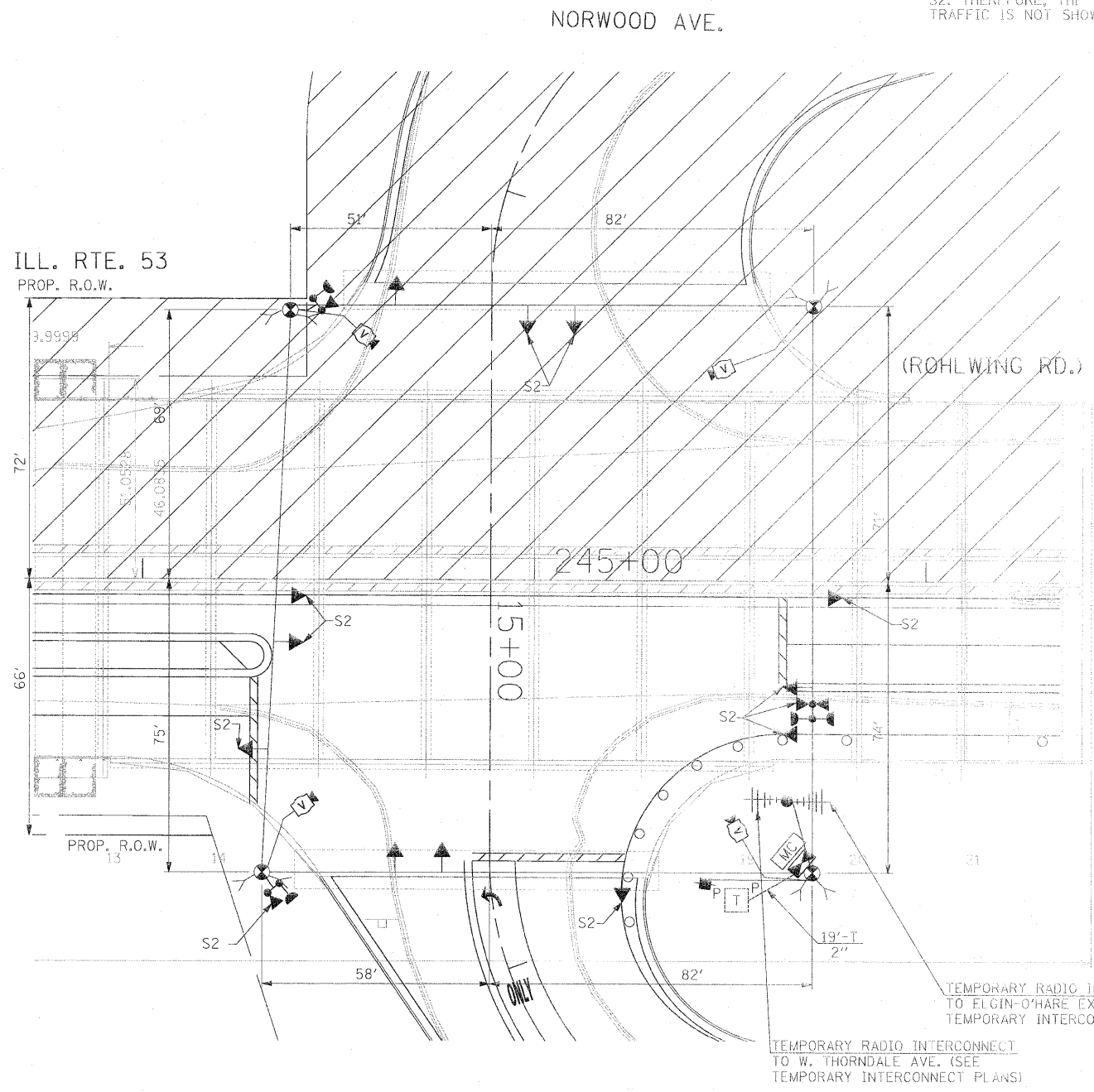
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

Rev. 6-8-11

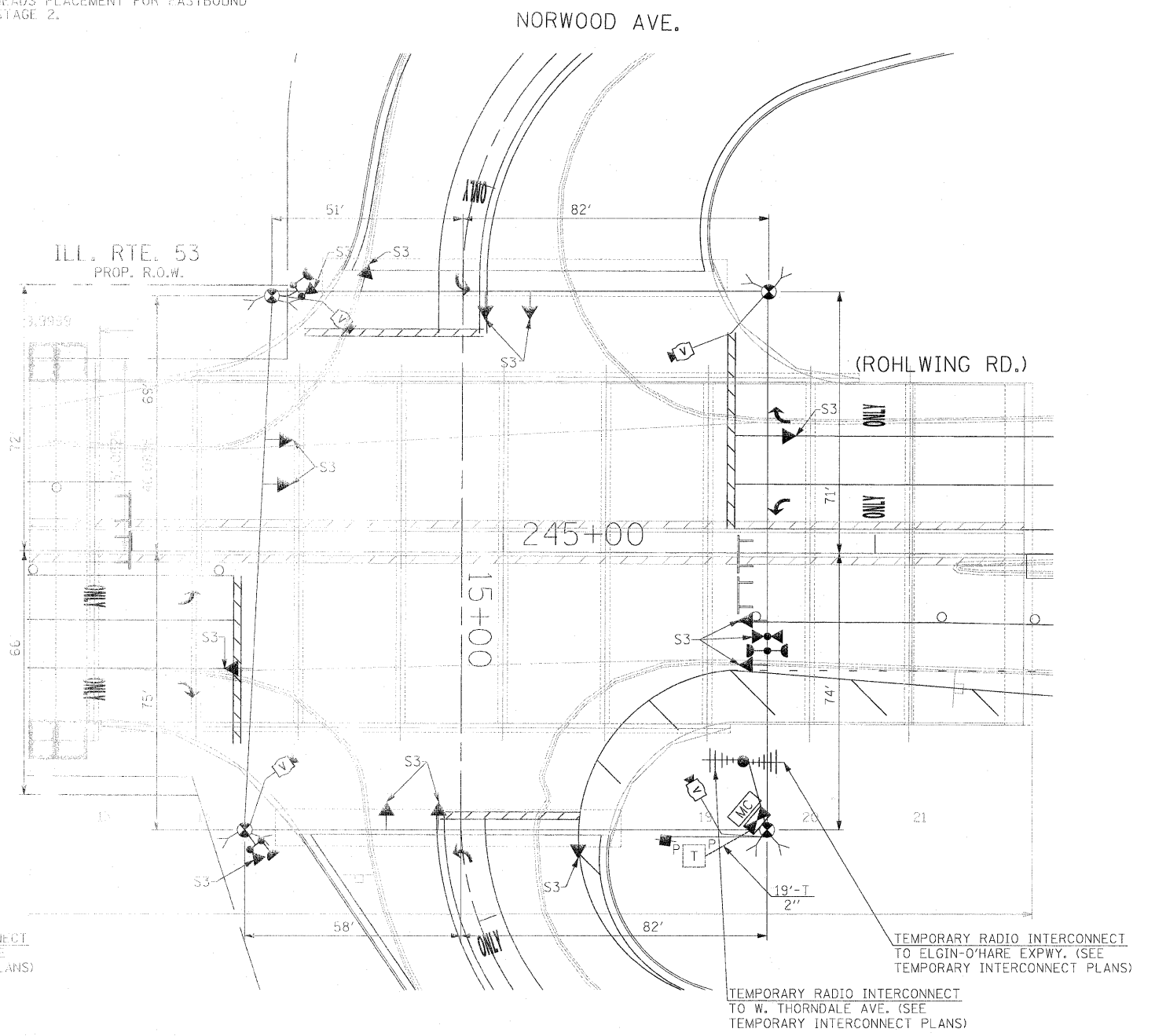
FILE NAME =	USER NAME = *USER*	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT NORWOOD AVE. PRE STAGE, PRE STAGE SUBSTAGE 1, PRE STAGE SUBSTAGE 2, AND STAGE 1 (SHEET 2 OF 4).</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 507
*FILEL*	PLOT SCALE = *SCALE*	DRAWN - MAA, EA	REVISED -		SCALE: 1"=20'	SHEET NO. OF	SHEETS	STA. TO STA.	CONTRACT NO. 60477			
	PLOT DATE = *DATE*	CHECKED - PKG, EA	REVISED -						ILLINOIS FED. AID PROJECT			
		DATE - 5/18/2011	REVISED -									



- NOTE 1: THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR CONSTRUCTION PRESTAGE - SUBSTAGE 1 AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.
- NOTE 2: THE SIGNAL HEAD PLACEMENT FOR NORWOOD AVENUE FOR CONSTRUCTION STAGES S2 AND S3 SHALL BE DETERMINED IN FIELD BY THE CONTRACTOR DEPENDING ON THE CONSTRUCTION STAGING USED BY THE CONTRACTOR FOR NORWOOD AVENUE.
- NOTE 3: THE WEST LEG IS CLOSED TO TRAFFIC DURING CONSTRUCTION STAGE S2. THEREFORE, THE SIGNAL HEADS PLACEMENT FOR EASTBOUND TRAFFIC IS NOT SHOWN FOR STAGE 2.



SIGNAL HEAD PLACEMENTS FOR STAGE S2



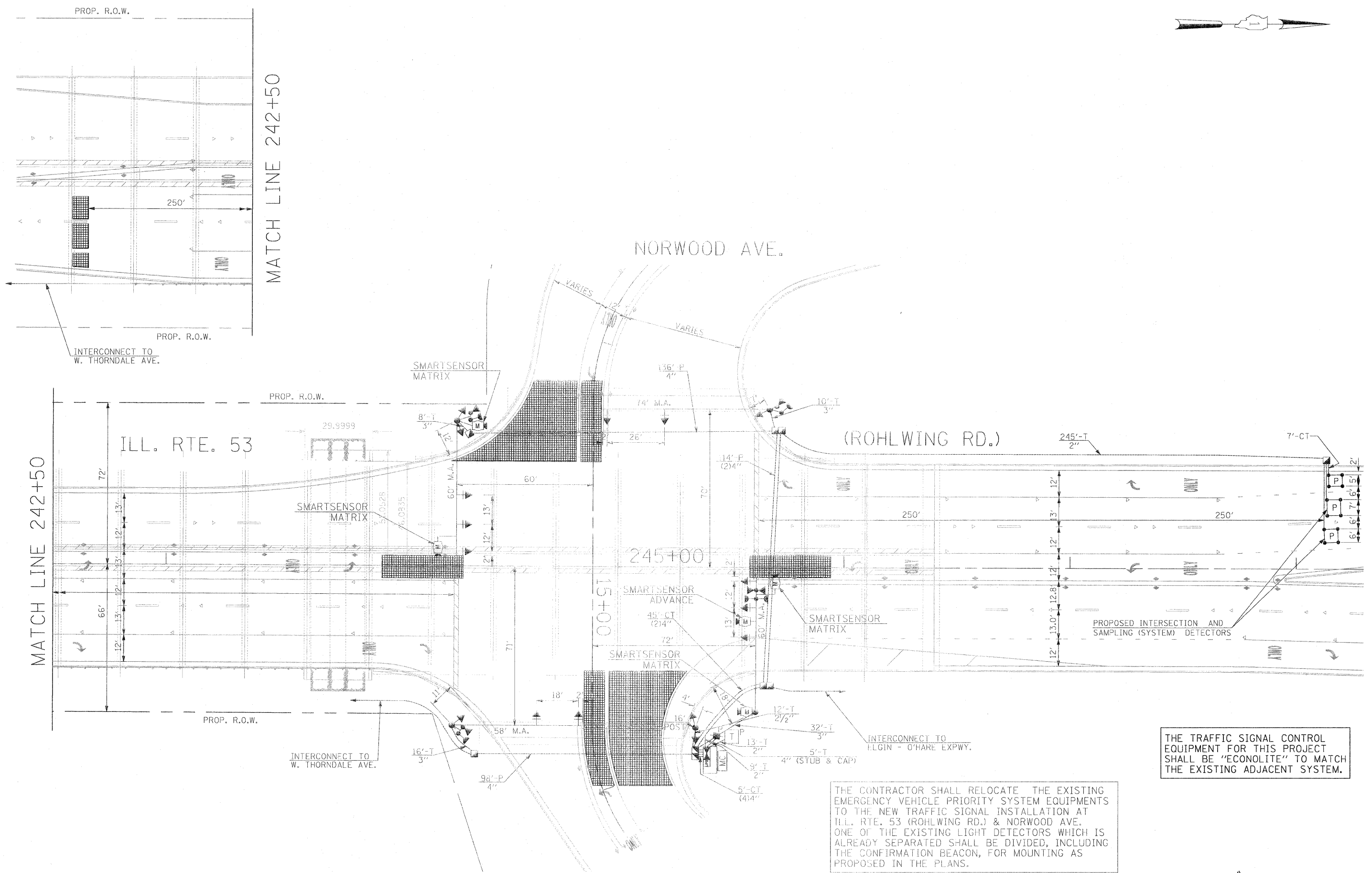
SIGNAL HEAD PLACEMENTS FOR STAGE S3

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

FILE NAME = #FILEL#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT NORWOOD AVE. STAGE 2 AND STAGE 3 (SHEET 3 OF 4).</b>		F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 508	
	PLOT SCALE = #SCALE#	DRAWN - MAA, EA	REVISED -		SCALE: 1"=20'	SHEET NO. OF SHEETS	STA. TO STA.	CONTRACT NO. 60477				
	PLOT DATE = #DATE#	CHECKED - PKG, EA	REVISED -					FED. ROAD DIST. NO. - [ILLINOIS] FED. AID PROJECT				
		DATE - 5/18/2011	REVISED -					Rev. 6-8-11				







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

THE CONTRACTOR SHALL RELOCATE THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM EQUIPMENTS TO THE NEW TRAFFIC SIGNAL INSTALLATION AT ILL. RTE. 53 (ROHLWING RD.) & NORWOOD AVE. ONE OF THE EXISTING LIGHT DETECTORS WHICH IS ALREADY SEPARATED SHALL BE DIVIDED, INCLUDING THE CONFIRMATION BEACON, FOR MOUNTING AS PROPOSED IN THE PLANS.

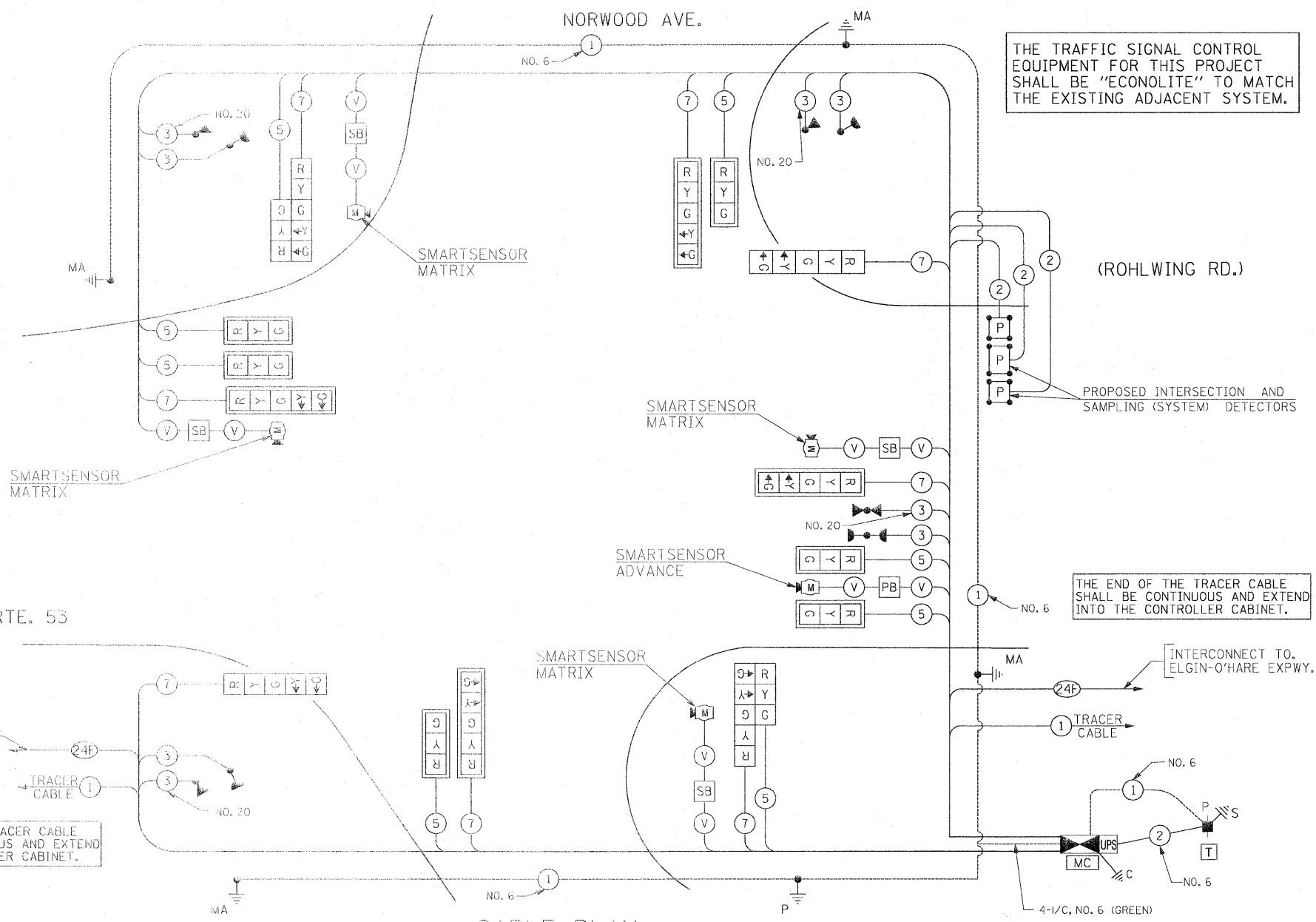
Rev. 6-8-11

FILE NAME = #FILEL#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC SIGNAL INSTALLATION PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT NORWOOD AVE.</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 510
	PLOT SCALE = #SCALE#	CHECKED - PKG, EA	REVISED -		SCALE: 1"=20'	SHEET NO. OF	SHEETS STA.	TO STA.	CONTRACT NO. 60477			
	PLOT DATE = #DATE#	DATE - 5/18/2011	REVISED -		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT							

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
31.5	SO FT	SIGN PANEL - TYPE 1
267	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
12	FOOT	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL
66	FOOT	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL
115	FOOT	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL
462	FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
3	EACH	HANDHOLE
3	EACH	DOUBLE HANDHOLE
371	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL
1	EACH	TRANSCIEVER-FIBER OPTIC
930	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
2015	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
1950	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
1377	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
29	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 58 FT.
2	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 60 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 74 FT.
4	FOOT	CONCRETE FOUNDATION, TYPE A
4	FOOT	CONCRETE FOUNDATION, TYPE C
88	FOOT	CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER
6	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
2	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
10	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
3	EACH	INDUCTIVE LOOP DETECTOR
1	EACH	LIGHT DETECTOR
1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
3	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT
1	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
1	FOOT	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
8	FOOT	REMOVE EXISTING HANDHOLE
9	EACH	REMOVE EXISTING CONCRETE FOUNDATION
113	EACH	PREFORMED DETECTOR LOOP
1	EACH	TEMPORARY TRAFFIC SIGNAL TIMING
1	EACH	SERVICE INSTALLATION - POLE MOUNTED
1	EACH	UNINTERRUPTIBLE POWER SUPPLY
770	FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
930	FOOT	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED
4	EACH	MICROWAVE VEHICLE SENSOR (SMARTSENSOR MATRIX)
1	EACH	MICROWAVE VEHICLE SENSOR (SMARTSENSOR ADVANCE)

100% COST TO VILLAGE OF ITASCA



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

(ROHLWING RD.)

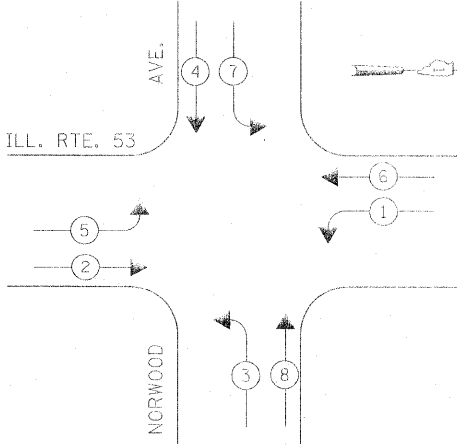
THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

ILL. RTE. 53

INTERCONNECT TO W. THORNDALE AVE.  
 TRACER CABLE  
 THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

CABLE PLAN (NOT TO SCALE)

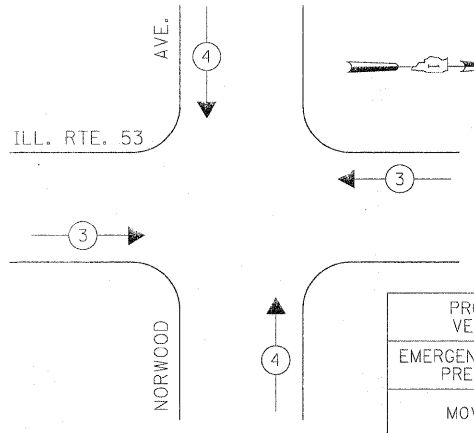
CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

THE CONTRACTOR SHALL RELOCATE THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM EQUIPMENTS TO THE NEW TRAFFIC SIGNAL INSTALLATION AT ILL. RTE. 53 (ROHLWING RD.) & NORWOOD AVE. ONE OF THE EXISTING LIGHT DETECTORS WHICH IS ALREADY SEPARATED SHALL BE DIVIDED, INCLUDING THE CONFIRMATION BEACON, FOR MOUNTING AS PROPOSED IN THE PLANS.

EMERGENCY VEHICLE PREEMPTION SEQUENCE



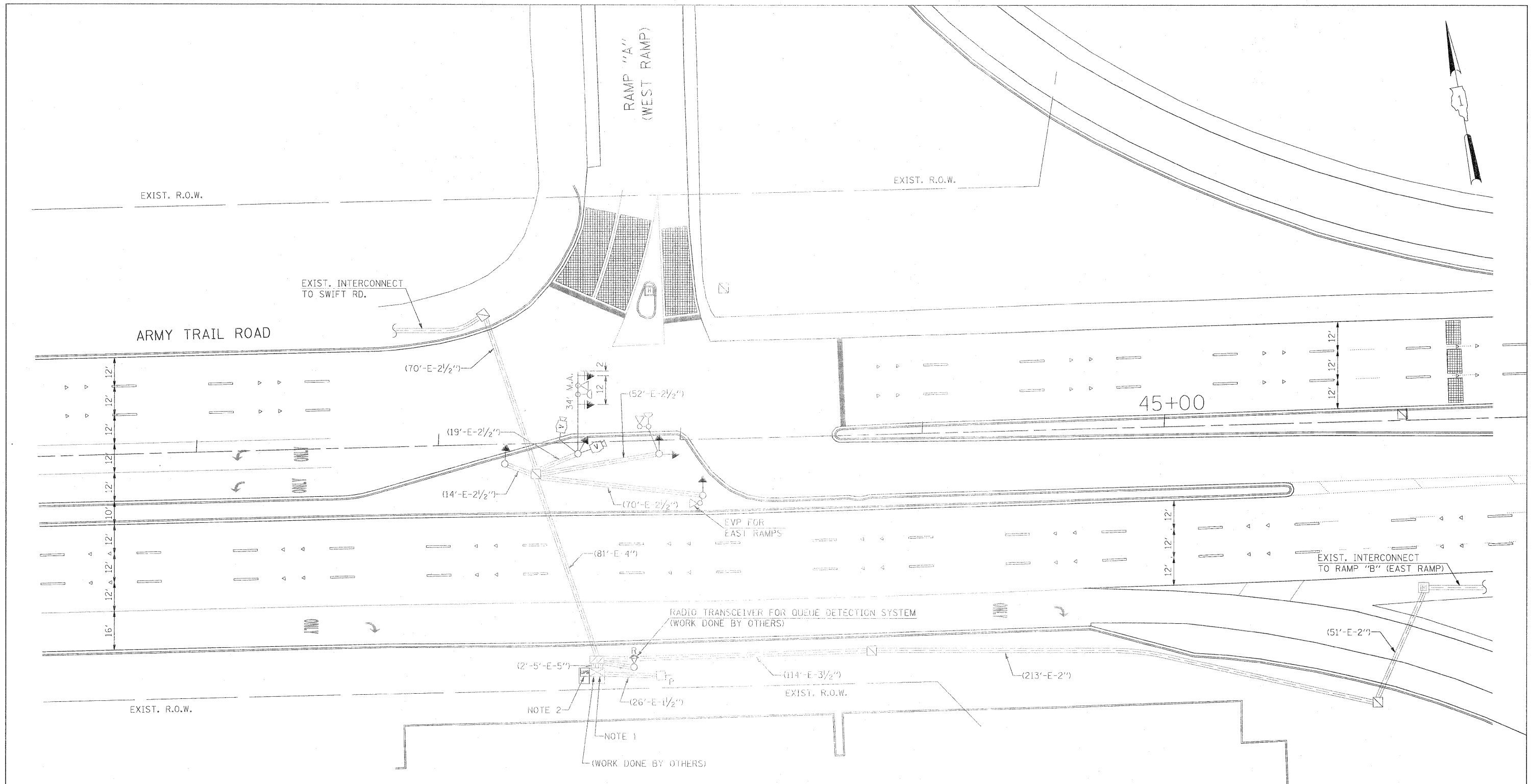
LEGEND  
 SB = SPLICE BOX  
 PB = POLE BOX

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE		%OPERATION	
		INCAND.	LED		
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	16	135	15	0.25	60
ARROW	16	135	12	0.10	19.2
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN			25	0.05	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 415.2

VILLAGE OF ITASCA  
 550 WEST IRVING PARK ROAD  
 ITASCA, ILLINOIS 60143-1795

ENERGY SUPPLY CONTACT: CURTIS TOPPS  
 PHONE: (630) 691-4356  
 COMPANY: COMMONWEALTH EDISON



THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACTOR'S BID PRICE.

- 2 EACH SIGNAL HEAD, 1-FACE, 3-SECTION, MAST ARM MOUNTED
- 3 EACH SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED
- 1 EACH SIGNAL HEAD, 2-FACE, 3-SECTION, BRACKET MOUNTED
- 2 EACH TRAFFIC SIGNAL BACKPLATE

NOTE 1: THE EXISTING 3C NO. 20 CABLE SHALL BE USED FOR TEMPORARY LIGHT DETECTOR TO BE MOUNTED ON THE TEMPORARY SIGNAL AT THE EAST RAMP FOR THE TRAFFIC SIGNAL INSTALLATION AT THE WEST RAMP. ADDITIONAL CABLE SHALL BE SPLICED AS NEEDED. AFTER THE PERMANENT TRAFFIC SIGNAL INSTALLATION AT THE EAST RAMP AND ARMY TRAIL ROAD IS OPERATIONAL, THE EXISTING 3C NO. 20 CABLE USED AS A TEMPORARY CABLE SHALL BE REMOVED (TOTAL 1701 FT.). THE REMOVAL OF THE EXISTING CABLE SHALL BE PAID FOR SEPARATELY AS "REMOVE EXISTING CABLE FROM CONDUIT".

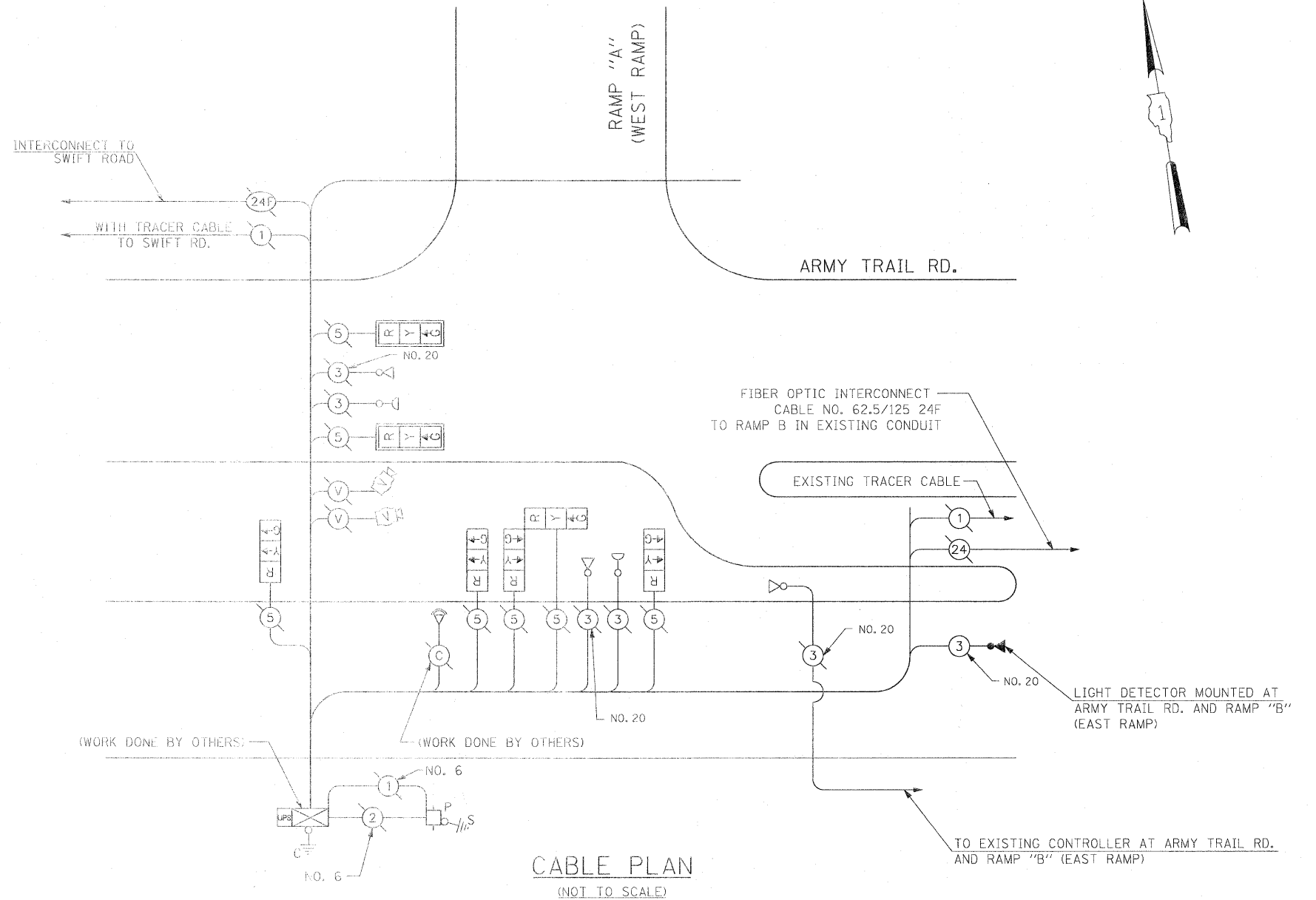
NOTE 2: A P.C.C. APRON SIDEWALK, FIVE (5) INCHES THICK, SHALL BE PROVIDED FOR THE UNINTERRUPTIBLE POWER SUPPLY IN ACCORDANCE WITH THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS. THIS WORK SHALL BE INCLUDED IN THE COST OF "UNINTERRUPTIBLE POWER SUPPLY" AND NO EXTRA COMPENSATION SHALL BE ALLOWED FOR THE SAME.

