### 1-17-14 LETTING ITEM 016

#### INDEX OF SHEETS

SEE SHEET NO. 2

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### STATE OF ILLINOIS

## DEPARTMENT OF TRANSPORTATION

**DIVISION OF HIGHWAYS** 

# PROPOSED HIGHWAY PLANS

VARIOUS LOCATIONS IN
NORTH COOK COUNTY
LIGHT EMITTING DIODE (LED) INSTALLATION
SECTION 2013-054TS
COOK COUNTY

C-91-020-14

#### **IDOT STANDARDS**

000001-06 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS 701001-02 OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY 701006-015 OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE 701101-04 OFF-ROAD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE 701106-02 OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' AWAY 701501-06 URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE 701502-06 701601-09 URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN 701606--09 URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN 701701-09 URBAN LANE CLOSURE, MULTILANE INTERSECTION 701901-03 TRAFFIC CONTROL DEVICES 720001--01 SIGN PANEL MOUNTING DETAILS 857001-01 STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES

862001-01 UNINTERRUPTABLE POWER SUPPLY (UPS) 880006-01 TRAFFIC SIGNAL MOUNTING DETAILS





CLINO19

D-91-020-14



Signed

JEFFREN A. MEINDL, P.E., IL License No. 062-054021
Expires 11/30/2013

Date 10 - 2 3 - 13

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

DEC 2013

JUND BA CAMBOLIPE B

ENGINEER OF DESIGN AND ENVIRONMENT

Office Common RE By DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

SAM SCHWARTZ ENGINEERING 3100 W. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 50161

0 10° 20° 300° 1° = 100° 10° 20° 30° 1° = 10° 0 50° 160° 1° = 50° 0 50° 100° 1° = 40° 0 50° 100° 1° = 30° 3 50° 100° 1° = 26°

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

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

PROJECT ENGINEER: AMIR CUBIC PROJECT MANAGER: SUDUD MAHMOUD

CONTRACT NO. 60X15

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

#### INDEX OF SHEETS

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2			INDEX OF SHEETS AND GENERAL NOTES
3-4			LOCATION MAP
5-9			SUMMARY OF QUANTITIES
10-15			IDOT DISTRICT ITRAFFIC SIGNAL STANDARDS
16	TS:	20385	BALLARD RD & BENDER RD/E RIVER RD
17	TS	4160	BALLARD RD & RAND RD
18	TS	677	CENTRAL RD & OAKTON COMMUNITY COLLEGE
- <del>19</del>	- <del>1</del> -5	<del>13070 -</del>	-DES-PLAINES-RIVER-RD-@-PERRY-ST
20	T\$	3020	IL 58 GOLF RD & MT PROSPECT RD
2:		5445	LEE ST @ TOUHY AVE
22		3085	US 12 RAND RD & 3RD AVE
23		370	US 12 RAND RD & US 12 (ELK BLVD)
24	TS :		US 12 RAND RD & WOLF RD
25 26		13050	US 12-45 GRACELAND & PRAIRIE AVE
26 27		13027 13000	US 12-45 GRACELAND & THACKER ST US 12-45 LEE ST & ALGONOUIN RD
28	TS		US 12-45 LEE ST & OAKTON ST
29		1245	US 12-45 LEE ST & US 12-45 MANNHEIM RD
30			US 12-45 LEE ST/MANNHEIM & PRAIRIE AVE
31		3026	US 12-45 LEE ST/MANNHEIM @ THACKER ST
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35		3080	US 14 NORTHWEST HWY & STATE ST
36	TS	3005	ALGONOUIN RD & SEYMOUR/KOLPIN DR
37	TS .	4130	ALGONOUIN RD & WOLF RD
38	TS	676	CENTRAL RD @ EAST RIVER RD
39	TS -	4765	CENTRAL RD & WOLF RD
40	TS -	4975	DES PLAINES RIVER RD & ALGONOUIN RD
4	T5 :	2785	IL 58/GOLF RD & 6TH AVE
42		2755	IL 58/GOLF RD & EAST RIVER RO
43		2825	IL 58/GOLF RD & COLLEGE DR
44		2835	IL 58/GOLF RD & POTTER RD
45		2865	IL 58/COLF RD & SEGERS RD/WOLF RD
46		4120	IL 62/ALCONOUIN RD & MT PROSPECT RD
47 48		1870 3270	IL 72/HIGGINS RD & LEE RAMP/TRAMMEL CROW IL 72/LEE ST & IL 72/TOUHY AVE
49		3235	IL 72/TOUHY AVE & MT PROSPECT RO
50		3260	IL 72/TOUHY AVE & WOLF RD
			-L-83/ELMIURSY RD-9 IL 83/OAKTON ST
			DAXTON ST O DES PLANES RIVER-RO
53		5545	OAKTON ST & MT PROSPECT RD
54	TS 1	2995	OAKTON ST @ WEBSTER LN
55	TS :	5550	OAKTON ST @ WOLF RD
56	T\$ 1	2985	TOUHY AVE & MAPLE ST
			US 12/RAND RD & US 12-US 45/DES PLAINES RIVER RO
			-US-12-US-45/ELK-BLYD-0-US-45/DES-PLAINES RIVER RO-
			-US-12-US-45/LEE-51-Q-US-45/DES-PLAINES-RIVER-RO
60	TŞ. I		US 12-US 45/MANNHEIM RD & LUNT AV
6	TS I		US 45/DES PLAINES RIVER RD & CENTRAL RD
62	TS	1626 5955	US 45/DES PLAINES RIVER RD & NAZARETH WAY/HOLY FAMILY WOLF RD & HOWARD ST
63 ca		3470	WOLF RD & THACKER/DEMPSTER ST
64 65		625	US 45 DES PLAINES RIVER RD & IL 58 GOLF RD
66	15		194 EDENS SPUR N RAMP BROOKSIDE PLZ Ø IL 43 WAUKEGAN RD
67	TS		194 EDENS SPUR S RAMP & IL 43 WAUKEGAN RO
68		4400	IL 43 WAUKEGAN RO & WALTERS AVE
69	TS :		IL 68 DUNDEE RD & HUEHL RD
70		3135	IL 68 DUNDEE RD & LANDWEHR RD
7:	TS.	3160	IL 68 DUNDEE RD & PFINGSTEN RD
72	15	3170	IL 68 DUNDEE RD @ SANDERS RD
73	TS :	3195	IL 68 DUNDEE RD & WESTERN AVE
74		5933	WILLOW RD & WESTLEIGH DR FOUNDERS DR
75		2100	IL 43/WAUKEGAN RD & IL 68/DUNDEE RD
76		14430	IL 43/WAUKEGAN RD & SHERMER RD
77		3137	IL 68/DUNDEE RO & ANTHONY TRAIL
78	15		IL 68/DUNDEE RD & CHARLEMAGNE/TORREY PRKWY
79		3140	IL 68/DUNDEE RD 9 MIDWAY RD
80		3180	IL 68/DUNDEE RD SHERMER RD
81		3185	IL 68/DUNDEE RD & CHERRY IN
82 83		14410 14405	PFINGSTEN RD © CHERRY LN PFINGSTEN RD © MARIA AV/NORTHSIDE DR
84		144UD 144I5	
84 85			MHILUM BO & CBEENMOOU VILE

PAGE . IS . SHEET NAME 86 TS 1690 IL 68 DUNDEE RD & NORTHGATE 87 TS 3145 IL 68 DUNDEE RD @ OLD MCHENRY/WHEELING RD 88 TS 3175 IL 68 DUNDEE RO & SCHOENBECK RD 89 TS 3430 IL 83 ELMHURST RD @ HINTZ RD 90 TS 3355 IL 83 ELMHURST RD @ IL 83 OLD MCHENRY 91 TS 21100 IL 83 OLD MCHENRY RD & LEXINGTON DR/PARK POINT 92 IS 5625 PALATINE RD & WHEFLING RD 93 TS 1715 US 45 IL 21MILWAUKEE AVE & IL 68 DUNDEE 94 TS 1730 US 45-IL 21MILWAUKEE AVE @ WOLF RD 95 TS 21200 IL 68/DUNDEE RD @ HUNTINGTON LN/LAKE BLVD 96 TS 3095 IL 68/DUNDEE RD & IL 83/ELMHURST 97 TS 1720 US 45-IL 21/MILWAUKEE AVE @ HINTZ RD 98 TS 1726 US 45-IL 21/MILWAUKEE AVE & LAKE COOK RD NORTH RAMP A&D 99 TS 1724 US 45-IL 21/MILWAUKEE AVE & LAKE COOK RO SOUTH RAMP B&C

#### GENERAL NOTES

- I. CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM PAINTED POSTS THAT ARE INDICATED FOR REPLACEMENT TO NEW POSTS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER, THE COST OF REMOVAL, RELOCATION, AND ANY NEW MOUNTING HARDWARE NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE TRAFFIC SIGNAL POST, GALVANIZED STEEL PAY ITEM OF THE LENGTH AS SPECIFIED IN THE PLANS.
- 2. IT SHALL BE THE CONTRACTOR'S RESPONSBLITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION, THIS SHALL INCLUDE VERIFYING THE EXISTING BOLT PATTERN ON EXISTING FOUNDATIONS SPECIFIED TO BE RE-USED.
- 3. THE EXACT LOCATION OF ALL UTILITES 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 BII, IN THE CITY OF CHICAGO CONTACT DIGGER AT (312) 744-7000 FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION REQUIRED).
- 4. ANY ADDITIONAL CABLE LENGTHS NECESSARY FOR THE PROPER INSTALLATION OF AN UNINTERUPTIBLE POWER SUPPLY, GROUND MOUNTED DUE TO THE LARGER DISTANCE AWAY FROM THE CONTROLLER CABINET SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNINTERUPTIBLE POWER SUPPLY, GROUND MOUNTED PAY ITEM.
- 5. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, LOCAL GOVERNMENT AGENCIES AND IDOT.
- 6. 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 DAWAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAWAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.
- 7. CONTRACTOR SHALL REPLACE ALL TRAFFIC SIGNAL HEAD METAL BRACKETS TO NEW POLYCARBONATE BRACKETS AT ALL RETROFIT SIGNAL HEAD INTERSECTIONS OR AS CIRECTED 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.
- 8. THE CONTRACTOR SHALL RELOCATE THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM PHASING UNIT FROM AN EXISTING TRAFFIC SIGNAL CONTROLLER CABINET TO A NEW TRAFFIC SIGNAL CONTROLLER CABINET, AS INDICATED IN THE PLANS. THE WORK SHALL INCLUDE DISCONNECTING THE EMERGENCY VEHICLE PRIORITY SYSTEM PHASING UNIT(S) AND RECONNECTING IT TO A NEW WIRING HARNESS WHICH IS TO BE FACTORY WIRED INTO THE NEW TRAFFIC SIGNAL CONTROLLER CABINET. THE EMERGENCY VEHICLE SYSTEM IS NOT TO BE INOPERATIVE FOR MORE THAN 8 HOURS AND THE CONTRACTOR MUST NOTIFY THE MUNICIPALITY OR FIRE PROTECTION DISTRICT 72 HOURS PRIOR TO THE DISCONNECTION OF THE EQUIPMENT, THE CONTRACTOR MUST DEMONSTRATE TO THE SATISFACTION OF THE ENCINEER THAT THE EMERGENCY VEHICLE SYSTEM OPERATES PROPERLY.
- 9. AT LOCATIONS ON THE PLANS WHERE TRAFFIC SIGNAL POST REMOVAL AND NEW TRAFFIC SIGNAL POST INSTALLATIONS ARE SPECIFIED, THE CONTRACTOR SHALL INSPECT THE EXISTING POST FOUNDATIONS, PRIOR TO REMOVING THE EXISTING TRAFFIC SIGNAL POST TO BE REPLACED, THE CONTRACTOR SHALL VERIFY THAT THE EXISTING CONDITION OF THE ANCHOR BOLTS IS ACCEPTABLE, IF THE EXISTING ANCHOR BOLT CONDITION IS NOT ACCEPTABLE, THE CONTRACTOR SHALL USE THE APPROVED METHOD TO REPLACE ANCHOR BOLTS AS DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL BE PAID FOR THE NUMBER OF TRAFFIC SIGNAL POSTS INSTALLED AND NO OTHER COMPENSATION WILL BE PROVIDED.
- IO.DUE TO THE PRESENCE OF A RED LIGHT RUNNING (RLR) CAMERA FOR THE BELOW LISTED LOCATIONS, THE CONTRACTOR SHALL NOTIFY THE VILLAGE AND RLR CAMERA COMPANY PRIOR TO THE START OF CONSTRUCTION. THE VILLAGE OR THE RLR CAMERA COMPANY SHALL MAKE THE CAMERA INOPERATIVE FOR THE TIME OF CONSTRUCTION, ANY RLR CAMERA EQUIPMENT THAT IS IN CONFLICT WITH THE PROPOSED CONSTRUCTION SGALL BE REMOVED BY ITS RESPECTIVE OWNERS PRIOR TO THE START OF CONSTRUCTION.

RLR CAMERA LOCATION: TS 5625 - PALATINE ROAD / WHEELING ROAD TS 1715 - US45/IL21(MILWAUKEE AVENUE) / IL68 (DUNDEE ROAD)

WHEELING POLICE DEPARTMENT I COMMUNITY BOULEVARD WHEELING, IL 60090 (847) 459-2632 REDSPEED ILLINOIS 400 EISENHOWER LANE NORTH LOMBARD, ILLINOIS 60148 630-317-5700 ATTN: KATHY JENSEN



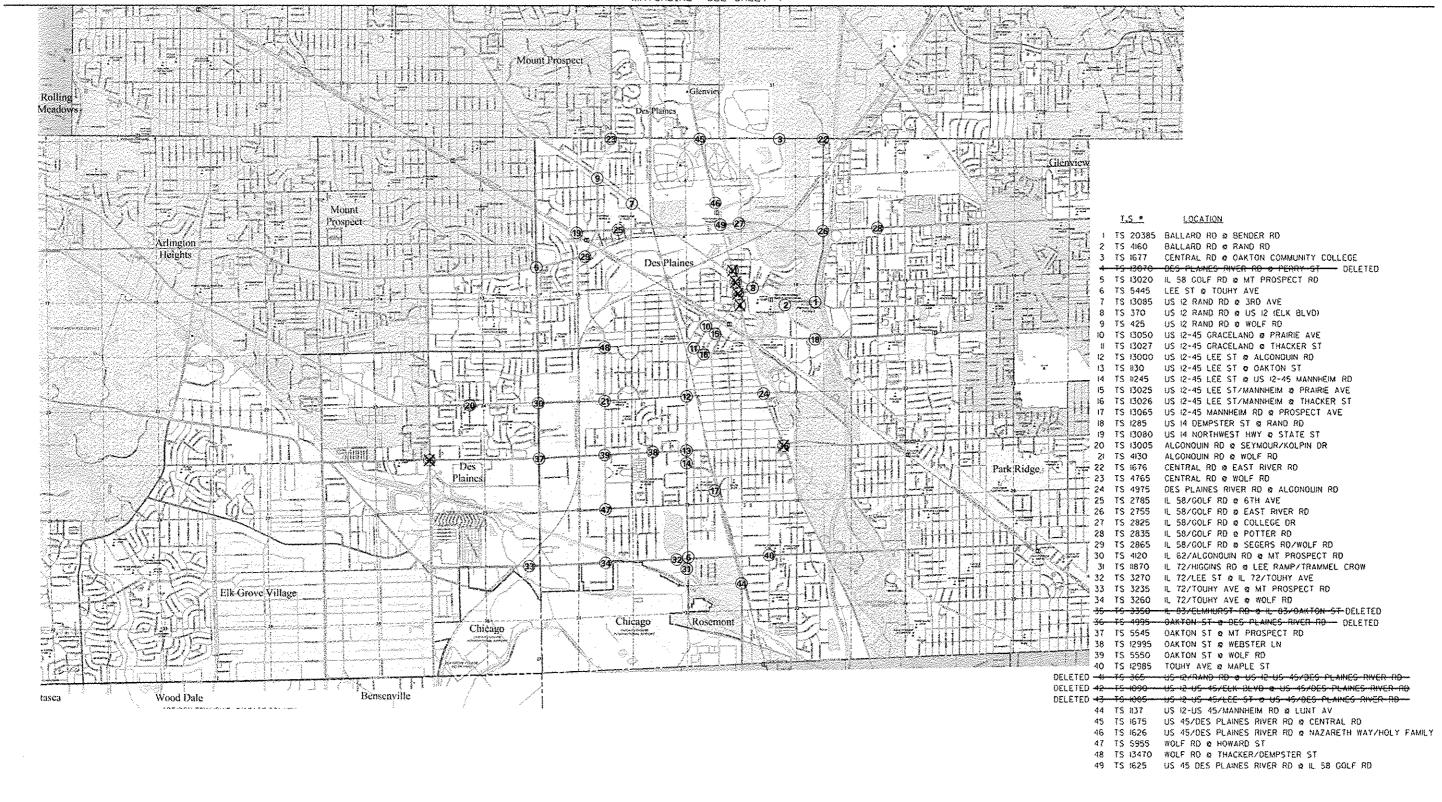
85 TS 5915 WILLOW RD & GREENWOOD AVE

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DATE - 10-14-13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: NONE

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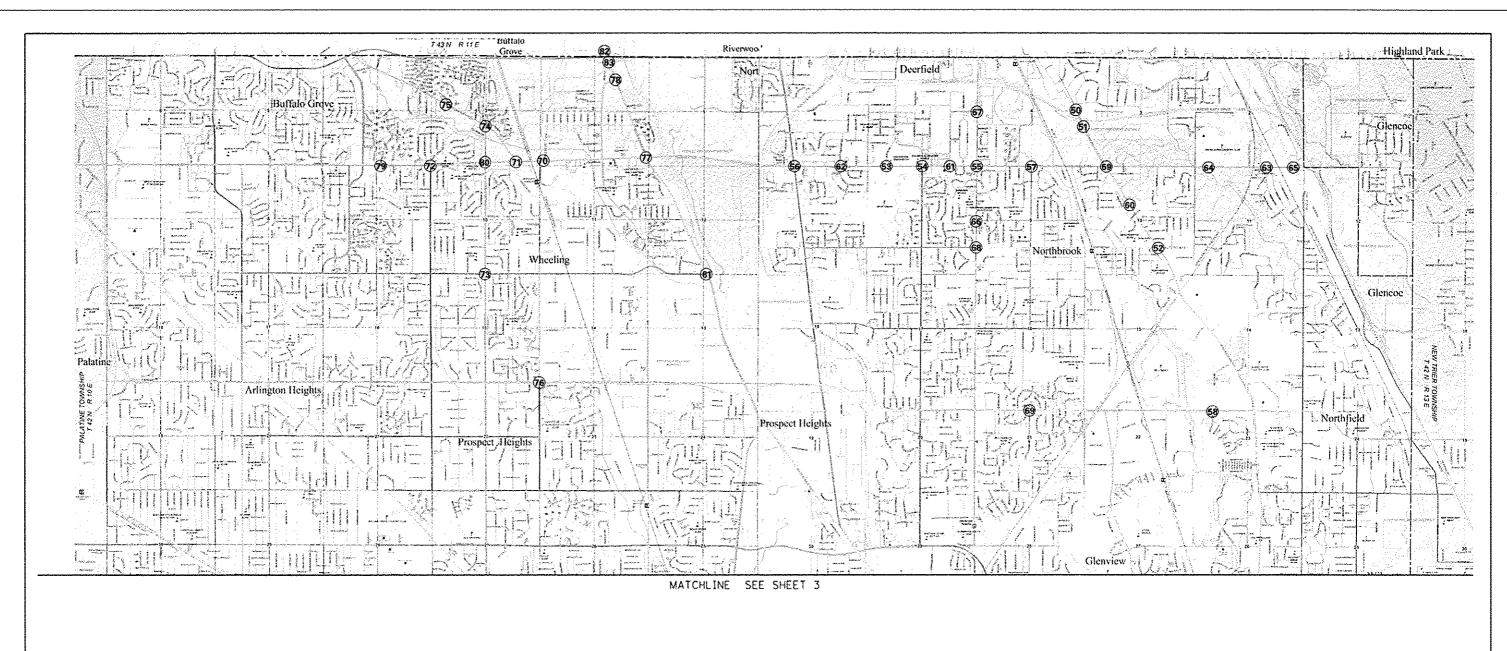


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-					F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	NO.	
***************************************			LOC	ATION MAP		VAR	2013-05475	COOK	99	3
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	1.5 #	LOCATION	1.S =	LOCATION
50	TS 60	194 EDENS SPUR N RAMP BROOKSIDE PLZ Ø IL 43 WAUKEGAN RD	70 TS 11690	IL 68 DUNDEE RD & NORTHGATE
51	TS 61	194 EDENS SPUR S RAMP @ IL 43 WAUKEGAN RD	71 TS 3145	IL 68 DUNDEE RD Ø OLD MCHENRY/WHEELING RD
52	TS 14400	IL 43 WAUKEGAN RD & WALTERS AVE	72 TS 3175	IL 68 DUNDEE RD @ SCHOENBECK RD
53	TS 3125	IL 68 DUNDEE RD & HUEHL RD	73 TS 3430	IL 83 ELMHURST RD @ HINTZ RD
54	TS 3135	IL 68 DUNDEE RO O LANDWEHR RO	74 TS 3355	IL 83 ELMHURST RD @ IL 63 OLD MCHENRY
55	TS 3/60	IL 68 DUNDEE RD @ PFINGSTEN RD	75 TS 21100	IL 83 OLD MCHENRY RD & LEXINGTON DR/PARK POINT
56	TS 3170	IL 68 DUNDEE RD @ SANDERS RD	76 15 5625	PALATINE RD & WHEELING RD
57	TS 3/95	IL 68 DUNDEE RD @ WESTERN AVE	77 TS 1715	US 45-IL ZIMILWAUKEE AVE O IL 68 DUNDEE
58	TS 5933	WILLOW RD & WESTLEIGH OR FOUNDERS DR	78 TS 1730	US 45-IL ZIMILWAUKEE AVE O WOLF RD
59	TS 2100	IL 43/WAUKEGAN RD & IL 68/DUNDEE RD	79 TS 21200	IL 68/DUNDEE RD & HUNTINGTON LN/LAKE BLVD
60	TS 14430	IL 43/WAUKEGAN RD & SHERMER RD	80 TS 3095	IL 68/DUNDEE RD @ IL 83/ELMHURST
61	TS 3137	II GB/OUNDER RO & ANTHONY TRAIL	8t TS 1720	US 45-IL 21/MIL WALIKEE AVE & HINTZ RD
62	18 345	IL 68/DUNDEE RD & CHARLEMAGNE/TORREY PRKWY	82 TS 1726	US 45-IL ZIZMILWAUKEE AVE @ LAKE COOK RO NORTH RAMP A&D
63	TS 3140	IL 68/DUNDEE RD & MIDWAY RD	83 TS 1724	US 45-IL ZI/MILWAUKEE AVE @ LAKE COOK RD SOUTH RAMP B&C
64	15 3180	IL 68/OUNDEE RD & SHERMER RD		
65	TS 3185	IL 68/OUNDEE RD @ SKOKIE BLVD		
66	TS 14410	PRINCETEN RD & CHERRY LN		
67	TS 14405	PFINGSTEN RD @ MARIA AV/NORTHSIDE DR		
68	TS 14415	PFINGSTEN RD & WALTERS AVE		
69	TS 5915	WILLOW RD & GREENWOOD AVE		



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DATE	4	10-14-13	REVISED -

STATE	OF	ILLINOIS
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				F.A. RTÉ.	SECTION	COUNTY	SHEETS	SHEET NO.				
	i.	UCA	TION M	VAR	2013-05415	COOK	100	4				
						1		CONTRAC	T NO. 6	30X15		
ALE: NONE SHEET 2	٥F	2	SHEETS	STA.	TO STA.	ILLINOIS FED. ATD PROJECT						

			FUNDING PARTICIPATION													]	
COLUMN NUMBER	TS NO.	INTERSECTION	STATE	DES PLAINES	MOUNT PROSPECT	ELK GROVE TOWNSHIP	ROSEMONT	NORTHBROOK	WHEELING	BUFFALO GROVE	FOREST PRESERVE	OAKTON COMMUNITY COLLEGE	SEITE 7.		DIV EDEN PROPERTY. LLC		
1	TS 20385	BALLARD RD & BENDER RD/E RIVER RD	100%														1
1	TS 4160	BALLARD RD & RAND RD	100%														1
?	TS 1677	CENTRAL RO @ OAKTON COMMUNITY COLLEGE	96.7%									3.3%					1
- 3	TS 13070	DES PLAINES RIVER-RD & PERRY ST	96.7%	3.3%										ļ			DELETE
1	TS 13020	IL 58 COLF RD @ MT PROSPECT RD	100%														1
4	TS 5445	LEE ST & TOUHY AVE	97.5%	2.5%													1
2	TS 13085	US 12 RAND RD @ 3RD AVE	95%	5%						······································			***************************************		<u> </u>		1
4	TS 370	US 12 RAND RD @ US 12 (ELK BLVD)	97.5%	2.5%											-		1
4	TS 425	US 12 RAND RD @ WOLF RD	97,5%	2.5%							<u> </u>		·—·				1
2	TS 13050	US 12-45 GRACELAND & PRAIRIE AVE	95%	5%			·						***************************************				7
2	TS 13027	US 12-45 GRACELAND & THACKER ST	95%	5%						-	-						1
2	TS 13000	US 12-45 LEE ST @ ALGONOUIN RD	95%	5%									·····				
4	TS 1130	US 12-45 LEE ST @ OAKTON ST	97.5%	2.5%								<b></b>					
3	TS 11245	US 12-45 LEE ST @ US 12-45 MANNHEIM RD	96.7%	3.3%													1
2	TS 13025	US 12-45 LEE ST/MANNHEIM @ PRAIRIE AVE	95%	5%								<del></del>		1	<u> </u>		1
2	TS 13026	US 12-45 LEE ST/MANNHEIM @ THACKER ST	95%	5%													1
2	TS 13065	US 12-45 MANNHEIM RD @ PROSPECT AVE	95%	5%								<u> </u>					
]	TS 1285	US 14 DEMPSTER ST & RAND RD	100%			-			-								-
1	TS 13080	US 14 NORTHWEST HWY @ STATE ST	100%								<u> </u>		<del>~~~~~~</del>	<u> </u>	<u> </u>		1
		ALGONOUIN RD @ SEYMOUR/KOLPIN DR	95%	5%		<del> </del>					<b> </b>				1		1
4		ALCONOUIN RD @ WOLF RD	97.5%	2.5%							ļ	<del> </del>		<del> </del>	<del> </del>		1
8		CENTRAL RD & EAST RIVER RD	97.5%			<del> </del>					2.5%				<u> </u>		-
5		CENTRAL RD & WOLF RD	92.5%	5%	2.5%							<b></b>			<del> </del>		1
2		DES PLAINES RIVER RD & ALGONQUIN RD	95%	5%	9,5-1						<b></b>						1
		IL 58/GOLF RO @ 6TH AVE	95%	5%							<b></b>	<b></b>			<del> </del>		1
1		IL 58/GOLF RD @ EAST RIVER RD	100%	0,7		<u> </u>		<b></b>			<b> </b>						1
7		IL 58/GOLF RD @ COLLEGE DR	96.7%			<del> </del>					<del> </del>	3.3%		<del> </del>	<del> </del>		-
1		IL 58/GOLF RD @ POTTER RD	100%	<u> </u>								- 01072					-
4		IL 58/GOLF RO © SEGERS RD/WOLF RD	97.5%	2.5%							<del> </del>			<del>                                     </del>	<del> </del>		1
		IL 62/ALGONOUIN RD & MT PROSPECT RD	100%	1.07							<del> </del>				<u> </u>		1
9		IL 72/HIGGINS RD & LEE RAMP/TRAMMEL CROW	97.5%					<b></b>			<u> </u>	<del> </del>	2.5%	ļ	<del> </del>		1
1		IL 72/LEE ST & IL 72/TOUHY AVE	100%														1
6		IL 72/TOUNY AVE & MT PROSPECT RD	95%	2,5%		2,5%						<u> </u>		<u> </u>			-
		IL 72/TOUHY AVE & WOLF RD	97.5%	2.5%		1					<del> </del>	<b> </b>		<del> </del>	<del> </del>	<b></b>	-
		IL 83/ELMIURST RD 2-IL 83/OAKTON-ST	100%											<u> </u>			DELE
	<u> </u>	OAKTON-ST @ DES PLAINES RIVER RD	97,5%	2.5%													DELET
<u> </u>	<u> </u>	OAKTON ST @ MT PROSPECT RD	100%	1		<del> </del>				Total Production	<del> </del>	<del> </del>				-	1
2		OAKTON ST & WEBSTER LN	95%	5%		<del>                                     </del>		<del> </del>			<u> </u>	<del> </del>	<b></b>	<del> </del>	-		1
1		OAKTON ST & WOLF RD	100%			<del> </del>					<del> </del>	<u> </u>		ļ	<del> </del>		-
2		TOUHY AVE & MAPLE ST	95%	5%		<del>                                     </del>				-	<del> </del>						1
		US 12/RAND RD & US 12 US 45/BES PLAINES RIVER RD	100%	J.,													DELET
		US 12-VS 45/ELK DLVD a US 45/DES PLAINES RIVER RD	100%					<u> </u>						<u> </u>			DELET
<u> </u>		US 12 US 45/LEE ST @ US 45/DES PLAINES RIVER RD	100%			<u> </u>								<u> </u>	<b></b>		DELET
10		US 12-US 45/MANNHEIM RD & LUNT AV	96.7%				3,3%										-
1		US 45/DES PLAINES RIVER RD & CENTRAL RD	100%			<del> </del>	3,5%				<del> </del>	<del> </del>		<del> </del>	<u> </u>	<b></b>	-
2		US 45/DES PLAINES RIVER RD & NAZARETH WAY/HOLY FAMILY	95%	5%		<del> </del>				-		<del> </del>		<del> </del>			-
		WOLF RD & HOWARD ST		<del> </del>		<b> </b>			<del></del>		ļ	<b> </b>		<b></b>	<u> </u>	<b></b>	4
		WOLF RD & HOWARD ST WOLF RD & THACKER/DEMPSTER ST	95%	5%		<del> </del>		ļ		ļ	<del> </del>	<del> </del>		<del> </del>		<b> </b>	4
			97.5%	2.5%		<del> </del>					<del> </del>			<del>                                     </del>			-
	15 1625	US 45 DES PLAINES RIVER RD 0 IL 58 GOLF RD	100%	1		<u></u>	<u> </u>	L		<u> </u>	<u></u>	L	L	<u> </u>	1	<u> </u>	اــا



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DATE	-	10-14-13	REVISED -

STATE OF	F ILLINOIS
DEPARTMENT OF	TRANSPORTATION

		SUMMAR	Y OF QUA	F.A. RTÉ.	SECTION	COUNTY	TOTAL	SHEET NO.			
		SH	EET 1 OF	5			VAR	2013-054TS	COOK CONTRACT	99 NO.	60X15
SCALE: NONE SHEET OF SHEETS STA. TO STA.								ILLINOIS FEO. A		NO.	90×13

									FUNDING PAF	RTICIPATION						
COLUMN NUMBER	TS NO.	INTERSECTION	STATE	DES PLAINES		ELK GROVE TOWNSHIP	ROSEMONT	NORTHBROOK	WHEEL INC	BUFFALO GROVE	FOREST PRESERVE	OAKTON COMMUNITY COLLEGE	SEITE 7.	CTK ASSET SERVICES., BROOKSIDE, c/o	PROPERTY,	
18	TS 60	I 94 EDENS SPUR N RAMP BROOKSIDE PLZ & IL 43 WAUKEGAN RD	97.5%											2.5%		
1	TS 61	1 94 EDENS SPUR S RAMP @ IL 43 WAUKEGAN RD	100%				<b></b>								······································	
11	TS 14400	IL 43 WAUKEGAN RO @ WALTERS AVE	95%					5%						-		
12	TS 3125	IL 68 DUNDEE RD & HUEHL RD	96.7%			<del> </del>		3.3%								
13	TS 3135	IL 68 DUNDEE RD @ LANDWEHR RD	97,5%		****			2.5%			7.		-			
1	TS 3160	IL 68 DUNDEE RD @ PFINGSTEN RD	100%													
1	TS 3170	IL 68 DUNDEE RD 2 SANDERS RD	100%													
11	TS 3195	IL 68 DUNDEE RD @ WESTERN AVE	95%					5%	-							
11	TS 5933	WILLOW RD & WESTLEIGH DR FOUNDERS DR	95%					5%								
1	TS 2100	IL 43/WAUKEGAN RD @ IL 68/DUNDEE RD	100%													
13	TS 14430	IL 43/WAUKEGAN RD & SHERMER RD	97.5%					2.5%		·						
12	TS 3137	IL 68/DUNDEE RD @ ANTHONY TRAIL	96.7%					3.3%								
11	TS 3115	IL 68/DUNDEE RD @ CHARLEMACNE/TORREY PRKWY	95%					5%				70000				
14	TS 3140	IL 68/DUNDEE RD @ MIDWAY RD	95%					2.5%							2,5%	
1	TS 3180	IL 68/DUNDEE RD & SHEMER RD	100%													
11	TS 3185	IL 68/DUNDEE RD & SKOKIE BLVD	95%					5%								
11	TS 14410	PFINGSTEN RD & CHERRY LN	95%					5%								
11	TS 14405	PFINGSTEN RD & MARIA AV/NORTHSIDE DR	95%					5%								
13	TS 14415	PFINGSTEN RD & WALTERS AVE	97,5%					2.5%								
11	TS 5915	WILLOW RD & CREENWOOD AVE	95%					5%								
15	TS 11690	IL 68 DUNDEE RD ® NORTHGATE	95%						5%							
16	TS 3145	IL 68 DUNDEE RD @ OLD MCHENRY/WHEELING RD	97.5%						2.5%			2,11,11				
16	TS 3175	IL 68 DUNDEE RD & SCHOENBECK RD	97.5%						2.5%							
1	TS 3430	IL 83 ELMHURST RD & HINTZ RD	100%													
16	TS 3355	IL 83 ELMHURST RD & IL 83 OLD MCHENRY	97.5%						2.5%							
15	TS 21100	IL 83 OLD MCHENRY RD & LEXINGTON DR/PARK POINT	95%						5%							
16	TS 5625	PALATINE RD @ WHEELING RD	97.5%						2.5%							
1	TS 1715	US 45-IL 21 MILWAUKEE AVE & IL 68 DUNDEE	100%													
16	TS 1730	US 45-IL 21 MILWAUKEE AVE & WOLF RD	97.5%		-				2,5%							
17	TS 21200	IL 68/DUNDEE RD & HUNTINGTON LN/LAKE BLVD	95%						2.5%	2.5%						
1	TS 3095	IL 68/DUNDEE RD @ IL 83/ELMHURST	100%						-							
8	TS 1720	US 45-IL 21/MILWAUKEE AVE @ HINTZ RD	97,5%								2.5%	_				
1	TS 1726	US 45-IL 21/MILWAUKEE AVE & LAKE COOK RD NORTH RAMP A&D	100%													
1	TS 1724	US 45-IL 21/MILWAUKEE AVE & LAKE COOK RD SOUTH RAMP B&C	100%													

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STATI	E OF	ILLINOIS
DEPARTMENT	OF	TRANSPORTATION

		SUMMARY	OF QUA	ANTITI	ES	F.A. RTE.	S£
		SHE	ET 2 OF	5		VAR	2013
SCALE: NONE	SHEET	OF	SHEETS	STA.	TO STA.	<b></b>	

F.A. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-054TS	COOK	99	5
		CONTRACT	1 NO. 6	0X15
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			URBAN		2	3	4	5 6	7	8		€ 0 C			A	4 15	16	17	18		
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	À1	1	-	(3)	- 1	1	1	1 1	RAFFI(	,	1	1	V 7/0	±	1 1			
					And Annual Andrews								UAN I								
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6						-											
												***************************************									
67100100	MOBILIZATION	L SUM	1	- Annual	-	I															
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	even necessary reserves		-			ales de la constante de la con					mproper proper p			<u> </u>	-		_	
						THE RESIDENCE AND ADDRESS OF THE PERSON ADDRESS OF			+												
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	77	23	14	•	8	1	2	2	1	1	8 2	2 3	3	1 2	5	1	1		
87502440	TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT,	EACH	3	2									1								
0.75.00.400	TOACCIO CIONAL DOCT CALVANITCO CICCLIA CT		23	-	<del>  7</del>				-						_						
87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	45	2									8		5						
87502490	TRAFFIC SIGNAL POST, GALVANIZED STEEL 15 FT.	EACH	3		1									- 2	2	***************************************					
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	24	7	3	ALL LANGE CO.	2	4	1				2	4	2 ;	3					
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	39	10	10		4	4	1		6		2		2						
88030050	SIGNAL HEAD, LED, 1-FACE. 3-SECTION, BRACKET MOUNTED	EACH	37	16	2	AND THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TO THE PERSON NAMED IN COLU			2		2		8	5.	5 3	2					
88030070	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	3		3	AND THE PROPERTY OF THE PROPER															
88030080	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	2			4									2						
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	14	9				4			·			and the second section of the second							
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	46	20	4		4	4	1		1		6		2 .	4					
									The state of the s												
88030210	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	21	****	6			***************************************	2		2		6	4	4						
88030220	SIGNAL HEAD, LED. 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	,	1				ACMAN AND AND AND AND AND AND AND AND AND A													
	DESIGNED - JAM   REVISED -						***************************************	AN EXECUTE OF THE PARTY OF THE								A.	SECT				Rev.

