

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

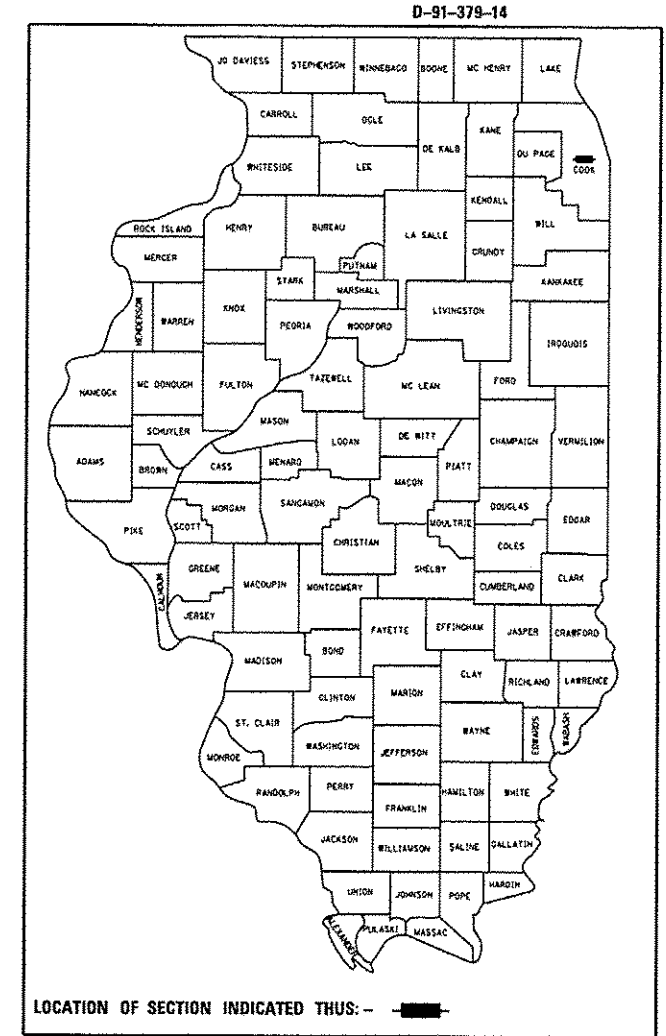
F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
--	2014-043TS	COOK	61	1
		ILLINOIS	CONTRACT NO. 60Y41	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

**PROPOSED
HIGHWAY PLANS**

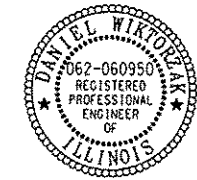
**VARIOUS LOCATIONS IN SOUTH COOK COUNTY / CONTRACT #6
LIGHT EMITTING DIODE (LED) INSTALLATION**

**2014-043TS
COOK COUNTY
D-91-379-14**



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

Signed *Daniel Wiktorzak*
DANIEL WIKTORZAK, P.E. IL. Lic. No. 062-060950
Expires 11-30-2015
Date 7/9/14

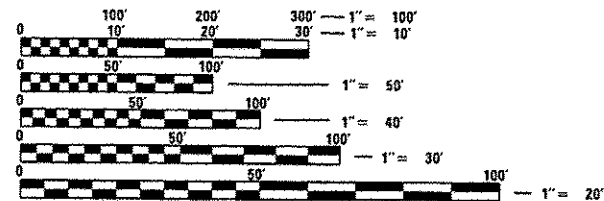


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED John D. Baranzelli 20 14
John D. Baranzelli DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
Aug 15 20 14
John D. Baranzelli, P.E. ENGINEER OF DESIGN AND ENVIRONMENT
Aug 15 20 14
Chris Cosman, P.E. DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

HIGHWAY STANDARDS

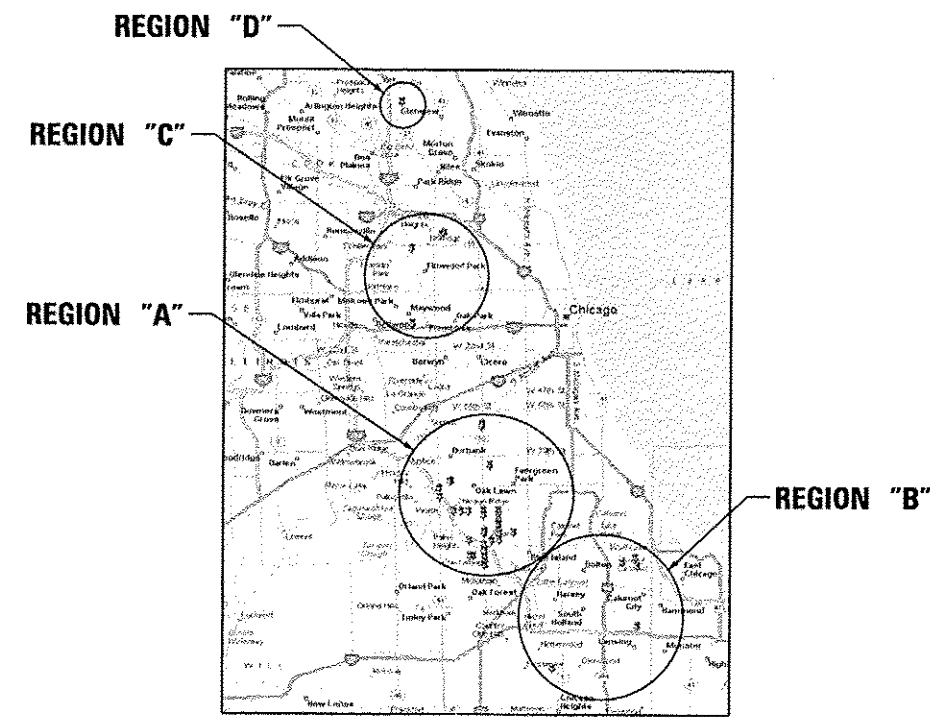
- 701006-05 OFF-ROAD OPERATIONS 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
- 701101-04 OFF-ROAD OPERATIONS MULTILANE, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
- 701701-09 URBAN LANE CLOSURE MULTILANE INTERSECTION
- 701901-03 TRAFFIC CONTROL DEVICES
- 720001-01 SIGN PANEL MOUNTING DETAIL
- 720006-04 SIGN PANEL ERECTION DETAILS
- 857001-01 STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
- 862001-01 UNINTERRUPTABLE POWER SUPPLY (UPS)
- 880001-01 SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION
- 880006-01 TRAFFIC SIGNAL MOUNTING DETAILS



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

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

PROJECT MANAGER: DARYLE DREW
PROJECT ENGINEER: LUKASZ POCIECHA
CONTRACT NO. 60Y41



COOK COUNTY
LOCATION MAP
SEE SHEET NO. 3 & 4



PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS



INDEX OF SHEETS

- 1 COVER SHEET
2 INDEX OF SHEETS & GENERAL NOTES
3-4 LOCATION MAP
5-10 SUMMARY OF QUANTITIES
11-17 DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS

TRAFFIC SIGNAL PLANS:

Table with columns: PAGE, TS, INTERSECTION NAME. Lists 61 entries of traffic signal plans including intersections like IL ROUTE 50 (CICERO AVENUE) AT 128TH PLACE, IL ROUTE 50 (CICERO AVENUE) AT 111TH STREET, etc.

GENERAL NOTES:

1. CONTRACTOR SHALL REPLACE ALL METAL MOUNTING BRACKETS AT ALL RETROFIT SIGNAL HEAD INTERSECTIONS OR AS DIRECTED BY THE ENGINEER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CORRESPONDING SIGNAL HEAD, LED, RETROFIT PAY ITEM OF THE TYPE AND NUMBER OF SIGNAL HEADS, FACES, AND SECTIONS AS SPECIFIED IN THE PLANS.

2. CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM PAINTED POSTS THAT ARE INDICATED FOR REPLACEMENT TO A NEW POSTS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE COST OF REMOVAL, RELOCATION AND ANY NEW MOUNTING HARDWARE NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE TRAFFIC SIGNAL POST, GALVANIZED STEEL PAY ITEM OF THE LENGTH AS SPECIFIED IN THE PLANS.

3. DUE TO THE PRESENCE OF A RED LIGHT RUNNING (RLR) CAMERA FOR THE BELOW LISTED LOCATIONS, CONTRACTOR SHALL NOTIFY THE VILLAGE AND RLR CAMERA COMPANY PRIOR TO THE START OF CONSTRUCTION. THE VILLAGE OR THE RLR CAMERA COMPANY SHALL MAKE THE CAMERA INOPERATIVE FOR THE TIME OF CONSTRUCTION. ANY RLR CAMERA EQUIPMENT THAT IS IN CONFLICT WITH THE PROPOSED CONSTRUCTION SHALL BE REMOVED BY ITS RESPECTIVE OWNERS PRIOR TO THE START OF CONSTRUCTION.

RLR CAMERA LOCATION:
100 - IL RTE 171/1ST AVE AT I-290 EISENHOWER EXPRESSWAY/HARRISON ST
VILLAGE OF MAYWOOD 40 MADISON STREET MAYWOOD, IL 60153 708-450-6300
AMERICAN TRAFFIC SOLUTIONS 1330 W. SOUTHERN AVE. TEMPE, AZ 85282 480-443-7000

4. AT LOCATIONS ON THE PLANS WHERE TRAFFIC SIGNAL POST REMOVAL AND NEW TRAFFIC SIGNAL POST INSTALLATIONS ARE SPECIFIED, THE CONTRACTOR SHALL INSPECT THE EXISTING POST FOUNDATIONS. PRIOR TO REMOVING THE EXISTING TRAFFIC SIGNAL POST TO BE REPLACED THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING ANCHOR BOLT IS ACCEPTABLE FOR REUSE WITH A NEW POST. IF THE EXISTING ANCHOR BOLT CONDITION IS NOT ACCEPTABLE, THE CONTRACTOR SHALL REPLACE ANCHOR BOLT AS DIRECTED BY THE ENGINEER. ANCHOR BOLT REPLACEMENT WILL BE PAID FOR AS "REMOVE AND REPLACE ANCHOR BOLTS". "REMOVE AND REPLACE ANCHOR BOLTS" PAY ITEM QUANTITIES SHOWN ARE NOMINAL AND ONLY TO BE UTILIZED AS APPROVED BY THE ENGINEER.

5. ANY ADDITIONAL CABLE LENGTHS NECESSARY FOR THE PROPER INSTALLATION OF AN UNINTERRUPTABLE POWER SUPPLY, GROUND MOUNTED DUE TO THE LARGER DISTANCE AWAY FROM THE CONTROLLER CABINET SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE UNINTERRUPTABLE POWER SUPPLY, GROUND MOUNTED PAY ITEM.

6. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION. THIS SHALL INCLUDE LOCATING THE MAST ARM FOUNDATIONS AND VERIFYING THE MAST ARM LENGTHS.

7. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE ORDERING ANY MATERIALS AND STARTING ANY WORK. FOR LOCATIONS OF UTILITIES, LOCALLY OWNED EQUIPMENT, LEASED ENFORCEMENT CAMERA SYSTEM FACILITIES AND IDOT UNDERGROUND FACILITIES, CONTACT THE LOCAL COUNTIES, MUNICIPALITIES AND IDOT FOR LOCATES. THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811, IN THE CITY OF CHICAGO CONTACT DIGGER AT (312) 744-7000 FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION REQUIRED).

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

9. PARTIAL PAYMENT AS DESCRIBED IN ARTICLE 109.07(b) OF THE STANDARD SPECIFICATIONS WILL NOT BE ALLOWED FOR ITEMS INCLUDED IN THIS CONTRACT.

10. A CONCRETE APRON SHALL NOT BE REQUIRED FOR NEW UPS INSTALLATIONS ADJACENT TO EXISTING IMPERVIOUS SURFACES THAT SATISFY THE NEED OF THE CONCRETE APRON, AS DIRECTED BY THE ENGINEER.

FILE NAME: M:\proj\1481\2103\PTB 168-01\SINGH\DOT VPR\VPR\DOT14-002 South Cook Co. LED\EN\Design\REV\Sheet Files\2008\index.dgn

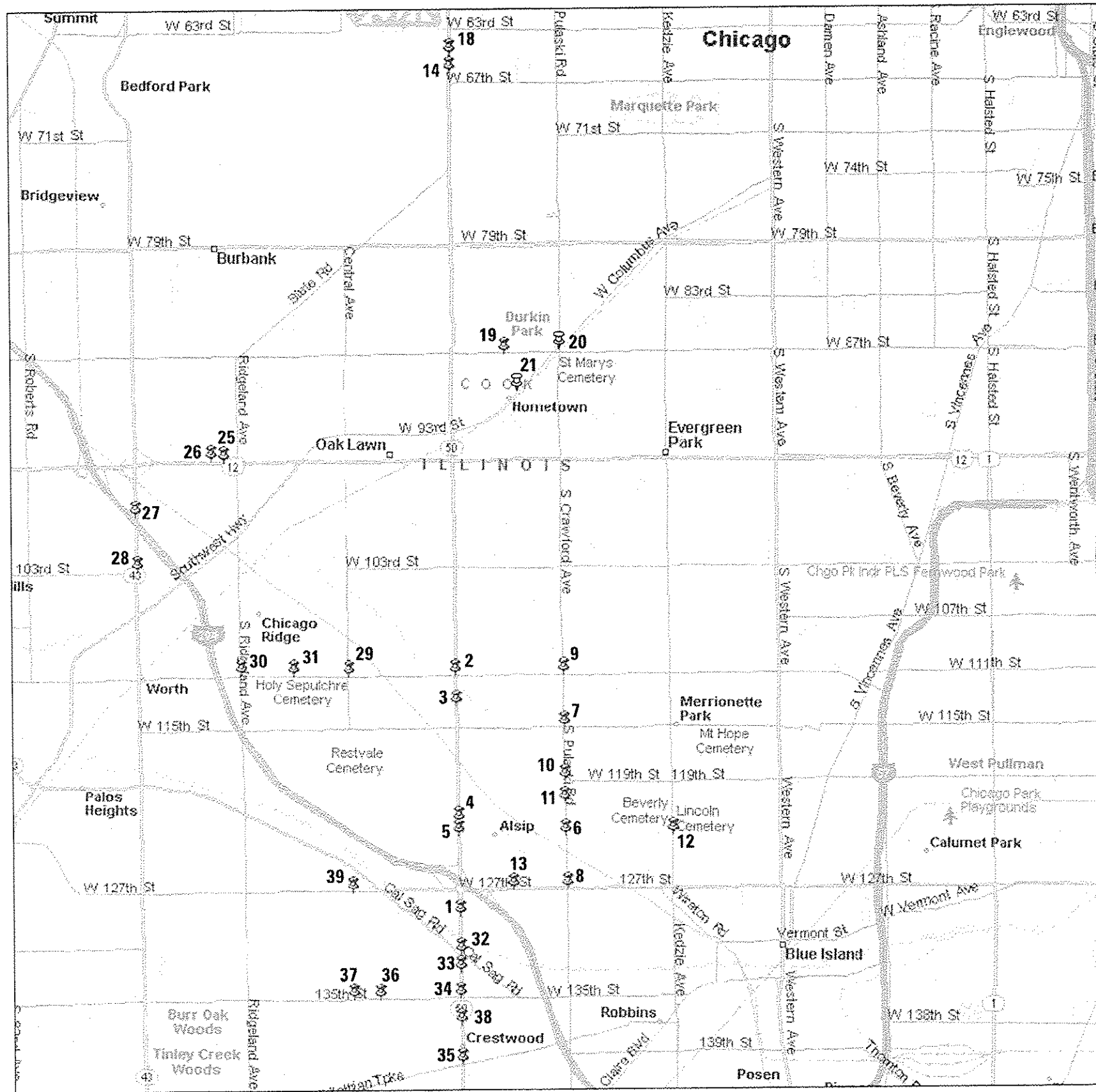
Table with columns: USER NAME, DESIGNED, DRAWN, CHECKED, DATE, REVISED, REVISIONS.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS & GENERAL NOTES

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

Table with columns: F.A. RTE., SECTION, COUNTY, TOTAL SHEETS, SHEET NO., CONTRACT NO. 60Y41.



REGION "A"

LOCATION NO.	REGION	TS. NO.	LOCATION
1.	A	125	IL ROUTE 50 (CICERO AVENUE) AT 128TH PLACE
2.	A	2510	IL ROUTE 50 (CICERO AVENUE) AT 111TH STREET
3.	A	2515	IL ROUTE 50 (CICERO AVENUE) AT 113TH STREET (STATE BANK OF ALSIP)
4.	A	2555	IL ROUTE 50 (CICERO AVENUE) AT 122ND STREET
5.	A	2560	IL ROUTE 50 (CICERO AVENUE) AT 123RD STREET
6.	A	3936	123RD STREET AT CRAWFORD AVENUE (PULASKI ROAD)
7.	A	3960	115TH STREET AT CRAWFORD AVENUE (PULASKI ROAD)
8.	A	3990	127TH STREET AT CRAWFORD AVENUE (PULASKI ROAD)
9.	A	4270	111TH STREET AT CRAWFORD AVENUE (PULASKI ROAD)
10.	A	4890	119TH STREET AT CRAWFORD AVENUE (PULASKI ROAD)
11.	A	4892	CRAWFORD AVENUE (PULASKI ROAD) AT JEWEL/ALDI (120TH STREET)
12.	A	5385	KEDZIE AVENUE AT 123RD STREET
13.	A	20965	127TH STREET AT KOSTNER AVENUE
14.	A	2456	IL ROUTE 50 (CICERO AVENUE) AT 66TH STREET
15.	B	4222	BURNHAM AVENUE AT 142ND STREET
16.	B	4530	140TH STREET AT TORRENCE AVENUE (IL ROUTE 83)
17.	B	20615	BRAINARD AVENUE AT HEGEWISCH METRA STATION
18.	A	2455	IL ROUTE 50 (CICERO AVENUE) AT 65TH STREET
19.	A	3915	87TH STREET AT KOSTNER AVENUE
20.	A	3920	SOUTHWEST HIGHWAY/PULASKI ROAD/KOMENSKY AVENUE AT 87TH STREET
21.	A	10750	IL ROUTE 7 (SOUTHWEST HIGHWAY) AT DUFFY AVENUE
22.	C	4115	IL ROUTE 171 (CUMBERLAND AVENUE) AT ADDISON STREET
23.	C	5095	FOREST PRESERVE DRIVE AT MONTROSE AVENUE
24.	B	5710	RIEDEL ROAD AT HOLBROOK ROAD
25.	A	470	U.S. ROUTES 12/20 (95TH STREET) AT CHICAGO RIDGE MALL DRIVE (ENTRANCE "B")
26.	A	505	U.S. ROUTES 12/20 (95TH STREET) AT CHICAGO RIDGE MALL DRIVE (ENTRANCE "A")/NASHVILLE AVENUE
27.	A	2200	IL ROUTE 43 (HARLEM AVENUE) AT 99TH STREET
28.	A	2205	IL ROUTE 43 (HARLEM AVENUE) AT 103RD STREET
29.	A	3945	111TH STREET AT CENTRAL AVENUE
30.	A	3950	111TH STREET AT RIDGELAND AVENUE
31.	A	21220	111TH STREET AT AUSTIN AVENUE
32.	A	2645	IL ROUTE 50-83 (CICERO AVENUE) AT IL ROUTE 83 (CAL SAG ROAD)
33.	A	2649	IL ROUTE 50-83 (CICERO AVENUE) AT RIVERCREST EAST ENTRANCE
34.	A	2650	IL ROUTE 50-83 (CICERO AVENUE) AT 135TH STREET
35.	A	2655	IL ROUTE 50-83 (CICERO AVENUE) AT MIDLOTHIAN TURNPIKE
36.	A	4030	135TH STREET AT LONG AVENUE
37.	A	4040	135TH STREET AT CENTRAL AVENUE
38.	A	20366	IL ROUTE 50-83 (CICERO AVENUE) AT 137TH STREET
39.	A	3985	127TH STREET AT CENTRAL AVENUE
40.	D	5405	PFINGSTEN ROAD AT EAST LAKE AVENUE
41.	C	5100	FOREST PRESERVE DRIVE AT OAK PARK AVENUE
42.	C	100	IL ROUTE 171/1ST AVENUE AT I-290 EISENHOWER EXPRESSWAY/HARRISON STREET

SOUTH COOK COUNTY

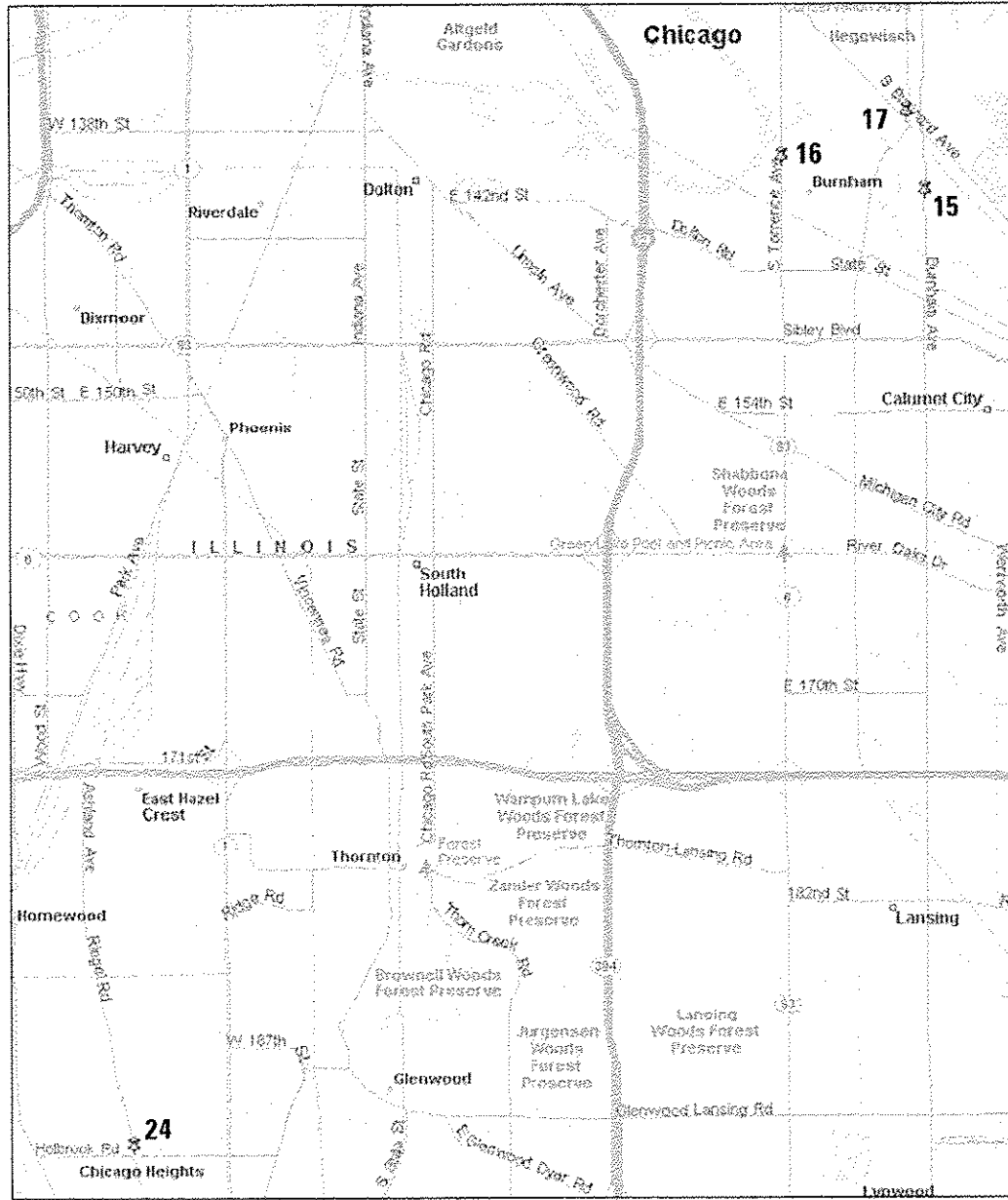
FILE NAME: P:\p03\1418\2123 P18 183 811 SINGH 1001 VAR-VAR\14-822 South Cook Co. LED\6-Caspe\CA\Sheet 1.dwg User: JDM Date: 7/9/2014

USER NAME * .USERNAME	DESIGNED - DW	REVISED -
	DRAWN - CC	REVISED -
PLOT SCALE = 20,0000' / 1"	CHECKED - JDM	REVISED -
PLOT DATE = 7/9/2014	DATE -	REVISED -

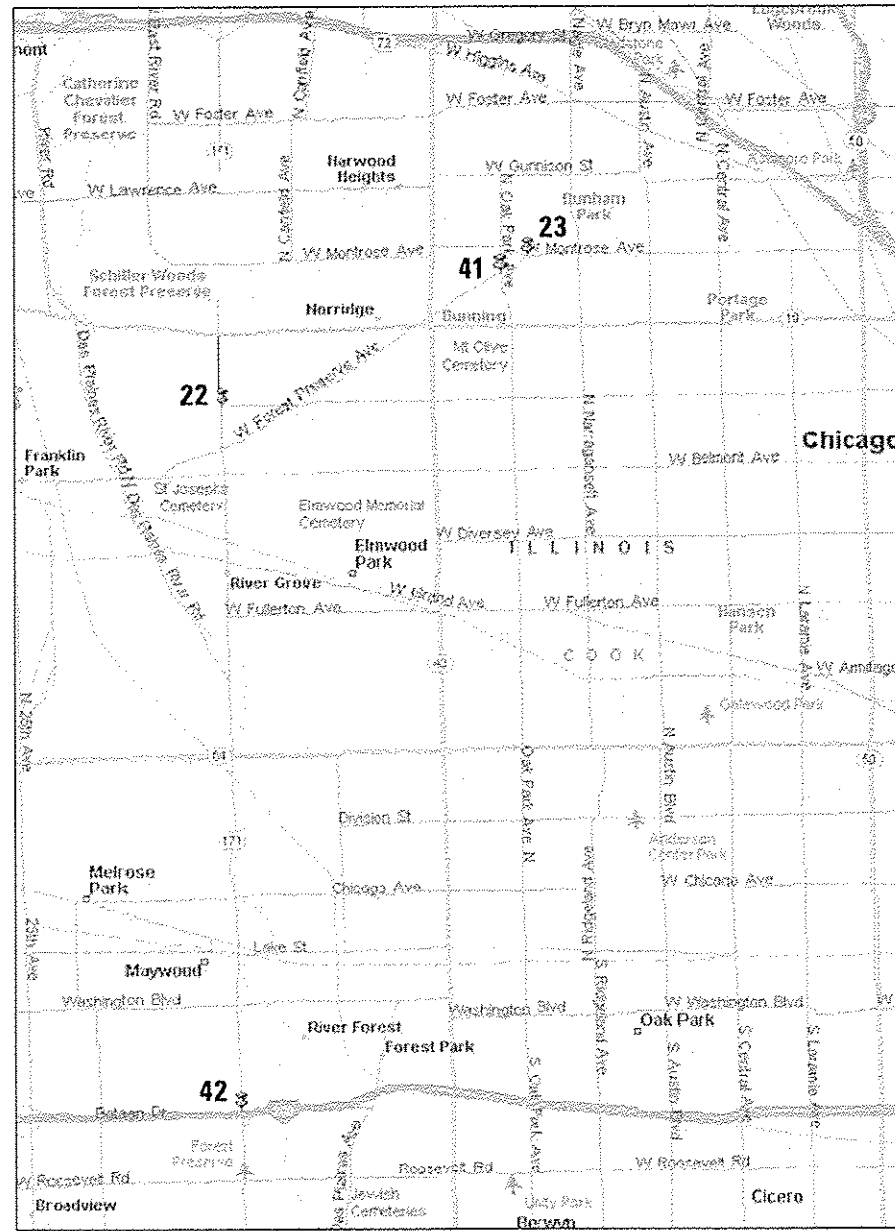
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

LOCATION MAP (SHEET 1 OF 2)				
SCALE: NTS	SHEET NO.	OF SHEETS	STA.	TO STA.

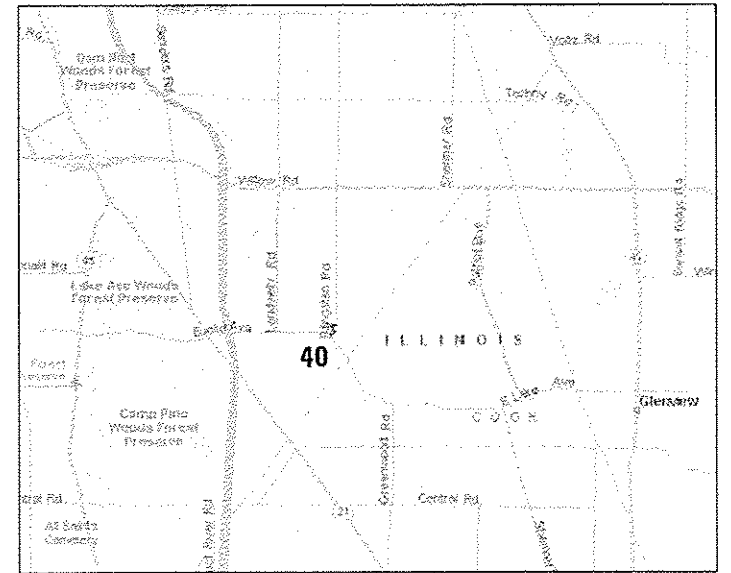
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	3
CONTRACT NO. 60Y41				



REGION "B"



REGION "C"



REGION "D"

SOUTH COOK COUNTY

FILE NAME: I:\Projects\141812\141812_P1B_160-011_SINGR_IDOT_VPR-VPR\VD14-012_South_Cook_Co_LED\Map\Design\Map_Sheet_Files\COOK_LocationMap2.dgn

USER NAME = USERNAME	DESIGNED - DW	REVISED -
	DRAWN - CC	REVISED -
PLOT SCALE = 24,000' / 1"	CHECKED - JDH	REVISED -
PLOT DATE = 7/9/2014	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

LOCATION MAP (SHEET 2 OF 2)	
SCALE: NTS	SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	90	4
CONTRACT NO. 60Y41			ILLINOIS	



SUMMARY OF QUANTITIES HEADING LEGEND

COLUMN NUMBER	TS*	INTERSECTION	STATE	FUNDING PARTICIPATION												
				ALSIP	BEDFORD PARK	BURNHAM	CHICAGO	HOMETOWN	HARWOOD HEIGHTS	CHICAGO RIDGE	CRESTWOOD	GLENVIEW	FIRST NATIONAL BANK OF BLUE ISLAND	METRA	CENTRO PROPERTIES GROUP	
3	125	IL RTE 50 (CICERO AVE) AT 128TH PL	95%	5%												
1	2510	IL RTE 50 (CICERO AVE) AT 111TH ST	100%													
5	2515	IL RTE 50 (CICERO AVE) AT 113TH ST (STATE BANK OF ALSIP)	95%										5%			
3	2555	IL RTE 50 (CICERO AVE) AT 122ND ST	95%	5%												
3	2560	IL RTE 50 (CICERO AVE) AT 123RD ST	95%	5%												
1	3936	123RD ST AT CRAWFORD AVE (PULASKI RD)	100%													
2	3960	115TH ST AT CRAWFORD AVE (PULASKI RD)	97.5%	2.5%												
1	3990	127TH ST AT CRAWFORD AVE (PULASKI RD)	100%													
1	4270	111TH ST AT CRAWFORD AVE (PULASKI RD)	100%													
2	4890	119TH ST AT CRAWFORD AVE (PULASKI RD)	97.5%	2.5%												
3	4892	CRAWFORD AVE (PULASKI RD) AT JEWEL/ALDI (120TH ST)	95%	5%												
1	5385	KEOZIE AVE AT 123RD ST	100%													
4	20965	127TH ST AT KOSTNER AVE	94%	6%												
6	2456	IL RTE 50 (CICERO AVE) AT 66TH ST	96.7%		3.3%											
7	4222	BURNHAM AVE AT 142ND ST	95%			5%										
7	4530	140TH ST AT TORRENCE AVE (IL RTE 83)	95%			5%										
8	20615	BRAINARD AVE AT HEGEWISCH METRA STATION	95%											5%		
9	2455	IL RTE 50 (CICERO AVE) AT 65TH ST	95%				5%									
11	3915	87TH ST AT KOSTNER AVE	95%				2.5%	2.5%								
1	3920	SOUTHWEST HIGHWAY/PULASKI RD/KOMENSKY AVE AT 87TH ST	100%													
10	10750	IL RTE 7 (SOUTHWEST HIGHWAY) AT DUFFY AVENUE	95%					5.0%								
1	4115	IL RTE 171 (CUMBERLAND AVE) AT ADDISON ST	100%													
12	5095	FOREST PRESERVE DR AT MONTROSE AVE	95%				1.7%		3.3%							
1	5710	RIEGEL RD AT HOLBROOK RD	100%													
14	470	US RTE 12-US RTE 20 (95TH ST) AT CHICAGO RIDGE MALL DR (ENTRANC	96.7%							3.3%						
15	505	US RTE 12-US RTE 20 (95TH ST) AT CHICAGO RIDGE MALL DR (ENTRANC	95%							5%						
14	2200	IL RTE 43 (HARLEM AVE) AT 99TH ST	96.7%							3.3%						
13	2205	IL RTE 43 (HARLEM AVE) AT 103RD ST	97.5%							2.5%						
1	3945	111TH ST AT CENTRAL AVE	100%													
1	3950	111TH ST AT RIDGELAND AVE	100%													
15	21220	111TH ST AT AUSTIN AVE	95%							5%						
18	2645	IL RTE 50-IL RTE 83 (CICERO AVE) AT IL RTE 83 (CAL SAG RD)	95%								5%					
19	2649	IL RTE 50-IL RTE 83 (CICERO AVE) AT RIVERCREST EAST ENTRANCE	95%													
16	2650	IL RTE 50-IL RTE 83 (CICERO AVE) AT 135TH ST	97.5%								2.5%					
1	2655	IL RTE 50-IL RTE 83 (CICERO AVE) AT MIDLOTHIAN TURNPIKE	100%													
17	4030	135TH ST AT LONG AVE	96.7%								3.3%					
1	4040	135TH ST AT CENTRAL AVE	100%													
18	20366	IL RTE 50-IL RTE 83 (CICERO AVE) AT 137TH ST	95%								5%					
1	3985	127TH ST AT CENTRAL AVE	100%													
20	5405	PFINGSTEN RD AT EAST LAKE AVE	97.5%									2.5%				
21	5100	FOREST PRESERVE DR AT OAK PARK AVE	97.5%							2.5%						
1	100	IL RTE 171 (1ST AVE) AT I-290 (EISENHOWER EXPY/HARRISON ST)	100%													

FILE NAME: I:\p\14181\2143 P1B 168 011 S1A01 1001 VAP-VARI-V014-012_South_Cook_Co_LED\6\Design\00\Sheet_Files\A000K_S001.dgn

USER NAME: USERNAME	DESIGNED: DW	REVISED:	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES (SHEET 1 OF 5)			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DRAWN: CC	REVISED:						2014-043TS	COOK	61	5	
PLOT SCALE: 10.0000 / in.	CHECKED: JQH	REVISED:		SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	ILLINOIS		CONTRACT NO. 60Y41		
PLOT DATE: 7/9/2014	DATE:	REVISED:									



CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE																				
				TRAFFIC SIGNAL																				
				0021																				
				URBAN																				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21				
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6																				
67100100	MOBILIZATION	L SUM	1	1																				
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1																				
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	42	14	2	4	1	1	1	2	1	1	1	1	1	2	2	1	1	2	1	1		
86400100	TRANSCEIVER - FIBER OPTIC	EACH	5	1			1	1							1	1								
87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	18	5					5	1	2	4	1											
87502490	TRAFFIC SIGNAL POST, GALVANIZED STEEL 15 FT.	EACH	5	2							2						1							
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	51	19	4			1		1	3		1	4	4	3	4		5			2		
87502520	TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	4	2				1			1													
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	45	16	1			3	2		6		2	2	4	3	2			4				
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	42	12	5			3	2		2	1	3	2		5	3		2			2		
88030070	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	5					1			1		1			2								
88030080	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	2											2										
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	17	2	1			1		1			2	4	1		1		4					

FILE NAME: M:\proj\148\2103 P1B 169-011 SIGN 1031 VAF-VAF\NO14-022_Sun& Cook Co. LED\FEN\Design\FBY\Sheet Files\CD06_S002.dgn

USER NAME = .\USERNAME.	DESIGNED - DW	REVISED -
DRAWN - CC	CHECKED - JQH	REVISED -
PLOT SCALE = 10.0000' / 1" =	DATE -	REVISED -
PLOT DATE = 7/9/2014		

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES (SHEET 2 OF 5)			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	90	6
			CONTRACT NO. 60Y41	
			[ILLINOIS]	



CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE																				
				TRAFFIC SIGNAL																				
				0021																				
				URBAN																				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21				
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	45	11	3			1		2	1		2	4	3	2	4		8		4			
88030210	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	8	2				4		1	1													
88030220	SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	5	1						1							1		1		1			
88030230	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-4 SECTION, BRACKET MOUNTED	EACH	3							1		1				1								
88030240	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	21	8	2					1	1	1			2		3		1		2			
88030250	SIGNAL HEAD, LED, 2-FACE, 1-4 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1														1							
88030310	SIGNAL HEAD, LED, 3-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2									2												
88030320	SIGNAL HEAD, LED, 3-FACE, 1-3 SECTION, 2-5 SECTION BRACKET MOUNTED	EACH	3														1		1		1			
88030330	SIGNAL HEAD, LED, 3-FACE, 2-3 SECTION, 1-5 SECTION BRACKET MOUNTED	EACH	4													2	1		1					
88055150	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2							1	1													
88055160	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	15	10								4	1											
88055165	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	2									1	1											
88055170	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	3	2										1										
88055190	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1											1										

FILE NAME: M:\proj\181\2182 P18 168 011 SINGH 1107 VAR-VAR\011-202 South Cook Co. LED\Design\Sheet Files\COOK_S003.dgn

14

USER NAME * USERNAME	DESIGNED - DW	REVISED -
PLOT SCALE = 1/8" = 1' / 1"	DRAWN - CC	REVISED -
PLOT DATE = 7/9/2014	CHECKED - JDH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES (SHEET 3 OF 5)			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	90	7
ILLINOIS			CONTRACT NO. 60Y41	



CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE																				
				TRAFFIC SIGNAL																				
				0021																				
				URBAN																				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21				
88055200	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	7	3															1	2	1			
88055350	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2																2					
88060110	COMBINATION SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION OPTICALLY PROGRAMMED, 1-3 SECTION, BRACKET MOUNTED	EACH	8	8																				
88060130	COMBINATION SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION OPTICALLY PROGRAMMED, 1-5 SECTION, BRACKET MOUNTED	EACH	2	1															1					
88060150	COMBINATION SIGNAL HEAD, LED, 2-FACE, 1-4 SECTION OPTICALLY PROGRAMMED, 1-3 SECTION, BRACKET MOUNTED	EACH	1																1					
88060180	COMBINATION SIGNAL HEAD, LED, 2-FACE, 1-5 SECTION OPTICALLY PROGRAMMED, 1-3 SECTION, BRACKET MOUNTED	EACH	2	2																				
88060405	COMBINATION SIGNAL HEAD, LED, 3-FACE, 1-3 SECTION OPTICALLY PROGRAMMED, 1-5 SECTION OPTICALLY PROGRAMMED, 1-3 SECTION, BRACKET MOUNTED	EACH	1	1																				
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	60	12	4	10	2		2	4			4	4	6	4		2	2		2	2		
88102747	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	16	6	3	2							2		1							2		
88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	113	42	4				2				8	2	8	9	8	6	4	4	12		4	
88500100	INDUCTIVE LOOP DETECTOR	EACH	37	10					4	8								10	5					
88800100	PEDESTRIAN PUSH-BUTTON	EACH	38	8	2	2			2	4	2			4	6			2	2		2	2		
89100400	ILLUMINATED SIGN, LED	EACH	1	1																				
89500100	RELOCATE EXISTING SIGNAL HEAD	EACH	12	8	4																			

FILE NAME: M:\p2\1181\2103 PTB 069-011 SIGNR EDDT VAP-VAR\VD14-082 South Cook Co. LED\Design\Sheet Files\A000K_S001.dgn

USER NAME * USERNAME	DESIGNED - DW	REVISED -
PLLOT SCALE = 10.0000 1/ in.	DRAWN - CC	REVISED -
PLLOT DATE = 7/9/2014	CHECKED - JDH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
(SHEET 4 OF 5)

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	90	8
ILLINOIS			CONTRACT NO. 60Y41	



CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE																				
				TRAFFIC SIGNAL																				
				0021																				
				URBAN																				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21				
89500200	RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	5	4				1																
89502210	MODIFY EXISTING CONTROLLER CABINET	EACH	33	12	1	4	1		2	1	1	1	1		1	2	1		2	1	1			
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	35	10	2	3	1	1	1	2	1	1	1	1	1	2	1	1	1	2	1			
Z0050400	REMOVE AND REPLACE ANCHOR BOLTS	EACH	42	15	2			1	3	1	2	5		1	2	2	2	2		3				
X8570226	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	5	1			1	1						1	1									
X8620200	UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	38	12	2	4	1	1	1	2	1	1	1	1	1	2	2	1		2	1			
X8803040	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT	EACH	2	2																				
X8803060	SIGNAL HEAD, LED, 3-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	1																	1				
X8803082	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	10	2	5															3				
X8803084	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	10	7	1															2				
X8803088	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	10	5	3															2				
X8803090	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	1	1																				
X8803210	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	6	5	1																			
X8803910	SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED RETROFIT	EACH	1																	1				

FILE NAME: \\p01\h1\2103 PTB 1659-011 SIGN II01 VAR-VAR\14-202 South Cook Co. LED\6\Design\COA\Sheet F:\s\COOK_5006.dgn

USER NAME * USERNAME	DESIGNED - DW	REVISED -
DRAWN - CC	CHECKED - JDH	REVISED -
PLOT SCALE = 10.0000' / 1" =	DATE -	REVISED -
PLOT DATE = 7/9/2014		

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES (SHEET 5 OF 5)			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	90	9
			CONTRACT NO. 60Y41	
			[ILLIN015]	



TRAFFIC SIGNAL LEGEND

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

RAILROAD SYMBOLS

	EXISTING	PROPOSED
RAILROAD CONTROL CABINET		
RAILROAD CANTILEVER MAST ARM		
FLASHING SIGNAL		
CROSSING GATE		
CROSSBUCK		

FILE NAME = M:\p\03\1481\2103 PTB 168-011 SINGH IDOT VAR-VAR\WD14-002 South Cook Co.LED\65 Design\CAD\Sheet Files\IDOT DETAIL.dgn

USER NAME = .USERNAME.	DESIGNED - DW	REVISED -
PLOT SCALE = 20.0000' / 1"	DRAWN - CC	REVISED -
PLOT DATE = 7/9/2014	CHECKED - JDH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE - STANDARD TRAFFIC SIGNAL DESIGN DETAILS
 SCALE: N.T.S. SHEET NO. 1 OF 7 SHEETS STA. TO STA.

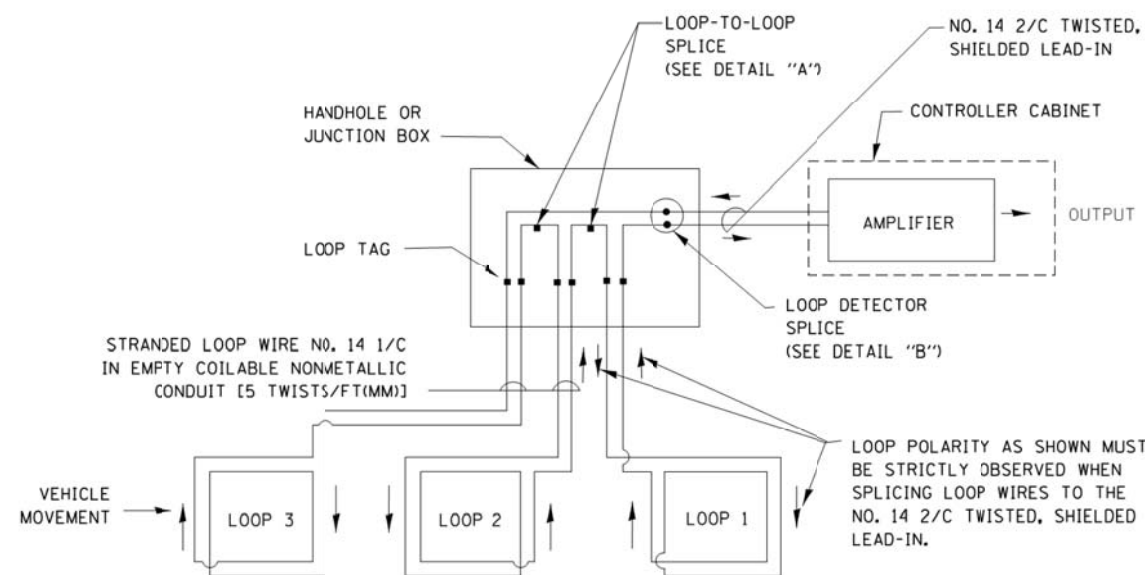
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	11
ILLINOIS			CONTRACT NO. 60Y41	

TS-1



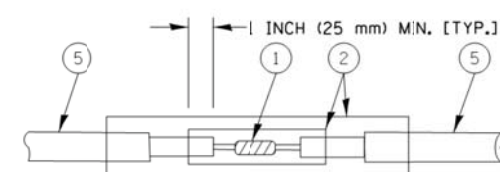
LOOP DETECTOR NOTES

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

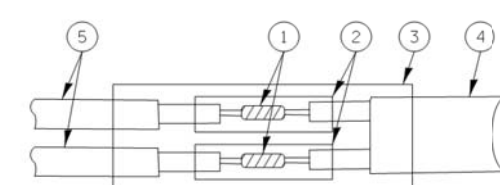


DETECTOR LOOP WIRING SCHEMATIC

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

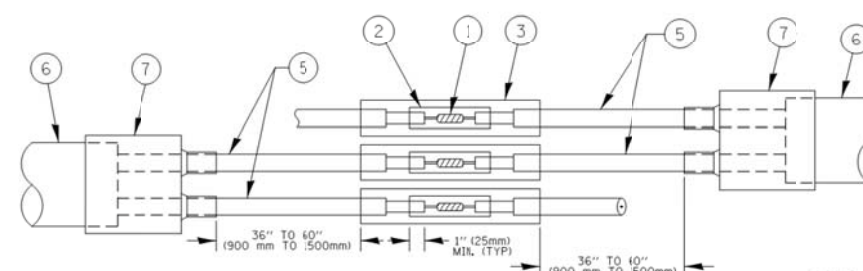


DETAIL "A"
LOOP-TO-LOOP SPLICE

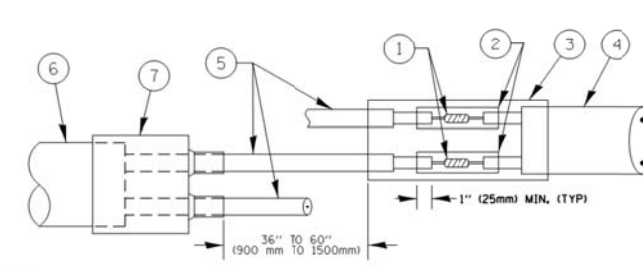


DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE

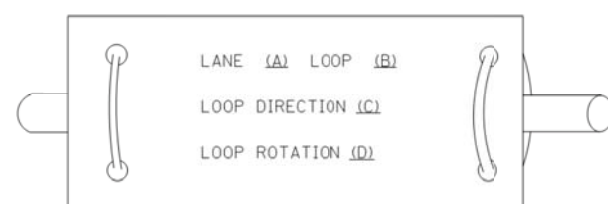


DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

PREFORMED LOOP

LOOP DETECTOR SPLICE

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.