Rev. 6-8-11

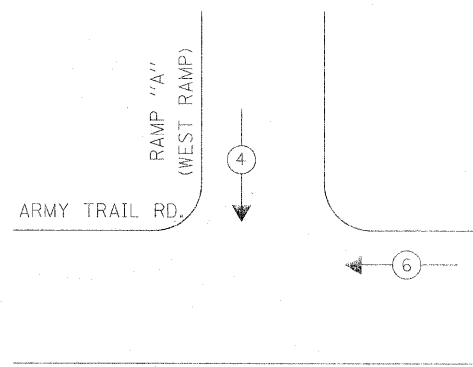
SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
3	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
2	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
* 1	EACH	LIGHT DETECTOR
1701	FOOT	REMOVE ELECTRIC CABLE FROM CONDUIT
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	UNINTERRUPTIBLE POWER SUPPLY
* 1772	FOOT	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED

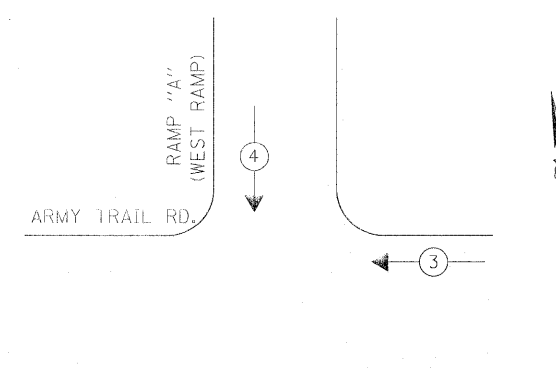
\* 100% COST TO VILLAGE OF ADDISON



CONTROLLER SEQUENCE



EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND

- ◉ DUAL ENTRY PHASE
- ◻ SINGLE ENTRY PHASE
- ◊ O.L. OVERLAP
- ◉ PEDESTRIAN PHASE
- \* NUMBER REFERS TO ASSOCIATED PHASE

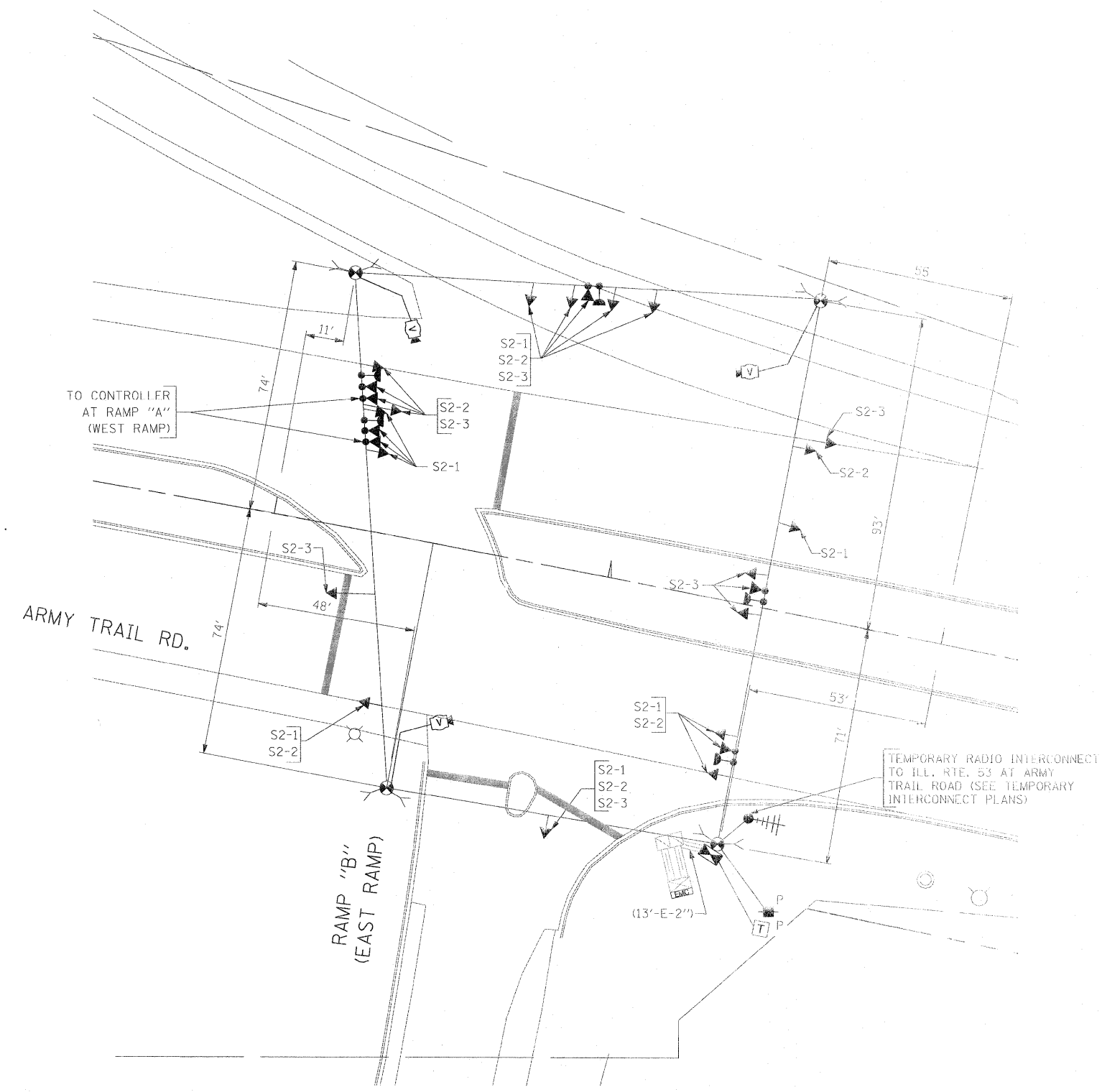
PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	←	↓

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE	%OPERATION	
		INCAND.	LED	
SIGNAL (RED)	7	135	17	59.5
(YELLOW)	7	135	25	43.75
(GREEN)	7	135	15	26.5
ARROW		135	12	0.10
PED. SIGNAL		90	25	1.00
CONTROLLER	1	100	100	100
ILLUM. SIGN			25	0.05
VIDEO SYSTEM	1	150	1.00	150
FLASHER				0.50
ENERGY COSTS TO:				TOTAL = 379.5

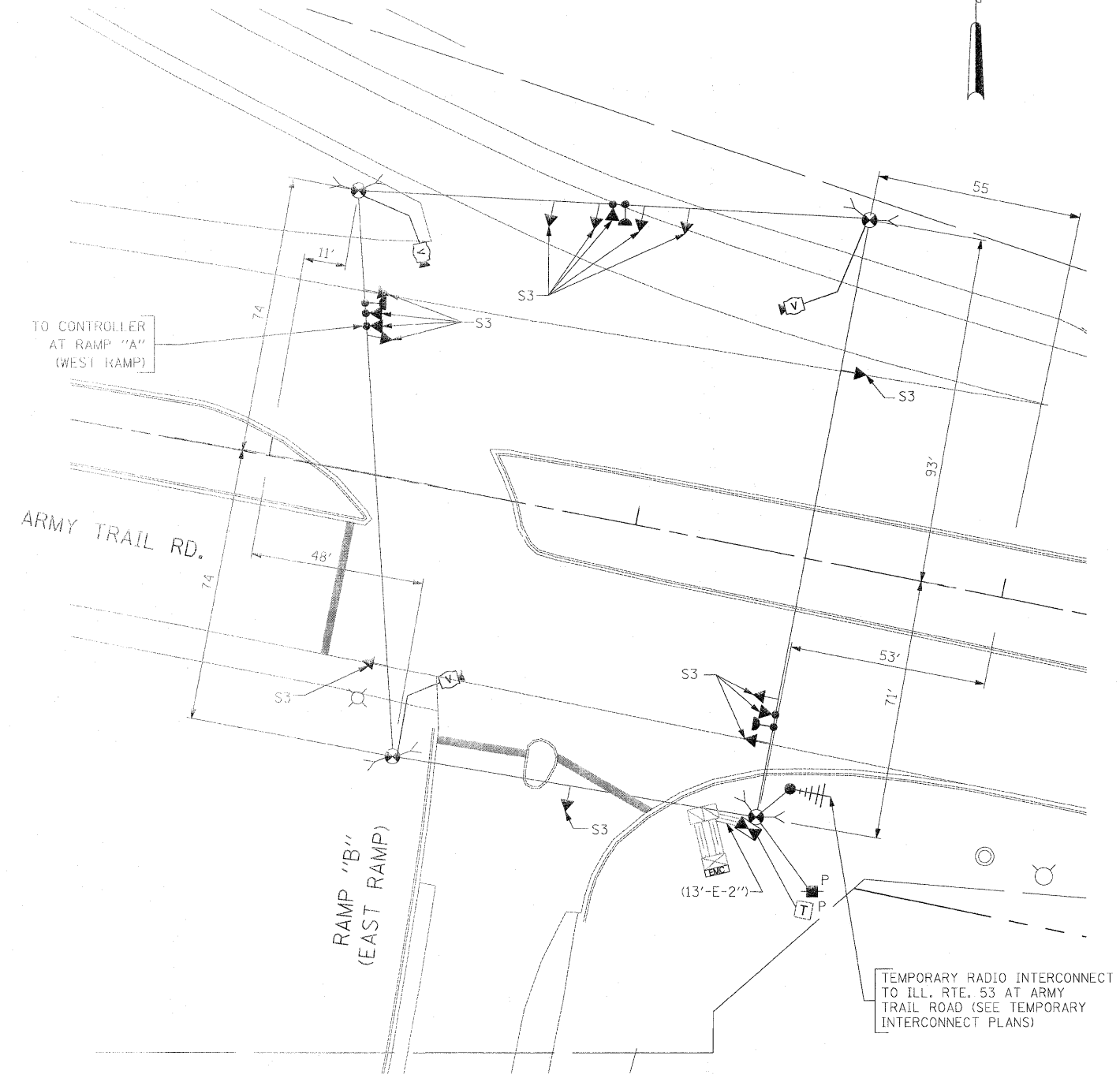
VILLAGE OF ADDISON  
1 FRIENDSHIP PLAZA  
ADDISON, ILLINOIS 60101

ENERGY SUPPLY CONTACT: CURTIS TOPPS  
PHONE: (630) 691-4356  
COMPANY: COMMONWEALTH EDISON





SIGNAL HEAD PLACEMENTS FOR STAGES: S2-1, S2-2, AND S2-3.



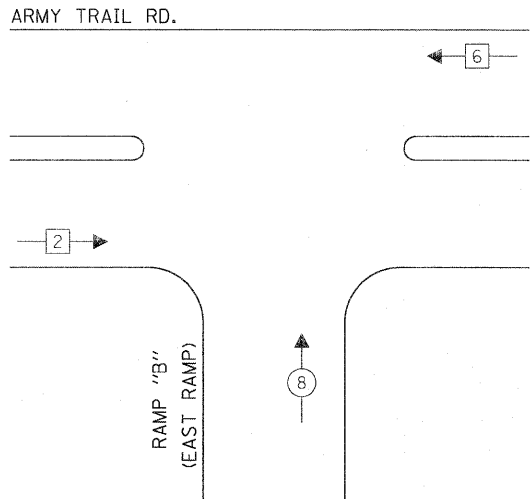
SIGNAL HEAD PLACEMENTS FOR STAGE 3.

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

Rev. 6-8-11

FILE NAME = #FILEL#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN ARMY TRAIL RD. AT RAMP "B" (EAST RAMP) STAGE 2 AND STAGE 3 (SHEET 2 OF 3)</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 515
	PLOT SCALE = #SCALE#	DRAWN - MAA, EA	REVISED -		SCALE: 1"=20'	SHEET NO. OF SHEETS	STA. TO STA.	CONTRACT NO. 60477				
	PLOT DATE = #DATE#	CHECKED - PKG, EA	REVISED -		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT							
		DATE - 5/18/2011	REVISED -									

CONTROLLER SEQUENCE

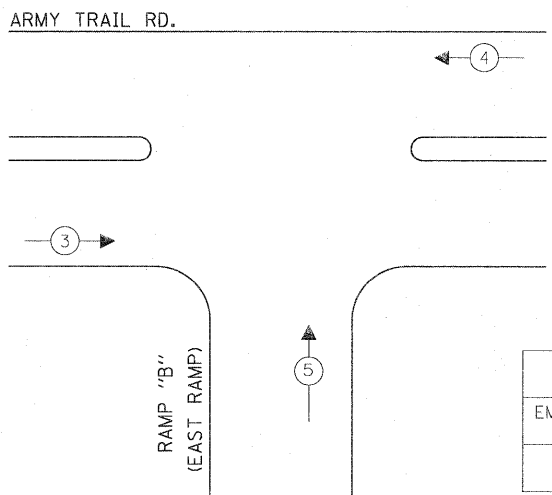


TEMPORARY PHASE DESIGNATION DIAGRAM  
CONSTRUCTION SEQUENCE FOR  
PRE-CONSTRUCTION STAGE ONLY

LEGEND

- ◉ DUAL ENTRY PHASE
- ◻ SINGLE ENTRY PHASE
- ◊ O.L. OVERLAP
- ◉ PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE

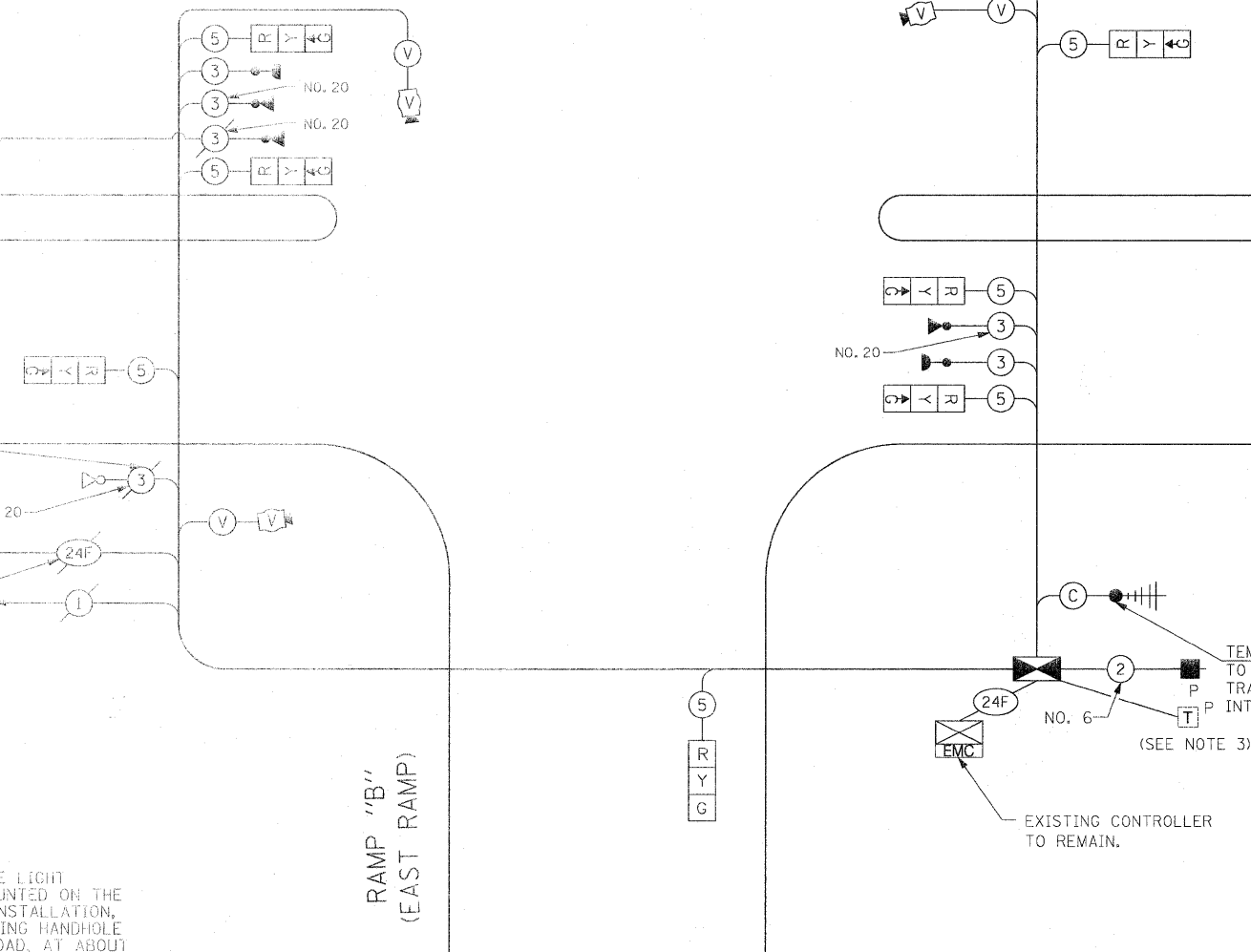
EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	3	4	5	
MOVEMENT	→	←	↑	

EMERGENCY VEHICLE PREEMPTION SEQUENCE  
FOR PRE-CONSTRUCTION STAGE ONLY

ARMY TRAIL RD.



CABLE PLAN

(NOT TO SCALE)

TO CONTROLLER AT ARMY TRAIL RD.  
AND RAMP "A" (WEST RAMP)  
(SEE NOTE 1)

TO EVP MOUNTED ON SIGNAL  
POST AT RAMP "A" (WEST RAMP)  
(SEE NOTE 2)

INTERCONNECT TO RAMP "A" (WEST RAMP)  
(SEE TEMPORARY INTERCONNECT PLANS)

TEMPORARY RADIO INTERCONNECT  
TO ILL. RTE. 53 AT ARMY  
TRAIL ROAD (SEE TEMPORARY  
INTERCONNECT PLANS)  
(SEE NOTE 3)

EXISTING CONTROLLER  
TO REMAIN.

NOTE 1: THE EXISTING 3C NO. 20 CABLE FOR THE LIGHT DETECTOR FOR WEST RAMP SIGNALS, MOUNTED ON THE MAST ARM AT THE EAST RAMP SIGNAL INSTALLATION, SHALL BE PULLED BACK INTO THE EXISTING HANDHOLE ON THE SOUTH SIDE OF ARMY TRAIL ROAD, AT ABOUT STA. 6+90. THE CABLE SHALL BE RE-ROUTED THROUGH THE EXISTING CONDUITS AND THE PROPOSED 2" CNC TO THE TEMPORARY TRAFFIC SIGNAL INSTALLATION AS SHOWN IN THE PLAN. ADDITIONAL CABLE SHALL BE SPLICED TO THE EXISTING CABLE AS NEEDED. THIS WORK SHALL BE INCIDENTAL TO THE TEMPORARY TRAFFIC SIGNAL INSTALLATION AT THE EAST RAMP AND ARMY TRAIL ROAD.

NOTE 2: INSTALL 2C NO. 20 CABLE BETWEEN EXISTING CONTROLLER AND TEMPORARY CONTROLLER FOR THE EXISTING LIGHT DETECTOR MOUNTED AT RAMP "A" (WEST RAMP) SIGNAL INSTALLATION FOR THE SIGNAL INSTALLATION AT RAMP "B" (EAST RAMP). THIS WORK WILL BE INCIDENTAL TO THE PAY ITEM "TEMPORARY TRAFFIC SIGNAL INSTALLATION".

NOTE 3: THE TELEPHONE SERVICE MUST BE MAINTAINED AT THIS TEMPORARY TRAFFIC SIGNAL INSTALLATION. THIS ITEM OF WORK SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCIDENTAL TO THE PAY ITEM "TEMPORARY TRAFFIC SIGNAL INSTALLATION".

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE		%OPERATION	
		INCAND.	LED		
SIGNAL (RED)	11	135	17	0.50	93.5
(YELLOW)	11	135	25	0.25	68.75
(GREEN)	11	135	15	0.25	41.25
ARROW		135	12	0.10	
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN				0.05	
VIDEO SYSTEM	1	150		1.00	150
FLASHER				0.50	
ENERGY COSTS TO: VILLAGE OF ADDISON 1 FRIENDSHIP PLAZA ADDISON, ILLINOIS 60101 ENERGY SUPPLY CONTACT: ELLIE SARALLO PHONE: (630) 424 5124 COMPANY: COMMONWEALTH EDISON					TOTAL = 453.5

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

Rev. 6-8-11

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION  
DIAGRAM, TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE  
ARMY TRAIL ROAD AT RAMP "B" (EAST RAMP) (SHEET 3 OF 3)

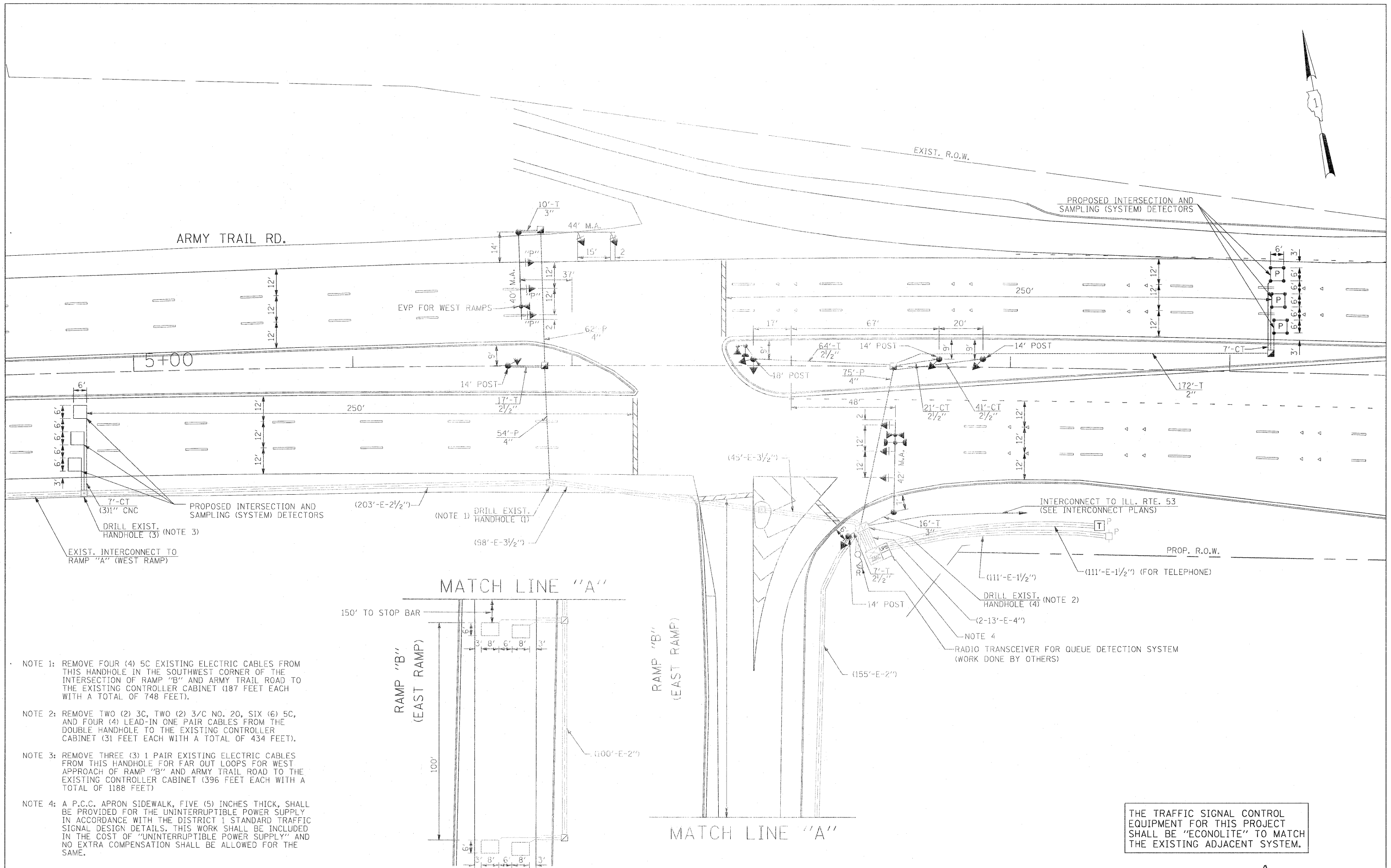
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2578	532B	DuPage	781	516
CONTRACT NO. 60477				

FILE NAME =	USER NAME = #USER#	DESIGNED - PKG	REVISED -
#FILEL#		DRAWN - MAA, EA	REVISED -
	PLOT SCALE = #SCALE#	CHECKED - PKG, EA	REVISED -
	PLOT DATE = #DATE#	DATE - 5/18/2011	REVISED -

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

FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT





- NOTE 1: REMOVE FOUR (4) 5C EXISTING ELECTRIC CABLES FROM THIS HANDHOLE IN THE SOUTHWEST CORNER OF THE INTERSECTION OF RAMP "B" AND ARMY TRAIL ROAD TO THE EXISTING CONTROLLER CABINET (187 FEET EACH WITH A TOTAL OF 748 FEET).
- NOTE 2: REMOVE TWO (2) 3C, TWO (2) 3/C NO. 20, SIX (6) 5C, AND FOUR (4) LEAD-IN ONE PAIR CABLES FROM THE DOUBLE HANDHOLE TO THE EXISTING CONTROLLER CABINET (31 FEET EACH WITH A TOTAL OF 434 FEET).
- NOTE 3: REMOVE THREE (3) 1 PAIR EXISTING ELECTRIC CABLES FROM THIS HANDHOLE FOR FAR OUT LOOPS FOR WEST APPROACH OF RAMP "B" AND ARMY TRAIL ROAD TO THE EXISTING CONTROLLER CABINET (396 FEET EACH WITH A TOTAL OF 1188 FEET)
- NOTE 4: A P.C.C. APRON SIDEWALK, FIVE (5) INCHES THICK, SHALL BE PROVIDED FOR THE UNINTERRUPTIBLE POWER SUPPLY IN ACCORDANCE WITH THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS. THIS WORK SHALL BE INCLUDED IN THE COST OF "UNINTERRUPTIBLE POWER SUPPLY" AND NO EXTRA COMPENSATION SHALL BE ALLOWED FOR THE SAME.

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

Rev. 6-8-11

FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC SIGNAL INSTALLATION PLAN ARMY TRAIL RD. AT RAMP "B" (EAST RAMP) (SHEET 1 OF 2)</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 517	
	PLOT SCALE = #SCALE#	CHECKED - PKG, EA	REVISED -		SCALE: 1"=20'	SHEET NO. OF	SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			
	PLOT DATE = #DATE#	DATE - 5/18/2011	REVISED -										
CONTRACT NO. 60477													

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
172	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
143	FOOT	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL
26	FOOT	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL
191	FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
4	EACH	HANDHOLE
279	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
306	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
3225	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
2058	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
4	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 40 FT. AND 44 FT.
20	FOOT	CONCRETE FOUNDATION, TYPE A
27	FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
4	EACH	DRILL EXISTING HANDHOLE
3	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, 1-FACE, 3-SECTION MAST ARM MOUNTED
5	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED
4	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
8	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
117	FOOT	DETECTOR LOOP, TYPE I
2	EACH	LIGHT DETECTOR
1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
2370	FOOT	REMOVE ELECTRIC CABLE FROM CONDUIT
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
3	EACH	REMOVE EXISTING HANDHOLE
6	EACH	REMOVE EXISTING CONCRETE FOUNDATION
117	FOOT	PREFORMED DETECTOR LOOP
1	EACH	TEMPORARY TRAFFIC SIGNAL TIMING
3	EACH	GROUNDING EXISTING HANDHOLE FRAME AND COVER
699	FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
306	FOOT	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED

100% COST TO VILLAGE OF ADDISON

NOTE 1: THE LIGHT DETECTOR WILL BE PAID FOR UNDER THE WEST RAMP PLANS.

PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS

LIGHT DETECTOR AND CONFIRMATION BEACON MOUNTED AT ARMY TRAIL RD. AND RAMP "A" (WEST RAMP)

FIBER OPTIC INTERCONNECT CABLE NO. 62.5/125 24F TO RAMP A

ARMY TRAIL RD.

PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS

INTERCONNECT TO ROHLWING RD.

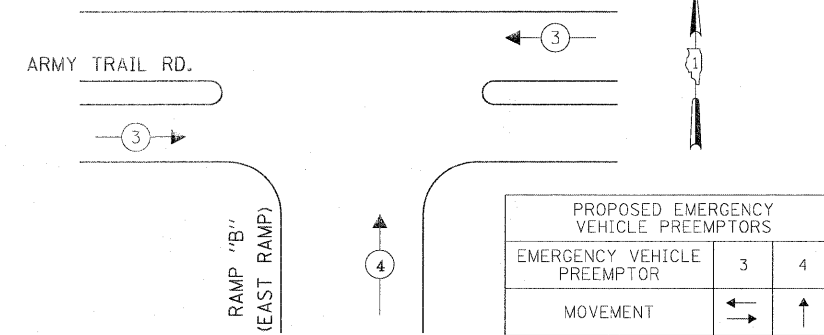
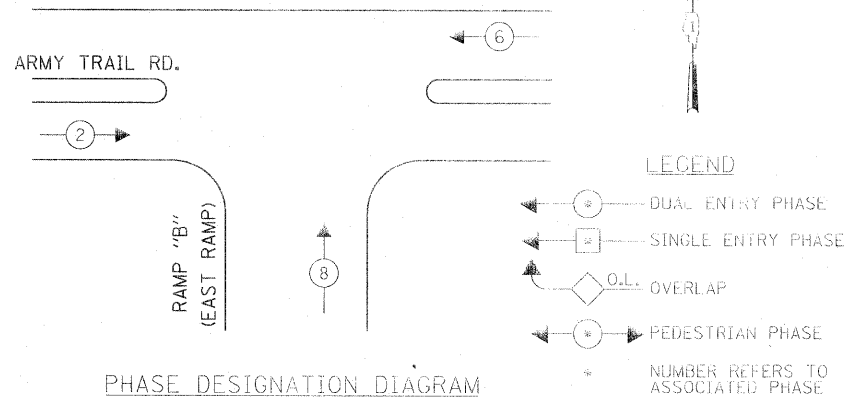
4-1/C, NO. 6 (GREEN) (WORK DONE BY OTHERS)

CABLE PLAN (NOT TO SCALE)

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

CONTROLLER SEQUENCE

EMERGENCY VEHICLE PREEMPTION SEQUENCE



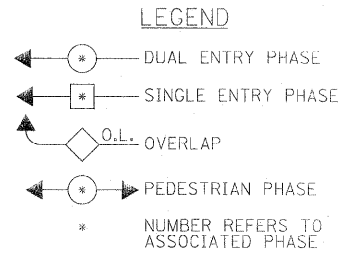
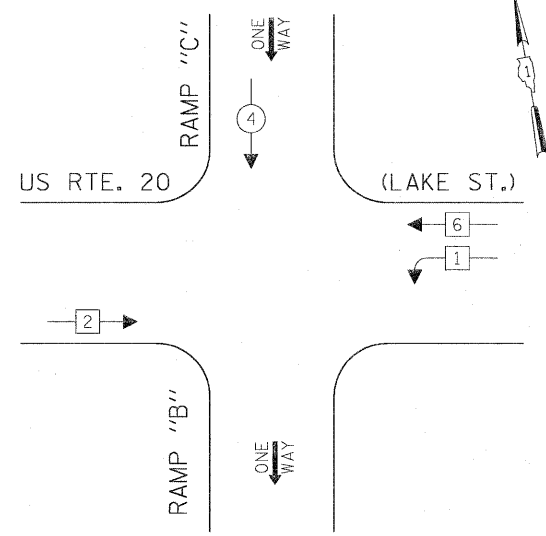
I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE		%OPERATION	
SIGNAL (RED)	14	INCAND.	LED	0.50	119
(YELLOW)	14	135	17	0.25	
(GREEN)	14	135	25	0.25	
ARROW		135	12	0.10	52.5
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN				0.05	
FLASHER				0.50	
TOTAL =					359

