

PROJECT LOCATED IN  
VILLAGE OF GENEVA AND  
CITY OF ST. CHARLES

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED  
FEDERAL AID HIGHWAY

FAP 336 (RANDALL ROAD)

FABYAN PARKWAY TO SILVER GLEN RD  
TRAFFIC SIGNALIZATION IMPROVEMENTS

SECTION: 11-00418-01-SP

PROJECT: HSIP-0089(177)

KANE COUNTY

C-91-128-14

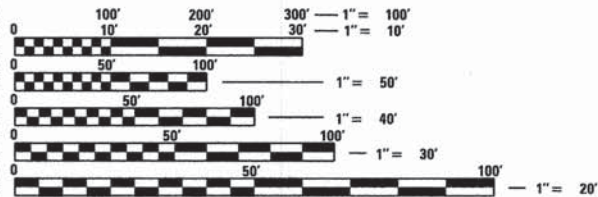
F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	11-00418-01-SP	KANE	61	1
		ILLINOIS	CONTRACT NO 63862	

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RANDALL ROAD

DESIGN DESIGNATION: OTHER ARTERIAL  
SPEED LIMIT = 45-50 MPH  
TRAFFIC = 29800-39000 ADT (2010)



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

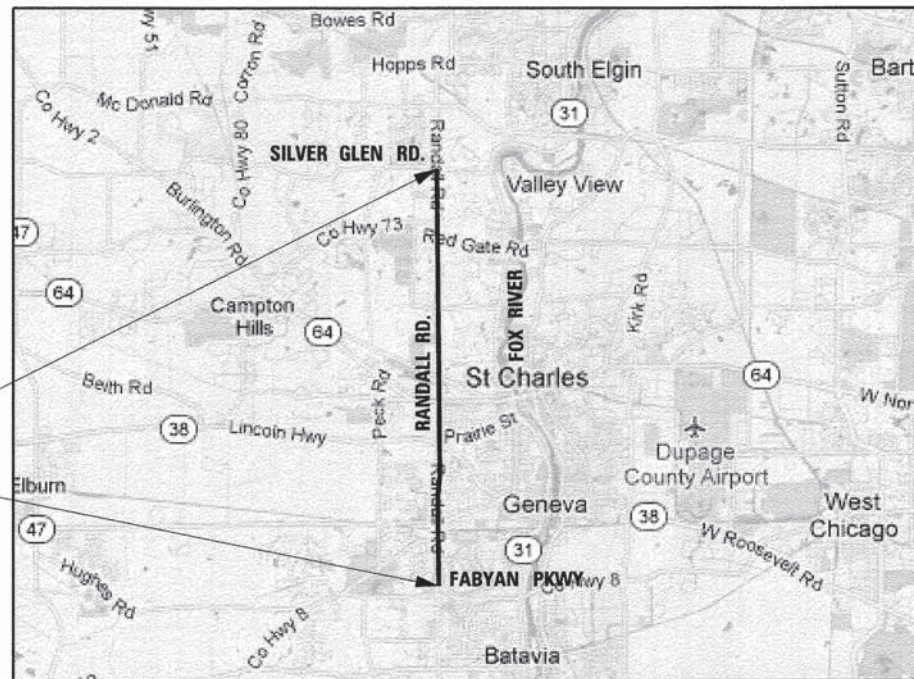
J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123  
OR 811

PROJECT MANAGER: JAMES YURATOVAC

CONTRACT NO. 63862

PROJECT ENDS  
STA 484 + 92

PROJECT BEGINS  
STA 100 + 00



LOCATION MAP

RANDALL ROAD LENGTH = 38,492 FT. = 7.29 MILES  
NET LENGTH = 38,492 FT. = 7.29 MILES



ESI CONSULTANTS, LTD  
1879 NORTH MILL STREET  
NAPERVILLE, IL 60563  
(630) 420-1700  
WWW.ESICONSULTANTS.LTD.COM  
ILLINOIS DEPARTMENT OF PROFESSIONAL REGULATION REGISTRATION #184-003685  
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EXCEPT FOR THIS SPECIFIC PROJECT WITHOUT THE WRITTEN CONSENT OF ESI CONSULTANTS, LTD.



LOCATION OF SECTION INDICATED THIS: - [shaded area]

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

APPROVED MAY 14 20 14  
*[Signature]*  
KANE COUNTY, COUNTY ENGINEER

PASSED MAY 22 20 14  
*[Signature]*  
CHRISTOPHER HOYT  
DISTRICT 1 ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID BASED ON LIMITED REVIEW May 22 20 14  
*[Signature]*  
JOHN FORTMANA JR.  
DEPUTY DIRECTOR OF HIGHWAYS, REGION 1 ENGINEER

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

PROFESSIONAL ENGINEER'S CERTIFICATION

I HEREBY CERTIFY THAT THIS SUBMISSION WAS PREPARED UNDER MY PERSONAL DIRECTION. THIS TECHNICAL SUBMISSION IS INTENDED TO BE USED AS AN INTEGRAL PART OF AND IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS AND CONTRACT DOCUMENTS.  
DATED THIS 14th DAY OF May, 2014



JAMES M. YURATOVAC  
ILLINOIS REG. PROF. ENGINEER NO.062-060059 EXPIRATION DATE 11-30-2015

FEDERAL AID PROGRAM ENGINEER: FAWAD AQUEEL (847) 705-4021, SCHAUMBURG, IL

PRINTED DATE: 5/13/2014 FILE NAME: K:\Projects\Kane County\2812 HSIP\CADD\Drawings\Sheets\Traffic\Signal Plans\01 Cover\_Sheet.dwg

GENERAL NOTES

1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR CALL "J.U.L.I.E." AT 800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES (48 HOUR NOTIFICATION IS REQUIRED).
2. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES.
3. THE CONTRACTOR SHALL CONTACT THE KDOT TRAFFIC MANAGER TOM SZABO AT (630) 208-3139 A MINIMUM 72 HOURS IN ADVANCE OF BEGINNING WORK.
4. THE CONTRACTOR SHALL CONTACT THE IDOT TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM 72 HOURS IN ADVANCE OF BEGINNING WORK AT THE STATE INTERSECTIONS.
5. THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC TECHNICIAN, RAY JOHNSON AT (630) 406-7356 AT LEAST 2 WEEKS PRIOR TO PLACING PERMANENT PAVEMENT MARKINGS.
6. BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE REESTABLISHED FOR STRIPING, EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.
7. ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
8. ALL HMA PAVEMENT PATCHING SHALL BE CLASS D.
9. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
10. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
11. THE CONTRACTOR SHALL SUBSCRIBE TO ALL GOVERNING REGULATIONS AND SHALL OBTAIN ALL NECESSARY PUBLIC AGENCY PERMITS.
12. ALL APPLICABLE PROVISIONS OF THE CURRENT OCCUPATIONAL SAFETY AND HEALTH ACT ARE HEREIN INCORPORATED BY REFERENCE.
13. NO BURNING OR INCINERATION OF RUBBISH WILL BE PERMITTED ON SITE.
14. THE CONTRACTOR SHALL PROVIDE FOR THE SAFE AND ORDERLY PASSAGE FOR TRAFFIC AND PEDESTRIANS WHERE CONSTRUCTION OPERATIONS IMPACT PUBLIC THOROUGHFARES AND ADJACENT PROPERTY.
15. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY EXISTING STORM DRAINAGE SYSTEM IN ACCORDANCE WITH THE EROSION CONTROL STANDARDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING SEDIMENT RESULTING FROM THIS PROJECT FROM STORM SEWERS AND DRAINAGE STRUCTURES.
16. STREET PAVING AND CURBS TO REMAIN SHALL BE PROTECTED FROM DAMAGE, AND, IF DAMAGED, SHALL BE REPLACED PROMPTLY IN CONFORMANCE WITH LOCAL OR IDOT STANDARD SPECIFICATIONS IN MATERIALS AND WORKMANSHIP, AT THE CONTRACTOR'S EXPENSE.
17. THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO (2) WEIGHTED SAND BAGS ON EACH TYPE I OR TYPE II BARRICADE (USE ONE (1) WEIGHTED SAND BAG ACROSS EACH BOTTOM RAIL).

CONSTRUCTION NOTES

1. THE LOCATION OF ALL UTILITIES AND PRIVATELY OWNED FACILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE INSTALLATION OF ANY COMPONENTS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING EXISTING IDOT ELECTRICAL FACILITIES AT HIS/HER OWN EXPENSE IF REQUIRED. THE CONTRACTOR SHALL ALSO BE LIABLE FOR ANY DAMAGE TO IDOT FACILITIES RESULTING FROM INACCURATE LOCATING.
3. THE CONTRACTOR WILL BE REQUIRED TO RELOCATE OR REMOVE AND REPLACE ALL SIGNS WHICH INTERFERE WITH CONSTRUCTION OPERATIONS OR ARE ATTACHED TO TRAFFIC SIGNAL EQUIPMENT THAT IS BEING REMOVED AS PART OF THE CONSTRUCTION ACTIVITIES. THE SIGNS SHALL BE RESET DURING THE CONSTRUCTION OPERATIONS AND RESET PERMANENTLY UPON COMPLETION OF THE TRAFFIC SIGNAL IMPROVEMENTS. THIS WORK, INCLUDING ALL NECESSARY POSTS, MOUNTING HARDWARE, AND LABOR, WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF STEEL MAST ARM ASSEMBLY AND POLE, STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, OR TRAFFIC SIGNAL POST. ALL WORK INVOLVING SIGNS SHALL BE GOVERNED BY THE FOLLOWING REQUIREMENTS:  
 A) SIGNS SHALL NOT BE MOVED UNTIL PROGRESS OF WORK NECESSITATES IT.  
 B) EVERY SIGN REMOVED MUST BE RE-ERECTED AT A TEMPORARY LOCATION IN A WORKMANLIKE MANNER AND BE VISIBLE TO TRAFFIC FOR WHICH IT IS INTENDED. ALL SUCH SIGNS MUST BE MAINTAINED STRAIGHT AND CLEAN FOR THE DURATION OF THE TEMPORARY SETTING.

CONSTRUCTION NOTES (CONT.)

- C) ALL SIGNS SHALL BE RE-ERECTED ACCORDING TO HIGHWAY STANDARD 720001-01 IN PERMANENT LOCATIONS AS THE TRAFFIC SIGNAL IMPROVEMENTS ARE COMPLETED. HORIZONTAL LOCATION FROM THE EDGE OF PAVEMENT SHALL BE AS DESIGNATED BY THE ENGINEER.
  - D) ALL UNUSED SIGNS WILL BE RETURNED TO THE COUNTY.
  - E) LONGER POSTS OR ALTERNATE MOUNTING HARDWARE MAY BE REQUIRED AT SOME TEMPORARY OR PERMANENT SIGN LOCATIONS TO MAINTAIN PROPER SIGN ELEVATIONS AND REQUIRED VISIBILITY.
4. ANY CONSTRUCTION ACTIVITIES THAT REQUIRE THE REMOVAL OR DEACTIVATION OF MORE THAN ONE TRAFFIC SIGNAL HEAD AT A TIME IN A GIVEN DIRECTION OF TRAVEL SHALL BE UNDERTAKEN BETWEEN THE HOURS OF 9:00 AM AND 3:00 PM; RELATED WORK PROPOSED TO BE COMPLETED OUTSIDE OF THIS TIME PERIOD MUST BE APPROVED BY THE KANE COUNTY DIVISION OF TRANSPORTATION TRAFFIC SECTION MANAGER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR STAGING THE WORK ACTIVITY TO ENSURE THESE OPERATIONAL REQUIREMENTS ARE MET. THE CONTRACTOR SHALL PROVIDE A SCHEDULE TO THE ENGINEER ON A WEEKLY BASIS ADVISING OF THE PLANNED SEQUENCE AND SCHEDULE OF WORK FOR REMOVING AND INSTALLING MAST ARMS AND SIGNAL HEADS. THE CONTRACTOR SHALL UTILIZE CHANGEABLE MESSAGE SIGNS IN ADVANCE OF THE AFFECTED INTERSECTION A MINIMUM OF 72 HOURS PRIOR TO THE PLANNED MAST ARM REMOVAL AND INSTALLATION TO ADVISE MOTORISTS OF DISRUPTIONS, AS DIRECTED BY THE ENGINEER. CHANGEABLE MESSAGE SIGNS ARE PAID FOR SEPARATELY. TEMPORARY TRAFFIC SIGNAL INSTALLATION SHALL NOT BE UTILIZED UNLESS DIRECTED BY THE ENGINEER.

HIGHWAY STANDARDS

- 000001-06 STANDARD TRAFFIC SIGNAL DESIGN DETAILS
- 280001-07 TEMPORARY EROSION CONTROL SYSTEMS
- 424001-07 PERPENDICULAR CURB RAMPS FOR SIDEWALKS
- 424006-01 DIAGONAL CURB RAMPS FOR SIDEWALKS
- 424011-01 CORNER PARALLEL CURB RAMPS FOR SIDEWALKS
- 424021-02 DEPRESSED CORNER FOR SIDEWALKS
- 424031-01 MEDIAN PEDESTRIAN CROSSINGS
- 606001-05 CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
- 630001-10 STEEL PLATE BEAM GUARDRAIL
- 630301-06 SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
- 631006-08 TRAFFIC BARRIER TERMINAL, TYPE 1B
- 701101-04 OFF-ROAD OPERATIONS, MULTILANE, 15' (4.5M) TO 24" (600MM) FROM PAVEMENT EDGE
- 701106-02 OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' (4.5M) AWAY
- 701426-06 LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION FOR SPEED > 45 MPH
- 701701-09 URBAN LANE CLOSURE, MULTILANE, INTERSECTION
- 701801-05 SIDEWALK, CORNER, OR CROSSWALK CLOSURE

HIGHWAY STANDARDS (CONT.)

- 701901-03 TRAFFIC CONTROL DEVICES
- 720001-01 SIGN PANEL MOUNTING DETAILS
- 780001-04 TYPICAL PAVEMENT MARKINGS
- 814001-02 HANDHOLES
- 814006-02 DOUBLE HANDHOLES
- 857001-01 STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
- 873001-02 TRAFFIC SIGNAL GROUNDING & BONDING
- 877001-05 STEEL MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
- 877011-05 STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
- 877012-02 STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 56' THROUGH 75'
- 878001-09 CONCRETE FOUNDATION DETAILS
- 880006-01 TRAFFIC SIGNAL MOUNTING DETAILS

DISTRICT ONE STANDARDS

- BD-24 CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT
- TC-10 TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
- TC-13 DISTRICT ONE TYPICAL PAVEMENT MARKINGS
- TC-22 ARTERIAL ROAD INFORMATION SIGN
- TS-5 STANDARD TRAFFIC SIGNAL DESIGN DETAILS

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FILE NAME: K:\Projects\Kane County\2012 HSP\CA00\Drawings\Sheets\Traffic Signal Plans\02 General Notes.dgn



USER NAME = draughton	DESIGNED - JY	REVISED -
PLOT SCALE = 100.0000' / in.	DRAWN - DN	REVISED -
PLOT DATE = 5/28/2014	CHECKED - MR	REVISED -
	DATE - 5/28/2014	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**GENERAL NOTES**

SCALE: SHEET NO OF SHEETS STA TO STA

F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
336	11-00418-01-SP	KANE	61	2
CONTRACT NO 63862			ILLINOIS FEDERAL AID PROJECT	

			CONSTRUCTION TYPE CODE 0021																	CONSTRUCTION TYPE CODE 0042		
CODE NO.	ITEM	UNIT	TOTAL	Randall @ Glencoe	Randall @ Christina	Randall @ Fargo	Randall @ Keslinger/ Kaneville	Randall @ Williamsburg	Randall @ Bricher Rd	Randall @ IL 38	Randall @ Prairie St	Randall @ Oak St	Randall @ IL 64	Randall @ Dean St	Randall @ Red Haw Ln	Randall @ Crane Rd	Randall @ Red Gate Rd	Randall @ Bolcum Rd	Randall @ Silver Glen Rd	ROADWAY		
* 20700220	POROUS GRANULAR EMBANKMENT	CU YD	88																		88	
* 42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	3512					435			777	1036		460		113	141	370	160			
* 42400800	DETECTABLE WARNINGS	SQ FT	783					83			106	152		213		40	46	96	47			
* 44000600	SIDEWALK REMOVAL	SQ FT	2982					385			726	1116		385				370				
* 63100169	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED	EACH	4																		4	
* 63200310	GUARDRAIL REMOVAL	FOOT	200																		200	
* 67100100	MOBILIZATION	L SUM	1																		1	
* 70106800	CHANGEABLE MESSAGE SIGN	CAL MO	7	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5			
* 70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625			
* 70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625			
* 72000100	SIGN PANEL - TYPE 1	SQ FT	682.5	60	60	60	60				60	60		60	30		60	15	60		97.5	
* 78009006	MODIFIED URETHANE PAVEMENT MARKING - LINE 6"	FOOT	584								494					70						
* 78009012	MODIFIED URETHANE PAVEMENT MARKING - LINE 12"	FOOT	114													114						
* 78009024	MODIFIED URETHANE PAVEMENT MARKING - LINE 24"	FOOT	50												22		28					
* 78300100	PAVEMENT MARKING REMOVAL	SQ FT	496								247				44	149	56					
* 81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	1439								104	56		172					132		975	
* 81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	1160	90	53	53	99	134	146		66	64		44	59	47	150	34	121			
* 81028230	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3 1/2" DIA.	FOOT	59											59								
* 81702110	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	25109	1436	2743	1277	3078	875	3051			2724		2091		1641	2679	671	2843			
* 82103250	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 250 WATT	EACH	42	2	4	2	4	4	4			4		4		2	4	4	4			
* 85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	16	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
* 87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	4750	591	38			384			1130	1043		1044			48	260	232			
* 87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	16722	1418	1076	763	1103	1280	826		1952	2054		2001	450	700	1094	516	1469			
* 87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	27973	1894	1498	1351	1582	3955	3794		1388	1527		2118	1230	2173	1755	938	2772			
* 87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	16189	827	1509	1392	1650	749	618		2068	1990		1529	457		1754	243	1403			
* 87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	1170																		1170	
* 87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	2365	114	77	77	123	158	199		249	226		409	82	70	193	57	331			
* 87500600	TRAFFIC SIGNAL POST, 10 FT.	EACH	6								2	2					1		1			
* 87501000	TRAFFIC SIGNAL POST, 14 FT.	EACH	18											2				1	2		13	
* 87501200	TRAFFIC SIGNAL POST, 16 FT.	EACH	2								1			1								
* 87700200	STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	2	1							1											
* 87700210	STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1	1																		
* 87700220	STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1			1																
* 87700230	STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	2			1						1										
* 87700260	STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.	EACH	1												1							
* 87700300	STEEL MAST ARM ASSEMBLY AND POLE, 52 FT.	EACH	2								1				1							
* 87700310	STEEL MAST ARM ASSEMBLY AND POLE, 54 FT.	EACH	1								1											
* 87702900	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 34 FT.	EACH	1											1								
* 87702910	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 36 FT.	EACH	2		1							1										
* 87702920	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 38 FT.	EACH	4				1										2		1			
* 87702940	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 42 FT.	EACH	2		1				1													
* 87702950	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 44 FT.	EACH	2														1		1			
* 87702960	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 46 FT.	EACH	2													1	1					
* 87702970	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 48 FT.	EACH	3				1	1							1							
* 87702980	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 50 FT.	EACH	4	1		2	1															
* 87702985	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 52 FT.	EACH	3	1				1											1			
* 87702990	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 54 FT.	EACH	3		2							1										
* 87703000	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 55 FT.	EACH	2				1												1			
* 87703010	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 56 FT.	EACH	2					1						1								
* 87703020	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 58 FT.	EACH	1									1										
* 87703030	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 60 FT.	EACH	2											1		1						

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 FILE NAME: K:\Projects\Kane County\2012\_HSP\CA00\Drawings\Sheets\Traffic\_Signal\_Plans\03\_S00\_01.dwg

\* SPECIALTY ITEMS

 ESI CONSULTANTS, LTD Excellence. Service. Integrity	USER NAME = draughton	DESIGNED = JY	REVISED =	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>SUMMARY OF QUANTITIES</b>				F.A.P. RTE 336	SECTION	COUNTY	TOTAL SHEETS	SHEET NO		
	PLOT SCALE = 1/8" = 1'-0"	DRAWN = DN	REVISED =							11-00418-01-SP	KANE	61	3		
	PLOT DATE = 5/28/2014	CHECKED = MR	REVISED =							CONTRACT NO 63862					
				SCALE:				SHEET NO OF SHEETS STA TO STA					ILLINOIS FEDERAL AID PROJECT		



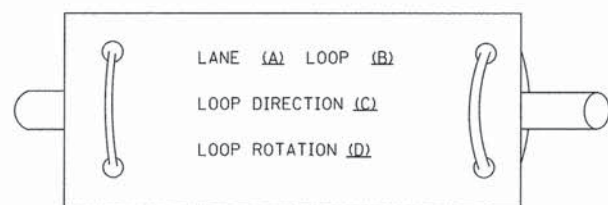
# TRAFFIC SIGNAL LEGEND

ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED											
CONTROLLER CABINET				EMERGENCY VEHICLE LIGHT DETECTOR				ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE														
RAILROAD CONTROL CABINET				CONFIRMATION BEACON				COAXIAL CABLE														
COMMUNICATIONS CABINET				HANDHOLE				VENDOR CABLE FOR CAMERA														
MASTER CONTROLLER				HEAVY DUTY HANDHOLE				COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED														
MASTER MASTER CONTROLLER				DOUBLE HANDHOLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F														
UNINTERRUPTABLE POWER SUPPLY				JUNCTION BOX				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F														
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT				UNDERGROUND CONDUIT, GALVANIZED STEEL (UC)				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM24F														
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT				TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM24F														
STEEL MAST ARM ASSEMBLY AND POLE				COMMON TRENCH				GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE														
ALUMINUM MAST ARM ASSEMBLY AND POLE				COILABLE NONMETALLIC CONDUIT (EMPTY)				CONTROLLER CABINET AND FOUNDATION TO BE REMOVED														
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE				SYSTEM ITEM				STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED														
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA				INTERSECTION ITEM				ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED														
SIGNAL POST				REMOVE ITEM				STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED														
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM				RELOCATE ITEM				SIGNAL POST AND FOUNDATION TO BE REMOVED														
GUY WIRE				ABANDON ITEM				INTERSECTION & SAMPLING (SYSTEM) DETECTOR														
SIGNAL HEAD				12" (300mm) TRAFFIC SIGNAL SECTION				SAMPLING (SYSTEM) DETECTOR														
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)				12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE				QUEUE DETECTOR														
SIGNAL HEAD WITH BACKPLATE				SIGNAL FACE				PREFORMED QUEUE DETECTOR														
SIGNAL HEAD OPTICALLY PROGRAMMED				SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD				PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR														
FLASHER INSTALLATION (S DENOTES SOLAR POWER)				"RB" INDICATES REFLECTIVE BACKPLATE				PREFORMED SAMPLING (SYSTEM) DETECTOR														
PEDESTRIAN SIGNAL HEAD				12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL				<h2 style="margin: 0;">RAILROAD SYMBOLS</h2> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">EXISTING</th> <th style="width: 50%;">PROPOSED</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </tbody> </table>			EXISTING	PROPOSED										
EXISTING	PROPOSED																					
PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED																		
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID																		
ILLUMINATED SIGN "NO LEFT TURN"				PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER																		
ILLUMINATED SIGN "NO RIGHT TURN"				RADIO INTERCONNECT																		
DETECTOR LOOP, TYPE I				RADIO REPEATER																		
PREFORMED DETECTOR LOOP				DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED																		
MICROWAVE VEHICLE SENSOR				GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)																		
VIDEO DETECTION CAMERA																						
VIDEO DETECTION ZONE																						
PAN, TILT, ZOOM CAMERA																						
WIRELESS DETECTOR SENSOR																						
WIRELESS ACCESS POINT																						

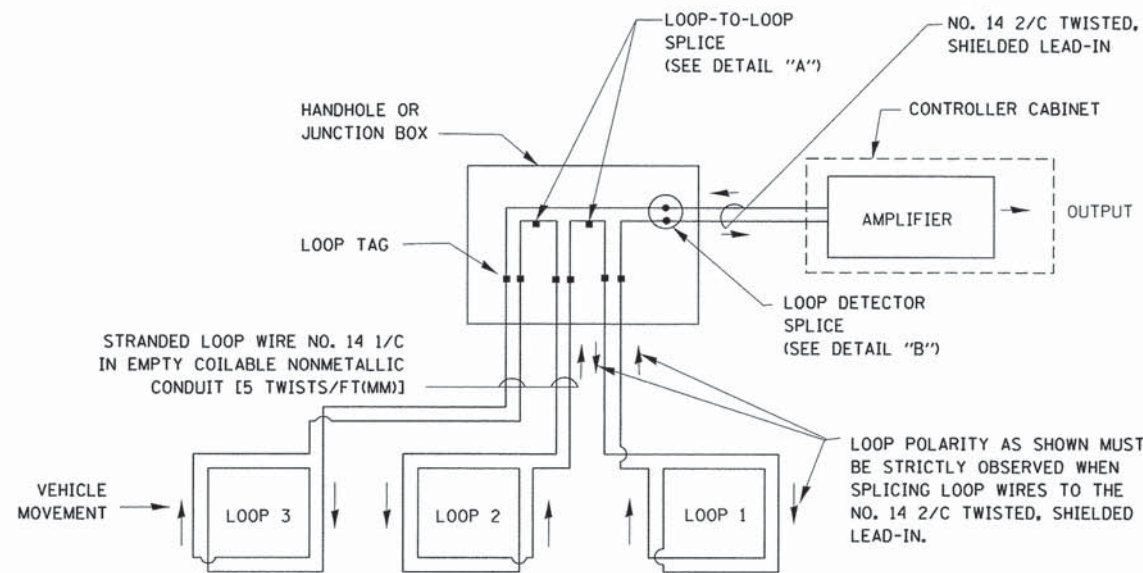
**LOOP DETECTOR NOTES**

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

**LOOP LEAD-IN CABLE TAG**

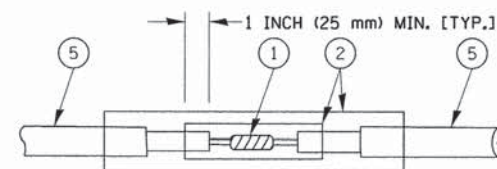


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

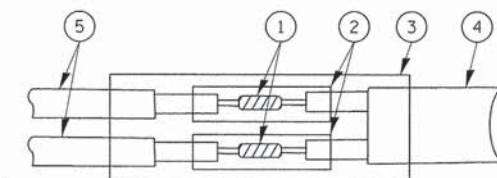


**DETECTOR LOOP WIRING SCHEMATIC**

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

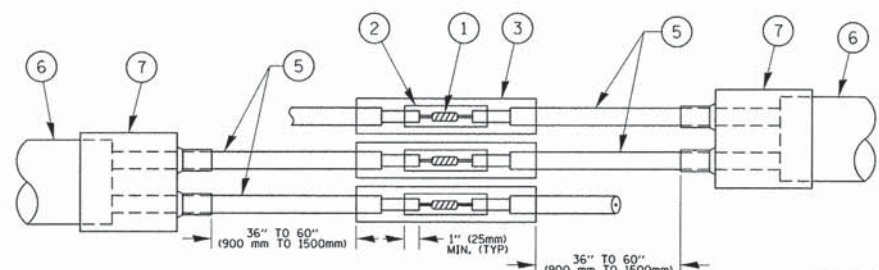


DETAIL "A"  
LOOP-TO-LOOP SPLICE

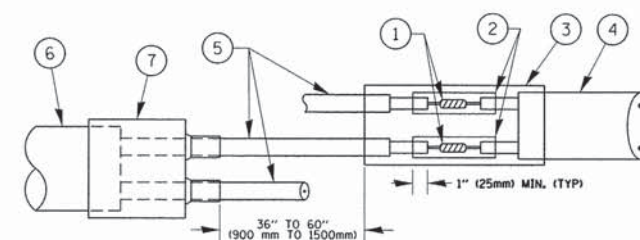


DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

**TYPE I LOOP**



DETAIL "A"  
LOOP-TO-LOOP SPLICE



DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

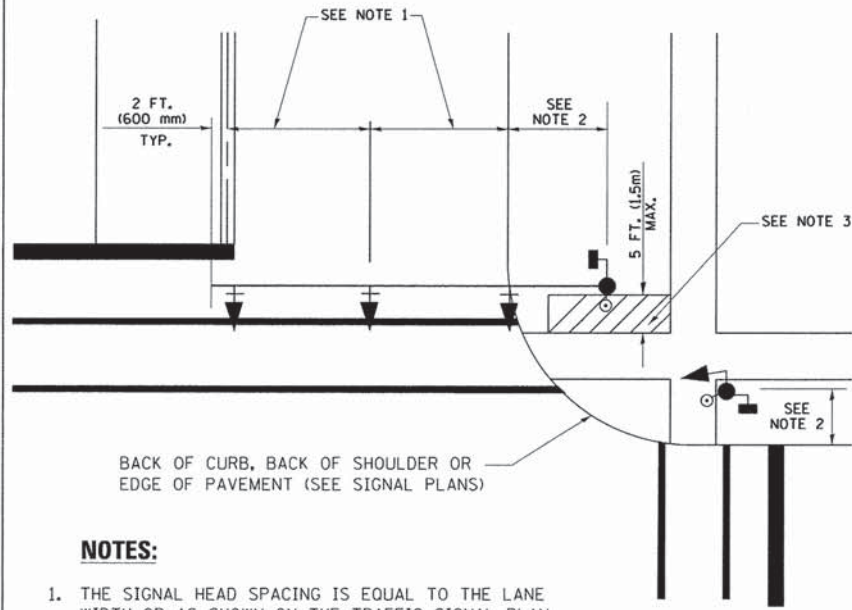
**PREFORMED LOOP**

**LOOP DETECTOR SPLICE**

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

FILE NAME =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS</b>			F.A.P. RTE. 336	SECTION 11-00418-01-SP	COUNTY KANE	TOTAL SHEETS 61	SHEET NO. 6
cs:\pw\work\p\psidot\footemj\d0108315\ts05.dgn		DRAWN - BCK	REVISED -		SCALE: NONE	SHEET NO. 2 OF 7 SHEETS	STA. TO STA.	<b>TS-05</b>		CONTRACT NO. 63862		
		CHECKED - DAD	REVISED -		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							
		DATE - 10-28-09	REVISED -									

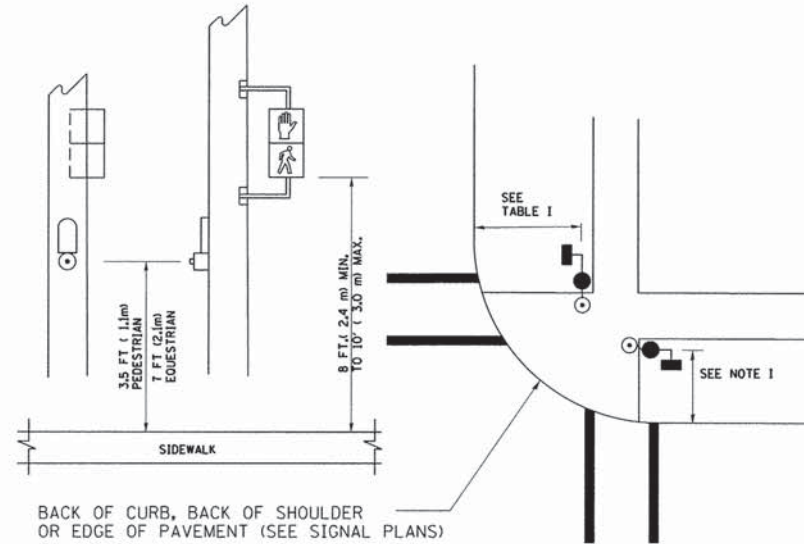
**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST  
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR  
FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN  
WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.**



**NOTES:**

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

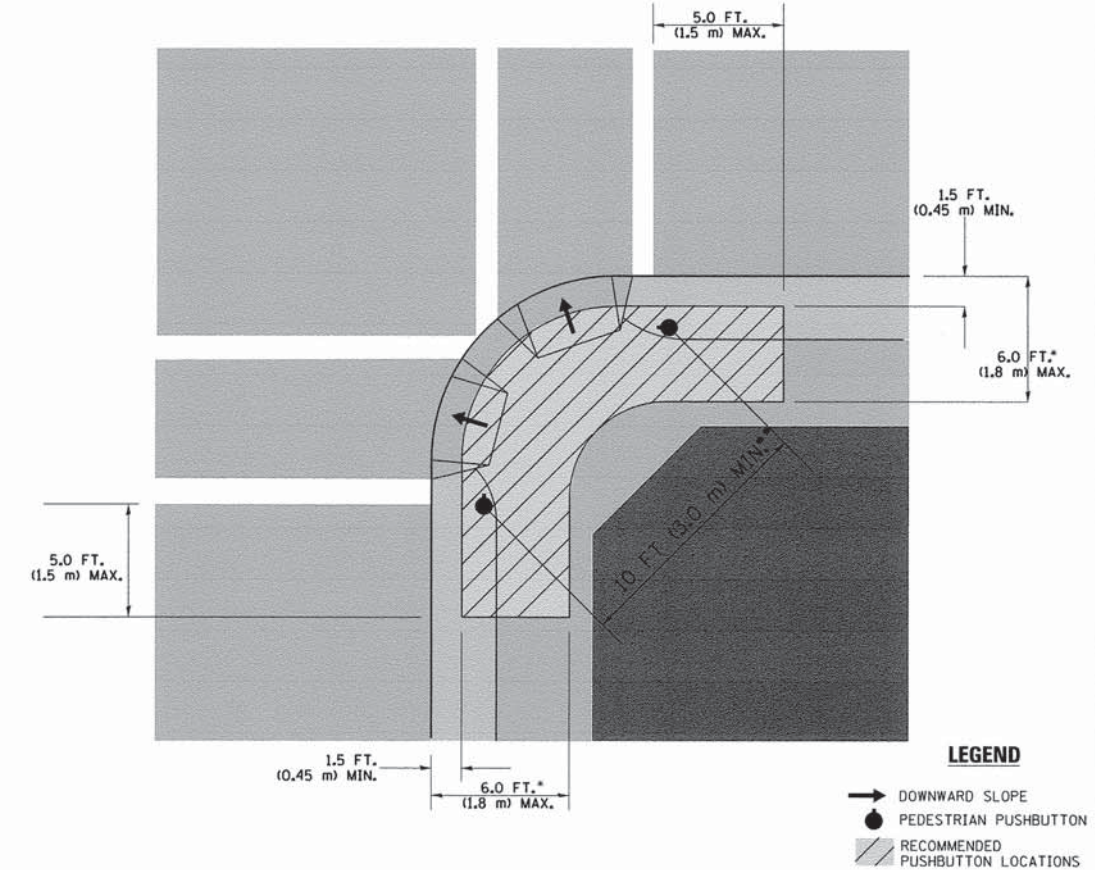
**PEDESTRIAN SIGNAL POST  
AND  
PEDESTRIAN PUSH BUTTON POST**



**NOTES:**

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

**RECOMMENDED PUSHBUTTON LOCATIONS**



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

**NOTES:**

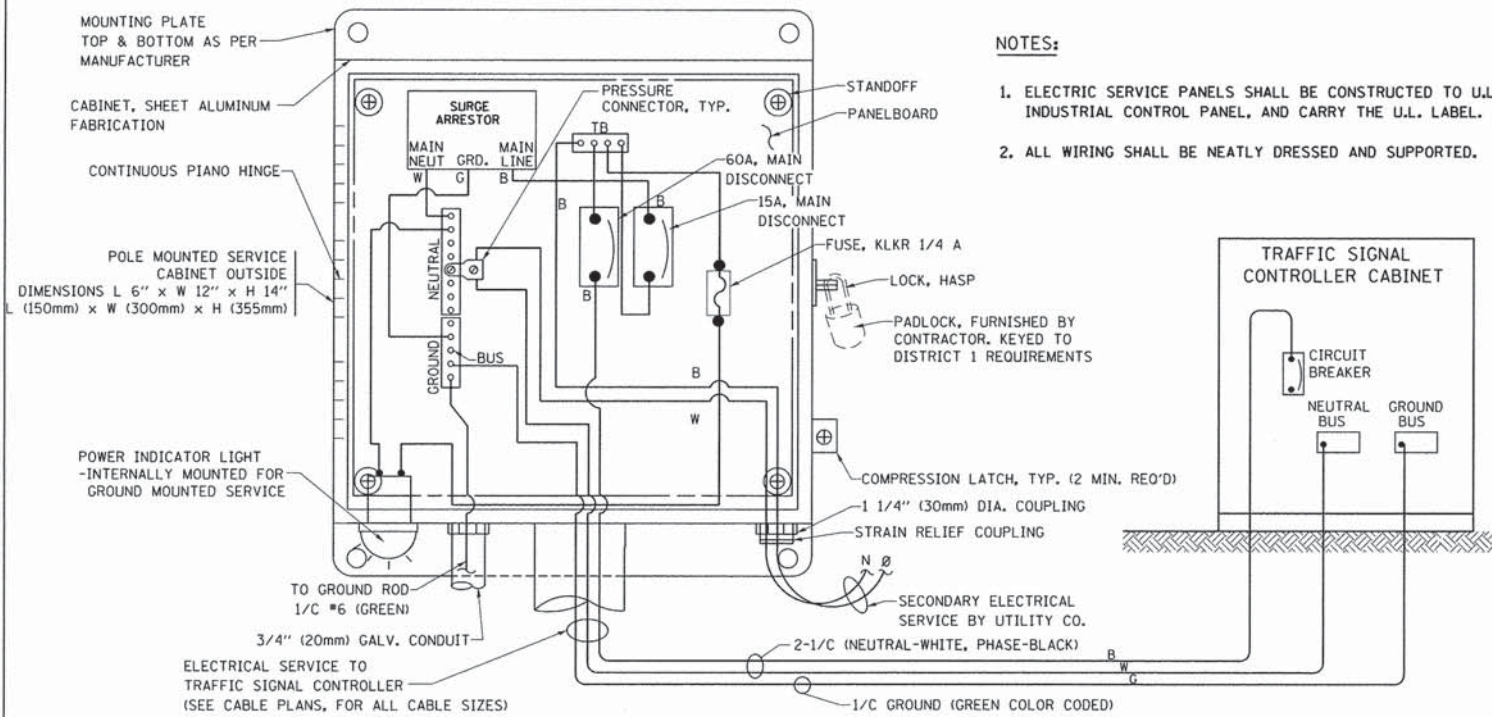
1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM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

**TRAFFIC SIGNAL EQUIPMENT OFFSET**

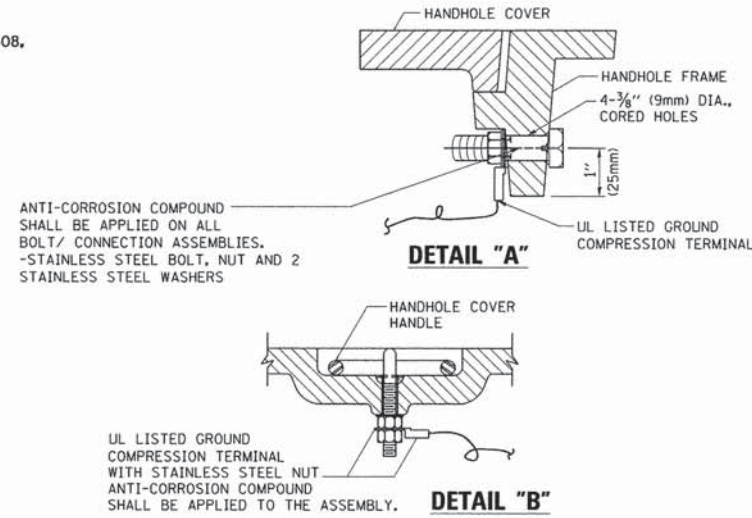
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10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

**NOTES:**

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

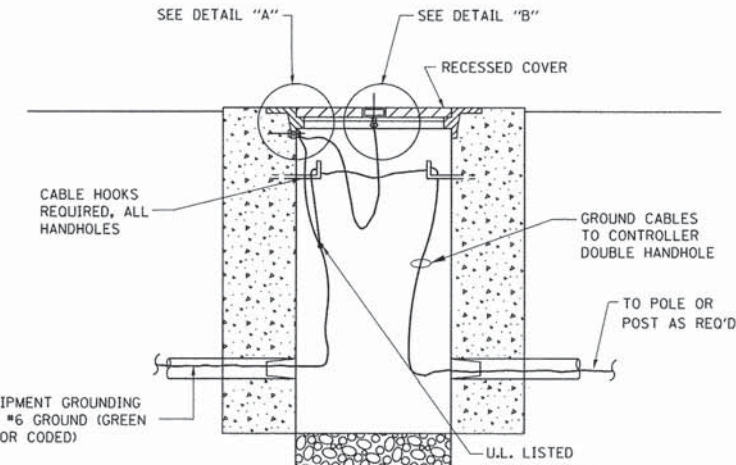


**ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)  
SERVICE INSTALLATION POLE MOUNT (SHOWN)  
(NOT TO SCALE)**

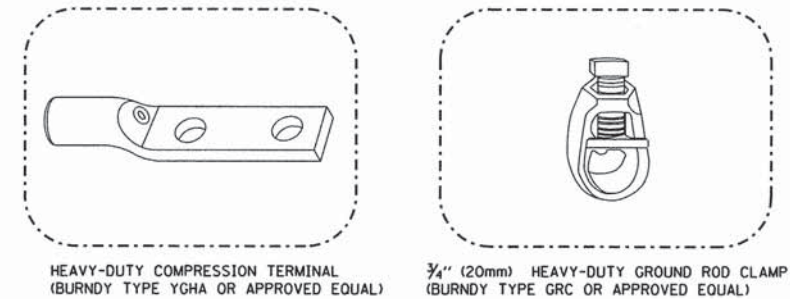


**NOTES:  
GROUNDING SYSTEM**

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

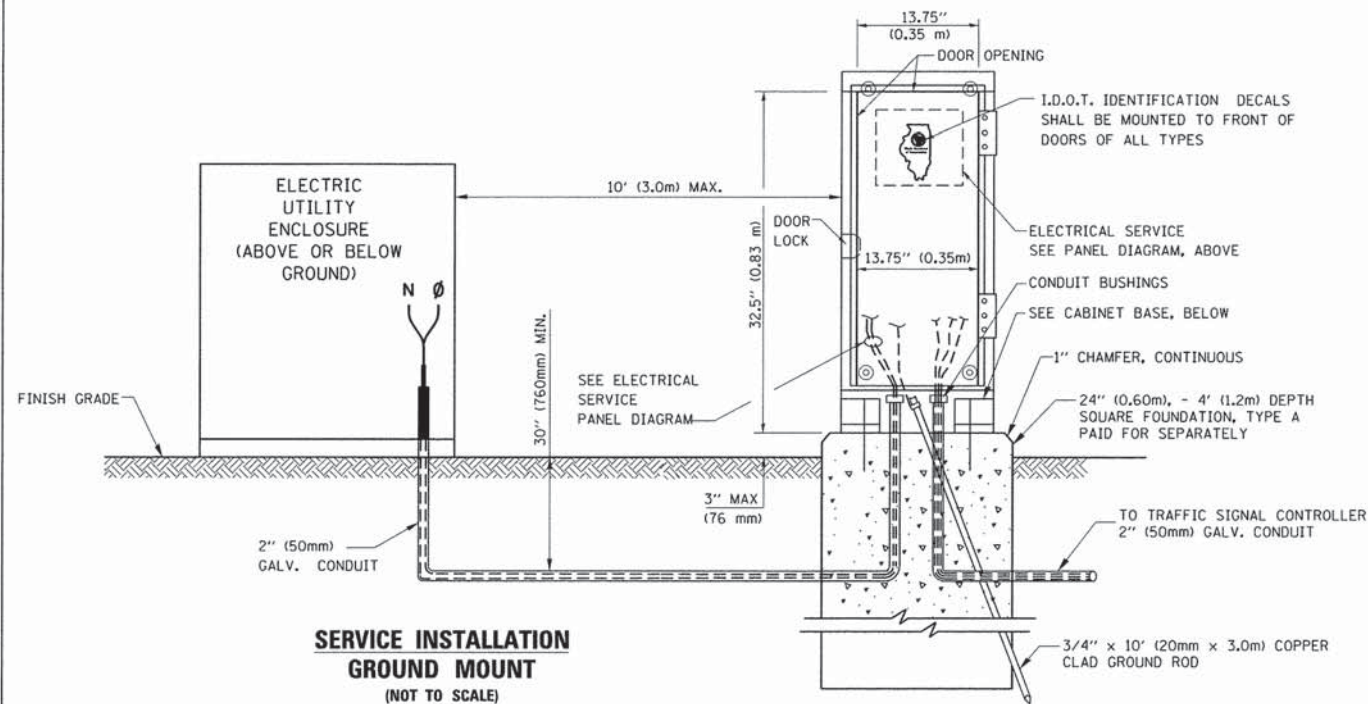


**HANDHOLE COVER & FRAME – GROUNDING DETAIL  
(NOT TO SCALE)**

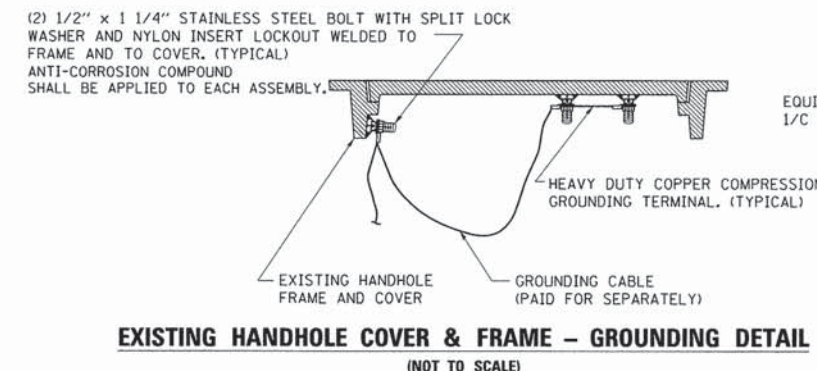


**NOTES:**

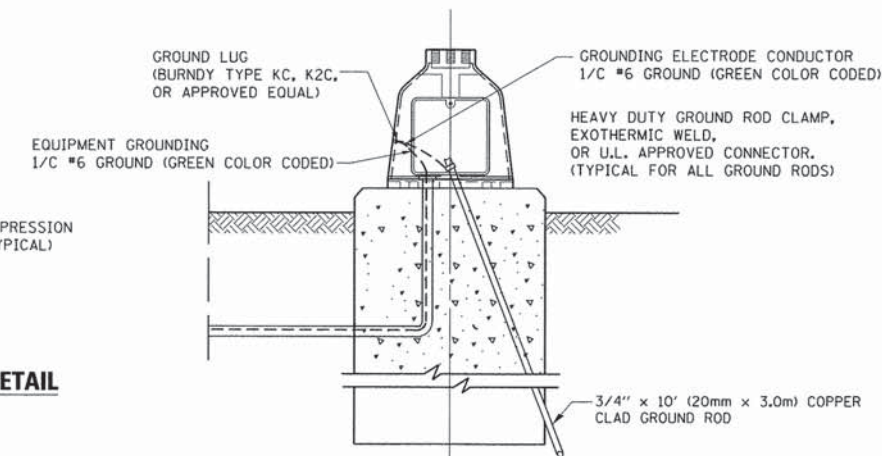
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



**SERVICE INSTALLATION GROUND MOUNT  
(NOT TO SCALE)**

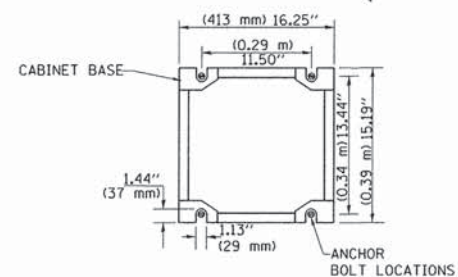


**EXISTING HANDHOLE COVER & FRAME – GROUNDING DETAIL  
(NOT TO SCALE)**



**MAST ARM POLE / POST-GROUNDING DETAIL  
(NOT TO SCALE)**

**CABINET – BASE BOLT PATTERN  
(NOT TO SCALE)**



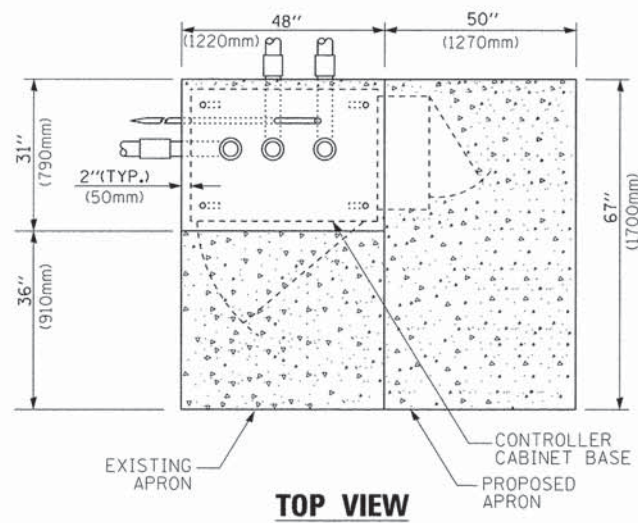
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		DATE - 10-28-09	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

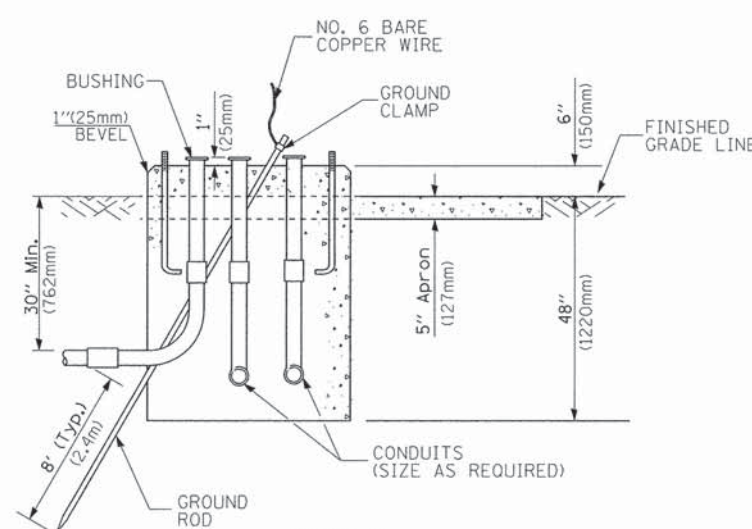
<b>DISTRICT ONE</b>	
<b>STANDARD TRAFFIC SIGNAL DESIGN DETAILS</b>	
SCALE: NONE	SHEET NO. 4 OF 7 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	11-00418-01-SP	KANE	61	8
TS-05		CONTRACT NO. 63862		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