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DATE	-	10-14-13	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	:	SUMMAR	Y OF QUANTITIES	
		SH	EET 3 OF 5	
LE: NONE	SHEET	٥F	SHEETS STA.	TO STA.

							an harman sa				CONS	STRUC	TION	CODE	-			**************************************
			URBAN	,	2	3	4	5	6 7	8	9	10	11 12	2   13	14	15	16 1	7 18
CODE NO.	ITEM	UNIT	TOTAL QUANTIT	Y							TF	0(	SIGN 021 BAN	1AL				
						1								***************************************				
88030230	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-4 SECTION, BRACKET MOUNTED	EACH	2								- 44			2				
88030240	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	26	8	2		4				1		4	2	4			
	· • • •	MARIAN PARAMANAN	<del> </del>	-		NAME AND ADDRESS OF THE PARTY O								And the same of th				
00030250	SIGNAL HEAD, LED. 2-FACE, 1-4 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1		1	PARAMETER AVI DA CENTRAL DE LA CONTRAL DE LA												
<del>-88030310</del>	SICNAL HEAD, LED. 3-FACE, 3-SECTION, BRACKET MOUNTED	EACH		1-1-	+	THE PARTY OF THE P			-	minute account para a desiration of a desirati				und de la constante de la cons				
88030330	SIGNAL HEAD, LED, 3-FACE, 2-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	3							00 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A			2					
88055150	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	<u> </u>	1		annih marata da					1							
88055160	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH		1														22// 22/20/20/20/20/20/20/20/20/20/20/20/20/2
88055170	OPTICALLY PROCRAMMED SIGNAL HEAD, LED, 1-FACE, 1-SECTION, MAST-ARM-MOUNTED	EACH	<u> </u>	1														
88060110	COMBINATION SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION OPTICALLY PROGRAMMED, 1-3 SECTION, BRACKET MOUNTED	EACH	1	J										-				
88060130	COMBINATION SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION OPTICALLY PROGRAMMED, 1-4 SECTION, BRACKET MOUNTED	EACH	973	1														
88060150	COMBINATION SIGNAL HEAD, LED, 2-FACE, 1-4 SECTION OPTICALLY PROGRAMMED, 1-3 SECTION, BRACKET MOUNTED	EACH		1-1-	-													
88102717	PEDESTRIAN SIGNAL HEAD, LED. 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	109	12	. 22	and the state of t	20					2 2	27 4	1 12	2		6	2
88102747	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	37	15	7	ALL DATE OF THE PARTY OF THE PA	4			Commence of the Commence of th			4	VIII.		4	2	
88102757	PEDESTRIAN SIGNAL HEAD, LED, 3-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	3	2				The state of the s	A 100				1					
88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	88	23	14	-	8	VO. 1.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.	8 2	2 8	7		8	6	4	AND REAL PROPERTY OF THE PERSON OF THE PERSO		
88800100	PEDESTRIAN PUSH-BUTTON	EACH	100	22	. 14		23					3	20 4	1 12	2		1	2
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DATE		10-14-13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE; MONE SHEET

SUMMARY OF QUANTITIES
SHEET 4 OF 5
SHEET OF SHEETS STA.

TO STA.

F.A. SECTION COUNTY TOTAL SHEET NO.

VAR 2013-054TS COOK 99 8

CONTRACT NO. 60X15

[ILLINOIS]FED. AID PROJECT

											CON	NS TRI	UÇTIC	)N C	ODE							
		-	URBAN		2	3 4	5	6	7	8	9	10	100	12	13	14	15 1	16 1	17 ]	8		
CODE NO.	ITEM	UNIT	TOTAL QUANTITY		······································				-2	*	T		IC S 002I JRBAI		L							
																				or frame and values		
89502210	MODIFY EXISTING CONTROLLER CABINET	EACH	73	21	13	1 7	1	1	2	2	1	1	8	2	3	1	2 5	5	1	1		
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	52	14	10			general	4	***************************************	1	1	6	1	2	1	1 4	4	1			
X8620050	UNINTERRUPTABLE POWER SUPPLY, GROUND MOUNTED	EACH	1															1				
X8620200	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	72	21	13	-	7 1	1	2	2	1	1	8	2	3	1	2 4	4	1	1		
X8803040	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT	EACH	15	3	1	2	4			1			2	1					-			
X8803082	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	33	19	4	1				2			4	3					1			
X8803084	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	63	20	G)	de La Carte de La	5 4			11				1			INTERPORTED TO THE PARTY OF THE		2			
X8803088	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	27	4	5	4	4			5			2	1					2			
X8803090	SIGNAL HEAD, LED. 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	10	3			*			1			2						2			
X8803110	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED, RETROFIT	EACH	1	France France Control of Control	T I I																	
X8803210	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	20	3	4					4				2					1			
X8880015	PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	95	7	25	19	3 5					3	12				4 1	11				
				And the state of t					name annum pooral					,								
				emment hemit der Aventura ber den meter		-	1															
				Andrew State of a control of the con					The second secon	AND THE PROPERTY OF THE PROPER												
				Village and Associated and Associate			Name and the second sec						ACCRETATION AND ACCRETATION OF A PARTIES OF									
	DESIGNED - JAM REVISED -						VARIATION AVERTANCES	Commence	RY OF	011-11			The second secon			F.A.	· ·	SECTION		COUNTY	,   101	Pey



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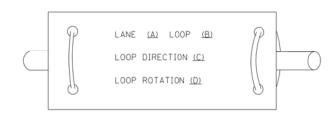
			OF QUANTITIES	
SCALE: NONE	SHEET	OF	SHEETS STA.	TO STA.

				13.5	- Y _′
	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VAR	2013-054TS	COOK	99	9
_			CONTRACT	NO. 6	0X15
		ILLINOIS FED. A	D PROJECT		

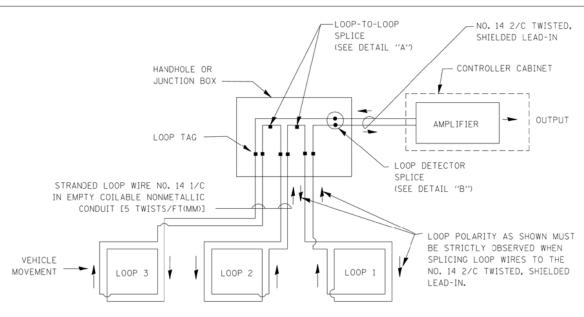
#### LOOP DETECTOR NOTES

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

#### LOOP LEAD-IN CABLE TAG

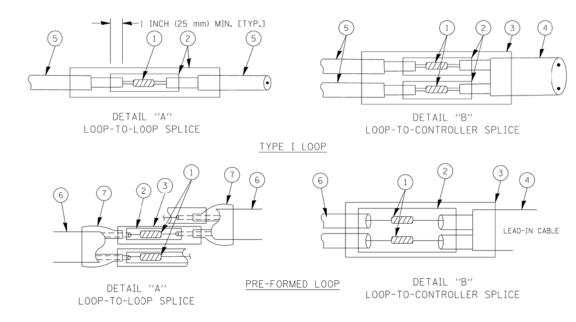


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



#### DETECTOR LOOP WIRING SCHEMATIC

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



#### LOOP DETECTOR SPLICE

- $\ensuremath{\mathbb{T}}$  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 LENGHT 6" (150 mm), UNDERWATER GRADE.
- (4) NO. 14 2/C TWISTED, SHIELDED CABLE.
- (5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- (6) PRE-FORMED LOOP

SCALE:

XL POLYOLEFIN 2 CONDUCTOR T BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

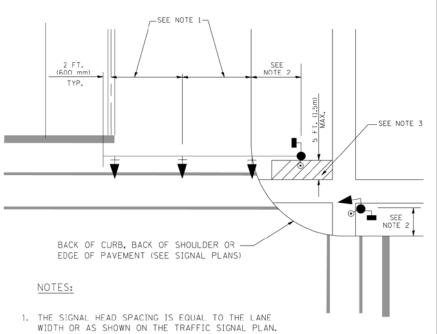
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c:\pw_work\PWIDOT\KANTHAPHIXAYBC\dØ1126	4\traffic_legend_v7.dgn	DRAWN - BCK	REVISED -
	PLOT SCALE = 20.0000 ' / IN.	CHECKED - DAD	REVISED -
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STATE	OF ILLINOIS
DEPARTMENT	OF TRANSPORTATION

	DISTRICT	ONF		F.A. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
STANDAR	D TRAFFIC SIGNA	NI DESIGN	DETAILS	VAR	2013-054TS	COOK	99	10
STANDAN	D TRAITIC STONY	AL DESIGN	DLIAILS			CONTRACT	NO. 6	0X15
CALE:	SHEET NO. 1 OF 6 SHEETS	STA.	TO STA.	FED. RO	DAD DIST. NO.   ILLINOIS FED.	AID PROJECT		

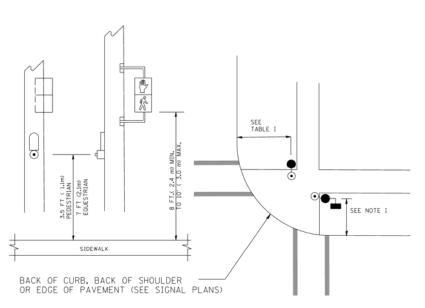
#### TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

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



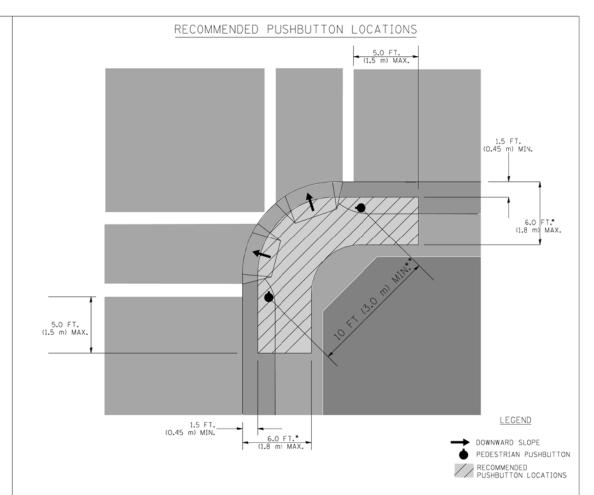
- 2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- 3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
- THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE 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."



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

### NOTES:

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

#### TRAFFIC SIGNAL EQUIPMENT OFFSET

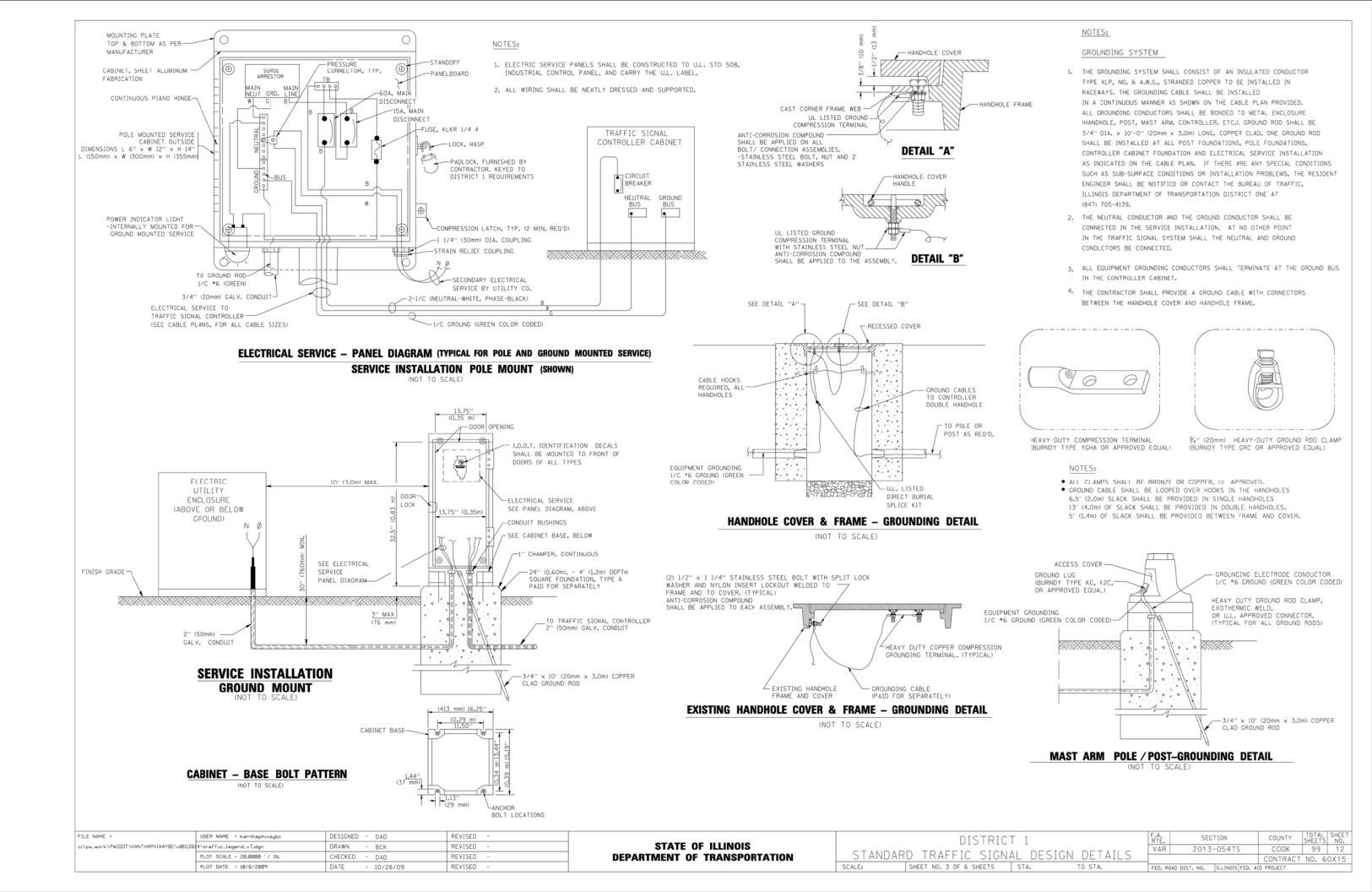
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10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

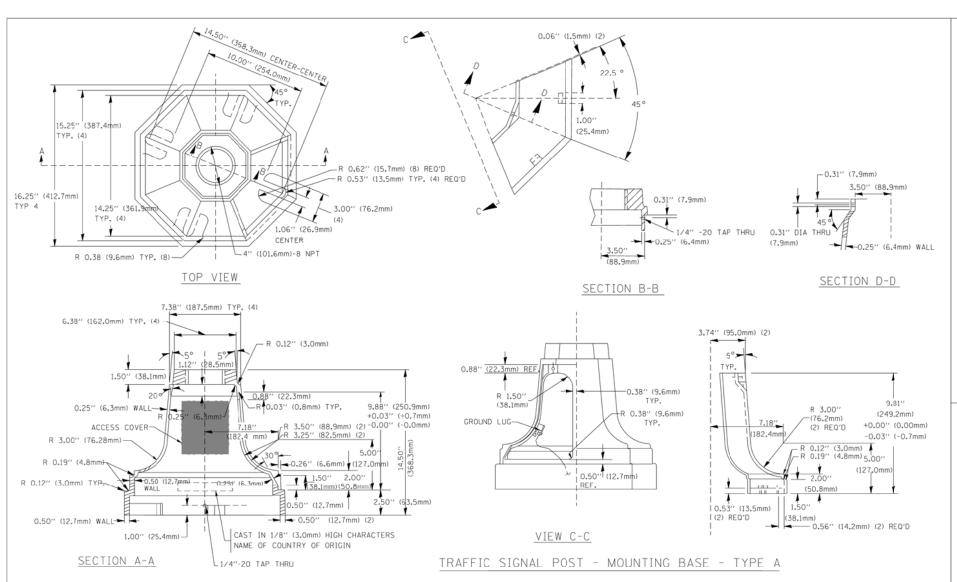
#### NOTES:

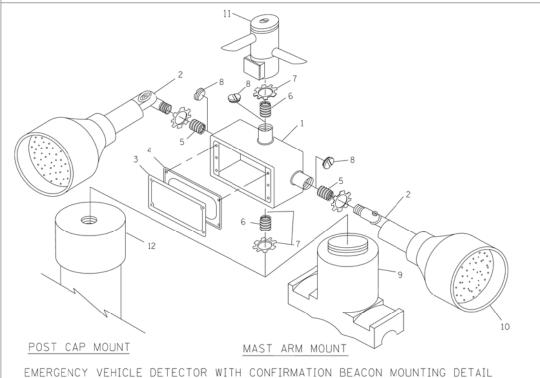
- 1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
- 2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
-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

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	DI	STRICT :	1		F.A. RTE.	SEC	TION	COUNTY	TOT
	STANDARD TRAFFIC	CICNIAI	DECION	DETAILS	VAR	2013-	054TS	COOK	9
	STANDARD TRAFFIC	, SIGNAL	DESIGN	DETAILS				CONTRACT	NO.
	SCALE: SHEET NO. 2 OF	6 SHEETS	STA.	TO STA.	FED. ROA	D DIST. NO.	ILLINOIS FED. A	ID PROJECT	



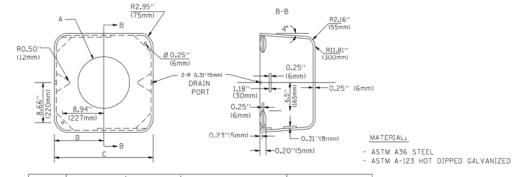




ITEM	NO. IDENTIFICATION
1	OUTLET BOX- GALV, 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	¾''(19 mm) CLOSE NIPPLE
7	¾4"(19 mm) LOCKNUT
8	3/4"(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

#### NOTES:

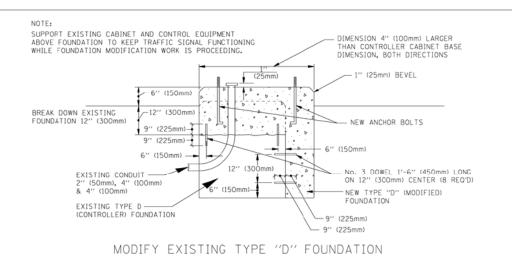
- 1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
- 2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
- 3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED.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

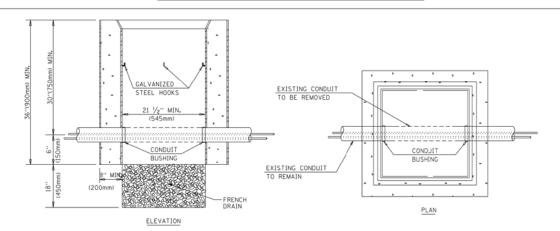


А	В	С	HEIGHT	WEIGHT
VARIES	9.5"(241mm)	19''(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIES	10.75"(273mm)	21.5"(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIES	13.0"(330mm)	26"(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIES	18.5"(470mm)	37''(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57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

#### SHROUD

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



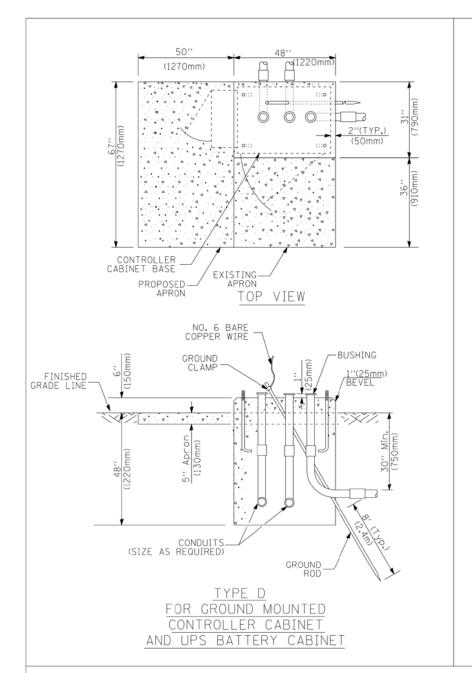


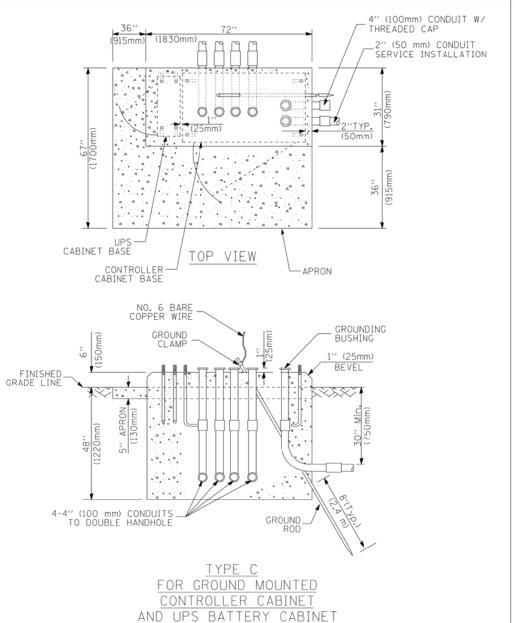
- 1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
- 2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCIDENTAL TO THE HANDHOLE.

#### HANDHOLE TO INTERCEPT EXISTING CONDUIT

#### DESIGNED - DAG REVISED FILE NAME = c:\pw\_work\PWIDOT\KANTHAPHIXAYBC\d0112614\traffic\_legend\_v7.dgr DRAWN REVISED CHECKED REVISED - DAD PLOT DATE = 10/6/2009 DATE - 10/28/09 REVISED

	DISTRICT	1	F.A. RTE	Ė. SECT	ION	COUNTY	TOTAL SHEETS	SHEET NO.
CT	ANDARD TRAFFIC SIGNA	TATIS VAF	AR 2013-	-054TS	COOK	99	13	
3 1	ANDARD TRAFFIC SIGNA	IL DESIGN DE	IAILS			CONTRACT	NO. 6	0X15
SCALE:	SHEET NO. 4 OF 6 SHEETS	STA. TO S	TA. FED.	. ROAD DIST. NO.	ILLINOIS FED. AI	D PROJECT		$\overline{}$





65" (SEE NOTE 4 (1651mm) 49" (SEE NOTE 4 1245mm 49" (SEE NOTE 4 1245	ITE 3) _ SEE NOTE 5
į	₹/4'' (19mm) TREATED PHYWOOD DECK
<u></u>	PHIWOOD BECK
	2" × 6" (51mm × 152mm) TREATED WOOD
	48" MIN. (305mm)
NOTES:	6" x 6" (152mm x 152mm)
BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS	TREATED WOOD POSTS SIONS OF 26" x 44" (660mm x 1118mm).
AD HIST DI ATTORM SIZE TO TIT CARINET BASE DIMENSIONS	BETNIC CLIBBILIED

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

## TEMPORARY SIGNAL CONTROLLER WOOD SUPPORT PLATFORM

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

CABLE SLACK

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

VERTICAL CABLE LENGTH

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

DEPTH OF FOUNDATION

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30′ (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
30' (9.1 m) and less than 40' (12.2 m)	11'-0'' (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0'' (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0'' (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0'' (6.4 m)	42'' (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0'' (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

#### NOTES:

- These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along
  the length of the shaft, with an average Unconfined Compressive Strength (Qu) > 1.0 tsf (100 kpa).
  This strength shall be verified by boring data prior to construction or with testing by the Engineer
  during foundation drilling. The Bureau of Bridges & structures should be contacted for a revised
  design if other conditions are encountered.
- 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 most arm assemblies with dual arms refer to state standard 878001.

### DEPTH OF MAST ARM FOUNDATIONS, TYPE E

TOTAL SHEET NO. 99 14

CONTRACT NO. 60X15

COUNTY

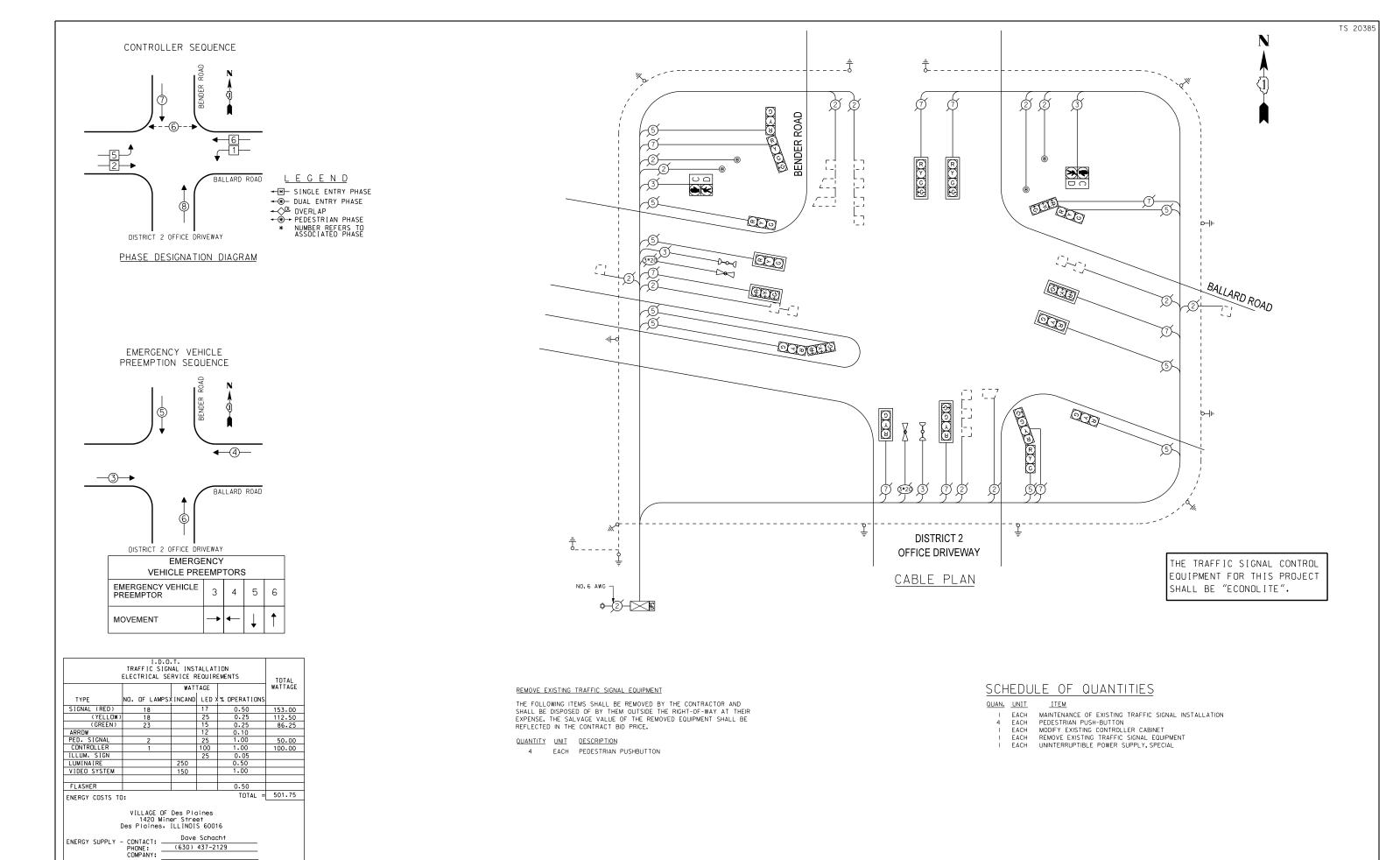
COOK

FILE NAME =	USER NAME = kanthaphixaybo	DESIGNED -	- DAG	REVISED	-	
c:\pw_work\PWIDOT\KANTHAPHIXAYBC\d01126	DRAWN -	- BCK	REVISED	-		
	PLOT SCALE = 20.0000 ' / IN.	CHECKED -	- DAD	REVISED	-	
	PLOT DATE = 10/6/2009	DATE -	10/28/09	REVISED	-	

	DIST	RICT 1			F.A. RTE.	SEC	TION
STANDARD	TRAFFIC S	STONAL	DESIGN	DETAILS	VAR	2013	-054TS
				DLIAILS			
SCALE: SI	HEET NO. 5 OF 6 SHE	ETS STA	. 1	TO STA.	FED. RO	DAD DIST. NO.	ILLINOIS FED.

