

06-14-13 LETTING ITEM 136

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
**PROPOSED
 HIGHWAY PLANS**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DUPAGE	89	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 60W02		

D-91-148-13

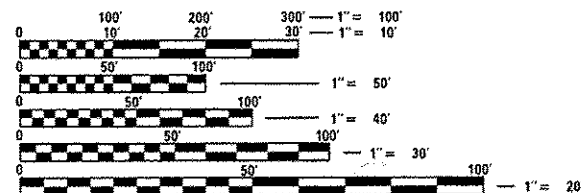
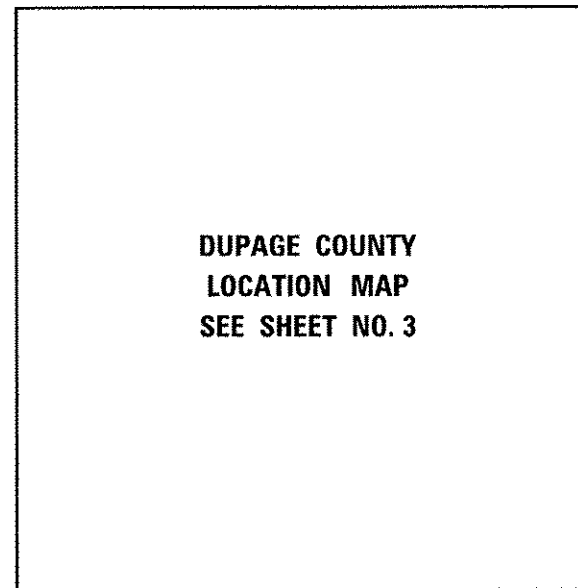
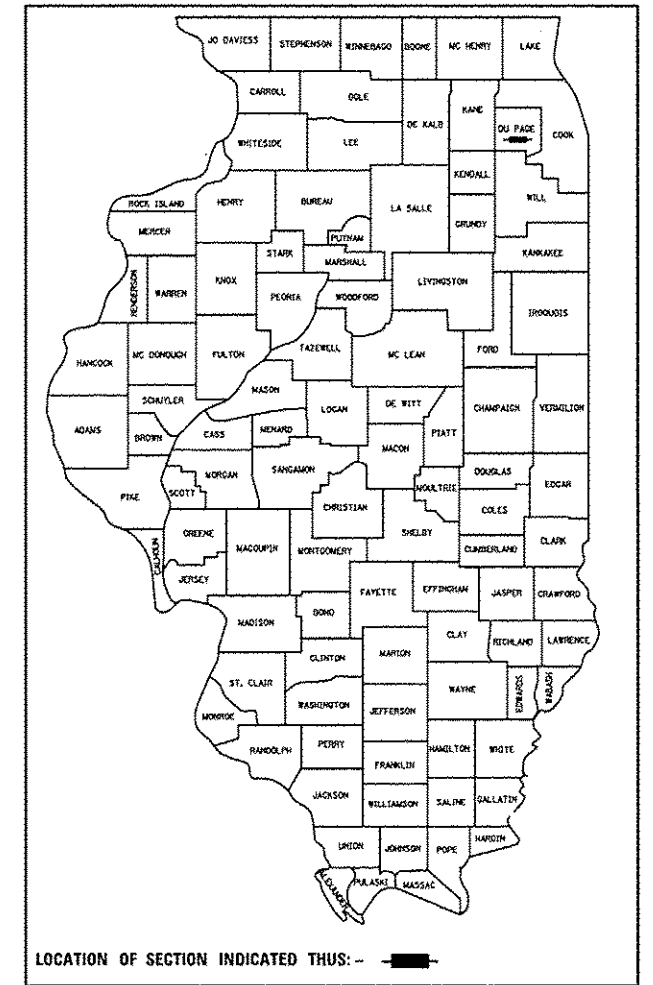
FOR INDEX OF SHEETS, SEE SHEET NO. 2

IDOT STANDARDS:

STD. NO.	TITLE
000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND SYMBOLS
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5m) AWAY
701008-04	OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5m) TO 24" (600mm) FROM PAVEMENT EDGE
701101-03	OFF-ROAD OPERATIONS, MULTILANE, 15' (4.5m) TO 24" (600 mm) FROM PAVEMENT EDGE
701106-02	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' (4.5m) AWAY
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701502-05	URBAN LANE CLOSURE, 2L, 2W, BIDIRECTIONAL LEFT TURN LANE
701501-08	URBAN LANE CLOSURE, MULTILANE, 1W, OR 2W WITH NONTRAVERSABLE MEDIAN
701606-08	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701-08	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701901-02	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
862001-01	UNINTERRUPTIBLE POWER SUPPLY (UPS)
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS

**VARIOUS LOCATIONS IN SOUTH DUPAGE COUNTY
 LIGHT EMITTING DIODE (LED) INSTALLATION**

**SECTION 2012-084TS
 DUPAGE COUNTY
 C-91-148-13**



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 LOCATING INFORMATION FOR EXCAVATORS
 1-800-892-0123
 OR 811

**PROJECT ENGINEER: SUDUD MAHMOUD
 PROJECT MANAGER: DARYLE DREW
 CONTRACT NO. 60W02**

BRUCE P. TALBOT
 062-046494
 REGISTERED
 PROFESSIONAL
 ENGINEER
 OF
 ILLINOIS
 DATE: 3/27/13
 Expires 11-30-13

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 SUBMITTED March 28 20 13
John F. Johnson
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
May 10 20 13
John D. Baranzelli PE
 acting ENGINEER OF DESIGN AND ENVIRONMENT
May 10 20 13
Omer Osman PE
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60504-9675
 Ph: 630.866.2100 Fax: 630.862.2199
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 OF THE STATE OF ILLINOIS**

BUREAU OF TRAFFIC, DISTRICT ONE: STEPHEN TRAVIA / SUDUD MAHMOUD (847) 705-4420

INDEX OF SHEETS

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- 3 LOCATION MAP
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- 10-15 DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS

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17	6350	IL ROUTE 56 AT WOODCREEK DR./LLOYD AVE.
18	6352	IL ROUTE 56 AT ESPLANADE DR./HOME DEPOT ENT.
19	6275	IL ROUTE 56 AT FINLEY RD.
20	11410	IL ROUTE 56 AT DOWNERS DR.
21	6050	US ROUTE 34 AT MONTGOMERY RD.
22	6048	US ROUTE 34 AT LONG GROVE RD.
23	6047	US ROUTE 34 AT 75TH ST.
24	6046	US ROUTE 34 AT COMMONS DR.
25	12360	US ROUTE 34 AT TRADE ST. (AURORA MARKET PL.)
26	20910	US ROUTE 34 AT FOX RIVER COMMONS S.C.
27	9526	US ROUTE 34 AT FORT HILL DR.
28	9549	US ROUTE 34 AT RICKERT DR.
29	9551	US ROUTE 34 AT FELDOTT LN.
30	9520	US ROUTE 34 AT AURORA AVE.
31	9552	US ROUTE 34 AT JEFFERSON ST
32	27140	US ROUTE 34 AT NORTH AURORA RD./RAYMOND DR.
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34	9507	US ROUTE 34 AT 5TH AVE. (FIRE STATION)
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36	9524	US ROUTE 34 AT BENEDETTI DR.
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39	9555	US ROUTE 34 AT LOOMIS ST.
40	9495	US ROUTE 34 AT IROQUOIS AVE.
41	10555	US ROUTE 34 AT NAPERVILLE-WHEATON RD.
42	9605	US ROUTE 34 AT NAPER BLVD./NAPERVILLE RD.
43	11840	US ROUTE 34 AT OLD TAVERN RD.
44	11835	US ROUTE 34 AT INDIANA/WESTERN AVE
45	11830	US ROUTE 34 AT YACKLEY AVE.
46	11825	US ROUTE 34 AT SCHWARTZ AVE.
47	7855	US ROUTE 34 AT MAIN ST. (LISLE)
48	21700	US ROUTE 34 AT CHELSEA AVE.
49	12421	US ROUTE 34 AT I-355 WEST RAMPS
50	12420	US ROUTE 34 AT I-355 EAST RAMPS
51	6120	US ROUTE 34 AT CROSS ST.
52	6125	US ROUTE 34 AT BELMONT/ RD.FINLEY RD.
53	11420	US ROUTE 34 AT SARATOGA AVE.
54	11425	US ROUTE 34 AT MAIN ST. (DOWNERS GROVE)
55	8370	US ROUTE 34 AT FAIRVIEW AVE.
56	21830	US ROUTE 34 AT DOWNERS PLAZA
57	8830	US ROUTE 34 AT WASHINGTON ST. (WESTMONT)
58	6095	US ROUTE 34 AT CASS AVE.
59	10910	US ROUTE 34 AT WARWICK S.C./JEWEL ENT.
60	11675	US ROUTE 34 AT BLACKHAWK DR.
61	6135	US ROUTE 34 AT OAKWOOD DR.
62	6110	US ROUTE 34 AT IL 83 WEST RAMPS
63	6115	US ROUTE 34 AT IL 83 EAST RAMPS
64	6130	US ROUTE 34 AT MADISON ST.
65	6118	US ROUTE 34 AT YORK RD.
66	6116	US ROUTE 34 AT SALT CREEK LN./OAK ST.
67	20635	ILLINOIS ROUTE 59 AT FOX VALLEY S.C. N. ENT.
68	6089	ILLINOIS ROUTE 59 AT MC COY DR./FOX RIVER COMMONS
69	12310	ILLINOIS ROUTE 59 AT AUDREY AVE./AURORA MARKET PL.
70	6360	ILLINOIS ROUTE 59 AT 75TH ST.
71	6362	ILLINOIS ROUTE 59 AT BEEBE DR./COSTCO ENT.
72	11970	ILLINOIS ROUTE 59 AT 83RD ST./MONTGOMERY RD.
73	6092	ILLINOIS ROUTE 59 AT 87TH ST./WHITE EAGLE CLUB
74	11665	ILLINOIS ROUTE 53 AT WARRENVILLE RD.
75	11680	ILLINOIS ROUTE 53 AT SOUTHPORT AVE./US 34 N. RAMP
76	11685	ILLINOIS ROUTE 53 AT US 34 S. RAMP
77	11670	ILLINOIS ROUTE 53 AT BURLINGTON AVE.
78	11660	ILLINOIS ROUTE 53 AT SHORT ST.
79	11655	ILLINOIS ROUTE 53 AT MAIN ST. (LISLE)
80	7830	ILLINOIS ROUTE 53 AT MAPLE AVE.
81	6250	ILLINOIS ROUTE 53 AT 59TH ST./FOUR LAKES AVE.
82	6240	ILLINOIS ROUTE 53 AT SUMMERHILL DR.
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85	6225	ILLINOIS ROUTE 53 AT HOBSON RD.
86	6220	ILLINOIS ROUTE 53 AT 75TH ST.
87	6245	ILLINOIS ROUTE 53 AT 83RD ST.

- 88 TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS (TC-10)
- 89 TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) (TC-14)

GENERAL NOTES:

THE CONTRACTOR SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 72 HOURS IN ADVANCE OF BEGINNING WORK.

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

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

IF THIS CONTRACT REQUIRES THE SERVICES OF AN ELECTRICAL CONTRACTOR, THE CONTRACTOR SHALL BE RESPONSIBLE AT HIS/HER OWN EXPENSE FOR LOCATING EXISTING IDOT ELECTRICAL FACILITIES PRIOR TO PERFORMING ANY WORK. IF THIS CONTRACT DOES NOT REQUIRE THE SERVICES OF AN ELECTRICAL CONTRACTOR, THE CONTRACTOR MAY REQUEST ONE FREE LOCATE FOR EXISTING IDOT ELECTRICAL FACILITIES FROM THE DISTRICT ONE ELECTRICAL MAINTENANCE CONTRACTOR PRIOR TO THE START OF ANY WORK. ADDITIONAL REQUESTS MAY BE AT THE EXPENSE OF THE CONTRACTOR. THE LOCATION OF UNDERGROUND TRAFFIC FACILITIES DOES NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO REPAIR ANY FACILITIES DAMAGED DURING CONSTRUCTION AT THEIR EXPENSE.

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

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

RESTORATION OF 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 SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

ANY REFERENCE TO THE STANDARDS THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED AS THE TEST STANDARD OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION.

THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE PLANS AND SHALL NOTIFY THE ENGINEER AT ONCE OF ANY DISCREPANCIES.

THE CONTRACTOR IS REQUIRED TO ATTEND AN ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT) PRECONSTRUCTION MEETING AND SHALL INFORM THE IDOT TRAFFIC ENGINEER BEFORE WORK COMMENCES.

THE CONTRACTOR SHALL KEEP PUBLIC STREET PAVEMENTS CLEAN OF DIRT AND DEBRIS.

THE CONTRACTOR SHALL BE RESPONSIBLE IN PROVIDING SAFE AND HEALTHFUL CONDITIONS THROUGHOUT THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND AND SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO A CONDITION EQUAL TO THAT EXISTING BEFORE THE DAMAGE INCURRED. THIS WORK SHALL BE AT THE CONTRACTOR'S EXPENSE.

NEW CONTROLLER CABINETS SHALL BE PLACED SO THAT, a) THE DOORS OPEN AWAY FROM THE CURB OR TRAVELED WAY., b) AND THE TRAFFIC MOVEMENTS AT THE INTERSECTION ARE VISIBLE FROM THE CONTROLLER.

ANY CONTROLLER CABINET WHETHER NEW OR EXISTING TO RECEIVE UPS, WILL HAVE A "L" SHAPED 3 FOOT CONCRETE MAINTENANCE PAD INSTALLED. THE COST OF INSTALLATION OF CONCRETE PAD IS INCIDENTAL TO NEW CONTROLLER AND OR UPS INSTALLATIONS.

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


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

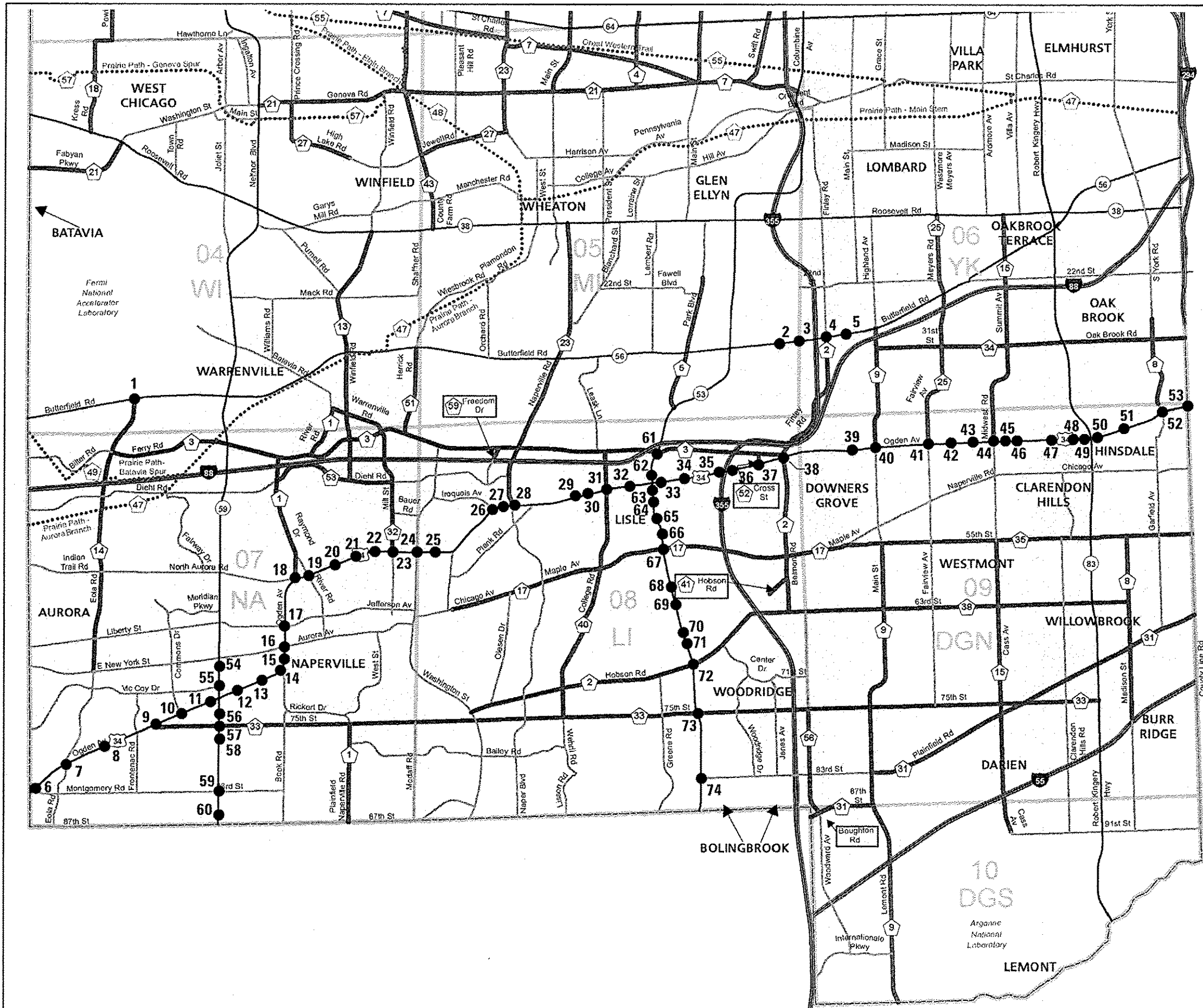
THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM PAINTED POSTS THAT ARE INDICATED FOR REPLACEMENT TO A NEW POSTS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE COST OF REMOVAL, RELOCATION AND ANY NEW MOUNTING HARDWARE NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE TRAFFIC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

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

RLR CAMERA LOCATION:
 TS# 11830 U.S. ROUTE 34 @ YACKLEY AVENUE
 TS# 7830 ILLINOIS ROUTE 53 @ MAPLE AVENUE

VILLAGE OF LISLE REDSPEED ILLINOIS
 925 BURLINGTON AVENUE 400 EISENHOWER LANE NORTH
 LISLE, IL 60532 LOMBARD, IL 60148
 630-271-4100 630-317-5720

FILE NAME * MICROST1352105\ 02-INDEX.DGN	USER NAME * JGC	DESIGNED - BPT	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS				 CEMCON, Ltd. Consulting Engineers, Land Surveyors & Planners 2250 White Oak Circle, Suite 100 Aurora, Illinois 60504-9675 Ph: 630.862.2100 Fax: 630.862.2199 E-Mail: oadd@cemcon.com Website: www.cemcon.com
		DRAWN - RDS/JGC	REVISED -		SCALE: 1"=20'				
		CHECKED - BPT	REVISED -		SHEET NO. OF SHEETS STA. TO STA.				
		DATE - 03-22-13	REVISED -		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
				CONTRACT NO. 60W02				TOTAL SHEETS 89	SHEET NO. 2



#	TS#	LOCATION
1	6325	IL ROUTE 56 AT EOLA RD.
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67	7830	ILLINOIS ROUTE 53 AT MAPLE AVE.
68	6250	ILLINOIS ROUTE 53 AT 59TH ST./FOUR LAKES AVE.
69	6240	ILLINOIS ROUTE 53 AT SUMMERHILL DR.
70	6255	ILLINOIS ROUTE 53 AT WOODRIDGE DR.
71	6256	ILLINOIS ROUTE 53 AT HIGH TRAIL/SEVEN BRIDGES DR.
72	6225	ILLINOIS ROUTE 53 AT HOBSON RD.
73	6220	ILLINOIS ROUTE 53 AT 75TH ST.
74	6245	ILLINOIS ROUTE 53 AT 83RD ST.

FILE NAME : \\MICROST\352185\ 03-LOC MAP.DGN
 USER NAME : JCC
 PLOT SCALE : NOT TO SCALE
 PLOT DATE : X

DESIGNED - BPT	REVISED -
DRAWN - RDS/JCC	REVISED -
CHECKED - BPT	REVISED -
DATE - 03-22-13	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

LOCATION MAP

SCALE: 1"=20' SHEET NO. OF SHEETS STA. TO STA.

PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
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 E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.U. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DUPAGE	89	3
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
		CONTRACT NO. 60W02		

SUMMARY OF QUANTITIES HEADING LEGEND

FUNDING PARTICIPATION

LOCATION #	COLUMN #	TS #	INTERSECTION	STATE	DUPAGE COUNTY	AURORA	DOWNERS GROVE	HINSDALE	LISLE	NAPERVILLE	WESTMONT	WOODRIDGE	UNIVERSITIES RESEARCH ASSN	MILTON TOWNSHIP	INLAND COMMERCIAL PROPERTY MGMT	FOX RIVER COMMONS SHOPPING CTR	JEWEL TEA COMPANY	BONNIE MGMT CORP	MARRIOTT INTERNATIONAL INC	DOWNERS PLAZA
1	14	6325	IL 56 AT EOLA ROAD	95.0%	2.5%								2.5%							
2	23	6350	IL 56 AT WOODCREEK/LLOYD	95.0%			2.5%							2.5%						
3	16	6352	IL 56 AT ESPLANADE/HOME DEPOT	95.0%			5.0%													
4	16	6275	IL 56 AT FINLEY ROAD	95.0%			5.0%													
5	16	11410	IL 56 AT DOWNERS DR	95.0%			5.0%													
6	13	6050	US 34 AT MONTGOMERY RD	95.0%		5.0%														
7	13	6049	DELETED																	
8	13	6048	US 34 AT LONG GROVE	95.0%		5.0%														
9	3	6047	US 34 AT 75TH STREET	96.7%	3.3%															
10	4	6046	US 34 AT COMMONS DR	96.7%		3.3%														
11	13	12360	US 34 AT TRADE ST (AURORA MARKET PL)	95.0%		5.0%														
12	24	20910	US 34 AT FOX RIVER COMMONS SC	95.0%												5.0%				
13	19	9526	US 34 AT FORT HILL DRIVE	95.0%						5.0%										
14	6	9549	US 34 AT RICKERT	96.7%						3.3%										
15	19	9551	US 34 AT FELDOTT	95.0%						5.0%										
16	19	9520	US 34 AT AURORA AVE	95.0%						5.0%										
17	19	9552	US 34 AT JEFFERSON ST	95.0%						5.0%										
18	10	27140	US 34 AT NORTH AURORA/RAYMOND	95.0%	2.5%					2.5%										
19	19	9567	US 34 AT RIVER ROAD	95.0%						5.0%										
20	19	9507	US 34 AT 5TH AVE (FIRE STATION)	95.0%						5.0%										
21	19	9565	US 34 AT ROYAL ST GEORGE DR	95.0%						5.0%										
22	19	9524	US 34 AT BENEDETTI	95.0%						5.0%										
23	10	9505	US 34 AT MILL STREET	95.0%	2.5%					2.5%										
24	19	9570	US 34 AT WASHINGTON ST (NAPERVILLE)	95.0%						5.0%										
25	19	9555	US 34 AT LOOMIS ST	95.0%						5.0%										
26	19	9495	US 34 AT IROQUOIS	95.0%						5.0%										
27	19	10555	US 34 AT NAPERVILLE RD/WHEATON RD	95.0%						5.0%										
28	10	9605	US 34 AT NAPER BLVD/NAPERVILLE RD	95.0%	2.5%					2.5%										
29	5	11840	US 34 AT OLD TAVERN RD	96.7%					3.3%											
30	18	11835	US 34 AT INDIANA/WESTERN AVE	95.0%					5.0%											
31	9	11830	US 34 AT YACKLEY	95.0%	5.0%															
32	18	11825	US 34 AT SCHWARTZ AVE	95.0%					5.0%											
33	18	7855	US 34 AT MAIN ST (LISLE)	95.0%					5.0%											
34	1	21700	US 34 AT CHELSEA AVE	100.0%																
35	1	12421	US 34 AT I-355 WEST RAMPS	100.0%																
36	1	12420	US 34 AT I-355 EAST RAMPS	100.0%																
37	16	6120	US 34 AT CROSS ST	95.0%			5.0%													
38	9	6125	US 34 AT FINLEY/BELMONT	95.0%	5.0%															
39	16	11420	US 34 AT SARATOGA	95.0%			5.0%													
40	11	11425	US 34 AT MAIN ST (DOWNERS GROVE)	95.0%	2.5%		2.5%													
41	11	8370	US 34 AT FAIRVIEW	95.0%	2.5%		2.5%													
42	25	21830	US 34 AT DOWNERS PLAZA	95.0%											2.5%					2.5%
43	21	8830	US 34 AT WASHINGTON ST (WESTMONT)	95.0%							5.0%									
44	21	6095	US 34 AT CASS AVE	95.0%							5.0%									
45	26	10910	US 34 AT WARWICK SC/JEWEL ENTR	95.0%													5.0%			
46	12	11675	US 34 AT BLACKHAWK DR	95.0%	2.5%						2.5%									
47	7	6135	US 34 AT OAKWOOD	96.7%							3.3%									
48	21	6100	DELETED																	
49	1	6110	US 34 AT IL RT 83 WEST RAMPS	100.0%																
50	1	6115	US 34 AT IL RT 83 EAST RAMPS	100.0%																
51	17	6130	US 34 AT MADISON ST	95.0%							5.0%									
52	17	6118	US 34 AT YORK ROAD	95.0%							5.0%									
53	17	6116	US 34 AT SALT GREEN/OAK ST	95.0%							5.0%									
54	15	20635	IL 59 AT FOX VALLEY SC NORTH ENTR	95.0%		2.5%						2.5%								
55	24	6089	IL 59 AT MCCOY DR/FOX RIVER COMMONS	95.0%												5.0%				
56	20	12310	IL 59 AT AUDREY AVE/AURORA MKT PL	95.0%							2.5%								2.5%	
57	9	6360	IL 59 AT 75TH STREET	95.0%	5.0%															
58	19	6362	IL 59 AT BEEBE DR/COSTCO ENTR	95.0%							5.0%									

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FILE NAME: \\MICROST\352185\04-SUMMARY.DGN
 USER NAME: JGC

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CHECKED - BPT	REVISED -
DATE - 03-22-13	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES
 (SHEET 1 OF 6)**

SCALE: 1"=20' SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE. VAR.	SECTION 2012-084TS	COUNTY DUPAGE	TOTAL SHEETS 89	SHEET NO. 4
CONTRACT NO. 60W02			ILLINOIS FED. AID PROJECT	

SUMMARY OF QUANTITIES HEADING LEGEND

FUNDING PARTICIPATION (CONT.)

LOCATION	COLUMN	TS	INTERSECTION	STATE	DUPAGE COUNTY	AURORA	DOWNERS GROVE	HINSDALE	LISLE	NAPERVILLE	WESTMONT	WOODRIDGE	UNIVERSITIES RESEARCH ASSN	MILTON TOWNSHIP	INLAND COMMERCIAL PROPERTY MGMT	FOX RIVER COMMONS SHOPPING CTR	JEWEL TEA COMPANY	BONNIE MGMT CORP	MARRIOTT INTERNATIONAL INC	DOWNERS PLAZA
59	15	11970	IL 59 AT 83RD ST/MONTGOMERY RD	95.0%		2.5%				2.5%										
60	15	6092	IL 59 AT 87TH ST/ WHITE EAGLE	95.0%		2.5%				2.5%										
61	9	11665	IL 53 AT WARRENVILLE RD	95.0%	5.0%															
62	2	11680	IL 53 AT SOUTHPORT/US 34 N RAMP	97.5%					2.5%											
63	1	11685	IL 53 AT US 34 SOUTH RAMP	100.0%																
64	18	11670	IL 53 AT BURLINGTON AVE	95.0%					5.0%											
65	18	11660	IL 53 AT SHORT STREET	95.0%					5.0%											
66	5	11655	IL 53 AT MAIN ST (LISLE)	96.7%					3.3%											
67	9	7830	IL 53 AT MAPLE AVE	95.0%	5.0%															
68	18	6250	IL 53 AT 59TH ST/FOUR LAKES	95.0%					5.0%											
69	27	6240	IL 53 AT SUMMERHILL DR	95.0%															5.0%	
70	22	6255	IL 53 AT WOODRIDGE DR	95.0%								5.0%								
71	22	6256	IL 53 AT HIGH TRAIL/SEVEN BRIDGES DR	95.0%								5.0%								
72	9	6225	IL 53 AT HOBSON ROAD	95.0%	5.0%															
73	9	6220	IL 53 AT 75TH STREET	95.0%	5.0%															
74	8	6245	IL 53 AT 83RD STREET	96.7%								3.3%								

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FILE NAME =	USER NAME = JGC	DESIGNED - BPT	REVISED -
\\MICROST\J52105\05-SUMMARY.DGN		DRAWN - RDS/JGC	REVISED -
	FLYOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -
	FLYOT DATE = X	DATE - 03-22-13	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
 (SHEET 2 OF 6)

SCALE: 1"=20' SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DUPAGE	89	5
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60W02	

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 0021																										
				TRAFFIC SIGNAL																										
				URBAN																										
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
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	72	6	1	1	1	2	1	1	1	7	3	2	1	3	1	3	5	3	5	13	1	2	2	1	1	3	1	1
86400100	TRANSCEIVER - FIBER OPTIC	EACH	5									2						2			1									
87502440	TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	1												1															
87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	40	13	3		4	3	1							1	4	1	4			3	2						1	
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	58	4	2		1	1	3	6		4	4		4	1	2	2	16	3		3							2	
87502520	TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	6				3												1			1	1							
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	91	23	3		3	4	1	3	2		2	4	7	4		10	1	10	1	1	8					4		
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	70	15	3		3	5	3	2			5					8	5	6	1	10	2					2		
88030070	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	1	1																										
88030080	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	1	1																										
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	45	1	2		1		1	3	2		8	4		3		3		10		5						2		

FILE NAME *	USER NAME * JGC	DESIGNED - BPT	REVISED -
\\MICROSTY\352105\06-SUMMARY.DGN		DRAWN - RDS/JGC	REVISED -
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		DATE - 03-22-13	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES
(SHEET 3 OF 6)**

SCALE: 1"=20' SHEET NO. OF SHEETS STA. TO STA.

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DUPAGE	89	6
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60W02	

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
				CONSTRUCTION CODE 0021																										
				TRAFFIC SIGNAL																										
				URBAN																										
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	64	3	2		1	2		1	1	6		8	4	3	2		3	3	16	1		5		1				2
88030210	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	21	2			1	3		2						1			6	2	2								2	
88030220	SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4									2		1			1													
88030230	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-4 SECTION, BRACKET MOUNTED	EACH	2	2																										
88030240	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	21	5				2								3	1		2	1	6	1								
88030310	SIGNAL HEAD, LED, 3-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1																											1
88030330	SIGNAL HEAD, LED, 3-FACE, 2-3 SECTION, 1-5 SECTION BRACKET MOUNTED	EACH	5	1															1		2								1	
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	114	2	2	2	2	4	2		2	14	8	4	4	10			4	14	8	12	2	4	4		6	2	2	
88102747	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	51	2								1	6	2	1				2	2	8	21		5	1					
88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	156	27	5		4	6		2	4	8		10	8	10	6		13	4	26	2		6		9				6
88500100	INDUCTIVE LOOP DETECTOR	EACH	69										25				7		26			11								
88800100	PEDESTRIAN PUSH-BUTTON	EACH	105		2	2	2	4	2		2	15	8			8				10	6	24	2	6	2			6	2	2
89500100	RELOCATE EXISTING SIGNAL HEAD	EACH	13									8								1		4								
89500200	RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	1									1																		

FILE NAME *
MICROST\352105\ 07-SUMMARY.DGN

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PLOT SCALE * NOT TO SCALE	CHECKED - BPT	REVISED -
PLOT DATE * X	DATE - 03-22-13	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES
(SHEET 4 OF 6)**

SCALE: 1"=20' SHEET NO. OF SHEETS STA. TO STA.

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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DUPAGE	89	7
CONTRACT NO. 60W02				

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
				CONSTRUCTION CODE 0021																											
				TRAFFIC SIGNAL																											
				URBAN																											
89500400	RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	EACH	1									1																			
89501400	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	5					3												1			1								
89501410	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	5										2						2			1									
89502210	MODIFY EXISTING CONTROLLER CABINET	EACH	65	6	1	1	1	2	1	1	1	6	1	2	1	3			3	3	3	6	12	1	2	2	1	2	1	1	1
89502350	REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT	FOOT	178																												
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	65	6	1	1	1	2	1	1	1	5	3	2	1	3	1	3	5	3	6	9	1	2	2	1	1	1	1	1	
X8570226	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	5										1			1		2			1										
X8570231	FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL	EACH	1										1																		
X8600105	MASTER CONTROLLER (SPECIAL)	EACH	1										1																		
X8620200	UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	71	6	1	1	1	2	1	1	1	6	3	2	1	3	1	3	5	3	6	13	1	2	2	1	2	1	1	1	
X8880015	PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	80	4										10	6	3		6	7	9	11	17		4	3						
X8803040	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT	EACH	19	2								4				2		4					2						3	2	
X8803050	SIGNAL HEAD, LED, 3-FACE, 1-3 SECTION, 2-5 SECTION, BRACKET MOUNTED, RETROFIT	EACH	1									1																			
X8803060	SIGNAL HEAD, LED, 3-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	2															2													

FILE NAME *	USER NAME * JGC	DESIGNED - BPT	REVISED -
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		DATE - 03-22-13	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES (SHEET 5 OF 6)			
SCALE: 1"=20'	SHEET NO.	OF SHEETS	STA. TO STA.

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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DUPAGE	89	8
CONTRACT NO. 60W02				

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
				CONSTRUCTION CODE 0021																											
				TRAFFIC SIGNAL																											
				URBAN																											
X8803082	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	13	1												2	4	3			1	2									
X8803084	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	71	4							15				13	18					7	9						3	2		
X8803088	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	39	3							13				5	4	1				3	7						1	2		
X8803090	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	12								1				2	4	2				1							1	1		
X8803210	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	21	1							3				3	4	2				1	5							2		
X8803910	SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED RETROFIT	EACH	6								4										1	1									

FILE NAME *	USER NAME * JGC	DESIGNED - BPT	REVISED -
\\MICROST\352105\00-SUMMARY.DGN		DRAWN - RDS/JGC	REVISED -
	PLDT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -
	PLDT DATE = X	DATE - 03-22-13	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES (SHEET 6 OF 6)			
SCALE: 1"=20'	SHEET NO.	OF SHEETS	STA. TO STA.

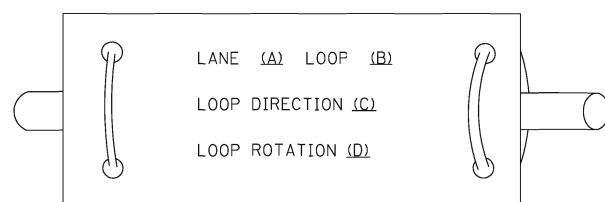
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DUPAGE	89	9
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60W02	

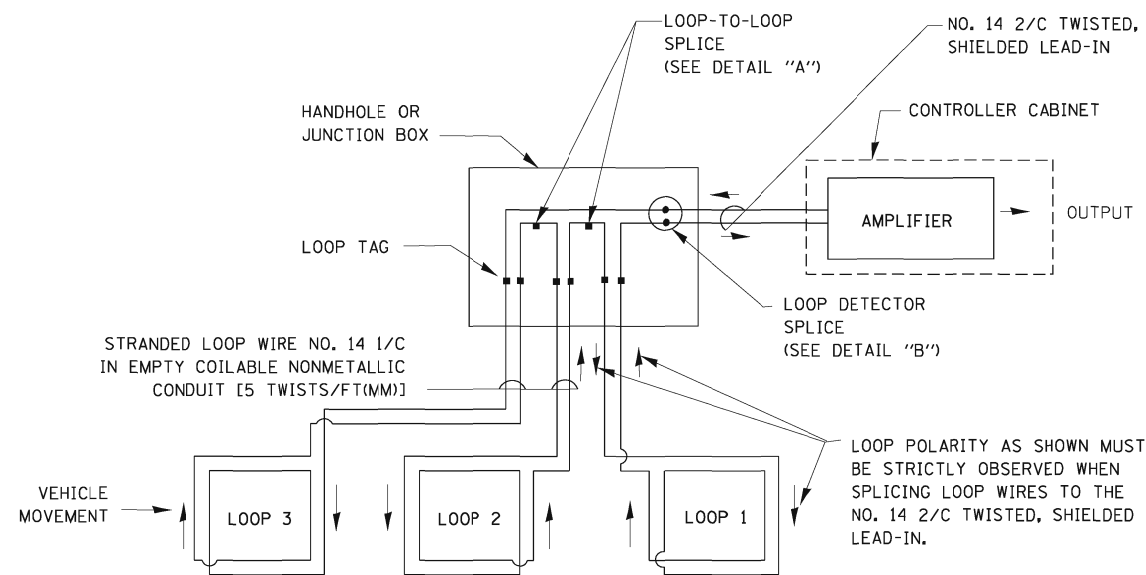
LOOP DETECTOR NOTES

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

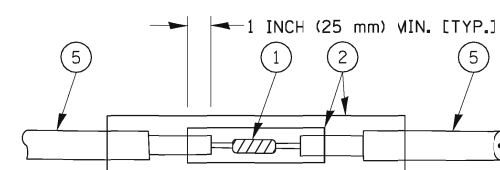


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

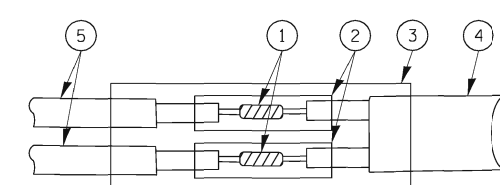


DETECTOR LOOP WIRING SCHEMATIC

- 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.

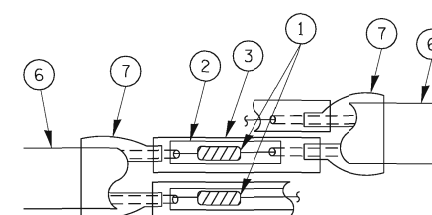


DETAIL "A" LOOP-TO-LOOP SPLICE

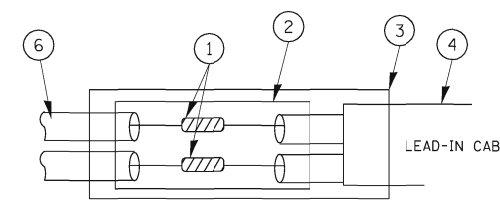


DETAIL "B" LOOP-TO-CONTROLLER SPLICE

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

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PLOT DATE = 10/6/2009		DATE - 10/28/09	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

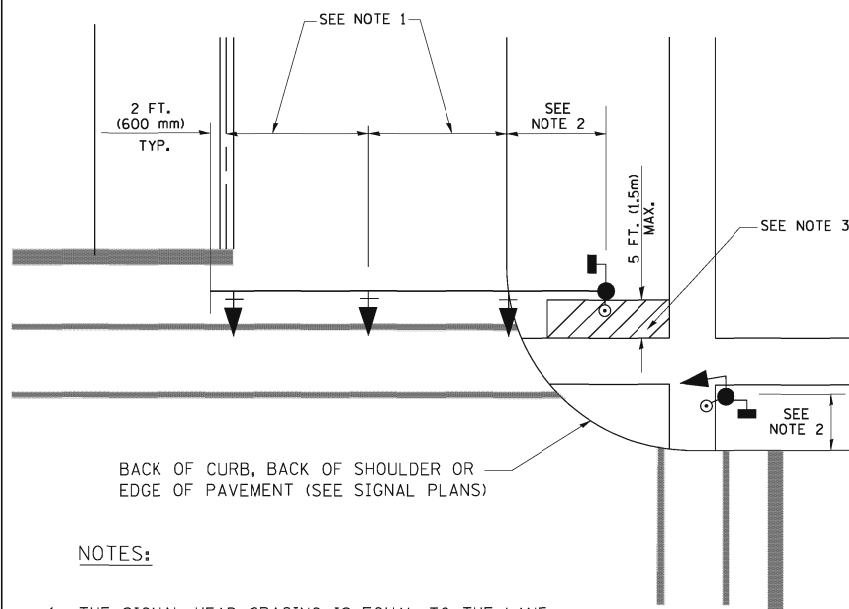
**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: SHEET NO. 1 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DUPAGE	89	10
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 60W02	

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

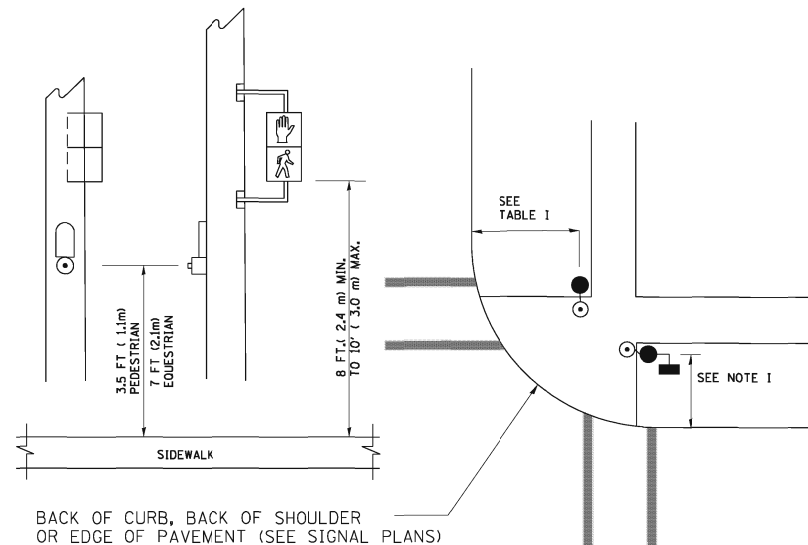
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



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."

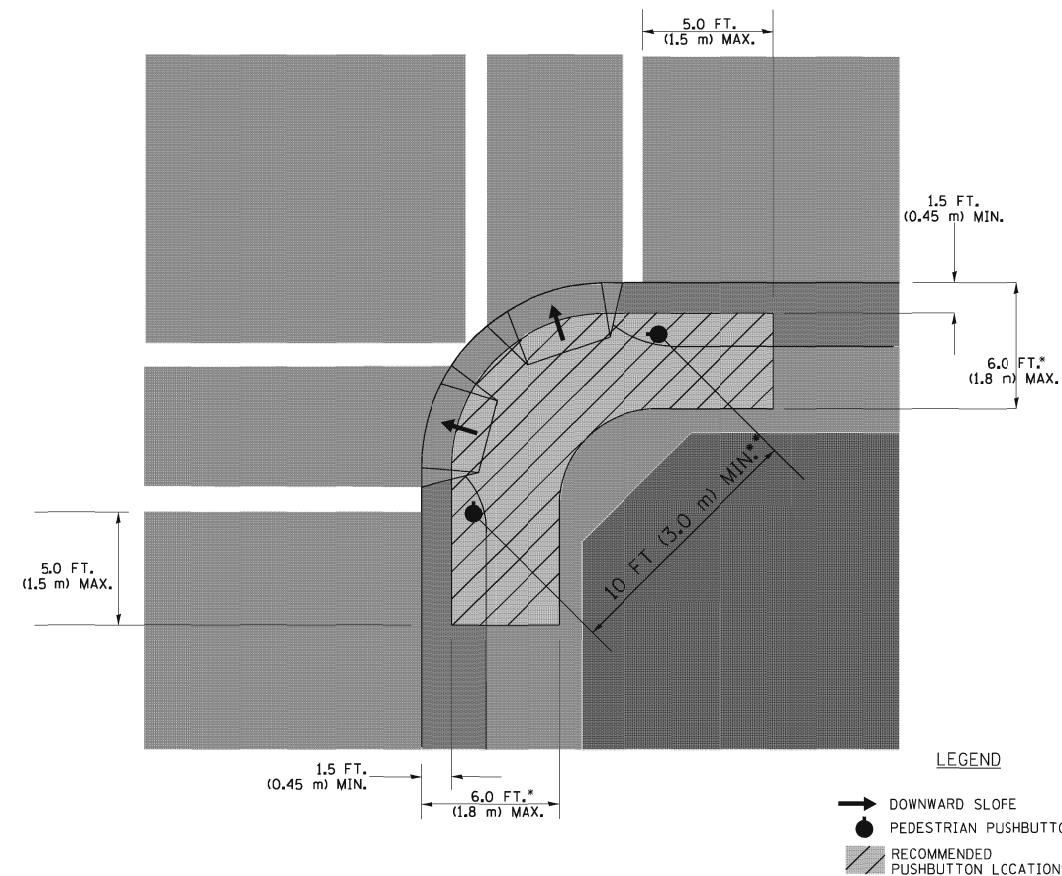
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



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



LEGEND

- DOWNWARD SLOPE
- PEDESTRIAN PUSHBUTTON
- ▨ RECOMMENDED PUSHBUTTON LOCATIONS

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

NOTES:

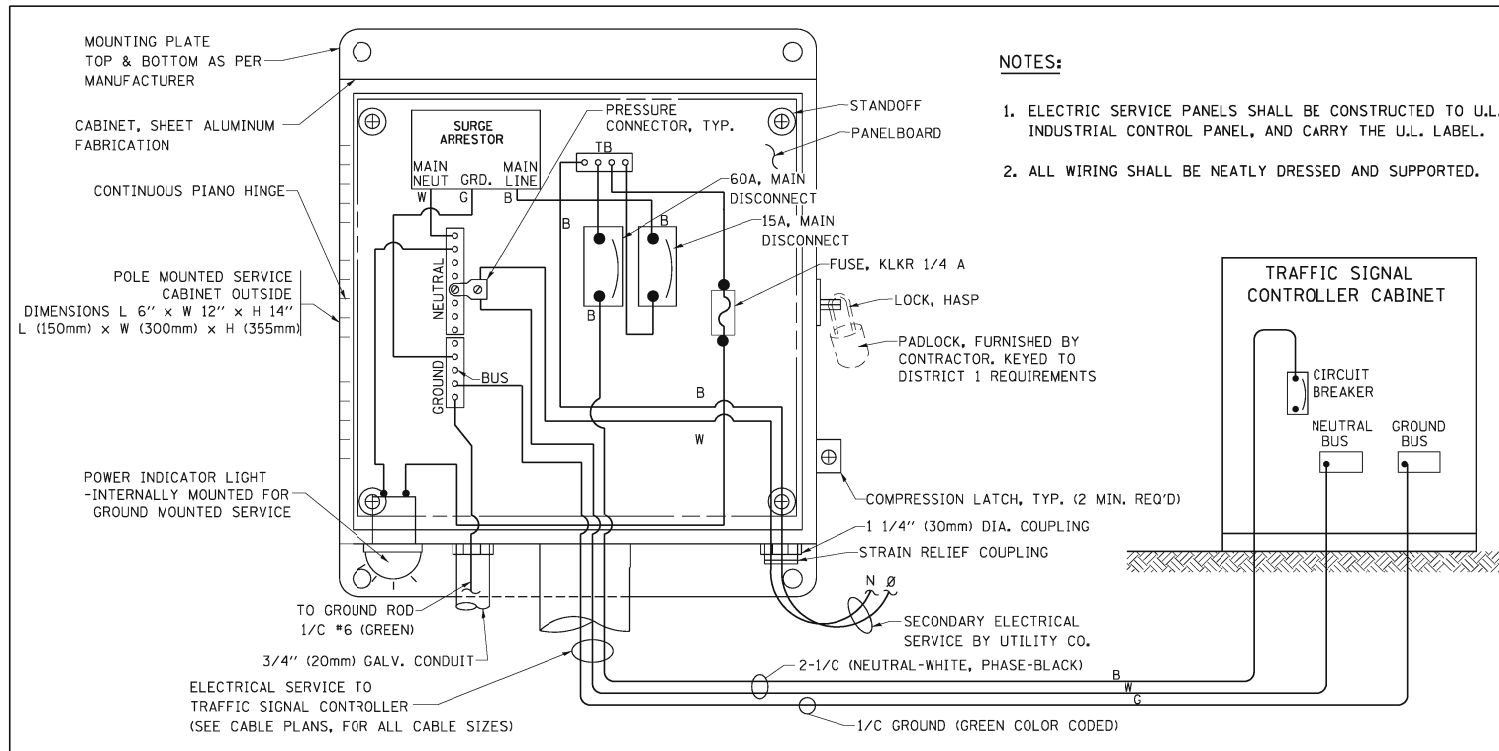
1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM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

TRAFFIC SIGNAL EQUIPMENT OFFSET

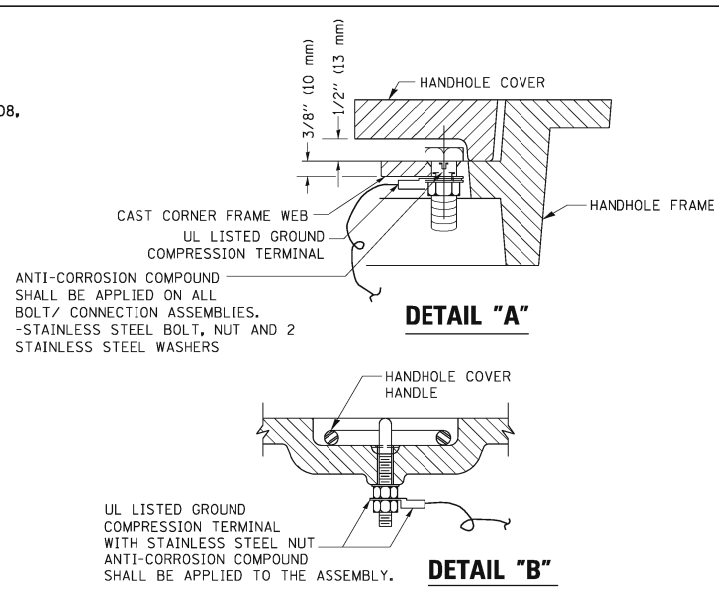
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10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

NOTES:

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



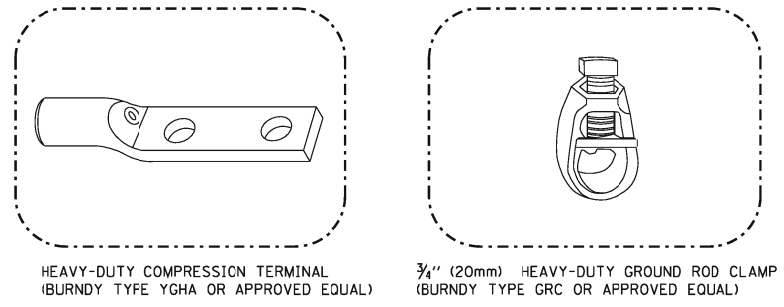
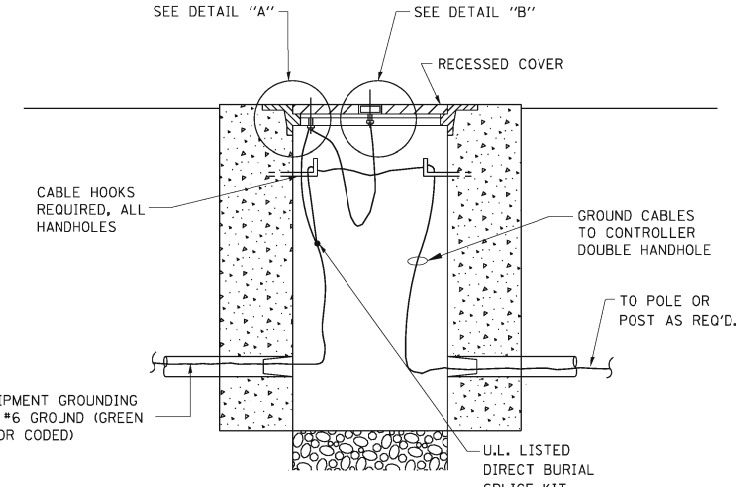
- NOTES:**
1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
 2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.



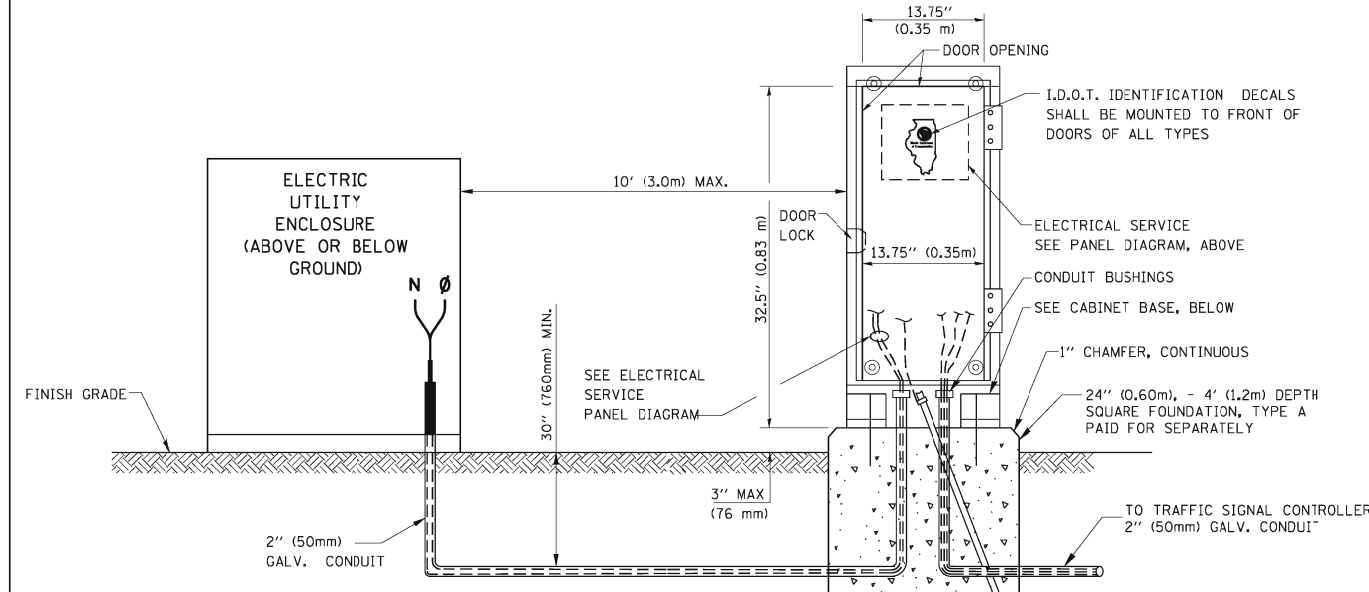
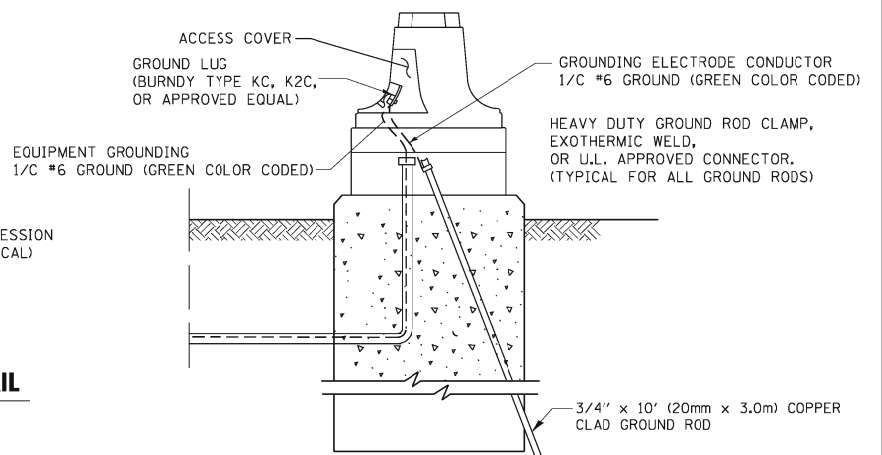
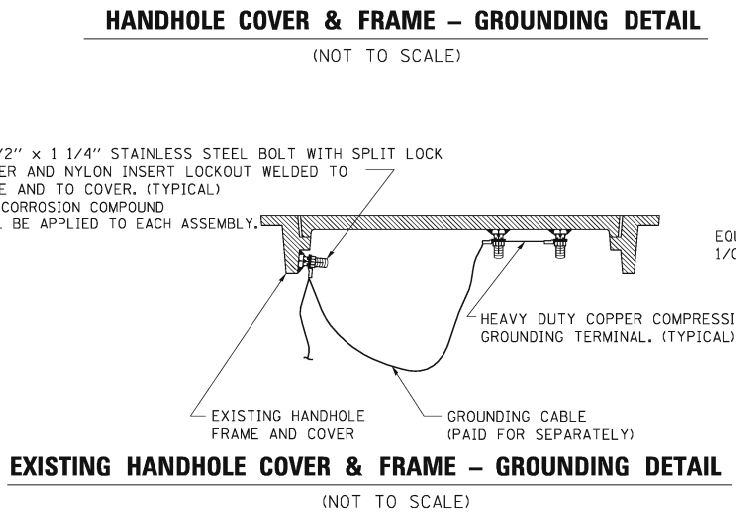
NOTES:
GROUNDING SYSTEM

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

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

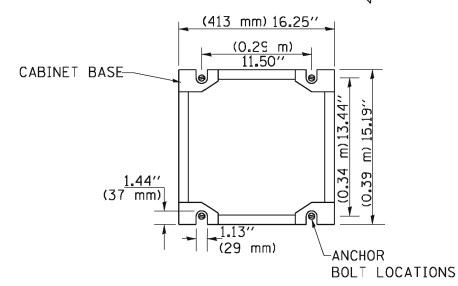


- NOTES:**
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
 - GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



SERVICE INSTALLATION GROUND MOUNT (NOT TO SCALE)

CABINET - BASE BOLT PATTERN (NOT TO SCALE)



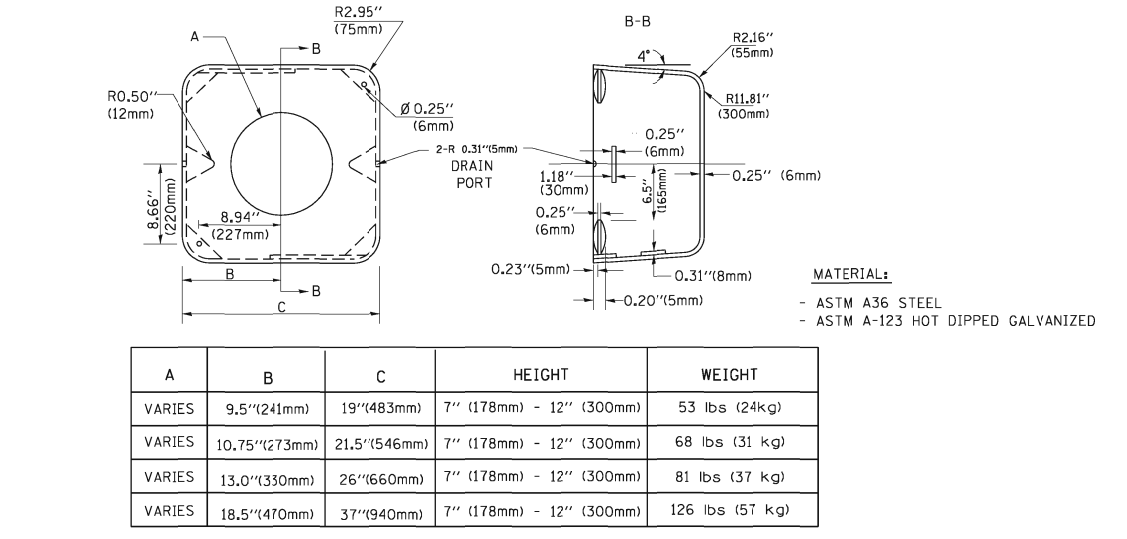
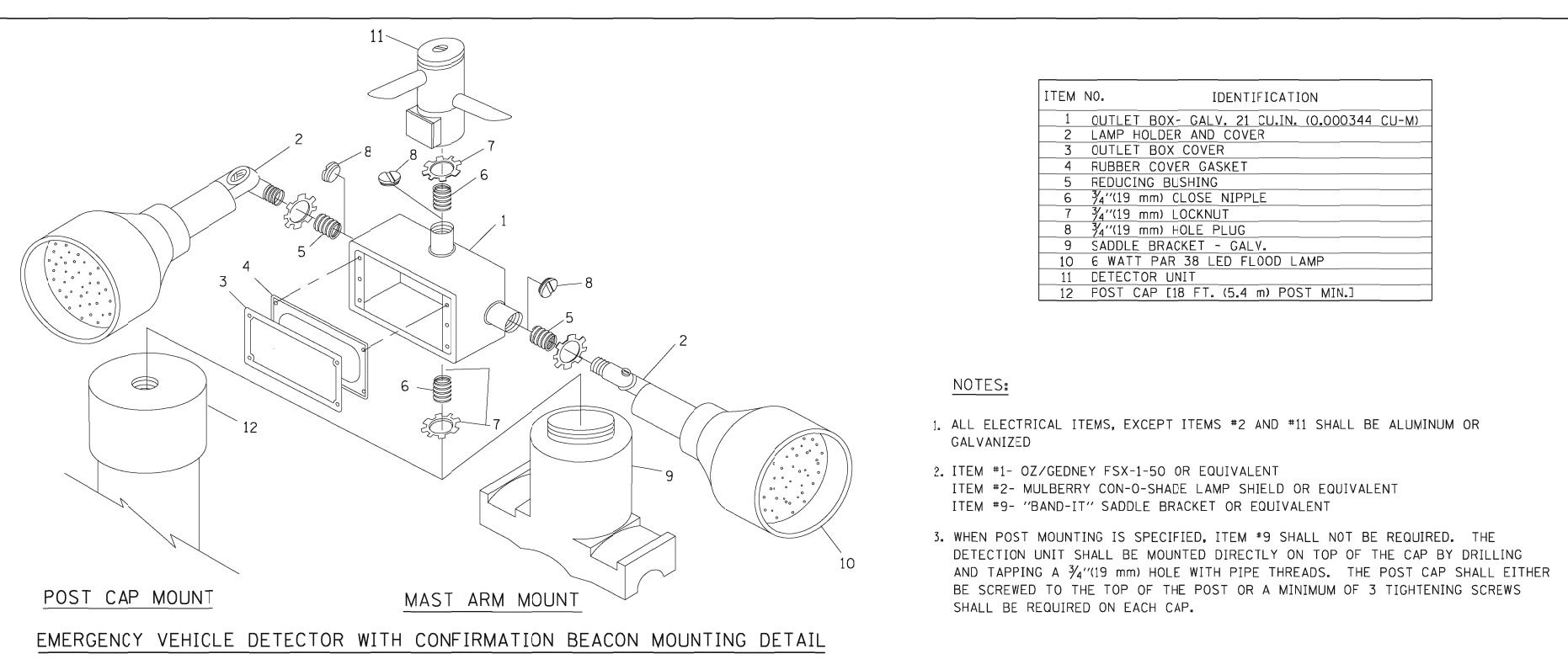
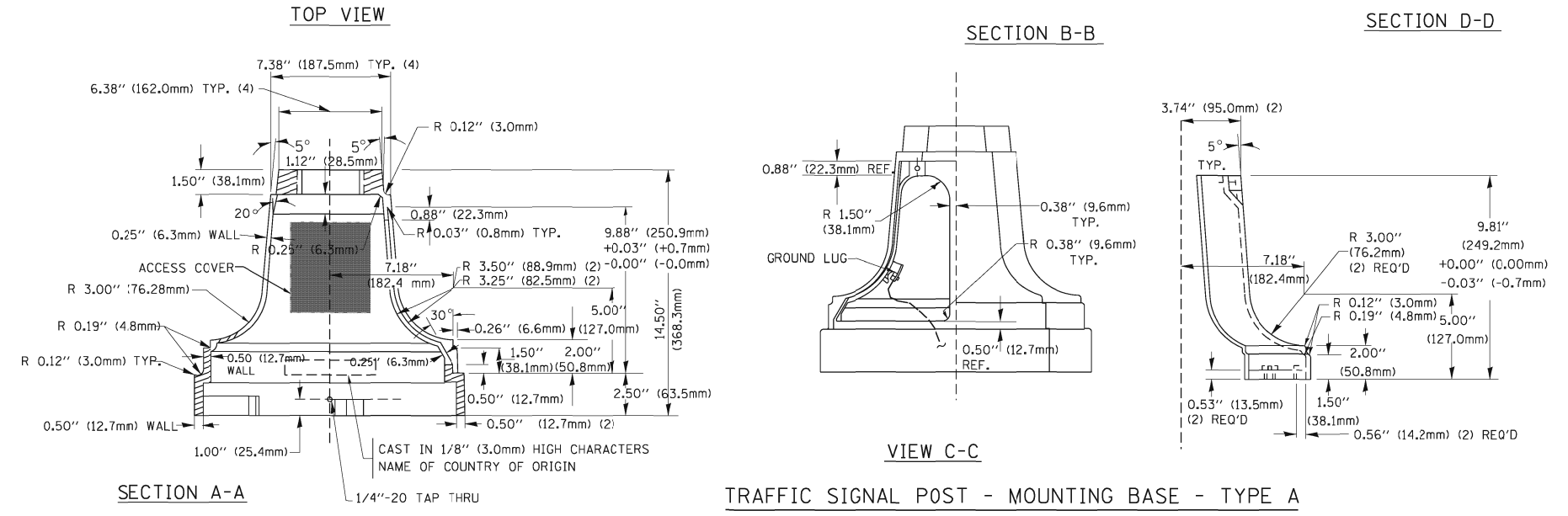
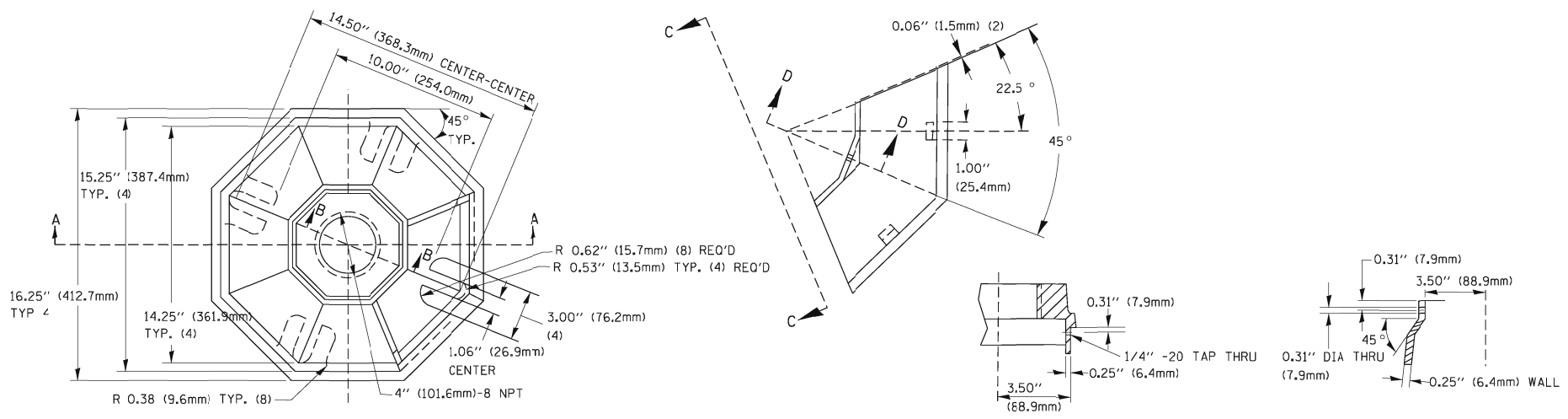
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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

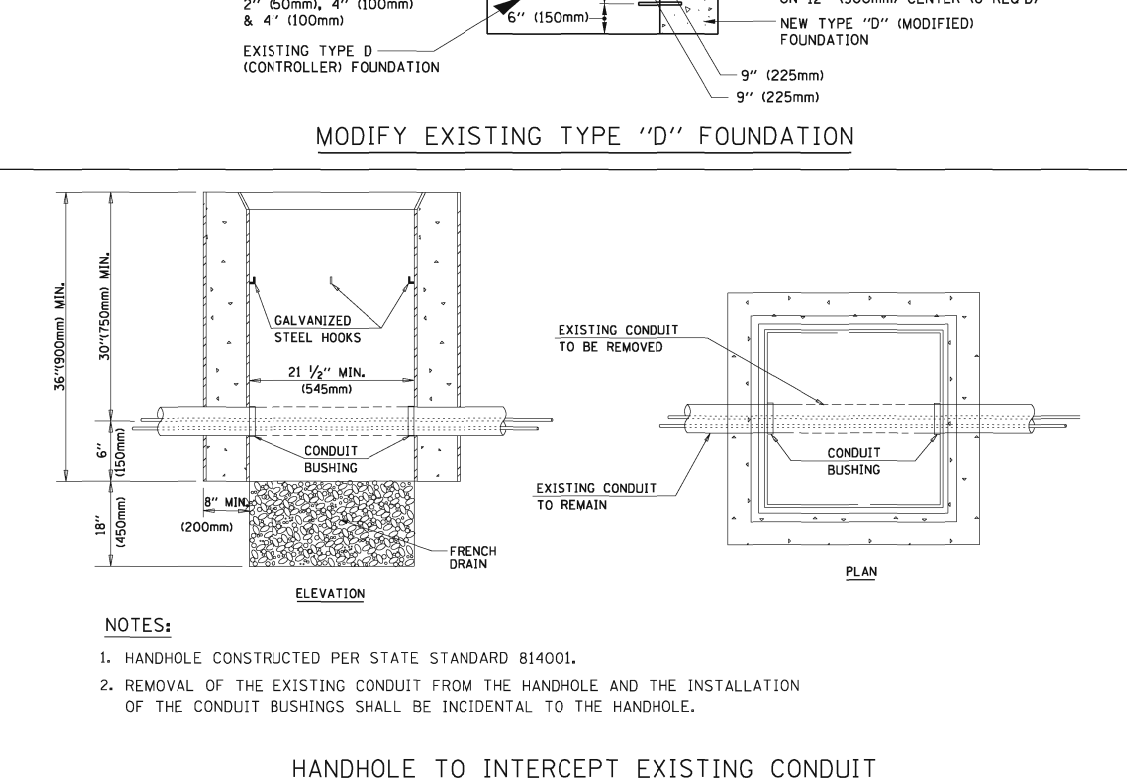
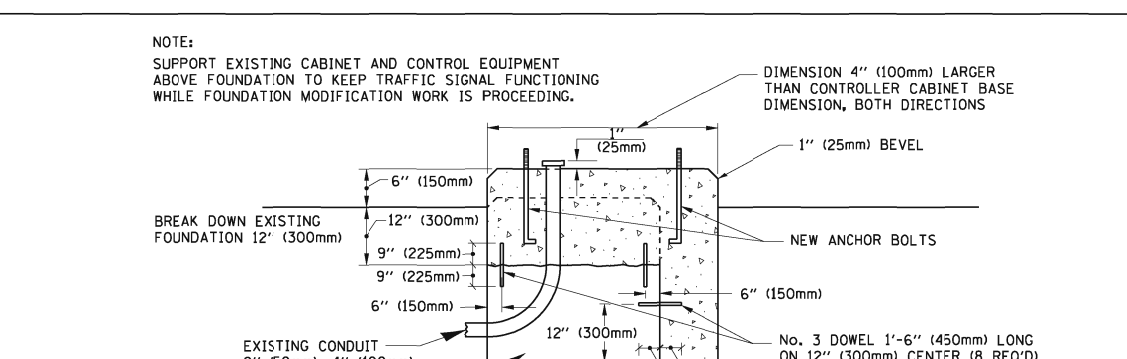
DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS

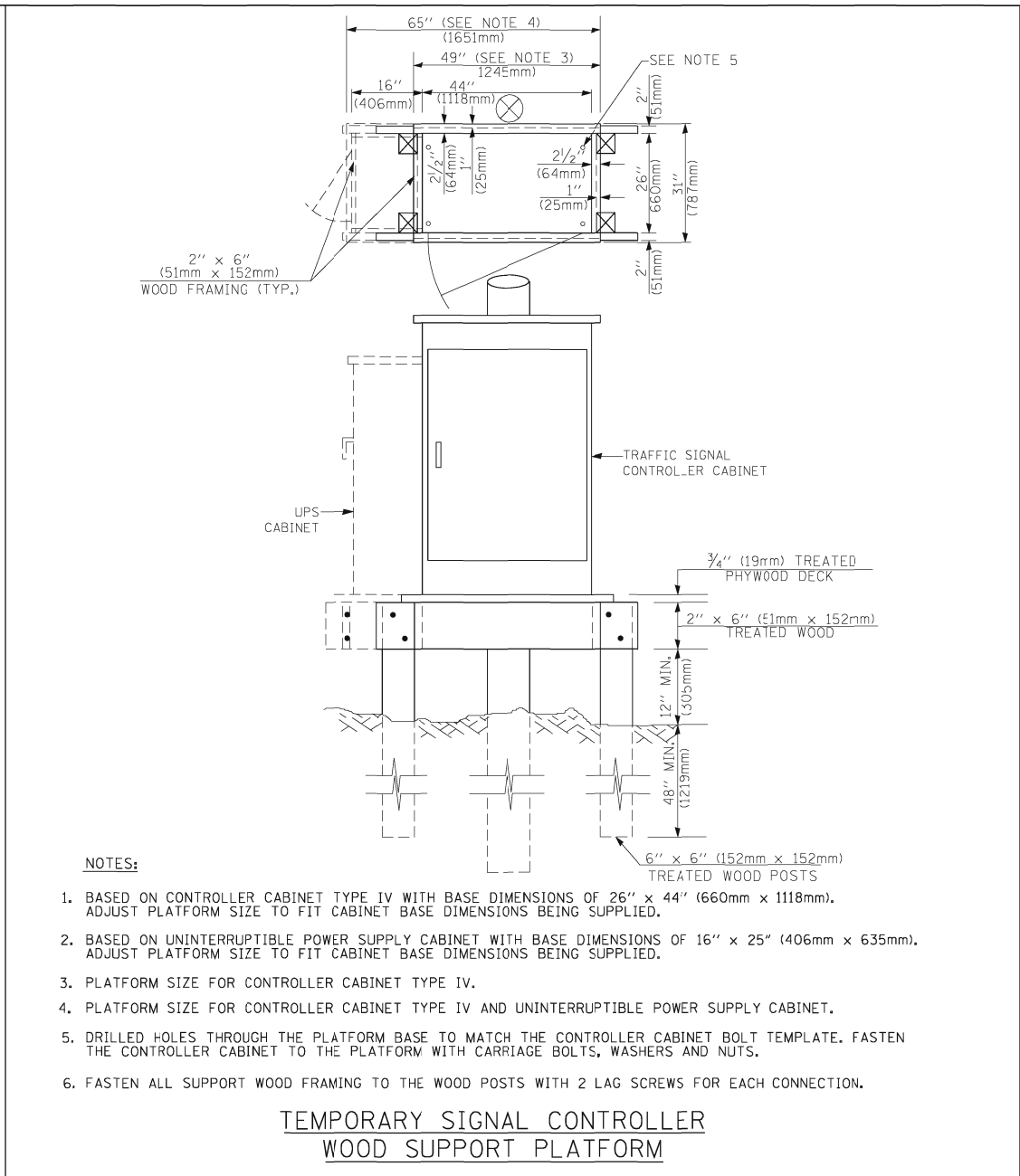
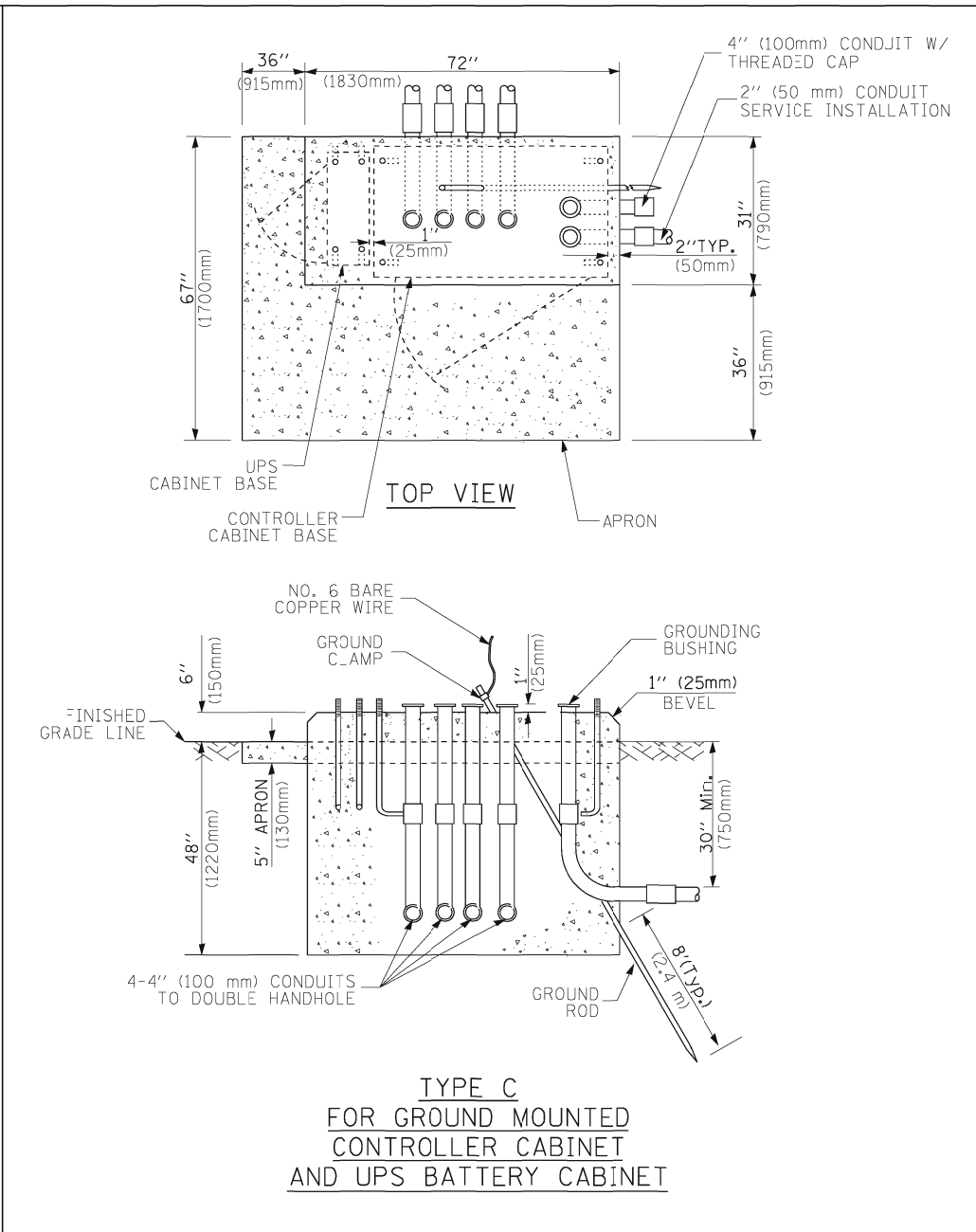
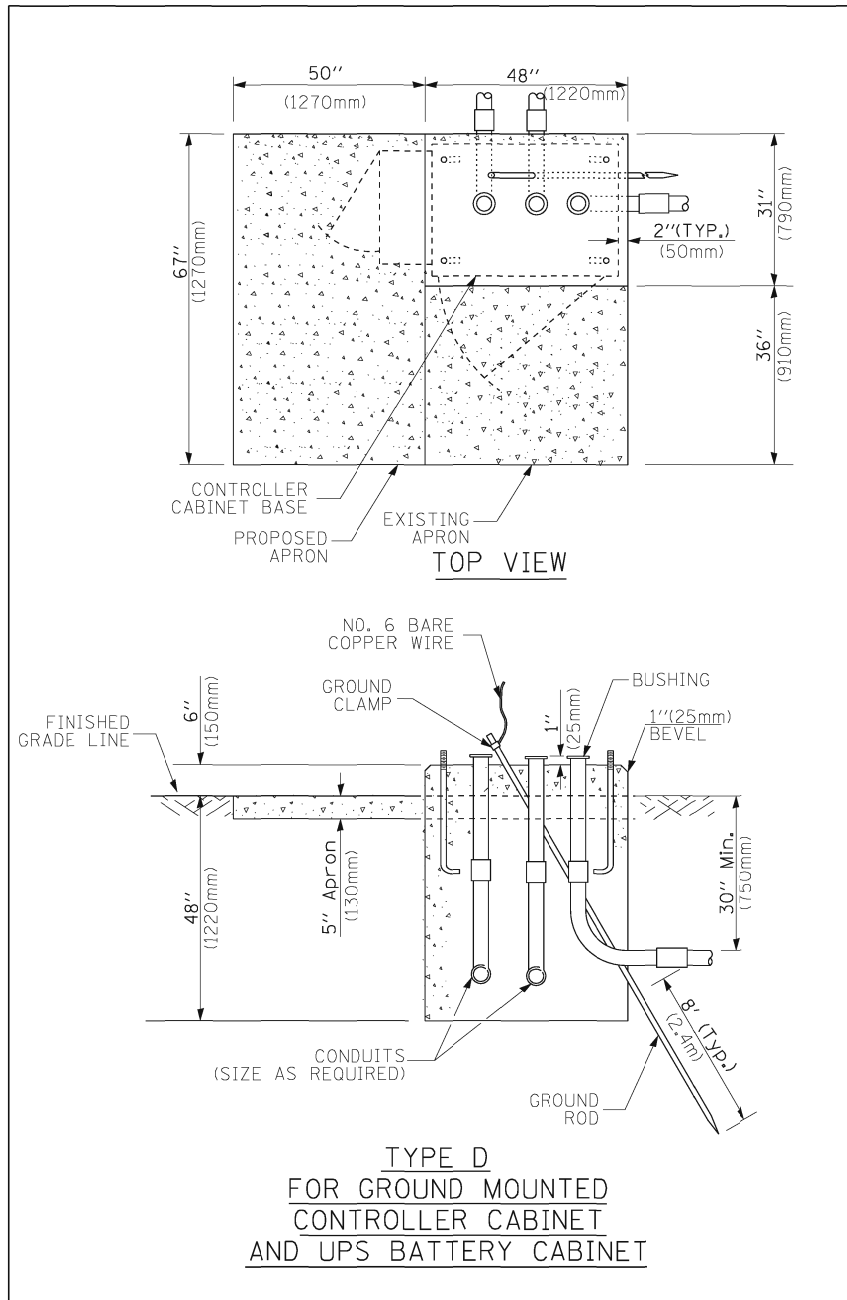
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DUPAGE	89	12
CONTRACT NO. 60W02				
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

SCALE: SHEET NO. 3 OF 6 SHEETS STA. TO STA.