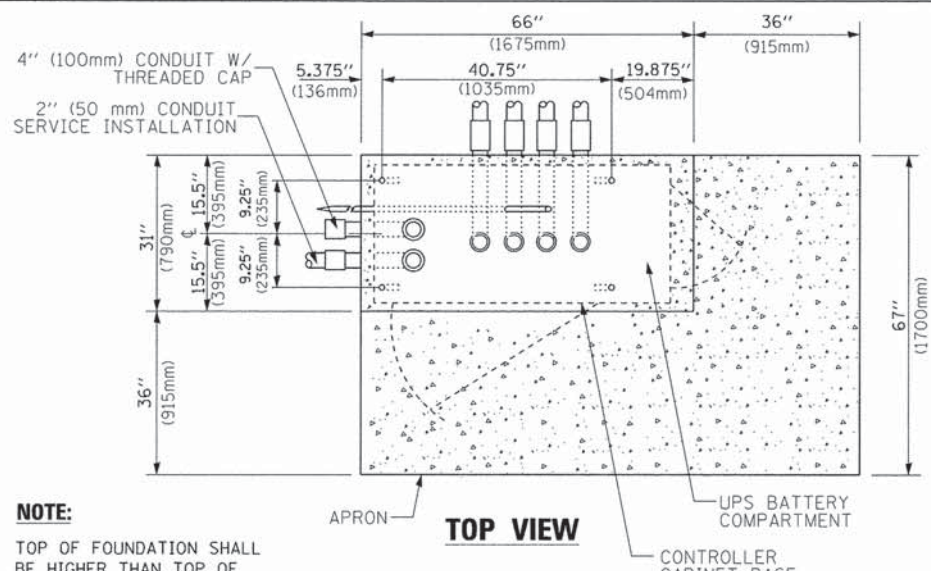




**TOP VIEW**

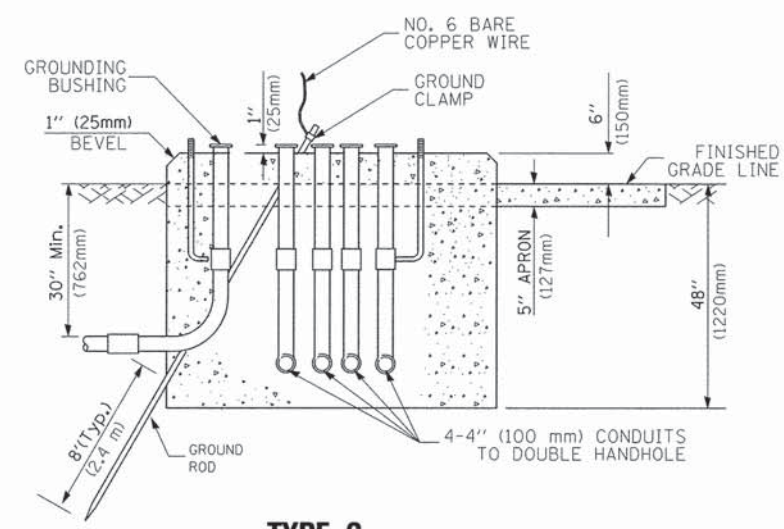


**TYPE D  
FOR GROUND MOUNTED  
CONTROLLER CABINET  
AND UPS BATTERY CABINET**

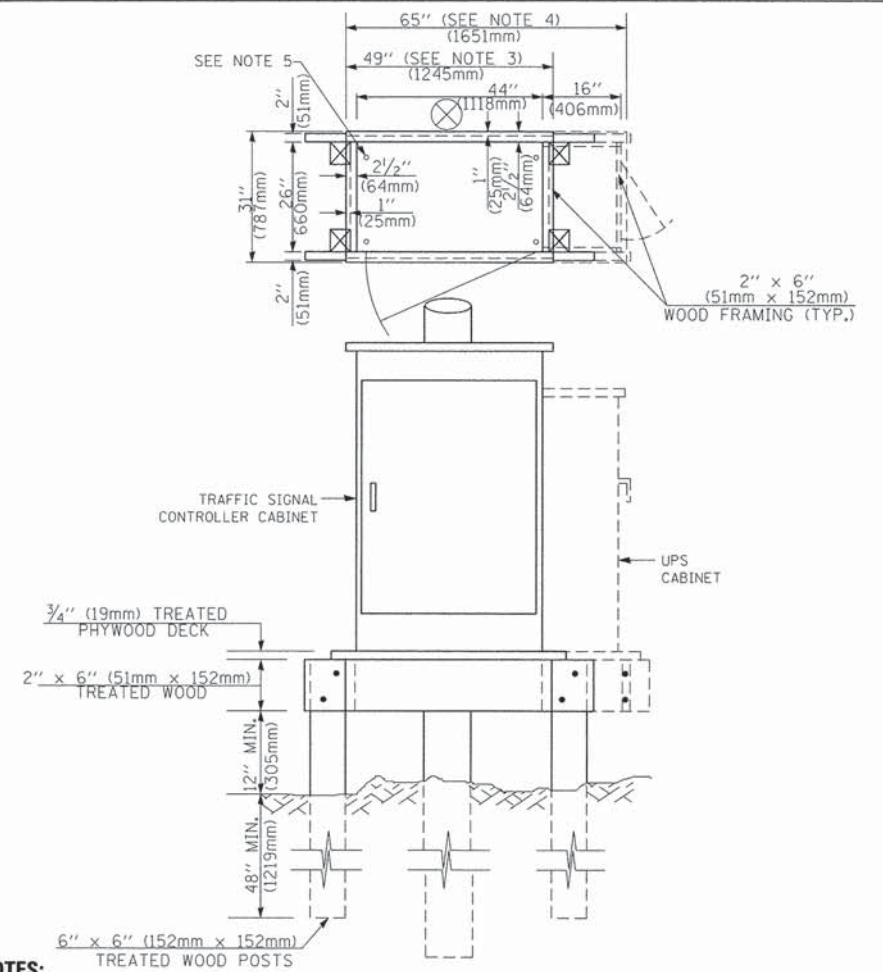


**TOP VIEW**

**NOTE:**  
TOP OF FOUNDATION SHALL BE HIGHER THAN TOP OF DOUBLE HANDHOLE



**TYPE C  
FOR GROUND MOUNTED  
SUPER P (TYPE IV) AND SUPER R (TYPE V)  
CONTROLLER CABINETS**



**NOTES:**

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

**TEMPORARY SIGNAL CONTROLLER  
WOOD SUPPORT PLATFORM**

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

**CABLE SLACK**

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

**VERTICAL CABLE LENGTH**

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

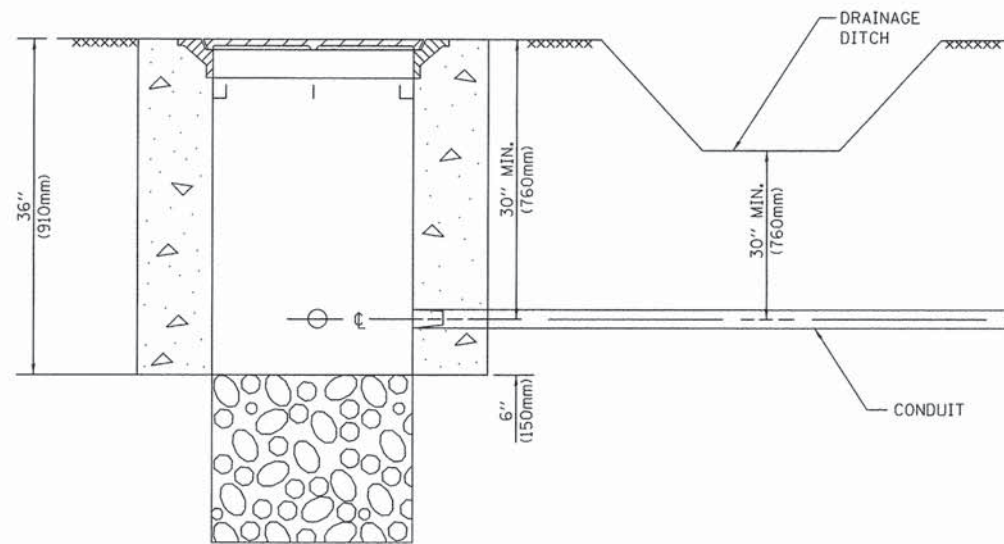
**DEPTH OF FOUNDATION**

MAST ARM LENGTH	① FOUNDATION DEPTH	FOUNDATION DIAMETER	SPIRAL DIAMETER	QUANTITY OF REBARS	SIZE OF REBARS
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

**NOTES:**

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

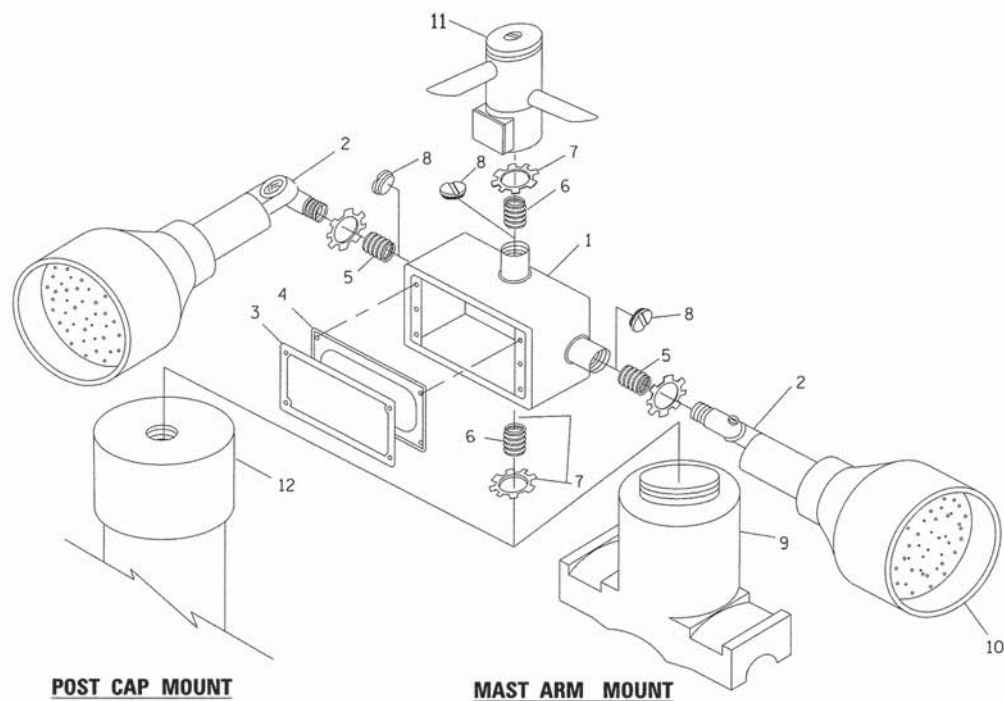
**DEPTH OF MAST ARM FOUNDATIONS, TYPE E**



**NOTES:**

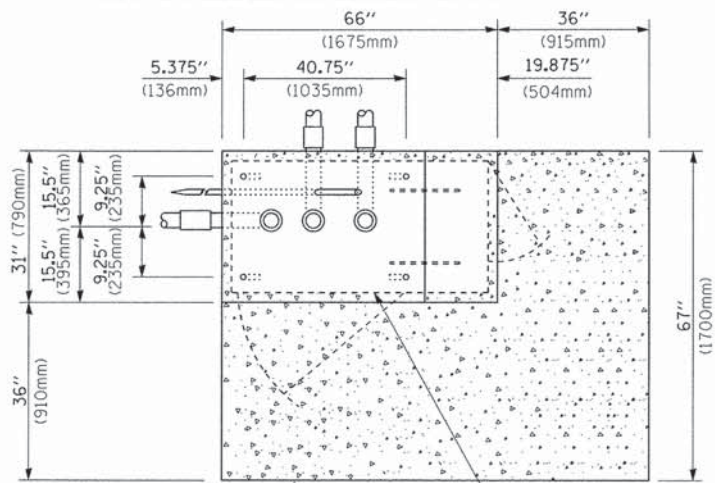
1. CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
2. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
3. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

**HANDHOLE WITH MINIMUM CONDUIT DEPTH**  
(NOT TO SCALE)

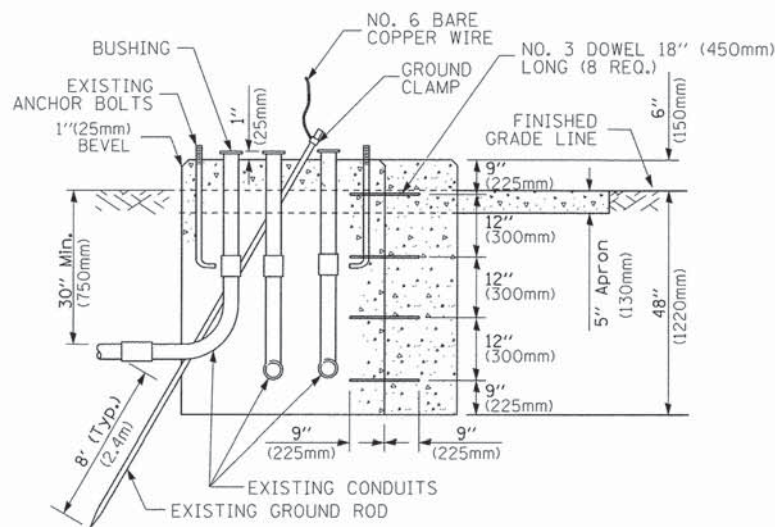


**EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL**

FILE NAME =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14
c:\pw_work\p1dot1\footemj\d0180315\ts05.dgn		DRAWN - BCK	REVISED -
	PLOT SCALE = 50.0000 / in.	CHECKED - DAD	REVISED -
	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -



**TOP VIEW**  
(NOT TO SCALE)

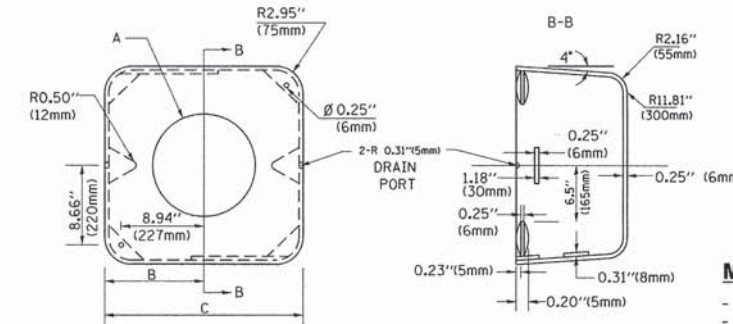


**MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION**  
(NOT TO SCALE)

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

**NOTES:**

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



**MATERIAL:**

- ASTM A36 STEEL
- ASTM A-123 HOT DIPPED GALVANIZED

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

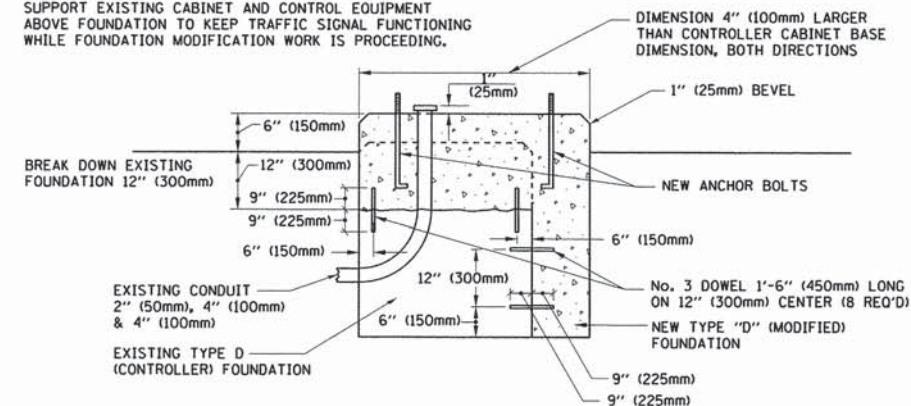
**SHROUD**

**NOTES:**

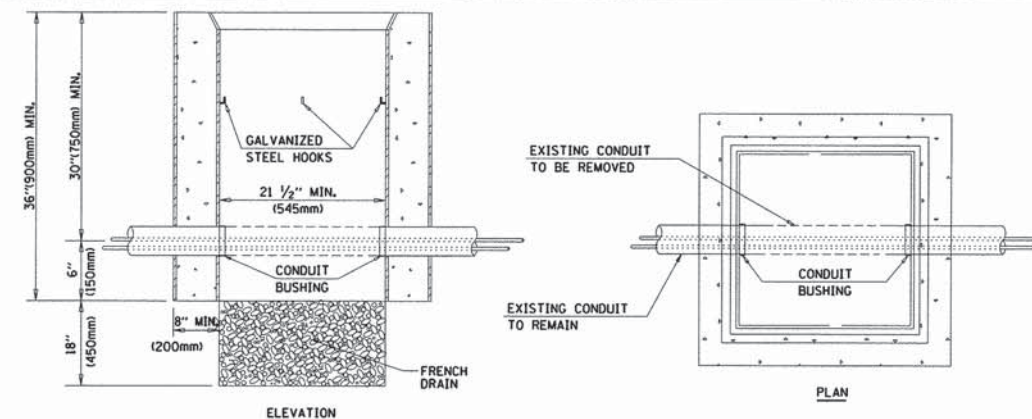
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE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

**NOTE:**

SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



**MODIFY EXISTING TYPE "D" FOUNDATION**



**NOTES:**

1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

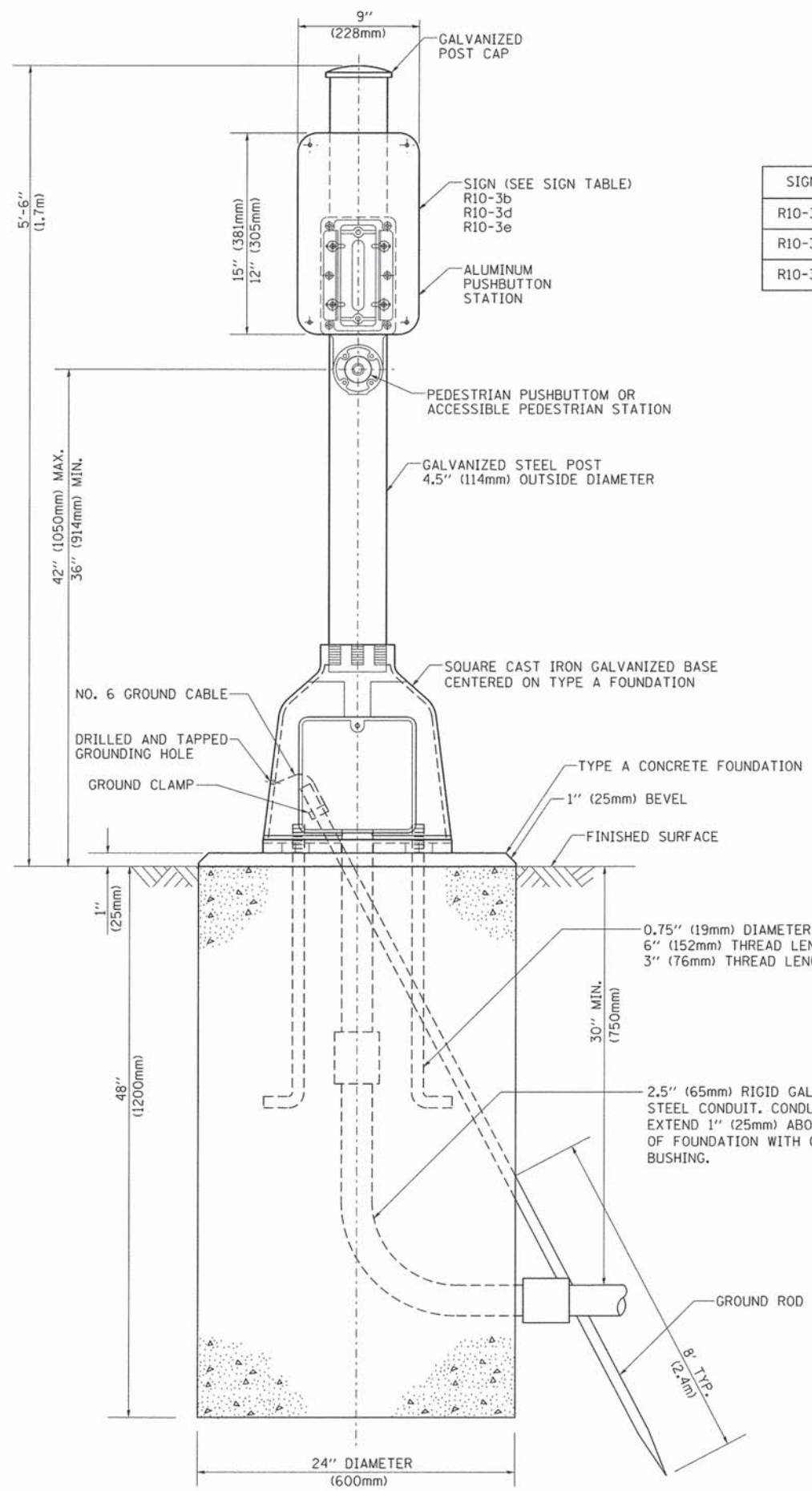
**HANDHOLE TO INTERCEPT EXISTING CONDUIT**

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE**  
**STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

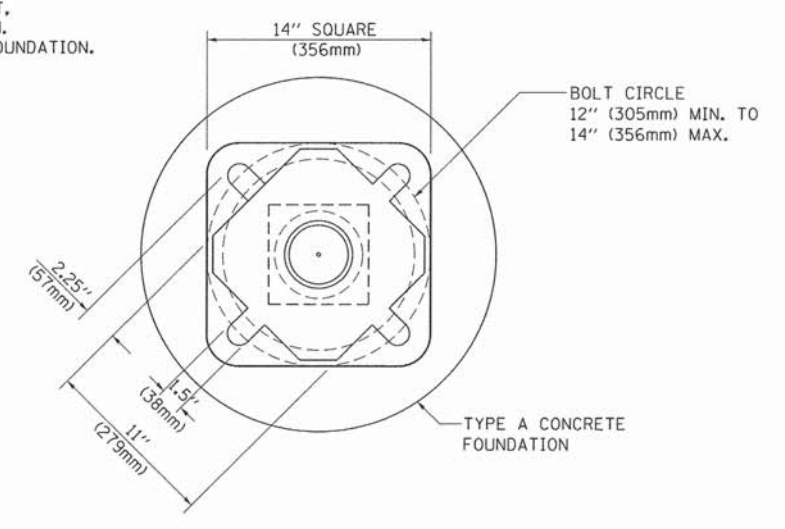
SCALE: NONE SHEET NO. 6 OF 7 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	11-00418-01-SP	KANE	61	10
	TS-05	CONTRACT NO.	63862	
FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT				



**SIGN TABLE**

SIGN	DIMENSIONS
R10-3b	9" (228mm) X 12" (305mm)
R10-3d	9" (228mm) X 12" (305mm)
R10-3e	9" (228mm) X 15" (381mm)



**BOLT PATTERN**  
**PEDESTRIAN PUSH BUTTON POST, TYPE A**

**CONSTRUCTION NOTES:**

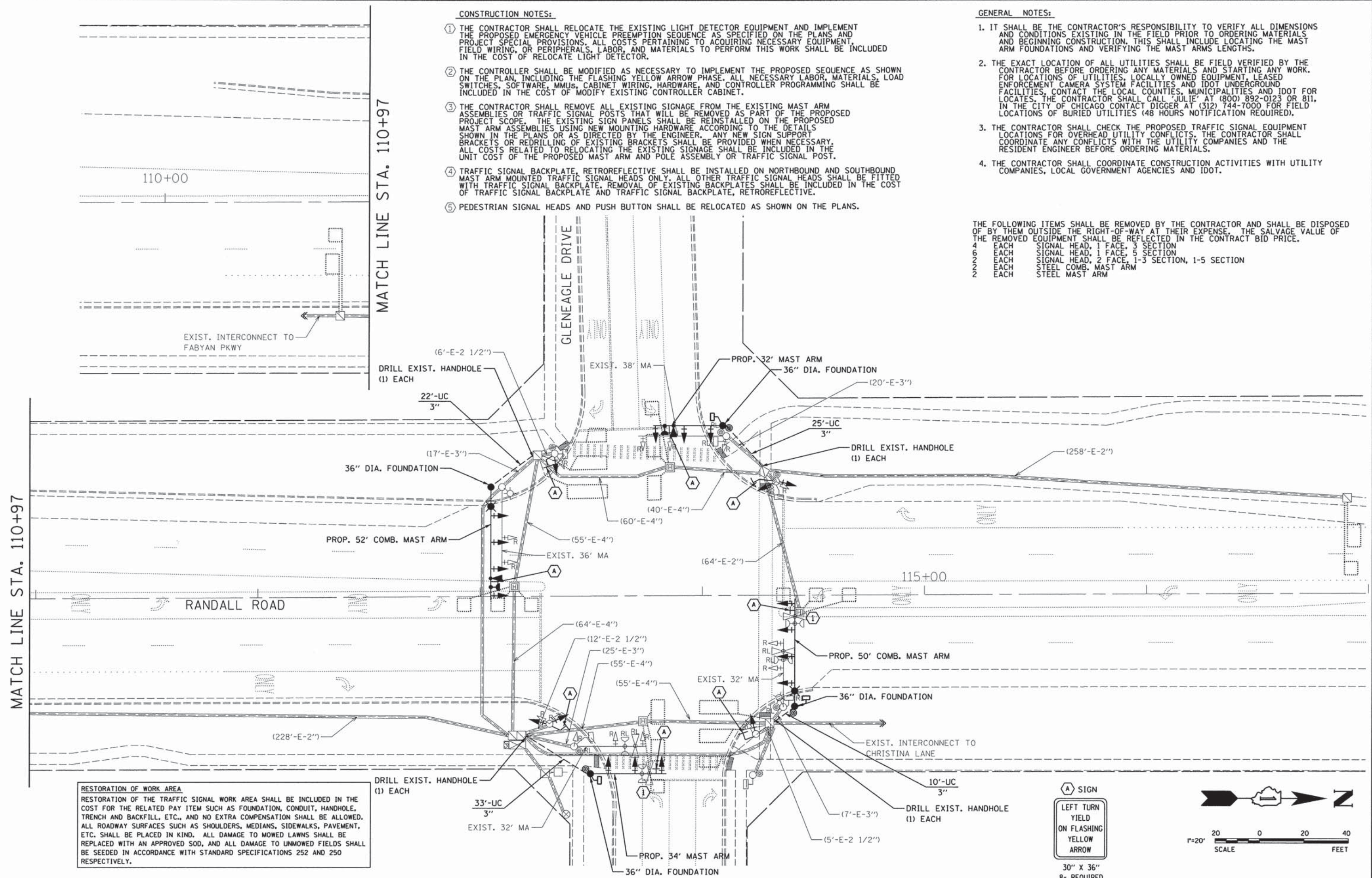
- ① THE CONTRACTOR SHALL RELOCATE THE EXISTING LIGHT DETECTOR EQUIPMENT AND IMPLEMENT THE PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE AS SPECIFIED ON THE PLANS AND PROJECT SPECIAL PROVISIONS. ALL COSTS PERTAINING TO ACQUIRING NECESSARY EQUIPMENT, FIELD WIRING, OR PERIPHERALS, LABOR, AND MATERIALS TO PERFORM THIS WORK SHALL BE INCLUDED IN THE COST OF RELOCATE LIGHT DETECTOR.
- ② THE CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE AS SHOWN ON THE PLAN, INCLUDING THE FLASHING YELLOW ARROW PHASE. ALL NECESSARY LABOR, MATERIALS, LOAD SWITCHES, SOFTWARE, MMUS, CABINET WIRING, HARDWARE AND CONTROLLER PROGRAMMING SHALL BE INCLUDED IN THE COST OF MODIFY EXISTING CONTROLLER CABINET.
- ③ THE CONTRACTOR SHALL REMOVE ALL EXISTING SIGNAGE FROM THE EXISTING MAST ARM ASSEMBLIES OR TRAFFIC SIGNAL POSTS THAT WILL BE REMOVED AS PART OF THE PROPOSED PROJECT SCOPE. THE EXISTING SIGN PANELS SHALL BE REINSTALLED ON THE PROPOSED MAST ARM ASSEMBLIES USING NEW MOUNTING HARDWARE ACCORDING TO THE DETAILS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER. ANY NEW SIGN SUPPORT BRACKETS OR REDRILLING OF EXISTING BRACKETS SHALL BE PROVIDED WHEN NECESSARY. ALL COSTS RELATED TO RELOCATING THE EXISTING SIGNAGE SHALL BE INCLUDED IN THE UNIT COST OF THE PROPOSED MAST ARM AND POLE ASSEMBLY OR TRAFFIC SIGNAL POST.
- ④ TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE SHALL BE INSTALLED ON NORTHBOUND AND SOUTHBOUND MAST ARM MOUNTED TRAFFIC SIGNAL HEADS ONLY. ALL OTHER TRAFFIC SIGNAL HEADS SHALL BE FITTED WITH TRAFFIC SIGNAL BACKPLATE. REMOVAL OF EXISTING BACKPLATES SHALL BE INCLUDED IN THE COST OF TRAFFIC SIGNAL BACKPLATE AND TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE.
- ⑤ PEDESTRIAN SIGNAL HEADS AND PUSH BUTTON SHALL BE RELOCATED AS SHOWN ON THE PLANS.

**GENERAL NOTES:**

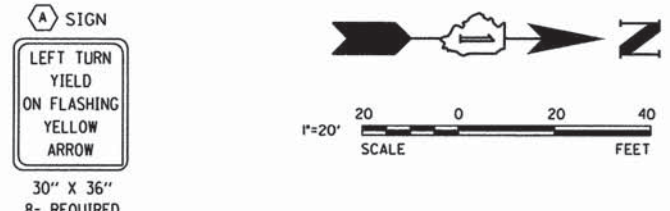
1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION. THIS SHALL INCLUDE LOCATING THE MAST ARM FOUNDATIONS AND VERIFYING THE MAST ARMS LENGTHS.
2. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE ORDERING ANY MATERIALS AND STARTING ANY WORK. FOR LOCATIONS OF UTILITIES, LOCALLY OWNED EQUIPMENT, LEASED ENFORCEMENT CAMERA SYSTEM FACILITIES AND IDOT UNDERGROUND FACILITIES, CONTACT THE LOCAL COUNTIES, MUNICIPALITIES AND IDOT FOR LOCATES. THE CONTRACTOR SHALL CALL 'JULIE' AT (800) 892-0123 OR 811, IN THE CITY OF CHICAGO CONTACT DIGGER AT (312) 744-7000 FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION REQUIRED).
3. THE CONTRACTOR SHALL CHECK THE PROPOSED TRAFFIC SIGNAL EQUIPMENT LOCATIONS FOR OVERHEAD UTILITY CONFLICTS. THE CONTRACTOR SHALL COORDINATE ANY CONFLICTS WITH THE UTILITY COMPANIES AND THE RESIDENT ENGINEER BEFORE ORDERING MATERIALS.
4. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, LOCAL GOVERNMENT AGENCIES AND IDOT.

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 CONTRACT BID PRICE.

4	EACH	SIGNAL HEAD, 1 FACE, 3 SECTION
6	EACH	SIGNAL HEAD, 1 FACE, 5 SECTION
22	EACH	SIGNAL HEAD, 2 FACE, 1-3 SECTION, 1-5 SECTION
2	EACH	STEEL COMB. MAST ARM
2	EACH	STEEL MAST ARM



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



PRINTED DATE: 5/15/2014  
 FILE NAME: K:\Projects\Kane County\2012 HSP\CoDD\Dr-wr\mg\Sheets\Traffic Signal Plans\12\_Randall & Gleneagle TS Plan.dgn



USER NAME = jjuratovac	DESIGNED - JY	REVISED -
PLOT SCALE = 20.0000' / in.	DRAWN - DN	REVISED -
PLOT DATE = 5/15/2014	CHECKED - MR	REVISED -
	DATE - 5/15/2014	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

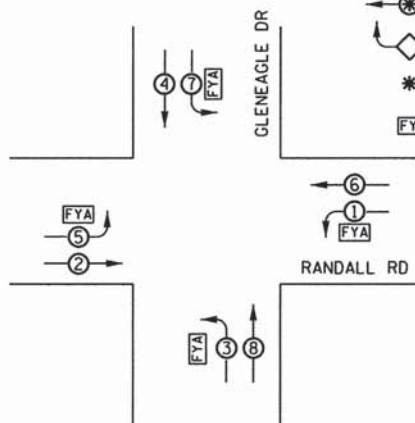
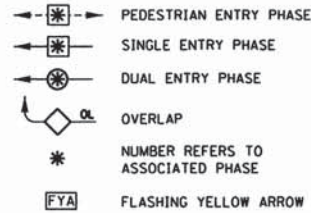
**TRAFFIC SIGNAL PLANS  
 RANDALL ROAD @ GLENEAGLE DRIVE**

SCALE: SHEET NO OF SHEETS STA TO STA

F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
336	11-00418-01-5P	KANE	61	12
CONTRACT NO 63862				
ILLINOIS FEDERAL AID PROJECT				

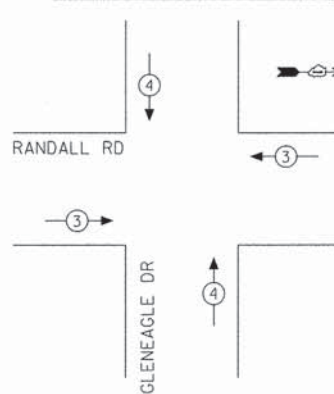
PROPOSED CONTROLLER SEQUENCE

LEGEND

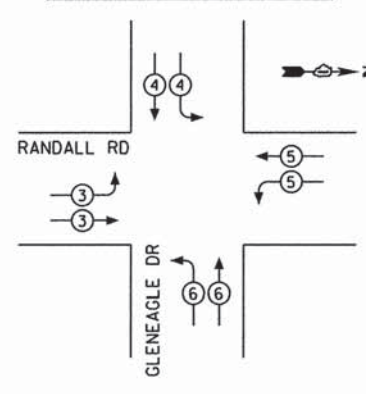


PROPOSED PHASE DESIGNATION DIAGRAM

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

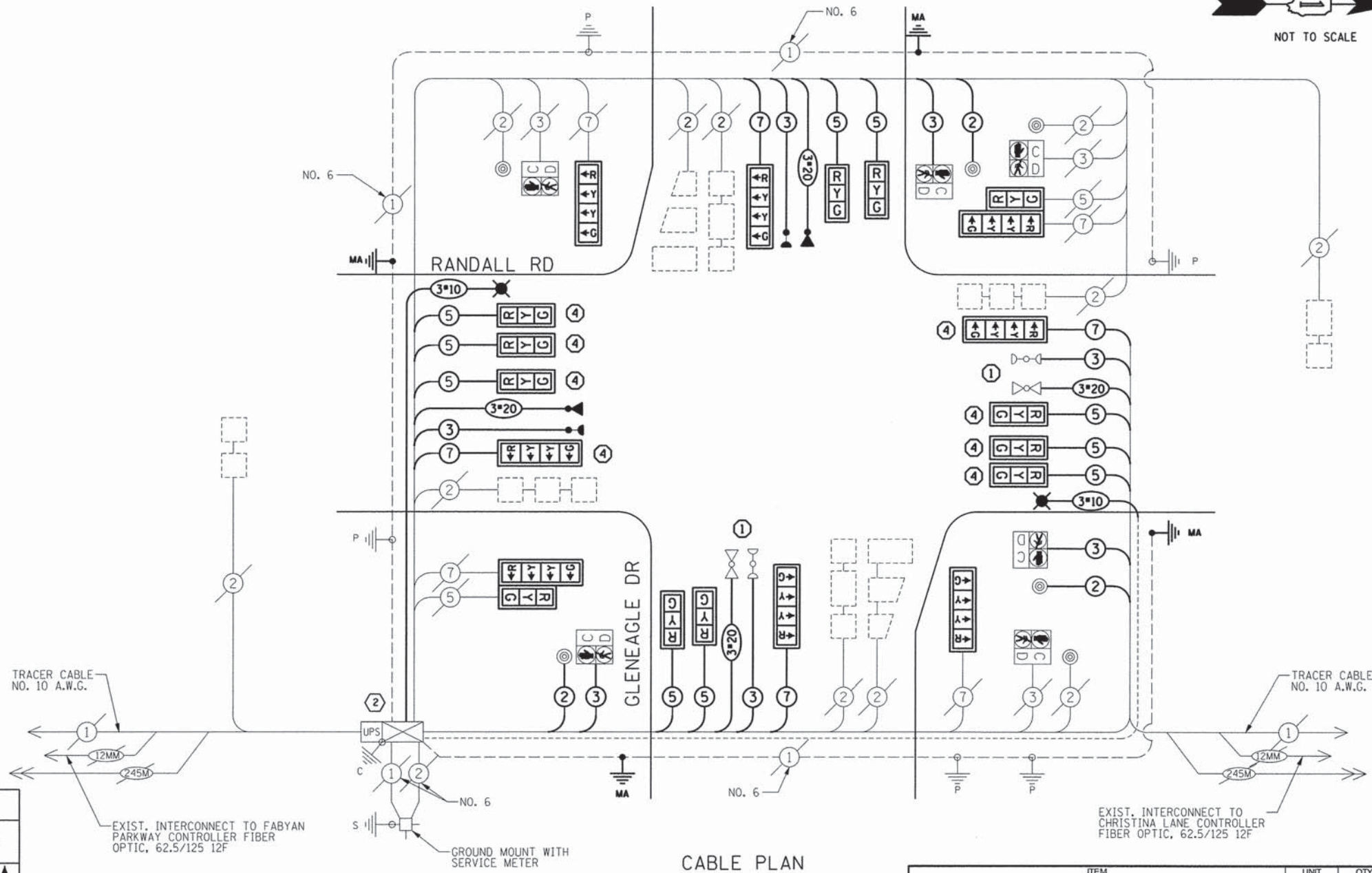


PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

PROPOSED EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3 4 5 6
MOVEMENT	↔ ↓ ↶ ↷



CABLE PLAN

CONSTRUCTION NOTES:

- THE CONTRACTOR SHALL RELOCATE THE EXISTING LIGHT DETECTOR EQUIPMENT AND IMPLEMENT THE PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE AS SPECIFIED ON THE PLANS AND PROJECT SPECIAL PROVISIONS. ALL COSTS PERTAINING TO ACQUIRING NECESSARY EQUIPMENT, FIELD WIRING, OR PERIPHERALS, LABOR, AND MATERIALS TO PERFORM THIS WORK SHALL BE INCLUDED IN THE COST OF RELOCATE LIGHT DETECTOR.
- THE CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE AS SHOWN ON THE PLAN, INCLUDING THE FLASHING YELLOW ARROW PHASE. ALL NECESSARY LABOR, MATERIALS, LOAD SWITCHES, SOFTWARE, MMUs, CABINET WIRING, HARDWARE, AND CONTROLLER PROGRAMMING SHALL BE INCLUDED IN THE COST OF MODIFY EXISTING CONTROLLER CABINET.
- THE CONTRACTOR SHALL REMOVE ALL EXISTING SIGNAGE FROM THE EXISTING MAST ARM ASSEMBLIES OR TRAFFIC SIGNAL POSTS THAT WILL BE REMOVED AS PART OF THE PROPOSED PROJECT SCOPE. THE EXISTING SIGN PANELS SHALL BE REINSTALLED ON THE PROPOSED MAST ARM ASSEMBLIES USING NEW MOUNTING HARDWARE ACCORDING TO THE DETAILS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER. ANY NEW SIGN SUPPORT BRACKETS OR REDRILLING OF EXISTING BRACKETS SHALL BE PROVIDED WHEN NECESSARY. ALL COSTS RELATED TO RELOCATING THE EXISTING SIGNAGE SHALL BE INCLUDED IN THE UNIT COST OF THE PROPOSED MAST ARM AND POLE ASSEMBLY OR TRAFFIC SIGNAL POST.
- TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE SHALL BE INSTALLED ON NORTHBOUND AND SOUTHBOUND MAST ARM MOUNTED TRAFFIC SIGNAL HEADS ONLY. ALL OTHER TRAFFIC SIGNAL HEADS SHALL BE FITTED WITH TRAFFIC SIGNAL BACKPLATE. REMOVAL OF EXISTING BACKPLATES SHALL BE INCLUDED IN THE COST OF TRAFFIC SIGNAL BACKPLATE AND TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE.
- PEDESTRIAN SIGNAL HEADS AND PUSH BUTTON SHALL BE RELOCATED AS SHOWN ON THE PLANS.

ITEM	UNIT	QTY
CHANGEABLE MESSAGE SIGN	CAL MO	0.5
TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	0.0625
TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	0.0625
SIGN PANEL - TYPE 1	FOOT	60
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	90
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/2" NO. 10	FOOT	1436
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 250 WATT	EACH	2
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	591
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1418
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1694
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	827
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	114
STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 50 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 52 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	52
DRILL EXISTING HANDHOLE	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	10
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 2-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-4 SECTION, BRACKET MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE	EACH	12
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	8
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	3
RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	EACH	3
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	4268
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	827
RELOCATE LIGHT DETECTOR	EACH	2
CONSTRUCTION LAYOUT	L SUM	0.0625

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE (INCAND.)	WATTAGE LED	%OPERATION	
SIGNAL (RED)	20	17	0.50	170.0	
(YELLOW)	20	25	0.25	125.0	
(GREEN)	20	15	0.25	75.0	
ARROW		12	0.10		
FYA SECTION	8	12	0.30	28.8	
PED. SIGNAL	6	25	1.00	150.0	
CONTROLLER	1	100	1.00	100.0	
ILLUM. SIGN	0	25	0.05	0.0	
VIDEO SYSTEM		150	1.00	0.0	
UPS	1	25	1.00	25	
FLASHER			0.50		
TOTAL =				673.8	

ENERGY COSTS TO: KANE COUNTY DIVISION OF TRANSPORTATION  
41W011 BURLINGTON ROAD  
ST. CHARLES, IL 60175

ENERGY SUPPLY CONTACT: MIKE WIDHALM  
PHONE: (847) 608-2376  
COMPANY: COMED



USER NAME = jjuratovac  
DESIGNED - JY  
DRAWN - DN  
CHECKED - MR  
DATE - 5/15/2014

REVISOR -  
REVISOR -  
REVISOR -  
REVISOR -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CABLE PLAN  
RANDALL ROAD @ GLENEAGLE DRIVE  
SCALE: SHEET NO OF SHEETS STA TO STA

F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
336	11-00418-01-SP	KANE	61	13

CONTRACT NO 63862  
ILLINOIS FEDERAL AID PROJECT

PRINTED DATE: 5/15/2014  
FILE NAME: K:\Projects\Kane County\2012 HSJPA\ADD-Dr-wrings\Sheets\Traffic Signal Plans\13 Randall & Gleneagle Cable Plan.dgn

**CONSTRUCTION NOTES:**

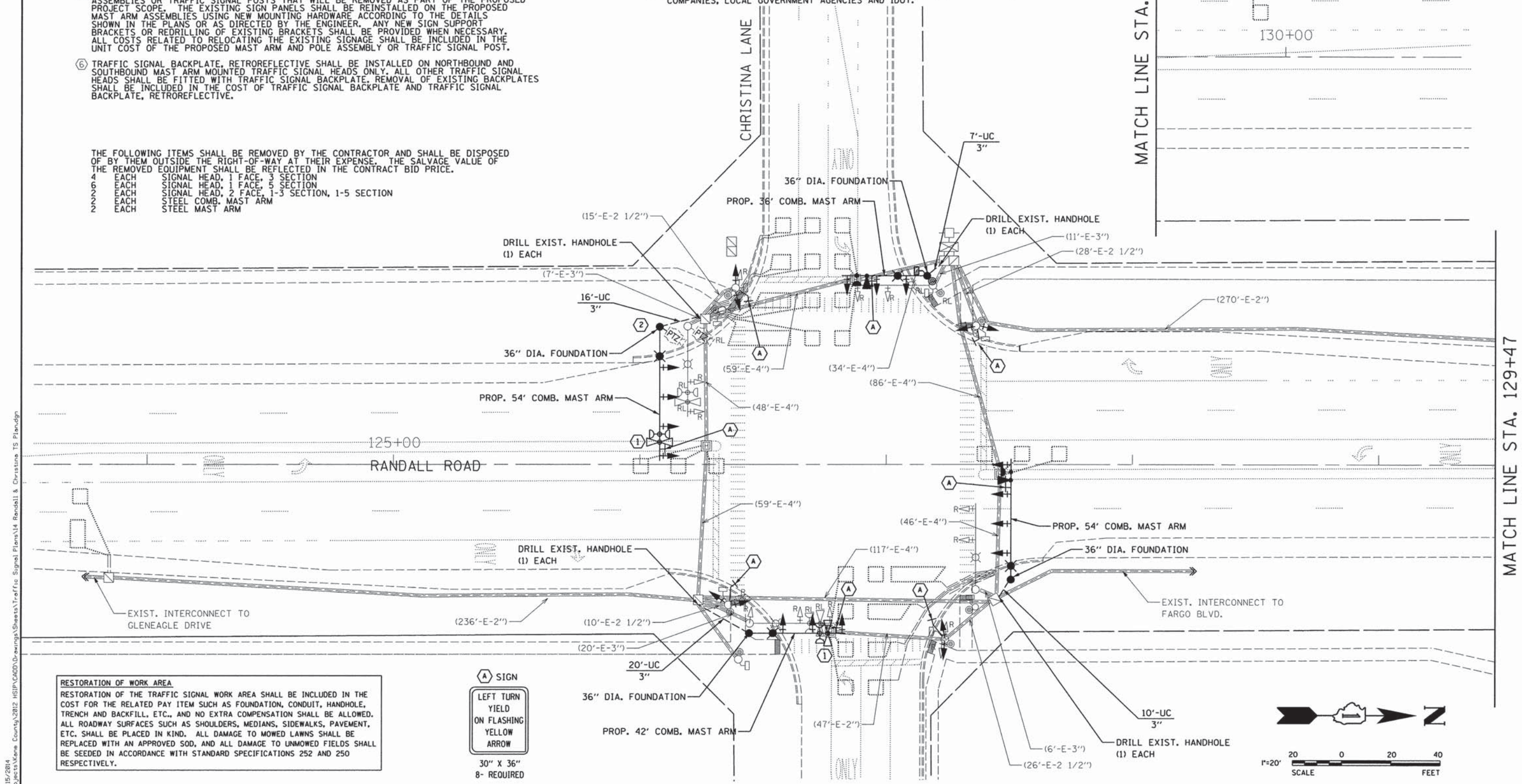
- ① THE CONTRACTOR SHALL RELOCATE THE EXISTING LIGHT DETECTOR EQUIPMENT AND IMPLEMENT THE PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE AS SPECIFIED ON THE PLANS AND PROJECT SPECIAL PROVISIONS. ALL COSTS PERTAINING TO ACQUIRING NECESSARY EQUIPMENT, FIELD WIRING, OR PERIPHERALS, LABOR, AND MATERIALS TO PERFORM THIS WORK SHALL BE INCLUDED IN THE COST OF RELOCATE LIGHT DETECTOR.
- ② THE CONTRACTOR SHALL RELOCATE THE EXISTING PAN-TILT-ZOOM CAMERA EQUIPMENT AS SPECIFIED ON THE PLANS AND PROJECT SPECIAL PROVISIONS. ALL COSTS PERTAINING TO ACQUIRING NECESSARY EQUIPMENT, LABOR, AND MATERIALS TO PERFORM THIS WORK SHALL BE INCLUDED IN RELOCATE EXISTING PTZ CAMERA.
- ③ THE CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE AS SHOWN ON THE PLAN, INCLUDING THE FLASHING YELLOW ARROW PHASE. ALL NECESSARY LABOR, MATERIALS, LOAD SWITCHES, SOFTWARE, MMUs, CABINET WIRING, HARDWARE, AND CONTROLLER PROGRAMMING SHALL BE INCLUDED IN THE COST OF MODIFY EXISTING CONTROLLER CABINET.
- ④ PEDESTRIAN SIGNAL HEADS AND PUSH BUTTON SHALL BE RELOCATED AS SHOWN ON THE PLANS.
- ⑤ THE CONTRACTOR SHALL REMOVE ALL EXISTING SIGNAGE FROM THE EXISTING MAST ARM ASSEMBLIES OR TRAFFIC SIGNAL POSTS THAT WILL BE REMOVED AS PART OF THE PROPOSED PROJECT SCOPE. THE EXISTING SIGN PANELS SHALL BE REINSTALLED ON THE PROPOSED MAST ARM ASSEMBLIES USING NEW MOUNTING HARDWARE ACCORDING TO THE DETAILS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER. ANY NEW SIGN SUPPORT BRACKETS OR REDRILLING OF EXISTING BRACKETS SHALL BE PROVIDED WHEN NECESSARY. ALL COSTS RELATED TO RELOCATING THE EXISTING SIGNAGE SHALL BE INCLUDED IN THE UNIT COST OF THE PROPOSED MAST ARM AND POLE ASSEMBLY OR TRAFFIC SIGNAL POST.
- ⑥ TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE SHALL BE INSTALLED ON NORTHBOUND AND SOUTHBOUND MAST ARM MOUNTED TRAFFIC SIGNAL HEADS ONLY. ALL OTHER TRAFFIC SIGNAL HEADS SHALL BE FITTED WITH TRAFFIC SIGNAL BACKPLATE. REMOVAL OF EXISTING BACKPLATES SHALL BE INCLUDED IN THE COST OF TRAFFIC SIGNAL BACKPLATE AND TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE.

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 CONTRACT BID PRICE.