ENERGY COSTS TO: VILLAGE OF ADDISON  
1 FRIENDSHIP PLAZA  
ADDISON, ILLINOIS 60101

ENERGY SUPPLY CONTACT: ELLIE SARALLO  
PHONE: (630) 424 5124  
COMPANY: COMMONWEALTH EDISON

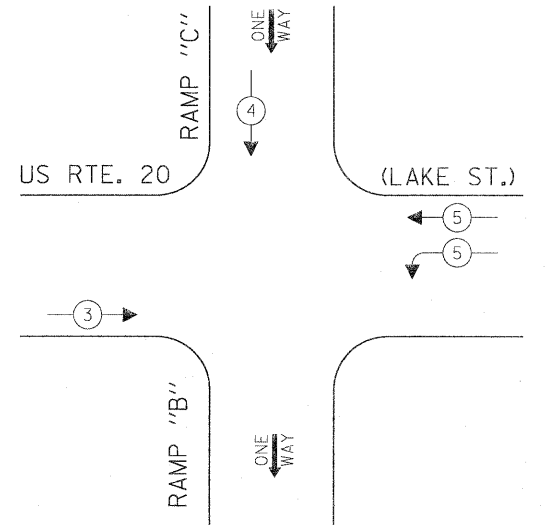


CONTROLLER SEQUENCE



TEMPORARY PHASE DESIGNATION DIAGRAM FOR ALL STAGES

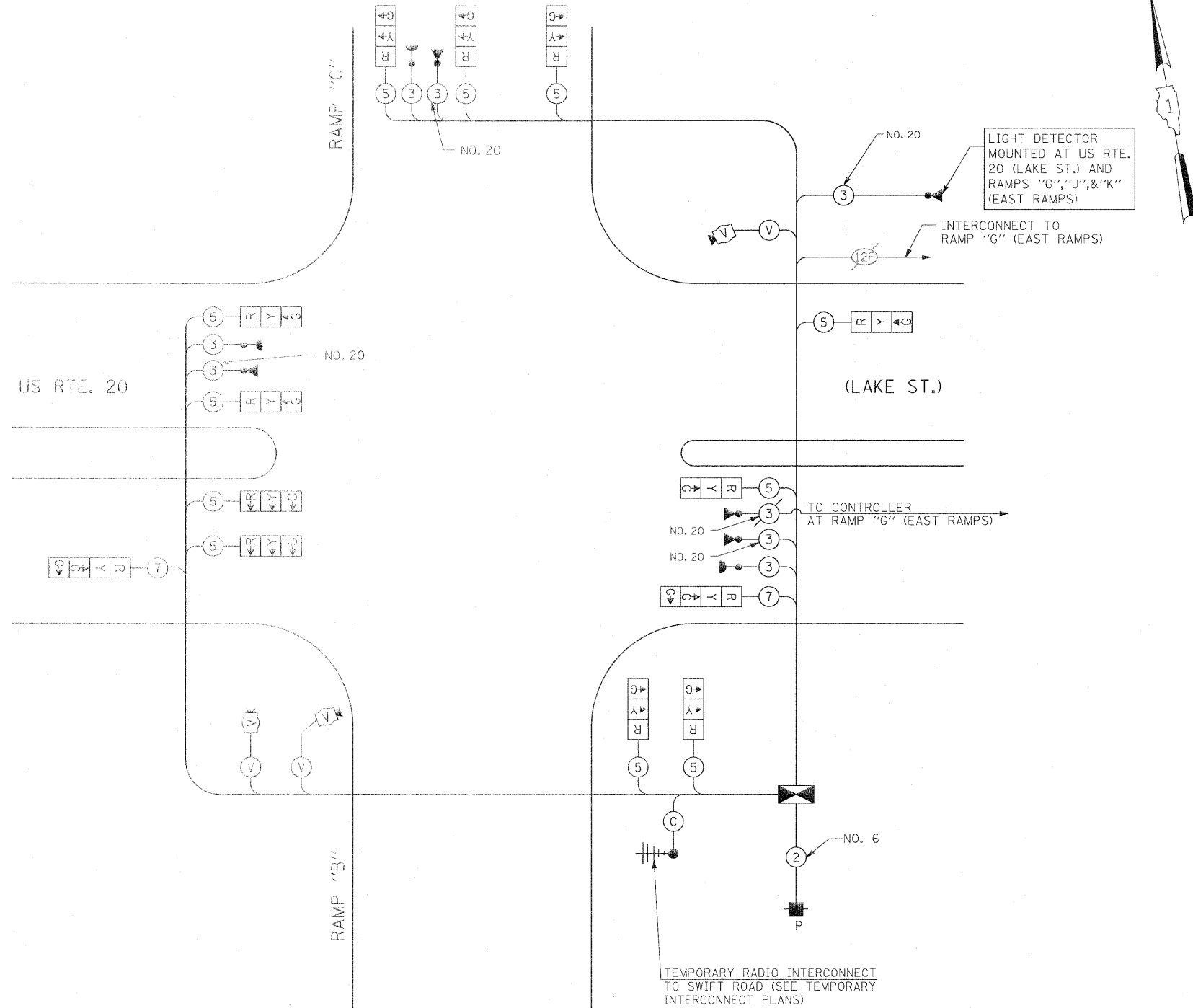
TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS

EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	→	↓	↙

FOR ALL STAGES



CABLE PLAN (NOT TO SCALE)

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

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

TYPE	NO LAMPS	WATTAGE		%OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	13	135	17	0.50	110.5
(YELLOW)	13	135	25	0.25	81.25
(GREEN)	15	135	15	0.25	56.25
ARROW		135	12	0.10	
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN				0.05	
VIDEO SYSTEM	1	150		1.00	150
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 498

ILLINOIS DEPARTMENT OF TRANSPORTATION  
201 WEST CENTER COURT  
SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY CONTACT: ELLIE SARALLO  
PHONE: (630) 424 5124  
COMPANY: COMMONWEALTH EDISON

FILE NAME =	USER NAME = #USER#	DESIGNED - PKG	REVISED -
#FILEL#		DRAWN - MAA, EA	REVISED -
	PLOT SCALE = #SCALE#	CHECKED - PKG, EA	REVISED -
	PLOT DATE = #DATE#	DATE - 5/18/2011	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

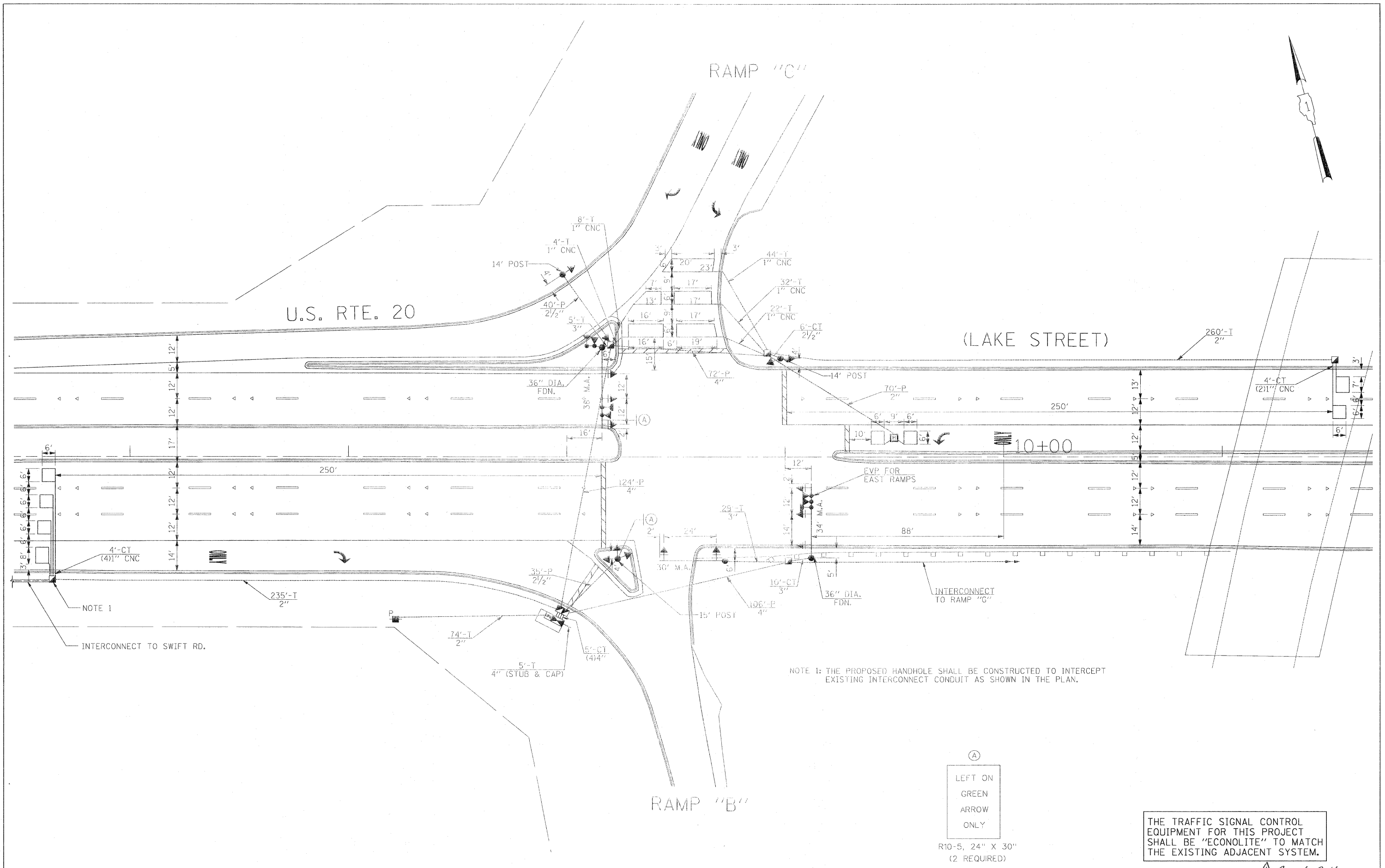
TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM, TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE US RTE. 20 AT RAMPS "B" AND "C" (WEST RAMPS) (SHEET 2 OF 2)

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

Rev. 6-8-11

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2578	532B	DuPage	781	520

CONTRACT NO. 60477



NOTE 1: THE PROPOSED HANDHOLE SHALL BE CONSTRUCTED TO INTERCEPT EXISTING INTERCONNECT CONDUIT AS SHOWN IN THE PLAN.

(A)  
LEFT ON  
GREEN  
ARROW  
ONLY  
R10-5, 24" X 30"  
(2 REQUIRED)

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

Rev. 6-8-11

FILE NAME =	USER NAME = #USER#	DESIGNED - PKG	REVISED -
#FILEL#		DRAWN - MAA, EA	REVISED -
	PLOT SCALE = #SCALE#	CHECKED - PKG, EA	REVISED -
	PLOT DATE = #DATE#	DATE - 5/18/2011	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL INSTALLATION PLAN  
U.S. ROUTE 20 (LAKE ST.) AT RAMPS "B" AND "C" (WEST RAMPS)  
(SHEET 1 OF 2)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2578	532B	DuPage	781	521
CONTRACT NO. 60477				

SCALE: 1"=20' SHEET NO. OF SHEETS STA. TO STA.

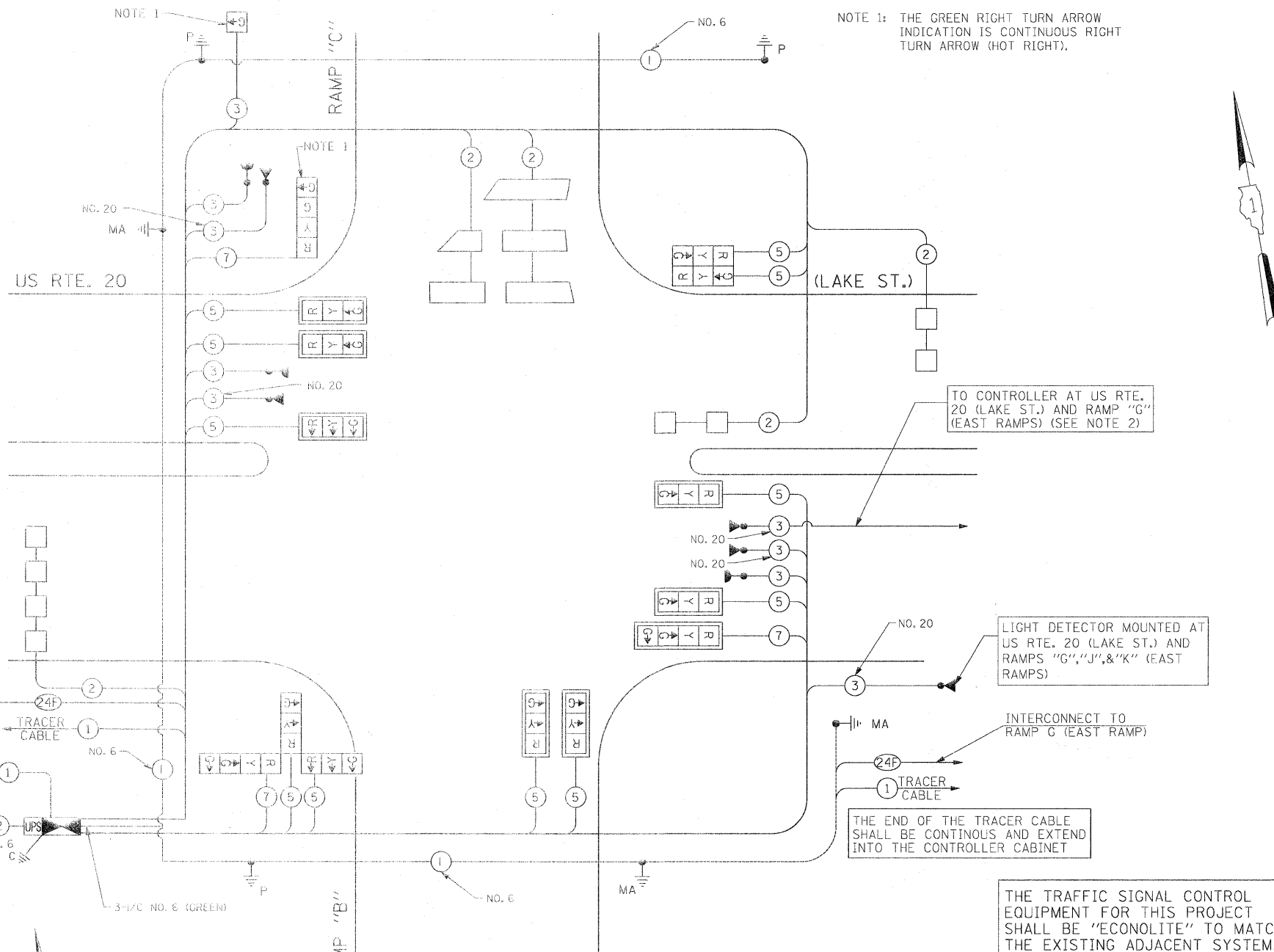
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

SCHEDULE OF QUANTITIES

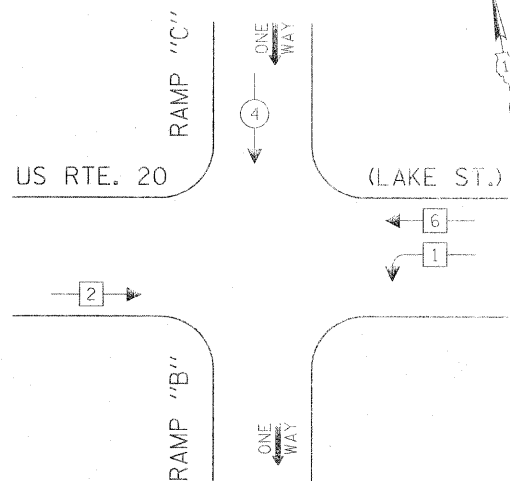
QUANTITY	UNIT	ITEM
10	SQ FT	SIGN PANEL - TYPE 1
569	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
6	FOOT	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL
44	FOOT	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL
25	FOOT	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL
70	FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
75	FOOT	CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL
302	FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
5	EACH	HANDHOLE
1	EACH	HEAVY-DUTY HANDHOLE
1	EACH	DOUBLE HANDHOLE
613	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	TRANSCEIVER-FIBER OPTIC
1831	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
2083	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
427	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
1455	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
94	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 15 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.
12	FOOT	CONCRETE FOUNDATION, TYPE A
4	FOOT	CONCRETE FOUNDATION, TYPE C
33	FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
1	EACH	SIGNAL HEAD, LED, 1-FACE, 1-SECTION, BRACKET MOUNTED
7	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED
1	EACH	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 3-FACE, 2-3 SECTION, 1-4 SECTION BRACKET MOUNTED
8	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
5	EACH	INDUCTIVE LOOP DETECTOR
562	FOOT	DETECTOR LOOP, TYPE 1
4	EACH	LIGHT DETECTOR
1	EACH	LIGHT DETECTOR AMPLIFIER
1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
7	EACH	REMOVE EXISTING HANDHOLE
8	EACH	REMOVE EXISTING CONCRETE FOUNDATION
1	EACH	TEMPORARY TRAFFIC SIGNAL TIMING
1	EACH	SERVICE INSTALLATION - POLE MOUNTED
1	EACH	UNINTERRUPTIBLE POWER SUPPLY
662	FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
1620	FOOT	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED

\* 100% COST TO VILLAGE OF ADDISON

NOTE 2: THE LIGHT DETECTOR WILL BE PAID FOR UNDER THE EAST RAMP PLANS.

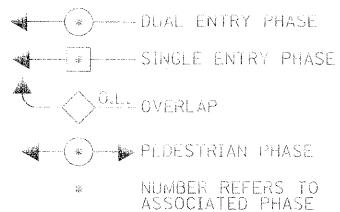


CONTROLLER SEQUENCE

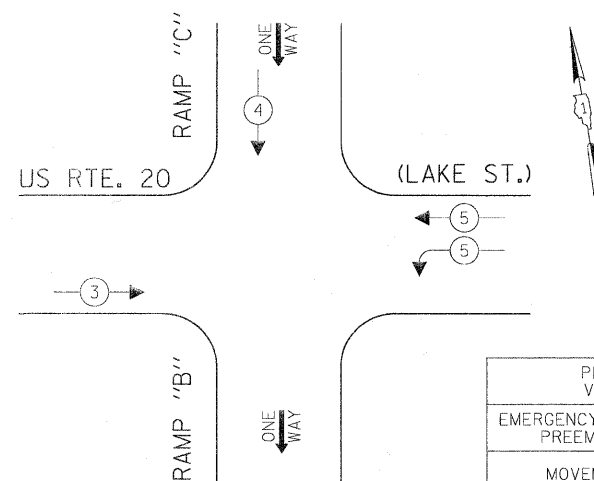


PHASE DESIGNATION DIAGRAM

LEGEND



EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE		%OPERATION	
		INCAND.	LED		
SIGNAL (RED)	14	135	17	0.50	119
(YELLOW)	14	135	25	0.25	87.5
(GREEN)	16	135	15	0.25	60
ARROW		135	12	0.10	
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN				0.05	
HOT GREEN RIGHT ARROW	2		12	1.00	24.00
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	390.5

ILLINOIS DEPARTMENT OF TRANSPORTATION  
201 WEST CENTER COURT  
SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY CONTACT: ELLIE SARALLO  
PHONE: (630) 424 5124  
COMPANY: COMMONWEALTH EDISON

**NOTES FOR TEMPORARY TRAFFIC SIGNALS**

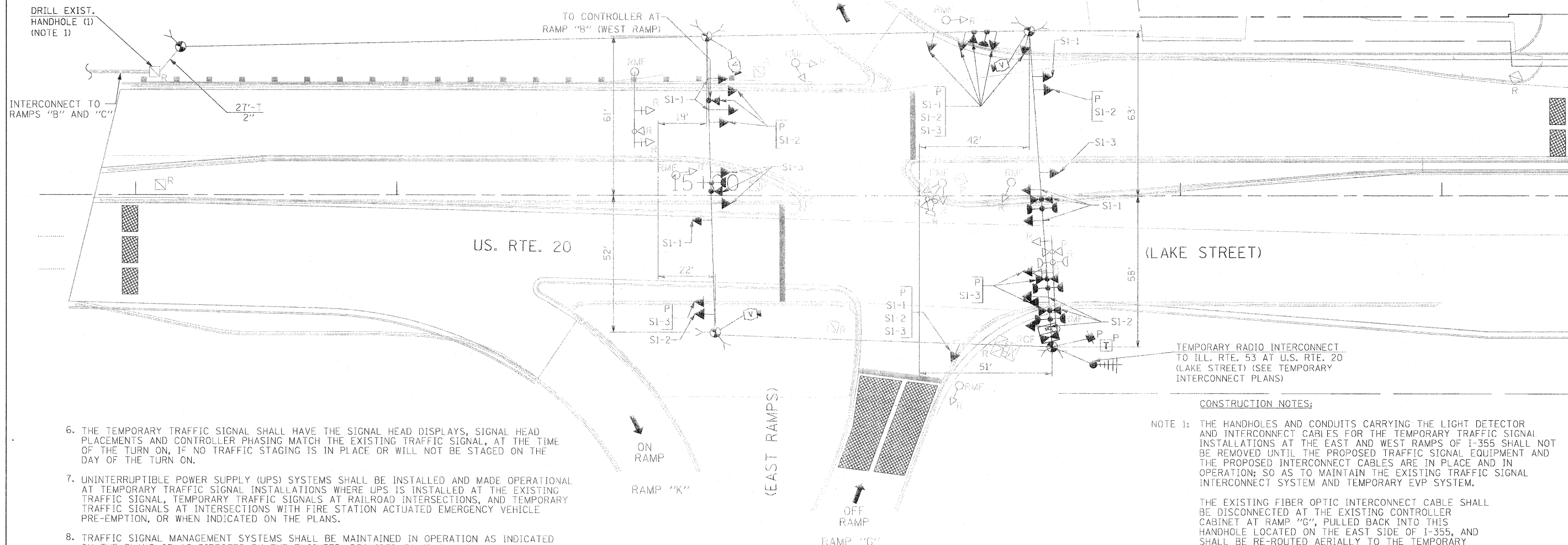
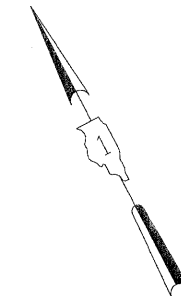
1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. 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" (300mm) 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.

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACTOR'S BID PRICE.

- 1 EACH CONTROLLER AND CABINET COMPLETE
- 4 EACH SIGNAL HEAD, 1-FACE, 3-SECTION, MAST ARM MOUNTED
- 4 EACH SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED
- 2 EACH SIGNAL HEAD, 2-FACE, 3-SECTION, BRACKET MOUNTED
- 4 EACH TRAFFIC SIGNAL BACKPLATE
- 6 EACH TRAFFIC SIGNAL POST
- 2 EACH STEEL MAST ARM ASSEMBLY AND POLE
- 1 EACH SERVICE INSTALLATION

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY:		VILLAGE OF ADDISON	
CONTACT INFORMATION:			
RUDY ESPEDIDO			
VILLAGE OF ADDISON			
ENGINEERING DEPARTMENT			
PHONE: (630)693-7533			
3	EACH	LIGHT DETECTOR	
1	EACH	LIGHT DETECTOR AMPLIFIER	



**SIGNAL HEAD PLACEMENTS FOR STAGES: PRE-STAGE, S1-1, S1-2, AND S1-3.**

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 RAILROAD INTERSECTIONS, AND 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.

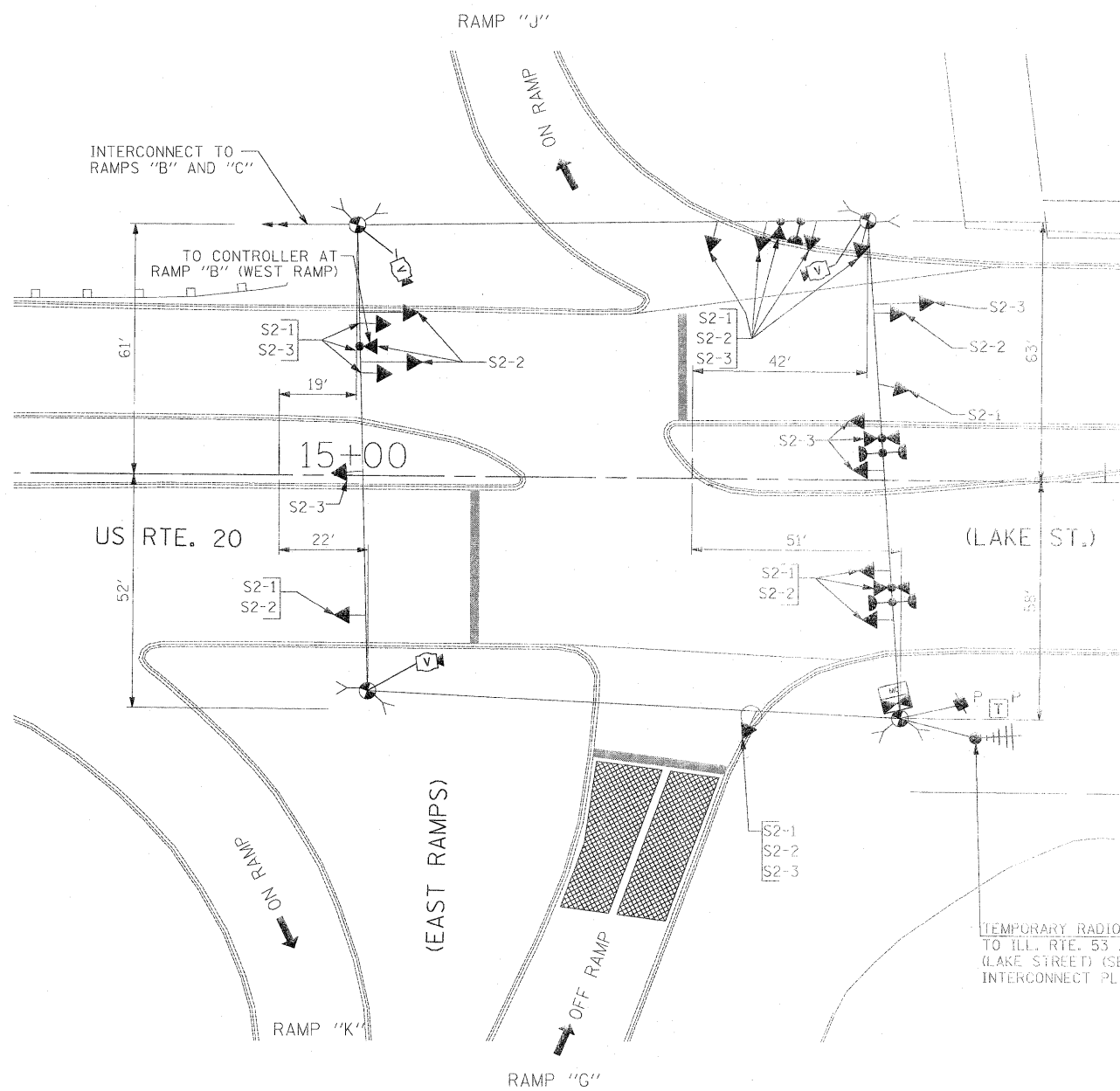
**CONSTRUCTION NOTES:**

- NOTE 1: THE HANDHOLES AND CONDUITS CARRYING THE LIGHT DETECTOR AND INTERCONNECT CABLES FOR THE TEMPORARY TRAFFIC SIGNAL INSTALLATIONS AT THE EAST AND WEST RAMPS OF I-355 SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT AND THE PROPOSED INTERCONNECT CABLES ARE IN PLACE AND IN OPERATION; SO AS TO MAINTAIN THE EXISTING TRAFFIC SIGNAL INTERCONNECT SYSTEM AND TEMPORARY EVP SYSTEM.
- THE EXISTING FIBER OPTIC INTERCONNECT CABLE SHALL BE DISCONNECTED AT THE EXISTING CONTROLLER CABINET AT RAMP "G", PULLED BACK INTO THIS HANDHOLE LOCATED ON THE EAST SIDE OF I-355, AND SHALL BE RE-ROUTED AERIALY TO THE TEMPORARY CONTROLLER CABINET AT RAMP "G", IF NEEDED. ADDITIONAL FIBER OPTIC CABLE SHALL BE SPLICED TO THE EXISTING FIBER OPTIC CABLE. THIS WORK WILL BE INCLUDED IN THE TEMPORARY TRAFFIC SIGNAL INSTALLATION AND NO EXTRA COMPENSATION SHALL BE PROVIDED FOR THE SAME.
- NOTE 2: THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR CONSTRUCTION PRE-STAGE AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.

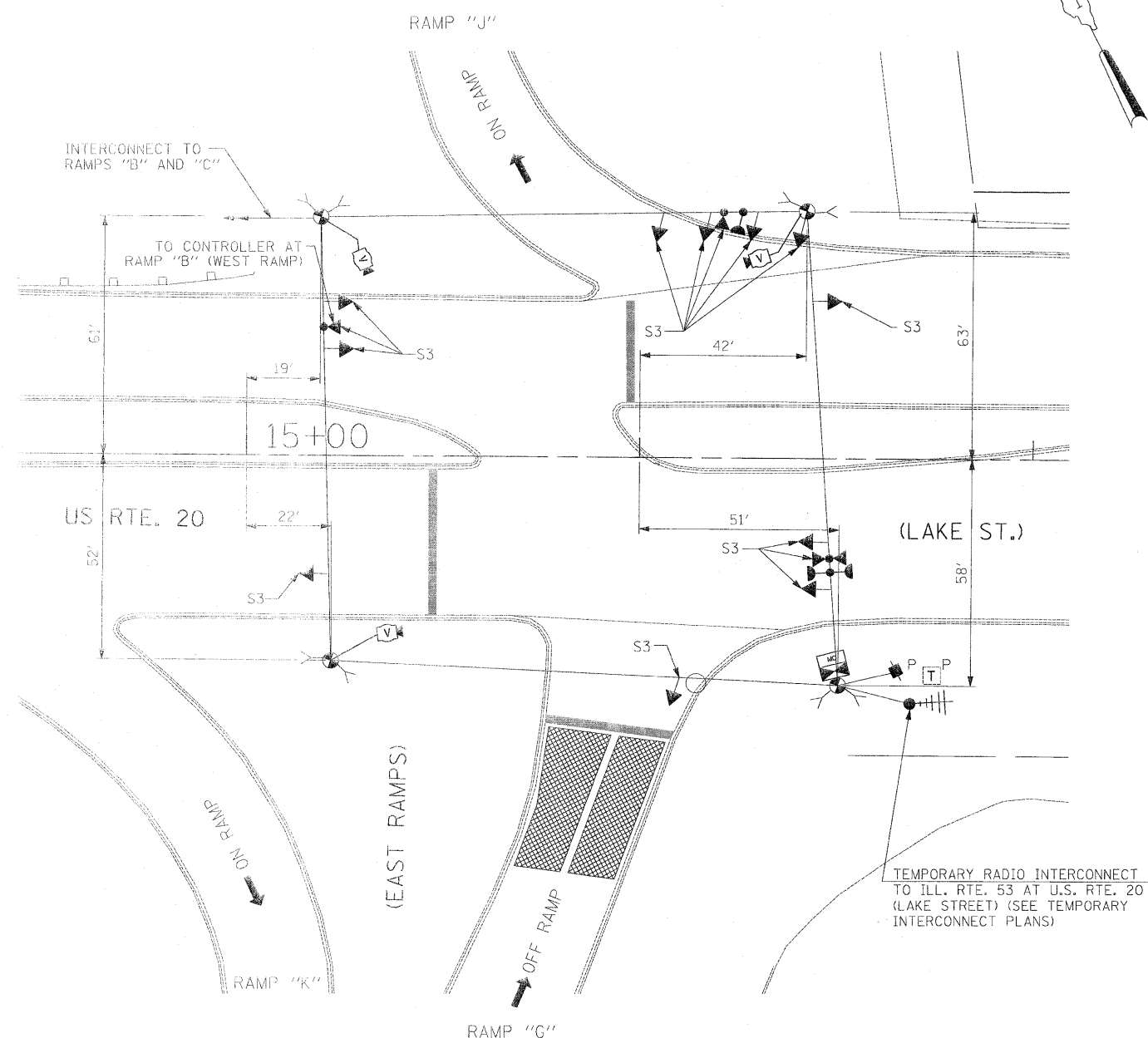
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME =	USER NAME = #USERS	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN U.S. ROUTE 20 (LAKE ST.) AT RAMPS "G", "J", AND "K" (EAST RAMPS) PRE STAGE AND STAGE 1 (SHEET 1 OF 3).</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
\$FILEL\$		DRAWN - MAA, EA	REVISED -		SCALE: 1"=20'	SHEET NO. OF SHEETS	STA. TO STA.	2578	532B	DuPage	781	523
		CHECKED - PKG, EA	REVISED -									
		DATE - 5/18/2011	REVISED -									CONTRACT NO. 60477

Rev. 6-8-11



SIGNAL HEAD PLACEMENTS FOR STAGES: S2-1, S2-2, AND S2-3.



SIGNAL HEAD PLACEMENTS FOR STAGE 3.