## TRAFFIC SIGNAL LEGEND

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WIRELESS ACCESS POINT		R			GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)		1	(1)	CROSSBUCK	le.	<del>**</del>	<b>1010</b>
WIRELESS DETECTOR SENSOR	F	~(W)	W	W	CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED	)	<u> </u>		CROSSING GATE		<del>202</del> >	<b>X</b> - <b>X</b> -
N, TILT, ZOOM CAMERA		R PTZ)1	PTZ)1	PTZ)(	DENOTES NUMBER OF CONDUCTORS, ELECTRIC		ERK		FLASHING SIGNAL		$\times \circ \times$	XOX
DEO DETECTION ZONE					RADIO REPEATER	R ERR	ERR	RR	RAILROAD CANTILEVER MAST ARM	X	<del>oz z</del> z	X <del>OX X</del> X
DEO DETECTION CAMERA		R VJ	(V)	(V)¶	RADIO INTERCONNECT	<del>    </del> 0	<del>     </del>	<u> </u>   ++•	RAILROAD CONTROL CABINET		R R	₽
CROWAVE VEHICLE SENSOR		R MJ	MI	M	PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER		<b>(₽</b> ) C <b>(\$</b> ) D	<b>₽</b> C <b>★</b> D			EXISTING	PROPOSED
EFORMED DETECTOR LOOP			99   P     00	Р	12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID		<b>()</b>	*	RAILROAD	<b>SYMBO</b>	LS	
ECTOR LOOP, TYPE I					INTERNATIONAL SYMBOL, OUTLINED				THE CHARLE SAMILEING (SISIEM) DETECTOR		1,31	13
UMINATED SIGN ) RIGHT TURN''		R (S)	<b>®</b>	<b>®</b>	WALK/DON'T WALK SYMBOL  12" (300mm) PEDESTRIAN SIGNAL HEAD		©W W		PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR  PREFORMED SAMPLING (SYSTEM) DETECTOR		PIS PS]	PIS
UMINATED SIGN ) LEFT TURN''		R R	8	•	12" (300mm) PEDESTRIAN SIGNAL HEAD		"P"	"P"	PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR	R	ÎPPÎ	
CESSIBLE PEDESTRIAN PUSHBU	BUTTON DETECTOR	R aps	@APS	APS  O  O  O  O  O  O  O  O  O  O  O  O  O				◆Y ◆G	PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR  EXISTING PREFORMED INTERSECTION LOOP DETECTOR	PR	L'.	
ESTRIAN PUSHBUTTON DETEC	CTOR	R	<ul><li>•</li></ul>	<u> </u>	SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD		(V)	Y	EXISTING INTERSECTION LOOP DETECTOR		[2]	3
ESTRIAN SIGNAL HEAD		R <sub>I</sub>	-0	-				R	(SYSTEM) DETECTOR  SAMPLING (SYSTEM) DETECTOR		[IS]	IS S
SHER INSTALLATION DENOTES SOLAR POWER)		R O-D>"F"	O-D″F″	<b>←</b> _″F″	STOTAL FACE		<b>(*)</b>	<b>←</b> Y <b>←</b> G	TO BE REMOVED  INTERSECTION & SAMPLING	0	553	
NAL HEAD WITH BACKPLATE NAL HEAD OPTICALLY PROGR.	RAMMED	+(\)^\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	+> ->"p"	+ <b>►</b> - <b>►</b> ''P''	SIGNAL FACE		(2)	Y	SIGNAL POST AND FOUNDATION	RMF		
NAL HEAD CONSTRUCTION ST MBERS INDICATE THE CONSTR		R		<b>→</b> <sup>2</sup>	YELLOW AND GREEN TRAFFIC SIGNAL FACE			R	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED	RMF O–X———		
NAL HEAD		R →	$\rightarrow$	-	12" (300mm) RED WITH 8" (200mm)		R		FOUNDATION TO BE REMOVED	0		
WIRE		>R	>	>-	12" (300mm) TRAFFIC SIGNAL SECTION		R	R	FOUNDATION TO BE REMOVED  ALUMINUM MAST ARM POLE AND	RMF		
PORARY WOOD POLE (CLASS TER) 45 FOOT (13.7m) MINIM		$\overset{R}{\otimes}$	$\otimes$	•	RELOCATE ITEM  ABANDON ITEM	A A			STEEL MAST ARM POLE AND	ORMF		
NAL POST		R <sub>O</sub>	0	•	REMOVE ITEM	R			CONTROLLER CABINET AND FOUNDATION TO BE REMOVED	RCF		
EEL COMBINATION MAST ARM SEMBLY AND POLE WITH PTZ			Q	● PIZM	INTERSECTION ITEM		I	IP	(H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE			<sup>1</sup>    <b> </b> -•
EL COMBINATION MAST ARM EMBLY AND POLE WITH LUMI	,,,	×	o-¤——	•*	COILABLE NONMETALLIC CONDUIT (EMPTY) SYSTEM ITEM		S	CNC S	NOTED ON PLANS)  GROUND ROD AT (C) CONTROLLER,		·	C .
MINUM MAST ARM ASSEMBLY	Ů.		0		COMMON TRENCH			СТ	FIBER OPTIC CABLE NO. 62.5/125, (NUMBER OF FIBERS & TYPE TO BE		<del>-</del> Ø-	——
POLE OR (G) GROUND MOUNT EL MAST ARM ASSEMBLY ANI	D	R	T	T	TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE	R			FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F		—24F—	—(24F)—
POLE OR (G) GROUND MOUNT EPHONE CONNECTION		-□ <sup>R</sup>	P	- <b>■</b> -	GALVANIZED STEEL CONDUIT IN TRENCH (T) OR PUSHED (P)				FIBER OPTIC CABLE NO. 62.5/125, MM12F		— <u>12F</u> —	
NTERRUPTIBLE POWER SUPPL VICE INSTALLATION,	_Y	UPS)	EUPS	UPS	JUNCTION BOX	* 🖂		0	NO. 18 3 PAIR TWISTED, SHIELDED		<u> </u>	-6-
TER MASTER CONTROLLER		R	EMMC	MMC	HEAVY DUTY HANDHOLE	R R	H	Н	VENDOR CABLE FOR CAMERA  COPPER INTERCONNECT CABLE,			
STER CONTROLLER			EMC	MC	HANDHOLE						~	
LROAD CONTROL CABINET		C C	ECC	<b>B</b> ✓ <b>E</b>	CONFIRMATION BEACON	R <sub>0</sub> _(]	o-()	•4	COAXIAL CABLE		<u> </u>	—c—
TROLLER CABINET		$\boxtimes^R$			EMERGENCY VEHICLE LIGHT DETECTOR	R ✓	≪	<b>.</b> ✓	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE			
1_	_	EMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED



s	Α	м	s	С	Н	w	Α	R	١ ٦	гΖ	
_	• •	_	•	• •	_	_		•		G	
310	) W.I	HIGGIN	IS, ST	E. 100	), HOF	FMAN	ESTA	TES,	. IL	60169	

DESI	GNED -	-	JAM	REVISED	-
DRAW	/N -	-	JAM	REVISED	-
CHEC	KED -	-	LMM	REVISED	-
DATE		-	10-14-13	REVISED	-

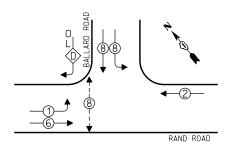
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	AND EME	RGENCY	VEHICLE	AN, PHASE DE PREEMPTION NDER ROAD	
SCALE: NONE	SHEET	OF	SHEETS :	STA.	TO STA.

F.A. SECTION COUNTY TOTAL SHEET NO.

VAR 2013-054TS COOK 99 16

CONTRACT NO. 60X15



LEGEND

→ ★ SINGLE ENTRY PHASE → ® DUAL ENTRY PHASE

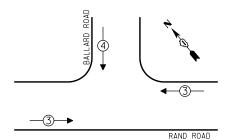
**UNDERLAP** ■

\* NUMBER REFERS TO ASSOCIATED PHASE

EMERGENCY VEHICLE PREEMPTION SEQUENCE

PHASE DESIGNATION DIAGRAM

OVERLAP PERMISSIVE PROTECTED LETTER PHASE PHASE D = 8 + 1



EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	3	4		
MOVEMENT	<b>+</b>	<b>\</b>		

	TOTAL					
		WATTAGE				
TYPE	NO. OF LAMPS	INCAND	LED >	% OPERATIONS		
SIGNAL (RED)	11		17	0.50	93.50	
(YELLOW)	11		25	0.25	68.75	
(GREEN)	11		15	0.25	41.25	
ARROW	8		12	0.10	9.60	
PED. SIGNAL	2		25	1.00	50.00	
CONTROLLER	1		100	1.00	100.00	
ILLUM. SIGN			25	0.05		
LUMINAIRE		250		0.50		
VIDEO SYSTEM		150		1.00		
FLASHER				0.50		
ENERGY COSTS TO	363.10					

VILLAGE OF Des Plaines 1420 Miner Street Des Plaines, ILLINOIS 60016

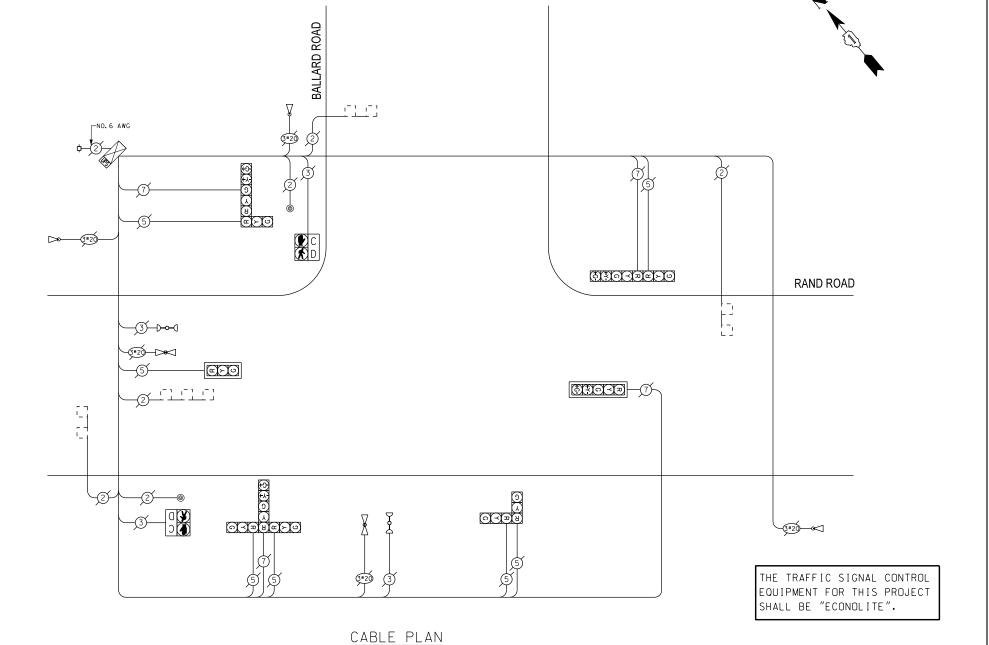
Dave Schacht ENERGY SUPPLY - CONTACT: Dave Schacht
PHONE: (630) 437-2129

DESIGNED	-	JAM	REVISED -
DRAWN	-	JAM	REVISED -
CHECKED	-	LMM	REVISED -
DATE	-	10-14-13	REVISED -

### STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

	AND EM	RGENC		E PRE	PHASE DESIGNATION EMPTION SEQUENCE, ROAD	F	F
SCALE: NONE	SHEET	OF	SHEETS	STA.	TO STA.		-

SECTION COUNTY COOK 99 17 CONTRACT NO. 60X15 VAR 2013-054TS

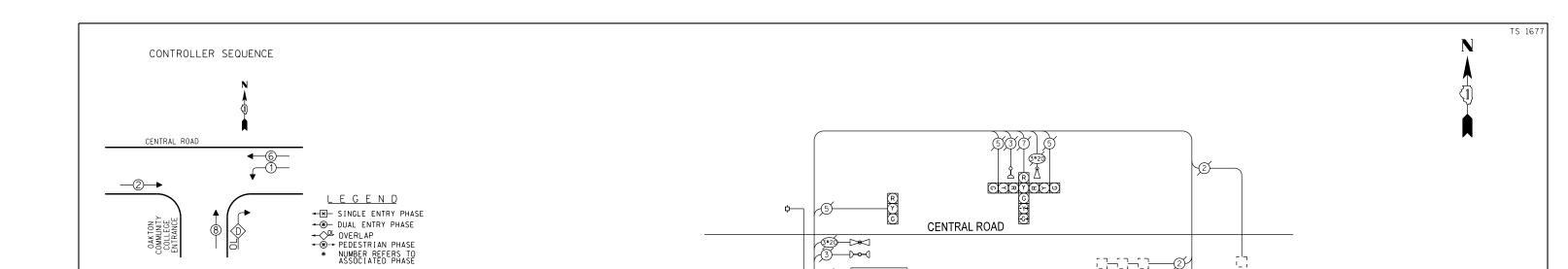


## SCHEDULE OF QUANTITIES

QUAN.	UNIT	ITEM

I EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
I EACH MODIFY EXISTING CONTROLLER CABINET
I EACH UNINTERRUPTIBLE POWER SUPPLY, SPECIAL

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



STATE OF ILLINOIS

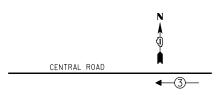
**DEPARTMENT OF TRANSPORTATION** 

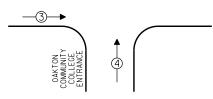
(S)—OCCUPATION (C)

PHASE DESIGNATION DIAGRAM OVERLAP PERMISSIVE PROTECTED LETTER PHASE PHASE

D = 8 + 1

EMERGENCY VEHICLE PREEMPTION SEQUENCE





	EMERGENCY VEHICLE PREEMPTORS					
EMERGENCY VEHICLE PREEMPTOR	3	4				
MOVEMENT	<b>=</b>	<b>↑</b>				

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL			
				WAT	TAGE		WATTAGE	
TYPE	NO.	OF	LAMPS	INCAND	LED >	% OPERATIONS		
SIGNAL (RED)			10		17	0.50	85.00	
(YELLOW)			10		25	0.25	62.50	
(GREEN)			10		15	0.25	37.50	
ARROW			8		12	0.10	9.60	
PED. SIGNAL					25	1.00		
CONTROLLER			1		100	1.00	100.00	
ILLUM. SIGN					25	0.05		
LUMINAIRE				250		0.50		
VIDEO SYSTEM				150		1.00		
FLASHER						0.50		
ENERGY COSTS TO	ENERGY COSTS TO: TOTAL =					294.60		

VILLAGE OF Des Plaines 1420 Miner Street Des Plaines, ILLINOIS 60016

Dave Schacht ENERGY SUPPLY - CONTACT:
PHONE:
COMPANY:

Dave Schacht
(630) 437-2129

DESIGNED	-	JAM	REVISED	-
DRAWN	-	JAM	REVISED	-
CHECKED	-	LMM	REVISED	-
DATE	-	10-14-13	REVISED	-

				HASE DESIGNATION
				MPTION SEQUENCE,
CENTRAL I	ROAD AT	OAKTON	COMMUNITY	COLLEGE ENTRANCE
SCALE: NONE	SHEET	OF	SHEETS STA.	TO STA.

CABLE PLAN

.A. TE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-054TS	COOK	99	18
		CONTRACT	NO. 6	SOX15
	ILLINOIS FED. AI	ID PROJECT		

SCHEDULE	OF	QUANTITIES

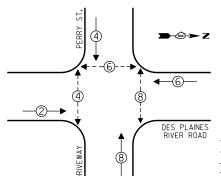
QUAN. UNIT

EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
MODIFY EXISTING CONTROLLER CABINET
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT

SHALL BE "ECONOLITE".

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

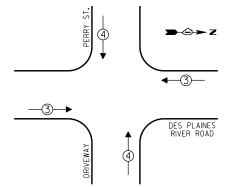


LEGEND

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

PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMP		6
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	<b>↓</b> ↑	<b>↓</b> ↑

TRAFFIC SIGNAL INSTALLÆTÆON ELECTRICAL SERVICE REQUIREMENTS									
		WATTAGE							
TYPE	NO.	OF	LAMPS)	INCAND	LED >	% OPERATIONS			
SIGNAL (RED)			16		17	0.50	136.00		
(YELLOW)			16		25	0.25	100.00		
(GREEN)			16		15	0.25	60.00		
ARROW					12	0.10			
PED. SIGNAL			6		25	1.00	150.00		
CONTROLLER			1		100	1.00	100.00		
ILLUM. SIGN					25	0.05			
LUMINAIRE				250		0.50			
VIDEO SYSTEM				150		1.00			
FLASHER						0.50			
ENERGY COSTS TO: TOTAL =									

ENERGY SUPPLY (630) 437-2129

1420 M	OF Des Plaines liner Street . ILLINOIS 60016	
CONTACT:	Dave Schacht	
CONTRO	46701 477 0400	

NOTE:

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

(C) (C) NO.6-DRIVEWAY CABLE PLAN

3

00

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SCHEDULE OF QUANTITIES

QUAN. UNIT

EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
EACH PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
EACH PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER

INTERSECTION AND SAMPLING (SYSTEM) DETECTORS

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

DES PLAINES RIVER ROAD

EACH PEDESTRIAN SIGNAL READ, LED, Z-FACE, DARCK EACH PEDESTRIAN PUSH-BUTTON, NON-LATCHING EACH MODIFY EXISTING CONTROLLER CABINET EACH REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT EACH UNINTERRUPTIBLE POWER SUPPLY, SPECIAL

### REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

NO. 6

QUANTITY UNIT DESCRIPTION

EACH PEDESTRIAN SIGNAL HEAD, I-FACE

EACH PEDESTRIAN SIGNAL HEAD, 2-FACE EACH PEDESTRIAN PUSHBUTTON

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

DESIGNED	-	JAM	REVISED	-
DRAWN	-	JAM	REVISED	-
CHECKED	-	LMM	REVISED	-
DATE	-	10-14-13	REVISED	-

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

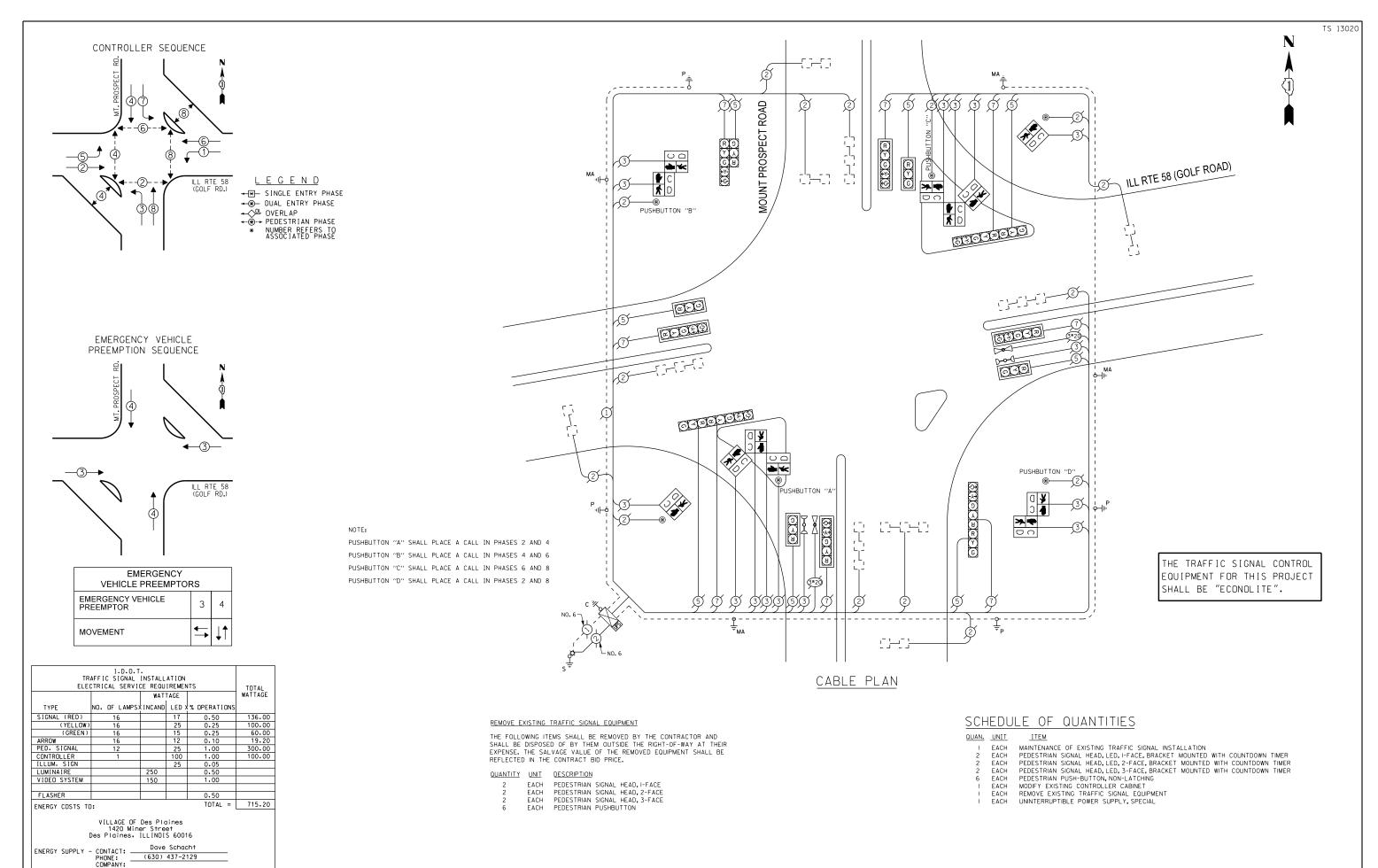
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, DES PLAINES RIVER ROAD AT PERRY STREET SHEET OF SHEETS STA.

STREET

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2

SECTION COUNTY VAR 2013-054TS COOK 99 19 CONTRACT NO. 60X15



s	A	М	S	С	н	w	A	R	Т	z	
_	• •	G	•	• •	_	_		•	•	•	
310	0 W.H	HIGGIN	IS <b>,</b> ST	E. 100	), HOF	FMAN	ESTA	TES,	IL 60	)169	

DESIGNED	-	JAM	REVISED	-
DRAWN	-	JAM	REVISED	-
CHECKED	-	LMM	REVISED	-
DATE	_	10-14-13	REVISED	_

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

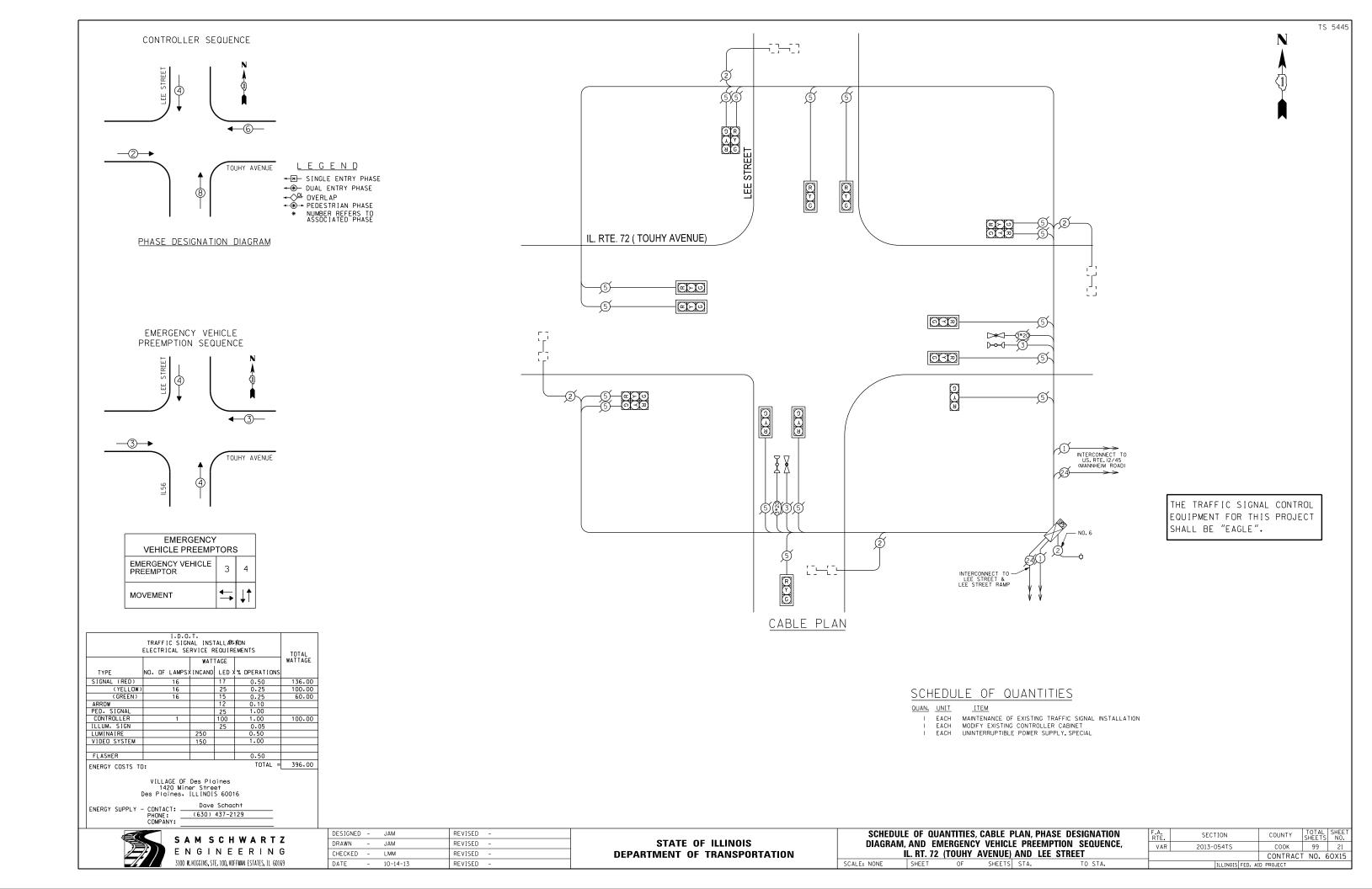
I				CABLE PLAN, PHA		F.A. RTE.	SECTION	
l					PTION SEQUENCE,	VAR	2013-054TS	
ŀ	ILL R	TE 58 (C	OLF ROA	<u>D) AT MOUNT PRO</u>	DSPECT ROAD			Т
ı	SCALE: NONE	SHEET	OF	SHEETS STA.	TO STA.		ILL INOIS FED.	AID

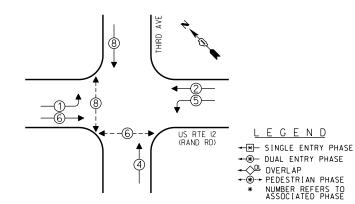
COUNTY

COOK

99 20

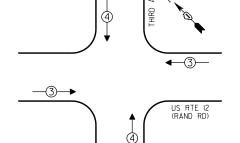
CONTRACT NO. 60X15





#### PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMP		6
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	<b>=</b>	<b>↓</b> ↑

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS									
	WATTAGE								
TYPE	NO. OF LAMPS)	INCAND	LED >	% OPERATIONS					
SIGNAL (RED)	12		17	0.50	102.00				
(YELLOW)	12		25	0.25	75.00				
(GREEN)	12		15	0.25	45.00				
ARROW	ARROW 8 12 0.10								
PED. SIGNAL	4		25	1.00	100.00				
CONTROLLER	1		100	1.00	100.00				
ILLUM. SIGN			25	0.05					
LUMINAIRE		250		0.50					
VIDEO SYSTEM		150		1.00					
FLASHER				0.50					
ENERGY COSTS TO	ENERGY COSTS TO: TOTAL = 431.60								
VILLAGE OF Des Plaines 1420 Miner Street Des Plaines, ILLINOIS 60016									

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

ENERGY SUPPLY - CONTACT: \_\_\_\_ PHONE: COMPANY: \_\_\_

Dave Schacht

(630) 437-2129

DESIGNED	-	JAM	REVISED -
DRAWN	-	JAM	REVISED -
CHECKED	-	LMM	REVISED -
DATE	-	10-14-13	REVISED -

#### STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, US RTE 12 (RAND ROAD) AT THIRD AVE

SECTION COUNTY COOK 99 22 VAR 2013-054TS CONTRACT NO. 60X15

CABLE PLAN

ITEM

REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

QUANTITY UNIT DESCRIPTION 4 EACH PEDESTRIAN PUSHBUTTON

TRACER CABLE

INTERCONNECT TO -

-3**\***20

US RTE 12 (RAND ROAD)

(C)

(\$\f\(\f\)(\f\)(\f\)

TRACER CABLE **3**C

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

QUAN. UNIT

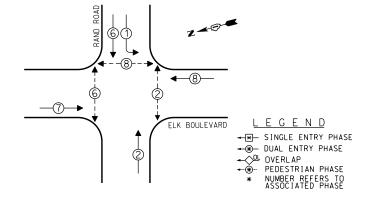
- INTERCONNECT TO ILL RT 58 (GOLF RD)

SCHEDULE OF QUANTITIES

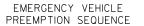
EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
EACH PEDESTRIAN PUSH-BUTTON
EACH MODIFY EXISTING CONTROLLER CABINET
EACH REMOYE EXISTING TRAFFIC SIGNAL EQUIPMENT
EACH UNINTERRUPTIBLE POWER SUPPLY, SPECIAL

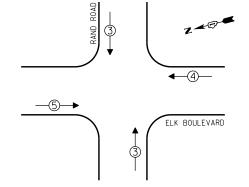
OF SHEETS STA. SHEET





#### PHASE DESIGNATION DIAGRAM





EMERGEN VEHICLE PREEM		RS	
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	<b>↓</b> ↑	•	-

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS									
		WATTAGE							
TYPE	NO.	OF	LAMPS)	INCAND	LED >	% OPERATIONS			
SIGNAL (RED)			15		17	0.50	127.50		
(YELLOW)			15		25	0.25	93.75		
(GREEN)			19		15	0.25	71.25		
ARROW			10		12	0.10	12.00		
PED. SIGNAL			6		25	1.00	150.00		
CONTROLLER			1		100	1.00	100.00		
ILLUM. SIGN					25	0.05			
LUMINAIRE				250		0.50			
VIDEO SYSTEM				150		1.00			
FLASHER	0.50								
ENERGY COSTS TO	ENERGY COSTS TO: TOTAL =								

VILLAGE OF Des Plaines 1420 Miner Street Des Plaines, ILLINOIS 60016

Dave Schacht ENERGY SUPPLY - CONTACT: Dave Schacht
PHONE: (630) 437-2129 NOTE:

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

## ROAD RAND 55 2 (5) PUSHBUTTON "D" Q Q Q Q Q 3 000 (3\*20)— D ELK BOULEVARD (DOC) THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

CABLE PLAN

#### REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

### SCHEDULE OF QUANTITIES

QUAN.	UNIT	ITEM

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

6 EACH PEDESTRIAN PUSHBUTTON

QUANTITY UNIT DESCRIPTION

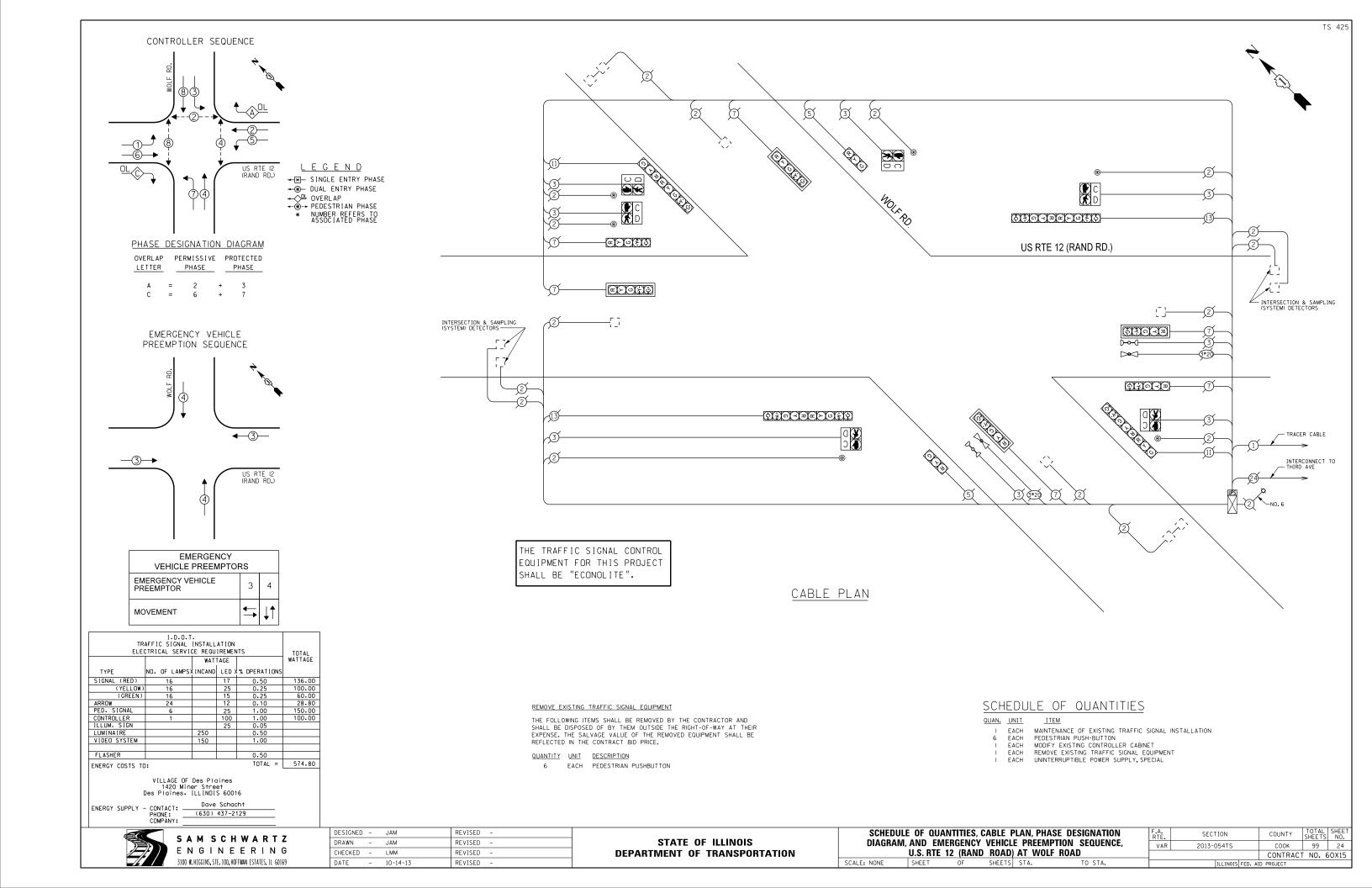
DESIGNED - JAM REVISED DRAWN - JAM REVISED CHECKED - LMM REVISED DATE - 10-14-13 REVISED

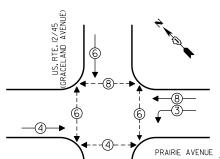
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, RAND ROAD AT ELK BOULEVARD OF SHEETS STA. SHEET

SECTION COUNTY COOK 99 23 VAR 2013-054TS CONTRACT NO. 60X15

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





LEGEND

- ← ¥ SINGLE ENTRY PHASE + SINGLE ENTRY PHASE

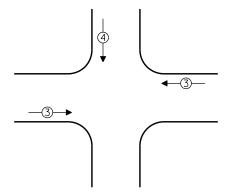
  + DUAL ENTRY PHASE

  + DU OVERLAP

  + EDESTRIAN PHASE

  \* NUMBER REFERS TO ASSOCIATED PHASE

EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGEN VEHICLE PREEM		RS
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	<b>_</b>	1

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS								
	WATTAGE							
TYPE	NO.	OF	LAMPS	INCAND	LED >	% OPERATIONS		
SIGNAL (RED)		1	2		17	0.50	102.00	
(YELLOW)		1	2		25	0.25	75.00	
(GREEN)		1	2		15	0.25	45.00	
ARROW			4		12	0.10	4.80	
PED. SIGNAL			8		25	1.00	200.00	
CONTROLLER			1		100	1.00	100.00	
ILLUM. SIGN					25	0.05		
LUMINAIRE				250		0.50		
VIDEO SYSTEM				150		1.00		
FLASHER						0.50		
ENERGY COSTS TO	):					TOTAL =	526.80	

VILLAGE OF DES PLAINES 1420 MINER STREET DES PLAINES. ILLINOIS 60016

DAVE SCHACHT ENERGY SUPPLY - CONTACT: DAVE SCHACHT
PHONE: COMPANY:

COMPANY: DAVE SCHACHT
(630) 437-2129

	DESIGNE
S A M S C H W A R T Z	DRAWN
ENGINEERING	CHECKE
3100 W.HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169	DATE

DESIGNED	-	JAM	REVISED -	_
DRAWN	-	JAM	REVISED -	
CHECKED	-	LMM	REVISED -	
DATE	-	10-14-13	REVISED -	

#### STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

SCHEDULI	E OF QI	UANTITIES, C	ABLE F	'LAN, P	PHASE DESIGNATION
DIAGRAM.	AND E	MERGENCY	VEHICL	E PREE	MPTION SEQUENCE.
US, RTE	12/45	(GRACELAND	AVEN	UE) AT	PRAIRIE AVENUE
SCALE: NONE	SHEET	OF	SHEETS		TO STA.