- 4 EACH SIGNAL HEAD, 1 FACE, 3 SECTION
- 6 EACH SIGNAL HEAD, 1 FACE, 5 SECTION
- 2 EACH SIGNAL HEAD, 2 FACE, 1-3 SECTION, 1-5 SECTION
- 2 EACH STEEL COMB. MAST ARM
- 2 EACH STEEL MAST ARM

**GENERAL NOTES:**

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION. THIS SHALL INCLUDE LOCATING THE MAST ARM FOUNDATIONS AND VERIFYING THE MAST ARMS LENGTHS.
2. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE ORDERING ANY MATERIALS AND STARTING ANY WORK. FOR LOCATIONS OF UTILITIES, LOCALLY OWNED EQUIPMENT, LEASED ENFORCEMENT CAMERA SYSTEM, FACILITIES AND IDOT UNDERGROUND FACILITIES, CONTACT THE LOCAL COUNTIES, MUNICIPALITIES AND IDOT FOR LOCATES. THE CONTRACTOR SHALL CALL 'JULIE' AT (800) 892-0123 OR 811. IN THE CITY OF CHICAGO CONTACT DIGGER AT (312) 744-7000 FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION REQUIRED).
3. THE CONTRACTOR SHALL CHECK THE PROPOSED TRAFFIC SIGNAL EQUIPMENT LOCATIONS FOR OVERHEAD UTILITY CONFLICTS. THE CONTRACTOR SHALL COORDINATE ANY CONFLICTS WITH THE UTILITY COMPANIES AND THE RESIDENT ENGINEER BEFORE ORDERING MATERIALS.
4. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, LOCAL GOVERNMENT AGENCIES AND IDOT.



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



PRINTED DATE: 5/15/2014  
 FILE NAME: K:\Projects\Kane County\2012\_HSP\CD00\Drawings\Sheets\Traffic Signal Plans\14\_Randall & Christina TS Plan.dgn



USER NAME = jjuratovac	DESIGNED - JY	REVISED -
PLOT SCALE = 20,0000' / in.	DRAWN - DN	REVISED -
PLOT DATE = 5/15/2014	CHECKED - MR	REVISED -
	DATE - 5/15/2014	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

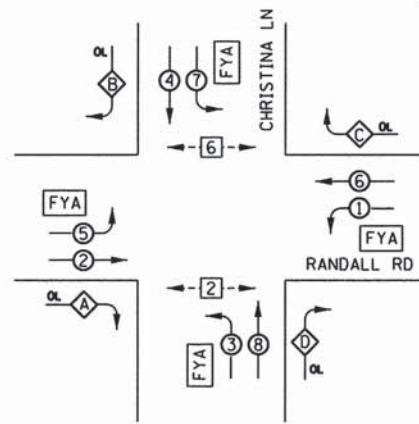
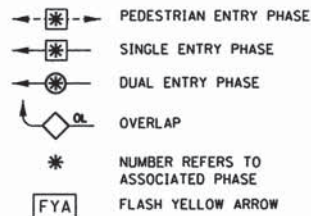
**TRAFFIC SIGNAL PLAN  
 RANDALL ROAD @ CHRISTINA LANE**

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

F.A.P. RTE 336	SECTION 11-00418-01-SP	COUNTY KANE	TOTAL SHEETS 61	SHEET NO 14
CONTRACT NO 63862				
ILLINOIS FEDERAL AID PROJECT				

PROPOSED CONTROLLER SEQUENCE

LEGEND



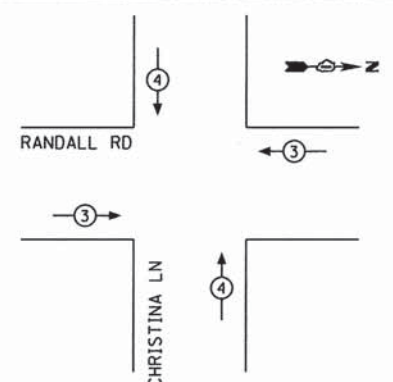
OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3
B	= 4	+ 5
C	= 6	+ 7
D	= 8	+ 1

ITEM	UNIT	QTY
CHANGEABLE MESSAGE SIGN	CAL MO	0.5
TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	0.0625
TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	0.0625
SIGN PANEL - TYPE 1	SQ FT	60
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	53
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/2" NO. 10	FOOT	2743
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 250 WATT	EACH	4
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	38
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1076
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1498
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1509
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	77
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 36 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 42 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 54 FT.	EACH	2
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	54
DRILL EXISTING HANDHOLE	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 2-FACE, 1-4 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	4
TRAFFIC SIGNAL BACKPLATE	EACH	12
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	10
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	1
RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	4548
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	831
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	210
ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 20 4 C	FOOT	210
RELOCATE LIGHT DETECTOR	EACH	2
RELOCATE EXISTING PTZ CAMERA	EACH	1
CONSTRUCTION LAYOUT	L SUM	0.0625

EXIST. INTERCONNECT TO GLENEAGLE CONTROLLER FIBER OPTIC, 62.5/125 12F

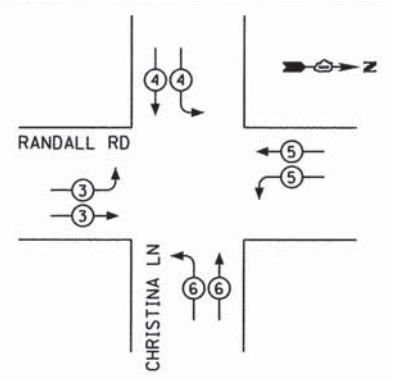
TRACER CABLE NO. 10 A.W.G.

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

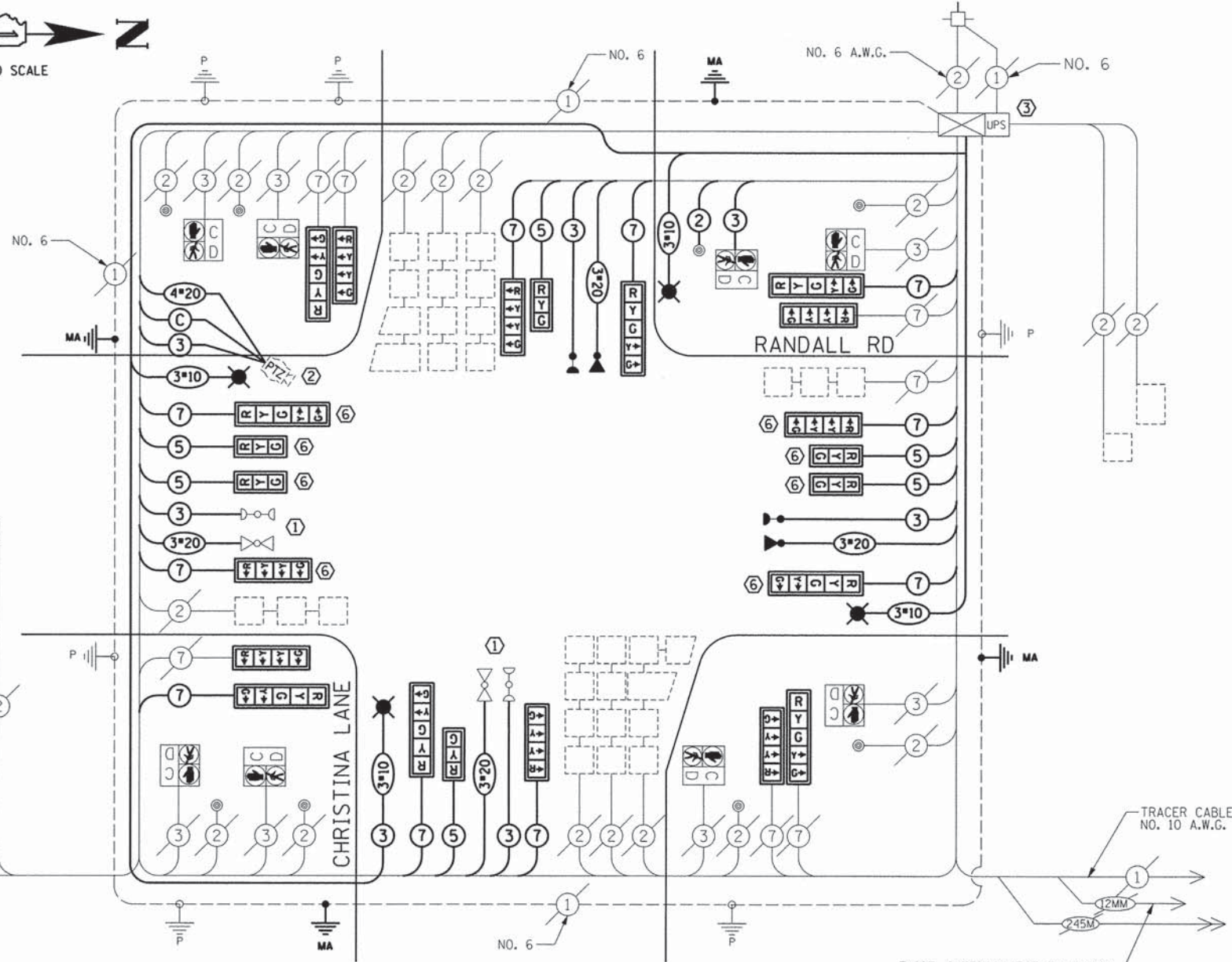
PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3 4 5 6
MOVEMENT	→ ↓ ↙ ↘

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

CABLE PLAN



CONSTRUCTION NOTES:

- THE CONTRACTOR SHALL RELOCATE THE EXISTING LIGHT DETECTOR EQUIPMENT AND IMPLEMENT THE PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE AS SPECIFIED ON THE PLANS AND PROJECT SPECIAL PROVISIONS. ALL COSTS PERTAINING TO ACQUIRING NECESSARY EQUIPMENT, FIELD WIRING, OR PERIPHERALS, LABOR, AND MATERIALS TO PERFORM THIS WORK SHALL BE INCLUDED IN THE COST OF RELOCATE LIGHT DETECTOR.
- THE CONTRACTOR SHALL RELOCATE THE EXISTING PAN-TILT-ZOOM CAMERA EQUIPMENT AS SPECIFIED ON THE PLANS AND PROJECT SPECIFIED PROVISIONS. ALL COSTS PERTAINING TO ACQUIRING NECESSARY EQUIPMENT, LABOR, AND MATERIALS TO PERFORM THIS WORK SHALL BE INCLUDED IN RELOCATE EXISTING PTZ CAMERA.
- THE CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE AS SHOWN ON THE PLAN, INCLUDING THE FLASHING YELLOW ARROW PHASE. ALL NECESSARY LABOR, MATERIALS, LOAD SWITCHES, SOFTWARE, MMUS, CABINET WIRING, HARDWARE, AND CONTROLLER PROGRAMMING SHALL BE INCLUDED IN THE COST OF MODIFY EXISTING CONTROLLER CABINET.
- PEDESTRIAN SIGNAL HEADS AND PUSH BUTTON SHALL BE RELOCATED AS SHOWN ON THE PLANS.
- THE CONTRACTOR SHALL REMOVE ALL EXISTING SIGNAGE FROM THE EXISTING MAST ARM ASSEMBLIES OR TRAFFIC SIGNAL POSTS THAT WILL BE REMOVED AS PART OF THE PROPOSED PROJECT SCOPE. THE EXISTING SIGN PANELS SHALL BE REINSTALLED ON THE PROPOSED MAST ARM ASSEMBLIES USING NEW MOUNTING HARDWARE ACCORDING TO THE DETAILS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER. ANY NEW SIGN SUPPORT BRACKETS OR REDRILLING OF EXISTING BRACKETS SHALL BE PROVIDED WHEN NECESSARY. ALL COSTS RELATED TO RELOCATING THE EXISTING SIGNAGE SHALL BE INCLUDED IN THE UNIT COST OF THE PROPOSED MAST ARM AND POLE ASSEMBLY OR TRAFFIC SIGNAL POST.
- TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE SHALL BE INSTALLED ON NORTHBOUND AND SOUTHBOUND MAST ARM MOUNTED TRAFFIC SIGNAL HEADS ONLY. ALL OTHER TRAFFIC SIGNAL HEADS SHALL BE FITTED WITH TRAFFIC SIGNAL BACKPLATE. REMOVAL OF EXISTING BACKPLATES SHALL BE INCLUDED IN THE COST OF TRAFFIC SIGNAL BACKPLATE AND TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE.

PRINTED DATE: 5/15/2014 FILE NAME: K:\Projects\Kane County\2012\_HSR\CAD\Drawings\Sheets\Traffic Signal Plans\15\_Randall & Christina Cable Plan.dgn

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE (INCAND.)	WATTAGE LED	% OPERATION	
SIGNAL (RED)	22	17	0.50		187.0
(YELLOW)	22	25	0.25		137.5
(GREEN)	22	15	0.25		82.5
ARROW	16	12	0.10		19.2
FYA SECTION	8	12	0.30		28.8
PED. SIGNAL	8	25	1.00		200.0
CONTROLLER	1	100	1.00		100.0
ILLUM. SIGN	0	25	0.05		0.0
VIDEO SYSTEM	1	150	1.00		150.0
UPS	1	25	1.00		25.0
FLASHER			0.50		
TOTAL =					930.0

ENERGY COSTS TO: KANE COUNTY DIVISION OF TRANSPORTATION  
41W011 BURLINGTON ROAD  
ST CHARLES, IL 60175  
CONTACT: MIKE WIDHALM  
PHONE: (847) 608-2376  
COMPANY: COMED

**ESI** CONSULTANTS, LTD.  
USER NAME: jpuratovac  
DESIGNED - JY  
DRAWN - DN  
CHECKED - MR  
DATE - 5/15/2014

DESIGNED - JY	REVISED -
DRAWN - DN	REVISED -
CHECKED - MR	REVISED -
DATE - 5/15/2014	REVISED -

**CABLE PLAN**  
RANDALL ROAD @ CHRISTINA LANE  
SCALE: SHEET NO OF SHEETS STA TO STA

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
336	11-00418-01-SP	KANE	61	15
CONTRACT NO 63862				
ILLINOIS FEDERAL AID PROJECT				

**CONSTRUCTION NOTES:**

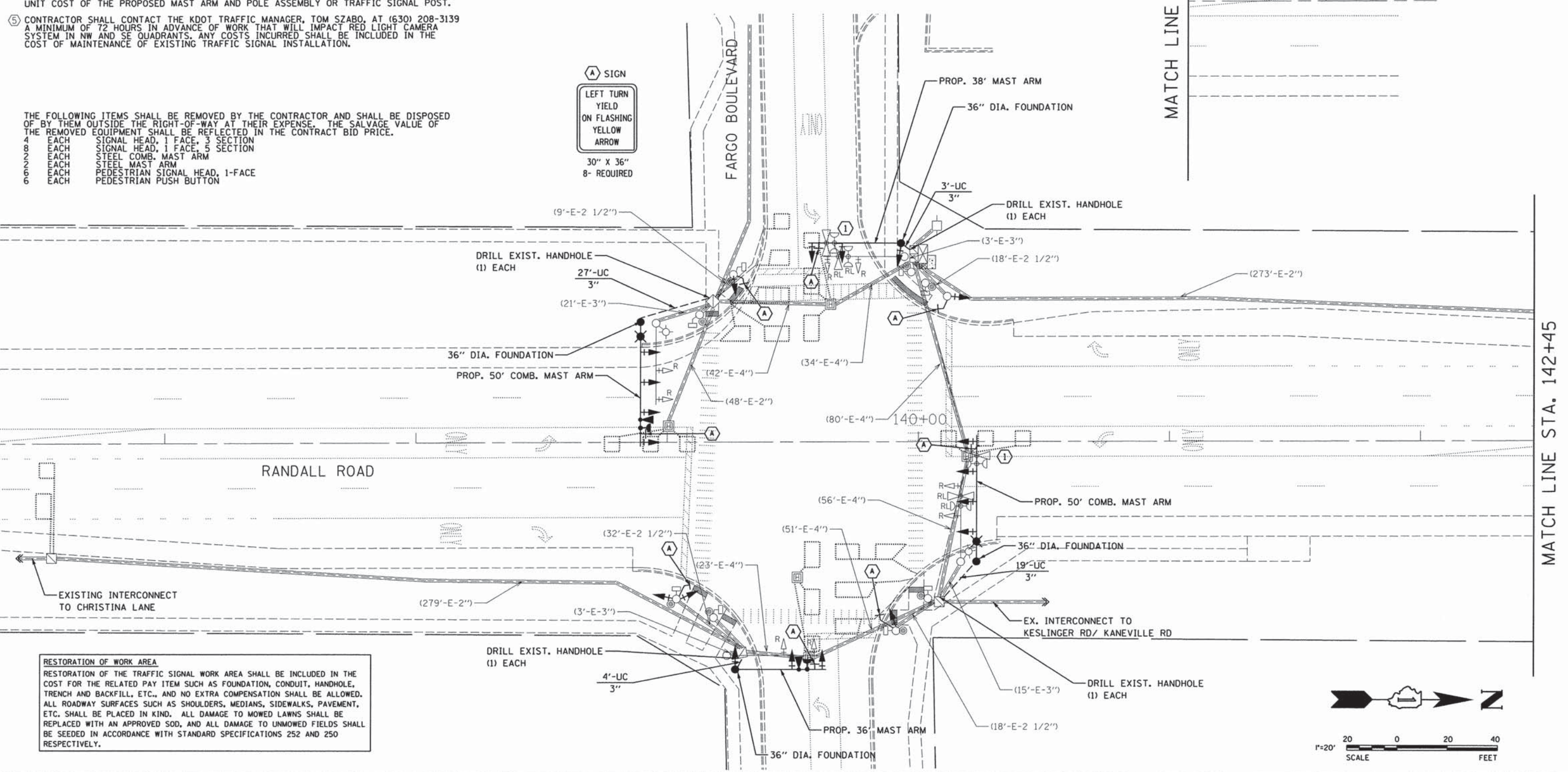
- ① THE CONTRACTOR SHALL RELOCATE THE EXISTING LIGHT DETECTOR EQUIPMENT AND IMPLEMENT THE PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE AS SPECIFIED ON THE PLANS AND PROJECT SPECIAL PROVISIONS. ALL COSTS PERTAINING TO ACQUIRING NECESSARY EQUIPMENT, FIELD WIRING, OR PERIPHERALS, LABOR, AND MATERIALS TO PERFORM THIS WORK SHALL BE INCLUDED IN THE COST OF RELOCATE LIGHT DETECTOR.
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- ⑤ CONTRACTOR SHALL CONTACT THE KDOT TRAFFIC MANAGER, TOM SZABO, AT (630) 208-3139 A MINIMUM OF 72 HOURS IN ADVANCE OF WORK THAT WILL IMPACT RED LIGHT CAMERA SYSTEM IN NW AND SE QUADRANTS. ANY COSTS INCURRED SHALL BE INCLUDED IN THE COST OF MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION.

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 CONTRACT BID PRICE.

- 4 EACH SIGNAL HEAD, 1 FACE, 3 SECTION
- 8 EACH SIGNAL HEAD, 1 FACE, 5 SECTION
- 2 EACH STEEL COMB. MAST ARM
- 2 EACH STEEL MAST ARM
- 6 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 6 EACH PEDESTRIAN PUSH BUTTON

**GENERAL NOTES:**

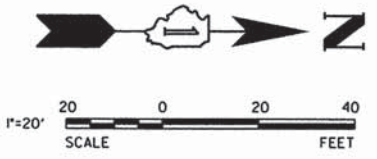
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4. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, LOCAL GOVERNMENT AGENCIES AND IDOT.



MATCH LINE STA. 142+45

MATCH LINE STA. 142+45

**RESTORATION OF WORK AREA**  
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PRINTED DATE: 5/15/2014 FILE NAME: K:\Projects\Kane County\2012\_HSP\CD\Drawings\Sheets\Traffic Signal Plans\6\_Randall & Fargo\_TS\_Plan.dgn



USER NAME = jjuratovac	DESIGNED - JY	REVISED -
PLOT SCALE = 20,0000' / in.	DRAWN - DN	REVISED -
PLOT DATE = 5/15/2014	CHECKED - MR	REVISED -
	DATE - 5/15/2014	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

**TRAFFIC SIGNAL PLAN**  
**RANDALL ROAD @ FARGO BOULEVARD**

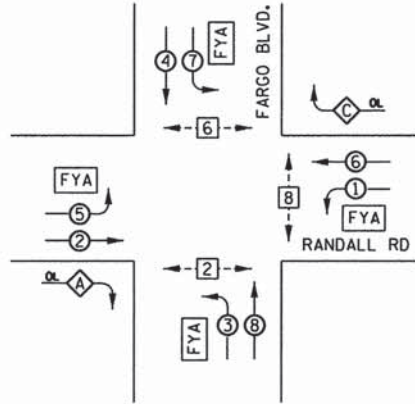
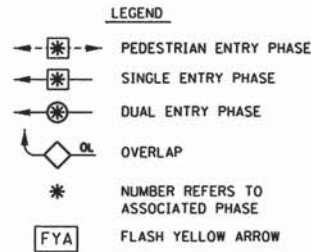
SCALE: SHEET NO OF SHEETS STA TO STA

F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
336	11-00418-01-SP	KANE	61	16
CONTRACT NO 63862				

ILLINOIS FEDERAL AID PROJECT



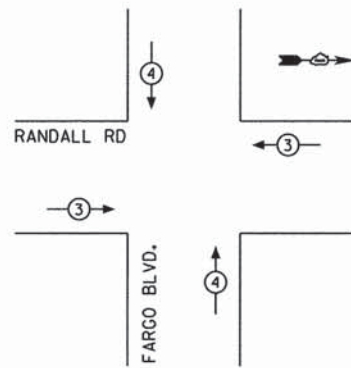
**CONTROLLER SEQUENCE**



**RIGHT TURN OVERLAP PHASE DESIGNATION**

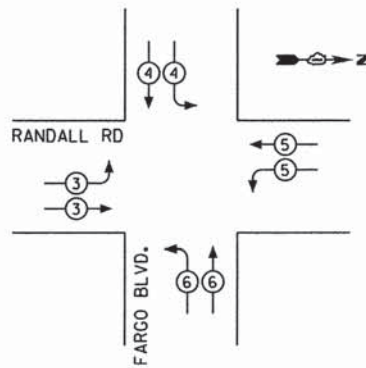
OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2 + 3	
C	= 6 + 7	

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**

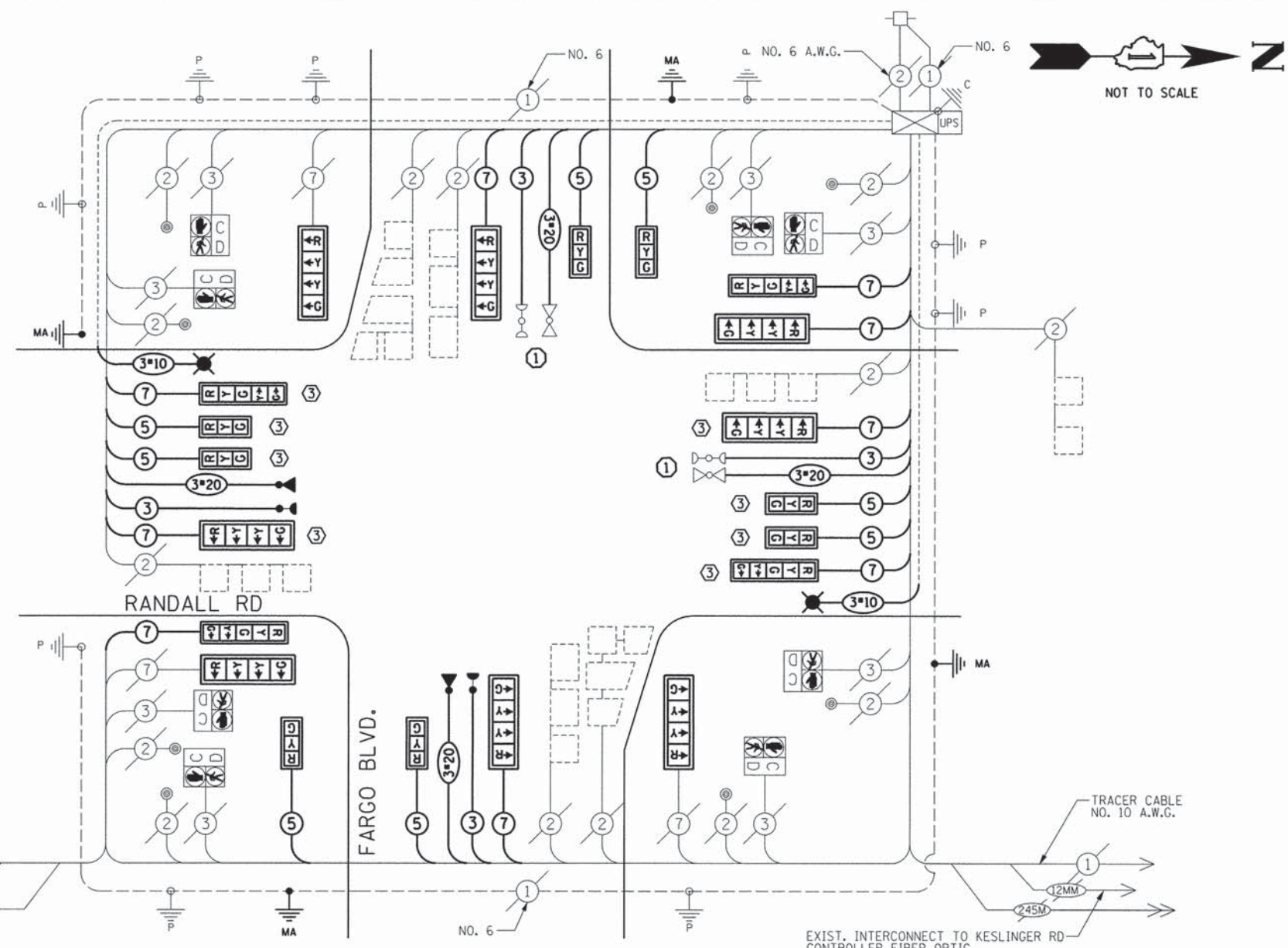


EXISTING EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	→	↑

**PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE**



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



**CABLE PLAN**

**CONSTRUCTION NOTES:**

- THE CONTRACTOR SHALL RELOCATE THE EXISTING LIGHT DETECTOR EQUIPMENT AND IMPLEMENT THE PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE AS SPECIFIED ON THE PLANS AND PROJECT SPECIAL PROVISIONS. ALL COSTS PERTAINING TO ACQUIRING NECESSARY EQUIPMENT, FIELD WIRING, OR PERIPHERALS, LABOR, AND MATERIALS TO PERFORM THIS WORK SHALL BE INCLUDED IN THE COST OF RELOCATE LIGHT DETECTOR.
- THE CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE AS SHOWN ON THE PLAN, INCLUDING THE FLASHING YELLOW ARROW PHASE. ALL NECESSARY LABOR, MATERIALS, LOAD SWITCHES, SOFTWARE, MMUS, CABINET WIRING, HARDWARE, AND CONTROLLER PROGRAMMING SHALL BE INCLUDED IN THE COST OF MODIFY EXISTING CONTROLLER CABINET.
- TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE SHALL BE INSTALLED ON NORTHBOUND AND SOUTHBOUND MAST ARM MOUNTED TRAFFIC SIGNAL HEADS ONLY. ALL OTHER TRAFFIC SIGNAL HEADS SHALL BE FITTED WITH TRAFFIC SIGNAL BACKPLATE. REMOVAL OF EXISTING BACKPLATES SHALL BE INCLUDED IN THE COST OF TRAFFIC SIGNAL BACKPLATE AND TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE.
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ITEM	UNIT	QTY
CHANGEABLE MESSAGE SIGN	CAL MO	0.5
TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	0.0625
TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	0.0625
SIGN PANEL - TYPE 1	SQ FT	60
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	53
ELECTRIC CABLE IN CONDUIT, 600V (PLP-TYPE USE) 1/2" NO. 10	FOOT	1277
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 250 WATT	EACH	2
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	763
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1351
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1392
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	77
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 50 FT.	EACH	2
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	52
DRILL EXISTING HANDHOLE	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 2-FACE, 1-4 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE	EACH	12
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	8
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2501
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	763
RELOCATE LIGHT DETECTOR	EACH	2
CONSTRUCTION LAYOUT	L SUM	0.0625

PRINTED DATE: 5/15/2014 FILE NAME: K:\Projects\Kane County\2012 HSP\CAD\Drawings\Sheets\Traffic Signal Plans\17 Randall & Fargo Cable Plan.dgn

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE (INCAND.)	% OPERATION	LED	
SIGNAL (RED)	20	17	0.50		170.0
(YELLOW)	20	25	0.25		125.0
(GREEN)	20	15	0.25		75.0
ARROW	8	12	0.10		9.6
FYA SECTION	8	12	0.30		28.8
PED. SIGNAL	8	25	1.00		150.0
CONTROLLER	1	100	1.00		100.0
ILLUM. SIGN	0	25	0.05		0.0
VIDEO SYSTEM	1	150	1.00		0.0
UPS	1	25	1.00		25
FLASHER			0.50		
<b>ENERGY COSTS TO:</b>					<b>TOTAL = 683.4</b>

KANE COUNTY DIVISION OF TRANSPORTATION  
41W011 BURLINGTON ROAD  
ST CHARLES, IL 60175  
ENERGY SUPPLY CONTACT: MIKE WIDHALM  
PHONE: (847) 608-2376  
COMPANY: COMED

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DATE = 5/15/2014

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REVISOR -  
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REVISOR -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**CABLE PLAN**  
**RANDALL ROAD @ FARGO BLVD.**

SCALE: SHEET NO OF SHEETS STA TO STA

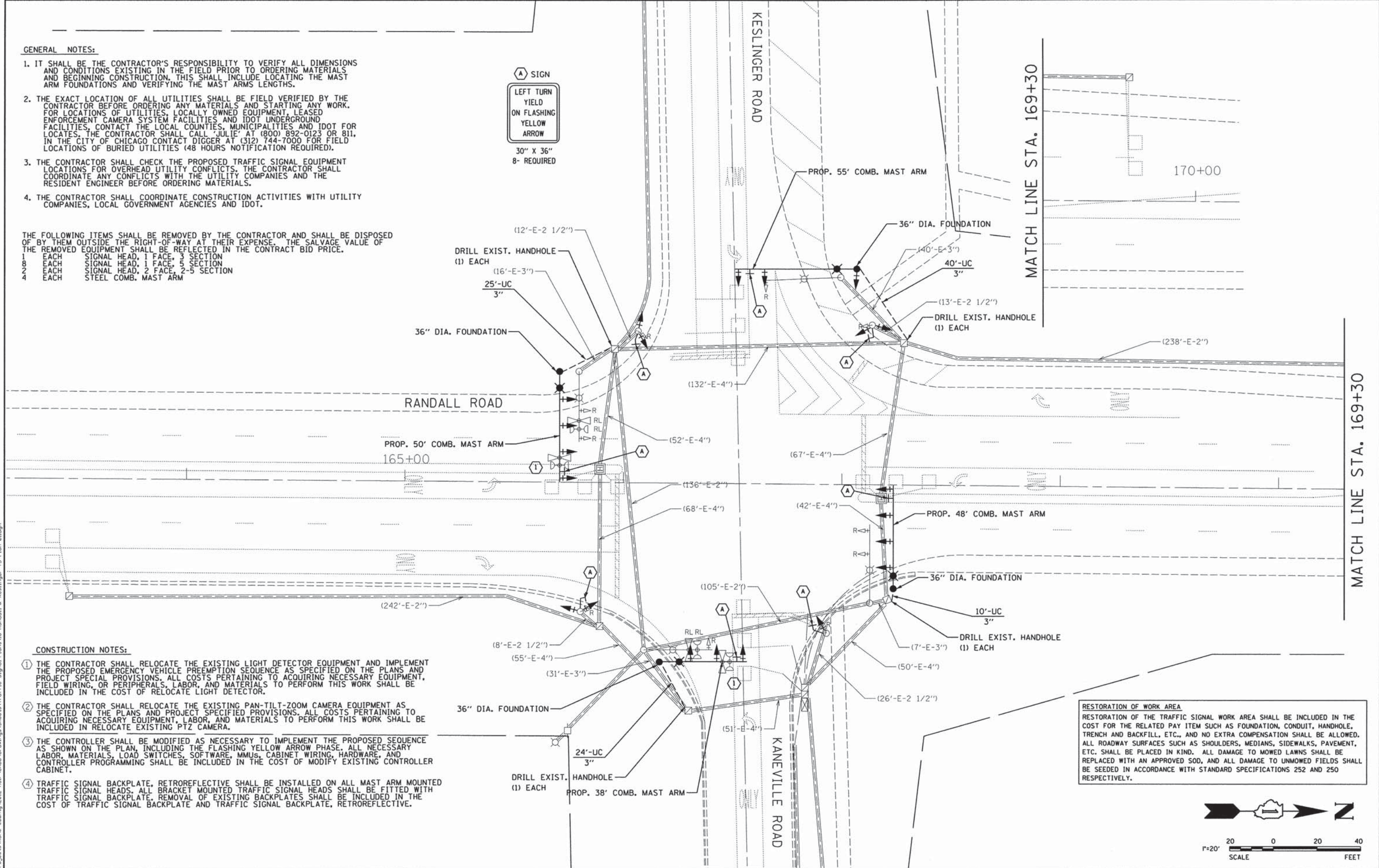
F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
336	11-00418-01-SP	KANE	61	17
CONTRACT NO 63862				
ILLINOIS FEDERAL AID PROJECT				

**GENERAL NOTES:**

- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION. THIS SHALL INCLUDE LOCATING THE MAST ARM FOUNDATIONS AND VERIFYING THE MAST ARMS LENGTHS.
- THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE ORDERING ANY MATERIALS AND STARTING ANY WORK. FOR LOCATIONS OF UTILITIES, LOCALLY OWNED EQUIPMENT, LEASED ENFORCEMENT CAMERA SYSTEM FACILITIES AND IDOT UNDERGROUND FACILITIES, CONTACT THE LOCAL COUNTIES, MUNICIPALITIES AND IDOT FOR LOCATES. THE CONTRACTOR SHALL CALL 'JULIE' AT (800) 892-0123 OR 811, IN THE CITY OF CHICAGO CONTACT DIGGER AT (312) 744-7000 FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION REQUIRED).
- THE CONTRACTOR SHALL CHECK THE PROPOSED TRAFFIC SIGNAL EQUIPMENT LOCATIONS FOR OVERHEAD UTILITY CONFLICTS. THE CONTRACTOR SHALL COORDINATE ANY CONFLICTS WITH THE UTILITY COMPANIES AND THE RESIDENT ENGINEER BEFORE ORDERING MATERIALS.
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, LOCAL GOVERNMENT AGENCIES AND IDOT.

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 CONTRACT BID PRICE.

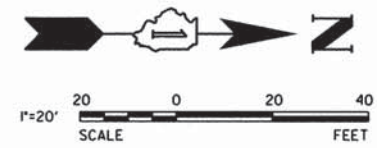
- |   |      |                                  |
|---|------|----------------------------------|
| 1 | EACH | SIGNAL HEAD, 1 FACE, 3 SECTION   |
| 8 | EACH | SIGNAL HEAD, 1 FACE, 5 SECTION   |
| 2 | EACH | SIGNAL HEAD, 2 FACE, 2-5 SECTION |
| 4 | EACH | STEEL COMB. MAST ARM             |



**CONSTRUCTION NOTES:**

- THE CONTRACTOR SHALL RELOCATE THE EXISTING LIGHT DETECTOR EQUIPMENT AND IMPLEMENT THE PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE AS SPECIFIED ON THE PLANS AND PROJECT SPECIAL PROVISIONS. ALL COSTS PERTAINING TO ACQUIRING NECESSARY EQUIPMENT, FIELD WIRING, OR PERIPHERALS, LABOR, AND MATERIALS TO PERFORM THIS WORK SHALL BE INCLUDED IN THE COST OF RELOCATE LIGHT DETECTOR.
- THE CONTRACTOR SHALL RELOCATE THE EXISTING PAN-TILT-ZOOM CAMERA EQUIPMENT AS SPECIFIED ON THE PLANS AND PROJECT SPECIFIED PROVISIONS. ALL COSTS PERTAINING TO ACQUIRING NECESSARY EQUIPMENT, LABOR, AND MATERIALS TO PERFORM THIS WORK SHALL BE INCLUDED IN RELOCATE EXISTING PTZ CAMERA.
- THE CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE AS SHOWN ON THE PLAN, INCLUDING THE FLASHING YELLOW ARROW PHASE. ALL NECESSARY LABOR, MATERIALS, LOAD SWITCHES, SOFTWARE, MMUs, CABINET WIRING, HARDWARE, AND CONTROLLER PROGRAMMING SHALL BE INCLUDED IN THE COST OF MODIFY EXISTING CONTROLLER CABINET.
- TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE SHALL BE INSTALLED ON ALL MAST ARM MOUNTED TRAFFIC SIGNAL HEADS. ALL BRACKET MOUNTED TRAFFIC SIGNAL HEADS SHALL BE FITTED WITH TRAFFIC SIGNAL BACKPLATE. REMOVAL OF EXISTING BACKPLATES SHALL BE INCLUDED IN THE COST OF TRAFFIC SIGNAL BACKPLATE AND TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE.

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



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PLOT DATE = 5/15/2014	CHECKED - MR	REVISED -
	DATE - 5/15/2014	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

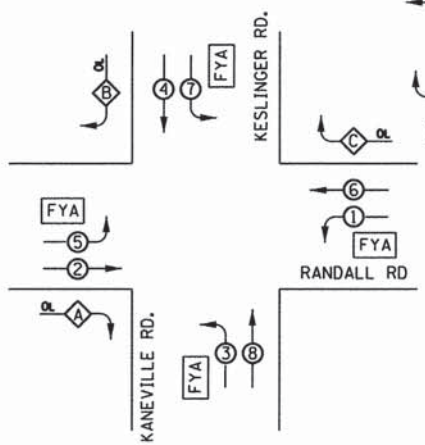
**TRAFFIC SIGNAL PLANS**  
**RANDALL ROAD @ KESLINGER ROAD/ KANEVILLE ROAD**  
 SCALE: SHEET NO OF SHEETS STA TO STA

F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
336	11-00418-01-SP	KANE	61	18
CONTRACT NO 63862				
ILLINOIS FEDERAL AID PROJECT				

**CONTROLLER SEQUENCE**

**LEGEND**

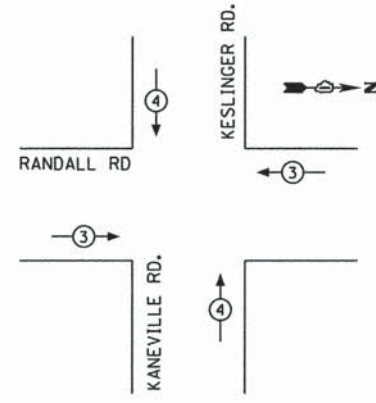
- ⊛ PEDESTRIAN ENTRY PHASE
- ⊙ DUAL ENTRY PHASE
- \* NUMBER REFERS TO ASSOCIATED PHASE
- ◇ OVERLAP
- ⚡ FLASH YELLOW ARROW



**RIGHT TURN OVERLAP PHASE DESIGNATION**

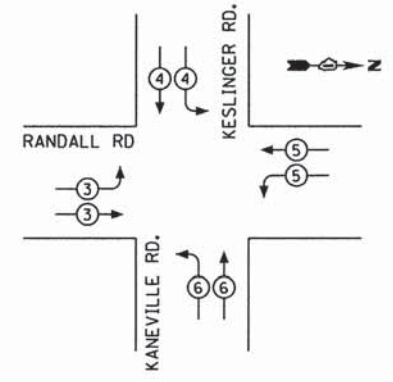
OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A =	2 +	3
B =	4 +	5
C =	6 +	7

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**

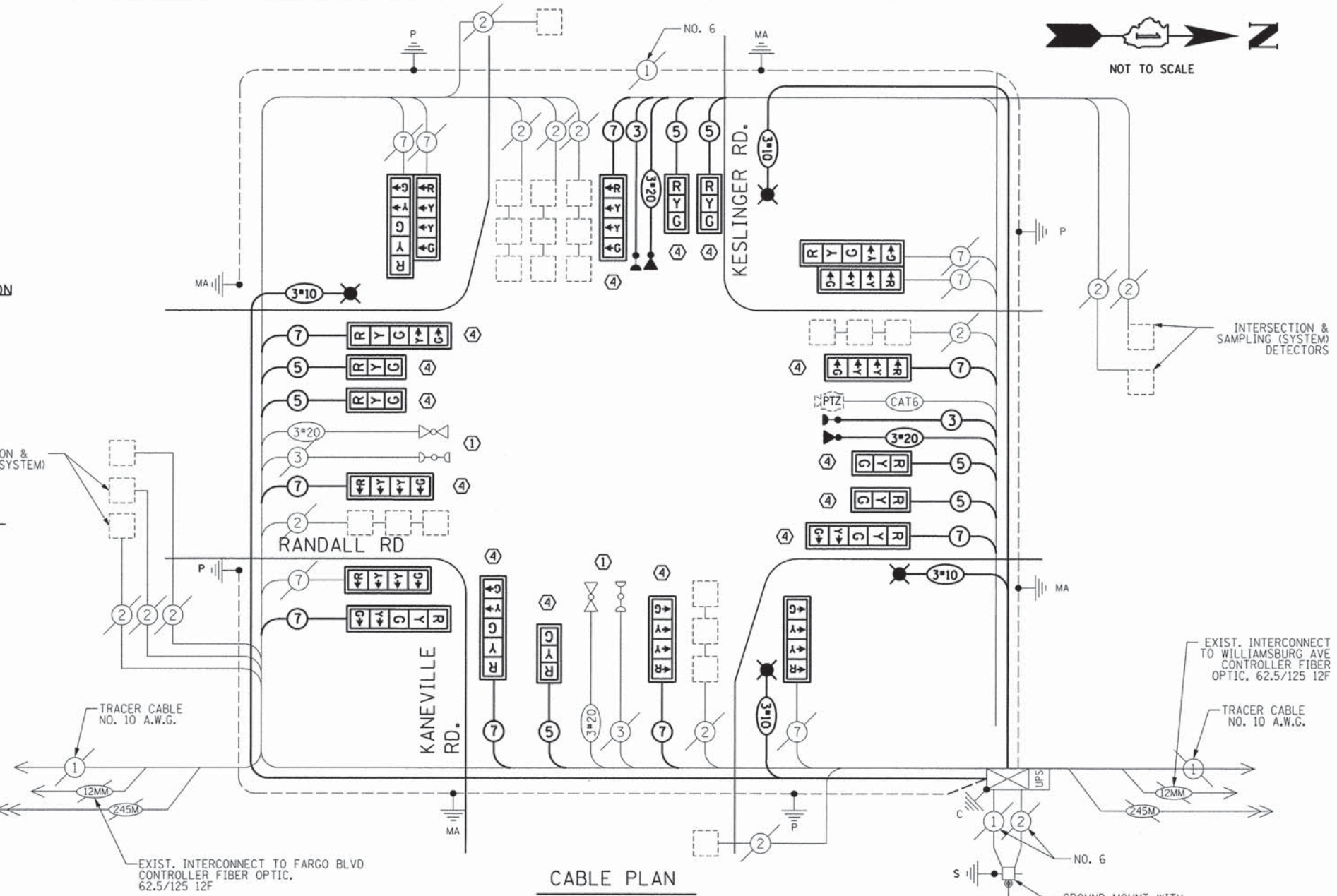


EXISTING EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	
MOVEMENT	←	→	↑

**PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE**



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



**CABLE PLAN**

ITEM	UNIT	QTY
CHANGEABLE MESSAGE SIGN	CAL MO	0.5
TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	0.0625
TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	0.0625
SIGN PANEL - TYPE 1	SQ FT	60
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	99
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/2" NO. 10	FOOT	3078
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 250 WATT	EACH	4
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1103
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1582
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1650
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	123
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 38 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 48 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 50 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 55 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	52
DRILL EXISTING HANDHOLE	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	7
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	3
SIGNAL HEAD, LED, 2-FACE, 1-4 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	3
TRAFFIC SIGNAL BACKPLATE	EACH	7
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	14
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3299
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	933
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	170
ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 20 4 C	FOOT	170
RELOCATE LIGHT DETECTOR	EACH	2
RELOCATE EXISTING PTZ CAMERA	EACH	1
CONSTRUCTION LAYOUT	L SUM	0.0625

**CONSTRUCTION NOTES:**

- THE CONTRACTOR SHALL RELOCATE THE EXISTING LIGHT DETECTOR EQUIPMENT AND IMPLEMENT THE PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE AS SPECIFIED ON THE PLANS AND PROJECT SPECIAL PROVISIONS. ALL COSTS PERTAINING TO ACQUIRING NECESSARY EQUIPMENT, FIELD WIRING, OR PERIPHERALS, LABOR, AND MATERIALS TO PERFORM THIS WORK SHALL BE INCLUDED IN THE COST OF RELOCATE LIGHT DETECTOR.
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I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE (INCAND.)	% OPERATION	LED	
SIGNAL (RED)	21	17	0.50		178.5
(YELLOW)	21	25	0.25		131.25
(GREEN)	21	15	0.25		78.75
ARROW	12	12	0.10		14.4
FYA SECTION	8	12	0.30		28.8
PED. SIGNAL	0	25	1.00		0.0
CONTROLLER	1	100	1.00		100.0
ILLUM. SIGN	0	25	0.05		
VIDEO SYSTEM	1	150	1.00		0.0
UPS	1	25	1.00		25.0
FLASHER	4	25	0.50		50.0
ENERGY COSTS TO:					TOTAL = 606.7

KANE COUNTY DIVISION OF TRANSPORTATION  
41W011 BURLINGTON ROAD  
ST. CHARLES, IL 60175

ENERGY SUPPLY CONTACT: MIKE WIDHALM  
PHONE: (847) 608-2376  
COMPANY: COMED

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DATE - 5/15/2014

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CABLE PLAN  
RANDALL ROAD @ KESLINGER ROAD/ KANEVILLE ROAD**

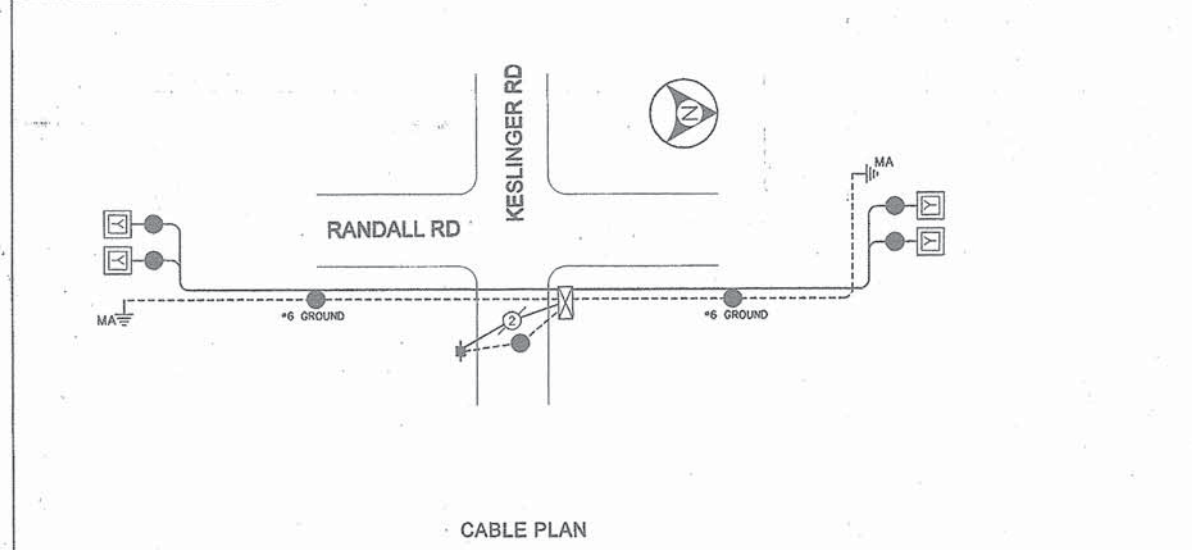
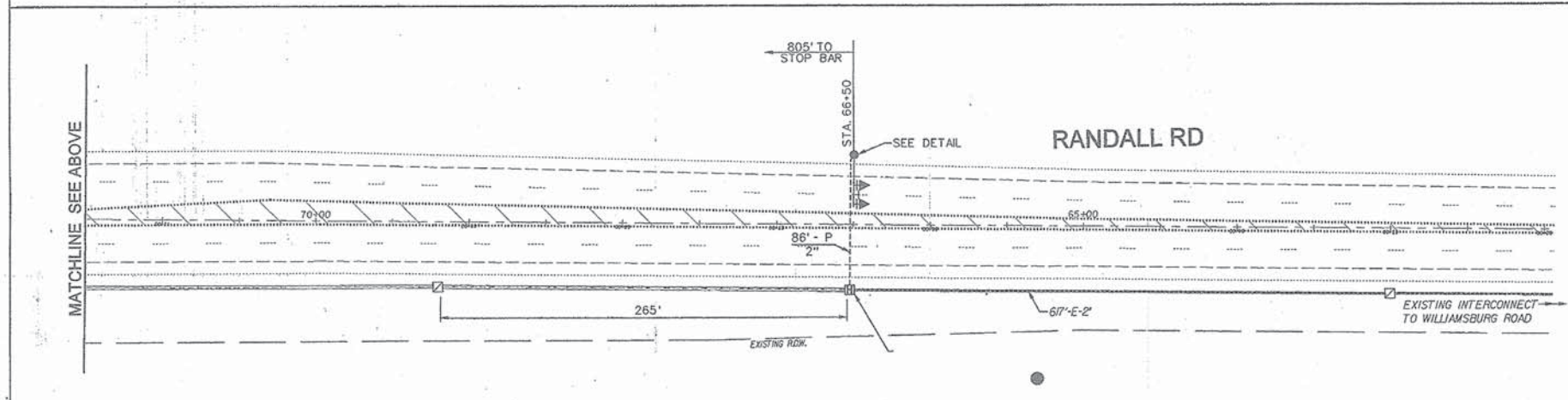
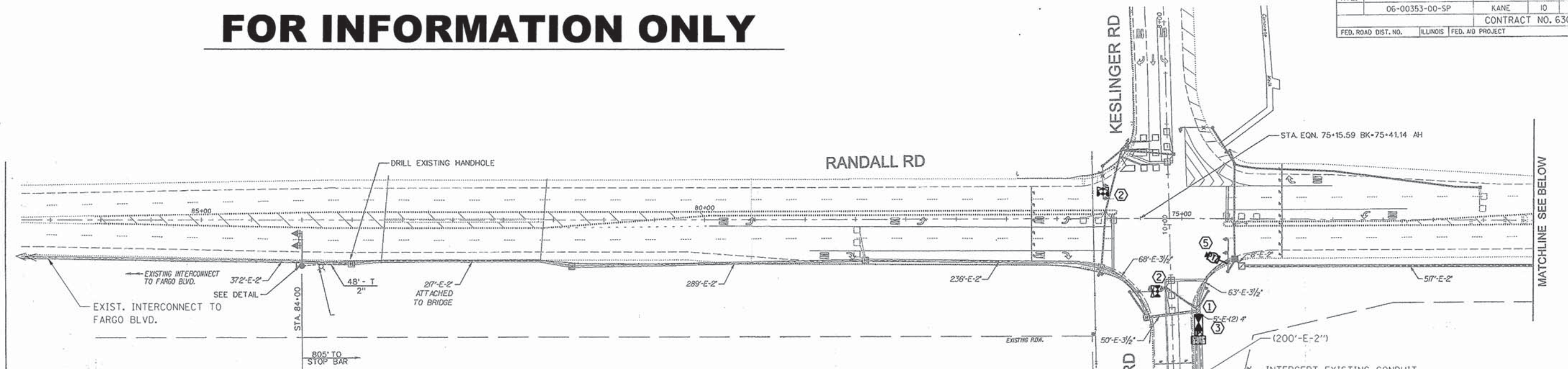
F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
336	11-00418-01-SP	KANE	61	19

CONTRACT NO 63862  
ILLINOIS FEDERAL AID PROJECT

SCALE: SHEET NO OF SHEETS STA TO STA

# FOR INFORMATION ONLY

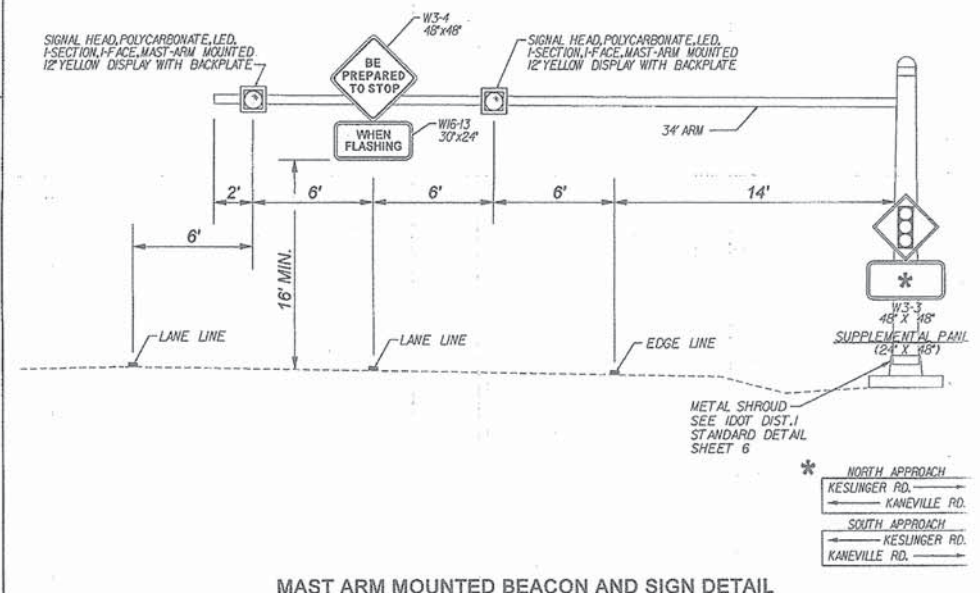
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	06-00353-00-SP	KANE	10	7
CONTRACT NO. 63041				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



ALTERNATING WIG-WAG FLASH

RANDALL ROAD AWF NB OUTBOARD	Y	X
RANDALL ROAD AWF NB INBOARD	X	Y
RANDALL ROAD AWF SB OUTBOARD	Y	X
RANDALL ROAD AWF SB INBOARD	X	Y

**OPERATION NOTES:**  
 ALTERNATE WIG-WAG FLASHING OPERATION SHALL COMMENCE 10 SECONDS IN ADVANCE OF THE DISPLAY OF THE NB-SB YELLOW AND SHALL CONTINUE TO FLASH DURING THE YELLOW AND RED. THE TRAFFIC SIGNAL CONTROLLER SHALL BE PROGRAMMED WITH TIMED LAGGING OVERLAPS FOLLOWING PHASE 7 AND PHASE 6. THE EXISTING CONTROL EQUIPMENT IS EAGLE BRAND.  
 THE AWF SHALL FLASH WHENEVER THE INTERSECTION TRAFFIC SIGNAL IS OPERATING IN A FLASH MODE.



