

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

DISTRICT 1

HIGHWAY SAFETY IMPROVEMENT PROJECT

**ILLINOIS ROUTE 19 (IRVING PARK ROAD)
JUDD AVENUE TO ILLINOIS ROUTE 171 (CUMBERLAND AVENUE)
F.A.P. ROUTE 345
SECTION 2009-085 TS PROJECT: ACHSIP-0345(052)
COOK COUNTY**

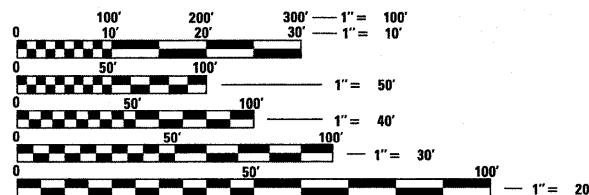
C-91-883-09



STANDARD DRAWINGS

- | | | | | |
|-------------|-------------|-------------|-------------|-------------|
| (701006-03) | (701011-02) | (701101-02) | (701301-03) | (701901-01) |
| (424001-05) | (442201-03) | (606001-04) | (606306-03) | (720001-01) |
| (780001-02) | (814001-02) | (814006-02) | (857001-01) | (862001-01) |
| (873001-02) | (877001-04) | 877006-03 | 877011-04 | (878001-08) |
| (880001-01) | (880006-01) | (886001-01) | 886006-01 | |
| 701201-03 | 701316-04 | 701321-08 | 701406-05 | 701501-05 |
| 701502-03 | 701606-06 | (701601-06) | (701701-06) | (701801-04) |

NOTE: STANDARD DRAWINGS REQUIRED (CIRCLED).

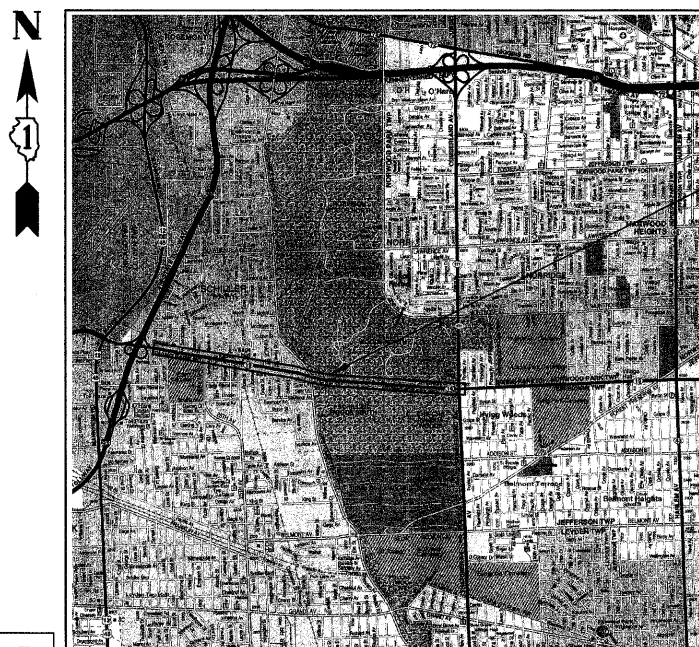


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

PREPARED BY: Steve Travin 10/16/09
TRAFFIC ENGINEER DATE

IMPROVEMENTS LOCATED IN THE VILLAGE OF SCHILLER PARK AND CITY OF CHICAGO

LEYDEN AND JEFFERSON TOWNSHIPS



LOCATION MAP

PROJECT LOCATION

FOR UNDERGROUND
UTILITY LOCATIONS



(800) 892-0123

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Oct. 16 20 09
Devin M. O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

20

ENGINEER OF PROJECT DEVELOPMENT AND IMPLEMENTATION
December 4, 20 09
Charles G. Ingersoll
ENGINEER OF DESIGN AND ENVIRONMENT

December 4, 20 09
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS**

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GENERAL NOTES

- 1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 1-800-892-0123 FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION REQUIRED).
- 2. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND GOVERNMENT AGENCIES.
- 3. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN CONSENT FROM THE DEPARTMENT.
- 4. ALL DIMENSIONS, INCLUDING RADII, ARE GIVEN TO THE CENTERLINE UNLESS OTHERWISE NOTED.
- 5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.
- 6. THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO (2) WEIGHTED SAND BAGS ON EACH TYPE I OR II BARRICADE USED, ONE (1) SAND BAG ACROSS EACH BOTTOM RAIL. TYPE III BARRICADES SHALL HAVE FOUR (4) WEIGHTED SAND BAGS.
- 7. PAY ITEMS IN THE SUMMARY OF QUANTITIES HAVE BEEN ESTIMATED. IF, IN THE ENGINEER'S OPINION, THE WORK IS NOT REQUIRED, THE ITEM WILL BE DEDUCTED FROM THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- 8. ALL EXISTING LANDSCAPING DISTURBED BY THE CONSTRUCTION OPERATIONS SHALL BE RESTORED, AS DIRECTED BY THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.
- 9. EARTH EXCAVATION FOR PROPOSED SIDEWALK, WHERE REQUIRED, SHALL BE INCIDENTAL TO THE PAY ITEM "PORTLAND CEMENT CONCRETE SIDEWALK."

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

PAY ITEM	AC TYPE	VOIDS
CLASS D PATCH		
CLASS D PATCH (HMA BINDER IL-19 MM)	PG 64-22*	4% @ 70 GYR.

NOTE: THE UNIT WEIGHT TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURES IS 112 LB/SY-IN.
 * WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22.

FILE NAME =	USER NAME = #USER#	DESIGNED - BRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES IL ROUTE 19 (IRVING PARK ROAD)	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
#FILE#		DRAWN - JRT	REVISED -			345	2009-085 TS	COOK	39	2	
PLOT SCALE = #SCALE#		CHECKED - JJE	REVISED -			CONTRACT NO. 60127					
PLOT DATE = #DATE#		DATE - 10/14/09	REVISED -			FED. ROAD DIST. NO. 7 (ILLINOIS) FED. AID PROJECT					
				SCALE: NO SCALE SHEET NO. 1 OF 1 SHEETS STA. TO STA.							

SUMMARY OF QUANTITIES		FUNDING BREAKDOWN		90% FEDERAL 6 2/3% STATE 3 1/3% SCHILLER PARK	90% FEDERAL 5% STATE 5% SCHILLER PARK	90% FEDERAL 6 2/3% STATE 3 1/3% SCHILLER PARK	90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	90% FEDERAL 10% STATE
		LOCATION OF WORK		IL ROUTE 19 & JUDD AV.	IL ROUTE 19 & 25TH AV./RUBY ST.	IL ROUTE 19 & WESLEY TER.	IL ROUTE 19 & DES PLAINES RIVER RD.	IL ROUTE 19 & IL ROUTE 171	IL ROUTE 19 INTERCONNECT
CODE NO.	PAY ITEM	UNIT	TOTAL	URBAN Y031-1F	URBAN Y031-1F	URBAN Y031-1F	URBAN Y031-1F	URBAN Y031-1F	URBAN Y031-1F
31101200	SUB-BASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	204	14	103	28	9	50	
42001300	PROTECTIVE COAT	SQ YD	244	20	120	30	19	55	
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	1821	125	925	246	75	450	
42400800	DETECTABLE WARNINGS	SQ FT	286	31	100	46	38	71	
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	140	20	74	10	15	21	
44000600	SIDEWALK REMOVAL	SQ FT	1300	25	925	200	75	75	
44003100	MEDIAN REMOVAL	SQ FT	108				108		
44201785	CLASS D PATCHES, TYPE I, 12 INCH	SQ YD	2				2		
44201789	CLASS D PATCHES, TYPE II, 12 INCH	SQ YD	9				9		
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	115	10	74	10		21	
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	25	10			15		
60619600	CONCRETE MEDIAN, TYPE SB-6.12	SQ FT	36				36		
60624600	CORRUGATED MEDIAN	SQ FT	9				9		
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6						
67100100	MOBILIZATION	L SUM	1	0.17	0.17	0.17	0.17	0.16	0.16
70101700	TRAFFIC CONTROL AND PROTECTION	L SUM	1	0.17	0.17	0.17	0.17	0.16	0.16
** 72000100	SIGN PANEL - TYPE 1	SQ FT	79		24	15		40	
** 72000200	SIGN PANEL - TYPE 2	SQ FT	88		30		58		
** 72400710	RELOCATE SIGN PANEL - TYPE 1	SQ FT	13				13		
** 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	37				37		
** 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	433	188			245		
** 78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	14				14		
** 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	583		258		325		
** 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	68				68		
78300100	PAVEMENT MARKING REMOVAL	SQ FT	663	94	258		311		
81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	728		24		704		
81000700	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	251				251		
81000800	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	43		9	11	23		
81001000	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	27		17	10			
81001100	CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	FOOT	20			10	10		
81018500	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	3116		1060	567	553		936
81018600	CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	59			32	12	15	
81018700	CONDUIT PUSHED, 3" DIA., GALVANIZED STEEL	FOOT	62		20	6	36		
81018900	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	942		321	158	463		
81019000	CONDUIT PUSHED, 5" DIA., GALVANIZED STEEL	FOOT	34		34				
81030100	CONDUIT SPLICE	EACH	1						1
81306500	REMOVE EXISTING JUNCTION BOX	EACH	4		4				
81400100	HANDHOLE	EACH	18		6	5	7		
81400200	HEAVY-DUTY HANDHOLE	EACH	7		3		4		
81400300	DOUBLE HANDHOLE	EACH	5		2	1	2		
81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	1032		50	26	956		
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	2	1				1	
85700205	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	2		1	1			
85700305	FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL	EACH	1				1		
86000105	MASTER CONTROLLER (SPECIAL)	EACH	1				1		
86400100	TRANSCEIVER - FIBER OPTIC	EACH	3		1	1	1		
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	2524	135	589	1028	482	290	
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	4459	229	1729	839	1058	604	
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	6468	565	1456	799	3032	616	
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	3992	419	1398	299	1876		

** Specialty Items

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 SHOULDER, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SALT TOLERANT SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

NOTE: THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM AT THE FOLLOWING INTERSECTIONS:

IL ROUTE 19 & JUDD AV.
IL ROUTE 19 & 25TH AV./RUBY ST.
IL ROUTE 19 & WESLEY TER.
IL ROUTE 19 & DES PLAINES RIVER RD.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM AT THE FOLLOWING INTERSECTION:

IL ROUTE 19 & IL ROUTE 171

SUMMARY OF QUANTITIES		FUNDING BREAKDOWN		90% FEDERAL 6 2/3% STATE 3 1/3% SCHILLER PARK	90% FEDERAL 5% STATE 5% SCHILLER PARK	90% FEDERAL 6 2/3% STATE 3 1/3% SCHILLER PARK	90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	90% FEDERAL 10% STATE
LOCATION OF WORK		URBAN		IL ROUTE 19 & JUDD AV.	IL ROUTE 19 & 25TH AV./RUBY ST.	IL ROUTE 19 & WESLEY TER.	IL ROUTE 19 & DES PLAINES RIVER RD.	IL ROUTE 19 & IL ROUTE 171	IL ROUTE 19 INTERCONNECT
CODE NO.	PAY ITEM	UNIT	TOTAL	Y031-1F	Y031-1F	Y031-1F	Y031-1F	Y031-1F	Y031-1F
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN NO. 14 1 PAIR	FOOT	8815		3409	1489	3917		
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	167		23	40	104		
87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	8			3	2	3	
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2				2		
87502520	TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	1				1		
87700160	STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	1			1			
87700170	STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.	EACH	1			1			
87700200	STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1		1				
87700210	STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1				1		
87700220	STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	4		2		2		
87700250	STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	1		1				
87700290	STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	1				1		
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	36			12	20	4	
87800150	CONCRETE FOUNDATION, TYPE C	FOOT	12		4	4	4		
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	120		45	30	45		
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	30		15		15		
87900200	DRILL EXISTING HANDHOLE	EACH	5					1	4
88030020	SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	37	5	7	4	9	12	
88030050	SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	11	3	1	5	2		
88030100	SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2		2				
88030110	SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	9		4		5		
88030210	SIGNAL HEAD, L.E.D., 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	6	2				4	
88030220	SIGNAL HEAD, L.E.D., 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2		1		1		
88030240	SIGNAL HEAD, L.E.D., 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	3				3		
88102717	PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	6	2		2	2		
88102747	PEDESTRIAN SIGNAL HEAD, L.E.D., 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	11	1	4	2		4	
88500100	INDUCTIVE LOOP DETECTOR	EACH	29		12	5	12		
88600100	DETECTOR LOOP, TYPE I	FOOT	1496		687	201	608		
88800100	PEDESTRIAN PUSH-BUTTON	EACH	17	3	4	4	2	4	
89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	3		1	1	1		
* 89501400	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	8		3	2	3		
* 89501410	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	3		1	1	1		
89502200	MODIFY EXISTING CONTROLLER	EACH	1	1					
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	6250	695		246		1455	3854
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	5	1	1	1	1	1	
89502380	REMOVE EXISTING HANDHOLE	EACH	28		8	6	14		
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	26		7	7	10	2	
X0322925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	6498						6498
X0325737	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	3		1	1	1		
X8050015	SERVICE INSTALLATION~POLE MOUNTED	EACH	3		1	1	1		
X8620020	UNINTERRUPTIBLE POWER SUPPLY	EACH	5	1	1	1	1	1	
X8710020	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SMI2F	FOOT	6570						6570
X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	1808		478	326	983	21	
* X8730250	ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED, SHIELDED	FOOT	1789		504	247	1038		
X8950200	REBUILD EXISTING HANDHOLE	EACH	2	1				1	
XX000406	BRICK PAVER REMOVAL AND REPLACEMENT	SQ FT	1156			1156			
XX004913	REMOVE FIBER OPTIC CABLE FROM CONDUIT	FOOT	3866						3866
XO326770	RETROREFLECTIVE TRAFFIC SIGNAL BACKPLATE	EACH	46	5	11	4	14	12	
XO325714	(POST MOUNTED) FLASHING BEACON, SOLAR POWERED INSTALLATION	EACH	1				1		

* 100% COST TO VILLAGE OF SCHILLER PARK Y031-30

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 SHOULDER, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SALT TOLERANT SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDING IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

NOTE: THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM AT THE FOLLOWING INTERSECTIONS:

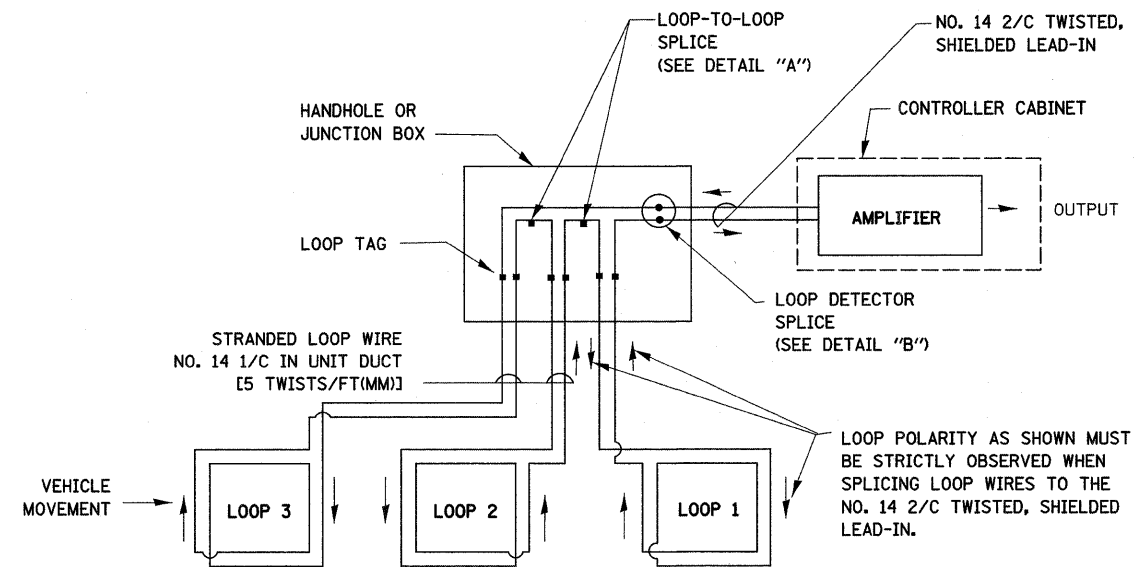
- IL ROUTE 19 & JUDD AV.
- IL ROUTE 19 & 25TH AV./RUBY ST.
- IL ROUTE 19 & WESLEY TER.
- IL ROUTE 19 & DES PLAINES RIVER RD.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM AT THE FOLLOWING INTERSECTION:

- IL ROUTE 19 & IL ROUTE 171

LOOP DETECTOR NOTES

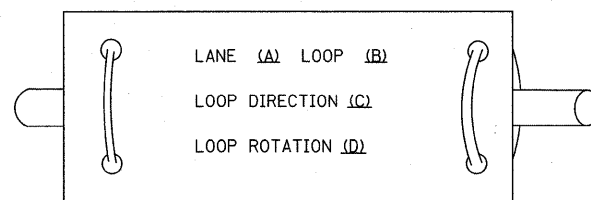
1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE UNIT DUCT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). UNIT DUCT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED 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.



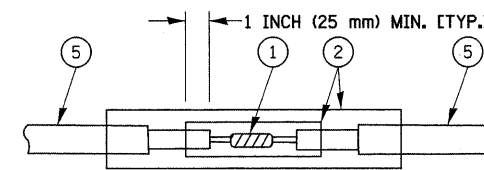
DETECTOR LOOP WIRING SCHEMATIC

- 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.

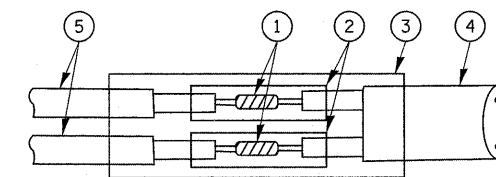
LOOP LEAD-IN CABLE TAG



- 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.



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



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

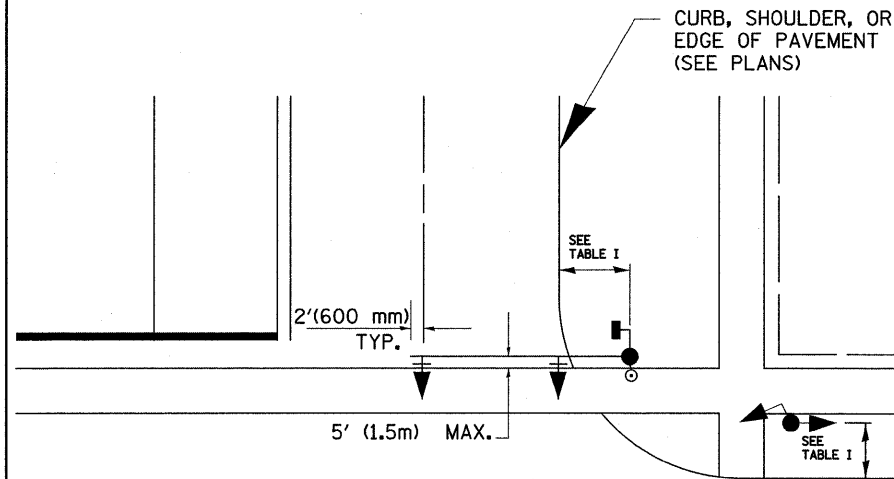
LOOP DETECTOR SPLICE

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

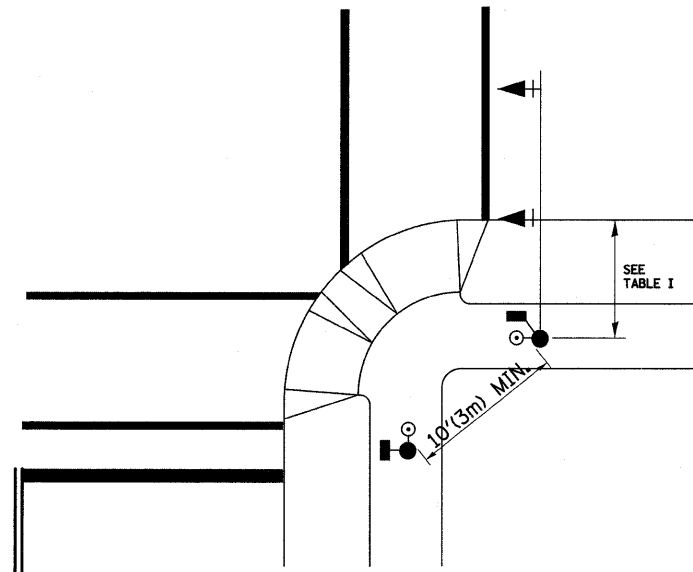
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	PLOT SCALE = #SCALE#	DRAWN - JRT	REVISED -					SCALE:	SHEET NO. 1 OF 4 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT	
	PLOT DATE = #DATE#	CHECKED - JJE	REVISED -							CONTRACT NO. 60I27			
		DATE - 10/14/09	REVISED -										

TRAFFIC SIGNAL MAST ARM AND POST

MAST ARM MOUNTED SIGNAL IN PROPOSED & FUTURE SIDEWALK AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNAL AND PUSHBUTTON DETECTOR



PEDESTRIAN SIGNAL PUSHBUTTON



RECOMMENDED PUSHBUTTON LOCATIONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHALL BE IN ACCORDANCE WITH THE CURRENT MUTCD (SEE NOTE 1). TO MEET MUTCD REQUIREMENTS, PEDESTRIAN SIGNAL PUSHBUTTONS MAY HAVE TO BE MOUNTED ON A SEPARATE POST.

NOTES:

- AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS WITH PEDESTRIAN ACTUATION. EACH PUSHBUTTON SHALL ACTIVATE BOTH THE WALK INTERVAL AND THE ACCESSIBLE PEDESTRIAN SIGNALS.
 AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS, PUSHBUTTONS SHOULD CLEARLY INDICATE WHICH CROSSWALK SIGNAL IS ACTUATED BY EACH PUSHBUTTON. PUSHBUTTONS AND TACTILE ARROWS SHOULD HAVE HIGH VISUAL CONTRAST (SEE THE DEPARTMENT OF JUSTICE'S AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN, 1991). TACTILE ARROWS SHOULD POINT IN THE SAME DIRECTION AS THE ASSOCIATED CROSSWALK. AT CORNERS OF SIGNALIZED LOCATIONS WITH ACCESSIBLE PEDESTRIAN SIGNALS WHERE PEDESTRIAN PUSHBUTTONS ARE PROVIDED, THE PUSHBUTTONS SHOULD BE SEPARATED BY THE DISTANCE OF AT LEAST 10 FT (3m). THIS ENABLES PEDESTRIANS WHO HAVE VISUAL DISABILITIES TO DISTINGUISH AND LOCATE THE APPROPRIATE PUSHBUTTON.
 PUSHBUTTONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHOULD BE LOCATED AS FOLLOWS:
 A: ADJACENT TO A LEVEL ALL-WEATHER SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR, AND WHERE THERE IS AN ALL WEATHER SURFACE, WHEELCHAIR ACCESSIBLE ROUTE TO THE RAMP.
 B: WITHIN 5 FT (1.5m) OF THE CROSSWALK EXTENDED.
 C: WITHIN 10 FT (3m) OF THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
 D: PARALLEL TO THE CROSSWALK TO BE USED (SEE MUTCD FIGURE 4E-2).
 E: NORMAL PEDESTRIAN PUSHBUTTON MOUNTING HEIGHT SHOULD BE 3.5 FT (1.05m) ABOVE ADJACENT SIDEWALK
- PEDESTRIAN SIGNAL FACES SHALL BE MOUNTED WITH THE BOTTOM OF THE HOUSING NOT LESS THAN 8 FT (2.4m) NOR MORE THAN 10 FT (3.0m) ABOVE THE SIDEWALK LEVEL AND SO THERE IS A PEDESTRIAN INDICATION IN THE LINE OF PEDESTRIANS' VISION WHICH PERTAINS TO THE CROSSWALK BEING USED.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, NOT MOUNTED OVER A ROADWAY, SHALL BE AT LEAST 10 FT (3.0m) BUT NOT MORE THAN 15 FT (4.5m) ABOVE THE SIDEWALK OR, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE HIGHWAY IF NO SIDEWALKS EXIST.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, MOUNTED OVER A ROADWAY, SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001 AND 877006. (16 FT (5m) MIN., 18 FT (5.5m) MAX., FROM HIGHEST POINT OF PAVEMENT)

PEDESTRIAN SIGNAL POST

PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN PUSHBUTTON DETECTOR LOCATION

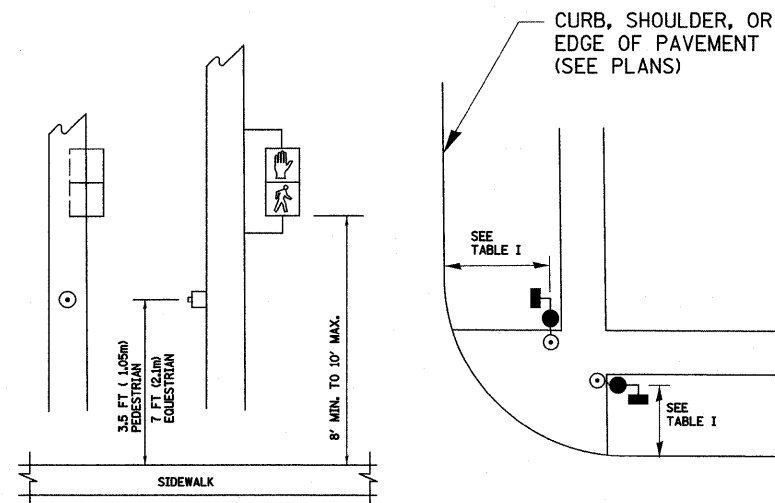
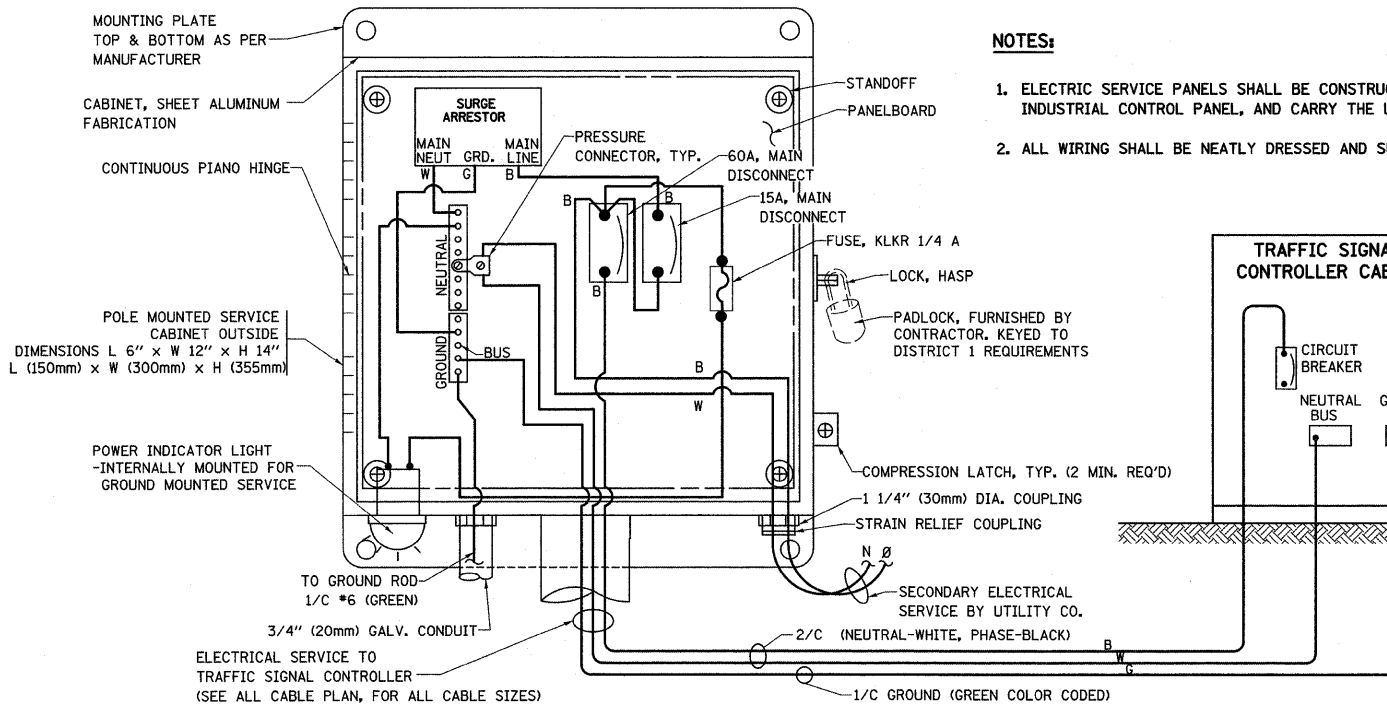
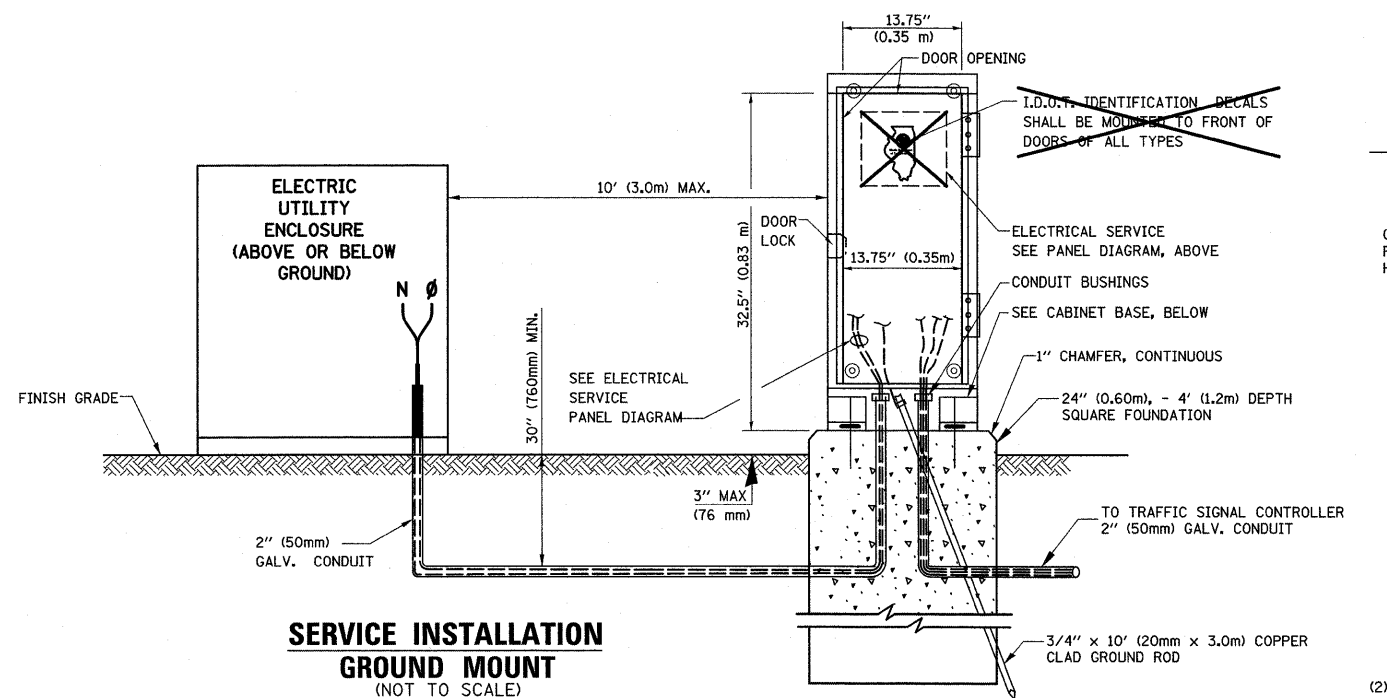