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

FILE NAME = M:\p\03\1481\2183 PTB 168-011 SINGH.IDOT VAR-VAR\WD14-002 South Cook Co.LED16 Design\CAD\Sheet Files\IDOT DETAIL.dgn

USER NAME = .USERNAME.	DESIGNED - DW	REVISED -
	DRAWN - CC	REVISED -
PLOT SCALE = 20.0000 ' / in.	CHECKED - JDH	REVISED -
PLOT DATE = 7/9/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE - STANDARD TRAFFIC SIGNAL DESIGN DETAILS

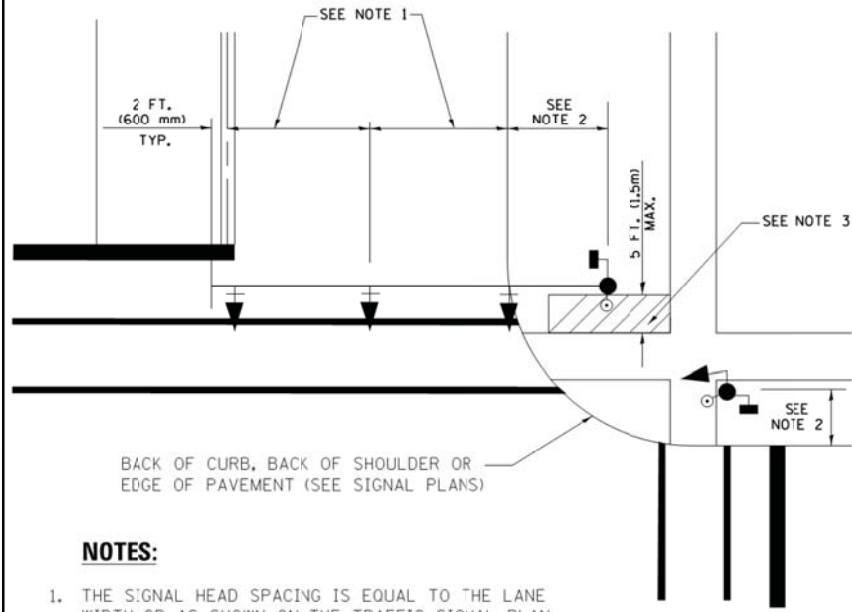
SCALE: N.T.S. SHEET NO. 2 OF 7 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	12
			CONTRACT NO. 60Y41	
ILLINOIS				

TS-2



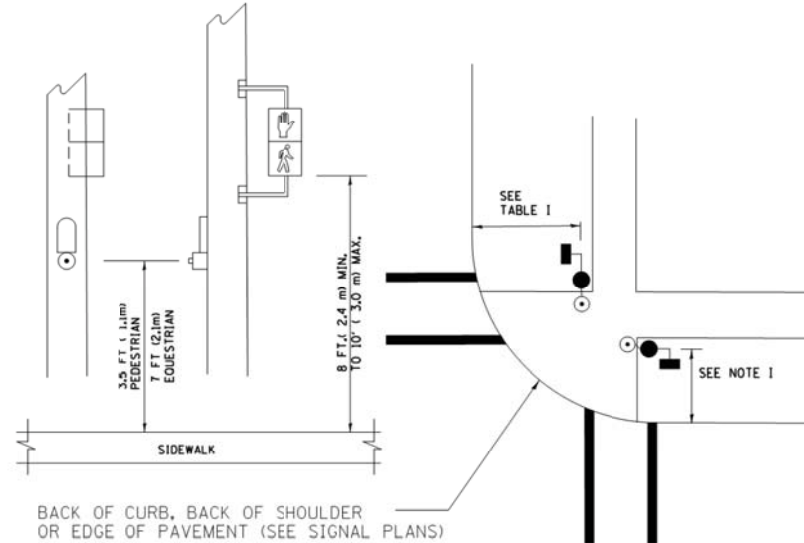
**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR
FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN
WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.**



NOTES:

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

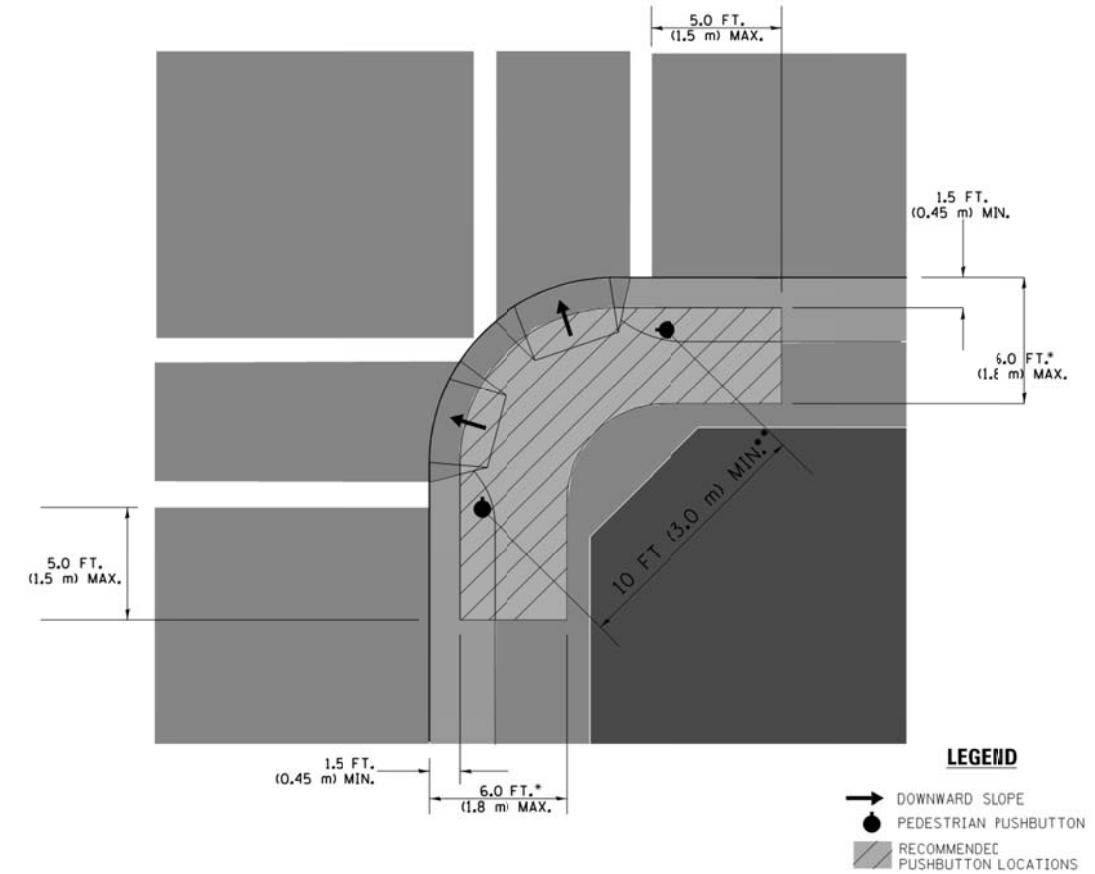
**PEDESTRIAN SIGNAL POST
AND
PEDESTRIAN PUSH BUTTON POST**



NOTES:

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

RECOMMENDED PUSHBUTTON LOCATIONS



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

NOTES:

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

TRAFFIC SIGNAL EQUIPMENT OFFSET

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

NOTES:

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

FILE NAME = M:\p\2\1481\2103 PTB 168-011 SINGH.IDDT VAR-VAR\WD14-002 South Cook Co.LED16 Design\CAD\Sheet_Files\IDDT DETAIL.dgn

USER NAME = .USERNAME.	DESIGNED - DW	REVISED -
PLOT SCALE = 20.0000' / in.	DRAWN - CC	REVISED -
PLOT DATE = 7/9/2014	CHECKED - JDH	REVISED -
	DATE -	REVISED -

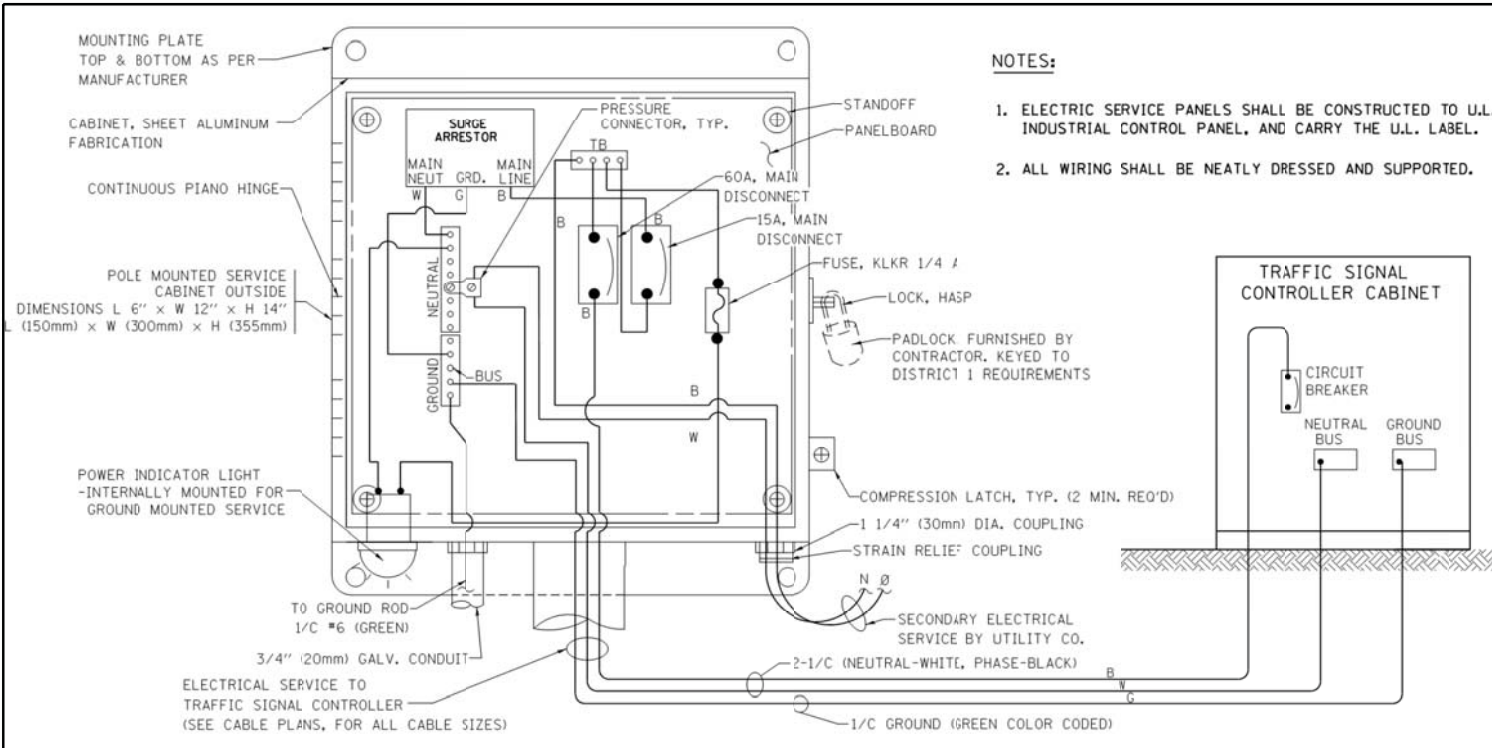
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE - STANDARD TRAFFIC SIGNAL DESIGN DETAILS

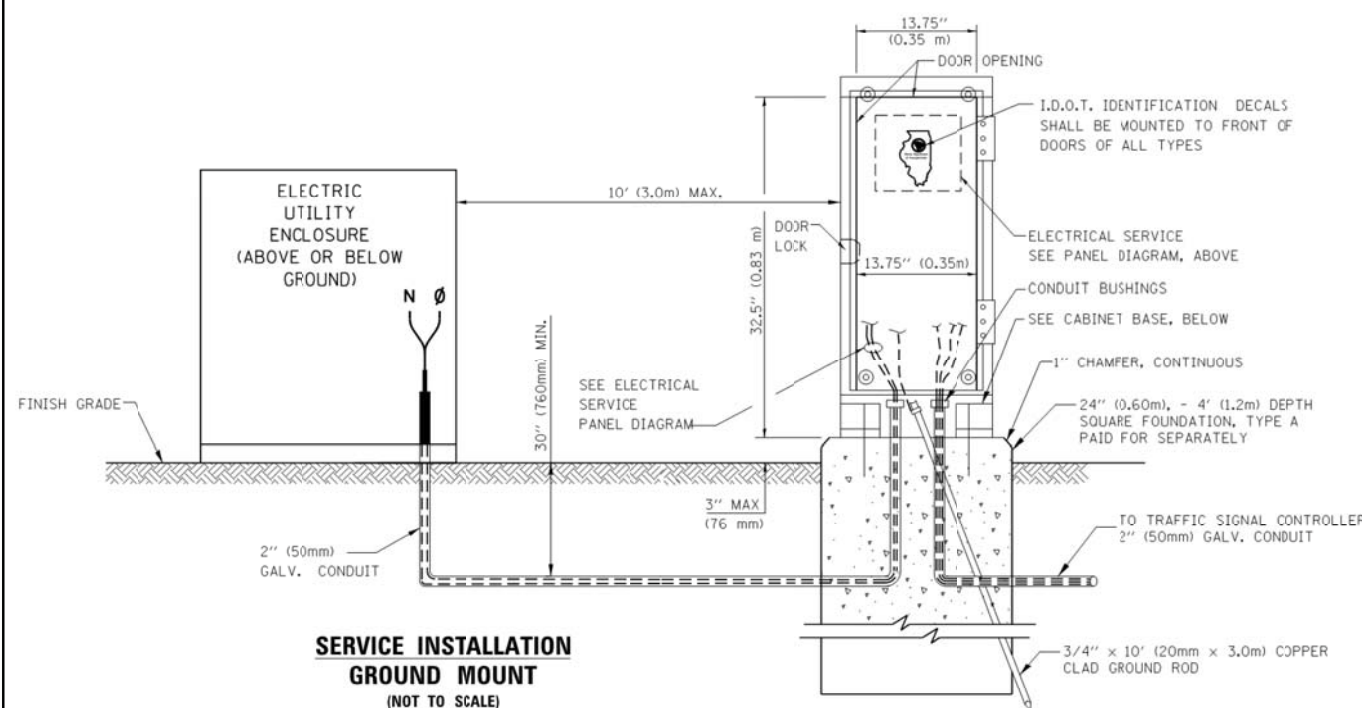
SCALE: N.T.S. SHEET NO. 3 OF 7 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	13
ILLINOIS			CONTRACT NO. 60Y41	

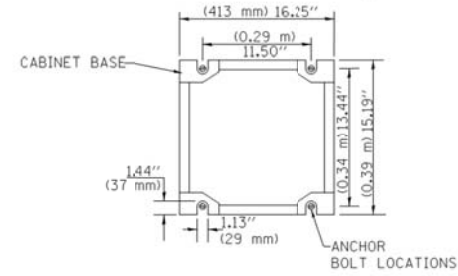
TS-3



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

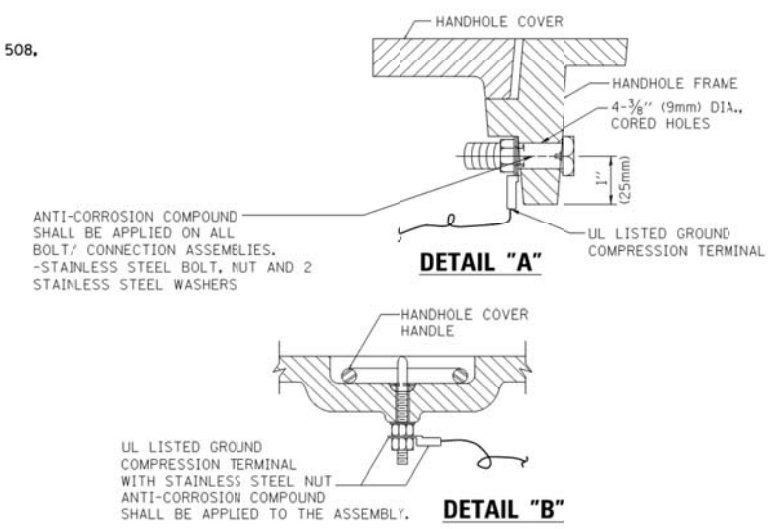


SERVICE INSTALLATION GROUND MOUNT (NOT TO SCALE)

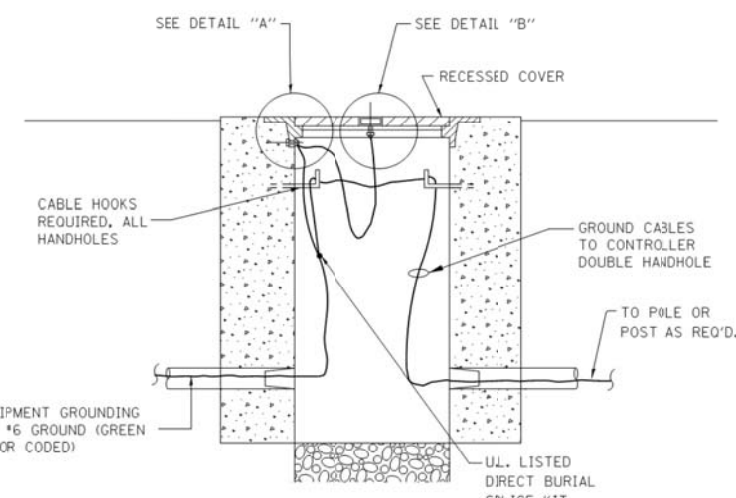


CABINET - BASE BOLT PATTERN (NOT TO SCALE)

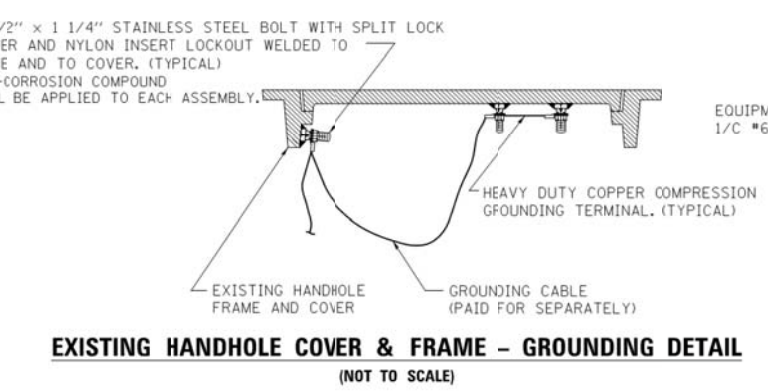
- NOTES:**
1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
 2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.



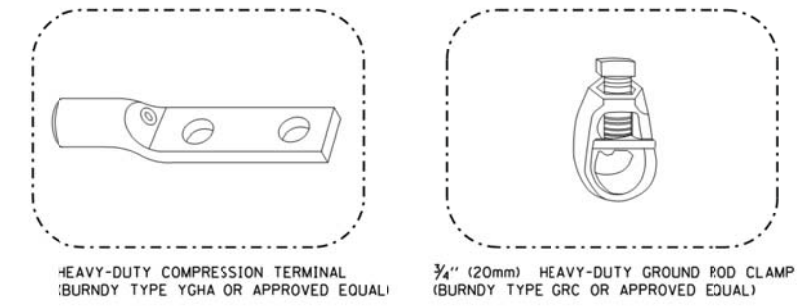
- NOTES:**
- GROUNDING SYSTEM**
1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED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



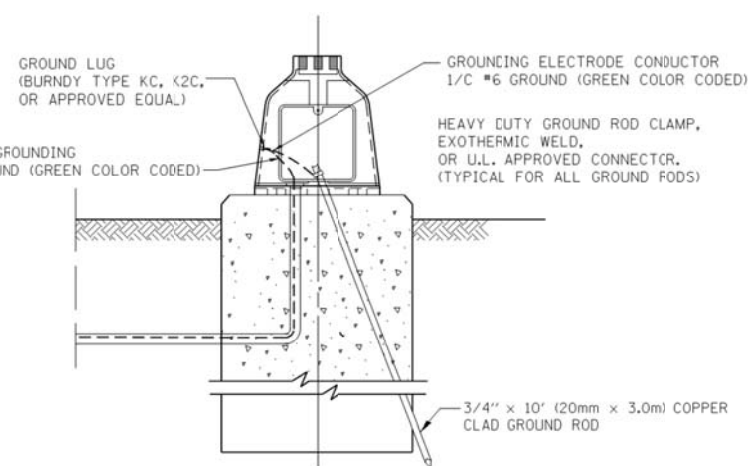
HANDHOLE COVER & FRAME - GROUNDING DETAIL (NOT TO SCALE)



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



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



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

FILE NAME = M:\p\1481\2103 PTB 168-011 SINGH.IDDT VAR-VAR\WD14-002 South Cook Co.LED+6 Design\CAD Sheet Files\IDDT DETAIL.dgn

USER NAME = .USERNAME.	DESIGNED - DW	REVISED -
	DRAWN - CC	REVISED -
PLOT SCALE = 20.0000' / in.	CHECKED - JDH	REVISED -
PLOT DATE = 7/9/2014	DATE -	REVISED -

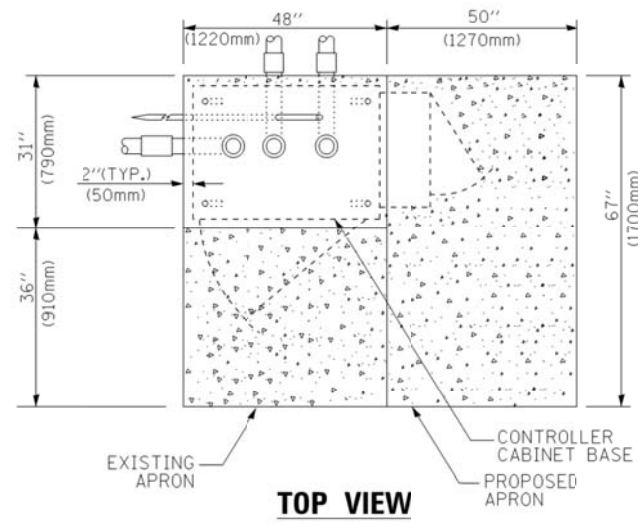
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE - STANDARD TRAFFIC SIGNAL DESIGN DETAILS

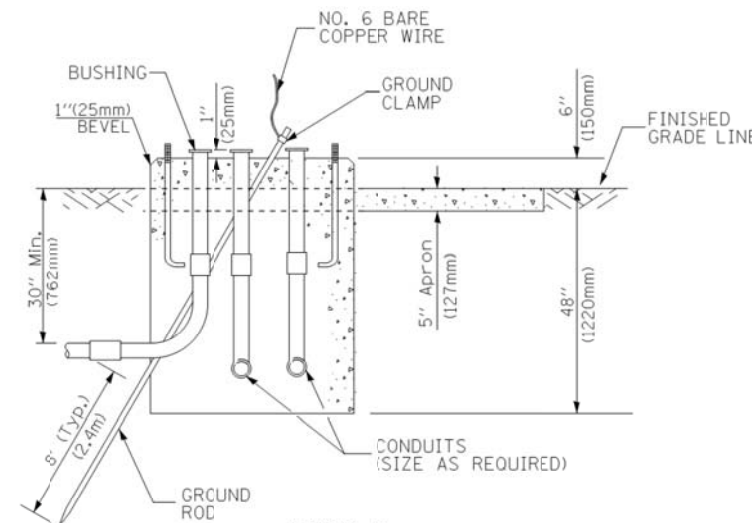
SCALE: N.T.S. SHEET NO. 4 OF 7 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	14
			CONTRACT NO. 60Y41	
ILLINOIS				

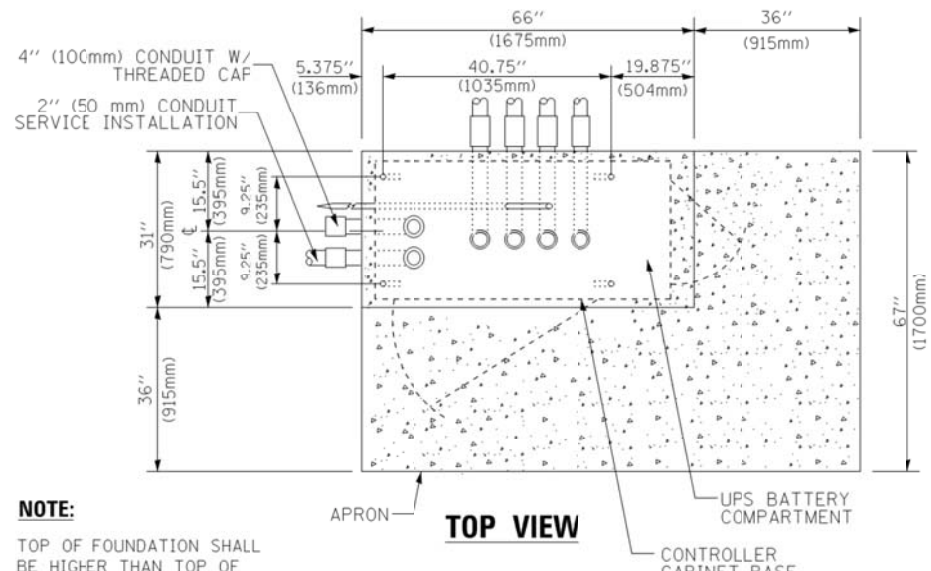
TS-4



TOP VIEW

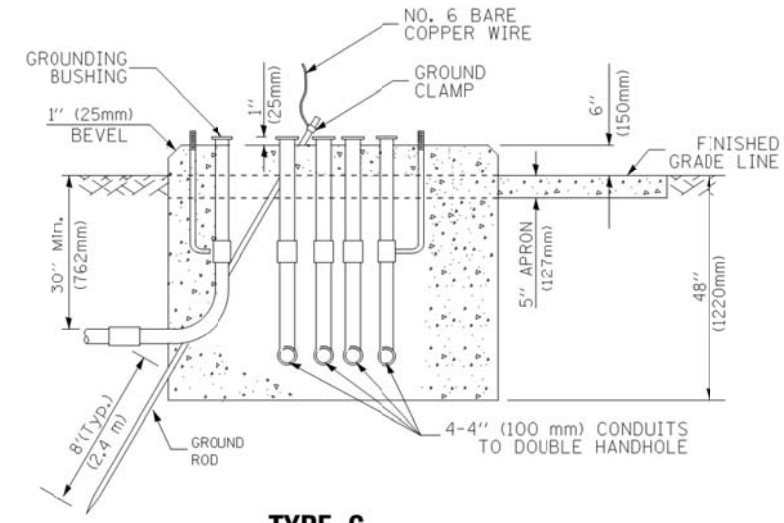


**TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**

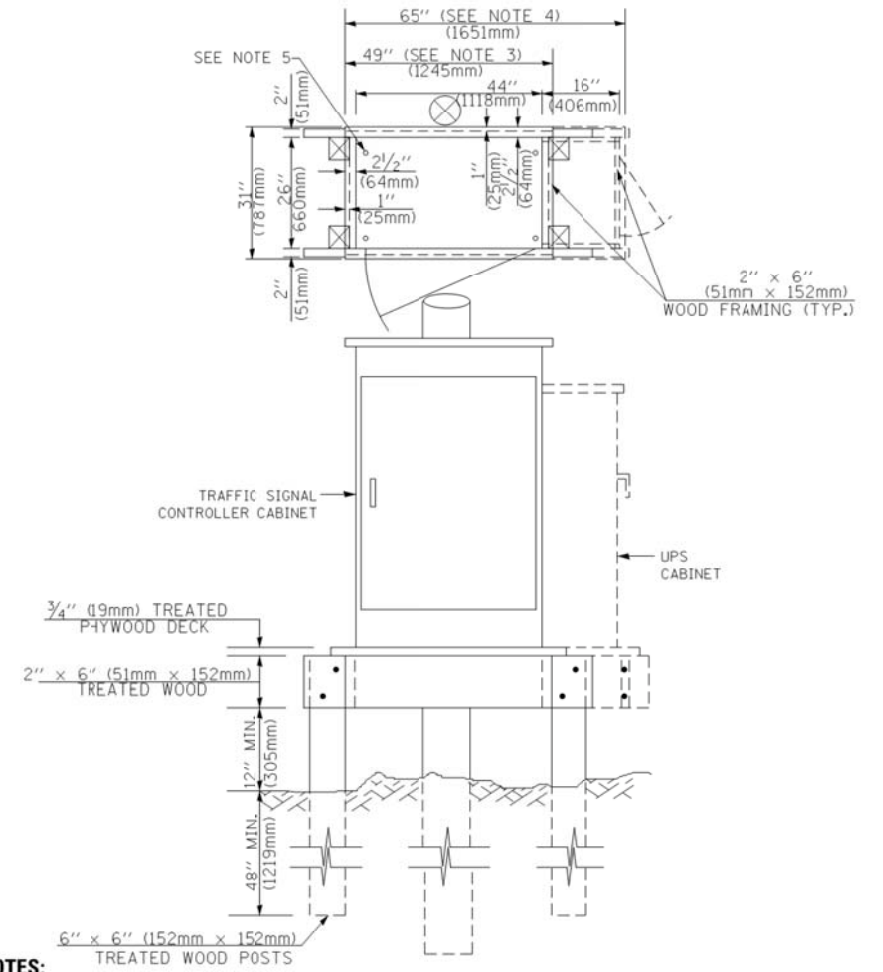


TOP VIEW

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



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



NOTES:

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

**TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM**

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

CABLE SLACK

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

VERTICAL CABLE LENGTH

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

DEPTH OF FOUNDATION

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

NOTES:

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

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

FILE NAME = M:\p\p\1481\2103 PTB 168-011 SINGH.IDOT VAR-VAR\WD14-002 South Cook Co.LED\6 Design\CAD\Sheet Files\IDOT DETAIL.dgn

USER NAME = .USERNAME.	DESIGNED - DW	REVISED -
PLOT SCALE = 20.0000' / in.	DRAWN - CC	REVISED -
PLOT DATE = 7/9/2014	CHECKED - JDH	REVISED -
	DATE -	REVISED -

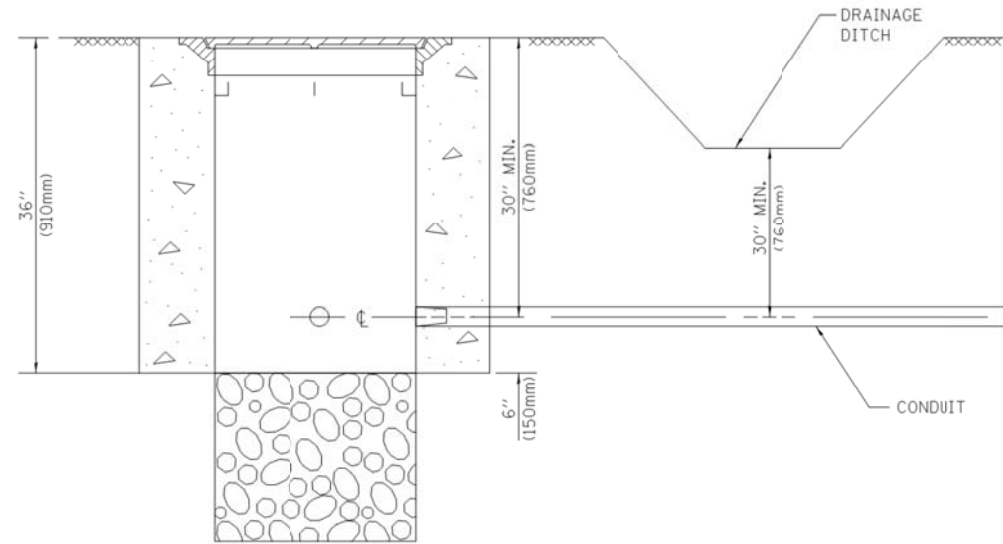
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE - STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: N.T.S. SHEET NO. 5 OF 7 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	15
ILLINOIS			CONTRACT NO. 60Y41	

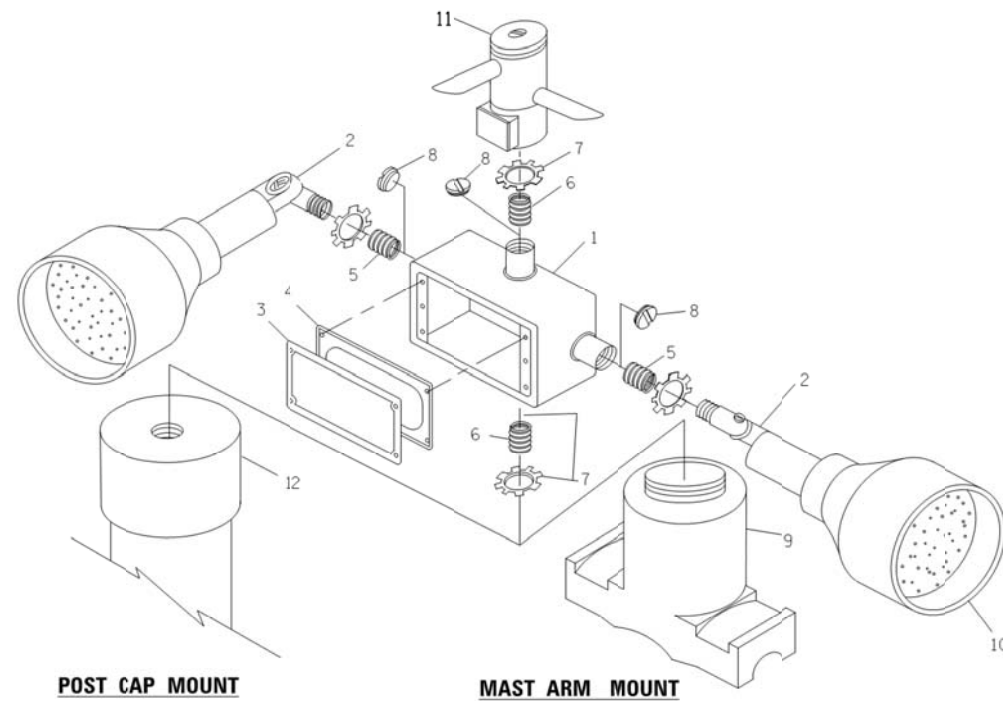
TS-5



NOTES:

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

HANDHOLE WITH MINIMUM CONDUIT DEPTH
(NOT TO SCALE)

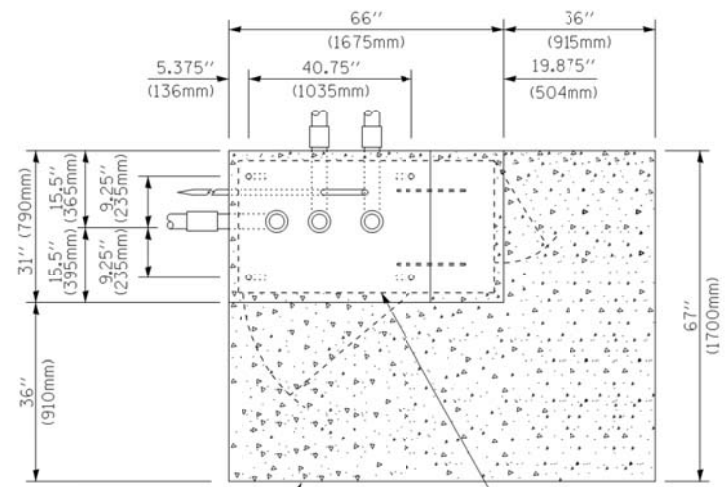


EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

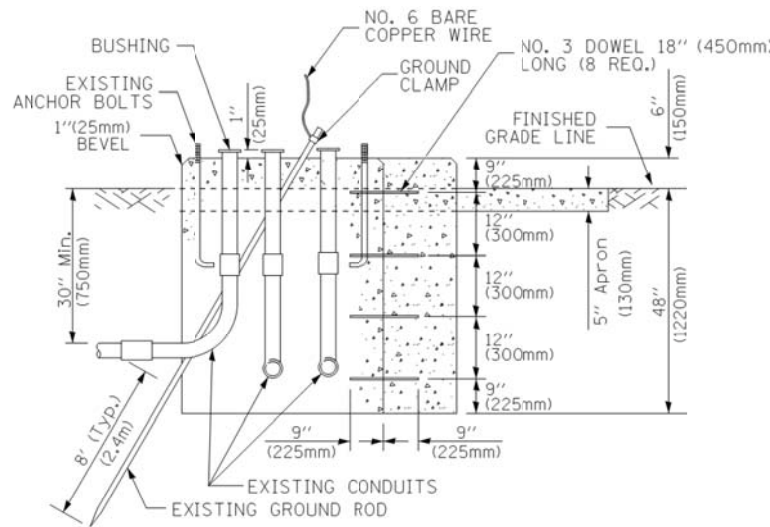
ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4" (19 mm) CLOSE NIPPLE
7	3/4" (19 mm) LOCKNUT
8	3/4" (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT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

NOTES:

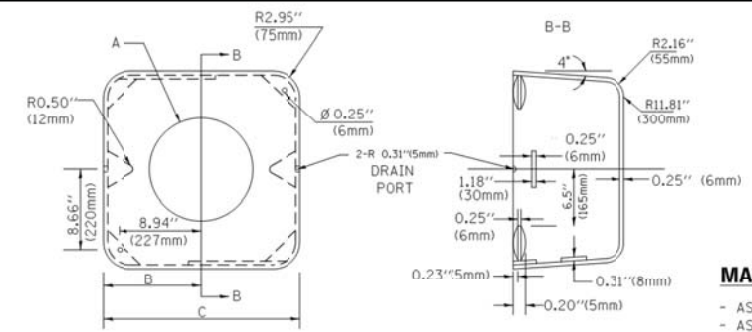
1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE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



TOP VIEW
(NOT TO SCALE)



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



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

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

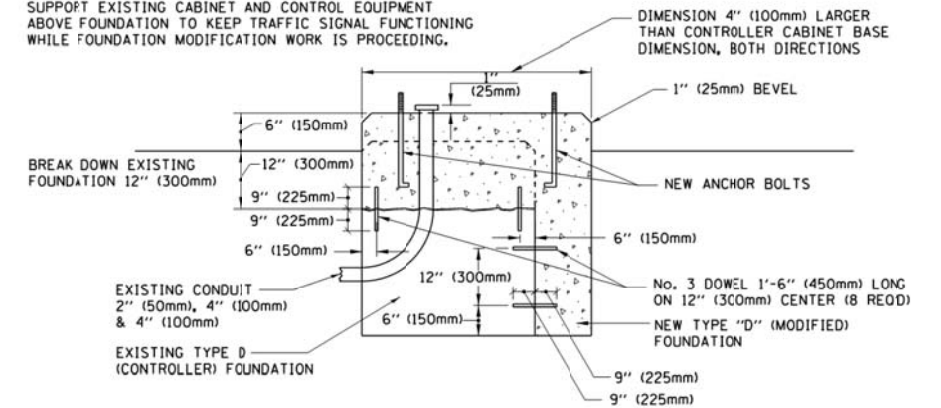
SHROUD

NOTES:

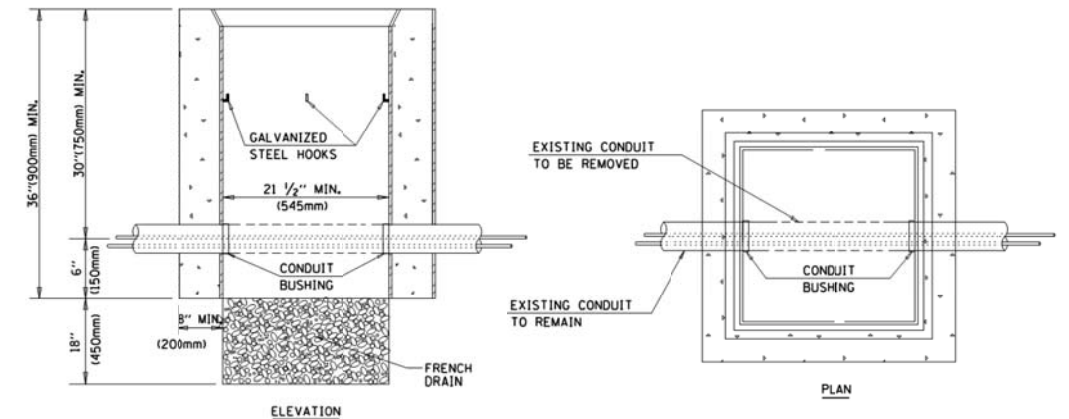
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

NOTE:

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



MODIFY EXISTING TYPE "D" FOUNDATION



NOTES:

1. HANDHOLE CONSTRUCTED PER STATE STANDARD 8:4001.
2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

HANDHOLE TO INTERCEPT EXISTING CONDUIT

FILE NAME = M:\p\p\1481\2103 PTB 168-011 SINGH IDOT VAR-VAR\WD14-002 South Cook Co. LED+6 Design\CAD\Sheet Files\IDOT DETAIL.dgn

USER NAME = .USERNAME.	DESIGNED - DW	REVISED -
PLOT SCALE = 20.0000 Ft / in.	DRAWN - CC	REVISED -
PLOT DATE = 7/9/2014	CHECKED - JDH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE - STANDARD TRAFFIC SIGNAL DESIGN DETAILS

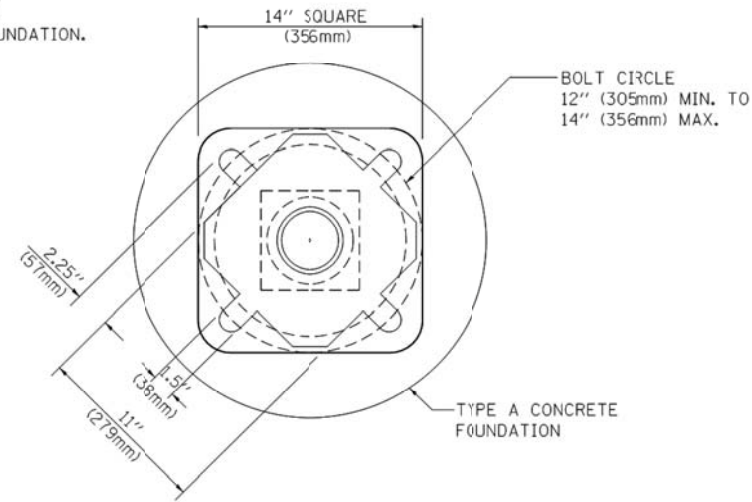
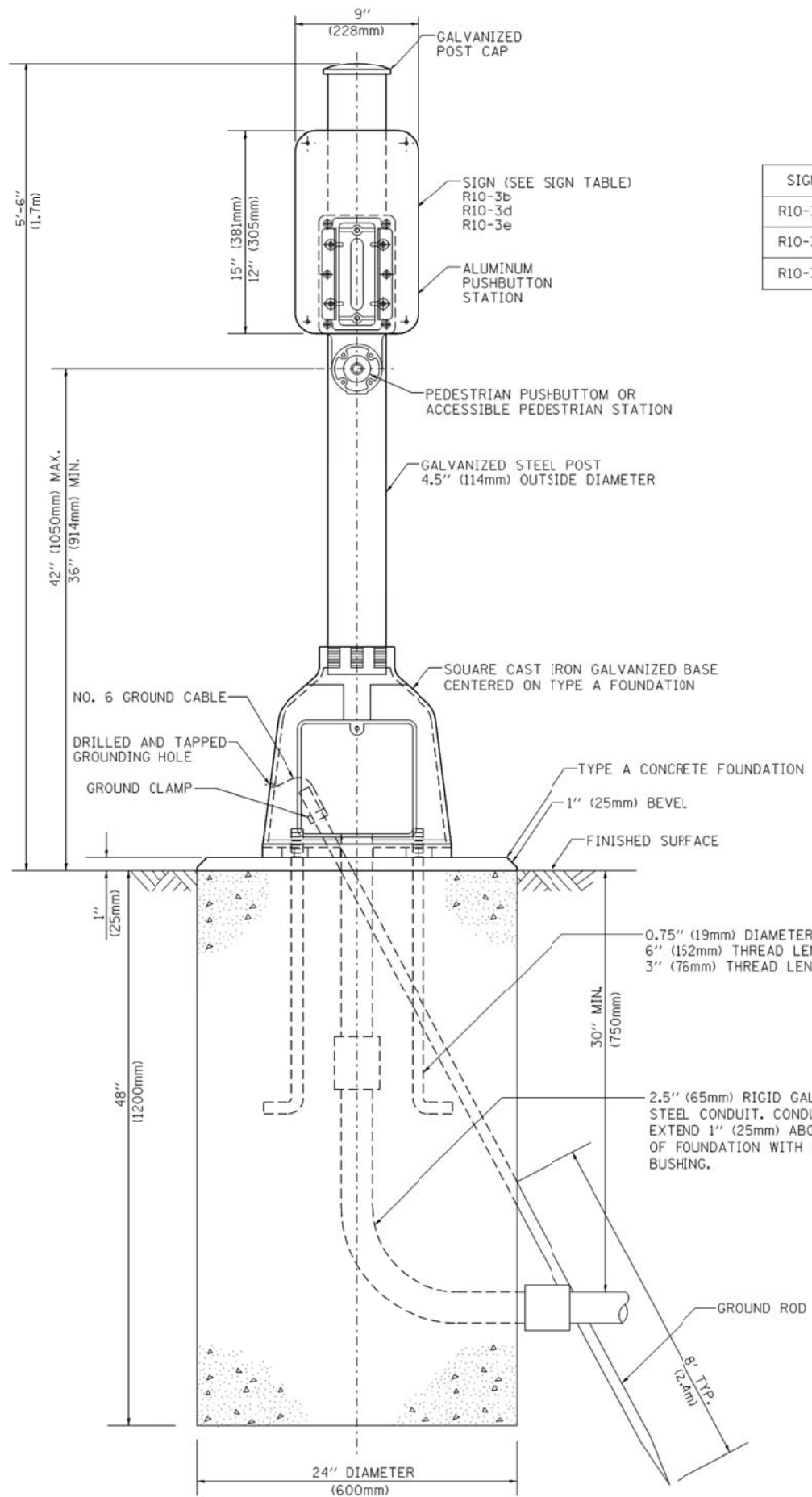
SCALE: N.T.S. SHEET NO. 6 OF 7 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	16
ILLINOIS			CONTRACT NO. 60Y41	

TS-6

SIGN TABLE

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



BOLT PATTERN
PEDESTRIAN PUSH BUTTON POST, TYPE A

FILE NAME = M:\p\p\1481\2103 PTB 168-011 SINGH IDOT VAR-VAR\WD14-002 South Cook Co.LED+6 Design\CAD\Sheet Files\IDOT DETAIL-7.dgn

USER NAME = .USERNAME.	DESIGNED - DW	REVISED -
	DRAWN - CC	REVISED -
PLOT SCALE = 20.0000 ft / in.	CHECKED - JDH	REVISED -
PLOT DATE = 7/9/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