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





- NOTES:**
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.

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

CABLE SLACK

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

VERTICAL CABLE LENGTH

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ LPS	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)	24" (600mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 55' (16.8 m) and less than 65' (19.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 75' (22.9 m) and up to 85' (25.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

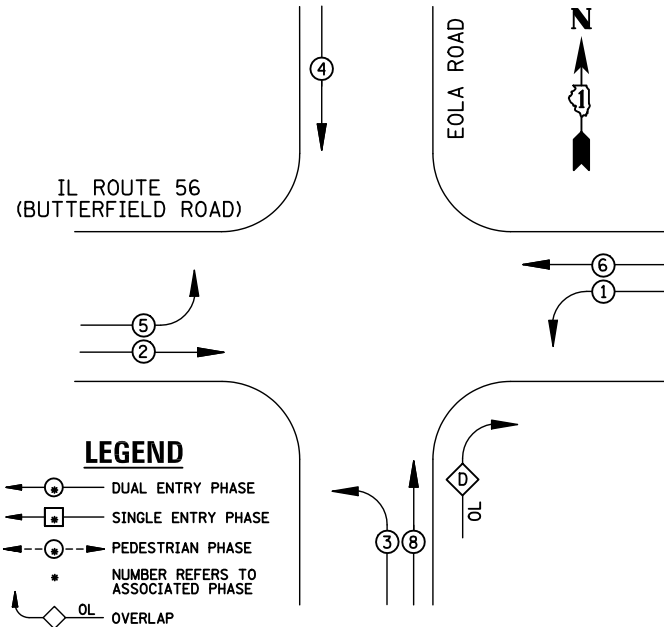
- NOTES:**
1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by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

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

TRAFFIC SIGNAL LEGEND

ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED				
CONTROLLER CABINET				EMERGENCY VEHICLE LIGHT DETECTOR				ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE							
RAILROAD CONTROL CABINET				CONFIRMATION BEACON				COAXIAL CABLE							
COMMUNICATIONS CABINET				HANDHOLE				VENDOR CABLE FOR CAMERA							
MASTER CONTROLLER				HEAVY DUTY HANDHOLE				COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED							
MASTER MASTER CONTROLLER				DOUBLE HANDHOLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F							
UNINTERRUPTIBLE POWER SUPPLY				JUNCTION BOX				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F							
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT				GALVANIZED STEEL CONDUIT IN TRENCH (T) OR PUSHED (P)				FIBER OPTIC CABLE NO. 62.5/125, MM12F							
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT				TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F (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				STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED							
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA				INTERSECTION ITEM				ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED							
SIGNAL POST				REMOVE ITEM				STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED							
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM				RELOCATE ITEM				SIGNAL POST AND FOUNDATION TO BE REMOVED							
GUY WIRE				ABANDON ITEM				INTERSECTION & SAMPLING (SYSTEM) DETECTOR							
SIGNAL HEAD				12" (300mm) TRAFFIC SIGNAL SECTION				SAMPLING (SYSTEM) DETECTOR							
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)				12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE				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 SYMEOL, OUTLINED				RAILROAD SYMBOLS							
PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMEOL, SOLID						EXISTING	PROPOSED				
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR				PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER											
ILLUMINATED SIGN "NO LEFT TURN"				RADIO INTERCONNECT											
ILLUMINATED SIGN "NO RIGHT TURN"				RADIO REPEATER											
DETECTOR LOOP, TYPE I				DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED											
PREFORMED DETECTOR LOOP				GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)											
MICROWAVE VEHICLE SENSOR				RAILROAD SYMBOLS											
VIDEO DETECTION CAMERA															
VIDEO DETECTION ZONE															
PAN, TILT, ZOOM CAMERA															
WIRELESS DETECTOR SENSOR															
WIRELESS ACCESS POINT															

EXISTING AND PROPOSED CONTROLLER SEQUENCE



EXISTING AND PROPOSED PHASE DESIGNATION DIAGRAM

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

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

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

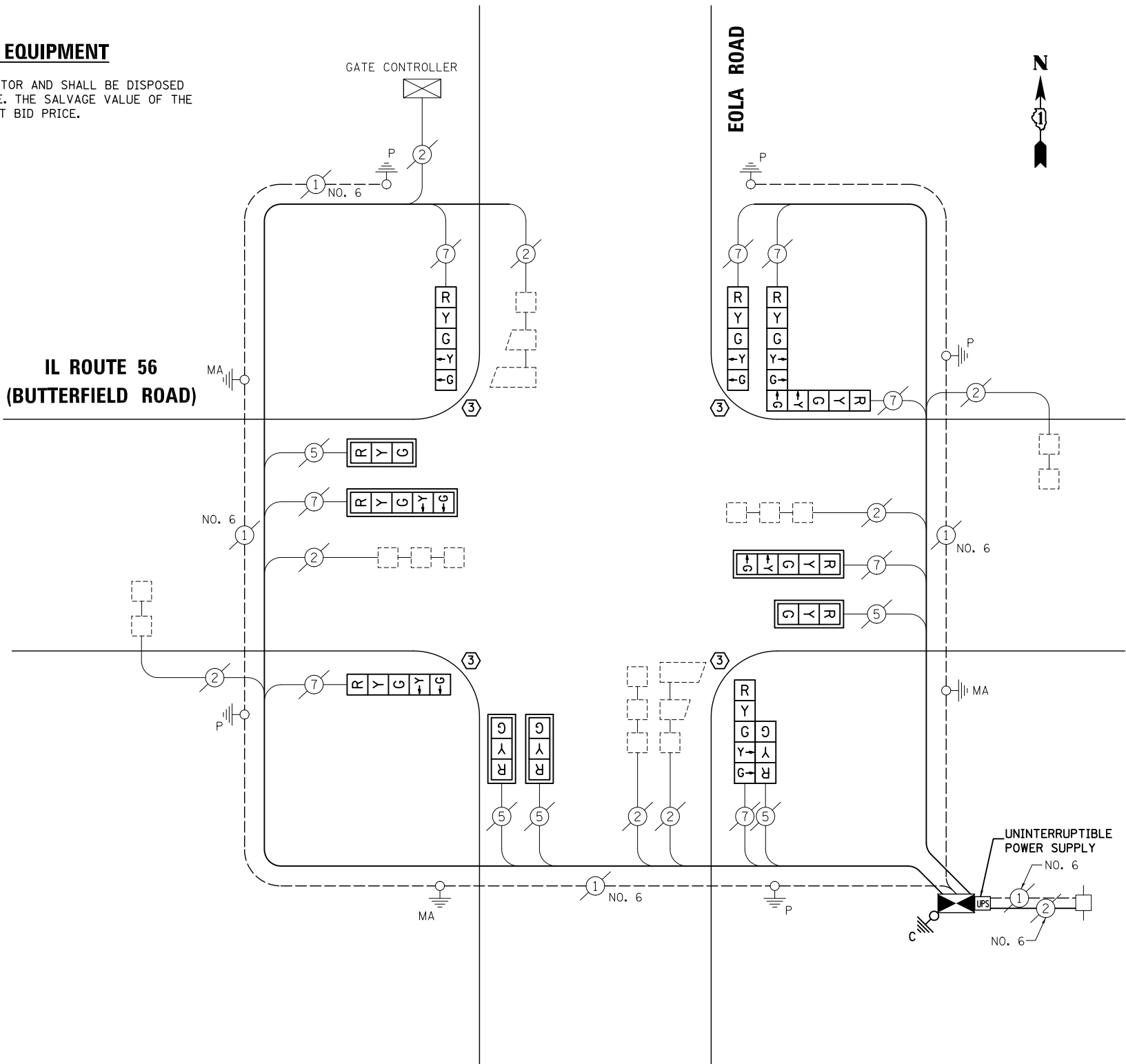
RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
D	= 8	+ 1

NOTES:

1. OMIT PHASES 1+5, 2+5, AND 4+8 WHEN SWITCH AT FERMILAB IS THROWN AND GATE IS CLOSED. OMIT PHASES 3, 4 AT OTHER TIMES WHEN SWITCH IS OPEN.
2. PHASES 1+5, 2+5 AND 4+8 MUST CLEAR BEFORE THEY CAN BE OMITTED.
3. PHASE 2+6 CANNOT CLEAR TO PHASES 1+5, 1+6 OR 2+5.

IL ROUTE 56 (BUTTERFIELD ROAD)



CABLE PLAN

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

TS# 6325
AURORA

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	13	135	17	0.50	110.5
(YELLOW)	13	135	25	0.25	81.25
(GREEN)	13	135	15	0.25	48.75
ARROW	16	135	12	0.10	19.2
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 359.7
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					
FILE NAME =	USER NAME = JGC				DESIGNED - BPT
\\MICROST\352105\01-6325.DGN					DRAWN - JGC/RDS
	PLOT SCALE = NOT TO SCALE				CHECKED - BPT
	PLOT DATE = X				DATE - 03-22-13
					REVISED -
					REVISED -
					REVISED -
					REVISED -

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	6
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	7

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

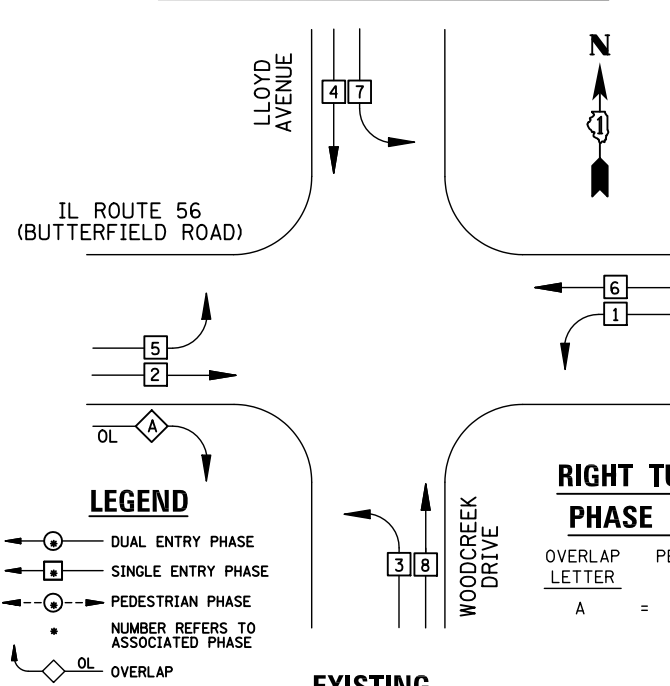
**SCHEDULE OF QUANTITIES, CABLE PLAN AND PHASE DESIGNATION DIAGRAM
IL ROUTE 56 (BUTTERFIELD ROAD) AT EOLA ROAD**

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

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	16
			CONTRACT NO. 60W02	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

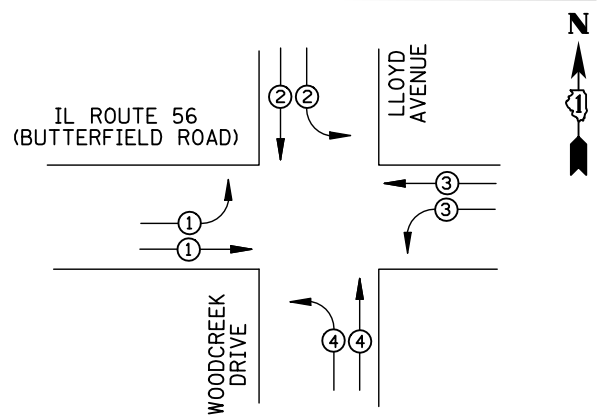
EXISTING CONTROLLER SEQUENCE



RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3

EXISTING PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	1	2	3	4
MOVEMENT				

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	21	135	17	0.50	178.5
(YELLOW)	21	135	25	0.25	131.25
(GREEN)	21	135	15	0.25	78.75
ARROW	4	135	12	0.10	4.8
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 493.3
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					
FILE NAME = \MICROST\352105\ 02-6350.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
		PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -	
		PLOT DATE = X	DATE - 03-22-13	REVISED -	

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

- 3 EACH TRAFFIC SIGNAL POST
- 19 EACH SIGNAL HEAD, 3-SECTION
- 2 EACH SIGNAL HEAD, 5-SECTION
- 9 EACH TRAFFIC SIGNAL BACKPLATE

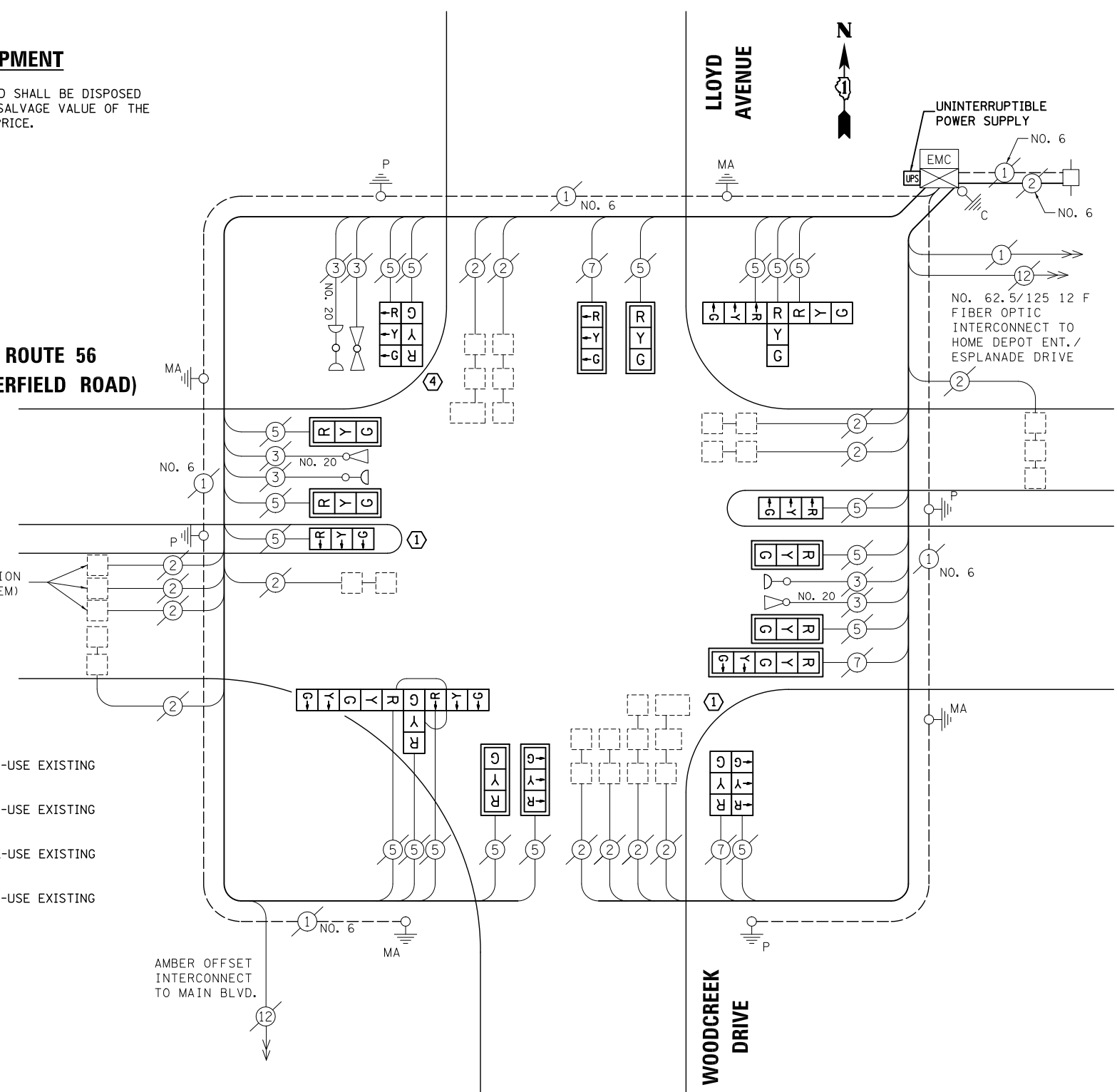
IL ROUTE 56 (BUTTERFIELD ROAD)

EXISTING INTERSECTION AND SAMPLING (SYSTEM) DETECTORS

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

AMBER OFFSET INTERCONNECT TO MAIN BLVD.

CABLE PLAN



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

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 3-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 3-FACE, 2-3 SECTION, 1-5 SECTION BRACKET MOUNTED	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	9
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION IL ROUTE 56 (BUTTERFIELD ROAD) AT WOODCREEK DR. / LLOYD AVE.

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

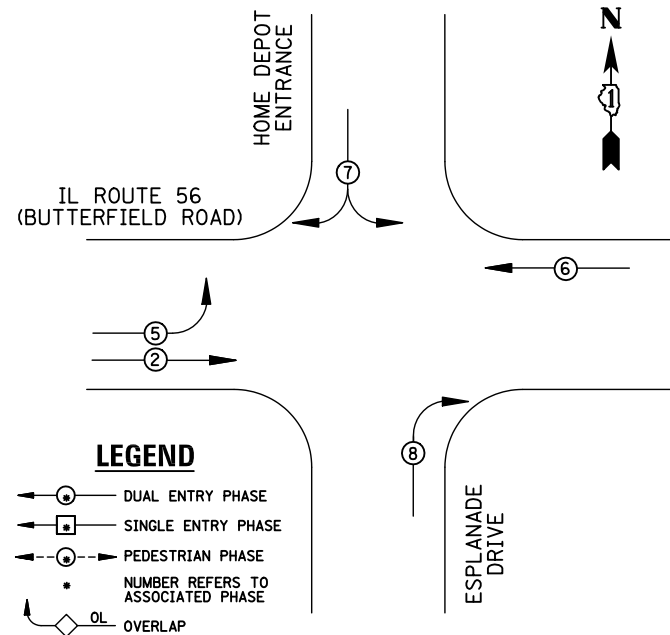
TS# 6350 DOWNERS GROVE

PREPARED BY: **CEMCON, Ltd.**
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60504-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	17

CONTRACT NO. 60W02
 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

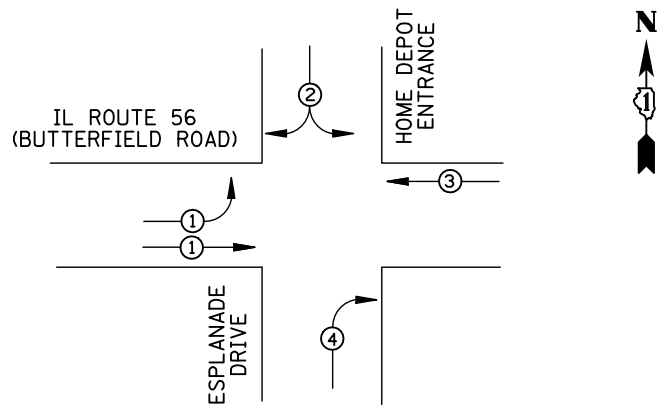
EXISTING CONTROLLER SEQUENCE



LEGEND

- ← ⊙ → DUAL ENTRY PHASE
- ← □ → SINGLE ENTRY PHASE
- ← ⊙ → PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE
- OL OVERLAP

EXISTING PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	1	2	3	4
MOVEMENT	→	←	←	→

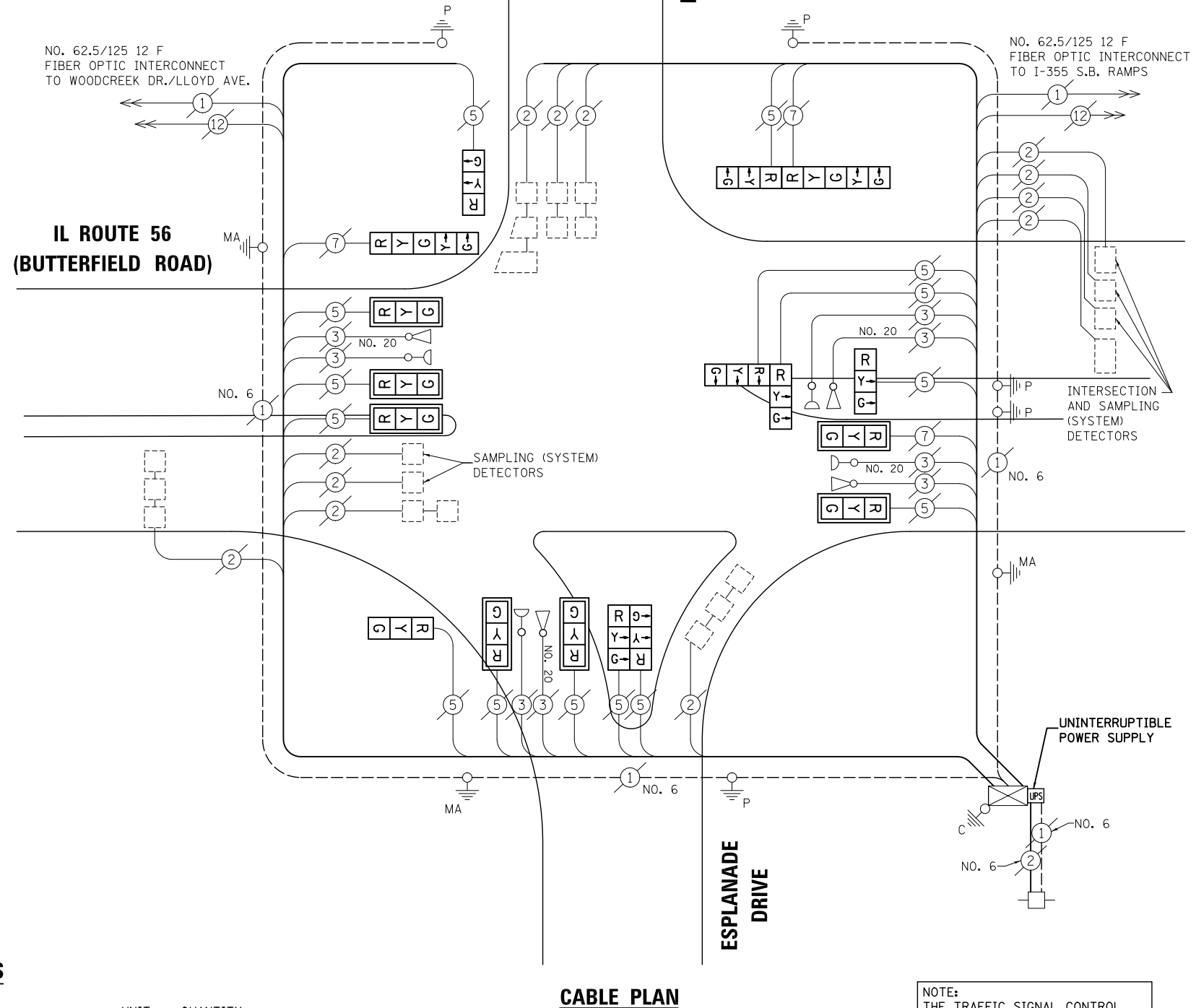
EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	17	135	17	0.50	144.5
(YELLOW)	17	135	25	0.25	106.25
(GREEN)	17	135	15	0.25	63.75
ARROW	4	135	12	0.10	4.8
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 419.3
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					
FILE NAME = \MICROST\352105\ 03-6352.DGN	USER NAME = JGC				
	DESIGNED - BPT	REVISED -			
	DRAWN - JGC/RDS	REVISED -			
	PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -		
	PLOT DATE = X	DATE - 03-22-13	REVISED -		

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

- 15 EACH SIGNAL HEAD, 3-SECTION
- 2 EACH SIGNAL HEAD, 5-SECTION
- 7 EACH TRAFFIC SIGNAL BACKPLATE



CABLE PLAN

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

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	7
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	7
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION IL ROUTE 56 (BUTTERFIELD ROAD) AT ESPLANADE DR./HOME DEPOT ENT.

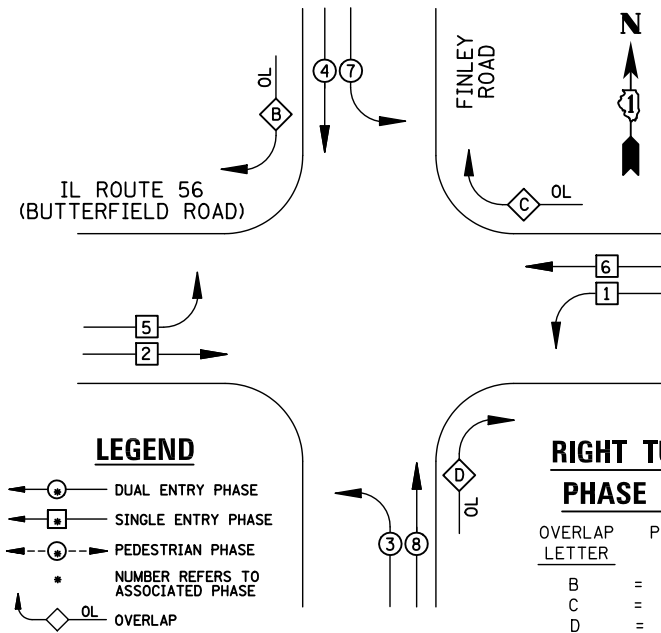
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

TS# 6352 DOWNERS GROVE

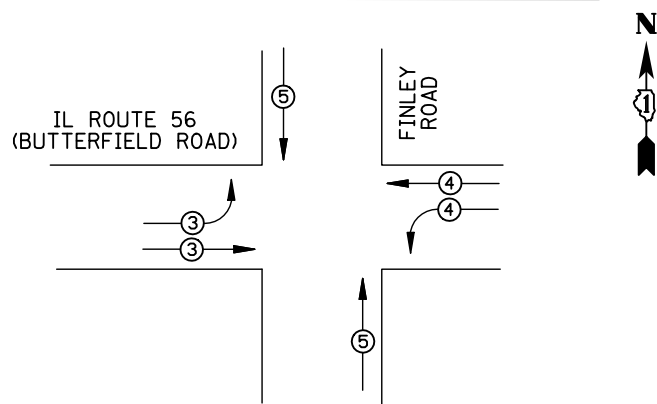
PREPARED BY: CEMCON, Ltd. Consulting Engineers, Land Surveyors & Planners 2280 White Oak Circle, Suite 100 Aurora, Illinois 60504-9675 Ph: 630.862.2100 Fax: 630.862.2199 E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	18
			CONTRACT NO. 60W02	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

EXISTING AND PROPOSED CONTROLLER SEQUENCE



EXISTING AND PROPOSED PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT			

EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE

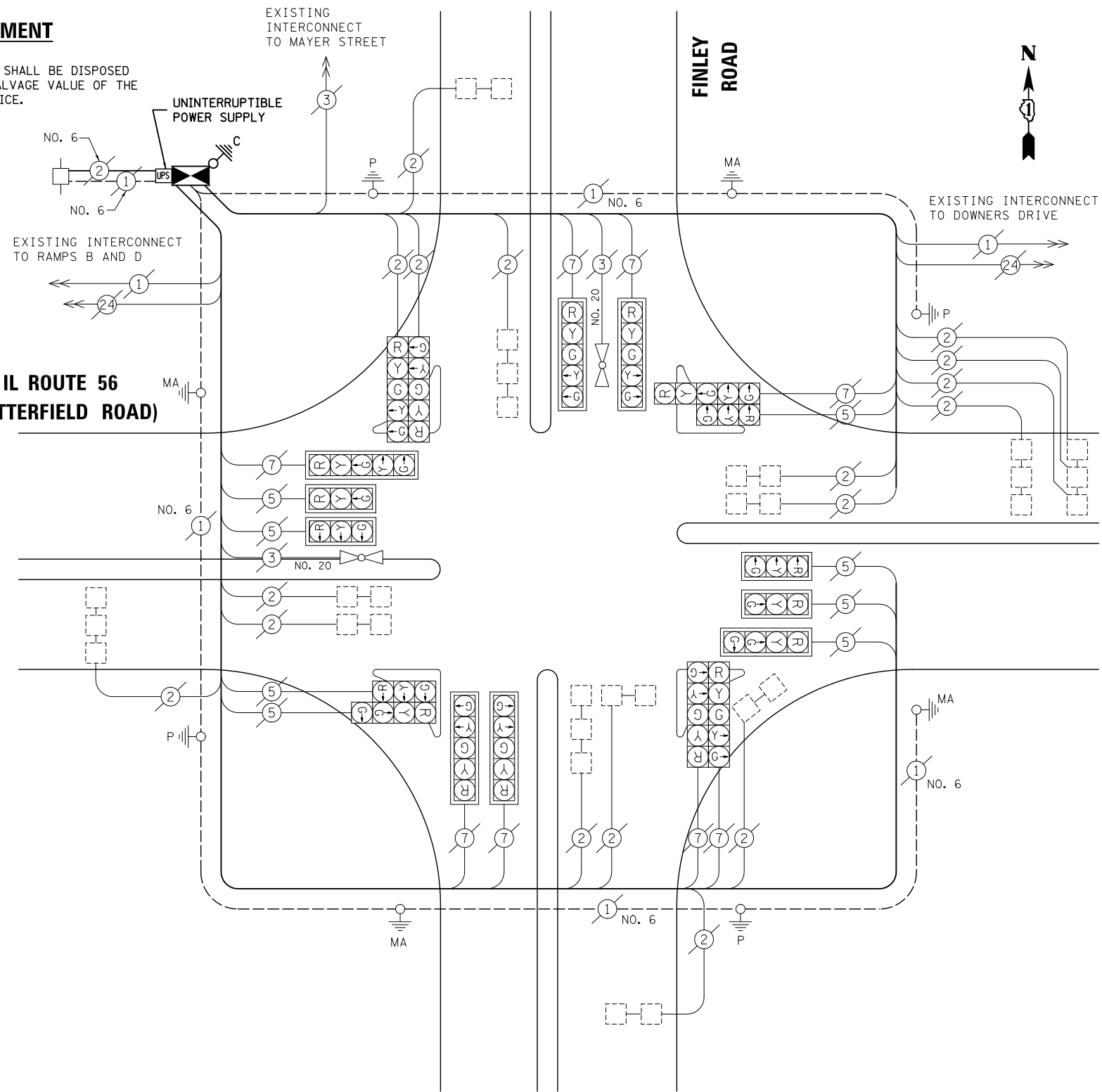
I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	
SIGNAL (RED)	18	135	17	0.50	153
(YELLOW)	18	135	25	0.25	112.5
(GREEN)	20	135	15	0.25	75
ARROW	20	135	12	0.10	24
PED. SIGNAL		90	25	1.00	100
CONTROLLER	1	100	100	1.00	
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 464.5
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

- 1 EACH CONTROLLER AND CABINET (COMPLETE)

IL ROUTE 56 (BUTTERFIELD ROAD)



CABLE PLAN

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

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	15
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION IL ROUTE 56 (BUTTERFIELD ROAD) AT FINLEY ROAD

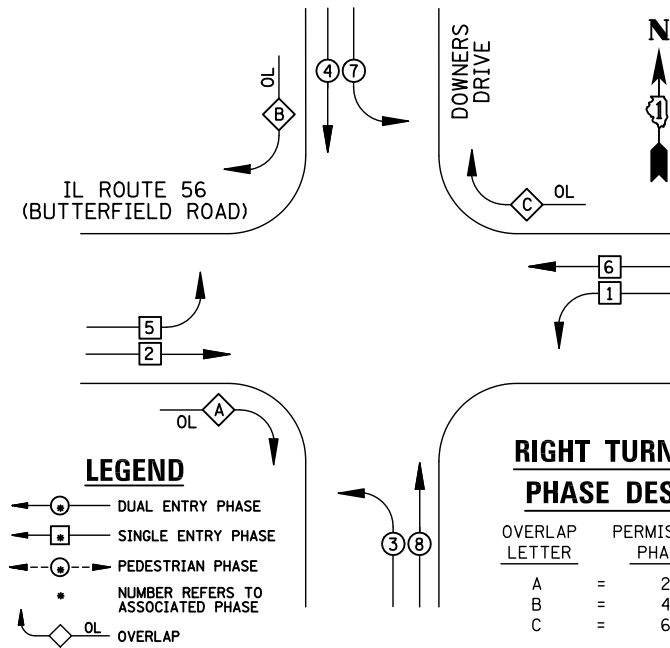
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

PREPARED BY: **CEMCON, Ltd.**
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60504-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

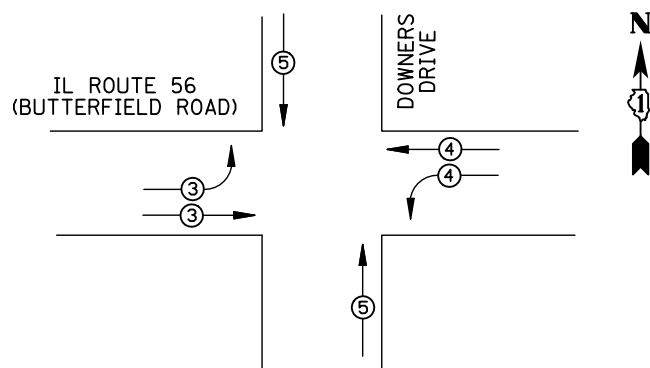
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	19
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60W02	

TS# 6275 DOWNERS GROVE

EXISTING AND PROPOSED CONTROLLER SEQUENCE



EXISTING AND PROPOSED PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT			

EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE

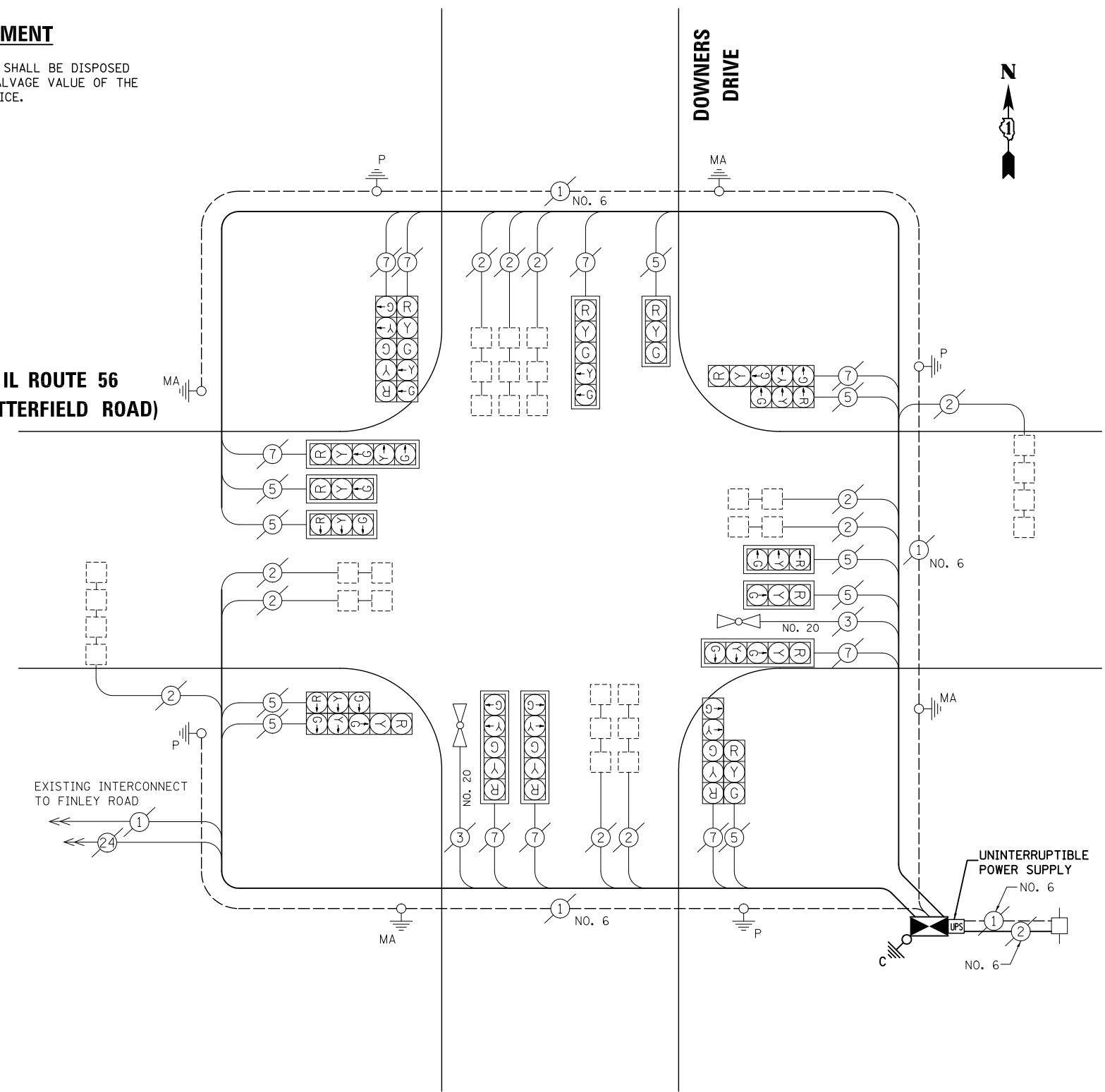
I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	
SIGNAL (RED)	18	135	17	0.50	153
(YELLOW)	18	135	25	0.25	112.5
(GREEN)	18	135	15	0.25	67.5
ARROW	20	135	12	0.10	24
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 457.0
ENERGY SUPPLY CONTACT:	X				
PHONE:	X				
COMPANY:	X				

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

- 1 EACH CONTROLLER AND CABINET (COMPLETE)

IL ROUTE 56 (BUTTERFIELD ROAD)



CABLE PLAN

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

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	11
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

TS# 11410
DOWNERS GROVE

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

FILE NAME = \MICROST\352105\ 05-11410.DGN
USER NAME = JGC
DESIGNED - BPT
DRAWN - JGC/RDS
PLOT SCALE = NOT TO SCALE
PLOT DATE = X

REVISIONS:
REVISED -
REVISED -
CHECKED - BPT
DATE - 03-22-13

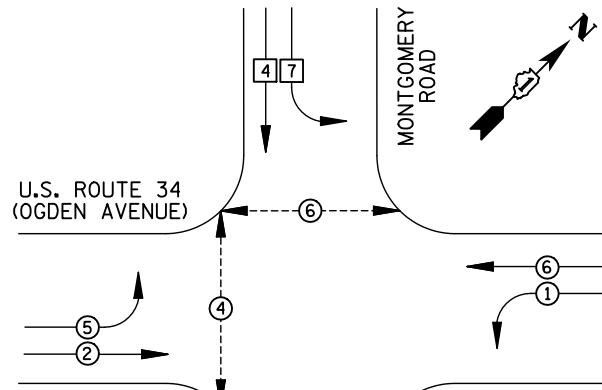
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
IL ROUTE 56 (BUTTERFIELD ROAD) AT DOWNERS DRIVE

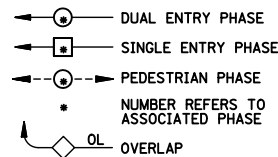
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	20
CONTRACT NO. 60W02			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

EXISTING CONTROLLER SEQUENCE



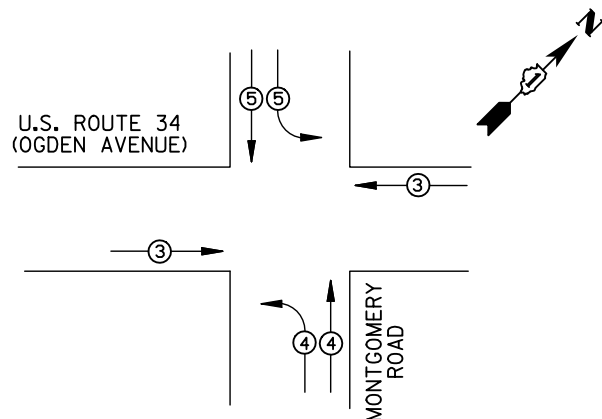
LEGEND



RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
D	= 8	+ 1

EXISTING PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	↔	↗	↘

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS						
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE	
SIGNAL (RED)	18	135	17	0.50	153	
(YELLOW)	18	135	25	0.25	112.5	
(GREEN)	18	135	15	0.25	67.5	
ARROW	12	135	12	0.10	14.4	
PED. SIGNAL	4	90	25	1.00	100	
CONTROLLER	1	100	100	1.00	100	
ILLUM. SIGN		84		0.05		
FLASHER		135	25	0.50		
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = X	
ENERGY SUPPLY CONTACT:	X					
PHONE:	X					
COMPANY:	X					
FILE NAME = \MICROST\352105\06-6050.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -			
		DRAWN - JGC/RDS	REVISED -			
		PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -		
		PLOT DATE = X	DATE - 03-22-13	REVISED -		

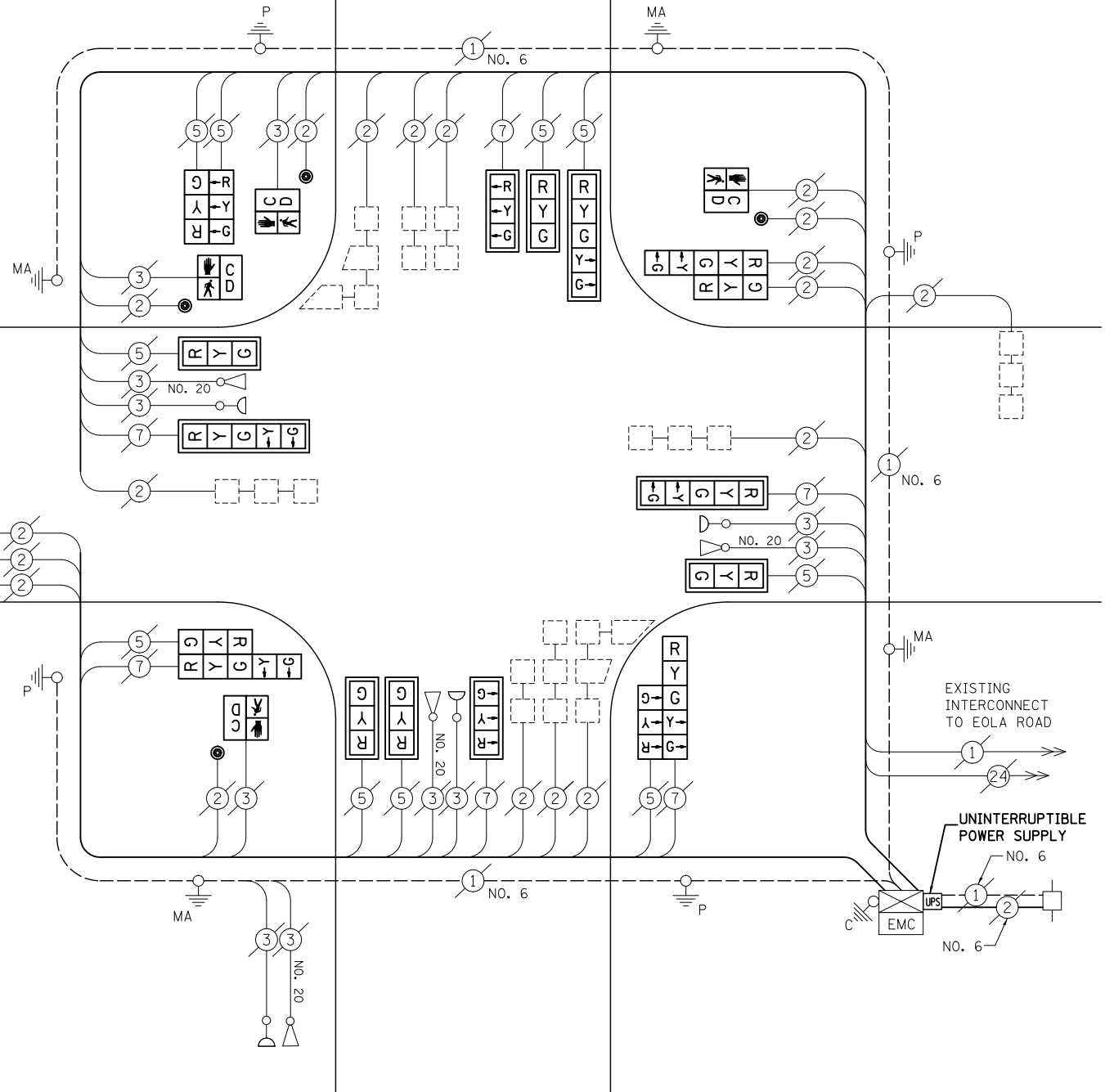
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

- 12 EACH SIGNAL HEAD, 3-SECTION
- 6 EACH SIGNAL HEAD, 5-SECTION
- 10 EACH TRAFFIC SIGNAL BACKPLATE
- 4 EACH PEDESTRIAN SIGNAL HEAD
- 4 EACH PEDESTRIAN PUSH-BUTTON

U.S. ROUTE 34 (OGDEN AVENUE)

EXISTING INTERSECTION AND SAMPLING (SYSTEM) DETECTORS



CABLE PLAN

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

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	7
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	3
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	3
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	10
PEDESTRIAN PUSH-BUTTON	EACH	4
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION U.S. ROUTE 34 (OGDEN AVENUE) AT MONTGOMERY ROAD

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

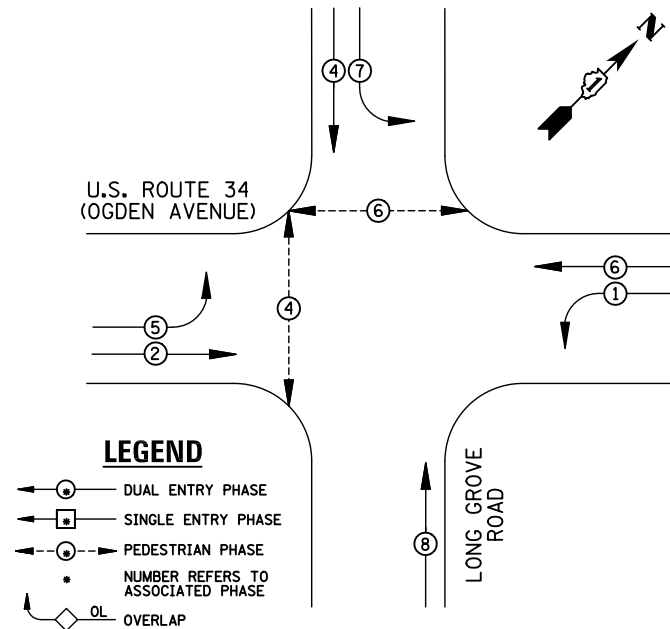
PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60504-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	21

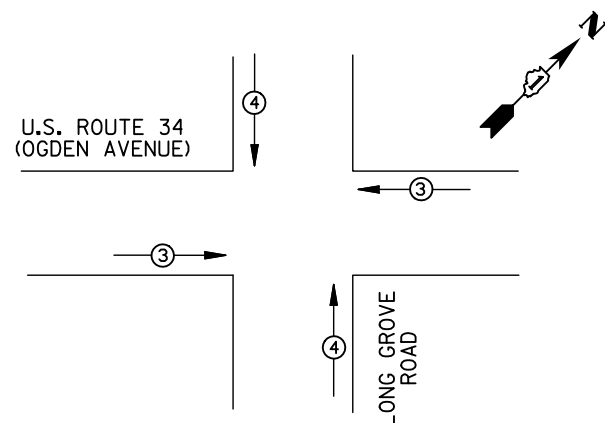
CONTRACT NO. 60W02
 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

TS# 6050 AURORA

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	13	135	17	0.50	110.5
(YELLOW)	13	135	25	0.25	81.25
(GREEN)	13	135	15	0.25	48.75
ARROW	12	135	12	0.10	14.4
PED. SIGNAL	4	90	25	1.00	100
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 454.9
ENERGY SUPPLY CONTACT:	X				
PHONE:	X				
COMPANY:	X				

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

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

SCHEDULE OF QUANTITIES

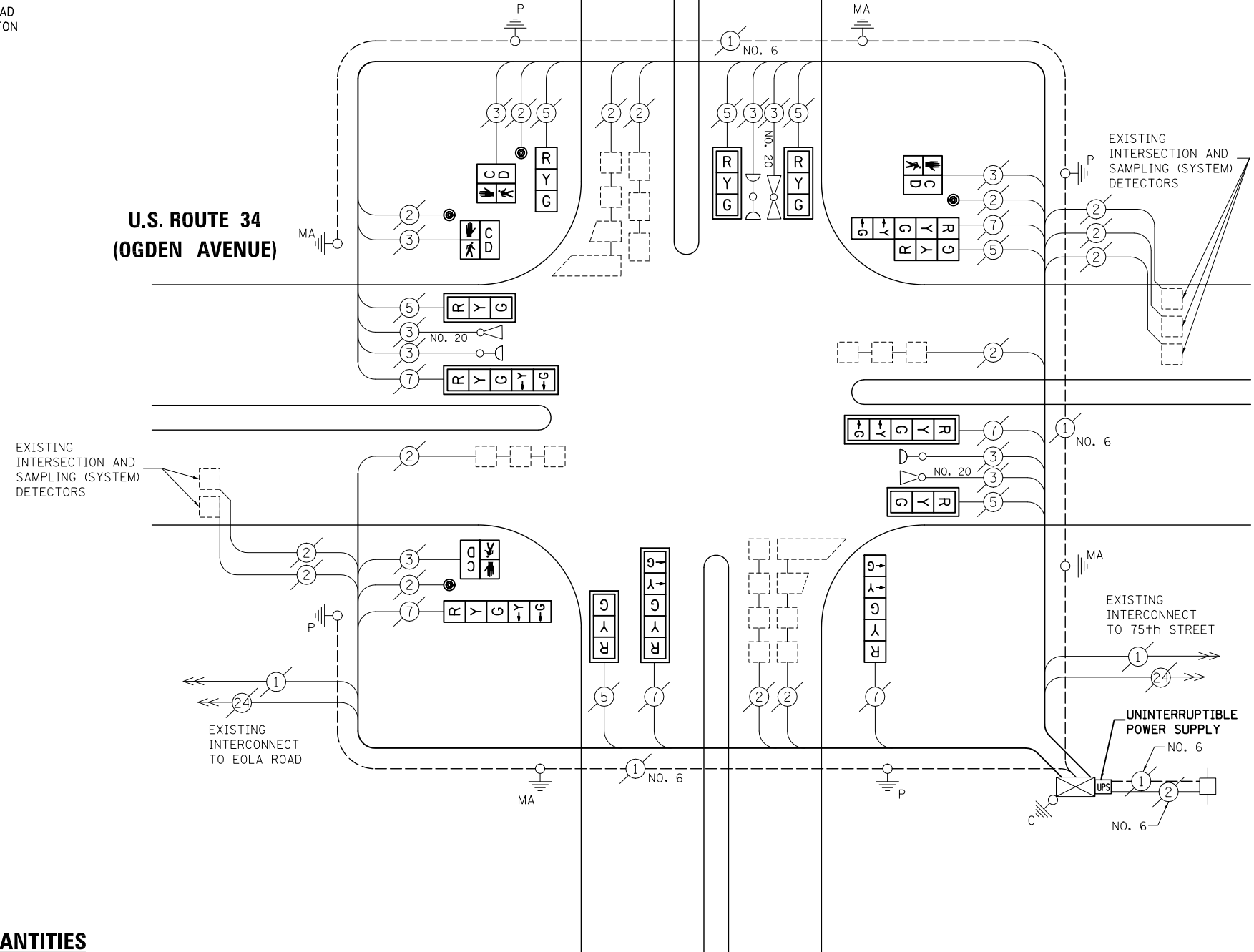
ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
PEDESTRIAN PUSH-BUTTON	EACH	4
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING INTERSECTION AND SAMPLING (SYSTEM) DETECTORS

U.S. ROUTE 34
(OGDEN AVENUE)

LONG GROVE ROAD



CABLE PLAN

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

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

TS# 6048
AURORA

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E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	22

CONTRACT NO. 60W02

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

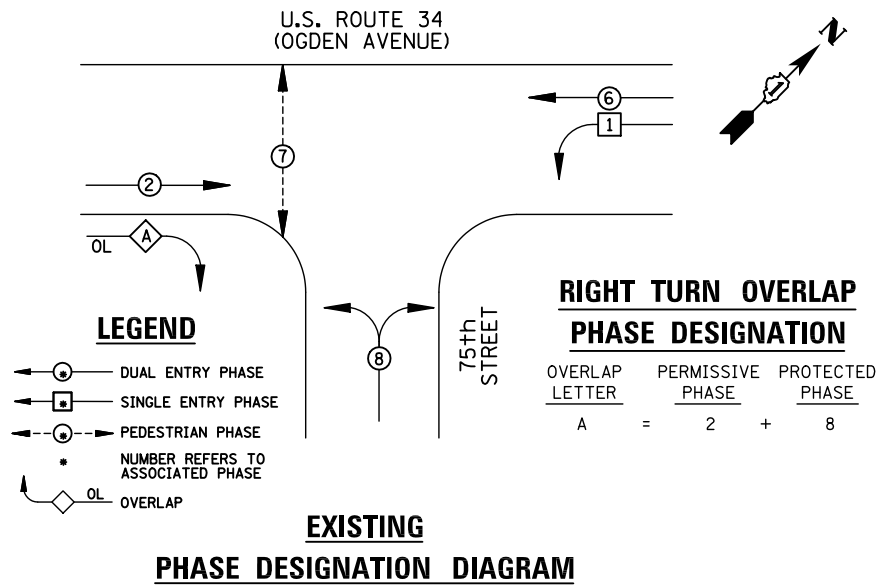
SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
U.S. ROUTE 34 (OGDEN AVENUE) AT LONG GROVE ROAD

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

DESIGNED - BPT	REVISED -
DRAWN - JGC/RDS	REVISED -
CHECKED - BPT	REVISED -
DATE - 03-22-13	REVISED -

FILE NAME = \MICROST\352105\ 08-6048.DGN	USER NAME = JGC
	PLOT SCALE = NOT TO SCALE
	PLOT DATE = X

EXISTING CONTROLLER SEQUENCE

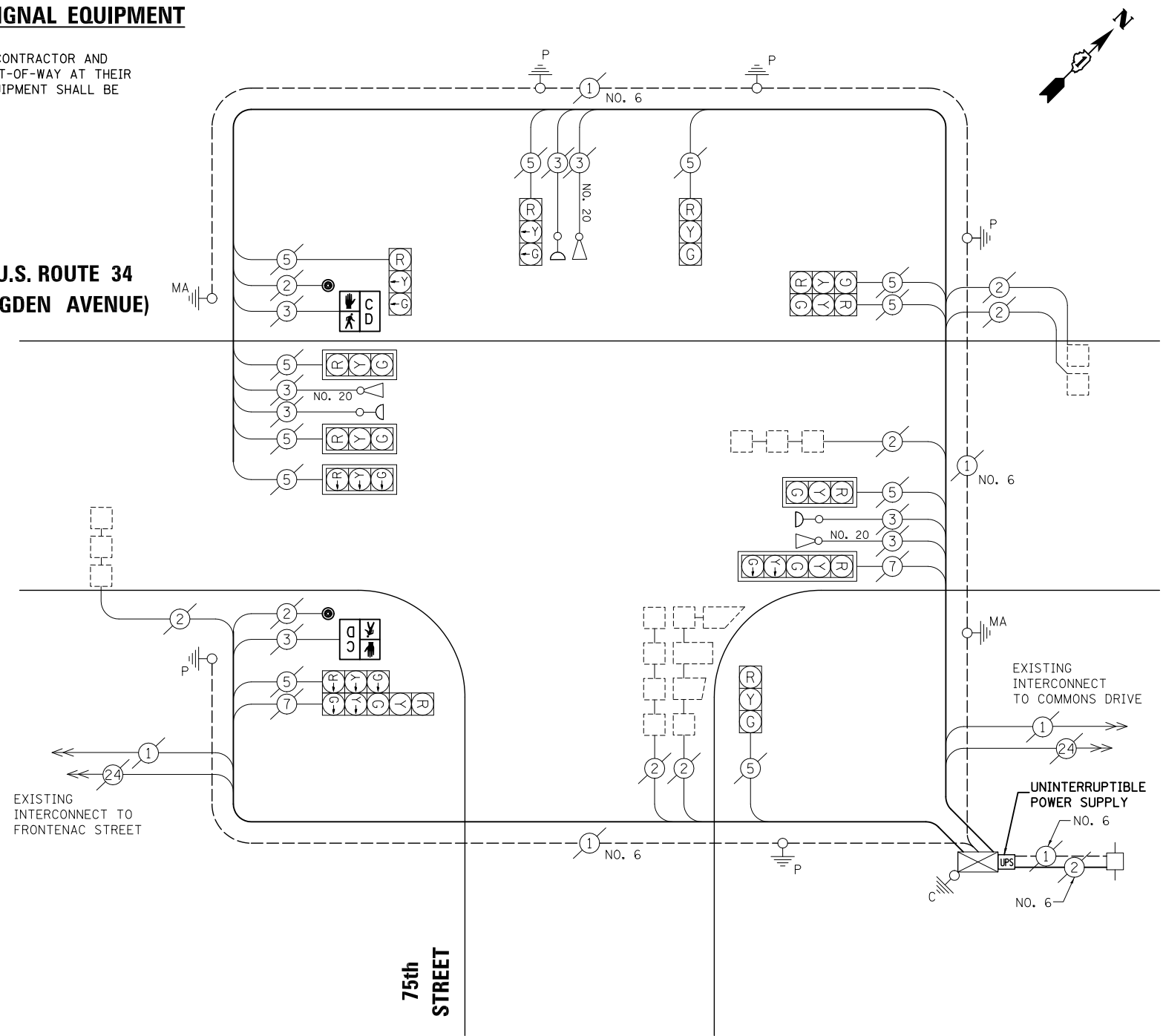


REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

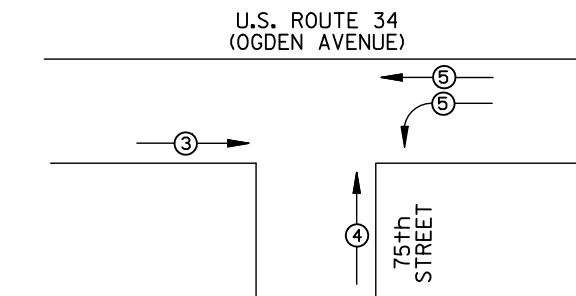
- 2 EACH PEDESTRIAN SIGNAL HEAD
- 2 EACH PEDESTRIAN PUSH-BUTTON

U.S. ROUTE 34 (OGDEN AVENUE)



CABLE PLAN

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



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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		%OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	13	135	17	0.50	110.5
(YELLOW)	13	135	25	0.25	81.25
(GREEN)	13	135	15	0.25	48.75
ARROW	4	135	12	0.10	4.8
PED. SIGNAL	2	90	25	1.00	50
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 395.3
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				
FILE NAME = \MICROST\352105\ 09-6047.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
	PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -		
	PLOT DATE = X	DATE - 03-22-13	REVISED -		

SCHEDULE OF QUANTITIES

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
U.S. ROUTE 34 (OGDEN AVENUE) AT 75th STREET

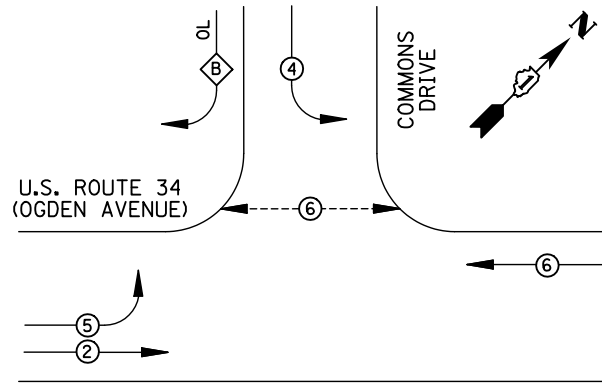
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

PREPARED BY:
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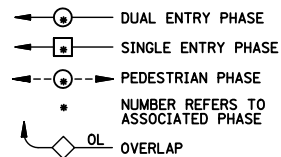
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	23
			CONTRACT NO. 60W02	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

TS# 6047
AURORA

EXISTING CONTROLLER SEQUENCE



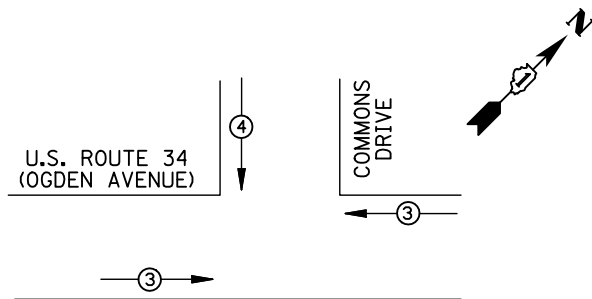
LEGEND



RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	= 4	+ 5

EXISTING PHASE DESIGNATION DIAGRAM



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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

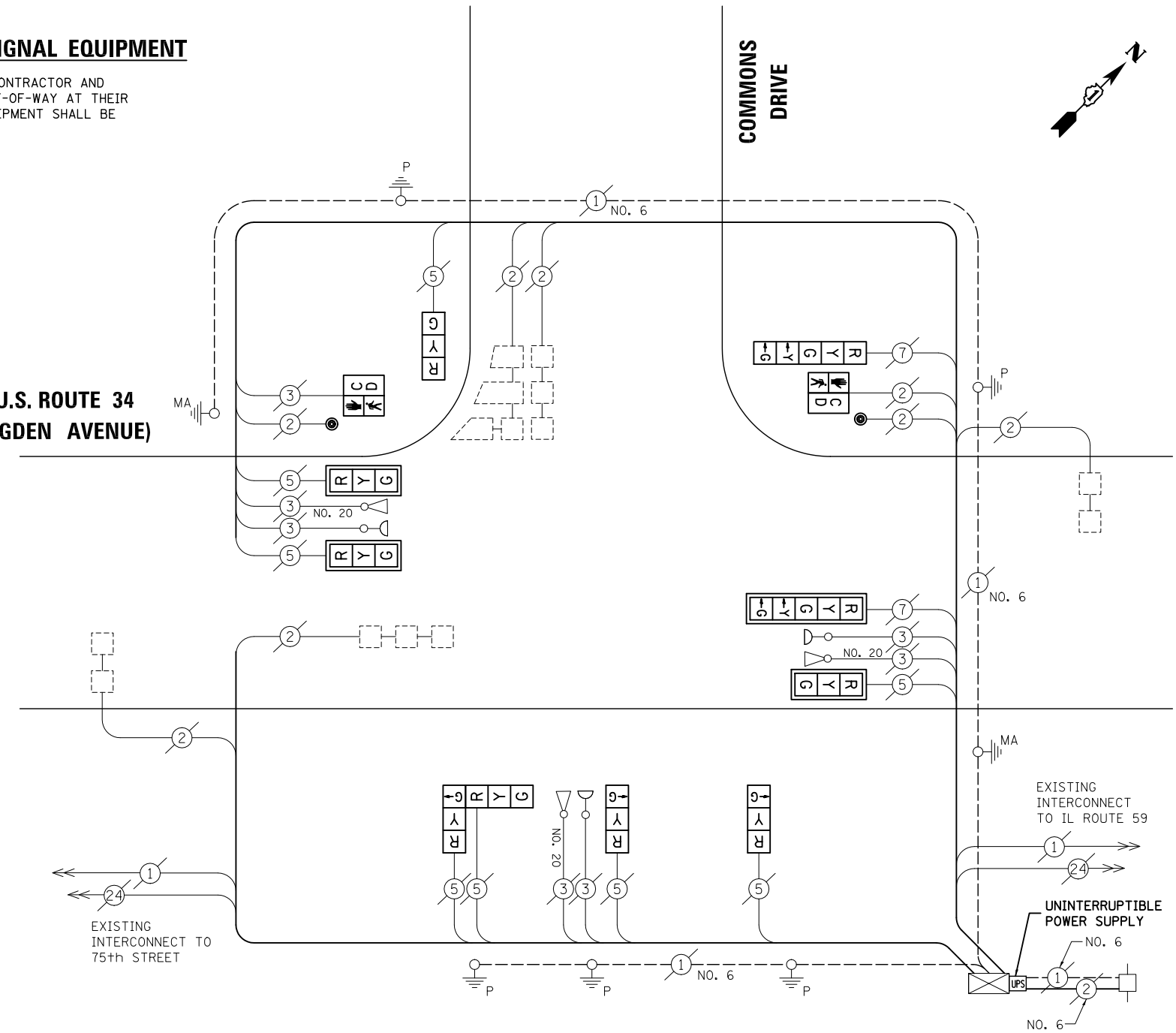
- 8 EACH SIGNAL HEAD, 3-SECTION
- 2 EACH SIGNAL HEAD, 5-SECTION
- 4 EACH TRAFFIC SIGNAL BACKPLATE
- 2 EACH PEDESTRIAN SIGNAL HEAD
- 2 EACH PEDESTRIAN PUSH-BUTTON

SCHEDULE OF QUANTITIES

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

U.S. ROUTE 34 (OGDEN AVENUE)



CABLE PLAN

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

TS# 6046
AURORA

PREPARED BY:
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E-Mail: cadd@cemcon.com Website: www.cemcon.com