TEMPORARY RADIO INTERCONNECT TO ILL. RTE. 53 AT U.S. RTE. 20 (LAKE STREET) (SEE TEMPORARY INTERCONNECT PLANS)

TEMPORARY RADIO INTERCONNECT TO ILL. RTE. 53 AT U.S. RTE. 20 (LAKE STREET) (SEE TEMPORARY INTERCONNECT PLANS)

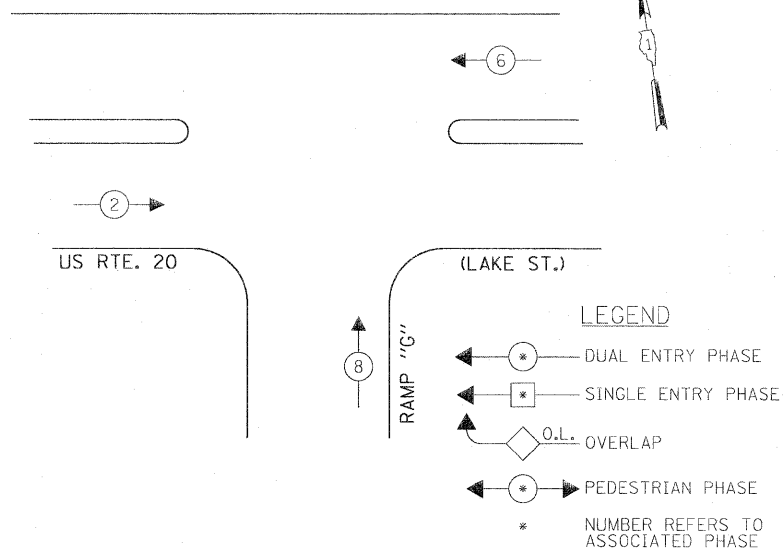
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

Rev. 6-8-11

FILE NAME =	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN U.S. ROUTE 20 (LAKE ST.) AT RAMP "G," "J," AND "K" (EAST RAMPS) STAGE 2 AND STAGE 3 (SHEET 2 OF 3).</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
#FILEL#		DRAWN - MAA, EA	REVISED -		SCALE: 1"=20'	SHEET NO. OF SHEETS	STA. TO STA.	2578	532B	DuPage	781	524
		CHECKED - PKG, EA	REVISED -					CONTRACT NO. 60477				
		DATE - 5/18/2011	REVISED -					ILLINOIS FED. AID PROJECT				



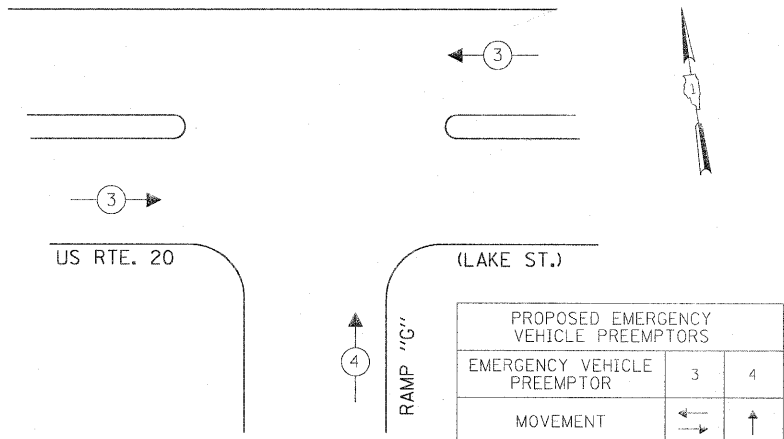
CONTROLLER SEQUENCE



TEMPORARY PHASE DESIGNATION DIAGRAM

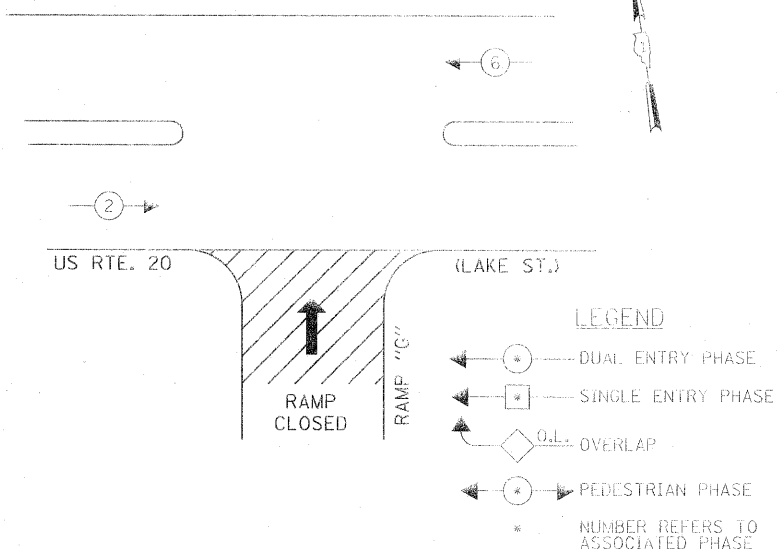
STAGES: S1-2, S1-3, S2-1, S2-2, S2-3, AND S3

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE



STAGES: S1-2, S1-3, S2-1, S2-2, S2-3, AND S3

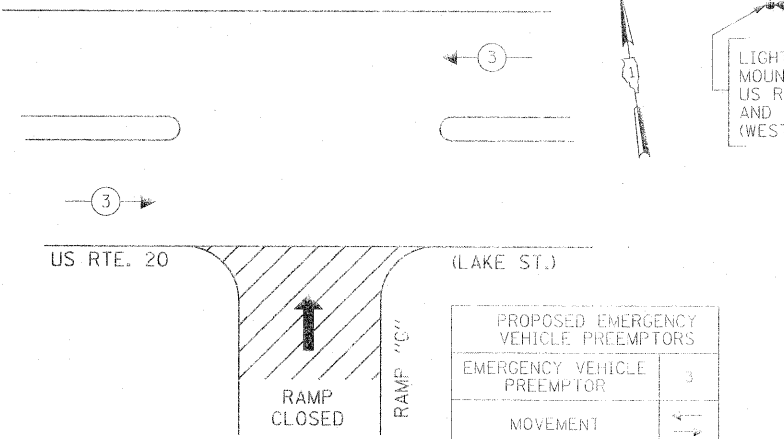
CONTROLLER SEQUENCE



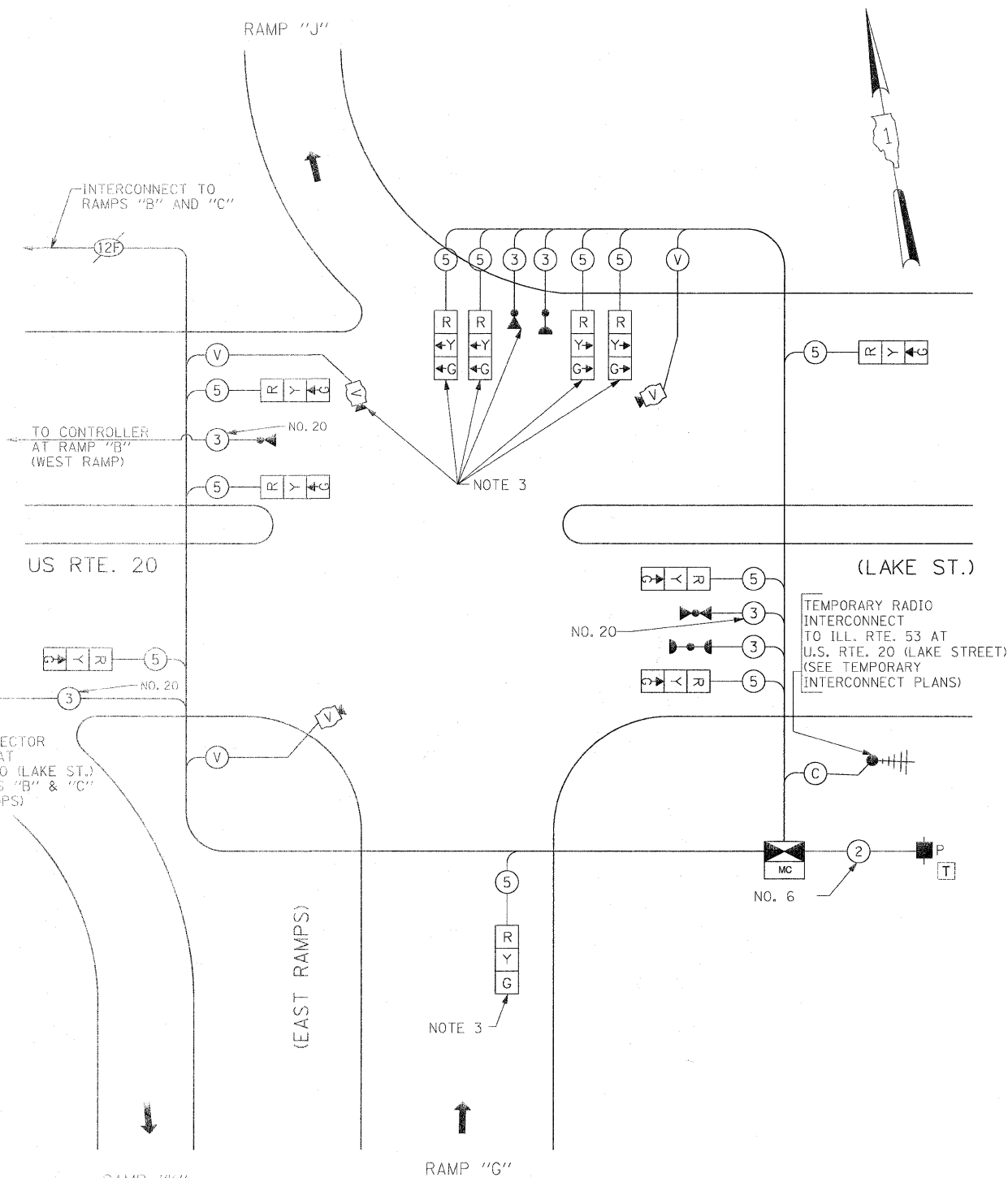
TEMPORARY PHASE DESIGNATION DIAGRAM

STAGE S1-1

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE



STAGE S1-1



CABLE PLAN

(NOT TO SCALE)

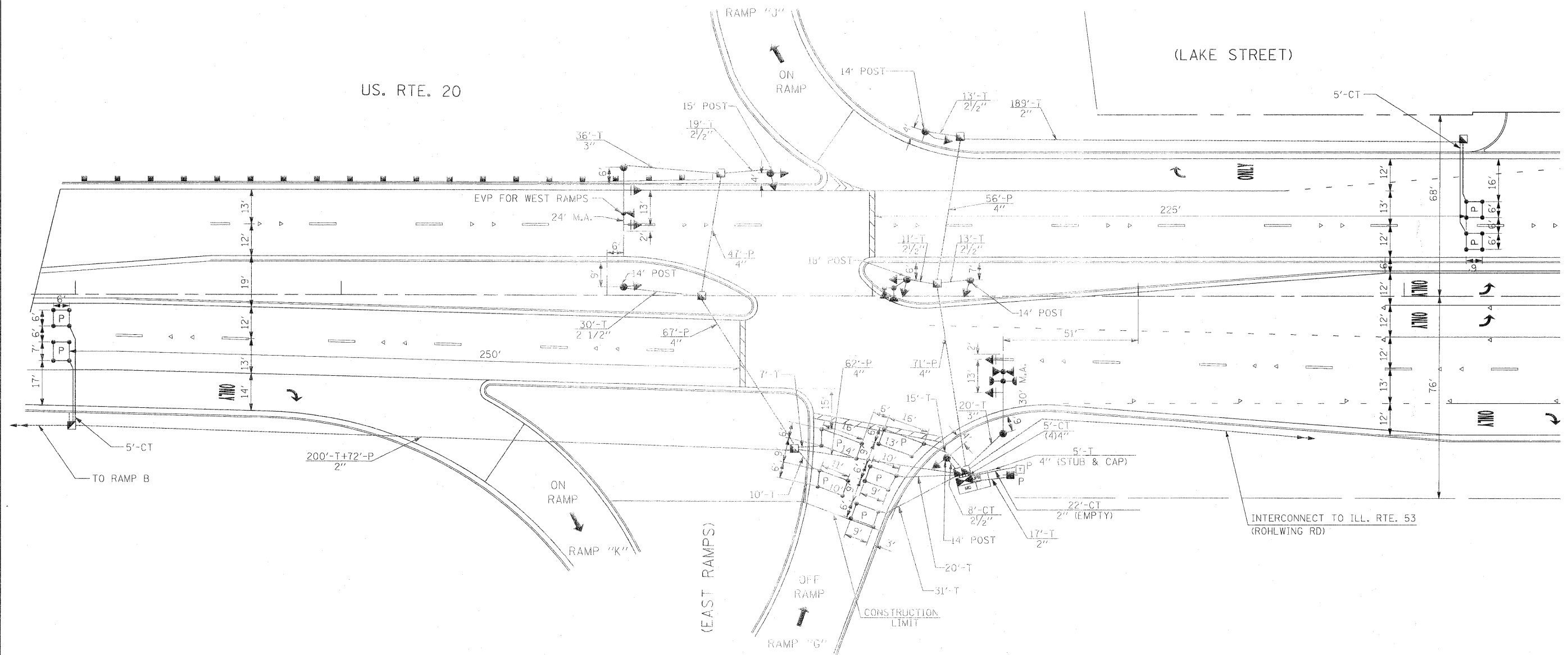
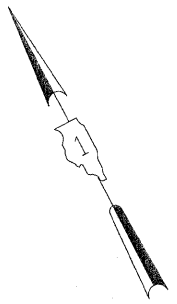
- NOTE 1: A MASTER CONTROLLER WILL BE SUPPLIED AT THIS INTERSECTION, THE COST OF WHICH SHALL BE INCLUDED IN THE PAY ITEM "TEMPORARY TRAFFIC SIGNAL INSTALLATION".
- NOTE 2: THE TELEPHONE SERVICE MUST BE MAINTAINED AT THIS TEMPORARY TRAFFIC SIGNAL INSTALLATION. THIS ITEM OF WORK SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCIDENTAL TO THE PAY ITEM "TEMPORARY TRAFFIC SIGNAL INSTALLATION".
- NOTE 3: THE SIGNAL HEADS FOR THE NB OFF RAMP AT LAKE STREET SHALL BE DISCONNECTED AT THE CONTROLLER AND BAGGED DURING CONSTRUCTION STAGE S1-1 WHEN THE OFF RAMP IS CLOSED TO TRAFFIC. THE VIDEO DETECTION SHALL ALSO BE DISABLED.

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE		%OPERATION	
SIGNAL (RED)	11	INCAND.	LED	0.50	93.5
(YELLOW)	11	135	25	0.25	68.75
(GREEN)	11	135	15	0.25	41.25
ARROW		135	12	0.10	
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN				0.05	
VIDEO SYSTEM	1	150		1.00	150
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 453.5

ILLINOIS DEPARTMENT OF TRANSPORTATION  
201 WEST CENTER COURT  
SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY CONTACT: ELLIE SARALLO  
PHONE: (630) 424 5124  
COMPANY: COMMONWEALTH EDISON



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

Rev. 6-8-11

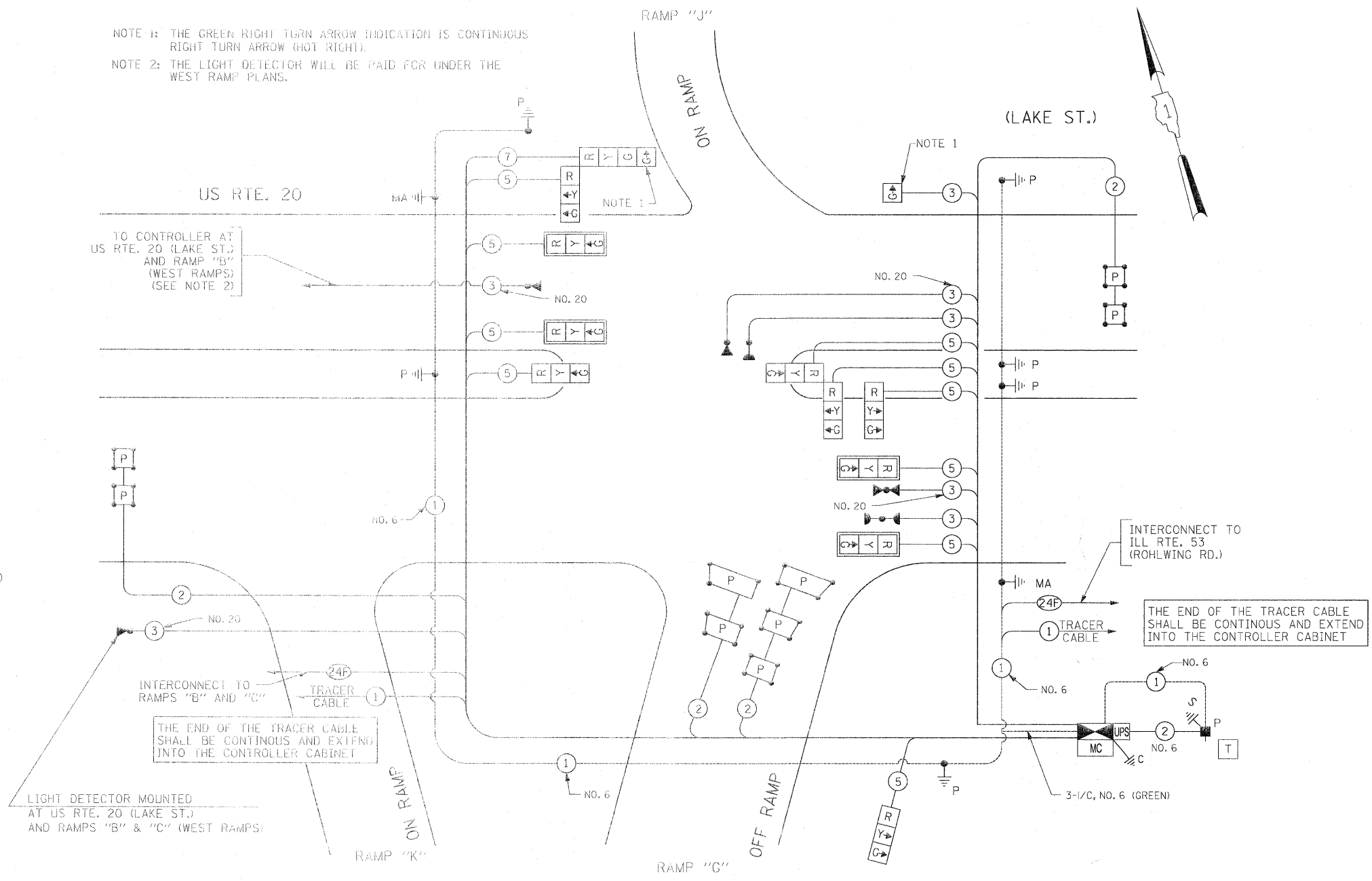
FILE NAME =	USER NAME = #USER#	DESIGNED - PKG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL INSTALLATION U.S. ROUTE 20 (LAKE ST.) AT RAMPS "G", "J", AND "K" (EAST RAMPS) (SHEET 1 OF 2)		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
\$FILEL\$		DRAWN - MAA, EA	REVISED -		SCALE: 1"=20'	SHEET NO. OF SHEETS	STA. TO STA.	2578	5328	DuPage	781	526
	PLOT SCALE = \$SCALE\$	CHECKED - PKG, EA	REVISED -					CONTRACT NO. 60477				
	PLOT DATE = \$DATE\$	DATE - 5/18/2011	REVISED -					FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

SCHEDULE OF QUANTITIES

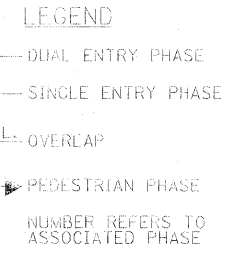
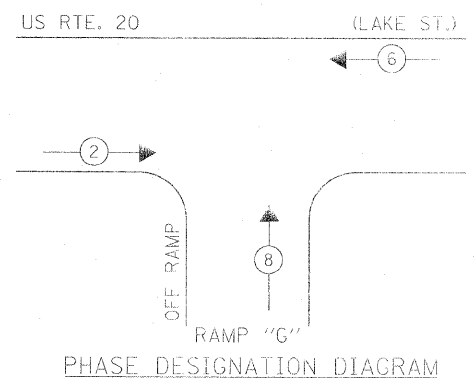
QUANTITY	UNIT	ITEM
423	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
94	FOOT	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL
56	FOOT	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL
25	FOOT	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL
72	FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
303	FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
7	EACH	HANDHOLE
1	EACH	DOUBLE HANDHOLE
563	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL
1	EACH	TRANSCEIVER-FIBER OPTIC
417	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
1674	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
844	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
37	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C
4	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 15 FT.
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.
24	FOOT	CONCRETE FOUNDATION, TYPE A
4	FOOT	CONCRETE FOUNDATION, TYPE C
10	FOOT	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER
11	FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
1	EACH	SIGNAL HEAD, LED, 1-FACE, 1-SECTION, BRACKET MOUNTED
4	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
3	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 3 SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-4 SECTION, BRACKET MOUNTED
4	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
4	EACH	INDUCTIVE LOOP DETECTOR
3	EACH	LIGHT DETECTOR
1	EACH	LIGHT DETECTOR AMPLIFIER
1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
8	EACH	REMOVE EXISTING HANDHOLE
9	EACH	REMOVE EXISTING CONCRETE FOUNDATION
385	EACH	PREFORMED DETECTOR LOOP
1	EACH	TEMPORARY TRAFFIC SIGNAL TIMING
1	EACH	SERVICE INSTALLATION - POLE MOUNTED
1	EACH	UNINTERRUPTIBLE POWER SUPPLY
690	FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
1071	FOOT	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED

• 100% COST TO VILLAGE OF ADDISON

NOTE 1: THE GREEN RIGHT TURN ARROW INDICATION IS CONTINUOUS RIGHT TURN ARROW (HOT RIGHT).  
 NOTE 2: THE LIGHT DETECTOR WILL BE PAID FOR UNDER THE WEST RAMP PLANS.



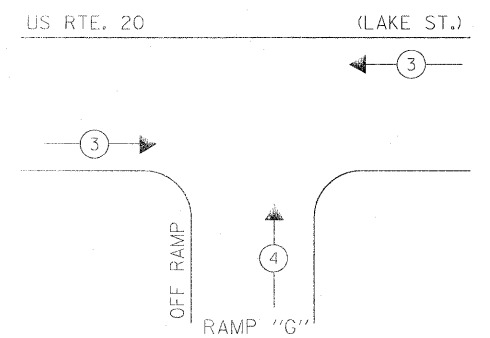
CONTROLLER SEQUENCE



CABLE PLAN

(NOT TO SCALE)

EMERGENCY VEHICLE PREEMPTION SEQUENCE

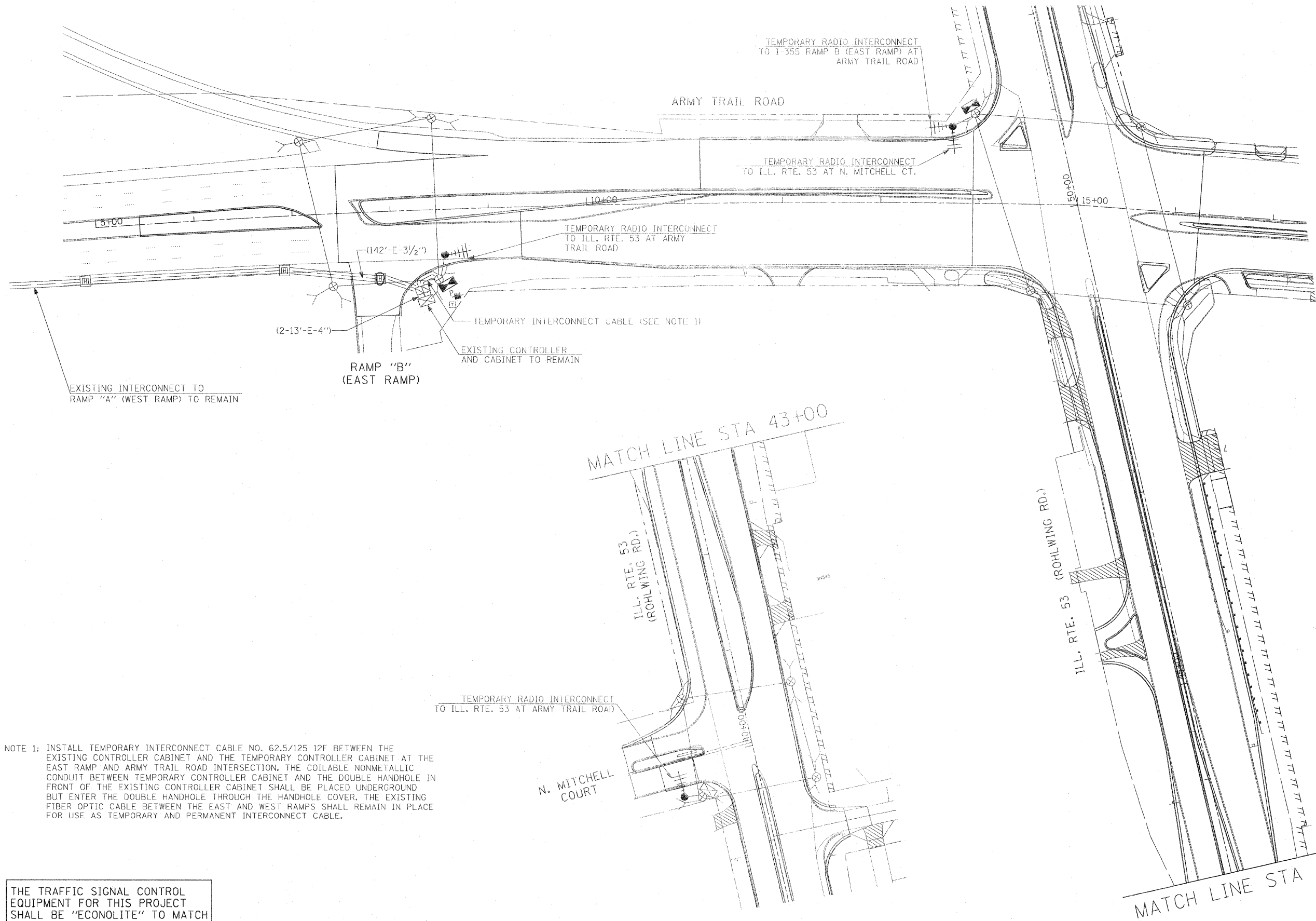


THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE	%OPERATION		
SIGNAL (RED)	11	135	17	0.50	93.5
(YELLOW)	11	135	25	0.25	68.75
(GREEN)	11	135	15	0.25	41.25
ARROW		135	12	0.10	
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN			25	0.05	
HOT GREEN RIGHT ARROW	2		12	1.00	24
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	327.5

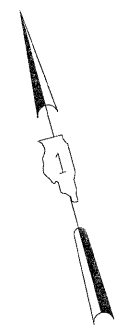
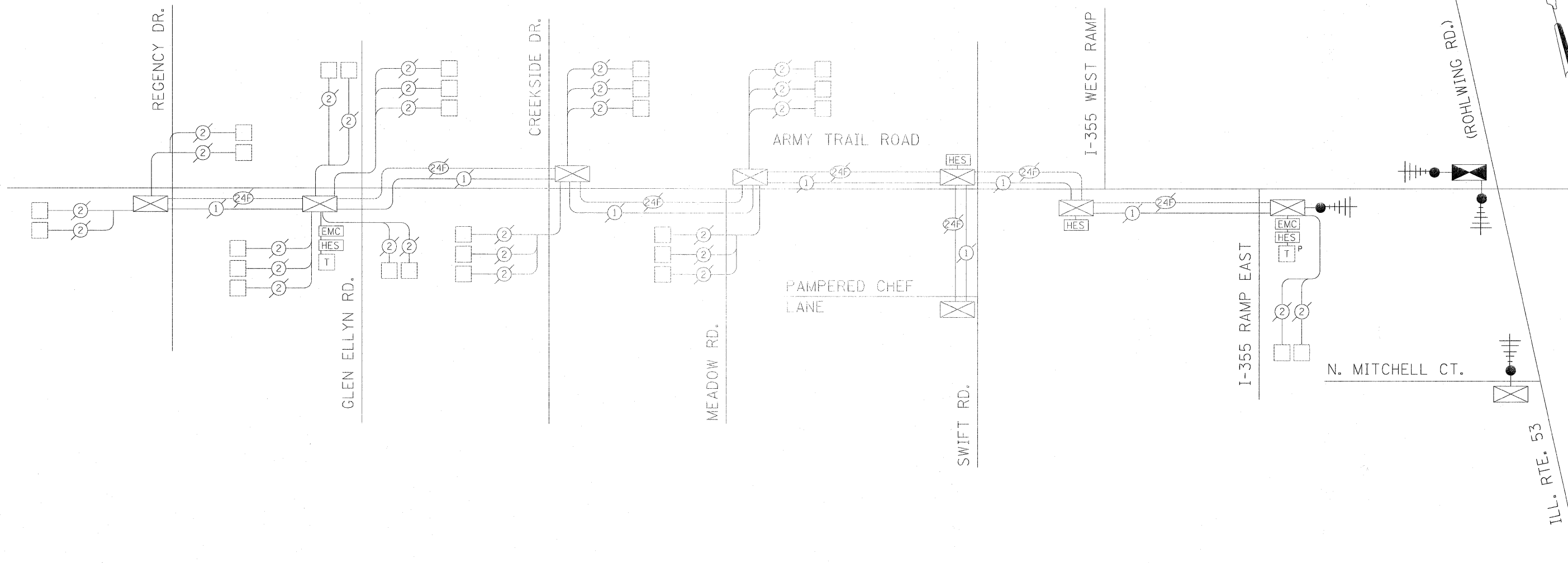
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 201 WEST CENTER COURT  
 SCHALMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY CONTACT: CURTIS TOPPS  
 PHONE: (630) 691-4356  
 COMPANY: COMMONWEALTH EDISON



NOTE 1: INSTALL TEMPORARY INTERCONNECT CABLE NO. 62.5/125 12F BETWEEN THE EXISTING CONTROLLER CABINET AND THE TEMPORARY CONTROLLER CABINET AT THE EAST RAMP AND ARMY TRAIL ROAD INTERSECTION. THE COILABLE NONMETALLIC CONDUIT BETWEEN TEMPORARY CONTROLLER CABINET AND THE DOUBLE HANDHOLE IN FRONT OF THE EXISTING CONTROLLER CABINET SHALL BE PLACED UNDERGROUND BUT ENTER THE DOUBLE HANDHOLE THROUGH THE HANDHOLE COVER. THE EXISTING FIBER OPTIC CABLE BETWEEN THE EAST AND WEST RAMP SHALL REMAIN IN PLACE FOR USE AS TEMPORARY AND PERMANENT INTERCONNECT CABLE.