**METRO TRANSPORTATION GROUP, INC.**  
 TRAFFIC ENGINEERING  
 TRANSPORTATION PLANNING/ENGINEERING  
 SIGNAL SYSTEMS/DESIGN  
 3100 W. HIGGINS ROAD, STE. 100  
 HOFFMAN ESTATES, IL 60169-2093  
 PH: 630.213.1000, FAX: 630.213.3227  
 www.metrotransportation.com

REVISIONS	
NO.	DATE DESCRIPTION

MAST ARMS WITH BEACONS AND SIGNS PLAN  
 KANE COUNTY, ILLINOIS

FILE NAME:	02_plan.dgn	SHEET NO.:	7
DATE:	June 26, 2008	OF	7
PROJECT NO.:	H0702.06-100		

PRINTED DATE: 5/12/2014  
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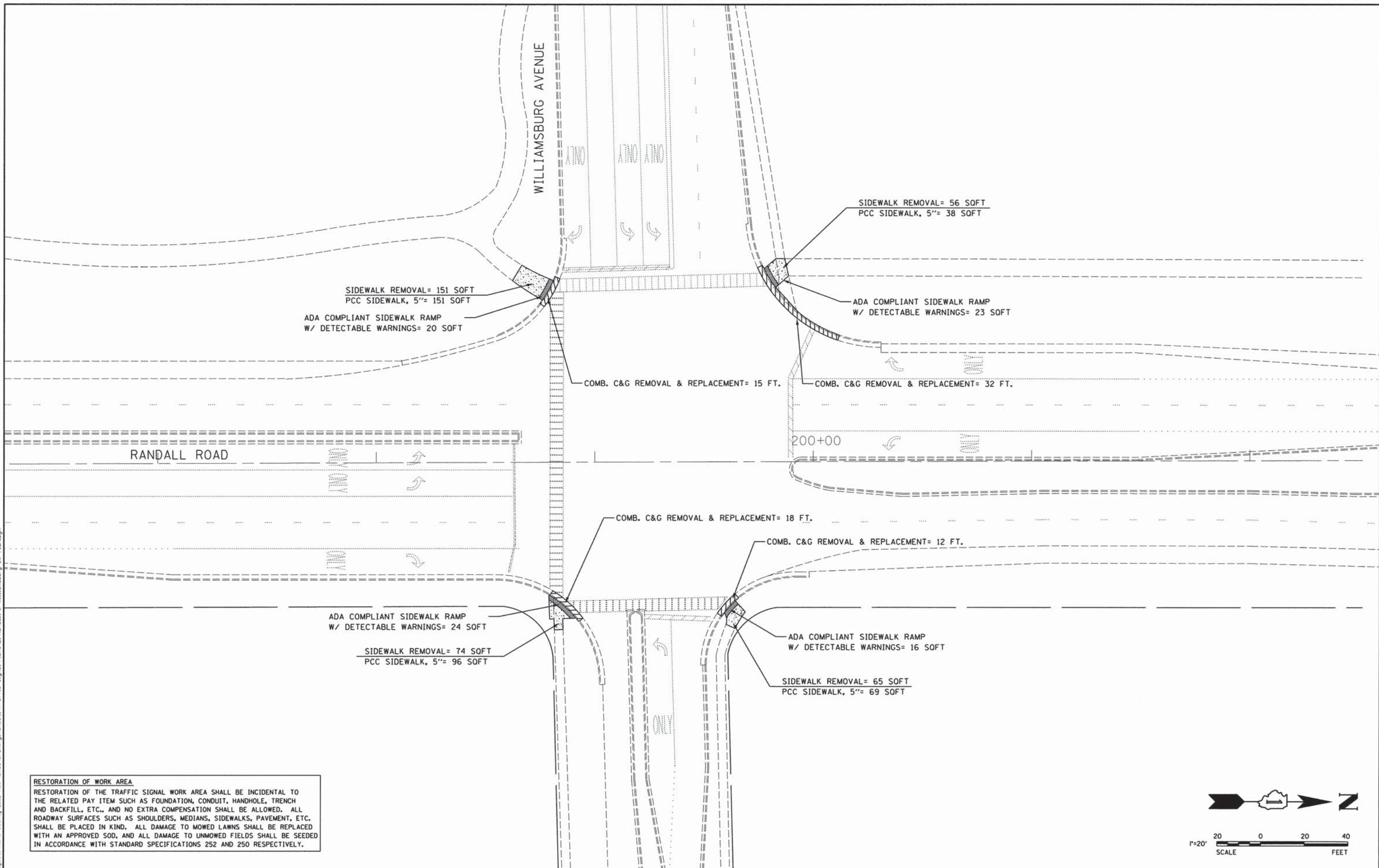
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STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

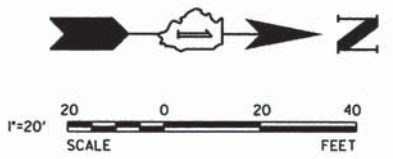
**TRAFFIC SIGNAL PLANS**  
**RANDALL ROAD @ KESLINGER ROAD/ KANEVILLE ROAD**  
 SCALE: SHEET NO OF SHEETS STA TO STA

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	11-00418-01-SP	KANE	61	20
CONTRACT NO 63862				
ILLINOIS FEDERAL AID PROJECT				

PRINTED DATE: 5/12/2014  
 FILE NAME: K:\Projects\Kene County\2012 HSP\CA00\Drawings\Sheets\Traffic Signal Plans\21 Randall & Williamsburg SW Plan.dgn



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



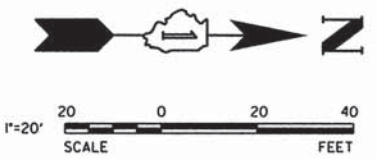
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PLOT DATE = 5/12/2014	CHECKED - MR	REVISED -
	DATE - 5/12/2014	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**SIDEWALK MODIFICATION PLAN**  
**RANDALL ROAD @ WILLIAMSBURG AVENUE**

SCALE: SHEET NO OF SHEETS STA TO STA

F.A.P. RTE 336	SECTION 11-00418-01-SP	COUNTY KANE	TOTAL SHEETS 61	SHEET NO 21
CONTRACT NO 63862				
ILLINOIS FEDERAL AID PROJECT				

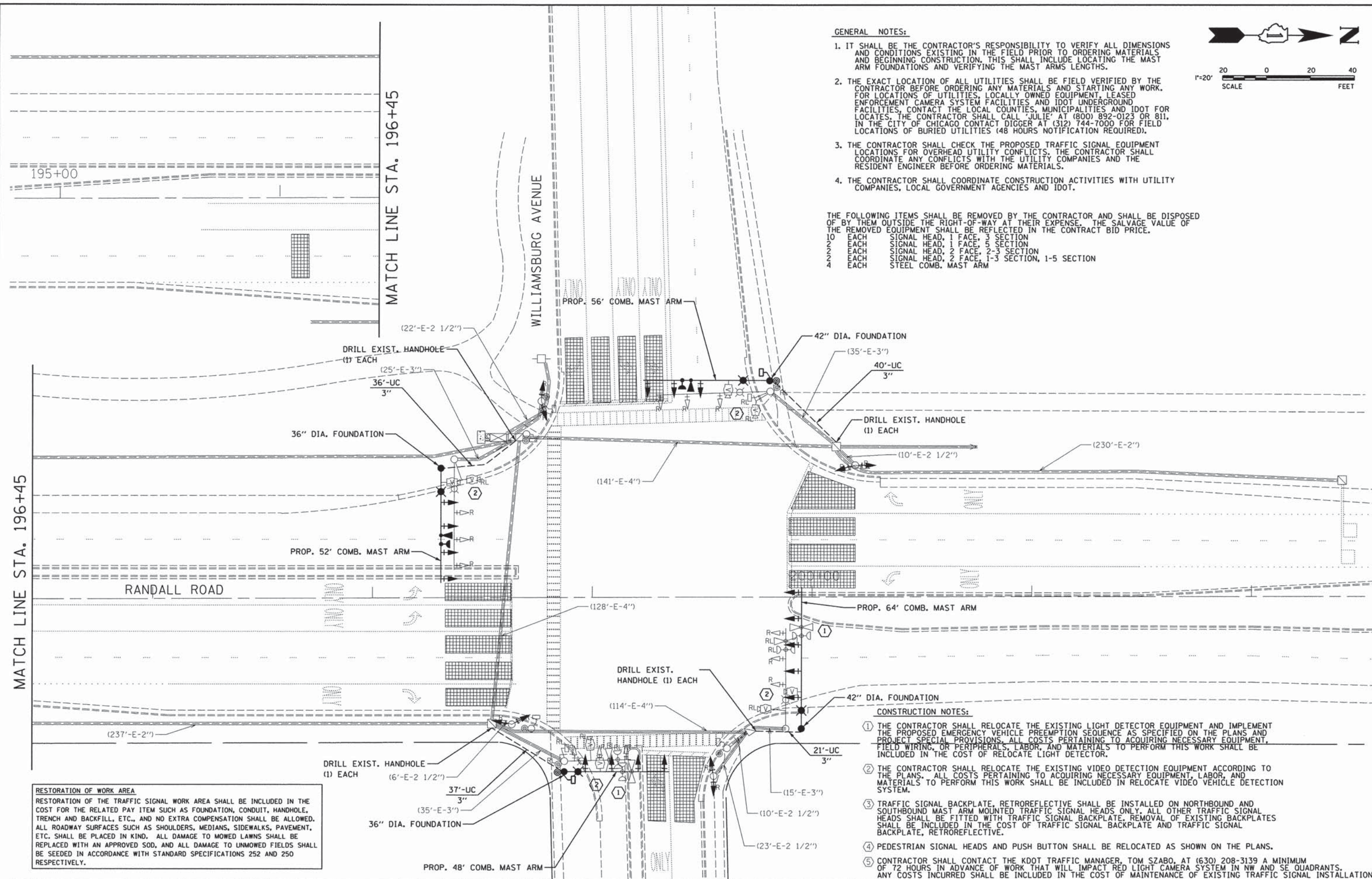


**GENERAL NOTES:**

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION, THIS SHALL INCLUDE LOCATING THE MAST ARM FOUNDATIONS AND VERIFYING THE MAST ARMS LENGTHS.
2. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE ORDERING ANY MATERIALS AND STARTING ANY WORK. FOR LOCATIONS OF UTILITIES, LOCALLY OWNED EQUIPMENT, LEASED ENFORCEMENT CAMERA SYSTEM FACILITIES AND IDOT UNDERGROUND FACILITIES, CONTACT THE LOCAL COUNTIES, MUNICIPALITIES AND IDOT FOR LOCATES. THE CONTRACTOR SHALL CALL 'JULIE' AT (800) 892-0123 OR 811. IN THE CITY OF CHICAGO CONTACT DIGGER AT (312) 744-7000 FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION REQUIRED).
3. THE CONTRACTOR SHALL CHECK THE PROPOSED TRAFFIC SIGNAL EQUIPMENT LOCATIONS FOR OVERHEAD UTILITY CONFLICTS. THE CONTRACTOR SHALL COORDINATE ANY CONFLICTS WITH THE UTILITY COMPANIES AND THE RESIDENT ENGINEER BEFORE ORDERING MATERIALS.
4. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, LOCAL GOVERNMENT AGENCIES AND IDOT.

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 CONTRACT BID PRICE.

10	EACH	SIGNAL HEAD, 1 FACE, 3 SECTION
2	EACH	SIGNAL HEAD, 1 FACE, 5 SECTION
2	EACH	SIGNAL HEAD, 2 FACE, 2-3 SECTION
4	EACH	SIGNAL HEAD, 2 FACE, 1-3 SECTION, 1-5 SECTION
4	EACH	STEEL COMB. MAST ARM



**CONSTRUCTION NOTES:**

- 1 THE CONTRACTOR SHALL RELOCATE THE EXISTING LIGHT DETECTOR EQUIPMENT AND IMPLEMENT THE PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE AS SPECIFIED ON THE PLANS AND PROJECT SPECIAL PROVISIONS. ALL COSTS PERTAINING TO ACQUIRING NECESSARY EQUIPMENT, FIELD WIRING, OR PERIPHERALS, LABOR, AND MATERIALS TO PERFORM THIS WORK SHALL BE INCLUDED IN THE COST OF RELOCATE LIGHT DETECTOR.
- 2 THE CONTRACTOR SHALL RELOCATE THE EXISTING VIDEO DETECTION EQUIPMENT ACCORDING TO THE PLANS. ALL COSTS PERTAINING TO ACQUIRING NECESSARY EQUIPMENT, LABOR, AND MATERIALS TO PERFORM THIS WORK SHALL BE INCLUDED IN RELOCATE VIDEO VEHICLE DETECTION SYSTEM.
- 3 TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE SHALL BE INSTALLED ON NORTHBOUND AND SOUTHBOUND MAST ARM MOUNTED TRAFFIC SIGNAL HEADS ONLY. ALL OTHER TRAFFIC SIGNAL HEADS SHALL BE FITTED WITH TRAFFIC SIGNAL BACKPLATE. REMOVAL OF EXISTING BACKPLATES SHALL BE INCLUDED IN THE COST OF TRAFFIC SIGNAL BACKPLATE AND TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE.
- 4 PEDESTRIAN SIGNAL HEADS AND PUSH BUTTON SHALL BE RELOCATED AS SHOWN ON THE PLANS.
- 5 CONTRACTOR SHALL CONTACT THE KDOT TRAFFIC MANAGER, TOM SZABO, AT (630) 208-3139 A MINIMUM OF 72 HOURS IN ADVANCE OF WORK THAT WILL IMPACT RED LIGHT CAMERA SYSTEM IN NW AND SE QUADRANTS. ANY COSTS INCURRED SHALL BE INCLUDED IN THE COST OF MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION.

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

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 FILE NAME: K:\Projects\Kane County\2012\_HSP\CAD\Drawings\Sheets\Traffic\_Signal\Williamsburg\_TS\_Plan.dgn



USER NAME = jjuratovac	DESIGNED - JY	REVISED -
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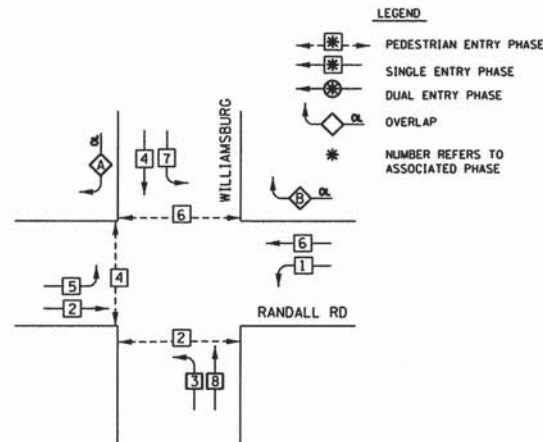
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

**TRAFFIC SIGNAL PLAN**  
**RANDALL ROAD @ WILLIAMSBURG AVENUE**

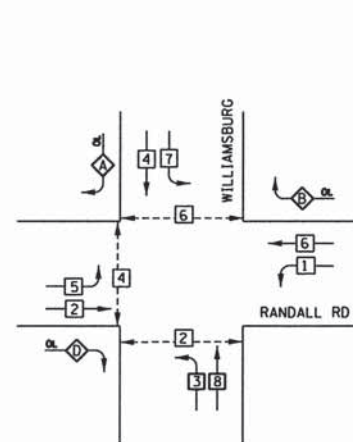
SCALE: SHEET NO OF SHEETS STA TO STA

F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
336	11-00418-01-SP	KANE	61	22
				CONTRACT NO 63862
ILLINOIS/FEDERAL AID PROJECT				

EXISTING CONTROLLER SEQUENCE



PROPOSED CONTROLLER SEQUENCE



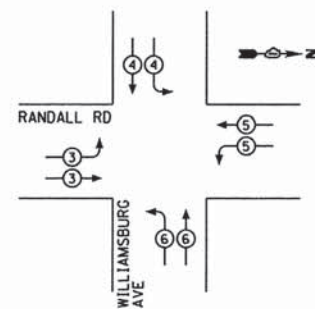
EXISTING PHASE DESIGNATION DIAGRAM

PROPOSED PHASE DESIGNATION DIAGRAM

RIGHT TURN OVERLAP PHASE DESIGNATION

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

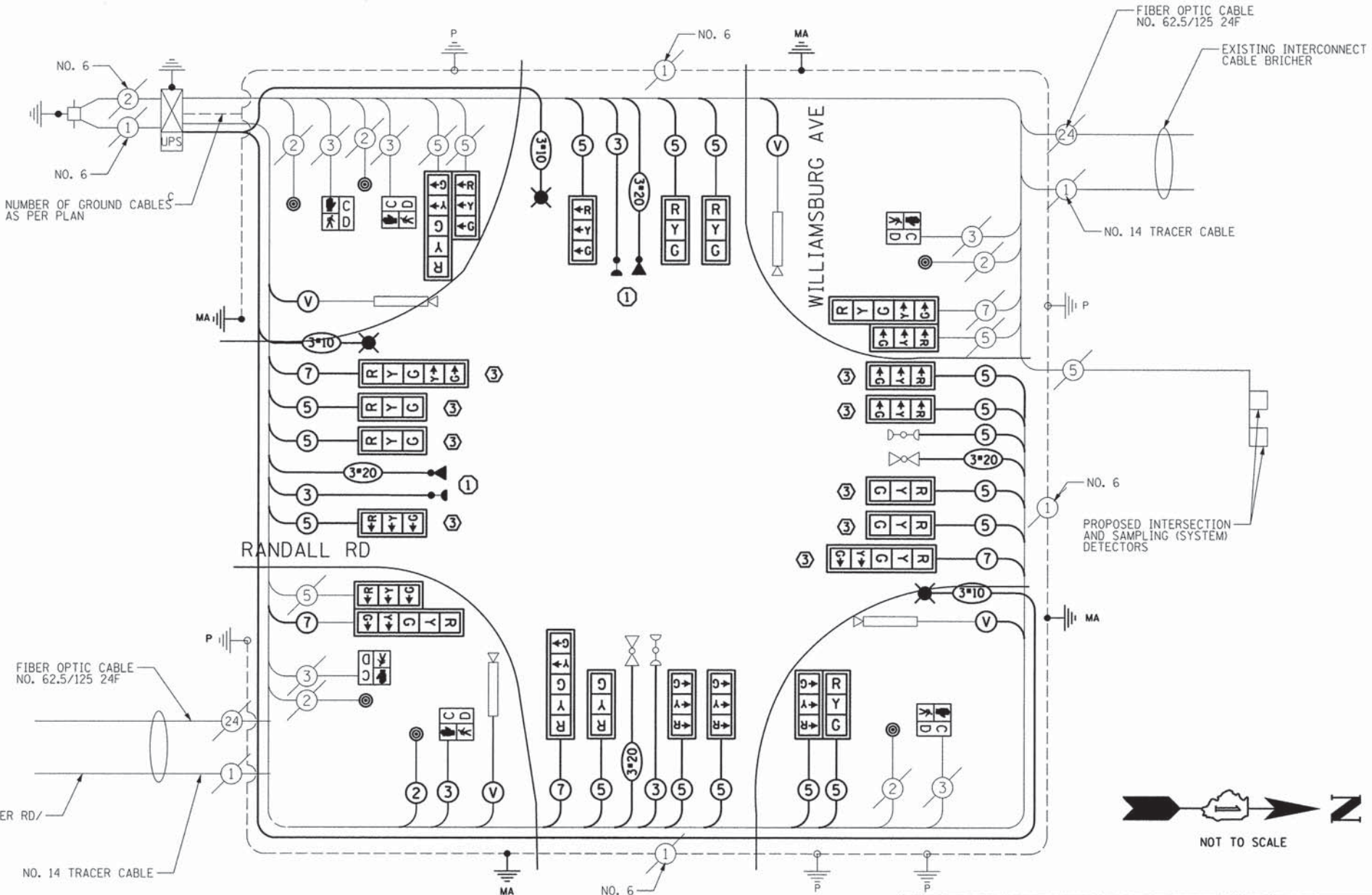
I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE (INCAND.)	% OPERATION	LED	
SIGNAL (RED)	24	17	0.50		204.0
(YELLOW)	24	25	0.25		150.0
(GREEN)	24	15	0.25		90.0
ARROW	12	12	0.10		14.4
FYA SECTION	0	12	0.30		0.0
PED. SIGNAL	0	25	1.00		0.0
CONTROLLER	1	100	1.00		100.0
ILLUM. SIGN	0	25	0.05		
VIDEO SYSTEM	1	150	1.00		150.0
UPS		25	1.00		25.0
FLASHER			0.50		
ENERGY COSTS TO:				TOTAL =	733.4

KANE COUNTY DIVISION OF TRANSPORTATION  
41W011 BURLINGTON ROAD  
ST CHARLES, IL 60175

ENERGY SUPPLY CONTACT: MIKE WIDHALM  
PHONE: (847) 608-2376  
COMPANY: COMED

CONSTRUCTION NOTES:

- THE CONTRACTOR SHALL RELOCATE THE EXISTING LIGHT DETECTOR EQUIPMENT AND IMPLEMENT THE PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE AS SPECIFIED ON THE PLANS AND PROJECT SPECIAL PROVISIONS. ALL COSTS PERTAINING TO ACQUIRING NECESSARY EQUIPMENT, FIELD WIRING, OR PERIPHERALS, LABOR, AND MATERIALS TO PERFORM THIS WORK SHALL BE INCLUDED IN THE COST OF RELOCATE LIGHT DETECTOR.
- THE CONTRACTOR SHALL RELOCATE THE EXISTING VIDEO DETECTION EQUIPMENT ACCORDING TO THE PLANS. ALL COSTS PERTAINING TO ACQUIRING NECESSARY EQUIPMENT, LABOR, AND MATERIALS TO PERFORM THIS WORK SHALL BE INCLUDED IN RELOCATE VIDEO VEHICLE DETECTION SYSTEM.
- TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE SHALL BE INSTALLED ON NORTHBOUND AND SOUTHBOUND MAST ARM MOUNTED TRAFFIC SIGNAL HEADS ONLY. ALL OTHER TRAFFIC SIGNAL HEADS SHALL BE FITTED WITH TRAFFIC SIGNAL BACKPLATE. REMOVAL OF EXISTING BACKPLATES SHALL BE INCLUDED IN THE COST OF TRAFFIC SIGNAL BACKPLATE AND TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE.
- PEDESTRIAN SIGNAL HEADS AND PUSH BUTTON SHALL BE RELOCATED AS SHOWN ON THE PLANS.
- CONTRACTOR SHALL CONTACT THE KDOT TRAFFIC MANAGER, TOM SZABO, AT (630) 208-3139 A MINIMUM OF 72 HOURS IN ADVANCE OF WORK THAT WILL IMPACT RED LIGHT CAMERA SYSTEM IN NW AND SE QUADRANTS. ANY COSTS INCURRED SHALL BE INCLUDED IN THE COST OF MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION



CABLE PLAN

ITEM	UNIT	QTY
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	435
DETECTABLE WARNINGS	SQ FT	83
SIDEWALK REMOVAL	SQ FT	385
CHANGEABLE MESSAGE SIGN	CAL MO	0.5
TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	0.0625
TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	0.0625
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	134
ELECTRIC CABLE IN CONDUIT, 600V (ALP-TYPE USE) 1/1C NO. 10	FOOT	875
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 250 WATT	EACH	4
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	364
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1280
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	3665
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	749
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	158
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 48 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 52 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 56 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 64 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	28
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	42
DRILL EXISTING HANDHOLE	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	13
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	3
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	3
TRAFFIC SIGNAL BACKPLATE	EACH	15
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	9
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	2
LIGHT DETECTOR	EACH	1
LIGHT DETECTOR AMPLIFIER	EACH	1
RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	2
RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	EACH	2
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3063
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
RELOCATE VIDEO VEHICLE DETECTION SYSTEM	EACH	1
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	918
RELOCATE LIGHT DETECTOR	EACH	2
ELECTRIC CABLE IN CONDUIT, VIDEO NO. 18 3C	FOOT	928
COMBINATION CONCRETE CURB AND GUTTER, REMOVAL AND REPLACEMENT	FOOT	61
CONSTRUCTION LAYOUT	L SUM	0.0625

PRINTED DATE: 5/15/2014 FILE NAME: K:\Projects\Kane County\2012\_HSP\CAD\Drawings\Sheets\Traffic Signal Plans\23\_Randall & Williamsburg Cable Plan.dgn



USER NAME = jjuratovac  
DESIGNED - JY  
DRAWN - DN  
PLOT SCALE = 20,0000' / in.  
CHECKED - MR  
DATE - 5/15/2014  
REVISOR -  
REVISED -  
REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CABLE PLAN  
RANDALL ROAD @ WILLIAMSBURG AVENUE

F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
336	11-00418-01-SP	KANE	61	23

CONTRACT NO 63862  
ILLINOIS FEDERAL AID PROJECT

SCALE: SHEET NO OF SHEETS STA TO STA

GENERAL NOTES:

- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION. THIS SHALL INCLUDE LOCATING THE MAST ARM FOUNDATIONS AND VERIFYING THE MAST ARMS LENGTHS.
- THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE ORDERING ANY MATERIALS AND STARTING ANY WORK. FOR LOCATIONS OF UTILITIES, LOCALLY OWNED EQUIPMENT, LEASED ENFORCEMENT CAMERA SYSTEM FACILITIES AND IDOT UNDERGROUND FACILITIES, CONTACT THE LOCAL COUNTIES, MUNICIPALITIES AND IDOT FOR LOCATES. THE CONTRACTOR SHALL CALL 'JULIE' AT (800) 892-0123 OR 811. IN THE CITY OF CHICAGO CONTACT 'DIGGER' AT (312) 744-7000 FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION REQUIRED).
- THE CONTRACTOR SHALL CHECK THE PROPOSED TRAFFIC SIGNAL EQUIPMENT LOCATIONS FOR OVERHEAD UTILITY CONFLICTS. THE CONTRACTOR SHALL COORDINATE ANY CONFLICTS WITH THE UTILITY COMPANIES AND THE RESIDENT ENGINEER BEFORE ORDERING MATERIALS.
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, LOCAL GOVERNMENT AGENCIES AND IDOT.



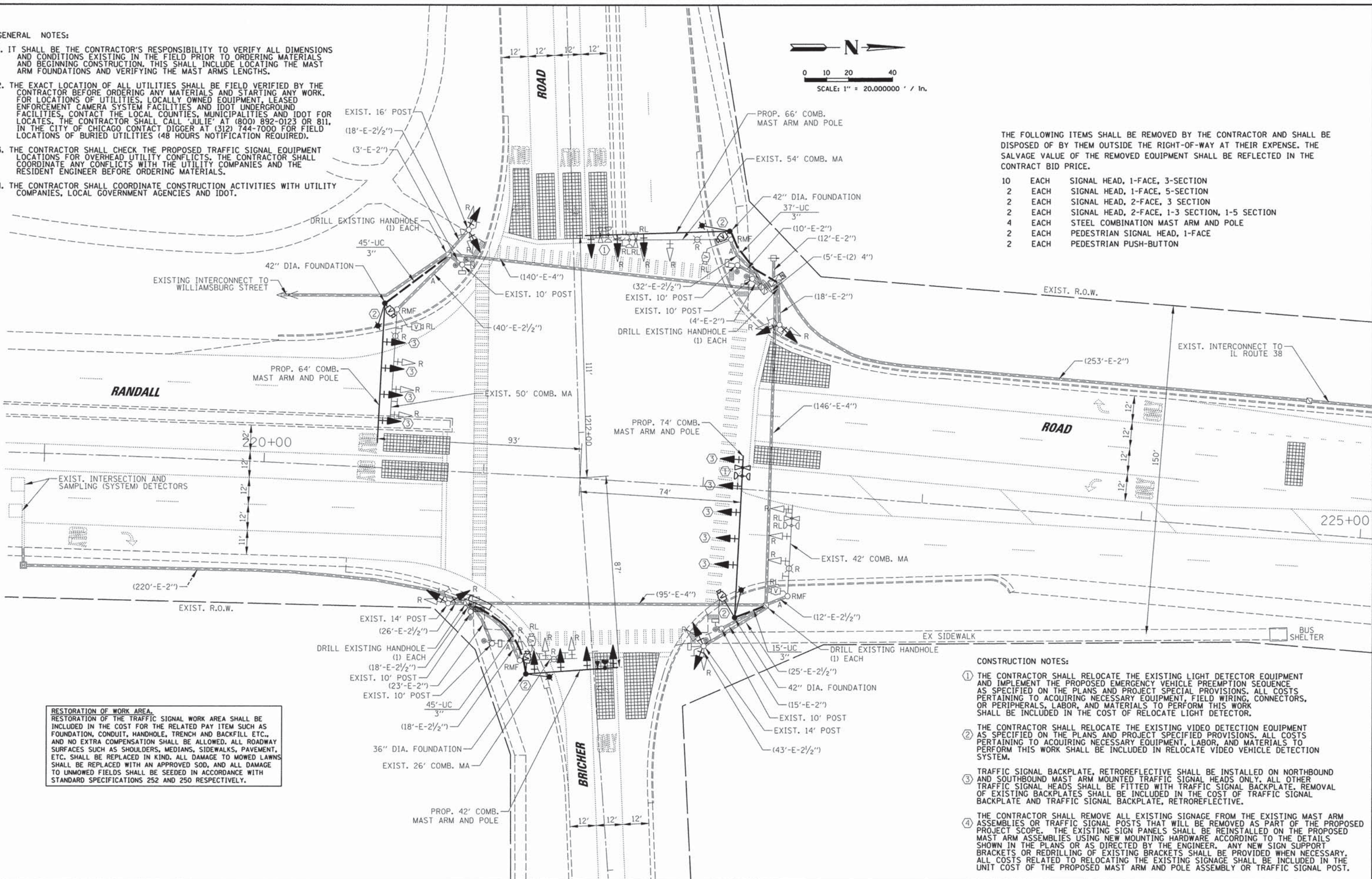
0 10 20 40  
SCALE: 1" = 20.000000' / In.

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 CONTRACT BID PRICE.

- 10 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 2 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 2 EACH SIGNAL HEAD, 2-FACE, 3 SECTION
- 2 EACH SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 4 EACH STEEL COMBINATION MAST ARM AND POLE
- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN PUSH-BUTTON

DATE	BY	DATE	BY

CHRISTOPHER B. BURKE ENGINEERING LTD.  
9575 East Higgins Road, Suite 600  
Rosemont, Illinois 60018  
(847) 823-0500



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

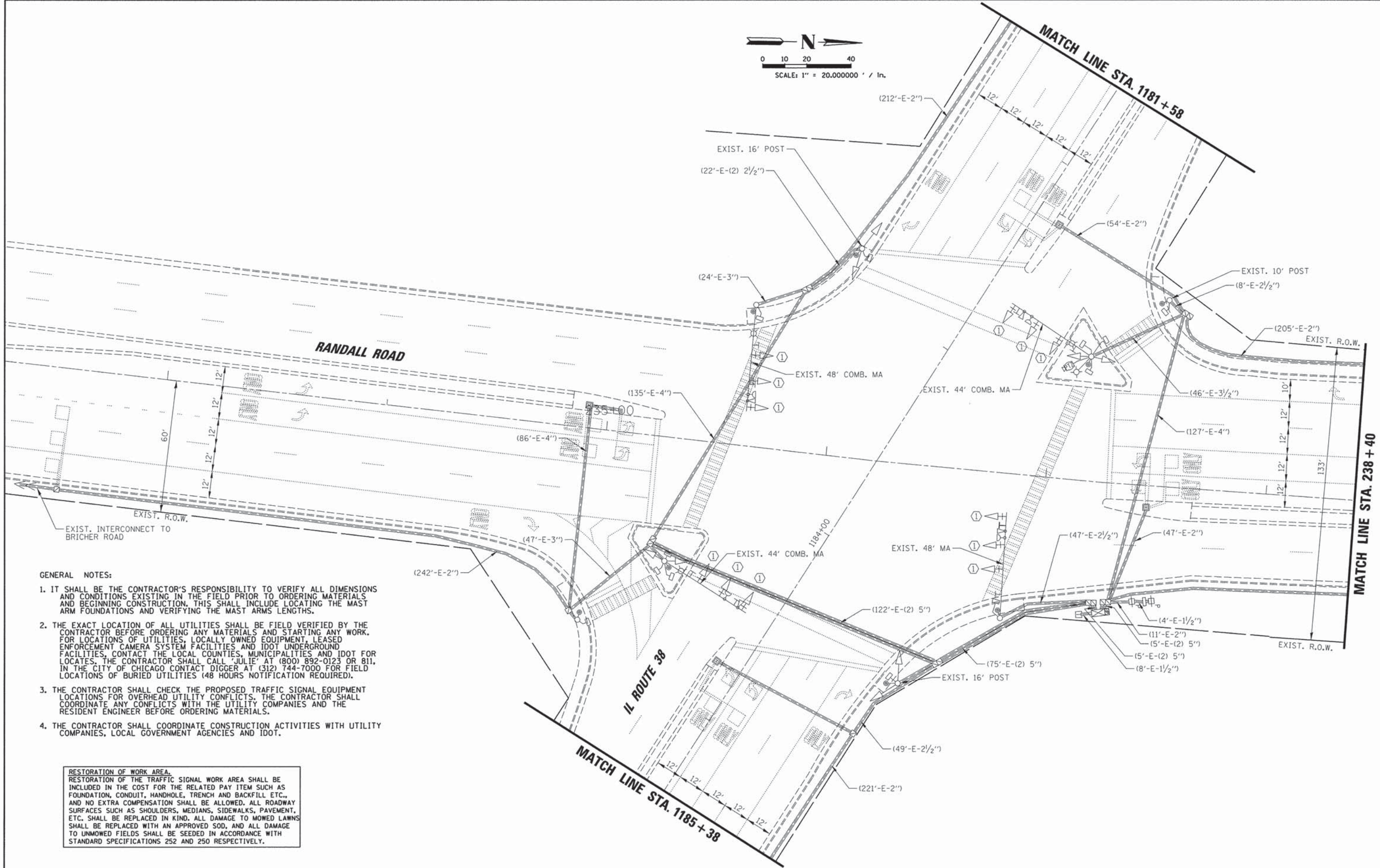
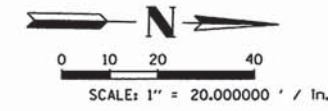
CONSTRUCTION NOTES:

- THE CONTRACTOR SHALL RELOCATE THE EXISTING LIGHT DETECTOR EQUIPMENT AND IMPLEMENT THE PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE AS SPECIFIED ON THE PLANS AND PROJECT SPECIAL PROVISIONS. ALL COSTS PERTAINING TO ACQUIRING NECESSARY EQUIPMENT, FIELD WIRING, CONNECTORS, OR PERIPHERALS, LABOR, AND MATERIALS TO PERFORM THIS WORK SHALL BE INCLUDED IN THE COST OF RELOCATE LIGHT DETECTOR.
- THE CONTRACTOR SHALL RELOCATE THE EXISTING VIDEO DETECTION EQUIPMENT AS SPECIFIED ON THE PLANS AND PROJECT SPECIFIED PROVISIONS. ALL COSTS PERTAINING TO ACQUIRING NECESSARY EQUIPMENT, LABOR, AND MATERIALS TO PERFORM THIS WORK SHALL BE INCLUDED IN RELOCATE VIDEO VEHICLE DETECTION SYSTEM.
- TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE SHALL BE INSTALLED ON NORTHBOUND AND SOUTHBOUND MAST ARM MOUNTED TRAFFIC SIGNAL HEADS ONLY. ALL OTHER TRAFFIC SIGNAL HEADS SHALL BE FITTED WITH TRAFFIC SIGNAL BACKPLATE. REMOVAL OF EXISTING BACKPLATES SHALL BE INCLUDED IN THE COST OF TRAFFIC SIGNAL BACKPLATE AND TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE.
- THE CONTRACTOR SHALL REMOVE ALL EXISTING SIGNAGE FROM THE EXISTING MAST ARM ASSEMBLIES OR TRAFFIC SIGNAL POSTS THAT WILL BE REMOVED AS PART OF THE PROPOSED PROJECT SCOPE. THE EXISTING SIGN PANELS SHALL BE REINSTALLED ON THE PROPOSED MAST ARM ASSEMBLIES USING NEW MOUNTING HARDWARE ACCORDING TO THE DETAILS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER. ANY NEW SIGN SUPPORT BRACKETS OR REDRILLING OF EXISTING BRACKETS SHALL BE PROVIDED WHEN NECESSARY. ALL COSTS RELATED TO RELOCATING THE EXISTING SIGNAGE SHALL BE INCLUDED IN THE UNIT COST OF THE PROPOSED MAST ARM AND POLE ASSEMBLY OR TRAFFIC SIGNAL POST.





DATE	BY	REVISIONS	DATE	BY
PLAN	NO.	NO.	NO.	NO.
NO.	NO.	NO.	NO.	NO.
<b>CHRISTOPHER B. BURKE ENGINEERING LTD.</b> 9675 N. Lincoln Road, Suite 600 Rosemont, Illinois 60018 (847) 823-0500				
PROFILE	NO.	NO.	NO.	NO.
NO.	NO.	NO.	NO.	NO.
GRADES CHECKED STRUCTURE NOTATIONS OK'D				



**GENERAL NOTES:**

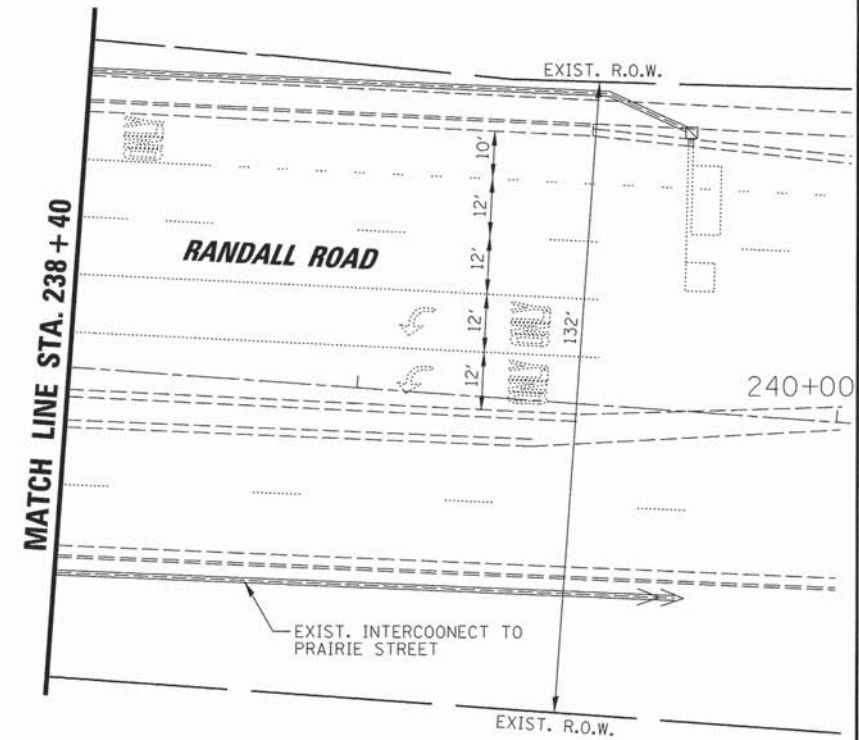
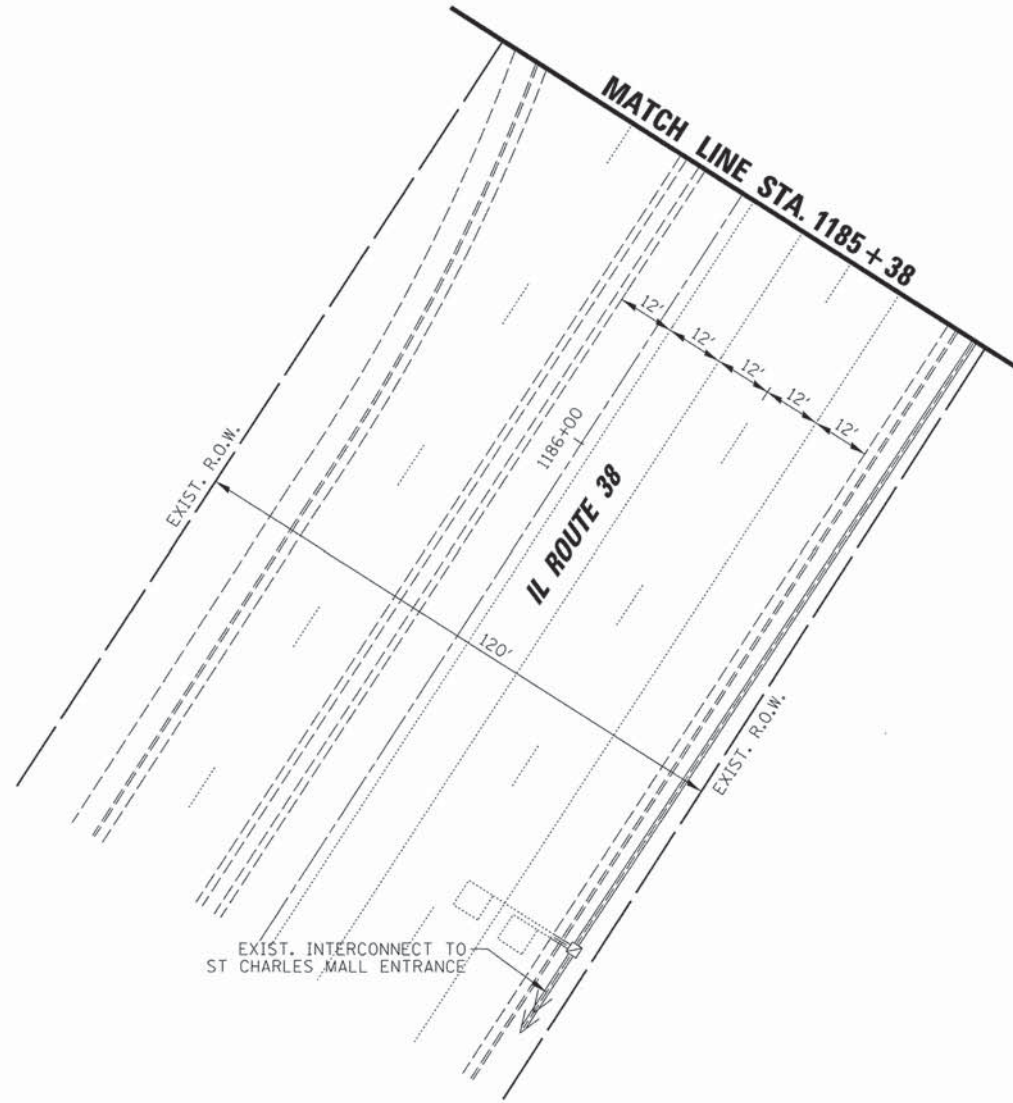
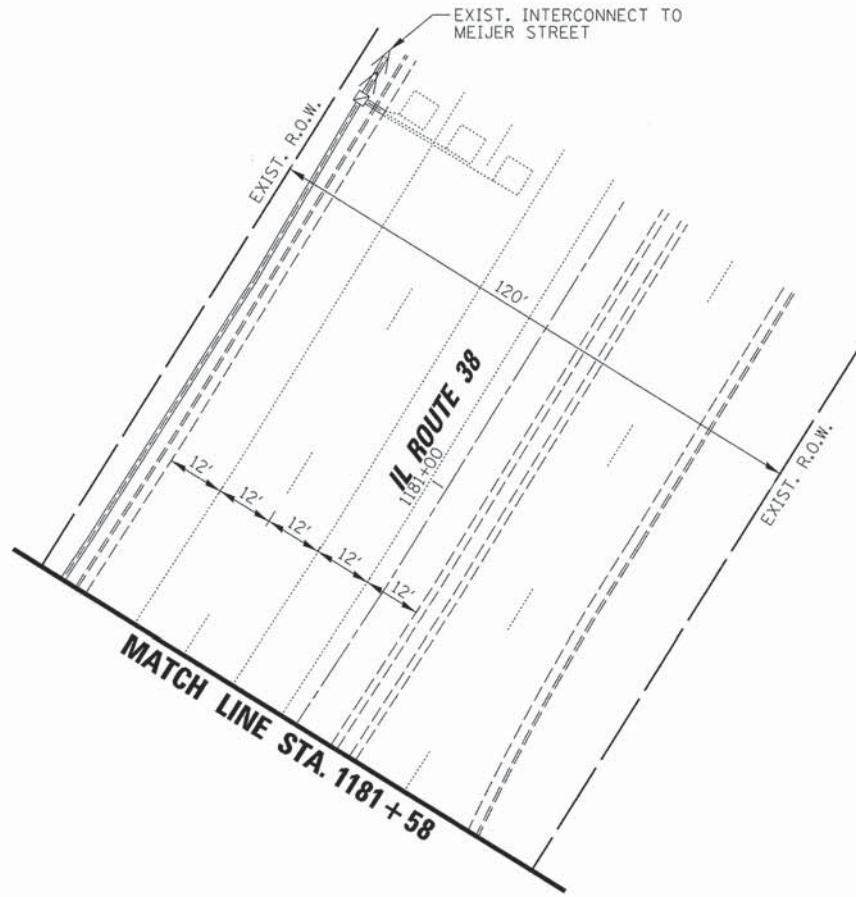
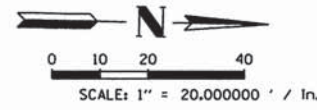
1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION. THIS SHALL INCLUDE LOCATING THE MAST ARM FOUNDATIONS AND VERIFYING THE MAST ARMS LENGTHS.
2. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE ORDERING ANY MATERIALS AND STARTING ANY WORK. FOR LOCATIONS OF UTILITIES, LOCALLY OWNED EQUIPMENT, LEASED ENFORCEMENT CAMERA SYSTEM FACILITIES AND IDOT UNDERGROUND FACILITIES, CONTACT THE LOCAL COUNTIES, MUNICIPALITIES AND IDOT FOR LOCATES. THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811, IN THE CITY OF CHICAGO CONTACT DIGGER AT (312) 744-7000 FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION REQUIRED).
3. THE CONTRACTOR SHALL CHECK THE PROPOSED TRAFFIC SIGNAL EQUIPMENT LOCATIONS FOR OVERHEAD UTILITY CONFLICTS. THE CONTRACTOR SHALL COORDINATE ANY CONFLICTS WITH THE UTILITY COMPANIES AND THE RESIDENT ENGINEER BEFORE ORDERING MATERIALS.
4. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, LOCAL GOVERNMENT AGENCIES AND IDOT.