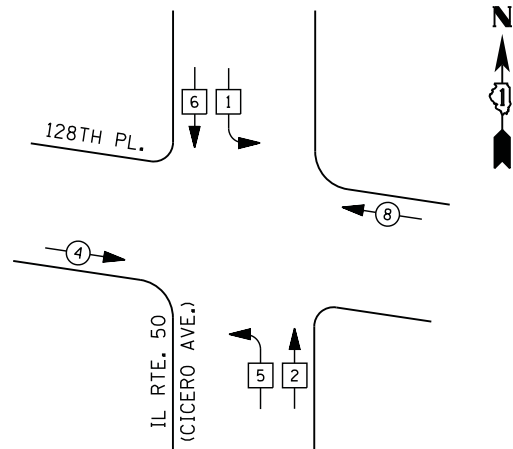
DISTRICT ONE - STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: N.T.S. SHEET NO. 7 OF 7 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	17
			CONTRACT NO. 60Y41	
ILLINOIS				



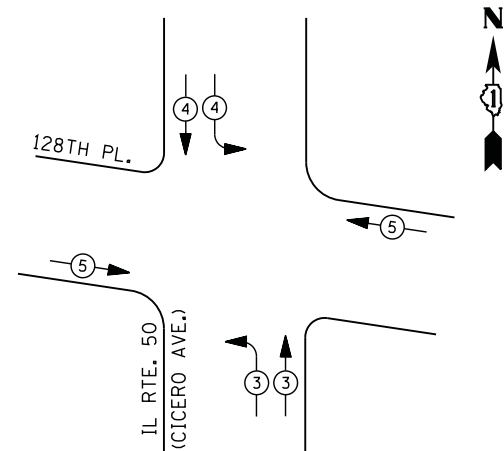
CONTROLLER SEQUENCE



LEGEND

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

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT			

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

TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	16	135	15	0.25	60
ARROW		135	12	0.10	
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
FLASHER LED					
TOTAL =					396

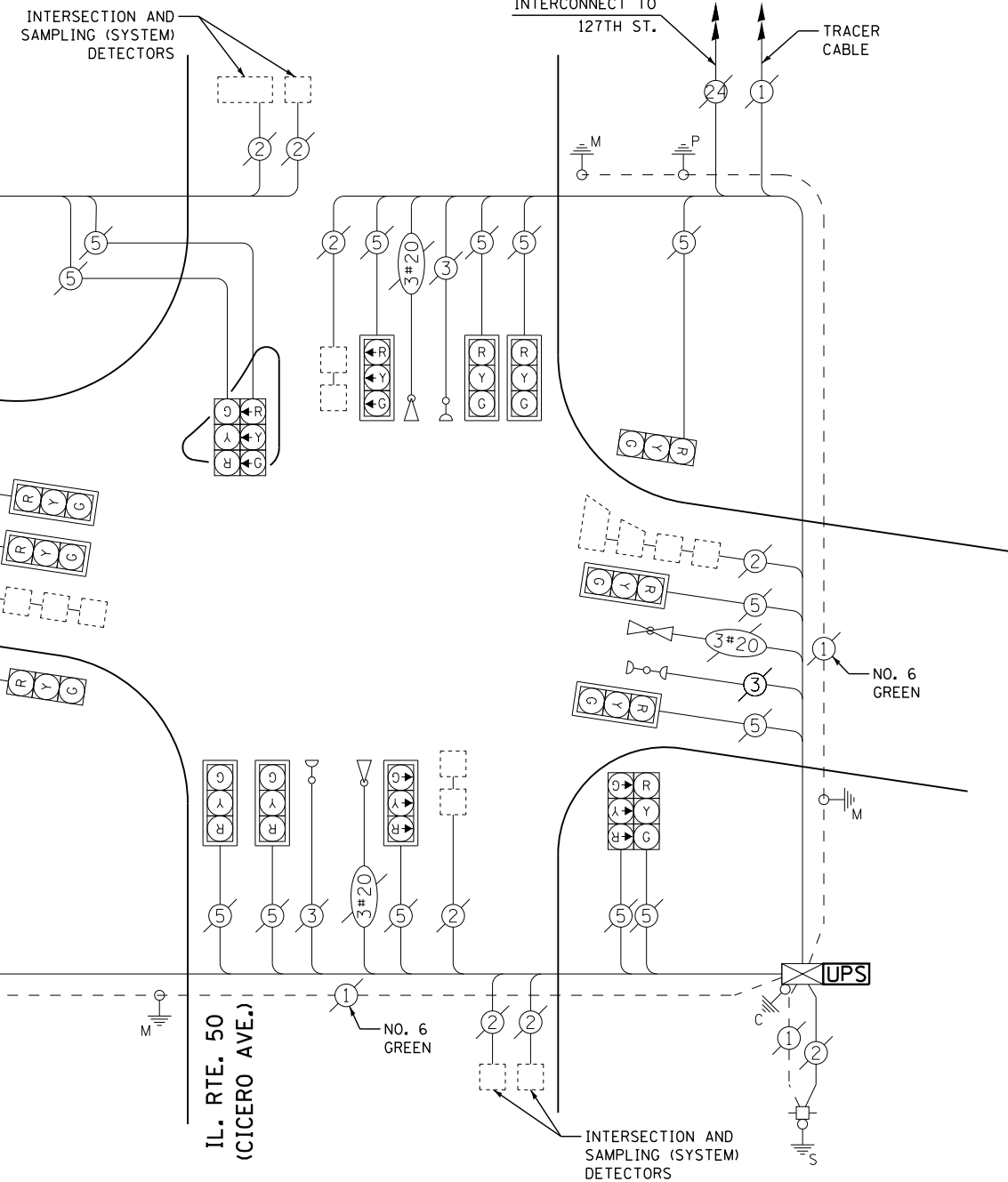
ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT ILYAS MOHIUDDIN
PHONE 708-235-2692
COMMONWEALTH EDISON

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**



CABLE PLAN

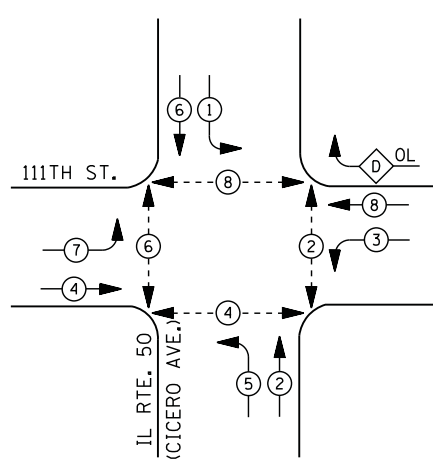
IL ROUTE 50 (CICERO AVENUE) AT 128TH PLACE SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SCALE: N.T.S.				SHEET NO.	OF SHEETS	STA.	TO STA.	
				ILLINOIS			61	18
				COOK		CONTRACT NO. 60Y41		

TS #125
ALSIP

FILE NAME = M:\p\2014\1481\2183 PTB 168-011 SINGH.IDOT VAR-VAR.VD14-002 South Cook Co.LED+LED+DesignCAD+Sheet.Files\125_CAB_CDOK.dgn



CONTROLLER SEQUENCE



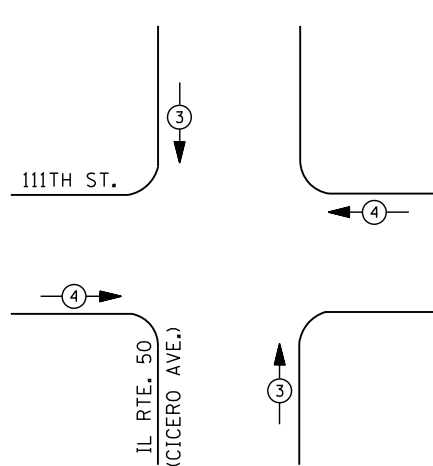
LEGEND

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

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
D	= 8	+ 1

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		

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

TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	17	135	17	0.50	145
(YELLOW)	17	135	25	0.25	107
(GREEN)	17	135	15	0.25	64
ARROW	20	135	12	0.10	24
PED. SIGNAL	10	90	25	1.00	250
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
FLASHER LED					
TOTAL =					690

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
 201 WEST CENTER COURT
 SCHAMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT ILYAS MOHIUDDIN
 PHONE 708-235-2692
 COMMONWEALTH EDISON

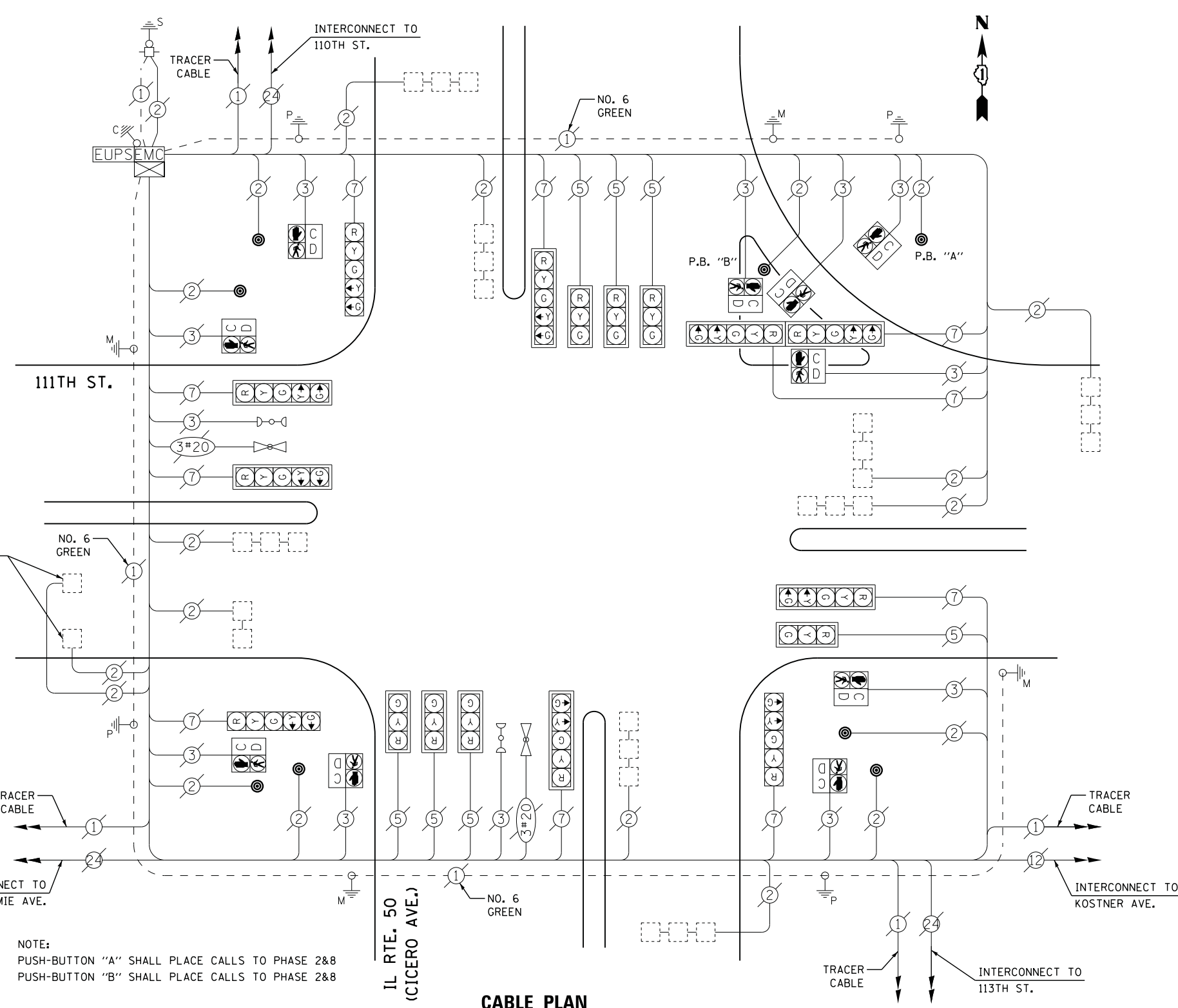
SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
8	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

8 EACH PEDESTRIAN PUSH-BUTTON



NOTE:
 PUSH-BUTTON "A" SHALL PLACE CALLS TO PHASE 2&8
 PUSH-BUTTON "B" SHALL PLACE CALLS TO PHASE 2&8

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 50 (CICERO AVENUE) AT 111TH STREET SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	19
CONTRACT NO. 60Y41				
ILLINOIS				

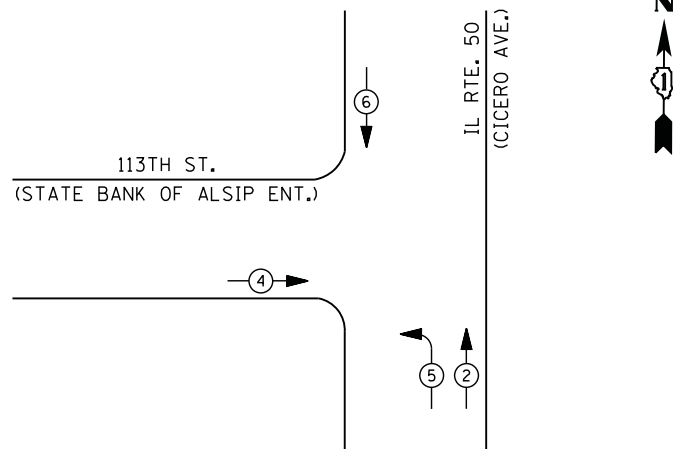
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

TS #2510
 ALSIP

FILE NAME = M:\p\03\1481\2183 PTB 168-011 SINGH.IDOT VAR-VAR\WD14-002 South Cook Co.LED16\Design\CAD\Sheet Files\2510_CAB_COOK.dgn

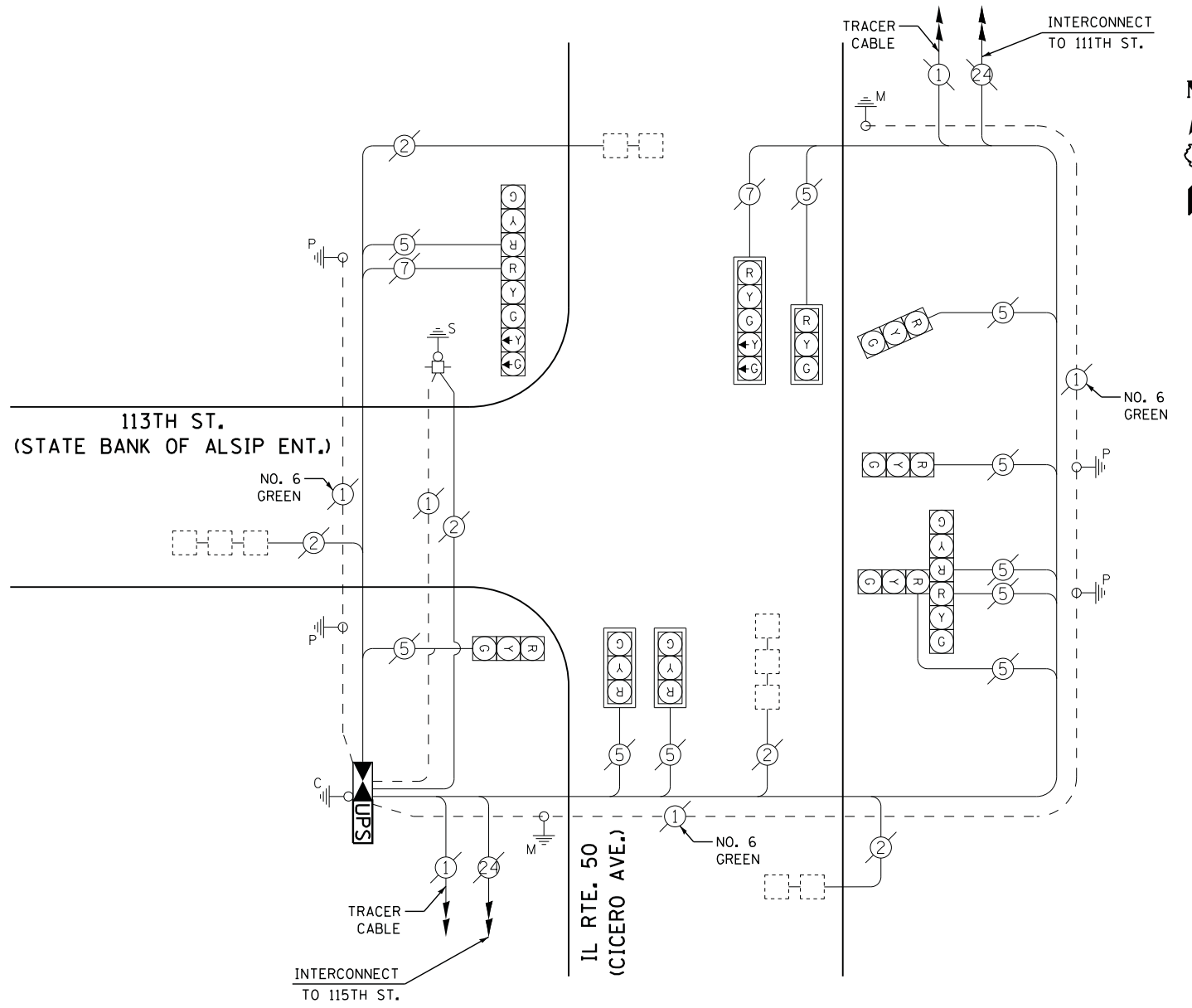


CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

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



CABLE PLAN

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

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

TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	4	135	12	0.10	5
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
TOTAL =					327

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	TRANSCEIVER - FIBER OPTIC
4	EACH	INDUCTIVE LOOP DETECTOR
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

1 EACH CONTROLLER AND CABINET (COMPLETE)

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT ILYAS MOHIUDDIN
PHONE 708-235-2692
COMMONWEALTH EDISON

USER NAME = .USERNAME.	DESIGNED - DW	REVISED -
	DRAWN - CC	REVISED -
PLOT SCALE = 20.000' / in.	CHECKED - JDH	REVISED -
PLOT DATE = 7/9/2014	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL ROUTE 50 (CICERO AVENUE) AT 113TH STREET (STATE BANK OF ALSIP)
SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM**

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

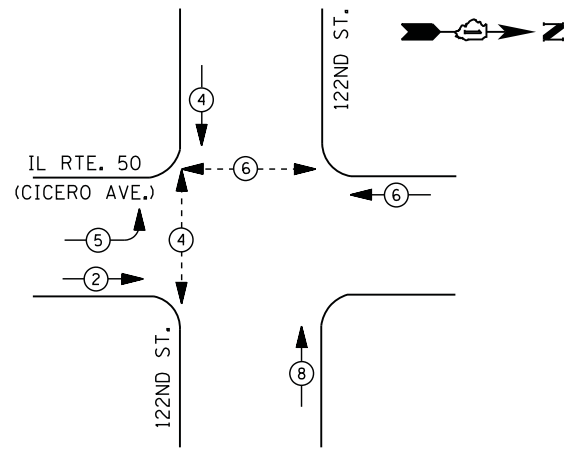
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	20
CONTRACT NO. 60Y41				

TS #2515
ALSIP

FILE NAME = M:\p\03\1481\2103 PTB 168-011 SINGH IDOT VAR-VAR\WD14-002 South Cook Co.,LED16\Design\CAD\Sheet_Files\2515_CAB_COOK.dgn



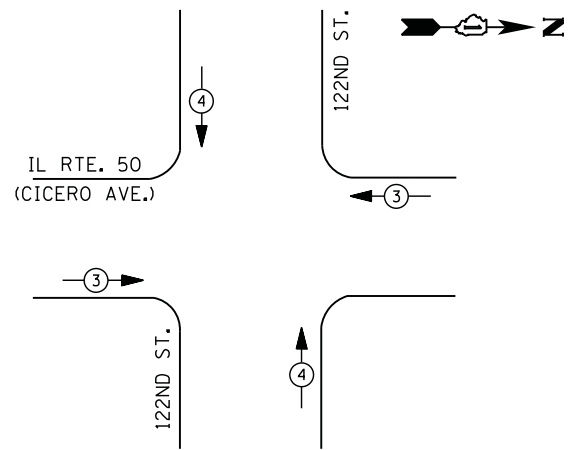
CONTROLLER SEQUENCE



LEGEND

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

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		

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

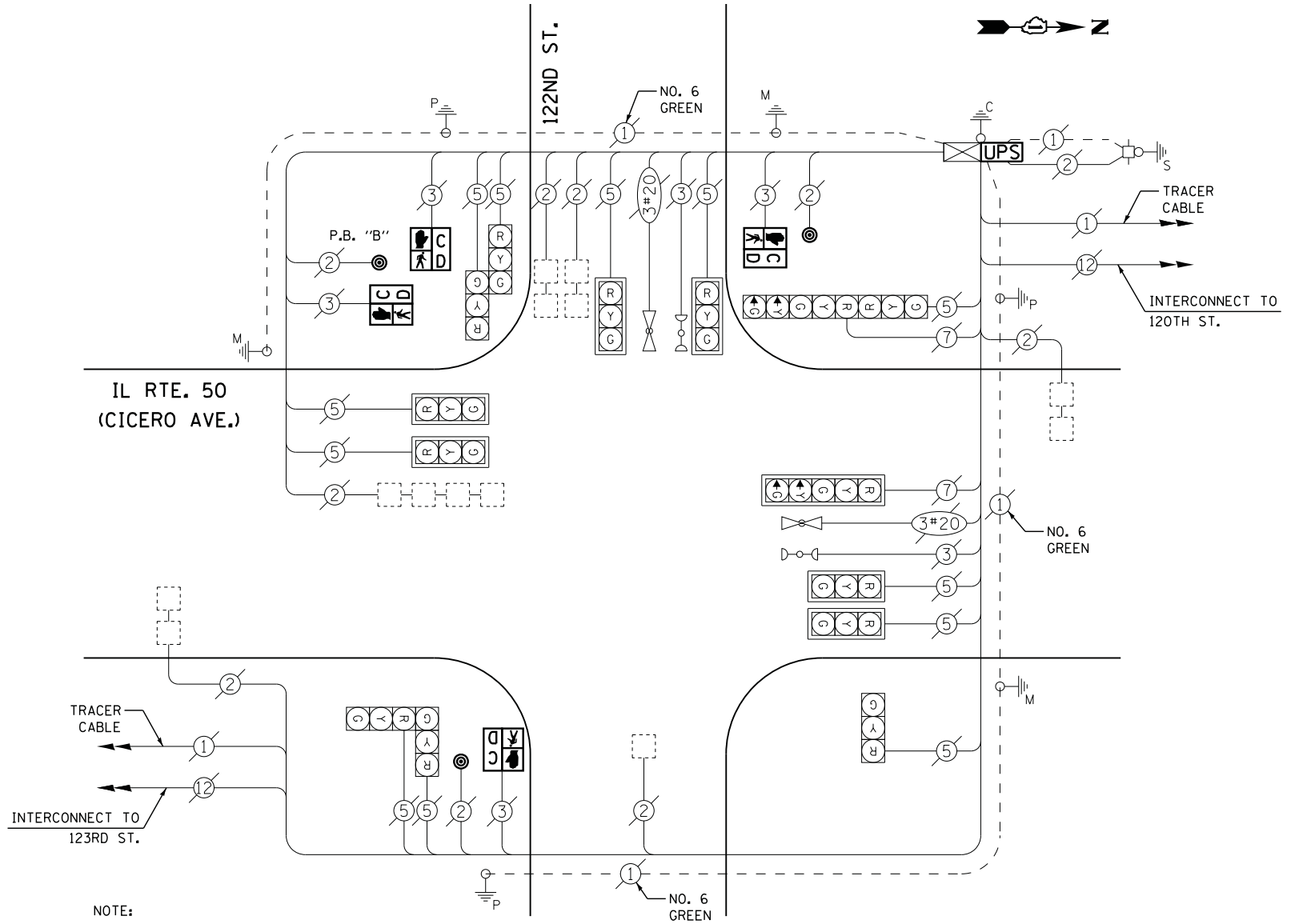
TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	14	135	17	0.50	119
(YELLOW)	14	135	25	0.25	88
(GREEN)	14	135	15	0.25	53
ARROW	4	135	12	0.10	5
PED. SIGNAL	4	90	25	1.00	100
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
TOTAL =					465

ENERGY COSTS- **BILLED TO: IDOT DISTRICT 1**
 201 WEST CENTER COURT
 SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - **CONTACT ILYAS MOHIUDDIN**
 PHONE 708-235-2692
 COMMONWEALTH EDISON

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
4	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
3	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING



NOTE:
 PUSH-BUTTON "B" SHALL PLACE CALLS TO PHASE 4 AND 6.

CABLE PLAN

UPS SHALL BE INSTALLED ON LEFT SIDE OF CONTROLLER CABINET DUE TO PHYSICAL CONSTRAINT, OR AS DIRECTED BY THE ENGINEER

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

4	EACH	PEDESTRIAN SIGNAL HEAD
3	EACH	PEDESTRIAN PUSH-BUTTON

FILE NAME = M:\p\03\1481\2103 PTB 168-011 SINGH.IDOT VAR-VAR\WD14-002 South Cook Co.LED\6 Design\CAD\Sheet Files\2555.CAB.COOK.dgn

USER NAME = .USERNAME.	DESIGNED - DW	REVISED -
	DRAWN - CC	REVISED -
PLOT SCALE = 20.000' / 1" =	CHECKED - JDH	REVISED -
PLOT DATE = 7/9/2014	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL ROUTE 50 (CICERO AVENUE) AT 122ND STREET
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE**

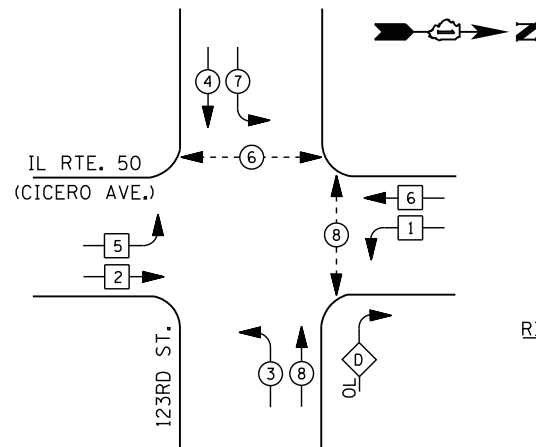
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	21
CONTRACT NO. 60Y41				
ILLINOIS				

TS #2555
ALSIP



CONTROLLER SEQUENCE



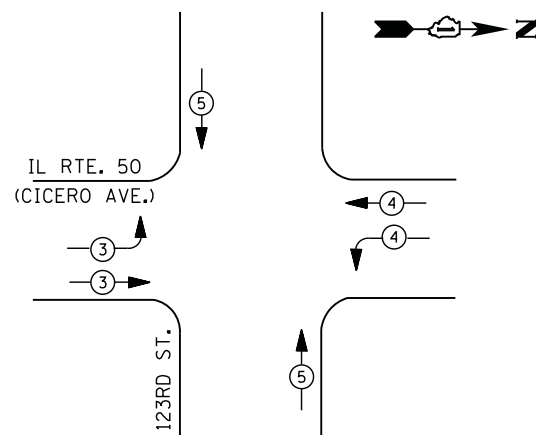
LEGEND

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

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
D	=	8 + 1

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT			

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

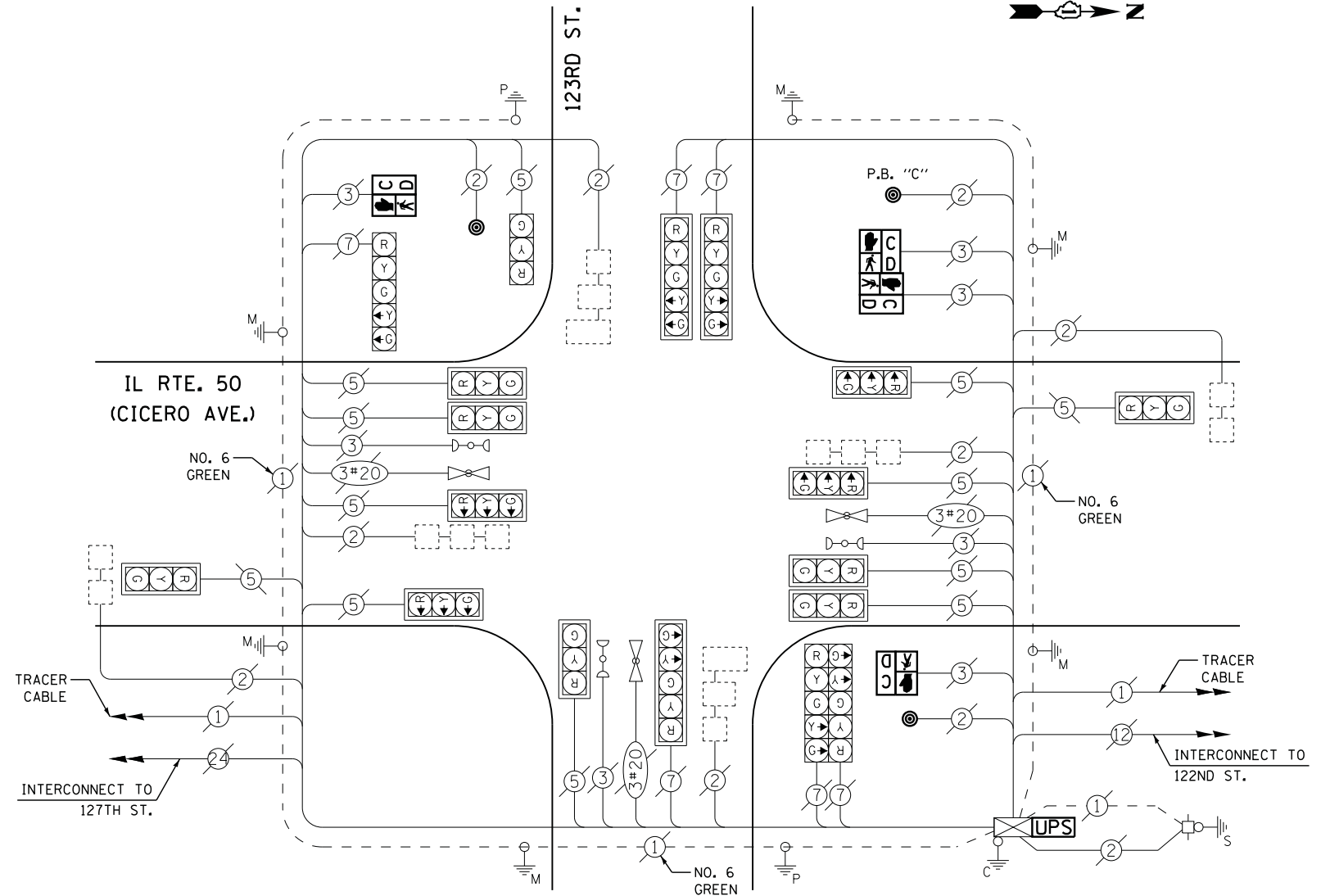
TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	18	135	17	0.50	153
(YELLOW)	18	135	25	0.25	113
(GREEN)	18	135	15	0.25	68
ARROW	12	135	12	0.10	15
PED. SIGNAL	4	90	25	1.00	100
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
TOTAL =					549

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT ILYAS MOHIUDDIN
PHONE 708-235-2692
COMMONWEALTH EDISON

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
1	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
3	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING



NOTE: PUSH-BUTTON "C" SHALL PLACE CALLS TO PHASE 6 AND 8.

CABLE PLAN

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

4	EACH	PEDESTRIAN SIGNAL HEAD
3	EACH	PEDESTRIAN PUSH-BUTTON

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 50 (CICERO AVENUE) AT 123RD STREET SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE

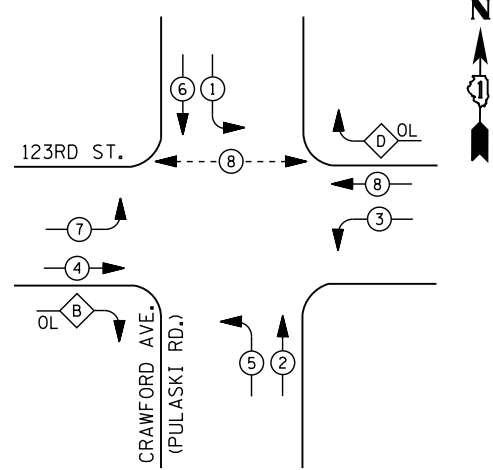
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	22
CONTRACT NO. 60Y41				

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

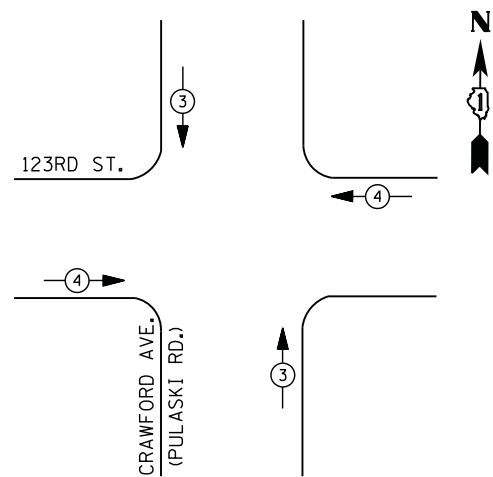
TS #2560 ALSIP



CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↑	←

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

TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	16	135	15	0.25	60
ARROW	24	135	12	0.10	29
PED. SIGNAL	2	90	25	1.00	50
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
TOTAL =					475

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
 201 WEST CENTER COURT
 SCHAUMBURG, IL 60196-1096

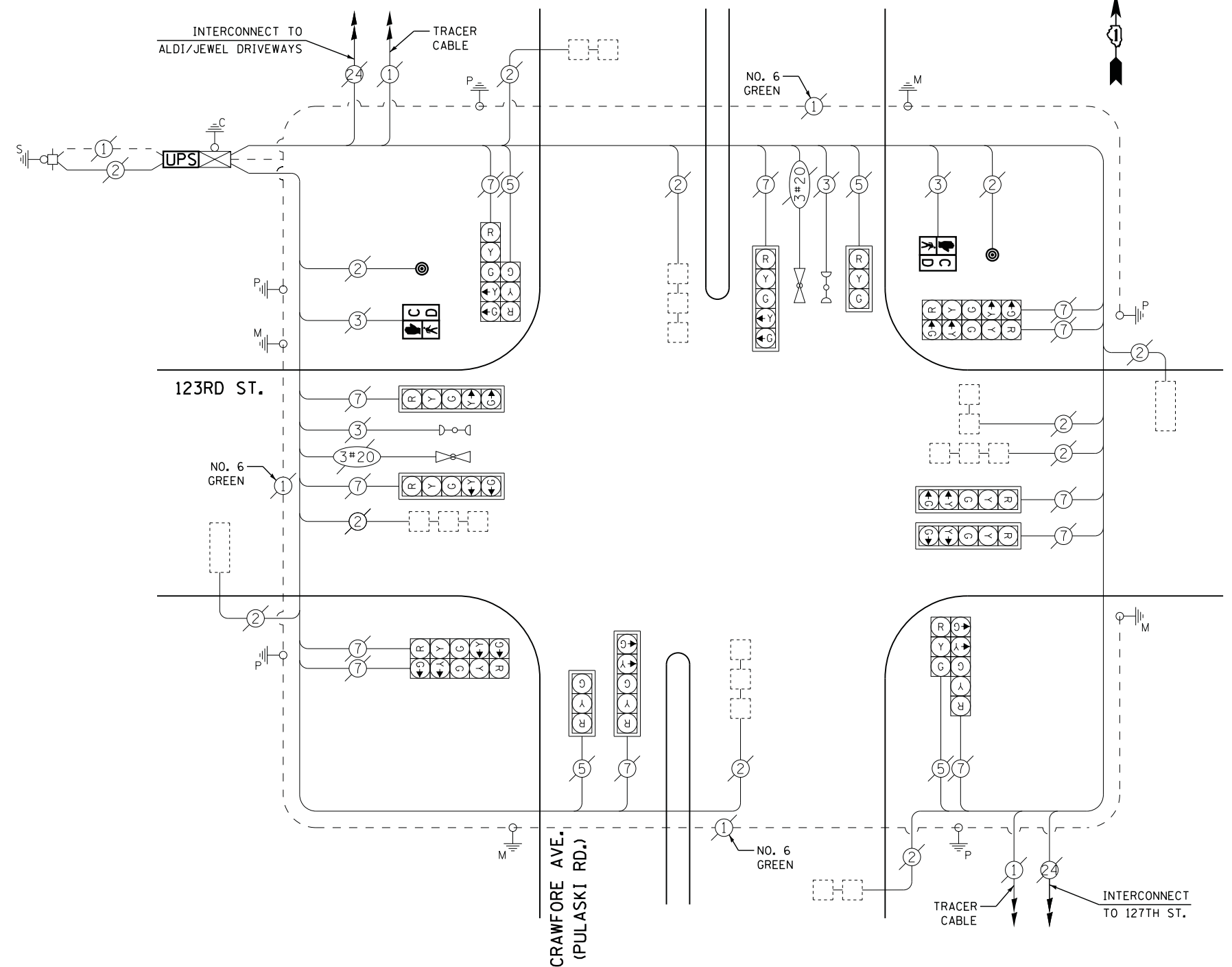
ENERGY SUPPLY - CONTACT ILYAS MOHIUDDIN
 PHONE 708-235-2692
 COMMONWEALTH EDISON

LEGEND

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

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	= 4	+ 5
D	= 8	+ 1



CABLE PLAN

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
2	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

- 2 EACH PEDESTRIAN SIGNAL HEAD
- 2 EACH PEDESTRIAN PUSH-BUTTONS

FILE NAME = M:\p\2014\1481\2103 PTB 168-011 SINGH IDOT VAR-VAR\WD14-002 South Cook Co. LED\6 Design\CAD\Sheet Files\3936.CAB.C00K.dgn

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

123RD STREET AT CRAWFORD AVENUE (PULASKI ROAD) SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE

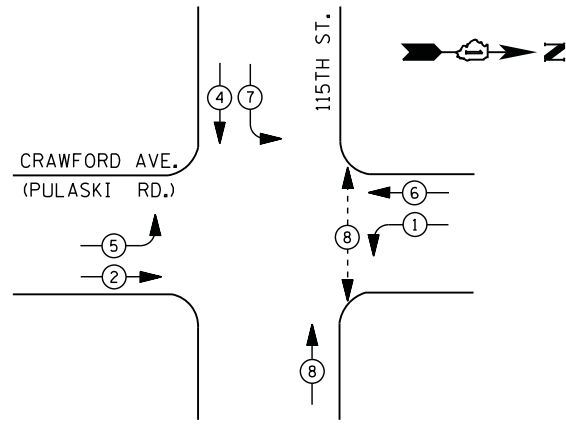
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	23
CONTRACT NO. 60Y41				

TS #3936
ALSIP

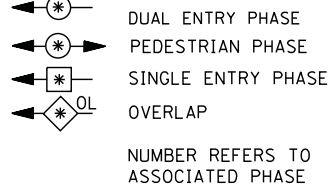
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.



CONTROLLER SEQUENCE

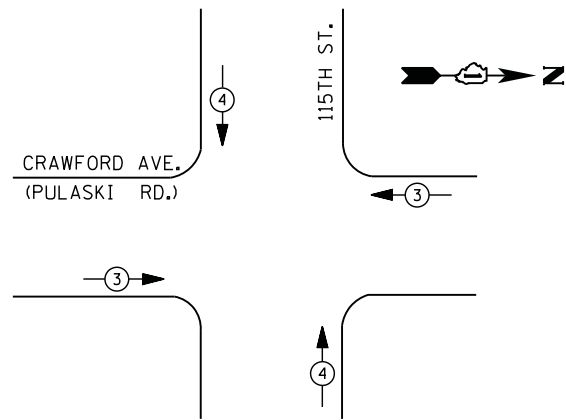


LEGEND



- ① REPLACE 10 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ② REPLACE 14 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ③ REPLACE 15 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ④ REPLACE 16 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ⑤ REPLACE 18 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE

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

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

TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	14	135	17	0.50	119
(YELLOW)	14	135	25	0.25	88
(GREEN)	14	135	15	0.25	53
ARROW	12	135	12	0.10	15
PED. SIGNAL	2	90	25	1.00	50
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
TOTAL =					425

ENERGY COSTS- **BILLED TO: IDOT DISTRICT 1**
 201 WEST CENTER COURT
 SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - **CONTACT ILYAS MOHIUDDIN**
 PHONE 708-235-2692
 COMMONWEALTH EDISON

SCHEDULE OF QUANTITIES

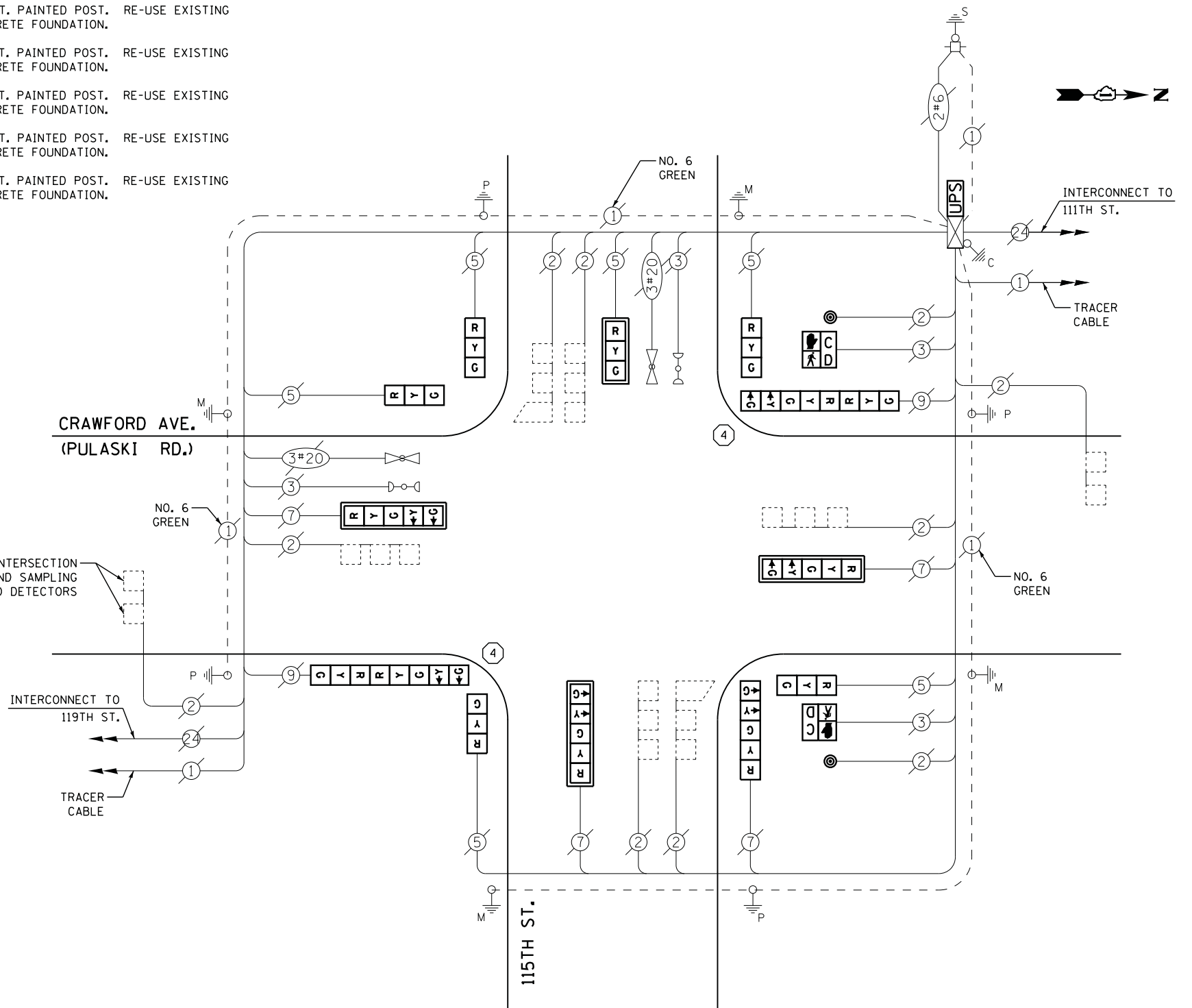
QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
1	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
5	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
3	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
2	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
4	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
2	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	REMOVE AND REPLACE ANCHOR BOLTS
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL

EXISTING INTERSECTION AND SAMPLING (SYSTEM) DETECTORS

INTERCONNECT TO 119TH ST.

TRACER CABLE

CABLE PLAN



REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

6	EACH	SIGNAL HEAD, 3 - SECTION
4	EACH	SIGNAL HEAD, 5 - SECTION
2	EACH	SIGNAL HEAD, 2 - FACE, 1-3 SECTION, 1-5 SECTION
4	EACH	TRAFFIC SIGNAL BACKPLATE
2	EACH	PEDESTRIAN SIGNAL HEAD
2	EACH	PEDESTRIAN PUSH-BUTTON
2	EACH	SIGNAL POST

USER NAME = .USERNAME.	DESIGNED - DW	REVISED -
	DRAWN - CC	REVISED -
PLOT SCALE = 20.000' / 1" =	CHECKED - JDH	REVISED -
PLOT DATE = 7/9/2014	DATE -	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

115TH STREET AT CRAWFORD AVENUE (PULASKI ROAD)			
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE			
SCALE: N.T.S.	SHEET NO.	OF SHEETS	STA. TO STA.