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

FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY INTERCONNECT PLAN ARMY TRAIL ROAD FROM RAMP "B" (EAST RAMP) TO ILL. RTE. 53 (ROHLWING RD.)</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 528
	PLOT SCALE = #SCALE#	CHECKED - PKG, EA	REVISED -		SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
	PLOT DATE = #DATE#	DATE - 5/18/2011	REVISED -		CONTRACT NO. 60477							
Rev. 6-8-11												

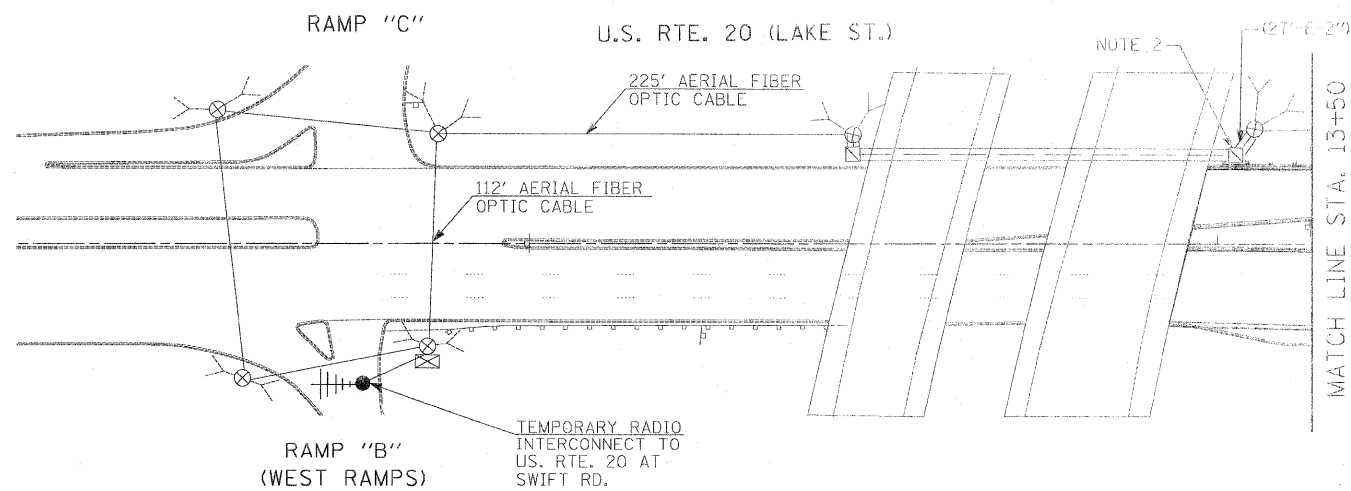
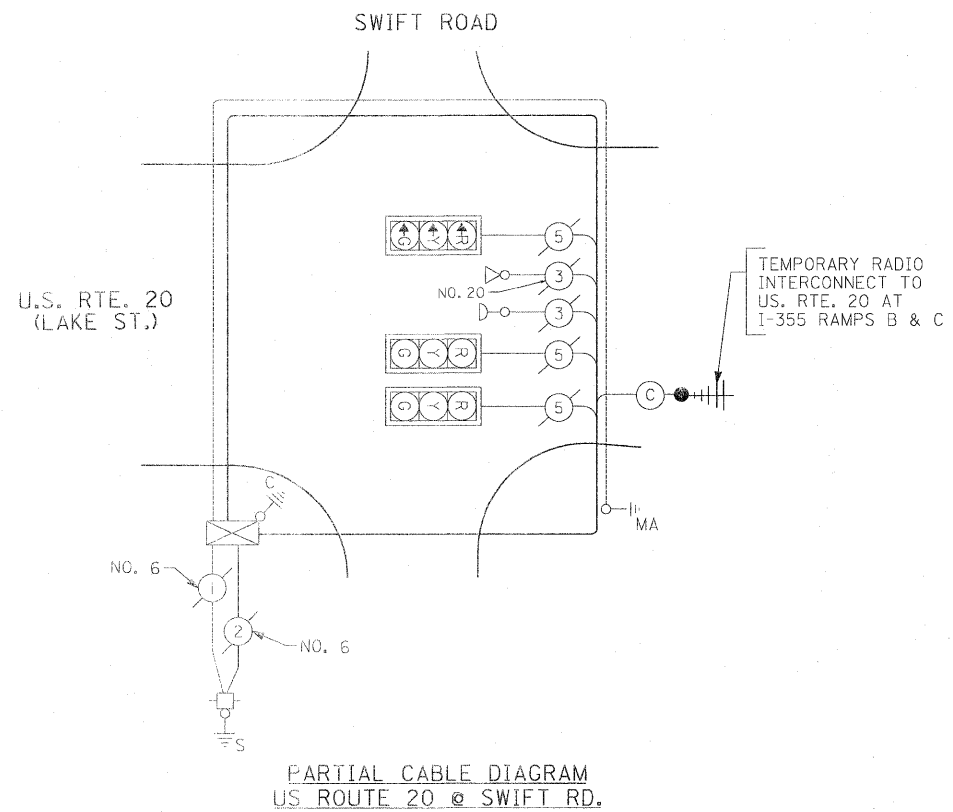
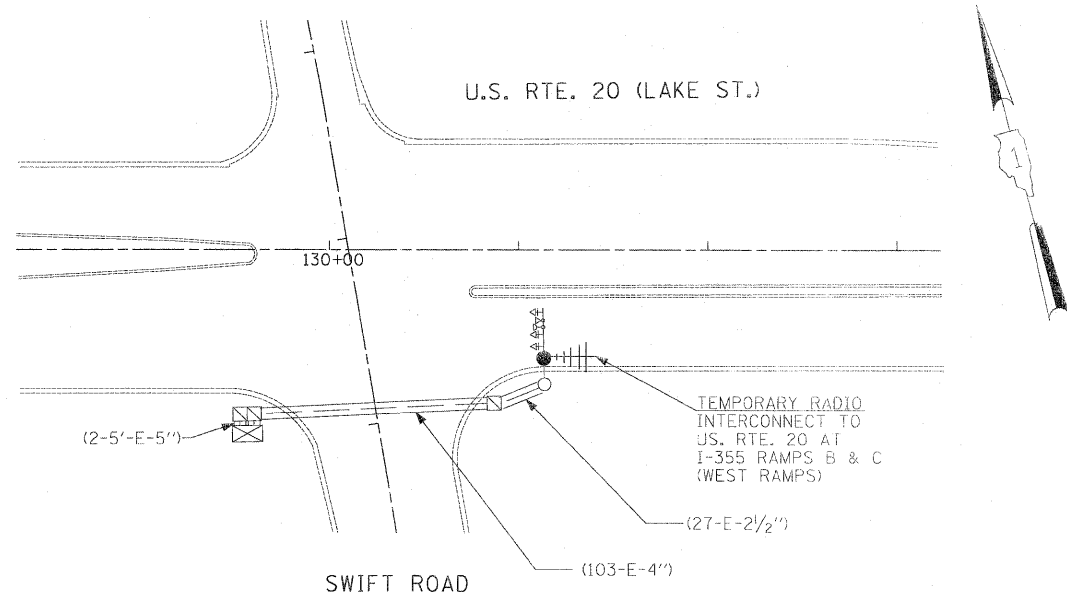


LEGEND  
 HARDENED ETHERNET SWITCH [HES]

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

Rev. 6-8-11

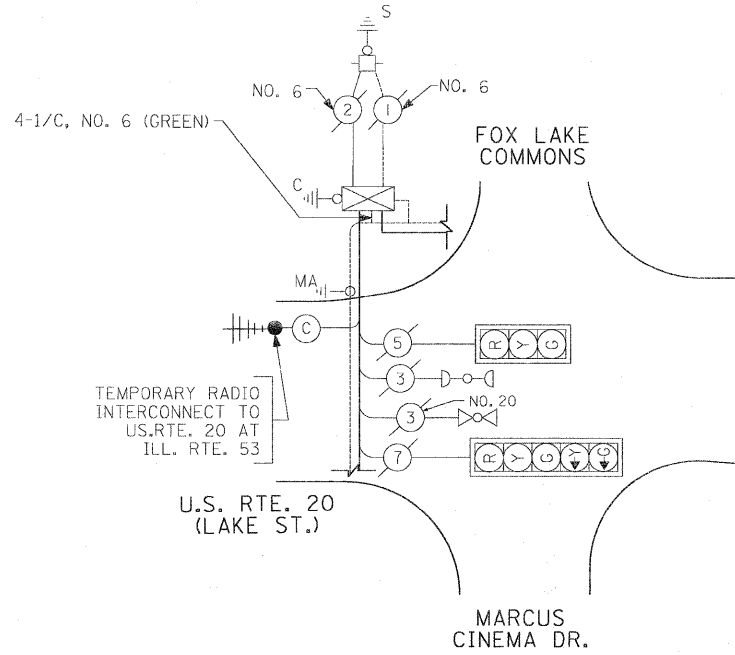
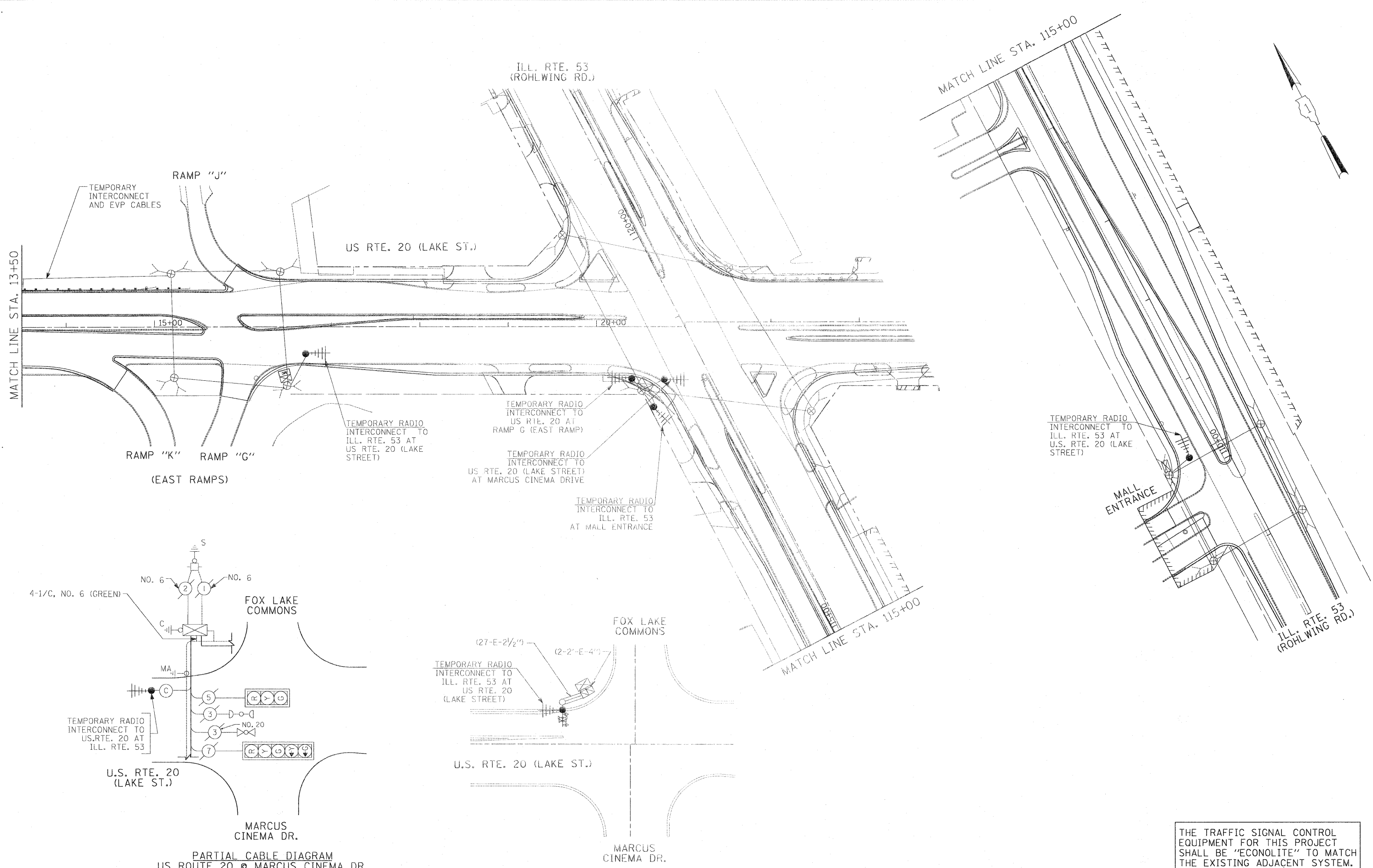
FILE NAME = #FILEL\$	USER NAME = #USER\$	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY INTERCONNECT SCHEMATIC ARMY TRAIL ROAD FROM REGENCY DR. TO ILL. RTE. 53 (ROHLWING RD.)</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 529
	PLOT SCALE = #SCALE\$	CHECKED - PKG, EA	REVISED -		SCALE: NONE	SHEET NO.	OF	SHEETS	STA.	TO STA.	CONTRACT NO. 60477	
	PLOT DATE = #DATE\$	DATE - 5/18/2011	REVISED -		FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT							



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

Rev. 6-8-11

FILE NAME =	USER NAME = \$USER\$	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY INTERCONNECT PLAN U.S. RTE. 20 (LAKE ST.) FROM ILL. RTE. 53 (ROHLWING RD.) TO SWIFT ROAD</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
\$FILEL\$		DRAWN - MAA, EA	REVISED -		2578	532B	DuPage	781	530			
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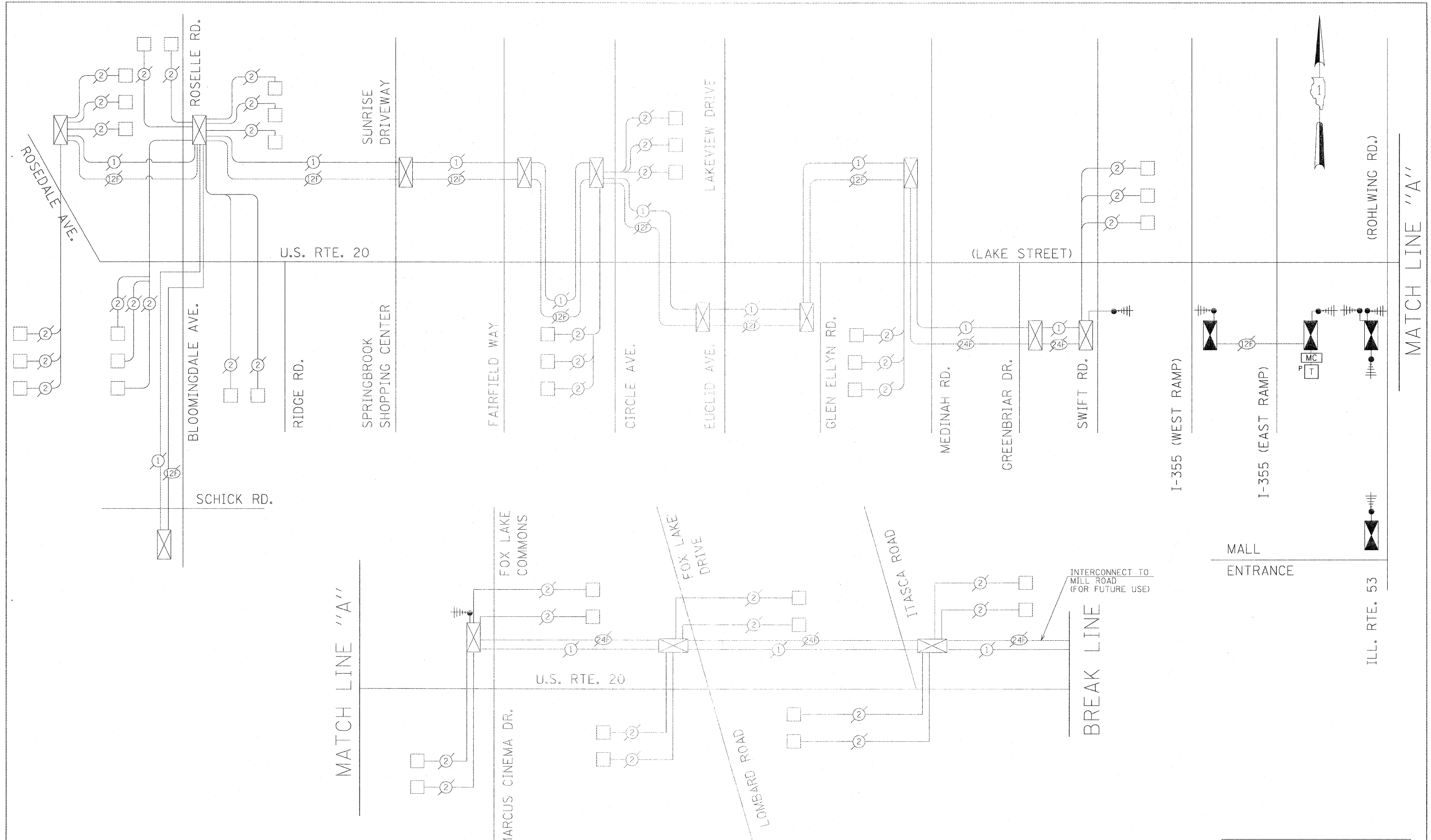


PARTIAL CABLE DIAGRAM  
US ROUTE 20 @ MARCUS CINEMA DR.

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

Rev. 6-8-11

FILE NAME =	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY INTERCONNECT PLAN U.S. RTE. 20 (LAKE ST.) FROM ILL. RTE. 53 (ROHLWING RD.) TO SWIFT ROAD</b>			F.A.P. RTE. 2578	SECTION 5328	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 530A
#FILEL#		DRAWN - MAA, EA	REVISED -		SCALE: 1"=50'	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. -	ILLINOIS FED. AID PROJECT	CONTRACT NO. 60477		
		CHECKED - PKG, EA	REVISED -									
		DATE 5/18/2011	REVISED -									

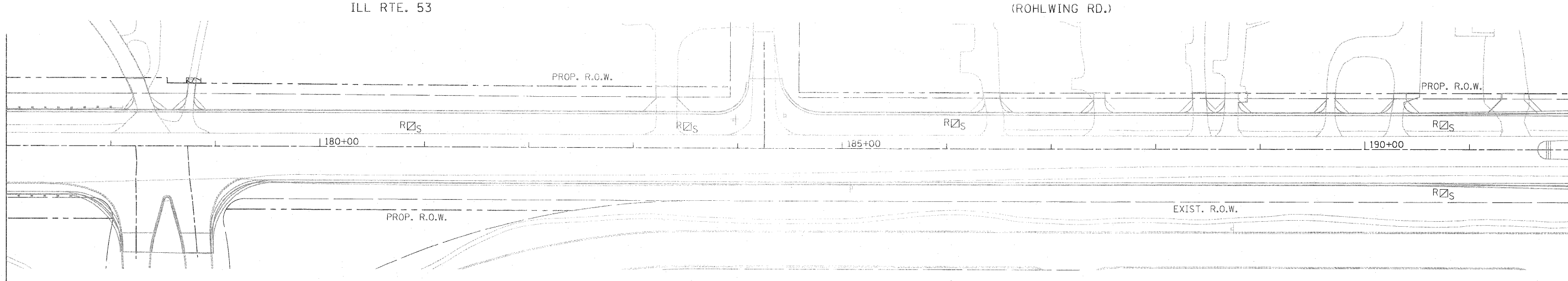
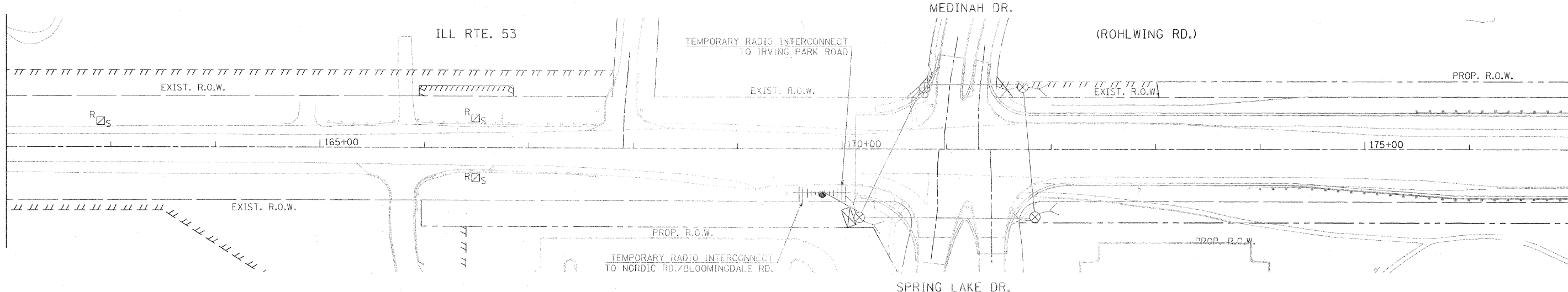
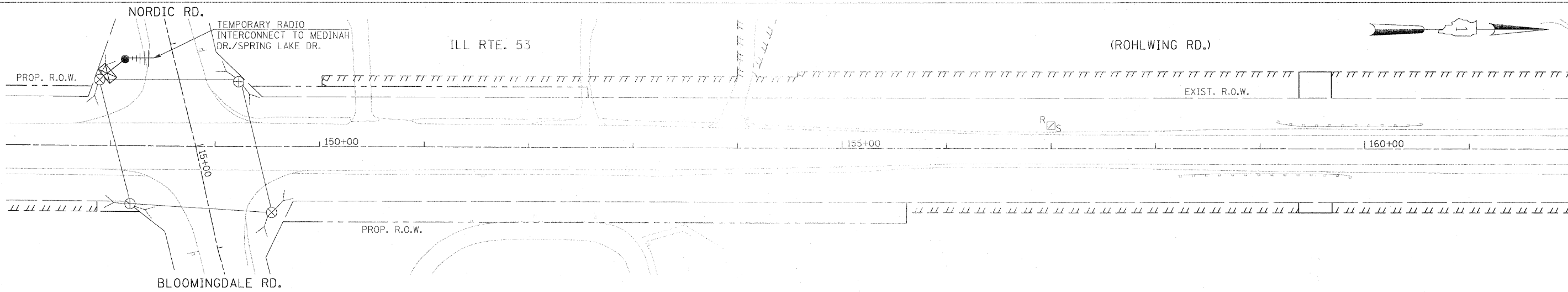


THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

Rev 6-8-11

FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY INTERCONNECT SCHEMATIC U.S. RTE. 20 (LAKE ST.) FROM ROSEDALE AVE. TO ILL. RTE. 53 (ROHLWING RD.)</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 531	
	PLOT SCALE = #SCALE#	DRAWN - MAA, EA	REVISED -		SCALE: NONE	SHEET NO. OF SHEETS STA.	TO STA.	CONTRACT NO. 60477		ILLINOIS FED. AID PROJECT			
	PLOT DATE = #DATE#	CHECKED - PKG, EA	REVISED -										
		DATE - 5/18/2011	REVISED -										

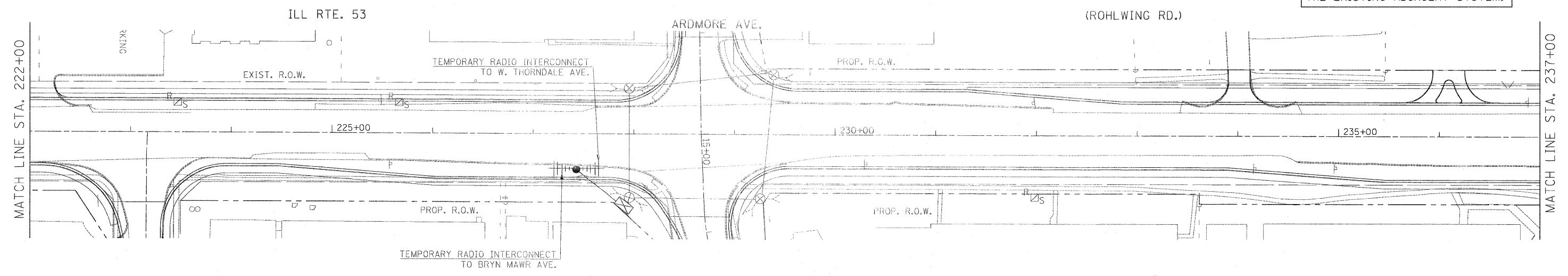
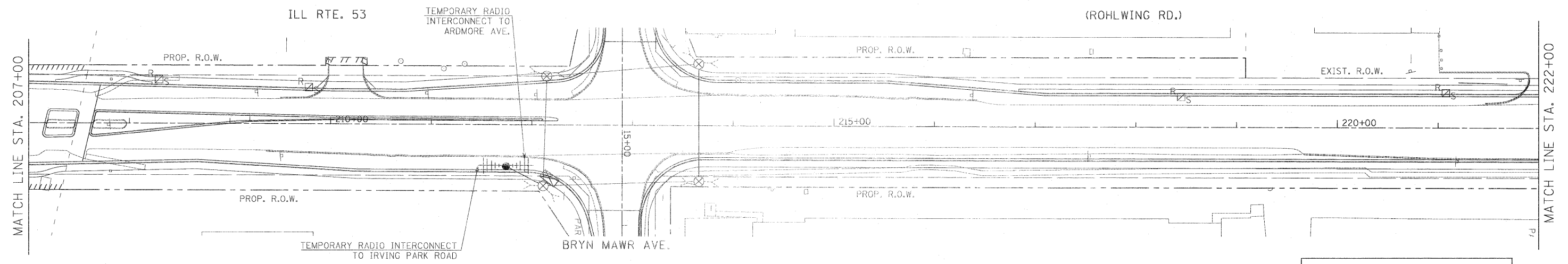
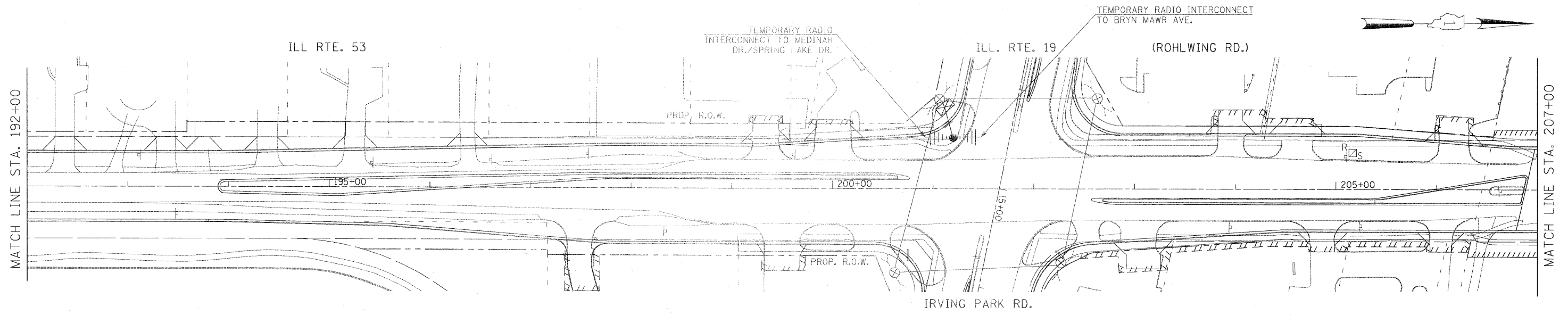




THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

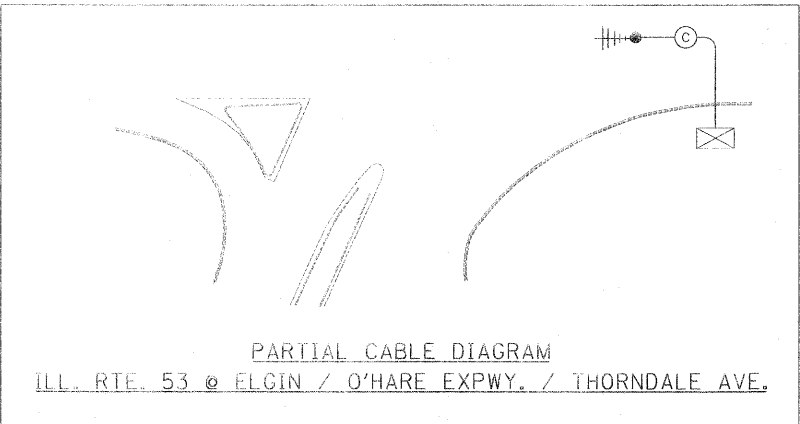
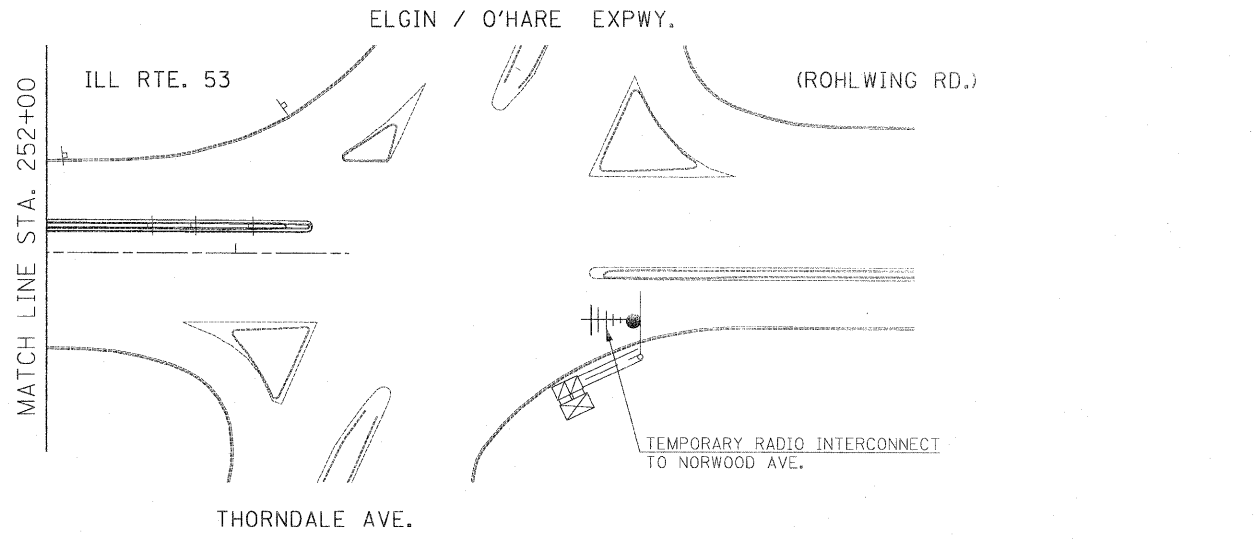
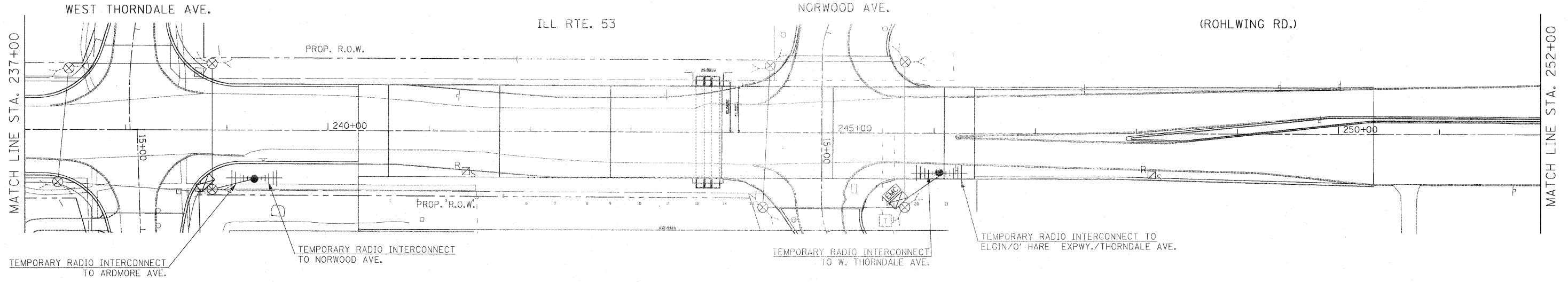
FILE NAME = #FILEL#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY INTERCONNECT PLAN ILL RTE. 53 (ROHLWING RD.) FROM NORDIC ROAD TO THORNDALE AVE. (SHEET 1 OF 3)</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 532
	PLOT SCALE = #SCALE#	DRAWN - MAA, EA	REVISED -		SCALE: 1"=50'	SHEET NO. OF	SHEETS	STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 60477	
	PLOT DATE = #DATE#	CHECKED - PKG, EA	REVISED -									
		DATE - 5/18/2011	REVISED -									

Rev. 6-8-11



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

FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED - PKG	REVISD -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY INTERCONNECT PLAN ILL. RTE. 53 (ROHLWING RD.) FROM NORDIC ROAD TO THORNDALE AVE. (SHEET 2 OF 3)</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 533
	PLOT SCALE = #SCALE#	DRAWN - MAA, EA	REVISD -		SCALE: 1"=50'	SHEET NO.	OF	SHEETS	STA.	TO STA.	CONTRACT NO. 60477	
	PLOT DATE = #DATE#	CHECKED - PKG, EA	REVISD -								ILLINOIS FED. AID PROJECT	
		DATE - 5/18/2011	REVISD -								Rev. 6-8-11	