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

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PLOT SCALE = 1" = 20.000000' / in.	CHECKED - WCE	REVISED -	REVISED -		SCALE: 1" = 20'	SHEET NO.	OF SHEETS	STA. --	TO STA. --	CONTRACT NO. 63862		
PLOT DATE = 5/12/2014	DATE - FEB 2014	REVISED -	REVISED -		ILLINOIS FED. AID PROJECT							

PROFILE	DATE	BY
SURVEYED		
GRADES CHECKED		
BLM. NOTED		
STRUCTURE NOTATIONS OK'D		
NOTE BOOK NO.		
PLAN	DATE	BY
SURVEYED		
ALIGNMENT CHECKED		
RT. OF WAY CHECKED		
ADD. FILE NAME		
NOTE BOOK NO.		

**CHRISTOPHER B. BURKE ENGINEERING LTD.**  
 3515 West Higgins Road, Suite 600  
 Rosemont, Illinois 60018  
 847 823-0500



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	PLOT DATE = 5/12/2014	DATE - FEB 2014	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

<b>TRAFFIC SIGNAL MODIFICATION PLAN    RANDALL ROAD AND IL ROUTE 38    SHEET 2 OF 2</b>			
SCALE: 1" = 20'	SHEET NO.	OF SHEETS	STA. -- TO STA. --

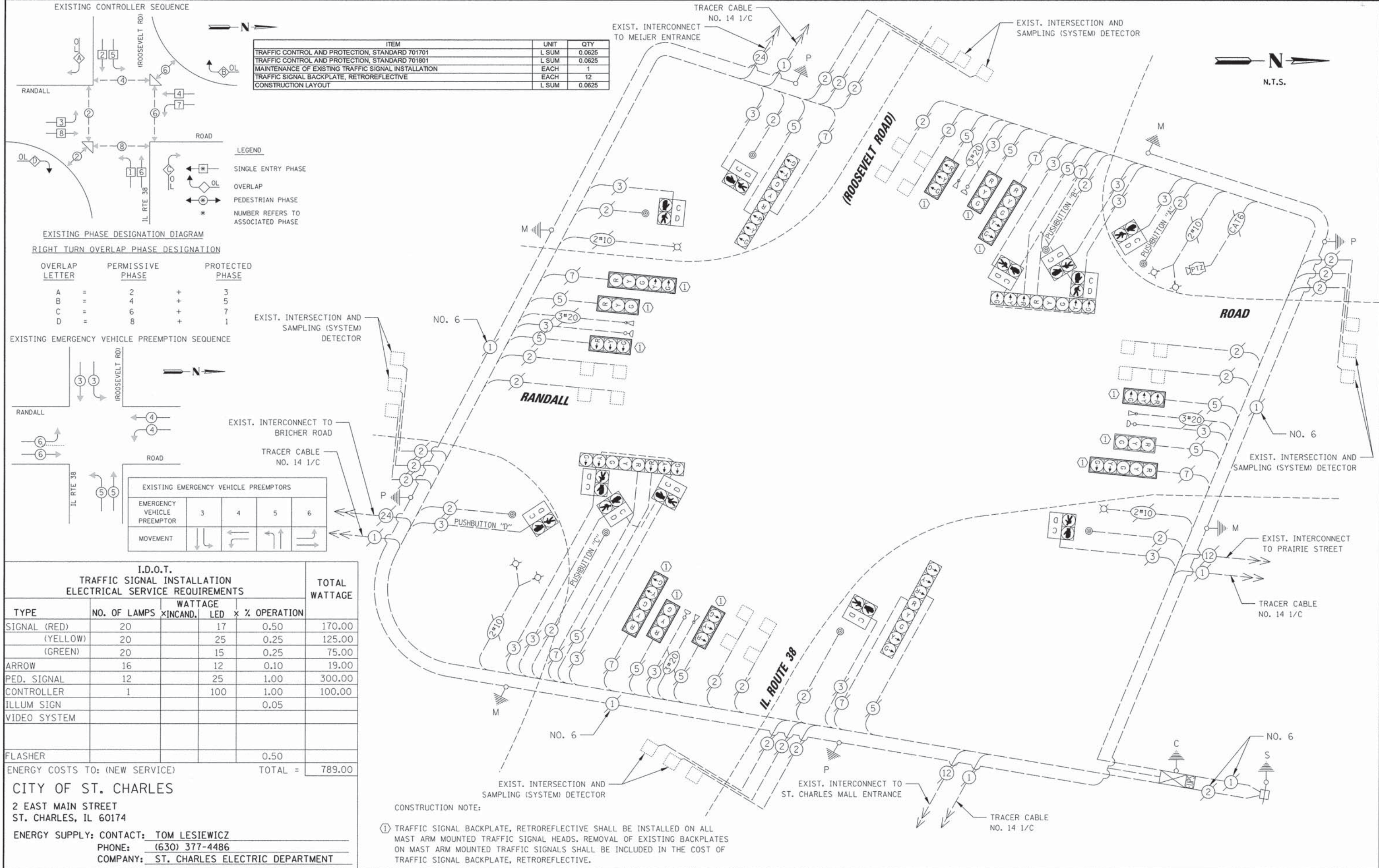
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	11-00418-01-SP	KANE	61	27
CONTRACT NO.			63862	
ILLINOIS FED. AID PROJECT				

DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 PROFILE: \_\_\_\_\_  
 NO. \_\_\_\_\_

DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 PLAN: \_\_\_\_\_  
 NO. \_\_\_\_\_

DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 I.D.O.T. \_\_\_\_\_  
 NO. \_\_\_\_\_

**CHRISTOPHER B. BURKE ENGINEERING LTD.**  
 9575 East Main Street, Suite 600  
 Rosemont, Illinois 60018  
 (847) 823-0500



ITEM	UNIT	QTY
TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	0.0625
TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	0.0625
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	12
CONSTRUCTION LAYOUT	L SUM	0.0625

- LEGEND**
- SINGLE ENTRY PHASE
  - OVERLAP
  - PEDESTRIAN PHASE
  - NUMBER REFERS TO ASSOCIATED PHASE

**EXISTING PHASE DESIGNATION DIAGRAM**

**RIGHT TURN OVERLAP PHASE DESIGNATION**

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

**EXISTING EMERGENCY VEHICLE PREEMPTORS**

EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	↓	↔	↑	↔

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

TYPE	NO. OF LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		XINCAND.	LED		
SIGNAL (RED)	20	17	0.50	170.00	
(YELLOW)	20	25	0.25	125.00	
(GREEN)	20	15	0.25	75.00	
ARROW	16	12	0.10	19.00	
PED. SIGNAL	12	25	1.00	300.00	
CONTROLLER	1	100	1.00	100.00	
ILLUM SIGN			0.05		
VIDEO SYSTEM					
FLASHER			0.50		
ENERGY COSTS TO: (NEW SERVICE)				TOTAL =	789.00

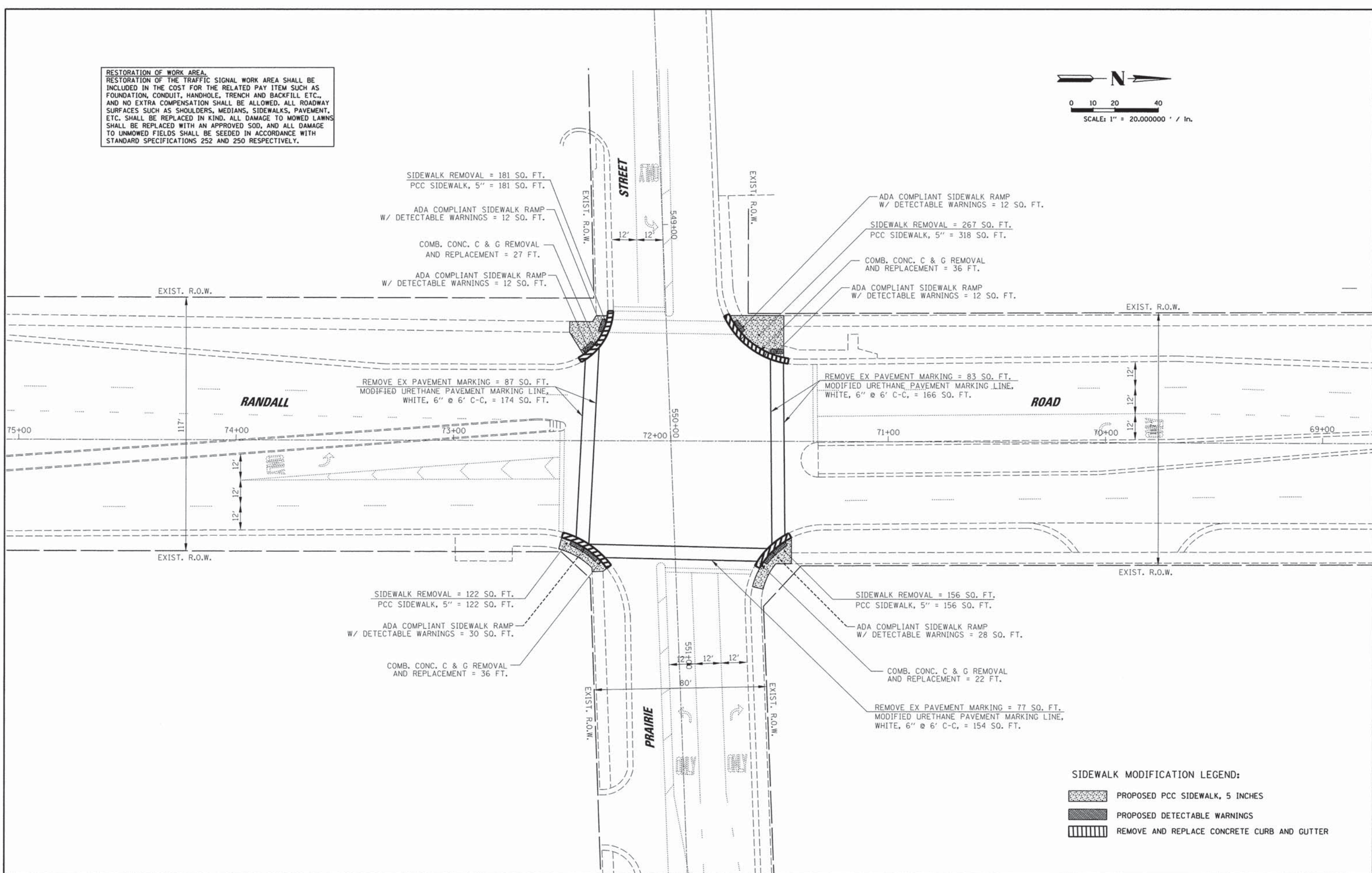
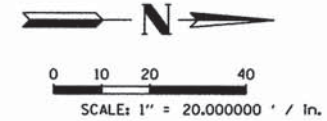
**CITY OF ST. CHARLES**  
 2 EAST MAIN STREET  
 ST. CHARLES, IL 60174

ENERGY SUPPLY CONTACT: **TOM LESIEWICZ**  
 PHONE: (630) 377-4486  
 COMPANY: **ST. CHARLES ELECTRIC DEPARTMENT**

**CONSTRUCTION NOTE:**

① TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE SHALL BE INSTALLED ON ALL MAST ARM MOUNTED TRAFFIC SIGNAL HEADS. REMOVAL OF EXISTING BACKPLATES ON MAST ARM MOUNTED TRAFFIC SIGNALS SHALL BE INCLUDED IN THE COST OF TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE.

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



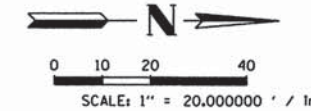
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DATE	BY
DATE	BY
DATE	BY

**CHRISTOPHER B. BURKE ENGINEERING LTD.**  
 3115 N. Main Street, Suite 600  
 Rockton, Illinois 60087  
 (815) 823-0500

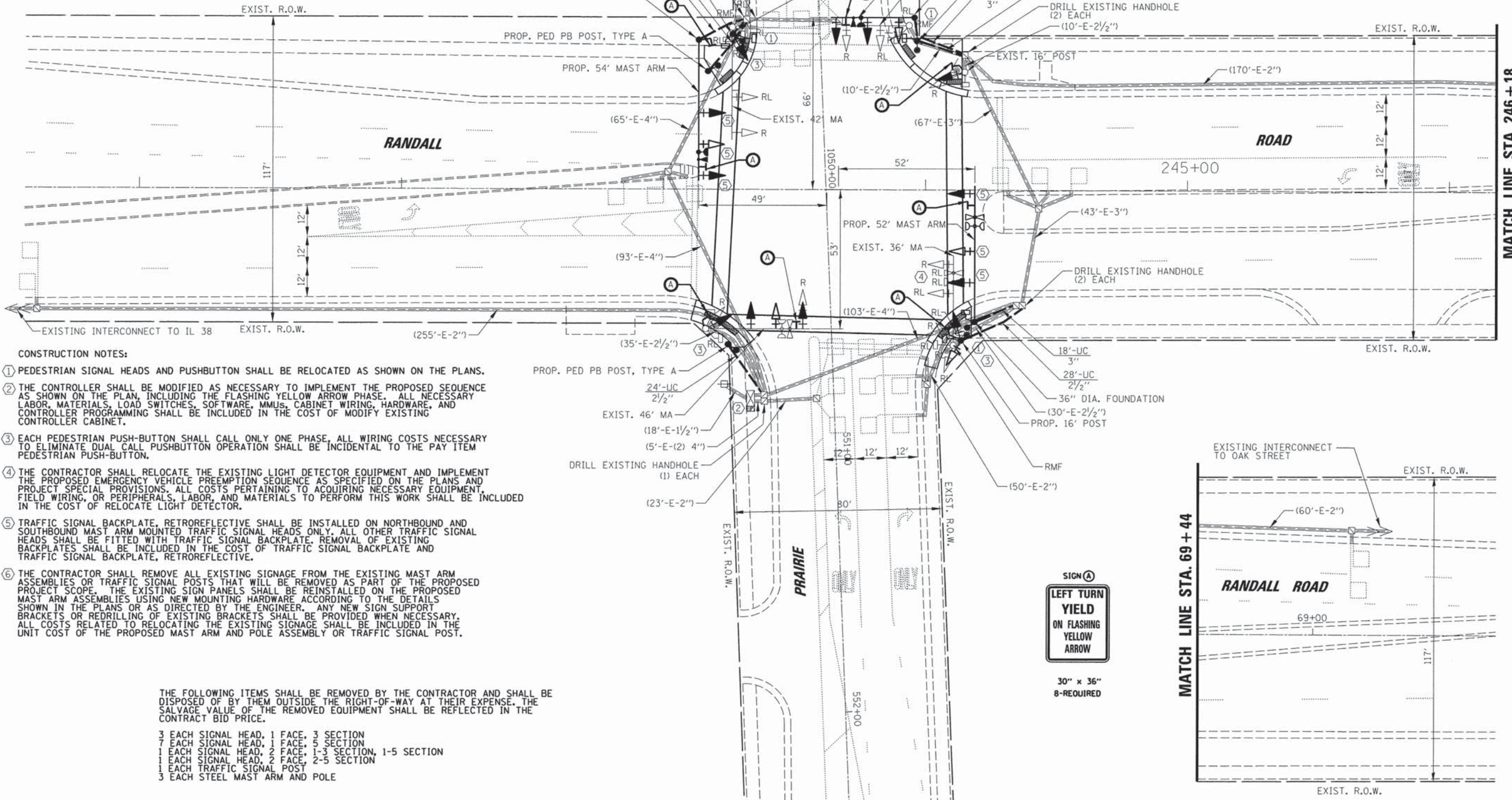
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PLOT SCALE = 1" = 20.000000' / In.	CHECKED - WCE	DATE - FEB 2014	REVISED -			CONTRACT NO. = 63862	ILLINOIS FED. AID PROJECT			
PLOT DATE = 5/12/2014	DATE - FEB 2014	REVISED -	REVISED -			SCALE: 1" = 20'	SHEET NO. OF SHEETS STA. -- TO STA. --			

GENERAL NOTES:

- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION. THIS SHALL INCLUDE LOCATING THE MAST ARM FOUNDATIONS AND VERIFYING THE MAST ARMS LENGTHS.
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- THE CONTRACTOR SHALL CHECK THE PROPOSED TRAFFIC SIGNAL EQUIPMENT LOCATIONS FOR OVERHEAD UTILITY CONFLICTS. THE CONTRACTOR SHALL COORDINATE ANY CONFLICTS WITH THE UTILITY COMPANIES AND THE RESIDENT ENGINEER BEFORE ORDERING MATERIALS.
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, LOCAL GOVERNMENT AGENCIES AND IDOT.



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

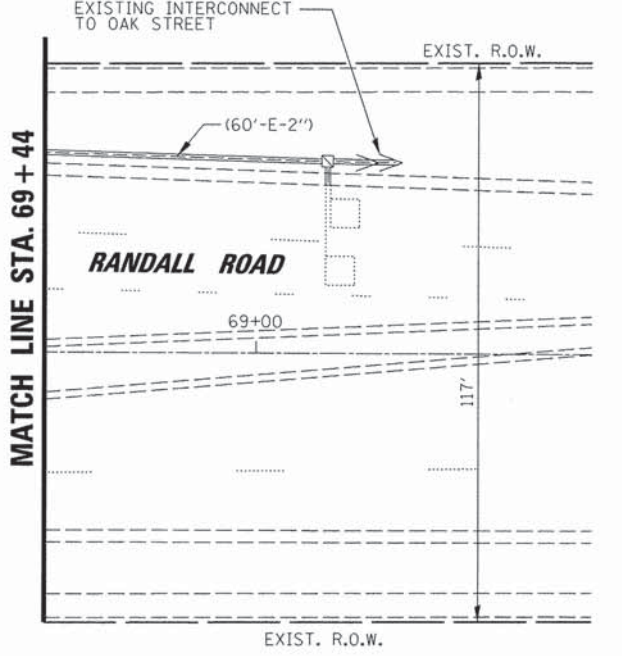


CONSTRUCTION NOTES:

- PEDESTRIAN SIGNAL HEADS AND PUSHBUTTON SHALL BE RELOCATED AS SHOWN ON THE PLANS.
- THE CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE AS SHOWN ON THE PLAN, INCLUDING THE FLASHING YELLOW ARROW PHASE. ALL NECESSARY LABOR, MATERIALS, LOAD SWITCHES, SOFTWARE, MMUS, CABINET WIRING, HARDWARE, AND CONTROLLER PROGRAMMING SHALL BE INCLUDED IN THE COST OF MODIFY EXISTING CONTROLLER CABINET.
- EACH PEDESTRIAN PUSH-BUTTON SHALL CALL ONLY ONE PHASE. ALL WIRING COSTS NECESSARY TO ELIMINATE DUAL CALL PUSHBUTTON OPERATION SHALL BE INCIDENTAL TO THE PAY ITEM PEDESTRIAN PUSH-BUTTON.
- THE CONTRACTOR SHALL RELOCATE THE EXISTING LIGHT DETECTOR EQUIPMENT AND IMPLEMENT THE PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE AS SPECIFIED ON THE PLANS AND PROJECT SPECIAL PROVISIONS. ALL COSTS PERTAINING TO ACQUIRING NECESSARY EQUIPMENT, FIELD WIRING, OR PERIPHERALS, LABOR, AND MATERIALS TO PERFORM THIS WORK SHALL BE INCLUDED IN THE COST OF RELOCATE LIGHT DETECTOR.
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- 3 EACH SIGNAL HEAD, 1 FACE, 3 SECTION
- 7 EACH SIGNAL HEAD, 1 FACE, 5 SECTION
- 1 EACH SIGNAL HEAD, 2 FACE, 1-3 SECTION, 1-5 SECTION
- 1 EACH SIGNAL HEAD, 2 FACE, 2-5 SECTION
- 1 EACH TRAFFIC SIGNAL POST
- 3 EACH STEEL MAST ARM AND POLE



DATE	BY	DESIGNED - EAJ	REVISED -
DATE	BY	DRAWN - FPB	REVISED -
DATE	BY	CHECKED - WCE	REVISED -
DATE	BY	DATE - FEB 2014	REVISED -

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Rosemont, Illinois 60018  
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FILE NAME = K:\Projects\Kane County\2012 HSIP\CADD\Drawings\Sheets\Traffic Signal Plans\30 MOD_PRAIRIE.dgn	DESIGNED - EAJ	REVISED -
PLOT SCALE = 1" = 20.000000' / 1in.	DRAWN - FPB	REVISED -
PLOT DATE = 5/12/2014	CHECKED - WCE	REVISED -
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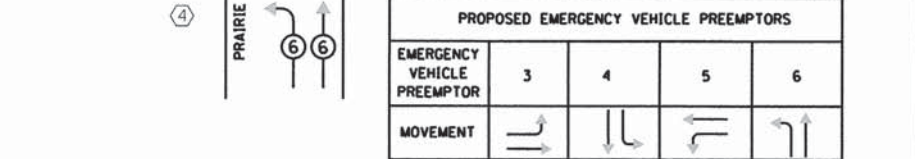
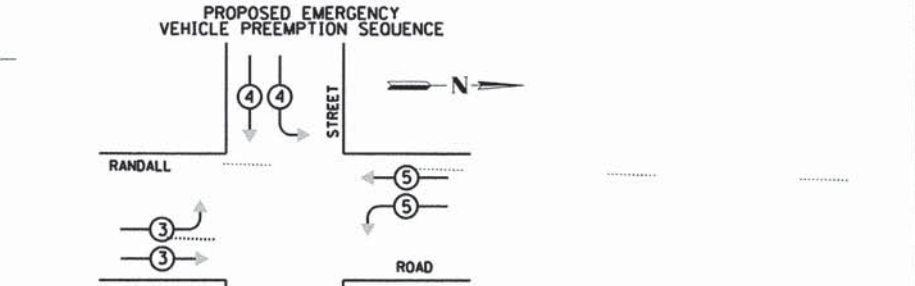
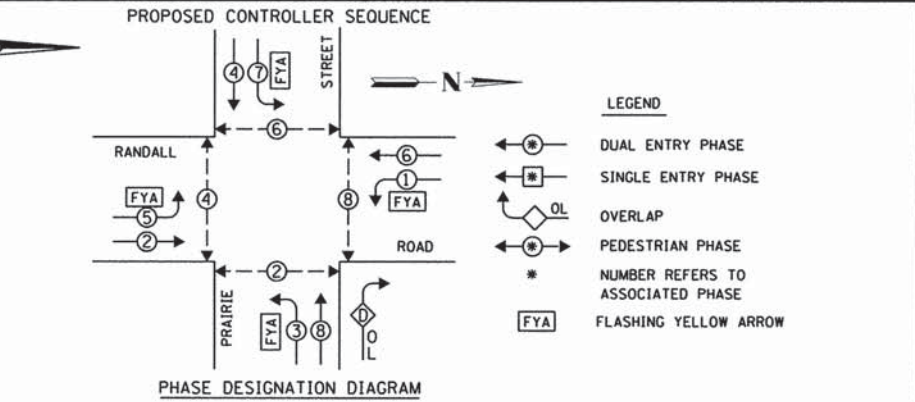
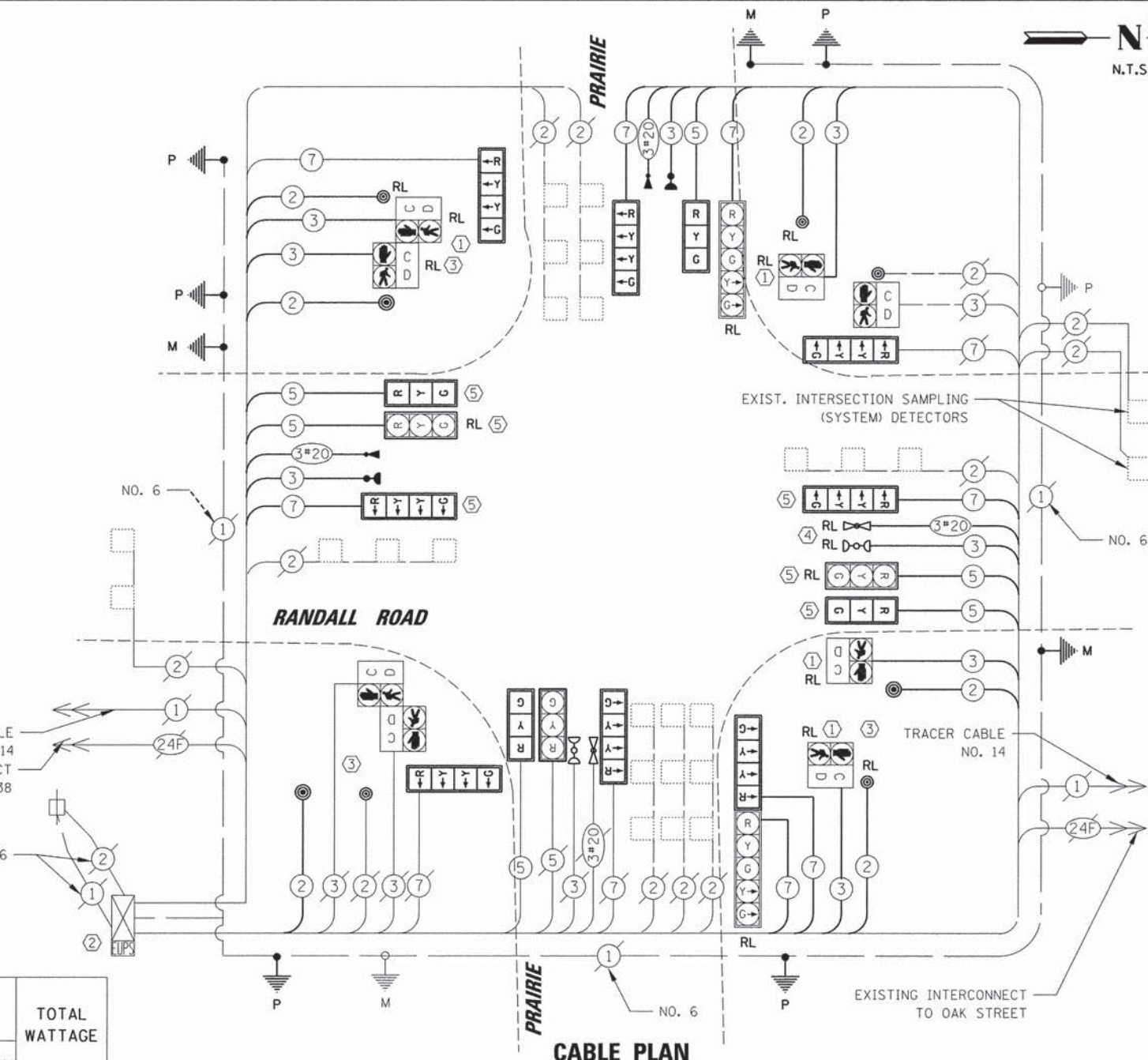
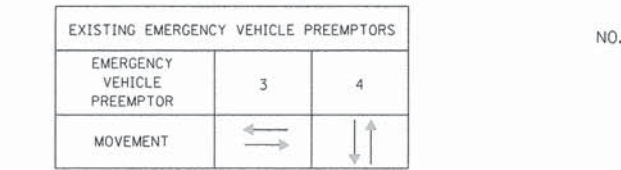
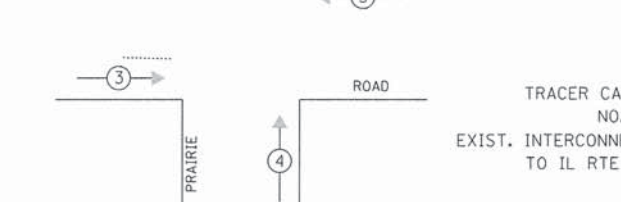
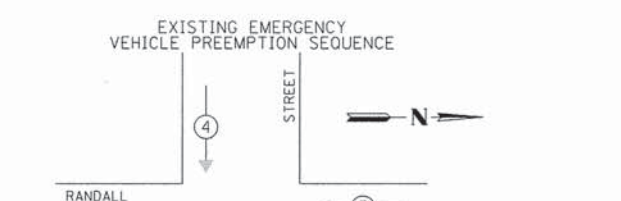
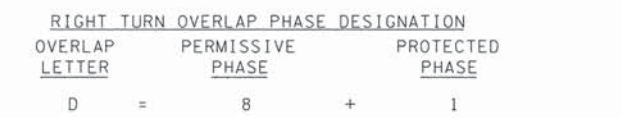
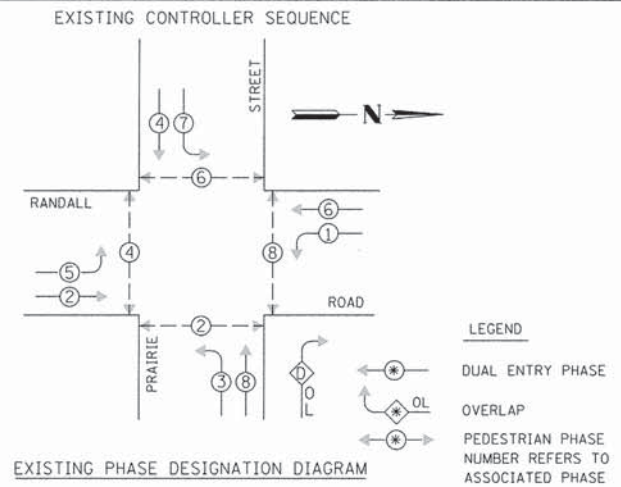
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN  
RANDALL ROAD AND PRAIRIE STREET

SCALE: 1" = 20'	SHEET NO. OF SHEETS	STA. -- TO STA. --	F.A.P. RTE. 336	SECTION 11-00418-01-SP	COUNTY KANE	TOTAL SHEETS 61	SHEET NO. 30
					CONTRACT NO. 63862		ILLINOIS FED. AID PROJECT

DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
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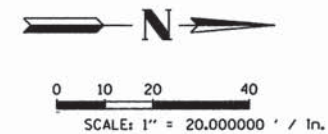
I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	17		17	0.50	144.5
(YELLOW)	17		25	0.25	106.25
(GREEN)	17		15	0.25	63.75
ARROW	4		12	0.10	4.8
FYA SECTION	8		12	0.30	28.80
PED. SIGNAL	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUM SIGN	-		25	0.05	-
VIDEO SYSTEM	-		150	1.00	-
UPS	1		25	1.00	25.00
FLASHER	-		-	0.50	-
ENERGY COSTS TO:					TOTAL = 673.1

**KANE COUNTY DIVISION OF TRANSPORTATION**  
 41W011 BURLINGTON ROAD  
 ST. CHARLES, IL 60175  
 ENERGY SUPPLY: CONTACT: MIKE WIDHALM  
 PHONE: (847) 608-2376  
 COMPANY: COMED

- CONSTRUCTION NOTES:**
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  - THE CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE AS SHOWN ON THE PLAN, INCLUDING THE FLASHING YELLOW ARROW PHASE. ALL NECESSARY LABOR, MATERIALS, LOAD SWITCHES, SOFTWARE, MMUS, CABINET WIRING, HARDWARE, AND CONTROLLER PROGRAMMING SHALL BE INCLUDED IN THE COST OF MODIFY EXISTING CONTROLLER CABINET.
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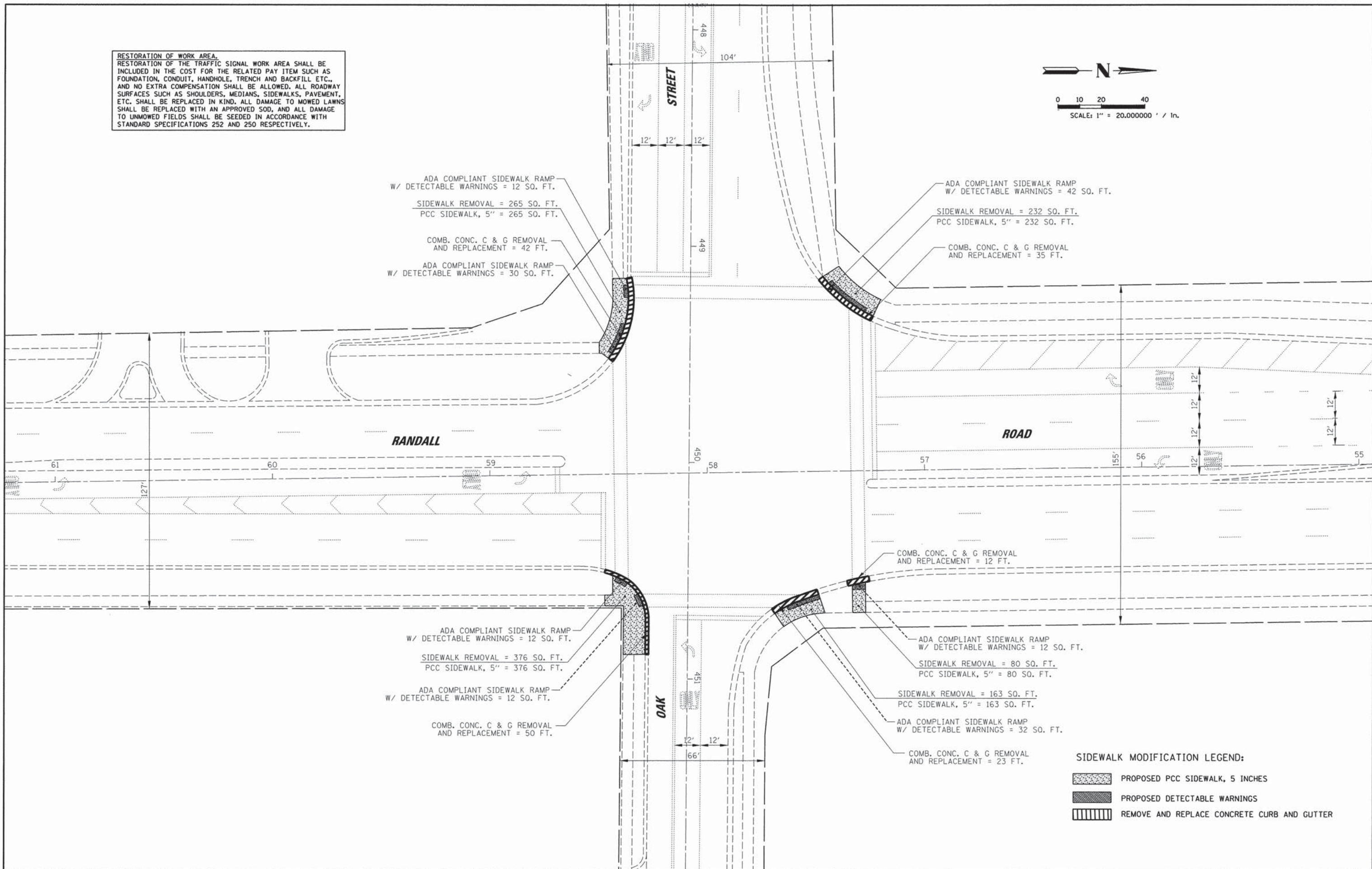
ITEM	UNIT	QTY
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	777
DETECTABLE WARNINGS	SQ FT	106
SIDEWALK REMOVAL	SQ FT	726
CHANGEABLE MESSAGE SIGN	CAL MO	0.5
TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	0.0625
TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	0.0625
SIGN PANEL - TYPE 1	SQ FT	60
MODIFIED URETHANE PAVEMENT MARKING - LINE 6"	FOOT	494
PAVEMENT MARKING REMOVAL	SQ FT	247
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	104
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	66
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1130
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1952
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1386
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	2068
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	249
TRAFFIC SIGNAL POST, 10 FT.	EACH	2
TRAFFIC SIGNAL POST, 16 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 52 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 54 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	20
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	14
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	30
DRILL EXISTING HANDHOLE	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	4
TRAFFIC SIGNAL BACKPLATE	EACH	8
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	6
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	3
RELOCATE EXISTING SIGNAL HEAD	EACH	4
RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	5
RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	EACH	3
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	6785
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	3
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	848
PEDESTRIAN PUSH-BUTTON POST, TYPE A	EACH	2
RELOCATE LIGHT DETECTOR	EACH	1
COMBINATION CONCRETE CURB AND GUTTER, REMOVAL AND REPLACEMENT	FOOT	111
CONSTRUCTION LAYOUT	L SUM	0.0625

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DATE	BY	DATE	BY
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**CHRISTOPHER B. BURKE ENGINEERING LTD.**  
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 Rosemont, Illinois 60018  
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ADA COMPLIANT SIDEWALK RAMP  
 W/ DETECTABLE WARNINGS = 12 SQ. FT.  
 SIDEWALK REMOVAL = 265 SQ. FT.  
 PCC SIDEWALK, 5" = 265 SQ. FT.  
 COMB. CONC. C & G REMOVAL  
 AND REPLACEMENT = 42 FT.  
 ADA COMPLIANT SIDEWALK RAMP  
 W/ DETECTABLE WARNINGS = 30 SQ. FT.

ADA COMPLIANT SIDEWALK RAMP  
 W/ DETECTABLE WARNINGS = 42 SQ. FT.  
 SIDEWALK REMOVAL = 232 SQ. FT.  
 PCC SIDEWALK, 5" = 232 SQ. FT.  
 COMB. CONC. C & G REMOVAL  
 AND REPLACEMENT = 35 FT.

ADA COMPLIANT SIDEWALK RAMP  
 W/ DETECTABLE WARNINGS = 12 SQ. FT.  
 SIDEWALK REMOVAL = 376 SQ. FT.  
 PCC SIDEWALK, 5" = 376 SQ. FT.  
 ADA COMPLIANT SIDEWALK RAMP  
 W/ DETECTABLE WARNINGS = 12 SQ. FT.  
 COMB. CONC. C & G REMOVAL  
 AND REPLACEMENT = 50 FT.

COMB. CONC. C & G REMOVAL  
 AND REPLACEMENT = 12 FT.

ADA COMPLIANT SIDEWALK RAMP  
 W/ DETECTABLE WARNINGS = 12 SQ. FT.  
 SIDEWALK REMOVAL = 80 SQ. FT.  
 PCC SIDEWALK, 5" = 80 SQ. FT.

SIDEWALK REMOVAL = 163 SQ. FT.  
 PCC SIDEWALK, 5" = 163 SQ. FT.

ADA COMPLIANT SIDEWALK RAMP  
 W/ DETECTABLE WARNINGS = 32 SQ. FT.

COMB. CONC. C & G REMOVAL  
 AND REPLACEMENT = 23 FT.

**SIDEWALK MODIFICATION LEGEND:**

	PROPOSED PCC SIDEWALK, 5 INCHES
	PROPOSED DETECTABLE WARNINGS
	REMOVE AND REPLACE CONCRETE CURB AND GUTTER

FILE NAME =	USER NAME = ghickey	DESIGNED - EAJ	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SIDEWALK MODIFICATION PLAN RANDALL ROAD AND OAK STREET</b>	F.A.P. RTE. 336	SECTION 11-00418-01-SP	COUNTY KANE	TOTAL SHEETS 61	SHEET NO. 32
K:\Projects\Kane County\2012 HSIP\CAOD\Drawings\Sheets\Traffic Signal Plans\32 REM_OAK.dgn	PLOT SCALE = 1" = 20.000000' / In.	DRAWN - FPB	REVISED -			CONTRACT NO. 63862				
	PLOT DATE = 5/12/2014	CHECKED - WCE	REVISED -							
		DATE - FEB 2014	REVISED -							
SCALE: 1" = 20'						SHEET NO. OF SHEETS		STA. -- TO STA. --		ILLINOIS FED. AID PROJECT



CONSTRUCTION NOTES:

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- |   |      |                                |
|---|------|--------------------------------|
| 2 | EACH | SIGNAL HEAD, 1-FACE, 3-SECTION |
| 2 | EACH | SIGNAL HEAD, 1-FACE, 5-SECTION |
| 2 | EACH | SIGNAL HEAD, 2-FACE, 5-SECTION |
| 3 | EACH | STEEL COMB. DUAL MAST ARM      |
| 3 | EACH | STEEL COMB. MAST ARM           |
| 6 | EACH | PEDESTRIAN SIGNAL HEAD, 1-FACE |
| 7 | EACH | PEDESTRIAN SIGNAL HEAD, 2-FACE |
| 7 | EACH | PEDESTRIAN PUSHBUTTONS         |

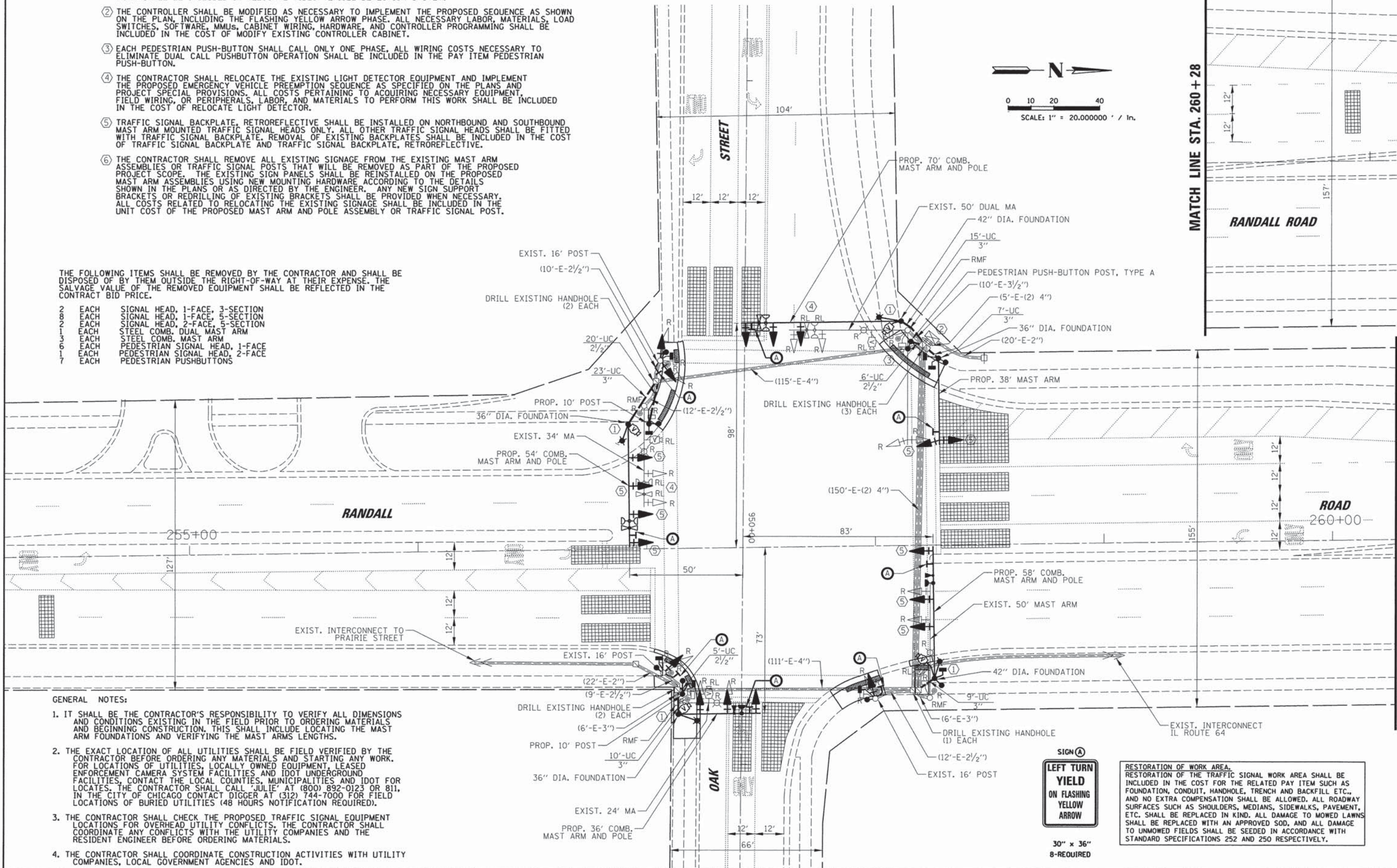
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 9575 East Higgins Road, Suite 600  
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DATE	BY

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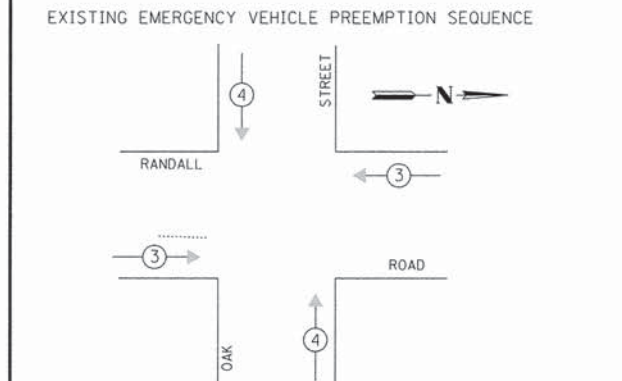
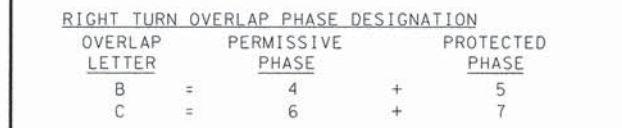
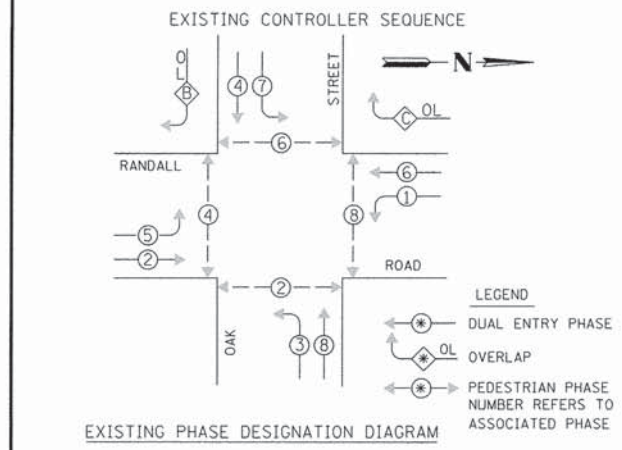
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FILE NAME =	USER NAME = ghsickey	DESIGNED - EAJ	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC SIGNAL MODIFICATION PLAN RANDALL ROAD AND OAK STREET</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
K:\Projects\Kane County\2012 HSIP\CA00\Drawings\Sheets\Traffic Signal Plans\33 MOD.OAK.dgn		DRAWN - FPB	REVISED -			336	11-00418-01-SP	KANE	61	33	
PLOT SCALE = 1" = 20.000000' / 1in.		CHECKED - WCE	REVISED -			CONTRACT NO. 63862		ILLINOIS FED. AID PROJECT			
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**CHRISTOPHER B. BURKE ENGINEERING LTD.**  
 9515 East Main Street, Suite 600  
 Rosemont, Illinois 60018  
 (847) 823-0500

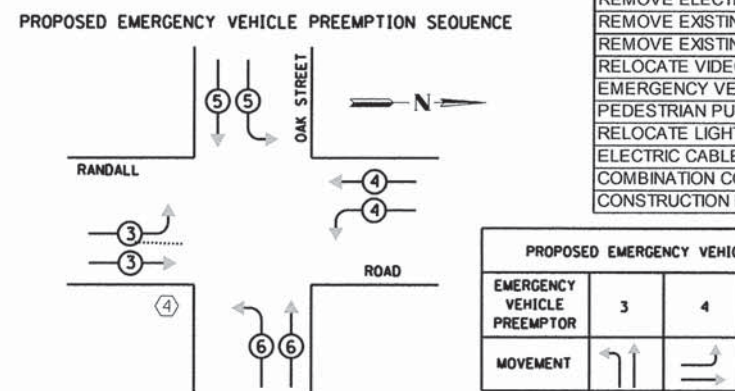
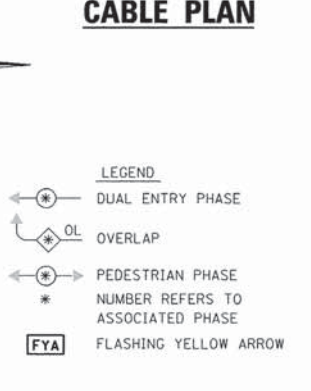
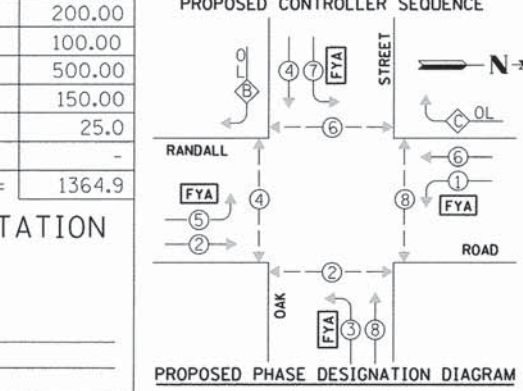
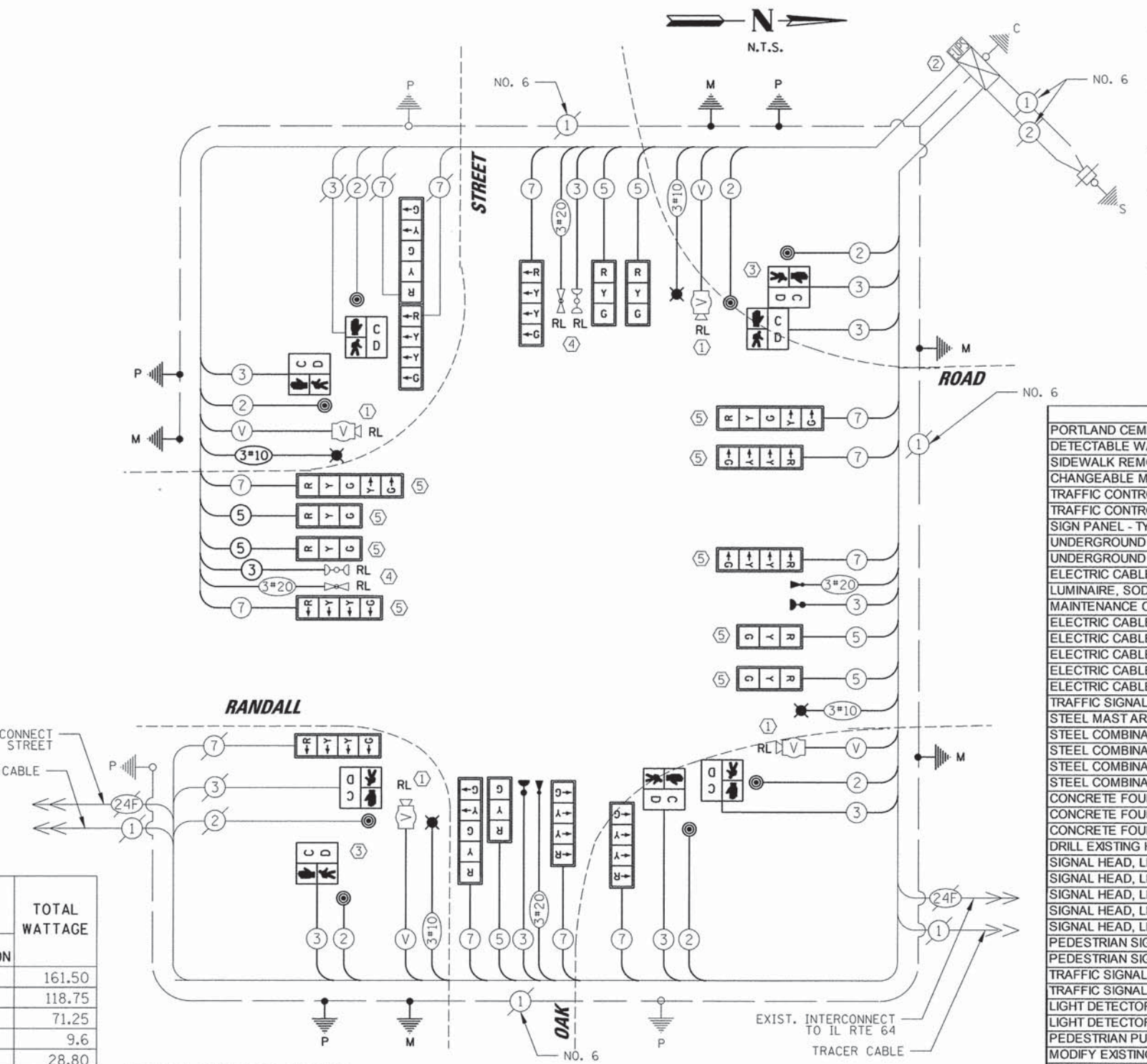
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 CHECKED: \_\_\_\_\_



EXISTING EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↔	↕

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	19	17	0.50		161.50
(YELLOW)	19	25	0.25		118.75
(GREEN)	19	15	0.25		71.25
ARROW	8	12	0.10		9.6
FYA SECTION	8	12	0.30		28.80
PED. SIGNAL	8	25	1.00		200.00
CONTROLLER	1	100	1.00		100.00
LUMINAIRE	4	250	0.50		500.00
VIDEO DETECTION	1	150	1.00		150.00
UPS	1	25	1.00		25.0
FLASHER	-	-	0.50		-
ENERGY COSTS TO:					TOTAL = 1364.9

**KANE COUNTY DIVISION OF TRANSPORTATION**  
 41W011 BURLINGTON ROAD  
 ST. CHARLES, IL 60175  
 ENERGY SUPPLY: CONTACT: MIKE WIDHALM  
 PHONE: (847) 608-2376  
 COMPANY: COMED



PROPOSED EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	↔	↔	↕	↕

- CONSTRUCTION NOTES:**
- THE CONTRACTOR SHALL RELOCATE THE EXISTING VIDEO DETECTION EQUIPMENT ACCORDING TO THE PLANS. ALL COSTS PERTAINING TO ACQUIRING NECESSARY EQUIPMENT, LABOR, AND MATERIALS TO PERFORM THIS WORK SHALL BE INCLUDED IN RELOCATE VIDEO VEHICLE DETECTION SYSTEM.
  - THE CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE AS SHOWN ON THE PLAN, INCLUDING THE FLASHING YELLOW ARROW PHASE. ALL NECESSARY LABOR, MATERIALS, LOAD SWITCHES, SOFTWARE, MMUS, CABINET WIRING, HARDWARE, AND CONTROLLER PROGRAMMING SHALL BE INCLUDED IN THE COST OF MODIFY EXISTING CONTROLLER CABINET.
  - EACH PEDESTRIAN PUSH-BUTTON SHALL CALL ONLY ONE PHASE. ALL WIRING COSTS NECESSARY TO ELIMINATE DUAL CALL PUSHBUTTON OPERATION SHALL BE INCLUDED IN THE PAY ITEM PEDESTRIAN PUSH-BUTTON.
  - THE CONTRACTOR SHALL RELOCATE THE EXISTING LIGHT DETECTOR EQUIPMENT AND IMPLEMENT THE PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE AS SPECIFIED ON THE PLANS AND PROJECT SPECIAL PROVISIONS. ALL COSTS PERTAINING TO ACQUIRING NECESSARY EQUIPMENT, FIELD WIRING, OR PERIPHERALS, LABOR, AND MATERIALS TO PERFORM THIS WORK SHALL BE INCLUDED IN THE COST OF RELOCATE LIGHT DETECTOR.
  - TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE SHALL BE INSTALLED ON NORTHBOUND AND SOUTHBOUND MAST ARM MOUNTED TRAFFIC SIGNAL HEADS ONLY. ALL OTHER TRAFFIC SIGNAL HEADS SHALL BE FITTED WITH TRAFFIC SIGNAL BACKPLATE. REMOVAL OF EXISTING BACKPLATES SHALL BE INCLUDED IN THE COST OF TRAFFIC SIGNAL BACKPLATE AND TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE.

