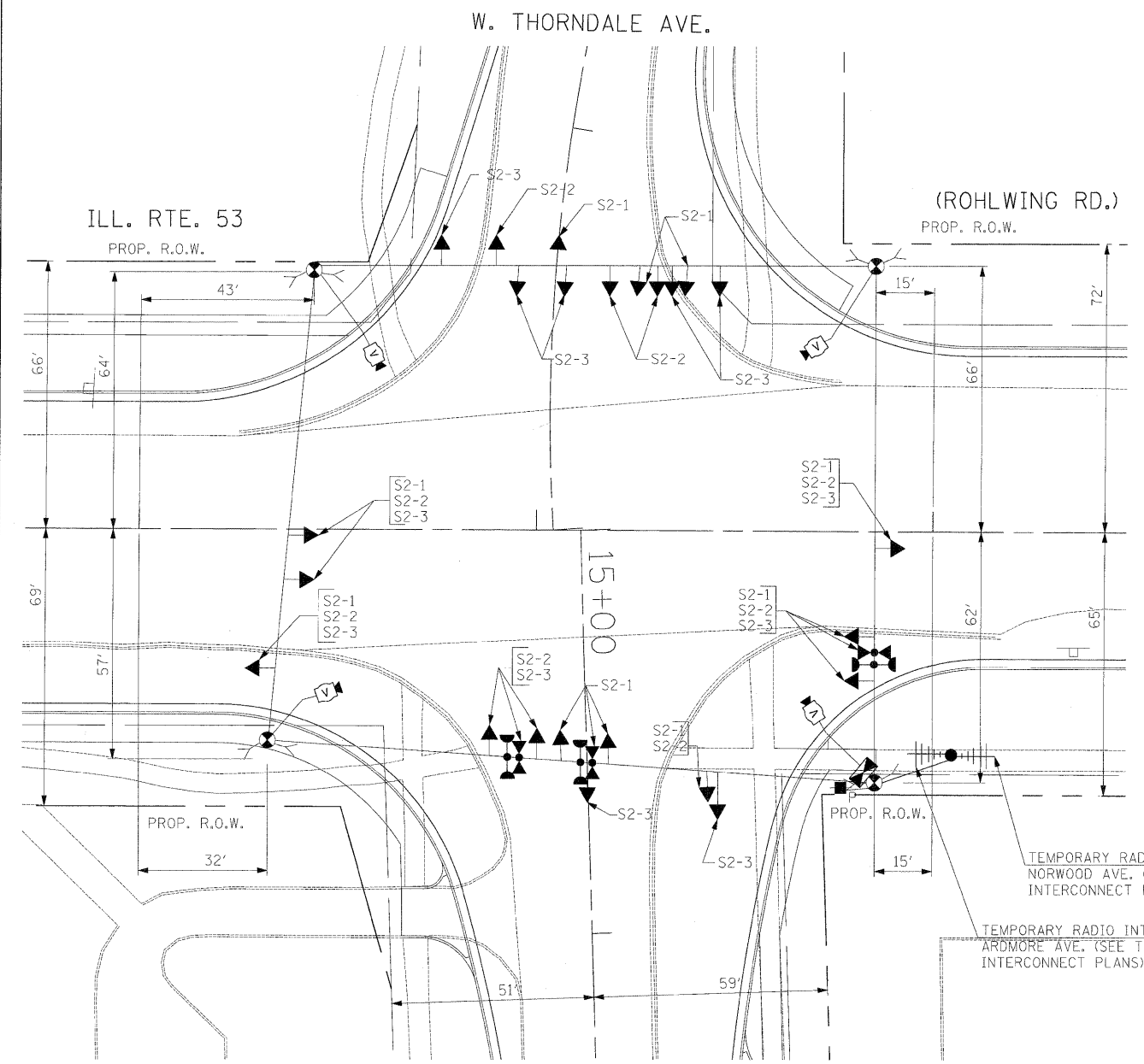


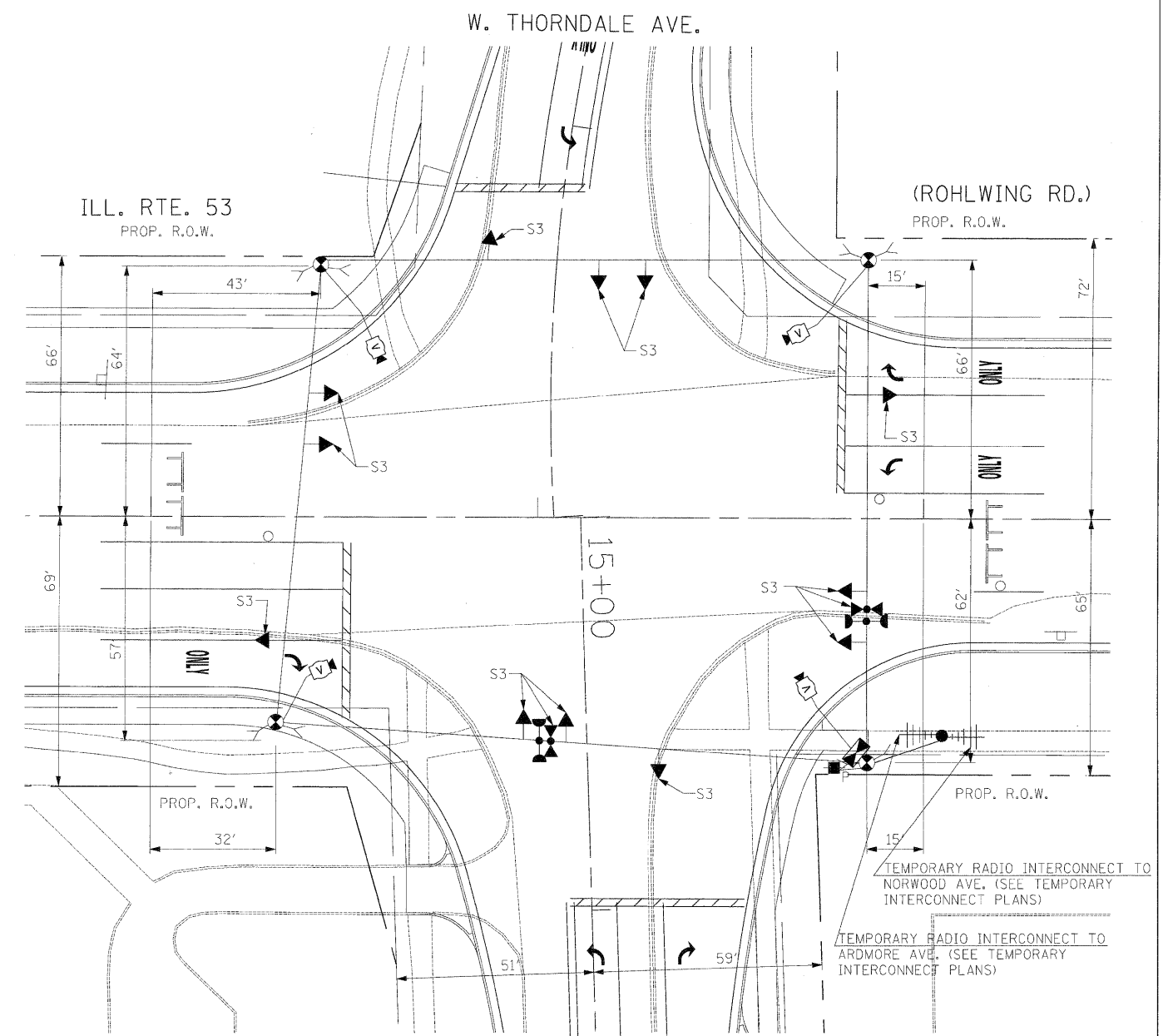
FILE NAME = #FILEL#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN</b> <b>ILLINOIS ROUTE 53 (ROHLWING RD.) AT W. THORNDALE AVE. PRE STAGE</b> <b>AND STAGE 1 (SHEET 2 OF 4).</b>				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = #SCALE#	DRAWN - MAA, EA	REVISED -						2578	532B	DuPage	781	501
	PLOT DATE = #DATE#	CHECKED - PKG, EA	REVISED -		SCALE: 1"=20'    SHEET NO. OF SHEETS    STA. TO STA.				FED. ROAD DIST. NO. - [ILLINOIS] FED. AID PROJECT				
	DATE - 5/10/2010	REVISED -	CONTRACT NO. 60477										



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.



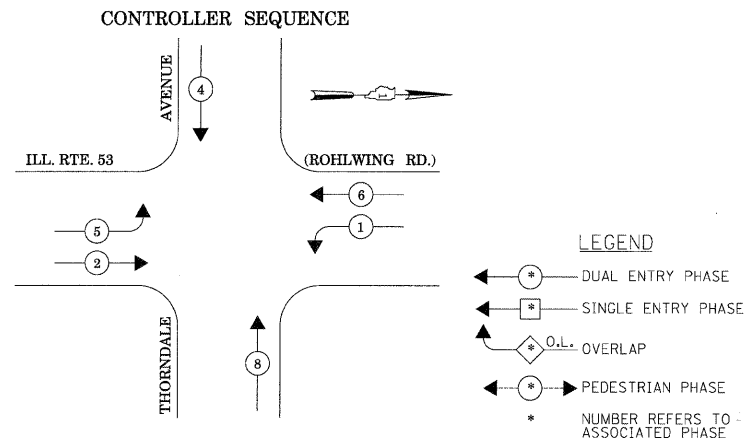
SIGNAL HEAD PLACEMENTS FOR STAGES: S2-1, S2-2, AND S2-3.



SIGNAL HEAD PLACEMENTS FOR STAGE 3

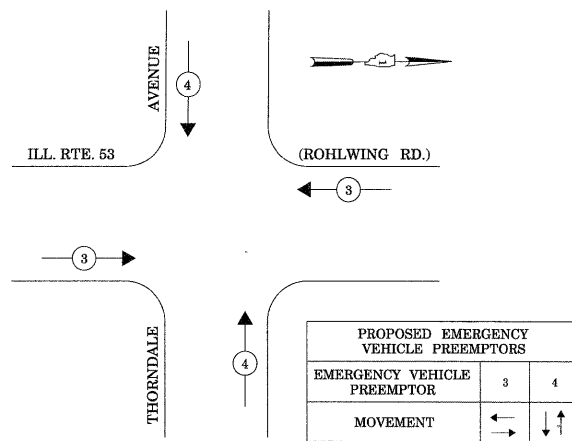
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

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. STAGE 2 AND STAGE 3 (SHEET 3 OF 4).</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 502
	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 - 5/10/2010	REVISED -									



**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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE		OPERATION	
		INCAND.	LED		
SIGNAL (RED)	15	135	17	0.50	127.5
(YELLOW)	15	135	25	0.25	93.75
(GREEN)	15	135	15	0.25	56.25
ARROW	8	135	12	1.00	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 = 537.1
ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, ILLINOIS 60196-1096					
ENERGY SUPPLY CONTACT: CURTIS TOPPS PHONE: (630) 691-4356 COMPANY: COMMONWEALTH EDISON					

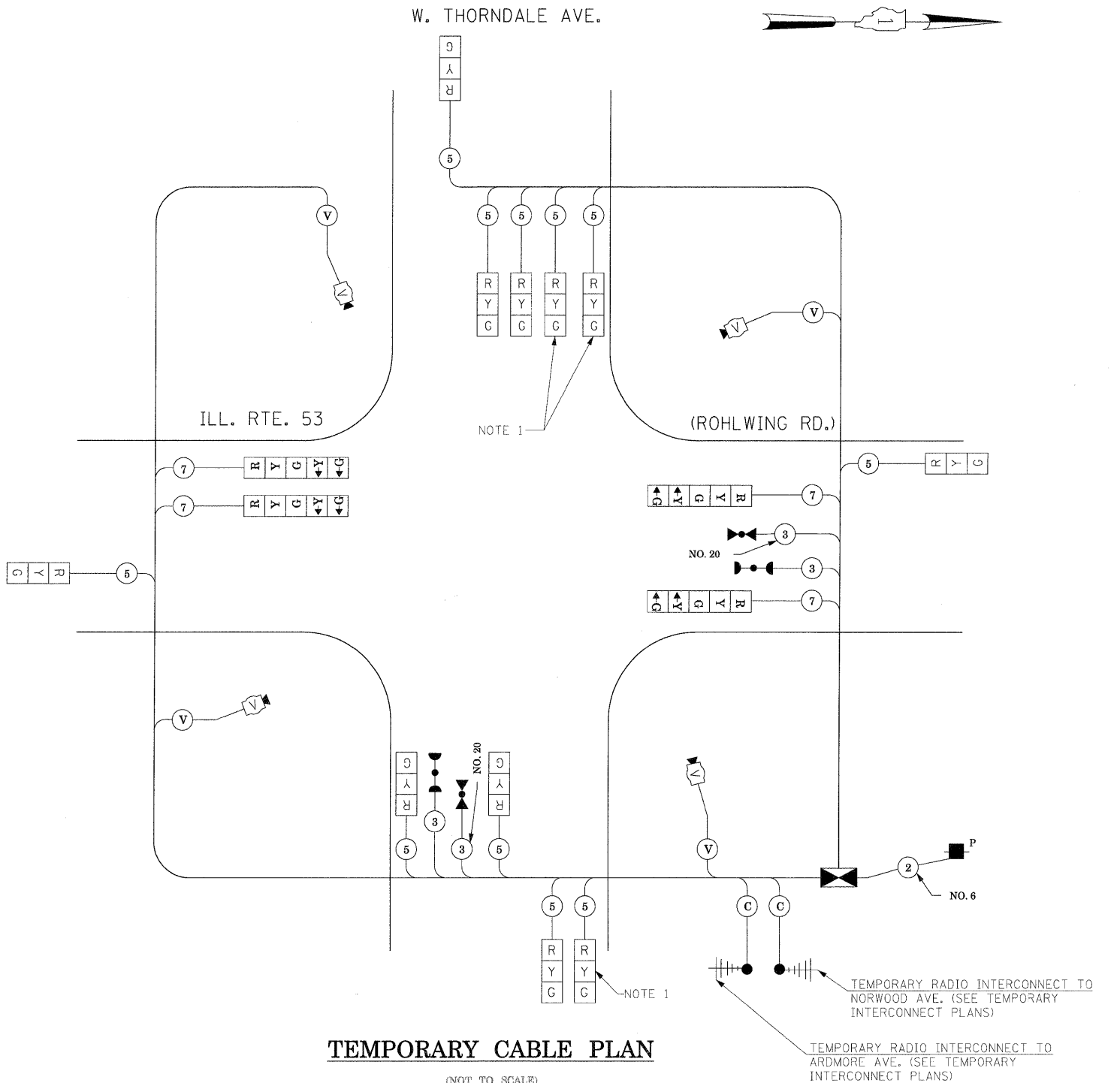
NOTE 1: THE 3-SECTION SIGNAL HEADS WITH CIRCULAR RED, YELLOW, AND GREEN INDICATIONS SHOWN WITH NOTE 1 FOR THE WESTBOUND DIRECTION OF TRAFFIC ARE NEEDED ONLY DURING STAGE 2 - SUBSTAGE 3 CONSTRUCTION ONLY AND SHALL NOT BE USED IN ANY OTHER CONSTRUCTION STAGES.

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**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.

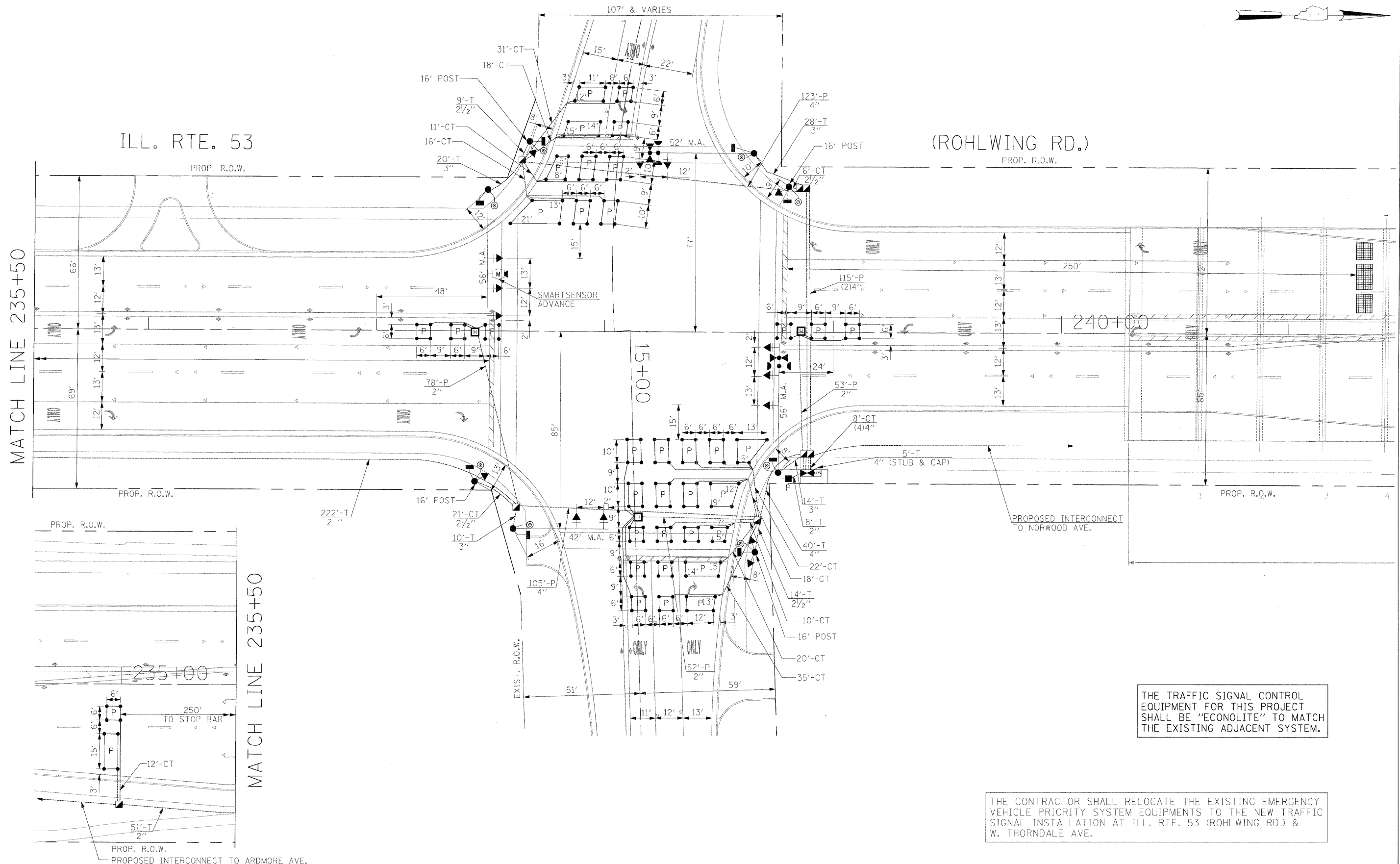
TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM,  
 TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE  
 ILLINOIS ROUTE 53 (ROHLWING RD.) AT W. THORNDALE AVE. PRE-STAGE,  
 STAGE 1, STAGE 2, AND STAGE 3 (SHEET 4 OF 4).

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2578	532B	DuPage	781	503
CONTRACT NO. 60477				

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

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

W. THORNDALE AVE.



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 = \$FILEL\$	USER NAME = \$USER\$	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED TRAFFIC SIGNAL INSTALLATION PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT W. THORNDALE AVE.</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = \$SCALE\$	DRAWN - MAA, EA	REVISED -					2578	532B	DuPage	781	504
PLOT DATE = \$DATE\$	DATE - 5/10/2010	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					

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
18	SQ FT	SIGN PANEL - TYPE 1
21	SQ FT	SIGN PANEL - TYPE 2
281	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
50	FOOT	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL
70	FOOT	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL
77	FOOT	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL
163	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
427	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	TRANSCIEVER-FIBER OPTIC
1546	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
1965	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
1172	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
2176	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
1729	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
30	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
3	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
8	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-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
8	EACH	REMOVE EXISTING HANDHOLE
9	EACH	REMOVE EXISTING CONCRETE FOUNDATION
1719	FOOT	PREFORMED DETECTOR LOOP
1	EACH	TEMPORARY TRAFFIC SIGNAL TIMING
1	EACH	SERVIC INSTALLATION - POLE MOUNTED
1	EACH	UNINTERRUPTIBLE POWER SUPPLY
715	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)

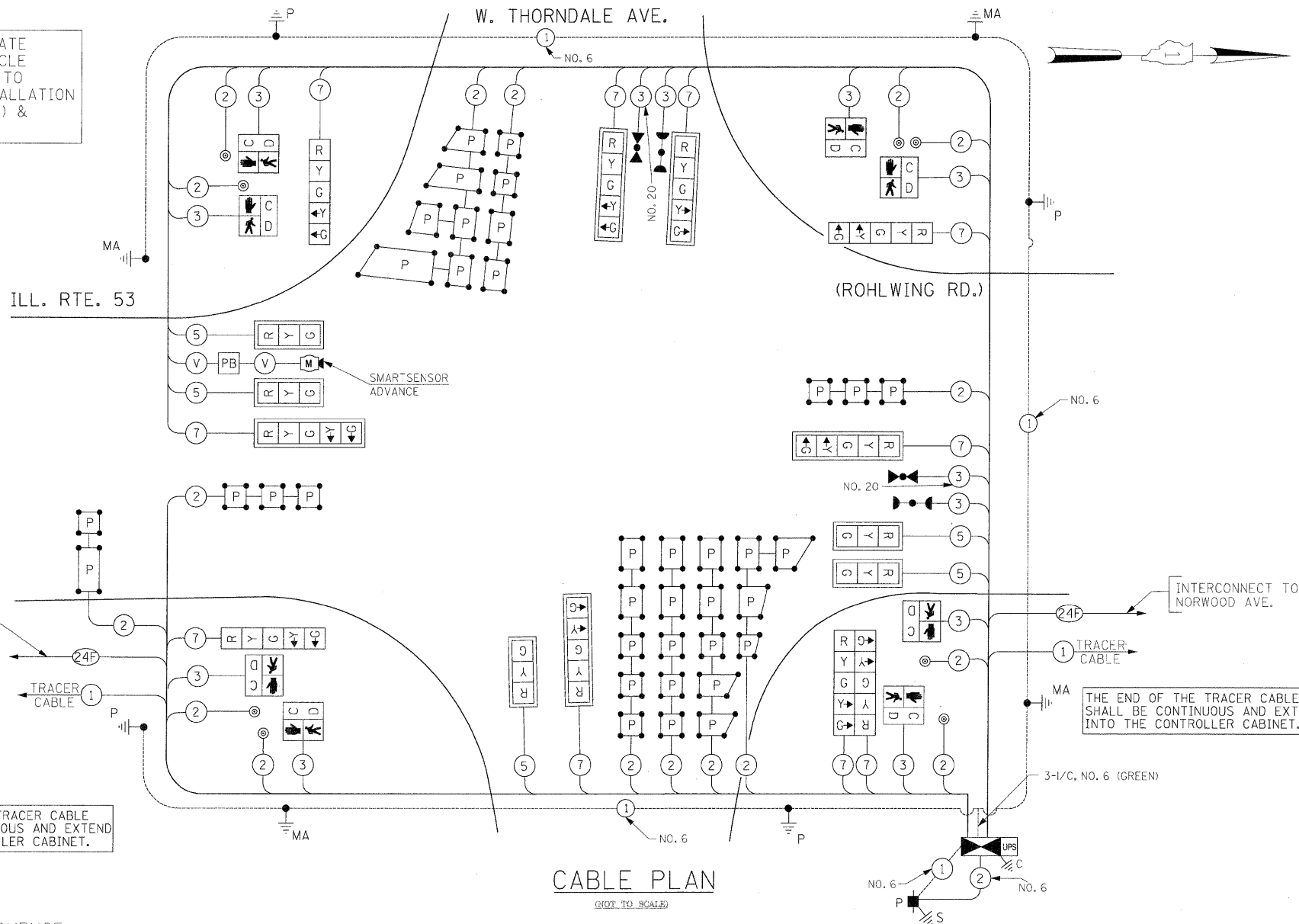
\* 100% COST TO VILLAGE OF ITASCA

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS						TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE		%OPERATION		
		INCAND.	LED			
SIGNAL (RED)	15	135	17	0.50		127.5
(YELLOW)	15	135	25	0.25		93.75
(GREEN)	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

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 -
		CHECKED - PKG, EA	REVISED -
		DATE - 5/10/2010	REVISED -

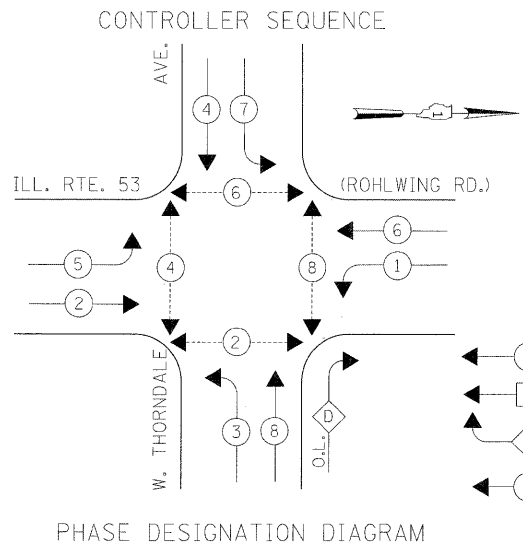
THE CONTRACTOR SHALL RELOCATE THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM EQUIPMENTS TO THE NEW TRAFFIC SIGNAL INSTALLATION AT ILL. RTE. 53 (ROHLWING RD.) & W. THORNDALE AVE.



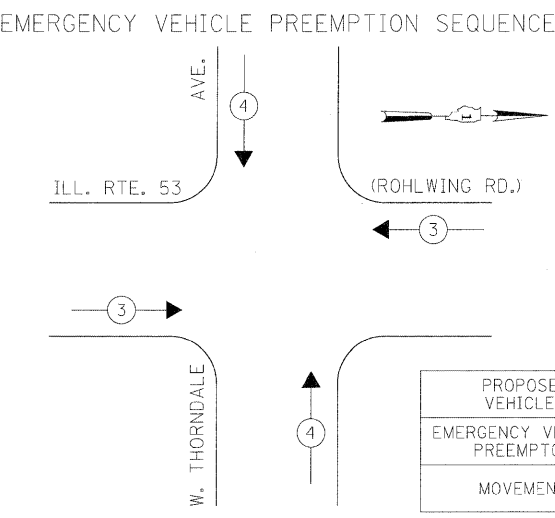
THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

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.



OVERLAP LETTER PERMISSIVE PHASE PROTECTED PHASE  
D = 8 + 1



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

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
CONTRACT NO. 60477				

NOTES FOR TEMPORARY TRAFFIC SIGNALS

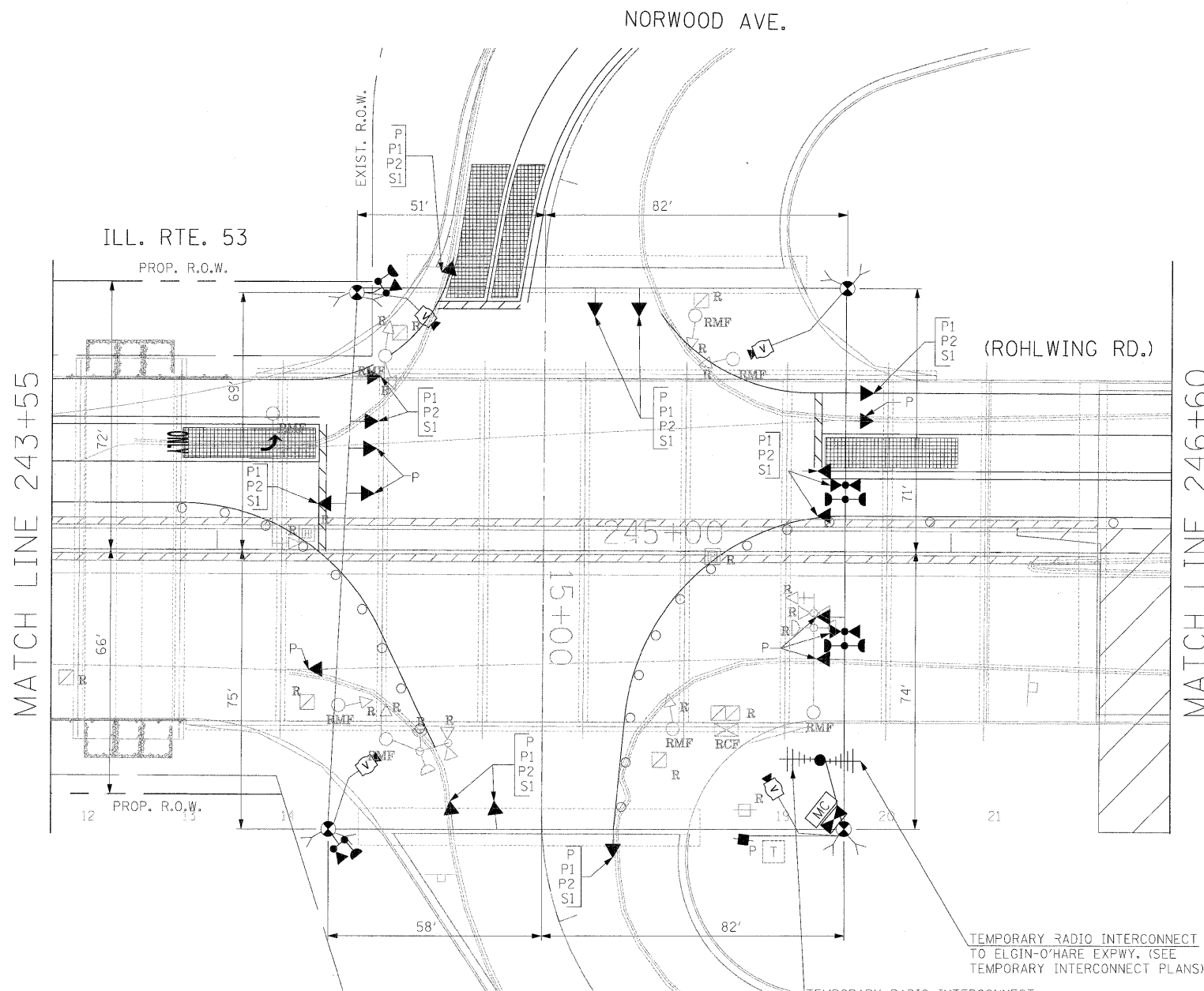
1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS.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

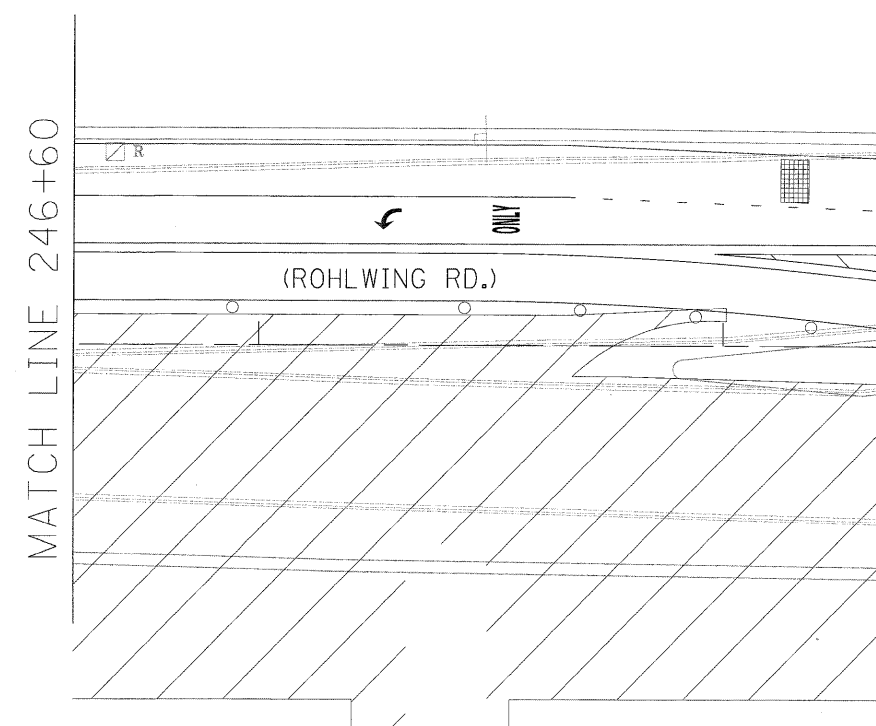
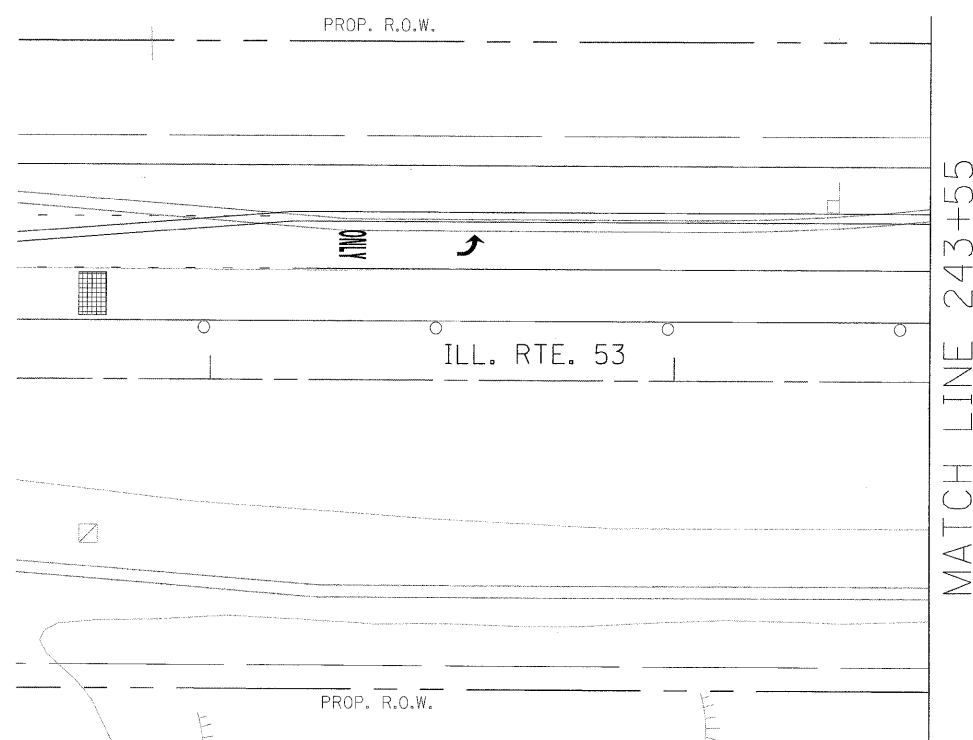
THE CONTRACTOR SHALL RELOCATE THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM EQUIPMENTS TO THE NEW TRAFFIC SIGNAL INSTALLATION AT ILL. RTE. 53 (ROHLWING RD.) & NORWOOD AVE. ONE OF THE EXISTING LIGHT DETECTORS WHICH IS ALREADY SEPARATED SHALL BE DIVIDED, INCLUDING THE CONFIRMATION BEACON, FOR MOUNTING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

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 -			2578	532B	DuPage	781	506	
		CHECKED - PKG, EA	REVISED -			CONTRACT NO. 60477					
		DATE - 5/10/2010	REVISED -								
				SCALE: 1"=20'		SHEET NO. OF SHEETS STA. TO STA.		FED. ROAD DIST. NO. - [ILLINOIS] FED. AID PROJECT			



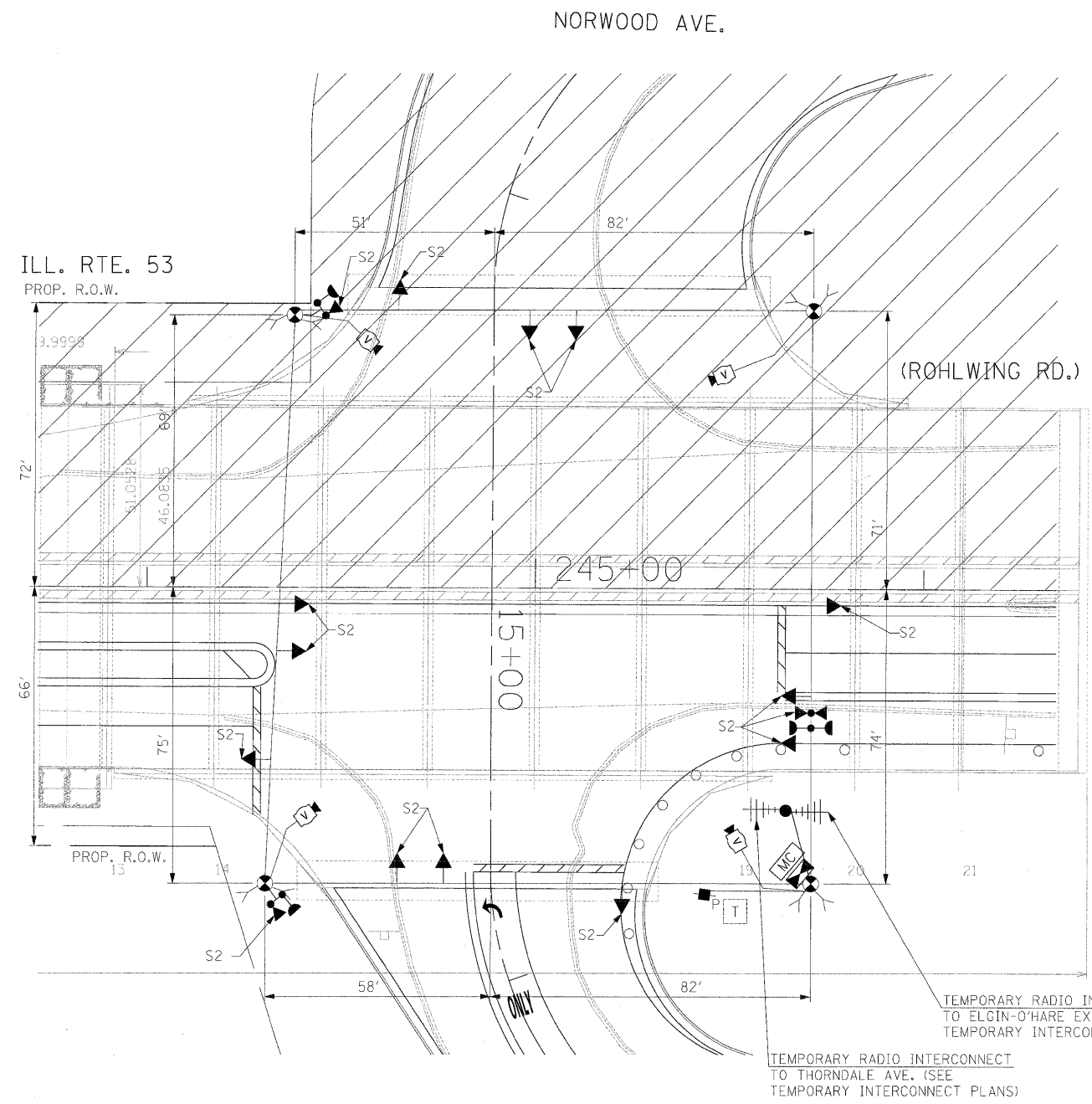
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

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 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	
	PLOT SCALE = #SCALE#	DRAWN - MAA, EA	REVISED -			SCALE: 1"=20'		FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT		CONTRACT NO. 60477	
	PLOT DATE = #DATE#	CHECKED - PKG, EA	REVISED -			SHEET NO. OF SHEETS STA. TO STA.					
		DATE - 5/10/2010	REVISED -								

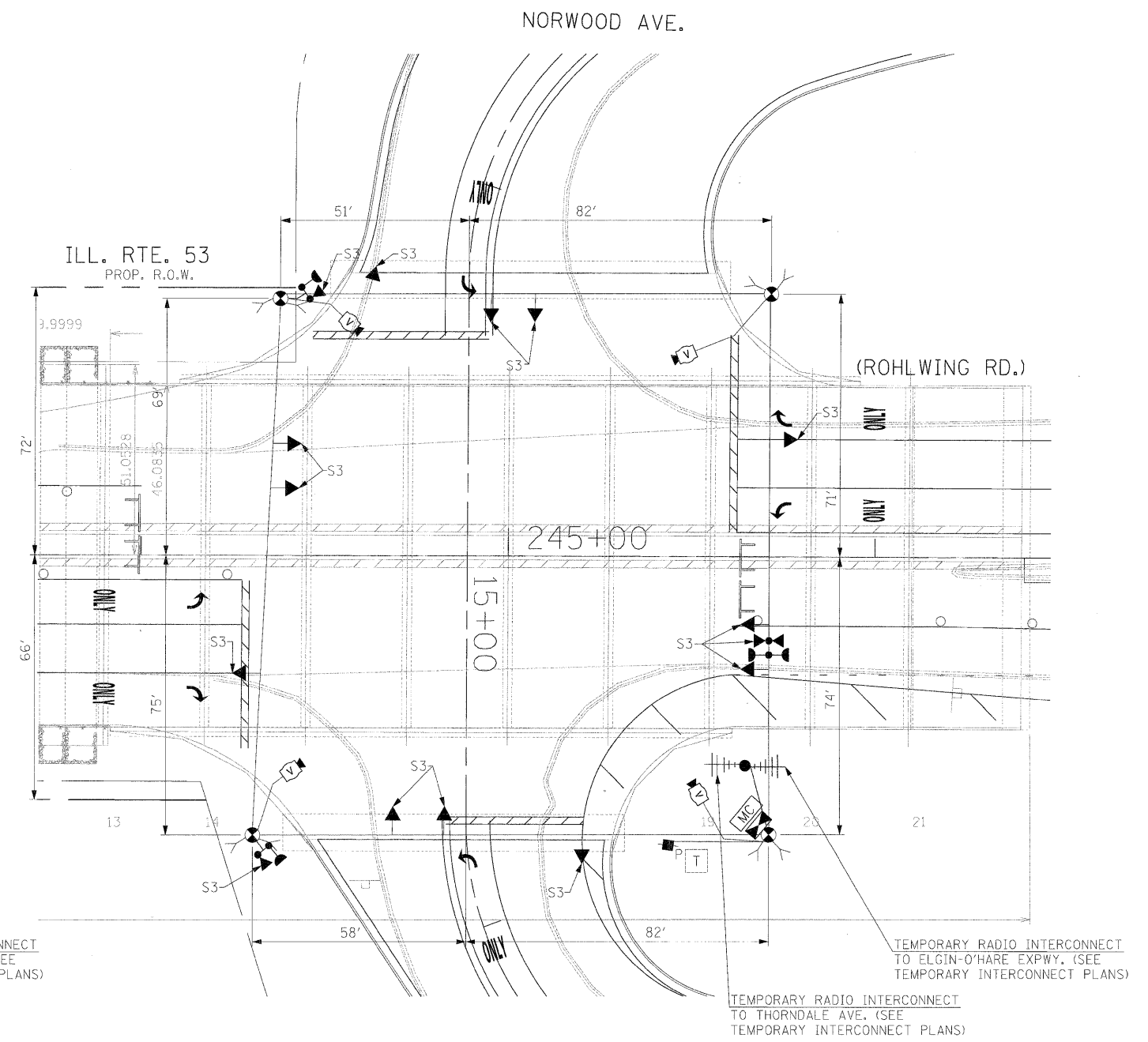


NOTE 1: THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR CONSTRUCTION STAGE 1 - SUBSTAGE 1 AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.

NOTE 2: THE SIGNAL HEAD PLACEMENT FOR 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.



SIGNAL HEAD PLACEMENTS FOR STAGE S2

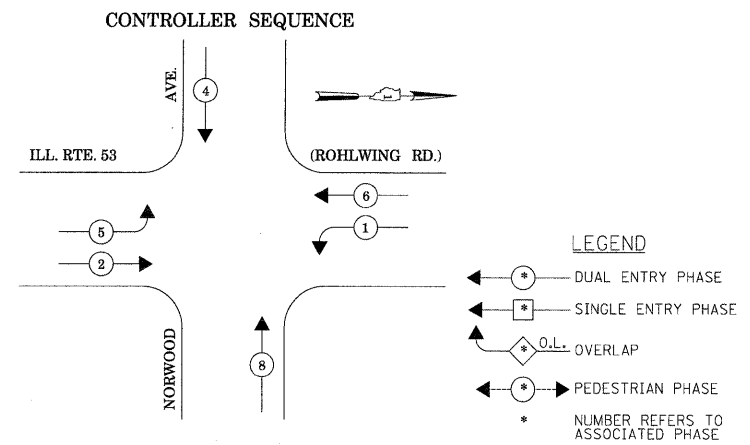


SIGNAL HEAD PLACEMENTS FOR STAGE S3

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

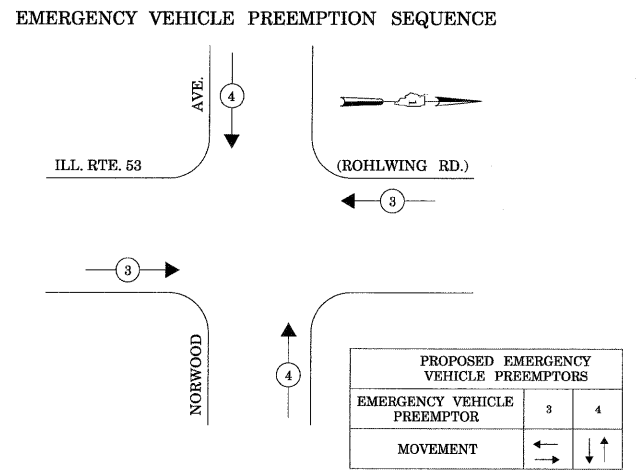
FILE NAME - #FILEL#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN ILLINOIS ROUTE 53 (ROHLWING RD.) AT NORWOOD AVE. STAGE 2 AND STAGE 3 (SHEET 3 OF 4).</b>	F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 508
PLOT SCALE = #SCALE#	CHECKED - PKG, EA	REVISIED -	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 - 5/10/2010	REVISIED -								



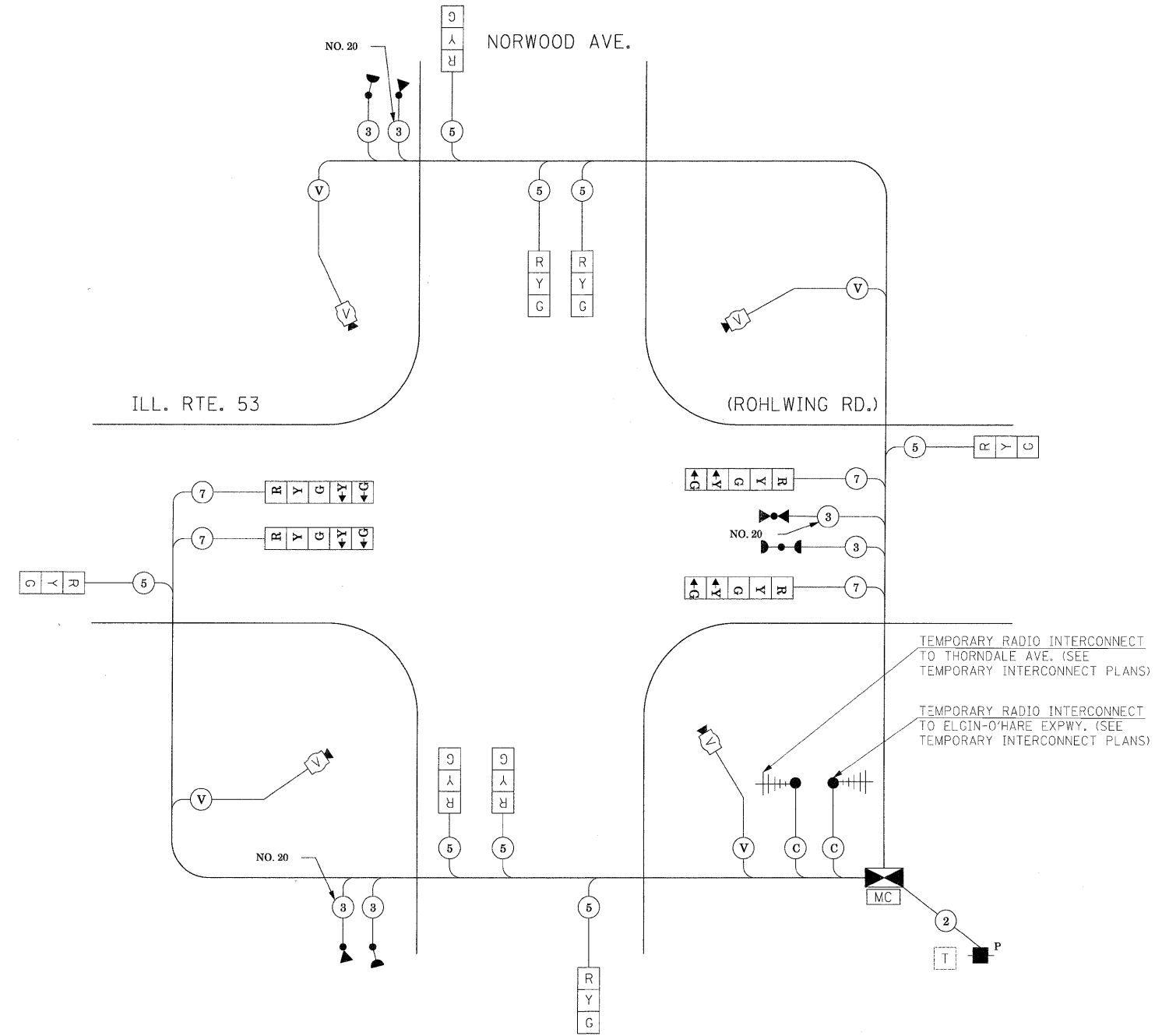


**TEMPORARY PHASE DESIGNATION DIAGRAM**

STAGES: PRE-STAGE, P1, P2, S1, S2, S3,  
AND AFTER PROPOSED GEOMETRICS ARE BUILT



STAGES: PRE-STAGE, P1, P2, S1, S2, S3,  
AND AFTER PROPOSED GEOMETRICS ARE BUILT



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

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".

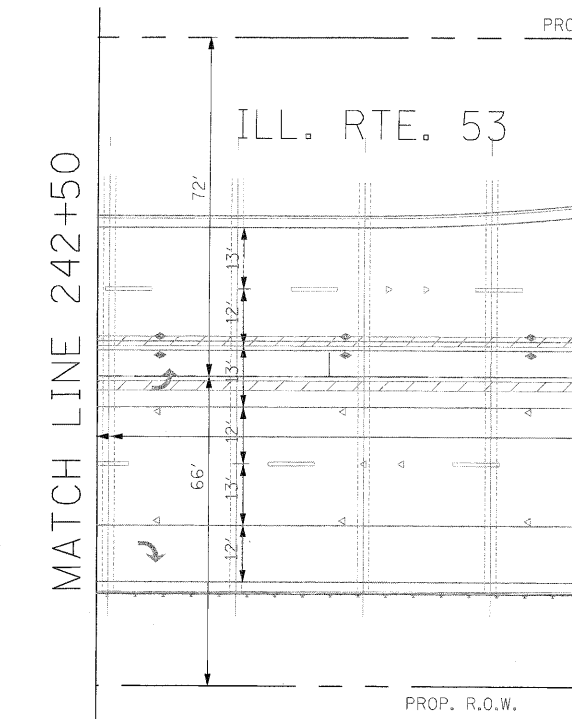
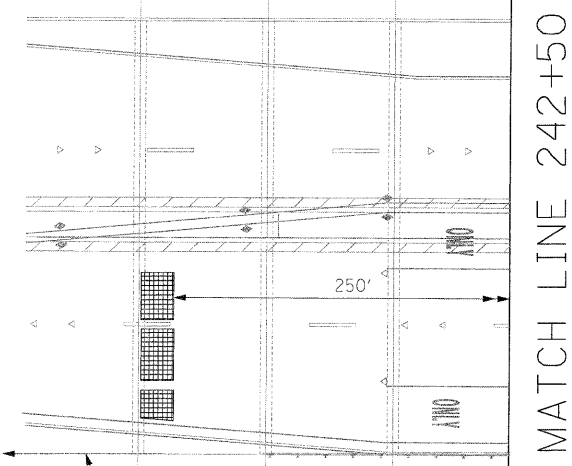
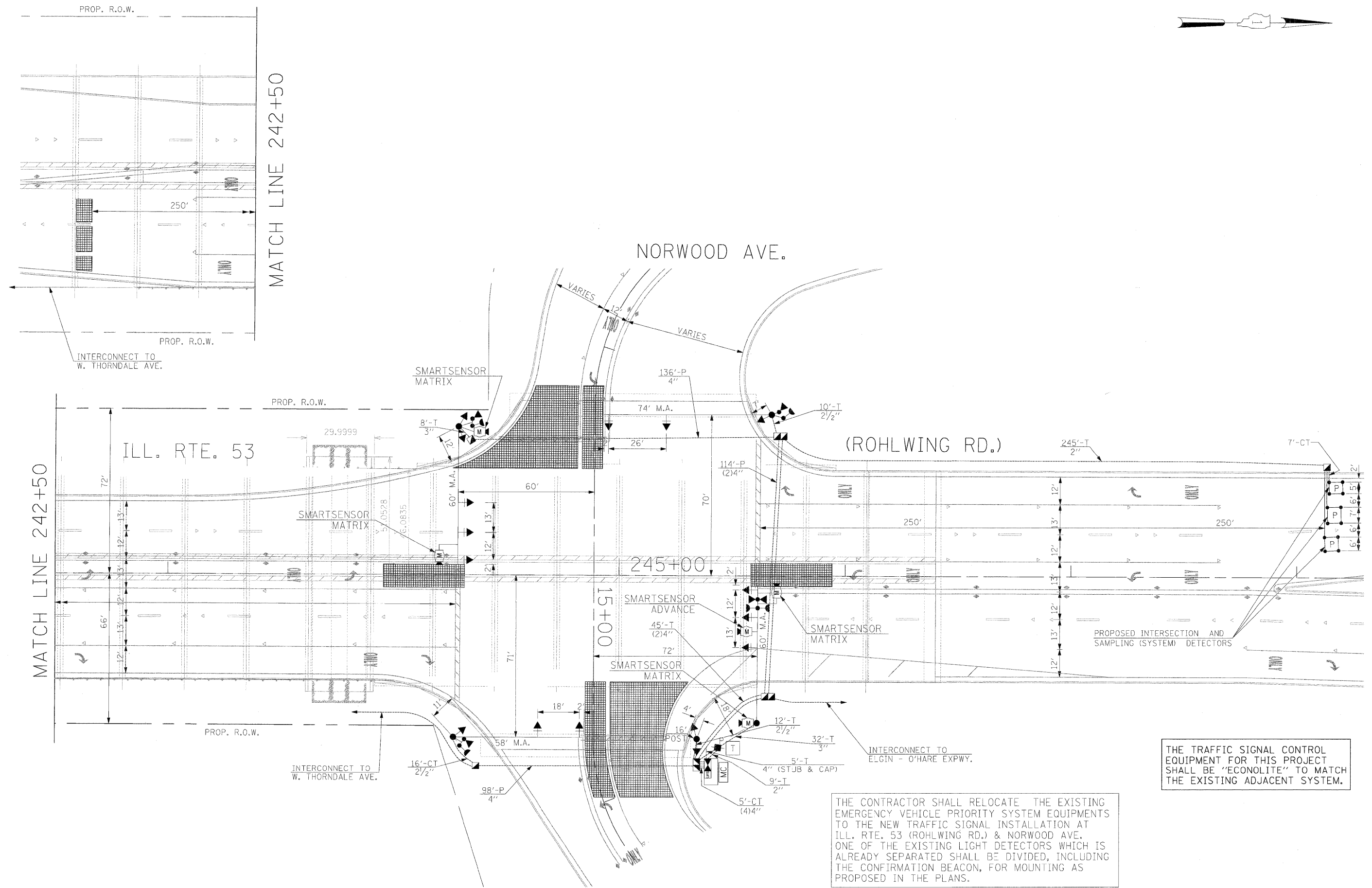
NOTE 2: THE TELEPHONE SERVICE MUST BE MAINTAINED AT THIS TEMPORARY TRAFFIC SIGNAL INSTALLATION. THIS ITEM OF WORK SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCIDENTAL TO THE PAY ITEM "TEMPORARY TRAFFIC SIGNAL INSTALLATION".

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

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

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 -	SCALE: NONE	SHEET NO. OF SHEETS STA. TO STA.	F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 509
#FILEL\$	PLOT SCALE = *SCALE*	DRAWN - MAA, EA	REVISED -			CONTRACT NO. 60477				
	PLOT DATE = *DATE*	CHECKED - PKG, EA	REVISED -			FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				
		DATE - 5/10/2010	REVISED -							



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.

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 -
		DRAWN - MAA, EA	REVISED -
		CHECKED - PKG, EA	REVISED -
		DATE - 5/10/2010	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED TRAFFIC SIGNAL INSTALLATION PLAN  
ILLINOIS ROUTE 53 (ROHLWING RD.) AT NORWOOD AVE.**

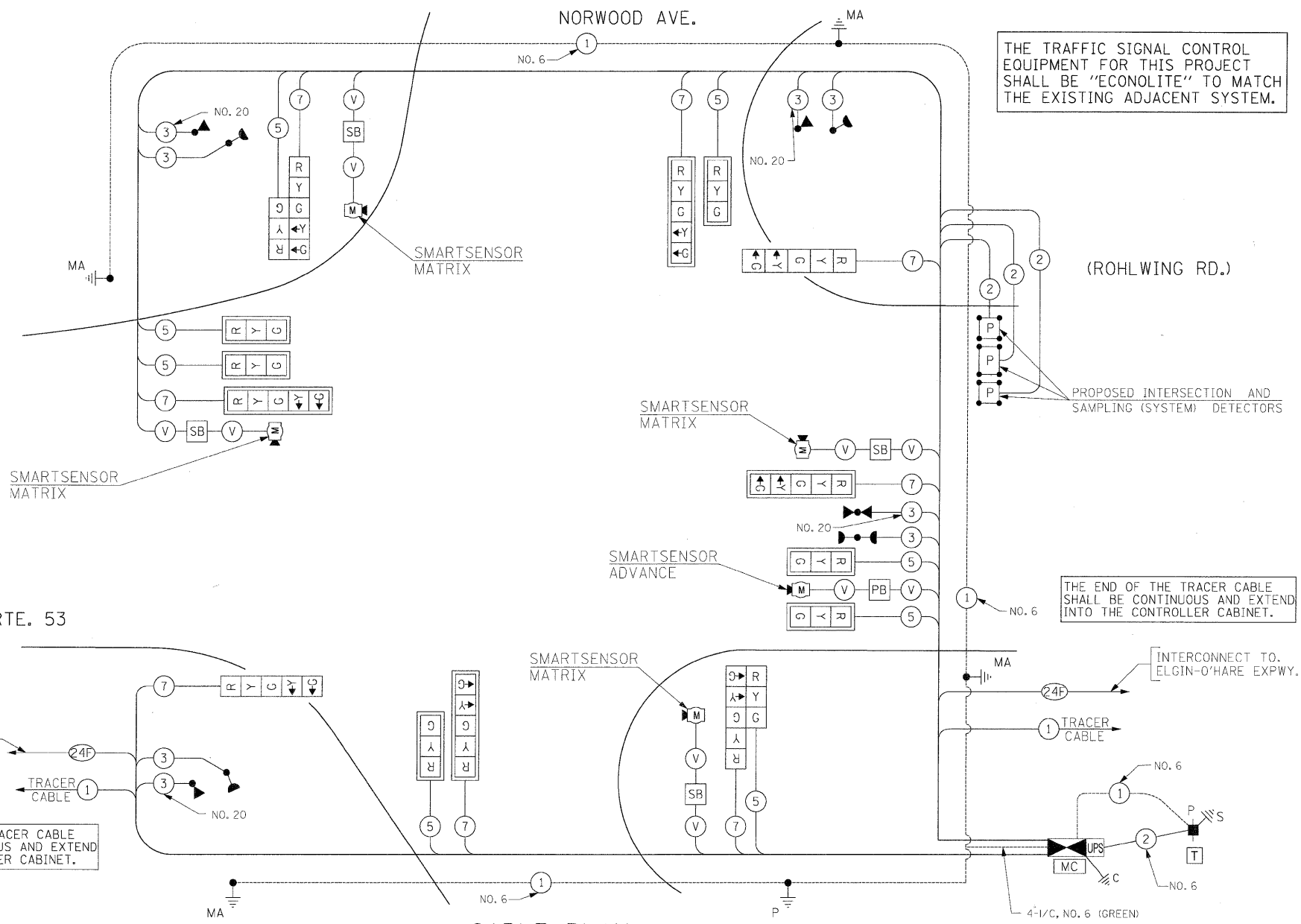
SCALE: 1"=20'    SHEET NO.    OF    SHEETS    STA.    TO    STA.

F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 510
CONTRACT NO. 60477				
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				

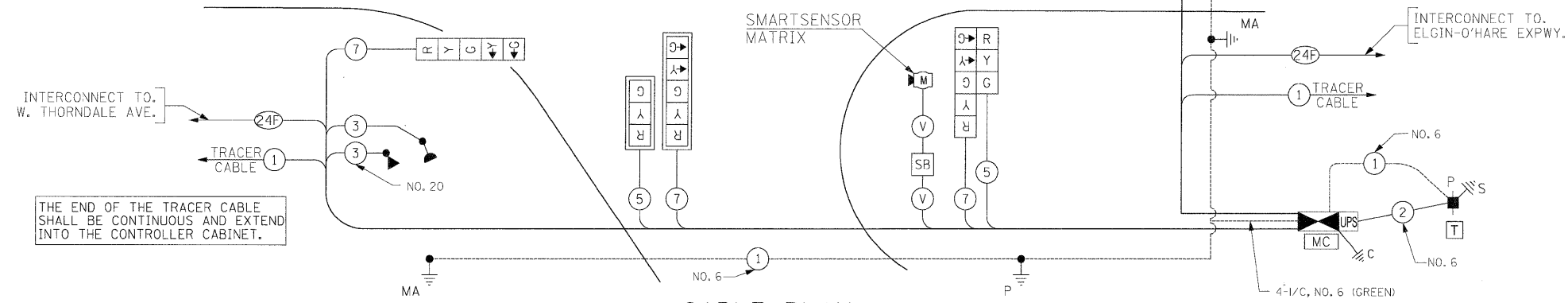
SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
36	SQ FT	SIGN PANEL - TYPE 1
254	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
22	FOOT	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL
40	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
355	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL
1	EACH	TRANSCIEVER-FIBER OPTIC
884	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
1966	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
1922	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
2	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
694	FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
884	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 VILLAG OF ITASCA

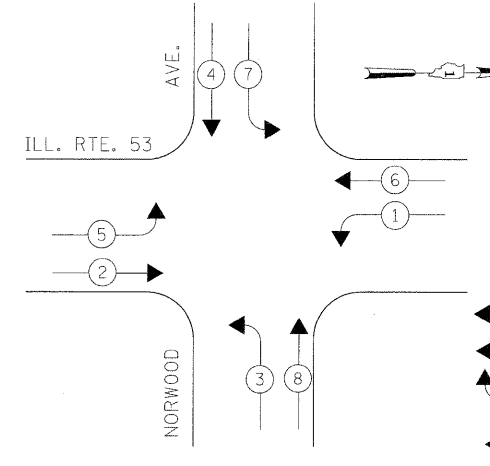


ILL. RTE. 53



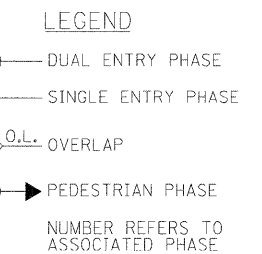
CABLE PLAN (NOT TO SCALE)

CONTROLLER SEQUENCE

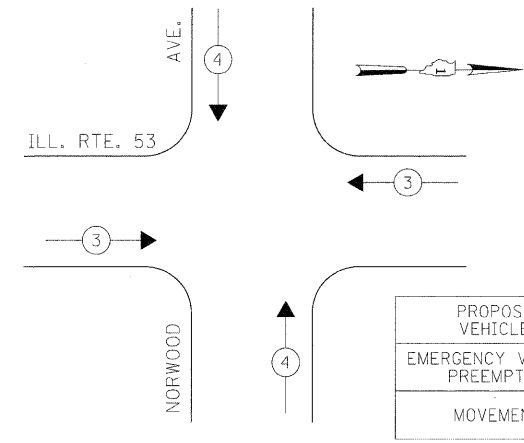


PHASE DESIGNATION DIAGRAM

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

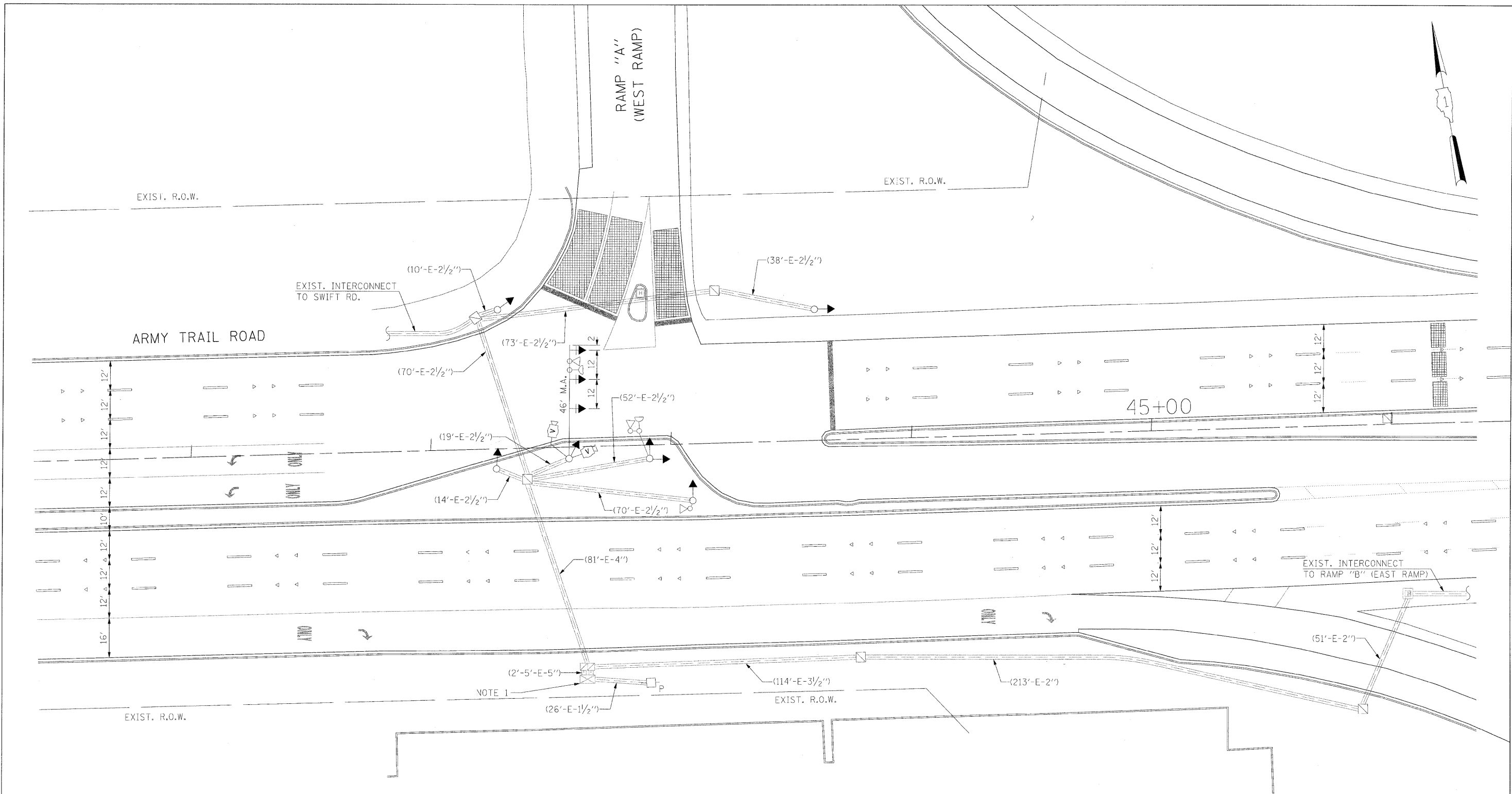
PROPOSED EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3 4
MOVEMENT	← ↓ ↑

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE	
TYPE	NO LAMPS	WATTAGE		OPERATION		
SIGNAL (RED)	16	135	17	0.50	136	
	(YELLOW)	16	135	25	0.25	100
	(GREEN)	16	135	15	0.25	60
ARROW	20	135	12	0.10	24	
PED. SIGNAL	90	25	1.00			
CONTROLLER	1	100	1.00	1.00	100	
ILLUM. SIGN			25	0.05		
FLASHER				0.50		
ENERGY COSTS TO:					TOTAL = 420	

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

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE, AND SCHEDULE OF QUANTITIES				F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ILLINOIS ROUTE 53 (ROHLWING RD.) AT NORWOOD AVE.				2578	532B	DuPage	781	511
SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.				CONTRACT NO. 60477				
				FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



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.

- 3 EACH SIGNAL HEAD, 1-FACE, 3-SECTION, MAST ARM MOUNTED
- 5 EACH SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED
- 1 EACH SIGNAL HEAD, 2-FACE, 3-SECTION, BRACKET MOUNTED
- 3 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 RAMPS 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 RAMPS 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".