TABLE I

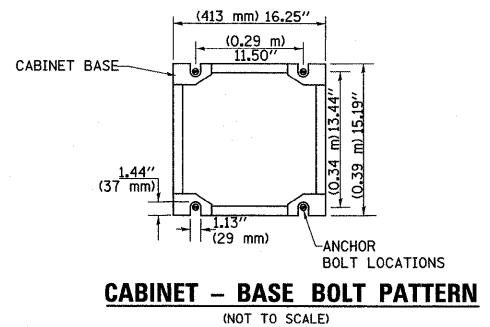
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MIN. DIST. FROM BACK OF CURB)	SHOULDER/NON-CURBED AREA (MIN. DIST. FROM EDGE OF PAVEMENT)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN PUSHBUTTON	SEE NOTE 1	SEE NOTE 1



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

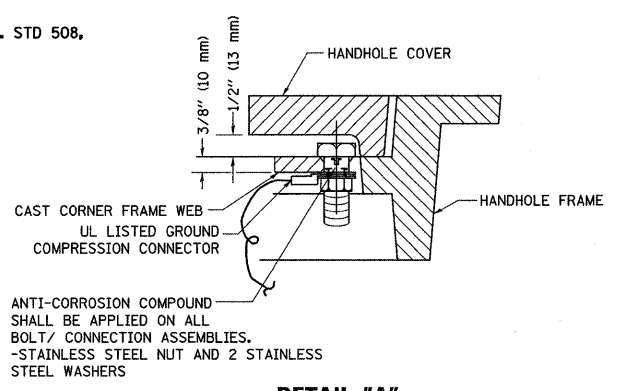


SERVICE INSTALLATION GROUND MOUNT
 (NOT TO SCALE)

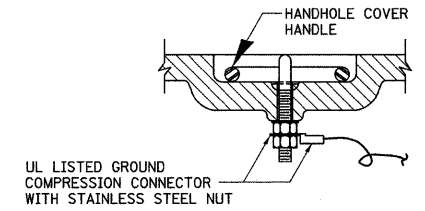


CABINET - BASE BOLT PATTERN
 (NOT TO SCALE)

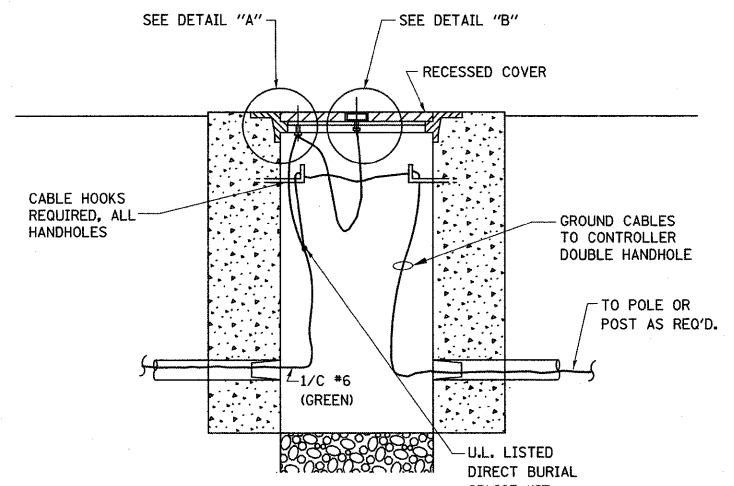
- NOTES:**
1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
 2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.



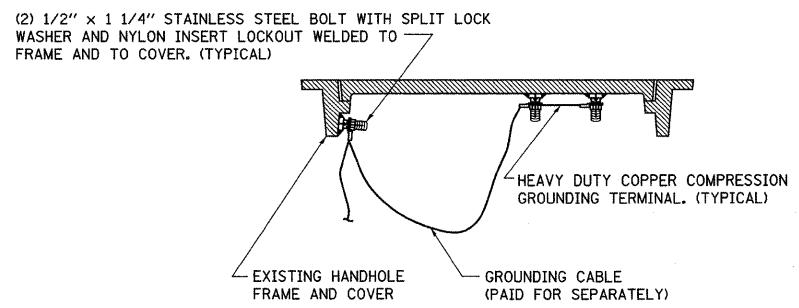
DETAIL "A"



DETAIL "B"



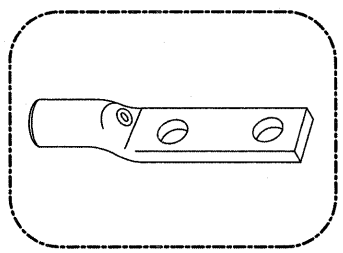
HANDHOLE COVER & FRAME - GROUNDING DETAIL
 (NOT TO SCALE)



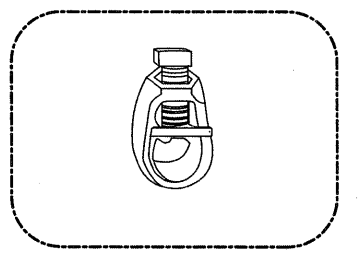
EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL
 (NOT TO SCALE)

- 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\"/>

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.

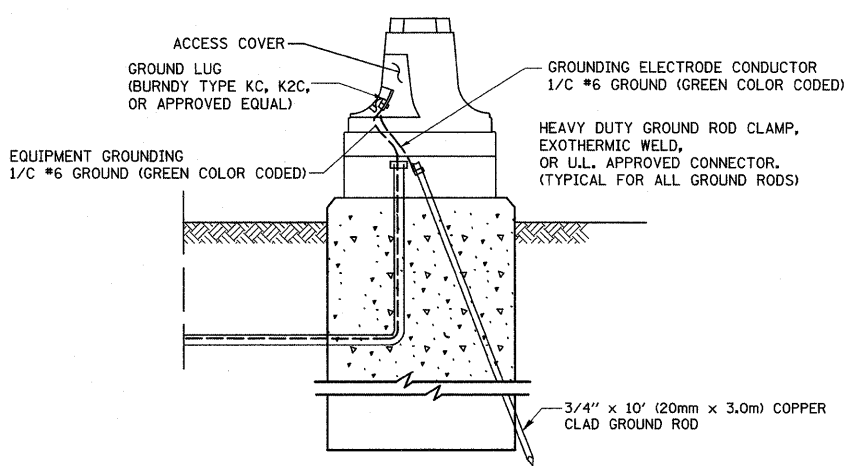


HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)



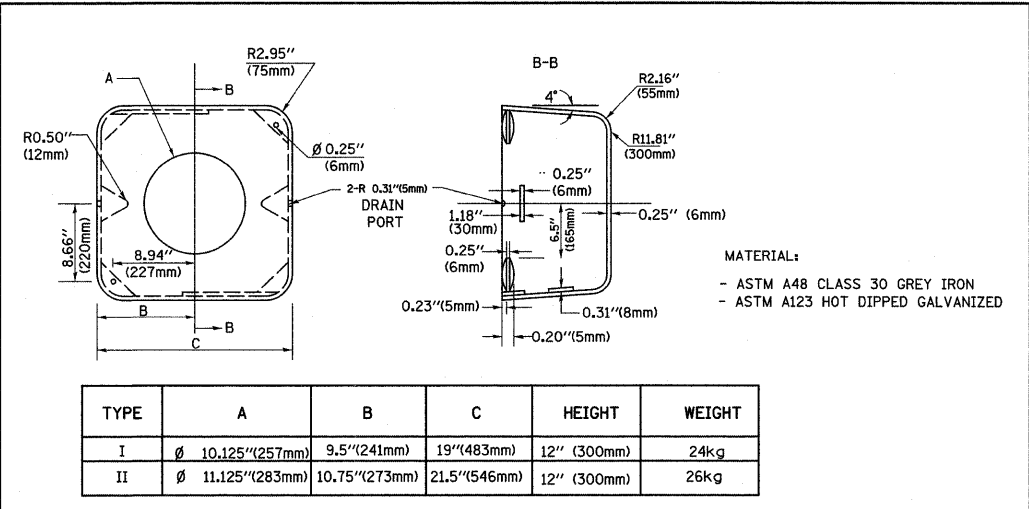
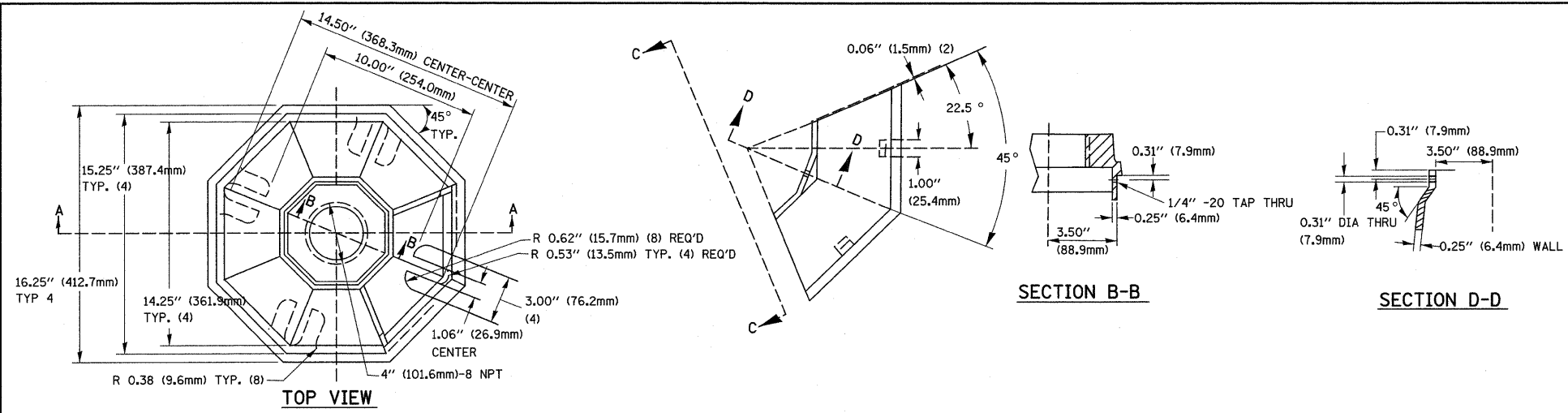
3/4\"/>

- 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.

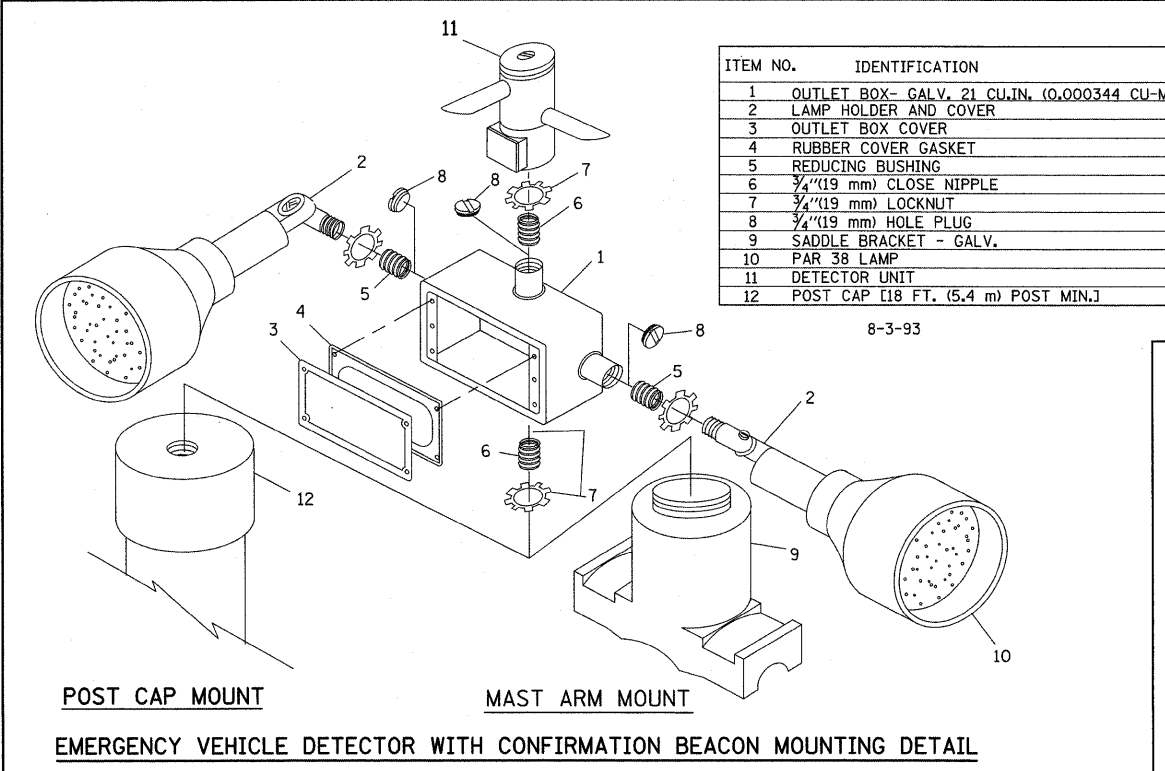
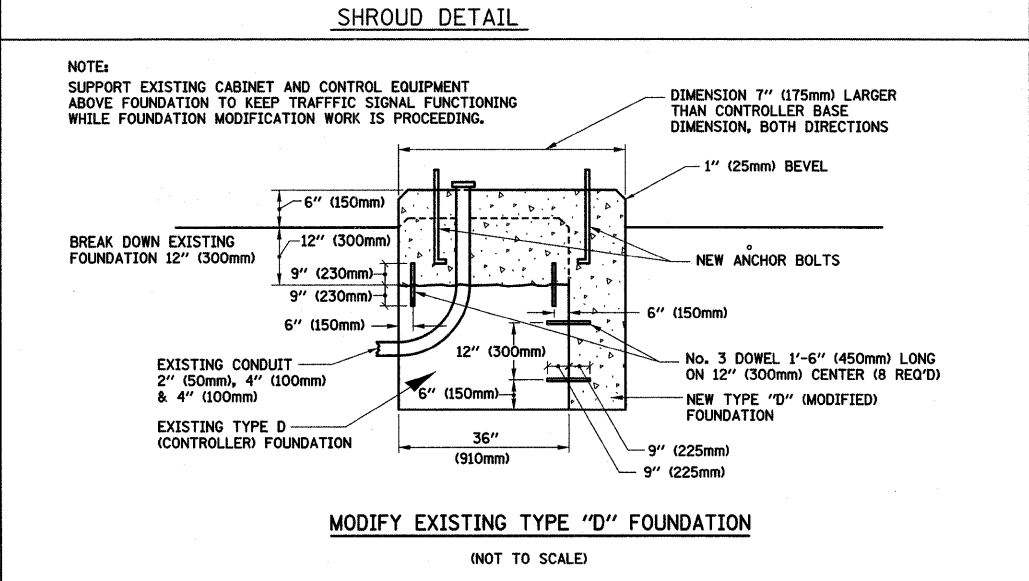
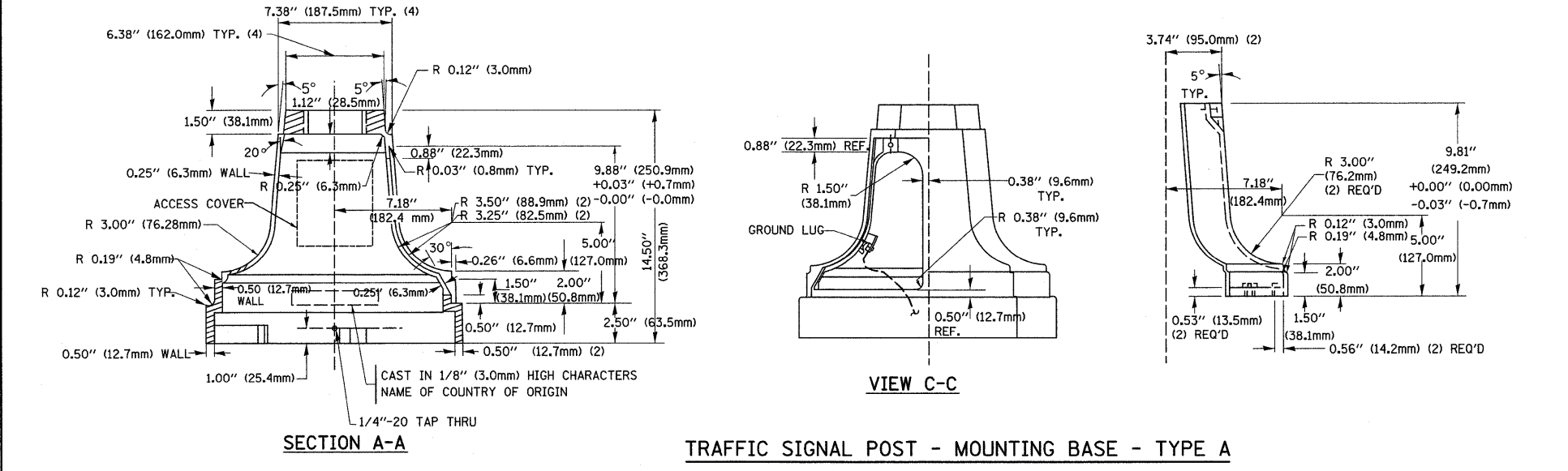


MAST ARM POLE / POST-GROUNDING DETAIL
 (NOT TO SCALE)

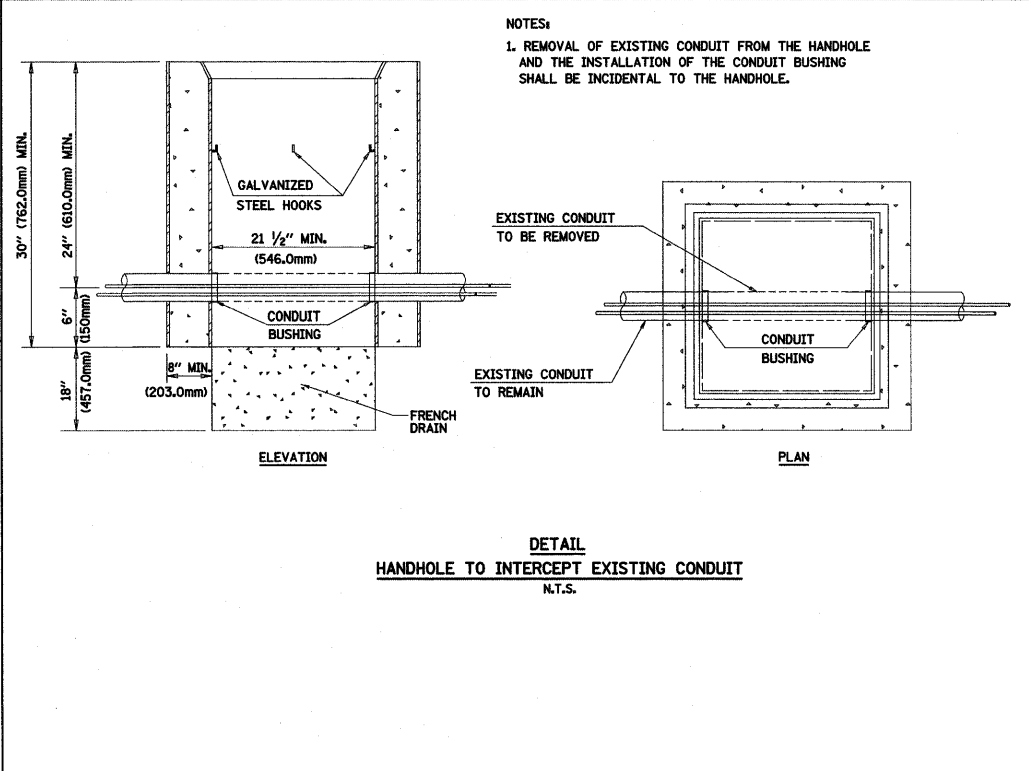
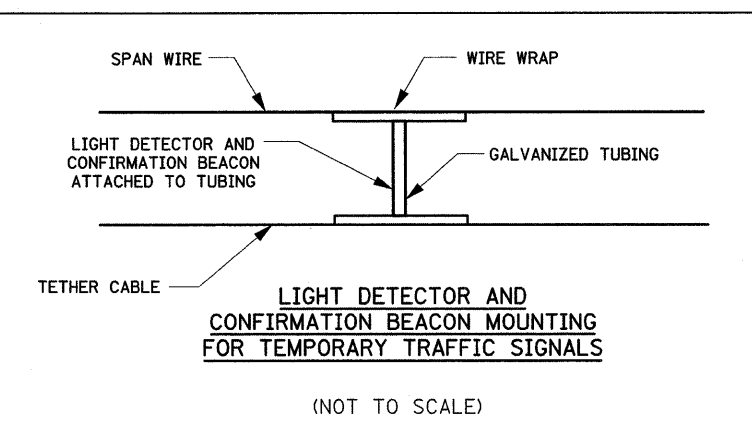
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	PLOT DATE = #DATE#	CHECKED - JJE	REVISED -			FED. ROAD DIST. NO. 7 (ILLINOIS) FED. AID PROJECT						
		DATE - 10/14/09	REVISED -									



TYPE	A	B	C	HEIGHT	WEIGHT
I	Ø 10.125\"(257mm)	9.5\"(241mm)	19\"(483mm)	12\" (300mm)	24kg
II	Ø 11.125\"(283mm)	10.75\"(273mm)	21.5\"(546mm)	12\" (300mm)	26kg



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

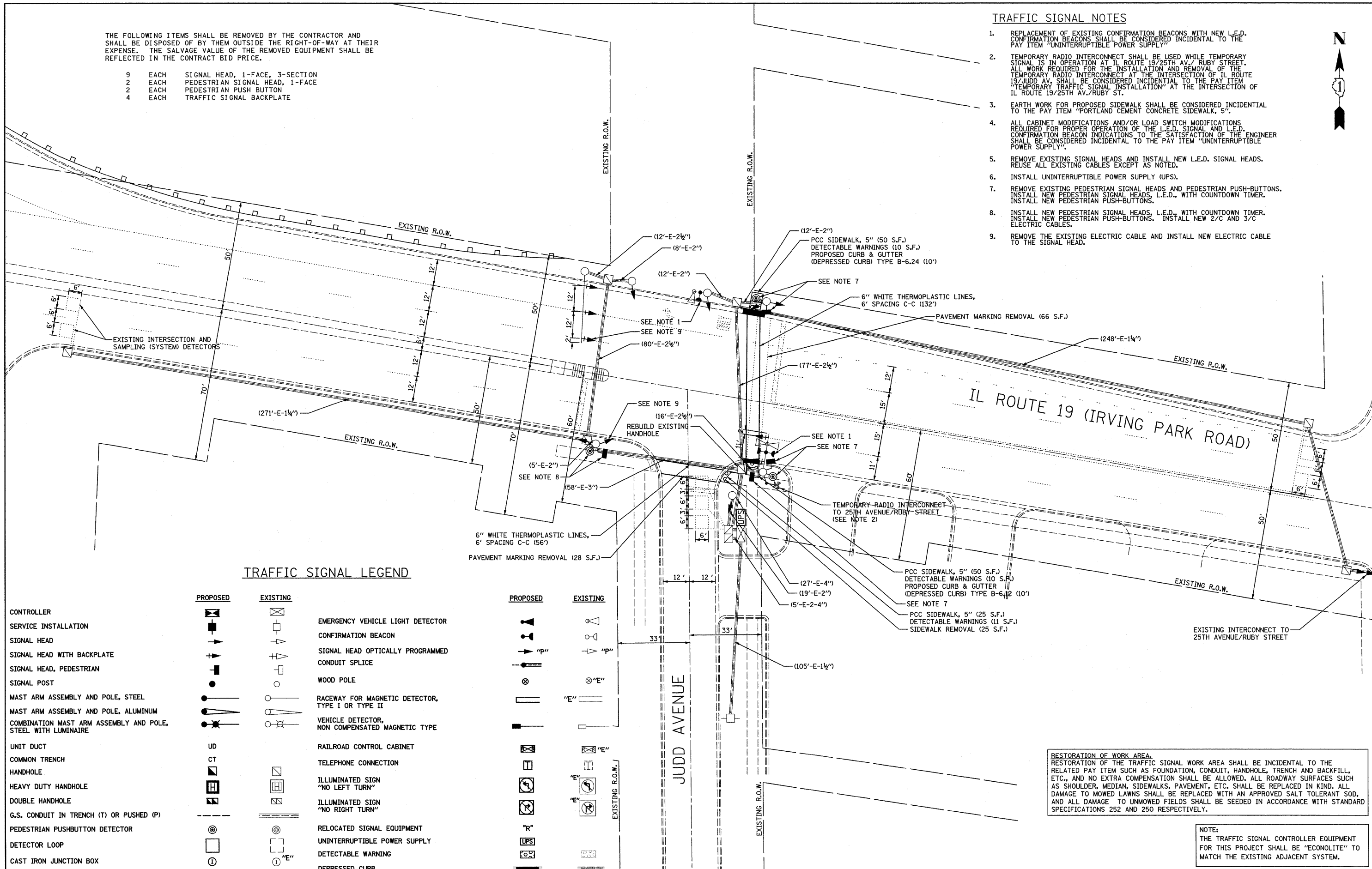
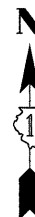


THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 9 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN PUSH BUTTON
- 4 EACH TRAFFIC SIGNAL BACKPLATE

TRAFFIC SIGNAL NOTES

1. REPLACEMENT OF EXISTING CONFIRMATION BEACONS WITH NEW L.E.D. CONFIRMATION BEACONS SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM "UNINTERRUPTIBLE POWER SUPPLY"
2. TEMPORARY RADIO INTERCONNECT SHALL BE USED WHILE TEMPORARY SIGNAL IS IN OPERATION AT IL ROUTE 19/25TH AV./ RUBY STREET. ALL WORK REQUIRED FOR THE INSTALLATION AND REMOVAL OF THE TEMPORARY RADIO INTERCONNECT AT THE INTERSECTION OF IL ROUTE 19/JUDD AV. SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM "TEMPORARY TRAFFIC SIGNAL INSTALLATION" AT THE INTERSECTION OF IL ROUTE 19/25TH AV./RUBY ST.
3. EARTH WORK FOR PROPOSED SIDEWALK SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM "PORTLAND CEMENT CONCRETE SIDEWALK, 5"
4. ALL CABINET MODIFICATIONS AND/OR LOAD SWITCH MODIFICATIONS REQUIRED FOR PROPER OPERATION OF THE L.E.D. SIGNAL AND L.E.D. CONFIRMATION BEACON INDICATIONS TO THE SATISFACTION OF THE ENGINEER SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM "UNINTERRUPTIBLE POWER SUPPLY"
5. REMOVE EXISTING SIGNAL HEADS AND INSTALL NEW L.E.D. SIGNAL HEADS. REUSE ALL EXISTING CABLES EXCEPT AS NOTED.
6. INSTALL UNINTERRUPTIBLE POWER SUPPLY (UPS).
7. REMOVE EXISTING PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSH-BUTTONS. INSTALL NEW PEDESTRIAN SIGNAL HEADS, L.E.D., WITH COUNTDOWN TIMER. INSTALL NEW PEDESTRIAN PUSH-BUTTONS.
8. INSTALL NEW PEDESTRIAN SIGNAL HEADS, L.E.D., WITH COUNTDOWN TIMER. INSTALL NEW PEDESTRIAN PUSH-BUTTONS. INSTALL NEW 2/C AND 3/C ELECTRIC CABLES.
9. REMOVE THE EXISTING ELECTRIC CABLE AND INSTALL NEW ELECTRIC CABLE TO THE SIGNAL HEAD.