ITEM	UNIT	QTY
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	1036
DETECTABLE WARNINGS	SQ FT	152
SIDEWALK REMOVAL	SQ FT	1116
CHANGEABLE MESSAGE SIGN	CAL MO	0.5
TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	0.0625
TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	0.0625
SIGN PANEL - TYPE 1	SQ FT	60
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	56
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	64
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	2724
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 250 WATT	EACH	4
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1043
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2054
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1527
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1990
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	226
TRAFFIC SIGNAL POST, 10 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 36 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 54 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 58 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 70 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	12
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	37
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	46
DRILL EXISTING HANDHOLE	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	7
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	5
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	3
SIGNAL HEAD, LED, 2-FACE, 1-4 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TI	EACH	6
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TI	EACH	1
TRAFFIC SIGNAL BACKPLATE	EACH	10
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	9
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	8
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	9564
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
RELOCATE VIDEO VEHICLE DETECTION SYSTEM	EACH	1
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	1013
PEDESTRIAN PUSH-BUTTON POST, TYPE A	EACH	1
RELOCATE LIGHT DETECTOR	EACH	2
ELECTRIC CABLE IN CONDUIT, VIDEO NO. 18 3C	FOOT	908
COMBINATION CONCRETE CURB AND GUTTER, REMOVAL AND REPLACEMENT	FOOT	159
CONSTRUCTION LAYOUT	L SUM	0.0625

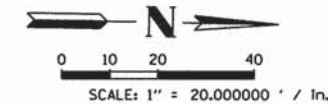
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		EAJ	WCE		
PLAN	NO.	DATE	BY	DATE	BY
PROFILE	NO.	DATE	BY	DATE	BY

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 9615 N. Lincoln Road, Suite 600  
 Rosemont, Illinois 60018  
 (847) 823-0500

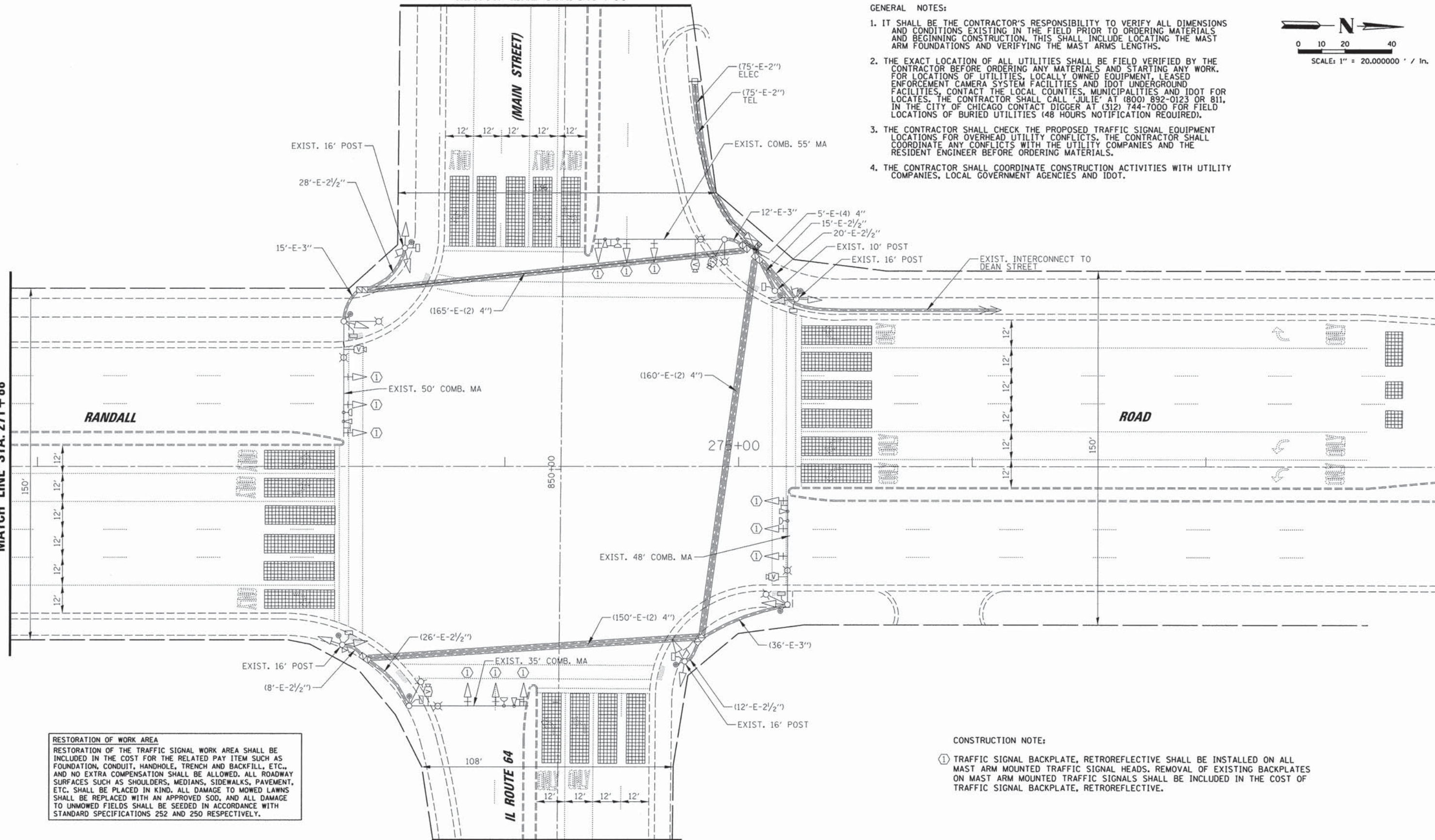
MATCH LINE STA. 848 + 00

GENERAL NOTES:

- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION. THIS SHALL INCLUDE LOCATING THE MAST ARM FOUNDATIONS AND VERIFYING THE MAST ARMS LENGTHS.
- THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE ORDERING ANY MATERIALS AND STARTING ANY WORK. FOR LOCATIONS OF UTILITIES, LOCALLY OWNED EQUIPMENT, LEASED ENFORCEMENT CAMERA SYSTEM FACILITIES AND IDOT UNDERGROUND FACILITIES, CONTACT THE LOCAL COUNTIES, MUNICIPALITIES AND IDOT FOR LOCATES. THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811. IN THE CITY OF CHICAGO CONTACT DIGGER AT (312) 744-7000 FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION REQUIRED).
- THE CONTRACTOR SHALL CHECK THE PROPOSED TRAFFIC SIGNAL EQUIPMENT LOCATIONS FOR OVERHEAD UTILITY CONFLICTS. THE CONTRACTOR SHALL COORDINATE ANY CONFLICTS WITH THE UTILITY COMPANIES AND THE RESIDENT ENGINEER BEFORE ORDERING MATERIALS.
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, LOCAL GOVERNMENT AGENCIES AND IDOT.



MATCH LINE STA. 271 + 88



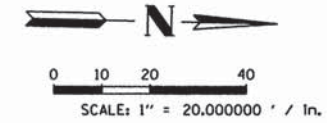
**RESTORATION OF WORK AREA**  
 RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE COST FOR THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS,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

CONSTRUCTION NOTE:

- ① TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE SHALL BE INSTALLED ON ALL MAST ARM MOUNTED TRAFFIC SIGNAL HEADS. REMOVAL OF EXISTING BACKPLATES ON MAST ARM MOUNTED TRAFFIC SIGNALS SHALL BE INCLUDED IN THE COST OF TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE.

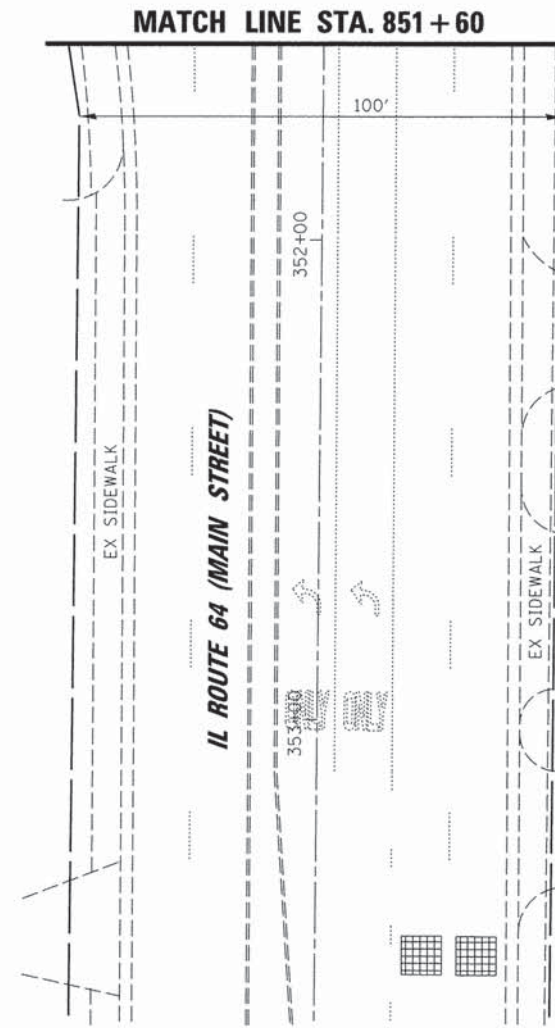
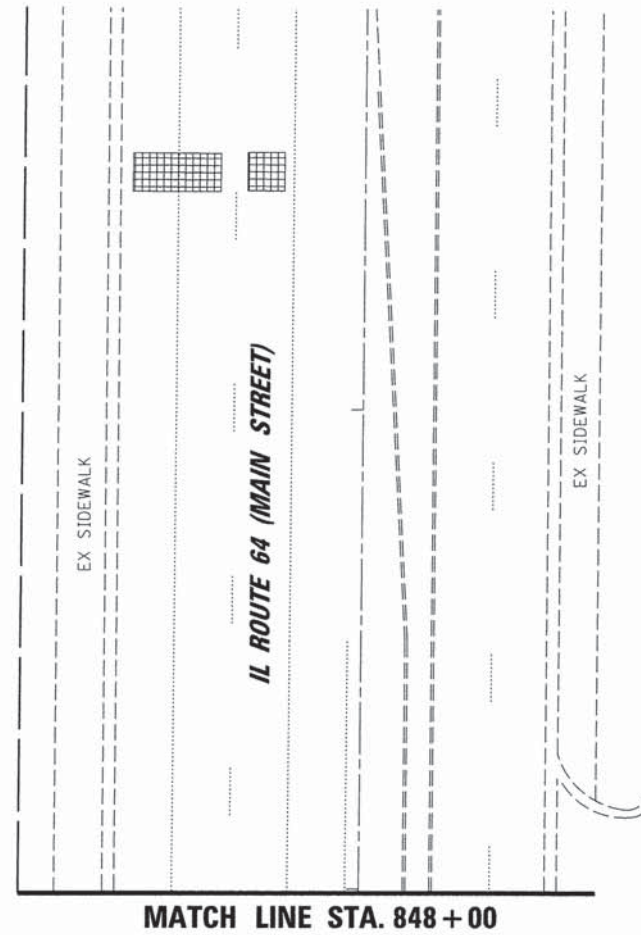
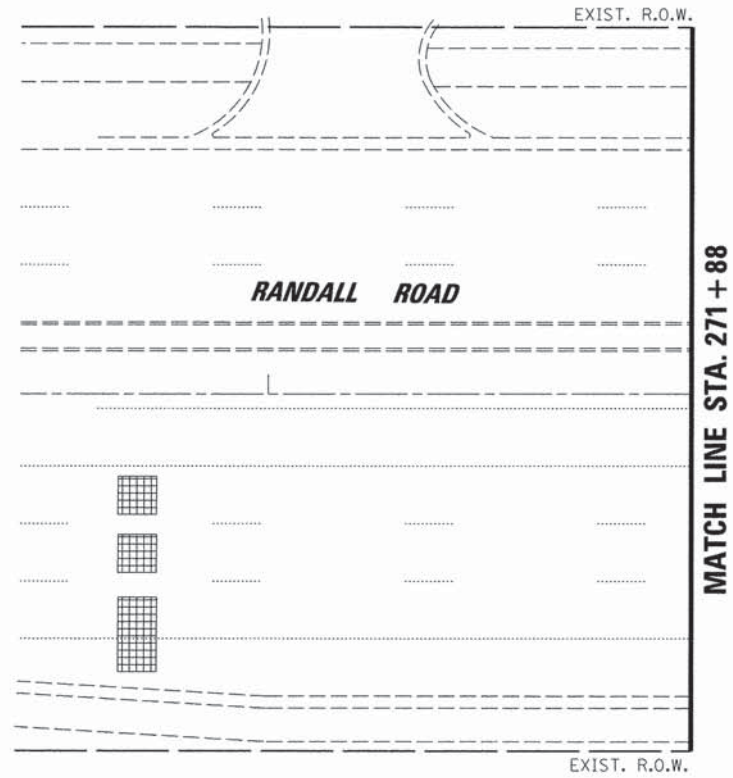
MATCH LINE STA. 851 + 60

FILE NAME =	USER NAME = ghickey	DESIGNED - EAJ	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC SIGNAL MODIFICATION PLAN RANDALL ROAD AND IL ROUTE 64</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
K:\Projects\Kane County\2012 HSIP\CA00\Drawings\Sheets\Traffic Signal Plans\35 M00_IL64_EX-01.dgn	DRAWN - FPB	REVISED -	336			11-00418-01-SP	KANE	61	35	
PLOT SCALE = 1" = 20.000000' / in.	CHECKED - WCE	REVISED -	CONTRACT NO. 63862							
PLOT DATE = 5/12/2014	DATE - FEB 2014	REVISED -	ILLINOIS FED. AID PROJECT							
				SCALE: 1" = 20'	SHEET NO. OF SHEETS	STA. -- TO STA. --				



PROFILE	DESIGNED	DATE	BY
NOTE BOOK NO.	GRADES CHECKED		
	STRUCTURE NOTATIONS CHECKED		
PLAN	NOTE BOOK NO.	DATE	BY
	ADJUSTMENT CHECKED		
	FILE NAME		

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 Rosemead, Illinois 60018  
 (847) 822-0500

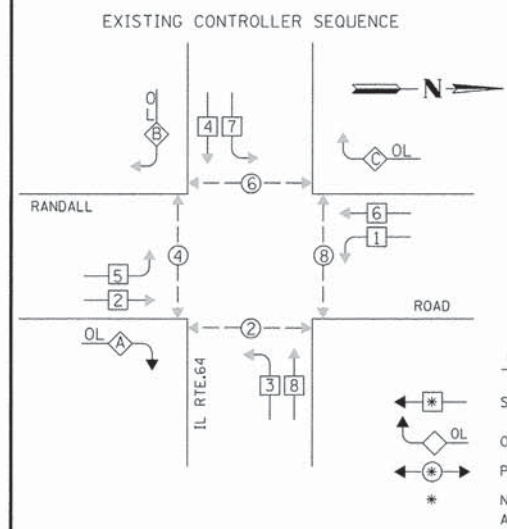


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	PLOT SCALE = 1" = 20.000000' / in.	DRAWN - FPB	REVISED -			SCALE: 1" = 20'	SHEET NO. OF SHEETS	STA. -- TO STA. --	CONTRACT NO. 63862		
	PLOT DATE = 5/12/2014	CHECKED - WCE	REVISED -			ILLINOIS FED. AID PROJECT					
		DATE - FEB 2014	REVISED -								

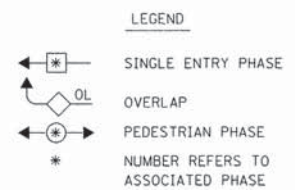
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 5415 N. Main Street, Suite 600  
 Rosemont, Illinois 60018  
 (847) 823-0500

DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
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 CHECKED: \_\_\_\_\_  
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CONSTRUCTION NOTE:  
 ① TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE SHALL BE INSTALLED ON ALL MAST ARM MOUNTED TRAFFIC SIGNAL HEADS. REMOVAL OF EXISTING BACKPLATES ON MAST ARM MOUNTED TRAFFIC SIGNALS SHALL BE INCLUDED IN THE COST OF TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE.

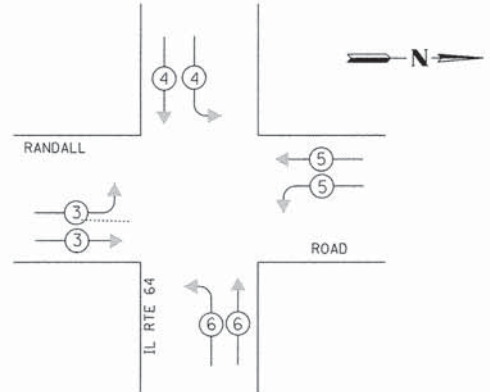


EXISTING PHASE DESIGNATION DIAGRAM

RIGHT TURN OVERLAP PHASE DESIGNATION

A	=	2	+	3
B	=	4	+	5
C	=	6	+	7

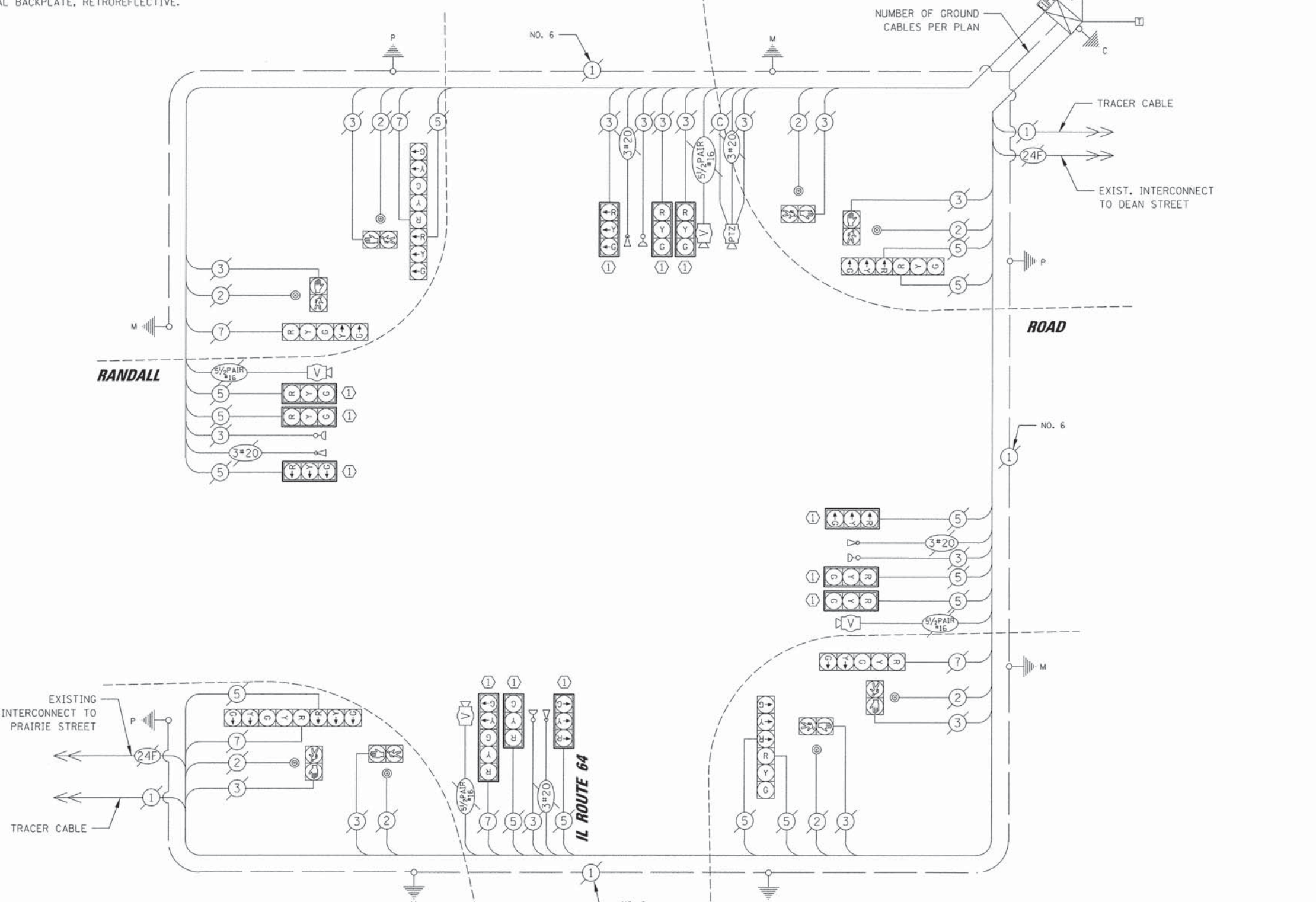
EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	22		17	0.50	187.00
(YELLOW)	22		25	0.25	137.50
(GREEN)	22		15	0.25	82.50
ARROW	12		12	0.10	14.40
PED. SIGNAL	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUM SIGN				0.05	
VIDEO SYSTEM	5		23		115.00
FLASHER				0.50	
ENERGY COSTS TO: (NEW SERVICE)					TOTAL = 836.40

CITY OF ST. CHARLES  
 2 EAST MAIN STREET  
 ST. CHARLES, IL 60174  
 ENERGY SUPPLY: CONTACT: TOM LESIEWICZ  
 PHONE: (630) 377-4486  
 COMPANY: ST. CHARLES ELECTRIC DEPARTMENT

FILE NAME = K:\Projects\Kane County\2012 HSIP\CADD\Drawings\Sheets\Traffic Signal Plans\37 CAB_IL64.EX.dgn	USER NAME = jjuratovac	DESIGNED - EAJ	REVISED -
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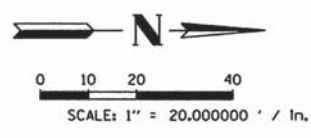


ITEM	UNIT	QTY
TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	0.0625
TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	0.0625
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	12
CONSTRUCTION LAYOUT	L SUM	0.0625

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION  
 DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE  
 RANDALL ROAD AND IL ROUTE 64  
 SCALE: 1" = 20' SHEET NO. OF SHEETS STA. -- TO STA. --

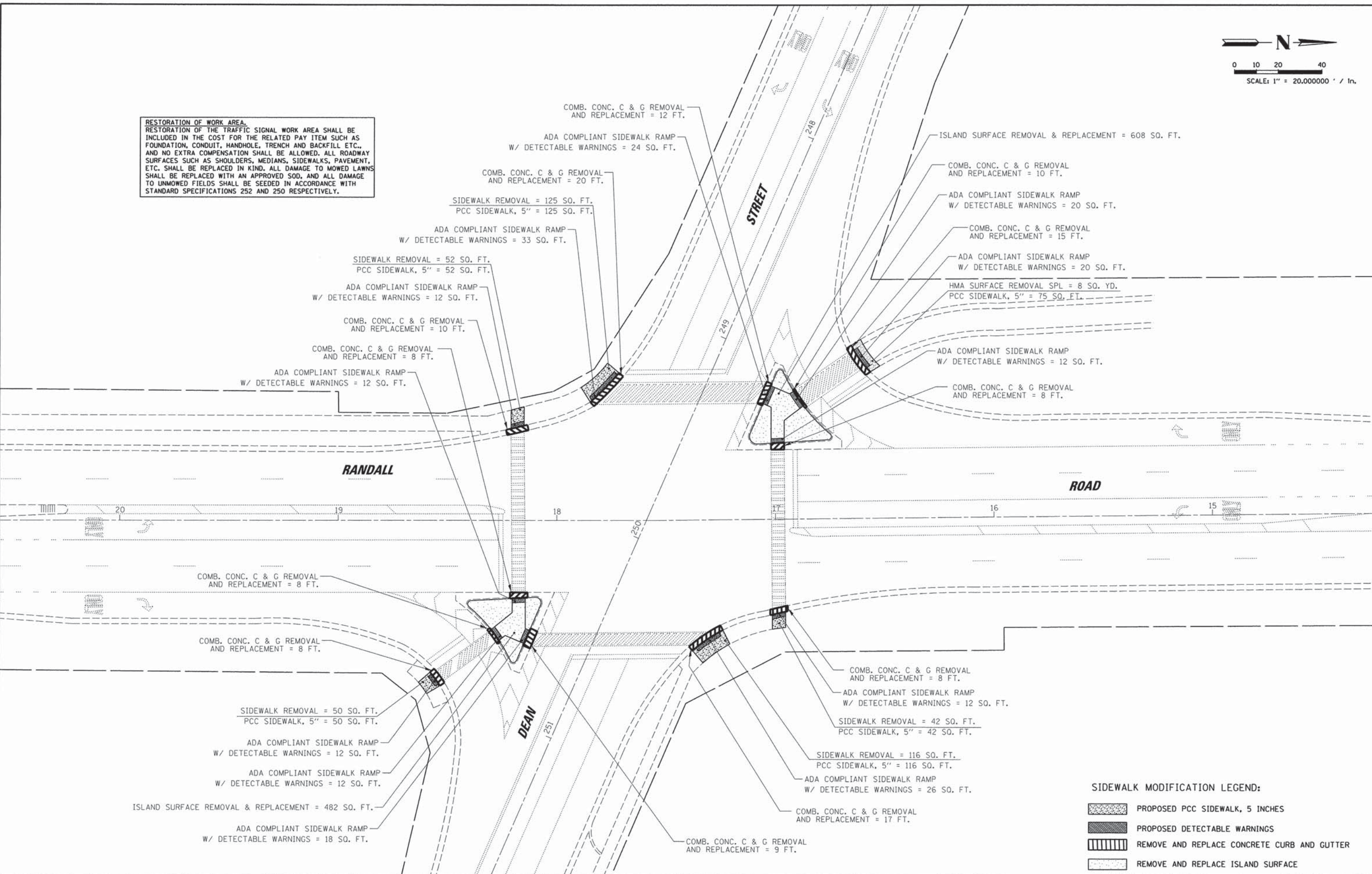
F.A.P. RTE. 336	SECTION 11-00418-01-SP	COUNTY KANE	TOTAL SHEETS 61	SHEET NO. 37
CONTRACT NO. 63862			ILLINOIS FED. AID PROJECT	



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

DATE  
BY  
SURVEYED  
ALIGNMENT CHECKED  
RT. OF WAY CHECKED  
CADD FILE NAME  
PLAN  
NOTE BOOK  
NO.  
DATE  
BY  
SURVEYED  
GRADES CHECKED  
B.M. NOTED  
STRUCTURE NOTATIONS OK'D  
PROFILE  
NOTE BOOK  
NO.

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Rosemont, Illinois 60018  
630 823-0500



FILE NAME = K:\Projects\Kane County\2012 HSIP\CADD\Drawings\Sheets\Traffic Signal Plans\38 REM\_DEAN.dgn  
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DESIGNED - EAJ  
DRAWN - FPB  
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

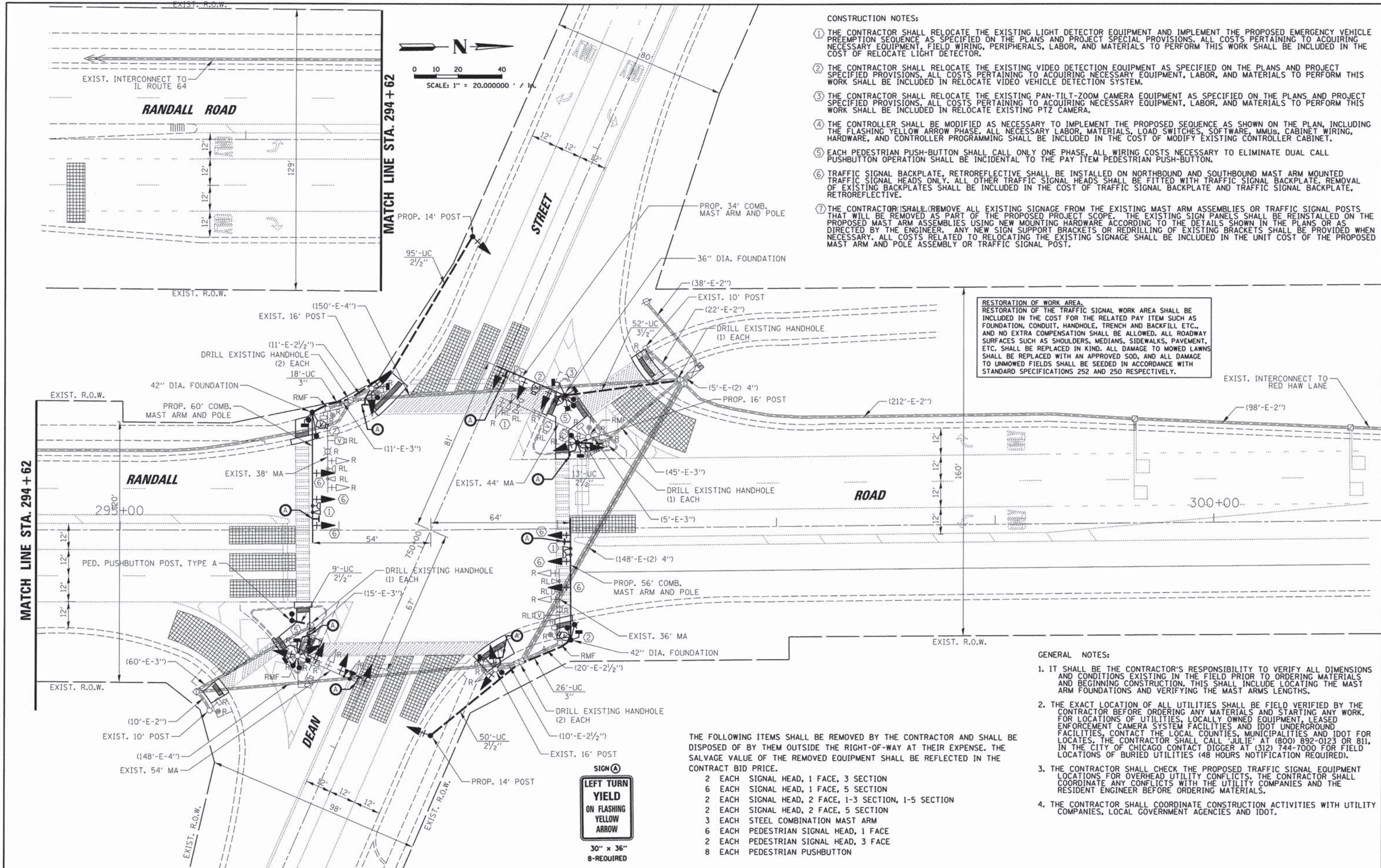
**SIDEWALK MODIFICATION PLAN  
RANDALL ROAD AND DEAN STREET**  
SCALE: 1" = 20'  
SHEET NO. OF SHEETS STA. -- TO STA. --

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	11-00418-01-SP	KANE	61	38
			CONTRACT NO. 63862	
ILLINOIS FED. AID PROJECT				

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 5175 S. MICHIGAN ROAD, SUITE 600  
 CHICAGO, ILLINOIS 60608  
 (847) 823-0500

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REVISIONS	
NO.	
DESCRIPTION	



FILE NAME =	USER NAME = ghickey	DESIGNED - EAJ	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC SIGNAL MODIFICATION PLAN RANDALL ROAD AND DEAN STREET</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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PLOT DATE = 5/12/2014	DATE - FEB 2014	CHECKED - WCE	REVISED -			<b>CONTRACT NO. 63862</b>		ILLINOIS FED. AID PROJECT			
		DATE - FEB 2014	REVISED -			SCALE: 1" = 20'	SHEET NO. OF SHEETS	STA. --	TO STA. --		



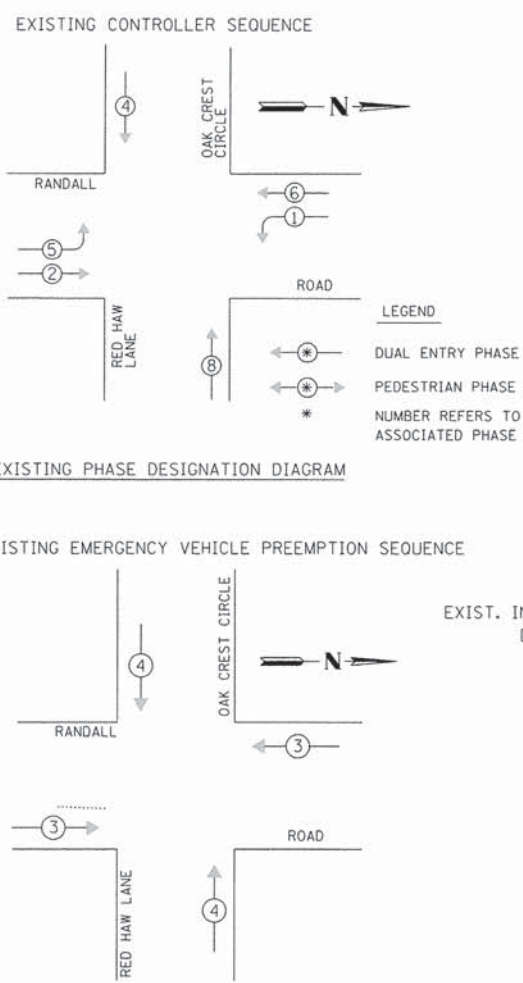




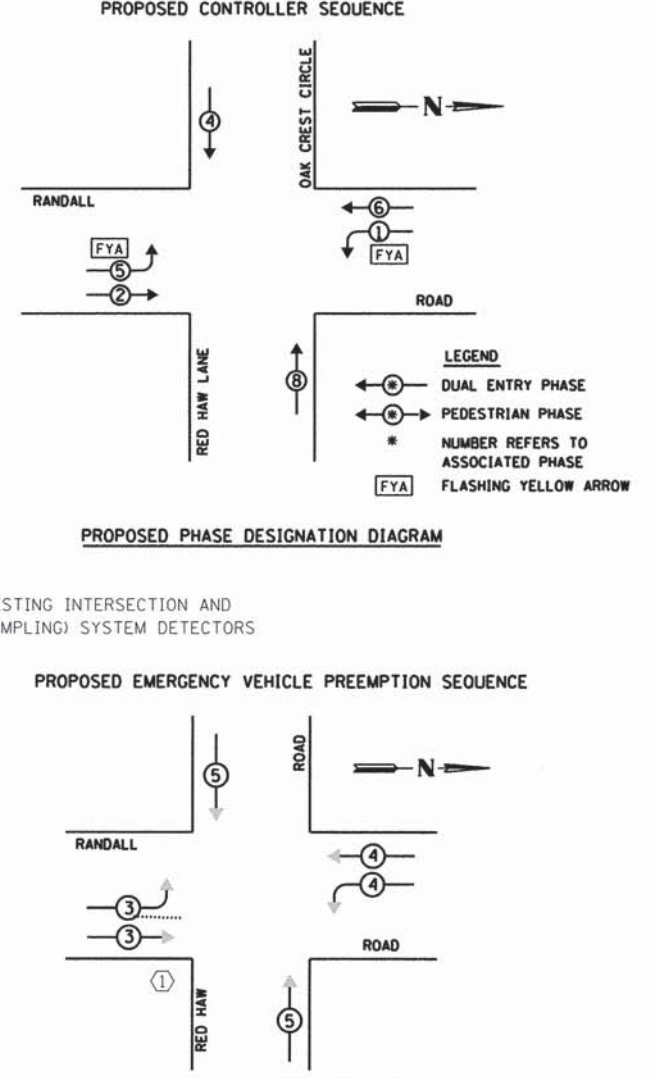
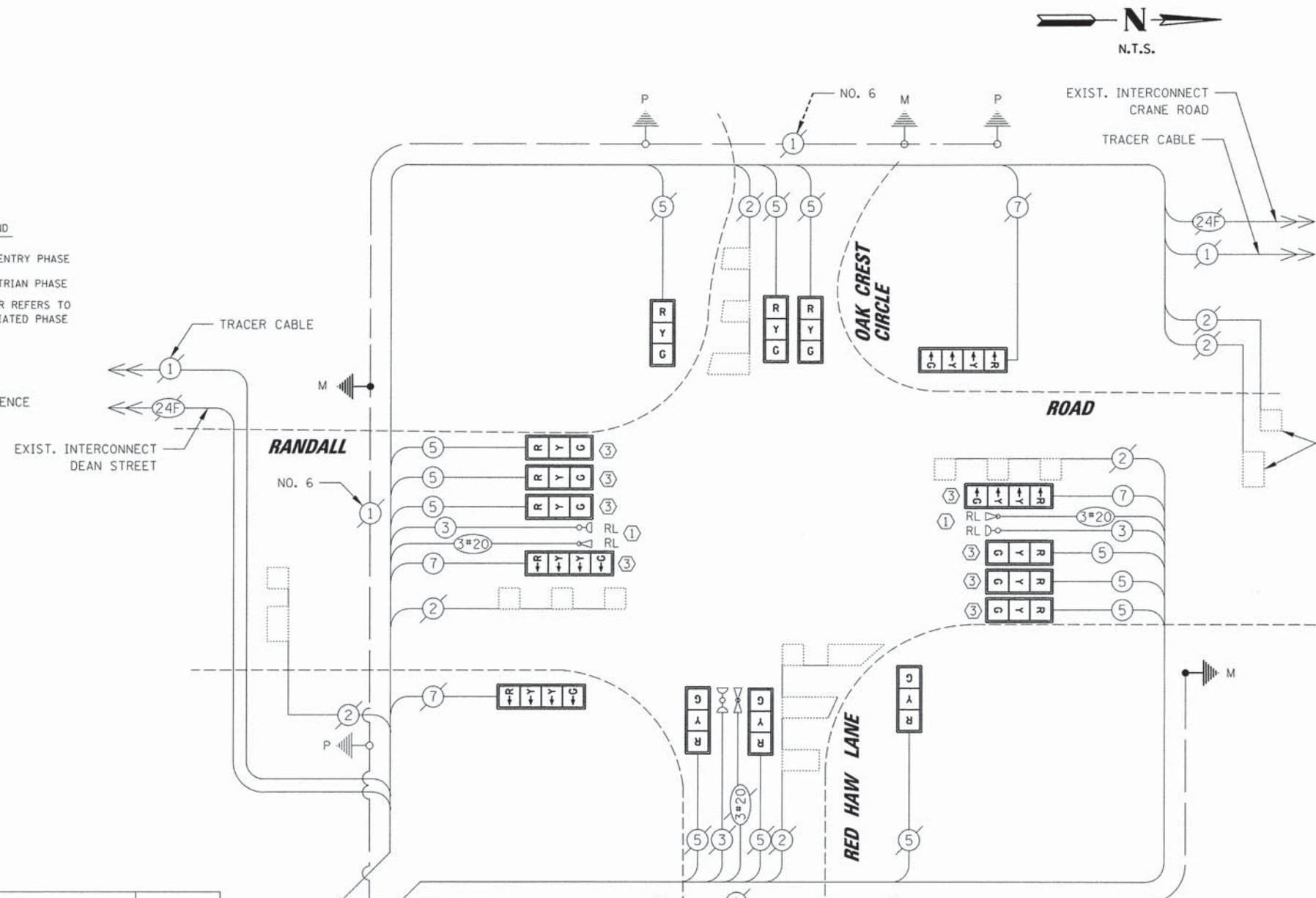


DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 PROFILE: \_\_\_\_\_  
 REVISIONS: \_\_\_\_\_  
 NO. \_\_\_\_\_

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 Rosemont, Illinois 60018  
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EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	←→	↑↓



EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	←→	↔	↑↓

TYPE	NO. OF LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	16	17	0.50	136.0	
(YELLOW)	16	25	0.25	100	
(GREEN)	16	15	0.25	60	
ARROW	0	12	0.10	0	
FYA SECTION	4	12	0.30	14.4	
PED. SIGNAL	-	25	1.00	-	
CONTROLLER	1	100	1.00	100.0	
LUMINAIRE	-	250	0.50	-	
PTZ CAMERA	-	100	1.00	-	
UPS	1	25	1.00	25.0	
FLASHER	-	-	0.50	-	
ENERGY COSTS TO: TOTAL = 435.4					

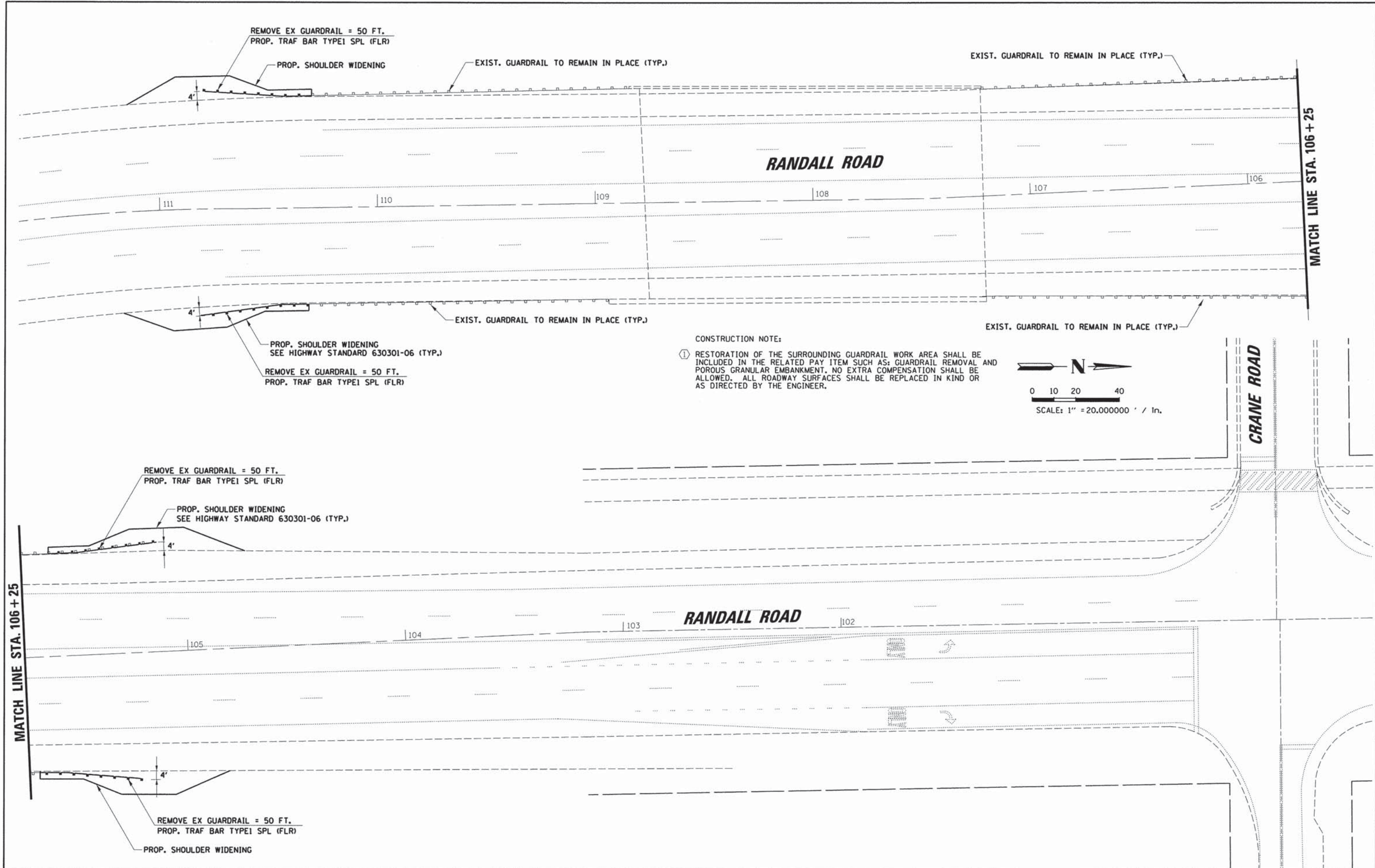
KANE COUNTY DIVISION OF TRANSPORTATION  
 41W011 BURLINGTON ROAD  
 ST. CHARLES, IL 60175  
 ENERGY SUPPLY: CONTACT: MIKE WIDHALM  
 PHONE: (847) 608-2376  
 COMPANY: COMED

- CONSTRUCTION NOTES:**
- THE CONTRACTOR SHALL RELOCATE THE EXISTING LIGHT DETECTOR EQUIPMENT AND IMPLEMENT THE PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE AS SPECIFIED ON THE PLANS AND PROJECT SPECIAL PROVISIONS. ALL COSTS PERTAINING TO ACQUIRING NECESSARY EQUIPMENT, FIELD WIRING, OR PERIPHERALS, LABOR, AND MATERIALS TO PERFORM THIS WORK SHALL BE INCLUDED IN THE COST OF RELOCATE LIGHT DETECTOR.
  - THE CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE AS SHOWN ON THE PLAN, INCLUDING THE FLASHING YELLOW ARROW PHASE. ALL NECESSARY LABOR, MATERIALS, LOAD SWITCHES, SOFTWARE, MMUS, CABINET WIRING, HARDWARE, AND CONTROLLER PROGRAMMING SHALL BE INCLUDED IN THE COST OF MODIFY EXISTING CONTROLLER CABINET.
  - TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE SHALL BE INSTALLED ON NORTHBOUND AND SOUTHBOUND MAST ARM MOUNTED TRAFFIC SIGNAL HEADS ONLY. ALL OTHER TRAFFIC SIGNAL HEADS SHALL BE FITTED WITH TRAFFIC SIGNAL BACKPLATE. REMOVAL OF EXISTING BACKPLATES SHALL BE INCLUDED IN THE COST OF TRAFFIC SIGNAL BACKPLATE AND TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE.