FILE NAME =	USER NAME = #USER#	DESIGNED - PKG	REVISED -
#FILE#		DRAWN - MAA, EA	REVISED -
	PLOT SCALE = #SCALE#	CHECKED - PKG, EA	REVISED -
	PLOT DATE = #DATE#	DATE - 5/10/2010	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

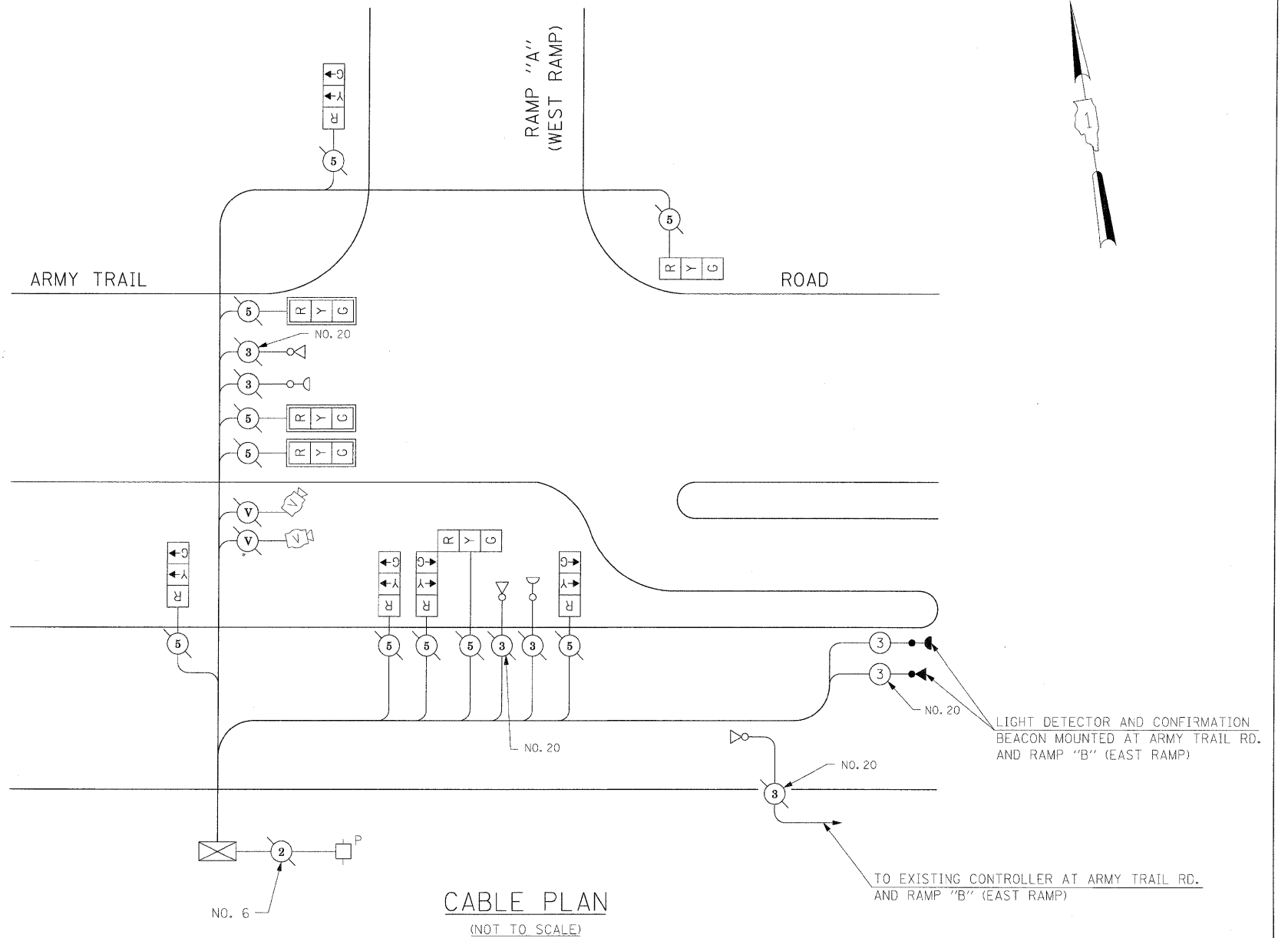
<b>TRAFFIC SIGNAL MODIFICATION PLAN</b>			
<b>ARMY TRAIL RD. AT RAMP "A" (WEST RAMP)</b>			
SCALE: 1"=20'	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2578	532B	DuPage	781	512
CONTRACT NO. 60477				
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				

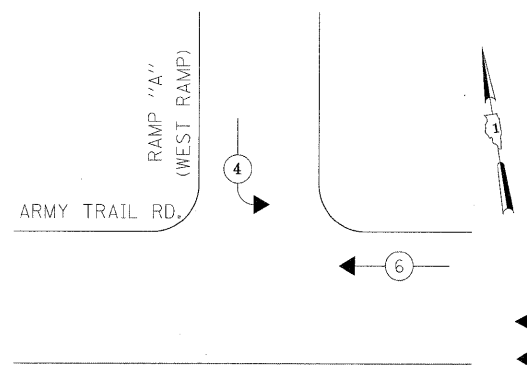
SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
• 1772	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
3	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
5	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
3	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
1701	FOOT	REMOVE ELECTRIC CABLE FROM CONDUIT
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
• 1772	FOOT	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED

• 100% COST TO VILLAGE OF ADDISON



CONTROLLER SEQUENCE

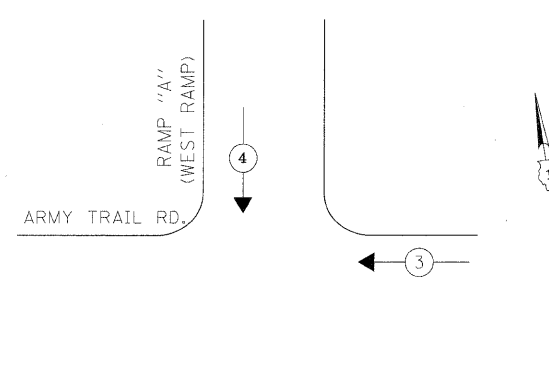


PHASE DESIGNATION DIAGRAM

LEGEND

- ① - DUAL ENTRY PHASE
- ② - SINGLE ENTRY PHASE
- ③ - OVERLAP
- ④ - PEDESTRIAN PHASE
- \* - NUMBER REFERS TO ASSOCIATED PHASE

EMERGENCY VEHICLE PREEMPTION SEQUENCE



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)	10	135	17	0.50	85.0
(YELLOW)	10	135	25	0.25	62.5
(GREEN)	10	135	15	0.25	37.5
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 =	435

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 -
#FILEL#		DRAWN - MAA, EA	REVISED -
	PLOT SCALE = #SCALE#	CHECKED - PKG, EA	REVISED -
	PLOT DATE = #DATE#	DATE - 5/10/2010	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM,  
 EMERGENCY VEHICLE PREEMPTION SEQUENCE, SCHEDULE OF QUANTITIES  
 ARMY TRAIL RD. AT RAMP "A" (WEST RAMP)

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2578	532B	DuPage	781	513
FED. ROAD DIST. NO. - [ILLINOIS] FED. AID PROJECT				CONTRACT NO. 60477

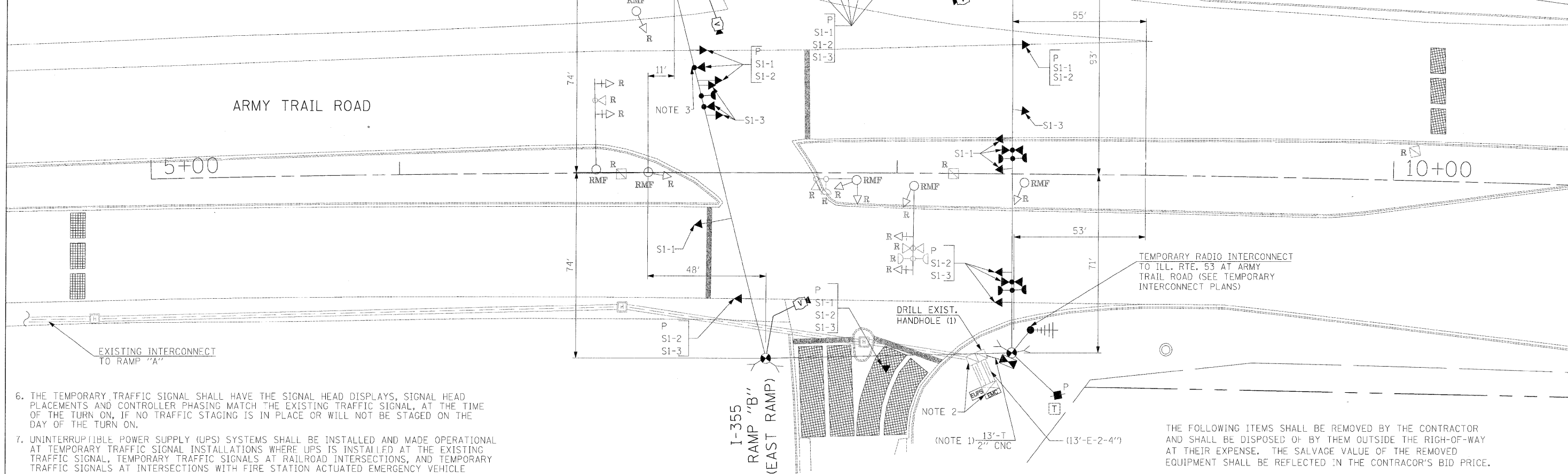
**NOTES FOR TEMPORARY TRAFFIC SIGNALS**

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.

**CONSTRUCTION NOTES:**

- NOTE 1: INSTALL TEMPORARY INTERCONNECT CABLE NO. 62.5/125 12F BETWEEN THE EXISTING CONTROLLER CABINET AND THE TEMPORARY CONTROLLER CABINET. THIS WORK IS INCIDENTAL TO THE PAY ITEM "TEMPORARY TRAFFIC SIGNAL INSTALLATION". ALSO, INSTALL ELECTRIC CABLE NO. 20, 3/C BETWEEN THE TEMPORARY CONTROLLER AND EXISTING CONTROLLER FOR THE EVP LOCATED AT RAMP "A" (WEST RAMP) FOR THE RAMP "B" (EAST RAMP) INTERSECTION.
- NOTE 2: THE EXISTING CONTROLLER AND CABINET, TYPE V WITH ALL ITS ACCESSORIES SHALL REMAIN IN PLACE AND SHALL BE REUSED. THE EXISTING DOUBLE HANDHOLE IN FRONT OF THE CONTROLLER CABINET SHALL ALSO REMAIN IN PLACE AND SHALL BE USED FOR THE PROPOSED SIGNAL INSTALLATION.

- NOTE 3: 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 4: 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.



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.

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

THE EXISTING TELEPHONE SERVICE AND EXISTING MASTER CONTROLLER SHALL BE MAINTAINED ON THE TEMPORARY TRAFFIC SIGNAL INSTALLATION, THE COST OF WHICH SHALL BE CONSIDERED AS INCIDENTAL TO "TEMPORARY TRAFFIC SIGNAL INSTALLATION".

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

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.

- 4 EACH SIGNAL HEAD, 1-FACE, 3-SECTION, MAST ARM MOUNTED
- 4 EACH SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED
- 1 EACH SIGNAL HEAD, 2-FACE, 3-SECTION, BRACKET MOUNTED
- 4 EACH TRAFFIC SIGNAL BACKPLATE
- 4 EACH TRAFFIC SIGNAL POST
- 2 EACH STEEL MAST ARM ASSEMBLY AND POLE

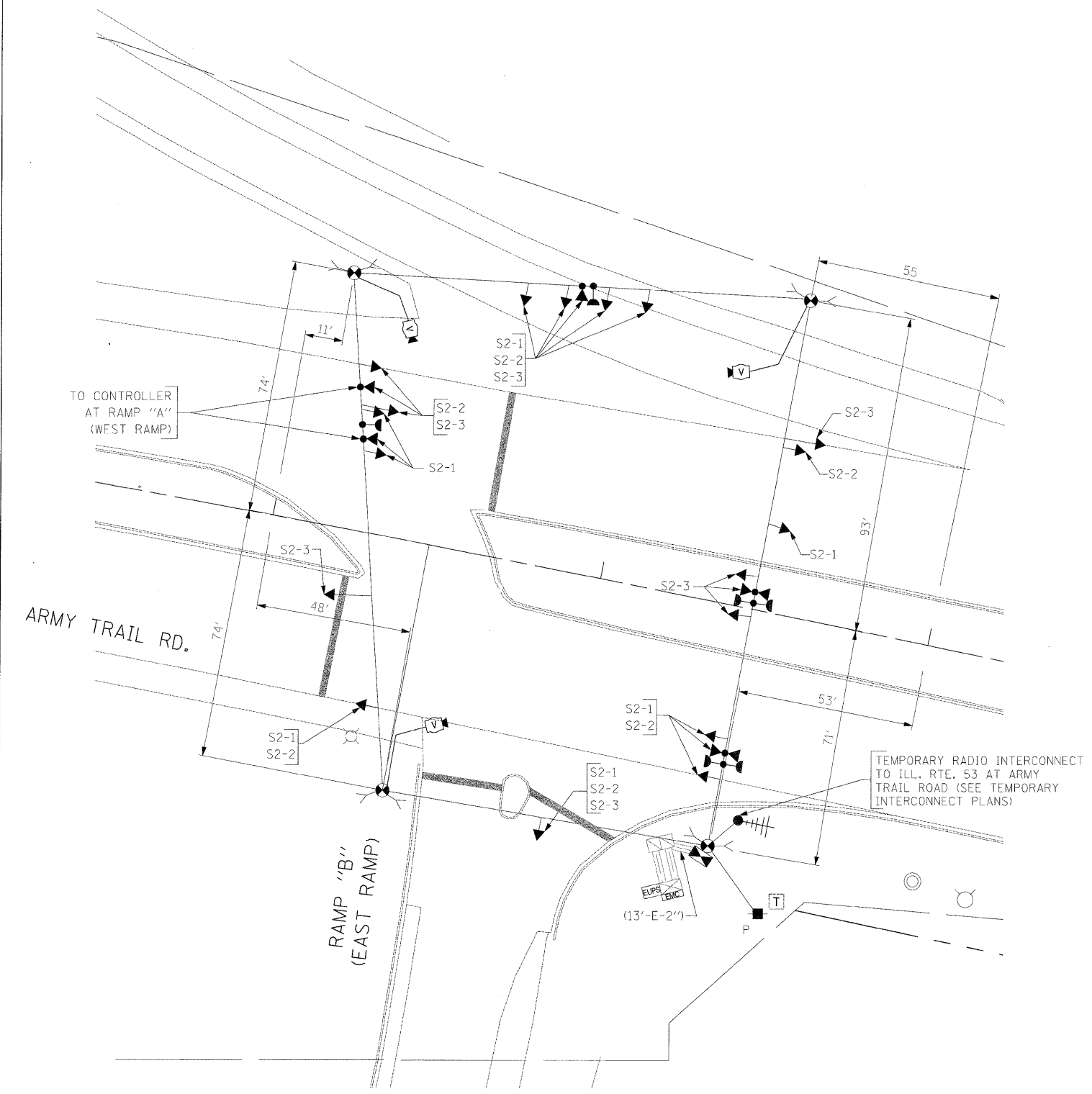
THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: VILLAGE OF ADDISON

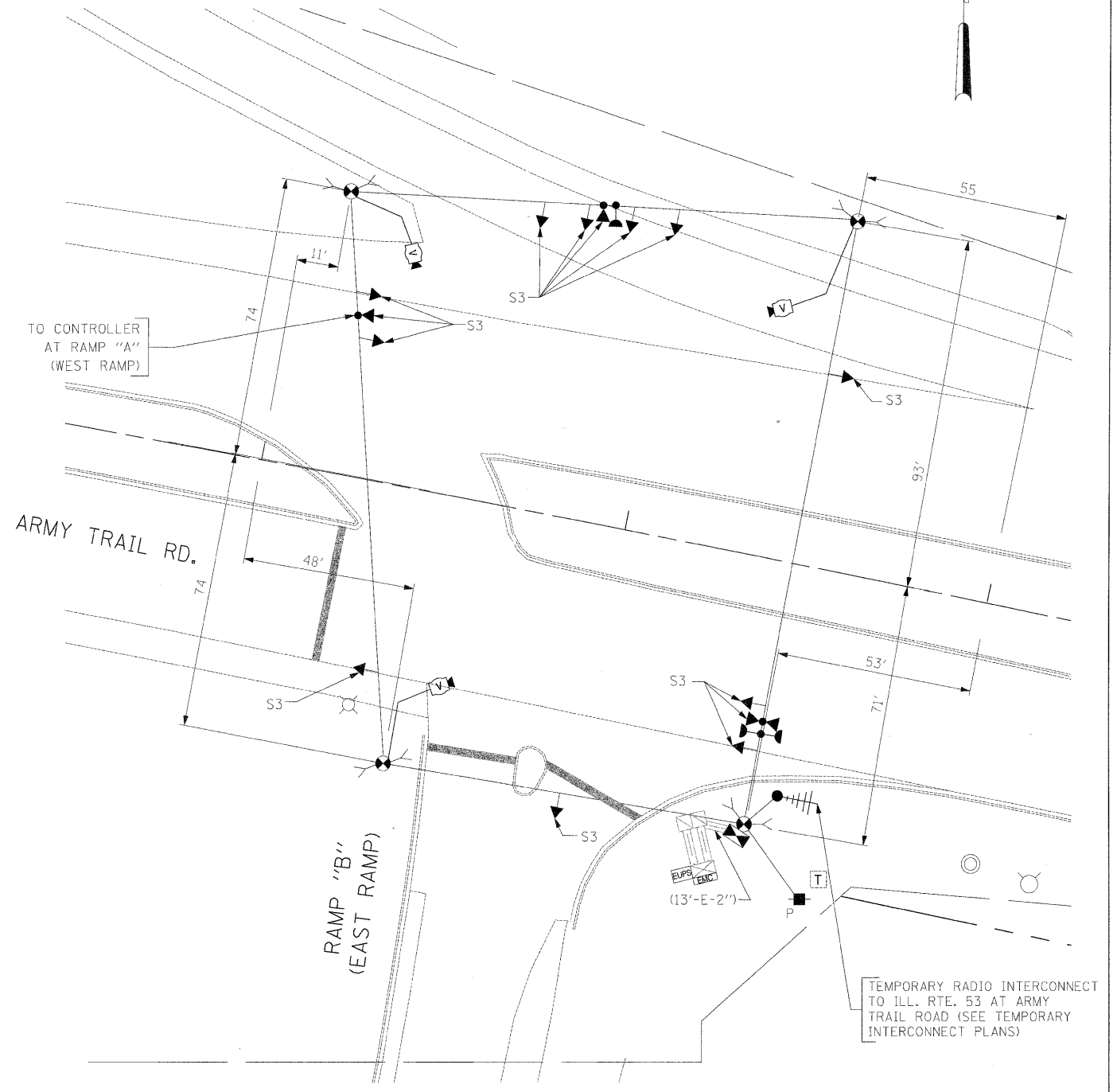
CONTACT INFORMATION:  
 RUDY ESPEDIDO  
 VILLAGE OF ADDISON  
 ENGINEERING DEPARTMENT  
 PHONE: (630)693-7533

3 EACH LIGHT DETECTOR

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 ARMY TRAIL RD. AT RAMP "B" (EAST RAMP) PRE STAGE AND STAGE 1 (SHEET 1 OF 3)</b>			F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 514
	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 - 5/10/2010	REVISED -									



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



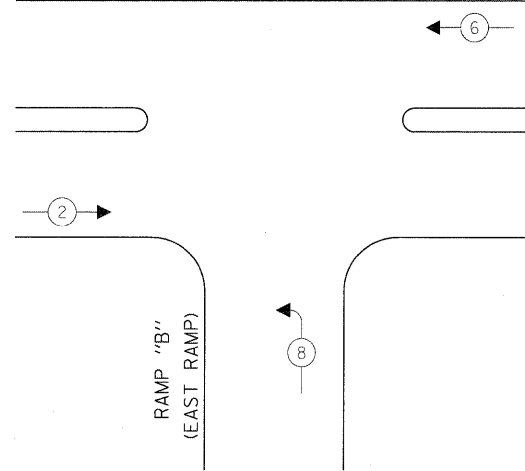
SIGNAL HEAD PLACEMENTS FOR STAGE 3.

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

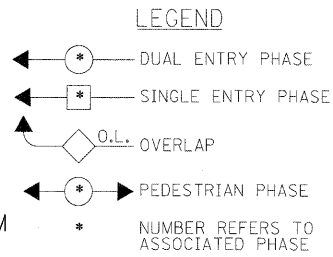
FILE NAME =	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN ARMY TRAIL RD. AT RAMP "B" (EAST RAMP) STAGE 2 AND STAGE 3 (SHEET 2 OF 3)</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
#FILEL#		DRAWN - MAA, EA	REVISED -		SCALE: 1"=20'	SHEET NO. OF SHEETS	STA. TO STA.	2578	532B	DuPage	78	515
	PLOT SCALE = #SCALE#	CHECKED - PKG, EA	REVISED -					CONTRACT NO. 60477				
	PLOT DATE = #DATE#	DATE - 5/10/2010	REVISED -					FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

CONTROLLER SEQUENCE

ARMY TRAIL RD.

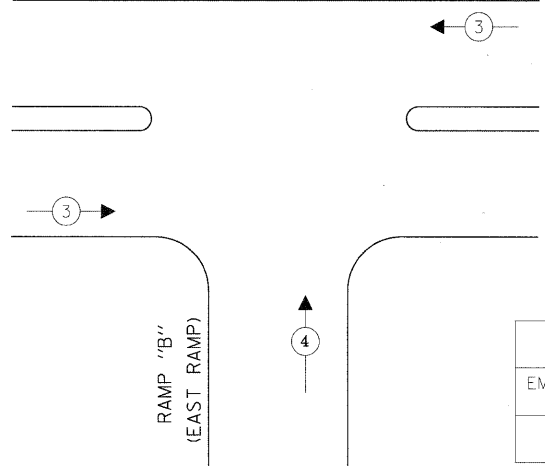


TEMPORARY PHASE DESIGNATION DIAGRAM  
CONSTRUCTION SEQUENCE FOR  
PRE-CONSTRUCTION STAGE ONLY



EMERGENCY VEHICLE PREEMPTION SEQUENCE

ARMY TRAIL RD.



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

EMERGENCY VEHICLE PREEMPTION SEQUENCE  
FOR PRE-CONSTRUCTION STAGE ONLY

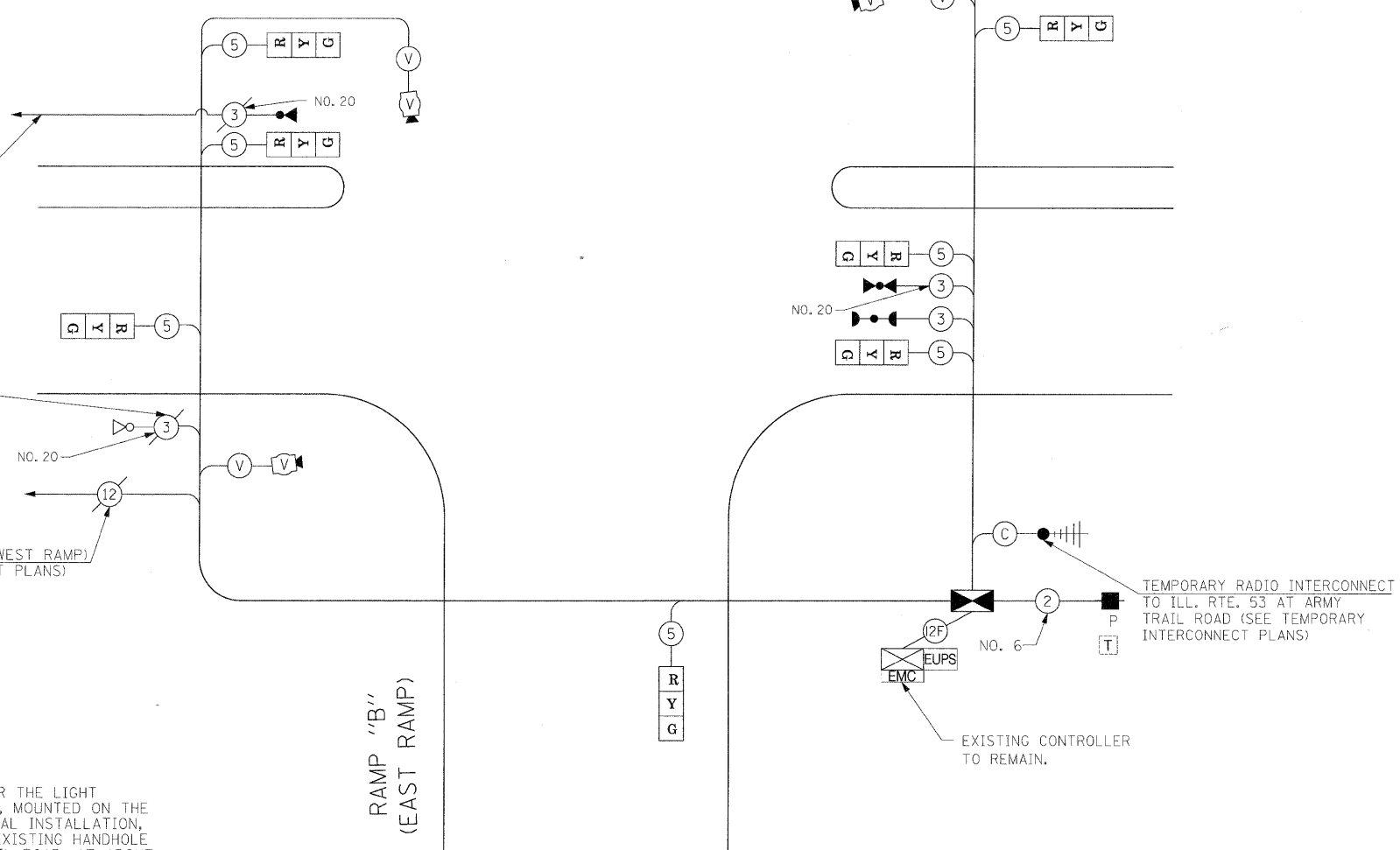
I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE	%OPERATION	
		INCAND.   LED		
SIGNAL (RED)	11	135   17	0.50	93.5
(YELLOW)	11	135   25	0.25	68.75
(GREEN)	11	135   15	0.25	41.25
ARROW		135   12	0.10	
PED. SIGNAL		90   25	1.00	
CONTROLLER	1	100   100	1.00	100
ILLUM. SIGN			0.05	
VIDEO SYSTEM	1	150	1.00	150
FLASHER			0.50	
ENERGY COSTS TO:				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				

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".

ARMY TRAIL RD.

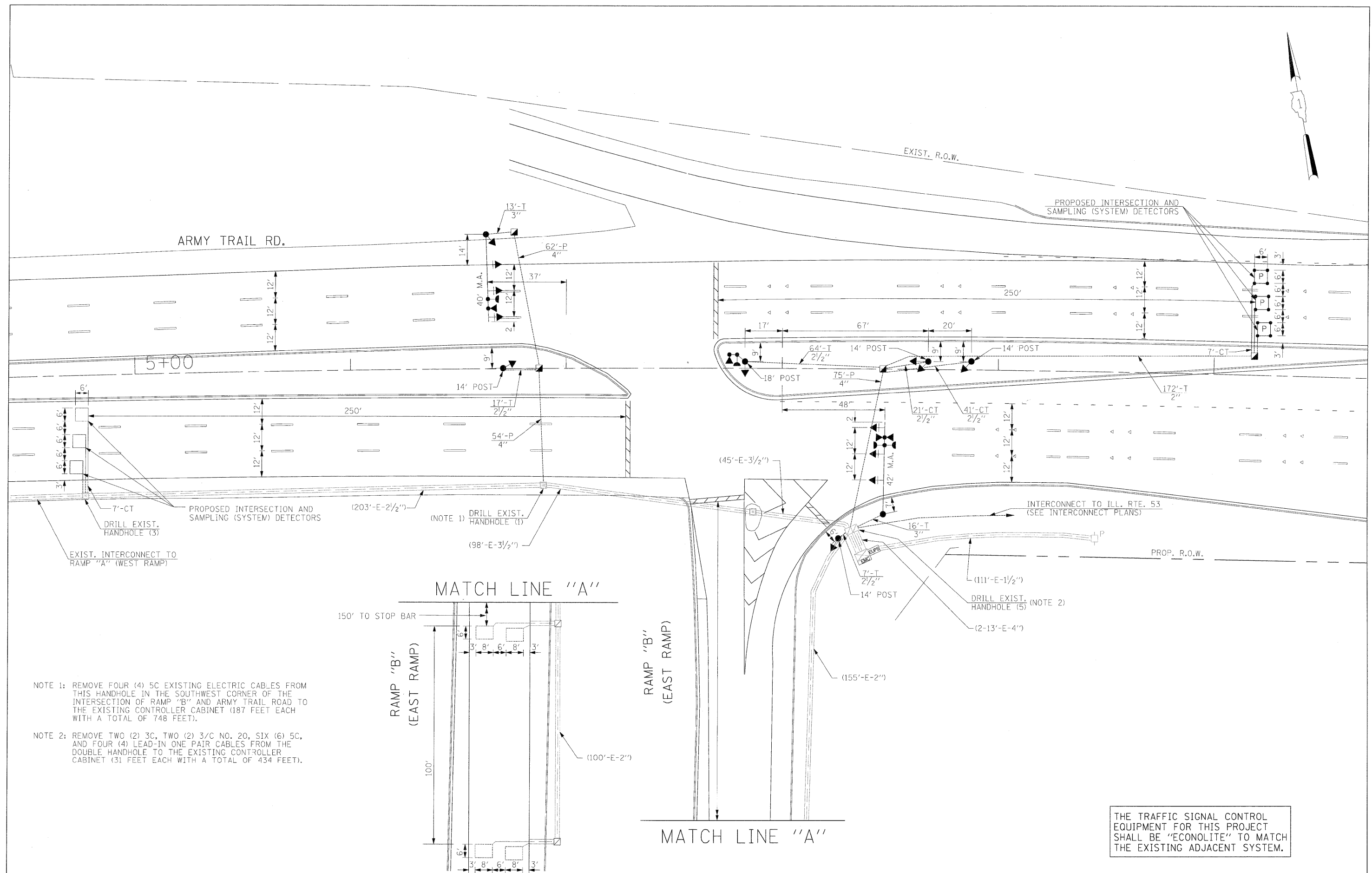


CABLE PLAN

(NOT TO SCALE)

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





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).

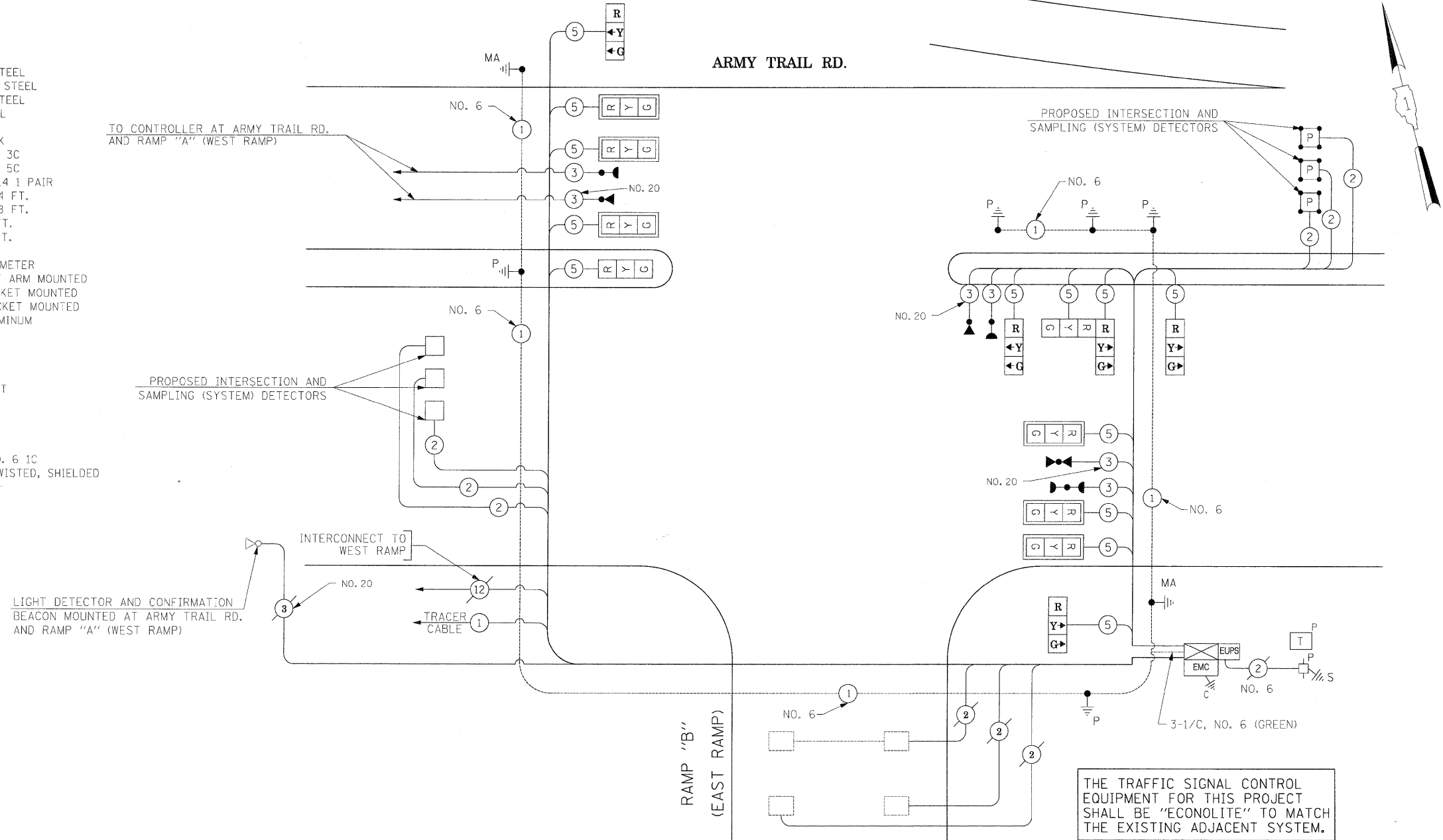
NOTE 2: REMOVE TWO (2) 3C, TWO (2) 3/C NO. 20, SIX (6) 5C, AND FOUR (4) LEAD-IN ONE PAIR CABLES FROM THE DOUBLE HANDHOLE TO THE EXISTING CONTROLLER CABINET (31 FEET EACH WITH A TOTAL OF 434 FEET).

FILE NAME = \$FILEL\$	USER NAME = \$USER\$	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED 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	TOTAL SHEETS 781	SHEET NO. 517
	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 - >KG, EA	REVISED -									
		DATE - 5/10/2010	REVISED -									

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
195	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
112	FOOT	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL
29	FOOT	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL
191	FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
6	EACH	HANDHOLE
816	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
299	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
2782	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
1483	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, 40 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.
20	FOOT	CONCRETE FOUNDATION, TYPE A
30	FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
6	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED
5	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
6	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
* 117	FOOT	DETECTOR LOOP, TYPE I
* 2	EACH	LIGHT DETECTOR
1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
1182	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
697	FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
* 299	FOOT	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED

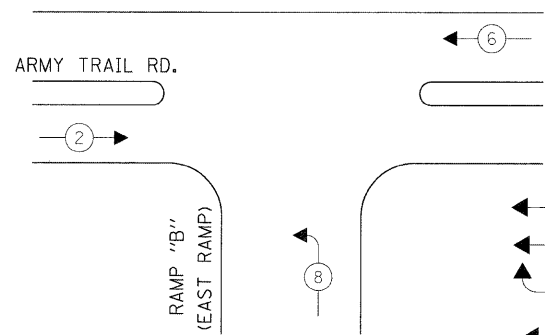
\* 100% COST TO VILLAGE OF ADDISON



CABLE PLAN

(NOT TO SCALE)

CONTROLLER SEQUENCE

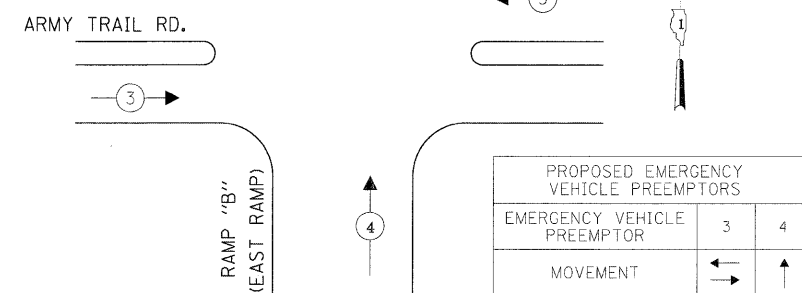


PHASE DESIGNATION DIAGRAM

LEGEND

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE



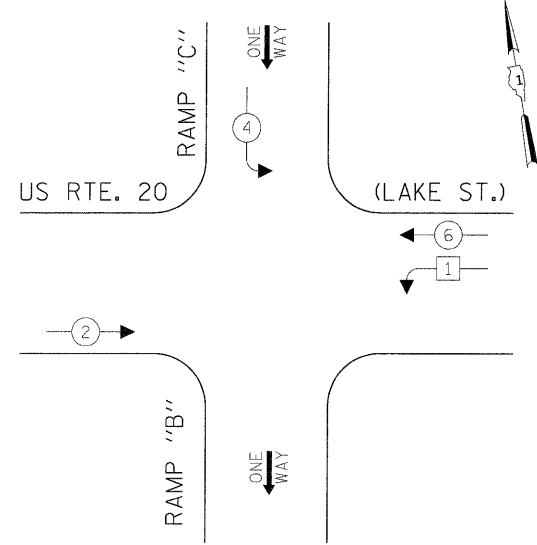
I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE		OPERATION	
		INCAND.	LED		
SIGNAL (RED)	13	135	17	0.50	110.5
(YELLOW)	13	135	25	0.25	81.25
(GREEN)	13	135	15	0.25	48.75
ARROW		135	12	0.10	
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN				0.05	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 340.5

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

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



CONTROLLER SEQUENCE

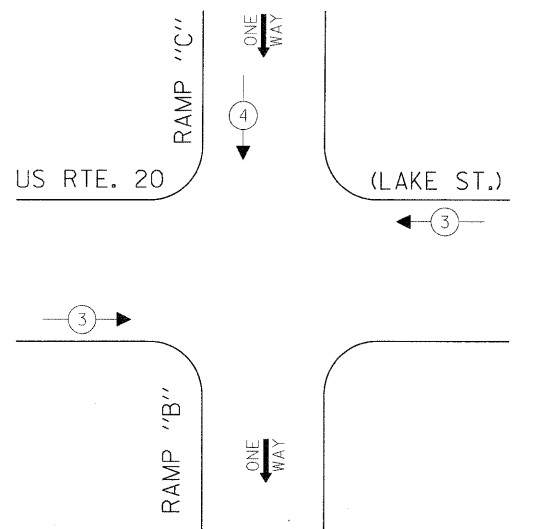


LEGEND

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

TEMPORARY PHASE DESIGNATION DIAGRAM FOR ALL STAGES

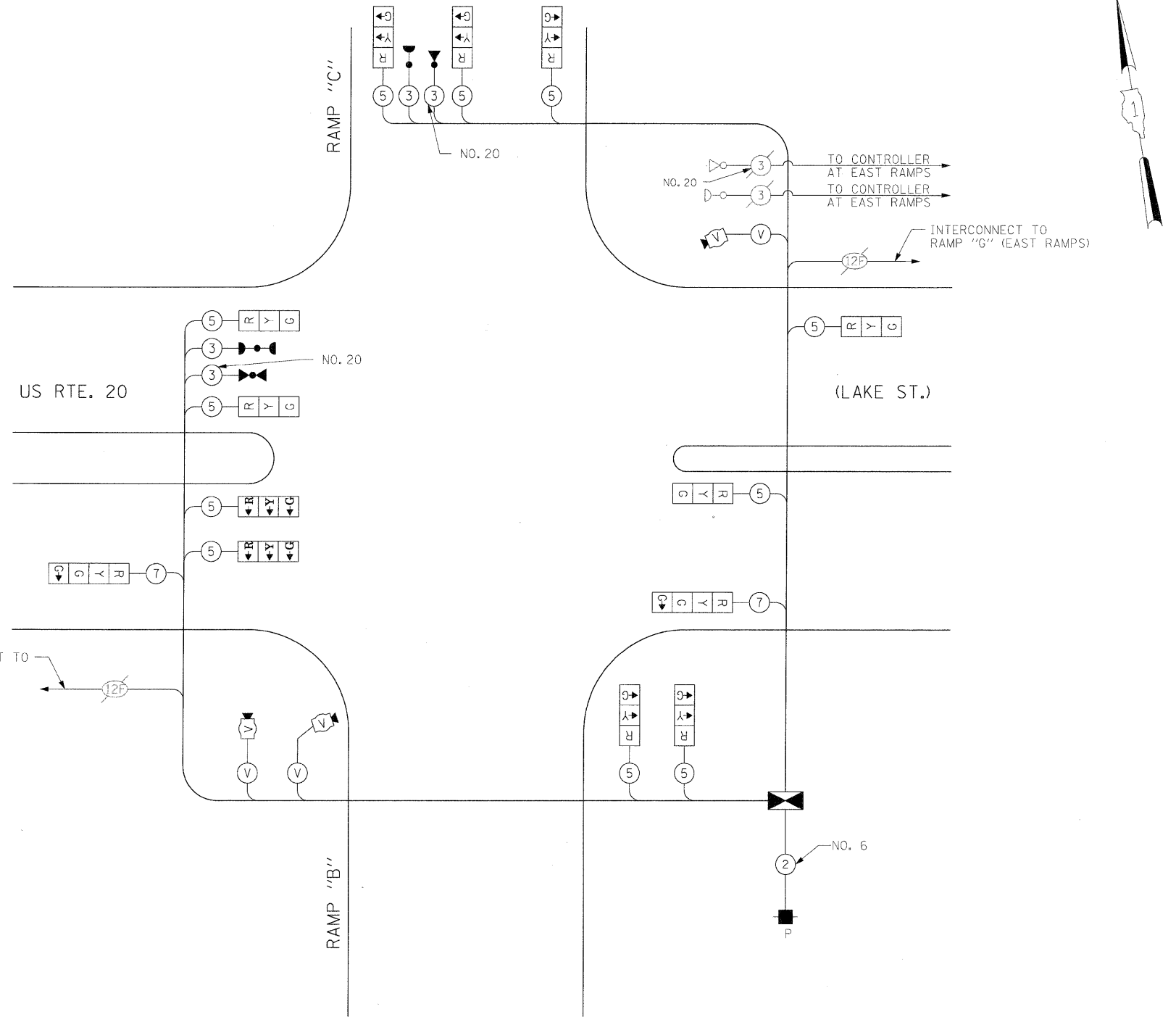
TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

FOR ALL STAGES

INTERCONNECT TO SWIFT RD.



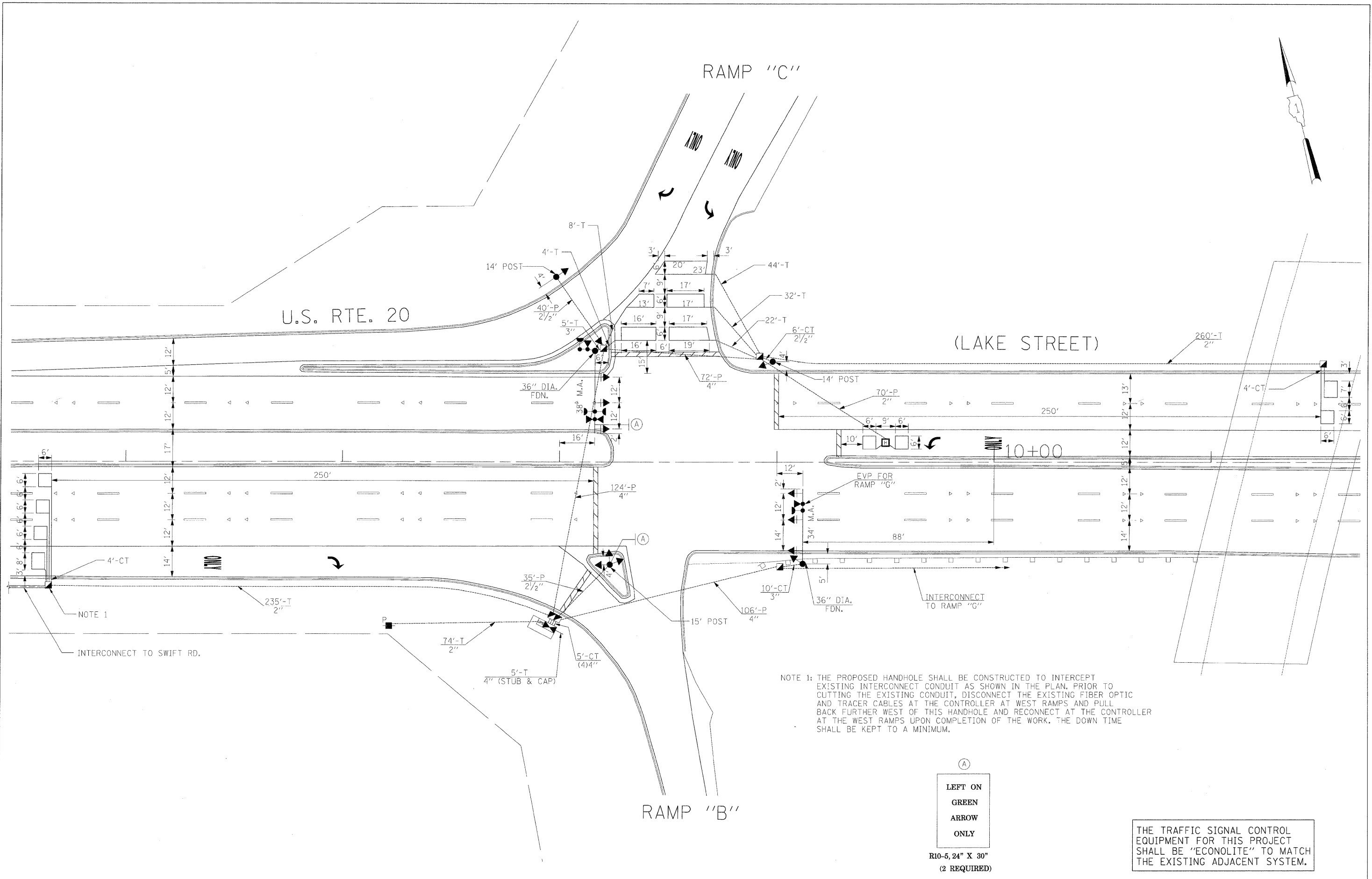
CABLE PLAN (NOT TO SCALE)

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE		%OPERATION	
SIGNAL (RED)	15	INCAND.	135	17	0.50
		LED	25	0.25	
			135	15	
SIGNAL (YELLOW)	13	INCAND.	135	17	0.25
		LED	25	0.25	
SIGNAL (GREEN)	13	INCAND.	135	15	0.25
		LED	12	0.10	
ARROW			90	25	1.00
PED. SIGNAL			100	100	1.00
CONTROLLER	1				0.05
ILLUM. SIGN					1.00
VIDEO SYSTEM	1		150		150
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 507.5

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.



NOTE 1: THE PROPOSED HANDHOLE SHALL BE CONSTRUCTED TO INTERCEPT EXISTING INTERCONNECT CONDUIT AS SHOWN IN THE PLAN. PRIOR TO CUTTING THE EXISTING CONDUIT, DISCONNECT THE EXISTING FIBER OPTIC AND TRACER CABLES AT THE CONTROLLER AT WEST RAMPS AND PULL BACK FURTHER WEST OF THIS HANDHOLE AND RECONNECT AT THE CONTROLLER AT THE WEST RAMPS UPON COMPLETION OF THE WORK. THE DOWN TIME SHALL BE KEPT TO A MINIMUM.

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

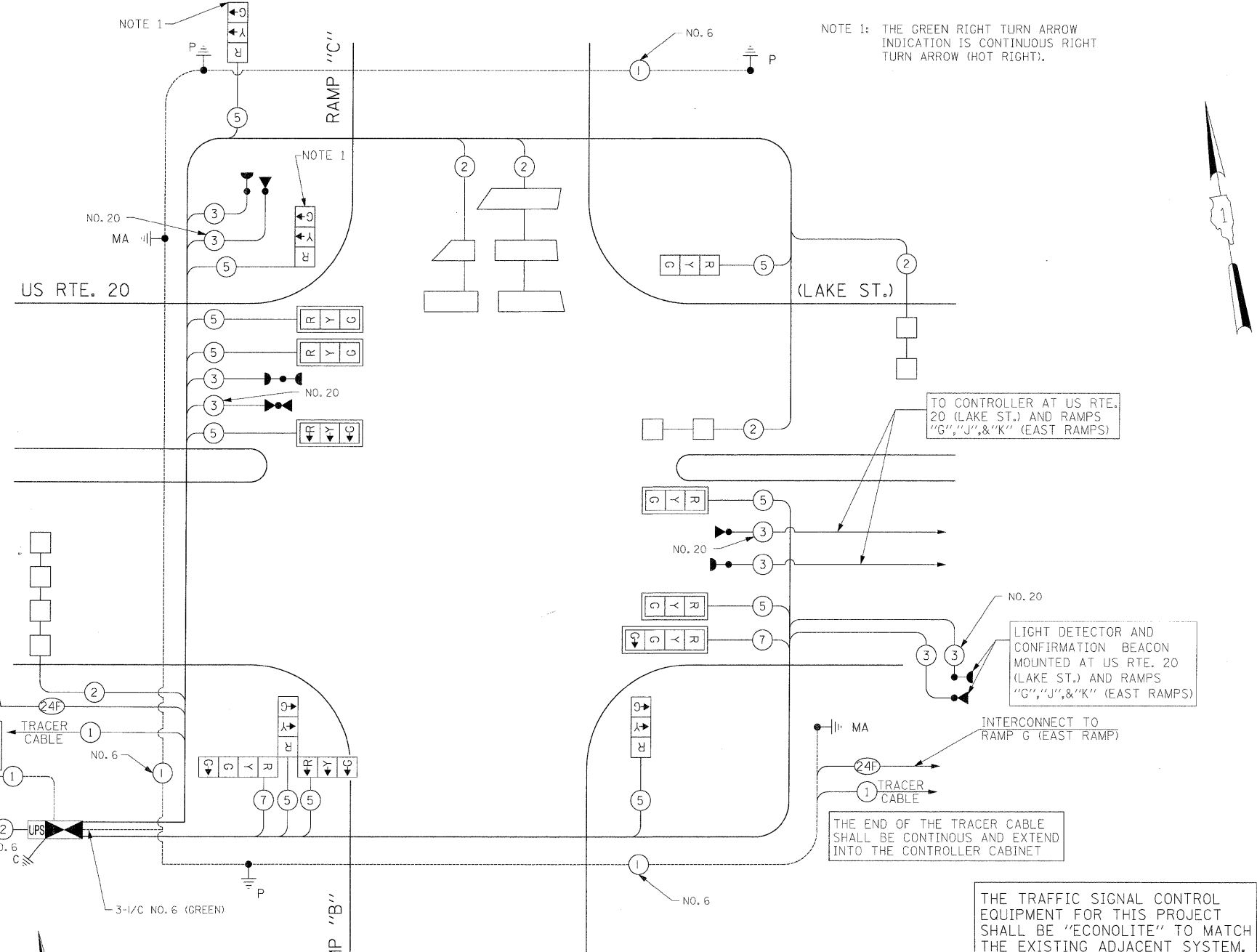
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME =	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED TRAFFIC SIGNAL INSTALLATION PLAN U.S. ROUTE 20 (LAKE ST.) AT RAMPS "B" AND "C" (WEST RAMPS) (SHEET 1 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.	2578	532B	DuPage	781	521
	PLOT SCALE = #SCALE#	CHECKED - PKG, EA	REVISED -											
	PLOT DATE = #DATE#	DATE - 5/10/2010	REVISED -											
												CONTRACT NO. 60477		
												FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT		

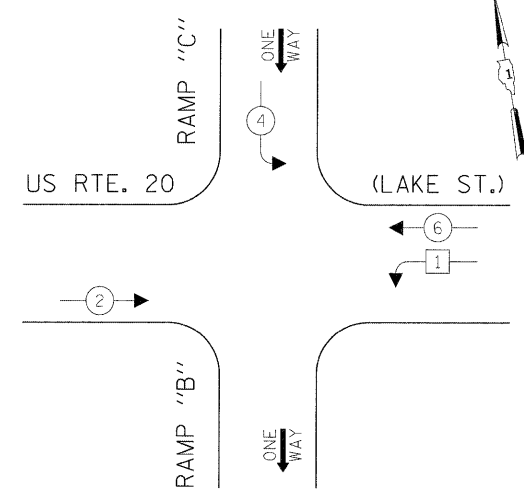
SCHEDULE OF QUANTITIES

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
15	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
584	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	TRANSCEIVER-FIBER OPTIC
1415	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
2140	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
251	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
1656	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, 34 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.
12	FOOT	CONCRETE FOUNDATION, TYPE A
4	FOOT	CONCRETE FOUNDATION, TYPE C
30	FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
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, 1-FACE, 4-SECTION, MAST ARM MOUNTED
1	EACH	SIGNAL HEAD, LED, 3-FACE, 2-3 SECTION, 1-4 SECTION, BRACKET MOUNTED
6	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
5	EACH	INDUCTIVE LOOP DETECTOR
562	FOOT	DETECTOR LOOP, TYPE 1
3	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
7	EACH	REMOVE EXISTING CONCRETE FOUNDATION
1	EACH	TEMPORARY TRAFFIC SIGNAL TIMING
1	EACH	SERVICE INSTALLATION - POLE MOUNTED
1	EACH	UNINTERRUPTIBLE POWER SUPPLY
601	FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
1415	FOOT	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED

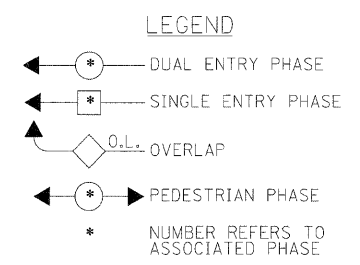
\* 100% COST TO VILLAGE OF ADDISON



CONTROLLER SEQUENCE

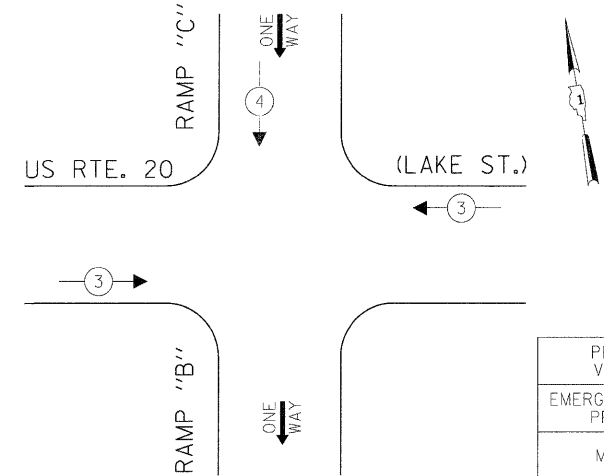


PHASE DESIGNATION DIAGRAM



CABLE PLAN (NOT TO SCALE)

EMERGENCY VEHICLE PREEMPTION SEQUENCE



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)	11	135	17	0.50	93.50
(YELLOW)	11	135	25	0.25	68.75
(GREEN)	13	135	15	0.25	48.75
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 = 335.00

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 -
#FILE#		DRAWN - MAA, EA	REVISED -
		CHECKED - PKG, EA	REVISED -
		DATE - 5/10/2010	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2578	532B	DuPage	781	522
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT			CONTRACT NO. 60477	

**NOTES FOR TEMPORARY TRAFFIC SIGNALS**

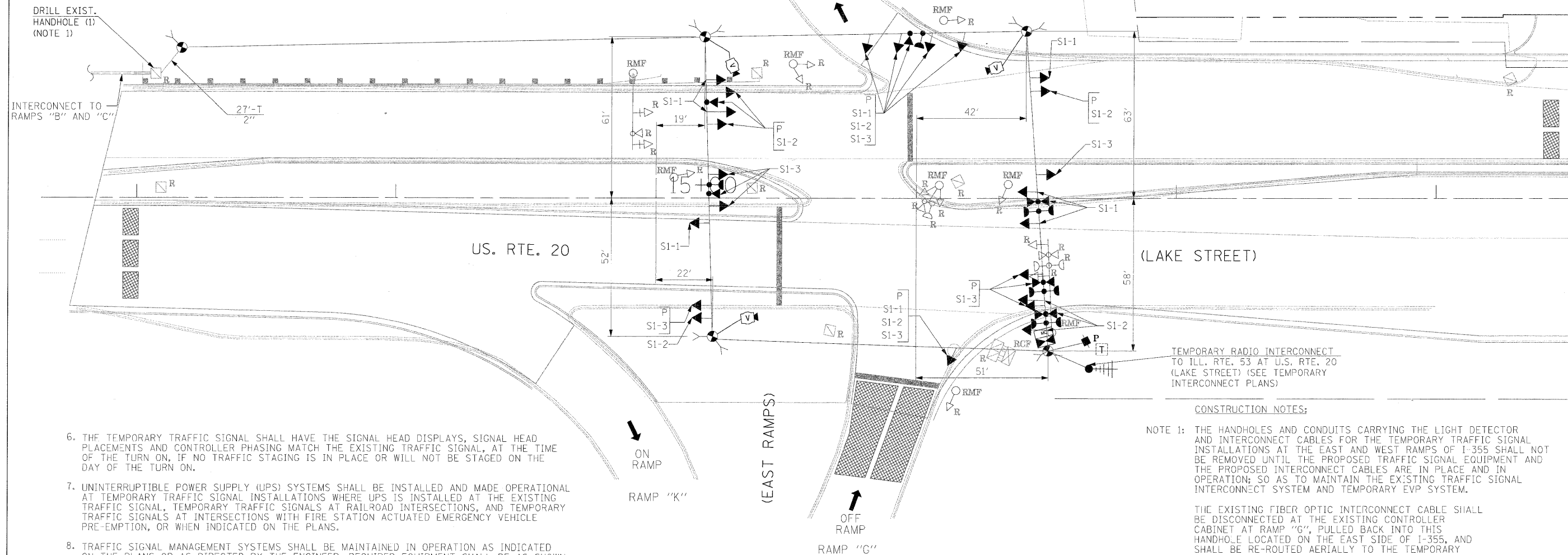
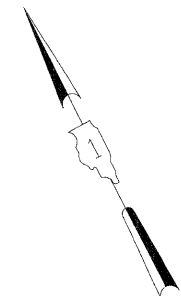
1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS.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

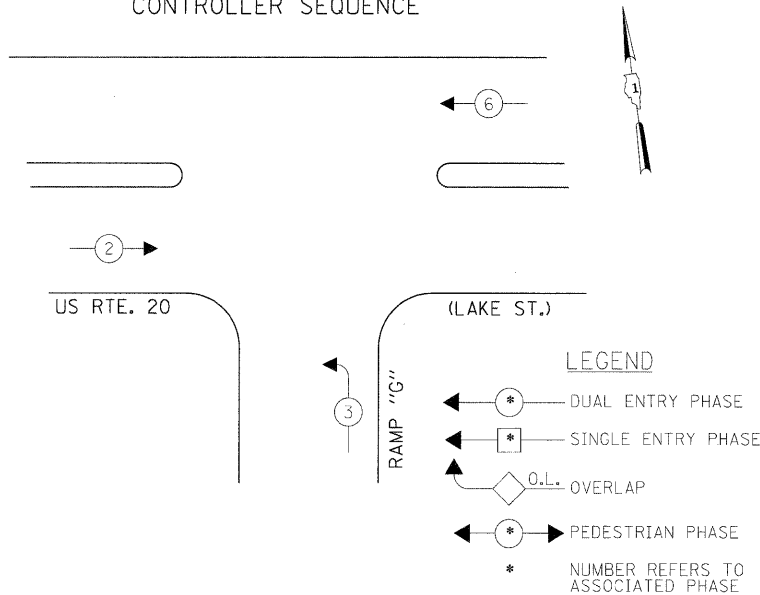
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME =	USER NAME = \$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 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 -		2578	532B	DuPage	781	523			
	PLOT SCALE = \$SCALE\$	CHECKED - PKG, EA	REVISED -		SCALE: 1"=20'				FED. ROAD DIST. NO. - ILLINOIS	FED. AID PROJECT		
	PLOT DATE = \$DATE\$	DATE - 5/10/2010	REVISED -		SHEET NO. OF SHEETS STA. TO STA.				CONTRACT NO. 6C477			





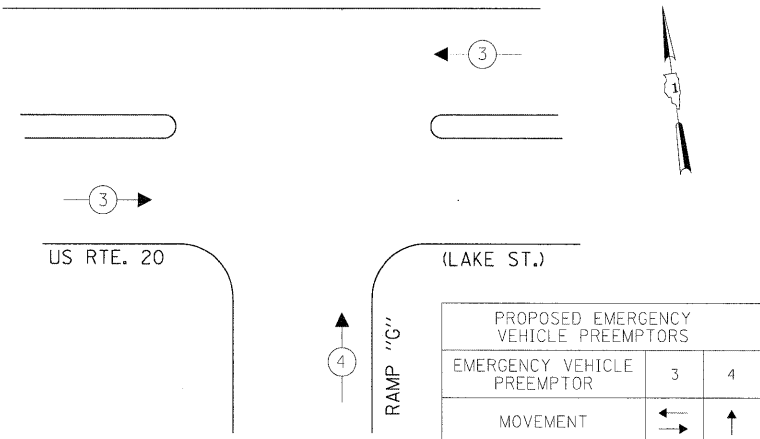
CONTROLLER SEQUENCE



TEMPORARY PHASE DESIGNATION DIAGRAM

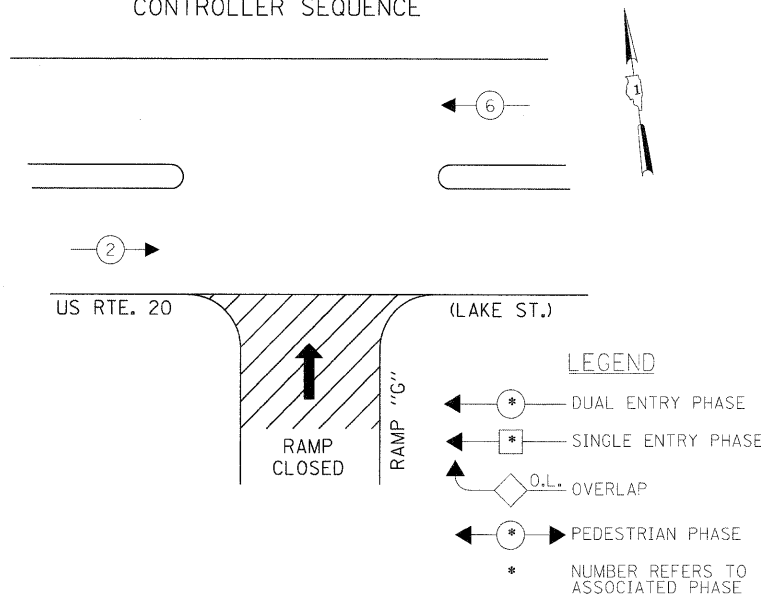
STAGES: S1-2, S1-3, S2-1, S2-2, S2-3, AND S3

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

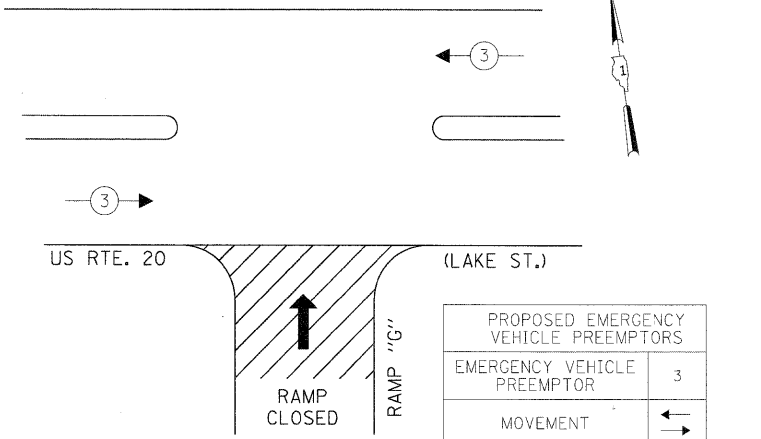
CONTROLLER SEQUENCE



TEMPORARY PHASE DESIGNATION DIAGRAM

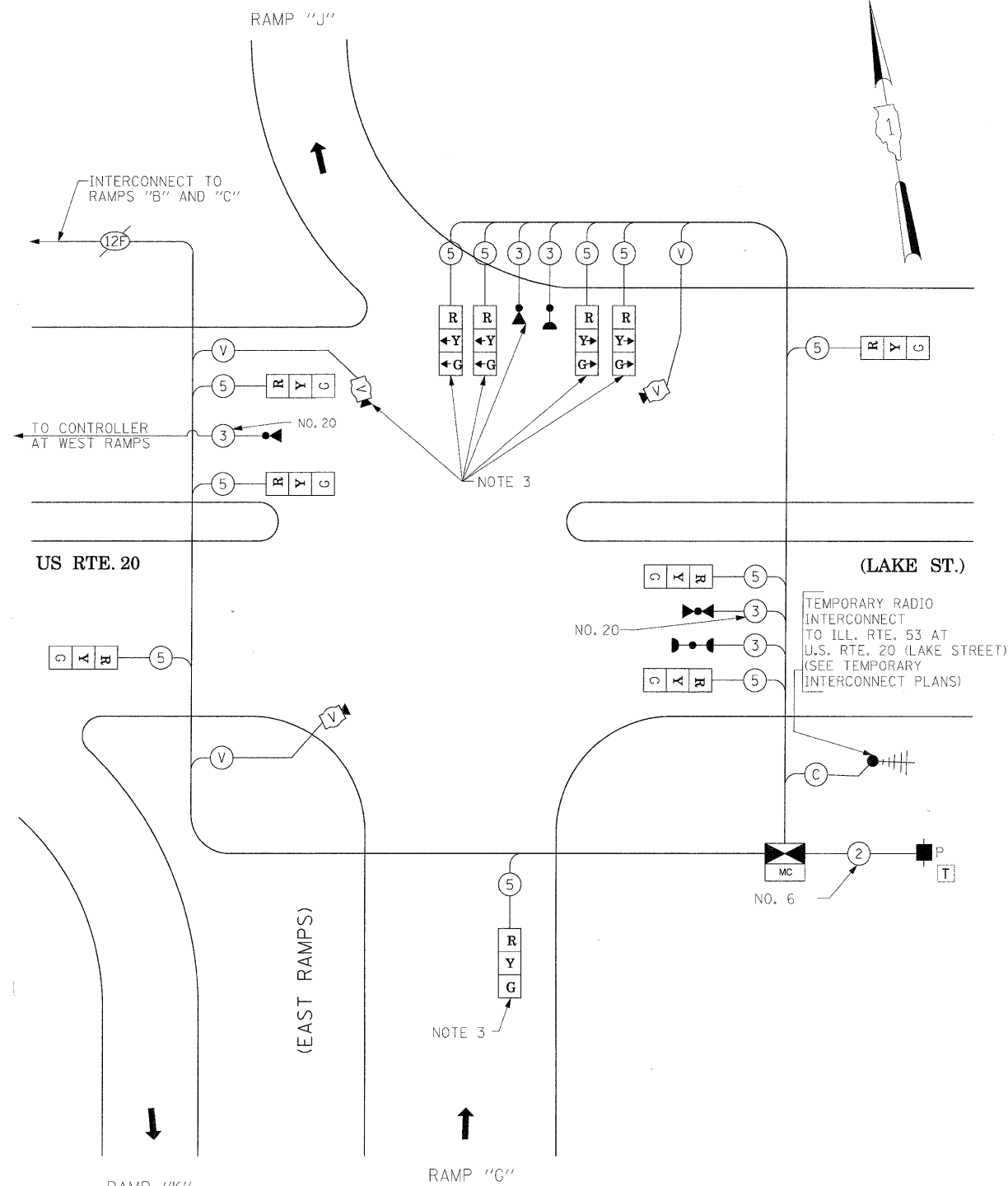
STAGE S1-1

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE



STAGE S1-1

RAMP "J"



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	
		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:					TOTAL = 453.5

ILLINOIS DEPARTMENT OF TRANSPORTATION  
201 WEST CENTER COURT  
SCHAMBURG, ILLINOIS 60196-1036

ENERGY SUPPLY CONTACT: ELLIE SARALLO  
PHONE: (630) 424 5124  
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 - 5/10/2010	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM,  
TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE  
U.S. RTE. 20 (LAKE ST.) AT RAMPS "G", "J", AND "K" (EAST RAMPS) (SHEET 3 OF 3)

SCALE:	SHEET NO. OF SHEETS	STA. TO STA.
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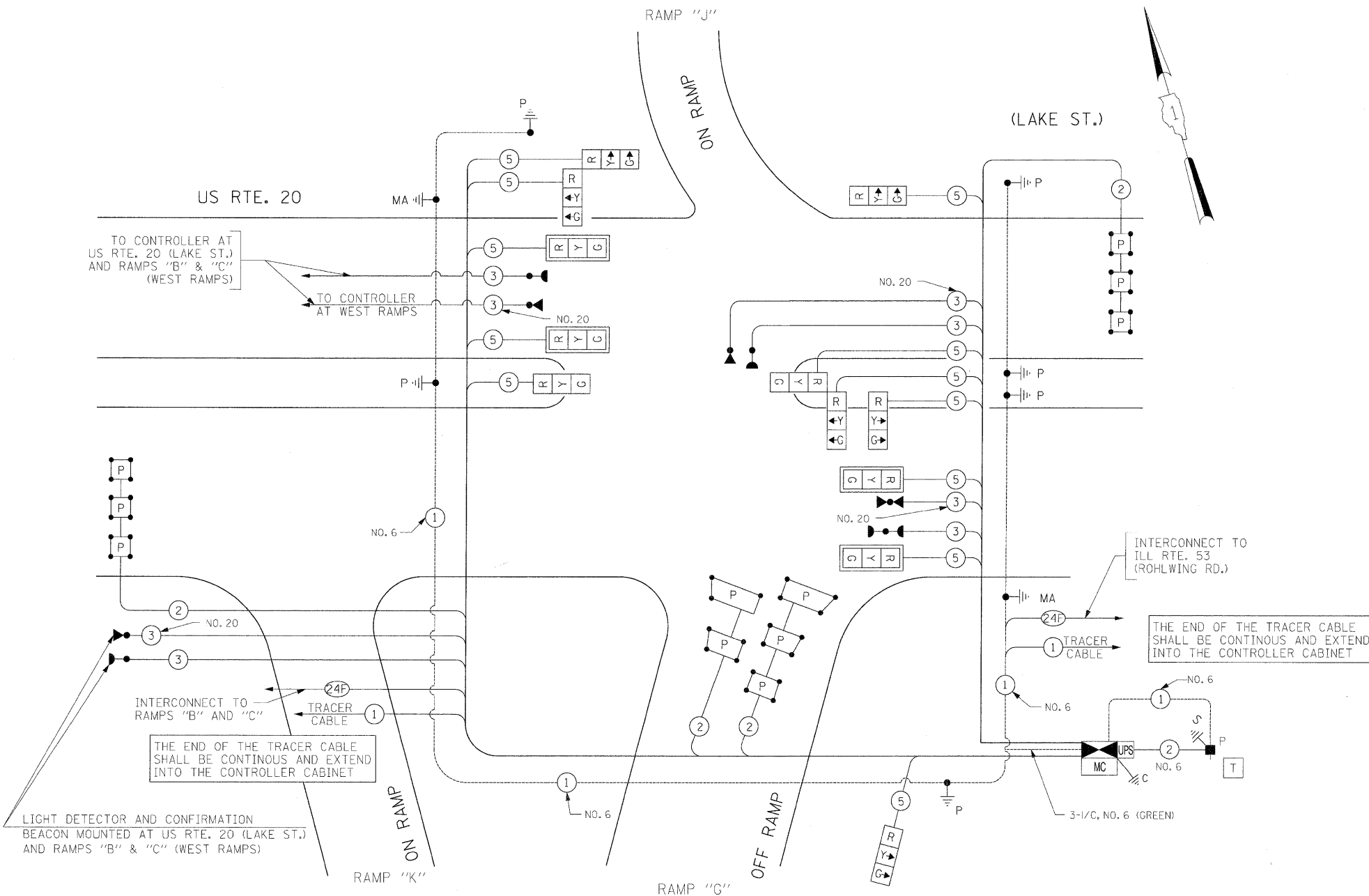
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2578	532B	DuPage	781	525
CONTRACT NO. 60477				
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				