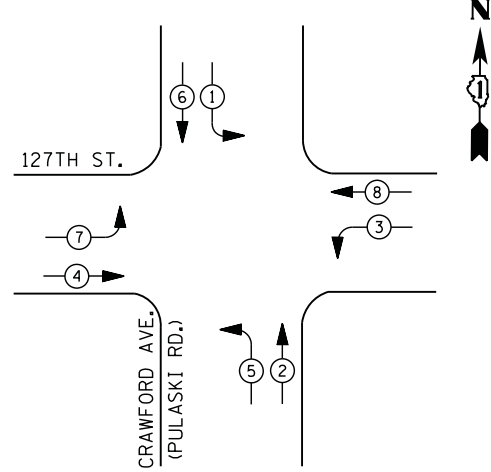
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	24
CONTRACT NO. 60Y41				
ILLINOIS				

TS #3960
ALSIP

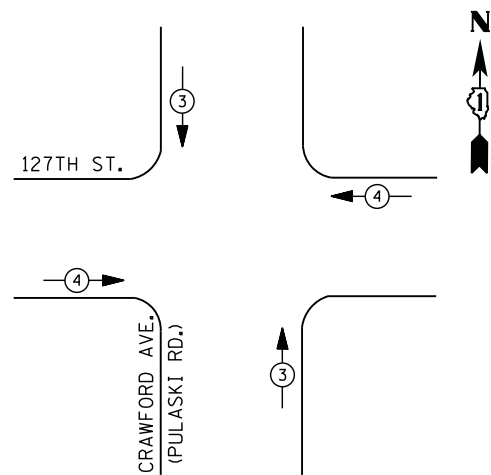
FILE NAME = M:\p\2014\1481\2103 PTB 168-011 SINGH IDOT VAR-VAR\WD14-002 South Cook Co. LED\6 Design\CAD\Sheet Files\3960.CAB.C00K.dgn



CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE

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

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

TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	16	135	15	0.25	60
ARROW	16	135	12	0.10	20
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
FLASHER LED					
TOTAL =					416

ENERGY COSTS- **BILLED TO: IDOT DISTRICT 1**
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - **CONTACT ILYAS MOHIUDDIN**
PHONE 708-235-2692
COMMONWEALTH EDISON

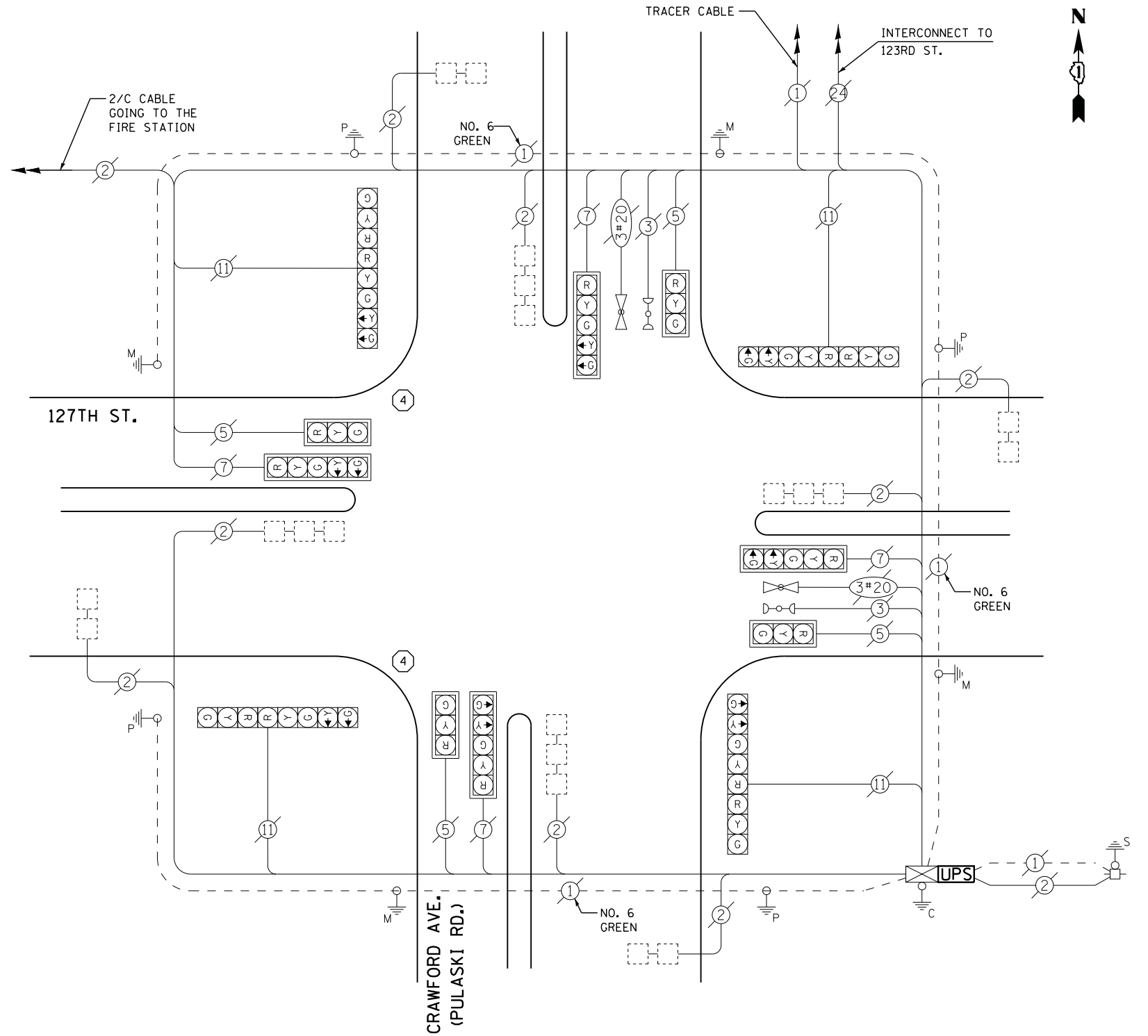
LEGEND

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

- ① REPLACE 10 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- ② REPLACE 14 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- ③ REPLACE 15 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- ④ REPLACE 16 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- ⑤ REPLACE 18 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	REMOVE AND REPLACE ANCHOR BOLTS
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL



CABLE PLAN

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

2 EACH SIGNAL POST

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**127TH STREET AT CRAWFORD AVENUE (PULASKI ROAD)
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	25
CONTRACT NO. 60Y41				

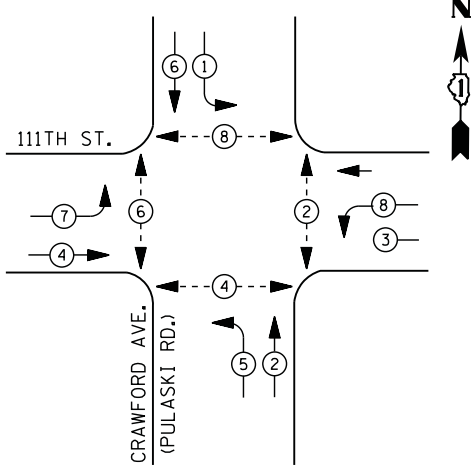
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

TS #3990
ALSIP

FILE NAME = M:\p\2014\1481\2103 PTB 168-011 SINGH IDOT VAR-VAR\WD14-002 South Cook Co. LED-65 Design\CAD\Sheet Files\3990.CAB.C00K.dgn

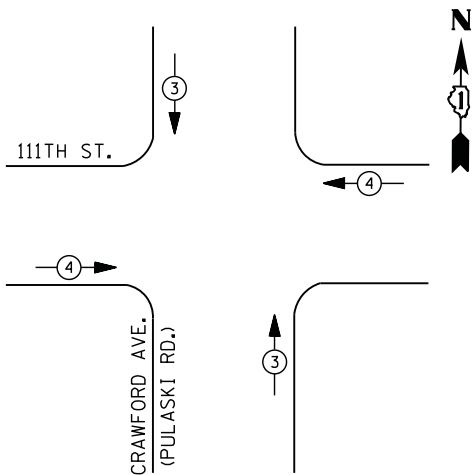


CONTROLLER SEQUENCE



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

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		

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

TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	16	135	12	0.10	20
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
TOTAL =					542

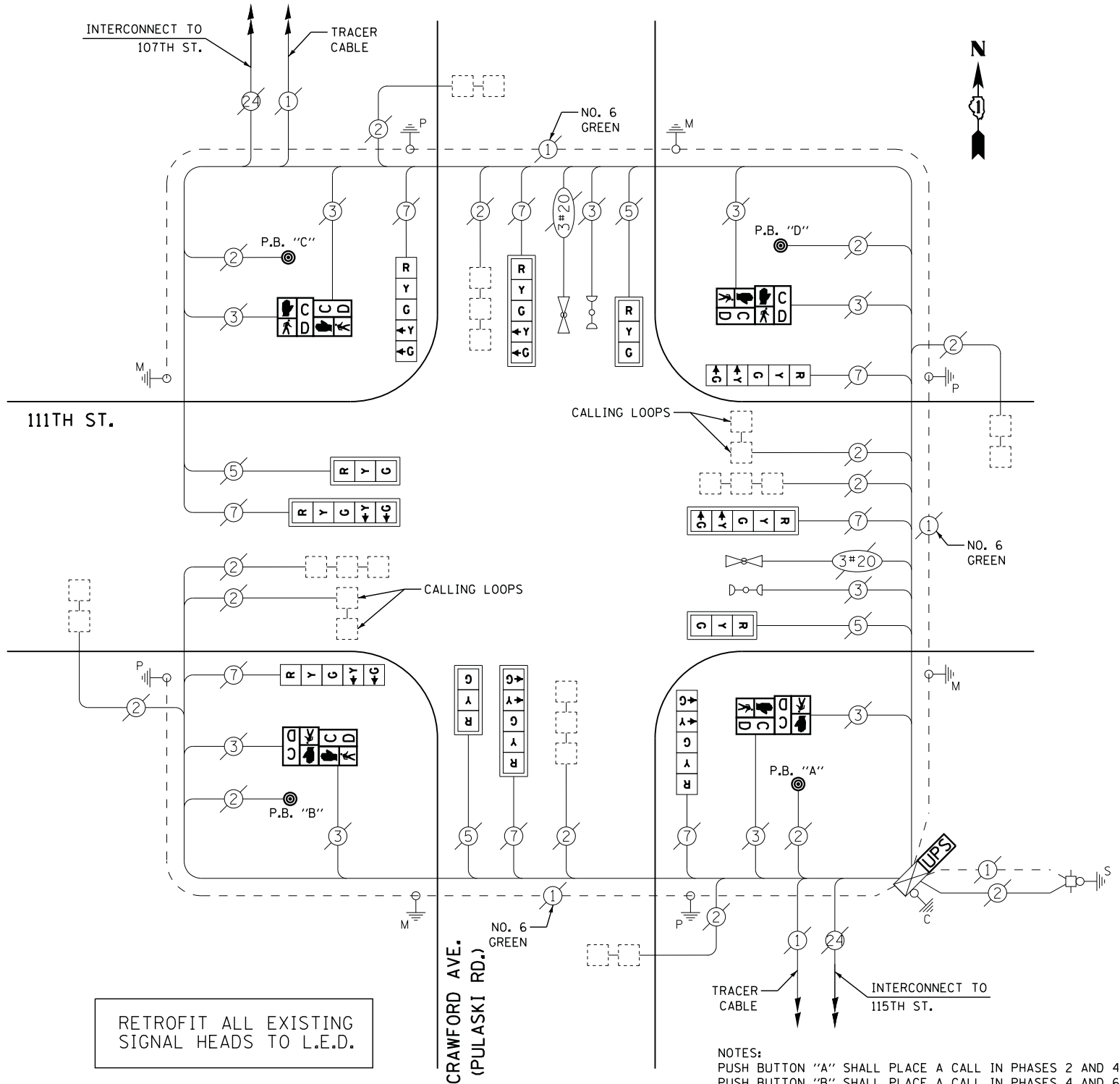
ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT ILYAS MOHIUDDIN
PHONE 708-235-2692
COMMONWEALTH EDISON

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
4	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
4	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT
4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT
4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT
4	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**



RETROFIT ALL EXISTING SIGNAL HEADS TO L.E.D.

CABLE PLAN

- NOTES:**
- PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4
 - PUSH BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6
 - PUSH BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8
 - PUSH BUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

- 8 EACH PEDESTRIAN SIGNAL HEAD
- 4 EACH PEDESTRIAN PUSH-BUTTON

TS #4270
ALSIP

FILE NAME = M:\p\1481\2103 PTB 168-011 SINGH IDOT VAR-VAR\WD14-002 South Cook Co. LED\6 Design\CAD\Sheet Files\4270 CAB_C00K.dgn

USER NAME = .USERNAME.	DESIGNED - DW	REVISED -
	DRAWN - CC	REVISED -
PLOT SCALE = 20.000' / in.	CHECKED - JDH	REVISED -
PLOT DATE = 7/9/2014	DATE -	REVISED -

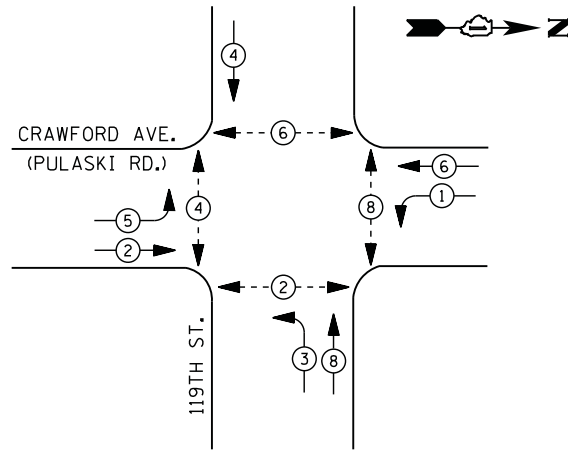
**111TH STREET AT CRAWFORD AVENUE (PULASKI ROAD)
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE**

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

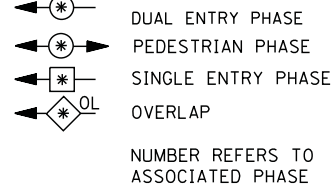
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	26
CONTRACT NO. 60Y41				
ILLINOIS				



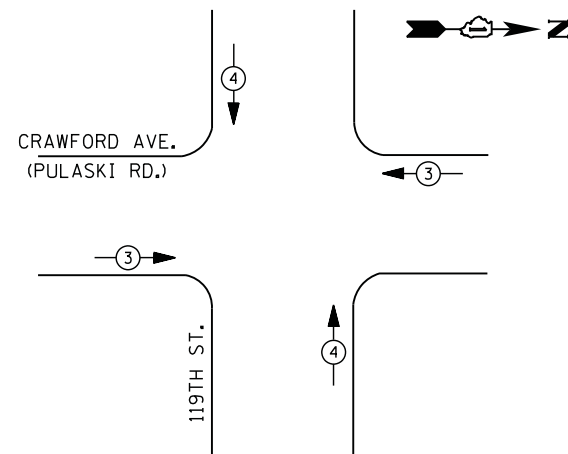
CONTROLLER SEQUENCE



LEGEND



PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE

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

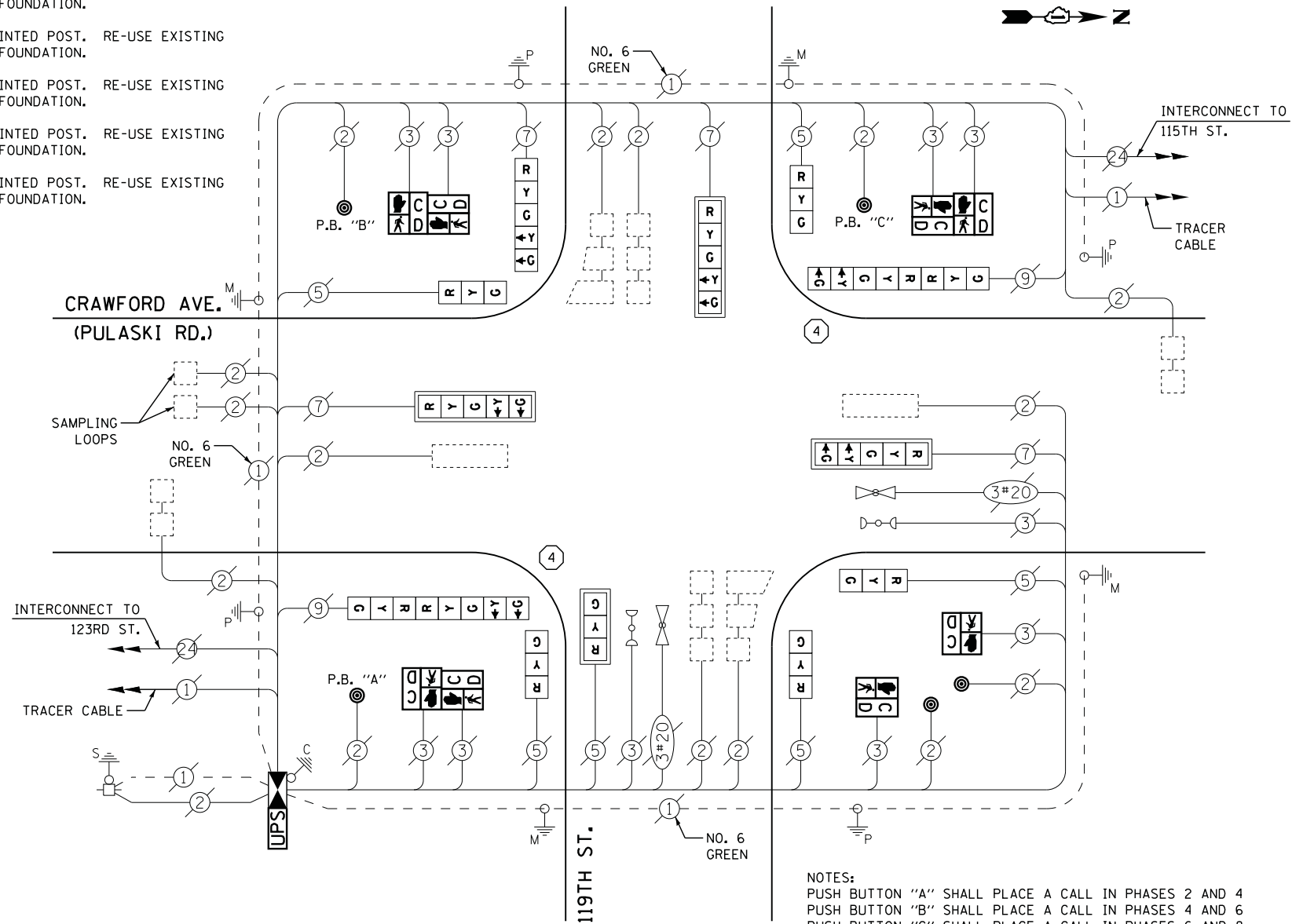
**I. D. O. T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	14	135	17	0.50	119
(YELLOW)	14	135	25	0.25	88
(GREEN)	14	135	15	0.25	53
ARROW	12	135	12	0.10	15
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
FLASHER LED					
TOTAL =					575

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT ILYAS MOHIUDDIN
PHONE 708-235-2692
COMMONWEALTH EDISON

- ① REPLACE 10 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- ② REPLACE 14 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- ③ REPLACE 15 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- ④ REPLACE 16 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- ⑤ REPLACE 18 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.



NOTES:
PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4
PUSH BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6
PUSH BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8

RETROFIT ALL EXISTING
SIGNAL HEADS TO L.E.D.

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

CONTRACTOR SHALL RELOCATE EXISTING
EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING
UNIT TO NEW CONTROLLER CABINET. THE COST
OF THIS WORK SHALL BE INCLUDED IN THE
FULL-ACTUATED CONTROLLER AND TYPE IV
CABINET, SPECIAL PAY ITEM.

CABLE PLAN

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

8	EACH	PEDESTRIAN SIGNAL HEAD
5	EACH	PEDESTRIAN PUSH-BUTTON
2	EACH	SIGNAL POST
1	EACH	CONTROLLER AND CABINET (COMPLETE)

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	TRANSCEIVER - FIBER OPTIC
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
3	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
10	EACH	INDUCTIVE LOOP DETECTOR
4	EACH	RELOCATE EXISTING SIGNAL HEAD
4	EACH	RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	REMOVE AND REPLACE ANCHOR BOLTS
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
2	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT
5	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT
1	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT
3	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT
1	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT
5	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**119TH STREET AT CRAWFORD AVENUE (PULASKI ROAD)
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE**

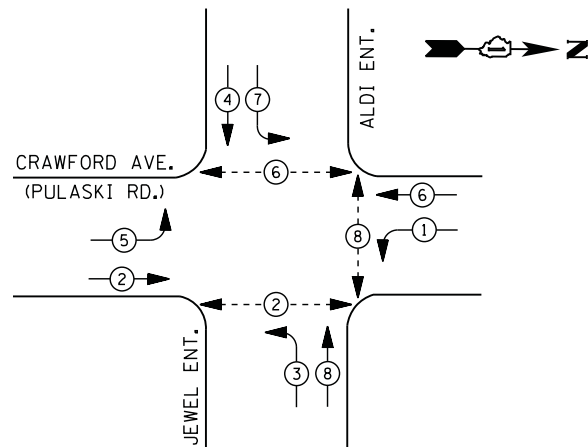
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	27
CONTRACT NO. 60Y41				
ILLINOIS				

TS #4890
ALSIP



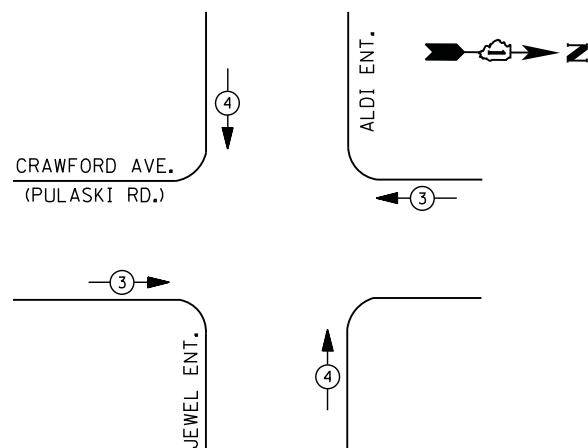
CONTROLLER SEQUENCE



LEGEND

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

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		

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

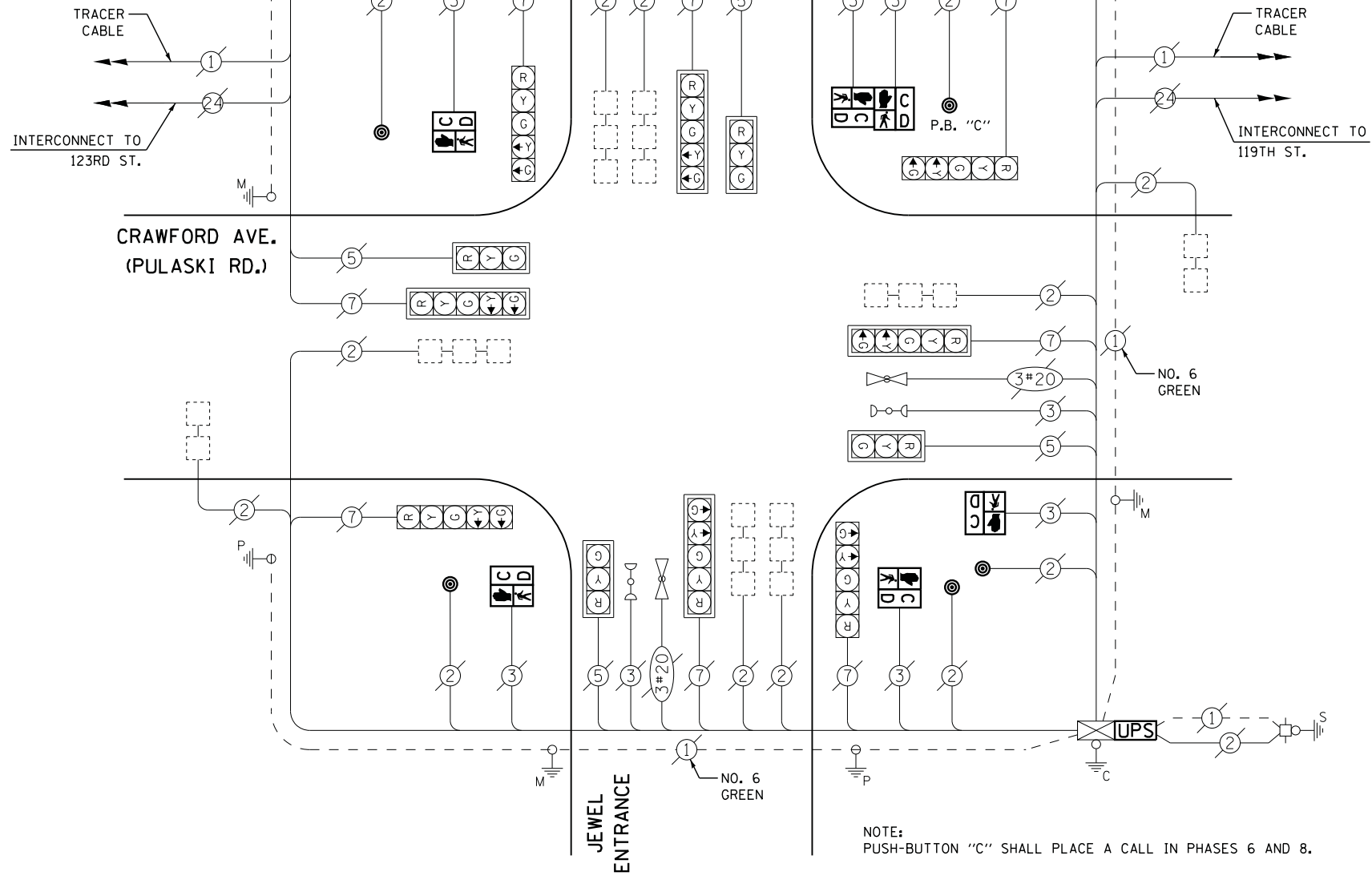
TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	16	135	12	0.10	20
PED. SIGNAL	6	90	25	1.00	150
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
FLASHER LED					
TOTAL =					492

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT ILYAS MOHIUDDIN
PHONE 708-235-2692
COMMONWEALTH EDISON

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
4	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
1	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
5	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING



CABLE PLAN

NOTE:
PUSH-BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

- 6 EACH PEDESTRIAN SIGNAL HEAD
- 5 EACH PEDESTRIAN PUSH-BUTTON

FILE NAME = M:\p\2014\1481\2103 PTB 168-011 SINGH IDOT VAR-VAR\WD14-002 South Cook Co. LED\6 Design\CAD\Sheet Files\4892 CAB_C00K.dgn

USER NAME = .USERNAME.	DESIGNED - DW	REVISED -
	DRAWN - CC	REVISED -
PLOT SCALE = 20.000' / in.	CHECKED - JDH	REVISED -
PLOT DATE = 7/9/2014	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CRAWFORD AVENUE (PULASKI ROAD) AT JEWEL /ALDI (120TH STREET)
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE**

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

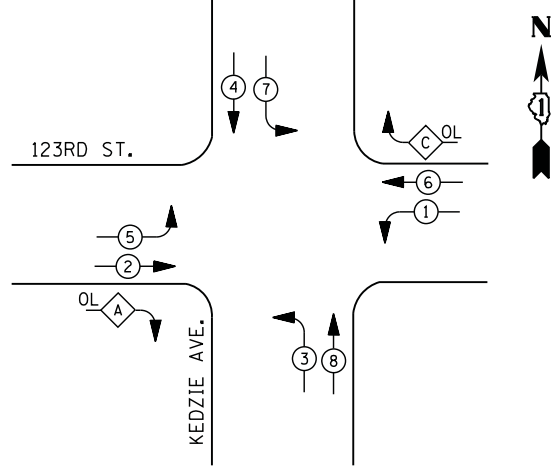
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	28
			CONTRACT NO. 60Y41	
ILLINOIS				

TS #4892
ALSIP

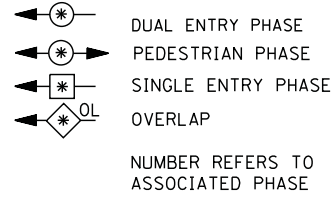


FILE NAME = M:\p\03\1481\2183 PTB 168-011 SINGH IDOT VAR-VAR\VD14-002 South Cook Co.,LED\6\Design\CAD\Sheet_Files\5385_CAB_COOK.dgn

CONTROLLER SEQUENCE



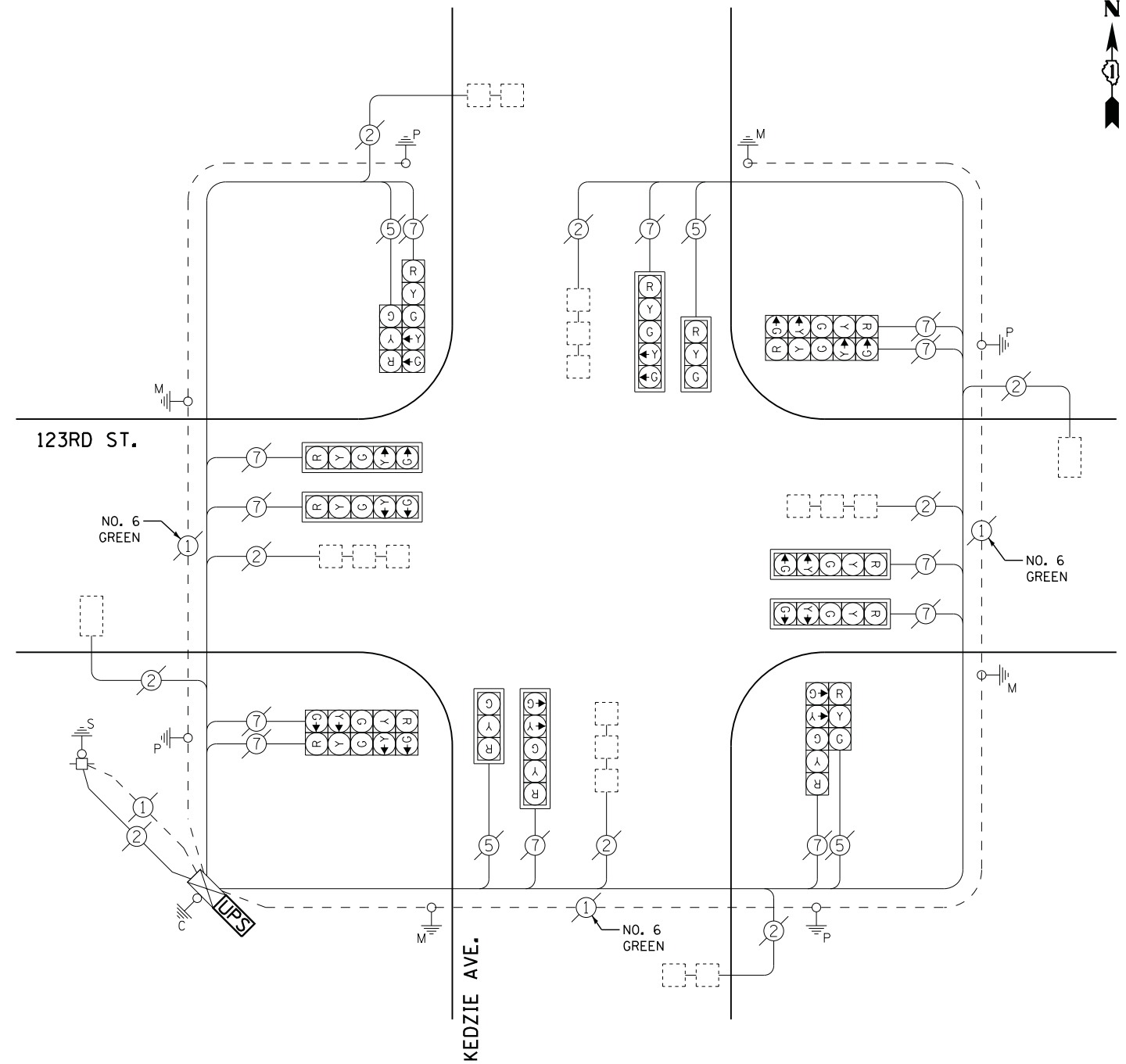
LEGEND



RIGHT TURN OVERLAP PHASE DESIGNATION

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

PHASE DESIGNATION DIAGRAM



CABLE PLAN

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

TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	16	135	15	0.25	60
ARROW	24	135	12	0.10	29
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
TOTAL =					425

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
 201 WEST CENTER COURT
 SCHAUMBURG, IL 60196-1096
 CONTACT ILYAS MOHIUDDIN
 PHONE 708-235-2692
 COMMONWEALTH EDISON

USER NAME = .USERNAME.	DESIGNED - DW	REVISED -
	DRAWN - CC	REVISED -
PLOT SCALE = 20.000' / in.	CHECKED - JDH	REVISED -
PLOT DATE = 7/9/2014	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**KEDZIE AVENUE AT 123RD STREET
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM**

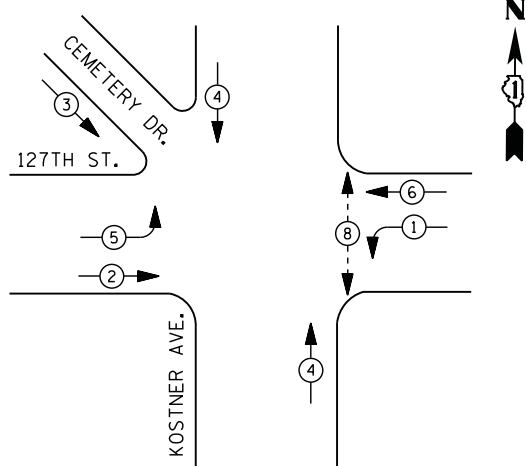
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	29
ILLINOIS			CONTRACT NO. 60Y41	

TS #5385
ALSIP

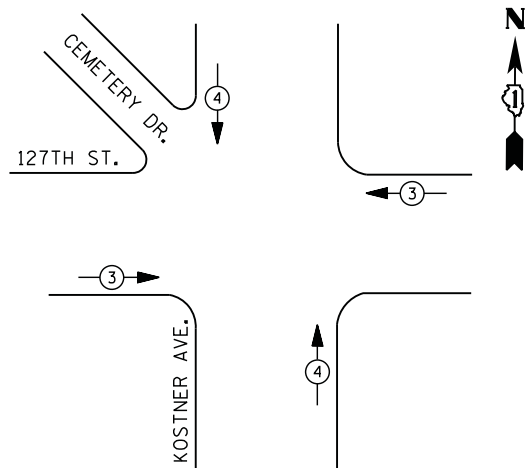


CONTROLLER SEQUENCE



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

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE

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

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

TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	13	135	17	0.50	111
(YELLOW)	13	135	25	0.25	82
(GREEN)	13	135	15	0.25	49
ARROW	8	135	12	0.10	10
PED. SIGNAL	2	90	25	1.00	50
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
FLASHER LED					
TOTAL =					402

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT ILYAS MOHIUDDIN
PHONE 708-235-2692
COMMONWEALTH EDISON

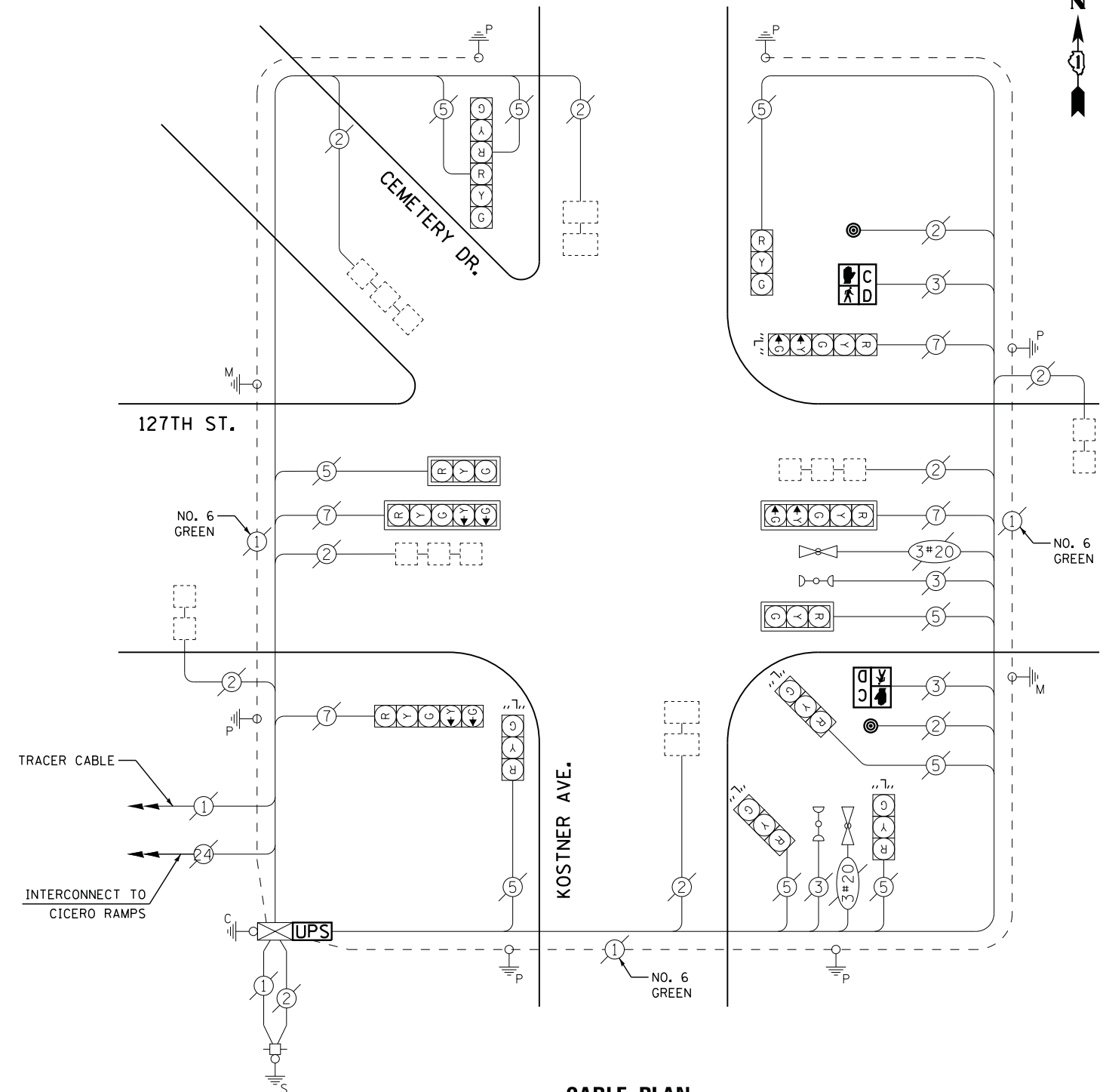
SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
2	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

2	EACH	PEDESTRIAN SIGNAL HEAD
2	EACH	PEDESTRIAN PUSH-BUTTON



CABLE PLAN

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**127TH STREET AT KOSTNER AVENUE
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE**

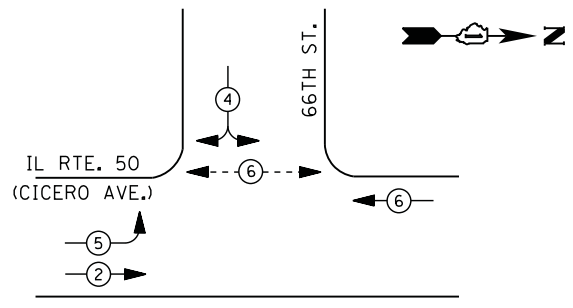
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	30
CONTRACT NO. 60Y41				

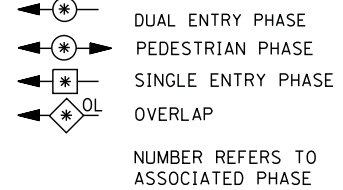
TS #20965
ALSIP



CONTROLLER SEQUENCE

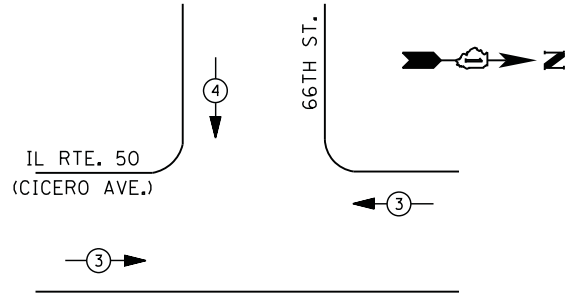


LEGEND



- ① REPLACE 10 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ② REPLACE 14 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ③ REPLACE 15 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ④ REPLACE 16 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ⑤ REPLACE 18 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE

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

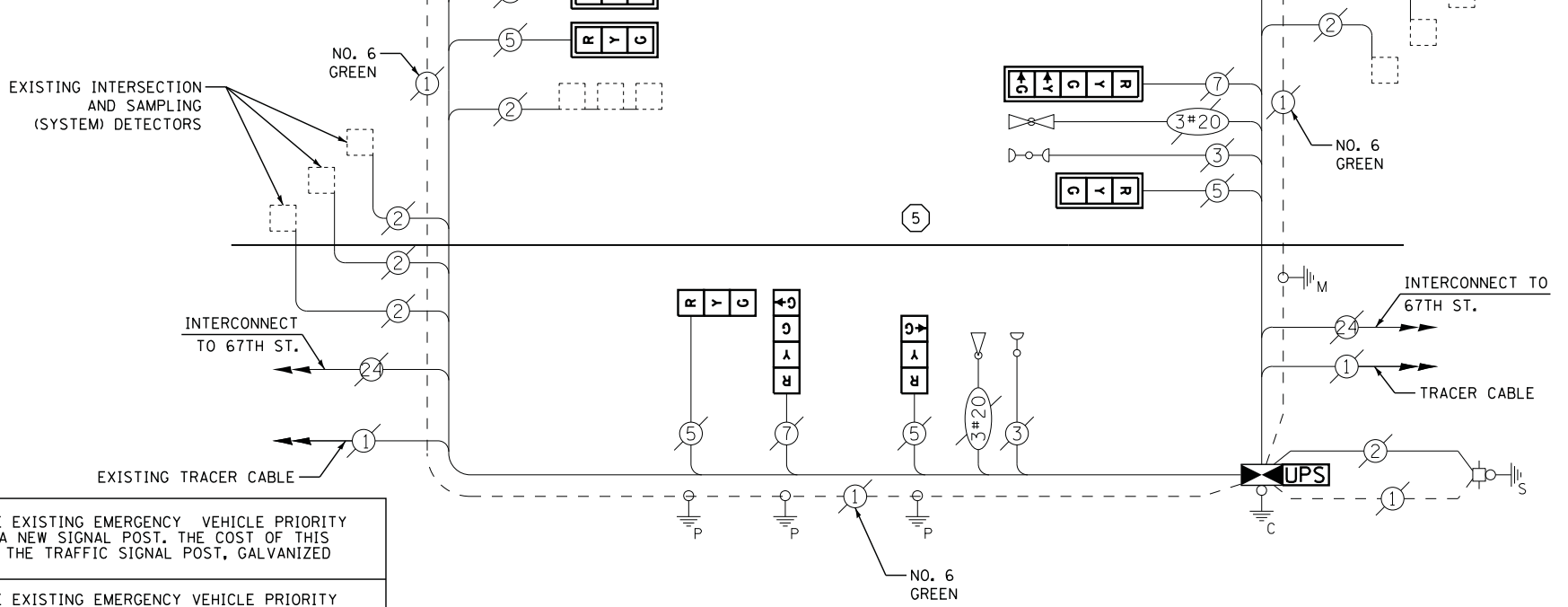
I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	9	135	17	0.50	77
(YELLOW)	9	135	25	0.25	57
(GREEN)	10	135	15	0.25	38
ARROW	4	135	12	0.10	5
PED. SIGNAL	2	90	25	1.00	50
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
TOTAL =					327

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
 201 WEST CENTER COURT
 SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT DONALD RIES
 PHONE 773-838-2905
 COMMONWEALTH EDISON

IL RTE. 50 (CICERO AVE.)



CABLE PLAN

CONTRACTOR SHALL RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT TO A NEW SIGNAL POST. THE COST OF THIS WORK SHALL BE INCLUDED IN THE TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT. PAY ITEM.

CONTRACTOR SHALL RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT TO NEW CONTROLLER CABINET. THE COST OF THIS WORK SHALL BE INCLUDED IN THE FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL PAY ITEM.

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	TRANSCEIVER - FIBER OPTIC
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.
3	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
3	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
8	EACH	INDUCTIVE LOOP DETECTOR
2	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	REMOVE AND REPLACE ANCHOR BOLTS
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL

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

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

2	EACH	PEDESTRIAN SIGNAL HEAD
2	EACH	PEDESTRIAN PUSH-BUTTON
2	EACH	SIGNAL POST
1	EACH	CONTROLLER AND CABINET (COMPLETE)
6	EACH	SIGNAL HEAD, 3 - SECTION
1	EACH	SIGNAL HEAD, 4 - SECTION
2	EACH	SIGNAL HEAD, 5 - SECTION

TS #2456
 BEDFORD PARK

FILE NAME = M:\p\03\1481\2103 PTB 168-011 SINGH IDOT VAR-VAR\WD14-002 South Cook Co.,LED\65 Design\CAD\Sheet Files\2456.CAB.C00K.dgn

USER NAME = .USERNAME.	DESIGNED - DW	REVISED -
	DRAWN - CC	REVISED -
PLOT SCALE = 20.000' / in.	CHECKED - JDH	REVISED -
PLOT DATE = 7/9/2014	DATE -	REVISED -

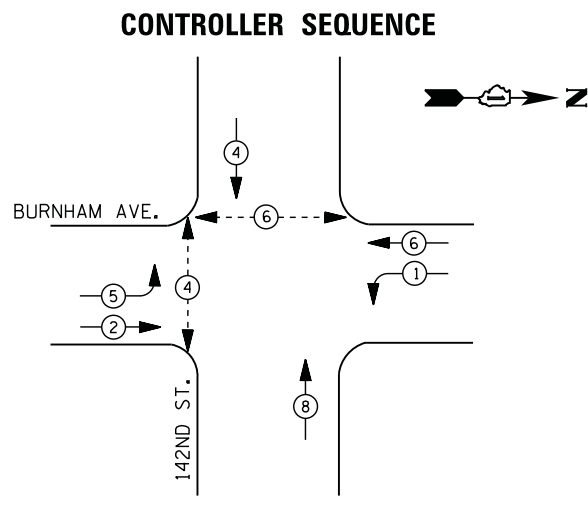
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

IL ROUTE 50 (CICERO AVENUE) AT 66TH STREET SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE			
SCALE: N.T.S.	SHEET NO.	OF SHEETS	STA. TO STA.