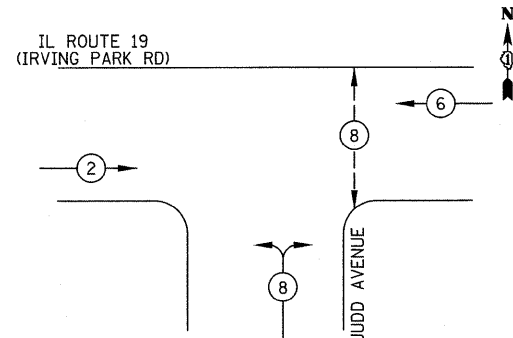
TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING		PROPOSED	EXISTING
CONTROLLER			EMERGENCY VEHICLE LIGHT DETECTOR		
SERVICE INSTALLATION			CONFIRMATION BEACON		
SIGNAL HEAD			SIGNAL HEAD OPTICALLY PROGRAMMED		
SIGNAL HEAD WITH BACKPLATE			CONDUIT SPLICE		
SIGNAL HEAD, PEDESTRIAN			WOOD POLE		
SIGNAL POST			RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		
MAST ARM ASSEMBLY AND POLE, STEEL			VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE		
MAST ARM ASSEMBLY AND POLE, ALUMINUM			RAILROAD CONTROL CABINET		
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE			TELEPHONE CONNECTION		
UNIT DUCT	UD		ILLUMINATED SIGN "NO LEFT TURN"		
COMMON TRENCH	CT		ILLUMINATED SIGN "NO RIGHT TURN"		
HANDHOLE			RELOCATED SIGNAL EQUIPMENT		
HEAVY DUTY HANDHOLE			UNINTERRUPTIBLE POWER SUPPLY		
DOUBLE HANDHOLE			DETECTABLE WARNING		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)			DEPRESSED CURB		
PEDESTRIAN PUSHBUTTON DETECTOR					
DETECTOR LOOP					
CAST IRON JUNCTION BOX					

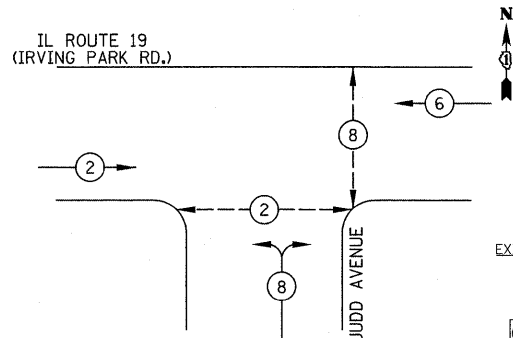
RESTORATION OF WORK AREA.
 RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDER, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL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

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

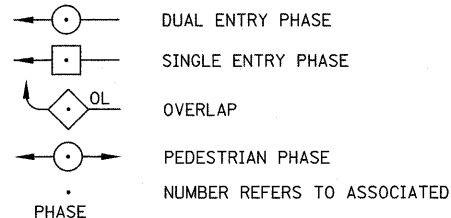
EXISTING CONTROLLER SEQUENCE



PROPOSED CONTROLLER SEQUENCE

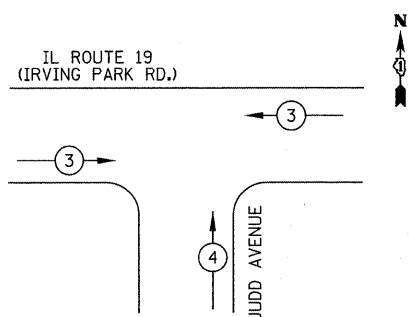


LEGEND



PHASE DESIGNATION DIAGRAM

EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	% OPERATION	
SIGNAL (RED)	12	17		0.50	102
(YELLOW)	12	25		0.25	75
(GREEN)	12	15		0.25	45
ARROW	-	12		0.10	-
PED. SIGNAL	4	25		1.00	100
CONTROLLER	1	100		1.00	100
TOTAL =					422

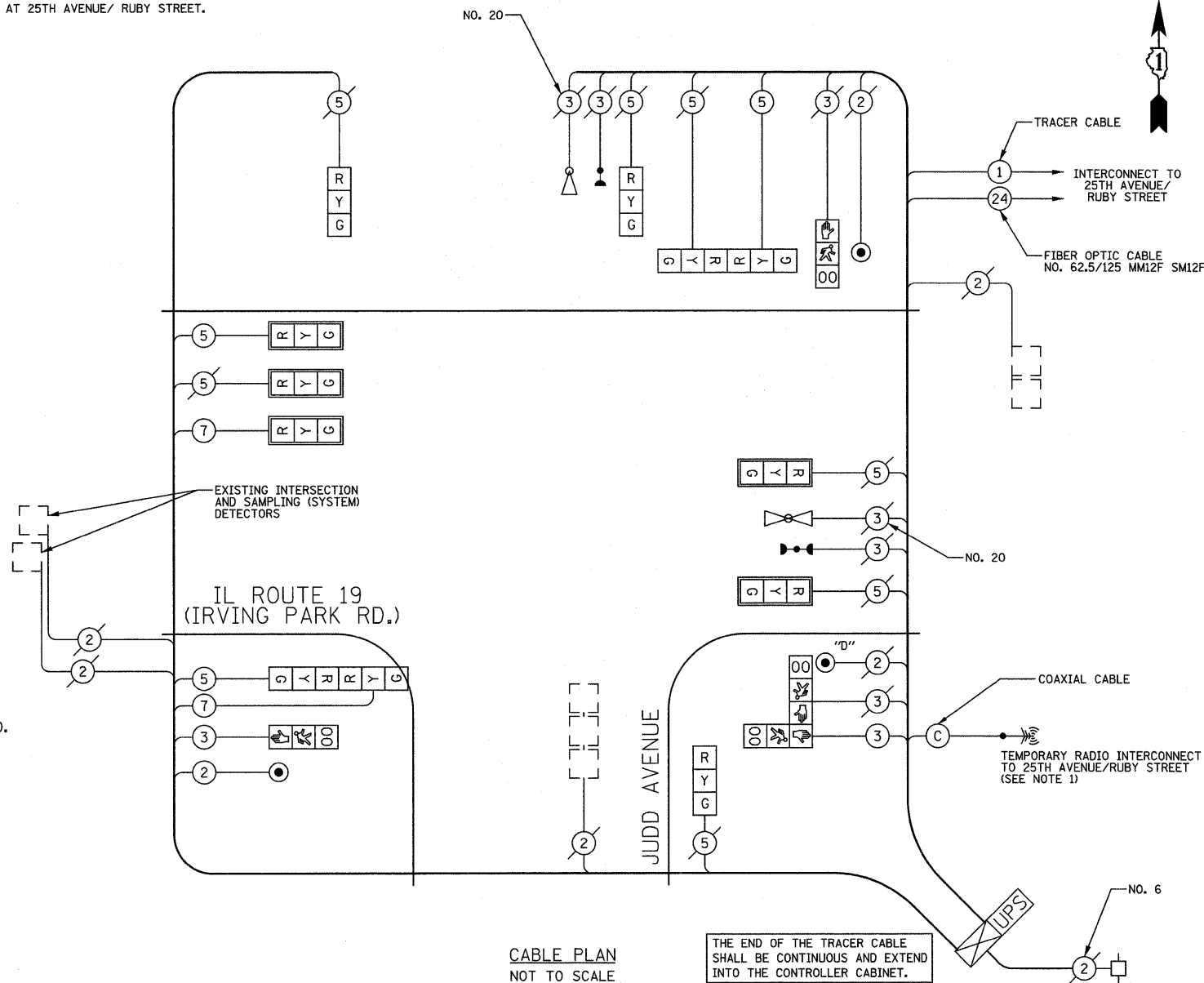
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201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096
CONTACT: LINDA KLOC
PHONE: (708) 410-5313
COMPANY: COM ED

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (2.0)
D- CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2'
E- M. ARM POLE	2 (1.0)	SIGNAL POST	2 (1.0)	6m+L-0.6m	
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

NOTES:
1. TEMPORARY RADIO INTERCONNECT SHALL BE IN OPERATION DURING TEMPORARY SIGNAL OPERATION AT 25TH AVENUE/ RUBY STREET.

CABLE PLAN LEGEND

- | | | |
|----------|----------|---|
| EXISTING | PROPOSED | |
| | | 8" (200mm) TRAFFIC SIGNAL SECTION |
| | | 12" (300mm) TRAFFIC SIGNAL SECTION |
| | | 12" (300mm) PEDESTRIAN SIGNAL SECTION |
| | | 16" x 18" PEDESTRIAN SIGNAL SECTION WITH COUNTDOWN TIMER |
| | | CONTROLLER CABINET |
| | | SERVICE INSTALLATION |
| | | TELEPHONE CONNECTION |
| | | MAGNETIC DETECTOR |
| | | EMERGENCY VEHICLE LIGHT DETECTOR |
| | | CONFIRMATION BEACON |
| | | PUSHBUTTON DETECTOR |
| | | VEHICLE DETECTOR, INDUCTION LOOP |
| | | 2 DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED. |
| | | SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD |
| | | RAILROAD CONTROL CABINET |
| | | ILLUMINATED SIGN "NO LEFT TURN" |
| | | ILLUMINATED SIGN "NO RIGHT TURN" |
| | | GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C). |
| | | GROUND ROD AT POST (P), OR MAST ARM POLE (MA). |
| | | GROUND ROD AT ELECTRIC SERVICE INSTALLATION |
| | | GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN) |
| | | FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 MM12F SM24F |
| | | UNINTERRUPTIBLE POWER SUPPLY |
| | | RADIO ANTENNA |



CABLE PLAN NOT TO SCALE

SCHEDULE OF QUANTITIES

PAY ITEM	UNIT	QUANTITY
SUB-BASE GRANULAR MATERIAL, TYPE B 4"	SO YD	14
PROTECTIVE COAT	SO YD	20
PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	SO FT	125
DETECTABLE WARNINGS	SO FT	31
COMBINATION CURB AND GUTTER REMOVAL	FOOT	20
SIDEWALK REMOVAL	SO FT	25
COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	10
COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	10
THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	188
PAVEMENT MARKING REMOVAL	SO FT	94
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	135
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	229
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	565
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	419
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	5
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, L.E.D., 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN SIGNAL HEAD, L.E.D., 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	3
MODIFY EXISTING CONTROLLER	EACH	1
REMOVE EXISTING CABLE FROM CONDUIT	FOOT	695
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
REBUILD EXISTING HANDHOLE	EACH	1
RETROREFLECTIVE TRAFFIC SIGNAL BACKPLATE	EACH	5

NOTE: PEDESTRIAN PUSH-BUTTON "D" SHALL PLACE A CALL TO PHASES 8 AND 2.

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

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

- 3 EACH ALUMINUM MAST ARM AND POLE
- 1 EACH ALUMINUM MAST ARM
- 4 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 4 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 1 EACH SIGNAL HEAD, 2-FACE, 3-SECTION
- 1 EACH SIGNAL HEAD, 2-FACE, 5-SECTION
- 2 EACH SIGNAL HEAD, 2 FACE, 1-3 SECTION, 1-5 SECTION
- 8 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 8 EACH PEDESTRIAN PUSH-BUTTON
- 3 EACH SIGNAL POST
- 1 EACH SERVICE INSTALLATION
- 1 EACH CONTROLLER AND CABINET, COMPLETE

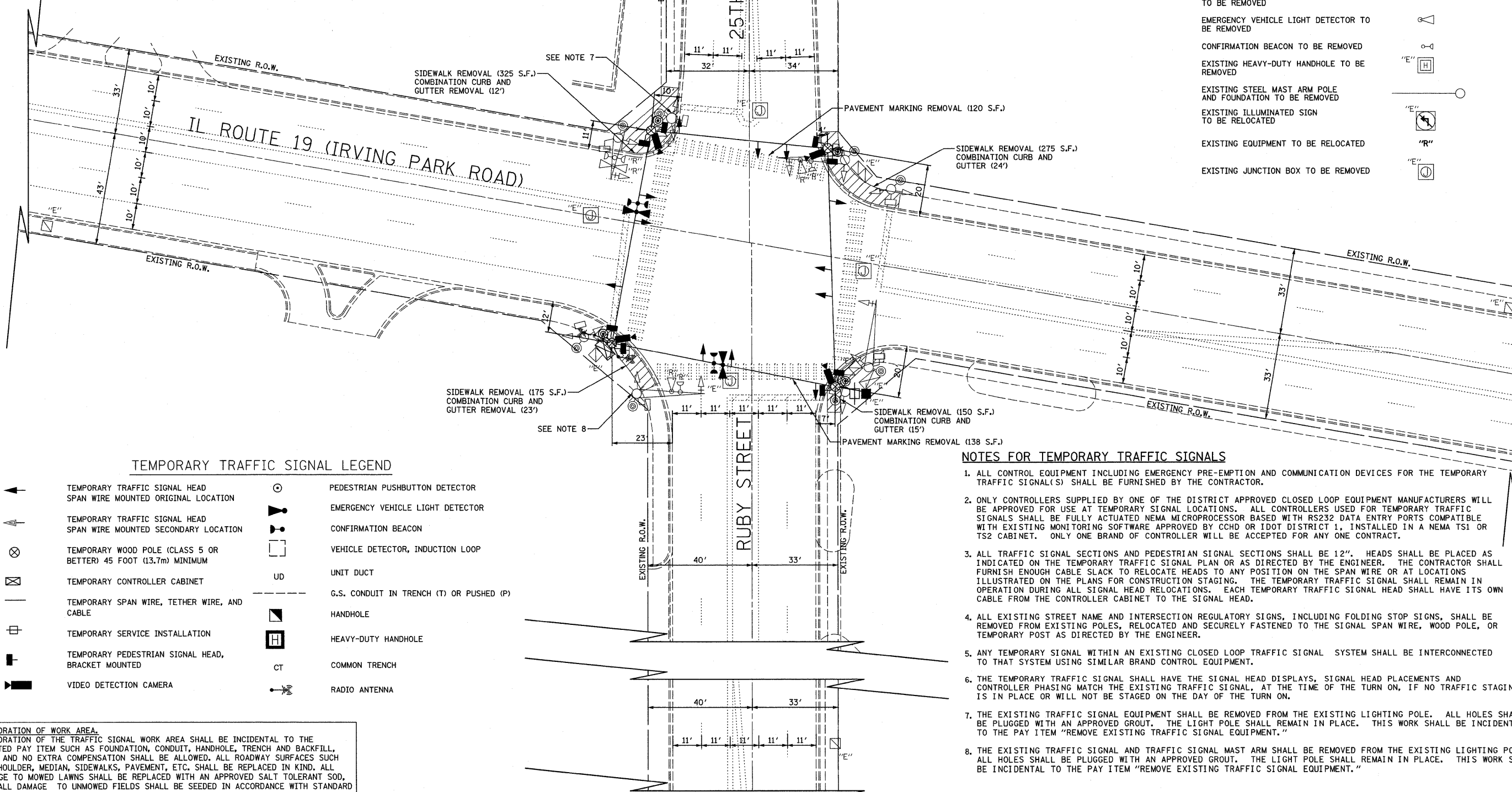
THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE RELOCATED TO THE PROPOSED SIGNAL. THE CONTRACTOR SHALL SAFELY STORE ALL EQUIPMENT TO BE RELOCATED TO THE PROPOSED SIGNAL AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

- 3 EACH EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT (INCLUDE CONFIRMATION BEACONS)
- 1 EACH EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT

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

EXISTING EQUIPMENT TO BE REMOVED LEGEND

- EXISTING SIGNAL HEAD TO BE REMOVED
- EXISTING SERVICE INSTALLATION TO BE REMOVED
- EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
- EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
- EXISTING CONTROLLER TO BE REMOVED
- EXISTING HANDHOLE TO BE REMOVED
- EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- EXISTING PEDESTRIAN PUSH BUTTON TO BE REMOVED
- EMERGENCY VEHICLE LIGHT DETECTOR TO BE REMOVED
- CONFIRMATION BEACON TO BE REMOVED
- EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED
- EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED
- EXISTING ILLUMINATED SIGN TO BE RELOCATED
- EXISTING EQUIPMENT TO BE RELOCATED
- EXISTING JUNCTION BOX TO BE REMOVED



TEMPORARY TRAFFIC SIGNAL LEGEND

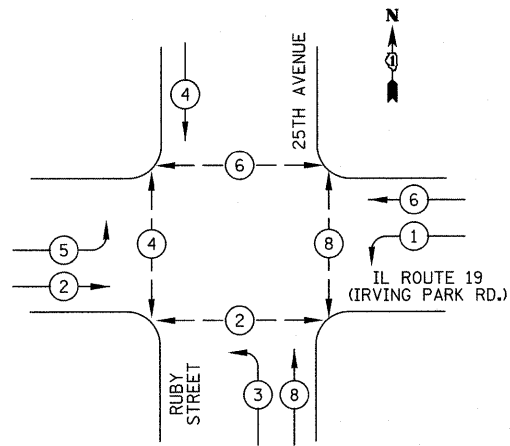
- ← TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION
- ↗ TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED SECONDARY LOCATION
- ⊗ TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM
- ⊠ TEMPORARY CONTROLLER CABINET
- TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
- ⊞ TEMPORARY SERVICE INSTALLATION
- TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
- ▶ VIDEO DETECTION CAMERA
- ⊙ PEDESTRIAN PUSHBUTTON DETECTOR
- ⊖ EMERGENCY VEHICLE LIGHT DETECTOR
- ⊕ CONFIRMATION BEACON
- VEHICLE DETECTOR, INDUCTION LOOP
- UD UNIT DUCT
- G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
- ⊞ HANDHOLE
- ⊞ HEAVY-DUTY HANDHOLE
- CT COMMON TRENCH
- ⊖ RADIO ANTENNA

NOTES FOR TEMPORARY TRAFFIC SIGNALS

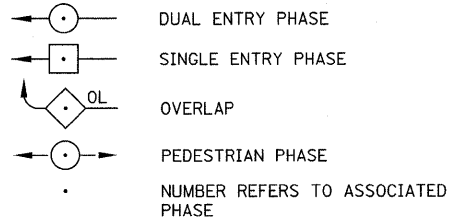
- ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
- ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY CCHD OR IDOT DISTRICT 1. INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
- ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12". HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
- ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS, INCLUDING FOLDING STOP SIGNS, SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE, WOOD POLE, OR TEMPORARY POST AS DIRECTED BY THE ENGINEER.
- ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
- THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
- THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED FROM THE EXISTING LIGHTING POLE. ALL HOLES SHALL BE PLUGGED WITH AN APPROVED GROUT. THE LIGHT POLE SHALL REMAIN IN PLACE. THIS WORK SHALL BE INCIDENTAL TO THE PAY ITEM "REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT."
- THE EXISTING TRAFFIC SIGNAL AND TRAFFIC SIGNAL MAST ARM SHALL BE REMOVED FROM THE EXISTING LIGHTING POLE. ALL HOLES SHALL BE PLUGGED WITH AN APPROVED GROUT. THE LIGHT POLE SHALL REMAIN IN PLACE. THIS WORK SHALL BE INCIDENTAL TO THE PAY ITEM "REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT."

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 SHOULDER, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SALT TOLERANT SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

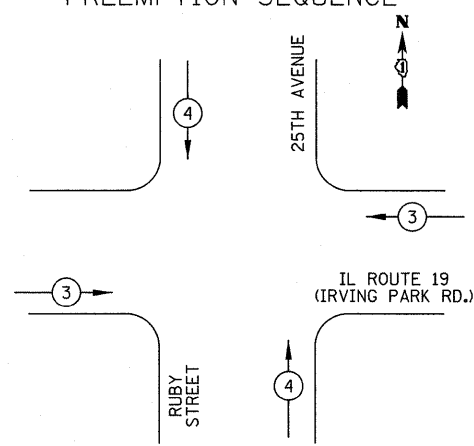
TEMPORARY CONTROLLER SEQUENCE



LEGEND



TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE

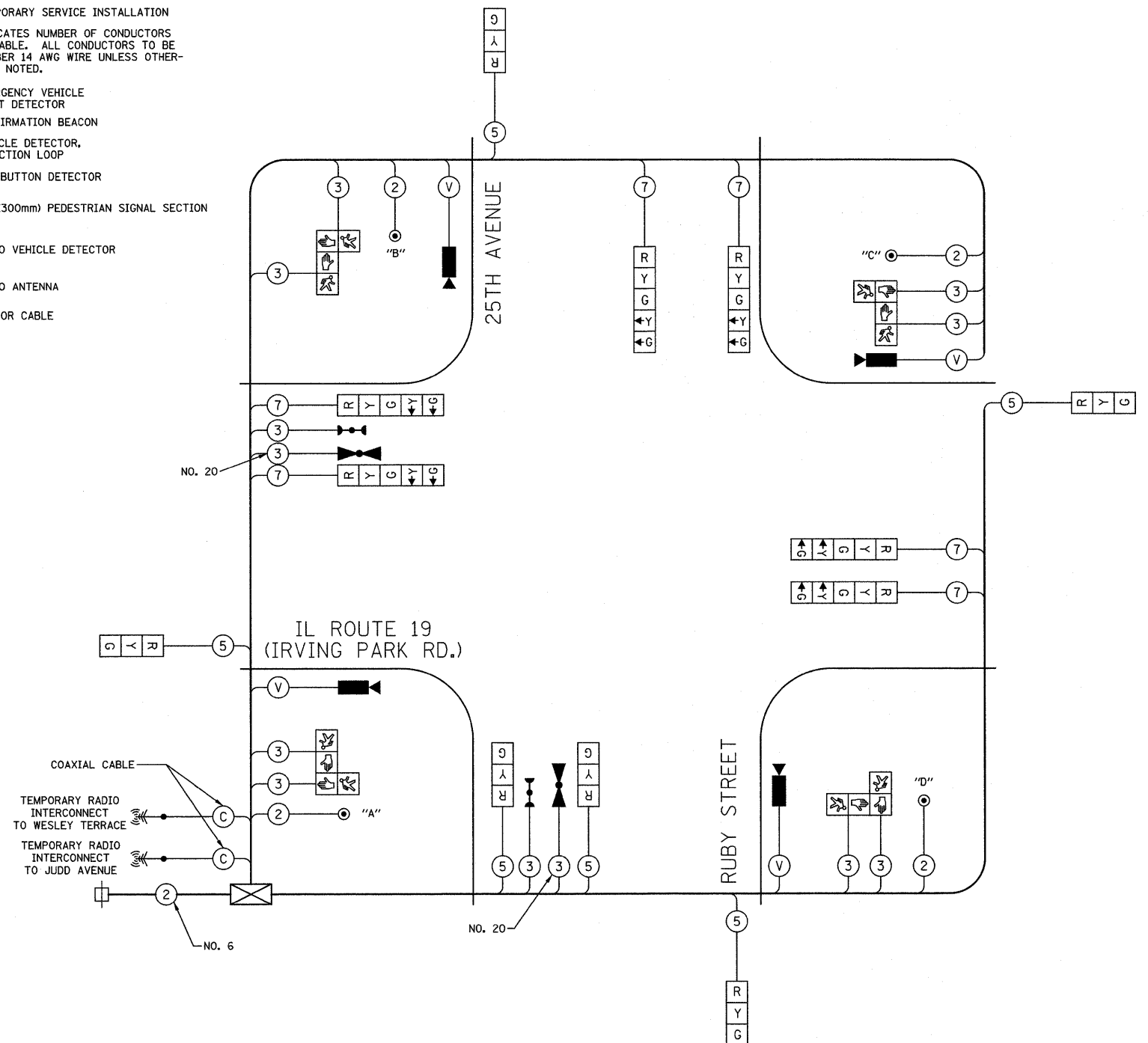


PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↑ ↓

TEMPORARY CABLE DIAGRAM LEGEND

- Ⓡ TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION 12" (300mm)
- ⓧ TEMPORARY CONTROLLER CABINET
- Ⓜ TEMPORARY SERVICE INSTALLATION
- ⑤ INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED.
- ▶ EMERGENCY VEHICLE LIGHT DETECTOR
- ◀ CONFIRMATION BEACON
- VEHICLE DETECTOR, INDUCTION LOOP
- ⊙ PUSHBUTTON DETECTOR
- Ⓡ 12" (300mm) PEDESTRIAN SIGNAL SECTION
- ▶ VIDEO VEHICLE DETECTOR
- Ⓜ RADIO ANTENNA
- Ⓥ VENDOR CABLE

PHASE DESIGNATION DIAGRAM



TEMPORARY CABLE PLAN
NOT TO SCALE

NOTE:
PEDESTRIAN PUSH-BUTTON "A" SHALL PLACE A CALL TO PHASES 2 & 4
PEDESTRIAN PUSH-BUTTON "B" SHALL PLACE A CALL TO PHASES 4 & 6
PEDESTRIAN PUSH-BUTTON "C" SHALL PLACE A CALL TO PHASES 6 & 8
PEDESTRIAN PUSH-BUTTON "D" SHALL PLACE A CALL TO PHASES 8 & 2

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	% OPERATION	
SIGNAL (RED)	12	17		0.50	102
(YELLOW)	12		25	0.25	75
(GREEN)	12		15	0.25	45
ARROW	12		12	0.10	14
PED. SIGNAL	8		25	1.00	200
CONTROLLER	1		100	1.00	100
TOTAL =					536

ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096
ENERGY SUPPLY: CONTACT: LINDA KLOC
PHONE: (708) 410-5313
COMPANY: COM ED

TRAFFIC SIGNAL NOTES

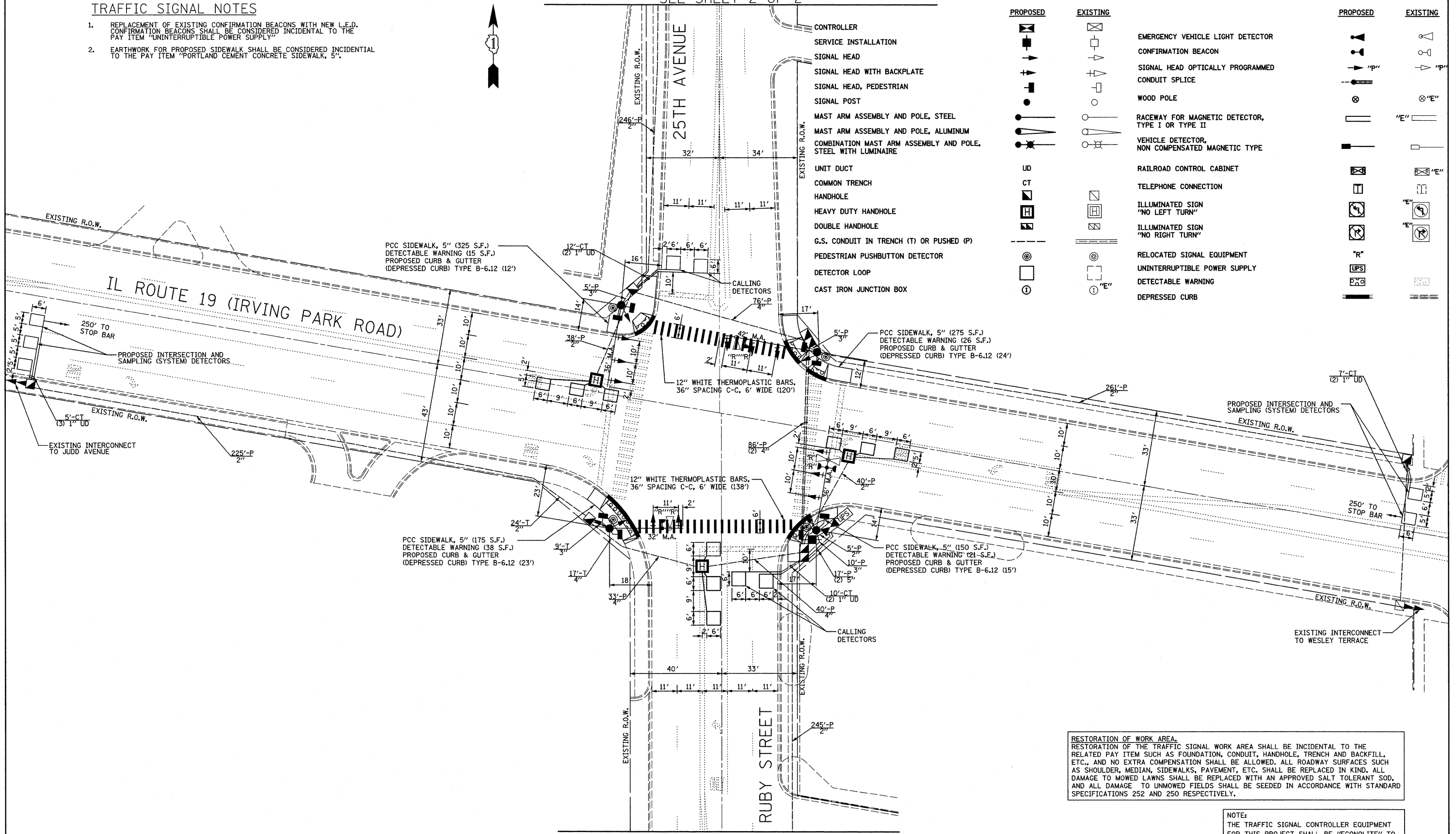
- REPLACEMENT OF EXISTING CONFIRMATION BEACONS WITH NEW L.E.D. CONFIRMATION BEACONS SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM "UNINTERRUPTIBLE POWER SUPPLY."
- EARTHWORK FOR PROPOSED SIDEWALK SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM "PORTLAND CEMENT CONCRETE SIDEWALK, 5'."



