

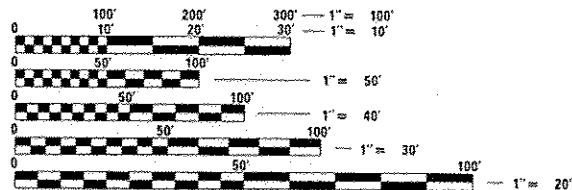
04-25-14 LETTING ITEM 010

INDEX OF SHEETS

SEE SHEET NO. 2

IDOT STANDARDS

- 000001-06 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 701006-05 OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
- 701101-04 OFF-ROAD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
- 701701-09 URBAN LANE CLOSURE, MULTILANE INTERSECTION
- 701901-03 TRAFFIC CONTROL DEVICES
- 720001-01 SIGN PANEL MOUNTING 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: SHAR-DAY SMITH
PROJECT MANAGER: SUDUD MAHMOUD

CONTRACT NO. 60X28

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

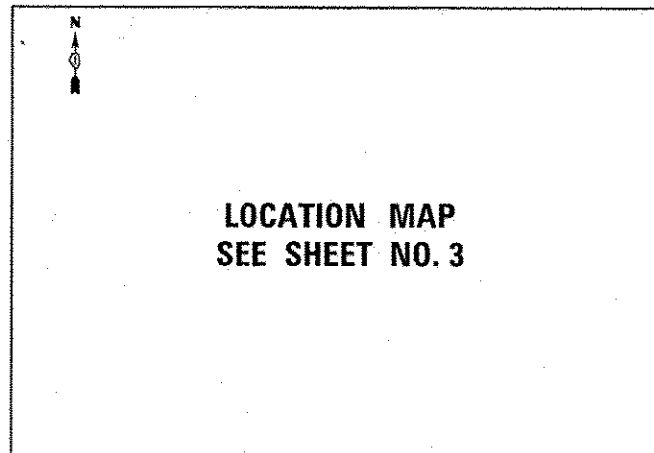
VARIOUS LOCATIONS IN
NORTH COOK COUNTY #6

LIGHT EMITTING DIODE (LED) INSTALLATION

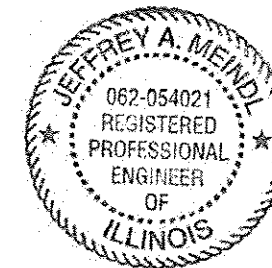
SECTION 2013-053TS

COOK COUNTY

C-91-051-14



LOCATION MAP
SEE SHEET NO. 3



Signed *Jeffrey A. Meindl*
JEFFREY A. MEINDL, P.E., IL License No. 062-054021
Expires 11/30/2015

Date 12-09-13

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Dec. 20 2013
John J. ...
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

Jan 24 2014
John D. Baranzelli P.E.
ENGINEER OF DESIGN AND ENVIRONMENT

Jan 24 2014
Omer Osman P.E.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

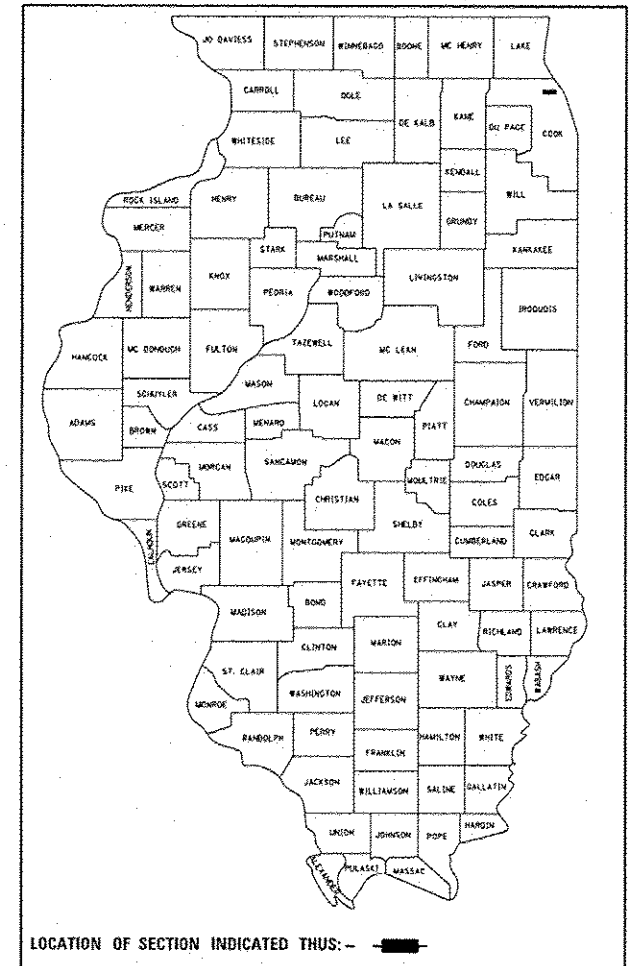
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OF THE STATE OF ILLINOIS

SAM SCHWARTZ
ENGINEERING
3100 W. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	1
ILLINOIS			CONTRACT NO. 60X28	

*88-4=84

D-91-051-14



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20	TS 13498	CENTRAL @ GROSS POINT RD
21	TS 13515	CENTRAL @ HARTEY
22	TS 13520	CENTRAL @ LINCOLNWOOD
23	TS 13480	CENTRAL AVE @ ASBURY
24	TS 13525	CENTRAL AVE @ MCDANIEL AVE
25	TS 13555	CRAWFORD AVE @ GROSS POINT RD
26	TS 13560	CRAWFORD AVE @ OLD GLENVIEW RD
27	TS 13485	DEMPSTER ST @ ASBURY
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36	TS 14805	CHURCH ST @ EAST PRAIRIE RD
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38	TS 14800	CHURCH ST @ CENTRAL PARK AVE
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40	TS 4870	CHURCH ST @ NILES CENTER RD
41	TS 4915	CRAWFORD AVE @ GOLF RD
42	TS 4920	CRAWFORD AVE @ HARRISON ST/OLD ORCHARD
43	TS 5140	GOLF RD @ CENTRAL PARK
44	TS 5145	GOLF RD @ EAST PRAIRIE/MCDANIEL AVE
45	TS 5150	GOLF RD @ GROSS POINT RD
46	TS 8905	GOLF RD @ LAMON AVE
47	TS 5170	GOLF RD @ MCCORMICK BLVD
48	TS 5245	GROSS POINT RD @ HARRISON/OLD ORCHARD
49	TS 5152	GROSS POINT RD @ KENTON AVE/JEWEL OSCO
50	TS 5265	GROSS POINT RD @ LINCOLN AVE
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54	TS 12010	IL 58/DEMPSTER ST @ GROSS POINT RD
55	TS 2805	IL 58/DEMPSTER ST @ LOCKWOOD AVE
56	TS 2820	IL 58/DEMPSTER ST @ NILES CENTER RD
57	TS 21750	LINCOLN NILES CENTER RD @ CALTZ DELETED
58	TS 14815	MAIN ST (IN SKOKIE) @ NILES CENTER RD
59	TS 1574	NILES CENTER RD @ FARGO
60	TS 20355	NILES CENTER RD/CARPENTER RD @ VILLAGE CROSSING SHOPPING CENTER
61	TS 14840	TOUHY AVE @ LARAMIE AVE
62	TS 14845	TOUHY AVE @ LECLAIRE AVE
63	TS 14835	TOUHY AVE @ NILES CENTER RD/CARPENTER RD
64	TS 5325	US 41/LINCOLN @ HOWARD ST
65	TS 1615	US 41/LINCOLN AVE @ TOUHY AVE
66	TS 1515	US 41/SKOKIE @ EDENS PLAZA
67	TS 1490	US 41/SKOKIE @ IL 58/DEMPSTER ST
68	TS 1560	US 41/SKOKIE @ MAIN ST
69	TS 1570	US 41/SKOKIE @ NILES CENTER RD
70	TS 1520	US 41/SKOKIE HWY @ EMERSON ST
71	TS 1540	US 41/SKOKIE HWY @ HOWARD ST
72	TS 1485	US 41-IL 50/CICERO AVE @ US 41/LINCOLN
73	TS 1510	US 41 SKOKIE @ EAST LAKE
74	TS 4950	CRAWFORD AVE/HUNTER RD @ WILMETTE
75	TS 5320	HIBBARD @ EAST LAKE AVE
76	TS 1565	US 41/SKOKIE @ NEW GLENVIEW RD
77	TS 1580	US 41/SKOKIE @ OLD GLENVIEW RD
78	TS 1620	US 41/SKOKIE @ WILMETTE
79	TS 15345	GREEN BAY RD @ ELDORADO
80	TS 15335	GREEN BAY RD @ ELM ST
81	TS 15355	GREEN BAY RD @ GAGE
82	TS 15340	GREEN BAY RD @ PINE ST
83	TS 15325	GREEN BAY RD @ SUNSET RD
84	TS 15350	GREEN BAY RD @ TOWER RD
85	TS 15365	HIBBARD @ WILLOW RD
86	TS 15385	SHERIDAN RD @ LLOYD DR
87	TS 15380	SHERIDAN RD @ MAPLE ST
88	TS 1183	SHERIDAN RD, AT ELDER

GENERAL NOTES

- CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM PAINTED POSTS THAT ARE INDICATED FOR REPLACEMENT TO NEW POSTS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE COST OF REMOVAL, RELOCATION, AND ANY NEW MOUNTING HARDWARE NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE TRAFFIC SIGNAL POST, GALVANIZED STEEL PAY ITEM OF THE LENGTH AS SPECIFIED IN THE PLANS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION. THIS SHALL INCLUDE VERIFYING THE EXISTING BOLT PATTERN ON EXISTING FOUNDATIONS SPECIFIED TO BE RE-USED.
- 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).
- ANY ADDITIONAL CABLE LENGTHS NECESSARY FOR THE PROPER INSTALLATION OF AN UNINTERRUPTIBLE POWER SUPPLY, GROUND MOUNTED DUE TO THE LARGER DISTANCE AWAY FROM THE CONTROLLER CABINET SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNINTERRUPTIBLE POWER SUPPLY, GROUND MOUNTED PAY ITEM.
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, LOCAL GOVERNMENT AGENCIES AND IDOT.
- RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.
- CONTRACTOR SHALL REPLACE ALL TRAFFIC SIGNAL HEAD METAL BRACKETS TO NEW POLYCARBONATE BRACKETS AT ALL RETROFIT SIGNAL HEAD INTERSECTIONS OR AS DIRECTED BY THE ENGINEER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CORRESPONDING SIGNAL HEAD, LED, RETROFIT PAY ITEM OF THE TYPE AND NUMBER OF SIGNAL HEADS, FACES, AND SECTIONS AS SPECIFIED IN THE PLANS.
- THE CONTRACTOR SHALL RELOCATE THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM PHASING UNIT FROM AN EXISTING TRAFFIC SIGNAL CONTROLLER CABINET TO A NEW TRAFFIC SIGNAL CONTROLLER CABINET, AS INDICATED IN THE PLANS. THE WORK SHALL INCLUDE DISCONNECTING THE EMERGENCY VEHICLE PRIORITY SYSTEM PHASING UNIT(S) AND RECONNECTING IT TO A NEW WIRING HARNESS WHICH IS TO BE FACTORY WIRED INTO THE NEW TRAFFIC SIGNAL CONTROLLER CABINET. THE EMERGENCY VEHICLE SYSTEM IS NOT TO BE INOPERATIVE FOR MORE THAN 8 HOURS AND THE CONTRACTOR MUST NOTIFY THE MUNICIPALITY OR FIRE PROTECTION DISTRICT 72 HOURS PRIOR TO THE DISCONNECTION OF THE EQUIPMENT. THE CONTRACTOR MUST DEMONSTRATE TO THE SATISFACTION OF THE ENGINEER THAT THE EMERGENCY VEHICLE SYSTEM OPERATES PROPERLY.
- 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 BOLTS IS ACCEPTABLE. IF THE EXISTING ANCHOR BOLT CONDITION IS NOT ACCEPTABLE, THE CONTRACTOR SHALL USE THE APPROVED METHOD TO REPLACE ANCHOR BOLTS 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 THE PAINTED POSTS THAT ARE INDICATED FOR REPLACEMENT TO NEW POSTS 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.

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

RLR CAMERA LOCATION:
 TS #1615 - US 41/LINCOLN AVENUE AT TOUHY AVENUE

VILLAGE OF SKOKIE
 5127 OAKTON STREET
 SKOKIE, IL 60077
 (847) 673-0500

ATS (AMERICAN TRAFFIC SOLUTIONS)
 1300 WEST SOUTHERN AVENUE
 TEMPE, ARIZONA 85282
 847-912-1193
 ATTN: PETER SOPKOVICH



DESIGNED	JAM	REVISED	
DRAWN	JAM	REVISED	
CHECKED	LMM	REVISED	
DATE	12-13-13	REVISED	

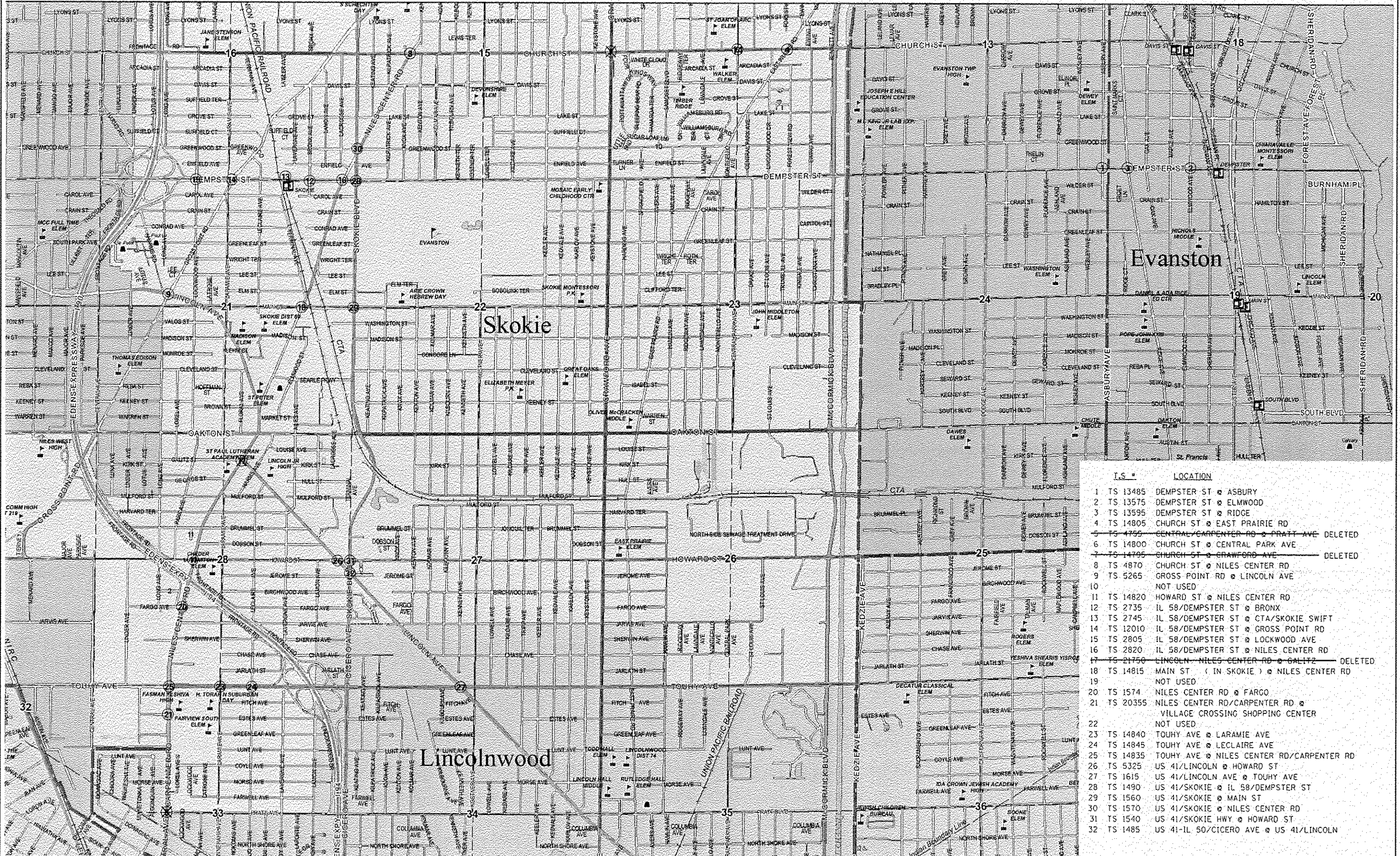
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS AND GENERAL NOTES

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	2
CONTRACT NO. 60X28				ILLINOIS FED. AID PROJECT

MATCHLINE SEE SHEET 4



I.S. #	LOCATION
1	TS 13485 DEMPSTER ST @ ASBURY
2	TS 13575 DEMPSTER ST @ ELMWOOD
3	TS 13595 DEMPSTER ST @ RIDGE
4	TS 14805 CHURCH ST @ EAST PRAIRIE RD
5	TS 4755 CENTRAL/CARPENTER RD @ PRATT AVE DELETED
6	TS 14800 CHURCH ST @ CENTRAL PARK AVE
7	TS 14795 CHURCH ST @ CRAWFORD AVE DELETED
8	TS 4870 CHURCH ST @ NILES CENTER RD
9	TS 5265 GROSS POINT RD @ LINCOLN AVE
10	NOT USED
11	TS 14820 HOWARD ST @ NILES CENTER RD
12	TS 2735 IL 58/DEMPSTER ST @ BRONX
13	TS 2745 IL 58/DEMPSTER ST @ CTA/SKOKIE SWIFT
14	TS 12010 IL 58/DEMPSTER ST @ GROSS POINT RD
15	TS 2805 IL 58/DEMPSTER ST @ LOCKWOOD AVE
16	TS 2820 IL 58/DEMPSTER ST @ NILES CENTER RD
17	TS 21750 LINCOLN NILES CENTER RD @ GALTZ DELETED
18	TS 14815 MAIN ST (IN SKOKIE) @ NILES CENTER RD
19	NOT USED
20	TS 1574 NILES CENTER RD @ FARGO
21	TS 20355 NILES CENTER RD/CARPENTER RD @ VILLAGE CROSSING SHOPPING CENTER
22	NOT USED
23	TS 14840 TOUHY AVE @ LARAMIE AVE
24	TS 14845 TOUHY AVE @ LECLAIRE AVE
25	TS 14835 TOUHY AVE @ NILES CENTER RD/CARPENTER RD
26	TS 5325 US 41/LINCOLN @ HOWARD ST
27	TS 1615 US 41/LINCOLN AVE @ TOUHY AVE
28	TS 1490 US 41/SKOKIE @ IL 58/DEMPSTER ST
29	TS 1560 US 41/SKOKIE @ MAIN ST
30	TS 1570 US 41/SKOKIE @ NILES CENTER RD
31	TS 1540 US 41/SKOKIE HWY @ HOWARD ST
32	TS 1485 US 41-IL 50/CICERO AVE @ US 41/LINCOLN

SAM SCHWARTZ ENGINEERING
 3100 W. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

DESIGNED - JAM
 DRAWN - JAM
 CHECKED - LMM
 DATE - 12-13-13

REVISED -
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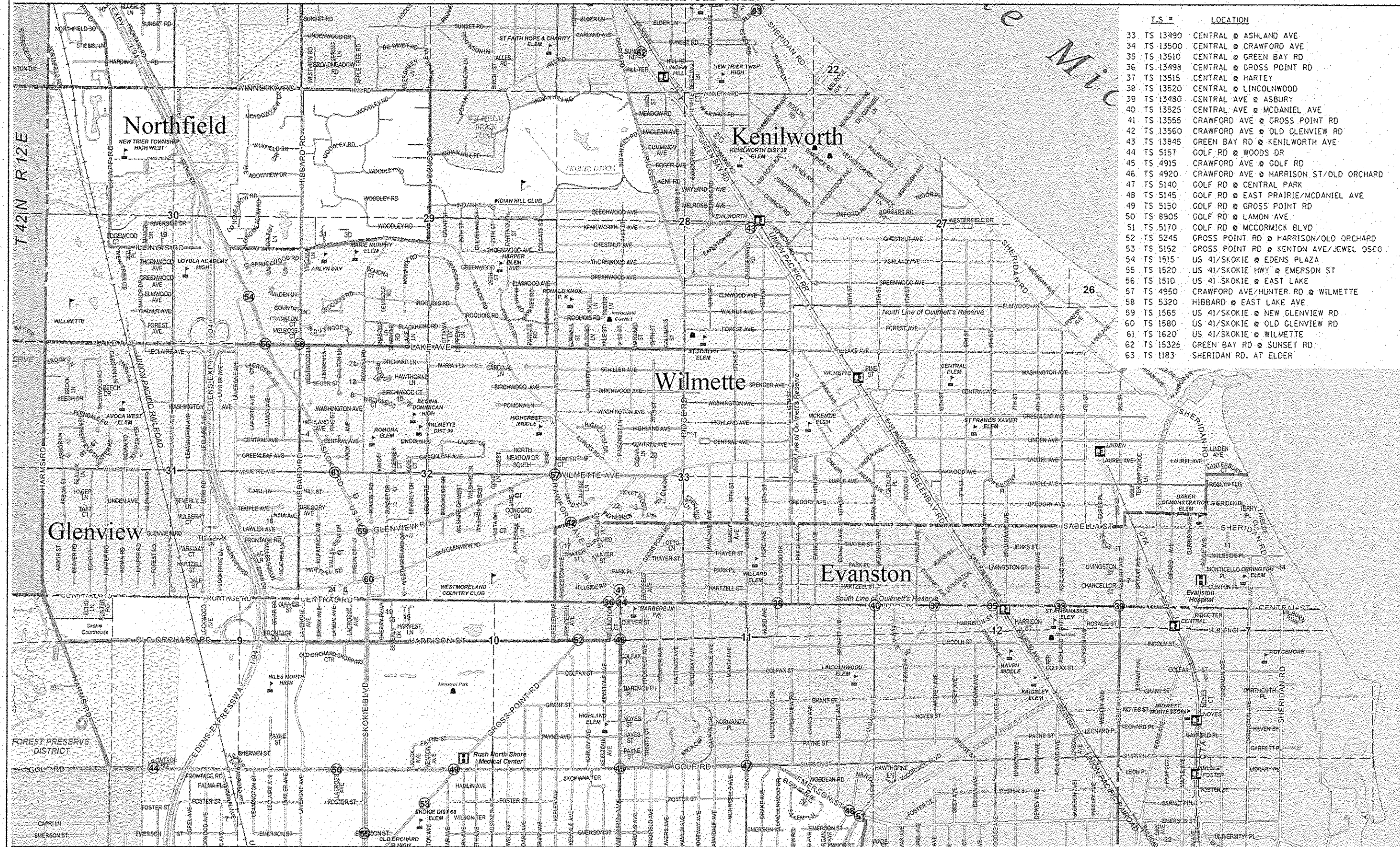
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

LOCATION MAP

SCALE: NONE SHEET 1 OF 3 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-05315	COOK	88	3
				CONTRACT NO. 60X28
ILLINOIS FED. AID PROJECT				

MATCHLINE SEE SHEET 5



TS #	LOCATION
33	TS 13490 CENTRAL @ ASHLAND AVE
34	TS 13500 CENTRAL @ CRAWFORD AVE
35	TS 13510 CENTRAL @ GREEN BAY RD
36	TS 13498 CENTRAL @ GROSS POINT RD
37	TS 13515 CENTRAL @ HARTEY
38	TS 13520 CENTRAL @ LINCOLNWOOD
39	TS 13480 CENTRAL AVE @ ASBURY
40	TS 13525 CENTRAL AVE @ MCDANIEL AVE
41	TS 13555 CRAWFORD AVE @ GROSS POINT RD
42	TS 13560 CRAWFORD AVE @ OLD GLENVIEW RD
43	TS 13845 GREEN BAY RD @ KENILWORTH AVE
44	TS 5157 GOLF RD @ WOODS DR
45	TS 4915 CRAWFORD AVE @ GOLF RD
46	TS 4920 CRAWFORD AVE @ HARRISON ST/OLD ORCHARD
47	TS 5140 GOLF RD @ CENTRAL PARK
48	TS 5145 GOLF RD @ EAST PRAIRIE/MCDANIEL AVE
49	TS 5150 GOLF RD @ GROSS POINT RD
50	TS 8905 GOLF RD @ LAMON AVE
51	TS 5170 GOLF RD @ MCCORMICK BLVD
52	TS 5245 GROSS POINT RD @ HARRISON/OLD ORCHARD
53	TS 5152 GROSS POINT RD @ KENTON AVE/JEWEL OSCO
54	TS 1515 US 41/SKOKIE @ EDENS PLAZA
55	TS 1520 US 41/SKOKIE HWY @ EMERSON ST
56	TS 1510 US 41 SKOKIE @ EAST LAKE
57	TS 4950 CRAWFORD AVE/HUNTER RD @ WILMETTE
58	TS 5320 HIBBARD @ EAST LAKE AVE
59	TS 1565 US 41/SKOKIE @ NEW GLENVIEW RD
60	TS 1580 US 41/SKOKIE @ OLD GLENVIEW RD
61	TS 1620 US 41/SKOKIE @ WILMETTE
62	TS 15325 GREEN BAY RD @ SUNSET RD
63	TS 1183 SHERIDAN RD. AT ELDER

MATCHLINE SEE SHEET 3



DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LOCATION MAP

SCALE: NONE SHEET 2 OF 3 SHEETS STA. TO STA.

F.A. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	4
CONTRACT NO. 60X28				
ILLINOIS FED. AID PROJECT				



T.S. #	LOCATION
64	TS 15345 GREEN BAY RD @ ELDORADO
65	TS 15335 GREEN BAY RD @ ELM ST
66	TS 15355 GREEN BAY RD @ GAGE
67	TS 15340 GREEN BAY RD @ PINE ST
68	TS 15350 GREEN BAY RD @ TOWER RD
69	TS 15365 HIBBARD @ WILLOW RD
70	TS 15385 SHERIDAN RD @ LLOYD DR
71	TS 15380 SHERIDAN RD @ MAPLE ST
72	TS 13718 IL 68/DUNDEE RD @ BOTANICAL GARDENS
73	TS 13720 IL 68/DUNDEE RD @ FORESTWAY DR
74	TS 13725 PARK AVE @ SHERIDAN DELETED

MATCHLINE SEE SHEET 4



DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LOCATION MAP

SCALE: NONE SHEET 3 OF 3 SHEETS STA. TO STA.

F.A. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-05375	COOK	88	5
				CONTRACT NO. 60X28
ILLINOISIFIED, AID PROJECT				

COLUMN NUMBER	TS NO.	INTERSECTION	FUNDING PARTICIPATION								DEVELOPER DIVERSIFIED REALTY CORP	EDENS CENTER ASSOCIATES	WESTFIELD OLD ORCHARD
			STATE	EVANSTON	GLENCOE	KENILWORTH	SKOKIE	WILMETTE	WINNETKA				
2	TS 13490	CENTRAL @ ASHLAND AVE	95%	5%									
2	TS 13500	CENTRAL @ CRAWFORD AVE	95%	5%									
2	TS 13510	CENTRAL @ GREEN BAY RD	95%	5%									
2	TS 13498	CENTRAL @ GROSS POINT RD	95%	5%									
3	TS 13515	CENTRAL @ HARTREY	96.7%	3.3%									
2	TS 13520	CENTRAL @ LINCOLNWOOD	95%	5%									
2	TS 13480	CENTRAL AVE @ ASBURY	95%	5%									
2	TS 13525	CENTRAL AVE @ MCDANIEL AVE	95%	5%									
2	TS 13555	CRAWFORD AVE @ GROSS POINT RD	95%	5%									
21	TS 13560	CRAWFORD AVE @ OLD GLENVIEW RD	92.5%	7.5%									
2	TS 13485	DEMPSTER ST @ ASBURY	95%	5%									
2	TS 13575	DEMPSTER ST @ ELMWOOD	95%	5%									
2	TS 13595	DEMPSTER ST @ RIDGE	95%	5%									
5	TS 13718	IL 68/DUNDEE RD @ BOTANICAL GARDENS	96.7%		3.3%								
6	TS 13720	IL 68/DUNDEE RD @ FORESTWAY DR	95%		5%								
7	TS 13845	GREEN BAY RD @ KENILWORTH AVE	95%			5%							
8	TS 5157	GOLF RD @ WOODS DR	96.7%				3.3%						
9	TS 14805	CHURCH ST @ EAST PRAIRIE RD	95%				5%						
9	TS 14800	CHURCH ST @ CENTRAL PARK AVE	95%				5%						
10	TS 4870	CHURCH ST @ NILES CENTER RD	97.5%				2.5%						
1	TS 4915	CRAWFORD AVE @ GOLF RD	100%										
2	TS 4920	CRAWFORD AVE @ HARRISON ST/OLD ORCHARD	95%	5%									
12	TS 5140	GOLF RD @ CENTRAL PARK	95%	2.5%			2.5%						
12	TS 5145	GOLF RD @ EAST PRAIRIE/MCDANIEL AVE	95%	2.5%			2.5%						
1	TS 5150	GOLF RD @ GROSS POINT RD	100%										
20	TS 8905	GOLF RD @ LAMON AVE	95%									5%	
4	TS 5170	GOLF RD @ MCCORMICK BLVD	97.5%	2.5%									
4	TS 5245	GROSS POINT RD @ HARRISON/OLD ORCHARD	97.5%	2.5%									
9	TS 5152	GROSS POINT RD @ KENTON AVE/JEWEL OSCO	95%				5%						
9	TS 5265	GROSS POINT RD @ LINCOLN AVE	95%				5%						
9	TS 14820	HOWARD ST @ NILES CENTER RD	95%				5%						
9	TS 2735	IL 58/DEMPSTER ST @ BRONX AVE	95%				5%						
9	TS 2745	IL 58/DEMPSTER ST @ CTA/SKOKIE SWIFT	95%				5%						
9	TS 12010	IL 58/DEMPSTER ST @ GROSS POINT RD	95%				5%						
9	TS 2805	IL 58/DEMPSTER ST @ LOCKWOOD AVE	95%				5%						
10	TS 2820	IL 58/DEMPSTER ST @ NILES CENTER RD	97.5%				2.5%						
11	TS 14815	MAIN ST (IN SKOKIE) @ NILES CENTER RD	92.5%				7.5%						
9	TS 1574	NILES CENTER RD @ FARGO	95%				5%						
18	TS 20355	NILES CENTER RD/CARPENTER RD @ VILLAGE CROSSING SHOPPING CENTER	95%							5%			
9	TS 14840	TOUHY AVE @ LARAMIE AVE	95%				5%						
9	TS 14845	TOUHY AVE @ LECLAIRE AVE	95%				5%						
1	TS 14835	TOUHY AVE @ NILES CENTER RD/CARPENTER RD	100%										
9	TS 5325	US 41/LINCOLN @ HOWARD ST	95%				5%						
1	TS 1615	US 41/LINCOLN AVE @ TOUHY AVE	100%										
19	TS 1515	US 41/SKOKIE @ EDENS PLAZA	96.7%								3.3%		



DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
SHEET 1 OF 5

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-0531S	COOK	88	6
CONTRACT NO. 60X28			ILLINOIS FED. AID PROJECT	

Rev.

COLUMN NUMBER	TS NO.	INTERSECTION	FUNDING PARTICIPATION							DEVELOPER DIVERSIFIED REALTY CORP.	EDENS CENTER ASSOCIATES	WESTFIELD OLD ORCHARD
			STATE	EVANSTON	GLENCOE	KENILWORTH	SKOKIE	WILMETTE	WINNETKA			
1	TS 1490	US 41/SKOKIE @ IL 58/DEMPSTER ST	100%									
9	TS 1560	US 41/SKOKIE @ MAIN ST	95%					5%				
10	TS 1570	US 41/SKOKIE @ NILES CENTER RD	97.5%					2.5%				
9	TS 1520	US 41/SKOKIE HWY @ EMERSON ST	95%					5%				
9	TS 1540	US 41/SKOKIE HWY @ HOWARD ST	95%					5%				
1	TS 1485	US 41-IL 50/CICERO AVE @ US 41/LINCOLN	100%									
1	TS 1510	US 41 SKOKIE @ EAST LAKE	100%									
13	TS 4950	CRAWFORD AVE/HUNTER RD @ WILMETTE	97.5%					2.5%				
1	TS 5320	HIBBARD @ EAST LAKE AVE	100%									
13	TS 1565	US 41/SKOKIE @ NEW GLENVIEW RD	97.5%					2.5%				
14	TS 1580	US 41/SKOKIE @ OLD GLENVIEW RD	95%					5%				
14	TS 1620	US 41/SKOKIE @ WILMETTE	95%					5%				
15	TS 15345	GREEN BAY RD @ ELDORADO	96.7%						3.3%			
16	TS 15335	GREEN BAY RD @ ELM ST	95%						5%			
16	TS 15355	GREEN BAY RD @ GAGE ST	95%						5%			
16	TS 15340	GREEN BAY RD @ PINE ST	95%						5%			
16	TS 15325	GREEN BAY RD @ SUNSET RD	95%						5%			
17	TS 15350	GREEN BAY RD @ TOWER RD	95.7%						4.3%			
16	TS 15365	HIBBARD @ WILLOW RD	95%						5%			
16	TS 15385	SHERIDAN RD @ LLOYD DR	95%						5%			
15	TS 15380	SHERIDAN RD @ MAPLE ST	96.7%						3.3%			
16	TS 1183	SHERIDAN RD, AT ELDER LN.	95%						5%			



**SAM SCHWARTZ
ENGINEERING**
3100 W. HIGGINS, STE. 100, HOUSTON, TEXAS, TX 77019

DESIGNED - JAM
DRAWN - JAM
CHECKED - LMM
DATE - 12-13-13

REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES
SHEET 2 OF 5**

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	7
CONTRACT NO. 60X28			ILLINOIS FED. AID PROJECT	

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
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	67	8	12	1	2	1	1	1	1	15	4	1	2	2	2	2	7	1	1	1	1	
87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	18										5	2	2	5				1	1	2		
87502490	TRAFFIC SIGNAL POST, GALVANIZED STEEL 15 FT.	EACH	2	2																				
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	41	14			4					4					4	8			3	2	2	
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	55	11	11							7	6		2	2	4	6		3	3			
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	71	7	15		4					14		4	2			11		6	1	2	1	4
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	28		3		4					6				4	8				2		1	
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	64	18	4		4					14	2	2		4	8			1	3	2	2	
88030210	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	34	3	8							3	5	2	4			2				2	1	4
88030220	SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	6	2								2									1		1	
88030240	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	27	13	1							7	1	2						3				



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DATE - 12-13-13

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES
SHEET 3 OF 5**

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	8
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60X28	

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
				TRAFFIC SIGNAL 0021 URBAN																				
88030310	SIGNAL HEAD, LED, 3-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2																1			1		
88030325	SIGNAL HEAD, LED, 3-FACE, 1-3 SECTION, 1-4 SECTION, 1-5 SECTION BRACKET MOUNTED	EACH	1																			1		
88030330	SIGNAL HEAD, LED, 3-FACE, 2-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	2																			2		
88055150	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4	1							2								1					
88055160	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	6	1							5													
88055190	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1								1													
88055200	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	1								1													
88060110	COMBINATION SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION OPTICALLY PROGRAMMED, 1-3 SECTION, BRACKET MOUNTED	EACH	5	1							4													
88060130	COMBINATION SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION OPTICALLY PROGRAMMED, 1-5 SECTION, BRACKET MOUNTED	EACH	2	1							1													
88060180	COMBINATION SIGNAL HEAD, LED, 2-FACE, 1-5 SECTION OPTICALLY PROGRAMMED, 1-3 SECTION, BRACKET MOUNTED	EACH	1								1													
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	232	24	36	6	8	2	2		2	66	16		12	10	4	4	20	6	4	2	8	
88102747	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	101	12	26		4		3		2	28	1		3	6	1	12	1	1		1		
88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	125	30	15		4					21	14	2	3	6	12	6		4	6	2		
88800100	PEDESTRIAN PUSH-BUTTON	EACH	116	16	8		8	2				40	10		12	8		2	10					

Rev.



DESIGNED - JAM
DRAWN - JAM
CHECKED - LMM
DATE - 12-13-13

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
SHEET 4 OF 5

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. SECTION COUNTY TOTAL SHEETS SHEET NO.
RTE. 2013-0537S COOK 88 9
VAR. CONTRACT NO. 60X28
ILLINOIS FED. AID PROJECT

CONSTRUCTION CODE																				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	TRAFFIC SIGNAL 0021 URBAN																				
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
89502210	MODIFY EXISTING CONTROLLER CABINET	EACH	61	8	12	1	1	1		1	1	16	3	1	1	2	2	2	5		1	1	1	1
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	66	8	12	1	2	1	1		1	16	3	1	2	2	2	2	7	1	1	1	1	1
X8620050	UNINTERRUPTABLE POWER SUPPLY, GROUND MOUNTED	EACH	7		3	1	1					1						1						
X8620200	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	54	8	9			1		1	1	15	3	1	1	2	2	1	5		1	1	1	1
X8803040	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT	EACH	7	1								6												
X8803082	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	12	1								9				2								
X8803084	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	38	5								31				2								
X8803088	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	25	3								22												
X8803090	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	5									1				4								
X8803210	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	18	2								16												
X8880015	PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	184	29	32		4		5		4	54	7			5	11	3	15	7	5		3	
Ø 20076604	TRAINEES- TRAINING PROGRAM GRADUATE	HOUR	500	500																				
X8760200	ACCESSIBLE PEDESTRIAN SIGNALS	EACH	8																					8

Ø 0042

Rev.



SAM SCHWARTZ ENGINEERING
3100 N. HEGGINS, STE. 100, NORTON (ESTATES), IL 60169

DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES SHEET 5 OF 5

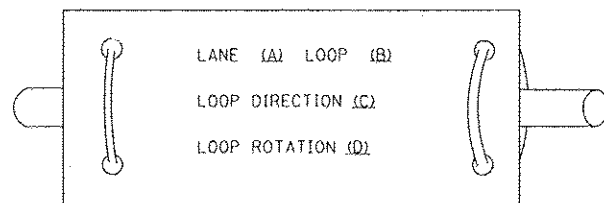
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	10
CONTRACT NO. 60X28			ILLINOIS FED. AID PROJECT	

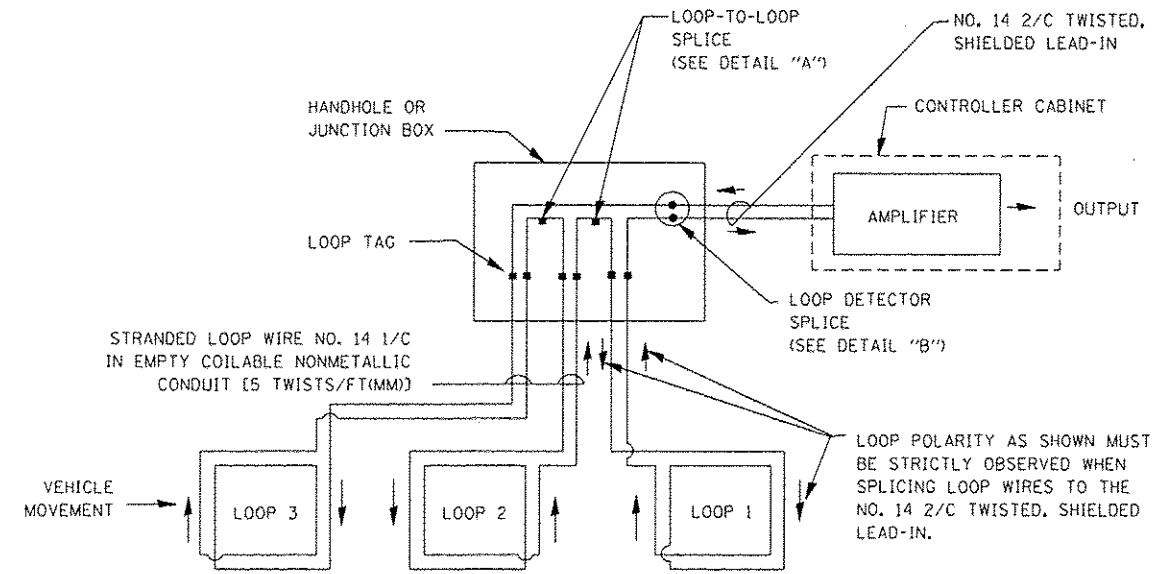
LOOP DETECTOR NOTES

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

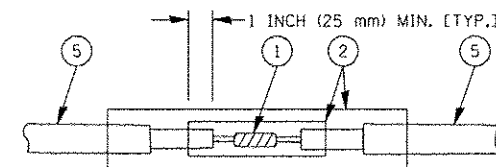


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

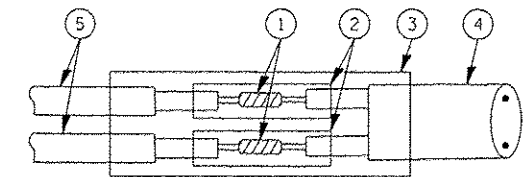


DETECTOR LOOP WIRING SCHEMATIC

- 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.

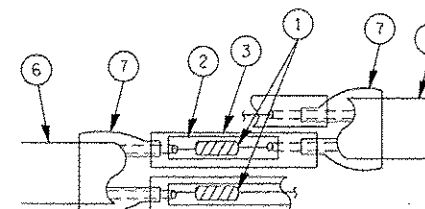


DETAIL "A" LOOP-TO-LOOP SPLICE

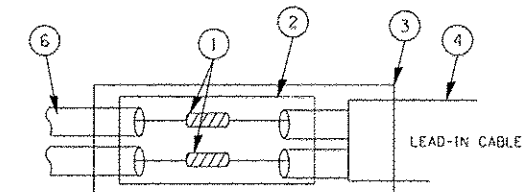


DETAIL "B" LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A" LOOP-TO-LOOP SPLICE



DETAIL "B" LOOP-TO-CONTROLLER SPLICE

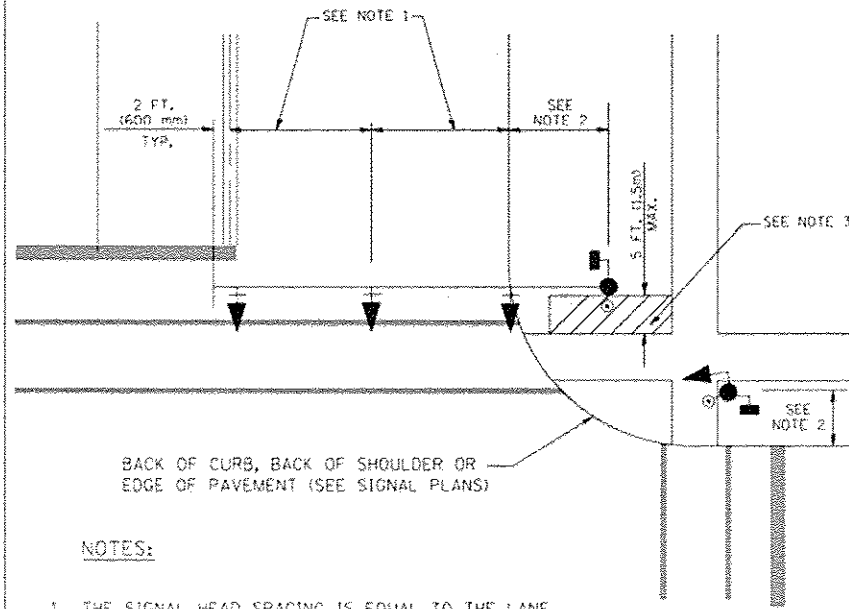
LOOP DETECTOR SPLICE

- 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 c:\p\work\p\WIDOT\KANTHA\HIXAYBC\d01126	USER NAME kanthaphixaybc	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.
	PLT SCALE = 20,000' / IN.	CHECKED - DAD	REVISED -			VAR	2013-053TS	COOK	88	11
PLT DATE = 10/6/2009	DATE = 10/28/09	REVISED -		SCALE:	SHEET NO. 1 OF 6 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT
									CONTRACT NO.	60X28

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

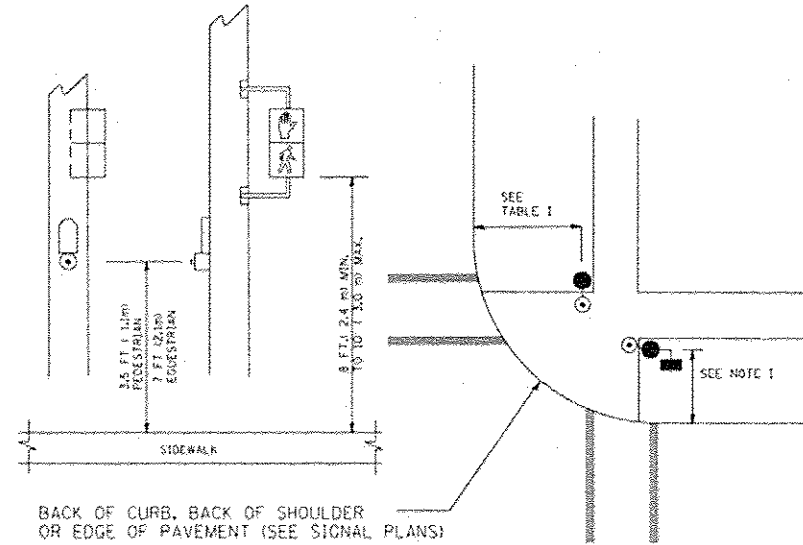
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



NOTES:

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

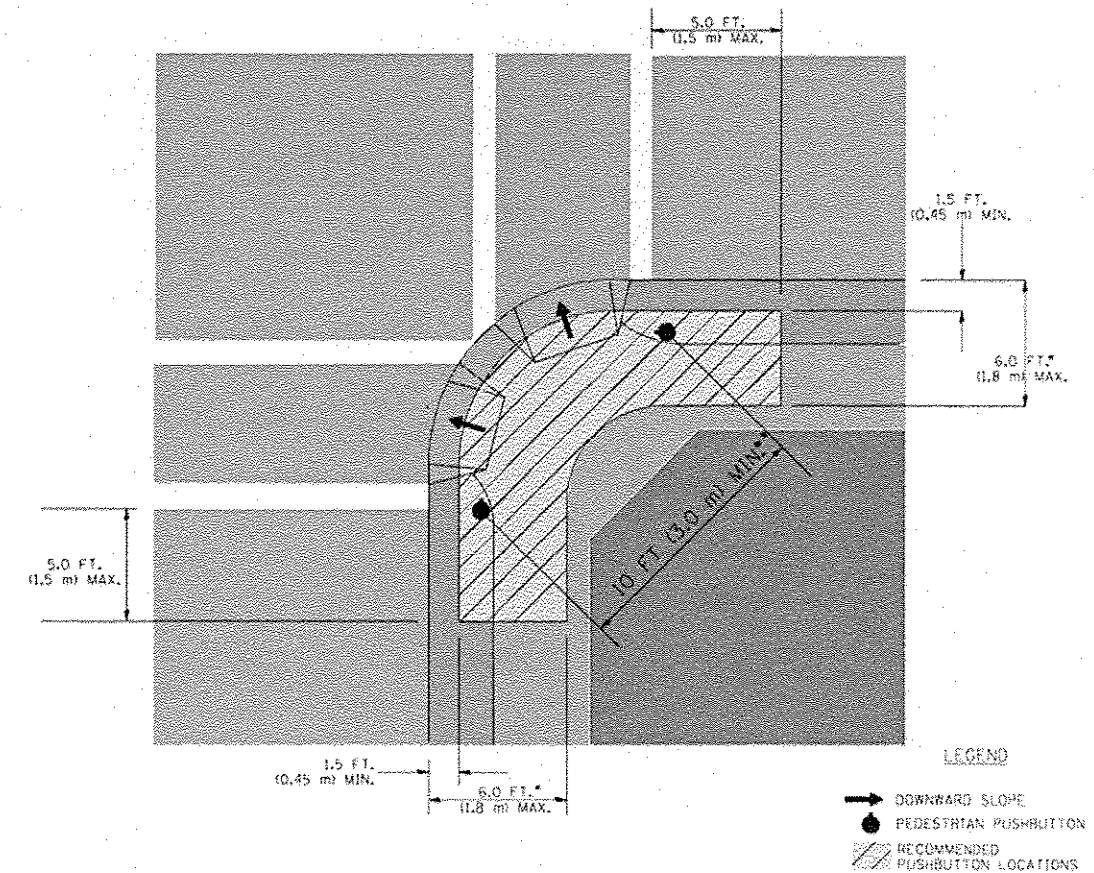
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



NOTES:

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

RECOMMENDED PUSHBUTTON LOCATIONS



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

NOTES:

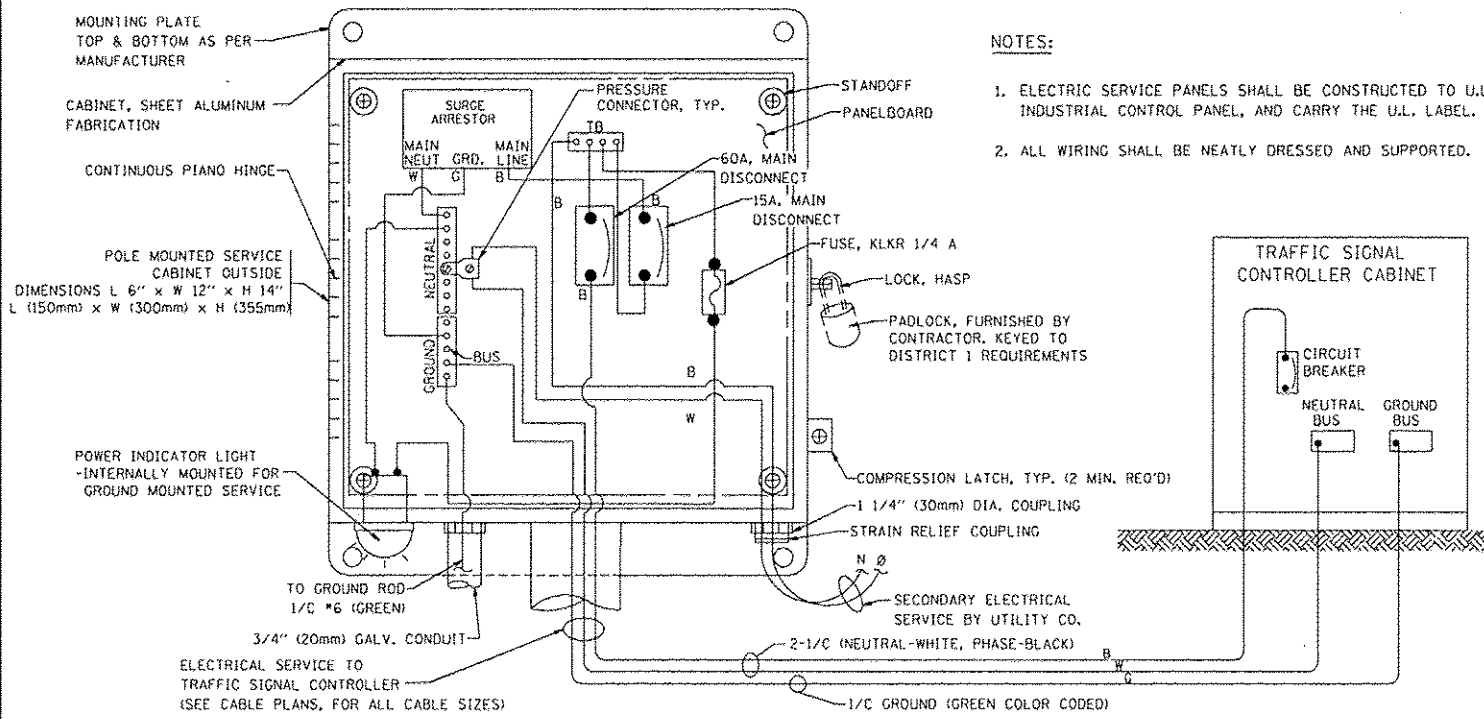
1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM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

TRAFFIC SIGNAL EQUIPMENT OFFSET

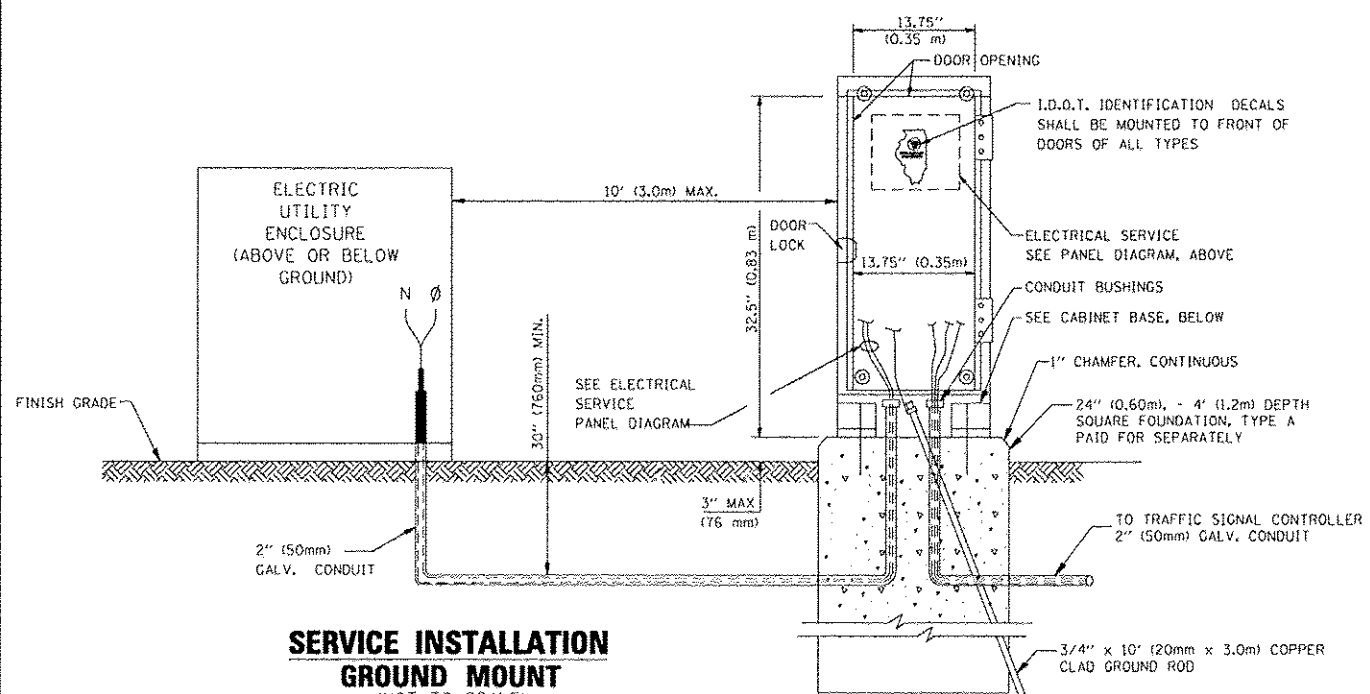
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10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

NOTES:

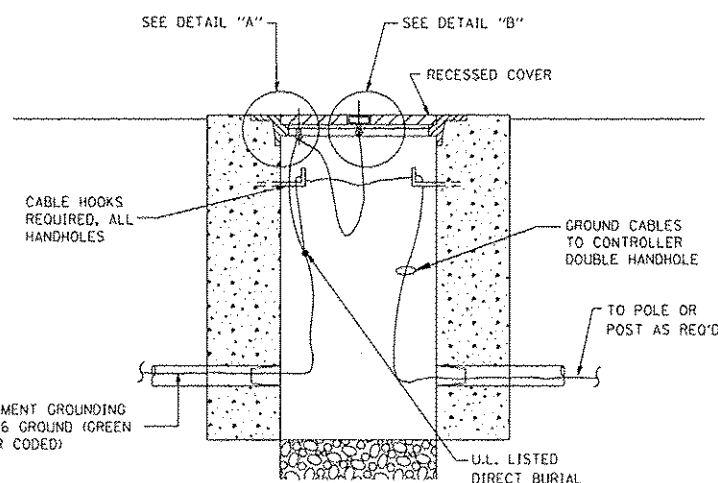
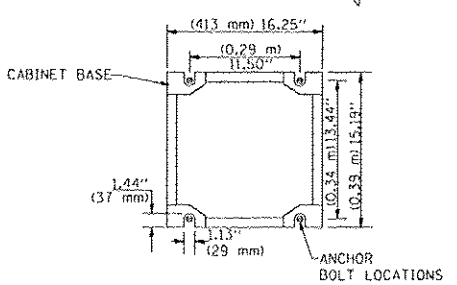
1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM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



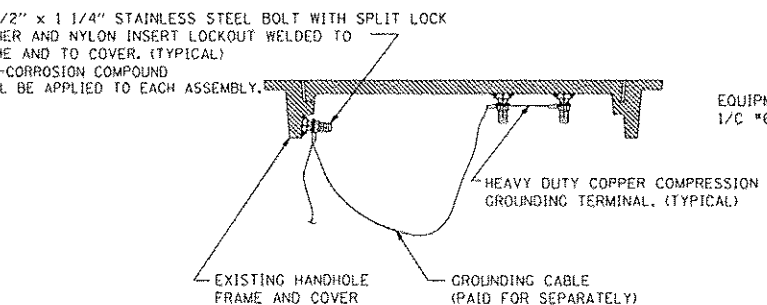
ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
 (NOT TO SCALE)



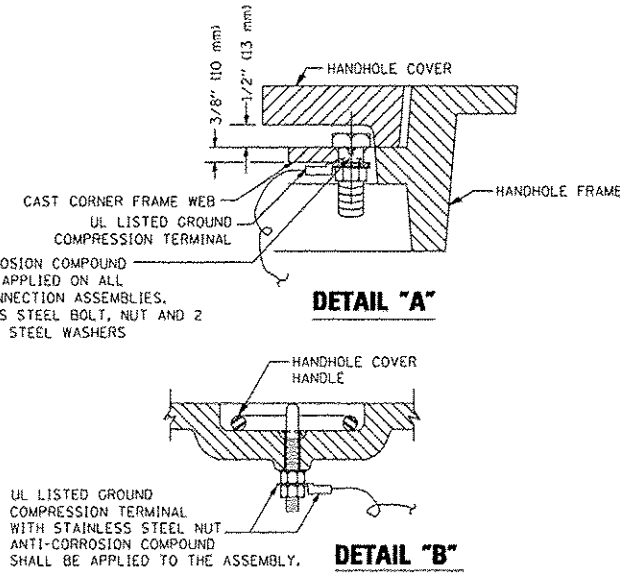
CABINET - BASE BOLT PATTERN
 (NOT TO SCALE)



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



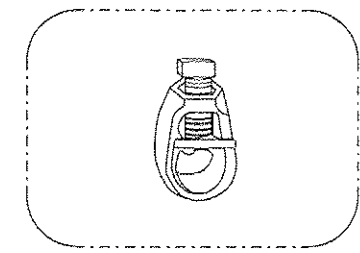
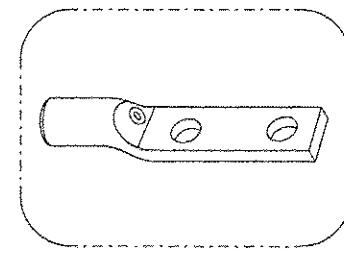
EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL
 (NOT TO SCALE)



NOTES:

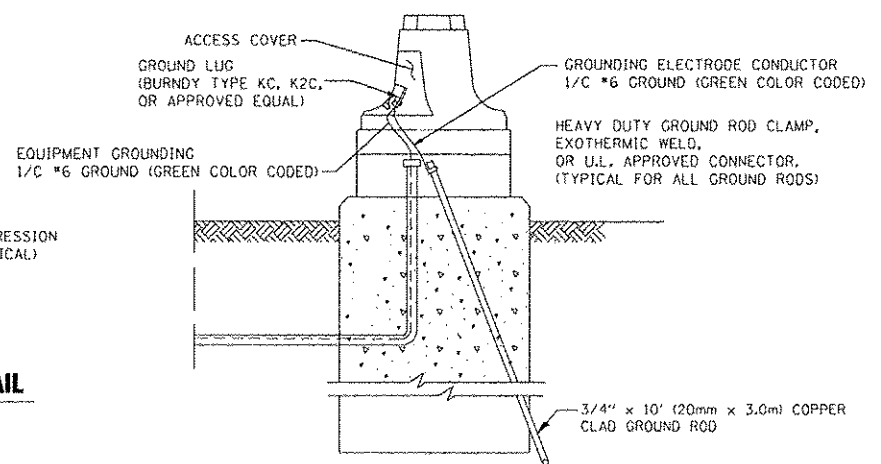
GROUNDING SYSTEM

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

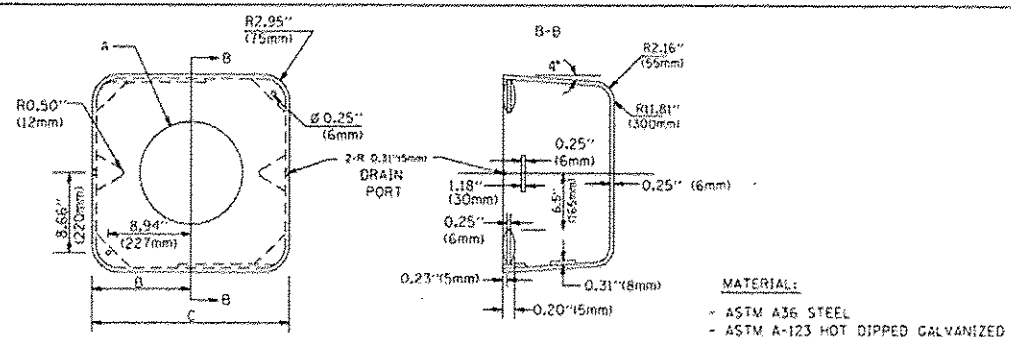
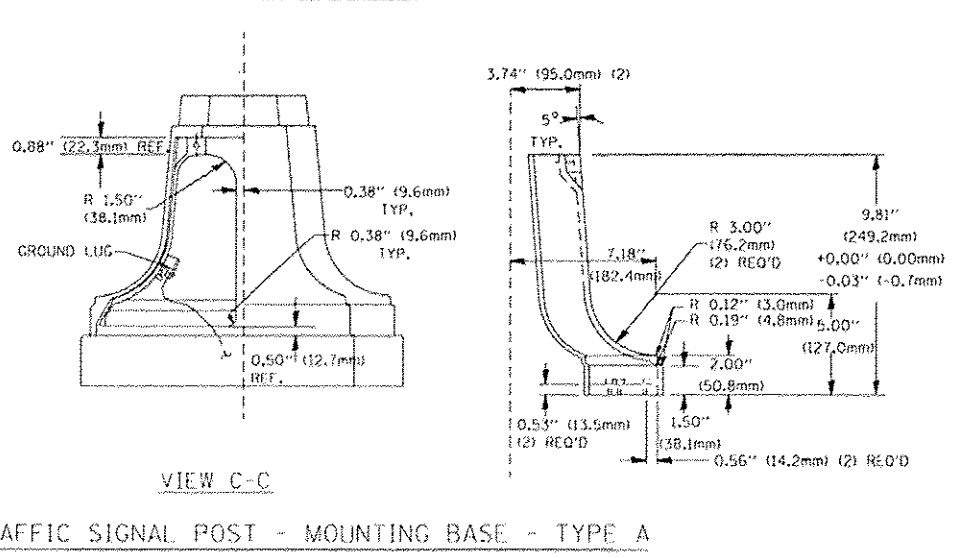
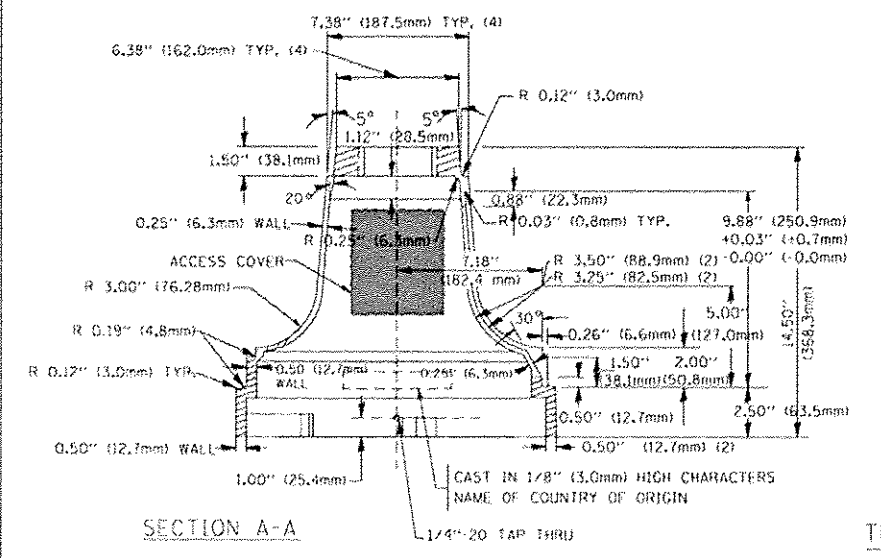
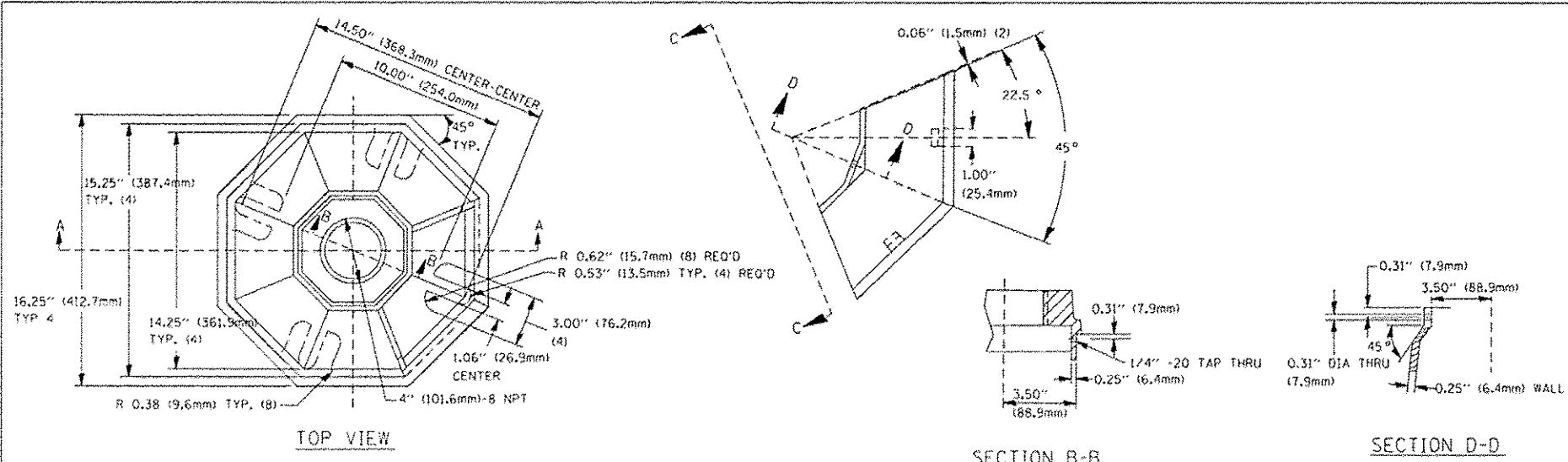


NOTES:

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



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

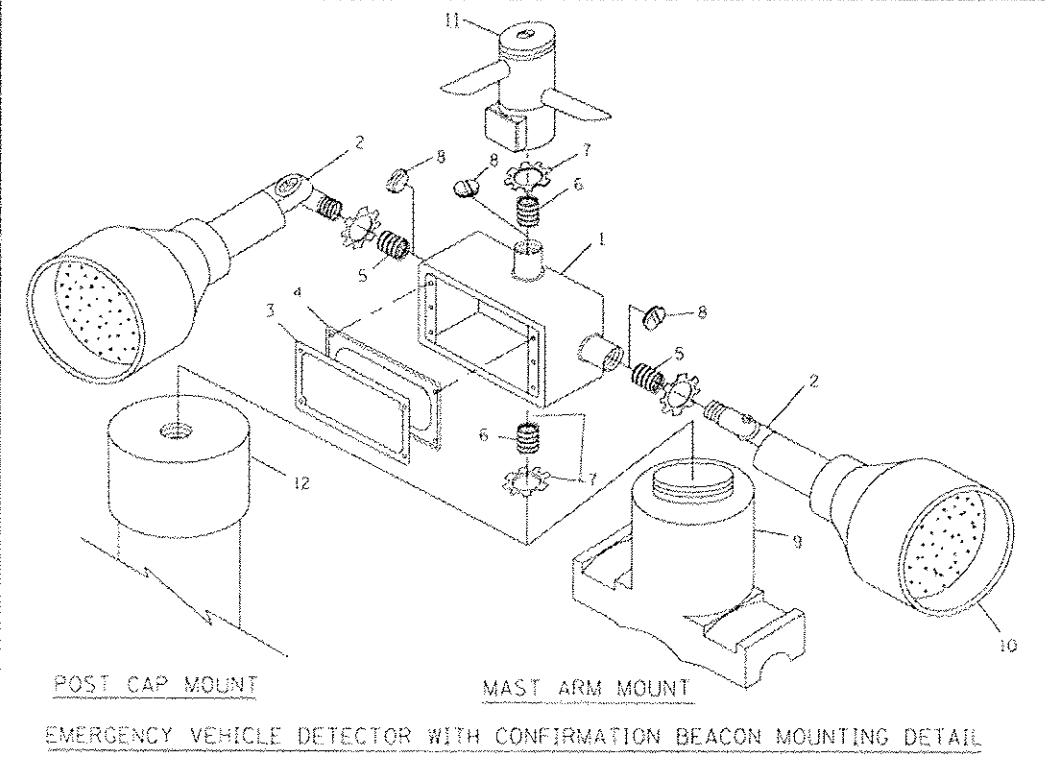
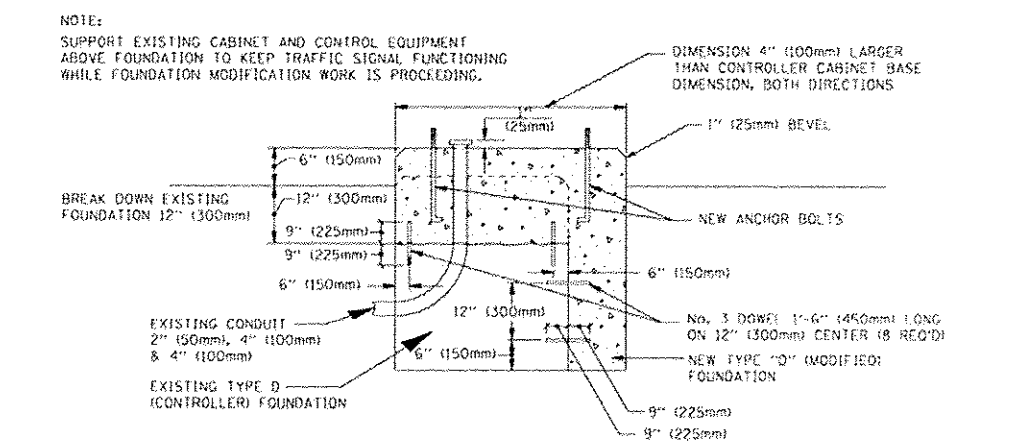


A	B	C	HEIGHT	WEIGHT
VARIABLES	9.5" (241mm)	19" (483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIABLES	10.75" (273mm)	21.5" (546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIABLES	13.0" (330mm)	26" (660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIABLES	18.5" (470mm)	37" (940mm)	7" (178mm) - 12"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

SHROUD

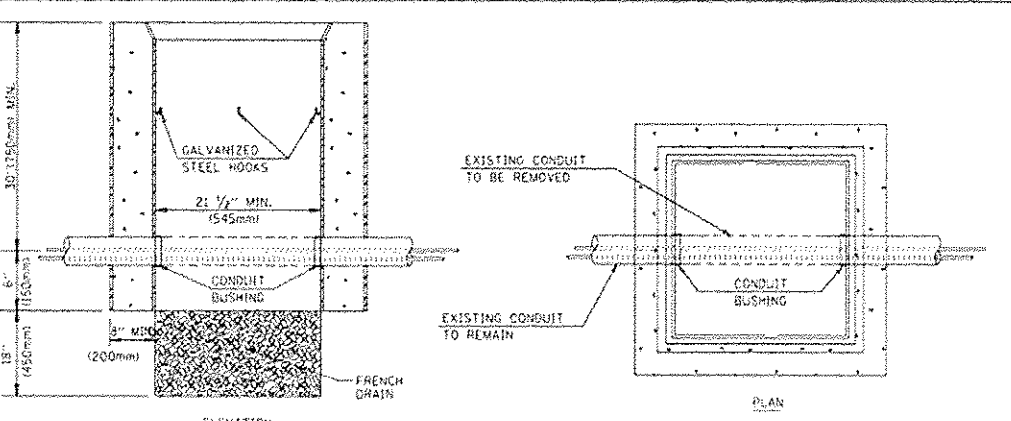
NOTES:

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



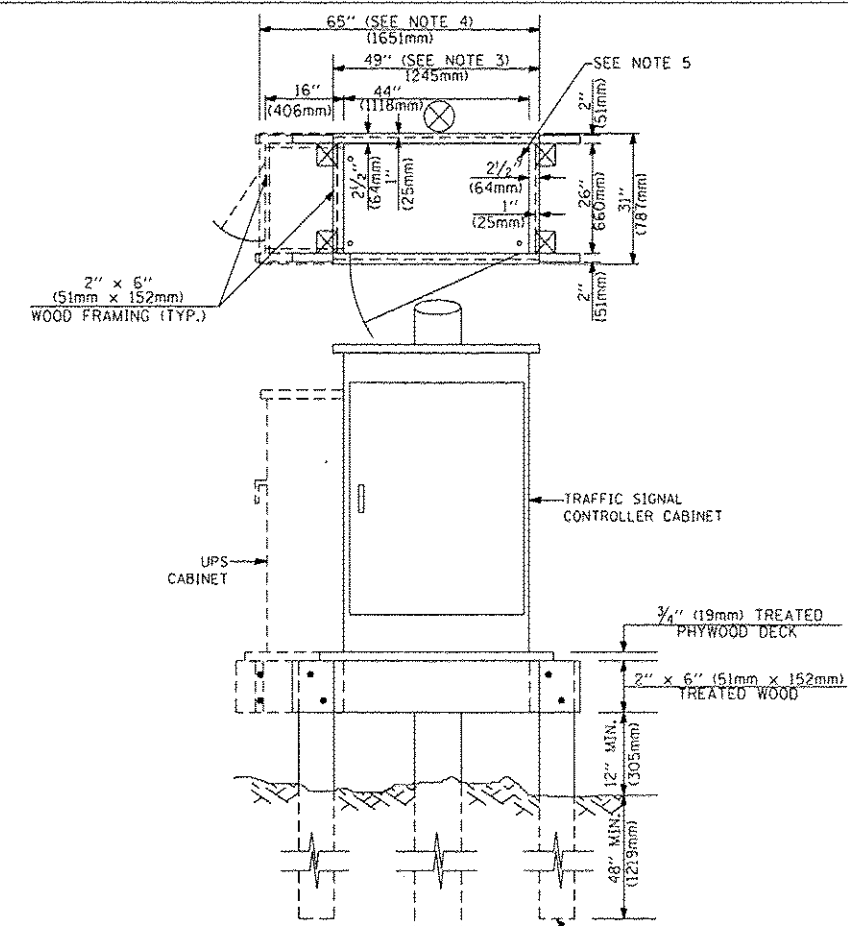
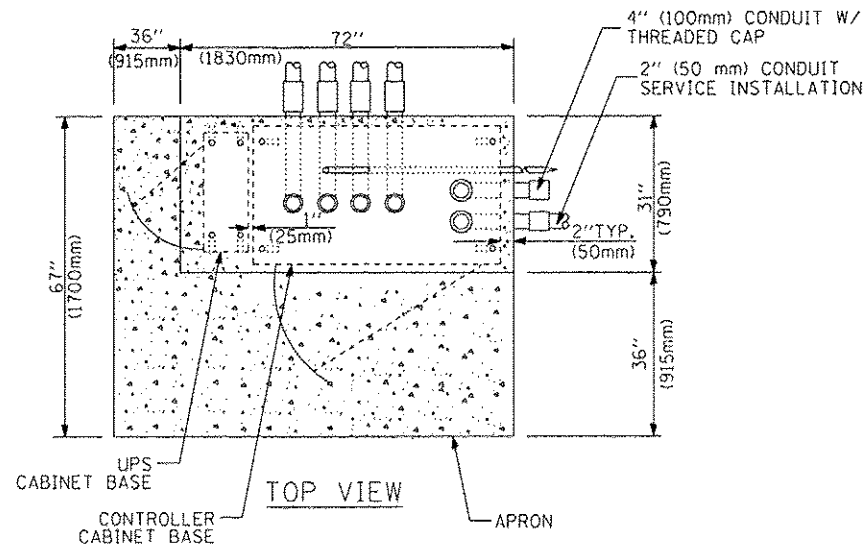
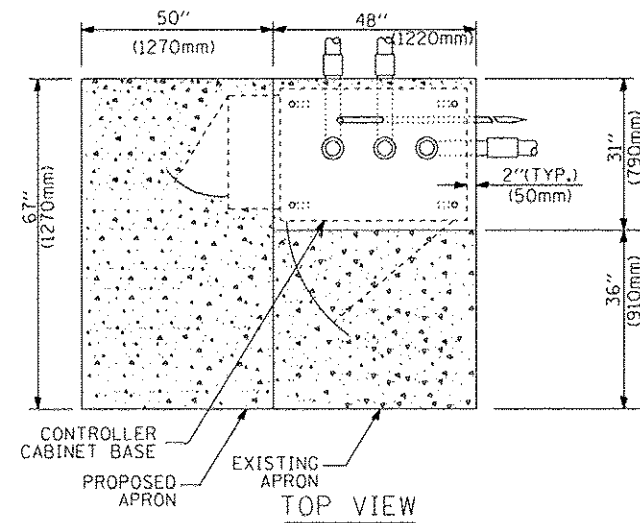
NOTES:

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



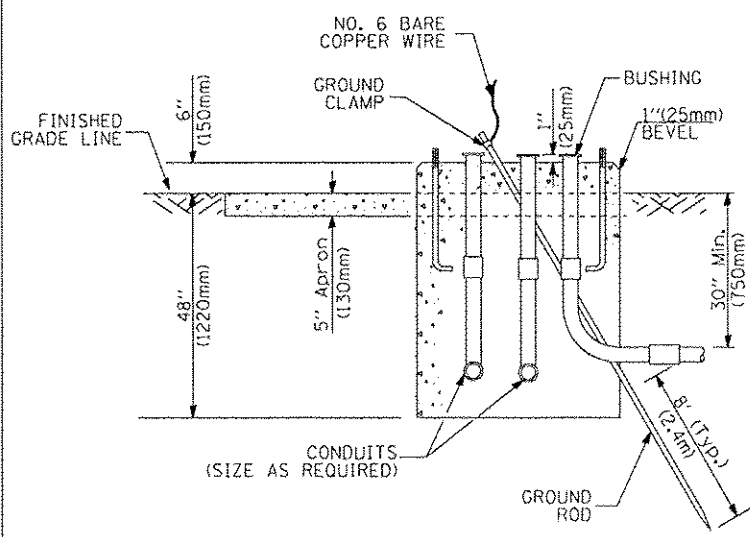
NOTES:

1. HANDHOLE CONSTRUCTED PER STATE STANDARD B14001.
2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCIDENTAL TO THE HANDHOLE.

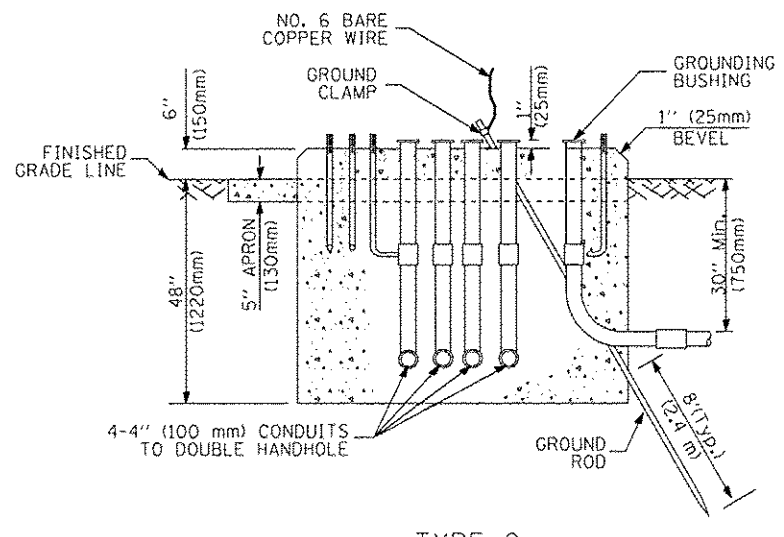


- NOTES:**
1. BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
 2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET 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



TYPE D FOR GROUND MOUNTED CONTROLLER CABINET AND UPS BATTERY CABINET



TYPE C FOR GROUND MOUNTED CONTROLLER CABINET AND UPS BATTERY CABINET

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)		
HL = 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	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 up to 56' (16.8 m) and less than 65' (19.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

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

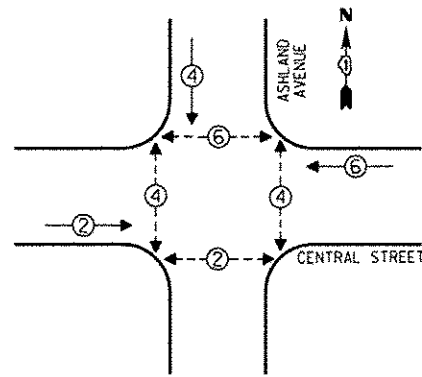
DEPTH OF MAST ARM FOUNDATIONS, TYPE E

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 SM12F			
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT				TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE				FIBER OPTIC CABLE NO. 62.5/125, (NUMBER OF FIBERS & TYPE TO BE NOTED ON PLANS)			
STEEL MAST ARM ASSEMBLY AND POLE				COMMON TRENCH				GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE			
ALUMINUM MAST ARM ASSEMBLY AND POLE				COILABLE NONMETALLIC CONDUIT (EMPTY)				CONTROLLER CABINET AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE				SYSTEM ITEM		S	S	STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA				INTERSECTION ITEM		I	IP	ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED			
SIGNAL POST				REMOVE ITEM	R			STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED			
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM				RELOCATE ITEM	RL			SIGNAL POST AND FOUNDATION TO BE REMOVED			
GUY WIRE				ABANDON ITEM	A			INTERSECTION & SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD				12" (300mm) TRAFFIC SIGNAL SECTION				SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)				12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE				EXISTING INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD WITH BACKPLATE				SIGNAL FACE				EXISTING PREFORMED INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD OPTICALLY PROGRAMMED				SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD				PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
FLASHER INSTALLATION (S DENOTES SOLAR POWER)				12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL				PREFORMED SAMPLING (SYSTEM) DETECTOR			
PEDESTRIAN SIGNAL HEAD				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED				RAILROAD SYMBOLS			
PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID				RAILROAD CONTROL CABINET			
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR				PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER				RAILROAD CANTILEVER MAST ARM			
ILLUMINATED SIGN "NO LEFT TURN"				RADIO INTERCONNECT				FLASHING SIGNAL			
ILLUMINATED SIGN "NO RIGHT TURN"				RADIO REPEATER				CROSSING GATE			
DETECTOR LOOP, TYPE I				DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED				CROSSBUCK			
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											



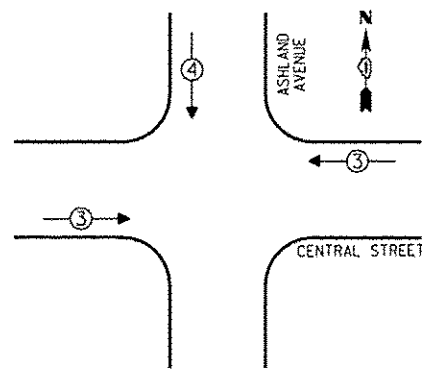
CONTROLLER SEQUENCE



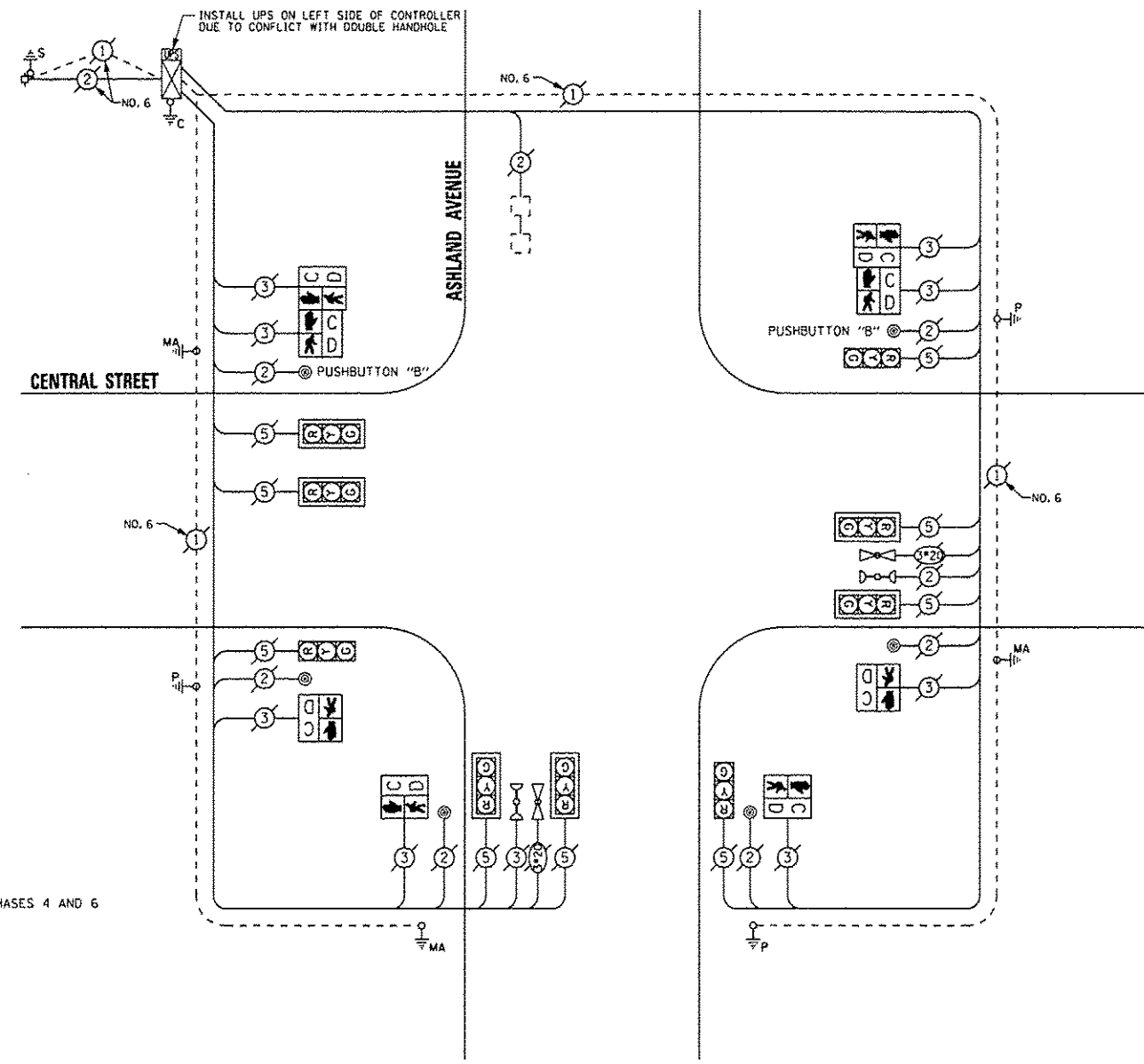
- LEGEND**
- SINGLE ENTRY PHASE
 - DUAL ENTRY PHASE
 - OVERLAP
 - PEDESTRIAN PHASE
 - NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



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



CABLE PLAN

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

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
4	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
2	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
6	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND.	LED	% OPERATIONS	
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	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 466.50

CITY OF EVANSTON
2100 RIDGE AVENUE
EVANSTON, ILLINOIS 60201

ENERGY SUPPLY - CONTACT: TERRI BLECK
PHONE: (847) 816-5239
COMPANY: ComEd



DESIGNED -	JAM	REVISED -	
DRAWN -	JAM	REVISED -	
CHECKED -	LMM	REVISED -	
DATE -	12-13-13	REVISED -	

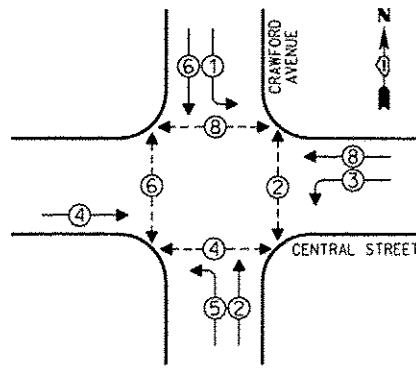
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	17
			CONTRACT NO. 60X28	
[ILLINOIS] FED. AID PROJECT				

SCALE: NONE SHEET OF SHEETS STA. TO STA.

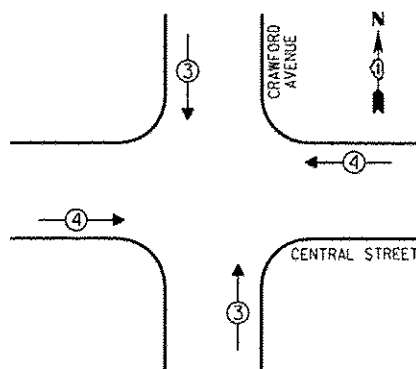
CONTROLLER SEQUENCE



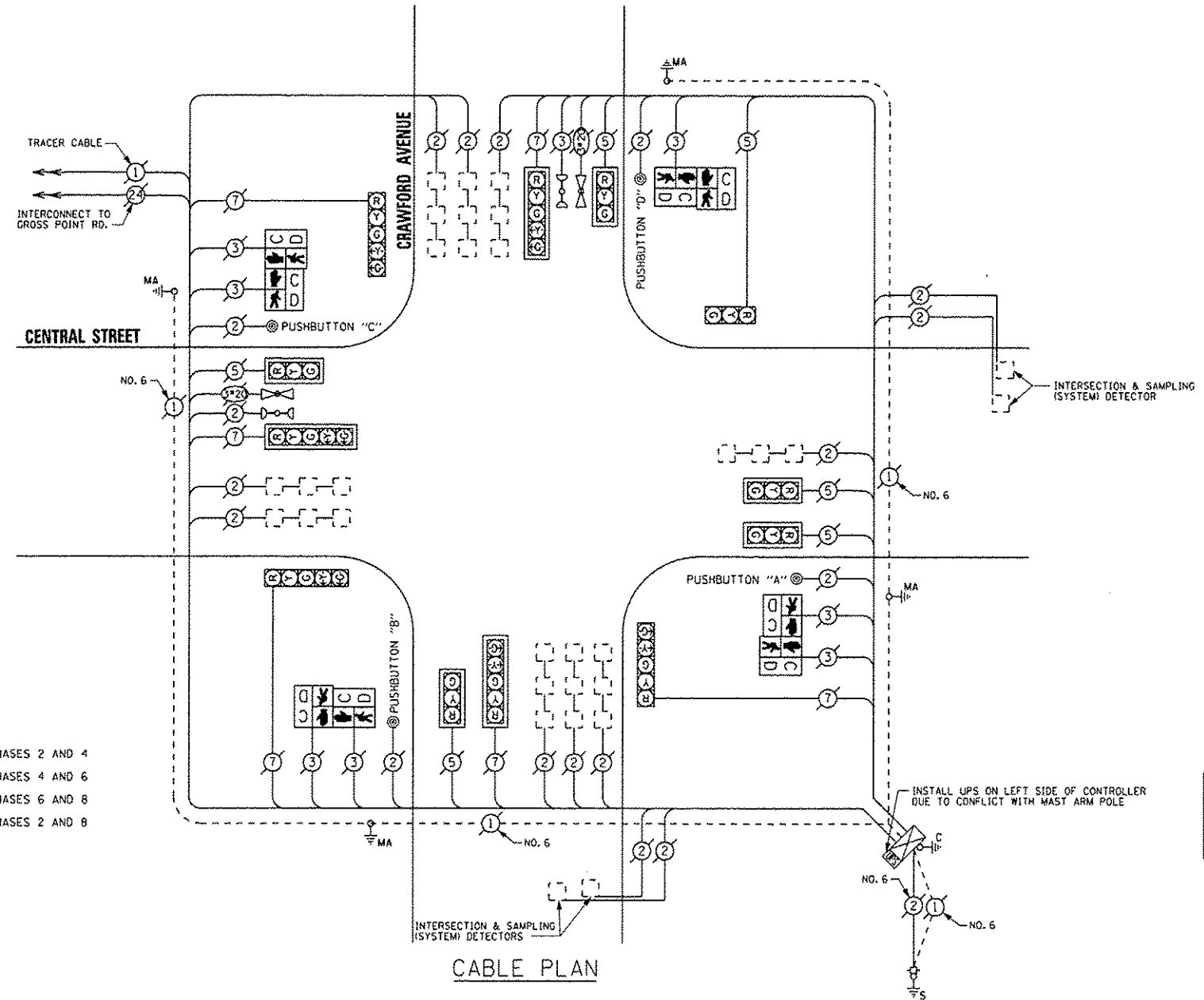
LEGEND
 [Symbol] SINGLE ENTRY PHASE
 [Symbol] DUAL ENTRY PHASE
 [Symbol] OVERLAP
 [Symbol] PEDESTRIAN PHASE
 [Symbol] NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



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



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

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND.	LED	% OPERATIONS	
SIGNAL (RED)	12		17	0.50	102.00
(YELLOW)	12		25	0.25	75.00
(GREEN)	12		15	0.25	45.00
ARROW	12		12	0.10	14.40
PEDESTRIAN SIGNAL	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 536.40

CITY OF EVANSTON
 2100 RIDGE AVENUE
 EVANSTON, ILLINOIS 60201

ENERGY SUPPLY - CONTACT: TERRI BLECK
 PHONE: (847) 816-5239
 COMPANY: ComEd

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
4	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
4	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

SAM SCHWARTZ ENGINEERING
 3100 N. HEGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

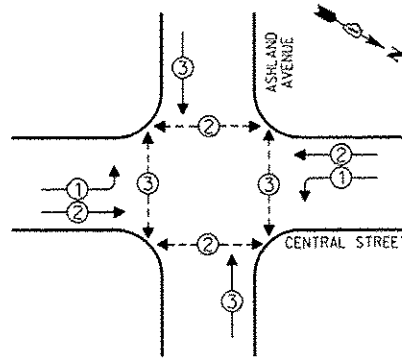
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

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

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-0537S	COOK	88	18
				CONTRACT NO. 60X28
[ILLINOIS] FED. AID PROJECT				

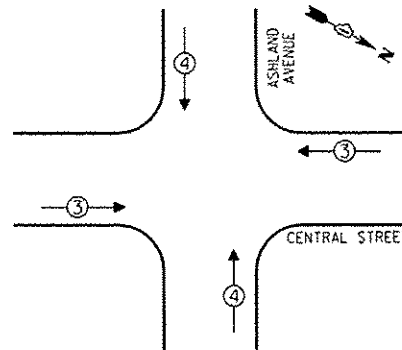
CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

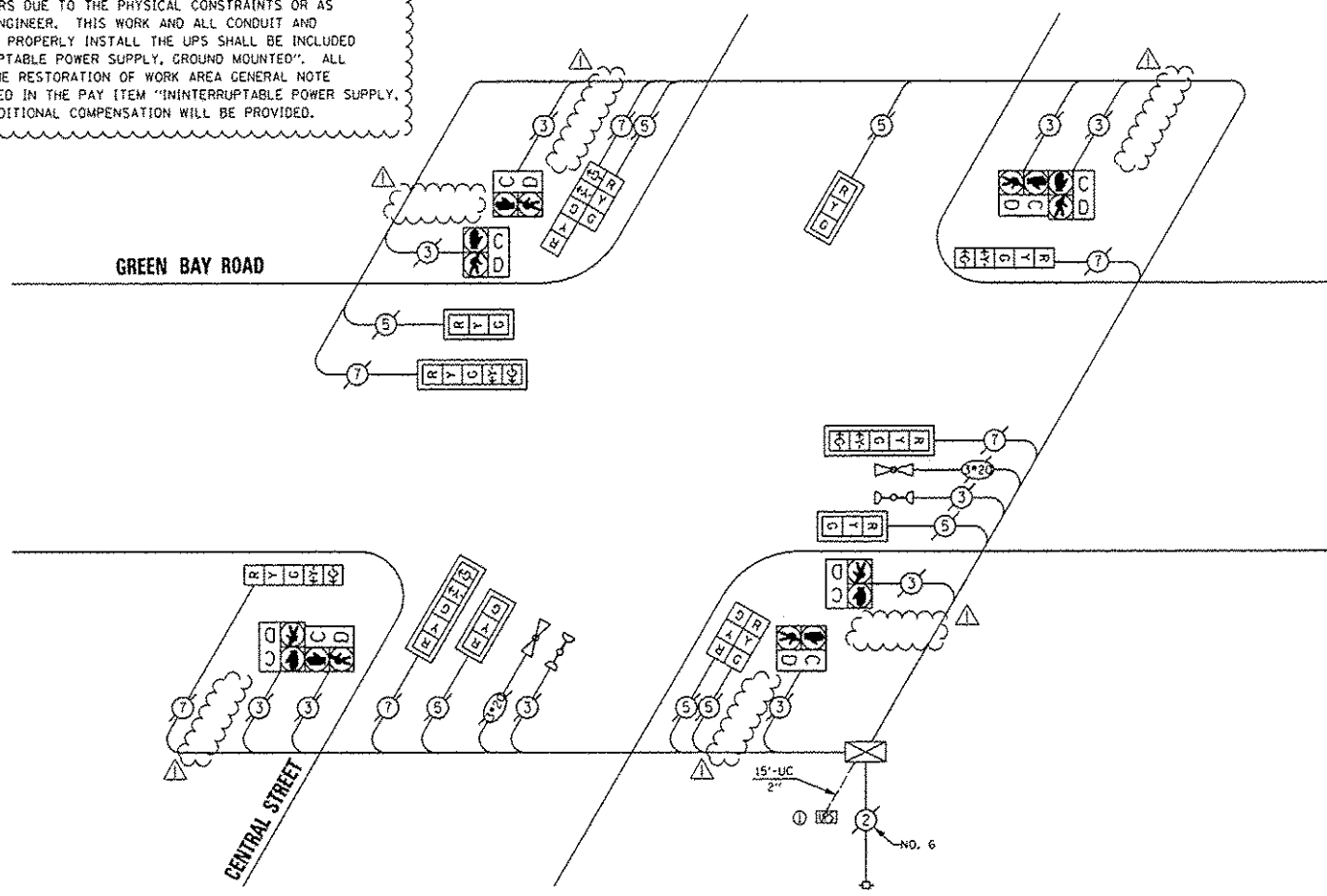
- LEGEND**
- SINGLE ENTRY PHASE
 - DUAL ENTRY PHASE
 - ⊕ OVERLAP
 - ⊙ PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE

EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

CONSTRUCTION NOTE:
 THE UPS SHALL BE INSTALLED NEXT TO THE EXISTING CONTROLLER CABINET USING HELICAL GROUND ANCHORS DUE TO THE PHYSICAL CONSTRAINTS OR AS DIRECTED BY THE RESIDENT ENGINEER. THIS WORK AND ALL CONDUIT AND ELECTRICAL CABLE NEEDED TO PROPERLY INSTALL THE UPS SHALL BE INCLUDED IN THE PAY ITEM "UNINTERRUPTABLE POWER SUPPLY, GROUND MOUNTED". ALL RESTORATION SPECIFIED IN THE RESTORATION OF WORK AREA GENERAL NOTE SHALL BE CONSIDERED INCLUDED IN THE PAY ITEM "UNINTERRUPTABLE POWER SUPPLY, GROUND MOUNTED" AND NO ADDITIONAL COMPENSATION WILL BE PROVIDED.



CABLE PLAN

REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
4	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
5	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION
1	EACH	SIGNAL HEAD, 2-FACE, 3-SECTION
1	EACH	SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
7	EACH	TRAFFIC SIGNAL BACKPLATE

SCHEDULE OF QUANTITIES

QUAN.	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
4	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED
2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
3	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
7	EACH	TRAFFIC SIGNAL BACKPLATE, LOWERED, ALUMINUM
6	EACH	PEDESTRIAN PUSHBUTTON, DELETED
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	UNINTERRUPTABLE POWER SUPPLY, GROUND MOUNTED

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND.	LED X% OPERATIONS	
SIGNAL (RED)	13		17 0.50	110.50
(YELLOW)	13		25 0.25	81.25
(GREEN)	13		15 0.25	48.75
ARROW	12		12 0.10	14.40
PED. SIGNAL	8		25 1.00	200.00
CONTROLLER	1		100 1.00	100.00
ILLUM. SIGN			25 0.05	
LUMINAIRE		250	0.50	
VIDEO SYSTEM		150	1.00	
FLASHER			0.50	
ENERGY COSTS TO:				TOTAL = 554.90

CITY OF EVANSTON
 2100 RIDGE AVENUE
 EVANSTON, ILLINOIS 60201

ENERGY SUPPLY - CONTACT: TERRI BLECK
 PHONE: (847) 816-5239
 COMPANY: ConEd



DESIGNED - JAM	REVISED - 01-28-14
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

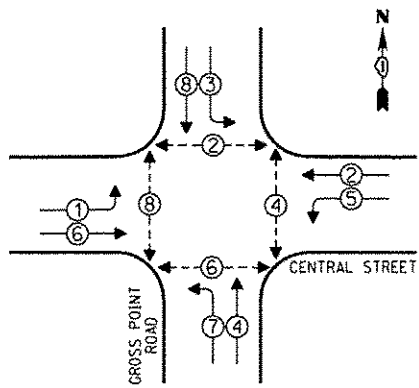
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, CENTRAL STREET AT GREEN BAY ROAD

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RFE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	19
				CONTRACT NO. 60X28
ILLINOIS FED. AID PROJECT				

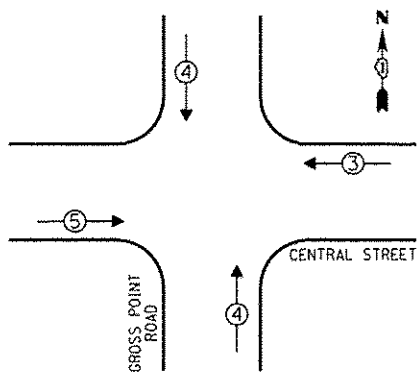
CONTROLLER SEQUENCE



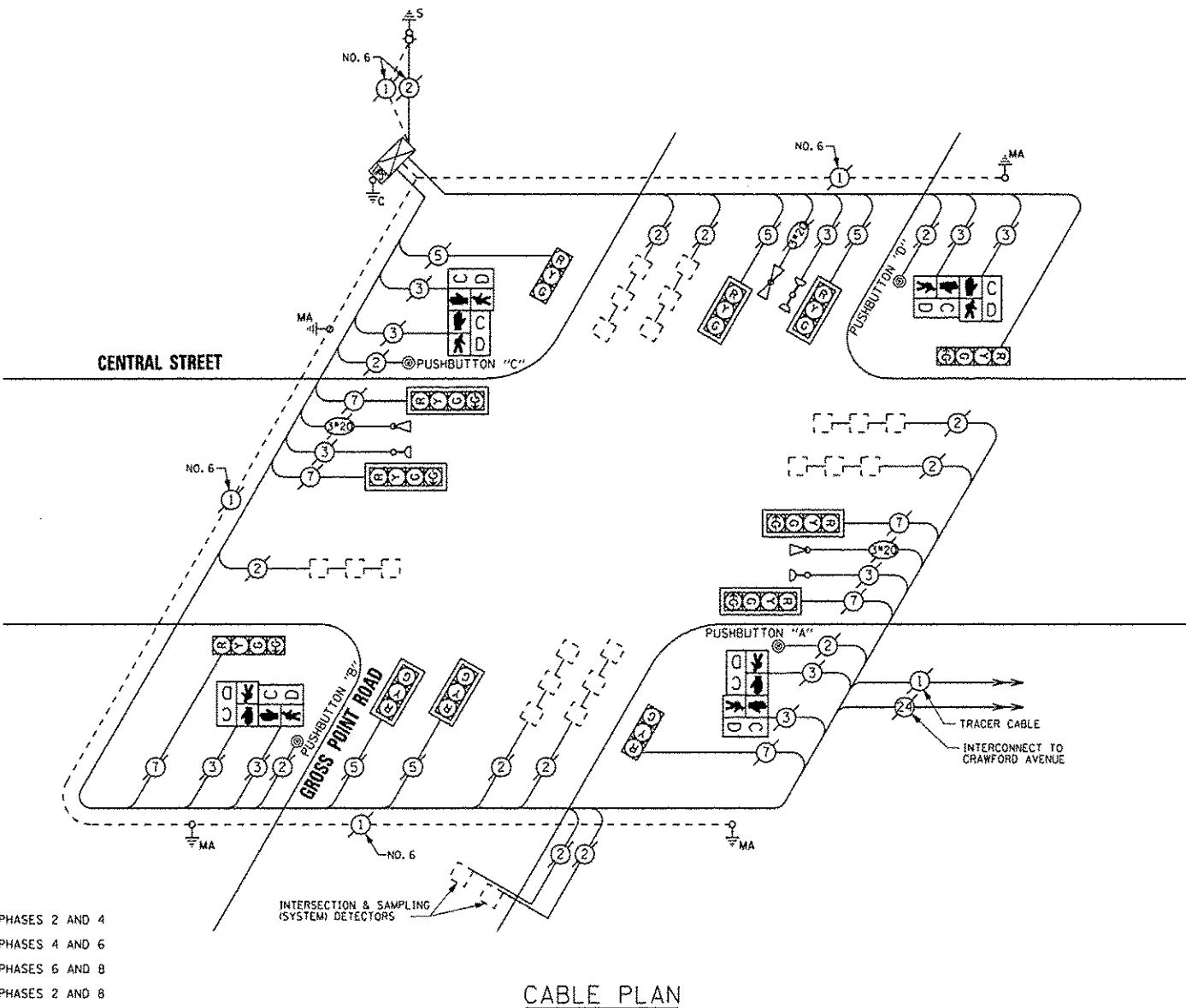
- LEGEND**
- SINGLE ENTRY PHASE
 - DUAL ENTRY PHASE
 - OVERLAP
 - PEDESTRIAN PHASE
 - NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



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



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

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND.	LED % OPERATIONS	WATTAGE	
SIGNAL (RED)	18		17	0.50	153.00
(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
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	573.00

CITY OF EVANSTON
 2100 RIDGE AVENUE
 EVANSTON, ILLINOIS 60201

ENERGY SUPPLY - CONTACT: TERRI BLECK
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 COMPANY: ComEd

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
4	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
4	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

SAM SCHWARTZ ENGINEERING
 3100 N. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

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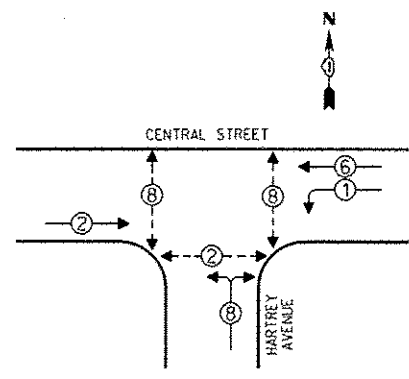
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, CENTRAL STREET AT GROSS POINT ROAD

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	20
				CONTRACT NO. 60X28
[ILLINOIS] FED. AID PROJECT				

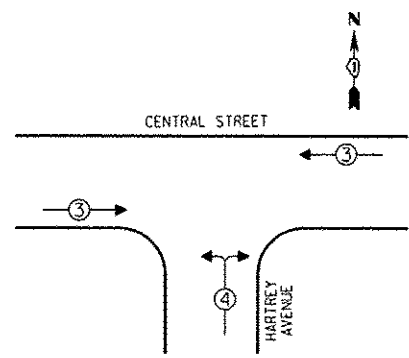
CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

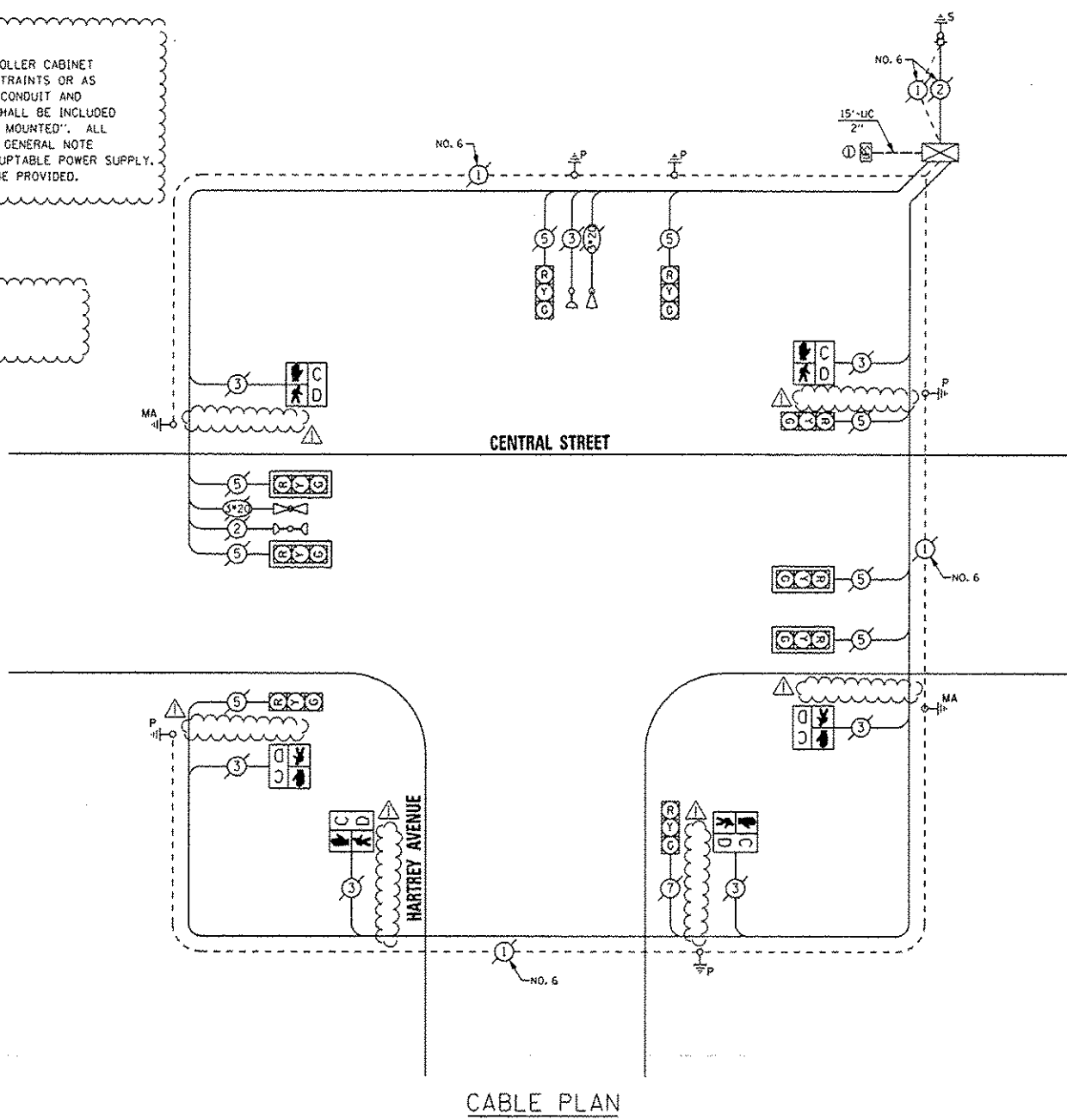
- LEGEND**
- ① SINGLE ENTRY PHASE
 - ② DUAL ENTRY PHASE
 - ③ OVERLAP
 - ④ PEDESTRIAN PHASE
 - NUMBER REFERS TO ASSOCIATED PHASE

EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

CONSTRUCTION NOTE:
 THE UPS SHALL BE INSTALLED NEXT TO THE EXISTING CONTROLLER CABINET USING HELICAL GROUND ANCHORS DUE TO THE PHYSICAL CONSTRAINTS OR AS DIRECTED BY THE RESIDENT ENGINEER. THIS WORK AND ALL CONDUIT AND ELECTRICAL CABLE NEEDED TO PROPERLY INSTALL THE UPS SHALL BE INCLUDED IN THE PAY ITEM "UNINTERRUPTABLE POWER SUPPLY, GROUND MOUNTED". ALL RESTORATION SPECIFIED IN THE RESTORATION OF WORK AREA GENERAL NOTE SHALL BE CONSIDERED INCLUDED IN THE PAY ITEM "UNINTERRUPTABLE POWER SUPPLY, GROUND MOUNTED" AND NO ADDITIONAL COMPENSATION WILL BE PROVIDED.



CABLE PLAN

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
9	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION DELETED
6	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE DELETED
4	EACH	TRAFFIC SIGNAL BACKPLATE DELETED

SCHEDULE OF QUANTITIES

QUAN.	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
4	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED DELETED
5	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED DELETED
6	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER DELETED
4	EACH	TRAFFIC SIGNAL BACKPLATE, LOWERED, ALUMINUM DELETED
6	EACH	PEDESTRIAN PUSHBUTTON DELETED
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	UNINTERRUPTABLE POWER SUPPLY, GROUND MOUNTED

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

TYPE	NO. OF LAMPS X INCAND	WATTAGE	LED X % OPERATIONS	TOTAL WATTAGE
SIGNAL (RED)	9	17	0.50	76.50
(YELLOW)	9	25	0.25	96.25
(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
ILLUM. SIGN		25	0.05	
LUMINAIRE		250	0.50	
VIDEO SYSTEM		150	1.00	
FLASHER			0.50	
ENERGY COSTS TO:			TOTAL =	416.50

CITY OF EVANSTON
 2100 RIDGE AVENUE
 EVANSTON, ILLINOIS 60201

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 COMPANY: ConEd

SAM SCHWARTZ ENGINEERING
 3100 N. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

DESIGNED - JAM	REVISED - 01-28-14
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

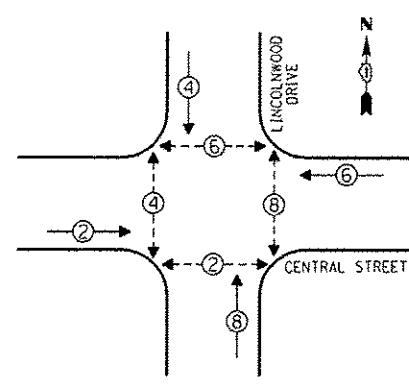
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

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

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-0537S	COOK	88	21
CONTRACT NO. 60X28				
ILLINOIS FED. AID PROJECT				

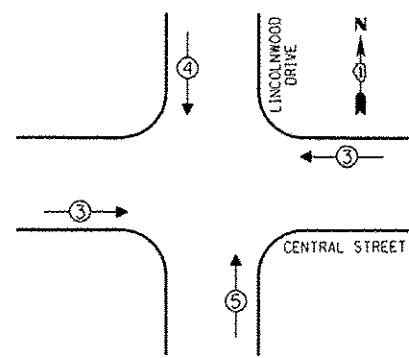
CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

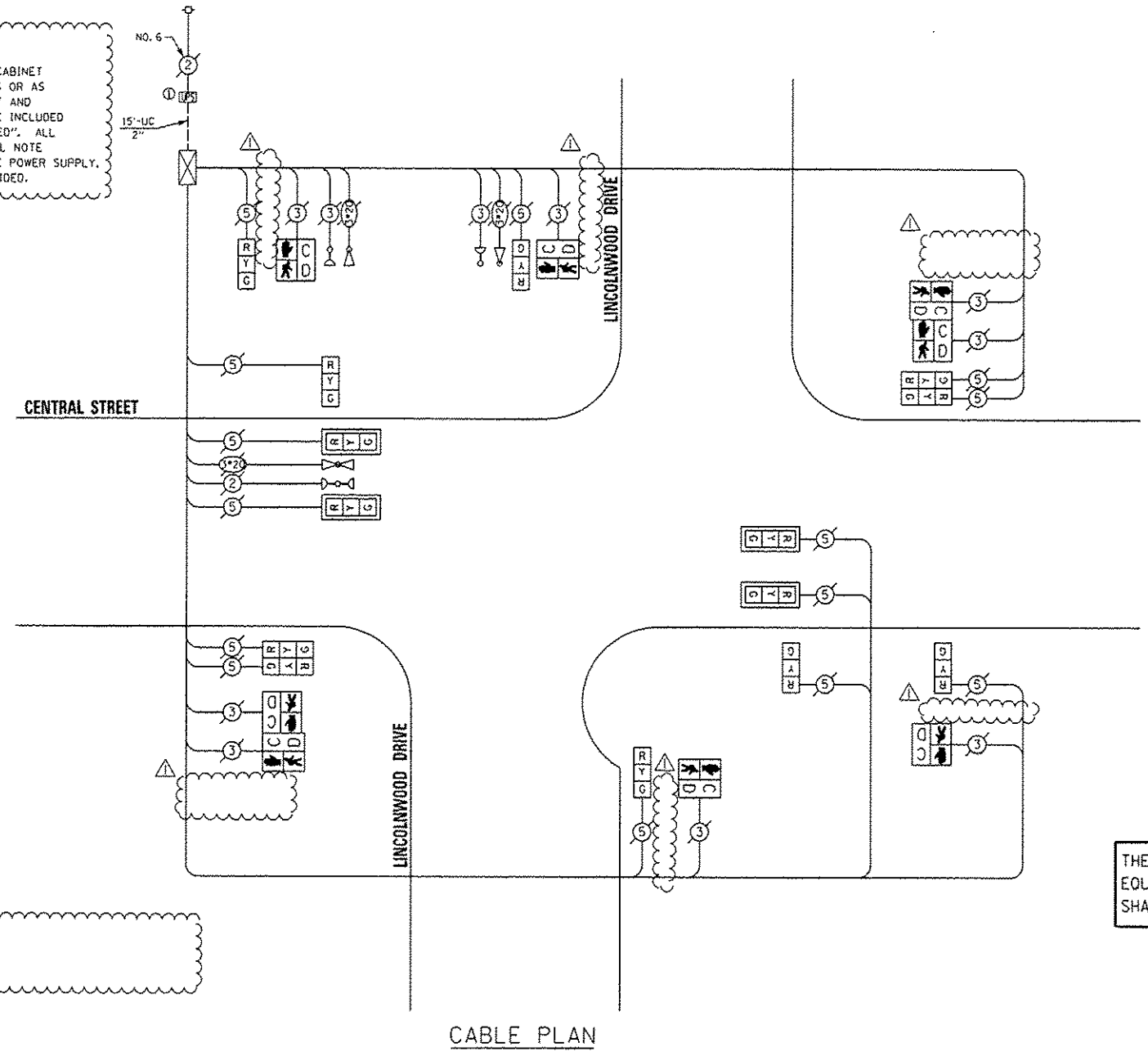
- LEGEND**
- ① SINGLE ENTRY PHASE
 - ② DUAL ENTRY PHASE
 - ③ OVERLAP
 - ④ PEDESTRIAN PHASE
 - ⑤ NUMBER REFERS TO ASSOCIATED PHASE

EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

CONSTRUCTION NOTE:
 THE UPS SHALL BE INSTALLED NEXT TO THE EXISTING CONTROLLER CABINET USING HELICAL GROUND ANCHORS DUE TO THE EXISTING CONSTRAINTS OR AS DIRECTED BY THE RESIDENT ENGINEER. THIS WORK AND ALL CONDUIT AND ELECTRICAL CABLE NEEDED TO PROPERLY INSTALL THE UPS SHALL BE INCLUDED IN THE PAY ITEM "UNINTERRUPTABLE POWER SUPPLY, GROUND MOUNTED". ALL RESTORATION SPECIFIED IN THE RESTORATION OF WORK AREA GENERAL NOTE SHALL BE CONSIDERED INCLUDED IN THE PAY ITEM "UNINTERRUPTABLE POWER SUPPLY, GROUND MOUNTED" AND NO ADDITIONAL COMPENSATION WILL BE PROVIDED.



REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE	LED % OPERATIONS	
SIGNAL (RED)	14	17	0.50	119.00
(YELLOW)	14	25	0.25	87.50
(GREEN)	14	15	0.25	52.50
ARROW		12	0.10	
PED. SIGNAL	8	25	1.00	200.00
CONTROLLER	1	100	1.00	100.00
ILLUM. SIGN		25	0.05	
LUMINAIRE		250	0.50	
VIDEO SYSTEM		150	1.00	
FLASHER			0.50	
ENERGY COSTS TO:				TOTAL = 559.00

CITY OF EVANSTON
 2100 RIDGE AVENUE
 EVANSTON, ILLINOIS 60201

ENERGY SUPPLY - CONTACT: TERRI BLECK
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 COMPANY: ComEd

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
10	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
2	EACH	SIGNAL HEAD, 2-FACE, 3-SECTION
4	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
2	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
4	EACH	TRAFFIC SIGNAL BACKPLATE

SCHEDULE OF QUANTITIES

QUAN.	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
4	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED
6	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
2	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
4	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
4	EACH	TRAFFIC SIGNAL BACKPLATE, LOWERED, ALUMINUM
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	UNINTERRUPTABLE POWER SUPPLY, GROUND MOUNTED

SAM SCHWARTZ ENGINEERING
 3100 W. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

DESIGNED - JAM	REVISED - 01-28-14
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DATE - 12-13-13	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

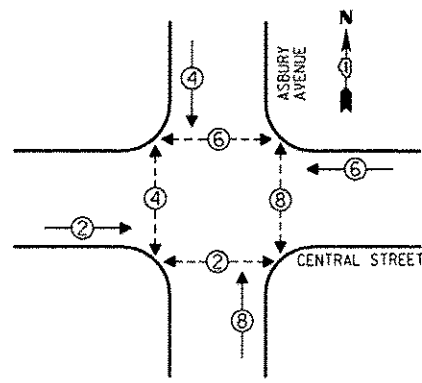
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, CENTRAL STREET AT LINCOLNWOOD DRIVE

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	22
CONTRACT NO. 60X28			ILLINOIS FED. AID PROJECT	



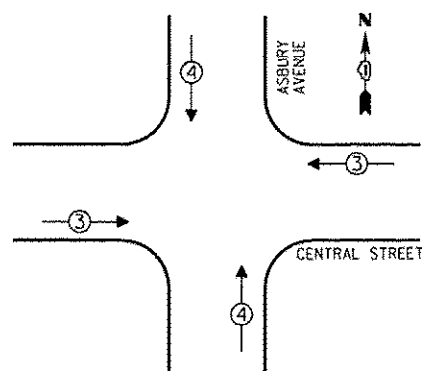
CONTROLLER SEQUENCE



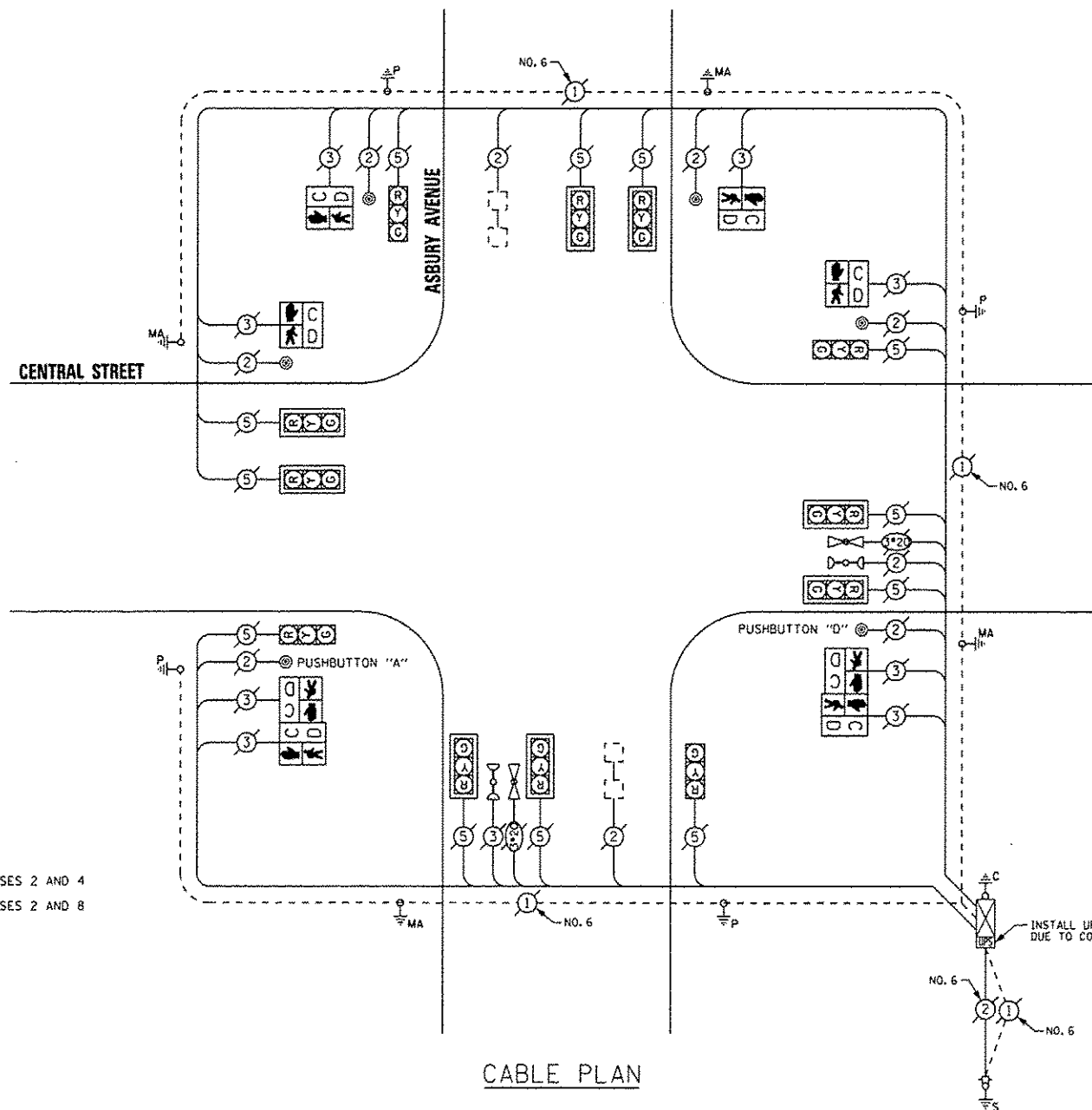
- LEGEND**
- SINGLE ENTRY PHASE
 - DUAL ENTRY PHASE
 - △ OVERLAP
 - ⊕ PEDESTRIAN PHASE
 - NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↔	↕



CABLE PLAN

NOTE:
 PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4
 PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

INSTALL UPS ON LEFT SIDE OF CONTROLLER DUE TO CONFLICT WITH DOUBLE HANDHOLE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS (INCAND)	LED % OPERATIONS	WATTAGE		
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
ILLUM. SIGH		25	0.05		
LUMINAIRE		250	0.50		
VIDEO SYSTEM		150	1.00		
FLASHER			0.50		
ENERGY COSTS TO:				TOTAL =	522.00

CITY OF EVANSTON
 2100 RIDGE AVENUE
 EVANSTON, ILLINOIS 60201

ENERGY SUPPLY - CONTACT: TERRI BLECK
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REMOVE 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.

QUAN.	UNIT	DESCRIPTION
4	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
2	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
4	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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



DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

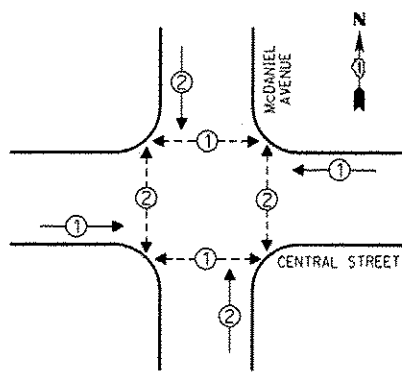
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

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

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	23
			CONTRACT NO. 60X28	
ILLINOIS FED. AID PROJECT				

CONTROLLER SEQUENCE

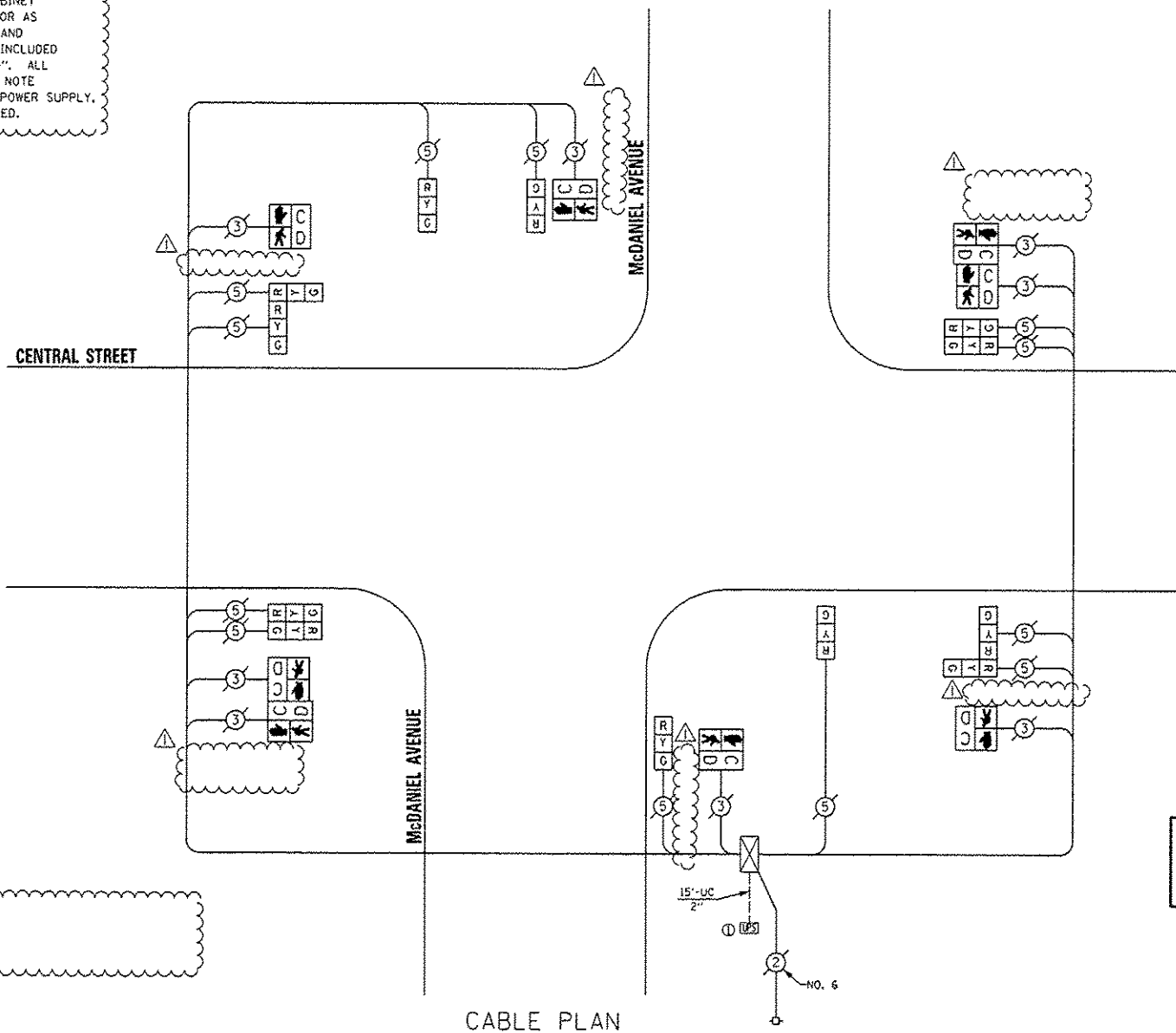


PHASE DESIGNATION DIAGRAM

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

CONSTRUCTION NOTE:

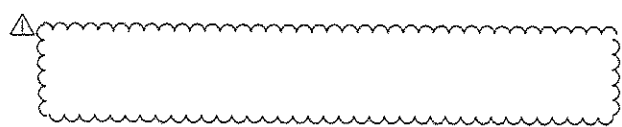
THE UPS SHALL BE INSTALLED NEXT TO THE EXISTING CONTROLLER CABINET USING HELICAL GROUND ANCHORS DUE TO THE PHYSICAL CONSTRAINTS OR AS DIRECTED BY THE RESIDENT ENGINEER. THIS WORK AND ALL CONDUIT AND ELECTRICAL CABLE NEEDED TO PROPERLY INSTALL THE UPS SHALL BE INCLUDED IN THE PAY ITEM "UNINTERRUPTABLE POWER SUPPLY, GROUND MOUNTED". ALL RESTORATION SPECIFIED IN THE RESTORATION OF WORK AREA GENERAL NOTE SHALL BE CONSIDERED INCLUDED IN THE PAY ITEM "UNINTERRUPTABLE POWER SUPPLY, GROUND MOUNTED" AND NO ADDITIONAL COMPENSATION WILL BE PROVIDED.



CABLE PLAN

REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".



REMOVE 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.

QUAN.	UNIT	DESCRIPTION
4	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
4	EACH	SIGNAL HEAD, 2-FACE, 3-SECTION
4	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
2	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE

SCHEDULE OF QUANTITIES

QUAN.	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
4	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
4	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
4	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	UNINTERRUPTABLE POWER SUPPLY, GROUND MOUNTED

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE	LED % OPERATIONS	
SIGNAL (RED)	12		0.50	102.00
(YELLOW)	12		0.25	75.00
(GREEN)	12		0.25	45.00
ARROW			0.10	
PED. SIGNAL	8		1.00	200.00
CONTROLLER	1		1.00	100.00
ILLUM. SIGN			0.05	
LUMINAIRE		250	0.50	
VIDEO SYSTEM		150	1.00	
FLASHER			0.50	
ENERGY COSTS TO:				TOTAL = 522.00

CITY OF EVANSTON
2100 RIDGE AVENUE
EVANSTON, ILLINOIS 60201

ENERGY SUPPLY - CONTACT: FERRI BLECK
PHONE: (847) 816-5239
COMPANY: ComEd



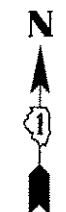
DESIGNED - JAM	REVISED - 01-28-14
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

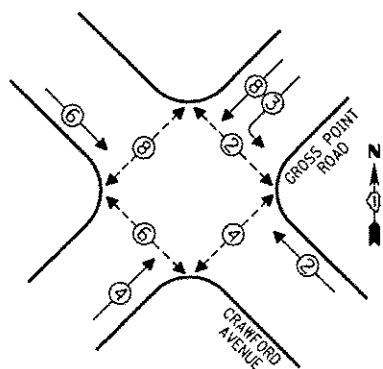
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE,
CENTRAL STREET AT McDANIEL AVENUE

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053T5	COOK	88	24
CONTRACT NO. 60X28			ILLINOIS FED. AID PROJECT	

SCALE: NONE SHEET OF SHEETS STA. TO STA.



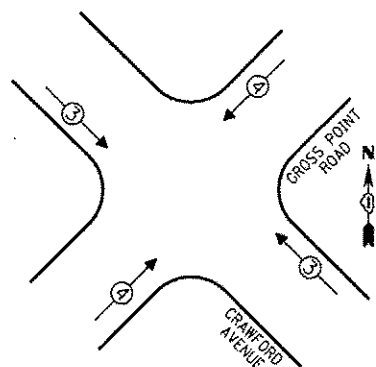
CONTROLLER SEQUENCE



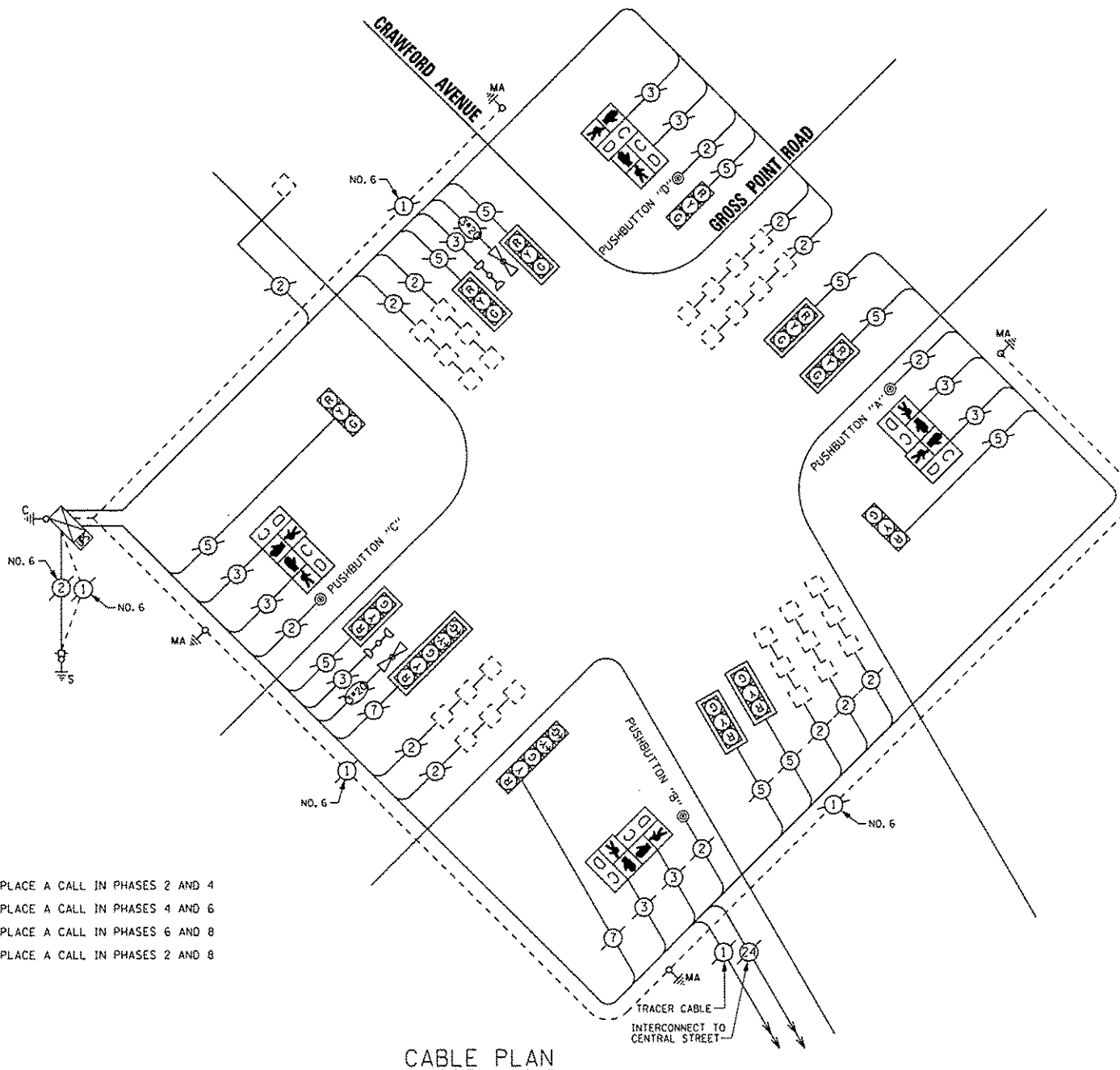
- LEGEND**
- ① SINGLE ENTRY PHASE
 - ② DUAL ENTRY PHASE
 - ③ OVERLAP
 - ④ PEDESTRIAN PHASE
 - ⑤ NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↔	↔



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

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

CABLE PLAN

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
4	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
4	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND.	LED	% OPERATIONS	
SIGNAL (RED)	12		17	0.50	102.00
(YELLOW)	12		25	0.25	75.00
(GREEN)	12		15	0.25	45.00
ARROW	4		12	0.10	4.80
PED. SIGNAL	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 526.80

CITY OF EVANSTON
 2100 RIDGE AVENUE
 EVANSTON, ILLINOIS 60201

ENERGY SUPPLY - CONTACT: TERRI BLECK
 PHONE: (847) 816-5239
 COMPANY: ComEd



DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

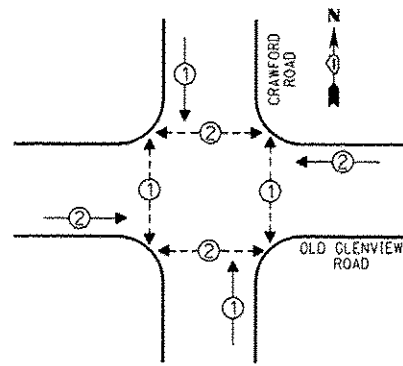
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
 DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE,
 GROSS POINT ROAD AT CRAWFORD AVENUE

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	25
				CONTRACT NO. 60X28
ILLINOIS FED. AID PROJECT				

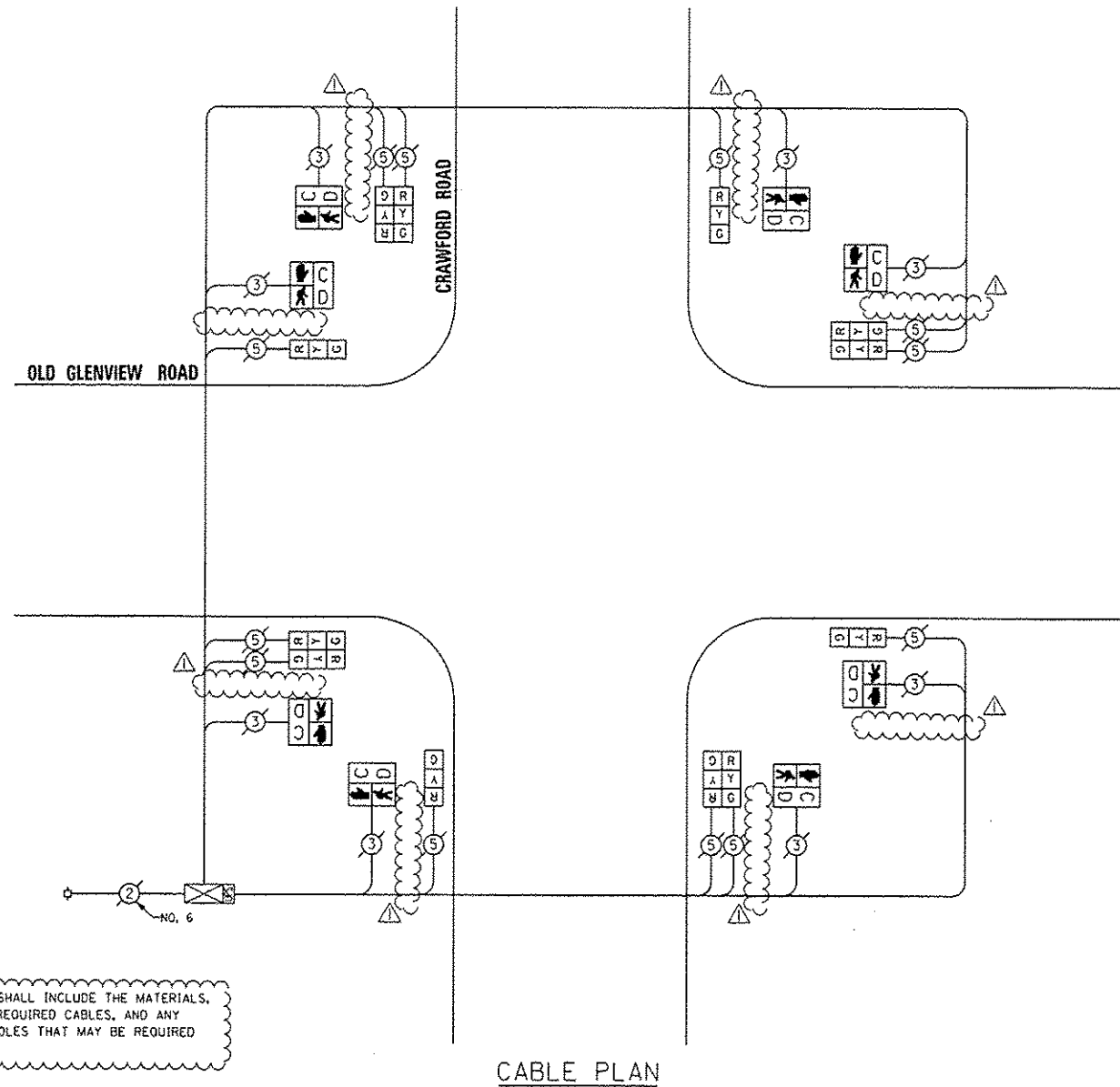
CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

LEGEND

- ◻ SINGLE ENTRY PHASE
- ◉ DUAL ENTRY PHASE
- ◌ OVERLAP
- ◉ PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE



CABLE PLAN

THE COST OF PEDESTRIAN PUSHBUTTONS SHALL INCLUDE THE MATERIALS, INSTALLATION, AND CONNECTION OF ALL REQUIRED CABLES, AND ANY MODIFICATIONS TO EXISTING POSTS OR POLES THAT MAY BE REQUIRED TO PROPERLY MOUNT THE PUSHBUTTONS.

REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE		
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
ILLUM. SIGN LUMINAIRE		25	0.65	
		250	0.50	
VIDEO SYSTEM		150	1.00	
FLASHER			0.50	
ENERGY COSTS TO:			TOTAL =	522.00

CITY OF EVANSTON
2100 RIDGE AVENUE
EVANSTON, ILLINOIS 60201

ENERGY SUPPLY - CONTACT: TERRI BLECK
PHONE: (847) 816-5239
COMPANY: CoreEd

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
4	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
4	EACH	SIGNAL HEAD, 2-FACE, 3-SECTION
8	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE

SCHEDULE OF QUANTITIES

QUAN.	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
4	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
4	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
8	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL



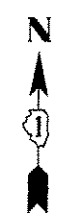
DESIGNED - JAM	REVISED - 01-28-14
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

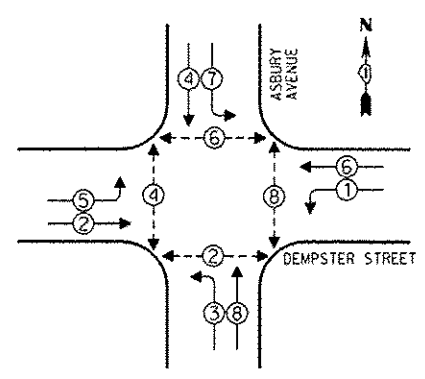
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, CRAWFORD ROAD AT OLD GLENVIEW ROAD

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	26
CONTRACT NO. 60X28			ILLINOIS FED. AID PROJECT	

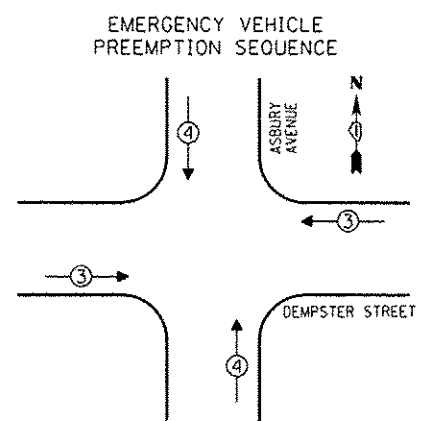


CONTROLLER SEQUENCE

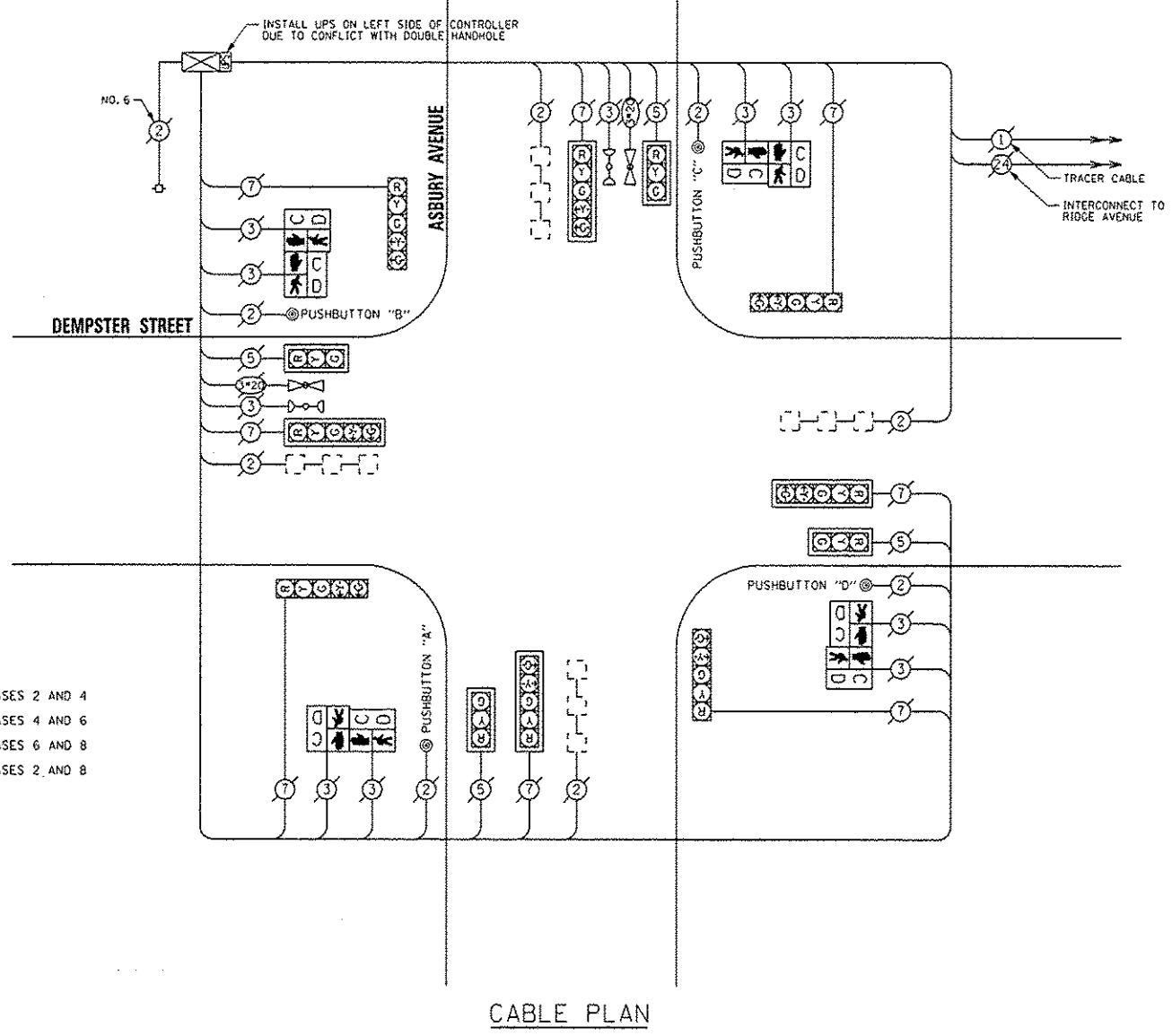


- LEGEND**
- SINGLE ENTRY PHASE
 - DUAL ENTRY PHASE
 - OVERLAP
 - PEDESTRIAN PHASE
 - NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM



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



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

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE	LED % OPERATIONS	
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
ILLUM. SIGN		25	0.05	
LUMINAIRE		250	0.50	
VIDEO SYSTEM		150	1.00	
FLASHER			0.50	
ENERGY COSTS TO:				TOTAL = 541.20

CITY OF EVANSTON
 2100 RIDGE AVENUE
 EVANSTON, ILLINOIS 60201

ENERGY SUPPLY - CONTACT: TERRI BLECK
 PHONE: (847) 816-5239
 COMPANY: ConEG

REMOVE 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.

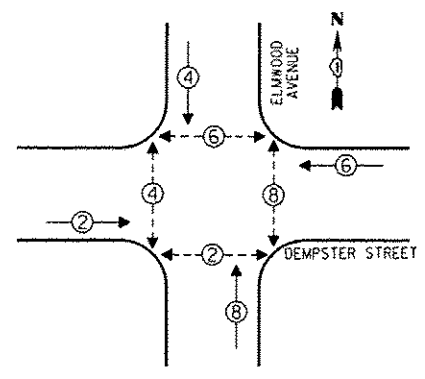
QUAN.	UNIT	DESCRIPTION
4	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION- DELETED
8	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION- DELETED
4	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
8	EACH	TRAFFIC SIGNAL BACKPLATE- DELETED
4	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

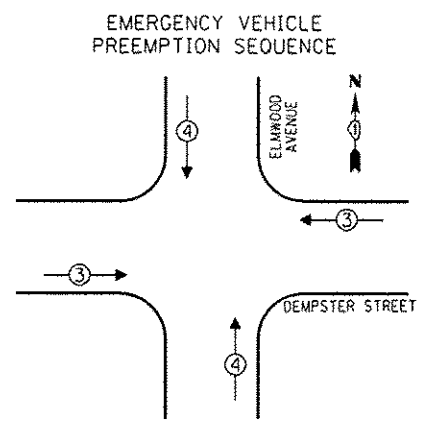


CONTROLLER SEQUENCE

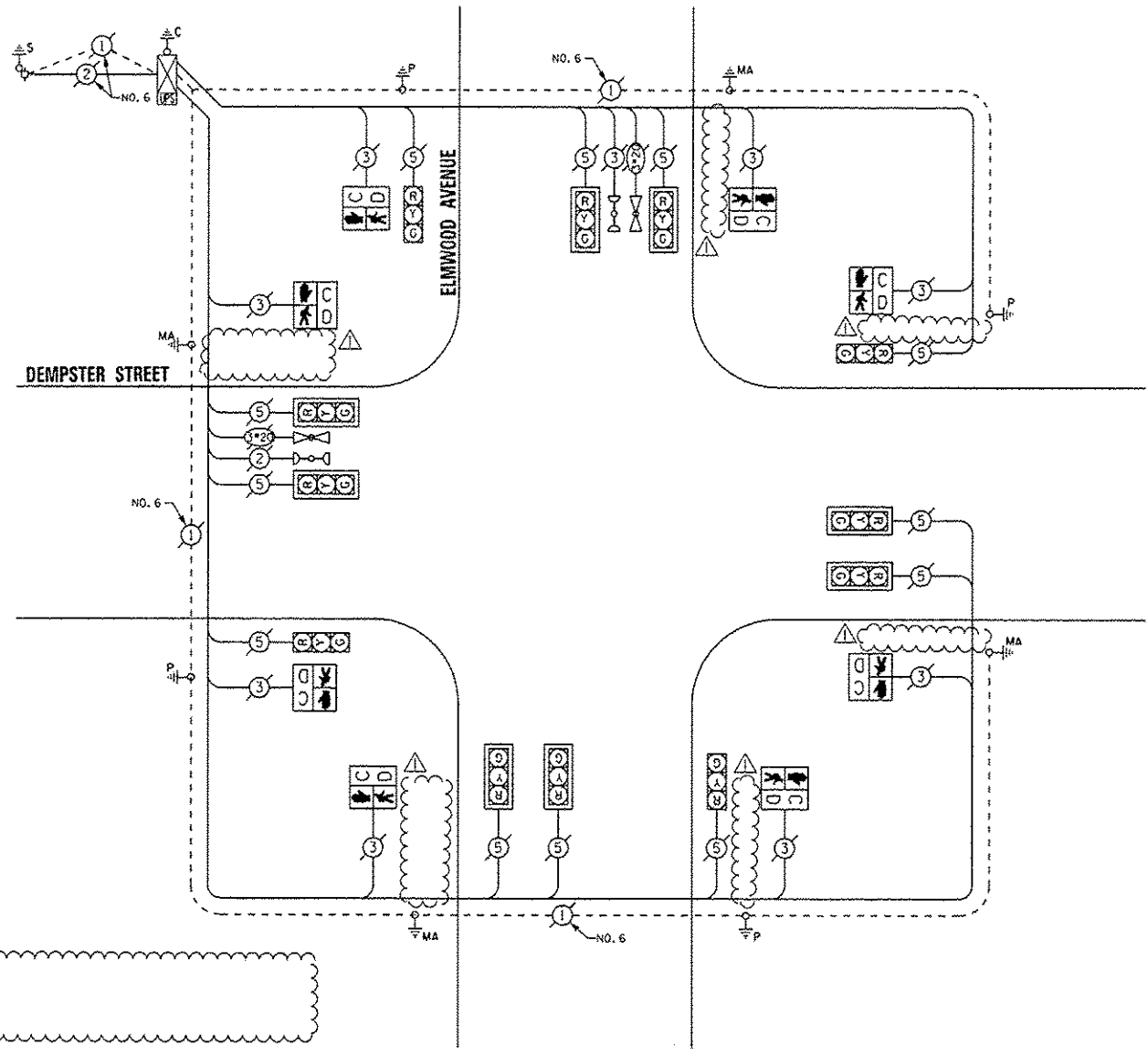


- LEGEND**
- SINGLE ENTRY PHASE
 - DUAL ENTRY PHASE
 - △ OVERLAP
 - ⊙ PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM



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



CABLE PLAN

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE		
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
ILLUM. SIGN		25	0.05	
LUMINAIRE		250	0.50	
VIDEO SYSTEM		150	1.00	
FLASHER			0.50	
ENERGY COSTS TO:			TOTAL =	522.00

CITY OF EVANSTON
2100 RIDGE AVENUE
EVANSTON, ILLINOIS 60201

ENERGY SUPPLY - CONTACT: TERRI BLECK
PHONE: (647) 816-5239
COMPANY: ConEd

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
8	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE

SCHEDULE OF QUANTITIES

QUAN.	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
8	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
1	EACH	PEDESTRIAN POSITION DELETED
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL

SAM SCHWARTZ ENGINEERING
3100 W. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

DESIGNED - JAM	REVISED - 01-28-14
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

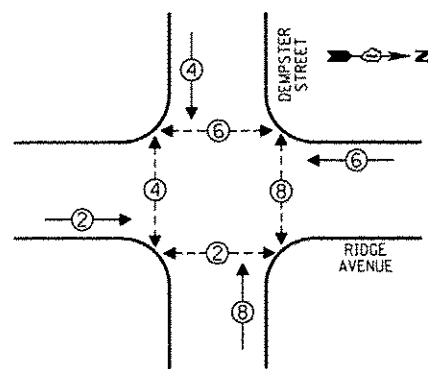
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, DEMPSTER STREET AT ELMWOOD AVENUE

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	28

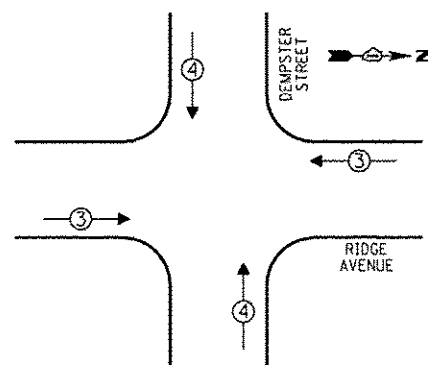
CONTRACT NO. 60X28
ILLINOIS FED. AID PROJECT

CONTROLLER SEQUENCE

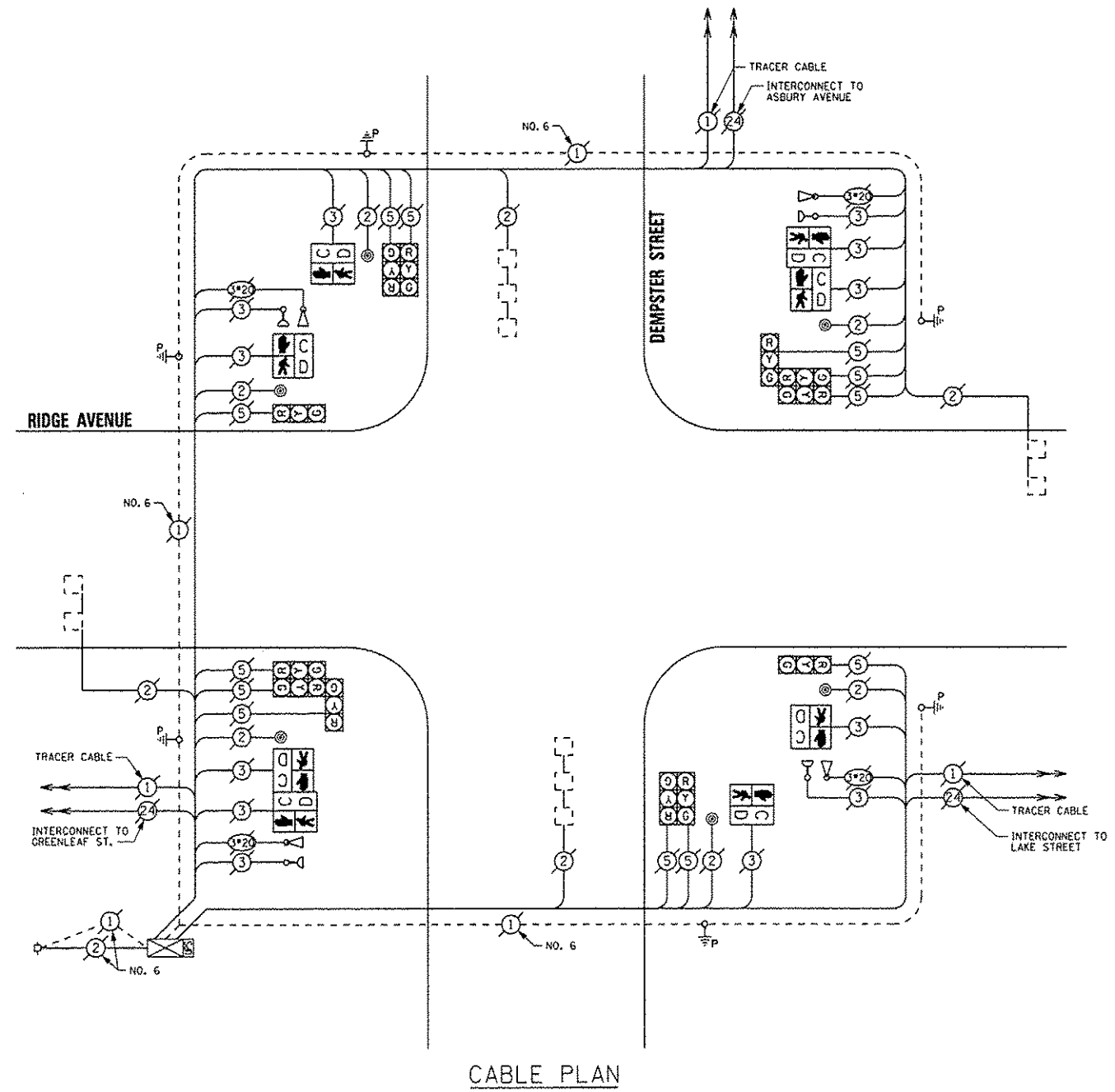


PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↔	↕



CABLE PLAN

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
4	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
2	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
6	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

I.O.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND	LED	% OPERATIONS	
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
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 522.00

CITY OF EVANSTON
 2100 RIDGE AVENUE
 EVANSTON, ILLINOIS 60201

ENERGY SUPPLY - CONTACT: TERRI BLECK
 PHONE: (847) 816-5239
 COMPANY: ComEd

SAM SCHWARTZ ENGINEERING
 3100 N. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

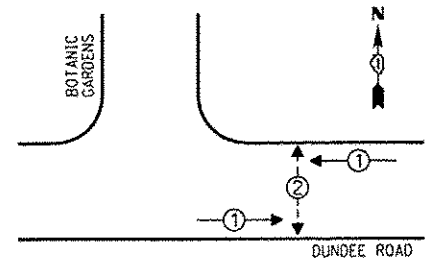
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, DEMPSTER STREET AT RIDGE AVENUE

F.A. R.F.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	29
			CONTRACT NO. 60X28	
ILLINOIS FED. AID PROJECT				

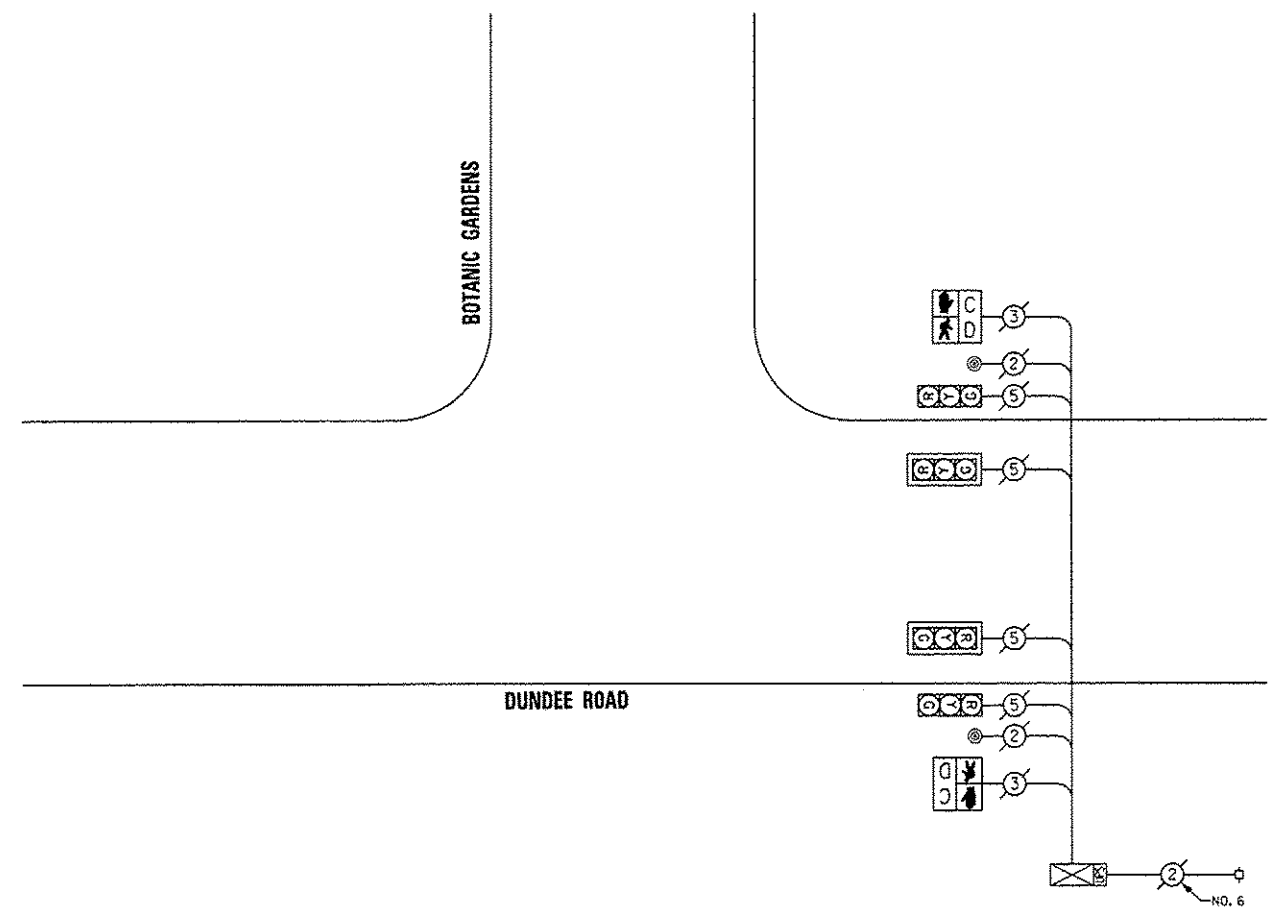


CONTROLLER SEQUENCE



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

PHASE DESIGNATION DIAGRAM



CABLE PLAN

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE (INCAND)	LED % OPERATIONS	
SIGNAL (RED)	4	17	0.50	34.00
(YELLOW)	4	25	0.25	25.00
(GREEN)	4	15	0.25	15.00
ARROW		12	0.10	
PED. SIGNAL	2	25	1.00	50.00
CONTROLLER	1	100	1.00	100.00
ILLUM. SIGN LUMINAIRE		250	0.50	
VIDEO SYSTEM		150	1.00	
FLASHER			0.50	
ENERGY COSTS TO:				TOTAL = 224.00

VILLAGE OF GLENCOE
675 VILLAGE COURT
GLENCOE, ILLINOIS 60022

ENERGY SUPPLY - CONTACT: TERRI BLECK
PHONE: (847) 816-5239
COMPANY: Core'd

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
2	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
2	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

**SAM SCHWARTZ
ENGINEERING**
3100 W. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

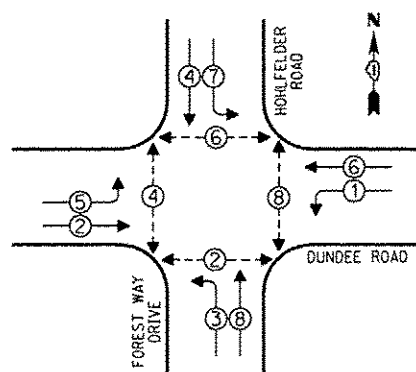
**SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE,
DUNDEE ROAD AT BOTANIC GARDENS PATH**

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	30
ILLINOIS FED. AID PROJECT				CONTRACT NO. 60X28



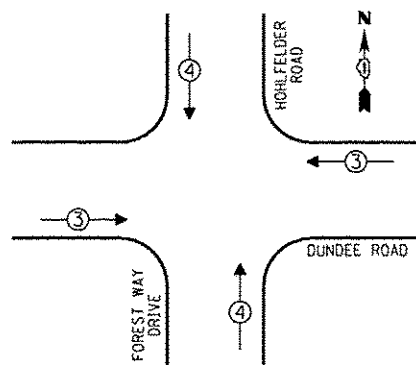
CONTROLLER SEQUENCE



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

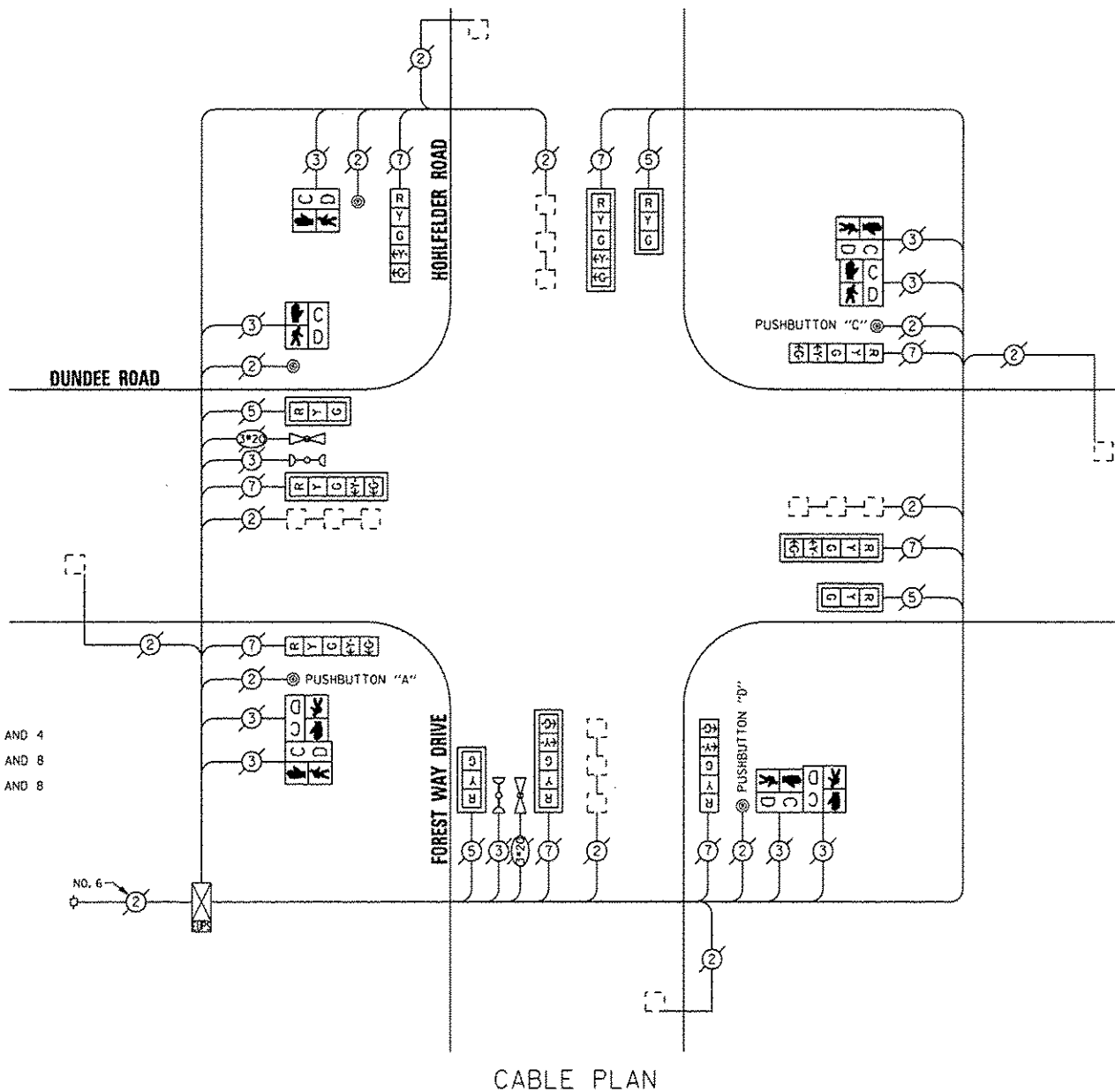
PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↔	↕

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



CABLE PLAN

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND.	LED	% OPERATIONS	
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
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 541.20

VILLAGE OF GLENCOE
 675 VILLAGE COURT
 GLENCOE, ILLINOIS 60022

ENERGY SUPPLY - CONTACT: TERRI BLECK
 PHONE: (847) 816-5239
 COMPANY: ComEd

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
2	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
3	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
5	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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



DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
 DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE,
 DUNDEE ROAD AT FOREST WAY DRIVE

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-0537S	COOK	88	31
			CONTRACT NO.	60X28
ILLINOIS FED. AID PROJECT				

SEQUENCE OF OPERATION

MOVEMENT	PHASE	INTERVAL	CHANGE TO	1	2	3A	3B	4	5	6A	6B
GREEN BAY ROAD ALL SIGNALS	N/B	G	G	Y	R	R	R	R	R	R	R
GREEN BAY ROAD ALL SIGNALS	S/B	G	G	Y	R	R	R	R	R	R	R
KENILWORTH AVENUE ALL SIGNALS	E/B	R	R	R	R	G	G	Y	R	R	R
KENILWORTH AVENUE FAR RIGHT AND NEAR RIGHT SIGNALS	N/B	R	R	R	R	G	G	Y	R	R	R
KENILWORTH AVENUE FAR LEFT AND END MAST ARM SIGNALS	N/B	R	R	R	R	G	G	Y	R	R	R
PARK DRIVE ALL SIGNALS	E/B	R	R	R	R	G	G	Y	R	R	R
PARK DRIVE FAR RIGHT AND NEAR RIGHT SIGNALS	N/B	R	R	R	R	G	G	Y	R	R	R
PARK DRIVE FAR LEFT AND MID LEFT SIGNALS	N/B	R	R	R	R	G	G	Y	R	R	R
PEDESTRIAN SIGNALS CROSSING KENILWORTH AVE. ON WEST SIDE OF GREEN BAY ROAD	*P	**FH	H	H	H	H	H	H	H	H	H
PEDESTRIAN SIGNALS CROSSING PARK DRIVE ON WEST SIDE OF GREEN BAY ROAD	*P	**FH	H	H	H	H	H	H	H	H	H
PEDESTRIAN SIGNALS CROSSING GREEN BAY ROAD ON NORTH SIDE OF KENILWORTH AVE.	H	H	H	H	*P	**FH	H	H	H	H	H
PEDESTRIAN SIGNALS CROSSING GREEN BAY ROAD ON SOUTH SIDE OF KENILWORTH AVE.	H	H	H	H	*P	**FH	H	H	H	H	H
PEDESTRIAN SIGNALS CROSSING GREEN BAY ROAD ON NORTH SIDE OF PARK DRIVE	H	H	H	H	*P	**FH	H	H	H	H	H

PHASE 2-6 SHALL BE PLACED ON RECALL.

* TO APPEAR ONLY UPON PUSHBUTTON ACTIVATION

** FLASHING IS TO TERMINATE AT THE COMPLETION OF THE PEDESTRIAN INTERVAL CLEARANCE.

P = ILLUMINATED PERSON = WALK

FH = ILLUMINATED FLASHING HAND = FLASHING DON'T WALK

H = ILLUMINATED SOLID HAND = DON'T WALK

RAILROAD PREEMPTION SEQUENCE OF OPERATION

	PREEMPTOR NUMBER 3	PREEMPTOR NUMBER 4	PREEMPTOR NUMBER 2											
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	1	4												
CHANGE FROM EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER		2	3											
RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	1D	1E	1F	1G	1H	2	3	4	5	CLEAR TO NORMAL SEQUENCE	
CHANGE TO RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1B	2	1D	2	1F	2	1H	2	3	4	5			
GREEN BAY ROAD ALL SIGNALS	N/B	Y	R	R	R	Y	R	R	R	R	R	R	G	Δ
GREEN BAY ROAD ALL SIGNALS	S/B	Y	R	R	R	Y	R	R	R	R	R	R	G	Δ
KENILWORTH AVENUE ALL SIGNALS	E/B	R	R	Y	R	R	Y	R	R	R	R	R	R	Δ
KENILWORTH AVENUE FAR RIGHT AND NEAR RIGHT SIGNALS	N/B	R	R	G	G	R	R	G	G	G	Y	R	R	Δ
KENILWORTH AVENUE FAR LEFT AND END MAST ARM SIGNALS	N/B	R	R	G	G	R	R	G	G	G	Y	R	R	Δ
PARK DRIVE ALL SIGNALS	E/B	R	R	Y	R	R	Y	R	R	R	R	R	R	Δ
PARK DRIVE FAR RIGHT AND NEAR RIGHT SIGNALS	N/B	R	R	G	G	R	R	G	G	G	Y	R	R	Δ
PARK DRIVE FAR LEFT AND MID LEFT SIGNALS	N/B	R	R	G	G	R	R	G	G	G	Y	R	R	Δ
PEDESTRIAN SIGNALS CROSSING KENILWORTH AVE. ON WEST SIDE OF GREEN BAY ROAD	FH	H	H	H	H	H	H	H	H	H	H	H	H	Δ
PEDESTRIAN SIGNALS CROSSING PARK DRIVE ON WEST SIDE OF GREEN BAY ROAD	FH	H	H	H	H	H	H	H	H	H	H	H	H	Δ
PEDESTRIAN SIGNALS CROSSING GREEN BAY ROAD ON NORTH SIDE OF KENILWORTH AVE.	H	H	FH	H	H	H	H	H	H	H	H	H	H	Δ
PEDESTRIAN SIGNALS CROSSING GREEN BAY ROAD ON SOUTH SIDE OF KENILWORTH AVE.	H	H	FH	H	H	H	H	H	H	H	H	H	H	Δ
PEDESTRIAN SIGNALS CROSSING GREEN BAY ROAD ON NORTH SIDE OF PARK DRIVE	H	H	FH	H	H	H	H	H	H	H	H	H	H	Δ

Δ RAILROAD PREEMPTION SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION OR PROPER CLEARANCE INTERVAL TO DISPLAY AN EMERGENCY VEHICLE INTERVAL (IF APPLICABLE) AFTER RAILROAD PREEMPTION INTERVAL 5 IS TERMINATED.

EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION

	PREEMPTOR NUMBER 3	PREEMPTOR NUMBER 4									
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	1	4									
EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	1D	1E	1F	1G	1H	2	3	CLEAR TO NORMAL SEQUENCE
CHANGE TO EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	2	1C	1D	3	1F	1G	2	3			
GREEN BAY ROAD ALL SIGNALS	N/B	G	G	Y	R	R	R	R	G	R	Δ
GREEN BAY ROAD ALL SIGNALS	S/B	G	G	Y	R	R	R	R	G	R	Δ
KENILWORTH AVENUE ALL SIGNALS	E/B	R	R	R	R	G	Y	R	G	R	Δ
KENILWORTH AVENUE FAR RIGHT AND NEAR RIGHT SIGNALS	N/B	R	R	R	R	G	Y	R	G	R	Δ
KENILWORTH AVENUE FAR LEFT AND END MAST ARM SIGNALS	N/B	R	R	R	R	G	Y	R	G	R	Δ
PARK DRIVE ALL SIGNALS	E/B	R	R	R	R	G	Y	R	G	R	Δ
PARK DRIVE FAR RIGHT AND NEAR RIGHT SIGNALS	N/B	R	R	R	R	G	Y	R	G	R	Δ
PARK DRIVE FAR LEFT AND MID LEFT SIGNALS	N/B	R	R	R	R	G	Y	R	G	R	Δ
PEDESTRIAN SIGNALS CROSSING KENILWORTH AVE. ON WEST SIDE OF GREEN BAY ROAD	FH	FH	H	H	H	H	H	H	H	H	Δ
PEDESTRIAN SIGNALS CROSSING PARK DRIVE ON WEST SIDE OF GREEN BAY ROAD	FH	FH	H	H	H	H	H	H	H	H	Δ
PEDESTRIAN SIGNALS CROSSING GREEN BAY ROAD ON NORTH SIDE OF KENILWORTH AVE.	H	H	H	H	FH	H	H	FH	H	H	Δ
PEDESTRIAN SIGNALS CROSSING GREEN BAY ROAD ON SOUTH SIDE OF KENILWORTH AVE.	H	H	H	H	FH	H	H	FH	H	H	Δ
PEDESTRIAN SIGNALS CROSSING GREEN BAY ROAD ON NORTH SIDE OF PARK DRIVE	H	H	H	H	FH	H	H	FH	H	H	Δ

Δ 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 INTERVAL AFTER EMERGENCY VEHICLE INTERVAL 2 OR 3 IS TERMINATED.