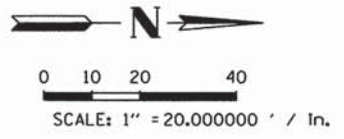
ITEM	UNIT	QTY
CHANGEABLE MESSAGE SIGN	CAL MO	0.5
TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	0.0625
TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	0.0625
SIGN PANEL - TYPE 1	SQ FT	30
MODIFIED URETHANE PAVEMENT MARKING - LINE 24"	FOOT	22
PAVEMENT MARKING REMOVAL	SQ FT	44
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	59
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	450
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1230
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	457
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	82
STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 52 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	28
DRILL EXISTING HANDHOLE	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	10
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE	EACH	8
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	8
LIGHT DETECTOR AMPLIFIER	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2219
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	2
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	450
RELOCATE LIGHT DETECTOR	EACH	2
CONSTRUCTION LAYOUT	L SUM	0.0625

DATE	BY	DESIGNED	CHECKED
		EAJ	WCE
DATE	BY	DRAWN	CHECKED
		FPB	WCE
DATE	BY	PLANNED	CHECKED
DATE	BY	NOTED	CHECKED

**CHRISTOPHER B. BURKE ENGINEERING LTD.**  
 5175 S. MOORE ROAD, SUITE 600  
 ROSELAND, ILLINOIS 60068  
 (847) 823-0500



**CONSTRUCTION NOTE:**  
 ① RESTORATION OF THE SURROUNDING GUARDRAIL WORK AREA SHALL BE INCLUDED IN THE RELATED PAY ITEM SUCH AS: GUARDRAIL REMOVAL AND POROUS GRANULAR EMBANKMENT. NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SHALL BE REPLACED IN KIND OR AS DIRECTED BY THE ENGINEER.



MATCH LINE STA. 106 + 25

MATCH LINE STA. 106 + 25

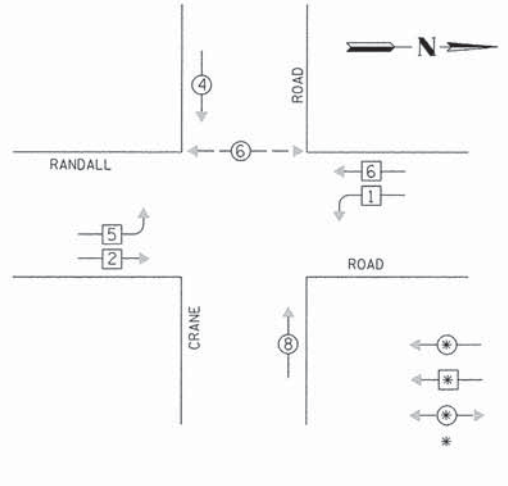
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PLOT SCALE = 1" = 20.000000' / in.	CHECKED - WCE	REVISOR -	REVISOR -			CONTRACT NO. 63862				
PLOT DATE = 5/12/2014	DATE - FEB 2014	REVISOR -	REVISOR -			ILLINOIS FED. AID PROJECT				
SCALE: 1" = 20'						SHEET NO. OF SHEETS	STA. -- TO STA. --			



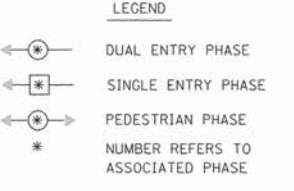
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 ILLUSTRATED: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 DATE: \_\_\_\_\_

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 2575 West Higgins Road, Suite 600  
 Rosemont, Illinois 60018  
 (847) 823-0500

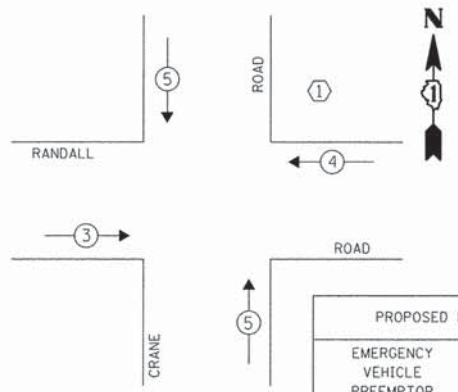
**PROPOSED CONTROLLER SEQUENCE**



**PHASE DESIGNATION DIAGRAM**



**EMERGENCY VEHICLE PREEMPTION SEQUENCE**



PROPOSED EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT			

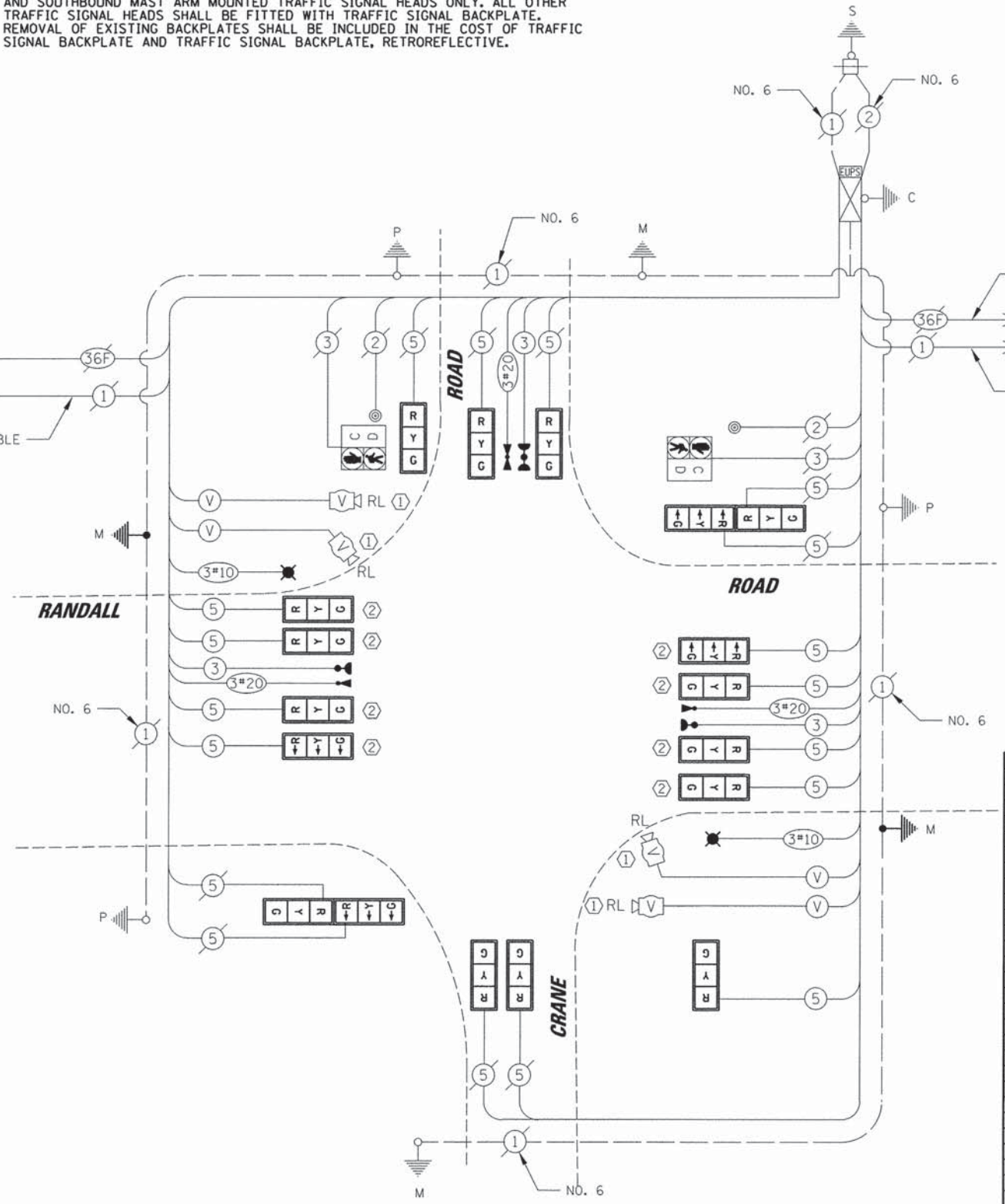
**CONSTRUCTION NOTES:**

- THE CONTRACTOR SHALL IMPLEMENT THE PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE AS SPECIFIED ON THE PLANS. ALL COSTS PERTAINING TO ACQUIRING NECESSARY EQUIPMENT, WIRING, CONNECTORS, OR PERIPHERALS, LABOR, AND MATERIALS TO PERFORM THIS WORK SHALL BE INCLUDED IN THE COST OF LIGHT DETECTOR AMPLIFIER.
- TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE SHALL BE INSTALLED ON NORTHBOUND AND SOUTHBOUND MAST ARM MOUNTED TRAFFIC SIGNAL HEADS ONLY. ALL OTHER TRAFFIC SIGNAL HEADS SHALL BE FITTED WITH TRAFFIC SIGNAL BACKPLATE. REMOVAL OF EXISTING BACKPLATES SHALL BE INCLUDED IN THE COST OF TRAFFIC SIGNAL BACKPLATE AND TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE.



I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND.	LED	% OPERATION	
SIGNAL (RED)	18		17	0.50	153.0
(YELLOW)	18		25	0.25	112.5
(GREEN)	18		15	0.25	67.5
ARROW	0		12	0.10	0.0
FYA SECTION	-		12	0.30	-
PED. SIGNAL	2		25	1.00	50.0
CONTROLLER	1		100	1.00	100.0
LUMINAIRE	2		250	0.50	250.0
VIDEO DETECTION	1		150	1.00	150.0
PTZ CAMERA	-		100	1.00	-
UPS	1		25	1.00	25.0
FLASHER	-		-	0.50	-
ENERGY COSTS TO: TOTAL =					908.0

KANE COUNTY DIVISION OF TRANSPORTATION  
 41W011 BURLINGTON ROAD  
 ST. CHARLES, IL 60175  
 ENERGY SUPPLY: CONTACT: MIKE WIDHALM  
 PHONE: (847) 608-2376  
 COMPANY: COMED



**CABLE PLAN**

ITEM	UNIT	QTY
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	113
DETECTABLE WARNINGS	SQ FT	40
CHANGEABLE MESSAGE SIGN	CAL MO	0.5
TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	0.0625
TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	0.0625
MODIFIED URETHANE PAVEMENT MARKING - LINE 6"	FOOT	70
MODIFIED URETHANE PAVEMENT MARKING - LINE 12"	FOOT	114
PAVEMENT MARKING REMOVAL	SQ FT	149
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	47
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	1641
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 250 WATT	EACH	2
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	700
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2173
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	70
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 48 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 60 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	13
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	21
DRILL EXISTING HANDHOLE	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	10
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE	EACH	10
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	8
LIGHT DETECTOR	EACH	3
LIGHT DETECTOR AMPLIFIER	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3884
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	2
RELOCATE VIDEO VEHICLE DETECTION SYSTEM	EACH	1
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	700
HOT-MIX ASPHALT SURFACE REMOVAL, SPECIAL	SQ YD	14
ELECTRIC CABLE IN CONDUIT, VIDEO NO. 18 3C	FOOT	1093
CONSTRUCTION LAYOUT	L SUM	0.0625

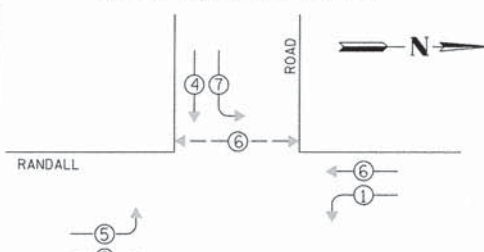


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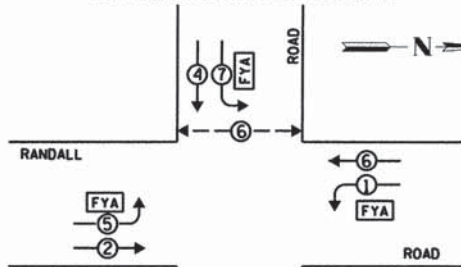
CHRISTOPHER B. BURKE ENGINEERING LTD.  
 2515 West Higgins Road, Suite 600  
 Rosemont, IL 60018  
 (847) 823-0500

DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
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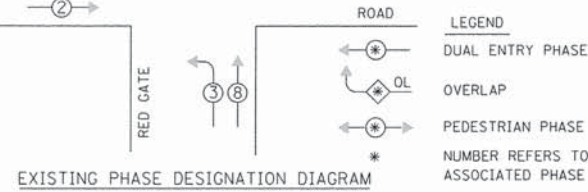
EXISTING CONTROLLER SEQUENCE



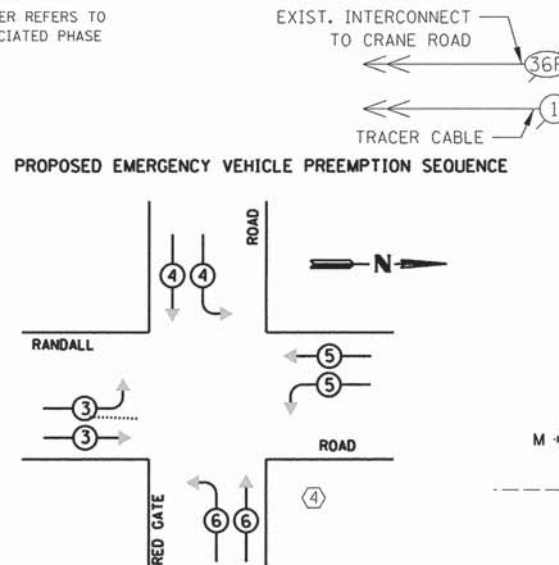
PROPOSED CONTROLLER SEQUENCE



- LEGEND
- DUAL ENTRY PHASE
  - OVERLAP
  - PEDESTRIAN PHASE
  - NUMBER REFERS TO ASSOCIATED PHASE
  - FYA FLASHING YELLOW ARROW

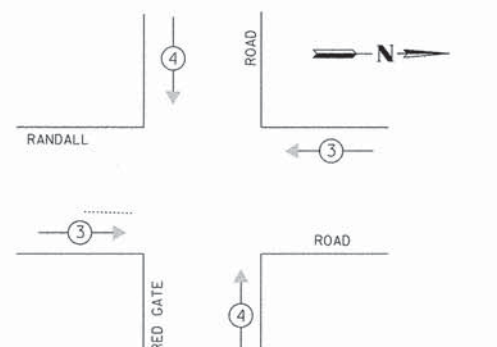


PROPOSED PHASE DESIGNATION DIAGRAM



PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS

EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	←→	↕

PROPOSED EMERGENCY VEHICLE PREEMPTORS

EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	←→	↕	↕	↕

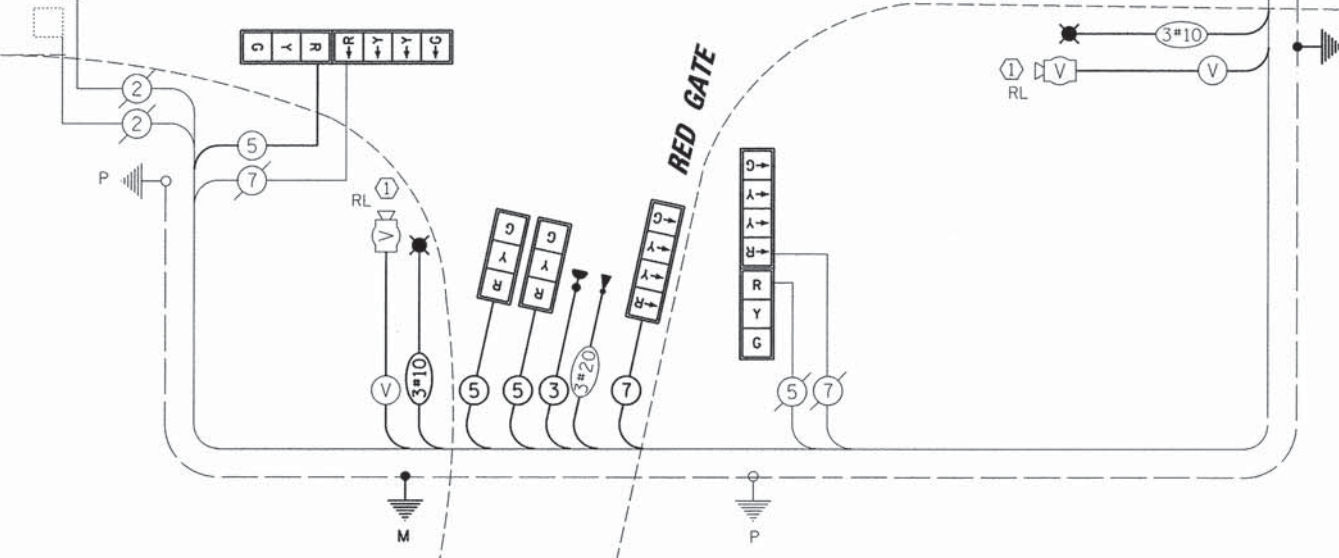
I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	22		17	0.50	187.0
(YELLOW)	22		25	0.25	137.5
(GREEN)	22		15	0.25	82.5
ARROW	0		12	0.10	0.0
FYA SECTION	8		12	0.30	28.8
PED. SIGNAL	2		25	1.00	50.0
CONTROLLER	1		100	1.00	100.0
LUMINAIRE	4		250	0.50	500.0
VIDEO DETECTION	1		150	1.00	150.0
PTZ CAMERA	1		100	1.00	100.0
UPS	1		25	1.00	25.0
FLASHER	-		-	0.50	-
TOTAL =					1360.8

ENERGY COSTS TO: TOTAL = 1360.8

KANE COUNTY DIVISION OF TRANSPORTATION  
 41W011 BURLINGTON ROAD  
 ST. CHARLES, IL 60175

ENERGY SUPPLY: CONTACT: MIKE WIDHALM  
 PHONE: (847) 608-2376  
 COMPANY: COMED



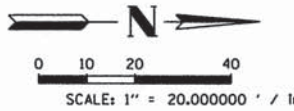
CABLE PLAN

CONSTRUCTION NOTES:




- THE CONTRACTOR SHALL RELOCATE THE EXISTING VIDEO DETECTION EQUIPMENT AS SPECIFIED ON THE PLANS AND PROJECT SPECIFIED PROVISIONS. ALL COSTS PERTAINING TO ACQUIRING NECESSARY EQUIPMENT, LABOR, AND MATERIALS TO PERFORM THIS WORK SHALL BE INCLUDED IN RELOCATE VIDEO VEHICLE DETECTION SYSTEM.
- THE CONTRACTOR SHALL RELOCATE THE EXISTING PAN-TILT-ZOOM CAMERA EQUIPMENT AS SPECIFIED ON THE PLANS AND PROJECT SPECIFIED PROVISIONS. ALL COSTS PERTAINING TO ACQUIRING NECESSARY EQUIPMENT, LABOR, AND MATERIALS TO PERFORM THIS WORK SHALL BE INCLUDED IN RELOCATE PTZ CAMERA.
- THE CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE AS SHOWN ON THE PLAN, INCLUDING THE FLASHING YELLOW ARROW PHASE AND PROPOSED EVP EQUIPMENT. ALL NECESSARY LABOR, MATERIALS, LOAD SWITCHES, SOFTWARE, SMULS, CABINET WIRING, HARDWARE, AND CONTROLLER PROGRAMMING SHALL BE INCLUDED IN THE COST OF MODIFY EXISTING CONTROLLER CABINET.
- THE CONTRACTOR SHALL RELOCATE THE EXISTING LIGHT DETECTOR EQUIPMENT AND IMPLEMENT THE PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE AS SPECIFIED ON THE PLANS AND PROJECT SPECIFIED PROVISIONS. ALL COSTS PERTAINING TO ACQUIRING NECESSARY EQUIPMENT, FIELD WIRING, CONNECTORS, OR PERIPHERALS, LABOR, AND MATERIALS TO PERFORM THIS WORK SHALL BE INCLUDED IN THE COST OF RELOCATE LIGHT DETECTOR.
- TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE SHALL BE INSTALLED ON NORTHBOUND AND SOUTHBOUND MAST ARM MOUNTED TRAFFIC SIGNAL HEADS ONLY. ALL OTHER TRAFFIC SIGNAL HEADS SHALL BE FITTED WITH TRAFFIC SIGNAL BACKPLATE. REMOVAL OF EXISTING BACKPLATES SHALL BE INCLUDED IN THE COST OF TRAFFIC SIGNAL BACKPLATE AND TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE.

ITEM	UNIT	QTY
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	141
DETECTABLE WARNINGS	SQ FT	46
CHANGEABLE MESSAGE SIGN	CAL MO	0.5
TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	0.0625
TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	0.0625
SIGN PANEL - TYPE 1	SQ FT	60
MODIFIED URETHANE PAVEMENT MARKING - LINE 24"	FOOT	28
PAVEMENT MARKING REMOVAL	SQ FT	56
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	150
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	2679
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 250 WATT	EACH	4
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	48
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1094
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1755
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1754
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	193
TRAFFIC SIGNAL POST, 10 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 38 FT.	EACH	2
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 44 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 46 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	48
DRILL EXISTING HANDHOLE	EACH	5
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-4 SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 2-FACE, 1-4 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE	EACH	14
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	8
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	1
RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	7523
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
RELOCATE VIDEO VEHICLE DETECTION SYSTEM	EACH	1
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	941
HOT-MIX ASPHALT SURFACE REMOVAL, SPECIAL	SQ YD	16
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	99
ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 20 4 C	FOOT	99
RELOCATE LIGHT DETECTOR	EACH	2
RELOCATE EXISTING PTZ CAMERA	EACH	1
ELECTRIC CABLE IN CONDUIT, VIDEO NO. 18 3C	FOOT	893
CONSTRUCTION LAYOUT	L SUM	0.0625





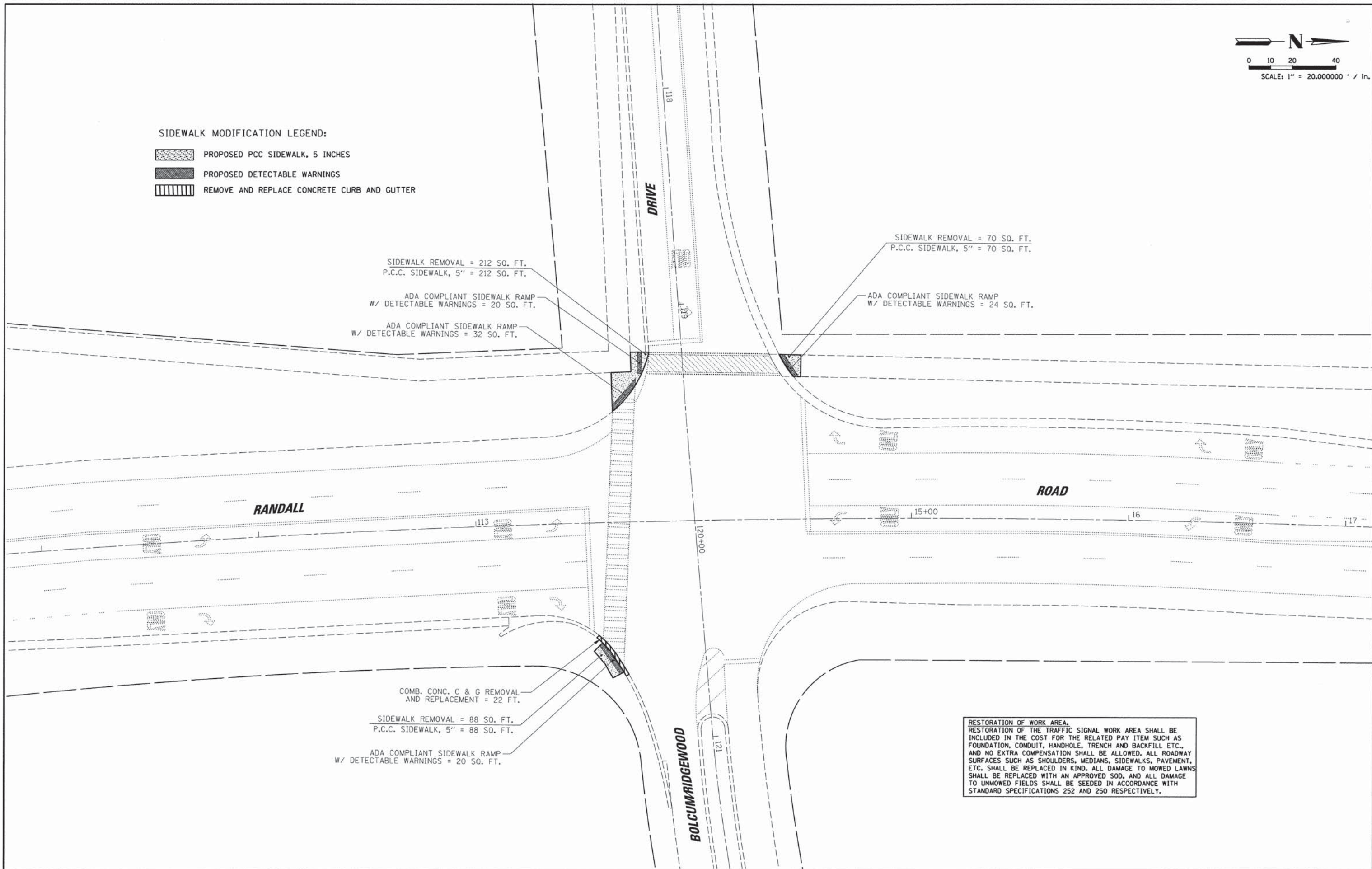
**SIDEWALK MODIFICATION LEGEND:**

-  PROPOSED PCC SIDEWALK, 5 INCHES
-  PROPOSED DETECTABLE WARNINGS
-  REMOVE AND REPLACE CONCRETE CURB AND GUTTER

DATE		DATE	
BY		BY	
REVISIONS		REVISIONS	
PLANNED		PLANNED	
NOTED		NOTED	
CHECKED		CHECKED	
DATE		DATE	
FILE NAME		FILE NAME	

**CHRISTOPHER B. BURKE ENGINEERING LTD.**  
 9575 East Higgins Road, Suite 600  
 Rosemont, Illinois 60008  
 (847) 823-0500

DATE		DATE	
BY		BY	
REVISIONS		REVISIONS	
PLANNED		PLANNED	
NOTED		NOTED	
CHECKED		CHECKED	
DATE		DATE	
FILE NAME		FILE NAME	



SIDEWALK REMOVAL = 212 SQ. FT.  
 P.C.C. SIDEWALK, 5" = 212 SQ. FT.

ADA COMPLIANT SIDEWALK RAMP  
 W/ DETECTABLE WARNINGS = 20 SQ. FT.

ADA COMPLIANT SIDEWALK RAMP  
 W/ DETECTABLE WARNINGS = 32 SQ. FT.

SIDEWALK REMOVAL = 70 SQ. FT.  
 P.C.C. SIDEWALK, 5" = 70 SQ. FT.

ADA COMPLIANT SIDEWALK RAMP  
 W/ DETECTABLE WARNINGS = 24 SQ. FT.

COMB. CONC. C & G REMOVAL  
 AND REPLACEMENT = 22 FT.

SIDEWALK REMOVAL = 88 SQ. FT.  
 P.C.C. SIDEWALK, 5" = 88 SQ. FT.

ADA COMPLIANT SIDEWALK RAMP  
 W/ DETECTABLE WARNINGS = 20 SQ. FT.

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

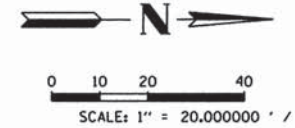
FILE NAME =	USER NAME = ghickey	DESIGNED - EAJ	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>SIDEWALK MODIFICATION PLAN</b> <b>RANDALL ROAD AND BOLCUM ROAD/RIDGEWOOD DRIVE</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
K:\Projects\Kane County\2012 HSIP\CAOD\Drawings\Sheets\Traffic Signal Plans\49 REM_BOLCUM.dgn	DRAWN - FPB	REVISOR -	336			11-00418-01-SP	KANE	61	49	
PLOT SCALE = 1" = 20,000,000' / in.	CHECKED - WCE	REVISOR -	CONTRACT NO. 63862							
PLOT DATE = 5/12/2014	DATE - FEB 2014	REVISOR -	ILLINOIS FED. AID PROJECT							

**GENERAL NOTES:**

- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION. THIS SHALL INCLUDE LOCATING THE MAST ARM FOUNDATIONS AND VERIFYING THE MAST ARMS LENGTHS.
- THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE ORDERING ANY MATERIALS AND STARTING ANY WORK. FOR LOCATIONS OF UTILITIES, LOCALLY OWNED EQUIPMENT, LEASED ENFORCEMENT CAMERA SYSTEM FACILITIES AND IDOT UNDERGROUND FACILITIES, CONTACT THE LOCAL COUNTIES, MUNICIPALITIES AND IDOT FOR LOCATES. THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811. IN THE CITY OF CHICAGO CONTACT DIGGER AT (312) 744-7000 FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION REQUIRED).
- THE CONTRACTOR SHALL CHECK THE PROPOSED TRAFFIC SIGNAL EQUIPMENT LOCATIONS FOR OVERHEAD UTILITY CONFLICTS. THE CONTRACTOR SHALL COORDINATE ANY CONFLICTS WITH THE UTILITY COMPANIES AND THE RESIDENT ENGINEER BEFORE ORDERING MATERIALS.
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, LOCAL GOVERNMENT AGENCIES AND IDOT.

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

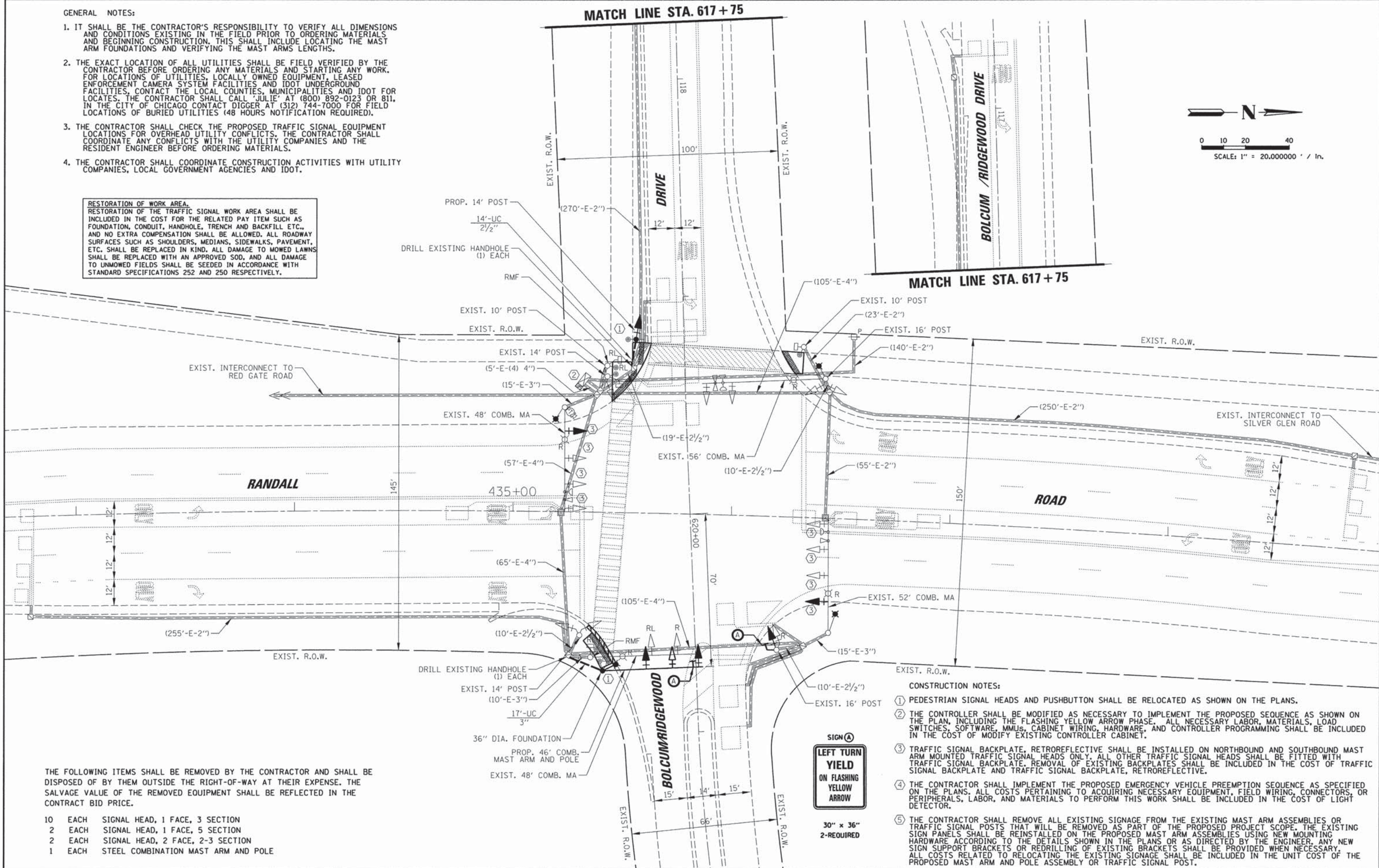
**MATCH LINE STA. 617+75**



DATE	BY	DATE	BY
DATE	BY	DATE	BY

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 9515 East Higgins Road, Suite 600  
 Rosemont, Illinois 60018  
 (847) 823-0500

DATE	BY	DATE	BY



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 CONTRACT BID PRICE.

- 10 EACH SIGNAL HEAD, 1 FACE, 3 SECTION
- 2 EACH SIGNAL HEAD, 1 FACE, 5 SECTION
- 2 EACH SIGNAL HEAD, 2 FACE, 2-3 SECTION
- 1 EACH STEEL COMBINATION MAST ARM AND POLE

**CONSTRUCTION NOTES:**

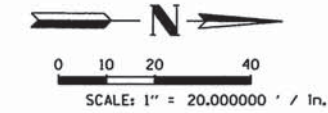
- PEDESTRIAN SIGNAL HEADS AND PUSHBUTTON SHALL BE RELOCATED AS SHOWN ON THE PLANS.
- THE CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE AS SHOWN ON THE PLAN, INCLUDING THE FLASHING YELLOW ARROW PHASE. ALL NECESSARY LABOR, MATERIALS, LOAD SWITCHES, SOFTWARE, MMUS, CABINET WIRING, HARDWARE, AND CONTROLLER PROGRAMMING SHALL BE INCLUDED IN THE COST OF MODIFY EXISTING CONTROLLER CABINET.
- TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE SHALL BE INSTALLED ON NORTHBOUND AND SOUTHBOUND MAST ARM MOUNTED TRAFFIC SIGNAL HEADS ONLY. ALL OTHER TRAFFIC SIGNAL HEADS SHALL BE FITTED WITH TRAFFIC SIGNAL BACKPLATE. REMOVAL OF EXISTING BACKPLATES SHALL BE INCLUDED IN THE COST OF TRAFFIC SIGNAL BACKPLATE AND TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE.
- THE CONTRACTOR SHALL IMPLEMENT THE PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE AS SPECIFIED ON THE PLANS. ALL COSTS PERTAINING TO ACQUIRING NECESSARY EQUIPMENT, FIELD WIRING, CONNECTORS, OR PERIPHERALS, LABOR, AND MATERIALS TO PERFORM THIS WORK SHALL BE INCLUDED IN THE COST OF LIGHT DETECTOR.
- THE CONTRACTOR SHALL REMOVE ALL EXISTING SIGNAGE FROM THE EXISTING MAST ARM ASSEMBLIES OR TRAFFIC SIGNAL POSTS THAT WILL BE REMOVED AS PART OF THE PROPOSED PROJECT SCOPE. THE EXISTING SIGN PANELS SHALL BE REINSTALLED ON THE PROPOSED MAST ARM ASSEMBLIES USING NEW MOUNTING HARDWARE ACCORDING TO THE DETAILS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER. ANY NEW SIGN SUPPORT BRACKETS OR REDRILLING OF EXISTING BRACKETS SHALL BE PROVIDED WHEN NECESSARY. ALL COSTS RELATED TO RELOCATING THE EXISTING SIGNAGE SHALL BE INCLUDED IN THE UNIT COST OF THE PROPOSED MAST ARM AND POLE ASSEMBLY OR TRAFFIC SIGNAL POST.

FILE NAME =	USER NAME = ghickey	DESIGNED - EAJ	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC SIGNAL MODIFICATION PLAN RANDALL ROAD AND BOLCUM ROAD/RIDGEWOOD DRIVE</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
K:\Projects\Kane County\2012 HSP\CA00\Drawings\Sheets\Traffic Signal Plans\50 M00_BOLCUM.dgn	DRAWN - FPB	REVISOR -	336			11-00418-01-SP	KANE	61	50	
PLOT SCALE = 1" = 20,000,000' / In.	CHECKED - WCE	REVISOR -	CONTRACT NO. 63862							
PLOT DATE = 5/12/2014	DATE - FEB 2014	REVISOR -	ILLINOIS FED. AID PROJECT							



**GENERAL NOTES:**

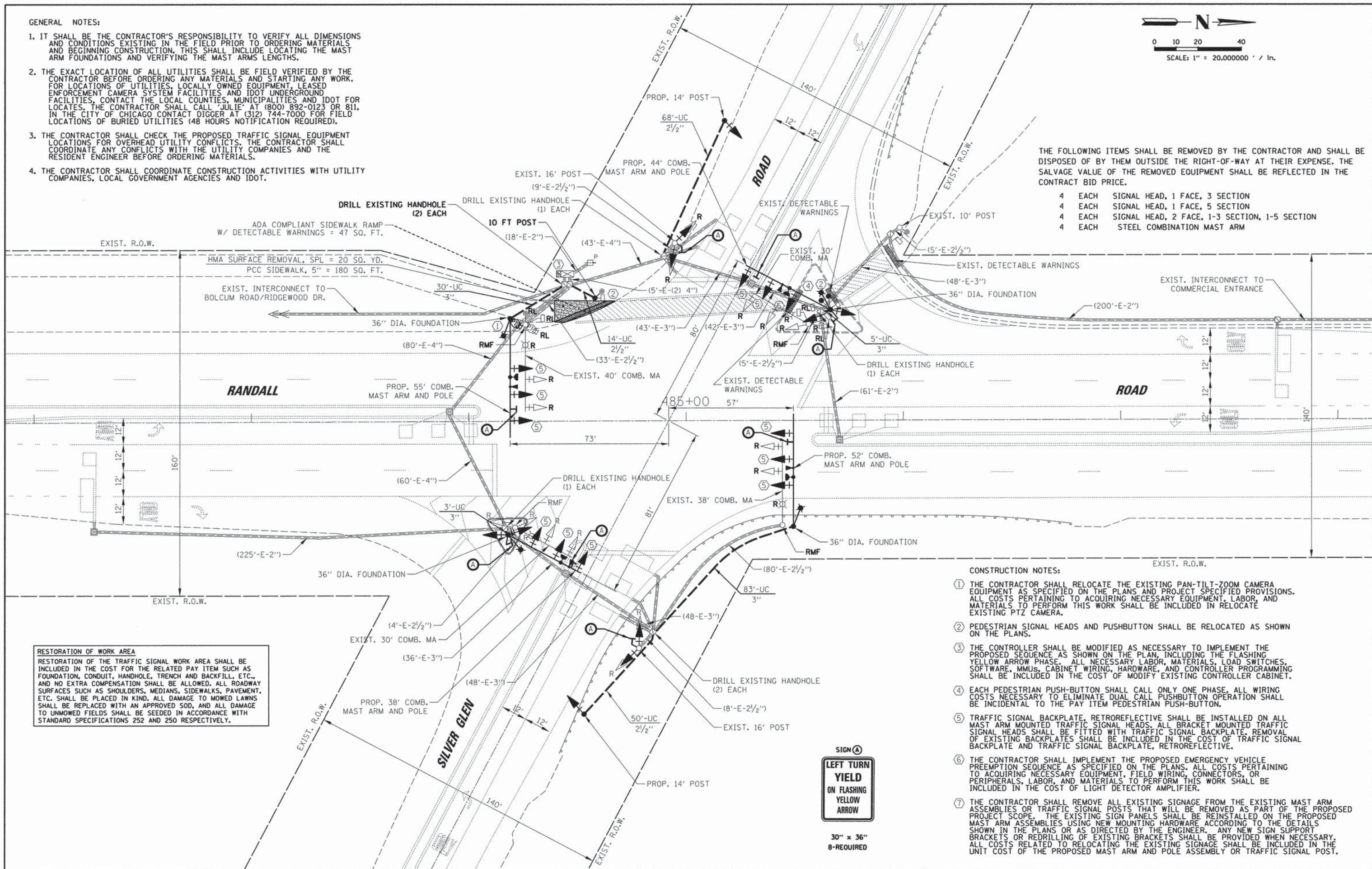
1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION. THIS SHALL INCLUDE LOCATING THE MAST ARM FOUNDATIONS AND VERIFYING THE MAST ARMS LENGTHS.
2. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE ORDERING ANY MATERIALS AND STARTING ANY WORK. FOR LOCATIONS OF UTILITIES, LOCALLY OWNED EQUIPMENT, LEASED ENFORCEMENT CAMERA SYSTEM FACILITIES AND IDOT UNDERGROUND FACILITIES, CONTACT THE LOCAL COUNTIES, MUNICIPALITIES AND IDOT FOR LOCATES. THE CONTRACTOR SHALL CALL 'JULIE' AT (800) 892-0123 OR 811, IN THE CITY OF CHICAGO CONTACT DIGGER AT (312) 744-7000 FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION REQUIRED).
3. THE CONTRACTOR SHALL CHECK THE PROPOSED TRAFFIC SIGNAL EQUIPMENT LOCATIONS FOR OVERHEAD UTILITY CONFLICTS. THE CONTRACTOR SHALL COORDINATE ANY CONFLICTS WITH THE UTILITY COMPANIES AND THE RESIDENT ENGINEER BEFORE ORDERING MATERIALS.
4. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, LOCAL GOVERNMENT AGENCIES AND IDOT.



- 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 CONTRACT BID PRICE.
- |   |      |                                               |
|---|------|-----------------------------------------------|
| 4 | EACH | SIGNAL HEAD, 1 FACE, 3 SECTION                |
| 4 | EACH | SIGNAL HEAD, 1 FACE, 5 SECTION                |
| 4 | EACH | SIGNAL HEAD, 2 FACE, 1-3 SECTION, 1-5 SECTION |
| 4 | EACH | STEEL COMBINATION MAST ARM                    |

DATE	BY	DESIGNED	PLANNING	NOTATION
DATE	BY	CHECKED	STRUCTURE	NOTATION
DATE	BY	DESIGNED	PLANNING	NOTATION
DATE	BY	CHECKED	STRUCTURE	NOTATION

**CHRISTOPHER B. BURKE ENGINEERING LTD.**  
 5015 West Higgins Road, Suite 600  
 Rosemont, Illinois 60018  
 (847) 822-0500



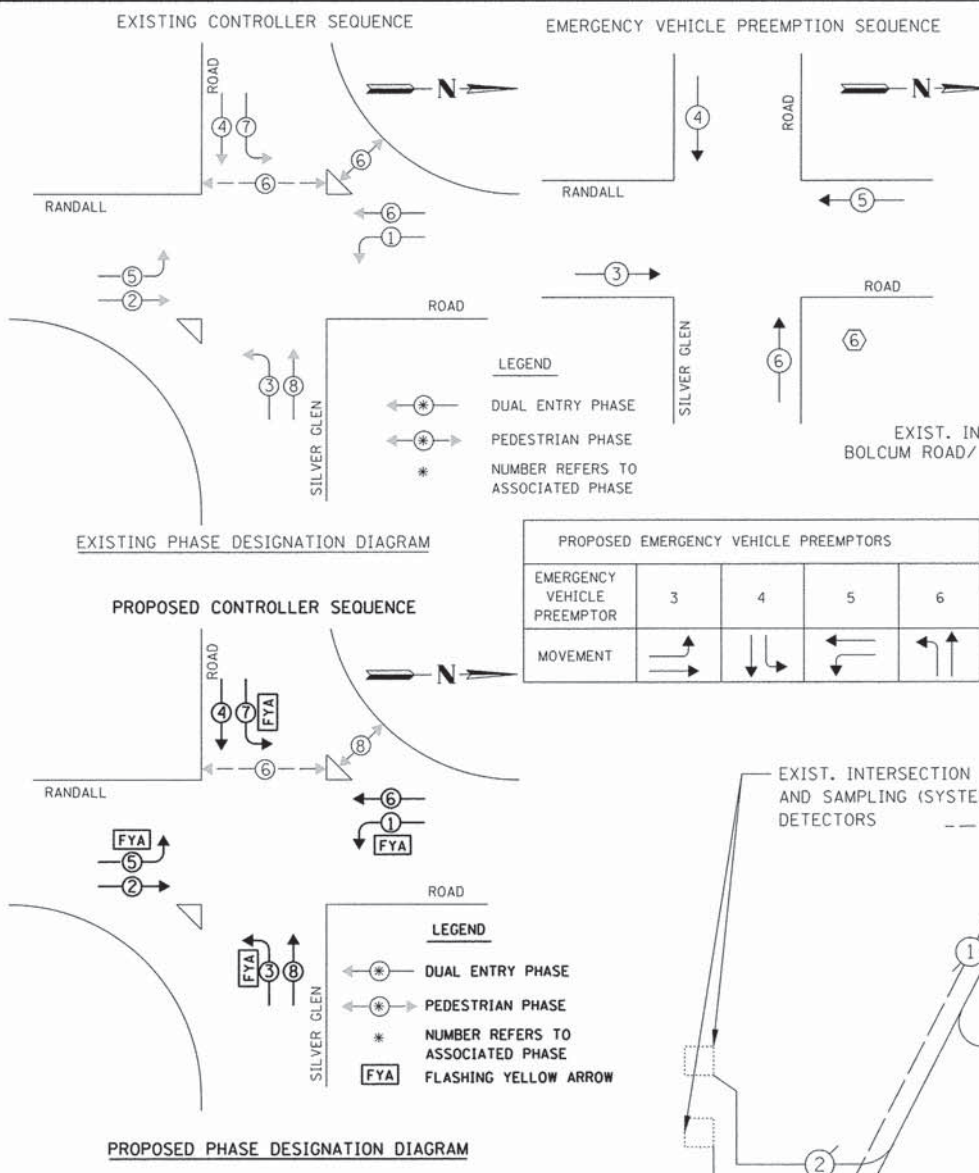
**RESTORATION OF WORK AREA**  
 RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE COST FOR THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS,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

- CONSTRUCTION NOTES:**
- 1 THE CONTRACTOR SHALL RELOCATE THE EXISTING PAN-TILT-ZOOM CAMERA EQUIPMENT AS SPECIFIED ON THE PLANS AND PROJECT SPECIFIED PROVISIONS. ALL COSTS PERTAINING TO ACQUIRING NECESSARY EQUIPMENT, LABOR, AND MATERIALS TO PERFORM THIS WORK SHALL BE INCLUDED IN RELOCATE EXISTING PTZ CAMERA.
  - 2 PEDESTRIAN SIGNAL HEADS AND PUSHBUTTON SHALL BE RELOCATED AS SHOWN ON THE PLANS.
  - 3 THE CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE AS SHOWN ON THE PLAN, INCLUDING THE FLASHING YELLOW ARROW PHASE. ALL NECESSARY LABOR, MATERIALS, LOAD SWITCHES, SOFTWARE, MMUS, CABINET WIRING, HARDWARE, AND CONTROLLER PROGRAMMING SHALL BE INCLUDED IN THE COST OF MODIFY EXISTING CONTROLLER CABINET.
  - 4 EACH PEDESTRIAN PUSH-BUTTON SHALL CALL ONLY ONE PHASE. ALL WIRING COSTS NECESSARY TO ELIMINATE DUAL CALL PUSHBUTTON OPERATION SHALL BE INCIDENTAL TO THE PAY ITEM PEDESTRIAN PUSH-BUTTON.
  - 5 TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE SHALL BE INSTALLED ON ALL MAST ARM MOUNTED TRAFFIC SIGNAL HEADS. ALL BRACKET MOUNTED TRAFFIC SIGNAL HEADS SHALL BE FITTED WITH TRAFFIC SIGNAL BACKPLATE. REMOVAL OF EXISTING BACKPLATES SHALL BE INCLUDED IN THE COST OF TRAFFIC SIGNAL BACKPLATE AND TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE.
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  - 7 THE CONTRACTOR SHALL REMOVE ALL EXISTING SIGNAGE FROM THE EXISTING MAST ARM ASSEMBLIES OR TRAFFIC SIGNAL POSTS THAT WILL BE REMOVED AS PART OF THE PROPOSED PROJECT SCOPE. THE EXISTING SIGN PANELS SHALL BE REINSTALLED ON THE PROPOSED MAST ARM ASSEMBLIES USING NEW MOUNTING HARDWARE ACCORDING TO THE DETAILS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER. ANY NEW SIGN SUPPORT BRACKETS OR REDRILLING OF EXISTING BRACKETS SHALL BE PROVIDED WHEN NECESSARY. ALL COSTS RELATED TO RELOCATING THE EXISTING SIGNAGE SHALL BE INCLUDED IN THE UNIT COST OF THE PROPOSED MAST ARM AND POLE ASSEMBLY OR TRAFFIC SIGNAL POST.