COUNTY TOTAL SHEET NO.

COOK 99 25

CONTRACT NO. 60X15 SECTION 2013-054TS VAR

	US, RTE. 12/45 (GRACELAND AVE		EXISTING INTERCONNECT TO MINER STREET  A A 1 12	
3 S S S S S S S S S S S S S S S S S S S				
PRAIRIE AVENUE				
(5) - CISTRICTURE (2) (7) - (3				
D D D D D D D D D D D D D D D D D D D	3 g 2	3 3 5	1) -> EXISTING TO LEE S	INTERCONNECT TREET
				THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT

CABLE PLAN

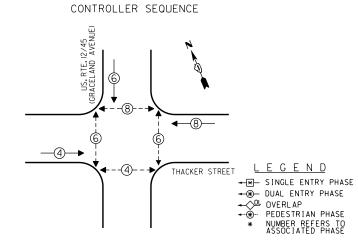
### SCHEDULE OF QUANTITIES

QUAN. UNIT ITEM

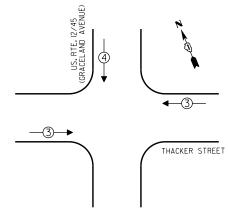
I EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
I EACH MODIFY EXISTING CONTROLLER CABINET
I EACH UNINTERRUPTIBLE POWER SUPPLY, SPECIAL

SHALL BE "ECONOLITE".





#### EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGEN VEHICLE PREEM		RS
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	<b>=</b>	<b>1</b>

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS							
	WATTAGE						
TYPE	NO.	OF	LAMPS	INCAND	LED >	% OPERATIONS	
SIGNAL (RED)			9		17	0.50	76.50
(YELLOW)			9		25	0.25	56.25
(GREEN)			9		15	0.25	33.75
ARROW					12	0.10	
PED. SIGNAL			8		25	1.00	200.00
CONTROLLER			1		100	1.00	100.00
ILLUM. SIGN					25	0.05	
LUMINAIRE				250		0.50	
VIDEO SYSTEM				150		1.00	
FLASHER						0.50	
ENERGY COSTS TO	):					TOTAL =	466.50

VILLAGE OF Des Plaines 1420 Miner Street Des Plaines, ILLINOIS 60016

SAM SCHWARTZ

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

Dave Schacht ENERGY SUPPLY - CONTACT: Dave Schacht
PHONE: (630) 437-2129

COMPANY:

DESIGNED	-	JAM	REVISE
DRAWN	-	JAM	REVISE
CHECKED	-	LMM	REVISE
DATE	-	10-14-13	REVISE

STATE OF ILLINOIS	
DEPARTMENT OF TRANSPORTATION	

1						HASE DESIGNATION
						MPTION SEQUENCE, THACKER STREET
ı	US. III L.	1473	GIIVOFFVIAN	WALIA	UL) A I	HIMUNEH STHEET
	SCALE: NONE	SHEET	OF	SHEETS	STA.	TO STA.

COUNTY TOTAL SHEET NO.

COOK 99 26

CONTRACT NO. 60X15 SECTION 2013-054TS VAR

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

SCHEDULE OF QUANTITIES

QUAN.	UNIT	ITE

EXISTING INTERCONNECT TO PRAIRIE AVENUE

**DEED** 5

I EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
I EACH MODIFY EXISTING CONTROLLER CABINET
I EACH UNINTERRUPTIBLE POWER SUPPLY, SPECIAL

EXISTING INTERCONNECT TO LEE STREET

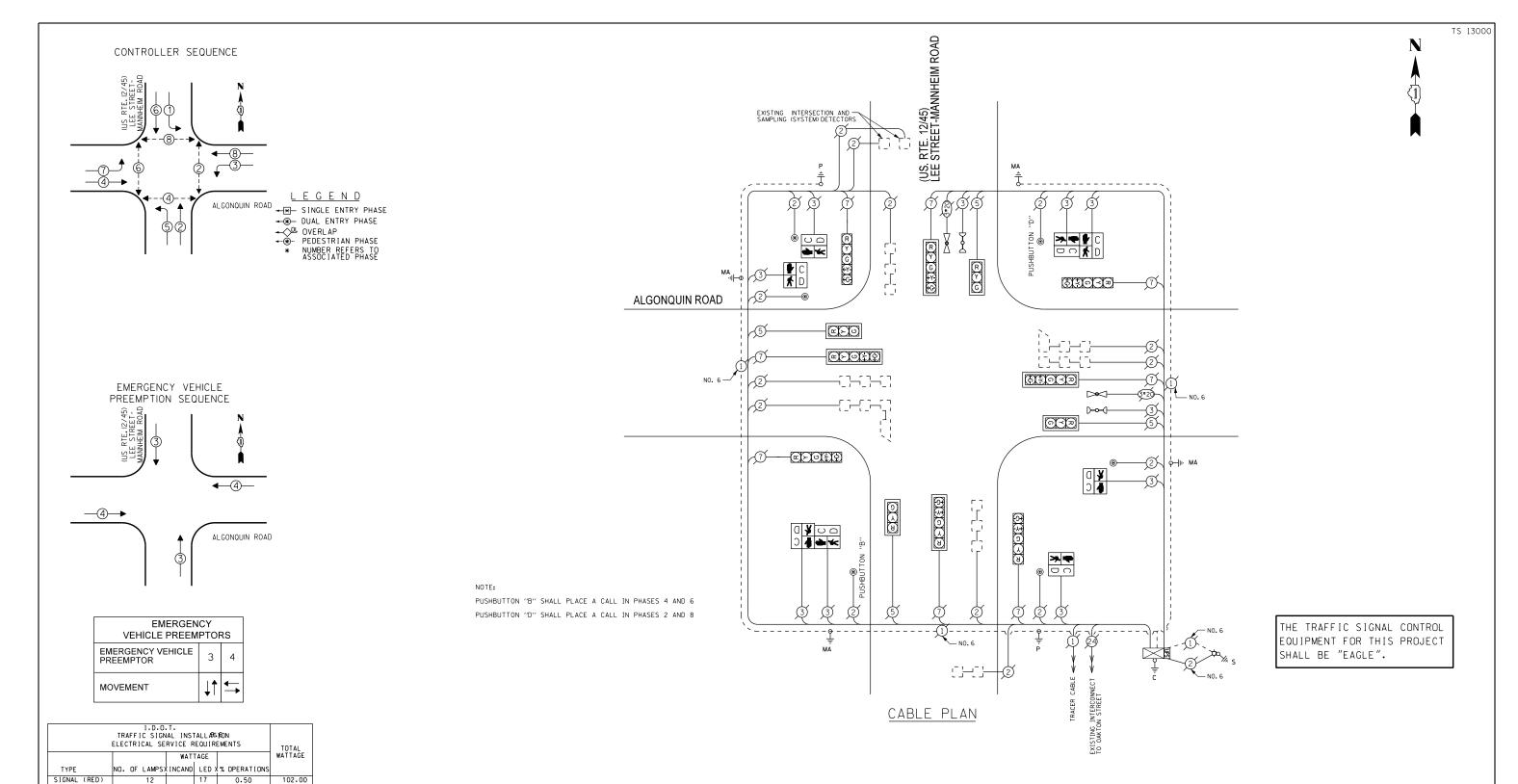
US. RTE. 12/45 (GRACELAND AVENUE)

\$ 38 \$

CABLE PLAN

SED -

THACKER STREET



(YELLOW) (GREEN) ARROW
PED. SIGNAL
CONTROLLER ILLUM. SIGN VIDEO SYSTEM 541.20 ENERGY COSTS TO:

VILLAGE OF Des Plaines 1420 Miner Street Des Plaines, ILLINOIS 60016

Dave Schacht ENERGY SUPPLY - CONTACT: Dave Schacht
PHONE: (630) 437-2129

LUMINAIRE

FLASHER

### REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

QUANTITY UNIT DESCRIPTION

EACH PEDESTRIAN SIGNAL HEAD, I-FACE EACH PEDESTRIAN SIGNAL HEAD, 2-FACE

PEDESTRIAN PUSHBUTTON

#### SCHEDULE OF QUANTITIES

QUAN. UNIT 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, NON-LATCHING EACH

EACH EACH EACH EACH

MODIFY EXISTING CONTROLLER CABINET
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

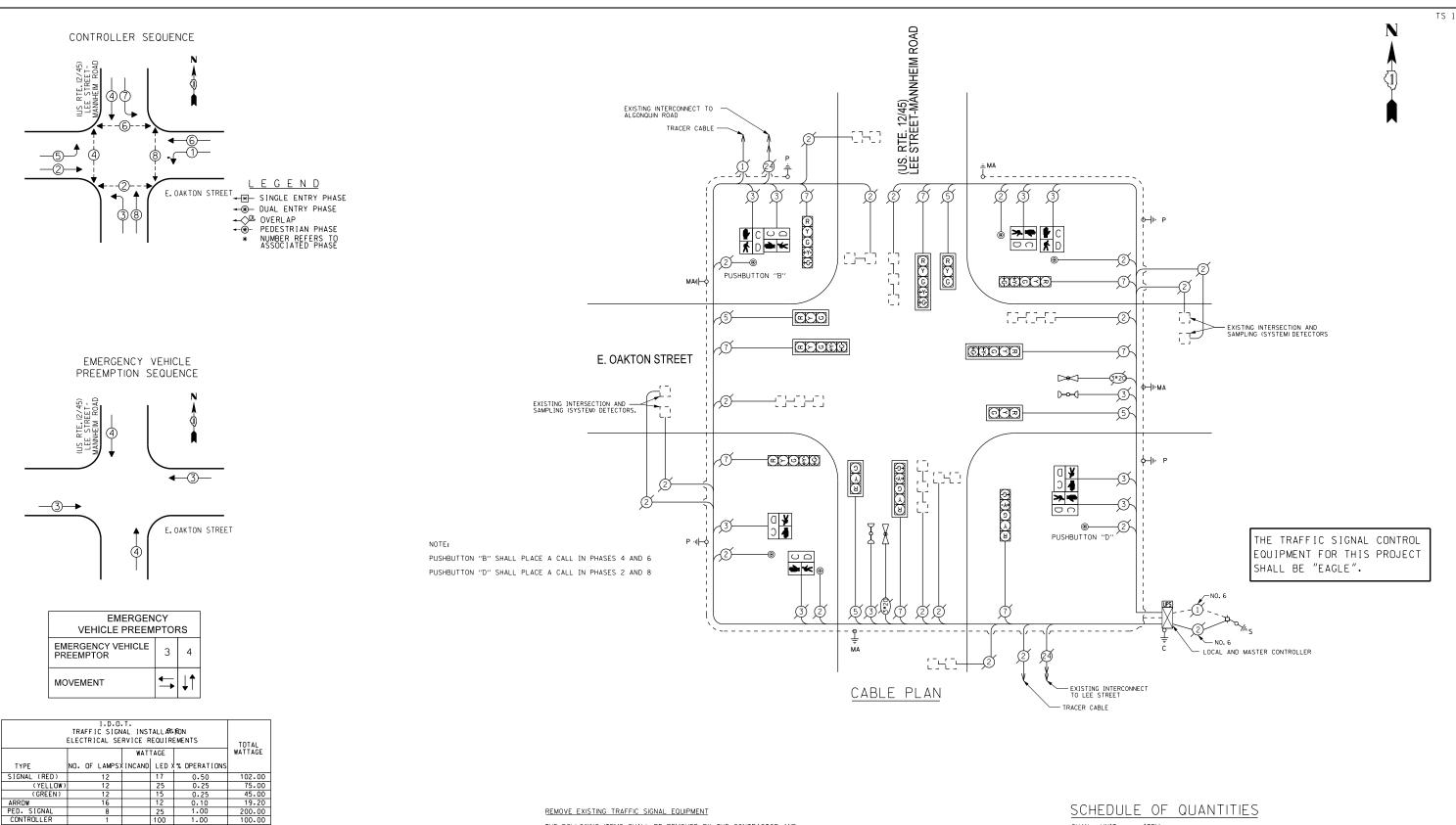
EACH UNINTERRUPTIBLE POWER SUPPLY, SPECIAL

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

DESIGNED	-	JAM	REVISED	-
DRAWN	-	JAM	REVISED	-
CHECKED	-	LMM	REVISED	-
DATE	-	10-14-13	REVISED	-

SCHEDIII	F OF OUA	NTITIES	CARLE P	IAN P	IASE DESIGNATION				
	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION								
DIVCDVIV	DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE.								
DIAGNAIVI,	HIND CIVI	ENGENC	VEHICLE	. FNEEI	VIFTIUN SEUDENGE,				
HC DTC 40	ME /IEE	BA A BIBLLIE	TINA DOA	D/ AND	ALCOMOUND DOAD				
US. KIE. 12	/43 (LEE-	INIVIAIVI	:IIVI KUA	U) ANU	ALGONQUIN ROAD				
CCALE NONE	CHEET	٥٢	CHEETC	CTA	TO CTA				
SCALE: NONE	SHEET	OF	SHEETS	SIA.	TO STA.				

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-054TS	COOK	99	27
		CONTRACT	NO. 6	0X15
	ILLINOIS FED. AI	ID PROJECT		



#### REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

#### QUANTITY UNIT DESCRIPTION

EACH PEDESTRIAN SIGNAL HEAD, I-FACE EACH PEDESTRIAN SIGNAL HEAD, 2-FACE

PEDESTRIAN PUSHBUTTON

QUAN. UNIT 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, NON-LATCHING FACH

EACH EACH EACH EACH

MODIFY EXISTING CONTROLLER CABINET
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

EACH UNINTERRUPTIBLE POWER SUPPLY, SPECIAL

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

Dave Schacht

(630) 437-2129

VILLAGE OF Des Plaines 1420 Miner Street Des Plaines, ILLINOIS 60016

541.20

ILLUM. SIGN

ENERGY COSTS TO:

ENERGY SUPPLY - CONTACT: \_\_\_\_ PHONE: COMPANY: \_\_\_

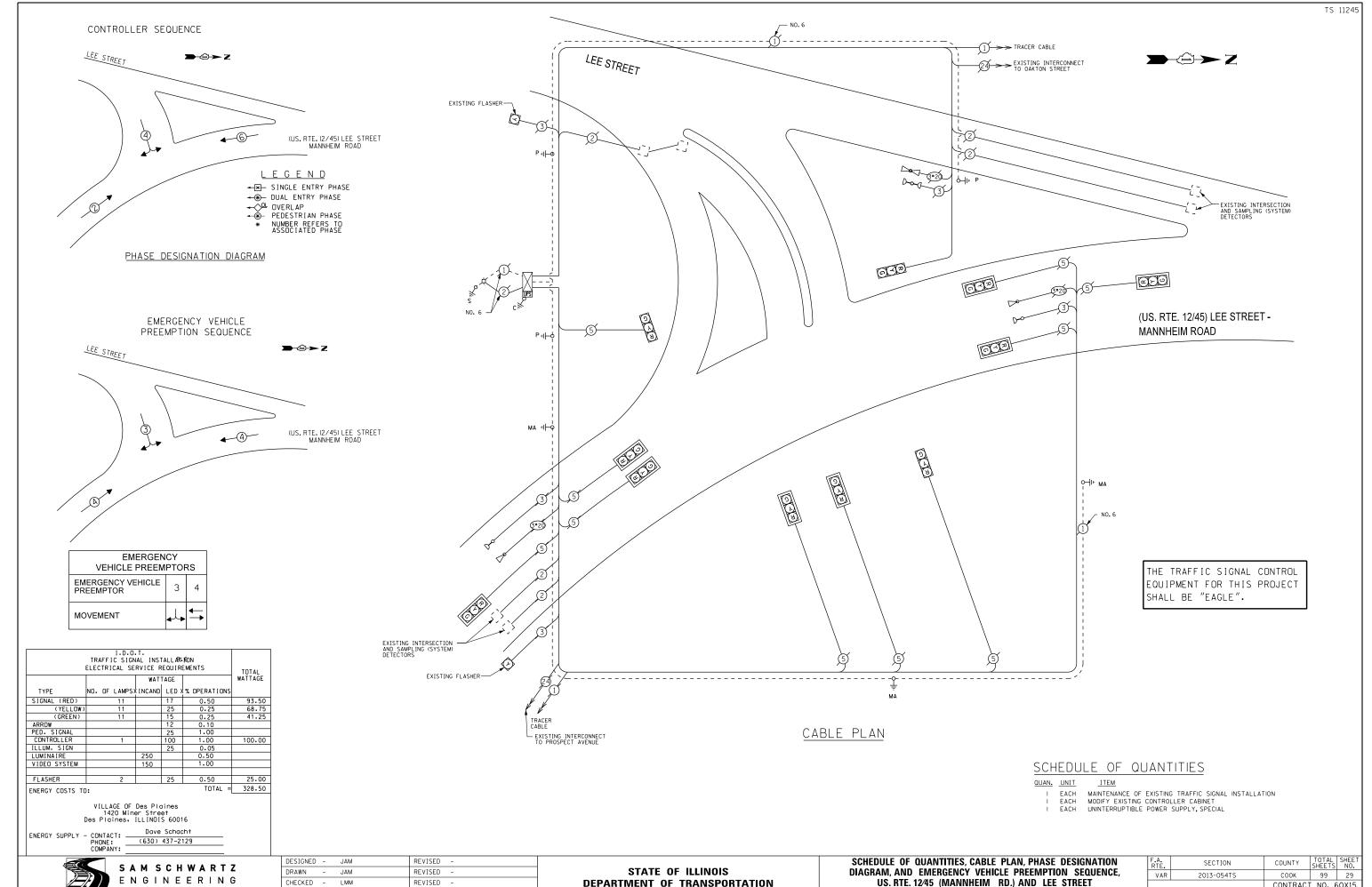
LUMINAIRE VIDEO SYSTEM

FLASHER

DESIGNED	-	JAM	REVISED	-
DRAWN	-	JAM	REVISED	-
CHECKED	-	LMM	REVISED	-
DATE	-	10-14-13	REVISED	-

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION								
					MPTION SEQUENCE, OAKTON STREET			
SCALE: NONE	SHEET	OF	SHEETS	STA.	TO STA.			

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-054TS	COOK	99	28
		CONTRACT	NO. 6	0X15
	ILLINOIS FED. A	ID PROJECT		



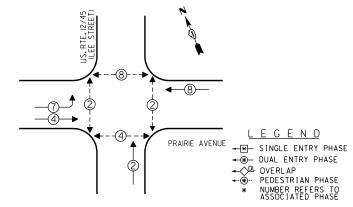
3100 W. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

CHECKED - LMM REVISED DATE REVISED - 10-14-13

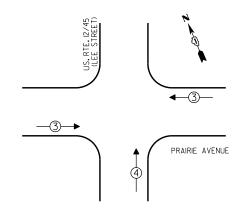
US. RTE. 12/45 (MANNHEIM RD.) AND LEE STREET SHEETS STA. SHEET

CONTRACT NO. 60X15





## EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTORS					
EMERGENCY VEHICLE PREEMPTOR	3	4			
MOVEMENT	<b>=</b>	1			

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS						
		WATTAGE				
TYPE	NO. OF LAMPS	INCAND	LED >	% OPERATIONS		
SIGNAL (RED)	11		17	0.50	93.50	
(YELLOW)	11		25	0.25	68.75	
(GREEN)	11		15	0.25	41.25	
ARROW	4		12	0.10	4.80	
PED. SIGNAL	8		25	1.00	200.00	
CONTROLLER	1		100	1.00	100.00	
ILLUM. SIGN			25	0.05		
LUMINAIRE		250		0.50		
VIDEO SYSTEM		150		1.00		
FLASHER				0.50		
ENERGY COSTS TO	):			TOTAL =	508.30	

VILLAGE OF DES PLAINES 1420 MINER STREET DES PLAINES. ILLINOIS 60016

ENERGY SUPPLY - CONTACT: DAVE SCHACHT PHONE: (630) 437-2129

3 C C C C C C C C C C C C C C C C C C C		3 5 B B C 3 B B B C 5 B B B B B B B B B B B B B B B	—≪
PRAIRIE AVENUE		D	
EXISTING INTERCONNECT TO GRACELAND AVENUE 1	US. RTE. 12/45 (LEE STREET)		
ф—2—NO. 6	US. RTE. 12 ONE WAY —		THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".
	<u>Cable Plan</u>		

SCHEDULE OF QUANTITIES

QUAN. UNIT ITEM

I EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
I EACH MODIFY EXISTING CONTROLLER CABINET
I EACH UNINTERRUPTIBLE POWER SUPPLY, SPECIAL

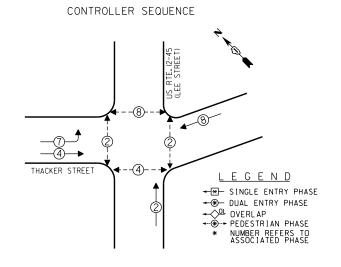
SAM SCHWARTZ ENGINEERING 3100 W. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

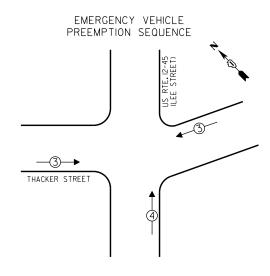
DESIGNED	-	JAM	REVISED	-
DRAWN	-	JAM	REVISED	-
CHECKED	-	LMM	REVISED	-
DATE	-	10-14-13	REVISED	-

**DEPARTMENT** 

STATE OF ILLINOIS TMENT OF TRANSPORTATION	DIAGRAM,	OF QUAN AND EMER . RTE. 12/45	RGENCY	VEHICL	E PREEI
	SCALE: NONE	SHEET	OF	SHEETS	STA.

				ASE DESIGNATION	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
				PTION SEQUENCE,	VAR	2013-054TS	COOK	99	30
TE. 12/	⁄45 (LEE	STREET) A	<u>IT PRAIR</u>	IE AVENUE			CONTRAC	NO. 6	0X15
EET	OF	SHEETS	STA.	TO STA.		ILL INOIS FED. AT	D PROJECT		





EMERGENC' VEHICLE PREEMP	•	3
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	<b>=</b>	1

		I.D.O.T SIGNAL	INSTALL			
ELEC	CTRICA	L SERVI	CE REQU	IREMEN	ITS	TOTAL
			WAT.	TAGE		WATTAGE
TYPE	NO. 0	F LAMPS)	INCAND	LED >	% OPERATIONS	
SIGNAL (RED)		11		17	0.50	93.50
(YELLOW)		11		25	0.25	68.75
(GREEN)		11		15	0.25	41.25
ARROW		6		12	0.10	7.20
PED. SIGNAL		8		25	1.00	200.00
CONTROLLER		1		100	1.00	100.00
ILLUM. SIGN				25	0.05	
LUMINAIRE			250		0.50	
VIDEO SYSTEM			150		1.00	
FLASHER					0.50	
ENERGY COSTS TO	):				TOTAL =	510.70

VILLAGE OF DES PLAINES 1420 MINER STREET DES PLAINES, ILLINOIS 60016

DAVE SCHACHT ENERGY SUPPLY - CONTACT:
PHONE:
COMPANY:

DAVE SCHACHT
(630) 437-2129

SAM SCHWARTZ

ENGINEERING

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

DESIGNED	-	JAM	REVISED	-
DRAWN	-	JAM	REVISED	-
CHECKED	-	LMM	REVISED	-
DATE	-	10-14-13	REVISED	-

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

DIAGRAM,	AND EMI	ERGEN	ICY VEHICL	E PREEI	HASE DESIGNATION MPTION SEQUENCE, ACKER STREET
SCALE: NONE	SHEET	OF	SHEETS	STA.	TO STA.

US RTE. 12-45 (LEE STREET)

ONE WAY-

CABLE PLAN

THACKER STREET

**2** C

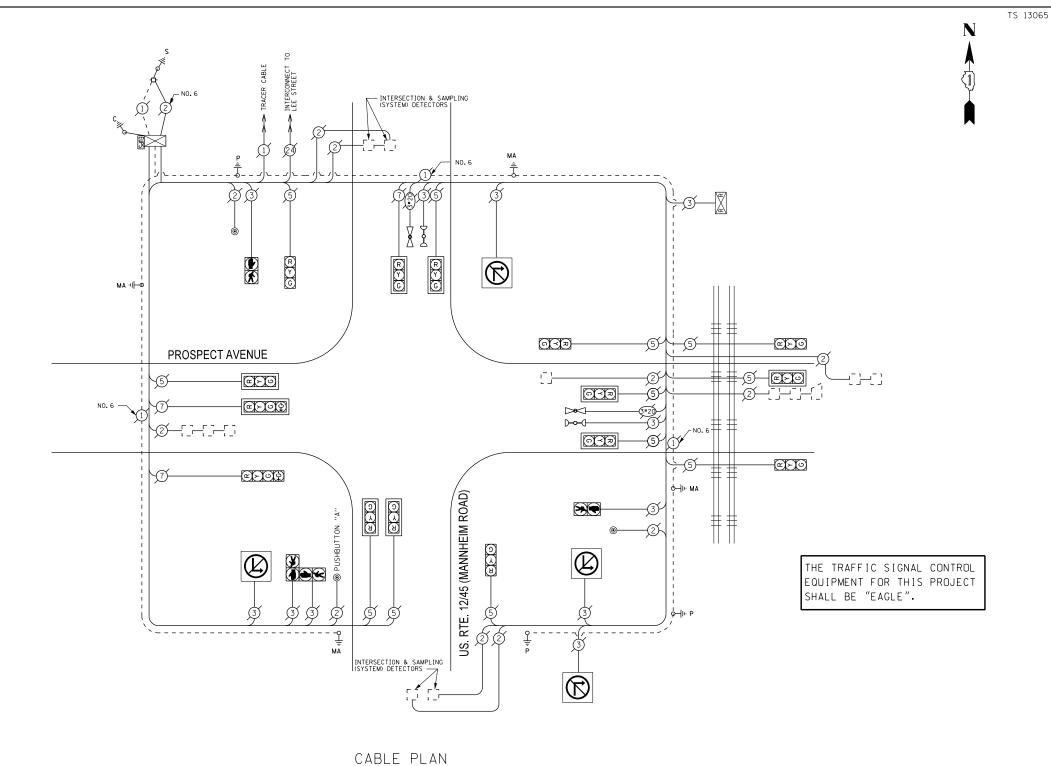
SECTION COUNTY COOK 99 31 CONTRACT NO. 60X15 2013-054TS VAR

I EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
I EACH MODIFY EXISTING CONTROLLER CABINET
I EACH UNINTERRUPTIBLE POWER SUPPLY, SPECIAL

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

SCHEDULE OF QUANTITIES

QUAN. UNIT



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

				.T. IAL INST RVICE R			TOTAL
				WAT.	TAGE		WATTAGE
TYPE	NO.	OF	LAMPS)	INCAND	LED >	% OPERATIONS	
SIGNAL (RED)			15		17	0.50	127.50
(YELLOW)			15		25	0.25	93.75
(GREEN)			17		15	0.25	63.75
ARROW					12	0.10	
PED. SIGNAL			4		25	1.00	100.00
CONTROLLER			1		100	1.00	100.00
ILLUM. SIGN					25	0.05	
LUMINAIRE				250		0.50	
VIDEO SYSTEM				150		1.00	
FLASHER						0.50	
ENERGY COSTS TO	):					TOTAL =	485.00

VILLAGE OF Des Plaines 1420 Miner Street Des Plaines, ILLINOIS 60016

Dave Schacht ENERGY SUPPLY - CONTACT: Dave Schacht
PHONE: (630) 437-2129

#### REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

QUANTITY UNIT DESCRIPTION

3 EACH PEDESTRIAN PUSHBUTTON

#### SCHEDULE OF QUANTITIES

QUAN. UNIT ITEM

I EACH 3 EACH I EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION PEDESTRIAN PUSH-BUTTON, NON-LATCHING REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

DESIGNED	-	JAM	REVISED	-
DRAWN	-	JAM	REVISED	-
CHECKED	-	LMM	REVISED	-
DATE	-	10-14-13	REVISED	-

SCHEDUL	E OF QUA	ANTITIES	, CABLE P	LAN, PH	ASE DESIGNATION
DIAGRAM,	AND EN	TERGENC	Y VEHICL	E PREEN	IPTION SEQUENCE,
US. 12	/45 (MAN	INHEIM	ROAD) AI	ND PROS	SPECT AVENUE
SCALE: NONE	SHEET	OF	SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-054TS	COOK	99	32
		CONTRACT	NO. 6	0X15
	ILLINOIS FED. A	ID PROJECT		