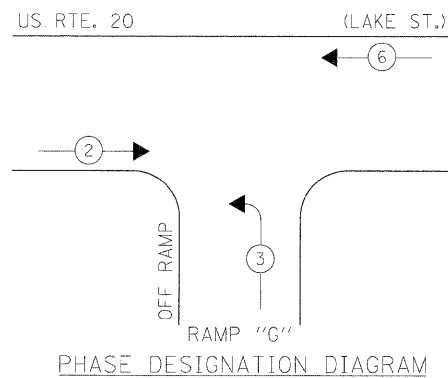
SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
400	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
101	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
72	FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
303	FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
7	EACH	HANDHOLE
1	EACH	DOUBLE HANDHOLE
540	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL
1	EACH	TRANSCEIVER-FIBER OPTIC
1080	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
2180	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
849	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
31	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C
5	EACH	TRAFFIC SIGNAL POST, CALVANIZED STEEL 14 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
15	FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
4	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
4	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
2	EACH	SIGNAL HEAD, LED, 2-FACE, 3 SECTION, BRACKET MOUNTED
2	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 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
446	EACH	PREFORMED DETECTOR LOOP
1	EACH	TEMPORARY TRAFFIC SIGNAL TIMING
1	EACH	SERVICE INSTALLATION - POLE MOUNTED
1	EACH	UNINTERRUPTIBLE POWER SUPPLY
619	FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
1080	FOOT	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED

\* 100% COST TO VILLAGE OF ADDISON



CONTROLLER SEQUENCE

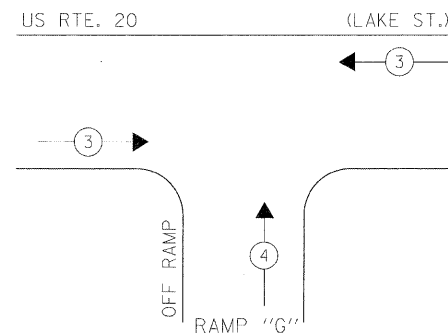


PHASE DESIGNATION DIAGRAM

CABLE PLAN

(NOT TO SCALE)

EMERGENCY VEHICLE PREEMPTION SEQUENCE



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 INCAND. LED	OPERATION	
SIGNAL (RED)	12	135 17	0.50	102
(YELLOW)	12	135 25	0.25	75
(GREEN)	12	135 15	0.25	45
ARROW		135 12	0.10	
PED. SIGNAL		90 25	1.00	
CONTROLLER	1	100 100	1.00	100
ILLUM. SIGN			0.05	
FLASHER			0.50	
ENERGY COSTS TO:				TOTAL = 322

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

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

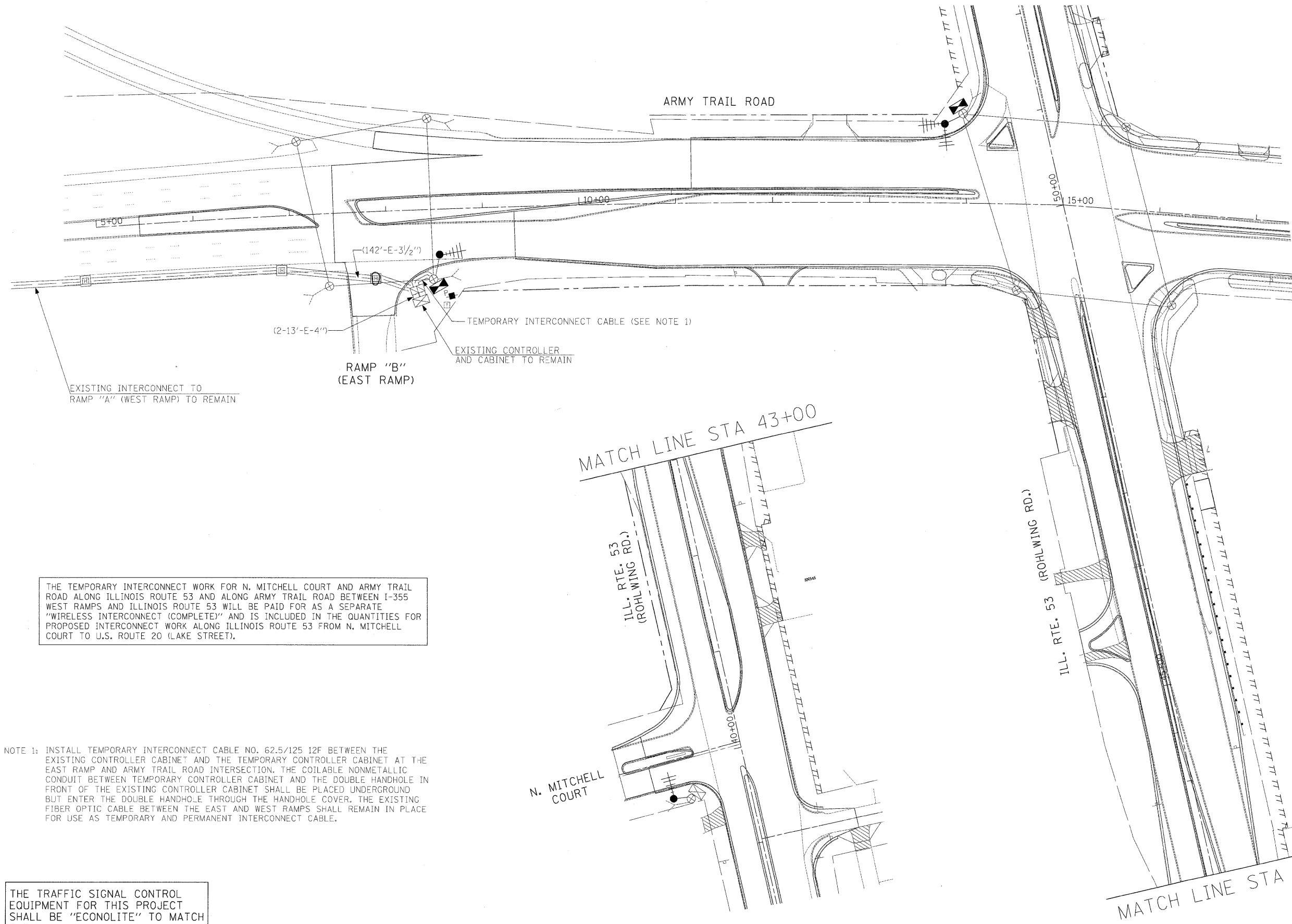
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		CHECKED - PKG, EA	REVISED -
		DATE - 5/10/2010	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM,  
EMERGENCY VEHICLE PREEMPTION SEQUENCE, SCHEDULE OF QUANTITIES  
U.S. ROUTE 20 (LAKE ST.) AT RAMPS "G", AND "J" (EAST RAMPS)  
(SHEET 2 OF 2)

F.A.P. RTE. 2578	SECTION 532B	COUNTY	TOTAL SHEETS 781	SHEET NO. 527
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60477	

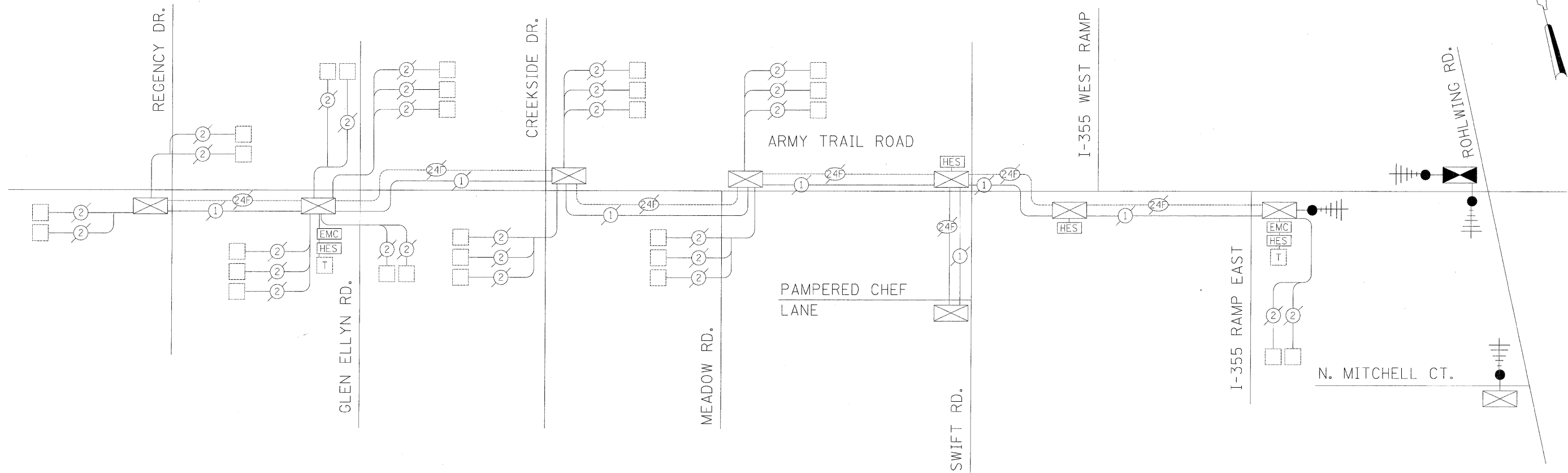
SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.



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 RAMPS 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.

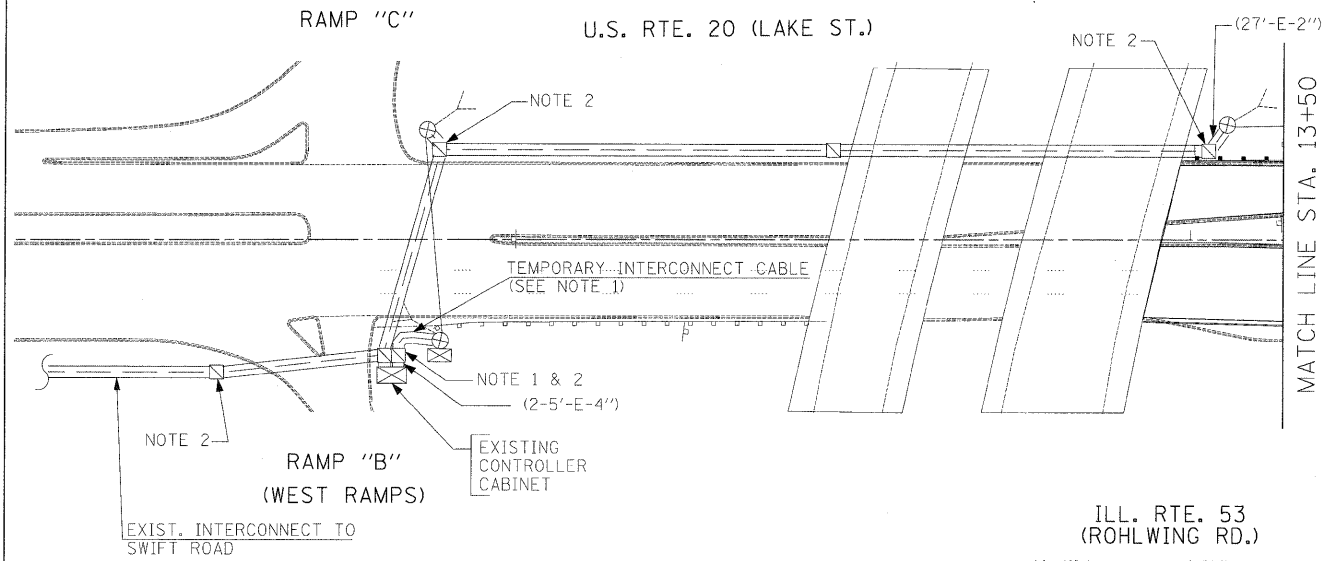
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\$FILEL\$		DRAWN - MAA, EA	REVISED -		<b>ARMY TRAIL ROAD FROM RAMP "B" (EAST RAMP) TO ILL. RTE. 53 (ROHLWING RD.)</b>				2578	532B	DuPage	781	528
	PLOT SCALE = #SCALE#	CHECKED - PKG, EA	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. - [ILLINOIS] FED. AID PROJECT		
	PLOT DATE = #DATE#	DATE - 5/10/2010	REVISED -		CONTRACT NO. 60477								



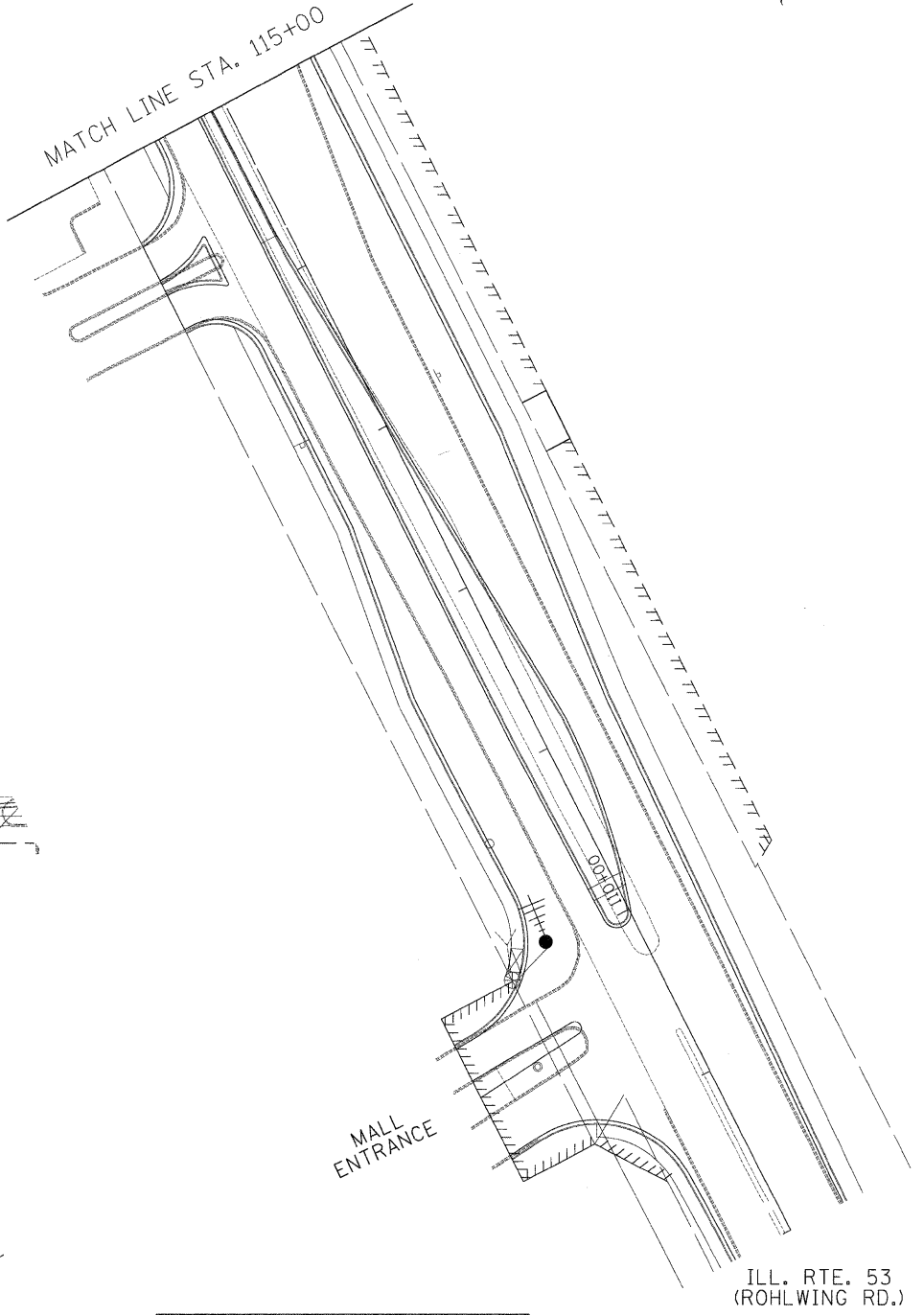
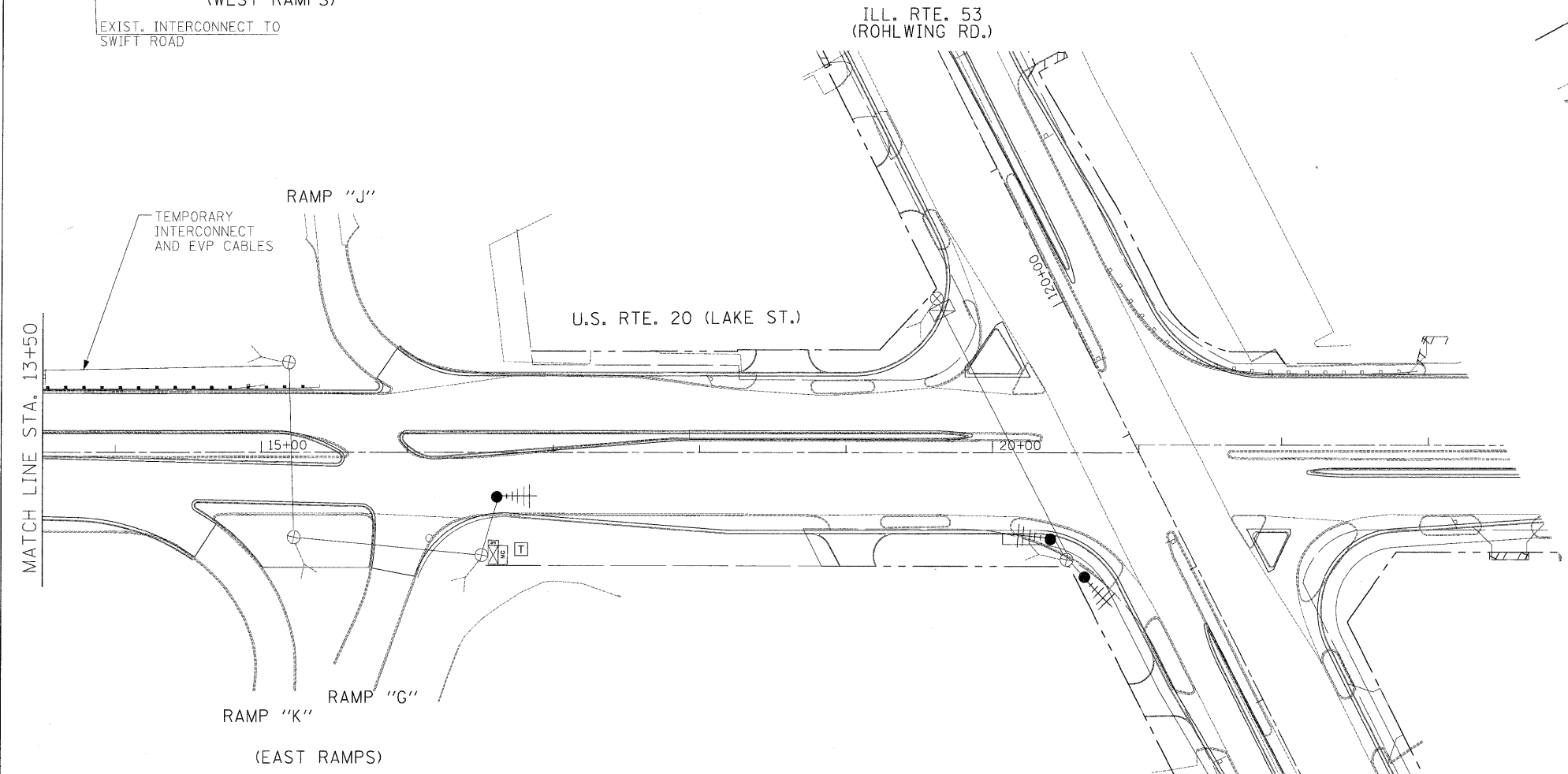
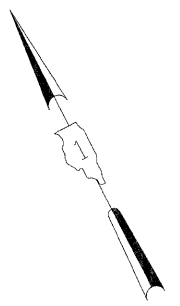
LEGEND  
 HARDENED ETHERNET SWITCH [HES]

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 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	
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	PLOT DATE = #DATE#	CHECKED - PKG, EA	REVISED -					FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				
		DATE - 5/10/2010	REVISED -									



THE TEMPORARY INTERCONNECT WORK ON U.S. ROUTE 20 BETWEEN I-355 WEST RAMPS AND ILLINOIS ROUTE 53 WILL BE PAID FOR AS A SEPARATE "WIRELESS INTERCONNECT (COMPLETE)" AND IS INCLUDED IN THE QUANTITIES FOR PROPOSED INTERCONNECT WORK ALONG ILLINOIS ROUTE 53 FROM N. MITCHELL COURT TO U.S. ROUTE 20 (LAKE STREET).

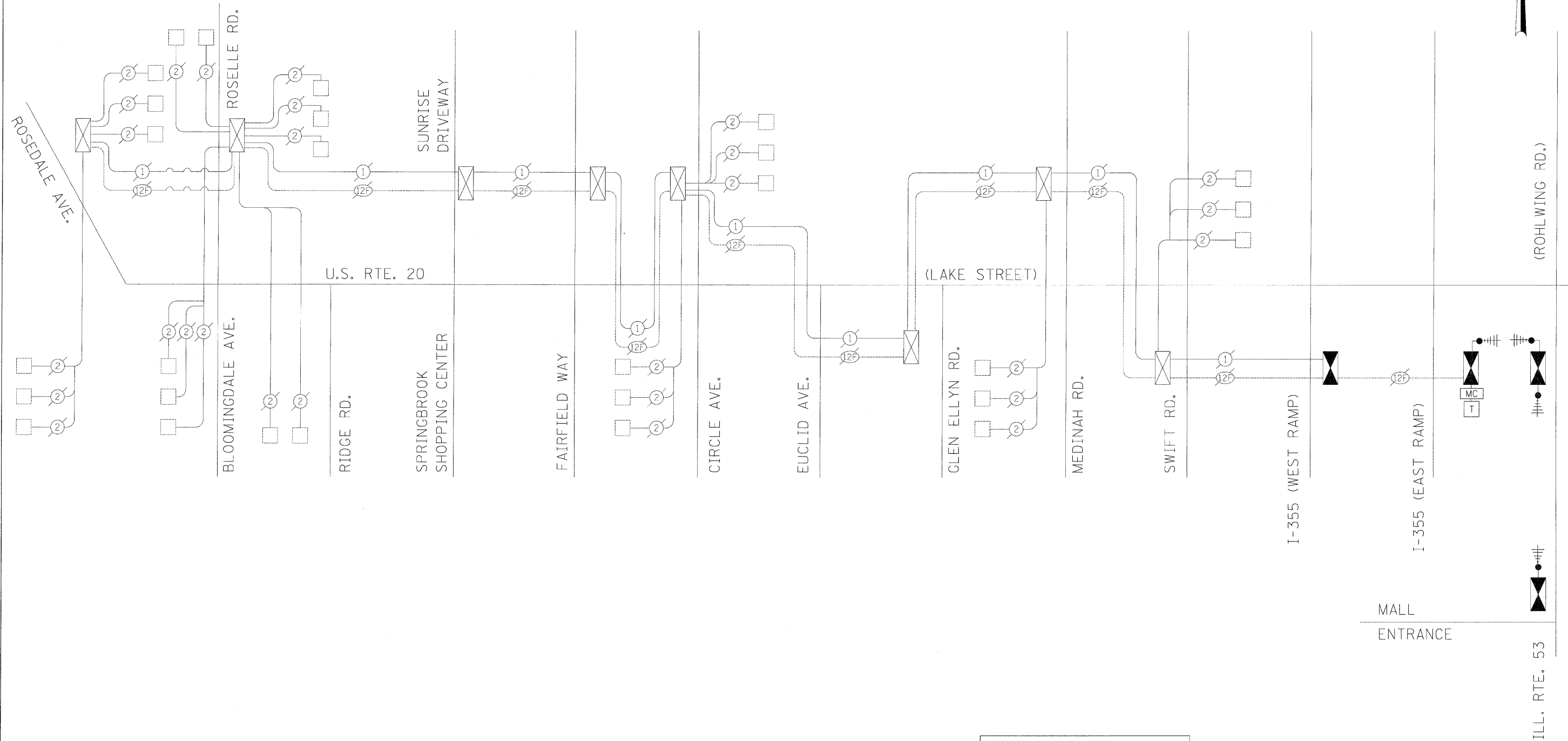


NOTE 1: AT WEST RAMPS, INSTALL TEMPORARY INTERCONNECT CABLE NO. 62.5/125 12F BETWEEN THE EXISTING CONTROLLER CABINET AND THE TEMPORARY CONTROLLER CABINET AT US RTE. 20 (LAKE ST.) AND WEST RAMPS. THE COILABLE NONMETALLIC CONDUIT BETWEEN TEMPORARY CONTROLLER CABINET AND THE DOUBLE HANDHOLE IN FRONT OF THE EXISTING CONTROLLER CABINET SHALL BE PLACED UNDERGROUND BUT ENTER THE DOUBLE HANDHOLE THROUGH THE HANDHOLE COVER. THE EXISTING FIBER OPTIC CABLE BETWEEN WEST RAMPS AND SWIFT ROAD SHALL REMAIN IN PLACE FOR USE AS TEMPORARY INTERCONNECT CABLE.

NOTE 2: THE HANDHOLES AND CONDUITS CARRYING THE EMERGENCY VEHICLE PREEMPTION CABLES AND/OR 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 EMERGENCY VEHICLE PREEMPTION CABLES.

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 INTERCONNECT PLAN U.S. RTE. 20 (LAKE ST.) FROM ILL. RTE. 53 (ROHLWING RD.) TO RAMPS "B" AND "C" (WEST RAMPS)</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
#FILE#		DRAWN - MAA, EA	REVISED -		2578	532B	DuPage	781	530			
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	PLOT DATE = #DATE#	DATE - 5/10/2010	REVISED -		SCALE: 1"=50'	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			



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

FILE NAME = \$FILEL\$	USER NAME = \$USER\$	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY INTERCONNECT SCHEMATIC</b>		F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 531
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PLOT DATE = \$DATE\$	DATE - 5/10/2010	CHECKED - PKG, EA	REVISED -					FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT			

ILL. RTE. 53

MALL  
ENTRANCE

I-355 (WEST RAMP)

I-355 (EAST RAMP)

(ROHLWING RD.)

(LAKE STREET)

U.S. RTE. 20

ROSEDALE AVE.

ROSELLE RD.

BLOOMINGDALE AVE.

RIDGE RD.

SPRINGBROOK SHOPPING CENTER

SUNRISE DRIVEWAY

FAIRFIELD WAY

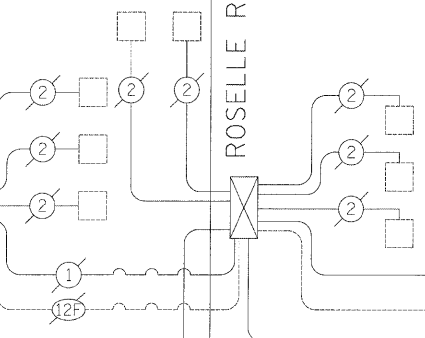
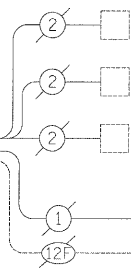
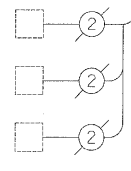
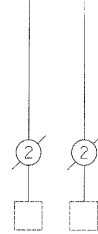
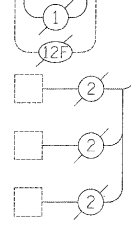
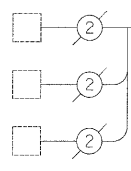
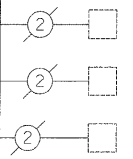
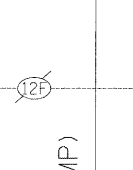
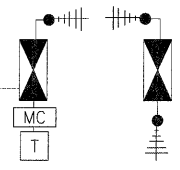
CIRCLE AVE.

EUCLID AVE.

GLEN ELLYN RD.

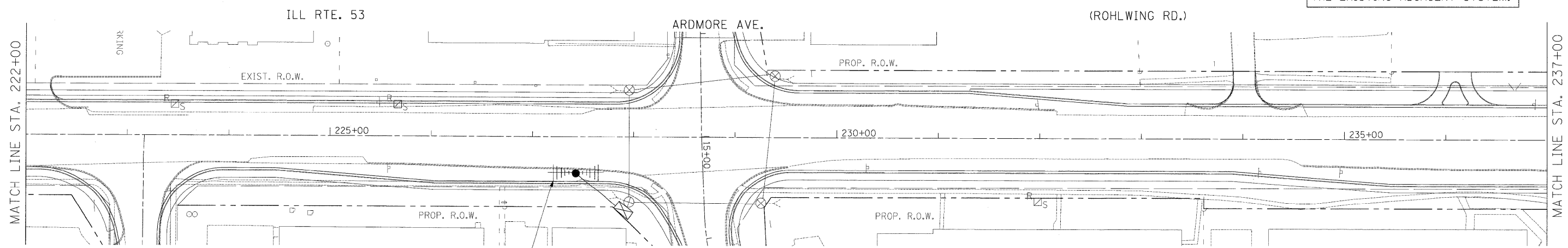
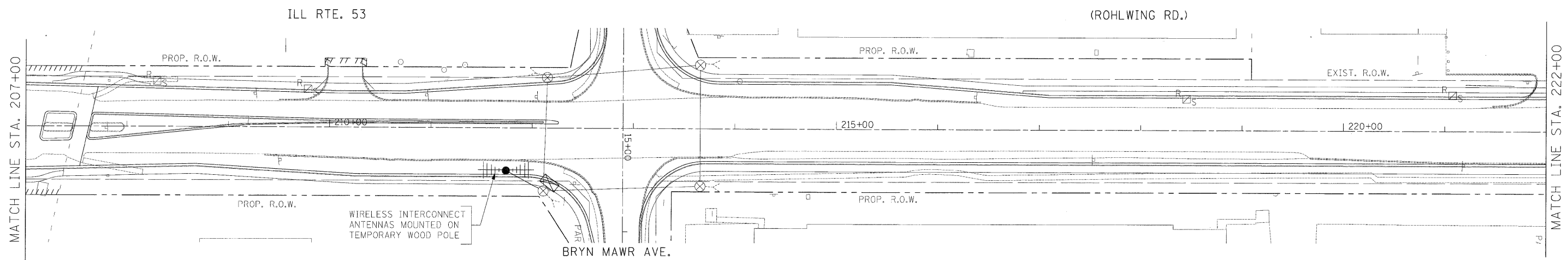
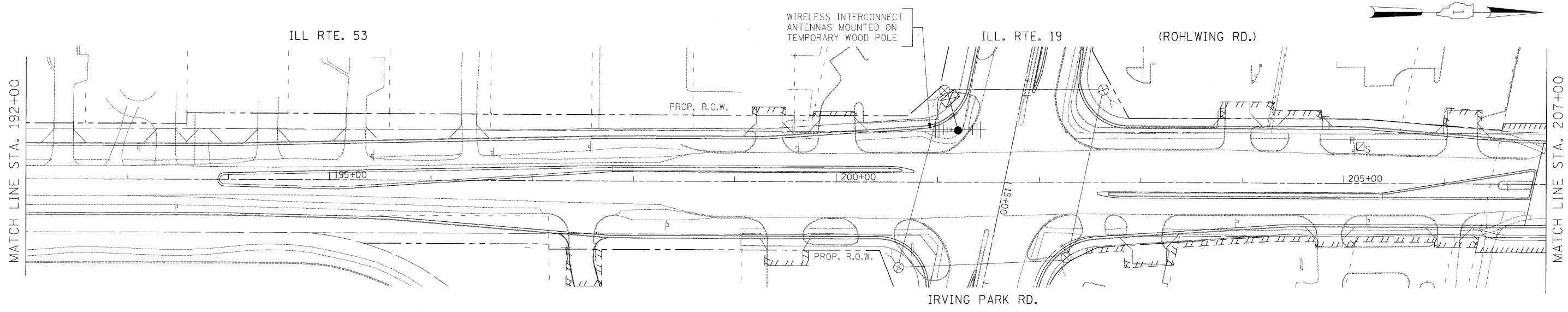
MEDINAH RD.

SWIFT RD.



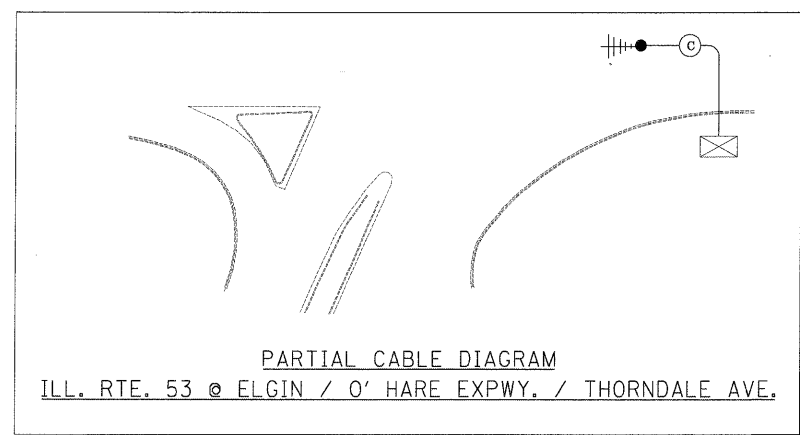
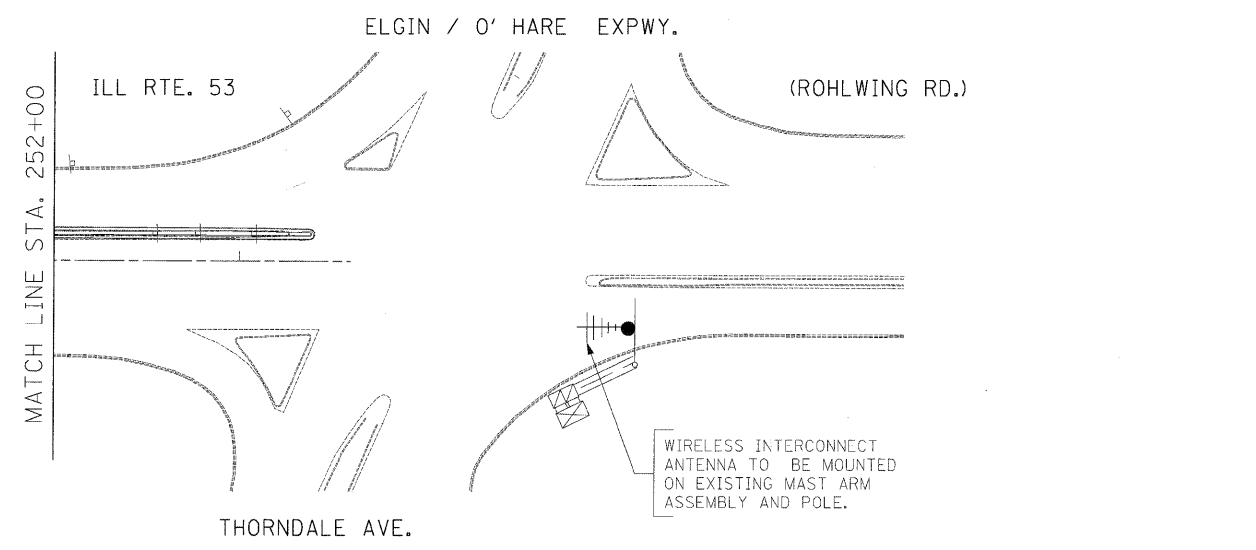
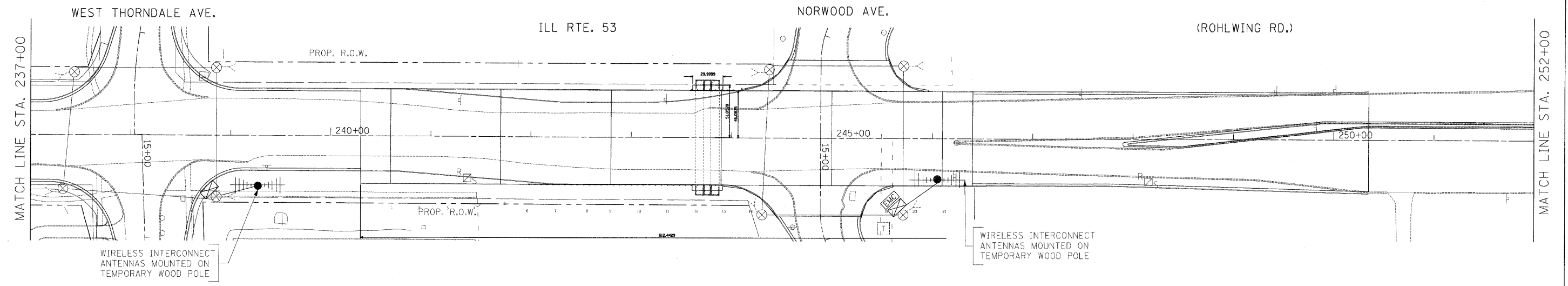






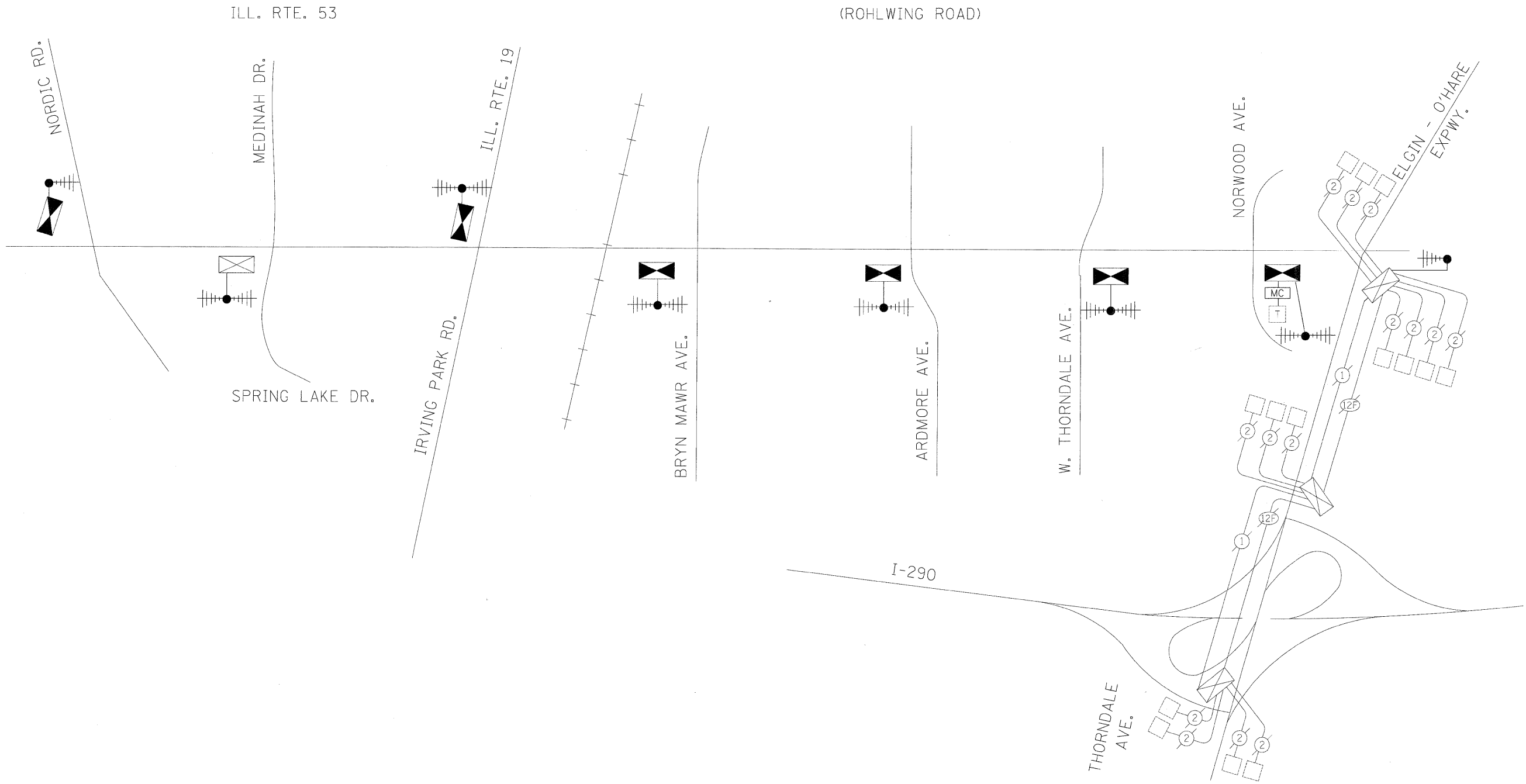
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

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 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	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 - 5/10/2010	REVISED -									



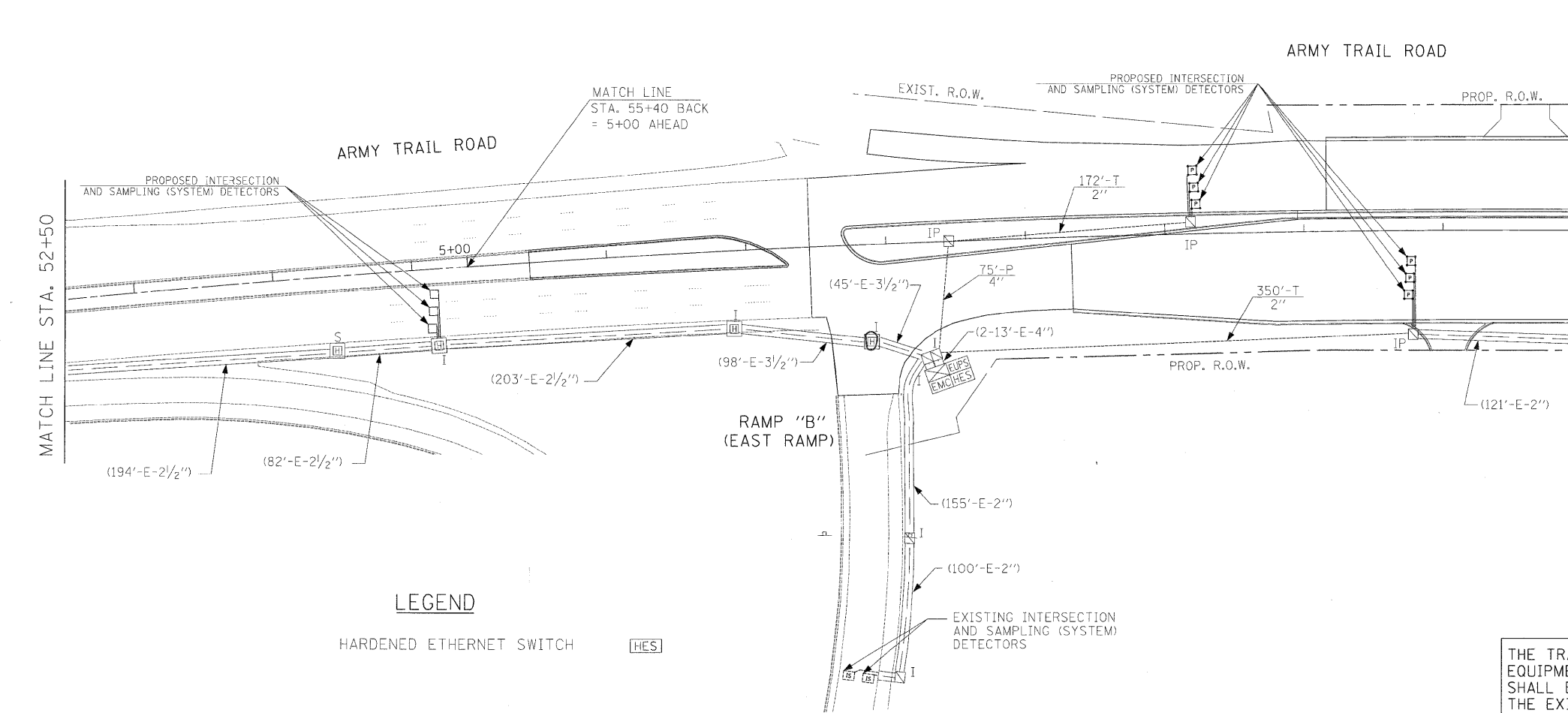
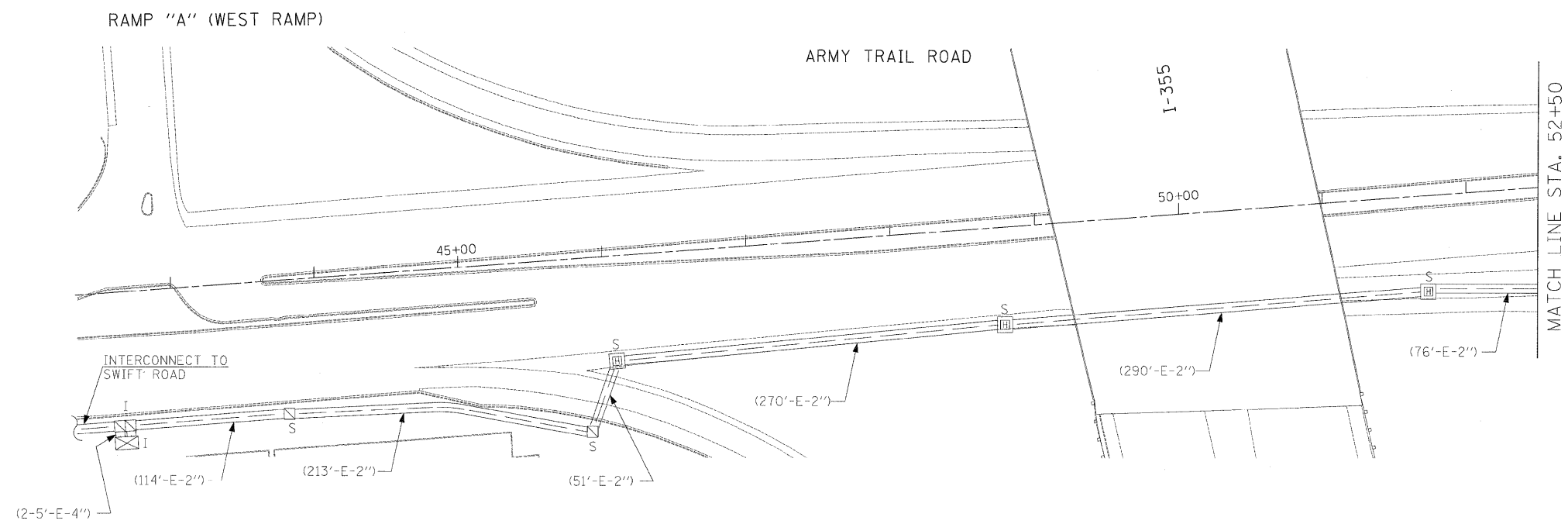
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

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 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 -		FED. ROAD DIST. NO. - [ILLINOIS] FED. AID PROJECT								
		DATE - 5/10/2010	REVISED -										



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

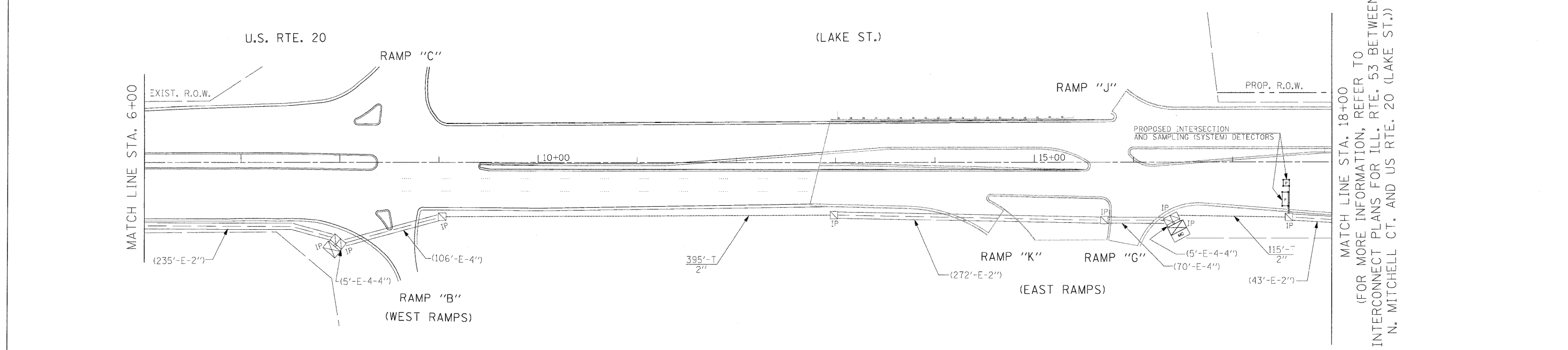
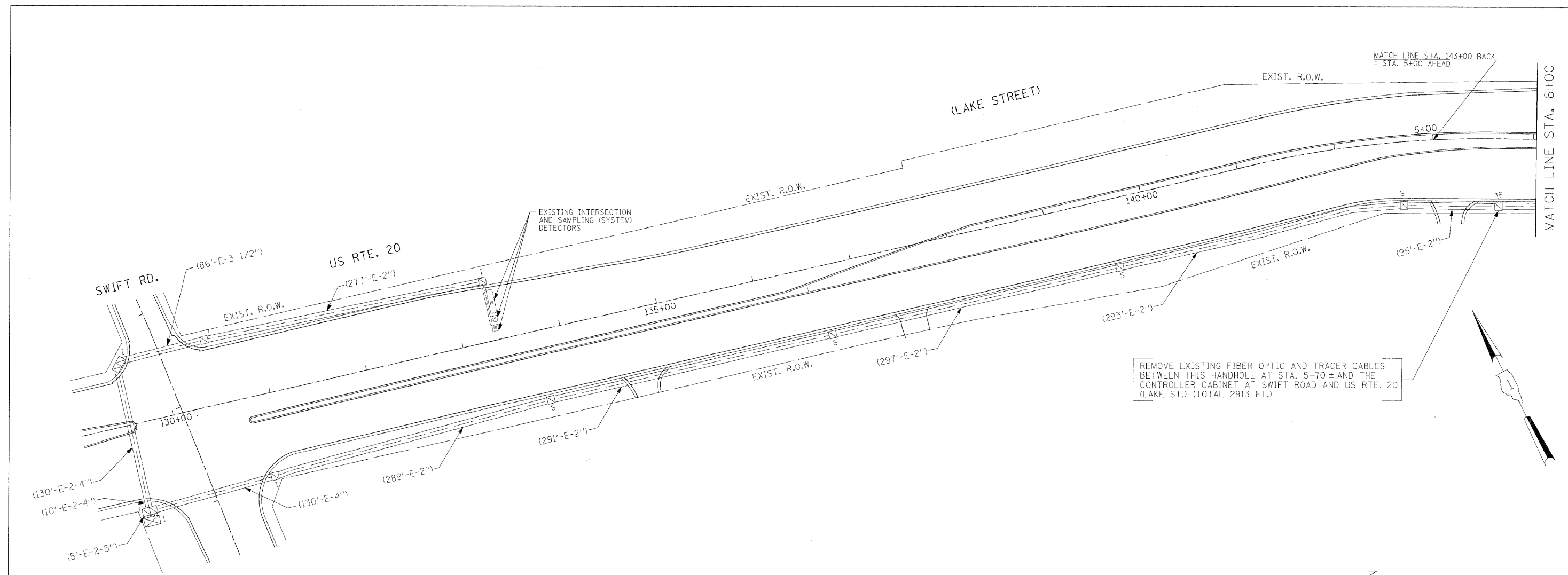
FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY INTERCONNECT SCHEMATIC ILLINOIS ROUTE 53 (ROHLWING RD.) FROM NORDIC ROAD TO ELGIN-O'HARE EXPWY./THORNDALE AVE.</b>			F.A.P. RTE. 2578	SECTION 5323	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 535
	PLOT SCALE = #SCALE#	CHECKED - PKG, EA	REVISED -		SCALE: NONE	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
	PLOT DATE = #DATE#	DATE - 5/10/2010	REVISED -					CONTRACT NO. 60477				



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.))

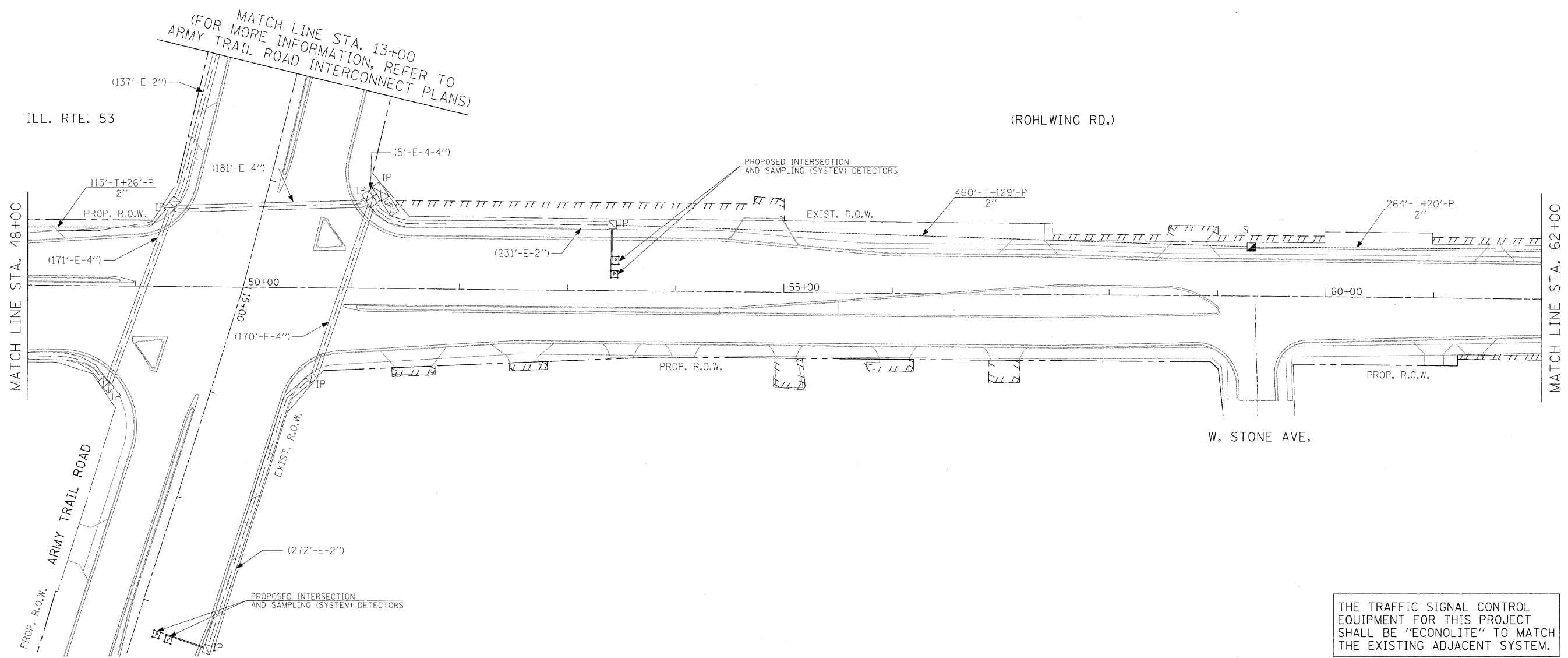
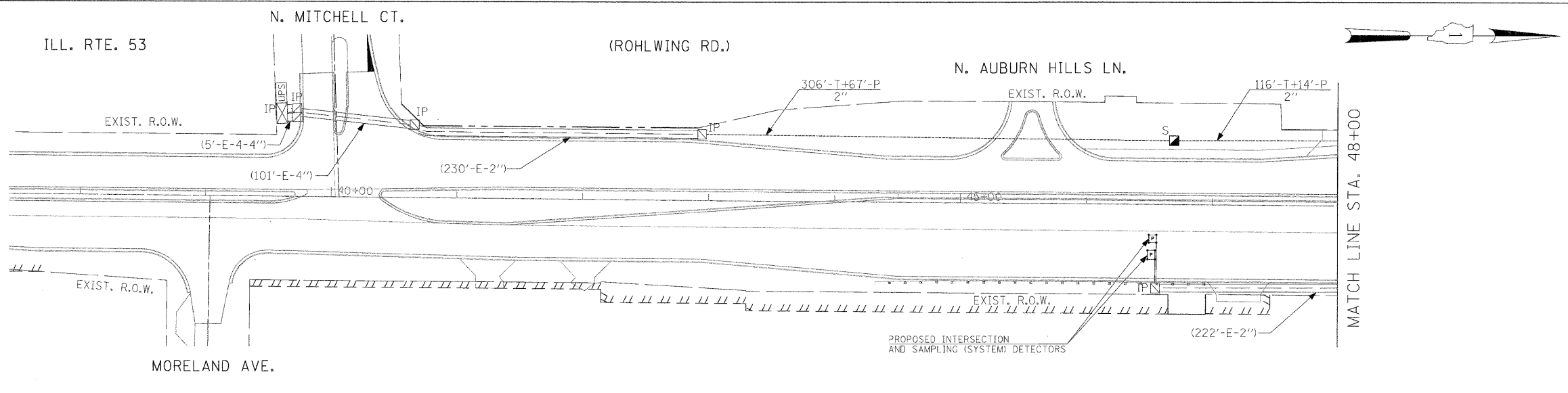
THE TRAFFIC SIGNAL CONTROL  
 EQUIPMENT FOR THIS PROJECT  
 SHALL BE "ECONOLITE" TO MATCH  
 THE EXISTING ADJACENT SYSTEM.

FILE NAME =	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
#FILEL#	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 - 5/10/2010	REVISED -									

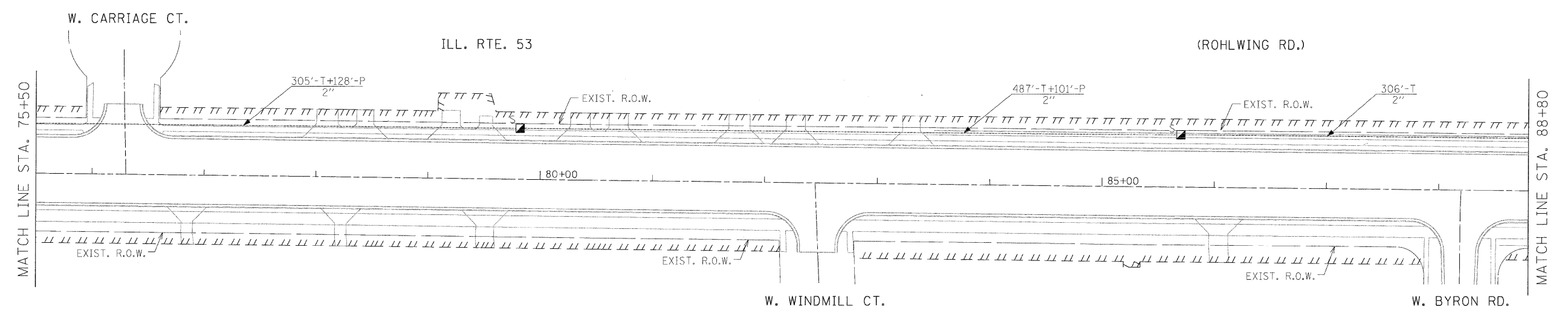
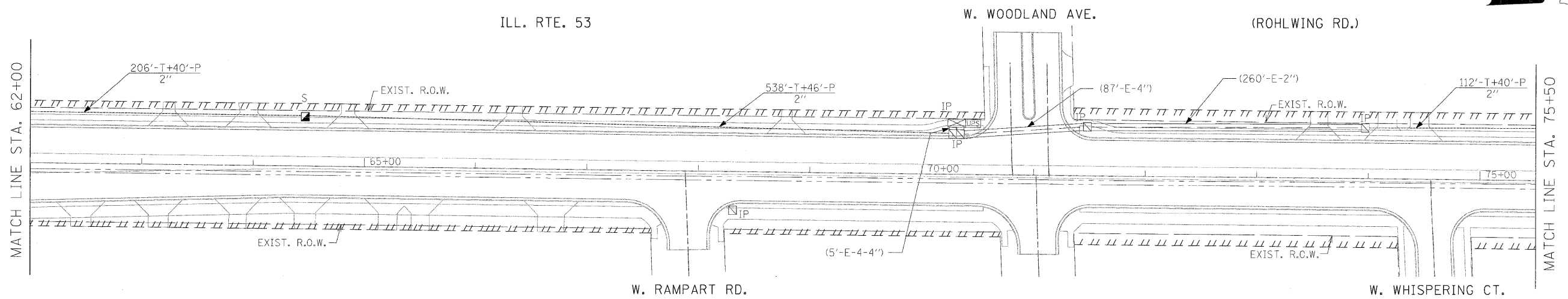


THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

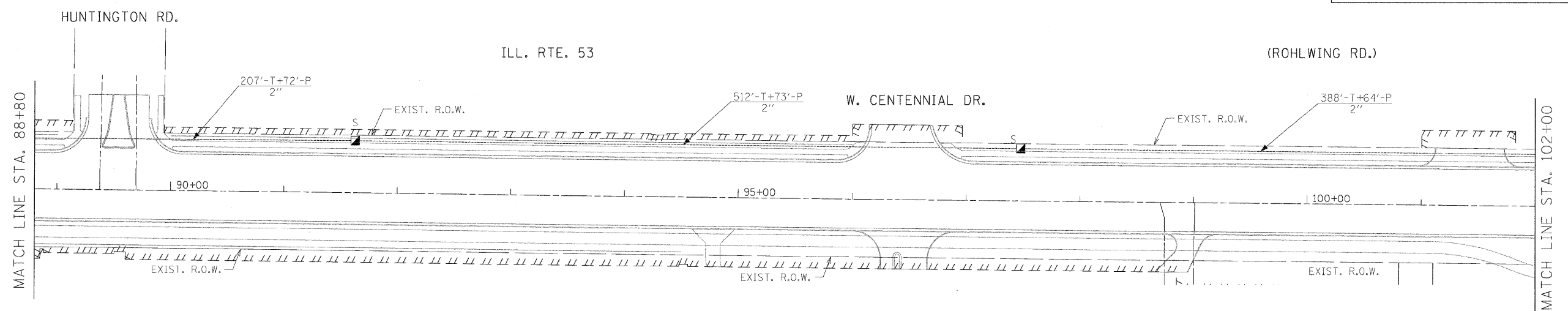
FILE NAME =	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED INTERCONNECT PLAN U.S. RTE. 20 (LAKE ST.) FROM ILL. RTE. 53 (ROHLING RD.) TO SWIFT ROAD (SHEET 1 OF 1)</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
#FILE#		DRAWN - MAA, EA	REVISED -		SCALE: 1"=50'	SHEET NO.	OF	SHEETS	STA.	TO STA.	2578	532B	DuPage	781	537
		CHECKED - PKG, EA	REVISED -												
		DATE - 5/10/2010	REVISED -												
														CONTRACT NO. 60477	
														FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	



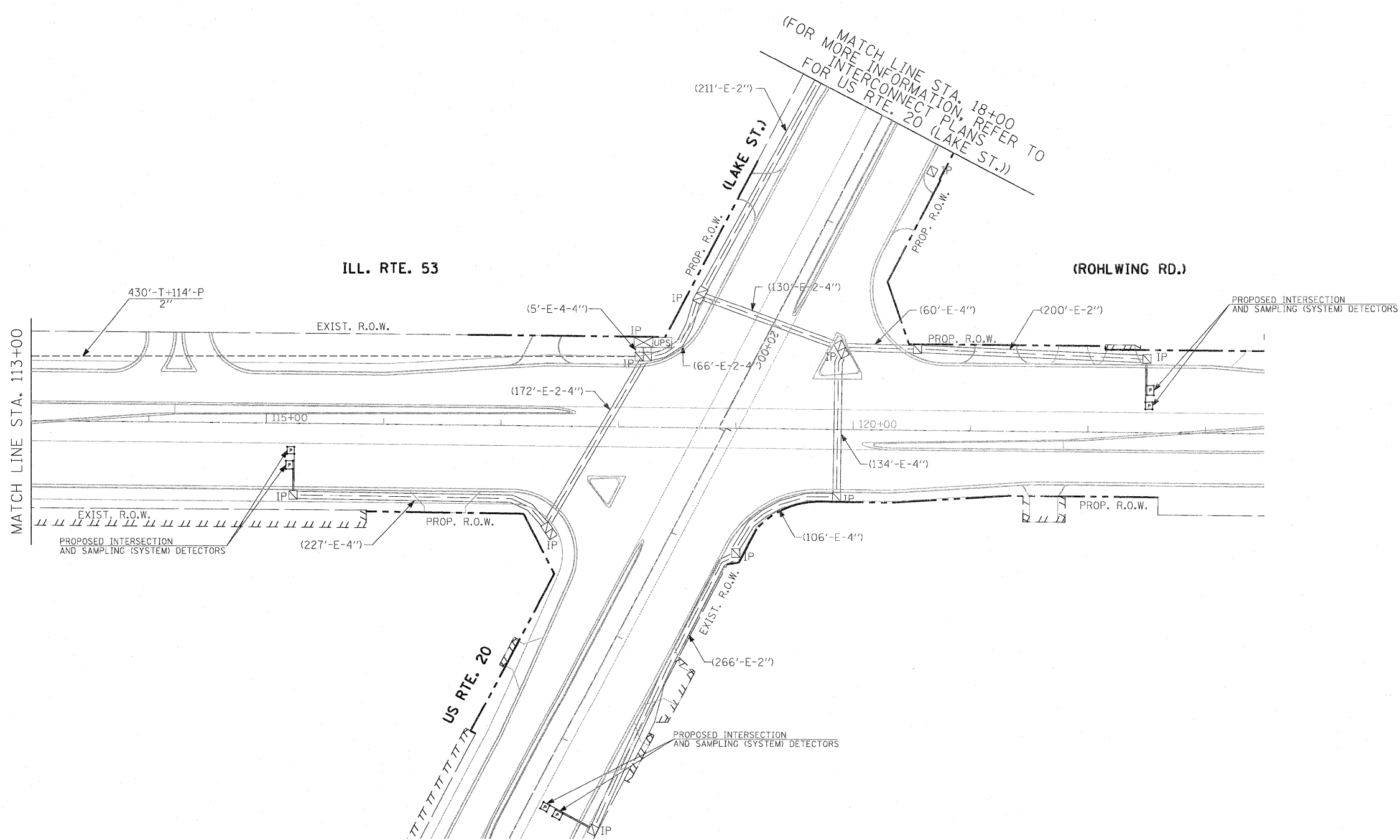
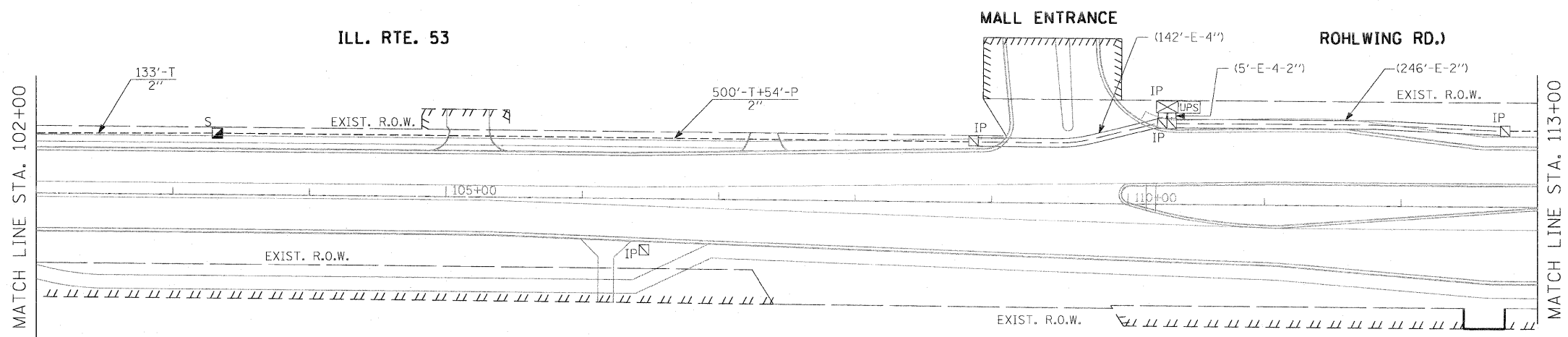
FILE NAME = \$FILEL\$	USER NAME = \$USER\$	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED INTERCONNECT PLAN ILL. RTE. 53 (ROHLWING RD.) FROM N. MITCHELL CT. TO US RTE. 20 (LAKE STREET) (SHEET 1 OF 3)</b>		F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 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 - 5/10/2010	REVISED -								



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



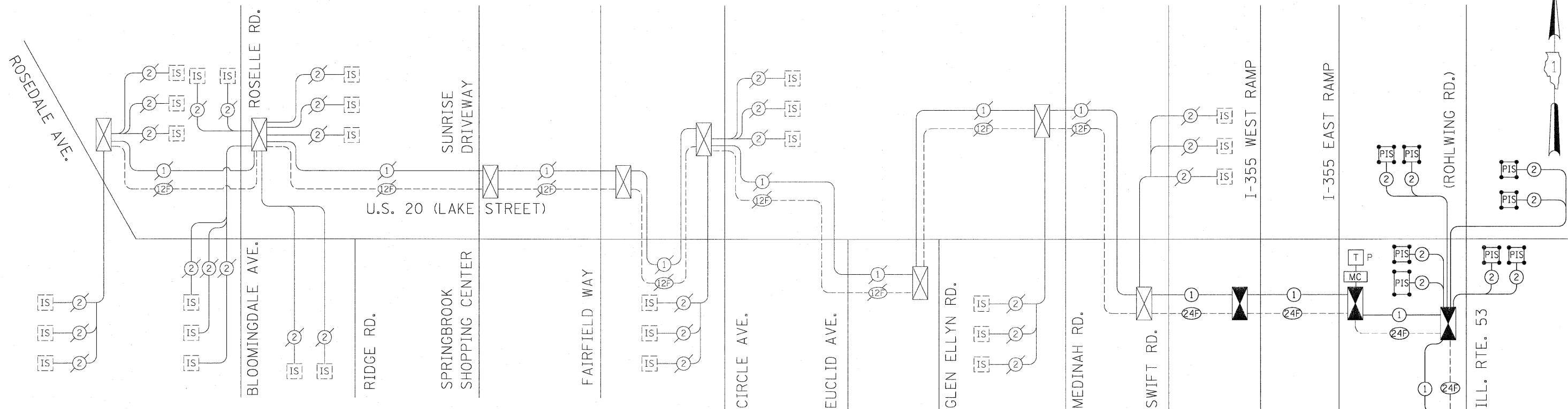
FILE NAME = #FILEL#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED INTERCONNECT PLAN ILL. RTE. 53 (ROHLWING RD.) FROM N. MITCHELL CT. TO US RTE. 20 (LAKE STREET) (SHEET 2 OF 3)</b>		F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 539
	PLOT SCALE = #SCALE#	CHECKED - PKG, EA	REVISED -				CONTRACT NO. 60477				
	PLOT DATE = #DATE#	DATE - 5/10/2010	REVISED -				FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				
SCALE: 1"=50'		SHEET NO. OF SHEETS STA. TO STA.									