MATCH LINE A
SEE SHEET 2 OF 2

TRAFFIC SIGNAL LEGEND

PROPOSED	EXISTING	PROPOSED	EXISTING

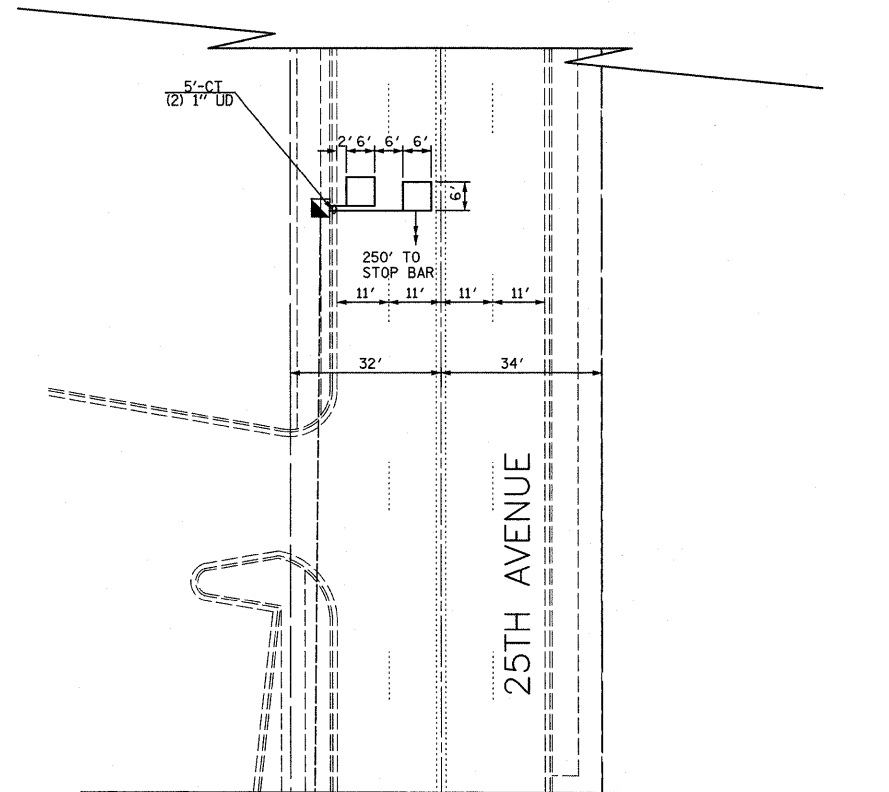


MATCH LINE B
SEE SHEET 2 OF 2

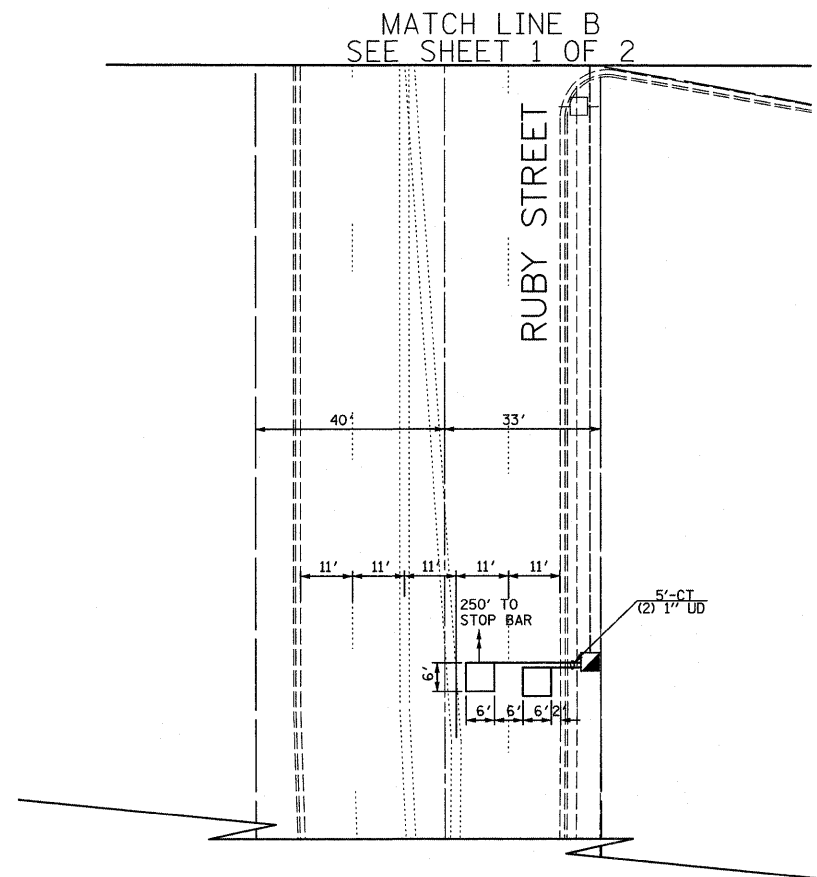
RESTORATION OF WORK AREA.
RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDER, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL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

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

FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED - BRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN (SHEET 1 OF 2) IL ROUTE 19 (IRVING PARK ROAD) AT 25TH AVENUE /RUBY STREET			F.A.P. RTE. 345	SECTION 2009-085 TS	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 13
	PLOT SCALE = #SCALE#	DRAWN - JRT	REVISED -		SCALE: 1" = 20'	SHEET NO. 1 OF 2 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				
	PLOT DATE = #DATE#	CHECKED - JJE	REVISED -					CONTRACT NO. 60127				
		DATE - 10/14/09	REVISED -									



MATCH LINE A
SEE SHEET 1 OF 2



TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING		PROPOSED	EXISTING
CONTROLLER			EMERGENCY VEHICLE LIGHT DETECTOR		
SERVICE INSTALLATION			CONFIRMATION BEACON		
SIGNAL HEAD			SIGNAL HEAD OPTICALLY PROGRAMMED		
SIGNAL HEAD WITH BACKPLATE			CONDUIT SPLICE		
SIGNAL HEAD, PEDESTRIAN			WOOD POLE		
SIGNAL POST			RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		
MAST ARM ASSEMBLY AND POLE, STEEL			VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE		
MAST ARM ASSEMBLY AND POLE, ALUMINUM			RAILROAD CONTROL CABINET		
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE			TELEPHONE CONNECTION		
UNIT DUCT	UD		ILLUMINATED SIGN "NO LEFT TURN"		
COMMON TRENCH	CT		ILLUMINATED SIGN "NO RIGHT TURN"		
HANDHOLE			RELOCATED SIGNAL EQUIPMENT		
HEAVY DUTY HANDHOLE			UNINTERRUPTIBLE POWER SUPPLY		
DOUBLE HANDHOLE			DETECTABLE WARNING		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)			DEPRESSED CURB		
PEDESTRIAN PUSHBUTTON DETECTOR					
DETECTOR LOOP					
CAST IRON JUNCTION BOX					

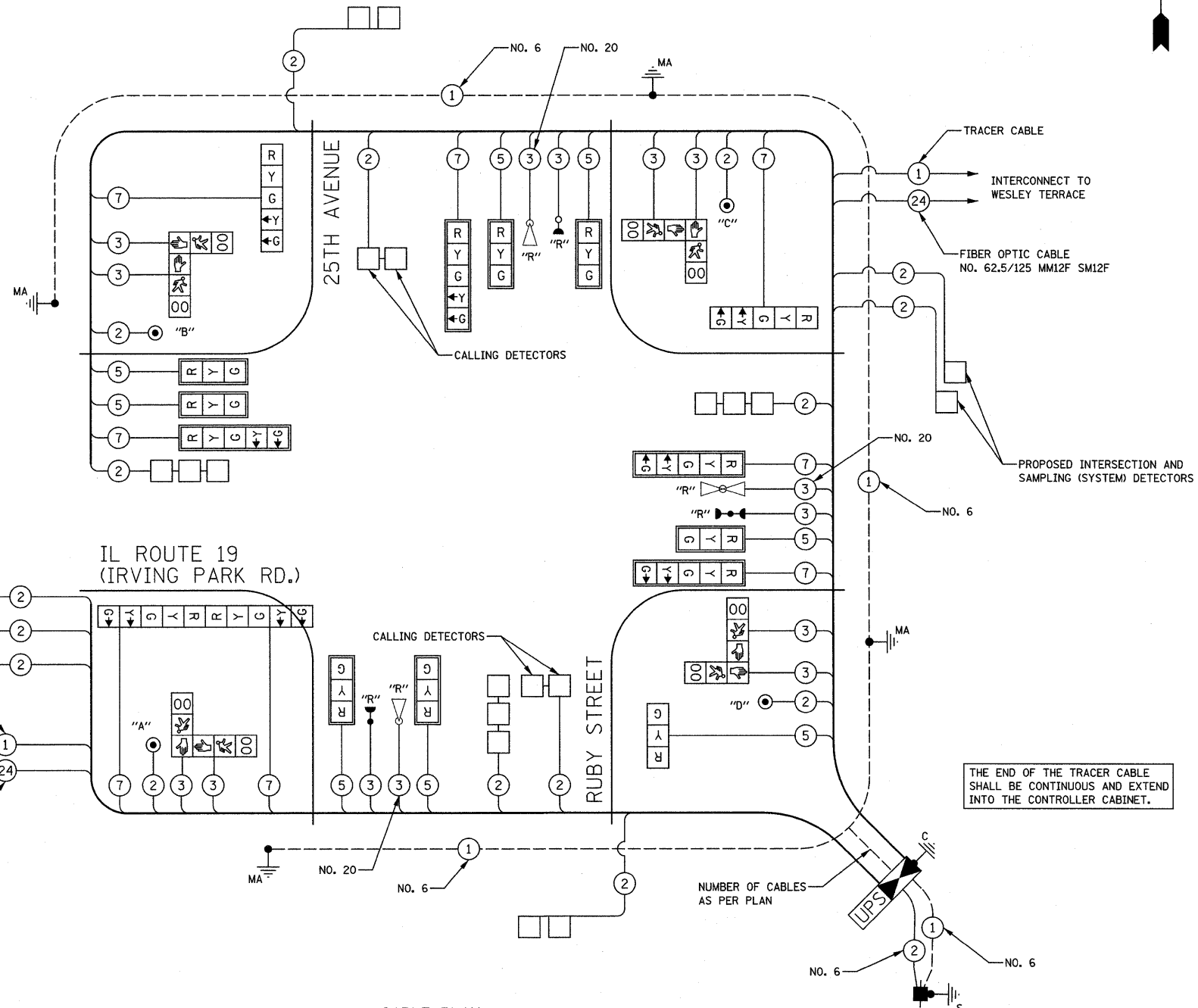
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NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME =	USER NAME = #USER#	DESIGNED - BRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN (SHEET 2 OF 2) IL ROUTE 19 (IRVING PARK ROAD) AT 25TH AVENUE /RUBY STREET		F.A.P. RTE. 345	SECTION 2009-085 TS	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 14	
#FILEL#	PLOT SCALE = #SCALE#	DRAWN - JRT	REVISED -		SCALE: 1" = 20'	SHEET NO. 2 OF 2 SHEETS	STA. TO STA.	CONTRACT NO. 60I27				
	PLOT DATE = #DATE#	CHECKED - JJE	REVISED -					FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				
		DATE - 10/14/09	REVISED -									

CABLE PLAN LEGEND

- | | | |
|----------|----------|---|
| EXISTING | PROPOSED | |
| | | 8" (200mm) TRAFFIC SIGNAL SECTION |
| | | 12" (300mm) TRAFFIC SIGNAL SECTION |
| | | 12" (300mm) PEDESTRIAN SIGNAL SECTION |
| | | 16" x 18" PEDESTRIAN SIGNAL SECTION WITH COUNTDOWN TIMER |
| | | CONTROLLER CABINET |
| | | SERVICE INSTALLATION |
| | | TELEPHONE CONNECTION |
| | | MAGNETIC DETECTOR |
| | | EMERGENCY VEHICLE LIGHT DETECTOR |
| | | CONFIRMATION BEACON |
| | | PUSHBUTTON DETECTOR |
| | | VEHICLE DETECTOR, INDUCTION LOOP |
| | | DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED. |
| | | MICROWAVE VEHICLE SENSOR |
| | | SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD |
| | | RAILROAD CONTROL CABINET |
| | | ILLUMINATED SIGN "NO LEFT TURN" |
| | | ILLUMINATED SIGN "NO RIGHT TURN" |
| | | GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (HH), OR CONTROLLER (C). |
| | | GROUND ROD AT POST (P), OR MAST ARM POLE (MA). |
| | | GROUND ROD AT ELECTRIC SERVICE INSTALLATION |
| | | GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN) |
| | | UNINTERRUPTIBLE POWER SUPPLY |
| | | "R" RELOCATED SIGNAL EQUIPMENT |



CABLE PLAN
NOT TO SCALE

NOTE:
PEDESTRIAN PUSH-BUTTON "A" SHALL PLACE A CALL TO PHASES 2 & 4
PEDESTRIAN PUSH-BUTTON "B" SHALL PLACE A CALL TO PHASES 4 & 6
PEDESTRIAN PUSH-BUTTON "C" SHALL PLACE A CALL TO PHASES 6 & 8
PEDESTRIAN PUSH-BUTTON "D" SHALL PLACE A CALL TO PHASES 8 & 2

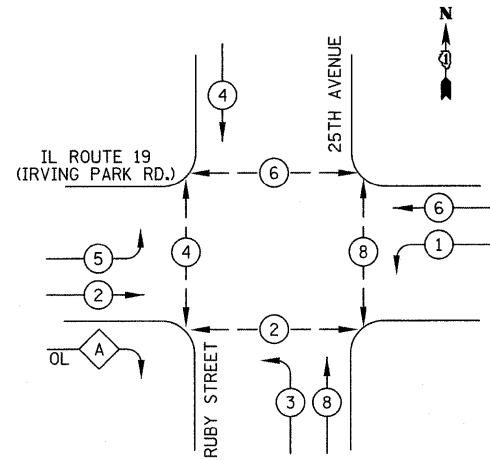
NOTE:
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I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		% OPERATION	
		INCAND.	LED		
SIGNAL (RED)	16	17		0.50	136
(YELLOW)	16		25	0.25	100
(GREEN)	16	15		0.25	60
ARROW	16	12		0.10	19
PED. SIGNAL	8	25		1.00	200
CONTROLLER	1	100		1.00	100
TOTAL =					615
FLASHER				0.50	

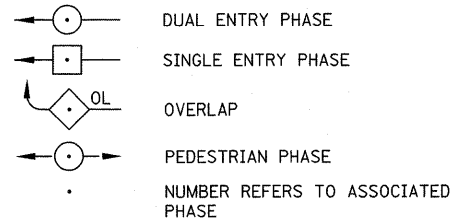
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096
CONTACT: LINDA KLOC
PHONE: (708) 410-5313
COMPANY: COM ED

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (2.0)
D- CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2=
E- M. ARM POLE		SIGNAL POST	2 (1.0)	(6m+L-0.6m)=	
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

PROPOSED
CONTROLLER SEQUENCE

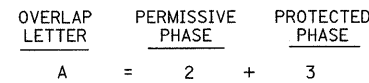


LEGEND

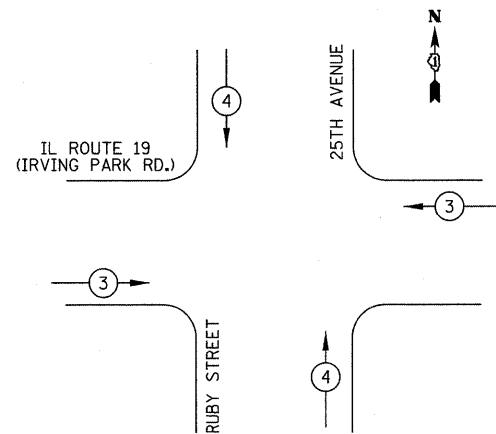


PHASE DESIGNATION DIAGRAM

RIGHT TURN OVERLAP PHASE DESIGNATION



PROPOSED
EMERGENCY VEHICLE
PREEMPTION SEQUENCE



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

SCHEDULE OF QUANTITIES

PAY ITEM	UNIT	QUANTITY
SUB-BASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	103
PROTECTIVE COAT	SQ YD	120
PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	SQ FT	925
DETECTABLE WARNINGS	SQ FT	100
COMBINATION CURB AND GUTTER REMOVAL	FOOT	74
SIDEWALK REMOVAL	SQ FT	925
COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	74
SIGN PANEL - TYPE 1	SQ FT	24
SIGN PANEL - TYPE 2	SQ FT	30
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	258
PAVEMENT MARKING REMOVAL	SQ FT	258
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	24
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	9
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	17
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	1060
CONDUIT PUSHED, 3" DIA., GALVANIZED STEEL	FOOT	20
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	321
CONDUIT PUSHED, 5" DIA., GALVANIZED STEEL	FOOT	34
REMOVE EXISTING JUNCTION BOX	EACH	4
HANDHOLE	EACH	6
HEAVY-DUTY HANDHOLE	EACH	3
DOUBLE HANDHOLE	EACH	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	50
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
TRANSCIEVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	589
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1729
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1456
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1398
ELECTRIC CABLE IN CONDUIT, LEAD-IN NO. 14 1 PAIR	FOOT	3409
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	23
STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	1
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	45
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	15
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	7
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, L.E.D., 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, L.E.D., 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
INDUCTIVE LOOP DETECTOR	EACH	12
DETECTOR LOOP, TYPE I	FOOT	687
PEDESTRIAN PUSH-BUTTON	EACH	4
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
* RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	3
* RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	8
REMOVE EXISTING CONCRETE FOUNDATION	EACH	7
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
SERVICE INSTALLATION, POLE MOUNTED	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	478
* ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED, SHIELDED	FOOT	504
RETROREFLECTIVE TRAFFIC SIGNAL BACKPLATE	EACH	11

* 100% COST TO VILLAGE OF SCHILLER PARK

NOTES FOR TEMPORARY TRAFFIC SIGNALS

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY CCHD OR IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12". HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS, INCLUDING FOLDING STOP SIGNS, SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE, WOOD POLE, OR TEMPORARY POST AS DIRECTED BY THE ENGINEER.

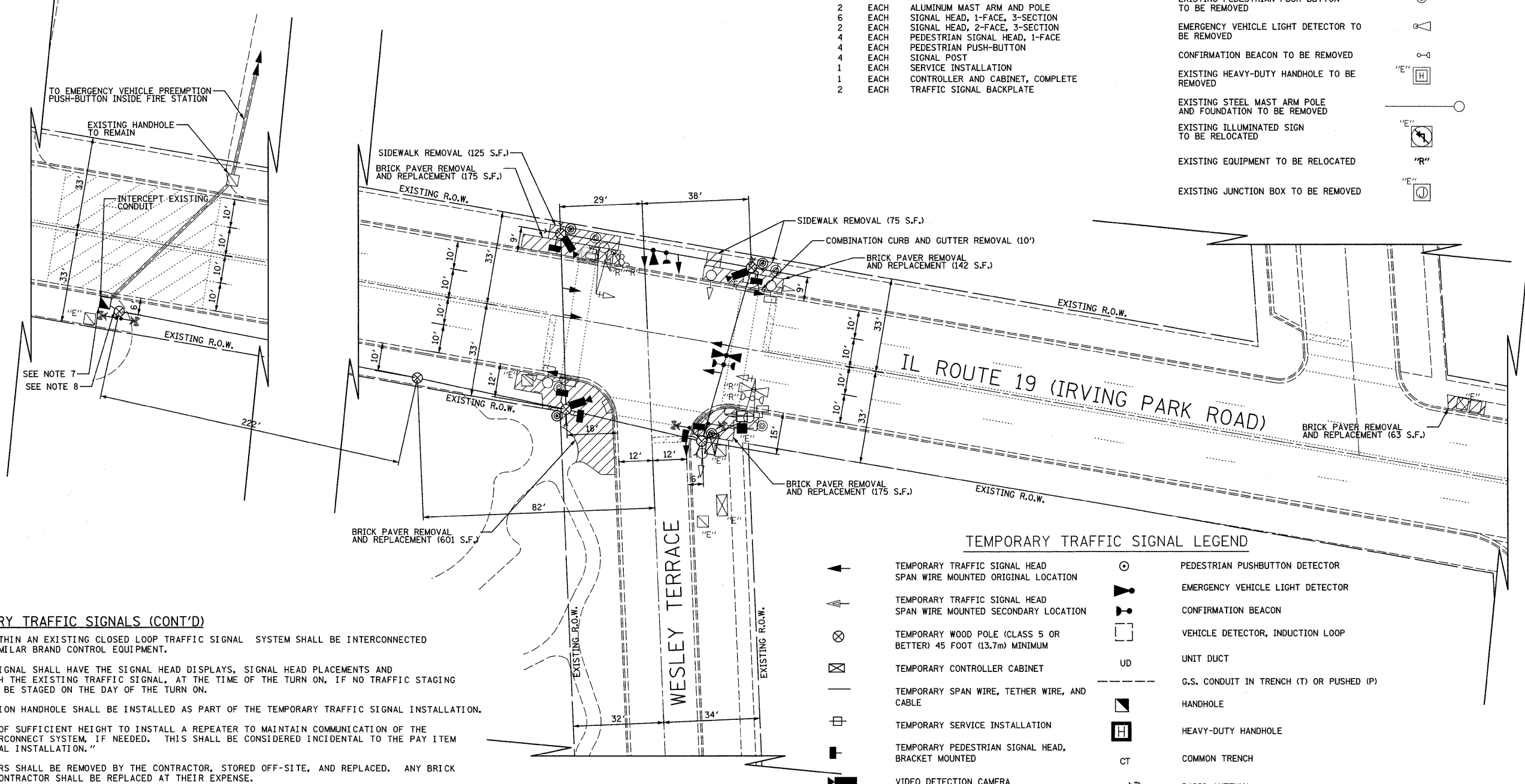
NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE RELOCATED TO THE PROPOSED SIGNAL. THE CONTRACTOR SHALL SAFELY STORE ALL EQUIPMENT TO BE RELOCATED TO THE PROPOSED SIGNAL AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

- 2 EACH EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT (INCLUDE CONFIRMATION BEACONS)
 - 1 EACH EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
- 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.
- 2 EACH ALUMINUM MAST ARM AND POLE
 - 6 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
 - 2 EACH SIGNAL HEAD, 2-FACE, 3-SECTION
 - 4 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
 - 4 EACH PEDESTRIAN PUSH-BUTTON
 - 4 EACH SIGNAL POST
 - 1 EACH SERVICE INSTALLATION
 - 1 EACH CONTROLLER AND CABINET, COMPLETE
 - 2 EACH TRAFFIC SIGNAL BACKPLATE

EXISTING EQUIPMENT TO BE REMOVED LEGEND

- EXISTING SIGNAL HEAD TO BE REMOVED
- EXISTING SERVICE INSTALLATION TO BE REMOVED
- EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
- EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
- EXISTING CONTROLLER TO BE REMOVED
- EXISTING HANDHOLE TO BE REMOVED
- EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- EXISTING PEDESTRIAN PUSH BUTTON TO BE REMOVED
- EMERGENCY VEHICLE LIGHT DETECTOR TO BE REMOVED
- CONFIRMATION BEACON TO BE REMOVED
- EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED
- EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED
- EXISTING ILLUMINATED SIGN TO BE RELOCATED
- EXISTING EQUIPMENT TO BE RELOCATED
- EXISTING JUNCTION BOX TO BE REMOVED



NOTES FOR TEMPORARY TRAFFIC SIGNALS (CONT'D)

5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
7. THIS PROPOSED INTERSECTION HANDHOLE SHALL BE INSTALLED AS PART OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION.
8. THE WOOD POLE SHALL BE OF SUFFICIENT HEIGHT TO INSTALL A REPEATER TO MAINTAIN COMMUNICATION OF THE TEMPORARY WIRELESS INTERCONNECT SYSTEM, IF NEEDED. THIS SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM "TEMPORARY TRAFFIC SIGNAL INSTALLATION."
9. THE EXISTING BRICK PAVERS SHALL BE REMOVED BY THE CONTRACTOR, STORED OFF-SITE, AND REPLACED. ANY BRICK PAVERS DAMAGED BY THE CONTRACTOR SHALL BE REPLACED AT THEIR EXPENSE.
10. THE CONTRACTOR SHALL NOTIFY THE SCHILLER PARK FIRE DEPARTMENT A MINIMUM OF 24 HOURS PRIOR TO, AND THE DAY OF ANY DOWN TIME IN OPERATION OF THE EMERGENCY VEHICLE PREEMPTION PUSH-BUTTON. THE DOWNTIME SHALL NOT EXCEED 2 HOURS.

TEMPORARY TRAFFIC SIGNAL LEGEND

- TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION
- TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED SECONDARY LOCATION
- TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM
- TEMPORARY CONTROLLER CABINET
- TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
- TEMPORARY SERVICE INSTALLATION
- TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
- VIDEO DETECTION CAMERA
- PEDESTRIAN PUSHBUTTON DETECTOR
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- VEHICLE DETECTOR, INDUCTION LOOP
- UNIT DUCT
- G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
- HANDHOLE
- HEAVY-DUTY HANDHOLE
- COMMON TRENCH
- RADIO ANTENNA

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 SHOULDER, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SALT TOLERANT SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

FILE NAME =	USER NAME = #USER#	DESIGNED - BRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN IL ROUTE 19 (IRVING PARK ROAD) AT WESLEY TERRACE	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
#FILE#	PLOT SCALE = #SCALE#	DRAWN - JRT	REVISED -			345	2009-085 TS	COOK	39	17	
	PLOT DATE = #DATE#	CHECKED - JJE	REVISED -			CONTRACT NO. 60127					
		DATE - 10/14/09	REVISED -			FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

TEMPORARY SEQUENCE OF OPERATION

MOVEMENT								
PHASE	2 + 6				8			
INTERVAL	1	2	3A	3B	4	5	6A	6B
CHANGE TO	8				2+6			
IL ROUTE 19 (IRVING PARK RD.) E/B - ALL SIGNALS	G	G	Y	R	R	R	R	R
IL ROUTE 19 (IRVING PARK RD.) W/B - ALL SIGNALS	G	G	Y	R	R	R	R	R
WESLEY TERRACE N/B - ALL SIGNALS	R	R	R	R	G	G	Y	R
PEDESTRIAN SIGNAL - CROSSING WESLEY TERRACE	*P	*FH	H	H	H	H	H	H
PEDESTRIAN SIGNAL - CROSSING IL ROUTE 19 (IRVING PARK RD.)	H	H	H	H	*P	*FH	H	H

- * TO APPEAR ONLY UPON PUSHBUTTON ACTUATION
- ** FLASHING UPRAISED HAND IS TO TERMINATE AT THE COMPLETION OF THE PEDESTRIAN CLEARANCE INTERVAL.
- P = ILLUMINATED PERSON = "WALK"
- FH = FLASHING UPRAISED HAND = "FLASHING DON'T WALK"
- H = ILLUMINATED SOLID HAND = "DON'T WALK"

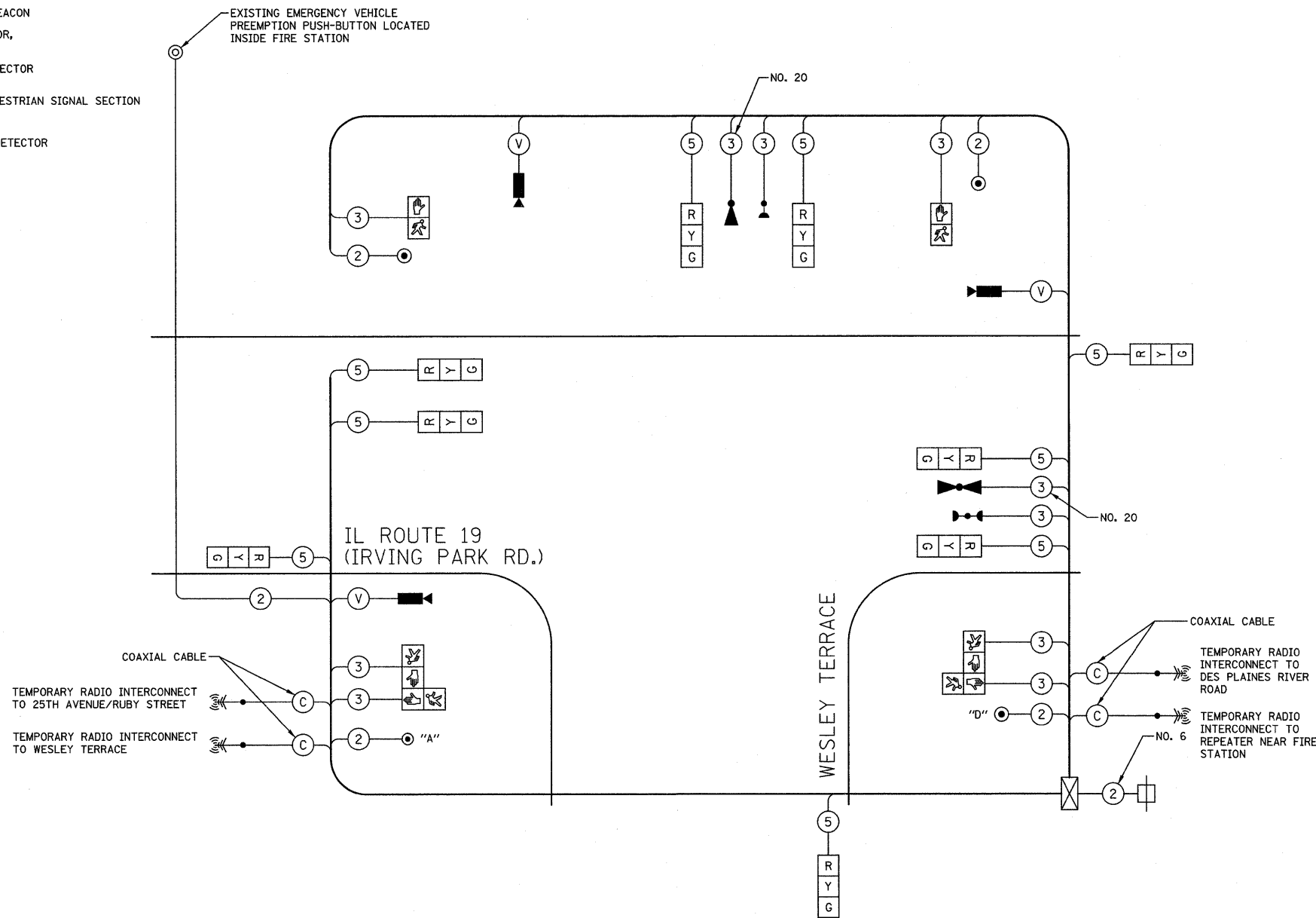
TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION

CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	1	1	4	4	PREEMPTOR NUMBER 3	PREEMPTOR NUMBER 4	PREEMPTOR NUMBER 5	CLEAR TO NORMAL SEQUENCE
EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	1D	1E	1F	1G	1H
CHANGE TO EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1B	1C	OR 4	3	1F	1G	OR 3	4
IL ROUTE 19 (IRVING PARK RD.) E/B - ALL SIGNALS	G	Y	R	G	R	R	R	R
IL ROUTE 19 (IRVING PARK RD.) W/B - ALL SIGNALS	G	Y	R	G	R	R	R	R
WESLEY TERRACE N/B - ALL SIGNALS	R	R	R	R	G	Y	R	G
PEDESTRIAN SIGNAL - CROSSING WESLEY TERRACE	*FH	H	H	*FH	H	H	H	H
PEDESTRIAN SIGNAL - CROSSING IL ROUTE 19 (IRVING PARK RD.)	H	H	H	H	*FH	H	H	H

- NOTE: PREEMPTOR NUMBER 3 SHALL BE ACTIVATED BY THE PUSHBUTTON LOCATED INSIDE THE FIRE STATION.
- ◇ EMERGENCY VEHICLE SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION OR PROPER CLEARANCE INTERVAL TO DISPLAY A DIFFERENT EMERGENCY VEHICLE INTERVAL AFTER EMERGENCY VEHICLE INTERVAL 2, 3, OR 4 IS TERMINATED.
 - ** FLASHING UPRAISED HAND IS TO TERMINATE AT THE COMPLETION OF THE PEDESTRIAN CLEARANCE INTERVAL.
 - P = ILLUMINATED PERSON = "WALK"
 - FH = FLASHING UPRAISED HAND = "FLASHING DON'T WALK"
 - H = ILLUMINATED SOLID HAND = "DON'T WALK"

TEMPORARY CABLE PLAN LEGEND

- R TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION 12" (300mm)
- ☒ TEMPORARY CONTROLLER CABINET
- ☒ TEMPORARY SERVICE INSTALLATION
- ⑤ INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED.
- ▲ EMERGENCY VEHICLE LIGHT DETECTOR
- ▶ CONFIRMATION BEACON
- VEHICLE DETECTOR, INDUCTION LOOP
- ⊙ PUSHBUTTON DETECTOR
- Ⓜ 12" (300mm) PEDESTRIAN SIGNAL SECTION
- ▶ VIDEO VEHICLE DETECTOR
- Ⓜ RADIO ANTENNA
- Ⓜ VENDOR CABLE



TEMPORARY CABLE PLAN
NOT TO SCALE

NOTE:
PUSH-BUTTON "A" SHALL PLACE A CALL TO PHASES 2 AND 8.
PUSH-BUTTON "D" SHALL PLACE A CALL TO PHASES 8 AND 2.