### SEQUENCE OF OPERATION

MOVEMENT N		<b>†</b>	2		4—————————————————————————————————————					F	
PHASE		2+	6				4+8				Α
INTERVAL	1	2	3A	3B	4	5	64	6B	60	6D	S
CHANGE TO			4+	+8				2	+6		Н
US RTE. 12/45 (MANNHEIM RD.) N/8 ALL SIGNALS	G	G	Y	R	R	R	R	R	R	R	R
US RTE. 12/45 (MANNHEIM RD.) S/6 ALL SIGNALS	G	G	Y	R	R	R	R	R	R	R	R
PROSPECT AVE. (EAST OF TRACKS) W/	R	R	R	R	G	G	Υ	R	R	R	R
PROSPECT AVE. (WEST OF TRACKS) W/	R	R	R	R	G	G	G	G	Υ	R	R
PROSPECT AVE. (WEST OF TRACKS) W/ FAR LEFT AND MAST ARM SIGNALS	R	R	R	Ř	G	G	G	G	Y	R	R
PROSPECT AVE. E/E ALL SIGNALS	R	R	R	R	G	G	G	G	Y	R	R
PEDESTRIAN SIGNALS CROSSING PROSPECT AVE. ON WEST SIDE OF US RTE. 12/45	•W	DW	DW	DW	DW	DW	DW	DW	DW	DW	D A
PEDESTRIAN SIGNALS CROSSING US RTE. 12/45 ON SOUTH SIDE OF PROSPECT AVE.	DW	DW	DW	DW	•W	*=FL DW	D₩	DW	DW	D₩	R K

## RAILROAD PREEMPTION SEQUENCE OF OPERATION

													- LEWOUTH	40
					PREEM NUMB		PREEM		PREEMPTOR NUMBER 2				OF THE	PE
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	1		4											
CHANGE FROM EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER					2		3							
RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1A	18	1C	10	1E	1F	1G	1H	2	3	4	5	CLEAR TO	
CHANGE TO RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	18	2	1D	2	1F	2	18	2	3	4	5		SEQUENCE	
US RTE. 12/45 (MANNHEIM RD.) N/B ALL SIGNALS	Y	R	R	R	Y	R	R	R	R	R	R	G	Δ	
US RTE. 12/45 (MANNHEIM RD.) S/B ALL SIGNALS	Υ	R	R	R	Y	R	R	R	R	R	R	G	Δ	
PROSPECT AVE. (EAST OF TRACKS) W/B ALL SIGNALS	R	R	Υ	R	R	R	Y	R	R	R	R	R	Δ	
PROSPECT AVE. (WEST OF TRACKS) W/B FAR RIGHT MAST ARM SIGNAL	R	R	G	G	R	R	G	G	G	Y	R	R	Δ	
PROSPECT AVE. (WEST OF TRACKS) W/B FAR LEFT AND MAST ARM SIGNALS	R	R	G	G	R	R	G	G	G G	Y	R	R	Δ	
PROSPECT AVE. E/B ALL SIGNALS	R	R	Υ	R	R	R	Y	R	R	R	R	R		
PEDESTRIAN SIGNALS CROSSING PROSPECT AVE. ON WEST SIDE OF US RTE. 12/45	FL DW	DW	DW	DW	DW	DW	D₩	DW	DW	DW	DW	DW	Δ	
PEDESTRIAN SIGNALS CROSSING US RTE. 12/45 ON SOUTH SIDE OF PROSPECT AVE.	DW	DW	FL DW	DW	D₩	DW	DW	DW	DW	DW	DW	DW	Δ	
INTERNALLY ILLUMINATED NO RIGHT TURN SIGNS	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	Δ	
INTERNALLY ILLUMINATED NO LEFT TURN SIGNS	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	Δ	
												1	1	

NRT = "NO RIGHT TURN" OR

NLT = "NO LEFT TURN" OR

## EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION

									PREEMPTOR NUMBER 3	PREEMPTOR NUMBER 4	
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER			1		1	4		4			CLEAR TO
EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER		1A	18	1C	1D	1E	1F	16	2	3	SEQUENCE
CHANGE TO EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER		1B	2	1D	3	1F	2	3			
US RTE. 12/45 (MANNHEIM RO.) ALL SIGNALS	N/B	G	G	G	Υ	R	R	R	G	R	$\Diamond$
US RTE. 12/45 (MANNHEIM RD.) ALL SIGNALS	S/B	G	G	G	Y	R	R	R	G	R	$\Diamond$
PROSPECT AVE. (EAST OF TRACKS) ALL SIGNALS	W/B	R	R	R	R	Y	R	G	R	G	$\Diamond$
PROSPECT AVE. (WEST OF TRACKS) FAR RIGHT MAST ARM SIGNAL	W/B	R	R	R	R	Y	R	G	R	G	<b>\langle</b>
PROSPECT AVE. (WEST OF TRACKS) FAR LEFT AND MAST ARM SIGNALS	W/B	R	R	R	R	Υ	R	G	R	G	<b>♦</b>
PROSPECT AVE. ALL SIGNALS	E/B	R	R	R	R	Y	R	G	R	G	<b>\Q</b>
PEDESTRIAN SIGNALS CROSSING PROSPECT AVE. ON WEST SIDE OF US RTE. 12/45		FL DW	DW	FL DW	DW	D₩	DW	DW	W	DW	<b>\Q</b>
PEDESTRIAN SIGNALS CROSSING US RTE. 12/45 ON SOUTH SIDE OF PROSPECT AVE.		DW	DW	DW	DW	FL DW	DW	FL DW	w	DW	$\Diamond$

. TO APPEAR ONLY UPON PUSHBUTTON ACTUATION

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

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

W = ILLUMINATED PERSON = WALK

FL = ILLUMINATED FLASHING HAND = FLASHING DON'T WALK

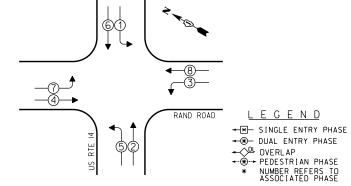
DW = ILLUMINATED SOLID HAND = DON'T WALK

s	Α	м	s	С	н	w	Α	R	Т	z	
_		G	•		_	_	• •			_	

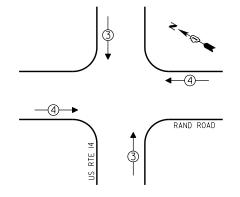
DESIGNED	-	JAM	REVISED	-
DRAWN	-	JAM	REVISED	-
CHECKED	-	LMM	REVISED	-
DATE	-	10-14-13	REVISED	-

	DIAGRAM,	AND EN	IERGENC	Y VEHICL	E PREEMI	SE DESIGNATION PTION SEQUENCE, PECT AVENUE
I	SCALE: NONE	SHEET	OF	SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
VAR	2013-054TS	COOK	99	33
		CONTRACT	NO. 6	0X15
	ILLINOIS FED. A	ID PROJECT		

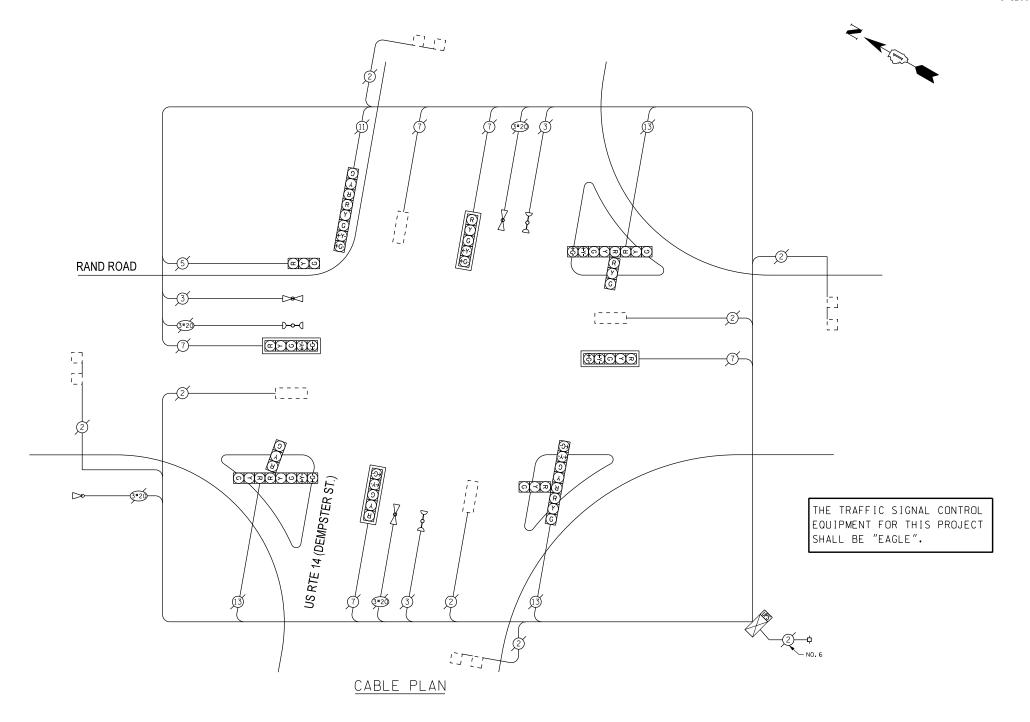


## EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTORS						
EMERGENCY VEHICLE PREEMPTOR	3	4				
MOVEMENT	<b>↓</b> ↑	<b>_</b>				

	TRAFFIC SIGN ELECTRICAL SE	NAL INS			TOTAL
		WAT	TAGE		WATTAGE
TYPE	NO. OF LAMPS	INCAND	LED >	% OPERATIONS	
SIGNAL (RED)	16		17	0.50	136.00
(YELLOW)	16		25	0.25	100.00
(GREEN)	16		15	0.25	60.00
ARROW	16		12	0.10	19.20
PED. SIGNAL			25	1.00	
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO	):			TOTAL =	415.20
ſ	VILLAGE OF 1420 Min Des Plaines.	er Stre	et	6	



### SCHEDULE OF QUANTITIES

QUAN.	UNIT	ITEM
GOAI1	CIVI	1100

I EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
I EACH MODIFY EXISTING CONTROLLER CABINET
I EACH UNINTERRUPTIBLE POWER SUPPLY, SPECIAL

COUNTY TOTAL SHEET NO.

COOK 99 34

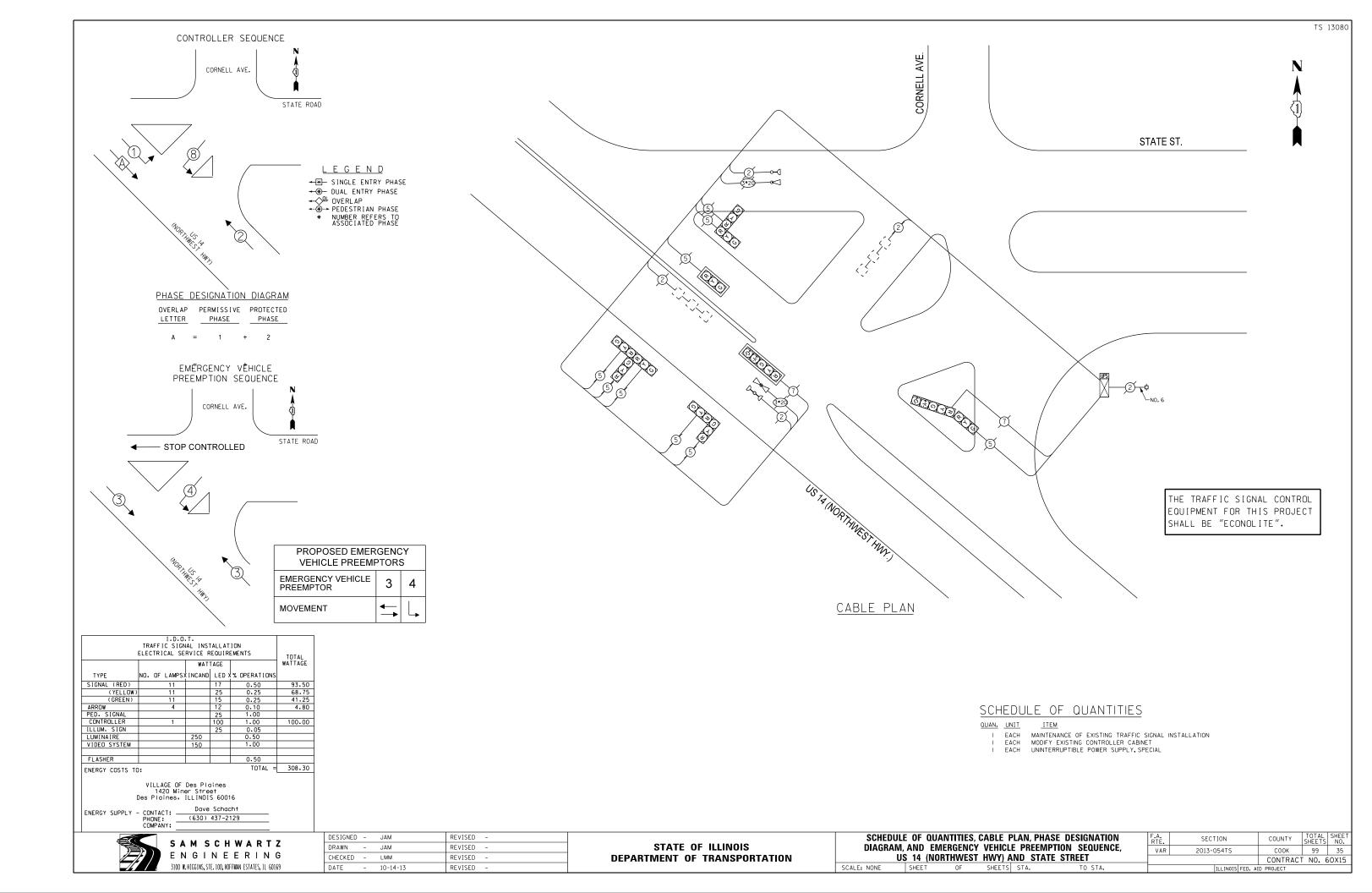
CONTRACT NO. 60X15

ENERGY SUPPLY - CONTACT: Dave Schacht
PHONE: (630) 437-2129
COMPANY:
SAM SCHWARTZ ENGINEERING 3100 W. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

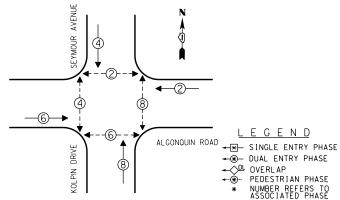
DESIGNED	-	JAM	REVISED	-
DRAWN	-	JAM	REVISED	-
CHECKED	-	LMM	REVISED	-
DATE	-	10-14-13	REVISED	-

STATE OF ILLINOIS	
DEPARTMENT OF TRANSPORTATION	

					HASE DESIGNATION	F.A. RTE.	SECTION
					EMPTION SEQUENCE, RAND ROAD	VAR	2013-054TS
US	NIE 14	(DEINIL9 I	EN SINE	CI) AI	NAINU NUAU		
SCALE: NONE	SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS FED. A

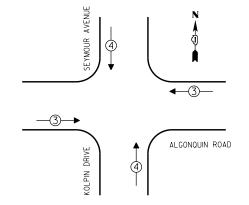






#### PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE

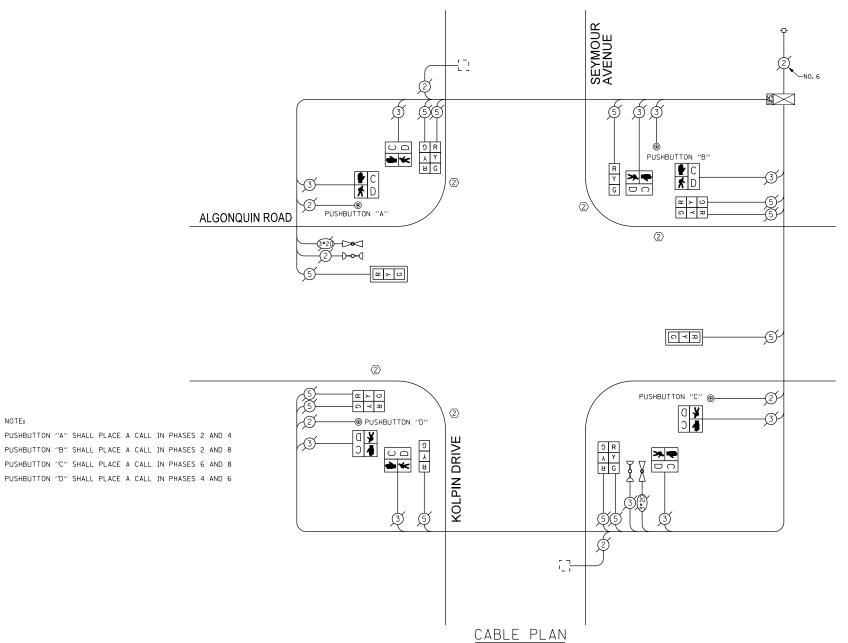


EMERGENCY VEHICLE PREEMP		6
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	<b>=</b>	<b>↓</b> ↑

	TOTAL						
				WAT	TAGE		WATTAGE
TYPE	NO.	OF	LAMPS	INCAND	LED >	% OPERATIONS	
SIGNAL (RED)			12		17	0.50	102.00
(YELLOW)			12		25	0.25	75.00
(GREEN)			12		15	0.25	45.00
ARROW					12	0.10	
PED. SIGNAL			8		25	1.00	200.00
CONTROLLER			1		100	1.00	100.00
ILLUM. SIGN					25	0.05	
LUMINAIRE				250		0.50	
VIDEO SYSTEM				150		1.00	
FLASHER						0.50	
ENERGY COSTS TO	):					TOTAL =	522.00
VILLAGE OF Des Plaines							

VILLAGE OF Des Plaines 1420 Miner Street Des Plaines, ILLINOIS 60016

Dave Schacht ENERGY SUPPLY - CONTACT: Dave Schacht
PHONE: (630) 437-2129 (2) REPLACE 14 FT. PAINTED POST, RE-USE EXISTING



TRAFFIC SIGNAL HEADS

REPLACE ALL EXISTING

REPLACE EXISTING TOP MOUNT TRAFFIC SIGNAL POSTS

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

#### REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

QUANTITY	UNIT	DESCRIPTION

EACH CONTROLLER AND CABINET (COMPLETE)
EACH TRAFFIC SIGNAL POST

FΔCH PEDESTRIAN SIGNAL HEAD, I-FACE

PEDESTRIAN PUSHBUTTON EACH

SIGNAL HEAD, I-FACE, 3-SECTION SIGNAL HEAD, 2-FACE, 3-SECTION EACH EACH

TRAFFIC SIGNAL BACKPLATE

#### SCHEDULE OF QUANTITIES

#### \_ITEM QUAN. UNIT

EACH

FACH

MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
SIGNAL HEAD, LED, I-FACE, 3-SECTION, MAST ARM MOUNTED
SIGNAL HEAD, LED, I-FACE, 3-SECTION, BRACKET MOUNTED
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
PEDESTRIAN SIGNAL HEAD, LED, I-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER

TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM MODIFY EXISTING CONTROLLER CABINET

REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT UNINTERRUPTIBLE POWER SUPPLY, SPECIAL PEDESTRIAN PUSH-BUTTON, NON-LATCHING FΔCH



DESIGNED	-	JAM	REVISED -	
DRAWN	-	JAM	REVISED -	
CHECKED	-	LMM	REVISED -	
DATE	-	10-04-13	REVISED -	

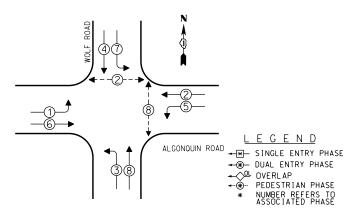
NOTE:

STATE	0F	ILLINOIS
<b>DEPARTMENT</b> (	OF T	RANSPORTATION

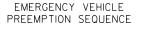
I	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION							
	DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, ALGONQUIN ROAD AND SEYMOUR AVENUE /KOLPIN DRIVE							
Ì	SCALE: NONE	SHEET	OF	SHEETS		TO STA.		

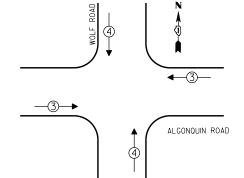
RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
VAR	2013-054TS	COOK	100	36		
		CONTRACT	NO. 6	SOX15		
ILLINOIS FED. AID PROJECT						

# CONTROLLER SEQUENCE



#### PHASE DESIGNATION DIAGRAM



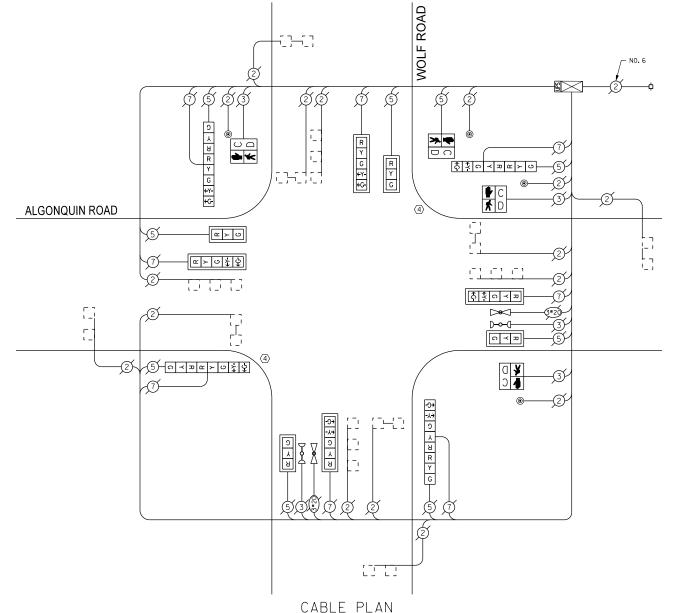


EMERGEN VEHICLE PREEM		RS
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	<b>†</b>	<b>↓</b> ↑

I.D.O.T.								
TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS								
				WAT	TAGE		TOTAL WATTAGE	
TYPE	NO.	OF	LAMPS	INCAND	LED >	% OPERATIONS		
SIGNAL (RED)		1	6		17	0.50	136.00	
(YELLOW)		1	6		25	0.25	100.00	
(GREEN)		1	6		15	0.25	60.00	
ARROW		1	6		12	0.10	19.20	
PED. SIGNAL			4		25	1.00	100.00	
CONTROLLER			1		100	1.00	100.00	
ILLUM. SIGN					25	0.05		
LUMINAIRE				250		0.50		
VIDEO SYSTEM				150		1.00		
FLASHER						0.50		
ENERGY COSTS TO	):					TOTAL =	515.20	

VILLAGE OF DES PLAINES 1420 MINER STREET DES PLAINES, ILLINOIS 60016

DAVE SCHACHT ENERGY SUPPLY - CONTACT: DAVE SCHACHT (630) 437-2129 COMPANY: 4 REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION.



REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

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

#### REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

#### QUANTITY UNIT DESCRIPTION

EACH TRAFFIC SIGNAL POST EACH SIGNAL HEAD, I-FACE, 3-SECTION

EACH SIGNAL HEAD, I-FACE, 5-SECTION EACH SIGNAL HEAD, 2-FACE, I-3 SECTION, I-5 SECTION

EACH SIGNAL READ, FIACE, 3 SECTION SIGNAL HEAD, 2-FACE, 1-3 SEC EACH PEDESTRIAN SIGNAL HEAD, 1-F EACH PEDESTRIAN PUSHBUTTON EACH TRAFFIC SIGNAL BACKPLATE PEDESTRIAN SIGNAL HEAD, I-FACE

# SCHEDULE OF QUANTITIES

#### QUAN. UNIT ITEM

EACH EACH

EACH EACH

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

EACH EACH

EACH

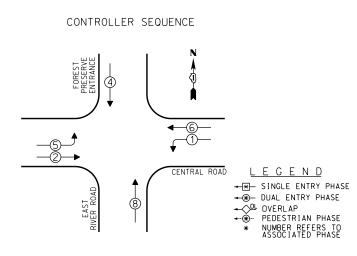
DESIGNED - JAM REVISED DRAWN -JAM REVISED CHECKED -LMM REVISED DATE 10-14-13 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

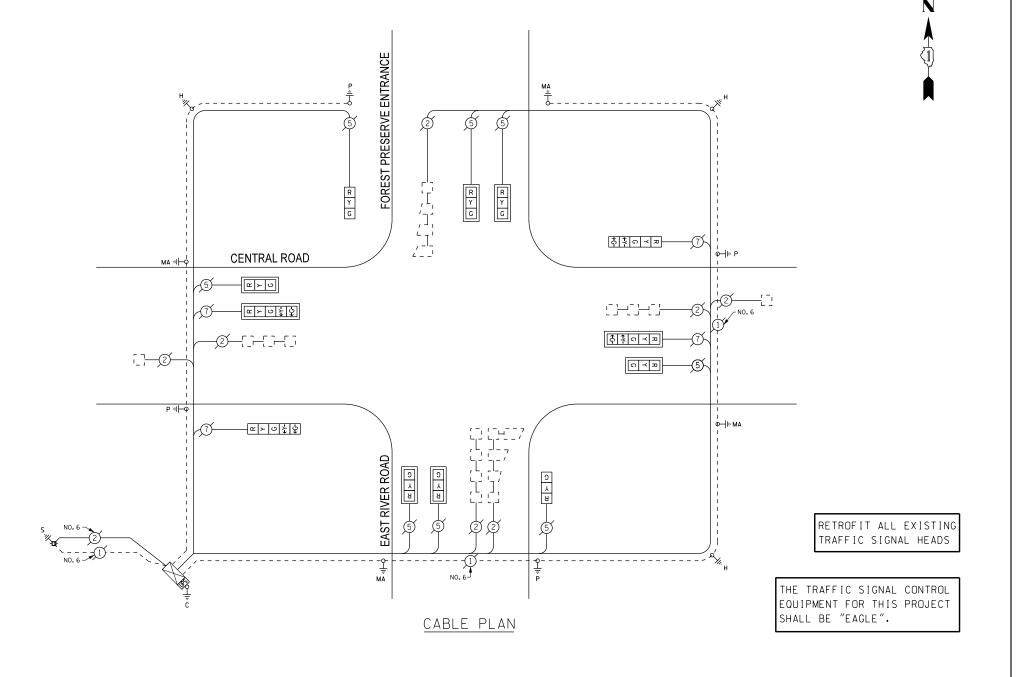
SCHEDULI	E OF QU	JANTITIES	S. CABLE P	LAN, P	HASE DESIGNATION		
DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE,							
Dirticili,			ROAD AT		•		
	ALU	CHAGOIN	NUAD AI	VVULI	NUAD		
SCALE: NONE	SHEET	OF	SHEETS	STA.	TO STA.		

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEE.
VAR	2013-054TS	COOK	99	37
		CONTRACT	NO. 6	0X15
	ILLINOIS FED. A	ID PROJECT		

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



PHASE DESIGNATION DIAGRAM



TRAFFIC SIGNAL INSTALLÆTÆON ELECTRICAL SERVICE REQUIREMENTS								
				WAT	TAGE		WATTAGE	
TYPE	NO.	OF	LAMPS)	INCAND	LED >	% OPERATIONS		
SIGNAL (RED)			12		17	0.50	102.00	
(YELLOW)			12		25	0.25	75.00	
(GREEN)			12		15	0.25	45.00	
ARROW			8		12	0.10	9.60	
PED. SIGNAL					25	1.00		
CONTROLLER			1		100	1.00	100.00	
ILLUM. SIGN					25	0.05		
LUMINAIRE				250		0.50		
VIDEO SYSTEM				150		1.00		
FLASHER						0.50		
ENERGY COSTS TO: TOTAL =								

VILLAGE OF Des Plaines 1420 Miner Street Des Plaines, ILLINOIS 60016

Dave Schacht ENERGY SUPPLY - CONTACT: \_\_ PHONE: COMPANY: \_\_ (630) 437-2129

DESIGNED	-	JAM	KEAIZED	-
DRAWN	-	JAM	REVISED	_
CHECKED	-	LMM	REVISED	-
DATE	-	10-14-13	REVISED	-

**DEPARTMENT OF TRANSPORTATION** 

STATE OF ILLINOIS

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, CENTRAL ROAD AT EAST RIVER ROAD OF SHEETS STA. SHEET

SECTION COUNTY COOK 99 38 CONTRACT NO. 60X15 VAR 2013-054TS

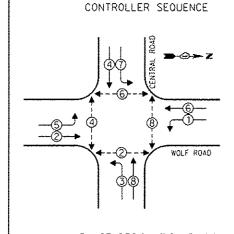
TS 1676

# SCHEDIILE OF OLIVITITIES

<u> 201</u>	<u>1EDU</u>	JLE OF QUANTITIES
QUAN.	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL
2	EACH	SIGNAL HEAD, LED, I-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT
6	EACH	SIGNAL HEAD, LED, I-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT
2	EACH	SIGNAL HEAD, LED, I-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT
2	EACH	SIGNAL HEAD, LED, I-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT

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

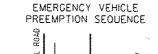


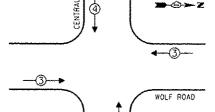


### LEGEND

- -- SINGLE ENTRY PHASE
- OUAL ENTRY PHASE
  OUERLAP
  PEDESTRIAN PHASE NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM





	EMERGENCY VEHICLE PREEMPT	ORS	
	EMERGENCY VEHICLE PREEMPTOR	3	4
400000000000000000000000000000000000000	MOVEMENT	<b>—</b>	11

ELECTRICAL SERVICE REQUIREMENTS							
			WAT	CAGE		WATTACE	
TYPE	NO. OF	LAMPS)	INCAND	LEO >	% OPERATIONS		
SIGNAL (RED)		16		17	0.50	136.00	
(YELLOW)		15		25	0.25	100.00	
(GREEN)	į	16		15	0.25	60,00	
ARROW		6		12	0.10	19.20	
PED. SIGNAL		8		25	1.00	200.00	
CONTROLLER		1		100	1.00	100.00	
ILLUM. SIGN				25	0.05		
LUMINAIRE			250		0.50		
VIDED SYSTEM			150		1.00		
FLASHER					0.50		
NERGY COSTS TO					TOTAL =	615.20	

VILLACE OF Des Plaines 1420 Miner Street Des Plaines, ILLINOIS 60016

SAM SCHWARTZ ENGINEERING

Dave Schacht

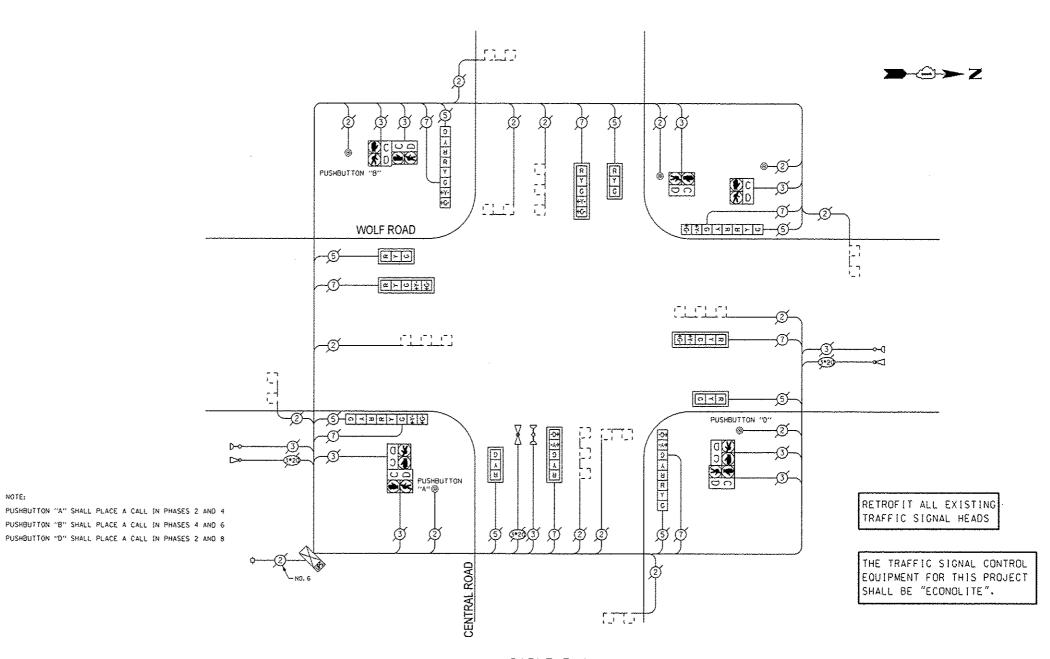
(630) 437-2129

DESIGNED -REVISED ORAWN - JAM REVISED CHECKED -LMM REVISED DATE 10-14-13 REVISED

NOTE:

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, CENTRAL ROAD AND WOLF ROAD SHEET SHEETS STA.