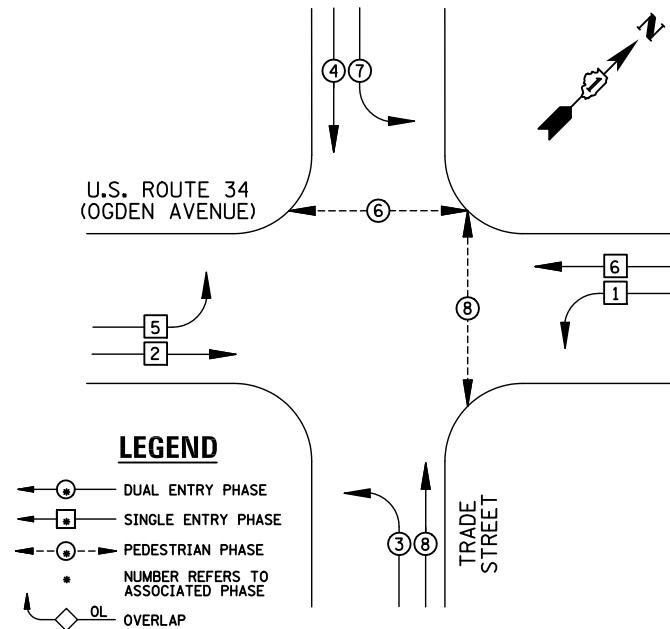
I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	10	135	17	0.50	85
(YELLOW)	10	135	25	0.25	62.5
(GREEN)	10	135	15	0.25	37.5
ARROW	4	135	12	0.10	4.8
PED. SIGNAL	2	90	25	1.00	50
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 339.8
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				
FILE NAME =	USER NAME = JGC	DESIGNED - BPT	REVISED -		
\\MICROST\352105\10-6046.DGN		DRAWN - JGC/RDS	REVISED -		
	PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -		
	PLOT DATE = X	DATE - 03-22-13	REVISED -		

SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
U.S. ROUTE 34 (OGDEN AVENUE) AT COMMONS DRIVE

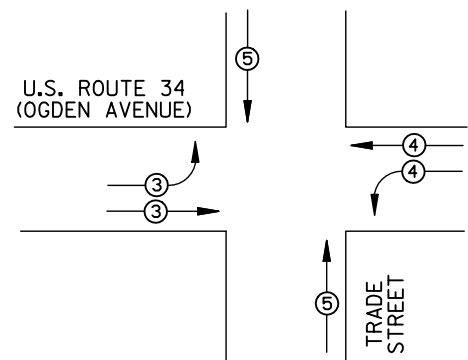
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-083TS	DU PAGE	89	24
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT			

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	18	135	17	0.50	153
(YELLOW)	18	135	25	0.25	112.5
(GREEN)	18	135	15	0.25	67.5
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	4	90	25	1.00	100
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 542.6
ENERGY SUPPLY CONTACT:	X				
PHONE:	X				
COMPANY:	X				
FILE NAME = \MICROST\352105\ 11-12368.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
		PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -	
		PLOT DATE = X	DATE - 03-22-13	REVISED -	

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

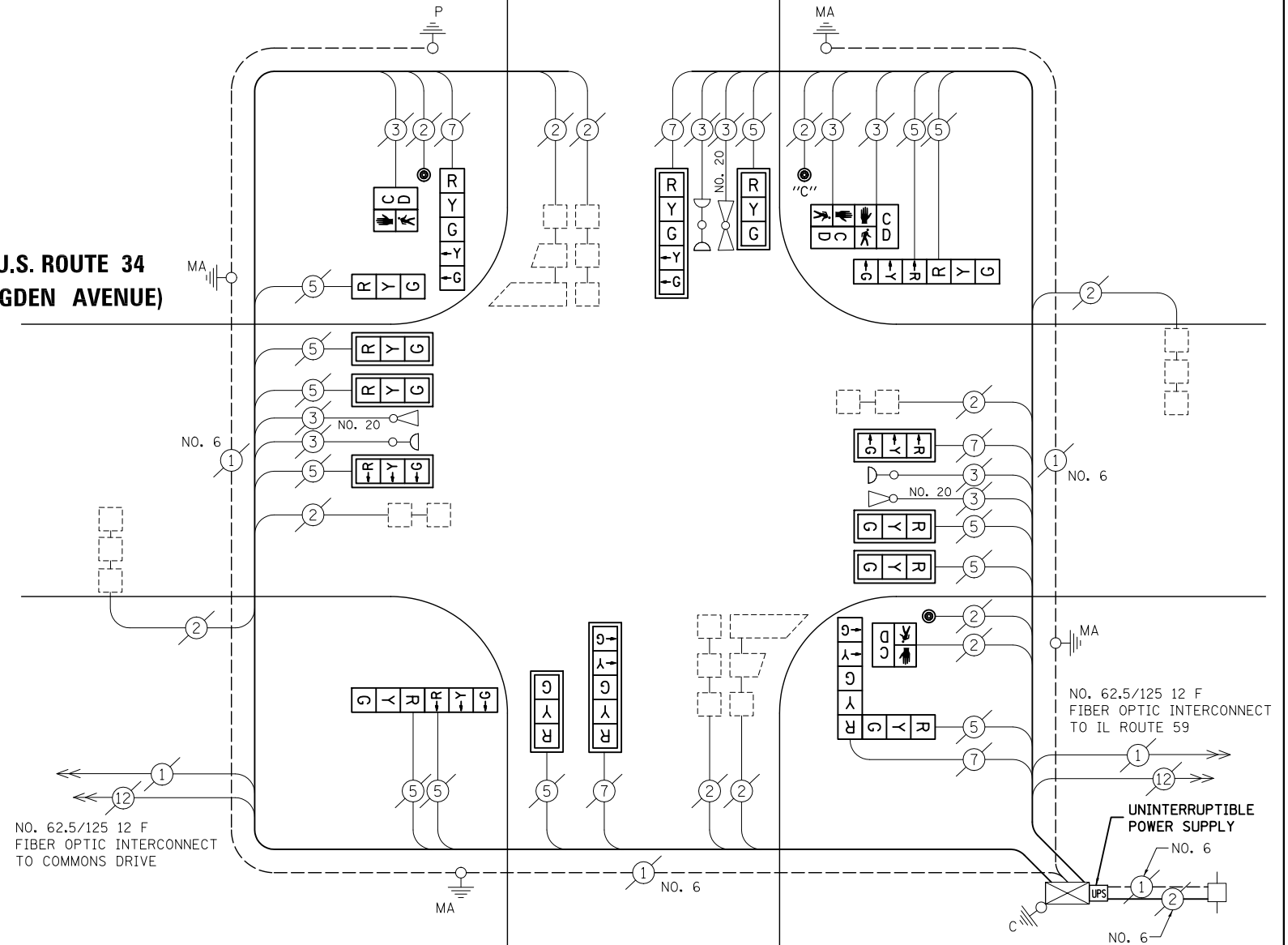
- 4 EACH PEDESTRIAN SIGNAL HEAD
- 3 EACH PEDESTRIAN PUSH-BUTTON

SCHEDULE OF QUANTITIES

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

U.S. ROUTE 34 (OGDEN AVENUE)



CABLE PLAN

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

NOTE:

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

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

TS# 12360
AURORA

PREPARED BY:
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	25

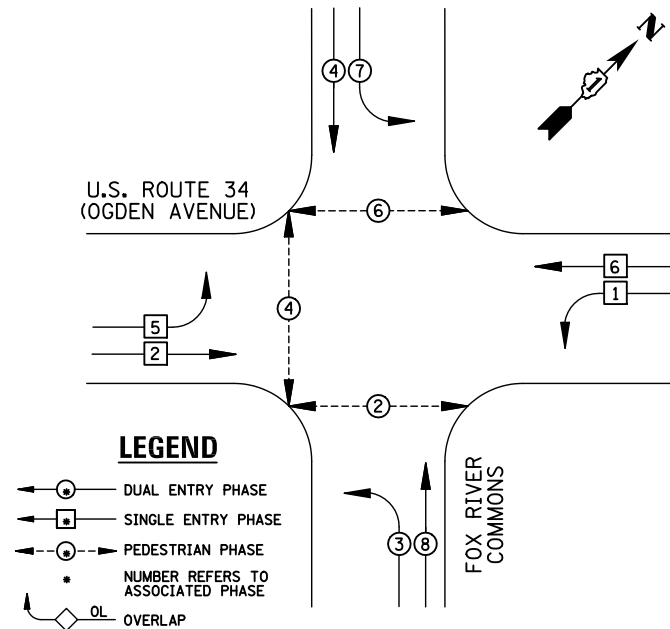
CONTRACT NO. 60W02

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

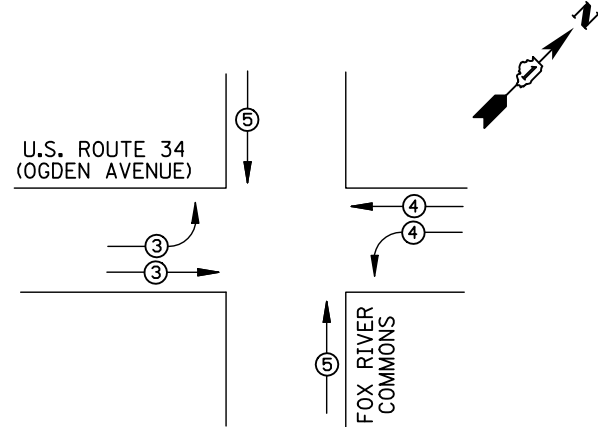
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION U.S. ROUTE 34 (OGDEN AVENUE) AT TRADE STREET

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

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT			

EMERGENCY VEHICLE PREEMPTION SEQUENCE

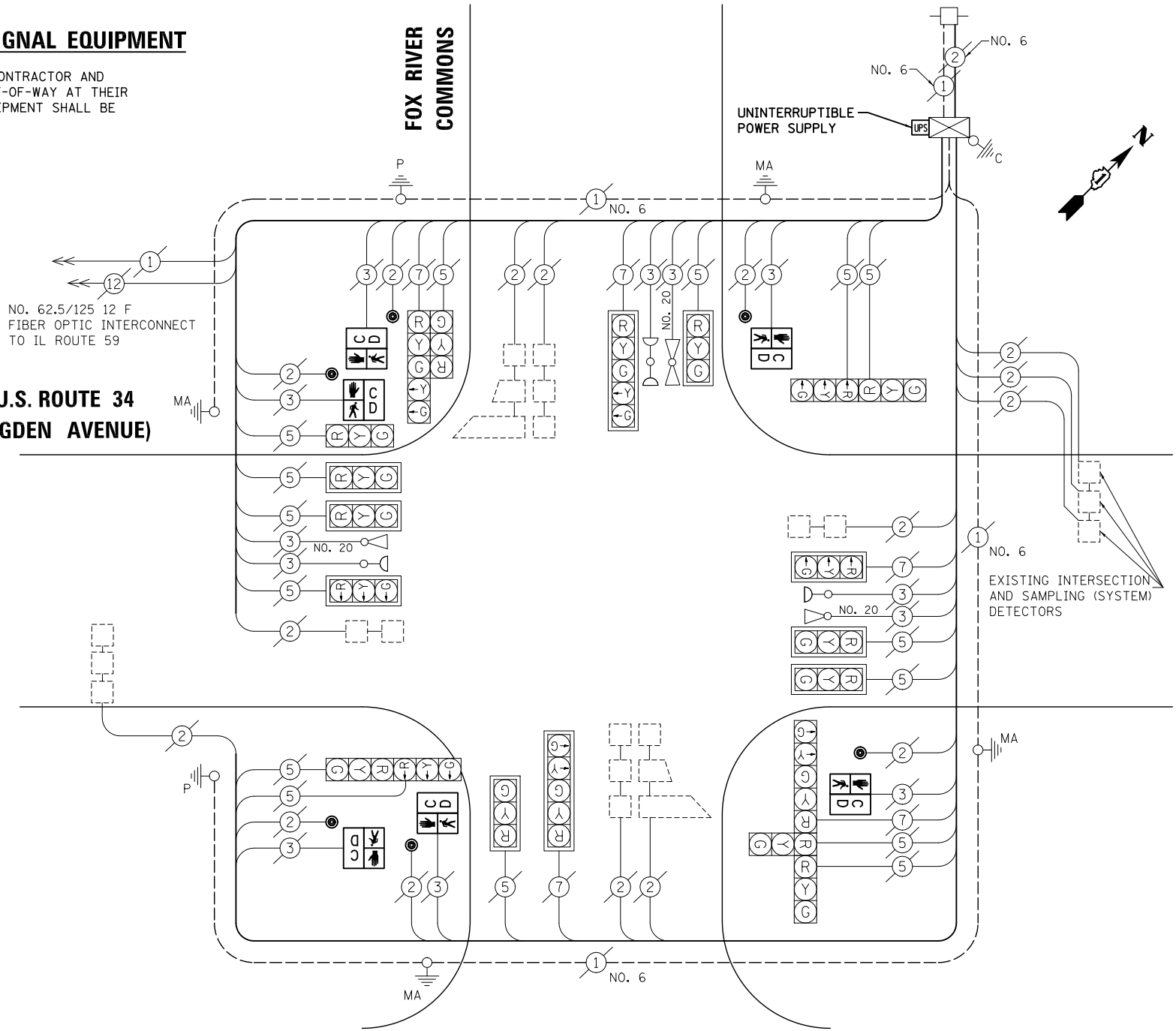
I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	19	135	17	0.50	161.5
(YELLOW)	19	135	25	0.25	118.75
(GREEN)	19	135	15	0.25	71.25
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	6	90	25	1.00	150
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 611.1
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					
FILE NAME = MICROST\352105\12-20910.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
	PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -		
	PLOT DATE = X	DATE - 03-22-13	REVISED -		

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

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

U.S. ROUTE 34 (OGDEN AVENUE)



CABLE PLAN

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

SCHEDULE OF QUANTITIES

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

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
U.S. ROUTE 34 (OGDEN AVENUE) AT FOX RIVER COMMONS**

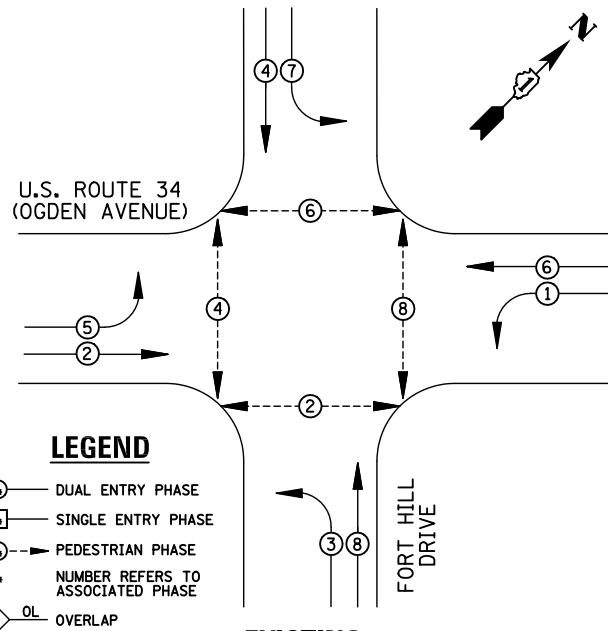
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

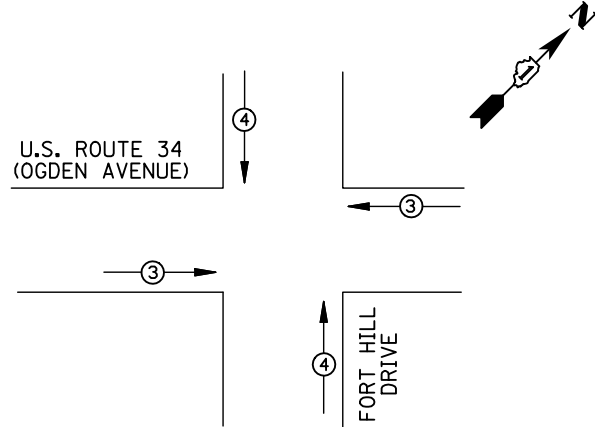
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	26
CONTRACT NO. 60W02				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

TS# 20910
AURORA

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

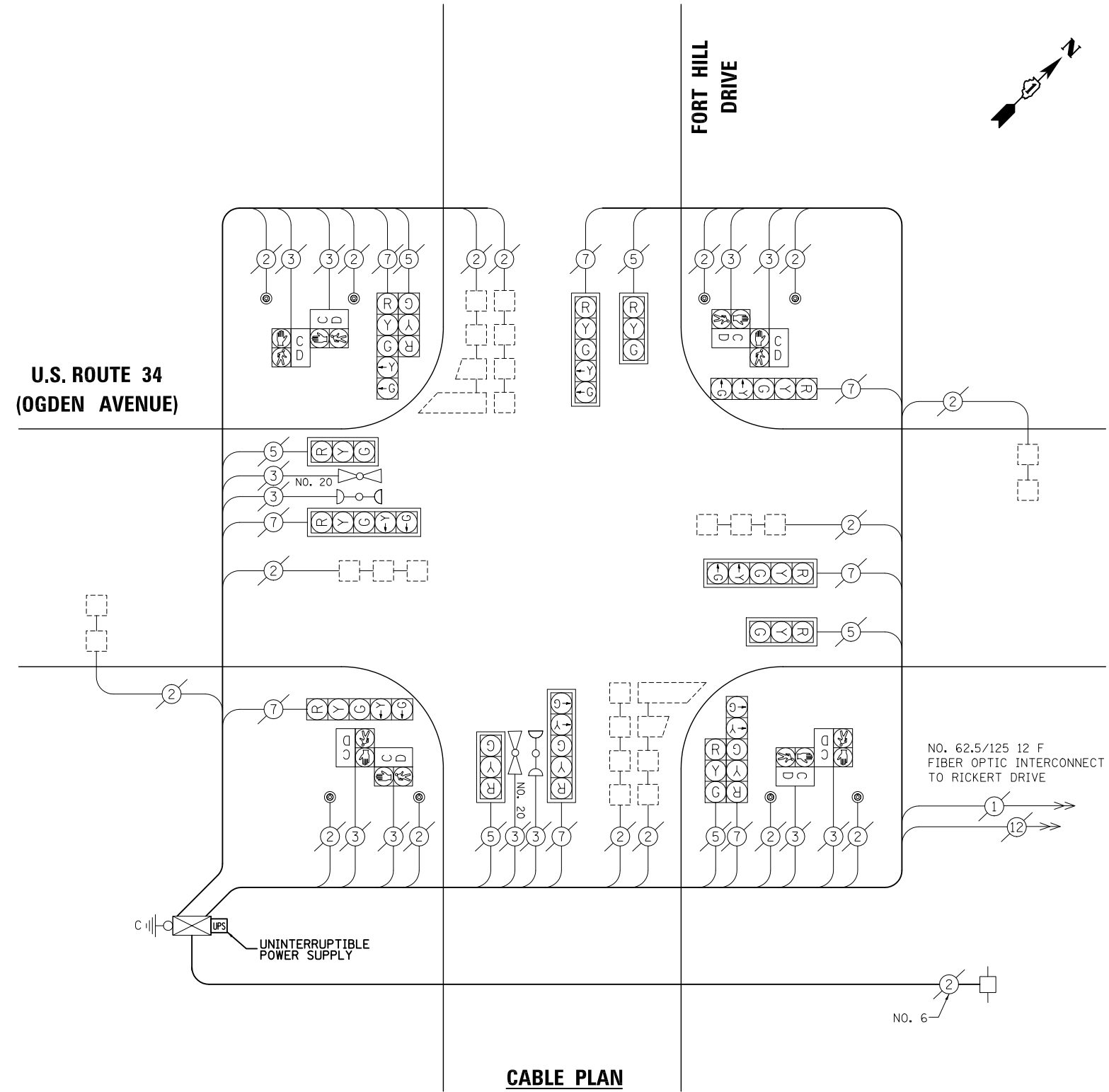
I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		%OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	14	135	17	0.50	119
(YELLOW)	14	135	25	0.25	87.5
(GREEN)	14	135	15	0.25	52.5
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: CITY OF NAPERVILLE 400 S. EAGLE STREET NAPERVILLE, IL 60540					TOTAL = 578.2
ENERGY SUPPLY CONTACT:	_____				
PHONE:	_____				
COMPANY:	_____				
FILE NAME =	USER NAME = JGC				
DESIGNED - BPT	REVISED -				
DRAWN - JGC/RDS	REVISED -				
PLOT SCALE = NOT TO SCALE	CHECKED - BPT				
PLOT DATE = X	DATE - 03-22-13				

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

SCHEDULE OF QUANTITIES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

U.S. ROUTE 34
(OGDEN AVENUE)



CABLE PLAN

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

**SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
U.S. ROUTE 34 (OGDEN AVENUE) AT FORT HILL DRIVE**

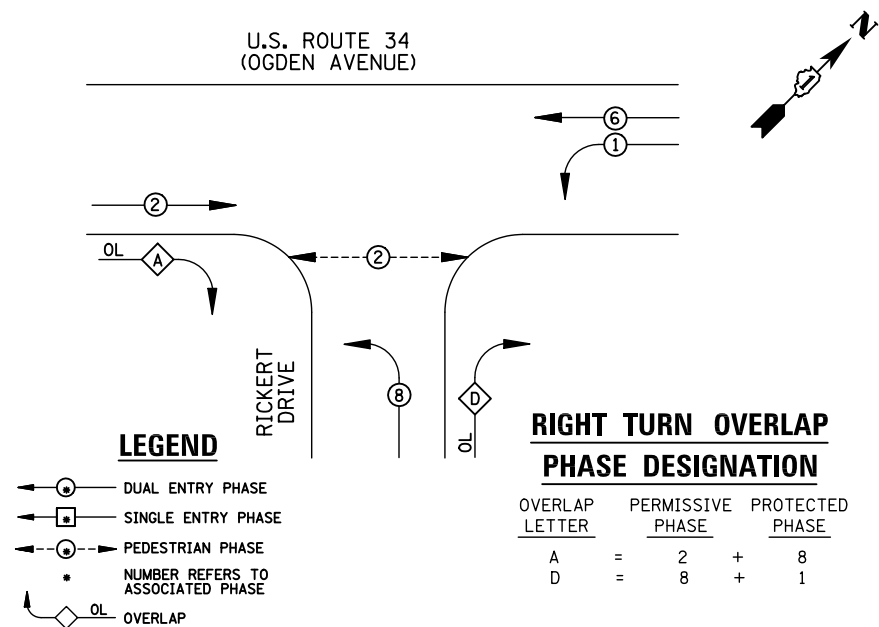
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	27
CONTRACT NO. 60W02			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

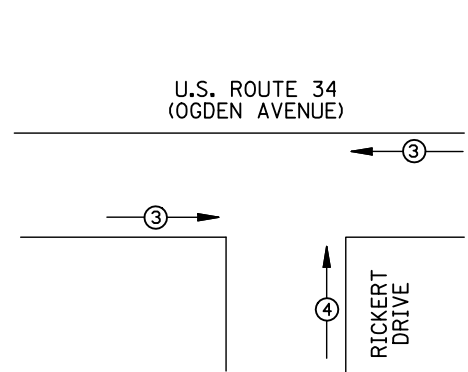
PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

TS# 9526
NAPERVILLE

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↔	↑

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	15	135	17	0.50	127.5
(YELLOW)	15	135	25	0.25	93.75
(GREEN)	15	135	15	0.25	56.25
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	2	90	25	1.00	50
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO:					TOTAL =
CITY OF NAPERVILLE 400 S. EAGLE STREET NAPERVILLE, IL 60540					437.1

ENERGY SUPPLY CONTACT: _____
 PHONE: _____
 COMPANY: _____

FILE NAME = \MICROST\352105\ 14-9549.DGN
 USER NAME = JGC
 PLOT SCALE = NOT TO SCALE
 PLOT DATE = X

DESIGNED - BPT	REVISED -
DRAWN - JGC/RDS	REVISED -
CHECKED - BPT	REVISED -
DATE - 03-22-13	REVISED -

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

- 2 EACH PEDESTRIAN SIGNAL HEAD
- 2 EACH PEDESTRIAN PUSH-BUTTON

U.S. ROUTE 34 (OGDEN AVENUE)

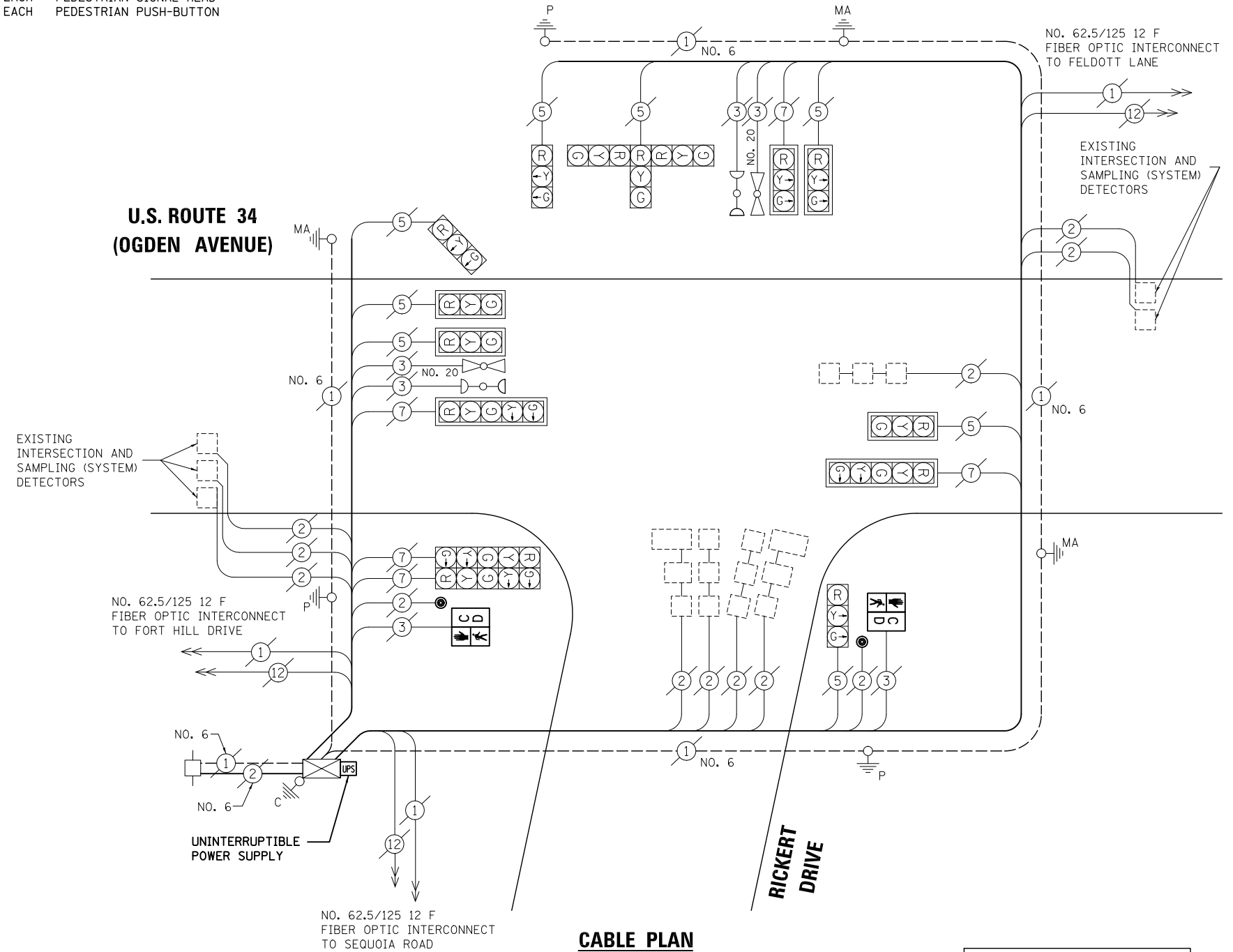
EXISTING INTERSECTION AND SAMPLING (SYSTEM) DETECTORS

NO. 62.5/125 12 F FIBER OPTIC INTERCONNECT TO FORT HILL DRIVE

UNINTERRUPTIBLE POWER SUPPLY

NO. 62.5/125 12 F FIBER OPTIC INTERCONNECT TO SEQUOIA ROAD

CABLE PLAN



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

SCHEDULE OF QUANTITIES

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
U.S. ROUTE 34 (OGDEN AVENUE) AT RICKERT DRIVE

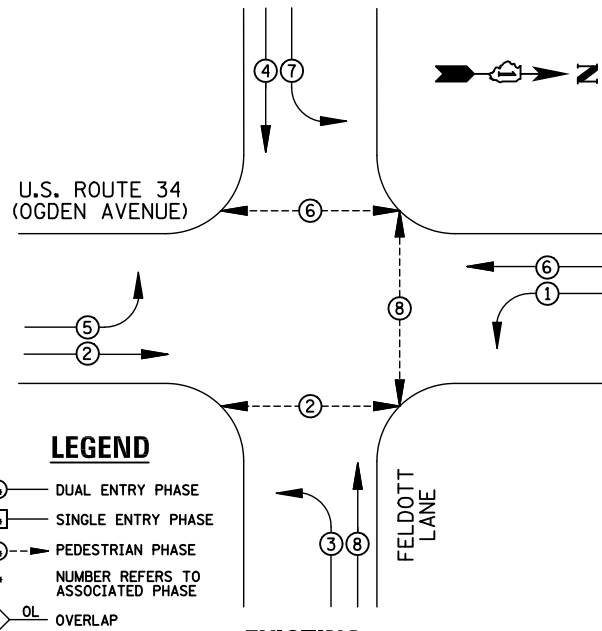
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
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Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

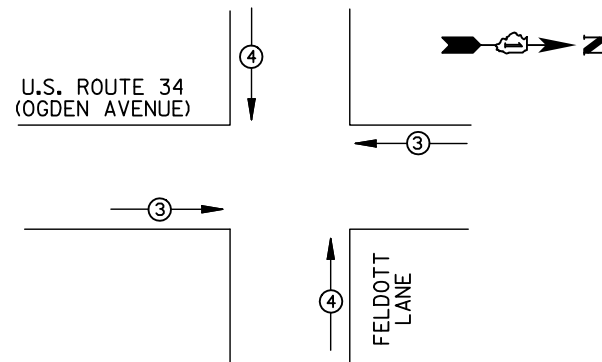
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	28
			CONTRACT NO. 60W02	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

TS# 9549
NAPERVILLE

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		%OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	6	90	25	1.00	150
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: CITY OF NAPERVILLE 400 S. EAGLE STREET NAPERVILLE, IL 60540					TOTAL = 491.2
ENERGY SUPPLY CONTACT:	X				
PHONE:	X				
COMPANY:	X				
FILE NAME = \MICROST\352105\ 15-9551.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
		PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -	
		PLOT DATE = X	DATE - 03-22-13	REVISED -	

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

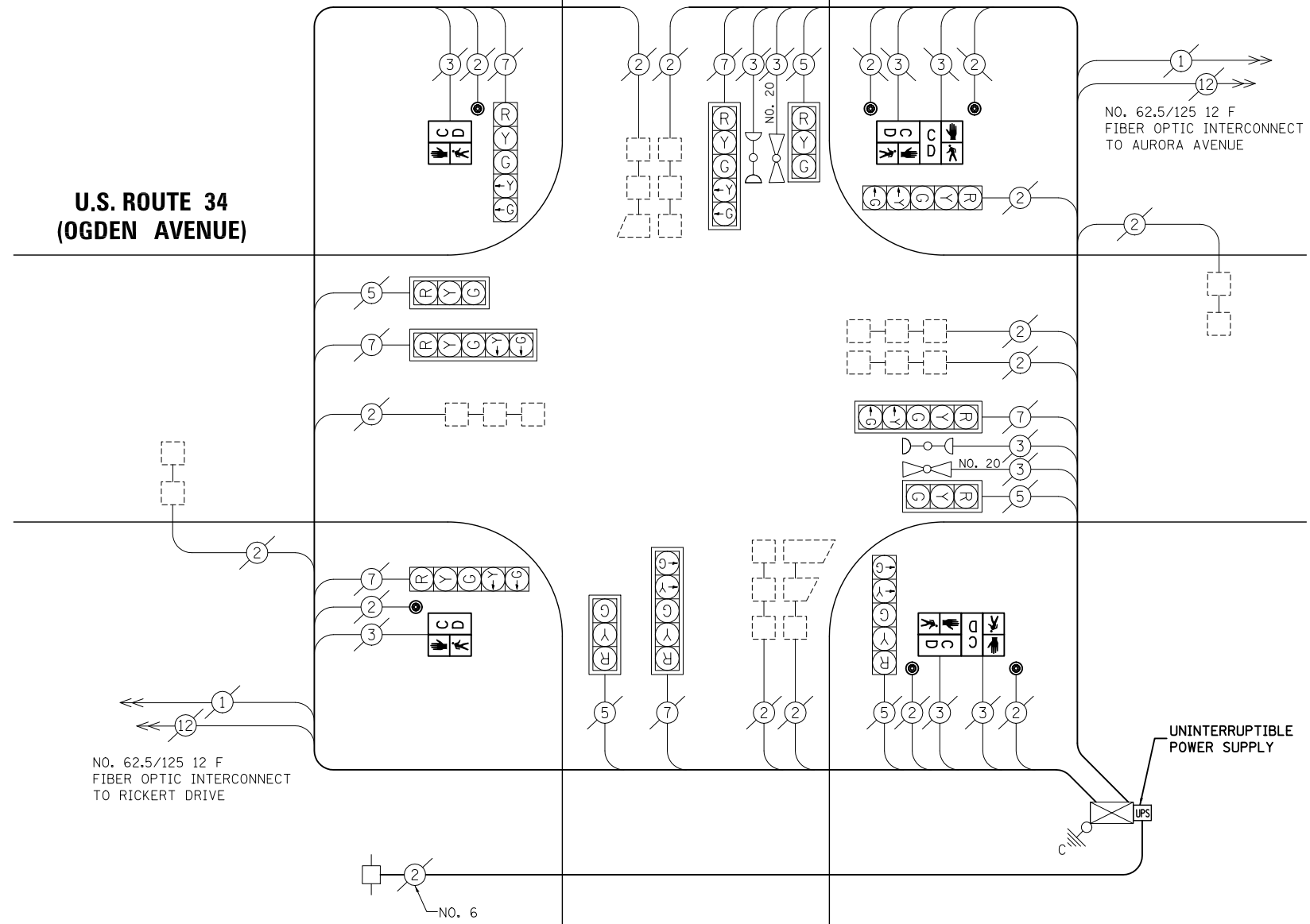
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

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

SCHEDULE OF QUANTITIES

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

U.S. ROUTE 34 (OGDEN AVENUE)



CABLE PLAN

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
U.S. ROUTE 34 (OGDEN AVENUE) AT FELDOTT LANE

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

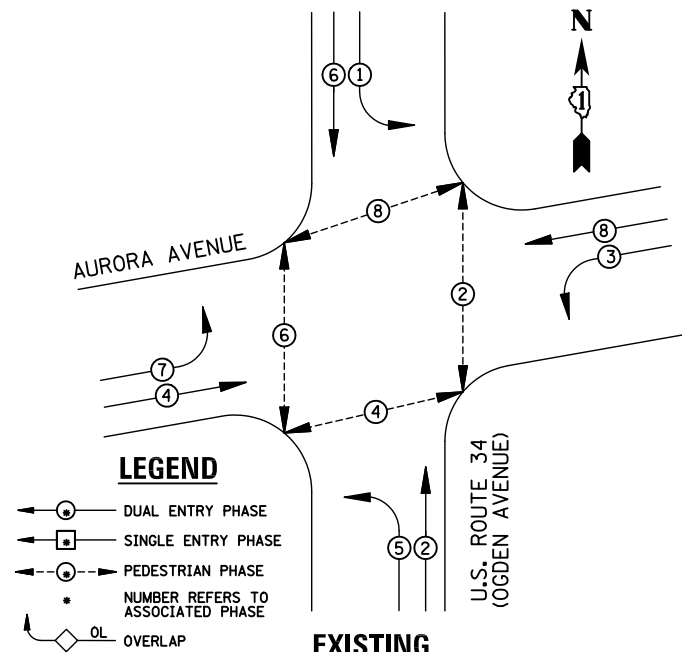
PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	29
CONTRACT NO. 60W02				

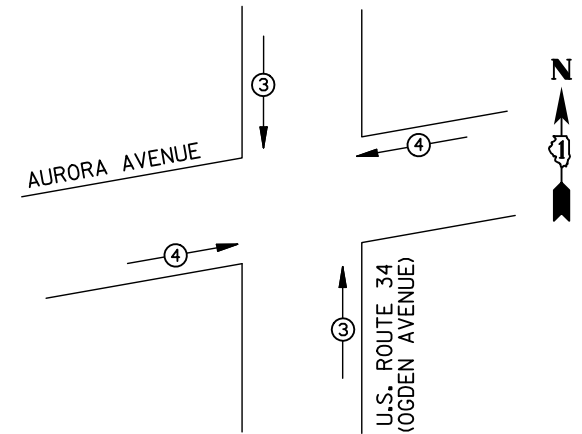
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

TS# 9551
NAPERVILLE

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	

ENERGY COSTS TO:
CITY OF NAPERVILLE
400 S. EAGLE STREET
NAPERVILLE, IL 60540

ENERGY SUPPLY CONTACT: _____
PHONE: _____
COMPANY: _____

TOTAL = 541.2

FILE NAME = \MICROST\352105\16-9520.DGN
USER NAME = JGC
DESIGNED - BPT
DRAWN - JGC/RDS
PLOT SCALE = NOT TO SCALE
PLOT DATE = X

ITEM

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

DESIGNED - BPT	REVISED -
DRAWN - JGC/RDS	REVISED -
CHECKED - BPT	REVISED -
DATE - 03-22-13	REVISED -

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

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

SCHEDULE OF QUANTITIES

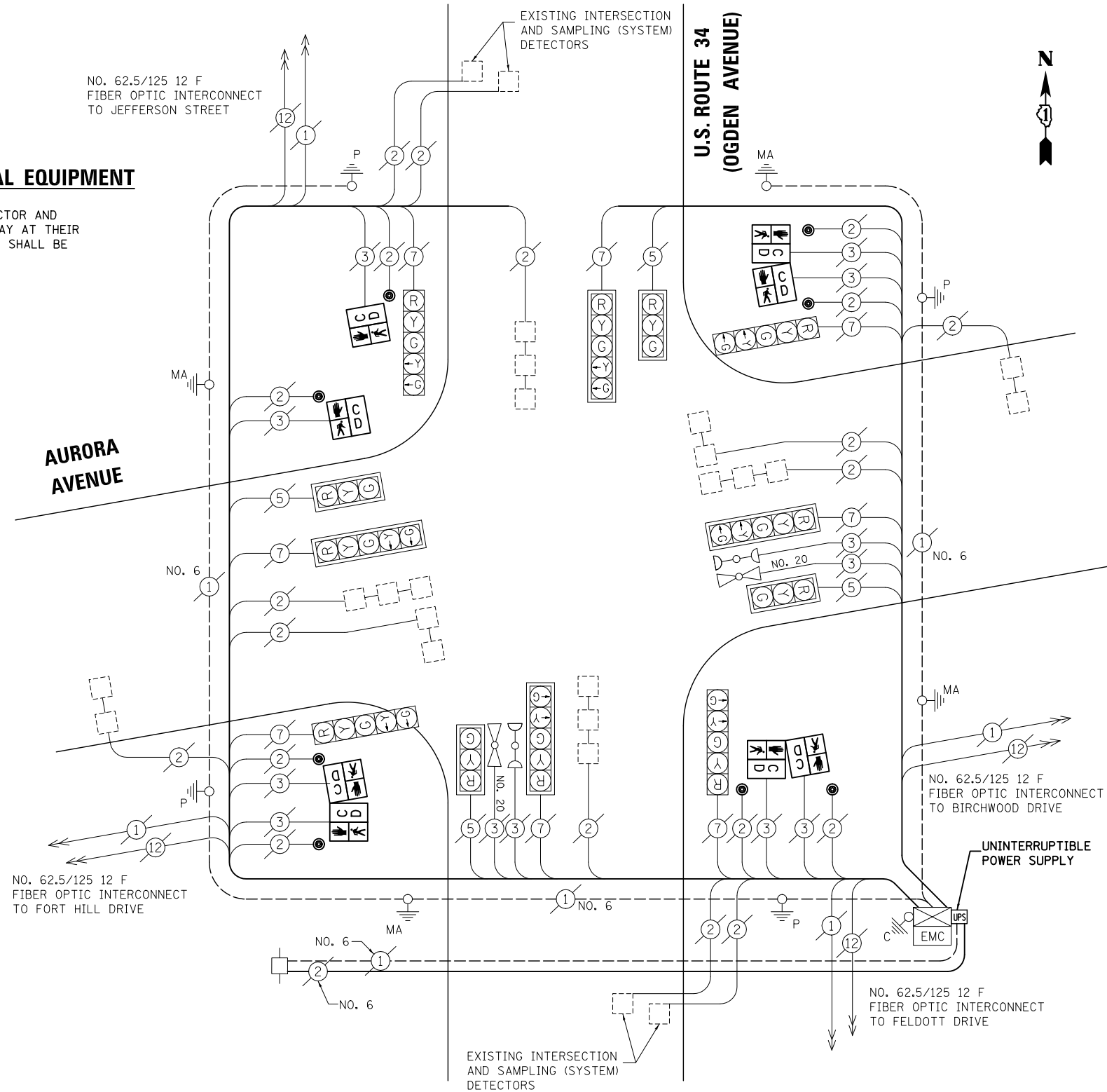
UNIT	QUANTITY
EACH	1
EACH	2
EACH	3
EACH	8
EACH	1
EACH	1
EACH	1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION U.S. ROUTE 34 (OGDEN AVENUE) AT AURORA AVENUE

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

CABLE PLAN



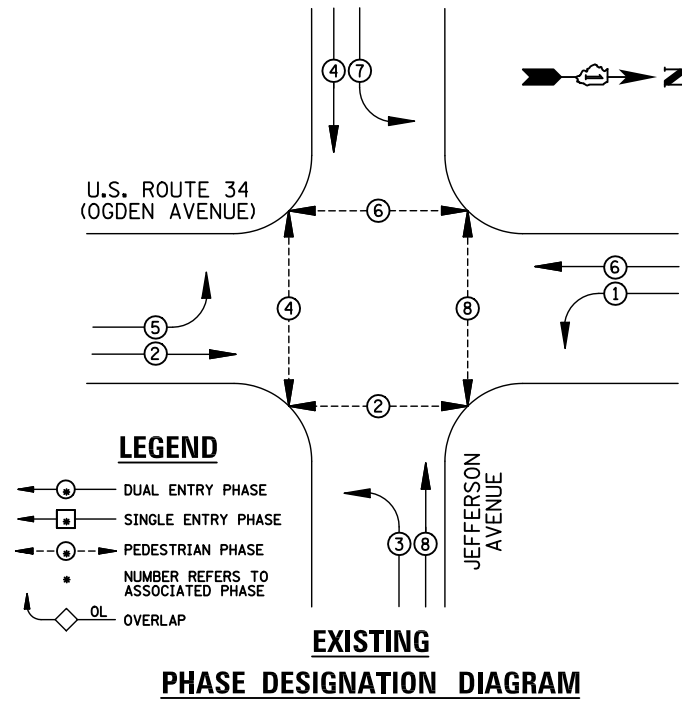
NOTE:
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	30
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	

TS# 9520
NAPERVILLE

EXISTING CONTROLLER SEQUENCE

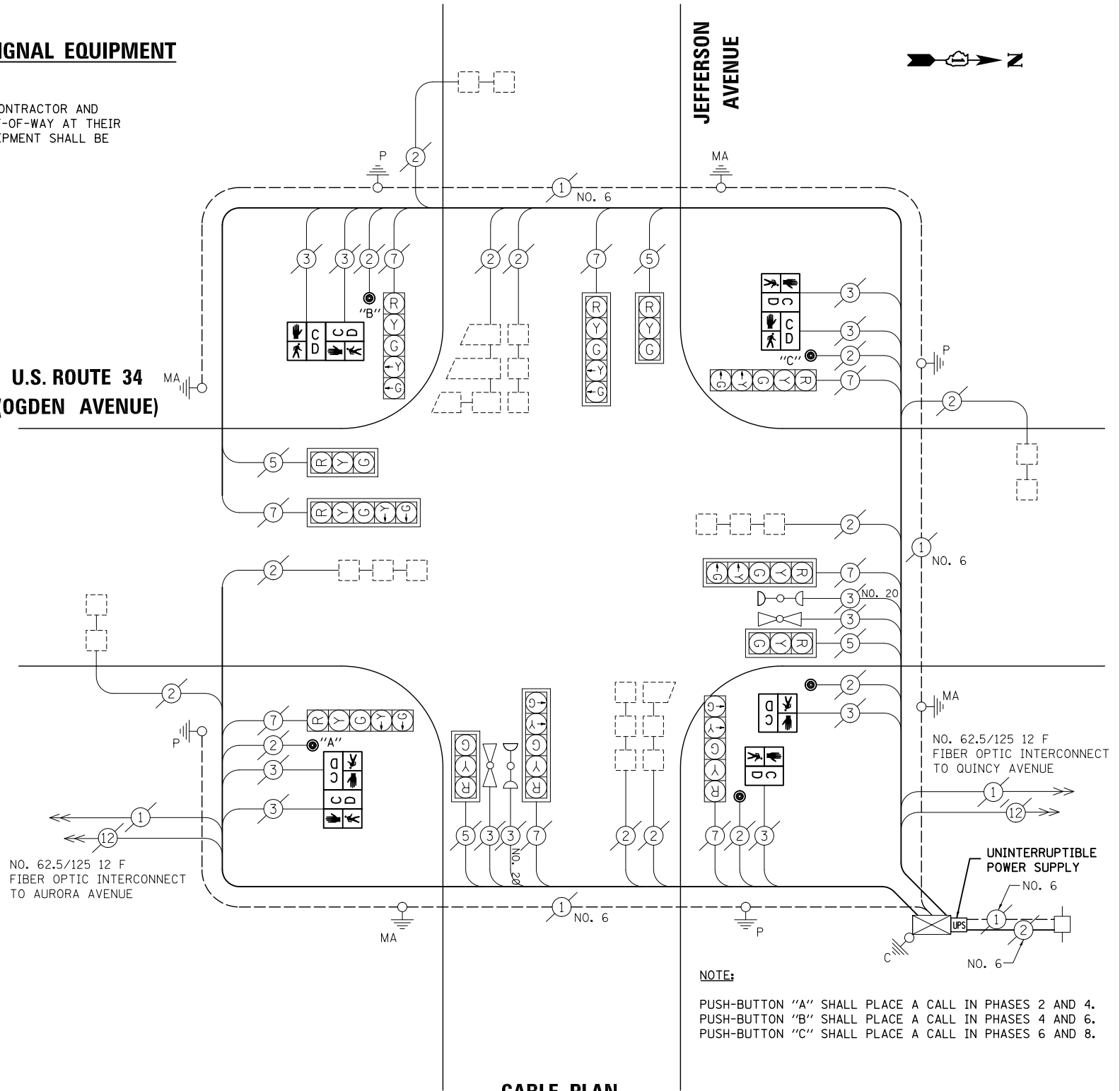


REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

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

U.S. ROUTE 34 (OGDEN AVENUE)



SCHEDULE OF QUANTITIES

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: CITY OF NAPERVILLE 400 S. EAGLE STREET NAPERVILLE, IL 60540					TOTAL = 541.2
ENERGY SUPPLY CONTACT: X PHONE: X COMPANY: X					
FILE NAME = \MICROST\352105\17-9552.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
	PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -		
	PLOT DATE = X	DATE - 03-22-13	REVISED -		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
U.S. ROUTE 34 (OGDEN AVENUE) AT JEFFERSON AVENUE

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

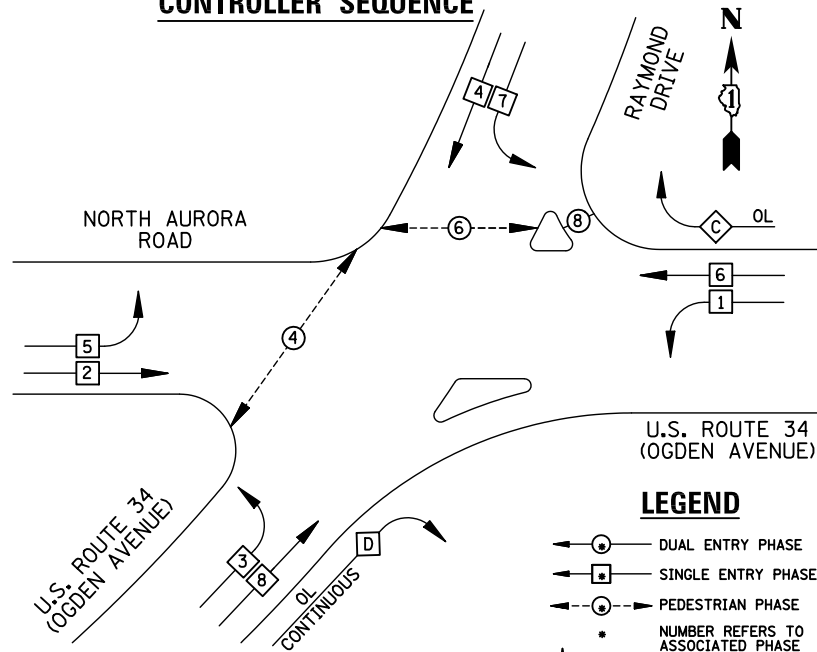
PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	31

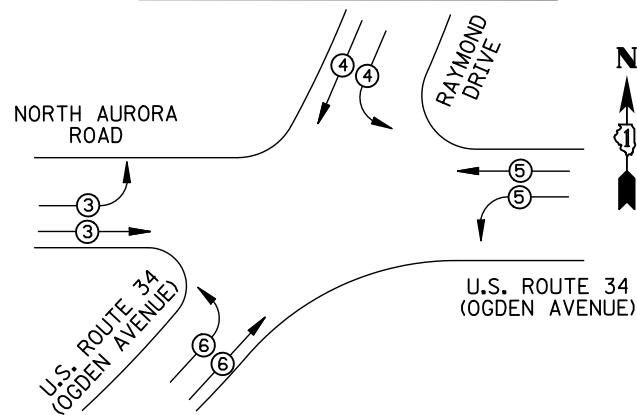
CONTRACT NO. 60W02
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

TS# 9552
NAPERVILLE

EXISTING AND PROPOSED CONTROLLER SEQUENCE



EXISTING AND PROPOSED PHASE DESIGNATION DIAGRAM



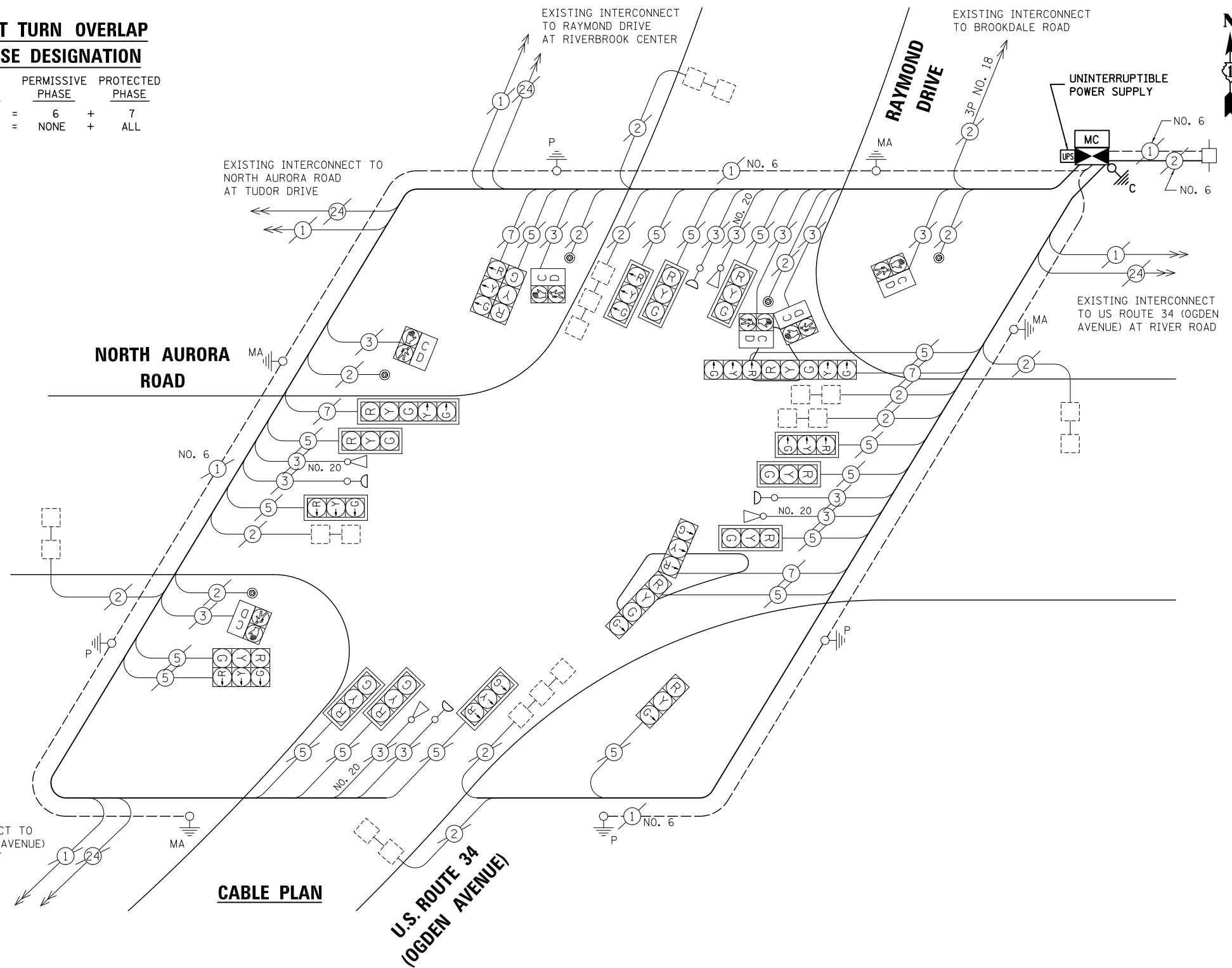
EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT				

EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
C	= 6	+ 7
D	= NONE	+ ALL

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



EXISTING INTERCONNECT TO US ROUTE 34 (OGDEN AVENUE) AT JEFFERSON STREET

CABLE PLAN

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	9
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL	EACH	1
MASTER CONTROLLER (SPECIAL)	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

- 1 EACH CONTROLLER AND CABINET, COMPLETE
- 1 EACH MASTER CONTROLLER

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

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	20	135	17	0.50	170
(YELLOW)	20	135	25	0.25	125
(GREEN)	20	135	15	0.25	75
ARROW	4	135	12	0.10	4.8
PED. SIGNAL	6	90	25	1.00	150
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
ARROW					24
FLASHER					
		135	25	0.50	
ENERGY COSTS TO: CITY OF NAPERVILLE 400 S. EAGLE STREET NAPERVILLE, IL 60540					TOTAL = 648.8
ENERGY SUPPLY CONTACT:	X				
PHONE:	X				
COMPANY:	X				

FILE NAME = \MICROST\352105\ 18-27140.DGN
USER NAME = JGC
DESIGNED - BPT
DRAWN - JGC/RDS
PLOT SCALE = NOT TO SCALE
PLOT DATE = X
CHECKED - BPT
DATE - 03-22-13

REVISD -
REVISD -
REVISD -
REVISD -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
U.S. ROUTE 34 (OGDEN AVENUE) AT RAYMOND DRIVE

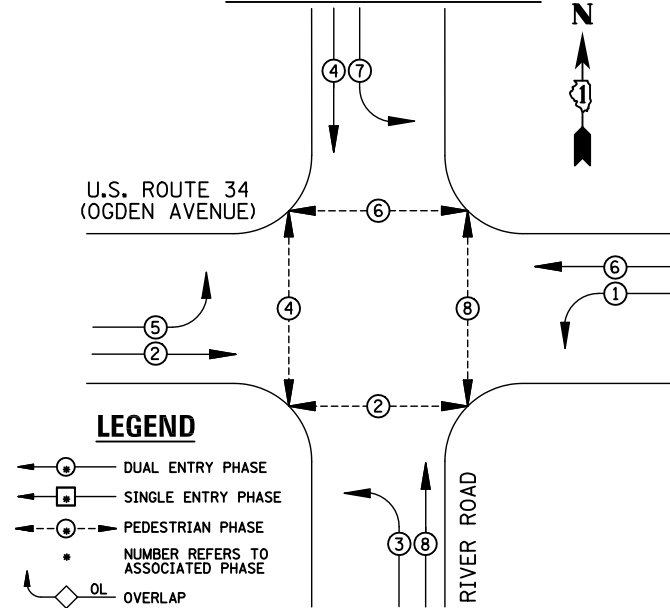
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

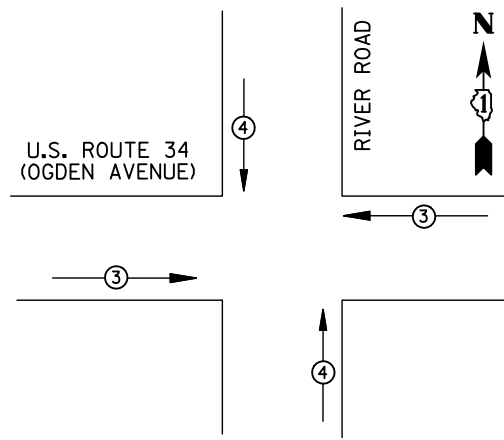
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	32
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	

TS# 27140
NAPERVILLE

EXISTING AND PROPOSED CONTROLLER SEQUENCE



EXISTING AND PROPOSED PHASE DESIGNATION DIAGRAM



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

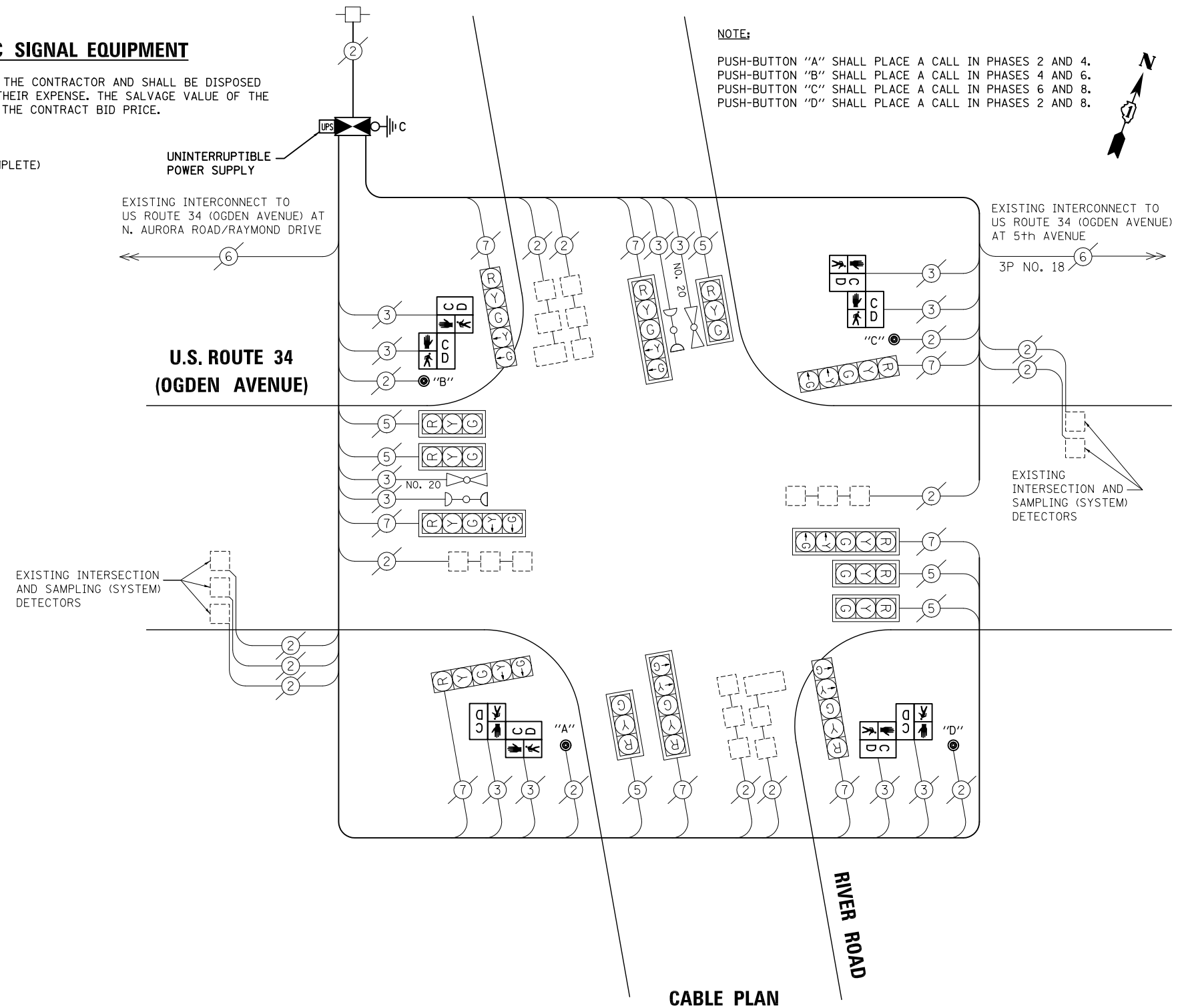
EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		%OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	14	135	17	0.50	119
(YELLOW)	14	135	25	0.25	87.5
(GREEN)	14	135	15	0.25	52.5
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: CITY OF NAPERVILLE 400 S. EAGLE STREET NAPERVILLE, IL 60540					TOTAL = 578.2
ENERGY SUPPLY CONTACT: _____					
PHONE: _____					
COMPANY: _____					
FILE NAME = \MICROST\352105\ 19-9567.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
		PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -	
		PLOT DATE = X	DATE - 03-22-13	REVISED -	

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

- 8 EACH PEDESTRIAN SIGNAL HEAD
- 4 EACH PEDESTRIAN PUSH-BUTTON
- 1 EACH CONTROLLER AND CABINET (COMPLETE)



NOTE:

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

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
INDUCTIVE LOOP DETECTOR	EACH	11
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	4
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1

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

TS# 9567
NAPERVILLE

PREPARED BY:
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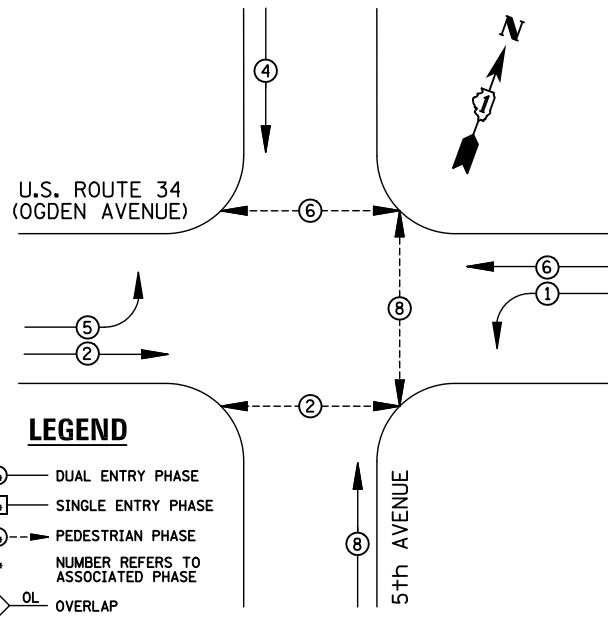
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION U.S. ROUTE 34 (OGDEN AVENUE) AT RIVER ROAD

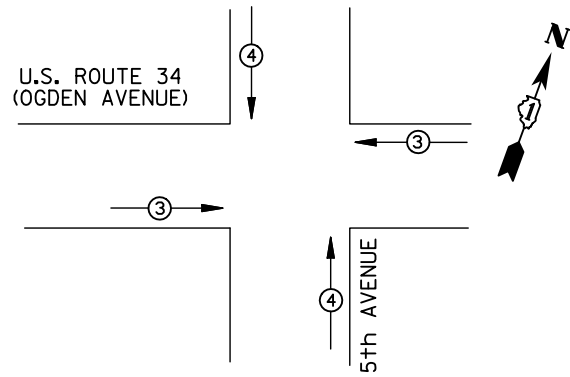
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	33
			CONTRACT NO. 60W02	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



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

*PREEMPTOR 5 IS THE FIRE STATION PUSH-BUTTON

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	6	90	25	1.00	150
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: CITY OF NAPERVILLE 400 S. EAGLE STREET NAPERVILLE, IL 60540					TOTAL = 481.6
ENERGY SUPPLY CONTACT:					
PHONE:					
COMPANY:					

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

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

SCHEDULE OF QUANTITIES

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DESIGNED - BPT	REVISED -
DRAWN - JGC/RDS	REVISED -
CHECKED - BPT	REVISED -
DATE - 03-22-13	REVISED -

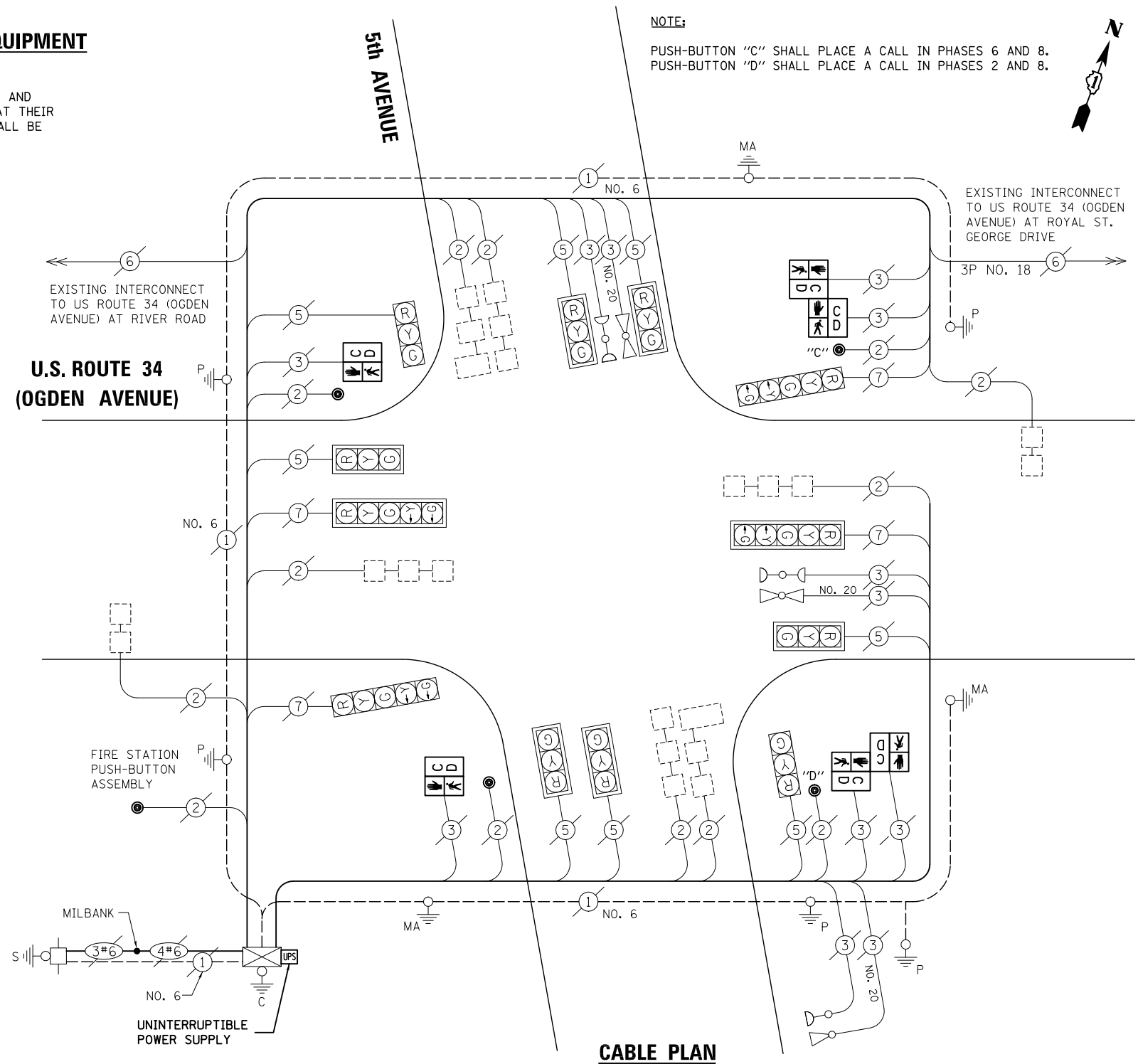
**SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
U.S. ROUTE 34 (OGDEN AVENUE) AT 5th AVENUE**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	34
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
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E-Mail: cadd@cemcon.com Website: www.cemcon.com

TS# 9507
NAPERVILLE



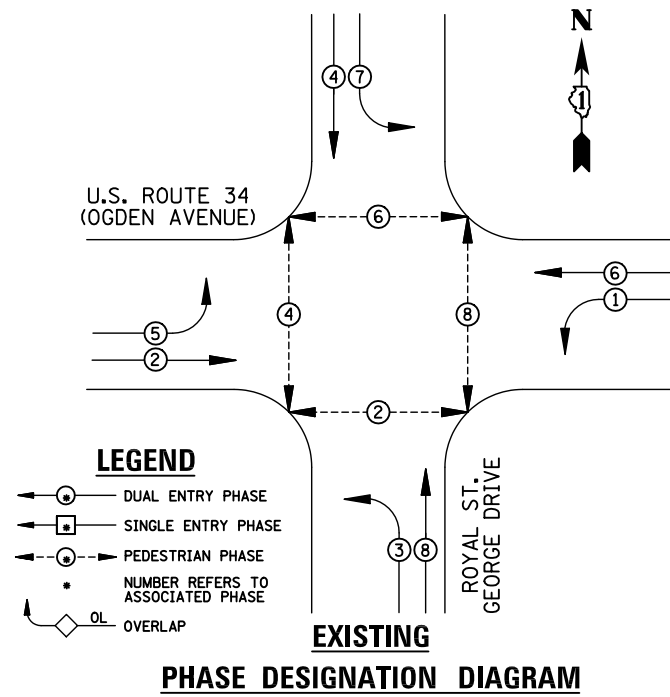
CABLE PLAN

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

FILE NAME = \MICROST\352105\ 20-9507.DGN

USER NAME = JGC
PLOT SCALE = NOT TO SCALE
PLOT DATE = X

EXISTING CONTROLLER SEQUENCE



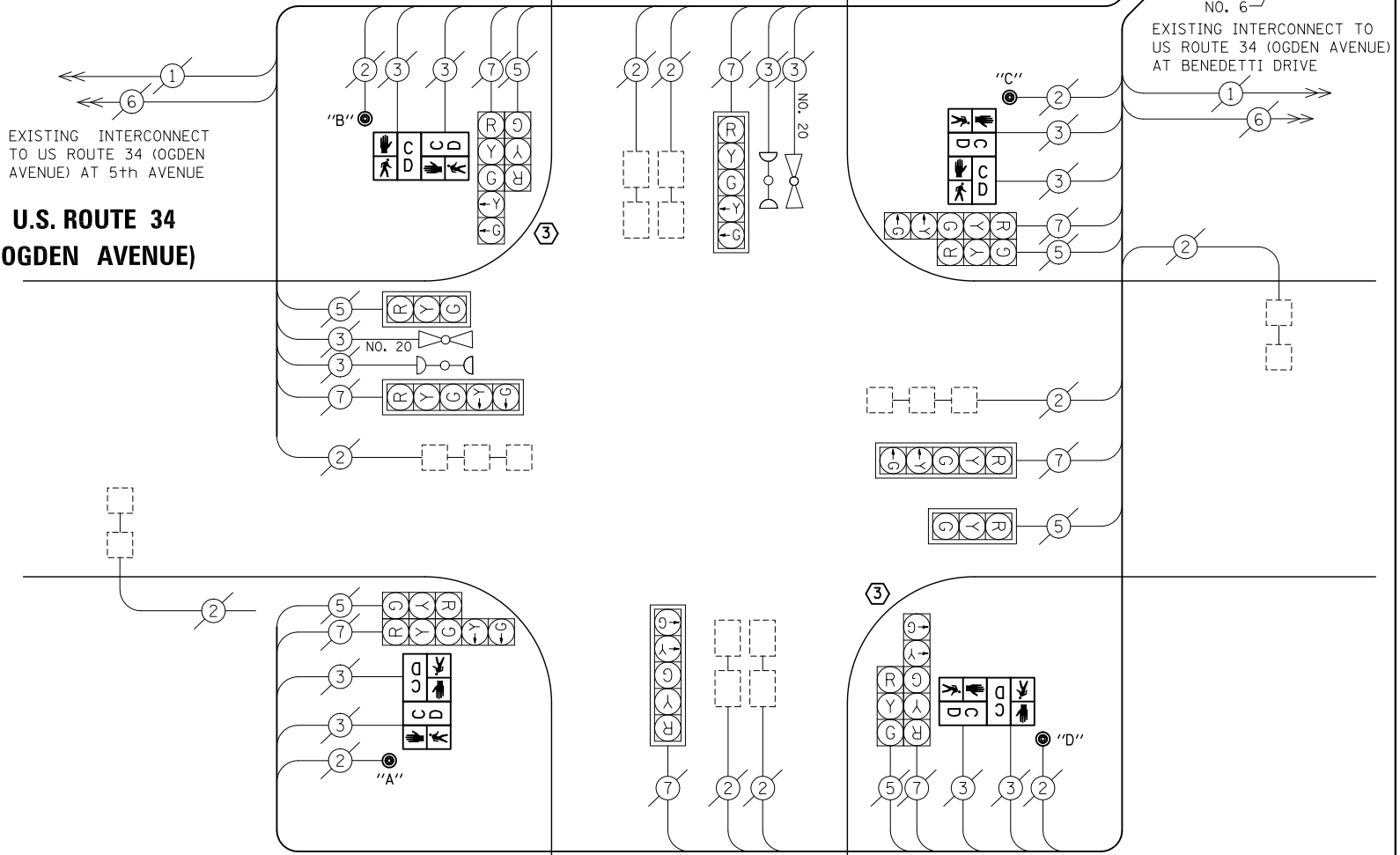
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

- 2 EACH TRAFFIC SIGNAL POST
- 9 EACH PEDESTRIAN SIGNAL HEAD
- 4 EACH PEDESTRIAN PUSH-BUTTON

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

U.S. ROUTE 34 (OGDEN AVENUE)



CABLE PLAN

NOTE:

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

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

SCHEDULE OF QUANTITIES

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

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	135	17	0.50	119
(YELLOW)	14	135	25	0.25	87.5
(GREEN)	14	135	15	0.25	52.5
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: CITY OF NAPERVILLE 400 S. EAGLE STREET NAPERVILLE, IL 60540					TOTAL = 578.2
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				

DESIGNED - BPT	REVISED -
DRAWN - JGC/RDS	REVISED -
CHECKED - BPT	REVISED -
DATE - 03-22-13	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES, CABLE PLAN,
 PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
 U.S. ROUTE 34 (OGDEN AVENUE) AT ROYAL ST. GEORGE DRIVE**

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

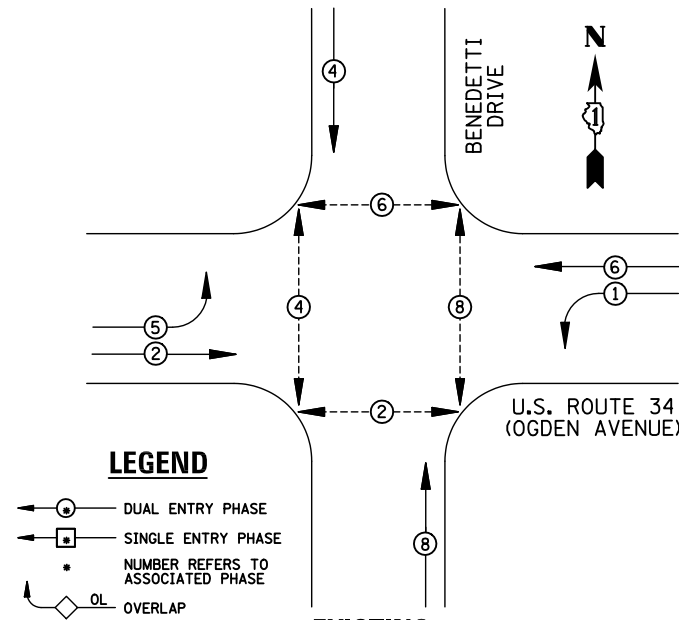
PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60504-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	35
			CONTRACT NO. 60W02	

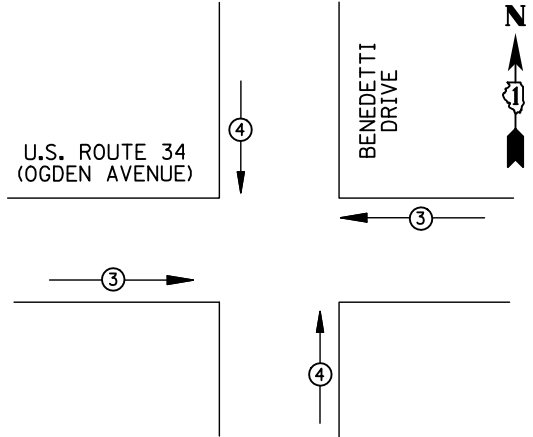
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

TS# 9565
 NAPERVILLE

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



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

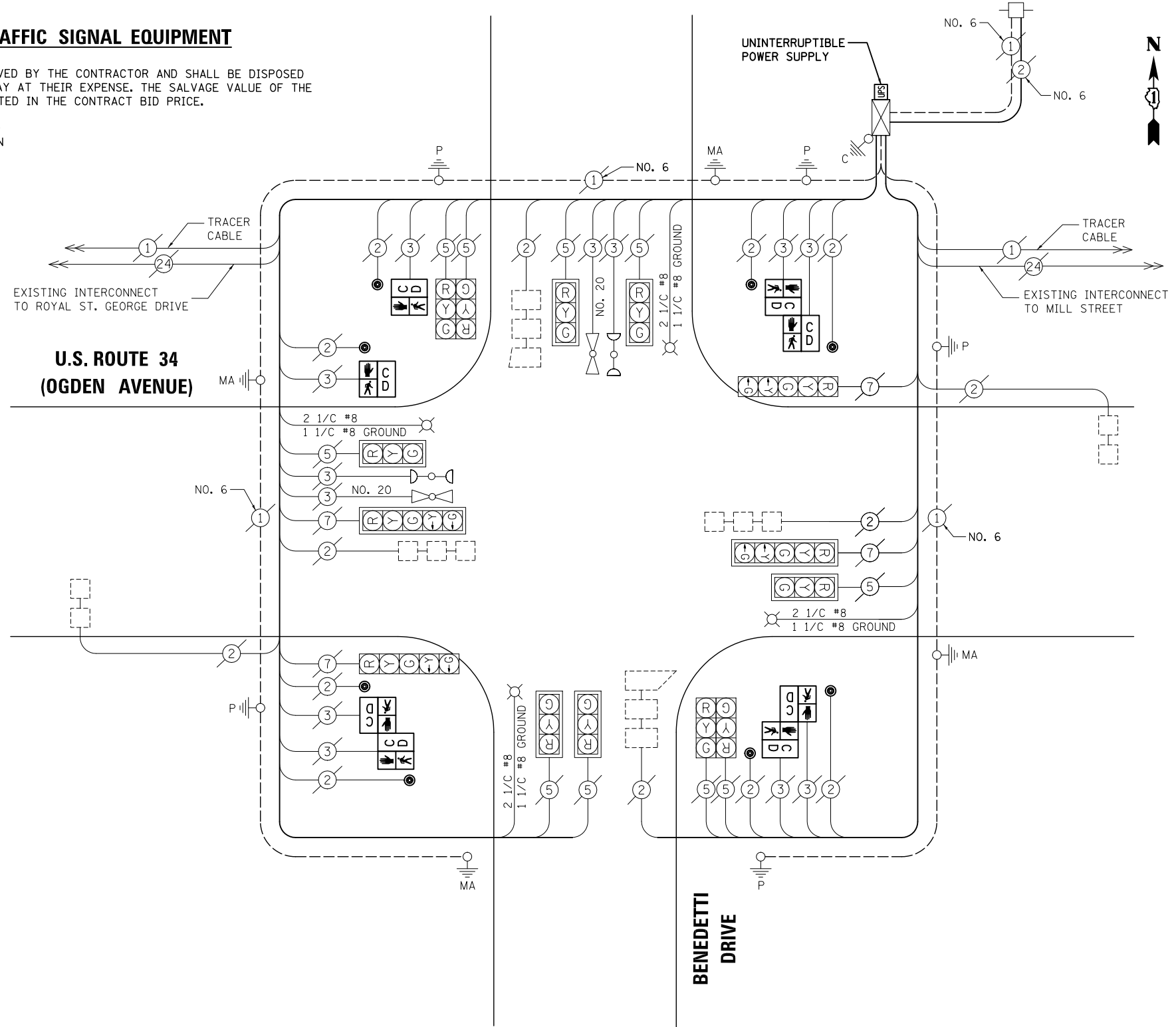
EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	135	17	0.50	119
(YELLOW)	14	135	25	0.25	87.5
(GREEN)	14	135	15	0.25	52.5
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: CITY OF NAPERVILLE 400 S. EAGLE STREET NAPERVILLE, IL 60540					TOTAL = 568.6
ENERGY SUPPLY CONTACT:	X				
PHONE:	X				
COMPANY:	X				

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

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



CABLE PLAN

SCHEDULE OF QUANTITIES

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

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

FILE NAME = \MICROST\352105\ 22-9524.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -
		DRAWN - JGC/RDS	REVISED -
		CHECKED - BPT	REVISED -
		DATE - 03-22-13	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION U.S. ROUTE 34 (OGDEN AVENUE) AT BENEDETTI DRIVE			
SCALE: N.T.S.	SHEET NO.	OF SHEETS	STA. TO STA.