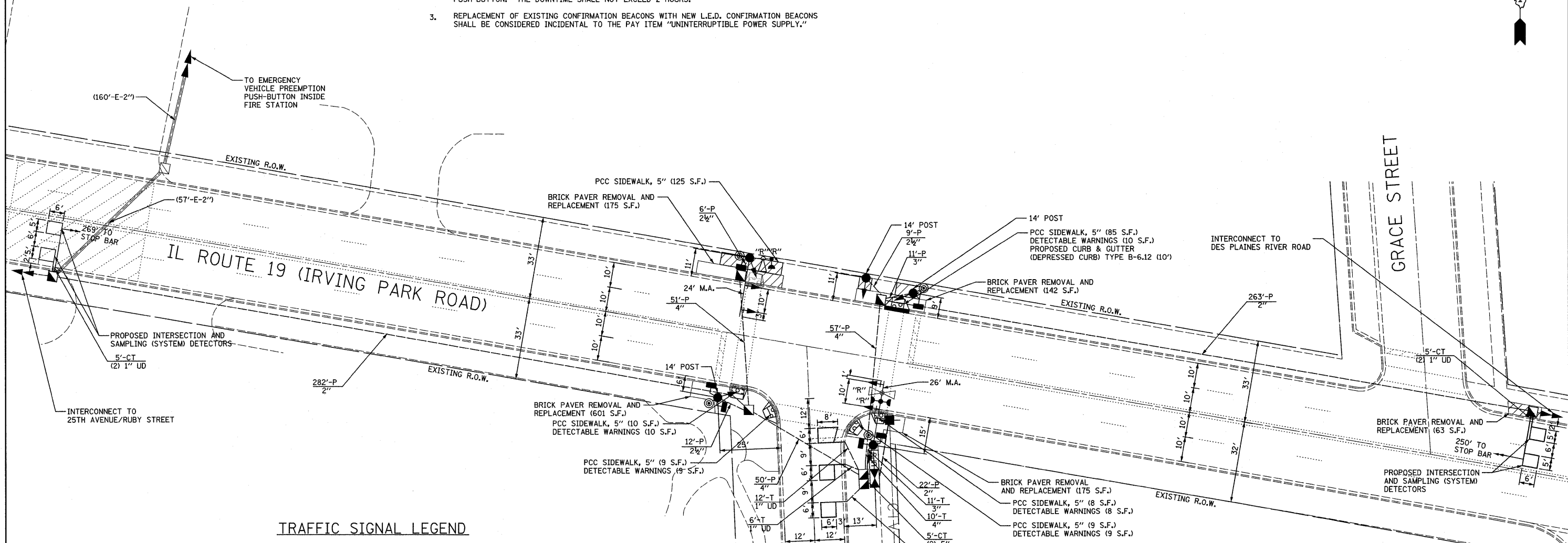
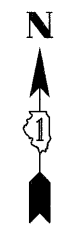
NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		% OPERATION	
SIGNAL (RED)	9	INCAND.	17	0.50	77
(YELLOW)	9	LED	25	0.25	56
(GREEN)	9		15	0.25	34
ARROW					
PED. SIGNAL	6		25	1.00	150
CONTROLLER	1		100	1.00	100
FLASHER				0.50	
TOTAL =					417

ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096
CONTACT: LINDA KLOC
PHONE: (708) 410-5313
COMPANY: COM ED

TRAFFIC SIGNAL NOTES

- EXISTING BRICK PAVER SIDEWALK RAMPS SHALL BE REPLACED UPON REINSTALLATION OF THE EXISTING BRICK PAVER SIDEWALK. A NEW BRICK PAVER SIDEWALK RAMP SHALL BE CONSTRUCTED WITH THE DETECTABLE WARNING ON THE NORTHEAST CORNER OF THE INTERSECTION. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM "BRICK PAVER REMOVAL AND REPLACEMENT".
- THE CONTRACTOR SHALL NOTIFY THE SCHILLER PARK FIRE DEPARTMENT A MINIMUM OF 24 HOURS PRIOR TO, AND THE DAY OF ANY DOWNTIME IN OPERATION OF THE EMERGENCY VEHICLE PREEMPTION PUSH-BUTTON. THE DOWNTIME SHALL NOT EXCEED 2 HOURS.
- REPLACEMENT OF EXISTING CONFIRMATION BEACONS WITH NEW L.E.D. CONFIRMATION BEACONS SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM "UNINTERRUPTIBLE POWER SUPPLY."



TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING		PROPOSED	EXISTING
CONTROLLER	[Symbol]	[Symbol]	EMERGENCY VEHICLE LIGHT DETECTOR	[Symbol]	[Symbol]
SERVICE INSTALLATION	[Symbol]	[Symbol]	CONFIRMATION BEACON	[Symbol]	[Symbol]
SIGNAL HEAD	[Symbol]	[Symbol]	SIGNAL HEAD OPTICALLY PROGRAMMED	[Symbol]	[Symbol]
SIGNAL HEAD WITH BACKPLATE	[Symbol]	[Symbol]	CONDUIT SPLICE	[Symbol]	[Symbol]
SIGNAL HEAD, PEDESTRIAN	[Symbol]	[Symbol]	WOOD POLE	[Symbol]	[Symbol]
SIGNAL POST	[Symbol]	[Symbol]	RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, STEEL	[Symbol]	[Symbol]	VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, ALUMINUM	[Symbol]	[Symbol]	RAILROAD CONTROL CABINET	[Symbol]	[Symbol]
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE	[Symbol]	[Symbol]	TELEPHONE CONNECTION	[Symbol]	[Symbol]
UNIT DUCT	UD	[Symbol]	ILLUMINATED SIGN "NO LEFT TURN"	[Symbol]	[Symbol]
COMMON TRENCH	CT	[Symbol]	ILLUMINATED SIGN "NO RIGHT TURN"	[Symbol]	[Symbol]
HANDHOLE	[Symbol]	[Symbol]	RELOCATED SIGNAL EQUIPMENT	[Symbol]	[Symbol]
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]	UNINTERRUPTIBLE POWER SUPPLY	[Symbol]	[Symbol]
DOUBLE HANDHOLE	[Symbol]	[Symbol]	DETECTABLE WARNING	[Symbol]	[Symbol]
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)	[Symbol]	[Symbol]	DEPRESSED CURB	[Symbol]	[Symbol]
PEDESTRIAN PUSHBUTTON DETECTOR	[Symbol]	[Symbol]			
DETECTOR LOOP	[Symbol]	[Symbol]			
CAST IRON JUNCTION BOX	[Symbol]	[Symbol]			

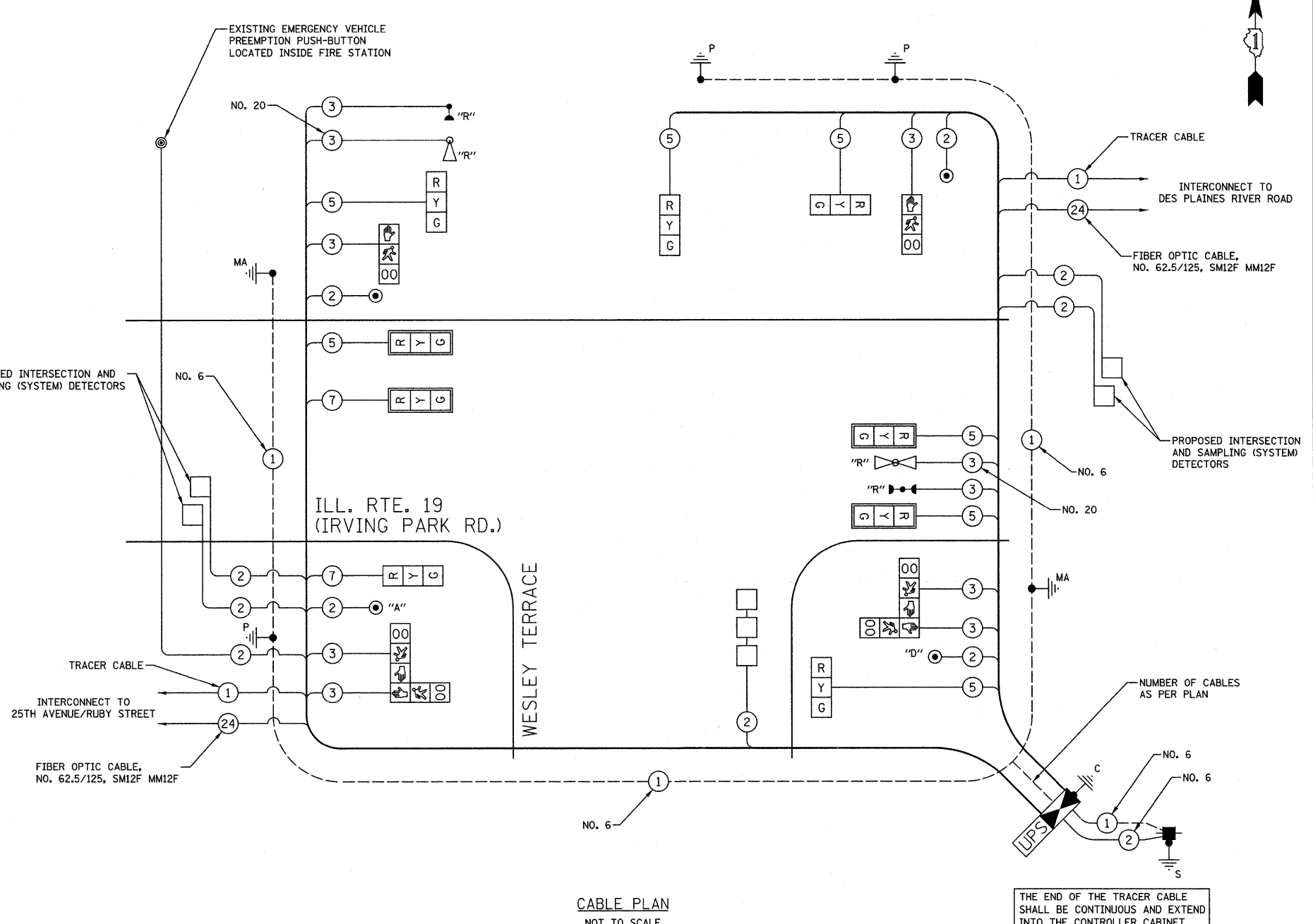
RESTORATION OF WORK AREA.
 RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDER, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL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

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

CABLE PLAN LEGEND

- | | | |
|----------|----------|---|
| EXISTING | PROPOSED | |
| | | 8" (200mm) TRAFFIC SIGNAL SECTION |
| | | 12" (300mm) TRAFFIC SIGNAL SECTION |
| | | 12" (300mm) PEDESTRIAN SIGNAL SECTION |
| | | 12" (300mm) PEDESTRIAN SIGNAL SECTION WITH COUNTDOWN TIMER |
| | | CONTROLLER CABINET |
| | | SERVICE INSTALLATION |
| | | TELEPHONE CONNECTION |
| | | MAGNETIC DETECTOR |
| | | EMERGENCY VEHICLE LIGHT DETECTOR |
| | | CONFIRMATION BEACON |
| | | PUSHBUTTON DETECTOR |
| | | VEHICLE DETECTOR, INDUCTION LOOP |
| | | DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED. |
| | | MICROWAVE VEHICLE SENSOR |
| | | SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD |
| | | RAILROAD CONTROL CABINET |
| | | ILLUMINATED SIGN "NO LEFT TURN" |
| | | ILLUMINATED SIGN "NO RIGHT TURN" |
| | | GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C). |
| | | GROUND ROD AT POST (P), OR MAST ARM POLE (MA). |
| | | GROUND ROD AT ELECTRIC SERVICE INSTALLATION |
| | | GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN) |
| | | UNINTERRUPTIBLE POWER SUPPLY |
| | | RELOCATED SIGNAL EQUIPMENT |

PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS



CABLE PLAN
NOT TO SCALE

NOTE:
PUSH-BUTTON "A" SHALL PLACE A CALL TO PHASES 2 AND 8.
PUSH-BUTTON "D" SHALL PLACE A CALL TO PHASES 8 AND 2.

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		% OPERATION	
SIGNAL (RED)	9	INCAND.	17	0.50	77
(YELLOW)	9	LED	25	0.25	56
(GREEN)	9		15	0.25	34
ARROW					
PED. SIGNAL	6		25	1.00	150
CONTROLLER	1		100	1.00	100
FLASHER				0.50	
TOTAL =					417

ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY: CONTACT: LINDA KLOC
PHONE: (708) 410-5313
COMPANY: COM ED

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (2.0)
D- CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2=
E- M. ARM POLE		SIGNAL POST	2 (1.0)		6m+L-0.6m=
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

PROPOSED SEQUENCE OF OPERATION

MOVEMENT	↑ N		← 6		↑ 8		F
PHASE	2 + 6		8				L
INTERVAL	1	2	3A	3B	4	5	6A
CHANGE TO	/		8		/		2+6
IL ROUTE 19 (IRVING PARK RD.) E/B - ALL SIGNALS	G	G	Y	R	R	R	R
IL ROUTE 19 (IRVING PARK RD.) W/B - ALL SIGNALS	G	G	Y	R	R	R	R
WESLEY TERRACE N/B - ALL SIGNALS	R	R	R	R	G	G	Y
PEDESTRIAN SIGNAL - CROSSING WESLEY TERRACE	*P	**FH	H	H	H	H	H
PEDESTRIAN SIGNAL - CROSSING IL ROUTE 19 (IRVING PARK RD.)	H	H	H	H	*P	**FH	H

- * TO APPEAR ONLY UPON PUSHBUTTON ACTUATION
- ** FLASHING UPRAISED HAND IS TO TERMINATE AT THE COMPLETION OF THE PEDESTRIAN CLEARANCE INTERVAL.
- P = ILLUMINATED PERSON = "WALK"
- FH = FLASHING UPRAISED HAND = "FLASHING DON'T WALK"
- H = ILLUMINATED SOLID HAND = "DON'T WALK"

PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION

CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	1		1		4		4		PREEMPTOR NUMBER 3	PREEMPTOR NUMBER 4	PREEMPTOR NUMBER 5	CLEAR TO NORMAL SEQUENCE
EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	1D	1E	1F	1G	1H	2	3	4	
CHANGE TO EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1B	1C	2 OR 4	3	1F	1G	2 OR 3	4				
IL ROUTE 19 (IRVING PARK RD.) E/B - ALL SIGNALS	G	Y	R	G	R	R	R	R	G	G	R	◇
IL ROUTE 19 (IRVING PARK RD.) W/B - ALL SIGNALS	G	Y	R	G	R	R	R	R	R	G	R	◇
WESLEY TERRACE N/B - ALL SIGNALS	R	R	R	R	G	Y	R	G	R	R	G	◇
PEDESTRIAN SIGNAL - CROSSING WESLEY TERRACE	**FH	H	H	**FH	H	H	H	H	H	H	H	◇
PEDESTRIAN SIGNAL - CROSSING IL ROUTE 19 (IRVING PARK RD.)	H	H	H	H	**FH	H	H	**FH	H	H	H	◇

- NOTE: PREEMPTOR NUMBER 3 SHALL BE ACTIVATED BY THE PUSHBUTTON LOCATED INSIDE THE FIRE STATION.
- ◇ EMERGENCY VEHICLE SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION OR PROPER CLEARANCE INTERVAL TO DISPLAY A DIFFERENT EMERGENCY VEHICLE INTERVAL AFTER EMERGENCY VEHICLE INTERVAL 2, 3, OR 4 IS TERMINATED.
- ** FLASHING UPRAISED HAND IS TO TERMINATE AT THE COMPLETION OF THE PEDESTRIAN CLEARANCE INTERVAL.
 - P = ILLUMINATED PERSON = "WALK"
 - FH = FLASHING UPRAISED HAND = "FLASHING DON'T WALK"
 - H = ILLUMINATED SOLID HAND = "DON'T WALK"

SCHEDULE OF QUANTITIES

PAY ITEM	UNIT	QUANTITY
SUB-BASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	28
PROTECTIVE COAT	SQ YD	30
PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	SQ FT	246
DETECTABLE WARNINGS	SQ FT	46
COMBINATION CURB AND GUTTER REMOVAL	FOOT	10
SIDEWALK REMOVAL	SQ FT	200
COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	10
SIGN PANEL - TYPE 1	SQ FT	15
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	11
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	567
CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	32
CONDUIT PUSHED, 3" DIA., GALVANIZED STEEL	FOOT	6
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	158
HANDHOLE	EACH	5
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	26
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1028
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	839
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	799
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	299
ELECTRIC CABLE IN CONDUIT, LEAD-IN NO. 14 1 PAIR	FOOT	1489
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	40
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	3
STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	12
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	30
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	5
PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN SIGNAL HEAD, L.E.D., 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
INDUCTIVE LOOP DETECTOR	EACH	5
DETECTOR LOOP, TYPE I	FOOT	201
PEDESTRIAN PUSH-BUTTON	EACH	4
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
* RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
* RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	246
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	6
REMOVE EXISTING CONCRETE FOUNDATION	EACH	7
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
SERVICE INSTALLATION, POLE MOUNTED	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	326
* ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED, SHIELDED	FOOT	247
BRICK PAVEMENT REMOVAL AND REPLACEMENT	SQ FT	1156
RETROREFLECTIVE TRAFFIC SIGNAL BACKPLATE	EACH	4

* 100% COST TO VILLAGE OF SCHILLER PARK

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.

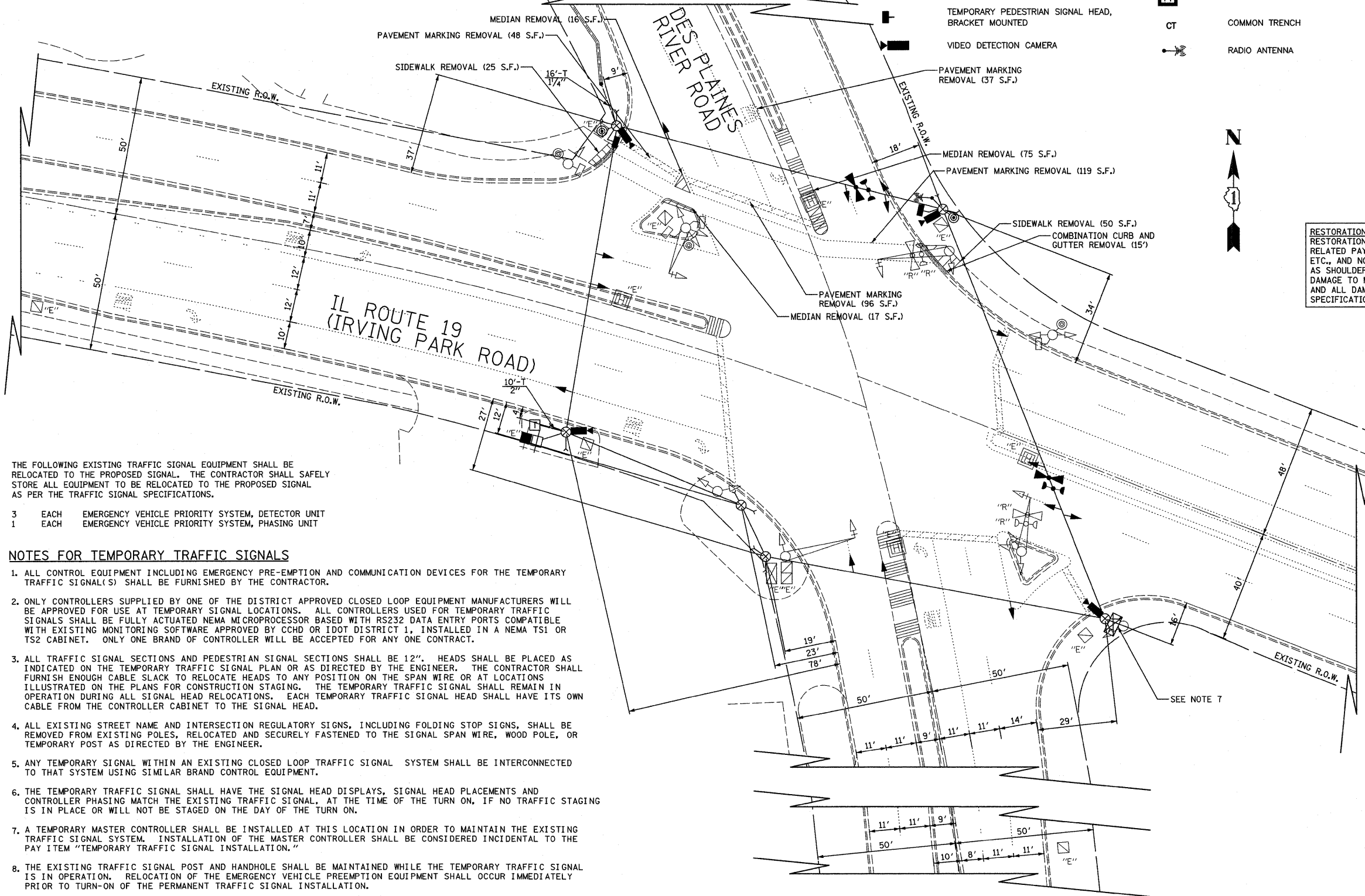
- 4 EACH ALUMINUM MAST ARM AND POLE
- 4 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 4 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 1 EACH SIGNAL HEAD, 2-FACE, 5-SECTION
- 1 EACH SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 1 EACH SIGNAL HEAD, 3-FACE, 2-3 SECTION, 1-5 SECTION
- 1 EACH SIGNAL HEAD, 3-FACE, 1-3 SECTION, 2-5 SECTION
- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 1 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 3 EACH PEDESTRIAN PUSH-BUTTON
- 5 EACH SIGNAL POST
- 1 EACH SERVICE INSTALLATION
- 1 EACH CONTROLLER AND CABINET, COMPLETE

TEMPORARY TRAFFIC SIGNAL LEGEND

- ← TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION
- ↔ TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED SECONDARY LOCATION
- ⊗ TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM
- ☒ TEMPORARY CONTROLLER CABINET
- TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
- ⊞ TEMPORARY SERVICE INSTALLATION
- ⊞ TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
- ▶ VIDEO DETECTION CAMERA
- ⊙ PEDESTRIAN PUSHBUTTON DETECTOR
- ⊙ EMERGENCY VEHICLE LIGHT DETECTOR
- ⊙ CONFIRMATION BEACON
- ⊙ VEHICLE DETECTOR, INDUCTION LOOP
- UD UNIT DUCT
- G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
- HANDHOLE
- ⊞ HEAVY-DUTY HANDHOLE
- CT COMMON TRENCH
- ⊙ RADIO ANTENNA

EXISTING EQUIPMENT TO BE REMOVED LEGEND

- ⊙ EXISTING SIGNAL HEAD TO BE REMOVED
- ⊙ EXISTING SERVICE INSTALLATION TO BE REMOVED
- ⊙ EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
- ⊙ EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
- ⊞ EXISTING CONTROLLER TO BE REMOVED
- ⊞ EXISTING HANDHOLE TO BE REMOVED
- ⊞ EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- ⊙ EXISTING PEDESTRIAN PUSH BUTTON TO BE REMOVED
- ⊙ EMERGENCY VEHICLE LIGHT DETECTOR TO BE REMOVED
- ⊙ CONFIRMATION BEACON TO BE REMOVED
- ⊞ EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED
- ⊙ EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED
- ⊙ EXISTING ILLUMINATED SIGN TO BE RELOCATED
- ⊙ EXISTING EQUIPMENT TO BE RELOCATED



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 SHOULDER, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SALT TOLERANT SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDING IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE RELOCATED TO THE PROPOSED SIGNAL. THE CONTRACTOR SHALL SAFELY STORE ALL EQUIPMENT TO BE RELOCATED TO THE PROPOSED SIGNAL AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

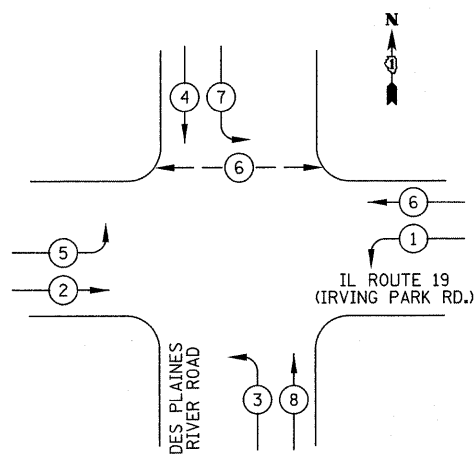
- 3 EACH EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT
- 1 EACH EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT

NOTES FOR TEMPORARY TRAFFIC SIGNALS

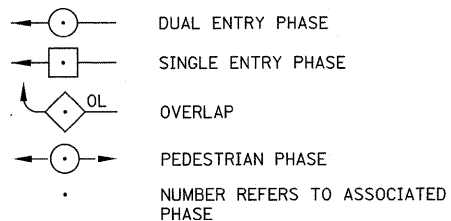
1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY CCHD OR IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12". HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS, INCLUDING FOLDING STOP SIGNS, SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE, WOOD POLE, OR TEMPORARY POST AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
7. A TEMPORARY MASTER CONTROLLER SHALL BE INSTALLED AT THIS LOCATION IN ORDER TO MAINTAIN THE EXISTING TRAFFIC SIGNAL SYSTEM. INSTALLATION OF THE MASTER CONTROLLER SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM "TEMPORARY TRAFFIC SIGNAL INSTALLATION."
8. THE EXISTING TRAFFIC SIGNAL POST AND HANDHOLE SHALL BE MAINTAINED WHILE THE TEMPORARY TRAFFIC SIGNAL IS IN OPERATION. RELOCATION OF THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT SHALL OCCUR IMMEDIATELY PRIOR TO TURN-ON OF THE PERMANENT TRAFFIC SIGNAL INSTALLATION.