COUNTY TOTAL SHEET NO.
COOK 99 39
CONTRACT NO. 60X15 SECTION VAR 2013-054TS

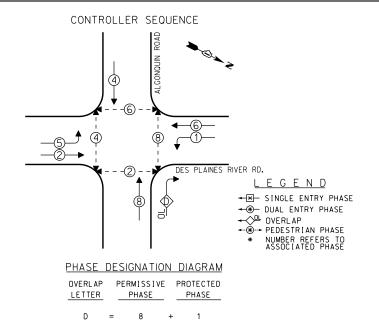


# CABLE PLAN

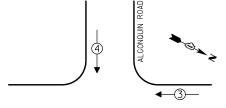
# SCHEDULE OF QUANTITIES

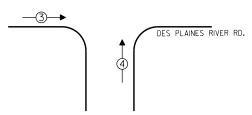
QUAN.	UNIT	<u> [TEM</u>
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
ŧ	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL
4	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT
4	EACH	SIGNAL HEAD, LED. I-FACE, J-SECTION, MAST ARM MOUNTED, RETROFIT
4	EACH	SIGNAL HEAD, LED. I-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT
5	EACH	PEDESTRIAN PUSHBUTTON, NON-LATCHING





#### EMERGENCY VEHICLE PREEMPTION SEQUENCE





EMERGENCY VEHICLE PREEMPTOI	₹S	
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	<b>=</b>	<b>↓</b> ↑

I.D.O.T. TRAFFIC SIGNAL INSTALLATION								
ELEC	NTS	TOTAL						
		WAT	TAGE		WATTAGE			
TYPE	NO. OF LAMP	SXINCAND	LED >	% OPERATIONS				
SIGNAL (RED)	12		17	0.50	102.0			
(YELLOW)	12		25	0.25	75.0			
(GREEN)	12		15	0.25	45.0			
ARROW	14		12	0.10	16.8			
PED. SIGNAL	8		25	1.00	200.0			
CONTROLLER	1		100	1.00	100.0			
ILLUM. SIGN			25	0.05				
LUMINAIRE		250		0.50				
VIDEO SYSTEM		150		1.00				
FLASHER				0.50				
ENERGY COSTS TO: TOTAL =								

VILLAGE OF DES PLAINES 1420 MINER STREET DES PLAINES, ILLINOIS 60016

DAVE SCHACHT ENERGY SUPPLY - CONTACT: \_\_\_\_ PHONE: COMPANY: \_\_\_ (630) 437-2129

PUSHBUTTON "C" ма⊣⊩ (K ≻ (D α ≻ υ ţ ţ G ≺ ¤ DES PLAINES RIVER ROAD - C - O + + INTERCONNECT TO OAKTON STREET TRACER CABLE -\* - TRACER CABLE NOTE: PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4 PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8 CABLE PLAN

#### REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

QUANTITY UNIT DESCRIPTION

EACH PEDESTRIAN SIGNAL HEAD, I-FACE EACH PEDESTRIAN SIGNAL HEAD, 2-FACE

EACH PEDESTRIAN PUSHBUTTON

# SCHEDULE OF QUANTITIES

QUAN. UNIT 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
MODIFY EXISTING CONTROLLER CABINET

REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT UNINTERRUPTIBLE POWER SUPPLY, SPECIAL

UNINITERRUPTIBLE POWER SUPPLY, SPECIAL
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT

EACH

PEDESTRIAN PUSH-BUTTON, NON-LATCHING

REFLECTED IN THE CONTRACT BID PRICE.

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

DESIGNED	-	JAM	REVISED	-
DRAWN	-	JAM	REVISED	-
CHECKED	-	LMM	REVISED	-
DATE	-	10-14-13	REVISED	-

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE.							
				T ALGONQUI				
SCALE: NONE	SHEET	OF	SHEETS	STA.	TO STA.			

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-054TS	COOK	99	40
		CONTRACT	NO. 6	0X15
	ILLINOIS FED. AL	ID PROJECT		

RETROFIT ALL EXISTING

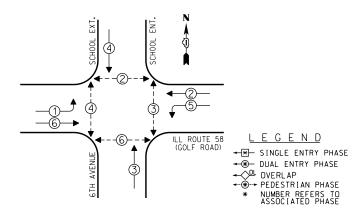
TRAFFIC SIGNAL HEADS

THE TRAFFIC SIGNAL CONTROL

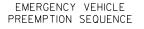
EQUIPMENT FOR THIS PROJECT

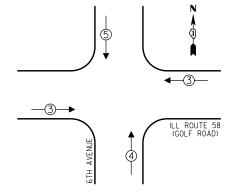
SHALL BE "EAGLE".

#### CONTROLLER SEQUENCE



### PHASE DESIGNATION DIAGRAM



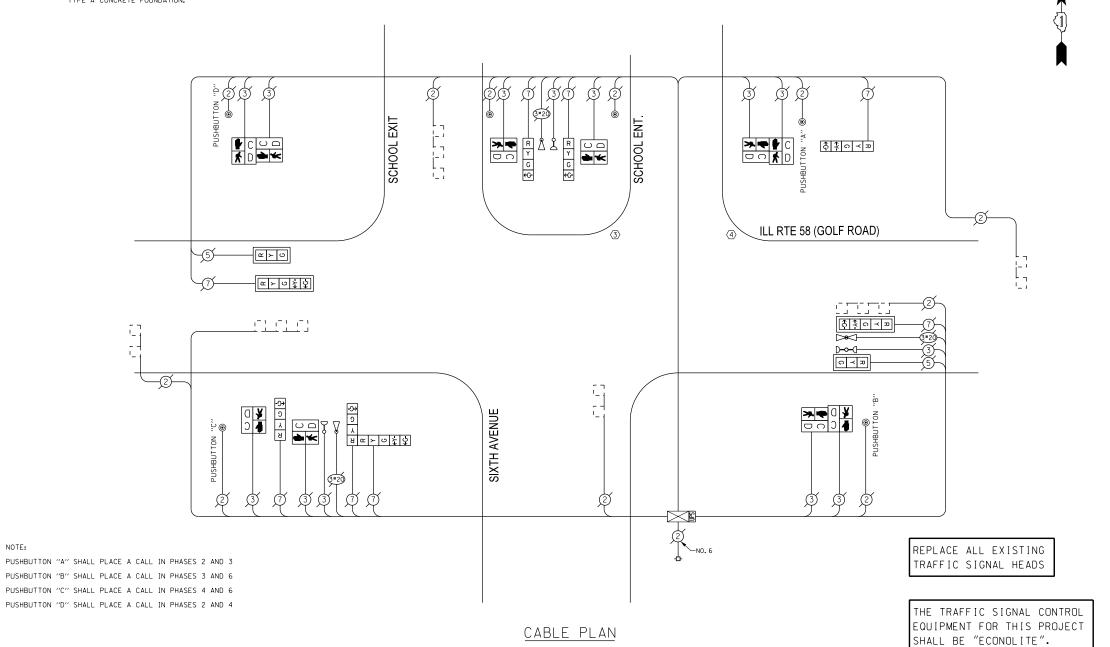


EMERGENCY VEHICLE PREEMPTORS					
EMERGENCY VEHICLE PREEMPTOR	3	4	5		
MOVEMENT	<b>=</b>	1	<b>↓</b>		

	ION EMENTS	TOTAL						
			WAT.	TAGE		WATTAGE		
TYPE	NO.	OF LAMPS)	INCAND	LED >	% OPERATIONS			
SIGNAL (RED)		10		17	0.50	85.00		
(YELLOW)		10		25	0.25	62.50		
(GREEN)		14		15	0.25	52.50		
ARROW		8		12	0.10	9.60		
PED. SIGNAL		10		25	1.00	250.00		
CONTROLLER		1		100	1.00	100.00		
ILLUM. SIGN				25	0.05			
LUMINAIRE			250		0.50			
VIDEO SYSTEM			150		1.00			
FLASHER					0.50			
ENERGY COSTS TO: TOTAL =								
	VILLAGE DE Des Plaines							

VILLAGE OF Des Plaines 1420 Miner Street Des Plaines, ILLINOIS 60016 Dave Schacht ENERGY SUPPLY - CONTACT: Dave Schacht
PHONE: (630) 437-2129

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



#### REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

QUANTITY	<u>UNIT</u>	DESCRIPTION
2	EACH	TRAFFIC SIGNAL POST
2	EACH	SIGNAL HEAD, I-FACE, 3-SECTION
4	EACH	SIGNAL HEAD, I-FACE, 4-SECTION
4	EACH	SIGNAL HEAD, I-FACE, 5-SECTION
4	EACH	PEDESTRIAN SIGNAL HEAD, I-FACE
3	EACH	PEDESTRIAN SIGNAL HEAD, 2-FAC
6	EACH	PEDESTRIAN PUSHBUTTON
4	EACH	TRAFFIC SIGNAL BACKPLATE

QUAN.	UNIT	<u>ITEM</u>
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
- 1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 15 FT.
- 1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
2	EACH	SIGNAL HEAD, LED, I-FACE, 3-SECTION, MAST ARM MOUNTED
3	EACH	SIGNAL HEAD, LED, I-FACE, 4-SECTION, BRACKET MOUNTED
- 1	EACH	SIGNAL HEAD, LED, I-FACE, 5-SECTION, BRACKET MOUNTED
2	EACH	SIGNAL HEAD, LED, I-FACE, 5-SECTION, MAST ARM MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, I-4 SECTION, I-5 SECTION, BRACKET MOUNTED
4	EACH	PEDESTRIAN SIGNAL HEAD, LED, I-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
3	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMES
4	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL
6	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING

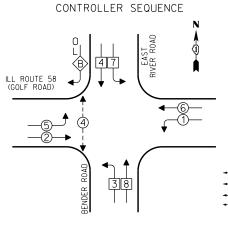


DESIGNED	-	JAM	REVISED	-
DRAWN	-	JAM	REVISED	-
CHECKED	-	LMM	REVISED	-
DATE	-	10-14-13	REVISED	-

NOTE:

				•	ASE DESIGNATION
DIAGRAM,			Y VEHICL RD) and		MPTION SEQUENCE, AVE
SCALE: NONE	SHEET	OF	SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
VAR	2013-054TS	COOK	99	41			
	CONTRACT NO. 60X15						
	THE INOIS FED. AID PROJECT						



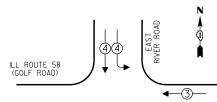
LEGEND

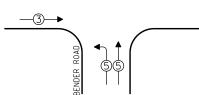
- → SINGLE ENTRY PHASE → DUAL ENTRY PHASE
- OL OVERLAP
- NUMBER REFERS TO ASSOCIATED PHASE

# PHASE DESIGNATION DIAGRAM

OVERLAP	F	PERMISSIVE		PROTECTE
LETTER		PHASE		PHASE
В	=	4	+	5

#### EMERGENCY VEHICLE PREEMPTION SEQUENCE





EMERGENCY VEHICLE PREEMPTORS					
EMERGENCY VEHICLE PREEMPTOR	3	4	5		
MOVEMENT	<b>=</b>	<b>↓</b> ↓	1		

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS								
			WAT	TAGE		WATTAGE		
TYPE	NO. OF	LAMPS)	INCAND	LED >	% OPERATIONS			
SIGNAL (RED)		16		17	0.50	136.00		
(YELLOW)		16		25	0.25	100.00		
(GREEN)		16		15	0.25	60.00		
ARROW		12		12	0.10	14.40		
PED. SIGNAL		2		25	1.00	50.00		
CONTROLLER		1		100	1.00	100.00		
ILLUM. SIGN				25	0.05			
LUMINAIRE			250		0.50			
VIDEO SYSTEM			150		1.00			
FLASHER 0.50								
ENERGY COSTS TO: TOTAL =								
VIII ACE DE Des Plaines								

SAM SCHWARTZ ENGINEERING

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

DESIGNED - JAM REVISED DRAWN JAM REVISED CHECKED -LMM REVISED DATE 10-14-13 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, EAST RIVER ROAD AT IL58 (GOLF ROAD) SHEETS STA. SHEET OF

SECTION COUNTY VAR 2013-054TS COOK 99 42 CONTRACT NO. 60X15

RETROFIT ALL EXISTING TRAFFIC SIGNAL HEADS

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

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

SCHEDULE OF QUANTITIES

-D→ R -从→ Y -B→ G

RIVER

EAST

R Y G

- R ≻ D

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BENDER ROAD

C→ - ↓ - ↓ - ↓ - ↓

INTERCONNECT TO -

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[C] ≺ D]

-NO.6 AWG

**−**12→→ INTERCONNECT TO POTTER ROAD

QUAN. UNIT EACH EACH EACH

CABLE PLAN

S S S

MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION

EACH EACH

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

EACH

EACH

SIGNAL HEAD, LED, I-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT

IL ROUTE 58 (GOLF RD)

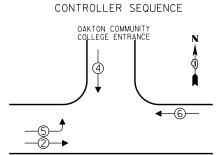
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

EACH PEDESTRIAN PUSHBUTTON

QUANTITY UNIT DESCRIPTION

VILLAGE OF Des Plaines 1420 Miner Street Des Plaines, ILLINOIS 60016

Dave Schacht ENERGY SUPPLY - CONTACT: PHONE: COMPANY: (630) 437-2129

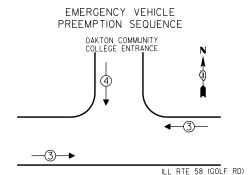


ILL RTE 58 (GOLF RD)

<u>L E G E N D</u>

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

### PHASE DESIGNATION DIAGRAM



	EMERGENCY VEHICLE PREEMPTORS							
EMERGENCY VEHICLE PREEMPTOR								
MOVEMENT	<b>=</b>	<b>↓</b>						

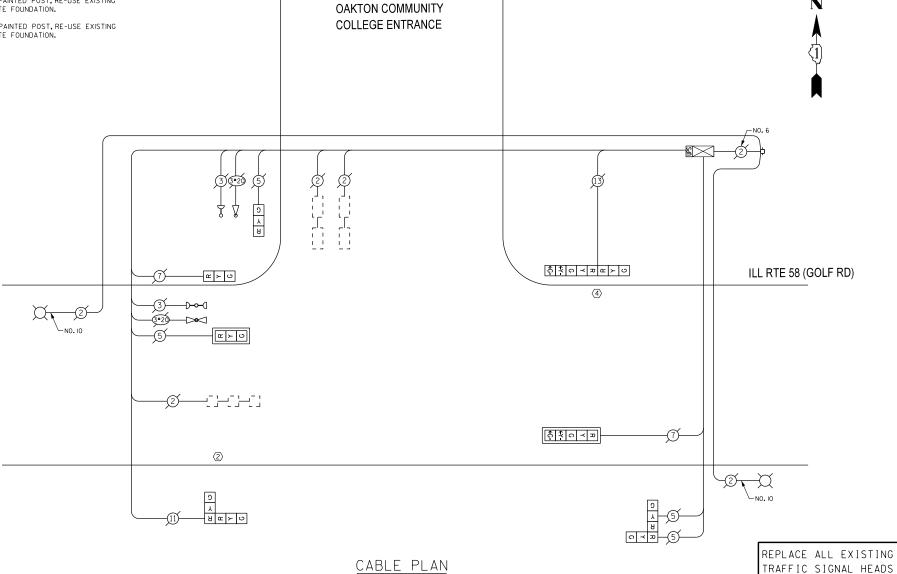
	TOTAL				
		WAT	TAGE		WATTAGE
TYPE	NO. OF LAMPS)	INCAND	LED >	% OPERATIONS	
SIGNAL (RED)	10		17	0.50	85.00
(YELLOW)	10		25	0.25	62.50
(GREEN)	10		15	0.25	37.50
ARROW	4		12	0.10	4.80
PED. SIGNAL			25	1.00	
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER					
ENERGY COSTS TO	289.80				
	VILLAGE OF	Nes Pic	nines		

1420 Miner Street
Des Plaines, ILLINOIS 60016

Dave Schacht ENERGY SUPPLY - CONTACT: Dave Schacht
PHONE: COMPANY:

COMPANY:

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



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

# REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

QUANTITY	<u>UNIT</u>	DESCRIPTION
2	EACH	TRAFFIC SIGNAL POST
3	EACH	SIGNAL HEAD, I-FACE, 3-SECTION
1	EACH	SIGNAL HEAD, I-FACE, 5-SECTION
2	EACH	SIGNAL HEAD, 2-FACE, 3-SECTION

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

# SCHEDULE OF QUANTITIES

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

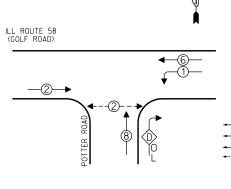
SAM SCHWARTZ ENGINEERING 3100 W. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

DESIGNED	-	JAM	REVISED	-
DRAWN	-	JAM	REVISED	-
CHECKED	-	LMM	REVISED	-
DATE	-	10-14-13	REVISED	-

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE,									
IL 58	GOLF R	D) AT C	AKTON (	COMMUNITY	COLLEGE				
SCALE: NONE	SHEET	OF	SHEETS	STA.	TO STA.				

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.				
VAR	2013-054TS	COOK	99	43				
		CONTRACT	NO. 6	50X15				
ILLINOIS FED. AID PROJECT								





CONTROLLER SEQUENCE

<u>LEGEND</u>

- → SINGLE ENTRY PHASE → ® DUAL ENTRY PHASE
- OVERLAP

NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

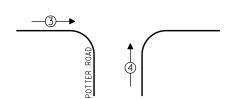
OVERLAP PERMISSIVE PROTECTED PHASE LETTER PHASE + 1

EMERGENCY VEHICLE PREEMPTION SEQUENCE



**4**─(3)─

ILL ROUTE 58 (GOLF ROAD)



EMERGENCY VEHICLE PREEMPTORS							
EMERGENCY VEHICLE PREEMPTOR	3	4					
MOVEMENT	<b>=</b>	1					

	TOTAL						
		WATTAGE					
TYPE	TYPE NO. OF LAMPSX INCAND LED X% OPERATION						
SIGNAL (RED)			12		17	0.50	102.00
(YELLOW)			12		25	0.25	75.00
(GREEN)			12		15	0.25	45.00
ARROW		8			12	0.10	9.60
PED. SIGNAL			2		25	1.00	50.00
CONTROLLER			1		100	1.00	100.00
ILLUM. SIGN					25	0.05	
LUMINAIRE				250		0.50	
VIDEO SYSTEM				150		1.00	
FLASHER						0.50	
ENERGY COSTS TO	):					TOTAL =	381.60

VILLAGE OF Des Plaines 1420 Miner Street Des Plaines, ILLINOIS 60016

ENERGY SUPPLY - CONTACT: \_\_\_\_ PHONE: COMPANY: \_\_\_

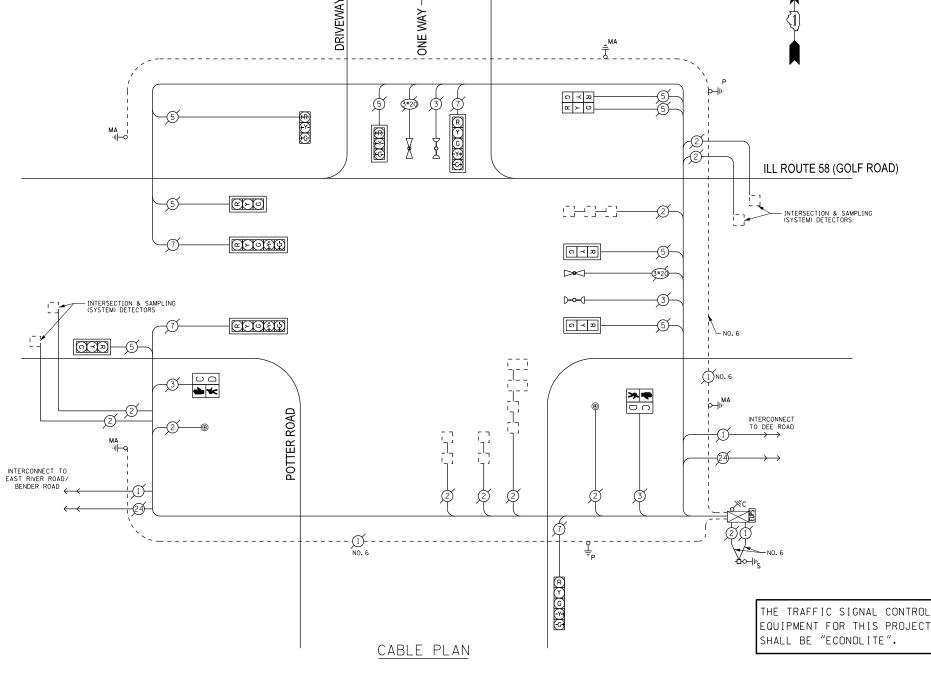
Dave Schacht (630) 437-2129

#### DESIGNED - JAM REVISED DRAWN -JAM REVISED CHECKED -LMM REVISED DATE - 10-14-13 REVISED



SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, IL ROUTE 58 (GOLF RD) AT POTTER ROAD OF SHEETS STA. SHEET

SECTION COUNTY COOK 99 44 VAR 2013-054TS CONTRACT NO. 60X15



### REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

QUANTITY UNIT DESCRIPTION

EACH PEDESTRIAN SIGNAL HEAD, I-FACE EACH PEDESTRIAN PUSHBUTTON

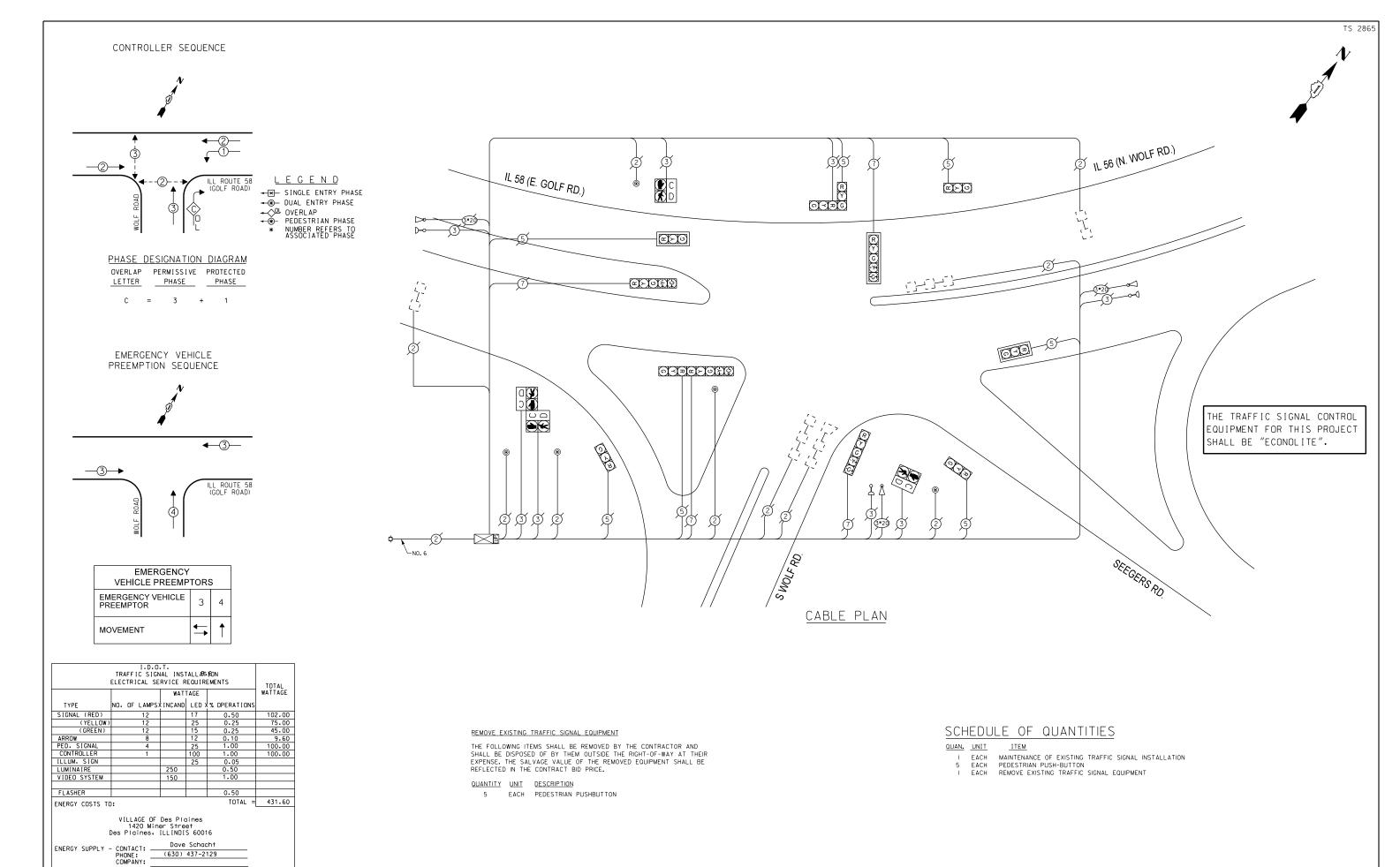
# SCHEDULE OF QUANTITIES

QUAN. UNIT

EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
EACH PEDESTRIAN SIGNAL HEAD, LED, I-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
EACH PEDESTRIAN PUSH-BUTTON

REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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



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

 DRAWN
 JAM
 REVISED

 CHECKED
 LMM
 REVISED

 DATE
 10-14-13
 REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE,

ILL RTE 58 (GOLF ROAD) AT WOLF ROAD

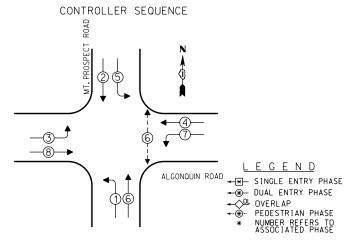
: NONE SHEET OF SHEETS STA. TO STA.

COUNTY

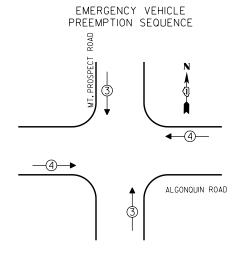
COOK

99 45

CONTRACT NO. 60X15



### PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS								
EMERGENCY VEHICLE PREEMPTOR	'EHICLE 3							
MOVEMENT	<b>↓</b> ↑	<b>=</b>						

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS							TOTAL	
				WAT.	TAGE		WATTAGE	
TYPE	NO.	OF	LAMPS	INCAND	LED >	% OPERATIONS	S	
SIGNAL (RED)		1	6		17	0.50	136.00	
(YELLOW)		1	6		25	0.25	100.00	
(GREEN)		1	6		15	0.25	60.00	
ARROW		16			12	0.10	19.20	
PED. SIGNAL			2		25	1.00	50.00	
CONTROLLER			1		100	1.00	100.00	
ILLUM. SIGN					25	0.05		
LUMINAIRE				250		0.50		
VIDEO SYSTEM				150		1.00		
FLASHER						0.50		
ENERGY COSTS TO: TOTAL =							465.20	
ENERGY COSTS TO:								

VILLAGE OF DES PLAINES 1420 MINER STREET DES PLAINES, ILLINOIS 60016

DAVE SCHACHT ENERGY SUPPLY - CONTACT: PHONE: COMPANY:

(630) 437-2129 SAM SCHWARTZ

ENGINEERING

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

#### DESIGNED - JAM REVISED DRAWN JAM REVISED CHECKED -LMM REVISED DATE 10-14-13 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, ALGONQUIN ROAD AND MOUNT PROSPECT ROAD SHEETS STA. SHEET

SECTION COUNTY VAR 2013-054TS COOK 99 46 CONTRACT NO. 60X15

MT. PROSPECT ROAD R Y G C > ○ ☆ ☆ (3\*20)—▶ ALGONQUIN ROAD O < x & > O \$ \$ ດ ≺ **ಸ**– -<del>ン・</del> -<del>、・</del> つ 人 と R Y G 4 REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION. C K - <del>-</del> MA CABLE PLAN

REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

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

### REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

#### QUANTITY UNIT DESCRIPTION

EACH TRAFFIC SIGNAL POST

SIGNAL HEAD, I-FACE, 3-SECTION SIGNAL HEAD, I-FACE, 5-SECTION

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

PEDESTRIAN PUSHBUTTON
TRAFFIC SIGNAL BACKPLATE

# SCHEDULE OF QUANTITIES

	QL	N. UNIT	. UNIT ITEM				
I EACH MAINTENANCE OF EXISTING TRAFFIC SIGN		I EACH	EACH MAINTENANCE	OF	EXISTING	TRAFFIC	SIGNAL

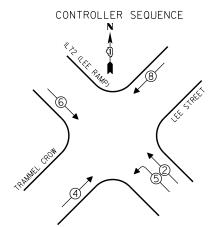
EACH

EACH

MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM EACH EACH

PEDESTRIAN PUSH-BUTTON
MODIFY EXISTING CONTROLLER CABINET

EACH EACH EACH EACH REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT UNINTERRUPTIBLE POWER SUPPLY, SPECIAL



LEGEND

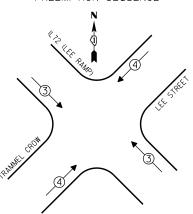
◆
★
→
SINGLE ENTRY PHASE

OVERLAP

NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTORS						
EMERGENCY VEHICLE PREEMPTOR	3	4				
MOVEMENT	7	4				

I.D.O.T. TRAFFIC SIGNAL INSTALLÆTÆON ELECTRICAL SERVICE REQUIREMENTS									
				WAT	TAGE		WATTAGE		
TYPE	NO.	OF	LAMPS)	INCAND	LED >	% OPERATIONS			
SIGNAL (RED)			15		17	0.50	127.50		
(YELLOW)			15		25	0.25	93.75		
(GREEN)			15		15	0.25	56.25		
ARROW			4		12	0.10	4.80		
PED. SIGNAL					25	1.00			
CONTROLLER			1		100	1.00	100.00		
ILLUM. SIGN					25	0.05			
LUMINAIRE				250		0.50			
VIDEO SYSTEM				150		1.00			
FLASHER						0.50			
ENERGY COSTS TO	):					TOTAL =	382.30		

VILLAGE OF Des Plaines 1420 Miner Street Des Plaines, ILLINOIS 60016

Dave Schacht ENERGY SUPPLY - CONTACT: \_\_\_\_ PHONE: COMPANY: \_\_\_ (630) 437-2129

# REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

**3=**20

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

QUANTITY	<u>UNIT</u>	DESCRIPTION
2	EACH	SIGNAL HEAD, I-FACE, 3-SECTION
2	EACH	COMBINATION SIGNAL HEAD, 2-FACE, 3-SECTION
1	EACH	COMBINATION SIGNAL HEAD, 2-FACE, I-3 SECTION, I-5 SECTION
6	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, I-FACE, 3-SECTION
1	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, I-FACE, 5-SECTION
7	EACH	TRAFFIC SIGNAL BACKPLATE

# SCHEDULE OF QUANTITIES

J 🗐 🛒

CONSTRUCTION NOTES

ALL PROGRAMMED HEADS SHALL BE REPLACED WITH STANDARD LED HEADS.

CONTRACTOR SHALL ALIGN TRAFFIC SIGNAL HEADS WITH THEIR RESPECTIVE APPROACHES.

CABLE PLAN



DESIGNED	-	JAM	REVISED	-
DRAWN	-	JAM	REVISED	-
CHECKED	-	LMM	REVISED	-
DATE	_	10-14-13	REVISED	_

#### STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

CANDER TO LAKE

DIAGRAM,	AND E	MERGEN	CY VEHICL	e preemp	SE DESIGNATION TION SEQUENCE, 2 (LEE STREET)
SCALE: NONE	SHEET	OF	SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-054TS	COOK	99	47
		CONTRACT	NO. 6	0X15
	THE INOIS FED. AT	D PROJECT		

TS 11870

REPLACE ALL EXISTING

TRAFFIC SIGNAL HEADS

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT

SHALL BE "EAGLE".