P = ILLUMINATED PERSON = WALK

FH = ILLUMINATED FLASHING HAND = FLASHING DON'T WALK

H = ILLUMINATED SOLID HAND = DON'T WALK



DESIGNED - JAM
 DRAWN - JAM
 CHECKED - LMM
 DATE - 12-13-13

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

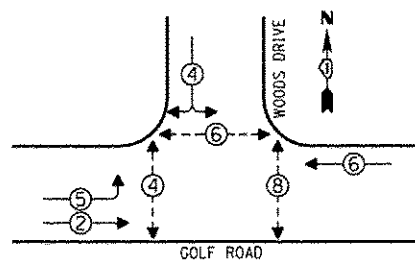
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
 DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE,
 GREEN BAY ROAD AT KENILWORTH AVENUE /PARK DRIVE

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	34
			CONTRACT NO. 60X28	
ILLINOIS FED. AID PROJECT				



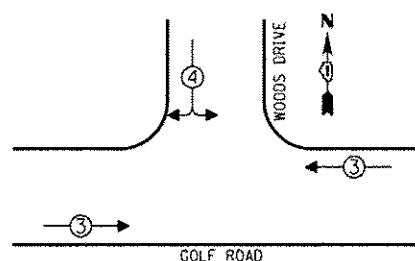
CONTROLLER SEQUENCE



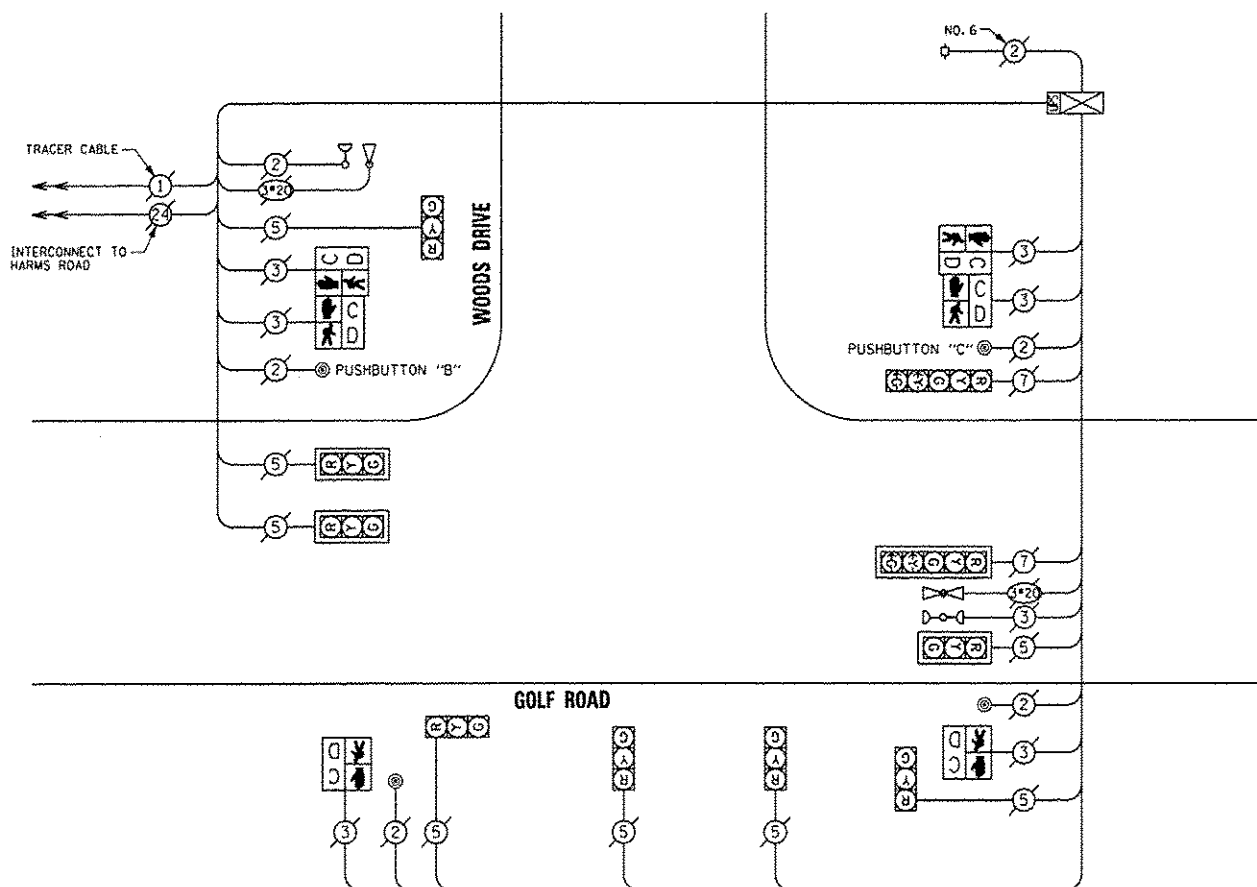
- LEGEND**
- SINGLE ENTRY PHASE
 - DUAL ENTRY PHASE
 - OVERLAP
 - PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	←	↓



CABLE PLAN

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

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
2	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
2	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
4	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND.	LED	% OPERATIONS	
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	6		25	1.00	150.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 439.80

VILLAGE OF SKOKIE
 5127 OAKTON STREET
 SKOKIE, ILLINOIS 60077

ENERGY SUPPLY - CONTACT: TERRI BLECK
 PHONE: (847) 816-5239
 COMPANY: ComEd



DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

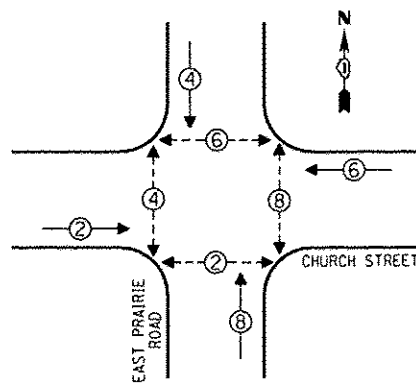
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, GOLF ROAD AT WOODS DRIVE

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	35
			CONTRACT NO. 60X28	
[ILLINOIS] FED. AID PROJECT				



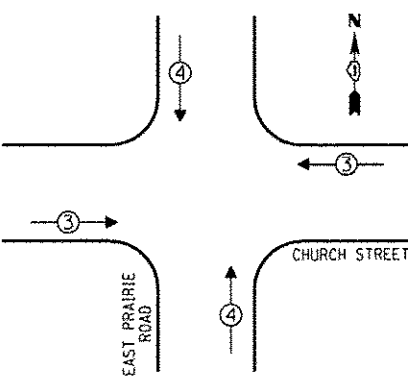
CONTROLLER SEQUENCE



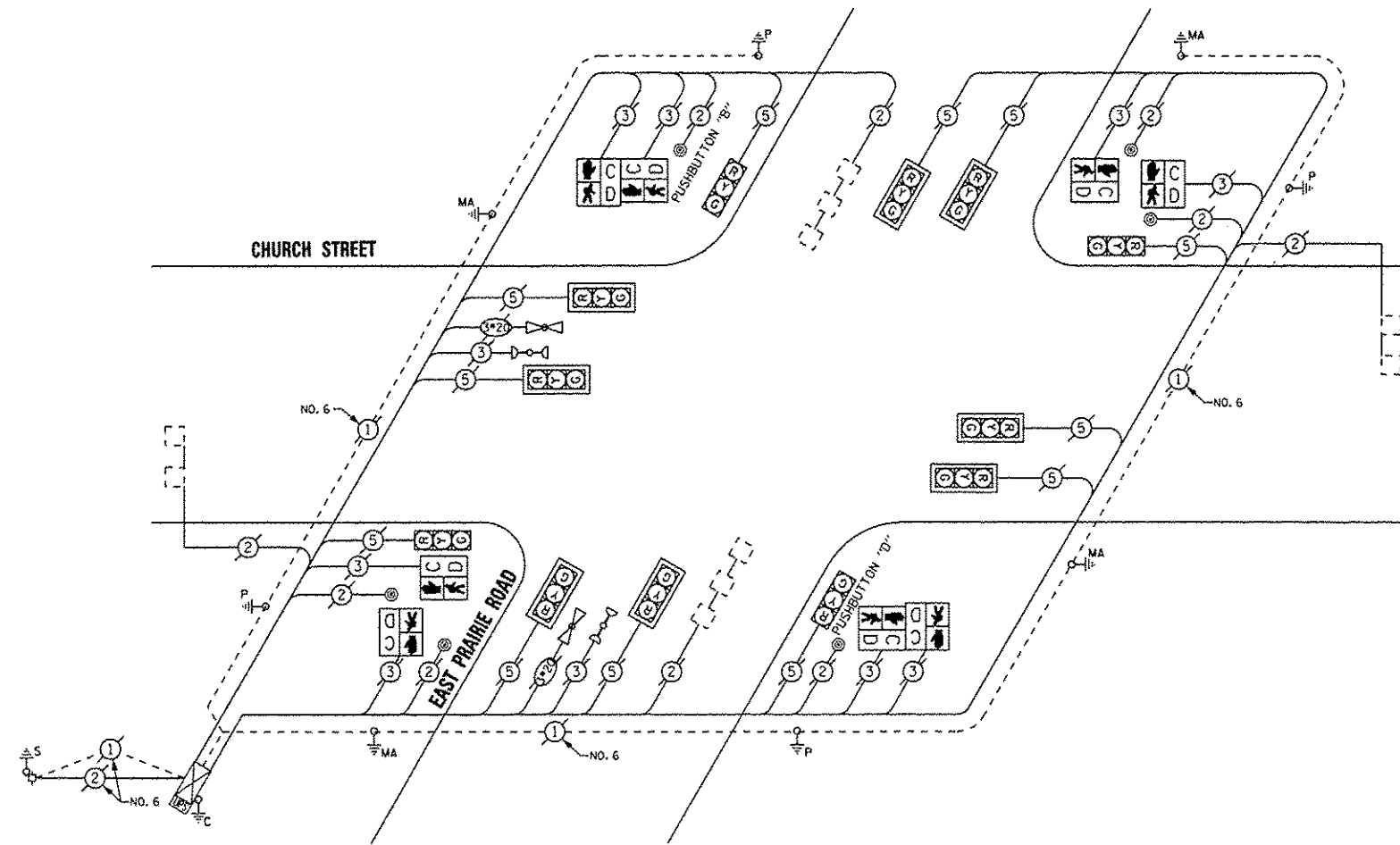
PHASE DESIGNATION DIAGRAM

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	
MOVEMENT	↔	↕	



CABLE PLAN

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

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
4	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
2	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
6	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND.	LED % OPERATIONS	WATTAGE	
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
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 522.00

VILLAGE OF SKOKIE
 5127 OAKTON STREET
 SKOKIE, ILLINOIS 60077

ENERGY SUPPLY - CONTACT: TERRI BLECK
 PHONE: (847) 816-5239
 COMPANY: ComEd

SAM SCHWARTZ ENGINEERING
 3100 W. HIGGINS, STE. 100, ROSEMONT, ILL. 60169

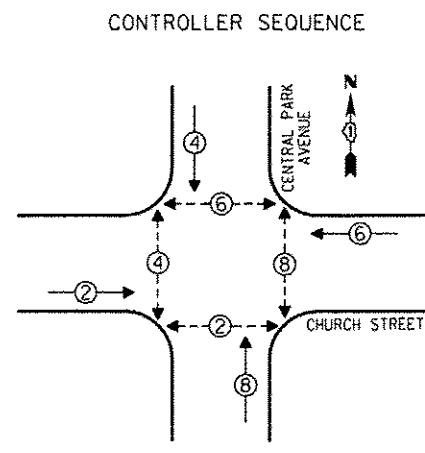
DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, CHURCH STREET AT EAST PRAIRIE ROAD

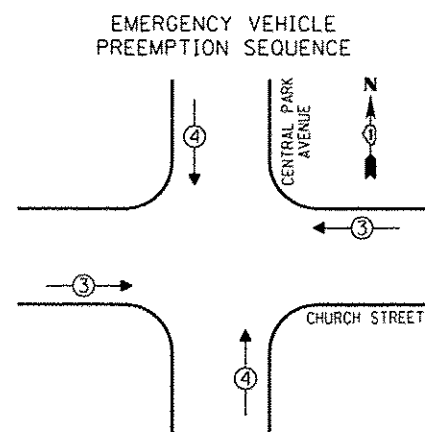
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	36
			CONTRACT NO. 60X28	
ILLINOIS FED. AID PROJECT				

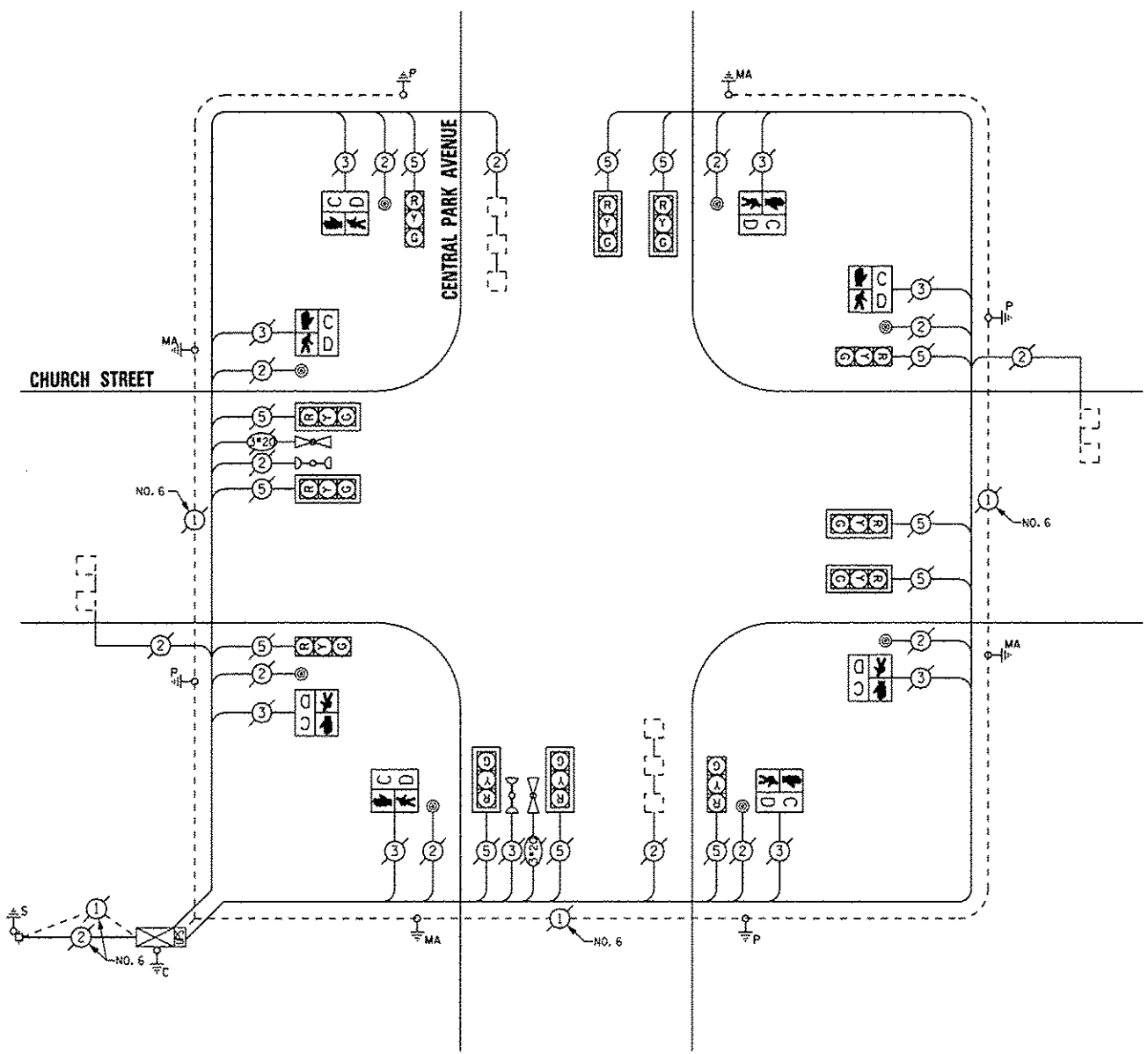


LEGEND
 [Symbol] SINGLE ENTRY PHASE
 [Symbol] DUAL ENTRY PHASE
 [Symbol] OVERLAP
 [Symbol] PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	
MOVEMENT	↔	↕	



CABLE PLAN

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
8	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
8	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

I.O.D.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND	LED	% OPERATIONS	
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
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 522.00

VILLAGE OF SKOKIE
 5127 OAKTON STREET
 SKOKIE, ILLINOIS 60077

ENERGY SUPPLY - CONTACT: TERRI BLECK
 PHONE: (847) 816-5239
 COMPANY: COMED

DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

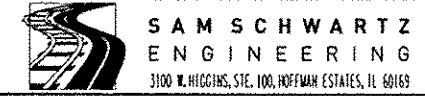
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

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

SCALE: NONE SHEET OF SHEETS STA. TO STA.

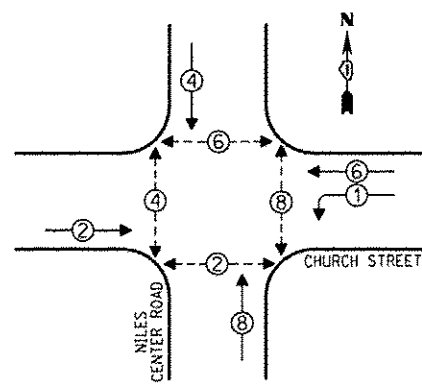
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	38

CONTRACT NO. 60X28
 [ILLINOIS] FED. AID PROJECT



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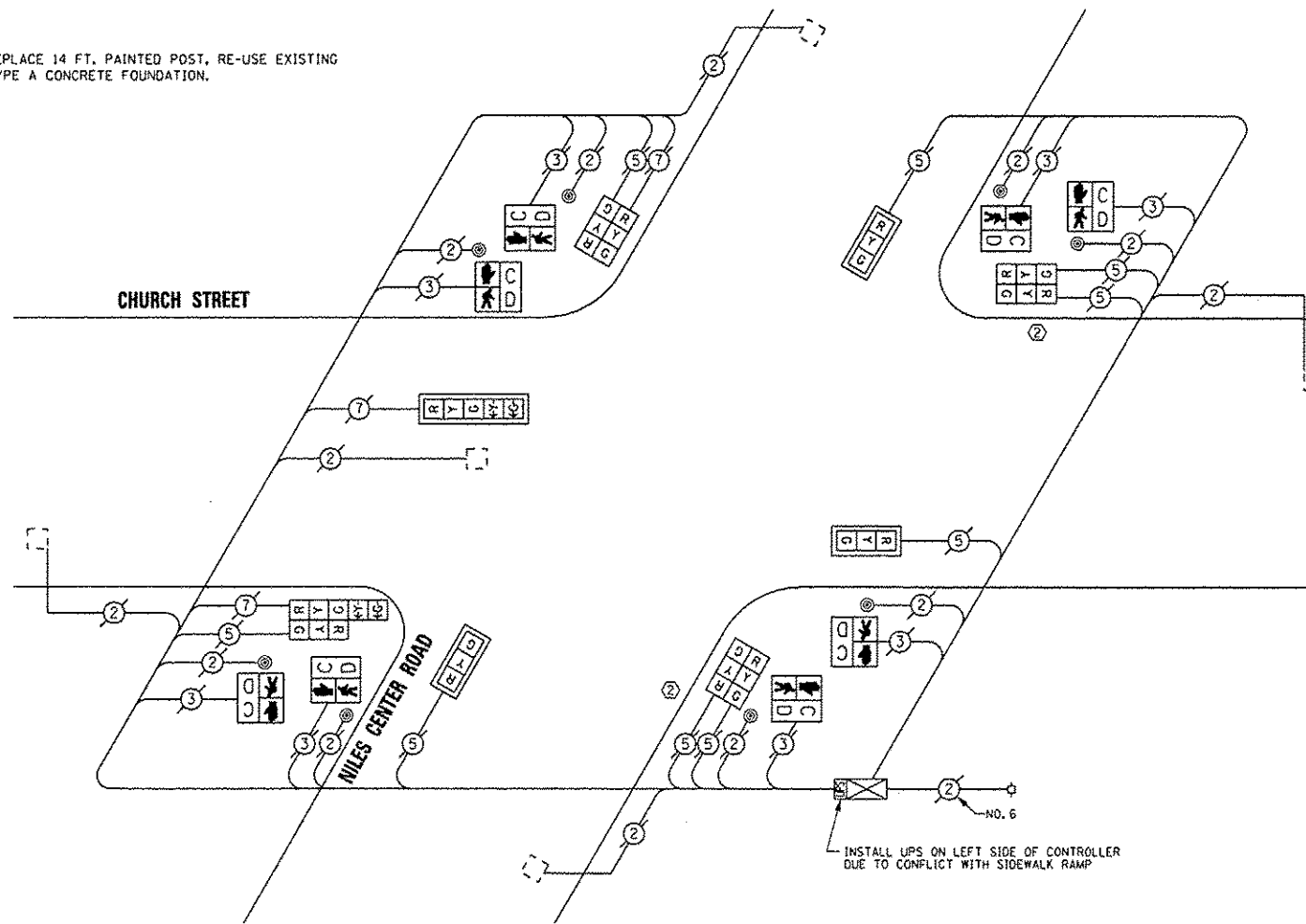
CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

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

② REPLACE 14 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION.



CABLE PLAN

REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

SCHEDULE OF QUANTITIES

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

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
2	EACH	TRAFFIC SIGNAL POST
3	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
1	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION
3	EACH	SIGNAL HEAD, 2-FACE, 3-SECTION
1	EACH	SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
8	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
4	EACH	TRAFFIC SIGNAL BACKPLATE
8	EACH	PEDESTRIAN PUSHBUTTON

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE	
TYPE	NO. OF LAMPS	INCAND.	LED X% OPERATIONS		
SIGNAL (RED)	12		17	0.50	102.00
(YELLOW)	12		25	0.25	75.00
(GREEN)	12		15	0.25	45.00
ARROW	4		12	0.10	4.80
PED. SIGNAL	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	526.80

VILLAGE OF SKOKIE
5127 OAKTON STREET
SKOKIE, ILLINOIS 60077

ENERGY SUPPLY - CONTACT: TERRI BLECK
PHONE: (847) 816-5239
COMPANY: ConEd



DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

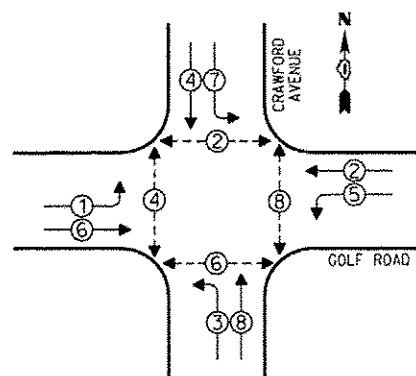
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE,
CHURCH STREET AT NILES CENTER ROAD

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	40
				CONTRACT NO. 60X28
ILLINOIS FED. AID PROJECT				

CONTROLLER SEQUENCE

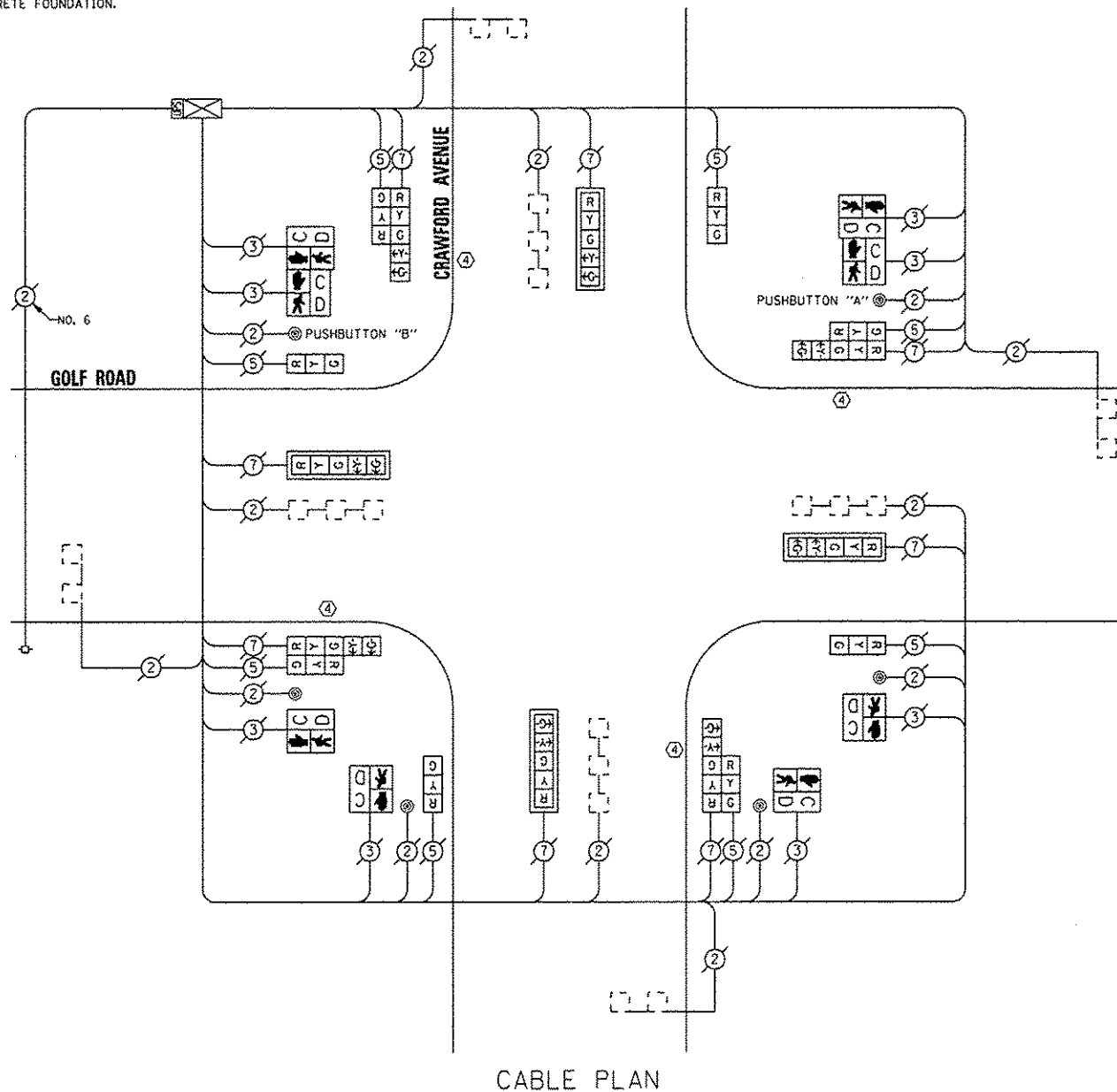


- LEGEND**
- SINGLE ENTRY PHASE
 - DUAL ENTRY PHASE
 - OVERLAP
 - PEDESTRIAN PHASE
 - NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

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

④ REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION.



REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND.	LED	% OPERATIONS	
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
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 615.20

VILLAGE OF SKOKIE
 5127 OAKTON STREET
 SKOKIE, ILLINOIS 60077

ENERGY SUPPLY - CONTACT: TERRI BLECK
 PHONE: (847) 816-5239
 COMPANY: ComEd

REMOVE 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.

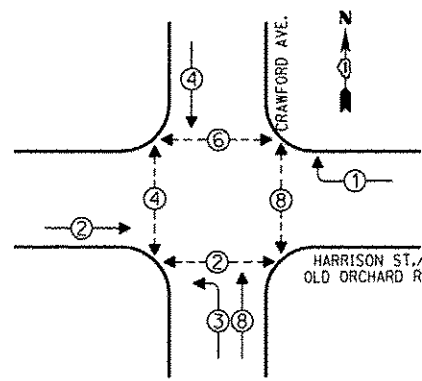
QUAN.	UNIT	DESCRIPTION
4	EACH	TRAFFIC SIGNAL POST
4	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
4	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION
4	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION
4	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
2	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
4	EACH	TRAFFIC SIGNAL BACKPLATE
6	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

<p>SAM SCHWARTZ ENGINEERING 3100 W. MCCOY, STE. 100, HOFFMAN ESTATES, IL 60169</p>	DESIGNED - JAM DRAWN - JAM CHECKED - LMM DATE - 12-13-13	REVISED - REVISED - REVISED - REVISED -	<p>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</p>	<p>SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, GOLF ROAD AT CRAWFORD AVENUE</p>	F.A. RTE. VAR	SECTION 2013-053TS	COUNTY COOK	TOTAL SHEETS 88	SHEET NO. 41
	SCALE: NONE	SHEET OF SHEETS STA. TO STA.			ILLINOIS FED. AID PROJECT				

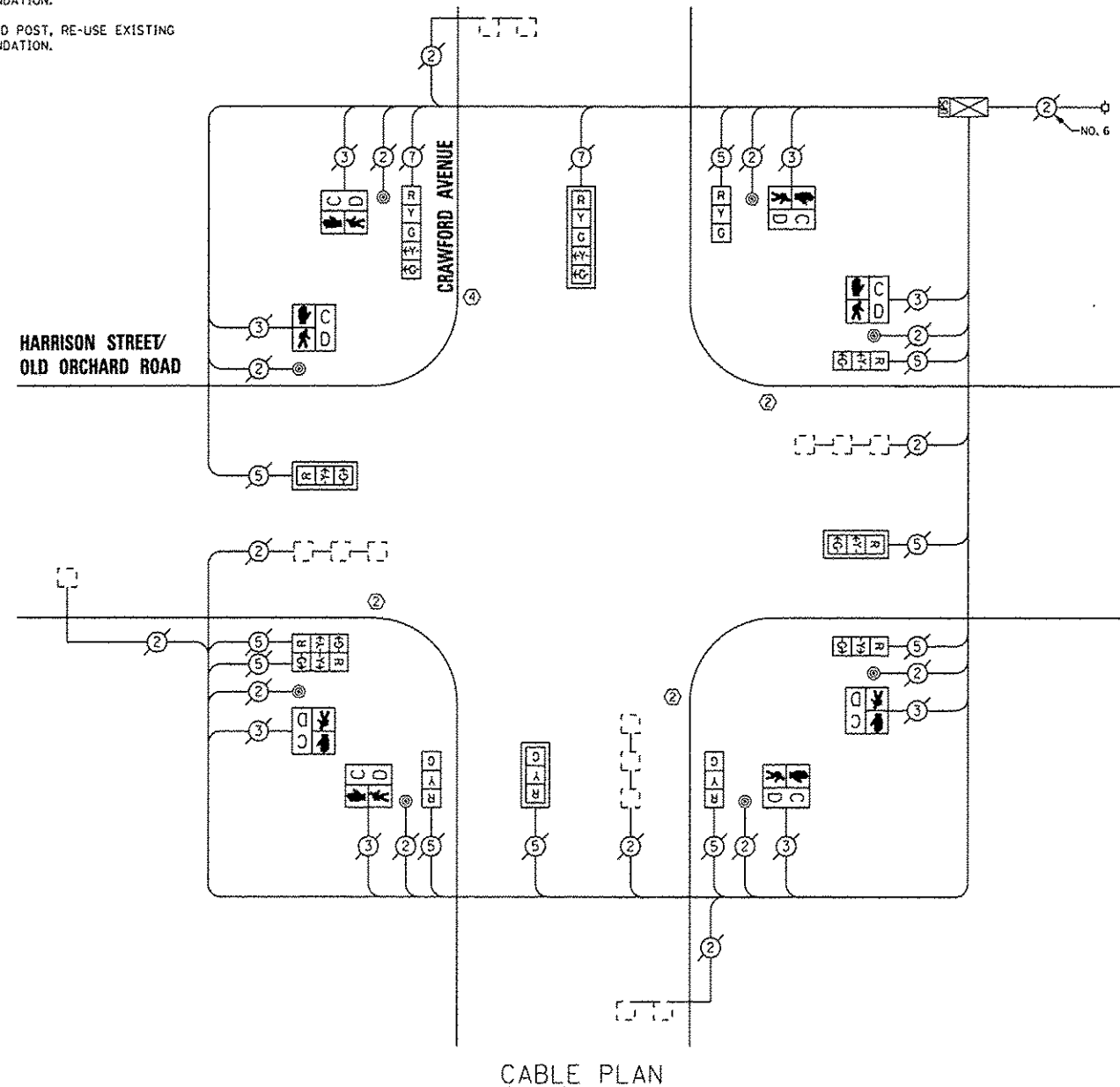
CONTROLLER SEQUENCE



LEGEND
 [Symbol] SINGLE ENTRY PHASE
 [Symbol] DUAL ENTRY PHASE
 [Symbol] OVERLAP
 [Symbol] PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

- ② REPLACE 14 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ④ REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION.



CABLE PLAN

REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
4	EACH	TRAFFIC SIGNAL POST
8	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
1	EACH	SIGNAL HEAD, 2-FACE, 3-SECTION
2	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION
8	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
4	EACH	TRAFFIC SIGNAL BACKPLATE
8	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND.	LED % OPERATIONS	WATTAGE	
SIGNAL (RED)	12		17	0.50	102.00
(YELLOW)	12		25	0.25	75.00
(GREEN)	12		15	0.25	45.00
ARROW	4		12	0.10	4.80
PED. SIGNAL	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 526.80

VILLAGE OF SKOKIE
 5127 DAKTON STREET
 SKOKIE, ILLINOIS 60077

ENERGY SUPPLY - CONTACT: FERRI BLECK
 PHONE: (847) 816-5239
 COMPANY: ComEd



DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

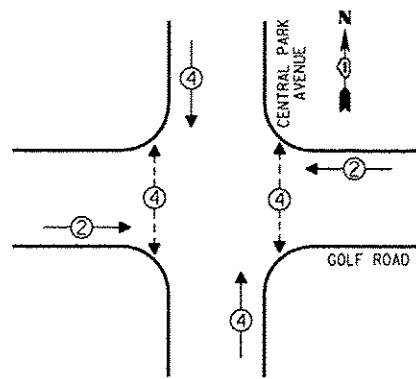
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE.
 HARRISON STREET/OLD ORCHARD ROAD AT CRAWFORD AVENUE

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	42
			CONTRACT NO. 60X28	
ILLINOIS FED. AID PROJECT				

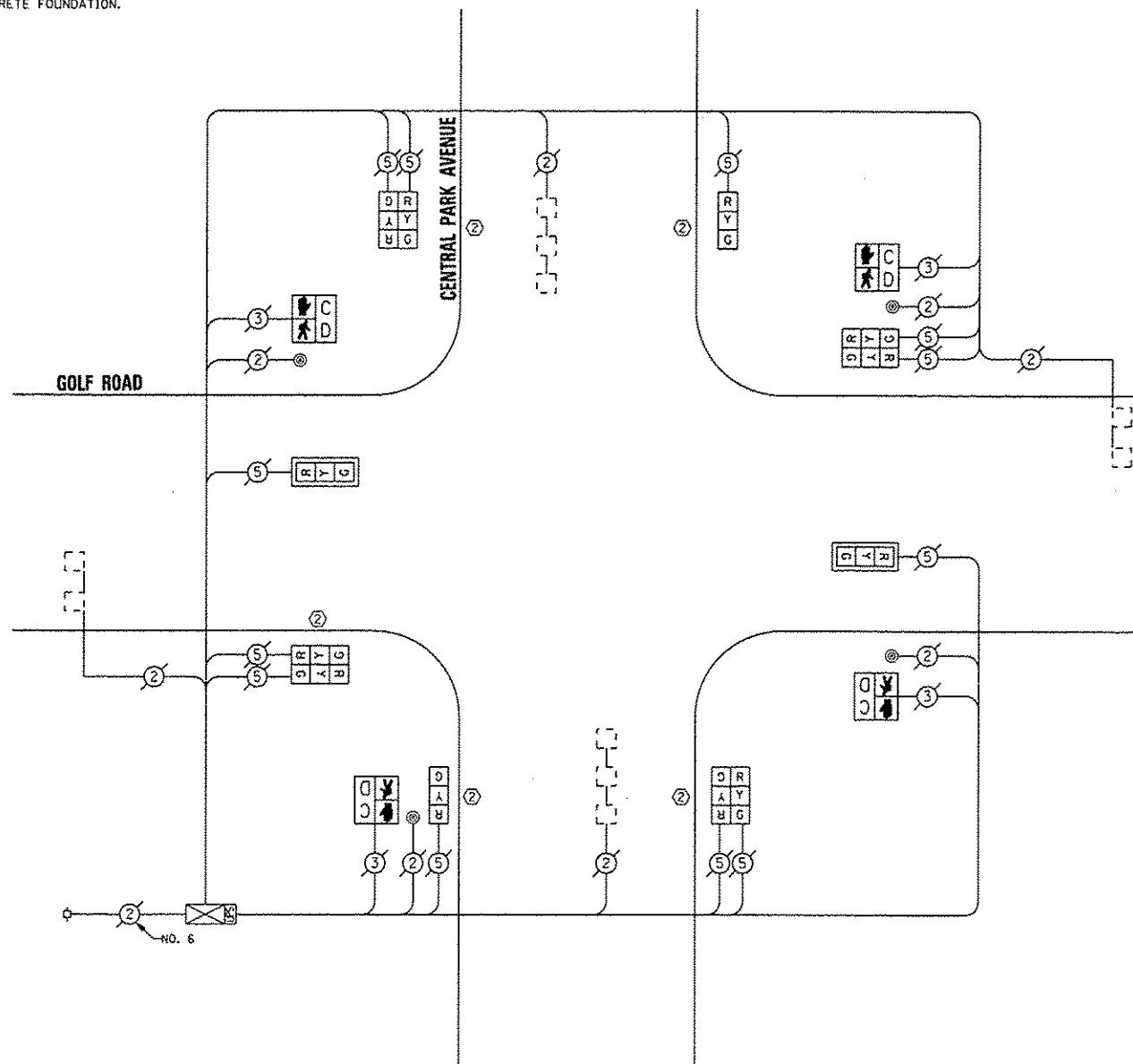
CONTROLLER SEQUENCE



- LEGEND**
- ① SINGLE ENTRY PHASE
 - ② DUAL ENTRY PHASE
 - ③ OVERLAP
 - ④ PEDESTRIAN PHASE
 - ⑤ NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

② REPLACE 14 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION.



CABLE PLAN

REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
5	EACH	TRAFFIC SIGNAL POST
4	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
4	EACH	SIGNAL HEAD, 2-FACE, 3-SECTION
4	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
2	EACH	TRAFFIC SIGNAL BACKPLATE
4	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

I.O.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND.	LED % OPERATIONS	WATTAGE	
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	4		25	1.00	100.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 422.00

VILLAGE OF SKOKIE
5127 OAKTON STREET
SKOKIE, ILLINOIS 60077

ENERGY SUPPLY - CONTACT: TERRI BLECK
PHONE: (847) 816-5239
COMPANY: ComEd

DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - (2-13-13)	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

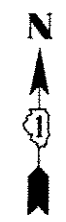
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE,
GOLF ROAD AT CENTRAL PARK AVENUE

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	43
			CONTRACT NO. 60X28	
[ILLINOIS] FED. AID PROJECT				

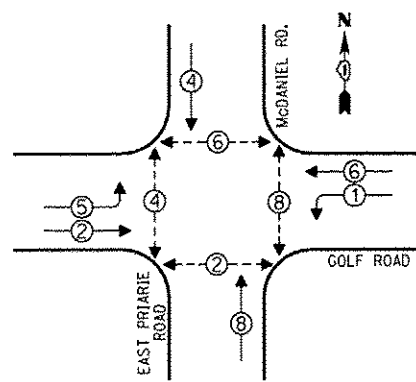
SCALE: NONE SHEET OF SHEETS STA. TO STA.



SAM SCHWARTZ
ENGINEERING
3100 N. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169



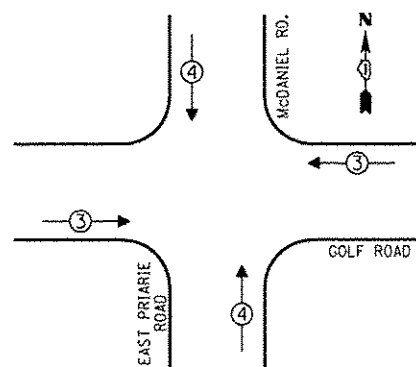
CONTROLLER SEQUENCE



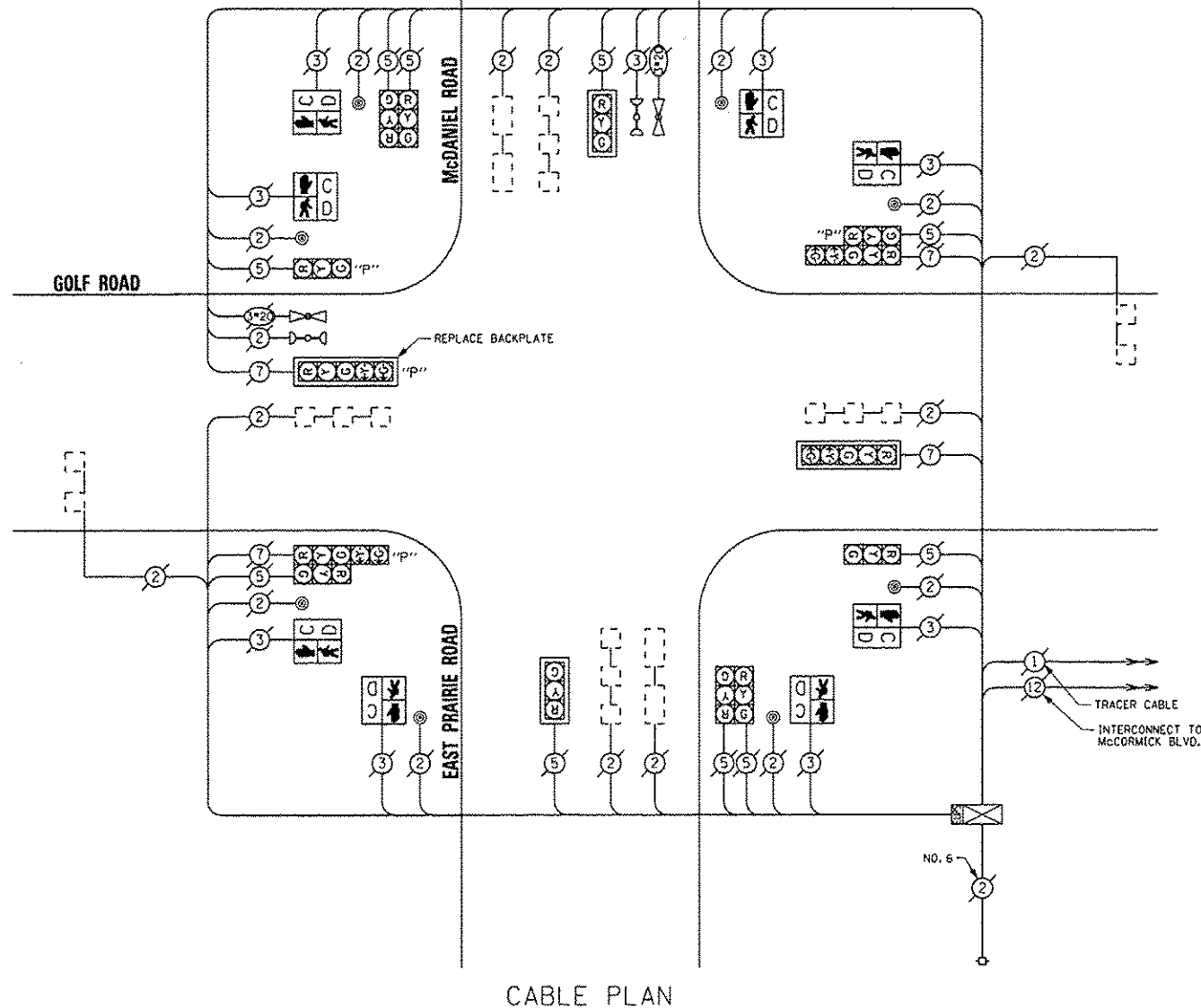
- LEGEND**
- SINGLE ENTRY PHASE
 - DUAL ENTRY PHASE
 - OVERLAP
 - PEDESTRIAN PHASE
 - NUMBER REFERS TO ASSOCIATED PHASE

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".

CABLE PLAN

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
8	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
1	EACH	TRAFFIC SIGNAL BACKPLATE
8	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

QUAN.	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
8	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
1	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
8	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND	LED X % OPERATIONS	
SIGNAL (RED)	14		17 0.50	119.00
(YELLOW)	14		25 0.25	87.50
(GREEN)	14		15 0.25	52.50
ARROW	8		12 0.10	9.60
PED. SIGNAL	8		25 1.00	200.00
CONTROLLER	1		100 1.00	100.00
ILLUM. SIGN			25 0.05	
LUMINAIRE		250		0.50
VIDEO SYSTEM		150		1.00
FLASHER				0.50
ENERGY COSTS TO:				TOTAL = 568.60

VILLAGE OF SKOKIE
5127 OAKTON STREET
SKOKIE, ILLINOIS 60077

ENERGY SUPPLY - CONTACT: TERRI BLECK
PHONE: (847) 816-5239
COMPANY: COMED

SAM SCHWARTZ ENGINEERING
3100 W. WIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

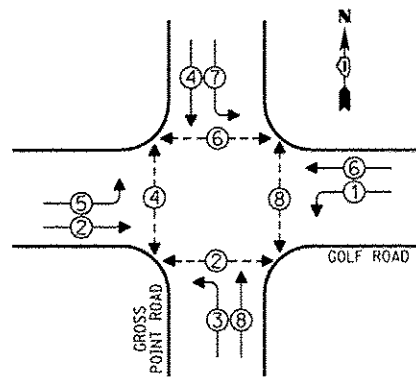
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE,
GOLF ROAD AT EAST PRAIRIE ROAD/McDANIEL ROAD

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	44
			CONTRACT NO. 60X28	
ILLINOIS FED. AID PROJECT				

SCALE: NONE SHEET OF SHEETS STA. TO STA.

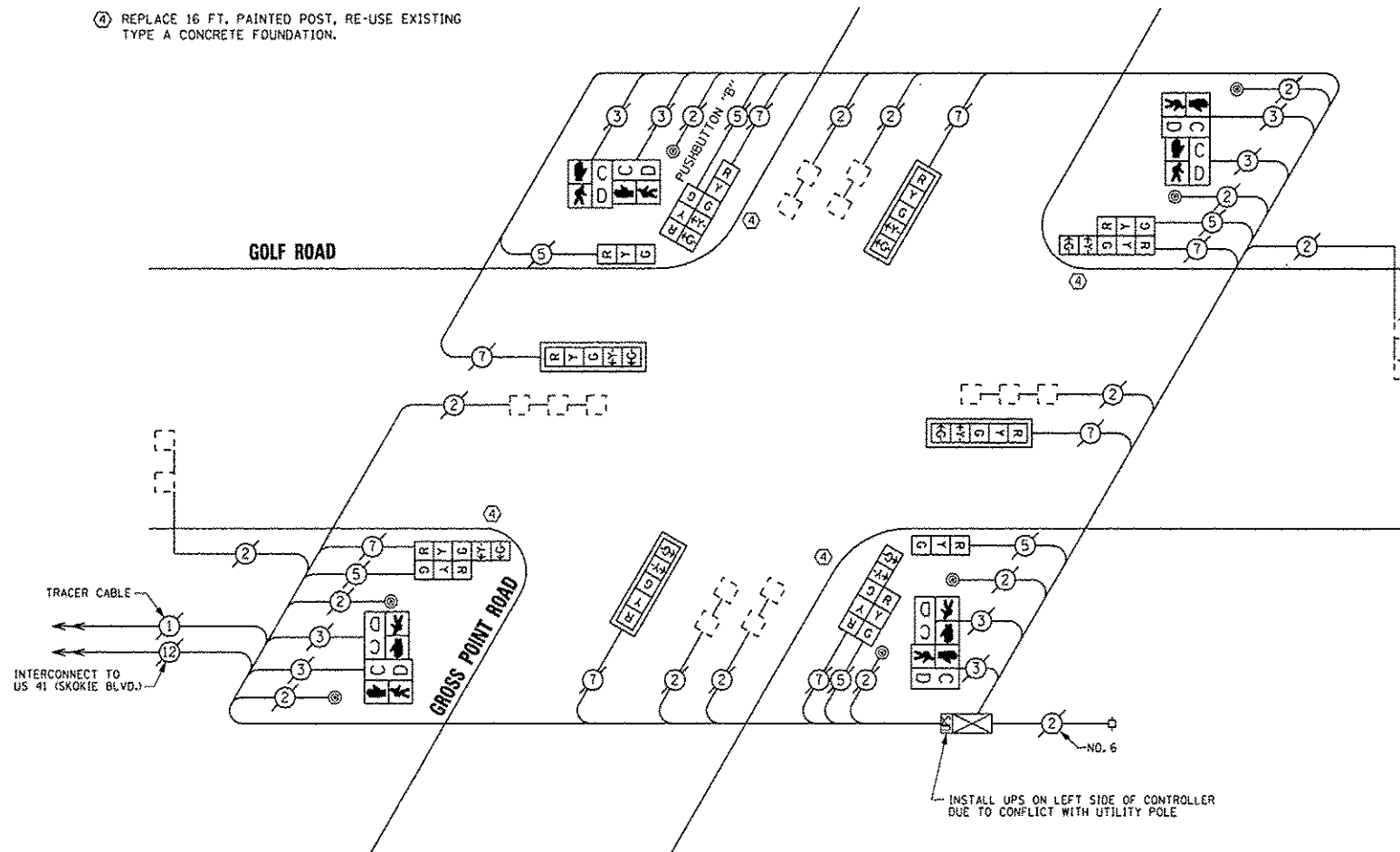
CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

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

④ REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION.



CABLE PLAN

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

INSTALL UPS ON LEFT SIDE OF CONTROLLER DUE TO CONFLICT WITH UTILITY POLE

REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
4	EACH	TRAFFIC SIGNAL POST
2	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
4	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION
4	EACH	SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
4	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
4	EACH	TRAFFIC SIGNAL BACKPLATE
7	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE	
TYPE	NO. OF LAMPS	INCAND.	LED % OPERATIONS		
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	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	578.20

VILLAGE OF SKOKIE
5127 OAKTON STREET
SKOKIE, ILLINOIS 60077

ENERGY SUPPLY - CONTACT: TERRI BLECK
PHONE: (847) 816-5239
COMPANY: COMED



DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

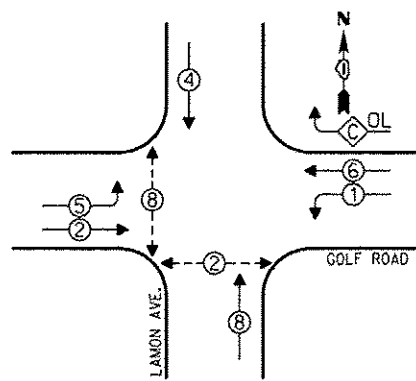
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE,
GOLF ROAD AT GROSS POINT ROAD

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-0537S	COOK	88	45
			CONTRACT NO. 60X28	
ILLINOIS FED. AID PROJECT				

CONTROLLER SEQUENCE

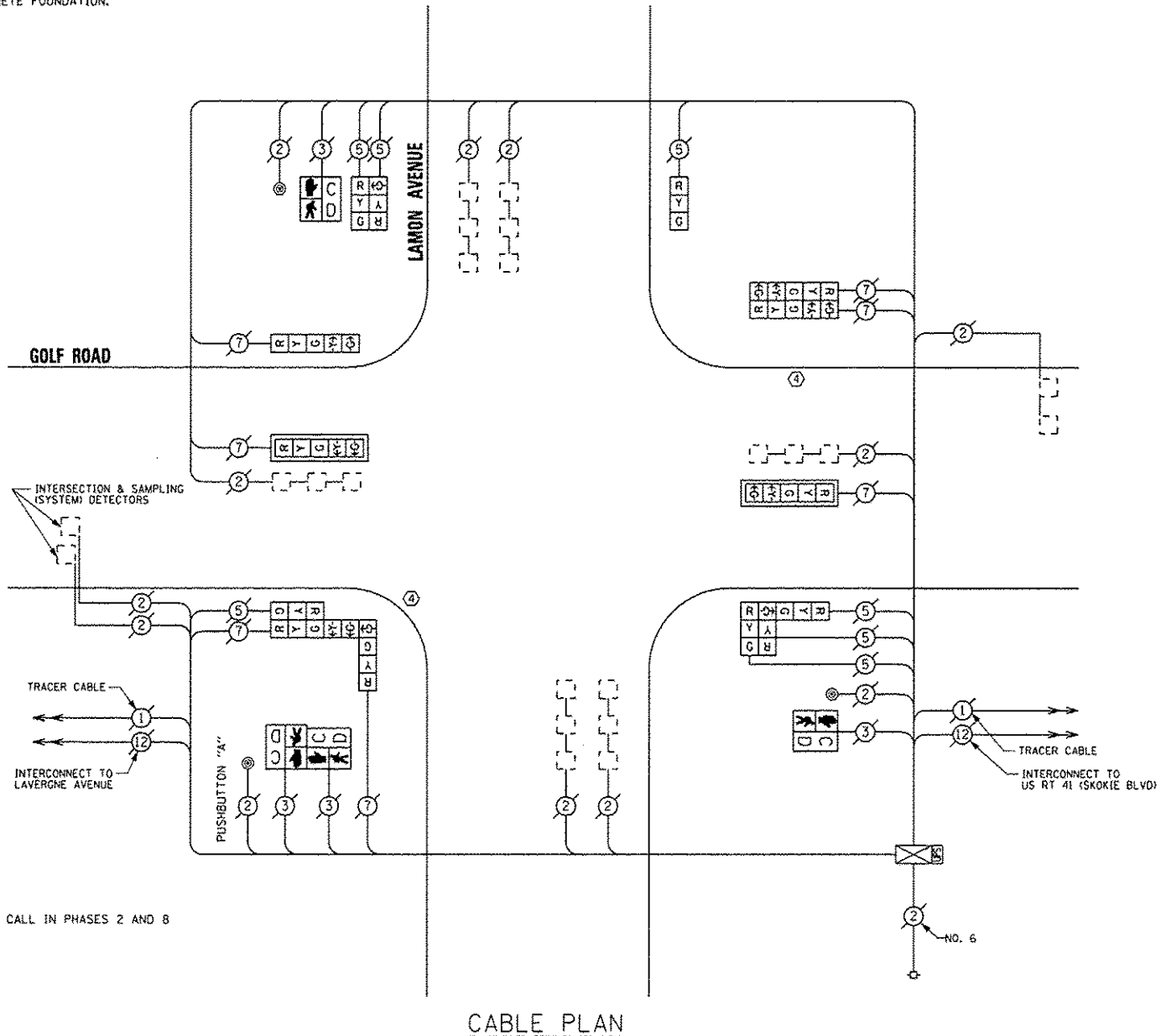


- LEGEND**
- SINGLE ENTRY PHASE
 - DUAL ENTRY PHASE
 - OVERLAP
 - PEDESTRIAN PHASE
 - NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
C	6	1

④ REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION.



NOTE:
PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 8

REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

CABLE PLAN

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
2	EACH	TRAFFIC SIGNAL POST
1	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
3	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION
1	EACH	SIGNAL HEAD, 2-FACE, 3-SECTION
1	EACH	SIGNAL HEAD, 2-FACE, 5-SECTION
1	EACH	SIGNAL HEAD, LED, 3-FACE, 3-SECTION
1	EACH	SIGNAL HEAD, LED, 3-FACE, 1-3 SECTION, 1-4 SECTION, 1-5 SECTION
2	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
1	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
2	EACH	TRAFFIC SIGNAL BACKPLATE
3	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND.	LED	% OPERATIONS	
SIGNAL (RED)	14		17	0.50	119.00
(YELLOW)	14		25	0.25	87.50
(GREEN)	15		15	0.25	56.25
ARROW	12		12	0.10	14.40
PED. SIGNAL	4		25	1.00	100.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 477.15

VILLAGE OF SKOKIE
5127 OAKTON STREET
SKOKIE, ILLINOIS 60077

ENERGY SUPPLY - CONTACT: TERRI BLECK
PHONE: (847) 816-5239
COMPANY: ComEd

SAM SCHWARTZ ENGINEERING
3100 N. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

DESIGNED - JAM
DRAWN - JAM
CHECKED - LMM
DATE - 12-13-13

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

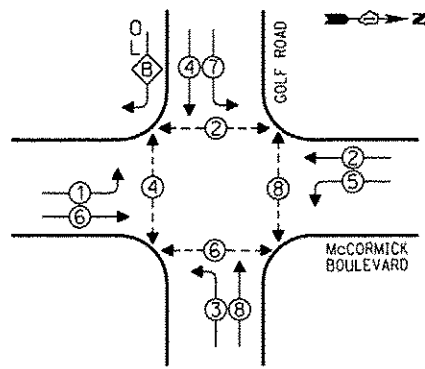
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE,
GOLF ROAD AT LAMON AVENUE

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	46

CONTRACT NO. 60X28
ILLINOIS FED. AID PROJECT

CONTROLLER SEQUENCE

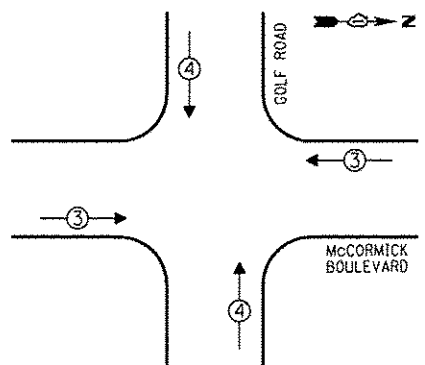


- LEGEND**
- SINGLE ENTRY PHASE
 - DUAL ENTRY PHASE
 - ◇ OVERLAP
 - ⊙ PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE

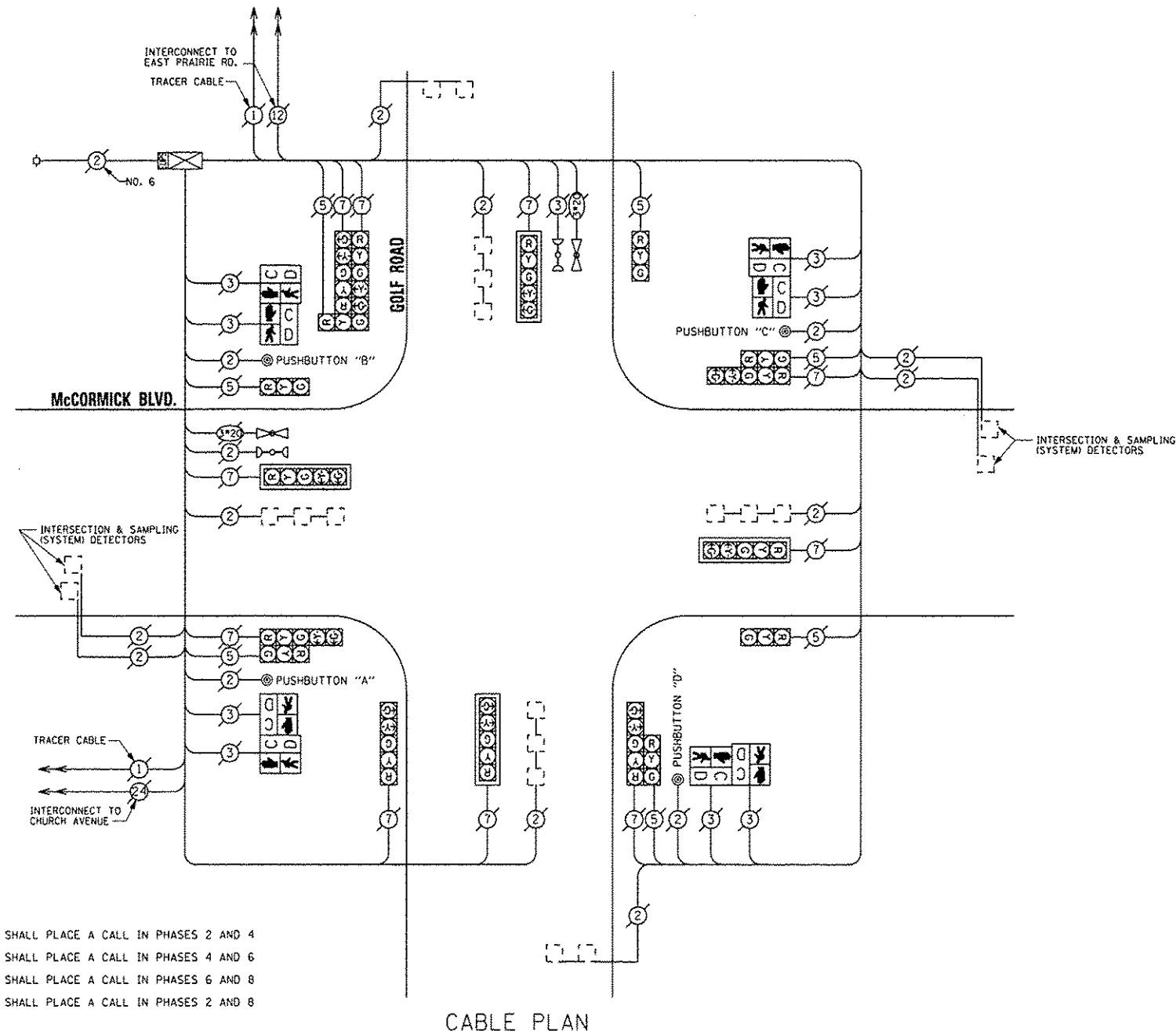
PHASE DESIGNATION DIAGRAM

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	= 4	+ 5

EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↔	↕



CABLE PLAN

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

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
4	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
4	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

I.O.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND.	LED	% OPERATIONS	
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	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 620.00

VILLAGE OF SKOKIE
 5127 DAKTON STREET
 SKOKIE, ILLINOIS 60077

ENERGY SUPPLY - CONTACT: FERRI BLECK
 PHONE: (847) 816-5239
 COMPANY: ComEd



DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

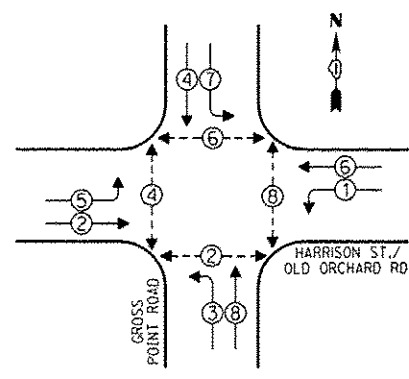
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
 DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE,
 GOLF ROAD AT McCORMICK BOULEVARD

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	47
			CONTRACT NO. 60X2B	
ILLINOIS FED. AID PROJECT				



CONTROLLER SEQUENCE

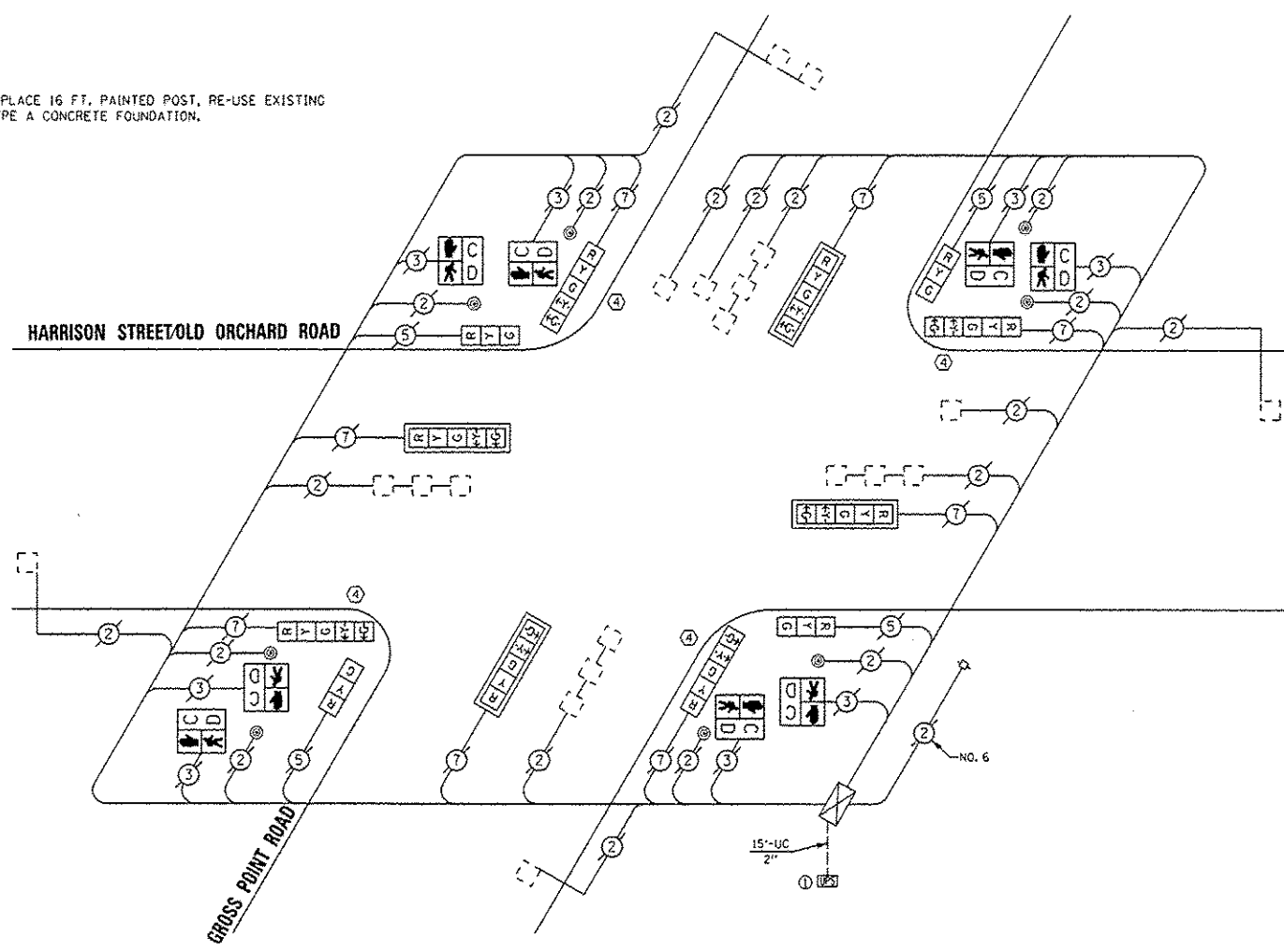


LEGEND
 □ SINGLE ENTRY PHASE
 ⊕ DUAL ENTRY PHASE
 ⊕ OVERLAP
 ⊕ PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

CONSTRUCTION NOTE:
 THE UPS SHALL BE INSTALLED NEXT TO THE EXISTING CONTROLLER CABINET USING HELICAL GROUND ANCHORS DUE TO THE PHYSICAL CONSTRAINTS OR AS DIRECTED BY THE RESIDENT ENGINEER. THIS WORK AND ALL CONDUIT AND ELECTRICAL CABLE NEEDED TO PROPERLY INSTALL THE UPS SHALL BE INCLUDED IN THE PAY ITEM "UNINTERRUPTABLE POWER SUPPLY, GROUND MOUNTED". ALL RESTORATION SPECIFIED IN THE RESTORATION OF WORK AREA GENERAL NOTE SHALL BE CONSIDERED INCLUDED IN THE PAY ITEM "UNINTERRUPTABLE POWER SUPPLY, GROUND MOUNTED" AND NO ADDITIONAL COMPENSATION WILL BE PROVIDED.

④ REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION.



CABLE PLAN

REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
4	EACH	TRAFFIC SIGNAL POST
4	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
8	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION
8	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
4	EACH	TRAFFIC SIGNAL BACKPLATE
8	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAND. LED % OPERATIONS		
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
ILLUM. SIGN		25	0.05	
LUMINAIRE		250	0.50	
VIDEO SYSTEM		150	1.00	
FLASHER			0.50	
ENERGY COSTS TO:				TOTAL = 541.20

VILLAGE OF SKOKIE
 5127 OAKTON STREET
 SKOKIE, ILLINOIS 60077

ENERGY SUPPLY - CONTACT: TERRI BLECK
 PHONE: (847) 816-5239
 COMPANY: ConEd

SAM SCHWARTZ ENGINEERING
 3100 W. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

DESIGNED - JAM	REVISED - 01-28-14
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

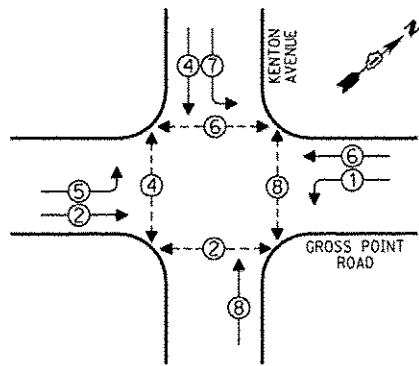
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE,
 HARRISON STREET / OLD ORCHARD ROAD AT GROSS POINT ROAD

SCALE: NONE SHEET OF SHEETS STA. TO STA.

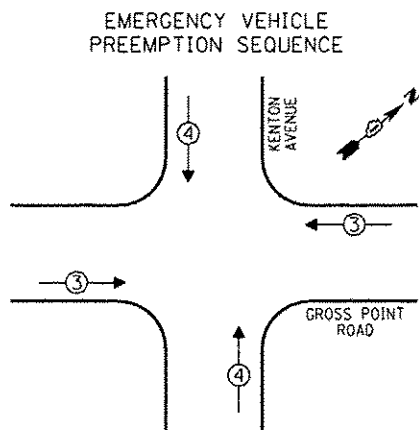
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	48
CONTRACT NO. 60X28				
ILLINOIS FED. AID PROJECT				

CONTROLLER SEQUENCE

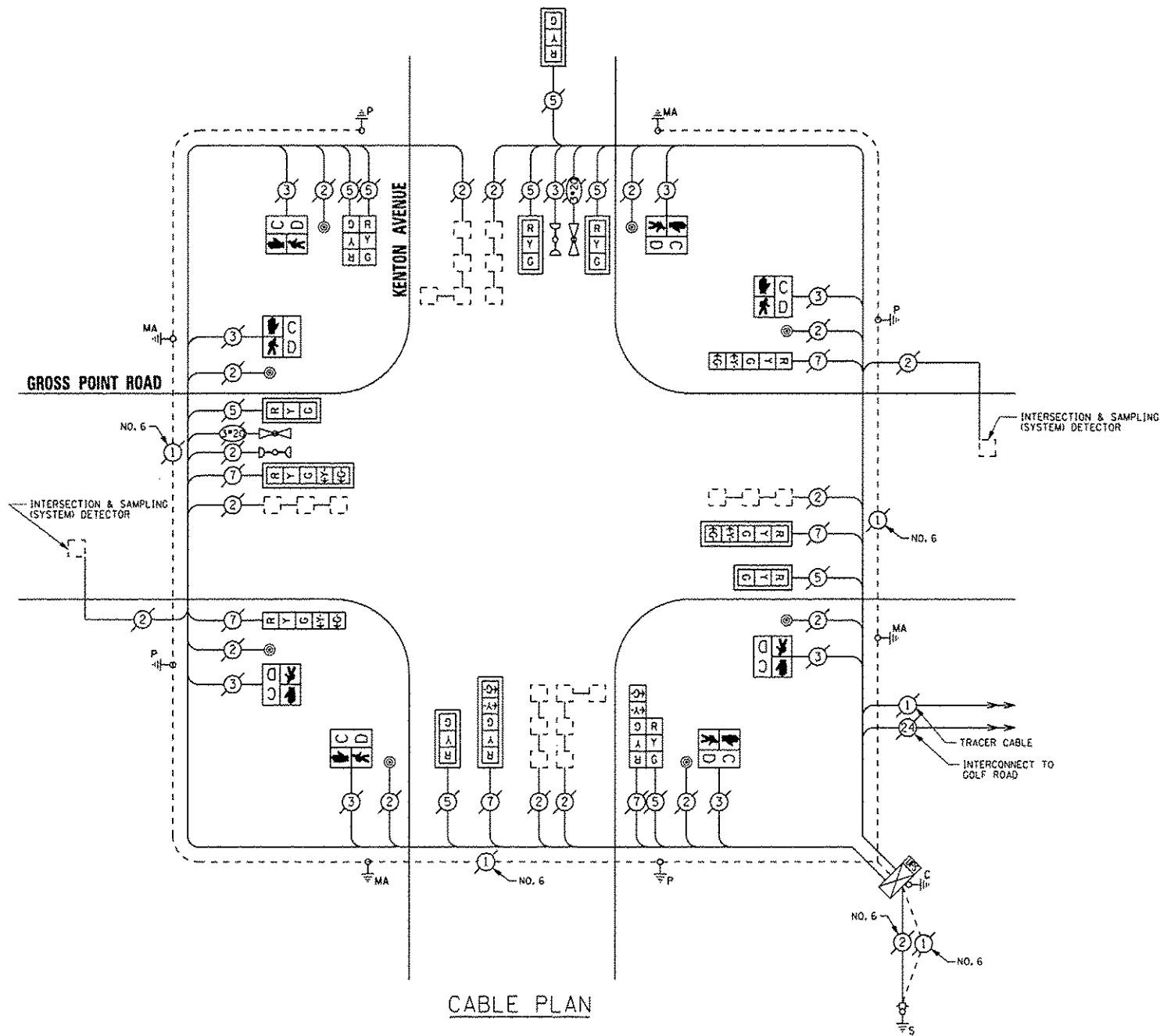


- LEGEND**
- SINGLE ENTRY PHASE
 - DUAL ENTRY PHASE
 - OVERLAP
 - PEDESTRIAN PHASE
 - NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↔	↕



RETROFIT ALL EXISTING TRAFFIC SIGNAL HEADS

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

CABLE PLAN

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
8	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
8	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND.	LED	% OPERATIONS	
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
PEDEST. SIGNAL	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 591.90

VILLAGE OF SKOKIE
5127 OAKTON STREET
SKOKIE, ILLINOIS 60077

ENERGY SUPPLY - CONTACT: TERRI BLECK
PHONE: (847) 816-5239
COMPANY: ComEd

SAM SCHWARTZ ENGINEERING
3100 W. HOGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

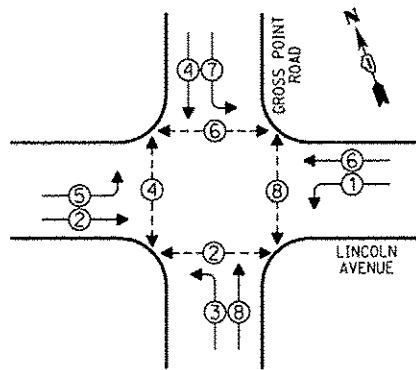
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, GROSS POINT ROAD AT KENTON AVENUE

SCALE: NONE SHEET OF SHEETS STA. TO STA.

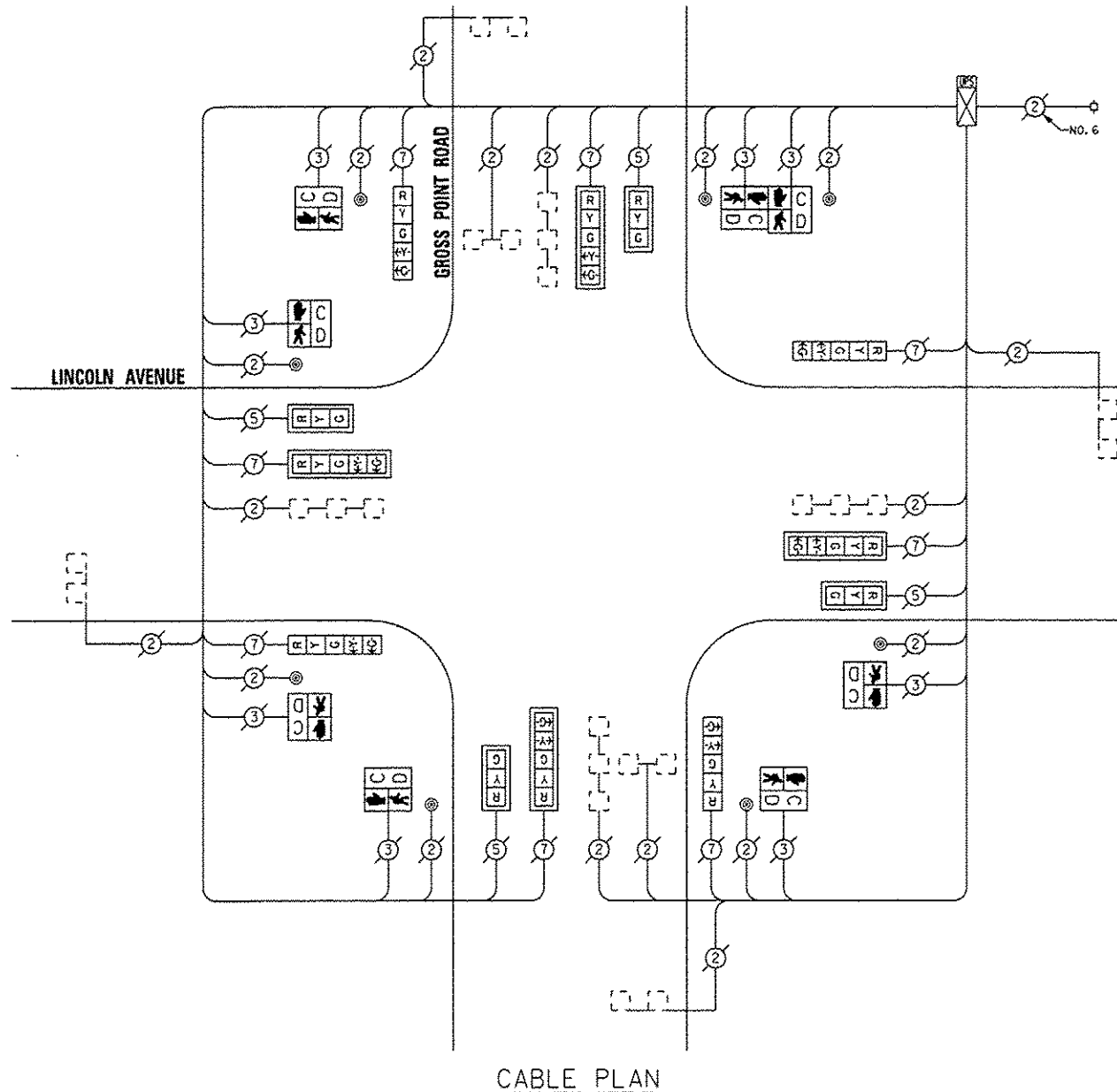
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-0531S	COOK	88	49
				CONTRACT NO. 60X28
ILLINOIS FED. AID PROJECT				

CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

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



CABLE PLAN

RETROFIT ALL EXISTING TRAFFIC SIGNAL HEADS

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND	LED % OPERATIONS	WATTAGE	
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
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:			TOTAL =		541.20

VILLAGE OF SKOKIE
5127 OAKTON STREET
SKOKIE, ILLINOIS 60077

ENERGY SUPPLY - CONTACT: TERRI BLECK
PHONE: (847) 816-5239
COMPANY: ComEd

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
6	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
1	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
8	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

SAM SCHWARTZ ENGINEERING
3100 W. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

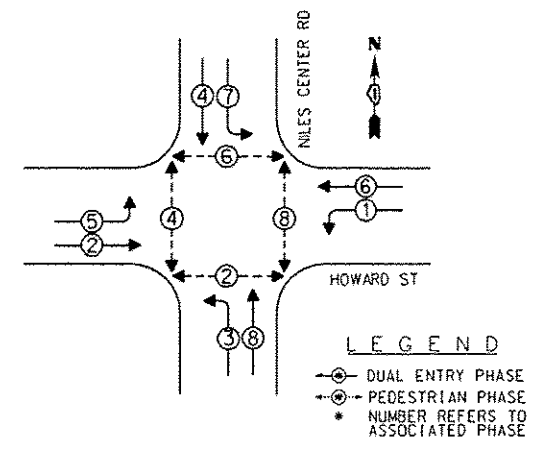
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE,
GROSS POINT ROAD AT LINCOLN AVENUE

SCALE: NONE SHEET OF SHEETS STA. TO STA.

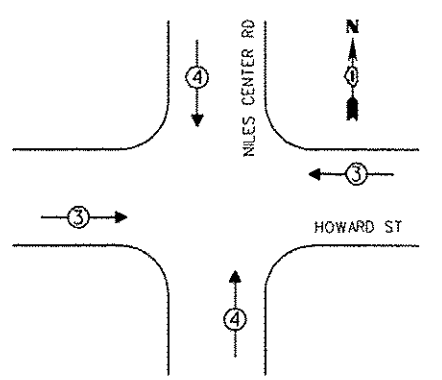
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	50
			CONTRACT NO. 60X28	
ILLINOIS FED. AID PROJECT				

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

RETROFIT ALL EXISTING TRAFFIC SIGNAL HEADS

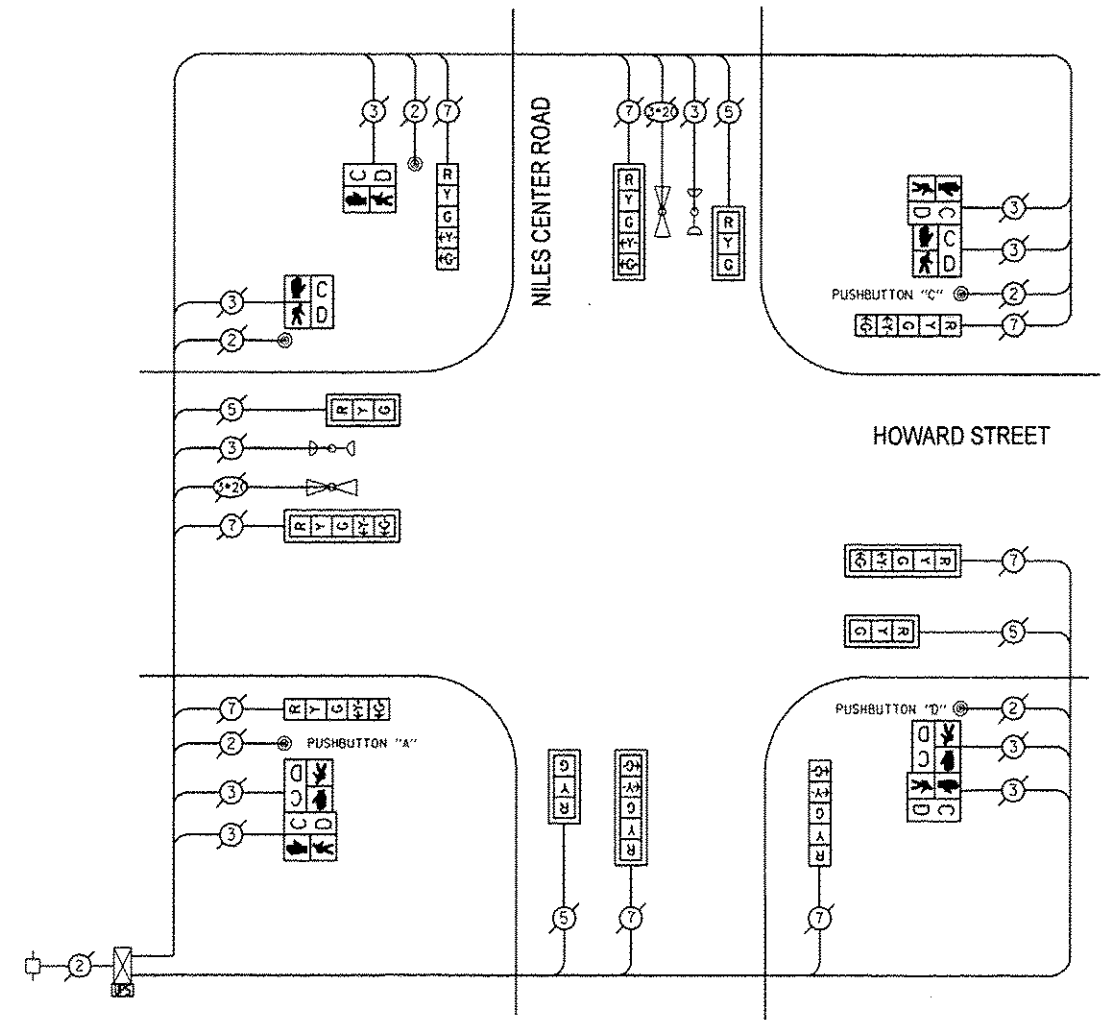
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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.

QUANTITY	UNIT	DESCRIPTION
2	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
3	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
5	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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



CABLE PLAN

PUSHBUTTON "A" SHALL PLACE A CALL TO PHASES 2 & 4
 PUSHBUTTON "C" SHALL PLACE A CALL TO PHASES 6 & 8
 PUSHBUTTON "D" SHALL PLACE A CALL TO PHASES 2 & 8

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

FILE NAME: P:\2012\ME12014_P10162_10_Schwar tz\CA00V\PH04_NorthCook_LED_6\Shets\60X28-shr-TS-HowardSt-NilesCenterRd.dgn
 PLOT SCALE: 1/8" = 1'-0"
 USER NAME: Millennium Professional Services

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND	LED X % OPERATIONS	
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
ILLUM. SIGN		0	0	0
VIDEO VEH. SENSOR		0	0	0
FLASHER		0	0	0
ENERGY COSTS TO:				TOTAL = 541.20

VILLAGE OF SKOKIE
 5127 OAKTON ST.
 SKOKIE, IL 60077

ENERGY SUPPLY - CONTACT: TERRIBLECK
 PHONE: (847) 816-5239
 COMPANY: ComEd

MILLENNIA PROFESSIONAL SERVICES
 2400 Warrenville Road, Suite 203, Downers Grove, IL 60515-1761
 630.705.0110 voice, 630.839.2566 fax
 www.mps-ll.com

DESIGNED - JNP	REVISED -
DRAWN - JNP	REVISED -
CHECKED - TVN	REVISED -
DATE - 12/9/2013	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

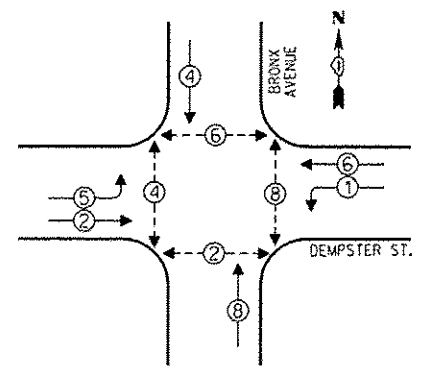
**SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM,
 AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 HOWARD STREET AT NILES CENTER ROAD**

SCALE: N/A SHEET OF SHEETS STA. TO STA.

F.A.P. RTE. VAR	SECTION 2013-053TS	COUNTY COOK	TOTAL SHEETS 88	SHEET NO. 51
CONTRACT NO. 60X28				
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT				



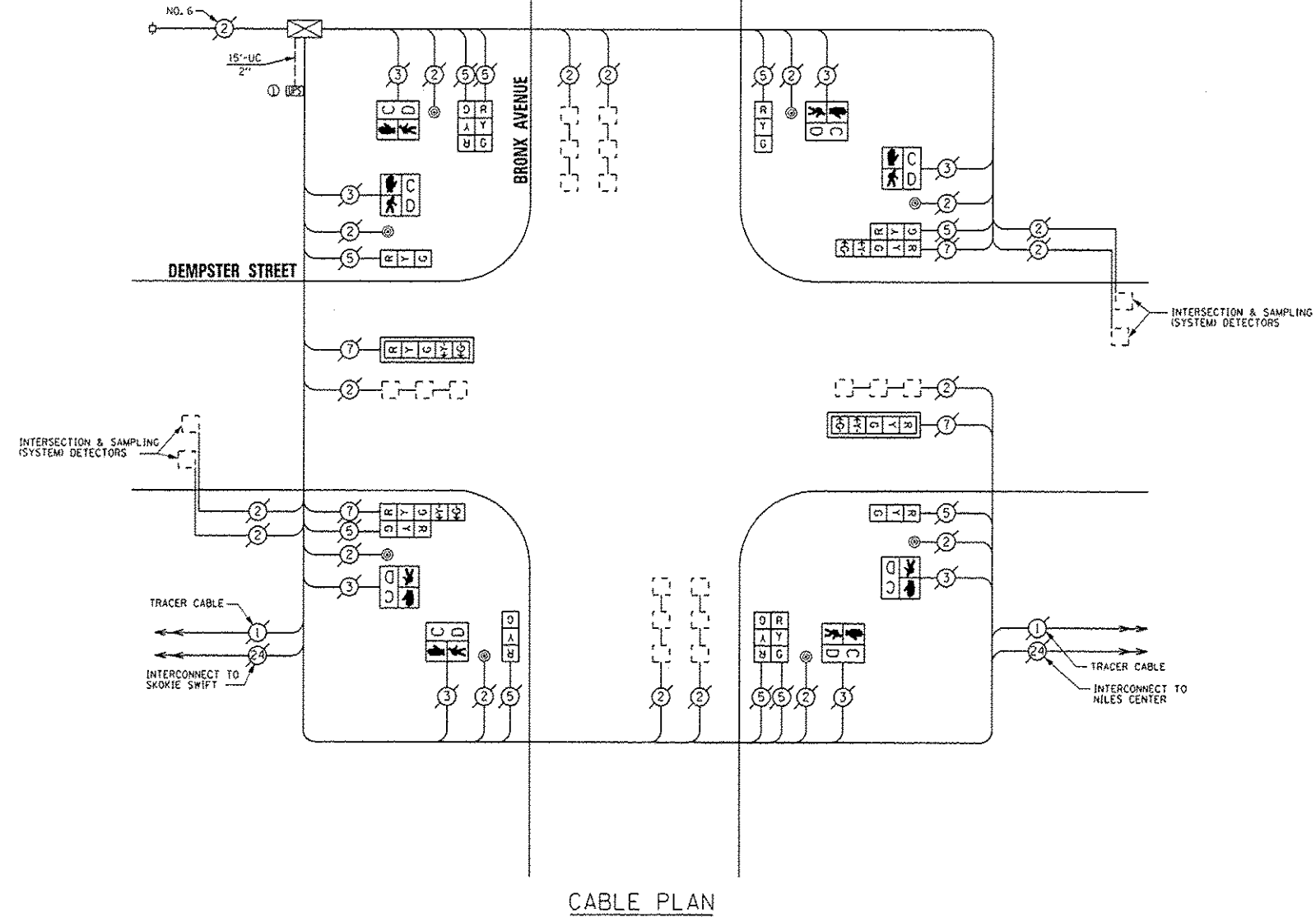
CONTROLLER SEQUENCE



LEGEND
 [Symbol] SINGLE ENTRY PHASE
 [Symbol] DUAL ENTRY PHASE
 [Symbol] OVERLAP
 [Symbol] PEDESTRIAN PHASE
 [Symbol] NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

CONSTRUCTION NOTE:
 THE UPS SHALL BE INSTALLED NEXT TO THE EXISTING CONTROLLER CABINET USING HELICAL GROUND ANCHORS DUE TO THE PHYSICAL CONSTRAINTS OR AS DIRECTED BY THE RESIDENT ENGINEER. THIS WORK AND ALL CONDUIT AND ELECTRICAL CABLE NEEDED TO PROPERLY INSTALL THE UPS SHALL BE INCLUDED IN THE PAY ITEM "UNINTERRUPTABLE POWER SUPPLY, GROUND MOUNTED". ALL RESTORATION SPECIFIED IN THE RESTORATION OF WORK AREA GENERAL NOTE SHALL BE CONSIDERED INCLUDED IN THE PAY ITEM "UNINTERRUPTABLE POWER SUPPLY, GROUND MOUNTED" AND NO ADDITIONAL COMPENSATION WILL BE PROVIDED.



CABLE PLAN

REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND	LED % OPERATIONS	
SIGNAL (RED)	14	17	0.50	119.00
(YELLOW)	14	25	0.25	87.50
(GREEN)	14	15	0.25	52.50
ARROW	8	12	0.10	9.60
PED. SIGNAL	8	25	1.00	200.00
CONTROLLER	1	100	1.00	100.00
ILLUM. SIGN		25	0.05	
LUMINAIRE		250	0.50	
VIDEO SYSTEM		150	1.00	
FLASHER			0.50	
ENERGY COSTS TO:				TOTAL = 588.60

VILLAGE OF SKOKIE
 5127 OAKTON STREET
 SKOKIE, ILLINOIS 60077

ENERGY SUPPLY - CONTACT: TERRI BLECK
 PHONE: (847) 816-5239
 COMPANY: COMEG

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
4	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
2	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION
2	EACH	SIGNAL HEAD, 2-FACE, 3-SECTION
2	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION
8	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
2	EACH	TRAFFIC SIGNAL BACKPLATE
8	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

SAM SCHWARTZ ENGINEERING
 3100 W. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

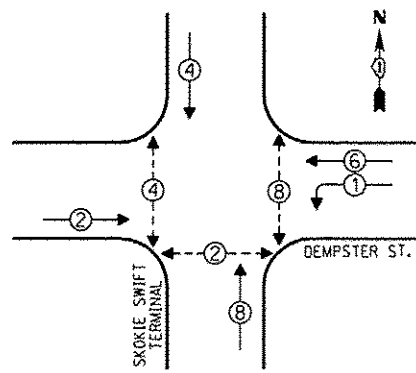
DESIGNED - JAM	REVISED - 01-28-14
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, DEMPSTER STREET AT BRONX AVENUE

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	52
CONTRACT NO. 60X28			ILLINOIS FED. AID PROJECT	

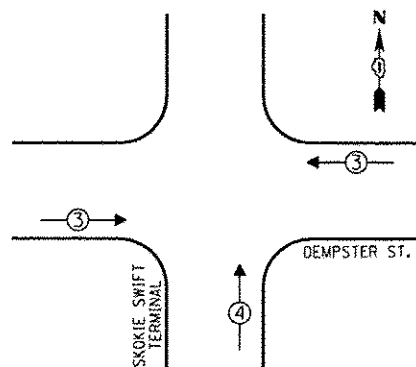
CONTROLLER SEQUENCE



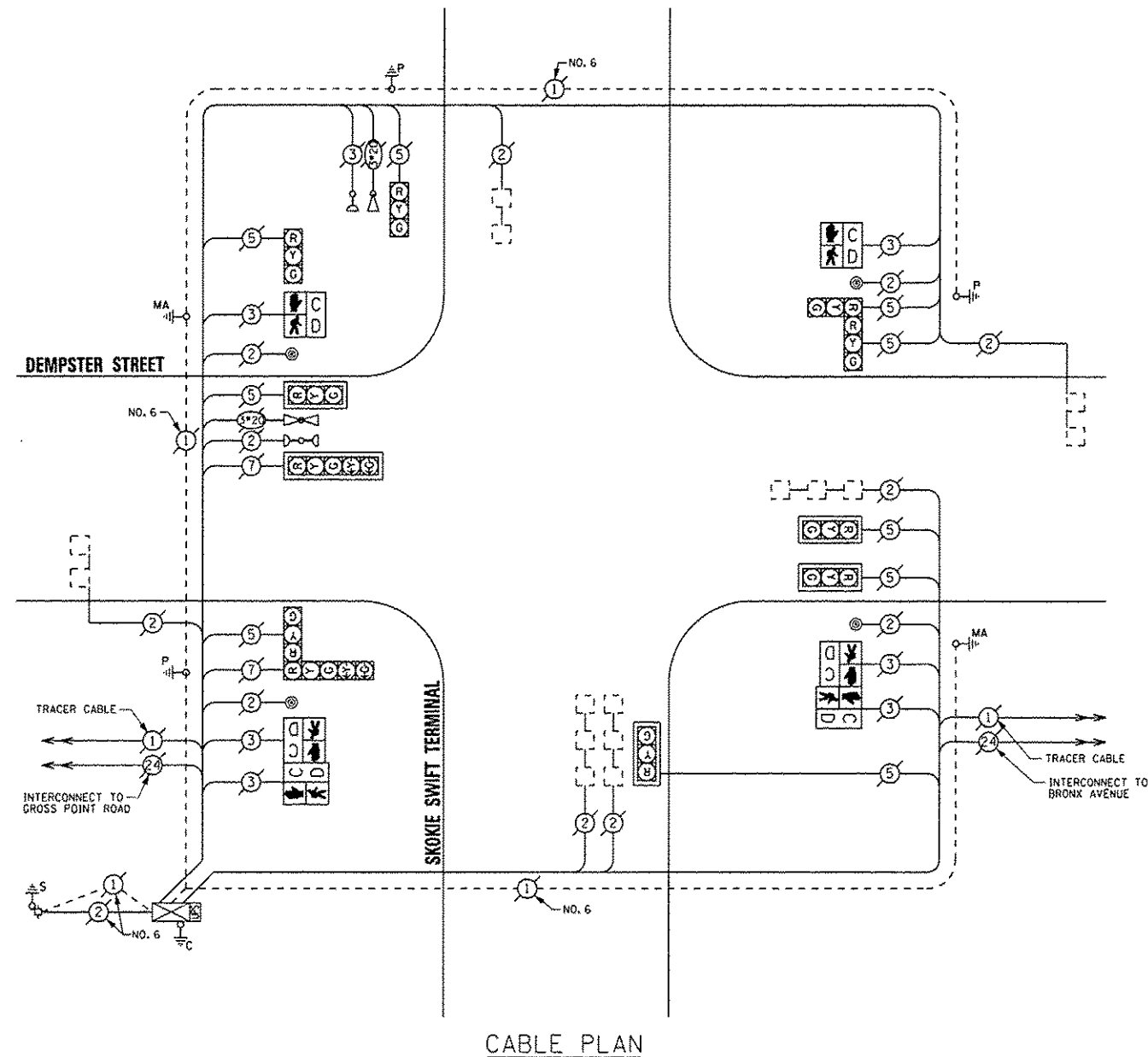
- LEGEND**
- SINGLE ENTRY PHASE
 - DUAL ENTRY PHASE
 - OVERLAP
 - PEDESTRIAN PHASE
 - NUMBER REFERS TO ASSOCIATED PHASE

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".

I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. OF LAMPS	INCAND.	LED % OPERATIONS	TOTAL WATTAGE	
SIGNAL (RED)	11		17	0.50	93.50
(YELLOW)	11		25	0.25	68.75
(GREEN)	11		15	0.25	41.25
ARROW	4		12	0.10	4.80
PED. SIGNAL	6		25	1.00	150.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN			25	0.50	
LUMINAIRE		250			
VIDEO SYSTEM		150			
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	458.30

VILLAGE OF SKOKIE
5127 OAKTON STREET
SKOKIE, ILLINOIS 60077

ENERGY SUPPLY - CONTACT: TERRI BLECK
PHONE: (847) 816-5239
COMPANY: ComEd

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
2	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
2	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
4	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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



DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

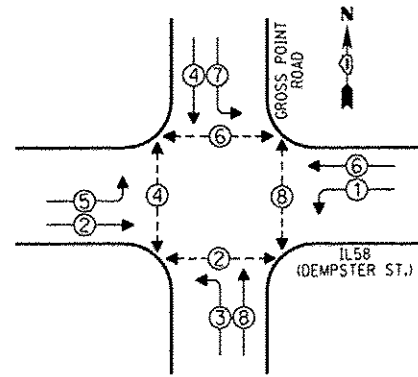
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE,
DEMPSTER STREET AT SKOKIE SWIFT TERMINAL

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	53
			CONTRACT NO. 60X28	
ILLINOIS FED. AID PROJECT				

CONTROLLER SEQUENCE

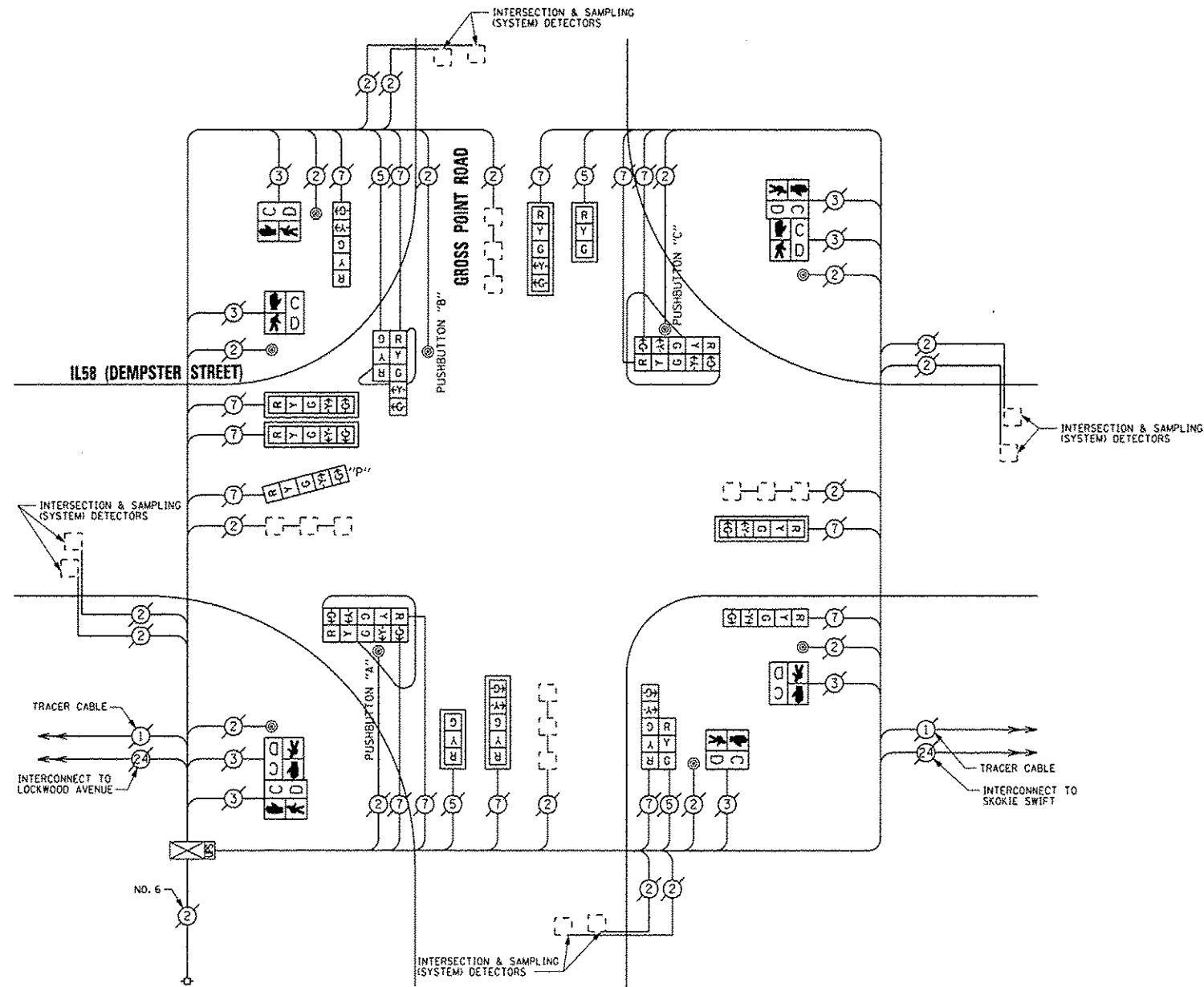


- LEGEND**
- SINGLE ENTRY PHASE
 - DUAL ENTRY PHASE
 - OVERLAP
 - PEDESTRIAN PHASE
 - NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

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



CABLE PLAN

REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE	
TYPE	NO. OF LAMPS	INCAND	LED % OPERATIONS		
SIGNAL (RED)	18		17	0.50	153.00
(YELLOW)	18		25	0.25	112.50
(GREEN)	18		15	0.25	67.50
ARROW	30		12	0.10	36.00
PED. SIGNAL	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	669.00

VILLAGE OF SKOKIE
5127 OAKTON STREET
SKOKIE, ILLINOIS 60077

ENERGY SUPPLY - CONTACT: TERRI BLECK
PHONE: (847) 816-5239
COMPANY: ComEd

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
2	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
8	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION
2	EACH	SIGNAL HEAD, 2-FACE, 5-SECTION
2	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION
4	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
2	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
7	EACH	TRAFFIC SIGNAL BACKPLATE
9	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

SAM SCHWARTZ ENGINEERING
3100 N. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

DESIGNED - JAM
DRAWN - JAM
CHECKED - LMM
DATE - 12-13-13

REVISED -
REVISED -
REVISED -
REVISED -

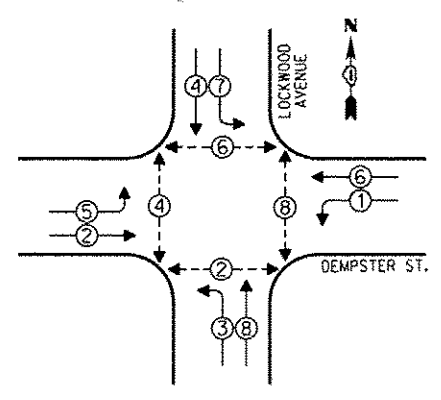
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE,
IL58 (DEMPSTER STREET) AT GROSS POINT ROAD

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	54
			CONTRACT NO. 60X28	
ILLINOIS FED. AID PROJECT				

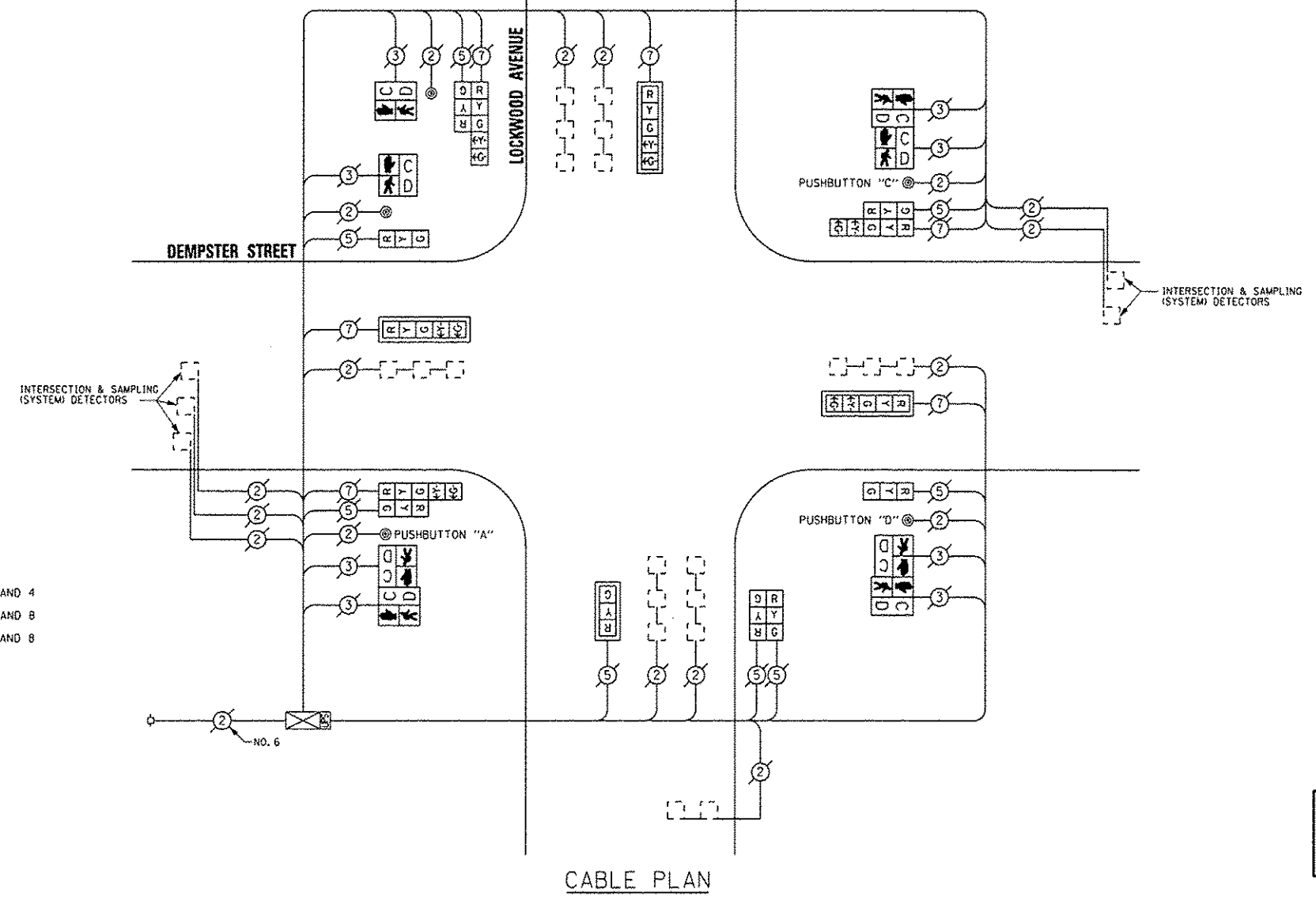
CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

LEGEND
 [Symbol] SINGLE ENTRY PHASE
 [Symbol] DUAL ENTRY PHASE
 [Symbol] OVERLAP
 [Symbol] PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

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



CABLE PLAN

REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
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, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION
2	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
3	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
4	EACH	TRAFFIC SIGNAL BACKPLATE
5	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE	
TYPE	NO. OF LAMPS	INCAND.	LED % OPERATIONS		
SIGNAL (RED)	14		17	0.50	119.00
(YELLOW)	14		25	0.25	87.50
(GREEN)	14		15	0.25	52.50
ARROW	12		12	0.10	14.40
PED. SIGNAL	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	573.40

VILLAGE OF SKOKIE
 5127 OAKTON STREET
 SKOKIE, ILLINOIS 60077

ENERGY SUPPLY - CONTACT: TERRI BLECK
 PHONE: (847) 816-5239
 COMPANY: ConEd

SAM SCHWARTZ ENGINEERING
 3100 W. HOGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

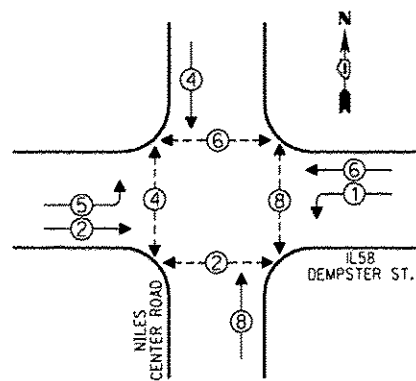
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, DEMPSTER STREET AT LOCKWOOD AVENUE

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	55
			CONTRACT NO. 60X28	
ILLINOIS FED. AID PROJECT				

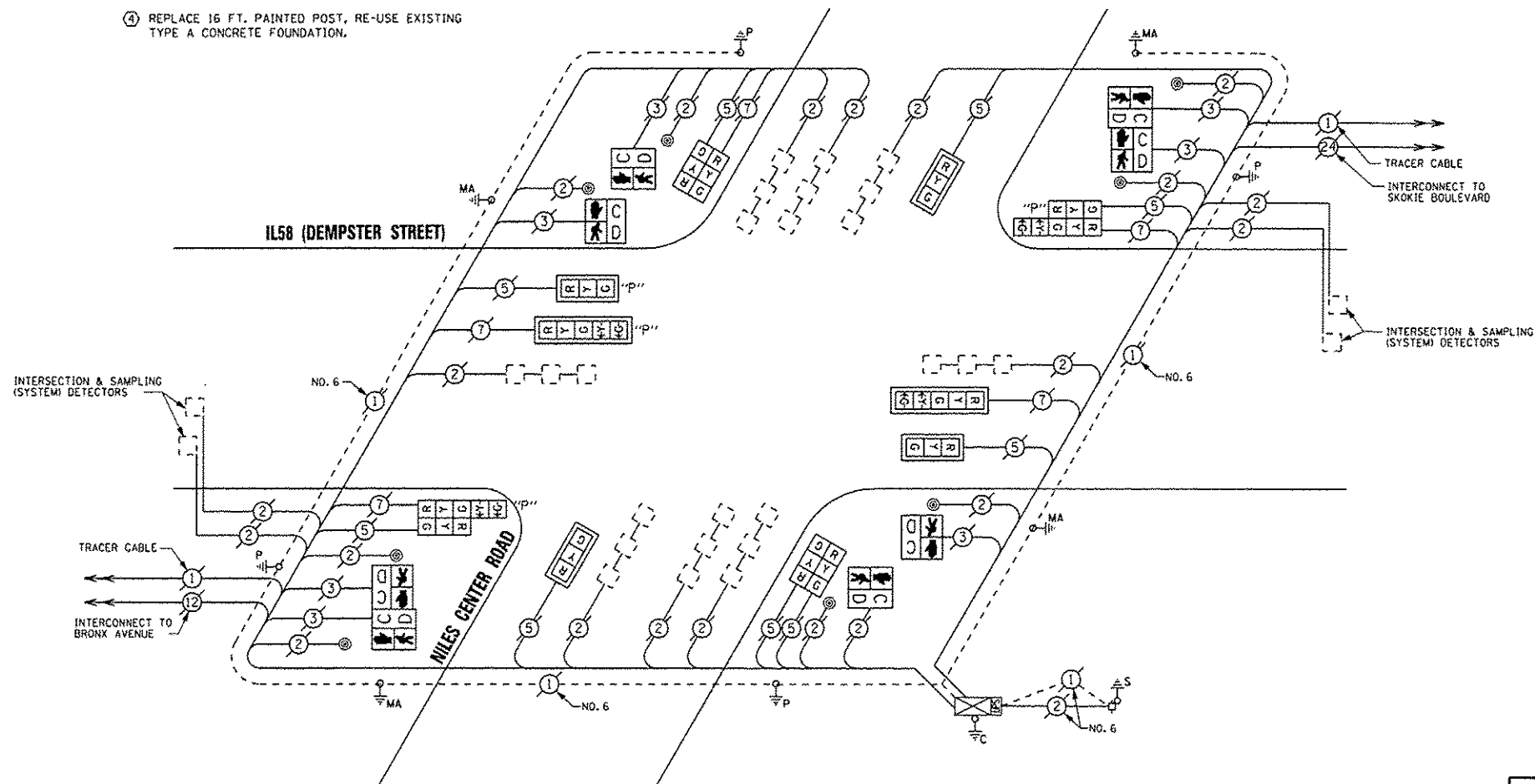
CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

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

④ REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION.



CABLE PLAN

REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

I.O.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. OF LAMPS X INCAND	WATTAGE		
SIGNAL (RED)	14	17	0.50	119.00
(YELLOW)	14	25	0.25	87.50
(GREEN)	14	15	0.25	52.50
ARROW	8	12	0.10	9.60
PED. SIGNAL	8	25	1.00	200.00
CONTROLLER	1	100	1.00	100.00
ILLUM. SIGN		25	0.05	
LUMINAIRE	250		0.50	
VIDEO SYSTEM	150		1.00	
FLASHER			0.50	
ENERGY COSTS TO:				TOTAL = 568.60

VILLAGE OF SKOKIE
5127 DAKTON STREET
SKOKIE, ILLINOIS 60077

ENERGY SUPPLY - CONTACT: TERRI BLECK
PHONE: (847) 816-5239
COMPANY: ComEd

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
4	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
2	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION
2	EACH	SIGNAL HEAD, 2-FACE, 3-SECTION
2	EACH	SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
6	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
1	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
6	EACH	TRAFFIC SIGNAL BACKPLATE
8	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

SAM SCHWARTZ ENGINEERING
3100 W. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

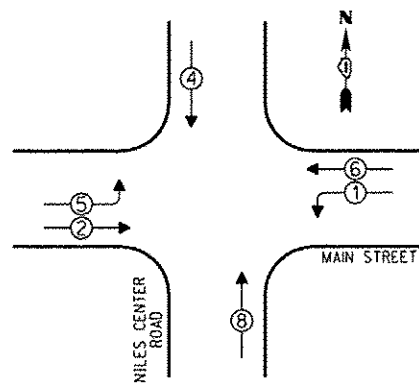
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, IL58 (DEMPSTER STREET) AT NILES CENTER ROAD

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	56
			CONTRACT NO. 60X28	
[ILLINOIS] FED. AID PROJECT				

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CONTROLLER SEQUENCE

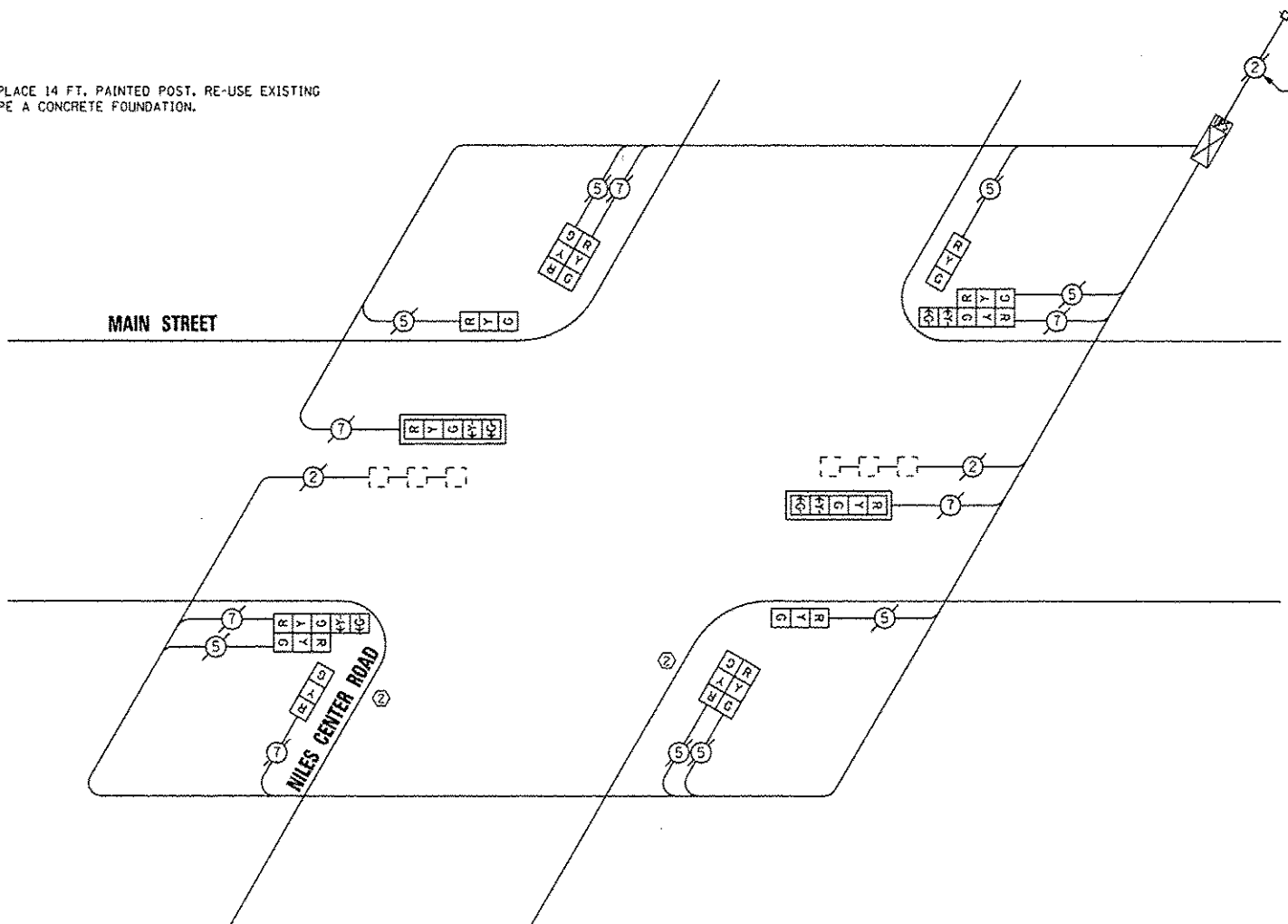


PHASE DESIGNATION DIAGRAM

LEGEND

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

② REPLACE 14 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.



CABLE PLAN

REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
2	EACH	TRAFFIC SIGNAL POST
4	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
2	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION
2	EACH	SIGNAL HEAD, 2-FACE, 3-SECTION
2	EACH	SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
2	EACH	TRAFFIC SIGNAL BACKPLATE

SCHEDULE OF QUANTITIES

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND.	LED	% OPERATIONS	
SIGNAL (RED)	14		17	0.50	119.00
(YELLOW)	14		25	0.25	87.50
(GREEN)	14		15	0.25	52.50
ARROW	8		12	0.10	9.60
PED. SIGNAL			25	1.00	
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 368.60

VILLAGE OF SKOKIE
5127 OAKTON STREET
SKOKIE, ILLINOIS 60077

ENERGY SUPPLY - CONTACT: TERRI BLECK
PHONE: (847) 816-5239
COMPANY: ComEd

DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

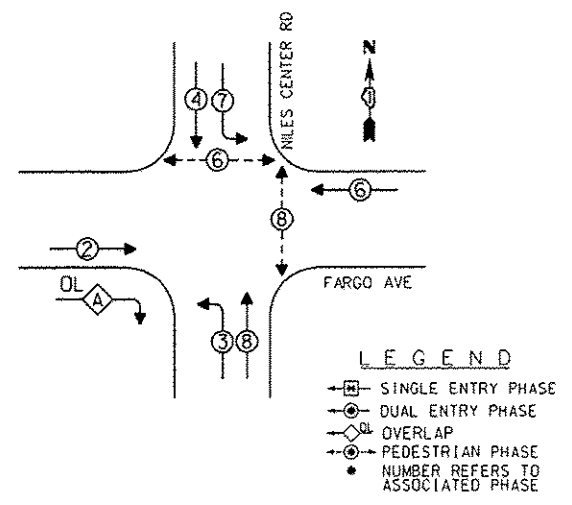
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, MAIN STREET AT NILES CENTER ROAD

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	58
CONTRACT NO. 60X28				
[ILLINOIS] FED. AID PROJECT				

SAM SCHWARTZ ENGINEERING
3100 W. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3

RETROFIT ALL EXISTING TRAFFIC SIGNAL HEADS

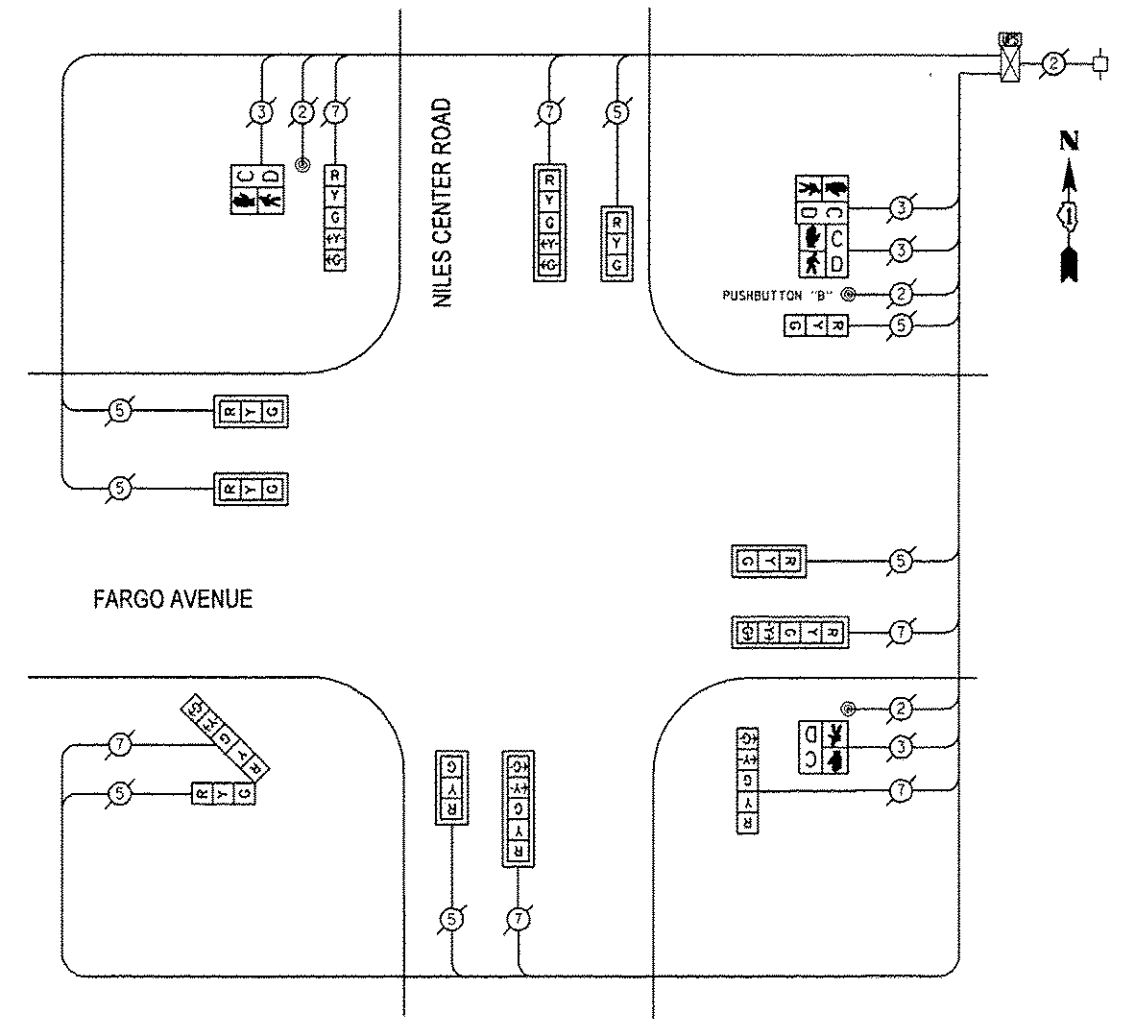
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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.