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

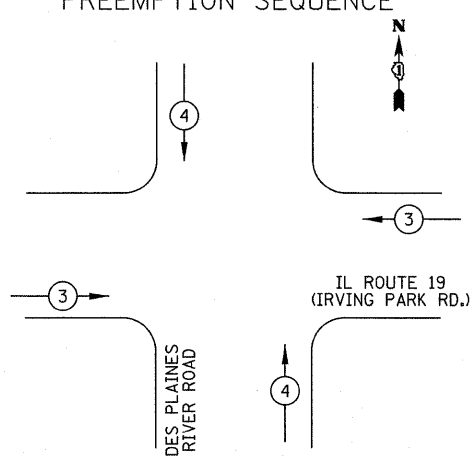
TEMPORARY CONTROLLER SEQUENCE



LEGEND



TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

TEMPORARY CABLE DIAGRAM LEGEND

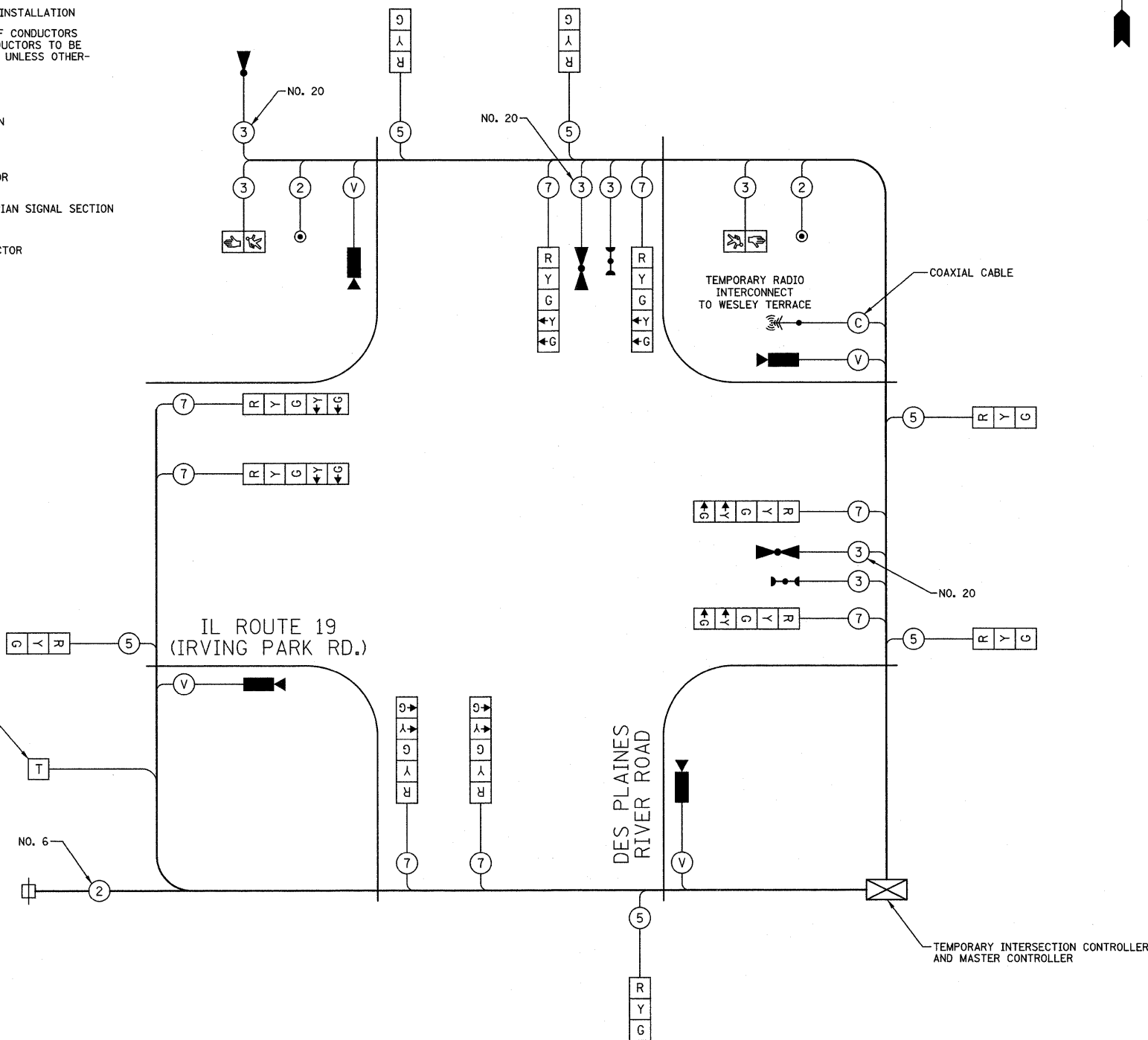
- R TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION 12" (300mm)
- C TEMPORARY CONTROLLER CABINET
- T TEMPORARY SERVICE INSTALLATION
- ⑤ INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED.
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- VEHICLE DETECTOR, INDUCTION LOOP
- PUSHBUTTON DETECTOR
- 12" (300mm) PEDESTRIAN SIGNAL SECTION
- VIDEO VEHICLE DETECTOR
- RADIO ANTENNA
- (V) VENDOR CABLE

PHASE DESIGNATION DIAGRAM

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS*	WATTAGE		% OPERATION	
SIGNAL (RED)	14	INCAND.	17	0.50	119
(YELLOW)	14		25	0.25	88
(GREEN)	14		15	0.25	53
ARROW	16		12	0.10	19
PED. SIGNAL	2		25	1.00	50
CONTROLLER	1		100	1.00	100
FLASHER				0.50	
TOTAL =					429

ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096
CONTACT: LINDA KLOC
PHONE: (708) 410-5313
COMPANY: COM ED

TELEPHONE SERVICE INSTALLATION



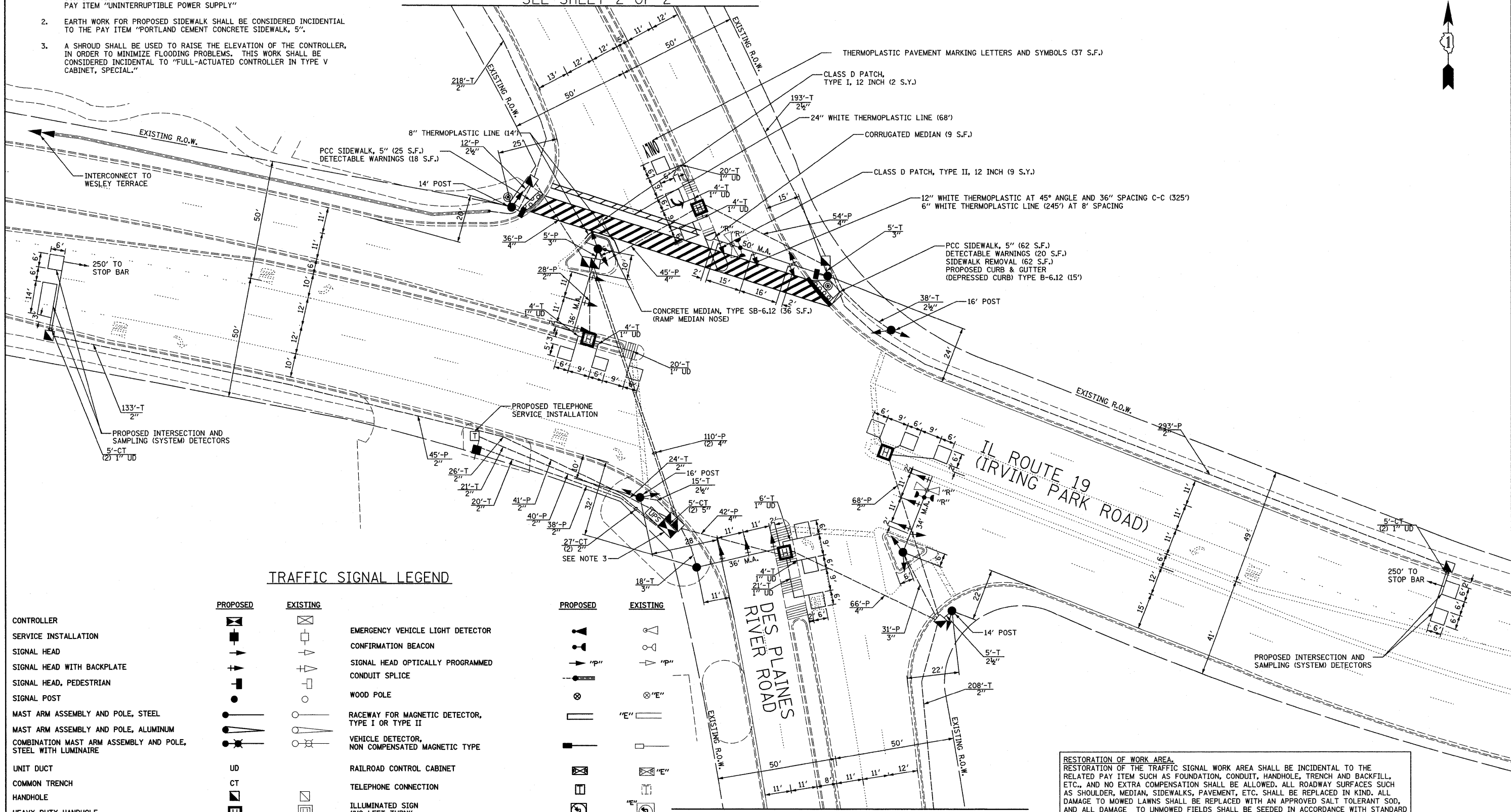
TEMPORARY CABLE PLAN
NOT TO SCALE

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

TRAFFIC SIGNAL NOTES

1. REPLACEMENT OF EXISTING CONFIRMATION BEACONS WITH NEW L.E.D. CONFIRMATION BEACONS SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM "UNINTERRUPTIBLE POWER SUPPLY"
2. EARTH WORK FOR PROPOSED SIDEWALK SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM "PORTLAND CEMENT CONCRETE SIDEWALK, 5"
3. A SHROUD SHALL BE USED TO RAISE THE ELEVATION OF THE CONTROLLER, IN ORDER TO MINIMIZE FLOODING PROBLEMS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO "FULL-ACTUATED CONTROLLER IN TYPE V CABINET, SPECIAL."

MATCH LINE A
SEE SHEET 2 OF 2



TRAFFIC SIGNAL LEGEND

PROPOSED	EXISTING	PROPOSED	EXISTING
CONTROLLER		EMERGENCY VEHICLE LIGHT DETECTOR	
SERVICE INSTALLATION		CONFIRMATION BEACON	
SIGNAL HEAD		SIGNAL HEAD OPTICALLY PROGRAMMED	
SIGNAL HEAD WITH BACKPLATE		CONDUIT SPLICE	
SIGNAL HEAD, PEDESTRIAN		WOOD POLE	
SIGNAL POST		RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II	
MAST ARM ASSEMBLY AND POLE, STEEL		VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE	
MAST ARM ASSEMBLY AND POLE, ALUMINUM		RAILROAD CONTROL CABINET	
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE		TELEPHONE CONNECTION	
UNIT DUCT	UD	ILLUMINATED SIGN "NO LEFT TURN"	
COMMON TRENCH	CT	ILLUMINATED SIGN "NO RIGHT TURN"	
HANDHOLE		RELOCATED SIGNAL EQUIPMENT	
HEAVY DUTY HANDHOLE		UNINTERRUPTIBLE POWER SUPPLY	
DOUBLE HANDHOLE		DETECTABLE WARNING	
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)		DEPRESSED CURB	
PEDESTRIAN PUSHBUTTON DETECTOR			
DETECTOR LOOP			
CAST IRON JUNCTION BOX			

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 SHOULDER, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SALT TOLERANT SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

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

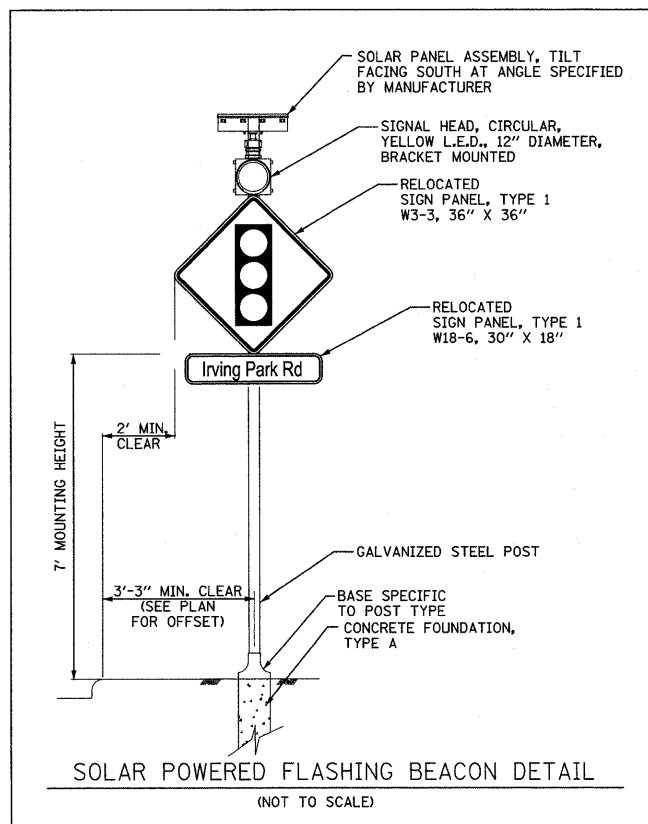
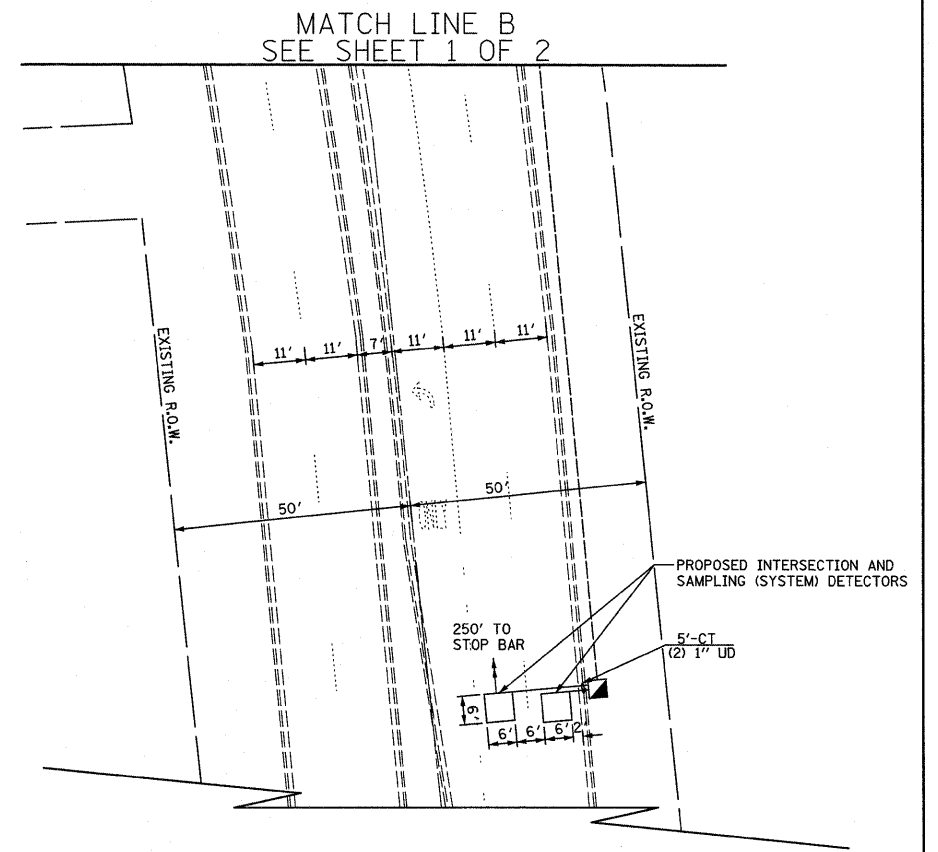
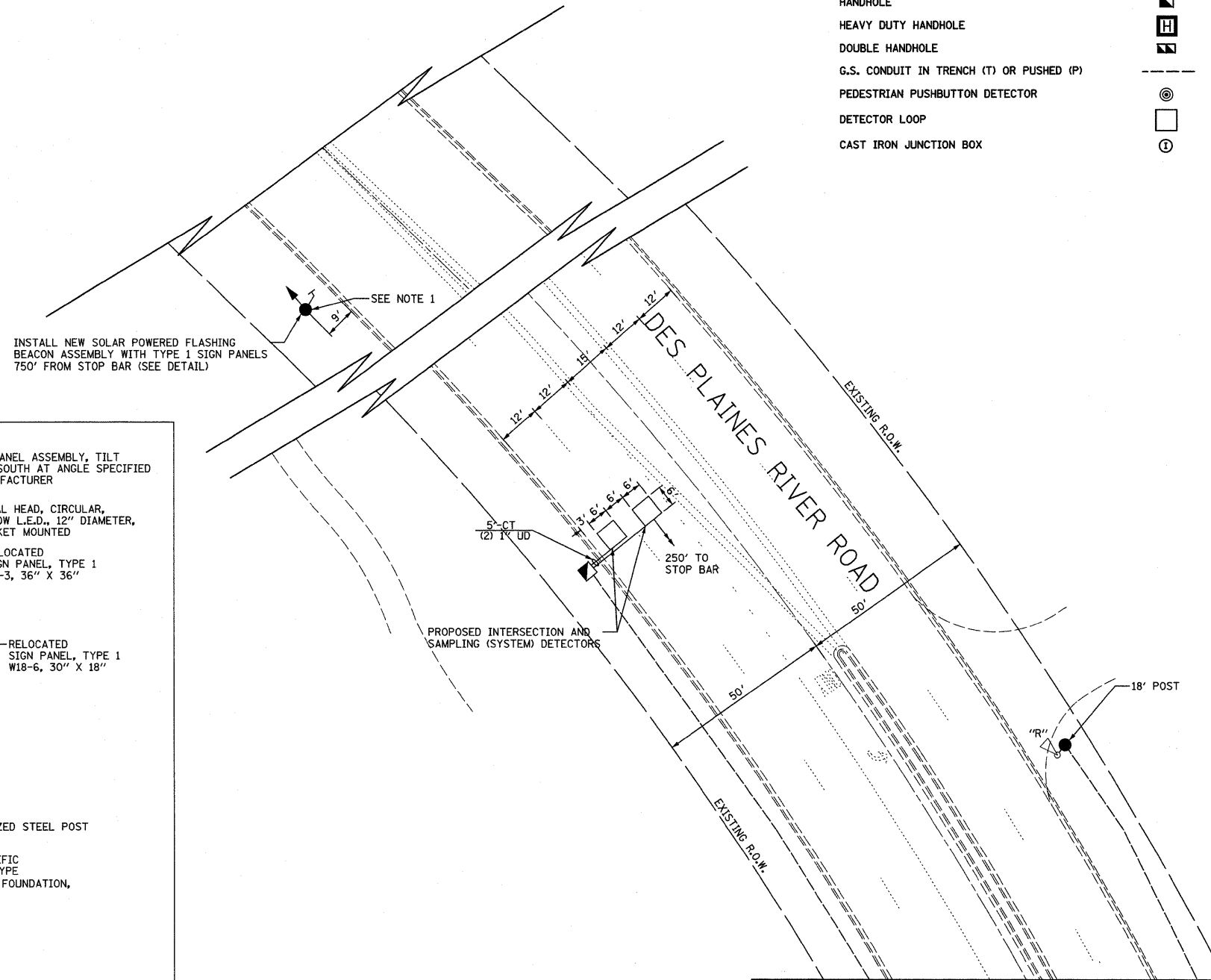
MATCH LINE B
SEE SHEET 2 OF 2

TRAFFIC SIGNAL NOTES

- 1. THE REMOVAL OF THE EXISTING SIGN PANEL SUPPORT SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM "RELOCATE SIGN PANEL-TYPE 1."

TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING		PROPOSED	EXISTING
CONTROLLER			EMERGENCY VEHICLE LIGHT DETECTOR		
SERVICE INSTALLATION			CONFIRMATION BEACON		
SIGNAL HEAD			SIGNAL HEAD OPTICALLY PROGRAMMED		
SIGNAL HEAD WITH BACKPLATE			CONDUIT SPLICE		
SIGNAL HEAD, PEDESTRIAN			WOOD POLE		
SIGNAL POST			RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		
MAST ARM ASSEMBLY AND POLE, STEEL			VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE		
MAST ARM ASSEMBLY AND POLE, ALUMINUM			RAILROAD CONTROL CABINET		
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE			TELEPHONE CONNECTION		
UNIT DUCT	UD		ILLUMINATED SIGN "NO LEFT TURN"		
COMMON TRENCH	CT		ILLUMINATED SIGN "NO RIGHT TURN"		
HANDHOLE			RELOCATED SIGNAL EQUIPMENT		
HEAVY DUTY HANDHOLE			UNINTERRUPTIBLE POWER SUPPLY		
DOUBLE HANDHOLE			DETECTABLE WARNING		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)			DEPRESSED CURB		
PEDESTRIAN PUSHBUTTON DETECTOR					
DETECTOR LOOP					
CAST IRON JUNCTION BOX					



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 SHOULDER, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SALT TOLERANT SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

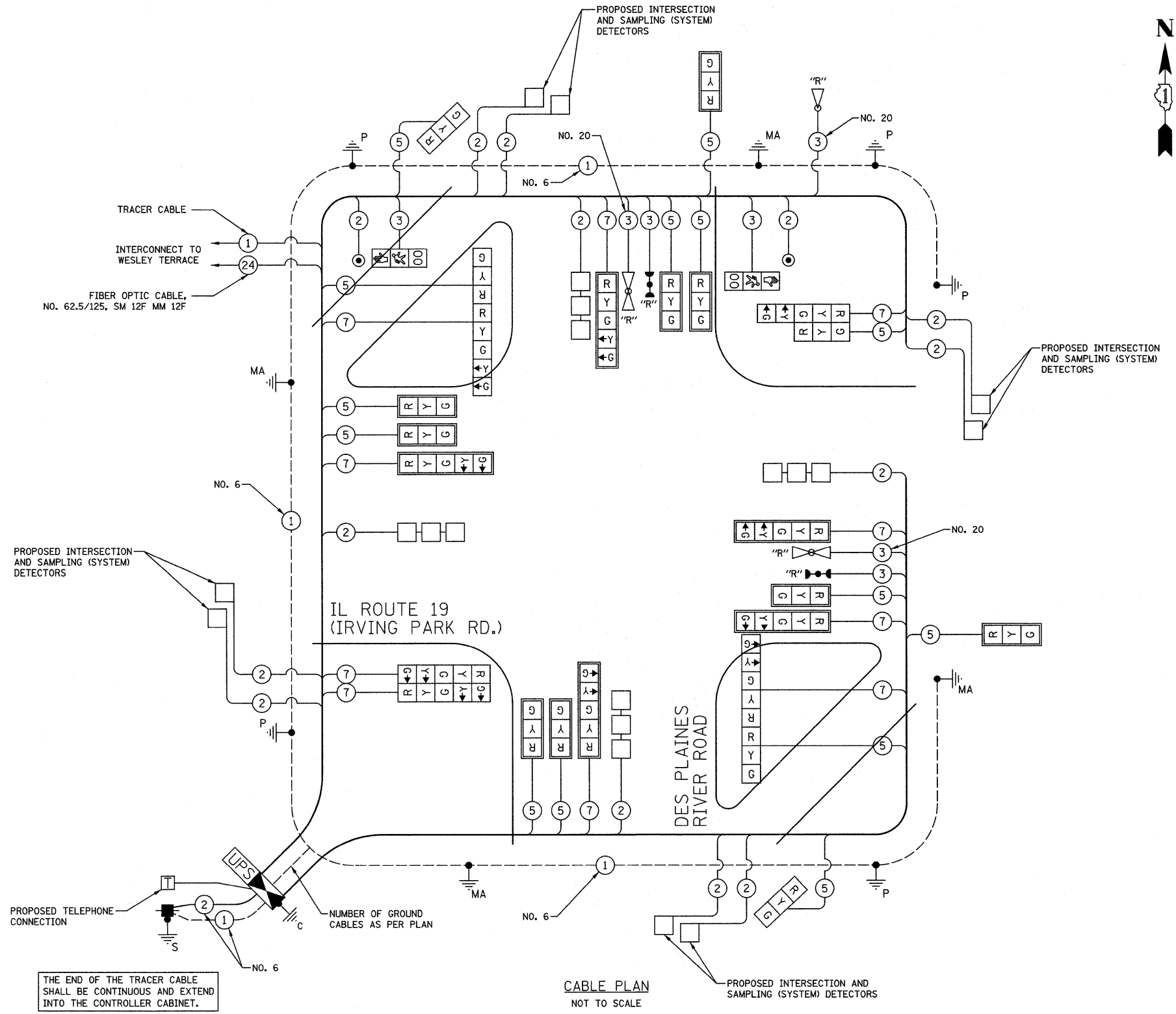
MATCH LINE A
 SEE SHEET 1 OF 2

MATCH LINE B
 SEE SHEET 1 OF 2

FILE NAME = #FILEL#	USER NAME = #USER#	DESIGNED - BRD	REVISIONS -	<p align="center">STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</p>	<p>TRAFFIC SIGNAL INSTALLATION PLAN (SHEET 2 OF 2) IL ROUTE 19 (IRVING PARK ROAD) AT DES PLAINES RIVER ROAD</p>			F.A.P. RTE. 345	SECTION 2009-085 TS	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 25
	PLOT SCALE = #SCALE#	DRAWN - JRT	REVISIONS -		SCALE: 1" = 20'	SHEET NO. 2 OF 2 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	CONTRACT NO. 60127	
	PLOT DATE = #DATE#	CHECKED - JJE	REVISIONS -									
		DATE - 10/14/09	REVISIONS -									

CABLE PLAN LEGEND

- EXISTING PROPOSED
- 8" (200mm) TRAFFIC SIGNAL SECTION
 - 12" (300mm) TRAFFIC SIGNAL SECTION
 - 12" (300mm) PEDESTRIAN SIGNAL SECTION
 - 12" (300mm) PEDESTRIAN SIGNAL SECTION WITH COUNTDOWN TIMER
 - CONTROLLER CABINET
 - SERVICE INSTALLATION
 - TELEPHONE CONNECTION
 - MAGNETIC DETECTOR
 - EMERGENCY VEHICLE LIGHT DETECTOR
 - CONFIRMATION BEACON
 - PUSHBUTTON DETECTOR
 - VEHICLE DETECTOR, INDUCTION LOOP
 - DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
 - MICROWAVE VEHICLE SENSOR
 - SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD
 - RAILROAD CONTROL CABINET
 - ILLUMINATED SIGN "NO LEFT TURN"
 - ILLUMINATED SIGN "NO RIGHT TURN"
 - GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C).
 - GROUND ROD AT POST (P), OR MAST ARM POLE (MA).
 - GROUND ROD AT ELECTRIC SERVICE INSTALLATION
 - GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
 - UNINTERRUPTIBLE POWER SUPPLY
 - RELOCATED SIGNAL EQUIPMENT



I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		% OPERATION	
		INCAND.	LED		
SIGNAL (RED)	24		17	0.50	204
(YELLOW)	24		25	0.25	150
(GREEN)	24		15	0.25	90
ARROW	20		12	0.10	24
PED. SIGNAL	2		25	1.00	50
CONTROLLER	1		100	1.00	100
TOTAL =					618

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (2.0)
D- CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'HL-2=
E- M. ARM POLE		SIGNAL POST	2 (1.0)	6m+L-0.6m)=	
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096
ENERGY SUPPLY: CONTACT: LINDA KLOC
PHONE: (708) 410-5313
COMPANY: COM ED

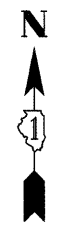
DESIGNED - BRD
DRAWN - JRT
CHECKED - JJE
DATE - 10/14/09

REVISED -
REVISED -
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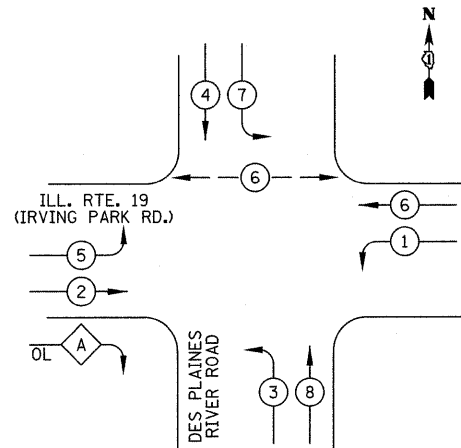
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN
IL ROUTE 19 (IRVING PARK ROAD) AT DES PLAINES RIVER ROAD

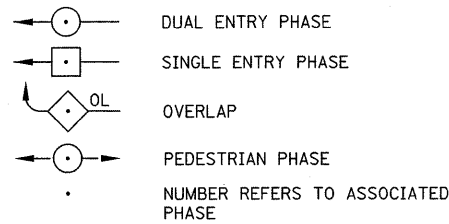
NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.