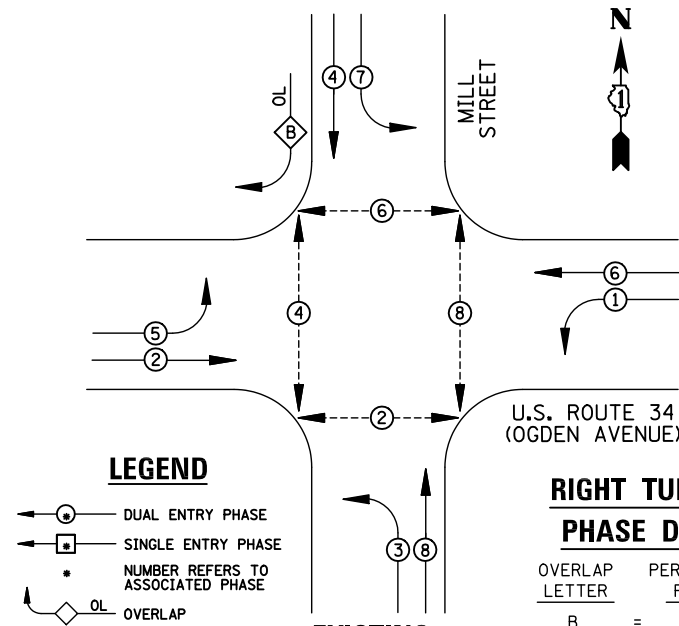
PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	36
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	

CONTRACT NO. 60W02

TS# 9524
NAPERVILLE

EXISTING CONTROLLER SEQUENCE

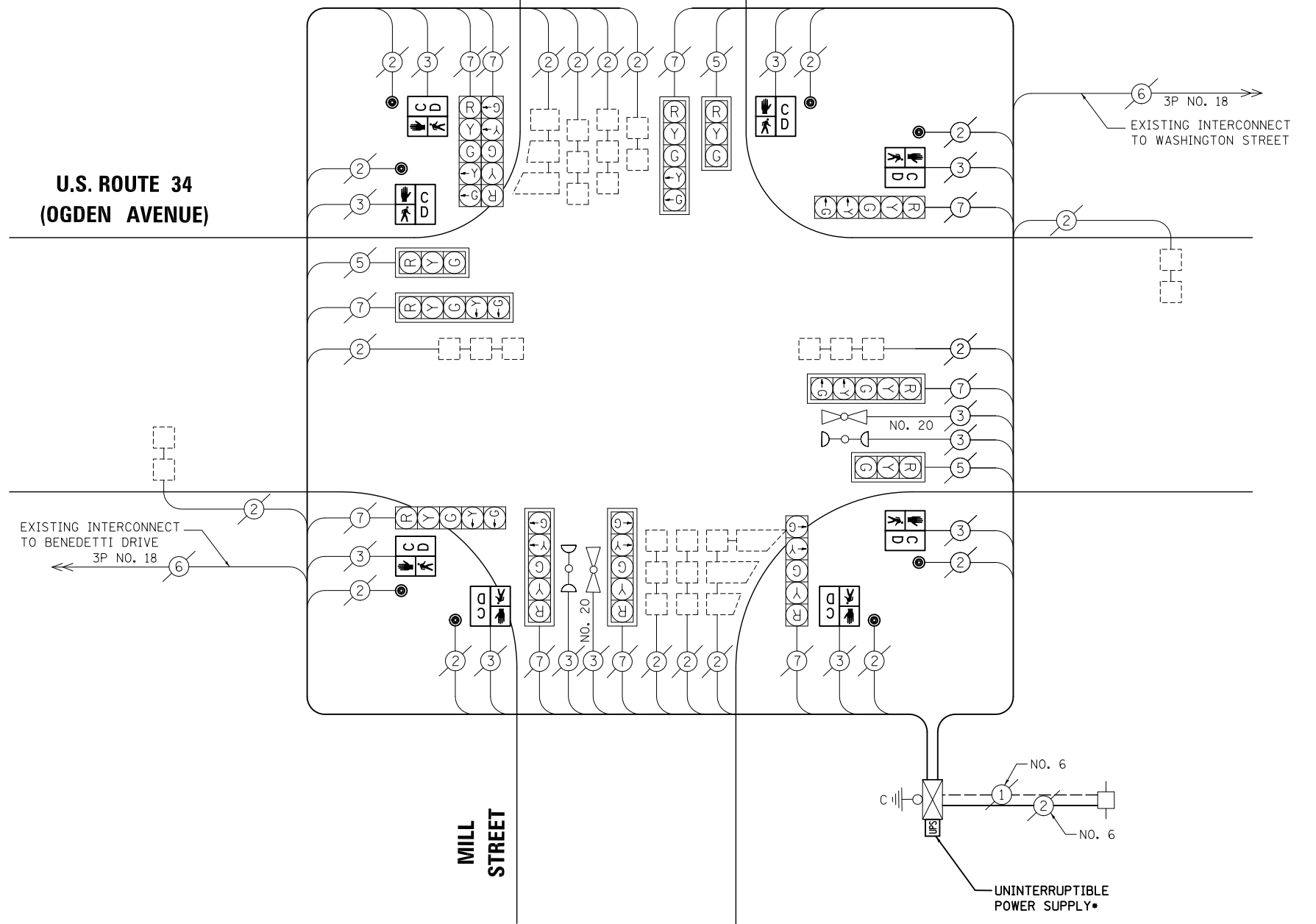


REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

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

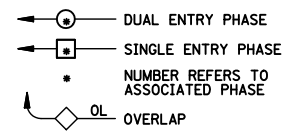
U.S. ROUTE 34 (OGDEN AVENUE)



CABLE PLAN

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

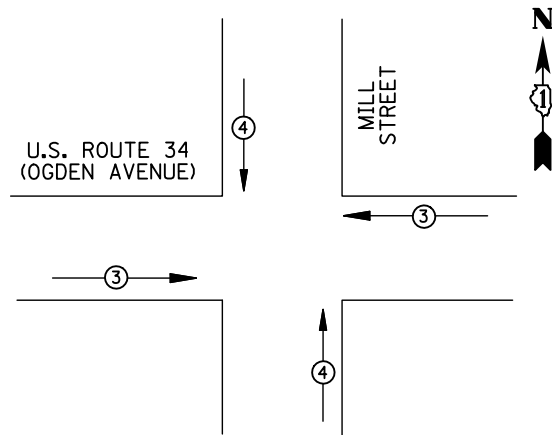
LEGEND



RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	= 4	+ 5

EXISTING PHASE DESIGNATION DIAGRAM



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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	
SIGNAL (RED)	13	135	17	0.50	110.5
(YELLOW)	13	135	25	0.25	81.25
(GREEN)	13	135	15	0.25	48.75
ARROW	20	135	12	0.10	24
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
TOTAL =					564.5

ENERGY COSTS TO:
CITY OF NAPERVILLE
400 S. EAGLE STREET
NAPERVILLE, IL 60540

ENERGY SUPPLY CONTACT: _____
PHONE: _____
COMPANY: _____

SCHEDULE OF QUANTITIES

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

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

FILE NAME = \MICROST\352105\ 23-9505.DGN
USER NAME = JGC
DESIGNED - BPT
DRAWN - JGC/RDS
PLOT SCALE = NOT TO SCALE
PLOT DATE = X

REVISIONS:
REVISED -
REVISED -
CHECKED - BPT
DATE - 03-22-13

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
U.S. ROUTE 34 (OGDEN AVENUE) AT MILL STREET**

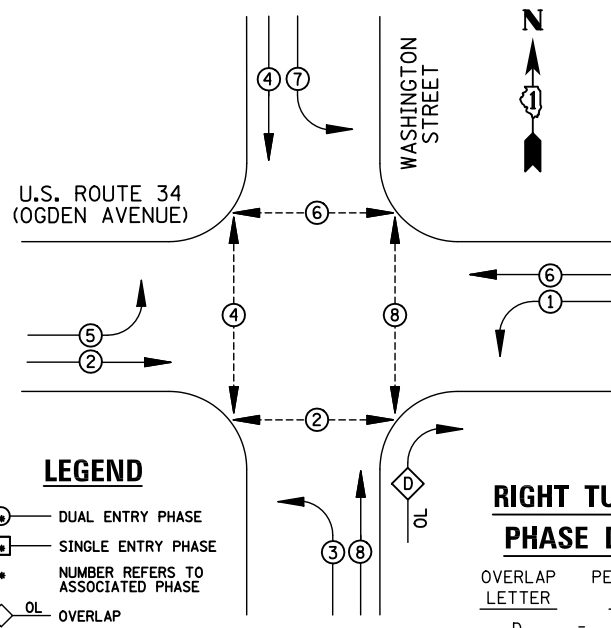
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
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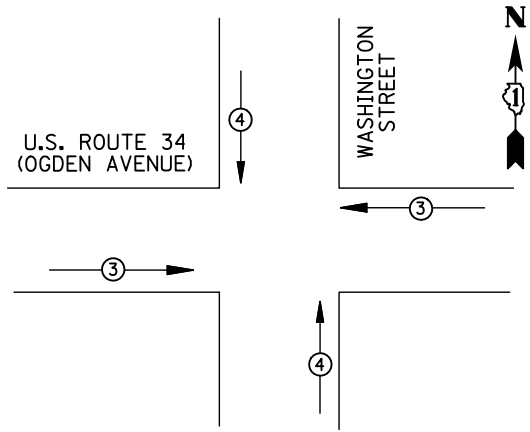
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	37
CONTRACT NO. 60W02			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

TS# 9505
NAPERVILLE

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	16	135	15	0.25	60
ARROW	20	135	12	0.10	24
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
TOTAL =					620

ENERGY COSTS TO:
CITY OF NAPERVILLE
400 S. EAGLE STREET
NAPERVILLE, IL 60540

ENERGY SUPPLY CONTACT: _____
PHONE: _____
COMPANY: _____

FILE NAME = \MICROST\352105\ 24-9570.DGN
USER NAME = JGC
DESIGNED - BPT
DRAWN - JGC/RDS
PLOT SCALE = NOT TO SCALE
PLOT DATE = X

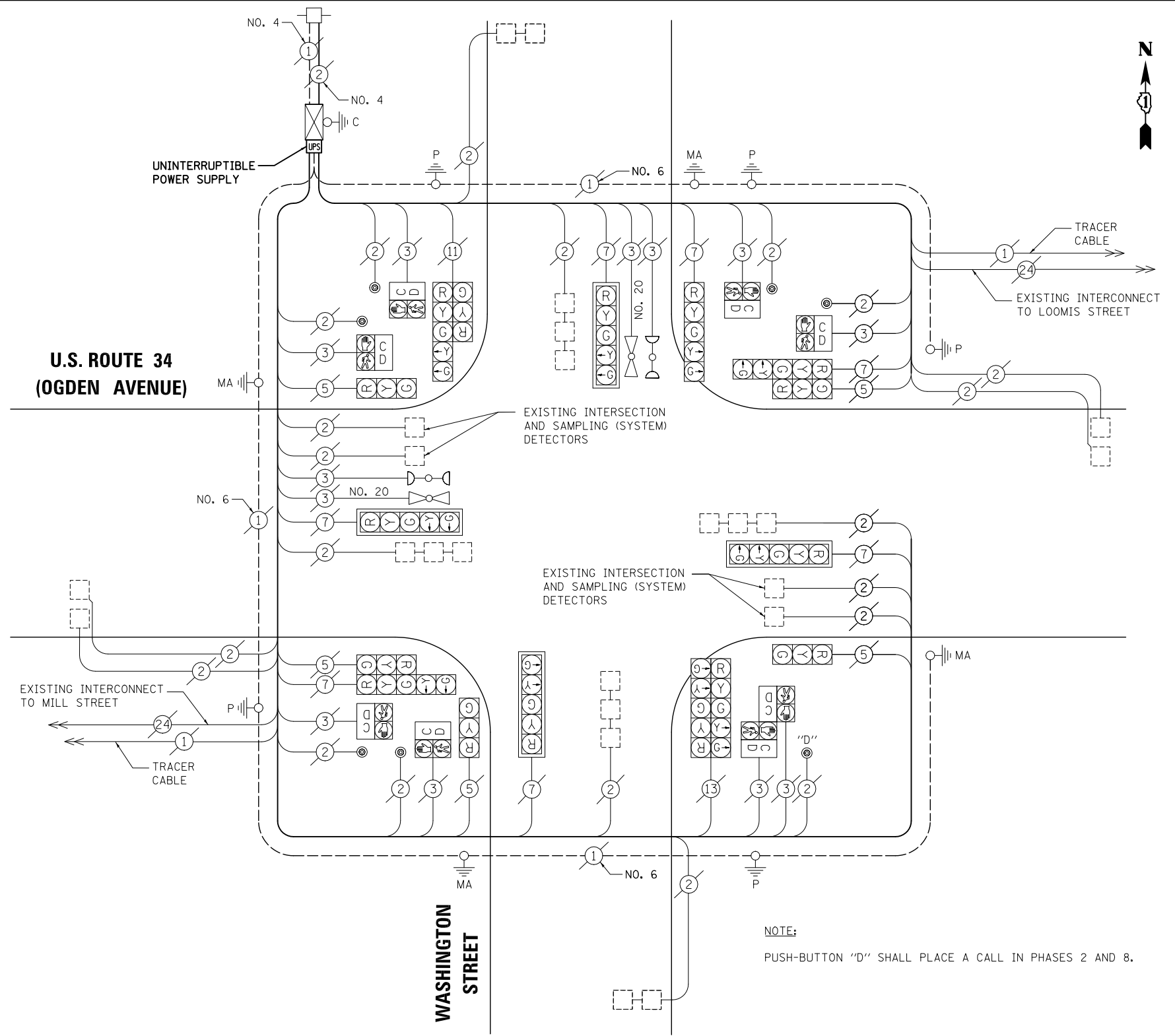
SCHEDULE OF QUANTITIES

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

DESIGNED - BPT
DRAWN - JGC/RDS
CHECKED - BPT
DATE - 03-22-13

REVISED -
REVISED -
REVISED -
REVISED -

U.S. ROUTE 34 (OGDEN AVENUE)



CABLE PLAN

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

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

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
U.S. ROUTE 34 (OGDEN AVENUE) AT WASHINGTON STREET**

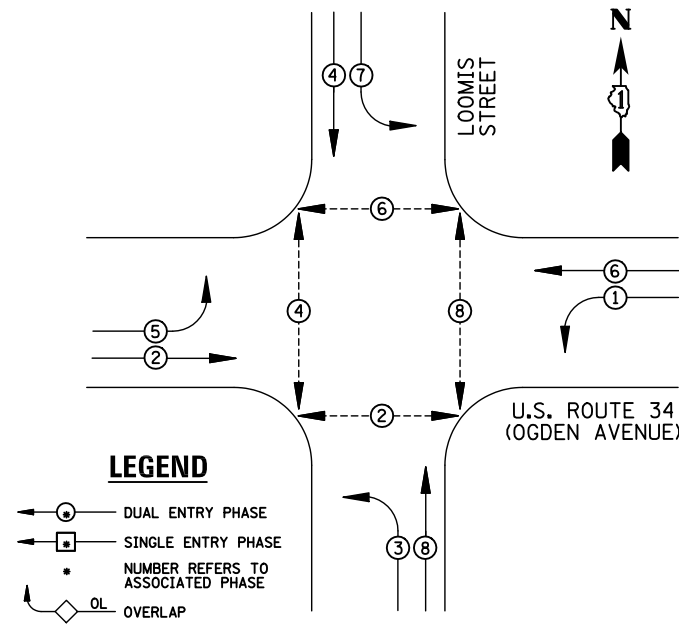
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

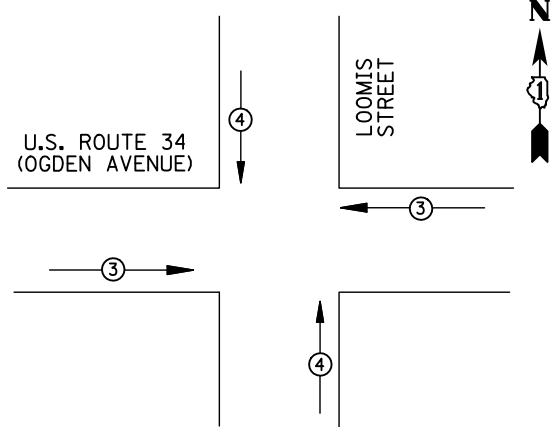
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	38
CONTRACT NO. 60W02			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

TS# 9570
NAPERVILLE

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

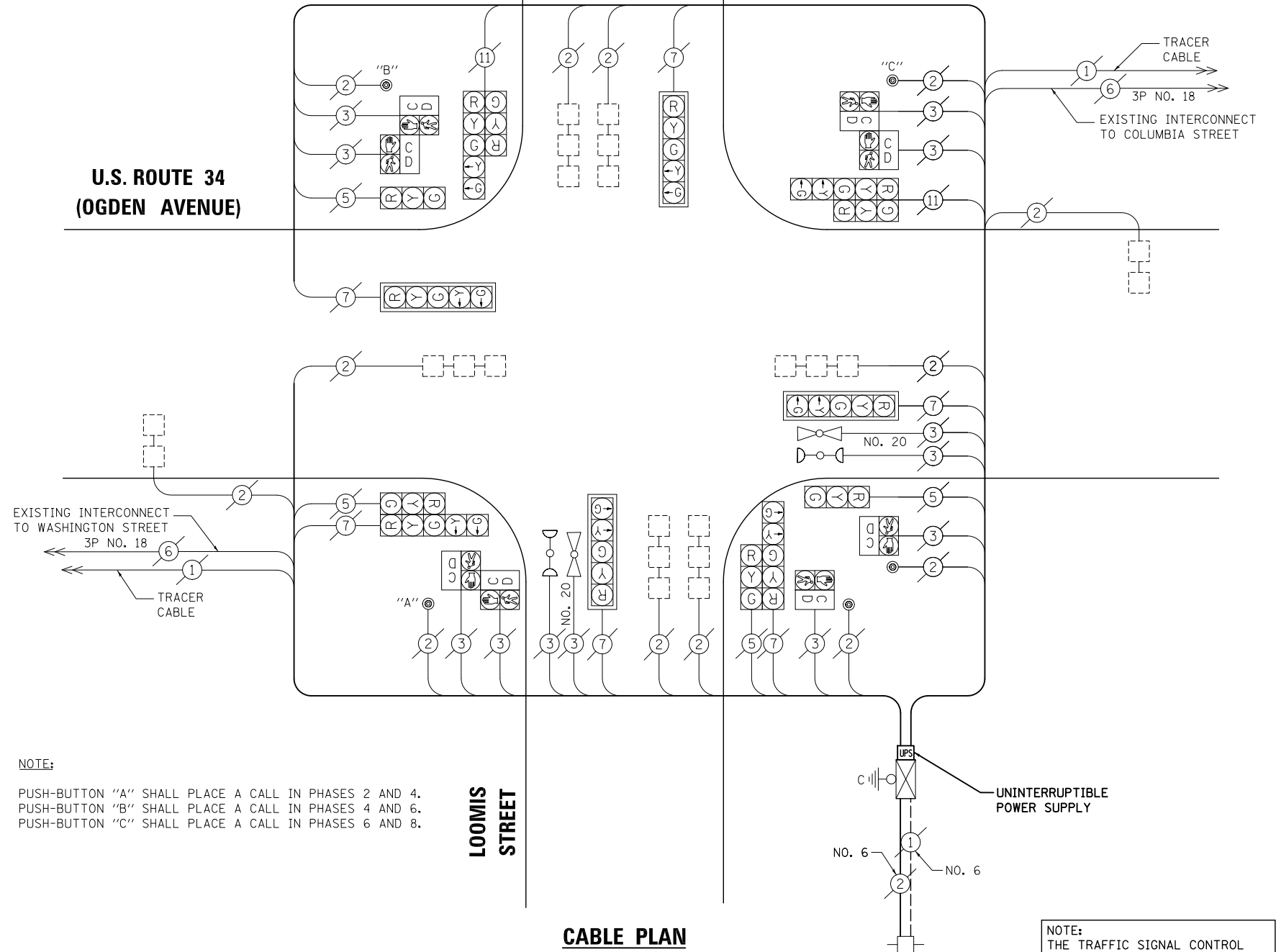
I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		%OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	14	135	17	0.50	119
(YELLOW)	14	135	25	0.25	87.5
(GREEN)	14	135	15	0.25	52.5
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: CITY OF NAPERVILLE 400 S. EAGLE STREET NAPERVILLE, IL 60540					TOTAL = 578.2
ENERGY SUPPLY CONTACT: _____					
PHONE: _____					
COMPANY: _____					
FILE NAME = \MICROST\352105\ 25-9555.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
	PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -		
	PLOT DATE = X	DATE - 03-22-13	REVISED -		

SCHEDULE OF QUANTITIES

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

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

U.S. ROUTE 34 (OGDEN AVENUE)



CABLE PLAN

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
U.S. ROUTE 34 (OGDEN AVENUE) AT LOOMIS STREET

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

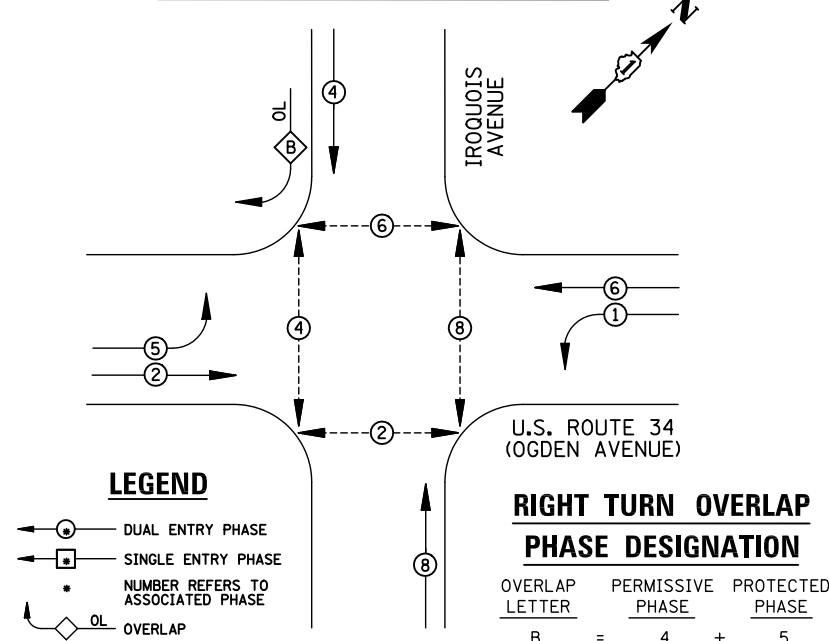
PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	39
			CONTRACT NO. 60W02	

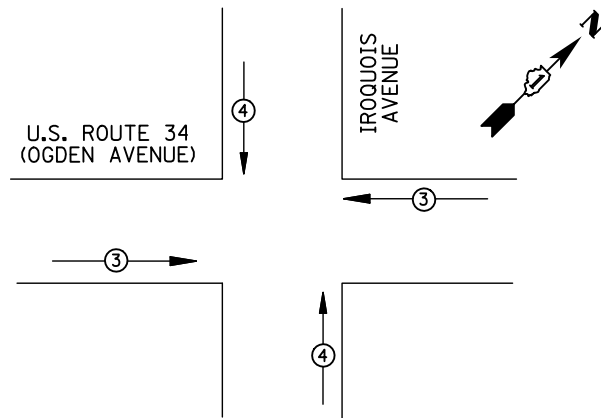
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

TS# 9555
NAPERVILLE

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



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

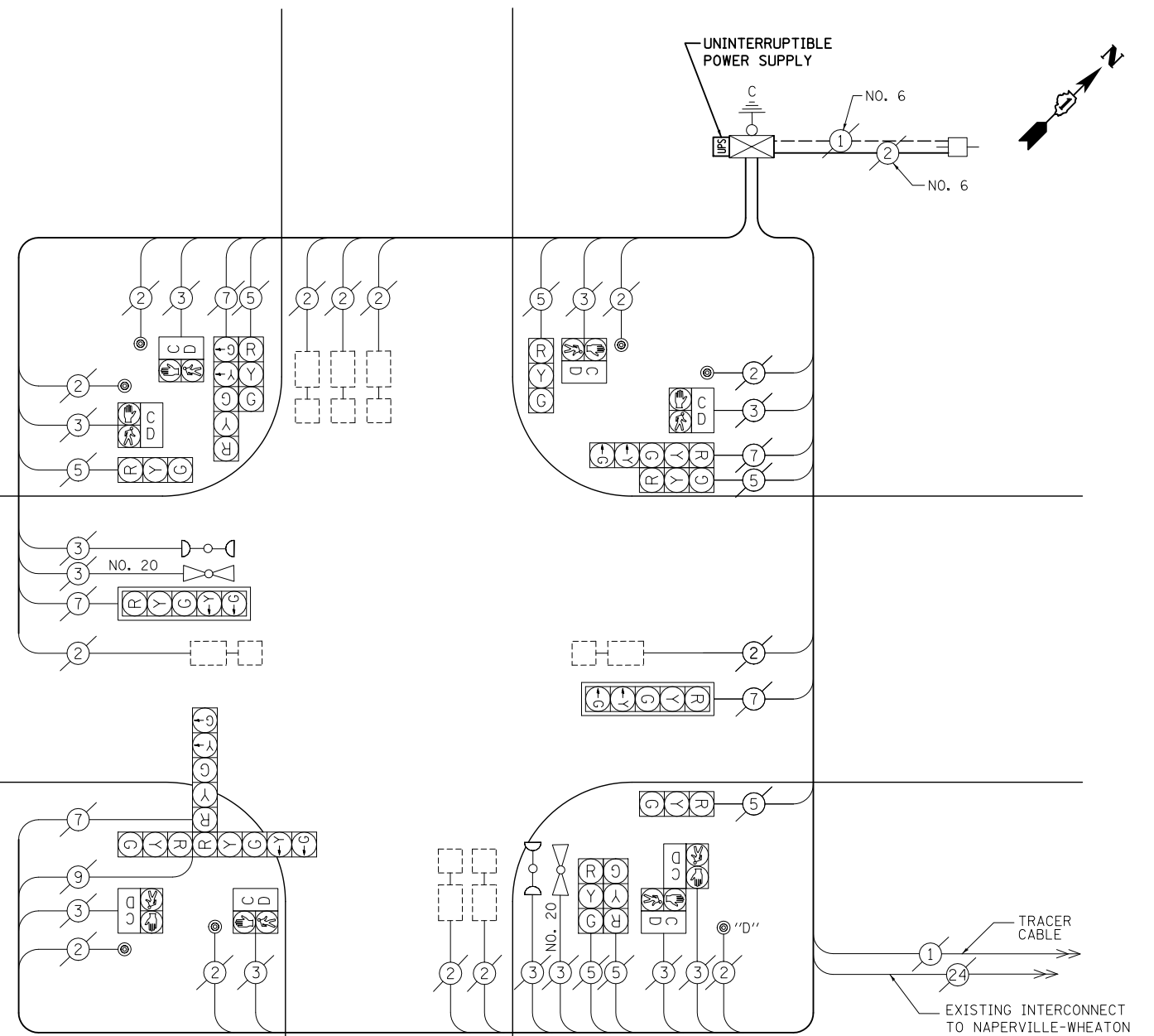
EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		%OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	14	135	17	0.50	119
(YELLOW)	14	135	25	0.25	87.5
(GREEN)	14	135	15	0.25	52.5
ARROW	12	135	12	0.10	14.4
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: DUPAGE COUNTY 421 N. COUNTY FARM ROAD WHEATON, IL 60187					TOTAL = 573.4
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					
FILE NAME = \MICROST\352105\ 26-9495.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
	PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -		
	PLOT DATE = X	DATE - 03-22-13	REVISED -		

SCHEDULE OF QUANTITIES

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

U.S. ROUTE 34 (OGDEN AVENUE)



IROQUOIS AVENUE

CABLE PLAN

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

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

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION U.S. ROUTE 34 (OGDEN AVENUE) AT IROQUOIS AVENUE

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

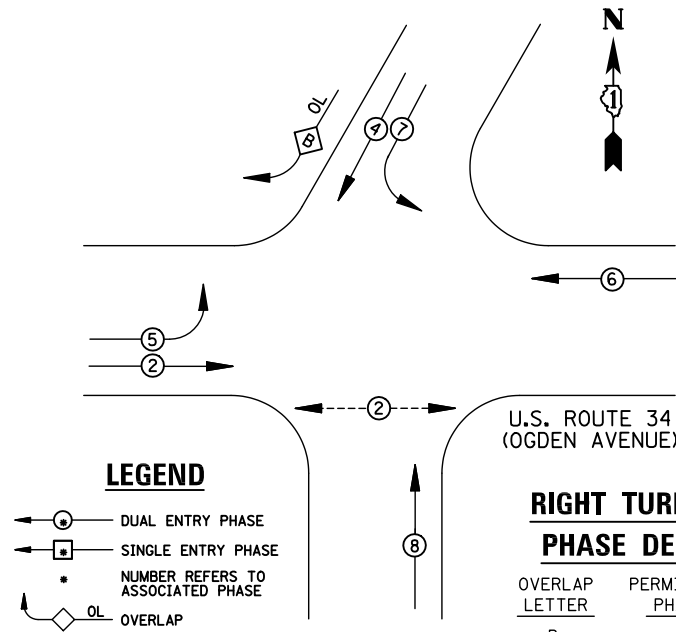
PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	40

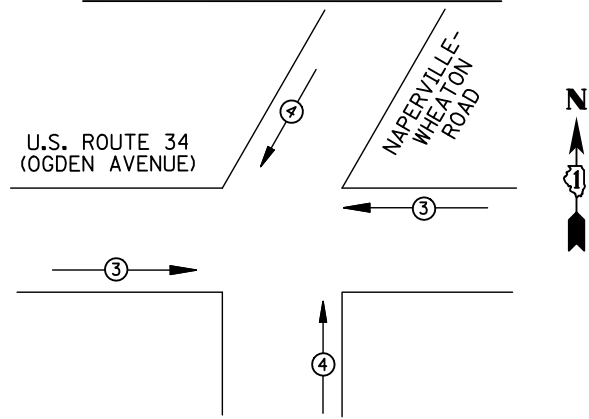
CONTRACT NO. 60W02
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

TS# 9495
NAPERVILLE

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS						TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION		
SIGNAL (RED)	15	135	17	0.50		127.5
(YELLOW)	15	135	25	0.25		93.75
(GREEN)	15	135	15	0.25		56.25
ARROW	12	135	12	0.10		14.4
PED. SIGNAL	2	90	25	1.00		50
CONTROLLER	1	100	100	1.00		100
ILLUM. SIGN		84		0.05		
FLASHER		135	25	0.50		
ENERGY COSTS TO: DUPAGE COUNTY 421 N. COUNTY FARM ROAD WHEATON, IL 60187						TOTAL = 441.9
ENERGY SUPPLY CONTACT: _____						
PHONE: _____						
COMPANY: _____						

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

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

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

SCHEDULE OF QUANTITIES

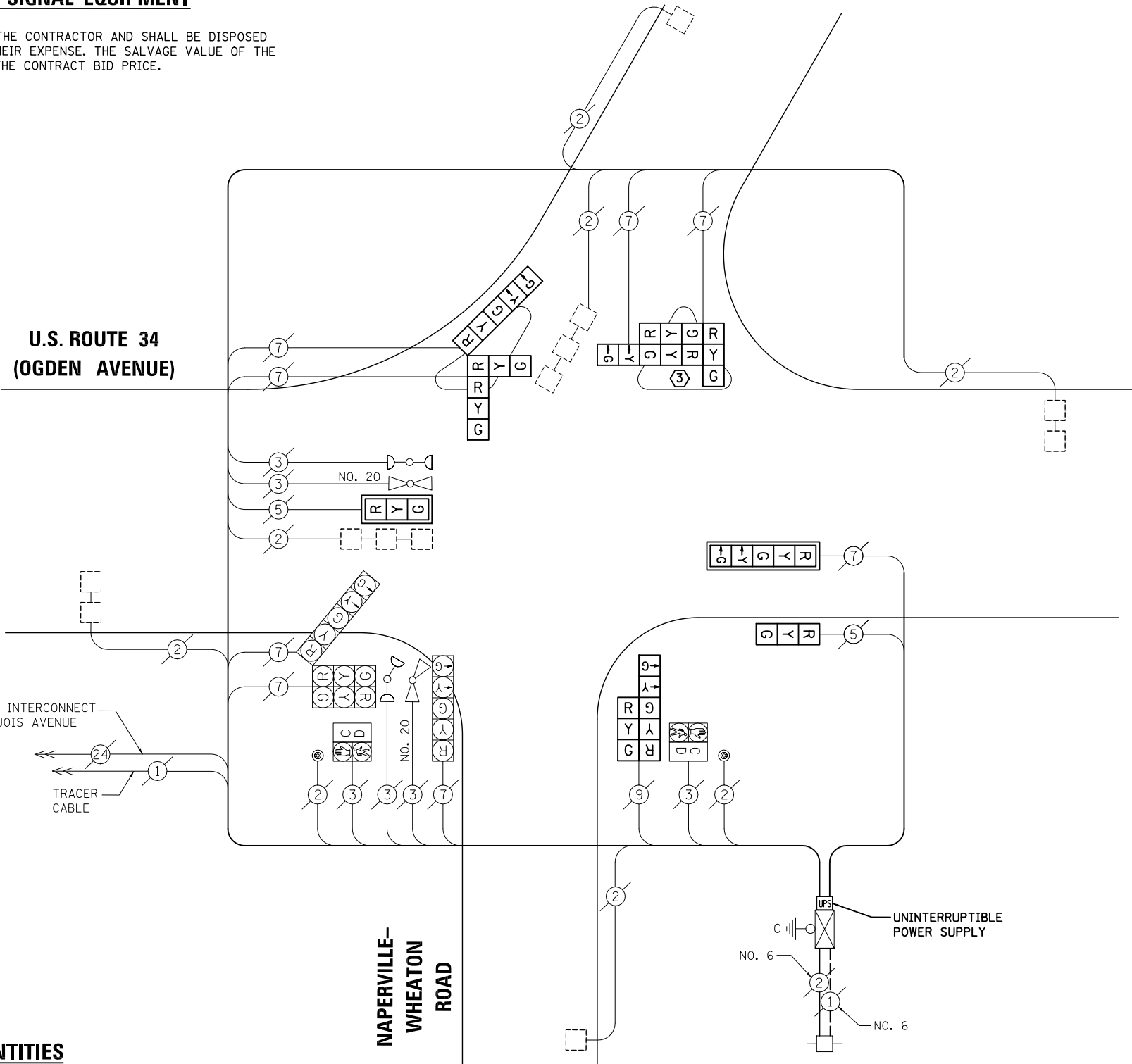
ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED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

U.S. ROUTE 34 (OGDEN AVENUE)

EXISTING INTERCONNECT TO IROQUOIS AVENUE
TRACER CABLE

NAPERVILLE-WHEATON ROAD

CABLE PLAN



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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
U.S. ROUTE 34 (OGDEN AVENUE) AT NAPERVILLE-WHEATON ROAD

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

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
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E-Mail: cadd@cemcon.com Website: www.cemcon.com

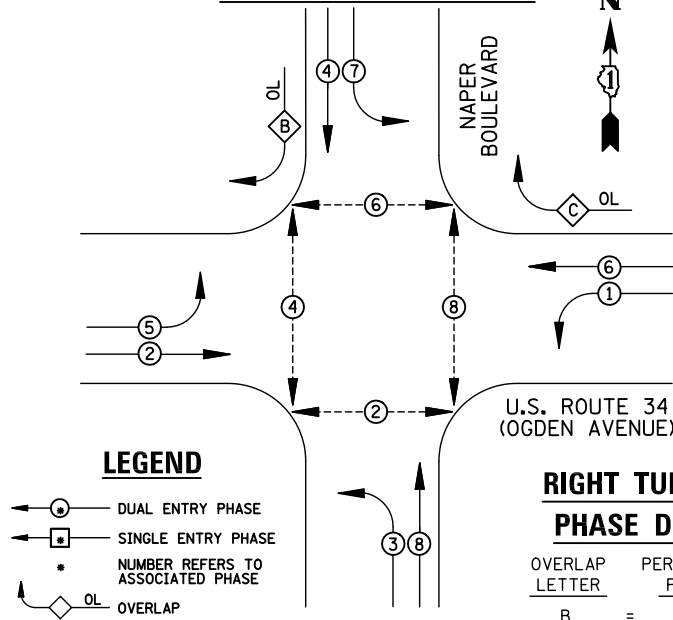
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	41

CONTRACT NO. 60W02
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

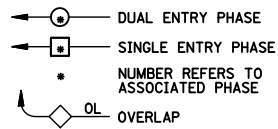
TS# 10555
NAPERVILLE

EXISTING AND PROPOSED

CONTROLLER SEQUENCE



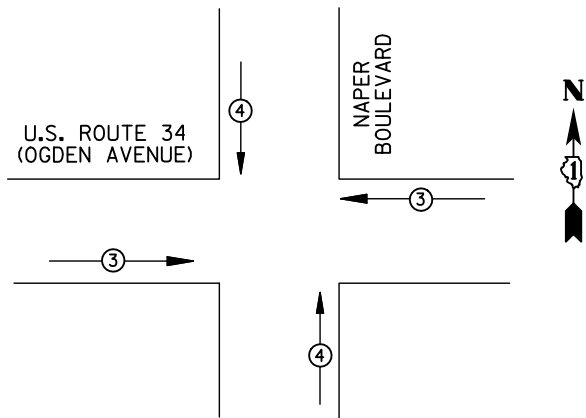
LEGEND



RIGHT TURN OVERLAP PHASE DESIGNATION

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

EXISTING AND PROPOSED PHASE DESIGNATION DIAGRAM



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

EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE

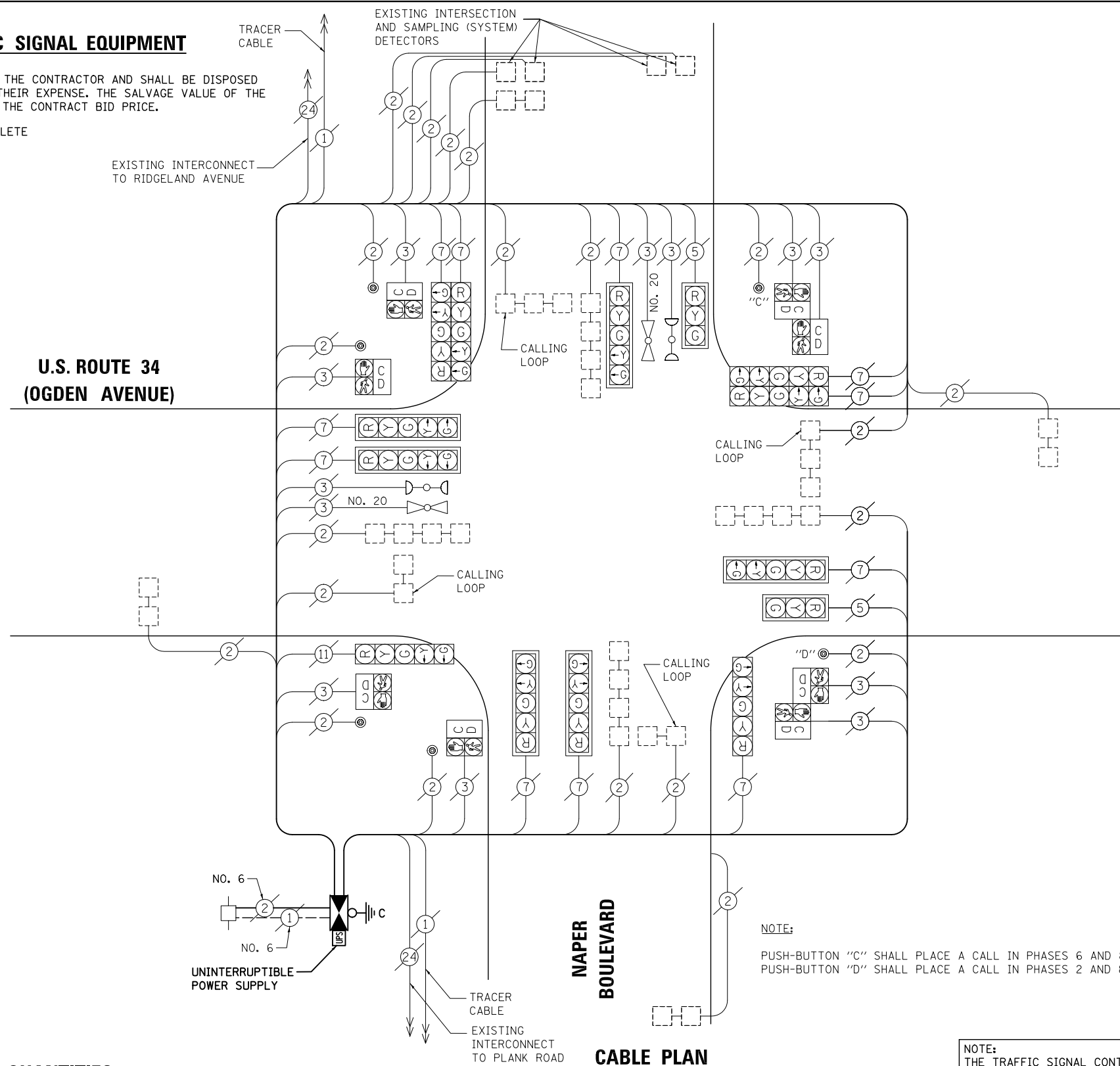
I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	135	17	0.50	119
(YELLOW)	14	135	25	0.25	87.5
(GREEN)	14	135	15	0.25	52.5
ARROW	24	135	12	0.10	28.8
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: DUPAGE COUNTY 421 N. COUNTY FARM ROAD WHEATON, IL 60187					TOTAL = 587.8
ENERGY SUPPLY CONTACT: X PHONE: X COMPANY: X					

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

- 1 EACH CONTROLLER AND CABINET, COMPLETE

U.S. ROUTE 34 (OGDEN AVENUE)



CABLE PLAN

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

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

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	16
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1

UNIT	QUANTITY
EACH	1
EACH	1
EACH	16
EACH	1
EACH	1
EACH	1
EACH	1

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION U.S. ROUTE 34 (OGDEN AVENUE) AT NAPER BLVD./NAPERVILLE RD.

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

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
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E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	42

CONTRACT NO. 60W02
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

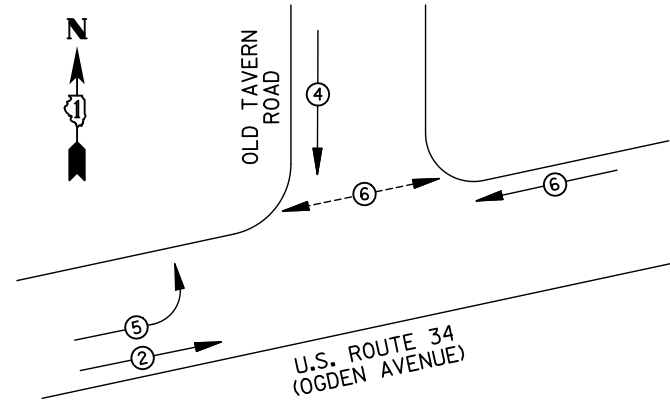
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USER NAME = JGC
DESIGNED - BPT
DRAWN - JGC/RDS
CHECKED - BPT
DATE - 03-22-13

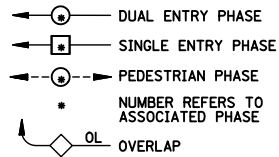
REVISIED -
REVISIED -
REVISIED -
REVISIED -

TS# 9605
NAPERVILLE

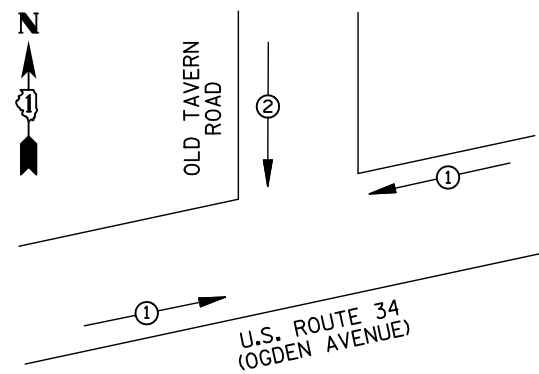
EXISTING CONTROLLER SEQUENCE



LEGEND



EXISTING PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	1	2
MOVEMENT	← →	↕

EMERGENCY VEHICLE PREEMPTION SEQUENCE

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

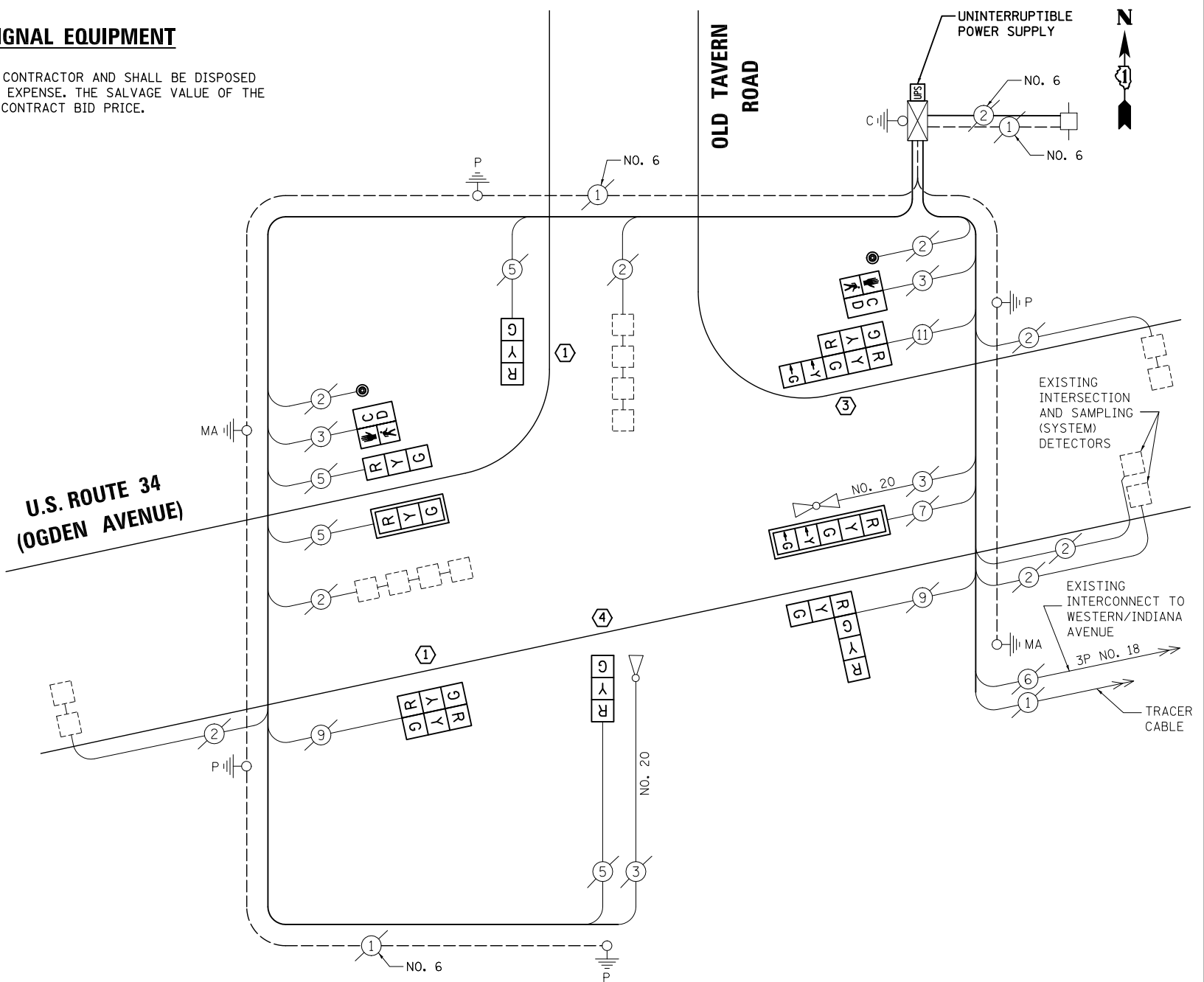
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 4 EACH TRAFFIC SIGNAL POST
 - 9 EACH SIGNAL HEAD, 3-SECTION
 - 2 EACH SIGNAL HEAD, 5-SECTION
 - 2 EACH TRAFFIC SIGNAL BACKPLATE
 - 2 EACH PEDESTRIAN SIGNAL HEAD
 - 2 EACH PEDESTRIAN PUSH-BUTTON
-
- ① REPLACE 14 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - ② REPLACE 15 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - ③ REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - ④ REPLACE 18 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	2
PEDESTRIAN PUSH-BUTTON	EACH	2
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	1

CABLE PLAN



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

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	11	135	17	0.50	93.5
(YELLOW)	11	135	25	0.25	68.75
(GREEN)	11	135	15	0.25	41.25
ARROW	4	135	12	0.10	4.8
PED. SIGNAL	2	90	25	1.00	50
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 358.3
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				
FILE NAME =	USER NAME = JGC	DESIGNED - BPT	REVISED -		
\\MICROST\352105\ 29-11840.DGN		DRAWN - JGC/RDS	REVISED -		
	PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -		
	PLOT DATE = X	DATE - 03-22-13	REVISED -		

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
U.S. ROUTE 34 (OGDEN AVENUE) AT OLD TAVERN ROAD**

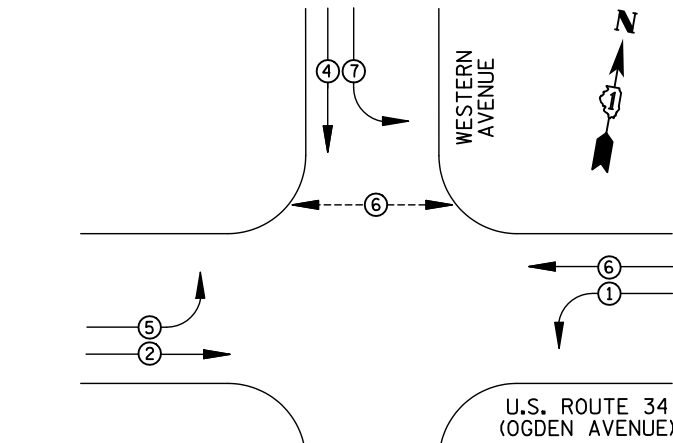
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

PREPARED BY:
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Consulting Engineers, Land Surveyors & Planners
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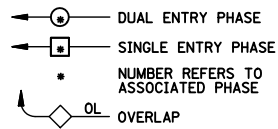
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	43
			CONTRACT NO. 60W02	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

TS# 11840
LISLE

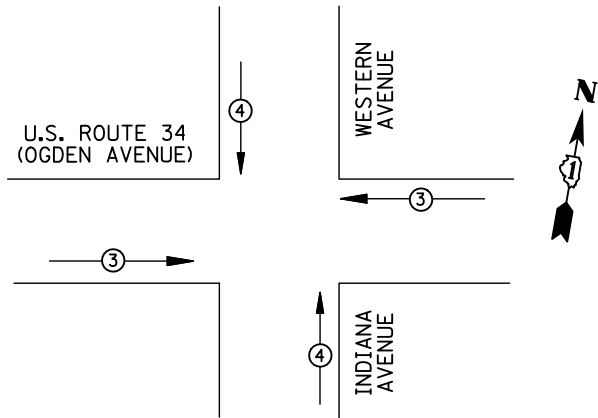
EXISTING CONTROLLER SEQUENCE



LEGEND



EXISTING PHASE DESIGNATION DIAGRAM



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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND. LED	%OPERATION	TOTAL WATTAGE	
SIGNAL (RED)	14	135 17	0.50	119	
(YELLOW)	14	135 25	0.25	87.5	
(GREEN)	14	135 15	0.25	52.5	
ARROW	16	135 12	0.10	19.2	
PED. SIGNAL	2	90 25	1.00	50	
CONTROLLER	1	100 100	1.00	100	
ILLUM. SIGN		84	0.05		
FLASHER		135 25	0.50		
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096				TOTAL =	428.2
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

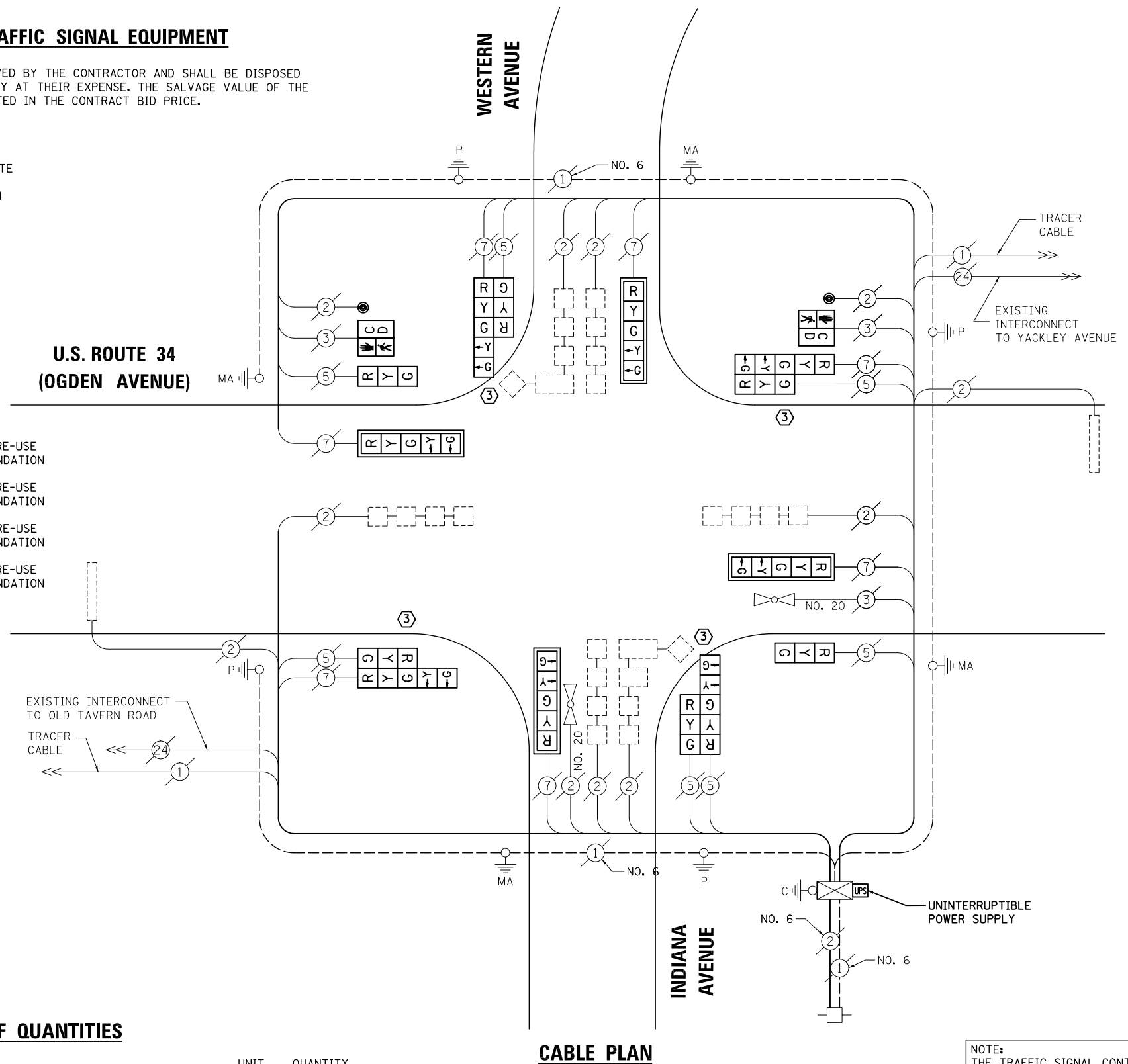
- 4 EACH TRAFFIC SIGNAL POST
- 6 EACH SIGNAL HEAD, 3-SECTION
- 8 EACH SIGNAL HEAD, 5-SECTION
- 4 EACH TRAFFIC SIGNAL BACKPLATE
- 2 EACH PEDESTRIAN SIGNAL HEAD
- 2 EACH PEDESTRIAN PUSH-BUTTON

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

SCHEDULE OF QUANTITIES

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

U.S. ROUTE 34 (OGDEN AVENUE)



CABLE PLAN

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

TS# 11835
LISLE

PREPARED BY:
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
U.S. ROUTE 34 (OGDEN AVENUE) AT INDIANA / WESTERN AVENUE**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	44
			CONTRACT NO. 60W02	

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

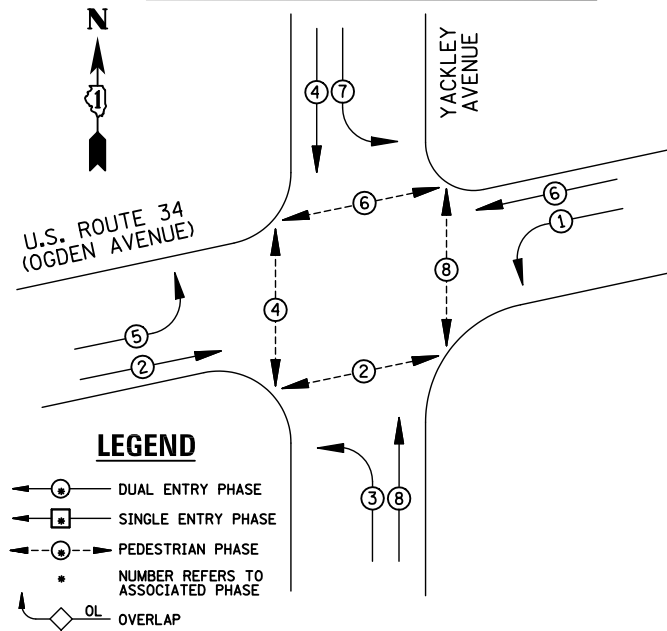
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

FILE NAME =
MICROST\352105\30-11835.DGN

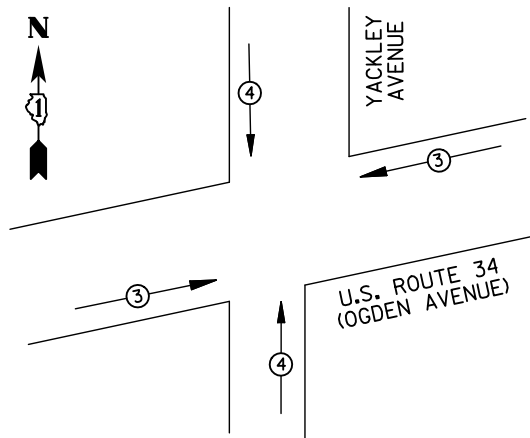
USER NAME = JGC
DESIGNED - BPT
DRAWN - JGC/RDS
PLOT SCALE = NOT TO SCALE
CHECKED - BPT
PLOT DATE = X
REVISED -
REVISED -
REVISED -
REVISED -

DATE - 03-22-13

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



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

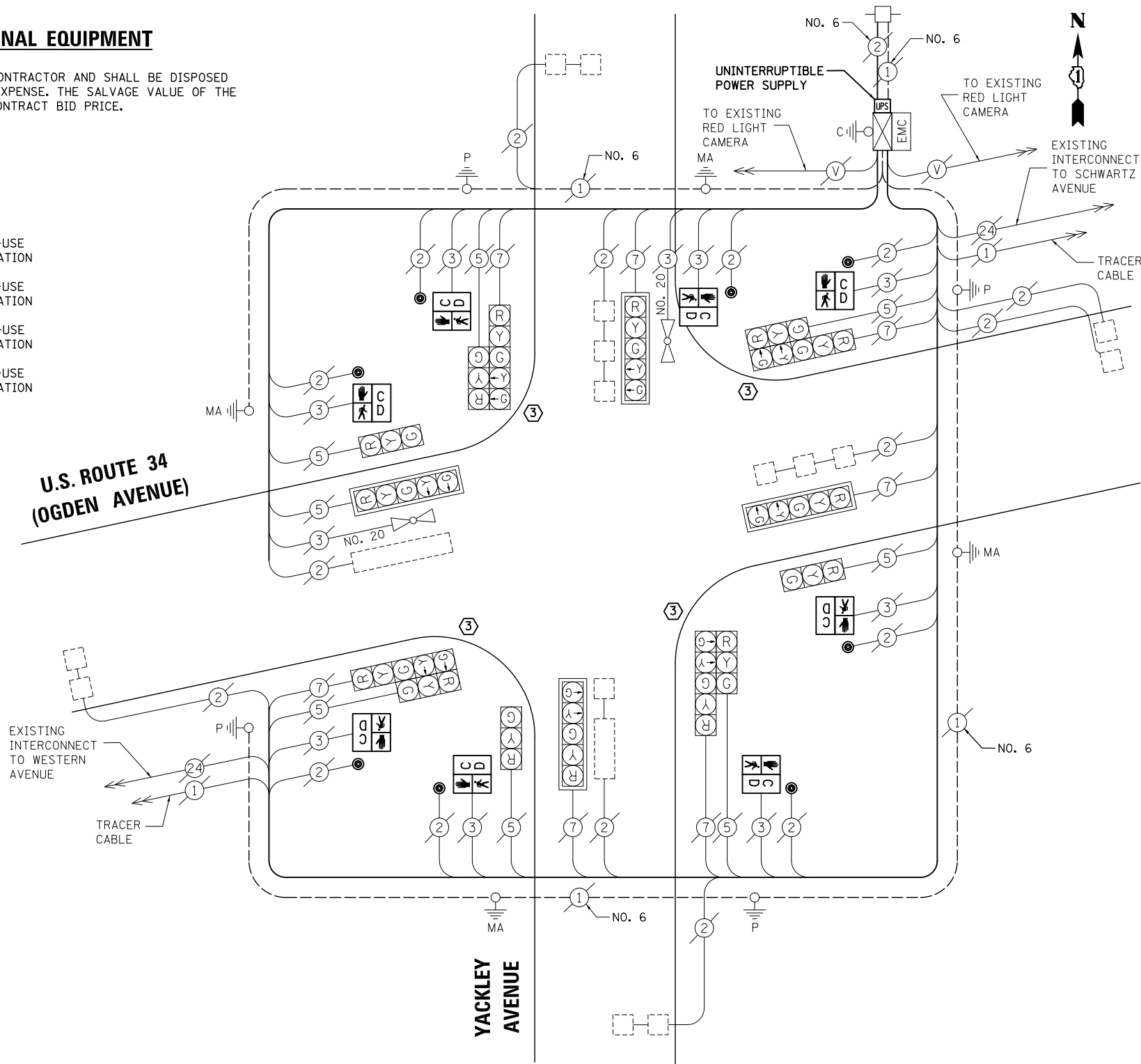
EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		%OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	15	135	17	0.50	127.5
(YELLOW)	15	135	25	0.25	93.75
(GREEN)	15	135	15	0.25	56.25
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 596.7
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				
FILE NAME =	USER NAME = JGC	DESIGNED - BPT	REVISED -		
\\MICROST\352105\ 31-11830.DGN		DRAWN - JGC/RDS	REVISED -		
	PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -		
	PLOT DATE = X	DATE - 03-22-13	REVISED -		

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

- 4 EACH TRAFFIC SIGNAL POST
 - 8 EACH PEDESTRIAN SIGNAL HEAD
 - 8 EACH PEDESTRIAN PUSH-BUTTON
-
- ① REPLACE 14 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - ② REPLACE 15 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - ③ REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - ④ REPLACE 18 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION



CABLE PLAN

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

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
PEDESTRIAN PUSH-BUTTON	EACH	8
RELOCATE EXISTING SIGNAL HEAD	EACH	8
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
U.S. ROUTE 34 (OGDEN AVENUE) AT YACKLEY AVENUE**

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

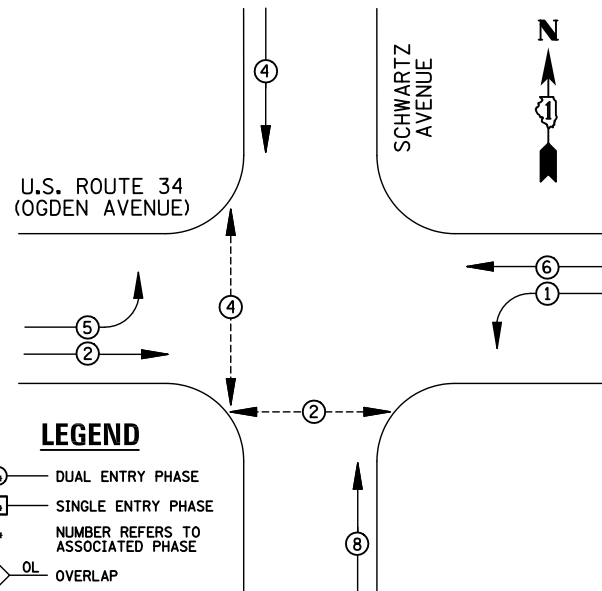
PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
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Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	45
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	

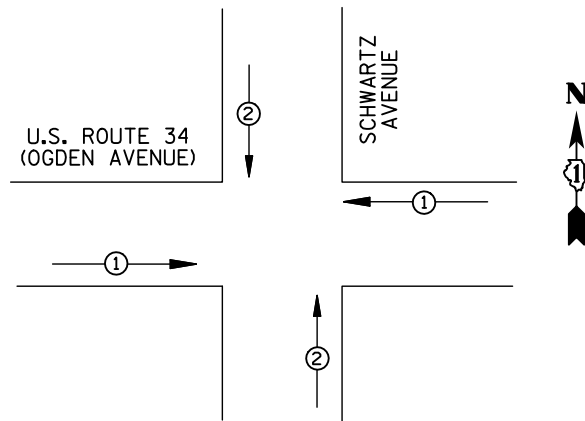
CONTRACT NO. 60W02

TS# 11830
LISLE

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND. LED	%OPERATION		
SIGNAL (RED)	14	135 17	0.50		119
(YELLOW)	14	135 25	0.25		87.5
(GREEN)	14	135 15	0.25		52.5
ARROW	8	135 12	0.10		9.6
PED. SIGNAL	4	90 25	1.00		100
CONTROLLER	1	100 100	1.00		100
ILLUM. SIGN		84	0.05		
FLASHER		135 25	0.50		
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096				TOTAL =	468.6
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				
FILE NAME = MICROST\352105\ 32-11825.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
	PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -		
	PLOT DATE = X	DATE - 03-22-13	REVISED -		