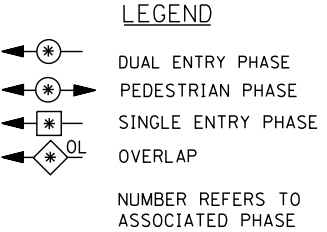
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	31
CONTRACT NO. 60Y41				
ILLINOIS				



FILE NAME = M:\p\1481\2183 PTB 168-011 SINGH.IDOT VAR-VAR\VD14-002 South Cook Co.LED\6 Design\CAD\Sheet Files\4222.CAB.C00K.dgn



PHASE DESIGNATION DIAGRAM



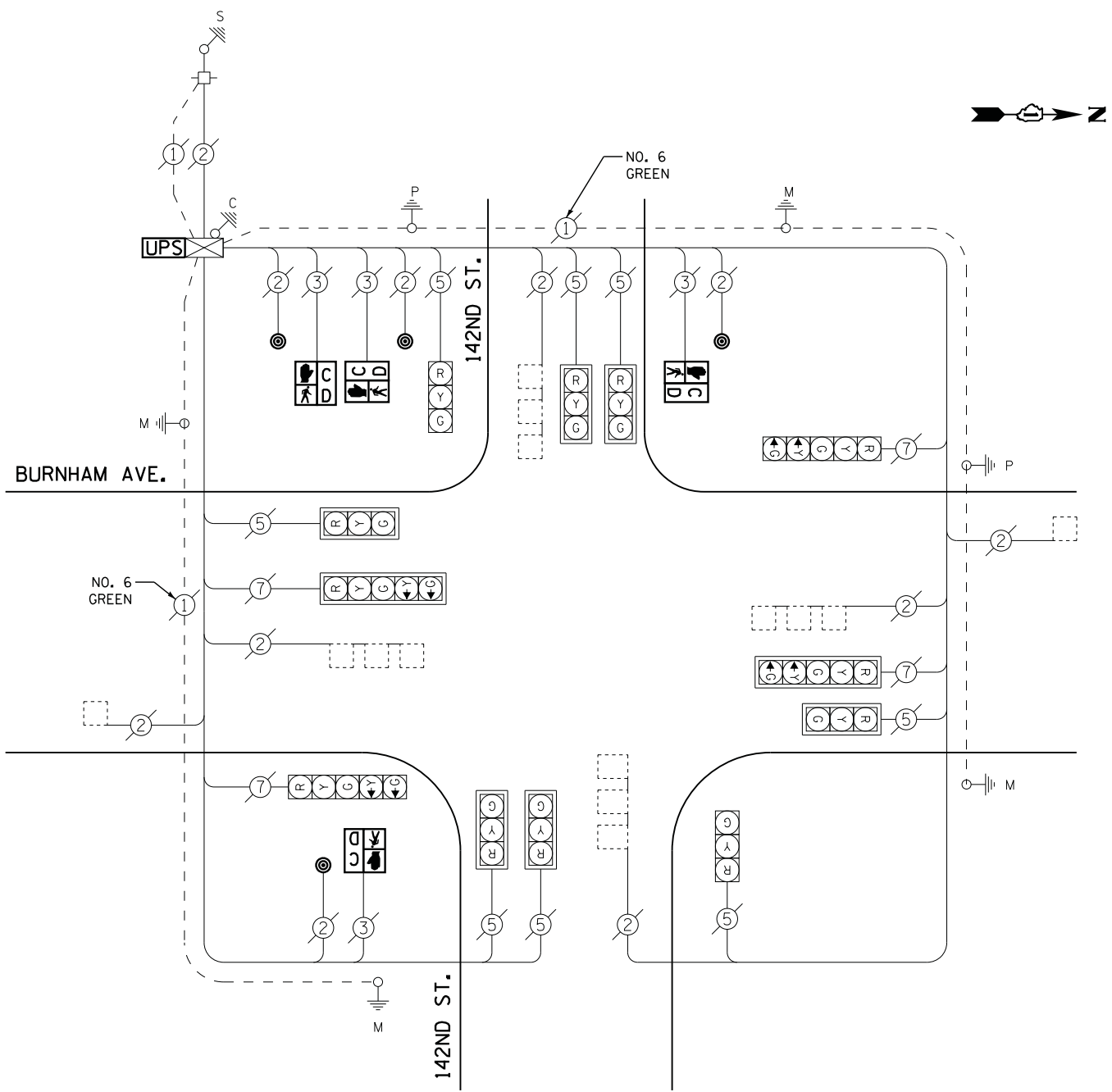
I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	8	135	12	0.10	10
PED. SIGNAL	4	90	25	1.00	100
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
TOTAL =					432

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT ILYAS MOHIUDDIN
PHONE 708-235-2692
COMMONWEALTH EDISON

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
4	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
4	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL



CABLE PLAN

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

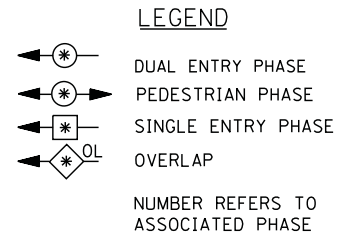
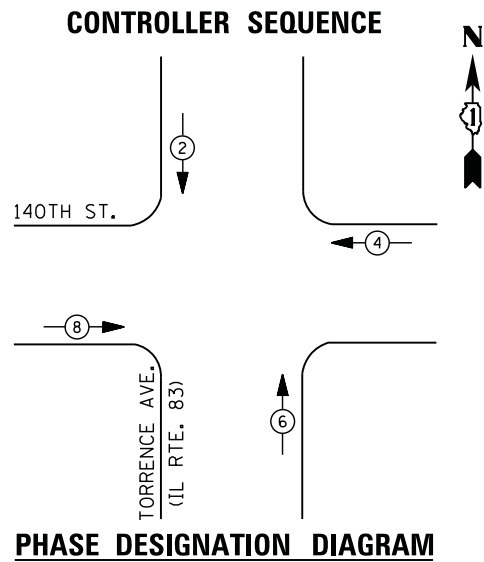
4	EACH	PEDESTRIAN SIGNAL HEAD
4	EACH	PEDESTRIAN PUSH-BUTTON

TS #4222
BURNHAM

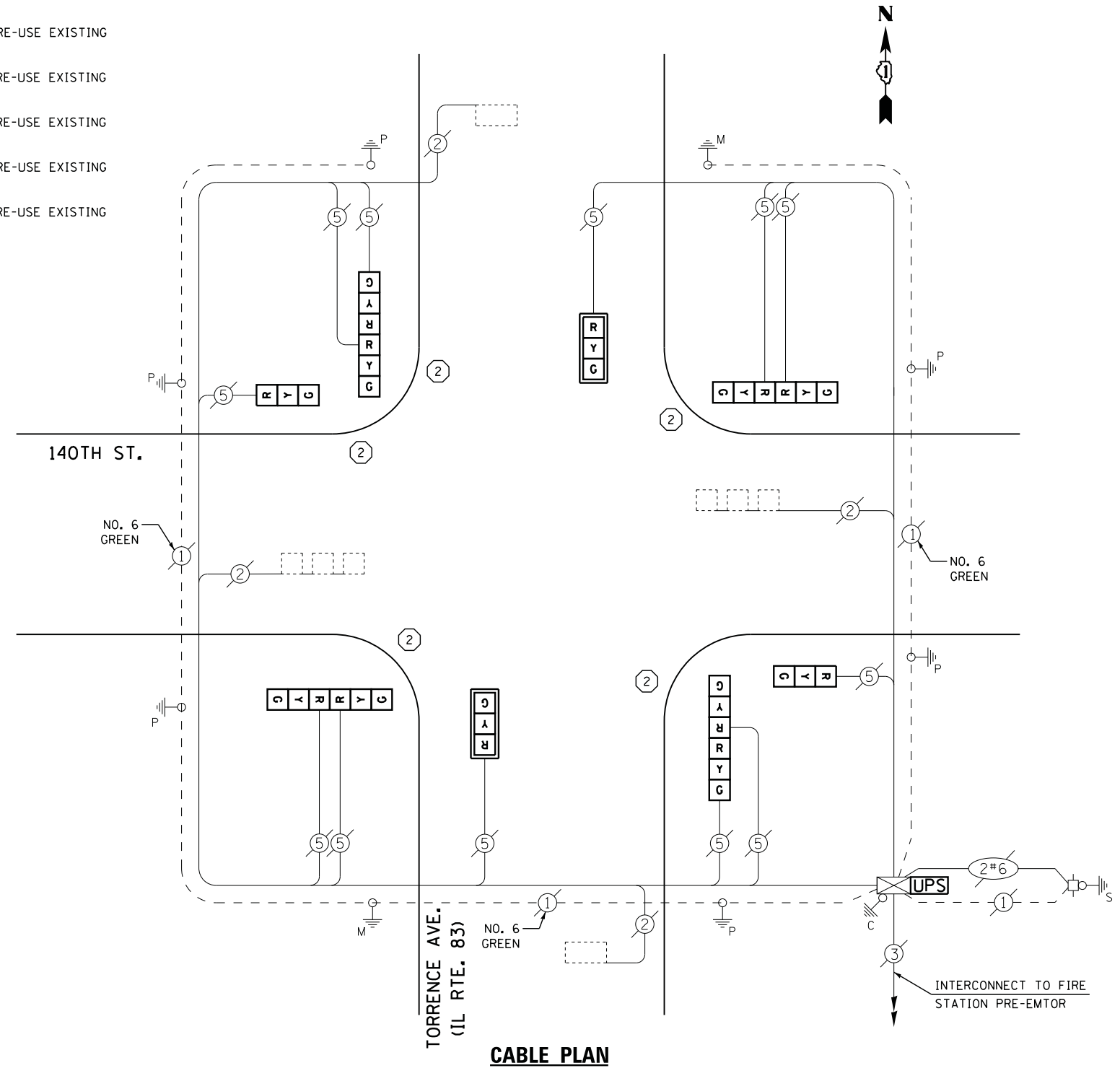
USER NAME = .USERNAME.	DESIGNED - DW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BURNHAM AVENUE AT 142ND STREET SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
PLOT SCALE = 20.000' / in.	DRAWN - CC	REVISED -		SCALE: N.T.S.	SHEET NO.	OF SHEETS	STA.	TO STA.	ILLINOIS	2014-043TS	COOK	61	32
PLOT DATE = 7/9/2014	CHECKED - JDH	REVISED -		CONTRACT NO. 60Y41									
	DATE -	REVISED -											



FILE NAME = M:\p\03\1481\2103 PTB 168-011 SINGH IDOT VAR-VAR\DOT VAR-VAR\DOT VAR-VAR\Design\CAD\Sheet Files\4530_CAB_COOK.dgn



- ① REPLACE 10 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ② REPLACE 14 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ③ REPLACE 15 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ④ REPLACE 16 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ⑤ REPLACE 18 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.



I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW		135	12	0.10	
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
TOTAL =					322

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT ILYAS MOHIUDDIN
PHONE 708-235-2692
COMMONWEALTH EDISON

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
5	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
4	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
2	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
3	EACH	REMOVE AND REPLACE ANCHOR BOLTS
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

4	EACH	SIGNAL HEAD, 3 - SECTION
4	EACH	SIGNAL HEAD, 2 - FACE, 3 SECTION
2	EACH	TRAFFIC SIGNAL BACKPLATE
5	EACH	SIGNAL POST

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

140TH STREET AT TORRENCE AVENUE (IL ROUTE 83)
SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	33
CONTRACT NO. 60Y41				

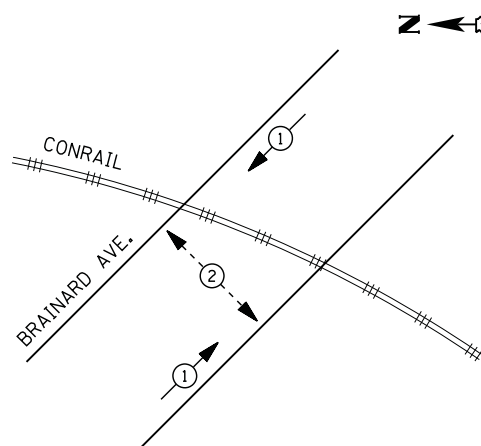
TS #4530
BURNHAM

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

ILLINOIS



CONTROLLER SEQUENCE

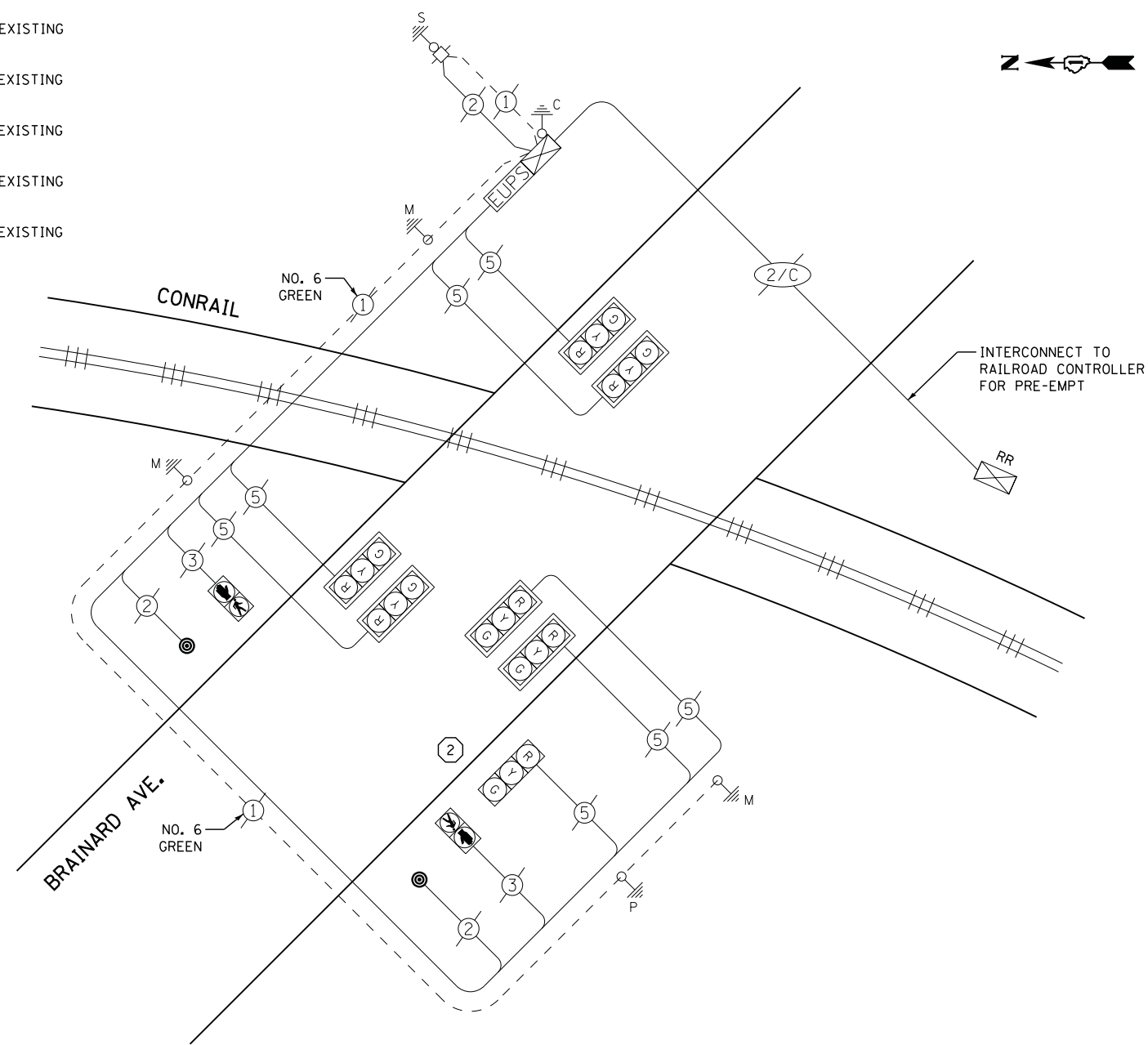


PHASE DESIGNATION DIAGRAM

LEGEND

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

- ① REPLACE 10 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- ② REPLACE 14 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- ③ REPLACE 15 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- ④ REPLACE 16 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- ⑤ REPLACE 18 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.



CABLE PLAN

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

TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	7	135	17	0.50	60
(YELLOW)	7	135	25	0.25	44
(GREEN)	7	135	15	0.25	27
ARROW		135	12	0.10	
PED. SIGNAL	2	90	25	1.00	50
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
TOTAL =					281

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
2	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	REMOVE AND REPLACE ANCHOR BOLTS

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

2	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	SIGNAL POST

FILE NAME = M:\p\2014\1481\2103 PTB 168-011 SINGH IDOT VAR-VAR\WD14-002 South Cook Co. LED\6 Design\CAD\Sheet Files\20615-CAB.CDDK.dgn

ENERGY COSTS- **BILLED TO: IDOT DISTRICT 1**
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - **CONTACT ILYAS MOHIUDDIN**
PHONE 708-235-2692
COMMONWEALTH EDISON

USER NAME = .USERNAME.	DESIGNED - DW	REVISED -
	DRAWN - CC	REVISED -
PLOT SCALE = 20.000' / in.	CHECKED - JDH	REVISED -
PLOT DATE = 7/9/2014	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BRAINARD AVENUE AT HEGEWISCH METRA STATION
SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM**

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

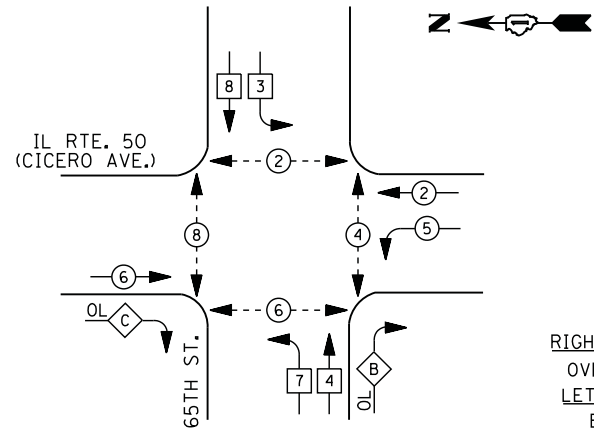
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	34
CONTRACT NO. 60Y41				

TS #20615
BURNHAM

ILLINOIS



CONTROLLER SEQUENCE



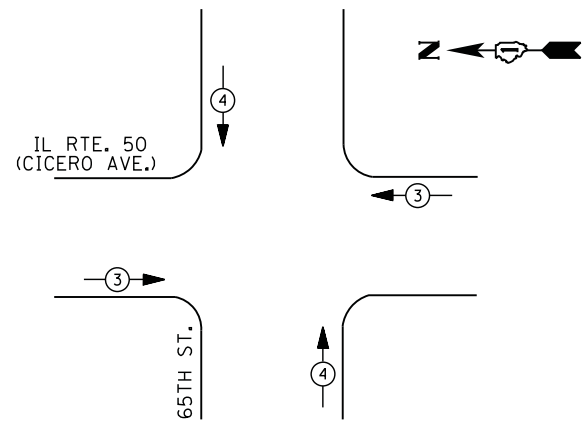
LEGEND

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

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B =	4	5
C =	6	7

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		

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

TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	17	135	17	0.50	145
(YELLOW)	17	135	25	0.25	107
(GREEN)	17	135	15	0.25	64
ARROW	12	135	12	0.10	15
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
FLASHER LED					
TOTAL =					631

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
 201 WEST CENTER COURT
 SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT DONALD RIES
 PHONE 773-838-2905
 COMMONWEALTH EDISON

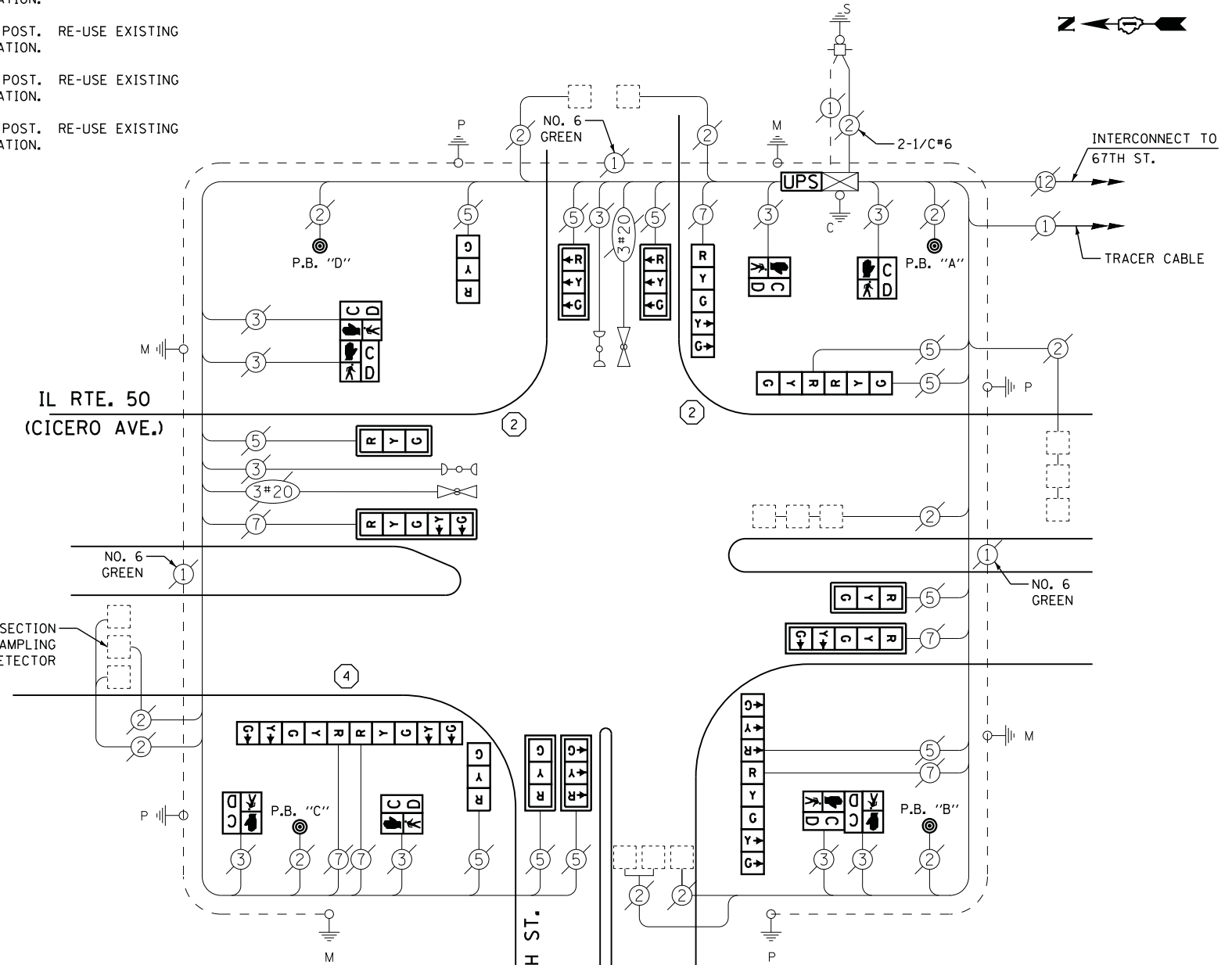
- 1 REPLACE 10 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- 2 REPLACE 14 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- 3 REPLACE 15 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- 4 REPLACE 16 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- 5 REPLACE 18 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.

IL RTE. 50 (CICERO AVE.)

EXISTING INTERSECTION AND SAMPLING (SYSTEM) DETECTOR

65TH ST.

CABLE PLAN



- NOTES:
 PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4
 PUSH BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6
 PUSH BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8
 PUSH BUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
6	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
4	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
8	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
2	EACH	REMOVE AND REPLACE ANCHOR BOLTS
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
4	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

8	EACH	SIGNAL HEAD, 3 - SECTION
3	EACH	SIGNAL HEAD, 5 - SECTION
1	EACH	SIGNAL HEAD, 2 - FACE, 1-3 SECTION, 1-5 SECTION
1	EACH	SIGNAL HEAD, 2 - FACE, 3 SECTION
1	EACH	SIGNAL HEAD, 2 - FACE, 5 SECTION
8	EACH	TRAFFIC SIGNAL BACKPLATE
8	EACH	PEDESTRIAN SIGNAL HEAD
4	EACH	PEDESTRIAN PUSH-BUTTON
3	EACH	SIGNAL POST

TS #2455
CHICAGO

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

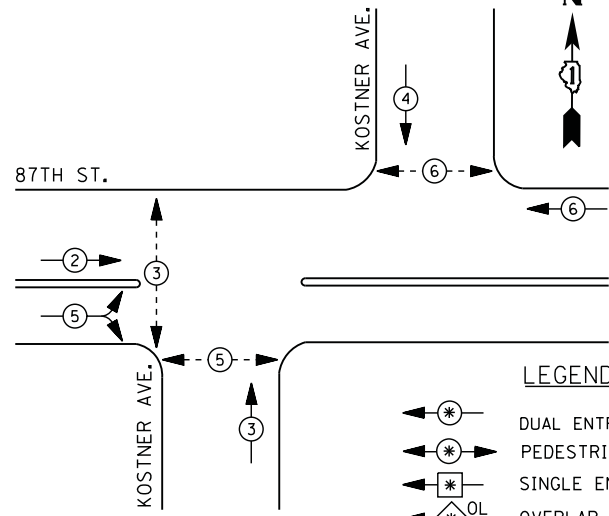
IL ROUTE 50 (CICERO AVENUE) AT 65TH STREET
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

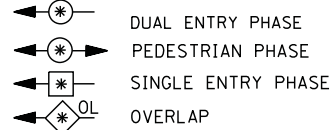
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	35
CONTRACT NO. 60Y41				
ILLINOIS				



CONTROLLER SEQUENCE

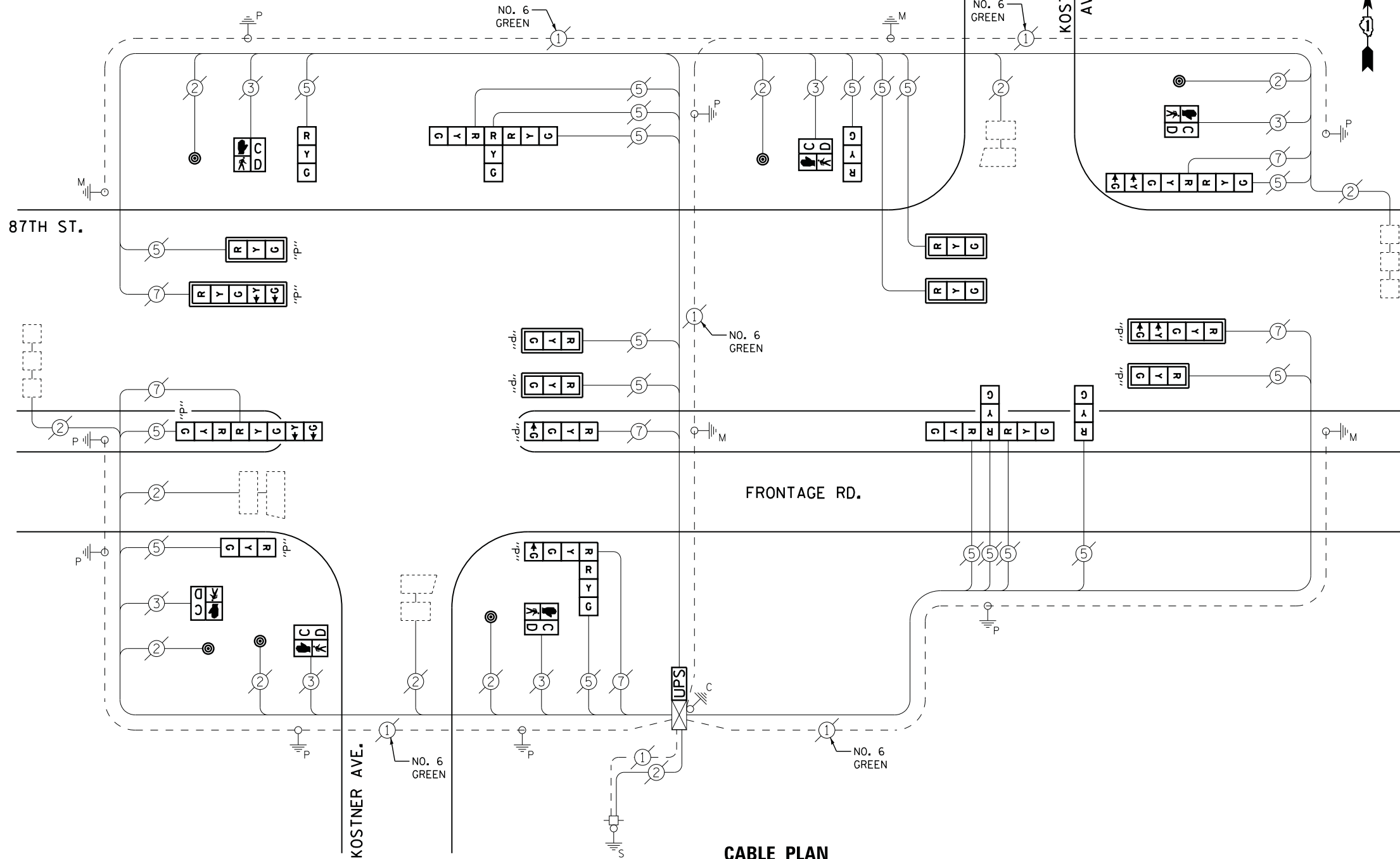


LEGEND



NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM



CABLE PLAN

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
3	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
2	EACH	SIGNAL HEAD, LED, 3-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
4	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED
1	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED
2	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED
1	EACH	COMBINATION SIGNAL HEAD, LED, 2-FACE, 1-4 SECTION OPTICALLY PROGRAMMED, 1-3 SECTION, BRACKET MOUNTED
1	EACH	COMBINATION SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION OPTICALLY PROGRAMMED, 1-5 SECTION, BRACKET MOUNTED
6	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
8	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
6	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

6	EACH	SIGNAL HEAD, 3 - SECTION
1	EACH	SIGNAL HEAD, 5 - SECTION
1	EACH	SIGNAL HEAD, 2 - FACE, 1-3 SECTION, 1-5 SECTION
2	EACH	SIGNAL HEAD, 3 - FACE, 3 SECTION
8	EACH	TRAFFIC SIGNAL BACKPLATE
6	EACH	PEDESTRIAN SIGNAL HEAD
6	EACH	PEDESTRIAN PUSH-BUTTON
6	EACH	OP SIGNAL HEAD, 3 - SECTION
2	EACH	OP SIGNAL HEAD, 4 - SECTION
2	EACH	OP SIGNAL HEAD, 5 - SECTION

TS #3915
HOMETOWN

FILE NAME = M:\p\03\1481\2103 PTB 168-011 SINGH IDOT VAR-VAR\WD14-002 South Cook Co., LED\6 Design\CAD\Sheet_Files\3915-CAB_COOK.dgn

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

TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	25	135	17	0.50	213
(YELLOW)	25	135	25	0.25	157
(GREEN)	27	135	15	0.25	102
ARROW	8	135	12	0.10	10
PED. SIGNAL	6	90	25	1.00	150
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
FLASHER LED					
TOTAL =					732

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT ILYAS MOHIUDDIN
PHONE 708-235-2692
COMMONWEALTH EDISON

USER NAME = .USERNAME.	DESIGNED - DW	REVISED -
	DRAWN - CC	REVISED -
PLOT SCALE = 20.000' / in.	CHECKED - JDH	REVISED -
PLOT DATE = 7/9/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

87TH STREET AT KOSTNER AVENUE
SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	36
CONTRACT NO. 60Y41				
ILLINOIS				



SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
10	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.
1	EACH	SIGNAL HEAD, LED, 1-FACE, 1-SECTION, BRACKET MOUNTED
14	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
1	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
8	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED
3	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED
8	EACH	COMBINATION SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION OPTICALLY PROGRAMMED, 1-3 SECTION, BRACKET MOUNTED
1	EACH	COMBINATION SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION OPTICALLY PROGRAMMED, 1-5 SECTION, BRACKET MOUNTED
2	EACH	COMBINATION SIGNAL HEAD, LED, 2-FACE, 1-5 SECTION OPTICALLY PROGRAMMED, 1-3 SECTION, BRACKET MOUNTED
1	EACH	COMBINATION SIGNAL HEAD, LED, 3- FACE, 1-3 SECTION OPTICALLY PROGRAMMED, 1-5 SECTION OPTICALLY PROGRAMMED, 1-3 SECTION, BRACKET MOUNTED
26	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
1	EACH	ILLUMINATED SIGN, LED
6	EACH	REMOVE AND REPLACE ANCHOR BOLTS

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRCTOR 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.

12	EACH	TRAFFIC SIGNAL POST
26	EACH	TRAFFIC SIGNAL BACKPLATE
18	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, 3-SECTION
6	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, 5-SECTION
1	EACH	SIGNAL HEAD, 1-SECTION
25	EACH	SIGNAL HEAD, 3-SECTION
2	EACH	SIGNAL HEAD, 5-SECTION
1	EACH	ILLUMINATED SIGN

- ① REPLACE 10 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- ② REPLACE 14 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- ③ REPLACE 15 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- ④ REPLACE 16 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- ⑤ REPLACE 18 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.

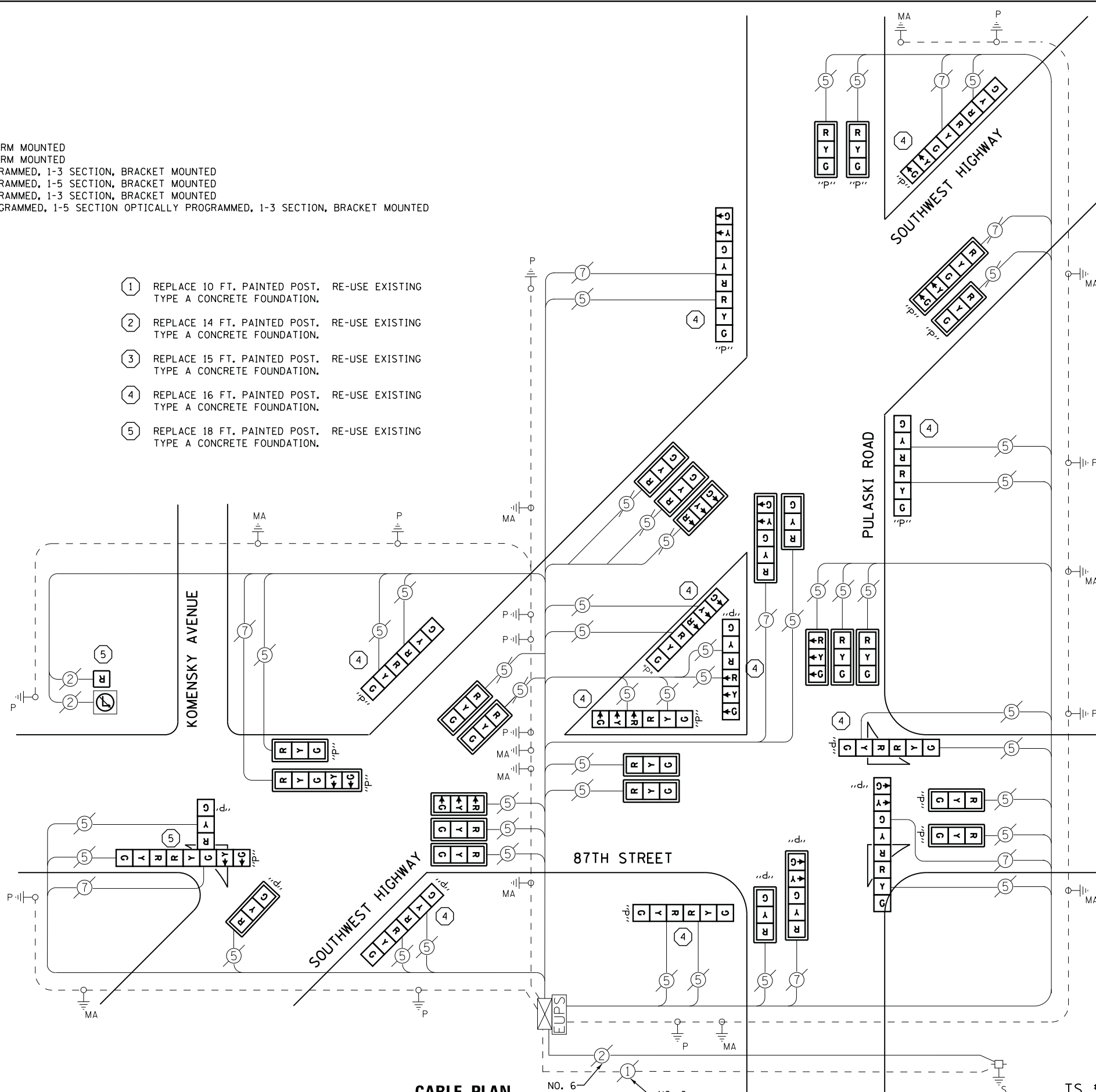
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM

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

TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	52	135	17	0.50	442
(YELLOW)	51	135	25	0.25	319
(GREEN)	51	135	15	0.25	191
ARROW	16	135	12	0.10	19
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN	1	252	25	0.05	1
VIDEO SYSTEM		150	-	1.00	
FLASHER LED					
TOTAL =					1072

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT ILYAS MOHIUDDIN
PHONE 708-235-2692
COMMONWEALTH EDISON



CABLE PLAN

TS #3920
HOMETOWN (SH. 1)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTHWEST HIGHWAY /PULASKI ROAD /KOMENSKY AVENUE AT 87TH STREET
SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	37
CONTRACT NO. 60Y41				

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.



FILE NAME = M:\p\1481\2183 PTB 168-011 SINGH.IDOT VAR-VAR\14-002 South Cook Co.LED\6 Design\CAD\Sheet Files\3928A_CAB_CDDC.dgn

PROPOSED SEQUENCE OF OPERATION	[Diagrammatic Sequence]																		FLASH
PHASE	1			2			3			4			5			6			
INTERVAL	1	1A	1B	2	2A	2B	3	3A	3B	4	4A	4B	5	5A	5B	6	6A	6B	
STREET	CHANGE TO 2			3			4			5			6			1			
PULASKI RD. N/2 @ 8TH ST. LEFT MAST ARM AND FAR LEFT SIGNALS	←R	←R	←R	←R	←R	←R	←G	←Y	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	
PULASKI RD. N/2 @ 8TH ST. RIGHT MAST ARM AND NEAR RIGHT SIGNALS	R	R	R	R	R	R	G	G	G	G	Y	R	R	R	R	R	R	R	
PULASKI RD. N/2 @ S.W. HWY. ALL SIGNALS	R	R	R	R	R	R	R	R	R	G	G	G	G	G	G	G	Y	R	
PULASKI RD. S/2 @ S.W. HWY. LEFT MAST ARM AND FAR LEFT SIGNALS	R	R	R	R	R	R	R	R	R	G	Y	R	R	R	R	R	R	R	
PULASKI RD. S/2 @ S.W. HWY. RIGHT MAST ARM AND NEAR RIGHT SIGNALS	R	R	R	R	R	R	R	R	R	G	Y	R	R	R	R	R	R	R	
PULASKI RD. S/2 @ 8TH ST. LEFT MAST ARM AND FAR LEFT SIGNALS	R	R	R	←G	←Y	R	R	R	R	R	G	G	←G	←Y	R	R	R	R	
PULASKI RD. S/2 @ 8TH ST. RIGHT MAST ARM AND NEAR RIGHT SIGNALS	R	R	R	G	Y	R	R	R	R	G	G	G	G	Y	R	R	R	R	
8TH ST. E/2 @ S.W. HWY. LEFT MAST ARM AND FAR LEFT SIGNALS	←R	←R	←R	←R	←R	←R	←R	←R	←R	←G	←G	←G	←G	←Y	←R	←R	←R	←R	
8TH ST. E/2 @ S.W. HWY. RIGHT MAST ARM AND NEAR RIGHT SIGNALS	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	Y	R	
8TH ST. E/2 @ PULASKI RD. ALL SIGNALS	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	
8TH ST. W/2 @ PULASKI RD. ALL SIGNALS	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	
8TH ST. W/2 @ S.W. HWY. LEFT MAST ARM AND FAR LEFT SIGNALS	←G	←Y	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	
8TH ST. W/2 @ S.W. HWY. RIGHT MAST ARM AND NEAR RIGHT SIGNALS	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	
S.W. HWY. NE/2 @ 8TH ST. ALL SIGNALS	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	
S.W. HWY. NE/2 @ PULASKI RD. LEFT MAST ARM AND FAR LEFT SIGNALS	←R	←Y	←R	←G	←Y	←R	←G	←Y	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	
S.W. HWY. NE/2 @ PULASKI RD. RIGHT MAST ARM AND NEAR RIGHT SIGNALS	R	R	R	G	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	
S.W. HWY. SW/2 @ PULASKI RD. LEFT MAST ARM AND FAR LEFT SIGNALS	←G	←Y	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	
S.W. HWY. SW/2 @ PULASKI RD. RIGHT MAST ARM AND NEAR RIGHT SIGNALS	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	
S.W. HWY. SW/2 @ 8TH ST. ALL SIGNALS	R	R	R	G	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	

SEQUENCE
1|2|3|4|5|6|9|10|
★ = PROTECTED LEFT TURN
TRACK CLEAR = φ9
HOLD = φ10
EXIT PHASE = φ3



NOTE:
ALL PHASES MUST BE ON MAX RECALL
NO LEFT TURN AT SW HWY @ 8TH
FOR NORTHEAST DIRECTION.

TS #3920
HOMETOWN (SH. 2)

USER NAME = .USERNAME.	DESIGNED - DW	REVISED -
DRAWN - CC	REVISOR -	
PLOT SCALE = 20.000' / in.	CHECKED - JDH	REVISOR -
PLOT DATE = 7/9/2014	DATE -	REVISOR -

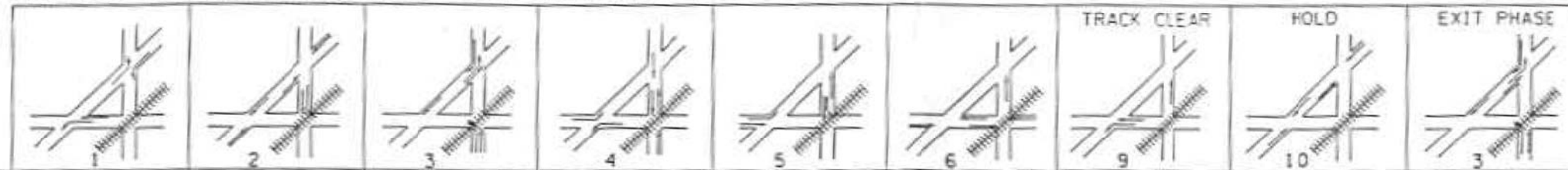
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTHWEST HIGHWAY / PULASKI ROAD / KOMENSKY AVENUE AT 8TH STREET
SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	38
			CONTRACT NO. 60Y41	
ILLINOIS				



PROPOSED RAILROAD PREEMPTION SEQUENCE OF OPERATION



CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	1		2		3		4		5		6		PREEMPTOR 2							
RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	1M	2	3	4	5	6	7	8	
CHANGE TO RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1B	2	1D	2	1F	2	1H	2	1K	2	1M	2	3	4	5	6	7	8	CLEAR TO NORMAL SEQUENCE	
PULASKI RD. N/B @ 8TH ST. LEFT MAST ARM AND FAR LEFT SIGNALS	←R	←R	←R	←R	←Y	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←G
PULASKI RD. N/B @ 8TH ST. RIGHT MAST ARM AND NEAR RIGHT SIGNALS	R	R	R	R	Y	R	Y	R	R	R	R	R	R	R	R	R	R	R	R	G
PULASKI RD. N/B @ S.W. HWY ALL SIGNALS	R	R	R	R	R	R	G	G	G	G	G	G	G	Y	R	R	R	R	R	R
PULASKI RD. S/B @ S.W. HWY. LEFT MAST ARM AND FAR LEFT SIGNALS	R	R	R	R	R	R	Y	R	R	R	R	R	R	R	R	R	R	R	R	R
PULASKI RD. S/B @ S.W. HWY. RIGHT MAST ARM AND NEAR RIGHT SIGNALS	R	R	R	R	R	R	Y	R	R	R	R	R	R	R	R	R	R	R	R	R
PULASKI RD. S/B @ 8TH ST. LEFT MAST ARM AND FAR LEFT SIGNALS	R	R	Y	R	R	R	Y	R	Y	R	R	R	R	R	R	R	R	R	R	R
PULASKI RD. S/B @ 8TH ST. RIGHT MAST ARM AND NEAR RIGHT SIGNALS	R	R	Y	R	R	R	Y	R	Y	R	R	R	R	R	R	R	R	R	R	R
8TH ST. E/B @ S.W. HWY. LEFT MAST ARM AND FAR LEFT SIGNALS	←R	←R	←R	←R	←R	←R	←Y	←R	←Y	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R
8TH ST. E/B @ S.W. HWY. RIGHT MAST ARM AND NEAR RIGHT SIGNALS	R	R	R	R	R	R	R	R	Y	R	Y	R	R	R	R	R	R	R	R	R
8TH ST. E/B @ PULASKI RD. ALL SIGNALS	R	R	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	R	R	R
8TH ST. N/B @ PULASKI RD. ALL SIGNALS	R	R	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	R	R	R
8TH ST. W/B @ S.W. HWY. LEFT MAST ARM AND FAR LEFT SIGNALS	←G	←G	R	R	R	R	←G	←G	R	R	G	G	←G	Y	R	R	R	R	R	R
8TH ST. W/B @ S.W. HWY. RIGHT MAST ARM AND NEAR RIGHT SIGNALS	G	G	R	R	R	R	R	R	R	R	G	G	G	Y	R	R	R	R	R	R
S.W. HWY. N/B @ 8TH ST. ALL SIGNALS	R	R	Y	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	R
S.W. HWY. N/B @ PULASKI RD. LEFT MAST ARM AND FAR LEFT SIGNALS	←Y	R	Y	R	Y	R	R	R	R	R	R	R	R	R	R	G	G	G	G	←G
S.W. HWY. N/B @ PULASKI RD. RIGHT MAST ARM AND NEAR RIGHT SIGNALS	R	R	Y	R	Y	R	R	R	R	R	R	R	R	R	R	G	G	G	G	G
S.W. HWY. S/B @ PULASKI RD. LEFT MAST ARM AND FAR LEFT SIGNALS	←Y	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R
S.W. HWY. S/B @ PULASKI RD. RIGHT MAST ARM AND NEAR RIGHT SIGNALS	R	R	Y	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	R
S.W. HWY. S/B @ 8TH ST. ALL SIGNALS	R	R	Y	R	Y	R	R	R	R	R	R	R	R	R	R	G	G	G	G	G

TRACK CLEAR HOLD EXIT PHASE

FILE NAME = M:\p\1481\2183 PTB 168-011 SINGH IDOT VAR-VAR\14-002 South Cook Co. LED\6 Design\CAD\Sheet Files\3928B\CAB_C006.dgn

USER NAME = .USERNAME.	DESIGNED - DW	REVISED -
	DRAWN - CC	REVISED -
PLOT SCALE = 20.000' / in.	CHECKED - JDH	REVISED -
PLOT DATE = 7/9/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTHWEST HIGHWAY / PULASKI ROAD / KOMENSKY AVENUE AT 8TH STREET
SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

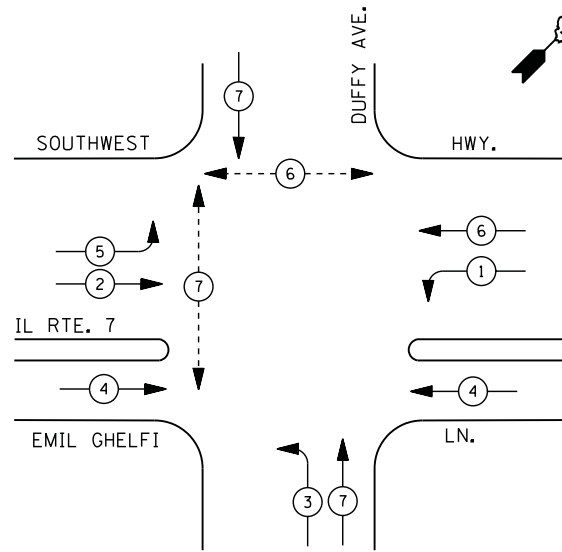
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	39
			CONTRACT NO. 60Y41	
ILLINOIS				

TS #3920
HOMETOWN (SH. 3)

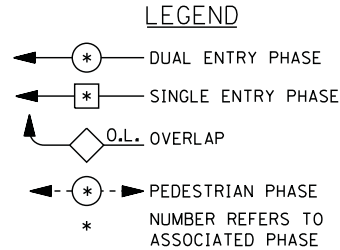


FILE NAME = M:\p\1481\2103 PTB 168-011 SINGH.IDOT VAR-VAR\WD14-002 South Cook Co.LED16 Design\CAD\Sheet_Files\10750_CAB_COOK.dgn

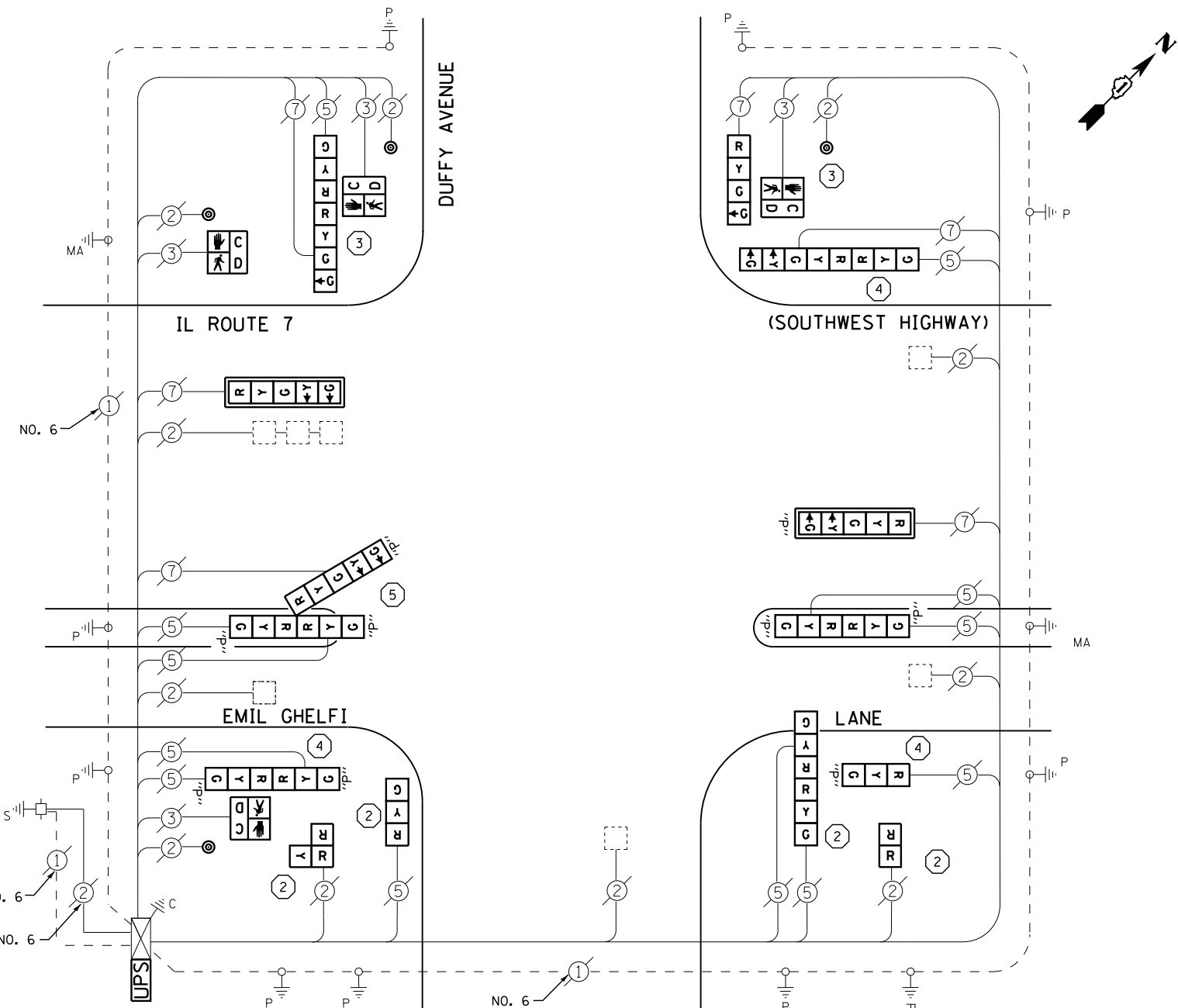
CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM



- ① REPLACE 10 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ② REPLACE 14 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ③ REPLACE 15 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ④ REPLACE 16 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ⑤ REPLACE 18 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.