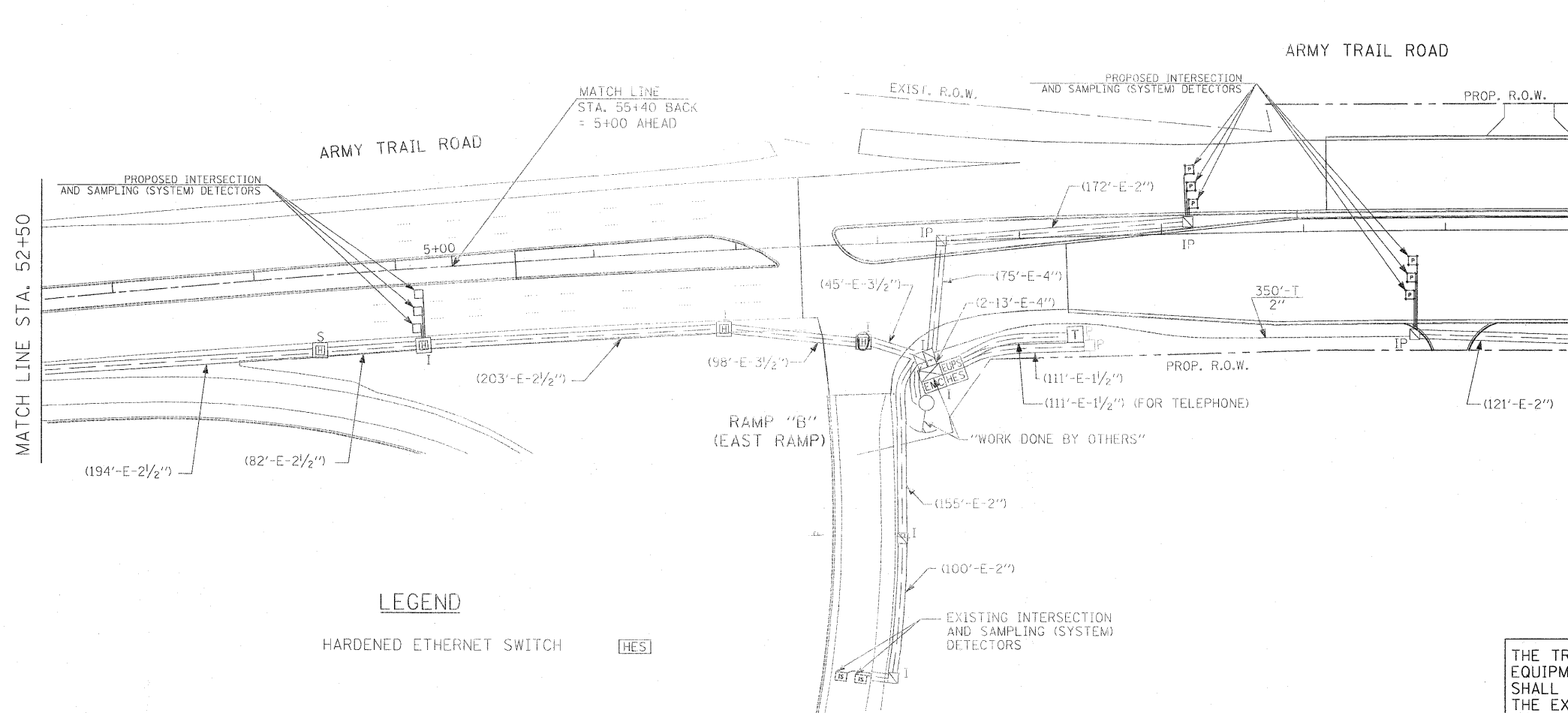
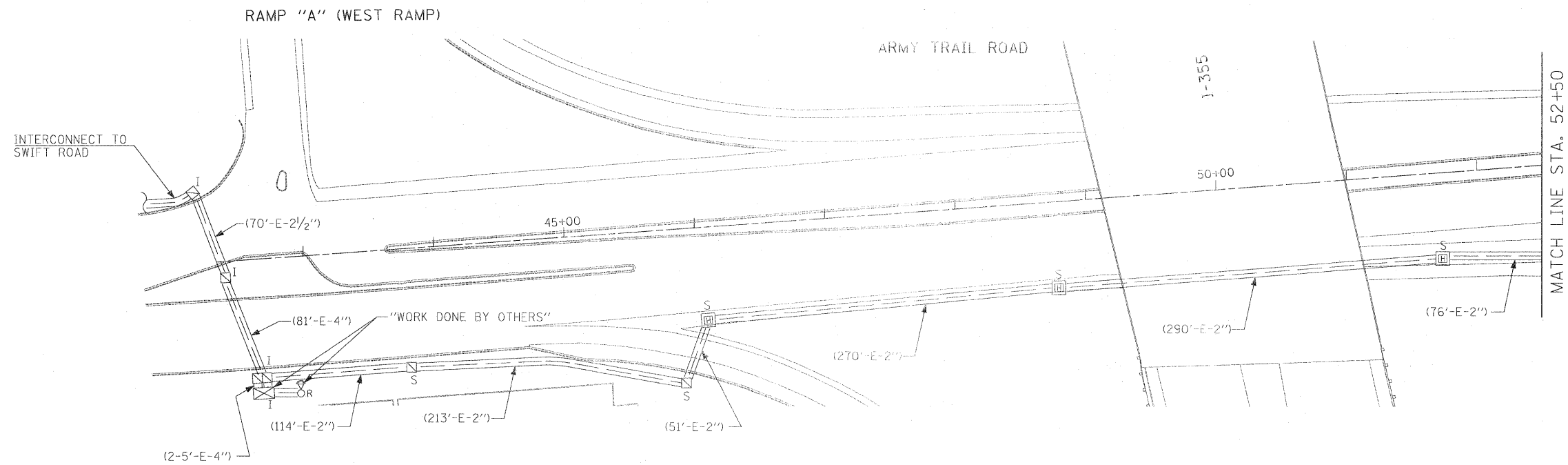


THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

Rev. 6-8-11

FILE NAME = \$FILEL\$	USER NAME = \$USER\$	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY INTERCONNECT PLAN ILL. RTE. 53 (ROHLWING RD.) FROM NORDIC ROAD TO THORNDALE AVE. (SHEET 3 OF 3)</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 534
	PLOT SCALE = \$SCALE\$	DRAWN - MAA, EA	REVISED -		SCALE: 1"=50'	SHEET NO.	OF	SHEETS	STA.	TO STA.	CONTRACT NO. 60477	
	PLOT DATE = \$DATE\$	CHECKED - PKG, EA	REVISED -								ILLINOIS FED. AID PROJECT	
		DATE - 5/18/2011	REVISED -									



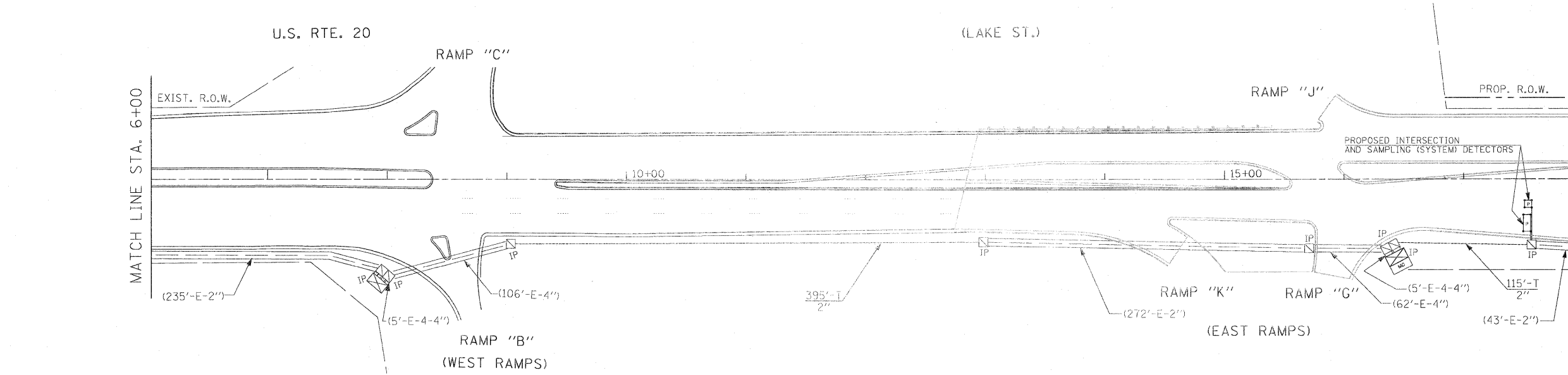
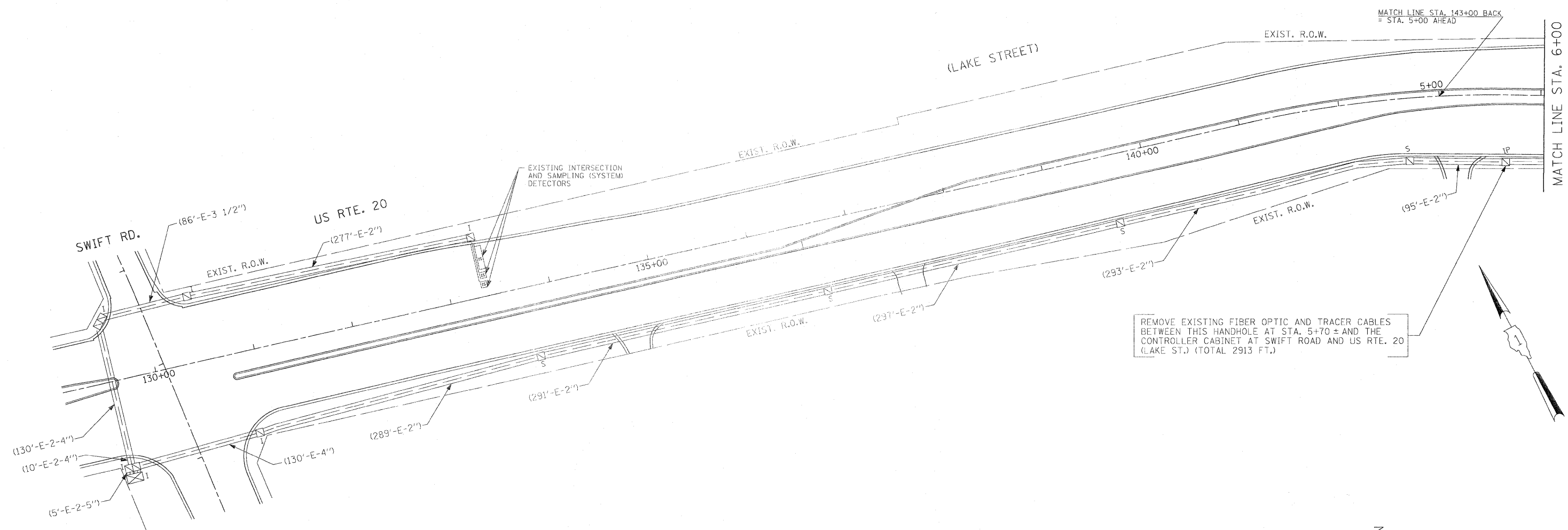


MATCH LINE STA. 13+00  
 (FOR MORE INFORMATION, REFER TO  
 ILL. RTE. 53 INTERCONNECT PLANS BETWEEN  
 N. MITCHELL CT. AND US RTE. 20 (LAKE ST.))

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

Rev. 6-8-11

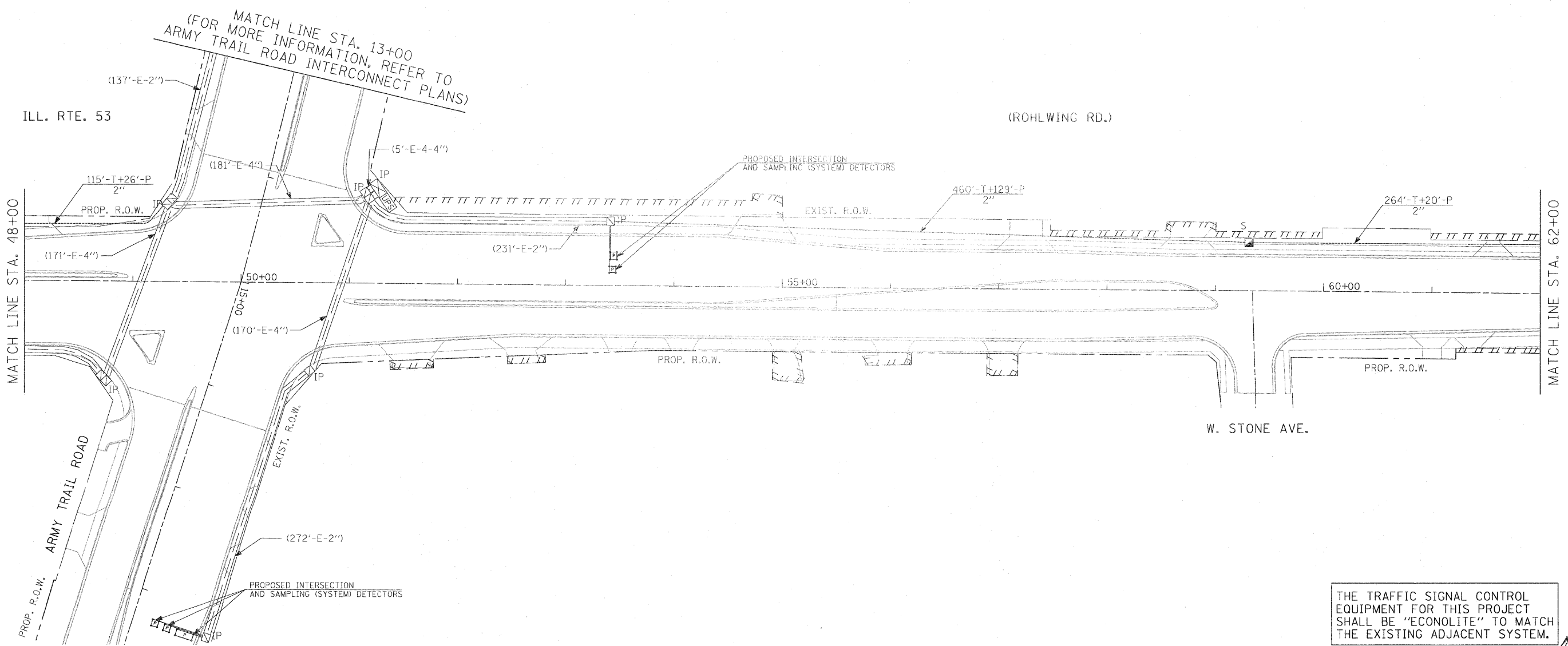
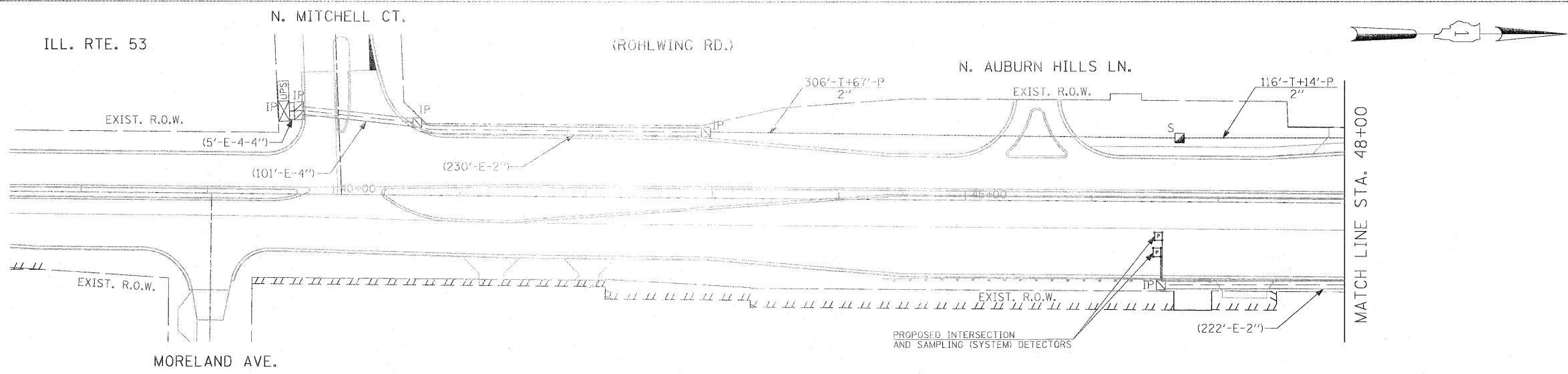
FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED INTERCONNECT PLAN ARMY TRAIL ROAD FROM ILL. RTE. 53 (ROHLWING RD.) TO I-355 RAMP "B" (SHEET 1 OF 1)</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 536
PLOT SCALE = #SCALE#	CHECKED - PKG, EA	REVISED -	REVISED -		SCALE: 1"=50'	SHEET NO. OF SHEETS	STA. TO STA.	CONTRACT NO. 60477				
PLOT DATE = #DATE#	DATE - 5/18/2011	REVISED -	REVISED -		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT							
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT												



MATCH LINE STA. 18+00  
 (FOR MORE INFORMATION, REFER TO  
 INTERCONNECT PLANS FOR ILL. RTE. 53 BETWEEN  
 N. MITCHELL CT. AND US RTE. 20 (LAKE ST.))

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

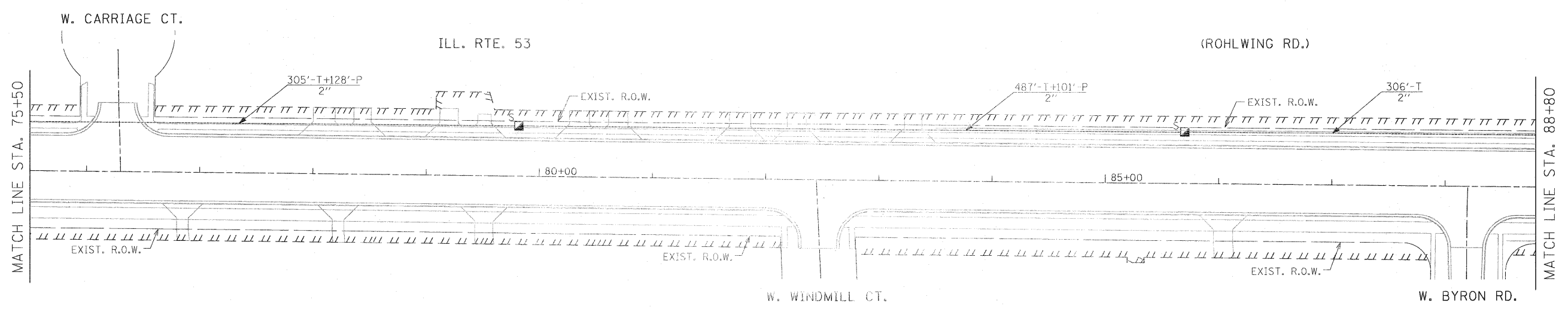
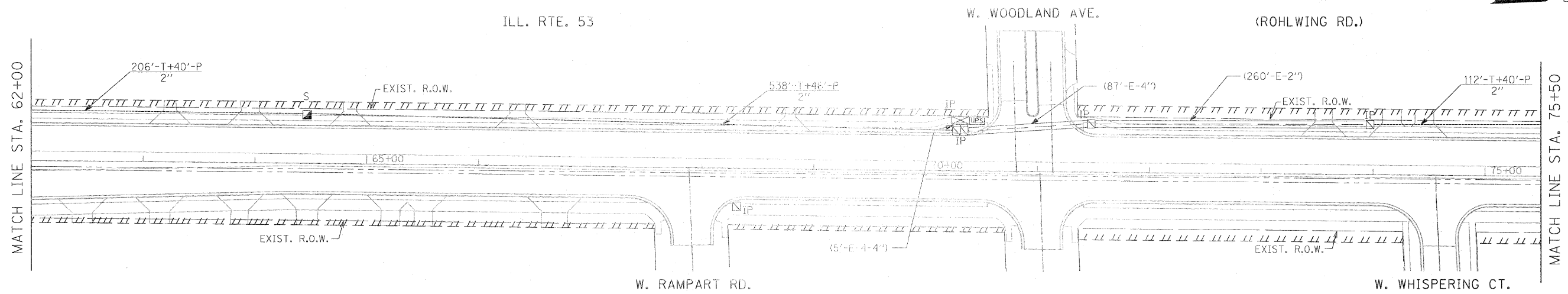
FILE NAME = #FILEL#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED INTERCONNECT PLAN U.S. RTE. 20 (LAKE ST.) FROM ILL. RTE. 53 (ROHLING RD.) TO SWIFT ROAD (SHEET 1 OF 1)</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 537
	PLOT SCALE = #SCALE#	DRAWN - MAA, EA	REVISED -		SCALE: 1"=50'	SHEET NO. OF SHEETS	STA. TO STA.	CONTRACT NO. 60477				
	PLOT DATE = #DATE#	CHECKED - PKG, EA	REVISED -					ILLINOIS FED. AID PROJECT				
		DATE - 5/18/2011	REVISED -					Rev. 6-8-11				



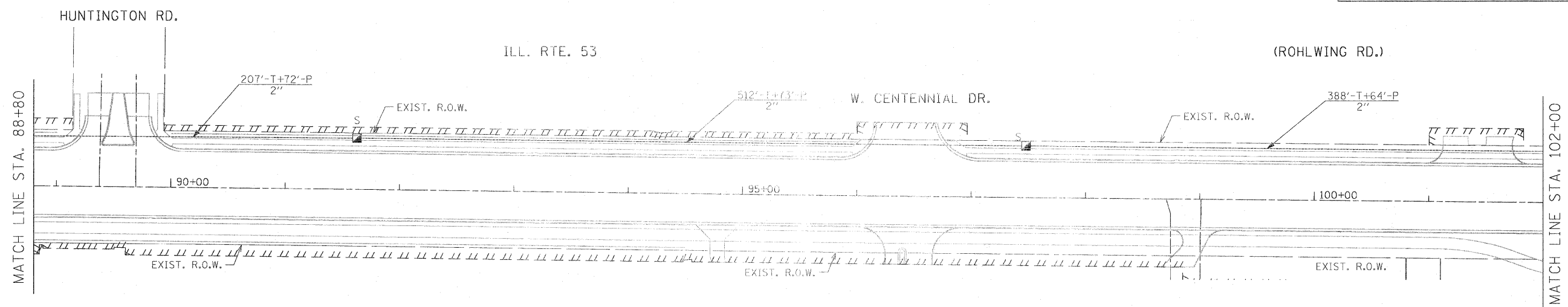
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

Rev. 6-8-11

FILE NAME = \$FILEL\$	USER NAME = \$USER\$	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED INTERCONNECT PLAN ILL. RTE. 53 (ROHLWING RD.) FROM N. MITCHELL CT. TO US RTE. 20 (LAKE STREET) (SHEET 1 OF 4)</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 538
	PLOT SCALE = \$SCALE\$	DRAWN - MAA, EA	REVISED -		SCALE: 1"=50'	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT	CONTRACT NO. 60477			
	PLOT DATE = \$DATE\$	CHECKED - PKG, EA	REVISED -									
		DATE - 5/18/2011	REVISED -									



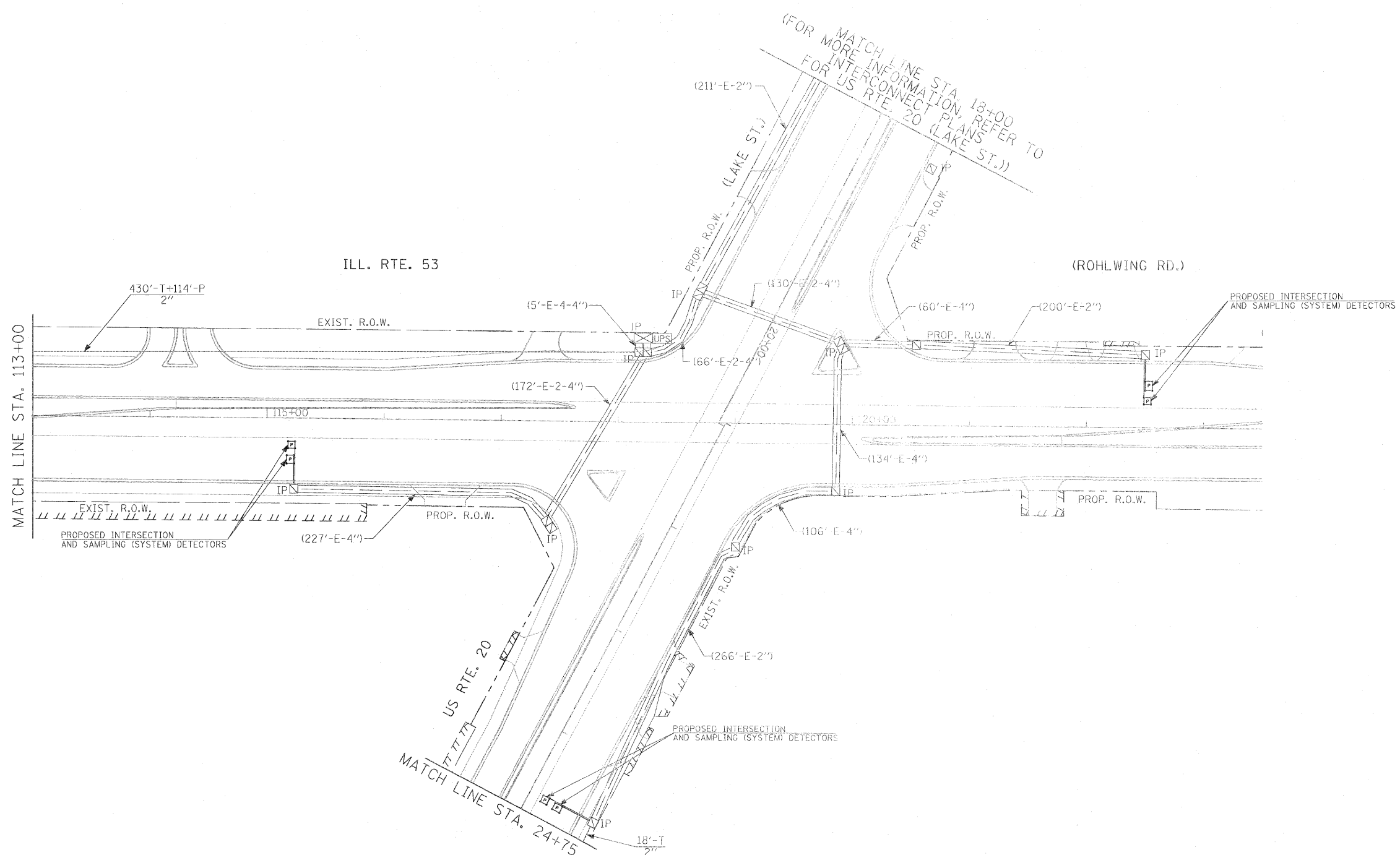
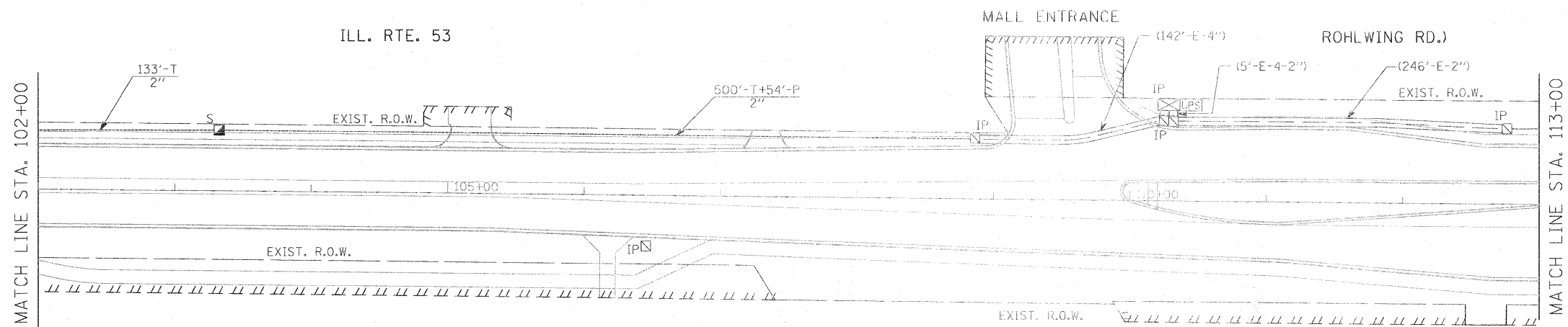
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.



FILE NAME = \$FILEL\$	USER NAME = \$USER\$	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED INTERCONNECT PLAN ILL. RTE. 53 (ROHLWING RD.) FROM N. MITCHELL CT. TO US RTE. 20 (LAKE STREET) (SHEET 2 OF 4)</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 539
	PLOT SCALE = \$SCALE\$	CHECKED - PKG, EA	REVISED -		SCALE: 1"=50'	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. -	ILLINOIS FED. AID PROJECT	CONTRACT NO. 60477		
	PLOT DATE = \$DATE\$	DATE - 5/18/2011	REVISED -									

Rev. 6-8-11

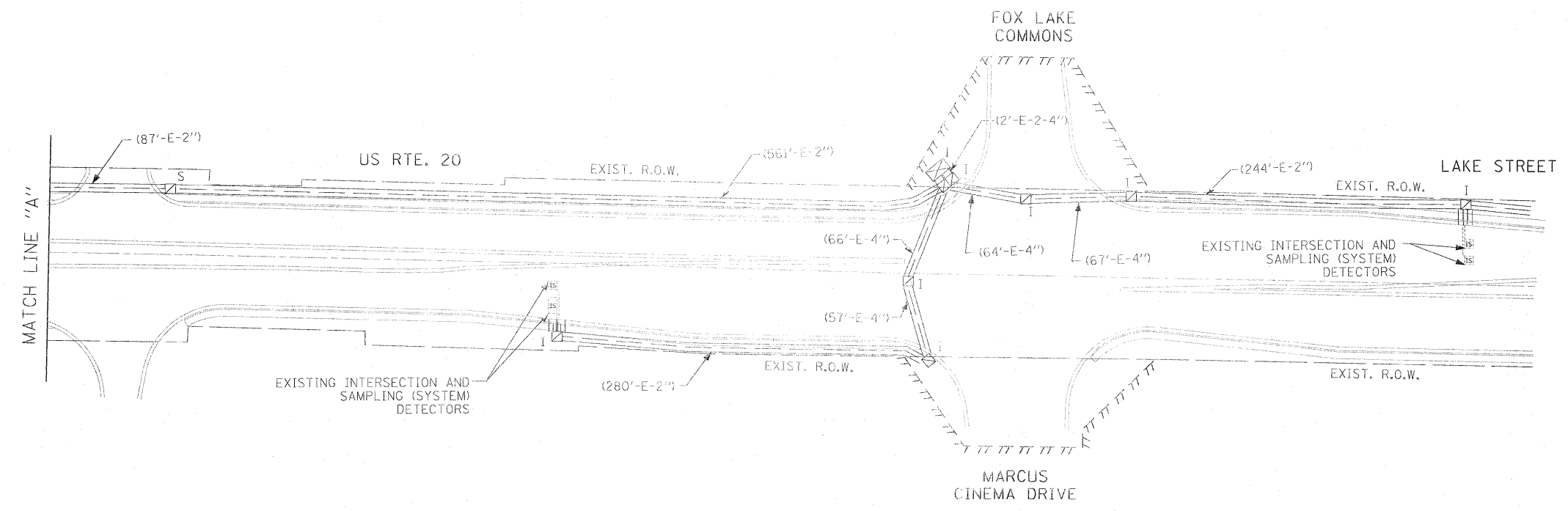
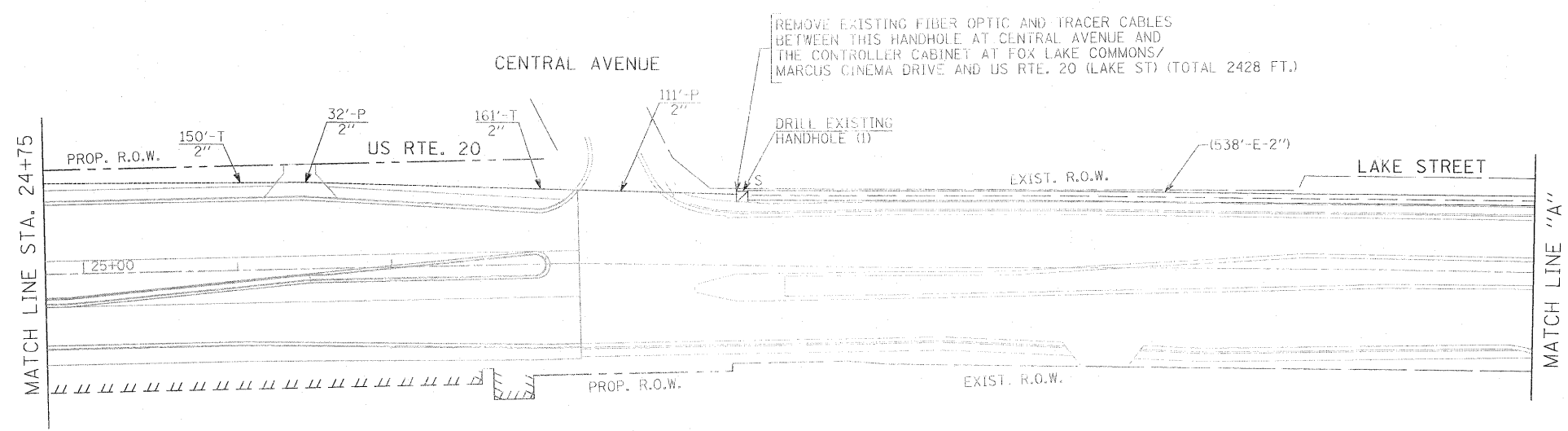
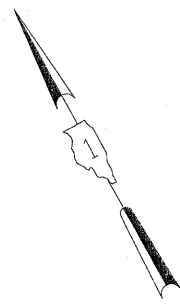