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

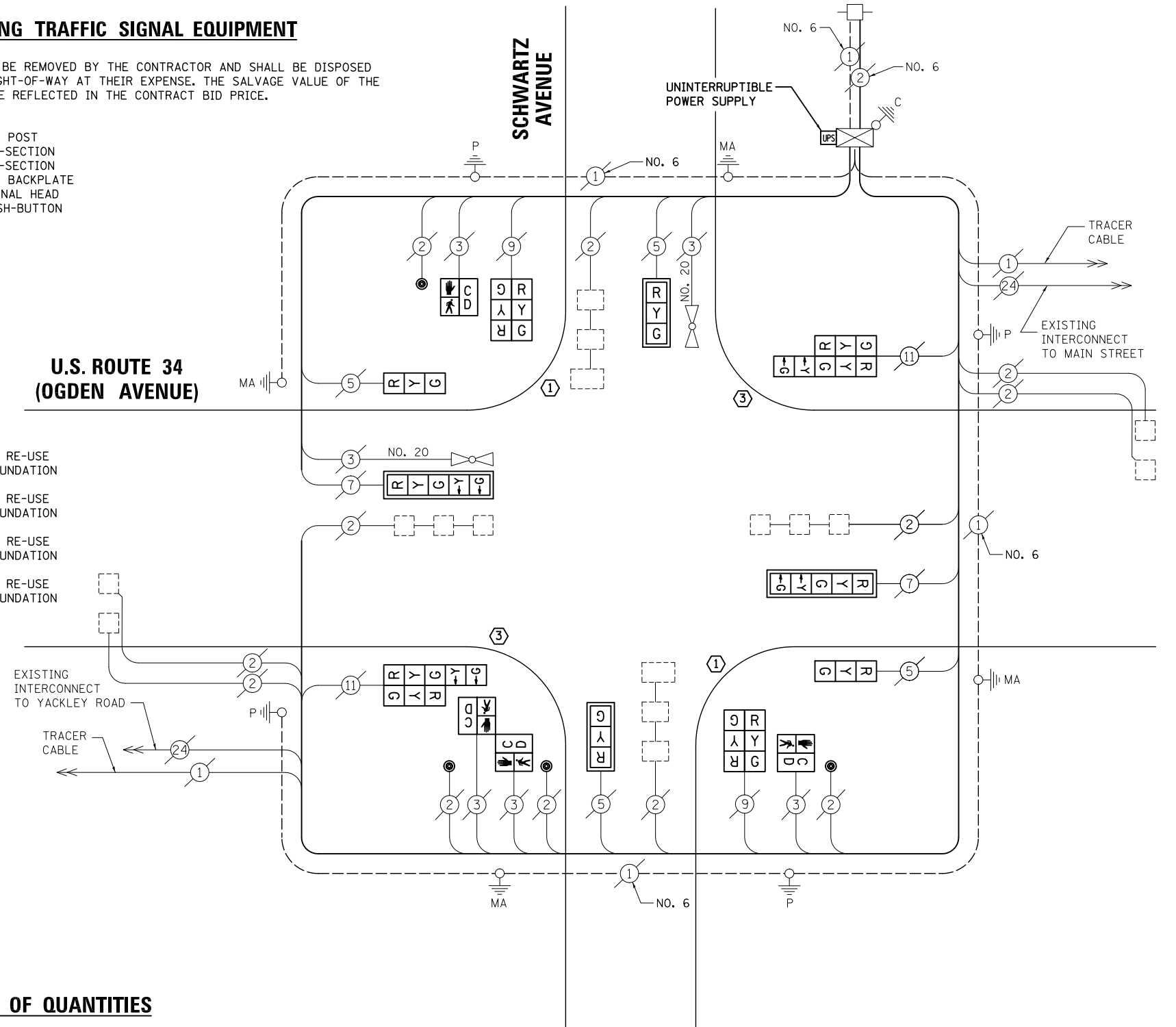
- 4 EACH TRAFFIC SIGNAL POST
- 10 EACH SIGNAL HEAD, 3-SECTION
- 4 EACH SIGNAL HEAD, 5-SECTION
- 5 EACH TRAFFIC SIGNAL BACKPLATE
- 4 EACH PEDESTRIAN SIGNAL HEAD
- 4 EACH PEDESTRIAN PUSH-BUTTON

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

SCHEDULE OF QUANTITIES

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

U.S. ROUTE 34 (OGDEN AVENUE)



CABLE PLAN

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

TS# 11825
LISLE

PREPARED BY:
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E-Mail: cadd@cemcon.com Website: www.cemcon.com

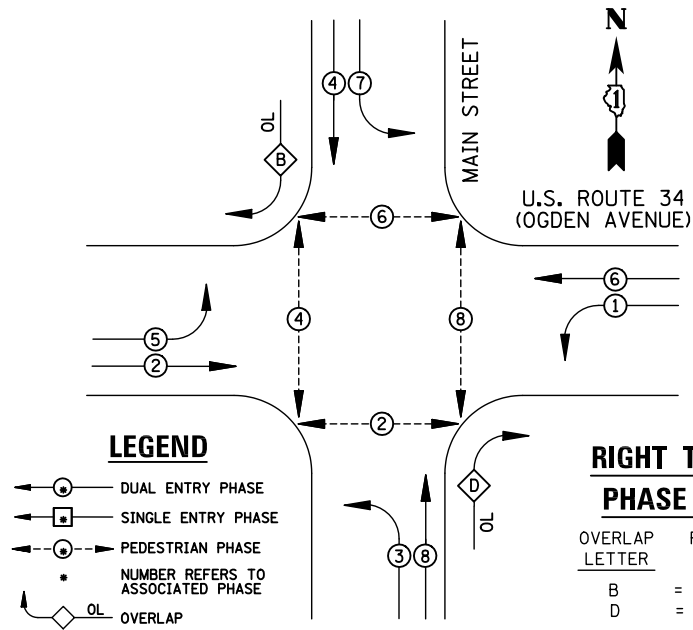
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
U.S. ROUTE 34 (OGDEN AVENUE) AT SCHWARTZ AVENUE

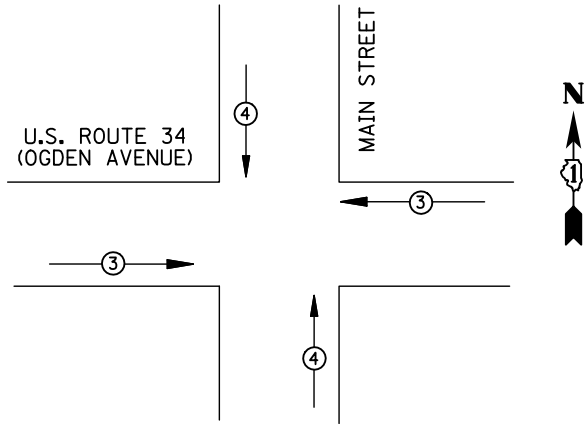
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	46
CONTRACT NO. 60W02				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

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

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	16	135	15	0.25	60
ARROW	24	135	12	0.10	28.8
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN	4		100	0.50	200
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 824.8
ENERGY SUPPLY CONTACT:	X				
PHONE:	X				
COMPANY:	X				

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

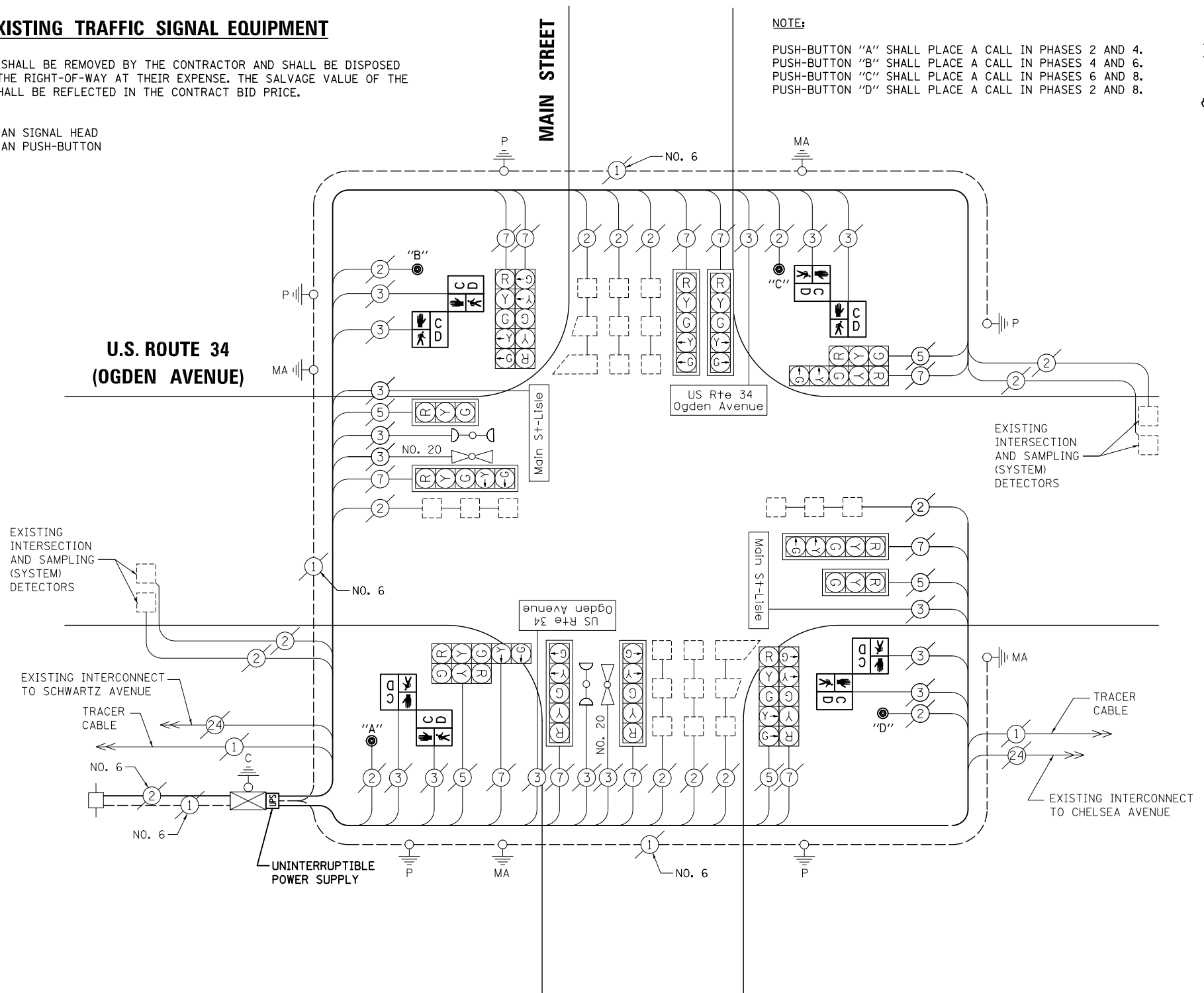
- 8 EACH PEDESTRIAN SIGNAL HEAD
- 4 EACH PEDESTRIAN PUSH-BUTTON

SCHEDULE OF QUANTITIES

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

MAIN STREET

U.S. ROUTE 34 (OGDEN AVENUE)



CABLE PLAN

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

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION U.S. ROUTE 34 (OGDEN AVENUE) AT MAIN STREET (LISLE)

PREPARED BY: **CEMCON, Ltd.**
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 2280 White Oak Circle, Suite 100
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 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	47
CONTRACT NO. 60W02			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

TS# 7855 LISLE

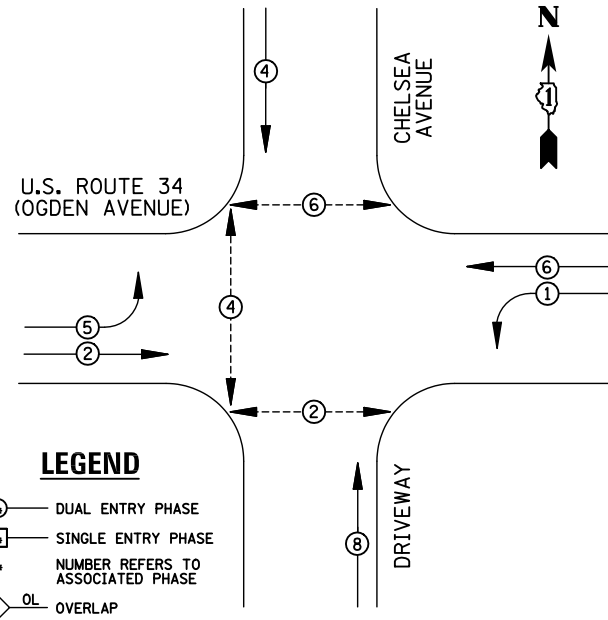
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USER NAME = JGC
 DESIGNED - BPT
 DRAWN - JGC/RDS
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 PLOT DATE = X

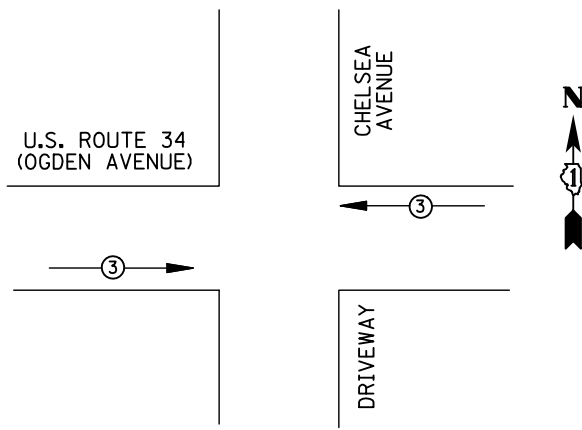
REVISIONS:
 REVISED -
 REVISED -
 REVISED -
 REVISED -
 DATE - 03-22-13

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

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3
MOVEMENT	↔

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	13	135	17	0.50	110.5
(YELLOW)	13	135	25	0.25	81.25
(GREEN)	13	135	15	0.25	48.75
ARROW	12	135	12	0.10	14.4
PED. SIGNAL	4	90	25	1.00	100
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION, 201 WEST CENTER COURT, SCHAUMBURG, IL 60196-1096					TOTAL = 454.9
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

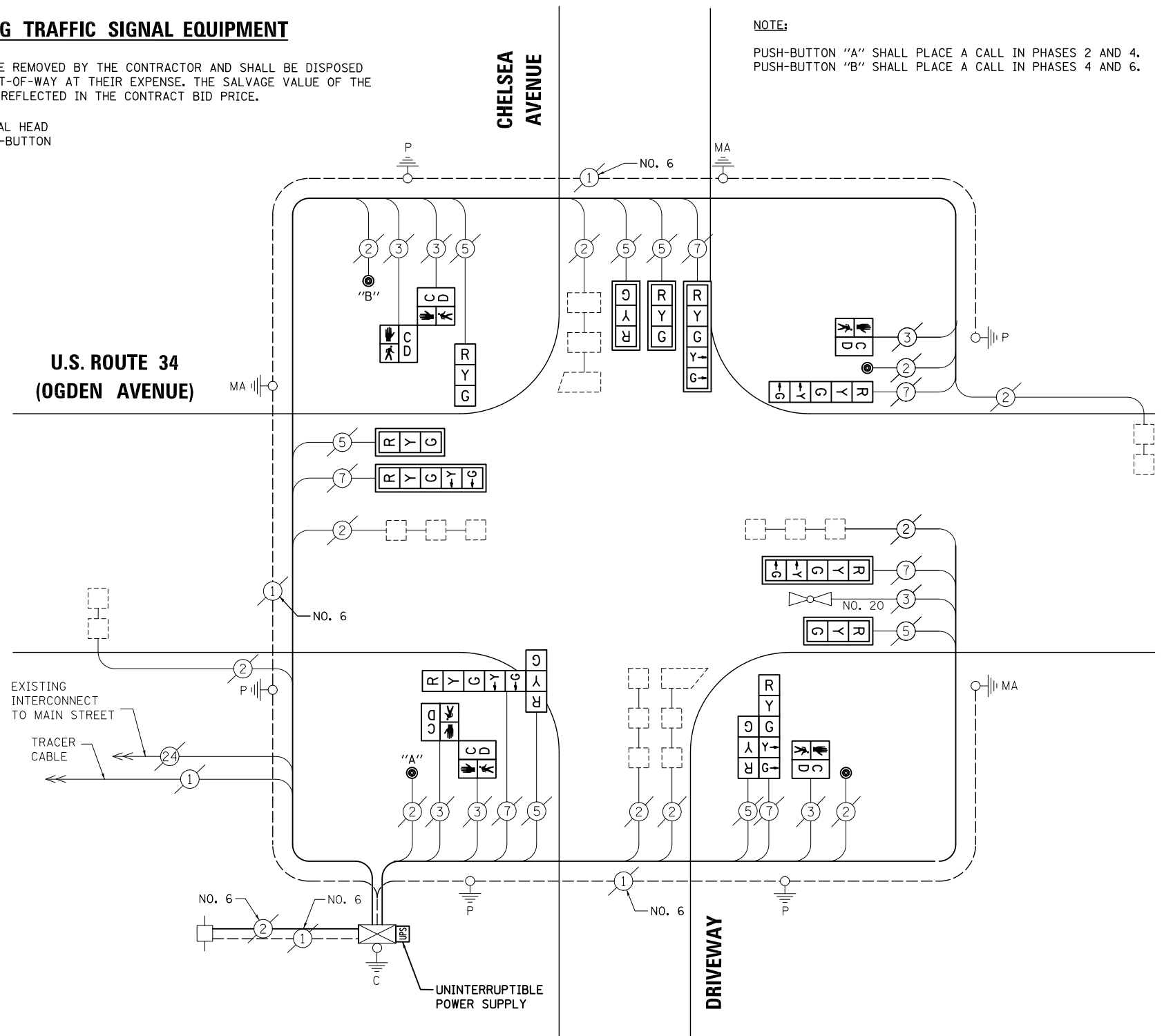
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

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

SCHEDULE OF QUANTITIES

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

CABLE PLAN



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

NOTE:
PUSH-BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.
PUSH-BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.

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

TS# 21700
LISLE

PREPARED BY:
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SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION U.S. ROUTE 34 (OGDEN AVENUE) AT CHELSEA AVENUE

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

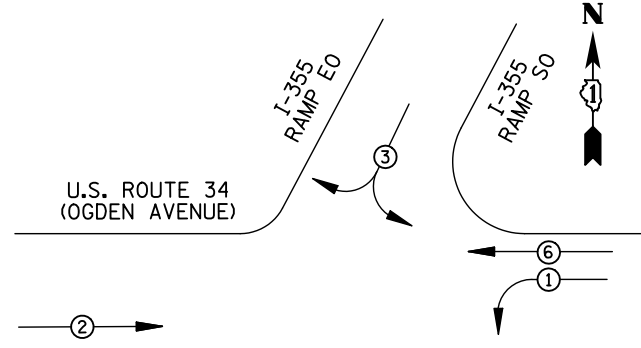
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	48
CONTRACT NO. 60W02			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

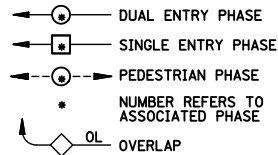
DESIGNED - BPT	REVISED -
DRAWN - JGC/RDS	REVISED -
CHECKED - BPT	REVISED -
DATE - 03-22-13	REVISED -

FILE NAME = \MICROST\352105\ 34-21700.DGN	USER NAME = JGC
PLOT SCALE = NOT TO SCALE	
PLOT DATE = X	

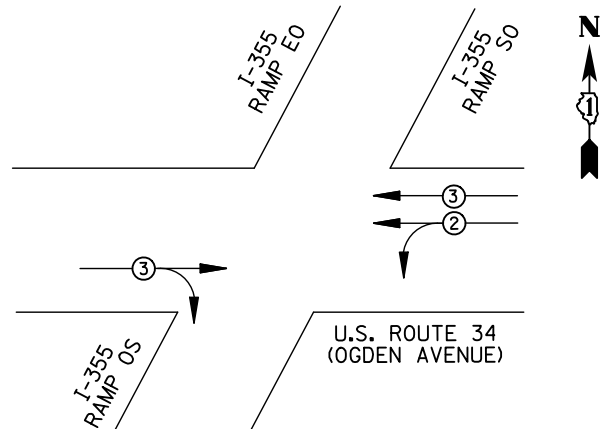
EXISTING CONTROLLER SEQUENCE



LEGEND



EXISTING PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	2	3
MOVEMENT	←	←

EMERGENCY VEHICLE PREEMPTION SEQUENCE

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

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

RIGHT TURN OVERLAP PHASE DESIGNATION

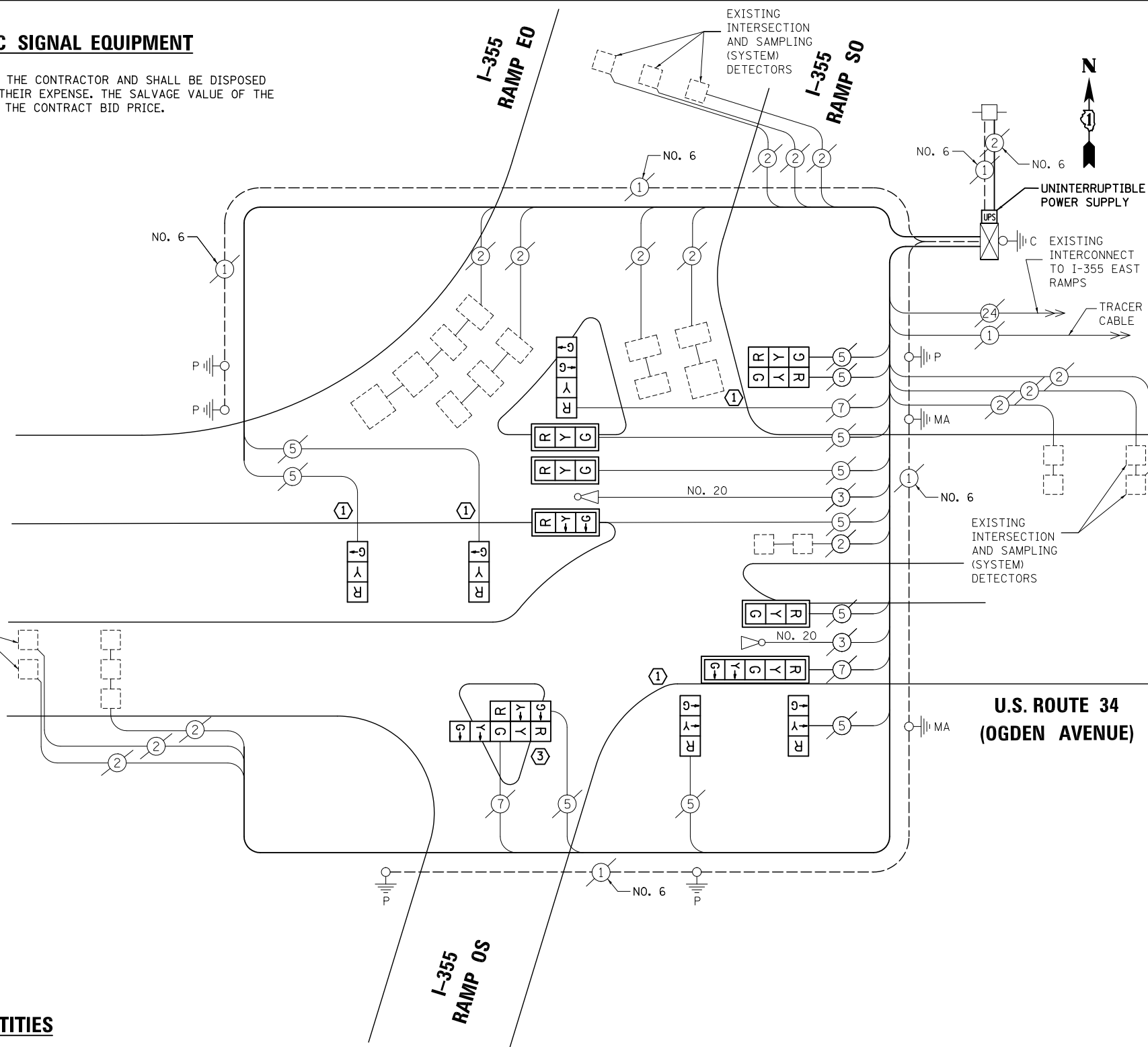
OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	=	2 + 3

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

SCHEDULE OF QUANTITIES

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

CABLE PLAN



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

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	14	135	17	0.50	119
(YELLOW)	14	135	25	0.25	87.5
(GREEN)	15	135	15	0.25	56.25
ARROW	4	135	12	0.10	4.8
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 367.55
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					

FILE NAME = \MICROST\352105\ 35-12421.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -
		DRAWN - JGC/RDS	REVISED -
		CHECKED - BPT	REVISED -
		DATE - 03-22-13	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

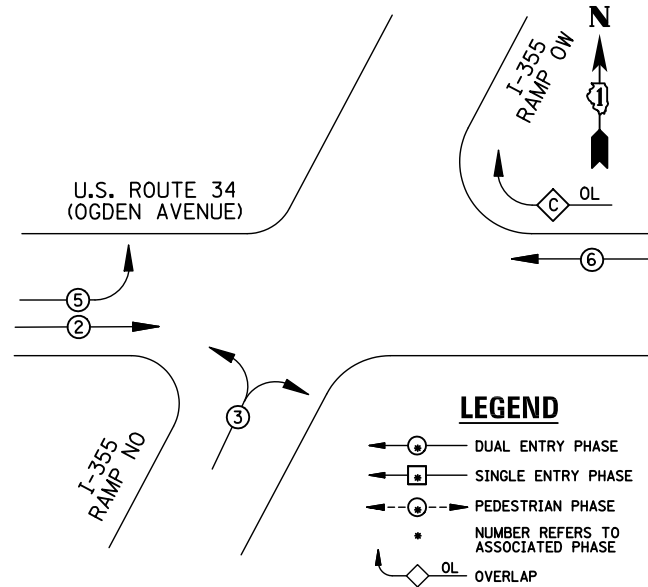
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION U.S. ROUTE 34 (OGDEN AVENUE) AT I-355 WEST RAMPS			
SCALE: N.T.S.	SHEET NO.	OF SHEETS	STA. TO STA.

PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60504-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

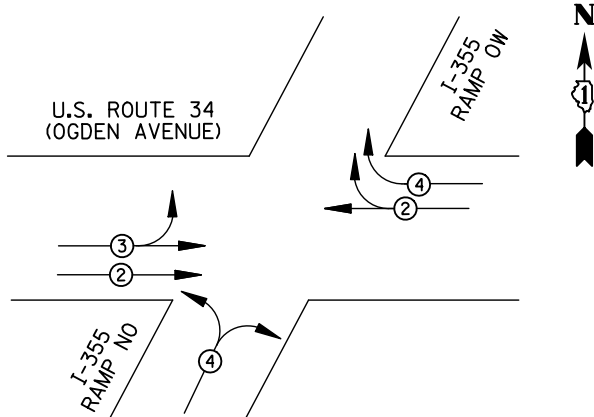
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	49
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	

TS# 12421 LISLE

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	2	3	4
MOVEMENT			

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS						TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		%OPERATION		
		INCAND.	LED			
SIGNAL (RED)	14	135	17	0.50	119	
(YELLOW)	14	135	25	0.25	87.5	
(GREEN)	15	135	15	0.25	56.25	
ARROW	4	135	12	0.10	4.8	
PED. SIGNAL		90	25	1.00		
CONTROLLER	1	100	100	1.00	100	
ILLUM. SIGN		84		0.05		
FLASHER		135	25	0.50		
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL =	367.55
ENERGY SUPPLY	CONTACT: X					
	PHONE: X					
	COMPANY: X					
FILE NAME =	USER NAME = JGC	DESIGNED - BPT	REVISED -			
\\MICROST\352105\36-12420.DGN		DRAWN - JGC/RDS	REVISED -			
	PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -			
	PLOT DATE = X	DATE - 03-22-13	REVISED -			

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

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

**RIGHT TURN OVERLAP
PHASE DESIGNATION**

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
C	6	3

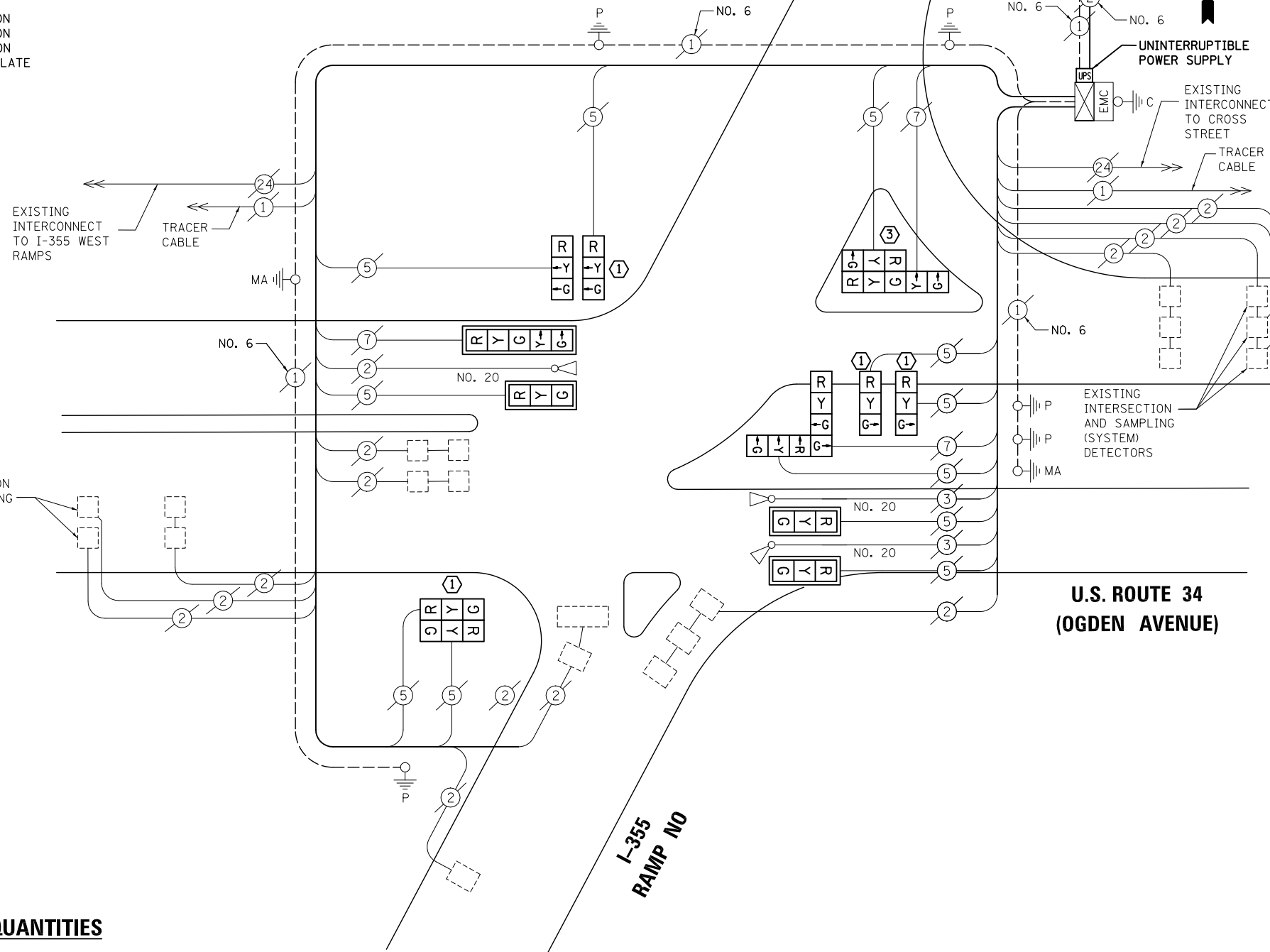
- ① REPLACE 14 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
- ② REPLACE 15 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
- ③ REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
- ④ REPLACE 18 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION

SCHEDULE OF QUANTITIES

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

EXISTING INTERCONNECT TO I-355 WEST RAMP

EXISTING INTERSECTION AND SAMPLING (SYSTEM) DETECTORS



CABLE PLAN

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
U.S. ROUTE 34 (OGDEN AVENUE) AT I-355 EAST RAMP

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

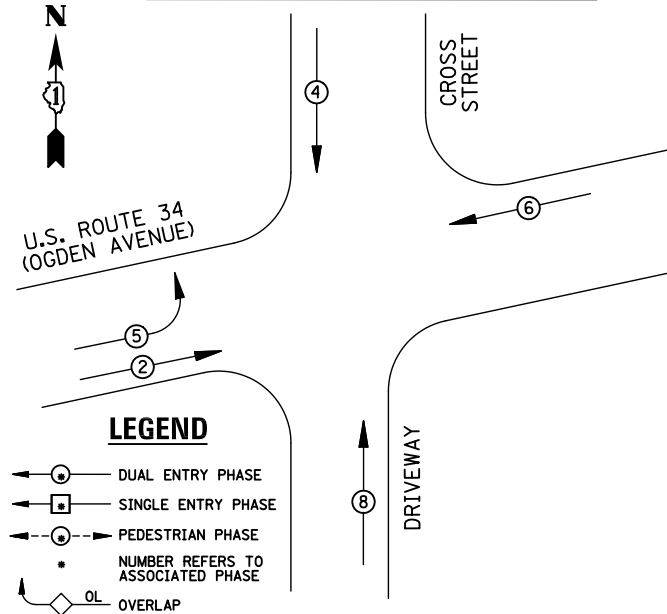
PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	50
			CONTRACT NO. 60W02	

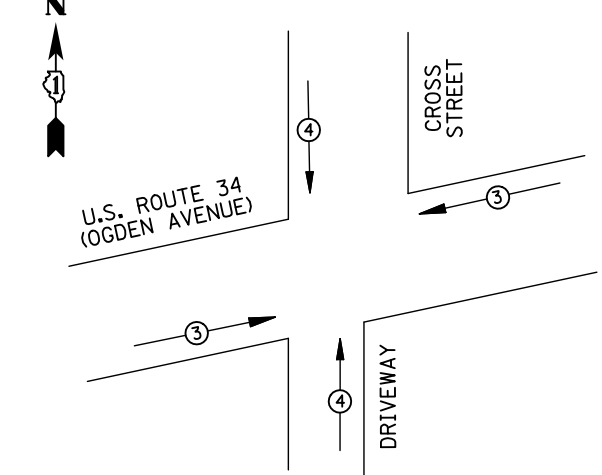
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

TS# 12420
LISLE

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		%OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	11	135	17	0.50	93.5
(YELLOW)	11	135	25	0.25	68.75
(GREEN)	11	135	15	0.25	41.25
ARROW	4	135	12	0.10	4.8
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 308.3
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					
FILE NAME = MICROST\352105\ 37-6120.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
		PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -	
		PLOT DATE = X	DATE - 03-22-13	REVISED -	

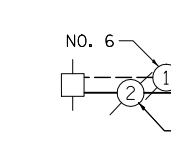
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

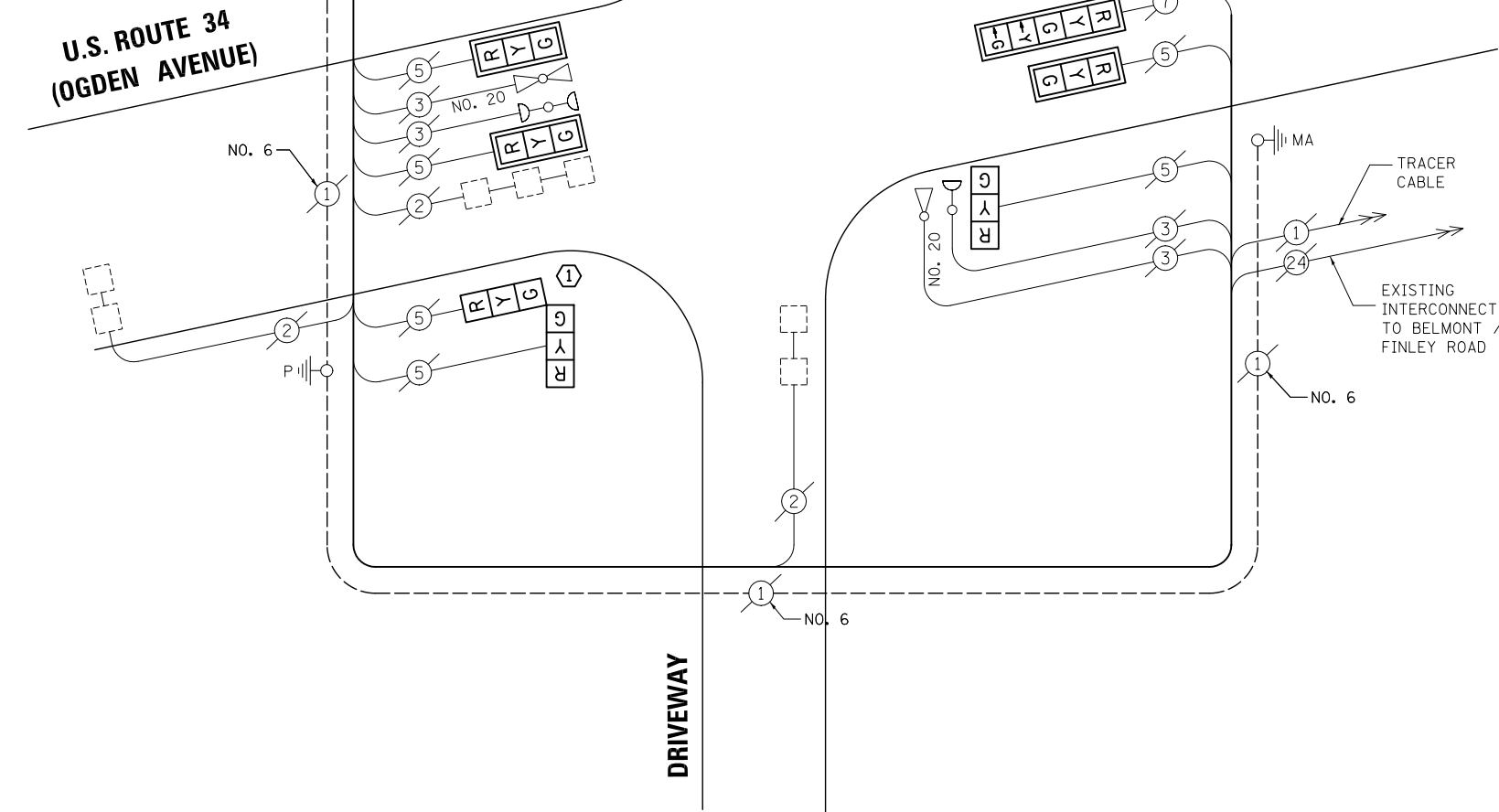
- 2 EACH TRAFFIC SIGNAL POST
- 9 EACH SIGNAL HEAD, 3-SECTION
- 2 EACH SIGNAL HEAD, 5-SECTION
- 4 EACH TRAFFIC SIGNAL BACKPLATE

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

UNINTERRUPTIBLE POWER SUPPLY



U.S. ROUTE 34 (OGDEN AVENUE)



CABLE PLAN

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

SCHEDULE OF QUANTITIES

ITEM

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

UNIT	QUANTITY
EACH	1
EACH	2
EACH	3
EACH	1
EACH	1
EACH	2
EACH	1
EACH	4
EACH	1
EACH	1
EACH	1

TS# 6120
DOWNERS GROVE

PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60504-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

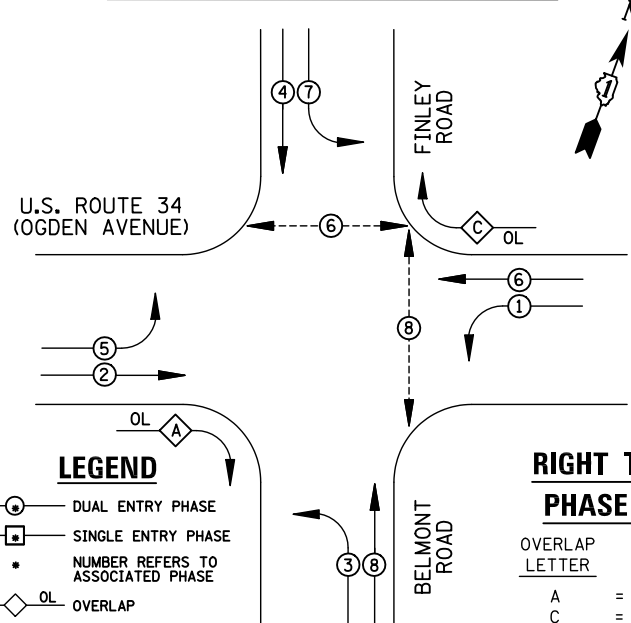
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
U.S. ROUTE 34 (OGDEN AVENUE) AT CROSS STREET**

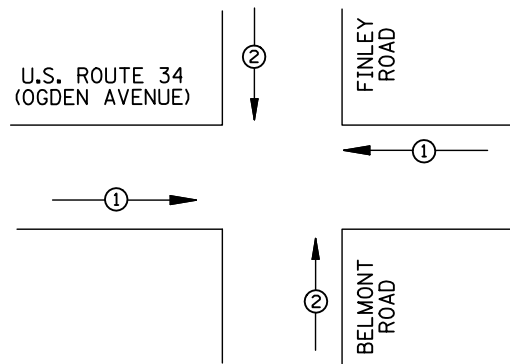
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	51
			CONTRACT NO. 60W02	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

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

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS						TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION		
SIGNAL (RED)	14	135	17	0.50		119
(YELLOW)	14	135	25	0.25		87.5
(GREEN)	14	135	15	0.25		52.5
ARROW	24	135	12	0.10		28.8
PED. SIGNAL	8	90	25	1.00		200
CONTROLLER	1	100	100	1.00		100
ILLUM. SIGN		84		0.05		
FLASHER		135	25	0.50		
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL =	587.8
ENERGY SUPPLY	CONTACT: X					
	PHONE: X					
	COMPANY: X					

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

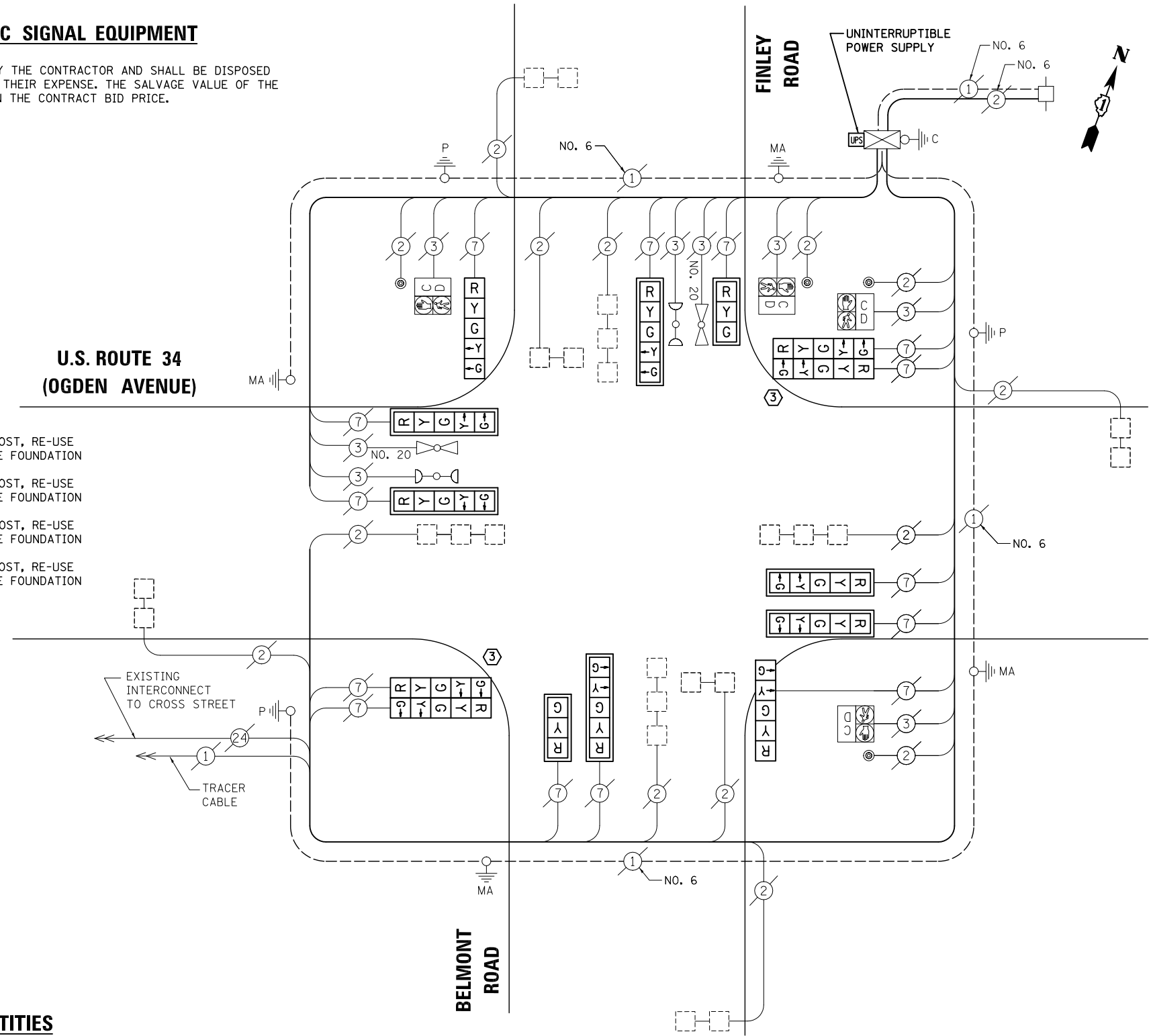
- 2 EACH TRAFFIC SIGNAL POST
- 2 EACH SIGNAL HEAD, 3-SECTION
- 12 EACH SIGNAL HEAD, 5-SECTION
- 8 EACH TRAFFIC SIGNAL BACKPLATE

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

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	1
RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

U.S. ROUTE 34 (OGDEN AVENUE)



CABLE PLAN

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

TS# 6125
DOWNERS GROVE

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	52

CONTRACT NO. 60W02
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

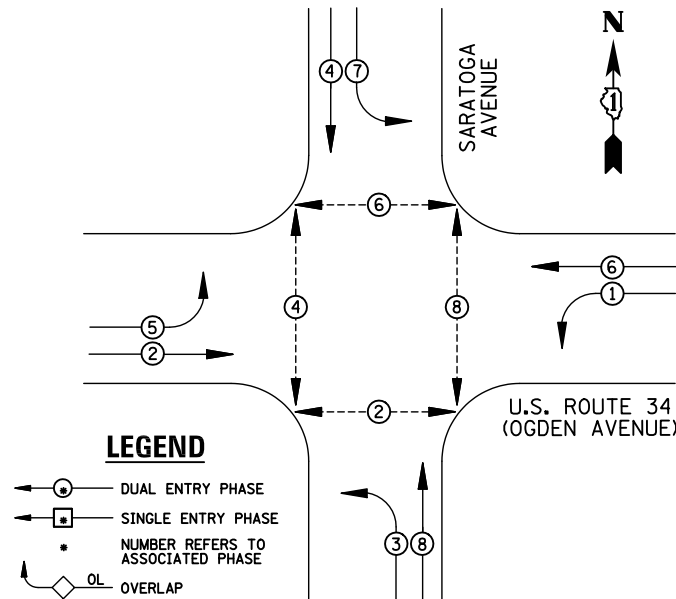
SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
U.S. ROUTE 34 (OGDEN AVENUE) AND BELMONT / FINLEY ROAD

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

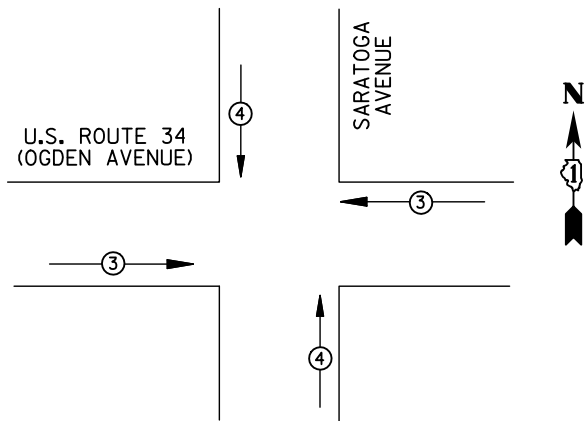
DESIGNED - BPT	REVISED -
DRAWN - JGC/RDS	REVISED -
CHECKED - BPT	REVISED -
DATE - 03-22-13	REVISED -

FILE NAME =	USER NAME = JGC
\\MICROST\352105\ 38-6125.DGN	
	PLOT SCALE = NOT TO SCALE
	PLOT DATE = X

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 531.6
ENERGY SUPPLY CONTACT:	X				
PHONE:	X				
COMPANY:	X				

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

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

- ① REPLACE 14 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
- ② REPLACE 15 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
- ③ REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
- ④ REPLACE 18 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
- ⑤ INSTALL NEW PEDESTRIAN HEADS AND PUSH-BUTTONS ON 14 FOOT POST. REMOVE AND REINSTALL CABLES UTILIZING EXISTING SLACK TO REACH NEW LOCATION.

SCHEDULE OF QUANTITIES

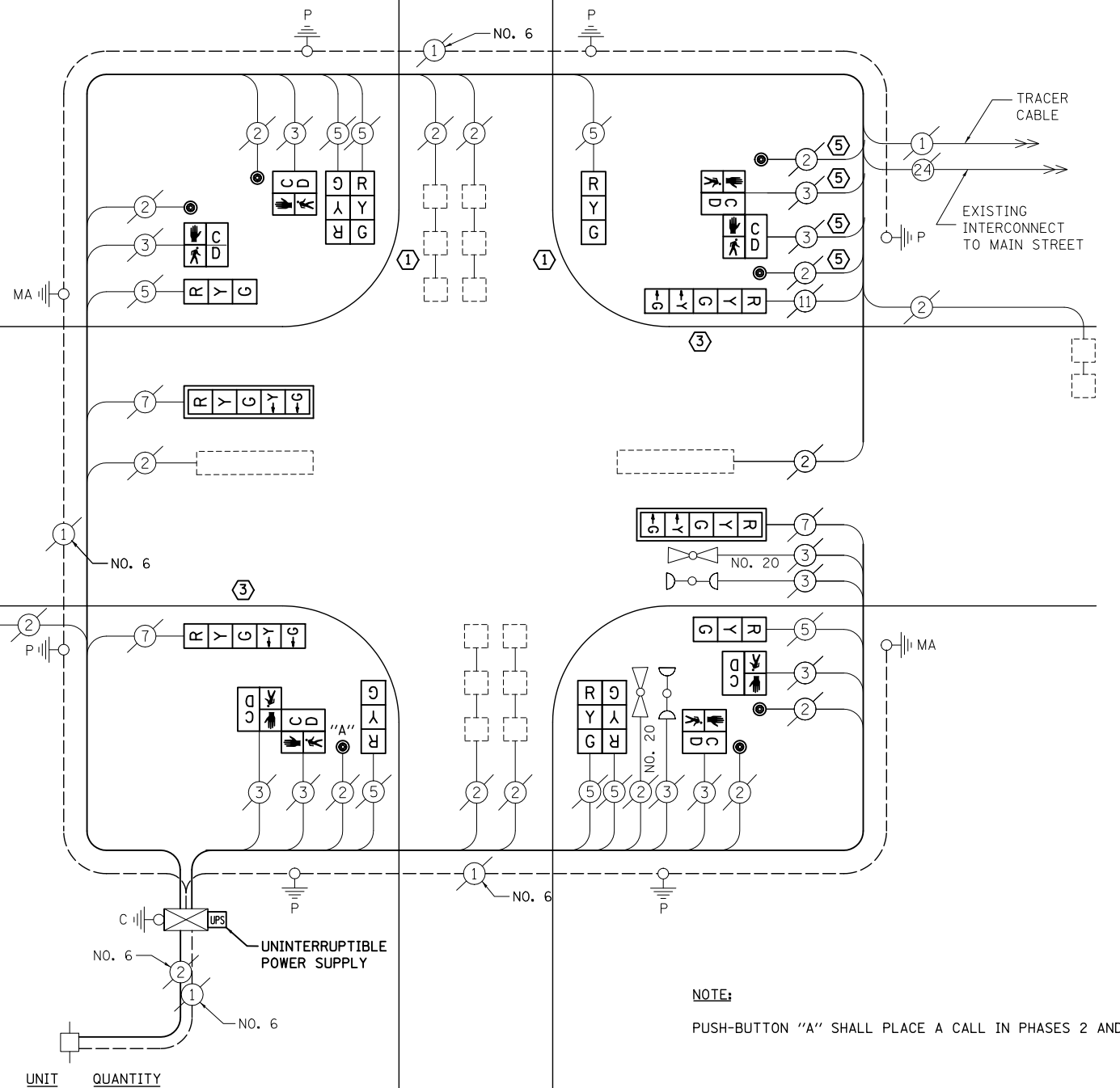
ITEM

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

UNIT	QUANTITY
EACH	1
EACH	2
EACH	2
EACH	4
EACH	2
EACH	2
EACH	2
EACH	2
EACH	4
EACH	2
EACH	2
EACH	2
EACH	1
FOOT	178
EACH	1
EACH	1
EACH	7

SARATOGA AVENUE

U.S. ROUTE 34 (OGDEN AVENUE)



CABLE PLAN

NOTE:
 PUSH-BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.

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

FILE NAME = \MICROST\352105\ 39-11420.DGN

USER NAME = JGC
 PLOT SCALE = NOT TO SCALE
 PLOT DATE = X

DESIGNED - BPT
 DRAWN - JGC/RDS
 CHECKED - BPT
 DATE - 03-22-13

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION U.S. ROUTE 34 (OGDEN AVENUE) AT SARATOGA AVENUE

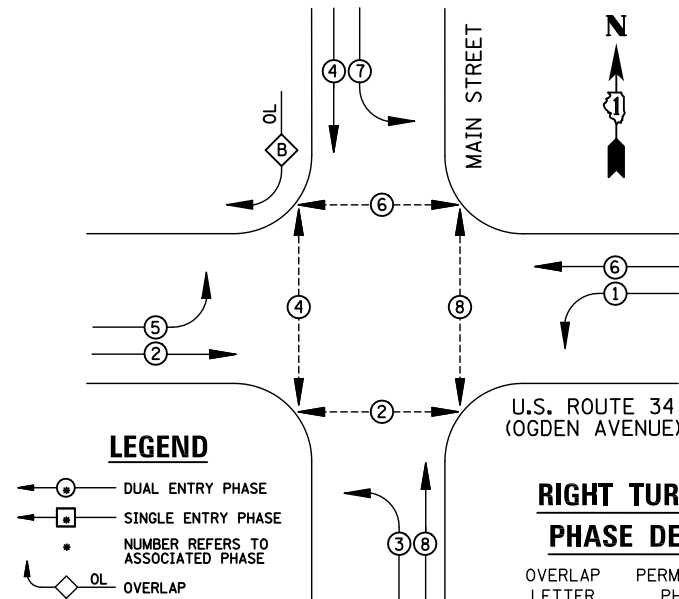
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	53
CONTRACT NO. 60W02			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

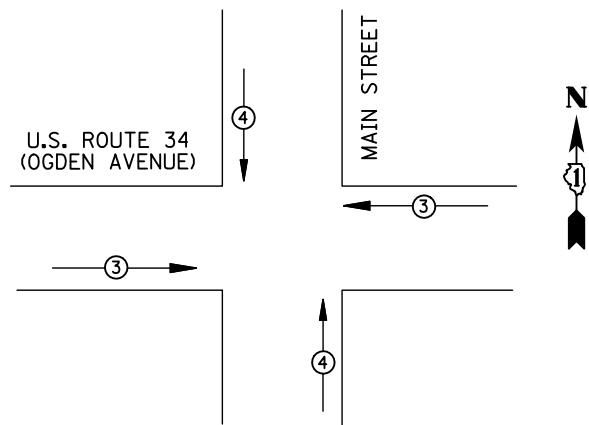
PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60504-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

TS# 11420
 DOWNERS GROVE

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	13	135	17	0.50	110.5
(YELLOW)	13	135	25	0.25	81.25
(GREEN)	13	135	15	0.25	48.75
ARROW	20	135	12	0.10	24
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 564.5
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				

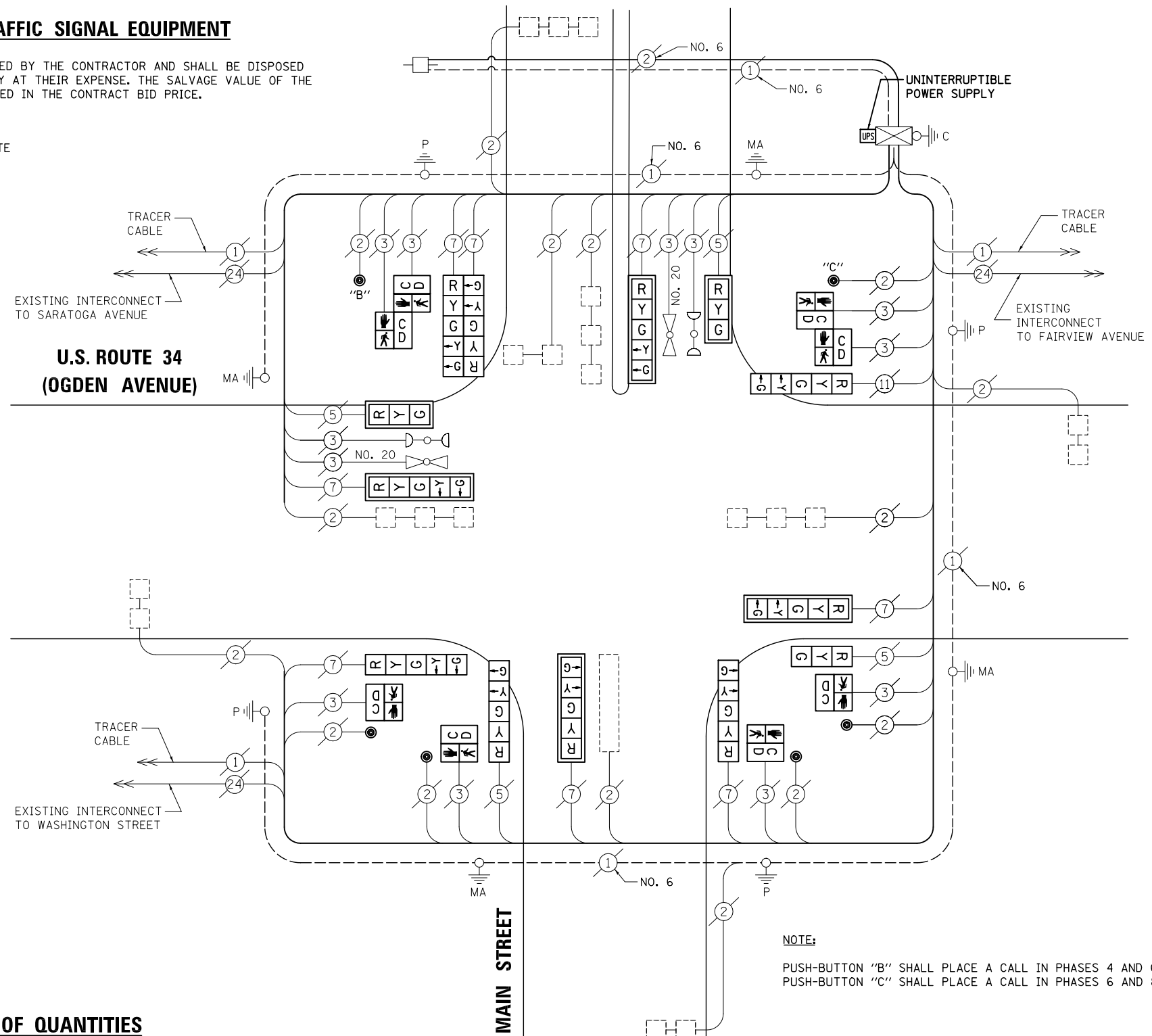
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

- 3 EACH SIGNAL HEAD, 3-SECTION
- 10 EACH SIGNAL HEAD, 5-SECTION
- 6 EACH TRAFFIC SIGNAL BACKPLATE
- 8 EACH PEDESTRIAN SIGNAL HEAD
- 6 EACH PEDESTRIAN PUSH-BUTTON

SCHEDULE OF QUANTITIES

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



CABLE PLAN

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

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
U.S. ROUTE 34 (OGDEN AVENUE) AT MAIN STREET (DOWNERS GROVE)

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	54
CONTRACT NO. 60W02			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

TS* 11425
DOWNERS GROVE

FILE NAME = \MICROST\352105\ 40-11425.DGN

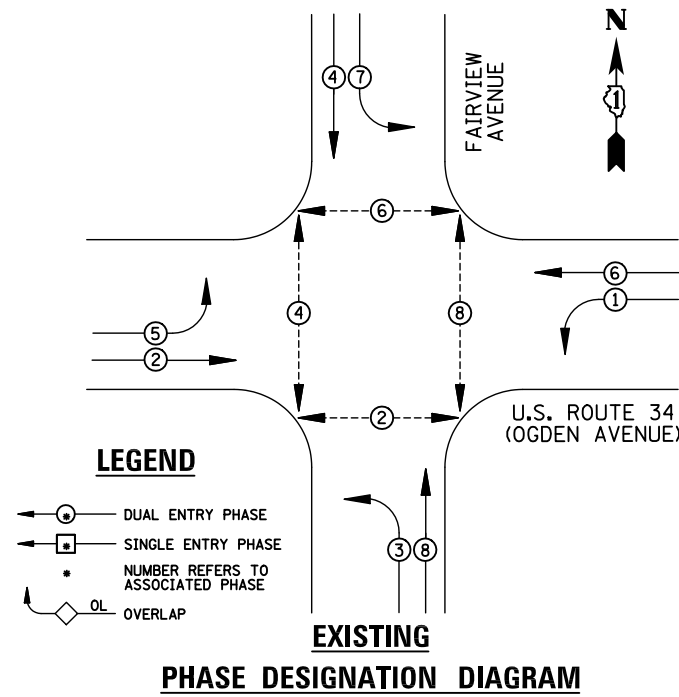
USER NAME = JGC
PLOT SCALE = NOT TO SCALE
PLOT DATE = X

DESIGNED - BPT
DRAWN - JGC/RDS
CHECKED - BPT
DATE - 03-22-13

REVISED -
REVISED -
REVISED -
REVISED -

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

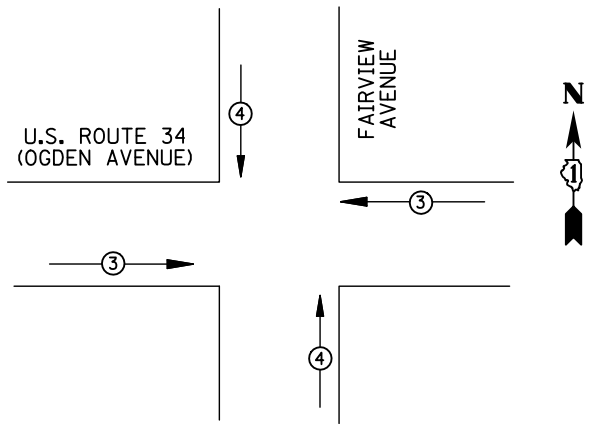
EXISTING CONTROLLER SEQUENCE



LEGEND

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

EXISTING PHASE DESIGNATION DIAGRAM



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

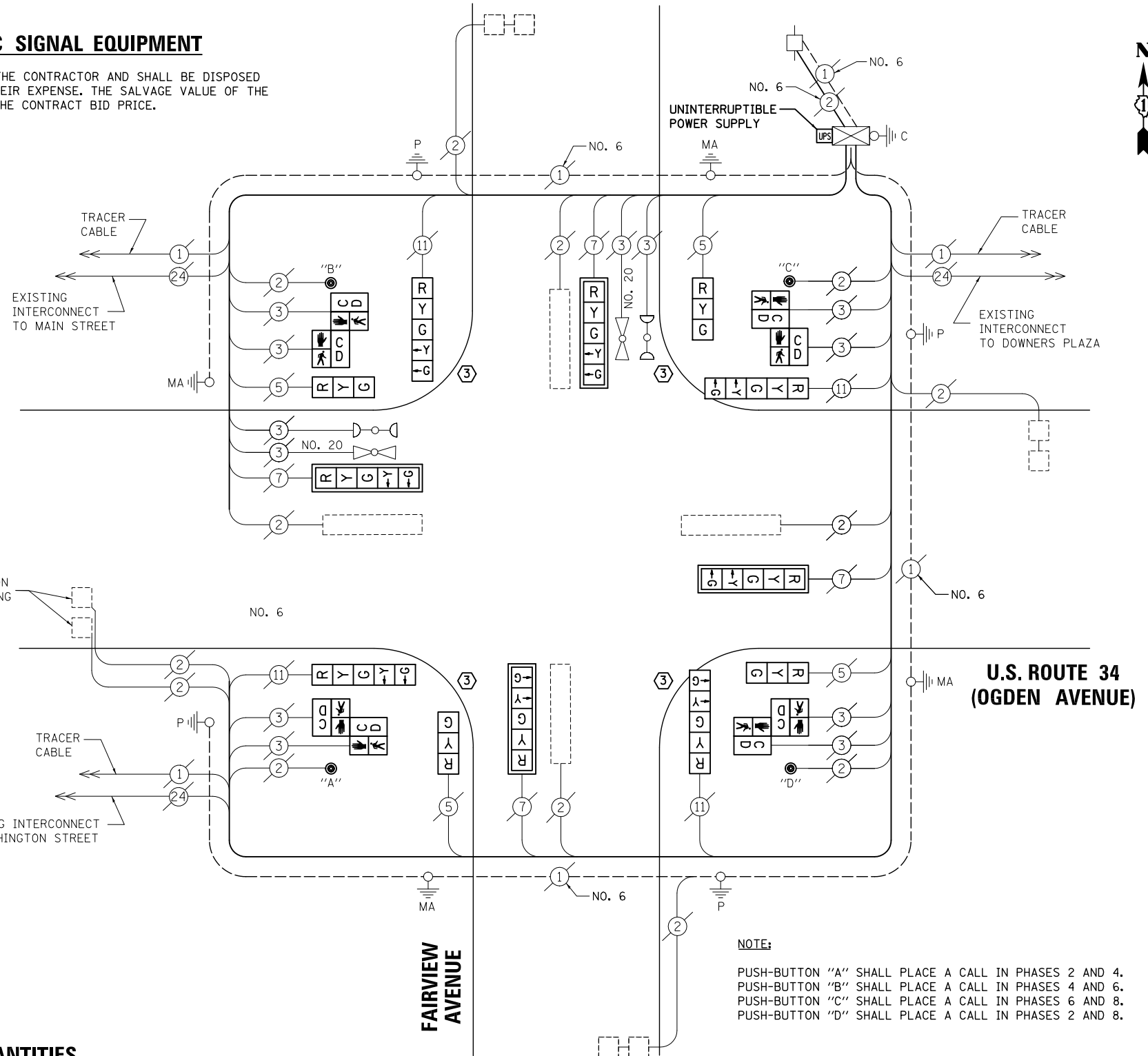
EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 541.2
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					
FILE NAME = \MICROST\352105\ 41-8370.DGN	USER NAME = JGC		DESIGNED - BPT	REVISED -	
	PLOT SCALE = NOT TO SCALE		DRAWN - JGC/RDS	REVISED -	
	PLOT DATE = X		CHECKED - BPT	REVISED -	
			DATE - 03-22-13	REVISED -	

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

- 4 EACH TRAFFIC SIGNAL POST
 - 4 EACH SIGNAL HEAD, 3-SECTION
 - 8 EACH SIGNAL HEAD, 5-SECTION
 - 4 EACH TRAFFIC SIGNAL BACKPLATE
 - 8 EACH PEDESTRIAN SIGNAL HEAD
 - 4 EACH PEDESTRIAN PUSH-BUTTON
- ① REPLACE 14 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - ② REPLACE 15 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - ③ REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - ④ REPLACE 18 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION



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

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

SCHEDULE OF QUANTITIES

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

CABLE PLAN

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION U.S. ROUTE 34 (OGDEN AVENUE) AT FAIRVIEW AVENUE

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

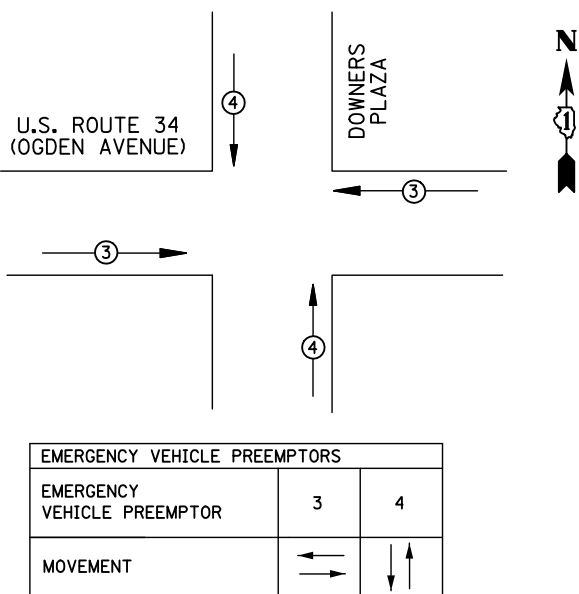
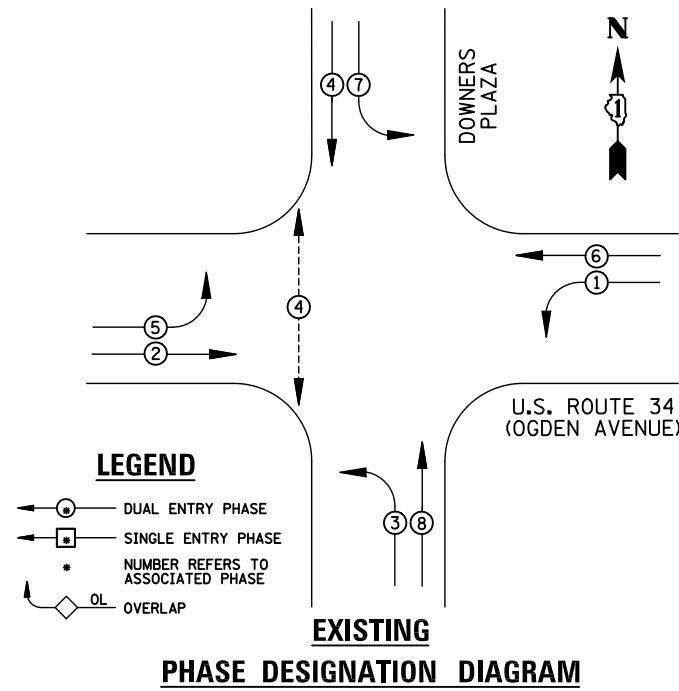
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 Aurora, Illinois 60504-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	55
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	

CONTRACT NO. 60W02

TS* 8370
 DOWNERS GROVE

EXISTING CONTROLLER SEQUENCE



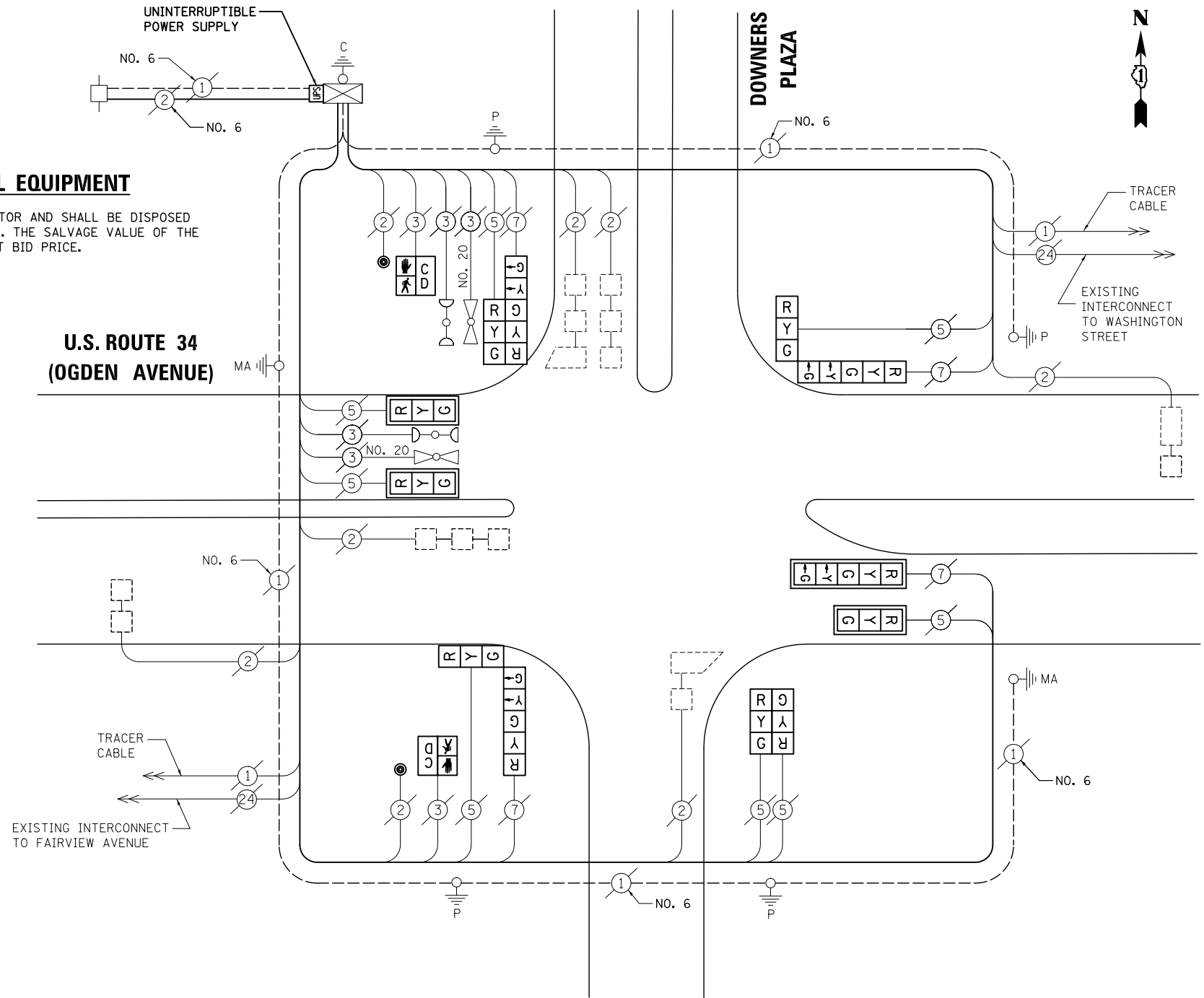
EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	2	90	25	1.00	50
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 381.6
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					
FILE NAME = MICROST\352105\ 42-21830.DGN	USER NAME = JGC		DESIGNED - BPT	REVISED -	
	PLOT SCALE = NOT TO SCALE		DRAWN - JGC/RDS	REVISED -	
	PLOT DATE = X		CHECKED - BPT	REVISED -	
			DATE - 03-22-13	REVISED -	