QUANTITY	UNIT	DESCRIPTION
2	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
1	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
3	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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



CABLE PLAN

PUSHBUTTON "B" SHALL PLACE A CALL TO PHASES 6 & 8

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

FILE NAME = P:\2013\11\2013_11_15_Schwerdt\CD\04_VH-04_Nor-U-Cook_LED_6\Shots\60X2B-11-15-NilesCenterRd-FargoAve.dgn
 PLOT SCALE = 3/8"=1'-0"
 USER NAME = Millennium Professional Services

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. OF LAMPS X INCAND	WATTAGE LED X % OPERATIONS		
SIGNAL (RED)	13	17	0.50	110.50
(YELLOW)	13	25	0.25	81.25
(GREEN)	13	15	0.25	48.75
ARROW	12	12	0.10	14.40
PEDESTRIAN SIGNAL	4	25	1.00	100.00
CONTROLLER	1	100	1.00	100.00
ILLUM. SIGN		0		0
VIDEO VEH. SENSOR		0		0
FLASHER		0		0
ENERGY COSTS TO:				TOTAL = 454.90

VILLAGE OF SKOKIE
5127 OAKTON ST.
SKOKIE, IL 60077

ENERGY SUPPLY - CONTACT: TERRIBLECK
PHONE: (847) 816-5239
COMPANY: ComEd

2600 Warrenville Road, Suite 203, Downers Grove, IL 60515-1761
630.795.0110 voice, 630.839.2566 fax
www.mps-ll.com

DESIGNED - JNP	REVISED -
DRAWN - JNP	REVISED -
CHECKED - TVN	REVISED -
DATE - 12/9/2013	REVISED -

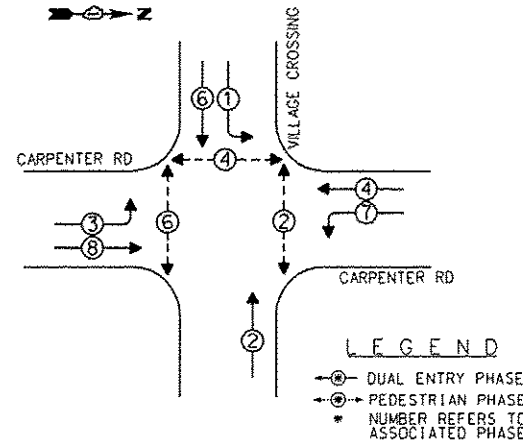
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN,
AND PHASE DESIGNATION DIAGRAM
NILES CENTER ROAD AT FARGO AVENUE

SCALE: N/A SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	59
			CONTRACT NO. 60X2B	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM

REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

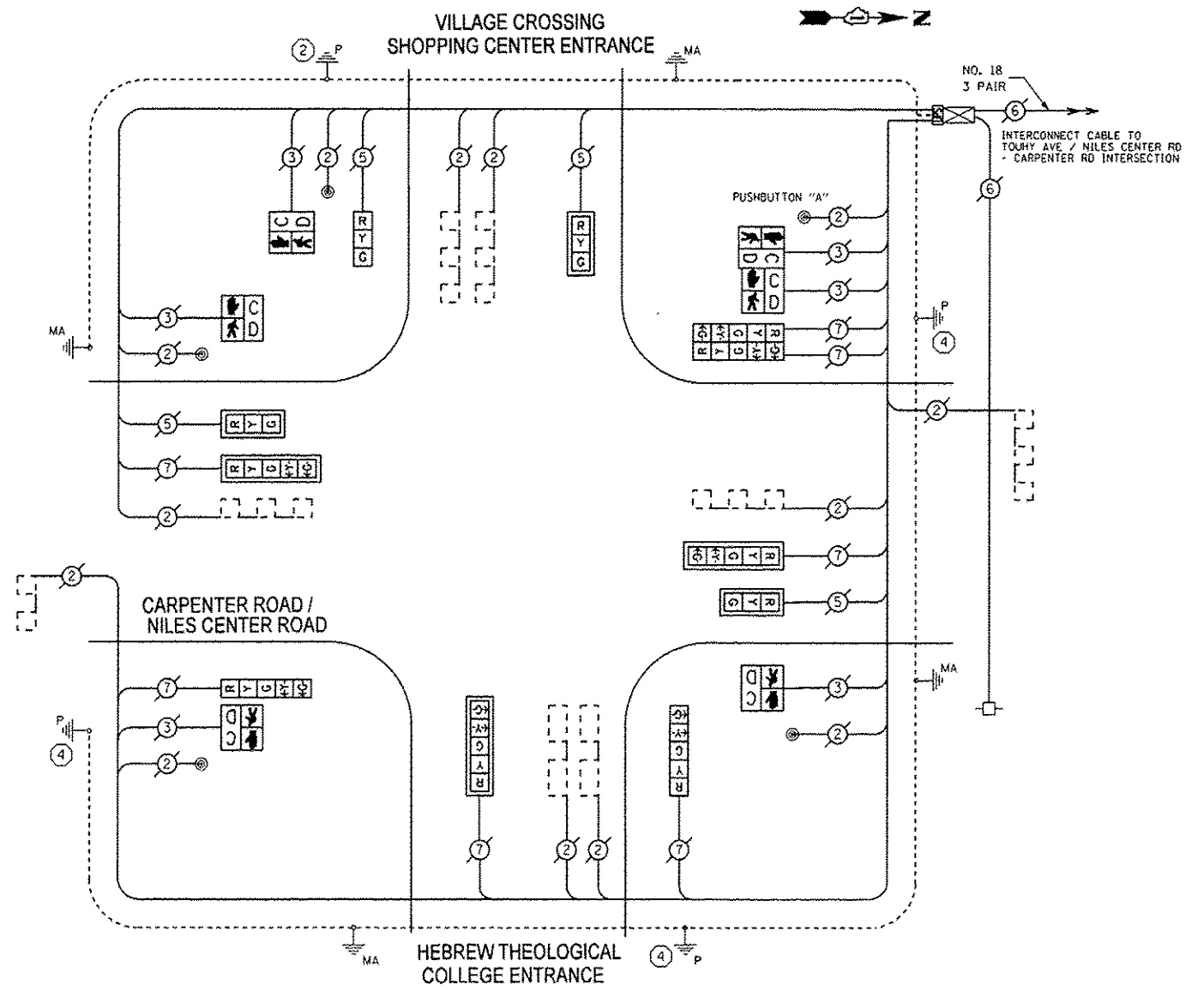
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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.

QUANTITY	UNIT	DESCRIPTION
4	EACH	TRAFFIC SIGNAL POST
4	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
5	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION
1	EACH	SIGNAL HEAD, 2-FACE, 5-SECTION
6	EACH	TRAFFIC SIGNAL BACKPLATE
4	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
1	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
5	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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



CABLE PLAN

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

PUSHBUTTON "A" SHALL PLACE A CALL TO PHASES 2 & 4

LEGENDS

- ② REPLACE 14 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
- ④ REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION

FILE NAME: P:\2013\ME\2014_P\16162_18_Schwartz\CADD\PH04_NorhtCook_LED_6\5hts\60X28-shr-TS-CarpenterRd_VillageCrossing.dgn
 USER: JNP
 DATE: 12/9/2013 10:58:58 AM
 MILLENNA PROFESSIONAL SERVICES

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAND	LED % OPERATIONS	
SIGNAL (RED)	11	17	0.50	93.50
(YELLOW)	11	25	0.25	68.75
(GREEN)	11	15	0.25	41.25
ARROW	14	12	0.10	16.80
PED. SIGNAL	6	25	1.00	150.00
CONTROLLER	1	100	1.00	100.00
ILLUM. SIGN		0	0	0
VIDEO VEH. SENSOR		0	0	0
FLASHER		0	0	0
ENERGY COSTS TO:				TOTAL = 470.30

ENERGY SUPPLY - CONTACT: TERRIBLECK
 PHONE: (847) 816-5239
 COMPANY: CbmEd

2600 Warrenville Road, Suite 203, Downers Grove, IL 60515-1761
 630.705.0110 voice, 630.839.2566 fax
 www.mps-ill.com

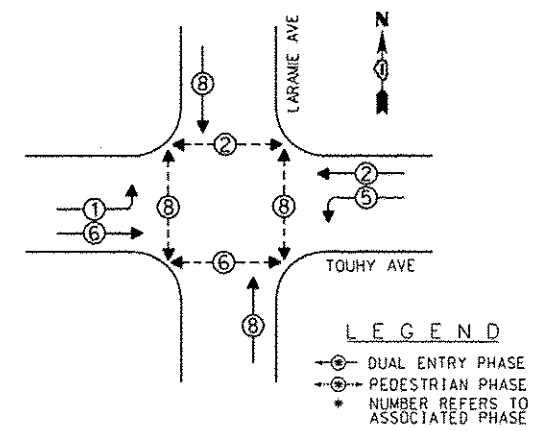
DESIGNED	JNP	REVISED	
DRAWN	JNP	REVISED	
CHECKED	TVN	REVISED	
DATE	12/9/2013	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM			
NILES CENTER RD/CARPENTER RD AT VILLAGE CROSSING SHOPPING CENTER		F.A.P. RTE.	SECTION
SCALE: N/A	SHEET OF SHEETS	STA.	TO STA.

COUNTY	TOTAL SHEETS	SHEET NO.
COOK	88	60
CONTRACT NO. 60X28		

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM

REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

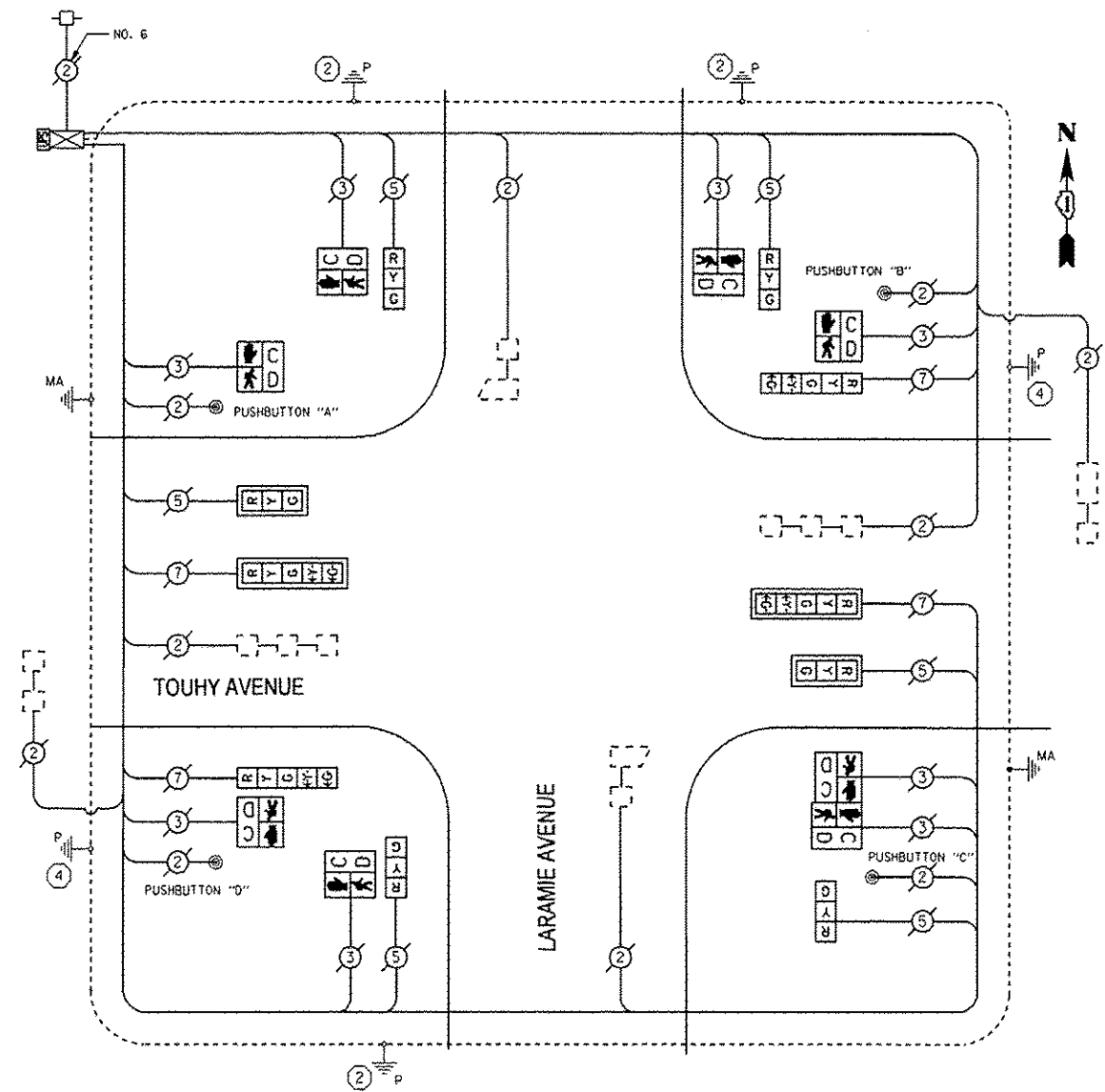
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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.

QUANTITY	UNIT	DESCRIPTION
5	EACH	TRAFFIC SIGNAL POST
6	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
4	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION
4	EACH	TRAFFIC SIGNAL BACKPLATE
6	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
1	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
4	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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



CABLE PLAN

PUSHBUTTON "A" SHALL PLACE A CALL TO PHASES 2 & 8
 PUSHBUTTON "B" SHALL PLACE A CALL TO PHASES 2 & 8
 PUSHBUTTON "C" SHALL PLACE A CALL TO PHASES 6 & 8
 PUSHBUTTON "D" SHALL PLACE A CALL TO PHASES 6 & 8

LEGENDS

- ② REPLACE 14 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
- ④ REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION

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

FILE NAME : P:\2012\ME12014_P1B162.1B_Schwarz\CAD\VPK4_NorwCook_LED_6\Shsta\60X28-shr-15-TouhyAve_LaramieAve.dgn
 PLOT SCALE : 1/8"=1'-0"
 USER NAME : J. Williams Professional Services

I.O.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND	LED % OPERATIONS	
SIGNAL (RED)	10	17	0.50	85.00
(YELLOW)	10	25	0.25	62.50
(GREEN)	10	15	0.25	37.50
ARROW	8	12	0.10	9.60
PED. SIGNAL	8	25	1.00	200.00
CONTROLLER	1	100	1.00	100.00
ILLUM. SIGN		0		0
VIDEO VEH. SENSOR		0		0
FLASHER		0		0
ENERGY COSTS TO:				TOTAL = 494.60

VILLAGE OF SKOKIE
 5127 OAKTON ST.
 SKOKIE, IL 60077

ENERGY SUPPLY - CONTACT: TERRIBLECK
 PHONE: (847) 616-5239
 COMPANY: ComEd

2600 Warrenville Road, Suite 203, Downers Grove, IL 60515-1761
 630.705.0110 voice, 630.839.2566 fax
 www.mps-ll.com

MILLENNIA PROFESSIONAL SERVICES

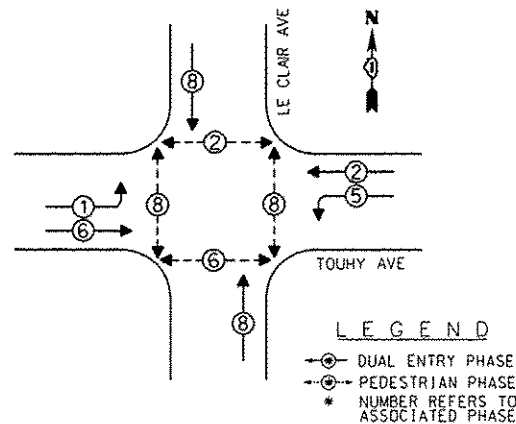
DESIGNED - JNP	REVISED -
DRAWN - JNP	REVISED -
CHECKED - TVN	REVISED -
DATE - 12/9/2013	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM		TOWHY AVENUE AT LARAMIE AVENUE	
SCALE: N/A	SHEET OF SHEETS	STA. TO STA.	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	61
CONTRACT NO. 60X28			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM

REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

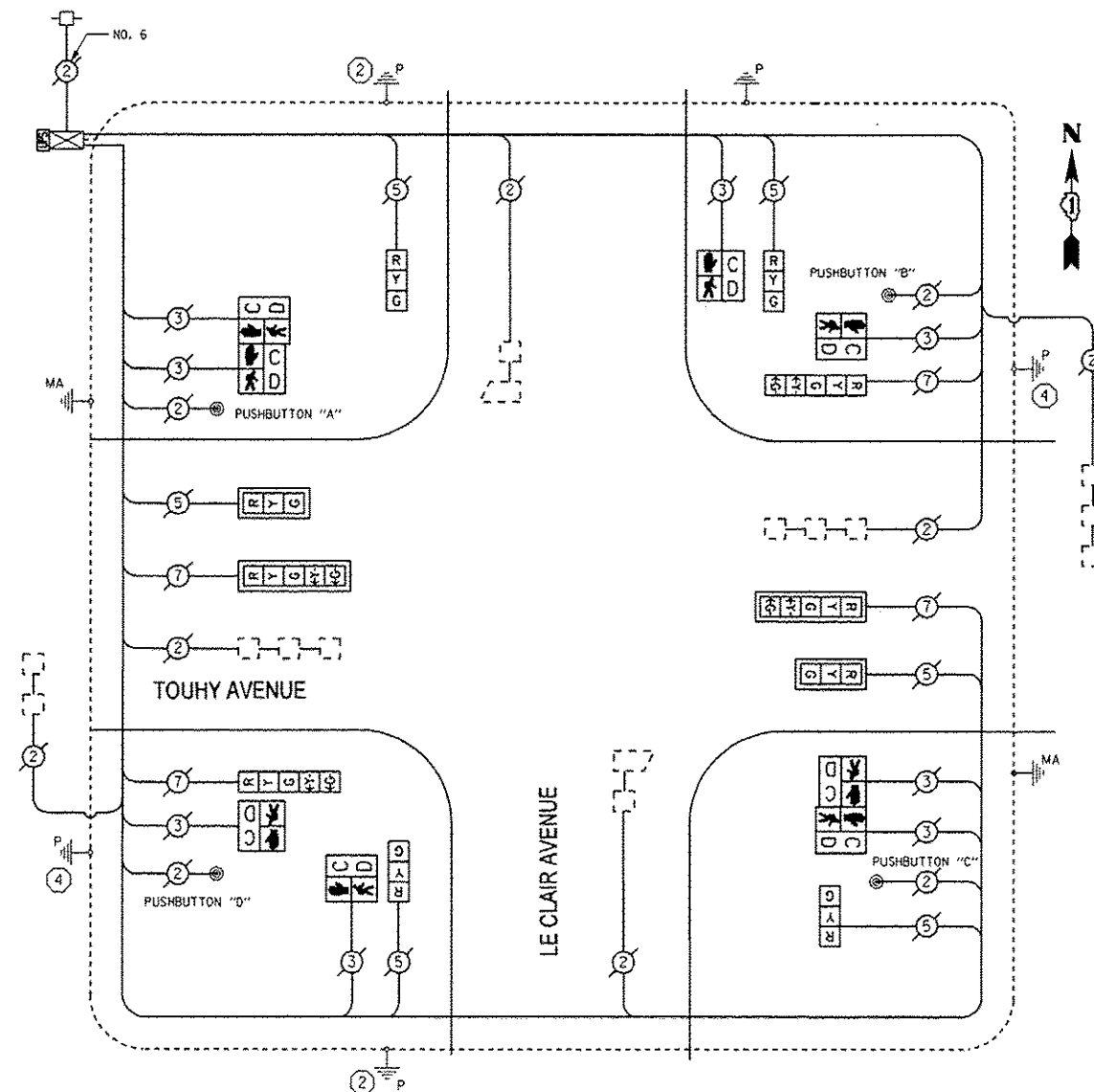
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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.

QUANTITY	UNIT	DESCRIPTION
4	EACH	TRAFFIC SIGNAL POST
6	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
4	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION
4	EACH	TRAFFIC SIGNAL BACKPLATE
2	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
3	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
4	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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



CABLE PLAN

PUSHBUTTON "A" SHALL PLACE A CALL TO PHASES 2 & 8
 PUSHBUTTON "B" SHALL PLACE A CALL TO PHASES 2 & 8
 PUSHBUTTON "C" SHALL PLACE A CALL TO PHASES 6 & 8
 PUSHBUTTON "D" SHALL PLACE A CALL TO PHASES 6 & 8

LEGENDS

- ② REPLACE 14 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
- ④ REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION

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

FILE NAME: P:\2012\ME12014.PT0162.10_Schwarz\CA00VPH04_NorthCook_LED.6\Shots\60X28-shr-TS-TouhyAve-LeClairAve.dgn
 PLOT SCALE: 1/8"=1'-0"
 USER NAME: Millennium Professional Services

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAND	LED % OPERATIONS	
SIGNAL (RED)	10	17	0.50	85.00
(YELLOW)	10	25	0.25	62.50
(GREEN)	10	15	0.25	37.50
ARROW	8	12	0.10	9.60
PEO. SIGNAL	8	25	1.00	200.00
CONTROLLER	1	100	1.00	100.00
ILLUM. SIGN		0	0	0
VIDEO VEH. SENSOR		0	0	0
FLASHER		0	0	0
ENERGY COSTS TO:				TOTAL = 494.60

VILLAGE OF SKOKIE
 5127 DAKTON ST.
 SKOKIE, IL 60077

ENERGY SUPPLY - CONTACT: TERRIBLECK
 PHONE: (847) 816-5239
 COMPANY: ComEd

2600 Warrenville Road, Suite 203, Downers Grove, IL 60515-1761
 630.705.0110 voice, 630.839.2566 fax
 www.mps-ill.com

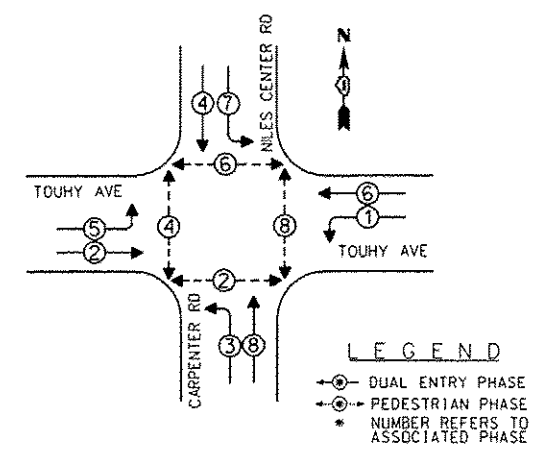
DESIGNED	JNP	REVISED	
DRAWN	JNP	REVISED	
CHECKED	TVN	REVISED	
DATE	12/9/2013	REVISED	

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN,
 AND PHASE DESIGNATION DIAGRAM
 TOUHY AVENUE AT LE CLAIR AVENUE

SCALE: N/A	SHEET OF SHEETS	STA. TO STA.	F.A.P. RTE. VAR	SECTION 2013-053TS	COUNTY COOK	TOTAL SHEETS 88	SHEET NO. 62
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EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM

REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

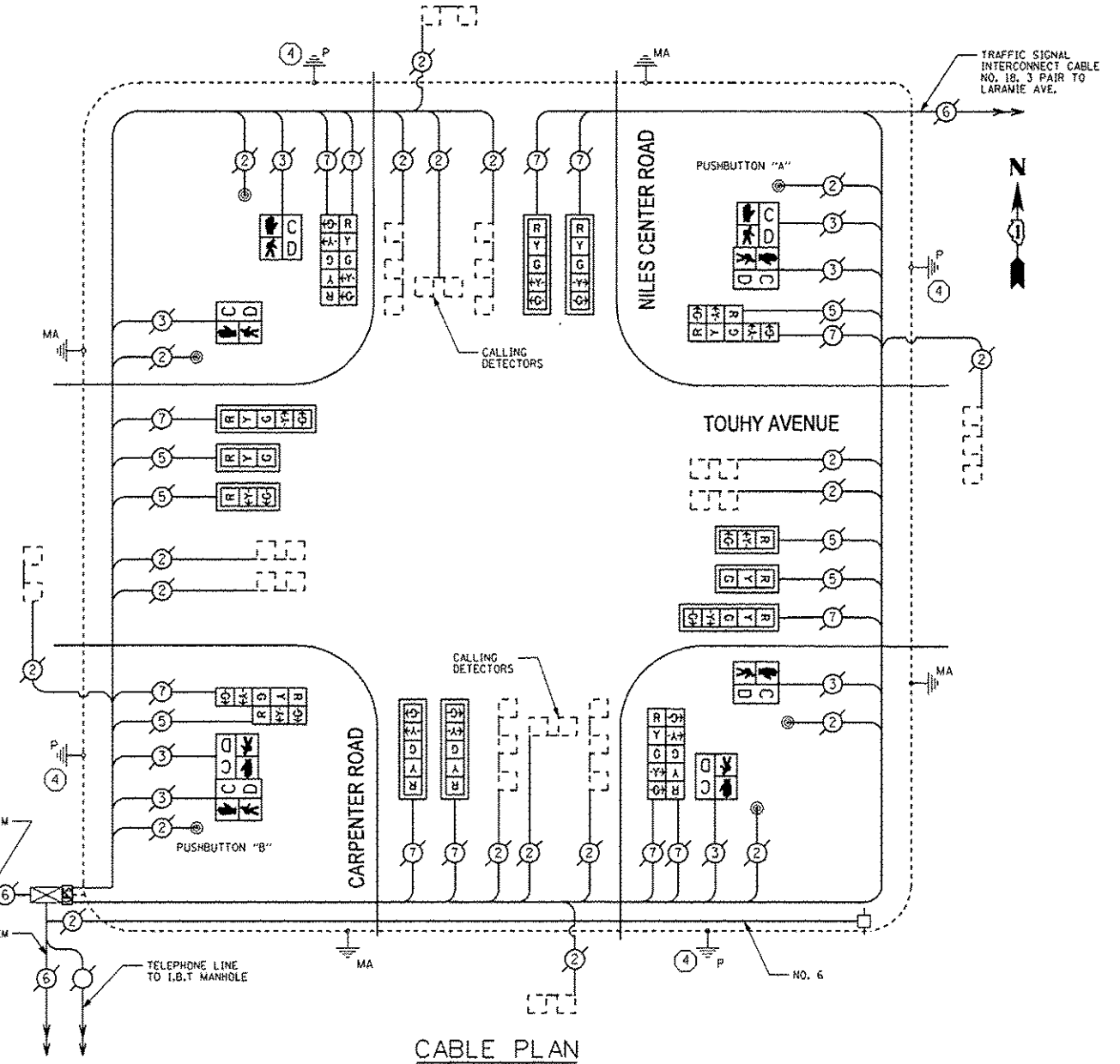
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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.

QUANTITY	UNIT	DESCRIPTION
4	EACH	TRAFFIC SIGNAL POST
4	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
6	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION
2	EACH	SIGNAL HEAD, 2-FACE, 1-3-SECTION, 1-5-SECTION
2	EACH	SIGNAL HEAD, 2-FACE, 5-SECTION
10	EACH	TRAFFIC SIGNAL BACKPLATE
4	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
2	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
6	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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



CABLE PLAN

PUSHBUTTON "A" SHALL PLACE A CALL TO PHASES 6 & 8
 PUSHBUTTON "B" SHALL PLACE A CALL TO PHASES 2 & 4

④ REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION

NOTES:
 THE PROGRAMMED HEADS WILL BE REPLACED WITH STANDARD LED HEADS.

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAND	LED % OPERATIONS	
SIGNAL (RED)	18	17	0.50	153.00
(YELLOW)	18	25	0.25	112.50
(GREEN)	18	15	0.25	67.50
ARROW	24	12	0.10	28.80
PED. SIGNAL	8	25	1.00	200.00
CONTROLLER	1	100	1.00	100.00
ILLUM. SIGN		0	0	0
VIDEO VEH. SENSOR		0	0	0
FLASHER		0	0	0
ENERGY COSTS TO:				TOTAL =
VILLAGE OF SKOKIE 5127 OAKTON ST. SKOKIE, IL 60077				661.80
ENERGY SUPPLY - CONTACT: TERRIBLECK PHONE: (847) 816-5239 COMPANY: ComEd				

FILE NAME: P:\2012\ME\2014\PTB162.10_Schwarz\CA00\PH04_NorthCook_LED.6\Shots\60X28-shr-TS-TouhyAve-NilesCenterRd-CarpenterRd.dgn
 PLOT SCALE: 1/8"=1'-0"
 USER: MJS
 MILLENIA PROFESSIONAL SERVICES

DESIGNED	JNP	REVISED	
DRAWN	JNP	REVISED	
CHECKED	TVN	REVISED	
DATE	12/5/2013	REVISED	

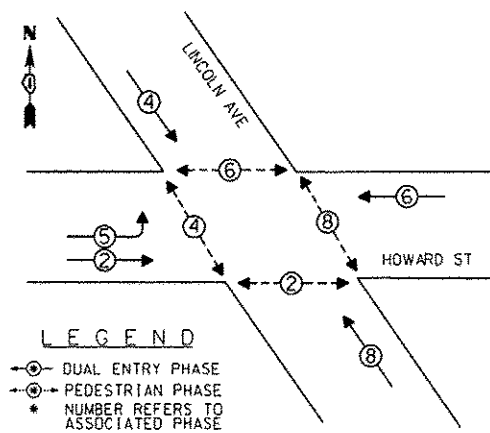
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM
 TOUHY AVENUE AT NILES CENTER ROAD /CARPENTER ROAD

SCALE: N/A SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	63
CONTRACT NO. 60X28				

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM

DUAL ENTRY - ALL LEGS
PROTECTED/PERMITTED LEFT TURN PHASING

RETROFIT ALL EXISTING TRAFFIC SIGNAL HEADS

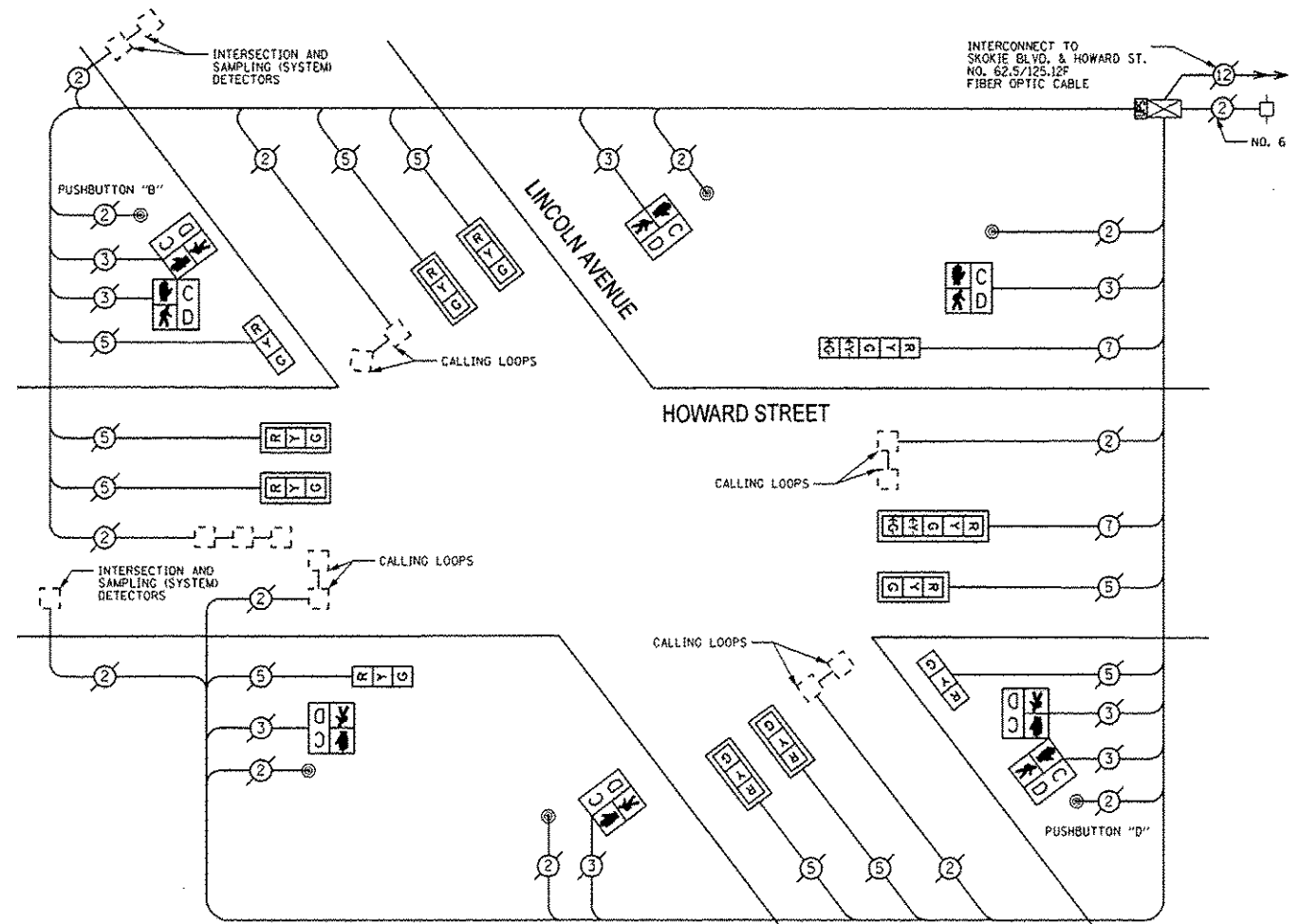
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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.

QUANTITY	UNIT	DESCRIPTION
4	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
2	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
6	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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



CABLE PLAN

PUSHBUTTON "B" SHALL PLACE A CALL TO PHASES 4 & 6
PUSHBUTTON "D" SHALL PLACE A CALL TO PHASES 2 & 8

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

FILE NAME: P:\2013\12\14\15\16\17\18\19\20\21\22\23\24\25\26\27\28\29\30\31\32\33\34\35\36\37\38\39\40\41\42\43\44\45\46\47\48\49\50\51\52\53\54\55\56\57\58\59\60\61\62\63\64\65\66\67\68\69\70\71\72\73\74\75\76\77\78\79\80\81\82\83\84\85\86\87\88\89\90\91\92\93\94\95\96\97\98\99\100\101\102\103\104\105\106\107\108\109\110\111\112\113\114\115\116\117\118\119\120\121\122\123\124\125\126\127\128\129\130\131\132\133\134\135\136\137\138\139\140\141\142\143\144\145\146\147\148\149\150\151\152\153\154\155\156\157\158\159\160\161\162\163\164\165\166\167\168\169\170\171\172\173\174\175\176\177\178\179\180\181\182\183\184\185\186\187\188\189\190\191\192\193\194\195\196\197\198\199\200\201\202\203\204\205\206\207\208\209\210\211\212\213\214\215\216\217\218\219\220\221\222\223\224\225\226\227\228\229\230\231\232\233\234\235\236\237\238\239\240\241\242\243\244\245\246\247\248\249\250\251\252\253\254\255\256\257\258\259\260\261\262\263\264\265\266\267\268\269\270\271\272\273\274\275\276\277\278\279\280\281\282\283\284\285\286\287\288\289\290\291\292\293\294\295\296\297\298\299\300\301\302\303\304\305\306\307\308\309\310\311\312\313\314\315\316\317\318\319\320\321\322\323\324\325\326\327\328\329\330\331\332\333\334\335\336\337\338\339\340\341\342\343\344\345\346\347\348\349\350\351\352\353\354\355\356\357\358\359\360\361\362\363\364\365\366\367\368\369\370\371\372\373\374\375\376\377\378\379\380\381\382\383\384\385\386\387\388\389\390\391\392\393\394\395\396\397\398\399\400\401\402\403\404\405\406\407\408\409\410\411\412\413\414\415\416\417\418\419\420\421\422\423\424\425\426\427\428\429\430\431\432\433\434\435\436\437\438\439\440\441\442\443\444\445\446\447\448\449\450\451\452\453\454\455\456\457\458\459\460\461\462\463\464\465\466\467\468\469\470\471\472\473\474\475\476\477\478\479\480\481\482\483\484\485\486\487\488\489\490\491\492\493\494\495\496\497\498\499\500\501\502\503\504\505\506\507\508\509\510\511\512\513\514\515\516\517\518\519\520\521\522\523\524\525\526\527\528\529\530\531\532\533\534\535\536\537\538\539\540\541\542\543\544\545\546\547\548\549\550\551\552\553\554\555\556\557\558\559\560\561\562\563\564\565\566\567\568\569\570\571\572\573\574\575\576\577\578\579\580\581\582\583\584\585\586\587\588\589\590\591\592\593\594\595\596\597\598\599\600\601\602\603\604\605\606\607\608\609\610\611\612\613\614\615\616\617\618\619\620\621\622\623\624\625\626\627\628\629\630\631\632\633\634\635\636\637\638\639\640\641\642\643\644\645\646\647\648\649\650\651\652\653\654\655\656\657\658\659\660\661\662\663\664\665\666\667\668\669\670\671\672\673\674\675\676\677\678\679\680\681\682\683\684\685\686\687\688\689\690\691\692\693\694\695\696\697\698\699\700\701\702\703\704\705\706\707\708\709\710\711\712\713\714\715\716\717\718\719\720\721\722\723\724\725\726\727\728\729\730\731\732\733\734\735\736\737\738\739\740\741\742\743\744\745\746\747\748\749\750\751\752\753\754\755\756\757\758\759\760\761\762\763\764\765\766\767\768\769\770\771\772\773\774\775\776\777\778\779\780\781\782\783\784\785\786\787\788\789\790\791\792\793\794\795\796\797\798\799\800\801\802\803\804\805\806\807\808\809\810\811\812\813\814\815\816\817\818\819\820\821\822\823\824\825\826\827\828\829\830\831\832\833\834\835\836\837\838\839\840\841\842\843\844\845\846\847\848\849\850\851\852\853\854\855\856\857\858\859\860\861\862\863\864\865\866\867\868\869\870\871\872\873\874\875\876\877\878\879\880\881\882\883\884\885\886\887\888\889\890\891\892\893\894\895\896\897\898\899\900\901\902\903\904\905\906\907\908\909\910\911\912\913\914\915\916\917\918\919\920\921\922\923\924\925\926\927\928\929\930\931\932\933\934\935\936\937\938\939\940\941\942\943\944\945\946\947\948\949\950\951\952\953\954\955\956\957\958\959\960\961\962\963\964\965\966\967\968\969\970\971\972\973\974\975\976\977\978\979\980\981\982\983\984\985\986\987\988\989\990\991\992\993\994\995\996\997\998\999\1000

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAND	LED % OPERATIONS	
SIGNAL (RED)	12	17	0.50	102.00
(YELLOW)	12	25	0.25	75.00
(GREEN)	12	15	0.25	45.00
ARROW	4	12	0.10	4.80
PED. SIGNAL	8	25	1.00	200.00
CONTROLLER	1	100	1.00	100.00
ILLUM. SIGN		0	0	0
VIDEO VEH. SENSOR		0	0	0
FLASHER		0	0	0
ENERGY COSTS TO:				TOTAL = 526.80
VILLAGE OF SKOKIE 5127 DAKTON ST. SKOKIE, IL 60077				
ENERGY SUPPLY - CONTACT: TERRIBLECK PHONE: (847) 816-5239 COMPANY: ComEd				

2600 Warrickville Road, Suite 203, Downers Grove, IL 60515-1761
 630.795.0110 voice, 630.839.2566 fax
 www.mps-ill.com
MILLENNIA PROFESSIONAL SERVICES

DESIGNED	JNP	REVISED	-
DRAWN	JNP	REVISED	-
CHECKED	TVN	REVISED	-
DATE	12/9/2013	REVISED	-

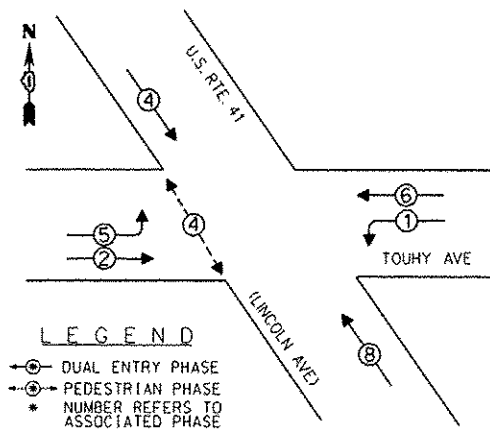
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM			
SCALE	SHEET	OF	SHEETS
N/A			

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	64

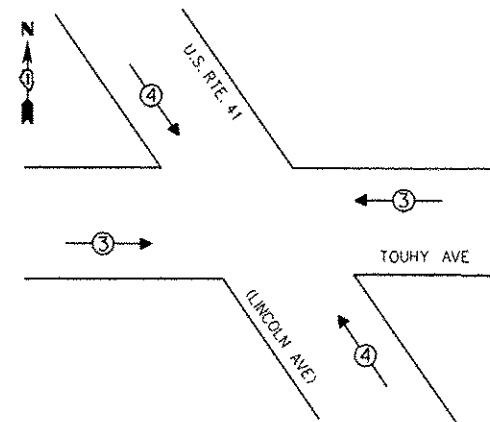
CONTRACT NO. 60X28
 FED. ROAD DIST. NO. 1 | ILLINOIS FED. AID PROJECT

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3 4
MOVEMENT	↔ ↕

REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

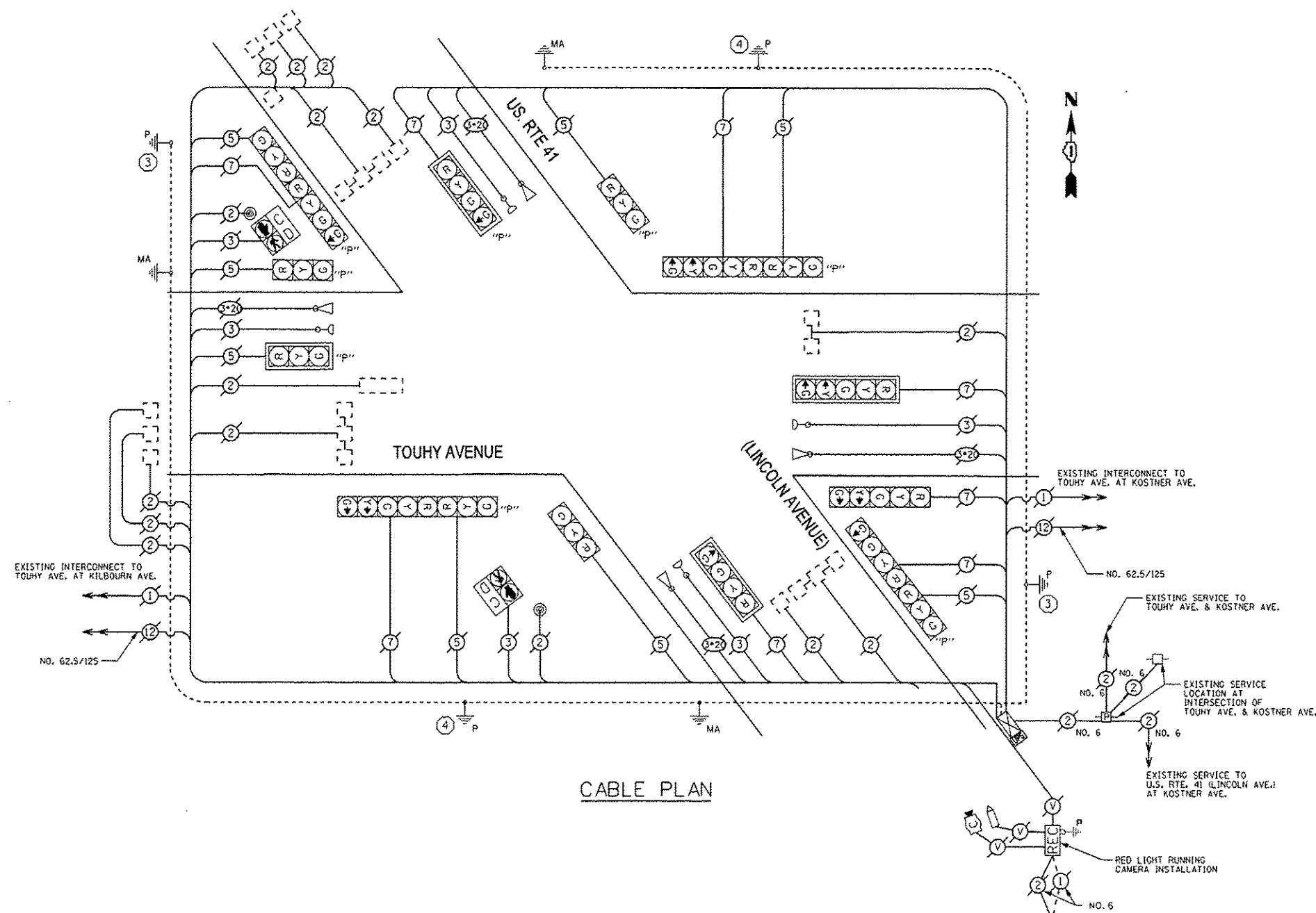
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

QUANTITY	UNIT	DESCRIPTION
4	EACH	TRAFFIC SIGNAL POST

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 15 FT.
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL

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



CABLE PLAN

LEGENDS

- ③ REPLACE 15 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
- ④ REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION

FILE NAME: P:\2013\NET2014\PTB162_10_Schmitt\LED\62515\80428-shr-15-LincolnAve-TouhyAve.dgn
 PLOT SCALE: 1"=40'-0" (AS SHOWN)
 USER: JNP

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAND	LED % OPERATIONS	
SIGNAL (RED)	16	17	0.50	136.00
(YELLOW)	16	25	0.25	100.00
(GREEN)	16	15	0.25	60.00
ARROW	12	12	0.10	14.40
PED. SIGNAL	2	25	1.00	50.00
CONTROLLER	1	100	1.00	100.00
ILLUM. SIGN		0	0	0
VIDEO VEH. SENSOR		0	0	0
FLASHER		0	0	0
ENERGY COSTS TO:				TOTAL = 460.40

VILLAGE OF SKOKIE
5127 OAKTON ST.
SKOKIE, IL 60077

ENERGY SUPPLY - CONTACT: TERRIBLECK
PHONE: (847) 816-5239
COMPANY: ComEd

MILLENNIA PROFESSIONAL SERVICES
 2600 Warrickville Road, Suite 203, Downers Grove, IL 60515-1761
 630.705.0110 voice, 630.839.2566 fax
 www.mps-ll.com

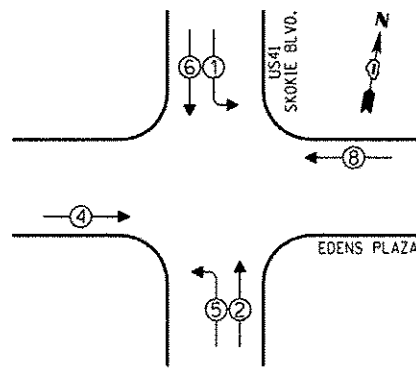
DESIGNED	JNP	REVISED	-
DRAWN	JNP	REVISED	-
CHECKED	TVN	REVISED	-
DATE	12/5/2013	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
US ROUTE 41/LINCOLN AVENUE AT TOUHY AVENUE

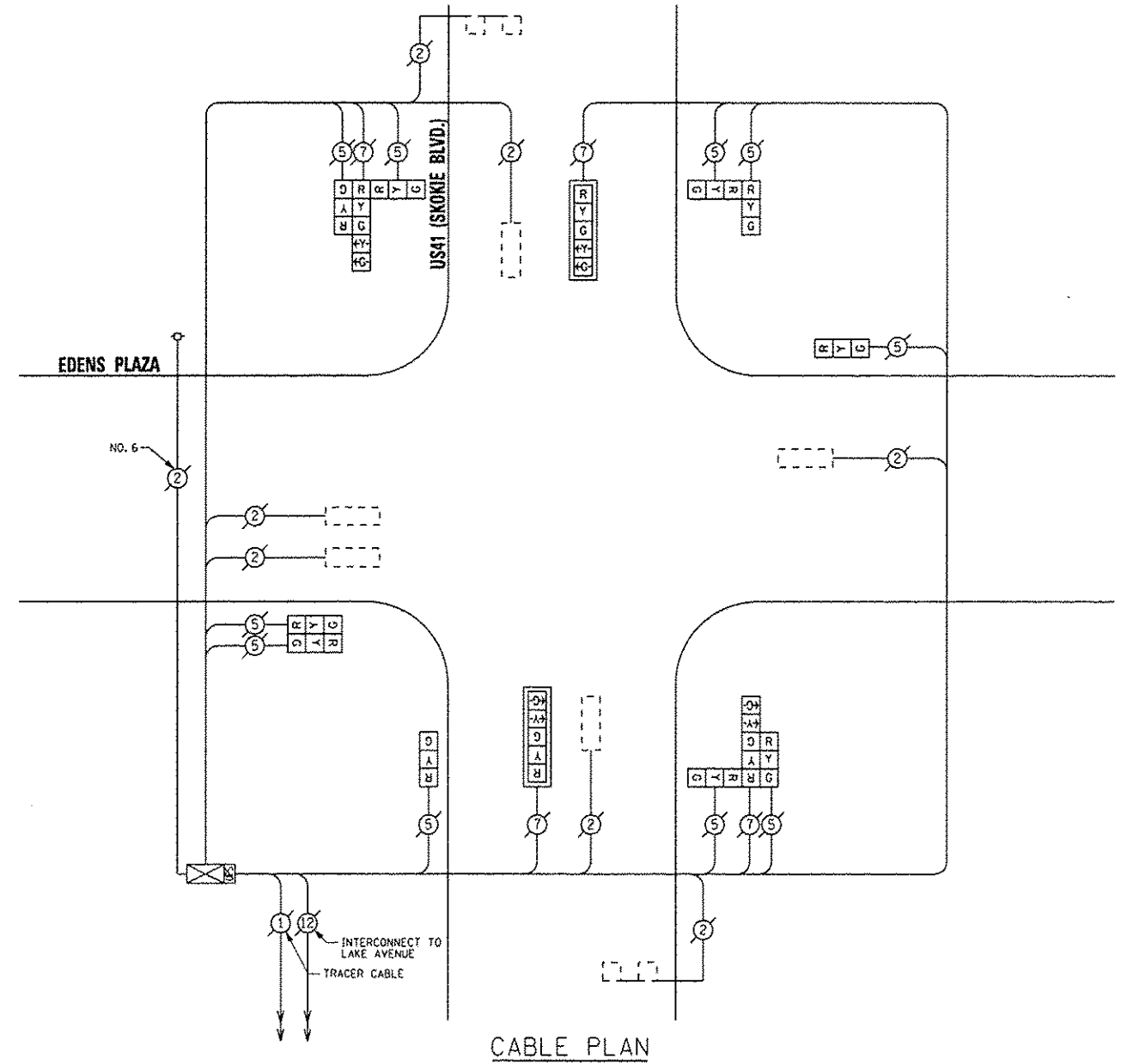
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	65
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 60X28	

CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

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



REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

CABLE PLAN

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

TYPE	NO. OF LAMPS	INCAND.	LED	% OPERATIONS	TOTAL WATTAGE
SIGNAL (RED)	14		17	0.50	119.00
(YELLOW)	14		25	0.25	87.50
(GREEN)	14		15	0.25	52.50
ARROW	8		12	0.10	9.60
PED. SIGNAL			25	1.00	
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	368.60

VILLAGE OF SKOKIE
5127 OAKTON STREET
SKOKIE, ILLINOIS 60077

ENERGY SUPPLY - CONTACT: TERRI BLECK
PHONE: (847) 816-5239
COMPANY: COMED

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
4	EACH	TRAFFIC SIGNAL POST
2	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
2	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION
2	EACH	SIGNAL HEAD, 2-FACE, 3-SECTION
2	EACH	SIGNAL HEAD, 3-FACE, 2-3 SECTION, 1-5 SECTION
2	EACH	TRAFFIC SIGNAL BACKPLATE

SCHEDULE OF QUANTITIES

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

SAM SCHWARTZ ENGINEERING
3100 W. WIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

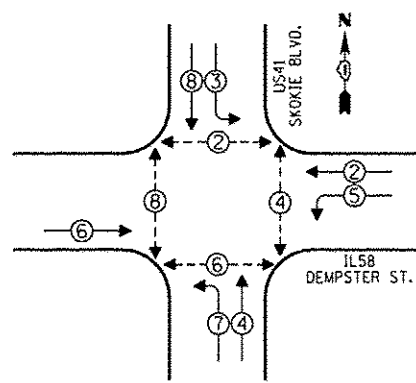
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, US41 (SKOKIE BOULEVARD) AT EDENS PLAZA

SCALE: NONE SHEET OF SHEETS STA. TO STA.

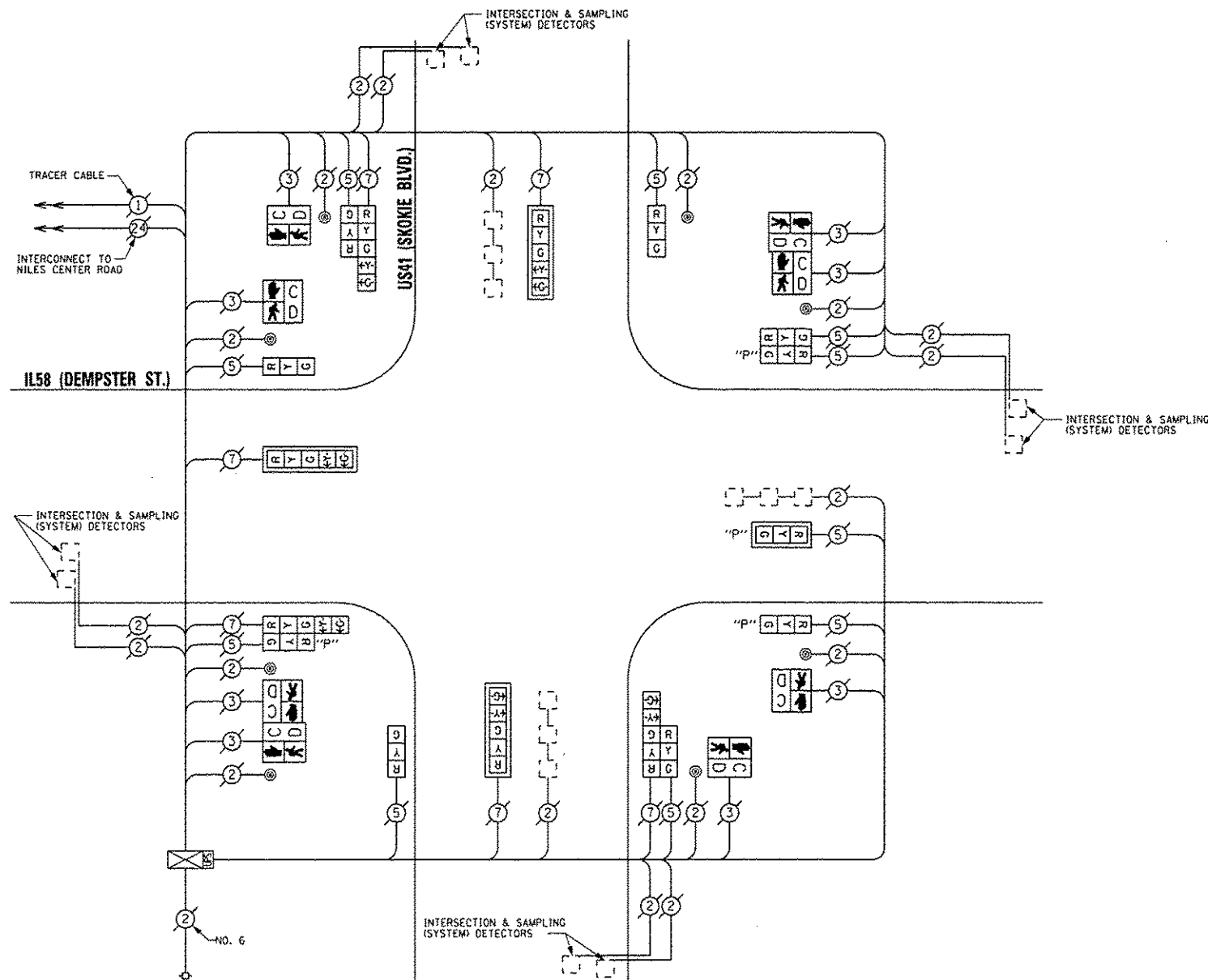
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	66
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60X2B	

CONTROLLER SEQUENCE



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

PHASE DESIGNATION DIAGRAM



CABLE PLAN

REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. OF LAMPS X INCAND	WATTAGE	LED X % OPERATIONS	
SIGNAL (RED)	16	17	0.50	136.00
(YELLOW)	16	25	0.25	100.00
(GREEN)	16	15	0.25	60.00
ARROW	12	12	0.10	14.40
PED. SIGNAL	8	25	1.00	200.00
CONTROLLER	1	100	1.00	100.00
ILLUM. SIGN		25	0.05	
LUMINAIRE		250	0.50	
VIDEO SYSTEM		150	1.00	
FLASHER			0.50	
ENERGY COSTS TO:			TOTAL =	610.40

VILLAGE OF SKOKIE
5127 OAKTON STREET
SKOKIE, ILLINOIS 60077

ENERGY SUPPLY - CONTACT: TERRI BLECK
PHONE: (847) 816-5239
COMPANY: ComEd

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
4	EACH	TRAFFIC SIGNAL POST
4	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
4	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION
4	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION
4	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
2	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
4	EACH	TRAFFIC SIGNAL BACKPLATE
6	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

SAM SCHWARTZ ENGINEERING
3100 W. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

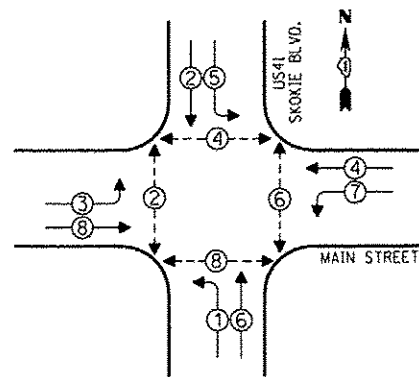
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE,
US41 (SKOKIE BOULEVARD) AT IL58 (DEMPSTER STREET)

SCALE: NONE SHEET OF SHEETS STA. TO STA.