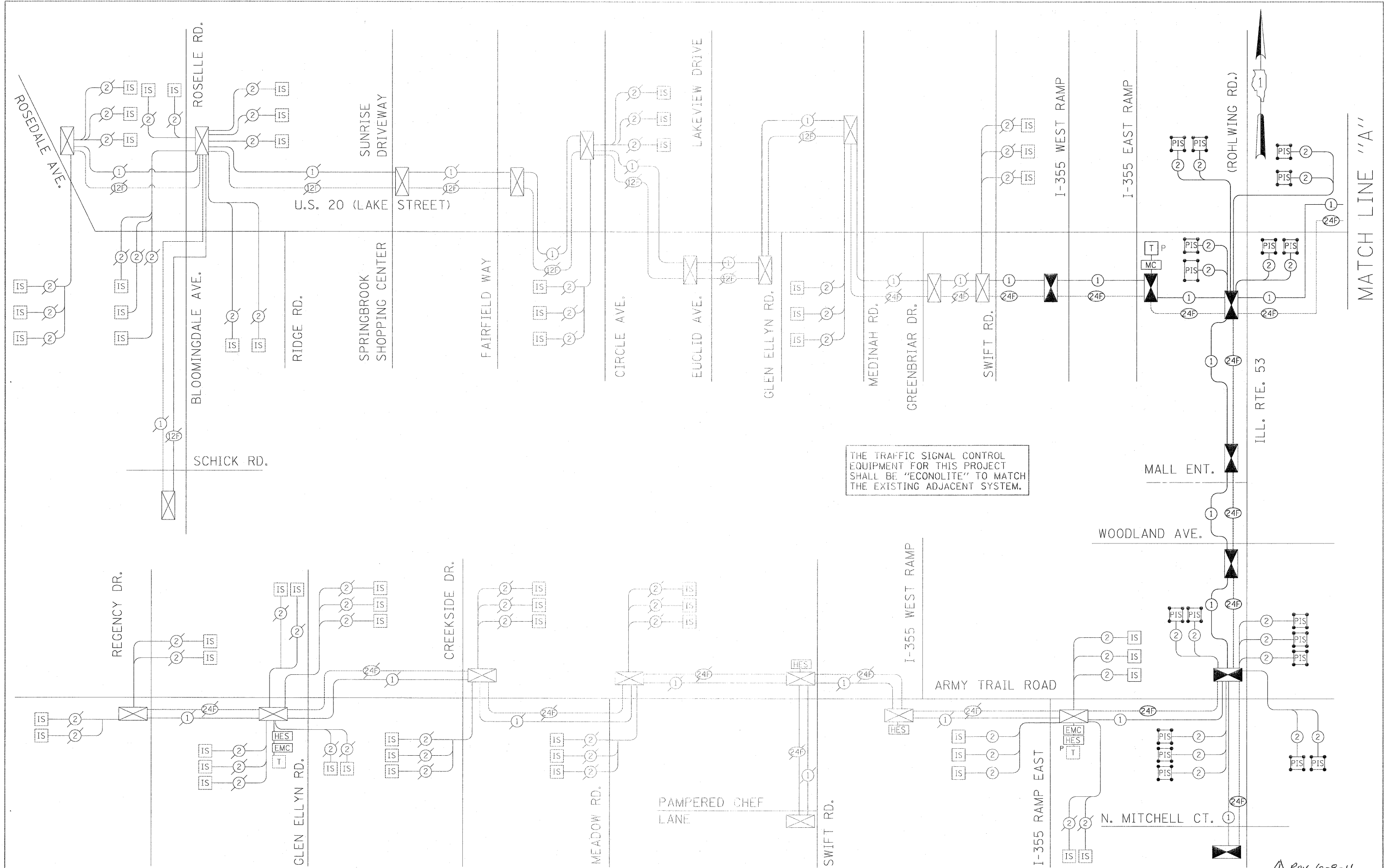
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

Rev. 6-8-11

FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED INTERCONNECT PLAN ILL. RTE. 53 (ROHLWING RD.) FROM N. MITCHELL CT. TO US RTE. 20 (LAKE STREET) (SHEET 3 OF 4)</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 540
	PLLOT SCALE = #SCALE#	DRAWN - MAA, EA	REVISED -		SCALE: 1"=50'	SHEET NO. OF	SHEETS	STA. TO STA.	CONTRACT NO. 60477			
	PLLOT DATE = #DATE#	CHECKED - PKG, EA	REVISED -		FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT							
		DATE - 5/18/2011	REVISED -									



FILE NAME = #FILEL#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED INTERCONNECT PLAN US RTE 20 (LAKE STREET) FROM ILL. RTE. 63 TO FOX LAKE COMMONS/MARCUS CINEMA DRIVE (SHEET 4 OF 4)</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 540A
	PLOT SCALE = #SCALE#	CHECKED - PKG, EA	REVISED -		SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				
	PLOT DATE = #DATE#	DATE - 5/18/2011	REVISED -		CONTRACT NO. 60477							
Rev. 6-8-11												

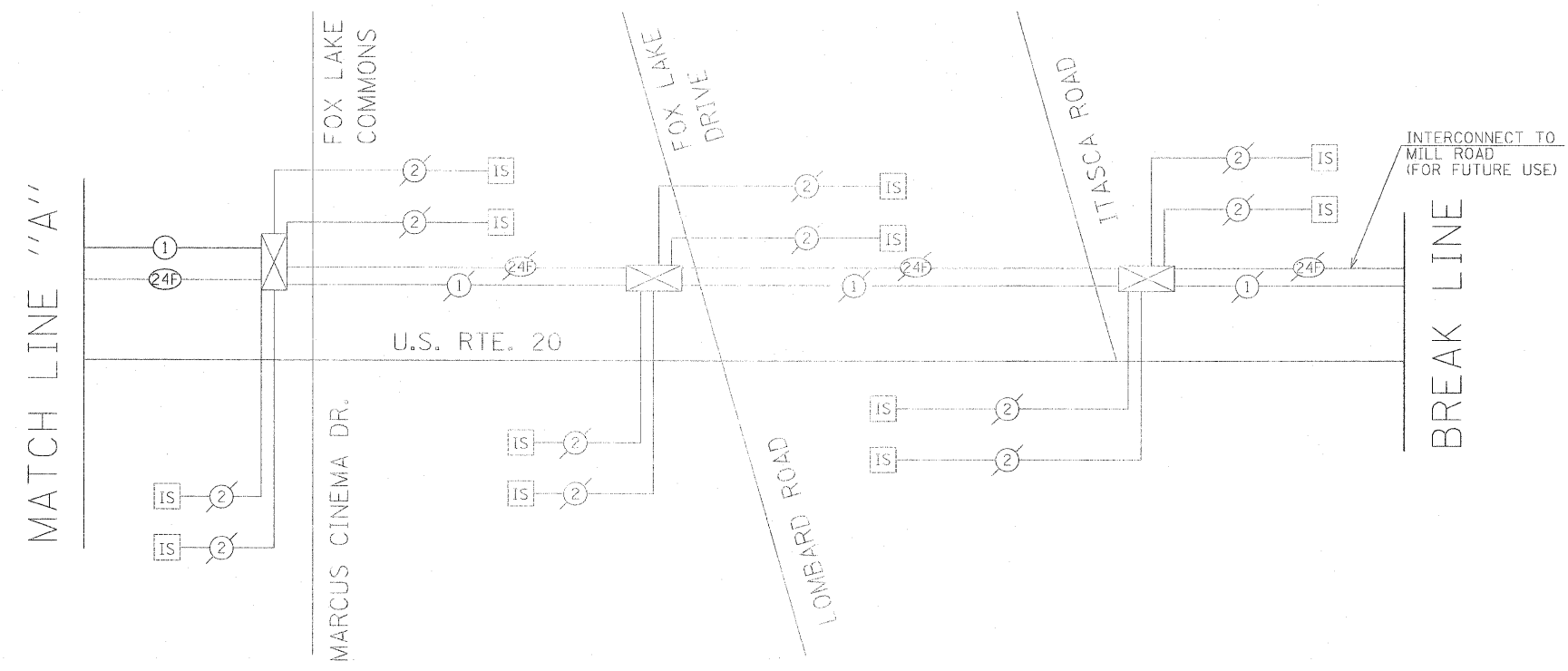


THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

MATCH LINE "A"

Rev. 6-8-11

FILE NAME = #FILEL\$	USER NAME = #USER\$	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED INTERCONNECT SCHEMATIC ILL. RTE. 53 (ROHLWING RD.) FROM N. MITCHELL CT. TO U.S. RTE. 20 (LAKE ST.), ARMY TRAIL ROAD FROM REGENCY DR. TO ILL. RTE. 53 (ROHLWING RD.) AND U.S. RTE. 20 (LAKE ST.) FROM ROSEDALE AVE. TO ILL. RTE. 53 (ROHLWING RD.) (SHEET 1 OF 2)</b>		F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 541	
	PLOT SCALE = #SCALE\$	DRAWN - MAA, EA	REVISED -		SCALE: NONE	SHEET NO. OF SHEETS STA.	TO STA.	CONTRACT NO. 60477				
	PLOT DATE = #DATE\$	CHECKED - PKG, EA	REVISED -		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT							
		DATE - 5/18/2011	REVISED -									



**SCHEDULE OF INTERCONNECT QUANTITIES**

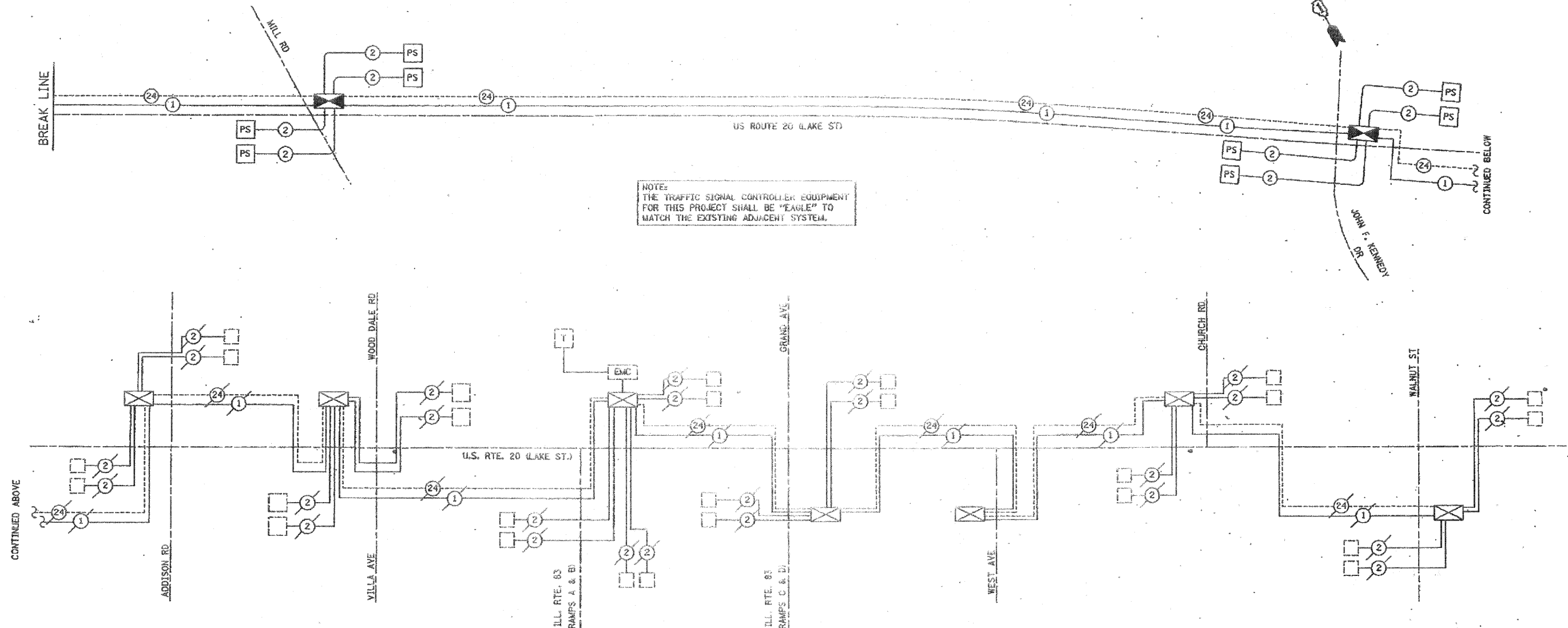
QUANTITY	UNIT	ITEM
6574	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
1131	FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
8	EACH	HANDHOLE
6574	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
2	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	MASTER CONTROLLER (SPECIAL)
5341	FOOT	REMOVE ELECTRIC CABLE FROM CONDUIT
1	EACH	REMOVE EXISTING HANDHOLE
14575	FOOT	ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1C
8	EACH	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM - LEVEL 2
14809	FOOT	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F

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

Rev. 6-8-11

FILE NAME = \$FILEL\$	USER NAME = \$USER\$	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED INTERCONNECT SCHEMATIC US RTE. 20 (LAKE AVE.) FROM MARCUS CINEMA DR/FOX LAKE COMMONS TO ITASCA RD. (SHEET 2 OF 2)</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 541A
	PLOT SCALE = \$SCALE\$	CHECKED - PKG, EA	REVISED -		SCALE: NONE	SHEET NO.	OF	SHEETS	STA.	TO STA.	CONTRACT NO. 60477	
	PLOT DATE = \$DATE\$	DATE - 5/18/2011	REVISED -		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT							

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3537	5Y-R-4	DUPAGE	282	262
STA		TO STA		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



NOTE:  
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

SCHEDULE OF QUANTITIES - "EAGLE SYSTEM"

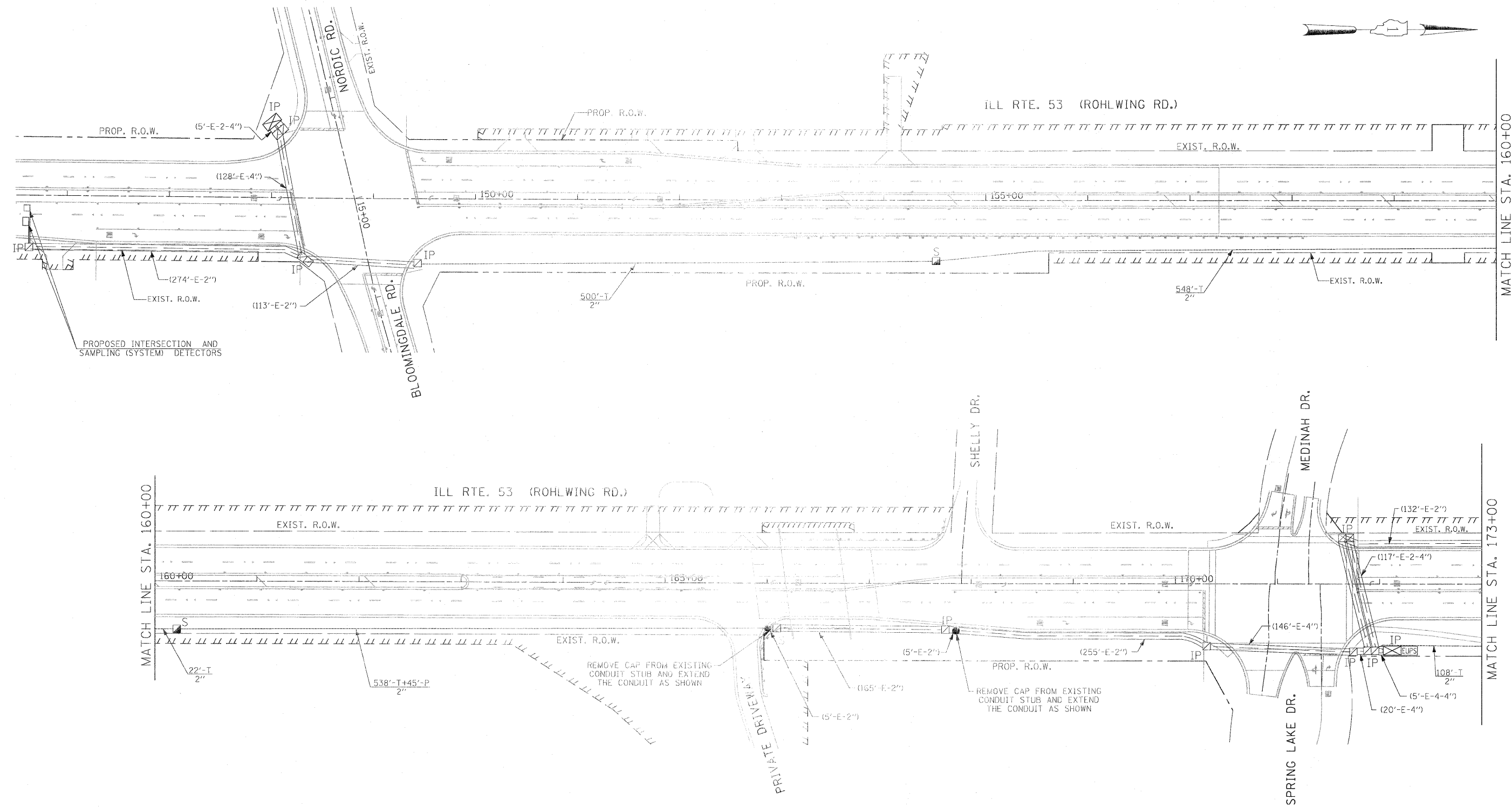
ITEM	UNIT	QUANTITY
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	6976
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	2473
HANDHOLE	EACH	10
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	6976
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	10469
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F 5M12F	FOOT	10469
DRILL EXISTING HANDHOLE	EACH	1
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1

INTERCONNECT SCHEMATIC LEGEND			
PROPOSED INTERSECTION CONTROLLER		PROPOSED INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE	
EXISTING INTERSECTION CONTROLLER		PROPOSED INTERCONNECT CABLE - NO. J8 3 PAIR TWISTED, SHIELDED	
PROPOSED MASTER CONTROLLER		PROPOSED LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED	
EXISTING MASTER CONTROLLER		EXISTING INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE	
MASTER MASTER CONTROLLER		EXISTING INTERCONNECT CABLE - NO. J8 3 PAIR TWISTED, SHIELDED	
PROPOSED INTERSECTION & SAMPLING (SYSTEM DETECTORS)		EXISTING LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED	
EXISTING INTERSECTION & SAMPLING (SYSTEM DETECTORS)		PROPOSED TELEPHONE CONNECTION	
PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125 MM12F 5M12F		PROPOSED ELECTRIC CABLE 1/C (AS SPECIFIED)	
		EXISTING INTERSECTION LOOP DETECTORS	
		PROPOSED SAMPLING (SYSTEM DETECTORS)	
		EXISTING TELEPHONE CONNECTION	
		EXISTING ELECTRIC CABLE 1/C (AS SPECIFIED)	
		EXISTING SAMPLING (SYSTEM DETECTORS)	
		PROPOSED SAMPLING (SYSTEM DETECTORS)	

REVISIONS	
NAME	DATE

SHEET 2 OF 2  
ILLINOIS DEPARTMENT OF TRANSPORTATION  
INTERCONNECT SCHEMATIC & SCHEDULE OF QUANTITIES  
US ROUTE 20 (LAKE STREET)  
"EAGLE" SYSTEM  
SCALE: NONE  
DATE: 03/01/05  
DRAWN BY: ALS  
CHECKED BY: MJH  
CHECKED BY: RJI

Rev. 6-8-11

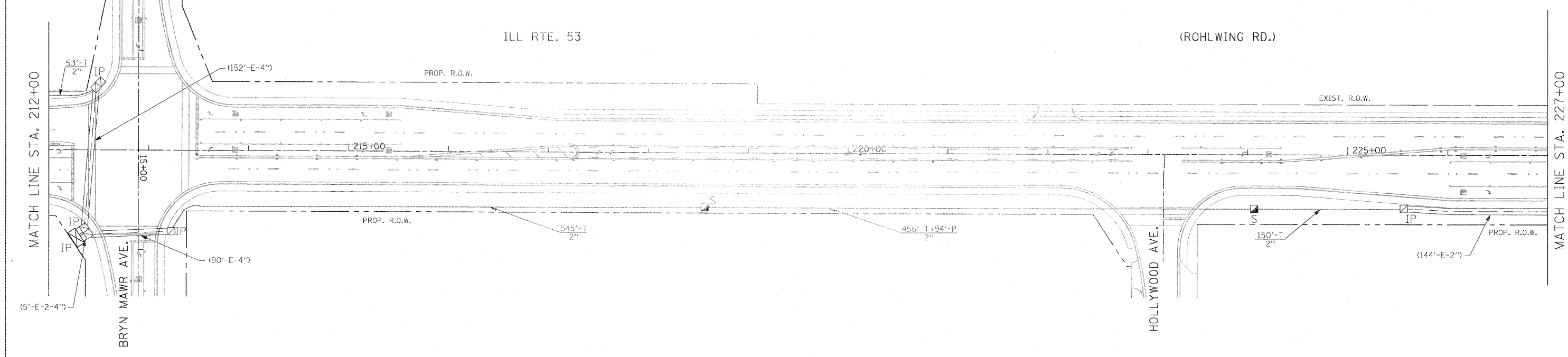
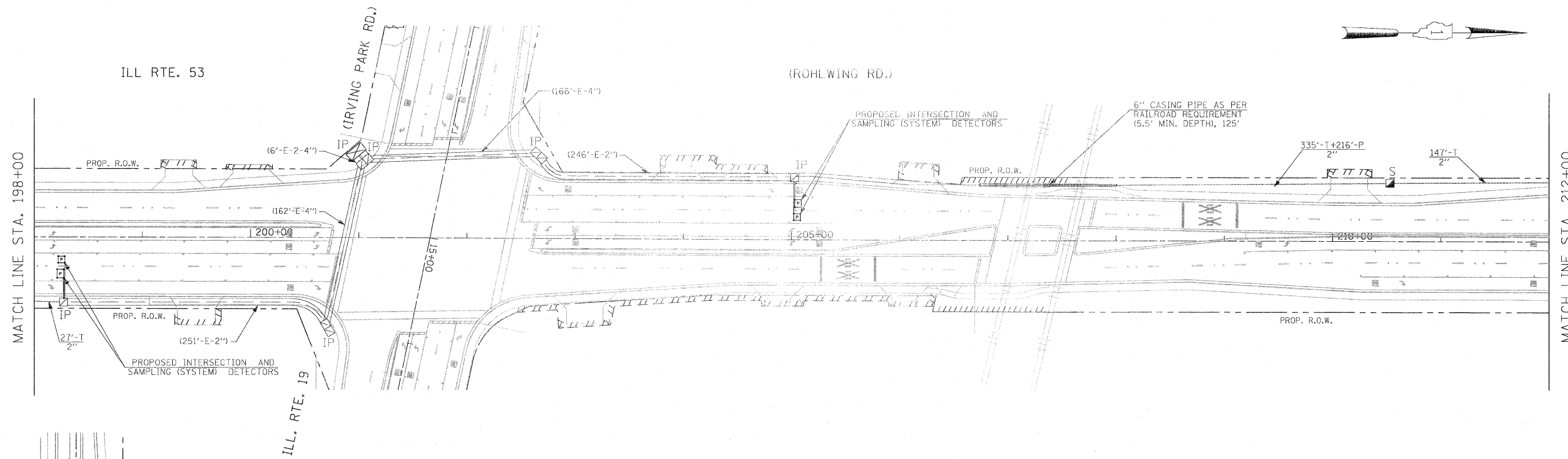


THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

Rev. 6-B-11

FILE NAME = \$FILEL\$	USER NAME = \$USERS\$	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED INTERCONNECT PLAN ILL. RTE. 53 (ROHLWING RD.) FROM NORDIC RD./BLOOMINGDALE RD. TO ELGIN-O'HARE EXPWY/THORNDALE AVE (SHEET 1 OF 4)</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 542
	PLOT SCALE = \$SCALE\$	CHECKED - PKG, EA	REVISED -		SCALE: 1"=50'	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				
	PLOT DATE = \$DATE\$	DATE - 5/18/2011	REVISED -									
CONTRACT NO. 60477												

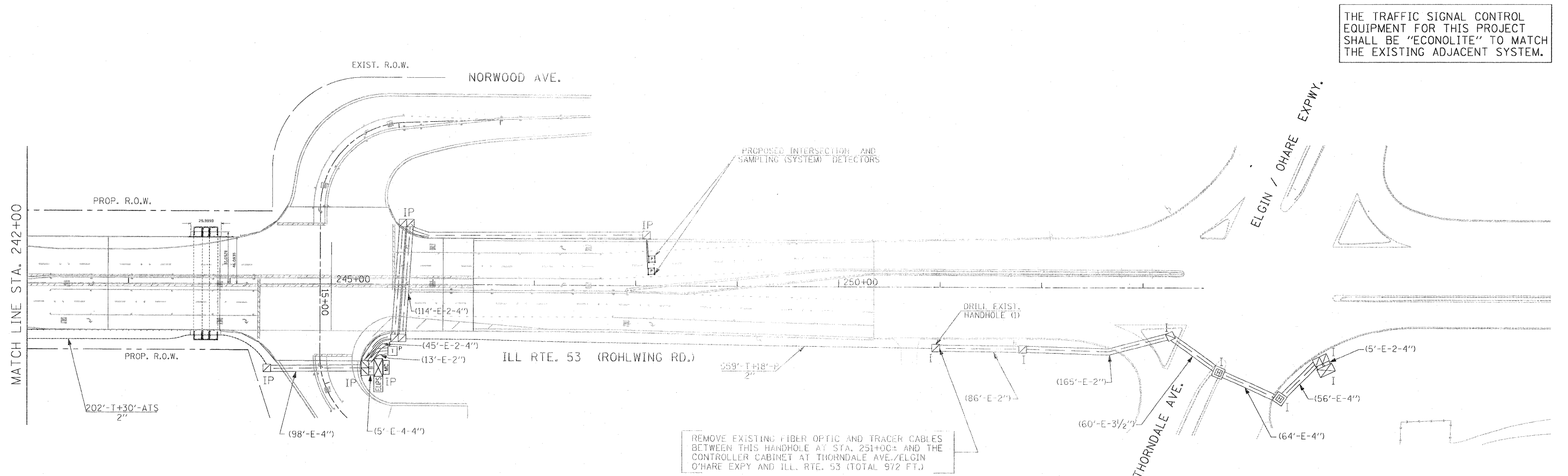
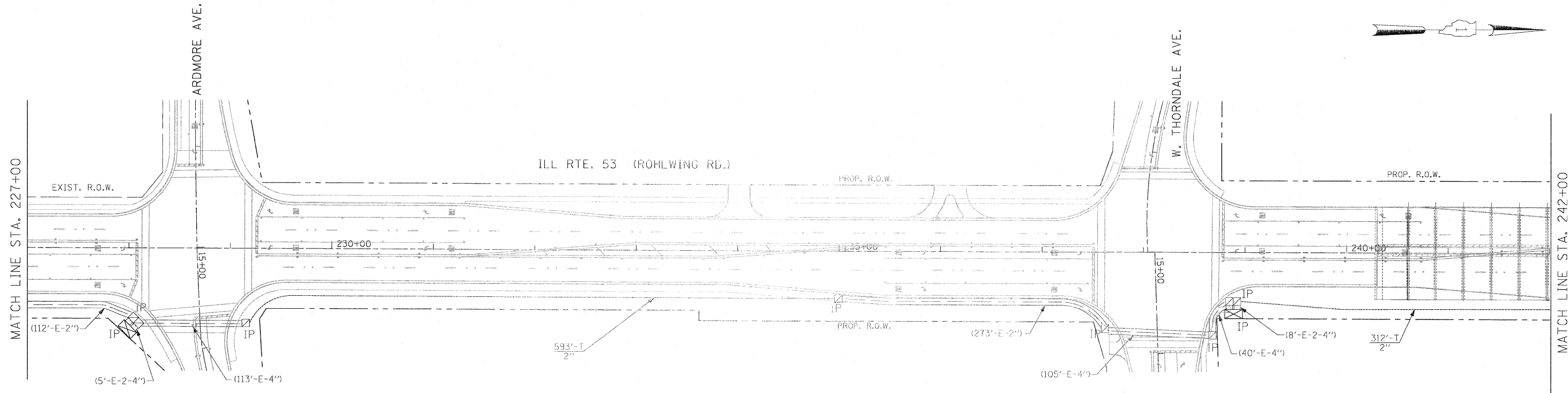




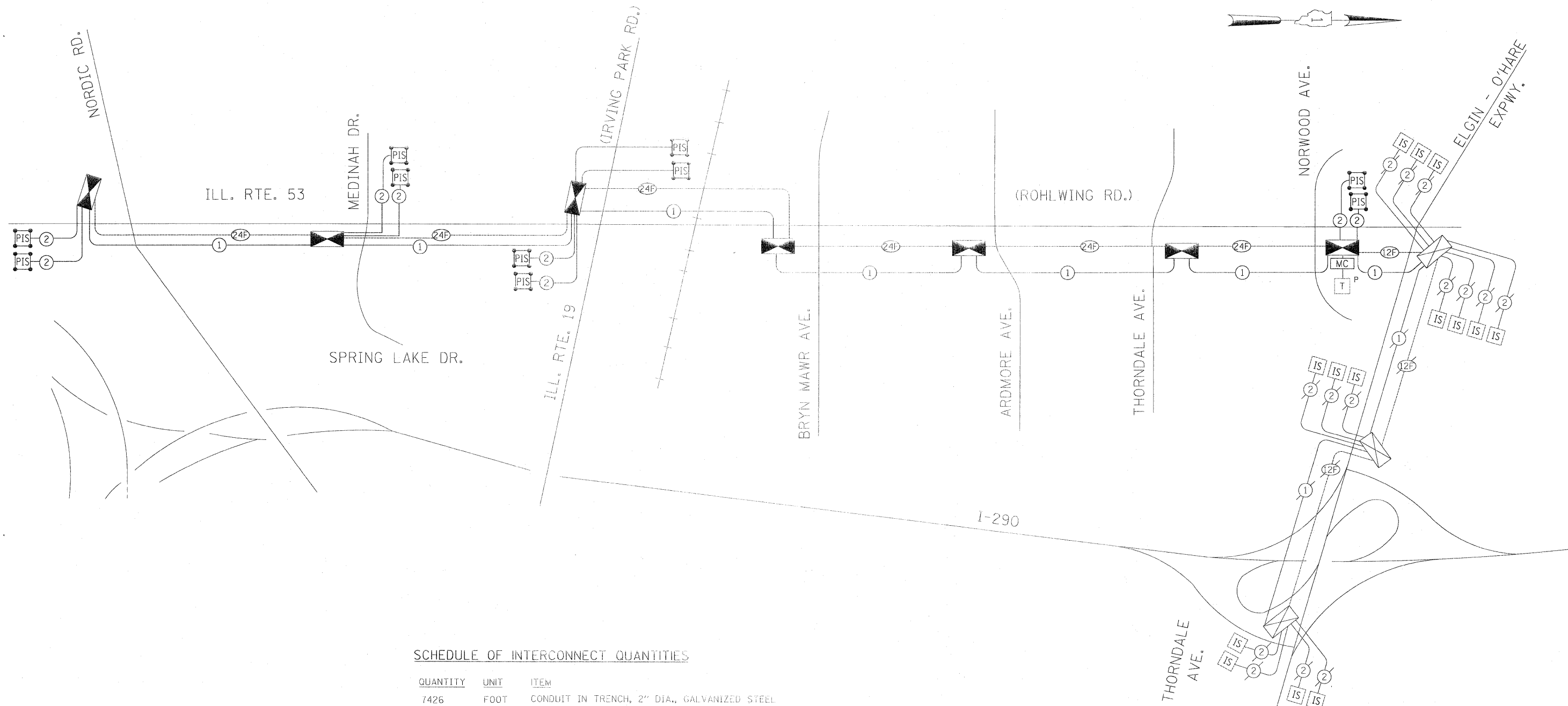
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED INTERCONNECT PLAN ILL. RTE 53 (ROHLWING RD.) FROM NORDIC RD./BLOOMINGDALE RD. TO ELGIN-O'HARE EXPWY/THORNDALE AVE. (SHEET 3 OF 4)</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 544
	PLOT SCALE = #SCALE#	DRAWN - MAA, EA	REVISED -		SCALE: 1"=50'	SHEET NO. OF SHEETS	STA. TO STA.	CONTRACT NO. 60477				
	PLOT DATE = #DATE#	CHECKED - PKG, EA	REVISED -		FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT							
		DATE - 5/18/2011	REVISED -		<div style="text-align: right;"> <span style="font-size: small;">A</span> Rev. 6-8-11         </div>							





FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED INTERCONNECT PLAN ILL. RTE. 53 (ROHLWING RD.) FROM NORDIC RD./GLOOMINGDALE RD. TO ELGIN-O'HARE EXPWY./THORNDALE AVE. (SHEET 4 OF 4)</b>			F.A.P. RTE. 2578	SECTION 5328	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 545
	PLOT SCALE = #SCALE#	DRAWN - MAA, EA	REVISED -		SCALE: 1"=50'	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				
	PLOT DATE = #DATE#	CHECKED - PKG, EA	REVISED -		CONTRACT NO. 60477							
		DATE - 5/18/2011	REVISED -		Rev. 6-8-11							

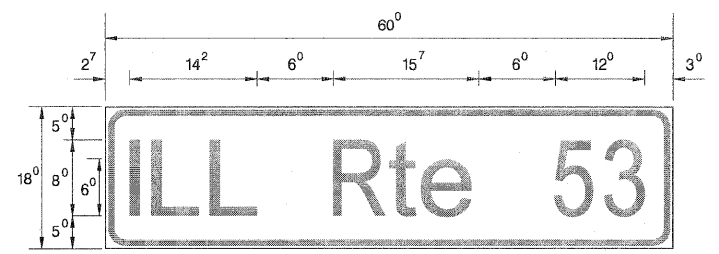


**SCHEDULE OF INTERCONNECT QUANTITIES**

QUANTITY	UNIT	ITEM
7426	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
547	FOOT	CONDUIT IN PUSHED, 2" DIA., GALVANIZED STEEL
30	FOOT	CONDUIT ATTACHED TO STRUCTURE, 2" DIA., GALVANIZED STEEL
9	EACH	HANDHOLE
7426	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	MASTER CONTROLLER (SPECIAL)
1	EACH	DRILL EXISTING HANDHOLE
972	FOOT	REMOVE ELECTRIC CABLE FROM CONDUIT
19	EACH	REMOVE EXISTING HANDHOLE
11834	FOOT	ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1C
7	EACH	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM - LEVEL 2
12016	FOOT	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F
125	FOOT	STEEL CASING 6"

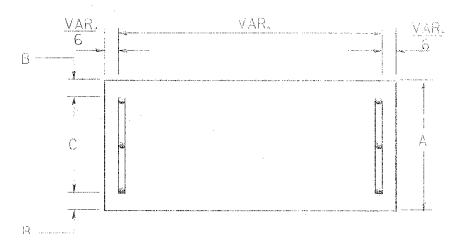
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

Rev. 6-8-11

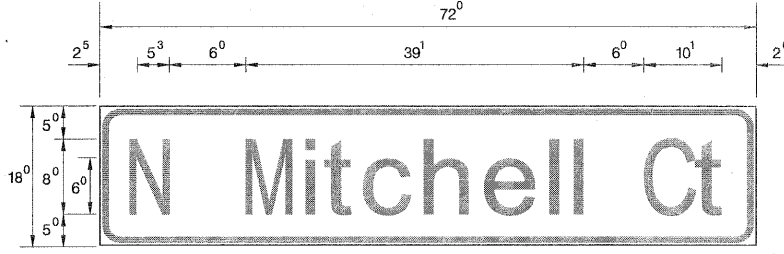


Sq. M. each  
 7.5 Sq. Ft. each  
 22 Required  
 Design Series D

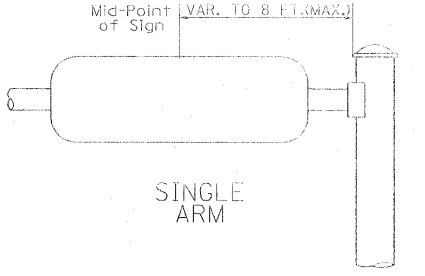
SUPPORTING CHANNELS



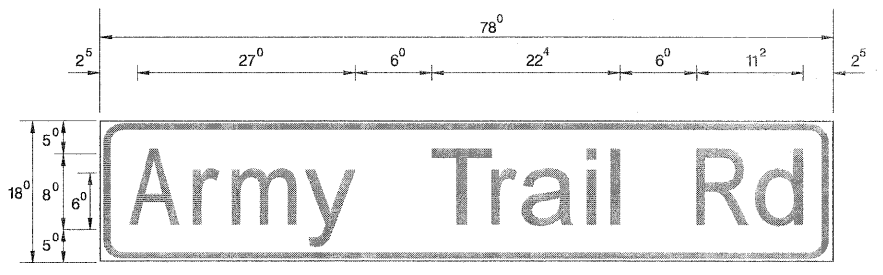
A	B	C
18"	2"	14"



Sq. M. each  
 9.0 Sq. Ft. each  
 2 Required  
 Design Series D

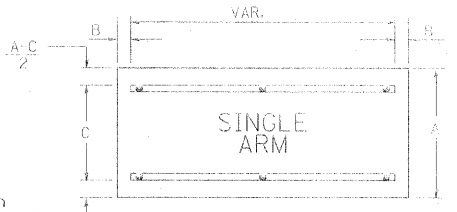


SINGLE ARM



Sq. M. each  
 9.75 Sq. Ft. each  
 2 Required  
 Design Series D

SUPPORTING CHANNELS



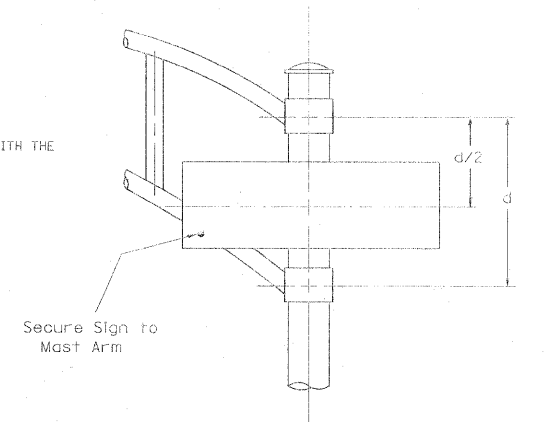
SINGLE ARM

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

NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS

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 3/8" 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  
 SELF TAPPING WITH NEOPRENE WASHER PART \*HPN034 (UNIVERSAL)  
 BRACKETS CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING  
 OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BRACKET OF THE ABOVE PRODUCT.