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		PROPOSED INTERCONNECT PLAN		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
#FILE#		DRAWN - MAA, 01/3/2011	REVISED -			ILL. RTE. 53 (ROHLWING RD.) FROM N. MITCHELL CT. TO US RTE. 20 (LAKE STREET)		2578	532B	DuPage	781	540
	PLOT SCALE = #SCALE#	CHECKED - PKG, 5/10/2010	REVISED -	(SHEET 3 OF 3)		SCALE: 1"=50'		SHEET NO. OF SHEETS STA. TO STA.		CONTRACT NO. 60477		
	PLOT DATE = #DATE#	DATE - 5/10/2010	REVISED -					FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

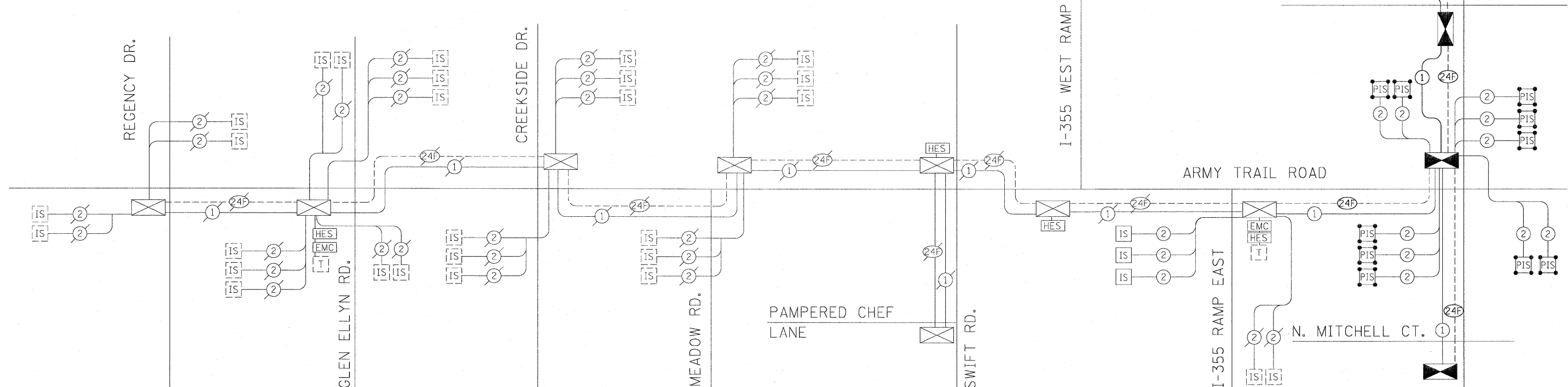


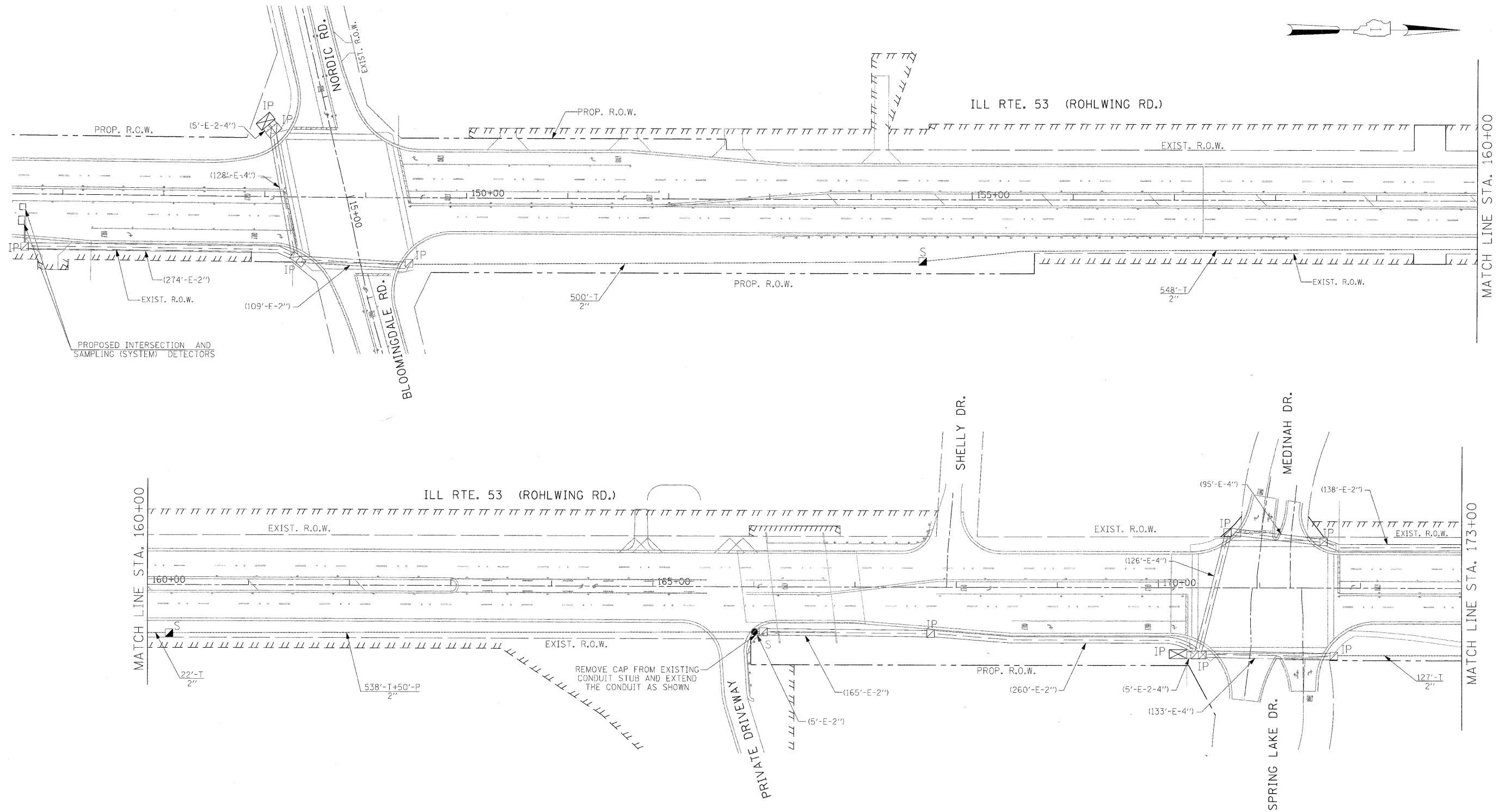


**SCHEDULE OF INTERCONNECT QUANTITIES**

QUANTITY	UNIT	ITEM
6245	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
988	FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
8	EACH	HANDHOLE
6245	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
1	EACH	MASTER CONTROLLER (SPECIAL)
2913	FOOT	REMOVE ELECTRIC CABLE FROM CONDUIT
12124	FOOT	ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1C
8	EACH	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM - LEVEL 2
12332	FOOT	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F
2	EACH	WIRELESS INTERCONNECT (COMPLETE)

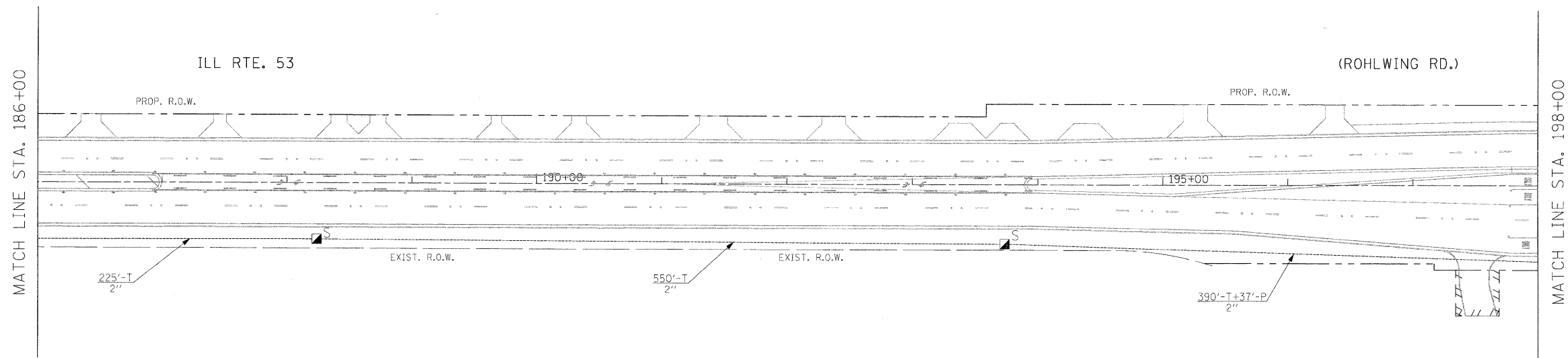
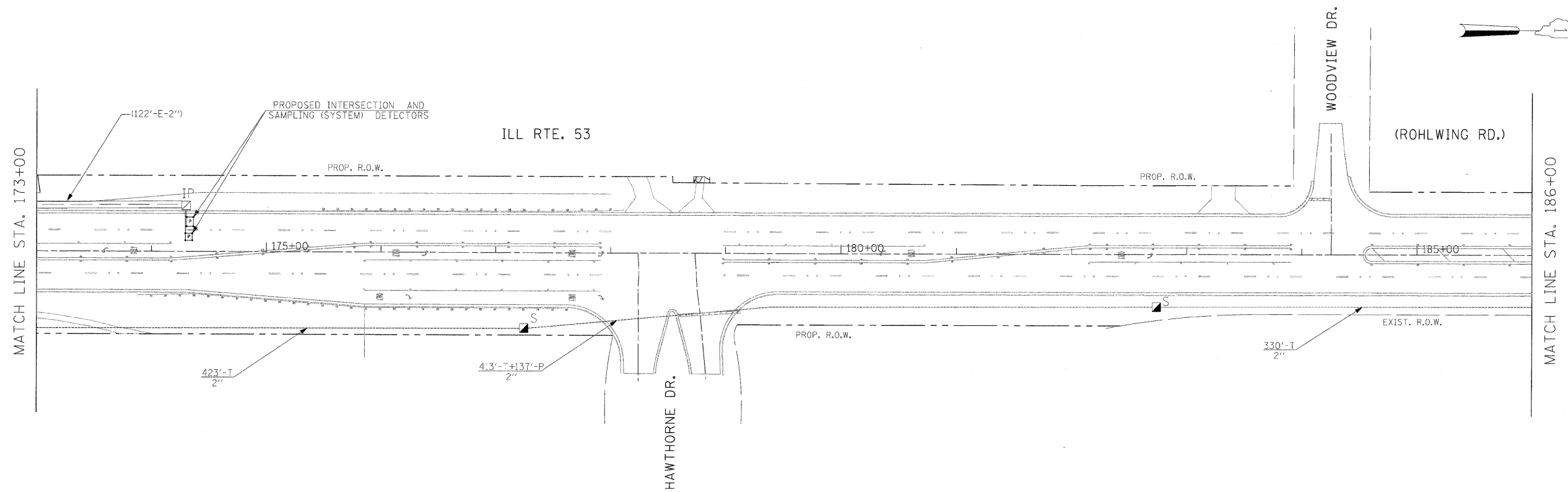
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.





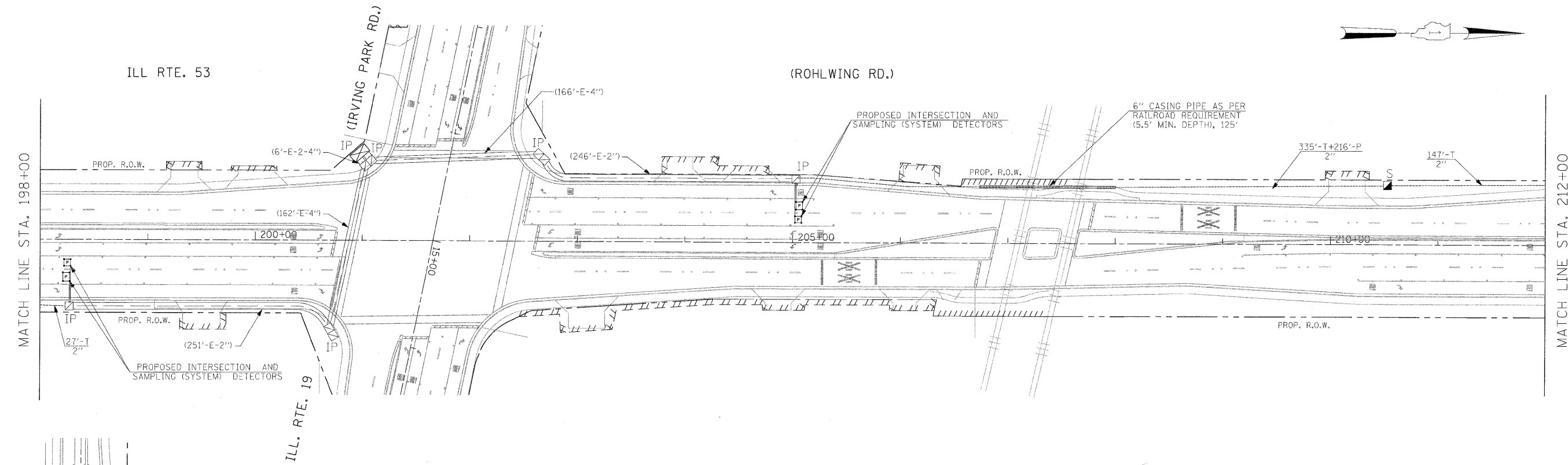
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME =	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 1 OF 4)</b>				F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 78	SHEET NO. 542
*FILE#	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 - 5/10/2010	REVISED -										



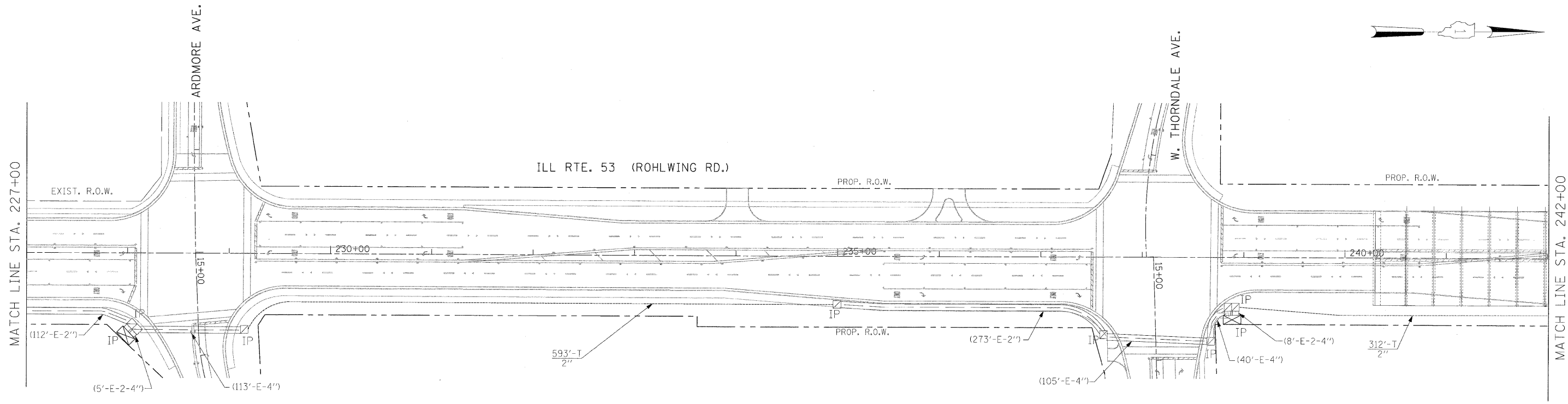
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME =	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED INTERCONNECT PLAN</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
#FILEL#		DRAWN - MAA, EA	REVISED -		ILL. RTE. 53 (ROHLWING RD.) FROM NORDIC RD./BLOOMINGDALE RD. TO ELGIN-O'HARE EXPWY/THORNDALE AVE.			2578	532B	DuPage	781	543
	PLOT SCALE = #SCALE#	CHECKED - PKG, EA	REVISED -		(SHEET 2 OF 4)							
	PLOT DATE = #DATE#	DATE - 5/10/2010	REVISED -		SCALE: 1"=50'	SHEET NO. OF	SHEETS	STA. TO STA.	FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT			
CONTRACT NO. 60477												

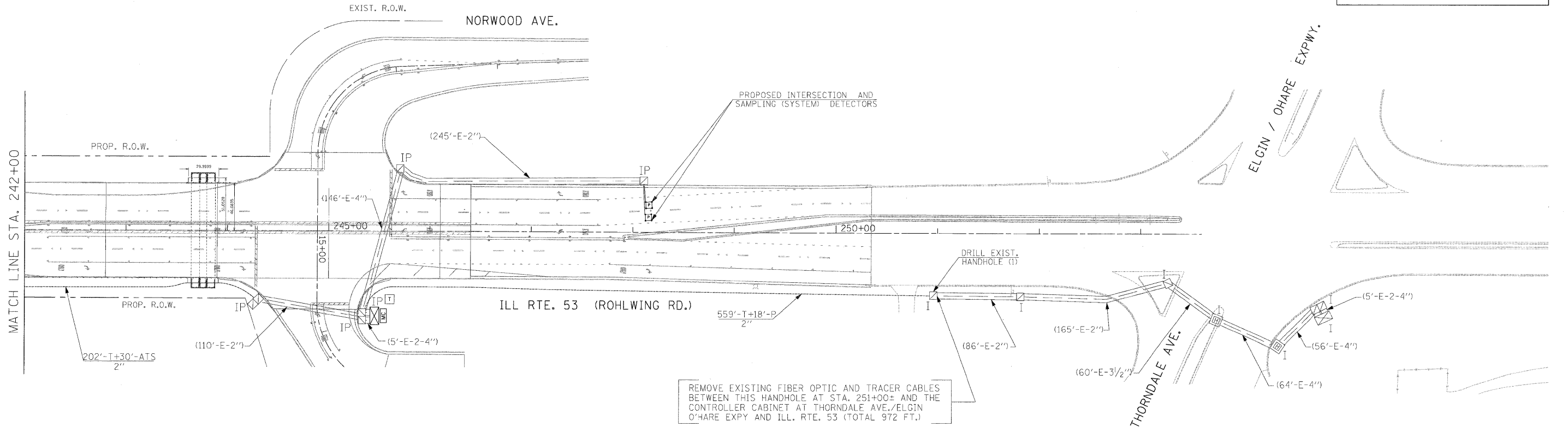


THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = #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 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 - 5/10/2010	REVISED -									



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 -
#FILEL#		DRAWN - MAA, EA	REVISED -
	PLOT SCALE = #SCALE#	CHECKED - PKG, EA	REVISED -
	PLOT DATE = #DATE#	DATE - 5/10/2010	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>PROPOSED INTERCONNECT PLAN</b>		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ILL RTE. 53 (ROHLWING RD.) FROM NORDIC RD./BLOOMINGDALE RD. TO ELGIN-O'HARE EXPY/THORNDALE AVE.		2578	532B	DuPage	781	545
(SHEET 4 OF 4)		CONTRACT NO. 60477				
SCALE: 1"=50'	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT			









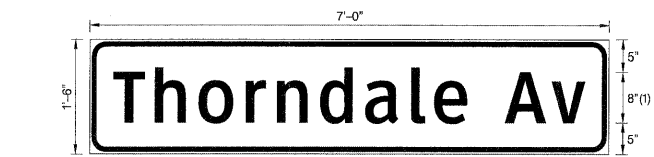








**SIGN DETAIL**  
1:10



BORDER  
R=2.25"  
TH=0.75"  
IN=0.38"  
FONT:  
(1) ClearviewHwy-3-W  
Panel Style: Street name Sign.ssi  
M.U.T.C.D.: 2003 Edition  
10.5 Sq. Ft. each  
2 Required

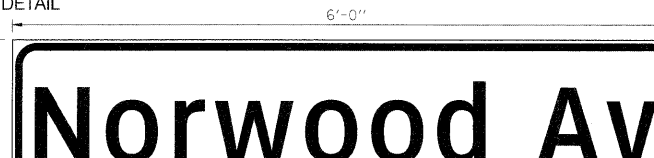
SIGN NUMBER	Thorndale Av
WIDTH x HGHT.	7'-0" x 1'-6"
BORDER WIDTH	0.75"
CORNER RADIUS	2.25"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND/BORDER	TYPE: Reflective COLOR: White/White

SYMBOL	ROT	X	Y	WID	HT

Panel Style: Street name Sign.ssi  
Dimensions are in inches tenths  
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)													LENGTH	SERIESIZE	
T	h	o	r	n	d	a	i	e	A	v					ClearviewHwy-3-W
3.8	10.6	17.6	25.3	30.3	37.4	44.6	52	55.8	61.1	67.2	74.8			76.3	86.5

**SIGN DETAIL**  
1:10



BORDER  
R=2.25"  
TH=0.75"  
IN=0.38"  
FONT:  
(1) ClearviewHwy-3-W  
Panel Style: Street name Sign.ssi  
M.U.T.C.D.: 2003 Edition  
9 Sq. Ft. each  
2 Required

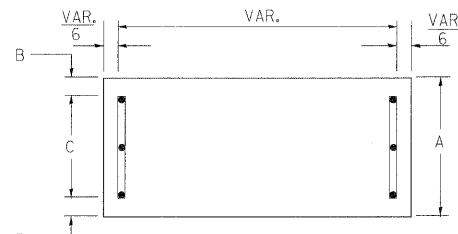
SIGN NUMBER	Norwood Av
WIDTH x HGHT.	6'-0" x 1'-6"
BORDER WIDTH	0.75"
CORNER RADIUS	2.25"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND/BORDER	TYPE: Reflective COLOR: White/White

SYMBOL	ROT	X	Y	WID	HT

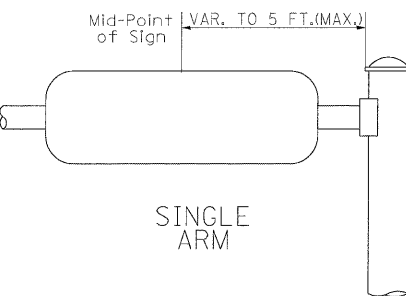
Panel Style: Street name Sign.ssi  
Dimensions are in inches tenths  
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)													LENGTH	SERIESIZE	
N	o	r	w	o	o	d	A	v							ClearviewHwy-3-W
2.5	10.2	17.5	21.9	31.7	38.8	45.8	51	56.7	64.1					67	86.5

**SUPPORTING CHANNELS**

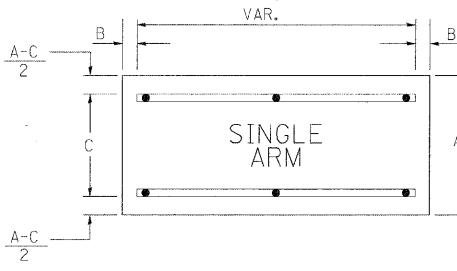


A	B	C
18"	2"	14"

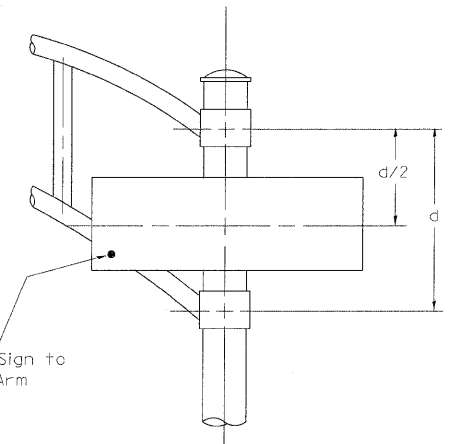


SINGLE ARM

**SUPPORTING CHANNELS**



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



DUAL ARM























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

**GENERAL NOTES**

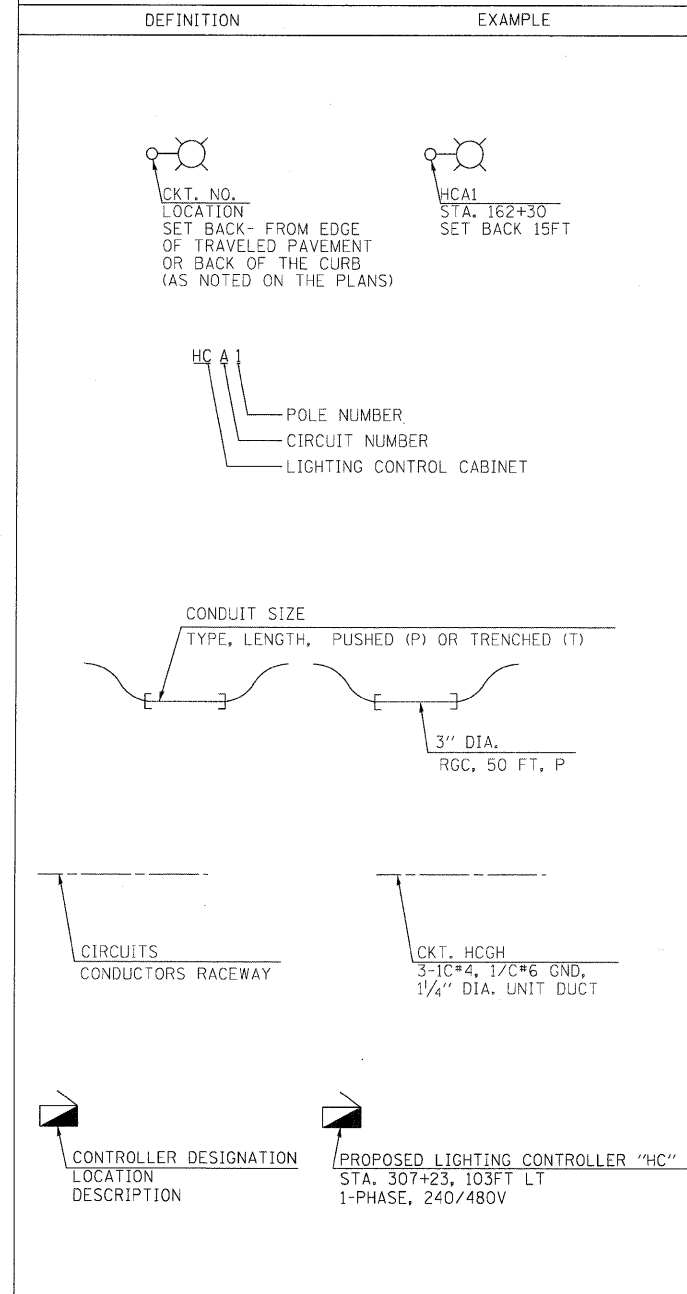
- WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
- ALL SIGNS SHALL HAVE A WHITE 3-W CLEARVIEW HIGHWAY FONT WITH 3M-S NEW DG3 REFLECTIVE LEGEND AND BORDER ON A GREEN 3M-S NEW DG3 REFLECTIVE BACKGROUND 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:
  - \* A.K.T. CORPORATION
  - \* TUCKER COMPANY, INC.
  - \* WAUWATOSA, WI
  - \* AMERICAN FABRICATION CO.
  - \* WESTERN TRAFFIC CONTROL INC.
  - \* CHICAGO HEIGHTS, IL
  - \* CICERO, IL

**PARTS LISTING:**  
SIGN CHANNEL PART #HPN053 (MED. CHANNEL)  
SIGN CHANNEL 1/4" x 14 x 1" H.W.H. #3  
SIGN SCREWS 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.

**LEGEND (IDOT)**

-  PROPOSED LIGHTING UNIT  
47.5' M.H., 15' M.A., 400W, 240V HPS LUMINAIRE  
TRANSFORMER BASE BREAKAWAY MAINTAINED  
BY IDOT
-  PROPOSED COMBINATION LIGHTING UNIT  
45' M.H., 15' M.A., 400W, 240V HPS LUMINAIRE  
MAINTAINED BY IDOT
-  PROPOSED TWIN COMBINATION LIGHTING  
UNIT 45' M.H., TWO 15' M.A., TWO 400W,  
240V HPS LUMINAIRE MAINTAINED BY IDOT
-  PROPOSED LIGHTING UNIT  
47.5' M.H., 15' M.A., 400W, 240V HPS LUMINAIRE  
TRANSFORMER BASE BREAKAWAY MAINTAINED  
BY DuPage COUNTY
-  PROPOSED COMBINATION LIGHTING UNIT  
45' M.H., 15' M.A., 400W, 240V HPS LUMINAIRE  
MAINTAINED BY DuPage COUNTY
-  PROPOSED TWIN COMBINATION LIGHTING  
UNIT 45' M.H., TWO 15' M.A., TWO 400W,  
240V HPS LUMINAIRE MAINTAINED BY  
DuPage COUNTY
-  PROPOSED LIGHTING UNIT  
47.5' M.H., 15' M.A., 400W, 240V HPS LUMINAIRE  
TRANSFORMER BASE BREAKAWAY MAINTAINED  
BY THE VILLAGE OF ADDISON
-  PROPOSED LIGHTING UNIT  
25' M.H., 15' M.A., 250W, 240V HPS LUMINAIRE  
TRANSFORMER BASE BREAKAWAY MAINTAINED  
BY VILLAGE OF ADDISON
-  TEMPORARY LIGHTING UNIT  
50' M.H., 15' M.A., 400W, 240V HPS LUMINAIRE  
MAINTAINED BY IDOT
-  TEMPORARY LIGHTING UNIT  
50' M.H., 15' M.A., 400W, 240V HPS LUMINAIRE  
MAINTAINED BY DuPage COUNTY
-  EXISTING LIGHTING UNIT TO REMAIN IN PLACE  
FOR TEMPORARY LIGHTING
-  EXISTING LIGHTING UNIT TO REMAIN IN PLACE
-  EXISTING LIGHTING UNIT TO BE REMOVED, SALVAGE  
(IDOT)
-  EXISTING LIGHTING UNIT TO BE REMOVED, SALVAGE  
(DuPage COUNTY)
-  RIGID GALVANIZED STEEL CONDUIT (RGC)  
PUSHED (P), OR TRENCHED (T)  
SIZE AS INDICATED
-  UNIT DUCT, AS SPECIFIED IN PLANS
-  AERIAL CABLE, AS SPECIFIED IN PLANS
-  EXISTING UNIT DUCT
-  PROPOSED LIGHTING CONTROLLER CABINET,  
SINGLE DOOR, CONSOLE TYPE, MAINTAINED BY  
VILLAGE OF ADDISON, 100A, 240/480V, 1Ø
-  EXISTING LIGHTING CONTROLLER CABINET
-  PROPOSED ELECTRIC SERVICE TRANSFORMER  
BY COMED ON EXISTING OR PROPOSED  
UTILITY WOOD POLE
-  ELECTRIC GROUND ROD

**CALL-OUT SAMPLES**



**ABBREVIATIONS**

SYMBOL	DESCRIPTION
AC	ALTERNATING CURRENT
A/C	AERIAL CABLE
AFG	ABOVE FINISHED GRADE
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CM	CENTIMETER
CNC	COILABLE NONMETALLIC CONDUIT
CT	CURRENT TRANSFORMER
CP	CONTROL PANEL
DA	DAVIT ARM
DC	DIRECT CURRENT
DIA	DIAMETER
DP	DISTRIBUTION PANEL
E	EXISTING UNIT TO REMAIN
ECA	ELECTRIC CABLE ASSEMBLY
EM	EXISTING UNIT TO BE MODIFIED (e.g. NEW LUMINAIRE, BALLAST OR MAST ARM)
ER	EXISTING RELOCATED UNIT
ET	EXISTING TEMPORARY UNIT TO REMAIN
ETR	EXISTING TEMPORARY RELOCATED UNIT
FT	FEET OR FOOT
FND BW	FOUNDATION BARRIER WALL
FND BW OS	FOUNDATION BARRIER WALL OFFSET
FND CON	FOUNDATION CONCRETE
FND CON OS	FOUNDATION CONCRETE OFFSET
FND MET	FOUNDATION METAL
FND PW	FOUNDATION PARAPET WALL
FU	FUSE
GND	GROUND
HID	HIGH INTENSITY DISCHARGE
JB	JUNCTION BOX
KVA	KILOVOLT-AMPERE
KW	KILOWATTS
M	METER
MA	MAST ARM
MM	MILLIMETER
MH	MOUNTING HEIGHT
NO. #	NUMBER
P	PROPOSED
PB	PUSH BUTTON
PNL	PANEL
PVCC RGC	PVC COATED RIGID GALVANIZED CONDUIT
PT	POTENTIAL TRANSFORMER
R	EXISTING UNIT TO BE REMOVED (OWNER SALVAGED U.N.O.)
RR	EXISTING UNIT TO BE REMOVED AND REINSTALLED
RECP	RECEPTACLE
RGC	RIGID GALVANIZED CONDUIT
RGS	RIGID GALVANIZED STEEL
SEL SW	SELECTOR SWITCH
SPARE	SPARE
SPACE	SPACE
SS	STAINLESS STEEL
STA	STATION
T	TEMPORARY LIGHTING UNIT
TB	TRANSFORMER BASE
TMP	TEMPORARY
TR	TEMPORARY UNIT TO BE REMOVED. SALVAGE EQUIPMENT AS SPECIFIED
TRR	TEMPORARY UNIT TO BE REMOVED AND RELOCATED
TUR	TEMPORARY UNIT ON UTILITY POLE TO BE REMOVED
UD	UNIT DUCT
U.N.O.	UNLESS NOTED OTHERWISE
WP	WOOD POLE
XFMR	TRANSFORMER

**GENERAL NOTES:**

1. THE CONTRACTOR SHALL VERIFY ALL OF THE INFORMATION SHOWN ON THE CONTRACT DRAWINGS, WHICH WOULD AFFECT THE WORK UNDER THIS CONTRACT.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ASCERTAIN EXISTING FIELD CONDITIONS BEFORE BIDDING ON THIS PROJECT, SPECIFICALLY AS THEY RELATE TO LUMP SUM ITEMS AND UNIT PRICE ITEMS.
3. ALL NEW CONDUITS, UNIT DUCTS, DIRECT BURIAL CABLES, AND APPURTENANCES ARE INDICATED DIAGRAMMATICALLY ON THE DRAWINGS. THE ACTUAL LOCATIONS IN THE FIELD SHALL MEET WITH APPROVAL OF THE ENGINEER.
4. THE ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND ASSOCIATED SUPPLEMENTAL CONDITIONS (LATEST EDITION).
5. THE SCALE SHOWN ON PLAN DRAWINGS APPLIES ONLY TO THE FULL SIZE PLANS AND NOT TO REDUCED SIZE PLANS.
6. THE CONTRACTOR SHALL FURNISH AND INSTALL LUMINAIRE LAMPS IN ACCORDANCE WITH THE SUPPLIER'S RECOMMENDATIONS AND IN ACCORDANCE WITH THE SPECIFICATIONS. THE COST OF THIS WORK AND MATERIAL SHALL BE INCLUDED IN THE APPLICABLE LUMINAIRE PAY ITEM. SEPARATE PAYMENT WILL NOT BE MADE.
7. ALL LUMINAIRES SHALL BE ORIENTED WITH THE OPTICS PERPENDICULAR TO THE ROADWAY UNLESS OTHERWISE INDICATED OR DIRECTED BY THE ENGINEER. THIS WORK SHALL BE CONSIDERED INCLUDED IN THE APPLICABLE LUMINAIRE PAY ITEMS. SEPARATE PAYMENT WILL NOT BE MADE.
8. CONDUITS AND UNIT DUCTS SHALL BE INSTALLED AT A MINIMUM 30" DEPTH BELOW GRADE AND POSITIONED IN THE FIELD TO AVOID CONFLICT WITH ROADWAY UNDERDRAINS AND OTHER EXISTING AND PROPOSED UTILITIES. THE CONTRACTOR SHALL INCREASE DEPTH OF UNIT DUCT AND CONDUIT AS REQUIRED AT NO ADDITIONAL COST TO THE STATE. THE CONTRACTOR SHALL COORDINATE RACEWAY DEPTH WITH THE ELECTRICAL DETAILS AND THE ENGINEER.
9. WHERE MULTIPLE CONDUITS ADJACENT TO EACH OTHER ARE INSTALLED IN A COMMON TRENCH, TRENCH AND BACKFILL WILL NOT BE PAID FOR EACH CONDUIT, BUT WILL BE PAID FOR THE LENGTH OF THE COMMON TRENCH ONLY.
10. WHERE THE CONTRACTOR'S EXCAVATION MEETS AN OBSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER FOR DIRECTION IN WRITING PRIOR TO EXCAVATION. THE CONTRACTOR SHALL RESTORE ANY DAMAGE TO EXISTING SYSTEMS OR UTILITIES AND REMOVE EXISTING OBSTRUCTIONS AND FOUNDATIONS TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE APPROPRIATE PAY ITEM.
11. BREAKAWAY DEVICE, TRANSFORMER BASE, 9", FOR 47.5' LIGHT POLES SHALL BE INSTALLED ON ALL GROUND MOUNTED POLES WITH 15" BOLT CIRCLE ON 24" DIA. FOUNDATION AS SHOWN IN THE PLANS.
12. BREAKAWAY DEVICE, TRANSFORMER BASE, 9", FOR 25' LIGHT POLES SHALL BE INSTALLED ON ALL GROUND MOUNTED POLES WITH 11.5" BOLT CIRCLE ON 24" DIA. FOUNDATION AS SHOWN IN THE PLANS.

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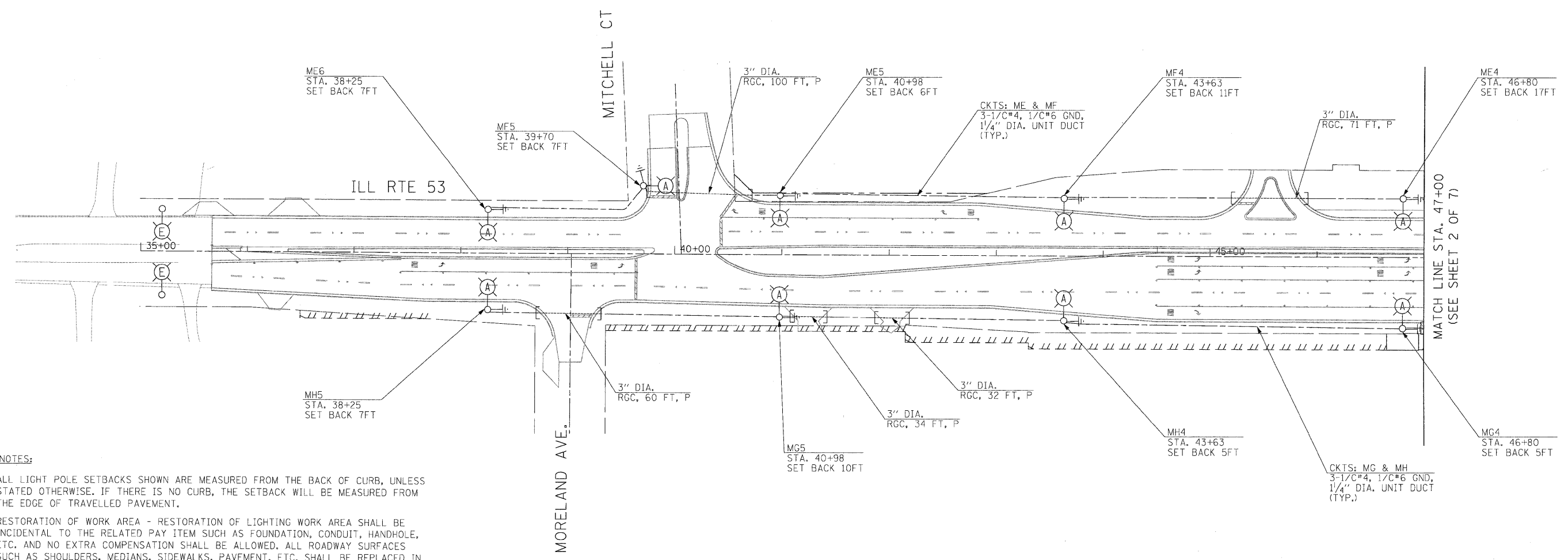
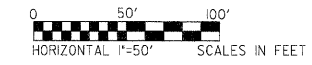
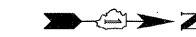
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FILE NAME =	USER NAME = .GAI.	DESIGNED - PKG	REVISED - 08-20-04	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ILL. RTE. 53 FROM MITCHELL CT. TO US RTE. 20 (LAKE ST.)</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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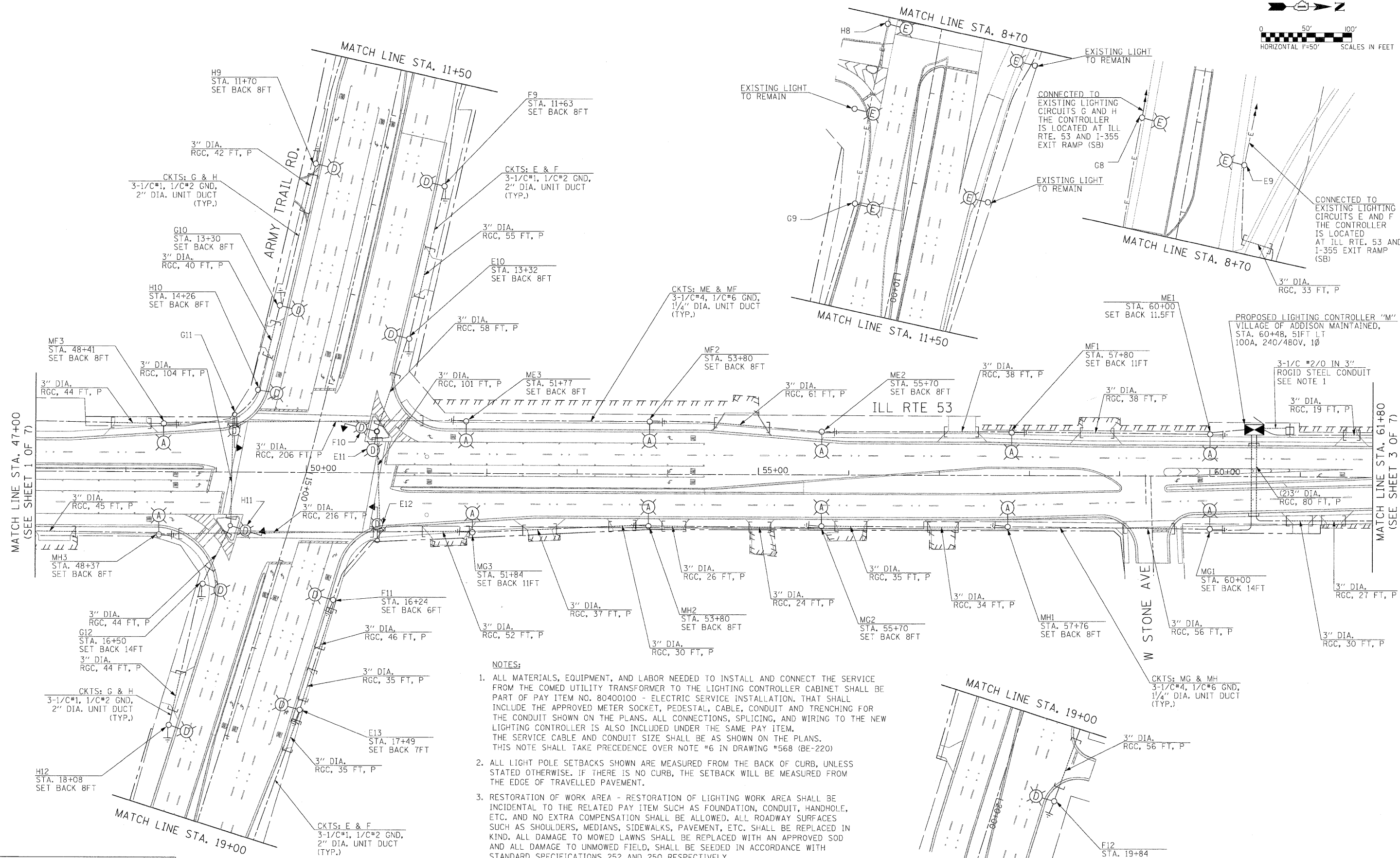
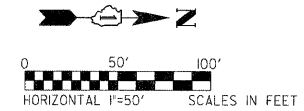
**NOTES:**

1. ALL LIGHT POLE SETBACKS SHOWN ARE MEASURED FROM THE BACK OF CURB, UNLESS STATED OTHERWISE. IF THERE IS NO CURB, THE SETBACK WILL BE MEASURED FROM THE EDGE OF TRAVELLED PAVEMENT.
2. RESTORATION OF WORK AREA - RESTORATION OF LIGHTING WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, ETC. AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD AND ALL DAMAGE TO UNMOWED FIELD, SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.
3. THE CONTRACTOR SHALL CONNECT ELECTRIC SERVICE CABLES FROM COMED SERVICE POLE TO LIGHTING CONTROLLER. CONTRACTOR SHALL COORDINATE SERVICE INSTALLATION WITH COMED AS SOON AS POSSIBLE TO AVOID ANY DELAYS.

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FILE NAME =	USER NAME = GAL	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED LIGHTING PLAN (SHEET 1 OF 7) ILL. RTE. 53 FROM MITCHELL CT. TO US RTE. 20 (LAKE ST.)</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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		DATE -	REVISED -						FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				





- NOTES:**
1. ALL MATERIALS, EQUIPMENT, AND LABOR NEEDED TO INSTALL AND CONNECT THE SERVICE FROM THE COMED UTILITY TRANSFORMER TO THE LIGHTING CONTROLLER CABINET SHALL BE PART OF PAY ITEM NO. 80400100 - ELECTRIC SERVICE INSTALLATION. THAT SHALL INCLUDE THE APPROVED METER SOCKET, PEDESTAL, CABLE, CONDUIT AND TRENCHING FOR THE CONDUIT SHOWN ON THE PLANS. ALL CONNECTIONS, SPLICING, AND WIRING TO THE NEW LIGHTING CONTROLLER IS ALSO INCLUDED UNDER THE SAME PAY ITEM. THE SERVICE CABLE AND CONDUIT SIZE SHALL BE AS SHOWN ON THE PLANS. THIS NOTE SHALL TAKE PRECEDENCE OVER NOTE #6 IN DRAWING #568 (BE-220)
  2. ALL LIGHT POLE SETBACKS SHOWN ARE MEASURED FROM THE BACK OF CURB, UNLESS STATED OTHERWISE. IF THERE IS NO CURB, THE SETBACK WILL BE MEASURED FROM THE EDGE OF TRAVELLED PAVEMENT.
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

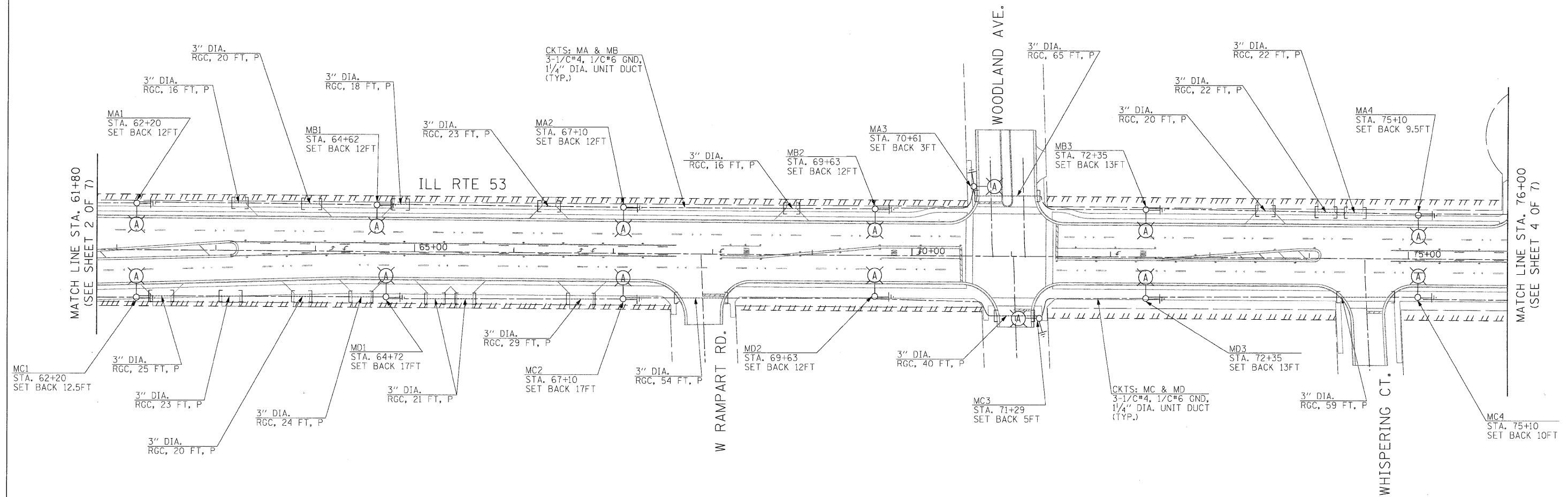
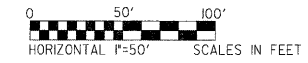
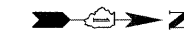
**PROPOSED LIGHTING PLAN (SHEET 2 OF 7)  
ILL. RTE. 53 FROM MITCHELL CT. TO US RTE. 20 (LAKE ST.)**

SCALE: 1"= 50'	SHEET NO. OF SHEETS	STA. TO STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2578	532B	DuPage	781	557
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 60477	

NOTES:

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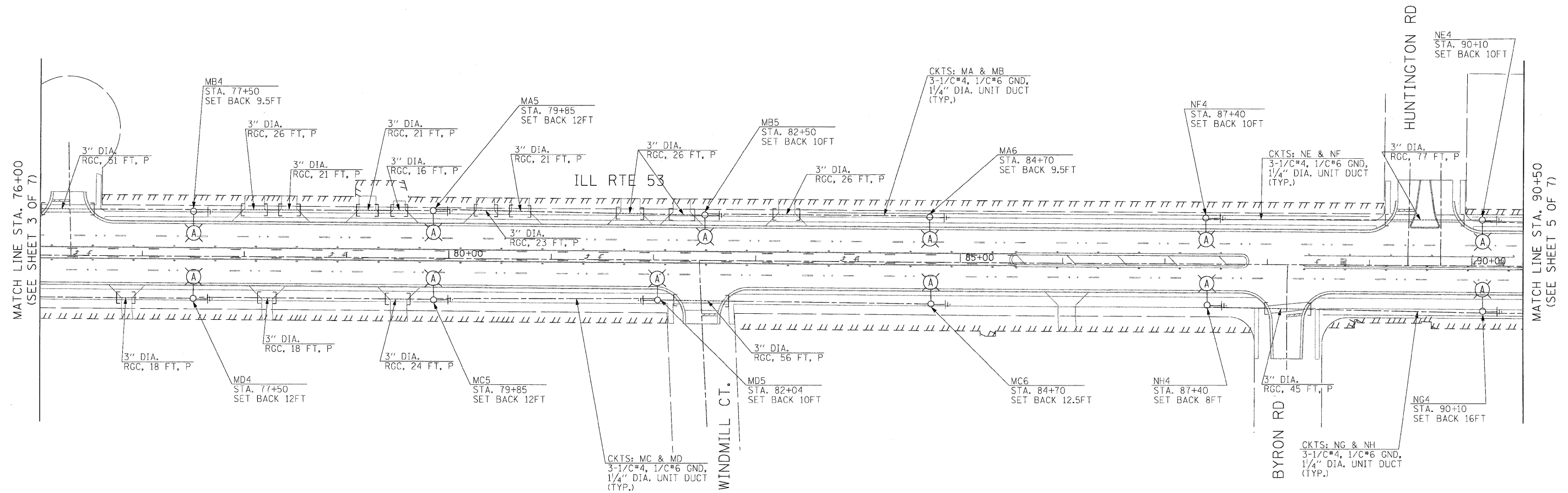
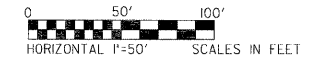
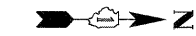


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FILE NAME =	USER NAME = .GAI	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED LIGHTING PLAN (SHEET 3 OF 7) ILL. RTE. 53 FROM MITCHELL CT. TO US RTE. 20 (LAKE ST.)</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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		DATE -	REVISED -										

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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

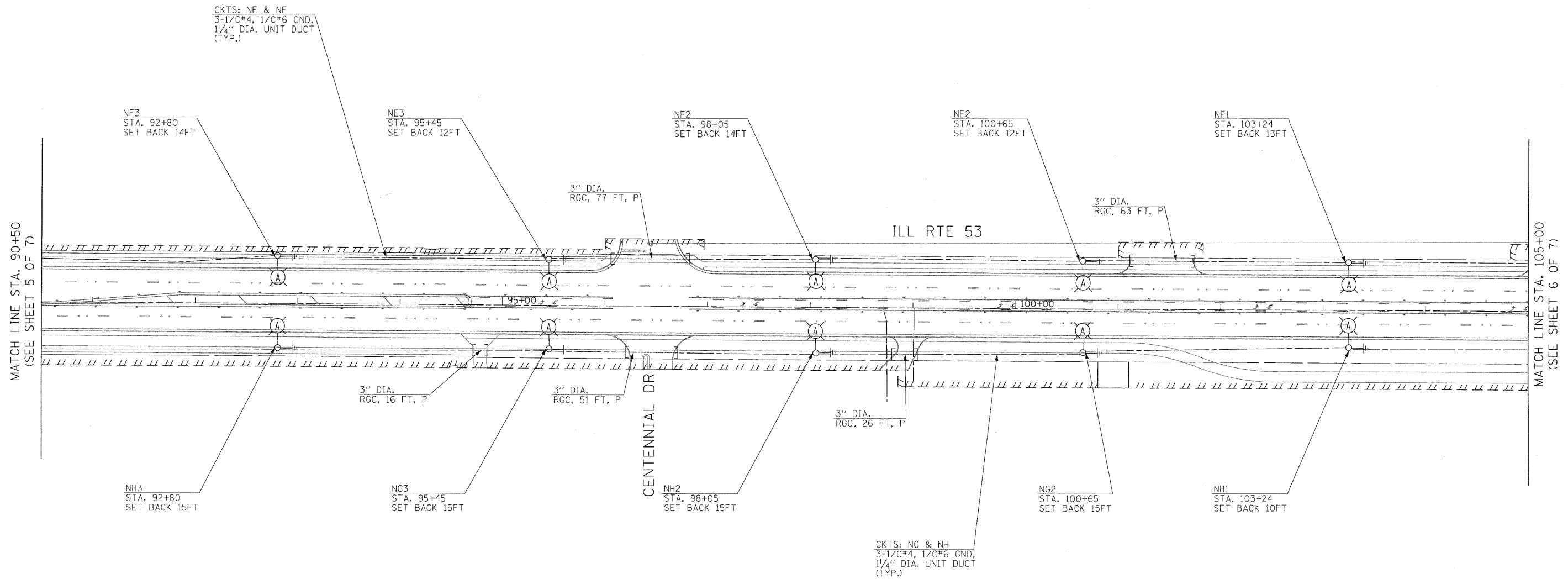
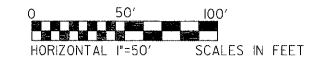
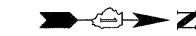
**PROPOSED LIGHTING PLAN (SHEET 4 OF 7)  
 ILL. RTE. 53 FROM MITCHELL CT. TO US RTE. 20 (LAKE ST.)**

SCALE: 1"= 50' SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2578	532B	DuPage	781	559
CONTRACT NO. 60477				
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT				

**NOTES:**

1. ALL LIGHT POLE SETBACKS SHOWN ARE MEASURED FROM THE BACK OF CURB, UNLESS STATED OTHERWISE. IF THERE IS NO CURB, THE SETBACK WILL BE MEASURED FROM THE EDGE OF TRAVELLED PAVEMENT.
2. RESTORATION OF WORK AREA - RESTORATION OF LIGHTING WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, ETC. AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD AND ALL DAMAGE TO UNMOWED FIELD, SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.
3. THE CONTRACTOR SHALL CONNECT ELECTRIC SERVICE CABLES FROM COMED SERVICE POLE TO LIGHTING CONTROLLER. CONTRACTOR SHALL COORDINATE SERVICE INSTALLATION WITH COMED AS SOON AS POSSIBLE TO AVOID ANY DELAYS.

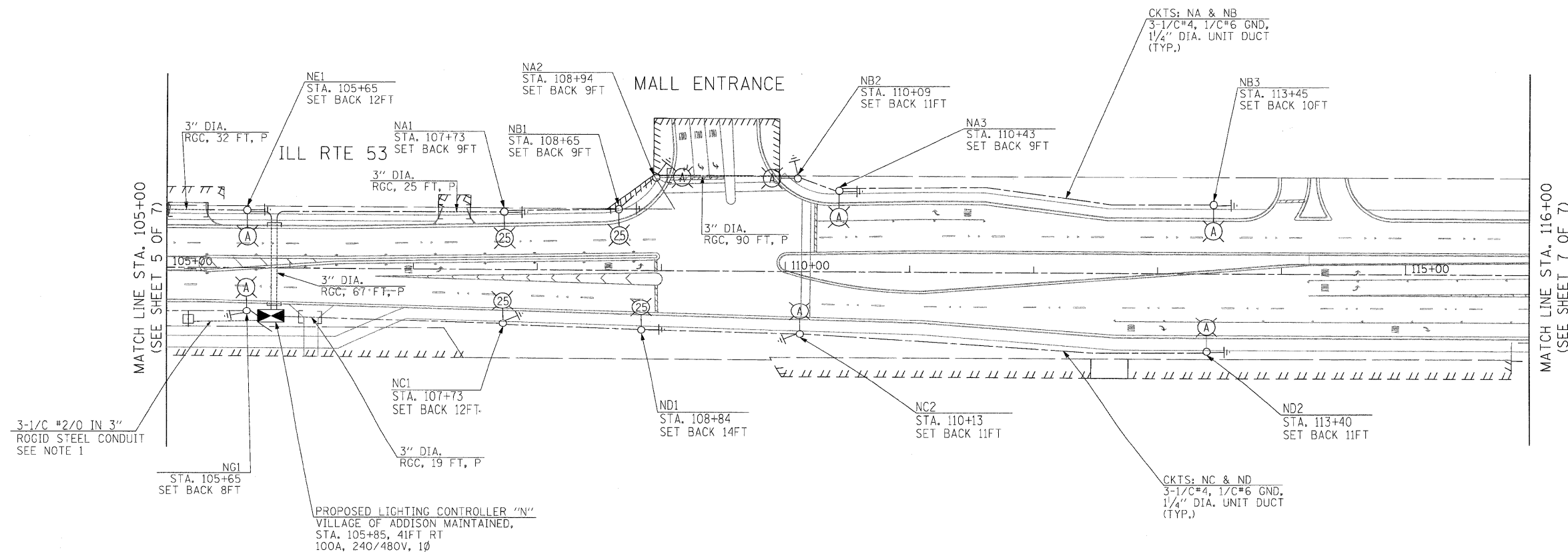
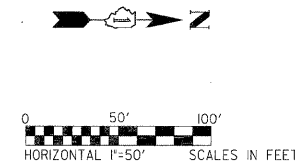


**ga** GANDHI AND ASSOCIATES, INC.  
ENGINEERS AND PLANNERS  
6035 N. NORTHWEST HIGHWAY  
SUITE 306  
CHICAGO, ILLINOIS 60631 TEL.(773)774-5910

FILE NAME =	USER NAME = .GAL	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED LIGHTING PLAN (SHEET 5 OF 7) ILL. RTE. 53 FROM MITCHELL CT. TO US RTE. 20 (LAKE ST.)</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
#FILEL#	PLOT SCALE = 1"=50'	DRAWN - MAA, SHM	REVISED -					2578	532B	DuPage	781	560
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		DATE -	REVISED -					CONTRACT NO. 60477				

**NOTES:**

1. ALL MATERIALS, EQUIPMENT, AND LABOR NEEDED TO INSTALL AND CONNECT THE SERVICE FROM THE COMED UTILITY TRANSFORMER TO THE LIGHTING CONTROLLER CABINET SHALL BE PART OF PAY ITEM NO. 80400100 - ELECTRIC SERVICE INSTALLATION, THAT SHALL INCLUDE THE APPROVED METER SOCKET, PEDESTAL, CABLE, CONDUIT AND TRENCHING FOR THE CONDUIT SHOWN ON THE PLANS. ALL CONNECTIONS, SPLICING, AND WIRING TO THE NEW LIGHTING CONTROLLER IS ALSO INCLUDED UNDER THE SAME PAY ITEM. THE SERVICE CABLE AND CONDUIT SIZE SHALL BE AS SHOWN ON THE PLANS. THIS NOTE SHALL TAKE PRECEDENCE OVER NOTE #6 IN DRAWING #568 (BE-220)
2. ALL LIGHT POLE SETBACKS SHOWN ARE MEASURED FROM THE BACK OF CURB, UNLESS STATED OTHERWISE. IF THERE IS NO CURB, THE SETBACK WILL BE MEASURED FROM THE EDGE OF TRAVELLED PAVEMENT.
3. RESTORATION OF WORK AREA - RESTORATION OF LIGHTING WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, ETC. AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD AND ALL DAMAGE TO UNMOWED FIELD, SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.
4. THE CONTRACTOR SHALL CONNECT ELECTRIC SERVICE CABLES FROM COMED SERVICE POLE TO LIGHTING CONTROLLER. CONTRACTOR SHALL COORDINATE SERVICE INSTALLATION WITH COMED AS SOON AS POSSIBLE TO AVOID ANY DELAYS.



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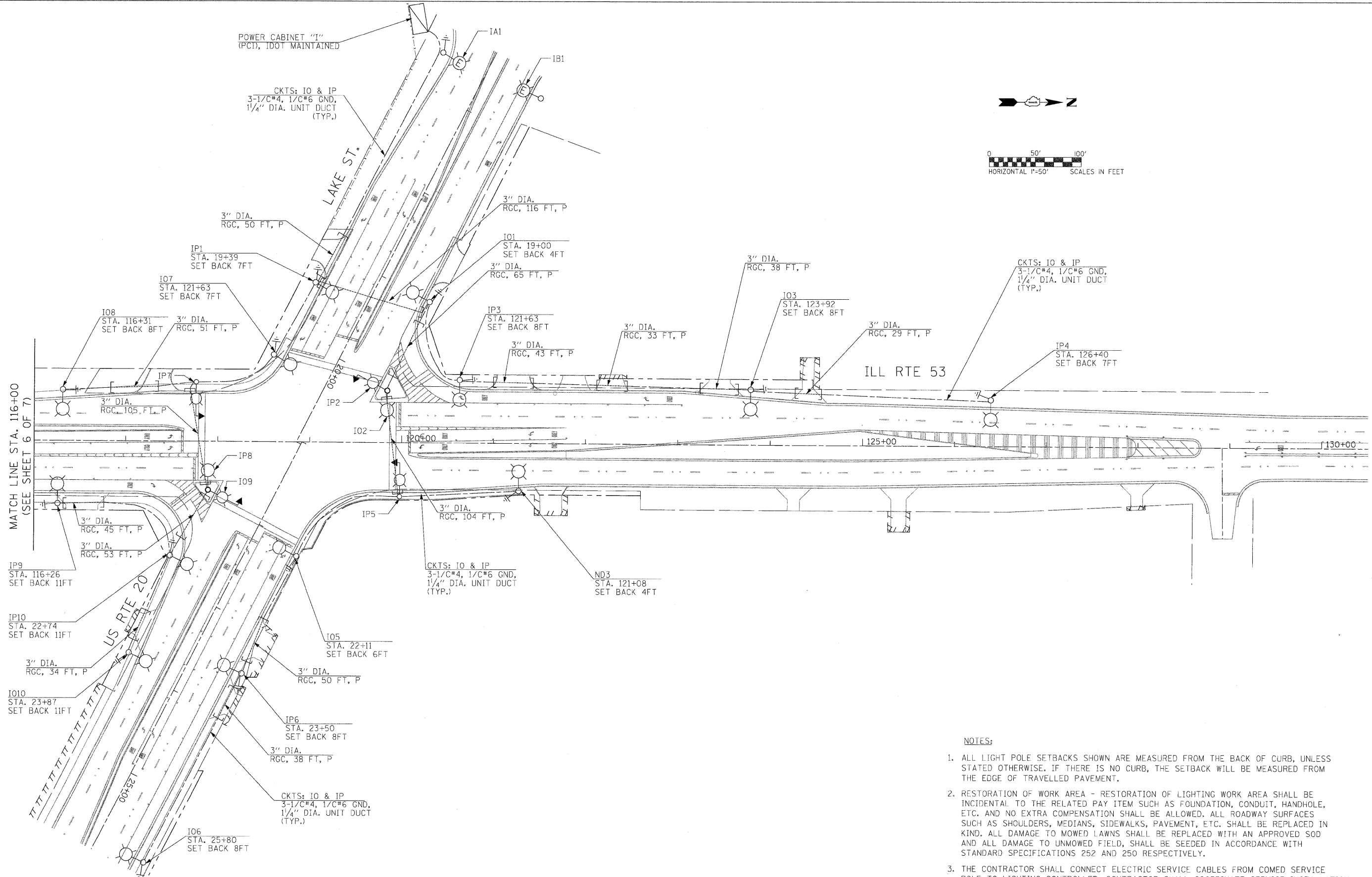
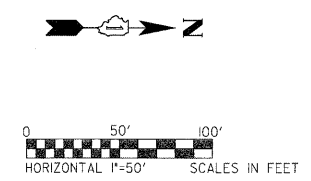
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	PLOT DATE = 11/24/2010	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED LIGHTING PLAN (SHEET 6 OF 7)  
ILL. RTE. 53 FROM MITCHELL CT. TO US RTE. 20 (LAKE ST.)**

SCALE: 1"= 50' SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2578	532B	DuPage	781	561
CONTRACT NO. 60477				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



- NOTES:**
1. ALL LIGHT POLE SETBACKS SHOWN ARE MEASURED FROM THE BACK OF CURB, UNLESS STATED OTHERWISE. IF THERE IS NO CURB, THE SETBACK WILL BE MEASURED FROM THE EDGE OF TRAVELLED PAVEMENT.
  2. RESTORATION OF WORK AREA - RESTORATION OF LIGHTING WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, ETC. AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD AND ALL DAMAGE TO UNMOWED FIELD, SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.
  3. THE CONTRACTOR SHALL CONNECT ELECTRIC SERVICE CABLES FROM COMED SERVICE POLE TO LIGHTING CONTROLLER. CONTRACTOR SHALL COORDINATE SERVICE INSTALLATION WITH COMED AS SOON AS POSSIBLE TO AVOID ANY DELAYS.