PROPOSED CONTROLLER SEQUENCE



LEGEND

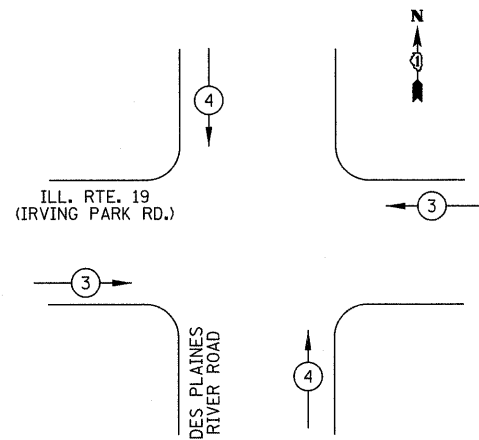


PHASE DESIGNATION DIAGRAM

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3

PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

SCHEDULE OF QUANTITIES

PAY ITEM	UNIT	QUANTITY
SUB-BASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	9
PROTECTIVE COAT	SQ YD	19
PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	SQ FT	75
DETECTABLE WARNINGS	SQ FT	38
COMBINATION CURB AND GUTTER REMOVAL	FOOT	15
SIDEWALK REMOVAL	SQ FT	75
MEDIAN REMOVAL	SQ FT	108
CLASS D PATCHES, TYPE I, 12 INCH	SQ YD	2
CLASS D PATCHES, TYPE II, 12 INCH	SQ YD	9
COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	15
CONCRETE MEDIAN, TYPE SB-6.12	SQ FT	36
CORRUGATED MEDIAN	SQ FT	9
SIGN PANEL - TYPE 2	SQ FT	58
RELOCATE SIGN PANEL - TYPE 1	SQ FT	13
THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	37
THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	245
THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	14
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	325
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	68
PAVEMENT MARKING REMOVAL	SQ FT	311
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	704
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	251
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	23
CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	553
CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	12
CONDUIT PUSHED, 3" DIA., GALVANIZED STEEL	FOOT	36
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	463
HANDHOLE	EACH	7
HEAVY-DUTY HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	956
FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL	EACH	1
MASTER CONTROLLER, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	482
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1058
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	3032
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1876
ELECTRIC CABLE IN CONDUIT, LEAD-IN NO. 14 1 PAIR	FOOT	3917
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	104
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	20
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	45
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	15
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	9
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	5
SIGNAL HEAD, L.E.D., 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, L.E.D., 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	3
PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
INDUCTIVE LOOP DETECTOR	EACH	12
DETECTOR LOOP, TYPE I	FOOT	608
PEDESTRIAN PUSH-BUTTON	EACH	2
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
* RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	3
* RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	14
REMOVE EXISTING CONCRETE FOUNDATION	EACH	10
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
SERVICE INSTALLATION, POLE MOUNTED	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	983
* ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED, SHIELDED	FOOT	1038
RETROREFLECTIVE TRAFFIC SIGNAL BACKPLATE	EACH	14
POST-MOUNTED FLASHING BEACON - SOLAR-POWERED INSTALLATION	EACH	1

* 100% COST TO VILLAGE OF SCHILLER PARK

MATCH LINE B
SEE SHEET 2 OF 2

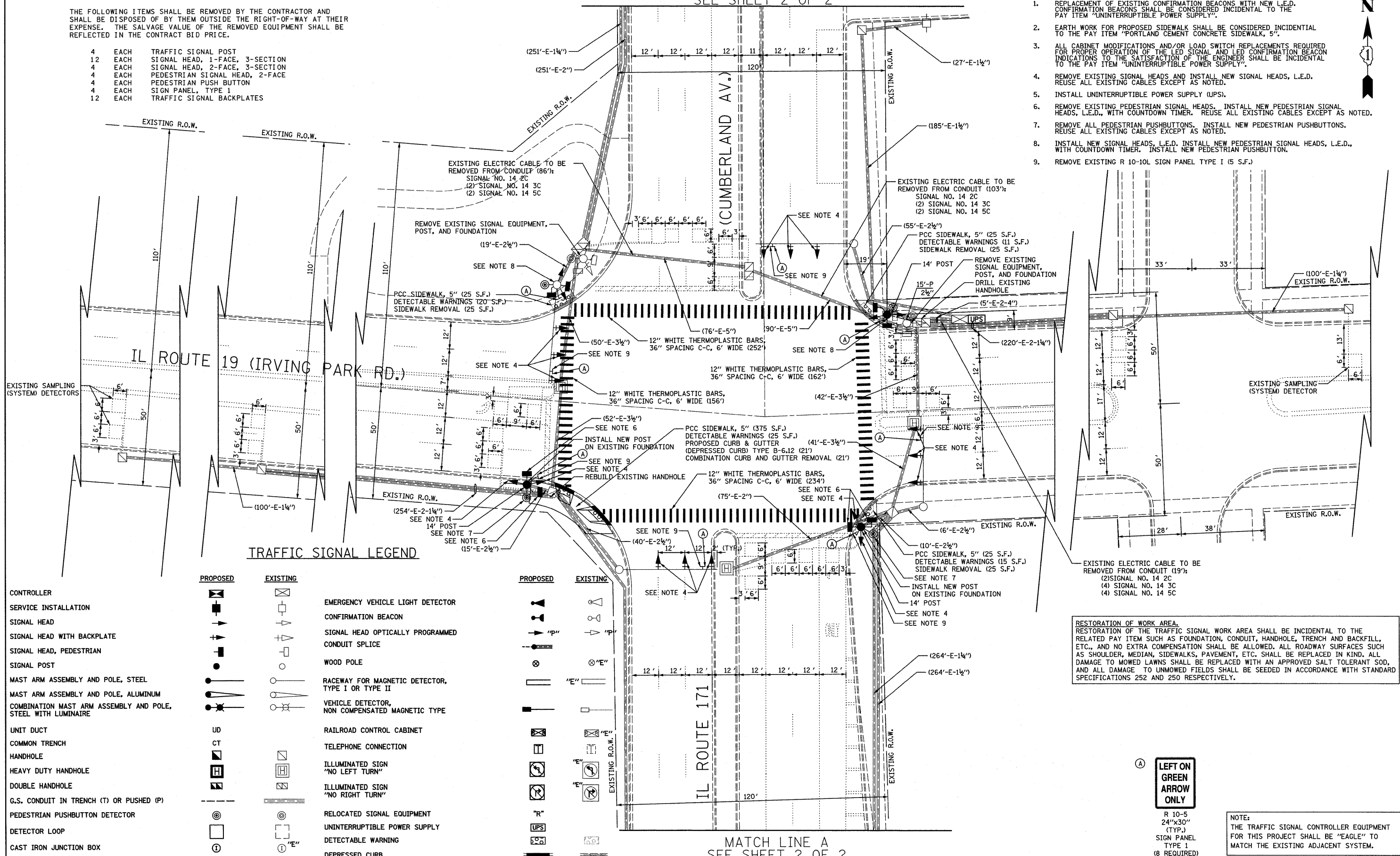
TRAFFIC SIGNAL NOTES

- REPLACEMENT OF EXISTING CONFIRMATION BEACONS WITH NEW L.E.D. CONFIRMATION BEACONS SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM "UNINTERRUPTIBLE POWER SUPPLY".
- EARTH WORK FOR PROPOSED SIDEWALK SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM "PORTLAND CEMENT CONCRETE SIDEWALK, 5'".
- ALL CABINET MODIFICATIONS AND/OR LOAD SWITCH REPLACEMENTS REQUIRED FOR PROPER OPERATION OF THE LED SIGNAL AND LED CONFIRMATION BEACON INDICATIONS TO THE SATISFACTION OF THE ENGINEER SHALL BE INCIDENTAL TO THE PAY ITEM "UNINTERRUPTIBLE POWER SUPPLY".
- REMOVE EXISTING SIGNAL HEADS AND INSTALL NEW SIGNAL HEADS, L.E.D. REUSE ALL EXISTING CABLES EXCEPT AS NOTED.
- INSTALL UNINTERRUPTIBLE POWER SUPPLY (UPS).
- REMOVE EXISTING PEDESTRIAN SIGNAL HEADS. INSTALL NEW PEDESTRIAN SIGNAL HEADS, L.E.D., WITH COUNTDOWN TIMER. REUSE ALL EXISTING CABLES EXCEPT AS NOTED.
- REMOVE ALL PEDESTRIAN PUSHBUTTONS. INSTALL NEW PEDESTRIAN PUSHBUTTONS. REUSE ALL EXISTING CABLES EXCEPT AS NOTED.
- INSTALL NEW SIGNAL HEADS, L.E.D. INSTALL NEW PEDESTRIAN SIGNAL HEADS, L.E.D., WITH COUNTDOWN TIMER. INSTALL NEW PEDESTRIAN PUSHBUTTON.
- REMOVE EXISTING R 10-10L SIGN PANEL TYPE I (5 S.F.)



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 TRAFFIC SIGNAL POST
- 12 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 4 EACH SIGNAL HEAD, 2-FACE, 3-SECTION
- 4 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 4 EACH PEDESTRIAN PUSH BUTTON
- 4 EACH SIGN PANEL, TYPE 1
- 12 EACH TRAFFIC SIGNAL BACKPLATES



TRAFFIC SIGNAL LEGEND

PROPOSED	EXISTING	DESCRIPTION
		CONTROLLER
		SERVICE INSTALLATION
		SIGNAL HEAD
		SIGNAL HEAD WITH BACKPLATE
		SIGNAL HEAD, PEDESTRIAN
		SIGNAL POST
		MAST ARM ASSEMBLY AND POLE, STEEL
		MAST ARM ASSEMBLY AND POLE, ALUMINUM
		COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE
		UNIT DUCT
		COMMON TRENCH
		HANDHOLE
		HEAVY DUTY HANDHOLE
		DOUBLE HANDHOLE
		G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
		PEDESTRIAN PUSHBUTTON DETECTOR
		DETECTOR LOOP
		CAST IRON JUNCTION BOX
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		SIGNAL HEAD OPTICALLY PROGRAMMED
		CONDUIT SPLICE
		WOOD POLE
		RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II
		VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE
		RAILROAD CONTROL CABINET
		TELEPHONE CONNECTION
		ILLUMINATED SIGN "NO LEFT TURN"
		ILLUMINATED SIGN "NO RIGHT TURN"
		RELOCATED SIGNAL EQUIPMENT
		UNINTERRUPTIBLE POWER SUPPLY
		DETECTABLE WARNING
		DEPRESSED CURB

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 SHOULDER, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SALT TOLERANT SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

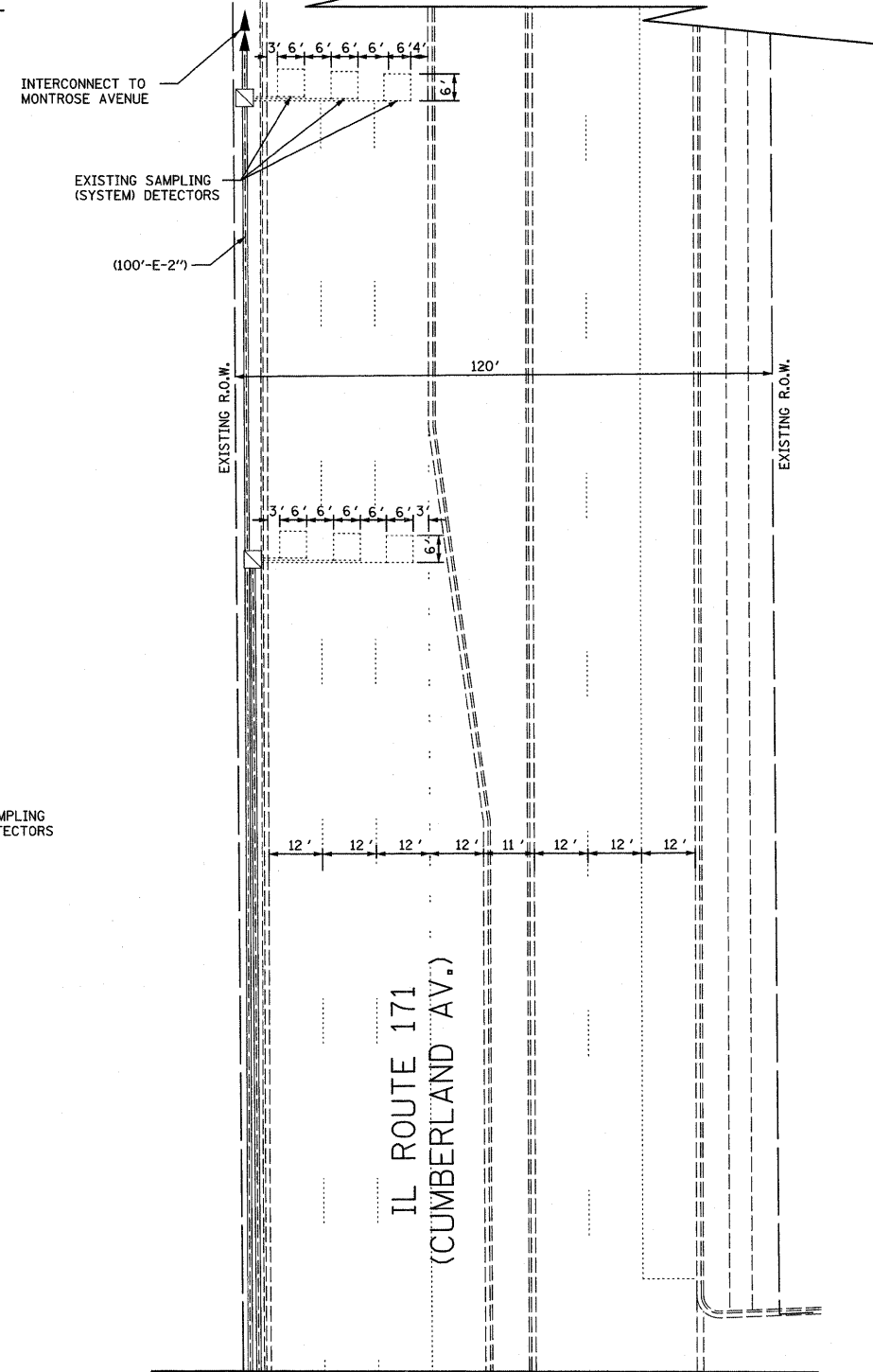
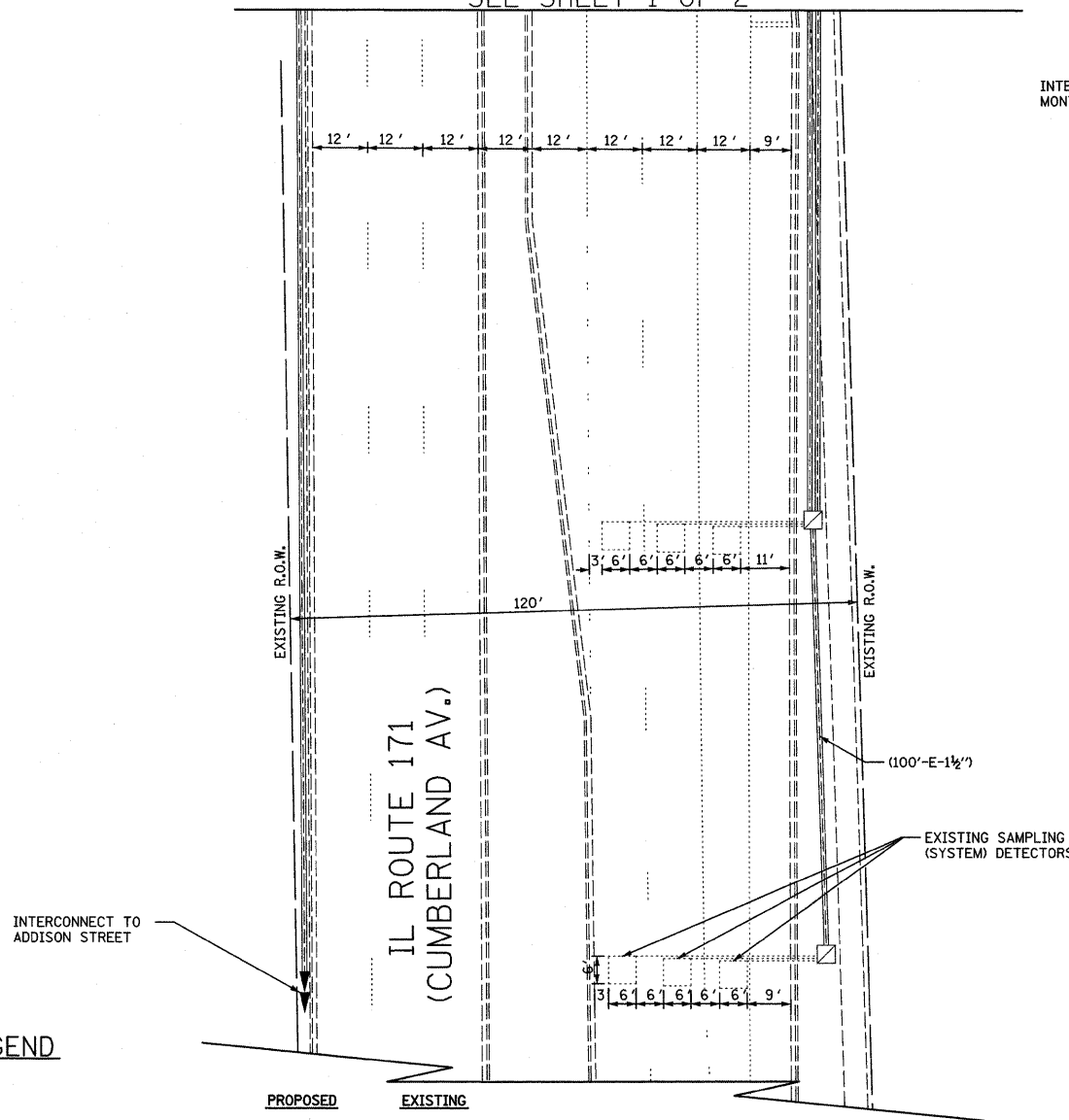
LEFT ON GREEN ARROW ONLY
R 10-5
24"x30"
(TYP.)
SIGN PANEL
TYPE 1
(8 REQUIRED)

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

MATCH LINE A
SEE SHEET 2 OF 2

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 SHOULDER, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SALT TOLERANT SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

MATCH LINE A
 SEE SHEET 1 OF 2



TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING		PROPOSED	EXISTING
CONTROLLER			EMERGENCY VEHICLE LIGHT DETECTOR		
SERVICE INSTALLATION			CONFIRMATION BEACON		
SIGNAL HEAD			SIGNAL HEAD OPTICALLY PROGRAMMED		
SIGNAL HEAD WITH BACKPLATE			CONDUIT SPLICE		
SIGNAL HEAD, PEDESTRIAN			WOOD POLE		
SIGNAL POST			RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		
MAST ARM ASSEMBLY AND POLE, STEEL			VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE		
MAST ARM ASSEMBLY AND POLE, ALUMINUM			RAILROAD CONTROL CABINET		
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE			TELEPHONE CONNECTION		
UNIT DUCT	UD		ILLUMINATED SIGN "NO LEFT TURN"		
COMMON TRENCH	CT		ILLUMINATED SIGN "NO RIGHT TURN"		
HANDHOLE			RELOCATED SIGNAL EQUIPMENT		
HEAVY DUTY HANDHOLE			UNINTERRUPTIBLE POWER SUPPLY		
DOUBLE HANDHOLE			DETECTABLE WARNING		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)			DEPRESSED CURB		
PEDESTRIAN PUSHBUTTON DETECTOR					
DETECTOR LOOP					
CAST IRON JUNCTION BOX					

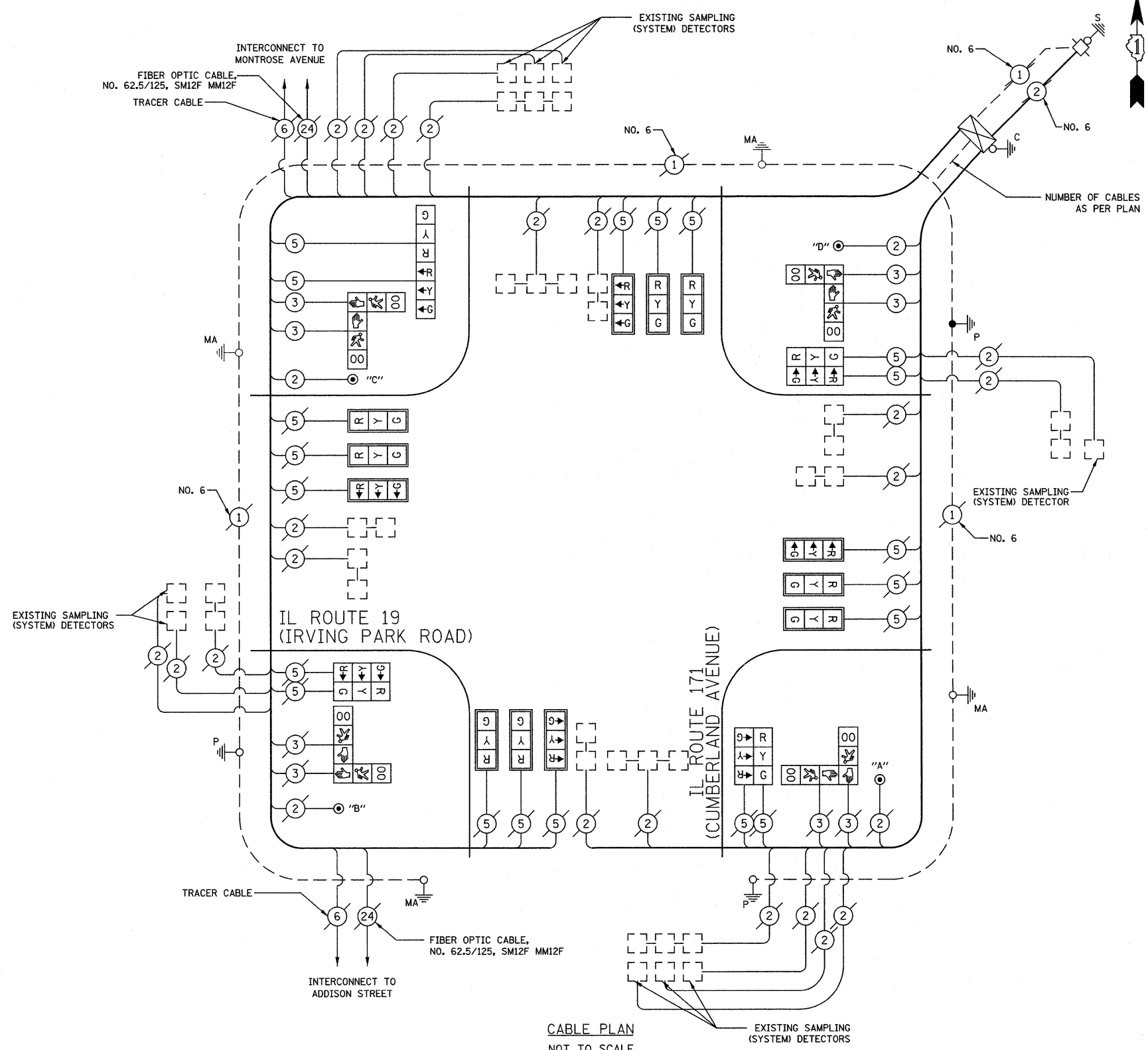
MATCH LINE B
 SEE SHEET 1 OF 2

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

FILE NAME =	USER NAME = #USER#	DESIGNED - BRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN (SHEET 2 OF 2) IL ROUTE 19 (IRVING PARK RD.) AT IL ROUTE 171 (CUMBERLAND AV.)			F.A.P. RTE. 345	SECTION 2009-085 TS	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 29
#FILE#	PLOT SCALE = #SCALE#	DRAWN - JRT	REVISED -		SCALE: 1" = 20'	SHEET NO. 2 OF 2 SHEETS	STA.	TO STA.	CONTRACT NO. 60I27			
	PLOT DATE = #DATE#	CHECKED - JJE	REVISED -		FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT							
		DATE - 10/14/09	REVISED -									

CABLE PLAN LEGEND

- | | | |
|-----------------|-----------------|---|
| EXISTING | PROPOSED | |
| | | 8" (200mm) TRAFFIC SIGNAL SECTION |
| | | 12" (300mm) TRAFFIC SIGNAL SECTION |
| | | 12" (300mm) PEDESTRIAN SIGNAL SECTION |
| | | 12" (300mm) PEDESTRIAN SIGNAL SECTION WITH COUNTDOWN TIMER |
| | | CONTROLLER CABINET |
| | | SERVICE INSTALLATION |
| | | TELEPHONE CONNECTION |
| | | MAGNETIC DETECTOR |
| | | EMERGENCY VEHICLE LIGHT DETECTOR |
| | | CONFIRMATION BEACON |
| | | PUSHBUTTON DETECTOR |
| | | VEHICLE DETECTOR, INDUCTION LOOP |
| | | DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED. |
| | | MICROWAVE VEHICLE SENSOR |
| | | SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD |
| | | RAILROAD CONTROL CABINET |
| | | ILLUMINATED SIGN "NO LEFT TURN" |
| | | ILLUMINATED SIGN "NO RIGHT TURN" |
| | | GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C). |
| | | GROUND ROD AT POST (P), OR MAST ARM POLE (MA). |
| | | GROUND ROD AT ELECTRIC SERVICE INSTALLATION |
| | | GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN) |
| | | UNINTERRUPTIBLE POWER SUPPLY |
| | | "R" RELOCATED SIGNAL EQUIPMENT |



CABLE PLAN
NOT TO SCALE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE	% OPERATION		
		INCAND.	LED		
SIGNAL (RED)	20	17	0.50		170
(YELLOW)	20	25	0.25		125
(GREEN)	20	15	0.25		75
ARROW		12	0.10		
PED. SIGNAL	8	25	1.00		200
CONTROLLER	1	100	1.00		100
TOTAL =					670

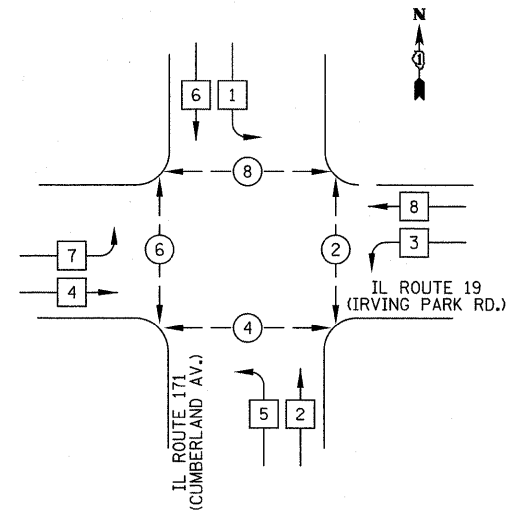
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096
CONTACT: LINDA KLOC
PHONE: (708) 410-5313
COMPANY: COM ED

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (2.0)
D- CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2=
E- M. ARM POLE		SIGNAL POST	2 (1.0)	6m+L-0.6m=	
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

NOTE:
PEDESTRIAN PUSH-BUTTON "A" SHALL PLACE A CALL TO PHASES 2 & 4
PEDESTRIAN PUSH-BUTTON "B" SHALL PLACE A CALL TO PHASES 4 & 6
PEDESTRIAN PUSH-BUTTON "C" SHALL PLACE A CALL TO PHASES 6 & 8
PEDESTRIAN PUSH-BUTTON "D" SHALL PLACE A CALL TO PHASES 8 & 2

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

EXISTING AND PROPOSED
CONTROLLER SEQUENCE

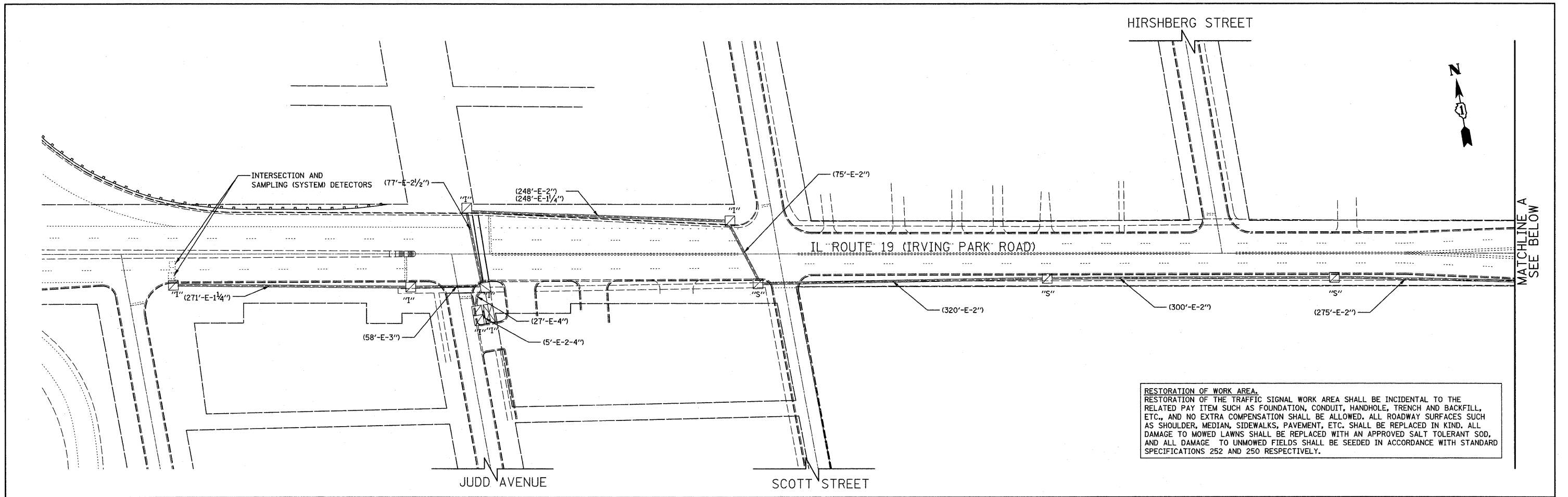


LEGEND

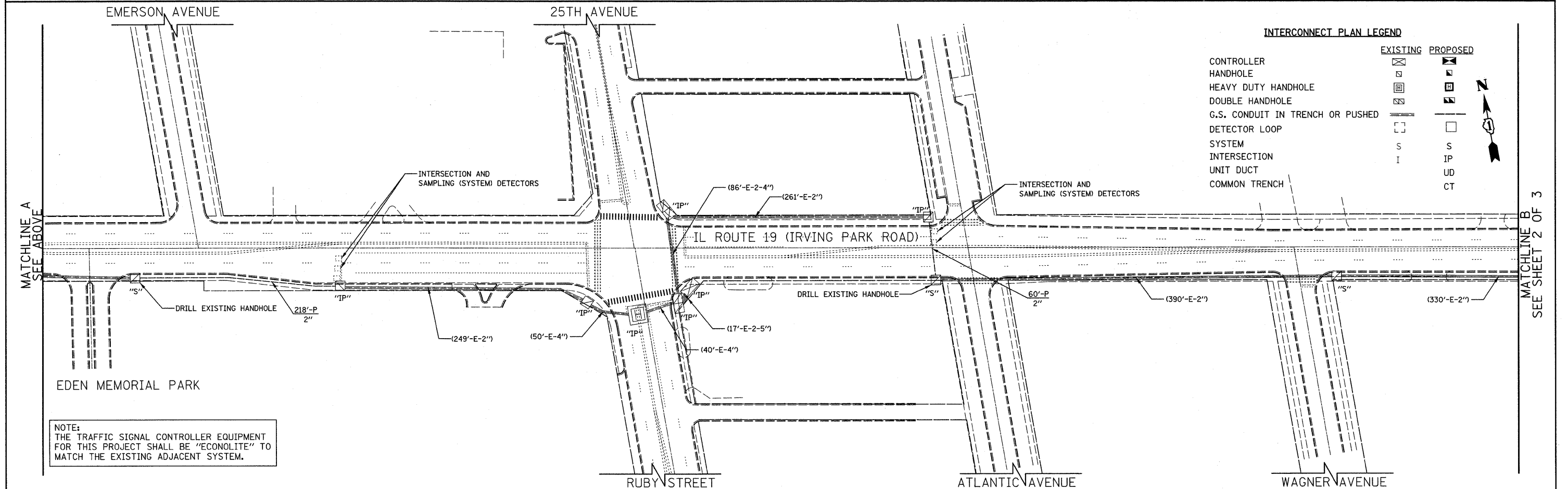
- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- OVERLAP
- PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

SCHEDULE OF QUANTITIES		
PAY ITEM	UNIT	QUANTITY
SUB-BASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	50
PROTECTIVE COAT	SQ YD	55
PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	SQ FT	450
DETECTABLE WARNINGS	SQ FT	71
COMBINATION CURB AND GUTTER REMOVAL	FOOT	21
SIDEWALK REMOVAL	SQ FT	75
COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	21
SIGN PANEL - TYPE 1	SQ FT	40
CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	15
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	290
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	604
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	616
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	3
CONCRETE FOUNDATION, TYPE A	FOOT	4
DRILL EXISTING HANDHOLE	EACH	1
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	12
SIGNAL HEAD, L.E.D., 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, L.E.D., 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
PEDESTRIAN PUSH-BUTTON	EACH	4
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1455
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	2
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	21
REBUILD EXISTING HANDHOLE	EACH	1
RETROREFLECTIVE TRAFFIC SIGNAL BACKPLATE	EACH	12



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 SHOULDER, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SALT TOLERANT SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.