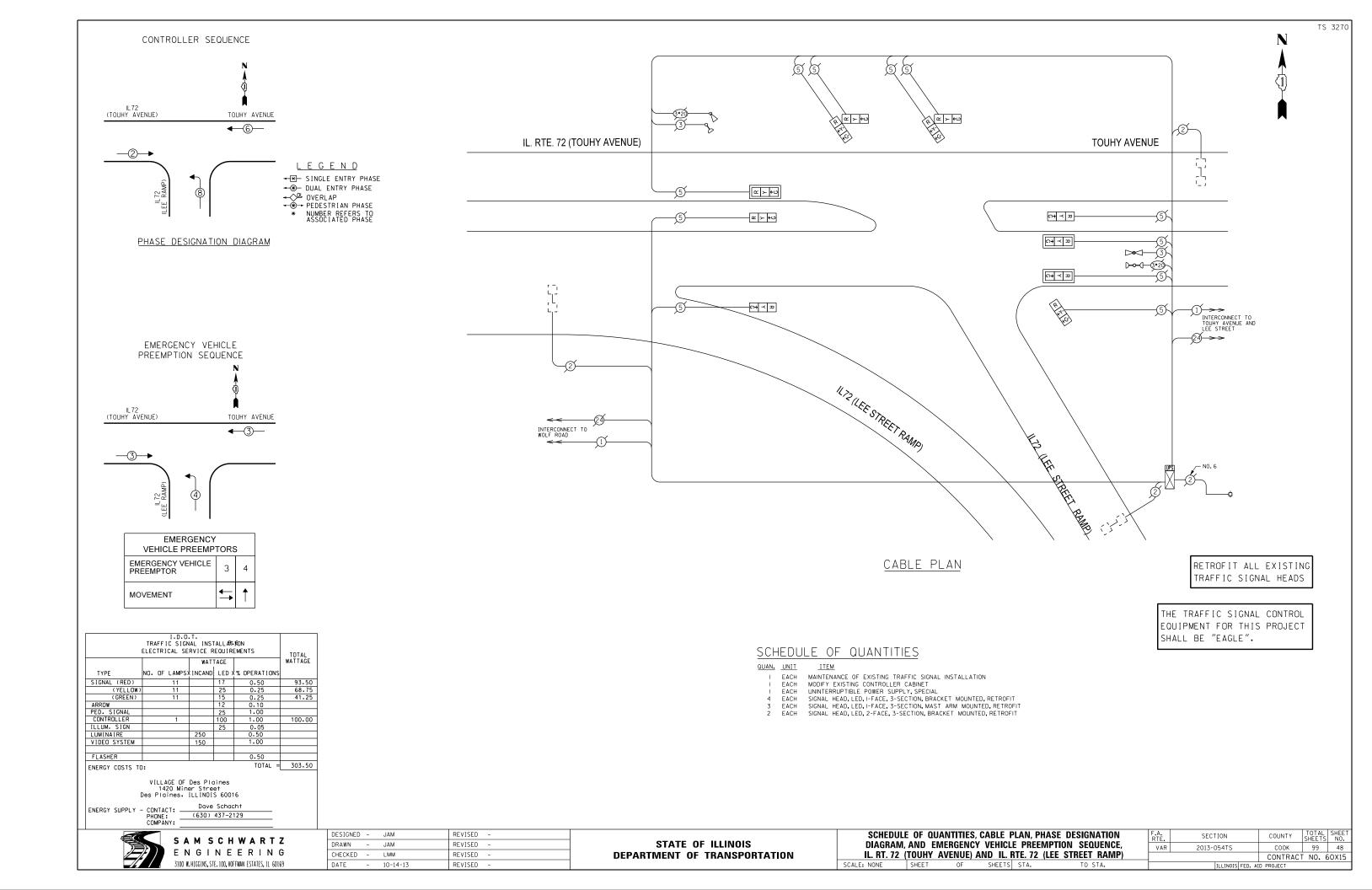
INTERCONNECT TO TOUHY AVENUE & LEE STREET

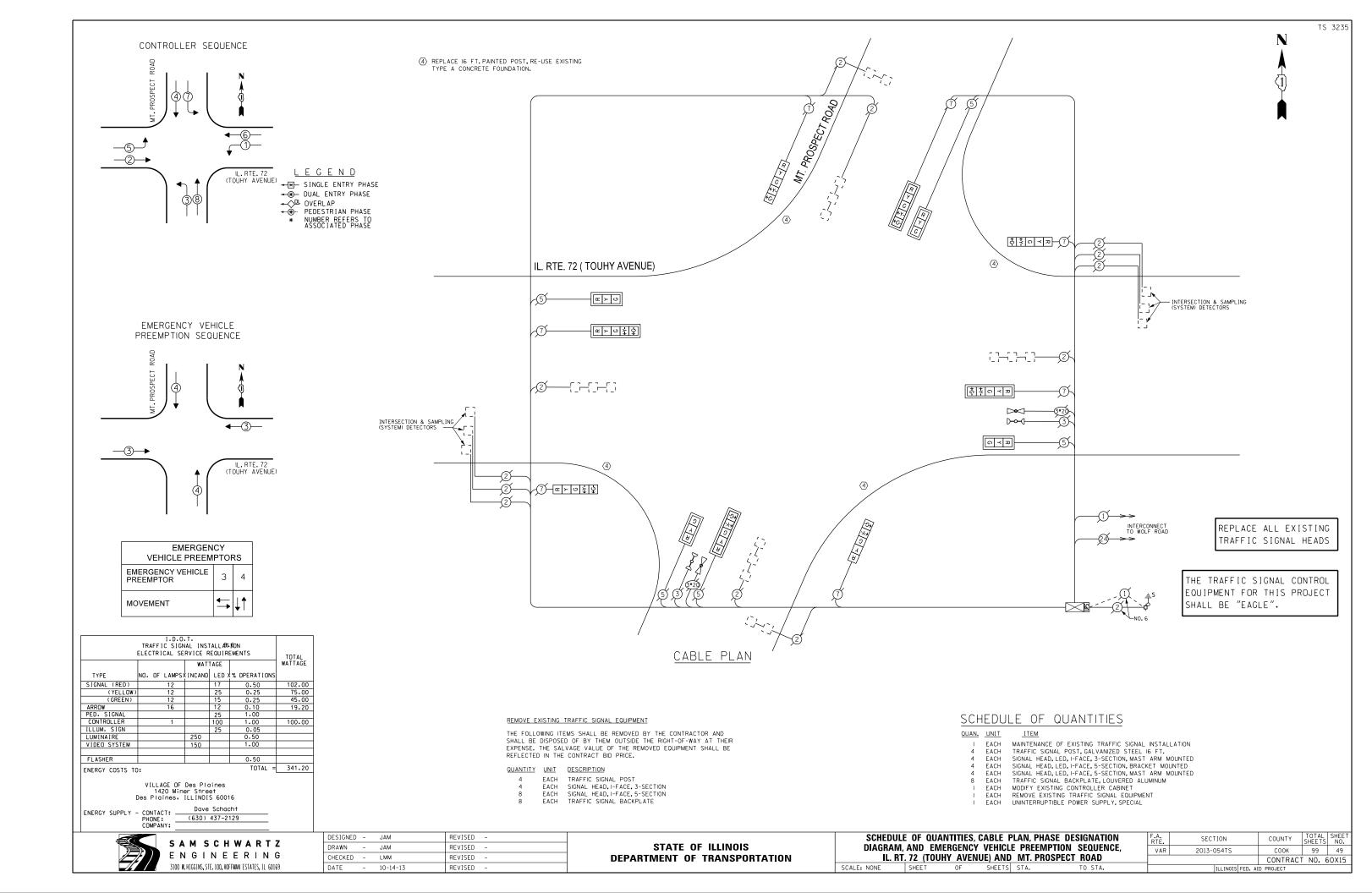
QUAN. UNIT ITEM

MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
SIGNAL HEAD, LED, I-FACE, 3-SECTION, MAST ARM MOUNTED
SIGNAL HEAD, LED, I-FACE, 3-SECTION, BRACKET MOUNTED
SIGNAL HEAD, LED, I-FACE, 5-SECTION, MAST ARM MOUNTED
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
SIGNAL HEAD, LED, 2-FACE, I-3 SECTION, I-5 SECTION, BRACKET MOUNTED EACH EACH

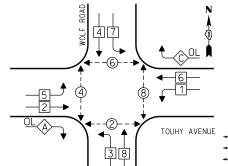
EACH EACH EACH EACH

EACH TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALLUMINUM
EACH MODIFY EXISTING CONTROLLER CABINET
EACH REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
EACH UNINTERRUPTIBLE POWER SUPPLY, SPECIAL









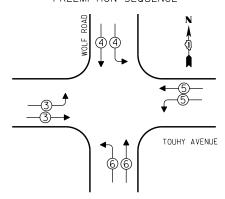
<u>LEGEND</u>

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

### PHASE DESIGNATION DIAGRAM

OVERLA	P P	ERMISSI	VE	PROTECTE	20
LETTE	₹	PHASE		PHASE	
Α	=	2	+	3	
(	=	6		7	

#### EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGEN VEHICLE PREEM		RS		
EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	<b>→</b>	<b>↓</b>	<b>↓</b>	<b>◆</b> ↑ <b>↑</b>

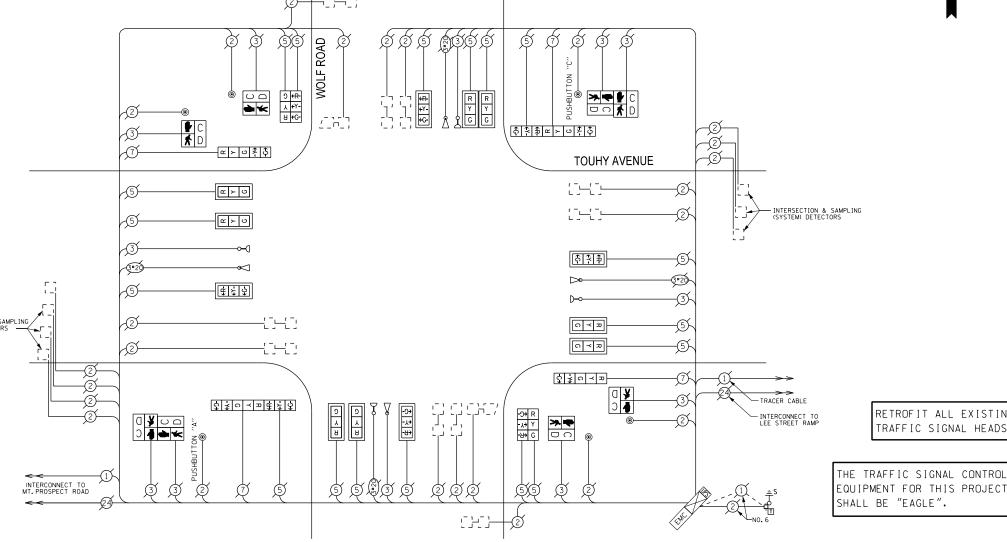
			I.D.O.				
	TOTAL						
				WAT	TAGE		WATTAGE
TYPE	NO.	OF	LAMPS)	INCAND	LED >	% OPERATIONS	
SIGNAL (RED)			22		17	0.50	187.00
(YELLOW)			22		25	0.25	137.50
(GREEN)			22		15	0.25	82.50
ARROW			8		12	0.10	9.60
PED. SIGNAL			8		25	1.00	200.00
CONTROLLER			1		100	1.00	100.00
ILLUM. SIGN					25	0.05	
LUMINAIRE				250		0.50	
VIDEO SYSTEM				150		1.00	
FLASHER						0.50	
ENERGY COSTS TO	716.60						

VILLAGE OF Des Plaines 1420 Miner Street Des Plaines, ILLINOIS 60016

Dave Schacht ENERGY SUPPLY - CONTACT: (630) 437-2129 PHONE: COMPANY:

#### NOTE:

PUSHBUTTON	"A"	SHALL	PLACE	Α	CALL	IN	PHASES	2	AND	4
PUSHBUTTON	"C"	SHALL	PLACE	Α	CALL	IN	PHASES	6	AND	8



CABLE PLAN

#### REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

QUANTITY UNIT DESCRIPTION

EACH PEDESTRIAN SIGNAL HEAD, I-FACE EACH PEDESTRIAN SIGNAL HEAD, 2-FACE EACH PEDESTRIAN PUSHBUTTON

## SCHEDULE OF QUANTITIES

QUAN.	UNIT	ITE

- 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, NON-LATCHING EΔCH
  - EACH
- MODIFY EXISTING CONTROLLER CABINET
  REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT FACH
- UNINTERRUPTIBLE POWER SUPPLY, SPECIAL
  SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT EACH EACH
- SIGNAL HEAD, LED, I-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT EACH EACH
- SIGNAL HEAD, LED, I-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT



DESIGNED	-	JAM	REVISED -
DRAWN	-	JAM	REVISED -
CHECKED	-	LMM	REVISED -
DATE	-	10-14-13	REVISED -

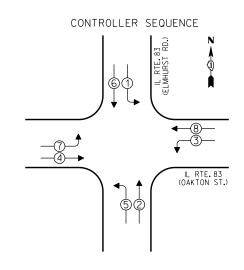
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

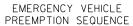
					PHASE DESIGNATION
					EEMPTION SEQUENCE, WOLF ROAD
SCALE: NONE	SHEET	OF	SHEETS	STA.	TO STA.

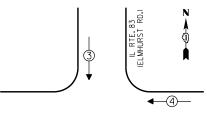
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-054TS	COOK	99	50
		CONTRACT	NO. 6	0X15
	ILL INOIS FED. AT	ID PROJECT		

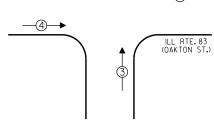
RETROFIT ALL EXISTING

TRAFFIC SIGNAL HEADS









VEHIC	EMERGENCY LE PREEMPTOF	RS	
EMERGENC PREEMPTO		3	4
MOVEMENT		<b>↓</b> ↑	<b>+</b>

I.D.O.T. TRAFFIC SIGNAL INSTALLATION							
ELEC	CTRI	CAL	SERVI	CE REQU	IREMEN	ITS	TOTAL
				WAT	TAGE		WATTAGE
TYPE	NO.	OF	LAMPS	INCAND	LED >	% OPERATION	s
SIGNAL (RED)		1	6		17	0.50	136.00
(YELLOW)		1	6		25	0.25	100.00
(GREEN)		1	6		15	0.25	60.00
ARROW		2	4		12	0.10	28.80
PED. SIGNAL					25	1.00	
CONTROLLER			1		100	1.00	100.00
ILLUM. SIGN					25	0.05	
LUMINAIRE				250		0.50	
VIDEO SYSTEM				150		1.00	
FLASHER						0.50	
ENERGY COSTS TO: TOTAL =							424.80
VILLACE OF DES PLAINES							

VILLAGE OF DES PLAINES 1420 MINER STREET DES PLAINES, ILLINOIS 60016

ENERGY SUPPLY - CONTACT: DAVE SCHACHT (630) 437-2129 COMPANY:

S	,	A	М	S	C	Н	W	A	R	T	Z
E		Ν	G	I	Ν	Ε	Ε	R	1	Ν	G
3	10	0 <b>W</b> .H	HIGGIN	IS, S	TE. 100	) <b>,</b> HOF	FMAN	ESTA	TES,	IL 60	169

DESIGNED	-	JAM	REVISED -	_
DRAWN	-	JAM	REVISED -	
CHECKED	-	LMM	REVISED -	
DATE	-	10-14-13	REVISED -	

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

IL RTE. 83 (OAKTON ST.)

-->•< **-**D**---**

DIAGRAM,	AND EME	RGEN	CY VEHICL	E PRE	<b>EMPTION</b>	SIGNATION SEQUENCE,	
IL	83 (ELIVITI	าหอา	ROAD) AT	IL 83	(UAKTUN	31)	
SCALE: NONE	SHEET	OF	SHEETS	STA.		TO STA.	

COUNTY TOTAL SHEET NO.

COOK 99 51

CONTRACT NO. 60X15 SECTION 2013-054TS VAR

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

TS 3350

SCHEDULE OF QUANTITIES

I EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
I EACH MODIFY EXISTING CONTROLLER CABINET
I EACH UNINTERRUPTIBLE POWER SUPPLY, SPECIAL

QUAN. UNIT ITEM

वे वे वेक्केव

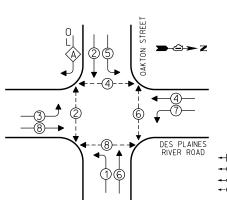
IL RTE. 83 (ELMHURST RD.)

CABLE PLAN



**→ © → Z** 

INTERSECTION & SAMPLING (SYSTEM) DETECTORS



CONTROLLER SEQUENCE

<u>LEGEND</u>

◆
★
→
SINGLE ENTRY PHASE → ® DUAL ENTRY PHASE OL OVERLAP

REPLACE 10 FT. PAINTED POST, RE-USE EXISTING

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

TYPE A CONCRETE FOUNDATION.

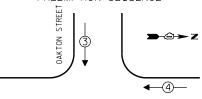
PEDESTRIAN PHASE NUMBER REFERS TO ASSOCIATED PHASE

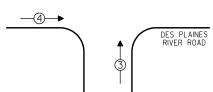
NOTE:

# PHASE DESIGNATION DIAGRAM

OVERLAP PERMISSIVE PROTECTED LETTER PHASE PHASE 2 + 3

#### EMERGENCY VEHICLE PREEMPTION SEQUENCE





EMERGEN VEHICLE PREEM		RS
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	<b>↓</b> ↑	<b>_</b>

TR ELE	TOTAL				
		WAT.	TAGE		WATTAGE
TYPE	NO. OF LAMPS	INCAND	LED >	% OPERATIONS	
SIGNAL (RED)	14		17	0.50	119.00
(YELLOW)	14		25	0.25	87.50
(GREEN)	14		15	0.25	52.50
ARROW	24		12	0.10	28.80
PED. SIGNAL	10		25	1.00	250.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO	637.80				

VILLAGE OF DES PLAINES 1420 MINER STREET DES PLAINES, ILLINOIS 60016

DAVE SCHACHT ENERGY SUPPLY - CONTACT: \_\_\_\_ PHONE: COMPANY: \_\_\_ (630) 437-2129

#### DESIGNED - JAM REVISED DRAWN JAM REVISED CHECKED -LMM REVISED DATE 10-14-13 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, DES PLAINES RIVER ROAD AT OAKTON STREET SHEET

FΔCH

SECTION COUNTY VAR 2013-054TS COOK 99 52 CONTRACT NO. 60X15

REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT

SHALL BE "EAGLE".

PUSHBUTTON "A" <u>\_\_\_\_</u> \$\$0 < ¤ R Y G  $\cup$   $\square$ **→ ≪** PUSHBUTTON "A" o ∩ **→** ≪ DES PLAINES RIVER ROAD (c) ≺ x) (조 > 이 첫 文 INTERSECTION & SAMPLING (SYSTEM) DETECTORS **೧** ≺ ਸ਼ \* ₩ ₩ ₽ ₩ PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4 PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6 4 - 4 PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8 PUSHBUTTON "C" OAKTON STREET PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8

REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

<u>QUANTITY</u>	<u>UNIT</u>	DESCRIPTION
4	EACH	TRAFFIC SIGNAL POST
3	EACH	SIGNAL HEAD, I-FACE, 3-SECTION
8	EACH	SIGNAL HEAD, I-FACE, 5-SECTION
2	EACH	SIGNAL HEAD, 2-FACE, 5-SECTION
3	EACH	PEDESTRIAN SIGNAL HEAD, I-FACE
2	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
I	EACH	PEDESTRIAN SIGNAL HEAD, 3-FACE
5	EACH	PEDESTRIAN PUSHBUTTON
8	EACH	TRAFFIC SIGNAL BACKPLATE

SCHEDULE OF QUANTITIES

CABLE PLAN

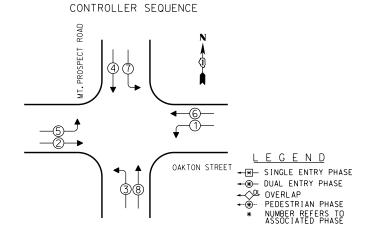
JUAN.	UNII	<u>ITEM</u>
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.
3	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
3	EACH	SIGNAL HEAD, LED, I-FACE, 3-SECTION, MAST ARM MOUNTED
3	EACH	SIGNAL HEAD, LED, I-FACE, 5-SECTION, BRACKET MOUNTED
5	EACH	SIGNAL HEAD, LED, I-FACE, 5-SECTION, MAST ARM MOUNTED
2	EACH	SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED
1	EACH	PEDESTRIAN SIGNAL HEAD, LED, I-FACE, BRACKET MOUNTED

WITH COUNTDOWN TIMER PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER PEDESTRIAN SIGNAL HEAD, LED, 3-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER EACH EACH EACH TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM MODIFY EXISTING CONTROLLER CABINET

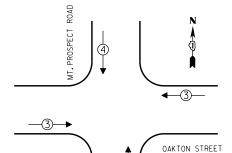
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT UNINTERRUPTIBLE POWER SUPPLY, SPECIAL PEDESTRIAN PUSH-BUTTON, NON-LATCHING EACH

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

SHEETS STA.



#### EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGEN VEHICLE PREEM		RS
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	<b>_</b>	<b>↓</b> ↑

	I.D.O.T. TRAFFIC SIGNAL INSTALLATION							
	ELE(	CTRICAL SERVI	CE REQU	IREMEN	ITS	TOTAL		
			WAT	TAGE		WATTAGE		
	TYPE	NO. OF LAMPS)	INCAND	LED >	% OPERATIONS			
	SIGNAL (RED)	12		17	0.50	102.00		
	(YELLOW)	12		25	0.25	75.00		
	(GREEN)	12		15	0.25	45.00		
	ARROW	16		12	0.10	19.20		
	PED. SIGNAL			25	1.00			
	CONTROLLER	1		100	1.00	100.00		
	ILLUM. SIGN			25	0.05			
	LUMINAIRE		250		0.50			
VIDEO SYSTEM			150		1.00			
FLASHER					0.50			
	ENERGY COSTS TO	 ):			TOTAL =	341.20		

VILLAGE OF DES PLAINES 1420 MINER STREET DES PLAINES, ILLINOIS 60016

SAM SCHWARTZ

ENGINEERING

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

DAVE SCHACHT ENERGY SUPPLY - CONTACT:
PHONE:
COMPANY:

DAVE SCHACHT
(630) 437-2129

DESIGNED	-	JA
DRAWN	-	JA
CHECKED	-	LM
DATE	-	10

DESIGNED	-	JAM	REVISED -	
DRAWN	-	JAM	REVISED -	
CHECKED	-	LMM	REVISED -	
DATE	-	10-14-13	REVISED -	

# STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, OAKTON STREET AT MT. PROSPECT ROAD OF SHEETS STA. SHEET

SECTION COUNTY COOK 99 53 CONTRACT NO. 60X15 2013-054TS VAR

MT. PROSPECT OAKTON STREET (\$\(\frac{1}{2}\)(\frac{1}\)(\frac{1}{2}\)(\frac{1}2\)(\frac{1}2\)(\frac{1}2\)(\frac{1 D---(I-030 CABLE PLAN

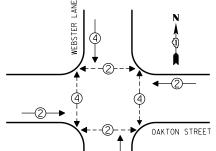
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

# SCHEDULE OF QUANTITIES

QUAN. UNIT

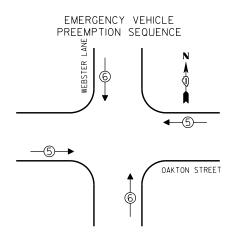
I EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
I EACH MODIFY EXISTING CONTROLLER CABINET
I EACH UNINTERRUPTIBLE POWER SUPPLY, SPECIAL





<u>L E G E N D</u>

- ← ¥ SINGLE ENTRY PHASE → DUAL ENTRY PHASE
- OVERLAP
  PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE



EMERGENCY VEHICLE PREEMPTORS						
EMERGENCY VEHICLE PREEMPTOR	5	6				
MOVEMENT	<b>_</b>	<b>↓</b> ↑				

	I.D.O.T. TRAFFIC SIGNAL INSTALLÆTÆON ELECTRICAL SERVICE REOUIREMENTS						
				WAT	TAGE		WATTAGE
TYPE	NO.	OF	LAMPS)	INCAND	LED >	% OPERATIONS	
SIGNAL (RED)			12		17	0.50	102.00
(YELLOW)			12		25	0.25	75.00
(GREEN)			12		15	0.25	45.00
ARROW					12	0.10	
PED. SIGNAL			8		25	1.00	200.00
CONTROLLER			1		100	1.00	100.00
ILLUM. SIGN					25	0.05	
LUMINAIRE				250		0.50	
VIDEO SYSTEM				150		1.00	
FLASHER						0.50	
ENERGY COSTS TO	):					TOTAL =	522.00

VILLAGE OF Des Plaines 1420 Miner Street Des Plaines, ILLINOIS 60016

ENERGY SUPPLY - CONTACT: \_\_\_\_ PHONE: COMPANY: \_\_\_

(630) 437-2129

Dave Schacht

DESIGNED	-	JAM	REVISED	-
DRAWN	-	JAM	REVISED	-
CHECKED	-	LMM	REVISED	-
DATE	-	10-14-13	REVISED	-

### STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, OAKTON STREET AT WEBSTER LANE OF SHEETS STA. SHEET

SECTION COUNTY COOK 99 54 VAR 2013-054TS CONTRACT NO. 60X15

THE TRAFFIC SIGNAL CONTROL

EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

TS 12995

WEBSTER LANE **OAKTON STREET** -0KB \$\$ \$ CABLE PLAN

### REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

QUANTITY UNIT DESCRIPTION

8 EACH PEDESTRIAN PUSHBUTTON

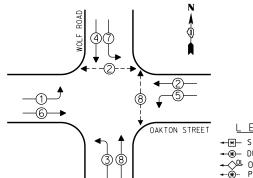
# SCHEDULE OF QUANTITIES

QUAN. UNIT ITEM

EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
EACH PEDESTRIAN PUSH-BUTTON
EACH MODIFY EXISTING CONTROLLER CABINET
EACH REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
EACH UNINTERRUPTIBLE POWER SUPPLY, SPECIAL

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

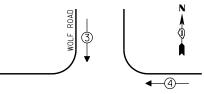
#### CONTROLLER SEQUENCE

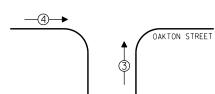


<u>L E G E N D</u>

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

#### EMERGENCY VEHICLE PREEMPTION SEQUENCE



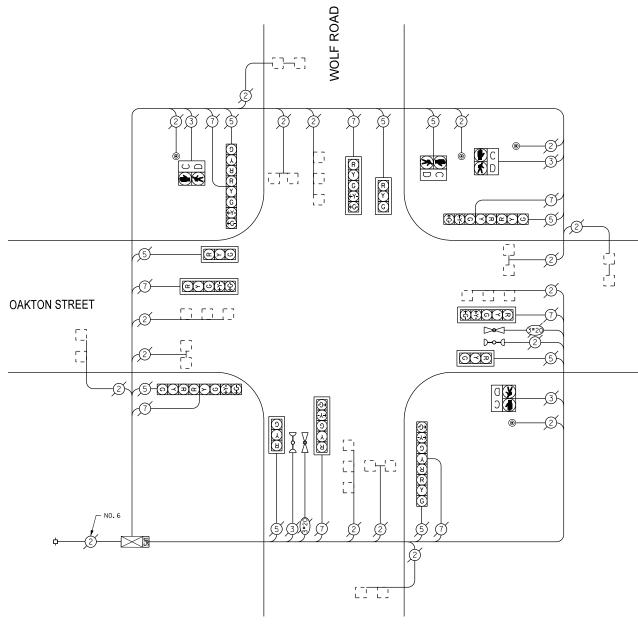


EMERGENCY VEHICLE PREEMPTORS					
EMERGENCY VEHICLE PREEMPTOR	3	4			
MOVEMENT	<b>↓</b> ↑	<b>_</b>			

TR. ELEC	TOTAL					
			WAT.	TAGE		WATTAGE
TYPE	NO. OF	LAMPS	INCAND	LED >	% OPERATIONS	
SIGNAL (RED)	16	5		17	0.50	136.00
(YELLOW)	16	ò		25	0.25	100.00
(GREEN)	16	5		15	0.25	60.00
ARROW	16	5		12	0.10	19.20
PED. SIGNAL	4	1		25	1.00	100.00
CONTROLLER	1			100	1.00	100.00
ILLUM. SIGN				25	0.05	
LUMINAIRE			250		0.50	
VIDEO SYSTEM			150		1.00	
FLASHER					0.50	
ENERGY COSTS TO	):				TOTAL =	515.20

VILLAGE OF DES PLAINES 1420 MINER STREET DES PLAINES, ILLINOIS 60016

DAVE SCHACHT ENERGY SUPPLY - CONTACT: DAVE SCHACHT (630) 437-2129 COMPANY:



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

CABLE PLAN

# REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

QUANTITY UNIT DESCRIPTION

4 EACH PEDESTRIAN PUSHBUTTON

# SCHEDULE OF QUANTITIES

| EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION |
| EACH PEDESTRIAN PUSH-BUTTON |
| EACH MODIFY EXISTING CONTROLLER CABINET |
| EACH REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT |
| EACH UNINTERRUPTIBLE POWER SUPPLY, SPECIAL

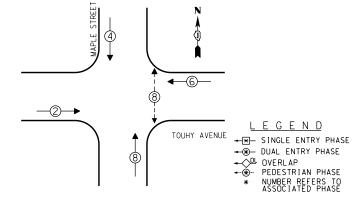


DESIGNED	-	JAM	REVISED	-
DRAWN	-	JAM	REVISED	-
CHECKED	-	LMM	REVISED	-
DATE	-	10-14-13	REVISED	-

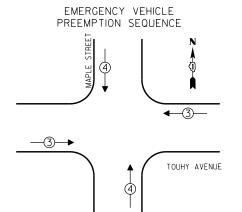
ı	SCHEDIII	F OF OH	ANITITIES	CABLE PLAN, PHA	SE DESIGNATION		
ı							
ı	DIVCBVM	VND EI	MEDGENIC	V VEHICLE DREEMI	PTION SEQUENCE,		
ı	DIAGNAIVI,	AND LI	VILITULIAC	I VEHICLE PRELIMI	TION SECULIAGE,		
ı		OAKTON STREET AT WOLF ROAD					
ı	OAKION SINELI AI WOLI NOAD						
ı	SCALE: NONE	SHEET	OF	SHEETS STA.	TO STA.		
ı	SCALE: NUNE	1 SHEET	UF	SHEETS STA.	IU SIA.		

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEE1
VAR	2013-054TS	COOK	99	55
		CONTRACT	NO. 6	0X15
	ILLINOIS FED. A	ID PROJECT		





### PHASE DESIGNATION DIAGRAM



EMERGEN VEHICI E PREEM		25
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	<b>=</b>	<b>↓</b> ↑

	TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS							
				WAT	TAGE		WATTAGE	
TYPE	NO.	OF	LAMPS)	INCAND	LED >	% OPERATIONS		
SIGNAL (RED)			12		17	0.50	102.00	
(YELLOW)			12		25	0.25	75.00	
(GREEN)			12		15	0.25	45.00	
ARROW					12	0.10		
PED. SIGNAL			2		25	1.00	50.00	
CONTROLLER			1		100	1.00	100.00	
ILLUM. SIGN					25	0.05		
LUMINAIRE				250		0.50		
VIDEO SYSTEM				150		1.00		
FLASHER						0.50		
ENERGY COSTS TO	):					TOTAL =	372.00	
1								

VILLAGE OF Des Plaines 1420 Miner Street Des Plaines, ILLINOIS 60016

Dave Schacht ENERGY SUPPLY - CONTACT: Dave Schacht
PHONE: (630) 437-2129

## REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

QUANTITY UNIT DESCRIPTION

EACH PEDESTRIAN SIGNAL HEAD, I-FACE EACH PEDESTRIAN PUSHBUTTON

# SCHEDULE OF QUANTITIES

QUAN. UNIT ITEM

MAPLE STREET

CABLE PLAN

(R) (R) (Y) (G)

INTERCONNECT TO
DES PLAINES RIVER ROAD

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT

SHALL BE "EAGLE".

