

5200 Main Street, Suite 240
Downers Grove, Illinois 60515
(630) 641-9900



F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-052TS	COOK	87	1
ILLINOIS			CONTRACT NO. 60X24	

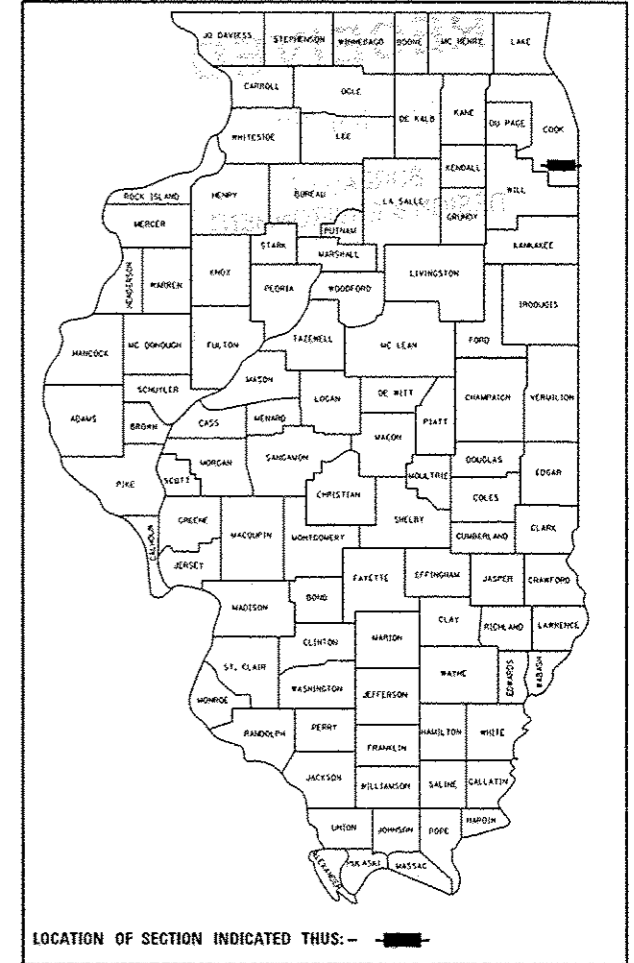
1-17-14 LETTING ITEM 018

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

**VARIOUS LOCATIONS IN SOUTH COOK COUNTY #3
LIGHT EMITTING DIODE (LED) INSTALLATION
SECTION 2013-052TS
COOK COUNTY**

D-91-044-14





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

C-91-044-14

**COOK COUNTY
LOCATION MAP
SEE SHEET 3**

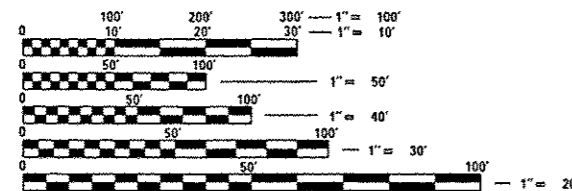
FOR INDEX OF SHEETS, SEE SHEET NO. 2

 *Brian K. Scifers*
BRIAN K. SCIFERS
REGISTRATION NO. 062-054567
10-10-2013 11-30-2013
DATE EXPIRES
APPLIES TO SHEETS 1-32, 52, 71-74, 80-87

 *George M. Ziegler*
GEORGE M. ZIEGLER
REGISTRATION NO. 062-045853
10-10-2013 11-30-2013
DATE EXPIRES
APPLIES TO SHEETS 33-51, 53-70, 75-79

STANDARDS

- 701006-03 OFF-ROAD OPERATIONS 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
- 701101-02 OFF-ROAD OPERATIONS MULTILANE, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
- 701701-08 URBAN LANE CLOSURE MULTILANE INTERSECTION
- 701901-02 TRAFFIC CONTROL DEVICES
- 720001-01 SIGN PANEL MOUNTING DETAIL
- 720006-03 SIGN PANEL ERECTION DETAILS
- 857001-01 STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
- 862001-01 UNINTERRUPTABLE POWER SUPPLY (UPS)
- 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 ENGINEER: SUDUD MAHMOUD
PROJECT MANAGER: DARYLE DREW

CONTRACT NO. 60X24

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED *Oct 25 2013*

John Fortin
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

Dec 6 2013
John D. Baranzelli
ENGINEER OF DESIGN AND ENVIRONMENT

Dec 6 2013
Omer Osman
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**



INDEX OF SHEETS

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3	LOCATION MAP
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7-12	IDOT TS DETAILS

PAGE #	TS#	INTERSECTION NAME
13	22	131ST ST @ KEDZIE AVE
14	4550	127TH ST @ MAPLE AVE
15	11380	127TH ST @ VINCENNES AVE/GREGORY ST
16	4575	127TH ST @ WESTERN AVE
17	5875	123RD ST @ WESTERN AVE
18	3995	12TH ST @ KEDZIE AVE
19	20445	127TH ST @ WIRETON RD
20	4545	BROADWAY ST @ CHATHAM ST
21	4580	BROADWAY ST @ WESTERN AVE
22	4560	GREGORY ST @ YORK RD
23	4585	WESTERN AVE @ VERMONT AVE
24	5870	WESTERN AVE @ 119TH ST
25-26	20	119TH ST @ MARSHFIELD AVE/ASHLAND AVE
27	4010	127TH ST @ WOOD ST
28	4005	127TH ST @ THROOP ST
29	4140	ASHLAND AVE @ VERMONT ST
30	25	I 57 @ 127TH ST EAST RAMP/MARSHFIELD
31	35	I 57 @ 127TH WEST RAMP/PAULINA
32	1790	IL 1/HALSTED ST @ 127TH ST
33	3972	119TH ST @ PAGE ST
34	12105	142ND ST @ COTTAGE GROVE AVE
35	4050	142ND ST MAIN ST @ CHICAGO RD
36	4060	142ND ST MAIN ST @ LINCOLN AVE
37	11460	IL 83 SIBLEY BLVD-147TH ST @ WOODLAWN AVE
38	11365	142ND ST @ WOODLAWN AVE
39	11370	LINCOLN ST @ WOODLAWN AVE
40	13090	144TH ST @ INDIANA AVE
41	11480	154TH ST @ COTTAGE GROVE AVE
42	11315	CHICAGO RD @ 144TH ST
43	3395	IL 83/147TH ST-SIBLEY BLVD @ CHICAGO RD
44-45	11475	IL 83/147TH ST-SIBLEY BLVD @ COTTAGE GROVE AVE
46	11470	IL 83/147TH ST-SIBLEY BLVD @ ENGLE PL
47-48	11465	IL 83/147TH ST-SIBLEY BLVD @ GREENWOOD RD
49	3465	IL 83/147TH ST-SIBLEY BLVD @ LASALLE ST/MARKHAM DR
50	3475	IL 83/147TH ST-SIBLEY BLVD @ LINCOLN AVE/MICHIGAN CITY RD
51	11430	LINCOLN AVE EAST OF AVALON AVE
52	4080	154TH ST @ CHICAGO RD/SOUTH PARK AVE
53	11750	US 6 159TH ST @ PARK AVE
54	13795	150TH ST @ WOOD ST
55	13800	154TH ST @ WOOD ST
56	13805	155TH ST @ WOOD ST
57	13810	156TH ST @ WOOD ST
58	13815	158TH ST @ WOOD ST
59	1810	IL 1/HALSTED ST @ 157TH ST
60	1815	IL 1/HALSTED ST @ 163RD ST
61	1820	IL 1/HALSTED ST @ 167TH ST
62	3385	IL 83/147TH ST-SIBLEY BLVD @ BROADWAY AVE
63	1765	IL 83/147TH ST-SIBLEY BLVD @ IL 1/HALSTED ST
64	3470	IL 83/147TH ST-SIBLEY BLVD @ LOOMIS ST
65	3510	IL 83/147TH ST-SIBLEY BLVD @ ROBAY AVE
66	3520	IL 83/147TH ST-SIBLEY BLVD @ WOOD ST
67	13835	MORGAN ST @ 150TH ST
68	13820	PARK AVE @ 154TH ST
69	13825	PARK AVE @ 155TH ST
70	13830	PARK AVE @ 157TH ST
71	1805	IL 1/HALSTED ST @ 152ND ST
72	1760	IL 1/HALSTED ST @ IL 1/VINCENNES AVE
73	5345	INDIANA AVE @ 137TH ST
74	5350	INDIANA AVE @ 138TH ST
75	1795	IL 1 HALSTED ST @ 138TH ST
76	9140	IL 1/HALSTED ST @ 144TH ST
77	4045	138TH ST @ ASHLAND AVE/WOOD ST
78	9135	IL 1/HALSTED ST @ 134TH/FORREST VIEW
79	3440	IL 83/147TH ST-SIBLEY BLVD @ INDIANA AVE
80	210	US 6/159TH ST @ COTTAGE GROVE AVE
81	295	US 6/159TH ST @ STATE ST/INDIANA AVE
82	12102	STATE ST @ ARMORY DR
83-84	225	US 6/159TH ST @ ELLIS AVE
85	285	US 6/159TH ST @ SCHOOL ST
86	290	US 6/159TH ST @ SOUTH PARK AVE/CHICAGO RD
87	11114	135TH ST @ KEDZIE AVE

GENERAL NOTES

ALL CONSTRUCTION SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (SSRBC), AND SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS; ADOPTED JANUARY 1, 2014 BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION AND ALL AMENDMENTS THERETO; IN CASE OF CONFLICT, THE MORE RESTRICTIVE PROVISIONS SHALL APPLY. ANY REFERENCE TO STANDARDS IN THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED TO BE THE LATEST STANDARDS OF THE DEPARTMENT.

THE CONTRACTOR SHALL CHECK THE PROPOSED TRAFFIC SIGNAL EQUIPMENT LOCATIONS FOR OVERHEAD UTILITY CONFLICTS, THE CONTRACTOR SHALL COORDINATE ANY CONFLICTS WITH THE UTILITY COMPANIES AND THE RESIDENT ENGINEER BEFORE ORDERING MATERIALS.

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

THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.

WHENEVER, DURING CONSTRUCTION OPERATIONS, ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF GUTTERS, DRAINAGE STRUCTURES, DITCHES, ETC. SUCH THAT THE NATURAL FLOW LINE OF WATER IS OBSTRUCTED, THE LOOSE MATERIAL WILL BE REMOVED AT THE CLOSE OF EACH WORKING DAY, AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES AND FLOW LINES SHALL BE FREE FROM DIRT AND DEBRIS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. THE CONTRACTOR'S FAILURE TO PROVIDE THE ABOVE WILL PRECLUDE ANY POSSIBLE ADDED COMPENSATION REQUESTED DUE TO DELAYS OF UNSUITABLE MATERIALS CREATED AS A RESULT THEREOF.

THE CONTRACTOR SHALL NOTIFY THE IDOT ARTERIAL TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

THE CONTRACTOR SHALL SOLELY BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNS, TRAFFIC CONTROL DEVICES, AND WARNING DEVICES TO INFORM AND PROTECT THE PUBLIC DURING ALL PHASES OF CONSTRUCTION.

THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ADJUTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT OR THE DIRECTION OF THE ENGINEER.

THE CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL AREAS AFFECTED BY EQUIPMENT OR LABORERS TO EXISTING CONDITIONS. THE CONTRACTOR IS ALSO RESPONSIBLE FOR PROTECTING ALL NEW WORK UNTIL COMPLETION OF THIS CONTRACT.

RESTORATION OF WORK AREA: RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS SIGNAL POST, UNINTERRUPTIBLE POWER SUPPLY ETC. AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD IN ACCORDANCE TO STANDARD SPECIFICATIONS ARTICLE 252 WHICH SHALL INCLUDE THE REQUIRED WATERING PER ARTICLE 252.08. ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEED IN ACCORDANCE WITH STANDARD SPECIFICATIONS ARTICLE 250 AND 251, RESPECTIVELY.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.

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).

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 EXISTING CONDITION OF THE ANCHOR BOLT IS ACCEPTABLE. IF THE EXISTING ANCHOR BOLT CONDITION IS NOT ACCEPTABLE, THE CONTRACTOR SHALL REPLACE ANCHOR BOLT AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL BE PAID FOR THE NUMBER OF TRAFFIC SIGNAL POSTS INSTALLED AND NO OTHER COMPENSATION WILL BE PROVIDED.

THE CONTRACTOR SHALL RELOCATE ANY EXISTING TRAFFIC SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS, AND PEDESTRIAN PUSH-BUTTONS FROM PAINTED POSTS THAT ARE INDICATED FOR REPLACEMENT TO A NEW POST AS SHOWN ON THE PLANS, EXCEPT AS SHOWN TO BE REPLACED 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 PAY ITEM OF THE LENGTH AS SPECIFIED IN THE PLANS.

THE CONTRACTOR SHALL RELOCATE ANY EXISTING SIGN PANELS FROM PAINTED POSTS THAT ARE INDICATED FOR REPLACEMENT TO A NEW POST 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 PAY ITEM OF THE LENGTH AS SPECIFIED IN THE PLANS.

CONTRACTOR SHALL REPLACE ALL EXISTING TRAFFIC SIGNAL AND PEDESTRIAN BRACKETS TO NEW POLYCARBONATE BRACKETS. 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.

FOR TS 4060, TS 11460, AND TS 3475 LOCATIONS, DUE TO THE PRESENCE OF A RED LIGHT RUNNING (RLR) CAMERA WITHIN THE PROJECT LIMITS, CONTRACTOR SHALL NOTIFY THE VILLAGE OF DOLTON AND REDSPEED ILLINOIS, LLC PRIOR TO THE START OF CONSTRUCTION. THE VILLAGE OF DOLTON OR REDSPEED ILLINOIS, LLC SHALL MAKE THE RLR 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.

VILLAGE OF DOLTON
141014 PARK AVENUE
DOLTON, IL 60419
(708) 849-4000

REDSPEED ILLINOIS, LLC
400 EISENHOWER LANE NORTH
LOMBARD, IL 60148
(630) 387-5700

FOR TS 3995, TS 4575, AND TS 11380 LOCATIONS, DUE TO THE PRESENCE OF A RED LIGHT RUNNING (RLR) CAMERA WITHIN THE PROJECT LIMITS, CONTRACTOR SHALL NOTIFY THE CITY OF BLUE ISLAND AND REDFLEX TRAFFIC SYSTEMS PRIOR TO THE START OF CONSTRUCTION. THE CITY OF BLUE ISLAND OR REDFLEX TRAFFIC SYSTEMS SHALL MAKE THE RLR 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.

CITY OF BLUE ISLAND
13051 S. GREENWOOD AVENUE
BLUE ISLAND, IL 60406
(708) 597-8603

REDFLEX TRAFFIC SYSTEMS
15020 N 74TH STREET
SCOTTSDALE, AZ 85260
(480) 607-0705

FOR TS 9401 LOCATION, DUE TO THE PRESENCE OF A RED LIGHT RUNNING (RLR) CAMERA WITHIN THE PROJECT LIMITS, CONTRACTOR SHALL NOTIFY THE VILLAGE OF RIVERDALE AND REDFLEX TRAFFIC SYSTEMS PRIOR TO THE START OF CONSTRUCTION. THE VILLAGE OF RIVERDALE OR REDSPEED ILLINOIS, LLC TRAFFIC SYSTEMS SHALL MAKE THE RLR 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.

VILLAGE OF RIVERDALE
157 W. 144TH ST.
RIVERDALE, IL 60827
(708) 841-2200

REDSPEED ILLINOIS, LLC
400 EISENHOWER LANE NORTH
LOMBARD, IL 60148
(630) 387-5700

FOR TS 210 AND TS 295 LOCATIONS, DUE TO THE PRESENCE OF A RED LIGHT RUNNING (RLR) CAMERA WITHIN THE PROJECT LIMITS, CONTRACTOR SHALL NOTIFY THE VILLAGE OF SOUTH HOLLAND AND REDFLEX TRAFFIC SYSTEMS PRIOR TO THE START OF CONSTRUCTION. THE VILLAGE OF SOUTH HOLLAND OR REDFLEX TRAFFIC SYSTEMS SHALL MAKE THE RLR 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.

VILLAGE OF SOUTH HOLLAND
16226 WASAU AVE.
SOUTH HOLLAND, IL 60473
(708) 210-2910

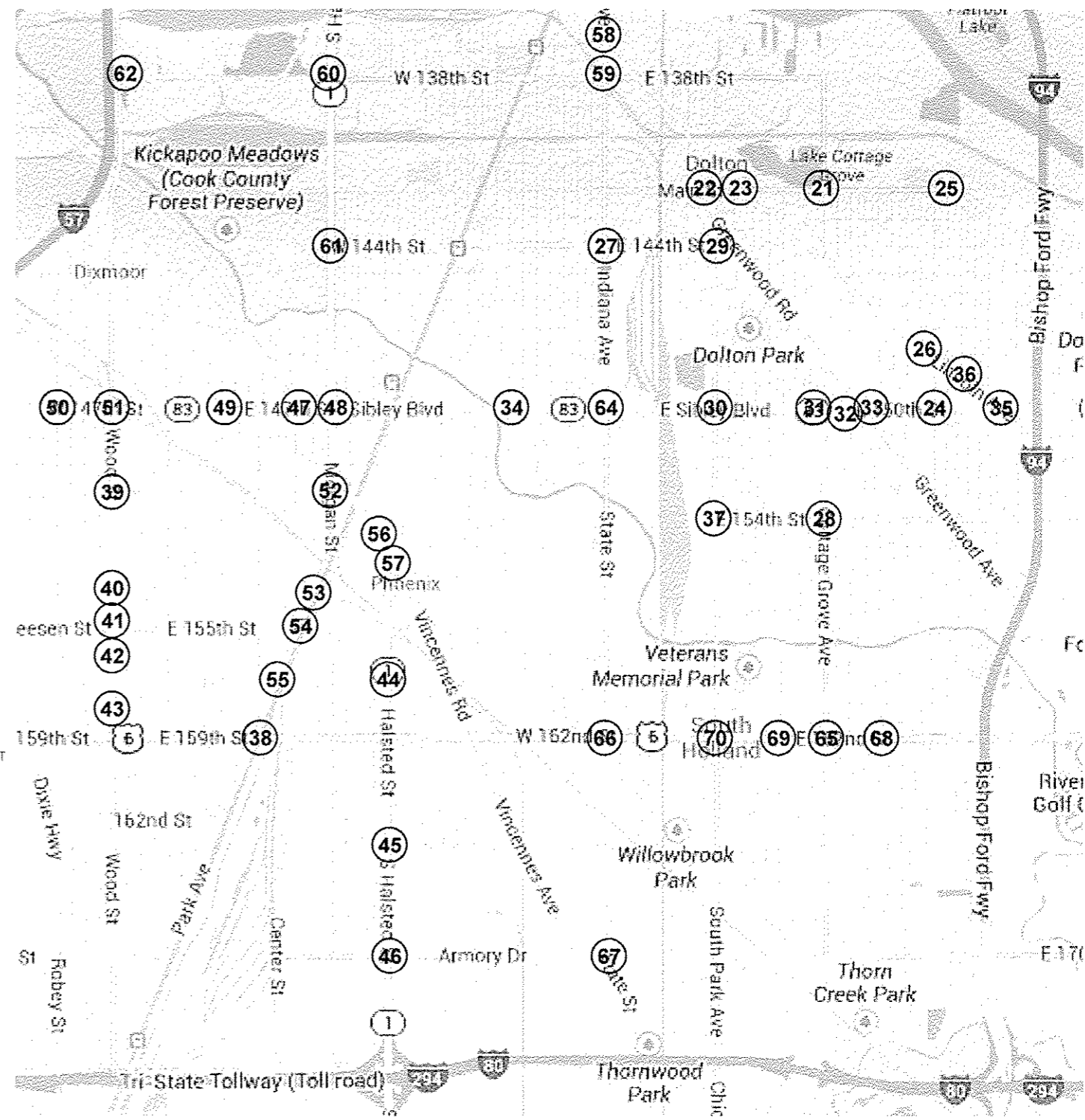
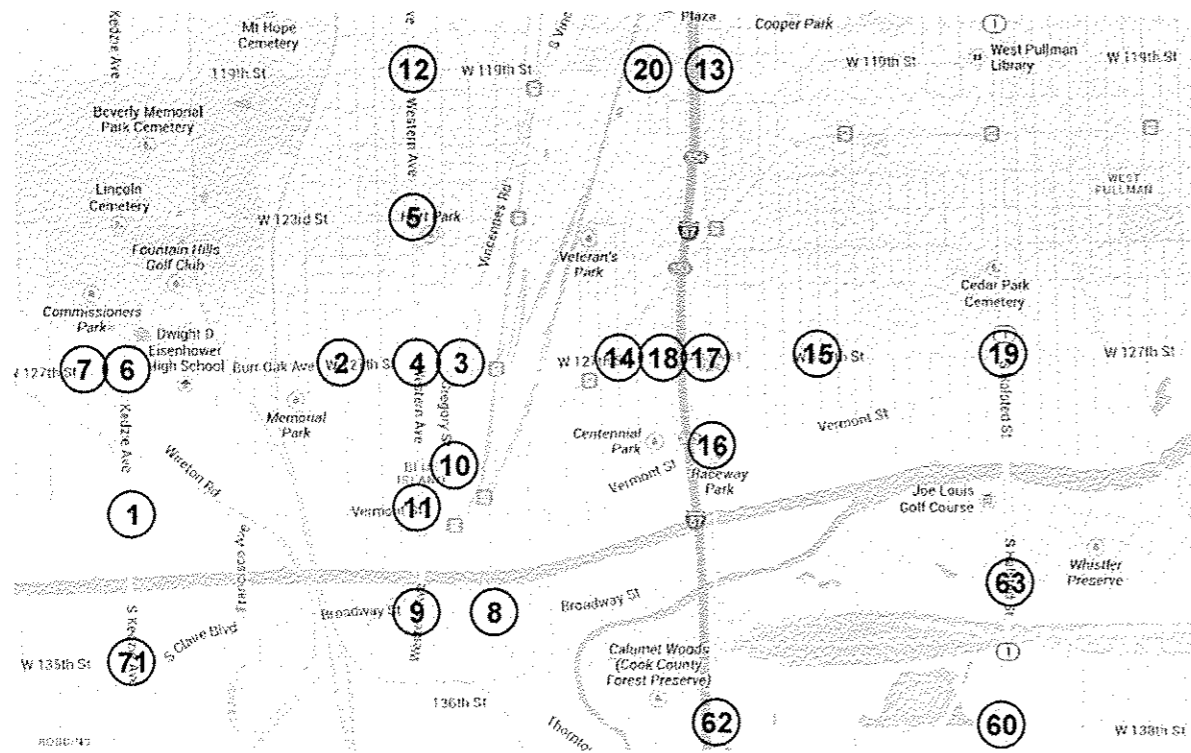
REDFLEX TRAFFIC SYSTEMS
15020 N 74TH STREET
SCOTTSDALE, AZ 85260
(480) 607-0705

FOR TS 3972 LOCATION, DUE TO THE PRESENCE OF A RED LIGHT RUNNING (RLR) CAMERA WITHIN THE PROJECT LIMITS, CONTRACTOR SHALL NOTIFY THE VILLAGE OF CALUMET PARK AND REDFLEX TRAFFIC SYSTEMS PRIOR TO THE START OF CONSTRUCTION. THE VILLAGE OF CALUMET PARK OR REDFLEX TRAFFIC SYSTEMS SHALL MAKE THE RLR 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.

VILLAGE OF CALUMET PARK
12409 SOUTH THROOP
CALUMET PARK, IL 60827
(708) 389-0850

REDFLEX TRAFFIC SYSTEMS
15020 N 74TH STREET
SCOTTSDALE, AZ 85260
(480) 607-0705

FILE NAME : D:\02\24-shs-gennate.dgn	USER NAME : Brian Seifens	DESIGNED - KJP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS AND GENERAL NOTES				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - DLW	REVISED -							2013-052TS	COOK	87	2
		CHECKED - BKS	REVISED -										CONTRACT NO. 60X24
		DATE -	REVISED -										ILLINOIS/FED. AID PROJECT
Default		PLOT SCALE : 40:2000 ' / in.			SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.		



LOC #	TS #	INTERSECTION	LOC #	TS #	INTERSECTION
1	22	131ST ST @ KEDZIE AVE	41	13805	155TH ST @ WOOD ST
2	4550	127TH ST @ MAPLE AVE	42	13810	156TH ST @ WOOD ST
3	11380	127TH ST @ VINCENNES AVE/GREGORY ST	43	13815	158TH ST @ WOOD ST
4	4575	127TH ST @ WESTERN AVE	44	1810	IL 1/HALSTED ST @ 157TH ST
5	5875	123RD ST @ WESTERN AVE	45	1815	IL 1/HALSTED ST @ 163RD ST
6	3995	12TH ST @ KEDZIE AVE	46	1820	IL 1/HALSTED ST @ 167TH ST
7	20445	127TH ST @ WIRETON RD	47	3385	IL 83/147TH ST-SIBLEY BLVD @ BROADWAY AVE
8	4545	BROADWAY ST @ CHATHAM ST	48	1765	IL 83/147TH ST-SIBLEY BLVD @ IL 1/HALSTED ST
9	4580	BROADWAY ST @ WESTERN AVE	49	3470	IL 83/147TH ST-SIBLEY BLVD @ LOOMIS ST
10	4560	GREGORY ST @ YORK RD	50	3510	IL 83/147TH ST-SIBLEY BLVD @ ROBEY AVE
11	4585	WESTERN AVE @ VERMONT AVE	51	3520	IL 83/147TH ST-SIBLEY BLVD @ WOOD ST
12	5870	WESTERN AVE @ 119TH ST	52	13835	MORGAN ST @ 150TH ST
13	20	119TH ST @ MARSHFIELD AVE/ASHLAND AVE	53	13820	PARK AVE @ 154TH ST
14	4010	127TH ST @ WOOD ST	54	13825	PARK AVE @ 155TH ST
15	4005	127TH ST @ THROOP ST	55	13830	PARK AVE @ 157TH ST
16	4140	ASHLAND AVE @ VERMONT ST	56	1805	IL 1/HALSTED ST @ 152ND ST
17	25	I 57 @ 127TH ST EAST RAMP/MARSHFIELD	57	1760	IL 1/HALSTED ST @ IL 1/VINCENNES AVE
18	35	I 57 @ 127TH WEST RAMP/PAULINA	58	5345	INDIANA AVE @ 137TH ST
19	1790	IL 1/HALSTED ST @ 127TH ST	59	5350	INDIANA AVE @ 138TH ST
20	3972	119TH ST @ PAGE ST	60	1795	IL 1 HALSTED ST @ 138TH ST
21	12105	142ND ST @ COTTAGE GROVE AVE	61	9140	IL 1/HALSTED ST @ 144TH ST
22	4050	142ND ST MAIN ST @ CHICAGO RD	62	4045	138TH ST @ ASHLAND AVE/WOOD ST
23	4060	142ND ST MAIN ST @ LINCOLN AVE	63	9135	IL 1/HALSTED ST @ 134TH/FOREST VIEW
24	11460	IL 83/SIBLEY BLVD-147TH ST @ WOODLAWN AVE	64	3440	IL 83/147TH ST-SIBLEY BLVD @ INDIANA AVE
25	11365	142ND ST @ WOODLAWN AVE	65	210	US 6/159TH ST @ COTTAGE GROVE AVE
26	11370	LINCOLN ST @ WOODLAWN AVE	66	295	US 6/159TH ST @ STATE ST/INDIANA AVE
27	13090	144TH ST @ INDIANA AVE	67	12102	STATE ST @ ARMORY DR
28	11480	154TH ST @ COTTAGE GROVE AVE	68	225	US 6/159TH ST @ ELLIS AVE
29	11315	CHICAGO RD @ 144TH ST	69	285	US 6/159TH ST @ SCHOOL ST
30	3395	IL 83/147TH ST-SIBLEY BLVD @ CHICAGO RD	70	290	US 6/159TH ST @ SOUTH PARK AVE/CHICAGO RD
31	11475	IL 83/147TH ST-SIBLEY BLVD @ COTTAGE GROVE AVE	71	11114	135TH ST @ KEDZIE AVE
32	11470	IL 83/147TH ST-SIBLEY BLVD @ ENGLE PL			
33	11465	IL 83/147TH ST-SIBLEY BLVD @ GREENWOOD RD			
34	3465	IL 83/147TH ST-SIBLEY BLVD @ LASALLE ST/MARKHAM DR			
35	3475	IL 83/147TH ST-SIBLEY BLVD @ LINCOLN AVE/MICHIGAN CITY RD			
36	11430	LINCOLN AVE EAST OF AVALON AVE			
37	4080	154TH ST @ CHICAGO RD/SOUTH PARK AVE			
38	11750	US 6/159TH ST @ PARK AVE			
39	13795	150TH ST @ WOOD ST			
40	13800	154TH ST @ WOOD ST			

FILE NAME : 0160X24-shr-locmap.dgn	USER NAME : Brian Soifers	DESIGNED - KJP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LOCATION MAP			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
Default		DRAWN - DLW	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.	87	3
		CHECKED - BKS	REVISED -		2013-052TS								
		DATE	REVISED -		CONTRACT NO. 60X24								

(ILLINOIS) FED. AID PROJECT



SUMMARY OF QUANTITIES HEADING LEGEND										
COLUMN NUMBER	TS#	INTERSECTION	FUNDING PARTICIPATION							
			STATE	BLUE ISLAND	CALUMET PARK	CHICAGO	DOLTON	ALSIP	WORTH	
2	22	131ST ST @ KEDZIE AVE	* 95%						2.5%	2.5%
3	4550	127TH ST @ MAPLE AVE	95%	5%						
1	11380	127TH ST @ VINCENNES AVE/GREGORY ST	100%							
1	4575	127TH ST @ WESTERN AVE	100%							
3	5875	123RD ST @ WESTERN AVE	95%	5%						
1	3995	127TH ST @ KEDZIE AVE	100%							
1	20445	127TH ST @ WIRETON RD	100%							
3	4545	BROADWAY ST @ CHATHAM ST	95%	5%						
1	4580	BROADWAY ST @ WESTERN AVE	100%							
3	4560	GREGORY ST @ YORK RD	95%	5%						
1	4585	WESTERN AVE @ VERMONT AVE	100%							
3	5870	WESTERN AVE @ 119TH ST	95%	5%						
4	20	119TH ST @ MARSHFIELD AVE/ASHLAND AVE	96.25%		1.25%	2.5%				
5	4010	127TH ST @ WOOD ST	96.25%		3.75%					
6	4005	127TH ST @ THROOP ST	95%		5%					
1	4140	ASHLAND AVE @ VERMONT ST	100%							
1	25	I 57 @ 127TH ST EAST RAMP/MARSHFIELD	100%							
1	35	I 57 @ 127TH WEST RAMP/PAULINA	100%							
1	1790	IL 1/HALSTED ST @ 127TH ST	100%							
6	3972	119TH ST @ PAGE ST	95%		5%					
7	12105	142ND ST @ COTTAGE GROVE AVE	95%				5%			
1	4050	142ND ST MAIN ST @ CHICAGO RD	100%							
1	4060	142ND ST MAIN ST @ LINCOLN AVE	100%							
7	11460	IL 83/SIBLEY BLVD-147TH ST @ WOODLAWN AVE	95%				5%			
8	11365	142ND ST @ WOODLAWN AVE	96.7%				3.3%			
7	11370	LINCOLN ST @ WOODLAWN AVE	95%				5%			
7	13090	144TH ST @ INDIANA AVE	95%				5%			
10	11480	154TH ST @ COTTAGE GROVE AVE	92.5%				5%		2.5%	
7	11315	CHICAGO RD @ 144TH ST	95%				5%			
1	3395	IL 83/147TH ST-SIBLEY BLVD @ CHICAGO RD	100%							
9	11475	IL 83/147TH ST-SIBLEY BLVD @ COTTAGE GROVE AVE	97.5%				2.5%			
8	11470	IL 83/147TH ST-SIBLEY BLVD @ ENGLE PL	96.7%				3.3%			
7	11465	IL 83/147TH ST-SIBLEY BLVD @ GREENWOOD RD	95%				5%			
11	3465	IL 83/147TH ST-SIBLEY BLVD @ LASALLE ST/MARKHAM DR	95%				2.5%	2.5%		
1	3475	IL 83/147TH ST-SIBLEY BLVD @ LINCOLN AVE/MICHIGAN CITY RD	100%							

* 2.5% ALSIP/2.5% WORTH

SUMMARY OF QUANTITIES HEADING LEGEND										
COLUMN NUMBER	TS#	INTERSECTION	FUNDING PARTICIPATION							
			STATE	DOLTON	HARVEY	PHOENIX	RIVERDALE	SOUTH HOLLAND	ROBINS	
8	11430	LINCOLN AVE EAST OF AVALON AVE	96.7%	3.3%						
12	4080	154TH ST @ CHICAGO RD/SOUTH PARK AVE	97%	1.5%					1.5%	
1	11750	US 6/159TH ST @ PARK AVE	100%							
13	13795	150TH ST @ WOOD ST	95%		5%					
13	13800	154TH ST @ WOOD ST	95%		5%					
13	13805	155TH ST @ WOOD ST	95%		5%					
13	13810	156TH ST @ WOOD ST	95%		5%					
13	13815	158TH ST @ WOOD ST	95%		5%					
13	1810	IL 1/HALSTED ST @ 157TH ST	95%		5%					
13	1815	IL 1/HALSTED ST @ 163RD ST	95%		5%					
13	1820	IL 1/HALSTED ST @ 167TH ST	95%		5%					
14	3385	IL 83/147TH ST-SIBLEY BLVD @ BROADWAY AVE	97.5%		2.5%					
1	1765	IL 83/147TH ST-SIBLEY BLVD @ IL 1/HALSTED ST	100%							
1	3470	IL 83/147TH ST-SIBLEY BLVD @ LOOMIS ST	100%							
13	3510	IL 83/147TH ST-SIBLEY BLVD @ ROBEY AVE	95%		5%					
1	3520	IL 83/147TH ST-SIBLEY BLVD @ WOOD ST	100%							
13	13835	MORGAN ST @ 150TH ST	95%		5%					
14	13820	PARK AVE @ 154TH ST	96.7%		3.3%					
15	13825	PARK AVE @ 155TH ST	93.33%		6.67%					
13	13830	PARK AVE @ 157TH ST	95%		5%					
16	1805	IL 1/HALSTED ST @ 152ND ST	95%			5%				
17	1760	IL 1/HALSTED ST @ IL 1/VINCENNES AVE	96.7%			3.3%				
18	5345	INDIANA AVE @ 137TH ST	97.5%				2.5%			
1	5350	INDIANA AVE @ 138th ST	100%							
1	1795	IL 1 HALSTED ST @ 138TH ST	100%							
19	9140	IL 1/HALSTED ST @ 144TH ST	95%			5%				
1	4045	138TH ST @ ASHLAND AVE/WOOD ST	100%							
19	9135	IL 1/HALSTED ST @ 134TH/FOREST VIEW	95%			5%				
20	3440	IL 83/147TH ST-SIBLEY BLVD @ INDIANA AVE	97.5%						2.5%	
21	210	US 6/159TH ST @ COTTAGE GROVE AVE	95%						5%	
20	295	US 6/159TH ST @ STATE ST/INDIANA AVE	97.5%						2.5%	
22	12102	STATE ST @ ARMORY DR	96.7%						3.3%	
21	225	US 6/159TH ST @ ELLIS AVE	95%						5%	
21	285	US 6/159TH ST @ SCHOOL ST	95%						5%	
1	290	US 6/159TH ST @ SOUTH PARK AVE/CHICAGO RD	100%							
23	11114	135TH ST @ KEDZIE AVE	95%							5%

Rev.



CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE																							
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
				TRAFFIC SIGNAL 0021 URBAN																							
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	71	22	1	5	1	1	2	6	3	1	1	1	1	11	2	1	1	1	1	2	2	3	1	1	
87502440	TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	12	1											2									4	5		
87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	62	15		2				2	2				3	14	1	3	4	2	3	2		8	1		
87502490	TRAFFIC SIGNAL POST, GALVANIZED STEEL 15 FT.	EACH	1																		1						
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	25	6						2					1	2	4	1				3		3	3		
87502520	TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	1																					1			
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	61	6						4	2				1	14	8	6	2	2		2		9	5		
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	56	19		4									3	9	2	1		1	4	2		11			
88030070	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	2																		2						
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	5														4					1					
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	13	3											1		4					2			3		
88030210	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	51	5		4				4	2				1	18	3	3	2	2	4	1		1	1		
88030240	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	13	6											1							3			3		
88030310	SIGNAL HEAD, LED, 3-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3																1	2							
88055160	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	5													1		2							2		
88055190	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2																						2		
88055200	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	2																						2		
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	182	56		24	4	4	10	8	2				4	6	36	6	8				2	10	2		
88102747	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	63	19		4	1			2		4			2		19	4	2				1	2	3		
88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	81	9						4	2				2	15	12	8	2	2		4		13	8		
88800100	PEDESTRIAN PUSH-BUTTON	EACH	129	34		24	5	4	10	2	2				6	20	6							8	8		
89502210	MODIFY EXISTING CONTROLLER CABINET	EACH	67	21	1	5		1	1	5	3	1	1	1	1	11	2	1	1	1	1	1	2	2	3	1	1
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	60	18		4	1	1	2	5	1	1			1	1	11	2	1	1	1	1	2	1	3	1	1
X8620050	UNINTERRUPTABLE POWER SUPPLY, GROUND MOUNTED	EACH	2	2																							
X8620200	UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	65	19	1	5		1	1	5	3	1	1	1	1	11	2	1	1	1	1	1	2	2	3	1	1



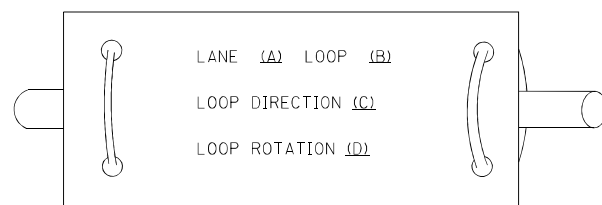
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE																						
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
				TRAFFIC SIGNAL 0021 URBAN																						
X8803040	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT	EACH	3	2																					1	
X8803082	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	46	18					6	1	3			2		14									2	
X8803084	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	101	40					2	8	3	4		6		34								1	3	
X8803088	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	58	25						8	1	4		2		10								7	1	
X8803090	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	4	3																					1	
X8803110	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED, RETROFIT	EACH	1								1															
X8803210	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	46	20						6	1	4		2		10									3	
X8803910	SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED RETROFIT	EACH	4							1														3		
X8880015	PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	88	27		4				8		4		6		27	4							3	5	
X8800110	COMBINATION SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION OPTICALLY PROGRAMMED, 1-3 SECTION, BRACKET MOUNTED	EACH	2																2							
Ø 20070004	TRAINEES - TRAINING PROGRAM GRADUATE	HOUR	500	500																						

11
Ø0042

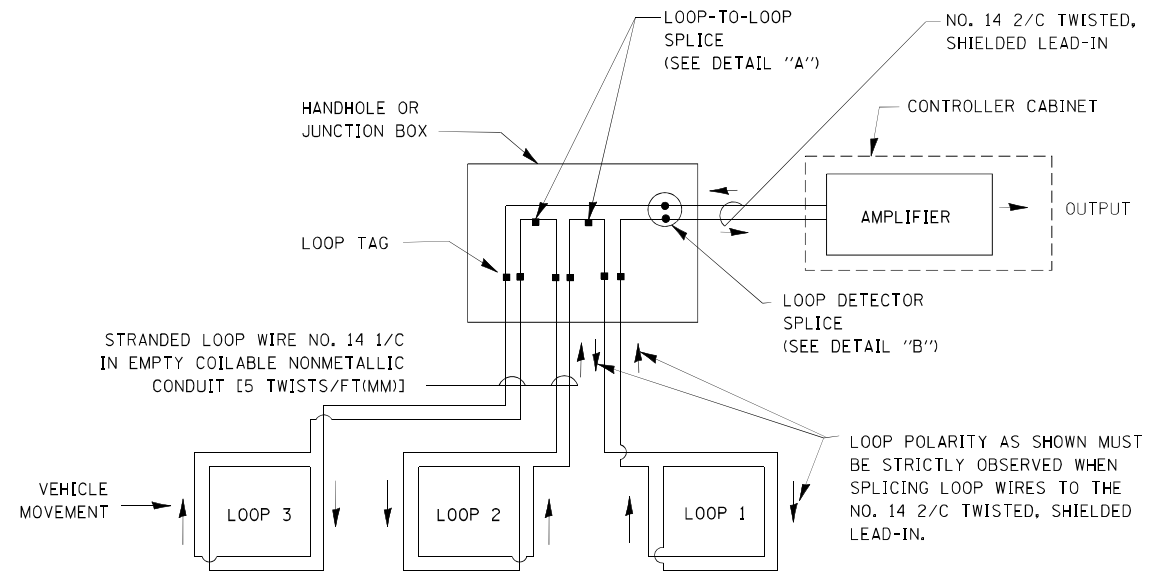
LOOP DETECTOR NOTES

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

LOOP LEAD-IN CABLE TAG

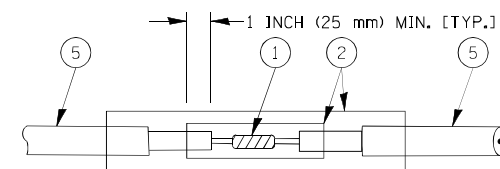


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

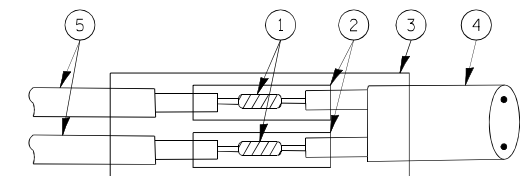


DETECTOR LOOP WIRING SCHEMATIC

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

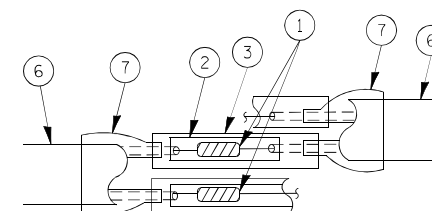


**DETAIL "A"
LOOP-TO-LOOP SPLICE**

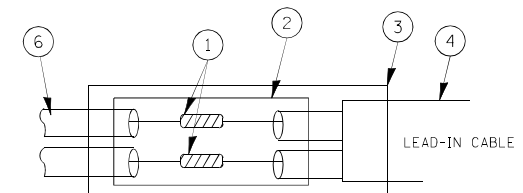


**DETAIL "B"
LOOP-TO-CONTROLLER SPLICE**

TYPE I LOOP



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



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

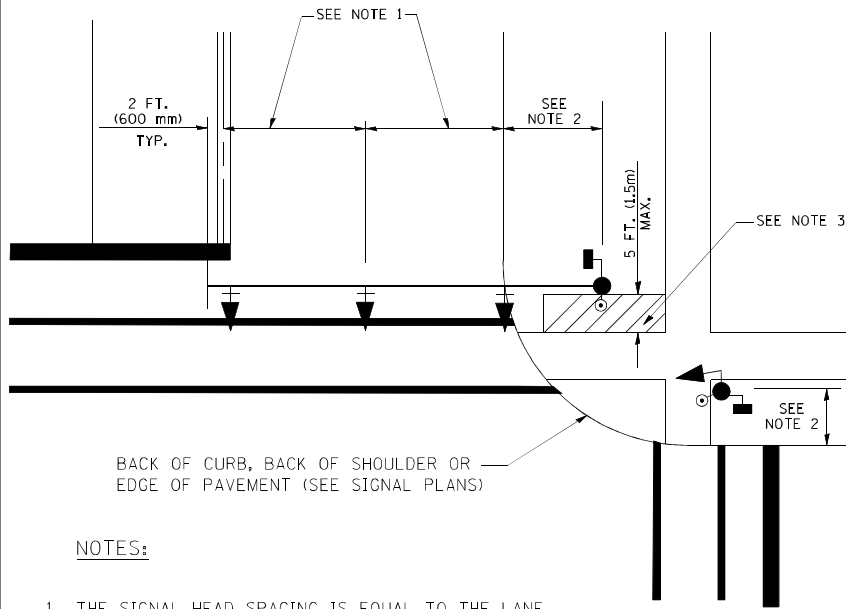
LOOP DETECTOR SPLICE

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

FILE NAME =	USER NAME = bauerdl	DESIGNED - DAD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS			F.A. RTE. =	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwwork\PIWIDT\BAUERDL\1010315\ts05.dgn		DRAWN - BCK	REVISED -		SCALE: NONE	SHEET NO. 1 OF 6 SHEETS	STA.	TO STA.	2013-052TS	COOK	87	12
		CHECKED - DAD	REVISED -						TS-05	CONTRACT NO. 60X24		
		DATE - 10-28-09	REVISED -						FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

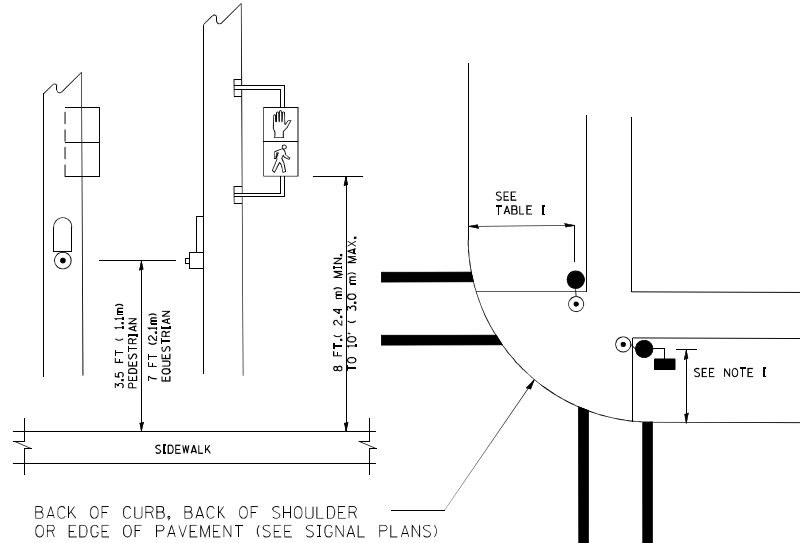
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



NOTES:

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

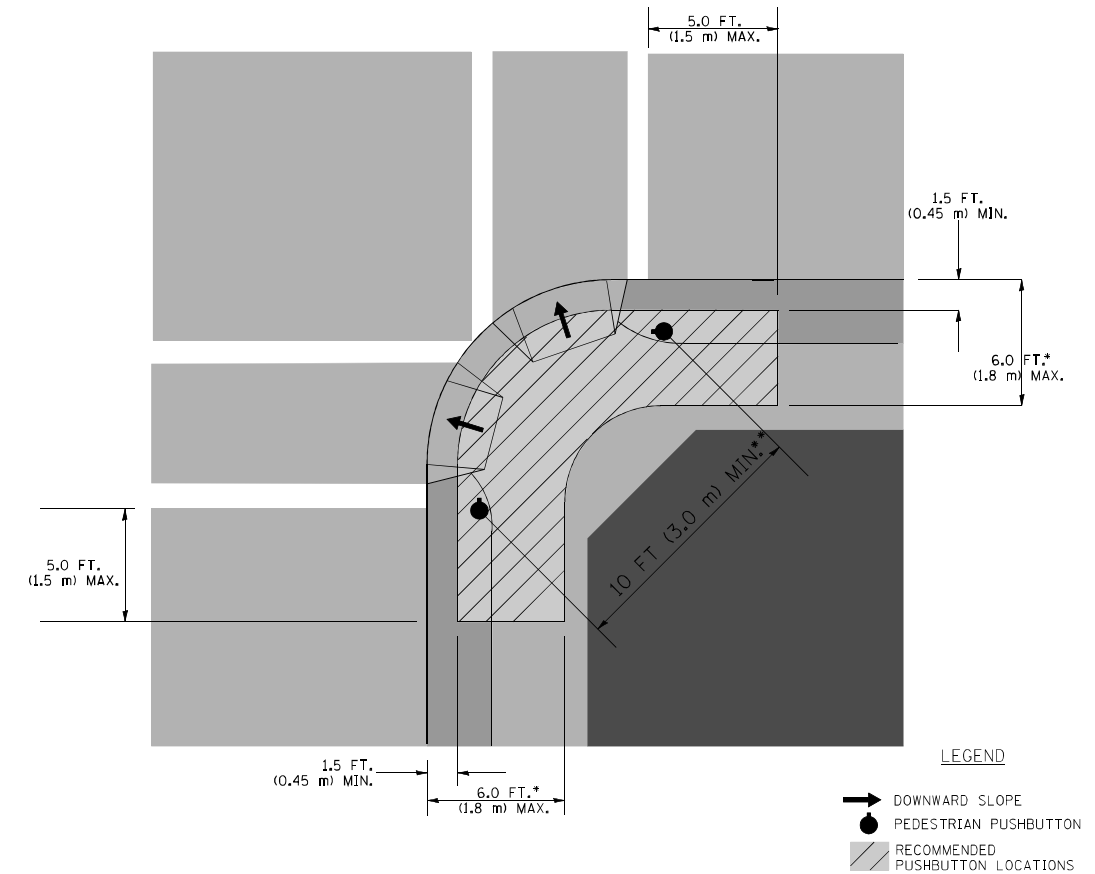
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



NOTES:

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

RECOMMENDED PUSHBUTTON LOCATIONS



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

NOTES:

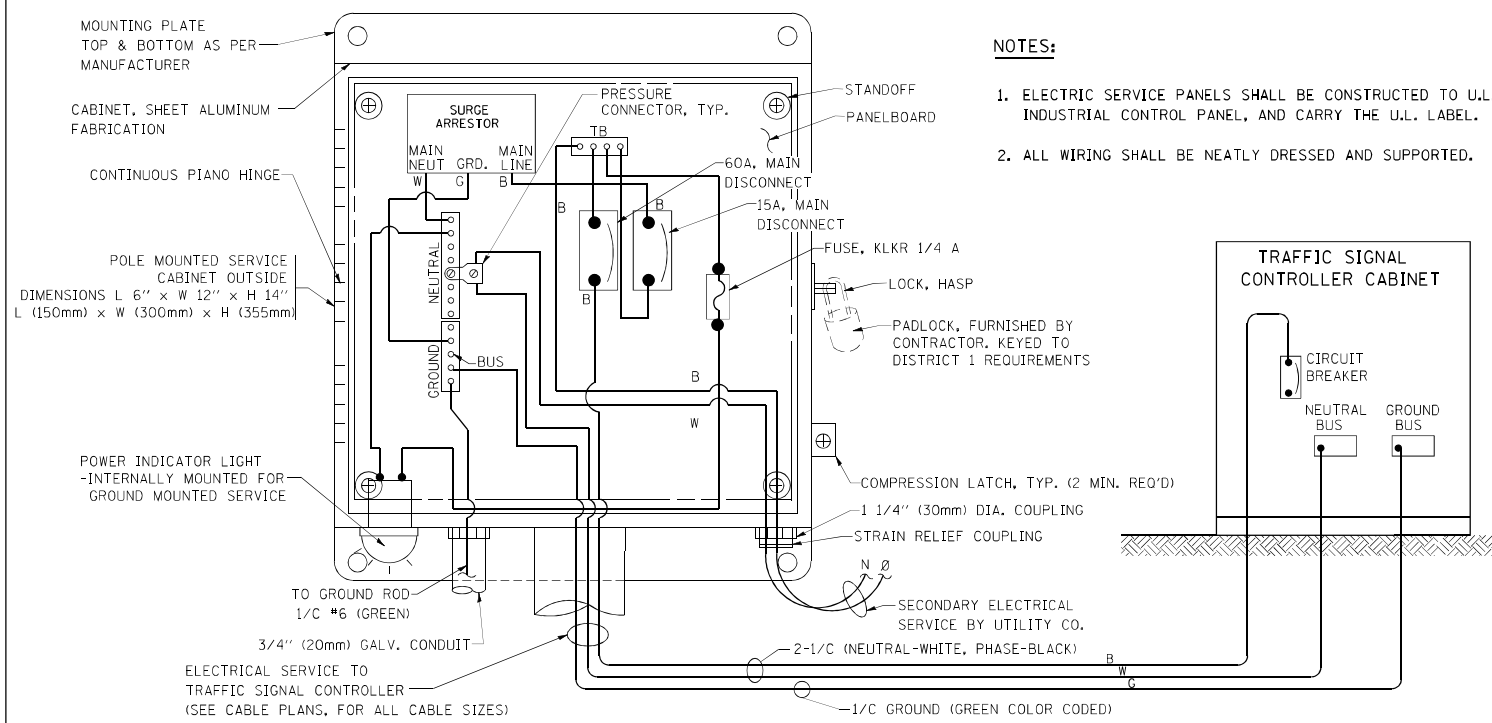
1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM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

TRAFFIC SIGNAL EQUIPMENT OFFSET

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

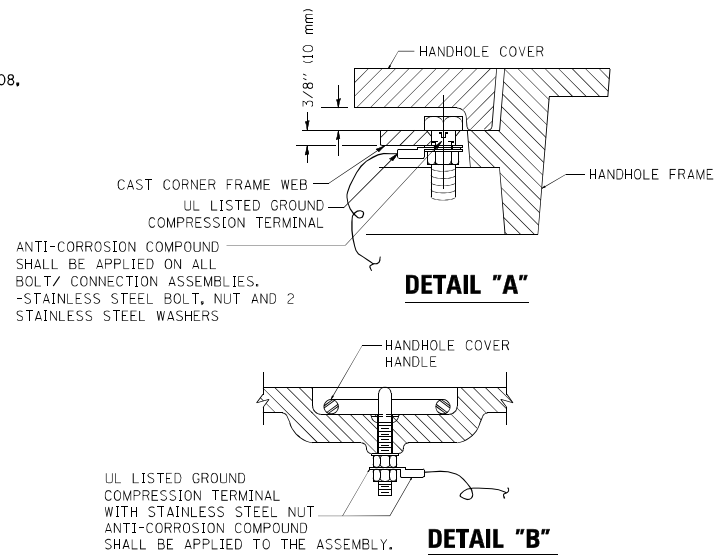
NOTES:

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



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.



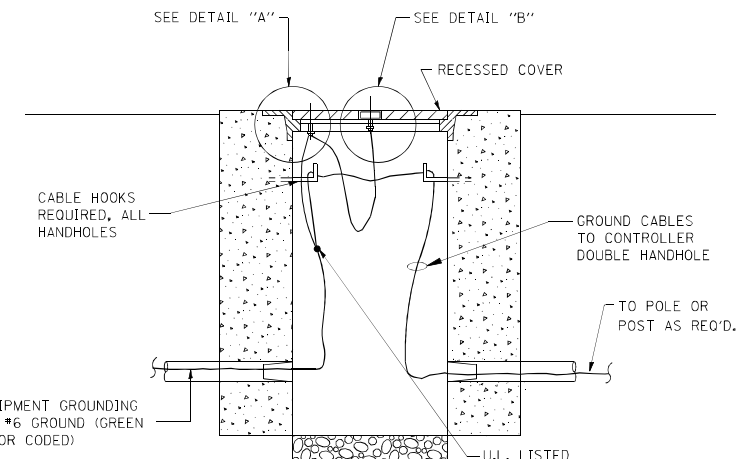
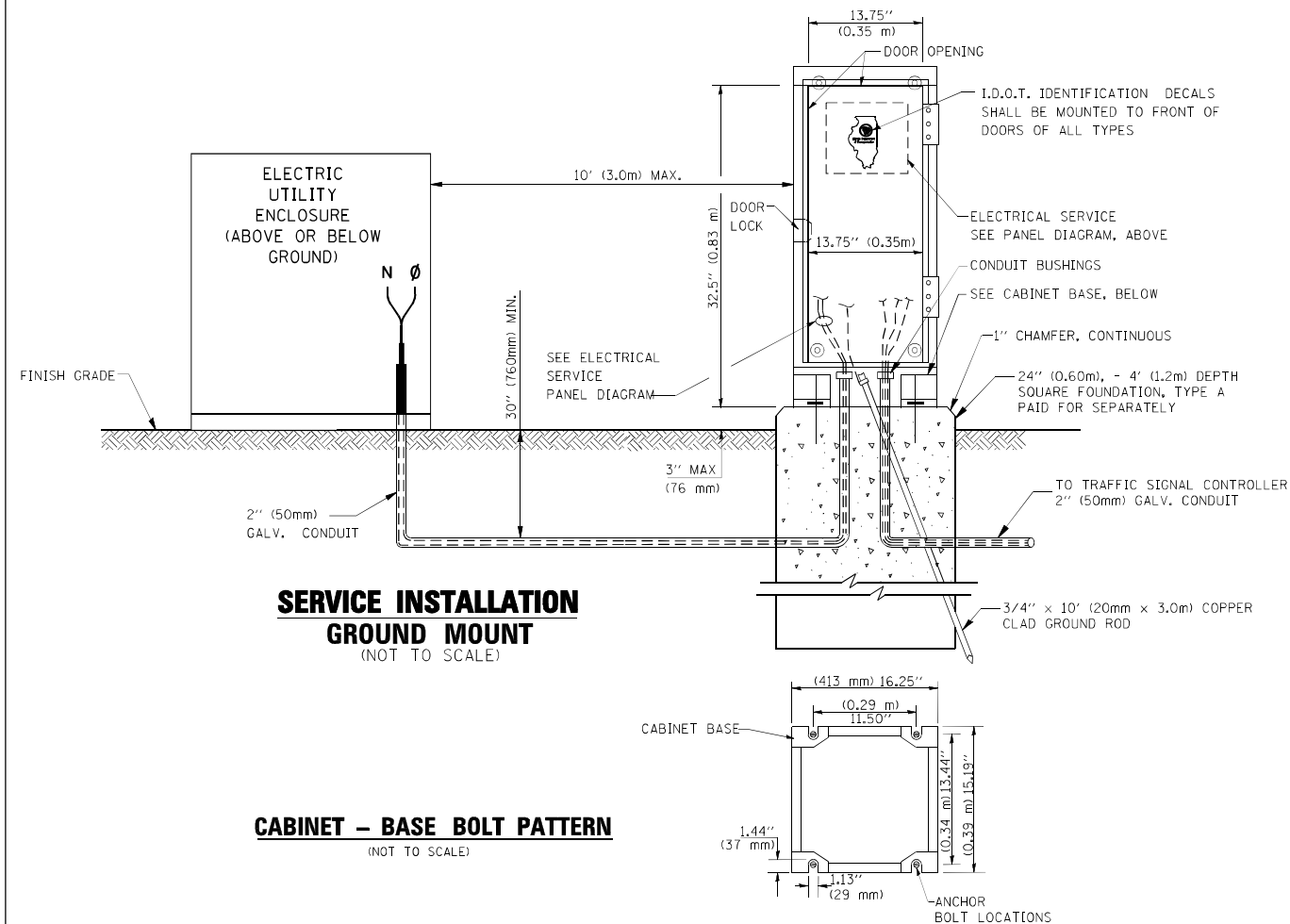
NOTES:

GROUNDING SYSTEM

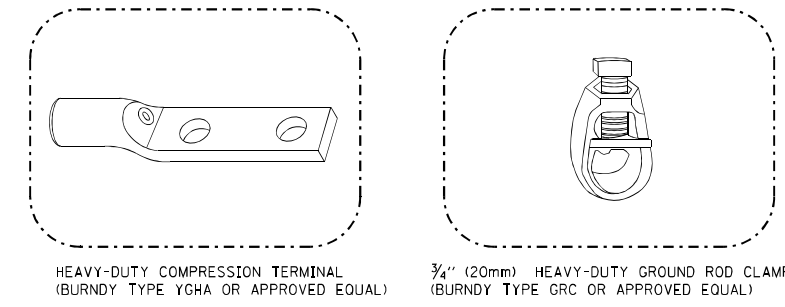
1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4\"/>
- 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.

ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)

SERVICE INSTALLATION POLE MOUNT (SHOWN)
(NOT TO SCALE)

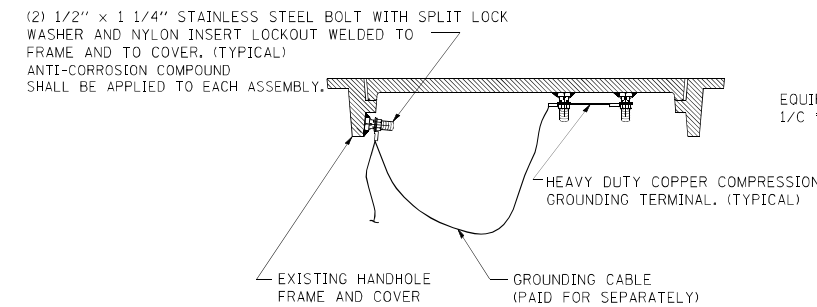


HANDHOLE COVER & FRAME - GROUNDING DETAIL
(NOT TO SCALE)

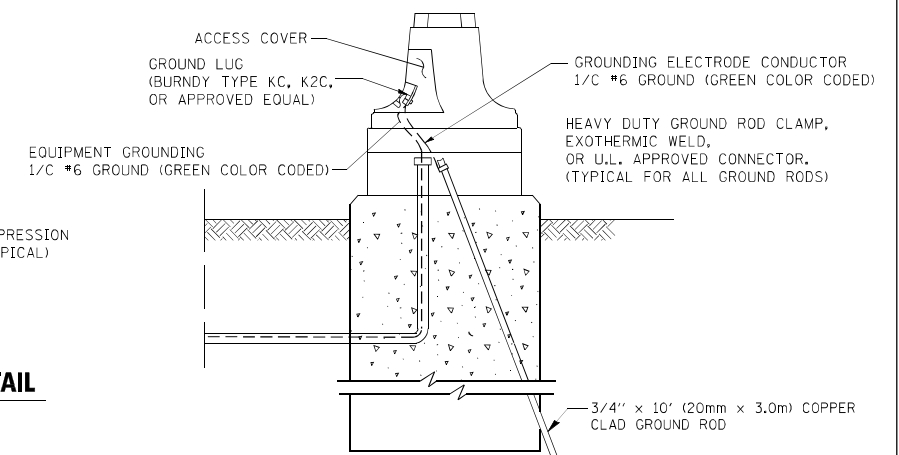


NOTES:

- 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.



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



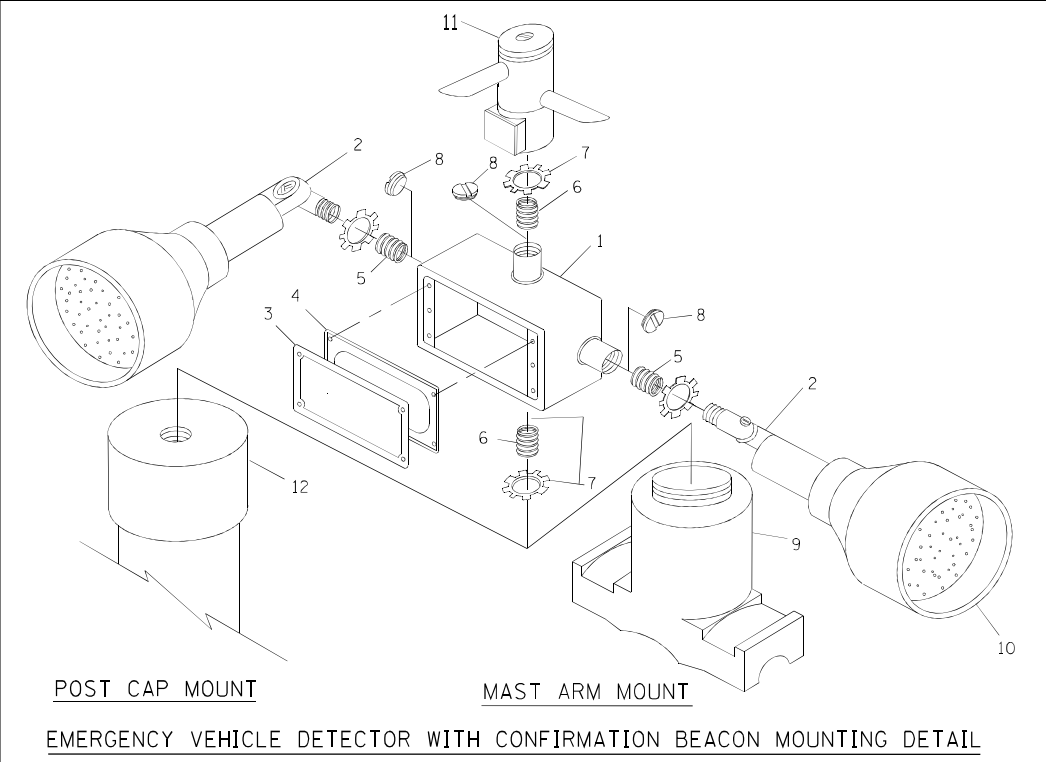
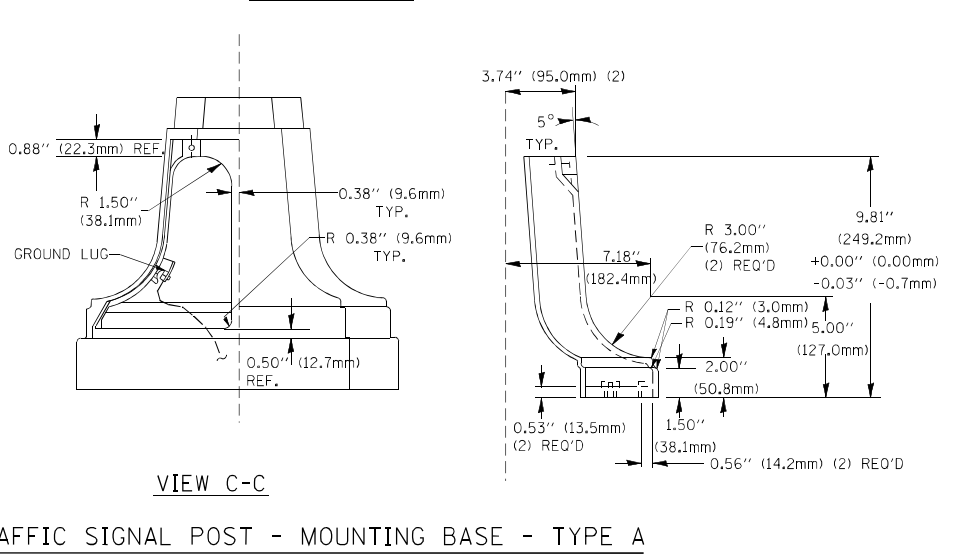
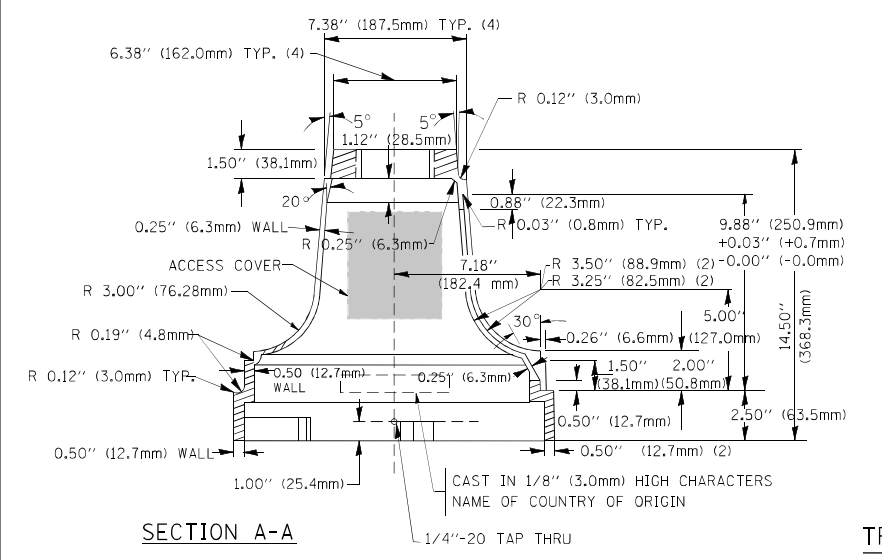
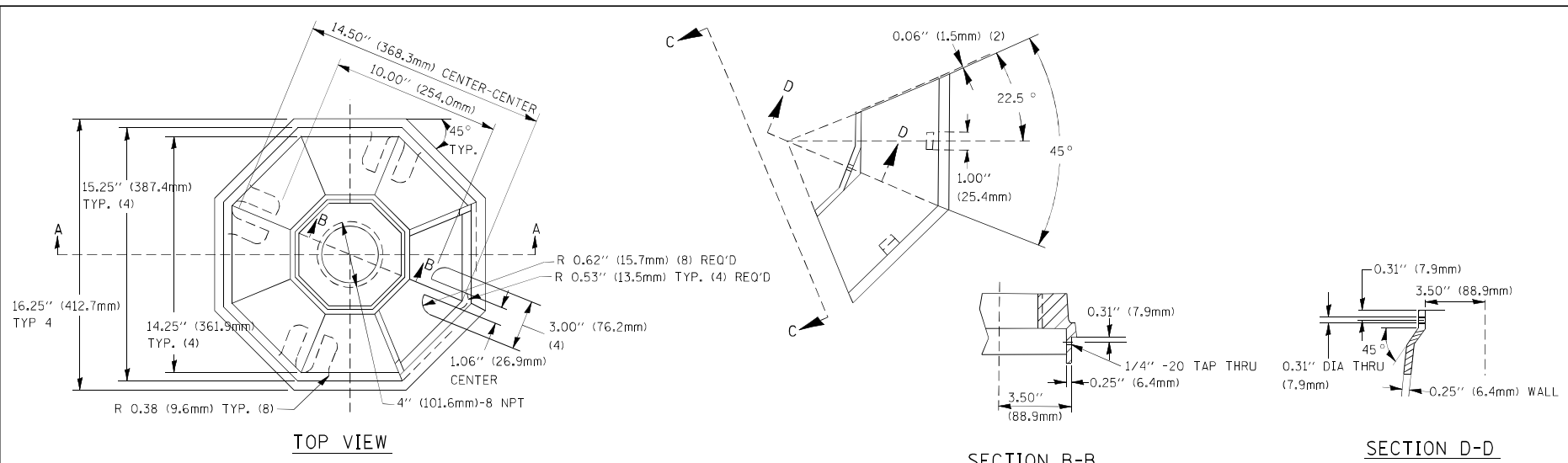
MAST ARM POLE / POST-GROUNDING DETAIL
(NOT TO SCALE)

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		DATE - 10-28-09	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

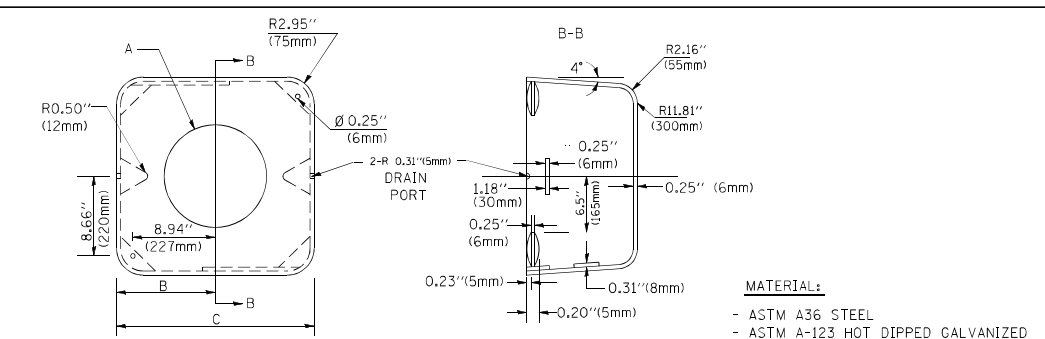
**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**
SCALE: NONE SHEET NO. 3 OF 6 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-052TS	COOK	87	12
	TS-05	CONTRACT NO.	60X24	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



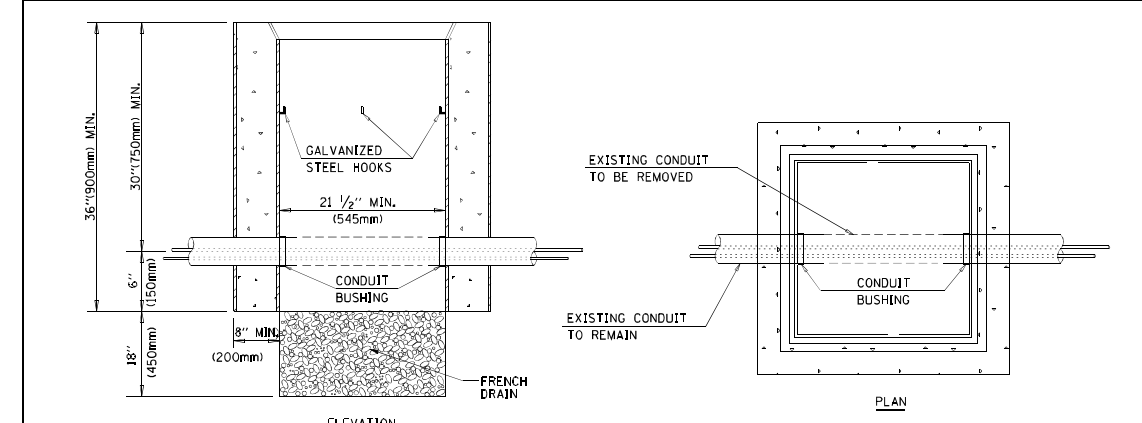
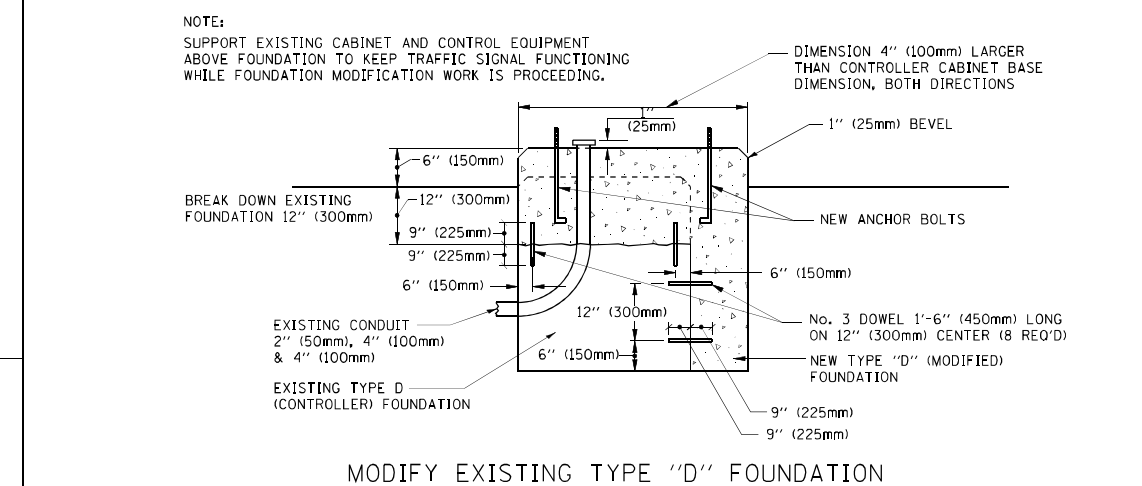
ITEM NO.	IDENTIFICATION
1	OUTLET BOX - GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4" (19 mm) CLOSE NIPPLE
7	3/4" (19 mm) LOCKNUT
8	3/4" (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT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

- NOTES:**
- ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
 - ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
ITEM #2- MULBERRY CON-0-SHADE LAMP SHIELD OR EQUIVALENT
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
 - WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4" (19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



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)

- NOTES:**
- 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.
 - THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
 - THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.