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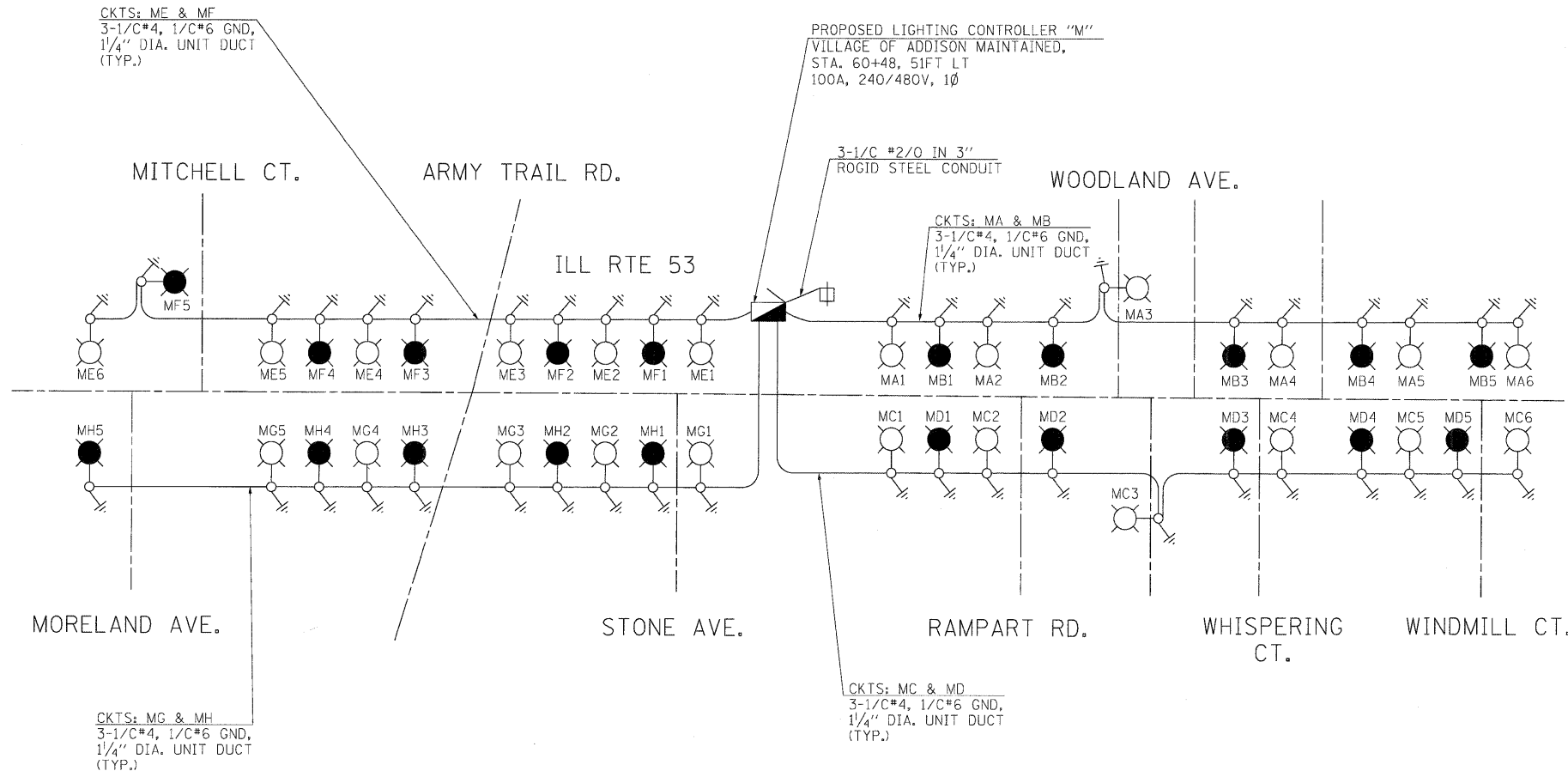
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	PLOT DATE = 11/24/2010	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**PROPOSED LIGHTING PLAN (SHEET 7 OF 7)  
 ILL. RTE. 53 FROM MITCHELL CT. TO US RTE. 20 (LAKE ST.)**

SCALE: 1"= 50'    SHEET NO.    OF    SHEETS    STA.    TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2578	532B	DuPage	781	562
CONTRACT NO. 60477				
FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				



**PROPOSED SINGLE LINE DIAGRAM  
LIGHTING CONTROLLER "M"**

LOAD TABLE  
PROPOSED LIGHTING CONTROLLER "M"  
(@ 240 VOLTS)

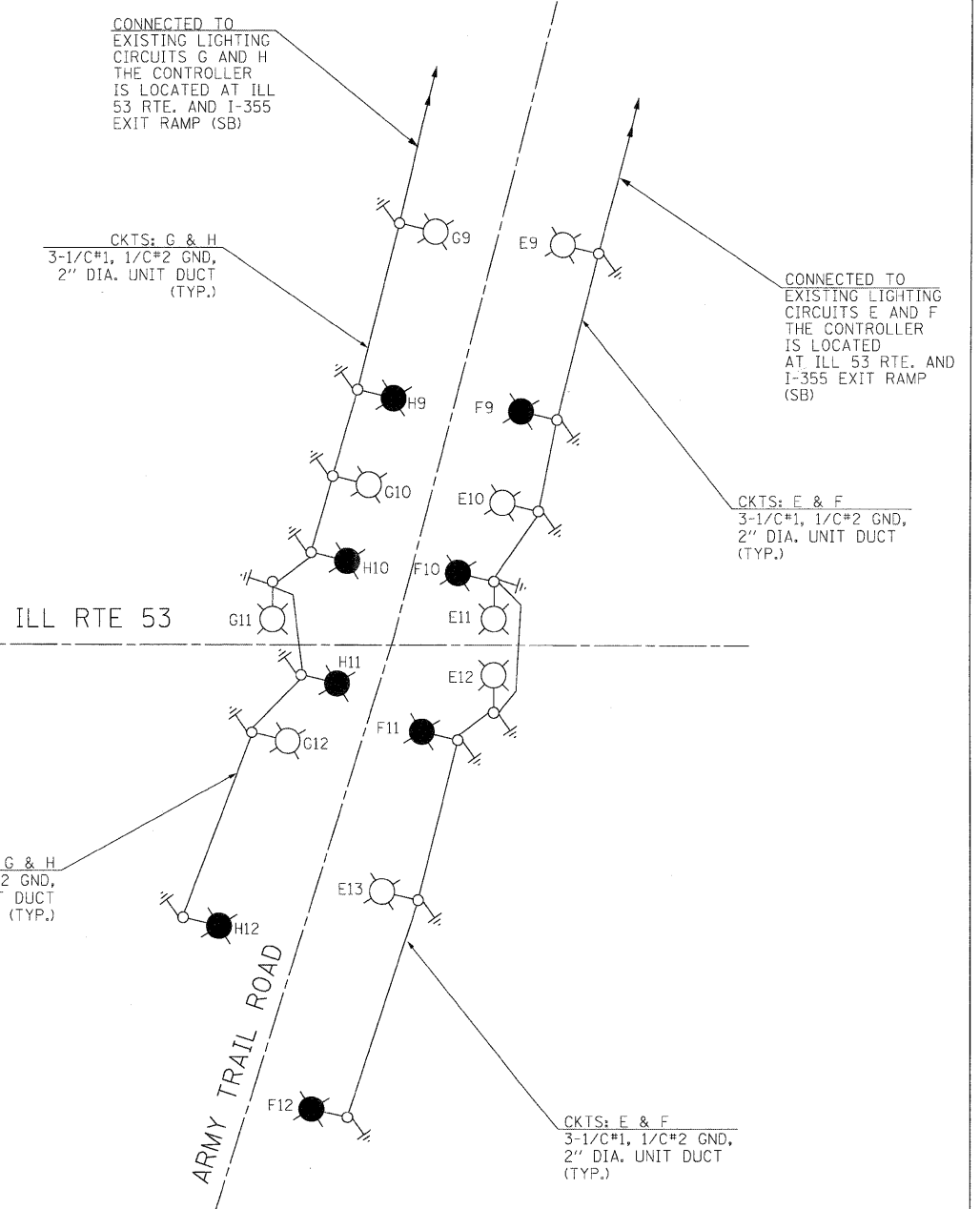
CIRCUIT	RED PHASE		CIRCUIT	BLACK PHASE	
	AMPS	WATTS		AMPS	WATTS
A	12	2880	B	10	2400
C	12	2880	D	10	2400
E	12	2880	F	10	2400
G	10	2400	H	10	2400
TOTAL	46	11040	TOTAL	40	9600

TOTAL LOAD ON CONTROLLER (@240 V): 86 AMP  
TOTAL LOAD ON CONTROLLER (@480 V): 43 AMP

LOAD TABLE EXISTING LIGHTING CONTROLLER  
LOCATED AT ILL 53 RTE. AND I-355 EXIT RAMP (SB)  
(@ 240 VOLTS)

CIRCUIT	RED PHASE		CIRCUIT	BLACK PHASE	
	AMPS	WATTS		AMPS	WATTS
A	EXISTING		B	EXISTING	
C	EXISTING		D	EXISTING	
E	16	3840	F	14.4	3456
G	15.1	3624	H	15.1	3624
I	EXISTING		J	EXISTING	
K	EXISTING		L	EXISTING	
M	EXISTING		N	EXISTING	
O	EXISTING		P	EXISTING	
TOTAL	-	-	TOTAL	-	-

- LEGEND**
- PROPOSED LIGHTING UNIT 47.5' M.H., 15' M.A., 400W HPS TYPE MC-III, 240V LUMINAIRE (BLACK PHASE)
  - PROPOSED LIGHTING UNIT 47.5' M.H., 15' M.A., 400W HPS TYPE MC-III, 240V LUMINAIRE (RED PHASE)
  - PROPOSED LIGHTING CONTROLLER CABINET "M", SINGLE DOOR, CONSOLE TYPE, VILLAGE OF ADDISON MAINTAINED, 100A, 240/480V, 1Ø
  - PROPOSED ELECTRIC SERVICE TRANSFORMER BY COMED ON EXISTING OR PROPOSED UTILITY WOOD POLE
  - ELECTRIC GROUND ROD



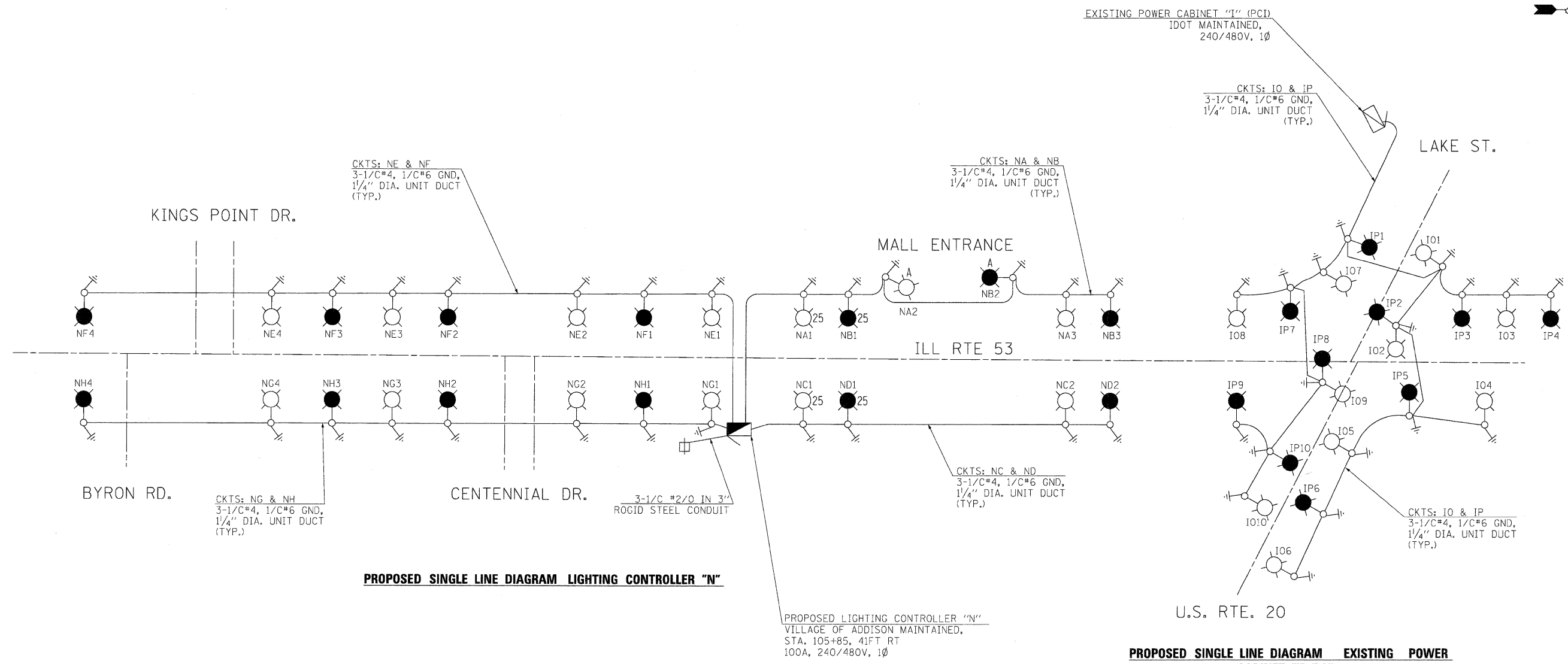
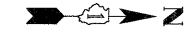
**PROPOSED SINGLE LINE DIAGRAM  
OF ARMY TRAIL ROAD LIGHTING CONNECTED TO EXISTING CONTROLLER**

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ENGINEERS AND PLANNERS  
6035 N. NORTHWEST HIGHWAY  
SUITE 306 CHICAGO, ILLINOIS 60631 TEL. (773) 774-5910

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	PLOT SCALE = 1"=50'	CHECKED - PKG	REVISED -
	PLOT DATE = 11/24/2010	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>PROPOSED SINGLE LINE DIAGRAM LIGHTING CONTROLLER "M"</b>		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SCALE: 1"= 50'		2578	532B	DuPage	781	563
SHEET NO. OF SHEETS STA. TO STA.		CONTRACT NO. 60477				
FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT						



**PROPOSED SINGLE LINE DIAGRAM LIGHTING CONTROLLER "N"**

**PROPOSED SINGLE LINE DIAGRAM EXISTING POWER CABINET "I" (PCI)**

**LOAD TABLE  
PROPOSED LIGHTING CONTROLLER "N"  
(@ 240 VOLTS)**

CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	AMPS	WATTS	
A	4.6	1104	B	4.6	1104
C	3.3	792	D	3.3	792
E	8	1920	F	8	1920
G	8	1920	H	8	1920
<b>TOTAL</b>	<b>23.9</b>	<b>5736</b>	<b>TOTAL</b>	<b>23.9</b>	<b>5736</b>

TOTAL LOAD ON CONTROLLER (@240 V): 47.8 AMP  
 TOTAL LOAD ON CONTROLLER (@480 V): 23.9 AMP

**LOAD TABLE  
EXISTING POWER CABINET "I" (PCI)  
(@ 240 VOLTS)**

CIRCUIT	RED PHASE		BLACK PHASE		
	AMPS	WATTS	AMPS	WATTS	
A	EXISTING		B	EXISTING	
C	EXISTING		D	EXISTING	
E	EXISTING		F	EXISTING	
G	EXISTING		H	EXISTING	
I	EXISTING		J	EXISTING	
K	EXISTING		L	EXISTING	
M	EXISTING		N	EXISTING	
O	20	4800	P	20	4800
<b>TOTAL</b>	<b>-</b>	<b>-</b>	<b>TOTAL</b>	<b>-</b>	<b>-</b>

**LEGEND**

- PROPOSED LIGHTING UNIT 47.5' M.H., 15' M.A., 400W HPS TYPE MC-III, 240V LUMINAIRE (BLACK PHASE)
- PROPOSED LIGHTING UNIT 47.5' M.H., 15' M.A., 400W HPS TYPE MC-III, 240V LUMINAIRE (RED PHASE)
- PROPOSED LIGHTING UNIT 25' M.H., 15' M.A., 250W HPS TYPE MC-III, 240V LUMINAIRE (BLACK PHASE)
- PROPOSED LIGHTING UNIT 25' M.H., 15' M.A., 250W HPS TYPE MC-III, 240V LUMINAIRE (RED PHASE)
- PROPOSED LIGHTING CONTROLLER CABINET "M", SINGLE DOOR, CONSOLE TYPE, VILLAGE OF ADDISON MAINTAINED, 100A, 240/480V, 1Ø
- PROPOSED ELECTRIC SERVICE TRANSFORMER BY COMED ON EXISTING OR PROPOSED UTILITY WOOD POLE
- ELECTRIC GROUND ROD

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 6035 N. NORTHWEST HIGHWAY  
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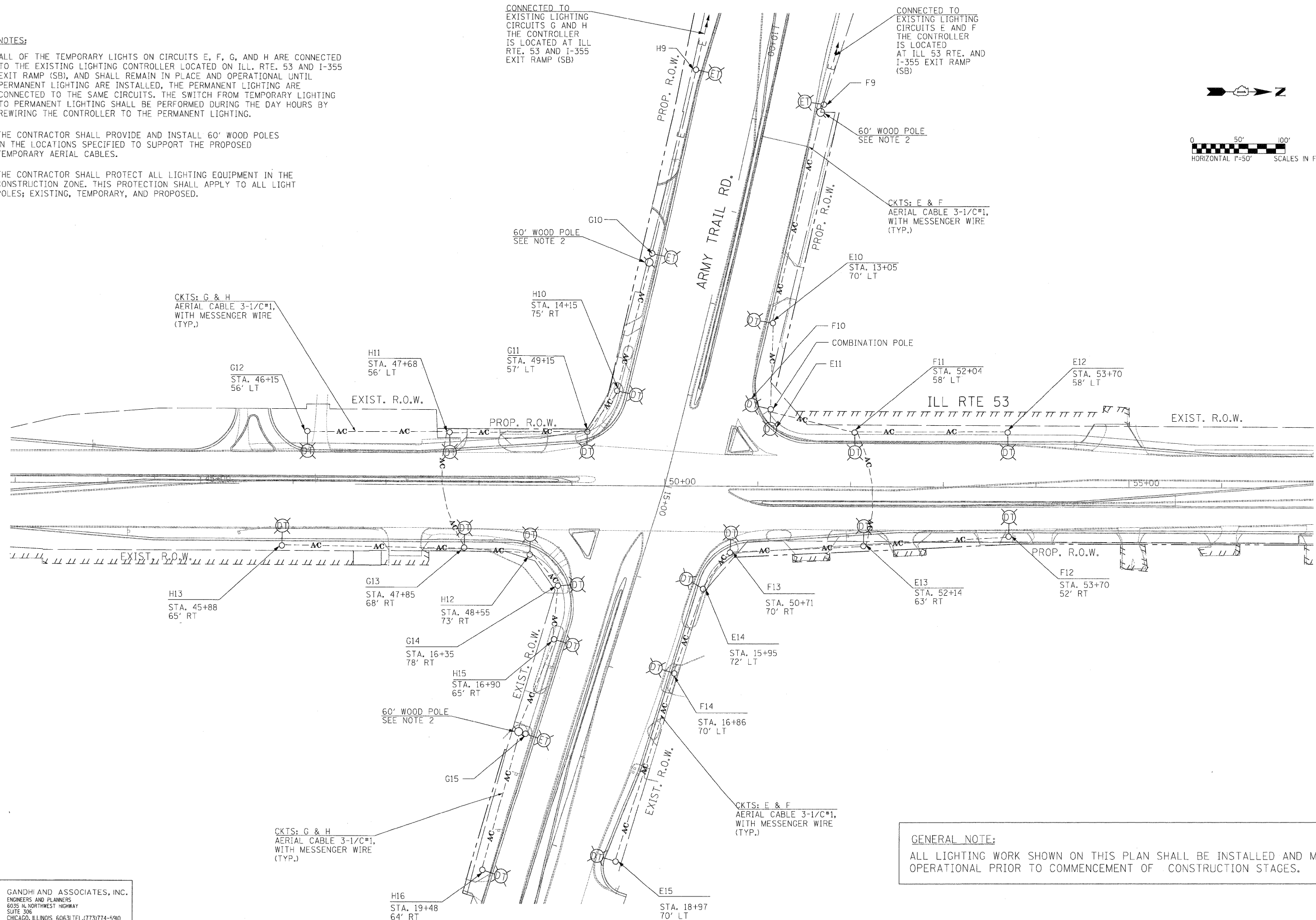
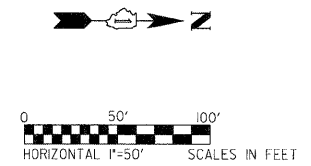


**NOTES:**

1. ALL OF THE TEMPORARY LIGHTS ON CIRCUITS E, F, G, AND H ARE CONNECTED TO THE EXISTING LIGHTING CONTROLLER LOCATED ON ILL. RTE. 53 AND I-355 EXIT RAMP (SB), AND SHALL REMAIN IN PLACE AND OPERATIONAL UNTIL PERMANENT LIGHTING ARE INSTALLED, THE PERMANENT LIGHTING ARE CONNECTED TO THE SAME CIRCUITS. THE SWITCH FROM TEMPORARY LIGHTING TO PERMANENT LIGHTING SHALL BE PERFORMED DURING THE DAY HOURS BY REWIRING THE CONTROLLER TO THE PERMANENT LIGHTING.
2. THE CONTRACTOR SHALL PROVIDE AND INSTALL 60' WOOD POLES IN THE LOCATIONS SPECIFIED TO SUPPORT THE PROPOSED TEMPORARY AERIAL CABLES.
3. THE CONTRACTOR SHALL PROTECT ALL LIGHTING EQUIPMENT IN THE CONSTRUCTION ZONE. THIS PROTECTION SHALL APPLY TO ALL LIGHT POLES; EXISTING, TEMPORARY, AND PROPOSED.

CONNECTED TO EXISTING LIGHTING CIRCUITS G AND H THE CONTROLLER IS LOCATED AT ILL RTE. 53 AND I-355 EXIT RAMP (SB)

CONNECTED TO EXISTING LIGHTING CIRCUITS E AND F THE CONTROLLER IS LOCATED AT ILL 53 RTE. AND I-355 EXIT RAMP (SB)



**GENERAL NOTE:**  
ALL LIGHTING WORK SHOWN ON THIS PLAN SHALL BE INSTALLED AND MADE OPERATIONAL PRIOR TO COMMENCEMENT OF CONSTRUCTION STAGES.

**GA** GANDHI AND ASSOCIATES, INC.  
ENGINEERS AND PLANNERS  
6035 N. NORTHWEST HIGHWAY  
SUITE 306  
CHICAGO, ILLINOIS 60631 TEL. 773/774-5900

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

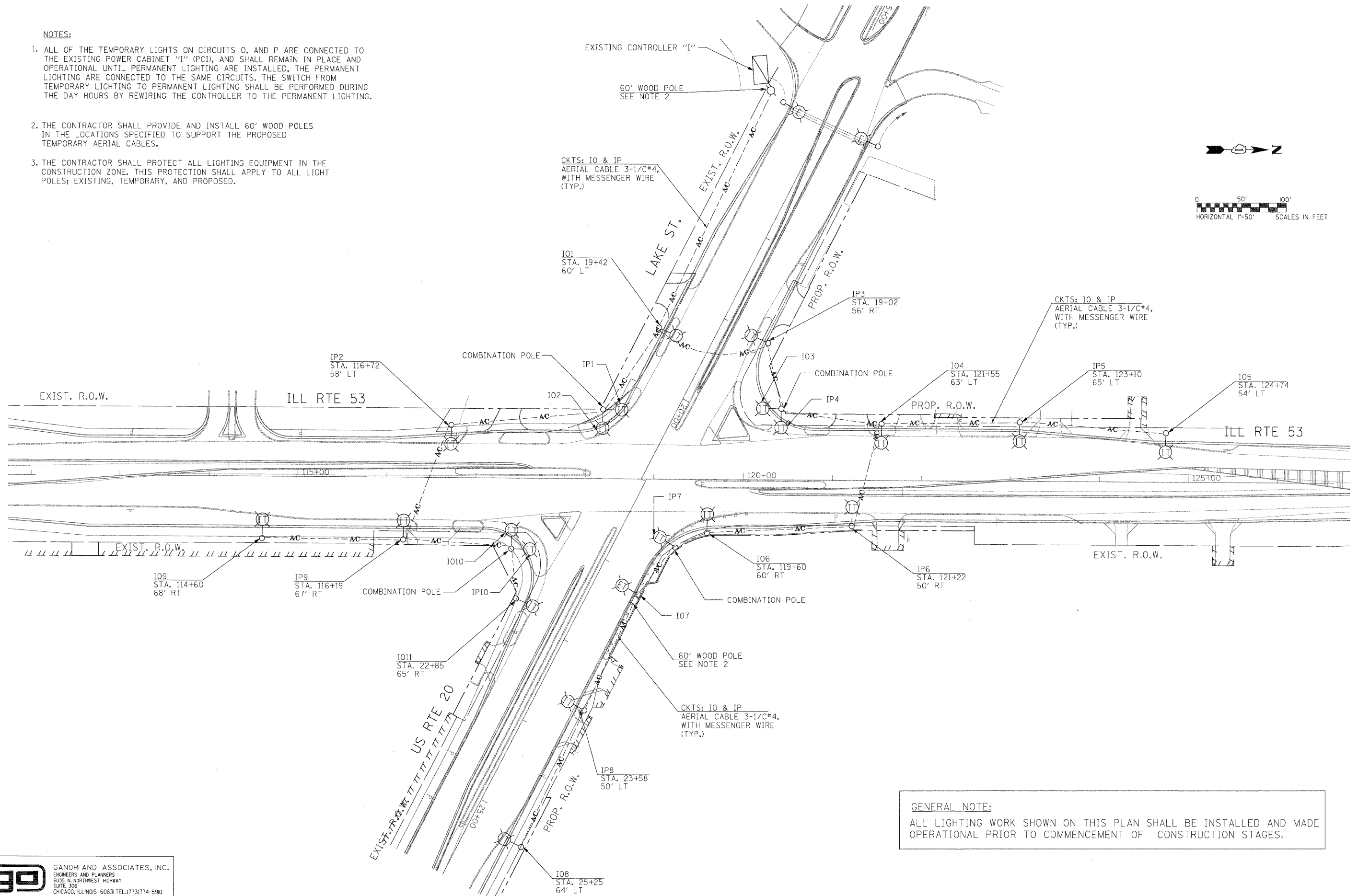
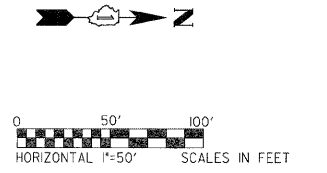
**TEMPORARY LIGHTING PLAN  
ILL. RTE. 53 AT ARMY TRAIL ROAD**

SCALE: 1"= 50' SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2578	532B	DuPage	781	565
CONTRACT NO. 60477				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

**NOTES:**

1. ALL OF THE TEMPORARY LIGHTS ON CIRCUITS O, AND P ARE CONNECTED TO THE EXISTING POWER CABINET "I" (PCI), AND SHALL REMAIN IN PLACE AND OPERATIONAL UNTIL PERMANENT LIGHTING ARE INSTALLED, THE PERMANENT LIGHTING ARE CONNECTED TO THE SAME CIRCUITS. THE SWITCH FROM TEMPORARY LIGHTING TO PERMANENT LIGHTING SHALL BE PERFORMED DURING THE DAY HOURS BY REWIRING THE CONTROLLER TO THE PERMANENT LIGHTING.
2. THE CONTRACTOR SHALL PROVIDE AND INSTALL 60' WOOD POLES IN THE LOCATIONS SPECIFIED TO SUPPORT THE PROPOSED TEMPORARY AERIAL CABLES.
3. THE CONTRACTOR SHALL PROTECT ALL LIGHTING EQUIPMENT IN THE CONSTRUCTION ZONE. THIS PROTECTION SHALL APPLY TO ALL LIGHT POLES; EXISTING, TEMPORARY, AND PROPOSED.



**GENERAL NOTE:**  
ALL LIGHTING WORK SHOWN ON THIS PLAN SHALL BE INSTALLED AND MADE OPERATIONAL PRIOR TO COMMENCEMENT OF CONSTRUCTION STAGES.

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SUITE 306  
CHICAGO, ILLINOIS 60631 TEL: (773) 774-5910

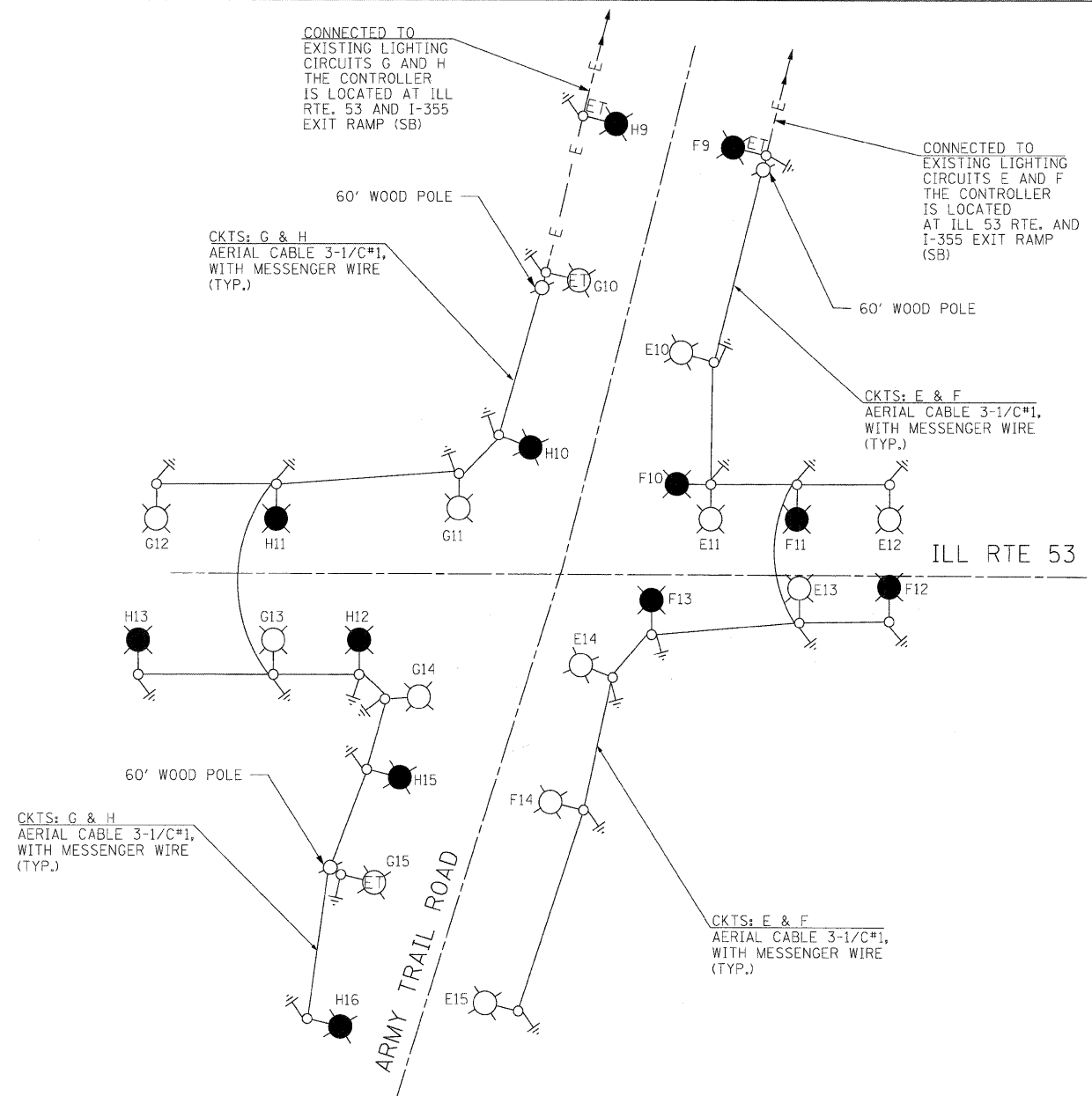
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	PLOT DATE = 11/24/2010	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY LIGHTING PLAN  
ILL. RTE. 53 AT U.S. RTE. 20 (LAKE ST.)**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2578	532B	DuPage	781	566
CONTRACT NO. 60477				
FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				

SCALE: 1"= 50' SHEET NO. OF SHEETS STA. TO STA.



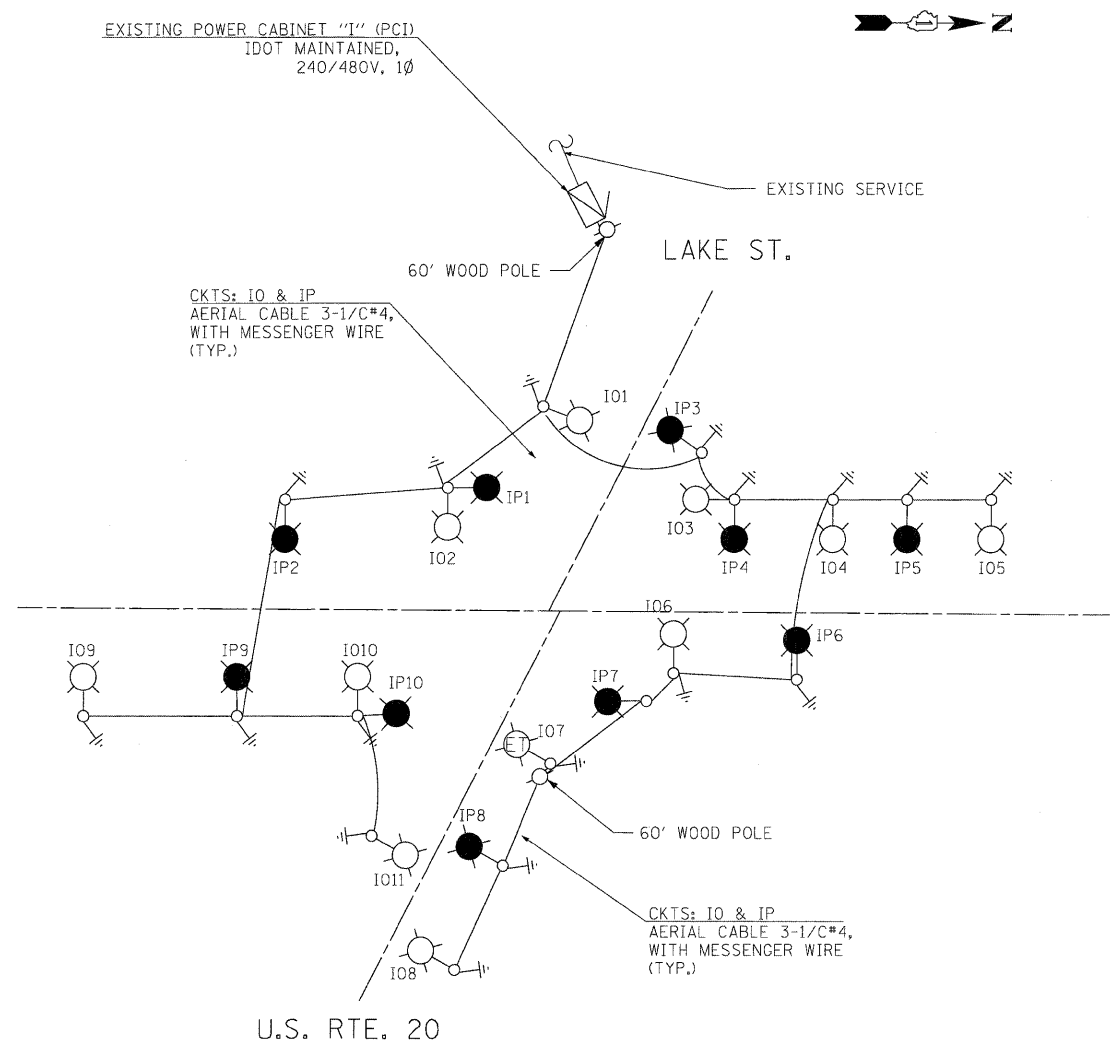
**TEMPORARY SINGLE LINE DIAGRAM OF ARMY TRAIL ROAD LIGHTING CONNECTED TO EXISTING CONTROLLER**

TEMPORARY LOAD TABLE EXISTING LIGHTING CONTROLLER LOCATED AT ILL 53 RTE. AND I-355 EXIT RAMP (SB) (@ 240 VOLTS)

CIRCUIT	RED PHASE		CIRCUIT	BLACK PHASE	
	AMPS	WATTS		AMPS	WATTS
A	EXISTING		B	EXISTING	
C	EXISTING		D	EXISTING	
E	20.4	4896	F	18.4	4416
G	21.1	5064	H	20.3	4872
I	EXISTING		J	EXISTING	
K	EXISTING		L	EXISTING	
M	EXISTING		N	EXISTING	
O	EXISTING		P	EXISTING	
TOTAL	-	-	TOTAL	-	-

TEMPORARY LOAD TABLE EXISTING POWER CABINET "I" (PCI) (@ 240 VOLTS)

CIRCUIT	RED PHASE		CIRCUIT	BLACK PHASE	
	AMPS	WATTS		AMPS	WATTS
A	EXISTING		B	EXISTING	
C	EXISTING		D	EXISTING	
E	EXISTING		F	EXISTING	
G	EXISTING		H	EXISTING	
I	EXISTING		J	EXISTING	
K	EXISTING		L	EXISTING	
M	EXISTING		N	EXISTING	
O	21.6	5184	P	22	5280
TOTAL	-	-	TOTAL	-	-



**TEMPORARY SINGLE LINE DIAGRAM EXISTING POWER CABINET "I" (PCI)**

- LEGEND**
- TEMPORARY LIGHTING UNIT 50' M.H., 15' M.A., 400W HPS TYPE MC-III, 240V LUMINAIRE (BLACK PHASE)
  - TEMPORARY LIGHTING UNIT 50' M.H., 15' M.A., 400W HPS TYPE MC-III, 240V LUMINAIRE (RED PHASE)
  - EXISTING LIGHTING UNIT TO REMAIN IN PLACE FOR TEMPORARY LIGHTING (RED PHASE)
  - EXISTING LIGHTING UNIT TO REMAIN IN PLACE FOR TEMPORARY LIGHTING (BLACK PHASE)
  - EXISTING LIGHTING CONTROLLER CABINET
  - ELECTRIC GROUND ROD

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6035 N. NORTHWEST HIGHWAY  
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	PLOT SCALE = 1"=50'	CHECKED - PKG	REVISED -
	PLOT DATE = 11/24/2010	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

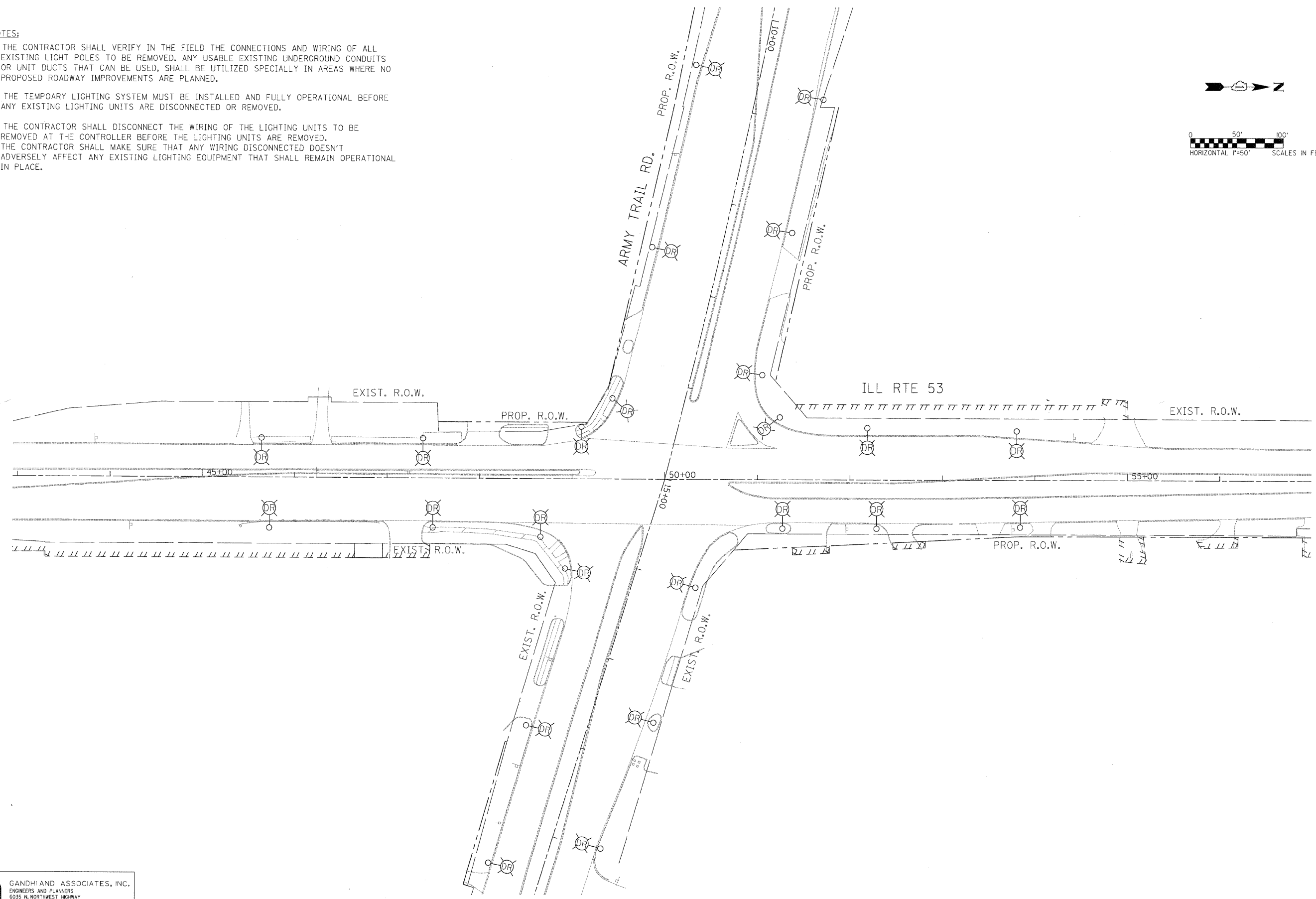
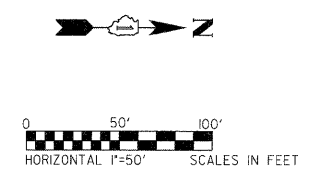
**TEMPORARY SINGLE LINE DIAGRAM**

SCALE: 1"= 50'	SHEET NO. OF SHEETS STA.	TO STA.	F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 567
			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

CONTRACT NO. 60477

**NOTES:**

1. THE CONTRACTOR SHALL VERIFY IN THE FIELD THE CONNECTIONS AND WIRING OF ALL EXISTING LIGHT POLES TO BE REMOVED. ANY USABLE EXISTING UNDERGROUND CONDUITS OR UNIT DUCTS THAT CAN BE USED, SHALL BE UTILIZED SPECIALLY IN AREAS WHERE NO PROPOSED ROADWAY IMPROVEMENTS ARE PLANNED.
2. THE TEMPORARY LIGHTING SYSTEM MUST BE INSTALLED AND FULLY OPERATIONAL BEFORE ANY EXISTING LIGHTING UNITS ARE DISCONNECTED OR REMOVED.
3. THE CONTRACTOR SHALL DISCONNECT THE WIRING OF THE LIGHTING UNITS TO BE REMOVED AT THE CONTROLLER BEFORE THE LIGHTING UNITS ARE REMOVED. THE CONTRACTOR SHALL MAKE SURE THAT ANY WIRING DISCONNECTED DOESN'T ADVERSELY AFFECT ANY EXISTING LIGHTING EQUIPMENT THAT SHALL REMAIN OPERATIONAL IN PLACE.



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 CHICAGO, ILLINOIS 60631 TEL. (773) 774-5910

FILE NAME =	USER NAME = .GAI.	DESIGNED - PKG	REVISED -
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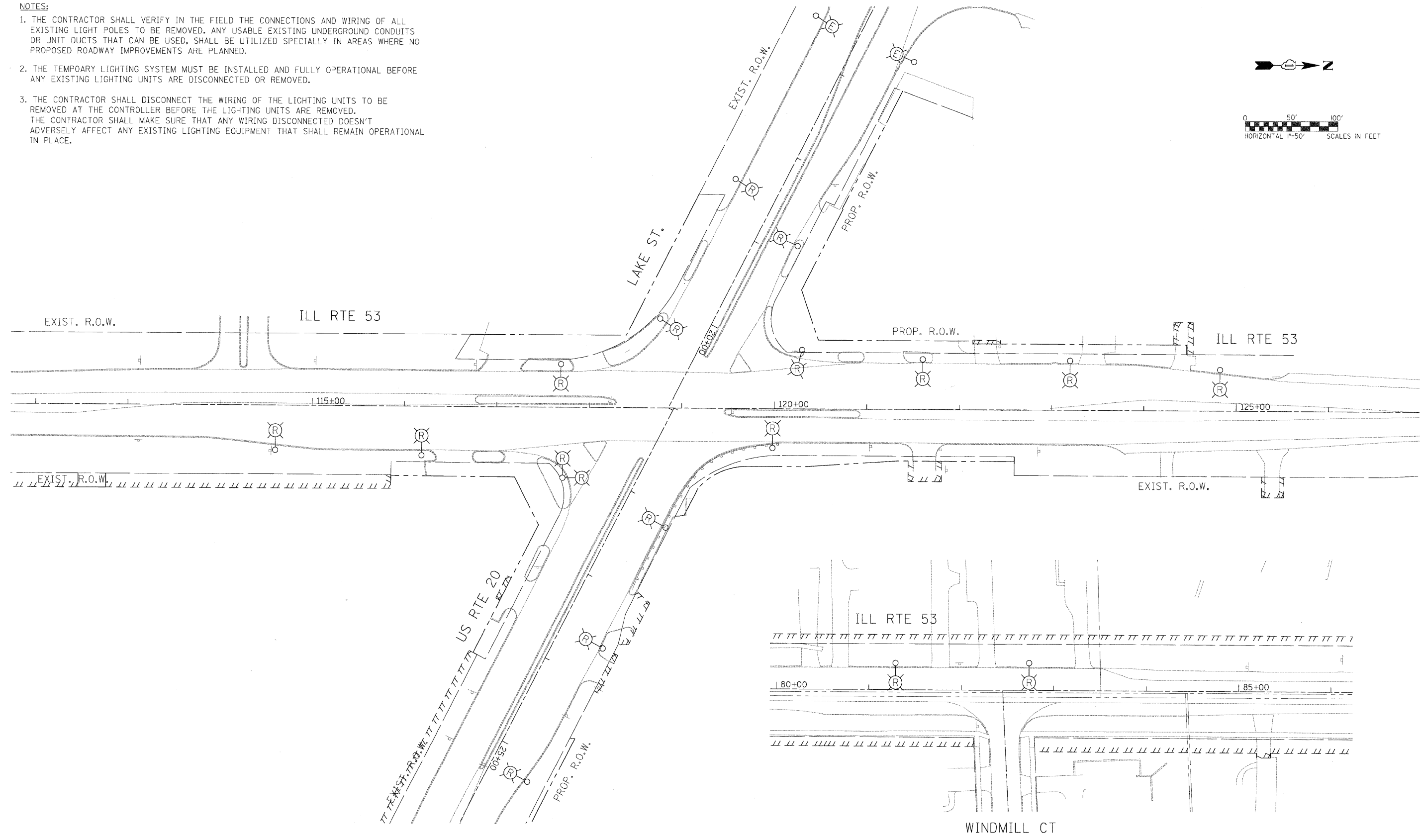
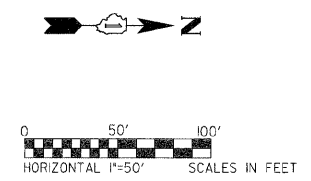
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**EXISTING LIGHTING REMOVAL PLAN  
 (SHEET 1 OF 2)**

SCALE: 1"= 50'	SHEET NO. OF SHEETS	STA. TO STA.	F.A.P. RTE. 2578	SECTION 532B	COUNTY DuPage	TOTAL SHEETS 781	SHEET NO. 568
			FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				
			CONTRACT NO. 60477				

**NOTES:**

1. THE CONTRACTOR SHALL VERIFY IN THE FIELD THE CONNECTIONS AND WIRING OF ALL EXISTING LIGHT POLES TO BE REMOVED. ANY USABLE EXISTING UNDERGROUND CONDUITS OR UNIT DUCTS THAT CAN BE USED, SHALL BE UTILIZED SPECIALLY IN AREAS WHERE NO PROPOSED ROADWAY IMPROVEMENTS ARE PLANNED.
2. THE TEMPORARY LIGHTING SYSTEM MUST BE INSTALLED AND FULLY OPERATIONAL BEFORE ANY EXISTING LIGHTING UNITS ARE DISCONNECTED OR REMOVED.
3. THE CONTRACTOR SHALL DISCONNECT THE WIRING OF THE LIGHTING UNITS TO BE REMOVED AT THE CONTROLLER BEFORE THE LIGHTING UNITS ARE REMOVED. THE CONTRACTOR SHALL MAKE SURE THAT ANY WIRING DISCONNECTED DOESN'T ADVERSELY AFFECT ANY EXISTING LIGHTING EQUIPMENT THAT SHALL REMAIN OPERATIONAL IN PLACE.



**ga** GANDHI AND ASSOCIATES, INC.  
 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
 SUITE 305  
 CHICAGO, ILLINOIS 60631 TEL. (773) 774-5910

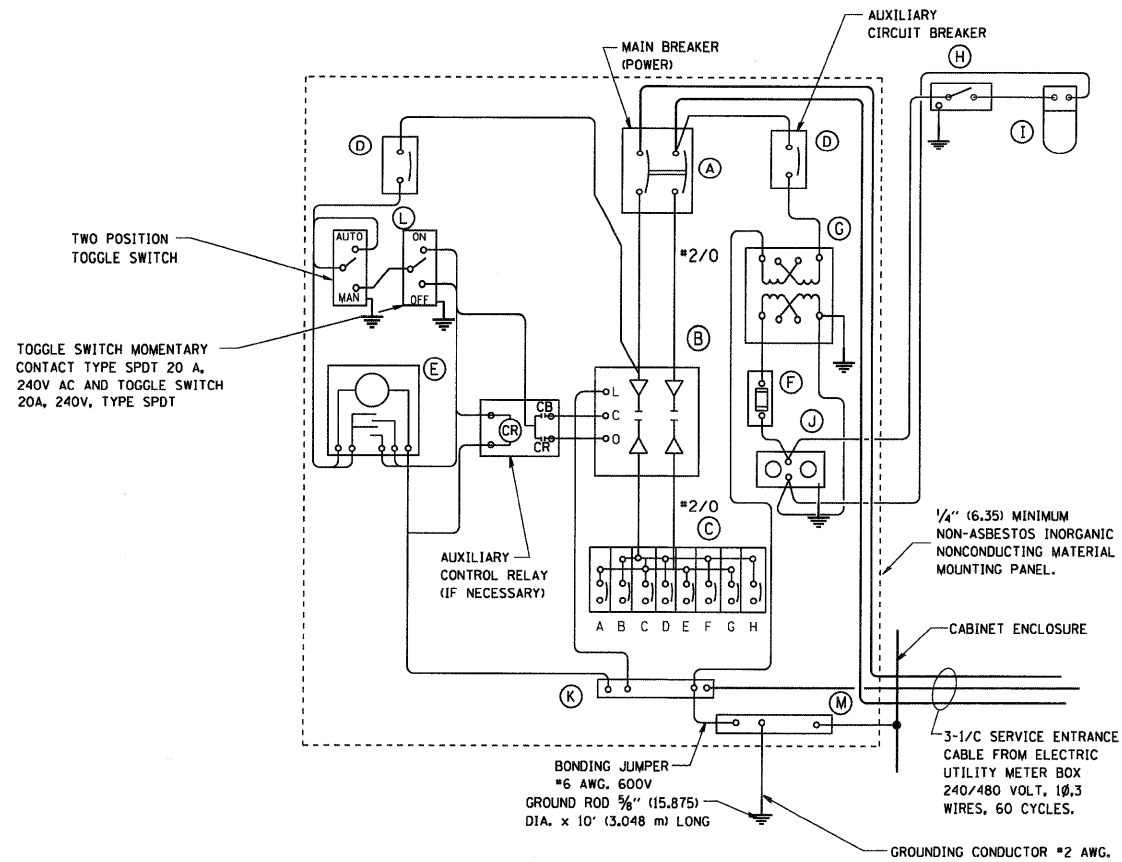
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\$FILEL\$		DRAWN - MAA, SHM	REVISED -
	PLOT SCALE = 1"=50'	CHECKED - PKG	REVISED -
	PLOT DATE = 11/24/2010	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**EXISTING LIGHTING REMOVAL PLAN  
 (SHEET 2 OF 2)**

SCALE: 1"= 50' SHEET NO. OF SHEETS STA. TO STA.

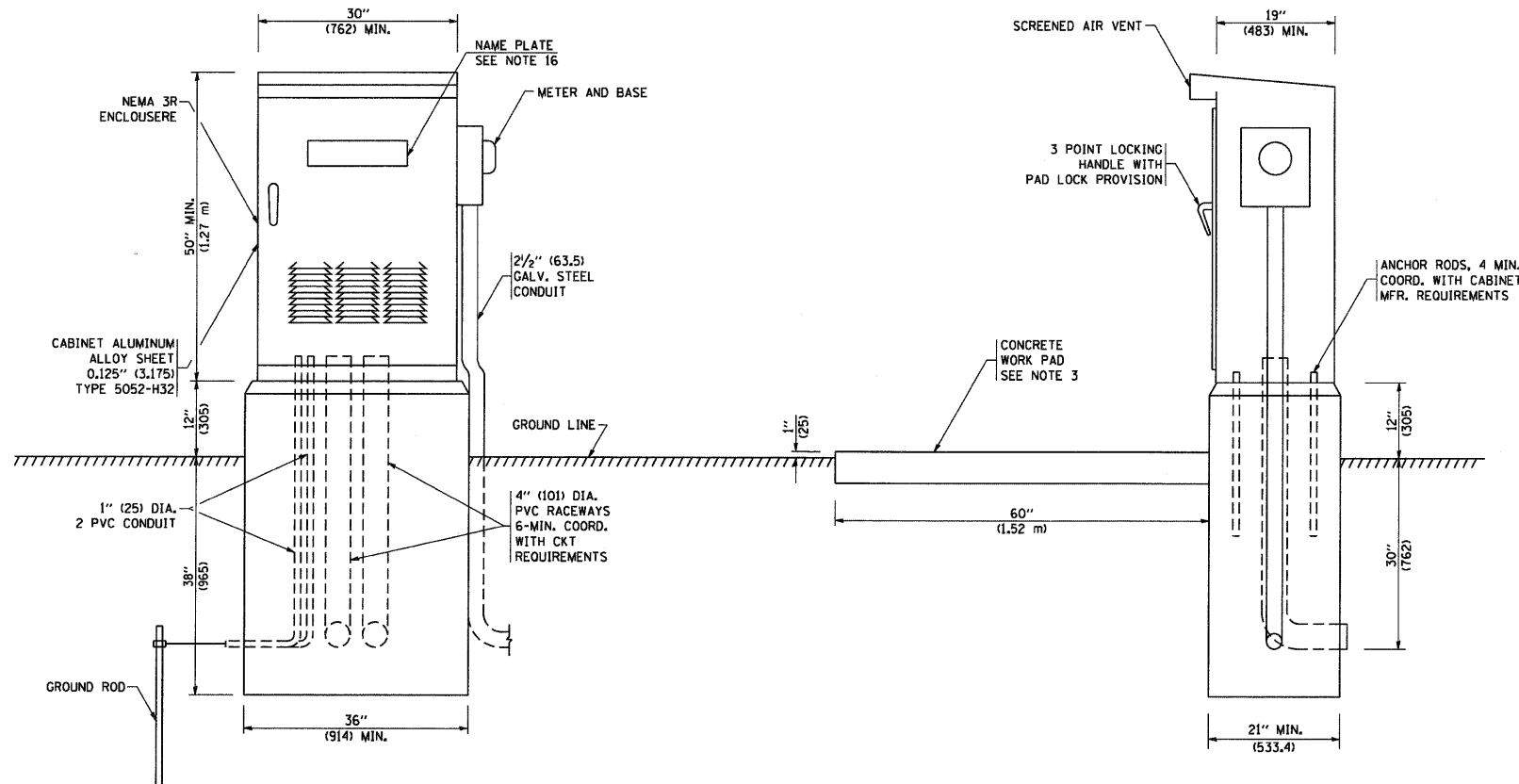
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2578	532B	DuPage	781	569
CONTRACT NO. 60477				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**PANEL WIRING DIAGRAM**

**PANEL EQUIPMENT**

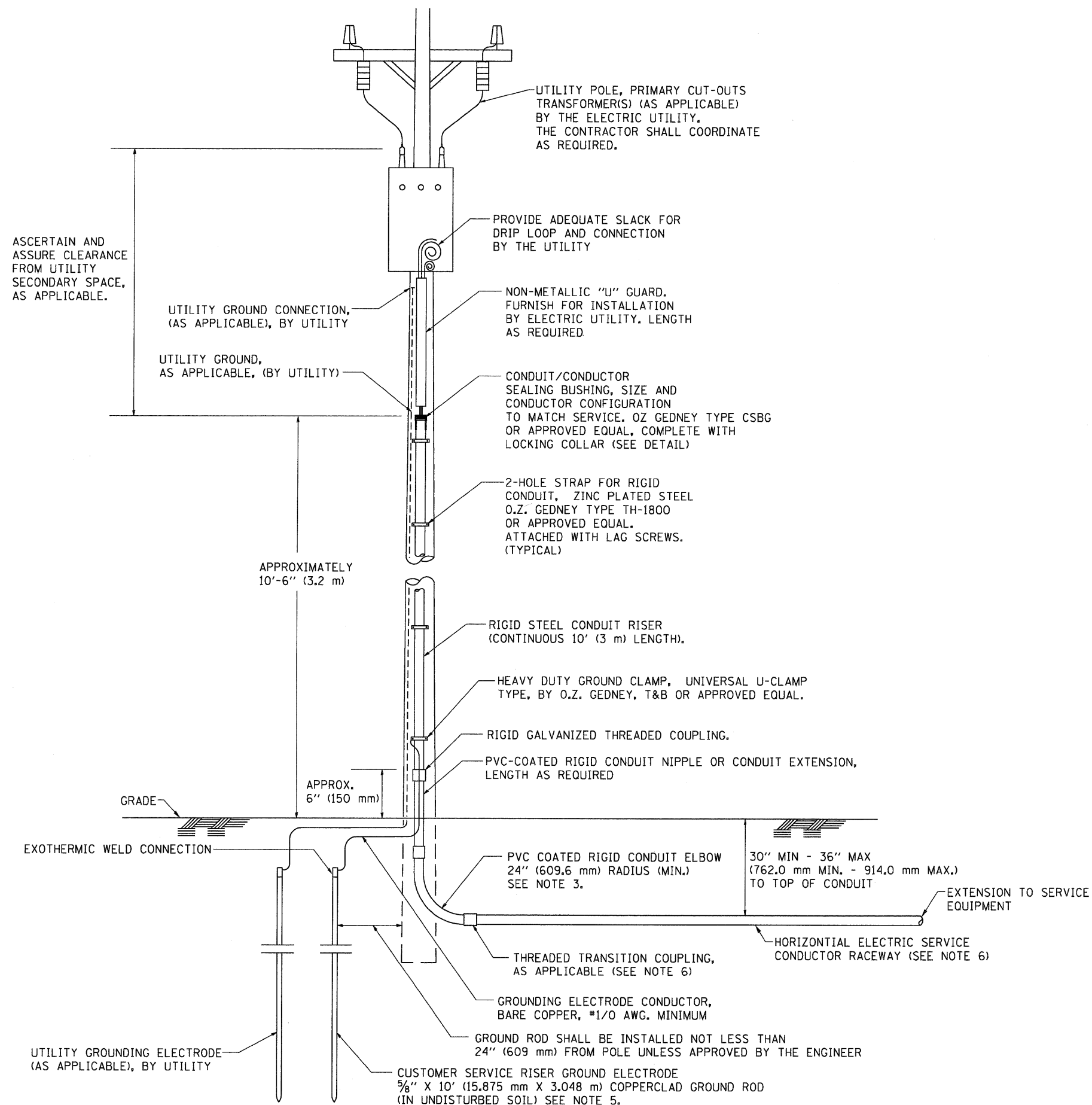
BILL OF MATERIAL		
ITEM	QUANTITY	DESCRIPTION
A	1	MAIN CIRCUIT BREAKER, 2 POLE, 600 VOLT 100 AMP. FRAME, 100 AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-22000 AMP. AT 480 VOLT.
B	1	REMOTE CONTROL SWITCH, ELECTRICALLY OPERATED, MECHANICALLY HELD, 2 POLE, SINGLE THROW, 100 AMP., 600 VOLTS CONTROL CIRCUIT 240 VOLT.
C	8	CIRCUIT BREAKERS, 1 POLE, 100AMP. FRAME, 50 AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-10,000 AMP. AT 240 V.
D	2	CONTROL CIRCUIT-CIRCUIT BREAKER, 1 POLE, 240 V., 100 AMP. FRAME, 15 AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-5000 AMP. AT 240 V.
E	1	ASTRONOMIC MICROPROCESSOR-BASED 2-CHANNEL CONTROLLER [TIME SWITCH].
F	1	20 A., 120 V. FUSE.
G	1	1.5 KVA, SINGLE PHASE, ENCAPSULATED TRANSFORMER 240 X 480 / 120 X 240 VOLT, 60 HZ.
H	1	SPST 20A SWITCH ON DOOR, TO TURN LIGHT ON WHEN DOOR IS OPEN.
I	1	INCANDESCENT LIGHTING FIXTURE ENCLOSED AND GASKETED WITH 60 WATT, 120 V. LAMP.
J	1	20 A., 120 V., DUPLEX RECEPTACLE, GFCI.
K	1	COPPER GROUND BUS 1/4" (6.35) X 1" (25.4) X 12" (304.8 mm) LONG MOUNTED ON PANEL WITH LUGS AND 4 SPARE LUGS
L	1	TOGGLE SWITCHES MOUNTED IN 4" (101.6) X 4" (101.6 mm) BOX.
M	1	COPPER GROUND BUS 1/4" (6.35) X 1" (25.4) X 12" (304.8 mm) LONG MOUNTED ON PANEL WITH LUGS AND SPARE LUGS



**NOTES:**

- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- FOUNDATION SIZE SHALL BE COORDINATED WITH CABINET SIZE AND MFR.
- IN FRONT OF CONTROL CABINET DOOR, REMOVE VEGETATION AND 2" (50.8 mm) TOP SOIL. LEVEL THE AREA AND ON TOP, PLACE LENGTH WISE PARALLEL TO CONTROL CABINET, A CONCRETE PAD 36" (914.4 mm) x 60" (18,288 mm) x 4" (101 mm) MIN. SIZE. THE COST OF LABOR AND MATERIALS ARE INCLUDED IN THE COST OF THE CONTROLLER.
- DOOR SHALL BE CONSTRUCTED FROM SAME TYPE OF MATERIAL AND THICKNESS AS CABINET.
- DOOR SHALL BE EQUIPPED WITH THREE POINT LATCHING MECHANISM WITH NYLON ROLLERS AT TOP THE BOTTOM.
- DOOR HINGE SHALL BE A HEAVY GAUGE CONTINUOUS HINGE WITH A 1/4" (6.35 mm) DIA. STAINLESS STEEL HINGE PIN.
- ALL EXTERNAL HARDWARE SHALL BE STAINLESS STEEL.
- CONTROL WIRING TO BE #12 AWG, 600V, TYPE "SIS" GRAY SWITCH BOARD WIRE, STRANDED COPPER.
- METER BOX SHALL BE MOUNTED ON THE SIDE OF CONTROL CABINET, NEAR TO THE SERVICE POLE.
- CABINETS SHALL BE PRIMED AND PAINTED AS SPECIFIED.
- THE HEADS OF CONNECTORS SCREWS SHALL BE PAINTED WHITE FOR NEUTRAL BAR CONNECTION AND GREEN FOR GROUND BAR CONNECTORS.
- ALL WIRING WITHIN THE CABINET SHALL BE COLOR CODED AS INDICATED.  
R = RED    BL = BLUE    W = WHITE  
B = BLACK    Y = YELLOW    G = GREEN
- PROVIDE SEALING GROMMETS FOR ALL OPEN WIRING EXTENDED FROM DEVICES IN BOXES OR CABINETS WITHIN THE CONTROL CABINET.
- ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.
- THE CONTROLLER SHALL BE CONSTRUCTED TO U.L. STD. 508 AND BEAR THE U.L. LABEL "ENCLOSED INDUSTRIAL CONTROL PANEL".
- 12" (304.8) X 16" (406.4 mm) STAINLESS STEEL EXTERIOR NAMEPLATE SHALL BE ENGRAVED TO "STATE OF ILLINOIS LIGHTING CONTROLS" UNLESS OTHERWISE SPECIFIED.

ASCERTAIN AND ASSURE CLEARANCE FROM UTILITY SECONDARY SPACE, AS APPLICABLE.

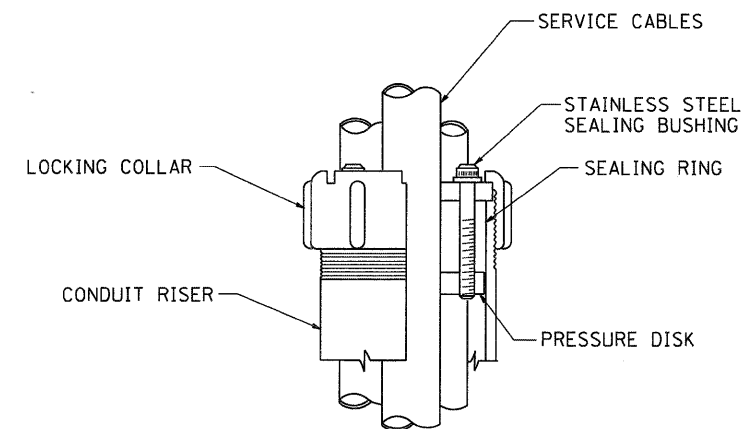


**APPLICATION**

THIS DETAIL APPLIES FOR LOW VOLTAGE ELECTRIC SERVICE (660 V OR LESS) FROM AN OVERHEAD UTILITY SUPPLY TO SEPERATLY-MOUNTED SERVICE EQUIPMENT.

**NOTES**

1. SERVICE VOLTAGE SHALL BE AS INDICATED ELSEWHERE IN THE DRAWINGS.
2. UNLESS OTHERWISE INDICATED, ITEMS AND WORK SHALL BE INCLUDED AND PAID AS PART OF THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.
3. CONDUIT AND CONNECTOR DIAMETER SHALL MATCH THE DIAMETER OF THE SERVICE CONDUCTOR RACEWAY AS INDICATED ON THE PLANS.
4. PVC COATED RACEWAYS AND ACCESSORIES SHALL BE CAREFULLY INSTALLED WITH MFR RECOMMENDED TOOLS AND PROCEDURES TO AVOID DAMAGE. ANY DAMAGE SHALL BE REPAIRED WITH COMPATIBLE PVC TOUCH-UP MATERIAL TO THE SATISFACTION OF THE ENGINEER OR THE DAMAGED MATERIAL SHALL BE REPLACED AT NO ADDITIONAL COST.
5. THE CONTRACTOR SHALL OBTAIN INSPECTION AND APPROVAL BY THE ENGINEER OF SERVICE RISER GROUND ELECTRODE, RISER ELBOW, NIPPLE AND CONNECTION TO SERVICE CONDUCTOR RACEWAY EXTENSION BEFORE BACKFILL AND SHALL ALSO OBTAIN INSPECTION OF SERVICE RISER AND SEALING BUSHING BEFORE UTILITY "U" GUARD INSTALLATION AND SERVICE CONNECTION.
6. THE HORIZONTAL ELECTRIC SERVICE CONDUCTOR RACEWAY SHALL BE AS INDICATED AND SHALL BE MEASURED SEPARATELY FOR PAYMENT. WHEN THE RACEWAY IS PVC-COATED RIGID GALVANIZED STEEL, THE COUPLING SHALL BE THE SAME. WHEN THE RACEWAY IS PVC CONDUIT (IN CONCRETE), THE COUPLING SHALL BE A METALIC TO NON METALIC ADAPTER, WHEN THE RACEWAY IS ENCASED IN CONCRETE, THE CONCRETE SHALL EXTEND TO COVER THE COUPLING.
7. PLANS AND DETAILS INDICATE THE GENERAL NATURE AND REQUIREMENTS. THEY DO NOT SHOW EVERY ACCESSORY AND ATTACHMENT, AND THEY DO NOT RELIEVE THE CONTRACTOR OF THE REQUIREMENTS OF THE SPECIFICATIONS AND SPECIAL PROVISIONS TO ASCERTAIN UTILITY REQUIREMENTS AND TO COORDINATE ACCORDINGLY, FURNISHING ALL ITEMS AND WORK NOT PROVIDED BY THE UTILITY, BUT NECESSARY FOR A COMPLETE SERVICE INSTALLATION IS REQUIRED AND SHALL BE INCLUDED IN THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.