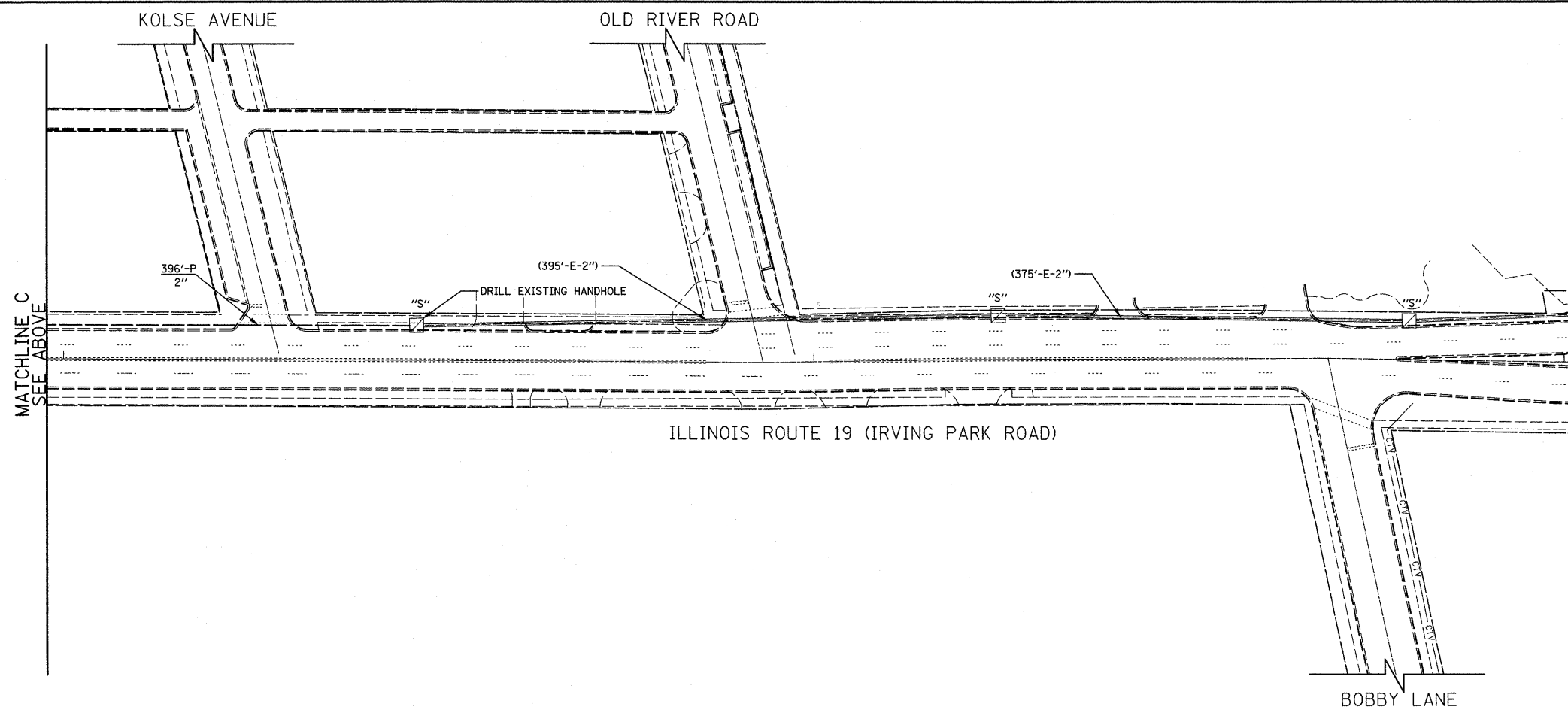
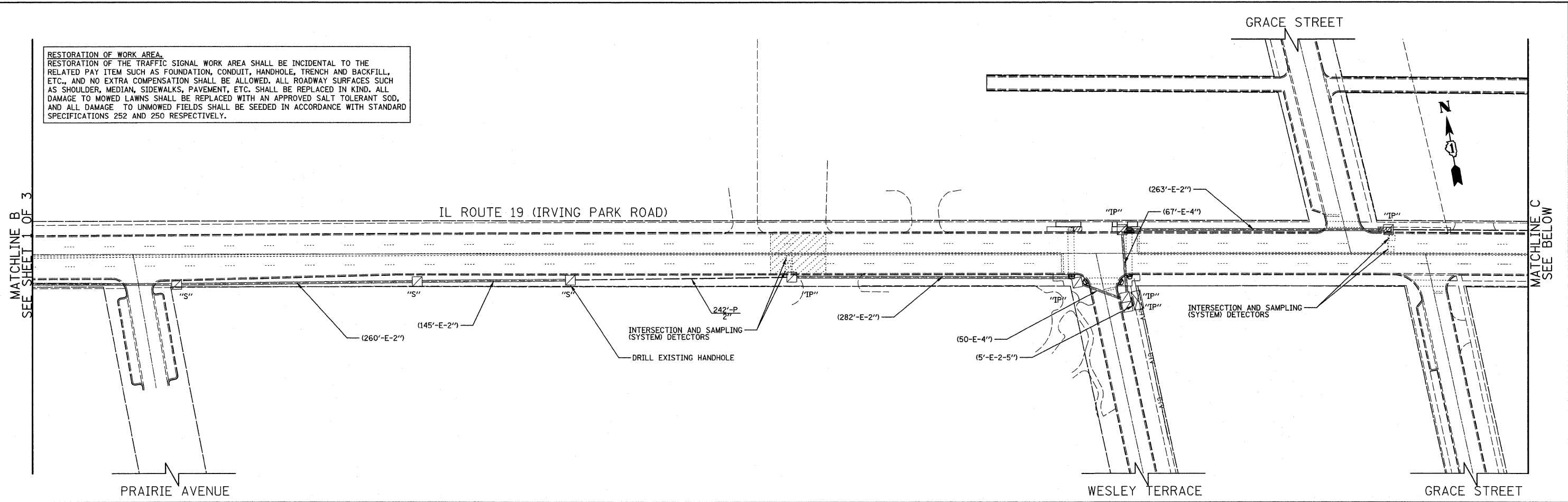
INTERCONNECT PLAN LEGEND

	EXISTING	PROPOSED
CONTROLLER		
HANDHOLE		
HEAVY DUTY HANDHOLE		
DOUBLE HANDHOLE		
G.S. CONDUIT IN TRENCH OR PUSHED		
DETECTOR LOOP		
SYSTEM	S	S
INTERSECTION	I	IP
UNIT DUCT		UD
COMMON TRENCH		CT

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

FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED - BRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INTERCONNECT PLAN (SHEET 1 OF 3) IL ROUTE 19 (IRVING PARK RD.) - JUDD AV. TO DES PLAINES RIVER RD.		F.A.P. RTE. 345	SECTION 2009-085 TS	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 32	
	PLOT SCALE = #SCALE#	DRAWN - JRT	REVISED -		SCALE: 1" = 50'	SHEET NO. 1 OF 3 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				
	PLOT DATE = #DATE#	CHECKED - JJE	REVISED -		CONTRACT NO. 60127							
		DATE - 10/14/09	REVISED -									

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 SHOULDER, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SALT TOLERANT SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDING IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

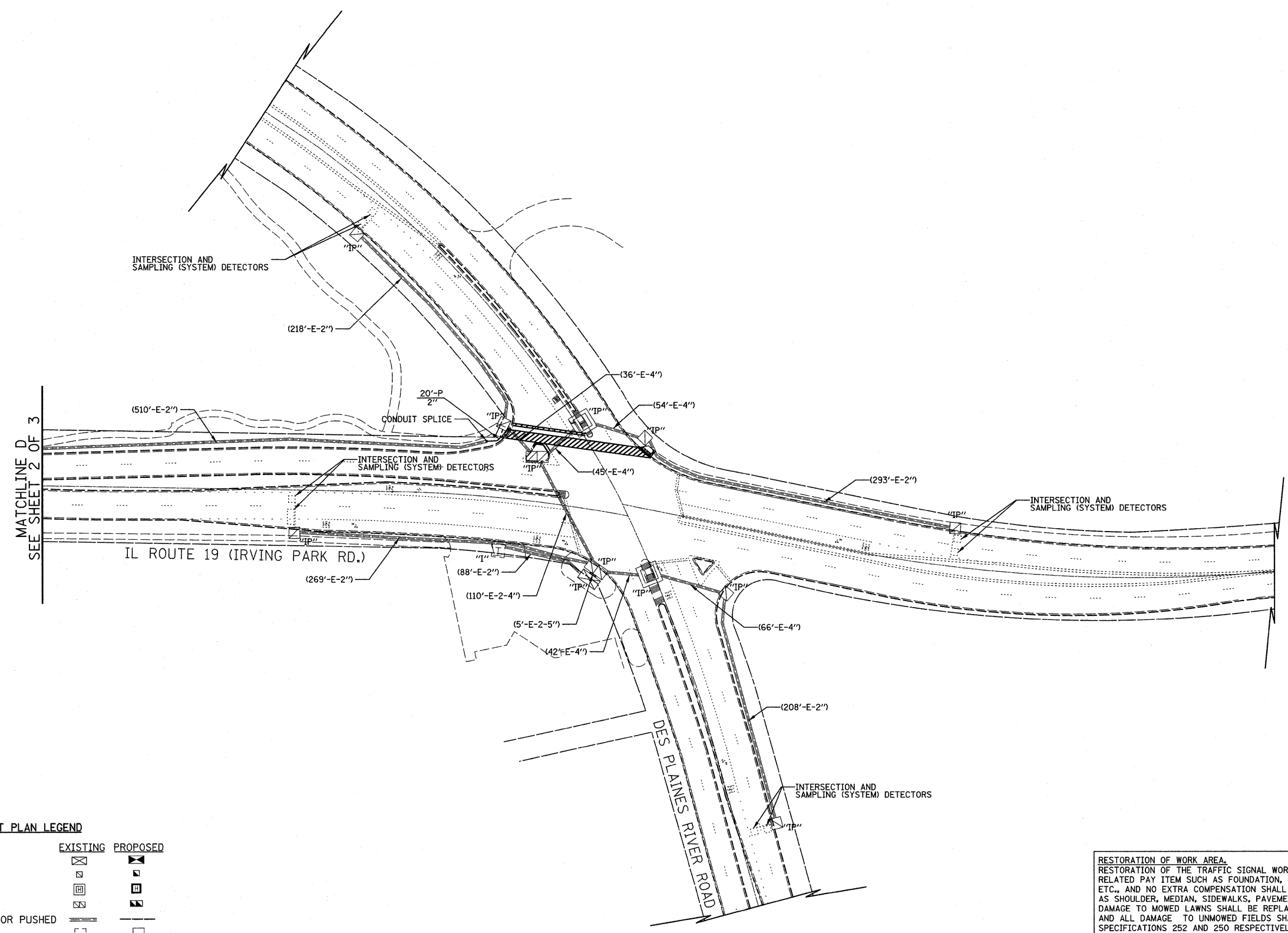


INTERCONNECT PLAN LEGEND

	EXISTING	PROPOSED
CONTROLLER		
HANDHOLE		
HEAVY DUTY HANDHOLE		
DOUBLE HANDHOLE		
G.S. CONDUIT IN TRENCH OR PUSHED		
DETECTOR LOOP		
SYSTEM	S	S
INTERSECTION	I	IP
UNIT DUCT		UD
COMMON TRENCH		CT

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

FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED - BRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INTERCONNECT PLAN (SHEET 2 OF 3) IL ROUTE 19 (IRVING PARK RD.) - JUDD AV. TO DES PLAINES RIVER RD.		F.A.P. RTE. 345	SECTION 2009-085 TS	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 33
	PLOT SCALE = #SCALE#	DRAWN - JRT	REVISED -		SCALE: 1" = 50'	SHEET NO. 2 OF 3 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT		CONTRACT NO. 60I27	
	PLOT DATE = #DATE#	CHECKED - JJE	REVISED -								
		DATE - 10/14/09	REVISED -								



INTERCONNECT PLAN LEGEND

	EXISTING	PROPOSED
CONTROLLER		
HANDHOLE		
HEAVY DUTY HANDHOLE		
DOUBLE HANDHOLE		
G.S. CONDUIT IN TRENCH OR PUSHED		
DETECTOR LOOP		
SYSTEM	S	S
INTERSECTION	I	IP
UNIT DUCT		UD
COMMON TRENCH		CT

RESTORATION OF WORK AREA.
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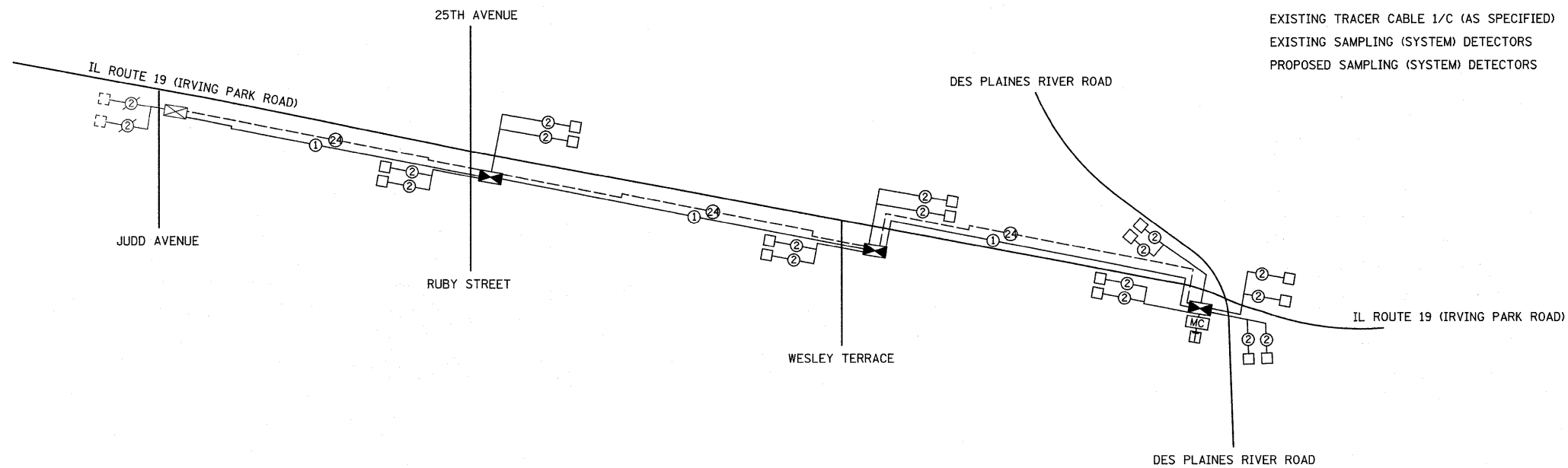
NOTE:
 THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME =	USER NAME = #USER#	DESIGNED - BRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INTERCONNECT PLAN (SHEET 3 OF 3) IL ROUTE 19 (IRVING PARK RD.) - JUDD AV. TO DES PLAINES RIVER RD.			F.A.P. RTE. 345	SECTION 2009-085 TS	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 34
#FILEL#		DRAWN - JRT	REVISED -		SCALE: 1" = 50'	SHEET NO. 3 OF 3 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				
		CHECKED - JJE	REVISED -					CONTRACT NO. 60I27				
		DATE - 10/14/09	REVISED -									

SCHEDULE OF QUANTITIES		
PAY ITEM	UNIT	QUANTITY
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	936
CONDUIT SPLICE	EACH	1
DRILL EXISTING HANDHOLE	EACH	4
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3854
ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1C	FOOT	6498
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT	6570
REMOVE FIBER OPTIC CABLE FROM CONDUIT	FOOT	3866

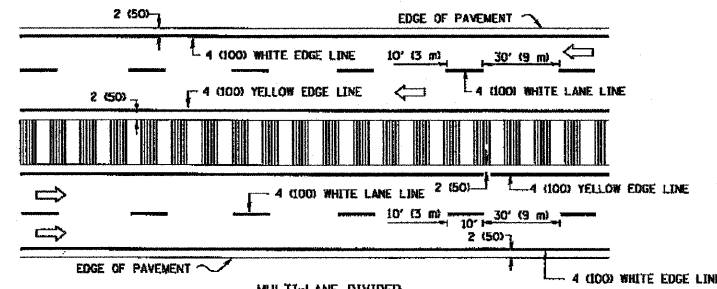
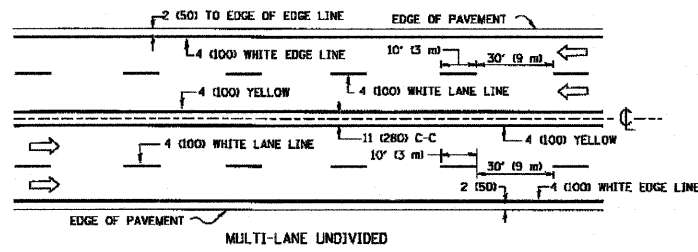
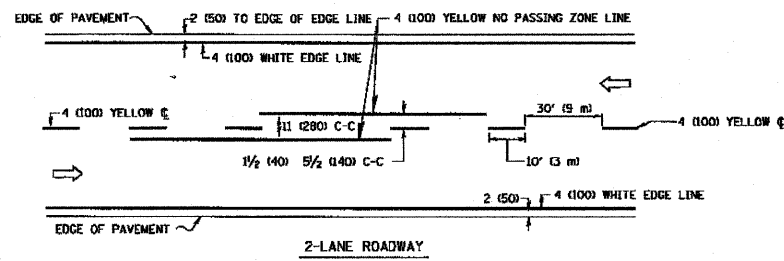
INTERCONNECT SCHEMATIC LEGEND

PROPOSED INTERSECTION CONTROLLER	
EXISTING INTERSECTION CONTROLLER	
PROPOSED MASTER CONTROLLER	
EXISTING MASTER CONTROLLER	
MASTER MASTER CONTROLLER	
PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS	
EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTORS	
INTERCONNECT CABLE - NO. 62.5/125 24F FIBER OPTIC CABLE	
INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE	
INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED	
LOOP DETECTOR CABLE - 2/C TWISTED, SHIELDED	
EXISTING INTERCONNECT CABLE - NO. 62.5/125 24F FIBER OPTIC CABLE	
EXISTING INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE	
EXISTING INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED	
EXISTING LOOP DETECTOR CABLE - 2/C TWISTED, SHIELDED	
TELEPHONE CONNECTION	
PROPOSED TRACER CABLE NO. 14 1C	
EXISTING INTERSECTION LOOP DETECTORS AND PROPOSED SAMPLING (SYSTEM) DETECTORS	
EXISTING TELEPHONE CONNECTION	
EXISTING TRACER CABLE 1/C (AS SPECIFIED)	
EXISTING SAMPLING (SYSTEM) DETECTORS	
PROPOSED SAMPLING (SYSTEM) DETECTORS	



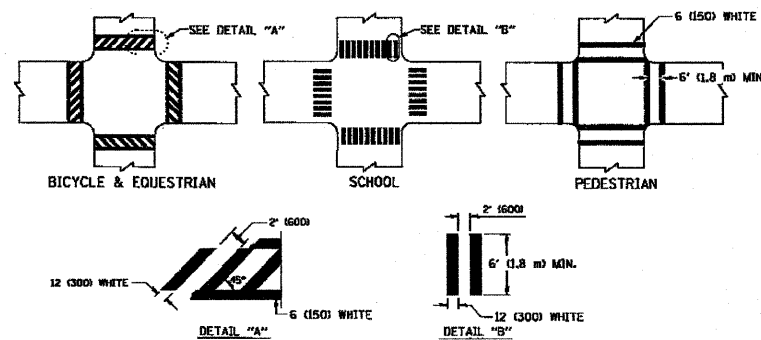
NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME =	USER NAME = #USER#	DESIGNED - BRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INTERCONNECT SCHEMATIC AND SCHEDULE OF QUANTITIES IL ROUTE 19 (IRVING PARK RD.) - JUDD AV. TO DES PLAINES RIVER RD.		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
#FILE#		DRAWN - JRT	REVISED -		SCALE: NO SCALE	SHEET NO. 1 OF 1 SHEETS	STA.	345	2009-085 TS	COOK	39	35
		CHECKED - JJE	REVISED -				TO STA.	CONTRACT NO. 60I27				
		DATE - 10/14/09	REVISED -				FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

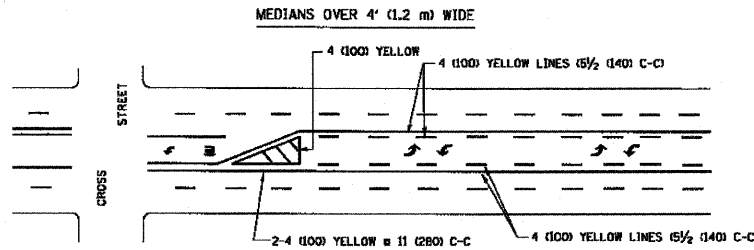
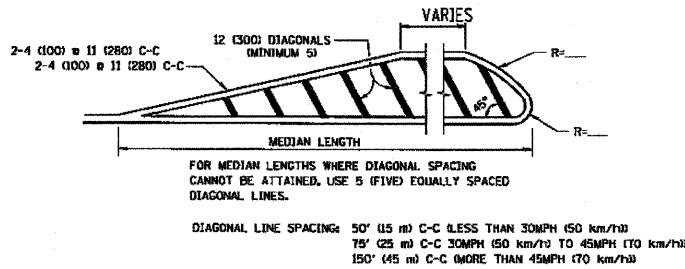
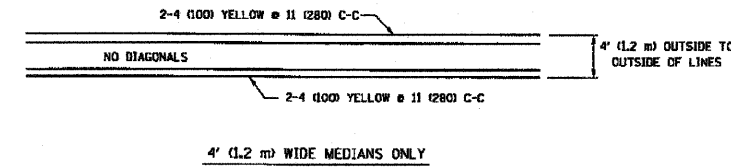


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

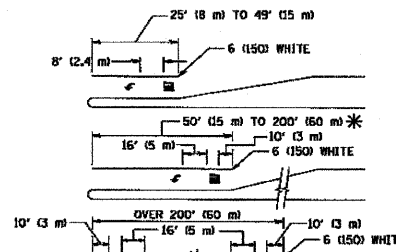
TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING

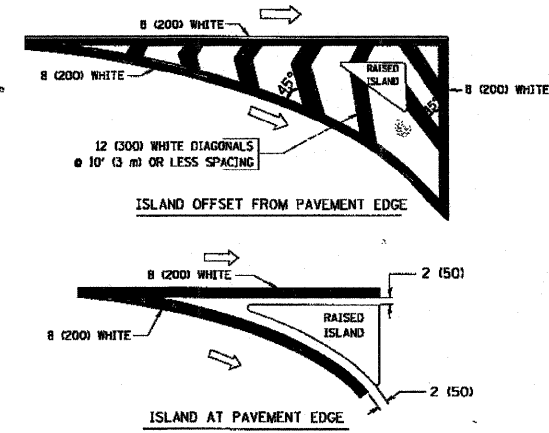


TYPICAL PAINTED MEDIAN MARKING



FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
 * AREA = 15.6 SQ. FT. (1.5 m²) * AREA = 20.8 SQ. FT. (1.9 m²)
 * 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 TURN LANE MARKING



TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (1000)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (1000)	SOLID	YELLOW	11 (2800) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (1000) 2 @ 4 (1000)	SOLID SOLID	YELLOW YELLOW	5/2 (1400) C-C FROM SKIP-DASH CENTERLINE 11 (2800) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (1000) 5 (1250) 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 (1000)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (1500) LINE; FULL SIZE LETTERS & SYMBOLS 8' (2.4m)	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (1000) 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; 5/2 (1400) 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 (1500) 12 (3000) @ 45° 12 (3000) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (6000)	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 (1000) WITH 12 (3000) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (2800) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
CORE MARKING AND CHANNELIZING LINES	8 (2000) WITH 12 (3000) 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 (6000) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (4000) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS	12 (3000) @ 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))

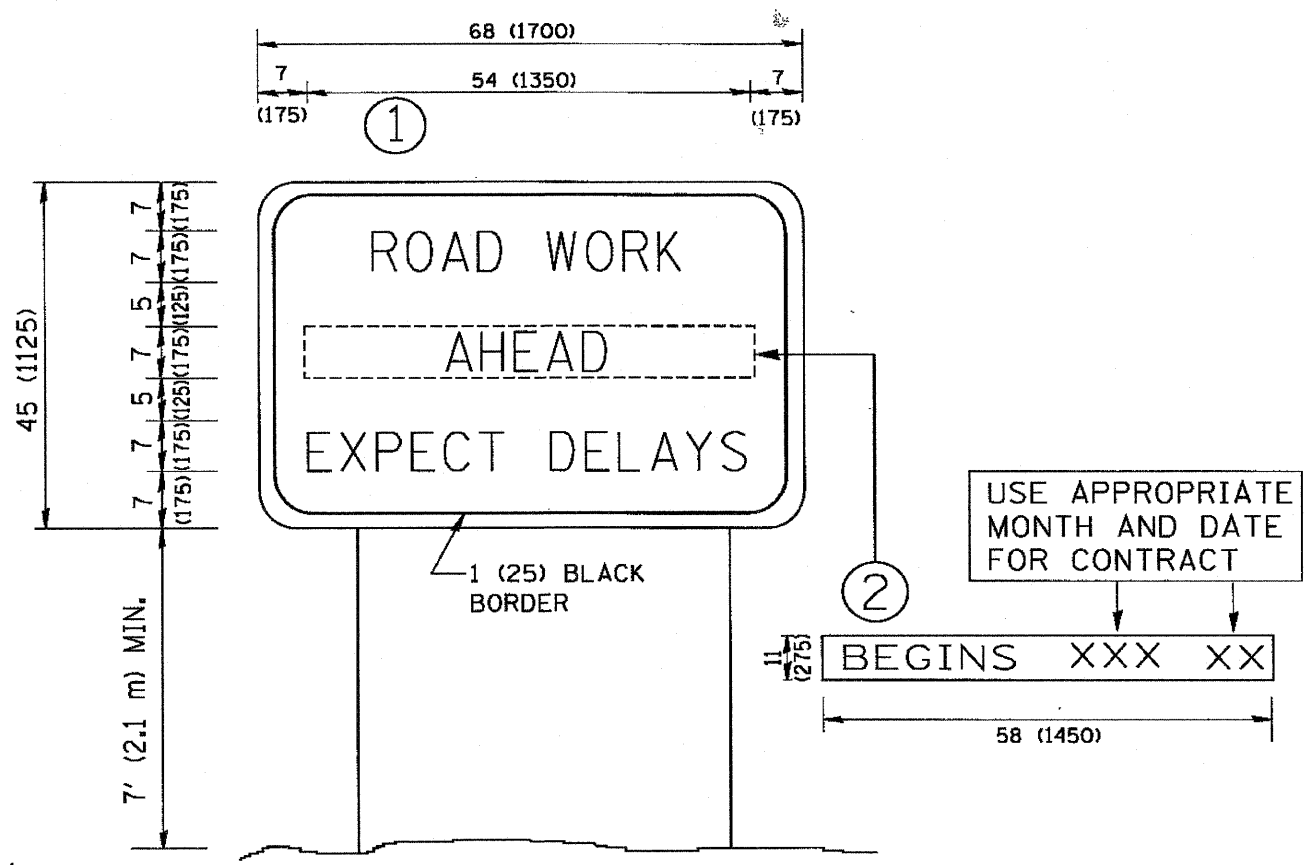
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

FILE NAME =	USER NAME = drsvokogn	DESIGNED - EVERS	REVISED - T. RAMMACHER 10-27-94
ca:\pwwork\paword\drsvokogn\08180315\3.dgn		DRAWN -	REVISED - C. JUCIUS 09-09-09
	PLOT SCALE = 58.800 / DL	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		345	2009-085 TS	COOK	39	38
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	CONTRACT NO. 60127		
FED. ROAD DIST. NO. 7 [ILLINOIS] FED. AID PROJECT						



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 = W:\chrsnd\22v34\to22.dgn	USER NAME = gaglencbs	DESIGNED - DRAWN -	REVISED - REVISED -
		PLDT SCALE = 50,000 / IN.	REVISED - T. RAMMACHER 02-02-99
		PLDT DATE = 1/4/2008	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. 345	SECTION 2009-085 TS	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 39
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				CONTRACT NO. 60127