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

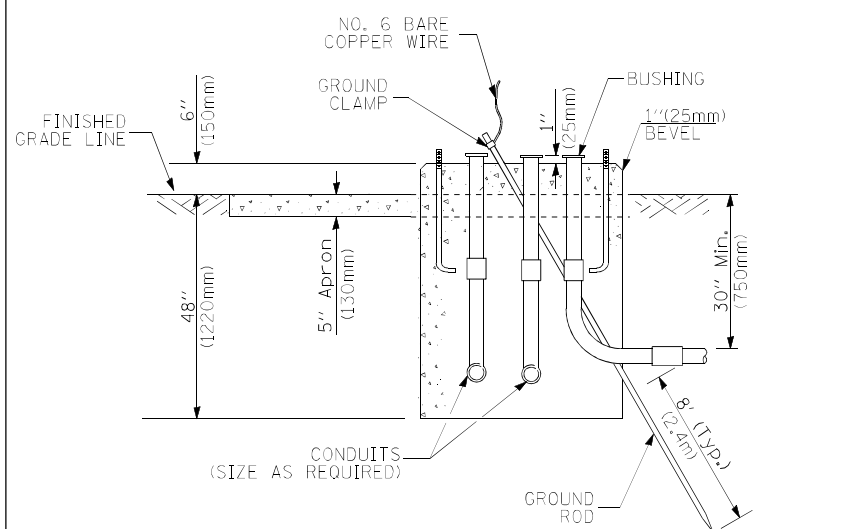
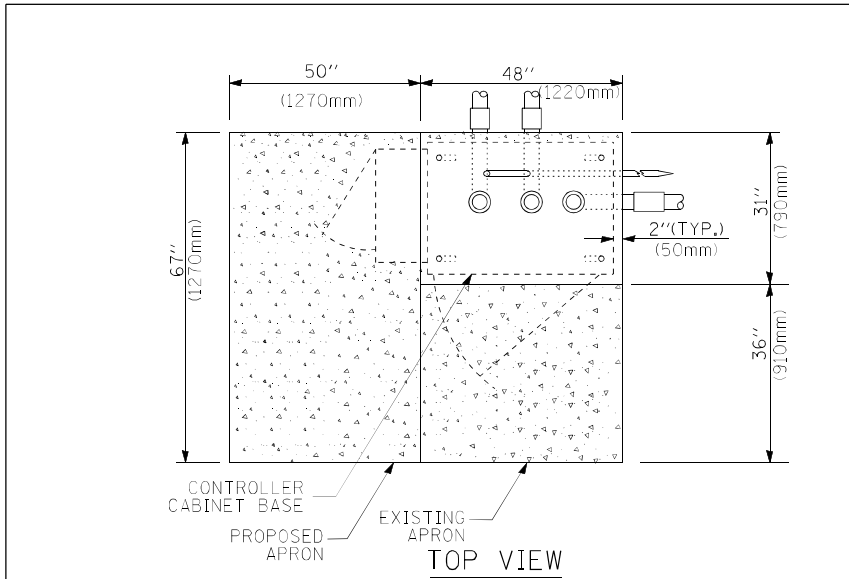
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

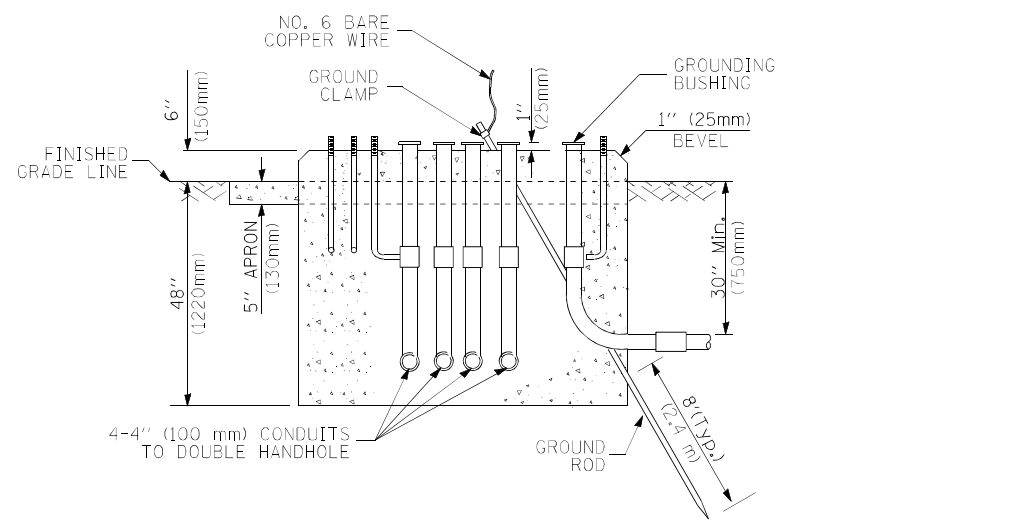
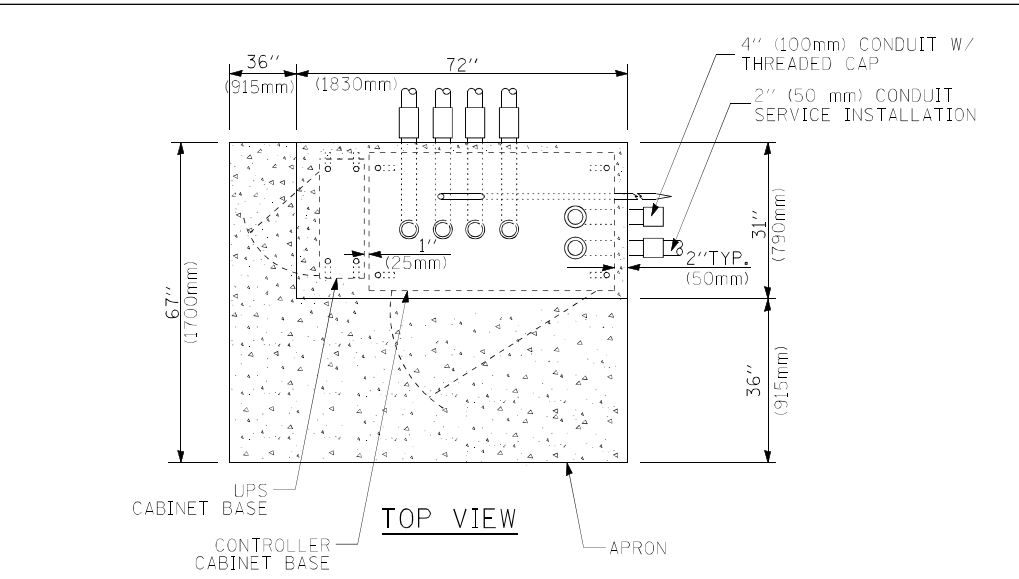
**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	TS-05	CONTRACT NO. 60X24		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

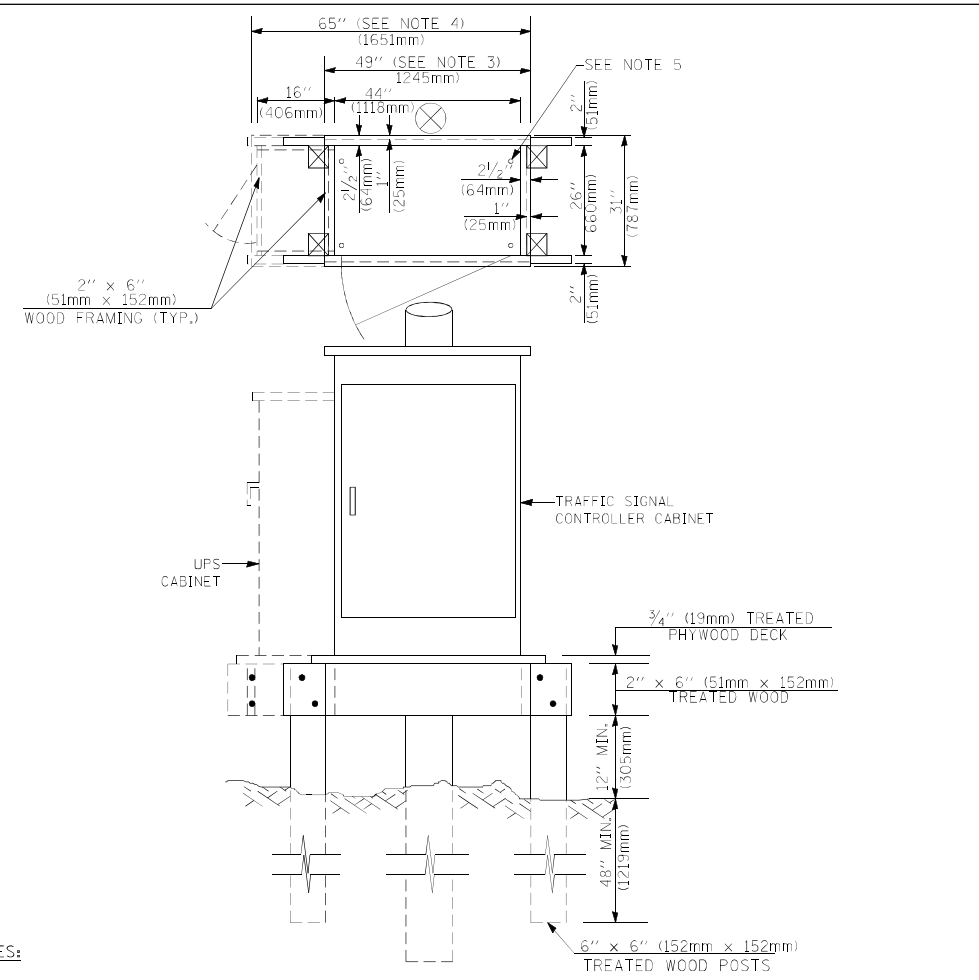
SCALE: NONE SHEET NO. 4 OF 6 SHEETS STA. TO STA.



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



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



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

**TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM**

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

CABLE SLACK

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE 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 less than 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

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

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

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

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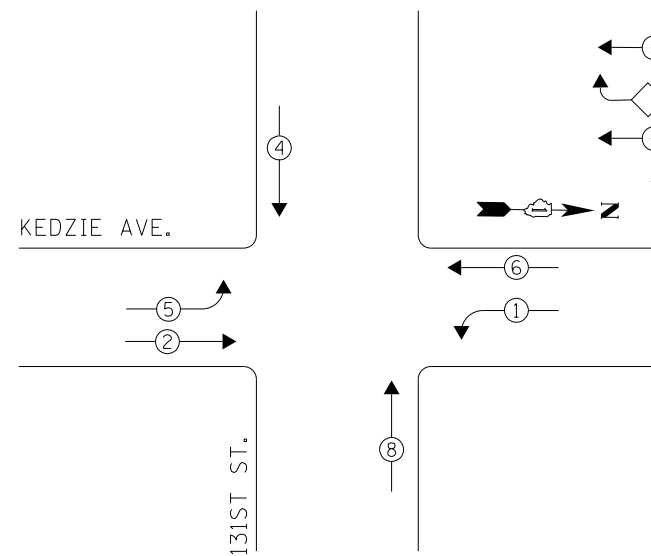
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-052TS	COOK	87	12
	TS-05	CONTRACT NO. 60X24		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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

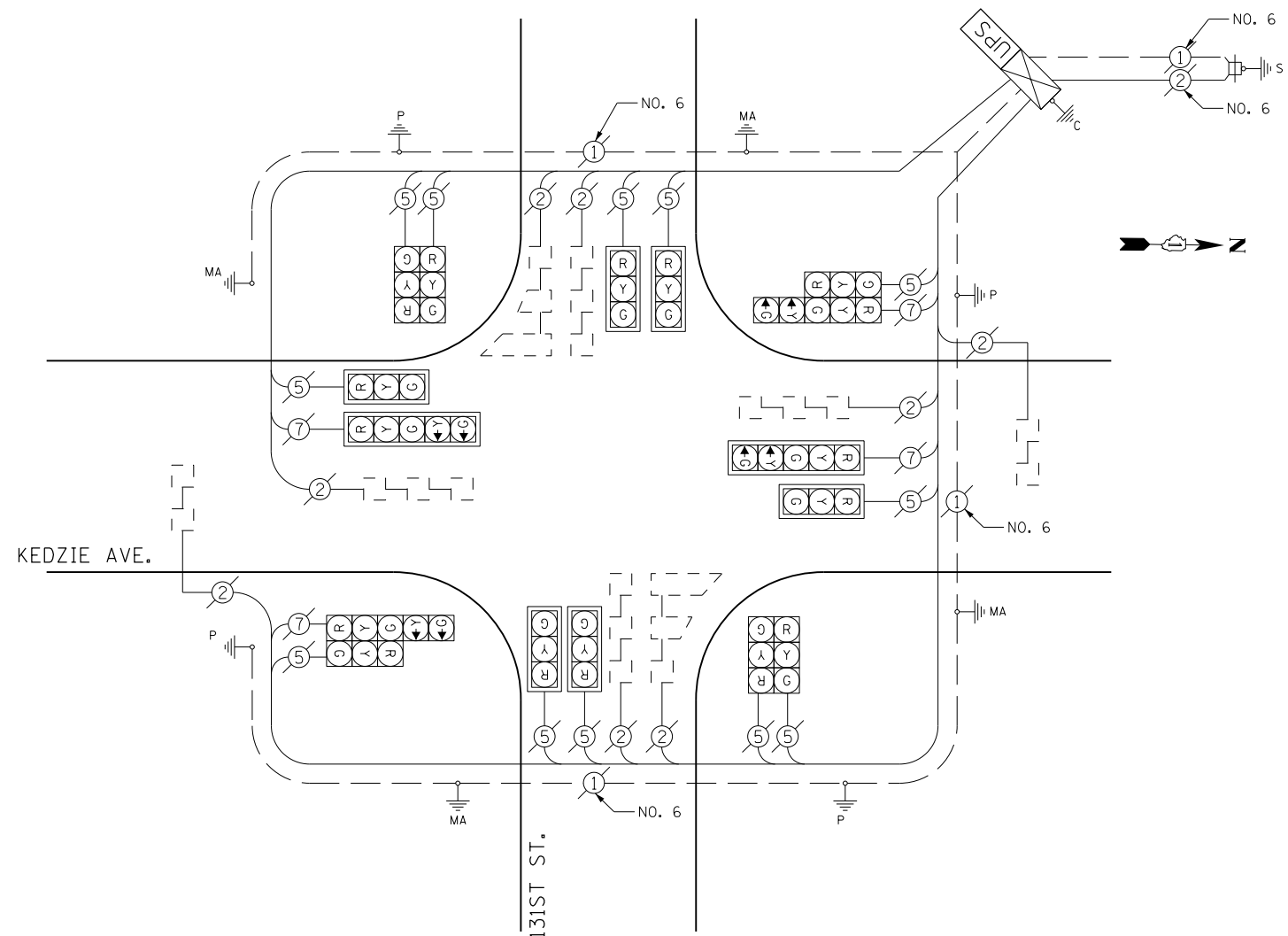
CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

LEGEND

- ← ● → DUAL ENTRY PHASE
- ◊ OL OVERLAP
- ← ● → PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE



CABLE PLAN

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

TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16		17	0.50	136.0
(YELLOW)	16		25	0.25	100.0
(GREEN)	16		15	0.25	60.0
ARROW	8		12	0.10	9.6
PED SIGNAL	-		25	1.00	-
CONTROLLER	1	100		1.00	100.0
VIDEO SYSTEM		150		1.00	-
BATTERY BACKUP	1	25		1.00	25.0
TOTAL =					430.6

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

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

SCHEDULE OF QUANTITIES
ITEM

- MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
- MODIFY EXISTING CONTROLLER CABINET
- UNINTERRUPTABLE POWER SUPPLY, SPECIAL

UNIT	QUANTITY
EACH	1
EACH	1
EACH	1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN & PHASE DESIGNATION DIAGRAM
KEDZIE AVE AT 131ST ST.

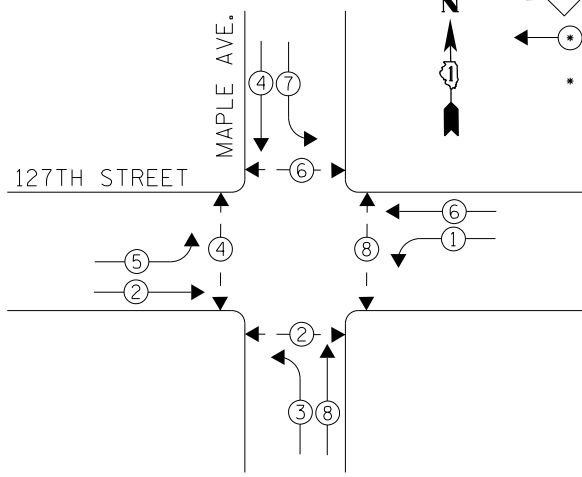
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-052TS	COOK	87	13
CONTRACT NO. 60X24				
ILLINOIS FED. AID PROJECT				

TS #22
BLUE ISLAND

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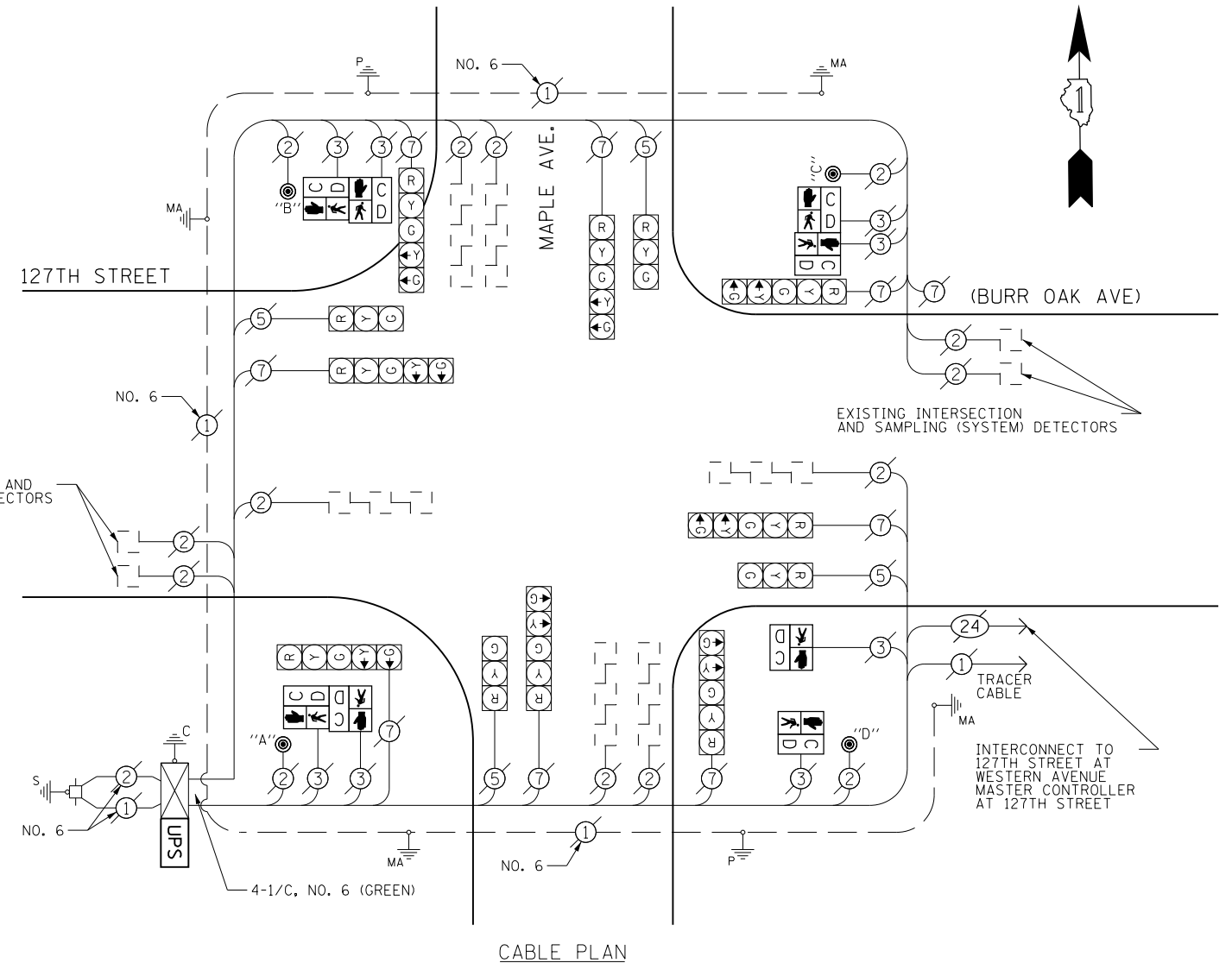
CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

LEGEND

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



CABLE PLAN

PUSH-BUTTON NOTE:

- 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.

- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 3 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 4 EACH PEDESTRIAN PUSH-BUTTON

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 INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12		17	0.50	102.0
(YELLOW)	12		25	0.25	75.0
(GREEN)	12		15	0.25	45.0
ARROW	16		12	0.10	19.2
PED SIGNAL	8		25	1.00	200.0
CONTROLLER	1	100		1.00	100.0
VIDEO SYSTEM		150		1.00	-
BATTERY BACKUP	1	25		1.00	25.0
TOTAL =					566.2

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

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

SCHEDULE OF QUANTITIES
ITEM

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

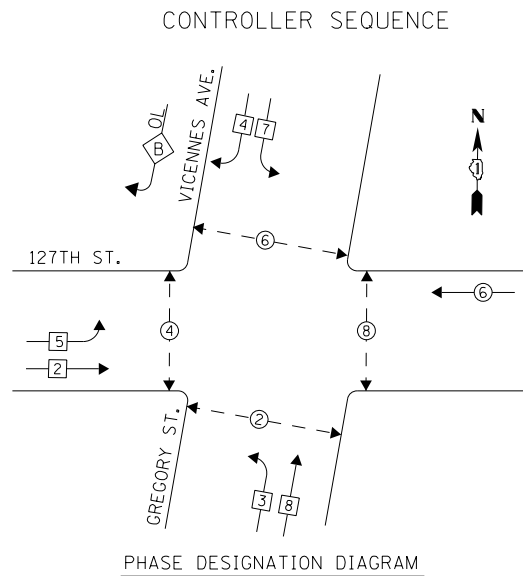
SCHEDULE OF QUANTITIES, CABLE PLAN & PHASE DESIGNATION DIAGRAM
127TH ST. AT MAPLE AVE.

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-052TS	COOK	87	14
CONTRACT NO. 60X24				
ILLINOIS FED. AID PROJECT				

TS #4550
BLUE ISLAND

FILE NAME = D:\60X24-sht-ts.TS4550.dgn	USER NAME = Brian Scifers	DESIGNED KJP	REVISED -
Default	PLOT SCALE = 40.0000' / in.	DRAWN DLW	REVISED -
	PLOT DATE = 10/8/2013	CHECKED BKS	REVISED -
		DATE -	REVISED -



LEGEND

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

RIGHT TURN OVERLAP PHASE DESIGNATION

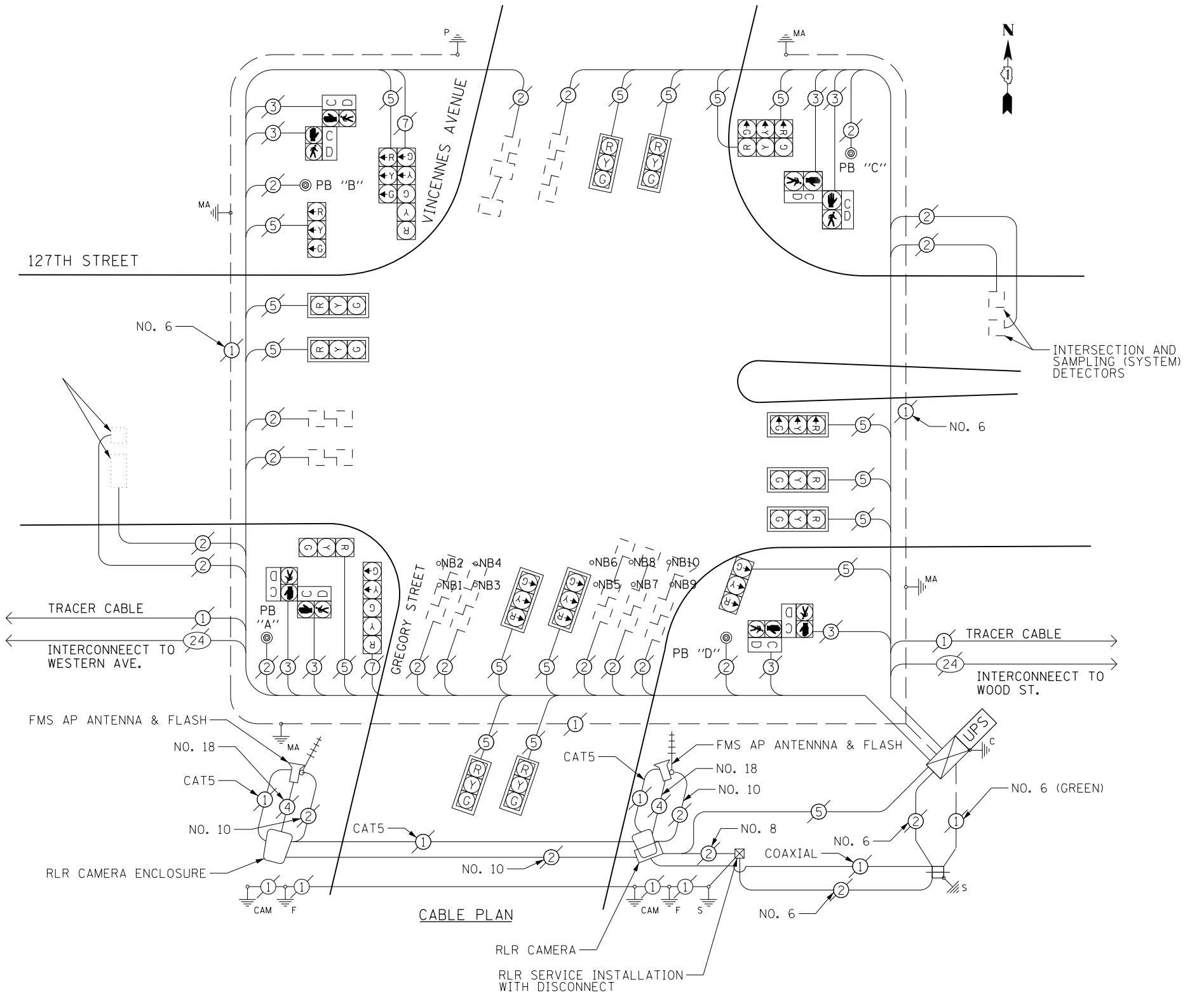
OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	= 4	+ 5

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

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	19		17	0.50	161.5
(YELLOW)	19		25	0.25	118.75
(GREEN)	19		15	0.25	71.25
ARROW	4		12	0.10	4.8
PED SIGNAL	8		25	1.00	200.0
CONTROLLER	1	100		1.00	100.0
VIDEO SYSTEM	-	150		1.00	0.0
BATTERY BACKUP	1	25		1.00	25.0
TOTAL =					681.3

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

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON



SCHEDULE OF QUANTITIES

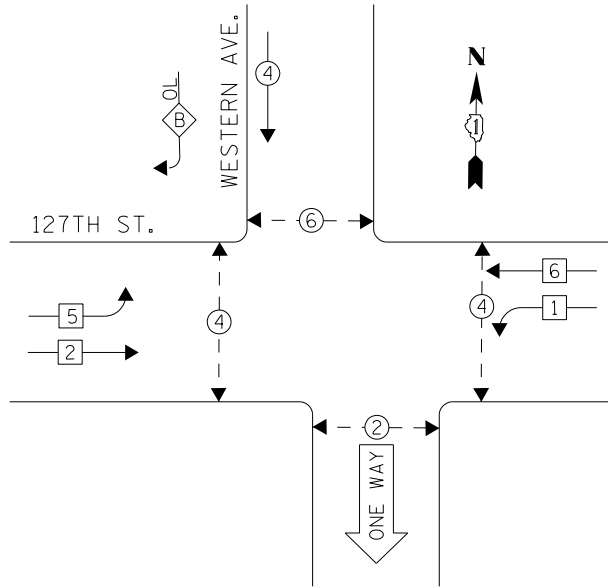
ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

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

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

TS #11380
BLUE ISLAND

CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	= 4	+ 5

LEGEND

- ← (⊙) ← DUAL ENTRY PHASE
- ← (⊙) ← SINGLE ENTRY PHASE
- ← (⊙) ← OVERLAP
- ← (⊙) ← PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE

127TH STREET

WESTERN AVE.



INTERSECTION AND SAMPLING (SYSTEM) DETECTORS

- EB1° • EB2
- EB3° • EB4
- EB5° • EB6
- EB7° • EB8
- EB9° • EB10

RLR SERVICE INSTALLATION WITH DISCONNECT

FMS AP ANTENNA & FLASH

RLR CAMERA ENCLOSURE COAXIAL

CAT5

NO. 18

CAT5

NO. 6

NO. 6

NO. 6

NO. 6

COMMUNICATION AND POWER CONNECTIONS ON EXISTING WOOD POLE

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN PUSH-BUTTON	EACH	8
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1

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-FACE
4	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
8	EACH	PEDESTRIAN PUSH-BUTTON

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 INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14		17	0.50	119.0
(YELLOW)	14		25	0.25	87.5
(GREEN)	14		15	0.25	52.5
ARROW	4		12	0.10	4.8
PED SIGNAL	8		25	1.00	200.0
CONTROLLER	1	100		1.00	100.0
VIDEO SYSTEM	0	150		1.00	0.0
BATTERY BACKUP	1	25		1.00	25.0
TOTAL =					588.8

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

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

FILE NAME = D:\60X24-sht-ts.TS4575.dgn	USER NAME = Brian Scifers	DESIGNED KJP	REVISED -
Default	PLOT SCALE = 40.0000' / in.	DRAWN DLW	REVISED -
	PLOT DATE = 10/8/2013	CHECKED BKS	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

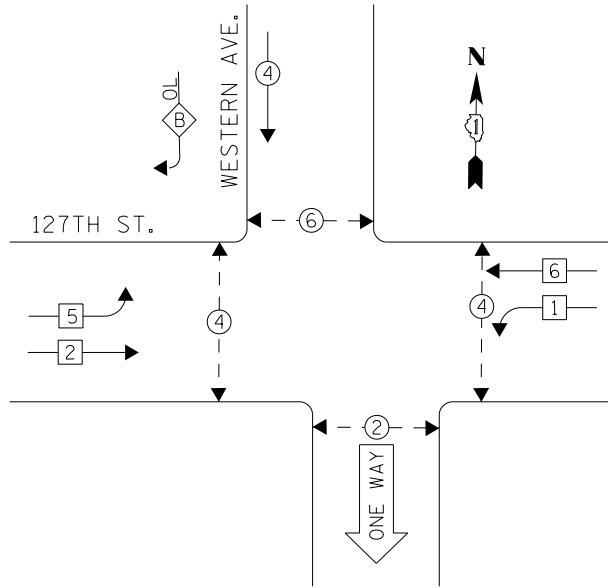
SCHEDULE OF QUANTITIES, CABLE PLAN & PHASE DESIGNATION DIAGRAM
WESTERN AVE. AT 127TH ST. (BURR OAK AVE.)

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-052TS	COOK	87	16
CONTRACT NO. 60X24				
ILLINOIS FED. AID PROJECT				

TS #4575
BLUE ISLAND

CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	= 4	+ 5

LEGEND

- ← (circle with dot) → DUAL ENTRY PHASE
- ← (square) → SINGLE ENTRY PHASE
- ← (diamond with OL) → OVERLAP
- ← (circle with dot and arrow) → PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE

127TH STREET

WESTERN AVE.

INTERSECTION AND SAMPLING (SYSTEM) DETECTORS

INTERCONNECT AND SAMPLING (SYSTEM) DETECTORS

RLR SERVICE INSTALLATION WITH DISCONNECT

FMS AP ANTENNA & FLASH

RLR CAMERA ENCLOSURE COAXIAL

CAT5

NO. 18

CAT5

NO. 6

NO. 6

NO. 6

COMMUNICATION AND POWER CONNECTIONS ON EXISTING WOOD POLE

4-1/C. NO. 6 (GREEN)

(BURR OAK AVE.)

NO. 62.5/125 MM12F & SM12F FIBER OPTIC CABLE

INTERCONNECT TO VINCENNES RD./GREGORY ST.

TRACER CABLE

NO. 14

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

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14		17	0.50	119.0
(YELLOW)	14		25	0.25	87.5
(GREEN)	14		15	0.25	52.5
ARROW	4		12	0.10	4.8
PED SIGNAL	8		25	1.00	200.0
CONTROLLER	1	100		1.00	100.0
VIDEO SYSTEM	0	150		1.00	0.0
BATTERY BACKUP	1	25		1.00	25.0
TOTAL =					588.8

ENERGY COSTS-

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

ENERGY SUPPLY-

CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

SCHEDULE OF QUANTITIES ITEM

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN PUSH-BUTTON	EACH	8
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

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-FACE
4	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
8	EACH	PEDESTRIAN PUSH-BUTTON

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

TS #4575
BLUE ISLAND

FILE NAME = D:\60X24-sht-ts.TS4575.dgn
Default

USER NAME = Brian Scifers
PLOT SCALE = 40.0000' / in.
PLOT DATE = 10/8/2013

DESIGNED KJP
DRAWN DLW
CHECKED BKS
DATE -

REVISED -
REVISED -
REVISED -
REVISED -

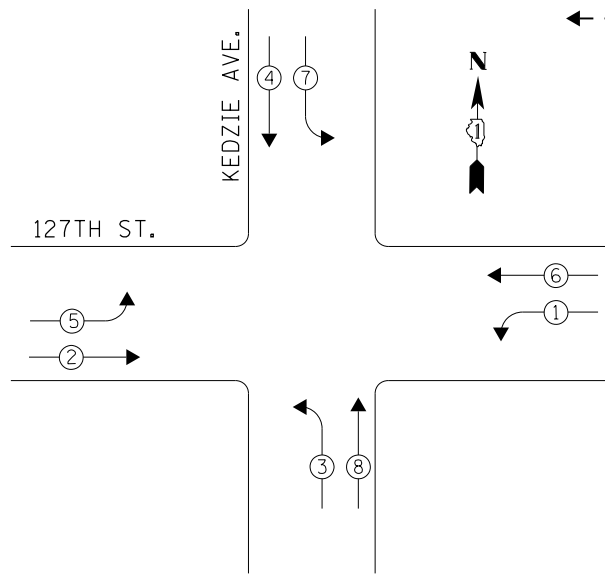
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN & PHASE DESIGNATION DIAGRAM
WESTERN AVE. AT 127TH ST. (BURR OAK AVE.)

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-052TS	COOK	87	16
CONTRACT NO. 60X24				
ILLINOIS FED. AID PROJECT				

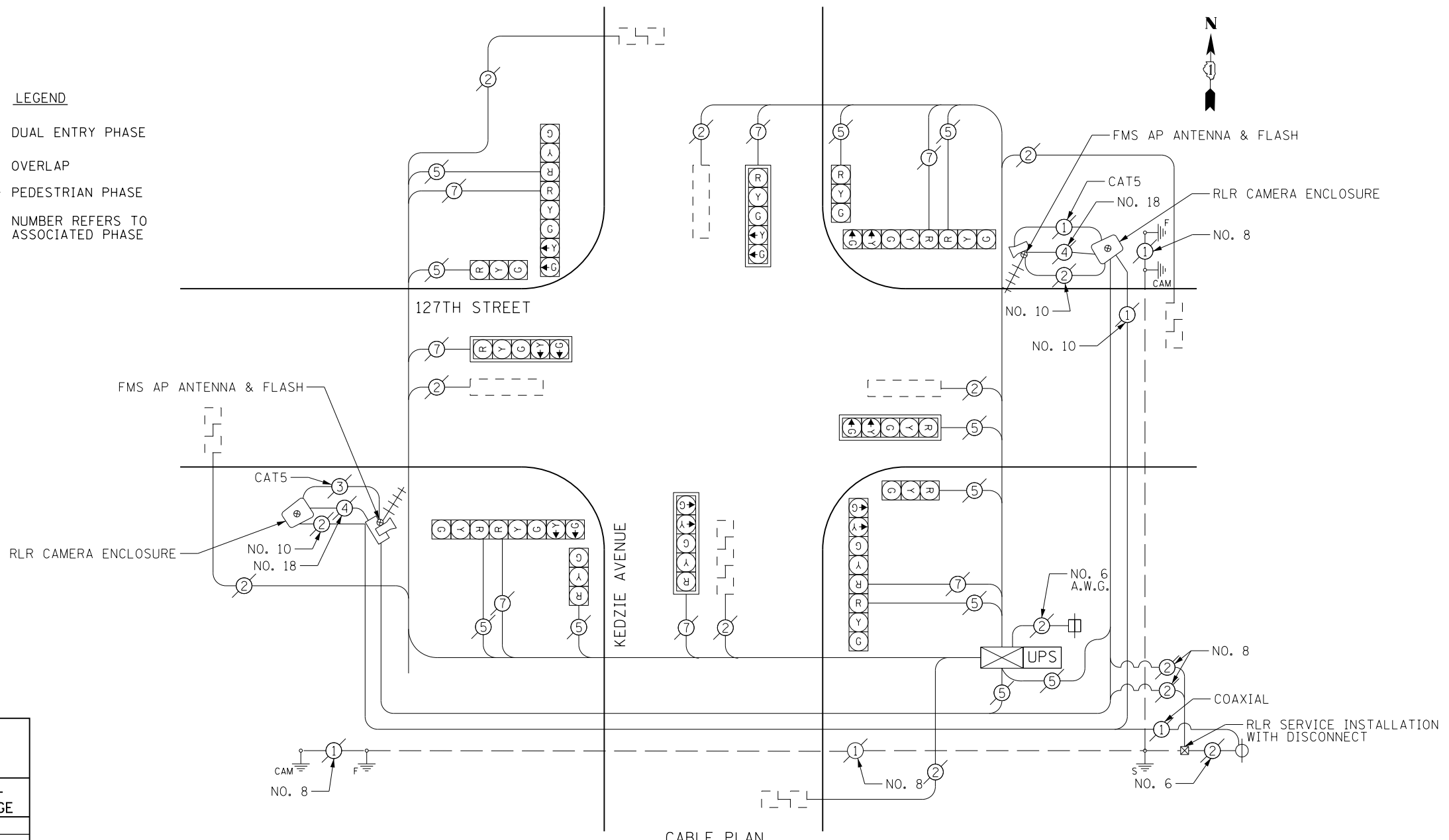
CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

LEGEND

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



CABLE PLAN

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

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16		17	0.50	93.5
(YELLOW)	16		25	0.25	68.75
(GREEN)	16		15	0.25	41.25
ARROW	16		12	0.10	4.8
PED SIGNAL	2		25	1.00	50
CONTROLLER	1	100		1.00	100
VIDEO SYSTEM	0	150		1.00	150
BATTERY BACKUP	1	25		1.00	25
TOTAL =					490.2

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

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

SCHEDULE OF QUANTITIES

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

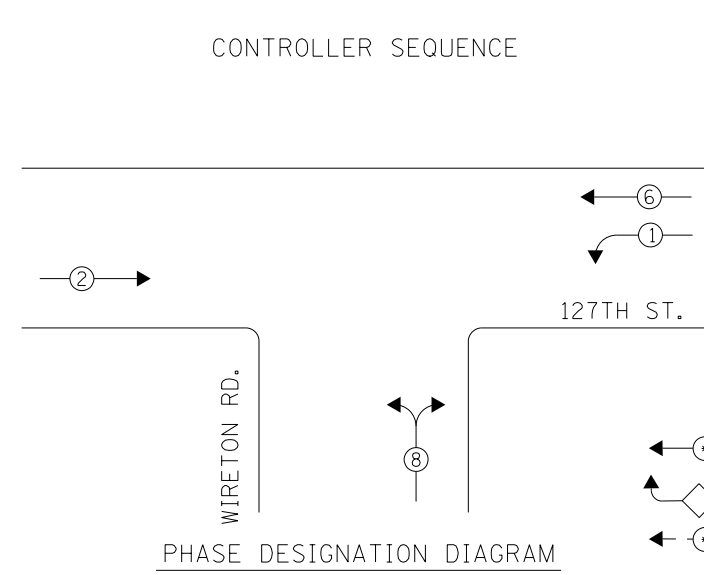
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN & PHASE DESIGNATION DIAGRAM
127TH ST. & KEDZIE AVE.

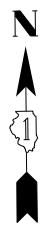
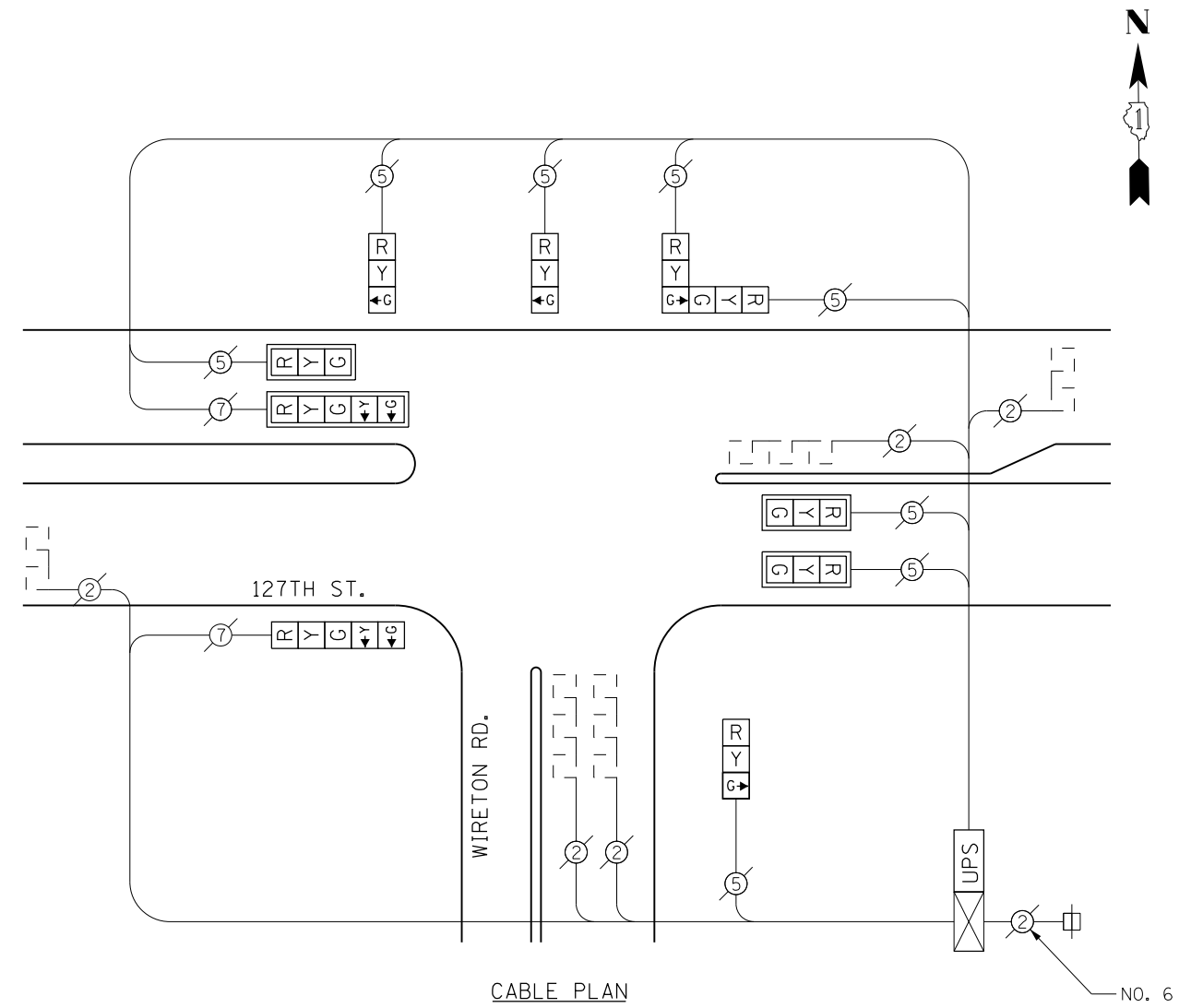
SCALE: SHEET OF SHEETS STA. TO STA.

TS #3995
BLUE ISLAND

FILE NAME = D:\60X24-sht-ts.TS3995.dgn	USER NAME = Brian Scifers	DESIGNED KJP	REVISED -	F.A. RTE. SECTION COUNTY TOTAL SHEETS SHEET NO. 2013-052TS COOK 87 18 CONTRACT NO. 60x24 ILLINOIS FED. AID PROJECT
Default	PLOT SCALE = 40.0000' / in.	DRAWN DLW	REVISED -	
	PLOT DATE = 10/8/2013	CHECKED BKS	REVISED -	
		DATE -	REVISED -	



- LEGEND**
- ← ● → DUAL ENTRY PHASE
 - ◊ OL OVERLAP
 - ← ● → PEDESTRIAN PHASE
 - NUMBER REFERS TO ASSOCIATED PHASE



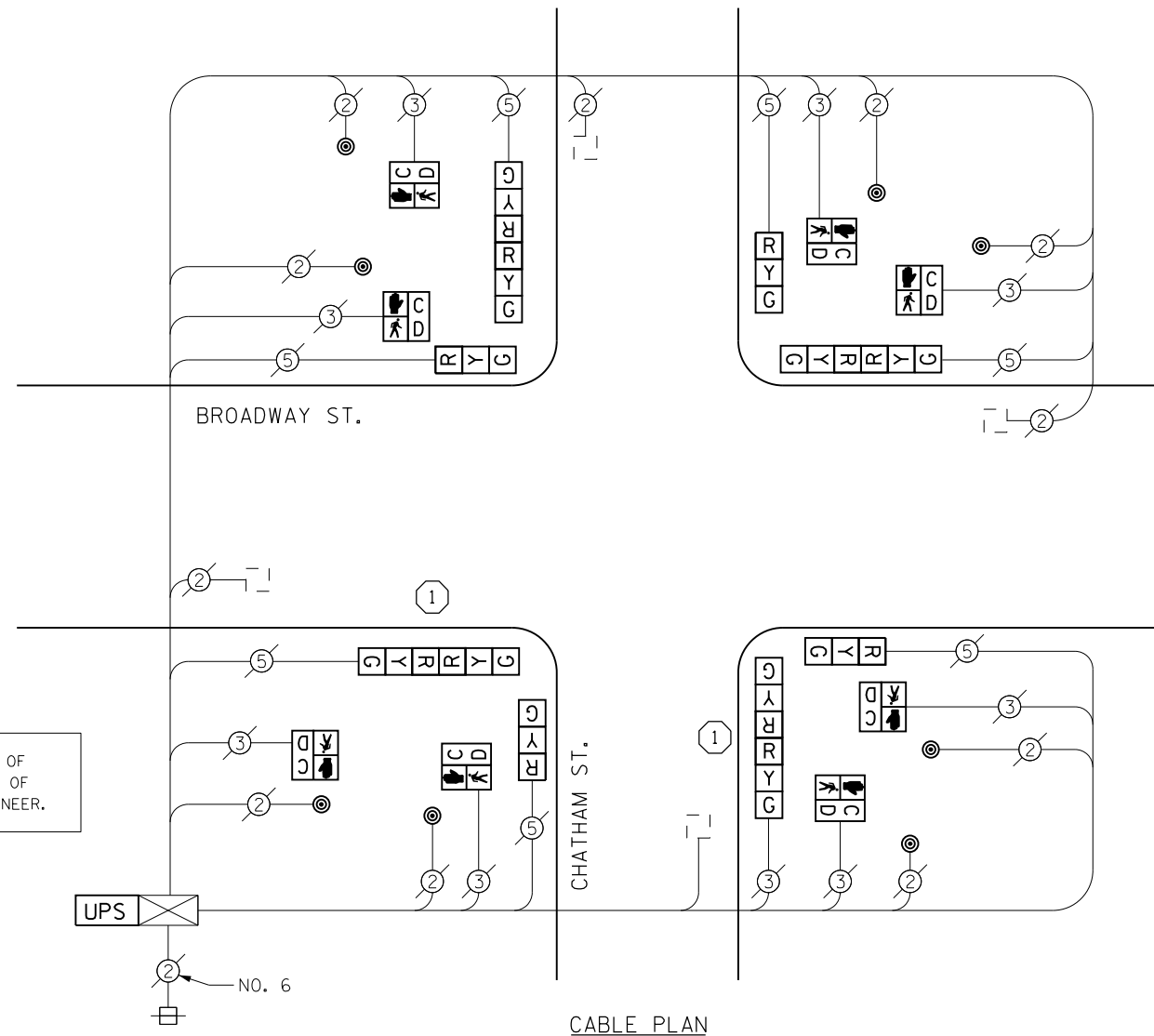
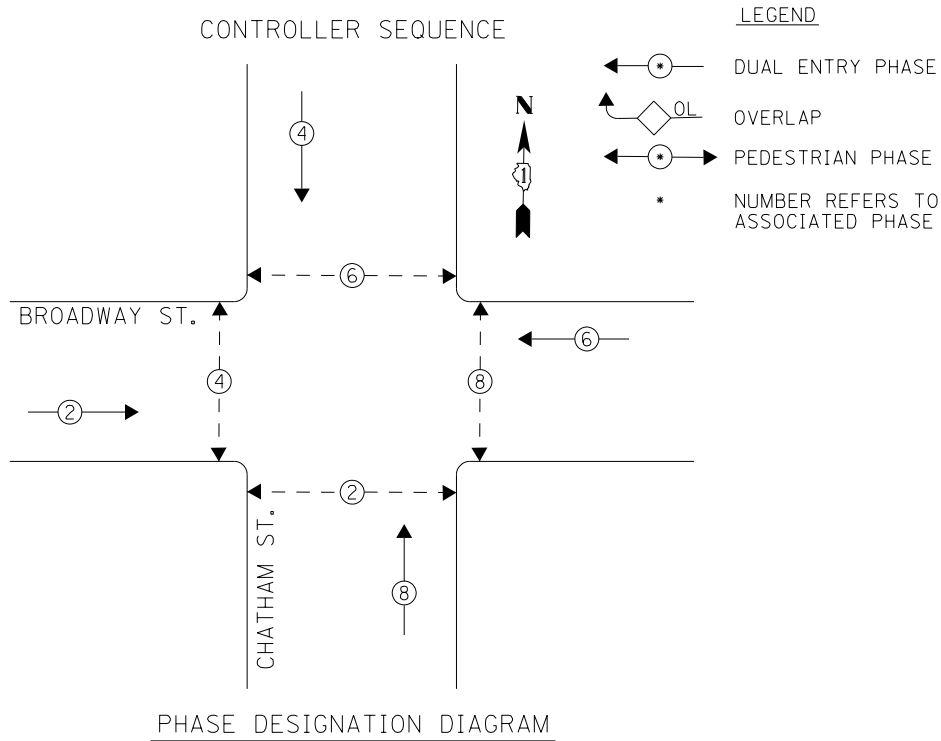
I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	10		17	0.50	85.0
(YELLOW)	10		25	0.25	62.5
(GREEN)	10		15	0.25	37.5
ARROW	4		12	0.10	4.8
PED SIGNAL	0		25	1.00	0.0
CONTROLLER	1	100		1.00	100.0
VIDEO SYSTEM	0	150		1.00	0.0
BATTERY BACKUP	1	25		1.00	25.0
TOTAL =					314.8

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

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

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

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



CONSTRUCTION NOTES:

1) THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 14 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

NOTES

1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED

2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION, THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT USABLE, REPLACE AS DIRECTED BY THE ENGINEER.

3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE 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 UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

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

TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12		17	0.50	102.0
(YELLOW)	12		25	0.25	75.0
(GREEN)	12		15	0.25	45.0
ARROW	0		12	0.10	0
PED SIGNAL	8		25	1.00	200.0
CONTROLLER	1	100		1.00	100.0
VIDEO SYSTEM	0	150		1.00	0
BATTERY BACKUP	1	25		1.00	25.0
TOTAL =					547.0

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

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

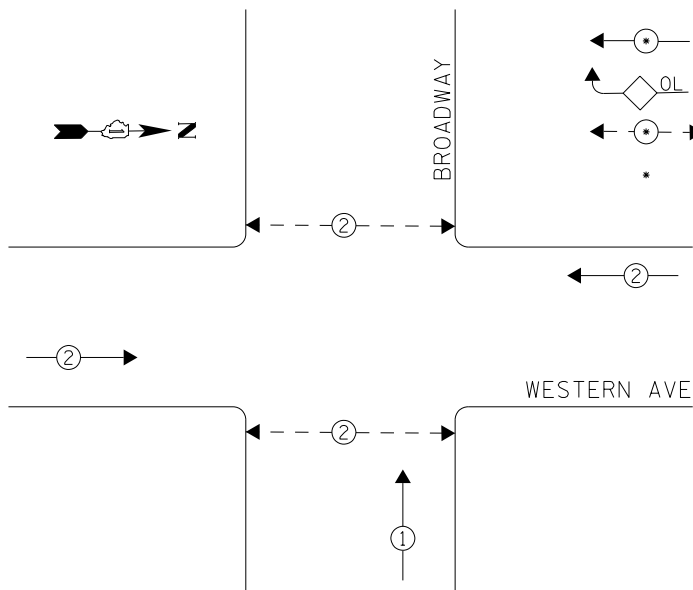
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

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

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
PEDESTRIAN PUSH-BUTTON	EACH	8
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

CONTROLLER SEQUENCE

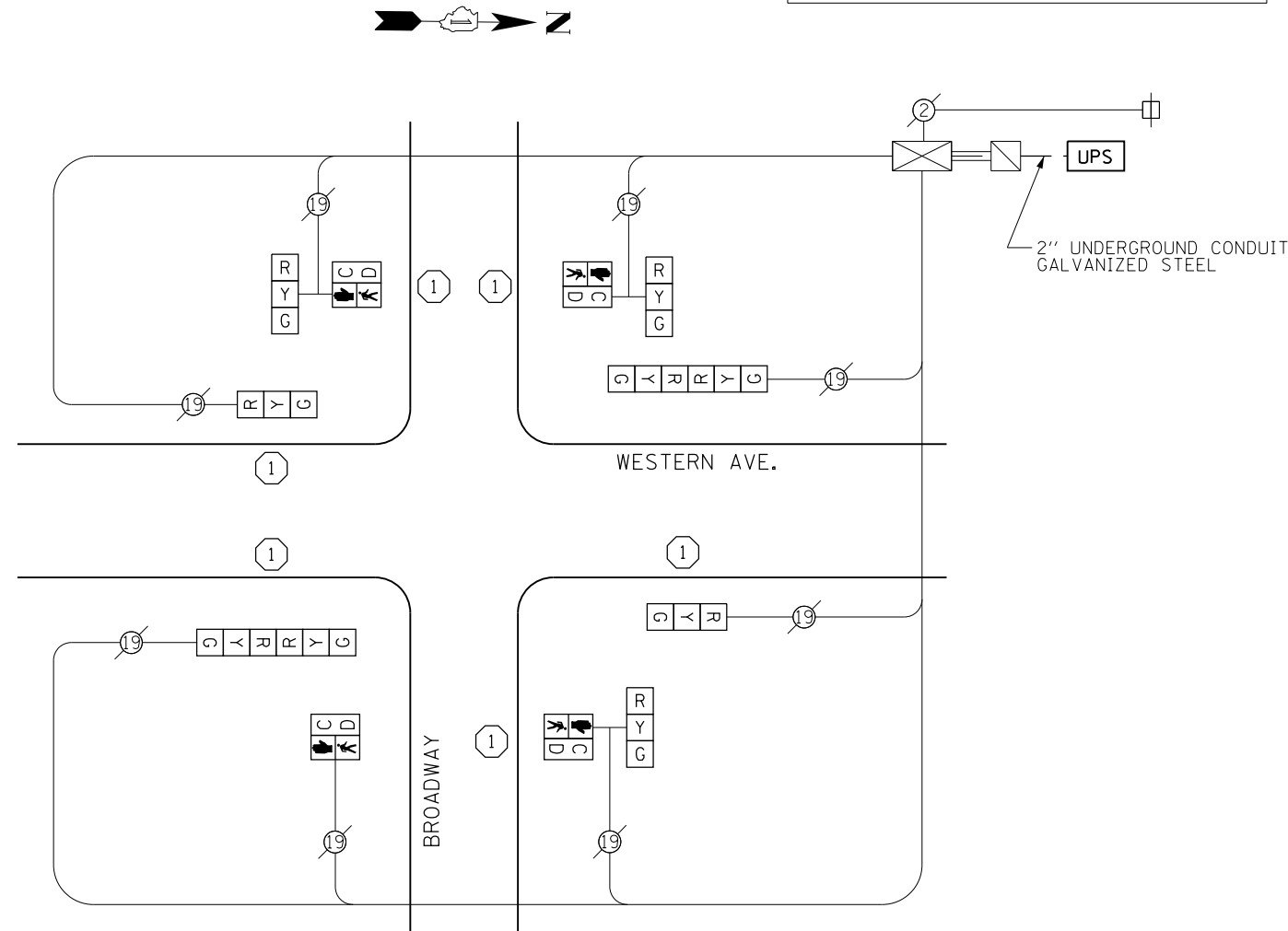


PHASE DESIGNATION DIAGRAM

LEGEND

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

UPS SHALL BE INSTALLED ON A SEPARATE FOUNDATION DUE TO PEDESTAL MOUNTED CONTROLLER CABINET, OR AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE INCLUDED IN THE PAY ITEM "UNINTERRUPTIBLE POWER SUPPLY, GROUND MOUNTED"



CABLE PLAN

I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				
TYPE	NO. LAMPS	WATTAGE INCAND. LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	8	17	0.50	68.0
(YELLOW)	8	25	0.25	50.0
(GREEN)	8	15	0.25	30.0
ARROW	0	12	0.10	0.0
PED SIGNAL	4	25	1.00	100.0
CONTROLLER	1	100	1.00	100.0
VIDEO SYSTEM	0	150	1.00	0.0
BATTERY BACKUP	1	25	1.00	25.0
TOTAL =				373.0

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

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

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

CONSTRUCTION NOTES:

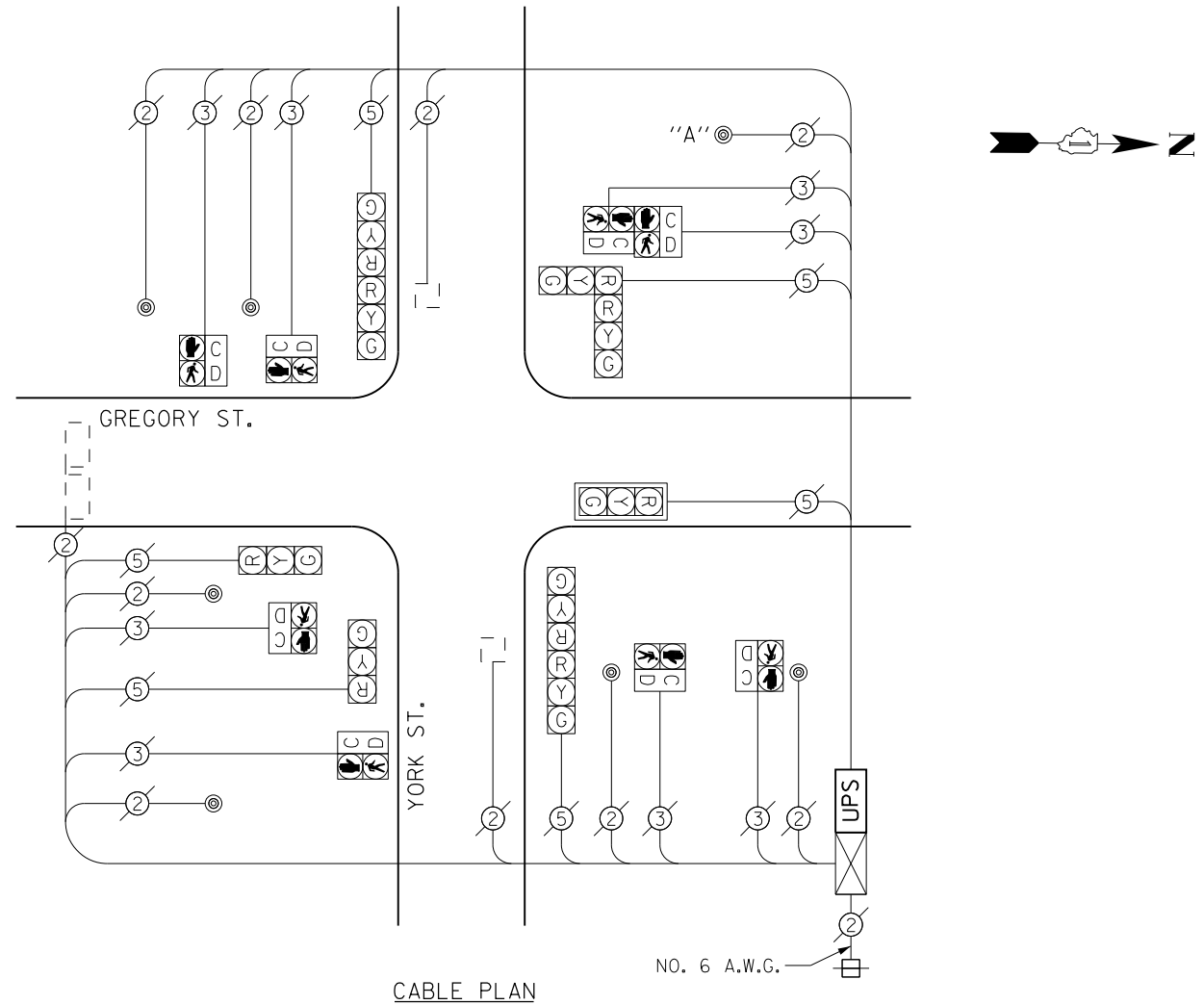
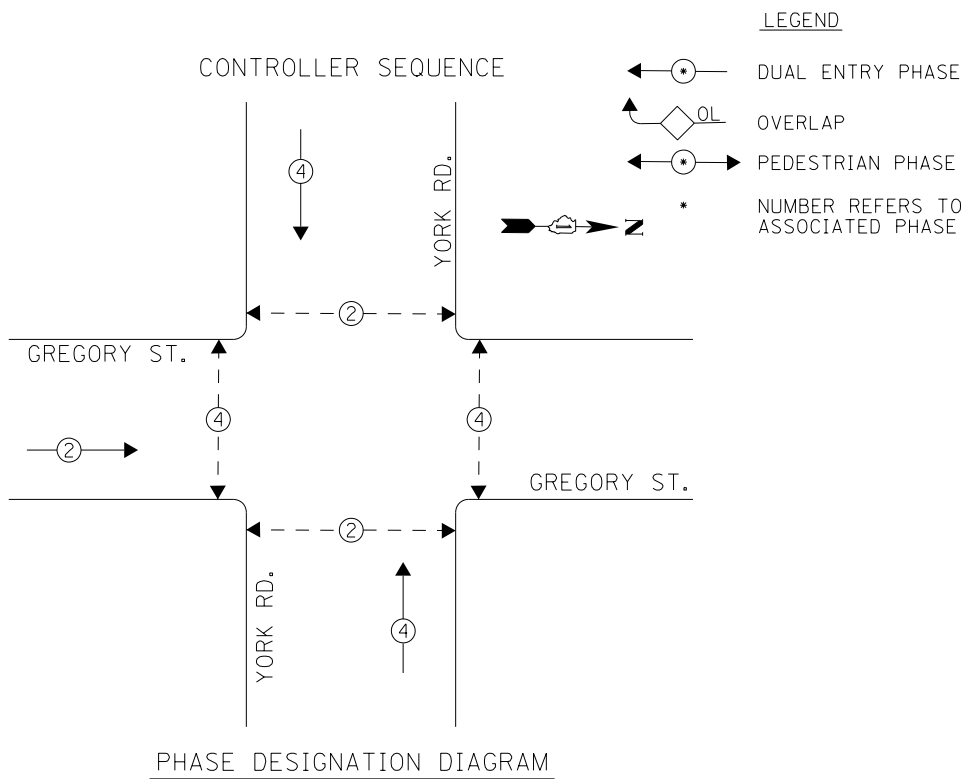
- 1) THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 14 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

NOTES

- 1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- 2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT USABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- 3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE 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 UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

TS #4580
BLUE ISLAND

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	5
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, GROUND MOUNTED	EACH	1



PUSHBUTTON NOTES:

PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4

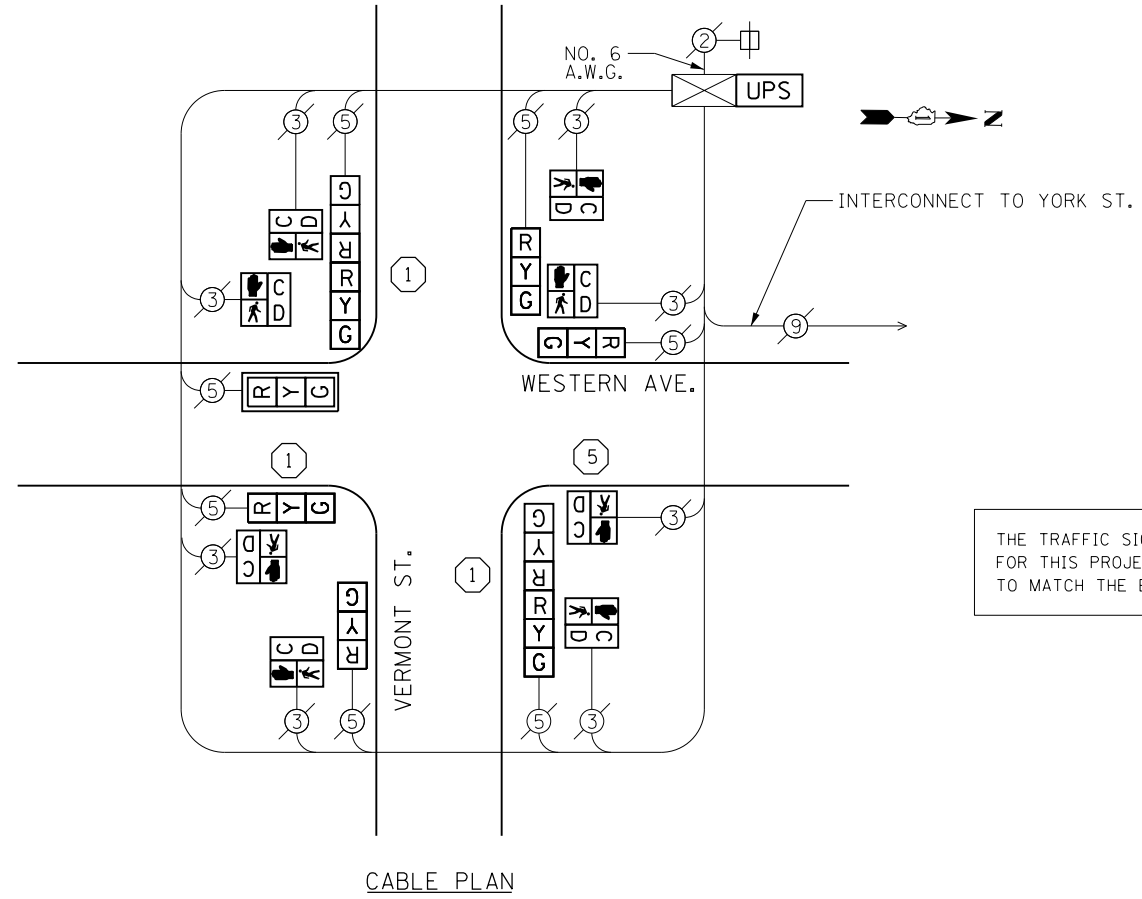
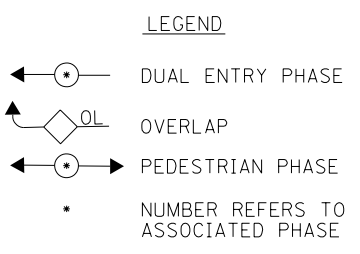
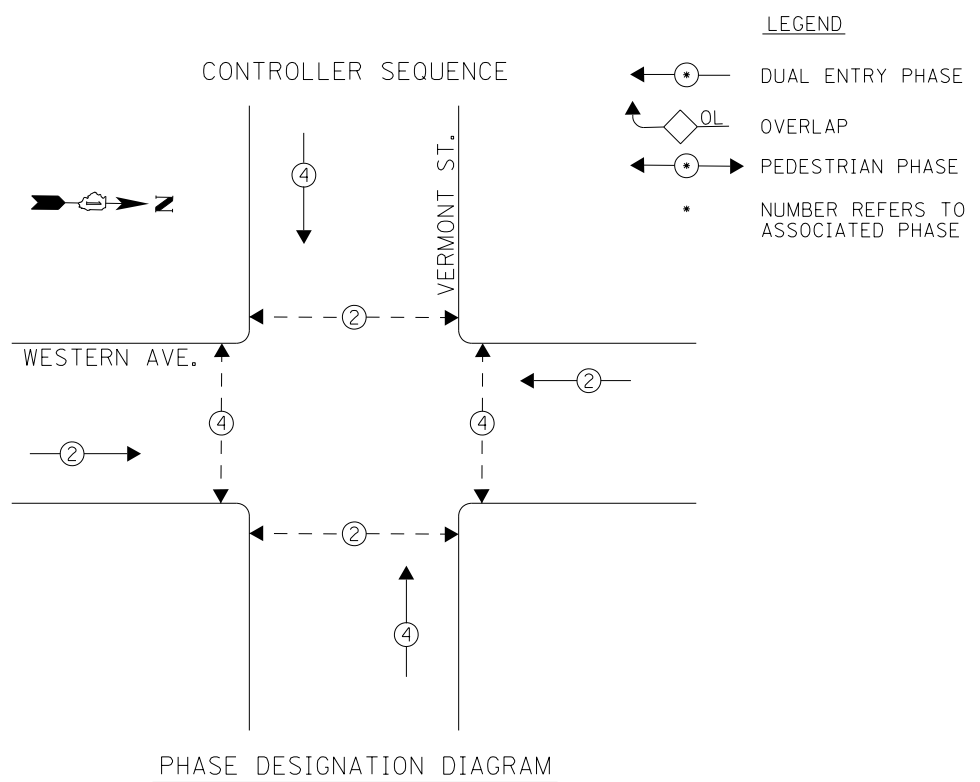
I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	9		17	0.50	76.5
(YELLOW)	9		25	0.25	56.25
(GREEN)	9		15	0.25	33.75
ARROW	0		12	0.10	0
PED SIGNAL	8		25	1.00	200.0
CONTROLLER	1	100		1.00	100.0
VIDEO SYSTEM	0	150		1.00	0
BATTERY BACKUP	1	25		1.00	25.0
TOTAL =					491.5

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

ENERGY SUPPLY- **CONTACT** BRAD SHINABARGAR
 PHONE 708-325-2692
 COMMONWEALTH EDISON

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

TS #4560
BLUE ISLAND



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 INCAND. LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	9	17	0.50	76.5
(YELLOW)	9	25	0.25	56.25
(GREEN)	9	15	0.25	33.75
ARROW	0	12	0.10	0
PED SIGNAL	8	25	1.00	200.0
CONTROLLER	1	100	1.00	100.0
VIDEO SYSTEM	0	150	1.00	0
BATTERY BACKUP	1	25	1.00	25.0
TOTAL =				491.5

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

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

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	TRAFFIC SIGNAL POST
8	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
4	EACH	SIGNAL HEAD, 1-FACE, 3 SECTION
2	EACH	SIGNAL HEAD, 2-FACE, 3 SECTION

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	3
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

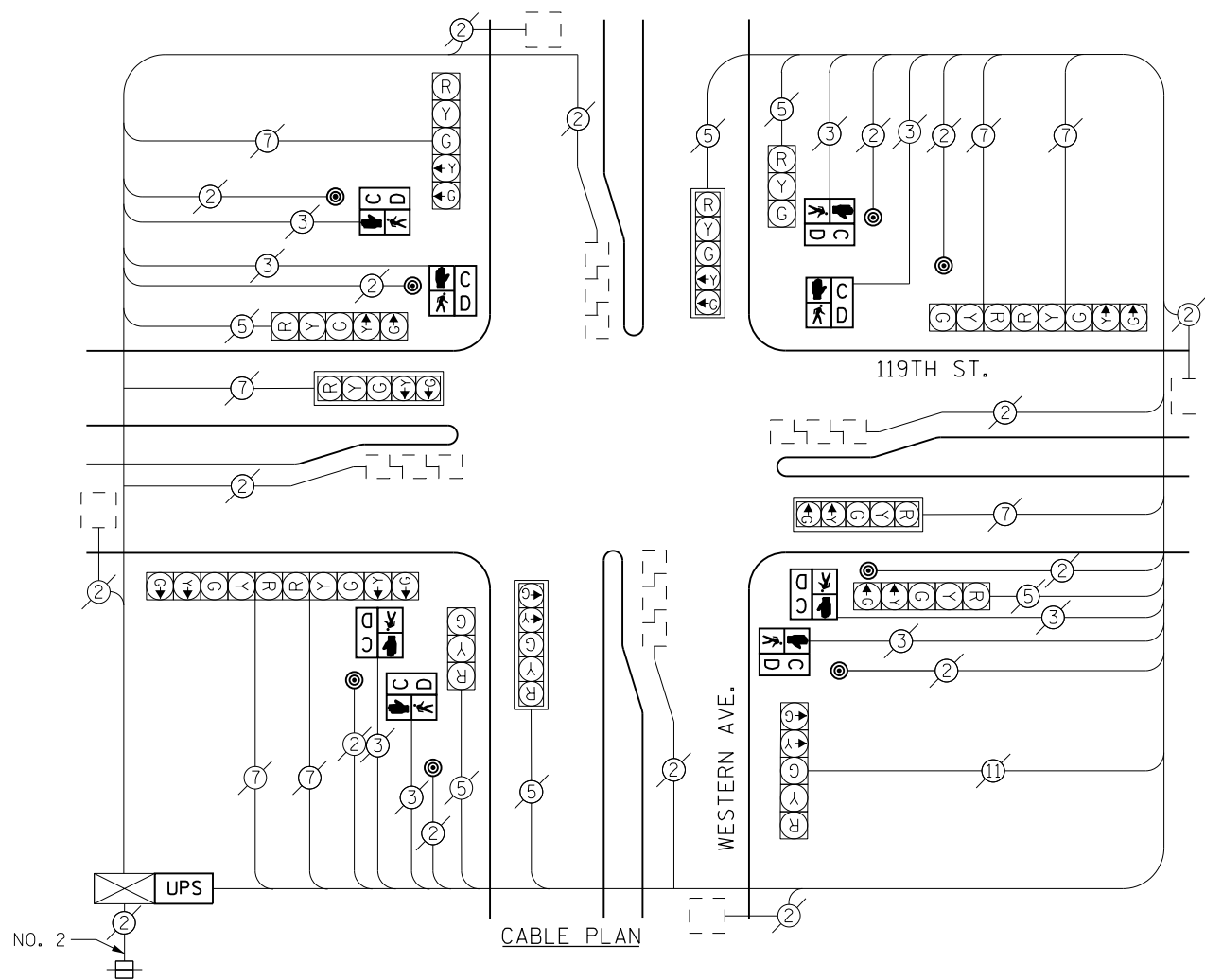
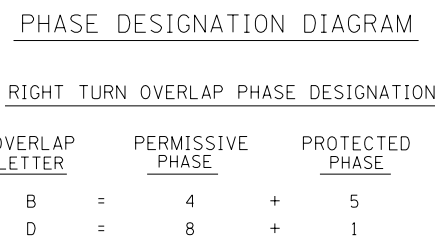
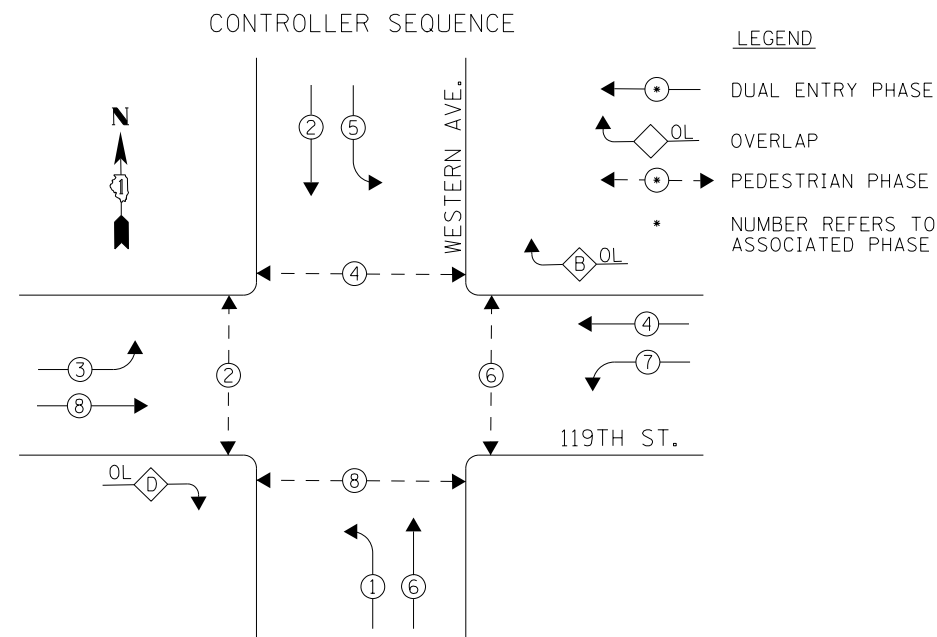
CONSTRUCTION NOTES:

- ① THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 14 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.
- ⑤ THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 10 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

NOTES

- 1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- 2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT USABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- 3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE 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 UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

TS #4585
BLUE ISLAND



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

TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14		17	0.50	119.0
(YELLOW)	14		25	0.25	87.5
(GREEN)	14		15	0.25	52.5
ARROW	20		12	0.10	9.6
PED SIGNAL	8		25	1.00	200.0
CONTROLLER	1	100		1.00	100.0
VIDEO SYSTEM	0	150		1.00	0
BATTERY BACKUP	1	25		1.00	25.0
TOTAL =					608.0

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

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

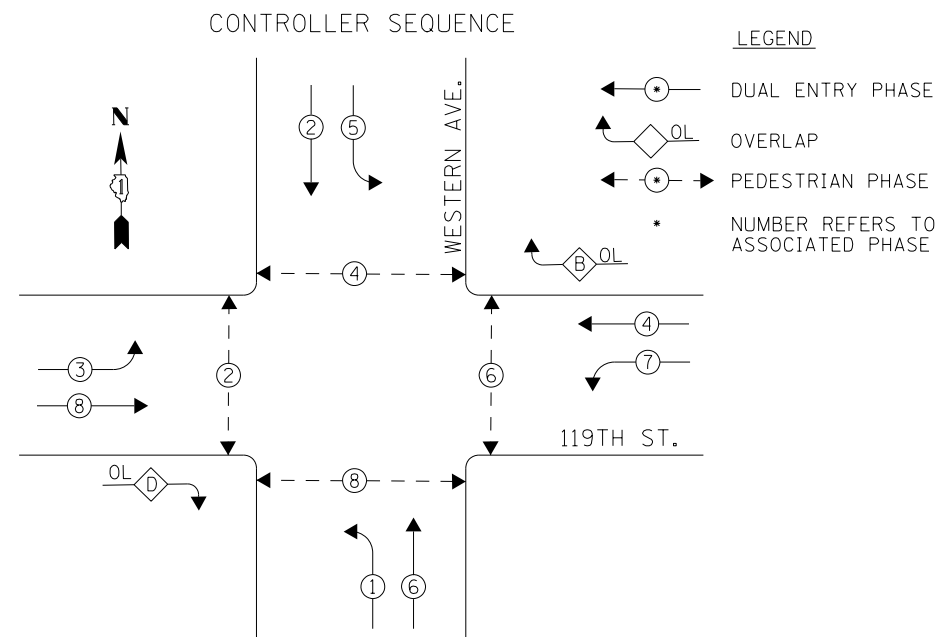
SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
PEDESTRIAN PUSH-BUTTON	EACH	8
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

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.