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

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

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

EXAMPLE, 2<sup>3</sup> DENOTES 3/8"

UPPER AND LOWER CASE LETTER WIDTHS

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

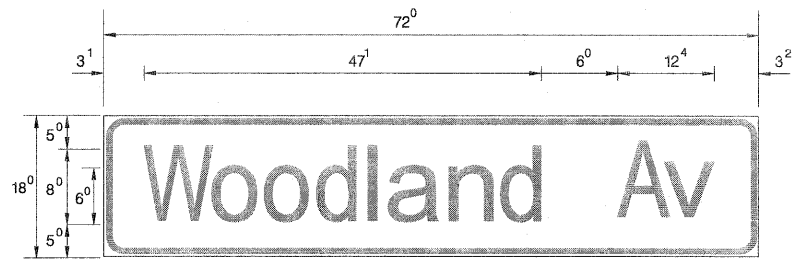
NUMBER	6 INCH SERIES		8 INCH SERIES	
	C	D	C	D
1	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	2 <sup>0</sup>
2	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
3	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
4	3 <sup>5</sup>	4 <sup>3</sup>	4 <sup>7</sup>	5 <sup>7</sup>
5	3 <sup>2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

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

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

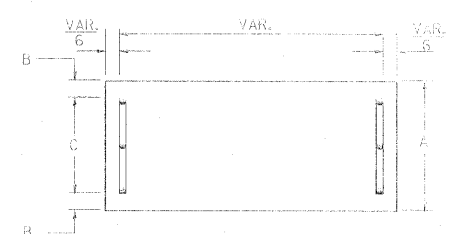
Number To Number  
 Spacing Chart 8 Inch Series "C & D"

FIRST NUMBER	SECOND NUMBER																			
	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
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

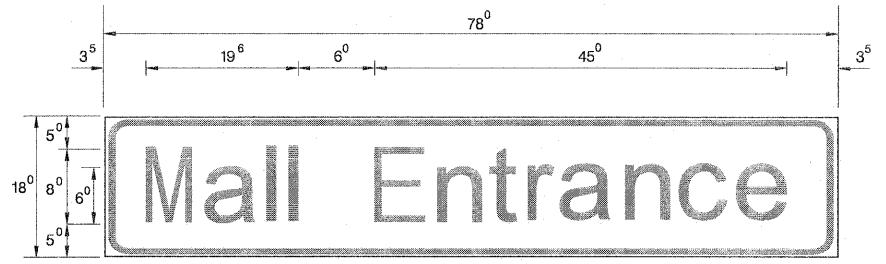


- Sq. M. each  
 9 Sq. Ft. each  
 2 Required  
 Design Series D

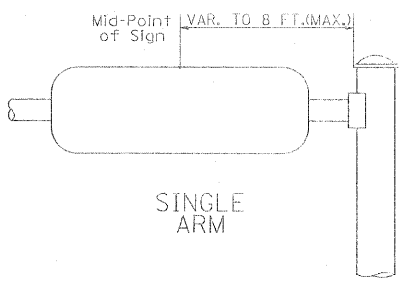
SUPPORTING CHANNELS



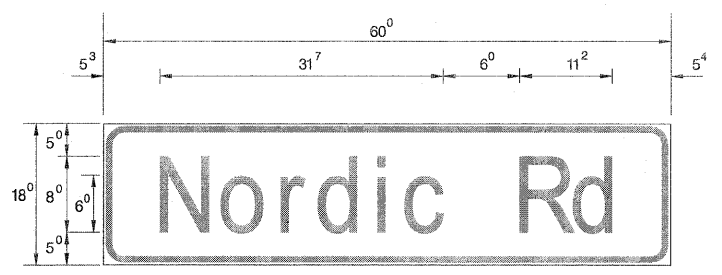
A	B	C
18"	2"	14"



- Sq. M. each  
 9.75 Sq. Ft. each  
 2 Required  
 Design Series D

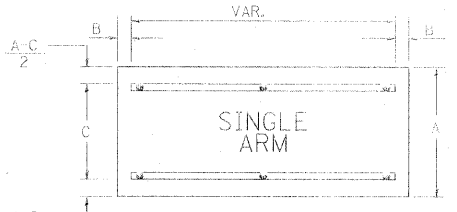


SINGLE ARM



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

SUPPORTING CHANNELS



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

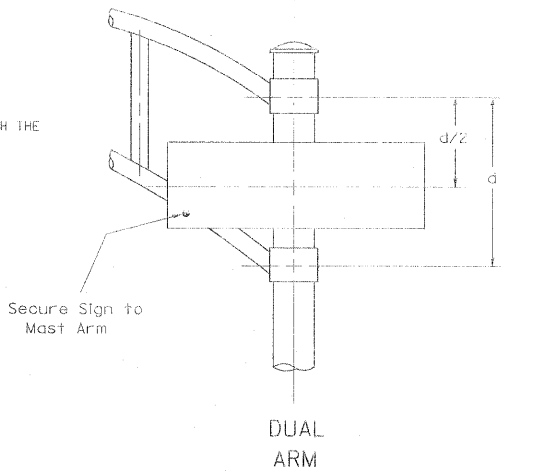
NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS

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.
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- 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. WOODBRIDGE, IL.

PARTS LISTING:  
 SIGN CHANNEL PART #HPN053 (MED. CHANNEL)  
 SIGN SCREWS 1/4" x 14 x 1" H.W.H. #3  
 SELF TAPPING WITH NEOPRENE WASHER  
 BRACKETS PART #HPN034 (UNIVERSAL)  
 CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING  
 OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BACKET OF THE ABOVE PRODUCT.



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<sup>(3)</sup> DENOTES 3/8"

SERIES	SECOND LETTER															
	a c c 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		
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	13	12	16	17	06	10	06	10	11	12	11	12	11	12	12	14
V	06	10	14	15	11	12	06	10	12	14	12	14	12	14	12	14
Y	05	06	14	15	06	10	05	06	05	07	05	06	06	10	11	12
Z	16	17	22	24	16	17	12	14	16	17	16	17	16	17	20	21

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

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

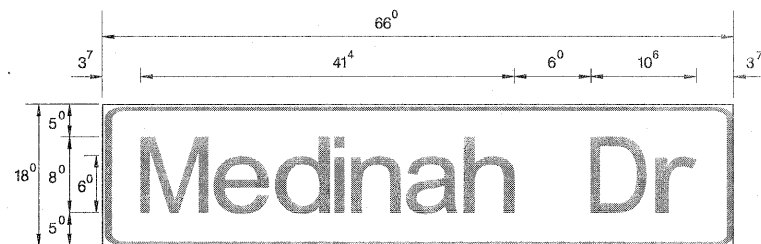
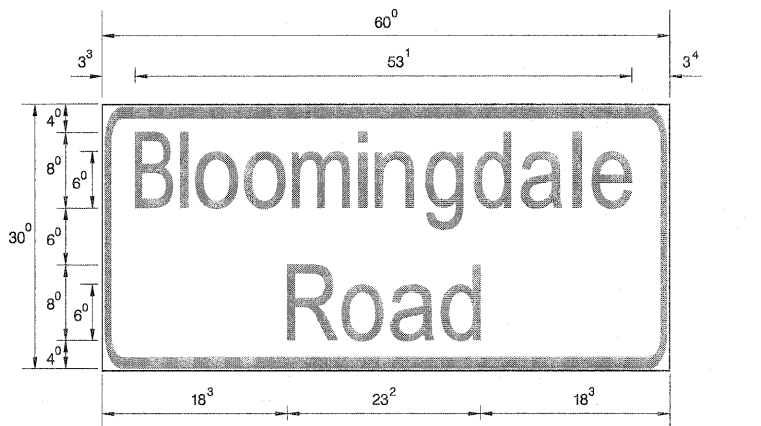
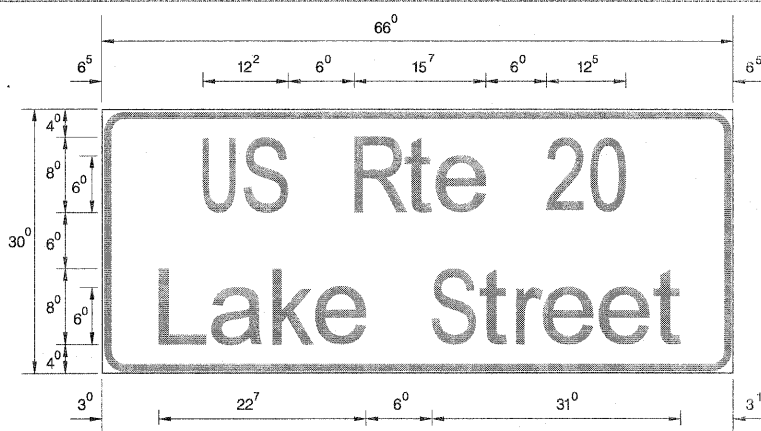
Number To Number  
 Spacing Chart 8 Inch Series "C & D"

SERIES	SECOND NUMBER																			
	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

UPPER AND LOWER CASE LETTER WIDTHS

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

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



NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS

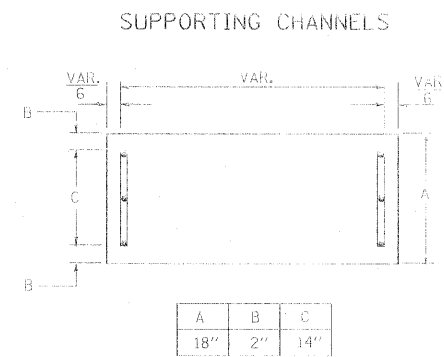
**GENERAL NOTES**

- 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:

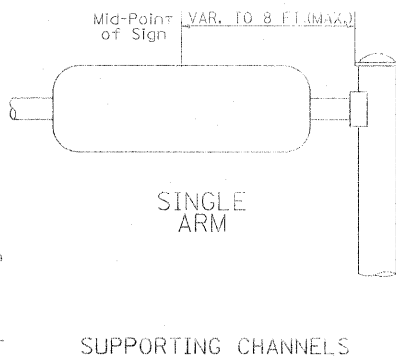
\* J.O. HERBERT CO. MIDLOTHIAN, VA. \* WESTERN REMAC INC. WOODRIDGE, IL.

**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.

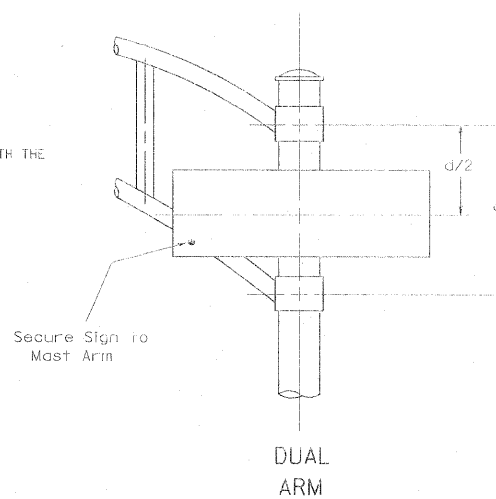
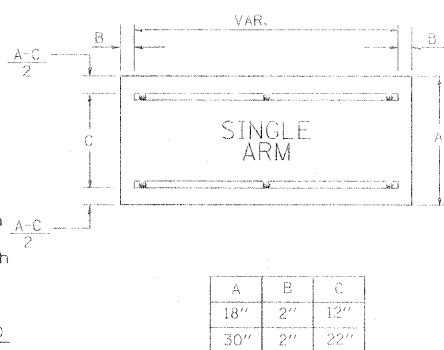
1 Sq. M. each  
 13.75 Sq. Ft. each  
 2 Required  
 Design Series D



1 Sq. M. each  
 12.5 Sq. Ft. each  
 2 Required  
 Design Series D



1 Sq. M. each  
 8.25 Sq. Ft. each  
 2 Required  
 Design Series D



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

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

EXAMPLE, 2<sup>3</sup> DENOTES 3/8

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

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

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

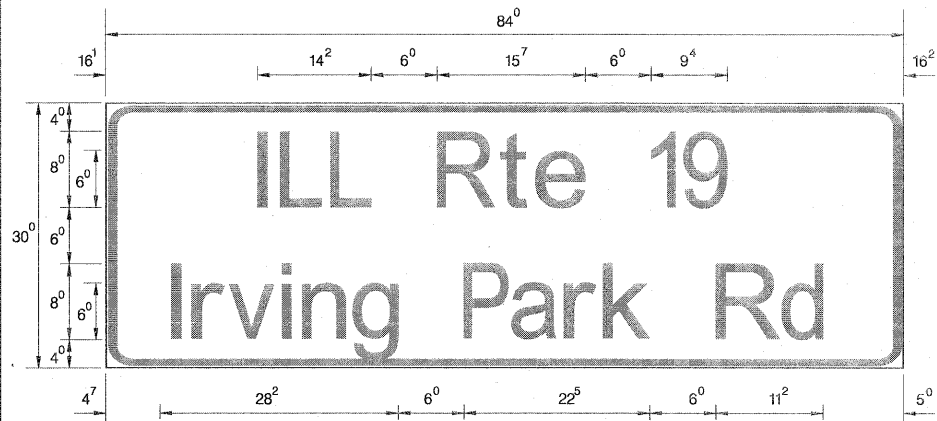
Number To Number  
 Spacing Chart 8 Inch Series "C & D"

SERIES	SECOND NUMBER																			
	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

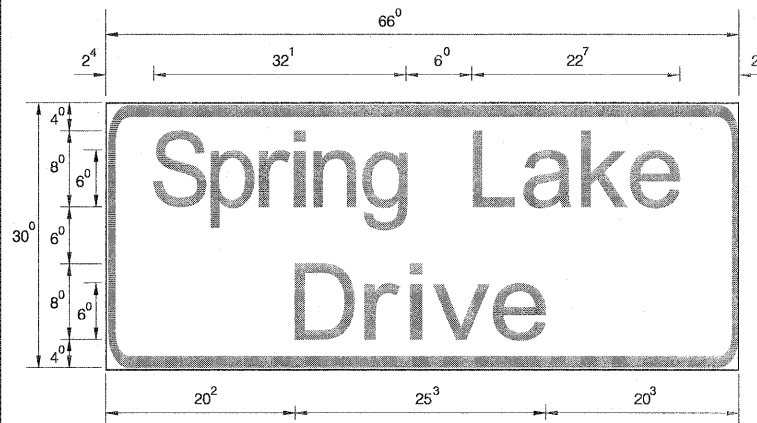
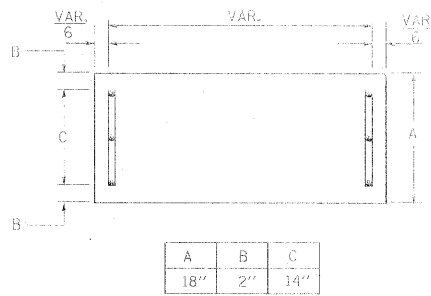
LETTERS	6 INCH UPPER CASE LETTERS				8 INCH UPPER CASE LETTERS				6 INCH LOWER CASE LETTERS			
	SERIES		SERIES		SERIES		SERIES		SERIES		SERIES	
	C	D	C	D	C	D	C	D	C	D	C	D
A	36	50	50	65	a	35	42					
B	32	40	43	53	b	35	42					
C	32	40	43	53	c	35	41					
D	32	40	43	53	d	35	42					
E	30	35	40	47	e	35	42					
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	20
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

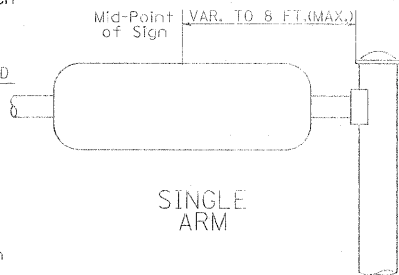
Rev. 6-8-11



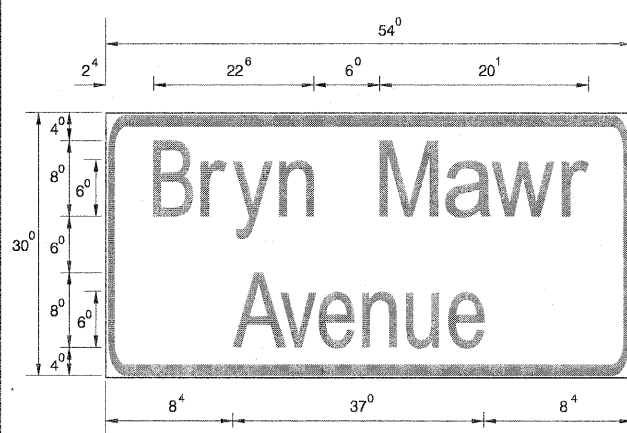
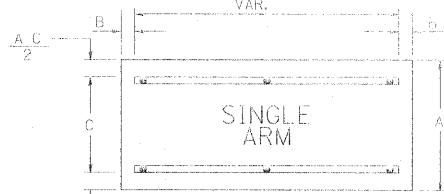
SUPPORTING CHANNELS



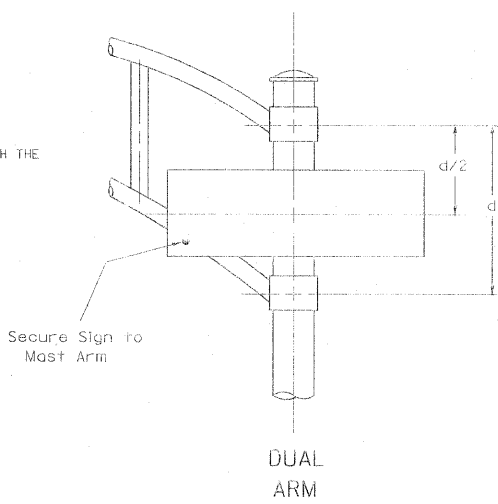
— Sq. M. each  
17.5 Sq. Ft. each  
2 Required  
Design Series D



SUPPORTING CHANNELS



— Sq. M. each  
11.25 Sq. Ft. each  
2 Required  
Design Series D



DUAL ARM  
SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM  
Should be used. See Note #5.

NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS

GENERAL NOTES

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\* 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  
SELF TAPPING WITH NEOPRENE WASHER  
BRACKETS PART #HPN034 (UNIVERSAL)  
CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING  
OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BACKET OF THE ABOVE PRODUCT.

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

EXAMPLE, 2<sup>3</sup> DENOTES 3/8"

SERIES	SECOND LETTER																			
	a c c 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	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>4</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>1</sup>	1 <sup>4</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>2</sup>	1 <sup>4</sup>				
B	1 <sup>4</sup>	1 <sup>5</sup>	2 <sup>0</sup>	2 <sup>1</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>6</sup>	1 <sup>7</sup>				
C E G	1 <sup>4</sup>	1 <sup>5</sup>	2 <sup>0</sup>	2 <sup>1</sup>	1 <sup>2</sup>	1 <sup>4</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>				
D O Q R	1 <sup>4</sup>	1 <sup>5</sup>	2 <sup>0</sup>	2 <sup>1</sup>	1 <sup>4</sup>	1 <sup>5</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>				
F	0 <sup>5</sup>	0 <sup>6</sup>	1 <sup>4</sup>	1 <sup>5</sup>	0 <sup>6</sup>	1 <sup>0</sup>	0 <sup>5</sup>	0 <sup>6</sup>	0 <sup>6</sup>	1 <sup>0</sup>	0 <sup>6</sup>	1 <sup>0</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>1</sup>	1 <sup>2</sup>				
H I M N	2 <sup>0</sup>	2 <sup>1</sup>	2 <sup>2</sup>	2 <sup>4</sup>	2 <sup>0</sup>	2 <sup>1</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>6</sup>	1 <sup>7</sup>	2 <sup>0</sup>	2 <sup>1</sup>	2 <sup>0</sup>	2 <sup>1</sup>				
J U	2 <sup>0</sup>	2 <sup>1</sup>	2 <sup>0</sup>	2 <sup>1</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>6</sup>	1 <sup>7</sup>	2 <sup>0</sup>	2 <sup>1</sup>				
K L	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>1</sup>	1 <sup>2</sup>	0 <sup>5</sup>	0 <sup>6</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>2</sup>	1 <sup>4</sup>				
P	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>4</sup>	0 <sup>5</sup>	0 <sup>6</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>				
S	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>2</sup>	1 <sup>4</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>				
T	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>6</sup>	1 <sup>7</sup>	0 <sup>6</sup>	1 <sup>0</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>2</sup>	1 <sup>4</sup>				
V	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>1</sup>	1 <sup>2</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>				
Y	0 <sup>5</sup>	0 <sup>6</sup>	1 <sup>4</sup>	1 <sup>5</sup>	0 <sup>6</sup>	1 <sup>0</sup>	0 <sup>5</sup>	0 <sup>6</sup>	0 <sup>5</sup>	0 <sup>7</sup>	0 <sup>5</sup>	0 <sup>6</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>1</sup>	1 <sup>2</sup>				
Z	1 <sup>6</sup>	1 <sup>7</sup>	2 <sup>2</sup>	2 <sup>4</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>6</sup>	1 <sup>7</sup>	2 <sup>0</sup>	2 <sup>1</sup>				

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

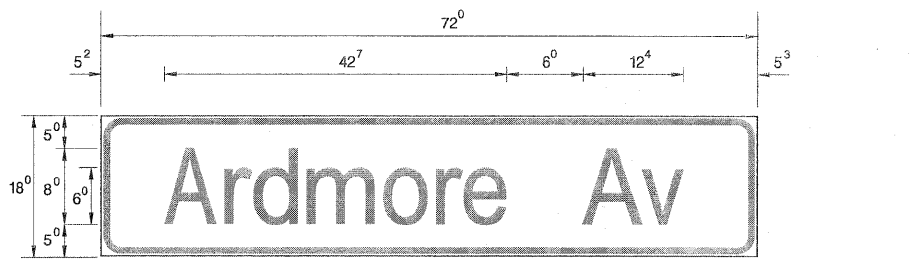
SERIES	SECOND LETTER																			
	a c c e				b h i k l				f w j				s t v y				x z			
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D				
a d h g i j	1 <sup>6</sup>	1 <sup>7</sup>	2 <sup>2</sup>	2 <sup>4</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>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

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

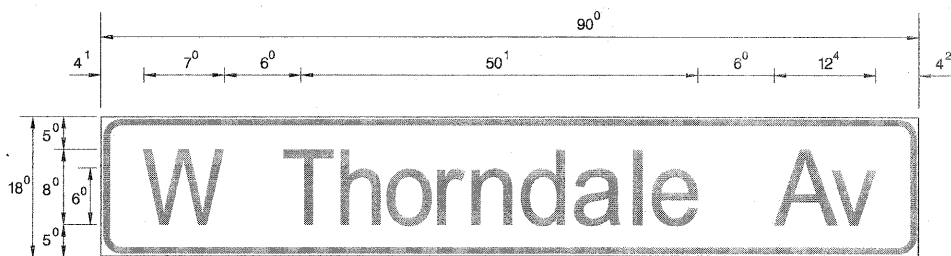
SERIES	SECOND NUMBER																			
	0		1		2		3		4		5		6		7		8		9	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
0 9	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>6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

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

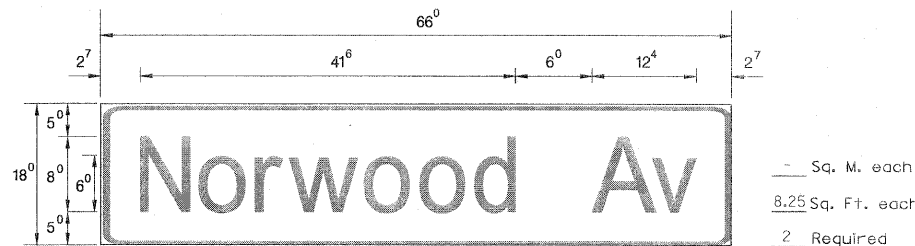
NUMBER	6 INCH SERIES		8 INCH SERIES	
	C	D	C	D
1	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	2 <sup>0</sup>
2	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
3	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
4	3 <sup>5</sup>	4 <sup>3</sup>	4 <sup>7</sup>	5 <sup>7</sup>
5	3 <sup>2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



— Sq. M. each  
 9 Sq. Ft. each  
 2 Required  
 Design Series D

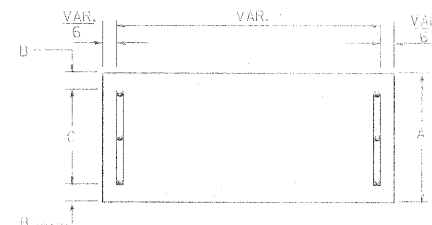


— Sq. M. each  
 11.25 Sq. Ft. each  
 2 Required  
 Design Series D

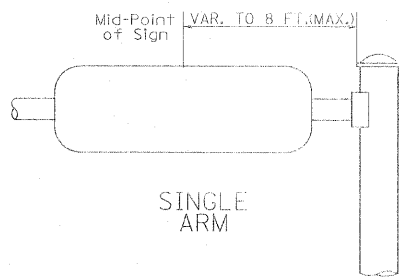


— Sq. M. each  
 8.25 Sq. Ft. each  
 2 Required  
 Design Series D

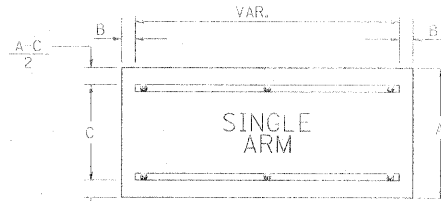
SUPPORTING CHANNELS



A	B	C
18"	2"	14"



SUPPORTING CHANNELS



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

NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS

GENERAL NOTES

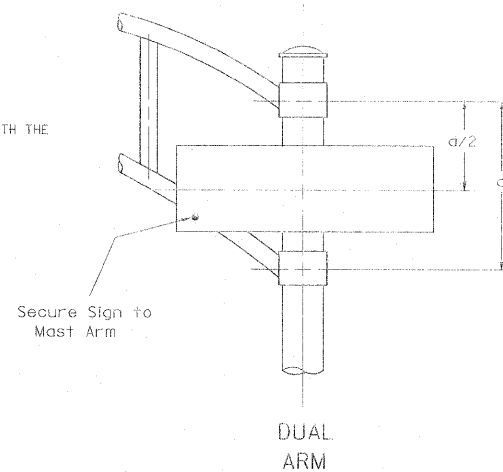
- WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE 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.



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<sup>3</sup> DENOTES 3" / 8"

SERIES	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 C	14	15	20	21	12	14	06	10	12	14	12	14	14	15	14	15
D O O R	14	15	20	21	14	15	06	10	12	14	12	14	14	15	14	15
F	05	06	14	15	06	10	05	06	06	10	06	10	06	10	11	12
H I M N	20	21	22	24	20	21	14	15	16	17	16	17	20	21	20	21
J U	20	21	20	21	16	17	14	15	16	17	16	17	16	17	20	21
K L	11	12	16	17	11	12	05	06	11	12	11	12	11	12	12	14
P	12	14	14	15	12	14	05	06	11	12	11	12	12	14	12	14
S	12	14	16	17	12	14	06	10	12	14	12	14	12	14	12	14
T	11	12	16	17	06	10	06	10	11	12	11	12	11	12	12	14
V	06	10	14	15	11	12	06	10	12	14	12	14	12	14	12	14
Y	05	06	14	15	06	10	05	06	05	07	05	06	06	10	11	12
Z	16	17	22	24	16	17	12	14	16	17	16	17	16	17	20	21

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

SERIES	SECOND LETTER															
	a c d e		b h i k l		f w		j		s t		v y		x		z	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
g d h g i j	16	17	22	24	16	17	12	14	14	15	14	15	16	17	16	17
l m n q u	12	14	16	17	11	12	05	06	11	12	11	12	12	14	12	14
b f k o p s	12	14	16	17	12	14	06	10	12	14	12	14	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 6 Inch Series "C & D"

SERIES	SECOND NUMBER																			
	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	11	12	11	12	14	15	14	15	11	12	14	15	14	15	14	15
6	16	17	14	15	14	15	12	14	15	16	14	15	14	15	11	12	14	15	14	15
7	12	14	12	14	14	15	12	14	15	16	12	14	14	15	11	12	14	15	12	14
8	16	17	16	17	14	15	12	14	15	16	14	15	16	17	12	14	16	17	14	15

LETTERS	UPPER AND LOWER CASE LETTER WIDTHS							
	6 INCH UPPER CASE LETTERS		8 INCH UPPER CASE LETTERS		LETTERS	6 INCH LOWER CASE LETTERS		
	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	20
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