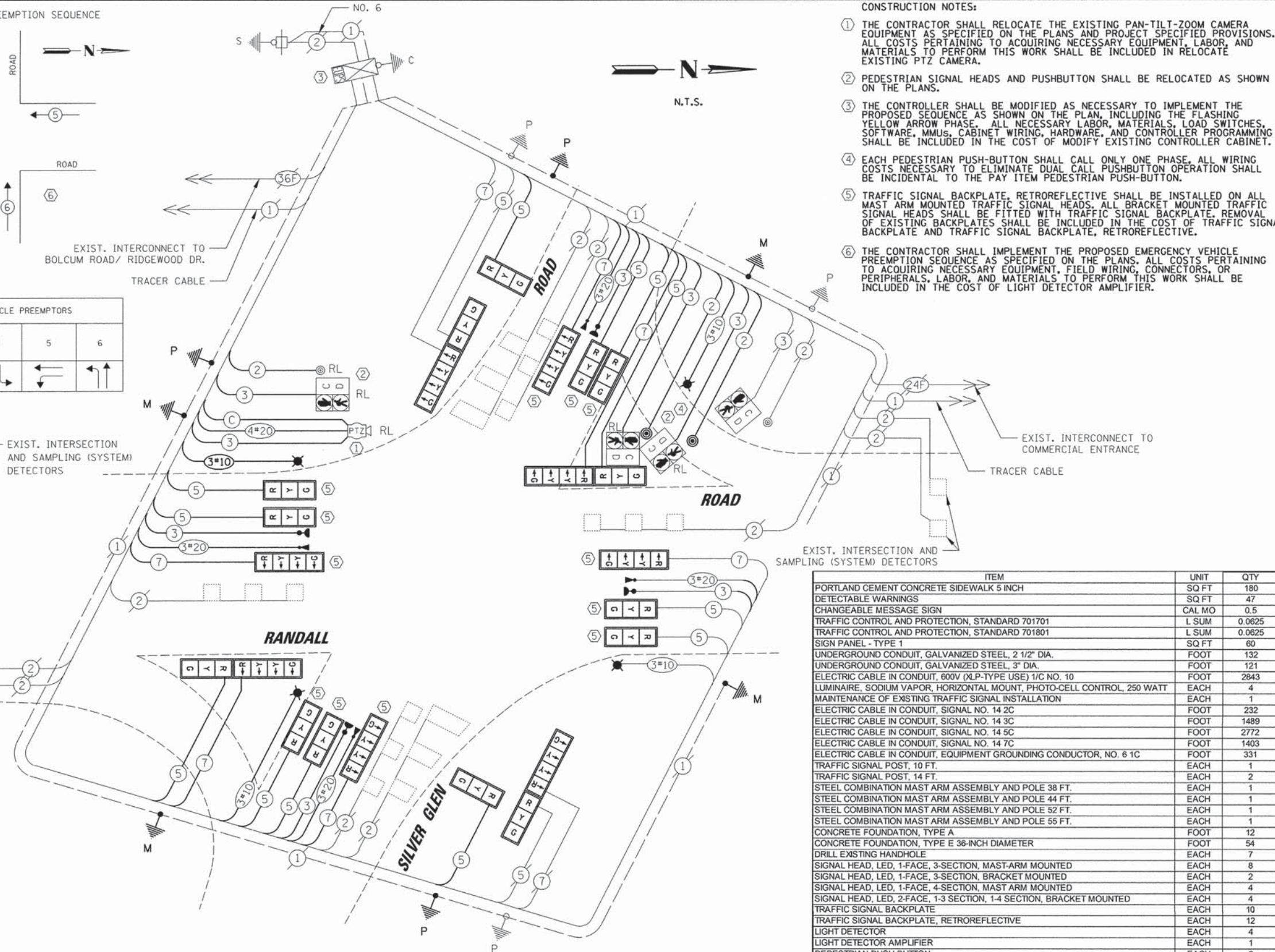
FILE NAME =	USER NAME = ghickey	DESIGNED - EAJ	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC SIGNAL MODIFICATION PLAN RANDALL ROAD AND SILVER GLEN ROAD</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
K:\Projects\Kane County\2012 HSIP\CADD\Drawings\Sheets\Traffic Signal Plans\52 M00_SILVERGLEN.dwg	DRAWN - FPB	REVISED -	336			11-00418-01-SP	KANE	61	52	
PLOT SCALE = 1" = 20.000000' / in.	CHECKED - WCE	REVISED -	CONTRACT NO. 63862							
PLOT DATE = 5/12/2014	DATE - FEB 2014	REVISED -	ILLINOIS FED. AID PROJECT							

DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 PROFILE FORWARDED PLOTTED GRADES CHECKED STRUCTURE NOTATIONS OK'D  
 NOTE BOOK NO. \_\_\_\_\_  
 PLAN FORWARDED PLOTTED ALIGNMENT CHECKED ROAD FILE NAME NO. \_\_\_\_\_  
**CHRISTOPHER B. BURKE ENGINEERING LTD.**  
 9615 S. ALDRICH ROAD, SUITE 600B  
 O'FALLON, ILLINOIS 62456  
 (847) 822-0500



PROPOSED EMERGENCY VEHICLE PREEMPTORS

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



- CONSTRUCTION NOTES:
- THE CONTRACTOR SHALL RELOCATE THE EXISTING PAN-TILT-ZOOM CAMERA EQUIPMENT AS SPECIFIED ON THE PLANS AND PROJECT SPECIFIED PROVISIONS. ALL COSTS PERTAINING TO ACQUIRING NECESSARY EQUIPMENT, LABOR, AND MATERIALS TO PERFORM THIS WORK SHALL BE INCLUDED IN RELOCATE EXISTING PTZ CAMERA.
  - PEDESTRIAN SIGNAL HEADS AND PUSHBUTTON SHALL BE RELOCATED AS SHOWN ON THE PLANS.
  - THE CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE AS SHOWN ON THE PLAN, INCLUDING THE FLASHING YELLOW ARROW PHASE. ALL NECESSARY LABOR, MATERIALS, LOAD SWITCHES, SOFTWARE, MMUS, CABINET WIRING, HARDWARE AND CONTROLLER PROGRAMMING SHALL BE INCLUDED IN THE COST OF MODIFY EXISTING CONTROLLER CABINET.
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  - TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE SHALL BE INSTALLED ON ALL MAST ARM MOUNTED TRAFFIC SIGNAL HEADS. ALL BRACKET MOUNTED TRAFFIC SIGNAL HEADS SHALL BE FITTED WITH TRAFFIC SIGNAL BACKPLATE. REMOVAL OF EXISTING BACKPLATES SHALL BE INCLUDED IN THE COST OF TRAFFIC SIGNAL BACKPLATE AND TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE.
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I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	22	17	0.50	87.0	
(YELLOW)	22	25	0.25	137.5	
(GREEN)	22	15	0.25	82.5	
ARROW	0	12	0.10	0.0	
FYA SECTION	8	12	0.30	28.8	
PED. SIGNAL	4	25	1.00	100.0	
CONTROLLER	1	100	1.00	100.0	
LUMINAIRE	4	250	0.50	500.0	
VIDEO DETECTION	-	150	1.00	-	
PTZ CAMERA	1	100	1.00	100.0	
UPS	1	25	1.00	25.0	
FLASHER	-	-	0.50	-	
TOTAL =					1160.8

ENERGY COSTS TO: TOTAL = 1160.8

KANE COUNTY DIVISION OF TRANSPORTATION  
 41W011 BURLINGTON ROAD  
 ST. CHARLES, IL 60175

ENERGY SUPPLY: CONTACT: MIKE WIDHALM  
 PHONE: (847) 608-2376  
 COMPANY: COMED

ITEM	UNIT	QTY
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	180
DETECTABLE WARNINGS	SQ FT	47
CHANGEABLE MESSAGE SIGN	CAL MO	0.5
TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	0.0625
TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	0.0625
SIGN PANEL - TYPE 1	SQ FT	60
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	132
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	121
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	2843
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 250 WATT	EACH	4
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	232
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1489
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2772
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1403
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	331
TRAFFIC SIGNAL POST, 10 FT.	EACH	1
TRAFFIC SIGNAL POST, 14 FT.	EACH	2
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 38 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 44 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 52 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 55 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	12
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	54
DRILL EXISTING HANDHOLE	EACH	7
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-4 SECTION, BRACKET MOUNTED	EACH	4
TRAFFIC SIGNAL BACKPLATE	EACH	10
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	12
LIGHT DETECTOR	EACH	4
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	2
RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	3
RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	7485
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	950
HOT-MIX ASPHALT SURFACE REMOVAL, SPECIAL	SQ YD	20
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	102
ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 20 4 C	FOOT	102
RELOCATE EXISTING PTZ CAMERA	EACH	1
CONSTRUCTION LAYOUT	L SUM	0.0625

DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 PLOTTED: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_  
 N: \_\_\_\_\_  
 STR. ACT. RE. NOTIC. 15 JAN 03

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 Rosemont, Illinois 60018  
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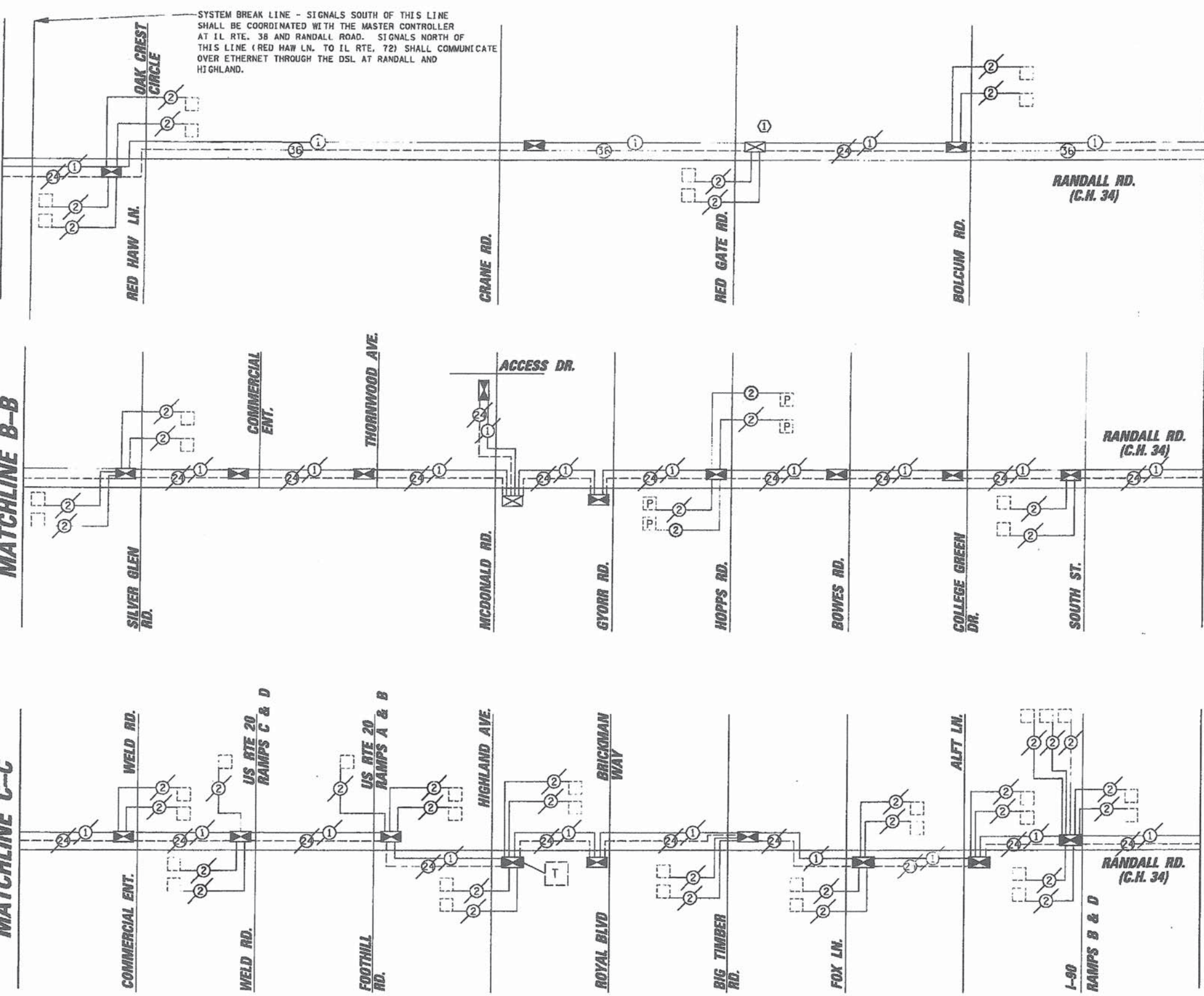
PLAN  
 NOTE BOOK  
 CHECKED  
 DATE: \_\_\_\_\_  
 FILE NAME

**MATCHLINE A-A**  
 (SEE SHEET NO. 56)

**MATCHLINE B-B**

**MATCHLINE C-C**

**MATCHLINE D-D**  
 (SEE SHEET NO. 55)



SYSTEM BREAK LINE - SIGNALS SOUTH OF THIS LINE SHALL BE COORDINATED WITH THE MASTER CONTROLLER AT IL RTE. 38 AND RANDALL ROAD. SIGNALS NORTH OF THIS LINE (RED HAW LN. TO IL RTE. 72) SHALL COMMUNICATE OVER ETHERNET THROUGH THE DSL AT RANDALL AND HIGHLAND.

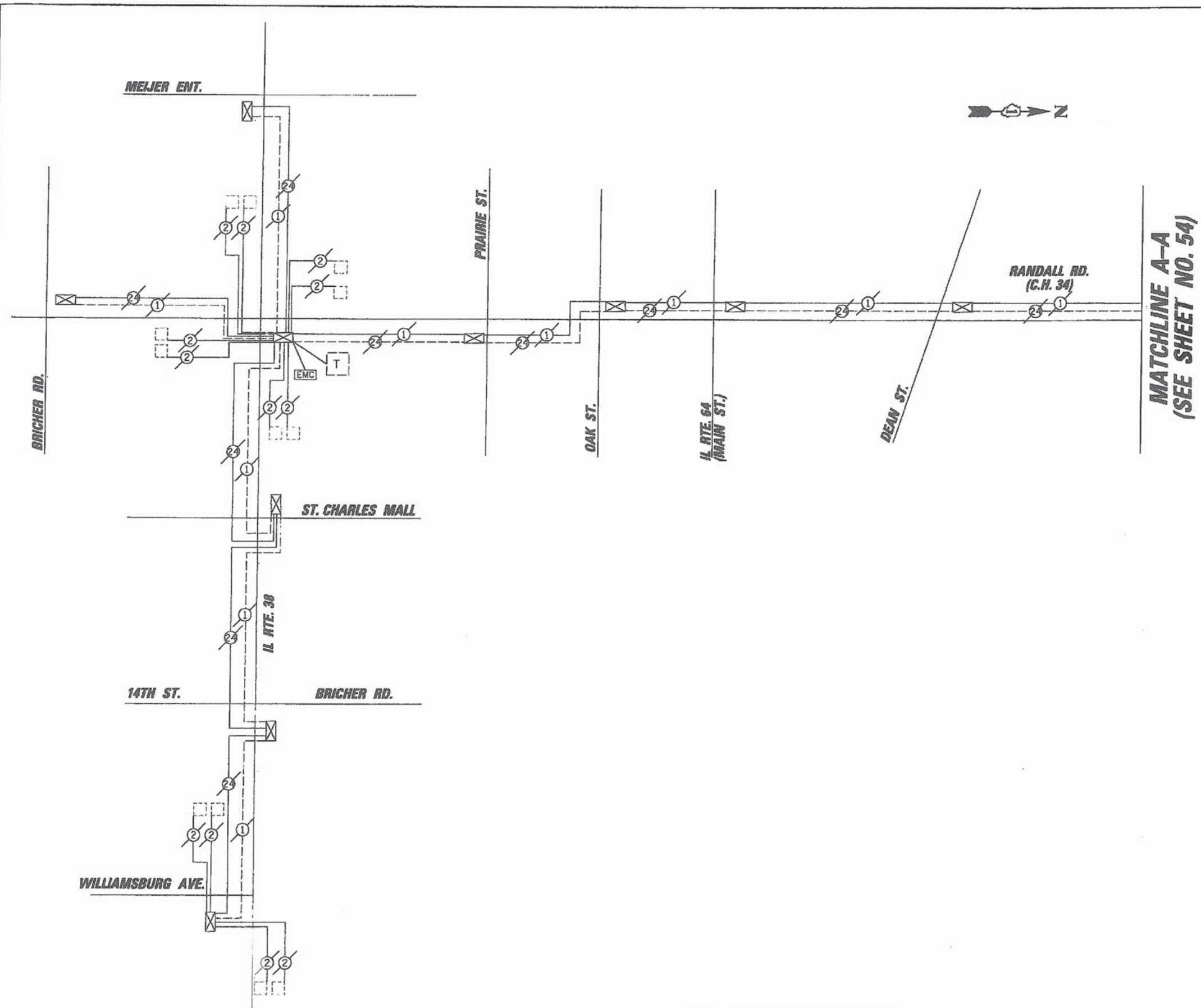
**INTERCONNECT SCHEMATIC LEGEND**

- EXISTING INTERSECTION CONTROLLER [Symbol]
  - PROPOSED INTERSECTION CONTROLLER [Symbol]
  - EXISTING MASTER CONTROLLER [Symbol]
  - PROPOSED MASTER CONTROLLER [Symbol]
  - MASTER MASTER CONTROLLER [Symbol]
  - EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTORS [Symbol]
  - PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS [Symbol]
  - EXISTING INTERSECTION LOOP DETECTORS [Symbol]
  - PROPOSED SAMPLING (SYSTEM) DETECTORS [Symbol]
  - EXISTING SAMPLING (SYSTEM) DETECTORS [Symbol]
  - PROPOSED SAMPLING (SYSTEM) DETECTORS [Symbol]
  - EXISTING SAMPLING (SYSTEM) DETECTORS, PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS. [Symbol]
  - EXISTING SAMPLING (SYSTEM) DETECTORS, PROPOSED SAMPLING (SYSTEM) DETECTORS. [Symbol]
  - EXISTING PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS [Symbol]
  - PROPOSED PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS [Symbol]
  - EXISTING SAMPLING (SYSTEM) PREFORMED DETECTORS [Symbol]
  - PROPOSED SAMPLING (SYSTEM) PREFORMED DETECTORS [Symbol]
  - EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F [Symbol]
  - PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F [Symbol]
  - EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F [Symbol]
  - PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F [Symbol]
  - EXISTING INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE [Symbol]
  - PROPOSED INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE [Symbol]
  - EXISTING INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED [Symbol]
  - PROPOSED INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED [Symbol]
  - EXISTING LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED [Symbol]
  - PROPOSED LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED [Symbol]
  - EXISTING ELECTRIC CABLE, 1/C (AS SPECIFIED) [Symbol]
  - PROPOSED ELECTRIC CABLE, 1/C (AS SPECIFIED) [Symbol]
  - EXISTING TELEPHONE CONNECTION [Symbol]
  - PROPOSED TELEPHONE CONNECTION [Symbol]
- CONSTRUCTION NOTES:  
 ① INTERCONNECTION AND INSTALLATION OF FIBER OPTIC CABLE TO RED GATE CABINET BY OTHERS.

**FOR INFORMATION ONLY**

FILE NAME * N:\anoo\city\878551\Traffic\ASDL.dgn	USER NAME * MWILLIAN	DESIGNED - DRAWN - CHECKED - DATE -	REVISED - REVISED - REVISED - REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>INTERCONNECT SCHEMATIC RANDALL ROAD FROM RED HAW LN. TO IL ROUTE 72</b>	F.A.P. RTE. 336	SECTION 11-00418-01-SP	COUNTY KANE	TOTAL SHEETS 61	SHEET NO. 54	CONTRACT NO. 63862	
PLOT SCALE = 28'				SCALE:				FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

PROFILE SURVEYED BY DATE  
 1/3" = 1' BOOK NO. PROJECT NO. 1070708 08/13  
 SURVEYED BY DATE  
 1/3" = 1' BOOK NO. PROJECT NO. 1070708 08/13  
 CHRYSTOPHER B. BURKE ENGINEERING LTD.  
 3575 West Higgins Road, Suite 800  
 Rosemont, Illinois 60018  
 (847) 823-0500



**INTERCONNECT SCHEMATIC LEGEND**

- EXISTING INTERSECTION CONTROLLER [Symbol]
- PROPOSED INTERSECTION CONTROLLER [Symbol]
- EXISTING MASTER CONTROLLER [Symbol]
- PROPOSED MASTER CONTROLLER [Symbol]
- MASTER MASTER CONTROLLER [Symbol]
- EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTORS [Symbol]
- PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS [Symbol]
- EXISTING INTERSECTION LOOP DETECTORS [Symbol]
- PROPOSED SAMPLING (SYSTEM) DETECTORS [Symbol]
- EXISTING SAMPLING (SYSTEM) DETECTORS [Symbol]
- PROPOSED SAMPLING (SYSTEM) DETECTORS [Symbol]
- EXISTING SAMPLING (SYSTEM) DETECTORS, PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS. [Symbol]
- EXISTING SAMPLING (SYSTEM) DETECTORS, PROPOSED SAMPLING (SYSTEM) DETECTORS. [Symbol]
- EXISTING PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS [Symbol]
- PROPOSED PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS [Symbol]
- EXISTING SAMPLING (SYSTEM) PREFORMED DETECTORS [Symbol]
- PROPOSED SAMPLING (SYSTEM) PREFORMED DETECTORS [Symbol]
- EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F [Symbol]
- PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F [Symbol]
- EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F [Symbol]
- PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F [Symbol]
- EXISTING INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE [Symbol]
- PROPOSED INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE [Symbol]
- EXISTING INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED [Symbol]
- PROPOSED INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED [Symbol]
- EXISTING LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED [Symbol]
- PROPOSED LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED [Symbol]
- EXISTING ELECTRIC CABLE, 1/C (AS SPECIFIED) [Symbol]
- PROPOSED ELECTRIC CABLE, 1/C (AS SPECIFIED) [Symbol]
- EXISTING TELEPHONE CONNECTION [Symbol]
- PROPOSED TELEPHONE CONNECTION [Symbol]

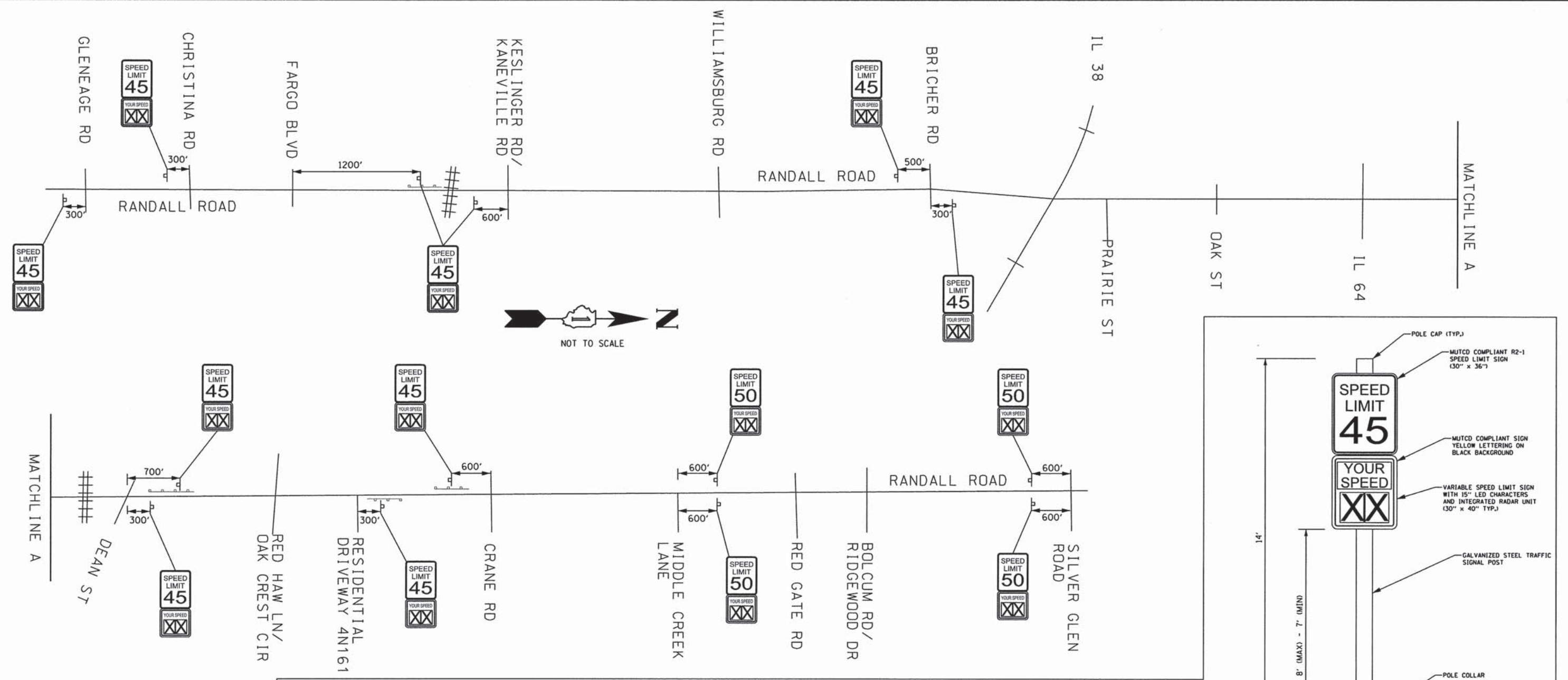
**MATCHLINE A-A  
(SEE SHEET NO. 54)**

**FOR INFORMATION ONLY**

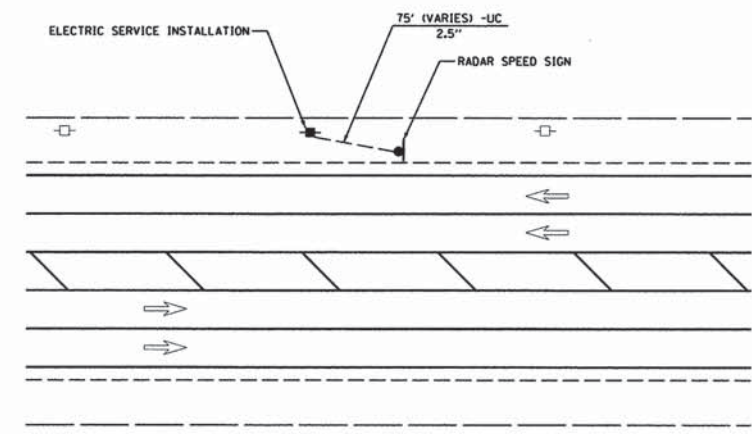
**FOR INFORMATION ONLY**

FILE NAME =	SER. NO. = 14011741	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>INTERCONNECT SCHEMATIC IL RTE. 38 AT RANDALL ROAD SYSTEM</b>	F.A.P. RTE. NO. 336	SECTION 11-00418-01-SP	COUNTY KANE	TOTAL SHEETS 61	SHEET NO. 55	
		DRAWN -	REVISED -			SCALE:		CONTRACT NO. 63862			
		CHECKED -	REVISED -					FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT	
		DATE -	REVISED -								

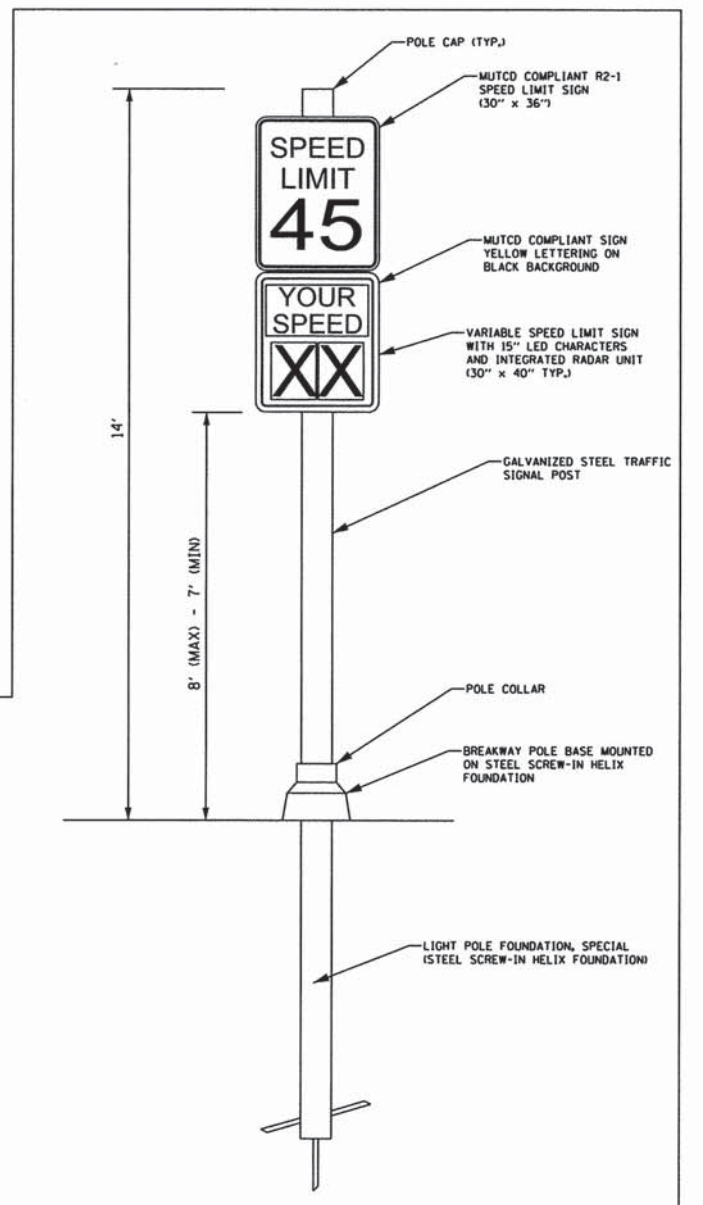
PRINTED DATE: 5/13/2014  
 FILE NAME: K:\Projects\Kane County\2012 HSP\ADD\Drawings\Sheets\Traffic Signal Plans\56 Signing Strip Map.dgn



- CONSTRUCTION NOTES:**
1. THE LOCATION OF ALL UTILITIES AND PRIVATELY OWNED FACILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE INSTALLATION OF ANY COMPONENTS.
  2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING EXISTING KANE COUNTY ELECTRICAL FACILITIES AT HIS/HER OWN EXPENSE IF REQUIRED, PRIOR TO PERFORMING ANY WORK. THE CONTRACTOR SHALL ALSO BE LIABLE FOR ANY DAMAGE TO KANE COUNTY FACILITIES RESULTING FROM INACCURATE LOCATING.
  3. THE RADAR SPEED LIMIT SIGNS AND ALL ASSOCIATED COMPONENTS SHALL BE IN FULL COMPLIANCE WITH THE LATEST PUBLISHED EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
  4. THE RADAR SPEED LIMIT SIGNS SHALL BE INSTALLED AT LOCATIONS AS SPECIFIED BY THE ENGINEER. EACH SIGN SHALL BE LOCATED WITHIN 75' OF COMED ELECTRICAL SERVICE FACILITY. CONTRACTOR SHALL VERIFY LOCATION WITH COMED. THE CONTRACTOR SHALL NOTIFY ART KLINICKI, AT (630) 845-7871 FOR LOCATION VERIFICATION PRIOR TO INSTALLATION.
  5. THE RADAR SPEED SIGN ASSEMBLIES SHALL BE INSTALLED AT A MINIMUM DISTANCE OF EIGHT FEET FROM THE EDGE OF PAVEMENT.
  6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORATION OF ALL AREAS DISTURBED BY CONSTRUCTION, THE COST OF THIS WORK SHALL BE INCLUDED IN THE BID PRICE FOR THE CONTRACT.
  7. SERVICE CABLE, NO. 6 2C SHALL BE INSTALLED FROM ELECTRIC SERVICE INSTALLATION TO THE RADAR SPEED SIGN IN A 2.5" GALVANIZED STEEL CONDUIT. CONTRACTOR SHALL VERIFY CABLE TYPE WITH EQUIPMENT VENDOR PRIOR TO PERFORMING ANY WORK.



SERVICE INSTALLATION DETAIL



ASSEMBLY DETAIL

**RADAR SPEED SIGN DETAIL**



USER NAME = ghiskey  
 PLOT SCALE = 20,0000' / in.  
 PLOT DATE = 5/13/2014

DESIGNED - JY  
 DRAWN - DN  
 CHECKED - MR  
 DATE - 5/13/2014

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

**SIGNING STRIP MAP**  
**RANDALL ROAD**

SCALE: SHEET NO OF SHEETS STA TO STA

F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
336	11-00418-01-SP	KANE	61	56
CONTRACT NO 63862				
ILLINOIS FEDERAL AID PROJECT				





NOTES:

1. COLOR:  
 BACKGROUND: WHITE  
 MESSAGE: BLACK
2. LINE 1 IS SERIES C  
 LINE 2, 4 AND 5 ARE SERIES D  
 LINE 3 IS SERIES B
3. ALL DIMENSIONS SHOWN ARE IN INCHES

PRINTED DATE: 5/13/2014  
 FILE NAME: K:\Projects\Kane County\2012 HSP\CHDD\Drawings\Sheets\Traffic Signal Plans\57\_Sign\_Detail.dgn



USER NAME = ghickey	DESIGNED - JY	REVISED -
	DRAWN - DN	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - MR	REVISED -
PLOT DATE = 5/13/2014	DATE - 5/13/2014	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SIGN DETAIL**

SCALE:	SHEET NO	OF	SHEETS	STA	TO STA
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F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
336	11-00418-01-SP	KANE	61	57
CONTRACT NO 63862				
ILLINOIS FEDERAL AID PROJECT				

VARIABLE - TO MEET EXISTING DIMENSIONS AND FIELD CONDITIONS (SEE NOTE ②)

PROP. CONC. CURB OR CURB AND GUTTER REPLACEMENT IN ACCORDANCE WITH STATE STANDARD 606001. (SEE NOTE ②)

SAW CUT FULL DEPTH - INCLUDED IN THE COST OF SIDEWALK, DRIVEWAY OR MEDIAN SURFACE REMOVAL PAY ITEM.

SEE STATE STANDARD 606001  
EXISTING OR PROPOSED HMA SURFACE (IF APPLICABLE)

1/4" (5) \*\*

18" (450) MAX.

EXISTING SIDEWALK, DRIVEWAY, MEDIAN SURFACE, SOD OR GROUND.

PROPOSED SIDEWALK, DRIVEWAY PAVEMENT, MEDIAN SURFACE OR SODDING SALT TOLERANT WITH TOP SOIL, 4" (100) SOD RESTORATION (SEE NOTE ①).

EXISTING CONCRETE PAVEMENT, CONCRETE BASE COURSE OR FLEXIBLE PAVEMENT

T/2 \*

3" (75) MIN.

SUITABLE BACKFILL MATERIAL (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT)

PROPOSED 3/4" (20) PREFORMED EXPANSION JOINT AT CONCRETE SIDEWALKS, DRIVEWAYS, AND MEDIANS. (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.)

\* 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.

\*\* IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.

SODDING, SALT TOLERANT AND TOP SOIL, FURNISH AND PLACE 4" WILL BE PAID FOR SEPARATELY.

② FERTILIZER FOR THE PLACEMENT OF THE SOD IS NOT REQUIRED

③ CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.

④ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.

⑤ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑥ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑦ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.

⑧ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

REMOVAL AND REPLACEMENT 4" (100) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

REMOVAL AND REPLACEMENT IN EXCESS OF 4" (100) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

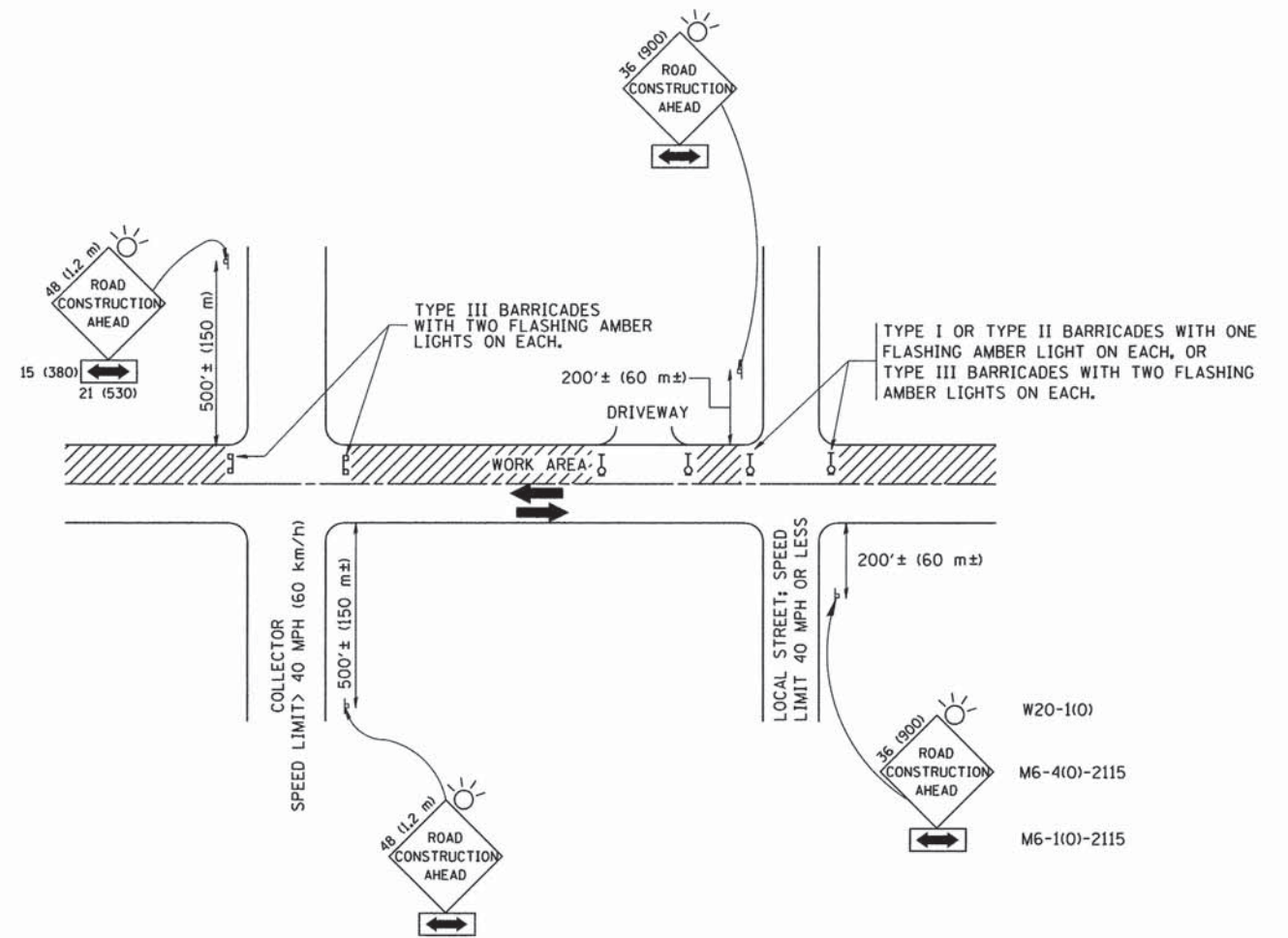
**BASIS OF PAYMENT:**

THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = drivakosgn	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ei:\p\work\p\dot\drivakosgn\d0108315\bc24.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	336	11-00418-01-SP	KANE	61	58
	PLOT SCALE = 50.0000 "/ IN.	CHECKED -	REVISED - M. GOMEZ 01-22-01					<b>BD600-06 (BD-24)</b>		CONTRACT NO. 63862			
	PLOT DATE = 12/15/2009	DATE - 03-11-94	REVISED - R. BORO 12-15-09					FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					



W20-1(0)  
M6-4(0)-2115  
M6-1(0)-2115

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

#### NOTES:

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

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

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

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

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

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

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

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

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

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

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

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

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

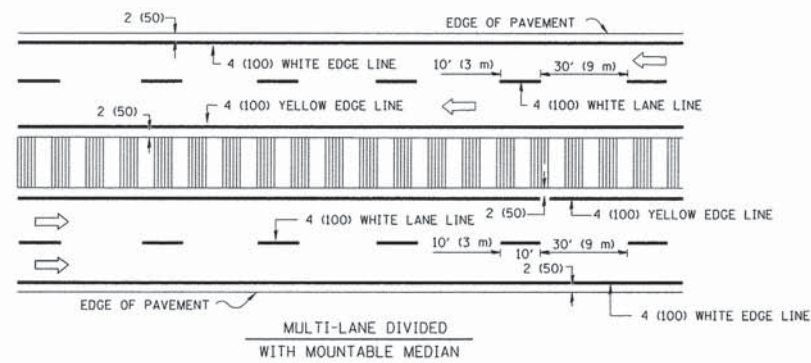
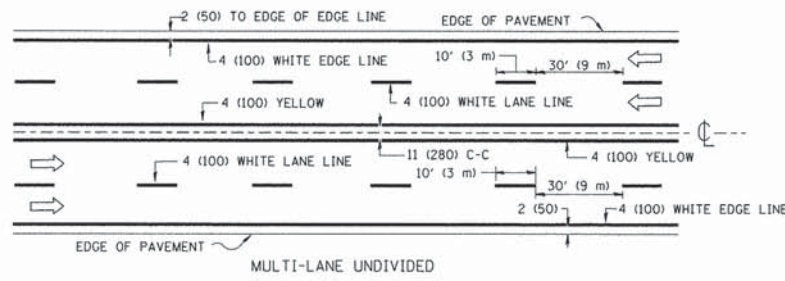
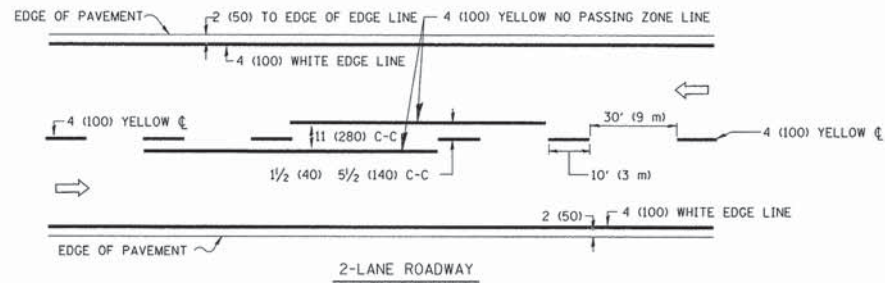
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		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

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

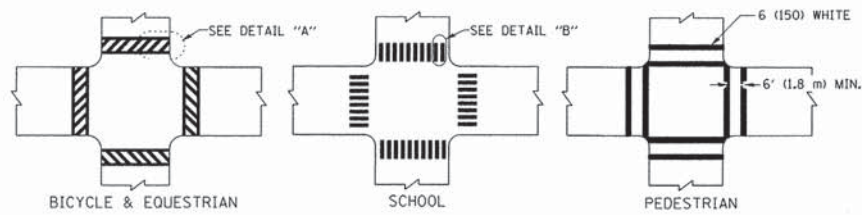
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	11-00418-01-SP	KANE	61	59
TC-10			CONTRACT NO. 63862	
FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT				

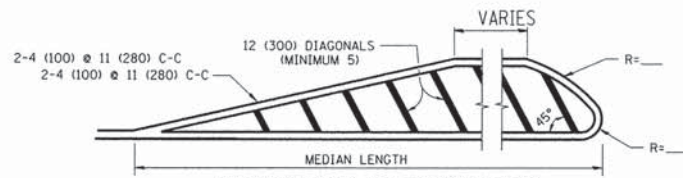
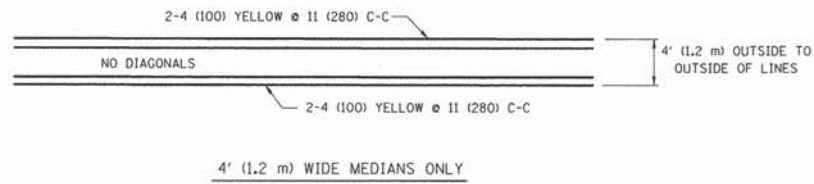


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING

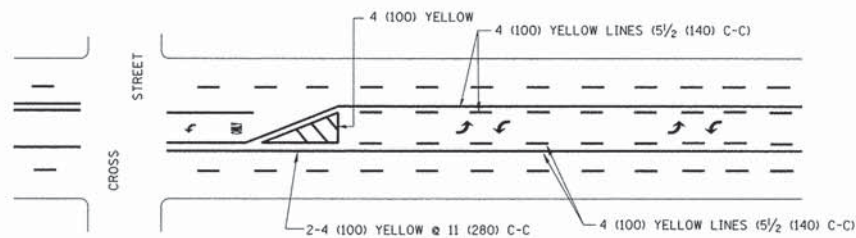


TYPICAL CROSSWALK MARKING

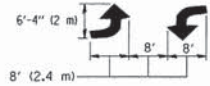


FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.  
 DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))  
 75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)  
 150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

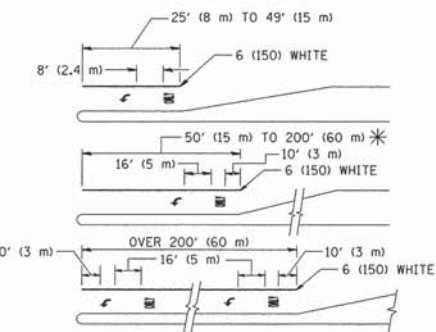


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

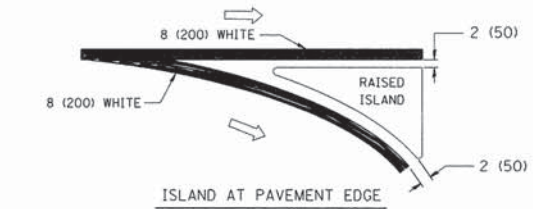
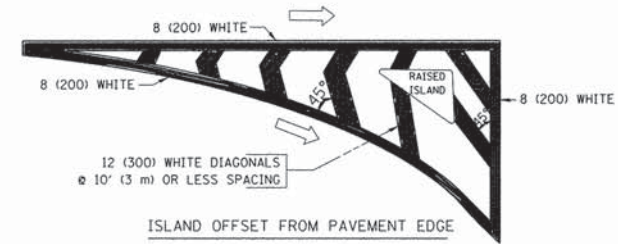


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
 AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)

\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5 1/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5 1/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m <sup>2</sup> ) EACH "X"=54.0 SQ. FT. (5.0 m <sup>2</sup> )
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

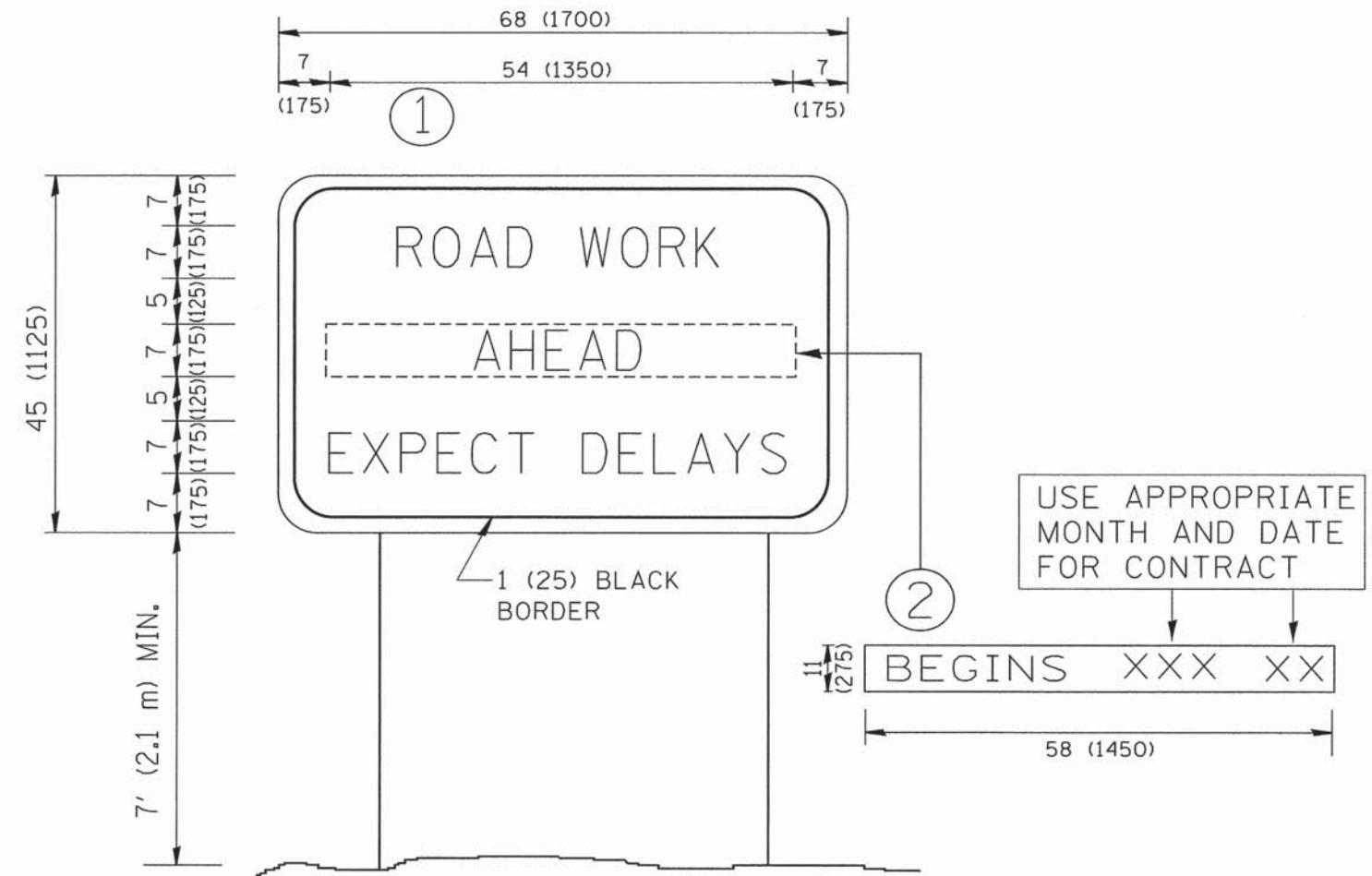
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = drivakasn	DESIGNED - EVERS	REVISED - T. RAMMACHER 10-27-94
c:\pw_work\pisd\drivakasn\d0108315\to3.dgn		DRAWN -	REVISED - C. JUCIUS 09-09-09
	PLOT SCALE = 50,000' / IN.	CHECKED -	REVISED -
	PLOT DATE = 9/9/2009	DATE - 03-19-90	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE		F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TYPICAL PAVEMENT MARKINGS		336	11-00418-01-SP	KANE	61	60
SCALE: NONE		SHEET NO. 1 OF 1 SHEETS		STA.	TO STA.	
		FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	11-00418-01-SP	KANE	61	60
TC-13		CONTRACT NO. 63862		



**NOTES:**

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = goglienobt	DESIGNED -	REVISED - R. MIRS 09-15-97
W:\distatd\22x34\to22.dgn		DRAWN -	REVISED - R. MIRS 12-11-97
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD  
INFORMATION SIGN**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	11-00418-01-SP	KANE	61	61
TC-22			CONTRACT NO. 63862	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				