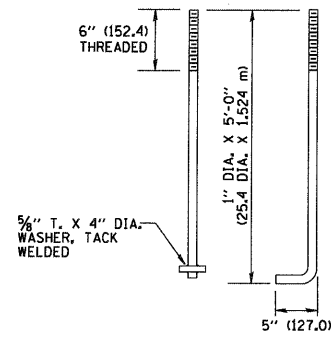
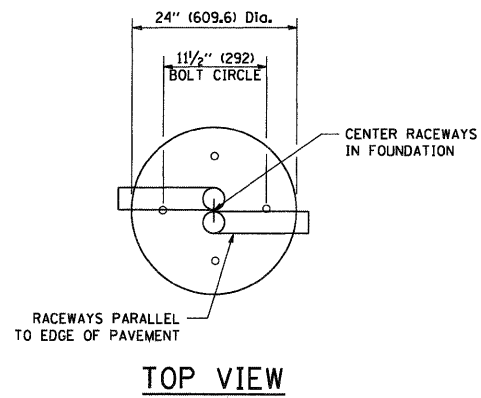


**SEALING BUSHING DETAIL**

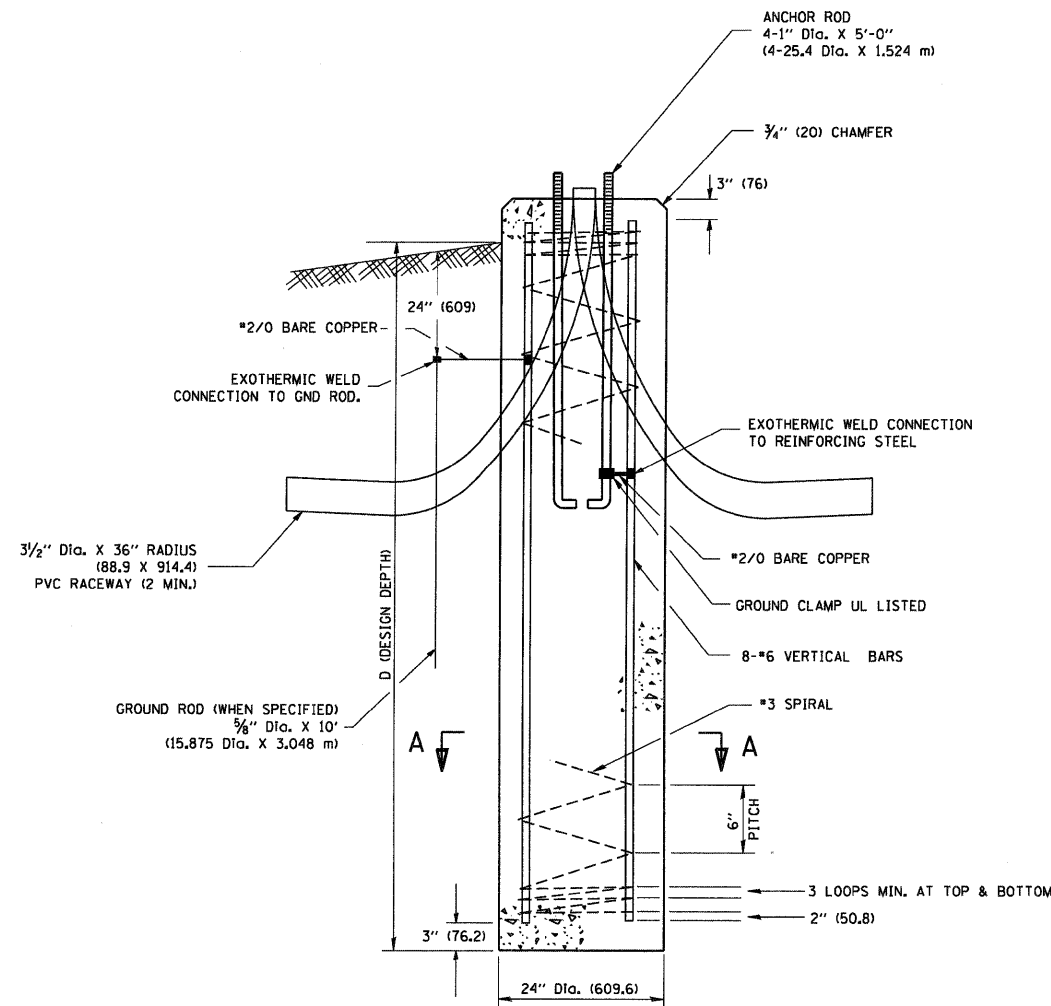
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	PLOT SCALE = 50,0000' / IN.	CHECKED - MEA	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	BE-220	CONTRACT NO.	781	571
PLOT DATE = 1/4/2008	DATE -	REVISED -						FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT				

**LIGHT POLE FOUNDATION DEPTH TABLE**  
**30 FT. (9.144 m) TO 35 FT. (10.668 m) MOUNTING HEIGHT**

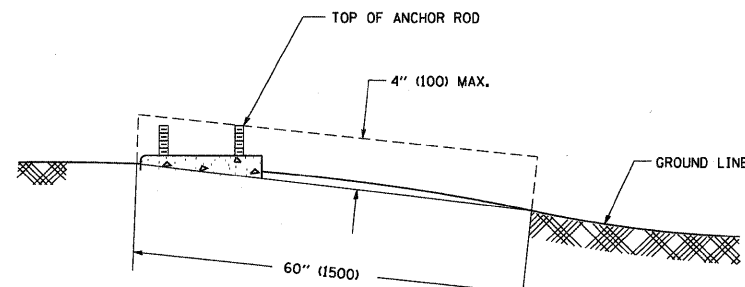
SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION	
	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY Ou = 0.375 TON/SQ. FT.	11'-0" (3.35 m)	12'-8" (3.85 m)
MEDIUM CLAY Ou = 0.75 TON/SQ.FT	9'-0" (2.74 m)	14'-10" (4.52 m)
STIFF CLAY Ou = 1.50 TON/SQ. FT.	7'-6" (2.29 m)	8'-7" (2.61 m)
LOOSE SAND φ = 34°	9'-6" (2.90 m)	10'-7" (3.22 m)
MEDIUM SAND φ = 37.5°	9'-0" (2.74 m)	9'-10" (2.99 m)
DENSE SAND φ = 40°	8'-3" (2.51 m)	9'-7" (2.91 m)



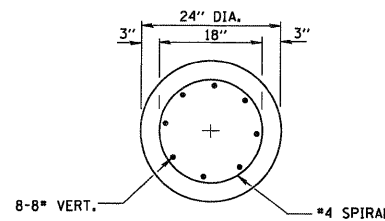
**ANCHOR BOLT DETAIL**



**FOUNDATION DETAIL**



**FOUNDATION EXTENSION DETAIL**



**SECTION A-A**

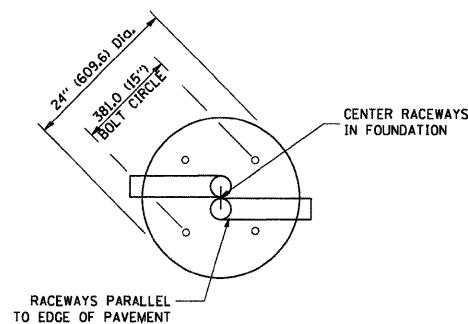
**NOTES**

- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED.
- THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 4 IN. (100 mm) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5 m) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED, IN ACCORDANCE WITH AASHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
- THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION, IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
- THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED 3/4-IN. (20 mm).
- THE CONCRETE SHALL BE CLASS SI. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
- THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UM(6 MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
- THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150 mm) WITH A MINIMUM OF 3 INCHES (75 mm) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
- ANCHOR RODS SHALL PROJECT 2 3/4" (69.9 mm) ABOVE THE TOP OF THE FOUNDATION, IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
- THE CONTRACTOR SHALL USE A #3 SPIRAL AT 6" (152.4 mm) PITCH OR MAY SUBSTITUTE #3 TIES AT 12" (304.8 mm) O.C. WITH THE APPROVAL OF THE ENGINEER.
- THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
- THE RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.

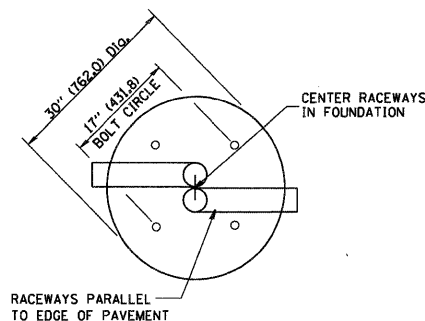


**LIGHT POLE FOUNDATION DEPTH TABLE**  
40 FT. (12.192 m) TO 47.5 FT. (14.478 m) MOUNTING HEIGHT

SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION	
	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY Qu = 0.375 TON/SO. FT.	13'-0" (3.96 m)	15'-0" (4.57 m)
MEDIUM CLAY Qu = 0.75 TON/SO. FT.	9'-6" (2.93 m)	10'-9" (3.23 m)
STIFF CLAY Qu = 1.50 TON/SO. FT.	7'-0" (2.13 m)	8'-0" (2.44 m)
LOOSE SAND φ = 34°	9'-0" (2.74 m)	10'-0" (3.05 m)
MEDIUM SAND φ = 37.5°	8'-3" (2.52 m)	9'-0" (2.74 m)
DENSE SAND φ = 40°	7'-9" (2.36 m)	9'-0" (2.74 m)



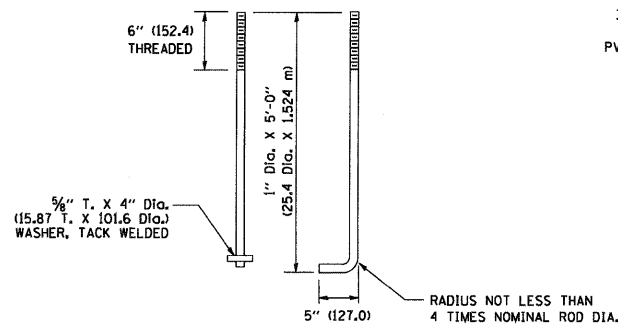
**TOP VIEW**



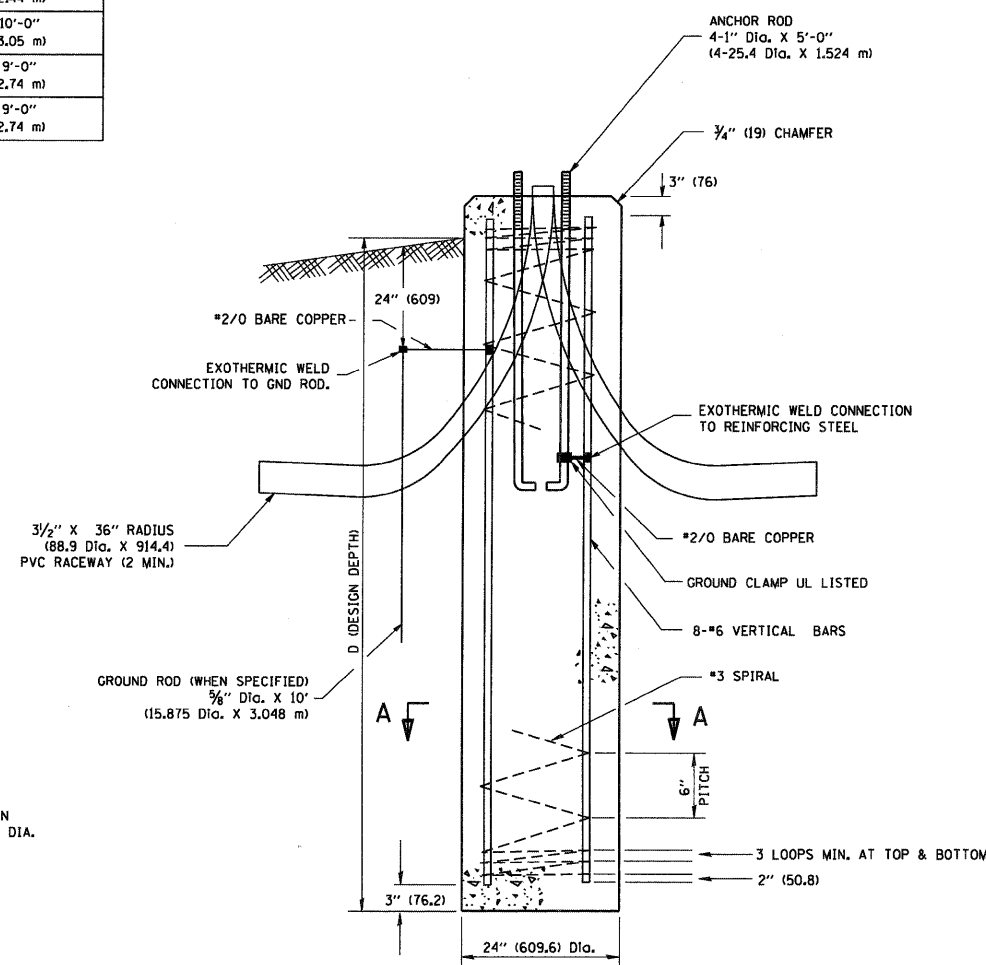
**TOP VIEW**

**NOTES**

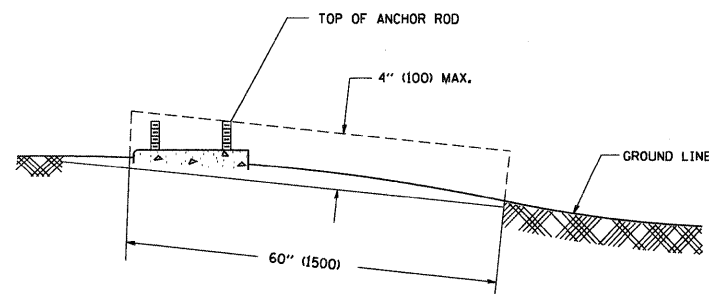
- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED.
- THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 100MM (4 IN.) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5 m) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED, IN ACCORDANCE WITH AASHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
- THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
- THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED 3/4-IN. (20 mm).
- THE CONCRETE SHALL BE CLASS SI. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
- THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UM(6 MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
- THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150 mm) WITH A MINIMUM OF 3 INCHES (75 mm) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
- ANCHOR RODS SHALL PROJECT 2 3/4" (69.9 mm) ABOVE THE TOP OF THE FOUNDATION. IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
- THE CONTRACTOR SHALL USE A #3 SPIRAL AT 6" (152.4 mm) PITCH OR MAY SUBSTITUTE #3 TIES AT 12" (304.8 mm) O.C. WITH THE APPROVAL OF THE ENGINEER.
- THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
- THE RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.



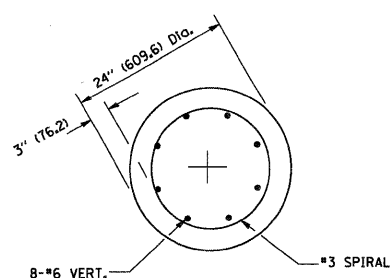
**ANCHOR ROD DETAIL**



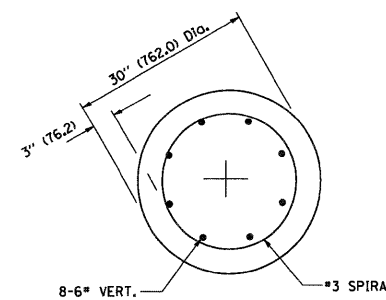
**FOUNDATION DETAIL**



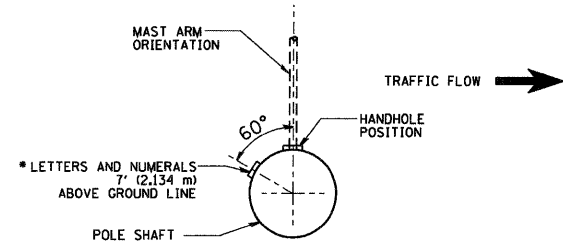
**FOUNDATION EXTENSION DETAIL**



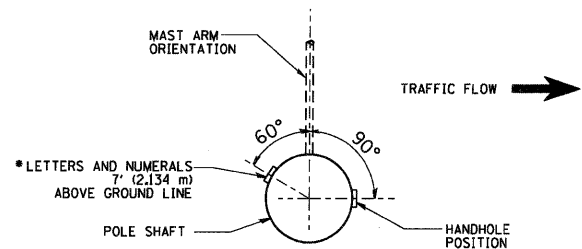
**SECTION A-A**



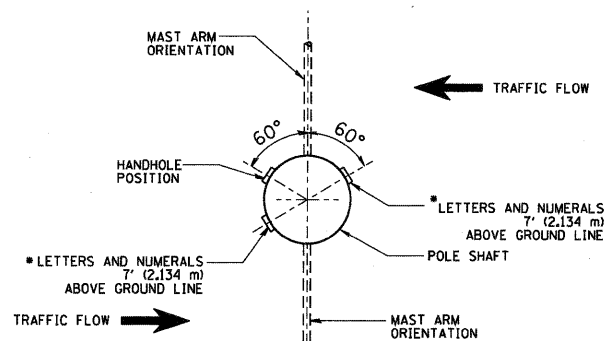
**SECTION A-A**



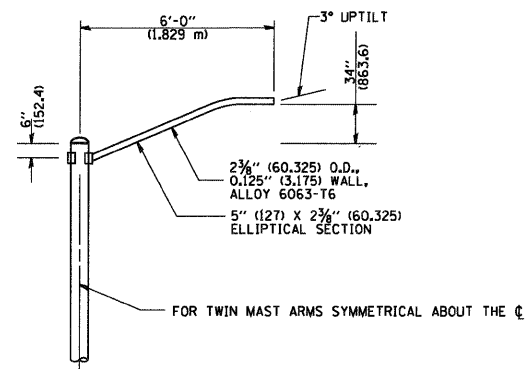
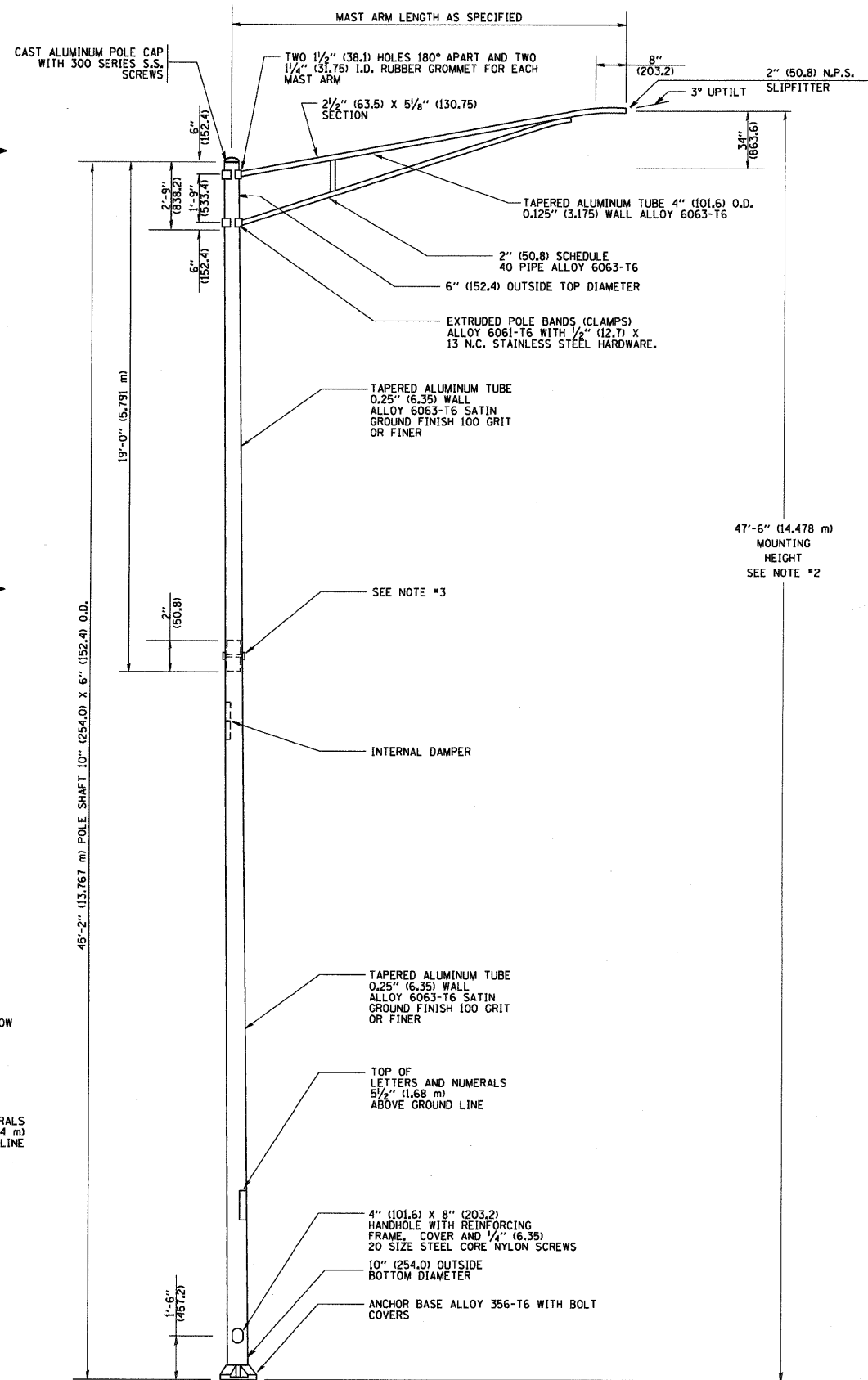
POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES MOUNTED ON BRIDGE PARAPET OR BARRIER WALL



POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES

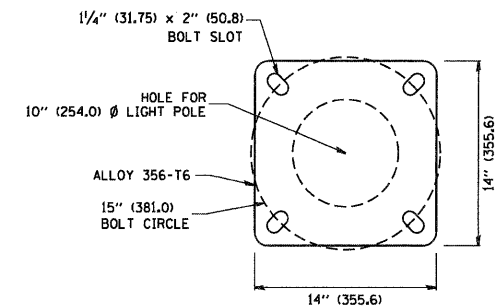


POSITION OF HANDHOLE AND POLE NUMBER FOR TWIN MAST ARM POLES

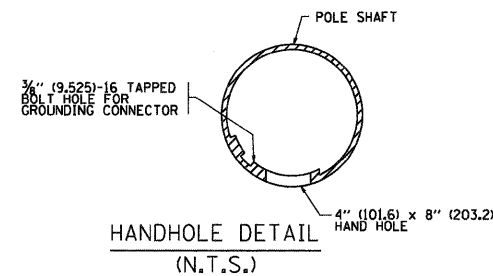


6' (1.8 m) SINGLE MEMBER MAST ARM (N.T.S.)

- NOTES:
- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
  - MOUNTING HEIGHT IS DEFINED AS THE DISTANCE FROM THE CENTERLINE OF THE TENON TO THE BOTTOM OF THE ANCHOR BASE.
  - TWO PIECE SHAFT WILL BE MATCHED MARKED AND INTERCHANGEABLE BETWEEN DIFFERENT UNITS. FIELD DRILLING OF THE HOLES WILL NOT BE ALLOWED.
  - THE LIGHT POLE WILL MEET AASHTO DESIGN CRITERIA AS SPECIFIED.
  - THE INSTALLING CONTRACTOR WILL PROVIDE A UL LISTED GROUNDING CONNECTOR, BURNDY K2C23, T&B SP4DL OR APPROVED EQUAL.
  - LIGHT POLES WILL NOT BE INSTALLED WITHOUT MAST ARMS AND LUMINAIRES.
  - LIGHT POLES WILL BE SET PLUMB ON THE FOUNDATION WITHOUT THE USE OF LEVELING NUTS, WASHERS OR SHIMS.
  - LIGHTING UNIT IDENTIFICATION NUMBERS SHALL BE INSTALLED BEFORE THE LIGHTING UNIT IS ENERGIZED.



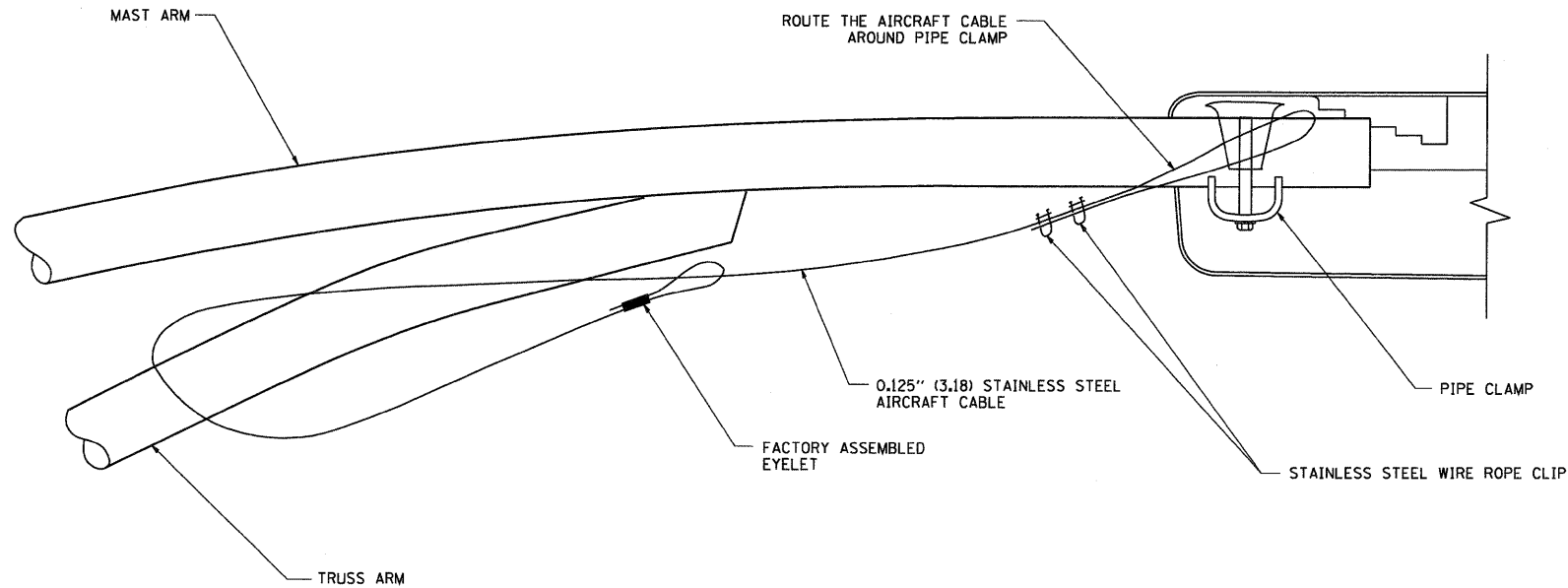
LIGHT POLE BASE PLATE DETAIL  
15 INCH (381.0) BOLT CIRCLE



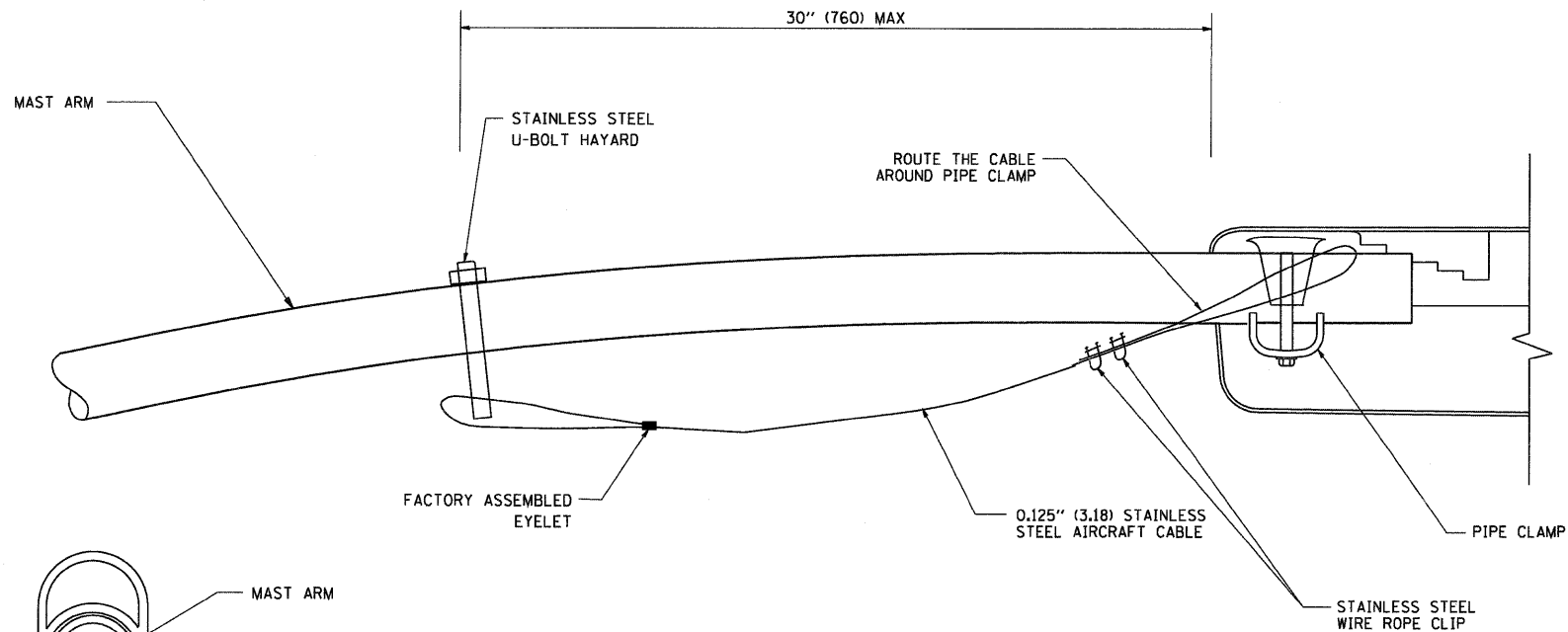
HANDHOLE DETAIL (N.T.S.)

FILE NAME = W:\diststd\22x34\be400.dgn	USER NAME = gogliobt	DESIGNED -	REVISED - R. TOMSONS 09-06-00	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ALUMINUM LIGHT POLE 47'-6" (14.478 m) MOUNTING HEIGHT</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 50.000' / IN.	DRAWN -	REVISED - R. TOMSONS 09-03-03		SCALE: NONE			SHEET NO. 1 OF 1 SHEETS			781	574
	PLOT DATE = 1/4/2008	CHECKED -	REVISED -		STA.			TO STA.			CONTRACT NO.	
		DATE -	REVISED -		FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT							

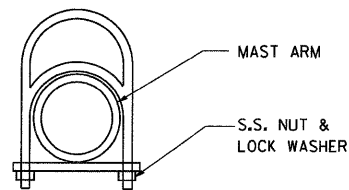




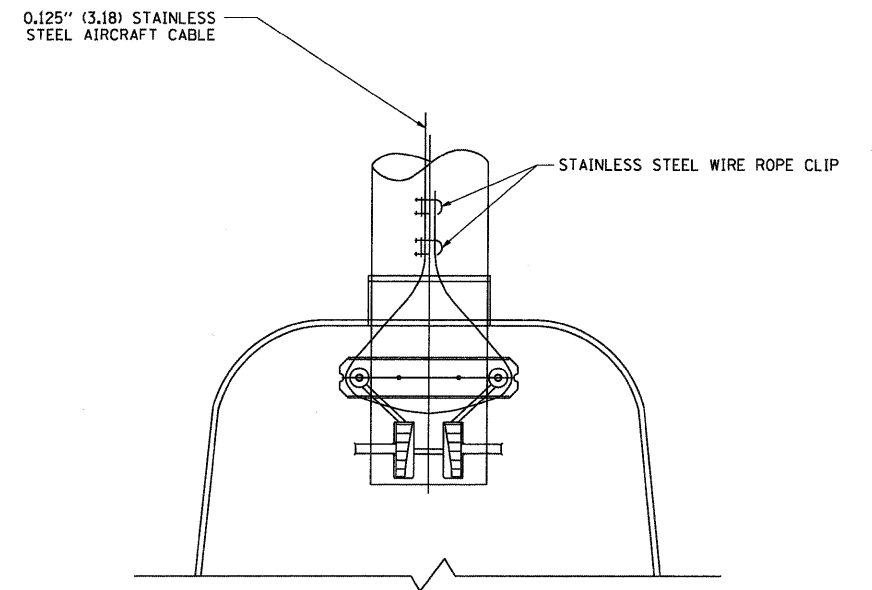
**SIDE VIEW (TRUSS ARM)**  
N.T.S.



**SIDE VIEW (SINGLE MEMBER OR DAVIT ARM)**  
N.T.S.



STAINLESS STEEL  
U-BOLT HAYARD

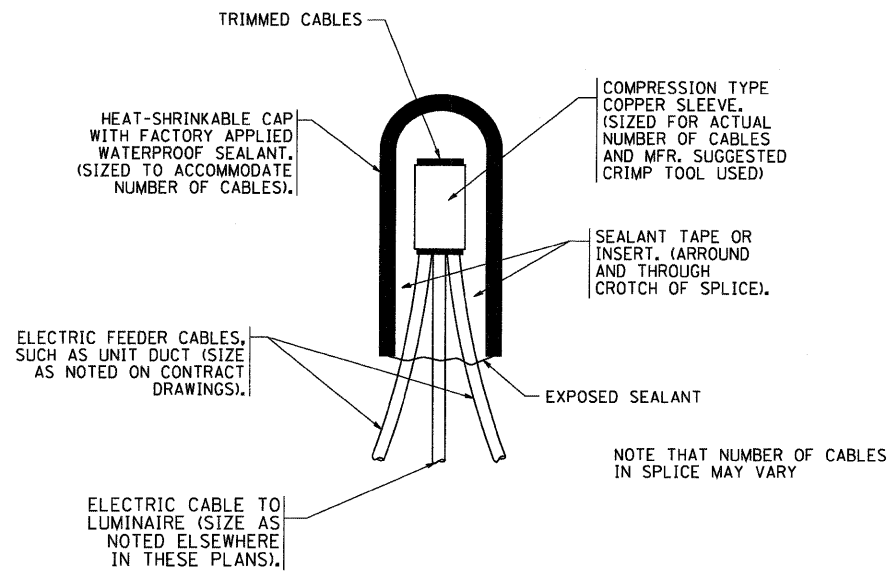


**BOTTOM VIEW**  
N.T.S.

**NOTES:**

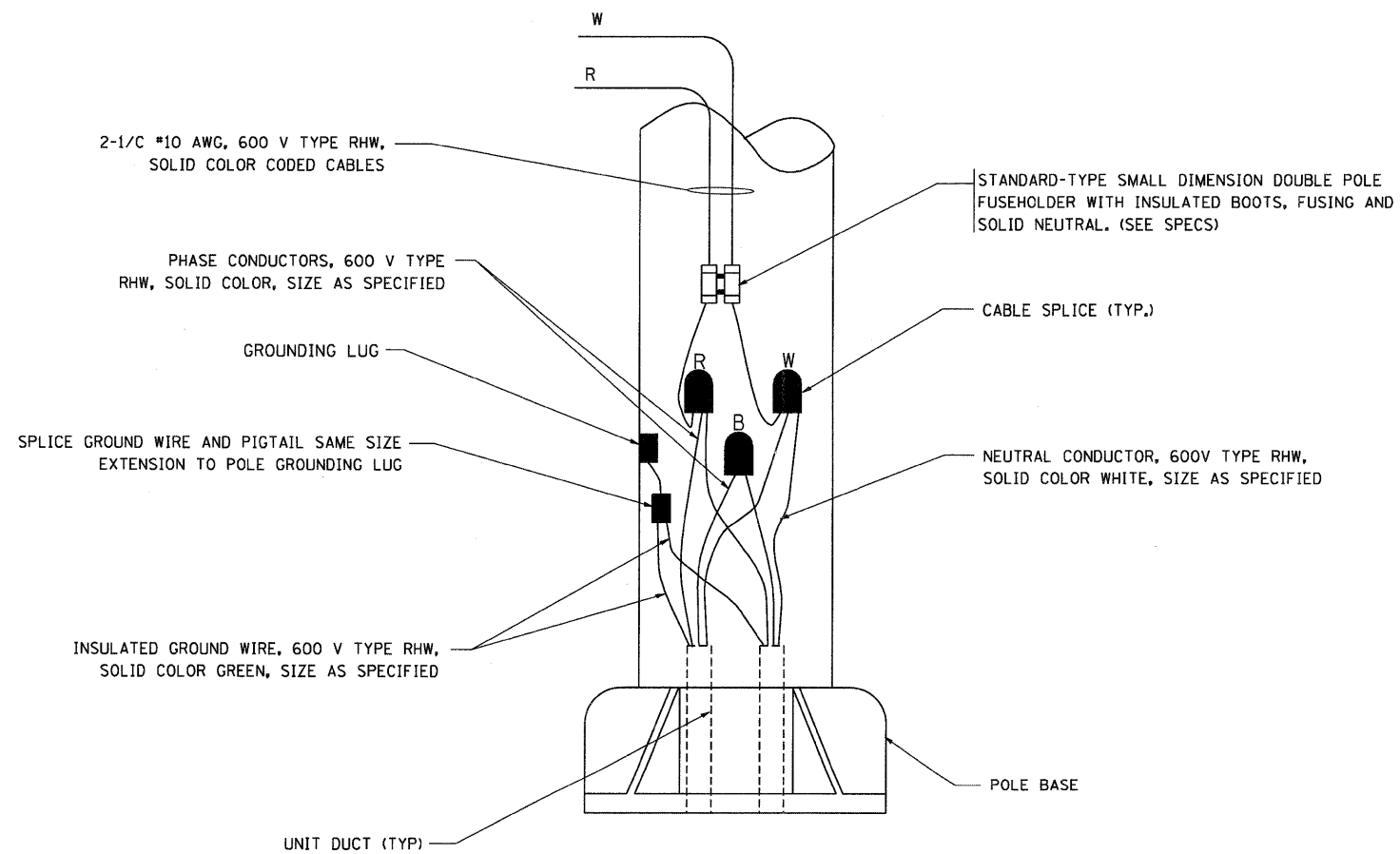
1. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.
2. CONTRACTOR SHALL ADJUST THE WIRE CLIP TO ELIMINATE ANY SLACK FROM THE WIRE ROPE.
3. THE 0.125" (3.18) STAINLESS STEEL AIRCRAFT CABLE SHALL REMAIN VISIBLE FROM THE GROUND LEVEL.
4. THE BREAKING STRENGTH OF THE CABLE SHALL BE 1700 LBS. MIN.

FILE NAME = W:\diststd\22x34\be701.dgn	USER NAME = geglienobt	DESIGNED -	REVISED - 08-08-03	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>LUMINAIRE SAFETY CABLE ASSEMBLY</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 50,000' / IN.	DRAWN -	REVISED -								781	576
PLOT DATE = 1/4/2008	DATE -	REVISED -			SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			
									BE-701 CONTRACT NO.			



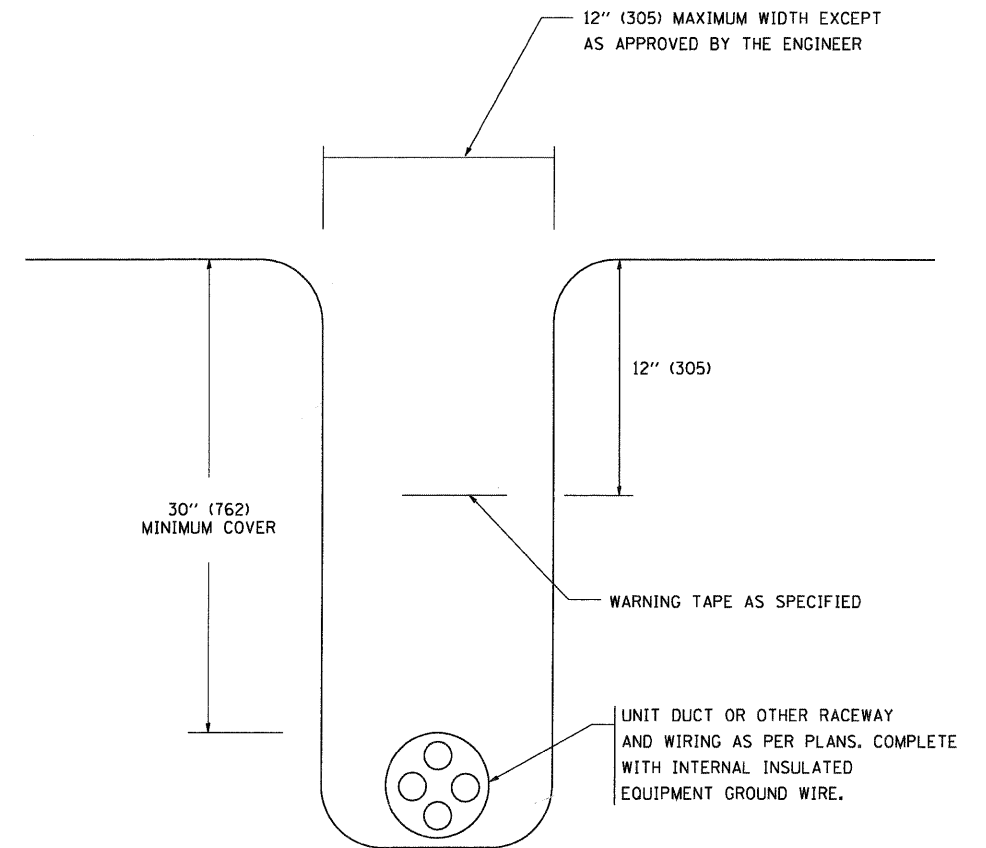
TYPICAL SPLICE DETAIL

N.T.S.



POLE WIRING DETAIL

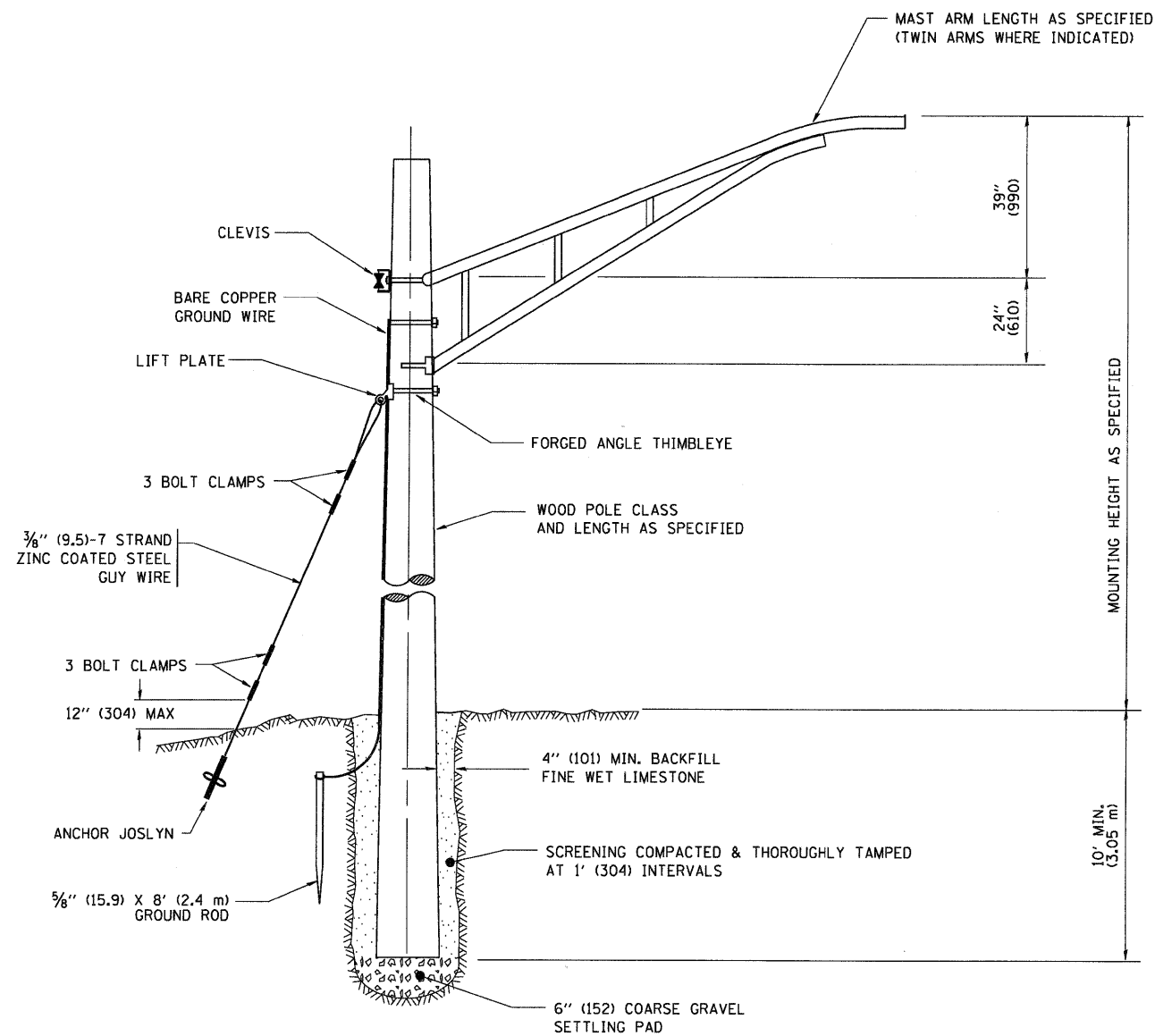
N.T.S.



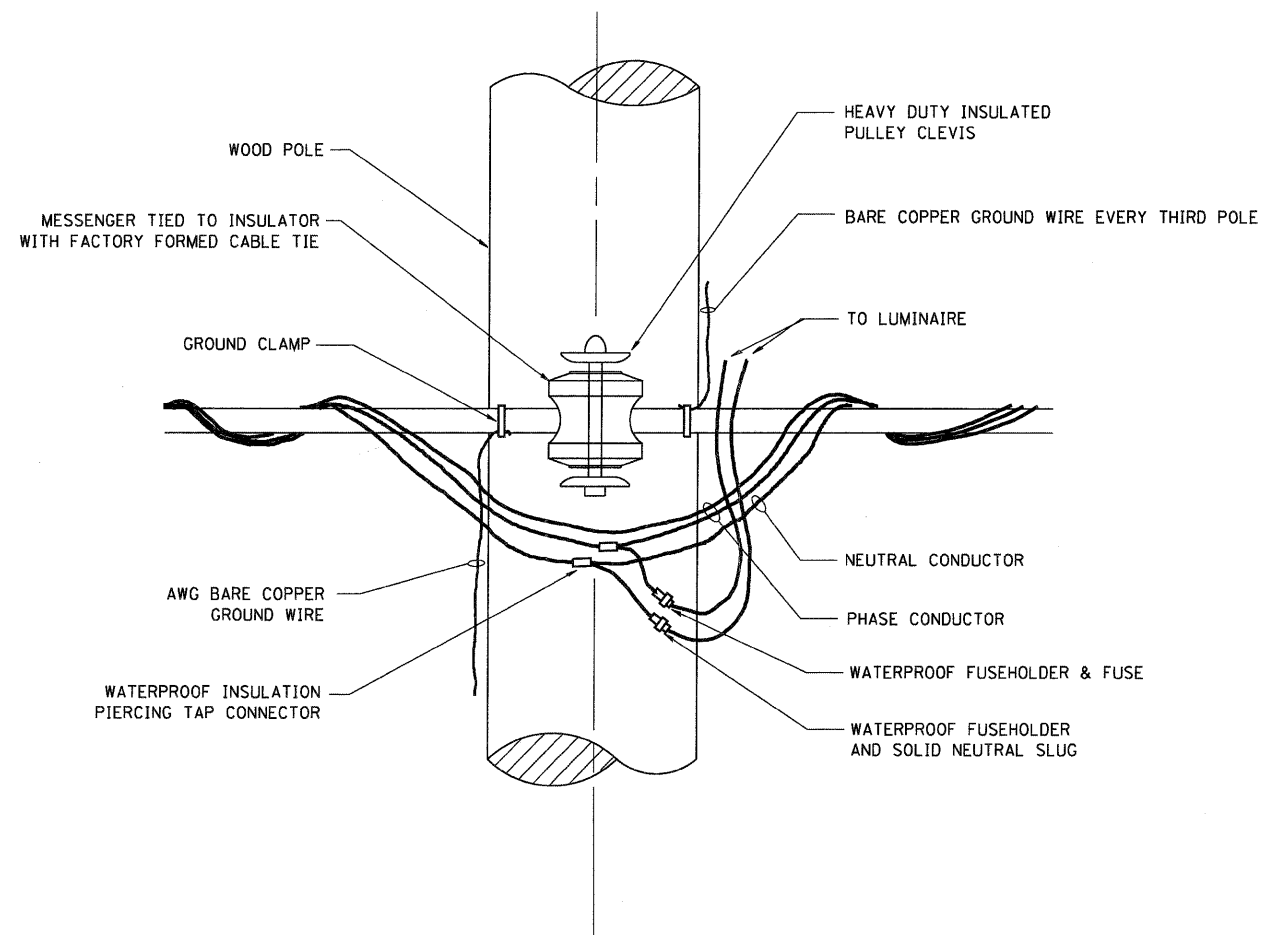
TYPICAL WIRING IN TRENCH DETAIL

N.T.S.

FILE NAME = W:\diststd\22x34\be702.dgn	USER NAME = geglienobt	DESIGNED -	REVISED - 08-08-03	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>MISC. ELECTRICAL DETAILS SHEET A</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 50,000' / IN.	CHECKED -	REVISED -								781	577
	PLOT DATE = 1/4/2008	DATE -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT				
								BE-702		CONTRACT NO.		



TEMPORARY LIGHT POLE DETAIL

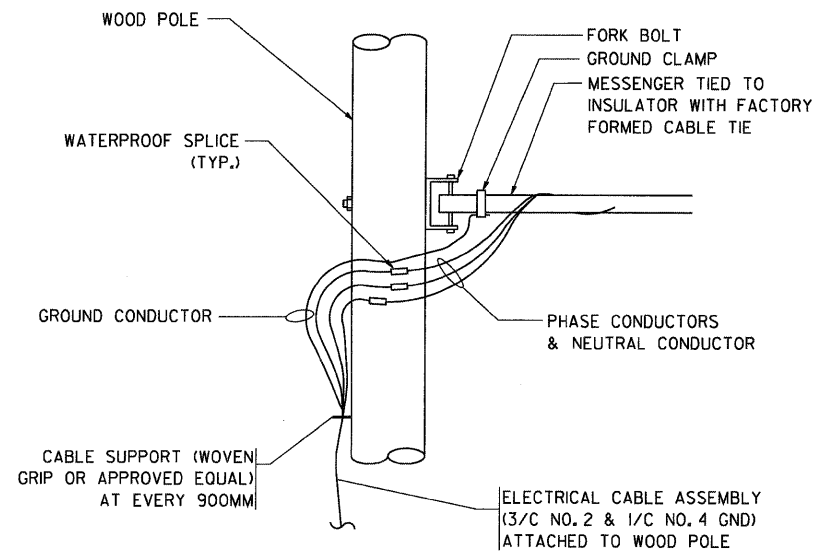


TEMPORARY LIGHT POLE ATTACHMENT DETAIL

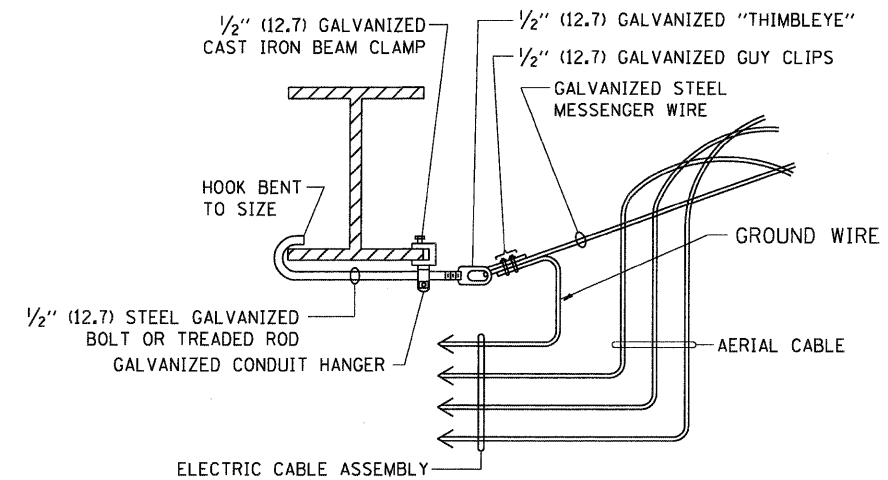
**NOTES:**

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED

FILE NAME = W:\diststd\22x34\be800.dgn	USER NAME = geglennob	DESIGNED -	REVISED - 08-08-03	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY LIGHT POLE DETAILS</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED -								781	578
	PLOT DATE = 1/4/2008	DATE -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT			
								BE-800		CONTRACT NO.		



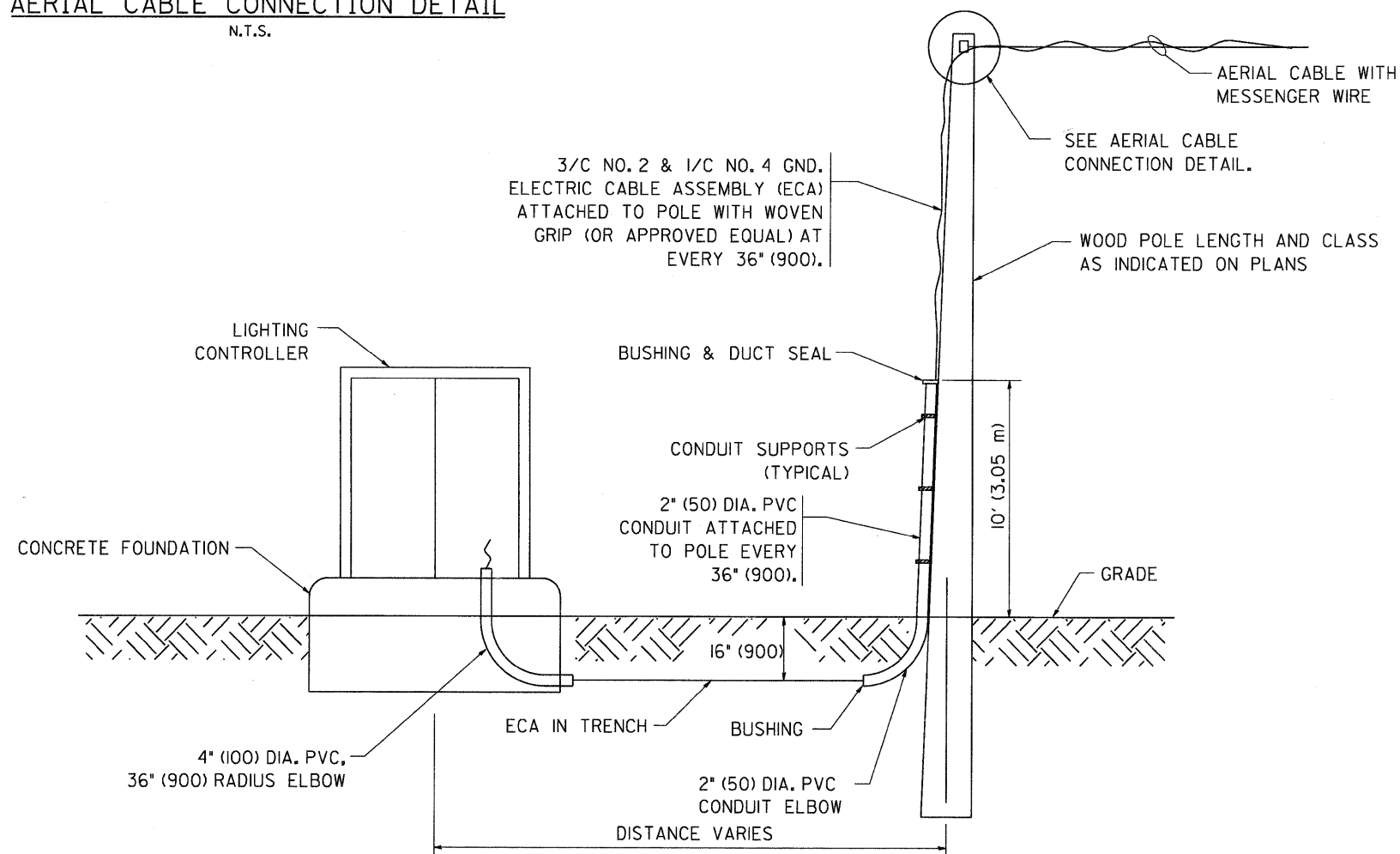
**AERIAL CABLE CONNECTION DETAIL**  
N.T.S.



**AERIAL CABLE ATTACHED TO STRUCTURE**  
NOT TO SCALE

**NOTES:**

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED.
2. SEE PROPOSED LIGHTING PLAN FOR CONDUIT, CABLE AND ROUTING.
3. THE CONTRACTOR SHALL PROVIDE INTERMEDIATE SUPPORTS TO MAINTAIN MINIMUM CLEARANCES. REFER TO AERIAL AERIAL CABLE ATTACHED TO STRUCTURE DETAIL.
4. COST OF SPLICES AND MOUNTING HARDWARE SHALL BE INCLUDED IN THE UNIT PRICE FOR AERIAL CABLE.

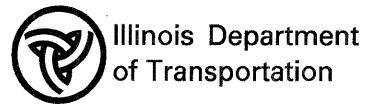


**WOOD POLE TO LIGHTING CONTROLLER WIRING CONNECTION DETAIL**  
N.T.S.

FILE NAME = W:\diststd\22x34\be801.dgn	USER NAME = geglienobt	DESIGNED -	REVISED - 08-08-03	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY AERIAL CABLE INSTALLATION</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 50.000' / IN.	DRAWN -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	BE-801	CONTRACT NO.	781	579
	PLOT DATE = 1/4/2008	CHECKED -	REVISED -									
		DATE -	REVISED -						FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT			

**Bench Mark:**  
Chiseled 'X' in Concrete Sidewalk on East side of IL RT. 53. 14.65' Northwest of PK nail in Power Pole and 41.00' Southwest of Building. Sta. 59+83.74, Offset 46.56 Rt., Elev. 747.43.

**Existing Structure:**  
The existing structure is a 3'x4' concrete box culvert.  
The existing structure is to be removed and replaced. Traffic is to be maintained on the existing roadway during construction by staging the construction.



**INDEX OF SHEETS**

- S1 - General Plan & Elevation
- S2 - Culvert Details
- S3 - Soil Borings

**GENERAL NOTES**

1. Precast Concrete Box Culvert shall conform to the requirements of Article 540.06 of the Standard Specifications and the applicable requirements of AASHTO M-259.
2. Reinforcement Bars shall conform to the requirements of AASHTO M-31, M-322, Grade 60. The cost of reinforcement is included with "Box Culvert End Sections".
3. Work this sheet with S2 for details of Cast-in-Place Sections.
4. All exposed concrete edges shall be chamfered  $\frac{3}{4}$ " unless otherwise noted.

**DESIGN SPECIFICATIONS**

2002 AASHTO Standard Specifications For Highway Bridges

**LOADING HS20-44**

Allowance for Future Wearing Surface=50 lb/ft<sup>2</sup>

**DESIGN STRESSES**

**Precast Units**

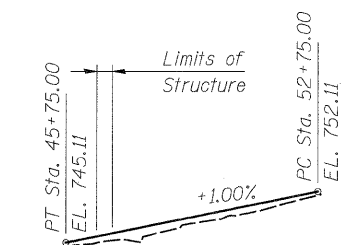
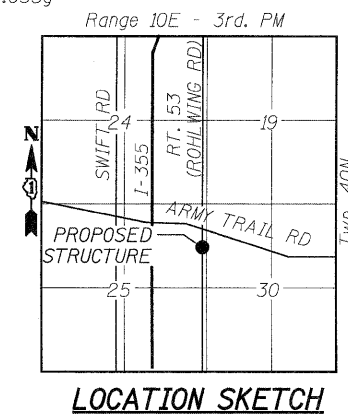
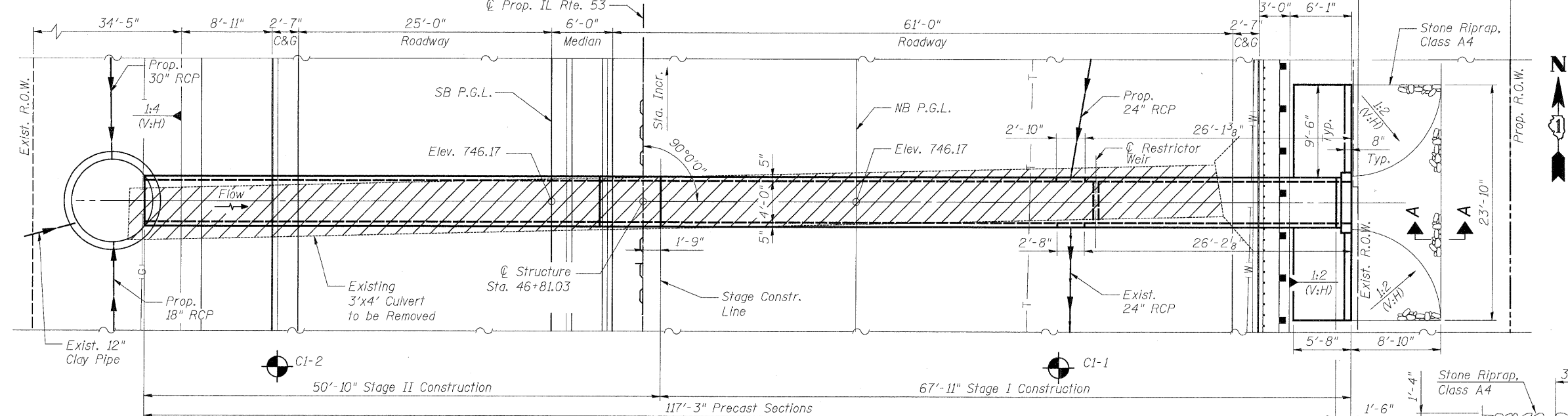
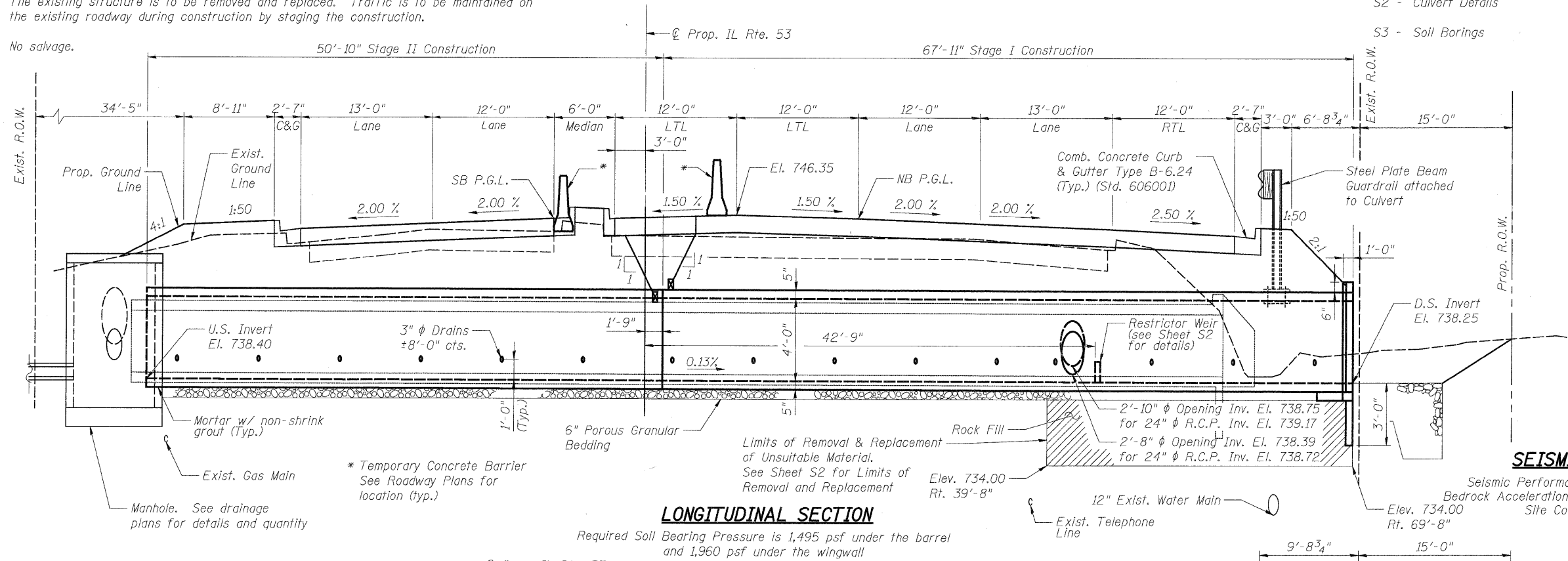
f'c=5,000 psi  
fy=65,000 psi (welded wire fabric)

**Field Units**

f'c=3,500 psi  
fy=60,000 psi (Reinf.)

**SEISMIC DATA**

Seismic Performance Category (SPC)=A  
Bedrock Acceleration Coefficient (A)=0.035g  
Site Coefficient (S)=1.0



**WATERWAY INFORMATION TABLE**

Proposed Low Grade Elev. = 744.7 @ Sta. 45+00  
Existing Low Grade Elev. = 744.6 @ Sta. 44+50

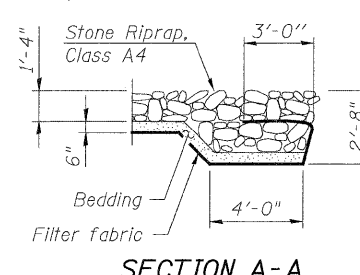
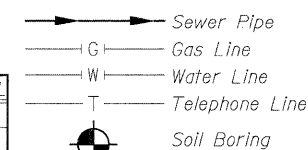
Flood	Freq. Yr.	Q (C.F.S.)	Opening (Sq. Ft.)		Nat. H.W.E.	Head (Ft.)		Headwater Elev.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	10	14	4	4	740.7	0.0	0.0	740.7	740.7
Base	50	29	7	7	741.5	0.1	0.1	741.6	741.6
Overtopping	100	36	8	8	741.8	0.4	0.4	742.2	742.2
Max. Calc.	500	73	12	12	743.3	1.8	1.8	745.1	745.1

Drainage Area = 28.8 Acres

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Removal And Disposal Of Unsuitable Material	Cu Yd	54
Stone Riprap, Class A4	Sq Yd	25
Filter Fabric	Sq Yd	25
* Temporary Sheet Piling	Sq Ft	287
* Box Culvert End Sections	Cu Yd	7.6
* Precast Concrete Box Culvert 4' X 4'	Foot	117.5
* Box Culvert Removal	Foot	108
* Rock Fill	Cu Yd	54

\* See Special Provisions

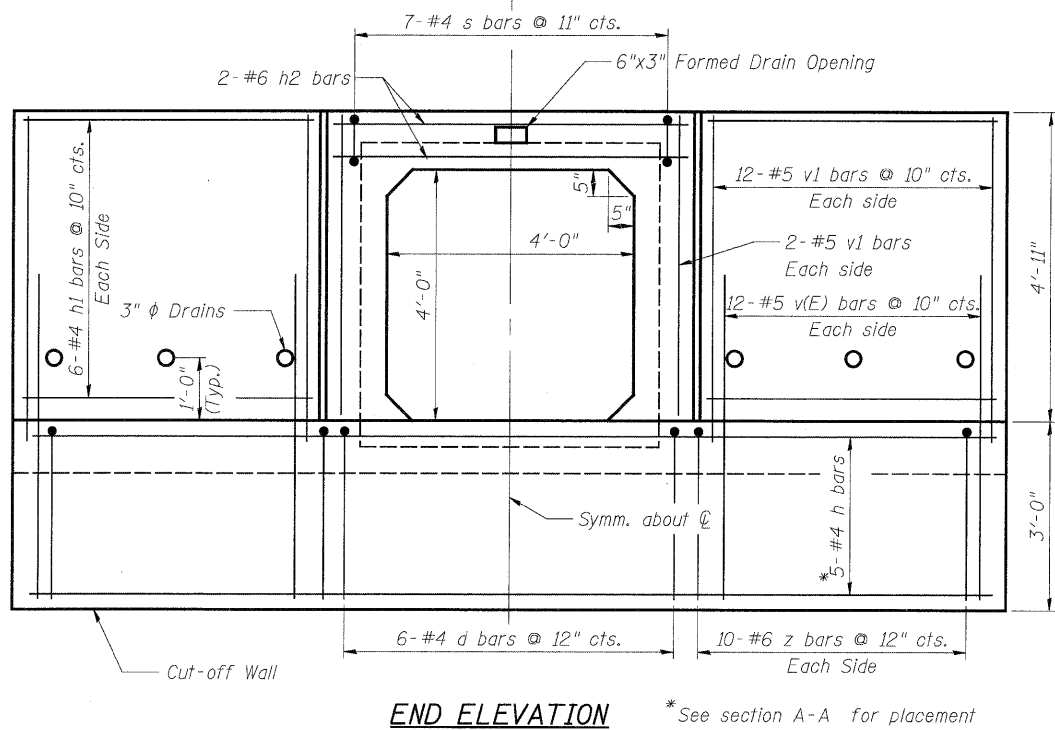


DESIGNED	- A. Durbak
CHECKED	- R. DiGiulio
DRAWN	- A. Durbak
CHECKED	- R. DiGiulio

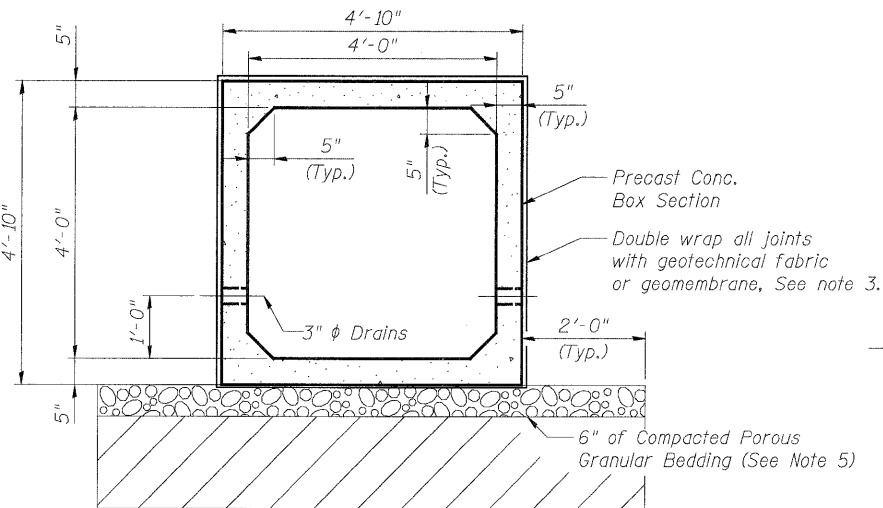
**4' X 4' BOX CULVERT GP&E**  
**ILLINOIS ROUTE 53**  
**FAU 2578 SECTION 532B-1**  
**DUPAGE COUNTY STATION 46+81.03**

SHEET NO. S1 OF S25	F.A.P. RTE. 2578	SECTION 532B	COUNTY DUPAGE	TOTAL SHEETS 781	SHEET NO. 580
	CONTRACT NO. 60477				
12/3/2010		ILLINOIS FED. AID PROJECT			

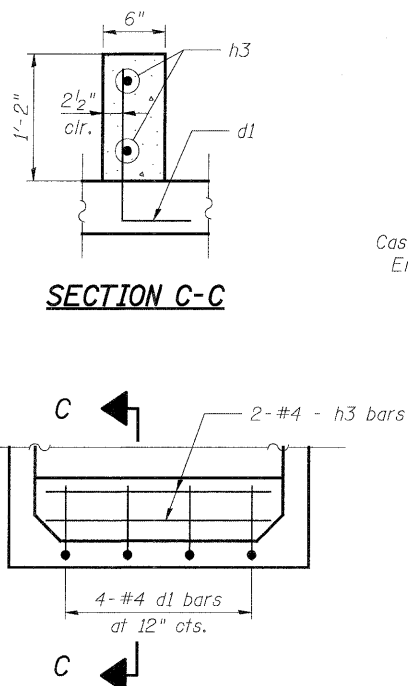




**END ELEVATION** \* See section A-A for placement

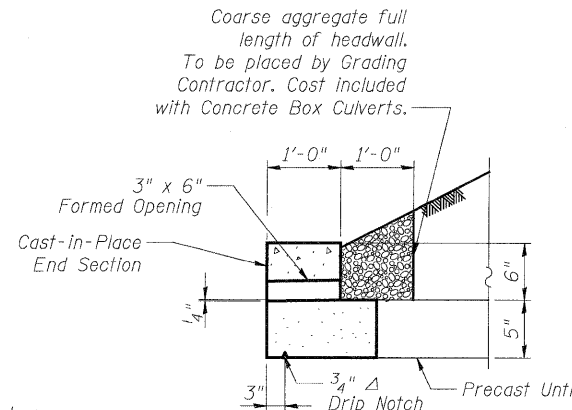


**SECTION THRU PRECAST CULVERT** Limits of Removal & Replacement of Unsuitable Material



**RESTRICTOR WEIR DETAIL**

Cost of Restrictor Weir to be included with Precast Concrete Box Culvert 4' X 4'



**SECTION THRU HEADWALL**

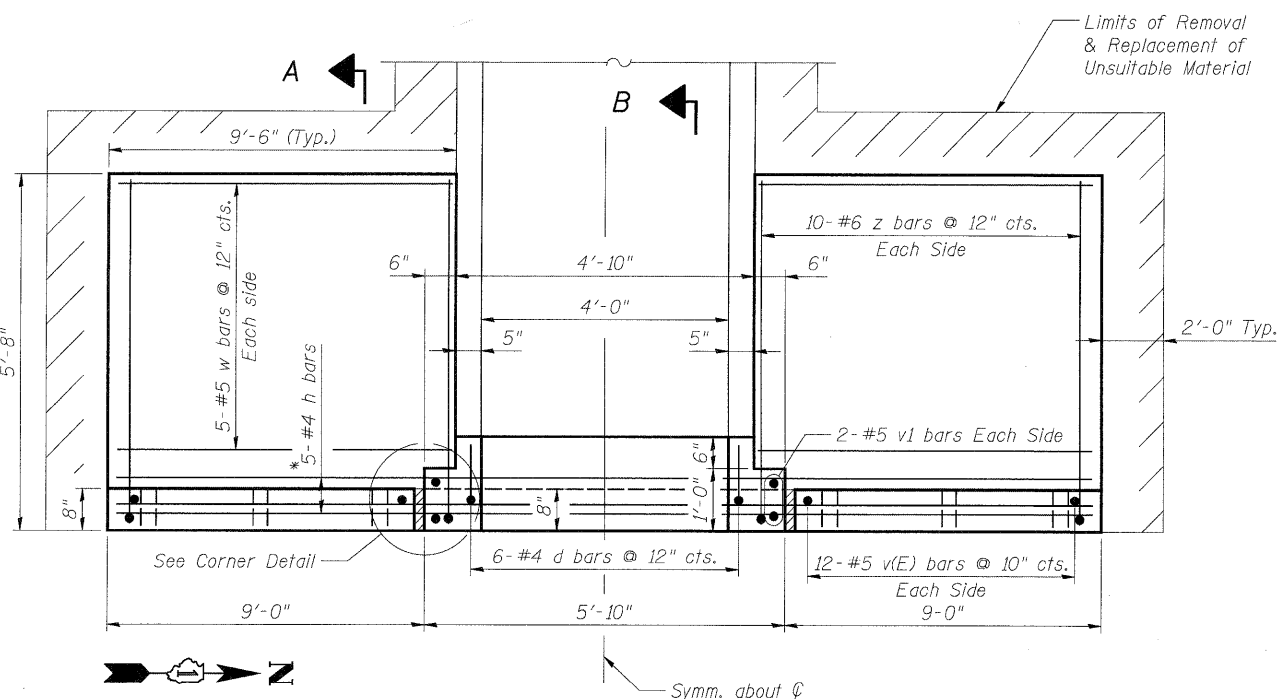
**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
* d	6	#4	3' - 7"	□
* d1	4	#4	2' - 0"	□
* h	5	#4	23' - 6"	—
* h1	12	#4	8' - 9"	—
* h2	4	#6	5' - 7"	—
* h3	2	#4	3' - 9"	—
* s	7	#4	3' - 1"	□
* v(E)	24	#5	5' - 7"	—
* v1	28	#5	4' - 8"	—
* w	10	#5	9' - 3"	—
* z	20	#6	8' - 2"	—
Box Culvert End Sections			Each	1

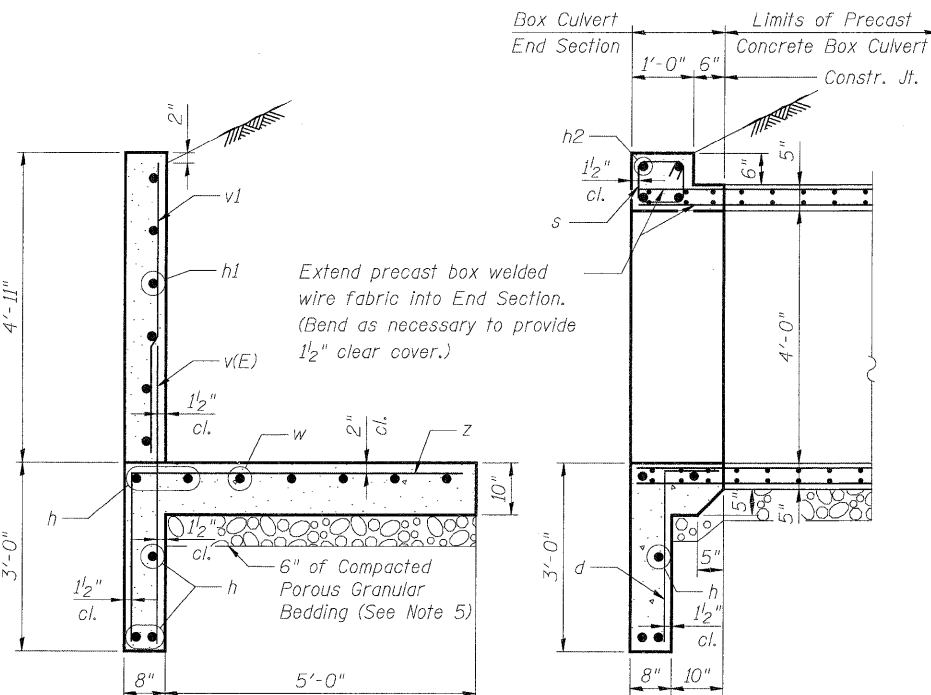
\* For information only. The cost of reinforcement is included with "Box Culvert End Sections".