CABLE PLAN

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
4	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 15 FT.
3	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.
5	EACH	SIGNAL HEAD, LED, 1-FACE, 1-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-4 SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
1	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED
2	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 3-FACE, 2-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
4	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
2	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
4	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
5	EACH	REMOVE AND REPLACE ANCHOR BOLTS

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

10	EACH	TRAFFIC SIGNAL POST
2	EACH	TRAFFIC SIGNAL BACKPLATE
4	EACH	PEDESTRIAN SIGNAL HEAD
4	EACH	PEDESTRIAN PUSH-BUTTON
7	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, 3-SECTION
2	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, 5-SECTION
5	EACH	SIGNAL HEAD, 1-SECTION
5	EACH	SIGNAL HEAD, 3-SECTION
2	EACH	SIGNAL HEAD, 4-SECTION
2	EACH	SIGNAL HEAD, 5-SECTION

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

TS #10750
HOMETOWN

I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	18	135	17	0.50	153
(YELLOW)	18	135	25	0.25	113
(GREEN)	18	135	15	0.25	68
ARROW	10	135	12	0.10	12
PED. SIGNAL	4	90	25	1.00	100
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
FLASHER LED					
TOTAL =					546
ENERGY COSTS- BILLED TO: IDOT DISTRICT 1					
201 WEST CENTER COURT					
SCHAUMBURG, IL 60196-1096					
ENERGY SUPPLY - CONTACT ILYAS MOHIUDDIN					
PHONE 708-235-2692					
COMMONWEALTH EDISON					
USER NAME =	DESIGNED -	DW	REVISED -		
	DRAWN -	CC	REVISED -		
PLOT SCALE = 20.000' / in.	CHECKED -	JDH	REVISED -		
PLOT DATE = 7/9/2014	DATE -		REVISED -		

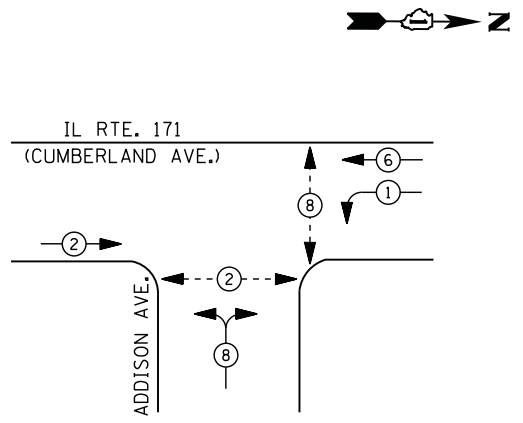
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 7 (SOUTHWEST HIGHWAY) AT DUFFY AVENUE
SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	40
CONTRACT NO. 60Y41				
ILLINOIS				

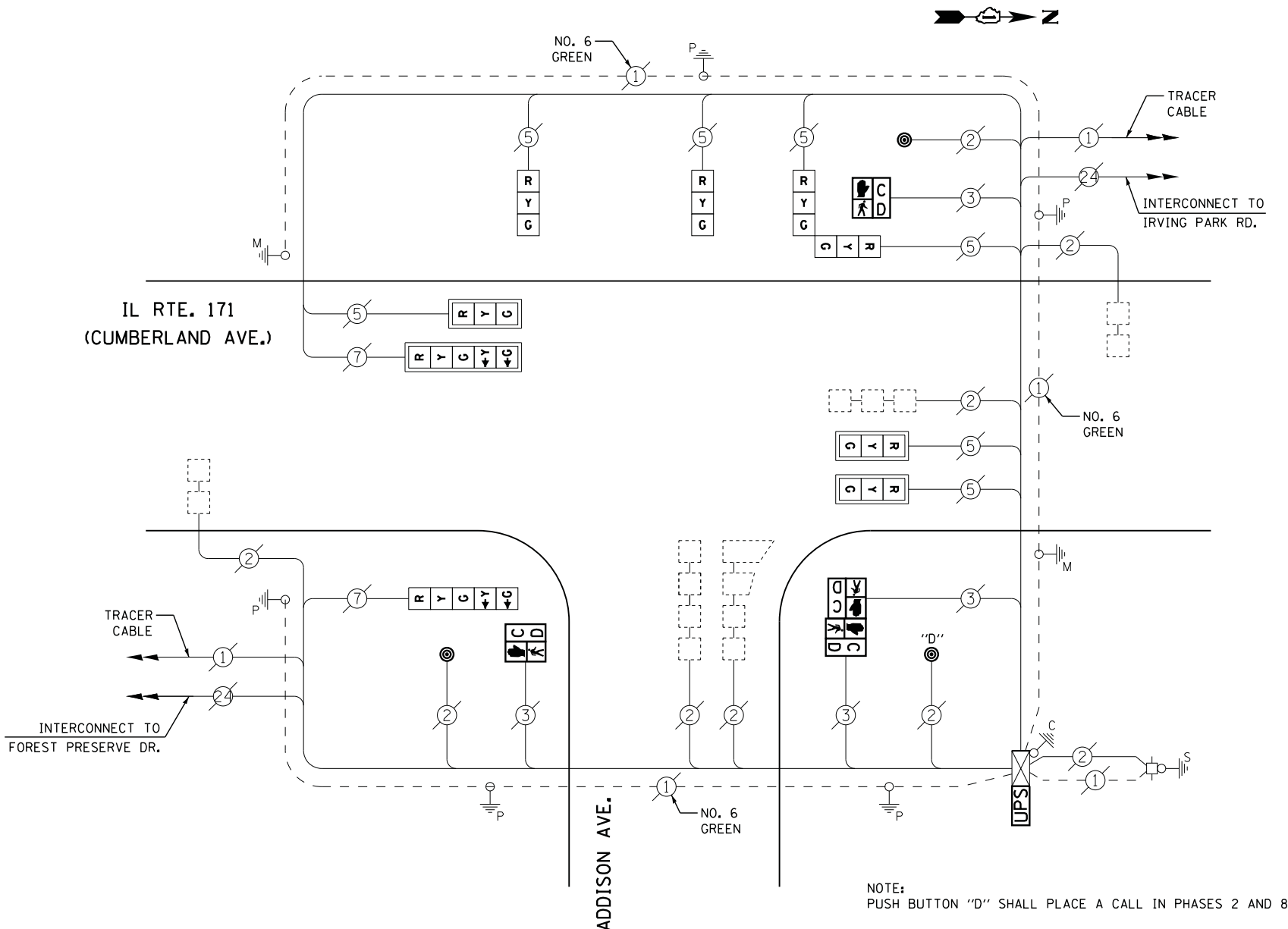


CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

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



CABLE PLAN

NOTE: PUSH BUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8

RETROFIT ALL EXISTING SIGNAL HEADS TO L.E.D.

UPS SHALL BE INSTALLED ON LEFT SIDE OF CONTROLLER CABINET DUE TO PHYSICAL CONSTRAINT, OR AS DIRECTED BY THE ENGINEER

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
1	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT
3	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT
1	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT
1	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT
1	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT
3	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

- 4 EACH PEDESTRIAN SIGNAL HEAD
- 3 EACH PEDESTRIAN PUSH-BUTTON

I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	9	135	17	0.50	77
(YELLOW)	9	135	25	0.25	57
(GREEN)	9	135	15	0.25	34
ARROW	4	135	12	0.10	5
PED. SIGNAL	4	90	25	1.00	100
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
TOTAL =					373

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT JOE LEUNG
PHONE 773-509-3288
COMMONWEALTH EDISON

FILE NAME = M:\p\03\1481\2183 PTB 168-011 SINGH IDOT VAR-VAR\WD14-002 South Cook Co. LED\6 Design\CAD\Sheet Files\4115.CAB.C00K.dgn

USER NAME = .USERNAME.	DESIGNED - DW	REVISED -
	DRAWN - CC	REVISED -
PLOT SCALE = 20.000' / in.	CHECKED - JDH	REVISED -
PLOT DATE = 7/9/2014	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL ROUTE 171 (CUMBERLAND AVENUE) AT ADDISON STREET
SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM**

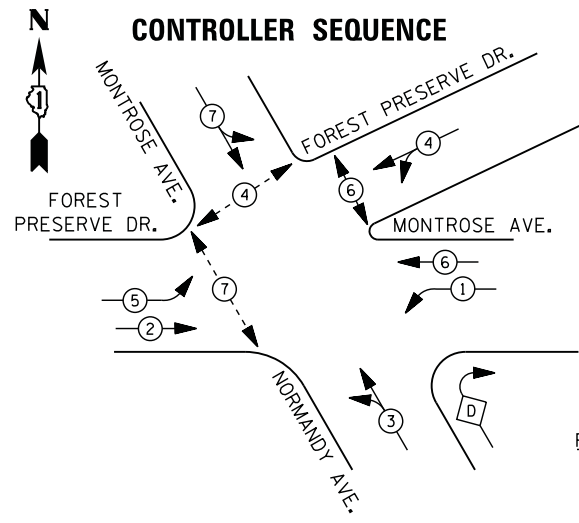
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	41
ILLINOIS			CONTRACT NO. 60Y41	

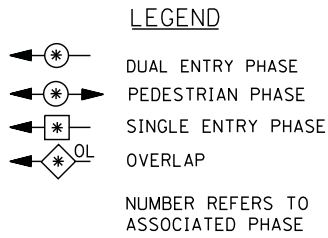
TS #4115
CHICAGO



FILE NAME = M:\p\03\1481\2103 PTB 168-011 SINGH IDOT VAR-VAR\WD14-002 South Cook Co. LED-16 Design\CAD\Sheet Files\5095_CAB_COOK.dgn



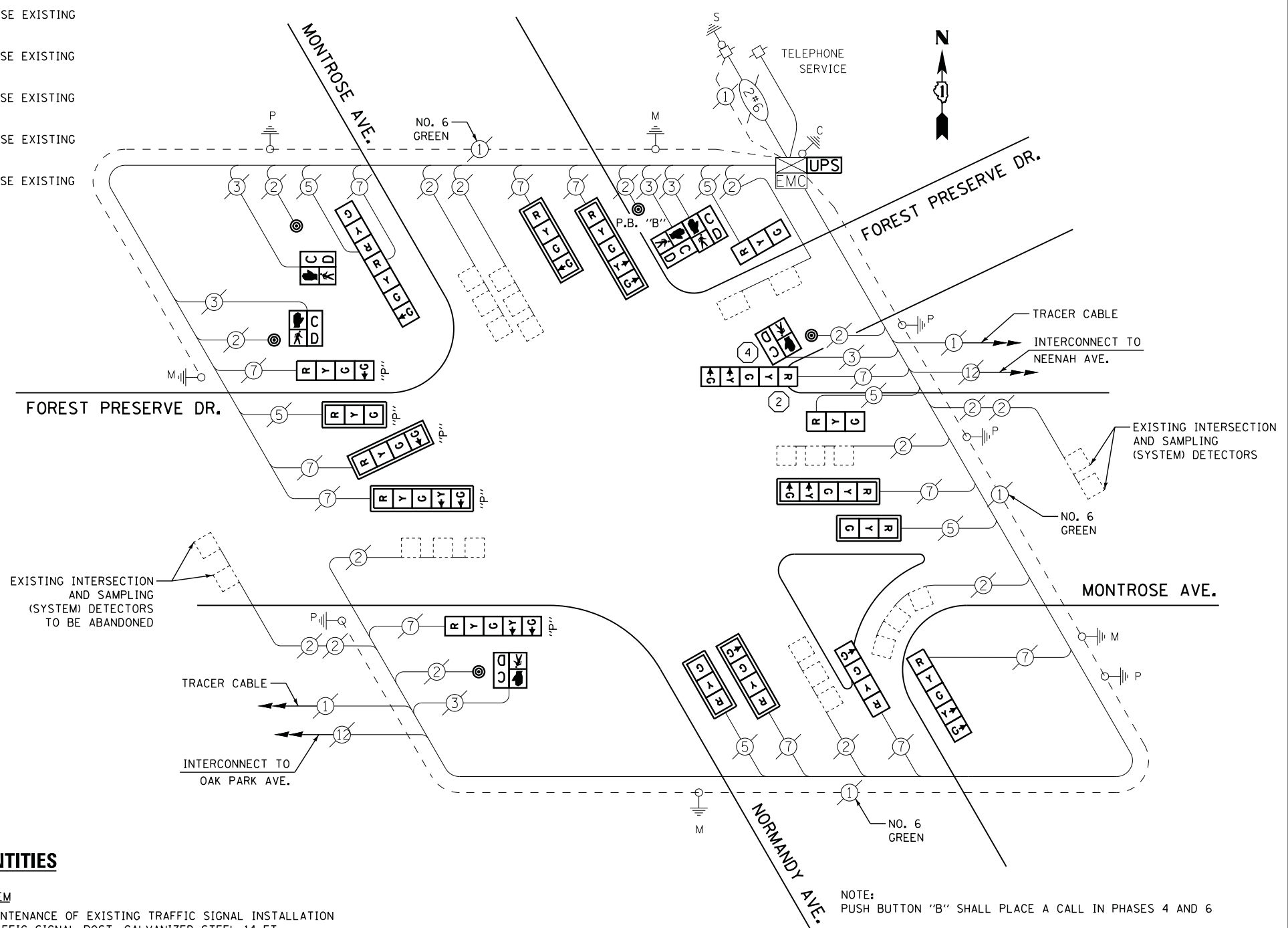
PHASE DESIGNATION DIAGRAM



- ① REPLACE 10 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- ② REPLACE 14 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- ③ REPLACE 15 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- ④ REPLACE 16 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- ⑤ REPLACE 18 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
D	= 3	+ 1



CABLE PLAN

NOTE: PUSH BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6

UPS SHALL BE INSTALLED ON LEFT SIDE OF CONTROLLER CABINET DUE TO PHYSICAL CONSTRAINT, OR AS DIRECTED BY THE ENGINEER

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

4	EACH	SIGNAL HEAD, 3 - SECTION
3	EACH	SIGNAL HEAD, 4 - SECTION
4	EACH	SIGNAL HEAD, 5 - SECTION
1	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, 3 - SECTION
2	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, 4 - SECTION
2	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, 5 - SECTION
1	EACH	SIGNAL HEAD, 2 - FACE, 1-3 SECTION, 1-4 SECTION
9	EACH	TRAFFIC SIGNAL BACKPLATE
2	EACH	SIGNAL POST
6	EACH	PEDESTRIAN SIGNAL HEAD
5	EACH	PEDESTRIAN PUSH-BUTTON

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED
2	EACH	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED
2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-4 SECTION, BRACKET MOUNTED
1	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED
1	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED
1	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED
1	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
1	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED
4	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
1	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
9	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	REMOVE AND REPLACE ANCHOR BOLTS
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
5	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING

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

TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	18	135	17	0.50	153
(YELLOW)	18	135	25	0.25	113
(GREEN)	24	135	15	0.25	90
ARROW	12	135	12	0.10	15
PED. SIGNAL	6	90	25	1.00	150
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
FLASHER LED					
TOTAL =					621

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT JOE LEUNG
PHONE 773-509-3288
COMMONWEALTH EDISON

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FOREST PRESERVE DRIVE AT MONTROSE AVENUE
SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	42
CONTRACT NO. 60Y41				

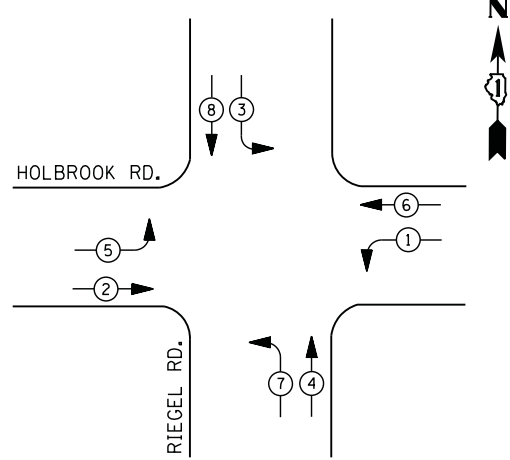
TS #5095
CHICAGO

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

ILLINOIS



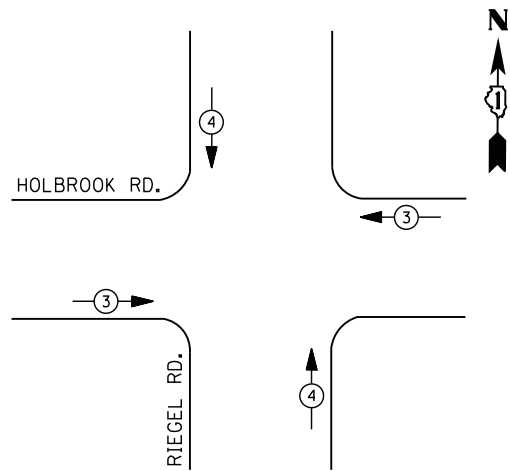
CONTROLLER SEQUENCE



LEGEND

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

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		

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

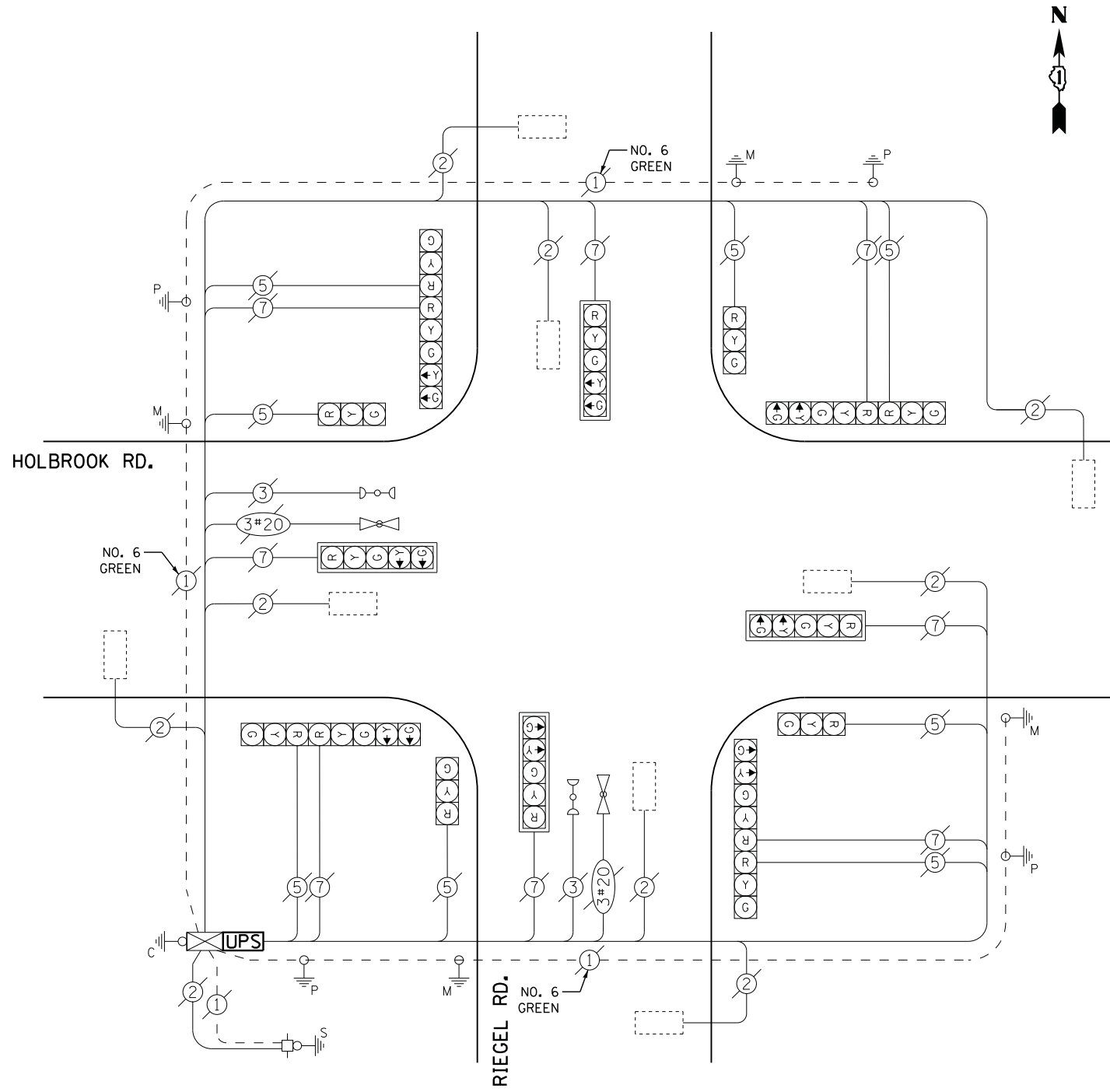
TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	16	135	15	0.25	60
ARROW	16	135	12	0.10	20
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
FLASHER LED					
TOTAL =					416

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT ILYAS MOHIUDDIN
PHONE 708-235-2692
COMMONWEALTH EDISON

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL



CABLE PLAN

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**RIEGEL ROAD AT HOLBROOK ROAD
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	43
CONTRACT NO. 60Y41				

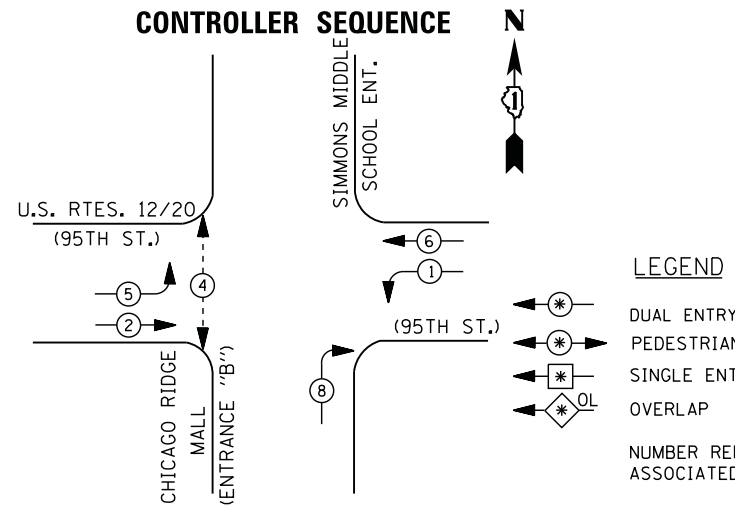
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

TS #5710
CHICAGO HEIGHTS

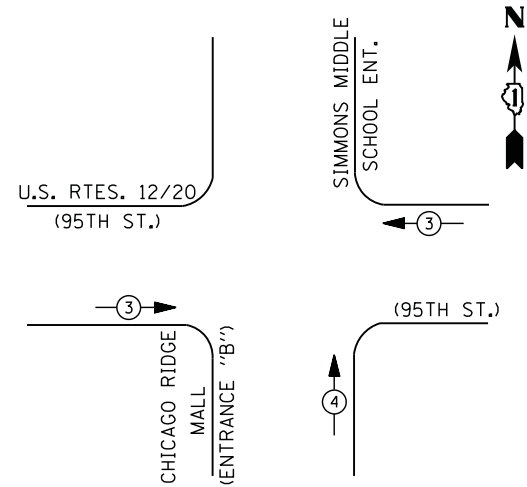
FILE NAME = M:\p\03\1481\2183 PTB 168-011 SINGH IDOT VAR-VAR\WD14-002 South Cook Co. LED\6 Design\CAD\Sheet Files\5710_CAB_COOK.dgn



FILE NAME = M:\p\03\1481\2103 PTB 168-011 SINGH.IDOT VAR-VAR\WD14-002 South Cook Co.,LED+6,Design\CAD\Sheet_Files\470_CAB_CDDK.dgn



PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	←	↑

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

TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	11	135	17	0.50	94
(YELLOW)	11	135	25	0.25	69
(GREEN)	11	135	15	0.25	42
ARROW	8	135	12	0.10	10
PED. SIGNAL	2	90	25	1.00	50
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
FLASHER LED					
TOTAL =					365

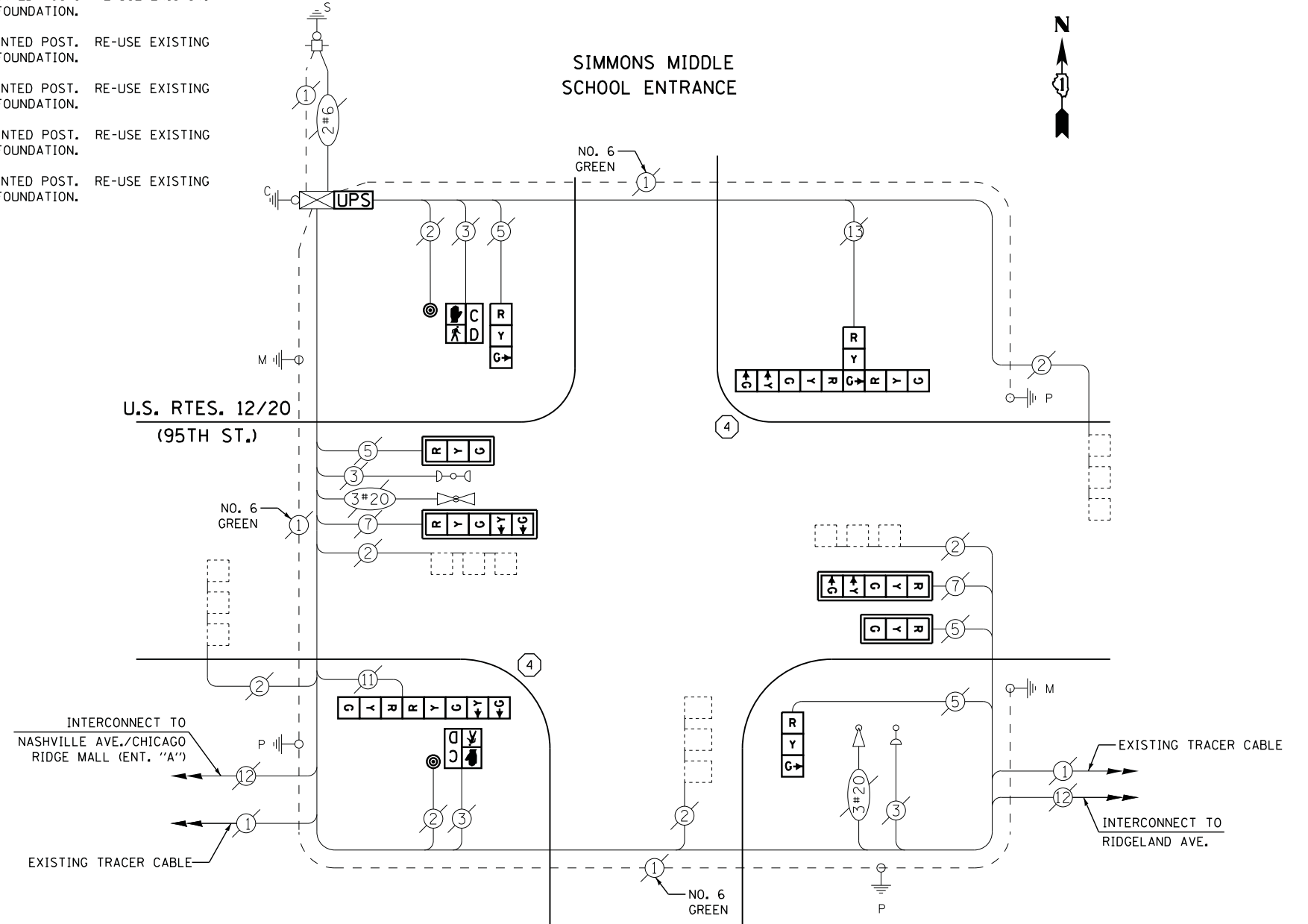
ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT ILYAS MOHIUDDIN
PHONE 708-235-2692
COMMONWEALTH EDISON

LEGEND

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

- ① REPLACE 10 FT. PAINTED POST, RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- ② REPLACE 14 FT. PAINTED POST, RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- ③ REPLACE 15 FT. PAINTED POST, RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- ④ REPLACE 16 FT. PAINTED POST, RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- ⑤ REPLACE 18 FT. PAINTED POST, RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.



CHICAGO RIDGE MALL (ENTRANCE 'B')

CABLE PLAN

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 3-FACE, 2-3 SECTION, 1-5 SECTION BRACKET MOUNTED
2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
4	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
2	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	REMOVE AND REPLACE ANCHOR BOLTS
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

4	EACH	SIGNAL HEAD, 3 - SECTION
2	EACH	SIGNAL HEAD, 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
4	EACH	TRAFFIC SIGNAL BACKPLATE
2	EACH	PEDESTRIAN SIGNAL HEAD
2	EACH	PEDESTRIAN PUSH-BUTTON
2	EACH	SIGNAL POST

USER NAME = .USERNAME.	DESIGNED - DW	REVISED -
	DRAWN - CC	REVISED -
PLOT SCALE = 20.000' / in.	CHECKED - JDH	REVISED -
PLOT DATE = 7/9/2014	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**U.S. ROUTES 12 /20 (95TH STREET) AT CHICAGO RIDGE MALL DRIVE (ENTRANCE "B")
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE**

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

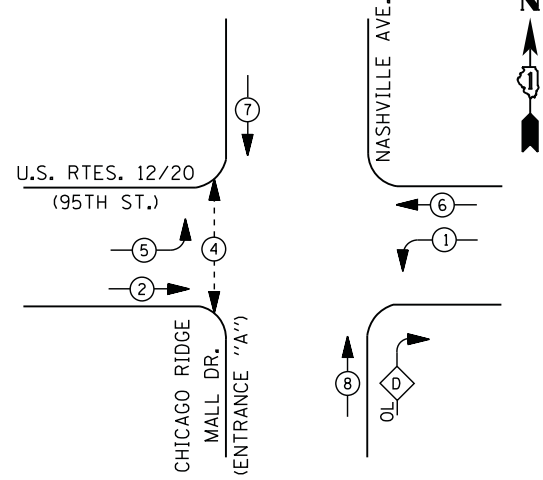
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	44
CONTRACT NO. 60Y41				
ILLINOIS				

TS #470
CHICAGO RIDGE

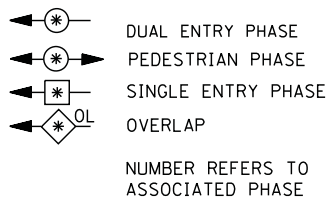


FILE NAME = M:\p\2014\1481\2103 PTB 168-011 SINGH.IDOT VAR-VAR\WD14-002 South Cook Co.,LED+6,Design\CAD\Sheet_Files\505_CAB_CDDK.dgn

CONTROLLER SEQUENCE



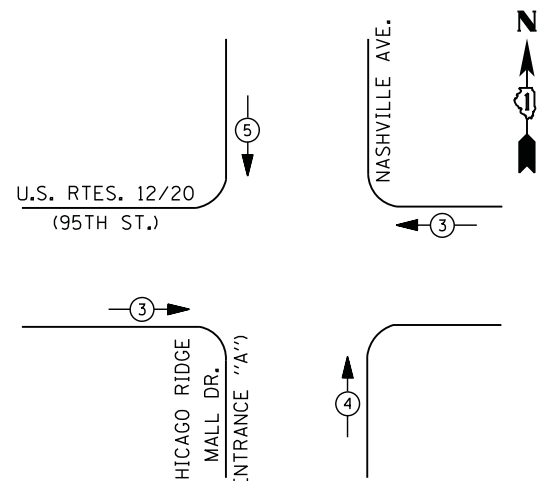
LEGEND



RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
D	= 8	+ 1

PHASE DESIGNATION DIAGRAM



- ① REPLACE 10 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ② REPLACE 14 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ③ REPLACE 15 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ④ REPLACE 16 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ⑤ REPLACE 18 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

EMERGENCY VEHICLE PREEMPTION SEQUENCE

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

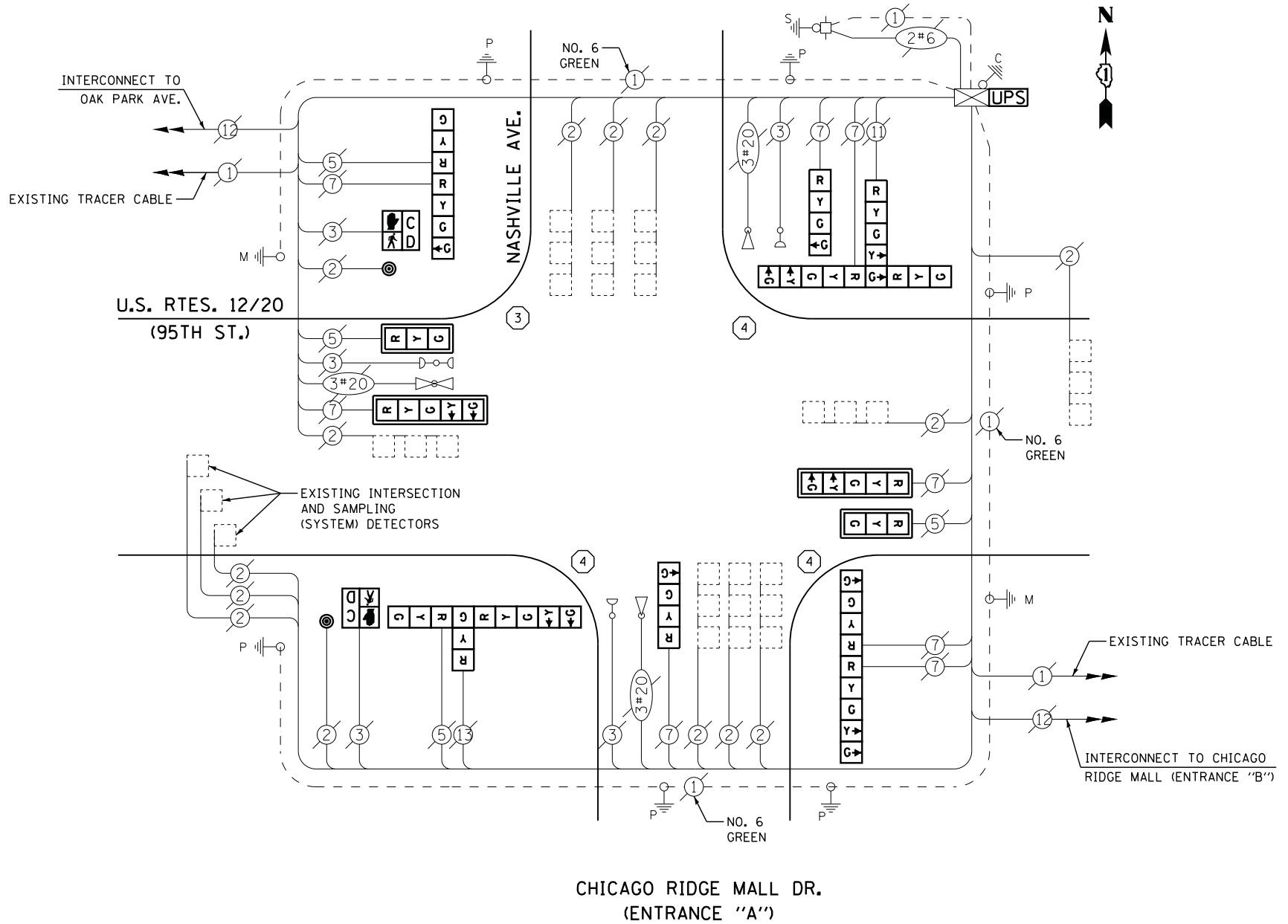
I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	20	135	15	0.25	75
ARROW	12	135	12	0.10	15
PED. SIGNAL	2	90	25	1.00	50
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
FLASHER LED					
TOTAL =					476

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
 201 WEST CENTER COURT
 SCHAUMBURG, IL 60196-1096
 CONTACT ILYAS MOHIUDDIN
 PHONE 708-235-2692
 COMMONWEALTH EDISON

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 15 FT.
3	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
2	EACH	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED
2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-4 SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 1-4 SECTION, 1-5 SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 3-FACE, 1-3 SECTION, 2-5 SECTION BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 3-FACE, 2-3 SECTION, 1-5 SECTION BRACKET MOUNTED
2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
4	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
2	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
2	EACH	REMOVE AND REPLACE ANCHOR BOLTS
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL



CABLE PLAN

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

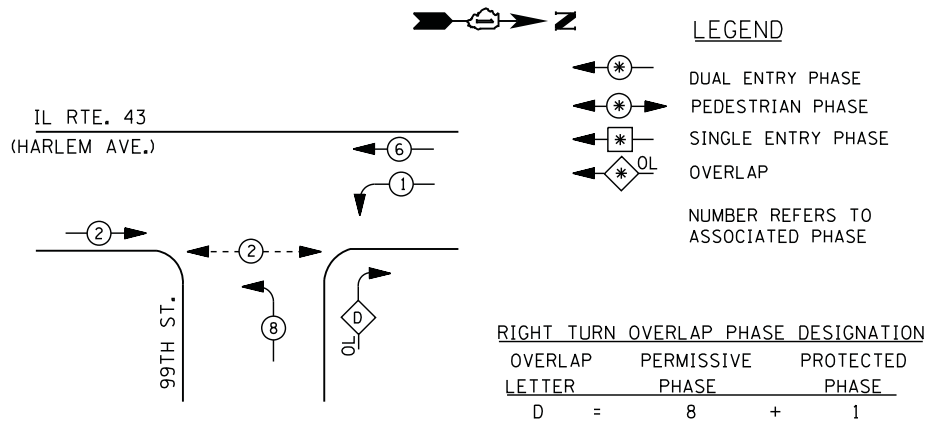
2	EACH	SIGNAL HEAD, 3 - SECTION
2	EACH	SIGNAL HEAD, 4 - SECTION
2	EACH	SIGNAL HEAD, 5 - SECTION
1	EACH	SIGNAL HEAD, 2 - FACE, 1-3 SECTION, 1-4 SECTION
1	EACH	SIGNAL HEAD, 2 - FACE, 1-4 SECTION, 1-5 SECTION
1	EACH	SIGNAL HEAD, 3 - FACE, 2-3 SECTION, 1-5 SECTION
1	EACH	SIGNAL HEAD, 3 - FACE, 1-3 SECTION, 2-5 SECTION
4	EACH	TRAFFIC SIGNAL BACKPLATE
2	EACH	PEDESTRIAN SIGNAL HEAD
2	EACH	PEDESTRIAN PUSH-BUTTON
4	EACH	SIGNAL POST

TS #505
CHICAGO RIDGE

USER NAME = .USERNAME.	DESIGNED - DW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	U.S. RTES. 12/20 (95TH ST.) AT CHICAGO RIDGE MALL DR. (ENTRANCE "A")/NASHVILLE AVE.	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN - CC	REVISED -		SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE		2014-043TS	COOK	61	45
	PLOT SCALE = 20.000' / 1" =	CHECKED - JDH							
	PLOT DATE = 7/9/2014	DATE -							
				SCALE: N.T.S.	SHEET NO.	OF SHEETS	STA.	TO STA.	ILLINOIS
							CONTRACT NO. 60Y41		



CONTROLLER SEQUENCE



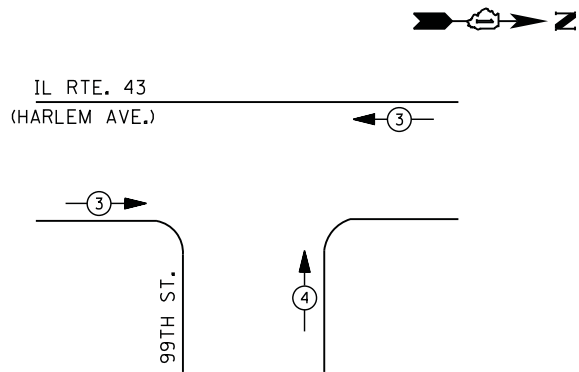
LEGEND

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

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
D	= 8	+ 1

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE

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

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

TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	11	135	17	0.50	94
(YELLOW)	11	135	25	0.25	69
(GREEN)	11	135	15	0.25	42
ARROW	8	135	12	0.10	10
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN	2	252	25	0.05	3
VIDEO SYSTEM		150	-	1.00	
FLASHER LED					
TOTAL =					318

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
 201 WEST CENTER COURT
 SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT ILYAS MOHIUDDIN
 PHONE 708-235-2692
 COMMONWEALTH EDISON

- ① REPLACE 10 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ② REPLACE 14 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ③ REPLACE 15 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ④ REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ⑤ REPLACE 18 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

CONTRACTOR SHALL RELOCATE EXISTING MICROWAVE DETECTOR UNIT TO A NEW SIGNAL POST. THE COST OF THIS WORK SHALL BE INCLUDED IN THE TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT. PAY ITEM.

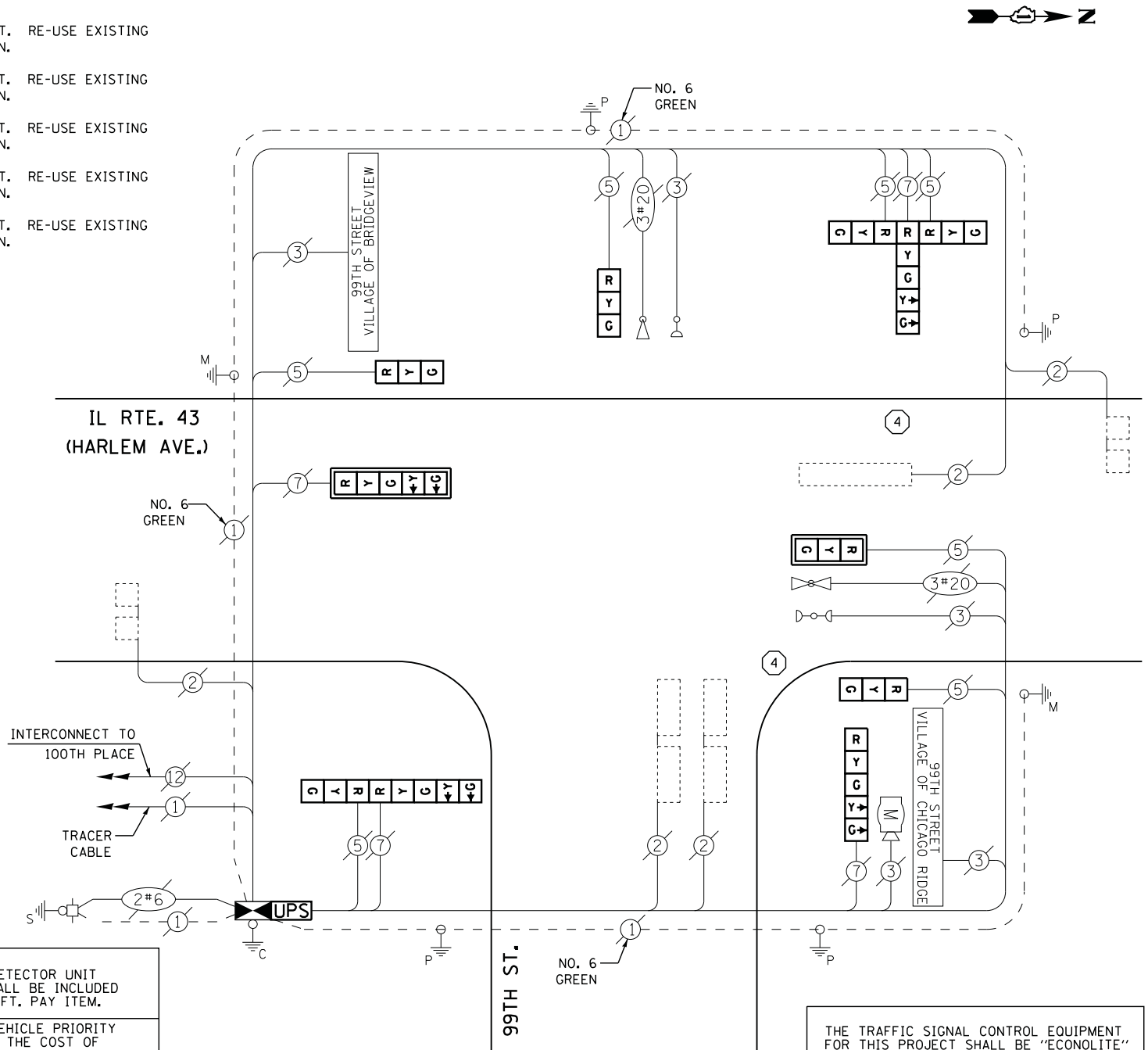
CONTRACTOR SHALL RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT TO NEW CONTROLLER CABINET. THE COST OF THIS WORK SHALL BE INCLUDED IN THE FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL PAY ITEM.