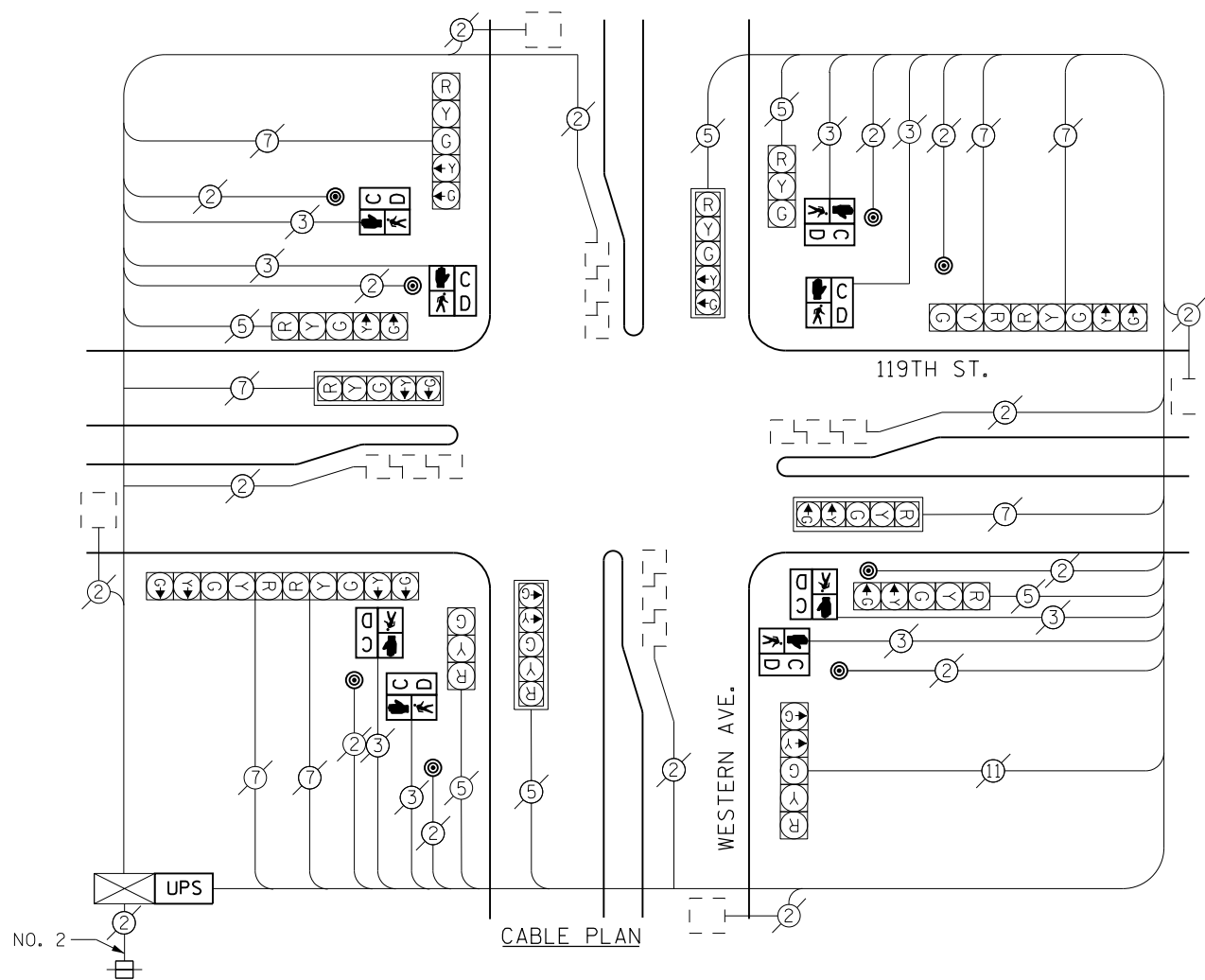
8	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
8	EACH	PEDESTRIAN PUSH BUTTON



PHASE DESIGNATION DIAGRAM

RIGHT TURN OVERLAP PHASE DESIGNATION

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



CABLE PLAN

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

TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14		17	0.50	119.0
(YELLOW)	14		25	0.25	87.5
(GREEN)	14		15	0.25	52.5
ARROW	20		12	0.10	9.6
PED SIGNAL	8		25	1.00	200.0
CONTROLLER	1	100		1.00	100.0
VIDEO SYSTEM	0	150		1.00	0
BATTERY BACKUP	1	25		1.00	25.0
TOTAL =					608.0

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

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

SCHEDULE OF QUANTITIES	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
PEDESTRIAN PUSH-BUTTON	EACH	8
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

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, 1-FACE
8	EACH	PEDESTRIAN PUSH BUTTON

FILE NAME = D:\60X24-sht-ts-TS5870.dgn	USER NAME = Brian Scifers	DESIGNED KJP	REVISED
Default	PLOT SCALE = 40.0000' / in.	DRAWN DLW	REVISED -
	PLOT DATE = 10/8/2013	CHECKED BKS	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCHEDULE OF QUANTITIES, CABLE PLAN & PHASE DESIGNATION DIAGRAM			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-052TS	COOK	87	24
CONTRACT NO. 60X24				
ILLINOIS FED. AID PROJECT				

TS #5870
BLUE ISLAND

EXISTING CONTROLLER SEQUENCE

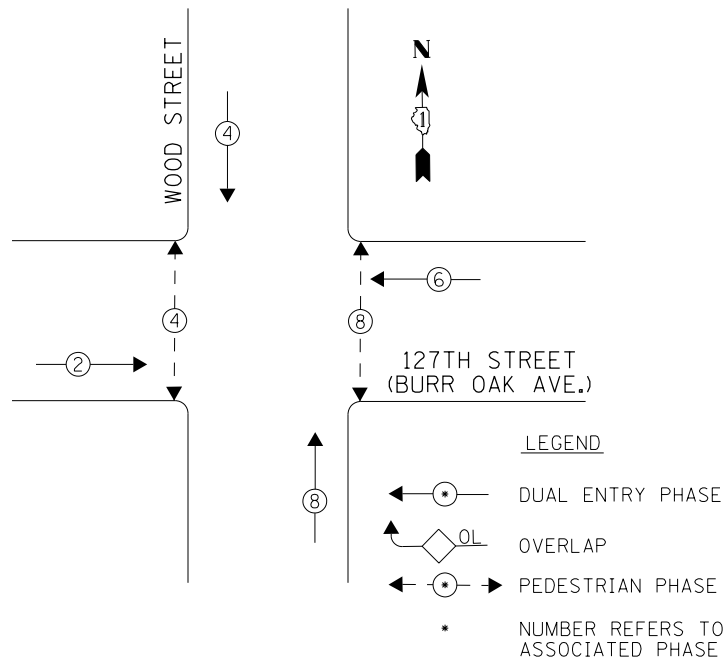
MOVEMENT	1		2								3								4								F L A S H										
	1	2	3A	3B	3C	3D	4A	4B	5	6	7A	7B	7C	7D	8A	8B	9	10	11A	11B	11C	11D	12A	12B	13	14		15A	15B	16A	16B	16C	16D				
PHASE																																					
INTERVAL																																					
CHANGE TO			2 OR 3				4				1 OR 4				3				1 OR 4				2						1				2 OR 3				
119 TH STREET EB @ SB MARSHFIELD AVE. NEAR RIGHT AND MID MAST ARM SIGNAL	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R				
119 TH STREET EB @ SB MARSHFIELD AVE. FAR LEFT AND END 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	R	R	R	R	R				
119 TH STREET EB @ NB ASHLAND AVE. MID MAST ARM SIGNAL	G	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	R	R	R	R					
119 TH STREET EB @ NB ASHLAND AVE. FAR LEFT AND END MAST ARM SIGNALS	-G	-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	R	R	R	R					
119 TH STREET WB @ NB ASHLAND AVE. NEAR RIGHT AND MID MAST ARM SIGNALS	R	R	R	R	R	R	R	R	G	G	Y	R	R	R	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R					
119 TH STREET WB @ NB ASHLAND AVE. FAR LEFT AND END MAST ARM SIGNALS	R	R	R	R	R	R	R	R	G	G	Y	R	R	R	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R					
119 TH STREET WB @ SB MARSHFIELD AVE. MID MAST ARM SIGNAL	R	R	R	R	R	R	R	R	G	G	G	G	Y	R	G	G	G	G	G	G	Y	R	G	G	R	R	R	R	R	R	R	R					
119 TH STREET WB @ SB MARSHFIELD AVE. FAR LEFT AND END MAST ARM SIGNALS	R	R	R	R	R	R	R	R	-G	-G	-G	-G	Y	R	-G	-G	-G	-G	-G	-G	Y	R	-G	-G	R	R	R	R	R	R	R	R					
SB MARSHFIELD AVE. NEAR RIGHT AND RIGHT MAST ARM SIGNALS	G	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	R	R	R	R					
SB MARSHFIELD AVE. FAR LEFT AND MID & END MAST ARM SIGNALS	G	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	R	R	R	R					
NB ASHLAND AVE. NEAR RIGHT AND RIGHT MAST ARM SIGNALS	R	R	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	R	R	R					
NB ASHLAND AVE. FAR LEFT AND MID & END 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	R	R	R	R					
PED. SIGNALS X-ING 119TH ST ON WEST SIDE OF MARSHFIELD AVE.	P	FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H					
PED. SIGNALS X-ING 119TH ST ON EAST SIDE OF ASHLAND AVE.	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H					
PED. SIGNALS X-ING MARSHFIELD AVE. ON NORTH SIDE OF 119TH STREET	H	H	H	H	H	H	H	H	P	FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H					
PED. SIGNALS X-ING MARSHFIELD AVE. ON SOUTH SIDE OF 119TH STREET	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	P	FH	H	H	H	H	H	H				
PED. SIGNALS X-ING ASHLAND AVE. ON NORTH SIDE OF 119TH STREET	H	H	H	H	H	H	H	H	P	FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H					
PED. SIGNALS X-ING ASHLAND AVE. ON SOUTH SIDE OF 119TH STREET	P	FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	P	FH	H	H	H	H	H					

P = ILLUMINATED PERSON = WALK
 FH = ILLUMINATED FLASHING HAND = FLASHING DON'T WALK
 H = ILLUMINATED SOLID HAND = DON'T WALK
 • TO APPEAR ONLY UPON PUSHBUTTON ACTUATION
 • FLASHING "G" IS TO TERMINATE AT THE COMPLETION OF THE PEDESTRIAN INTERVAL CLEARANCE.
 "G" AND FLASHING "G" TIMINGS TO BE SET ONLY ON PHASES WHERE "G" AND FLASHING "G" ARE INDICATED IN THE SEQUENCE OF OPERATION.

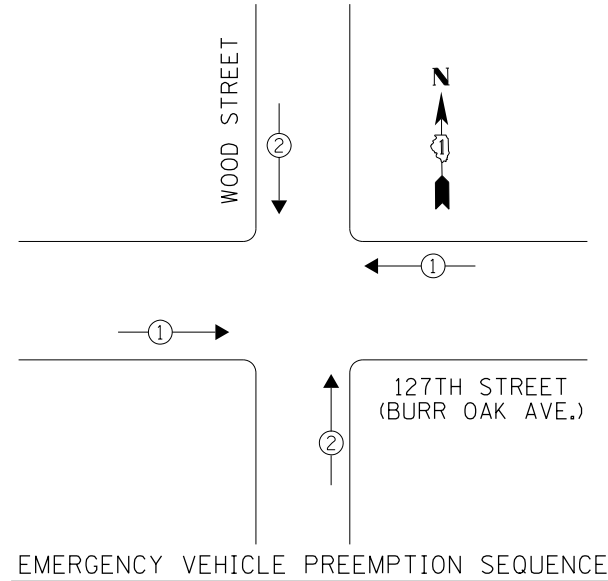
○ - THIS "G" OR FLASHING "G" INTERVAL MAY FINISH TIMING IN THE BI-DIRECTIONAL STRAIGHT THROUGH MOVEMENT IF THE LEFT ARROW TIME IS NOT SUFFICIENT TO COMPLETE "G" OR FLASHING "G" INTERVALS.

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

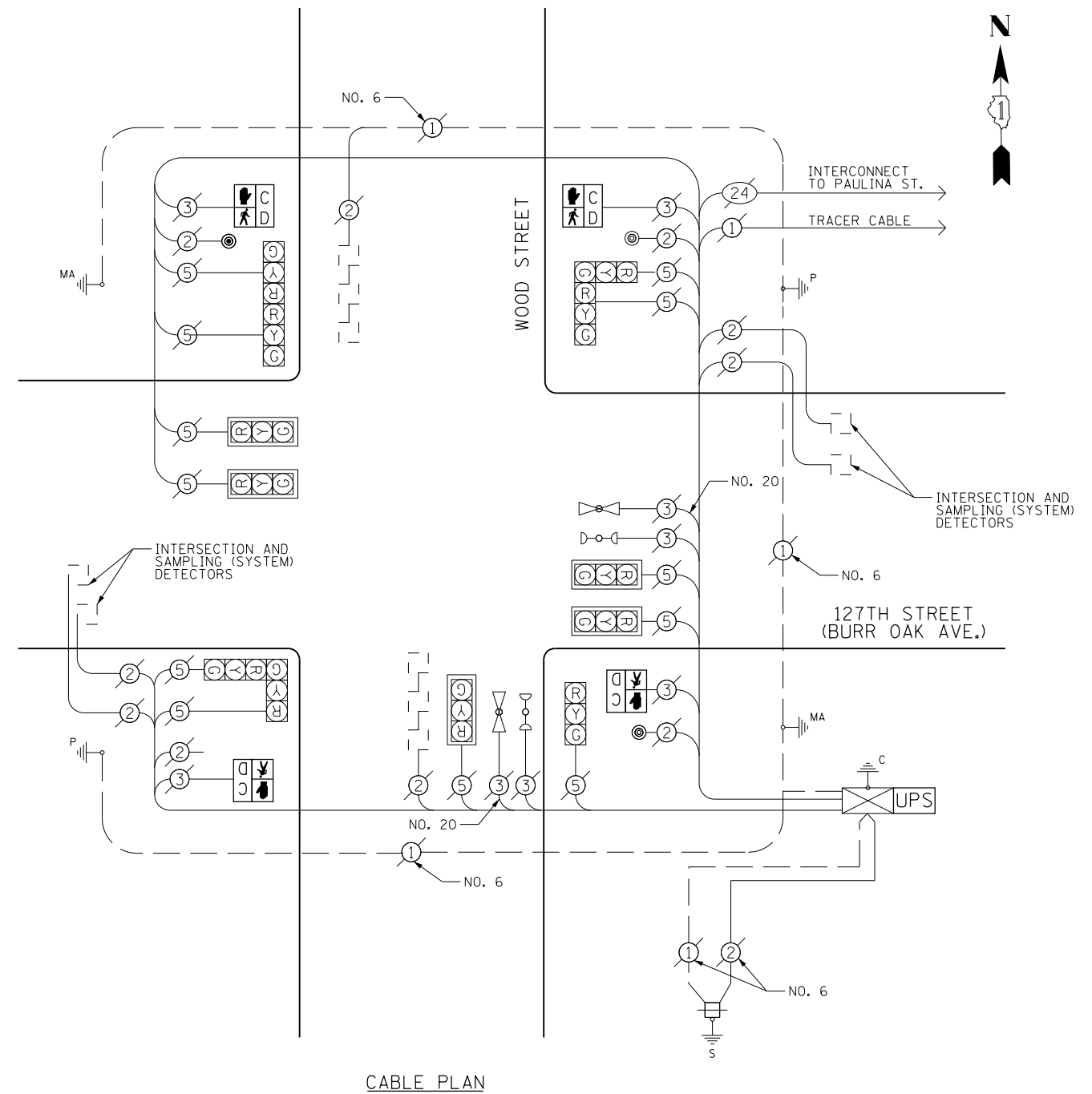
TS #20
 CALUMENT PARK



PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	1	2
MOVEMENT	← →	↑ ↓



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

I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12		17	0.50	102
(YELLOW)	12		25	0.25	75
(GREEN)	12		15	0.25	45
ARROW			12	0.10	-
PED SIGNAL	4		25	1.00	100
CONTROLLER	1	100		1.00	100
VIDEO SYSTEM		150		1.00	-
BATTERY BACKUP	1	25		1.00	25
TOTAL =					447.0

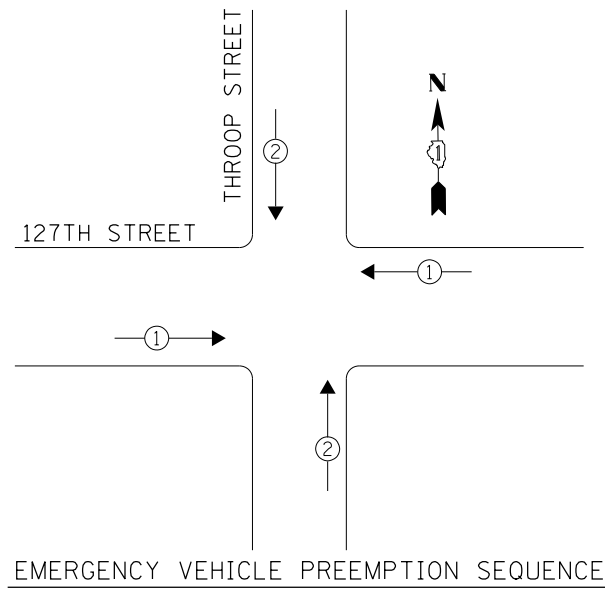
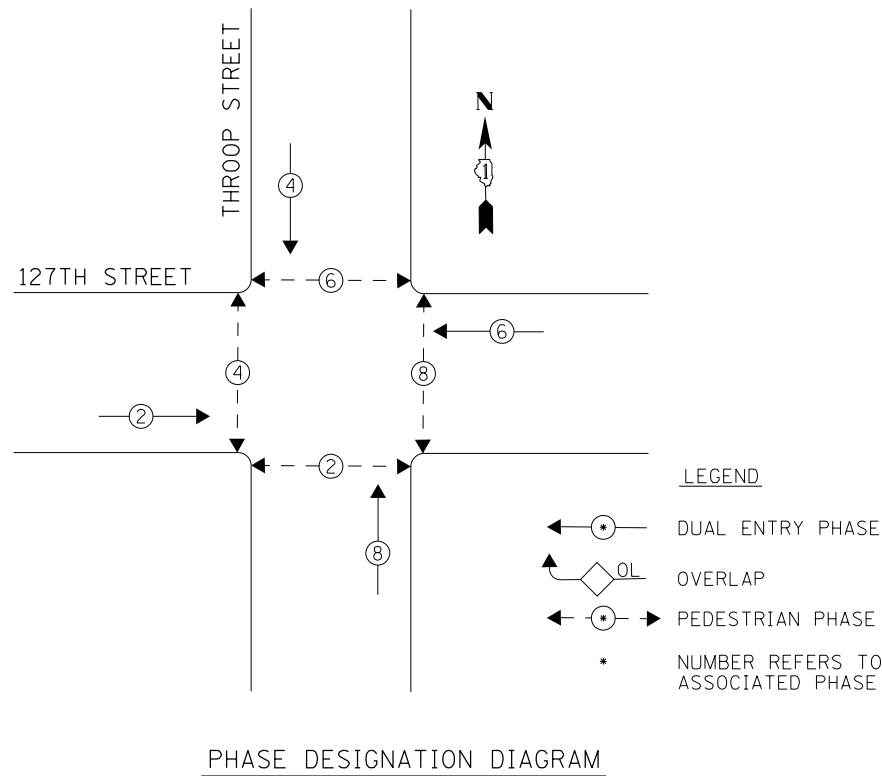
ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

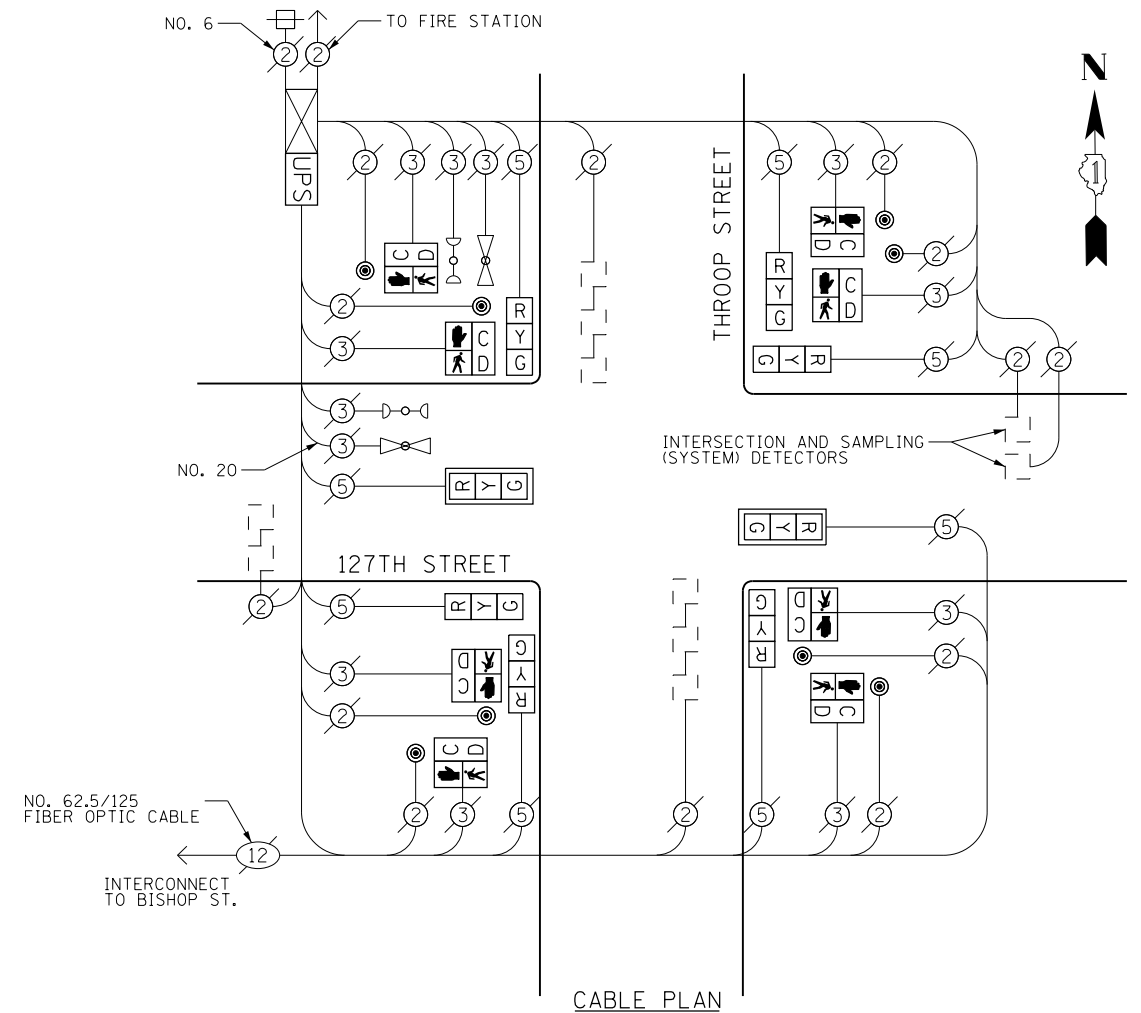
ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
PEDESTRIAN PUSH-BUTTON	EACH	4
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER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

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, 1-FACE
4	EACH	PEDESTRIAN PUSH BUTTON



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	1	2
MOVEMENT	← →	↑ ↓



I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	8		17	0.50	68
(YELLOW)	8		25	0.25	50
(GREEN)	8		15	0.25	30
ARROW			12	0.10	-
PED SIGNAL	8		25	1.00	200
CONTROLLER	1	100		1.00	100
VIDEO SYSTEM		150		1.00	-
BATTERY BACKUP	1	25		1.00	25
TOTAL =					473.0

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

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
PEDESTRIAN PUSH-BUTTON	EACH	8
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	2

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

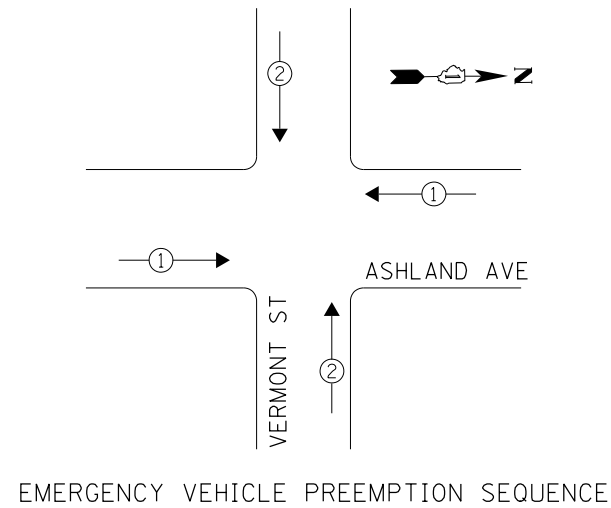
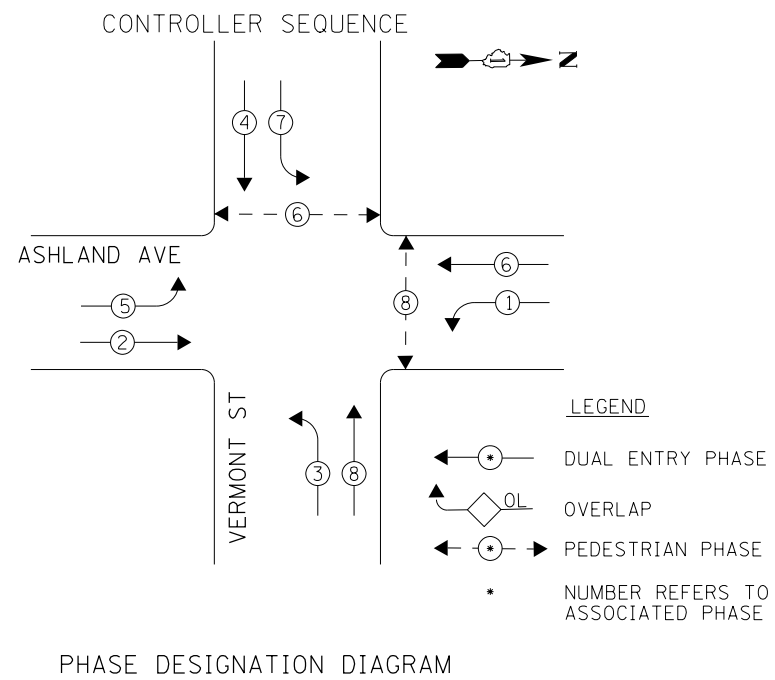
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

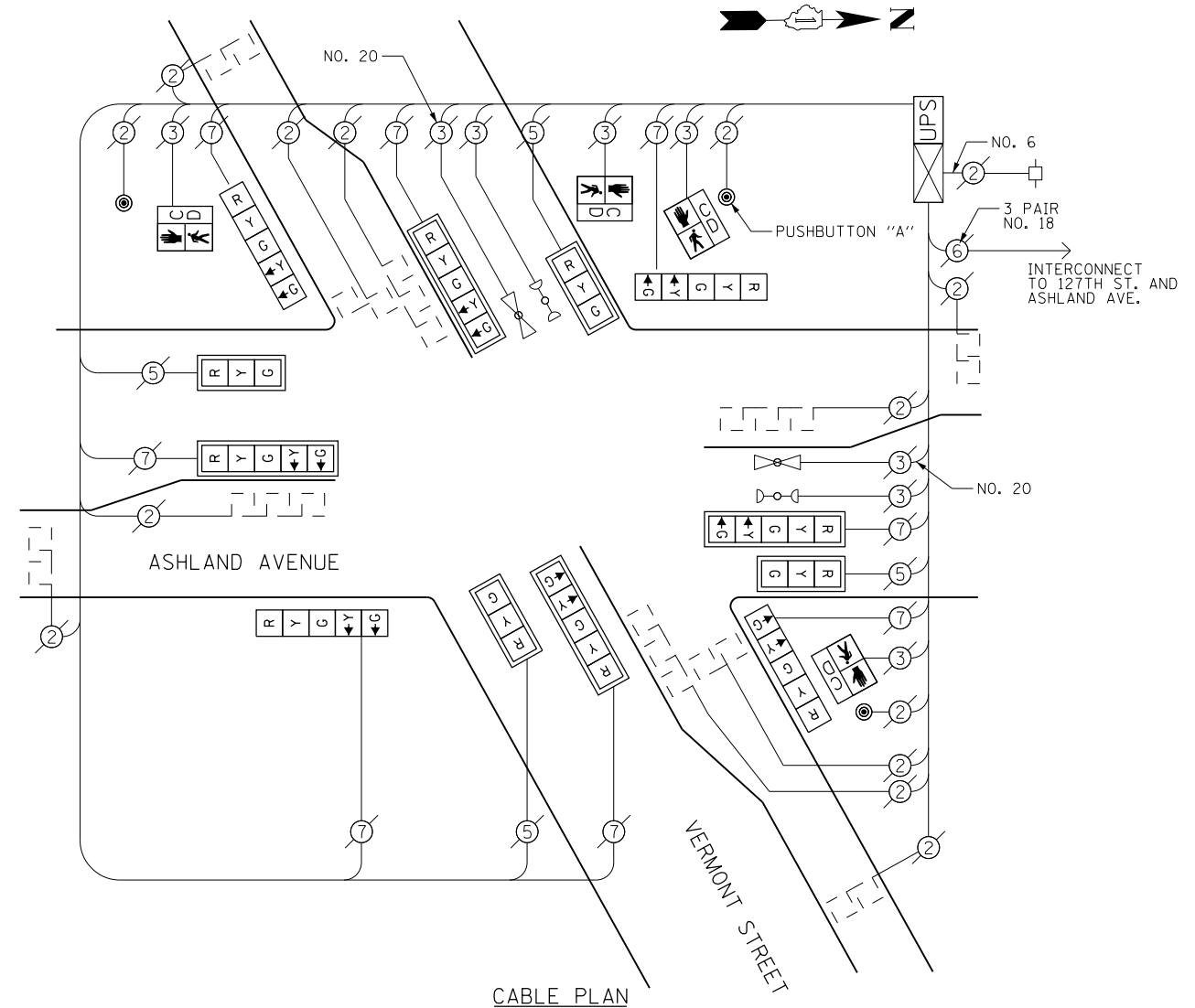
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

8	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
8	EACH	PEDESTRIAN PUSH BUTTON

TS #4005
CALUMENT PARK



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	1	2
MOVEMENT	← →	↑ ↓



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

I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12		17	0.50	102
(YELLOW)	12		25	0.25	75
(GREEN)	12		15	0.25	45
ARROW	16		12	0.10	19.2
PED SIGNAL	4		25	1.00	100
CONTROLLER	1	100		1.00	100
VIDEO SYSTEM		150		1.00	-
BATTERY BACKUP	1	25		1.00	25
TOTAL =					466.2

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

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

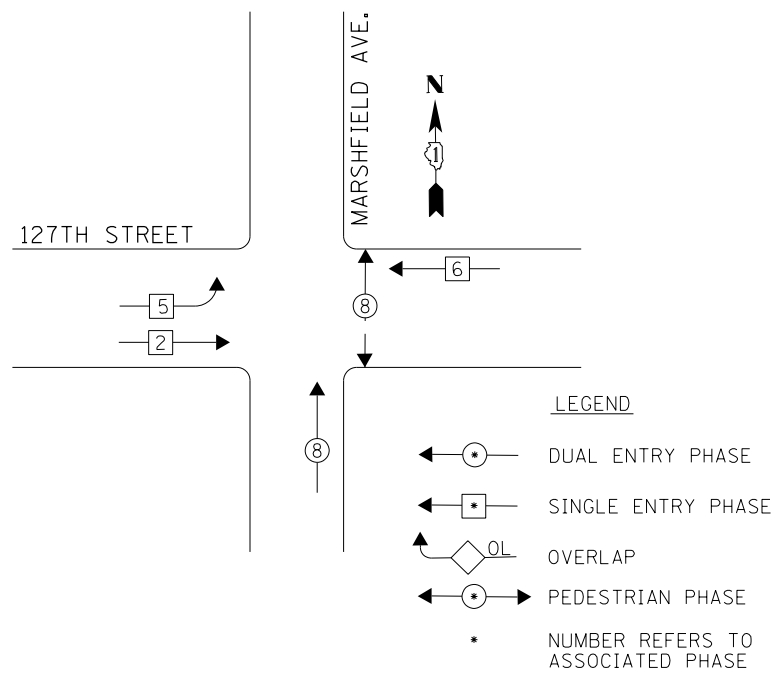
ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL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

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.

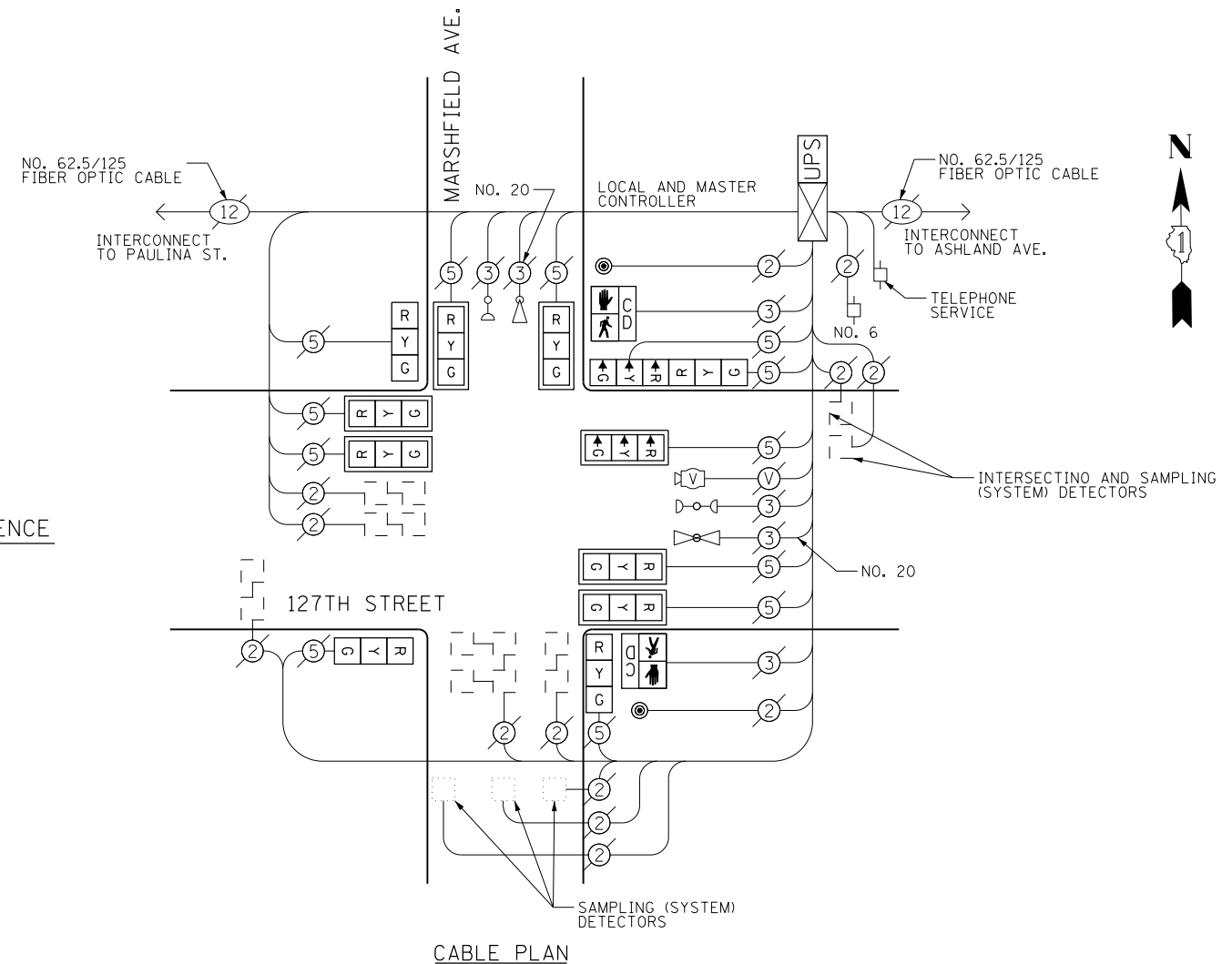
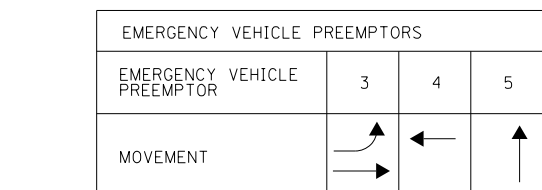
4	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
3	EACH	PEDESTRIAN PUSH BUTTON

EXISTING CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



CABLE PLAN

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

TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12		17	0.50	102
(YELLOW)	12		25	0.25	75
(GREEN)	12		15	0.25	45
ARROW	0		12	0.10	0
PED SIGNAL	2		25	1.00	50
CONTROLLER	1	100		1.00	100
VIDEO SYSTEM	1	150		1.00	150
BATTERY BACKUP	1	25		1.00	25
TOTAL =					547.0

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

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

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.

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, 1-FACE
2	EACH	PEDESTRIAN PUSH BUTTON

SCHEDULE OF QUANTITIES	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN PUSH-BUTTON	EACH	2
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	3
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	7
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	1

FILE NAME = D:\60X24-sht-ts.TS25.dgn	USER NAME = Brian Scifers	DESIGNED - KP	REVISED -
Default	PLOT SCALE = 48.0000' / in.	DRAWN - DLW	REVISED -
	PLOT DATE = 10/8/2013	CHECKED - BKS	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

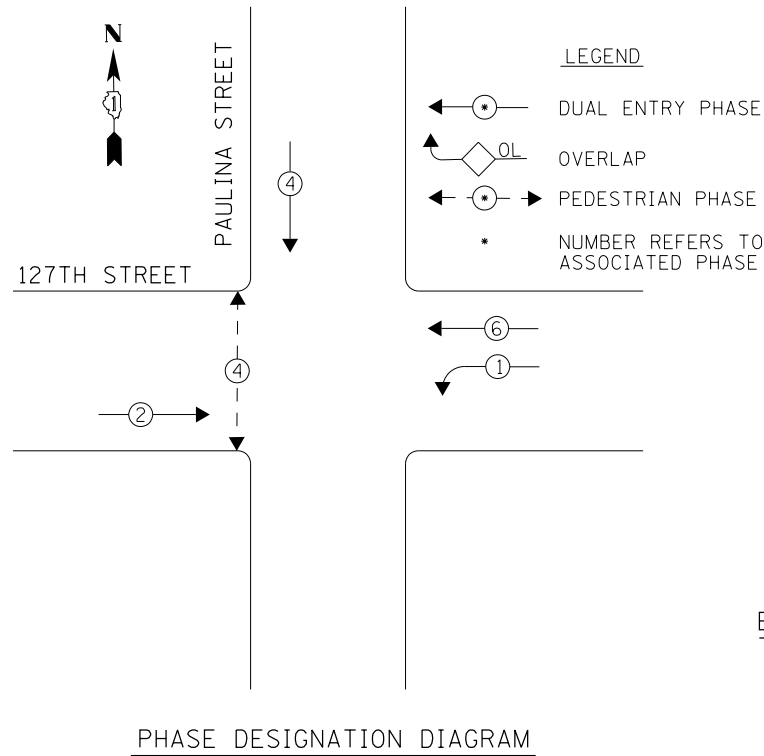
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
I 57 AT 127TH ST. EAST RAMP / MARSHFIELD

SCALE: SHEET OF SHEETS STA. TO STA.

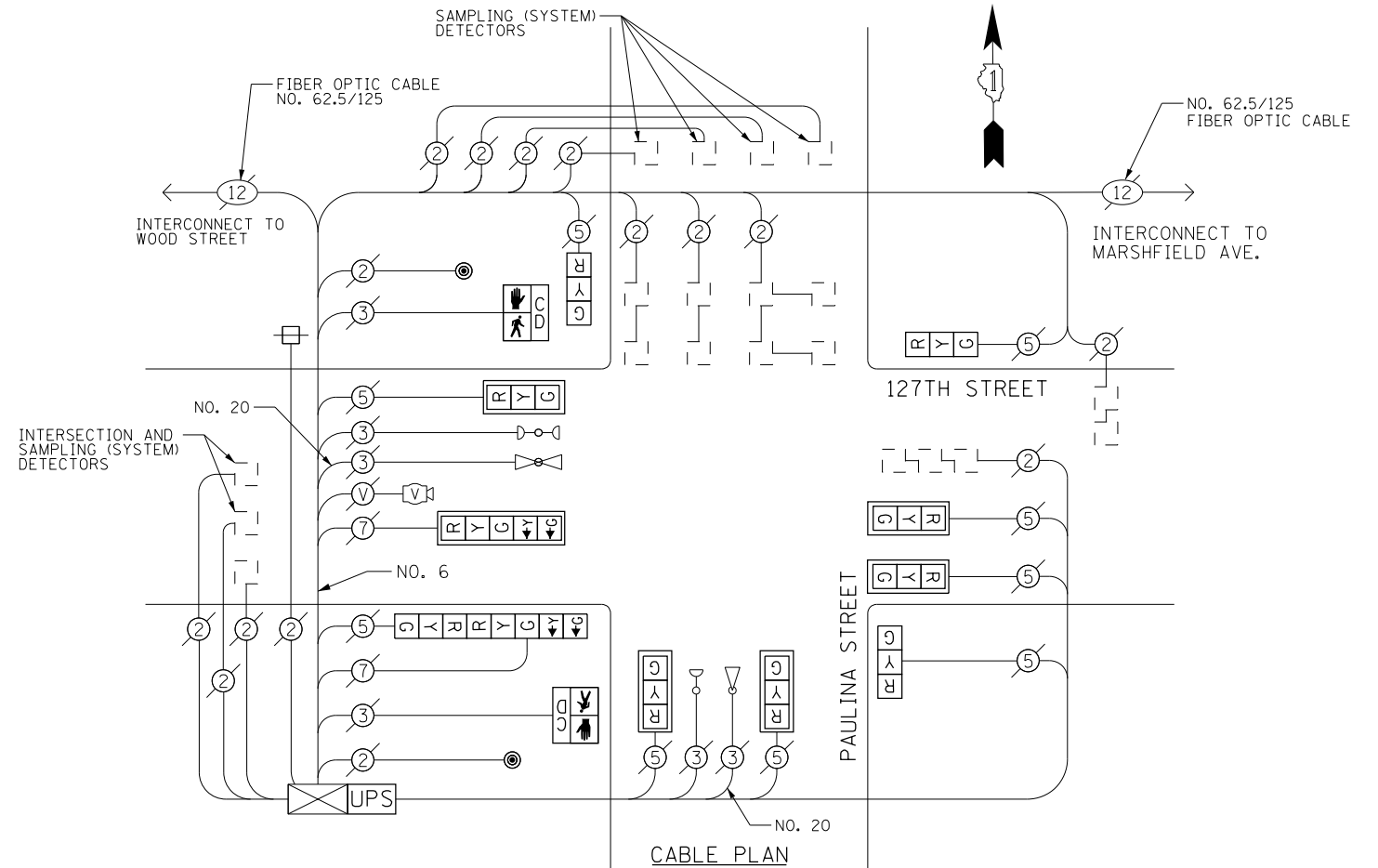
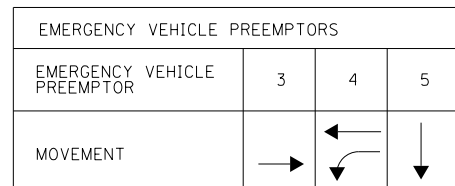
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-052TS	COOK	87	30
CONTRACT NO. 60X24				
ILLINOIS FED. AID PROJECT				

TS #25
CALUMENT PARK

EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



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.

I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	11		17	0.50	93.5
(YELLOW)	11		25	0.25	68.75
(GREEN)	11		15	0.25	41.25
ARROW	4		12	0.10	4.8
PED SIGNAL	2		25	1.00	50
CONTROLLER	1	100		1.00	100
VIDEO SYSTEM	1	150		1.00	150
BATTERY BACKUP	1	25		1.00	25
TOTAL =					533.3

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

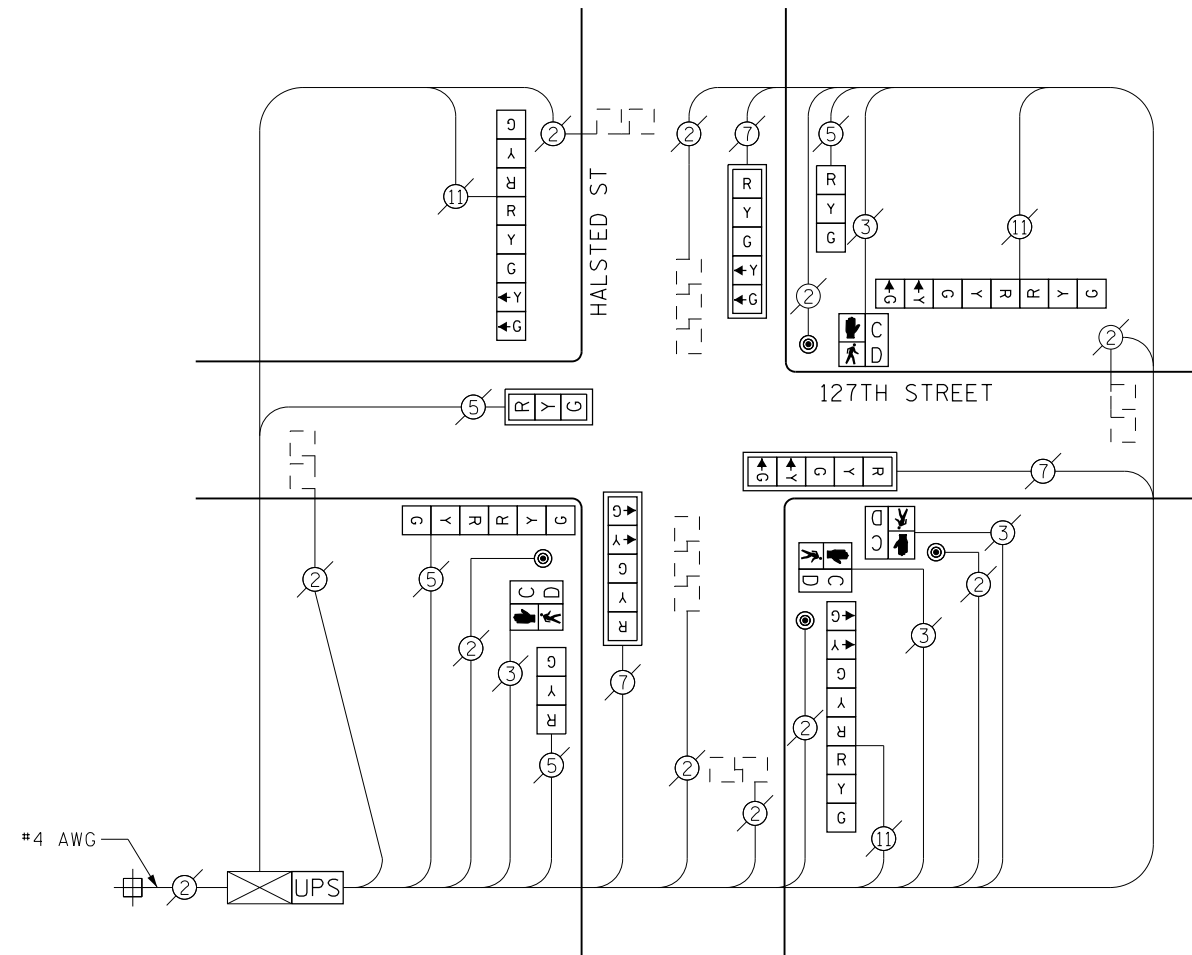
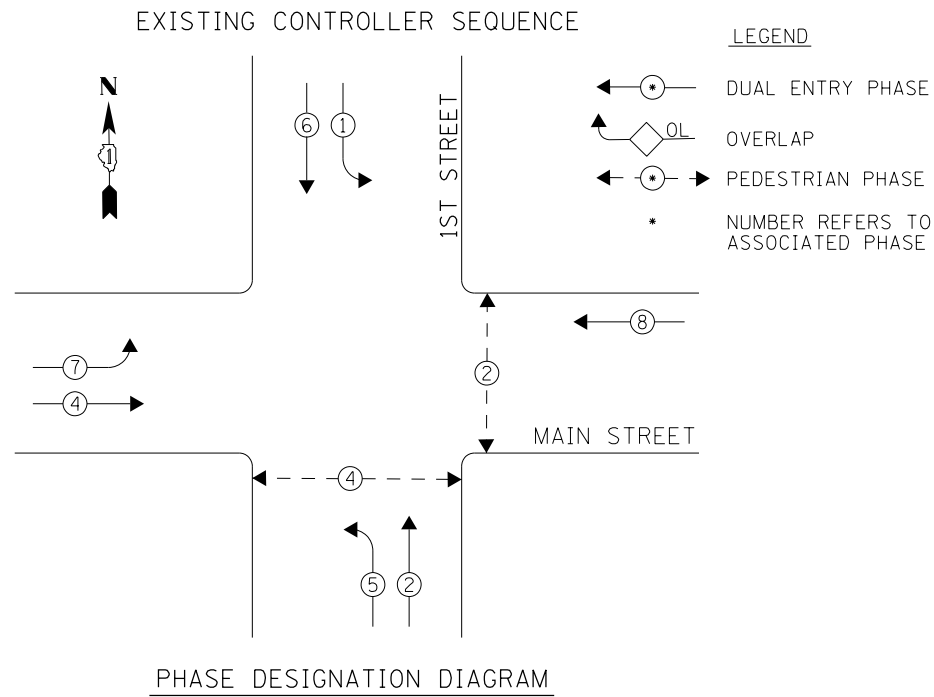
ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

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

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, 1-FACE
2	EACH	PEDESTRIAN PUSH BUTTON



I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14		17	0.50	119
(YELLOW)	14		25	0.25	87.5
(GREEN)	14		15	0.25	52.5
ARROW	12		12	0.10	14.4
PED SIGNAL	4		25	1.00	100
CONTROLLER	1	100		1.00	100
VIDEO SYSTEM		150		1.00	-
BATTERY BACKUP	1	25		1.00	25
TOTAL =					498.4

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

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
 PHONE 708-325-2692
 COMMONWEALTH EDISON

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

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

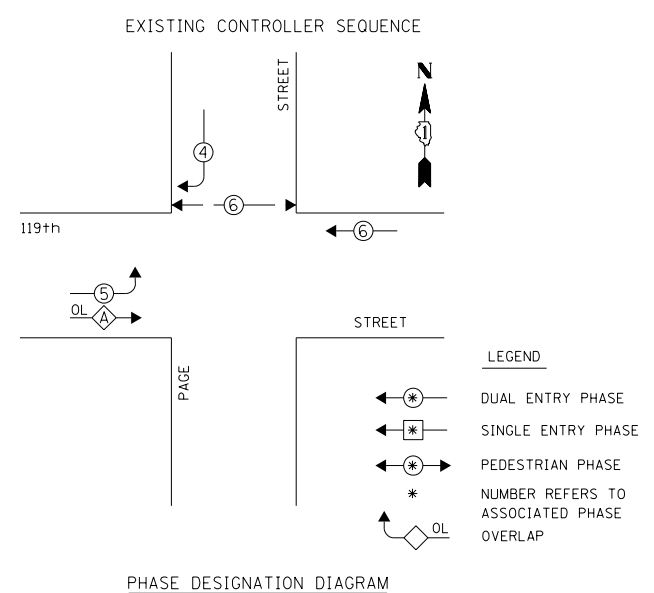
BY: _____ DATE: _____
 SURVEYED _____
 ALIGNED _____
 RT. OF WAY CHECKED _____
 ADJ. FILE NAME _____

PLAN _____
 NOTE BOOK _____
 NO. _____

BY: _____ DATE: _____
 SURVEYED _____
 GRADES CHECKED _____
 E.M. NOTED _____
 STRUCTURE NOTATIONS OKWD _____

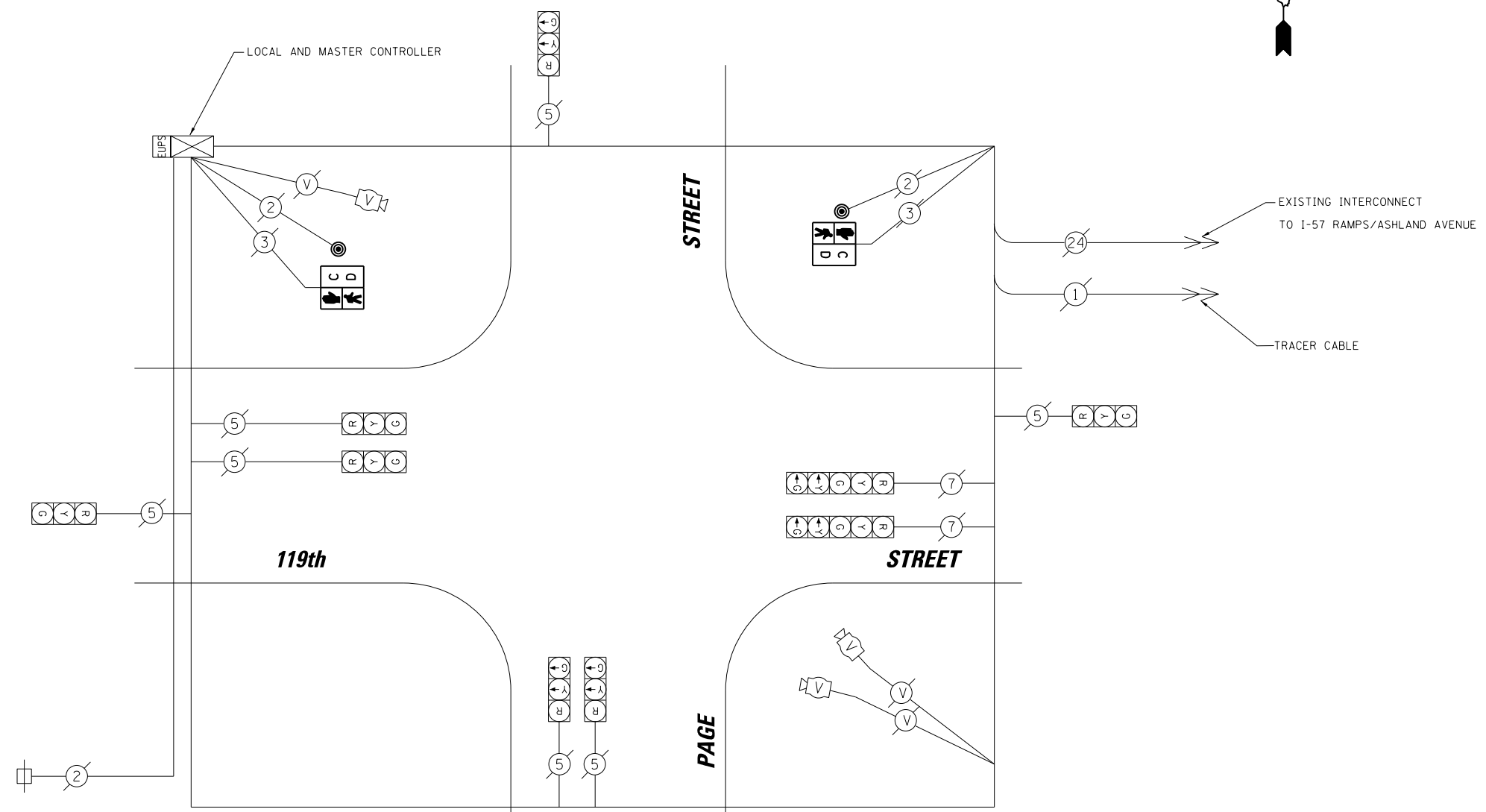
PROFILE _____
 NOTE BOOK _____
 NO. _____

CHRISTOPHER B. BURKE ENGINEERING LTD.
 3575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (617) 923-5938



RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE	DISPLAY
A	= 4	+ 5	+ 6



CABLE PLAN

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE		% OPERATION	
		X INCAND.	LED		
SIGNAL (RED)	9		17	0.50	76.50
(YELLOW)	9		25	0.25	56.25
(GREEN)	9		15	0.25	33.75
ARROW	4		12	0.10	4.80
PED. SIGNAL	2		25	1.00	50.00
CONTROLLER	1		100	1.00	100.00
ILLUMINATED SIGN	-		25	0.05	-
VIDEO SYSTEM	1		150	1.00	150.00
LUMINAIRE	-	250		0.50	-
BATTERY BACKUP	1	25		1.00	25.0
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	496.30

VILLAGE OF CALUMET PARK
 12409 S. THROOP STREET
 CALUMET PARK, IL 60827
 ENERGY SUPPLY: CONTACT: BRAD SHINABARGAR
 PHONE: (708)-235-2692
 COMPANY: COMED

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, 1-FACE
2	EACH	PEDESTRIAN PUSH-BUTTON

SCHEDULE OF QUANTITIES

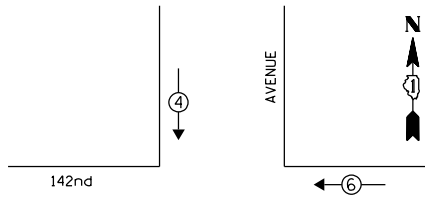
ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN PUSH-BUTTON	EACH	2
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1

TS # 3972
 CALUMET PARK

DATE: _____ BY: _____
 SURVEYED: _____ GRADES CHECKED: _____
 ALIGNED: _____ RT. OF WAY CHECKED: _____
 NOTE BOOK NO.: _____
 I.D.O.T. PROJECT NO.: _____
 ILLINOIS DEPARTMENT OF TRANSPORTATION
 STATE OF ILLINOIS
 PROJECT NO. 130116
 SHEET NO. 34

DATE: _____ BY: _____
 SURVEYED: _____ GRADES CHECKED: _____
 ALIGNED: _____ RT. OF WAY CHECKED: _____
 NOTE BOOK NO.: _____
 I.D.O.T. PROJECT NO.: _____
 ILLINOIS DEPARTMENT OF TRANSPORTATION
 STATE OF ILLINOIS
 PROJECT NO. 130116
 SHEET NO. 34

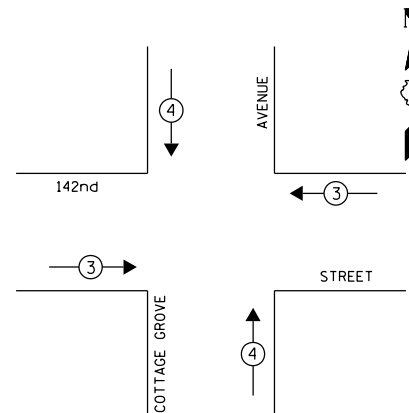
EXISTING CONTROLLER SEQUENCE



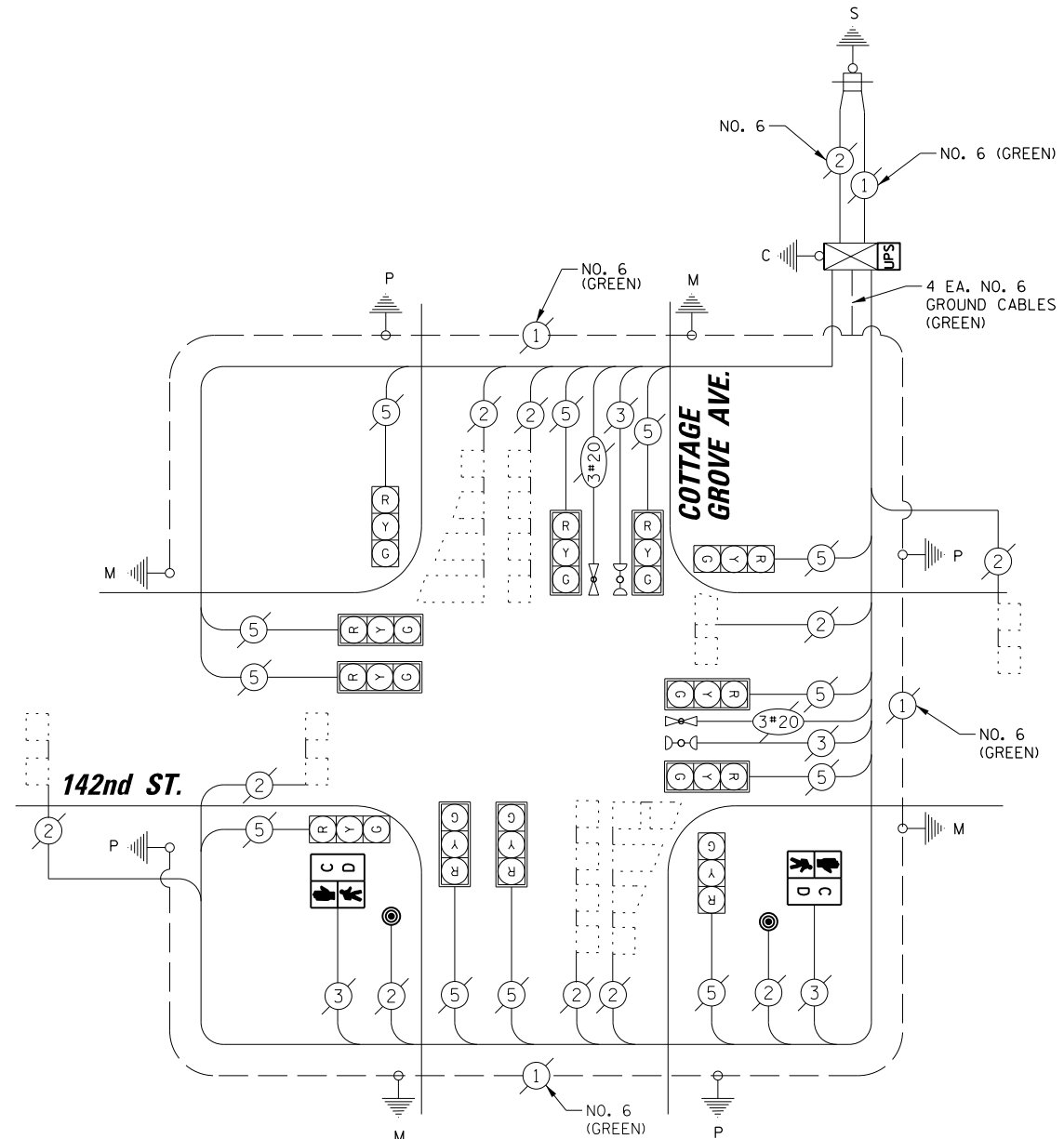
LEGEND
 * DUAL ENTRY PHASE
 * SINGLE ENTRY PHASE
 OL OVERLAP
 * PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



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



CABLE PLAN

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE		% OPERATION	
SIGNAL (RED)	12	INCAND.	17	0.50	102.00
(YELLOW)	12		25	0.25	75.00
(GREEN)	12		15	0.25	45.00
ARROW	-		12	0.10	-
PED. SIGNAL	2		25	1.00	50.00
CONTROLLER	1		100	1.00	100.00
ILLUMINATED SIGN	-		25	0.05	-
VIDEO SYSTEM	-		150	1.00	-
LUMINAIRE	-	250		0.50	-
BATTERY BACKUP	1	25		1.00	25.00
FLASHER	-			0.50	-
ENERGY COSTS TO:				TOTAL =	397.00

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, 1-FACE
- 2 EACH PEDESTRIAN PUSH-BUTTON

SCHEDULE OF QUANTITIES

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

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196
 ENERGY SUPPLY: CONTACT: BRAD SHINABARGAR
 PHONE: (708)-235-2692
 COMPANY: COMED

FILE NAME =	USER NAME = fpaceione	DESIGNED - EAJ	REVISED -
N:\dot\130116\Work Order 13019 - South Cook County LED Traffic\CAB_142nd-Cottage Grove	DRAWN - FPB / FCP	CHECKED - GMZ	REVISED -
	PLOT SCALE = 48"	DATE - SEPT. , 2013	REVISED -