**NOTES:**

- See Sheet S1 for Culvert Plan and Elevation.
- All Construction Joints shall be bonded.
- Geotechnical Fabric or geomembrane shall be in accordance with Section 540.06 of Standard Specifications. Cost is included with "Precast Concrete Box Culvert 4'x4'".
- The precast manufacturer shall design and detail a connection/construction joint between the precast box culvert and the C.I.P. end section. The minimum area of reinforcement passing through these construction joints shall be 0.20 sq. in./lineal ft. of welded wire fabric. The design shall be detailed in the shop drawings. The cost of connection is included in the cost of end sections.
- The porous granular bedding material shall be gradation CA-7, CA-11 or CA-18 and shall be compacted to the satisfaction of the engineer by mechanical means. Cost for porous granular bedding shall be included with "Precast Concrete Box Culverts 4' x 4'".



**PLAN**



**SECTION A-A**

**SECTION B-B**

6. The limits and quantities of removal and replacement shown are based on the boring data and may be modified by the District Geotechnical and Field Engineers for variable subsurface conditions encountered in the field.

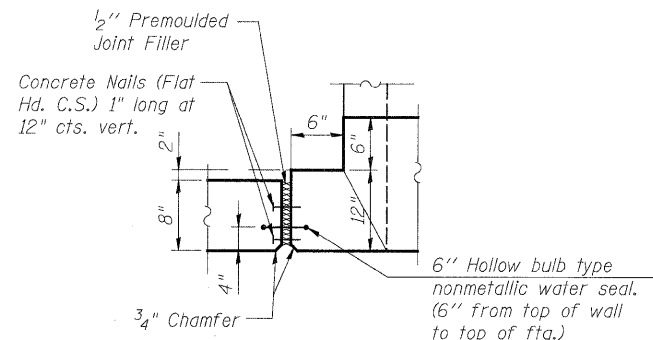
7. The Rockfill shall be capped with 6 in. of CA7 and satisfy the Standard Specifications unless otherwise indicated in the Special Provisions. The cost of the capping material shall be included in the pay item for "Rock Fill"

DESIGNED	- A. Durbak
CHECKED	- R. DiGiulio
DRAWN	- A. Durbak
CHECKED	- R. DiGiulio

**BARS d, d1 & z**

**BAR s**

**CORNER DETAIL**



**CULVERT DETAILS  
ILLINOIS ROUTE 53  
FAU 2578 SECTION 532B-1  
DUPAGE COUNTY STATION 46+81.03**

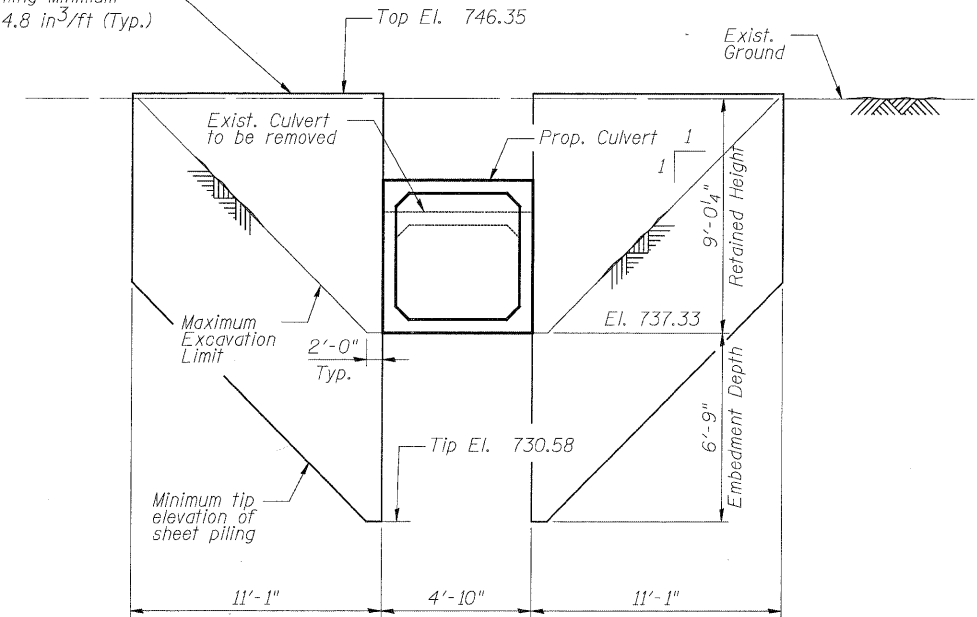
**PATRICK ENGINEERING**  
PATRICK ENGINEERING INC.  
4970 VARSITY DRIVE  
LISLE, IL 60532  
patrickengineering.com

SHEET NO. S2 OF S25	F.A.P. RTE. 2578	SECTION 532B	COUNTY DUPAGE	TOTAL SHEETS 781	SHEET NO. 581
	CONTRACT NO. 60477				
12/3/2010		ILLINOIS FED. AID PROJECT			

BLOOM COMPANIES, LLC.		BORING LOG		CHICAGO, ILLINOIS					
JOB NO: BMS-1272 CLIENT: ILLINOIS DEPARTMENT OF TRANSPORTATION		BORING NO: C1-1		STATION: 46+65					
PROJECT: IL-53 Improvements - Thorndale Avenue to Army Trail Road		STATION: 46+65		OFFSET: 41' RT					
LOCATION: Culvert No. 1		SURF ELEV: 744.4							
BORING RIG & METHOD: Diedrich D-50 w/Hollow Stem Augers									
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/FT	QU	STRAIN %	WATER CONTENT %	
0.0-1.0		742.9	14" Bituminous Concrete						
1.0-2.5			4" Sand A-1-a	16	Auger 12 10-8	8.8	15	18.8	
3.5-5.0			FILL: Gr to Black Silty Clay A-7-6, trace Gravel, roots and wood chips	13	3 2-4	1.2	15	22.0	
6.0-7.5				14	2 4-5	2.1	15	25.6	
8.5-10.0		739.9		15	2 2-3	1.0	15	22.0	
11.0-12.5		731.4	Soft Br Clay A-6, trace Gravel, 1" Sand Seam noted	17	2 4-6	0.4	15	19.3	
13.5-15.0				15	4 7-11	2.1	15	12.3	
16.0-17.5			Very Stiff to Stiff Gr Silty Clay Loam A-6, trace Gravel	5	4 8-5	(2.0)		14.0	
18.5-20.0		724.4		10	3 18-12	1.7	15	13.3	
Boring terminated @ 20'									
REMARKS: Automatic Hammer Used.						( ) Denotes Calibrated Penetrometer Estimate			
WATER DRY FT. ELEV.		DURING DRILLING		CORE SIZE		IN. DATE: Jan 5, 10			
WATER Caved @ 16.5 FT. ELEV.		AT COMPLETION		CASING LENGTH		FT. DRILLER: Shimon			
WATER FT. ELEV.		AFTER HRS.		CASING DIAMETER		IN. INSPECTOR: Kuzel			

BLOOM COMPANIES, LLC.		BORING LOG		CHICAGO, ILLINOIS					
JOB NO: BMS-1272 CLIENT: ILLINOIS DEPARTMENT OF TRANSPORTATION		BORING NO: C1-2		STATION: 46+74					
PROJECT: IL-53 Improvements - Thorndale Avenue to Army Trail Road		STATION: 46+74		OFFSET: 36' LT					
LOCATION: Culvert No. 1		SURF ELEV: 744.8							
BORING RIG & METHOD: Diedrich D-50 w/Hollow Stem Augers									
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/FT	QU	STRAIN %	WATER CONTENT %	
0.0-1.0		744.3	6" Gr Silty Clay Topsoil						
1.0-2.5		741.8	FILL: Br Clay Loam A-6, trace roots	15	Auger 2 4-5	4.1	15	12.5	
3.5-5.0		739.3	FILL: Br to Gr Silty Clay A-6, trace wood chips	13	3 3-3	2.1	15	21.4	
6.0-7.5		736.8	Probable FILL: Br to Gr Clay A-6	14	3 3-4	1.2	15	24.3	
8.5-10.0			Stiff to Very Stiff Br to Gr Clay A-6, trace Gravel	17	2 3-3	1.2	15	17.4	
11.0-12.5		731.8		10	2 4-5	2.5	15	19.3	
13.5-15.0				16	2 2-4	1.7	15	15.5	
16.0-17.5			Stiff Gr Silty Clay Loam A-6, trace Gravel	17	2 3-5	1.4	15	16.9	
18.5-20.0		724.8		17	3 3-5	1.7	15	15.1	
Boring terminated @ 20'									
REMARKS: Automatic Hammer Used.						( ) Denotes Calibrated Penetrometer Estimate			
WATER DRY FT. ELEV.		DURING DRILLING		CORE SIZE		IN. DATE: Jan 5, 10			
WATER Caved @ 14.5 FT. ELEV.		AT COMPLETION		CASING LENGTH		FT. DRILLER: Shimon			
WATER FT. ELEV.		AFTER HRS.		CASING DIAMETER		IN. INSPECTOR: Kuzel			

Temporary Sheet Piling Minimum  
Section Modulus = 4.8 in<sup>3</sup>/ft (Typ.)



**TEMPORARY SHEET PILING ELEV.**

DESIGNED	- A. Durbak
CHECKED	- R. DiGiulio
DRAWN	- A. Durbak
CHECKED	- R. DiGiulio

**SOIL BORINGS  
ILLINOIS ROUTE 53  
FAU 2578 SECTION 532B-1  
DUPAGE COUNTY STATION 46+81.03**

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

SHEET NO. S3 OF S25	F.A.P RTE. 2578	SECTION 532B	COUNTY DUPAGE	TOTAL SHEETS 781	SHEET NO. 582
	CONTRACT NO. 60477				
12/3/2010		ILLINOIS FED. AID PROJECT			

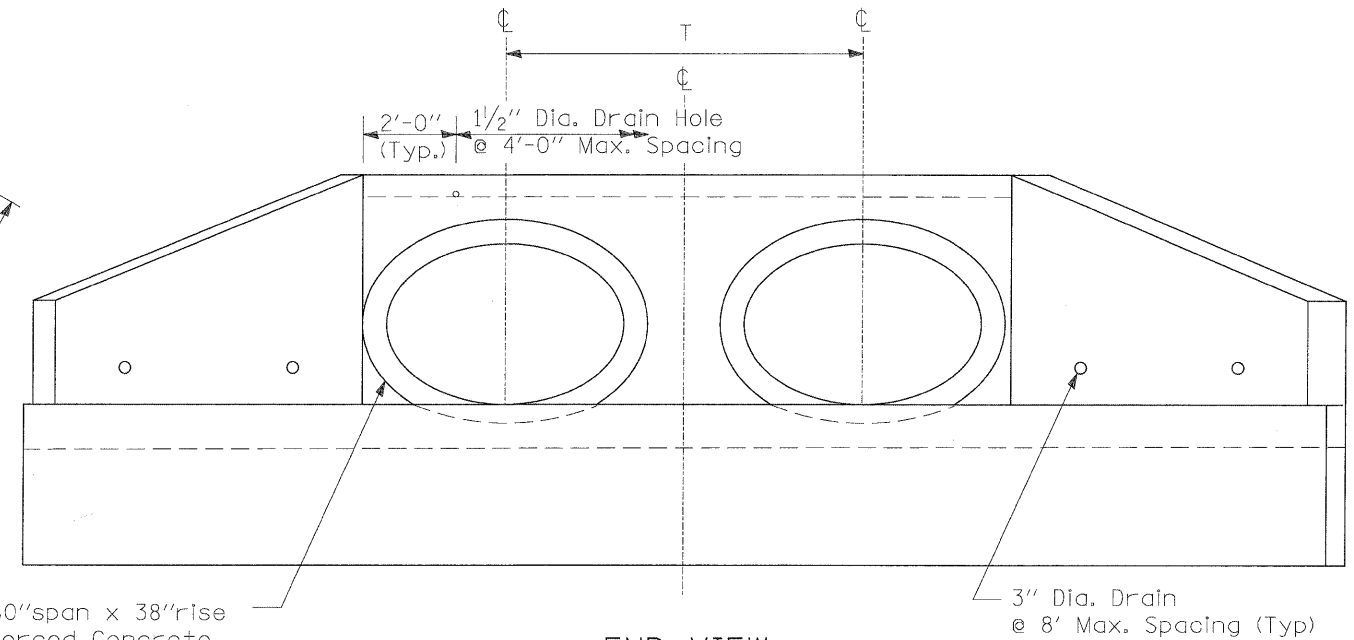
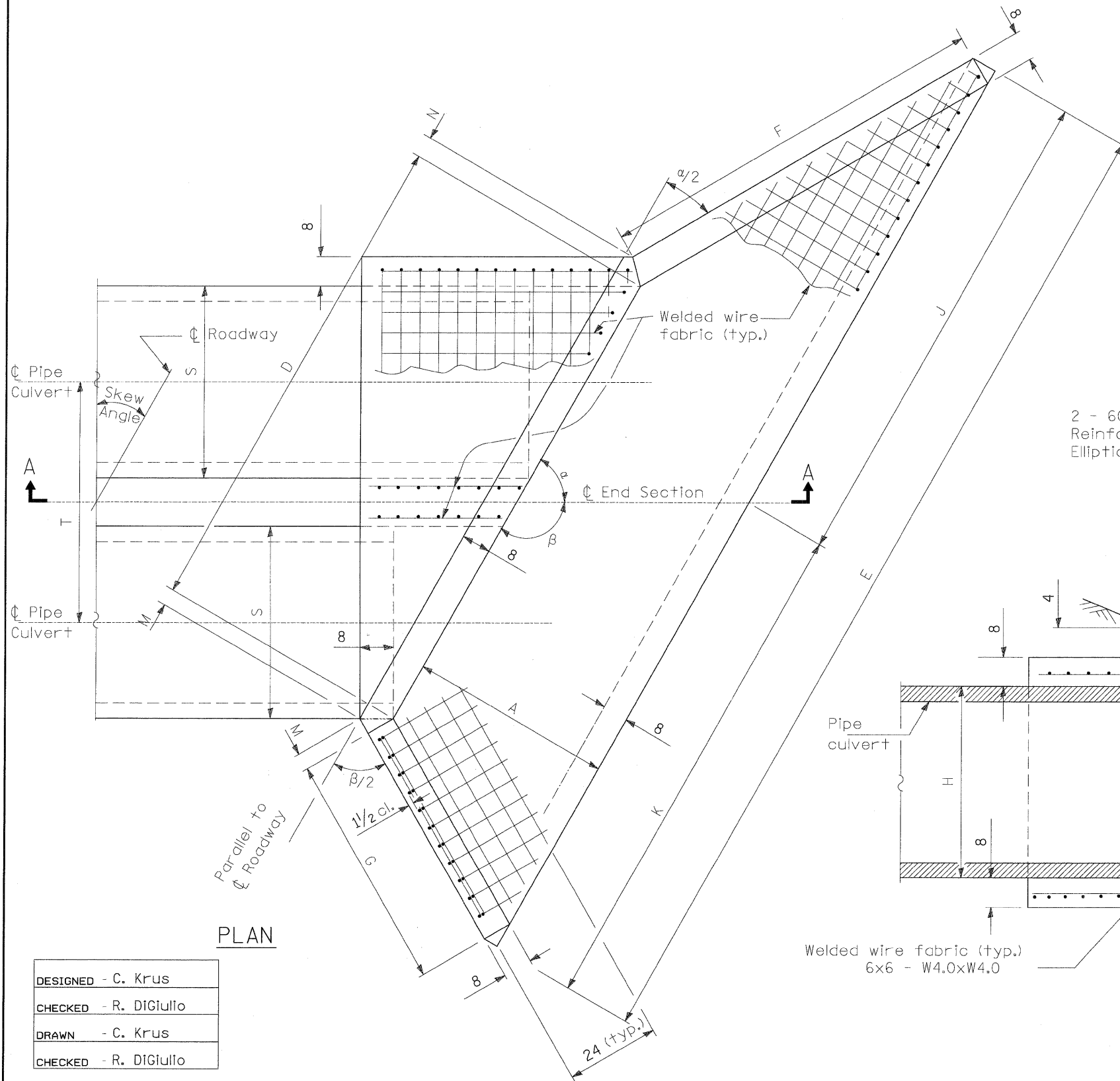
DIMENSION TABLE

Skew Angle	Nominal Pipe Size	Dimensions for Concrete															Concrete 2 End Secs. cu. yd.	Wire Fabric 2 End Secs. sq. yd.
		A	B	C	D	E	F	G	H	J	K	M	N	S	T	$\alpha$		
27.6°	60x36 Elliptical	5'-3 3/4"	24	4'-7 1/4"	15'-1 1/4"	27'-11 1/4"	10'-0"	6'-2 1/2"	4'-1"	13'-10 1/2"	14'-0 3/4"	4 1/2"	6"	5'-11"	7'-6"	62.4°	22.4	120

TOTAL BILL OF MATERIAL

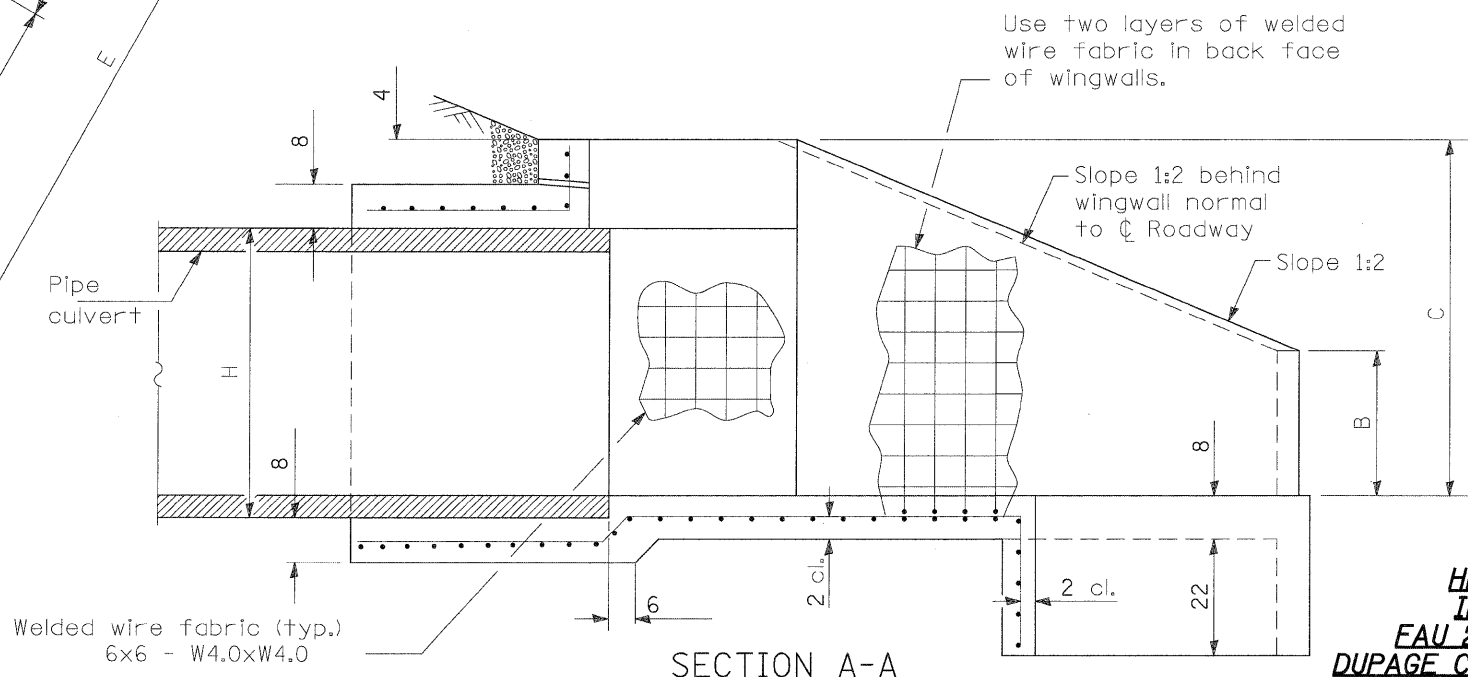
ITEM	UNIT	TOTAL
* Cast-In-Place Reinforced Concrete End Sections	CU YD	22.4

\* See Special Provisions



END VIEW

NOTE(S)  
See Drainage Plans for location.



SECTION A-A

HEADWALL DETAILS  
ILLINOIS ROUTE 53  
FAU 2578 SECTION 532B-1  
DUPAGE COUNTY STATION 133+62.93

DESIGNED - C. Krus  
CHECKED - R. DiGiulio  
DRAWN - C. Krus  
CHECKED - R. DiGiulio

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

SHEET NO.  
S4 OF S25

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2578	532B	DUPAGE	781	583
CONTRACT NO. 60477				
12/3/2010	ILLINOIS FED. AID PROJECT			

Bench Mark:

**Existing Structure:**

The existing structure is a 6'x6' concrete box culvert. The existing structure is to be removed and replaced. Traffic is to be maintained on the existing roadway during construction by staging the construction.

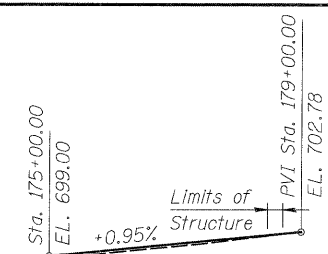
No salvage.



\* Dimension measured perpendicular to roadway  
 \*\* Temporary Concrete Barrier. See Roadway Plans for location.

**INDEX OF SHEETS**

- S5 - General Plan & Elevation
- S6 - Culvert Details I
- S7 - Culvert Details II
- S8 - Soil Borings



**PROFILE GRADE - IL RT. 53**

**GENERAL NOTES**

1. The Precast Concrete Box Culvert shall conform to the requirements of Article 540.06 of the Standard Specifications and the applicable requirements of AASHTO M-259.
2. Reinforcement Bars shall conform to the requirements of AASHTO M-31, M-322, Grade 60. The cost of reinforcement is included with "Box Culvert End Sections".
3. Work this sheet with S6 & S7 for details of Cast-In-Place Sections.
4. All exposed concrete edges shall be chamfered 3/4" unless otherwise noted.

**DESIGN SPECIFICATIONS**

2002 AASHTO Standard Specifications for Highway Bridges

**LOADING HS20-44**

Allowance for Future Wearing Surface=50 lb/ft<sup>2</sup>

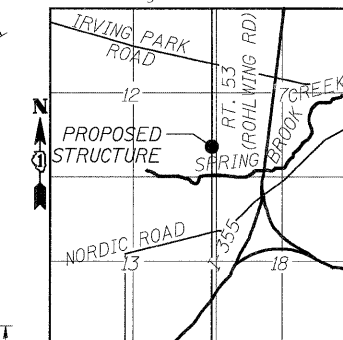
**DESIGN STRESSES**

- Precast Units**  
 f'c=5,000 psi  
 fy=65,000 psi (welded wire fabric)
- Field Units**  
 f'c=3,500 psi  
 fy=60,000 psi (Reinf.)  
 fy=65,000 psi (welded wire fabric)

**SEISMIC DATA**

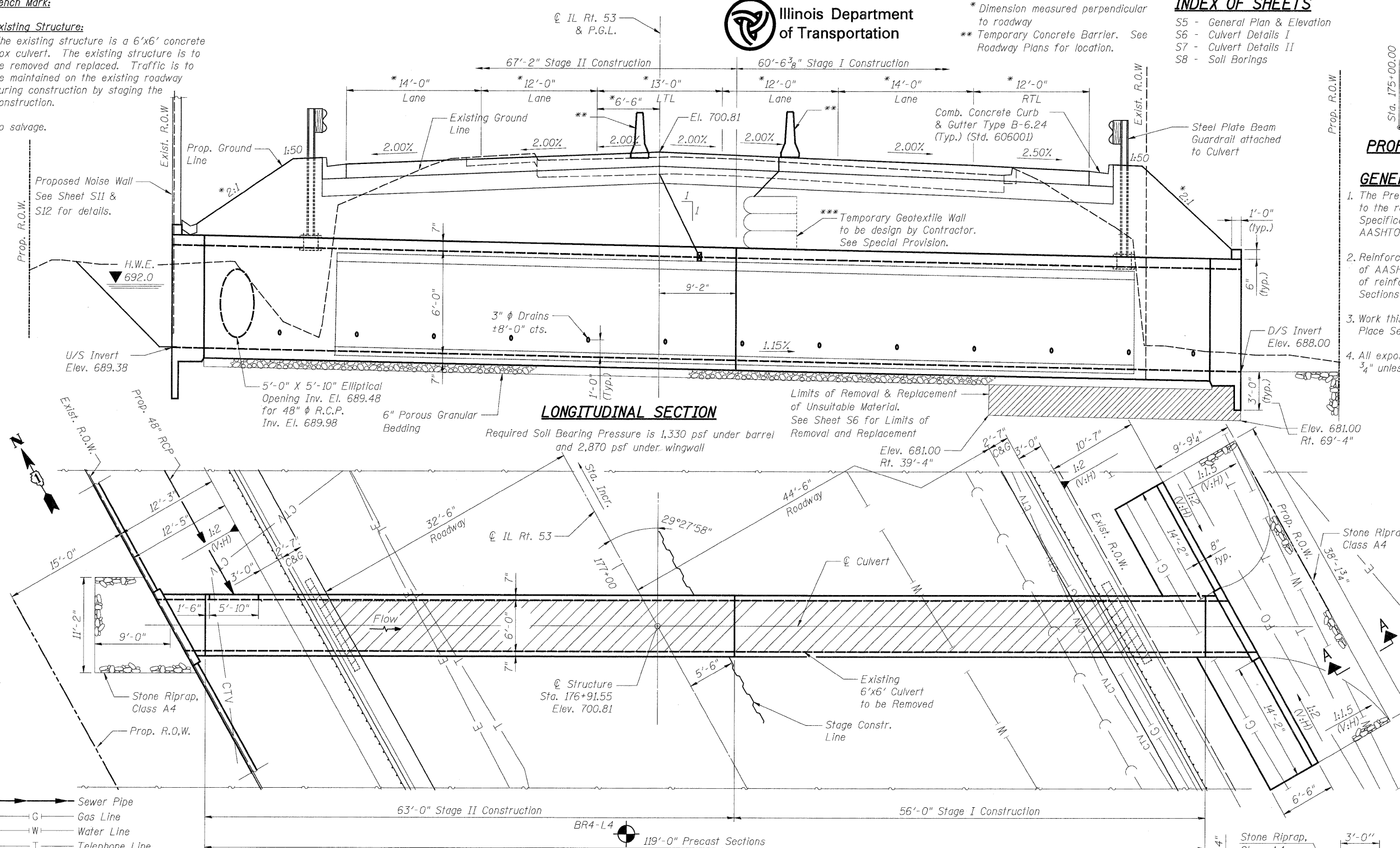
Seismic Performance Category (SPC)=A  
 Bedrock Acceleration Coefficient (A)=0.035g  
 Site Coefficient (S)=1.0

Range 10E - 3rd. PM



**LOCATION SKETCH**

**6' X 6' BOX CULVERT GP&E**  
**ILLINOIS ROUTE 53**  
**FAU 2578 SECTION 532B-1**  
**DUPAGE COUNTY STATION 176+91.55**



**LONGITUDINAL SECTION**

Limits of Removal & Replacement of Unsuitable Material. See Sheet S6 for Limits of Removal and Replacement

Required Soil Bearing Pressure is 1,330 psf under barrel and 2,870 psf under wingwall

- Sewer Pipe
- Gas Line
- Water Line
- Telephone Line
- CTV — Cable TV Line
- FO — Fibre Optic Line
- Sewer Line

**LEGEND**

- DESIGNED - A. Durbak
- CHECKED - R. DiGiulio
- DRAWN - A. Durbak
- CHECKED - R. DiGiulio

**WATERWAY INFORMATION TABLE**

Proposed Low Grade Elev. = 696.2 @ Sta. 172+00  
 Existing Low Grade Elev. = 696.1 @ Sta. 172+00

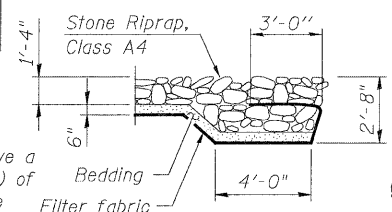
Flood	Freq. Yr.	Q (C.F.S.)	Opening (Sq. Ft.)		Nat. H.W.E.	Head (Ft.)		Headwater Elev.		
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.	
Design	10	65	16	16	692.0	0.0	0.0	692.0	692.0	
Base	50	94	19	18	692.4	0.2	0.3	692.6	692.7	
Overtop Exist	100	102	19	19	692.5	0.3	0.4	692.8	692.9	
Overtop Prop	Ex. & Pr. 500+ years									
Max. Calc.	500	134	21	20	692.8	0.7	0.8	693.5	693.6	

**TOTAL BILL OF MATERIAL**

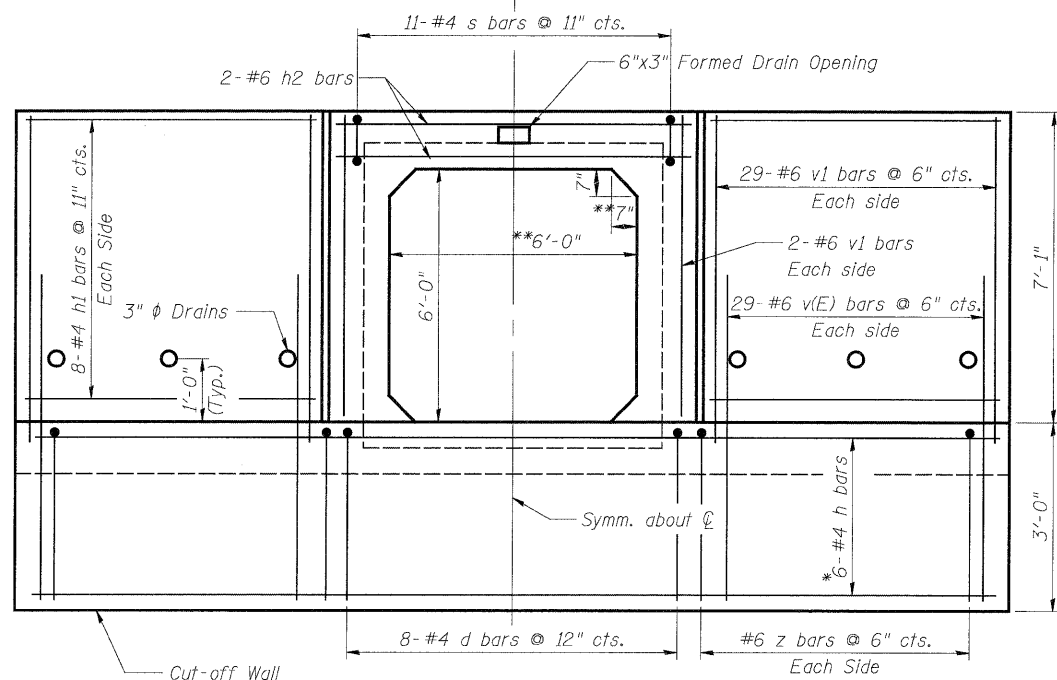
ITEM	UNIT	TOTAL
Removal And Disposal Of Unsuitable Material	Cu Yd	165
Stone Riprap, Class A4	Sq Yd	58
Filter Fabric	Sq Yd	58
Temporary Sheet Piling	Sq Ft	584
Box Culvert End Sections	Cu Yd	22.7
Precast Concrete Box Culvert 6' X 6'	Foot	119.0
Box Culvert Removal	Foot	96.0
Rock Fill	Cu Yd	165
Geotextile Retaining Wall	Sq Ft	39

\*\*\* The geotextile soil reinforcement shall have a minimum allowable tensile strength (T min.) of 36 lb./in. as determined by the procedure described in the Special Provision. The computations supporting the determination of T min. shall be submitted to the engineer for approval.

**SECTION A-A**

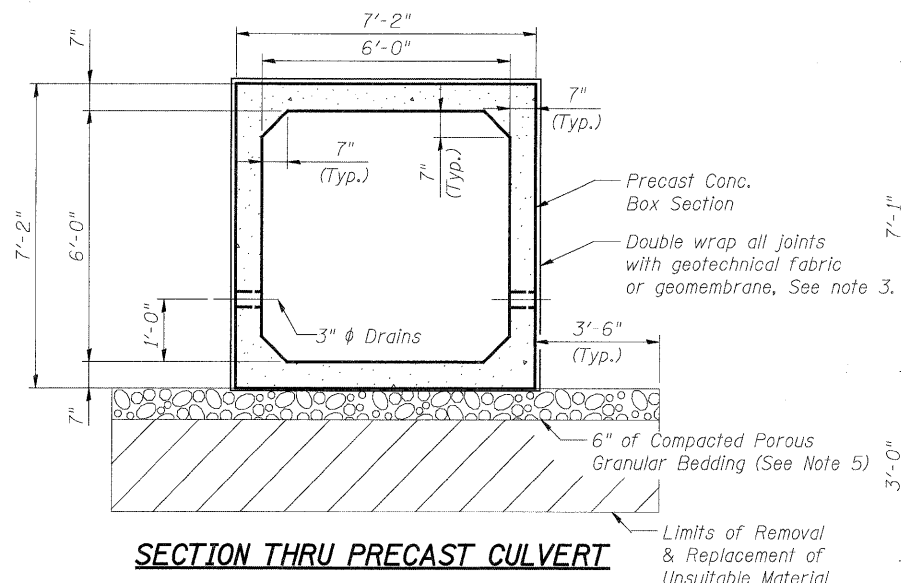


SHEET NO.	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S5 OF S25	2578	532B	DUPAGE	781	584
12/3/2010			ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60477					

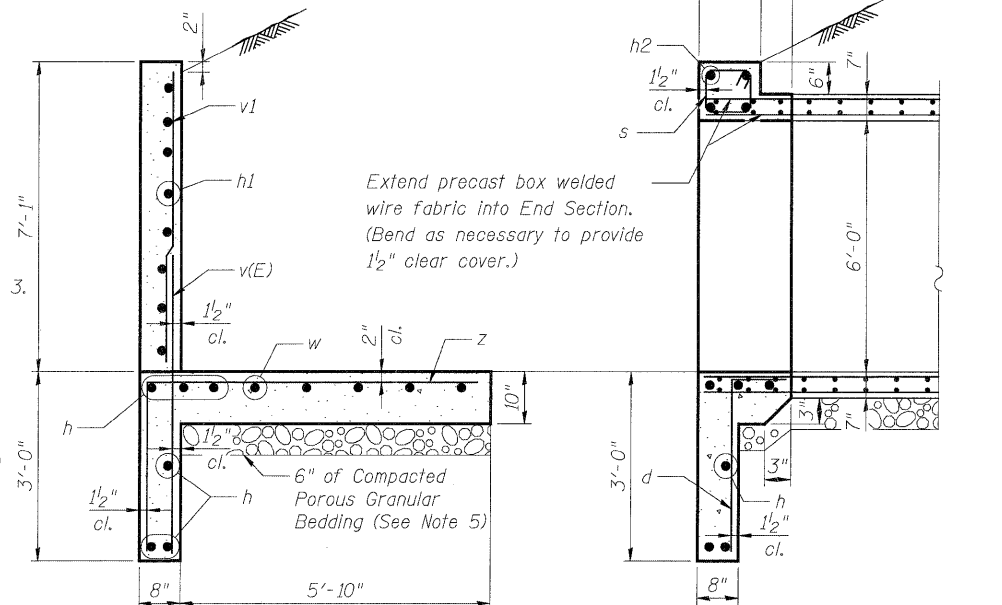


**END ELEVATION**  
(East End Section)

\* See section A-A for placement  
\*\* Measured normal to centerline of culvert

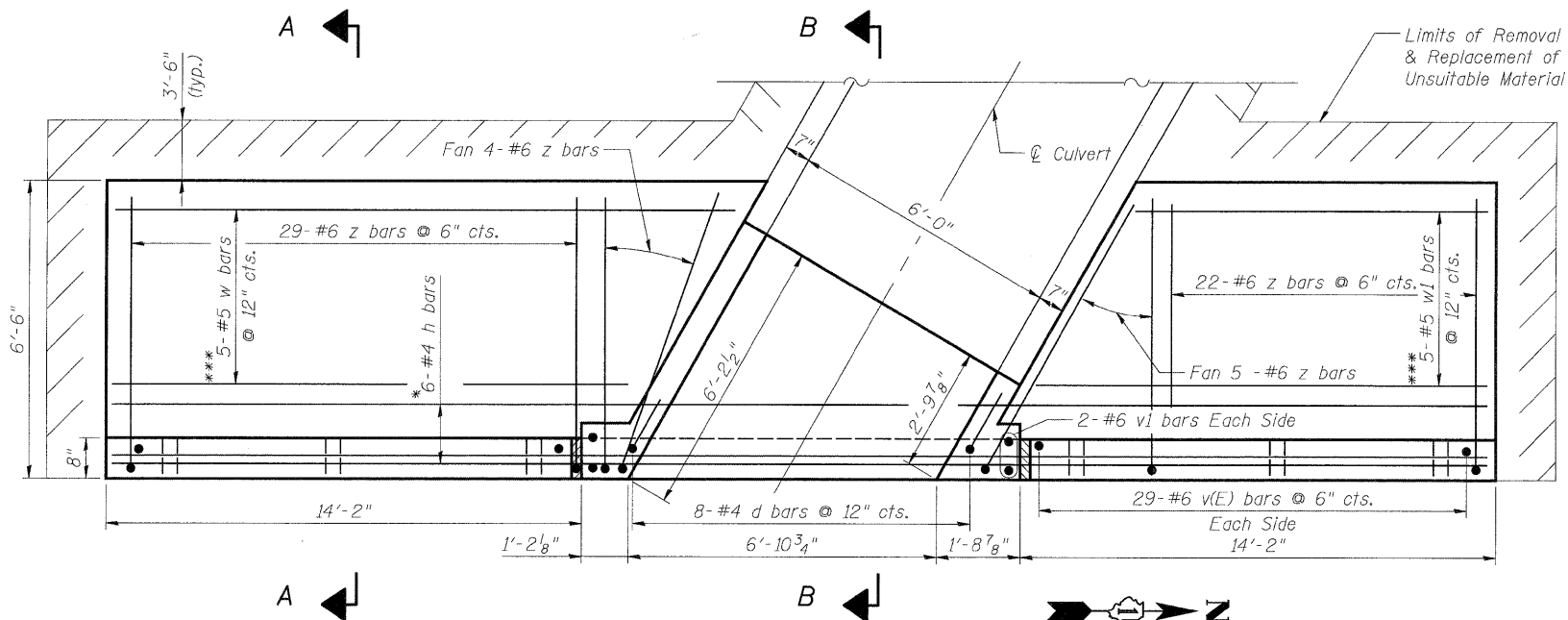


**SECTION THRU PRECAST CULVERT**

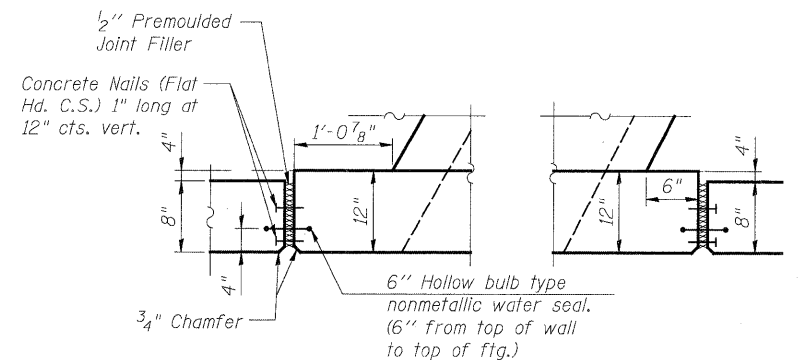


**SECTION A-A**

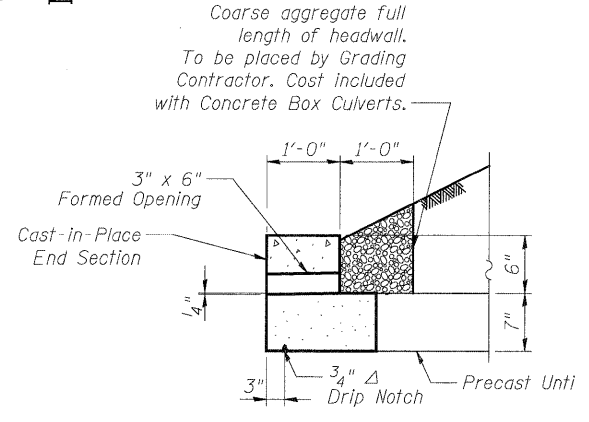
**SECTION B-B**



**PLAN**  
(East End Section) \*\*\* Field cut to fit



**CORNER DETAIL**  
(East End Section)



**SECTION THRU HEADWALL**  
(East End Section)

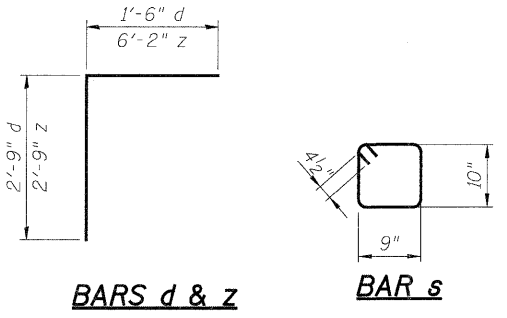
**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
* d	17	#4	4' - 3"	—
* h	6	#4	37' - 9"	—
* h1	16	#4	13' - 11"	—
* h2	4	#6	9' - 5"	—
* h3	9	#6	9' - 5"	—
* s	22	#4	3' - 11"	□
* v(E)	58	#6	6' - 1"	—
* v1	66	#6	6' - 10"	—
* w	5	#5	18' - 0"	—
* w1	5	#5	13' - 11"	—
* z	60	#6	8' - 11"	—
Box Culvert End Sections			Each	2

\* For information only. The cost of reinforcement is included with "Box Culvert End Sections".

**NOTES:**

- See Sheet S5 for Culvert Plan and Elevation.
- All Construction Joints shall be bonded.
- Geotechnical Fabric or geomembrane shall be in accordance with Section 540.06 of Standard Specifications. Cost is included with "Precast Concrete Box Culvert 6'x6'".
- The precast manufacturer shall design and detail a connection/construction joint between the precast box culvert and the C.I.P. end section. The minimum area of reinforcement passing through these construction joints shall be 0.20 sq. in./lined ft. of welded wire fabric. The design shall be detailed in the shop drawings. The cost of connection is included in the cost of end sections.
- The porous granular bedding material shall be gradation CA-7, CA-11 or CA-18 and shall be compacted to the satisfaction of the engineer by mechanical means. Cost for porous granular bedding shall be included with "Precast Concrete Box Culverts 6' x 6'".
- The limits and quantities of removal and replacement shown are based on the boring data and may be modified by the District Geotechnical and Field Engineers for variable subsurface conditions encountered in the field.
- The Rockfill shall be capped with 6 in. of CA7 and satisfy the Standard Specifications unless otherwise indicated in the Special Provisions. The cost of the capping material shall be included in the pay item for "Rock Fill".

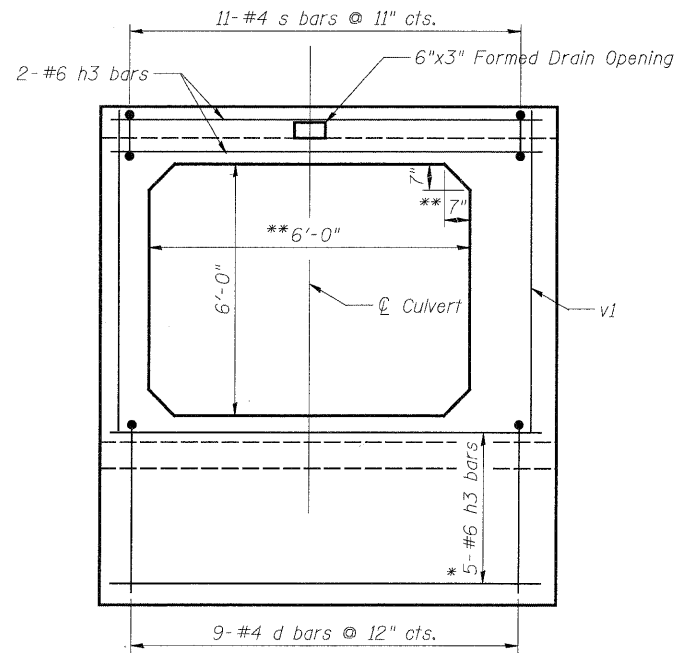


DESIGNED	- A. Durbak
CHECKED	- R. DIGiulio
DRAWN	- A. Durbak
CHECKED	- R. DIGiulio

SHEET NO. S6 OF S25	F.A.P RTE. 2578	SECTION 532B	COUNTY DUPAGE	TOTAL SHEETS 781	SHEET NO. 585
	CONTRACT NO. 60477				
12/3/2010		ILLINOIS FED. AID PROJECT			

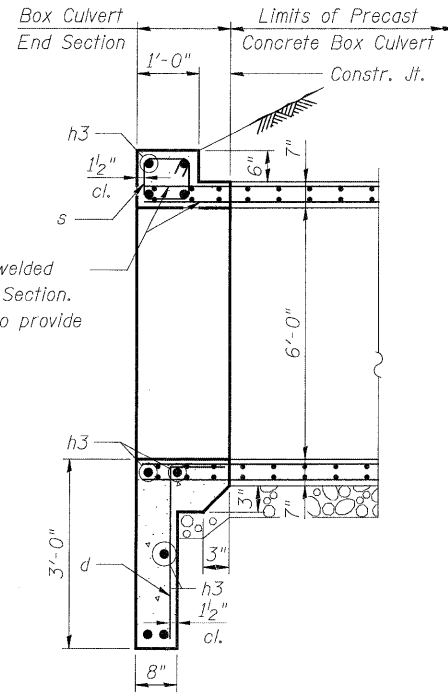
**PATRICK ENGINEERING INC.**  
4970 VARSITY DRIVE  
LISLE, IL 60532  
patrickengineering.com

**CULVERT DETAILS I**  
**ILLINOIS ROUTE 53**  
**FAU 2578 SECTION 532B-1**  
**DUPAGE COUNTY STATION 177+91.55**



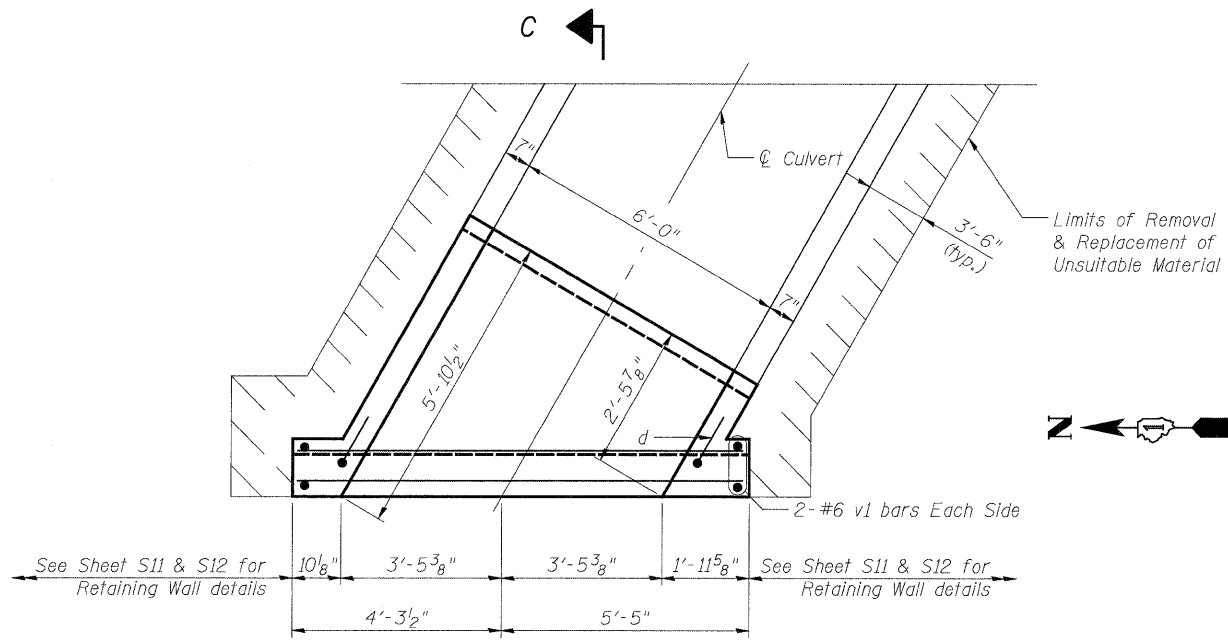
**END ELEVATION**  
(West End Section)

\* See section C-C for placement  
\*\* Measured normal to centerline of culvert

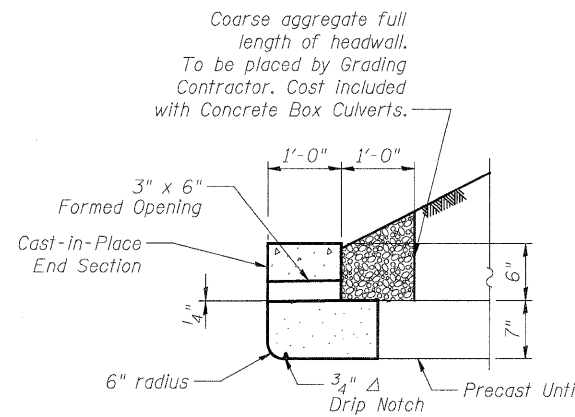


**SECTION C-C**

Extend precast box welded wire fabric into End Section. (Bend as necessary to provide 1/2" clear cover.)



**PLAN**  
(West End Section)



**SECTION THRU HEADWALL**  
(West End Section)

DESIGNED	- A. Durbak
CHECKED	- R. DiGiulio
DRAWN	- A. Durbak
CHECKED	- R. DiGiulio

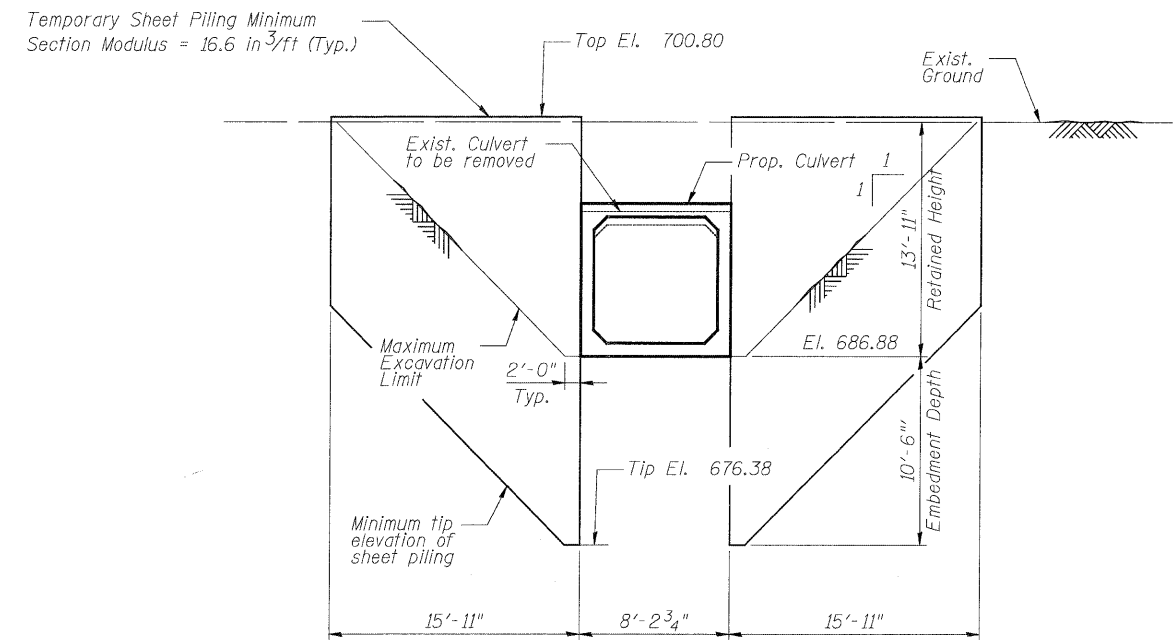
**PATRICK ENGINEERING**  
PATRICK ENGINEERING INC.  
4970 VARSITY DRIVE  
LISLE, IL 60532  
patrickengineering.com

SHEET NO. S7 OF S25	F.A.P RTE. 2578	SECTION 532B	COUNTY DUPAGE	TOTAL SHEETS 781	SHEET NO. 586
	CONTRACT NO. 60477				
12/3/2010		ILLINOIS FED. AID PROJECT			

**CULVERT DETAILS II**  
**ILLINOIS ROUTE 53**  
**FAU 2578 SECTION 532B-1**  
**DUPAGE COUNTY STATION 176+91.55**

BLOOM COMPANIES, LLC.		BORING LOG		CHICAGO, ILLINOIS					
JOB NO:	BM3-1272	CLIENT:	ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING NO:	BR4-L4				
PROJECT:	IL-53 Improvements - Thorndale Avenue to Army Trail Road	STATION:	176+71	STATION:	176+71				
LOCATION:	Barrier Wall No. 4	OFFSET:	15' LT	OFFSET:	15' LT				
BORING RIG & METHOD:	Diedrich D-50 w/Hollow Stem Augers		SURF ELEV:		700.2				
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/FT	%	STRAIN	WATER CONTENT	
0.0-1.0	699.4	8" Bituminous Concrete							
1.0-2.5		1" Sand A-1-a		10	3-4	(3.5)		14.3	
3.5-5.0		FILL: Br to Gr Clay A-6, trace Gravel and Organics		15	3-4	1.7	15	18.5	
6.0-7.5				10	2-3	0.5	16	19.1	
8.5-10.0				12	3		16	25.3	
11.0-12.5	687.2			6	2-2	(0.8)		24.9	
13.5-15.0	684.7	Very Stiff Br Clay A-6, trace Gravel		17	4-5	2.8	15	23.6	
16.0-17.5		Soft to Medium Stiff Gr Sandy Clay A-4, trace Gravel		12	2-4	(0.3)		19.2	
18.5-20.0				15	5-7	(0.8)		20.0	
21.0-22.5	679.2			18	6-10			20.2	
23.5-25.0		Medium Dense Fine Sand A-3, trace Gravel		16	5-8			19.7	
26.0-27.5		Gr Clay Seam @ 26.5' (Hard Gr Clay A-6)		16	8-11	5.8	15	17.6	
28.5-30.0	670.2			16	6-8			19.9	
31.0-32.5		Very Stiff to Stiff Gr Clay A-6, trace Gravel		14	5-9	2.3	15	19.8	
33.5-35.0	666.2			18	6-10	1.4	15	13.4	
Boring terminated @ 35'									
REMARKS: Automatic Hammer Used.						() Denotes Calibrated Penetrometer Estimate			
WATER	17 FT. ELEV.	683.2	DURING DRILLING	✓	CORE SIZE	IN.	DATE:	Mar 29, 10	
WATER	12.5 FT. ELEV.	667.7	AT COMPLETION	✓	CASING LENGTH	FT.	DRILLER:	Shilmon	
WATER	FT. ELEV.		AFTER HRS.	✓	CASING DIAMETER	IN.	INSPECTOR:	Alsalami	

BLOOM COMPANIES, LLC.		BORING LOG		CHICAGO, ILLINOIS					
JOB NO:	BM3-1272	CLIENT:	ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING NO:	BR4-3				
PROJECT:	IL-53 Improvements - Thorndale Avenue to Army Trail Road	STATION:	176+28	STATION:	176+28				
LOCATION:	Barrier Wall No. 4	OFFSET:	30' RT	OFFSET:	30' RT				
BORING RIG & METHOD:	Diedrich D-50 w/Hollow Stem Augers		SURF ELEV:		699.2				
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/FT	%	STRAIN	WATER CONTENT	
0.0-1.0	698.2	Sand A-1-a (Gravel Shoulder)							
1.0-2.5	696.2	FILL: Br Sand A-1-a, trace Clay Lumps		12	20-12			5.2	
3.5-5.0				14	3-5	1.7	15	22.3	
6.0-7.5		Probable FILL: Br to Gr Clay A-6, trace Gravel and Organics		10	3-4	1.2	15	28.3	
8.5-10.0				17	2		17	19.0	
11.0-12.5	688.2			9	4-6	1.2	15	36.4	
13.5-15.0		Stiff to Medium Stiff Br to Gr Clay A-7-8, trace Gravel		17	3-4	1.7	15	23.6	
16.0-17.5	681.2			16	1-2	(0.5)		21.4	
18.5-20.0	678.2	Stiff Br to Gr Clay Loam A-6		17	4-5	1.7	15	13.1	
Boring terminated @ 20'									
REMARKS: Automatic Hammer Used.						() Denotes Calibrated Penetrometer Estimate			
WATER	15 FT. ELEV.	684.2	DURING DRILLING	✓	CORE SIZE	IN.	DATE:	Jan 5, 10	
WATER	Caved @ 14.5 FT. ELEV.	684.7	AT COMPLETION	✓	CASING LENGTH	FT.	DRILLER:	Shilmon	
WATER	FT. ELEV.		AFTER HRS.	✓	CASING DIAMETER	IN.	INSPECTOR:	Kuzel	



**TEMPORARY SHEET PILING ELEV.**

DESIGNED	- A. Durbak
CHECKED	- R. DiGiulio
DRAWN	- A. Durbak
CHECKED	- R. DiGiulio

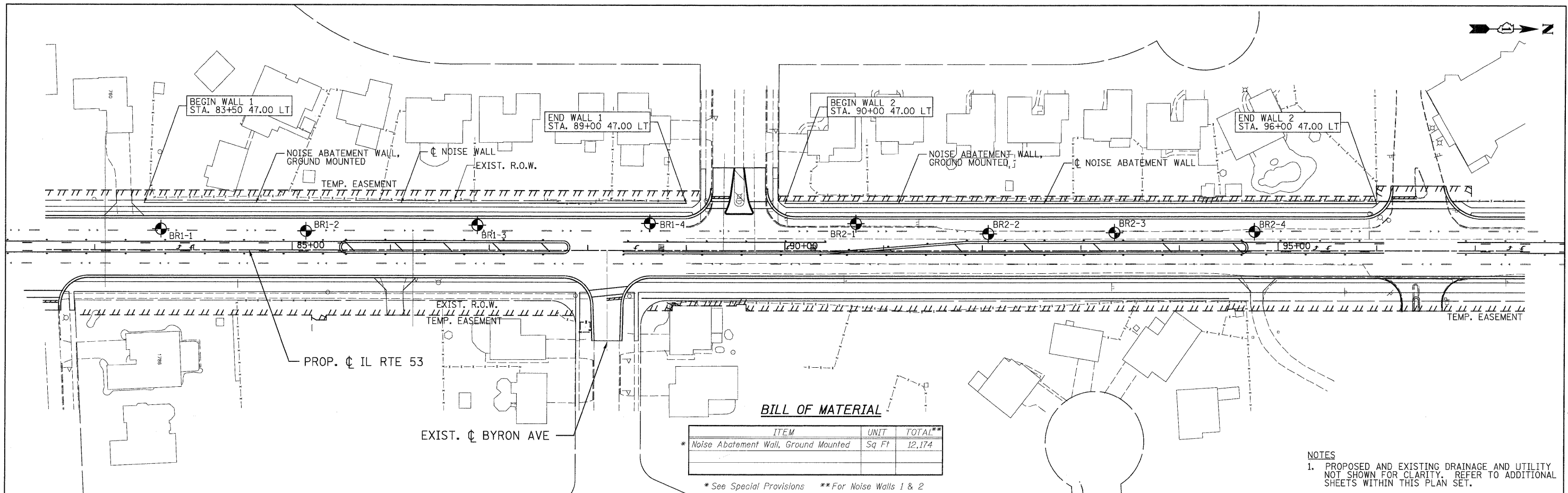
**SOIL BORINGS**  
**ILLINOIS ROUTE 53**  
**FAU 2578 SECTION 532B-1**  
**DUPAGE COUNTY STATION 176+91.55**

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

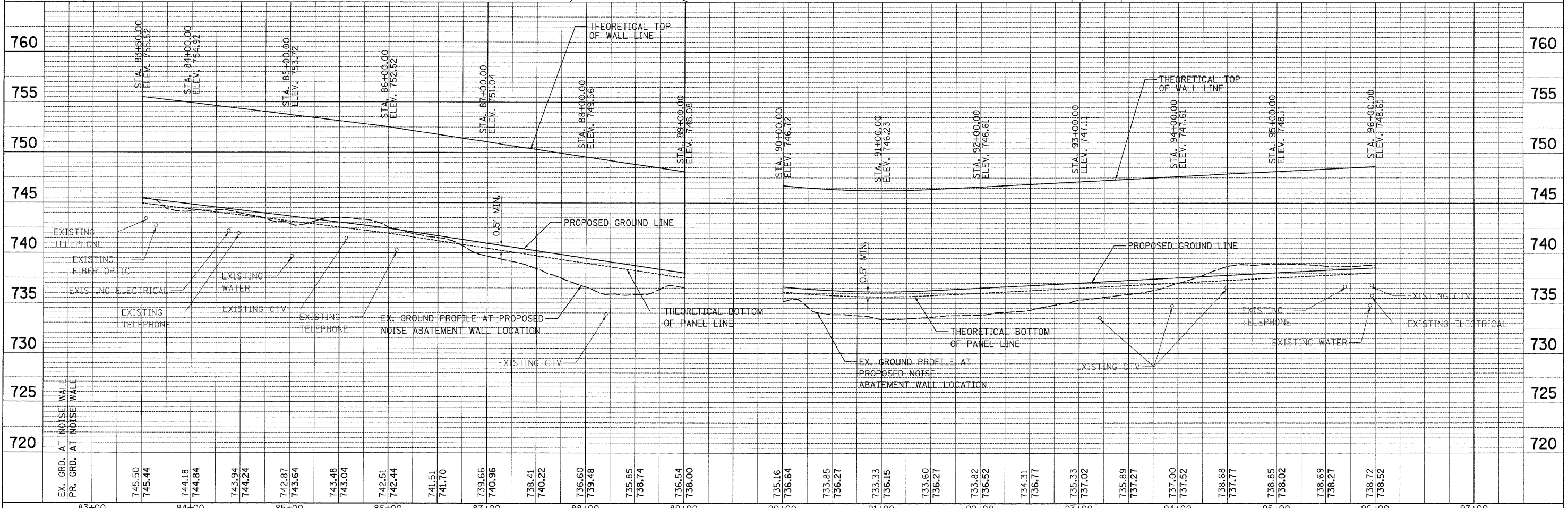
SHEET NO. S8 OF S25	F.A.P. RTE. 2578	SECTION 532B	COUNTY DUPAGE	TOTAL SHEETS 781	SHEET NO. 587
	CONTRACT NO. 60477				
12/3/2010		ILLINOIS FED. AID PROJECT			

PLAN	DATE
NO. _____	BY _____
REVISED	DATE
ALIGNED	BY _____
RT. OF WAY CHECKED	DATE
NO. _____	BY _____
NO. _____	BY _____
NO. _____	BY _____

PROFILE	DATE
NO. _____	BY _____
REVISED	DATE
GRADES CHECKED	BY _____
B.M. NOTED	DATE
STRUCTURE NOTATIONS COR'D	BY _____



**NOTES**  
 1. PROPOSED AND EXISTING DRAINAGE AND UTILITY NOT SHOWN FOR CLARITY. REFER TO ADDITIONAL SHEETS WITHIN THIS PLAN SET.