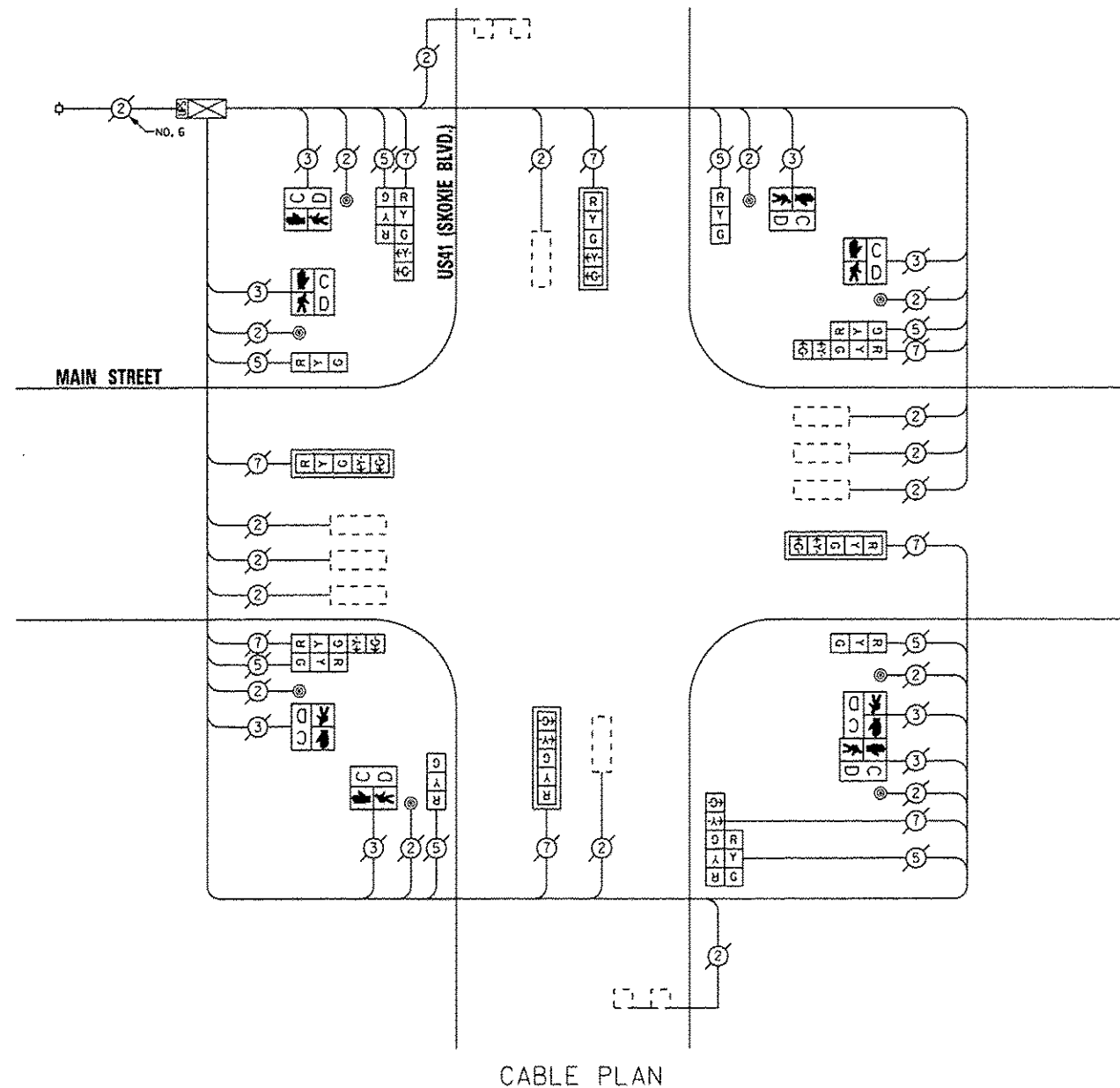
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-0531S	COOK	88	67
			CONTRACT NO. 60X28	
ILLINOIS FED. AID PROJECT				

CONTROLLER SEQUENCE



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

PHASE DESIGNATION DIAGRAM



CABLE PLAN

RETROFIT ALL EXISTING TRAFFIC SIGNAL HEADS

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND.	LED	% OPERATIONS	
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
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	615.20

VILLAGE OF SKOKIE
5127 OAKTON STREET
SKOKIE, ILLINOIS 60077

ENERGY SUPPLY - CONTACT: TERRI BLECK
PHONE: (847) 816-5239
COMPANY: ComEd

REMOVE 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.

- | QUAN. | UNIT | DESCRIPTION |
|-------|------|--------------------------------|
| 4 | EACH | PEDESTRIAN SIGNAL HEAD, 1-FACE |
| 2 | EACH | PEDESTRIAN SIGNAL HEAD, 2-FACE |
| 8 | EACH | PEDESTRIAN PUSHBUTTON |

SCHEDULE OF QUANTITIES

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



DESIGNED - JAM
DRAWN - JAM
CHECKED - LMM
DATE - 12-13-13

REVISED -
REVISED -
REVISED -
REVISED -

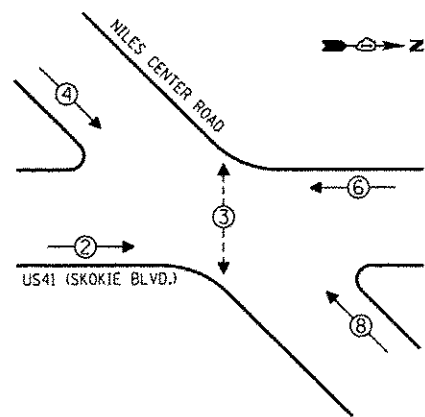
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE,
US41 (SKOKIE BLVD.) AT MAIN STREET

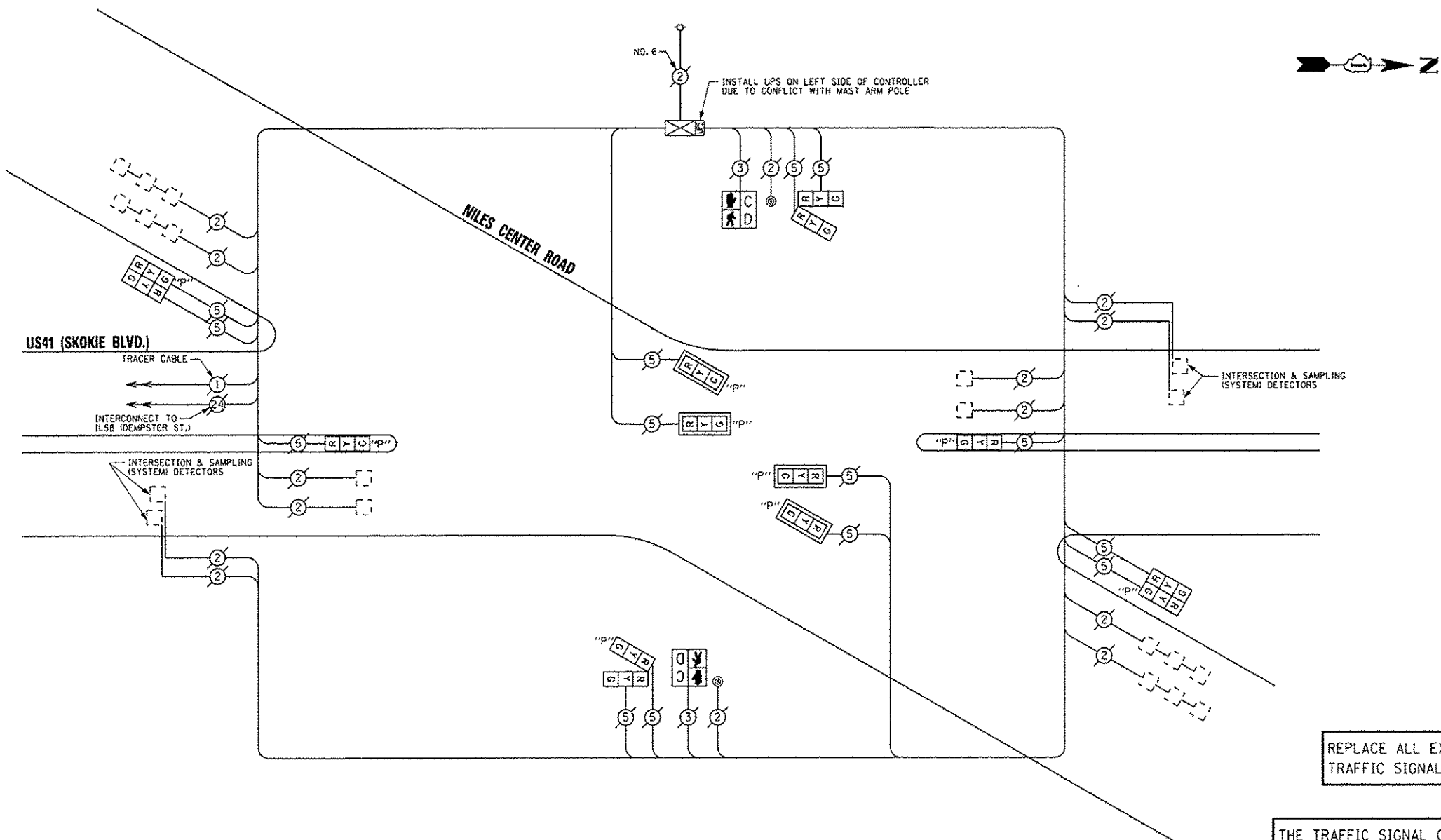
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	68
			CONTRACT NO. 60X28	
ILLINOIS FED. AID PROJECT				

CONTROLLER SEQUENCE



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



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

TYPE	NO. OF LAMPS	INCAND.	LED	% OPERATIONS	TOTAL WATTAGE
SIGNAL (RED)	14		17	0.50	119.00
(YELLOW)	14		25	0.25	87.50
(GREEN)	14		15	0.25	52.50
ARROW			12	0.10	
PED. SIGNAL	2		25	1.00	50.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	409.00

VILLAGE OF SKOKIE
5127 OAKTON STREET
SKOKIE, ILLINOIS 60077

ENERGY SUPPLY - CONTACT: TERRI BLECK
PHONE: (847) 816-5239
COMPANY: ComEd

REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

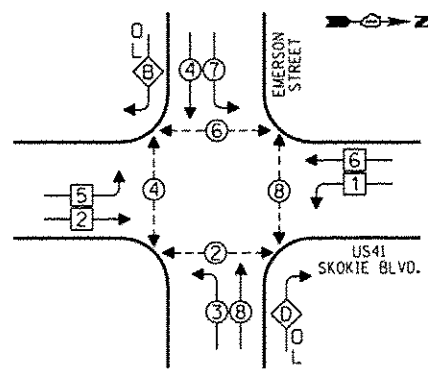
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

QUAN.	UNIT	DESCRIPTION
6	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
4	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION
2	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
4	EACH	TRAFFIC SIGNAL BACKPLATE
2	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

CONTROLLER SEQUENCE

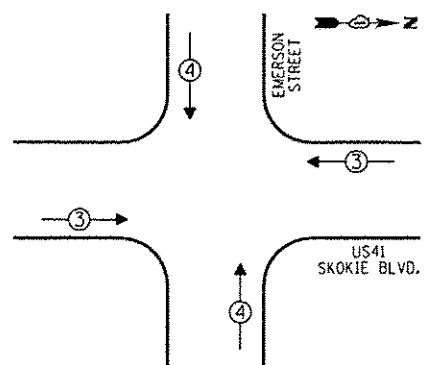


LEGEND
 [Symbol] SINGLE ENTRY PHASE
 [Symbol] DUAL ENTRY PHASE
 [Symbol] OVERLAP
 [Symbol] PEDESTRIAN PHASE
 [Symbol] NUMBER REFERS TO ASSOCIATED PHASE

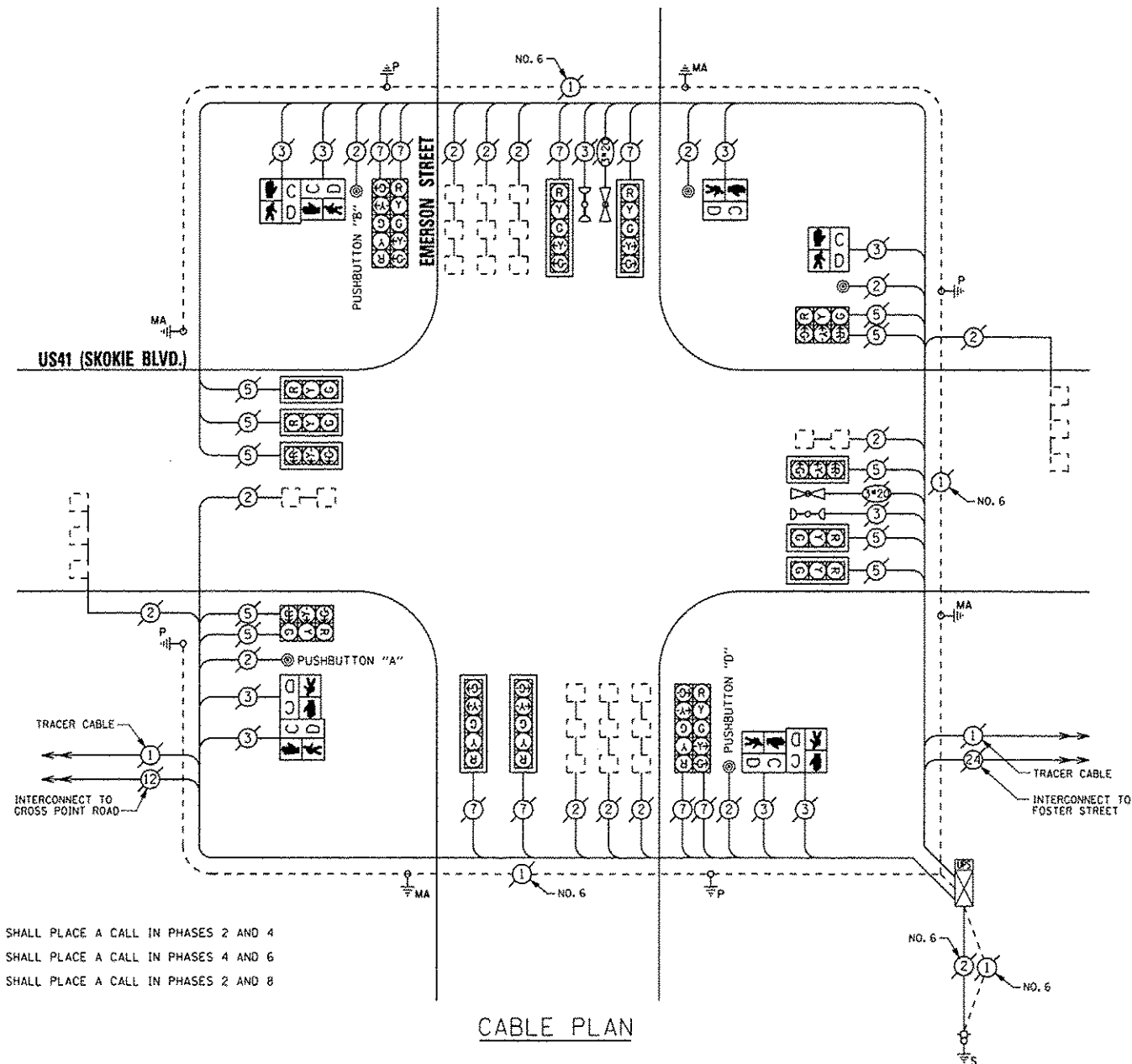
PHASE DESIGNATION DIAGRAM

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↔	↕



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

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
2	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
3	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
5	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND	LED %	OPERATIONS	
SIGNAL (RED)	18		17	0.50	153.00
(YELLOW)	18		25	0.25	112.50
(GREEN)	18		15	0.25	67.50
ARROW	16		12	0.10	19.20
PED. SIGNAL	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 652.20

VILLAGE OF SKOKIE
 5127 OAKTON STREET
 SKOKIE, ILLINOIS 60077

ENERGY SUPPLY - CONTACT: TERRI BLECK
 PHONE: (847) 816-5239
 COMPANY: CorEd

SAM SCHWARTZ ENGINEERING
 3100 N. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

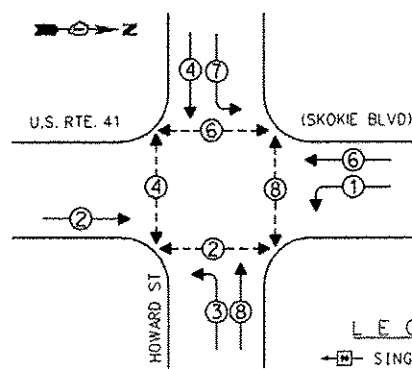
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, US14 (SKOKIE BOULEVARD) AT EMERSON STREET

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	70
				CONTRACT NO. 60X28
[ILLINOIS] FED. AID PROJECT				

SCALE: NONE SHEET OF SHEETS STA. TO STA.

EXISTING CONTROLLER SEQUENCE



LEGEND
 [Symbol] SINGLE ENTRY PHASE
 [Symbol] DUAL ENTRY PHASE
 [Symbol] OVERLAP
 [Symbol] PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

RETROFIT ALL EXISTING TRAFFIC SIGNAL HEADS

EXISTING PHASE DESIGNATION DIAGRAM

DUAL ENTRY - ALL LEGS
 PROTECTED/PERMITTED LEFT TURN PHASING

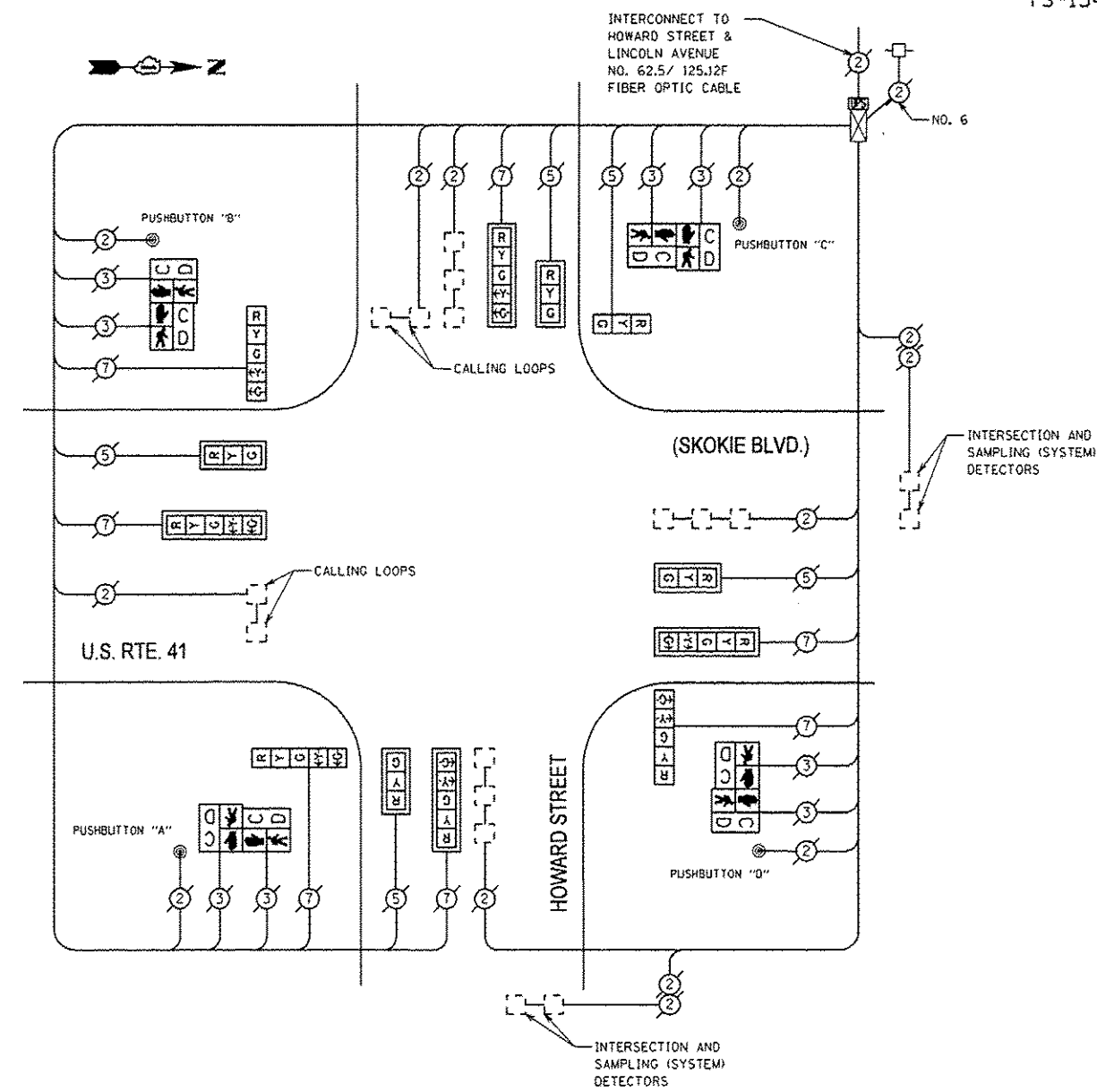
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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.

QUANTITY	UNIT	DESCRIPTION
4	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
4	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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



CABLE PLAN

PUSHBUTTON "A" SHALL PLACE A CALL TO PHASES 2 & 4
 PUSHBUTTON "B" SHALL PLACE A CALL TO PHASES 4 & 8
 PUSHBUTTON "C" SHALL PLACE A CALL TO PHASES 6 & 8
 PUSHBUTTON "D" SHALL PLACE A CALL TO PHASES 2 & 8

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

FILE NAME: P:\2012\AME\12014_P1B162_1B_Schmitt\CAD\DWG\44-Nor-D\Cook-LED-6V\5\13\60X28-INT-TS-US 41-Skokie\Hy-Howard-St.dwg
 PLOT SCALE: 1/8" = 1'-0"
 USER NAME: Millennia Professional Services

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAND	LED % OPERATIONS	
SIGNAL (RED)	12	17	0.50	102.00
(YELLOW)	12	25	0.25	75.00
(GREEN)	12	15	0.25	45.00
ARROW	12	12	0.19	14.40
PED. SIGNAL	8	25	1.00	200.00
CONTROLLER	1	100	1.00	100.00
ILLUM. SIGN		0	0	0
VIDEO VEH. SENSOR		0	0	0
FLASHER		0	0	0
ENERGY COSTS TO:				TOTAL = 536.40
VILLAGE OF SKOKIE 5127 DAKTON ST. SKOKIE, IL 60077				
ENERGY SUPPLY - CONTACT: TERRIBLECK PHONE: (847) 816-5239 COMPANY: ComEd				

MILLENNIA PROFESSIONAL SERVICES
 2600 Warrickville Road, Suite 203, Downers Grove, IL 60515-1761
 630.705.0110 voice, 630.839.2566 fax
 www.mps-ll.com

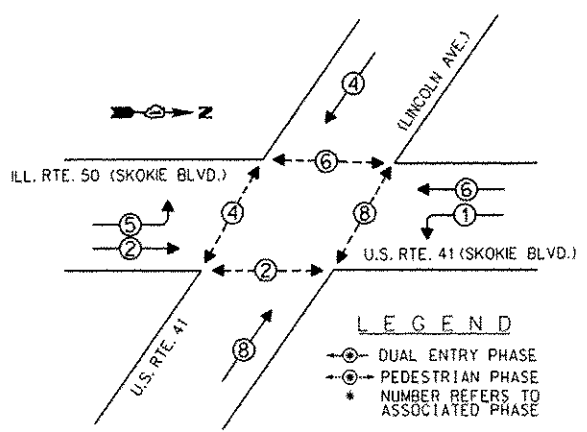
DESIGNED - JNP	REVISED -
DRAWN - JNP	REVISED -
CHECKED - TVN	REVISED -
DATE - 12/9/2013	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES, CABLE PLAN,
 AND PHASE DESIGNATION DIAGRAM**
US ROUTE 41 (SKOKIE BOULEVARD) AT HOWARD STREET

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	71
CONTRACT NO. 60X28			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

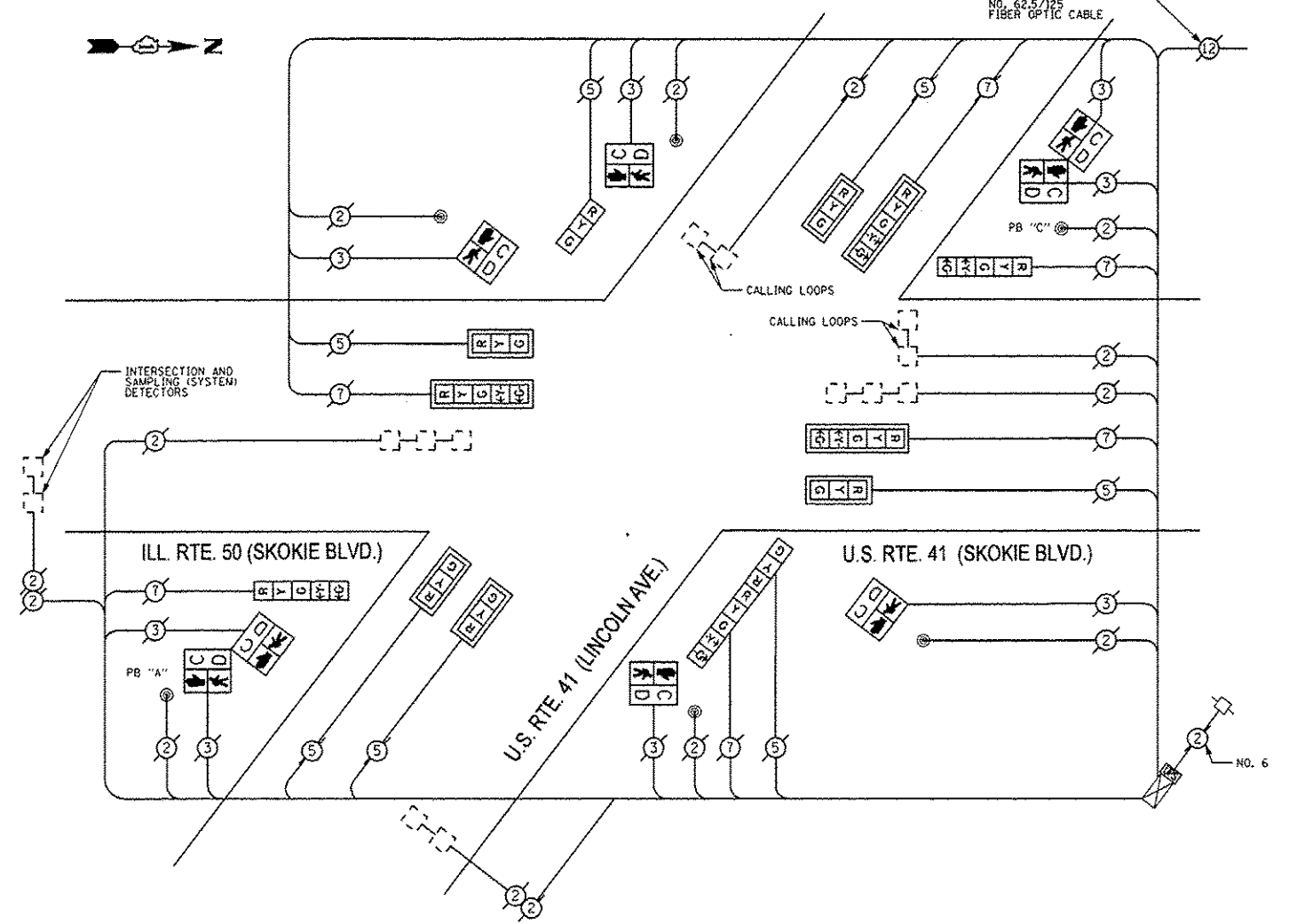
EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM

DUAL ENTRY - ALL LEGS
PROTECTED/PERMITTED LEFT TURN PHASING

RETROFIT ALL EXISTING TRAFFIC SIGNAL HEADS



CABLE PLAN

PUSHBUTTON "A" SHALL PLACE A CALL TO PHASES 2 & 4
PUSHBUTTON "C" SHALL PLACE A CALL TO PHASES 6 & 8

REMOVE 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.

QUANTITY	UNIT	DESCRIPTION
4	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
2	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
6	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

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

FILE NAME: P:\2012\ME12814_P18162_18_Scholar\24\ADD\VP\04_Non-Dr\Cook_LED_6\Shas\60228\shs-ts-1485-ILL-50-Skokie\shs.dwg
 PLOT SCALE: 1/8"=1'-0"
 USER NAME: Millennium Professional Services

I.D.O.F. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAND	LED X% OPERATIONS	
SIGNAL (RED)	13	17	0.50	110.50
(YELLOW)	13	25	0.25	81.25
(GREEN)	13	15	0.25	48.75
ARROW	12	12	0.10	14.40
PED. SIGNAL	8	25	1.00	200.00
CONTROLLER	1	100	1.00	100.00
ILLUM. SIGN		0	0	0
VIDEO VEH. SENSOR		0	0	0
FLASHER		0	0	0
ENERGY COSTS TO:				TOTAL = 554.90
VILLAGE OF SKOKIE 5127 OAKTON ST. SKOKIE, IL 60077				
ENERGY SUPPLY - CONTACT: TERRIBLECK PHONE: (847) 616-5239 COMPANY: ComEd				

MILLENNIA PROFESSIONAL SERVICES

2600 Warrenville Road, Suite 203, Downers Grove, IL 60515-1761
 630.705.0110 voice, 630.839.2566 fax
 www.mps-ll.com

DESIGNED	JNP	REVISED	
DRAWN	JNP	REVISED	
CHECKED	TVN	REVISED	
DATE	12/9/2013	REVISED	

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

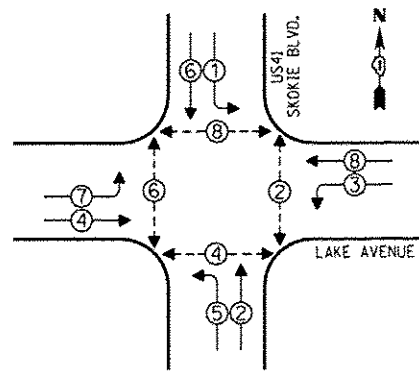
SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM

US RTE 41-IL 50/CICERO AVE AT US ROUTE 41/LINCOLN AVE

SCALE: N/A SHEET OF SHEETS STA. TO STA.

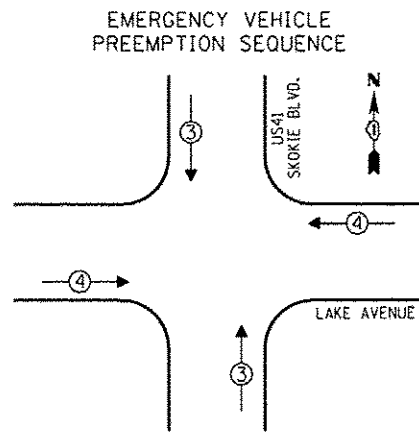
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	72
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 60X28	

CONTROLLER SEQUENCE



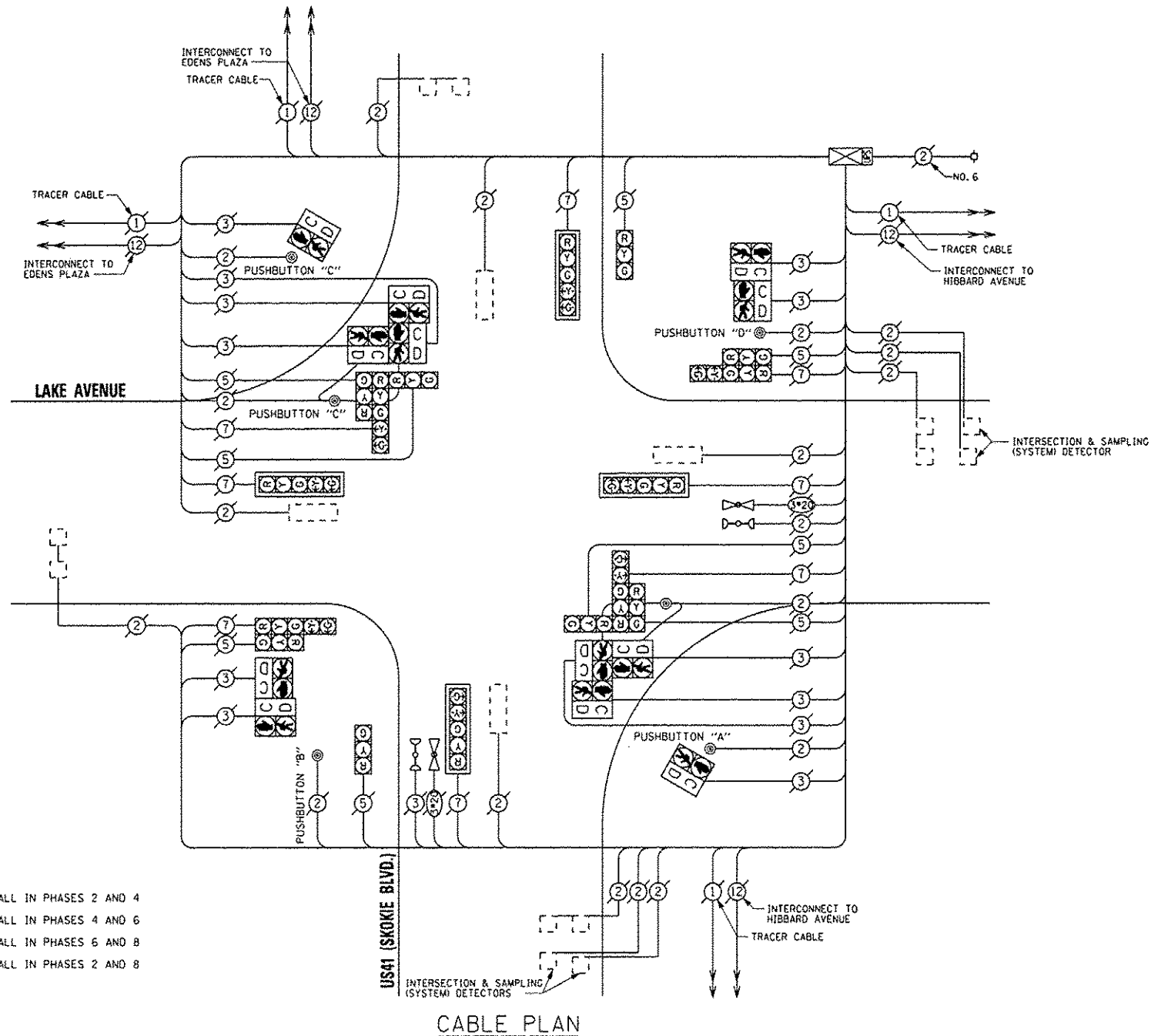
- LEGEND**
- SINGLE ENTRY PHASE
 - DUAL ENTRY PHASE
 - OVERLAP
 - PEDESTRIAN PHASE
 - NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↑	←

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



THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND.	LED % OPERATIONS	WATTAGE	
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	12		25	1.00	300.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	715.20

VILLAGE OF WILMETTE
 1200 WILMETTE AVENUE
 WILMETTE, ILLINOIS 60091

ENERGY SUPPLY - CONTACT: TERRI BLECK
 PHONE: (847) 816-5239
 COMPANY: ComEd

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
6	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

QUAN.	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL
6	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING



DESIGNED -	JAM	REVISED -	
DRAWN -	JAM	REVISED -	
CHECKED -	LMM	REVISED -	
DATE -	12-13-13	REVISED -	

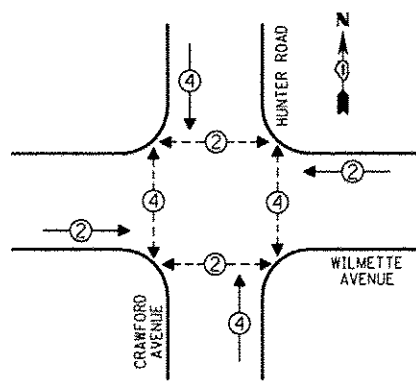
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, US41 (SKOKIE BOULEVARD) AT LAKE AVENUE

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	73
			CONTRACT NO. 60X28	
ILLINOIS FED. AID PROJECT				

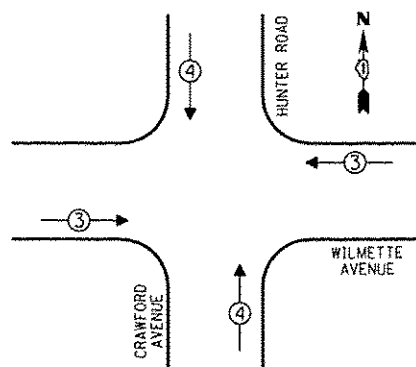
CONTROLLER SEQUENCE



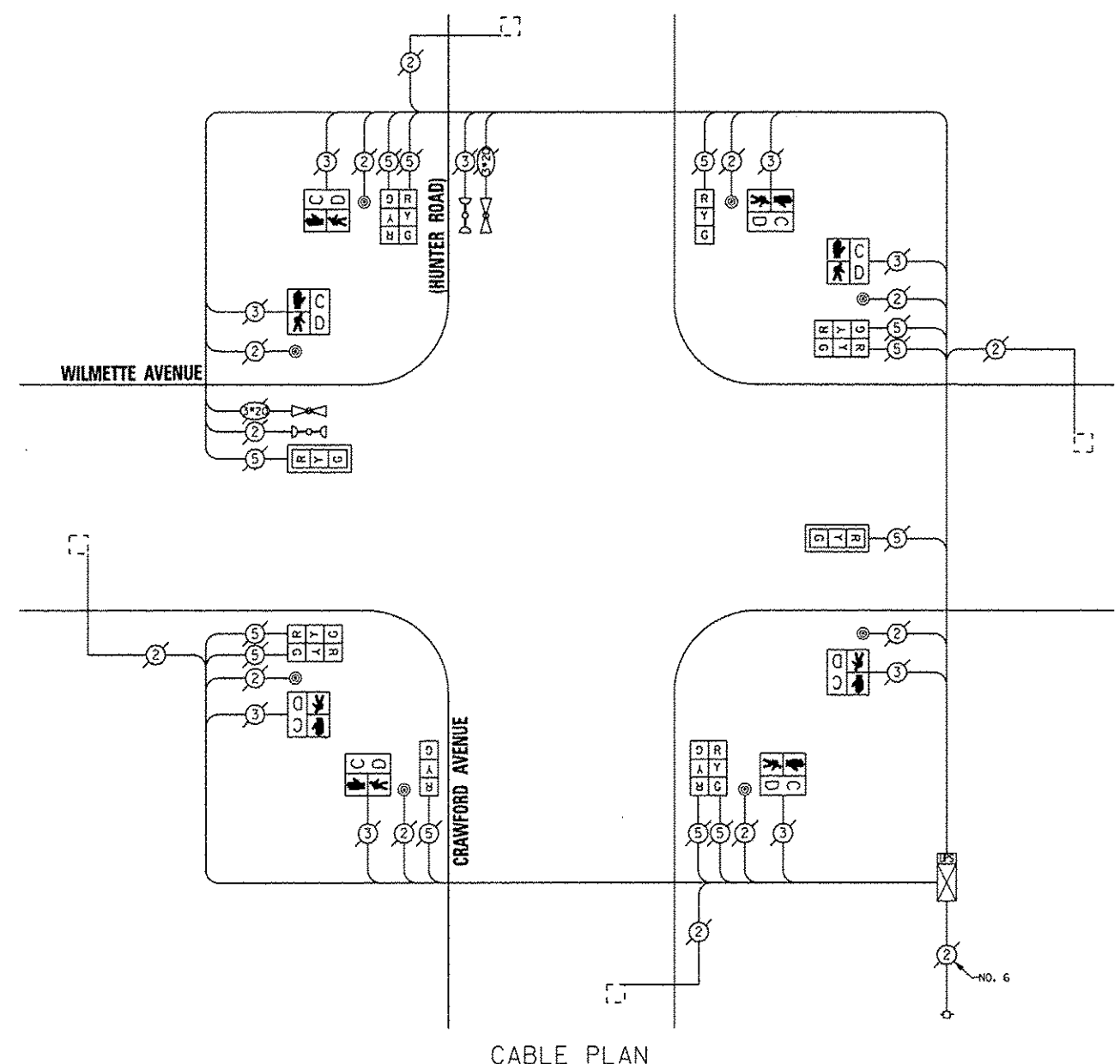
- LEGEND**
- SINGLE ENTRY PHASE
 - DUAL ENTRY PHASE
 - ◇ OVERLAP
 - ⊕ PEDESTRIAN PHASE
 - NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↔	↕



RETROFIT ALL EXISTING TRAFFIC SIGNAL HEADS

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

CABLE PLAN

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
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 PUSHBUTTON

SCHEDULE OF QUANTITIES

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND.	LED X % OPERATIONS	
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
ILLUM. SIGN			25 0.05	
LUMINAIRE		250	0.50	
VIDEO SYSTEM		150	1.00	
FLASHER			0.50	
ENERGY COSTS TO:				TOTAL = 522.00

VILLAGE OF WILMETTE
1200 WILMETTE AVENUE
WILMETTE, ILLINOIS 60091

ENERGY SUPPLY - CONTACT: TERRI BLECK
PHONE: (847) 816-5239
COMPANY: ComEd

SAM SCHWARTZ ENGINEERING
3100 W. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

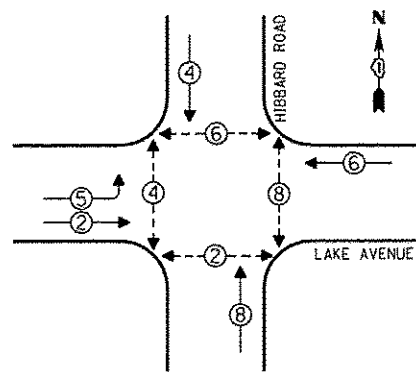
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, CRAWFORD AVENUE (HUNTER ROAD) AT WILMETTE AVENUE

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	74
			CONTRACT NO. 60X28	
[ILLINOIS] FED. AID PROJECT				

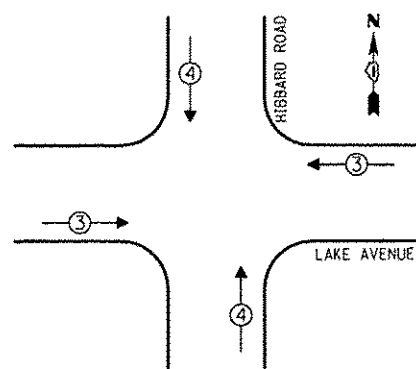
CONTROLLER SEQUENCE



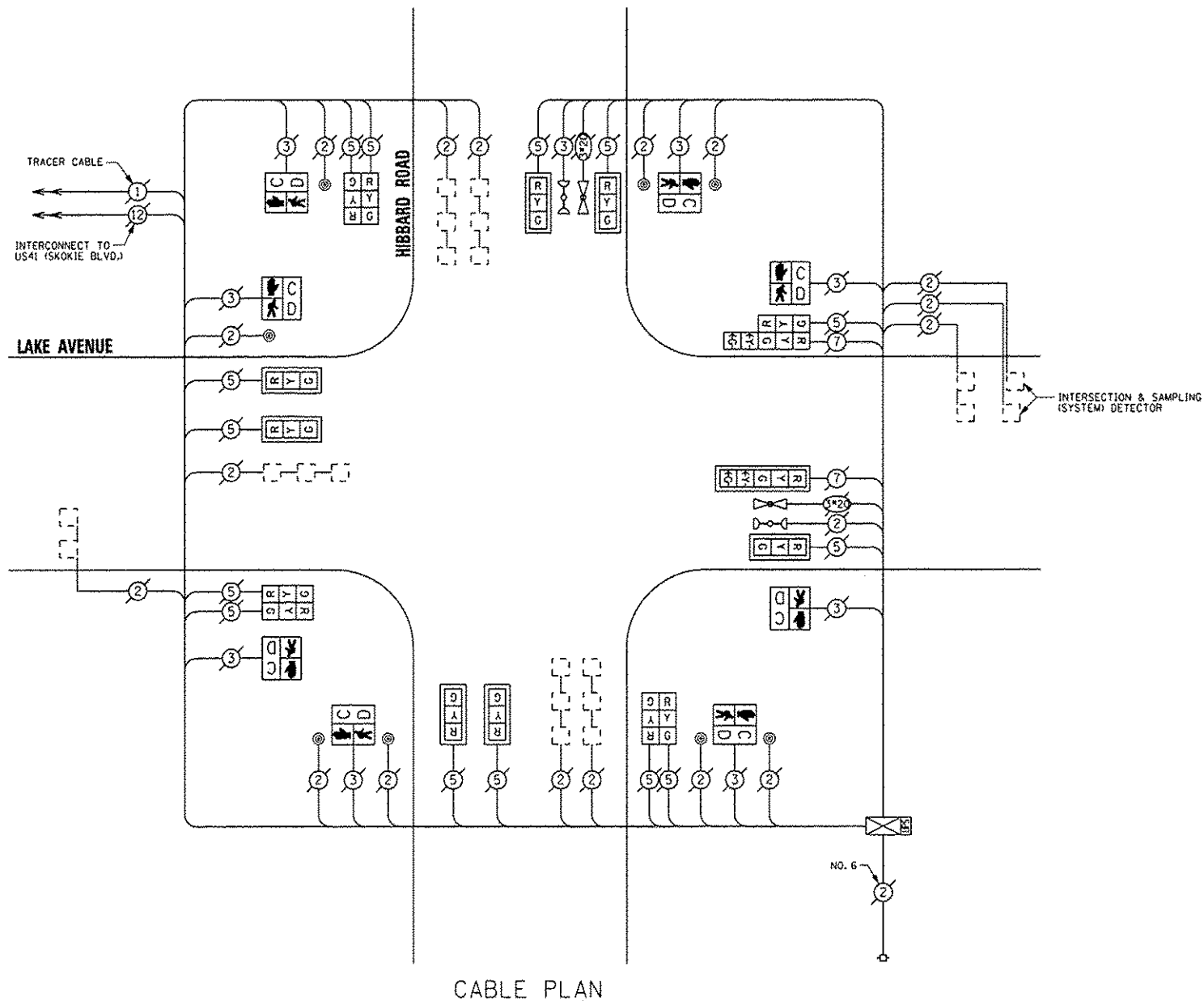
LEGEND
 [Symbol] SINGLE ENTRY PHASE
 [Symbol] DUAL ENTRY PHASE
 [Symbol] OVERLAP
 [Symbol] PEDESTRIAN PHASE
 [Symbol] NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



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



REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

CABLE PLAN

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
7	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
1	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION
3	EACH	SIGNAL HEAD, 2-FACE, 3-SECTION
1	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION
8	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
8	EACH	TRAFFIC SIGNAL BACKPLATE
8	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND.	LED	% OPERATIONS	
SIGNAL (RED)	16		17	0.50	136.00
(YELLOW)	16		25	0.25	100.00
(GREEN)	16		15	0.25	60.00
ARROW	4		12	0.10	4.80
PED. SIGNAL	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 600.80

VILLAGE OF WILMETTE
 1200 WILMETTE AVENUE
 WILMETTE, ILLINOIS 60091

ENERGY SUPPLY - CONTACT: TERRI BLECK
 PHONE: (847) 816-5239
 COMPANY: ComEd

SAM SCHWARTZ ENGINEERING
 3100 N. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

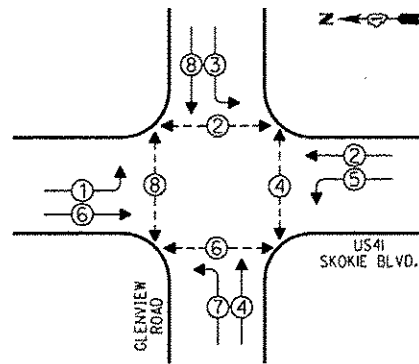
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, HIBBARD ROAD AT LAKE AVENUE

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE. VAR	SECTION 2013-053TS	COUNTY COOK	TOTAL SHEETS 88	SHEET NO. 75
CONTRACT NO. 60X28				
[ILLINOIS] FED. AID PROJECT				

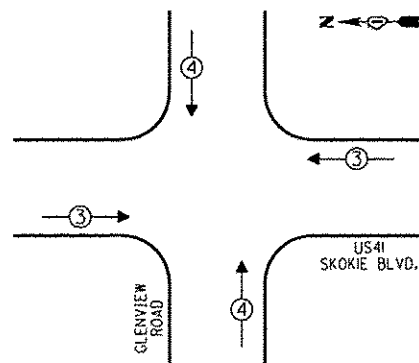
CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

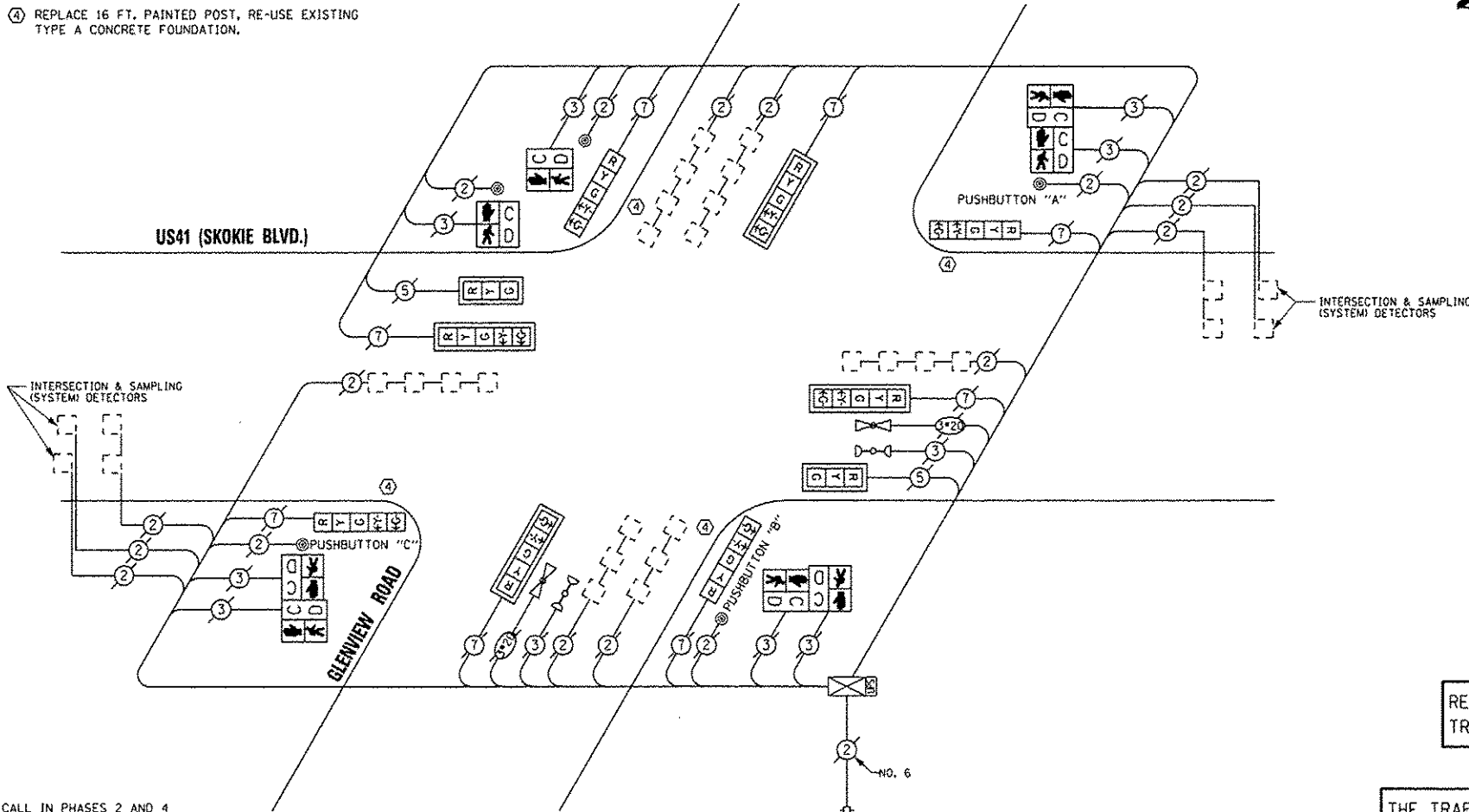
- LEGEND**
- SINGLE ENTRY PHASE
 - ◻ DUAL ENTRY PHASE
 - ◻ OVERLAP
 - ◻ PEDESTRIAN PHASE
 - NUMBER REFERS TO ASSOCIATED PHASE

EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↔	↕

④ REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION.



CABLE PLAN

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

REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
4	EACH	TRAFFIC SIGNAL POST
2	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
8	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION
2	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
3	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
6	EACH	TRAFFIC SIGNAL BACKPLATE
5	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. OF LAMPS X INCAND.	WATTAGE	LED X % OPERATIONS	
SIGNAL (RED)	10		17 0.50	85.00
(YELLOW)	10		25 0.25	62.50
(GREEN)	10		15 0.25	37.50
ARROW	16		12 0.10	19.20
PED. SIGNAL	8		25 1.00	200.00
CONTROLLER	1		100 1.00	100.00
ILLUM. SIGN			25 0.05	
LUMINAIRE		250	0.50	
VIDEO SYSTEM		150	1.00	
FLASHER			0.50	
ENERGY COSTS TO:				TOTAL = 504.20

VILLAGE OF WILMETTE
 1200 WILMETTE AVENUE
 WILMETTE, ILLINOIS 60091

ENERGY SUPPLY - CONTACT: TERRI BLECK
 PHONE: (847) 816-5239
 COMPANY: ComEd

DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

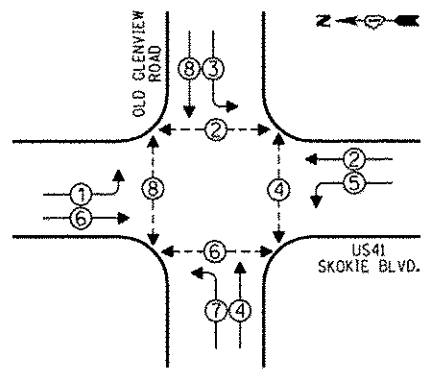
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, US41 (SKOKIE BOULEVARD) AT GLENVIEW ROAD

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	76
			CONTRACT NO.	60X28
[ILLINOIS] FED. AID PROJECT				

SAM SCHWARTZ ENGINEERING
 3100 N. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60189

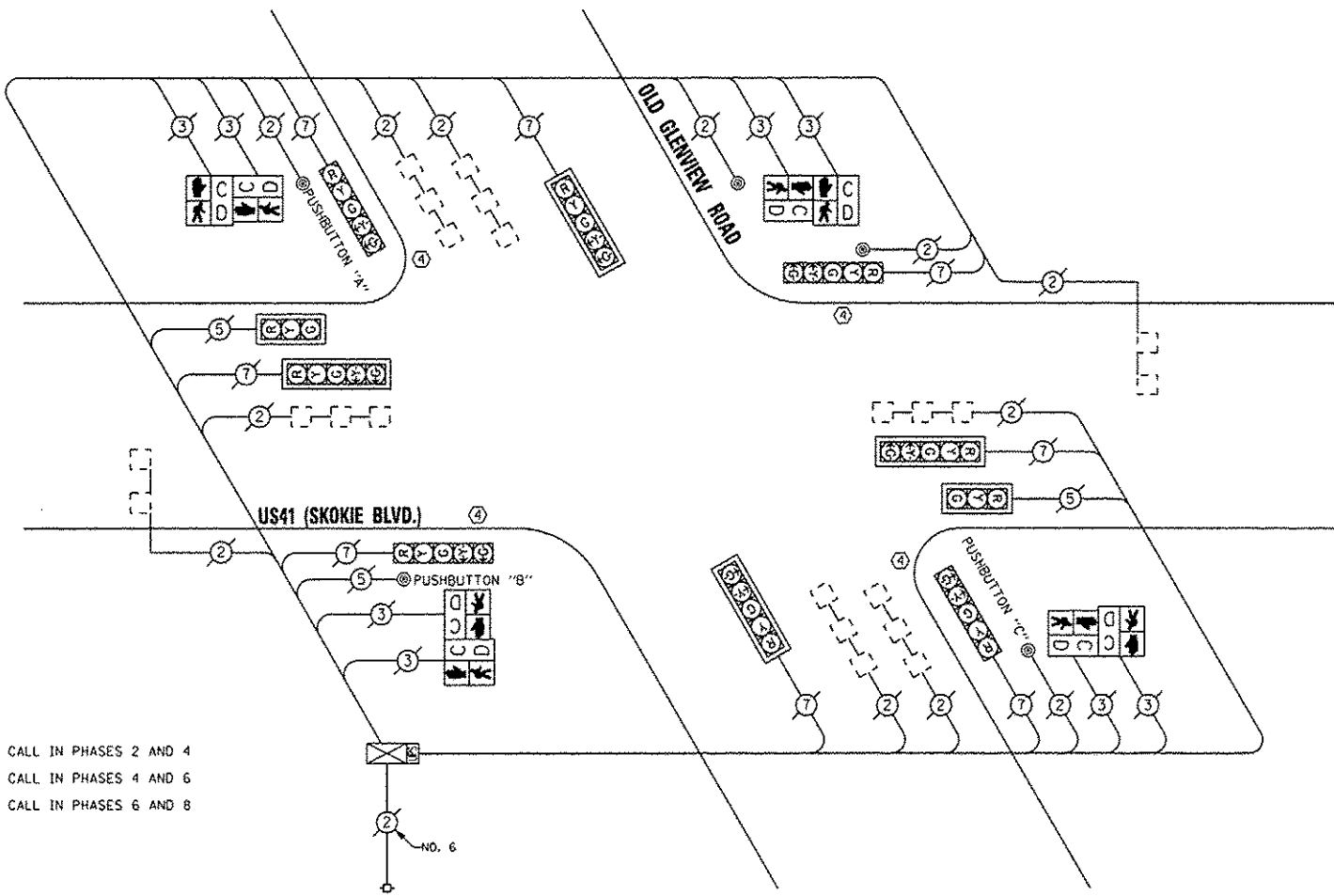
CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

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

④ REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION.



CABLE PLAN

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

REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

I.O.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND.	LED % OPERATIONS	WATTAGE	
SIGNAL (RED)	10		17	0.50	85.00
(YELLOW)	10		25	0.25	62.50
(GREEN)	10		15	0.25	37.50
ARROW	16		12	0.10	19.20
PED. SIGNAL	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	504.20

VILLAGE OF WILMETTE
 1200 WILMETTE AVENUE
 WILMETTE, ILLINOIS 60091

ENERGY SUPPLY - CONTACT: TERRI BLECK
 PHONE: (847) 816-5239
 COMPANY: ComEd

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
4	EACH	TRAFFIC SIGNAL POST
2	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
8	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION
4	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
6	EACH	TRAFFIC SIGNAL BACKPLATE
5	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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



DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

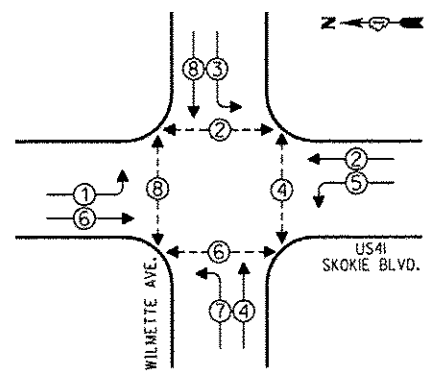
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
 DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE,
 US14 (SKOKIE BOULEVARD) AT OLD GLENVIEW ROAD

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	77
			CONTRACT NO. 60X28	
ILLINOIS FED. AID PROJECT				

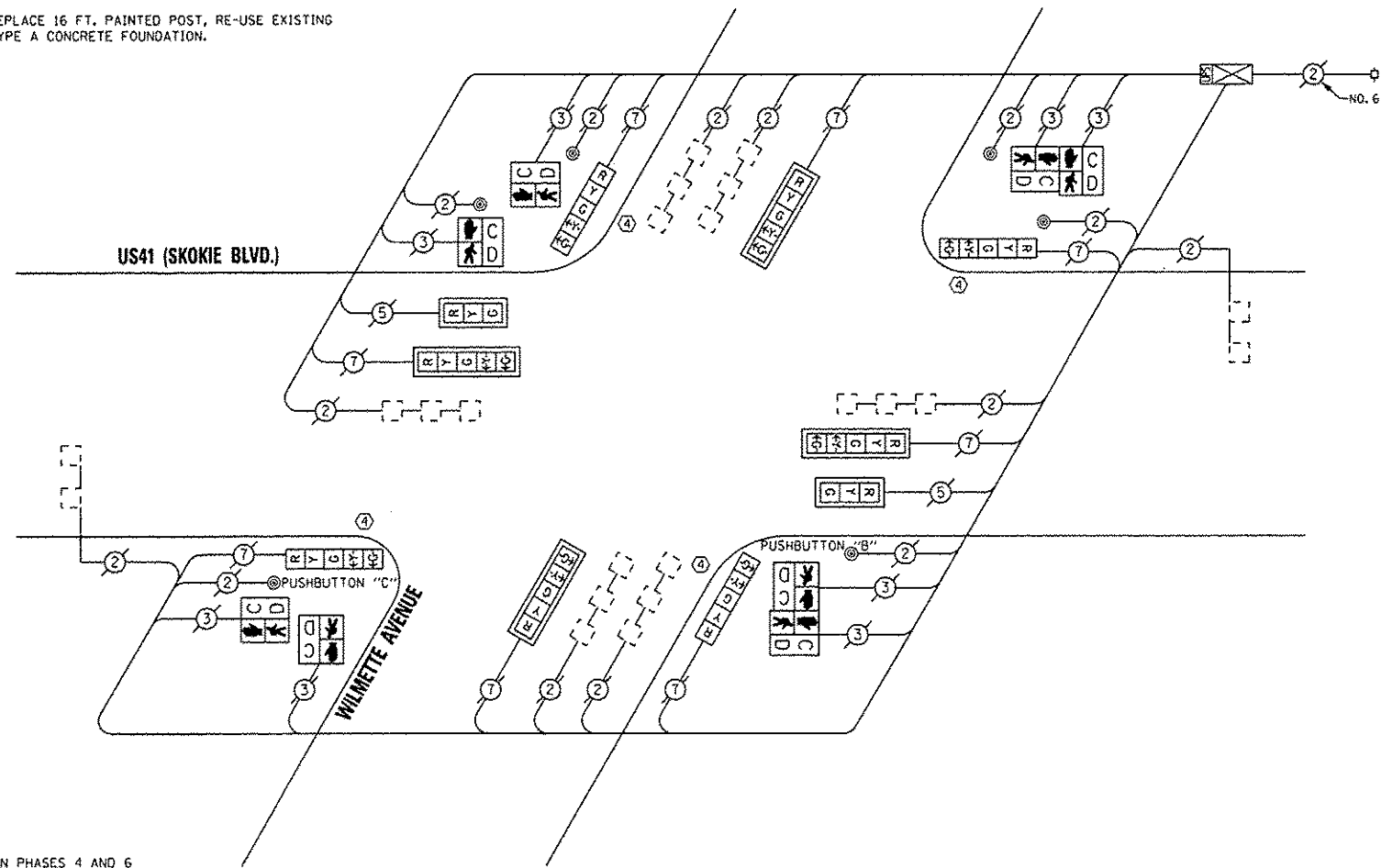
CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

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

④ REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION.