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

- 2 EACH PEDESTRIAN SIGNAL HEAD
- 2 EACH PEDESTRIAN PUSH-BUTTON



CABLE PLAN

SCHEDULE OF QUANTITIES

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

**RETROFIT ALL VEHICULAR
SIGNAL HEADS TO L.E.D.**

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

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

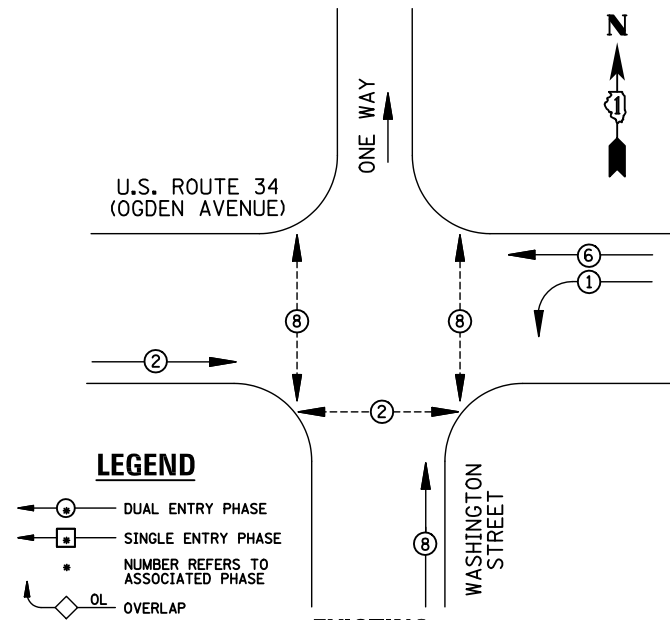
**SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
U.S. ROUTE 34 (OGDEN AVENUE) AT DOWNERS PLAZA**

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

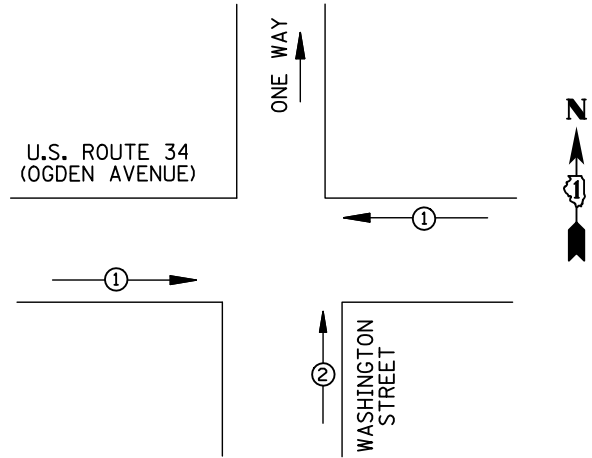
PREPARED BY: CEMCON, Ltd. Consulting Engineers, Land Surveyors & Planners 2280 White Oak Circle, Suite 100 Aurora, Illinois 60504-9675 Ph: 630.862.2100 Fax: 630.862.2199 E-Mail: cadd@cemcon.com Website: www.cemcon.com			
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS
VAR.	2012-084TS	DU PAGE	89
		CONTRACT NO.	60W02
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			

TS# 21830
DOWNERS GROVE

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	1	2
MOVEMENT	←	↑

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	9	135	17	0.50	76.5
(YELLOW)	9	135	25	0.25	56.25
(GREEN)	9	135	15	0.25	33.75
ARROW	4	135	12	0.10	4.8
PED. SIGNAL	6	90	25	1.00	150
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 421.3
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					
FILE NAME = MICROST\352105\ 43-8838.DGN	USER NAME = JGC		DESIGNED - BPT	REVISED -	
	PLOT SCALE = NOT TO SCALE		DRAWN - JGC/RDS	REVISED -	
	PLOT DATE = X		CHECKED - BPT	REVISED -	
			DATE - 03-22-13	REVISED -	

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

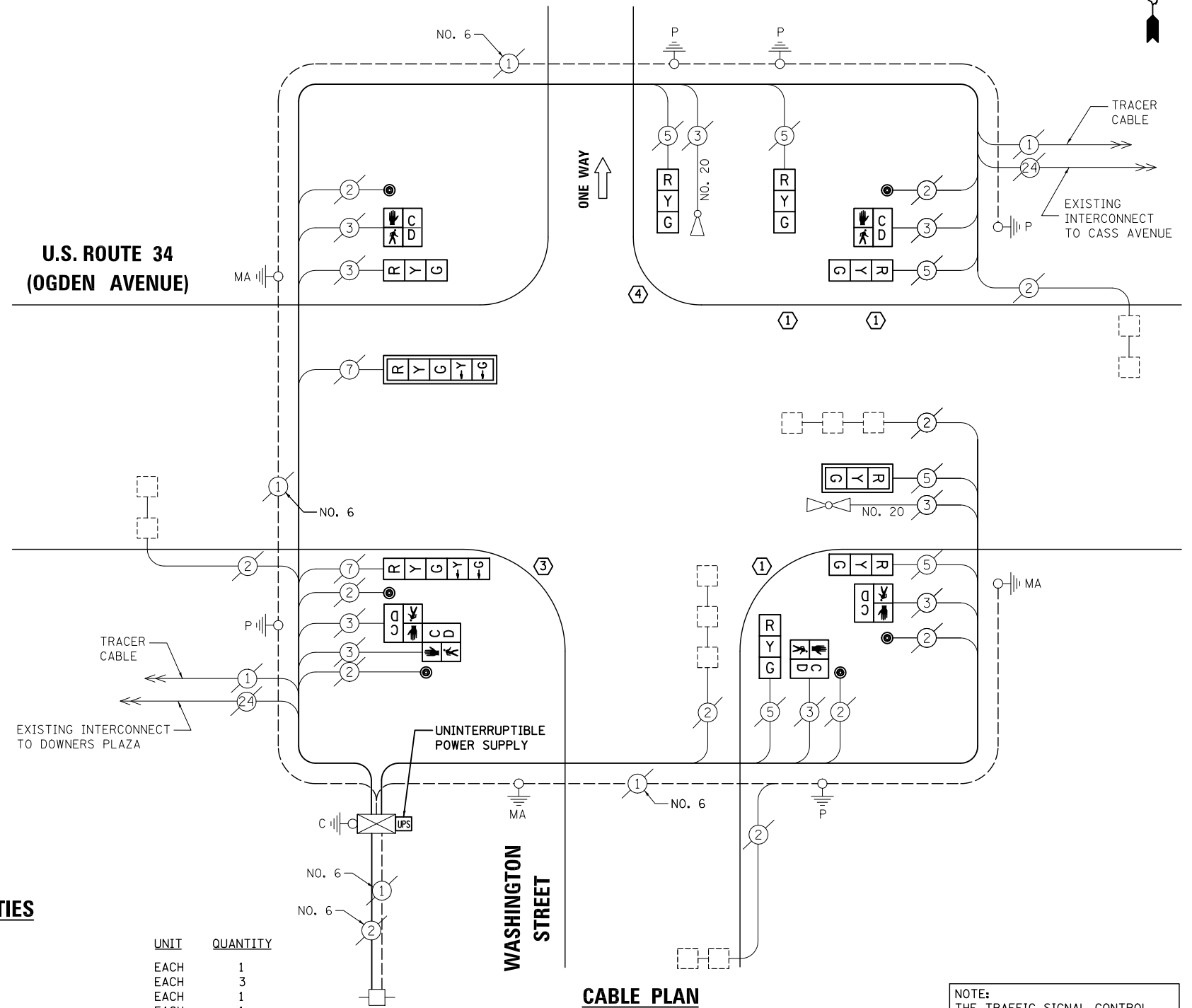
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 5 EACH TRAFFIC SIGNAL POST
 - 7 EACH SIGNAL HEAD, 3-SECTION
 - 2 EACH SIGNAL HEAD, 5-SECTION
 - 2 EACH TRAFFIC SIGNAL BACKPLATE
 - 6 EACH PEDESTRIAN SIGNAL HEAD
 - 6 EACH PEDESTRIAN PUSH-BUTTON
-
- ① REPLACE 14 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - ② REPLACE 15 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - ③ REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - ④ REPLACE 18 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	3
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	2
PEDESTRIAN PUSH-BUTTON	EACH	6
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1

**U.S. ROUTE 34
(OGDEN AVENUE)**



CABLE PLAN

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

TS# 8830
WESTMONT

PREPARED BY:
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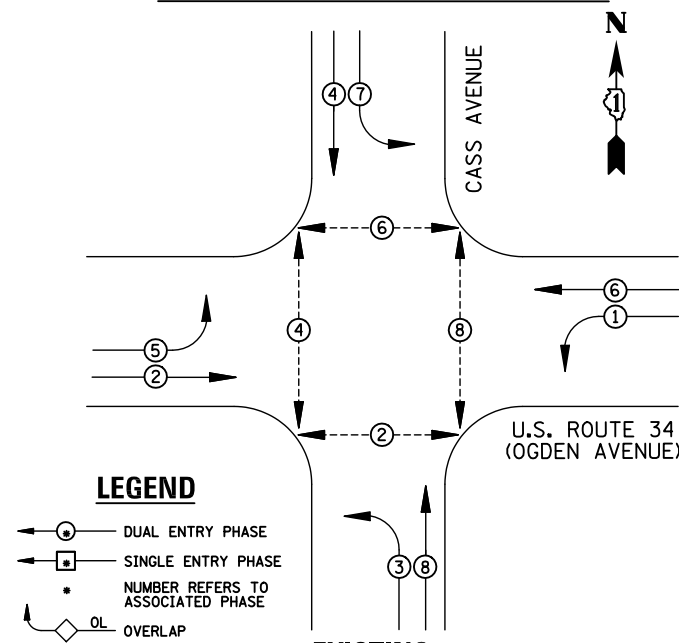
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
U.S. ROUTE 34 (OGDEN AVENUE) AT WASHINGTON STREET (WESTMONT)

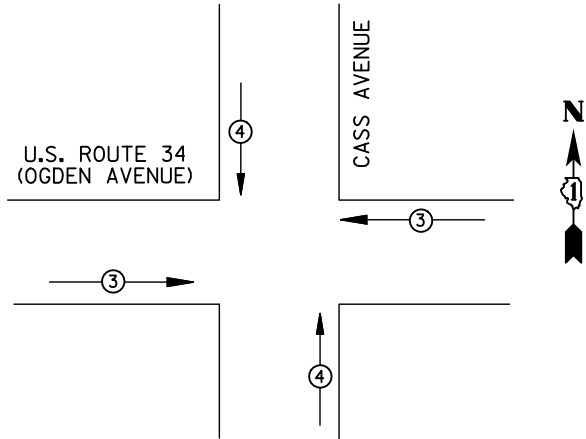
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	57
CONTRACT NO. 60W02				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	
MOVEMENT	←	↑	

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND. LED	%OPERATION		
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096				TOTAL =	541.2
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

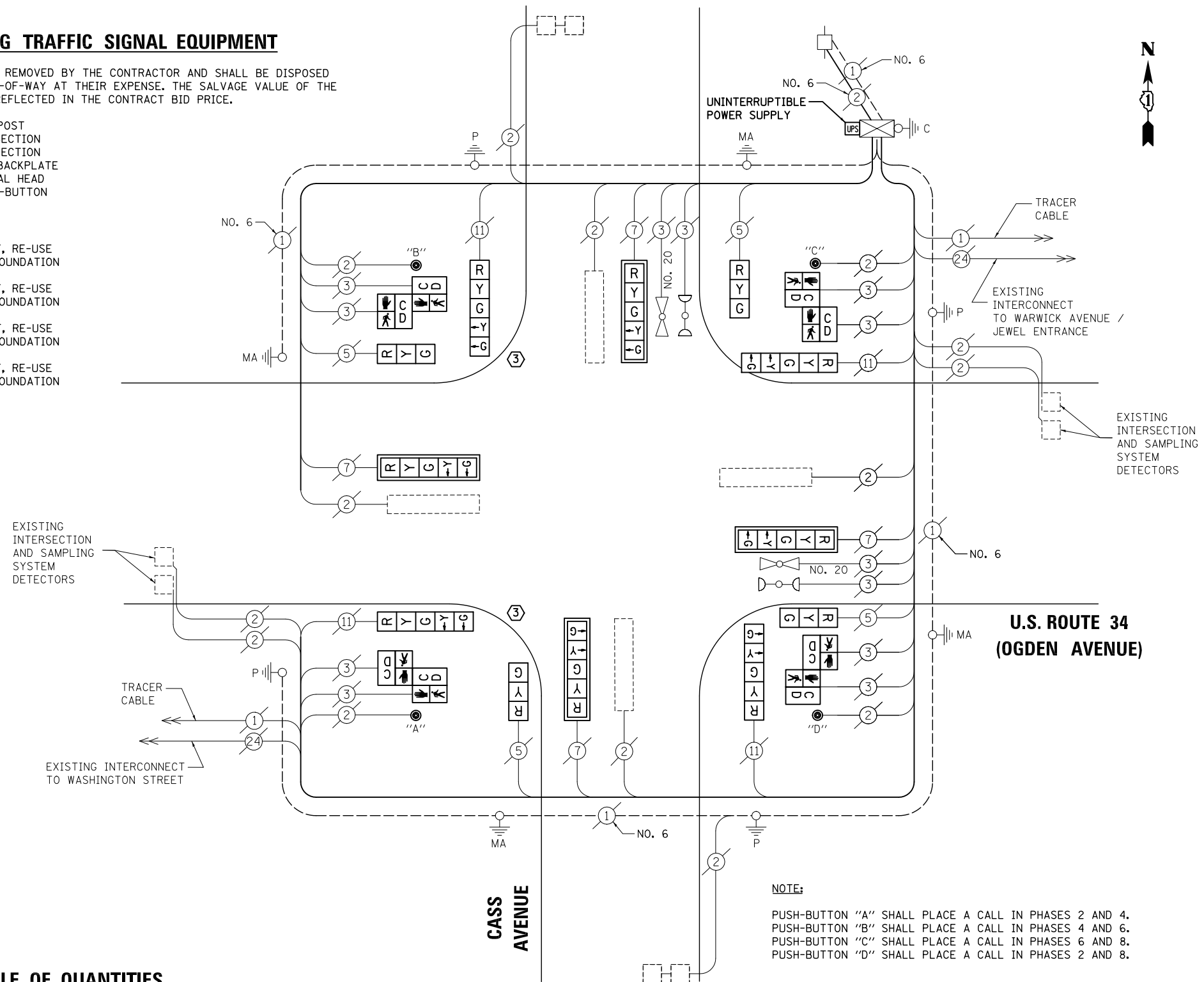
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 2 EACH TRAFFIC SIGNAL POST
 - 4 EACH SIGNAL HEAD, 3-SECTION
 - 8 EACH SIGNAL HEAD, 5-SECTION
 - 4 EACH TRAFFIC SIGNAL BACKPLATE
 - 8 EACH PEDESTRIAN SIGNAL HEAD
 - 4 EACH PEDESTRIAN PUSH-BUTTON
-
- ① REPLACE 14 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - ② REPLACE 15 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - ③ REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - ④ REPLACE 18 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION

SCHEDULE OF QUANTITIES

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

CABLE PLAN



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

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

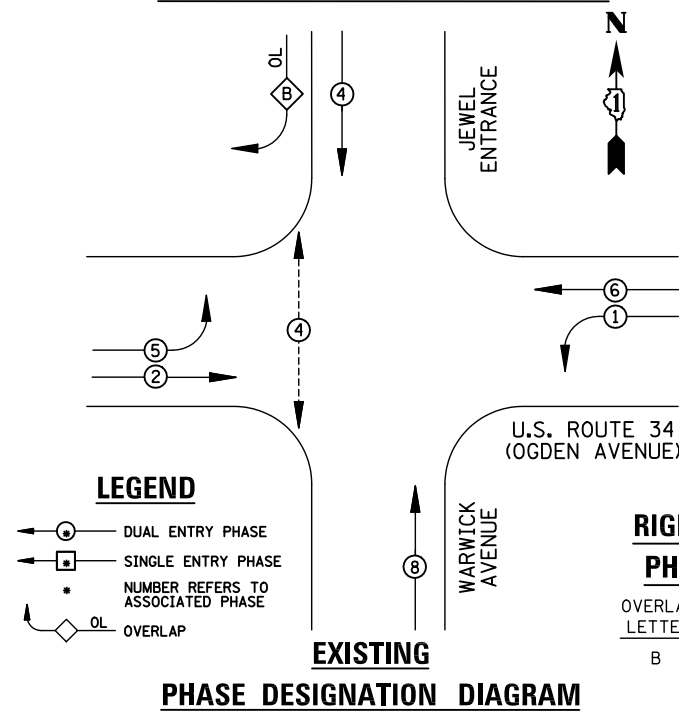
SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
U.S. ROUTE 34 (OGDEN AVENUE) AT CASS AVENUE

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

PREPARED BY: CEMCON, Ltd. Consulting Engineers, Land Surveyors & Planners 2280 White Oak Circle, Suite 100 Aurora, Illinois 60504-9675 Ph: 630.862.2100 Fax: 630.862.2199 E-Mail: cadd@cemcon.com Website: www.cemcon.com			
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS
VAR.	2012-084TS	DU PAGE	89
			SHEET NO. 58
			CONTRACT NO. 60W02
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			

TS# 6095
WESTMONT

EXISTING CONTROLLER SEQUENCE



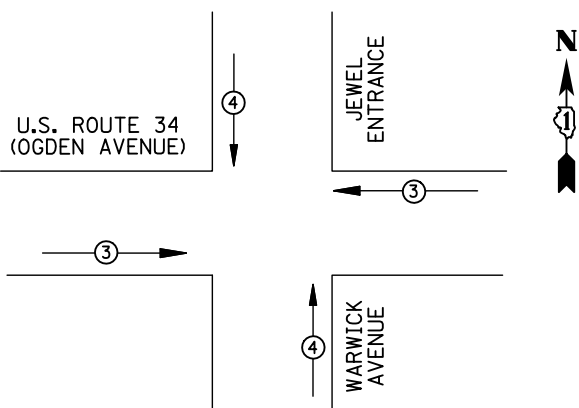
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

- 2 EACH PEDESTRIAN SIGNAL HEAD
- 2 EACH PEDESTRIAN PUSH-BUTTON

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	= 4	+ 5



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

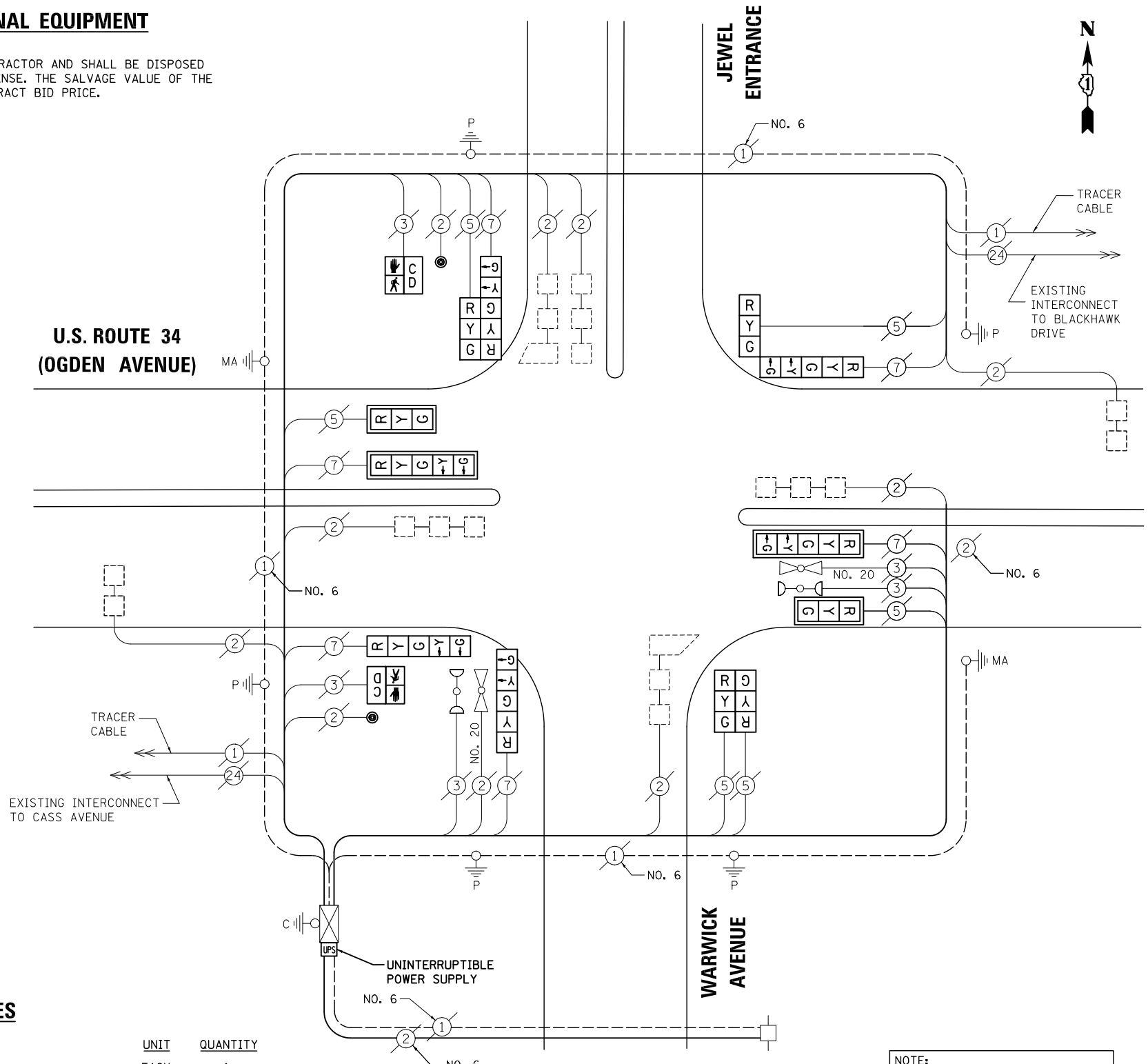
EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	12	135	12	0.10	14.4
PED. SIGNAL	2	90	25	1.00	50
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 386.4
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					
FILE NAME = \MICROST\352105\ 45-10910.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
		PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -	
		PLOT DATE = X	DATE - 03-22-13	REVISED -	

SCHEDULE OF QUANTITIES

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

U.S. ROUTE 34 (OGDEN AVENUE)



CABLE PLAN

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

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

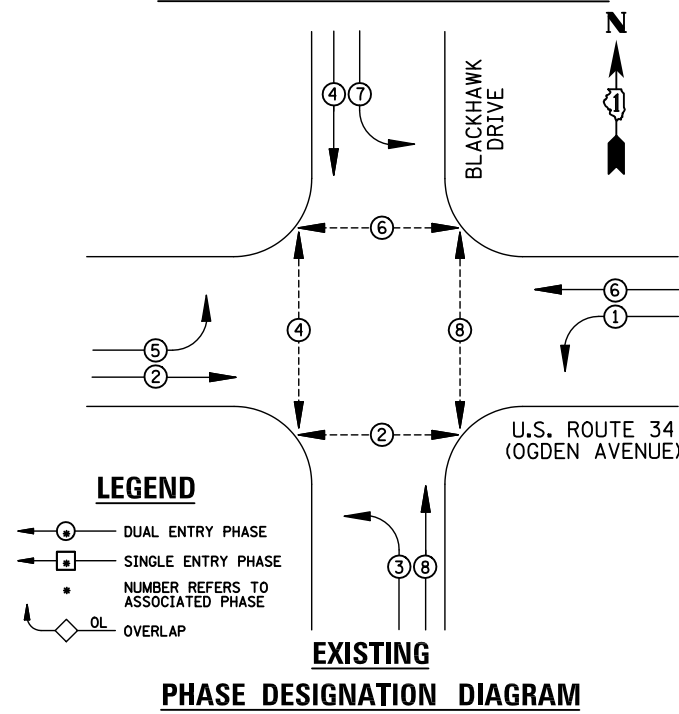
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION U.S. ROUTE 34 (OGDEN AVENUE) AT WARWICK AVENUE / JEWEL ENTRANCE

PREPARED BY: **CEMCON, Ltd.**
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60504-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	59
CONTRACT NO. 60W02			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

EXISTING CONTROLLER SEQUENCE



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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 541.2
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					
FILE NAME = MICROST\352105\ 46-11675.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
	PLOT SCALE = NOT TO SCALE	DRAWN - JGC/RDS	REVISED -		
	PLOT DATE = X	CHECKED - BPT	REVISED -		
		DATE - 03-22-13	REVISED -		

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

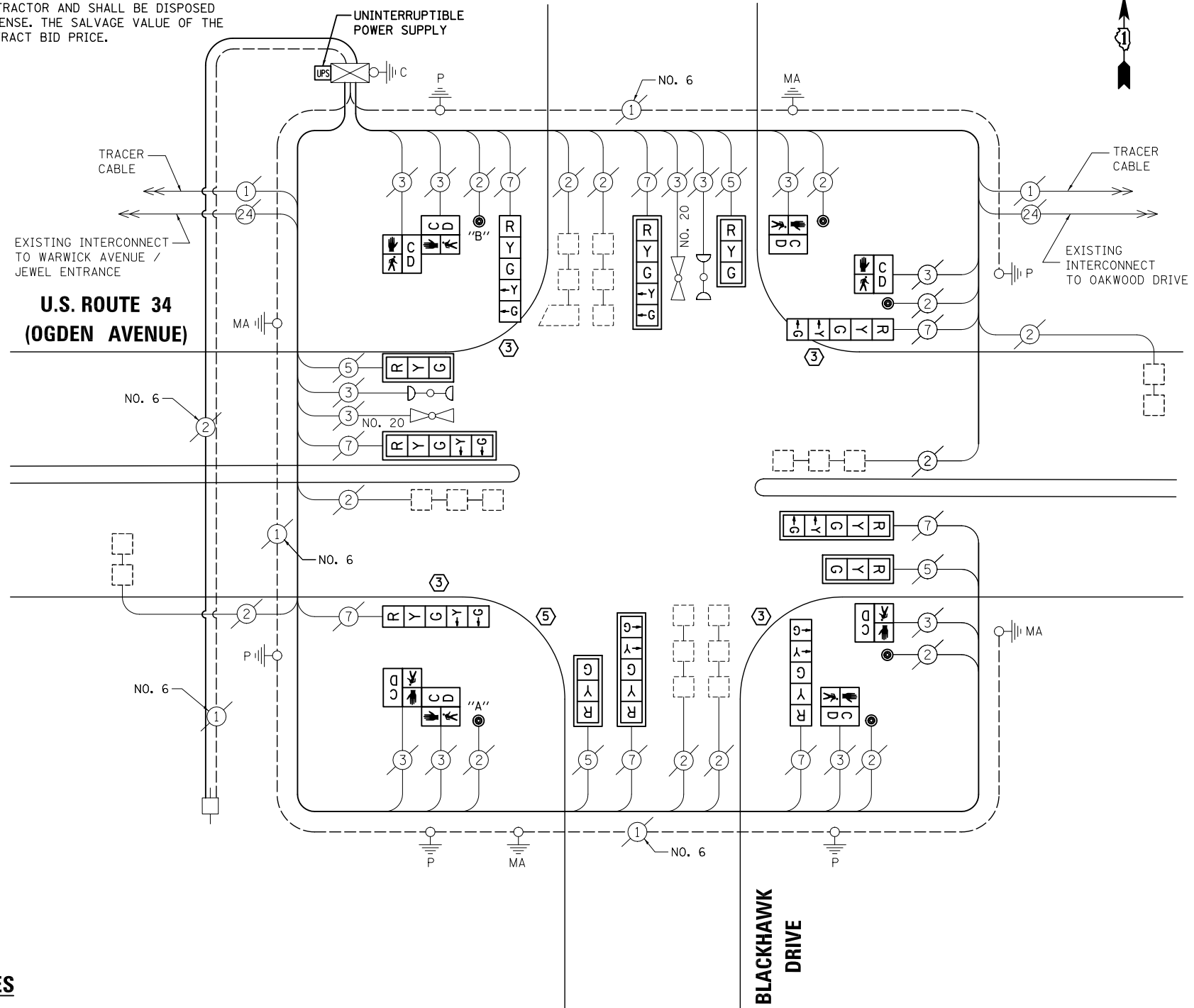
- 5 EACH TRAFFIC SIGNAL POST
 - 4 EACH SIGNAL HEAD, 3-SECTION
 - 8 EACH SIGNAL HEAD, 5-SECTION
 - 8 EACH TRAFFIC SIGNAL BACKPLATE
 - 8 EACH PEDESTRIAN SIGNAL HEAD
 - 6 EACH PEDESTRIAN PUSH-BUTTON
- 1 REPLACE 14 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - 2 REPLACE 15 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - 3 REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - 4 REPLACE 18 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - 5 REPLACE 10 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	6

NOTE:

PUSH-BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.
PUSH-BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.



CABLE PLAN

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

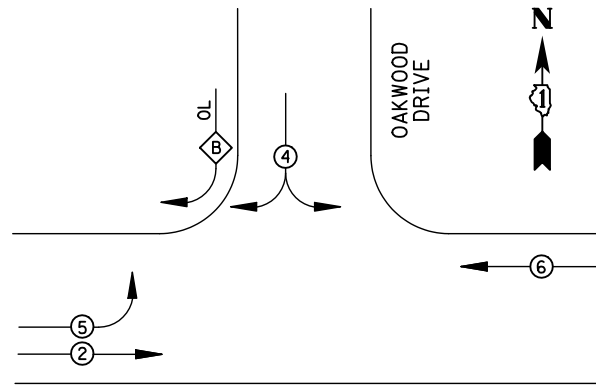
SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
U.S. ROUTE 34 (OGDEN AVENUE) AT BLACKHAWK DRIVE

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

PREPARED BY:			
CEMCON, Ltd.			
Consulting Engineers, Land Surveyors & Planners 2280 White Oak Circle, Suite 100 Aurora, Illinois 60504-9675 Ph: 630.862.2100 Fax: 630.862.2199 E-Mail: cadd@cemcon.com Website: www.cemcon.com			
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS
VAR.	2012-084TS	DU PAGE	89
			SHEET NO. 60
			CONTRACT NO. 60W02
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			

TS# 11675
WESTMONT

EXISTING CONTROLLER SEQUENCE

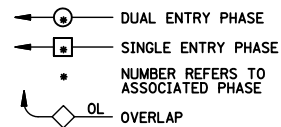


U.S. ROUTE 34
(OGDEN AVENUE)

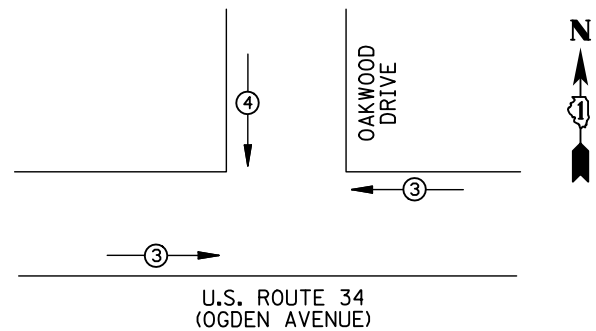
**RIGHT TURN OVERLAP
PHASE DESIGNATION**

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	= 4	+ 5

LEGEND



**EXISTING
PHASE DESIGNATION DIAGRAM**



U.S. ROUTE 34
(OGDEN AVENUE)

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

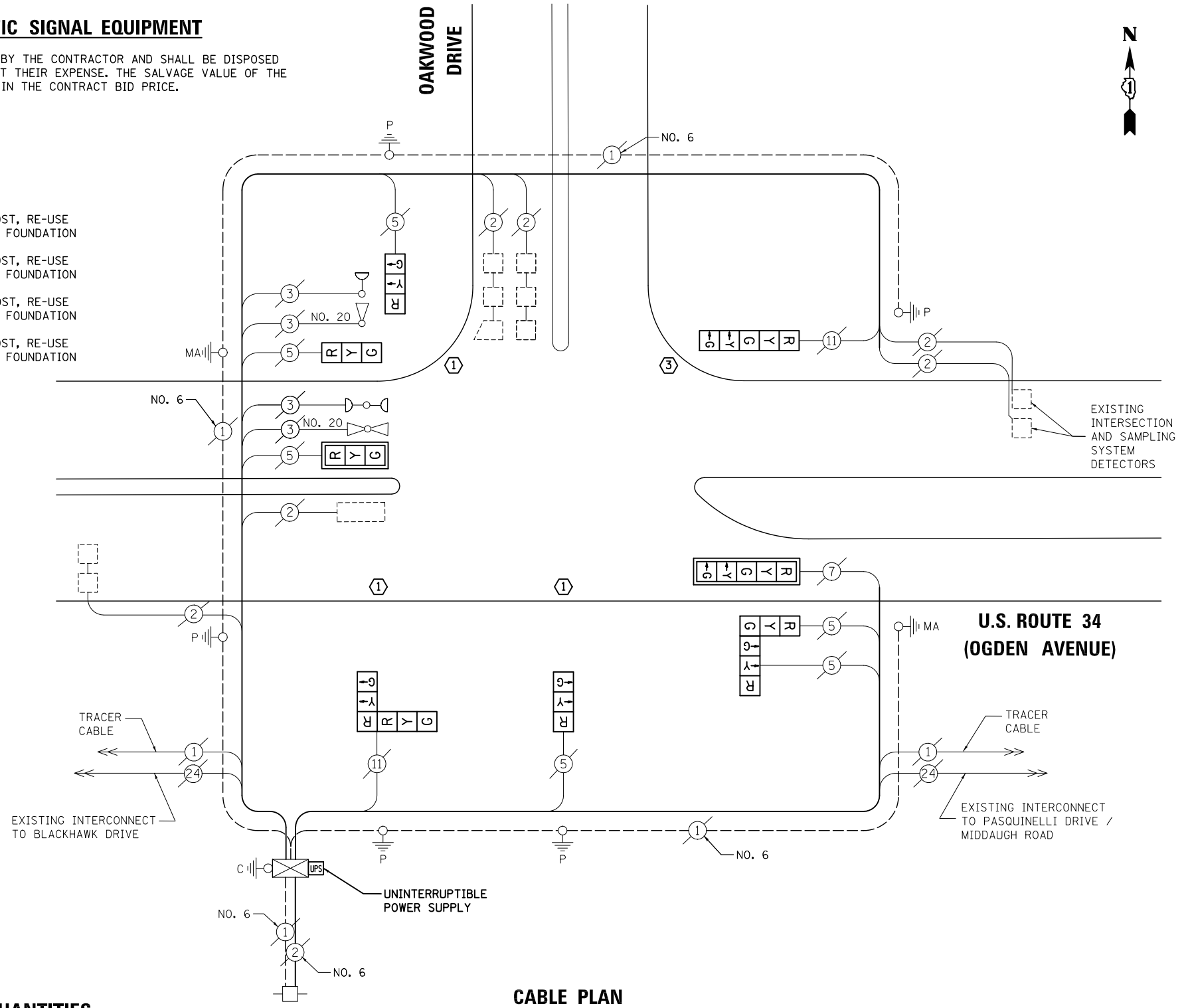
I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	10	135	17	0.50	85
(YELLOW)	10	135	25	0.25	62.5
(GREEN)	10	135	15	0.25	37.5
ARROW	4	135	12	0.10	4.8
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 289.8
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				
FILE NAME = \MICROST\352105\ 47-6135.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
	PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -		
	PLOT DATE = X	DATE - 03-22-13	REVISED -		

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

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

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



SCHEDULE OF QUANTITIES

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

CABLE PLAN

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
U.S. ROUTE 34 (OGDEN AVENUE) AT OAKWOOD DRIVE

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

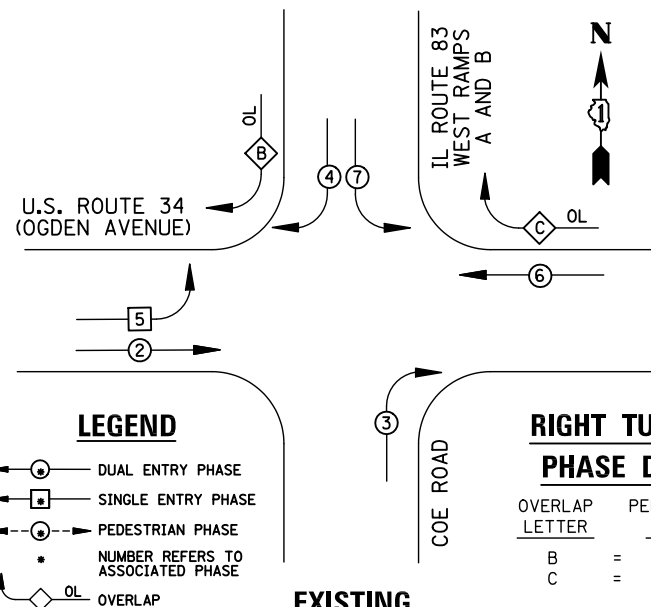
PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	61

CONTRACT NO. 60W02
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

TS# 6135
WESTMONT

EXISTING CONTROLLER SEQUENCE



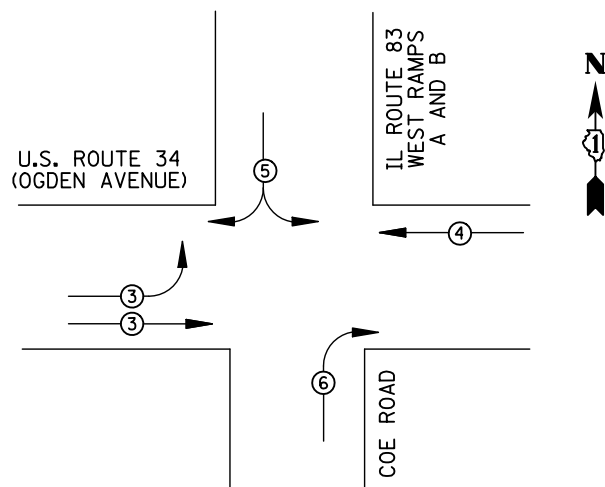
LEGEND

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

RIGHT TURN OVERLAP PHASE DESIGNATION

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

EXISTING PHASE DESIGNATION DIAGRAM



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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		%OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	16	135	15	0.25	60
ARROW	4	135	12	0.10	4.8
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 400.8
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

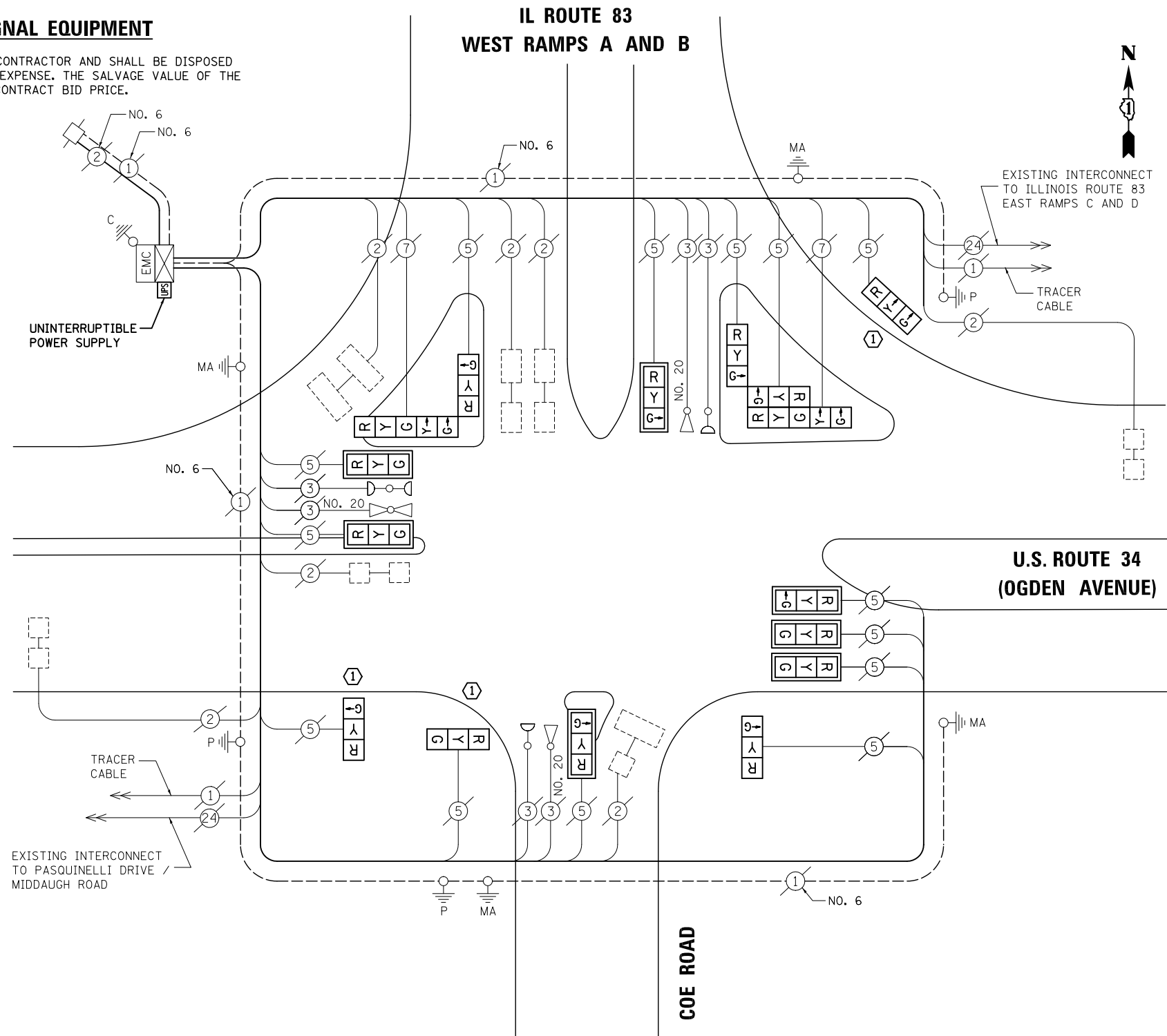
- 3 EACH TRAFFIC SIGNAL POST
- 12 EACH SIGNAL HEAD, 3-SECTION
- 2 EACH SIGNAL HEAD, 4-SECTION
- 2 EACH SIGNAL HEAD, 5-SECTION
- 7 EACH TRAFFIC SIGNAL BACKPLATE

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

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	3
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	7
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 3-FACE, 2-3 SECTION, 1-5 SECTION BRACKET MOUNTED	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	7
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

IL ROUTE 83 WEST RAMPS A AND B



CABLE PLAN

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

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION U.S. ROUTE 34 (OGDEN AVENUE) AT IL ROUTE 83 WEST RAMPS A AND B

PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60504-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

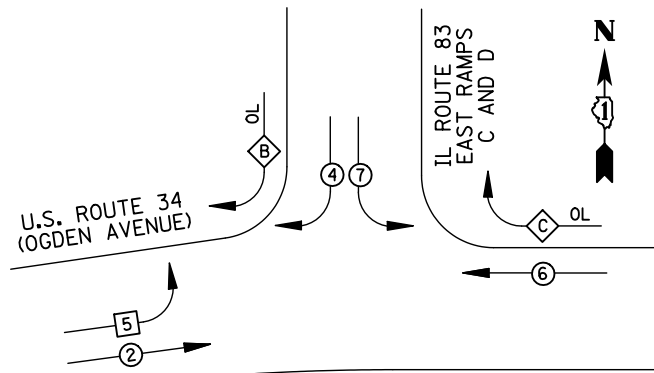
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	62
			CONTRACT NO. 60W02	

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

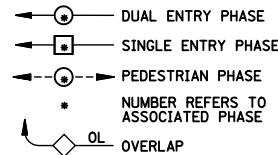
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

TS# 6110 WESTMONT

EXISTING CONTROLLER SEQUENCE



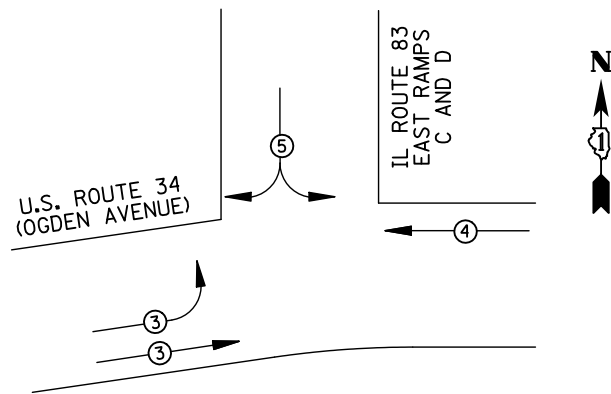
LEGEND



RIGHT TURN OVERLAP PHASE DESIGNATION

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

EXISTING PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	3	4	5	
MOVEMENT				

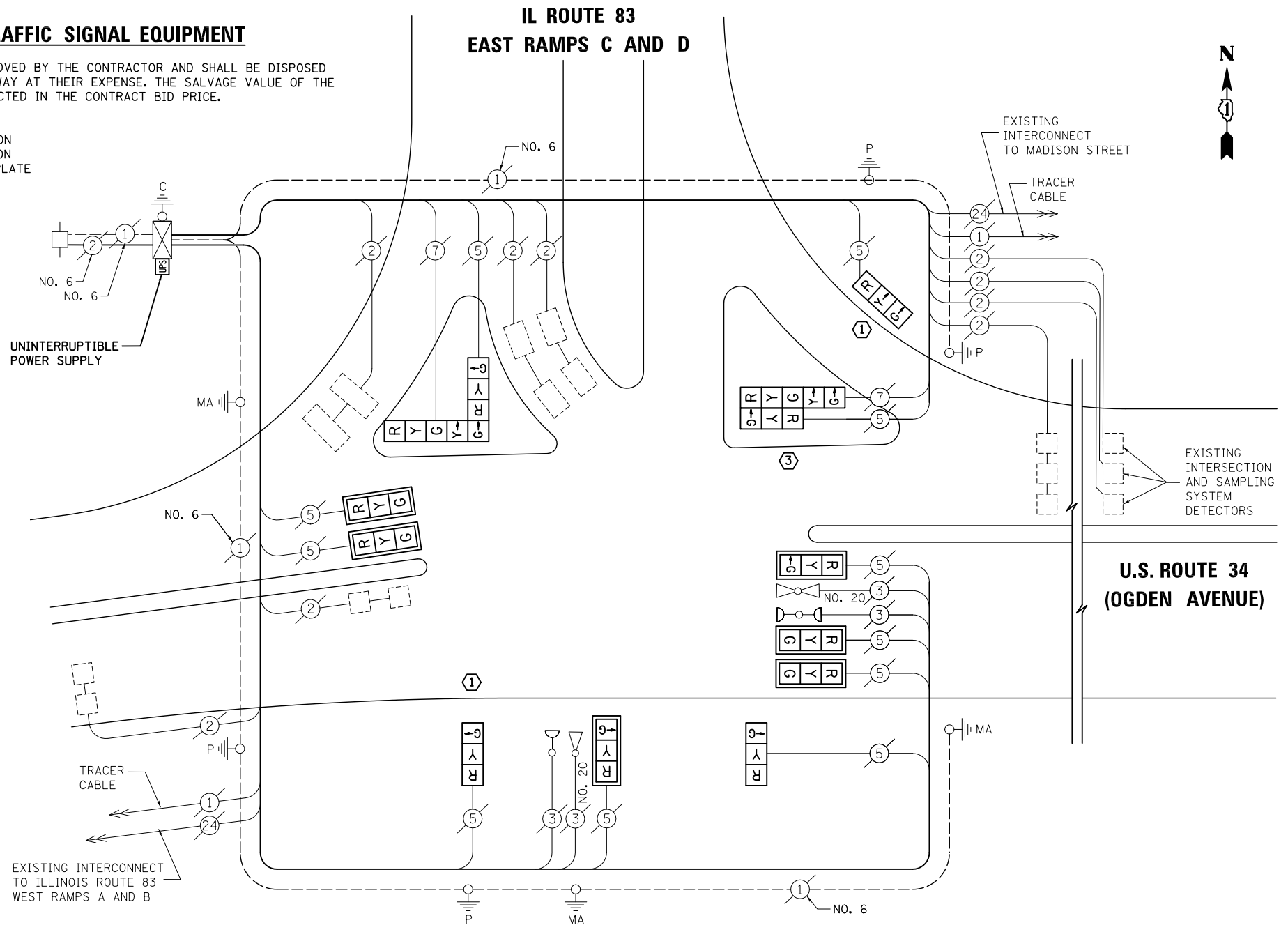
EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	13	135	17	0.50	110.5
(YELLOW)	13	135	25	0.25	81.25
(GREEN)	13	135	15	0.25	48.75
ARROW	4	135	12	0.10	4.8
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 345.3
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				
FILE NAME = \MICROST\352105\ 50-6115.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
	PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -		
	PLOT DATE = X	DATE - 03-22-13	REVISED -		

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

- 3 EACH TRAFFIC SIGNAL POST
- 11 EACH SIGNAL HEAD, 3-SECTION
- 2 EACH SIGNAL HEAD, 5-SECTION
- 6 EACH TRAFFIC SIGNAL BACKPLATE



CABLE PLAN

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

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

SCHEDULE OF QUANTITIES

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

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

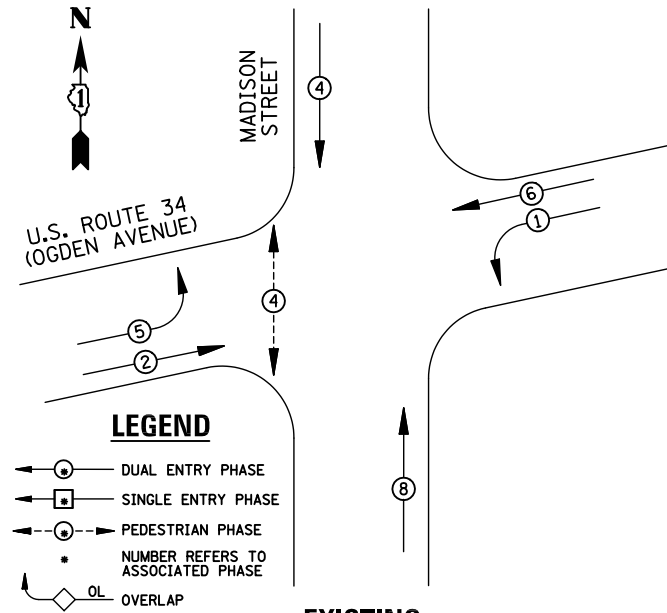
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION U.S. ROUTE 34 (OGDEN AVENUE) AT IL ROUTE 83 EAST RAMPS C AND D

PREPARED BY: **CEMCON, Ltd.**
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60504-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

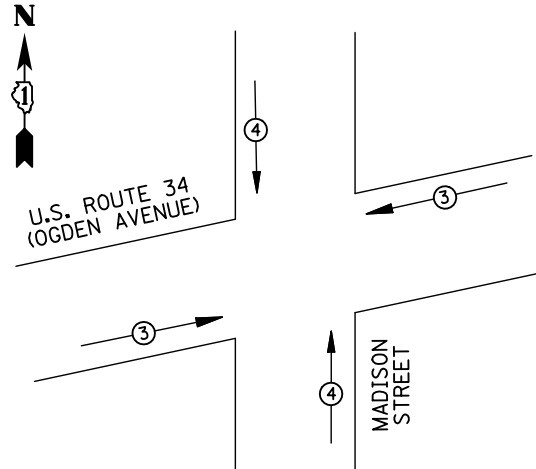
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	63
			CONTRACT NO. 60W02	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

TS# 6115 HINSDALE

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	2	90	25	1.00	50
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 381.6
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					
FILE NAME = \MICROST\352105\ 51-6130.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
	PLOT SCALE = NOT TO SCALE	DRAWN - JGC/RDS	REVISED -		
	PLOT DATE = X	CHECKED - BPT	REVISED -		
		DATE - 03-22-13	REVISED -		

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

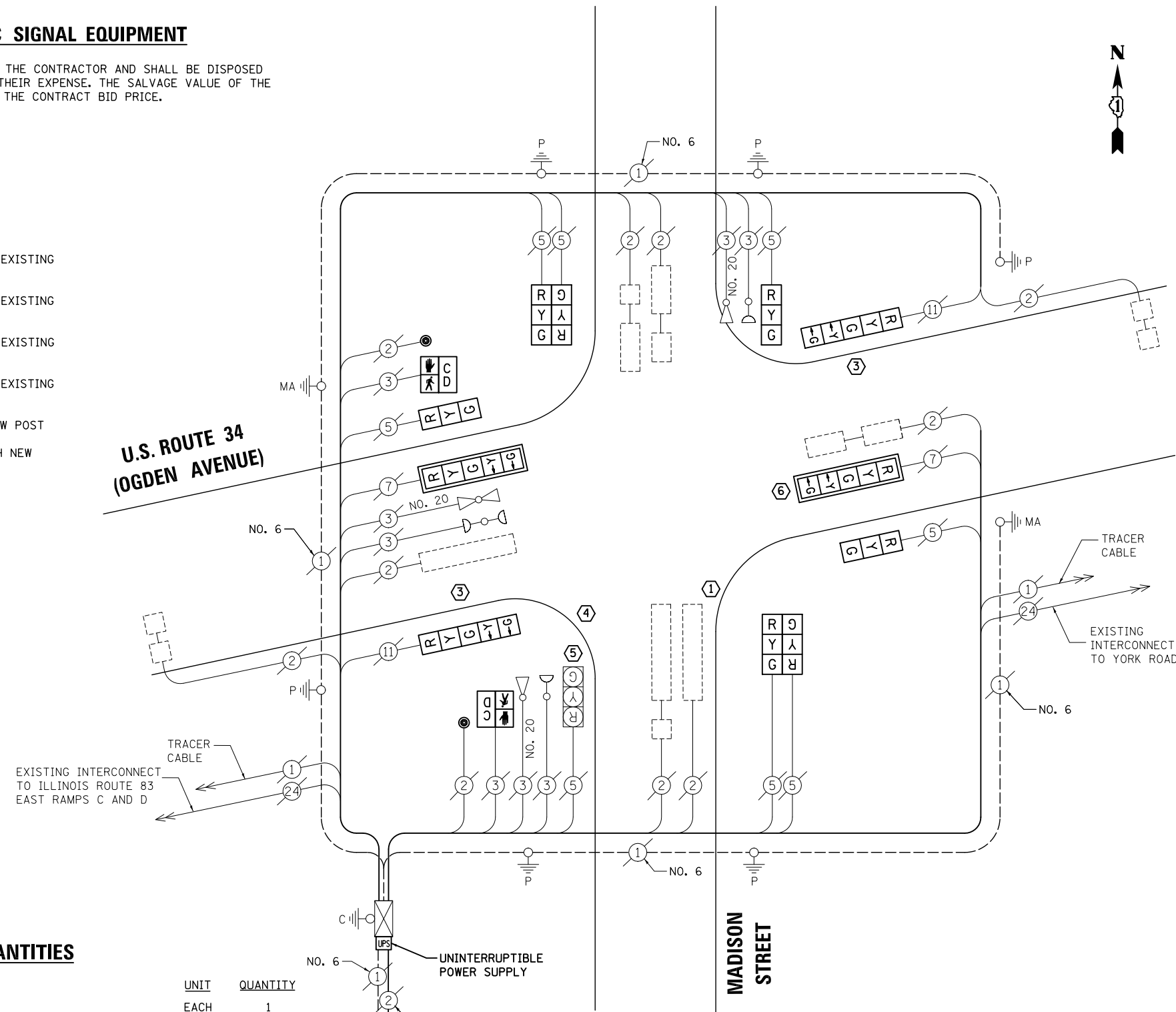
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 4 EACH TRAFFIC SIGNAL POST
 - 1 EACH SIGNAL HEAD, 5-SECTION
 - 2 EACH PEDESTRIAN SIGNAL HEAD
 - 2 EACH PEDESTRIAN PUSH-BUTTON
-
- ① REPLACE 14 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - ② REPLACE 15 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - ③ REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - ④ REPLACE 18 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - ⑤ RELOCATE EXISTING SIGNAL HEAD TO NEW POST
 - ⑥ REMOVE SIGNAL HEAD AND REPLACE WITH NEW

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
TRAFFIC SIGNAL BACKPLATE, GALVANIZED STEEL 18 FT.	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	2
RELOCATE EXISTING SIGNAL HEAD	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	1
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	2

U.S. ROUTE 34 (OGDEN AVENUE)



CABLE PLAN

RETROFIT ALL VEHICULAR SIGNAL HEADS TO L.E.D. EXCEPT AS NOTED

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

TS# 6130 HINSDALE

PREPARED BY:
CEMCON, Ltd.
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 2280 White Oak Circle, Suite 100
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 E-Mail: cadd@cemcon.com Website: www.cemcon.com

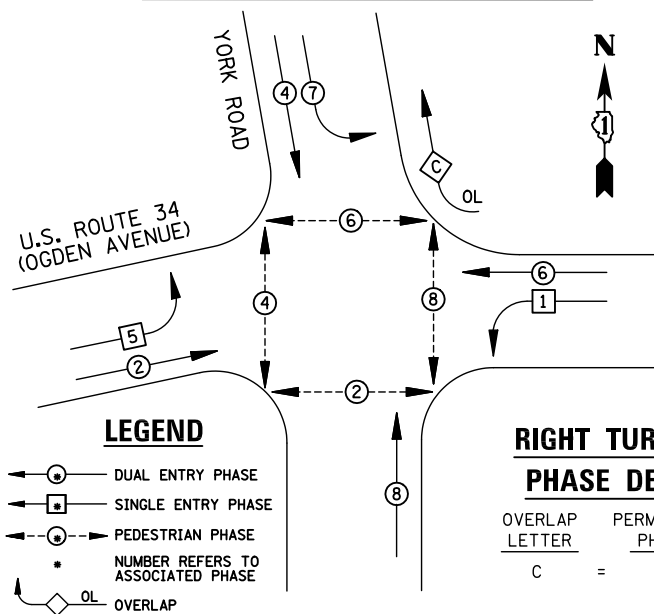
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	64
			CONTRACT NO. 60W02	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

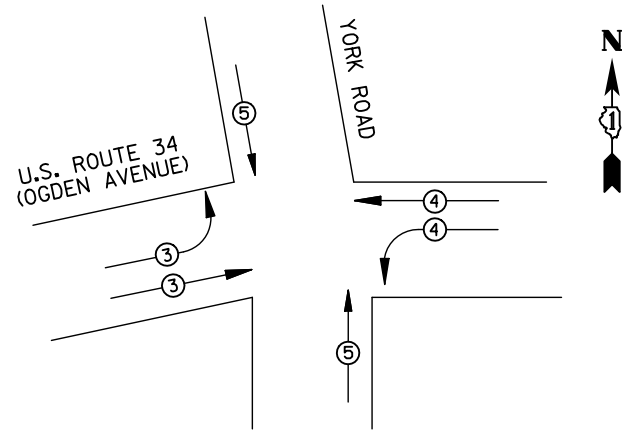
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION U.S. ROUTE 34 (OGDEN AVENUE) AT MADISON STREET

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

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT			

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		%OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	17	135	17	0.50	144.5
(YELLOW)	17	135	25	0.25	106.25
(GREEN)	17	135	15	0.25	63.75
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = X
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				
FILE NAME = \MICROST\352105\ 52-6118.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
	PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -		
	PLOT DATE = X	DATE - 03-22-13	REVISED -		

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

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

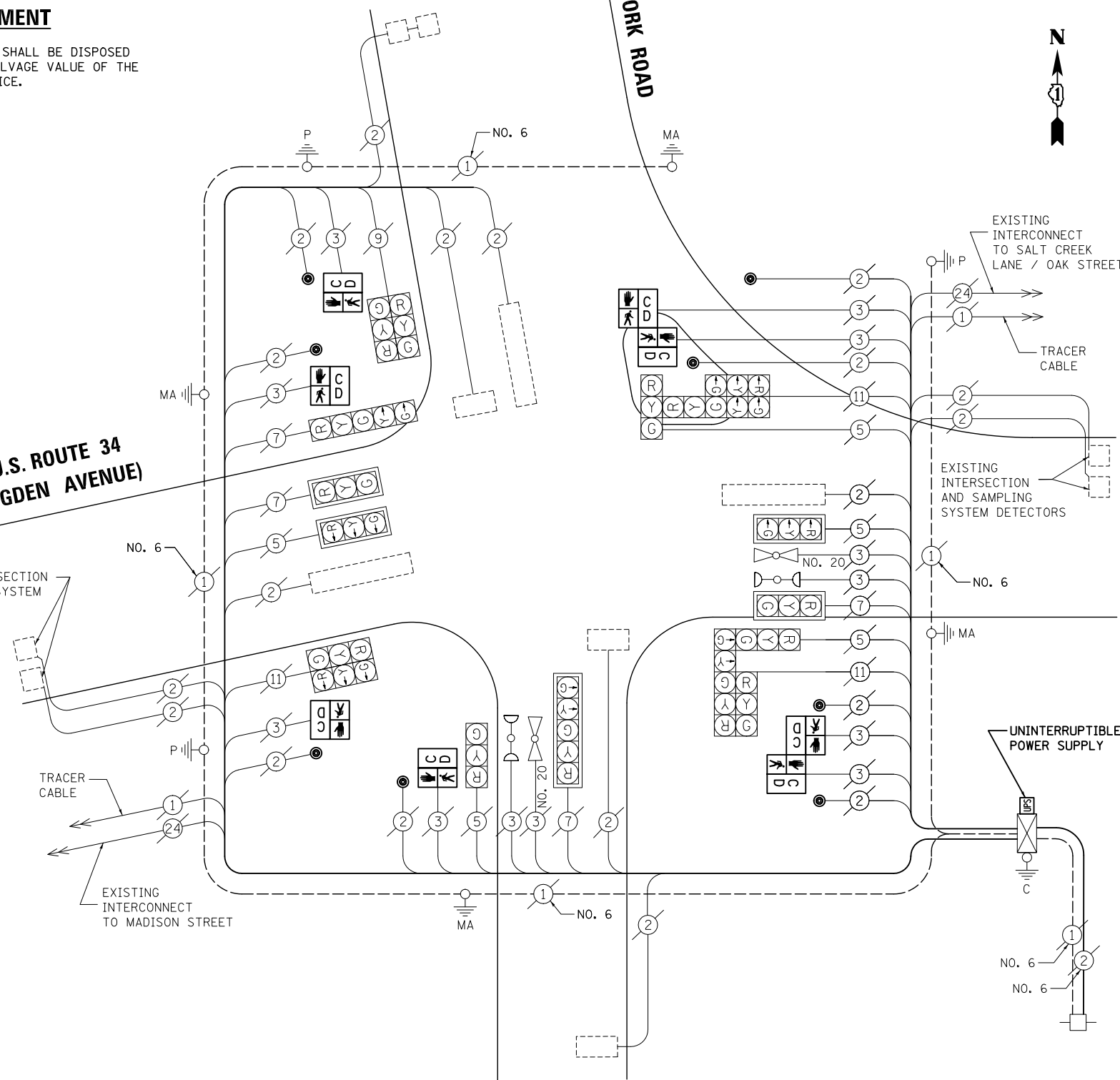
SCHEDULE OF QUANTITIES

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

U.S. ROUTE 34 (OGDEN AVENUE)

EXISTING INTERSECTION AND SAMPLING SYSTEM DETECTORS



CABLE PLAN

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

TS# 6118
HINSDALE

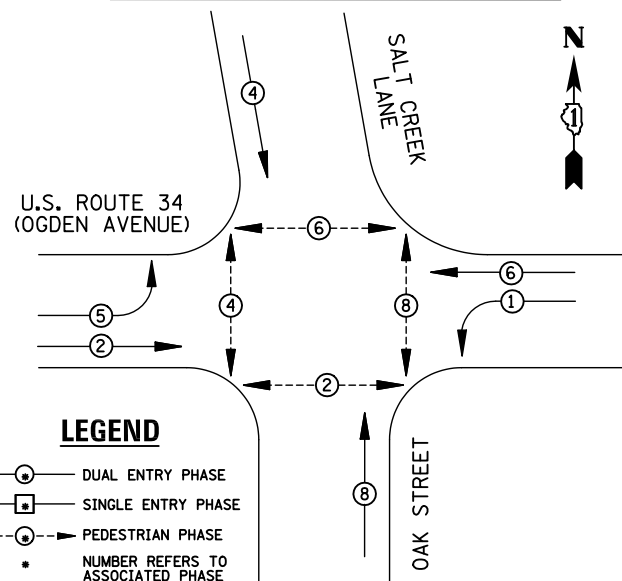
PREPARED BY:
CEMCON, Ltd.
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Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION U.S. ROUTE 34 (OGDEN AVENUE) AT YORK ROAD

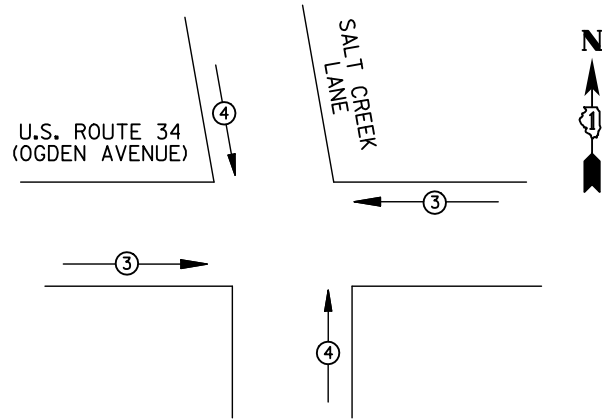
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	65
			CONTRACT NO. 60W02	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

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

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



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

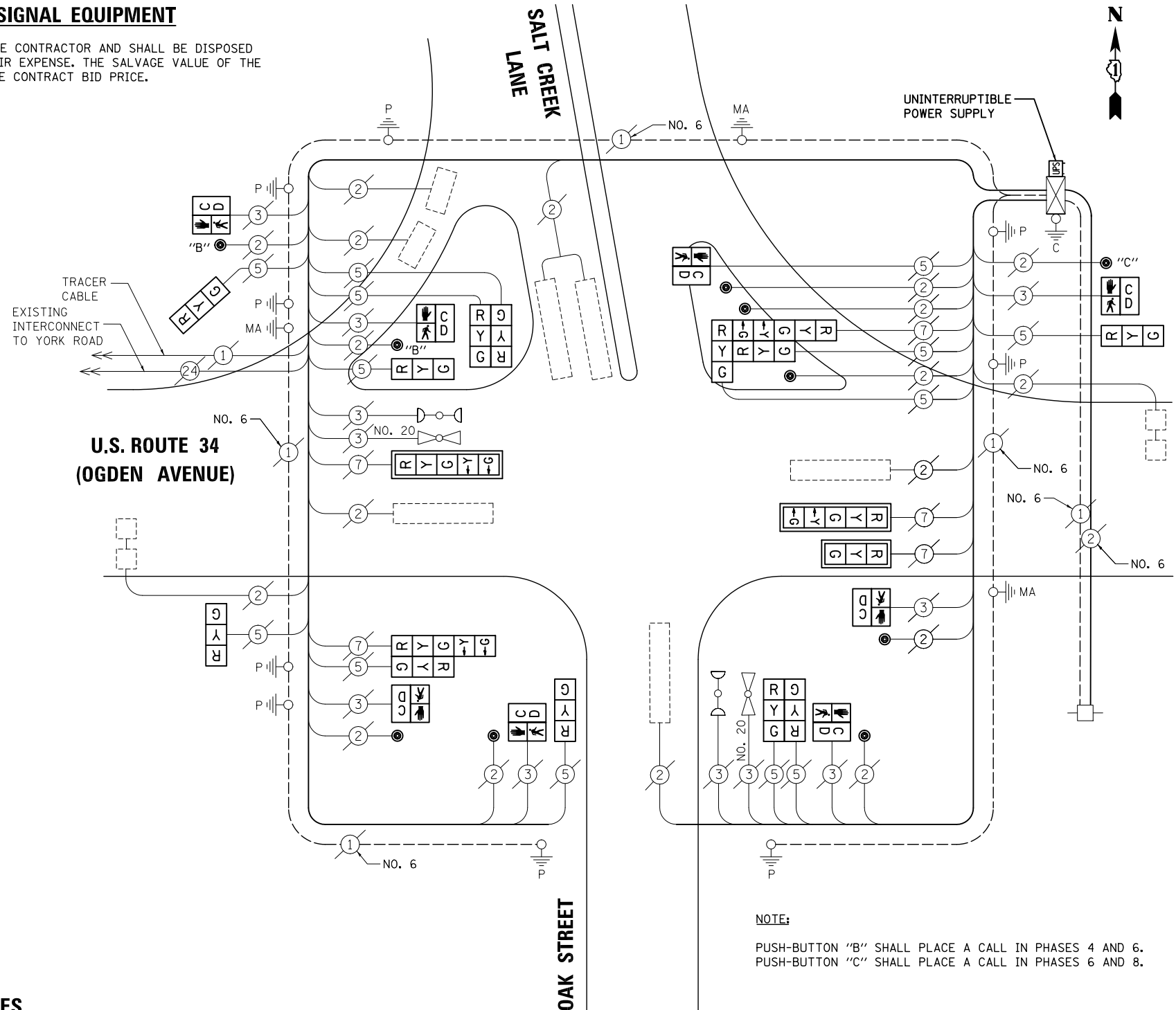
EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		%OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	17	135	17	0.50	144.5
(YELLOW)	17	135	25	0.25	106.25
(GREEN)	17	135	15	0.25	63.75
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 624.1
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					
FILE NAME =	USER NAME = JGC				
DESIGNED - BPT	REVISED -				
DRAWN - JGC/RDS	REVISED -				
CHECKED - BPT	REVISED -				
DATE - 03-22-13	REVISED -				

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

- 13 EACH SIGNAL HEAD, 3-SECTION
- 4 EACH SIGNAL HEAD, 5-SECTION
- 3 EACH TRAFFIC SIGNAL BACKPLATE
- 8 EACH PEDESTRIAN SIGNAL HEAD
- 9 EACH PEDESTRIAN PUSH-BUTTON



CABLE PLAN

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	5
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 3-FACE, 2-3 SECTION, 1-5 SECTION BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	3
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1
PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	9

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
U.S. ROUTE 34 (OGDEN AVENUE) AT SALT CREEK LANE / OAK STREET

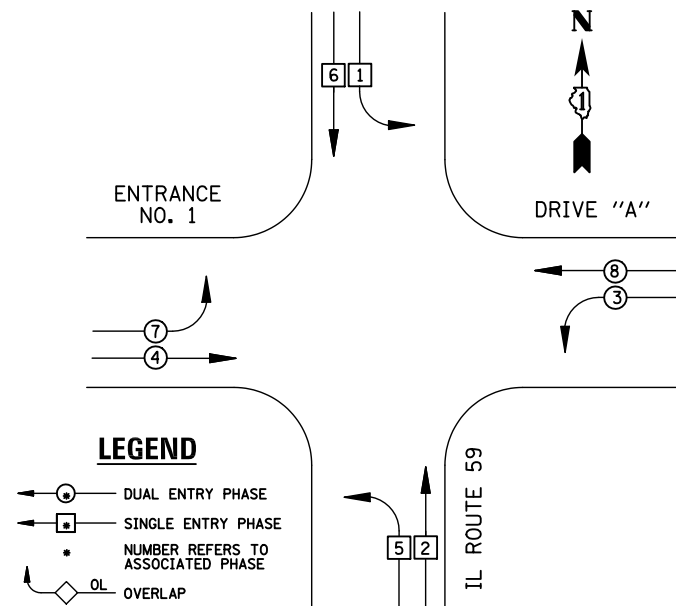
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
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E-Mail: cadd@cemcon.com Website: www.cemcon.com