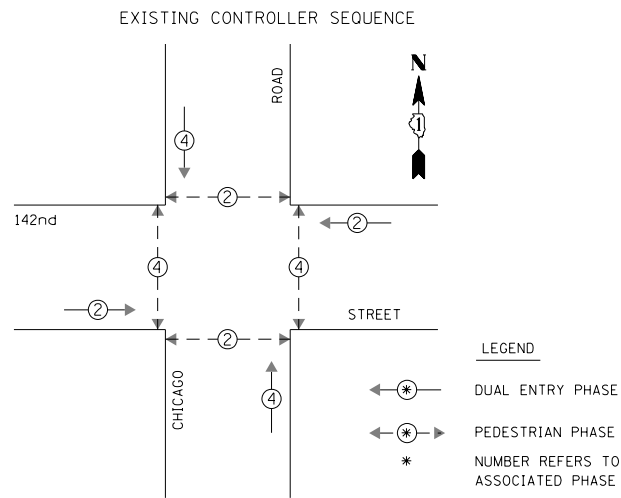
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
142nd STREET AT COTTAGE GROVE AVENUE
 SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VARIOUS	COOK	87	34
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60X24	

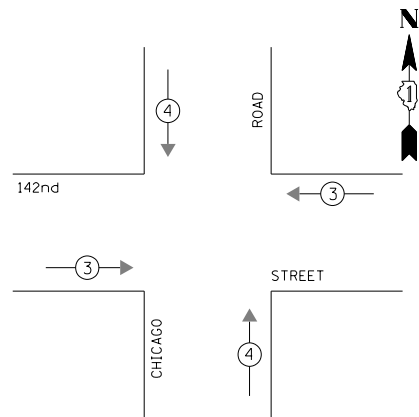
TS # 12105
DOLTON

DATE: _____ BY: _____
 SURVEYED: _____ ALIGNED: _____ CHECKED: _____
 PLAN: _____ RT. OF WAY CHECKED: _____
 NOTE BOOK: _____ NO. _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (617) 823-5500
 DATE: _____ BY: _____
 SURVEYED: _____ GRADES CHECKED: _____
 PROFILE: _____ STRUCTURE NOTATIONS: _____
 NOTE BOOK: _____ NO. _____



EXISTING PHASE DESIGNATION DIAGRAM

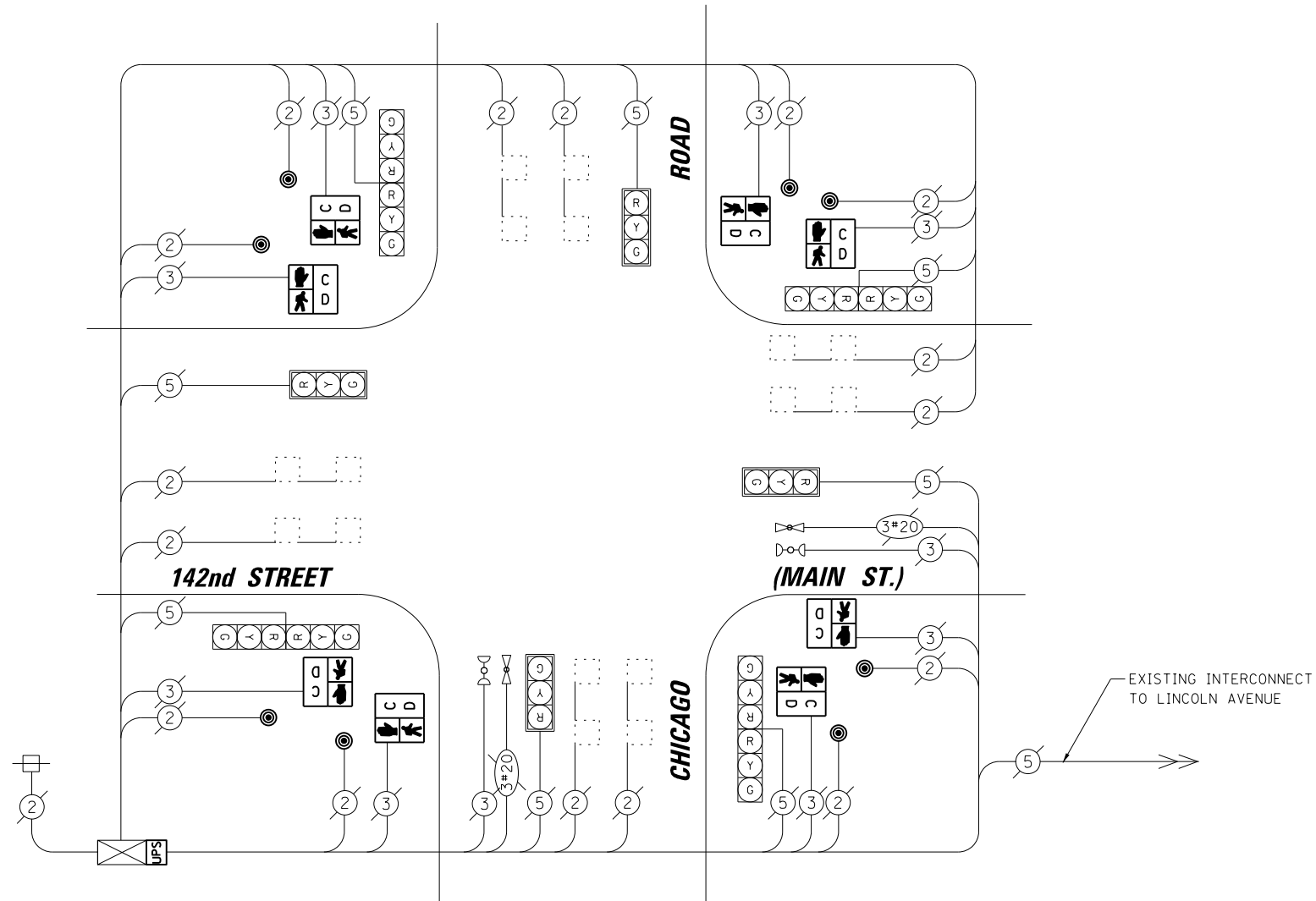
EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	12		17	0.50	102.00
(YELLOW)	12		25	0.25	75.00
(GREEN)	12		15	0.25	45.00
ARROW	-		12	0.10	-
PED. SIGNAL	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUMINATED SIGN	-		25	0.05	-
VIDEO SYSTEM	-		150	1.00	-
LUMINAIRE	-	250		0.50	-
BATTERY BACKUP	1	25		1.00	25.00
FLASHER				0.50	-
ENERGY COSTS TO:					TOTAL = 547.00

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY: CONTACT: BRAD SHINABARGAR
 PHONE: (708)-235-2692
 COMPANY: COMED



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, 1-FACE
- 8 EACH PEDESTRIAN PUSH-BUTTON

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
PEDESTRIAN PUSH-BUTTON	EACH	8
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

FILE NAME = N:\dot\130116\Work Order 13019 - South Cook County LED\Traffic\CAB_142nd-Chicago.shx	USER NAME = fpaceone	DESIGNED - EAJ	REVISED -
		DRAWN - FPB / FCP	REVISED -
		CHECKED - GMZ	REVISED -
		DATE - SEPT. , 2013	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
142nd STREET (MAIN ST.) AT CHICAGO ROAD

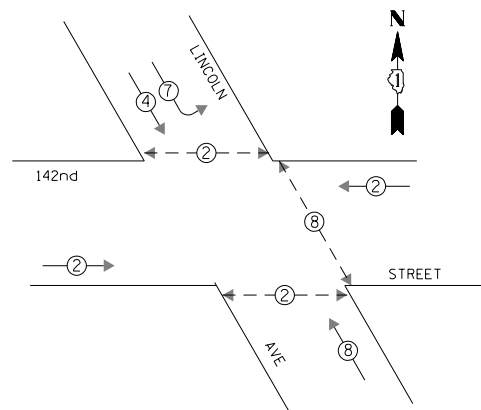
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VARIOUS	COOK	87	35
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60X24	

TS # 4050
DOLTON

DATE: _____ BY: _____
 SURVEYED: _____ ALIGNED: _____
 PLAN: _____ CHECKED: _____
 NOTE BOOK: _____ RT. OF WAY CHECKED: _____
 NO.: _____ ADD. FILE NAME: _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 3575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (617) 823-5500
 DATE: _____ BY: _____
 SURVEYED: _____ GRADES CHECKED: _____
 PROFILE: _____ STRUCTURE NOTATIONS OKWD
 NOTE BOOK: _____

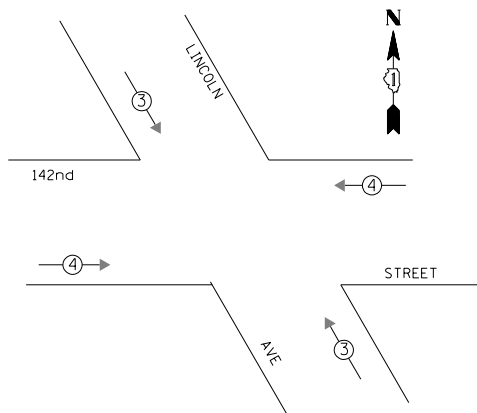
EXISTING CONTROLLER SEQUENCE



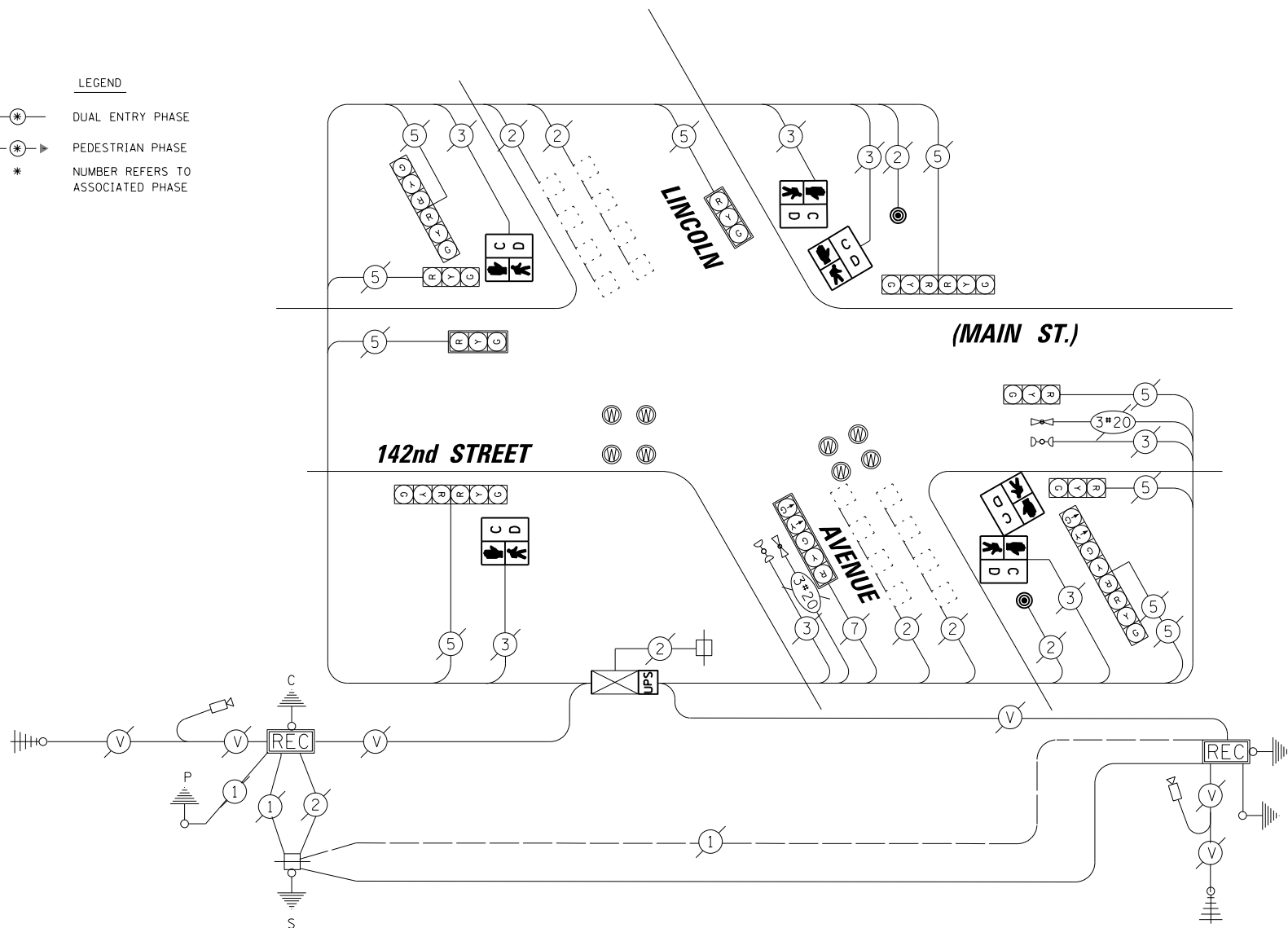
LEGEND
 * DUAL ENTRY PHASE
 * PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

EXISTING PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



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



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.

- 1 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 4 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN PUSH-BUTTON

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	14		17	0.50	119.00
(YELLOW)	14		25	0.25	87.50
(GREEN)	14		15	0.25	52.50
ARROW	4		12	0.10	4.80
PED. SIGNAL	6		25	1.00	150.00
CONTROLLER	1		100	1.00	100.00
ILLUMINATED SIGN	-		25	0.05	-
VIDEO SYSTEM	-		150	1.00	-
LUMINAIRE	-	250		0.50	-
BATTERY BACKUP	1	25		1.00	25.0
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 538.80

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY: CONTACT: BRAD SHINABARGAR
 PHONE: (708)-235-2692
 COMPANY: COMED

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

FILE NAME = N:\idot\130116\Work Order 13019 - South Cook County LED Traffic\CAB_142nd-Lincoln.sht	USER NAME = fpaceone	DESIGNED - EAJ	REVISED -
		DRAWN - FPB / FCP	REVISED -
	PLLOT SCALE = 48"	CHECKED - GMZ	REVISED -
	PLLOT DATE = 10/7/2013	DATE - SEPT. , 2013	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
142nd STREET (MAIN ST.) AT LINCOLN AVENUE

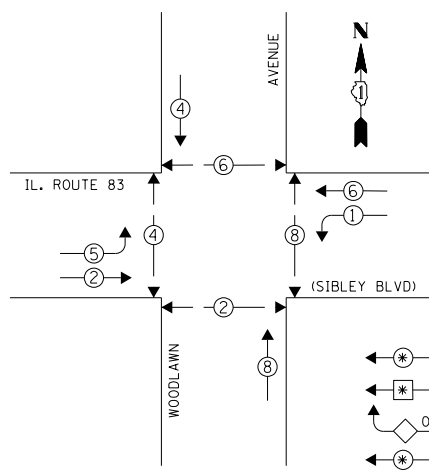
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VARIOUS	COOK	87	36
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60X24	

TS # 4060
DOLTON

DATE: _____ BY: _____
 SURVEYED: _____ ALIGNED: _____ CHECKED: _____
 PLAN: _____ NOTE BOOK: _____ RT. OF WAY CHECKED: _____
 NO. _____ NO. _____ NO. _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (630) 923-5500
 PROFILE: _____ SURVEYED: _____ GRADES CHECKED: _____
 NOTE BOOK: _____ ELEM. NOTED: _____ STRUCTURE: _____ NOTATIONS: _____
 NO. _____ NO. _____ NO. _____

EXISTING CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

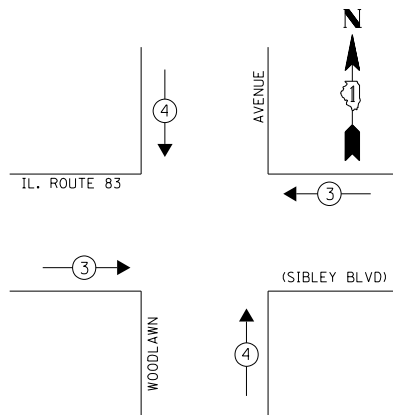
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

3 EACH STEEL POST

LEGEND

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

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	12	17	0.50	102.00	
(YELLOW)	12	25	0.25	75.00	
(GREEN)	12	15	0.25	45.00	
ARROW	8	12	0.10	9.60	
PED. SIGNAL	8	25	1.00	200.00	
CONTROLLER	1	100	1.00	100.00	
ILLUMINATED SIGN	-	25	0.05	-	
VIDEO SYSTEM	-	150	1.00	-	
LUMINAIRE	-	250	0.50	-	
BATTERY BACKUP	1	25	1.00	25.0	
FLASHER	-	-	0.50	-	
ENERGY COSTS TO:				TOTAL =	556.60

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY: CONTACT: **BRAD SHINABARGAR**
 PHONE: (708)-235-2692
 COMPANY: **COMED**

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

FILE NAME =	USER NAME = fpaceone	DESIGNED - EAJ	REVISED -
N:\dot\130116\Work Order 13019 - South Cook County LED Traffic\CAB_IL83-Woodlawn.sh		DRAWN - FPB / FCP	REVISED -
		CHECKED - GMZ	REVISED -
		DATE - SEPT. , 2013	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

NOTES

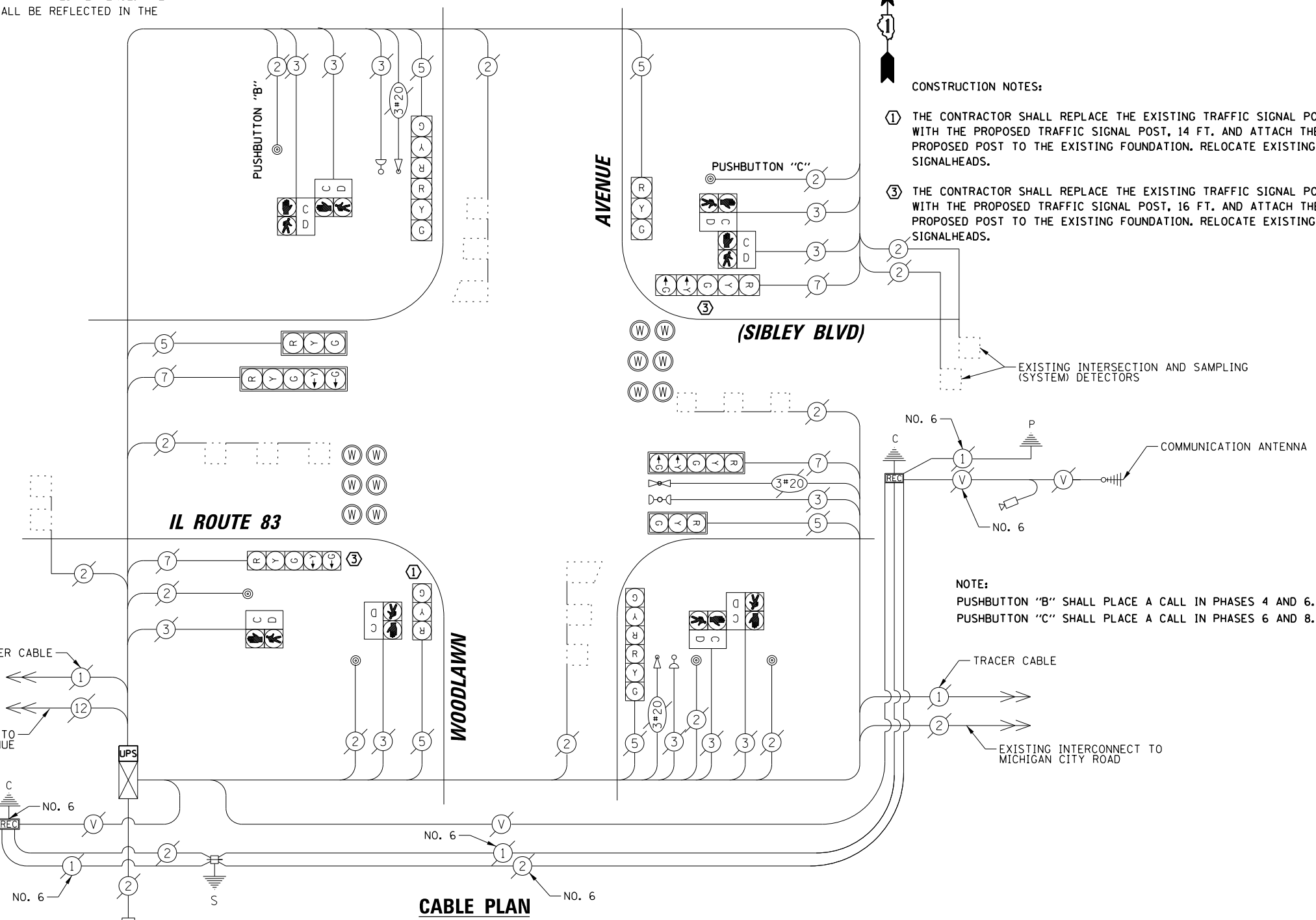
- 1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- 2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION, THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT REUSABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- 3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE 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 UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL ROUTE 83 (SIBLEY BLVD) AT WOODLAWN AVENUE

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VARIOUS	COOK	87	37
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 60X24	

TS # 11460
DOLTON



CABLE PLAN

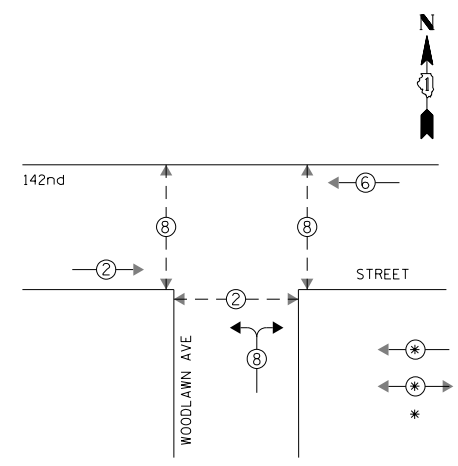
CONSTRUCTION NOTES:

- 1) THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 14 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION. RELOCATE EXISTING SIGNALHEADS.
- 3) THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 16 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION. RELOCATE EXISTING SIGNALHEADS.

NOTE:
 PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.
 PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.

BY: _____ DATE: _____
 SURVEYED: _____
 PLAN: _____
 NOTE BOOK: _____
 NO.: _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (617) 823-5930
 SURVEYED: _____
 GRADES CHECKED: _____
 ELEM. NOTED: _____
 STRUCTURE NOTATIONS OK'D: _____

EXISTING CONTROLLER SEQUENCE

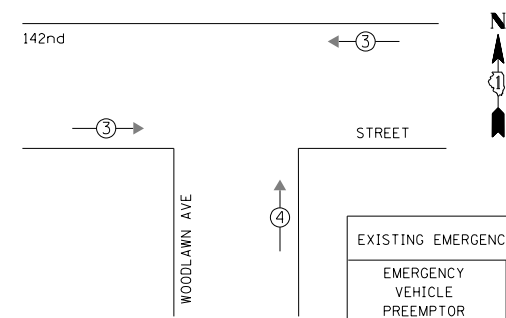


LEGEND

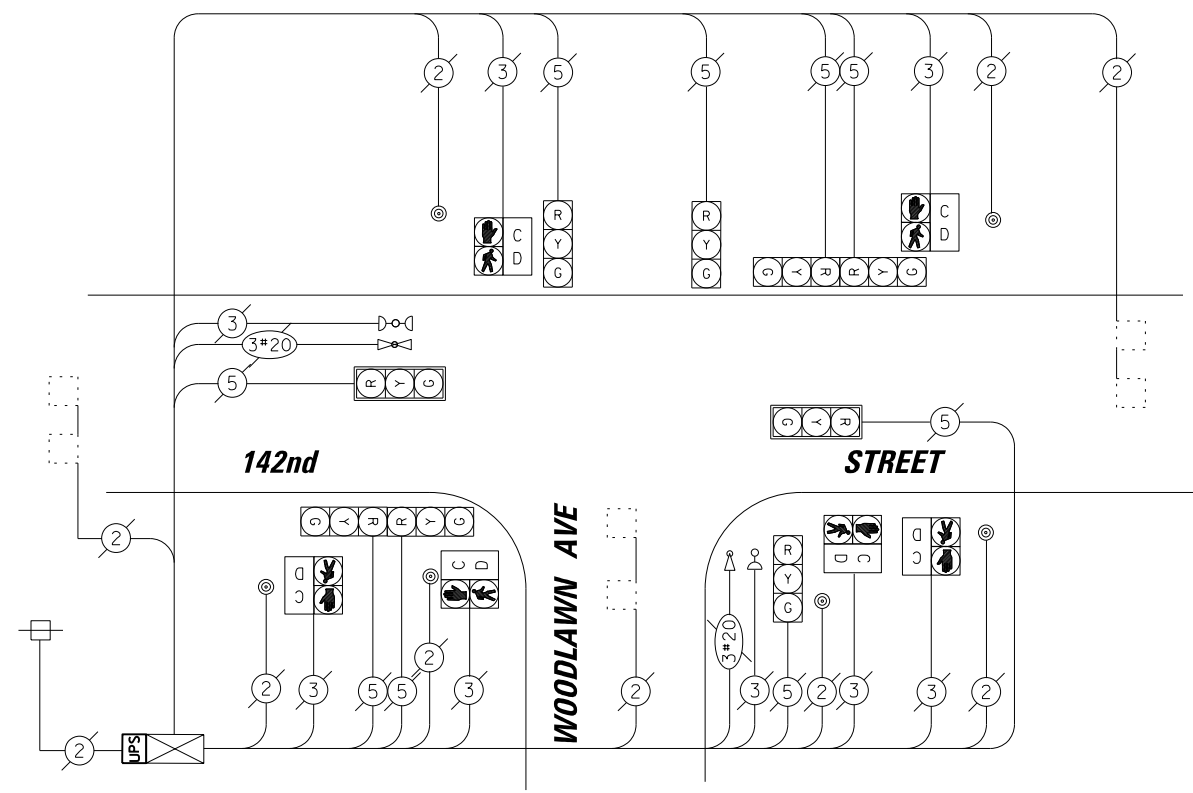
- ← * → DUAL ENTRY PHASE
- ← * PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE

EXISTING PHASE DESIGNATION DIAGRAM

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	←	↑



CABLE PLAN

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	9		17	0.50	76.50
(YELLOW)	9		25	0.25	56.25
(GREEN)	9		15	0.25	33.75
ARROW	-		12	0.10	-
PED. SIGNAL	6		25	1.00	150.00
CONTROLLER	1		100	1.00	100.00
ILLUMINATED SIGN	-		25	0.05	-
VIDEO SYSTEM	-		150	1.00	-
LUMINAIRE	-	250		0.50	-
BATTERY BACKUP	1	25		1.00	25.0
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	441.50

VILLAGE OF DOLTON
 14014 PARK AVENUE
 DOLTON, IL 60419
 ENERGY SUPPLY: CONTACT: BRAD SHINABARGAR
 PHONE: (708)-235-2692
 COMPANY: COMED

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

FILE NAME = N:\dot\130116\Work Order 13019 - South Cook County LED\Traffic\CAB_142nd-Woodlawn	USER NAME = fpace	DESIGNED - EAJ	REVISED -
		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 48"	CHECKED - GMZ	REVISED -
	PLOT DATE = 10/7/2013	DATE - SEPT. , 2013	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
142nd STREET AT WOODLAWN AVENUE**

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VARIOUS	COOK	87	38
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	

CONTRACT NO. 60X24

TS # 11365
DOLTON

BY: _____ DATE: _____
 SURVEYED _____
 ALIGNED _____
 RT. OF WAY CHECKED _____
 ADD. FILE NAME _____

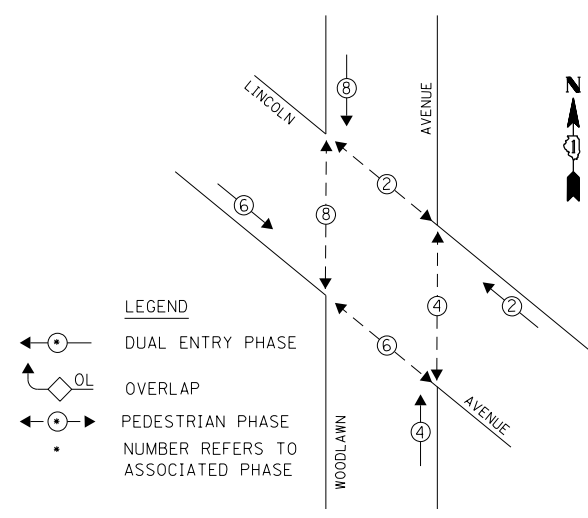
PLAN NO. _____

ENGINEERING LTD.
 3575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (617) 923-5500

BY: _____ DATE: _____
 SURVEYED _____
 GRADES CHECKED _____
 ELEM. NOTED _____
 STRUCTURE NOTATIONS OKWD

PROFILE NO. _____

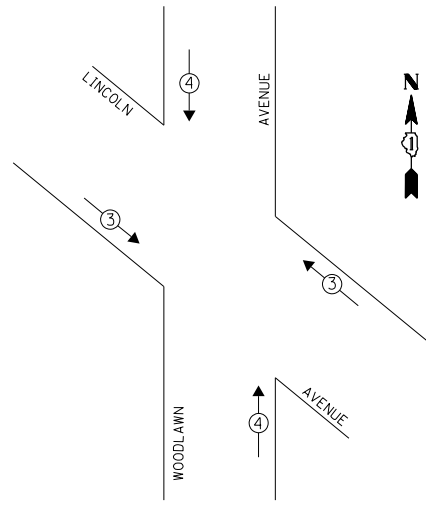
EXISTING CONTROLLER SEQUENCE



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

PHASE DESIGNATION DIAGRAM

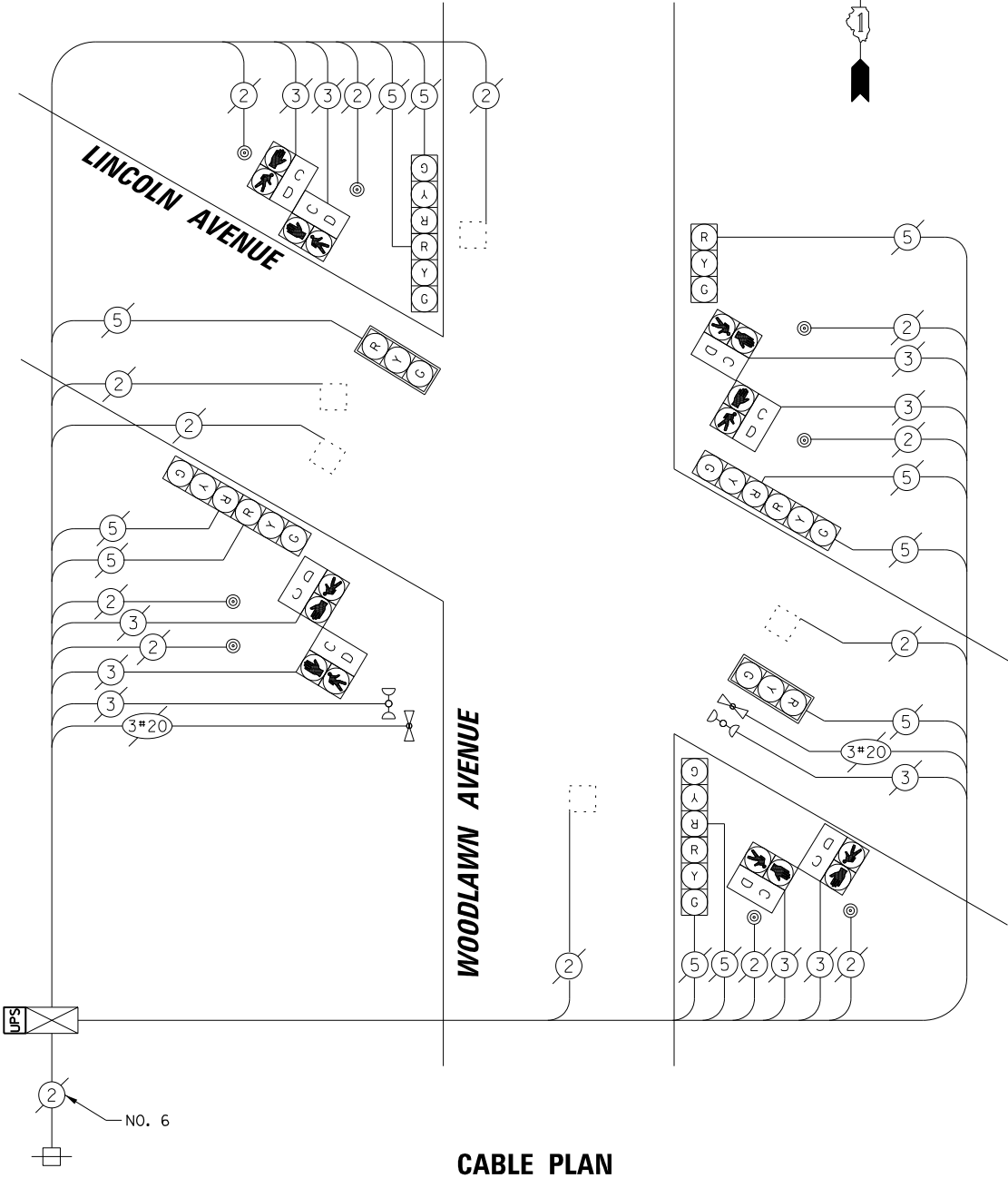
EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	11		17	0.50	93.50
(YELLOW)	11		25	0.25	68.75
(GREEN)	11		15	0.25	41.25
ARROW	-		12	0.10	-
PED. SIGNAL	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUMINATED SIGN	-		25	0.05	-
VIDEO SYSTEM	-		150	1.00	-
LUMINAIRE	-	250		0.50	-
BATTERY BACKUP	1	25		1.00	25.0
FLASHER				0.50	-
ENERGY COSTS TO:				TOTAL =	528.50

VILLAGE OF DOLTON
 14014 PARK AVENUE
 DOLTON, IL 60419
 ENERGY SUPPLY: CONTACT: BRAD SHINABARGAR
 PHONE: (708)-235-2692
 COMPANY: COMED



CABLE PLAN

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

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

FILE NAME = N:\dot\130116\Work Order 13019 - South Cook County LED\Traffic\CAB\Lincoln-Woodlawn	USER NAME = fpaceone	DESIGNED - EAJ	REVISED -
		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 48"	CHECKED - GMZ	REVISED -
	PLOT DATE = 10/7/2013	DATE - SEPT. , 2013	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE LINCOLN AVENUE AT WOODLAWN AVENUE			
SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	

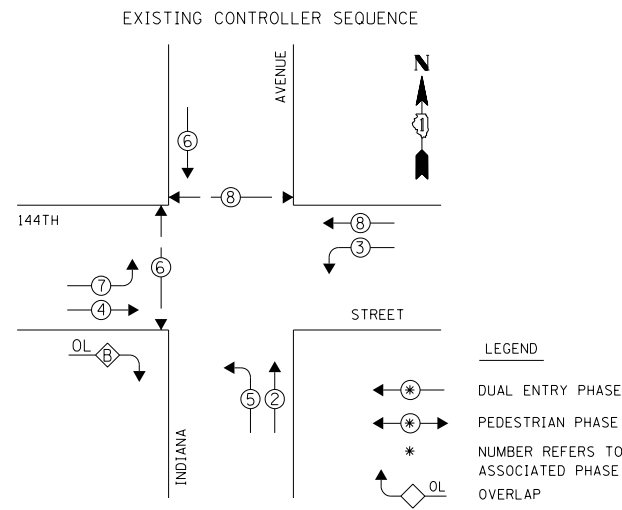
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VARIOUS	COOK	87	39
CONTRACT NO. 60X24			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

TS# 11370
 DOLTON

DATE: _____ BY: _____
 SURVEYED: _____ GRADES CHECKED: _____
 ALIGNED: _____ RT. OF WAY CHECKED: _____
 NOTE BOOK NO. _____
 PROJECT: _____

CHRISTOPHER B. BURKE ENGINEERING LTD.
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (617) 823-5930

DATE: _____ BY: _____
 SURVEYED: _____ GRADES CHECKED: _____
 ALIGNED: _____ RT. OF WAY CHECKED: _____
 NOTE BOOK NO. _____
 PROJECT: _____

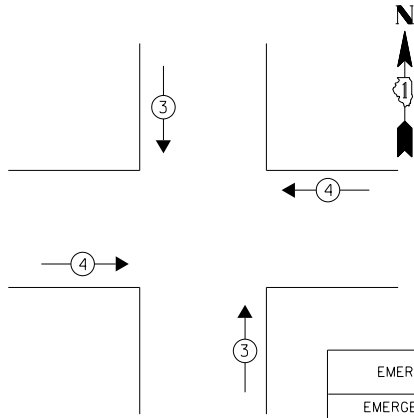


PHASE DESIGNATION DIAGRAM

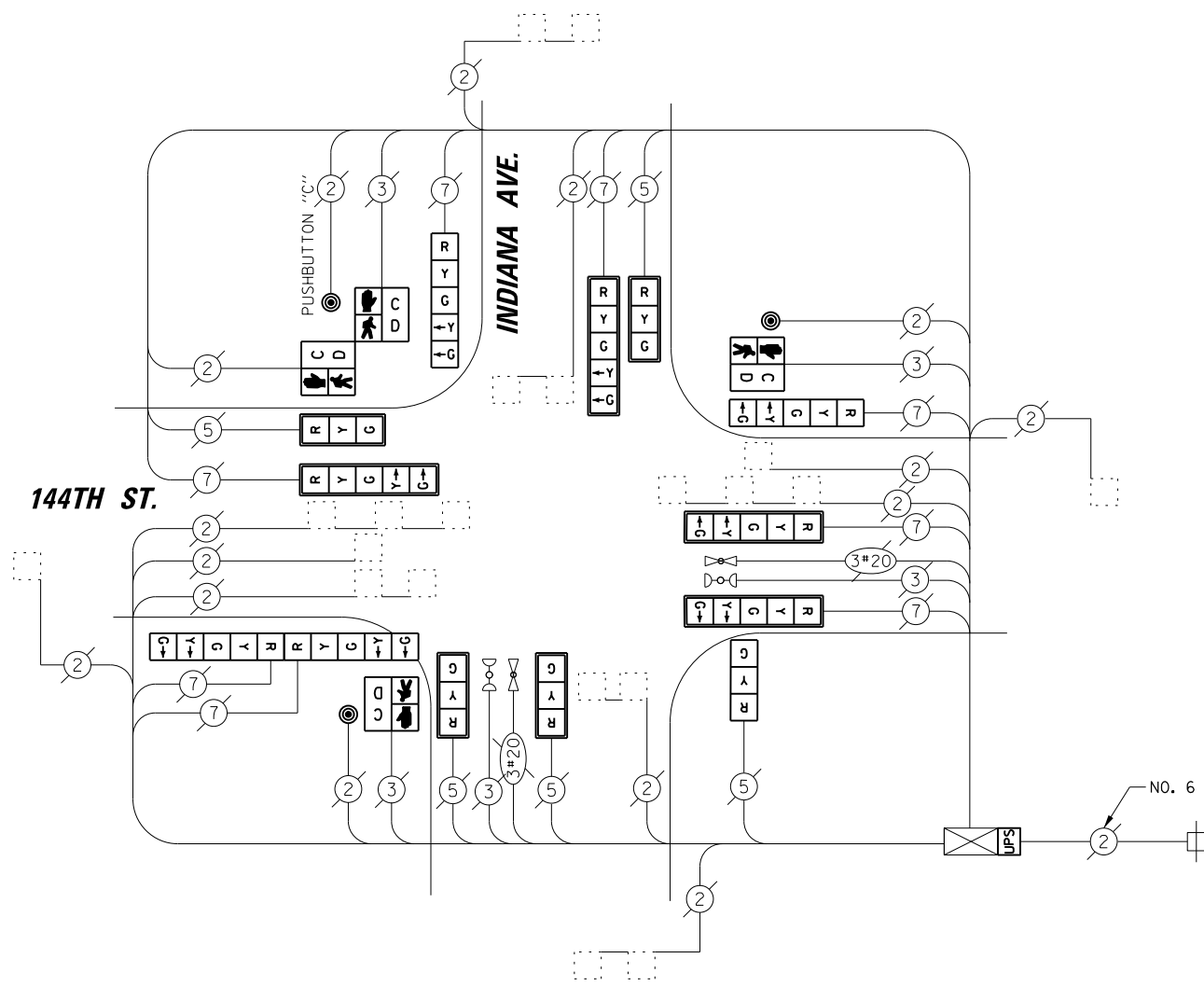
RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	= 4	+ 5

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



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



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.

- 1 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE.
- 3 EACH PEDESTRIAN PUSH-BUTTON

NOTE:
 PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	13		17	0.50	110.50
(YELLOW)	13		25	0.25	81.25
(GREEN)	13		15	0.25	48.75
ARROW	16		12	0.10	19.20
PED. SIGNAL	4		25	1.00	100.00
CONTROLLER	1		100	1.00	100.00
ILLUMINATED SIGN	-		25	0.05	-
VIDEO SYSTEM	-		150	1.00	-
LUMINAIRE	-	250		0.50	-
BATTERY BACKUP	1	25		1.00	25.0
FLASHER				0.50	-
ENERGY COSTS TO:				TOTAL =	484.45

VILLAGE OF DOLTON
 14014 PARK AVENUE
 DOLTON, IL 60419
 ENERGY SUPPLY: CONTACT: BRAD SHINABARGAR
 PHONE: (708)-235-2692
 COMPANY: COMED

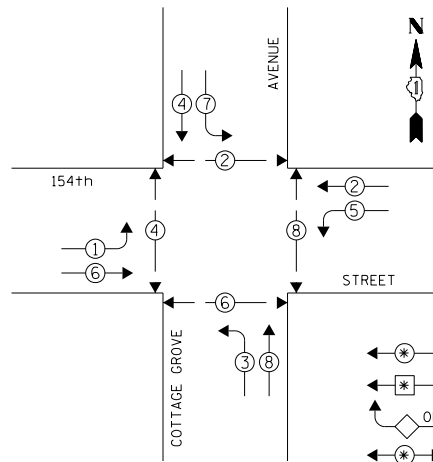
SCHEDULE OF QUANTITIES		
ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH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

PROFILE SURVEYED _____ GRADES CHECKED _____
 NOTE BOOK NO. _____ ELEM. NOTED _____
 STRUCTURE NOTATIONS OKWD

BY: _____ DATE: _____
 SURVEYED _____
 PLAN NOTE BOOK NO. _____
 ENGINEERING LTD.

CHRISTOPHER B. BURKE
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (647) 923-5500

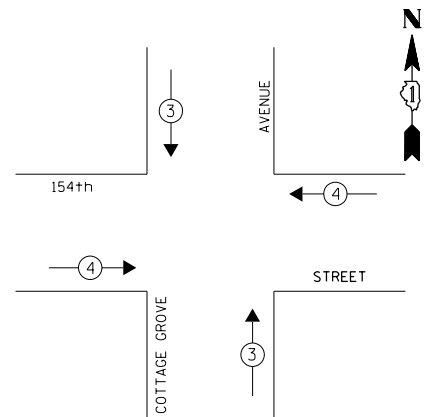
EXISTING CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

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

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



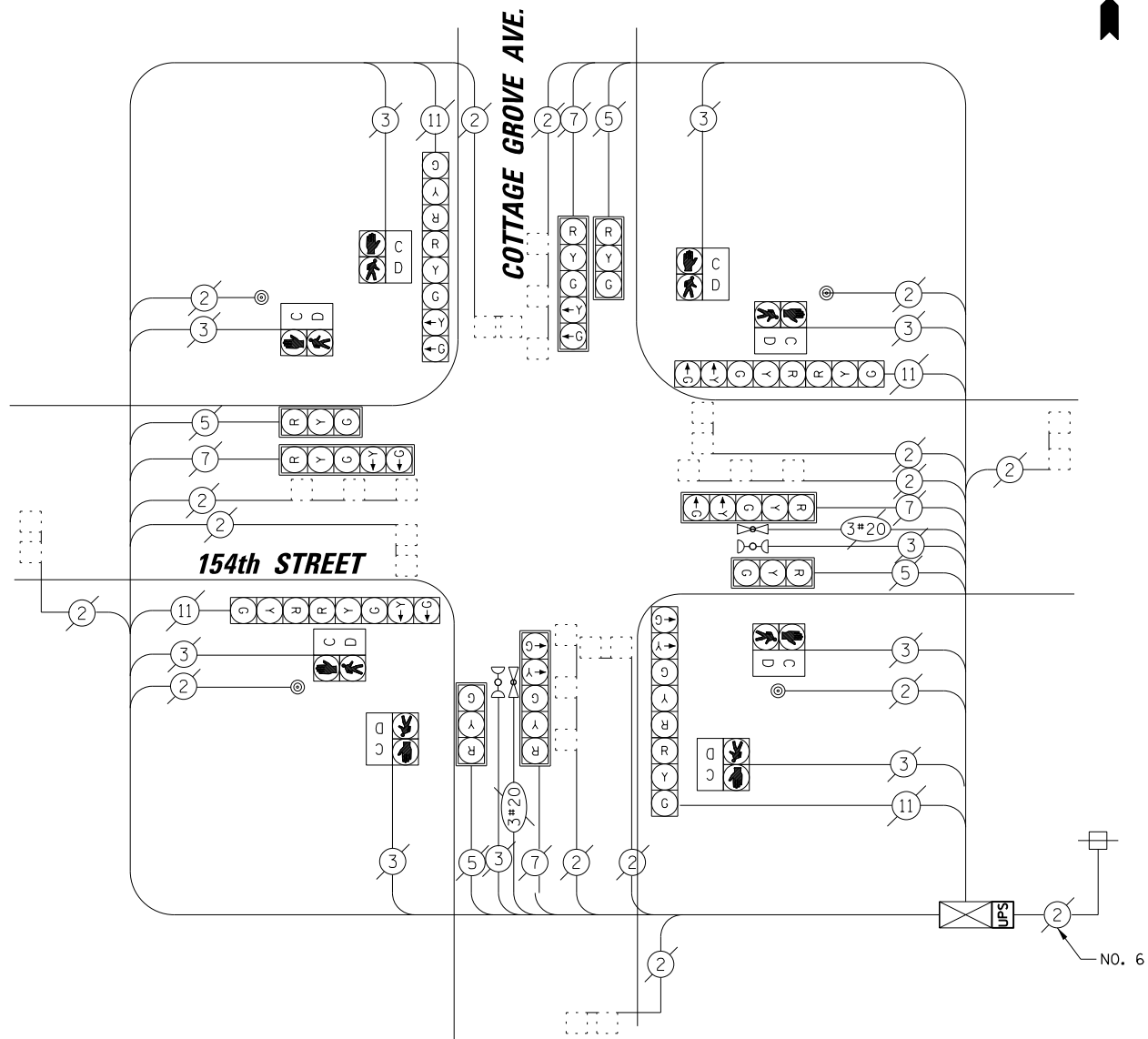
EXISTING EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	
MOVEMENT	↓ ↑	← →	

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE		% OPERATION	
		INCAND.	LED		
SIGNAL (RED)	16		17	0.50	136.00
(YELLOW)	16		25	0.25	100.00
(GREEN)	16		15	0.25	60.00
ARROW	16		12	0.10	19.20
PED. SIGNAL	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUMINATED SIGN	-		25	0.05	-
VIDEO SYSTEM	-		150	1.00	-
LUMINAIRE	-	250		0.50	-
BATTERY BACKUP	1	25		1.00	25.0
FLASHER	-			0.50	-
ENERGY COSTS TO:				TOTAL =	640.20

VILLAGE OF DOLTON

14014 PARK AVENUE
DOLTON, IL 60419

ENERGY SUPPLY: CONTACT: BRAD SHINABARGAR
PHONE: (708)-235-2692
COMPANY: COMED



CABLE PLAN

SCHEDULE OF QUANTITIES

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

FILE NAME =	USER NAME = fpaceione	DESIGNED - EAJ	REVISED -
N:\dot\130116\Work Order 13019 - South Cook County LED\Traffic\CAB\CottageGrove-154th		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 48"	CHECKED - GMZ	REVISED -
	PLOT DATE = 10/7/2013	DATE - SEPT. , 2013	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
COTTAGE GROVE AVENUE AT 154TH STREET

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

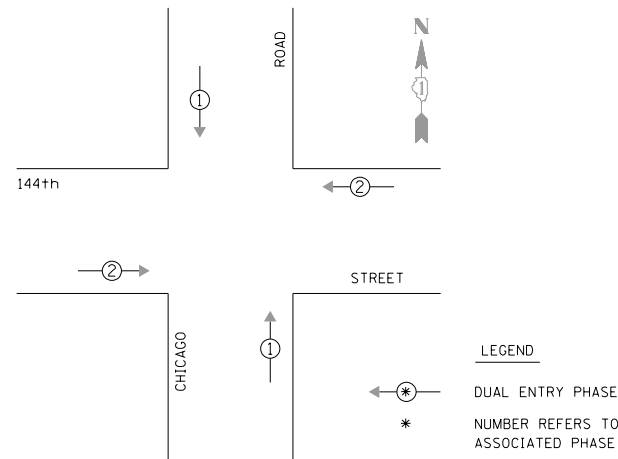
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VARIOUS	COOK	87	41
CONTRACT NO. 60X24				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

TS # 11480
DOLTON

PROFILE SURVEYED _____ DATE _____
 GRADES CHECKED _____
 ELEM. NOTED _____
 STRUCTURE NOTATIONS OKWD
 BY: _____
 PLAN SURVEYED _____ DATE _____
 NOTE BOOK _____
 NO. _____
 SURVEYED _____
 ALIGNMENT CHECKED _____
 RT. OF WAY CHECKED _____
 CADD FILE NAME _____

CHRISTOPHER B. BURKE
 ENGINEERING LTD.
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (617) 823-5500

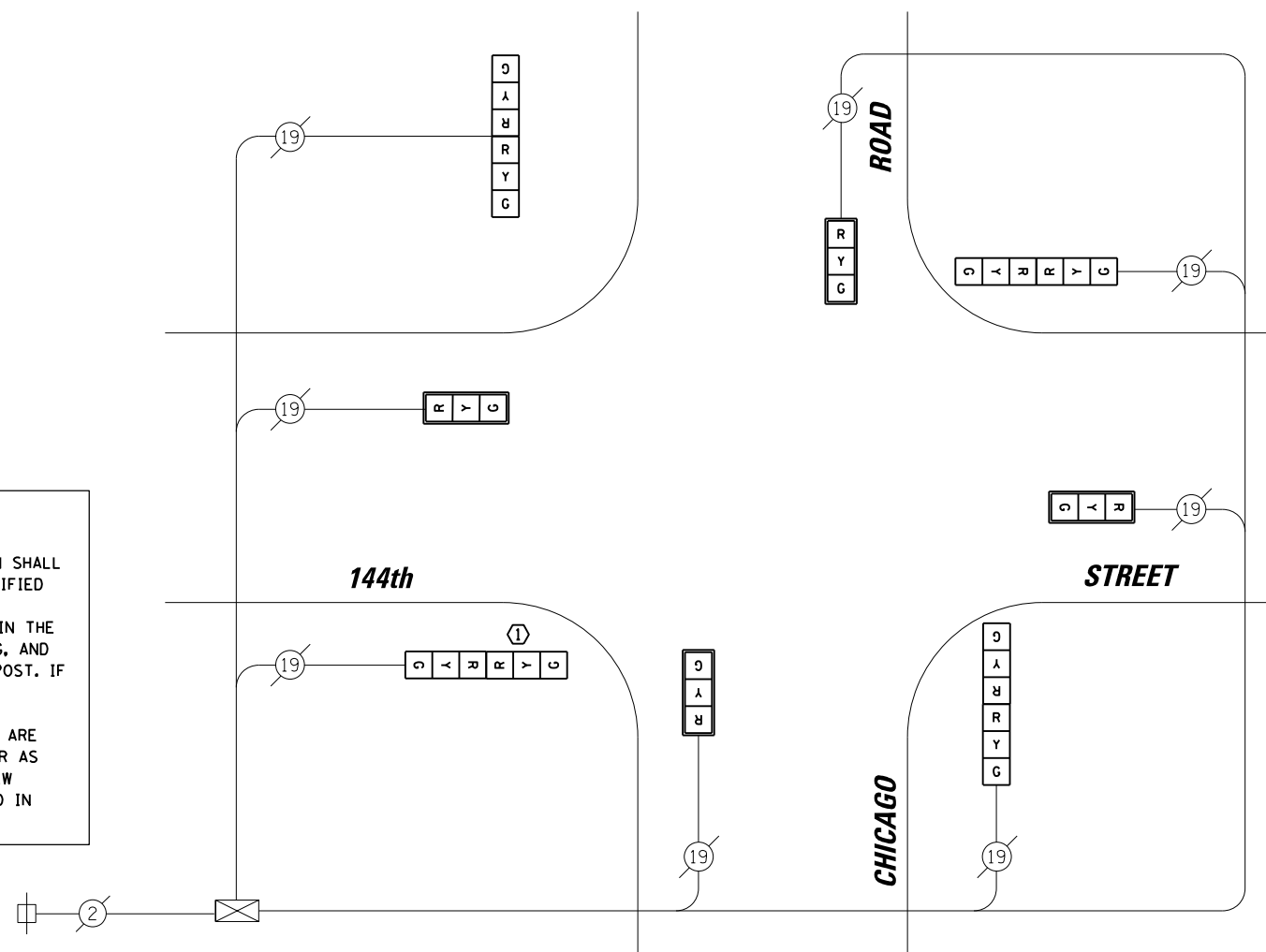
EXISTING CONTROLLER SEQUENCE



CONSTRUCTION NOTE:
 ① THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 14 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

NOTES

- 1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- 2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION, THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT REUSABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- 3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE 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 UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.



I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAND.	LED	% OPERATION	
SIGNAL (RED)	12		17	0.50	102.00
(YELLOW)	12		25	0.25	75.00
(GREEN)	12		15	0.25	45.00
ARROW	-		-	0.10	-
PED. SIGNAL	-		25	1.00	-
CONTROLLER	1		100	1.00	100.00
ILLUMINATED SIGN	-		25	0.05	-
VIDEO SYSTEM	-		150	1.00	-
LUMINAIRE	-	250		0.50	-
BATTERY BACKUP	-	25		1.00	-
FLASHER	-			0.50	-
ENERGY COSTS TO:					TOTAL = 322.00

VILLAGE OF DOLTON

14014 PARK AVENUE
DOLTON, IL 60419

ENERGY SUPPLY: CONTACT: BRAD SHINABARGAR
 PHONE: (708)-235-2692
 COMPANY: COMED

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 HEADS, 2-FACE, 3-SECTION |
| 4 | EACH | SIGNAL HEADS, 1-FACE, 3-SECTION |
| 1 | EACH | STEEL POST |

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	4
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1

TS # 11315
DOLTON

FILE NAME =	USER NAME = fpaceone	DESIGNED - EAJ	REVISED -
N:\dot\130116\Work Order 13019 - South Cook County LED\Traffic\CAB_144th-Chicago.sht		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 48"	CHECKED - GMZ	REVISED -
	PLOT DATE = 10/7/2013	DATE - SEPT. , 2013	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
144th STREET AT CHICAGO ROAD

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VARIOUS	COOK	87	42
CONTRACT NO. 60X24			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

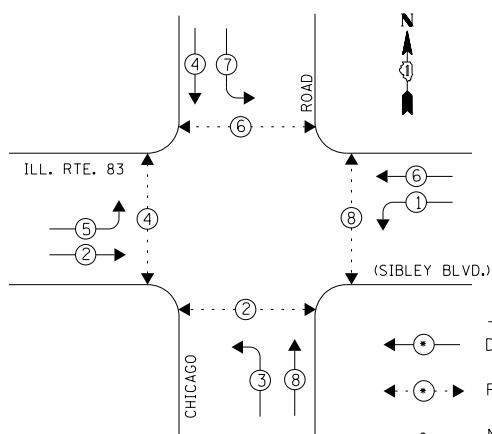
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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, 2-FACE
- 4 EACH PEDESTRIAN PUSH-BUTTON



EXISTING CONTROLLER SEQUENCE

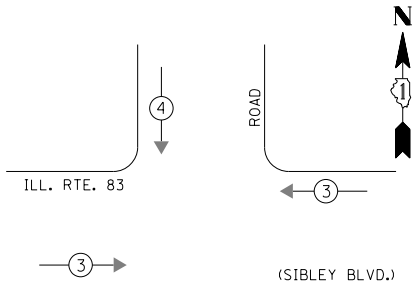


LEGEND

- ◀ ⊙ ▶ DUAL ENTRY PHASE
- ◀ ⊙ ▶ PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE

EXISTING PHASE DESIGNATION DIAGRAM
DUAL ENTRY - ALL LEGS
PROTECTED/PERMITTED LEFT TURN PHASING

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

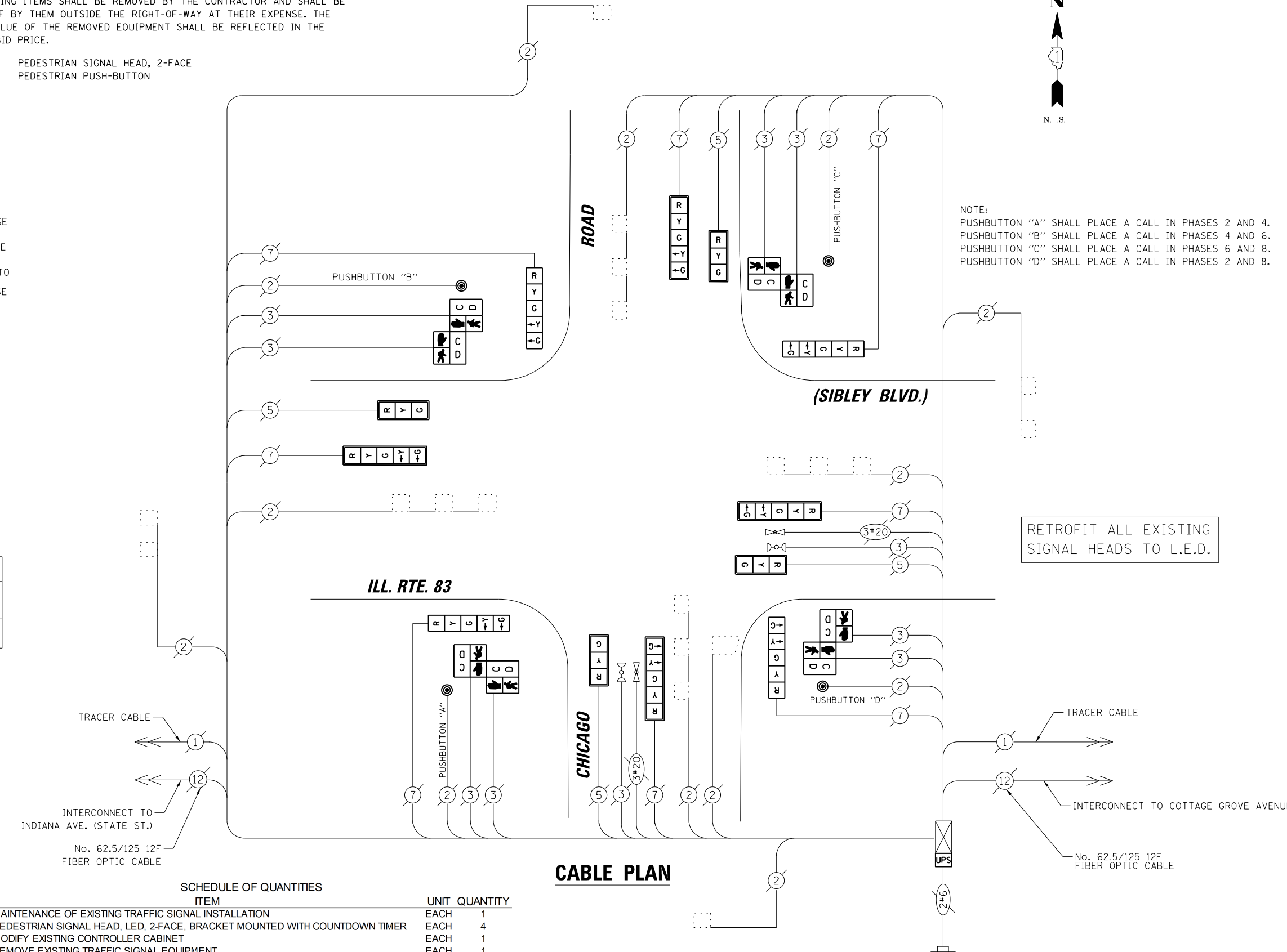
BY: [Signature] DATE: [Blank]
 SURVEYED: [Blank] ALIGNED: [Blank] CHECKED: [Blank]
 PLAN: [Blank] NOTE BOOK NO.: [Blank]
CHRISTOPHER B. BURKE ENGINEERING LTD.
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (617) 823-5500
 PROFILE: [Blank] SURVEYED: [Blank] GRADES CHECKED: [Blank] STRUCTURE NOTATIONS: [Blank]
 NOTE BOOK NO.: [Blank]

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	12	17	0.50		102.00
(YELLOW)	12	25	0.25		75.00
(GREEN)	12	15	0.25		45.00
ARROW	16	12	0.10		19.20
PED. SIGNAL	8	25	1.00		200.00
CONTROLLER	1	100	1.00		100.00
ILLUMINATED SIGN	-	25	0.05		-
VIDEO SYSTEM	-	150	1.00		-
LUMINAIRE	-	250	0.50		-
BATTERY BACKUP	1	25	1.00		25.0
FLASHER	-	-	0.50		-
ENERGY COSTS TO:					TOTAL = 566.20

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY: CONTACT: **BRAD SHINABARGAR**
 PHONE: **(708)-235-2692**
 COMPANY: **COMED**

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

CABLE PLAN



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

NOTE:
 PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.
 PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.
 PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.
 PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

FILE NAME =	USER NAME = fpaceone	DESIGNED - EAJ	REVISED -
N:\dot\130116\Work Order 13019 - South Cook County LED\Traffic\CAB_IL83-Chicago.L.sh		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 48"	CHECKED - GMZ	REVISED -
	PLOT DATE = 10/7/2013	DATE - SEPT. , 2013	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL RTE 83 (SIBLEY BLVD.) AND CHICAGO ROAD

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VARIOUS	COOK	87	43
CONTRACT NO. 60X24				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

TS# 3395
 DOLTON

BY: _____ DATE: _____
 SURVEYED _____
 ALIGNED _____
 CHECKED _____
 RT. OF WAY CHECKED _____
 ADD. FILE NAME _____

PLAN NO. _____

BY: _____ DATE: _____
 SURVEYED _____
 GRADES CHECKED _____
 ELEM. NOTED _____
 STRUCTURE NOTATIONS OKWD _____

PROFILE NO. _____

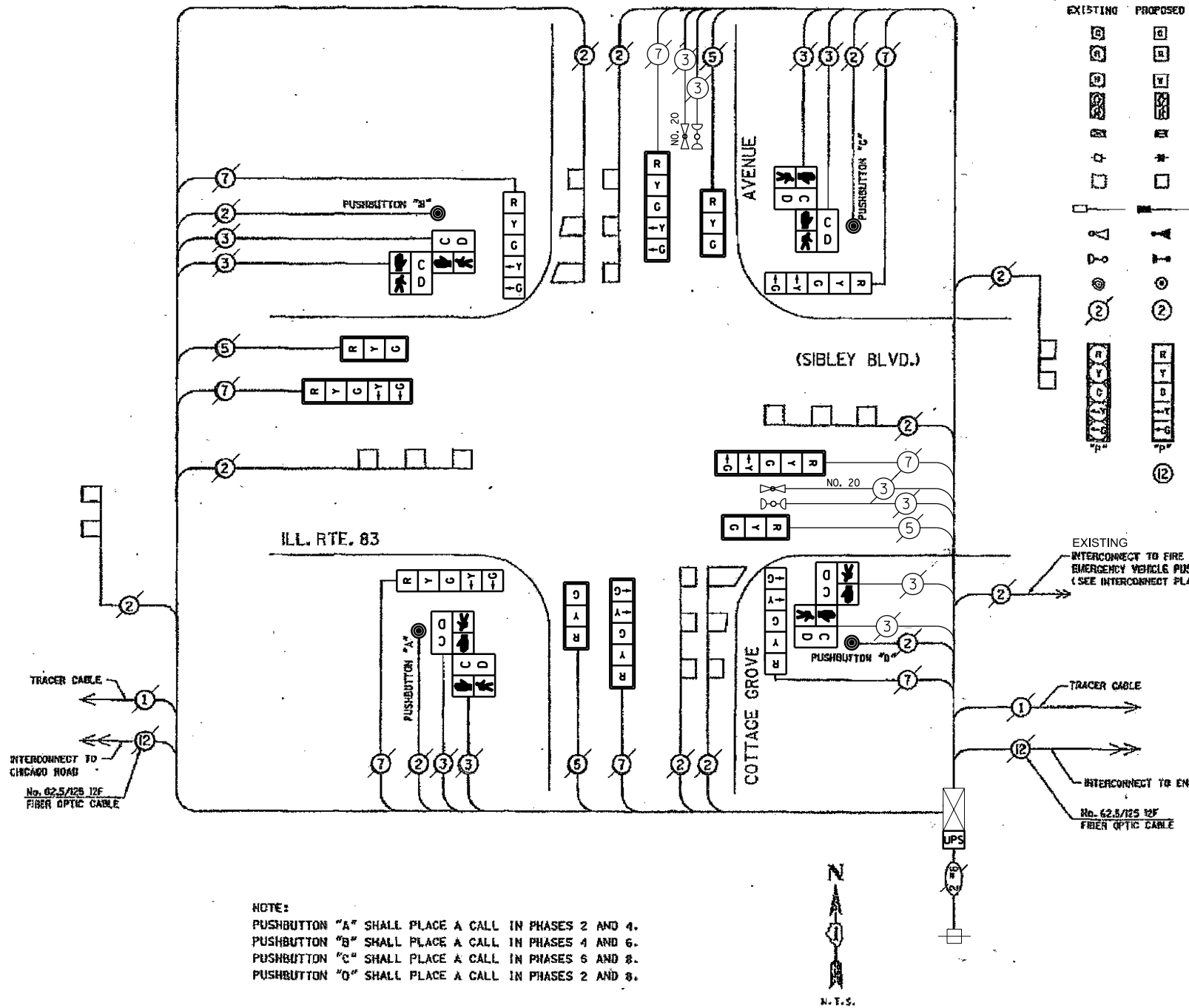
BY: _____ DATE: _____
 SURVEYED _____
 GRADES CHECKED _____
 ELEM. NOTED _____
 STRUCTURE NOTATIONS OKWD _____

CHRISTOPHER B. BURKE
 ENGINEERING LTD.
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (617) 823-5500

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.

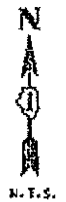
- 4 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 4 EACH PEDESTRIAN PUSH-BUTTON



CABLE PLAN LEGEND

- | | | |
|----------|----------|---|
| EXISTING | PROPOSED | |
| | | 8" (200 mm) TRAFFIC SIGNAL SECTION |
| | | 12" (300 mm) TRAFFIC SIGNAL SECTION |
| | | 12" (300 mm) PEDESTRIAN SIGNAL SECTION |
| | | 12" (300 mm) PEDESTRIAN SIGNAL SECTION |
| | | CONTROLLER CABINET |
| | | SERVICE INSTALLATION |
| | | VEHICLE DETECTOR, INDUCTION LOOP |
| | | MAGNETIC DETECTOR |
| | | EMERGENCY VEHICLE LIGHT DETECTOR |
| | | CONFIRMATION BEACON |
| | | PUSHBUTTON DETECTOR |
| | | DENOTES NUMBER OF CONDUCTORS.
ALL CABLE NO. 14 EXCEPT AS INDICATED.
ALL LOOP DETECTOR CABLE TO BE SHIELDED. |
| | | SIGNAL FACE WITH BACKPLATE.
"P" INDICATES PROGRAMMED HEAD. |
| | | No. 62.5/125 12F FIBER OPTIC CABLE |

NOTE:
 PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.
 PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.
 PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.
 PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.



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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	12		17	0.50	102.00
(YELLOW)	12		25	0.25	75.00
(GREEN)	12		15	0.25	45.00
ARROW	16		12	0.10	19.20
PED. SIGNAL	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUMINATED SIGN	-		25	0.05	-
VIDEO SYSTEM	-		150	1.00	-
LUMINAIRE	-	250		0.50	-
BATTERY BACKUP	1	25		1.00	25.0
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 566.20

SCHEDULE OF QUANTITIES

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

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY: CONTACT: BRAD SHINABARGAR
 PHONE: (708)-235-2692
 COMPANY: COMED

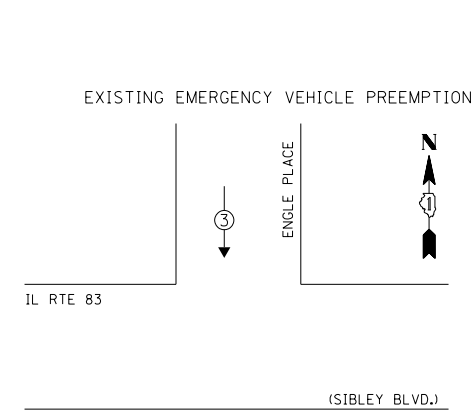
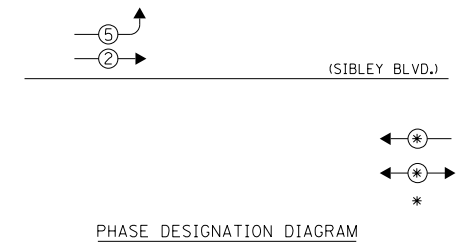
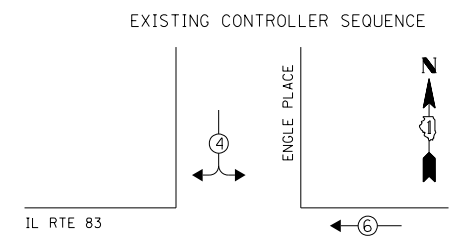
TS# 11475
DOLTON

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ER ER
NE

DATE	BY	DATE	BY
SURVEYED		SURVEYED	
GRADE CHECKED		GRADE CHECKED	
E.L.M. NOTED		E.L.M. NOTED	
STRUCTURE NOTATIONS OK'D		STRUCTURE NOTATIONS OK'D	
NOTE BOOK NO.		NOTE BOOK NO.	
PLAN NO.		PLAN NO.	
SURVEYED		SURVEYED	
ALIGNMENT CHECKED		ALIGNMENT CHECKED	
RT. OF WAY CHECKED		RT. OF WAY CHECKED	
ADD. FILE NAME		ADD. FILE NAME	

BY: **CHRISTOPHER B. BURKE**
ENGINEERING LTD.
3575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(647) 823-5500

DATE	BY
SURVEYED	
GRADE CHECKED	
E.L.M. NOTED	
STRUCTURE NOTATIONS OK'D	
NOTE BOOK NO.	
PLAN NO.	