CABLE PLAN

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

REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
4	EACH	TRAFFIC SIGNAL POST
2	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
8	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION
4	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
2	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
6	EACH	TRAFFIC SIGNAL BACKPLATE
6	EACH	PEDESTRIAN PUSHBUTTON

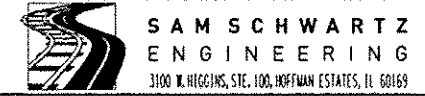
SCHEDULE OF QUANTITIES

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE	OPERATIONS		
SIGNAL (RED)	10		17	0.50	85.00
(YELLOW)	10		25	0.25	62.50
(GREEN)	10		15	0.25	37.50
ARROW	16		12	0.10	19.20
PED. SIGNAL	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 504.20

VILLAGE OF WILMETTE
 1200 WILMETTE AVENUE
 WILMETTE, ILLINOIS 60091

ENERGY SUPPLY - CONTACT: TERRI BLECK
 PHONE: (847) 816-5239
 COMPANY: ComEd



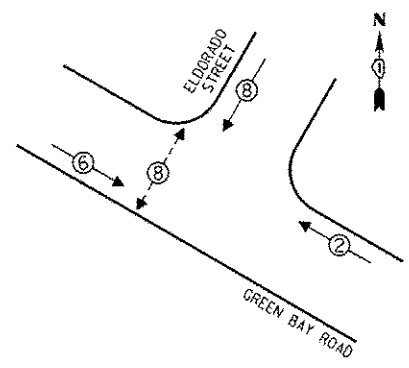
DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE,
 US41 (SKOKIE BOULEVARD) AT WILMETTE AVENUE

F.A. RTE. VAR	SECTION 2013-053TS	COUNTY COOK	TOTAL SHEETS 88	SHEET NO. 78
SCALE: NONE			SHEET OF SHEETS STA. TO STA.	
ILLINOIS FED. AID PROJECT				

CONTROLLER SEQUENCE

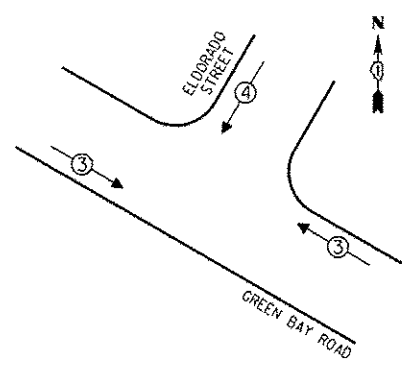


LEGEND

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

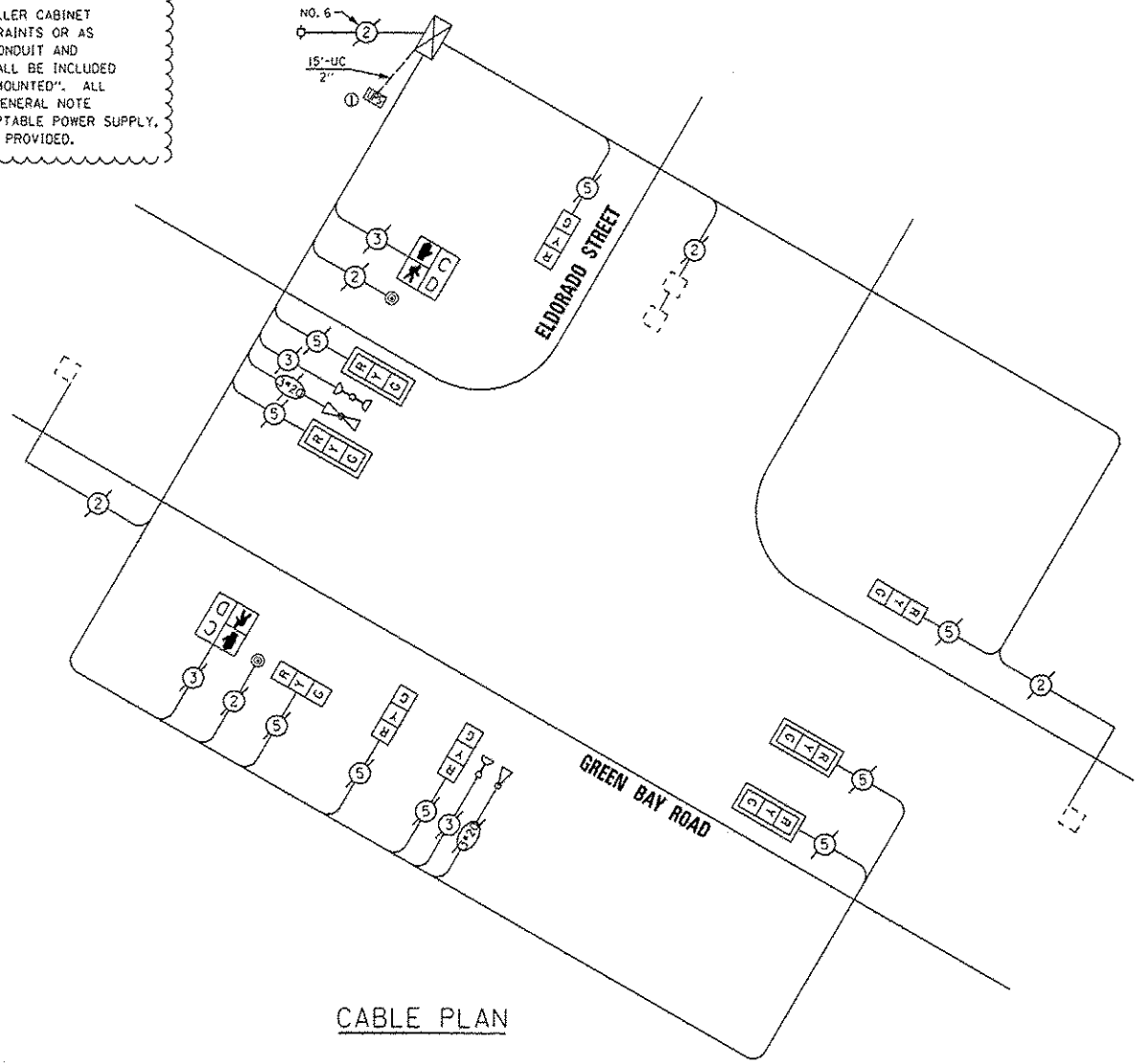
PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↔	↕

CONSTRUCTION NOTE:
 THE UPS SHALL BE INSTALLED NEXT TO THE EXISTING CONTROLLER CABINET USING HELICAL GROUND ANCHORS DUE TO THE PHYSICAL CONSTRAINTS OR AS DIRECTED BY THE RESIDENT ENGINEER. THIS WORK AND ALL CONDUIT AND ELECTRICAL CABLE NEEDED TO PROPERLY INSTALL THE UPS SHALL BE INCLUDED IN THE PAY ITEM "UNINTERRUPTABLE POWER SUPPLY, GROUND MOUNTED". ALL RESTORATION SPECIFIED IN THE RESTORATION OF WORK AREA GENERAL NOTE SHALL BE CONSIDERED INCLUDED IN THE PAY ITEM "UNINTERRUPTABLE POWER SUPPLY, GROUND MOUNTED" AND NO ADDITIONAL COMPENSATION WILL BE PROVIDED.



CABLE PLAN

REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE	LED % OPERATIONS	
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	2	25	1.00	50.00
CONTROLLER	1	100	1.00	100.00
ILLUM. SIGN LUMINAIRE		25	0.05	
VIDEO SYSTEM		150	1.00	
FLASHER			0.50	
ENERGY COSTS TO:		TOTAL =		316.50

VILLAGE OF WINNETKA
 510 GREEN BAY ROAD
 WINNETKA, ILLINOIS 60093

ENERGY SUPPLY - CONTACT: TERRI BLECK
 PHONE: (847) 816-5239
 COMPANY: ConEd

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
9	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
2	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
4	EACH	TRAFFIC SIGNAL BACKPLATE
2	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

SAM SCHWARTZ ENGINEERING
 3100 W. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

DESIGNED - JAM	REVISED - 01-28-14
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

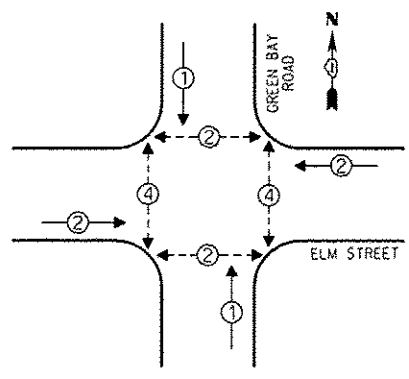
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, GREEN BAY ROAD AT ELDORADO STREET

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	79
CONTRACT NO. 60X28			ILLINOIS FED. AID PROJECT	

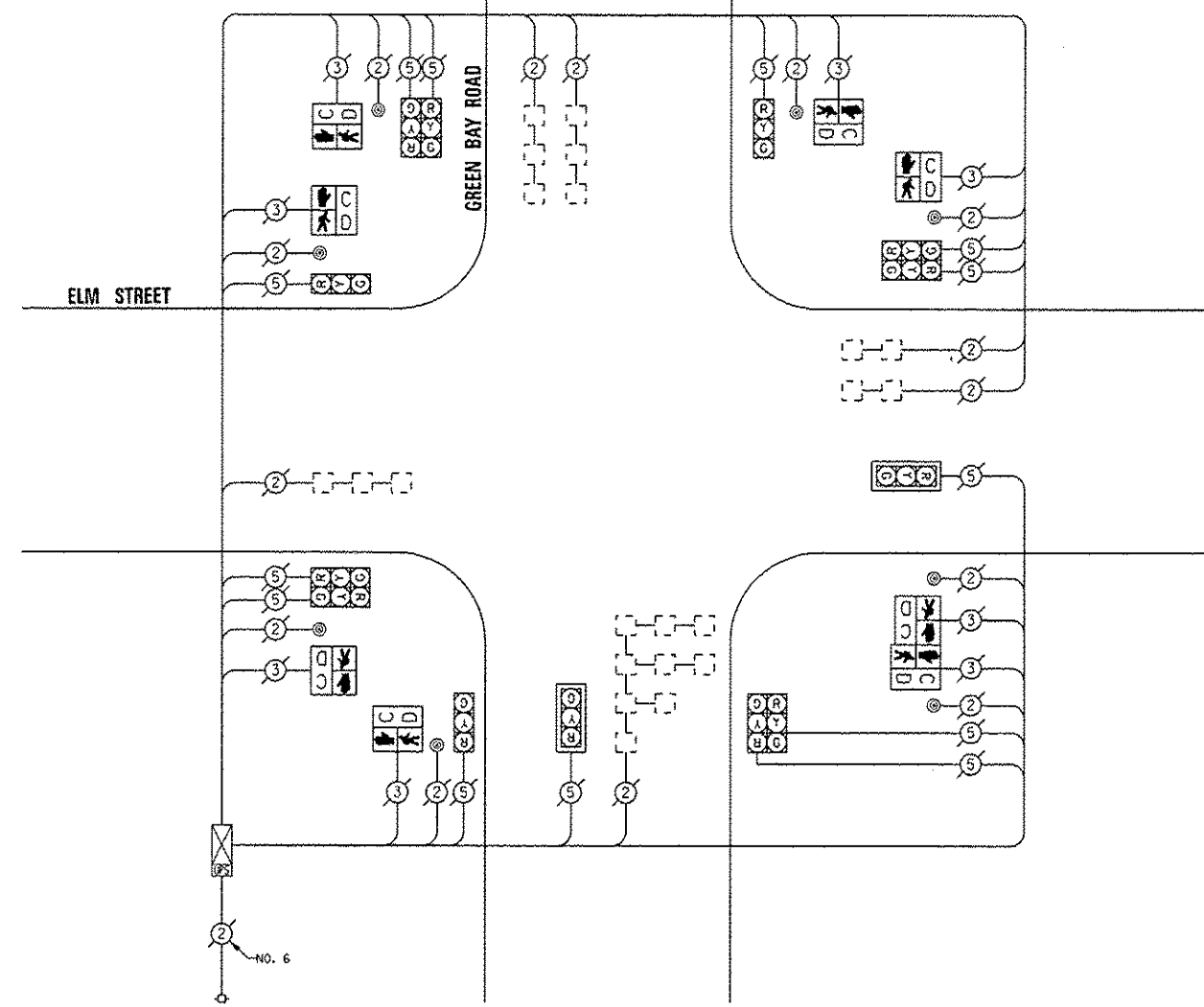


CONTROLLER SEQUENCE



- LEGEND**
- ① SINGLE ENTRY PHASE
 - ② DUAL ENTRY PHASE
 - ③ OVERLAP
 - ④ PEDESTRIAN PHASE
 - ⑤ NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM



CABLE PLAN

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND.	LED % OPERATIONS	
SIGNAL (RED)	13	17	0.50	110.50
(YELLOW)	13	25	0.25	81.25
(GREEN)	13	15	0.25	48.75
ARROW		12	0.10	
PED. SIGNAL	8	25	1.00	200.00
CONTROLLER	1	100	1.00	100.00
ILLUM. SIGN		25	0.05	
LUMINAIRE		250	0.50	
VIDEO SYSTEM		150	1.00	
FLASHER			0.50	
ENERGY COSTS TO:			TOTAL =	540.50

VILLAGE OF WINNETKA
510 GREEN BAY ROAD
WINNETKA, ILLINOIS 60093

ENERGY SUPPLY - CONTACT: TERRI BLECK
PHONE: (847) 816-5239
COMPANY: ComEd

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
6	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
1	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
8	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

QUAN.	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
6	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
1	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
8	EACH	PEDESTRIAN PUSHBUTTON DELETED
8	EACH	ACCESSIBLE PEDESTRIAN SIGNALS
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL

**SAM SCHWARTZ
ENGINEERING**
3100 W. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

DESIGNED - JAM	REVISED - 01-28-14
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

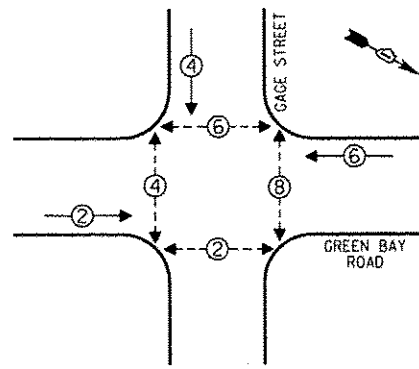
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE,
GREEN BAY ROAD AT ELM STREET**

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	80
				CONTRACT NO. 60X28
ILLINOIS FED. AID PROJECT				

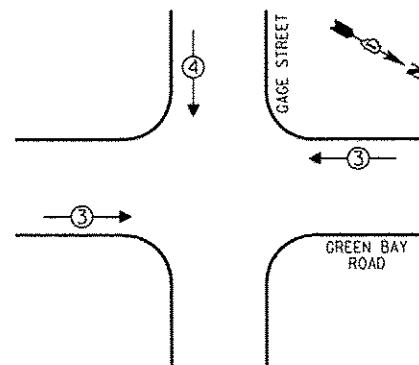
CONTROLLER SEQUENCE



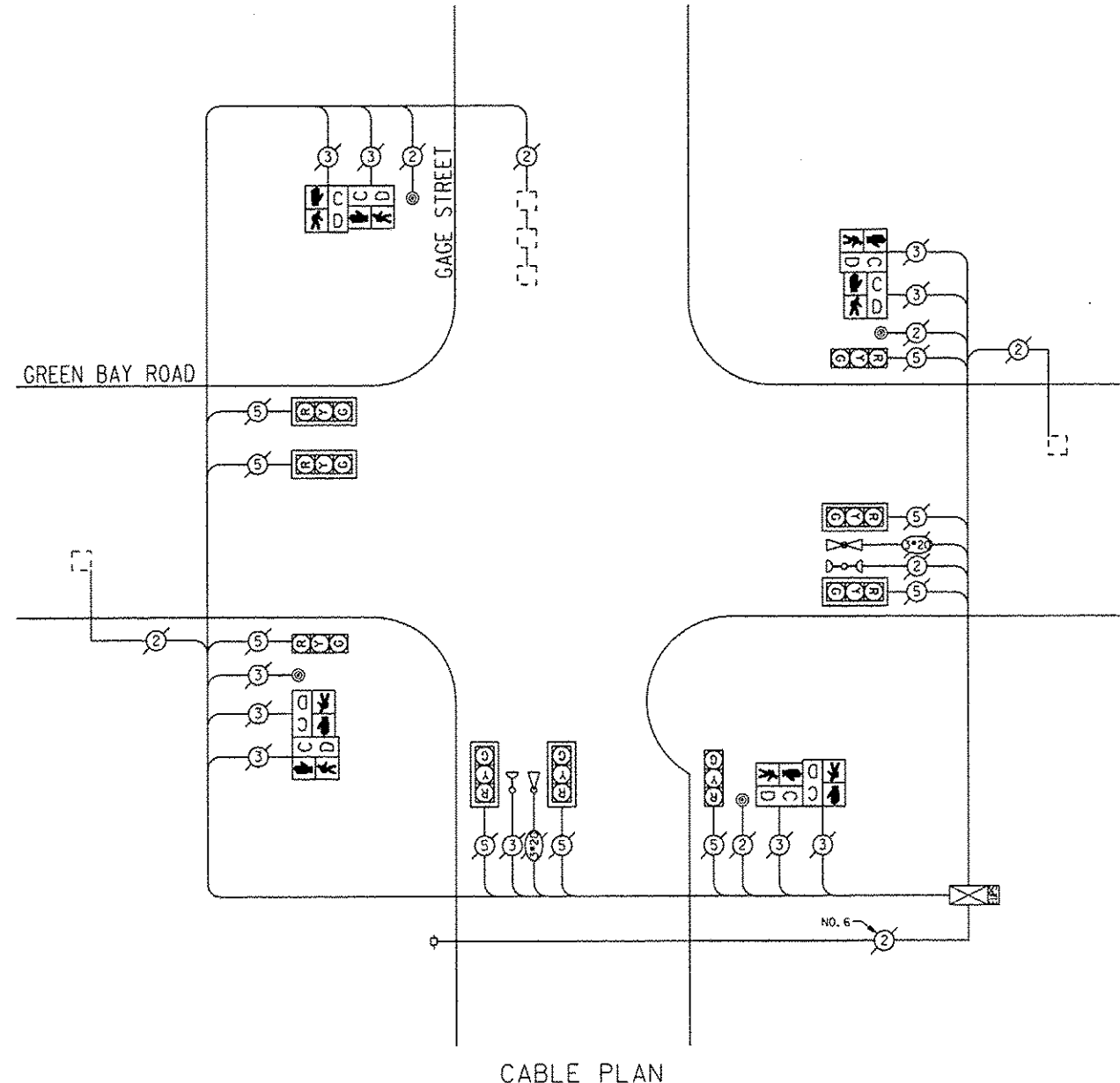
PHASE DESIGNATION DIAGRAM

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE



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



CABLE PLAN

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
4	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
4	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND	LED	% OPERATIONS	
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	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 466.50

VILLAGE OF WINNETKA
510 GREEN BAY ROAD
WINNETKA, ILLINOIS 60093

ENERGY SUPPLY - CONTACT: TERRI BLECK
PHONE: (847) 816-5239
COMPANY: COMED

DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE,
GREEN BAY ROAD AT GAGE STREET

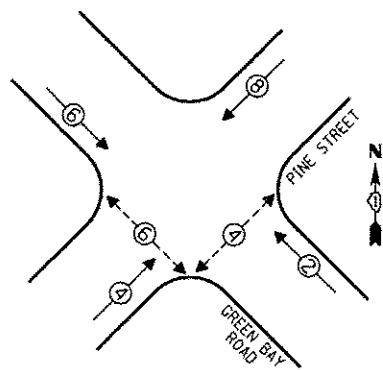
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	81
CONTRACT NO. 60X28			ILLINOIS FED. AID PROJECT	

SCALE: NONE SHEET OF SHEETS STA. TO STA.





CONTROLLER SEQUENCE

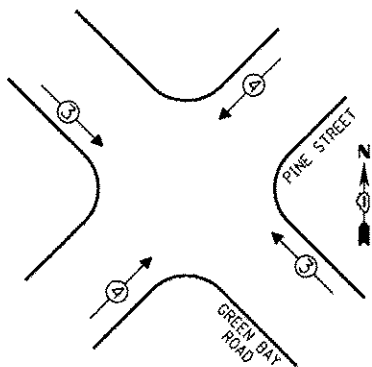


LEGEND

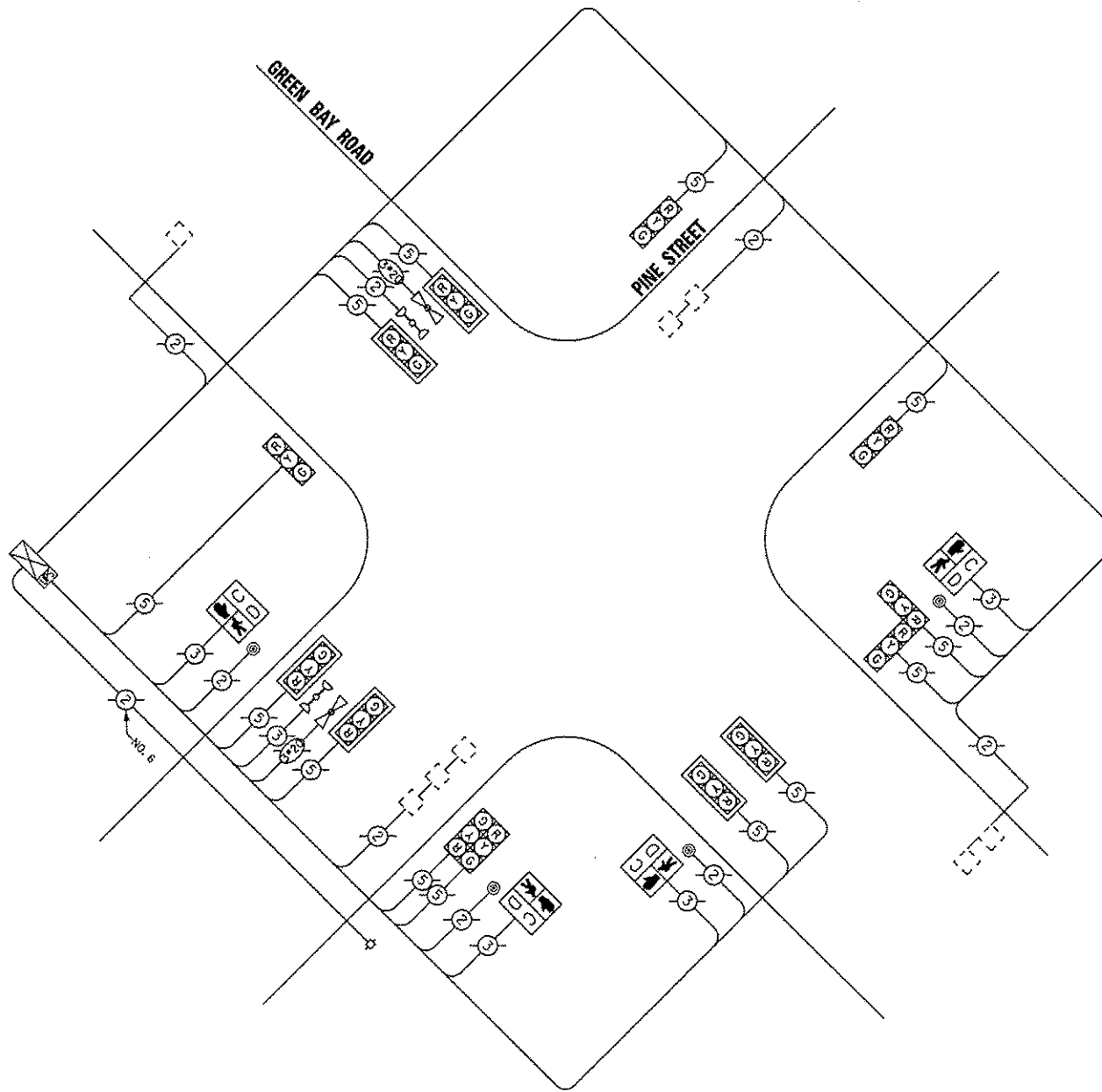
- SINGLE ENTRY PHASE
- DUAL ENTRY PHASE
- OVERLAP
- PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↔	↕



CABLE PLAN

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND.	LED %	OPERATIONS	
SIGNAL (RED)	13		17	0.50	110.50
(YELLOW)	13		25	0.25	81.25
(GREEN)	13		15	0.25	48.75
ARROW			12	0.10	
PED. SIGNAL	4		25	1.00	100.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	440.50

VILLAGE OF WINNETKA
510 GREEN BAY ROAD
WINNETKA, ILLINOIS 60093

ENERGY SUPPLY - CONTACT: TERRI BLECK
PHONE: (847) 816-5239
COMPANY: ComEd

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
2	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
1	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
4	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

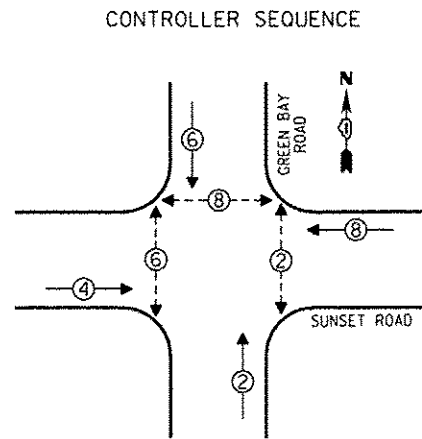
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE,
GREEN BAY ROAD AT PINE STREET

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-0531S	COOK	88	82
			CONTRACT NO. 60X28	
ILLINOIS FED. AID PROJECT				

SCALE: NONE SHEET OF SHEETS STA. TO STA.

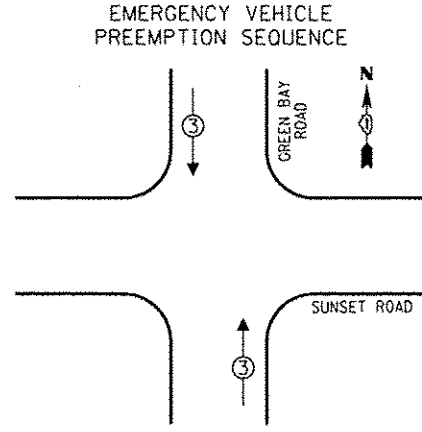


SAMSWARTZ
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3100 W. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

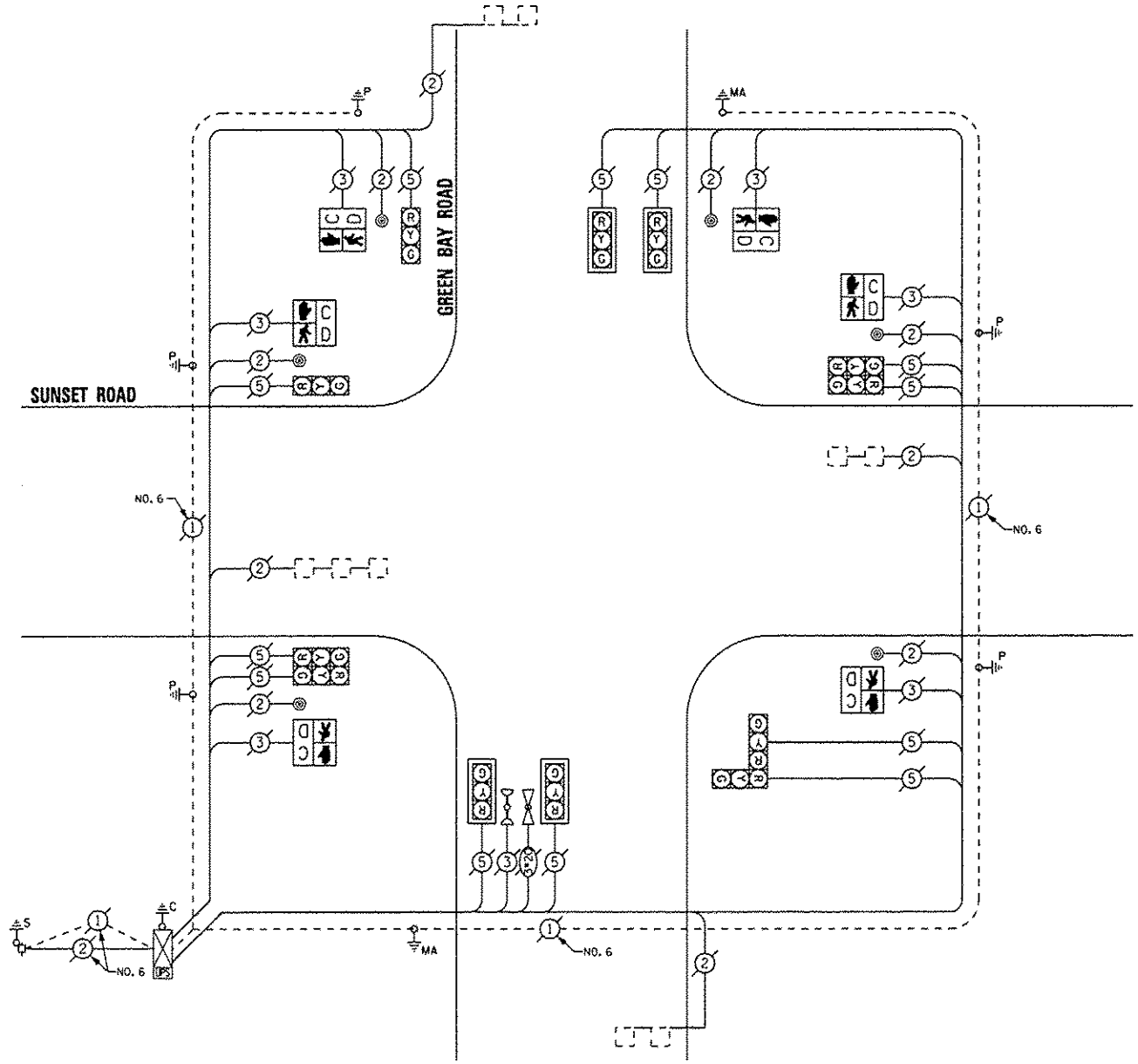


LEGEND
 [Symbol] SINGLE ENTRY PHASE
 [Symbol] DUAL ENTRY PHASE
 [Symbol] OVERLAP
 [Symbol] PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3
MOVEMENT	↑↓



CABLE PLAN

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND	LED % OPERATIONS	WATTAGE	
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
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:			TOTAL =		472.00

VILLAGE OF WINNETKA
 510 GREEN BAY ROAD
 WINNETKA, ILLINOIS 60093

ENERGY SUPPLY - CONTACT: TERRI BLECK
 PHONE: (847) 816-5239
 COMPANY: ComEd

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
6	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
6	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

SAM SCHWARTZ ENGINEERING
 3100 W. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

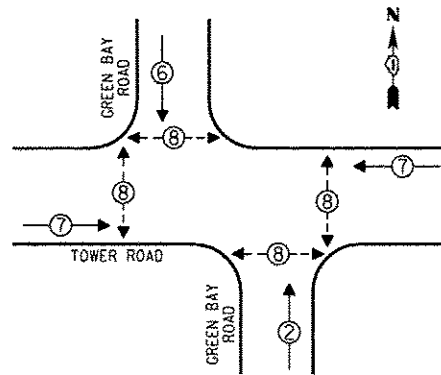
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, GREEN BAY ROAD AT SUNSET ROAD

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	83
				CONTRACT NO. 60X28
ILLINOIS FED. AID PROJECT				

CONTROLLER SEQUENCE

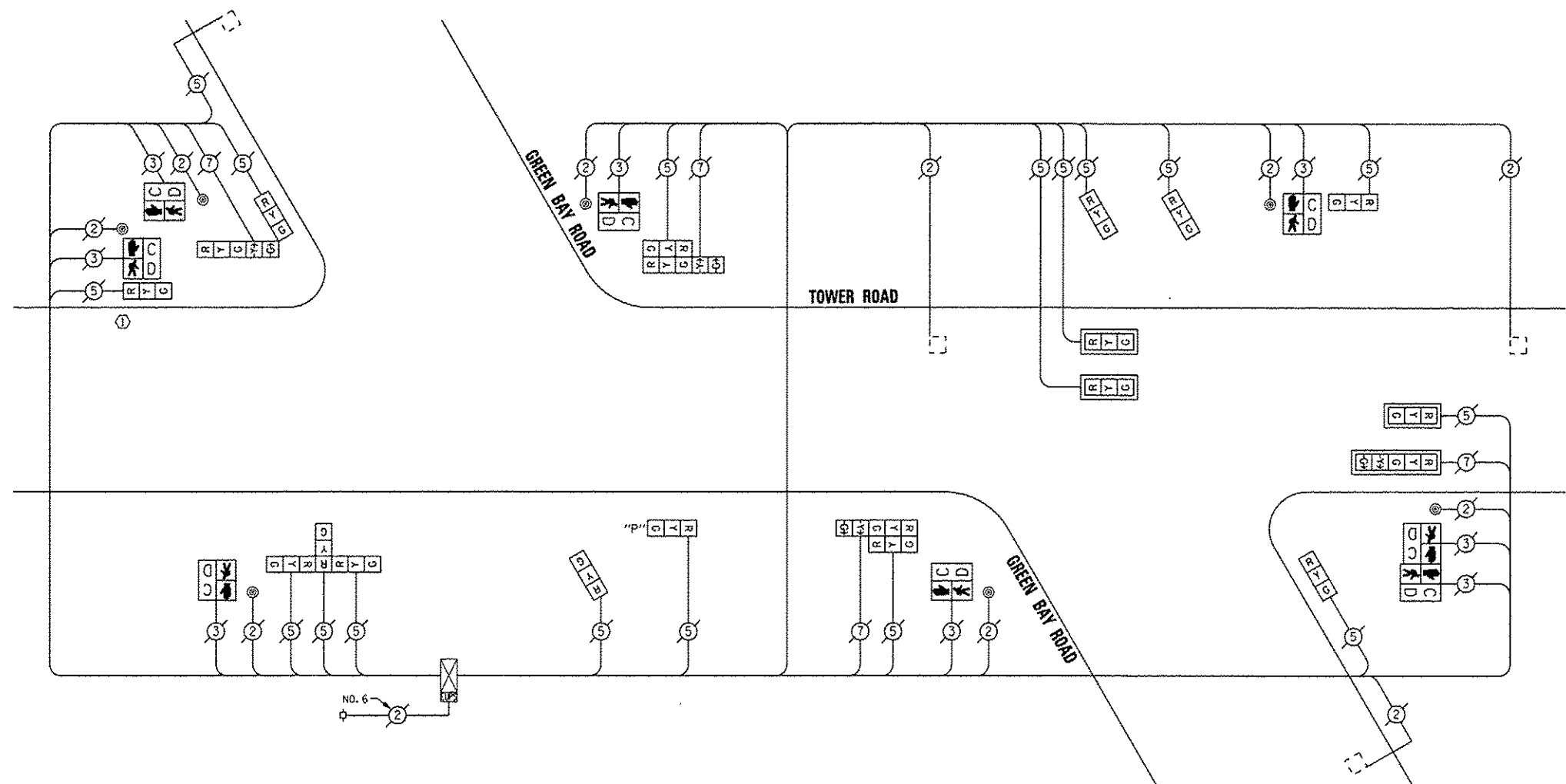


PHASE DESIGNATION DIAGRAM

- LEGEND**
- ① SINGLE ENTRY PHASE
 - ② DUAL ENTRY PHASE
 - ③ OVERLAP
 - ④ PEDESTRIAN PHASE
 - ⑤ NUMBER REFERS TO ASSOCIATED PHASE

① REPLACE 10 FT. PAINTED POST (WITH 14 FT. POST). RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

NOTE:
ALL PUSHBUTTONS SHALL PLACE A CALL IN PHASE 8



CABLE PLAN

REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND.	LED %	OPERATIONS	
SIGNAL (RED)	20		17	0.50	170.00
(YELLOW)	20		25	0.25	125.00
(GREEN)	20		15	0.25	75.00
ARROW	8		12	0.10	9.60
PED. SIGNAL	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	679.60

VILLAGE OF WINNETKA
510 GREEN BAY ROAD
WINNETKA, ILLINOIS 60093

ENERGY SUPPLY - CONTACT: TERRI BLECK
PHONE: (847) 816-5239
COMPANY: ComEd

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
1	EACH	TRAFFIC SIGNAL POST
10	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
3	EACH	SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
1	EACH	SIGNAL HEAD, 3-FACE, 3-SECTION
6	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
1	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
4	EACH	TRAFFIC SIGNAL BACKPLATE
7	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

QUAN.	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
3	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED
6	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED
3	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 3-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
6	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
1	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
4	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
7	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING



DESIGNED - JAM
DRAWN - JAM
CHECKED - LMM
DATE - 12-13-13

REVISED -
REVISED -
REVISED -
REVISED -

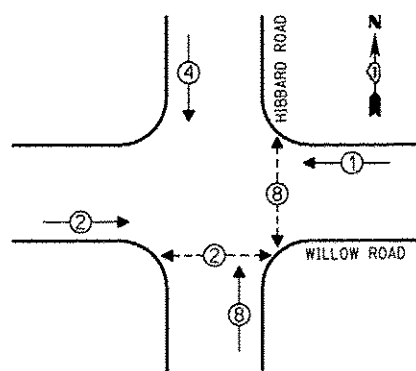
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE,
GREEN BAY ROAD AT TOWER ROAD

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	84
			CONTRACT NO. 60X28	
ILLINOIS FED. AID PROJECT				

SCALE: NONE SHEET OF SHEETS STA. TO STA.

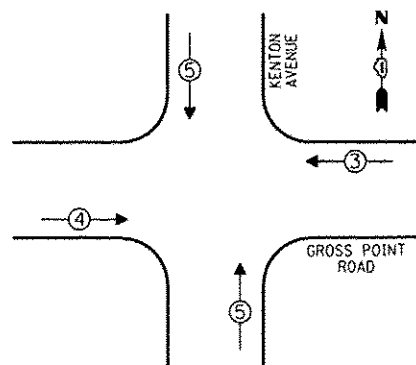
CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

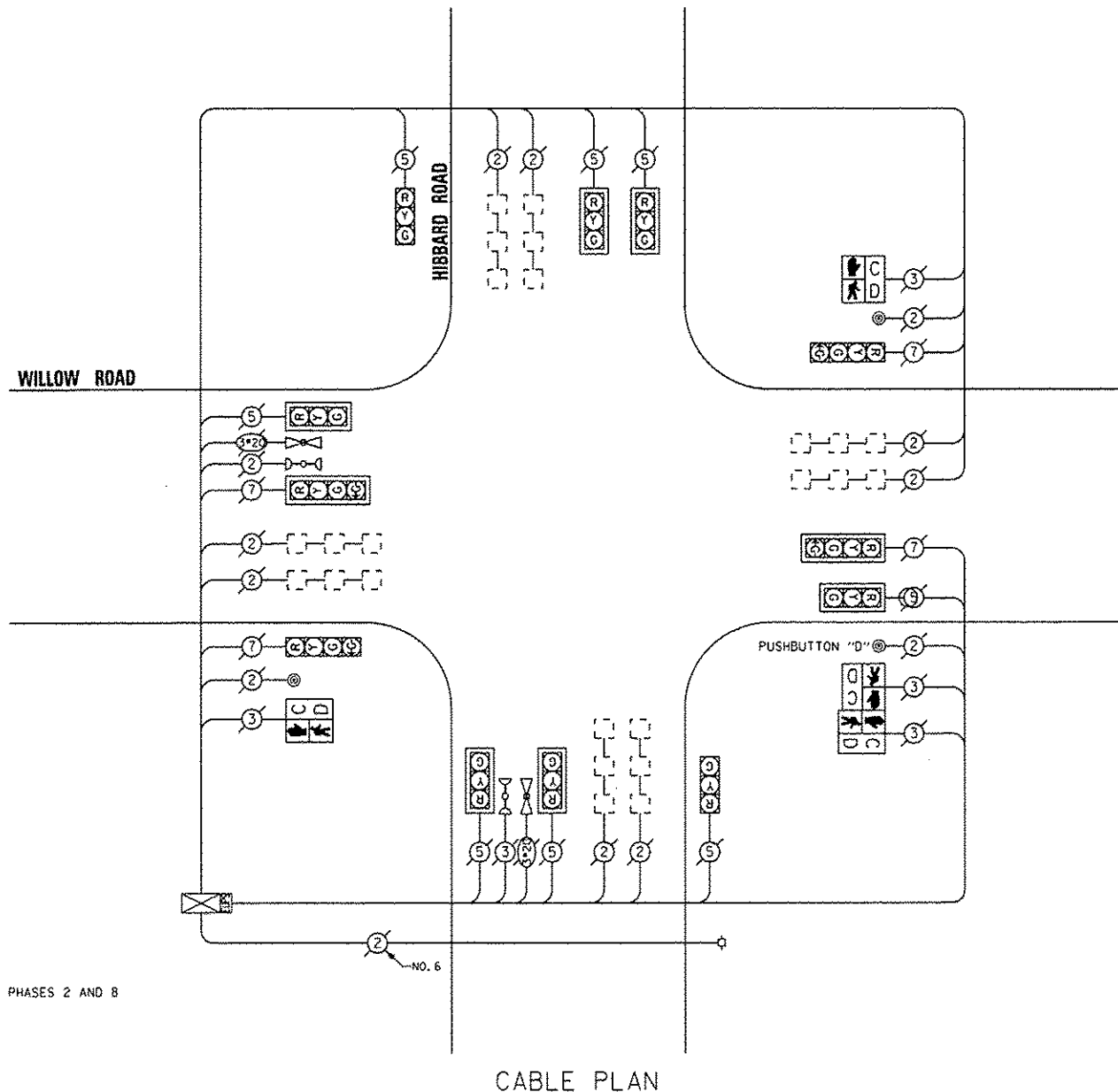
- LEGEND**
- SINGLE ENTRY PHASE
 - DUAL ENTRY PHASE
 - OVERLAP
 - PEDESTRIAN PHASE
 - NUMBER REFERS TO ASSOCIATED PHASE

EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

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



CABLE PLAN

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
2	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
1	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
3	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND.	LED	% OPERATIONS	
SIGNAL (RED)	12		17	0.50	102.00
(YELLOW)	12		25	0.25	75.00
(GREEN)	16		15	0.25	60.00
ARROW			12	0.10	
PED. SIGNAL	4		25	1.00	100.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 437.00

VILLAGE OF MINNETKA
510 GREEN BAY ROAD
MINNETKA, ILLINOIS 60093

ENERGY SUPPLY - CONTACT: TERRI BLECK
PHONE: (847) 816-5239
COMPANY: ComEd

DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

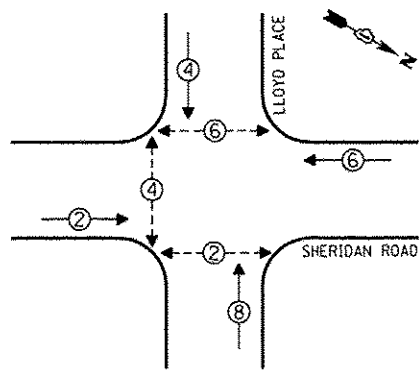
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE,
HIBBARD ROAD AT WILLOW ROAD

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTEL.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	85
			CONTRACT NO. 60X28	
ILLINOIS FED. AID PROJECT				

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3100 W. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

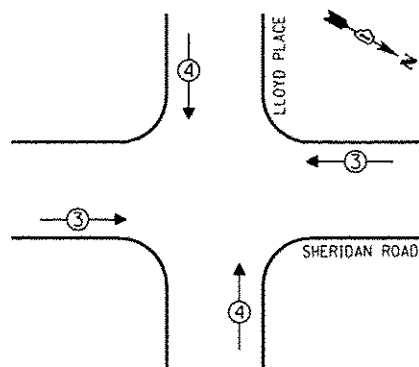
CONTROLLER SEQUENCE



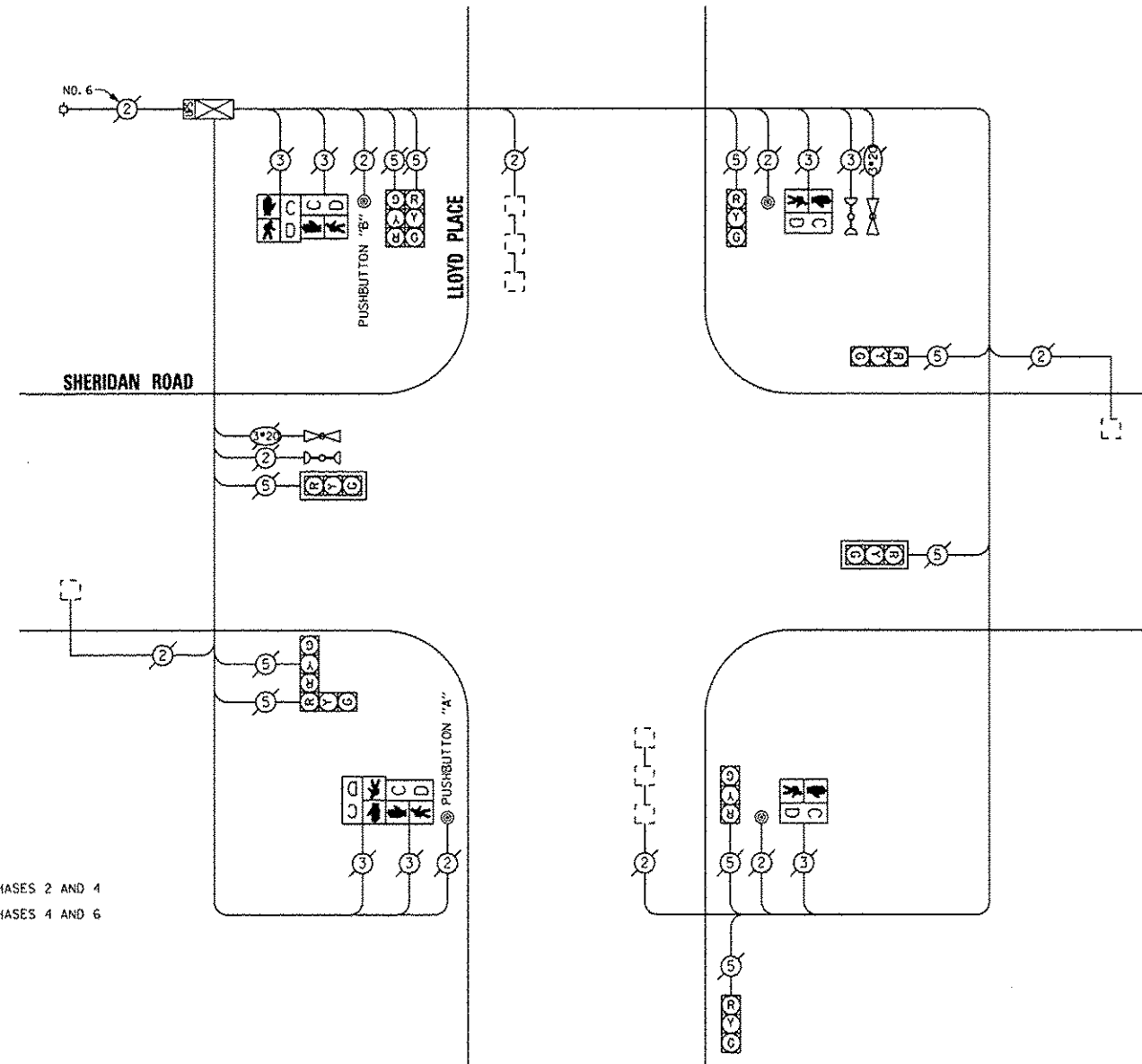
PHASE DESIGNATION DIAGRAM

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↔	↕



CABLE PLAN

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

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND	LED	% OPERATIONS	
SIGNAL (RED)	10		17	0.50	85.00
(YELLOW)	10		25	0.25	62.50
(GREEN)	10		15	0.25	37.50
ARROW			12	0.10	
PEO. SIGNAL	6		25	1.00	150.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 435.00

VILLAGE OF WINNETKA
 510 GREEN BAY ROAD
 WINNETKA, ILLINOIS 60093

ENERGY SUPPLY - CONTACT: FERRI BLECK
 PHONE: (847) 816-5239
 COMPANY: ComEd

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
2	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
2	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
4	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

SAM SCHWARTZ ENGINEERING
 3100 W. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

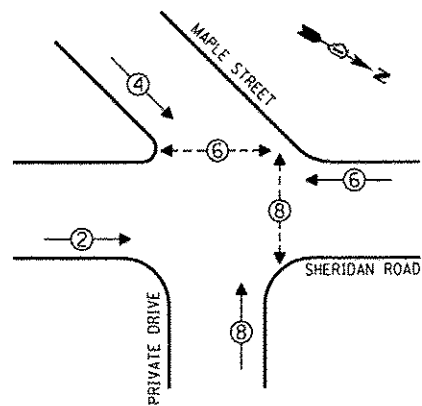
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, SHERIDAN ROAD AT LLOYD PLACE

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-0531S	COOK	88	86
			CONTRACT NO. 60X28	
ILLINOIS FED. AID PROJECT				

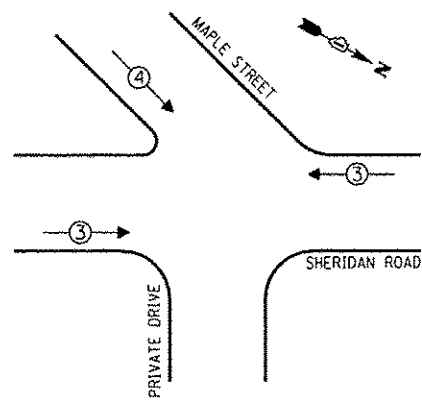
CONTROLLER SEQUENCE



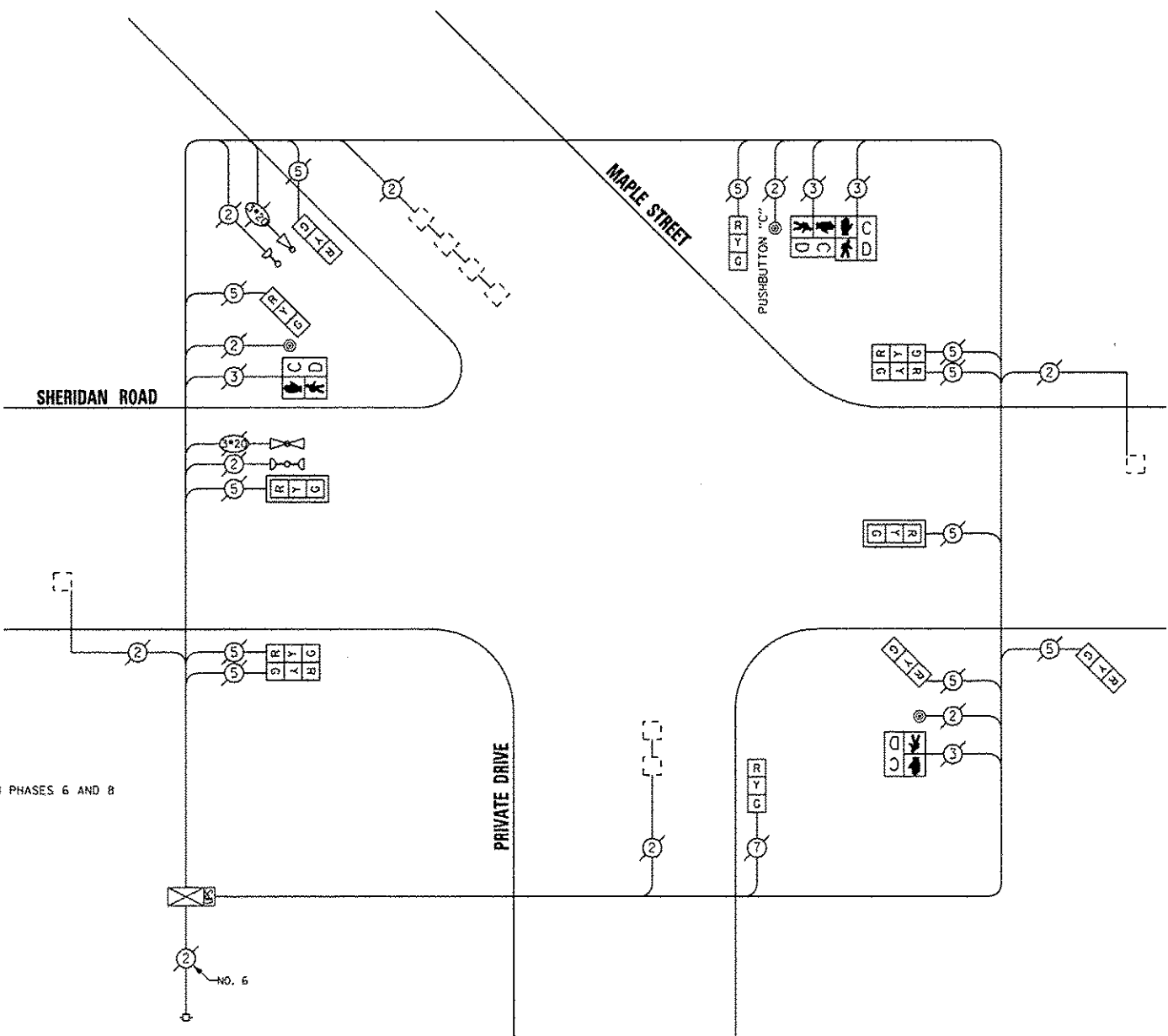
LEGEND
 [Symbol] SINGLE ENTRY PHASE
 [Symbol] DUAL ENTRY PHASE
 [Symbol] OVERLAP
 [Symbol] PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



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



CABLE PLAN

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

REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
8	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
2	EACH	SIGNAL HEAD, 2-FACE, 3-SECTION
2	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
1	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
2	EACH	TRAFFIC SIGNAL BACKPLATE
3	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

QUAN.	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED
6	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
2	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
1	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
2	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL
3	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND.	LED	% OPERATIONS	
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	4		25	1.00	100.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 422.00

VILLAGE OF WINNETKA
 510 GREEN BAY ROAD
 WINNETKA, ILLINOIS 60093

CONTACT: TERRI BLECK
 PHONE: (847) 816-5239
 COMPANY: ComEd

SAM SCHWARTZ ENGINEERING
 3100 N. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

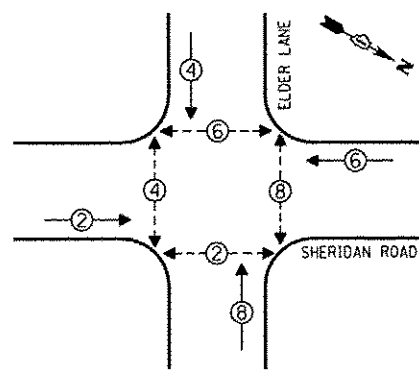
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, SHERIDAN ROAD AT MAPLE STREET

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-0537S	COOK	88	87
CONTRACT NO. 60X28			ILLINOIS FED. AID PROJECT	

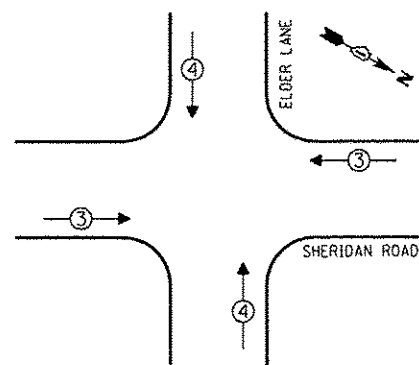
CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

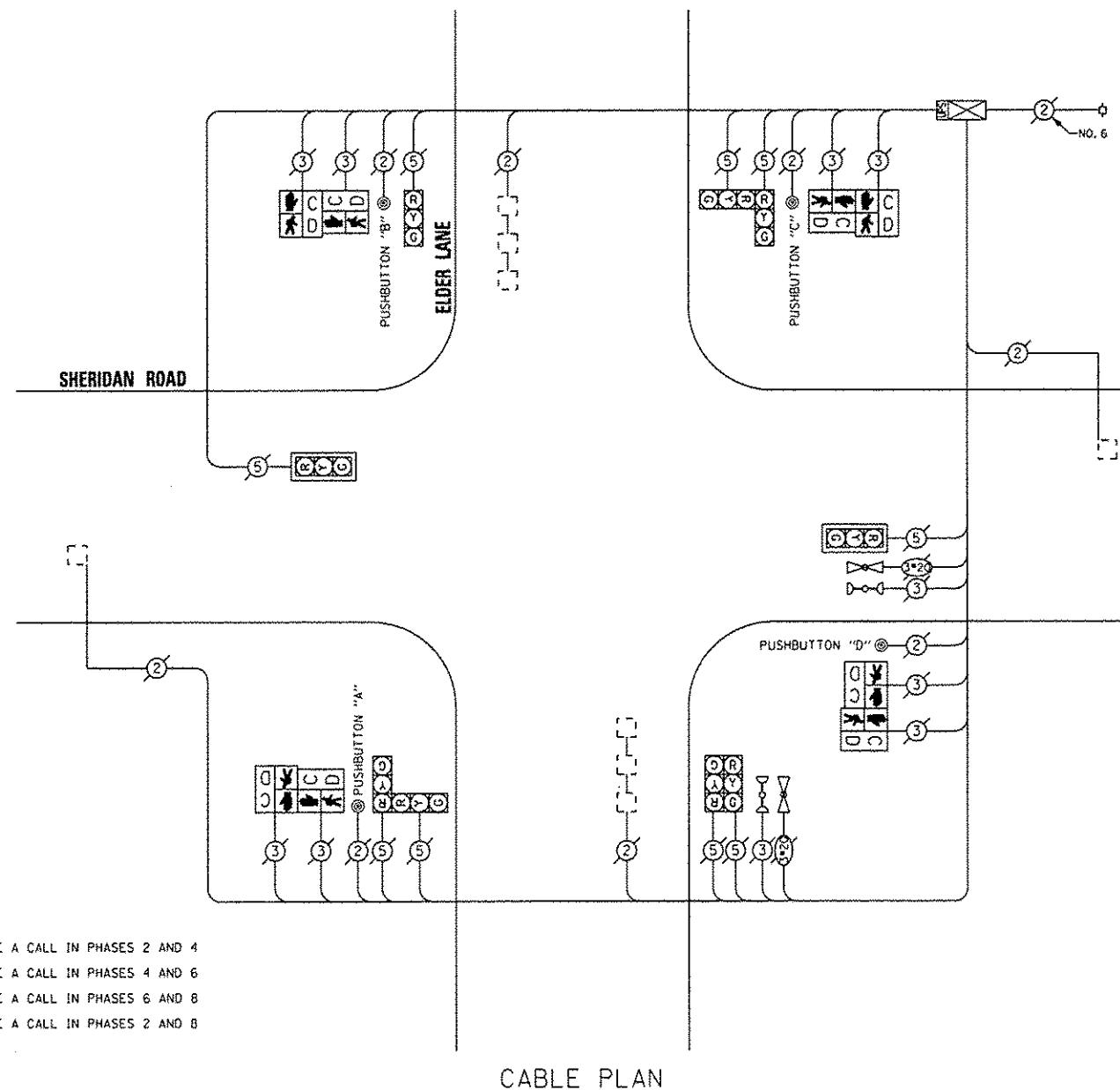
- LEGEND**
- SINGLE ENTRY PHASE
 - DUAL ENTRY PHASE
 - OVERLAP
 - PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE

EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↔	↕

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

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

REMOVE 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.

QUAN.	UNIT	DESCRIPTION
4	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
4	EACH	PEDESTRIAN PUSHBUTTON

SCHEDULE OF QUANTITIES

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND	LED	% OPERATIONS	
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	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 466.50

VILLAGE OF WINNETKA
 510 GREEN BAY ROAD
 WINNETKA, ILLINOIS 60093

ENERGY SUPPLY - CONTACT: TERRI BLECK
 PHONE: (847) 816-5239
 COMPANY: ComEd

DESIGNED - JAM	REVISED -
DRAWN - JAM	REVISED -
CHECKED - LMM	REVISED -
DATE - 12-13-13	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
 DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE,
 SHERIDAN ROAD AT ELDER LANE

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-053TS	COOK	88	88
CONTRACT NO. 60X28			ILLINOIS FED. AID PROJECT	

SAM SCHWARTZ ENGINEERING
 3100 W. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169