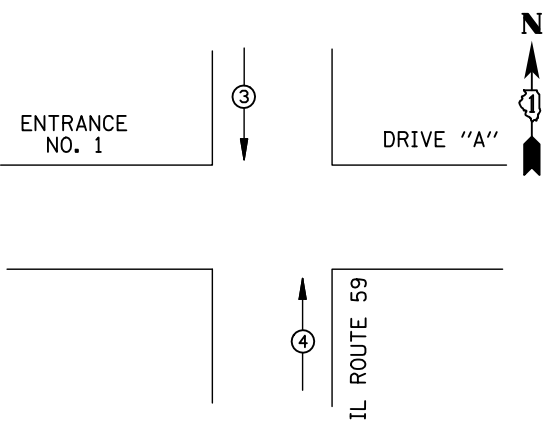
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	66
CONTRACT NO. 60W02			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

TS# 6116
HINSDALE

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	
MOVEMENT	↓	↑	

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	16	135	15	0.25	60
ARROW	8	135	12	0.10	9.6
PED. SIGNAL		90	25	1.00	100
CONTROLLER	1	100	100	1.00	
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 405.6
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					
FILE NAME = MICROST\352105\ 54-20635.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
		PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -	
		PLOT DATE = X	DATE - 03-22-13	REVISED -	

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

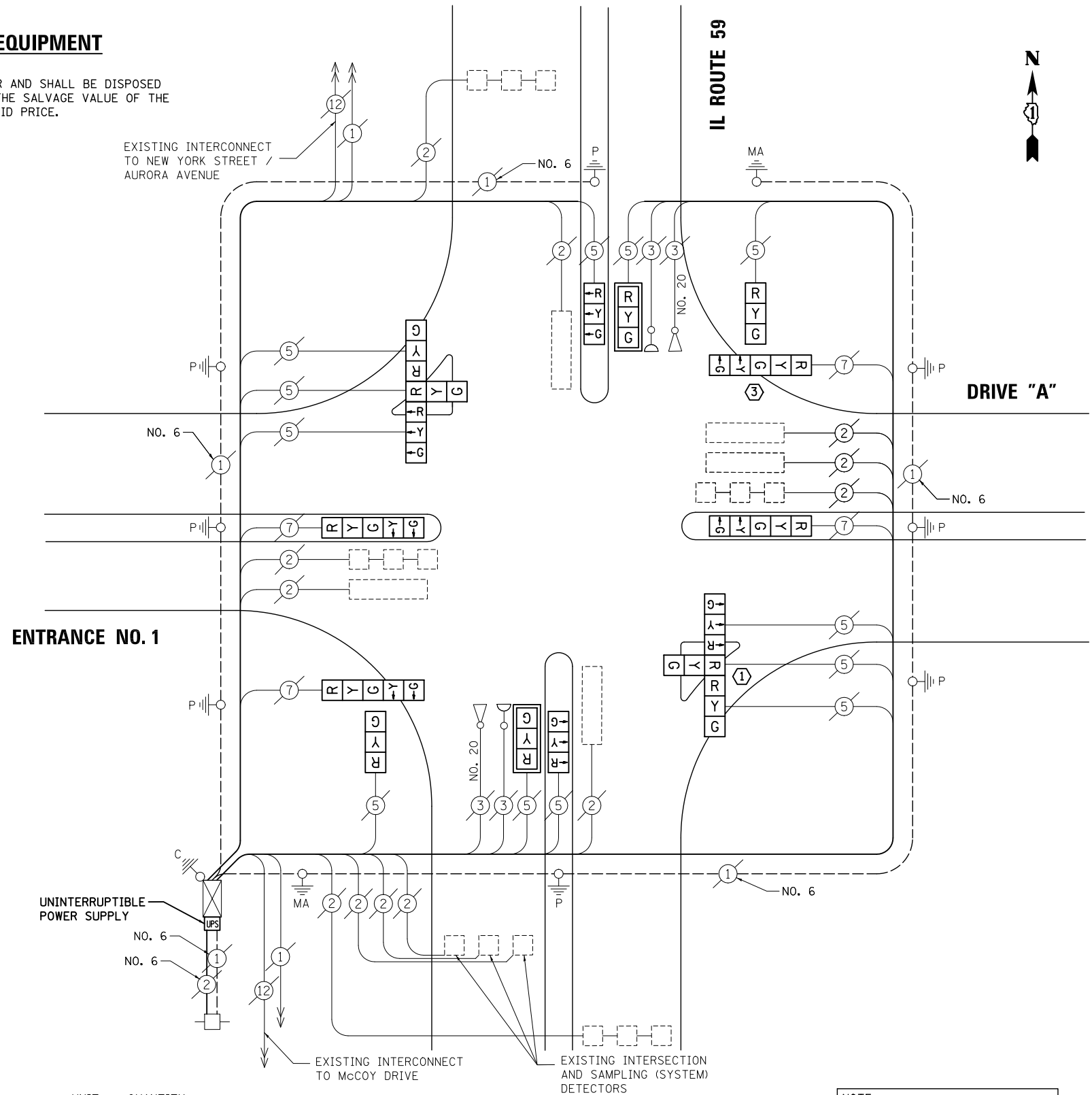
- 2 EACH TRAFFIC SIGNAL POST
- ① REPLACE 14 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
- ② REPLACE 15 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
- ③ REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
- ④ REPLACE 18 FT. PAINTED POST, RE-USE EXISTING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

SCHEDULE OF QUANTITIES

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

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

ENTRANCE NO. 1



CABLE PLAN

**RETROFIT ALL VEHICULAR
SIGNAL HEADS TO L.E.D.**

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

TS# 20635
AURORA

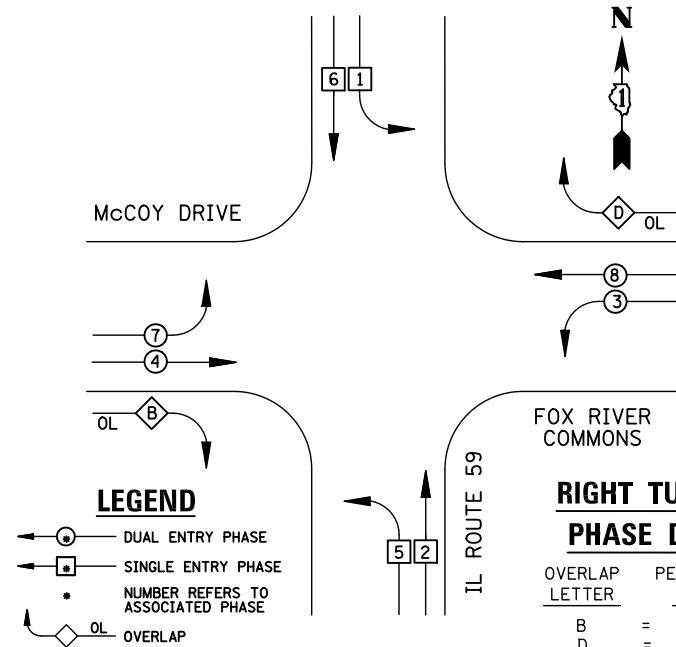
PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

**SCHEDULE OF QUANTITIES, CABLE PLAN
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
IL ROUTE 59 AND FOX VALLEY SHOPPING CENTER NORTH ENTRANCE**

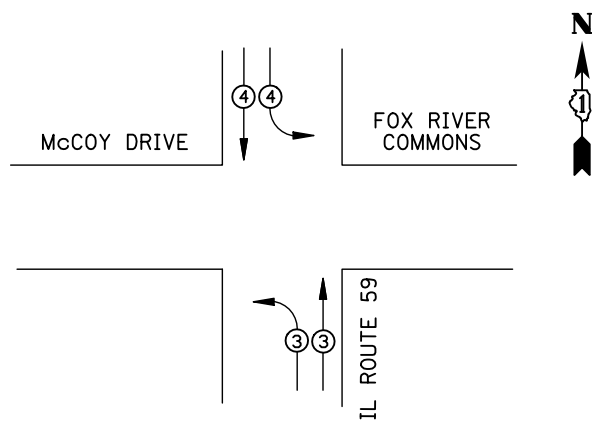
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	67
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	

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

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	20	135	17	0.50	170
(YELLOW)	20	135	25	0.25	125
(GREEN)	20	135	15	0.25	75
ARROW	16	135	12	0.10	19.2
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 489.2
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					
FILE NAME = \MICROST\352105\ 55-6089.DGN>>	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
	PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -		
	PLOT DATE = X	DATE - 03-22-13	REVISED -		

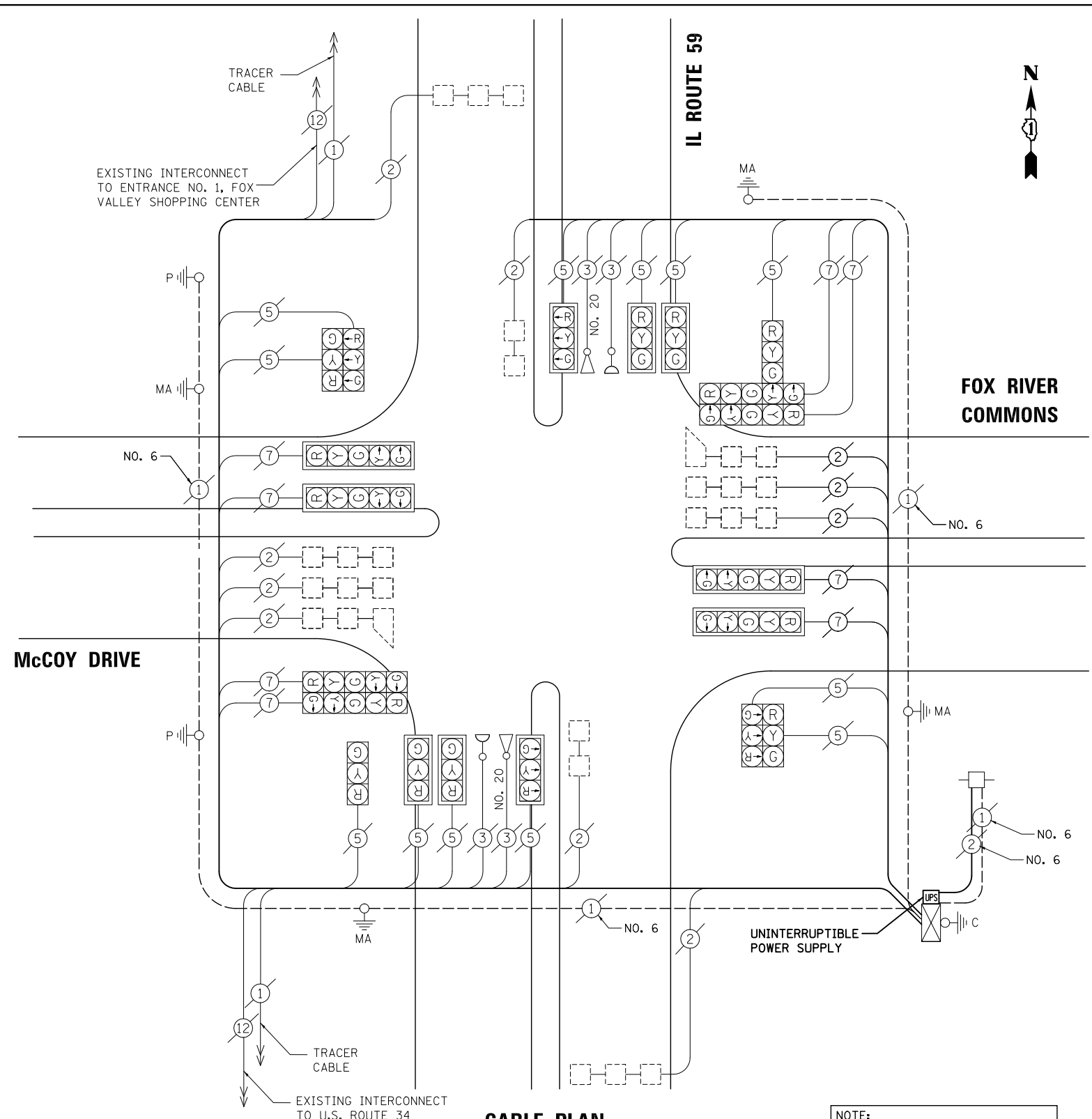
SCHEDULE OF QUANTITIES

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

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION IL ROUTE 59 AND McCOY DRIVE / FOX RIVER COMMONS

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



CABLE PLAN

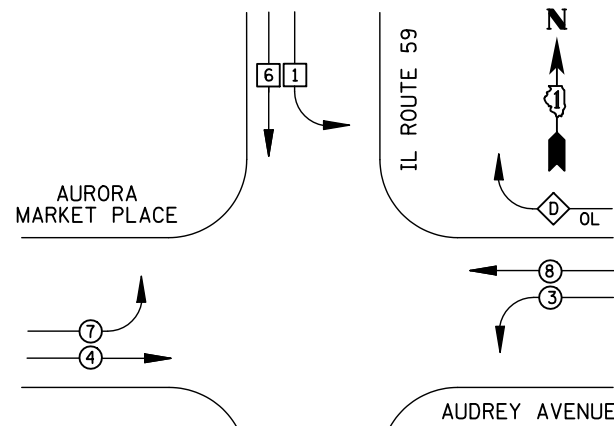
NOTE: THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
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 E-Mail: cadd@cemcon.com Website: www.cemcon.com

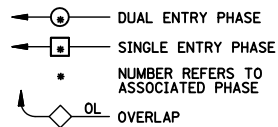
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DUPAGE	89	68
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60W02	

TS# 6089 NAPERVILLE

EXISTING CONTROLLER SEQUENCE



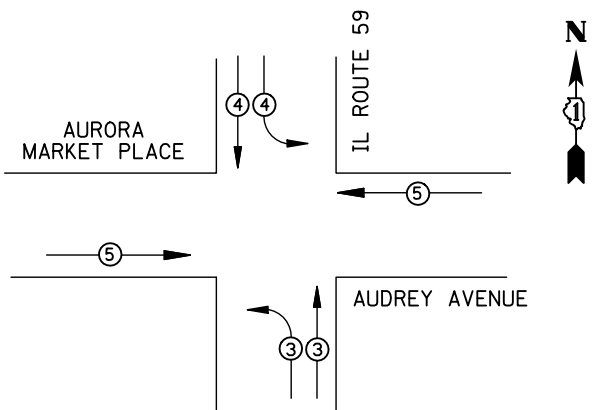
LEGEND



RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2 +	3
D	= 8 +	1

EXISTING PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	↖ ↗	↘ ↙	↔

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	
SIGNAL (RED)	20	135	17	0.50	170
(YELLOW)	20	135	25	0.25	125
(GREEN)	20	135	15	0.25	75
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	2	90	25	1.00	50
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 539.2
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

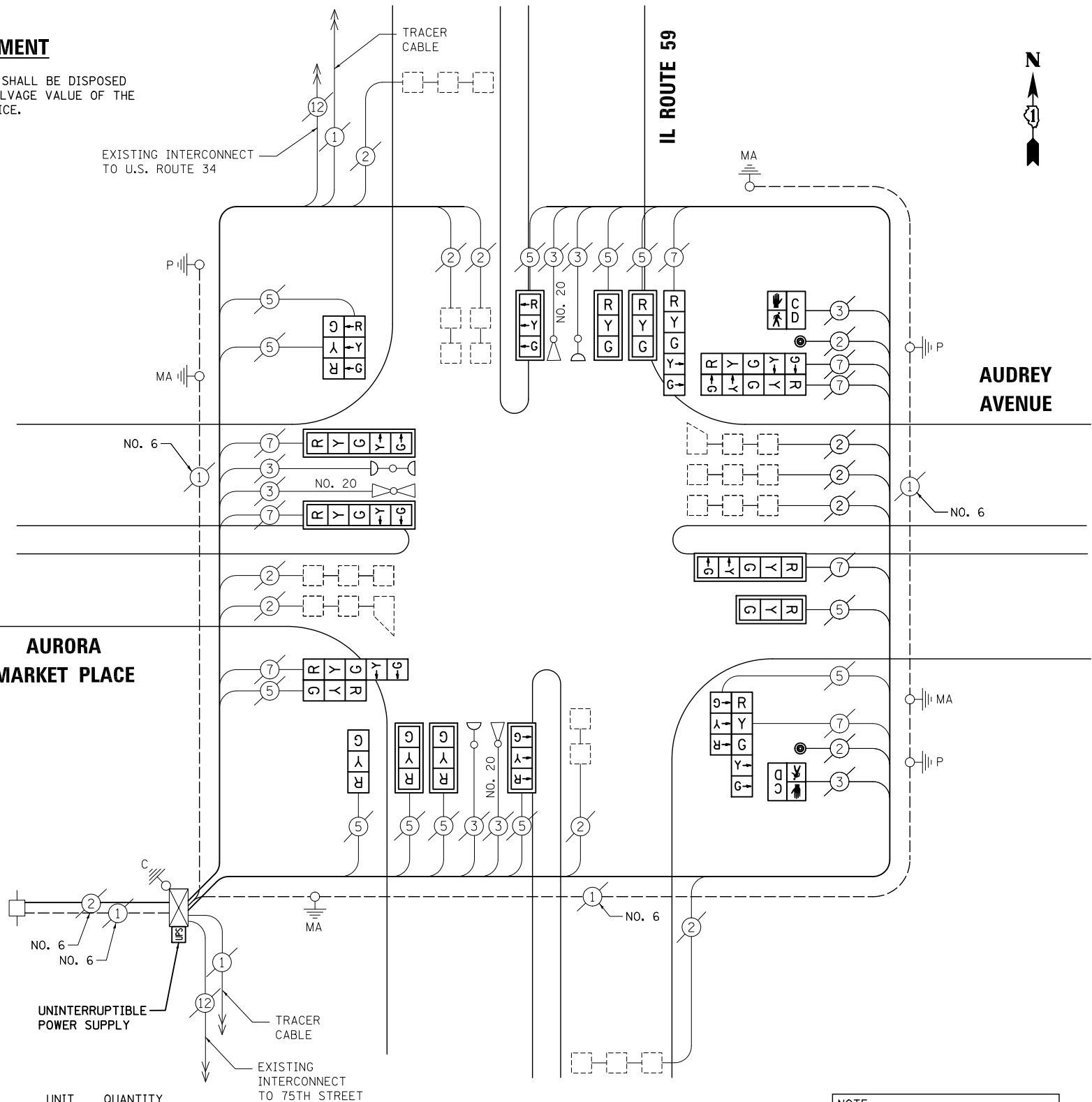
- 2 EACH PEDESTRIAN SIGNAL HEAD
- 2 EACH PEDESTRIAN PUSH-BUTTON

SCHEDULE OF QUANTITIES

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DESIGNED - BPT	REVISED -
DRAWN - JGC/RDS	REVISED -
CHECKED - BPT	REVISED -
DATE - 03-22-13	REVISED -



CABLE PLAN

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

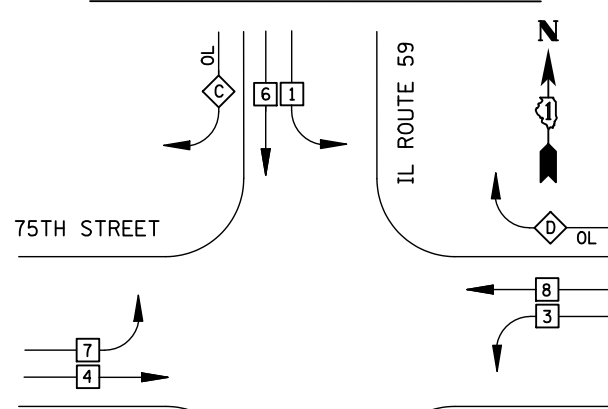
NOTE:
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

TS# 12310
AURORA

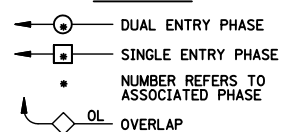
PREPARED BY: CEMCON, Ltd. Consulting Engineers, Land Surveyors & Planners 2280 White Oak Circle, Suite 100 Aurora, Illinois 60504-9675 Ph: 630.862.2100 Fax: 630.862.2199 E-Mail: cadd@cemcon.com Website: www.cemcon.com			
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS
VAR.	2012-084TS	DUPAGE	89
			SHEET NO. 69
CONTRACT NO. 60W02			
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION IL ROUTE 59 AND AUDREY AVENUE / AURORA MARKET PLACE			
SCALE: N.T.S.	SHEET NO.	OF SHEETS	STA. TO STA.

EXISTING CONTROLLER SEQUENCE



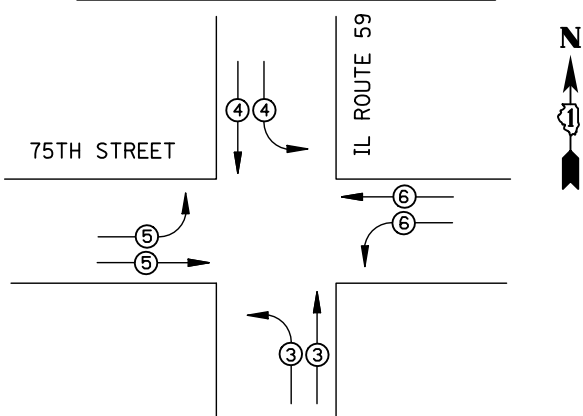
LEGEND



RIGHT TURN OVERLAP PHASE DESIGNATION

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

EXISTING PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	↖ ↗	↘ ↙	↔	↕

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	
SIGNAL (RED)	22	135	17	0.50	187
(YELLOW)	22	135	25	0.25	137.5
(GREEN)	22	135	15	0.25	82.5
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	2	90	25	1.00	50
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 566.6
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				

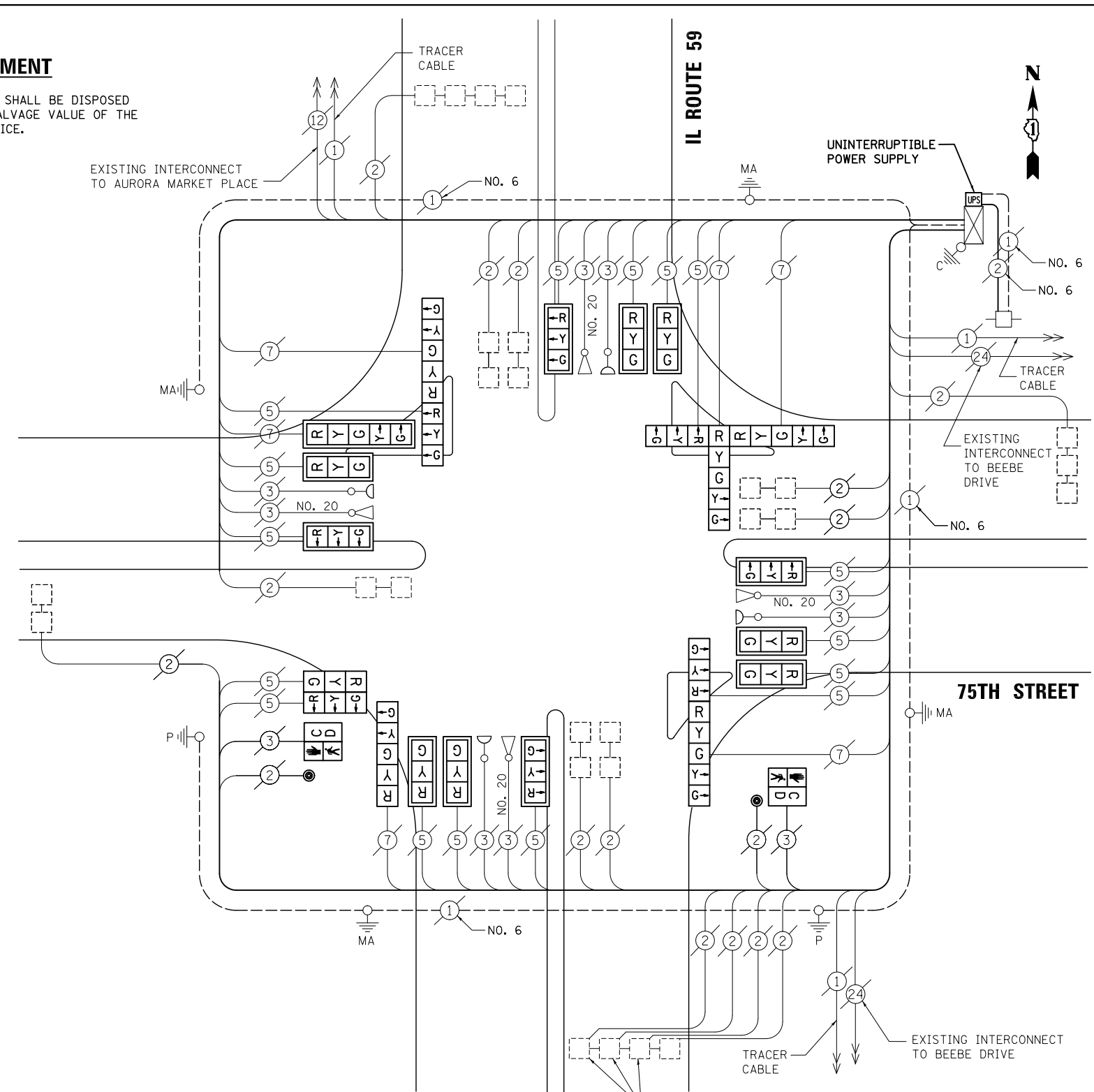
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

- 2 EACH PEDESTRIAN SIGNAL HEAD
- 2 EACH PEDESTRIAN PUSH-BUTTON

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN PUSH-BUTTON	EACH	2
MODIFY EXISTING CONTROLLER SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 3-FACE, 1-3 SECTION, 2-5 SECTION, BRACKET MOUNTED, RETROFIT	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	11
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	1
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	1



CABLE PLAN

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

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

TS# 6360 AURORA

PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60504-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DUPAGE	89	70

CONTRACT NO. 60W02
 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

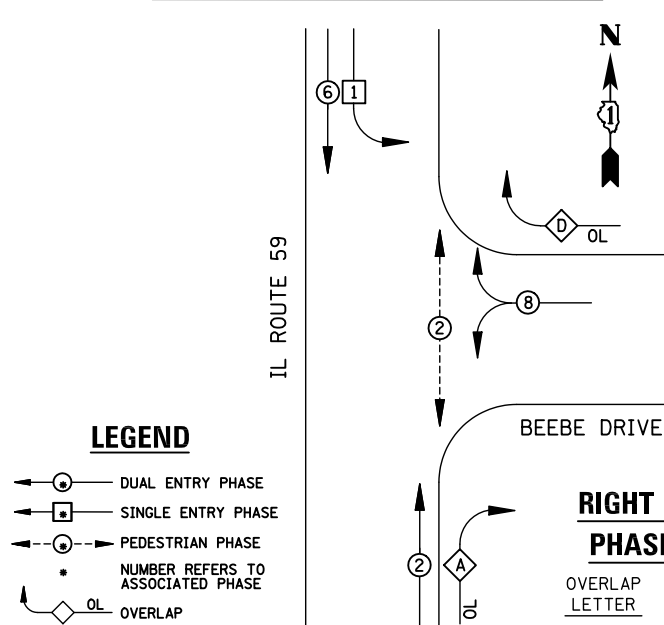
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION IL ROUTE 59 AND 75TH STREET

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

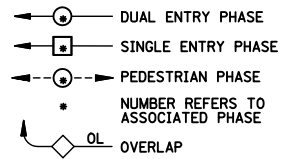
DESIGNED - BPT	REVISED -
DRAWN - JGC/RDS	REVISED -
CHECKED - BPT	REVISED -
DATE - 03-22-13	REVISED -

FILE NAME = \MICROST\352105\ 57-6360.DGN	USER NAME = JGC
PLOT SCALE = NOT TO SCALE	
PLOT DATE = X	

EXISTING CONTROLLER SEQUENCE



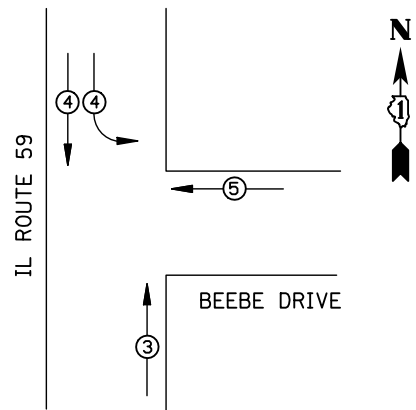
LEGEND



RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2 + 8	
D	= 8 + 1	

EXISTING PHASE DESIGNATION DIAGRAM



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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	
SIGNAL (RED)	13	135	17	0.50	110.5
(YELLOW)	13	135	25	0.25	81.25
(GREEN)	13	135	15	0.25	48.75
ARROW	4	135	12	0.10	4.8
PED. SIGNAL	2	90	25	1.00	50
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 395.3
ENERGY SUPPLY CONTACT:	X				
PHONE:	X				
COMPANY:	X				

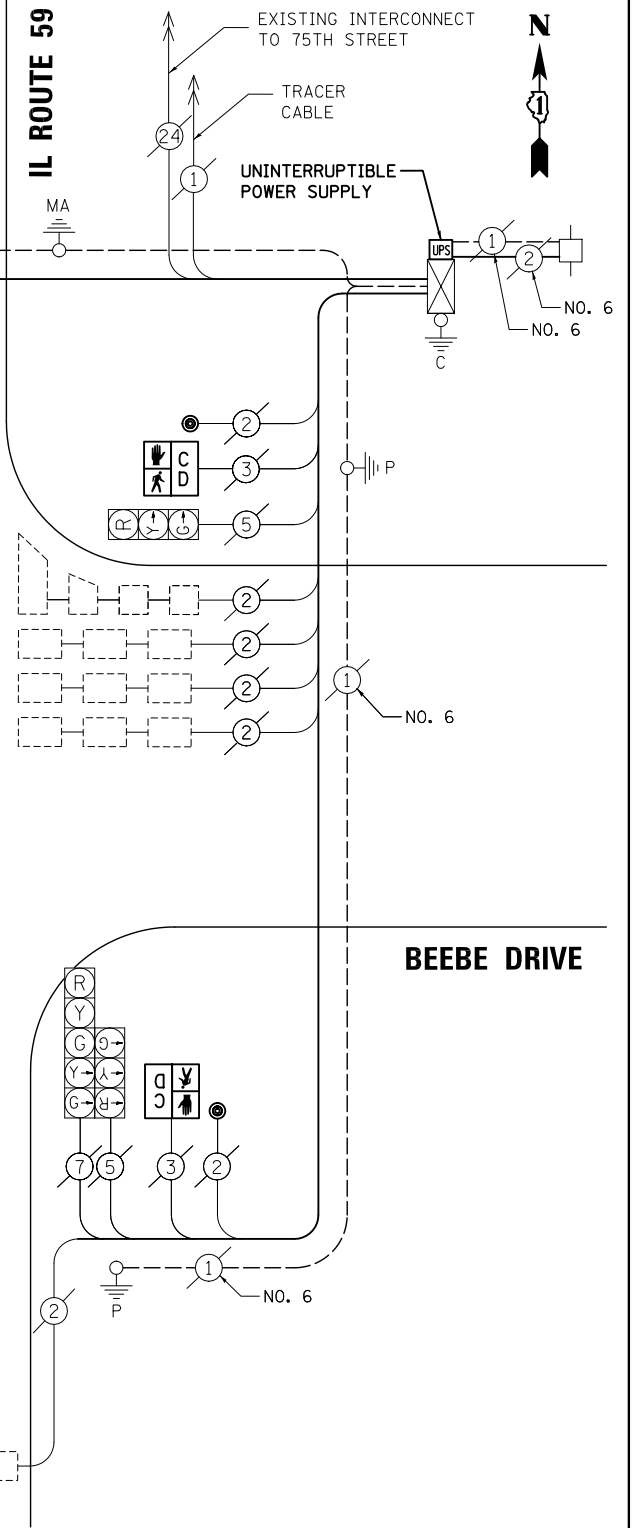
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

- 2 EACH PEDESTRIAN SIGNAL HEAD
- 2 EACH PEDESTRIAN PUSH-BUTTON

SCHEDULE OF QUANTITIES

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



CABLE PLAN

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

FILE NAME = \MICROST\352105\ 58-6362.DGN

USER NAME = JGC
 DESIGNED - BPT
 DRAWN - JGC/RDS
 PLOT SCALE = NOT TO SCALE
 PLOT DATE = X

REVISIED -
 REVISIED -
 REVISIED -
 REVISIED -
 DATE - 03-22-13

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN,
 PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
 IL ROUTE 59 AND BEEBE DRIVE / COSTCO ENTRANCE

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

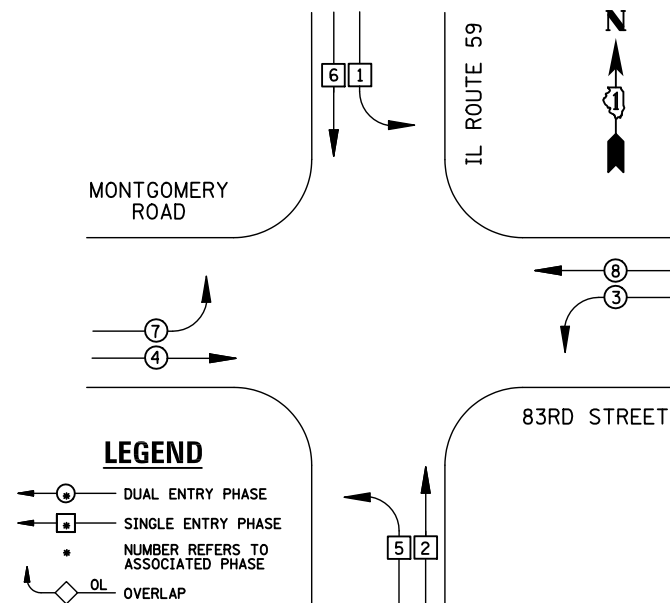
PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60504-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DUPAGE	89	71

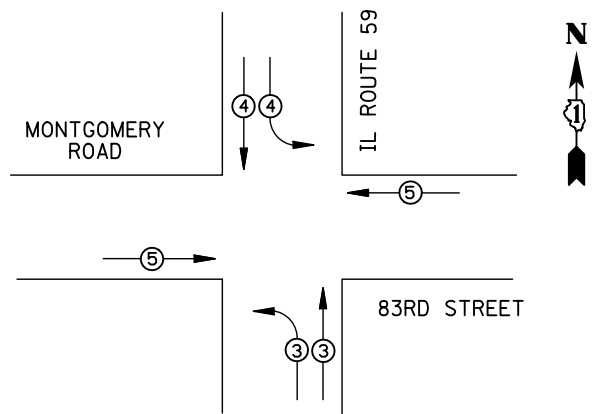
CONTRACT NO. 60W02
 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

TS# 6362
 NAPERVILLE

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT			

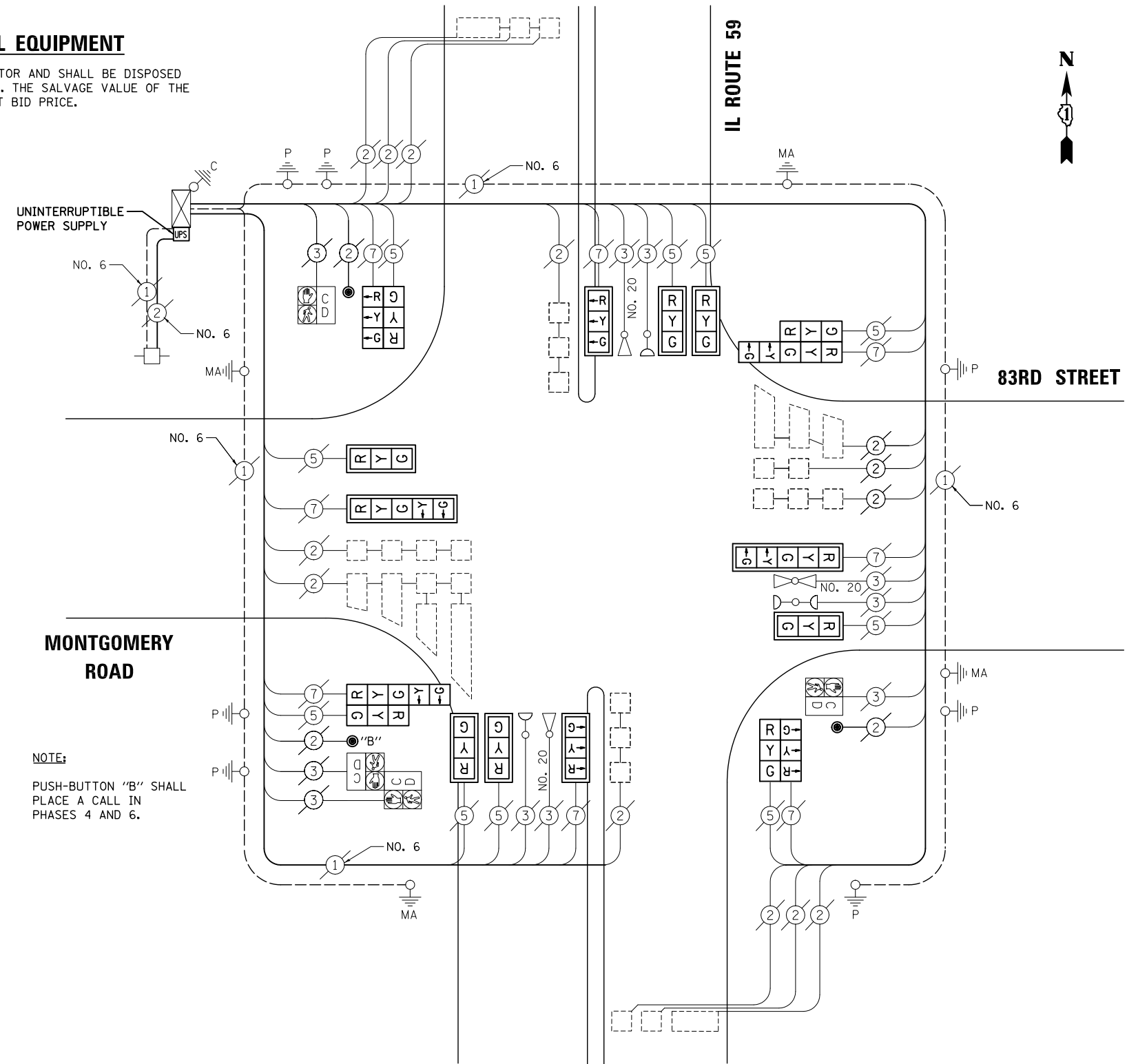
EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	18	135	17	0.50	153
(YELLOW)	18	135	25	0.25	112.5
(GREEN)	18	135	15	0.25	67.5
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	4	90	25	1.00	100
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 542.6
ENERGY SUPPLY CONTACT:	X				
PHONE:	X				
COMPANY:	X				
FILE NAME = MICROST\352105\ 59-11970.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
		PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -	
		PLOT DATE = X	DATE - 03-22-13	REVISED -	

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

- 3 EACH PEDESTRIAN PUSH-BUTTON



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

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	3
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, BRACKET MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	8
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	2

CABLE PLAN

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

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

TS# 11970
AURORA

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

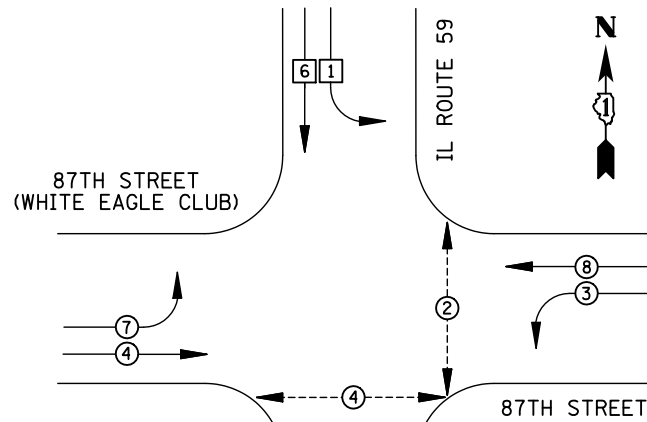
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN
AND PHASE DESIGNATION DIAGRAM
IL ROUTE 59 AND 83RD STREET / MONTGOMERY ROAD

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DUPAGE	89	72
CONTRACT NO. 60W02			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

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

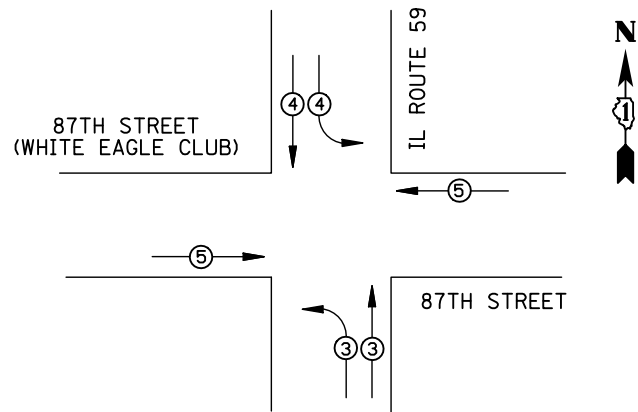
EXISTING CONTROLLER SEQUENCE



LEGEND

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

EXISTING PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	↕	↕	↕

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	18	135	17	0.50	153
(YELLOW)	18	135	25	0.25	112.5
(GREEN)	18	135	15	0.25	67.5
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	4	90	25	1.00	100
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 542.6
ENERGY SUPPLY CONTACT:	X				
PHONE:	X				
COMPANY:	X				

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

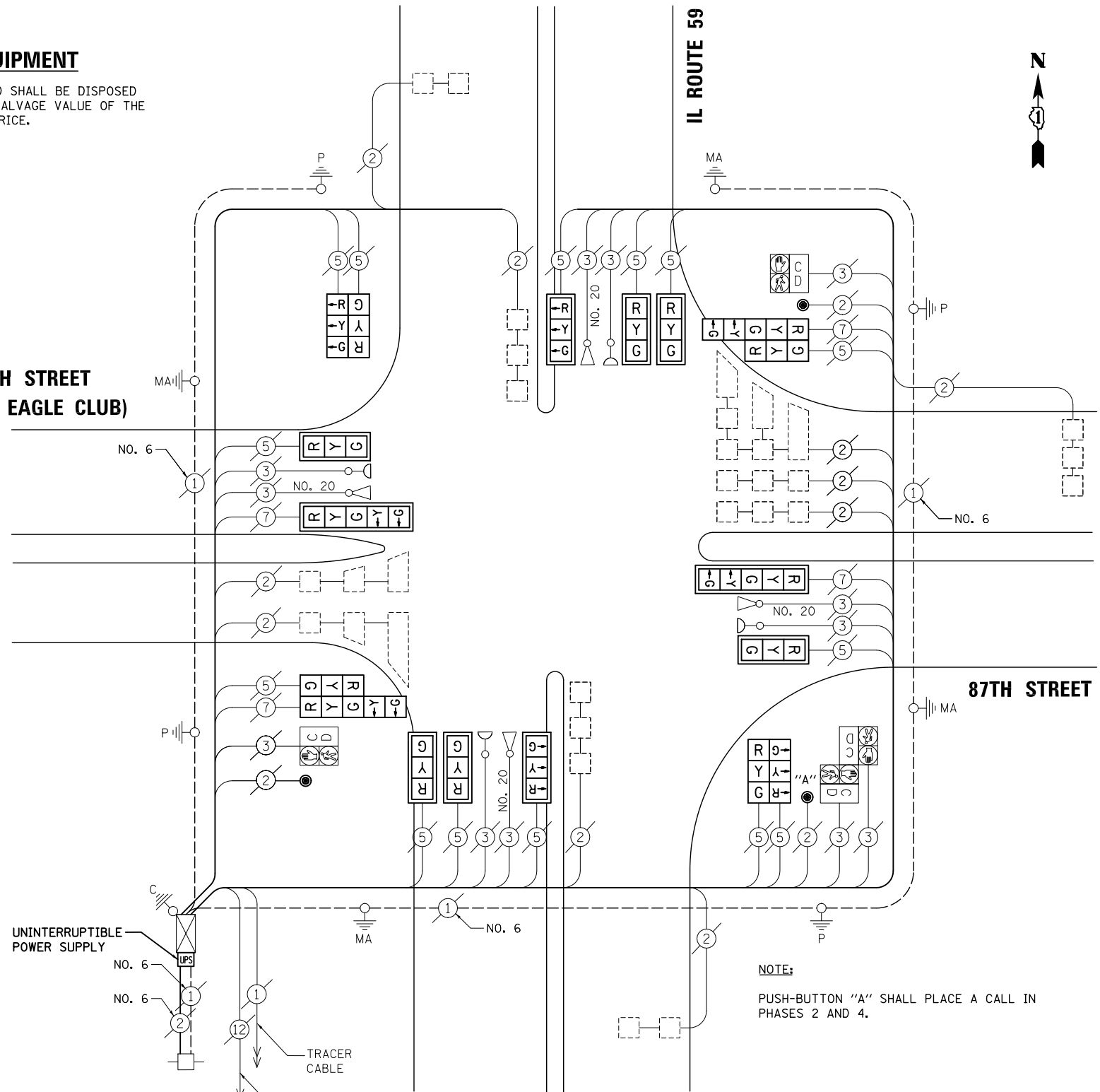
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 3 EACH PEDESTRIAN PUSH-BUTTON

SCHEDULE OF QUANTITIES

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

87TH STREET (WHITE EAGLE CLUB)



CABLE PLAN

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

NOTE:
PUSH-BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.

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

TS# 6092
AURORA

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

FILE NAME =
MICROST\352105\ 60-6092.DGN

USER NAME = JGC
DESIGNED - BPT
DRAWN - JGC/RDS
PLOT SCALE = NOT TO SCALE
PLOT DATE = X

REVISIONS:
REVISED -
REVISED -
REVISED -
REVISED -

DATE - 03-22-13

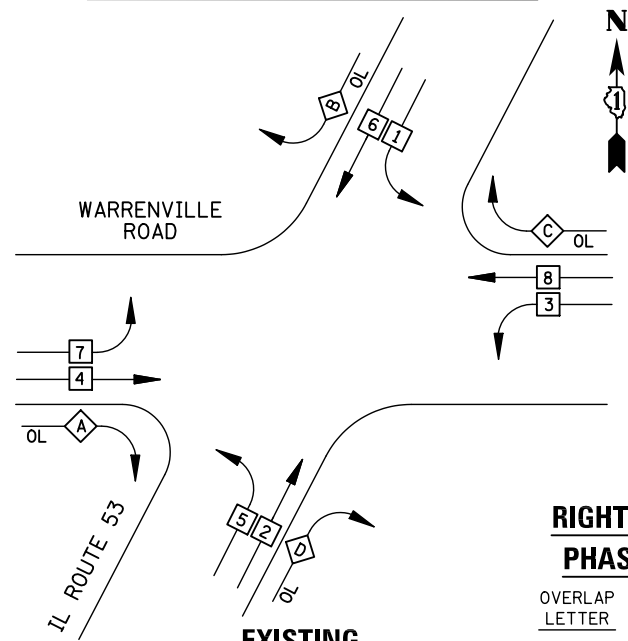
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
IL ROUTE 59 AND 87TH STREET / WHITE EAGLE CLUB**

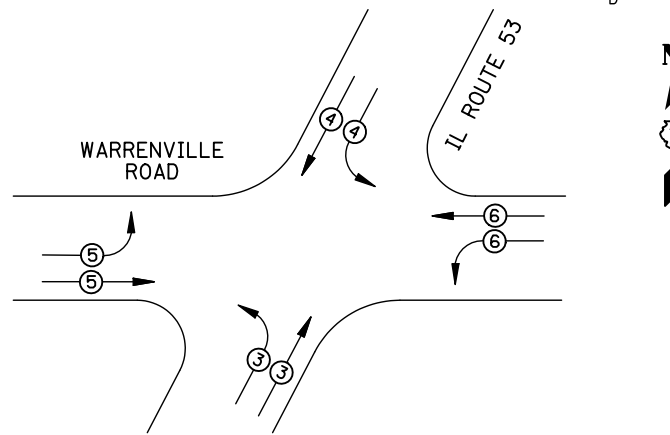
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DUPAGE	89	73
CONTRACT NO. 60W02			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT				

EMERGENCY VEHICLE PREEMPTION SEQUENCE

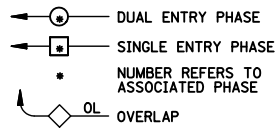
I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		%OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	19	135	17	0.50	161.5
(YELLOW)	19	135	25	0.25	118.75
(GREEN)	19	135	15	0.25	71.25
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	4	90	25	1.00	100
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 570.7
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

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

LEGEND



RIGHT TURN OVERLAP PHASE DESIGNATION

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

SCHEDULE OF QUANTITIES

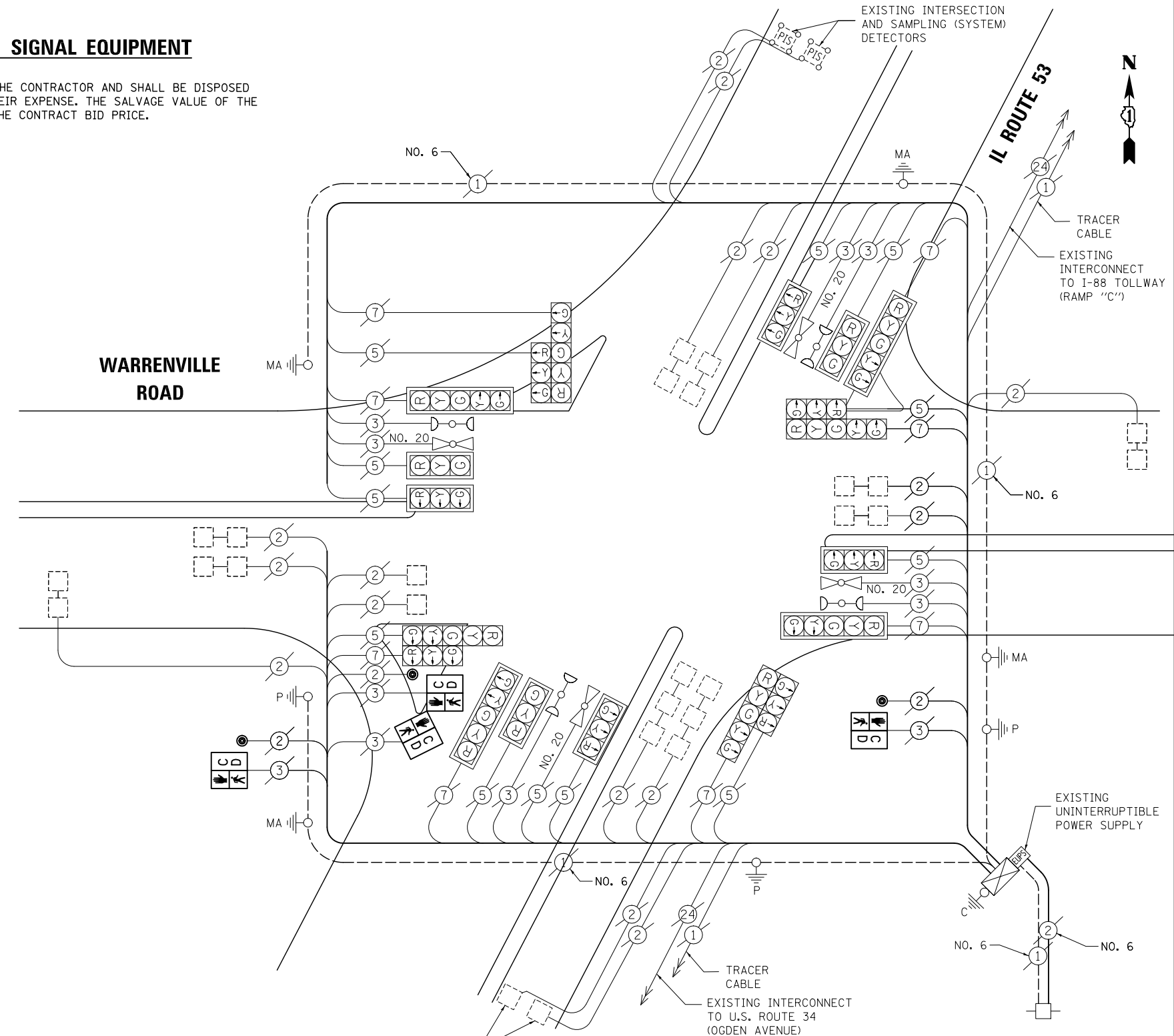
ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	3
REMOVE EXISTING TRAFFIC SIGNAL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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DESIGNED - BPT	REVISED -
DRAWN - JGC/RDS	REVISED -
CHECKED - BPT	REVISED -
DATE - 03-22-13	REVISED -

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION IL ROUTE 53 AND WARRENVILLE ROAD

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



CABLE PLAN

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

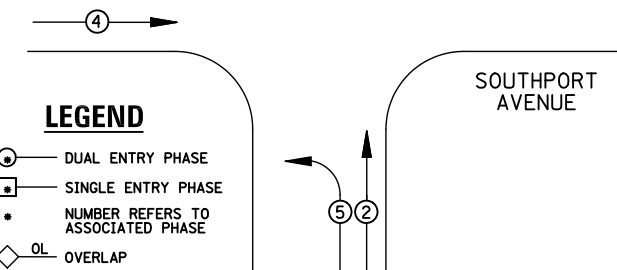
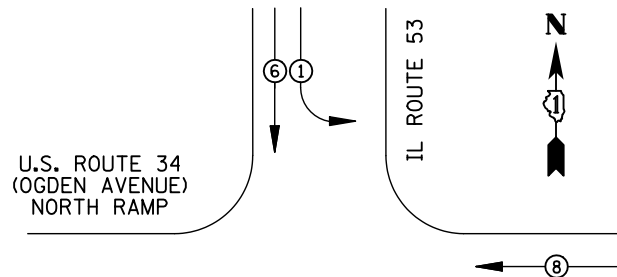
TS# 11665
LISLE

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DUPAGE	89	74

CONTRACT NO. 60W02
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

EXISTING CONTROLLER SEQUENCE



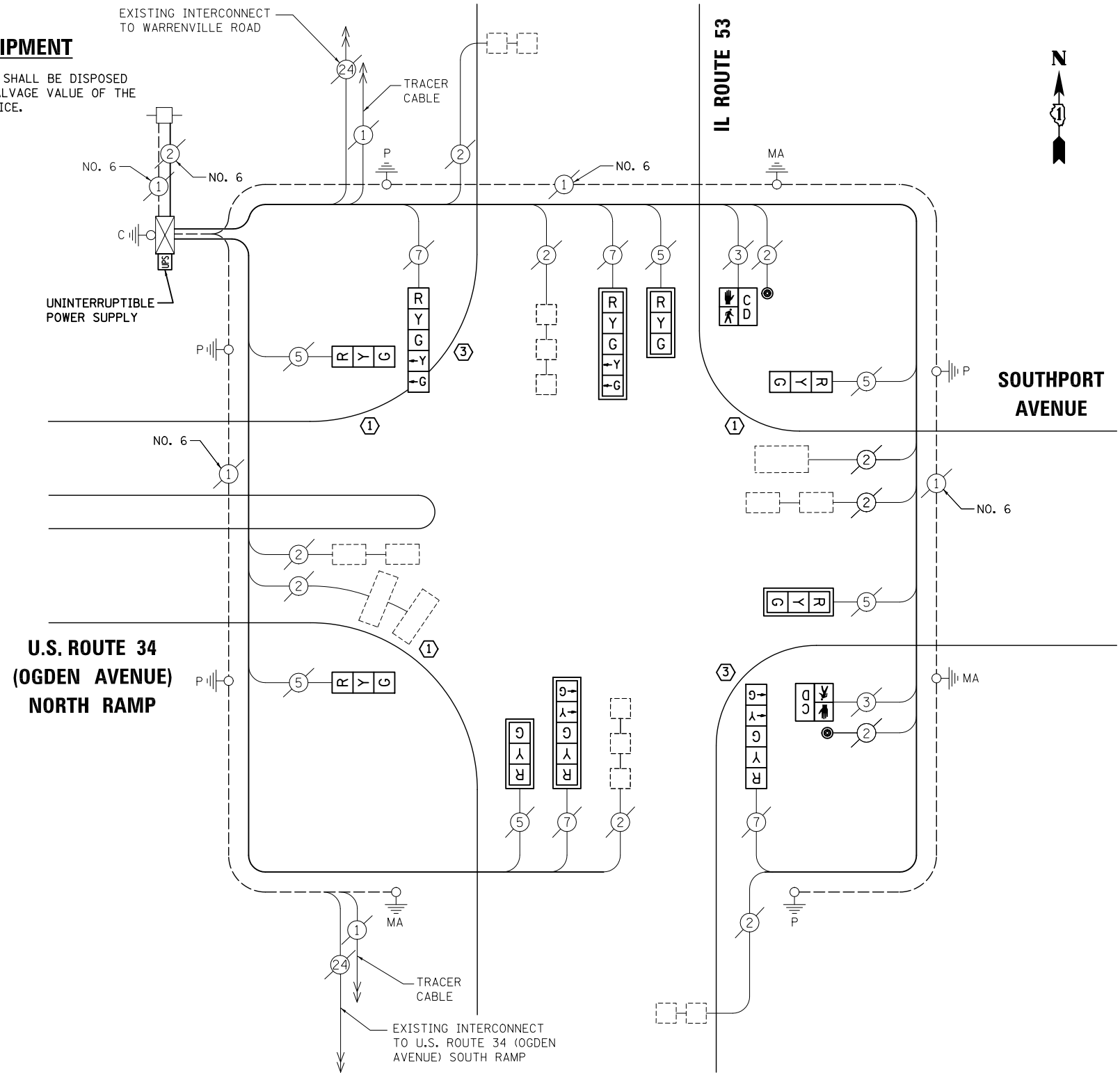
EXISTING PHASE DESIGNATION DIAGRAM

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

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

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



CABLE PLAN

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

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	10	135	17	0.50	85
(YELLOW)	10	135	25	0.25	62.5
(GREEN)	10	135	15	0.25	37.5
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	2	90	25	1.00	50
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 344.6
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					
FILE NAME = MICROST\352105\ 62-11688.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
		PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -	
		PLOT DATE = X	DATE - 03-22-13	REVISED -	

SCHEDULE OF QUANTITIES

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

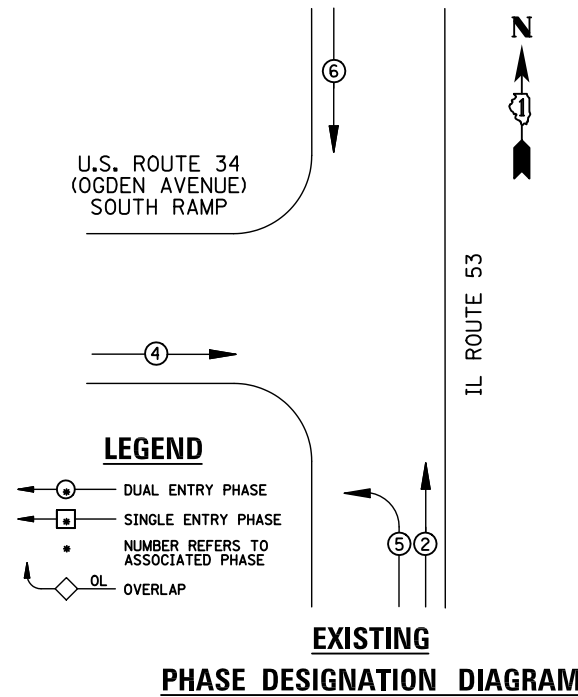
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN
AND PHASE DESIGNATION DIAGRAM
IL ROUTE 53 AND U.S. ROUTE 34 NORTH RAMP / SOUTHPORT AVENUE
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

PREPARED BY: CEMCON, Ltd. Consulting Engineers, Land Surveyors & Planners 2280 White Oak Circle, Suite 100 Aurora, Illinois 60504-9675 Ph: 630.862.2100 Fax: 630.862.2199 E-Mail: cadd@cemcon.com Website: www.cemcon.com			
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS
VAR.	2012-084TS	DUPAGE	89
			SHEET NO. 75
			CONTRACT NO. 60W02
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			

TS# 11680
LISLE

EXISTING CONTROLLER SEQUENCE

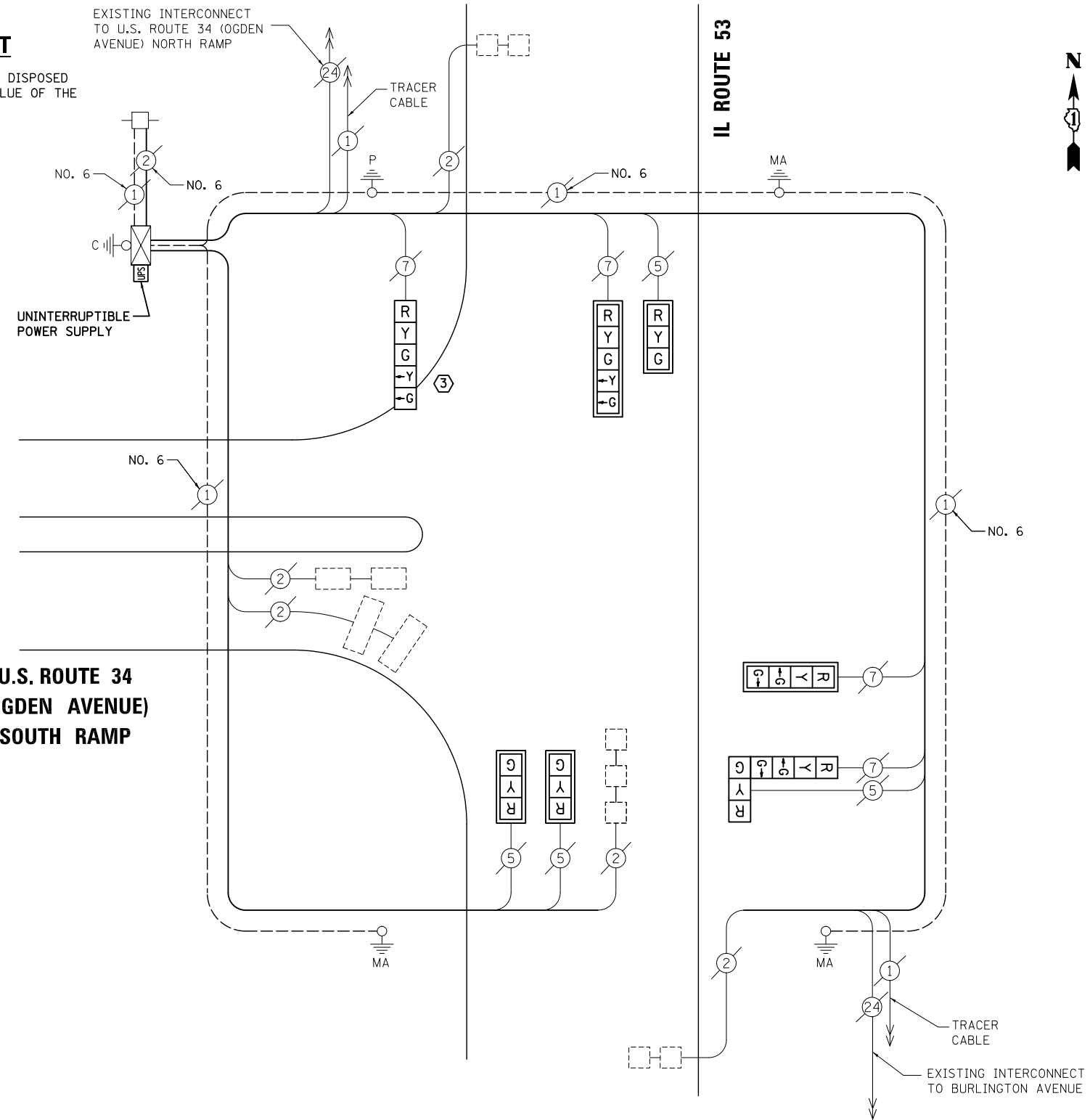


REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

- 1 EACH TRAFFIC SIGNAL POST
 - 4 EACH SIGNAL HEAD, 3-SECTION
 - 2 EACH SIGNAL HEAD, 4-SECTION
 - 2 EACH SIGNAL HEAD, 5-SECTION
 - 5 EACH TRAFFIC SIGNAL BACKPLATE
-
- ① REPLACE 14 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - ② REPLACE 15 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - ③ REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - ④ REPLACE 18 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION

U.S. ROUTE 34 (OGDEN AVENUE) SOUTH RAMP



CABLE PLAN

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

SCHEDULE OF QUANTITIES

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

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	10	135	17	0.50	85
(YELLOW)	8	135	25	0.25	50
(GREEN)	8	135	15	0.25	50
ARROW	4	135	12	0.10	4.8
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 289.8
ENERGY SUPPLY CONTACT:	X				
PHONE:	X				
COMPANY:	X				
FILE NAME =	USER NAME = JGC	DESIGNED - BPT	REVISED -		
\\MICROST\352105\ 63-11685.DGN		DRAWN - JGC/RDS	REVISED -		
	PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -		
	PLOT DATE = X	DATE - 03-22-13	REVISED -		

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES, CABLE PLAN
AND PHASE DESIGNATION DIAGRAM
IL ROUTE 53 AND U.S. ROUTE 34 SOUTH RAMP**

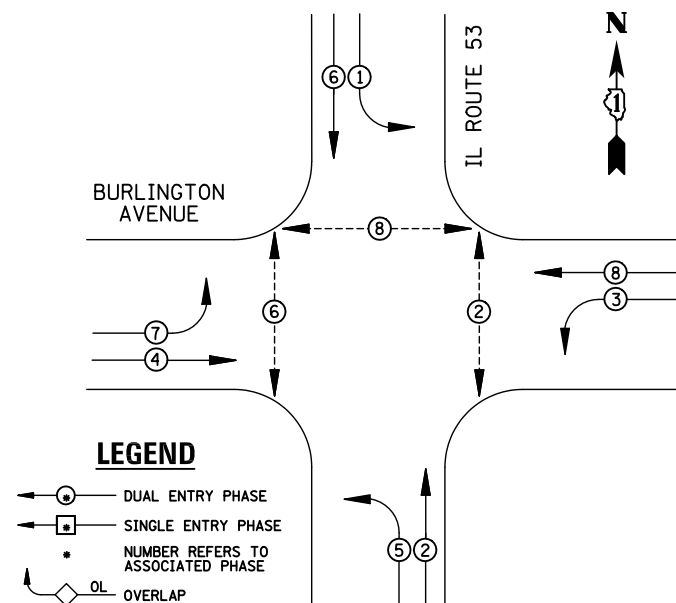
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
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E-Mail: cadd@cemcon.com Website: www.cemcon.com

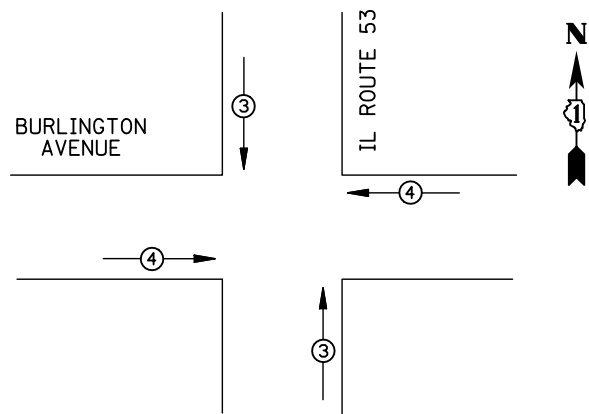
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DUPAGE	89	76
CONTRACT NO. 60W02			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

TS# 11685
LISLE

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	
SIGNAL (RED)	10	135	17	0.50	85
(YELLOW)	10	135	25	0.25	62.5
(GREEN)	10	135	15	0.25	37.5
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	6	90	25	1.00	150
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 454.2
ENERGY SUPPLY CONTACT:	X				
PHONE:	X				
COMPANY:	X				

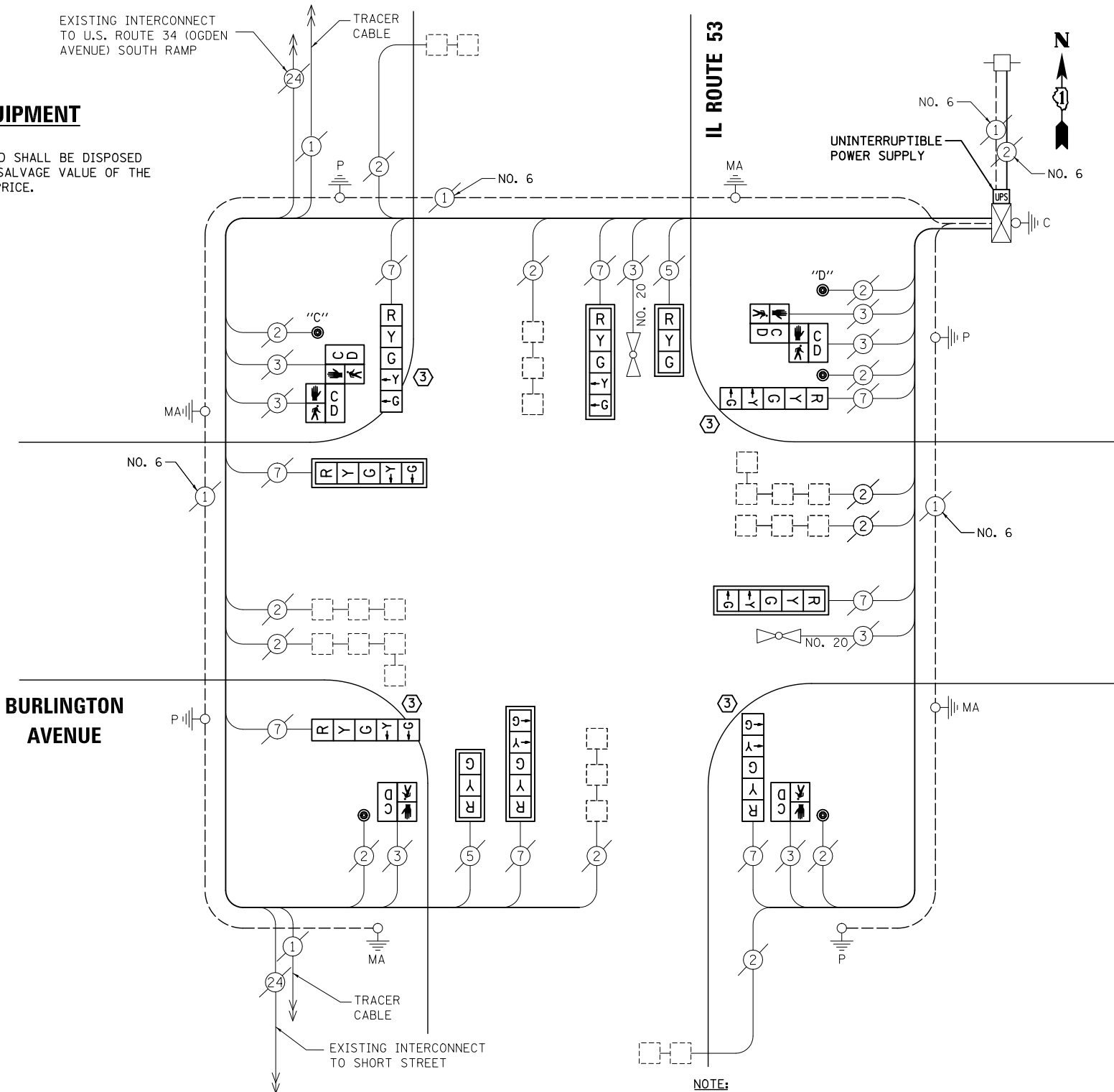
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

- 4 EACH TRAFFIC SIGNAL POST
 - 2 EACH SIGNAL HEAD, 3-SECTION
 - 8 EACH SIGNAL HEAD, 5-SECTION
 - 6 EACH TRAFFIC SIGNAL BACKPLATE
 - 6 EACH PEDESTRIAN SIGNAL HEAD
 - 4 EACH PEDESTRIAN PUSH-BUTTON
-
- ① REPLACE 14 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - ② REPLACE 15 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - ③ REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - ④ REPLACE 18 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION

SCHEDULE OF QUANTITIES

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



CABLE PLAN

NOTE: PUSH-BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8. PUSH-BUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

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

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION IL ROUTE 53 AND BURLINGTON AVENUE

PREPARED BY:
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 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DUPAGE	89	77
CONTRACT NO. 60W02			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

FILE NAME = \MICROST\352105\ 64-11670.DGN

USER NAME = JGC
 DESIGNED - BPT
 DRAWN - JGC/RDS
 PLOT SCALE = NOT TO SCALE
 PLOT DATE = X

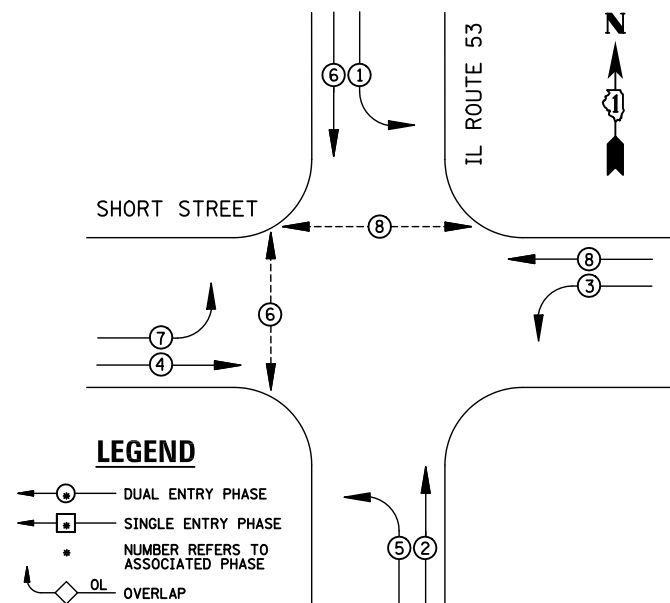
REVISIONS:
 REVISED -
 REVISED -
 REVISED -
 REVISED -

DATE - 03-22-13

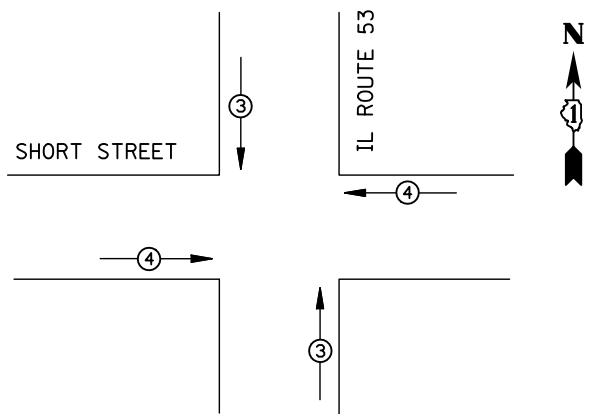
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