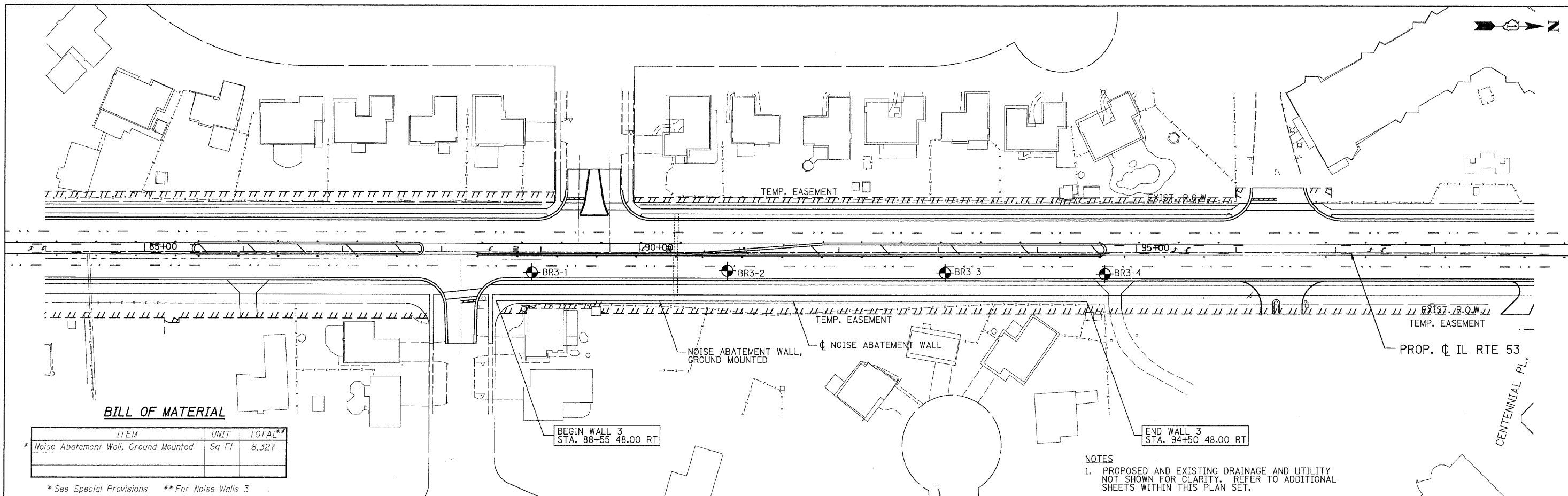


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	SCALE: 1"=50' SHEET NO. 59 OF 525 STA. 83+43 TO STA. 89+10				CONTRACT NO.			



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

PROFILE	SURVEYED	DATE
	NOTED	
	CHECKED	
	BY	
	NO. OF WAY CHECKED	
	NO.	
	FILE NAME	

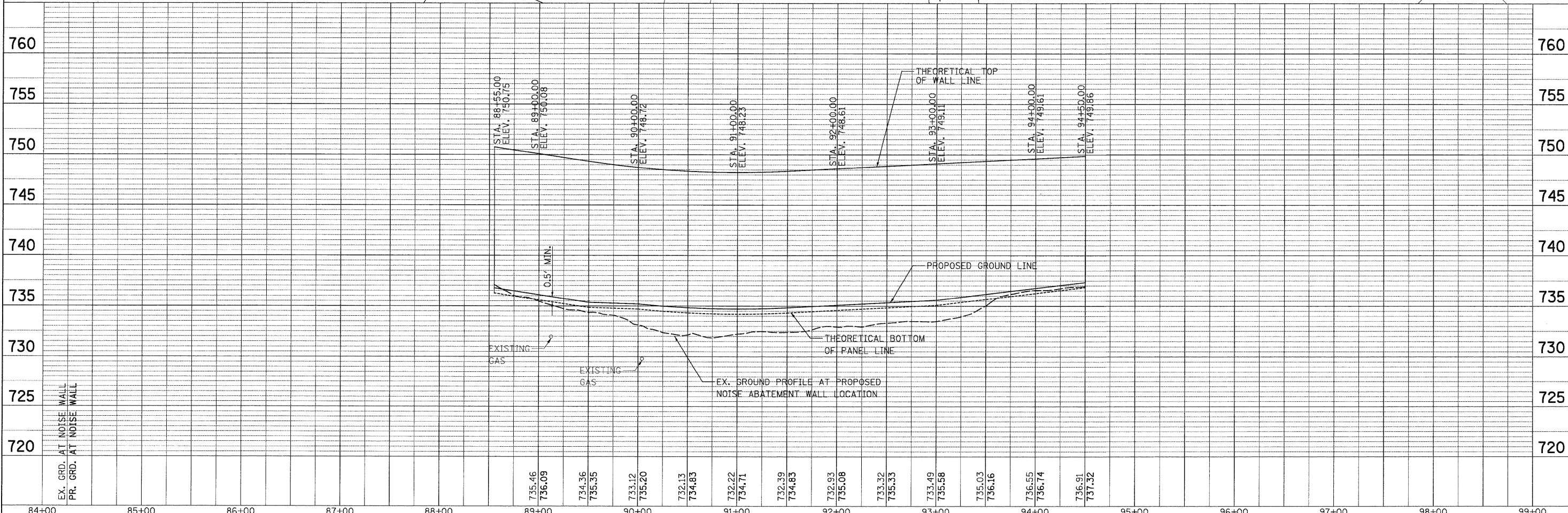


**BILL OF MATERIAL**

ITEM	UNIT	TOTAL**
* Noise Abatement Wall, Ground Mounted	Sq Ft	8,327

\* See Special Provisions \*\* For Noise Walls 3

NOTES  
1. PROPOSED AND EXISTING DRAINAGE AND UTILITY NOT SHOWN FOR CLARITY. REFER TO ADDITIONAL SHEETS WITHIN THIS PLAN SET.

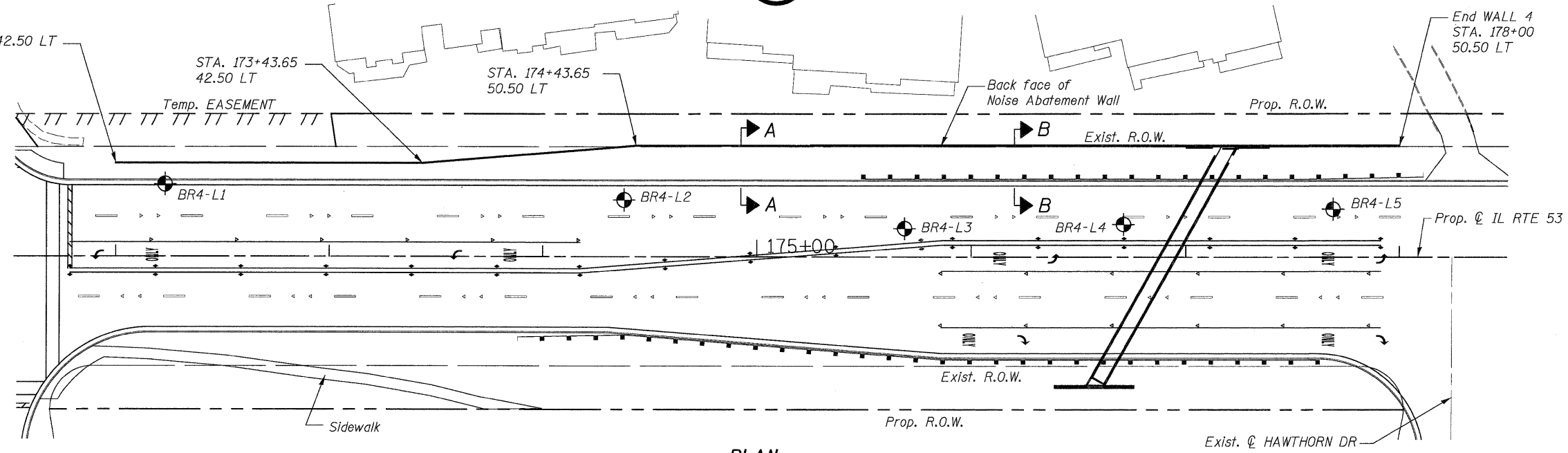


<p>PATRICK ENGINEERING INC. 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com</p>	USER NAME = thepperr(Rdwy.Lisle) PLOT CONFIG = PDFI-82_TopoGrey_Large.plt PLOT SCALE = 1/50 PLOT DATE = 12/3/2010 1:21:36 PM	DESIGNED - RLD DRAWN - JTV CHECKED - APD DATE - 12/3/2010	REVISED - REVISED - REVISED - REVISED -	<p>Illinois Department of Transportation</p>	<p>ILLINOIS ROUTE 53 NOISE WALL 3 STA. 88+55 TO STA. 94+50</p>	F.A.U. RTE. 2578	SECTION 532B	COUNTY DUPAGE	TOTAL SHEETS 781	SHEET NO. 589
	SCALE: 1"=50' SHEET NO. S10 OF S25 STA. 88+60 TO STA. 94+74	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	CONTRACT NO.							

q:\dot\9356.n\6153\drawings\cadd sheets\019139797-sht-str-589.dgn



Begin WALL 4  
STA. 172+00 42.50 LT



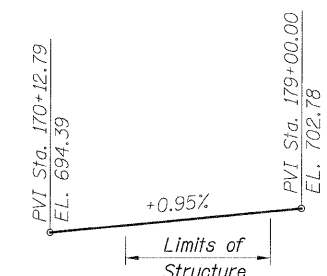
**PLAN**

**DESIGN SPECIFICATIONS**

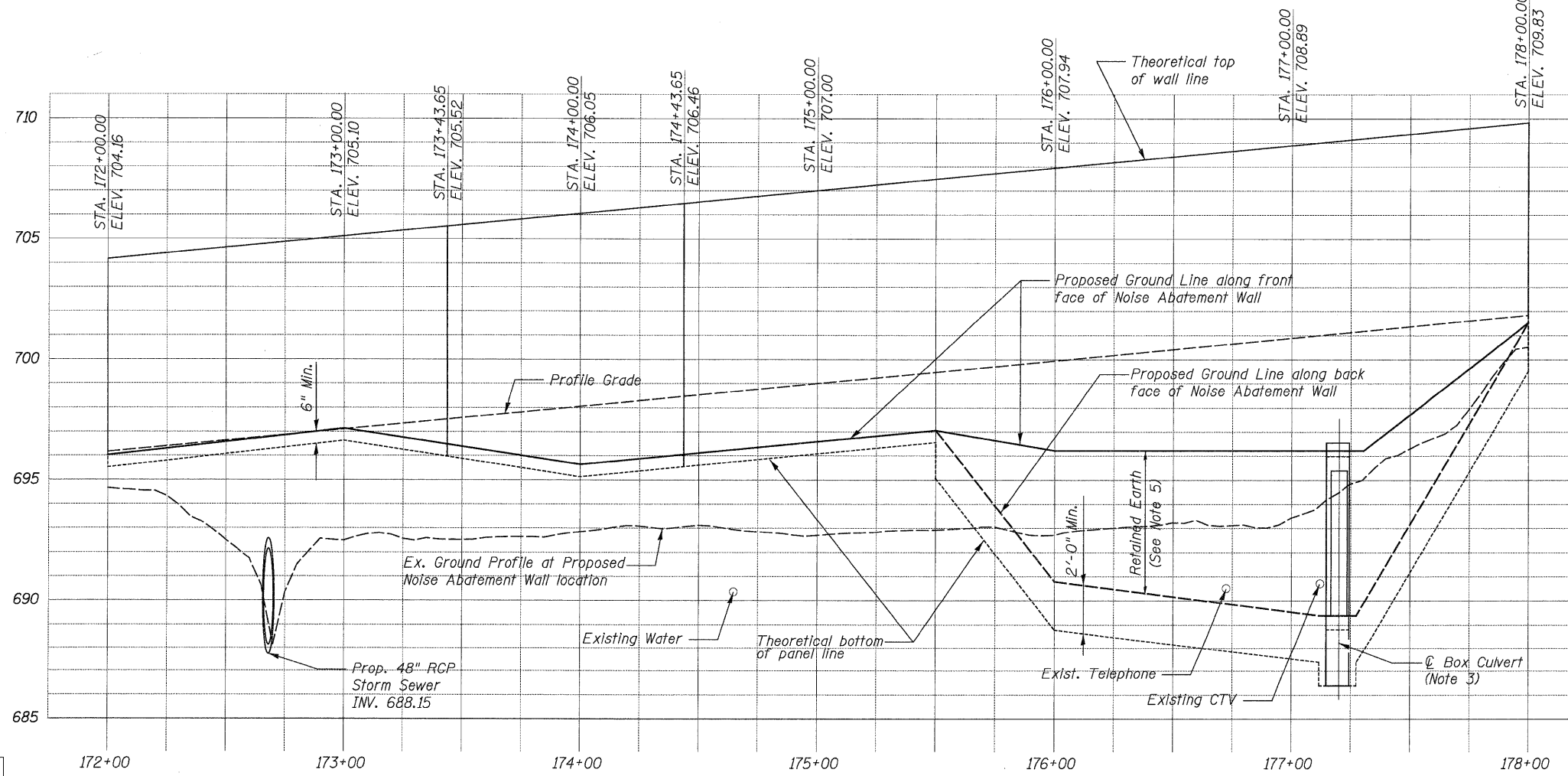
AASHTO 2002 Standard  
Specifications for Highway Bridges  
AASHTO 1989 Guide Specifications  
for Structural Design of Sound  
Barriers and 1992 & 2002 Interims

**LOADING**

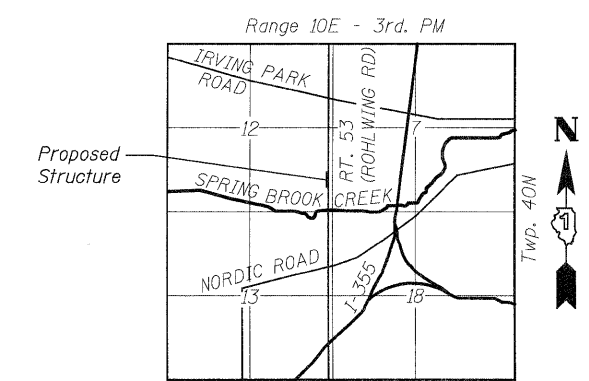
Wind Load on Noise Wall = 25 psf  
Active Earth Pressure = 40 pcf (equivalent fluid)  
LL Surcharge Pressure = 2 ft of earth pressure



**PROFILE GRADE**



**ELEVATION**



**LOCATION SKETCH**

- NOTES:**
- Proposed and existing drainage and utility not shown for clarity. Refer to additional sheets within this plan set.
  - For Sections A-A and B-B, see Sheet S12 of S25.
  - See Sheet S12 of S25 for Box Culvert End Section Detail.
  - For Table Of Wall Elevations, see Sheet S12 of S25.
  - From Sta. 175+50 to Sta. 178+00, the wall system shall be designed to withstand active earth pressure and live load surcharge.

**GENERAL PLAN AND ELEVATION  
NOISE WALL 4  
ILLINOIS ROUTE 53  
FROM STA. 172+00 TO STA. 178+00**

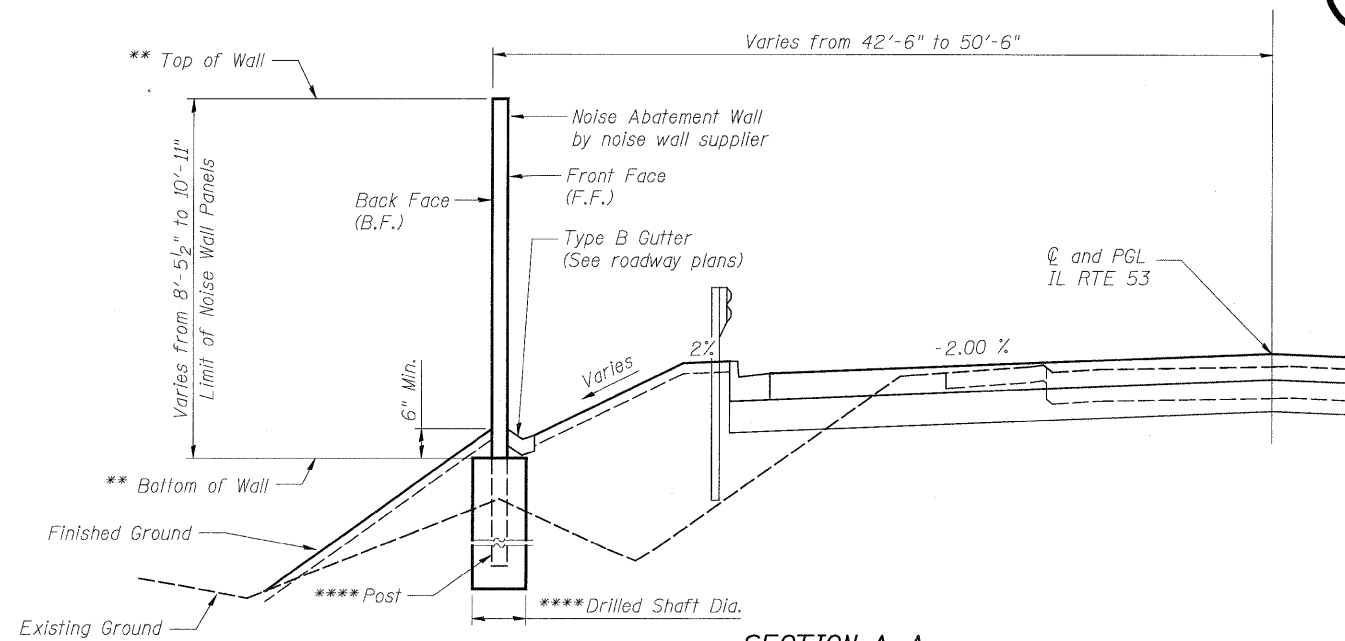
DESIGNED - RLD / AY
CHECKED - AD / RLD
DRAWN - JV / AY
CHECKED - RLD

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LISLE, IL 60532  
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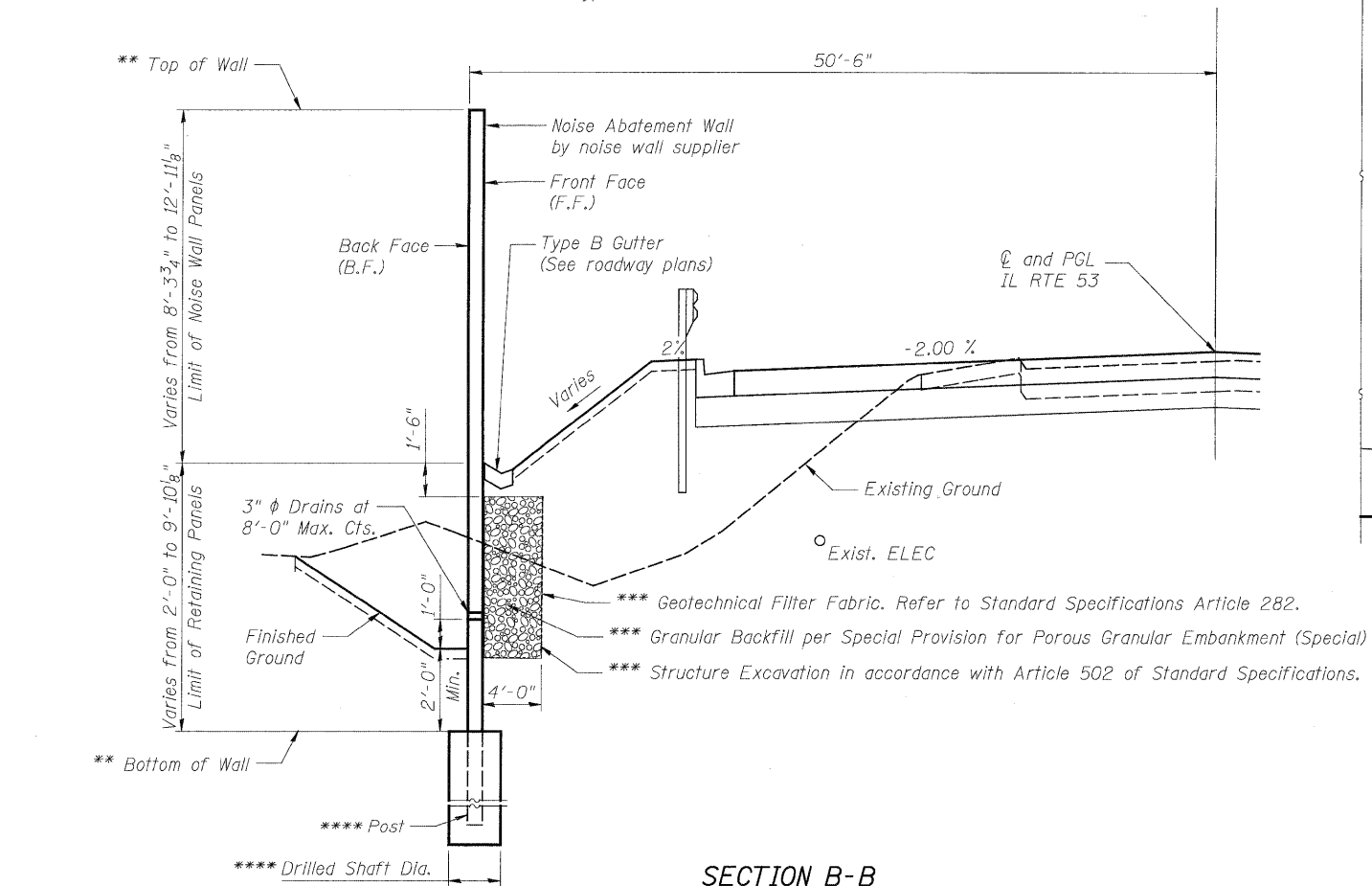
SHEET NO. S11 OF S25	F.A.P RTE. 2578	SECTION 532B	COUNTY DUPAGE	TOTAL SHEETS 781	SHEET NO. 590
	CONTRACT NO. 60477				
12/3/2010		ILLINOIS FED. AID PROJECT			

NOTES:

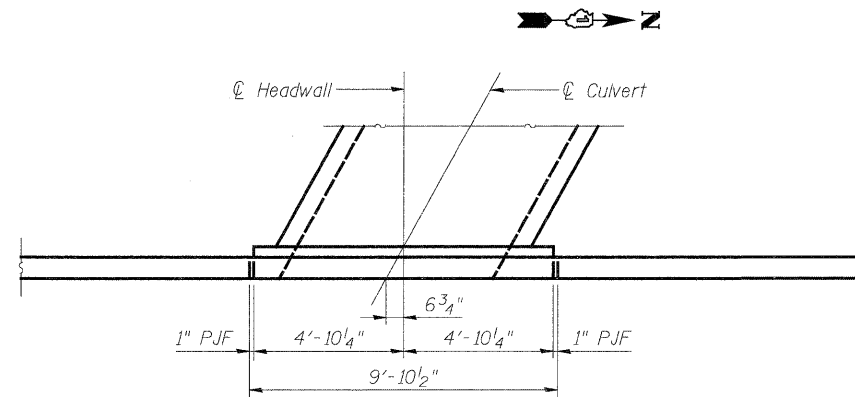
- For additional details of Box Culvert, see Sheet S7 of S25.
- Work wall elevations with Cross Section Sheets within this plan set.



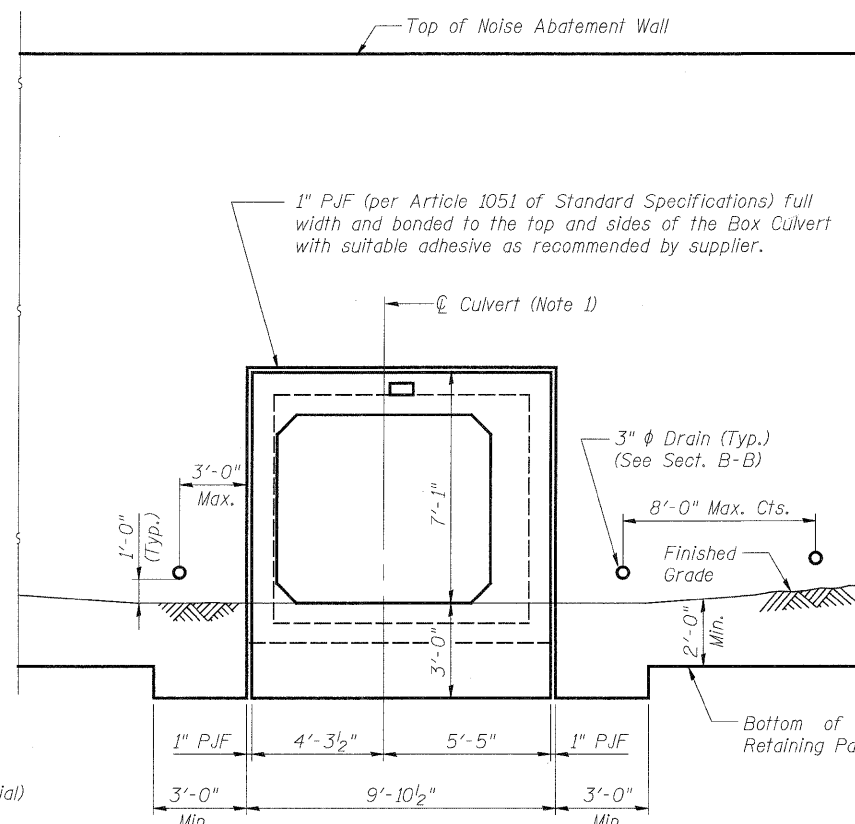
**SECTION A-A**  
(Typical Wall Section from Sta. 172+00 to Sta. 175+50)



**SECTION B-B**  
(Typical Wall Section from Sta. 175+50 to Sta. 178+00)



**TOP PLAN**



**END ELEVATION**

**BOX CULVERT END SECTION DETAIL**

**TABLE OF WALL ELEVATIONS**

Station	Existing Grade	Finished Grade (F.F.)	Finished Grade (B.F.)	Theoretical Top of Wall	Theoretical Bottom of Wall
172+00.00	694.65	696.02	696.02	704.16	695.52
172+25.00	694.32	696.30	696.30	704.40	695.80
172+50.00	692.50	696.58	696.58	704.63	696.08
172+70.00	688.15	696.80	696.80	704.82	696.30
173+00.00	692.48	697.14	697.14	705.10	696.64
173+25.00	692.50	696.77	696.77	705.34	696.27
173+43.65	692.51	696.49	696.49	705.52	695.99
173+75.00	692.58	696.02	696.02	705.81	695.52
174+00.00	692.84	695.64	695.64	706.05	695.14
174+25.00	693.10	695.88	695.88	706.29	695.38
174+43.65	693.12	696.05	696.05	706.46	695.55
174+75.00	692.87	696.35	696.35	706.76	695.85
175+00.00	692.69	696.59	696.59	707.00	696.09
175+25.00	692.81	696.83	696.83	707.23	696.33
175+50.00	692.92	697.06	697.06	707.47	696.56
175+75.00	693.04	696.64	693.92	707.71	691.92
176+00.00	692.71	696.22	690.78	707.94	688.78
176+25.00	692.97	696.22	690.46	708.18	688.46
176+50.00	693.23	696.22	690.14	708.42	688.14
176+75.00	693.18	696.22	689.81	708.65	687.81
177+00.00	693.43	696.22	689.49	708.89	687.49
177+25.00	694.85	696.22	689.38	709.12	686.38
177+50.00	696.29	697.87	693.16	709.36	691.16
177+75.00	697.96	699.69	697.34	709.60	695.34
178+00.00	700.51	701.52	701.52	709.83	699.52

**BILL OF MATERIAL**

ITEM	UNIT	TOTAL
* Noise Abatement Wall, Ground Mounted	Sq Ft	7,952

\* See Special Provisions

DESIGNED -	A.Y.
CHECKED -	R.L.D.
DRAWN -	A.Y.
CHECKED -	R.L.D.

- \*\* Wall limits for noise wall panels and retaining wall panels including top of wall and bottom of wall shall be determined by the Contractor. Theoretical elevations for top of wall and bottom of wall are given in Table of Wall Elevations.
- \*\*\* Cost of Structure Excavation, Geotechnical Filter Fabric, and Granular Backfill will be included with the item "Noise Abatement Wall, Ground Mounted".
- \*\*\*\* Type, size, and spacing of post and drilled shaft including shaft diameter, embedment depth, top of shaft elevation, and reinforcement details shall be determined by the Contractor during construction.

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SHEET NO. S12 OF S25	F.A.P RTE. 2578	SECTION 532B	COUNTY DUPAGE	TOTAL SHEETS 781	SHEET NO. 591
CONTRACT NO. 60477					
12/3/2010 ILLINOIS FED. AID PROJECT					

**WALL DETAILS  
NOISE WALL 4  
ILLINOIS ROUTE 53  
FROM STA. 172+00 TO STA. 178+00**

**BLOOM COMPANIES, LLC. CHICAGO, ILLINOIS**

**BORING LOG**

JOB NO: **BM3-1272** CLIENT: **ILLINOIS DEPARTMENT OF TRANSPORTATION** BORING NO: **BR1-1**  
 PROJECT: **IL-53 Improvements - Thorndale Avenue to Army Trail Road** STATION: **83+67**  
 LOCATION: **Barrier Wall No. 1** OFFSET: **21' LT**  
 BORING RIG & METHOD: **Diedrich D-50 w/Hollow Stem Augers** SURF ELEV: **743.7**

DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q <sub>u</sub>	STRAIN %	WATER CONTENT %
	0.0-1.0	742.7	FILL: Gr Sand and Gravel w/ Silt A-1-a		Auger 5			10.5
	1.0-2.5			14	6-7	2.5	15	15.0
	3.5-5.0		Very Stiff Br to Green Silty Clay A-4, trace Gravel	18	3 4-6	3.3	15	19.2
	6.0-7.5	735.7		17	5 7-11	2.5	15	19.4
10	8.5-10.0	732.7	Very Stiff Gr Clay A-6, trace Gravel	17	4 5-6	2.1	15	16.8
	11.0-12.5	730.7	Medium Dense Gr Sand A-3, little Gravel	14	3 6-6			9.4
	13.5-15.0		Loose to Medium Dense Gr Sandy Loam A-1-b, trace Gravel	13	4 4-5			12.9
	16.0-17.5	725.7		6	6 9-9			23.9
20	18.5-20.0		Stiff to Very Stiff Gr Clay A-6, trace Gravel	12	4 4-5	1.9	15	16.4
	21.0-22.5	720.7		13	3 5-6	2.1	15	19.9
	23.5-25.0	718.7	Very Stiff Gr Silty Clay Loam A-6, trace Gravel	17	4 5-8	2.1	15	14.3

Boring terminated at 25'

REMARKS Automatic Hammer Used.

( ) Denotes Calibrated Penetrometer Estimate

WATER 13 FT. ELEV. 730.7 DURING DRILLING  CORE SIZE IN. DATE: Jan 13, 10  
 WATER Caved@13 FT. ELEV. 730.7 AT COMPLETION  CASING LENGTH FT. DRILLER: Shlimon  
 WATER FT. ELEV. AFTER HRS.  CASING DIAMETER IN. INSPECTOR: Kuzel

**BLOOM COMPANIES, LLC. CHICAGO, ILLINOIS**

**BORING LOG**

JOB NO: **BM3-1272** CLIENT: **ILLINOIS DEPARTMENT OF TRANSPORTATION** BORING NO: **BR1-2**  
 PROJECT: **IL-53 Improvements - Thorndale Avenue to Army Trail Road** STATION: **85+14**  
 LOCATION: **Barrier Wall No. 1** OFFSET: **19' LT**  
 BORING RIG & METHOD: **Diedrich D-50 w/Hollow Stem Augers** SURF ELEV: **742.3**

DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q <sub>u</sub>	STRAIN %	WATER CONTENT %
	0.0-1.0	741.3	FILL: Gr Sand and Gravel w/ Silt, A-1-a		Auger 8			6.9
	1.0-2.5	739.3	Hard Br Silty Clay Loam A-4, trace Gravel 3" Sand Seam noted @ 2.2'	15	8-11	4.1	15	12.0
	3.5-5.0		Very Stiff Br Clay A-6, trace Gravel	17	4 7-9	2.9	15	18.3
	6.0-7.5	734.8		16	4 7-10	2.5	15	16.3
10	8.5-10.0			17	4 5-7	2.1	15	16.5
	11.0-12.5			16	4 6-9	2.1	15	16.4
	13.5-15.0		Very Stiff to Stiff Br to Gr Clay A-6, trace Gravel	17	3 5-8	2.3	15	16.8
	16.0-17.5			14	4 4-7	2.6	15	17.0
20	18.5-20.0	722.3		17	3 5-8	1.7	15	18.8

Boring terminated @ 20'

REMARKS Automatic Hammer Used.

( ) Denotes Calibrated Penetrometer Estimate

WATER 14.5 FT. ELEV. 727.8 DURING DRILLING  CORE SIZE IN. DATE: Jan 11, 10  
 WATER Caved@14 FT. ELEV. 728.3 AT COMPLETION  CASING LENGTH FT. DRILLER: Shlimon  
 WATER FT. ELEV. AFTER HRS.  CASING DIAMETER IN. INSPECTOR: Kuzel

DESIGNED - N/A  
 CHECKED - N/A  
 DRAWN - A. Durbak  
 CHECKED - R. DiGiulio

**NOISE WALL - SOIL BORINGS 1  
 ILLINOIS ROUTE 53  
 FAU 2578 SECTION 532B-1  
 DUPAGE COUNTY**

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

SHEET NO. S13 OF S25	F.A.P RTE. 2578	SECTION 532B	COUNTY DUPAGE	TOTAL SHEETS 781	SHEET NO. 592
	CONTRACT NO. 60477				
12/3/2010		ILLINOIS FED. AID PROJECT			

**BLOOM COMPANIES, LLC. CHICAGO, ILLINOIS**

**BORING LOG**

JOB NO: **BM3-1272** CLIENT: **ILLINOIS DEPARTMENT OF TRANSPORTATION** BORING NO: **BR1-3**  
 PROJECT: **IL-53 Improvements - Thorndale Avenue to Army Trail Road** STATION: **86+88**  
 LOCATION: **Barrier Wall No. 1** OFFSET: **25' LT**  
 BORING RIG & METHOD: **Diedrich D-50 w/Hollow Stem Augers** SURF ELEV: **740.4**

DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q <sub>u</sub>	STRAIN %	WATER CONTENT %
	0.0-1.0		FILL: Gr Sand and Gravel w/ Silt, A-1-a		Auger 4			10.2
	1.0-2.5	737.9		8	3-9			7.8
	3.5-5.0			17	3	1.2	15	19.4
	6.0-7.5		Stiff to Very Stiff Br Clay A-6, trace Gravel	17	3	2.5	15	17.2
10	8.5-10.0	729.9		18	4	2.5	15	17.7
	11.0-12.5			17	4	2.1	15	16.8
	13.5-15.0		Very Stiff to Stiff Gr Clay A-6, trace Gravel	18	3	1.4	15	20.2
	16.0-17.5			17	3	2.1	15	16.4
20	18.5-20.0	720.4		13	4	2.3	15	17.5

Boring terminated @ 20'

REMARKS: Automatic Hammer Used.

( ) Denotes Calibrated Penetrometer Estimate

WATER	DRY	FT. ELEV.	DURING DRILLING	CORE SIZE	IN.	DATE:	<b>Jan 11, 10</b>
WATER	Caved@13	FT. ELEV.	AT COMPLETION	CASING LENGTH	FT.	DRILLER:	<b>Shlimon</b>
WATER		FT. ELEV.	AFTER HRS.	CASING DIAMETER	IN.	INSPECTOR:	<b>Kuzel</b>

**BLOOM COMPANIES, LLC. CHICAGO, ILLINOIS**

**BORING LOG**

JOB NO: **BM3-1272** CLIENT: **ILLINOIS DEPARTMENT OF TRANSPORTATION** BORING NO: **BR1-4**  
 PROJECT: **IL-53 Improvements - Thorndale Avenue to Army Trail Road** STATION: **88+63**  
 LOCATION: **Barrier Wall No. 1** OFFSET: **27' LT**  
 BORING RIG & METHOD: **Diedrich D-50 w/Hollow Stem Augers** SURF ELEV: **736.9**

DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q <sub>u</sub>	STRAIN %	WATER CONTENT %
	0.0-1.0	736.2	FILL: Gr Sand and Gravel w/ Silt, A-1-a		Auger 2			14.2
	1.0-2.5			10	3-4	(0.5)		19.4
	3.5-5.0		FILL: Br Silty Clay A-7-6, trace Gravel	14	4	0.8	15	21.8
	6.0-7.5	731.4		16	2	1.2	15	18.1
	8.5-10.0	727.4	Stiff Br Clay A-6, trace Gravel	17	3	2.5	15	17.6
10	11.0-12.5			8	3	2.5	15	17.6
	13.5-15.0		Very Stiff to Stiff Gr Silty Clay A-6, trace Gravel	16	3	1.9	15	16.5
	16.0-17.5			14	3	1.9	15	17.2
20	18.5-20.0	716.9		13	3	1.2	15	19.4

Boring terminated @ 20'

REMARKS: Automatic Hammer Used.

( ) Denotes Calibrated Penetrometer Estimate

WATER	DRY	FT. ELEV.	DURING DRILLING	CORE SIZE	IN.	DATE:	<b>Jan 11, 10</b>
WATER	Caved@14	FT. ELEV.	AT COMPLETION	CASING LENGTH	FT.	DRILLER:	<b>Shlimon</b>
WATER		FT. ELEV.	AFTER HRS.	CASING DIAMETER	IN.	INSPECTOR:	<b>Kuzel</b>

DESIGNED	- N/A
CHECKED	- N/A
DRAWN	- A. Durbak
CHECKED	- R. DiGiulio

**NOISE WALL - SOIL BORINGS 2**  
**ILLINOIS ROUTE 53**  
**FAU 2578 SECTION 532B-1**  
**DUPAGE COUNTY**

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

SHEET NO. S14 OF S25	F.A.P RTE. 2578	SECTION 532B	COUNTY DUPAGE	TOTAL SHEETS 781	SHEET NO. 593
	CONTRACT NO. 60477				
12/3/2010		ILLINOIS FED. AID PROJECT			

**BLOOM COMPANIES, LLC. CHICAGO, ILLINOIS**

**BORING LOG**

JOB NO: **BM3-1272** CLIENT: **ILLINOIS DEPARTMENT OF TRANSPORTATION** BORING NO: **BR2-1**  
 PROJECT: **IL-53 Improvements - Thorndale Avenue to Army Trail Road** STATION: **90+72**  
 LOCATION: **Barrier Wall No. 2** OFFSET: **27' LT**  
 BORING RIG & METHOD: **Diedrich D-50 w/Hollow Stem Augers** SURF ELEV: **735.7**

DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q <sub>u</sub>	STRAIN %	WATER CONTENT %
	0.0-1.0	734.7	Gr Clay A-7-6 (Topsoil)		Auger 2			19.7
	1.0-2.5		FILL: Br to Black Silty Clay A-7-6; trace Sand and Gravel, trace Organics	13	4-4	1.0	15	18.2
	3.5-5.0			17	6-7	2.1	15	27.2
	6.0-7.5	729.7	Hard Gr to Green Silty Clay Loam A-7-6, trace Gravel		3			
		727.7		15	4-7	4.7	15	22.9
	8.5-10.0		Stiff Br Clay A-4 (7), trace Gravel	16	5-8	1.9	15	17.3
	11.0-12.5	725.2	Hard Br Clay A-6, trace Gravel		4			
		722.7		15	4-5	5.0	15	17.5
	13.5-15.0		Very Stiff Br Clay A-6, trace Gravel	17	7-11	2.5	15	19.5
	16.0-17.5			18	7-10	2.9	15	15.8
	18.5-20.0	715.7		18	5-7	2.5	15	16.3

Boring terminated @ 20'

REMARKS Automatic Hammer Used.

(.) Denotes Calibrated Penetrometer Estimate

WATER DRY FT. ELEV. DURING DRILLING  CORE SIZE IN. DATE: **Jan 13, 10**  
 WATER Caved@15 FT. ELEV. AT COMPLETION  CASING LENGTH FT. DRILLER: **Shlimon**  
 WATER FT. ELEV. AFTER HRS.  CASING DIAMETER IN. INSPECTOR: **Kuzel**

**BLOOM COMPANIES, LLC. CHICAGO, ILLINOIS**

**BORING LOG**

JOB NO: **BM3-1272** CLIENT: **ILLINOIS DEPARTMENT OF TRANSPORTATION** BORING NO: **BR2-2**  
 PROJECT: **IL-53 Improvements - Thorndale Avenue to Army Trail Road** STATION: **92+06**  
 LOCATION: **Barrier Wall No. 2** OFFSET: **17' LT**  
 BORING RIG & METHOD: **Diedrich D-50 w/Hollow Stem Augers** SURF ELEV: **735.9**

DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q <sub>u</sub>	STRAIN %	WATER CONTENT %
	0.0-1.0	734.9	FILL: Br Sand and Gravel A-1-a		Auger 11			7.3
	1.0-2.5		FILL: Gr to Black Silty Clay A-7-6; trace Sand and Gravel, trace Organics	13	11-7	1.4	15	21.1
	3.5-5.0			15	4-8	0.4	15	34.0
	6.0-7.5	729.4	Stiff Green Silty Clay Loam A-7-6, trace Gravel		3			
		727.9		17	4-4	1.0	15	30.9
	8.5-10.0		Very Stiff to Hard Br Clay A-6, trace Gravel	16	7			
				16	8-9	2.5	15	17.6
	11.0-12.5			17	7-11	4.1		17.5
	13.5-15.0	720.9	Very Stiff Gr Clay A-6, trace Gravel	18	4			
				18	6-10	2.5	15	15.1
	16.0-17.5		Very Stiff Gr Clay A-6, trace Gravel	17	4			
				17	7-9	2.5	15	15.2
	18.5-20.0	715.9		16	4			
				16	6-9	2.3	15	17.4

Boring terminated @ 20'

REMARKS Automatic Hammer Used.

(.) Denotes Calibrated Penetrometer Estimate

WATER DRY FT. ELEV. DURING DRILLING  CORE SIZE IN. DATE: **Jan 13, 10**  
 WATER Caved@14 FT. ELEV. AT COMPLETION  CASING LENGTH FT. DRILLER: **Shlimon**  
 WATER FT. ELEV. AFTER HRS.  CASING DIAMETER IN. INSPECTOR: **Kuzel**

DESIGNED - N/A  
 CHECKED - N/A  
 DRAWN - A. Durbak  
 CHECKED - R. DiGiulio

**NOISE WALL - SOIL BORINGS 3**  
**ILLINOIS ROUTE 53**  
**FAU 2578 SECTION 532B-1**  
**DUPAGE COUNTY**

**PATRICK ENGINEERING**  
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 4970 VARSITY DRIVE  
 Lisle, IL 60532  
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SHEET NO. S15 OF S25	F.A.P. RTE. 2578	SECTION 532B	COUNTY DUPAGE	TOTAL SHEETS 781	SHEET NO. 594
	CONTRACT NO. 60477				
12/3/2010		ILLINOIS FED. AID PROJECT			

**BLOOM COMPANIES, LLC. CHICAGO, ILLINOIS**  
**BORING LOG**  
 JOB NO: **BM3-1272** CLIENT: **ILLINOIS DEPARTMENT OF TRANSPORTATION** BORING NO: **BR2-3**  
 PROJECT: **IL-53 Improvements - Thorndale Avenue to Army Trail Road** STATION: **93+34**  
 LOCATION: **Barrier Wall No. 2** OFFSET: **18' LT**  
 BORING RIG & METHOD: **Diedrich D-50 w/Hollow Stem Augers** SURF ELEV: **736.6**

DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q <sub>u</sub>	STRAIN %	WATER CONTENT %
0.0-1.0		735.6	FILL: Br Sand and Gravel A-1-a		Auger 3			7.2
1.0-2.5		733.6	FILL: Br to Black Silty Clay A-7-8, trace Gravel, trace Organics	13	6-8	2.9	15	19.8
3.5-5.0		730.6	FILL: Black Organic Clay A-7-8, trace Gravel	11	5-8	(2.0)		29.7
6.0-7.5		728.6	Stiff Br Clay A-6, trace Gravel	10	4-4	1.2	15	24.9
8.5-10.0			Medium Stiff Br Sandy Clay A-4, trace Gravel	14	6-6	0.6	15	23.7
11.0-12.5		723.6		5	9-10	-	-	19.8
13.5-15.0				16	4-8	4.0	15	15.5
16.0-17.5			Hard to Very Stiff Gr Clay A-6, trace Gravel	15	5-11	4.1	15	16.3
18.5-20.0		716.6		17	7-10	2.5	15	15.5

Boring terminated @ 20'

REMARKS: Automatic Hammer Used. ( ) Denotes Calibrated Penetrometer Estimate  
 WATER 13 FT. ELEV. 723.6 DURING DRILLING  CORE SIZE IN. DATE: Jan 13, 10  
 WATER Caved@12.4 FT. ELEV. 724.2 AT COMPLETION  CASING LENGTH FT. DRILLER: Shlimon  
 WATER FT. ELEV. AFTER HRS.  CASING DIAMETER IN. INSPECTOR: Kuzel

**BLOOM COMPANIES, LLC. CHICAGO, ILLINOIS**  
**BORING LOG**  
 JOB NO: **BM3-1272** CLIENT: **ILLINOIS DEPARTMENT OF TRANSPORTATION** BORING NO: **BR2-4**  
 PROJECT: **IL-53 Improvements - Thorndale Avenue to Army Trail Road** STATION: **94+76**  
 LOCATION: **Barrier Wall No. 2** OFFSET: **19' LT**  
 BORING RIG & METHOD: **Diedrich D-50 w/Hollow Stem Augers** SURF ELEV: **737.8**

DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q <sub>u</sub>	STRAIN %	WATER CONTENT %
0.0-1.0		736.8	FILL: Br Sand and Gravel A-1-a		Auger 15			5.0
1.0-2.5		734.8	FILL: Br to Black Silty Clay A-7-8; trace Sand and Gravel	13	10-10	4.5	15	15.6
3.5-5.0		732.3	Stiff Br Silty Clay A-8, trace Gravel	17	6-6	1.7	15	21.3
6.0-7.5			Hard to Very Stiff Br Clay A-6, trace Gravel	17	6-10	4.5	15	18.8
8.5-10.0		726.8		17	9-10	2.1	15	13.2
11.0-12.5				16	6-7	2.7	15	17.2
13.5-15.0			Very Stiff to Stiff Gr Clay A-6, trace Gravel	17	5-8	1.7	15	17.7
16.0-17.5				16	6-8	2.1	15	17.4
18.5-20.0		717.8		18	5-7	2.1	15	15.7

Boring terminated @ 20'

REMARKS: Automatic Hammer Used. ( ) Denotes Calibrated Penetrometer Estimate  
 WATER DRY FT. ELEV. DURING DRILLING  CORE SIZE IN. DATE: Jan 13, 10  
 WATER Caved@13 FT. ELEV. AT COMPLETION  CASING LENGTH FT. DRILLER: Shlimon  
 WATER FT. ELEV. AFTER HRS.  CASING DIAMETER IN. INSPECTOR: Kuzel

DESIGNED - N/A  
 CHECKED - N/A  
 DRAWN - A. Durbak  
 CHECKED - R. DiGiulio

**NOISE WALL - SOIL BORINGS 4**  
**ILLINOIS ROUTE 53**  
**FAU 2578 SECTION 532B-1**  
**DUPAGE COUNTY**


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

SHEET NO. S16 OF S25	F.A.P. RTE. 2578	SECTION 532B	COUNTY DUPAGE	TOTAL SHEETS 781	SHEET NO. 595
	CONTRACT NO. 60477				
12/3/2010		ILLINOIS FED. AID PROJECT			

**BLOOM COMPANIES, LLC. CHICAGO, ILLINOIS**

**BORING LOG**

JOB NO: **BM3-1272** CLIENT: **ILLINOIS DEPARTMENT OF TRANSPORTATION** BORING NO: **BR3-1**  
 PROJECT: **IL-53 Improvements - Thorndale Avenue to Army Trail Road** STATION: **88+91**  
 LOCATION: **Barrier Wall No. 3** OFFSET: **20' RT**  
 BORING RIG & METHOD: **Diedrich D-50 w/Hollow Stem Augers** SURF ELEV: **737.1**

DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q <sub>u</sub>	STRAIN %	WATER CONTENT %
	0.0-1.0	736.1	FILL: Br Sand and Gravel A-1-a		Auger			7.0
	1.0-2.5	734.1	FILL: Br to Black Silty Clay A-6, trace Gravel, trace Organics	15	6-9	4.1	15	21.6
	3.5-5.0	731.1	FILL: Black Organic Clay A-6, trace Gravel	11	3-5	1.7	15	32.9
	6.0-7.5		Medium Stiff to Stiff Br Clay A-6, trace Gravel	16	3-4	0.8	15	29.8
	8.5-10.0	726.6		17	3-4	1.4	15	22.2
	11.0-12.5		Very Stiff to Stiff Gr Clay A-6, trace Gravel	16	6-10	2.5	15	17.8
	13.5-15.0			17	5-9	1.7	15	15.8
	16.0-17.5			17	5-7	1.7	15	17.9
20	18.5-20.0	717.1		17	4-6	1.2	15	18.5

Boring terminated @ 20'

REMARKS: Automatic Hammer Used.

( ) Denotes Calibrated Penetrometer Estimate

WATER DRY FT. ELEV. DURING DRILLING  CORE SIZE IN. DATE: **Jan 13, 10**  
 WATER Caved@13 FT. ELEV. AT COMPLETION  CASING LENGTH FT. DRILLER: **Shlimon**  
 WATER FT. ELEV. AFTER HRS.  CASING DIAMETER IN. INSPECTOR: **Kuzel**

**BLOOM COMPANIES, LLC. CHICAGO, ILLINOIS**

**BORING LOG**

JOB NO: **BM3-1272** CLIENT: **ILLINOIS DEPARTMENT OF TRANSPORTATION** BORING NO: **BR3-2**  
 PROJECT: **IL-53 Improvements - Thorndale Avenue to Army Trail Road** STATION: **90+88**  
 LOCATION: **Barrier Wall No. 3** OFFSET: **18' RT**  
 BORING RIG & METHOD: **Diedrich D-50 w/Hollow Stem Augers** SURF ELEV: **735.5**

DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q <sub>u</sub>	STRAIN %	WATER CONTENT %
	0.0-1.0	734.5	FILL: Br Sand and Gravel A-1-a		Auger			7.7
	1.0-2.5	732.5	FILL: Br Silty Clay A-6, trace Sand and Gravel	14	5-9	4.1	15	15.4
	3.5-5.0	729.5	FILL: Br to Black Silty Clay A-6, trace Sand and Gravel	16	4-5	2.9	15	20.7
	6.0-7.5	727.5	FILL: Black Organic Clay A-6, trace Gravel	12	3-5	(2.5)		32.9
	8.5-10.0	725.0	Stiff Green Silty Clay A-6, trace Gravel	14	2-3	1.7	15	25.3
	11.0-12.5		Stiff Br Clay A-6, trace Gravel	16	3-5	1.7	15	21.5
	13.5-15.0	719.5		17	5-8	1.4	15	17.4
	16.0-17.5		Very Stiff Gr Clay A-6, trace Gravel	16	4-7	3.3	15	15.5
20	18.5-20.0	715.5		17	7-9	2.5	15	13.6

Boring terminated @ 20'

REMARKS: Automatic Hammer Used.

( ) Denotes Calibrated Penetrometer Estimate

WATER DRY FT. ELEV. DURING DRILLING  CORE SIZE IN. DATE: **Jan 13, 10**  
 WATER Caved@13 FT. ELEV. AT COMPLETION  CASING LENGTH FT. DRILLER: **Shlimon**  
 WATER FT. ELEV. AFTER HRS.  CASING DIAMETER IN. INSPECTOR: **Kuzel**

DESIGNED - N/A  
 CHECKED - N/A  
 DRAWN - A. Durbak  
 CHECKED - R. DiGiulio

**NOISE WALL - SOIL BORINGS 5**  
**ILLINOIS ROUTE 53**  
**FAU 2578 SECTION 532B-1**  
**DUPAGE COUNTY**

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

SHEET NO. S17 OF S25	F.A.P RTE. 2578	SECTION 532B	COUNTY DUPAGE	TOTAL SHEETS 781	SHEET NO. 596
	CONTRACT NO. 60477				
12/3/2010		ILLINOIS FED. AID PROJECT			



**BLOOM COMPANIES, LLC.** **BORING LOG** **CHICAGO, ILLINOIS**  
 JOB NO: **BM3-1272** CLIENT: **ILLINOIS DEPARTMENT OF TRANSPORTATION** BORING NO: **BR3-3**  
 PROJECT: **IL-53 Improvements - Thorndale Avenue to Army Trail Road** STATION: **93+07**  
 LOCATION: **Barrier Wall No. 3** OFFSET: **20' RT**  
 BORING RIG & METHOD: **Diedrich D-50 w/Hollow Stem Augers** SURF ELEV: **736.5**

DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q <sub>u</sub>	STRAIN %	WATER CONTENT %
	0.0-1.0	735.5	FILL: Br Sand and Gravel A-1-a		Auger			8.3
	1.0-2.5	733.5	FILL: Green to Black Silty Clay A-6, trace Gravel	14	6-7	3.7	15	21.1
	3.5-5.0	730.5	FILL: Black Organic Clay A-6	13	4-8	1.2	15	17.1
	6.0-7.5		Medium Stiff to Stiff Br Clay A-6, trace Gravel	15	4-5	0.8	15	19.9
10	8.5-10.0	726.0		17	4-5	1.7	15	20.6
	11.0-12.5		Hard to Very Stiff Gr Clay A-6, trace Gravel	17	2-14	4.1	15	17.3
	13.5-15.0			17	7-10	2.7	15	15.8
	16.0-17.5			16	6-9	2.5	15	16.8
20	18.5-20.0	716.5		16	4-9	2.5	15	18.7

Boring terminated @ 20'

REMARKS: Automatic Hammer Used

( ) Denotes Calibrated Penetrometer Estimate

WATER	DRY	FT. ELEV.	DURING DRILLING	CORE SIZE	IN.	DATE:	<b>Jan 13, 10</b>
WATER	Caved	@13.5	AT COMPLETION	CASING LENGTH	FT.	DRILLER:	<b>Shlimon</b>
WATER		FT. ELEV.	AFTER HRS.	CASING DIAMETER	IN.	INSPECTOR:	<b>Kuzel</b>

**BLOOM COMPANIES, LLC.** **BORING LOG** **CHICAGO, ILLINOIS**  
 JOB NO: **BM3-1272** CLIENT: **ILLINOIS DEPARTMENT OF TRANSPORTATION** BORING NO: **BR3-4**  
 PROJECT: **IL-53 Improvements - Thorndale Avenue to Army Trail Road** STATION: **94+68**  
 LOCATION: **Barrier Wall No. 3** OFFSET: **21' RT**  
 BORING RIG & METHOD: **Diedrich D-50 w/Hollow Stem Augers** SURF ELEV: **737.1**

DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q <sub>u</sub>	STRAIN %	WATER CONTENT %
	0.0-1.0	736.1	FILL: Br Sand and Gravel A-1-a		Auger			7.2
	1.0-2.5	734.1	FILL: Br Clay A-6, trace Gravel	14	8-8	(3.5)		18.3
	3.5-5.0		FILL: Black Organic Clay A-6, little Sand	15	4-3	1.2	15	19.1
	6.0-7.5	729.1		6	3-3	1.2	15	24.4
10	8.5-10.0		Stiff to Very Stiff Br to Gr Silty Clay A-6, trace Gravel	10	3			17.5
	11.0-12.5			17	5-8	2.5	15	17.3
	13.5-15.0			17	6-10	1.2	15	15.1
	16.0-17.5			16	5-9	1.2	15	17.4
20	18.5-20.0	717.1		17	4-9	2.1	15	15.4

Boring terminated @ 20'

REMARKS: Automatic Hammer Used

( ) Denotes Calibrated Penetrometer Estimate

WATER	DRY	FT. ELEV.	DURING DRILLING	CORE SIZE	IN.	DATE:	<b>Jan 13, 10</b>
WATER		FT. ELEV.	AT COMPLETION	CASING LENGTH	FT.	DRILLER:	<b>Shlimon</b>
WATER		FT. ELEV.	AFTER HRS.	CASING DIAMETER	IN.	INSPECTOR:	<b>Kuzel</b>

DESIGNED	- N/A
CHECKED	- N/A
DRAWN	- A. Durbak
CHECKED	- R. DiGiulio

**NOISE WALL - SOIL BORINGS 6**  
**ILLINOIS ROUTE 53**  
**FAU 2578 SECTION 532B-1**  
**DUPAGE COUNTY**


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

SHEET NO. S18 OF S25	F.A.P. RTE. 2578	SECTION 532B	COUNTY DUPAGE	TOTAL SHEETS 781	SHEET NO. 597
	CONTRACT NO. 60477				
12/3/2010		ILLINOIS FED. AID PROJECT			

BLOOM COMPANIES, LLC. CHICAGO, ILLINOIS											
BORING LOG											
JOB NO: BM3-1272			CLIENT: ILLINOIS DEPARTMENT OF TRANSPORTATION			BORING NO: BR4-L1					
PROJECT: IL-53 Improvements - Thorndale Avenue to Army Trail Road			STATION: 172+23			OFFSET: 33' LT					
LOCATION: Barrier Wall No. 4			SURF ELEV: 695.8			BORING RIG & METHOD: Diedrich D-50 w/Hollow Stem Augers					
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	QU	STRAIN %	WATER CONTENT %			
0.0-1.0		694.9	FILL: Black Organic Clay A-7-6		Auger			30.8			
1.0-2.5				12	3-4	2.8	15	16.2			
3.5-5.0			FILL: Br to Gr Clay A-6, trace Gravel and Organics	16	3-5	(1.5)		10.7			
6.0-7.5		687.8		13	3-5	(1.5)		28.7			
8.5-10.0			Stiff to Very Stiff Br to Gr Clay A-6, trace Gravel	16	2-5	1.2	15	27.1			
11.0-12.5		682.6		16	3-5	3.1	15	20.8			
13.0-15.0		680.3	Hard Gr Clay Loam A-6, trace Gravel	13	6-8	4.2	15	11.6			
16.0-17.5				13	4-7	2.7	15	16.4			
18.5-20.0				13	5-5	3.5	15	17.3			
21.0-22.5			Very Stiff to Stiff Gr Clay A-6, trace Gravel	15	4-6	1.7	15	18.0			
23.5-25.0				14	4-6	2.3	15	17.0			
26.0-27.5				17	4-6	1.7	15	16.6			
28.5-30.0		665.8	Boring terminated @ 30'	14	4-7	2.9	15	17.8			
REMARKS: Automatic Hammer Used. ( ) Denotes Calibrated Penetrometer Estimate											
WATER 28 FT. ELEV. 667.8 DURING DRILLING <input checked="" type="checkbox"/> CORE SIZE IN. DATE: Mar 29, 10											
WATER Cased @ 18.5 FT. ELEV. AT COMPLETION <input checked="" type="checkbox"/> CASING LENGTH FT. DRILLER: Shlimon											
WATER FT. ELEV. AFTER HRS. <input checked="" type="checkbox"/> CASING DIAMETER IN. INSPECTOR: Alsalami											

BLOOM COMPANIES, LLC. CHICAGO, ILLINOIS											
BORING LOG											
JOB NO: BM3-1272			CLIENT: ILLINOIS DEPARTMENT OF TRANSPORTATION			BORING NO: BR4-L2					
PROJECT: IL-53 Improvements - Thorndale Avenue to Army Trail Road			STATION: 174+38			OFFSET: 26' LT					
LOCATION: Barrier Wall No. 4			SURF ELEV: 697.4			BORING RIG & METHOD: Diedrich D-50 w/Hollow Stem Augers					
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	QU	STRAIN %	WATER CONTENT %			
0.0-1.0		696.4	Sand A-1-a (Gravel Shoulder)		Auger			5.3			
1.0-2.5				12	4-7	(4.5+)		11.0			
3.5-5.0				10	2-3			26.4			
6.0-7.5			FILL: Gr to Black Silty Clay A-7-6, trace Gravel and Organics	14	3-5	0.7	15	31.4			
8.5-10.0				14	4-4	1.7	15	24.7			
11.0-12.5		684.4		14	4-6	1.9	15	26.7			
13.5-15.0				16	6-8	5.6	15	17.4			
16.0-17.5			Hard to Very Stiff Br to Gr Clay A-6, trace Gravel	12	6-8	3.2	15	15.6			
18.5-20.0		677.4		3	5-6	(3.5)		14.0			
21.0-22.5				16	5-6	1.5	15	18.8			
23.5-25.0			Stiff Gr Clay A-6, trace Gravel	15	5-5	1.4	15	14.3			
26.0-27.5				4	5-6	(1.3)		17.9			
28.5-30.0		667.4	Boring terminated @ 30'	16	4-5	1.8	15	18.4			
REMARKS: Automatic Hammer Used. ( ) Denotes Calibrated Penetrometer Estimate											
WATER DRY FT. ELEV. DURING DRILLING <input checked="" type="checkbox"/> CORE SIZE IN. DATE: Mar 29, 10											
WATER DRY FT. ELEV. AT COMPLETION <input checked="" type="checkbox"/> CASING LENGTH FT. DRILLER: Shlimon											
WATER FT. ELEV. AFTER HRS. <input checked="" type="checkbox"/> CASING DIAMETER IN. INSPECTOR: Alsalami											

DESIGNED	- N/A
CHECKED	- N/A
DRAWN	- A. Durbak
CHECKED	- R. DIGIulfo

**NOISE WALL - SOIL BORINGS 7  
ILLINOIS ROUTE 53  
FAU 2578 SECTION 532B-1  
DUPAGE COUNTY**

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

SHEET NO. S19 OF S25	F.A.P RTE. 2578	SECTION 532B	COUNTY DUPAGE	TOTAL SHEETS 781	SHEET NO. 598
	CONTRACT NO. 60477				
12/3/2010		ILLINOIS FED. AID PROJECT			

BLOOM COMPANIES, LLC.		BORING LOG		CHICAGO, ILLINOIS				
JOB NO: BM3-1272 CLIENT: ILLINOIS DEPARTMENT OF TRANSPORTATION		BORING NO: BR4-L3						
PROJECT: IL-53 Improvements - Thorndale Avenue to Army Trail Road		STATION: 175+69						
LOCATION: Barrier Wall No. 4		OFFSET: 13' LT						
BORING RIG & METHOD: Diedrich D-50 w/Hollow Stem Augers		SURF ELEV: 699.2						
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	$q_u$	STRAIN %	WATER CONTENT %
	0.0-1.0	698.4	8" Bituminous Concrete 2" Sand A-1-a		Auger 3			
	1.0-2.5			8	2-4	(1.8)		18.9
	3.5-5.0			15	2 3-4	1.7	15	23.5
	6.0-7.5		FILL: Black to Gr Clay A-6, trace Gravel and little Organics	13	2 4-8	(3.0)		27.8
	8.5-10.0			15	2 4-6	1.2	15	24.1
	11.0-12.5	699.2		12	3 3-6	(2.5)		40.9
	13.5-15.0	683.2	Very Stiff Br to Gr Clay A-6, trace Gravel	13	3 2-4	2.0	15	18.0
	16.0-17.5	690.2	Medium Stiff Br to Gr Sandy Clay A-6, trace Gravel	18	0 1-1	(0.8)		27.8
	18.5-20.0	690.2		12	1 2-3	(0.5)		36.9
	21.0-22.5	679.2	Loose to Very Loose Gr Sand A-3, little Gravel	18	1 1-2			20.5
	23.5-25.0			18	2 1-2	(1.0)		17.8
	26.0-27.5	671.2	Stiff Br to Gr Sandy Clay A-6, trace Gravel	18	1 2-3	(1.3)		20.7
	28.5-30.0			18	3 2-5			21.9
	31.0-32.5		Loose to Medium Dense Gr Sand A-3, little Gravel, trace Clay	15	2 4-8			15.1
	33.5-35.0	664.2		18	5 6-9			19.0
Boring terminated @ 35'								
REMARKS: Automatic Hammer Used.						() Denotes Calibrated Penetrometer Estimate		
WATER	16 FT. ELEV.	683.2	DURING DRILLING	✓	CORE SIZE	IN. DATE:	Mar 29, 10	
WATER	11.5 FT. ELEV.	687.7	AT COMPLETION	✓	CASING LENGTH	FT. DRILLER:	Shimon	
WATER	FT. ELEV.		AFTER HRS.	✓	CASING DIAMETER	IN. INSPECTOR:	Alsalam	

BLOOM COMPANIES, LLC.		BORING LOG		CHICAGO, ILLINOIS				
JOB NO: BM3-1272 CLIENT: ILLINOIS DEPARTMENT OF TRANSPORTATION		BORING NO: BR4-L4						
PROJECT: IL-53 Improvements - Thorndale Avenue to Army Trail Road		STATION: 176+71						
LOCATION: Barrier Wall No. 4		OFFSET: 15' LT						
BORING RIG & METHOD: Diedrich D-50 w/Hollow Stem Augers		SURF ELEV: 700.2						
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	$q_u$	STRAIN %	WATER CONTENT %
	0.0-1.0	699.4	8" Bituminous Concrete 2" Sand A-1-a		Auger 3			
	1.0-2.5			10	3-4	(3.5)		14.3
	3.5-5.0			15	3 3-4	1.7	15	18.5
	6.0-7.5		FILL: Br to Gr Clay A-6, trace Gravel and Organics	10	2 2-3	0.5	15	19.1
	8.5-10.0			12	3 3-4	1.3	15	25.3
	11.0-12.5	687.2		6	2 2-2	(0.8)		24.9
	13.5-15.0	684.7	Very Stiff Br Clay A-6, trace Gravel	17	3 4-6	2.8	15	23.6
	16.0-17.5			12	1 2-4	(0.3)		19.2
	18.5-20.0	679.2	Soft to Medium Stiff Gr Sandy Clay A-4, trace Gravel	15	4 5-7	(0.6)		20.0
	21.0-22.5			18	3 6-10			20.2
	23.5-25.0			18	5 5-8			19.7
	26.0-27.5		Medium Dense Fine Sand A-3, trace Gravel 6" Clay Seam @ 26.5' (Hard Gr Clay A-6)	18	5 8-11	3.8	15	17.8
	28.5-30.0	670.2		18	5 6-8			19.9
	31.0-32.5		Very Stiff to Stiff Gr Clay A-6, little Gravel	14	4 5-9	2.3	15	19.6
	33.5-35.0	665.2		18	5 6-10	1.4	15	13.4
Boring terminated @ 35'								
REMARKS: Automatic Hammer Used.						() Denotes Calibrated Penetrometer Estimate		
WATER	17 FT. ELEV.	683.2	DURING DRILLING	✓	CORE SIZE	IN. DATE:	Mar 29, 10	
WATER	12.5 FT. ELEV.	687.7	AT COMPLETION	✓	CASING LENGTH	FT. DRILLER:	Shimon	
WATER	FT. ELEV.		AFTER HRS.	✓	CASING DIAMETER	IN. INSPECTOR:	Alsalam	

DESIGNED - N/A
CHECKED - N/A
DRAWN - A. Durbak
CHECKED - R. DiGiulio

**NOISE WALL - SOIL BORINGS 8  
ILLINOIS ROUTE 53  
FAU 2578 SECTION 532B-1  
DUPAGE COUNTY**

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

SHEET NO. S20 OF S25	F.A.P RTE. 2578	SECTION 532B	COUNTY DUPAGE	TOTAL SHEETS 781	SHEET NO. 599
	CONTRACT NO. 60477				
12/3/2010		ILLINOIS FED. AID PROJECT			

BLOOM COMPANIES, LLC.		BORING LOG		CHICAGO, ILLINOIS				
JOB NO: BM3-1272		CLIENT: ILLINOIS DEPARTMENT OF TRANSPORTATION		BORING NO: BR4-L5				
PROJECT: IL-53 Improvements - Thorndale Avenue to Army Trail Road		LOCATION: Barrier Wall No. 4		STATION: 177+69				
BORING RIG & METHOD: Diedrich D-50 w/Hollow Stem Augers		SURF ELEV: 701.1		OFFSET: 22' LT				
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/ft	q <sub>u</sub>	STRAIN %	WATER CONTENT %
	0.0-1.0	700.1	Sand A-1-a (Gravel Shoulder)		Auger			1.8
	1.0-2.5	698.1	FILL: Gr to Black Silty Clay A-7-8, trace Gravel and Organics	12	3-5			24.8
	3.5-5.0		Medium Stiff to Stiff Br to Gr Clay A-6, trace Gravel	10	3-4	0.9	15	20.1
	6.0-7.5	693.1		13	3-3	(1.3)		20.2
10	8.5-10.0	690.6	Loose Br Sand A-3, trace Gravel	16	3-4			19.0
	11.0-12.5			15	5-7	2.3	15	17.4
	13.5-15.0			15	5-6	2.5	15	16.4
	16.0-17.5		Very Stiff Gr Clay A-6, trace Gravel	15	5-7	2.3	15	19.1
20	18.5-20.0			5	5-7	2.0	15	18.9
	21.0-22.5	679.1		18	4-6			14.2
	23.5-25.0	675.0	Medium Dense Gr Fine Sand A-3, trace Gravel	12	5-8			15.3
	26.0-27.5			18	16-6	(2.8)		12.3
30	28.5-30.0	671.1	Very Stiff Gr Clay Loom A-6, trace Gravel	18	4-8	2.6	15	12.4
Boring terminated @ 30'								
REMARKS: Automatic Hammer Used								
() Denotes Calibrated Penetrometer Estimate								
WATER	10 FT. ELEV.	691.1	DURING DRILLING	✓	CORE SIZE	IN.	DATE:	Mar 29, 10
WATER	FT. ELEV.		AT COMPLETION	✓	CASING LENGTH	FT.	DRILLER:	Shimon
WATER	10 FT. ELEV.	691.1	AFTER 2 HRS.	✓	CASING DIAMETER	IN.	INSPECTOR:	Alsalami

DESIGNED	- N/A
CHECKED	- N/A
DRAWN	- A. Durbak
CHECKED	- R. DiGiulio

**NOISE WALL - SOIL BORINGS 9**  
**ILLINOIS ROUTE 53**  
**FAU 2578 SECTION 532B-1**  
**DUPAGE COUNTY**

**PATRICK ENGINEERING**  
PATRICK ENGINEERING INC.  
4970 VARSITY DRIVE  
LISLE, IL 60532  
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SHEET NO. S21 OF S25	F.A.P. RTE. 2578	SECTION 532B	COUNTY DUPAGE	TOTAL SHEETS 781	SHEET NO. 600
	CONTRACT NO. 60477				
12/3/2010		ILLINOIS FED. AID PROJECT			