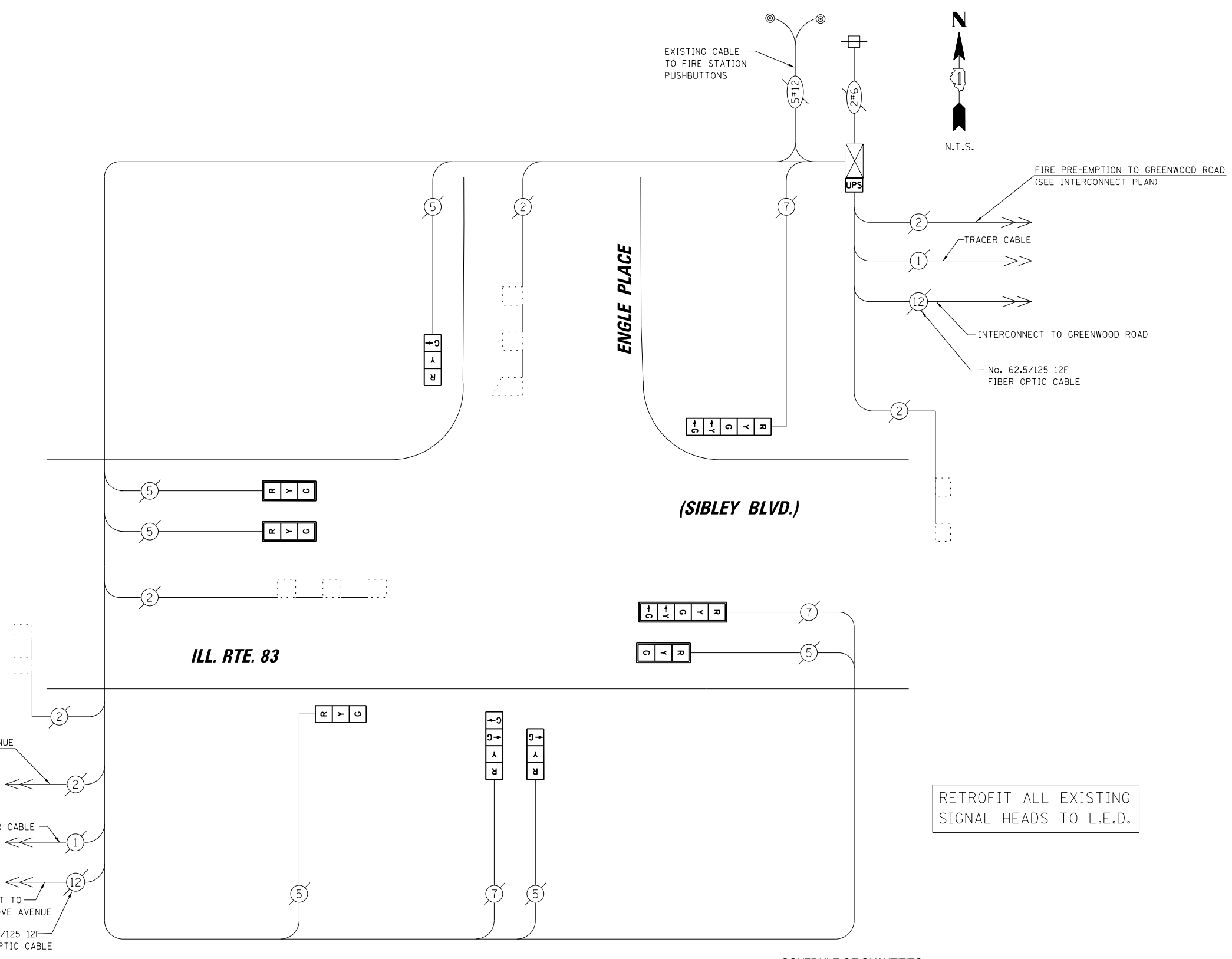


EMERGENCY VEHICLE PREEMPTOR	3
MOVEMENT	↓

LEGEND
 * DUAL ENTRY PHASE
 * PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	9		17	0.50	76.50
(YELLOW)	9		25	0.25	56.25
(GREEN)	9		15	0.25	33.75
ARROW	5		12	0.10	6.00
PED. SIGNAL	-		25	1.00	-
CONTROLLER	1		100	1.00	100.00
ILLUMINATED SIGN	-		25	0.05	-
VIDEO SYSTEM	-		150	1.00	-
LUMINAIRE	-	250		0.50	-
BATTERY BACKUP	1	25		1.00	25.0
FLASHER				0.50	-
ENERGY COSTS TO:					TOTAL = 297.50

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY: CONTACT: **BRAD SHINABARGAR**
 PHONE: (708)-235-2692
 COMPANY: **COMED**



CABLE PLAN

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

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

FILE NAME =	USER NAME = fpaceone	DESIGNED - EAJ	REVISED -
N:\dot\130116\Work Order 13019 - South Cook County LED\Traffic\CAB_IL83-Engle.Lsht		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 48"	CHECKED - GMZ	REVISED -
	PLOT DATE = 10/7/2013	DATE - SEPT. , 2013	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

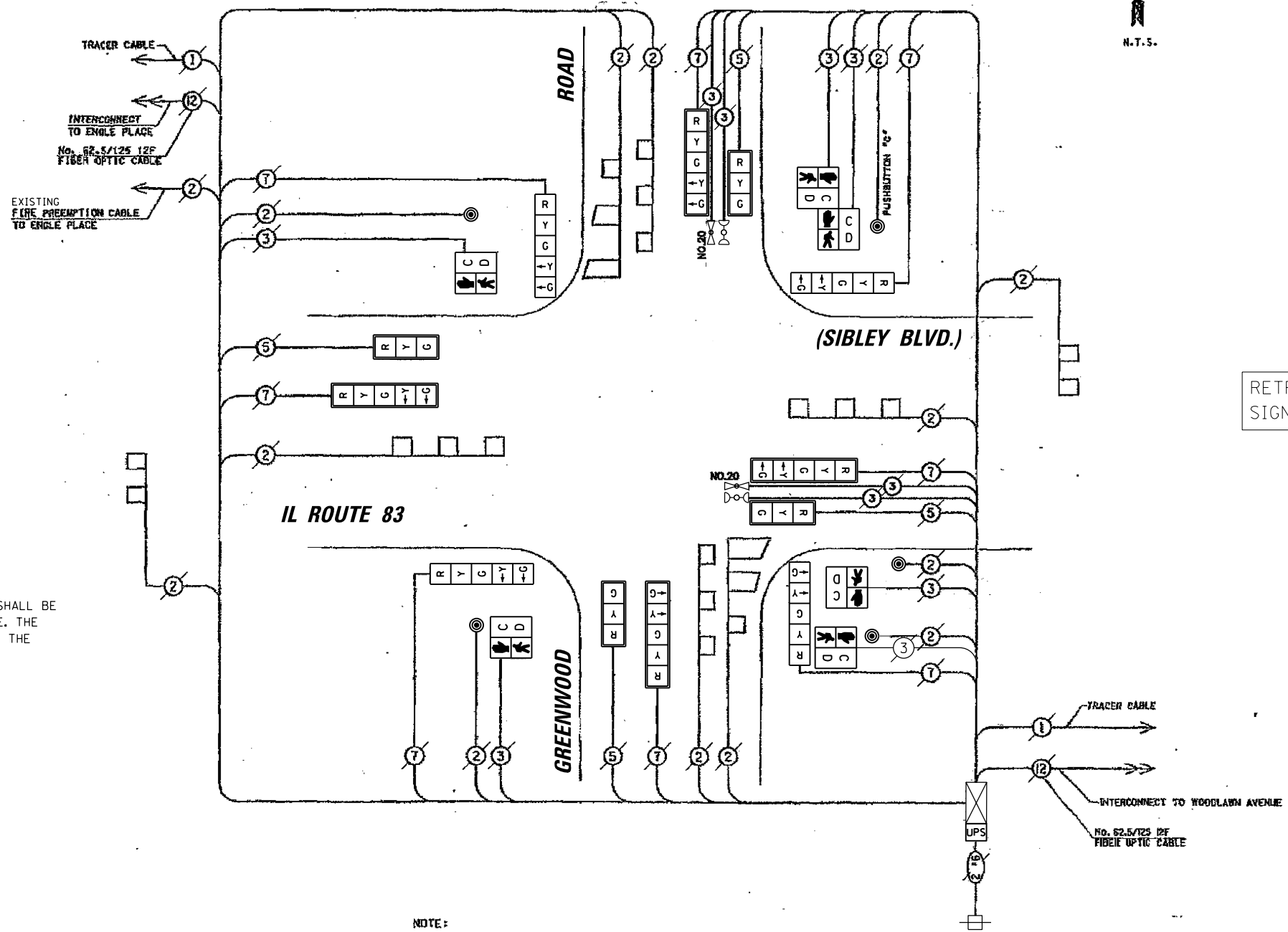
**SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 IL ROUTE 83 /147TH STREET – SIBLEY BLVD AT ENGLE PLACE**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VARIOUS	COOK	87	46
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	

TS# 11470
DOLTON

CONTRACT NO. 60X24

DATE: _____ BY: _____
 SURVEYED: _____ ALIGNED: _____
 PLAN: _____ RT. OF WAY CHECKED: _____
 NOTE BOOK: _____ NO. _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (630) 923-5500
 PROFILE: _____
 SURVEYED: _____ GRADES CHECKED: _____
 DATE: _____ BY: _____
 NOTE BOOK: _____ NO. _____
 STRUCTURE: _____ NOTATIONS: _____



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

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 PEDESTRIAN SIGNAL HEAD, 2-FACE
- 4 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 5 EACH PEDESTRIAN PUSH-BUTTONS

NOTE:
 PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE		% OPERATION	
		INCAND.	LED		
SIGNAL (RED)	12		17	0.50	102.00
(YELLOW)	12		25	0.25	75.00
(GREEN)	12		15	0.25	45.00
ARROW	16		12	0.10	19.20
PED. SIGNAL	6		25	1.00	150.00
CONTROLLER	1		100	1.00	100.00
ILLUMINATED SIGN	-		25	0.05	-
VIDEO SYSTEM	-		150	1.00	-
LUMINAIRE	-	250		0.50	-
BATTERY BACKUP	1	25		1.00	25.0
FLASHER				0.50	-
ENERGY COSTS TO:					TOTAL = 516.20

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY: CONTACT: BRAD SHINABARGAR
 PHONE: (708)-235-2692
 COMPANY: COMED

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

FILE NAME =	USER NAME = fpaceone	DESIGNED - EAJ	REVISED -
N:\dot\130116\Work Order 13019 - South Cook County LED Traffic\CAB_IL83-Greenwood.shk		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 48"	CHECKED - GMZ	REVISED -
	PLOT DATE = 10/7/2013	DATE - SEPT. , 2013	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL ROUTE 83 (SIBLEY BLVD.) AT GREENWOOD ROAD
 SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VARIOUS	COOK	87	47
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60X24	

TS # 11465
 DOLTON

**EXISTING
SEQUENCE OF OPERATION**

MOVEMENT	1 + 5				2 + 5				1 + 6				2 + 6				3 + 7				3 + 8				4 + 7				4 + 8																										
PHASE	1 + 5				2 + 5				1 + 6				2 + 6				3 + 7				3 + 8				4 + 7				4 + 8																										
INTERVAL	1	2	3	4	5	6	7A	7B	8	9A	9B	10	11	12A	12B	13	14A	14B	15	16	17A	17B	18	19	20	21	22	23	24A	24B	25	26A	26B	27	28	29A	29B	30	31A	31B	32	33	34A	34B											
CHANGE TO	2+5				1+5				2+6				1+5				2+6				3+7				3+8				4+7				4+8																						
ILL. RTE. 83 E/B FAR RIGHT SIGNAL	R	R	R	R	G	G	Y	R	G	Y	R	R	R	R	R	R	R	R	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R										
ILL. RTE. 83 E/B FAR LEFT AND END MAST ARM SIGNALS	R	R	R	R	R	G	G	Y	R	G	Y	R	R	R	R	R	R	R	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R								
ILL. RTE. 83 W/B FAR RIGHT SIGNAL	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R						
ILL. RTE. 83 W/B FAR LEFT AND END 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	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R						
COTTAGE GROVE AVE. N/B FAR RIGHT SIGNAL	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R					
COTTAGE GROVE AVE. N/B FAR LEFT AND END 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	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R					
COTTAGE GROVE AVE. S/B FAR RIGHT SIGNAL	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R				
COTTAGE GROVE AVE. S/B FAR LEFT AND END 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	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R				
PEDESTRIAN SIGNALS CROSSING ON SOUTHWEST SIDE OF COTTAGE GROVE AVE.	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW				
PEDESTRIAN SIGNALS CROSSING ON WEST SIDE OF ILL. RTE. 83	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW		
PEDESTRIAN SIGNALS CROSSING ON NORTHWEST SIDE OF COTTAGE GROVE AVE.	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	
PEDESTRIAN SIGNALS CROSSING ON EAST SIDE OF ILL. RTE. 83	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW

**EXISTING EMERGENCY VEHICLE PREEMPTION
SEQUENCE OF OPERATION**

CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER																												PREEMPTOR NUMBER 3	PREEMPTOR NUMBER 4	PREEMPTOR NUMBER 5	RESUME NORMAL SEQUENCE																					
	1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	1M	1N	1P	1Q	1R	1S	1T	1U	1V	1W	1X	1Y	1Z	1AA	1AB	1AC	1AD	1AE	1AF	1AG		1AH	2	3	4																	
EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	1M	1N	1P	1Q	1R	1S	1T	1U	1V	1W	1X	1Y	1Z	1AA	1AB	1AC	1AD	1AE	1AF	1AG	1AH	2	3	4																		
CHANGE TO EMERGENCY VEHICLE PREEMPTION SEQUENCE INTERVAL	1B	2,3 OR 4	1D	1E	2 OR 4	1G	3	1J	1K	2 OR 4	1M	3	1P	1Q	2 OR 4	3	1T	2,3 OR 4	1V	1W	2 OR 4	1Y	4	1AA	1AB	2 OR 4	1AD	4	1AF	1AG	2 OR 4	4																					
ILL. 83 E/B FAR RIGHT SIGNAL	R	R	G	Y	R	G	G	R	R	R	R	R	R	G	Y	R	G	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	R															
ILL. 83 E/B FAR LEFT AND END MAST ARM SIGNALS	R	R	G	Y	R	G	G	R	R	R	R	R	R	G	Y	R	G	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	R														
ILL. 83 W/B FAR RIGHT SIGNAL	R	R	R	R	R	R	R	G	Y	R	G	G	Y	R	G	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	R															
ILL. 83 W/B FAR LEFT AND END MAST ARM SIGNALS	R	R	R	R	R	R	R	G	Y	R	G	G	Y	R	G	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	R													
COTTAGE GROVE AVE. N/B FAR RIGHT SIGNAL	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R			
COTTAGE GROVE AVE. N/B FAR LEFT AND END 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	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R			
COTTAGE GROVE AVE. S/B FAR RIGHT SIGNAL	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R		
COTTAGE GROVE AVE. S/B FAR LEFT AND END 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	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R		
PEDESTRIAN SIGNALS CROSSING ON SOUTH SIDE OF COTTAGE GROVE AVE.	DW	DW	FL DW	DW	DW	FL DW	DW	DW	DW	DW	DW	DW	DW	FL DW	DW	DW	FL DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW		
PEDESTRIAN SIGNALS CROSSING ON WEST SIDE OF ILL. 83	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	FL DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	
PEDESTRIAN SIGNALS CROSSING ON NORTH SIDE OF COTTAGE GROVE AVE.	DW	DW	DW	DW	DW	DW	DW	FL DW	DW	DW	FL DW	DW	FL DW	DW	DW	DW	FL DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW
PEDESTRIAN SIGNALS CROSSING ON EAST SIDE OF ILL. 83	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	FL DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW

* TO APPEAR ONLY UPON PUSHBUTTON ACTIVATION

** FLASHING "DON'T WALK" IS TO TERMINATE AT THE COMPLETION OF THE PEDESTRIAN INTERVAL CLEARANCE.

◇ THIS "WALK" OR FLASHING "DON'T WALK" INTERVAL MAY FINISH TIMING IN THE BIDIRECTIONAL STRAIGHT THROUGH MOVEMENT IF THE LEFT ARROW TIME IS NOT SUFFICIENT TO COMPLETE "WALK" OR FLASHING "DON'T WALK" INTERVALS.

W = "WALK"

FL DW = FLASHING "DON'T WALK"

DW = "DON'T WALK"

◇ EMERGENCY VEHICLE SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION ON PROPER CLEARANCE INTERVAL TO DISPLAY A DIFFERENT EMERGENCY INTERVAL AFTER EMERGENCY VEHICLE INTERVAL 2 IS TERMINATED.

FIRE STATION PUSH BUTTON SHALL CALL EVP SEQUENCE 2, PREEMPTOR 3.

PROFILE
 DATE: _____ BY: _____
 SURVEYED: _____
 GRADES CHECKED: _____
 E.I.M. NOTED: _____
 STRUCTURE NOTATIONS: OWK
 PLAN
 NO. _____
 SURVEYED: _____
 ALIGNED: _____
 CHECKED: _____
 R.T. OF WAY CHECKED: _____
 ADD. FILE NAME: _____
 ENGINEERING LTD.
CHRISTOPHER B. BURKE
 3575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (631) 252-9500
 DATE: _____ BY: _____
 SURVEYED: _____
 GRADES CHECKED: _____
 E.I.M. NOTED: _____
 STRUCTURE NOTATIONS: OWK

BY: _____ DATE: _____
 SURVEYED _____
 ALIGNED _____
 CHECKED _____
 R.T. OF WAY CHECKED _____
 ADD. FILE NAME _____

PLAN NO. _____

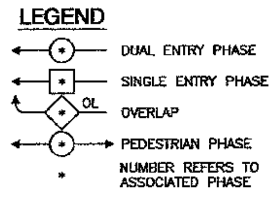
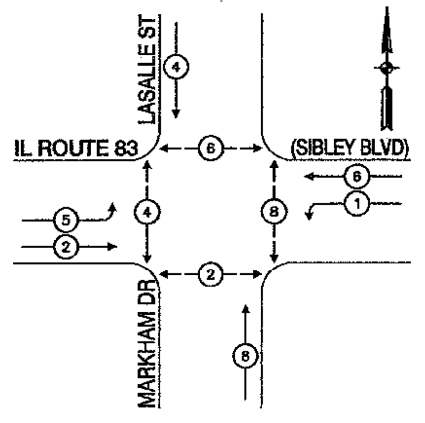
BY: _____ DATE: _____
 SURVEYED _____
 GRADES CHECKED _____
 E.M. NOTED _____
 STRUCTURE NOTATIONS OKWD _____

PROFILE NO. _____

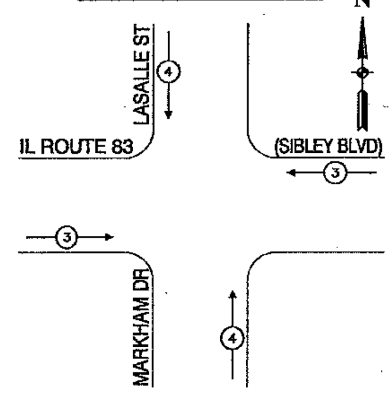
BY: _____ DATE: _____
 SURVEYED _____
 GRADES CHECKED _____
 E.M. NOTED _____
 STRUCTURE NOTATIONS OKWD _____

ENGINEERING LTD.
CHRISTOPHER B. BURKE
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (617) 923-5500

EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

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

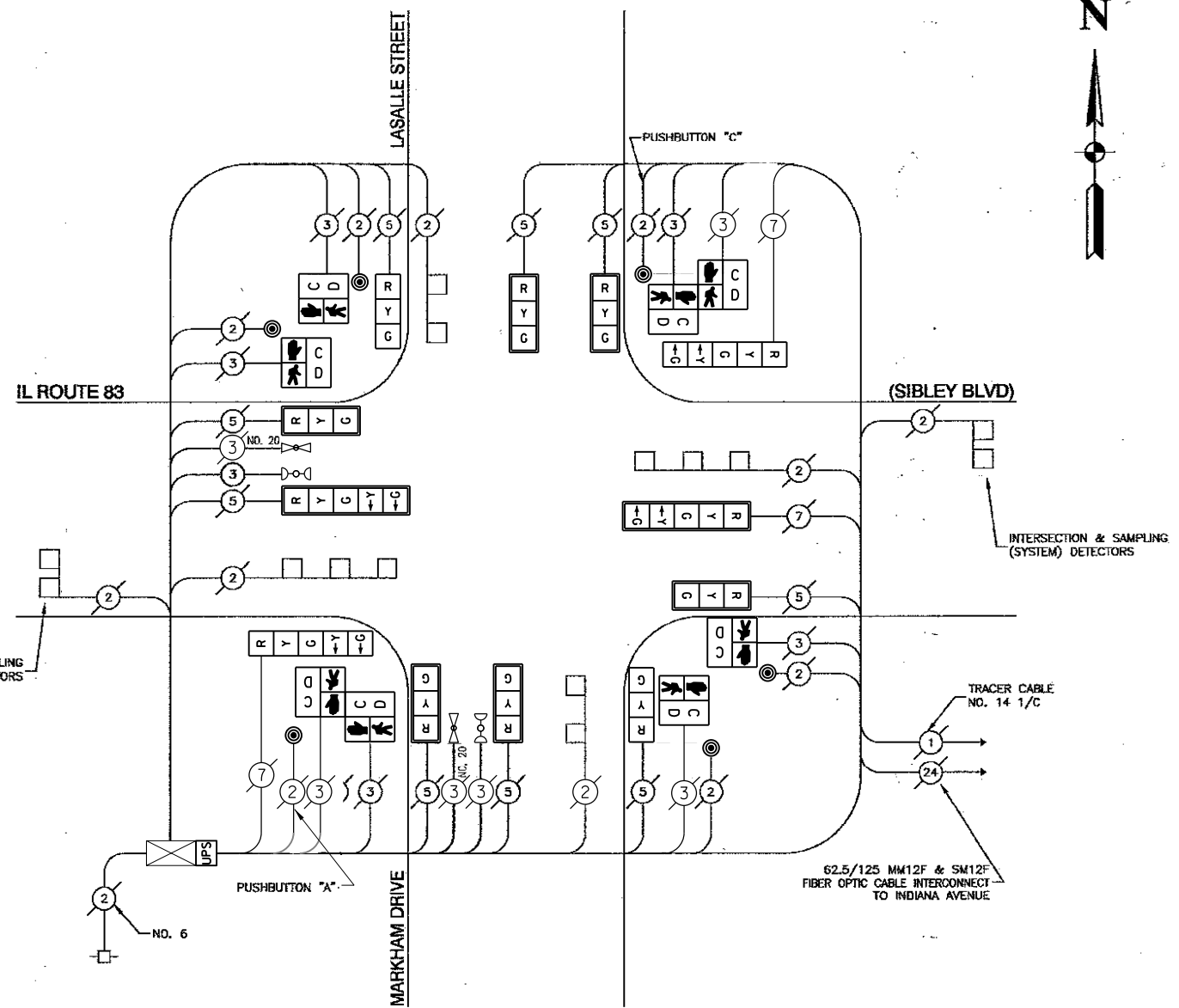
I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	12		17	0.50	102.00
(YELLOW)	12		25	0.25	75.00
(GREEN)	12		15	0.25	45.00
ARROW	8		12	0.10	9.60
PED. SIGNAL	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUMINATED SIGN	-		25	0.05	-
VIDEO SYSTEM	-		150	1.00	-
LUMINAIRE	-	250		0.50	-
BATTERY BACKUP	1	25		1.00	25.0
FLASHER				0.50	-
ENERGY COSTS TO:					TOTAL = 556.60

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY: CONTACT: BRAD SHINABARGAR
 PHONE: (708)-235-2692
 COMPANY: COMED

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-FACE
4	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
6	EACH	PEDESTRIAN PUSH-BUTTON



NOTE:
 PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 & 4
 PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 & 8

CABLE PLAN
 NOT TO SCALE

SCHEDULE OF QUANTITIES		
ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	6
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	2

FILE NAME =	USER NAME = fpaceone	DESIGNED - EAJ	REVISED -
N:\dot\130116\Work Order 13019 - South Cook County LED\Traffic\CAB_IL83-LaSalle.L.sh		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 48"	CHECKED - GMZ	REVISED -
	PLOT DATE = 10/7/2013	DATE - SEPT. , 2013	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL ROUTE 83 AT LASALLE STREET / MARKHAM DRIVE

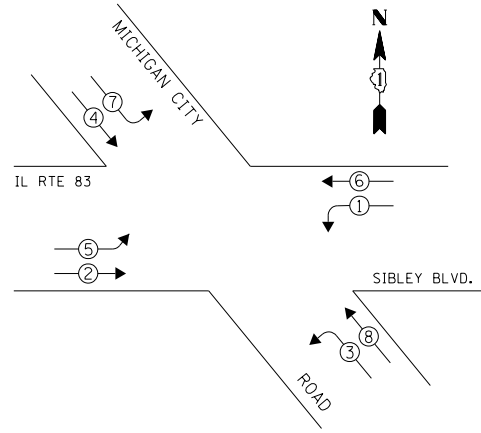
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VARIOUS	COOK	87	49
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60X24	

TS # 3465
 DOLTON

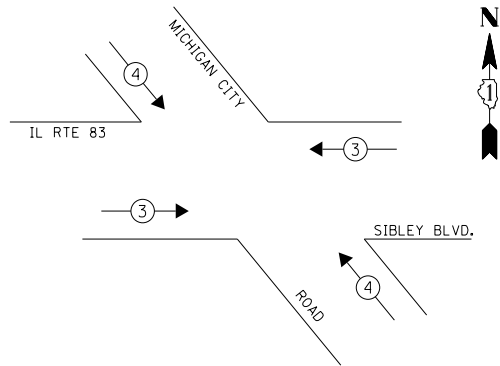
DATE: _____ BY: _____
 SURVEYED: _____ ALIGNED: _____
 PLAN: _____ RT. OF WAY CHECKED: _____
 NOTE BOOK NO.: _____
 ENGINEERING LTD.
CHRISTOPHER B. BURKE
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (617) 923-5500
 DATE: _____ BY: _____
 SURVEYED: _____ GRADES CHECKED: _____
 PROFILE: _____ ELEM. NOTED: _____
 NOTE BOOK NO.: _____ STRUCTURE NOTATIONS: OK/NO

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	
MOVEMENT	←	↘	↙

CONSTRUCTION NOTE:

- ③ THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 16 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION. RELOCATE EXISTING SIGNAL HEADS.

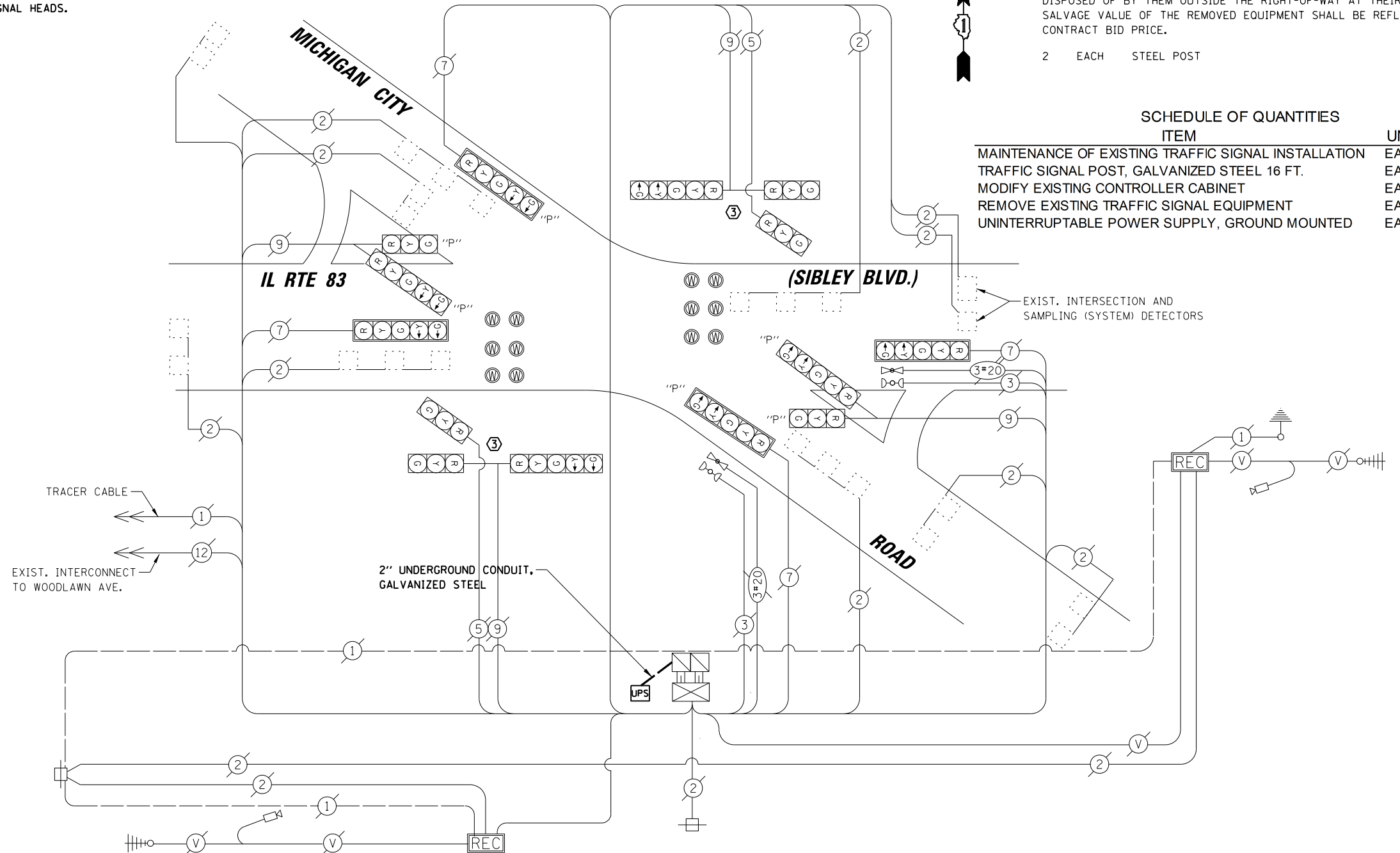


REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT
 THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

2 EACH STEEL POST

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, GROUND MOUNTED	EACH	1



CABLE PLAN

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	14		17	0.50	119.00
(YELLOW)	14		25	0.25	87.50
(GREEN)	14		15	0.25	52.50
ARROW	16		12	0.10	19.20
PED. SIGNAL	-		25	1.00	-
CONTROLLER	1		100	1.00	100.00
ILLUMINATED SIGN	-		25	0.05	-
VIDEO SYSTEM	-		150	1.00	-
LUMINAIRE	-	250		0.50	-
BATTERY BACKUP	1	25		1.00	25.0
FLASHER				0.50	-
ENERGY COSTS TO:					TOTAL = 403.20

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY: CONTACT: BRAD SHINABARGAR
 PHONE: (708)-235-2692
 COMPANY: COMED

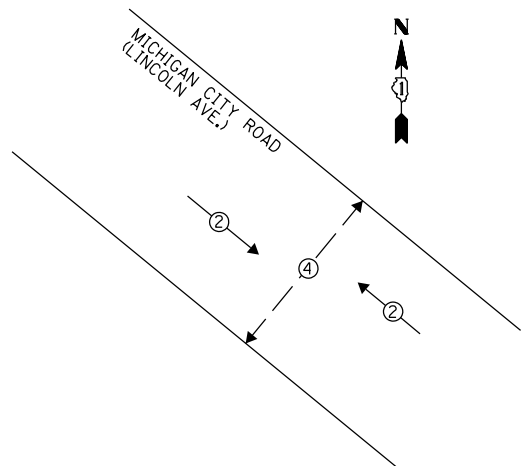
UPS SHALL BE INSTALLED ON A SEPARATE FOUNDATION DUE TO PHYSICAL CONSTRAINTS, OR AS DIRECTED BY THE ENGINEER. THIS WORK INCLUDING CONDUIT, DRILLING EXISTING HANDHOLE, INSTALLING CONCRETE FOUNDATION, CABLES, CONNECTORS, AND ALL HARDWARE, MATERIAL, AND LABOR REQUIRED FOR PROPER OPERATION, SHALL BE INCLUDED IN THE PAY ITEM "UNINTERRUPTIBLE POWER SUPPLY, GROUND MOUNTED."

- NOTES**
- 1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
 - 2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION, THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT REUSABLE, REPLACE AS DIRECTED BY THE ENGINEER.
 - 3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE 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 UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

TS# 3475
 DOLTON

DATE: _____ BY: _____
 SURVEYED: _____ ALIGNED: _____
 GRADES CHECKED: _____ RT. OF WAY CHECKED: _____
 PLAN NOTE BOOK NO. _____
 ENGINEERING LTD.
CHRISTOPHER B. BURKE
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (617) 923-5930
 DATE: _____ BY: _____
 SURVEYED: _____ GRADES CHECKED: _____
 PLAN NOTE BOOK NO. _____
 STRUCTURE NOTATIONS: OK/KO

EXISTING CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

CONSTRUCTION NOTE:

- ① THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 14 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

NOTES

- 1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- 2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION. THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT REUSABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- 3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE 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 UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE		% OPERATION	
		INCAND.	LED		
SIGNAL (RED)	6		17	0.50	51.00
(YELLOW)	6		25	0.25	37.50
(GREEN)	6		15	0.25	22.50
ARROW			12	0.10	-
PED. SIGNAL	2		25	1.00	50.00
CONTROLLER	1		100	1.00	100.00
ILLUMINATED SIGN	-		25	0.05	-
VIDEO SYSTEM	-		150	1.00	-
LUMINAIRE	-	250		0.50	-
BATTERY BACKUP	1	25		1.00	25.0
FLASHER				0.50	-
ENERGY COSTS TO:				TOTAL =	266.00

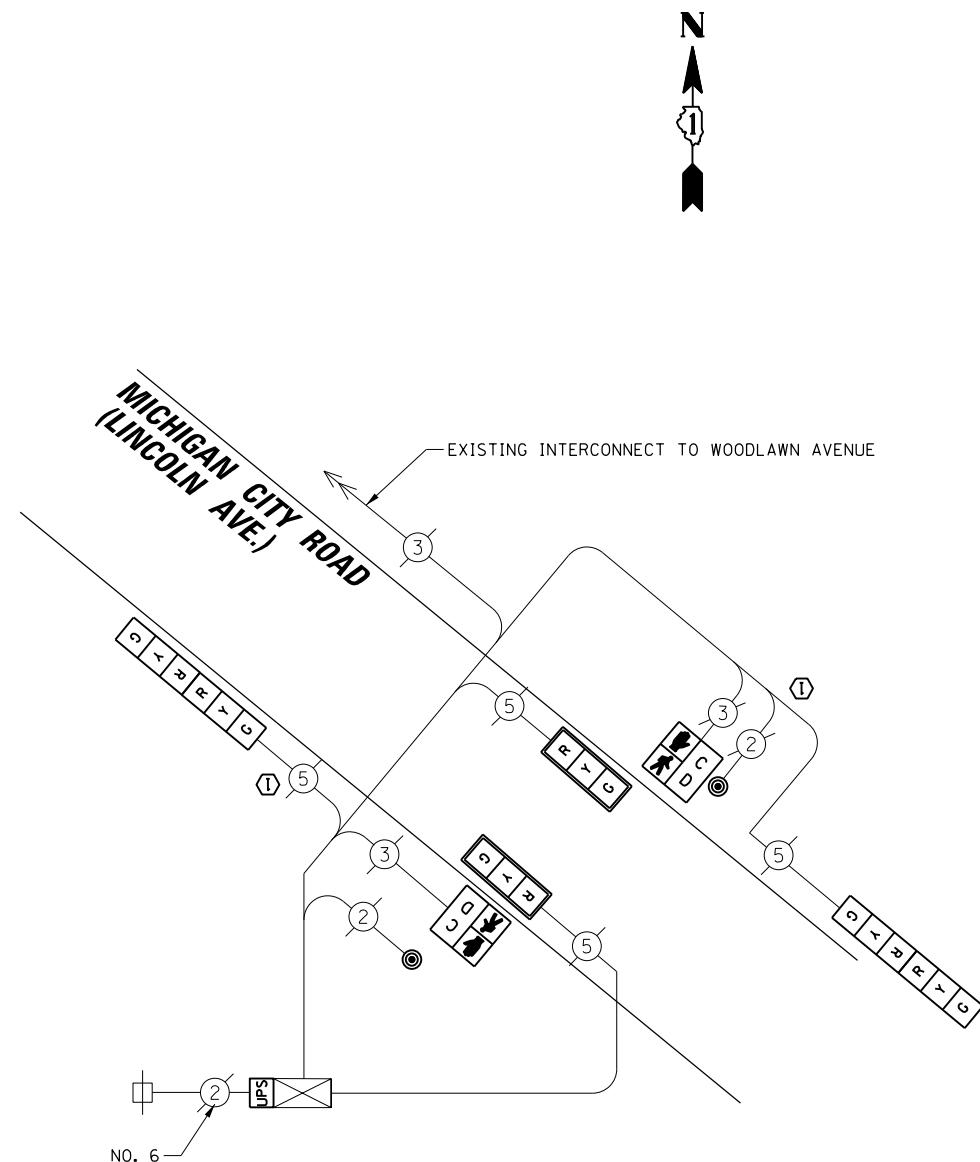
VILLAGE OF DOLTON

14014 PARK AVENUE
 DOLTON, IL 60419
 ENERGY SUPPLY: CONTACT: BRAD SHINABARGAR
 PHONE: (708)-235-2692
 COMPANY: COMED

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 HEADS, 2-FACE, 3-SECTION
- 2 EACH SIGNAL HEADS, 1-FACE, 3-SECTION
- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN PUSH-BUTTONS
- 2 EACH STEEL POST



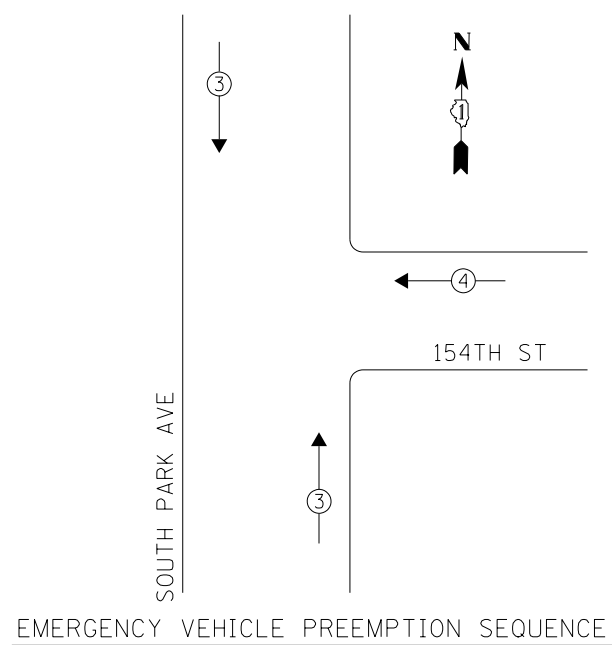
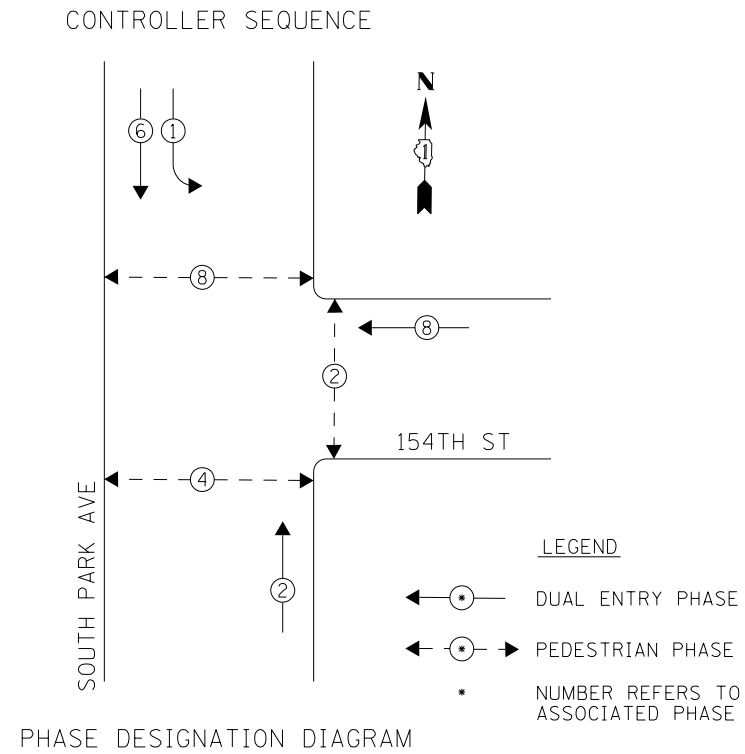
CABLE PLAN

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

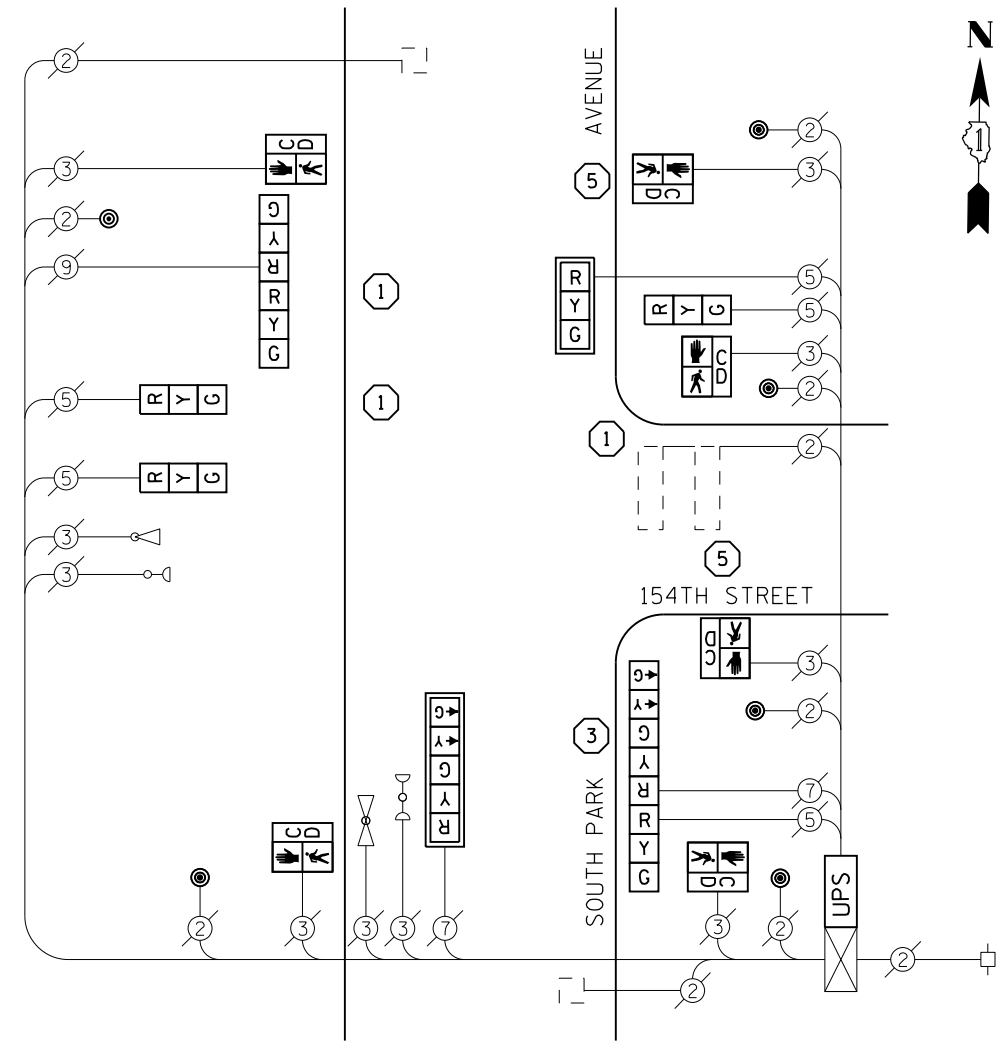
SCHEDULE OF QUANTITIES

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

TS #11430
 DOLTON



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



CONSTRUCTION NOTES

- ① THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 14 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.
- ③ THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 16 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.
- ⑤ THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 10 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

NOTES

- 1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- 2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT USABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- 3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE 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 UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

TS #4080
DOLTON

I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				
	NO. LAMPS	WATTAGE INCAND. LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	9	17	0.50	76.5
(YELLOW)	9	25	0.25	56.25
(GREEN)	9	15	0.25	33.75
ARROW	4	12	0.10	4.8
PED SIGNAL	6	25	1.00	150.0
CONTROLLER	1	100	1.00	100.0
VIDEO SYSTEM	0	150	1.00	0
BATTERY BACKUP	1	25	1.00	25.0
TOTAL =				446.3
ENERGY COSTS- BILLED TO: IDOT DISTRICT 1 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096				
ENERGY SUPPLY- CONTACT BRAD SHINABARGAR PHONE 708-325-2692 COMMONWEALTH EDISON				

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

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	3
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	6
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	2
PEDESTRIAN PUSH-BUTTON	EACH	6
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
154TH ST. AT CHICAGO RD./SOUTH PARK AVE.

FILE NAME = D160X24-shr-ts.TS4080.dgn	USER NAME = Brian Scifers	DESIGNED KJP	REVISED -
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	PLOT DATE = 10/8/2013	CHECKED BKS	REVISED -
		DATE -	REVISED -

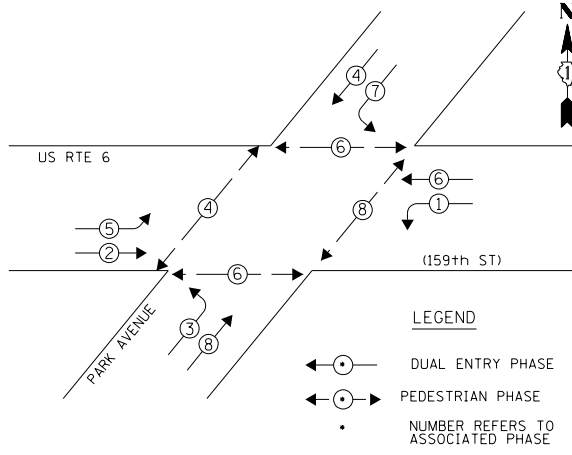
SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-052TS	COOK	87	52
CONTRACT NO. 60X24				
ILLINOIS FED. AID PROJECT				

BY: DATE: SURVEYED: ALIGNED: CHECKED: RT. OF WAY CHECKED: MAINT. FILE NAME: PLAN: NOTE BOOK NO.: SURVEYED: GRADES CHECKED: ELEM. NOTED: STRUCTURE NOTATIONS OKWD: PROFILE: NOTE BOOK NO.: SURVEYED: GRADES CHECKED: ELEM. NOTED: STRUCTURE NOTATIONS OKWD:

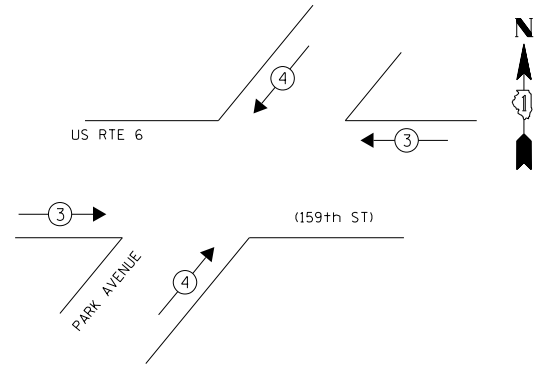
CHRISTOPHER B. BURKE ENGINEERING LTD.
8575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(617) 823-5500

EXISTING CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

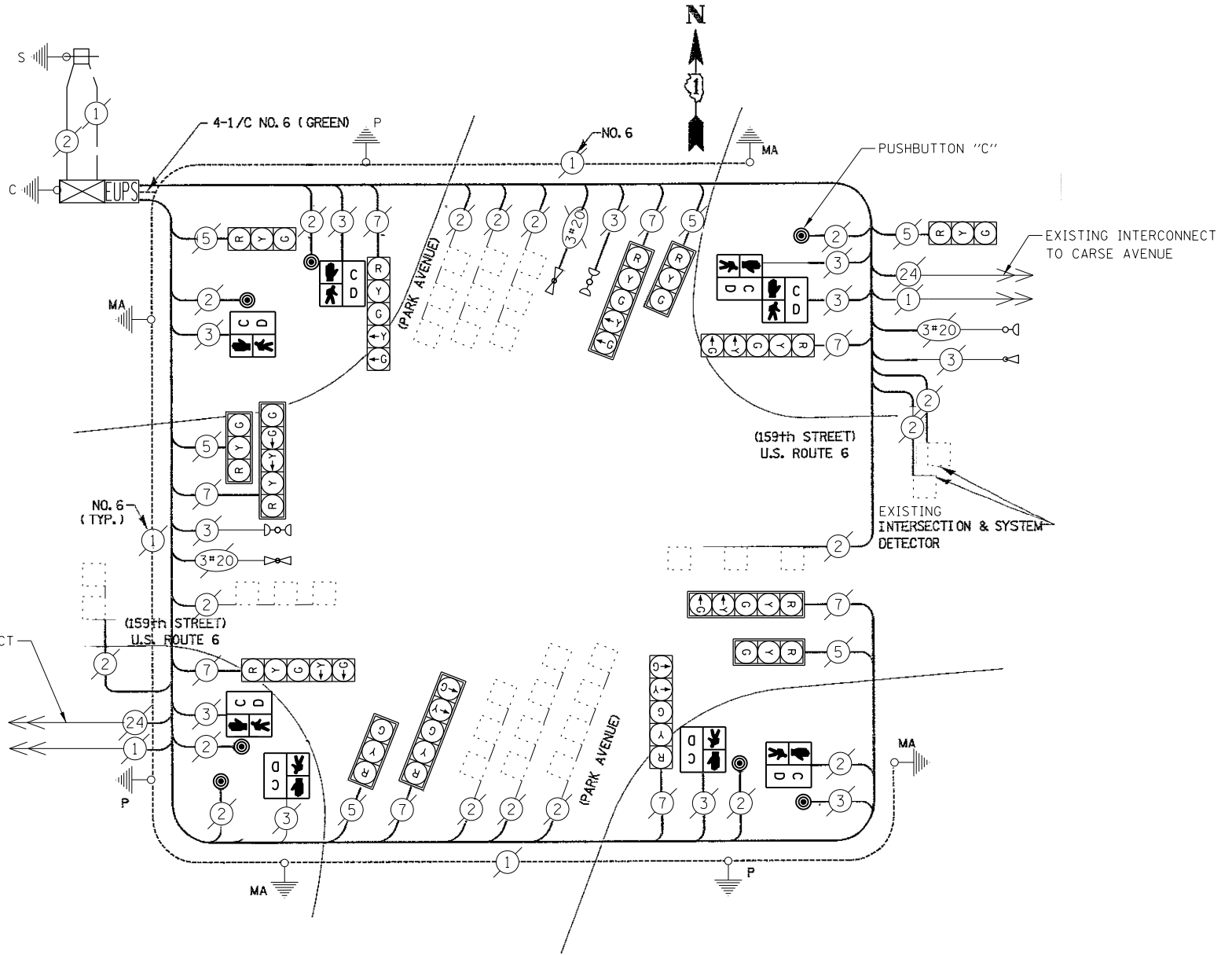
EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE		% OPERATION	
SIGNAL (RED)	14	INCAND.	17	0.50	119.00
(YELLOW)	14		25	0.25	87.50
(GREEN)	14		15	0.25	52.50
ARROW	16		12	0.10	19.20
PED. SIGNAL	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUMINATED SIGN	-		25	0.05	-
VIDEO SYSTEM	-		150	1.00	-
LUMINAIRE	-		250	0.50	-
BATTERY BACKUP	1		25	1.00	25.0
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 603.20

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY: CONTACT: BRAD SHINABARGAR
 PHONE: (708)-235-2692
 COMPANY: COMED



NOTE:
 PUSHBUTTON "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.

- 1 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 6 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 7 EACH PEDESTRIAN PUSH-BUTTON

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	6
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	7

FILE NAME =	USER NAME = fpaceone	DESIGNED - EAJ	REVISED -
N:\dot\130116\Work Order 13019 - South Cook County LED\Traffic\CAB-US6 159th-Park		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 48"	CHECKED - GMZ	REVISED -
	PLOT DATE = 10/7/2013	DATE - SEPT. , 2013	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
 DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 US RTE 6 / 159th AT PARK AVENUE
 SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VARIOUS	COOK	87	53
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60X24	

TS # 11750
 HARVEY

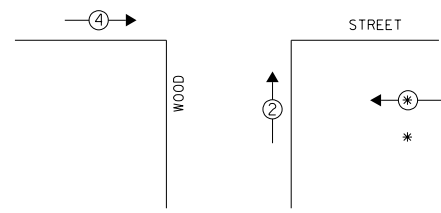
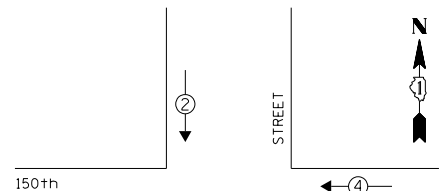
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 RT. OF WAY: _____
 CHECKED: _____
 FILE NAME: _____

DATE: _____ BY: _____
 SURVEYED: _____ CHECKED: _____
 GRADES: _____
 ELEM. NOTED: _____
 STRUCTURE: _____
 NOTES: _____

DATE: _____ BY: _____
 SURVEYED: _____ CHECKED: _____
 GRADES: _____
 ELEM. NOTED: _____
 STRUCTURE: _____
 NOTES: _____

CHRISTOPHER B. BURKE
 ENGINEERING LTD.
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (617) 923-5500

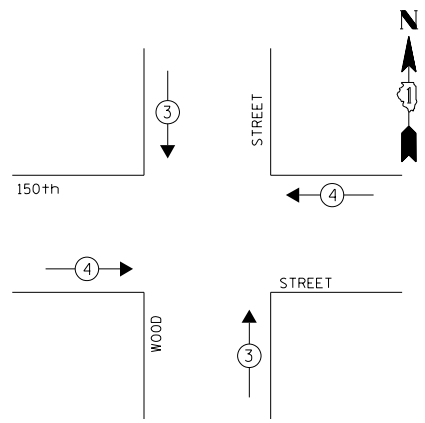
EXISTING CONTROLLER SEQUENCE



LEGEND
 * DUAL ENTRY PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

EXISTING PHASE DESIGNATION DIAGRAM

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

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, 2-FACE, 3-SECTION
- 4 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 3 EACH STEEL POST

NOTES

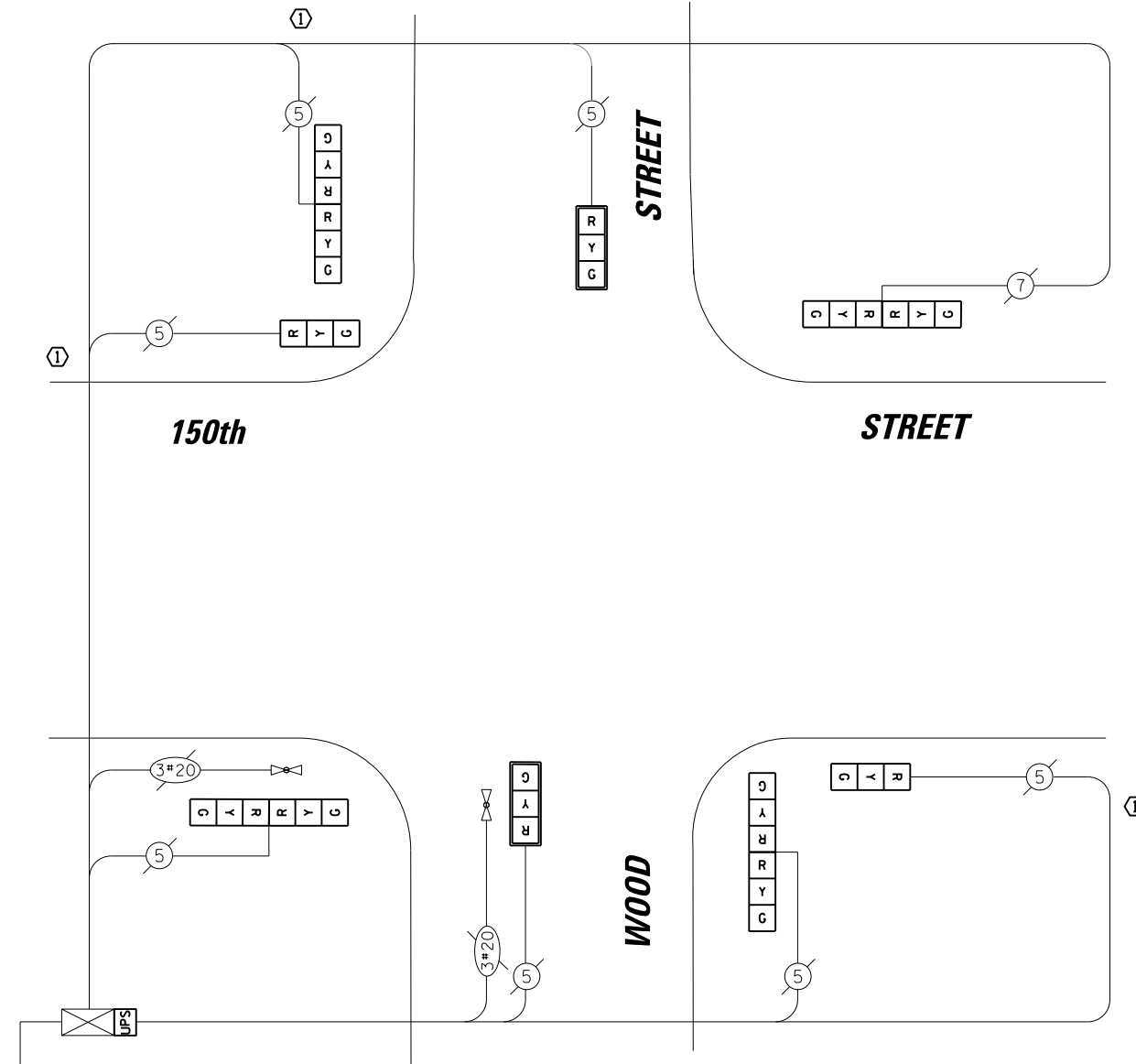
- 1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- 2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION, THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT REUSABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- 3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE 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 UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	12		17	0.50	102.00
(YELLOW)	12		25	0.25	75.00
(GREEN)	12		15	0.25	45.00
ARROW	-		12	0.10	-
PED. SIGNAL	-		25	1.00	-
CONTROLLER	1		100	1.00	100.00
ILLUMINATED SIGN	-		25	0.05	-
VIDEO SYSTEM	-		150	1.00	-
LUMINAIRE	-	250		0.50	-
BATTERY BACKUP	1	25		1.00	25.0
FLASHER				0.50	-
ENERGY COSTS TO:					TOTAL = 347.00

CITY OF HARVEY
 15320 BROADWAY AVENUE
 HARVEY, IL 60426
 ENERGY SUPPLY: CONTACT: **BRAD SHINABARGAR**
 PHONE: (708)-235-2692
 COMPANY: COMED

CONSTRUCTION NOTE:

- ① THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 14 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.



CABLE PLAN

SCHEDULE OF QUANTITIES

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

FILE NAME = N:\dot\130116\Work Order 13019 - South Cook County LED\Traffic\CAB_150th-Wood.L.sht	USER NAME = fpaceone	DESIGNED - EAJ	REVISED -
		DRAWN - FPB / FCP	REVISED -
		CHECKED - GMZ	REVISED -
		DATE - SEPT. , 2013	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

**SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 150TH STREET AT WOOD STREET**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VARIOUS	COOK	87	54
CONTRACT NO. 60X24			ILLINOIS FED. AID PROJECT	

TS # 13795
 HARVEY

BY: _____ DATE: _____
 SURVEYED _____
 ALIGNED _____
 RT. OF WAY CHECKED _____
 CADD FILE NAME: _____

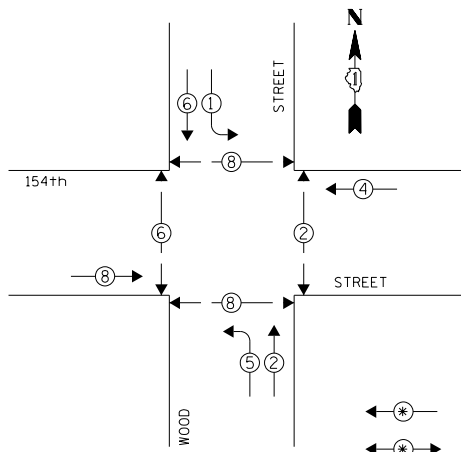
PLAN NO. _____

ENGINEERING LTD.
CHRISTOPHER B. BURKE
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (617) 823-5500

BY: _____ DATE: _____
 SURVEYED _____
 GRADES CHECKED _____
 ELEM. NOTED _____
 STRUCTURE NOTATIONS OKWD

PROFILE NO. _____

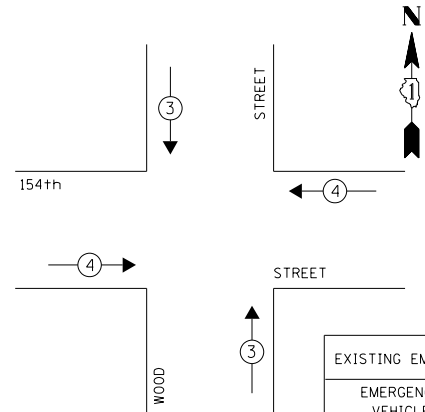
EXISTING CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

LEGEND
 * DUAL ENTRY PHASE
 * PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

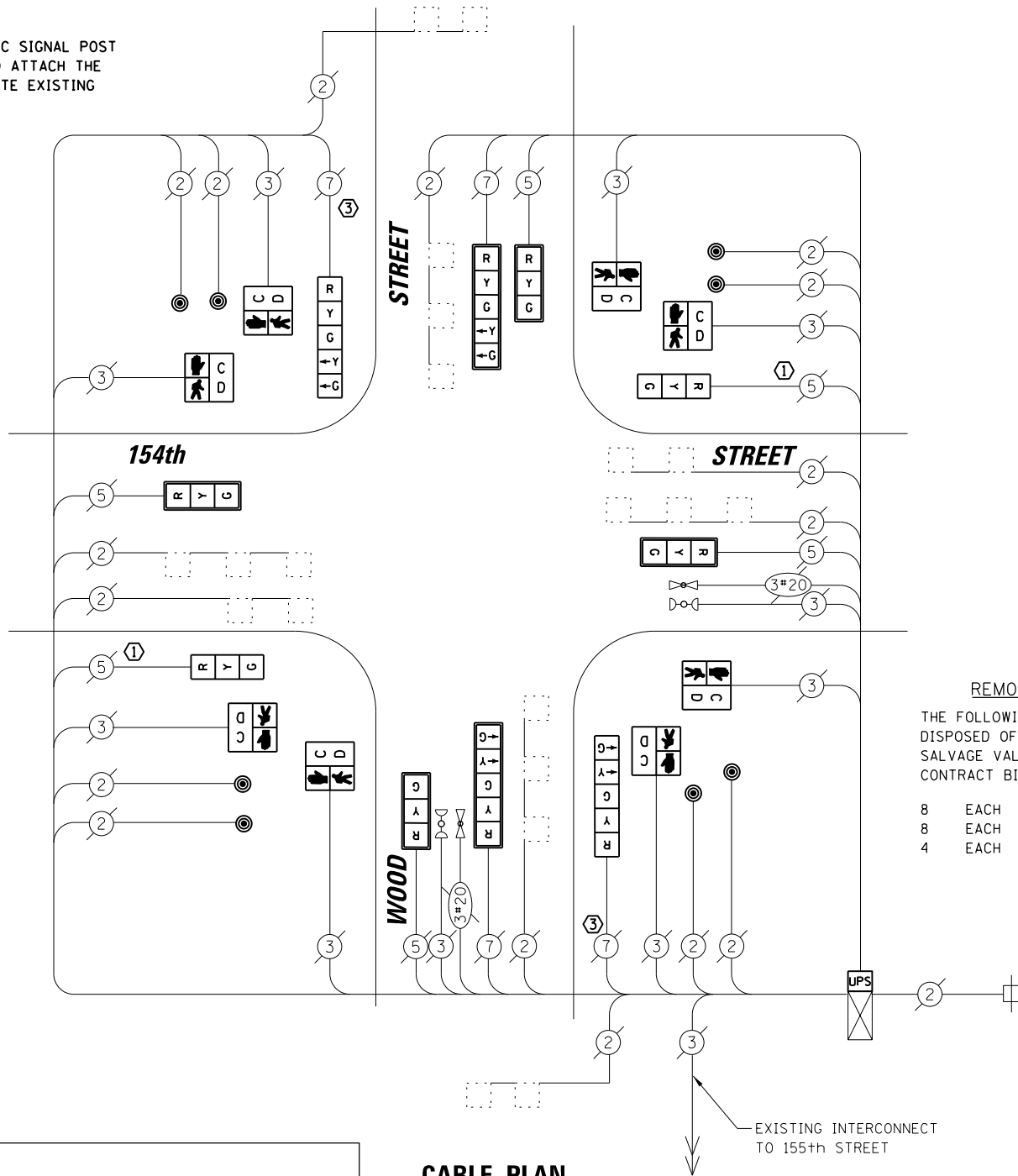
EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

CONSTRUCTION NOTES:

- ① THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 14 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION. RELOCATE EXISTING SIGNAL HEAD.
- ③ THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 16 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION. RELOCATE EXISTING SIGNAL HEAD.



CABLE PLAN

SCHEDULE OF QUANTITIES

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

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, 1-FACE
- 8 EACH PEDESTRIAN PUSH-BUTTON
- 4 EACH STEEL POST

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

NOTES

- 1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- 2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION, THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT REUSABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- 3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE 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 UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	10		17	0.50	85.00
(YELLOW)	10		25	0.25	62.5
(GREEN)	10		15	0.25	37.5
ARROW	8		12	0.10	33.60
PED. SIGNAL	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUMINATED SIGN	-		25	0.05	-
VIDEO SYSTEM	-		150	1.00	-
LUMINAIRE	-	250		0.50	-
BATTERY BACKUP	1	25		1.00	25.0
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 543.60

CITY OF HARVEY
 15320 BROADWAY AVENUE
 HARVEY, IL 60426
 ENERGY SUPPLY: CONTACT: BRAD SHINABARGAR
 PHONE: (708)-235-2692
 COMPANY: COMED

FILE NAME =	USER NAME = fpaceone	DESIGNED - EAJ	REVISED -
N:\dot\130116\Work Order 13019 - South Cook County LED\Traffic\CAB_154th-Wood.L.sht		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 48"	CHECKED - GMZ	REVISED -
	PLOT DATE = 10/7/2013	DATE - SEPT. , 2013	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 154TH STREET AT WOOD STREET

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VARIOUS	COOK	87	55
CONTRACT NO. 60X24				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

TS # 13800
 HARVEY

BY: _____ DATE: _____
 SURVEYED _____
 GRADES CHECKED _____
 ILL. NOTED _____
 STRUCTURE NOTATIONS OKWD

BY: _____ DATE: _____
 SURVEYED _____
 GRADES CHECKED _____
 ILL. NOTED _____
 STRUCTURE NOTATIONS OKWD

BY: _____ DATE: _____
 SURVEYED _____
 GRADES CHECKED _____
 ILL. NOTED _____
 STRUCTURE NOTATIONS OKWD

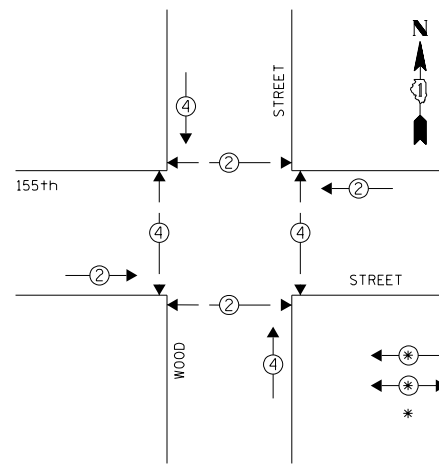
BY: _____ DATE: _____
 SURVEYED _____
 GRADES CHECKED _____
 ILL. NOTED _____
 STRUCTURE NOTATIONS OKWD

PLAN NO. _____
 SURVEYED _____
 ALIGNED _____
 RT. OF WAY CHECKED _____
 ADD. FILE NAME _____

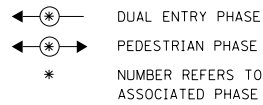
ENGINEERING LTD.
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (617) 923-5500

C B

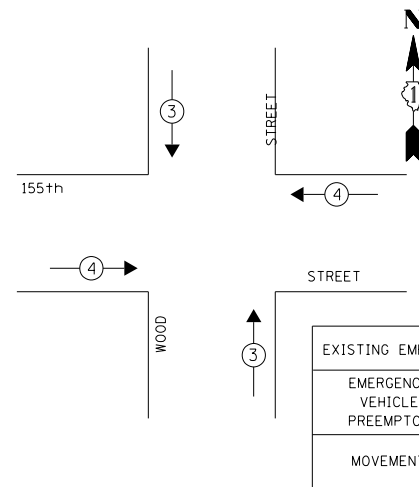
EXISTING CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

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

CONSTRUCTION NOTE:

- ① THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 14 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

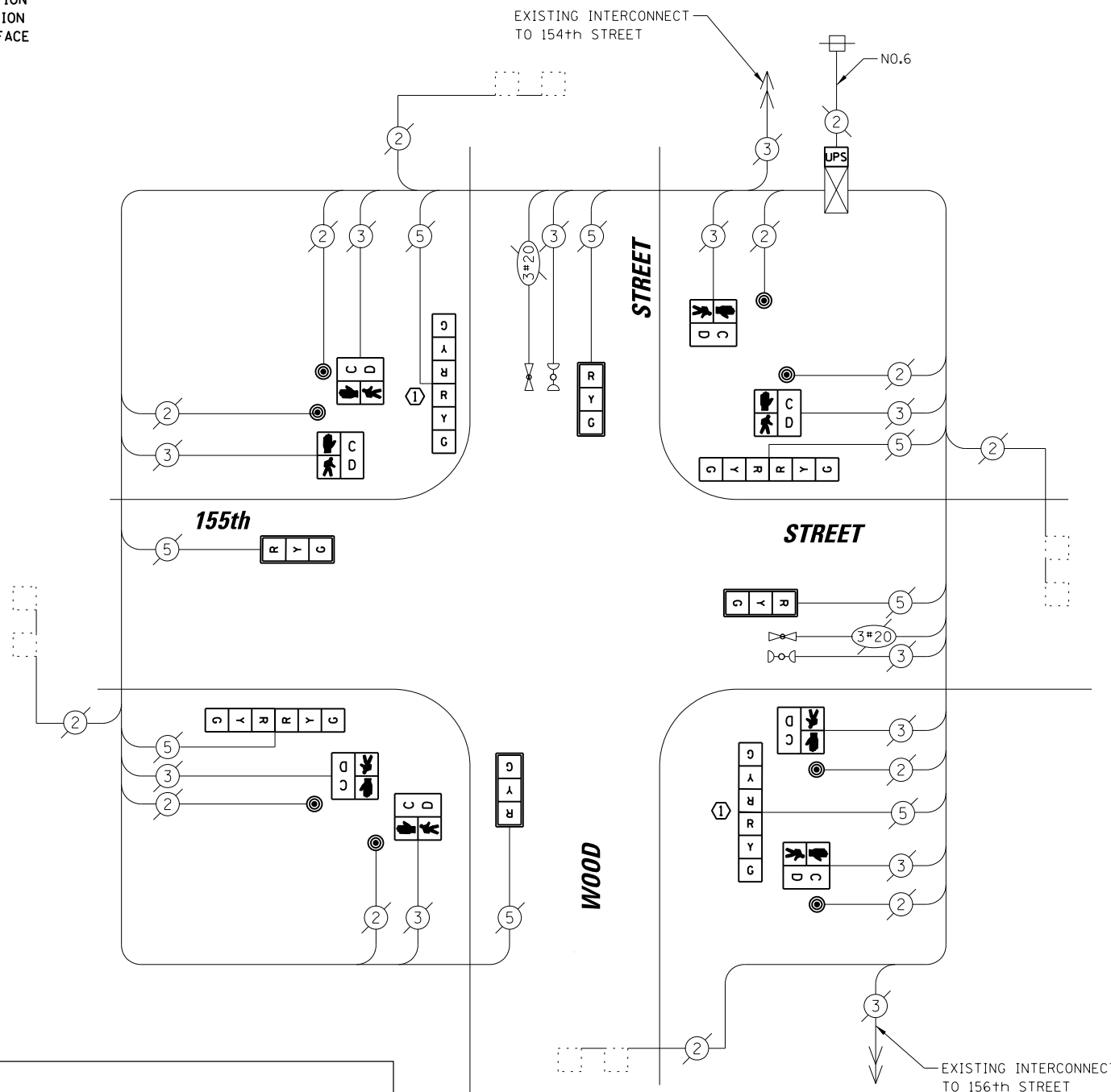
I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	12		17	0.50	102.00
(YELLOW)	12		25	0.25	75.00
(GREEN)	12		15	0.25	45.00
ARROW	-		12	0.10	-
PED. SIGNAL	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUMINATED SIGN	-		25	0.05	-
VIDEO SYSTEM	-		150	1.00	-
LUMINAIRE	-	250		0.50	-
BATTERY BACKUP	1	25		1.00	25.0
FLASHER				0.50	-
ENERGY COSTS TO:					TOTAL = 547.00

CITY OF HARVEY
 15320 BROADWAY AVENUE
 HARVEY, IL 60426
 ENERGY SUPPLY CONTACT: **BRAD SHINABARGAR**
 PHONE: (708)-235-2692
 COMPANY: **COMED**

NOTES

- 1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- 2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION, THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT REUSABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- 3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE 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 UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

CABLE PLAN



SCHEDULE OF QUANTITIES

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

FILE NAME =	USER NAME = fpaceone	DESIGNED - EAJ	REVISED -
N:\dot\130116\Work Order 13019 - South Cook County LED\Traffic\CAB_155th-Wood.L.sht		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 48"	CHECKED - GMZ	REVISED -
	PLOT DATE = 10/7/2013	DATE - SEPT. , 2013	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 155TH STREET AT WOOD STREET

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

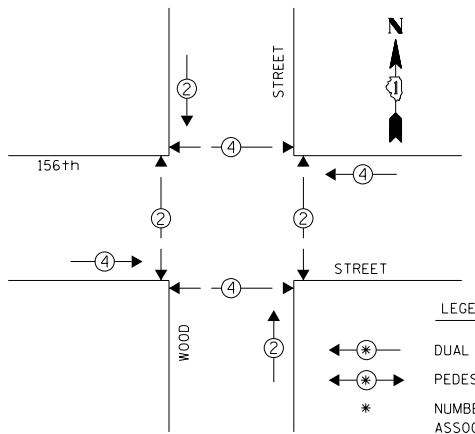
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VARIOUS	COOK	87	56
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 60X24	

TS # 13805
 HARVEY

DATE: _____ BY: _____
 SURVEYED: _____ ALIGNED: _____
 GRADES CHECKED: _____ RT. OF WAY CHECKED: _____
 NOTE BOOK NO.: _____ ADD. FILE NAME: _____
 PROFILE: _____
 SURVEYED: _____
 GRADES CHECKED: _____
 ELEM. NOTED: _____
 STRUCTURE NOTATIONS: OK/NO

ENGINEERING LTD.
CHRISTOPHER B. BURKE
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (630) 922-5533

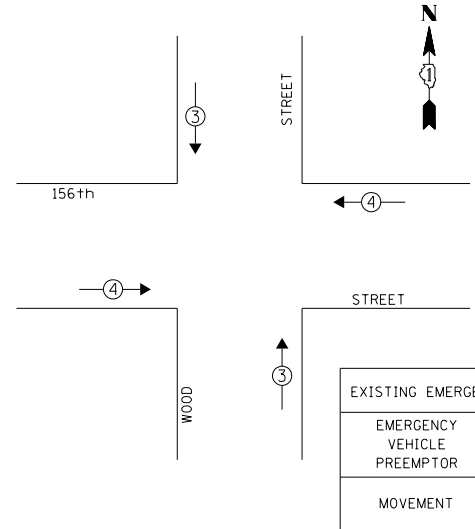
EXISTING CONTROLLER SEQUENCE



LEGEND
 ←*→ DUAL ENTRY PHASE
 ←* PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

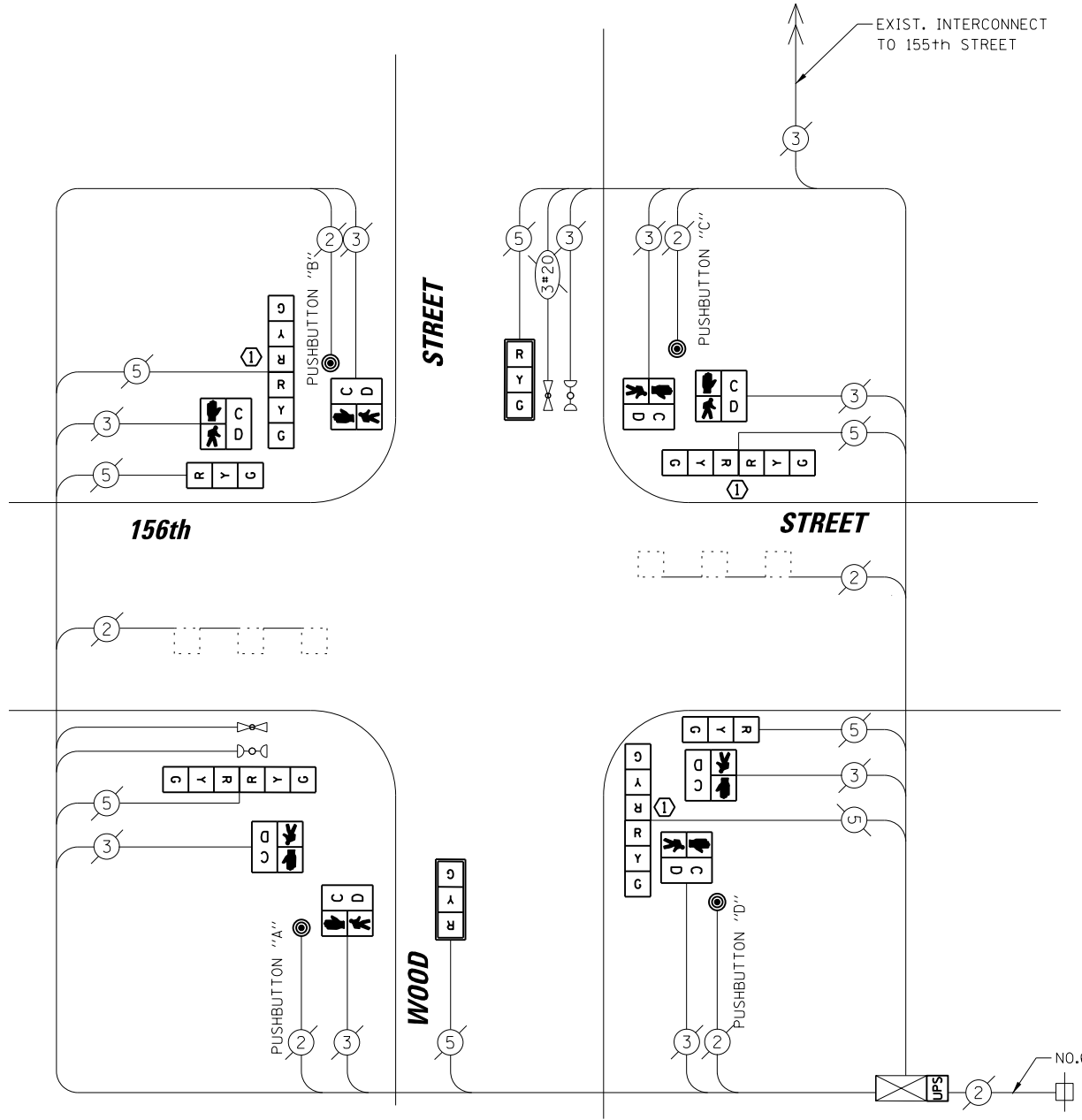
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

CONSTRUCTION NOTE:

- ① THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 14 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.