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	TRANSCEIVER - FIBER OPTIC
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
1	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
3	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 3-FACE, 2-3 SECTION, 1-5 SECTION BRACKET MOUNTED
2	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
5	EACH	INDUCTIVE LOOP DETECTOR
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	REMOVE AND REPLACE ANCHOR BOLTS
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

CABLE PLAN



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

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

4	EACH	SIGNAL HEAD, 1 - FACE, 3 - SECTION
2	EACH	SIGNAL HEAD, 1 - 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
2	EACH	TRAFFIC SIGNAL BACKPLATE
2	EACH	SIGNAL POST
1	EACH	CONTROLLER AND CABINET (COMPLETE)

TS #2200 CHICAGO RIDGE

FILE NAME = M:\p\2\1481\2103 PTB 168-011 SINGH IDOT VAR-VAR\WD14-002 South Cook Co.,LED-65 Design\CAD\Sheet Files\2200 CAB.COOK.dgn

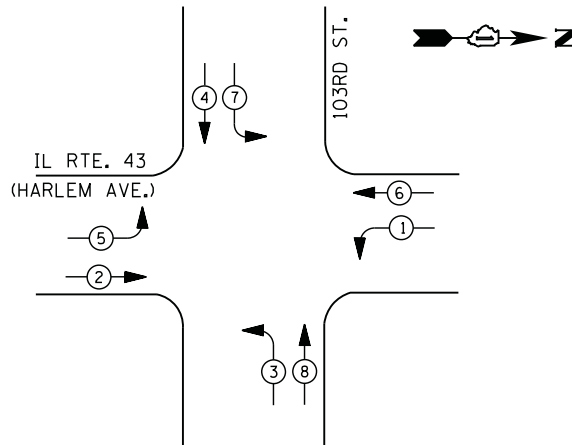
USER NAME = .USERNAME.	DESIGNED - DW	REVISED -
	DRAWN - CC	REVISED -
PLOT SCALE = 20.000' / 1" =	CHECKED - JDH	REVISED -
PLOT DATE = 7/9/2014	DATE -	REVISED -

IL ROUTE 43 (HARLEM AVENUE) AT 99TH STREET SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE			
SCALE: N.T.S.	SHEET NO.	OF SHEETS	STA. TO STA.

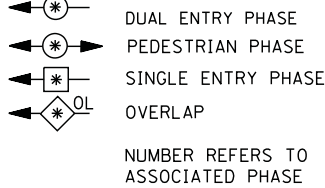
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	46
CONTRACT NO. 60Y41				
ILLINOIS				



CONTROLLER SEQUENCE

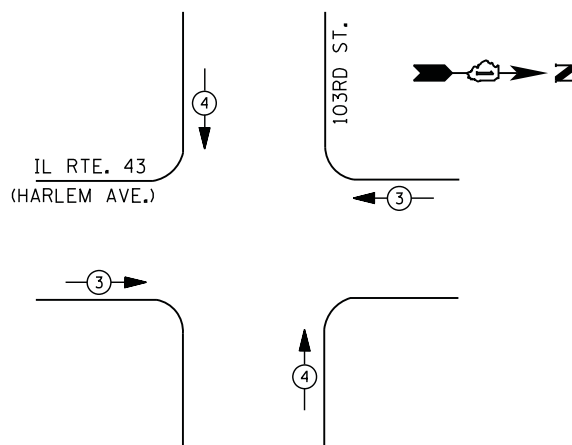


LEGEND



- ① REPLACE 10 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ② REPLACE 14 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ③ REPLACE 15 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ④ REPLACE 16 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ⑤ REPLACE 18 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE

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

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

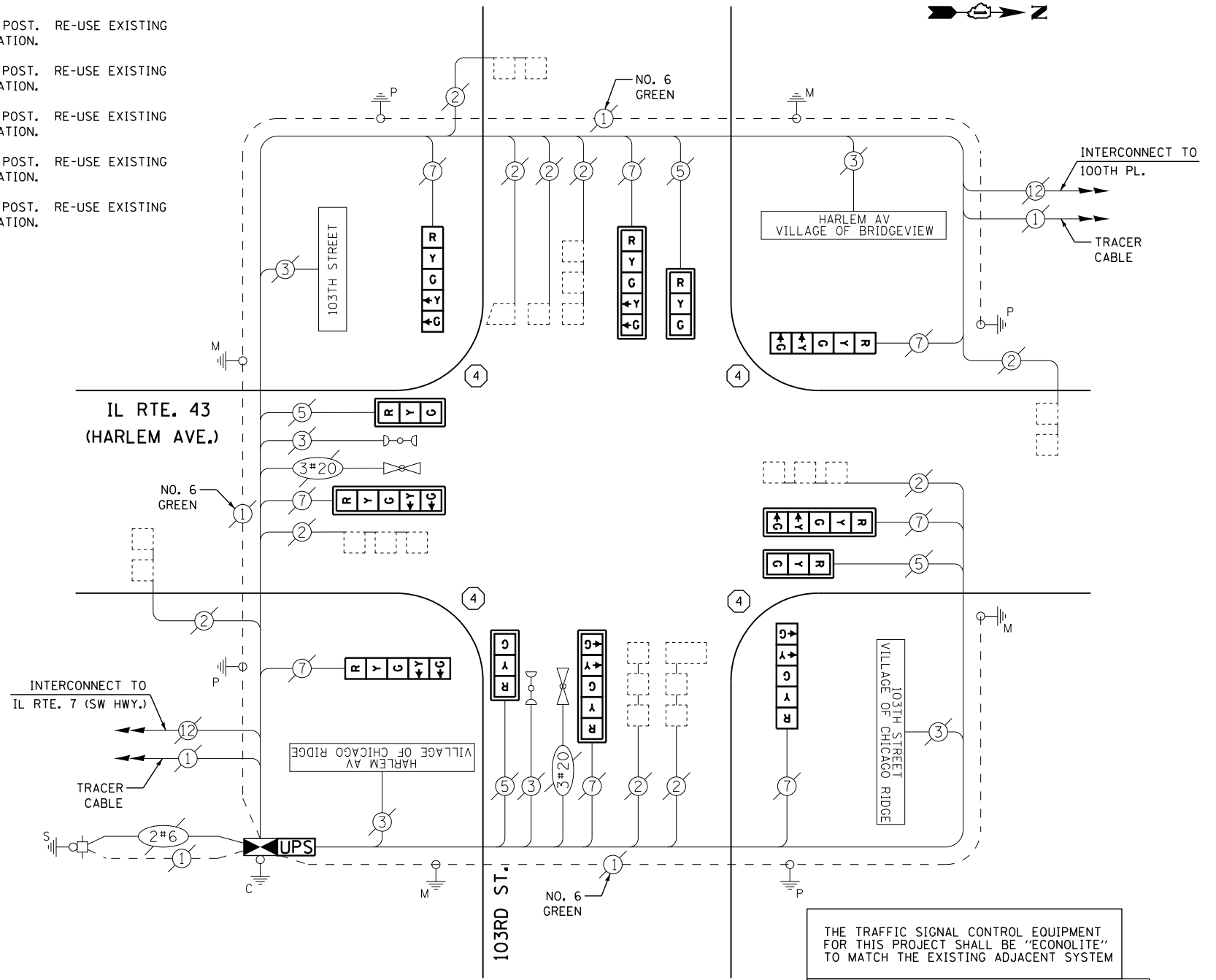
TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	16	135	12	0.10	20
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN	4	252	25	0.05	5
VIDEO SYSTEM		150	-	1.00	
TOTAL =					347

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
 201 WEST CENTER COURT
 SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT ILYAS MOHIUDDIN
 PHONE 708-235-2692
 COMMONWEALTH EDISON

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	TRANSCEIVER - FIBER OPTIC
4	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
4	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
8	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
10	EACH	INDUCTIVE LOOP DETECTOR
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
2	EACH	REMOVE AND REPLACE ANCHOR BOLTS
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL



CABLE PLAN

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

CONTRACTOR SHALL RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT TO NEW CONTROLLER CABINET. THE COST OF THIS WORK SHALL BE INCLUDED IN THE FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL PAY ITEM.

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

4	EACH	SIGNAL POST
4	EACH	SIGNAL HEAD, 1 - FACE, 3 - SECTION
8	EACH	SIGNAL HEAD, 1 - FACE, 5 - SECTION
8	EACH	TRAFFIC SIGNAL BACKPLATE
1	EACH	CONTROLLER AND CABINET (COMPLETE)

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 43 (HARLEM AVENUE) AT 103RD STREET
 SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE

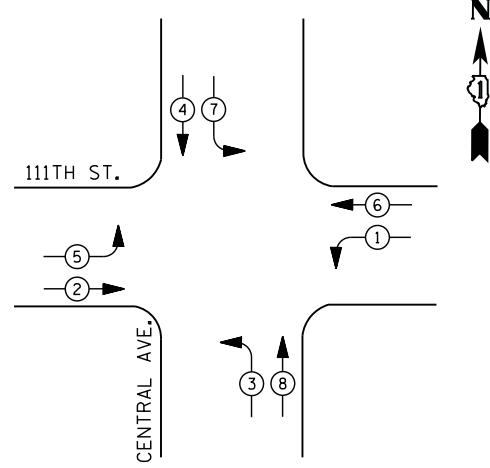
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	47
CONTRACT NO. 60Y41				

TS #2205 CHICAGO RIDGE

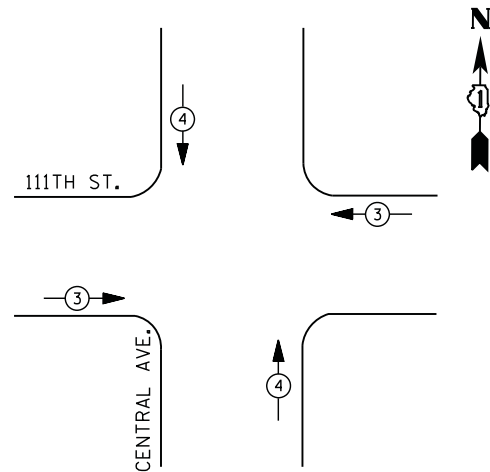
FILE NAME = M:\p\2014\1481\2103 PTB 168-011 SINGH IDOT VAR-VAR\WD14-002 South Cook Co. LED\6 Design\CAD\Sheet Files\2295.CAB.C00K.dgn



CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	←	↑

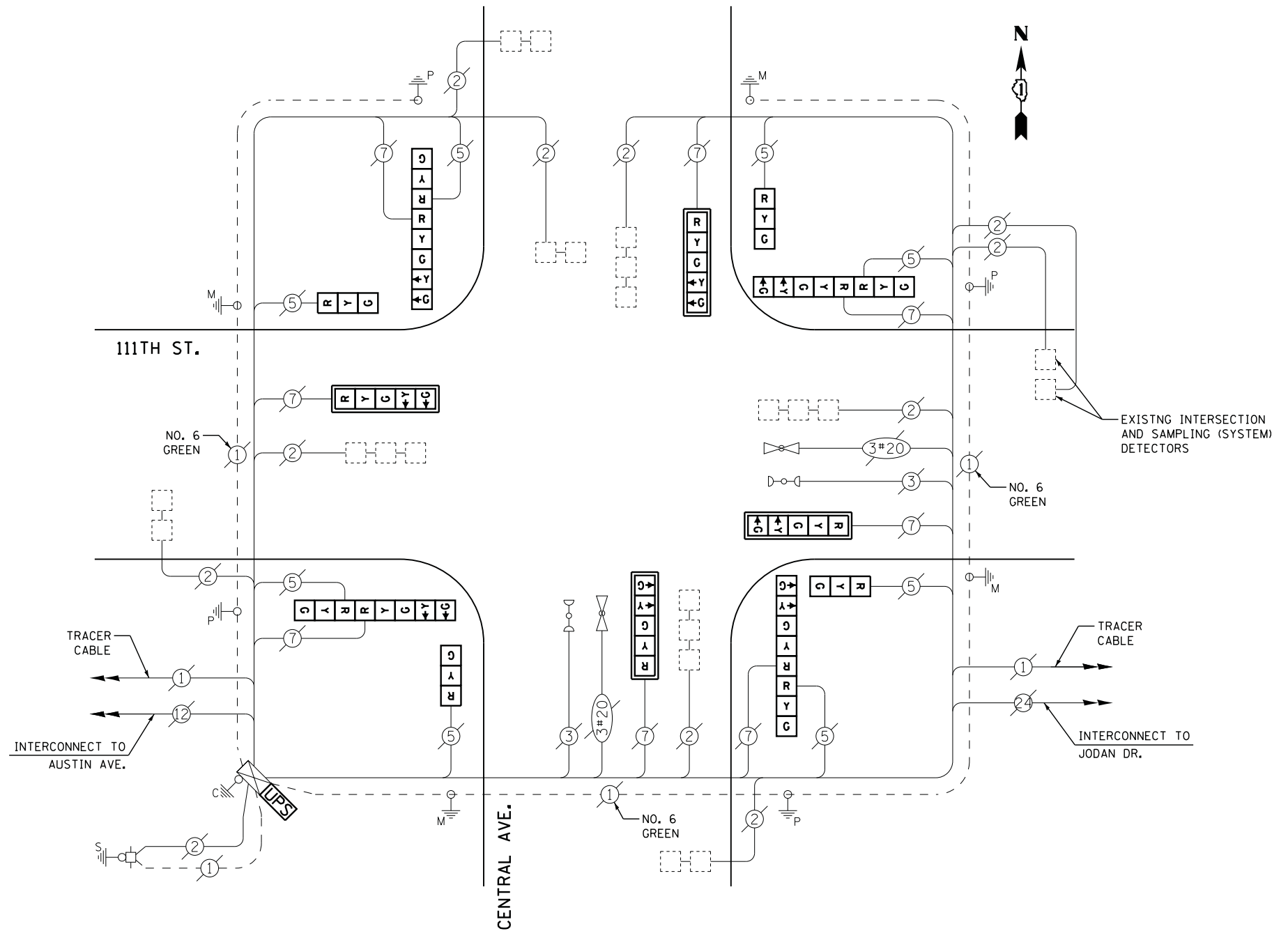
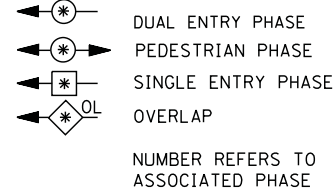
**I. D. O. T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	16	135	15	0.25	60
ARROW	16	135	12	0.10	20
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
FLASHER LED					
TOTAL =					416

ENERGY COSTS- **BILLED TO: IDOT DISTRICT 1**
 201 WEST CENTER COURT
 SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - **CONTACT ILYAS MOHIUDDIN**
 PHONE 708-235-2692
 COMMONWEALTH EDISON

LEGEND



CABLE PLAN

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
4	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
4	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
4	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

4	EACH	SIGNAL HEAD, 1 - FACE, 3 - SECTION
4	EACH	SIGNAL HEAD, 1 - FACE, 5 - SECTION
4	EACH	SIGNAL HEAD, 2 - FACE, 1-3 - SECTION, 1-5 - SECTION
4	EACH	TRAFFIC SIGNAL BACKPLATE

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**111TH STREET AT CENTRAL AVENUE
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE**

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

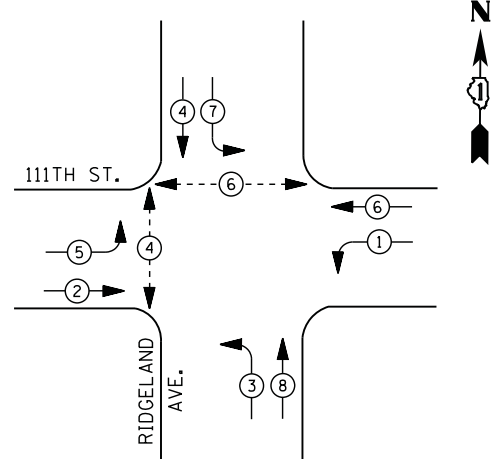
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	48
CONTRACT NO. 60Y41				

TS #3945
CHICAGO RIDGE

FILE NAME = M:\p\2014\1481\2103 PTB 168-011 SINGH IDOT VAR-VAR\VD14-002 South Cook Co., LED\65 Design\CAD\Sheet Files\3945_CAB_COOK.dgn



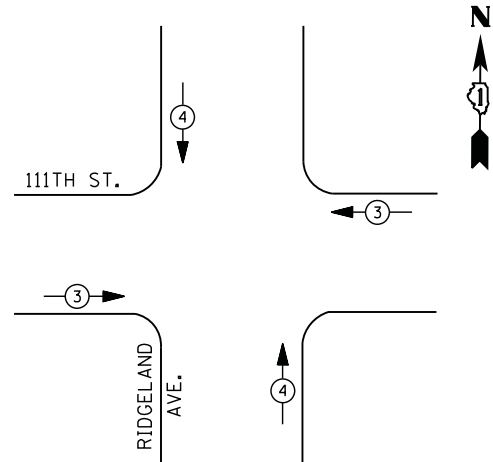
CONTROLLER SEQUENCE



LEGEND

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

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		

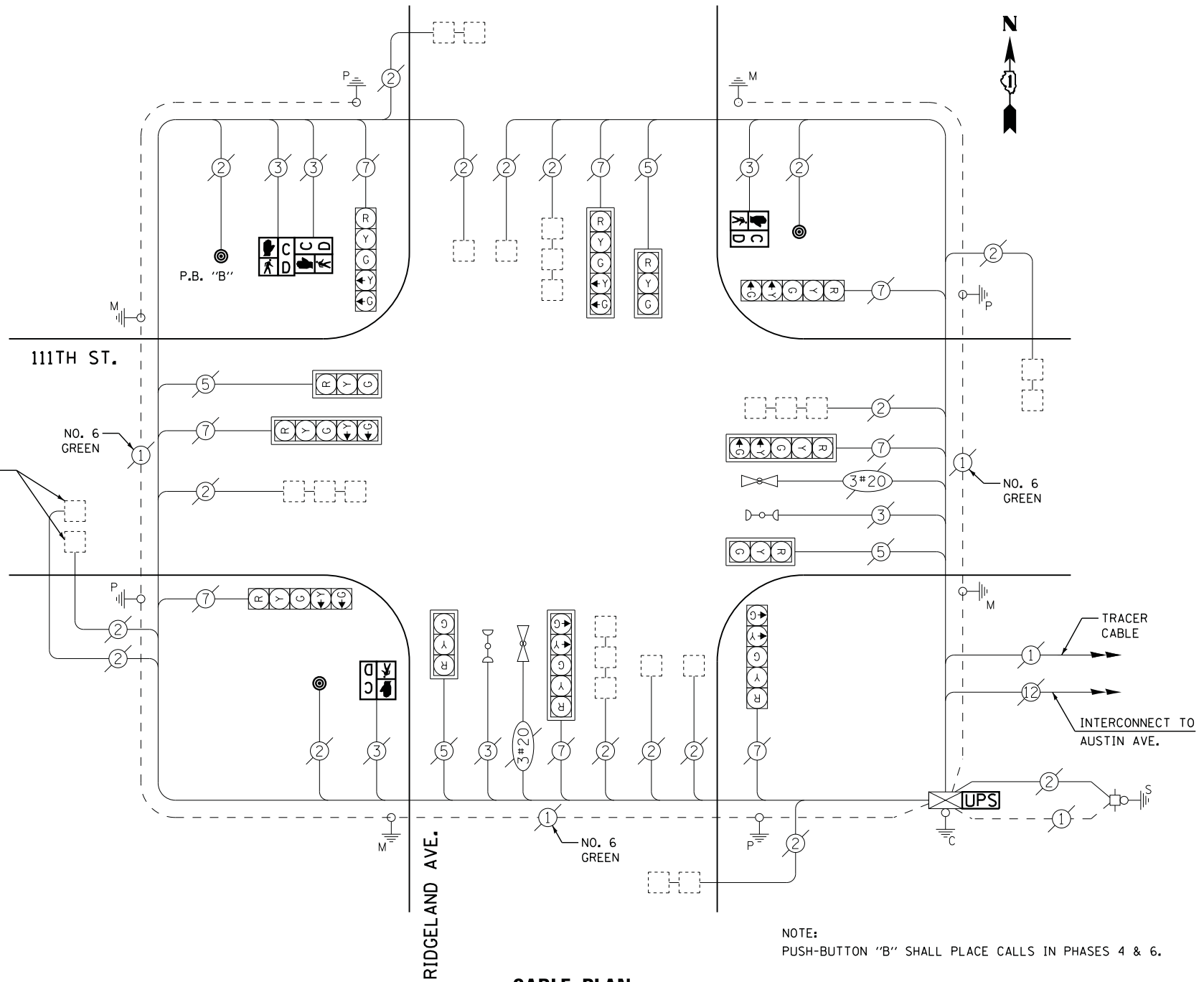
**I. D. O. T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	16	135	12	0.10	20
PED. SIGNAL	4	90	25	1.00	100
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
TOTAL =					442

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT ILYAS MOHIUDDIN
PHONE 708-235-2692
COMMONWEALTH EDISON

EXISTING INTERSECTION AND SAMPLING (SYSTEM) DETECTORS



CABLE PLAN

NOTE:
PUSH-BUTTON "B" SHALL PLACE CALLS IN PHASES 4 & 6.

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
1	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
3	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

- 4 EACH PEDESTRIAN SIGNAL HEAD
- 3 EACH PEDESTRIAN PUSH-BUTTON

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**111TH STREET AT RIDGELAND AVENUE
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE**

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

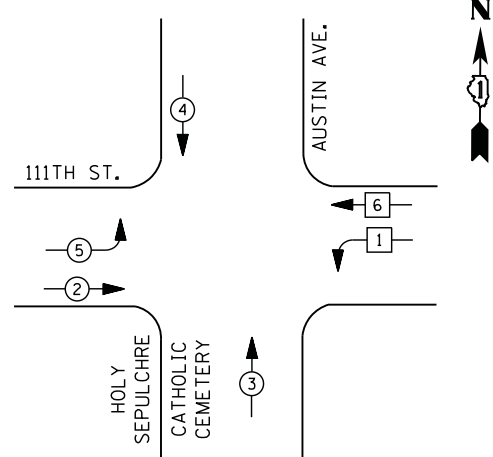
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	49
CONTRACT NO. 60Y41				

TS #3950
CHICAGO RIDGE

FILE NAME = M:\p\2014\1481\2103 PTB 168-011 SINGH IDOT VAR-VAR\WD14-002 South Cook Co.,LED\6\Design\CAD\Sheet_Files\3950_CAB_C00K.dgn



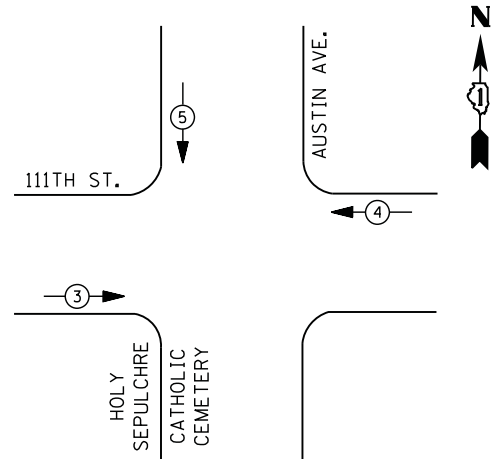
CONTROLLER SEQUENCE



LEGEND

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

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE

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

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

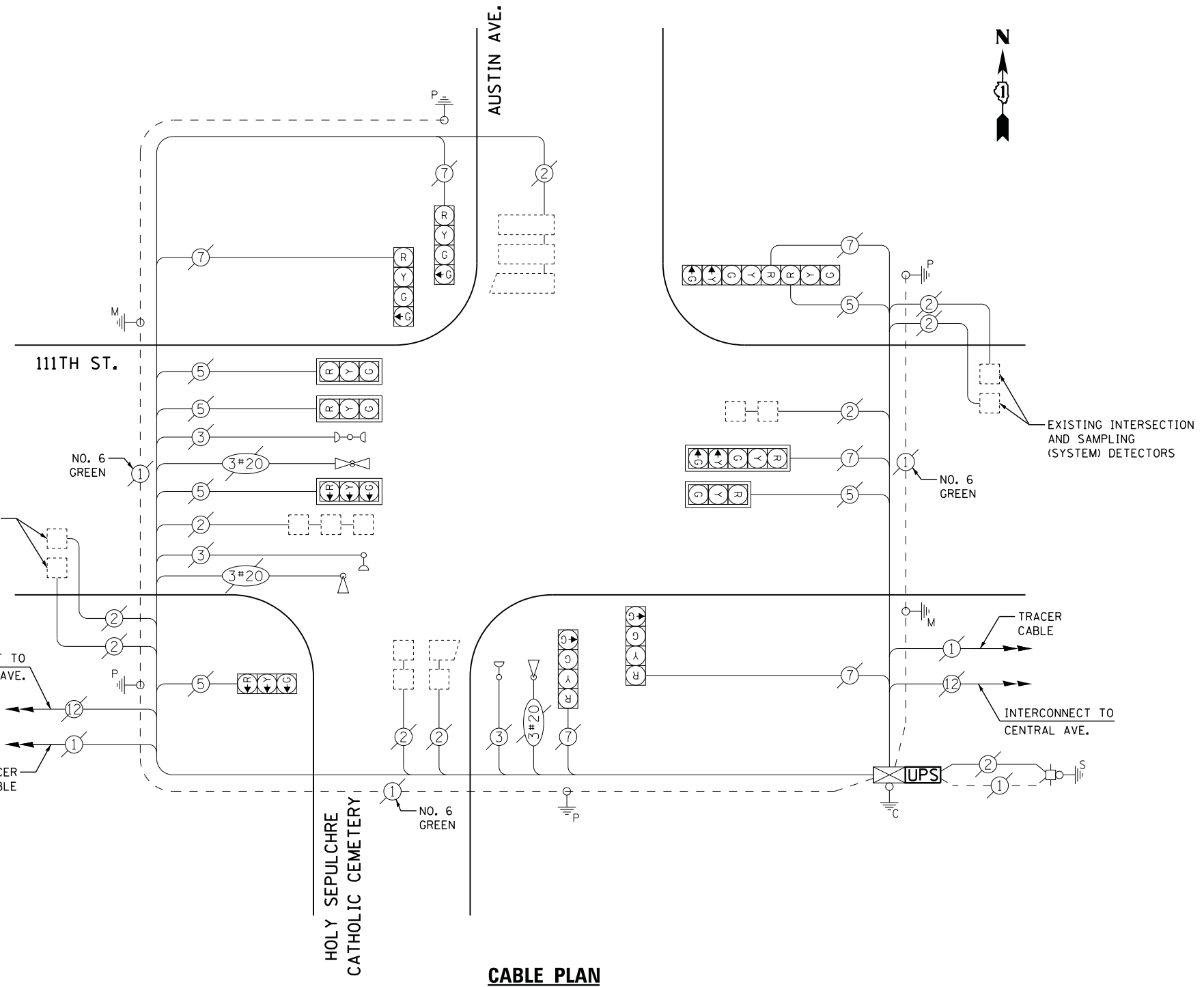
TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	16	135	15	0.25	60
ARROW	4	135	12	0.10	5
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
FLASHER LED					
TOTAL =					342

ENERGY COSTS- **BILLED TO: IDOT DISTRICT 1**
 201 WEST CENTER COURT
 SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - **CONTACT ILYAS MOHIUDDIN**
 PHONE 708-235-2692
 COMMONWEALTH EDISON

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL



CABLE PLAN

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**111TH STREET AT AUSTIN AVENUE
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE**

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

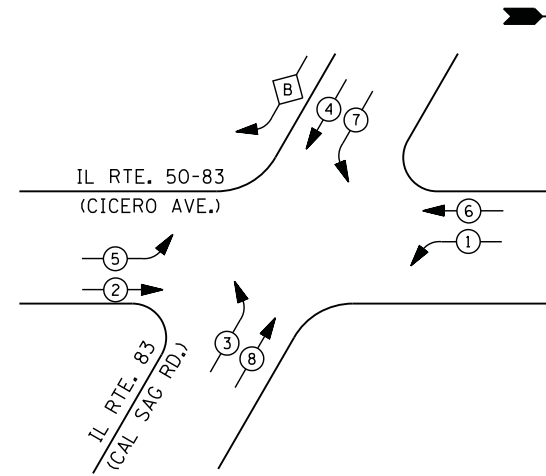
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	50
CONTRACT NO. 60Y41				

TS #21220
CHICAGO RIDGE

FILE NAME = M:\p\2014\1481\2103 PTB 168-011 SINGH IDOT VAR-VAR\WD14-002 South Cook Co.,LED16 Design\CAD\Sheet_Files\21220_CAB.CDDK.dgn

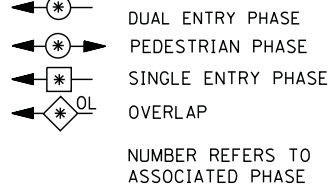


CONTROLLER SEQUENCE



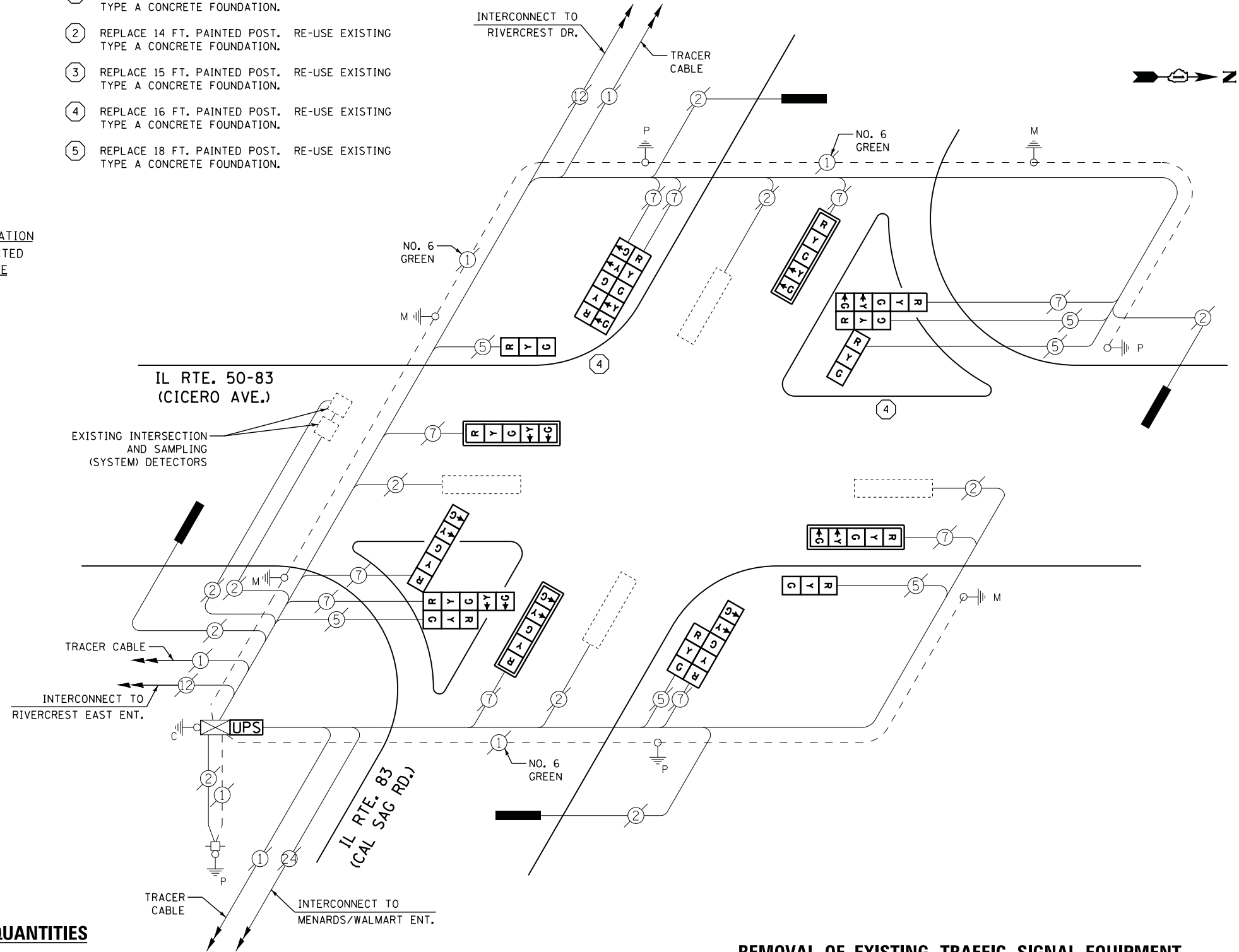
PHASE DESIGNATION DIAGRAM

LEGEND



RIGHT TURN OVERLAP PHASE DESIGNATION
 OVERLAP PERMISSIVE PROTECTED
 LETTER PHASE PHASE
 B = 4 + 5

- ① REPLACE 10 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- ② REPLACE 14 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- ③ REPLACE 15 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- ④ REPLACE 16 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- ⑤ REPLACE 18 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.



CABLE PLAN

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

2	EACH	SIGNAL HEAD, 3 - SECTION
4	EACH	SIGNAL HEAD, 5 - SECTION
1	EACH	SIGNAL HEAD, 2 - FACE, 1-3 SECTION, 1-5 SECTION
1	EACH	SIGNAL HEAD, 2 - FACE, 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
4	EACH	TRAFFIC SIGNAL BACKPLATE
2	EACH	SIGNAL POST

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 3-FACE, 1-3 SECTION, 2-5 SECTION BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 3-FACE, 2-3 SECTION, 1-5 SECTION BRACKET MOUNTED
4	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	REMOVE AND REPLACE ANCHOR BOLTS
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL

I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	16	135	15	0.25	60
ARROW	20	135	12	0.10	24
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
TOTAL =					420

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
 201 WEST CENTER COURT
 SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT ILYAS MOHIUDDIN
 PHONE 708-235-2692
 COMMONWEALTH EDISON

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL ROUTE 50-83 (CICERO AVENUE) AT IL ROUTE 83 (CAL SAG ROAD)
SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM**

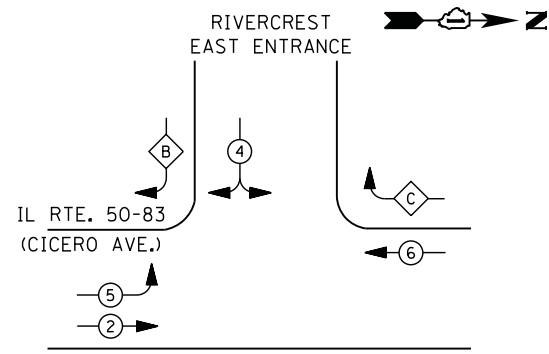
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	51
CONTRACT NO. 60Y41				

TS #2645
CRESTWOOD

FILE NAME = M:\p\03\1481\2103 PTB 168-011 SINGH IDOT VAR-VAR\WD14-002 South Cook Co. LED\6 Design\CAD\Sheet Files\2645 CAB.C00K.dgn



CONTROLLER SEQUENCE



LEGEND

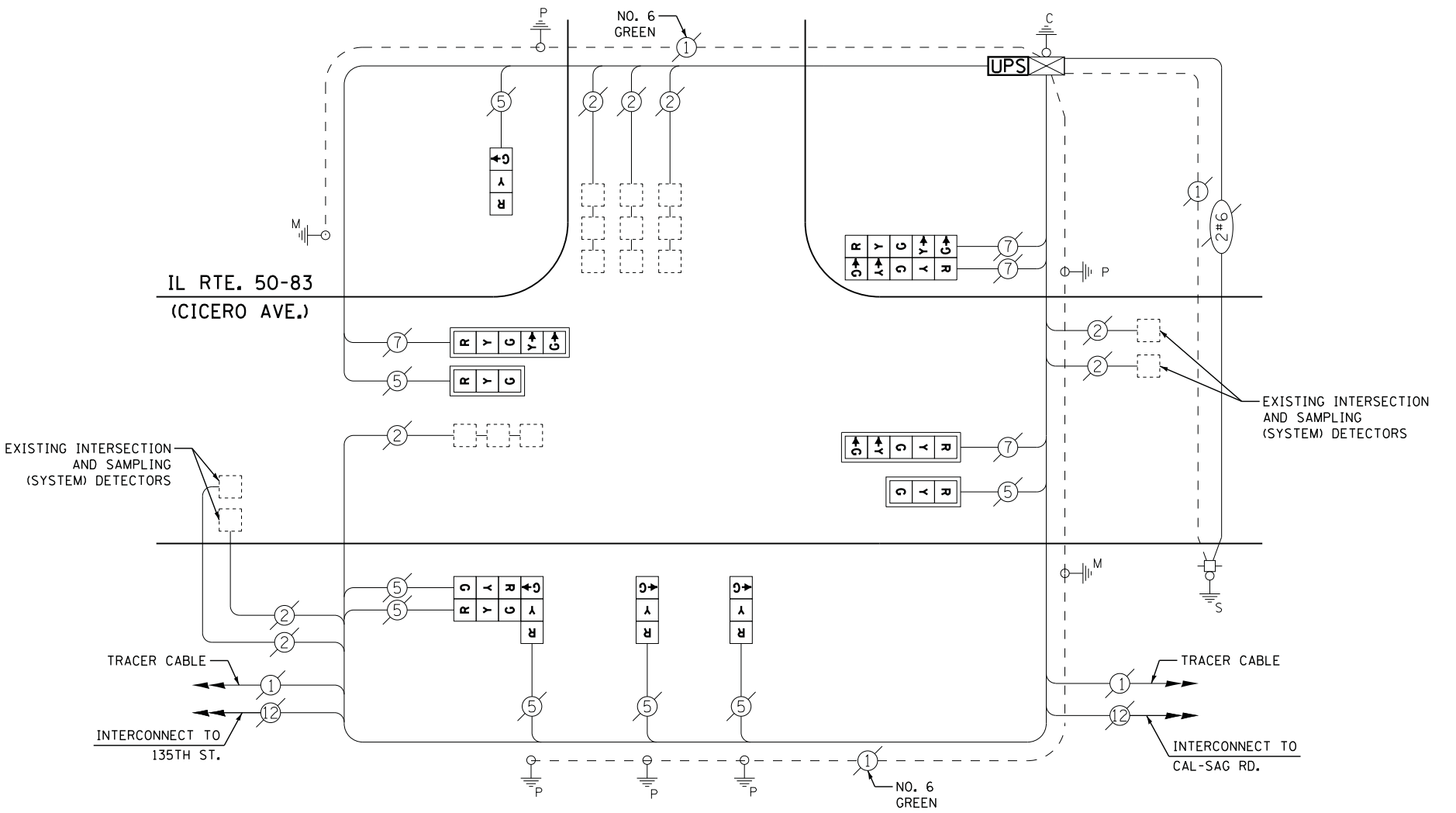
- DUAL ENTRY PHASE
- PEDESTRIAN PHASE
- SINGLE ENTRY PHASE
- OVERLAP
- NUMBER REFERS TO ASSOCIATED PHASE

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B =	4	+ 5
C =	6	+ 4

PHASE DESIGNATION DIAGRAM

RIVERCREST EAST ENTRANCE



CABLE PLAN

RETROFIT ALL EXISTING SIGNAL HEADS TO L.E.D.

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

TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	8	135	12	0.10	10
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
FLASHER LED					
TOTAL =					332

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
1	EACH	SIGNAL HEAD, LED, 3-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT
3	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT
2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT
2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT
1	EACH	SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED RETROFIT

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
 201 WEST CENTER COURT
 SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT ILYAS MOHIUDDIN
 PHONE 708-235-2692
 COMMONWEALTH EDISON

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

IL ROUTE 50-83 (CICERO AVENUE) AT RIVERCREST EAST ENTRANCE
 SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

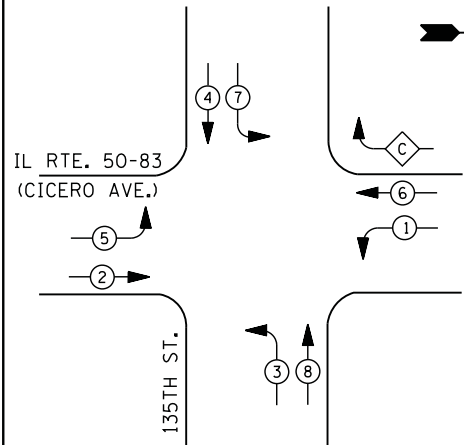
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	52
CONTRACT NO. 60Y41				

TS #2649
 CRESTWOOD

FILE NAME = M:\p\2014\1481\2183 PTB 168-011 SINGH IDOT VAR-VAR\WD14-002 South Cook Co., LED\65 Design\CAD\Sheet Files\2649_CAB_COOK.dgn



CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

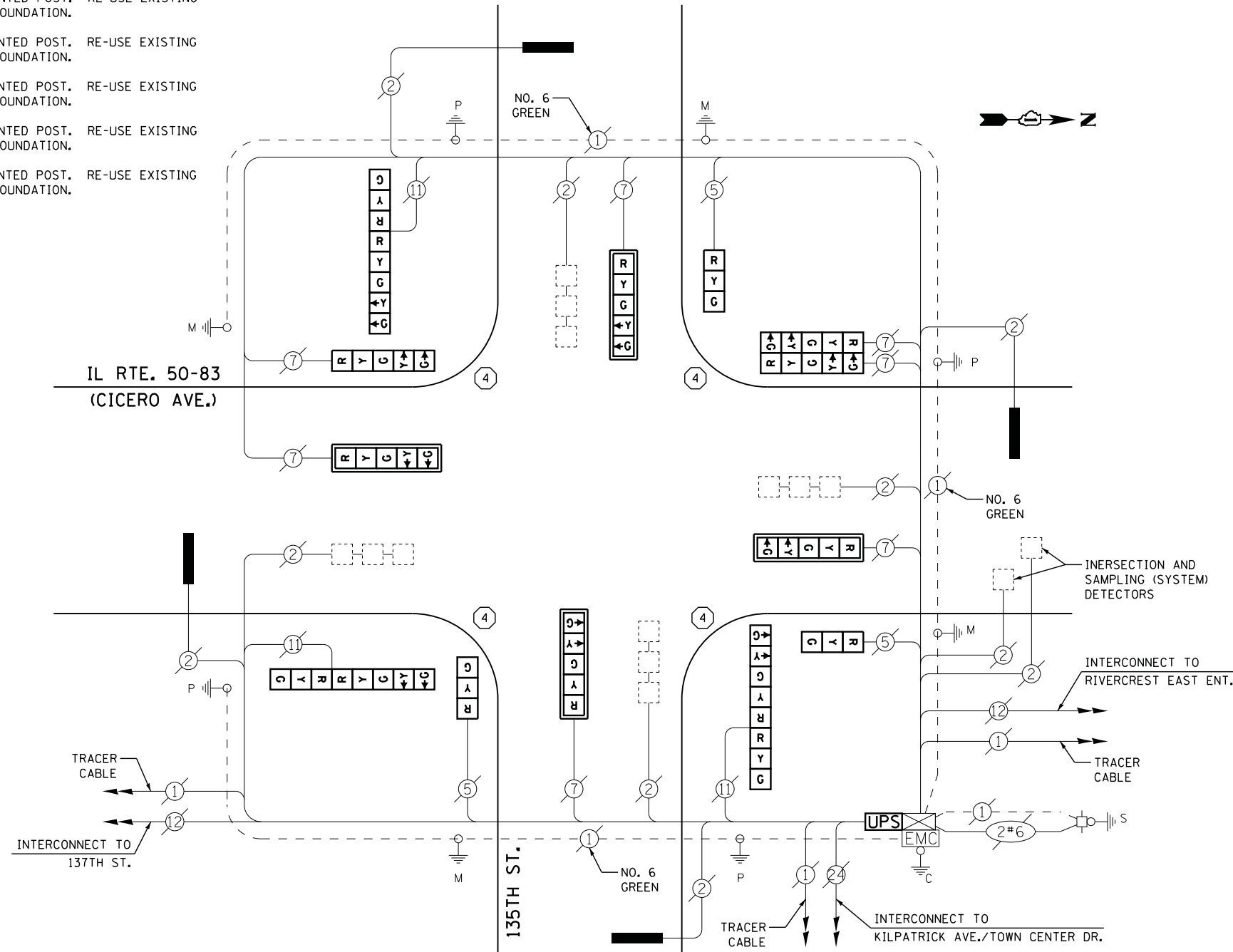
LEGEND

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

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
C	=	6 + 7

- ① REPLACE 10 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ② REPLACE 14 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ③ REPLACE 15 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ④ REPLACE 16 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ⑤ REPLACE 18 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.



CABLE PLAN

UPS SHALL BE INSTALLED ON LEFT SIDE OF CONTROLLER CABINET DUE TO PHYSICAL CONSTRAINT, OR AS DIRECTED BY THE ENGINEER

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

3	EACH	SIGNAL HEAD, 3 - SECTION
5	EACH	SIGNAL HEAD, 5 - SECTION
3	EACH	SIGNAL HEAD, 2 - FACE, 1-3 SECTION, 1-5 SECTION
1	EACH	SIGNAL HEAD, 2 - FACE, 5 SECTION
4	EACH	TRAFFIC SIGNAL BACKPLATE
4	EACH	SIGNAL POST

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
4	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
3	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED
3	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
4	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
2	EACH	REMOVE AND REPLACE ANCHOR BOLTS
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL

I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	16	135	15	0.25	60
ARROW	20	135	12	0.10	24
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
TOTAL =					420

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT ILYAS MOHIUDDIN
PHONE 708-235-2692
COMMONWEALTH EDISON

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 50-83 (CICERO AVENUE) AT 135TH STREET
SCHEDULE OF QUANTITIES, CABLE PLAN AND PHASE DESIGNATION DIAGRAM

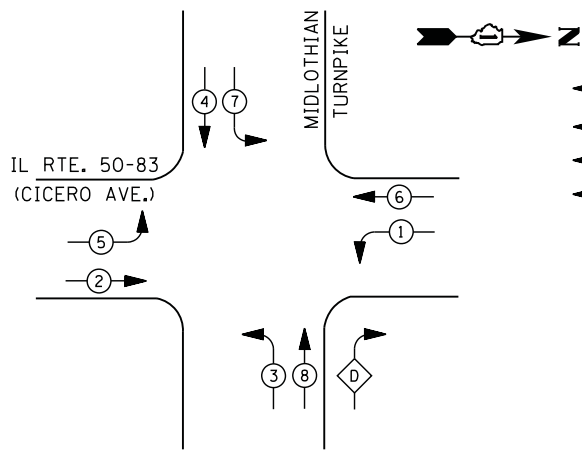
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	53
CONTRACT NO. 60Y41				

TS #2650
CRESTWOOD

FILE NAME = M:\p\2014\1481\2103 PTB 168-011 SINGH IDOT VAR-VAR\WD14-002 South Cook Co. LED\Design\CAD\Sheet Files\2650 CAB.C00K.dgn



CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

LEGEND

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

RIGHT TURN OVERLAP PHASE DESIGNATION

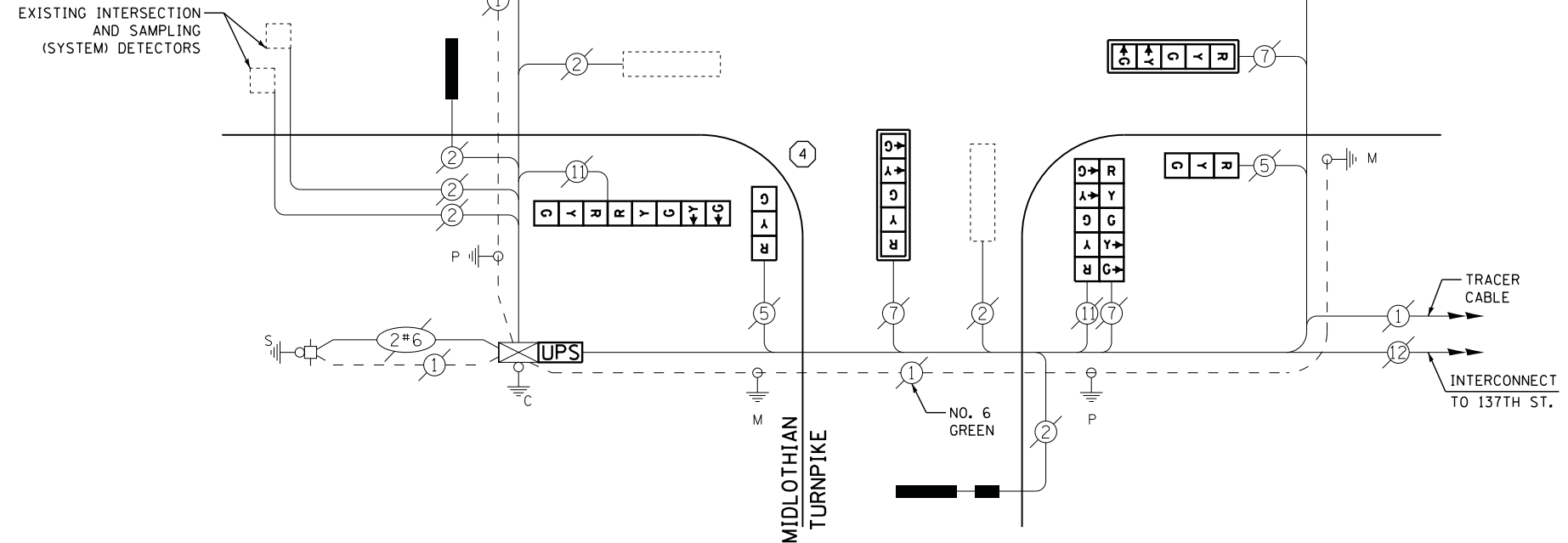
OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
D	= 8	+ 1

- ① REPLACE 10 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- ② REPLACE 14 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- ③ REPLACE 15 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- ④ REPLACE 16 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.
- ⑤ REPLACE 18 FT. PAINTED POST. RE-USE EXISTING
TYPE A CONCRETE FOUNDATION.