TS# 11670 LISLE

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↑	←

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	10	135	17	0.50	85
(YELLOW)	10	135	25	0.25	62.5
(GREEN)	10	135	15	0.25	37.5
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	4	90	25	1.00	100
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 404.2
ENERGY SUPPLY CONTACT:	X				
PHONE:	X				
COMPANY:	X				

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

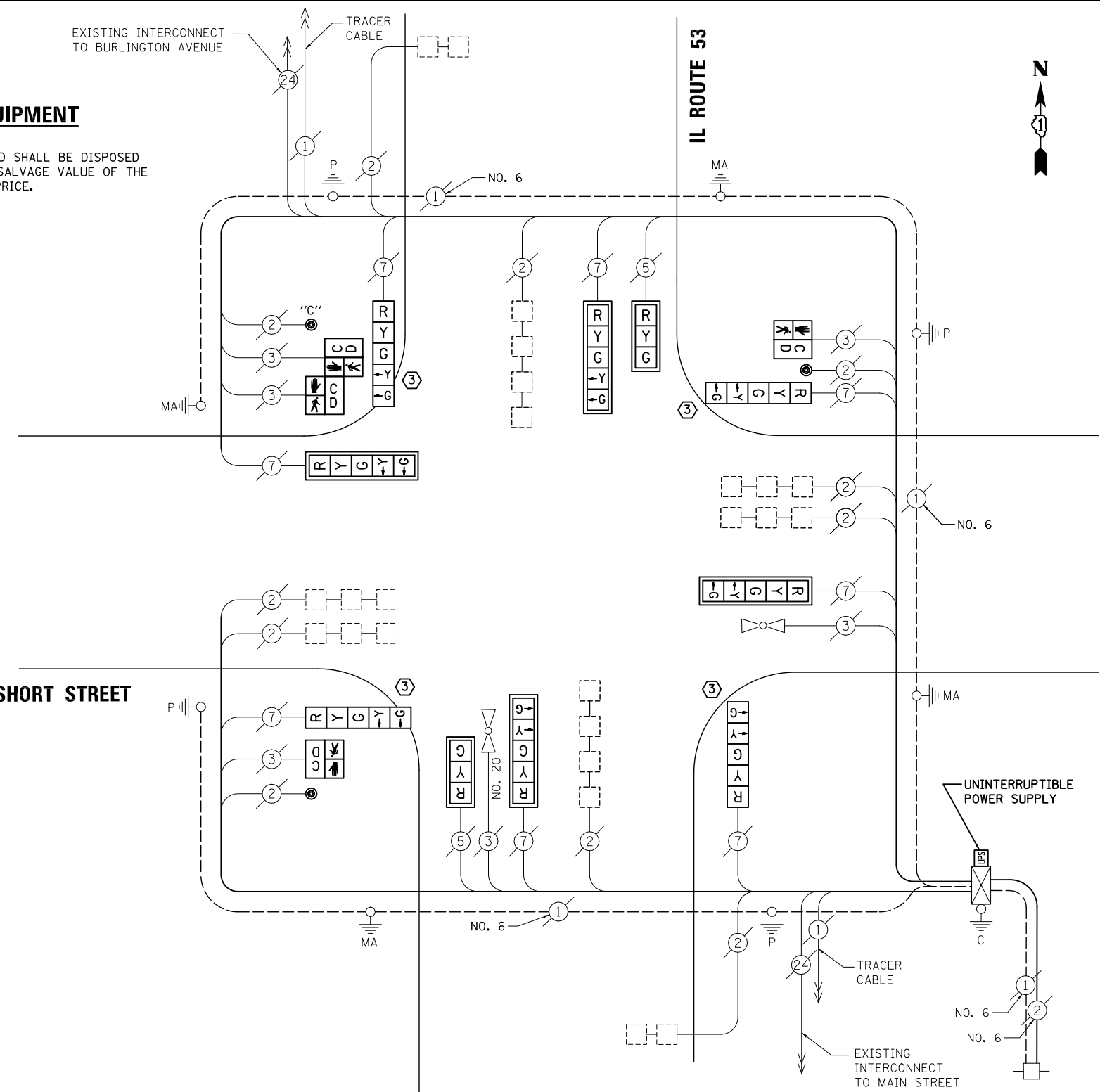
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 4 EACH TRAFFIC SIGNAL POST
 - 2 EACH SIGNAL HEAD, 3-SECTION
 - 8 EACH SIGNAL HEAD, 5-SECTION
 - 6 EACH TRAFFIC SIGNAL BACKPLATE
 - 4 EACH PEDESTRIAN SIGNAL HEAD
 - 3 EACH PEDESTRIAN PUSH-BUTTON
-
- ① REPLACE 14 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - ② REPLACE 15 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - ③ REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - ④ REPLACE 18 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION

SCHEDULE OF QUANTITIES

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

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION



CABLE PLAN

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

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

TS# 11660 LISLE

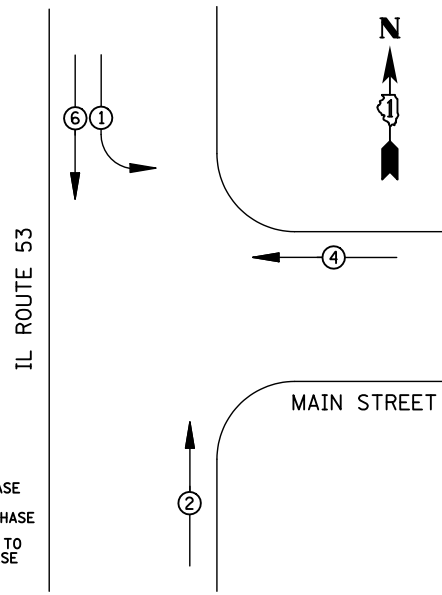
PREPARED BY: **CEMCON, Ltd.**
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
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 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION IL ROUTE 53 AND SHORT STREET

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DUPAGE	89	78
			CONTRACT NO. 60W02	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

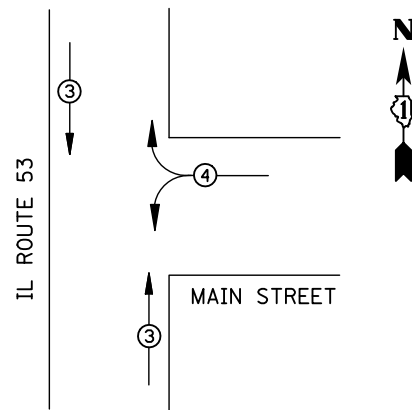
EXISTING CONTROLLER SEQUENCE



LEGEND

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

EXISTING PHASE DESIGNATION DIAGRAM



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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	10	135	17	0.50	85
(YELLOW)	10	135	25	0.25	62.5
(GREEN)	10	135	15	0.25	37.5
ARROW	4	135	12	0.10	4.8
PED. SIGNAL	2	90	25	1.00	50
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 339.8
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				

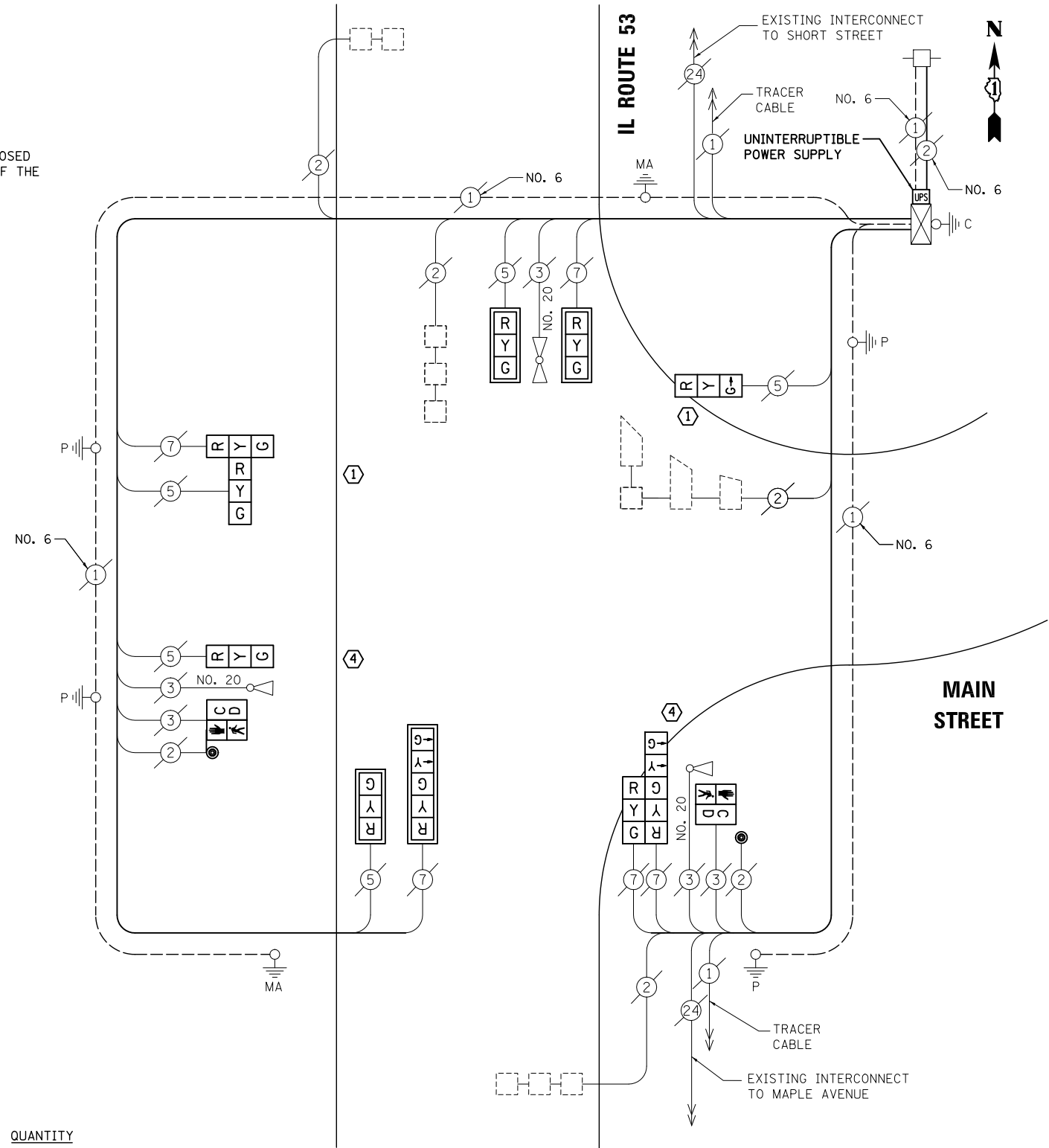
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

- 4 EACH TRAFFIC SIGNAL POST
 - 8 EACH SIGNAL HEAD, 3-SECTION
 - 2 EACH SIGNAL HEAD, 5-SECTION
 - 4 EACH TRAFFIC SIGNAL BACKPLATE
 - 2 EACH PEDESTRIAN SIGNAL HEAD
 - 2 EACH PEDESTRIAN PUSH-BUTTON
-
- ① REPLACE 14 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - ② REPLACE 15 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - ③ REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - ④ REPLACE 18 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION

SCHEDULE OF QUANTITIES

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



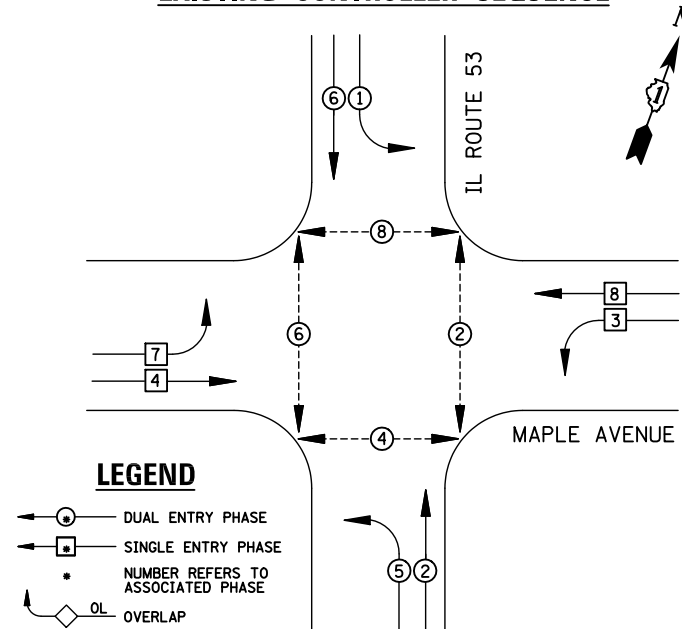
CABLE PLAN

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

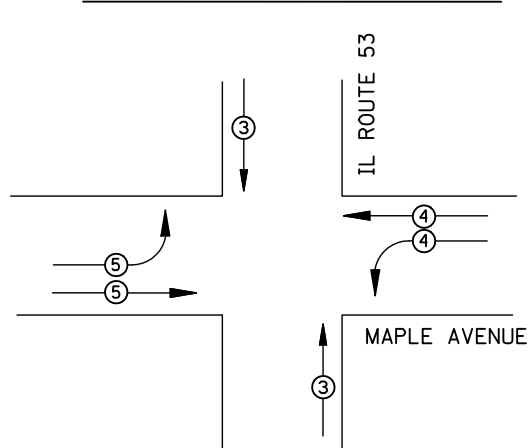
TS# 11655
LISLE

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		%OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	18	135	17	0.50	153
(YELLOW)	18	135	25	0.25	112.5
(GREEN)	18	135	15	0.25	67.5
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 652.2
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				

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.

SCHEDULE OF QUANTITIES

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

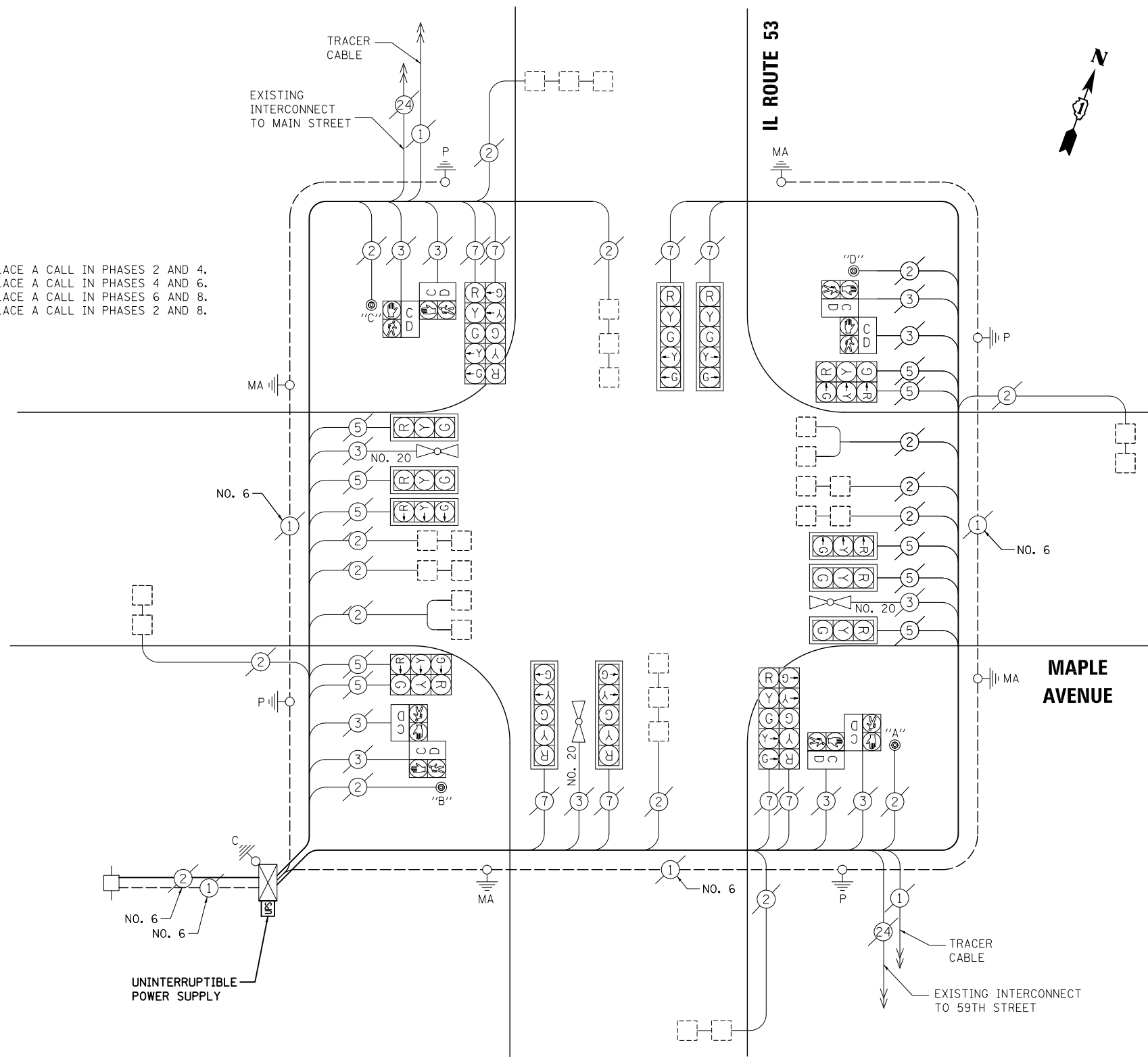
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

DESIGNED - BPT	REVISED -
DRAWN - JGC/RDS	REVISED -
CHECKED - BPT	REVISED -
DATE - 03-22-13	REVISED -

SCHEDULE OF QUANTITIES, CABLE PLAN,
 PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
 IL ROUTE 53 AND MAPLE AVENUE

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

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



CABLE PLAN

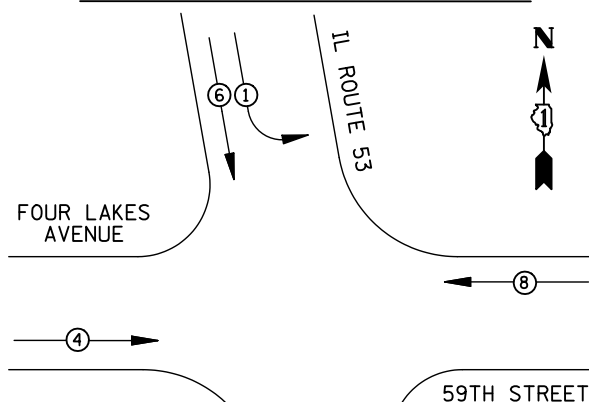
PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60504-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DUPAGE	89	80

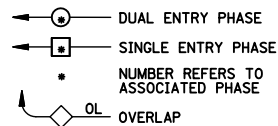
CONTRACT NO. 60W02
 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

TS# 7830
 LISLE

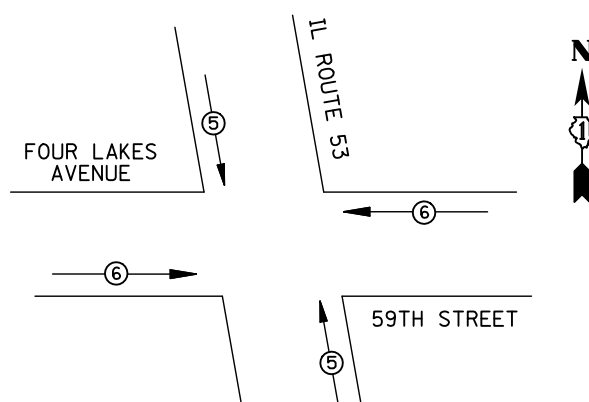
EXISTING CONTROLLER SEQUENCE



LEGEND



EXISTING PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	5	6
MOVEMENT	↑	→

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND. LED	%OPERATION		
SIGNAL (RED)	10	135 17	0.50	85	
(YELLOW)	10	135 25	0.25	62.5	
(GREEN)	10	135 15	0.25	37.5	
ARROW	8	135 12	0.10	9.6	
PED. SIGNAL		90 25	1.00		
CONTROLLER	1	100 100	1.00	100	
ILLUM. SIGN		84	0.05		
FLASHER		135 25	0.50		
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096				TOTAL =	294.6
ENERGY SUPPLY CONTACT:	X				
PHONE:	X				
COMPANY:	X				
FILE NAME =	USER NAME = JGC	DESIGNED - BPT	REVISED -		
\\MICROST\352105\ 68-6250.DGN		DRAWN - JGC/RDS	REVISED -		
	PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -		
	PLOT DATE = X	DATE - 03-22-13	REVISED -		

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

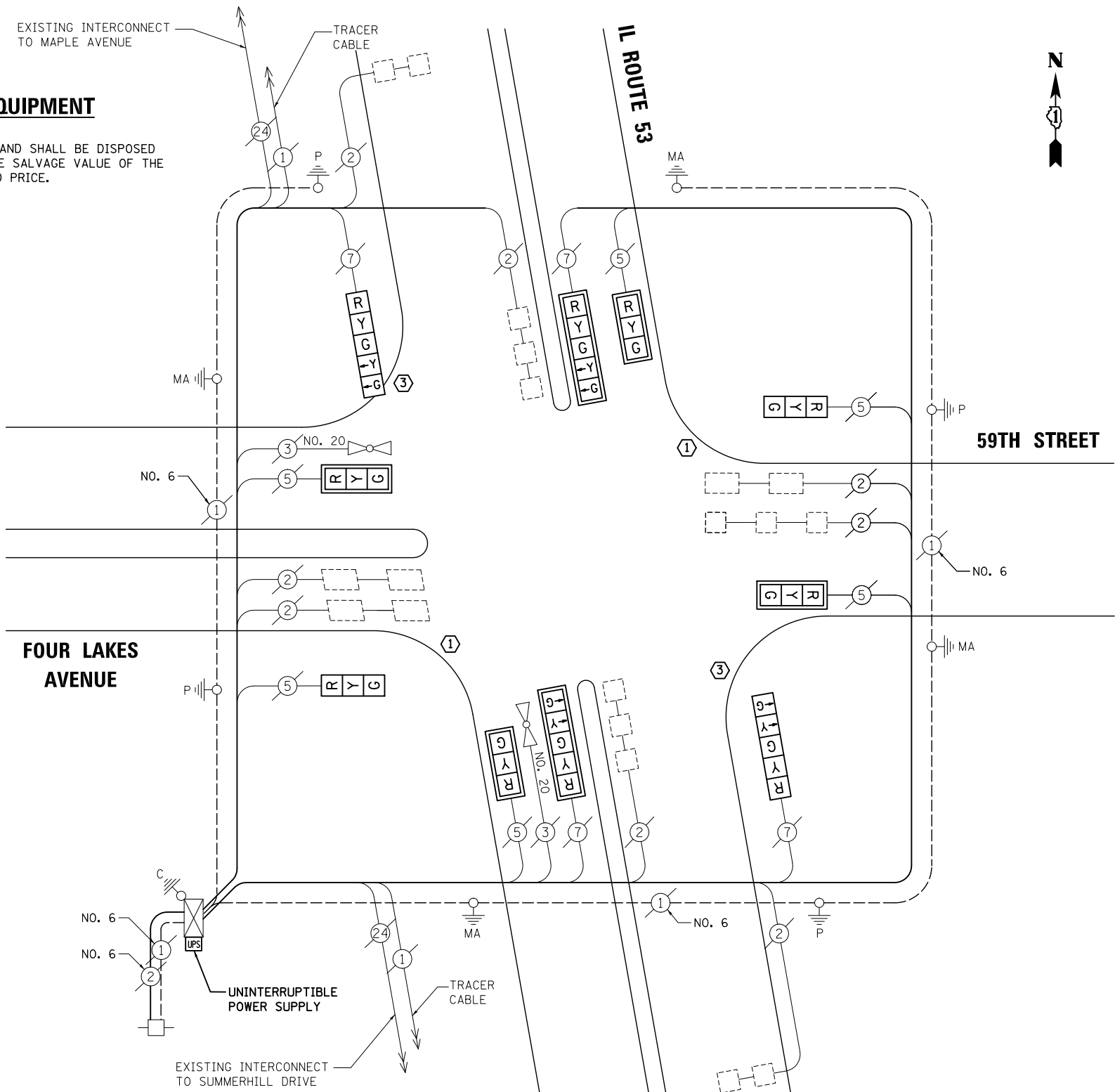
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 4 EACH TRAFFIC SIGNAL POST
 - 6 EACH SIGNAL HEAD, 3-SECTION
 - 4 EACH SIGNAL HEAD, 5-SECTION
 - 6 EACH TRAFFIC SIGNAL BACKPLATE
-
- ① REPLACE 14 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - ② REPLACE 15 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - ③ REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
 - ④ REPLACE 18 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION

SCHEDULE OF QUANTITIES

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



CABLE PLAN

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

TS# 6250
LISLE

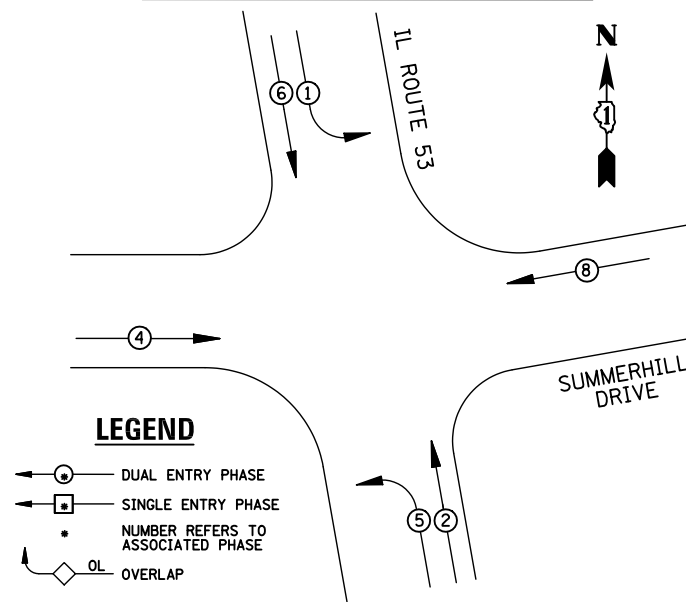
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**SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
IL ROUTE 53 AND 59TH STREET / FOUR LAKES AVENUE**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DUPAGE	89	81
CONTRACT NO. 60W02			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

EXISTING CONTROLLER SEQUENCE



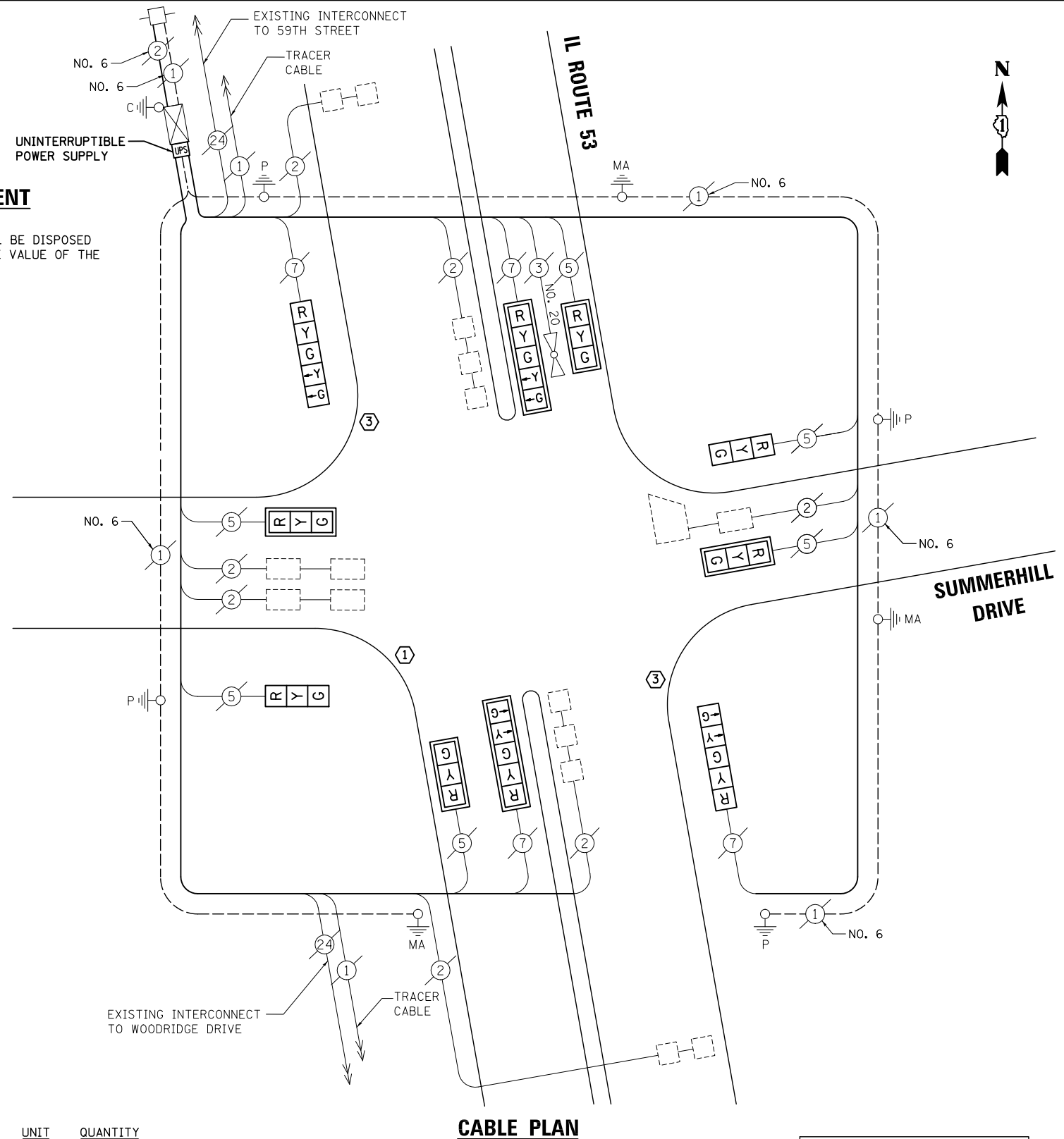
EXISTING PHASE DESIGNATION DIAGRAM

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

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

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



CABLE PLAN

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

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		%OPERATION	
		INCAND.	LED		
SIGNAL (RED)	10	135	17	0.50	85
(YELLOW)	10	135	25	0.25	62.5
(GREEN)	10	135	15	0.25	37.5
ARROW	8	135	12	0.10	9.6
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 294.6
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					

SCHEDULE OF QUANTITIES

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

FILE NAME = \MICROST\352105\ 69-6248.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -
	PLOT SCALE = NOT TO SCALE	DRAWN - JGC/RDS	REVISED -
	PLOT DATE = X	CHECKED - BPT	REVISED -
		DATE - 03-22-13	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

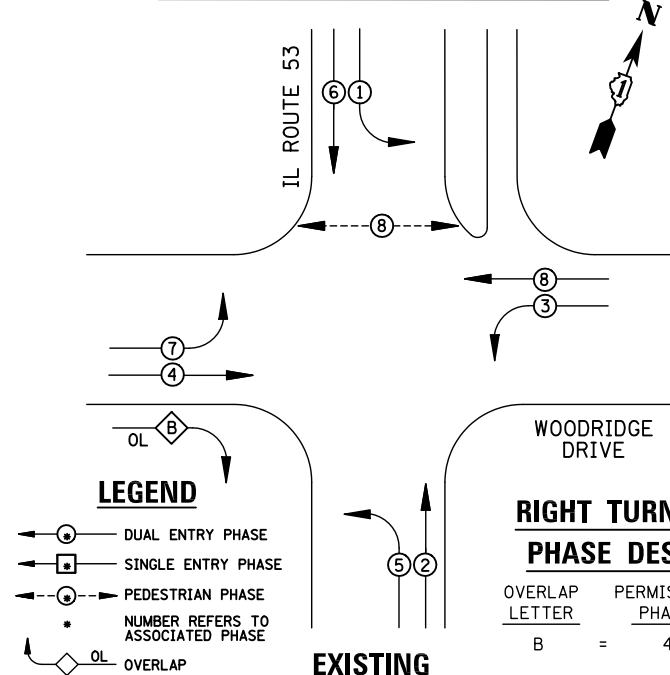
SCHEDULE OF QUANTITIES, CABLE PLAN AND PHASE DESIGNATION DIAGRAM IL ROUTE 53 AND SUMMERHILL DRIVE			
SCALE: N.T.S.	SHEET NO. OF SHEETS	STA.	TO STA.

PREPARED BY:
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Consulting Engineers, Land Surveyors & Planners
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Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

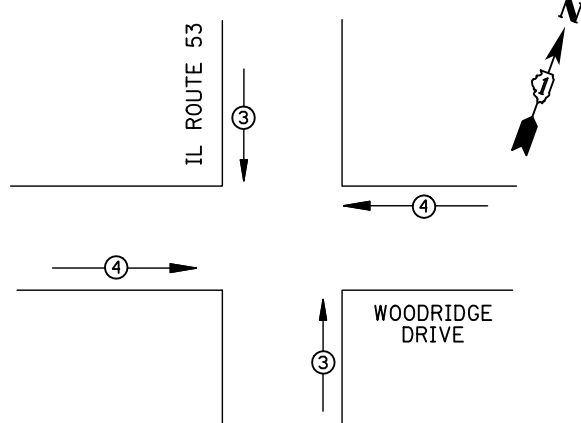
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DUPAGE	89	82
			CONTRACT NO. 60W02	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

TS# 6240
WOODRIDGE

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTIONS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↑	←

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	13	135	17	0.50	110.5
(YELLOW)	13	135	25	0.25	81.25
(GREEN)	13	135	15	0.25	48.75
ARROW	20	135	12	0.10	24
PED. SIGNAL	2	90	25	1.00	50
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 414.5
ENERGY SUPPLY CONTACT:	X				
PHONE:	X				
COMPANY:	X				

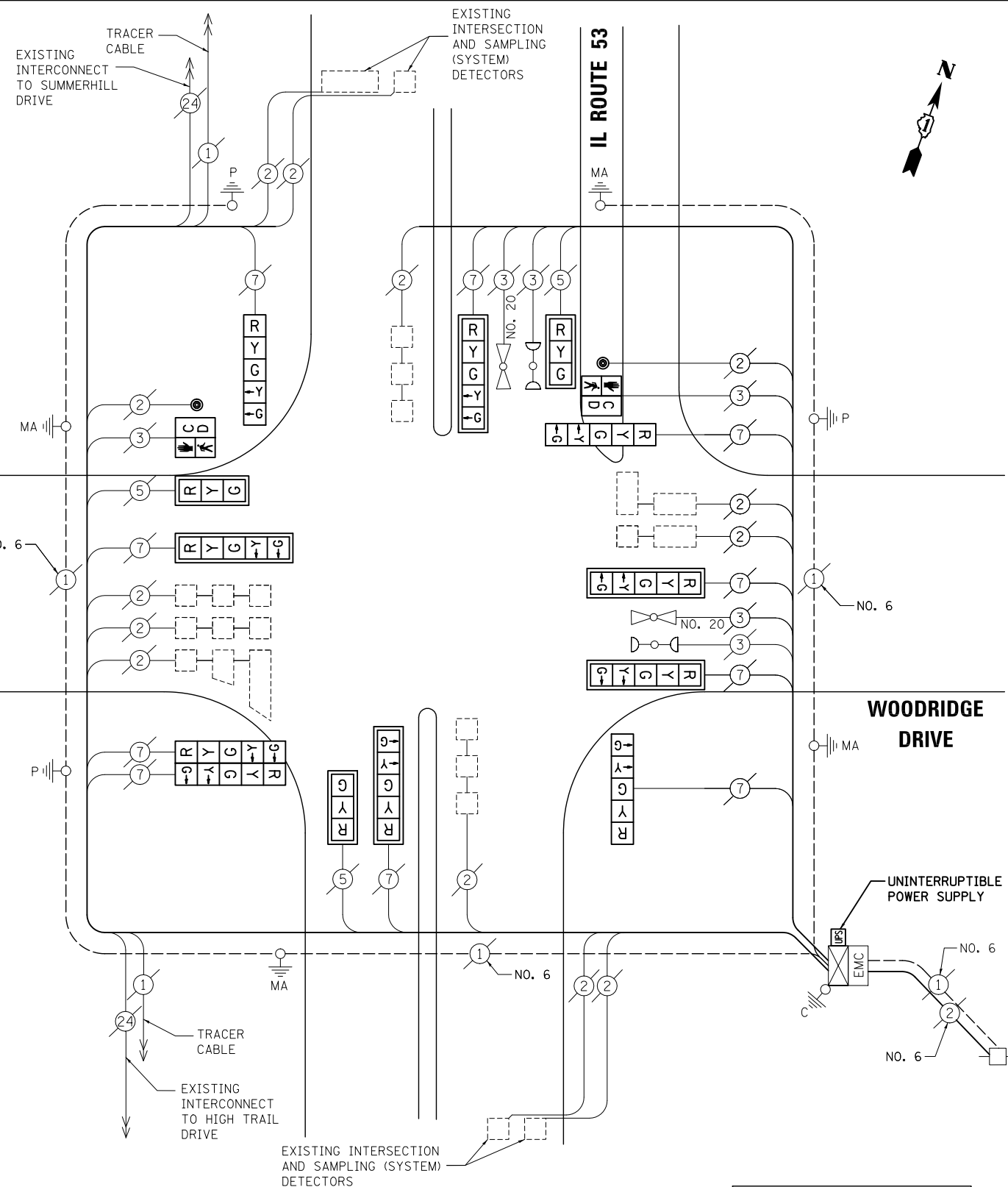
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

- 2 EACH PEDESTRIAN SIGNAL HEAD
- 2 EACH PEDESTRIAN PUSH-BUTTON

SCHEDULE OF QUANTITIES

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



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

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION IL ROUTE 53 AND WOODRIDGE DRIVE

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

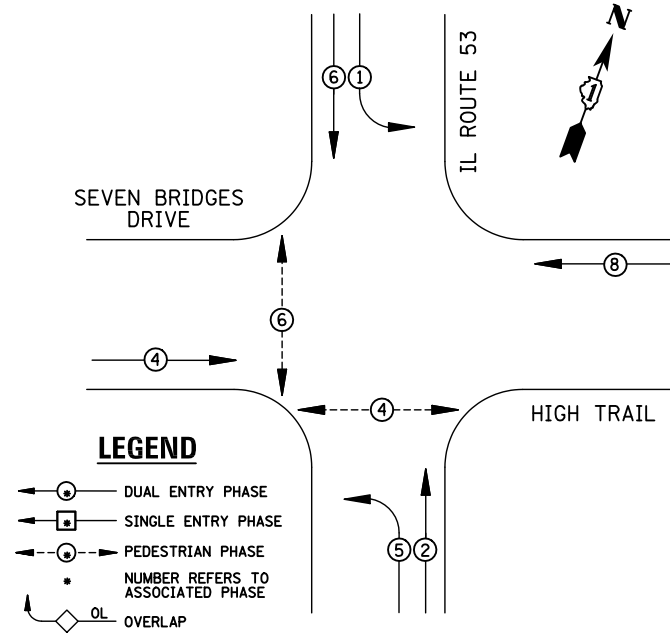
PREPARED BY: **CEMCON, Ltd.**
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60504-9675
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DUPAGE	89	83

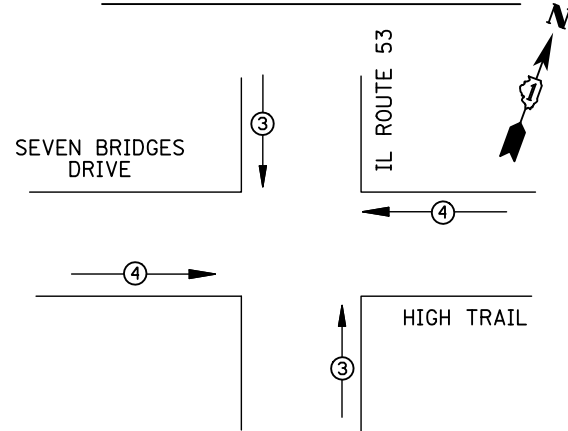
CONTRACT NO. 60W02
 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

TS# 6255 WOODRIDGE

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	4	90	25	1.00	100
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 431.6
ENERGY SUPPLY CONTACT:	X				
PHONE:	X				
COMPANY:	X				
FILE NAME = \MICROST\352105\ 71-6256.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
	PLOT SCALE = NOT TO SCALE	DRAWN - JGC/RDS	REVISED -		
	PLOT DATE = X	CHECKED - BPT	REVISED -		
		DATE - 03-22-13	REVISED -		

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

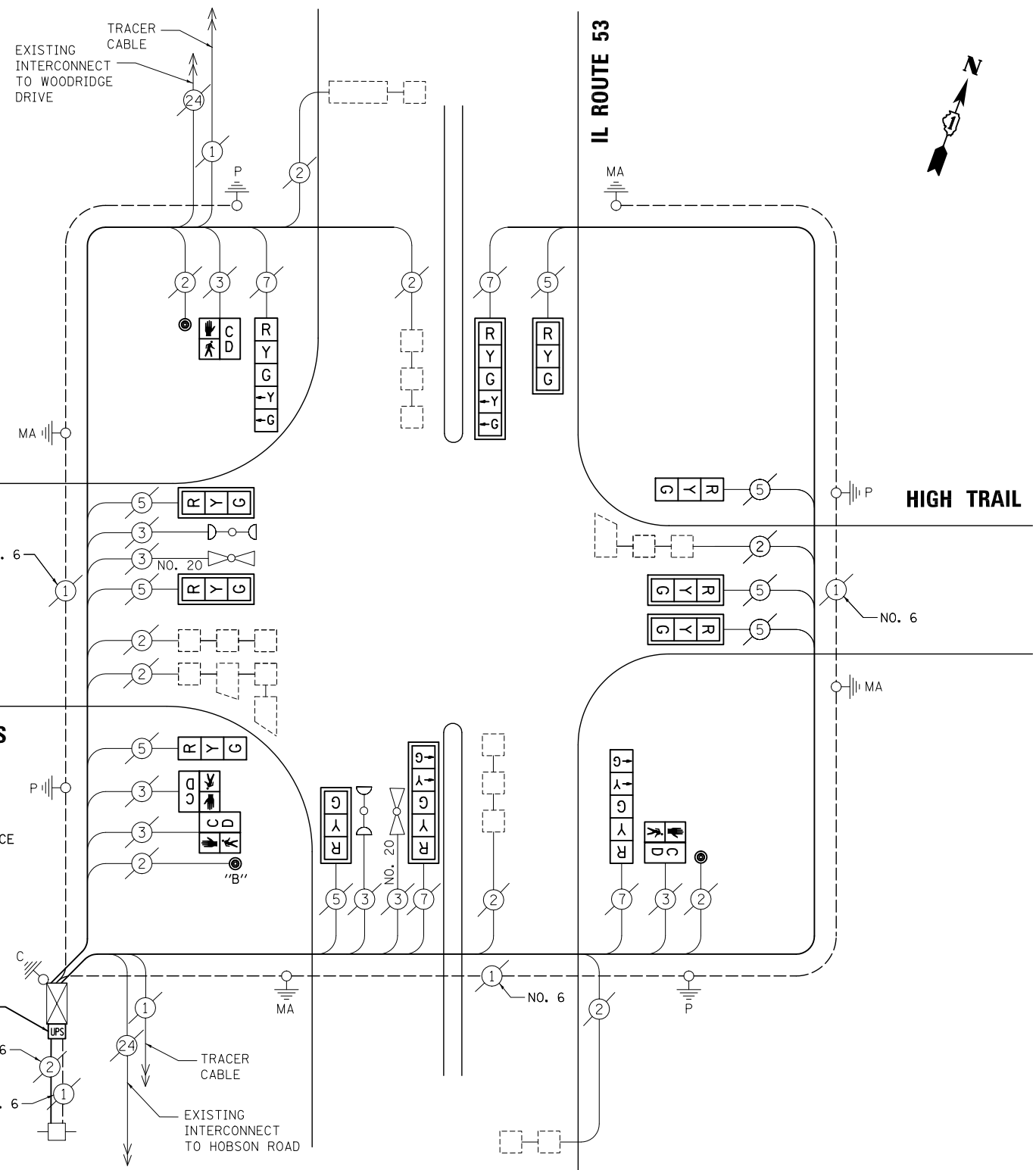
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

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

SCHEDULE OF QUANTITIES

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



CABLE PLAN

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

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

TS# 6256
WOODRIDGE

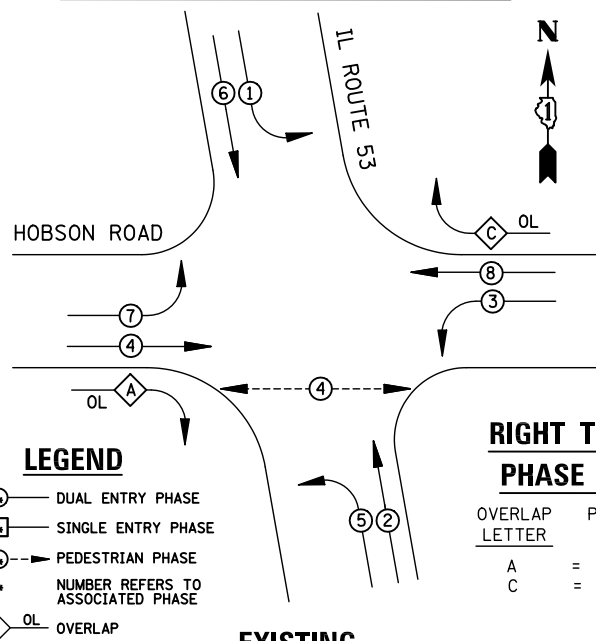
PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
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E-Mail: cadd@cemcon.com Website: www.cemcon.com

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION IL ROUTE 53 AND SEVEN BRIDGES DRIVE / HIGH TRAIL

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DUPAGE	89	84
CONTRACT NO. 60W02			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

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

EXISTING CONTROLLER SEQUENCE



REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

- 2 EACH PEDESTRIAN SIGNAL HEAD
- 2 EACH PEDESTRIAN PUSH-BUTTON

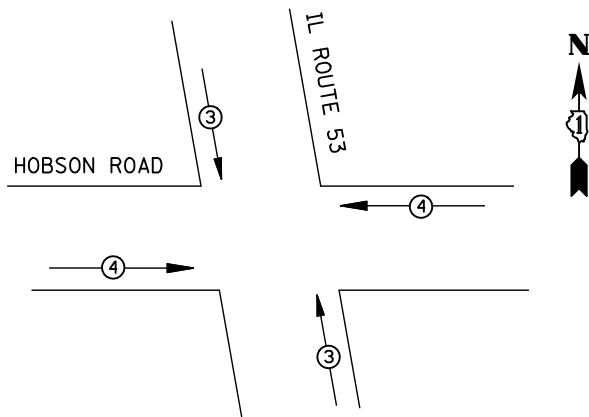
RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 4 +	5
C	= 8 +	1

LEGEND

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

EXISTING PHASE DESIGNATION DIAGRAM



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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

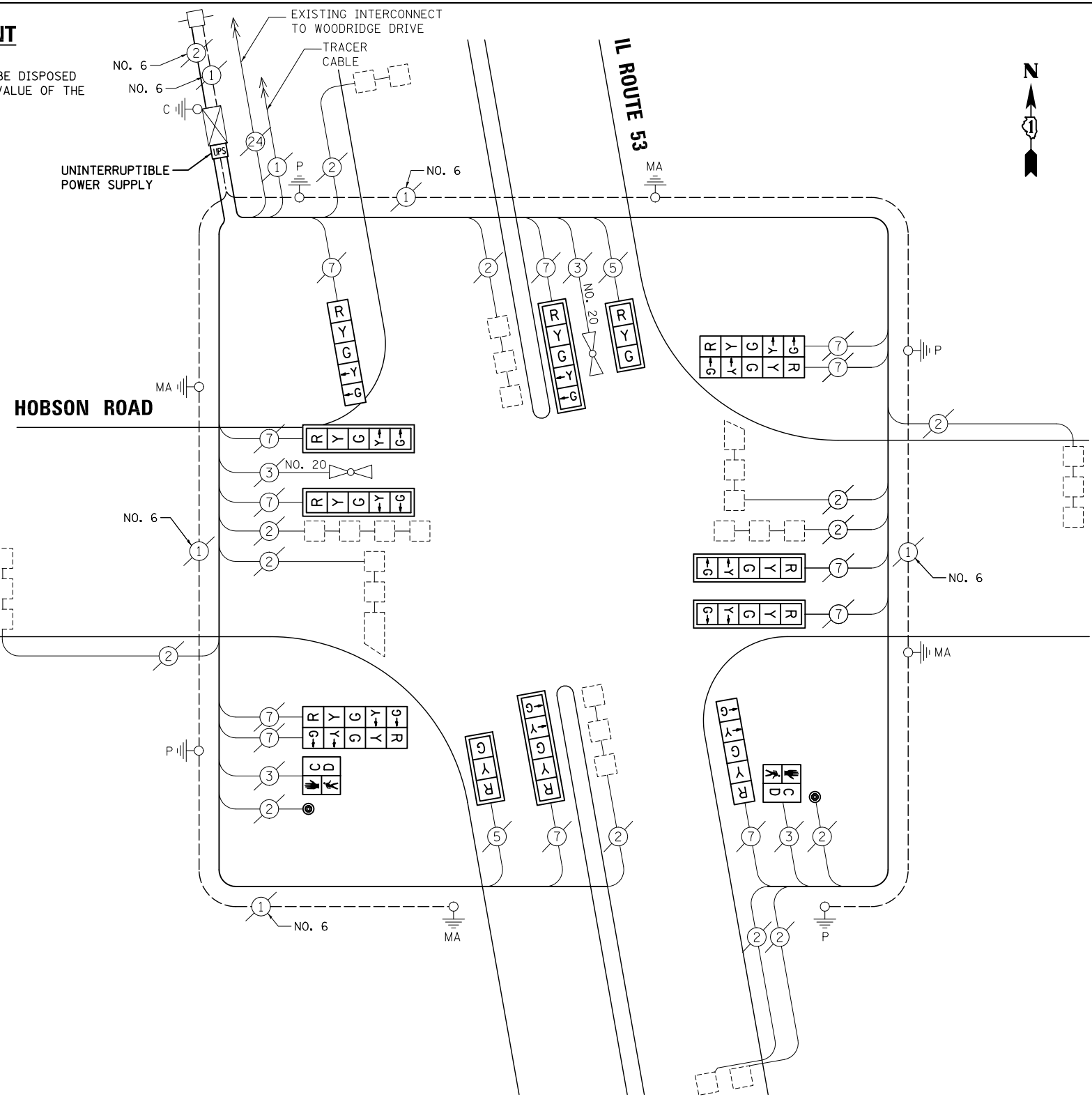
I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	14	135	17	0.50	119
(YELLOW)	14	135	25	0.25	87.5
(GREEN)	14	135	15	0.25	52.5
ARROW	24	135	12	0.10	28.8
PED. SIGNAL	2	90	25	1.00	50
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 437.8
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					

SCHEDULE OF QUANTITIES

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

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

DESIGNED - BPT	REVISED -
DRAWN - JGC/RDS	REVISED -
CHECKED - BPT	REVISED -
DATE - 03-22-13	REVISED -



CABLE PLAN

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

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

TS# 6225 WOODRIDGE

PREPARED BY: **CEMCON, Ltd.**
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60504-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION IL ROUTE 53 AND HOBSON ROAD

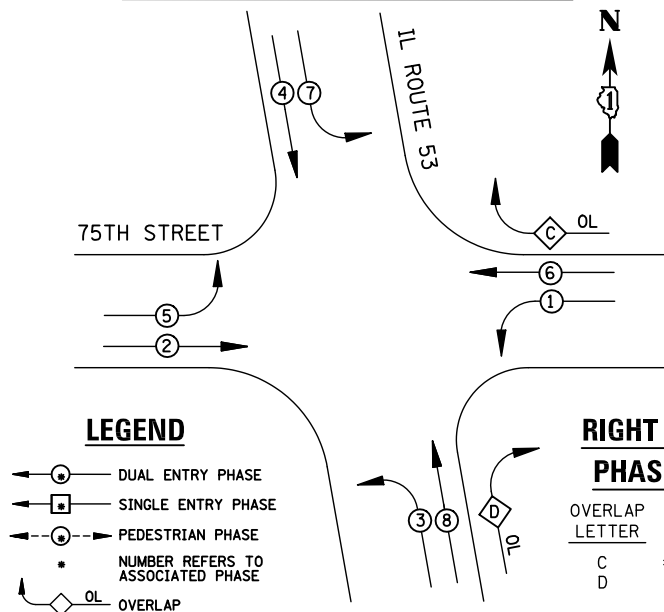
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DUPAGE	89	85

CONTRACT NO. 60W02

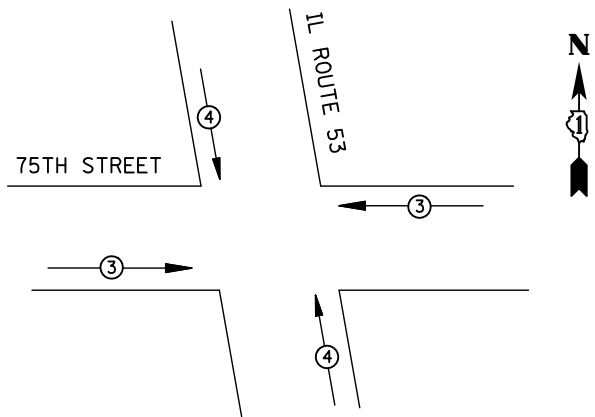
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE

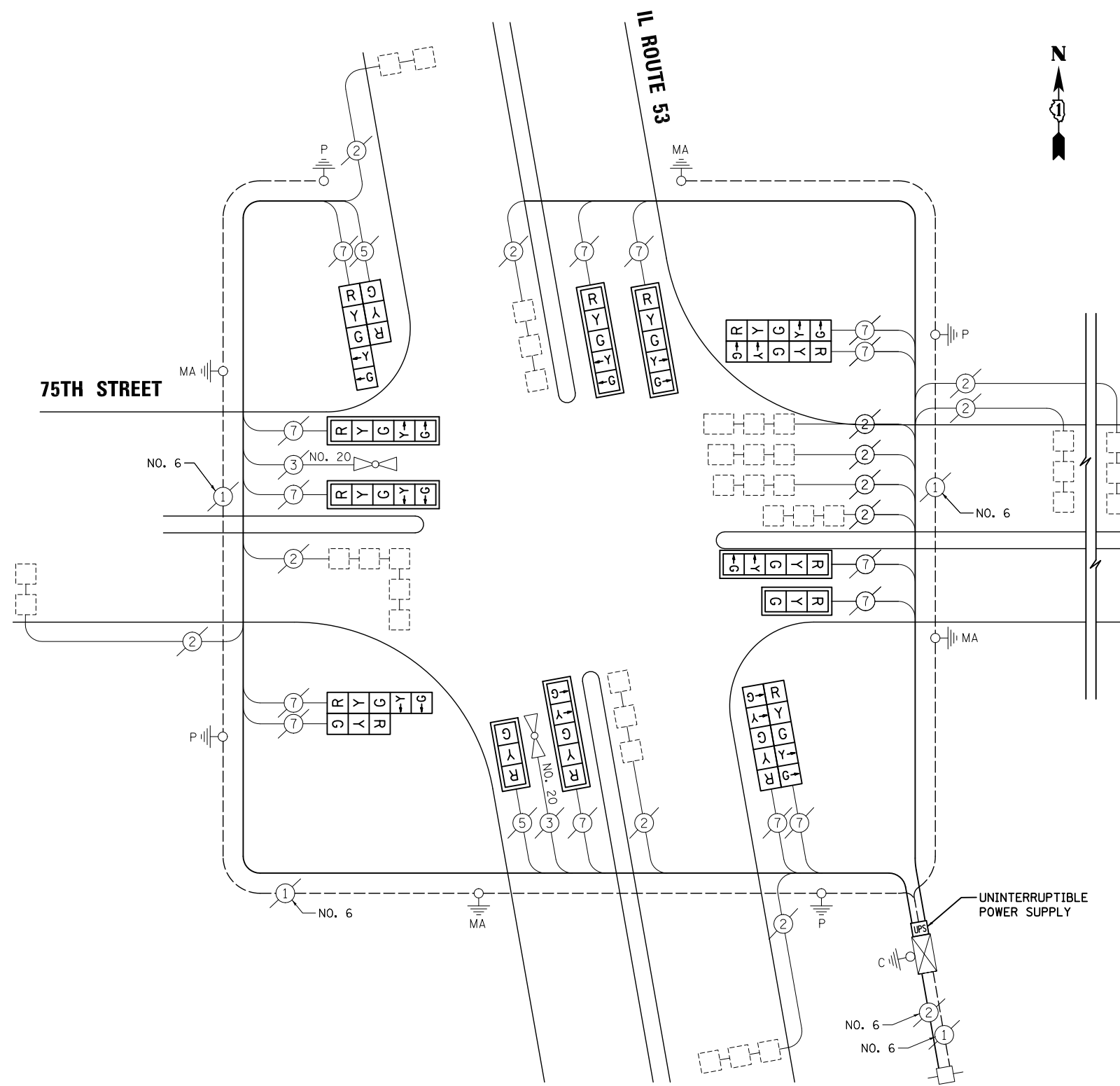
I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	16	135	15	0.25	60
ARROW	24	135	12	0.10	28.8
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 424.8
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					
FILE NAME = \MICROST\352105\ 73-6220.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
	PLOT SCALE = NOT TO SCALE	DRAWN - JGC/RDS	REVISED -		
	PLOT DATE = X	CHECKED - BPT	REVISED -		
		DATE - 03-22-13	REVISED -		

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	6
SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED RETROFIT	EACH	2

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

CABLE PLAN



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

TS# 6220 WOODRIDGE

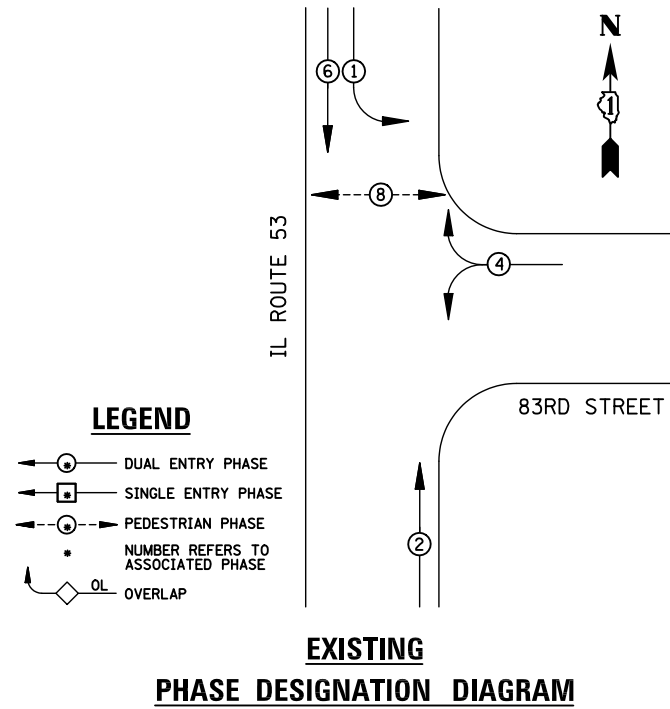
PREPARED BY: **CEMCON, Ltd.**
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
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 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION IL ROUTE 53 AND 75TH STREET

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DU PAGE	89	86
			CONTRACT NO. 60W02	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

EXISTING CONTROLLER SEQUENCE

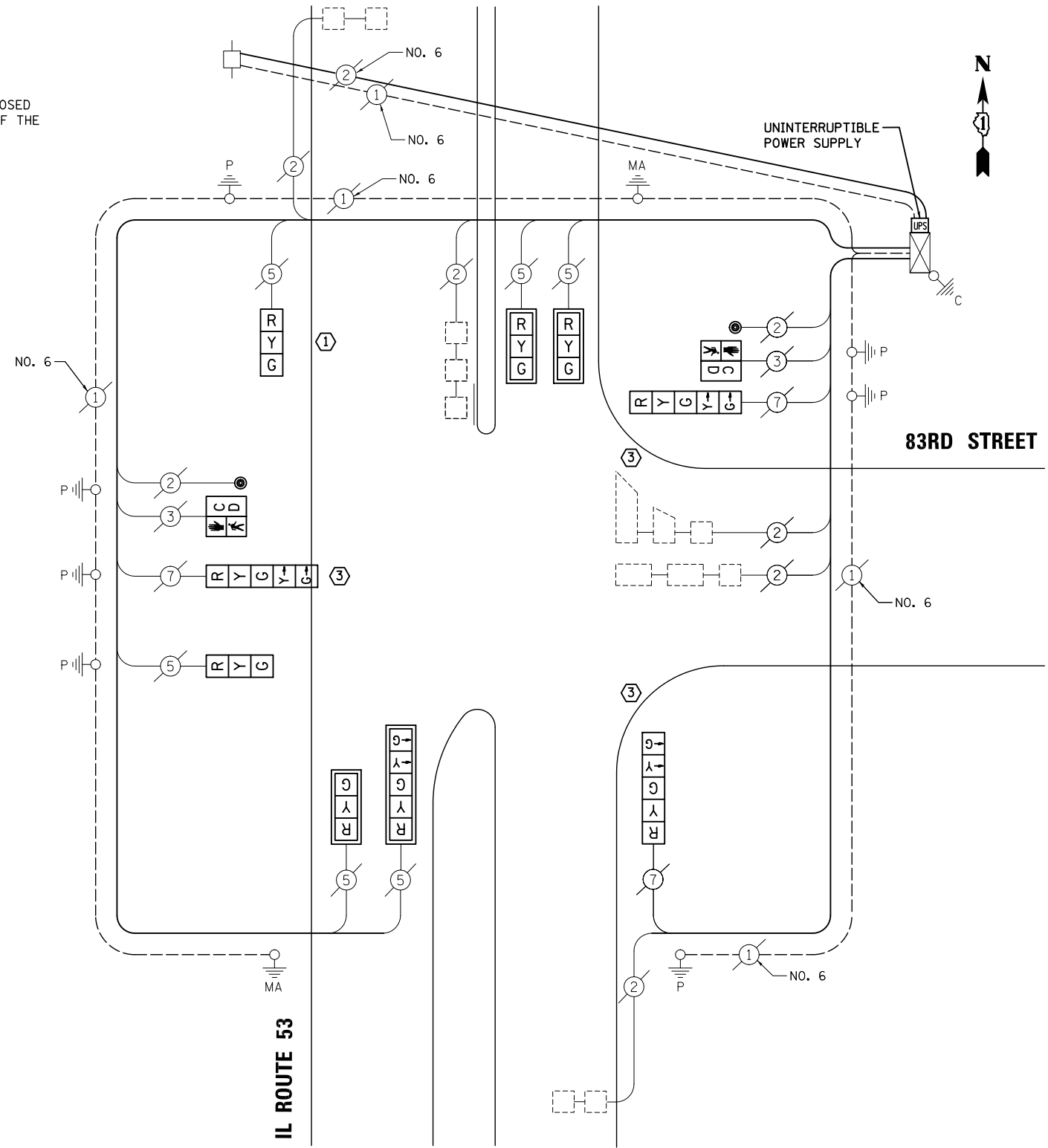


REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

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

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



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

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	9	135	17	0.50	76.5
(YELLOW)	9	135	25	0.25	56.25
(GREEN)	9	135	15	0.25	33.75
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	2	90	25	1.00	50
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 326.1
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					
FILE NAME =	USER NAME = JGC				DESIGNED - BPT
\\MICROST\352105\ 74-6245.DGN					DRAWN - JGC/RDS
	PLOT SCALE = NOT TO SCALE				CHECKED - BPT
	PLOT DATE = X				DATE - 03-22-13
		REVISED -		REVISED -	

SCHEDULE OF QUANTITIES

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

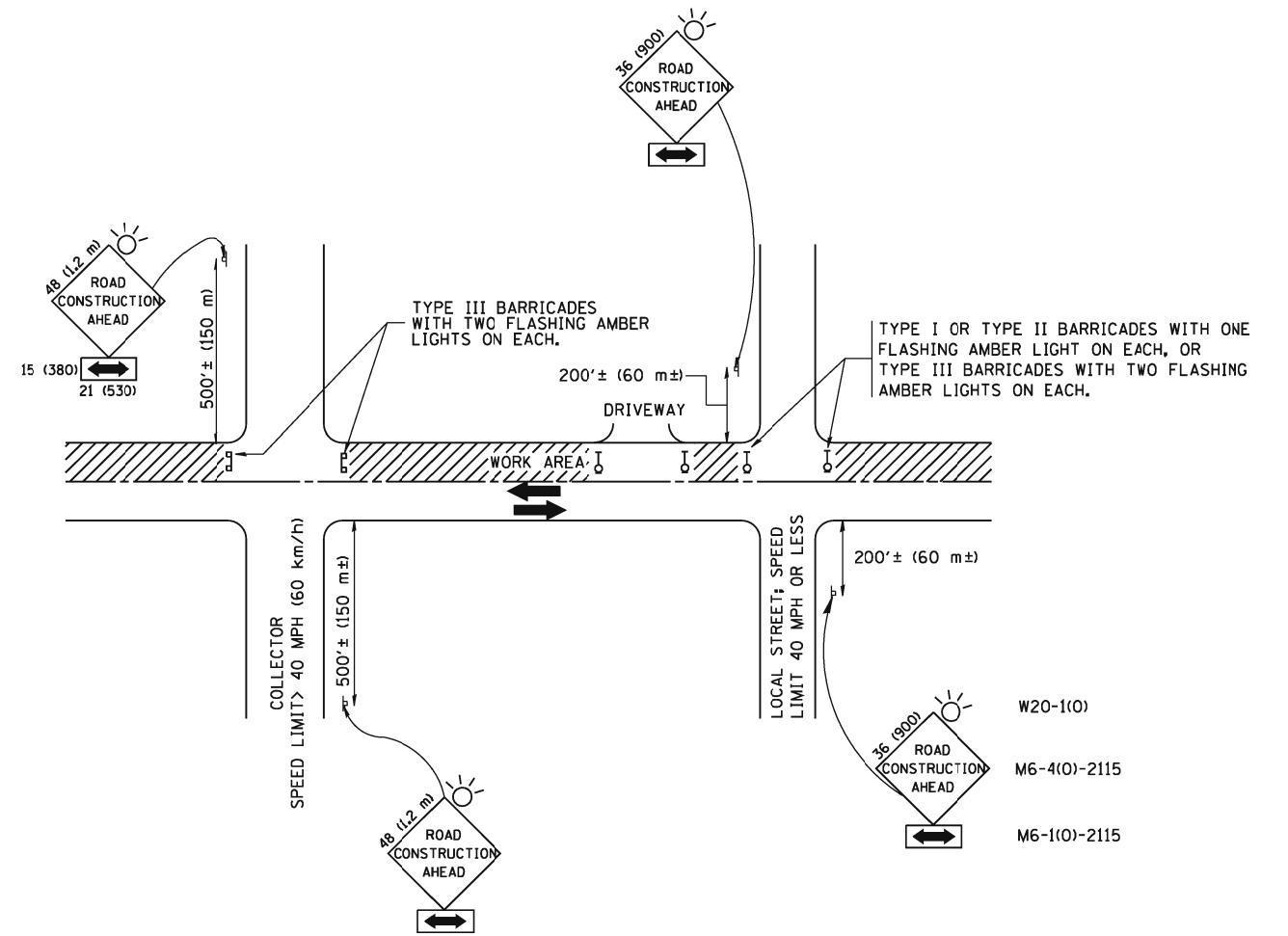
SCHEDULE OF QUANTITIES, CABLE PLAN
AND PHASE DESIGNATION DIAGRAM
IL ROUTE 53 AND 83RD STREET

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

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DUPAGE	89	87
CONTRACT NO. 60W02			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

TS# 6245
WOODRIDGE



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

NOTES:

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

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

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

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

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

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

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

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

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

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

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

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

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

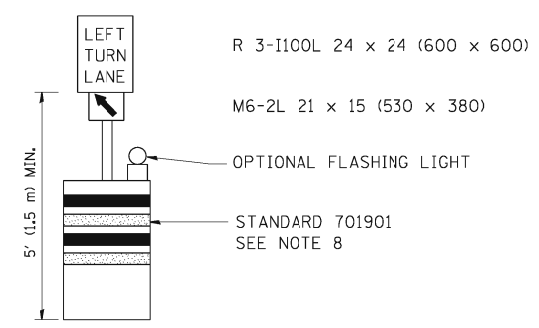
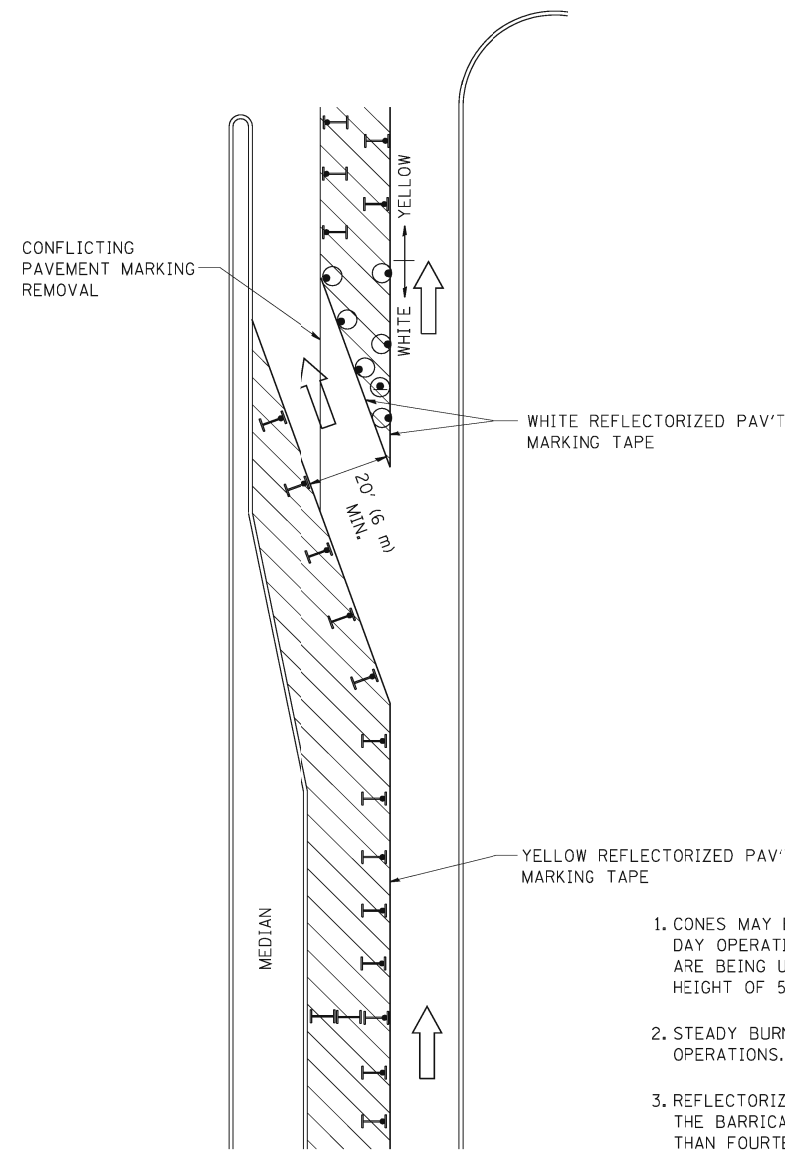
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		DRAWN -	REVISED - A. HOUSEH 03-06-96
		PLOT SCALE = 50.000' / IN.	REVISED - A. HOUSEH 10-15-96
		PLOT DATE = 1/4/2008	REVISED - T. RAMMACHER 01-06-00
		DATE - 06-89	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DUPAGE	89	88
TC-10			CONTRACT NO. 60W02	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				









GENERAL NOTES

1. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 5' (1.5 m).
2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.
4. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-100 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
5. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. FORM OPER 725 IS REQUIRED.
8. IF A DRUM OR TYPE II BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHRP 350 REQUIREMENTS.
9. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

LEGEND

-  WORK AREA
-  LANE OPEN TO TRAFFIC
-  TYPE I OR II BARRICADE WITH STEADY BURN LIGHT
-  DRUM WITH STEADY BURN LIGHT
-  DRUM WITH SIGN (WITH OPTIONAL FLASHING LIGHT) SEE DETAIL
-  TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

FILE NAME =	USER NAME = drivakosgn	REVISED -T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09
ct:\pw\work\PK1001\DRIVAKOS\N\d0100315\14.dgn		REVISED - A. HOUSEH 11-07-95	REVISED -
		REVISED - A. HOUSEH 10-12-96	REVISED -
PLOT SCALE = 49.9999 / / IN.		REVISED -T. RAMMACHER 01-06-00	REVISED -
PLOT DATE = 9/14/2009			

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC CONTROL AND PROTECTION AT TURN BAYS
(TO REMAIN OPEN TO TRAFFIC)**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2012-084TS	DUPAGE	89	89
TC-14			CONTRACT NO. 60W02	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				