NOTE:
 PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.
 PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.
 PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.
 PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

CABLE PLAN

SCHEDULE OF QUANTITIES

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

NOTES

- 1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- 2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION, THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT REUSABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- 3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE 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 UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	12		17	0.50	102.00
(YELLOW)	12		25	0.25	75.00
(GREEN)	12		15	0.25	45.00
ARROW	-		12	0.10	-
PED. SIGNAL	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUMINATED SIGN	-		25	0.05	-
VIDEO SYSTEM	-		150	1.00	-
LUMINAIRE	-	250		0.50	-
BATTERY BACKUP	1	25		1.00	25.0
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 547.00

CITY OF HARVEY
 15320 BROADWAY AVENUE
 HARVEY, IL 60426
 ENERGY SUPPLY: CONTACT: BRAD SHINABARGAR
 PHONE: (708)-235-2692
 COMPANY: COMED

FILE NAME =	USER NAME = fpaceone	DESIGNED - EAJ	REVISED -
N:\dot\130116\Work Order 13019 - South Cook County LED\Traffic\CAB_156th-Wood_L.sht		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 48"	CHECKED - GMZ	REVISED -
	PLOT DATE = 10/7/2013	DATE - SEPT. , 2013	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 156TH STREET AT WOOD STREET

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VARIOUS	COOK	87	57
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
CONTRACT NO. 60X24				

TS# 13810
 HARVEY

BY: _____ DATE: _____
 SURVEYED _____
 ALIGNED _____
 RT. OF WAY CHECKED _____
 ADD. FILE NAME _____

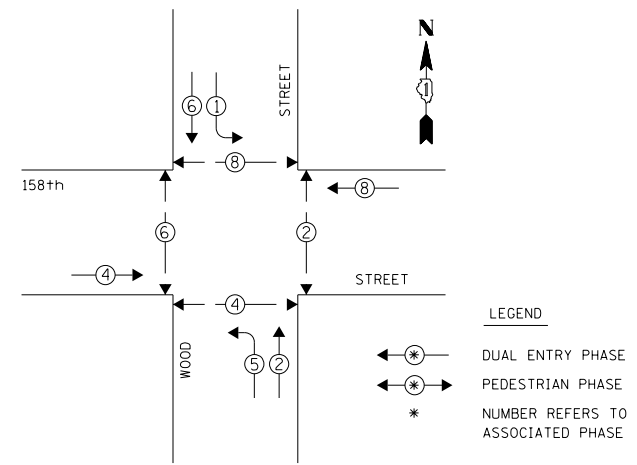
PLAN NO. _____
 NOTE BOOK NO. _____

ENGINEERING LTD.
CHRISTOPHER B. BURKE
 3575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (617) 823-5500

DATE: _____
 BY: _____
 SURVEYED _____
 GRADES CHECKED _____
 ELEM. NOTED _____
 STRUCTURE NOTATIONS OKWD

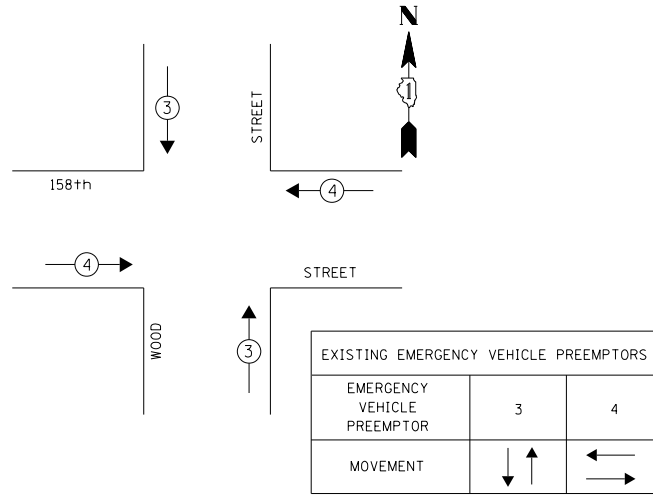
PROFILE NO. _____
 NOTE BOOK NO. _____

EXISTING CONTROLLER SEQUENCE IV



PHASE DESIGNATION DIAGRAM

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



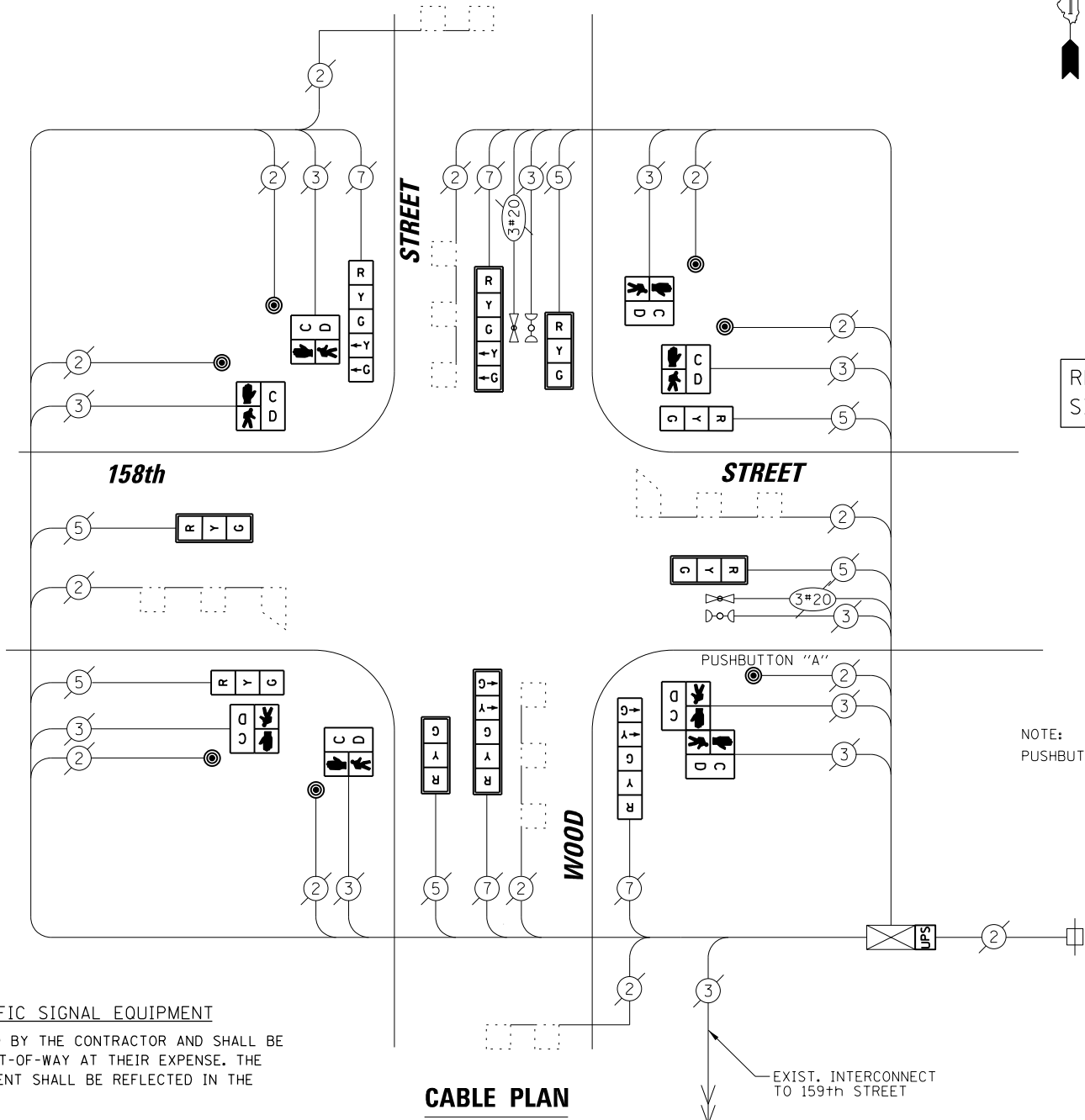
I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	10		17	0.50	85.00
(YELLOW)	10		25	0.25	62.50
(GREEN)	10		15	0.25	37.50
ARROW	4		12	0.10	4.80
PED. SIGNAL	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUMINATED SIGN	-		25	0.05	-
VIDEO SYSTEM	-		150	1.00	-
LUMINAIRE	-	250		0.50	-
BATTERY BACKUP	1	25		1.00	25.0
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 514.80

CITY OF HARVEY
 15320 BROADWAY AVENUE
 HARVEY, IL 60426
 ENERGY SUPPLY: CONTACT: BRAD SHINABARGAR
 PHONE: (708)-235-2692
 COMPANY: COMED

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 PEDESTRIAN SIGNAL HEAD, 2-FACE
- 6 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 7 EACH PEDESTRIAN PUSH-BUTTON



CABLE PLAN

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	6
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	2
PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	7

FILE NAME = N:\dot\130116\Work Order 13019 - South Cook County LED\Traffic\CAB_158th-Wood.L.sht	USER NAME = fpaceone	DESIGNED - EAJ	REVISED -
		DRAWN - FPB / FCP	REVISED -
		CHECKED - GMZ	REVISED -
		DATE - SEPT. , 2013	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 158TH STREET AT WOOD STREET

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VARIOUS	COOK	87	58
CONTRACT NO. 60X24				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

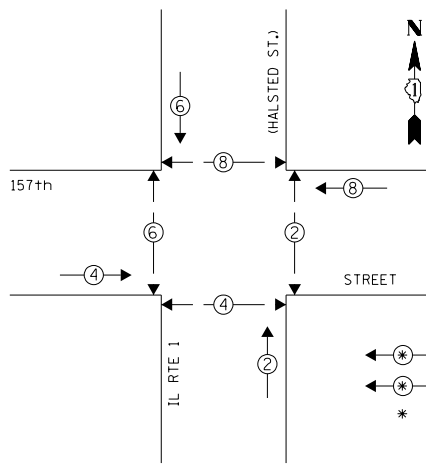
TS # 13815
 HARVEY

DATE	BY	DATE	BY
DATE	BY	DATE	BY
DATE	BY	DATE	BY
DATE	BY	DATE	BY
DATE	BY	DATE	BY

PROFILE SURVEYED
 GRADES CHECKED
 ELEM. NOTED
 STRUCTURE NOTATIONS OKWD
 NOTE BOOK NO. _____
 SURVEYED BY: _____
 ALIGNED CHECKED
 RT. OF WAY CHECKED
 ADD. FILE NAME

PLAN NOTE BOOK NO. _____
 ENGINEERING LTD.
CHRISTOPHER B. BURKE
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (617) 823-5500

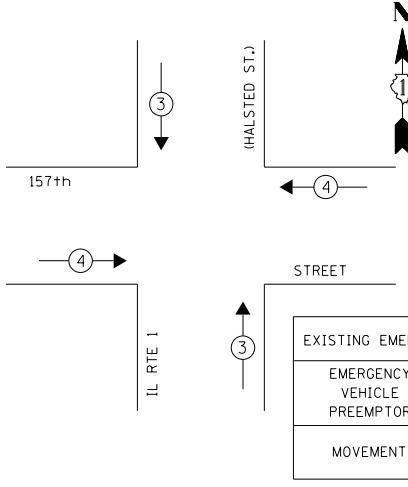
EXISTING CONTROLLER SEQUENCE



LEGEND
 ← * → DUAL ENTRY PHASE
 ← * → PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

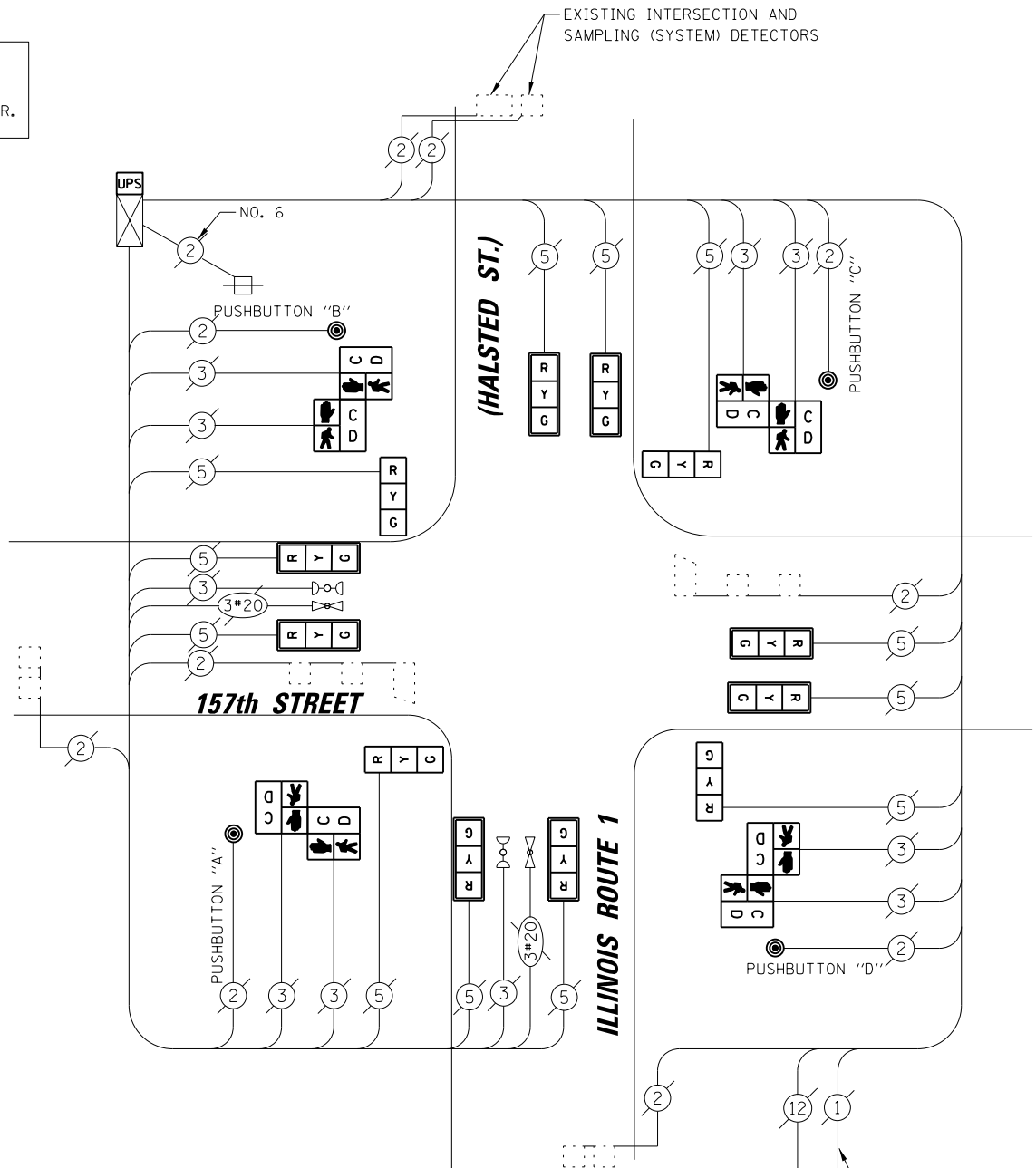
PHASE DESIGNATION DIAGRAM

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

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



CABLE PLAN

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

NOTE:
 PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 4 AND 6.
 PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 6 AND 8.
 PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 2 AND 8.
 PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 4.

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, 2-FACE
- 4 EACH PEDESTRIAN PUSH-BUTTON

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	8
PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	4

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	12	17	0.50		102.00
(YELLOW)	12	25	0.25		75.00
(GREEN)	12	15	0.25		45.00
ARROW	-	12	0.10		-
PED. SIGNAL	8	25	1.00		200.00
CONTROLLER	1	100	1.00		100.00
ILLUMINATED SIGN	-	25	0.05		-
VIDEO SYSTEM	-	150	1.00		-
LUMINAIRE	-	250	0.50		-
BATTERY BACKUP	1	25	1.00		25.0
FLASHER			0.50		
ENERGY COSTS TO:					TOTAL = 524.00

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY: CONTACT: BRAD SHINABARGAR
 PHONE: (708)-235-2692
 COMPANY: COMED

FILE NAME =	USER NAME = fpaceone	DESIGNED - EAJ	REVISED -
N:\dot\130116\Work Order 13019 - South Cook County LED\Traffic\CAB_Halsted-157th.sht		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 48"	CHECKED - GMZ	REVISED -
	PLOT DATE = 10/7/2013	DATE - SEPT. , 2013	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE ILLINOIS ROUTE 1 (HALSTED ST.) AT 157th STREET

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VARIOUS	COOK	87	59
CONTRACT NO. 60X24				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

TS# 1810 HARVEY

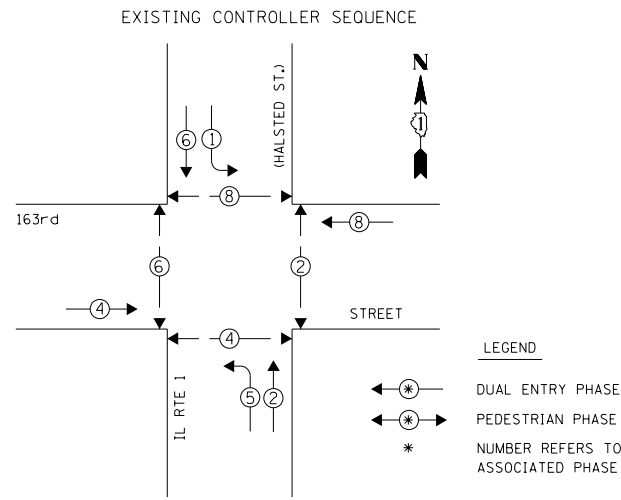
BY: _____ DATE: _____
 SURVEYED _____
 ALIGNED _____
 RT. OF WAY CHECKED _____
 CADD FILE NAME: _____

PLAN NO. _____

ENGINEERING LTD.
CHRISTOPHER B. BURKE
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (617) 823-5500

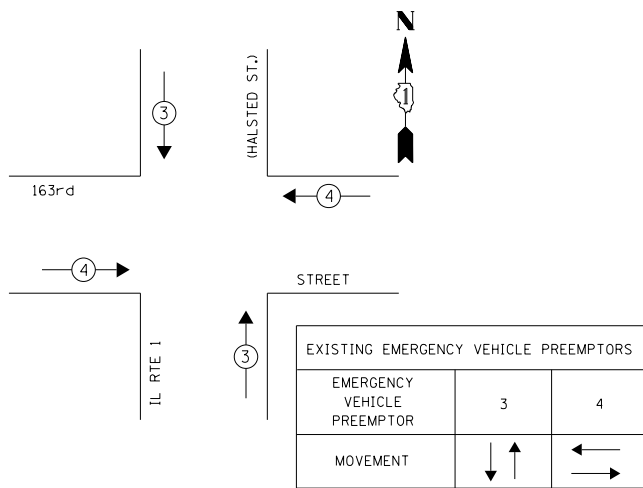
BY: _____ DATE: _____
 SURVEYED _____
 GRADES CHECKED _____
 ELEM. NOTED _____
 STRUCTURE NOTATIONS OKWD

PROFILE NO. _____



PHASE DESIGNATION DIAGRAM

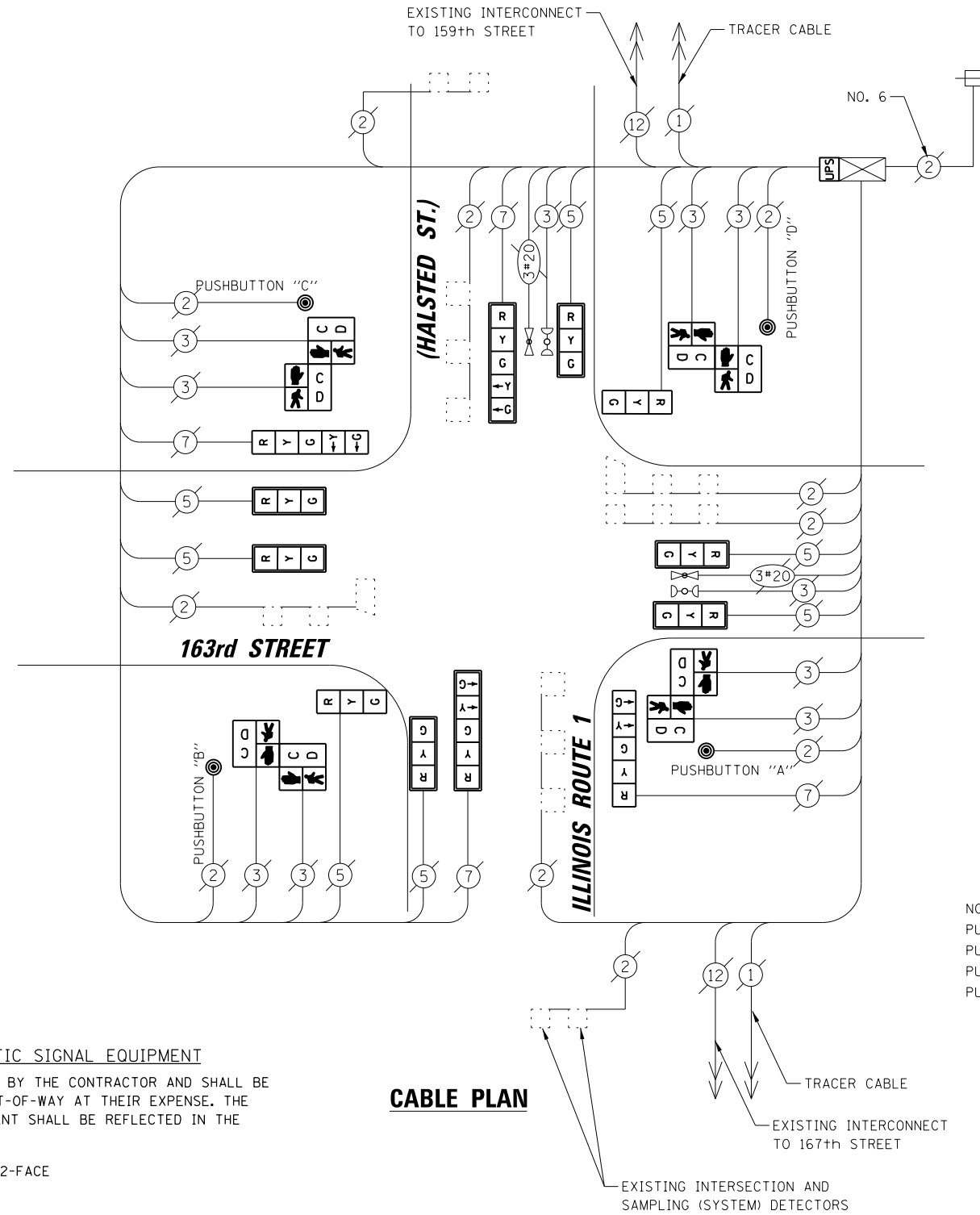
EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	12	17	0.50		102.00
(YELLOW)	12	25	0.25		75.00
(GREEN)	12	15	0.25		45.00
ARROW	8	12	0.10		9.60
PED. SIGNAL	8	25	1.00		200.00
CONTROLLER	1	100	1.00		100.00
ILLUMINATED SIGN	-	25	0.05		-
VIDEO SYSTEM	-	150	1.00		-
LUMINAIRE	-	250	0.50		-
BATTERY BACKUP	1	25	1.00		25.0
FLASHER			0.50		
ENERGY COSTS TO:					TOTAL = 556.60

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY: CONTACT: **BRAD SHINABARGAR**
 PHONE: (708)-235-2692
 COMPANY: **COMED**

FILE NAME =	USER NAME = fpaceone	DESIGNED - EAJ	REVISED -
N:\idot\130116\Work Order 13019 - South Cook County LED\Traffic\CAB-Halsted-163rd.sht		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 48"	CHECKED - GMZ	REVISED -
	PLOT DATE = 10/7/2013	DATE - SEPT. , 2013	REVISED -



CABLE PLAN

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

NOTE:
 PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.
 PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.
 PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.
 PUSHBUTTON "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.

- 4 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 4 EACH PEDESTRIAN PUSH-BUTTON

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	6
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	2
PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	4

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE ILLINOIS ROUTE 1 (HALSTED ST.) AT 163rd STREET

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

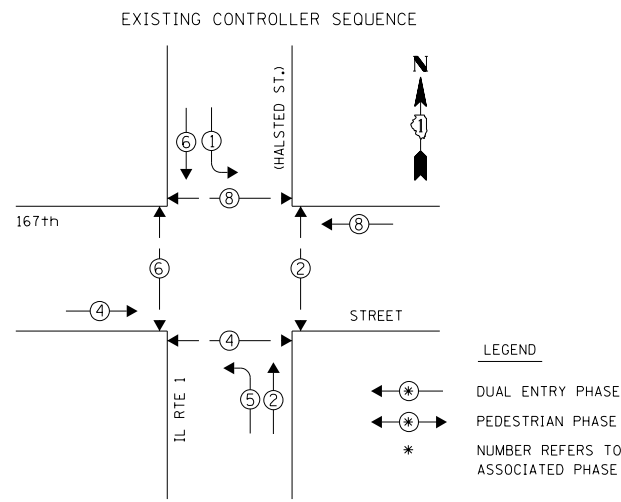
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VARIOUS	COOK	87	60
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60X24	

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

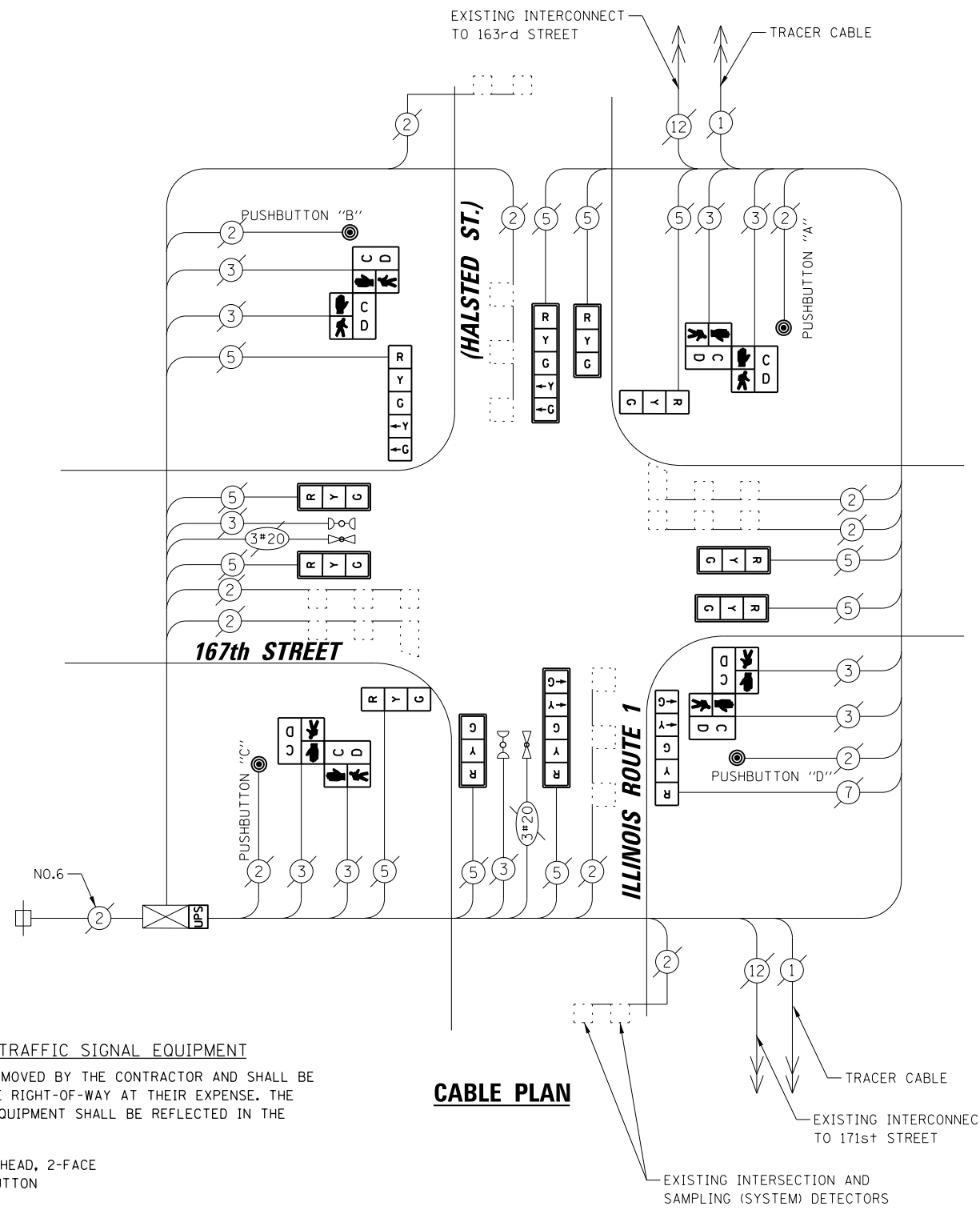
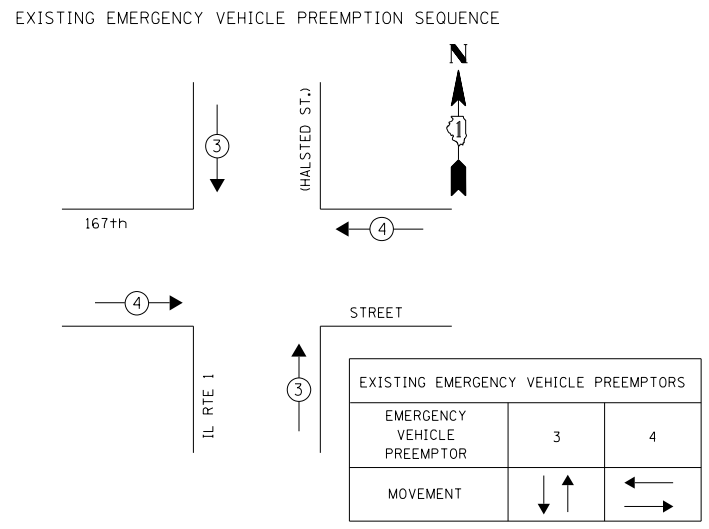
TS # 1815 HARVEY

DATE	BY	DATE	BY
DATE	BY	DATE	BY
DATE	BY	DATE	BY
DATE	BY	DATE	BY
DATE	BY	DATE	BY

SURVEYED _____
 ALIGNED _____
 RT. OF WAY CHECKED _____
 ADD. FILE NAME _____
 PLAN NO. _____
 NOTE BOOK NO. _____
CHRISTOPHER B. BURKE
 ENGINEERING LTD.
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (647) 823-5500
 SURVEYED _____
 GRADES CHECKED _____
 ELEM. NOTED _____
 STRUCTURE NOTATIONS OKWD _____
 PROFILE NO. _____
 NOTE BOOK NO. _____



PHASE DESIGNATION DIAGRAM



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

NOTE:
 PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 8.
 PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 6 AND 8.
 PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 4 AND 6.
 PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 4.

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, 2-FACE
- 4 EACH PEDESTRIAN PUSH-BUTTON

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	12	17	0.50		102.00
(YELLOW)	12	25	0.25		75.00
(GREEN)	12	15	0.25		45.00
ARROW	8	12	0.10		9.60
PED. SIGNAL	8	25	1.00		200.00
CONTROLLER	1	100	1.00		100.00
ILLUMINATED SIGN	-	25	0.05		-
VIDEO SYSTEM	-	150	1.00		-
LUMINAIRE	-	-	0.50		-
BATTERY BACKUP	1	25	1.00		25.0
FLASHER			0.50		
ENERGY COSTS TO:					TOTAL = 556.60

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY: CONTACT: BRAD SHINABARGAR
 PHONE: (708)-235-2692
 COMPANY: COMED

FILE NAME =	USER NAME = fpaceone	DESIGNED - EAJ	REVISED -
N:\dot\130116\Work Order 13019 - South Cook County LED\Traffic\CAB_Halsted-167th.sht		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 48"	CHECKED - GMZ	REVISED -
	PLOT DATE = 10/7/2013	DATE - SEPT. , 2013	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE ILLINOIS ROUTE 1 (HALSTED ST.) AT 167th STREET			
SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	

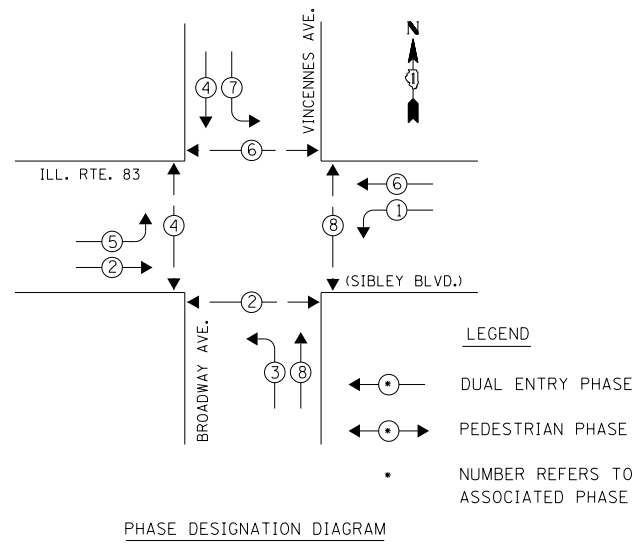
ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	6
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	2
PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	4

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VARIOUS	COOK	87	61
			CONTRACT NO. 60X24	
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

TS# 1820 HARVEY

BY: DATE: SURVEYED: ALIGNED: CHECKED: RT. OF WAY CHECKED: FILE NAME: PLAN: NOTE BOOK NO.: ENGINEERING LTD. 8575 West Higgins Road, Suite 600 Rosemont, Illinois 60018 (630) 922-5500

EXISTING CONTROLLER SEQUENCE



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

NOTE:
 PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.
 PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.
 PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.
 PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

CONSTRUCTION NOTE:

- ③ THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 16 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

NOTES

- 1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- 2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION, THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT REUSABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- 3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE 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 UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

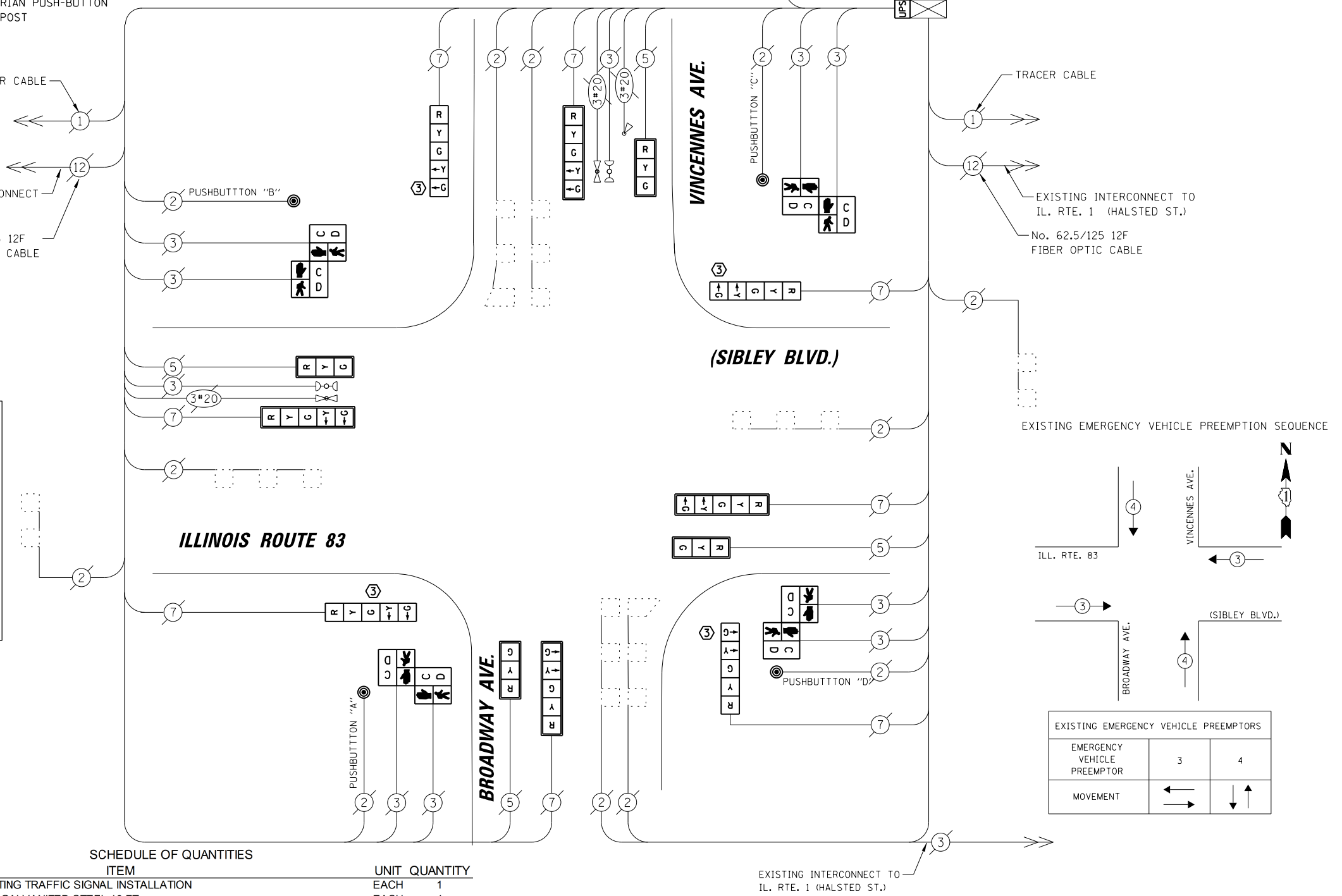
I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	12	17	0.50	102.00	
(YELLOW)	12	25	0.25	75.00	
(GREEN)	12	15	0.25	45.00	
ARROW	16	12	0.10	19.20	
PED. SIGNAL	8	25	1.00	200.00	
CONTROLLER	1	100	1.00	100.00	
ILLUMINATED SIGN	-	25	0.05	-	
VIDEO SYSTEM	-	150	1.00	-	
LUMINAIRE	-	250	0.50	-	
BATTERY BACKUP	1	25	1.00	25.0	
FLASHER	-	-	0.50	-	
ENERGY COSTS TO:				TOTAL =	566.20

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY: CONTACT: BRAD SHINABARGAR
 PHONE: (708)-235-2692
 COMPANY: COMED

SCHEDULE OF QUANTITIES

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

CABLE PLAN



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

FILE NAME =	USER NAME = fpaceone	DESIGNED - EAJ	REVISED -
N:\dot\130116\Work Order 13019 - South Cook County LED\Traffic\CAB_IL83-Broadway.L		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 48"	CHECKED - GMZ	REVISED -
	PLOT DATE = 10/7/2013	DATE - SEPT. , 2013	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 IL ROUTE 83 AT BROADWAY AVENUE /VINCENNES AVENUE
 SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VARIOUS	COOK	87	62
CONTRACT NO. 60X24			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

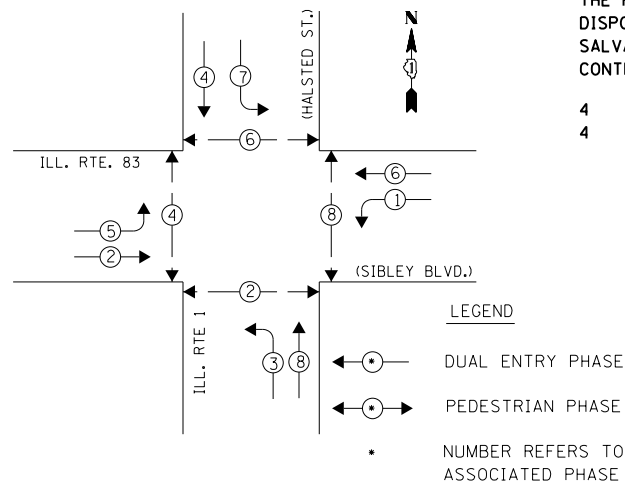
TS# 3385
 HARVEY

DATE: _____ BY: _____
 SURVEYED: _____ GRADES CHECKED: _____
 ALIGNED: _____ RT. OF WAY CHECKED: _____
 NOTE BOOK NO. _____
 ILLINOIS DEPARTMENT OF TRANSPORTATION
 STATE OF ILLINOIS
 PROJECT NO. _____
 SHEET NO. _____

BY: **CHRISTOPHER B. BURKE** ENGINEERING LTD.
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (630) 922-5500

DATE: _____ BY: _____
 SURVEYED: _____ GRADES CHECKED: _____
 ALIGNED: _____ RT. OF WAY CHECKED: _____
 NOTE BOOK NO. _____
 ILLINOIS DEPARTMENT OF TRANSPORTATION
 STATE OF ILLINOIS
 PROJECT NO. _____
 SHEET NO. _____

EXISTING CONTROLLER SEQUENCE



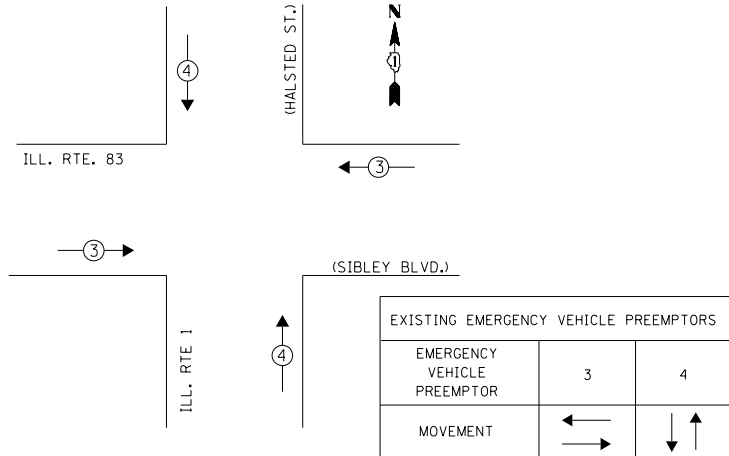
LEGEND
 ○ DUAL ENTRY PHASE
 ○ PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

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, 2-FACE
- 4 EACH PEDESTRIAN PUSH-BUTTON

EXISTING PHASE DESIGNATION DIAGRAM

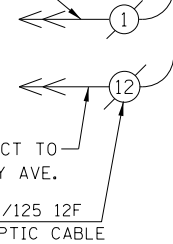


I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	12	17	0.50	102.00	
(YELLOW)	12	25	0.25	75.00	
(GREEN)	12	15	0.25	45.00	
ARROW	16	12	0.10	19.20	
PED. SIGNAL	8	25	1.00	200.00	
CONTROLLER	1	100	1.00	100.00	
ILLUMINATED SIGN	-	25	0.05	-	
VIDEO SYSTEM	-	150	1.00	-	
LUMINAIRE	-	250	0.50	-	
BATTERY BACKUP	1	25	1.00	25.0	
FLASHER	-	-	0.50	-	
ENERGY COSTS TO:				TOTAL =	566.20

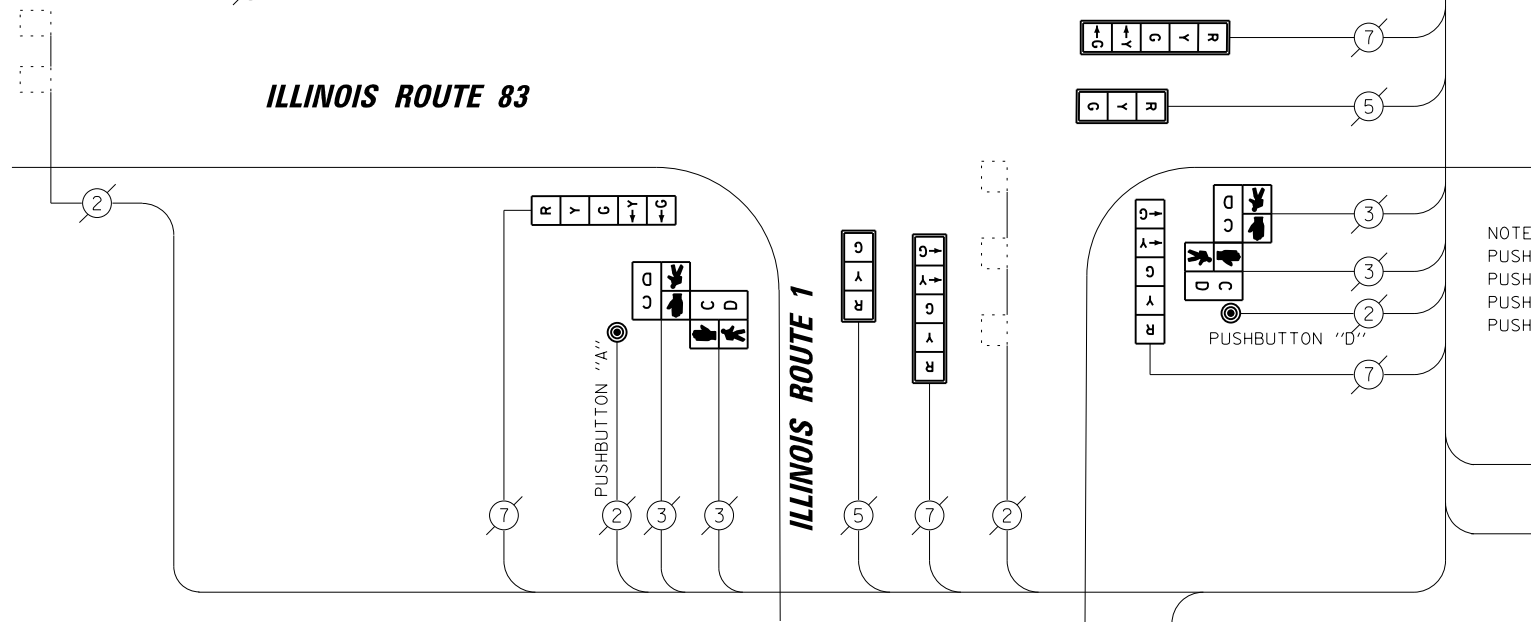
ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY: CONTACT: **BRAD SHINABARGAR**
 PHONE: (708)-235-2692
 COMPANY: COMED

EXISTING INTERCONNECT TO VINCENNES AVE./BROADWAY AVE.
 No. 62.5/125 12F FIBER OPTIC CABLE

TRACER CABLE



ILLINOIS ROUTE 83



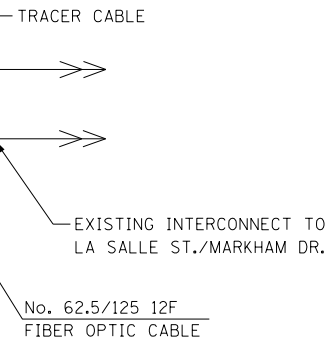
SCHEDULE OF QUANTITIES

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

CABLE PLAN

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

NOTE:
 PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.
 PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.
 PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.
 PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.



FILE NAME = N:\dot\130116\Work Order 13019 - South Cook County LED\Traffic\CAB_IL83-ILHalsted.L	USER NAME = fpacione	DESIGNED - EAJ	REVISED -
PLOT SCALE = 48"	PLotted DATE = 10/7/2013	CHECKED - GMZ	REVISED -
		DATE - SEPT. , 2013	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE IL ROUTE 83 (SIBLEY BLVD) AT IL ROUTE 1 (HALSTED ST.)

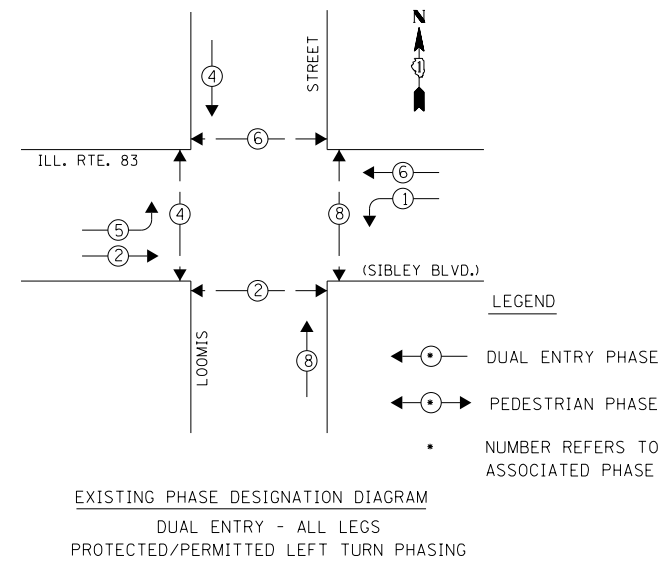
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VARIOUS	COOK	87	63
CONTRACT NO. 60X24			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

TS# 1765 HARVEY

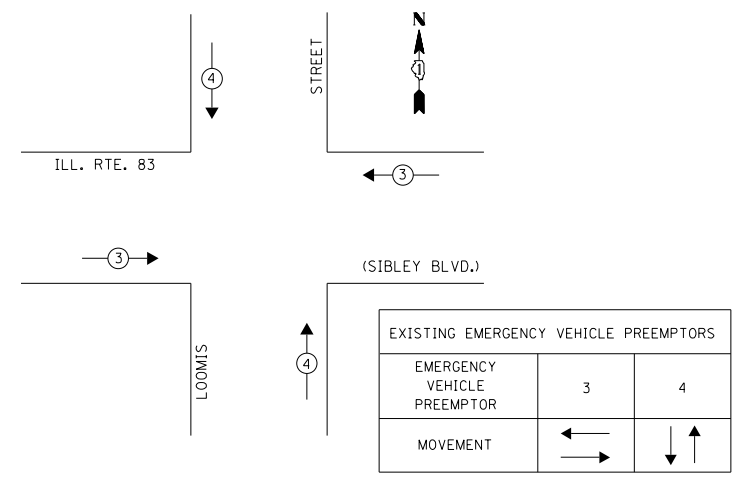
BY: DATE: SURVEYED: GRADES CHECKED: STRUCTURE NOTATIONS OK/NO
 PLAN: NOTE BOOK NO.:
 SURVEYED: ALIGNED: CHECKED: RT. OF WAY CHECKED: ADJ. FILE NAME:
CHRISTOPHER B. BURKE ENGINEERING LTD. 8575 West Higgins Road, Suite 600 Rosemont, Illinois 60018 (647) 923-5500
 DATE: BY: SURVEYED: GRADES CHECKED: STRUCTURE NOTATIONS OK/NO

EXISTING CONTROLLER SEQUENCE



NOTE:
 PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.
 PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.
 PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.
 PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

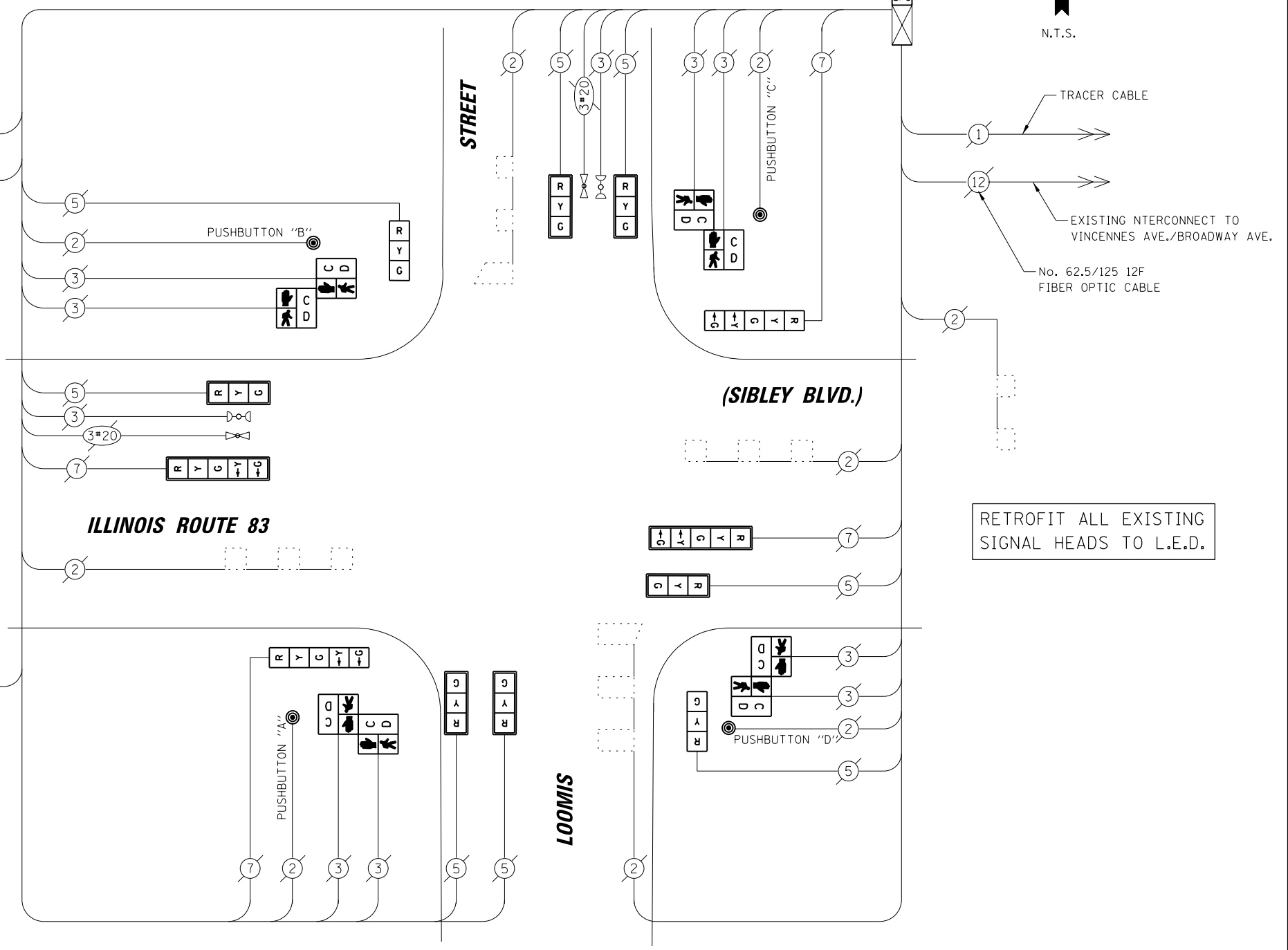


I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	WATTAGE X INCAND. LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	17	0.50	102.00
(YELLOW)	12	25	0.25	75.00
(GREEN)	12	15	0.25	45.00
ARROW	8	12	0.10	9.60
PED. SIGNAL	8	25	1.00	200.00
CONTROLLER	1	100	1.00	100.00
ILLUMINATED SIGN	-	25	0.05	-
VIDEO SYSTEM	-	150	1.00	-
LUMINAIRE	-	250	0.50	-
BATTERY BACKUP	1	25	1.00	25.0
FLASHER	-	-	0.50	-
ENERGY COSTS TO:			TOTAL =	556.60

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY: CONTACT: **BRAD SHINABARGAR**
 PHONE: (708)-235-2692
 COMPANY: **COMED**

TRACER CABLE
EXISTING INTERCONNECT TO WOOD STREET
 No. 62.5/125 12F FIBER OPTIC CABLE



SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	6
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	2
PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	4

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, 2-FACE
4	EACH	PEDESTRIAN PUSH-BUTTON

FILE NAME =	USER NAME = fpaceone	DESIGNED - EAJ	REVISED -
N:\dot\130116\Work Order 13019 - South Cook County LED\Traffic\CAB_IL83-Loomis.L.shx		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 48"	CHECKED - GMZ	REVISED -
	PLOT DATE = 10/7/2013	DATE - SEPT. , 2013	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

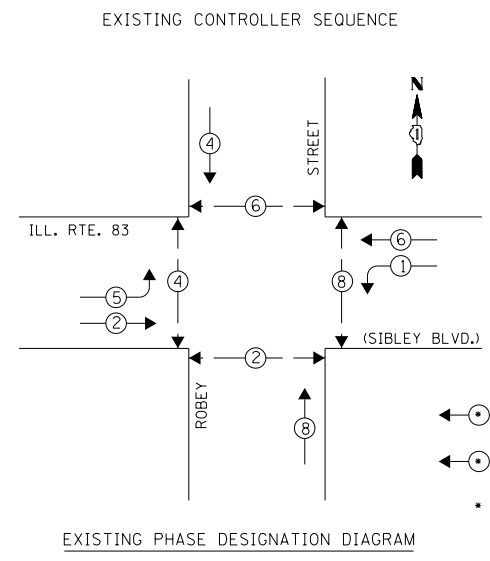
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE ILLINOIS ROUTE 83 AT LOOMIS STREET

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

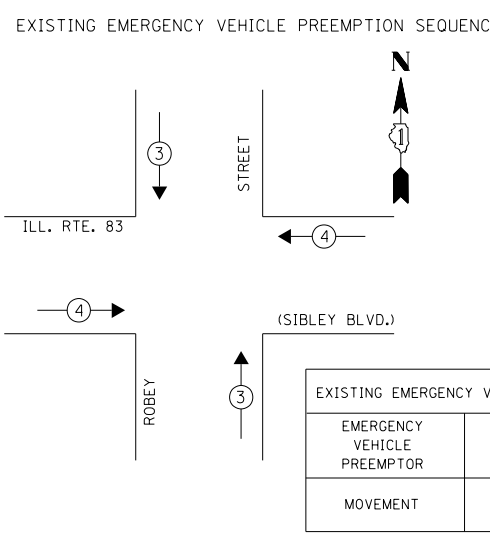
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VARIOUS	COOK	87	64
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60X24	

TS# 3470
 HARVEY

DATE: _____ BY: _____
 SURVEYED: _____ ALIGNED: _____ CHECKED: _____
 RT. OF WAY CHECKED: _____
 DATE: _____ BY: _____
 PLAN: _____
 NOTE BOOK NO.: _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (617) 823-5500
 DATE: _____ BY: _____
 SURVEYED: _____ GRADES CHECKED: _____
 ELEM. NOTED: _____ STRUCTURE NOTATIONS OK'D: _____
 NOTE BOOK NO.: _____



LEGEND
 ← ● → DUAL ENTRY PHASE
 ← ● PEDESTRIAN PHASE
 ● NUMBER REFERS TO ASSOCIATED PHASE

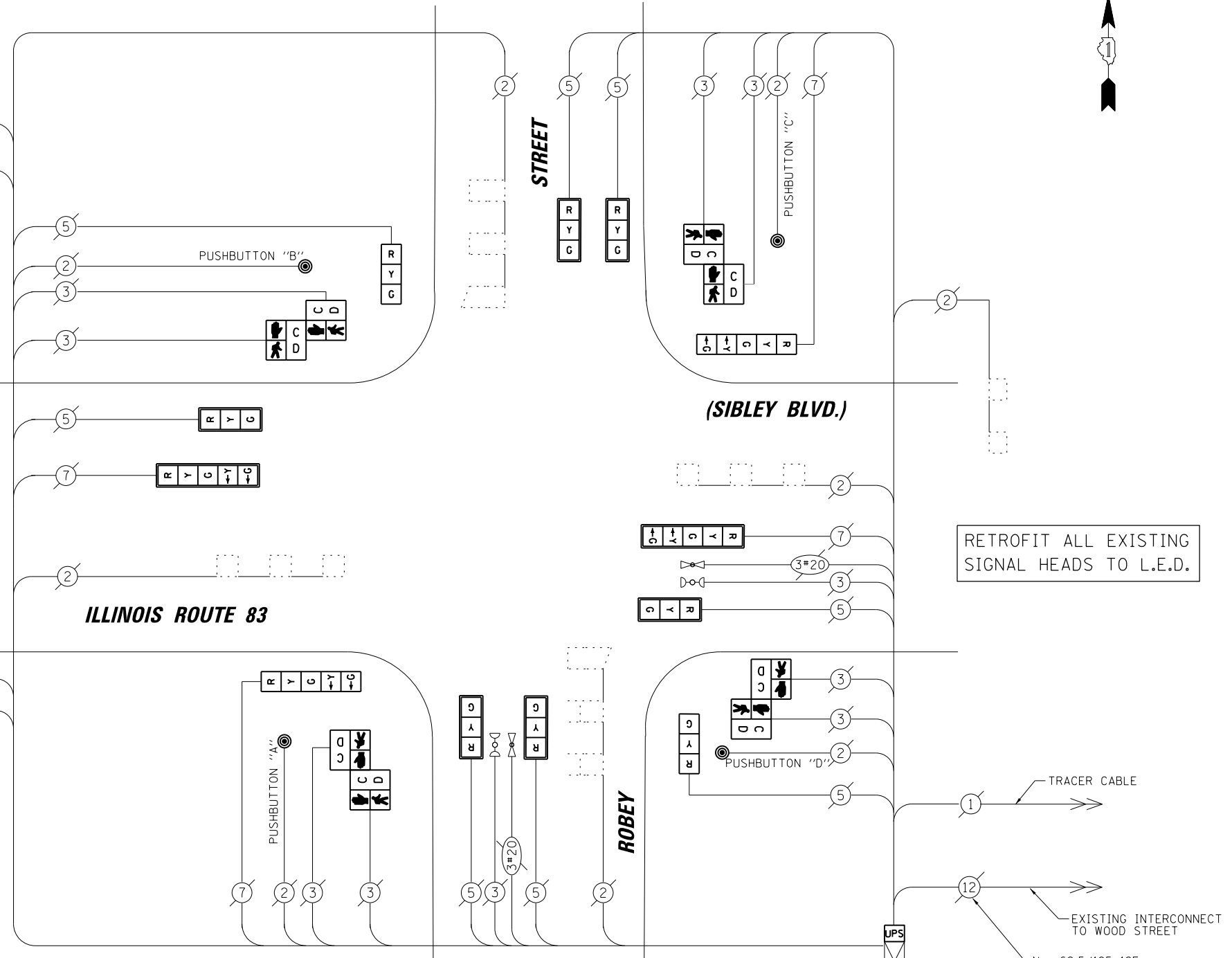


NOTE:
 PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.
 PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.
 PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.
 PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

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

TRACER CABLE
 EXISTING INTERCONNECT TO DIXIE HIGHWAY
 No. 62.5/125 12F FIBER OPTIC CABLE

EXISTING INTERSECTION AND SAMPLING (SYSTEM) DETECTORS



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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	12		17	0.50	102.00
(YELLOW)	12		25	0.25	75.00
(GREEN)	12		15	0.25	45.00
ARROW	8		12	0.10	9.60
PED. SIGNAL	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUMINATED SIGN	-		25	0.05	-
VIDEO SYSTEM	-		150	1.00	-
LUMINAIRE	-	250		0.50	-
BATTERY BACKUP	1	25		1.00	25.0
FLASHER				0.50	-
ENERGY COSTS TO:					TOTAL = 556.60

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY: CONTACT: BRAD SHINABARGAR
 PHONE: (708)-235-2692
 COMPANY: COMED

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	6
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	2
PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	4

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, 2-FACE
4	EACH	PEDESTRIAN PUSH-BUTTON

FILE NAME = USER NAME = fpaceone
 N:\dot\130116\Work Order 13019 - South Cook County LED Traffic\CAB_IL83-Robey.Lsht
 DRAWN - FPB / FCP
 CHECKED - GMZ
 DATE - SEPT. , 2013

DESIGNED - EAJ
 REVISIONS:
 REVISIONS:
 REVISIONS:

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

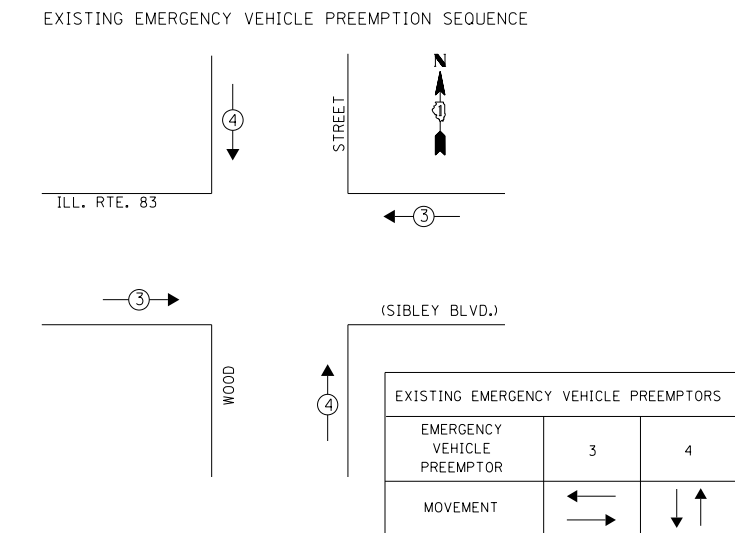
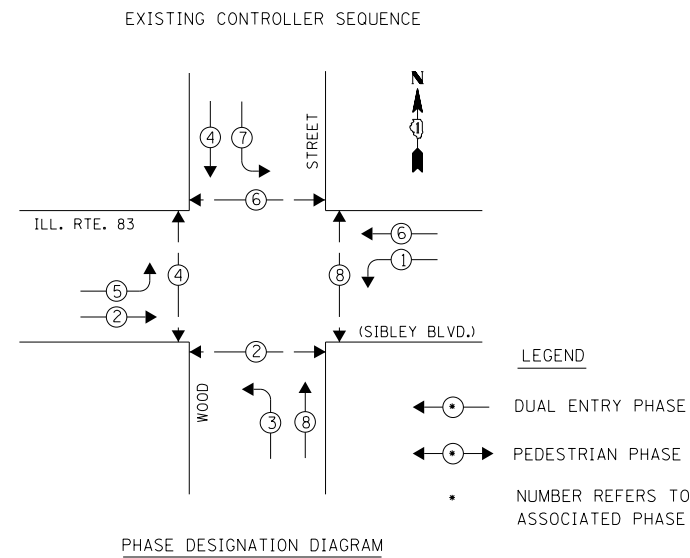
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE ILLINOIS ROUTE 83 AT ROBIEY AVENUE

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VARIOUS	COOK	87	65
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60X24	

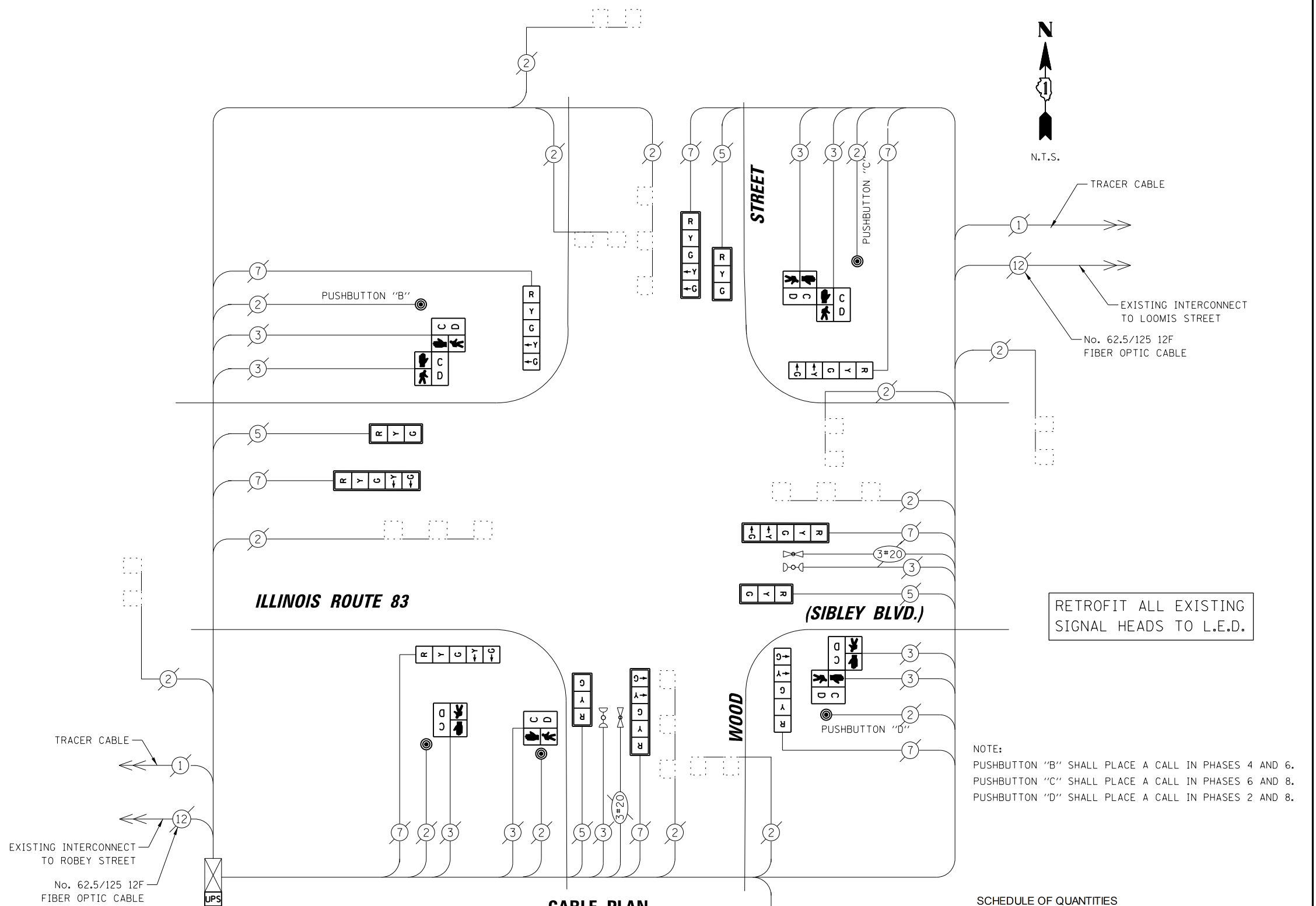
TS# 3510 HARVEY

BY: _____ DATE: _____
 SURVEYED _____
 ALIGNED _____
 RT. OF WAY CHECKED _____
 CADD FILE NAME: _____
 PLAN NO. _____
 NOTE BOOK NO. _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (617) 823-5500
 PROFILE SURVEYED _____
 GRADES CHECKED _____
 ELEM. NOTED _____
 STRUCTURE NOTATIONS OKWD



I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	12	17	0.50		102.00
(YELLOW)	12	25	0.25		75.00
(GREEN)	12	15	0.25		45.00
ARROW	16	12	0.10		19.20
PED. SIGNAL	8	25	1.00		200.00
CONTROLLER	1	100	1.00		100.00
ILLUMINATED SIGN	-	25	0.05		-
VIDEO SYSTEM	-	150	1.00		-
LUMINAIRE	-	250	0.50		-
BATTERY BACKUP	1	25	1.00		25.0
FLASHER			0.50		
ENERGY COSTS TO:				TOTAL =	566.20

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY: CONTACT: **BRAD SHINABARGAR**
 PHONE: (708)-235-2692
 COMPANY: **COMED**



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 PEDESTRIAN SIGNAL HEAD, 2-FACE
- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 5 EACH PEDESTRIAN PUSH-BUTTON

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

FILE NAME =	USER NAME = fpaceone	DESIGNED - EAJ	REVISED -
N:\dot\130116\Work Order 13019 - South Cook County LED\Traffic\CAB_IL83-Wood.L.sh		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 48"	CHECKED - GMZ	REVISED -
	PLOT DATE = 10/7/2013	DATE - SEPT. , 2013	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE ILLINOIS ROUTE 83 AT WOOD STREET

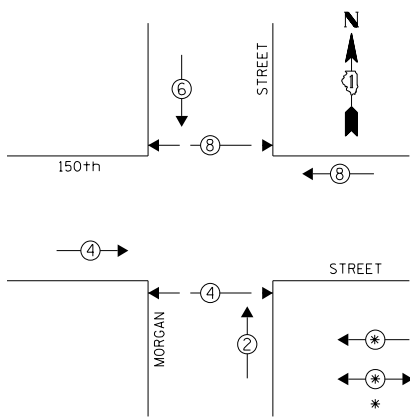
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VARIOUS	COOK	87	66
CONTRACT NO. 60X24				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

TS# 3520 HARVEY

DATE: _____ BY: _____
 SURVEYED: _____ ALIGNED: _____
 PLAN: _____ NOTE BOOK: _____
 ENGINEERING LTD. 3575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
CHRISTOPHER B. BURKE
 (617) 823-5500
 PROFILE: _____ SURVEYED: _____
 GRADES CHECKED: _____
 NOTE BOOK: _____ ELEM. NOTED: _____
 STRUCTURE: _____ NOTATIONS: _____

EXISTING CONTROLLER SEQUENCE



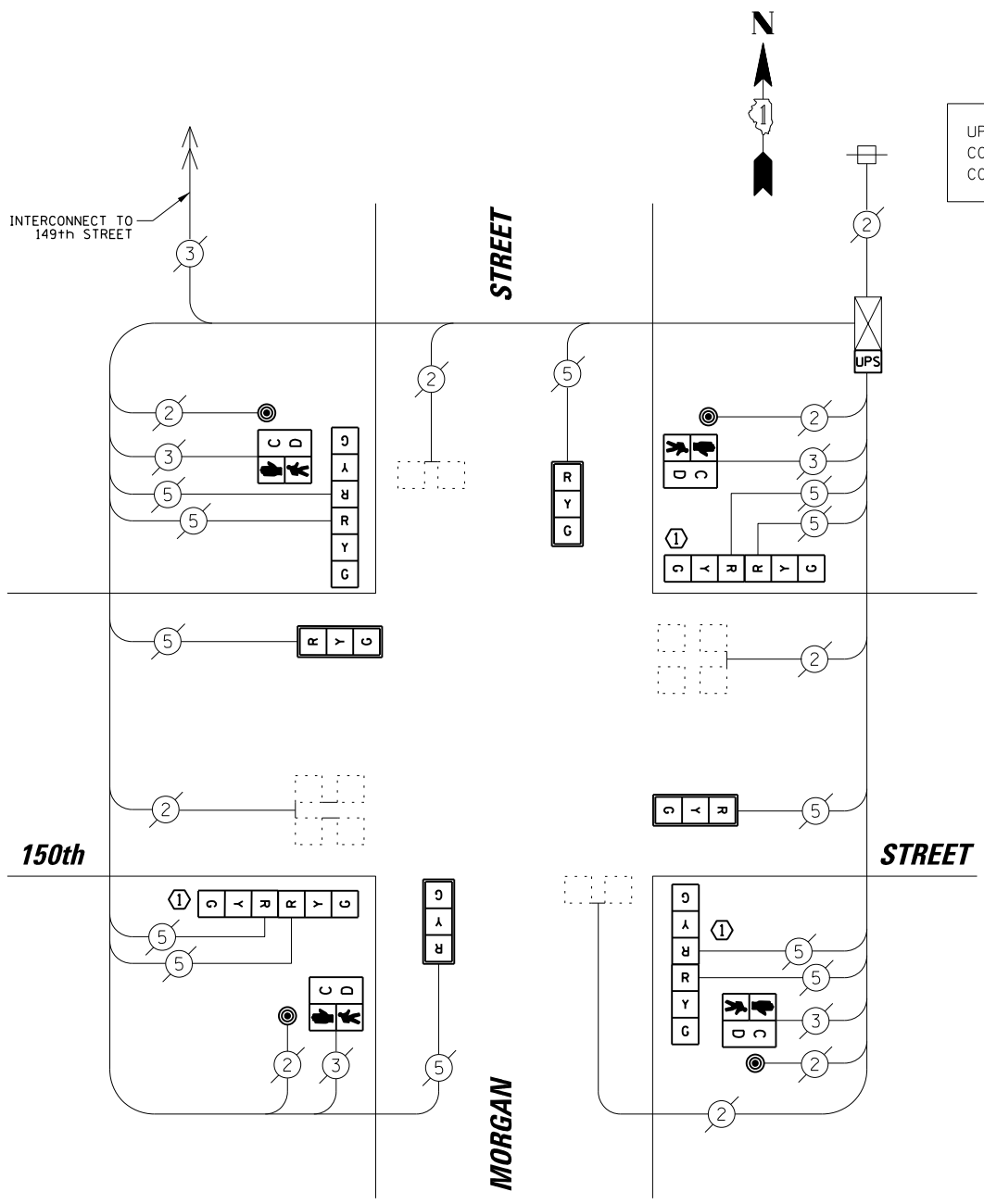
LEGEND
 ← * → DUAL ENTRY PHASE
 ← * → PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

NOTES

- 1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- 2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION, THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT REUSABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- 3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE 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 UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

EXISTING INTERCONNECT TO 149th STREET



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

CABLE PLAN

CONSTRUCTION NOTE:

- 1) THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 14 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING 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.