EXISTING INTERSECTION AND SAMPLING (SYSTEM) DETECTORS

IL RTE. 50-83 (CICERO AVE.)

MIDLOTHIAN TURNPIKE



CABLE PLAN

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

TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	16	135	15	0.25	60
ARROW	20	135	12	0.10	24
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
FLASHER LED					
TOTAL =					420

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
3	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
3	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED
3	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
4	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
2	EACH	REMOVE AND REPLACE ANCHOR BOLTS
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

3	EACH	SIGNAL HEAD, 3 - SECTION
5	EACH	SIGNAL HEAD, 5 - SECTION
3	EACH	SIGNAL HEAD, 2 - FACE, 1-3 SECTION, 1-5 SECTION
1	EACH	SIGNAL HEAD, 2 - FACE, 5 SECTION
4	EACH	TRAFFIC SIGNAL BACKPLATE
3	EACH	SIGNAL POST

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT ILYAS MOHIUDDIN
PHONE 708-235-2692
COMMONWEALTH EDISON

TS #2655
CRESTWOOD

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 50-83 (CICERO AVENUE) AT MIDLOTHIAN TURNPIKE
SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM

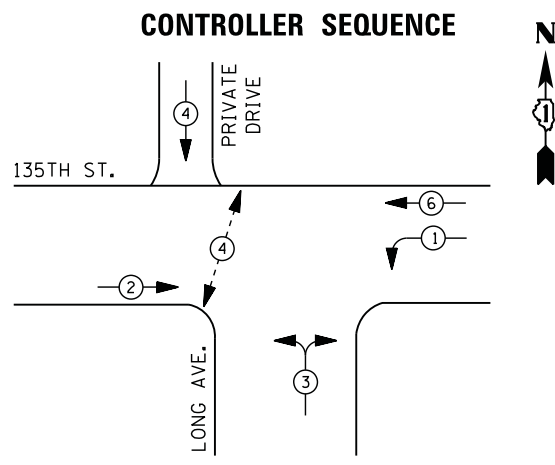
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	54
CONTRACT NO. 60Y41				

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

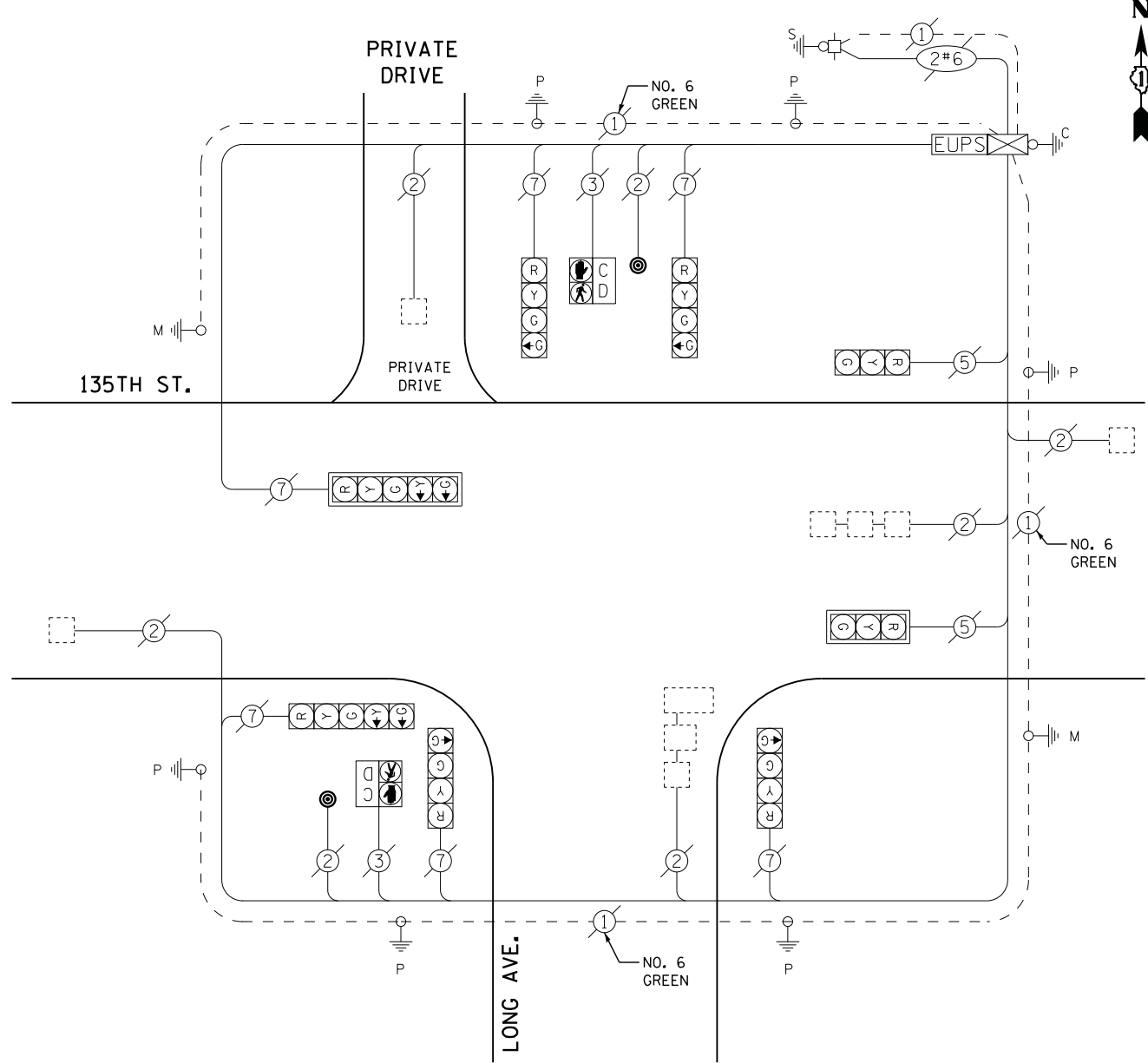
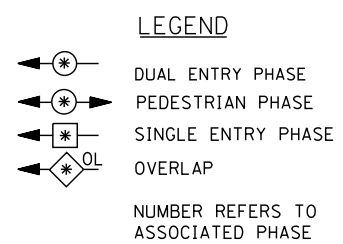
ILLINOIS



FILE NAME = M:\p\03\1481\2183 PTB 168-011 SINGH IDOT VAR-VAR\WD14-002 South Cook Co.,LED\6\Design\CAD\Sheet_Files\4030_CAB_COOK.dgn



PHASE DESIGNATION DIAGRAM



CABLE PLAN

I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	8	135	17	0.50	68
(YELLOW)	8	135	25	0.25	50
(GREEN)	12	135	15	0.25	45
ARROW	4	135	12	0.10	5
PED. SIGNAL	2	90	25	1.00	50
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
FLASHER LED					
TOTAL =					318

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

- 2 EACH PEDESTRIAN PUSH-BUTTON

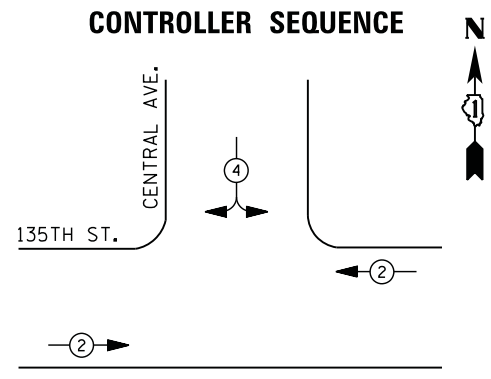
ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
 201 WEST CENTER COURT
 SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT ILYAS MOHIUDDIN
 PHONE 708-235-2692
 COMMONWEALTH EDISON

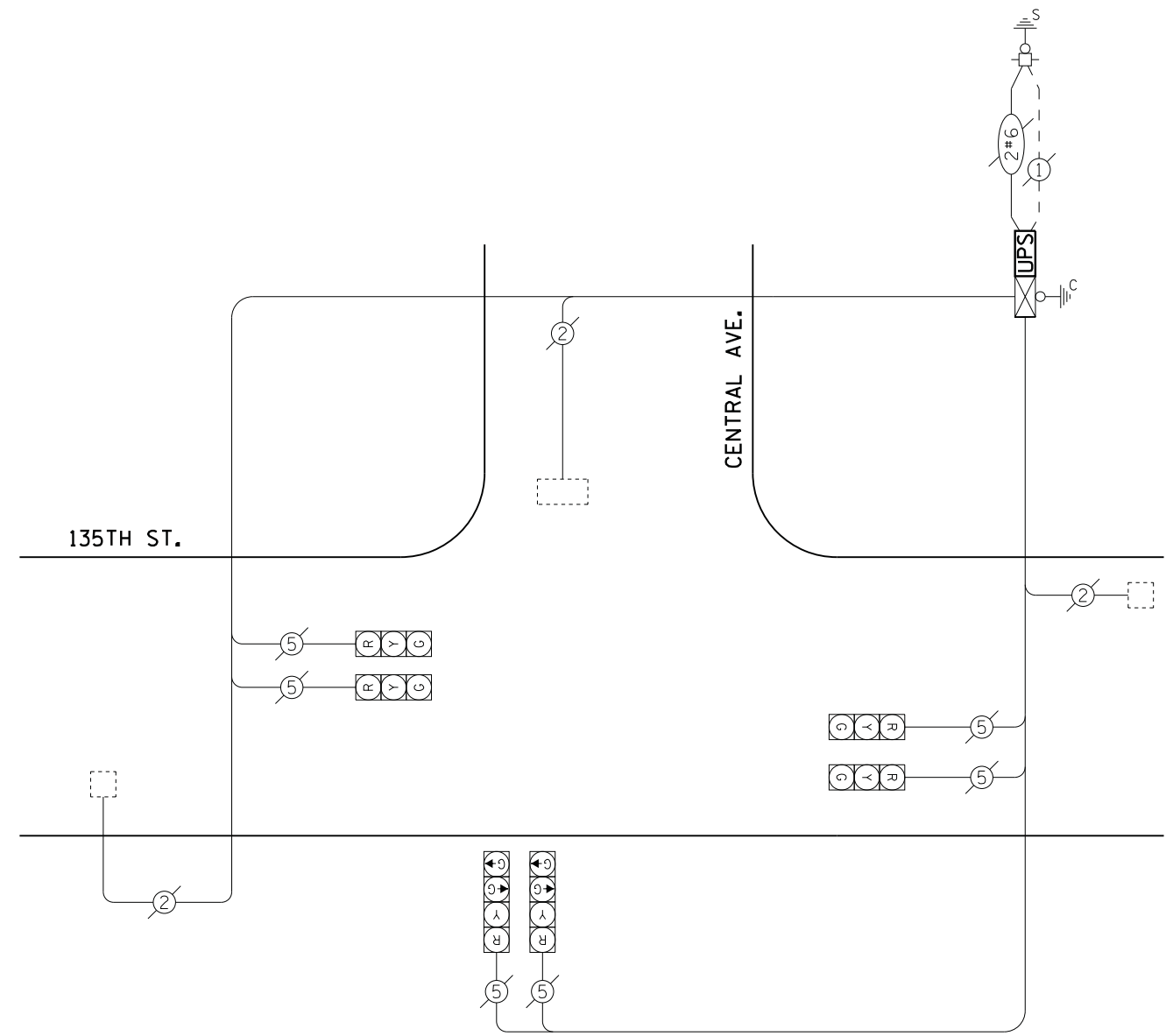
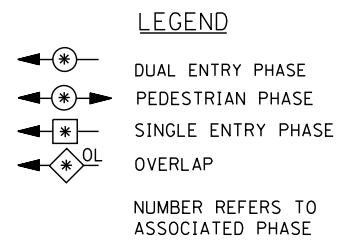
TS #4030
 CRESTWOOD



FILE NAME = M:\p\1481\2183 PTB 168-011 SINGH IDOT VAR-VAR\VD14-002 South Cook Co. LED\6 Design\CAD\Sheet Files\4040 CAB_C00K.dgn



PHASE DESIGNATION DIAGRAM



CABLE PLAN

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

TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	6	135	17	0.50	51
(YELLOW)	6	135	25	0.25	38
(GREEN)	8	135	15	0.25	30
ARROW		135	12	0.10	
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
FLASHER LED					
TOTAL =					219

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT ILYAS MOHIUDDIN
PHONE 708-235-2692
COMMONWEALTH EDISON

USER NAME = .USERNAME.	DESIGNED - DW	REVISED -
	DRAWN - CC	REVISED -
PLOT SCALE = 20.000' / in.	CHECKED - JDH	REVISED -
PLOT DATE = 7/9/2014	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**135TH STREET AT CENTRAL AVENUE
SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM**

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

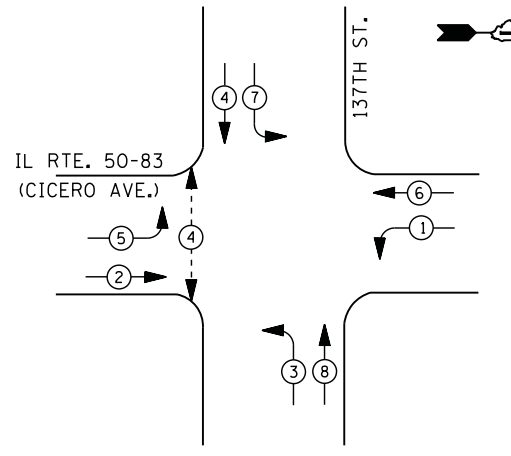
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	56
CONTRACT NO. 60Y41				

TS #4040
CRESTWOOD

ILLINOIS



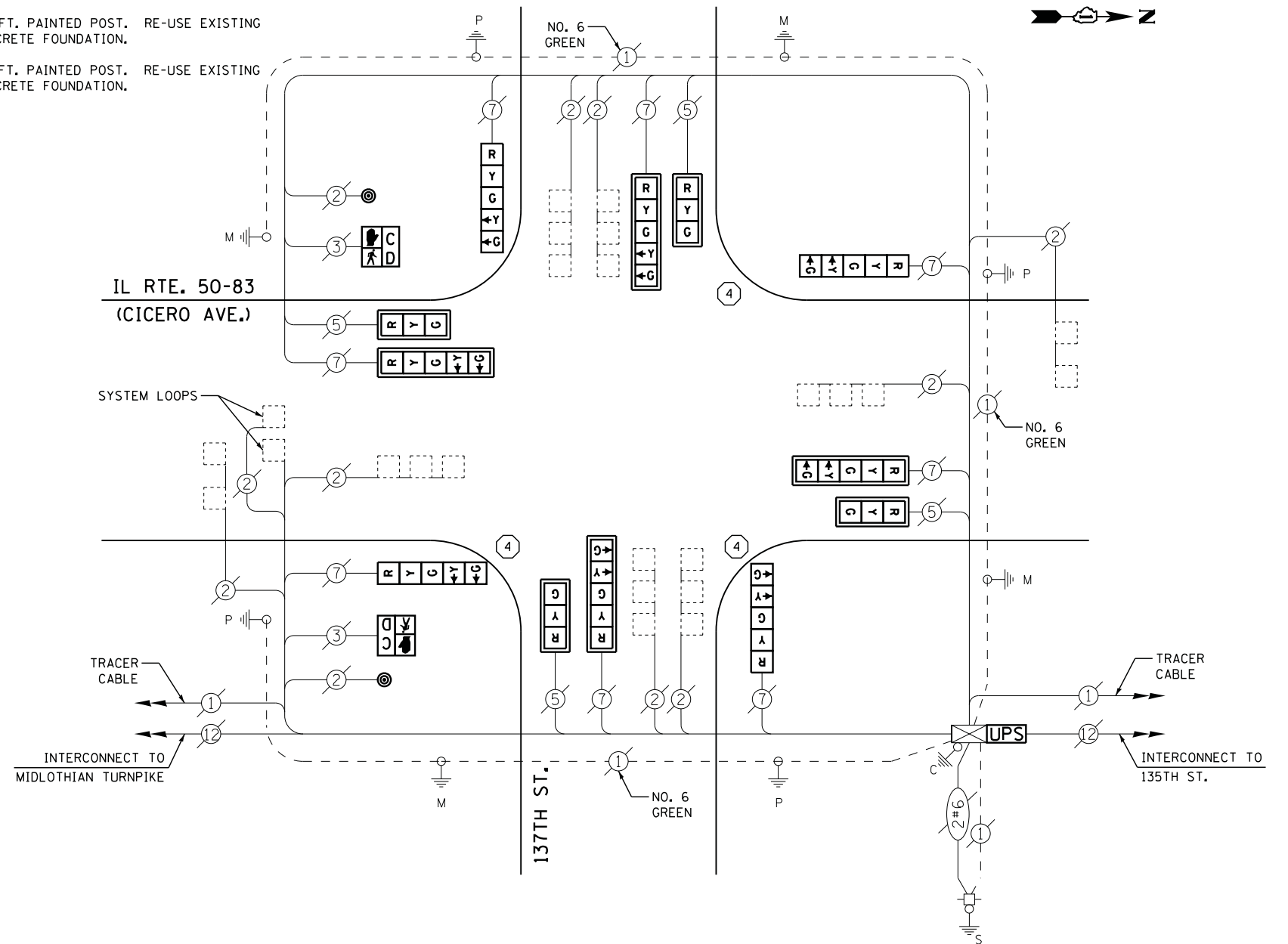
CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

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

- ① REPLACE 10 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ② REPLACE 14 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ③ REPLACE 15 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ④ REPLACE 16 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ⑤ REPLACE 18 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.



CABLE PLAN

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

TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	16	135	12	0.10	20
PED. SIGNAL	2	90	25	1.00	50
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
TOTAL =					392

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT ILYAS MOHIUDDIN
PHONE 708-235-2692
COMMONWEALTH EDISON

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
3	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
4	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
8	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
2	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
2	EACH	REMOVE AND REPLACE ANCHOR BOLTS
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

4	EACH	SIGNAL HEAD, 3 - SECTION
8	EACH	SIGNAL HEAD, 5 - SECTION
8	EACH	TRAFFIC SIGNAL BACKPLATE
2	EACH	PEDESTRIAN SIGNAL HEAD
2	EACH	PEDESTRIAN PUSH-BUTTON
3	EACH	SIGNAL POST

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL ROUTE 50-83 (CICERO AVENUE) AT 137TH STREET
SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM**

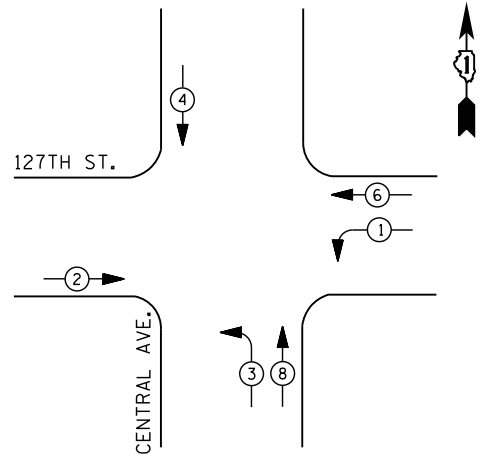
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	57
CONTRACT NO. 60Y41				

TS #20366
CRESTWOOD

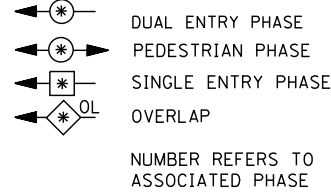


CONTROLLER SEQUENCE

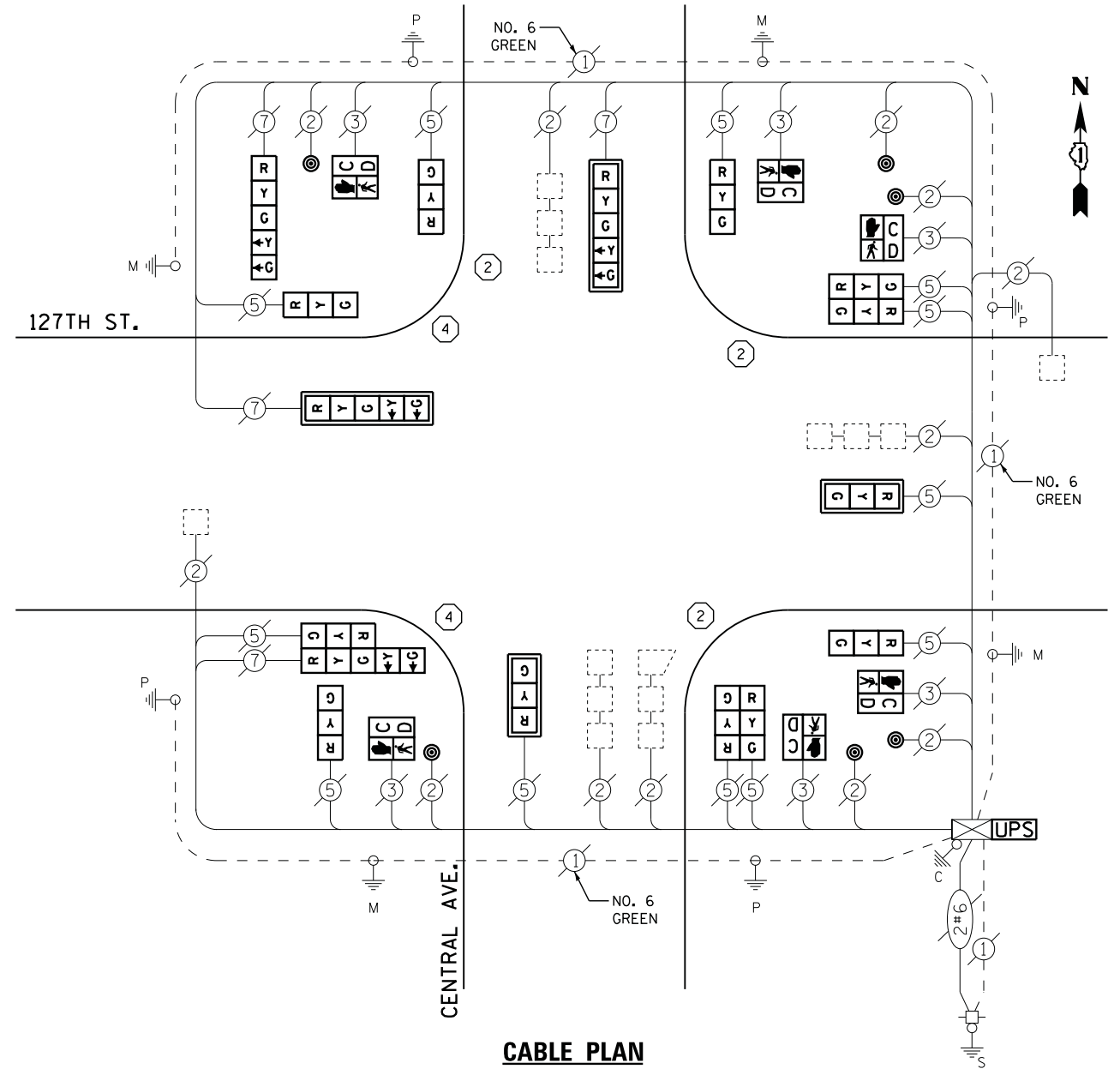


PHASE DESIGNATION DIAGRAM

LEGEND



- ① REPLACE 10 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ② REPLACE 14 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ③ REPLACE 15 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ④ REPLACE 16 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ⑤ REPLACE 18 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.



CABLE PLAN

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

TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	16	135	15	0.25	60
ARROW	8	135	12	0.10	10
PED. SIGNAL	6	90	25	1.00	150
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
TOTAL =					556

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
3	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
5	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
2	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
6	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
4	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
6	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
3	EACH	REMOVE AND REPLACE ANCHOR BOLTS
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

7	EACH	SIGNAL HEAD, 3 - SECTION
3	EACH	SIGNAL HEAD, 5 - SECTION
2	EACH	SIGNAL HEAD, 2 - FACE, 3 SECTION
1	EACH	SIGNAL HEAD, 2 - FACE, 1-3 SECTION, 1-5 SECTION
4	EACH	TRAFFIC SIGNAL BACKPLATE
6	EACH	PEDESTRIAN SIGNAL HEAD
6	EACH	PEDESTRIAN PUSH-BUTTON
5	EACH	SIGNAL POST

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT ILYAS MOHIUDDIN
PHONE 708-235-2692
COMMONWEALTH EDISON

TS #3985
CRESTWOOD

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

127TH STREET AT CENTRAL AVENUE
SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM

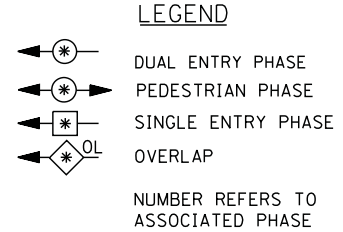
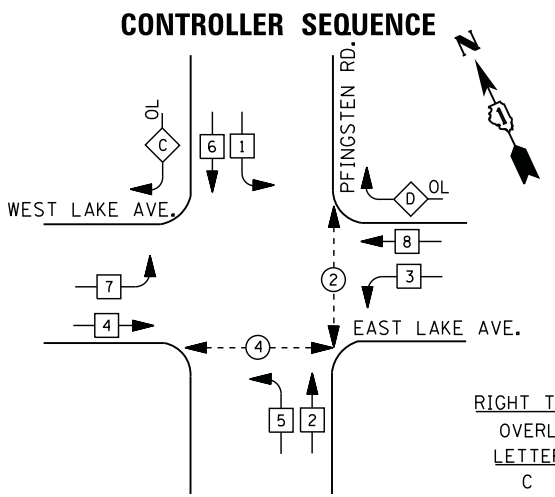
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	58
CONTRACT NO. 60Y41				

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

ILLINOIS

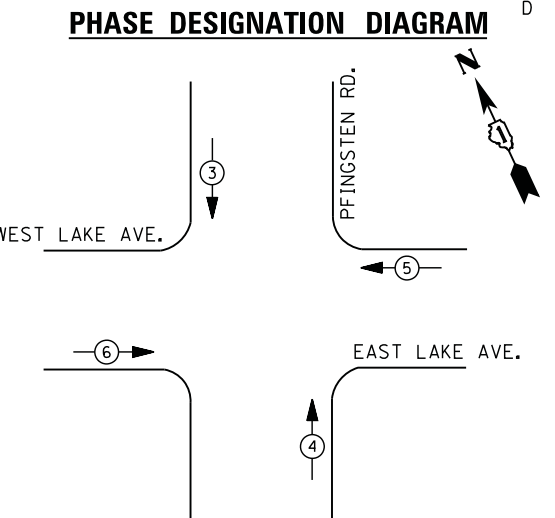


FILE NAME = M:\p\03\1481\2103 PTB 16B-011 SINGH IDOT VAR-VAR\WD14-002 South Cook Co. LED-65 Design\CAD\Sheet Files\5405_CAB_COOK.dgn



RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
C =	6	7
D =	8	1



EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT				

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

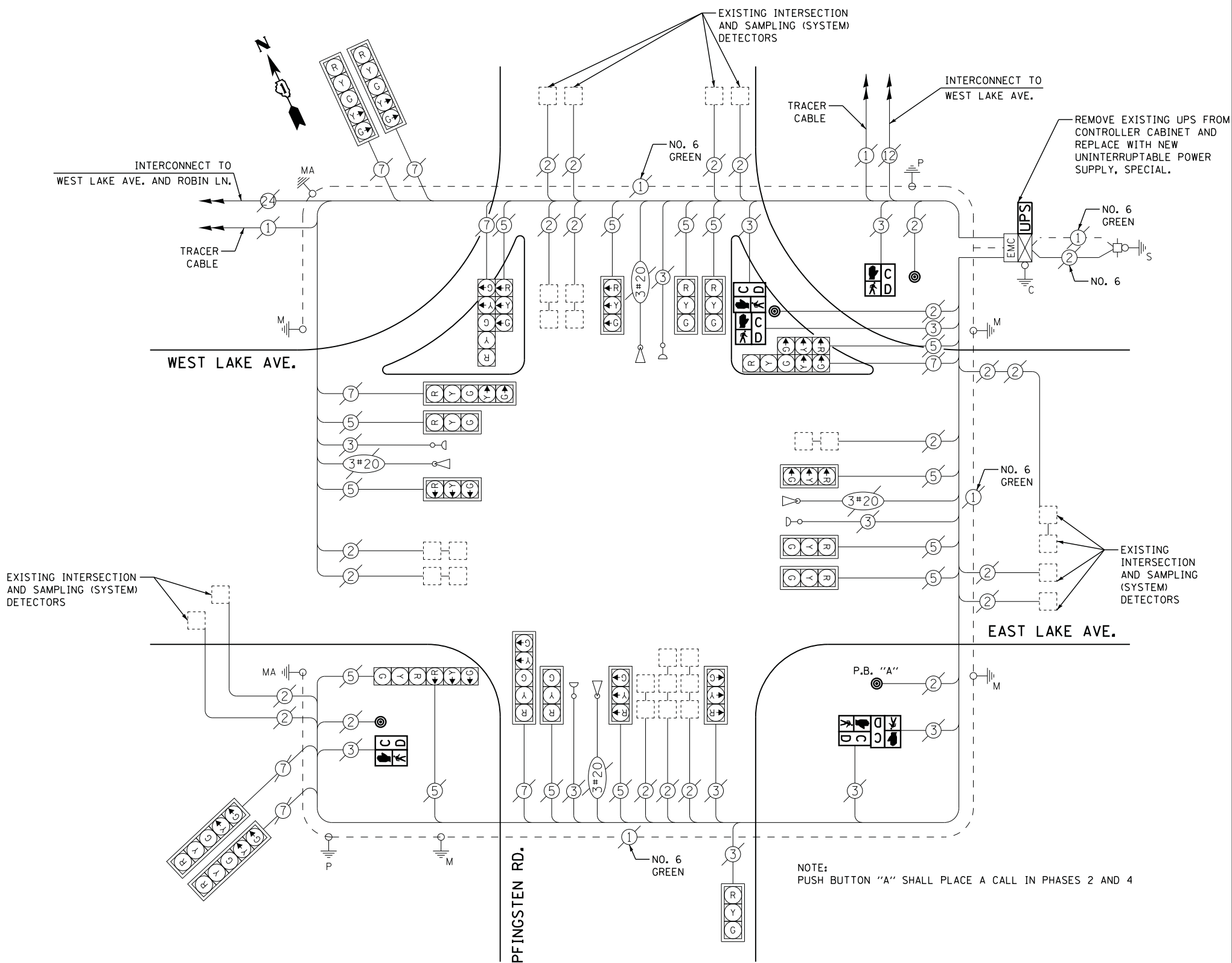
TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	24	135	17	0.50	204
(YELLOW)	24	135	25	0.25	150
(GREEN)	24	135	15	0.25	90
ARROW	16	135	12	0.10	20
PED. SIGNAL	6	90	25	1.00	150
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
FLASHER LED					
TOTAL =					714

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
 201 WEST CENTER COURT
 SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT TERRY BLECK
 PHONE 847-316-5239
 COMMONWEALTH EDISON

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
4	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING



REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

6	EACH	PEDESTRIAN SIGNAL HEAD
4	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	UNINTERRUPTABLE POWER SUPPLY (COMPLETE)

TS #5405
 GLENVIEW

USER NAME = .USERNAME.	DESIGNED - DW	REVISED -
	DRAWN - CC	REVISED -
PLOT SCALE = 20.000' / 1" =	CHECKED - JDH	REVISED -
PLOT DATE = 7/9/2014	DATE -	REVISED -

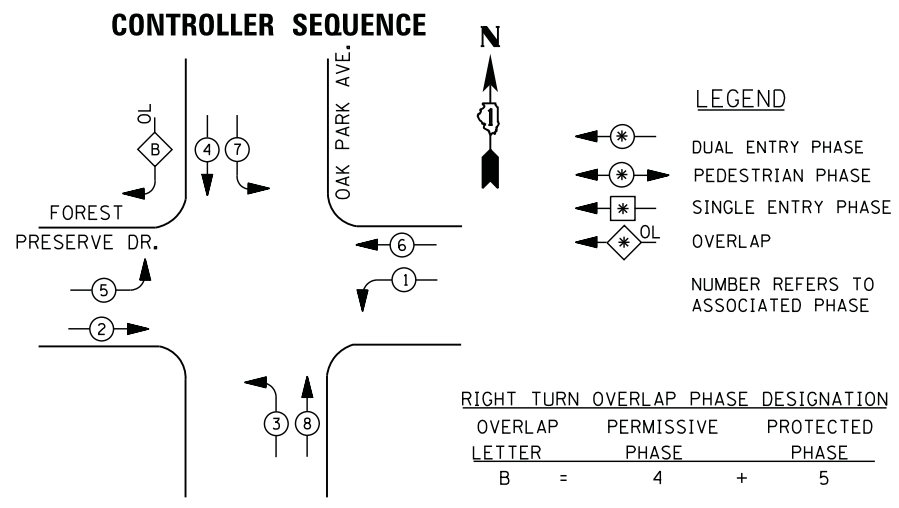
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PFINGSTEN ROAD AT EAST LAKE AVENUE SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE			
SCALE: N.T.S.	SHEET NO.	OF SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	59
CONTRACT NO. 60Y41				
ILLINOIS				



FILE NAME = M:\p\1481\2183 PTB 168-011 SINGH IDOT VAR-VAR\WD14-002 South Cook Co.,LED16 Design\CAD\Sheet Files\51002-CAB_COOK.dgn

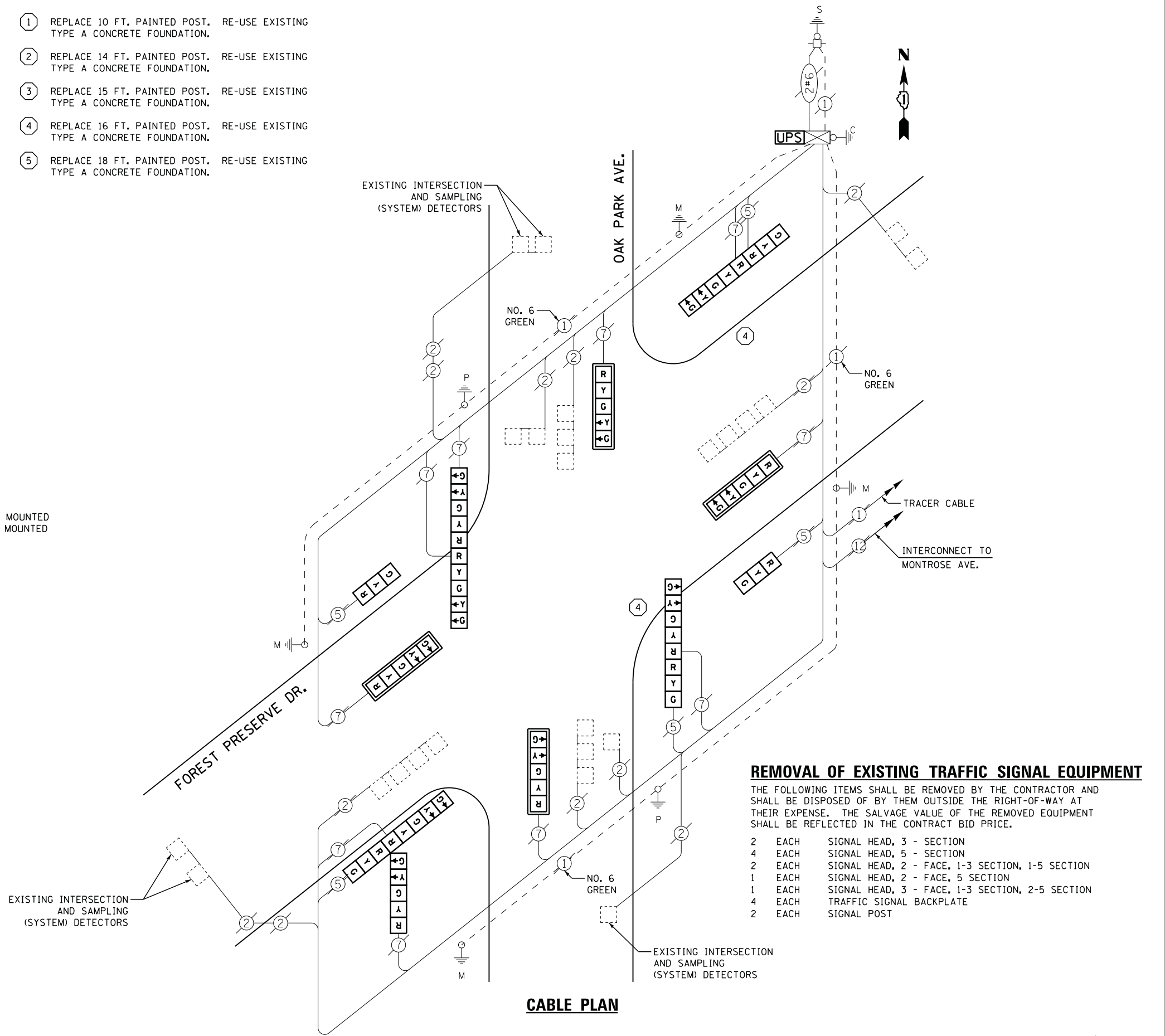


PHASE DESIGNATION DIAGRAM

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED
2	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 3-FACE, 1-3 SECTION, 2-5 SECTION BRACKET MOUNTED
4	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	REMOVE AND REPLACE ANCHOR BOLTS
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL

- ① REPLACE 10 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ② REPLACE 14 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ③ REPLACE 15 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ④ REPLACE 16 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ⑤ REPLACE 18 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.



REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

2	EACH	SIGNAL HEAD, 3 - SECTION
4	EACH	SIGNAL HEAD, 5 - SECTION
2	EACH	SIGNAL HEAD, 2 - FACE, 1-3 SECTION, 1-5 SECTION
1	EACH	SIGNAL HEAD, 2 - FACE, 5 SECTION
1	EACH	SIGNAL HEAD, 3 - FACE, 1-3 SECTION, 2-5 SECTION
4	EACH	TRAFFIC SIGNAL BACKPLATE
2	EACH	SIGNAL POST

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

TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	15	135	17	0.50	128
(YELLOW)	15	135	25	0.25	94
(GREEN)	15	135	15	0.25	57
ARROW	20	135	12	0.10	24
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
FLASHER LED					
TOTAL =					403

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT JOE LEUNG
PHONE 773-509-3288
COMMONWEALTH EDISON

USER NAME = .USERNAME.	DESIGNED - DW	REVISED -
	DRAWN - CC	REVISED -
PLOT SCALE = 20.000' / in.	CHECKED - JDH	REVISED -
PLOT DATE = 7/9/2014	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**FOREST PRESERVE DRIVE AT OAK PARK AVENUE
SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM**

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

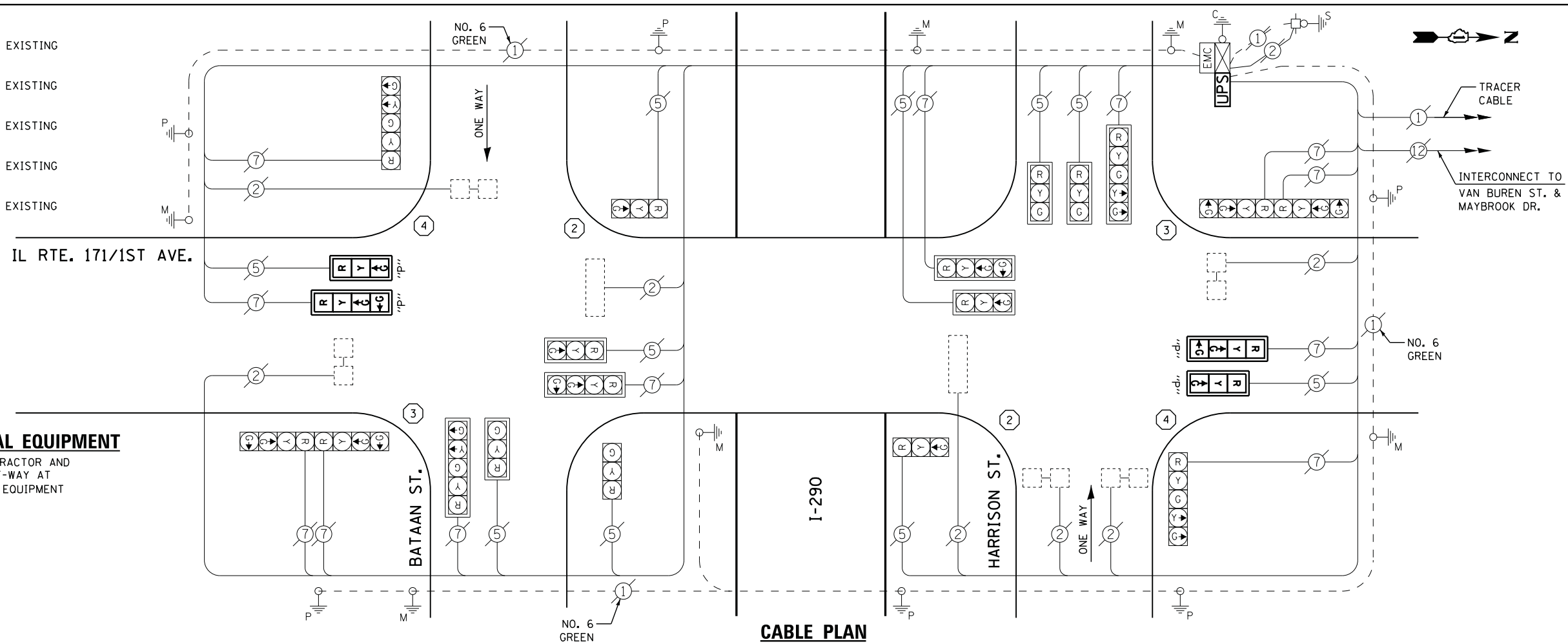
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	60
CONTRACT NO. 60Y41				

ILLINOIS

TS #5100
CHICAGO



- ① REPLACE 10 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ② REPLACE 14 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ③ REPLACE 15 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ④ REPLACE 16 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ⑤ REPLACE 18 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.



REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

- 6 EACH SIGNAL POST
- 2 EACH OP SIGNAL HEAD, 3 - SECTION
- 2 EACH OP SIGNAL HEAD, 4 - SECTION
- 4 EACH TRAFFIC SIGNAL BACKPLATE

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 15 FT.
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
2	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED
2	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED
4	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
8	EACH	RELOCATE EXISTING SIGNAL HEAD
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
3	EACH	REMOVE AND REPLACE ANCHOR BOLTS
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL

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

TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	22	135	17	0.50	187
(YELLOW)	22	135	25	0.25	138
(GREEN)	30	135	15	0.25	113
ARROW	8	135	12	0.10	10
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252	25	0.05	
VIDEO SYSTEM		150	-	1.00	
TOTAL =					548

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT JOE STACHO
PHONE 630-424-5704
COMMONWEALTH EDISON

CABLE PLAN

PROPOSED SEQUENCE OF OPERATIONS

MOVEMENT	PHASE																								FLASH			
	1	2A	2B	2C	2D	3A	3B	4	5A	5B	5C	5D	6A	6B	7	8A	8B	8C	8D	9A	9B	10	11A	11B		12A	12B	12C
1ST AVE N/B AT BATAAN E/B NEAR RIGHT AND MID MOUNT MAST ARM SIGNALS	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
1ST AVE N/B AT BATAAN E/B FAR LEFT AND END MOUNT MAST ARM SIGNALS	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
1ST AVE N/B AT HARRISON ST W/B MID MOUNT MAST ARM SIGNAL	G	G	G	Y	R	G	G	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	
1ST AVE N/B AT HARRISON ST W/B FAR LEFT AND END MOUNT MAST ARM SIGNALS	G	G	G	Y	R	G	G	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	
1ST AVE S/B AT HARRISON ST W/B NEAR RIGHT AND MID MOUNT MAST ARM SIGNALS	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	
1ST AVE S/B AT HARRISON ST W/B FAR LEFT AND END MOUNT MAST ARM SIGNALS	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	
1ST AVE S/B AT BATAAN E/B MID MOUNT MAST ARM SIGNAL	R	R	R	R	R	R	R	R	G	G	Y	R	G	G	G	G	G	Y	R	G	G	R	R	R	R	R	R	
1ST AVE S/B AT BATAAN E/B FAR LEFT AND END MOUNT MAST ARM SIGNALS	R	R	R	R	R	R	R	R	G	G	Y	R	G	G	G	G	G	Y	R	G	G	R	R	R	R	R	R	
BATAAN E/B NEAR RIGHT AND MID MOUNT MAST ARM SIGNALS	G	Y	R	R	R	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	
BATAAN E/B FAR LEFT AND END MOUNT MAST ARM SIGNAL	G	Y	R	R	R	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	
HARRISON W/B NEAR RIGHT AND INSIDE MOUNT MAST ARM SIGNALS	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	
HARRISON W/B MID MOUNT AND END MOUNT MAST ARM SIGNALS	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	

NOTE: WHERE DOUBLE CLEARANCE INTERVALS ARE REQUIRED THE CLEARANCE REQUIRES 4 ADJUSTABLE TIME INTERVALS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 171 /1ST AVENUE AT I-290 EISENHOWER EXPRESSWAY/HARRISON STREET
SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2014-043TS	COOK	61	61
ILLINOIS			CONTRACT NO. 60Y41	

TS #100
MAYBROOK

FILE NAME = M:\p\1481\2103 PTB 168-011 SINGH IDOT VAR-VAR\14-002 South Cook Co. LED-ES Design\CAD\Sheet Files\100_CAB_CDDK.dgn