- | | | |
|---|------|--------------------------------|
| 4 | EACH | SIGNAL HEAD, 2-FACE, 3-SECTION |
| 4 | EACH | SIGNAL HEAD, 1-FACE, 3-SECTION |
| 4 | EACH | PEDESTRIAN SIGNAL HEAD, 1-FACE |
| 4 | EACH | PEDESTRIAN PUSH-BUTTON |
| 3 | EACH | STEEL POST |

SCHEDULE OF QUANTITIES

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

TS # 13835
 HARVEY

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	12		17	0.50	102.00
(YELLOW)	12		25	0.25	75.00
(GREEN)	12		15	0.25	45.00
ARROW	-		12	0.10	-
PED. SIGNAL	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUMINATED SIGN	-		25	0.05	-
VIDEO SYSTEM	-		150	1.00	-
LUMINAIRE	-	250		0.50	-
BATTERY BACKUP	1	25		1.00	25.0
FLASHER	-			0.50	-
ENERGY COSTS TO:					TOTAL = 547.00

CITY OF HARVEY
 15320 BROADWAY AVENUE
 HARVEY, IL 60426
 ENERGY SUPPLY: CONTACT: BRAD SHINABARGAR
 PHONE: (708)-235-2692
 COMPANY: COMED

FILE NAME = N:\dot\130116\Work Order 13019 - South Cook County LED\Traffic\CAB_Morgan-150th.Lsp	USER NAME = fpaceone	DESIGNED - EAJ	REVISED -
		DRAWN - FPB / FCP	REVISED -
		CHECKED - GMZ	REVISED -
		DATE - SEPT. , 2013	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE MORGAN STREET AT 150TH STREET

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VARIOUS	COOK	87	67
CONTRACT NO. 60X24				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

BY: _____ DATE: _____
 SURVEYED _____
 ALIGNED _____
 CHECKED _____
 RT. OF WAY CHECKED _____
 ADD. FILE NAME _____

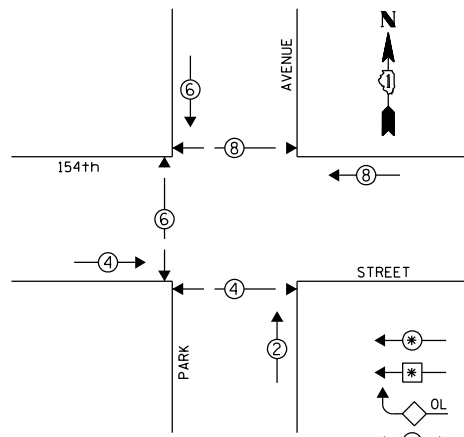
PLAN NO. _____
 NOTE BOOK NO. _____

ENGINEERING LTD.
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (617) 823-5500

BY: _____ DATE: _____
 SURVEYED _____
 GRADES CHECKED _____
 ELEM. NOTED _____
 STRUCTURE NOTATIONS OKWD

PROFILE NO. _____
 NOTE BOOK NO. _____

EXISTING CONTROLLER SEQUENCE



CONSTRUCTION NOTE:

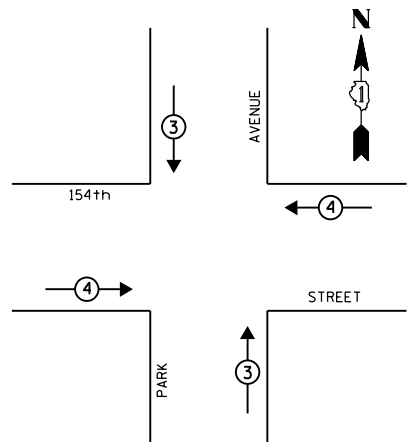
- ① THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 14 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

LEGEND

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

EXISTING PHASE DESIGNATION DIAGRAM

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	12		17	0.50	102.00
(YELLOW)	12		25	0.25	75.00
(GREEN)	12		15	0.25	45.00
ARROW	-		12	0.10	-
PED. SIGNAL	6		25	1.00	150.00
CONTROLLER	1		100	1.00	100.00
ILLUMINATED SIGN	-		25	0.05	-
VIDEO SYSTEM	-		150	1.00	-
LUMINAIRE	-	250		0.50	-
BATTERY BACKUP	1	25		1.00	25.0
FLASHER	-			0.50	-
ENERGY COSTS TO:					TOTAL = 497.00

CITY OF HARVEY

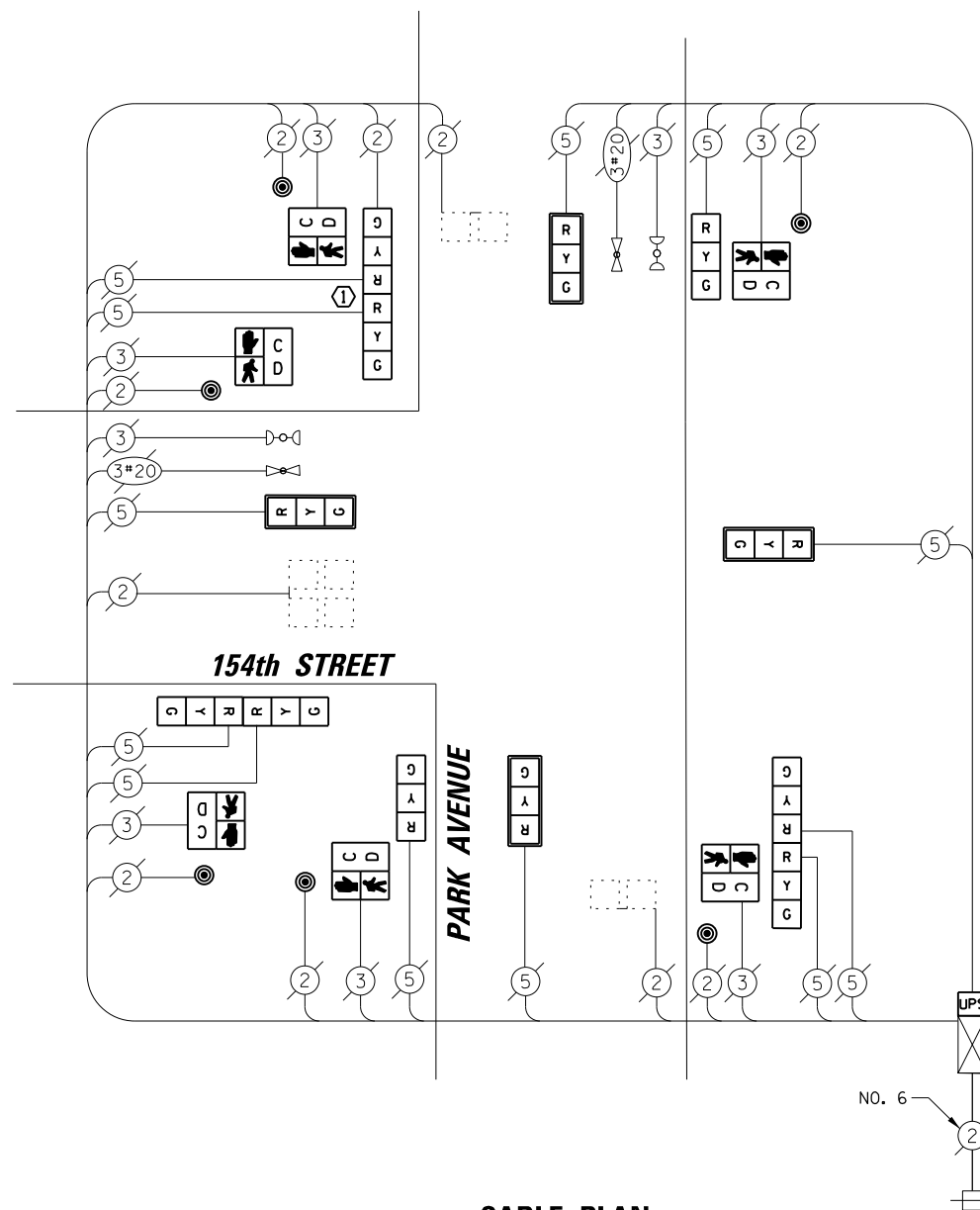
15320 BROADWAY AVENUE
 HARVEY, IL 60426

ENERGY SUPPLY: CONTACT: BRAD SHINABARGAR
 PHONE: (708)-235-2692
 COMPANY: COMED

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, 2-FACE, 3-SECTION
6	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
6	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
6	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	STEEL POST



CABLE PLAN

- NOTES
- 1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
 - 2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION, THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT REUSABLE, REPLACE AS DIRECTED BY THE ENGINEER.
 - 3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE 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 UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

SCHEDULE OF QUANTITIES

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

TS # 13820
 HARVEY

FILE NAME =	USER NAME = fpaceone	DESIGNED - EAJ	REVISED -
N:\dot\130116\Work Order 13019 - South Cook County LED\Traffic\CAB_ParkAve-154th.sh		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 48"	CHECKED - GMZ	REVISED -
	PLOT DATE = 10/7/2013	DATE - SEPT. , 2013	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

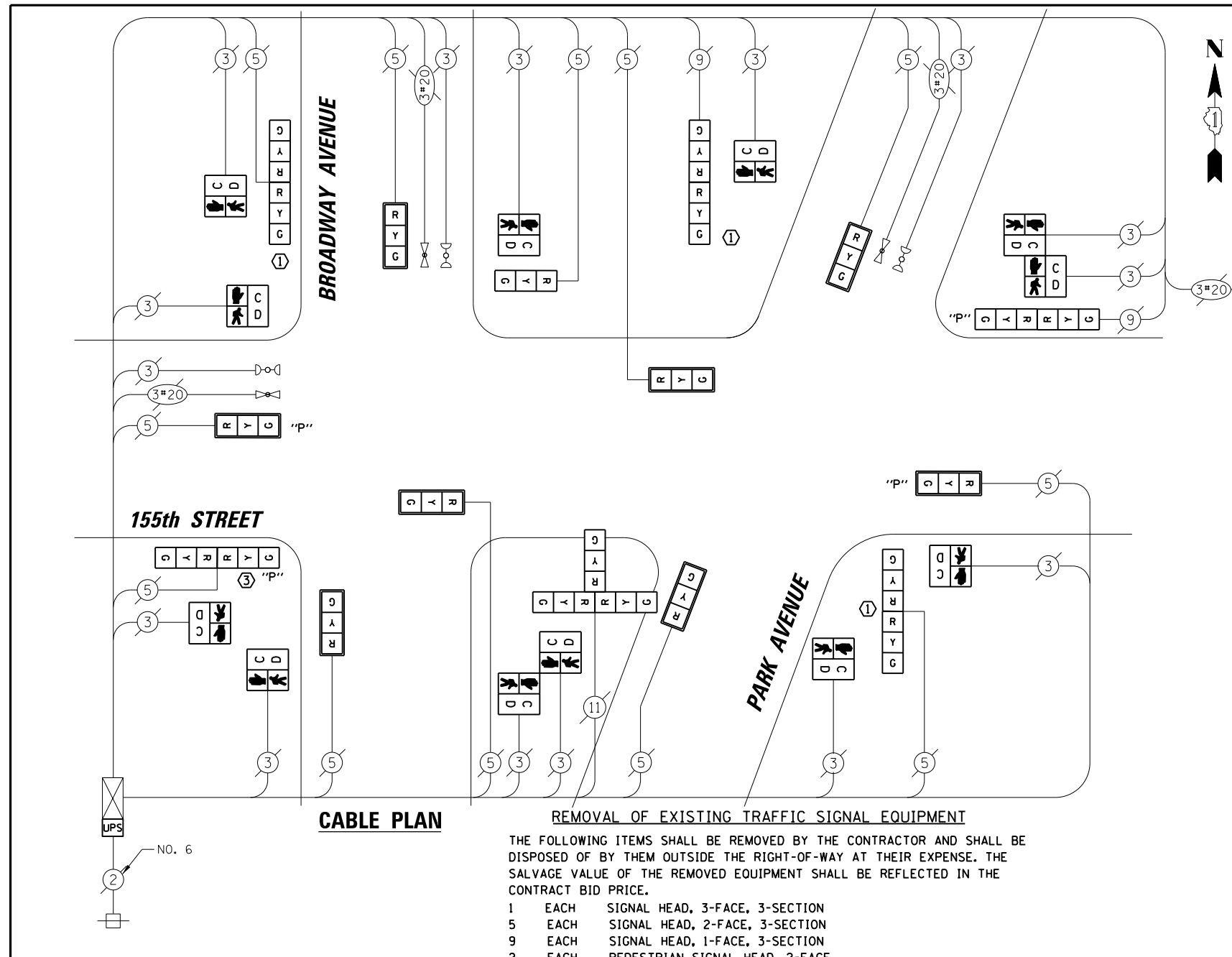
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 PARK AVENUE AT 154th STREET

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VARIOUS	COOK	87	68
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60X24	

BY: DATE: SURVEYED: GRADES CHECKED: ILLINOIS PROFESSIONAL ENGINEERING LICENSE NO. 0000000000
 PLAN NO. NOTE BOOK NO. DATE: SURVEYED: GRADES CHECKED: ILLINOIS PROFESSIONAL ENGINEERING LICENSE NO. 0000000000
 PROFILE: SURVEYED: GRADES CHECKED: ILLINOIS PROFESSIONAL ENGINEERING LICENSE NO. 0000000000

FILE NAME: N:\dot\130116\Work Order 130119 - South Cook County LED\Traffic\CAB.ParkAve-155th.sh
 USER NAME: fpaceone
 DESIGNED: EAJ
 DRAWN: FPB / FCP
 CHECKED: GMZ
 DATE: SEPT. , 2013
 REVISIONS: REVISED -
 REVISED -
 REVISED -
 REVISED -



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

TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	22	17	0.50	187.00	
(YELLOW)	22	25	0.25	137.50	
(GREEN)	22	15	0.25	82.50	
ARROW	-	12	0.10	-	
PED. SIGNAL	12	25	1.00	300.00	
CONTROLLER	1	100	1.00	100.00	
ILLUMINATED SIGN	-	25	0.05	-	
VIDEO SYSTEM	-	150	1.00	-	
LUMINAIRE	-	250	0.50	-	
BATTERY BACKUP	1	25	1.00	25.0	
FLASHER	-	-	0.50	-	
ENERGY COSTS TO:				TOTAL =	832.00

CITY OF HARVEY
 15320 BROADWAY AVENUE
 HARVEY, IL 60426
 ENERGY SUPPLY: CONTACT: BRAD SHINABARGAR
 PHONE: (708)-235-2692
 COMPANY: COMED

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 SIGNAL HEAD, 3-FACE, 3-SECTION
- 5 EACH SIGNAL HEAD, 2-FACE, 3-SECTION
- 9 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 2 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 8 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 4 EACH STEEL POST

CONSTRUCTION NOTES:

- THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 14 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.
- THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 16 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

NOTES

- ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION, THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT REUSABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE 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 UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

EXISTING SEQUENCE OF OPERATIONS

MOVEMENT	FLASHER													
PHASE	1					3					4			
INTERVAL	1	2	3	4	5	6	7	8	9	10	11	12	13	14
CHANGE TO	3					4					1			
155th STREET E/B SIGNALS AT BROADWAY AVENUE	G	G	Y	R	R	R	R	R	R	R	R	R	R	R
155th STREET W/B SIGNALS AT BROADWAY AVENUE	G	G	G	R	R	R	R	R	R	R	G	G	G	R
155th STREET E/B SIGNALS AT PARK AVENUE	G	G	G	R	G	G	Y	R	R	R	R	R	R	R
155th STREET W/B SIGNALS AT PARK AVENUE	G	G	Y	R	R	R	R	R	R	R	R	R	R	R
PARK AVENUE SIGNALS	R	R	R	R	R	R	R	R	R	R	G	G	Y	R
BROADWAY AVENUE SIGNALS	R	R	R	R	R	G	G	Y	R	R	R	R	R	R
PED SIGNALS X-ING BROADWAY AVE. AT 155th ST.	W	FL	D	D	D	D	D	D	D	D	D	D	D	D
PED SIGNALS X-ING PARK AVE. AT 155th ST.	W	W	W	W	W	W	FL	D	D	D	D	D	D	D
PED SIGNALS X-ING 155th ST. AT PARK AVE.	D	D	D	D	D	D	D	D	D	D	W	FL	D	D
PED SIGNALS X-ING 155th ST. AT BROADWAY AVE.	D	D	D	D	D	W	FL	D	D	D	D	D	D	D

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NO.	EMERGENCY VEHICLE SEQUENCE																CLEAR TO NORMAL SEQUENCE
	1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	1M	1N	1P	1Q	1W	
EMERGENCY VEHICLE PREEMPTION SEQUENCE INTERVAL	1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	1M	1N	1P	1Q	1W	
CHANGE TO EMERGENCY VEHICLE PREEMPTION SEQUENCE INTERVAL	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
155th STREET E/B SIGNALS AT BROADWAY AVENUE	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	
155th STREET W/B SIGNALS AT BROADWAY AVENUE	G	G	Y	R	R	R	R	R	R	R	R	G	G	Y	R	G	
155th STREET E/B SIGNALS AT PARK AVENUE	G	G	Y	R	G	G	Y	R	G	G	Y	R	R	R	R	R	
155th STREET W/B SIGNALS AT PARK AVENUE	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	
PARK AVENUE SIGNALS	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	G	
BROADWAY AVENUE SIGNALS	R	R	R	R	R	R	G	Y	R	R	R	R	R	R	R	R	
PED SIGNALS X-ING BROADWAY AVE. AT 155th ST.	FL	FL	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
PED SIGNALS X-ING PARK AVE. AT 155th ST.	FL	FL	D	D	D	D	FL	D	D	D	D	D	D	D	D	D	
PED SIGNALS X-ING 155th ST. AT PARK AVE.	D	D	D	D	D	D	D	D	D	D	D	FL	D	D	D	D	
PED SIGNALS X-ING 155th ST. AT BROADWAY AVE.	D	D	D	D	D	D	FL	D	D	D	D	D	D	D	D	D	

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

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	3
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, LED, 3-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1
COMBINATION SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION OPTICALLY PROGRAMMED, 1-3 SECTION, BRACKET MOUNTED	EACH	2

TS # 13825
 HARVEY

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

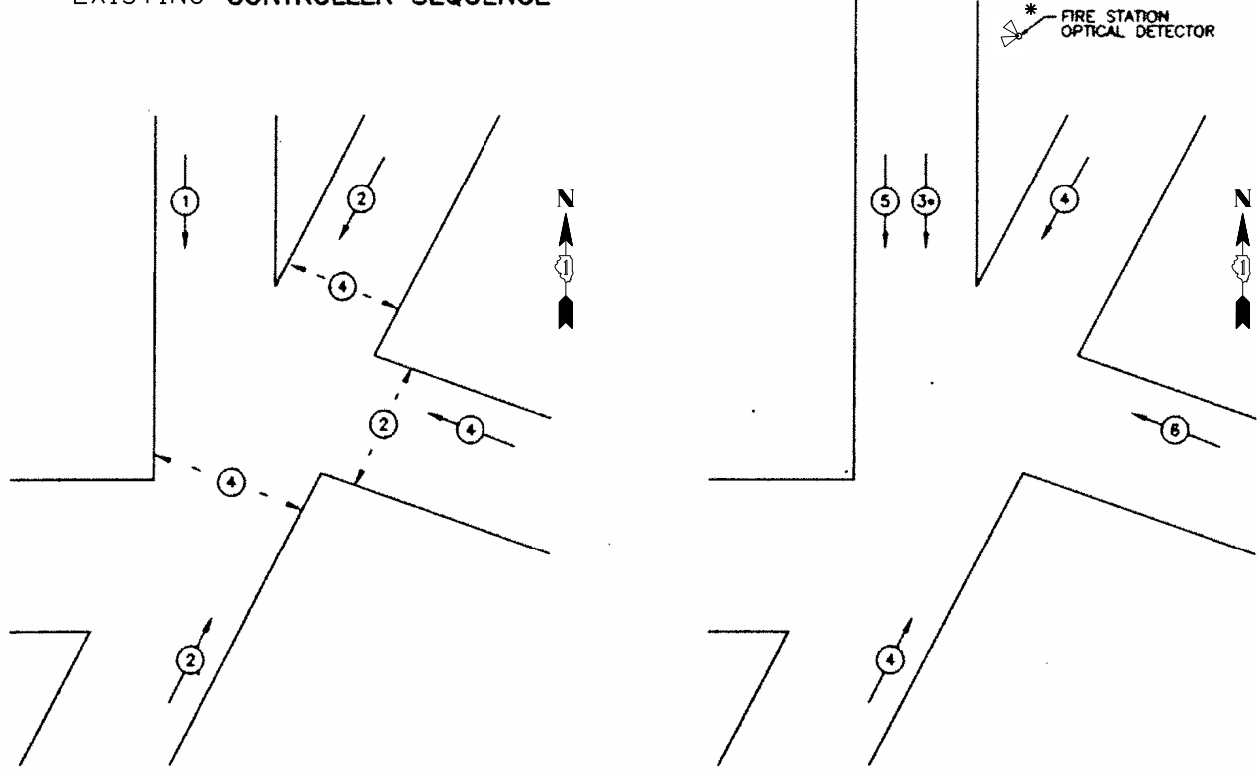
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE PARK AVENUE AND 155th STREET

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VARIOUS	COOK	87	69
CONTRACT NO. 60X24				

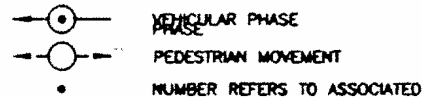
SCALE: SHEET NO. OF SHEETS STA. TO STA. FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

BY: _____ DATE: _____
 SURVEYED _____ ALIGNED _____
 NOTE BOOK _____ RT. OF WAY CHECKED _____
 NO. _____ SADDY FILE NAME _____
 PLAN _____
 ENGINEERING LTD.
CHRISTOPHER B. BURKE
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (647) 923-5500
 PROFILE SURVEYED _____ GRADES CHECKED _____
 NOTE BOOK _____ ELEM. NOTED _____
 NO. _____ STRUCTURE NOTATIONS OK/NO

EXISTING CONTROLLER SEQUENCE



LEGEND



PHASE DESIGNATION DIAGRAM

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EXISTING EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	3*	4	5	6
MOVEMENT	↓	↘	↓	↘

* FROM FIRE STATION DETECTOR HEADS

NOTES: THE FIRE STATION PREEMPTION SEQUENCE SHALL STOP ALL MOVEMENTS AT THE INTERSECTION FOLLOWED BY NORMAL PHASE 1.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	12	17	0.50	102.00	
(YELLOW)	12	25	0.25	75.00	
(GREEN)	12	15	0.25	45.00	
ARROW	-	12	0.10	-	
PED. SIGNAL	6	25	1.00	150.00	
CONTROLLER	1	100	1.00	100.00	
ILLUMINATED SIGN	-	25	0.05	-	
VIDEO SYSTEM	-	150	1.00	-	
LUMINAIRE	-	250	0.50	-	
BATTERY BACKUP	1	25	1.00	25.0	
FLASHER	-	-	0.50	-	
ENERGY COSTS TO:				TOTAL =	497.00

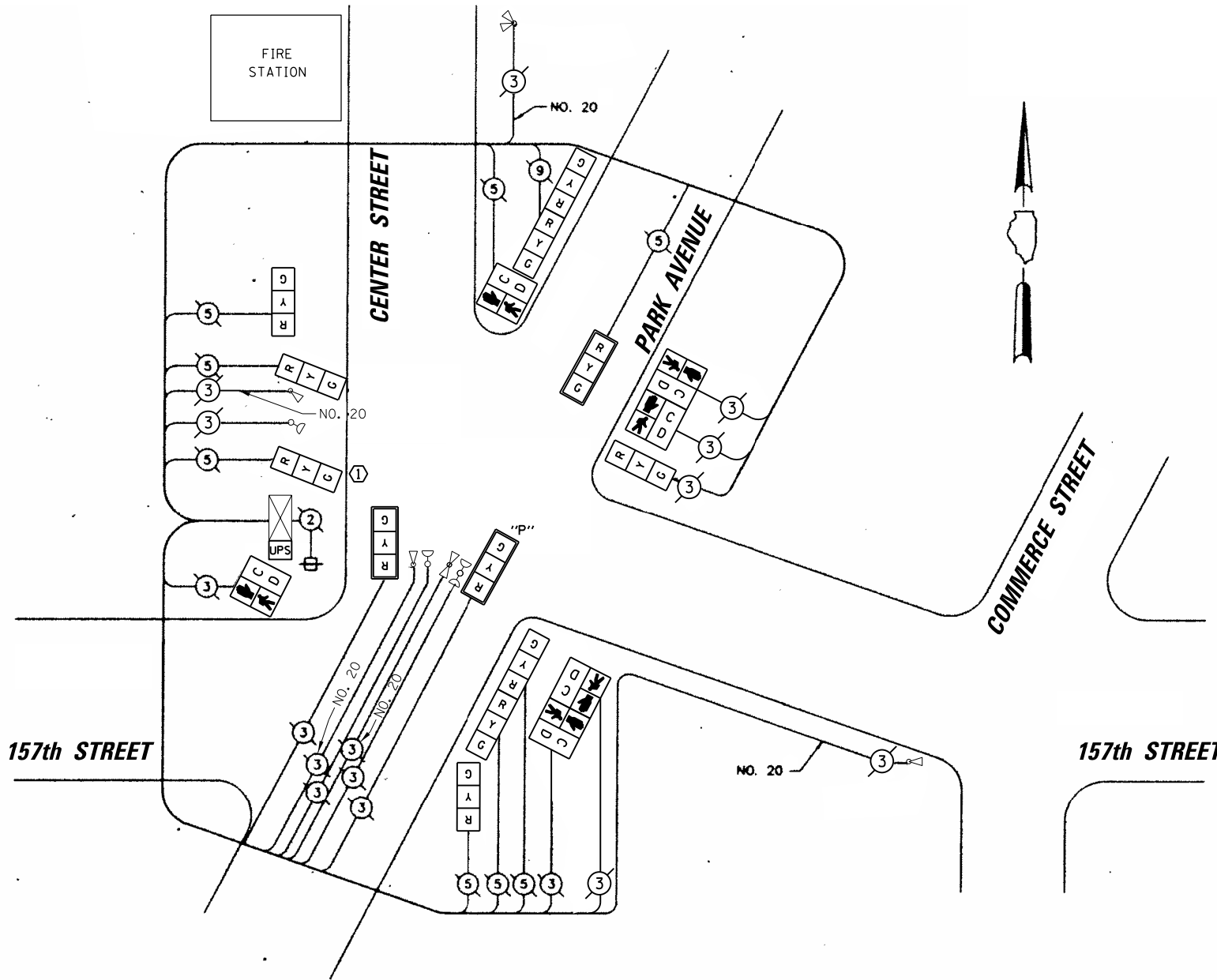
CITY OF HARVEY

15320 BROADWAY AVENUE
 HARVEY, IL 60426

ENERGY SUPPLY: CONTACT: **BRAD SHINABARGAR**
 PHONE: (708)-235-2692
 COMPANY: COMED

NOTES

- ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION, THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT REUSABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE 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 UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.



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, 2-FACE, 3-SECTION
- 8 EACH SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 1 EACH STEEL POST

CONSTRUCTION NOTE:

- ① THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 14 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

SCHEDULE OF QUANTITIES

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

TS # 13830
 HARVEY

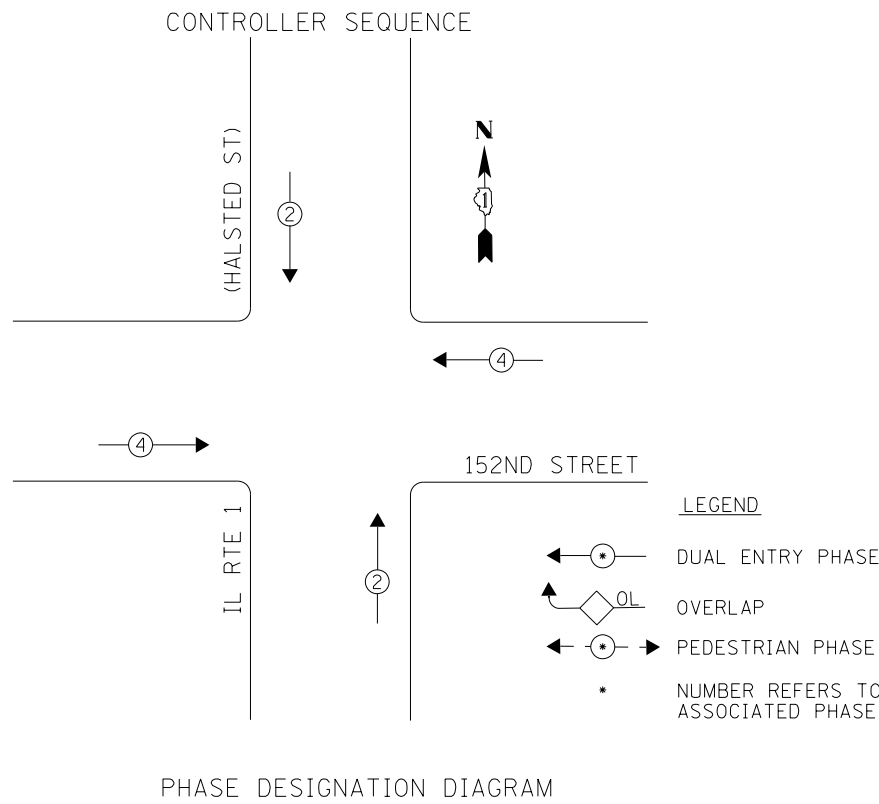
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N:\dot\130116\Work Order 13019 - South Cook County LED\Traffic\CAB.ParkAve-157th.sh		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 48"	CHECKED - GMZ	REVISED -
	PLOT DATE = 10/7/2013	DATE - SEPT. , 2013	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 PARK AVENUE AT 157th STREET**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VARIOUS	COOK	87	70
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60X24	



CONSTRUCTION NOTES:

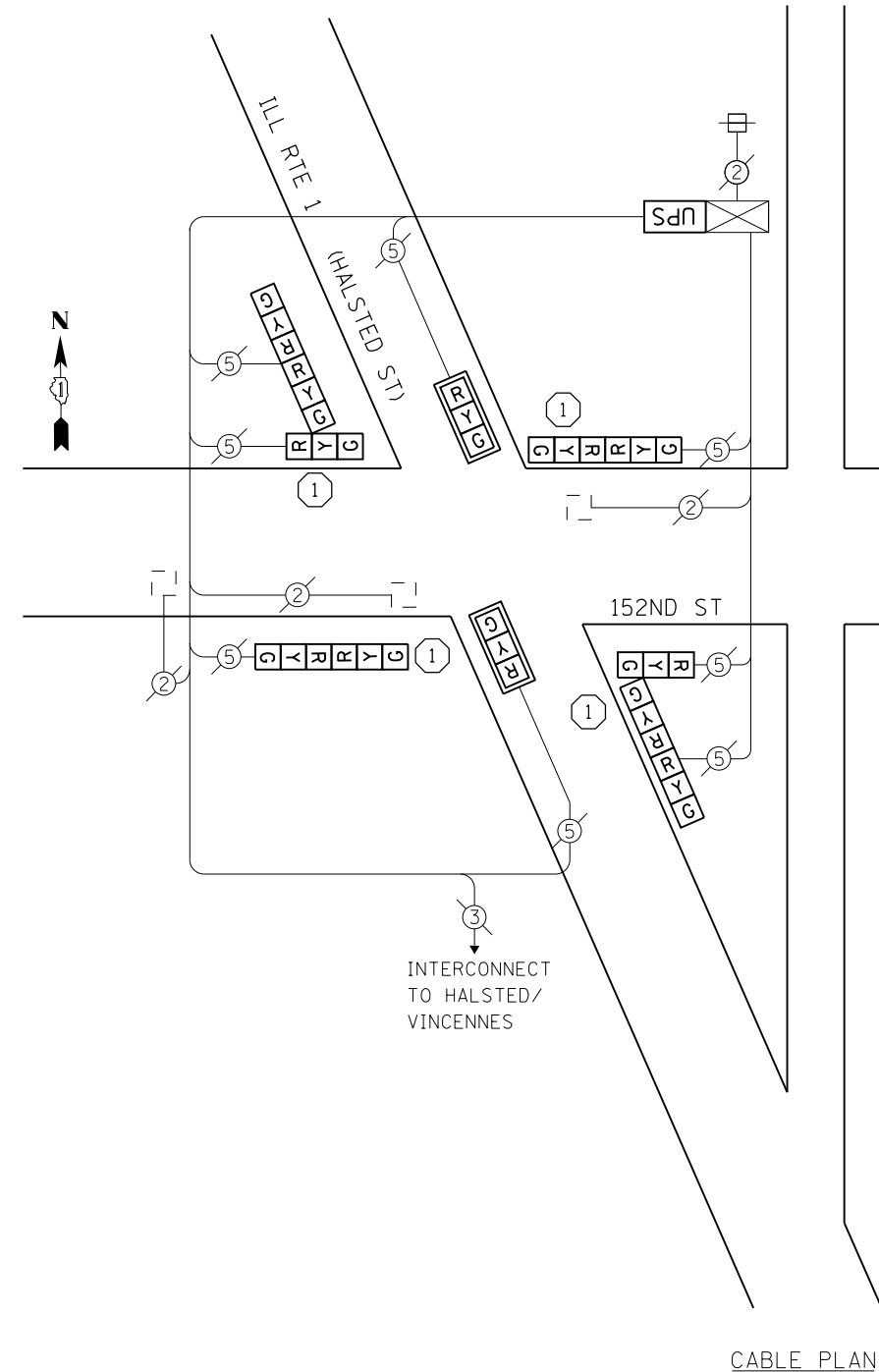
1) THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 14 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

NOTES

1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED

2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT USABLE, REPLACE AS DIRECTED BY THE ENGINEER.

3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE 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 UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.



I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				
	NO. LAMPS	WATTAGE INCAND. LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	17	0.50	102.0
(YELLOW)	12	25	0.25	75.0
(GREEN)	12	15	0.25	45.0
ARROW	0	12	0.10	0
PED SIGNAL	0	25	1.00	0
CONTROLLER	1	100	1.00	100.0
VIDEO SYSTEM		150	1.00	-
BATTERY BACKUP	1	25	1.00	25.0
TOTAL =				347.0

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

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
 PHONE 708-325-2692
 COMMONWEALTH EDISON

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

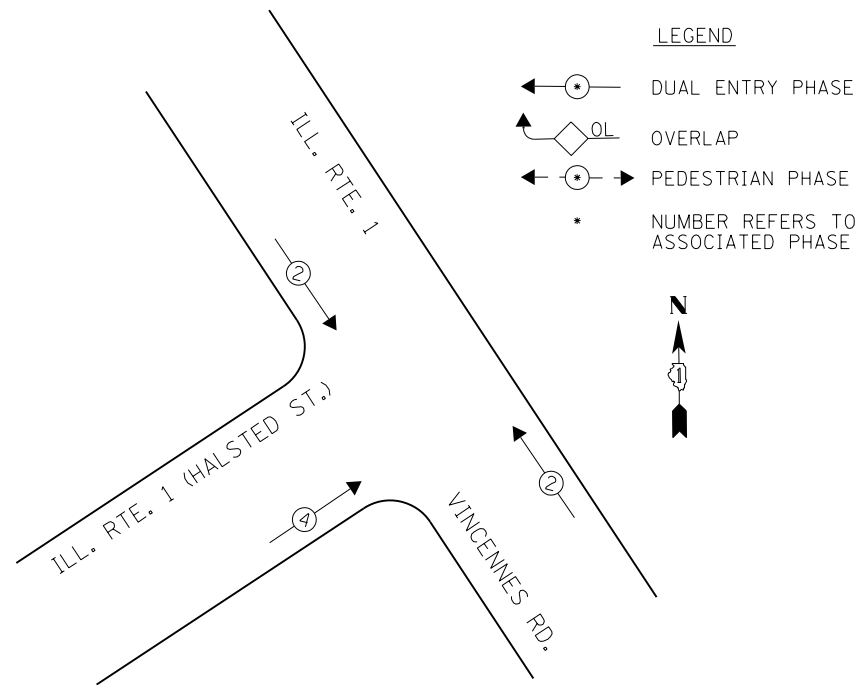
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

2	EACH	SIGNAL HEAD, 3-FACE, 3-SECTION
2	EACH	SIGNAL HEAD, 2-FACE, 3-SECTION
2	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
4	EACH	STEEL POST

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

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

CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

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

	NO. LAMPS	WATTAGE INCAND. LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	9	17	0.50	76.5
(YELLOW)	9	25	0.25	56.25
(GREEN)	9	15	0.25	33.75
ARROW	0	12	0.10	0
PED SIGNAL	0	25	1.00	0
CONTROLLER	1	100	1.00	100.0
VIDEO SYSTEM		150	1.00	-
BATTERY BACKUP	1	25	1.00	25.0
TOTAL =				296.3

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

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

CONSTRUCTION NOTE

- THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 14 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.
- THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 15 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

NOTES

- ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT USABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE 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 UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

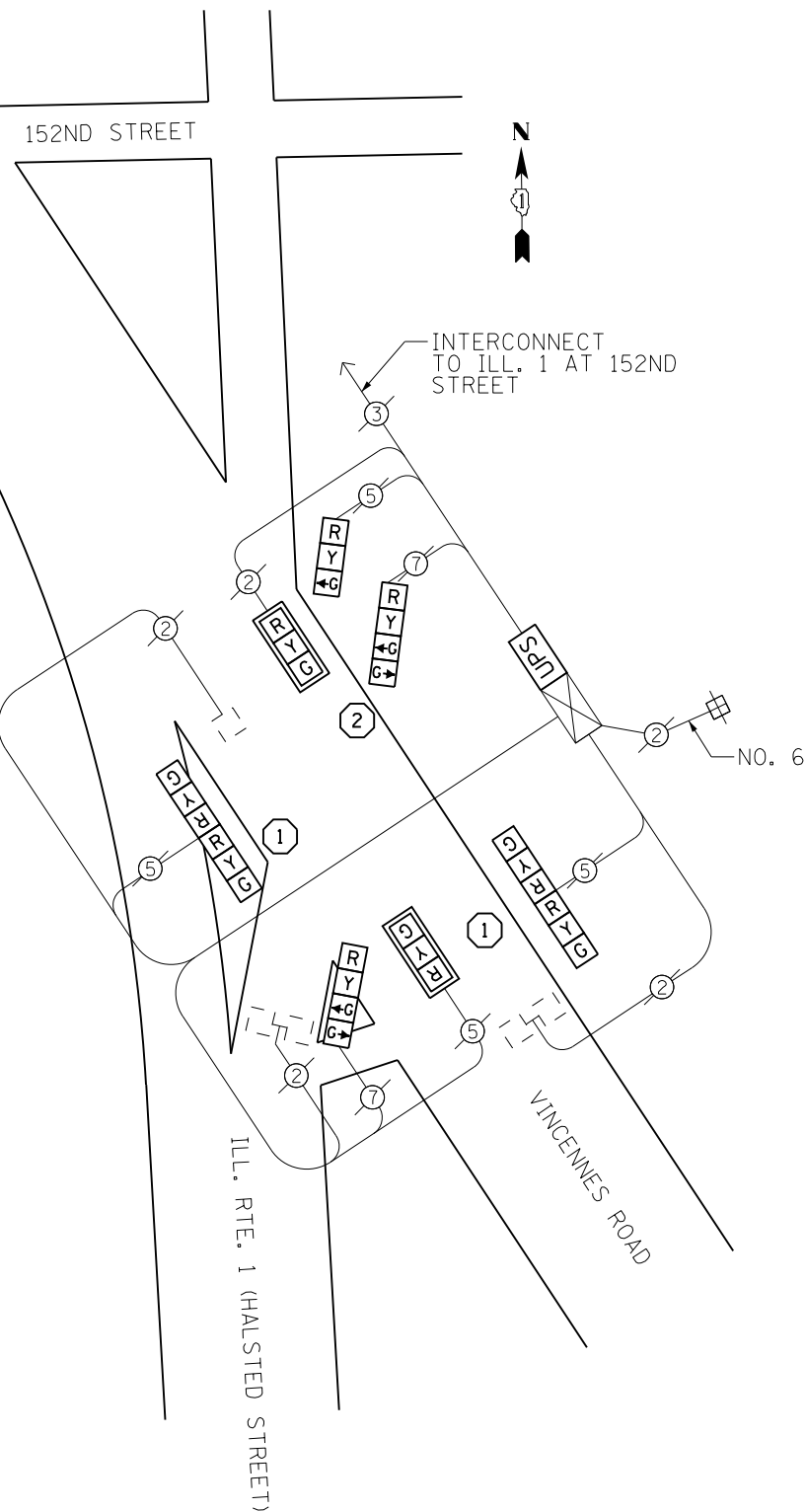
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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, 2-FACE, 3-SECTION
2	EACH	SIGNAL HEAD, 1-FACE, 4-SECTION
3	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
3	EACH	STEEL POST

SCHEDULE OF QUANTITIES
ITEM

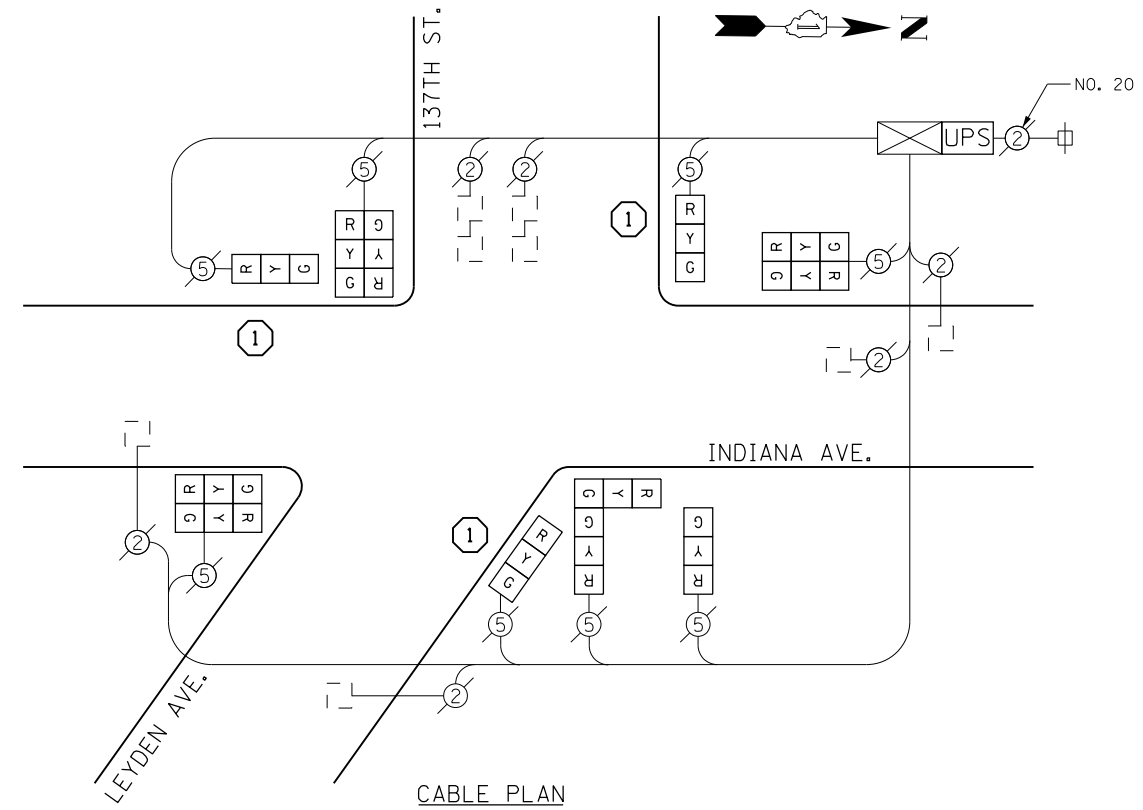
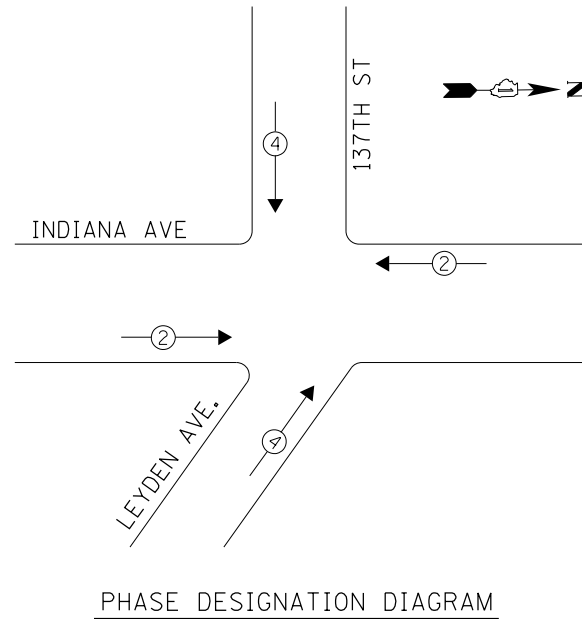
ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 15 FT.	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH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



CABLE PLAN

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

TS #1760
PHOENIX



I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				
TYPE	NO. LAMPS	WATTAGE INCAND. LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	17	0.50	102
(YELLOW)	12	25	0.25	75
(GREEN)	12	15	0.25	45
ARROW		12	0.10	-
PED SIGNAL		25	1.00	-
CONTROLLER	1	100	1.00	100
VIDEO SYSTEM		150	1.00	-
BATTERY BACKUP	1	25	1.00	25
TOTAL =				347.0

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

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

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, 2-FACE, 3-SECTION
- 3 EACH STEEL POST

**SCHEDULE OF QUANTITIES
ITEM**

- MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
- TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
- SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
- SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
- MODIFY EXISTING CONTROLLER CABINET
- REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
- UNINTERRUPTABLE POWER SUPPLY, SPECIAL

UNIT	QUANTITY
EACH	1
EACH	3
EACH	4
EACH	4
EACH	1
EACH	1
EACH	1

CONSTRUCTION NOTE

- ① THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 14 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

NOTES

- 1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- 2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED IN THE PLANS THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT USABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- 3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE 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 UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

TS #5345
RIVERDALE



EXISTING SEQUENCE OF OPERATION

PHASE	A					B		FLASH
	1	2	3	4	5			
138TH ST EB	G	Y	Y	R	R			R
138TH ST WB	G	Y	R	R	R			R
INDIANA AVE	R	R	R	G	Y			R

EXISTING RAILROAD PREEMPTION

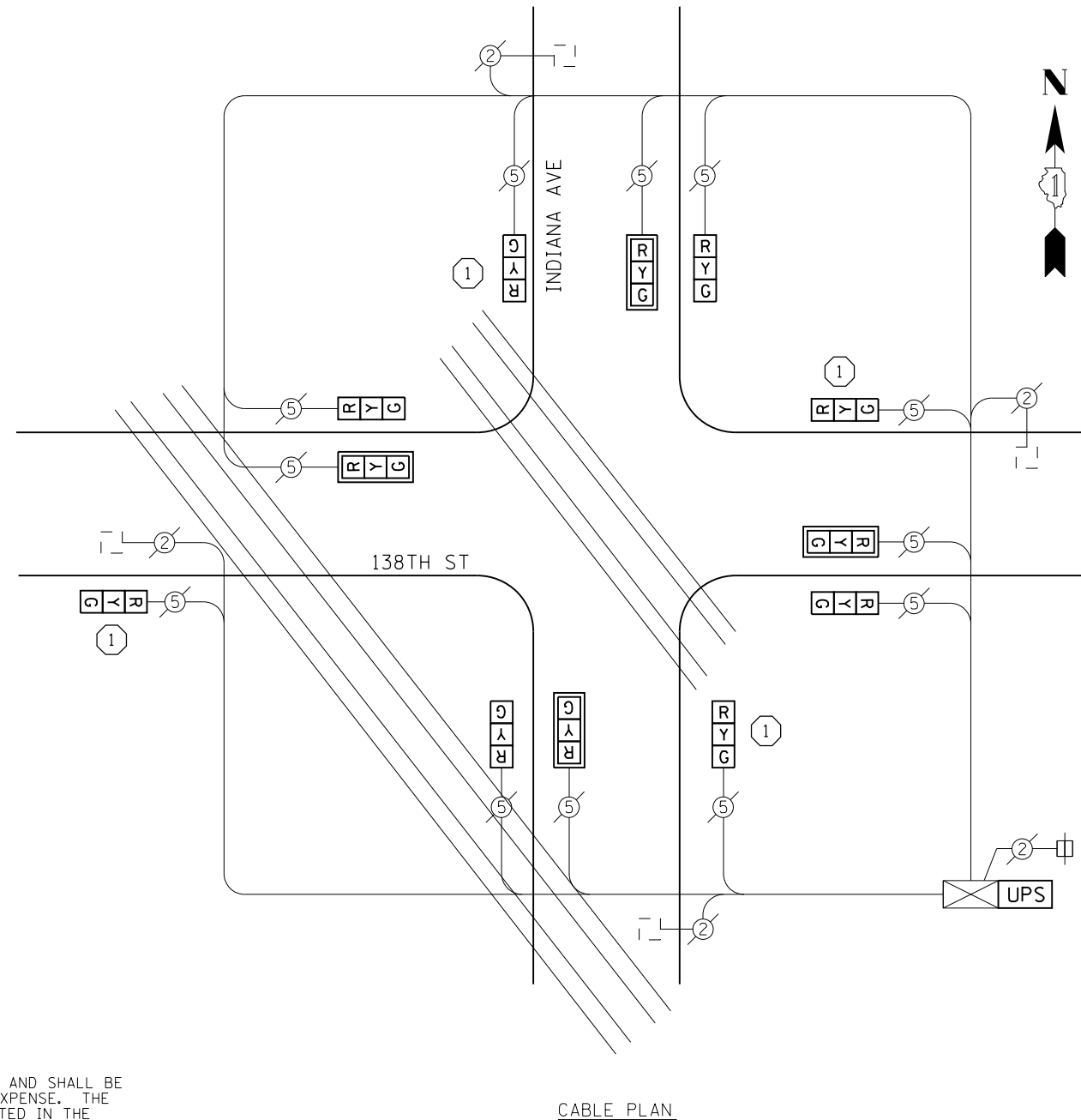
CLEARANCE REQ'D IF IN INTERVAL						PREEMPTION INTERVALS				NORMAL OPERATION
	1	2	3	4	5	6	7	8	9	
CHANGE TO		6	6	6	6	6	7	8	9	
138TH ST EB	Y	Y	Y	Y	R	R	R	R	R	
138TH ST WB	Y	R	R	R	R	R	R	R	R	
INDIANA AVE SB	R	R	R	R	Y	Y	R	R	R	
INDIANA AVE NB	R	R	R	R	G	Y	G	Y	R	

CONSTRUCTION NOTES:

- 1) THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 14 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

NOTES

- 1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- 2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT USABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- 3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE 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 UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.



CABLE PLAN

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

TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12		17	0.50	102.0
(YELLOW)	12		25	0.25	75.0
(GREEN)	12		15	0.25	45.0
ARROW			12	0.10	-
PED SIGNAL			25	1.00	-
CONTROLLER	1	100		1.00	100.0
VIDEO SYSTEM		150		1.00	-
BATTERY BACKUP	1	25		1.00	25.0
TOTAL =					347.0

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.

- 12 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 4 EACH STEEL POST

SCHEDULE OF QUANTITIES ITEM

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	8
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	4
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

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

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

FILE NAME = D:\60X24-sht-ts-TS5350.dgn	USER NAME = Brian Scifers	DESIGNED KJP	REVISED -
Default		DRAWN DLW	REVISED -
	PLOT SCALE = 40.0000' / in.	CHECKED BKS	REVISED -
	PLOT DATE = 10/8/2013	DATE -	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, & CHART SEQUENCES INDIANA AVE. AT 138TH ST.

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-052TS	COOK	87	74
CONTRACT NO. 60X24				
ILLINOIS FED. AID PROJECT				

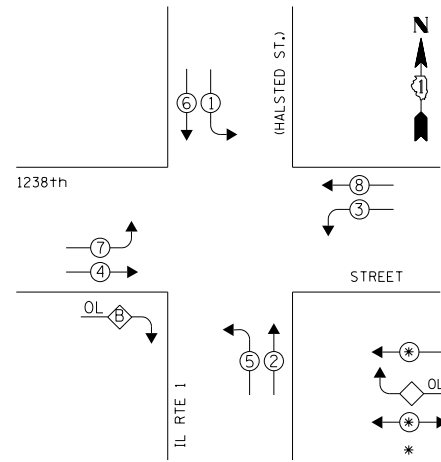
TS #5350 RIVERDALE

PROFILE SURVEYED GRADES CHECKED
 NOTE BOOK NO. _____
 STRUCTURE NOTATIONS OK/NO

PLAN SURVEYED ALIGNED CHECKED
 NOTE BOOK NO. _____
 RT. OF WAY CHECKED
 ADD. FILE NAME

BY: _____ DATE: _____
 ENGINEERING LTD.
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (630) 923-5500

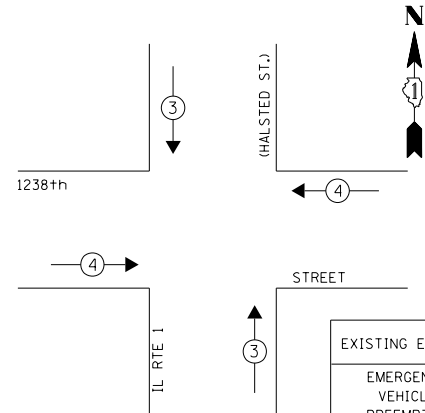
EXISTING CONTROLLER SEQUENCE



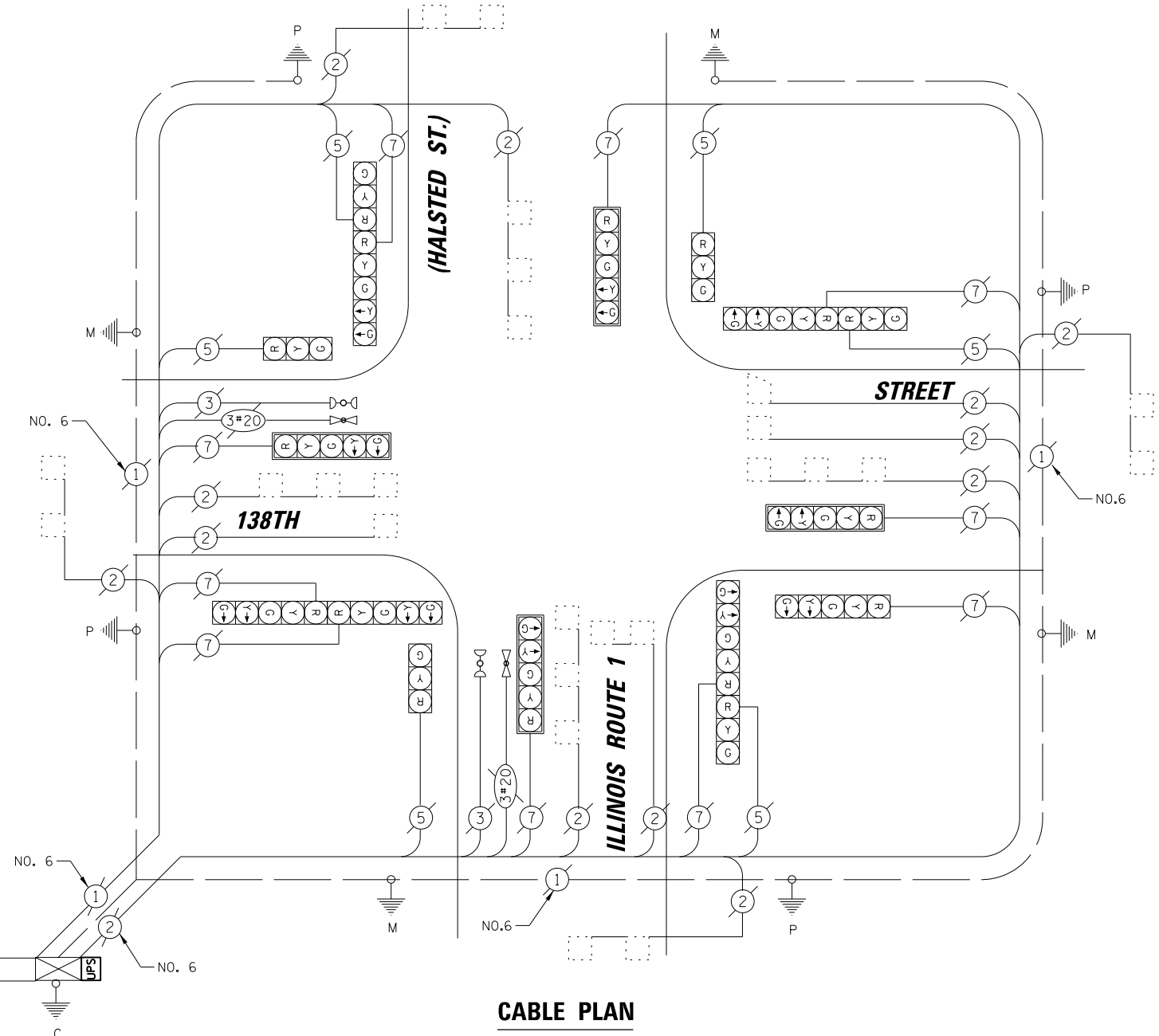
- LEGEND**
- ⊙ DUAL ENTRY PHASE
 - ⊙ OL OVERLAP
 - ⊙ PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



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



CABLE PLAN

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	16		17	0.50	136.00
(YELLOW)	16		25	0.25	100.00
(GREEN)	16		15	0.25	60.00
ARROW	20		12	0.10	24.00
PED. SIGNAL	-		25	1.00	-
CONTROLLER	1		100	1.00	100.00
ILLUMINATED SIGN	-			0.05	-
VIDEO SYSTEM	-			1.00	-
LUMINAIRE	-	250		0.50	-
BATTERY BACKUP	1	25		1.00	25.0
FLASHER				0.50	-
ENERGY COSTS TO:					TOTAL = 445.00

SCHEDULE OF QUANTITIES

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

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY: CONTACT: BRAD SHINABARGAR
 PHONE: (708)-235-2692
 COMPANY: COMED

TS # 1795
RIVERDALE

DATE: _____ BY: _____
 SURVEYED: _____ ALIGNED: _____ CHECKED: _____
 PLAN: _____ RT. OF WAY CHECKED: _____
 NOTE BOOK: _____ NO. _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (631) 923-5500
 DATE: _____ BY: _____
 SURVEYED: _____ GRADES CHECKED: _____
 PROFILE: _____ ELEM. NOTED: _____
 NOTE BOOK: _____ STRUCTURE: _____ NOTATIONS: _____
 NO. _____

NOTES

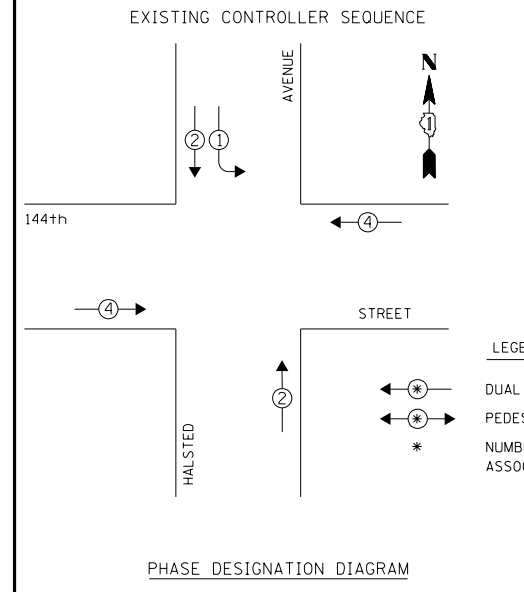
- 1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- 2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION. THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT REUSABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- 3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE 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 UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

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.

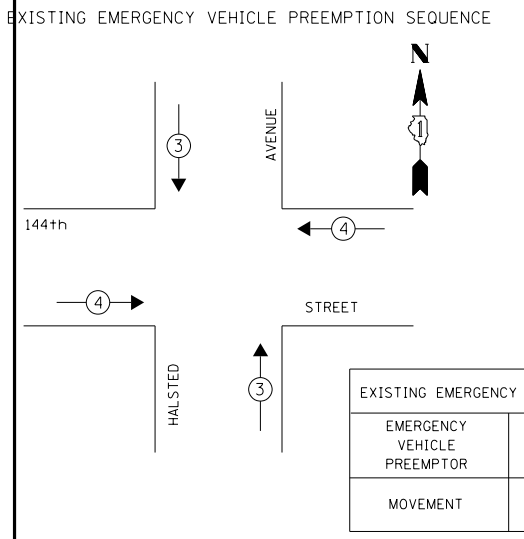
2 EACH STEEL POST

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



LEGEND

- ← * → DUAL ENTRY PHASE
- ← * PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE



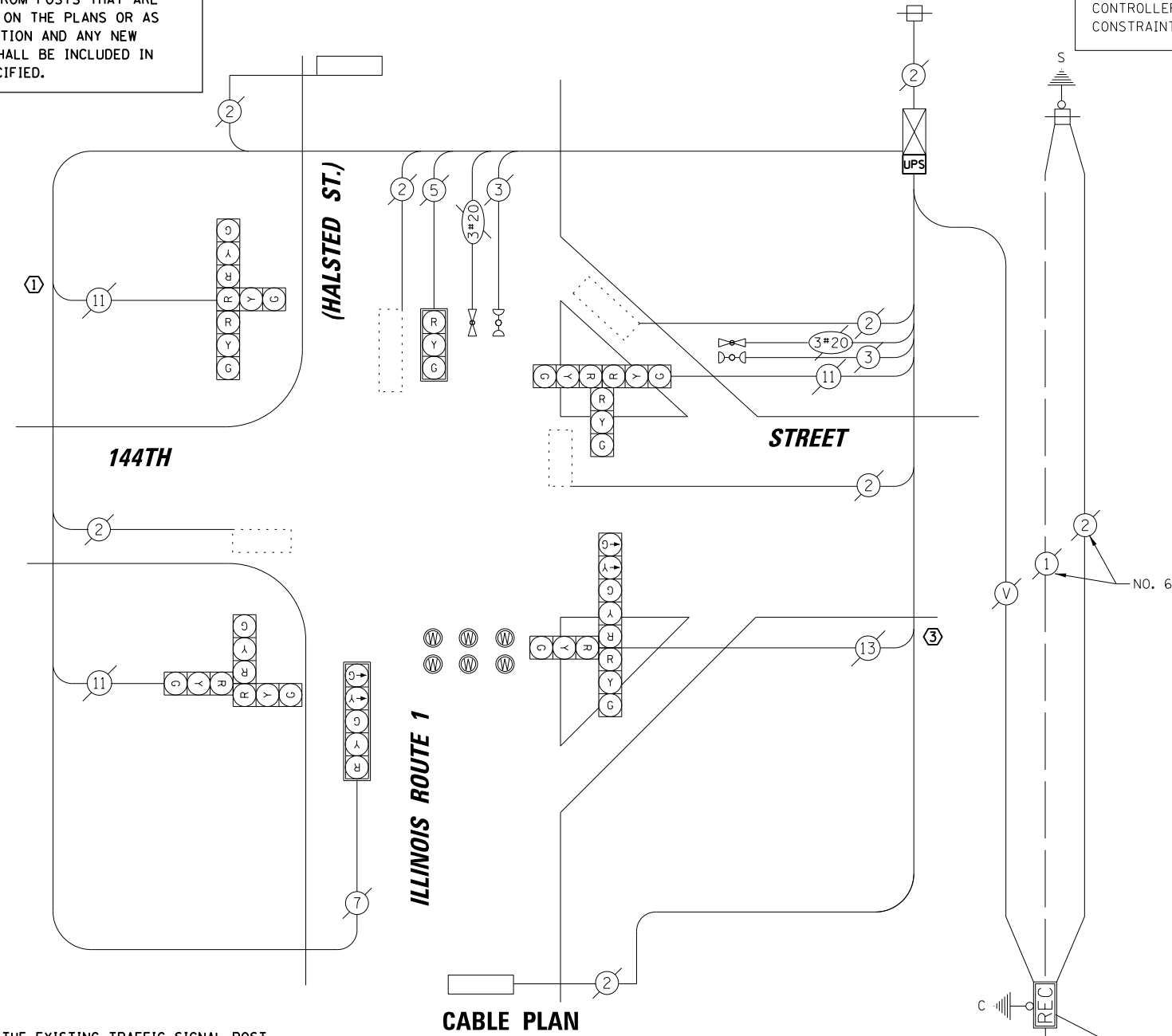
EXISTING EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	
MOVEMENT	↓	↑	←

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	14		17	0.50	119.00
(YELLOW)	14		25	0.25	87.50
(GREEN)	14		15	0.25	52.50
ARROW	4		12	0.10	4.80
PED. SIGNAL	-		25	1.00	-
CONTROLLER	1		100	1.00	100.00
ILLUMINATED SIGN	-	25		0.05	-
VIDEO SYSTEM	-	150		1.00	-
LUMINAIRE	-	250		0.50	-
BATTERY BACKUP	1	25		1.00	25.0
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 388.30

VILLAGE OF RIVERDALE
 157 W 144th STREET
 RIVERDALE, IL 60827
 ENERGY SUPPLY: CONTACT: BRAD SHINABARGAR
 PHONE: (708)-235-2692
 COMPANY: COMED

CONSTRUCTION NOTES:

- 1) THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 14 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION. RELOCATE EXISTING SIGNAL HEADS.
- 3) THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 16 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION. RELOCATE EXISTING SIGNAL HEADS.



SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

FILE NAME = N:\dot\130116\Work Order 13019 - South	USER NAME = fpacione	DESIGNED - EAJ	REVISED -
Book County LED\Traffic\CAB_144th\Halsted.sht		DRAWN - FPB / FCP	REVISED -
PLOT SCALE = 48"		CHECKED - GMZ	REVISED -
PLOT DATE = 10/7/2013		DATE - SEPT. , 2013	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
ILLINOIS ROUTE 1 (HALSTED ST.) AT 144th STREET

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VARIOUS	COOK	87	76
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60X24	

TS # 9140
 RIVERDALE

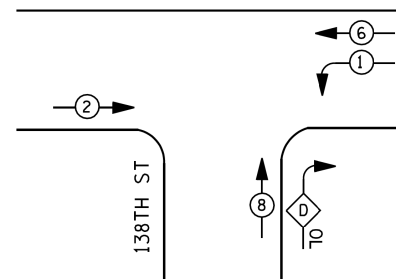
BY: _____ DATE: _____
 SURVEYED _____ CHECKED _____
 ALIGNED _____ CHECKED _____
 RT. OF WAY CHECKED _____
 FILE NAME _____
 PLAN NO. _____
 NOTE BOOK NO. _____
 SURVEYED _____ CHECKED _____
 GRADES CHECKED _____
 ELEM. NOTED _____
 STRUCTURE NOTATIONS OKWD

BY: _____ DATE: _____
 SURVEYED _____ CHECKED _____
 ALIGNED _____ CHECKED _____
 RT. OF WAY CHECKED _____
 FILE NAME _____
 PLAN NO. _____
 NOTE BOOK NO. _____
 SURVEYED _____ CHECKED _____
 GRADES CHECKED _____
 ELEM. NOTED _____
 STRUCTURE NOTATIONS OKWD

CHRISTOPHER B. BURKE
 ENGINEERING LTD.
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (647) 923-5500

EXISTING CONTROLLER SEQUENCE

ASHLAND AVE



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

CONSTRUCTION NOTE:

- ① THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 14 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION. RELOCATE EXISTING SIGNAL HEADS.
- ③ THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 16 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION. RELOCATE EXISTING SIGNAL HEADS.

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

NOTES

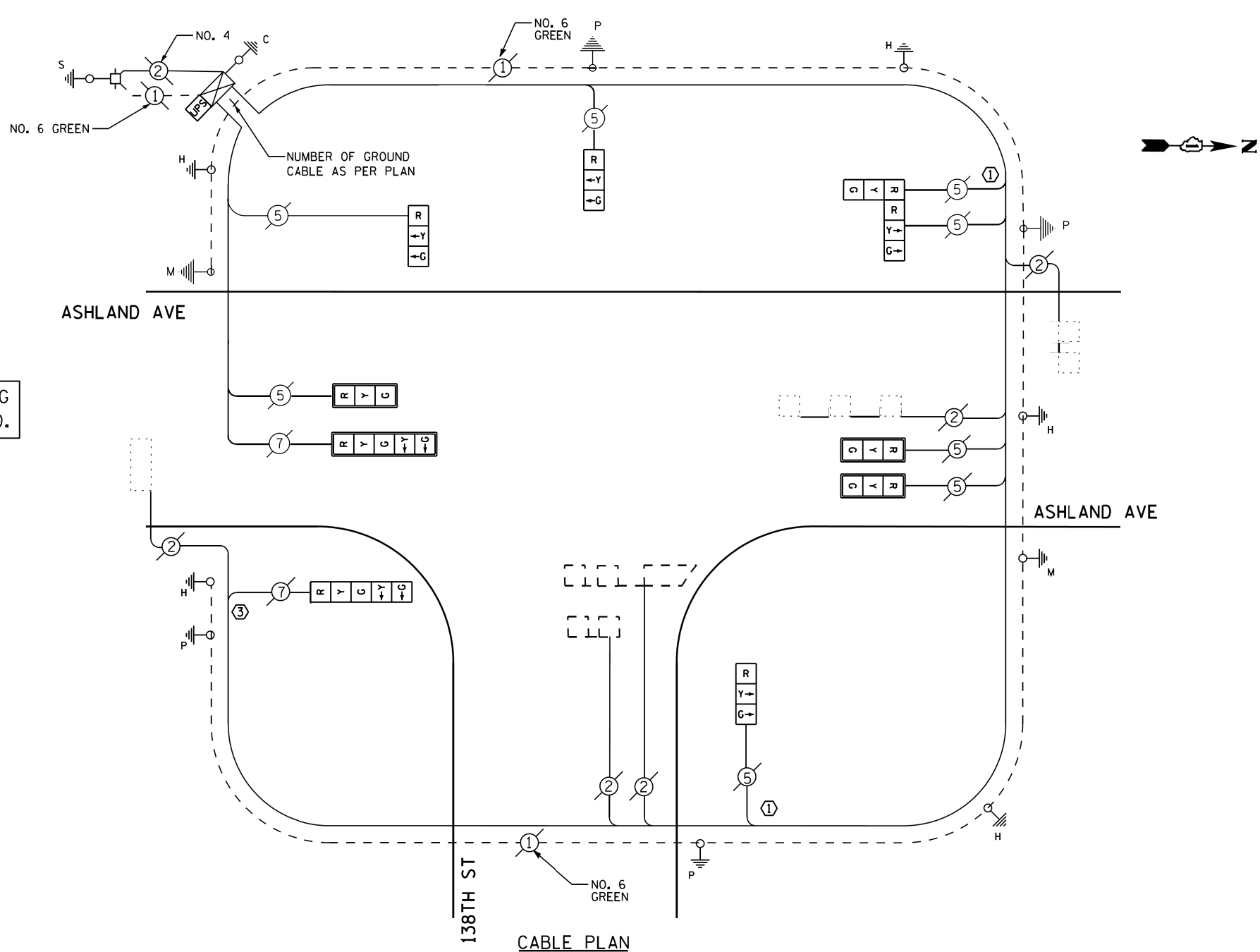
- 1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- 2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION, THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT REUSABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- 3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE 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 UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	10	17	0.50		85.00
(YELLOW)	10	25	0.25		62.50
(GREEN)	10	15	0.25		37.50
ARROW	4	12	0.10		4.80
PED. SIGNAL	-	25	1.00		-
CONTROLLER	1	100	1.00		100.00
ILLUMINATED SIGN	-	25	0.05		-
VIDEO SYSTEM	-	150	1.00		-
LUMINAIRE	-	250	0.50		-
BATTERY BACKUP	1	25	1.00		25.0
FLASHER			0.50		
ENERGY COSTS TO:					TOTAL = 314.80

ILLINOIS DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY: CONTACT: BRAD SHINABARGAR
 PHONE: (708)-235-2692
 COMPANY: COMED

FILE NAME = N:\dot\130116\Work Order 13019 - South Cook County LED Traffic\CAB_Ashland-138th.sht	USER NAME = fpaceone	DESIGNED - EAJ	REVISED -
PLOT SCALE = 48"		DRAWN - FPB / FCP	REVISED -
PLOT DATE = 10/7/2013		CHECKED - GMZ	REVISED -
		DATE - SEPT. , 2013	REVISED -



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 STEEL POST

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	3
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	1
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	1

TS # 4045
 RIVERDALE

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

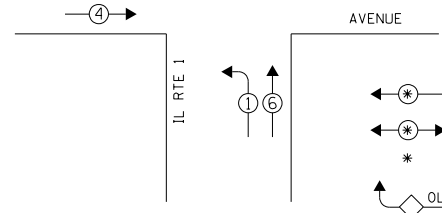
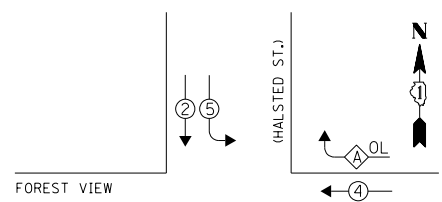
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE ASHLAND AVE./WOOD ST. AT 138th STREET

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VARIOUS	COOK	87	77
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60X24	

DATE: _____ BY: _____
 SURVEYED: _____ GRADES CHECKED: _____
 ALIGNED: _____ RT. OF WAY CHECKED: _____
 PLAN NO. _____ NOTE BOOK NO. _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (617) 923-5500
 PROFILE SURVEYED: _____ GRADES CHECKED: _____
 ELEM. NOTED: _____ STRUCTURE NOTATIONS: OK/NO

EXISTING CONTROLLER SEQUENCE



LEGEND
 * DUAL ENTRY PHASE
 * PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE
 OL OVERLAP

PHASE DESIGNATION DIAGRAM

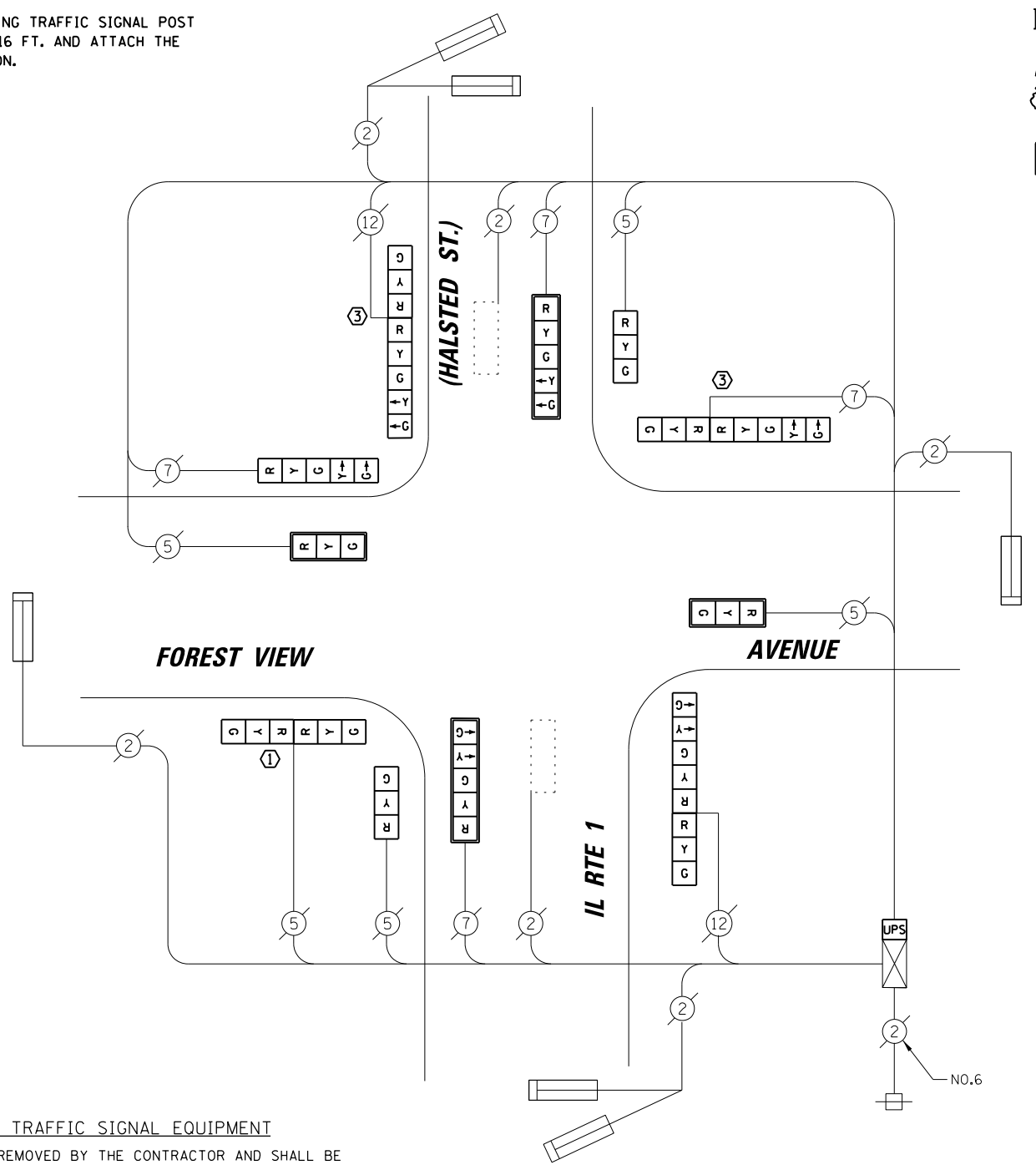
RIGHT TURN OVERLAP PHASE DESIGNATION
 OVERLAP LETTER PERMISSIVE PHASE PROTECTED PHASE
 A = 4 + 5

CONSTRUCTION NOTES:

- ① THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 14 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.
- ③ THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 16 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

NOTES

- 1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- 2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION, THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT REUSABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- 3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE 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 UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.



I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAND.	LED	% OPERATION	
SIGNAL (RED)	15		17	0.50	127.50
(YELLOW)	15		25	0.25	93.75
(GREEN)	15		15	0.25	56.25
ARROW	12		12	0.10	14.40
PED. SIGNAL	-		25	1.00	-
CONTROLLER	1		100	1.00	100.00
ILLUMINATED SIGN	-	25		0.05	-
VIDEO SYSTEM	-	150		1.00	-
LUMINAIRE	-	250		0.50	-
BATTERY BACKUP	1	25		1.00	25.0
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	416.90

VILLAGE OF RIVERDALE
 157 W 144th STREET
 RIVERDALE, IL 60827
 ENERGY SUPPLY: CONTACT: BRAD SHINABARGAR
 PHONE: (708)-235-2692
 COMPANY: COMED

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

SCHEDULE OF QUANTITIES

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

FILE NAME = N:\dot\130116\Work Order 13019 - South Cook County LED\Traffic\CAB-Halsted-Forest View	USER NAME = fpaceone	DESIGNED - EAJ	REVISED -
PLOT SCALE = 48"	CHECKED - GMZ	REVISOR - FPB / FCP	REVISOR -
PLOT DATE = 10/7/2013	DATE - SEPT. , 2013	REVISOR -	REVISOR -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

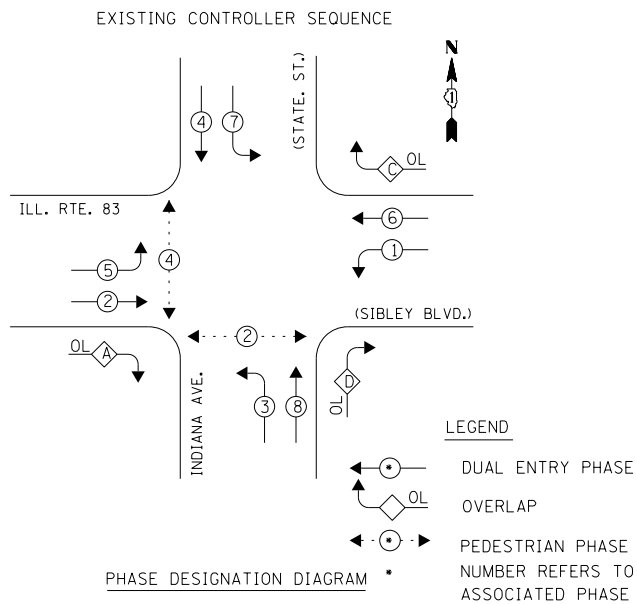
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 IL RTE 1 (HALSTED ST.) AT 134th ST./FOREST VIEW AVE.

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VARIOUS	COOK	87	78
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60X24	

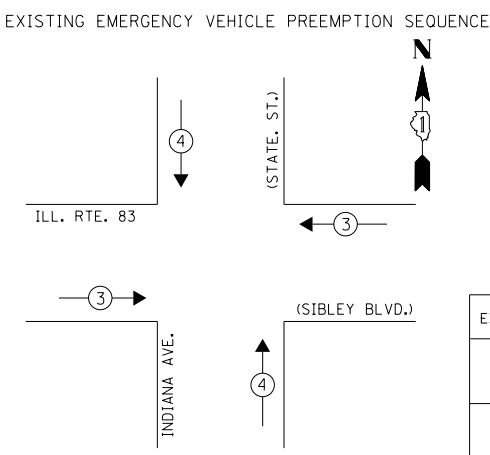
TS # 9135
 RIVERDALE

BY: DATE: SURVEYED: GRADES CHECKED: STRUCTURE NOTATIONS OK/NO
 PLAN: NOTE BOOK NO.: ALIGNED: CHECKED: RT. OF WAY CHECKED: ADD. FILE NAME:
CHRISTOPHER B. BURKE ENGINEERING LTD. 8575 West Higgins Road, Suite 600, Rosemont, Illinois 60018 (630) 923-5500
 PROFILE: SURVEYED: GRADES CHECKED: STRUCTURE NOTATIONS OK/NO
 NOTE BOOK NO.: ALIGNED: CHECKED: RT. OF WAY CHECKED: ADD. FILE NAME:



RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE	DISPLAY
A	2	3	2
C	6	7	6
D	8	1	8



EXISTING EMERGENCY VEHICLE PREEMPTORS

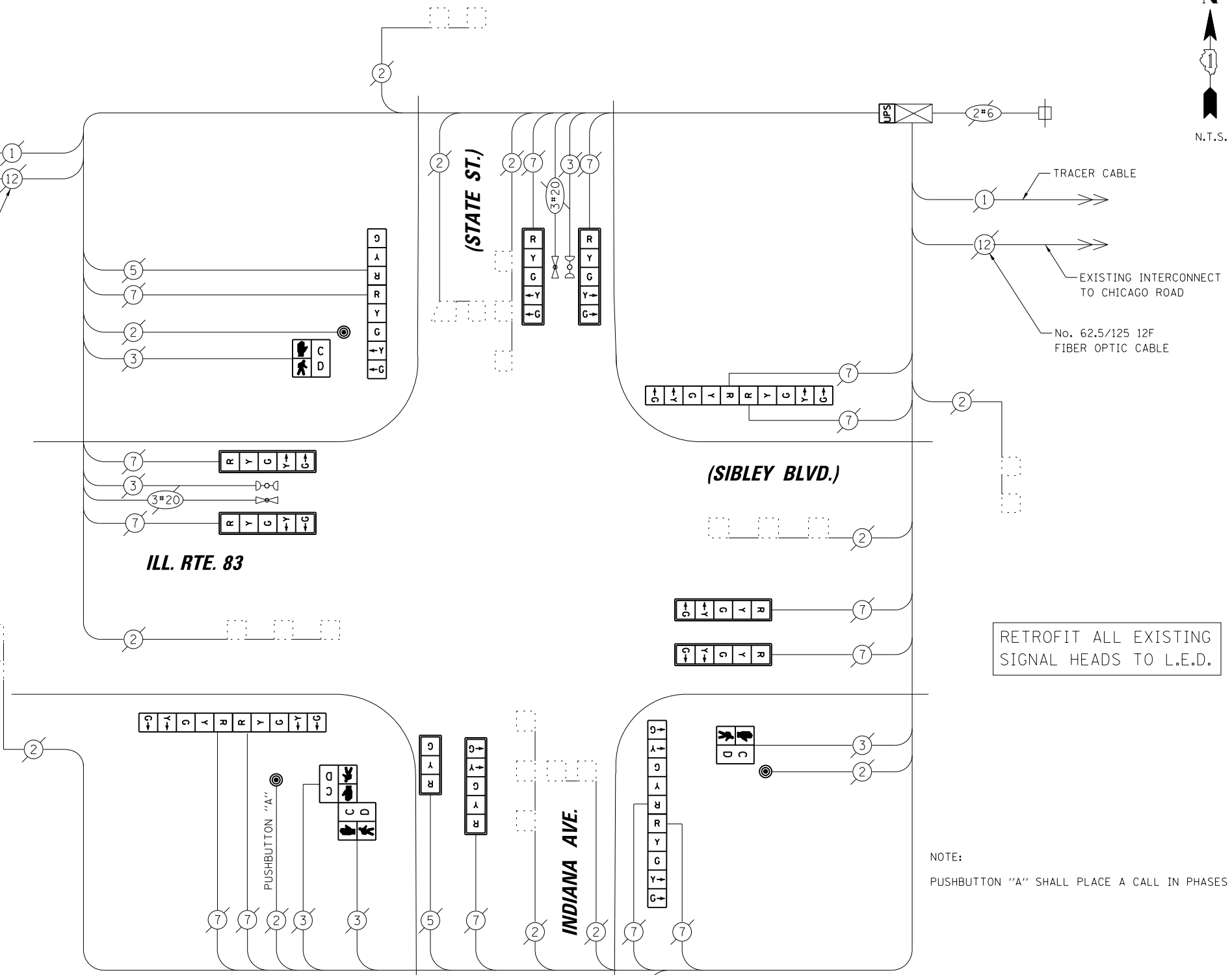
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↓ ↑

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

TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	17	0.50		136.00
(YELLOW)	16	25	0.25		100.00
(GREEN)	16	15	0.25		60.00
ARROW	28	12	0.10		33.60
PED. SIGNAL	4	25	1.00		100.00
CONTROLLER	1	100	1.00		100.00
ILLUMINATED SIGN	-	25	0.05		-
VIDEO SYSTEM	-	150	1.00		-
LUMINAIRE	-	250	0.50		-
BATTERY BACKUP	1	25	1.00		25.0
FLASHER	-	-	0.50		-
ENERGY COSTS TO:					TOTAL = 554.60

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY: CONTACT: **BRAD SHINABARGAR**
 PHONE: (708)-235-2692
 COMPANY: **COMED**

TRACER CABLE
 EXISTING INTERCONNECT TO MARKHAM DR./LA SALLE ST.
 No. 62.5/125 12F FIBER OPTIC CABLE



SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	3
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	7
SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED RETROFIT	EACH	3

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	PEDESTRIAN SIGNAL HEAD, 2-FACE
2	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
3	EACH	PEDESTRIAN PUSH-BUTTON

FILE NAME =	USER NAME = fpaceone	DESIGNED - EAJ	REVISED -
N:\dot\130116\Work Order 13019 - South Cook County LED Traffic\CAB_IL83-Indiana.L.sh		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 48"	CHECKED - GMZ	REVISED -
	PLOT DATE = 10/7/2013	DATE - SEPT. , 2013	REVISED -

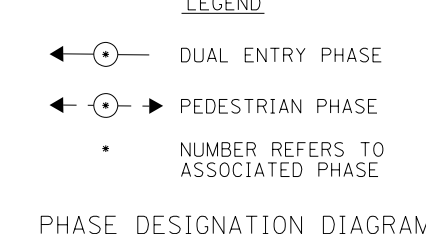
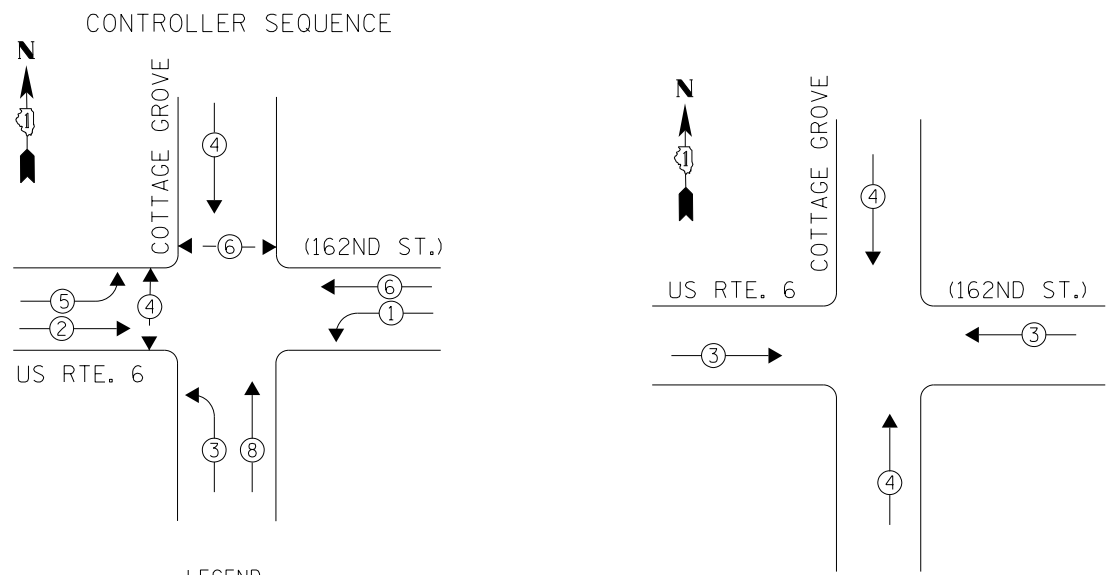
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL ROUTE 83/147TH STREET - SIBLEY BLVD AT INDIANA AVENUE

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VARIOUS	COOK	87	79
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60X24	

TS# 3440
 SOUTH HOLLAND



EMERGENCY VEHICLE PREEMPTION SEQUENCE

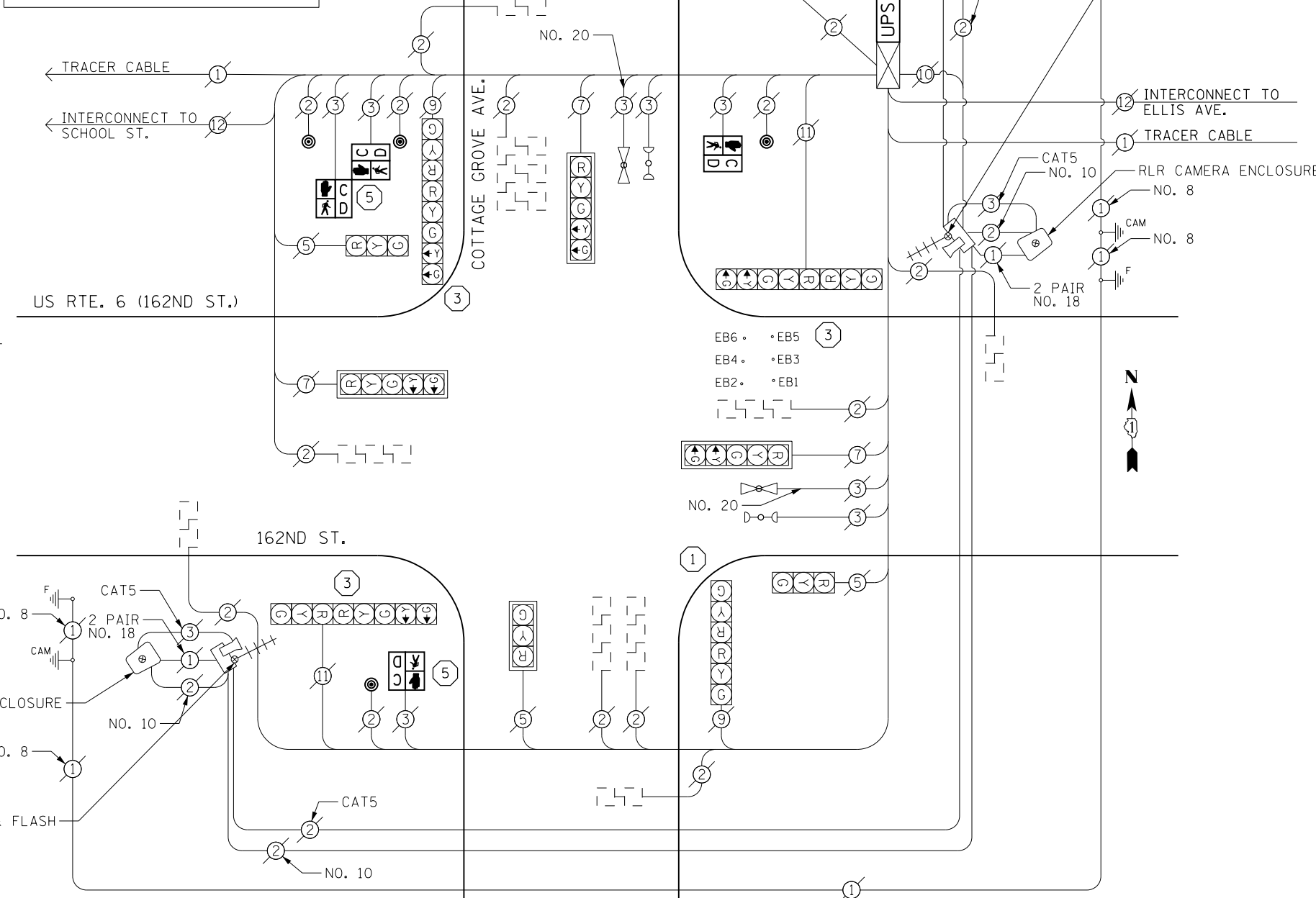
EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	←	↓

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, 1-FACE
1	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
4	EACH	PEDESTRIAN PUSH BUTTON
6	EACH	STEEL POST

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

	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14		17	0.50	119.0
(YELLOW)	14		25	0.25	87.5
(GREEN)	14		15	0.25	52.5
ARROW	12		12	0.10	14.4
PED SIGNAL	4		25	1.00	100.0
CONTROLLER	1	100		1.00	100.0
VIDEO SYSTEM		150		1.00	-
BATTERY BACKUP	1	25		1.00	25.0
TOTAL =					498.4

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

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	3
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	3
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	4
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1

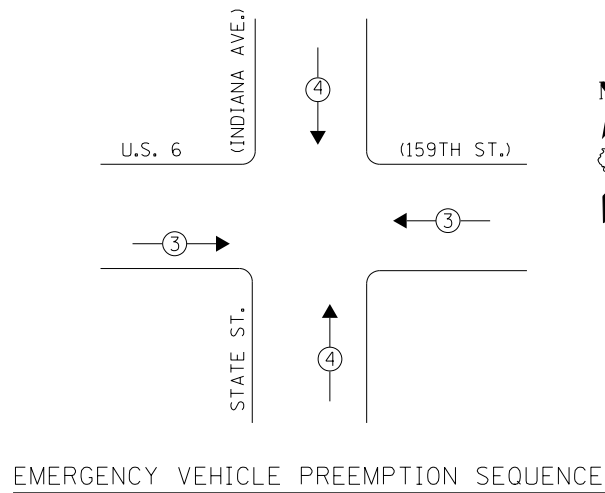
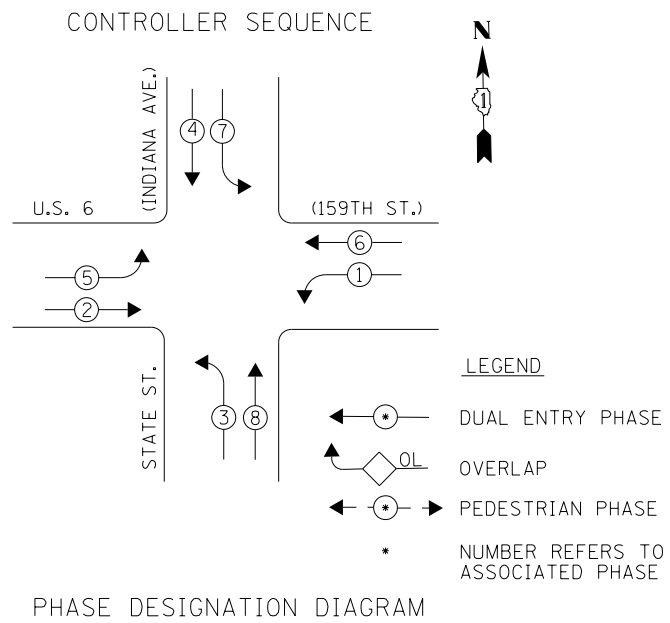
NOTES

- ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT USABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE 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 UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

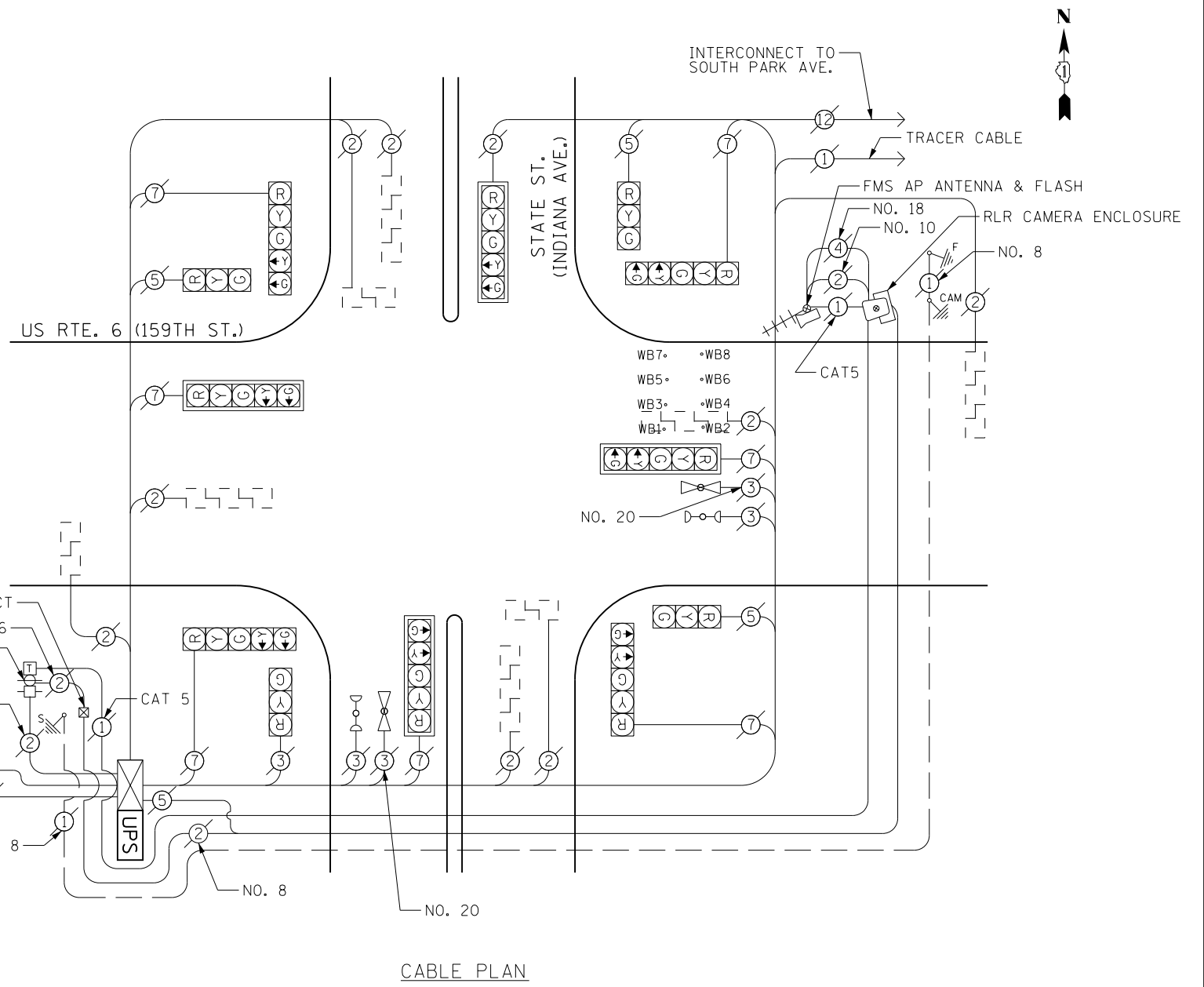
CONSTRUCTION NOTES:

- THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 14 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.
- THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 16 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.
- THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 10 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

TS #210
SOUTH HOLLAND



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



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

TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12		17	0.50	102.0
(YELLOW)	12		25	0.25	75.0
(GREEN)	12		15	0.25	45.0
ARROW	16		12	0.10	19.2
PED SIGNAL			25	1.00	-
CONTROLLER	1	100		1.00	100.0
VIDEO SYSTEM		150		1.00	-
BATTERY BACKUP	1	25		1.00	25.0
TOTAL =					366.2

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

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

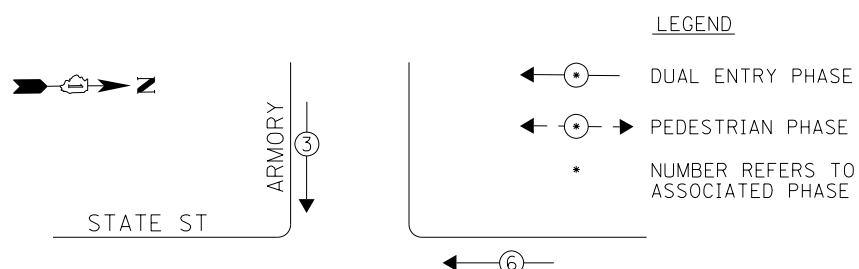
SCHEDULE OF QUANTITIES

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

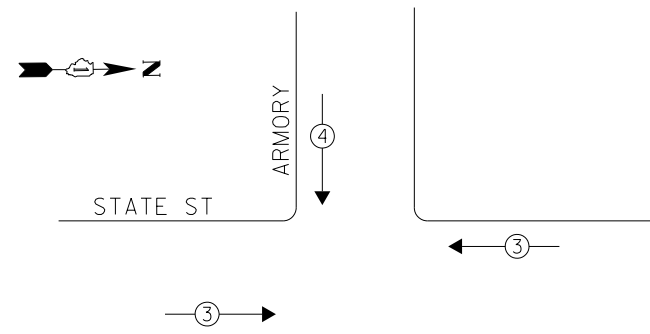
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

TS #295
SOUTH HOLLAND

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

	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	11		17	0.50	93.5
(YELLOW)	11		25	0.25	68.75
(GREEN)	11		15	0.25	41.25
ARROW	8		12	0.10	9.6
PED SIGNAL	0		25	1.00	0
CONTROLLER	1	100		1.00	100.0
VIDEO SYSTEM		150		1.00	0
BATTERY BACKUP	1	25		1.00	25.0
TOTAL =					338.1

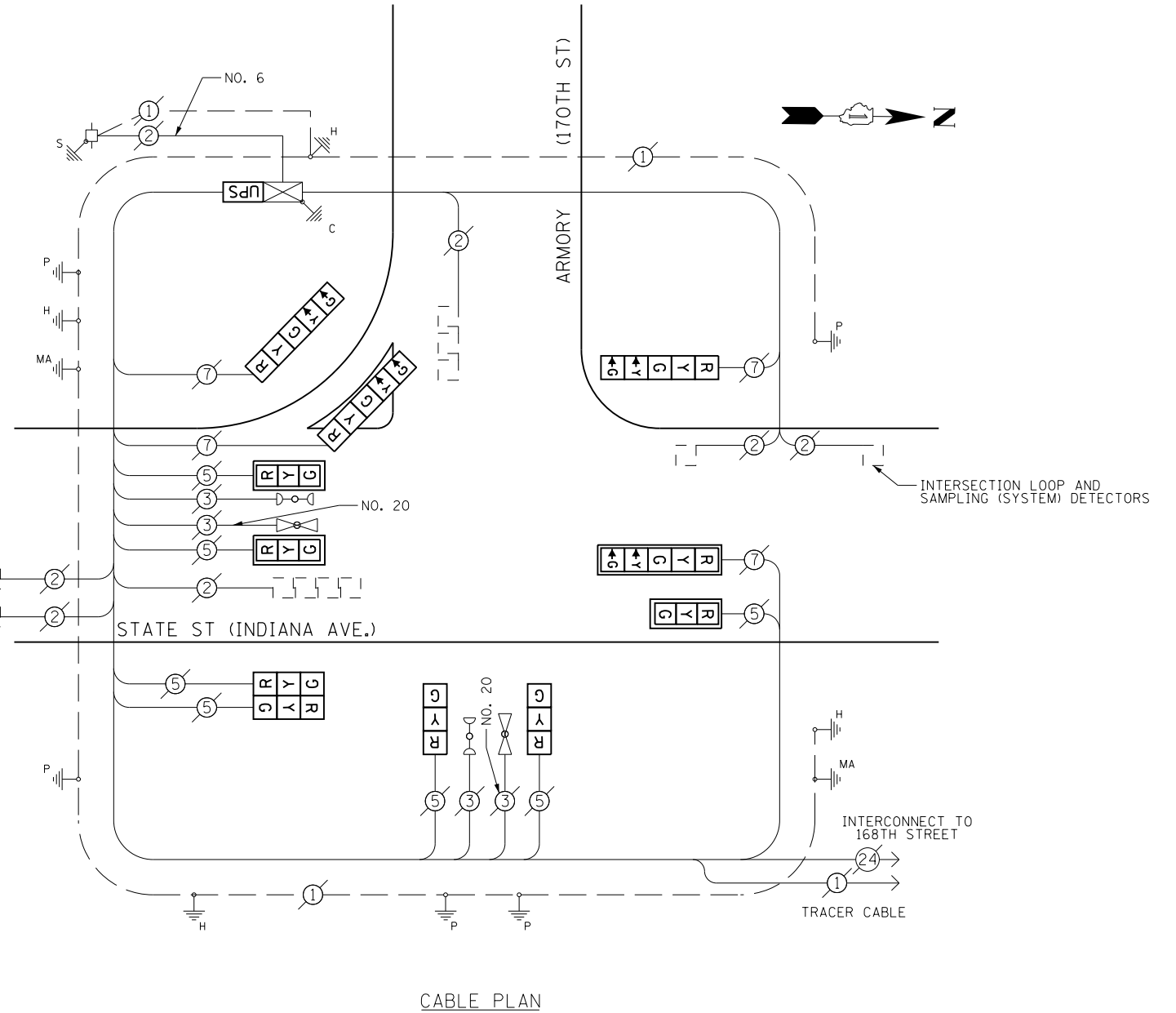
ENERGY COSTS-

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

ENERGY SUPPLY-

CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

INTERSECTION LOOP AND SAMPLING (SYSTEM) DETECTORS



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

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

SCHEDULE OF QUANTITIES
ITEM

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

UNIT	QUANTITY
EACH	1
EACH	1
EACH	1
EACH	1
EACH	2
EACH	3
EACH	1
EACH	1
EACH	3

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
STATE ST AT ARMORY DR

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-052TS	COOK	87	82
CONTRACT NO. 60X24				

TS #12102
SOUTH HOLLAND

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USER NAME = Brian Scifers
PLOT SCALE = 48.0000' / in.
PLOT DATE = 10/8/2013

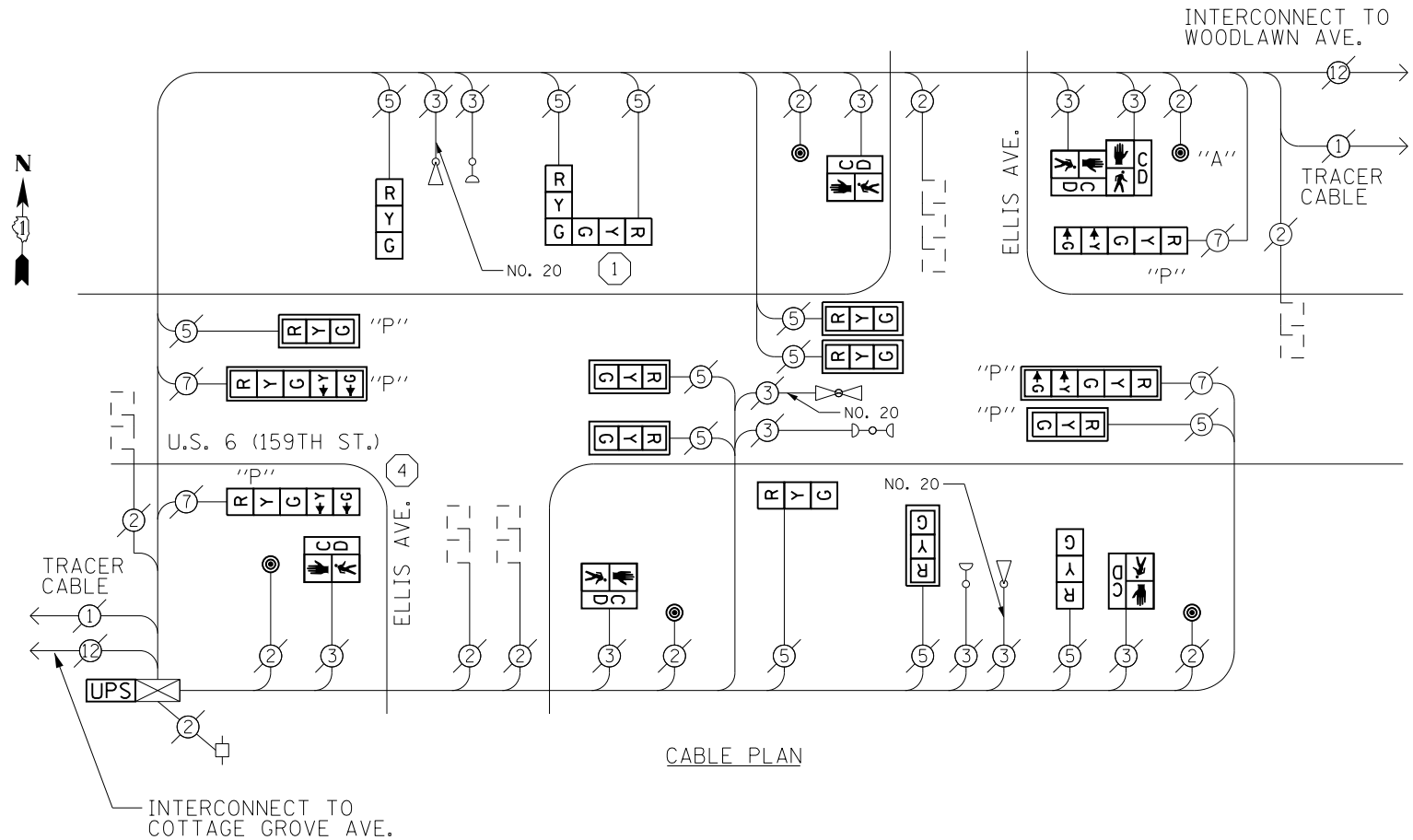
DESIGNED KJP
DRAWN DLW
CHECKED BKS
DATE -

REVISED -
REVISED -
REVISED -
REVISED -

- ① THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 14 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.
- ④ THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 18 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

NOTES

- 1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- 2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT USABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- 3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE 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 UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.



CABLE PLAN

NOTE: PUSHBUTTON "A" SHALL PLACE A CALL TO PHASES 3 & 6

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

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				
	NO. LAMPS	WATTAGE INCAND. LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	17	0.50	136.0
(YELLOW)	16	25	0.25	100.0
(GREEN)	16	15	0.25	60.0
ARROW	8	12	0.10	9.6
PED SIGNAL	6	25	1.00	150.0
CONTROLLER	1	100	1.00	100.0
VIDEO SYSTEM		150	1.00	0
BATTERY BACKUP	1	25	1.00	25.0
TOTAL =				580.6

**SCHEDULE OF QUANTITIES
ITEM**

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	5
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	2
OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	9
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	5

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

TS #225
SOUTH HOLLAND

FILE NAME =	USER NAME = Brian Scifers	DESIGNED KJP	REVISED -
D160X24-sht-ts.TS225.dgn		DRAWN DLW	REVISED -
Default	PLOT SCALE = 40.0000' / in.	CHECKED BKS	REVISED -
	PLOT DATE = 10/8/2013	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCHEDULE OF QUANTITIES AND CABLE PLAN US RTE. 6 (159TH ST) AT ELLIS AVE.			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-052TS	COOK	87	83
				CONTRACT NO.
ILLINOIS FED. AID PROJECT				

SEQUENCE OF OPERATION

MOVEMENT	2+6										3								4							
	1	2	3A	3B	3C	3D	4A	4B	4C	4D	5	6	7A	7B	8A	8B	8C	8D	9	10A	10B	11A	11B	11C	11D	
PHASE	2+6										3								4							
INTERVAL	2+6										3								4							
CHANGE TO	3										4								2+6							
ELLIS AVE. N/B SIGNALS	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	Y	R	R	R
ELLIS AVE. S/B SIGNALS	R	R	R	R	R	R	R	R	R	R	G	G	Y	R	Y	R	R	R	R	R	R	R	R	R	R	R
U.S. 6 E/B FAR RIGHT SIGNAL AT EAST INTERSECTION	G	G	G	G	Y	R	G	G	G	G	R	R	R	R	R	R	R	R	R	G	G	G	G	Y	R	R
U.S. 6 E/B END MAST ARM AND FAR LEFT SIGNALS AT EAST INTERSECTION	G	G	G	G	Y	R	G	G	G	G	R	R	R	R	R	R	R	R	R	G	G	G	G	Y	R	R
U.S. 6 W/B SIGNALS AT EAST INTERSECTION	G	G	Y	R	R	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
U.S. 6 W/B FAR RIGHT SIGNAL AT WEST INTERSECTION	G	G	G	G	G	G	G	Y	R	G	G	G	G	G	G	G	Y	R	R	R	R	R	R	R	R	R
U.S. 6 W/B END MAST ARM AND FAR LEFT SIGNALS AT WEST INTERSECTION	G	G	G	G	G	G	G	Y	R	G	G	G	G	G	G	G	Y	R	R	R	R	R	R	R	R	R
U.S. 6 E/B SIGNALS AT WEST INTERSECTION	G	G	Y	R	R	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
PEDESTRIAN SIGNALS X-ING U.S. 6 AT EAST INTERSECTION	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
PEDESTRIAN SIGNALS X-ING ELLIS AVE AT EAST AND WEST INTERSECTION	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D

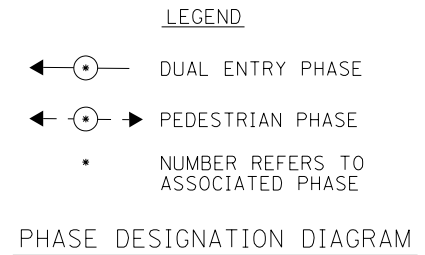
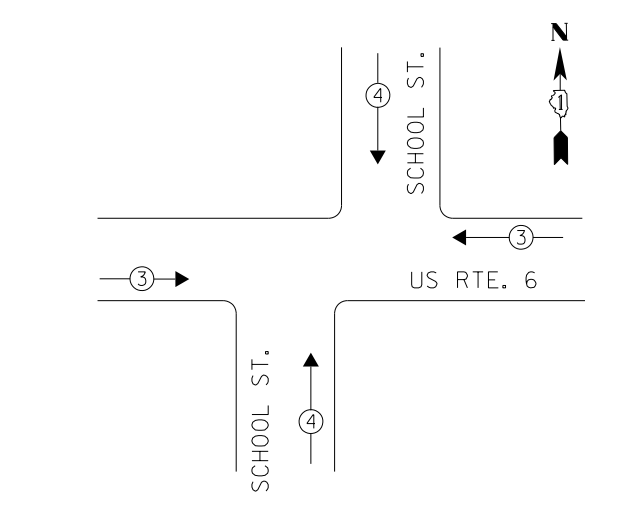
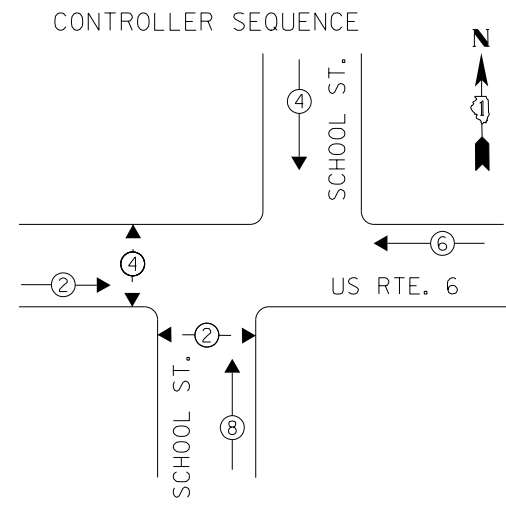
* TO APPEAR ON PUSHBUTTON ACTUATION ONLY.
 ** FLASHING "DON'T WALK" IS TO TERMINATE AT THE COMPLETION OF THE PEDESTRIAN CLEARANCE INTERVAL.

EMERGENCY VEHICLE PREEMPTION SEQUENCE

CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NO.	1																5																9																EMERGENCY VEHICLE PREEMPTOR			CLEAR TO NORMAL SEQUENCE						
	1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	1M	1N	1P	1Q	1R	1S	1T	1U	1V	1W	1X	1Y	1Z	1AA	1BB	1CC	2	3	4																												
EMERGENCY VEHICLE PREEMPTION SEQUENCE INTERVAL NO.	1																5																9																3			4			5			
CHANGE TO EMERGENCY VEHICLE PREEMPTION SEQUENCE INTERVAL NO.	2																1C																1D																2			3			4			
ELLIS AVE. N/B SIGNALS	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Y	R	Y	R	R	R	R	G	R	R	G																										
ELLIS AVE. S/B SIGNALS	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	R																									
U.S. 6 E/B FAR RIGHT SIGNAL AT EAST INTERSECTION	G	G	G	G	Y	R	G	G	G	G	R	R	R	R	R	R	R	R	R	R	R	G	G	G	G	Y	R	G	G	R	G																											
U.S. 6 E/B END MAST ARM AND FAR LEFT SIGNALS AT EAST INTERSECTION	G	G	G	G	Y	R	G	G	G	G	R	R	R	R	R	R	R	R	R	R	R	G	G	G	G	Y	R	G	G	R	G																											
U.S. 6 W/B SIGNALS AT EAST INTERSECTION	G	G	Y	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R																											
U.S. 6 W/B FAR RIGHT SIGNAL AT WEST INTERSECTION	G	G	G	G	G	G	G	G	Y	R	G	G	G	G	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	G	R																										
U.S. 6 W/B END MAST ARM AND FAR LEFT SIGNALS AT WEST INTERSECTION	G	G	G	G	G	G	G	G	Y	R	G	G	G	G	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	G	R																										
U.S. 6 E/B SIGNALS AT WEST INTERSECTION	G	G	Y	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R																											
PEDESTRIAN SIGNALS X-ING U.S. 6 AT EAST INTERSECTION	D	D	D	D	D	D	D	D	D	D	FL	D	D	FL	FL	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D																											
PEDESTRIAN SIGNALS X-ING ELLIS AVE AT EAST AND WEST INTERSECTION	FL	FL	D	D	D	D	FL	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D																											

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

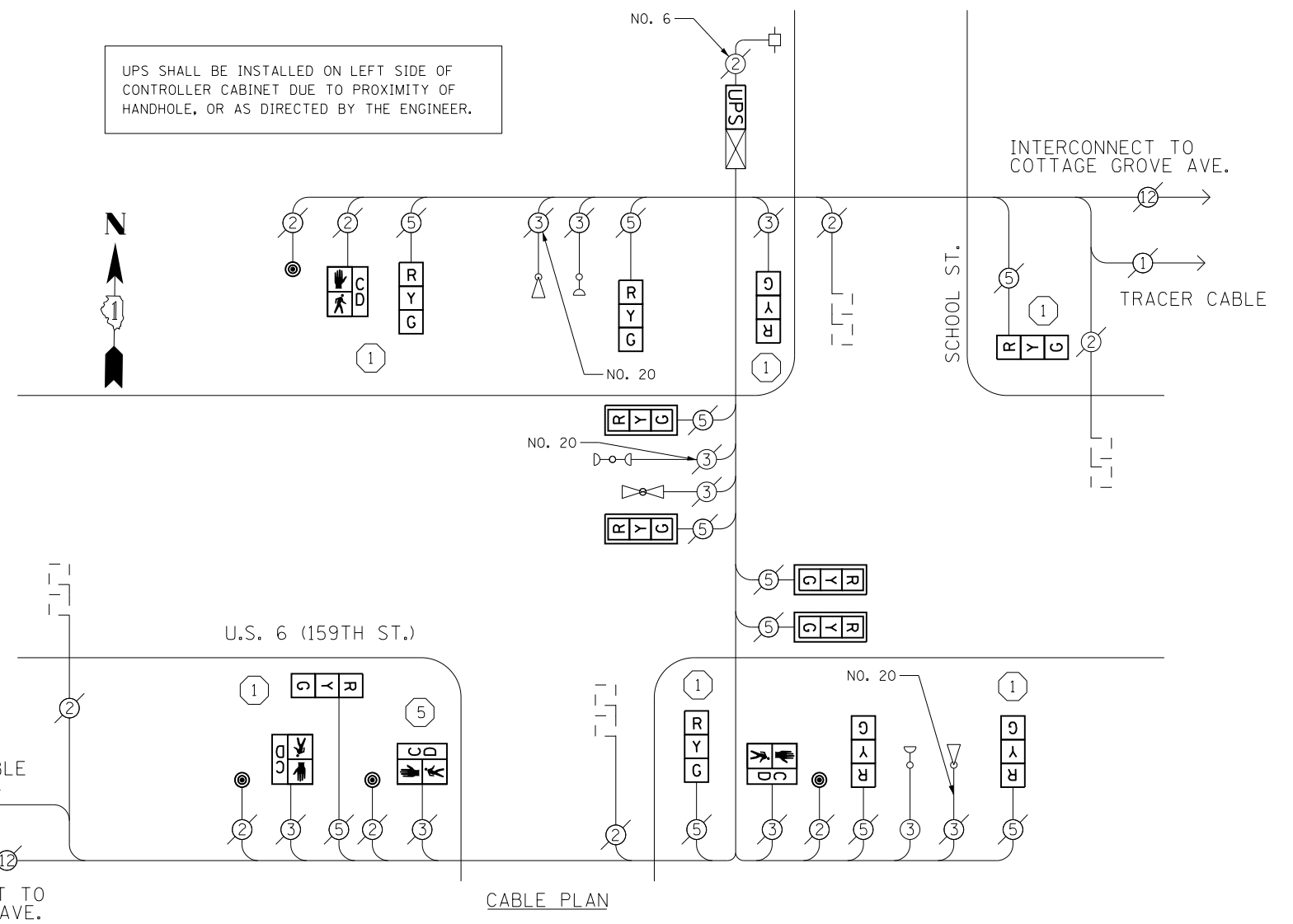
TS #225
SOUTH HOLLAND



EMERGENCY VEHICLE PREEMPTION SEQUENCE

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

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



UPS SHALL BE INSTALLED ON LEFT SIDE OF CONTROLLER CABINET DUE TO PROXIMITY OF HANDHOLE, OR AS DIRECTED BY THE ENGINEER.

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

TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12		17	0.50	102.0
(YELLOW)	12		25	0.25	75.0
(GREEN)	12		15	0.25	45.0
ARROW	0		12	0.10	0
PED SIGNAL	4		25	1.00	100.0
CONTROLLER	1	100		1.00	100.0
VIDEO SYSTEM		150		1.00	0
BATTERY BACKUP	1	25		1.00	25.0
TOTAL =					447.0

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

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
 PHONE 708-325-2692
 COMMONWEALTH EDISON

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, 1-FACE
4	EACH	PEDESTRIAN PUSH BUTTON
12	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
7	EACH	STEEL POST

SCHEDULE OF QUANTITIES

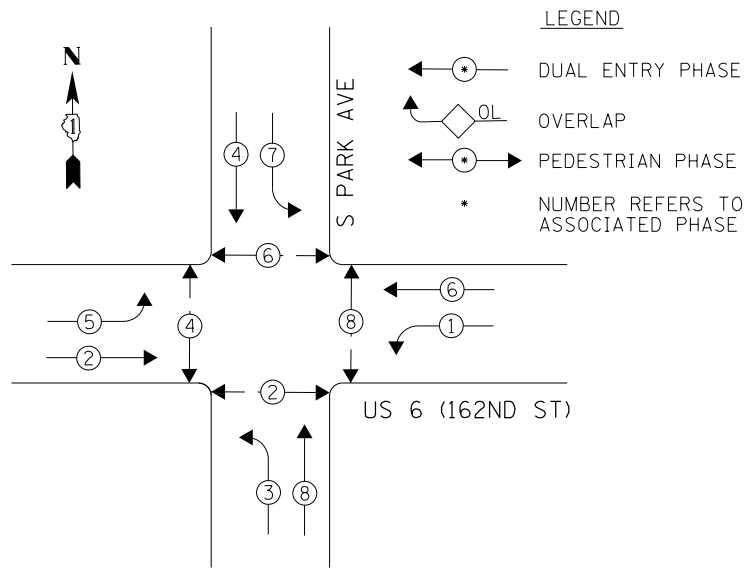
ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	8
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	4
PEDESTRIAN PUSH-BUTTON	EACH	4
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

- CONSTRUCTION NOTES:**
- THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 14 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.
 - THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 10 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

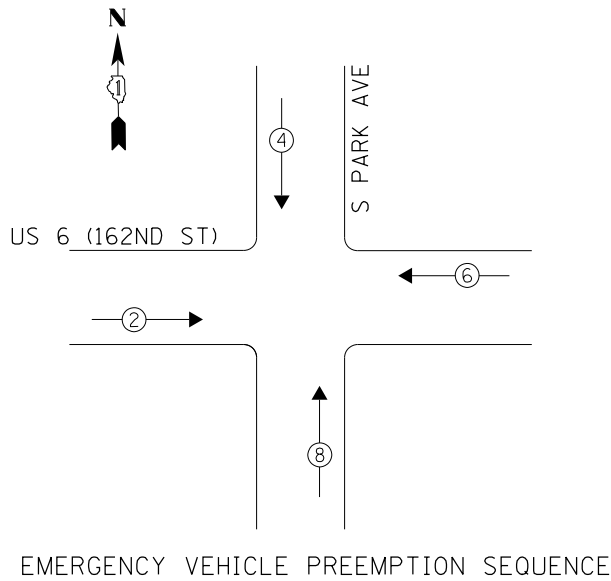
- NOTES**
- ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
 - PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT USABLE, REPLACE AS DIRECTED BY THE ENGINEER.
 - THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE 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 UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

TS #285
SOUTH HOLLAND

EXISTING CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	←	↑

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

UPS SHALL BE INSTALLED ON LEFT SIDE OF CONTROLLER CABINET DUE TO PROXIMITY OF HANDHOLE, OR AS DIRECTED BY THE ENGINEER.

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

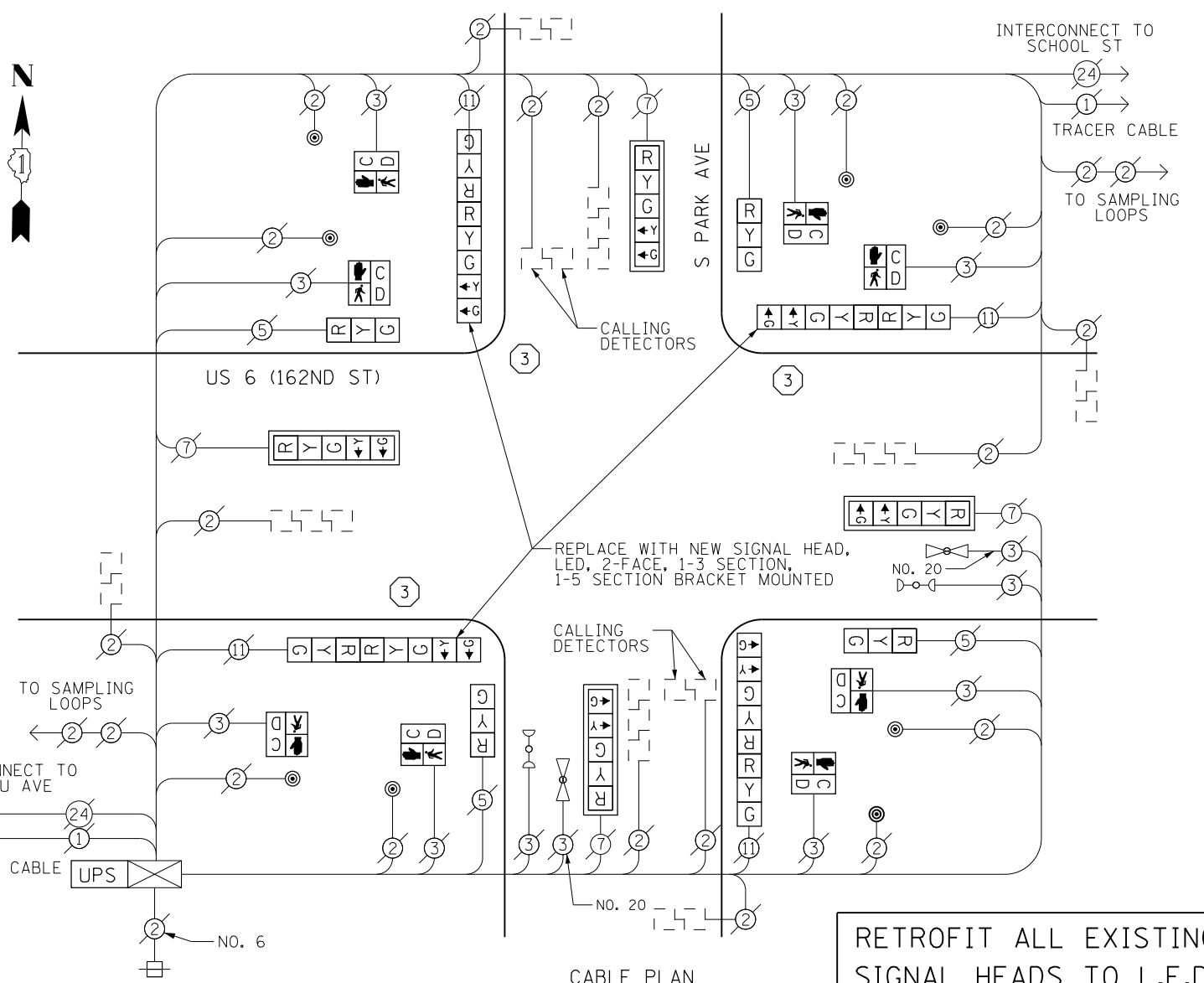
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

6	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
6	EACH	PEDESTRIAN PUSH BUTTON
3	EACH	STEEL POST

SCHEDULE OF QUANTITIES

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



CABLE PLAN

RETROFIT ALL EXISTING SIGNAL HEADS TO L.E.D. EXCEPT AS NOTED OR DIRECTED BY THE ENGINEER

CONSTRUCTION NOTES:

- 3 THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 16 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

NOTES

- ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT USABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE 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 UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

TS #290
SOUTH HOLLAND

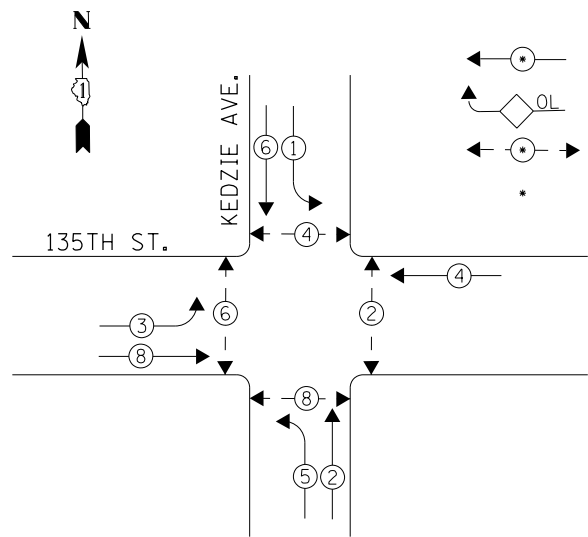
I. D. O. T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16		17	0.50	136.0
(YELLOW)	16		25	0.25	100.0
(GREEN)	16		15	0.25	60.0
ARROW	16		12	0.10	19.2
PED SIGNAL	8		25	1.00	200.0
CONTROLLER	1	100		1.00	100.0
VIDEO SYSTEM		150		1.00	0.0
BATTERY BACKUP	1	25		1.00	25.0
TOTAL =					640.2

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

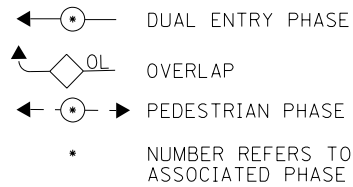
ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

LEGEND



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.

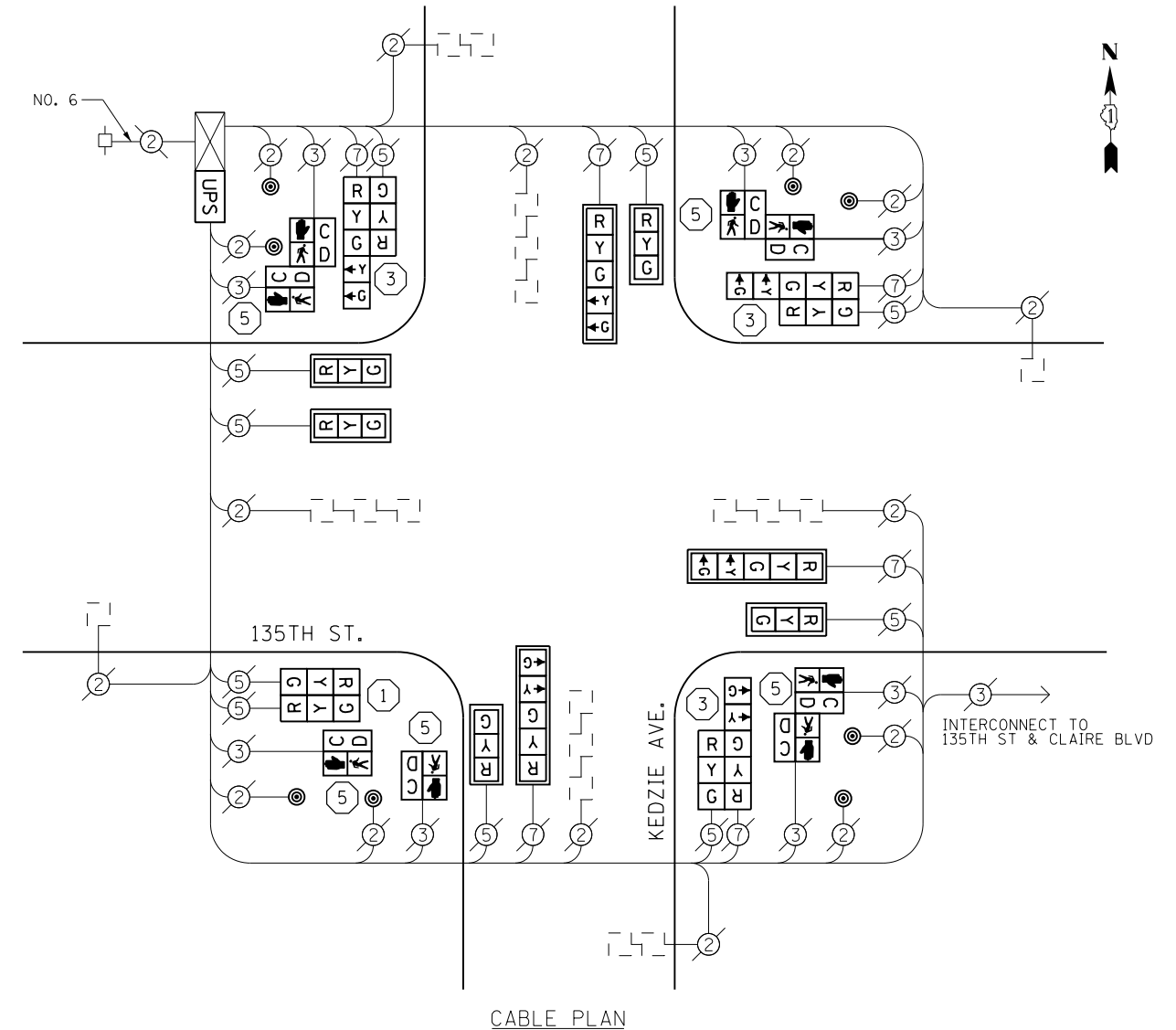
5	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
3	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION
1	EACH	SIGNAL HEAD, 2-FACE, 3-SECTION
3	EACH	SIGNAL HEAD, 2-FACE, 3-SECTION, 5-SECTION
3	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
2	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
8	EACH	PEDESTRIAN PUSH BUTTON
9	EACH	STEEL POST

CONSTRUCTION NOTES

- ① THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 14 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.
- ③ THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 16 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.
- ⑤ THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 10 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

NOTES

- 1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- 2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT USABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- 3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE 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 UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.



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 INCAND. LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	17	0.50	136.0
(YELLOW)	16	25	0.25	100.0
(GREEN)	16	15	0.25	60.0
ARROW	12	12	0.10	14.4
PED SIGNAL	8	25	1.00	200.0
CONTROLLER	-	100	1.00	100.0
VIDEO SYSTEM	1	150	1.00	-
BATTERY BACKUP	-	25	1.00	25.0
TOTAL =				635.4

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

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

SCHEDULE OF QUANTITIES
ITEM

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	5
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	3
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	5
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	3
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	3
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	3
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
PEDESTRIAN PUSH-BUTTON	EACH	8
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, & PHASE DESIGNATION DIAGRAM
135TH ST AND KEDZIE AVE

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-052TS	COOK	87	87
CONTRACT NO. 60X24				
ILLINOIS FED. AID PROJECT				

TS #11114
ROBINS

FILE NAME = D160X24-shr-ts-TS11114.dgn	USER NAME = Brian Scifers	DESIGNED KJP	REVISED -
Default	PLOT SCALE = 40.0000' / in.	DRAWN DLW	REVISED -
	PLOT DATE = 10/8/2013	CHECKED BKS	REVISED -
		DATE -	REVISED -