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

									_		
_		<b>M</b> G	_	_		• • •				_	
310	0 <b>W</b> .H	HIGGIN	s, st	E. 100	) <b>,</b> HOF	FMAN	ESTA	TES,	IL 60	169	

DESIGNED	-	JAM	REVISED	-
DRAWN	-	JAM	REVISED	-
CHECKED	-	LMM	REVISED	-
DATE	-	10-14-13	REVISED	-

STATE OF ILLINOIS	
<b>DEPARTMENT OF TRANSPORTATION</b>	

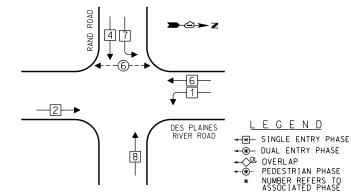
TOUHY AVENUE

**₹**20 **►** 

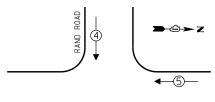
				•	SE DESIGNATION	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DIAGRAM,					PTION SEQUENCE,	VAR	2013-054TS	COOK	99	56
	TOUH	AVENU	E AND I	MAPLE ST	REET			CONTRAC	T NO. 6	0X15
SCALE: NONE	SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS FED. A	D PROJECT		

**→**©→Z

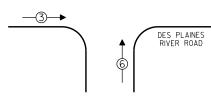
### CONTROLLER SEQUENCE



### PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE

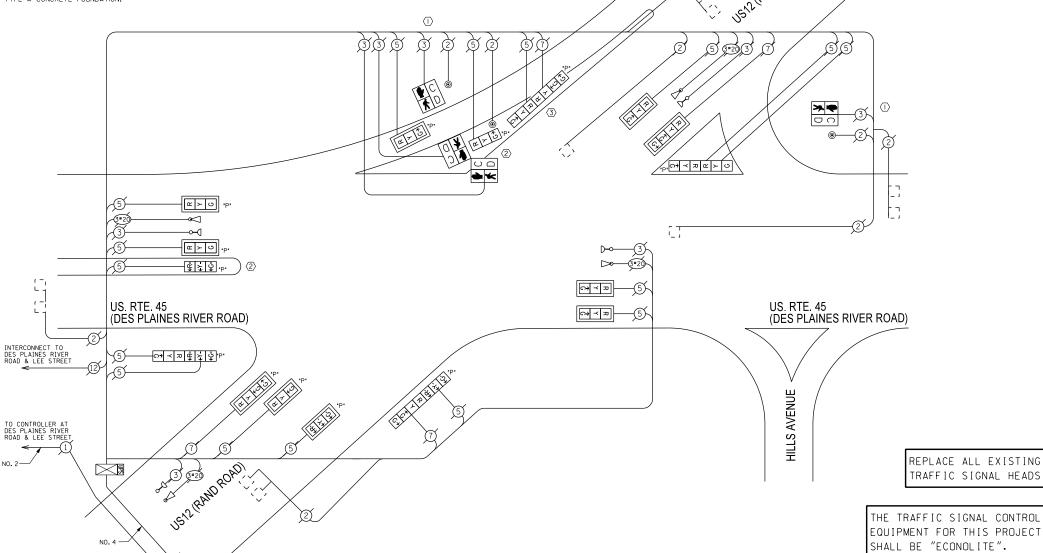


EMERO VEHICLE PRE			S	
EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	-	<b>→</b>	<b>+</b>	<b>↑</b>

	I.D. TRAFFIC SIO ELECTRICAL S	SNAL INS			TOTAL
		WAT	TAGE		WATTAGE
TYPE	NO. OF LAMP	SKINCAND	LED >	% OPERATIONS	
SIGNAL (RED)	20		17	0.50	170.00
(YELLOW)	20		25	0.25	125.00
(GREEN)	24		15	0.25	90.00
ARROW			12	0.10	
PED. SIGNAL	4		25	1.00	100.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO	):			TOTAL =	585.00
	VILLAGE OF 1420 Mi Des Plaines.	ner Stre	et	16	

( REPLACE 10 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

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



SCALE: NONE

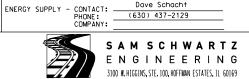
#### REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

QUANTITY	<u>UNIT</u>	DESCRIPTION
5	EACH	TRAFFIC SIGNAL POST
10	EACH	SIGNAL HEAD, I-FACE, 3-SECTION
2	EACH	SIGNAL HEAD, I-FACE, 4-SECTION
2	EACH	SIGNAL HEAD, 2-FACE, 3-SECTION
2	EACH	SIGNAL HEAD, 2-FACE, I-3 SECTION, I-4 SECTION
2	EACH	PEDESTRIAN SIGNAL HEAD, I-FACE
1	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
3	EACH	PEDESTRIAN PUSHBUTTON
10	EACH	TRAFFIC SIGNAL BACKPLATE

#### SCHEDIILE OF OLIANTITIES

<u> 50</u> F	<u>ILDU</u>	ILE OF QUANTITIES
QUAN.	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 15 FT.
3	EACH	SIGNAL HEAD, LED, I-FACE, 3-SECTION, MAST ARM MOUNTED
1	EACH	SIGNAL HEAD, LED, I-FACE, 4-SECTION, MAST ARM MOUNTED
2	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, I-FACE, 3-SECTION, BRACKET MOUNTED
5	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, I-FACE, 3-SECTION, MAST ARM MOUNTED
1	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, I-FACE, 4-SECTION, MAST ARM MOUNTED
2	EACH	COMBINATION SIGNAL HEAD, LED, 2-FACE, I-3 SECTION OPTICALLY PROGRAMMED, I-3 SECTION, BRACKET MOUNTED
1	EACH	COMBINATION SIGNAL HEAD, LED, 2-FACE, I-3 SECTION OPTICALLY PROGRAMMED, I-4 SECTION, BRACKET MOUNTED
1	EACH	COMBINATION SIGNAL HEAD, LED, 2-FACE, I-4 SECTION OPTICALLY PROGRAMMED, I-3 SECTION, BRACKET MOUNTED
2	EACH	PEDESTRIAN SIGNAL HEAD, LED, I-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
1	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
10	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
3	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL



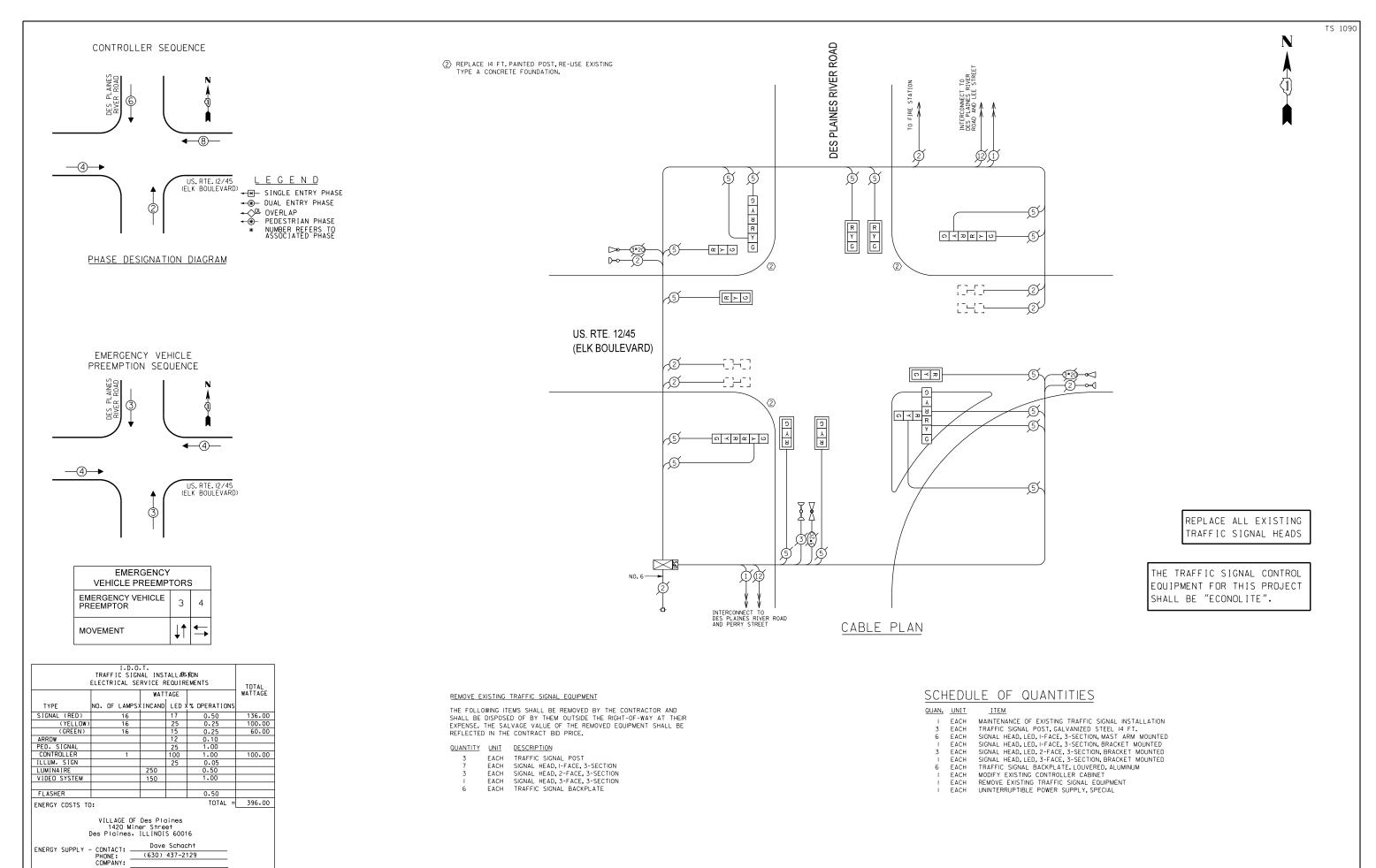
Dave Schacht

DESIGNED	_	JAM	REVISED	_
DRAWN	_	JAM	REVISED	_
CHECKED	-	LMM	REVISED	-
DATE	-	10-14-13	REVISED	-

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

CABLE PLAN

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	
DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE,	VAR	2013-054TS	COOK	99	57
DES PLAINES RIVER ROAD AT RAND ROAD			CONTRAC	NO.	60X15
F: NONE SHEET OF SHEETS STA. TO STA.		ILL INOIS FED. AT	PROJECT		



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

 DESIGNED
 JAM
 REVISED

 DRAWN
 JAM
 REVISED

 CHECKED
 LMM
 REVISED

 DATE
 10-14-13
 REVISED

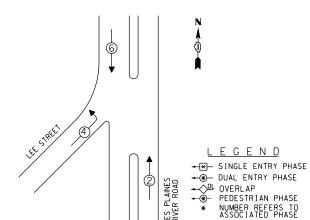
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, US. RTE. 12/45 (ELK BOULEVARD) AND DES PLAINES RIVER ROAD E. NONE SHEET OF SHEETS STA. TO STA.

F.A. SECTION COUNTY TOTAL SHEETS NO.

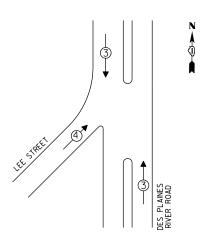
VAR 2013-054TS COOK 99 58

CONTRACT NO. 60X15



PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



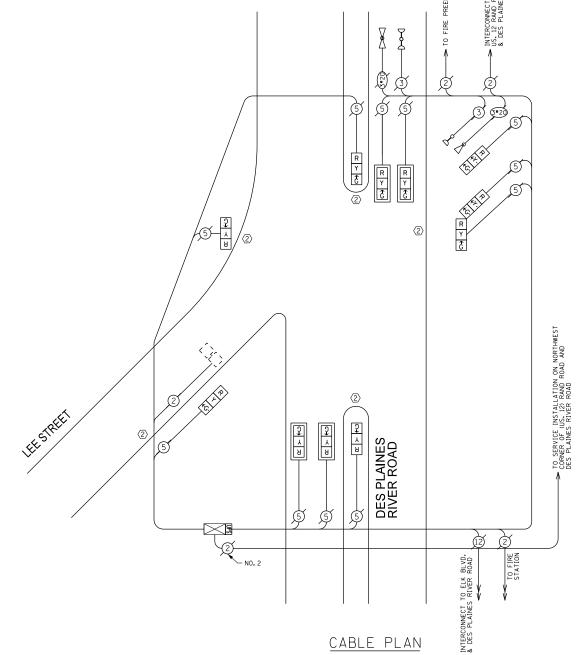
EMERGEN VEHICLE PREEM		RS
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	<b>↓</b> ↑	<b>-</b>

TR ELEC	TOTAL					
			WAT	TAGE		WATTAGE
TYPE	NO. OF LA	AMPSX	INCAND	LED >	% OPERATIONS	
SIGNAL (RED)	11			17	0.50	93.50
(YELLOW)	11			25	0.25	68.75
(GREEN)	11			15	0.25	41.25
ARROW				12	0.10	
PED. SIGNAL				25	1.00	
CONTROLLER	1			100	1.00	100.00
ILLUM. SIGN				25	0.05	
LUMINAIRE			250		0.50	
VIDEO SYSTEM			150		1.00	
FLASHER						
ENERGY COSTS TO	):				TOTAL =	303.50

VILLAGE OF DES PLAINES 1420 MINER STREET DES PLAINES, ILLINOIS 60016

DAVE SCHACHT ENERGY SUPPLY - CONTACT: DAVE SCHACHT (630) 437-2129 COMPANY:





REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

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

# REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

#### QUANTITY UNIT DESCRIPTION

EACH TRAFFIC SIGNAL POST

EACH SIGNAL HEAD, I-FACE, 3-SECTION EACH SIGNAL HEAD, 2-FACE, 3-SECTION

EACH TRAFFIC SIGNAL BACKPLATE

# SCHEDULE OF QUANTITIES

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

SAM SCHWARTZ ENGINEERING

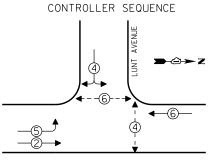
3100 W. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

DESIGNED	-	JAM	REVISED	-
DRAWN	-	JAM	REVISED	-
CHECKED	-	LMM	REVISED	-
DATE	-	10-14-13	REVISED	-

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION								
∣ DIAGRAM.	AND EMI	ERGENC	Y VEHICLI	E PRE	EMPTION SEQUENCE,			
					-			
L	FF SIKEE	I AND	DES PLAI	INF2	RIVER ROAD			
SCALE: NONE	SHEET	OF	SHEETS	STA	TO STA.			

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-054TS	COOK	99	59
		CONTRACT	NO. 6	0X15
	ILLINOIS FED. A	ID PROJECT		

**→**©→Z



MANNHEIM ROAD

LEGEND

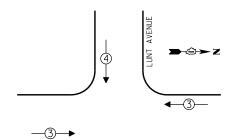
◆ SINGLE ENTRY PHASE **- ®** DUAL ENTRY PHASE

→ OL OVERLAP 

PHASE DESIGNATION DIAGRAM

NUMBER REFERS TO ASSOCIATED PHASE

EMERGENCY VEHICLE PREEMPTION SEQUENCE



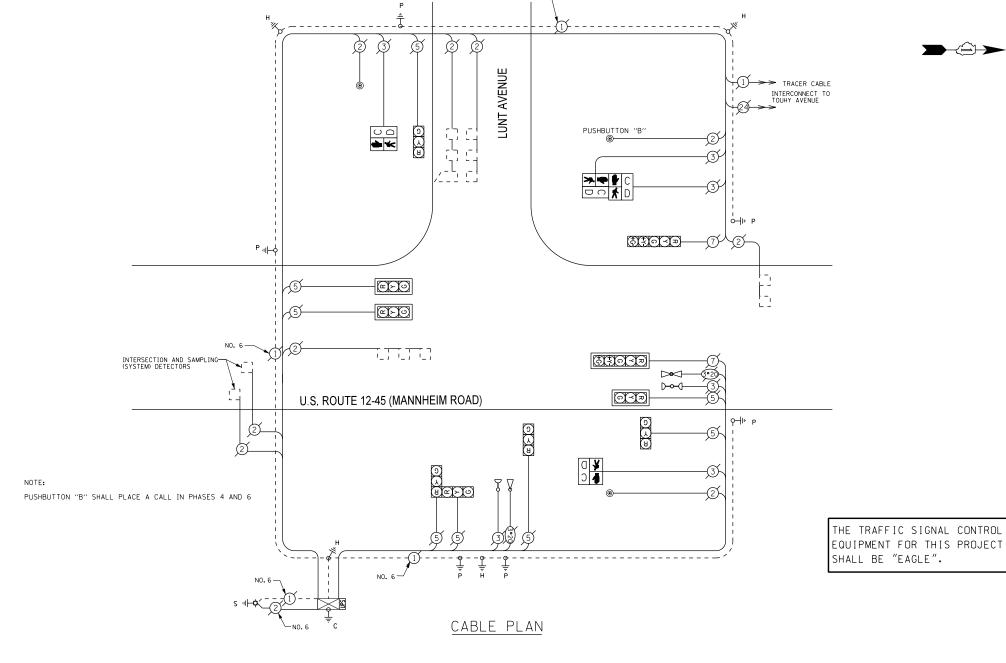
MANNHEIM ROAD

EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	3	4		
MOVEMENT	<b>_</b>	Ţ		

TR. ELEC	TOTAL								
	WATTAGE								
TYPE	NO.	OF	LAMPS	INCAND	LED >	1%	OPERATIONS		
SIGNAL (RED)		1	0		17		0.50	85.00	
(YELLOW)		1	0		25		0.25	62.50	
(GREEN)		1	0		15		0.25	37.50	
ARROW			4		12		0.10	4.80	
PED. SIGNAL			4		25		1.00	100.00	
CONTROLLER			1		100		1.00	100.00	
ILLUM. SIGN					25		0.05		
LUMINAIRE				250			0.50		
VIDEO SYSTEM				150			1.00		
FLASHER 0.50									
ENERGY COSTS TO	ENERGY COSTS TO: TOTAL =							389.80	

VILLAGE OF DES PLAINES 1420 MINER STREET DES PLAINES, ILLINOIS 60016

DAVE SCHACHT ENERGY SUPPLY - CONTACT: DAVE SCHACHT (630) 437-2129 COMPANY:



# REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

QUANTITY UNIT DESCRIPTION

EACH PEDESTRIAN SIGNAL HEAD, I-FACE EACH PEDESTRIAN SIGNAL HEAD, 2-FACE EACH PEDESTRIAN PUSHBUTTON

## SCHEDULE OF QUANTITIES

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

EACH. PEDESTRIAN PUSH-BUTTON, NON-LATCHING

EACH MODIFY EXISTING CONTROLLER CABINET
EACH REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
EACH UNINTERRUPTIBLE POWER SUPPLY, SPECIAL

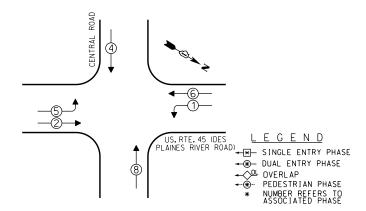
SAM SCHWARTZ ENGINEERING 3100 W. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

DESIGNED	-	JAM	REVISED	-
DRAWN	-	JAM	REVISED	-
CHECKED	-	LMM	REVISED	-
DATE	-	10-14-13	REVISED	-

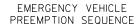
				SE DESIGNATION
				PTION SEQUENCE, LUNT AVENUE
SCALE: NONE	SHEET	OF	SHEETS	 TO STA.

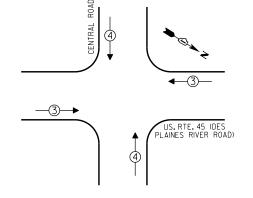
F.A. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-054TS		COOK	99	60
			CONTRACT	NO. 6	OX15
	ILLINOIS FED.	AID	PROJECT		

#### CONTROLLER SEQUENCE



### PHASE DESIGNATION DIAGRAM





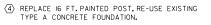
EMERGENCY VEHICLE PREEMP		6
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	<b>=</b>	<b>↓</b> ↑

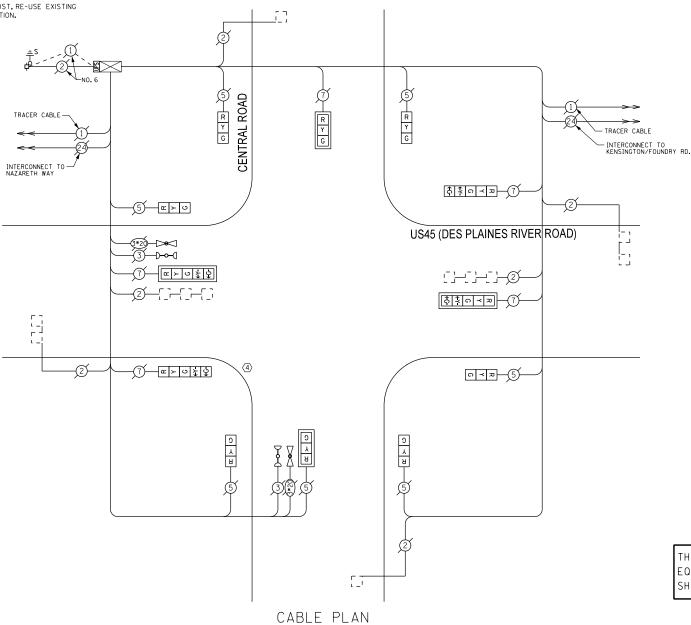
I.D.O.T.								
TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS								
			WAT	TAGE		TOTAL WATTAGE		
TYPE	NO. 0	F LAMPS	INCAND	LED >	% OPERATIONS			
SIGNAL (RED)		12		17	0.50	102.00		
(YELLOW)		12		25	0.25	75.00		
(GREEN)		12		15	0.25	45.00		
ARROW		8		12	0.10	9.60		
PED. SIGNAL				25	1.00			
CONTROLLER		1		100	1.00	100.00		
ILLUM. SIGN				25	0.05			
LUMINAIRE			250		0.50			
VIDEO SYSTEM			150		1.00			
FLASHER 0.5								
ENERGY COSTS TO	):				TOTAL =	331.60		

VILLAGE OF DES PLAINES 1420 MINER STREET DES PLAINES, ILLINOIS 60016

ENERGY SUPPLY - CONTACT: DAVE SCHACHT (630) 437-2129 COMPANY:

DAVE SCHACHT





REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

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

#### REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

QUANTITY UNIT DESCRIPTION

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

## SCHEDULE OF QUANTITIES

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

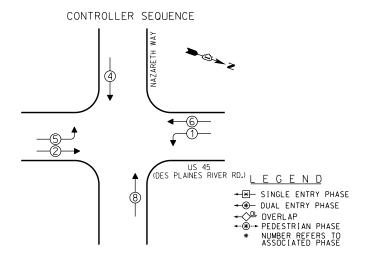
I EACH UNINTERRUPTIBLE POWER SUPPLY, SPECIAL

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

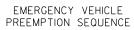
_					
	DATE	-	10-14-13	REVISED	-
	CHECKED	-	LMM	REVISED	-
	DRAWN	-	JAM	REVISED	-
	DESIGNED	-	JAM	REVISED	-

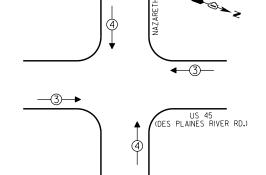
1	SCHEDIIII	F OF OL	IANTITIES	CARLE P	DIAN PHA	SE DESIGNATION	
ı							
ı	DIVCBVM	AND E	MEBCENIC	V VEHICL	E DREEMI	PTION SEQUENCE.	
ı	DIAGNAIVI,	AND E	MENGENG	I VEHICE	C FNEEIVII	TION SECULIAGE,	
ı	IIC DTE /	E /DEC	DIVINES	DIVED D	OVD/VID	CENTRAL ROAD	
ı	U3. NIE. 4	io (DEO	LIMINES	DIVED D	UAU) ANU	CENTRAL NUAD	
ı	SCALE: NONE	SHEET	OF	SHEETS	CTA	TO STA.	
ı	SCALE: NUNE	DHEEL	UF	SHEETSI	SIA.	IU SIA.	

A. TE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-054TS	COOK	99	61
		CONTRACT	NO. 6	0X15
	ILLINOIS FED. A	ID PROJECT		



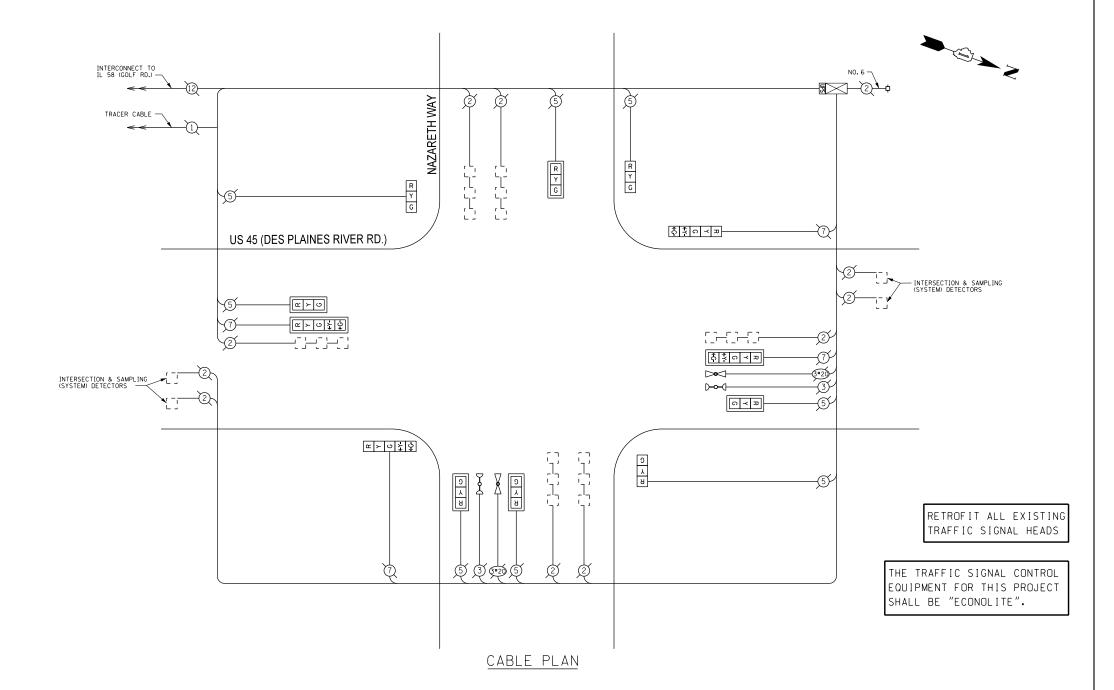
### PHASE DESIGNATION DIAGRAM





EMERGENCY VEHICLE PREEMPTORS						
EMERGENCY VEHICLE PREEMPTOR	3	4				
MOVEMENT	<b>=</b>	<b>↓</b> ↑				

	I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS								
		TOTAL WATTAGE							
	TYPE	NO. OF	LAMPS)	INCAND	LED >	% OPERATIONS	1		
	SIGNAL (RED)		2		17	0.50	102.00		
	(YELLOW)		2		25	0.25	75.00		
	(GREEN)		2		15	0.25	45.00		
	ARROW	8			12	0.10	9.60		
	PED. SIGNAL				25	1.00			
	CONTROLLER		1		100	1.00	100.00		
	ILLUM. SIGN				25	0.05			
	LUMINAIRE			250		0.50			
	VIDEO SYSTEM			150		1.00			
	FLASHER 0.50 ENERGY COSTS TO: TOTAL =								
	VILLAGE OF DES PLAINES 1420 MINER STREET DES PLAINES, ILLINOIS 60016								



# SCHEDULE OF QUANTITIES

QUAN.	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL
3	EACH	SIGNAL HEAD, LED, I-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT
5	EACH	SIGNAL HEAD, LED, I-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFI
2	EACH	SIGNAL HEAD, LED, I-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFI
2	EACH	SIGNAL HEAD, LED, I-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT



ENERGY SUPPLY - CONTACT: DAVE SCHACHT PHONE: COMPANY:

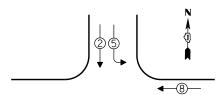
DAVE SCHACHT

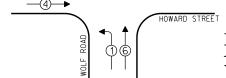
DESIGNED	-	JAM	REVISED	-
DRAWN	-	JAM	REVISED	-
CHECKED	-	LMM	REVISED	-
DATE	-	10-14-13	REVISED	-

	SCHEDULE OF QUANTITIES, CABLE
STATE OF ILLINOIS	DIAGRAM, AND EMERGENCY VEHIC
DEPARTMENT OF TRANSPORTATION	US 45 (DES PLAINES RIVER RO

			•		PHASE DESIGNATION	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	RAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE,						2013-054TS	COOK	99	62
S 45	45 (DES PLAINES RIVER ROAD) AT NAZARETH WAY							CONTRACT	T NO. 6	0X15
	SHEET	OF	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT				

#### CONTROLLER SEQUENCE



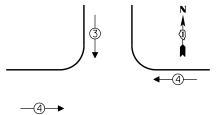


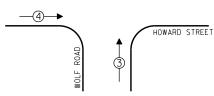
<u>L E G E N D</u>

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

# PHASE DESIGNATION DIAGRAM

#### EMERGENCY VEHICLE PREEMPTION SEQUENCE





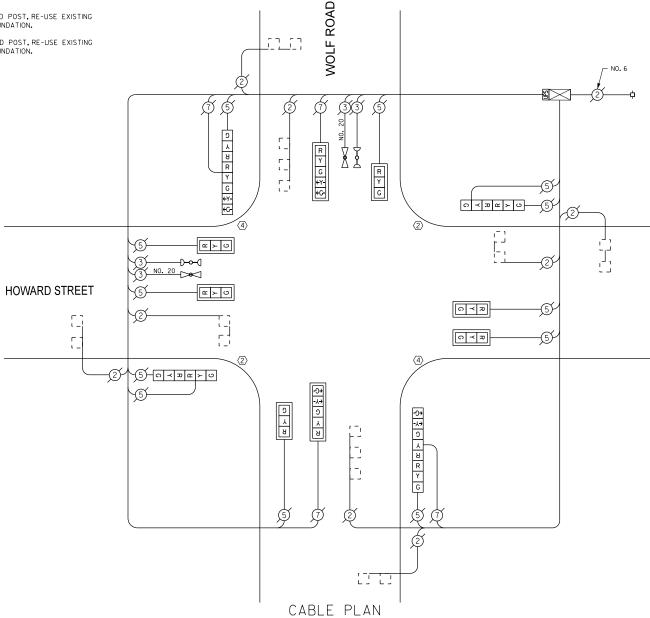
EMERGENCY VEHICLE PREEMPTORS					
EMERGENCY VEHICLE PREEMPTOR	3	4			
MOVEMENT	<b>↓</b> ↑	<b>—</b>			

	I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS								
				WAT.	TAGE		WATTAGE		
	TYPE	NO. 0	F LAMPS)	INCAND	LED >	% OPERATIONS			
	SIGNAL (RED)		16		17	0.50	136.00		
	(YELLOW)		16		25	0.25	100.00		
	(GREEN)	16			15	0.25	60.00		
	ARROW		8		12	0.10	9.60		
	PED. SIGNAL				25	1.00			
	CONTROLLER		1		100	1.00	100.00		
	ILLUM. SIGN				25	0.05			
	LUMINAIRE			250		0.50			
	VIDEO SYSTEM			150		1.00			
FLASHER						0.50			
	ENERGY COSTS TO: TOTAL =								
	ENERGY 60373 101								

VILLAGE OF DES PLAINES 1420 MINER STREET DES PLAINES, ILLINOIS 60016

DAVE SCHACHT ENERGY SUPPLY - CONTACT: DAVE SCHACHT (630) 437-2129 COMPANY: ② REPLACE 14 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

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



REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

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

#### REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

<u>QUANTITY</u>	<u>UNIT</u>	DESCRIPTION
4	EACH	TRAFFIC SIGNAL POST
6	EACH	SIGNAL HEAD, I-FACE, 3-SECTION
2	EACH	SIGNAL HEAD, I-FACE, 5-SECTION
2	EACH	SIGNAL HEAD, 2-FACE, 3-SECTION
2	EACH	SIGNAL HEAD, 2-FACE, I-3 SECTION, I-5 SECTION
8	EACH	TRAFFIC SIGNAL BACKPLATE

# SCHEDULE OF QUANTITIES

QUAN.	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
6	EACH	SIGNAL HEAD, LED, I-FACE, 3-SECTION, MAST ARM MOUNTED
2	EACH	SIGNAL HEAD, LED, I-FACE, 5-SECTION, MAST ARM MOUNTED
2	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
2	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
8	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM

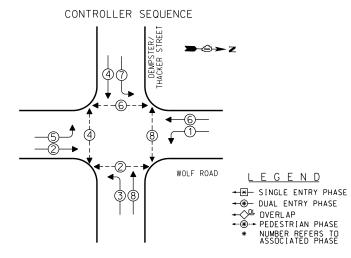
EACH MODIFY EXISTING CONTROLLER CABINET
EACH REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
EACH UNINTERRUPTIBLE POWER SUPPLY, SPECIAL



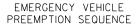
DESIGNED	-	JAM	REVISED -
DRAWN	-	JAM	REVISED -
CHECKED	-	LMM	REVISED -
DATE	-	10-14-13	REVISED -

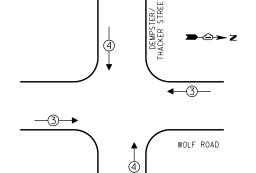
	AND E	MERGENC		ASE DESIGNATION IPTION SEQUENCE, OAD
SCALE: NONE	SHEET	OF	SHEETS STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-054TS	COOK	99	63
		CONTRACT	NO. 6	0X15
	ILL INOIS FED. A	ID PROJECT		



#### PHASE DESIGNATION DIAGRAM





EMERGENCY VEHICLE PREEMPTOI	RS	
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	<b>+</b>	<b>↓</b> ↑

		SIGNAL I SERVII			ITS	TOT 41
ELECTRICAL SERVICE REQUIREMENTS WATTAGE						TOTAL WATTAGE
TYPE	NO. 0	F LAMPS)	INCAND	LED >	% OPERATIONS	
SIGNAL (RED)		12		17	0.50	102.00
(YELLOW)		12		25	0.25	75.00
(GREEN)		12		15	0.25	45.00
ARROW		16		12	0.10	19.20
PED. SIGNAL		8		25	1.00	200.00
CONTROLLER		1		100	1.00	100.00
ILLUM. SIGN				25	0.05	
LUMINAIRE			250		0.50	
VIDEO SYSTEM			150		1.00	
FLASHER					0.50	
ENERGY COSTS TO	):				TOTAL =	541.20

VILLAGE OF DES PLAINES 1420 MINER STREET DES PLAINES, ILLINOIS 60016

DAVE SCHACHT ENERGY SUPPLY - CONTACT: DAVE SCHACHT (630) 437-2129 COMPANY:



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

QUANTITY UNIT DESCRIPTION

EACH PEDESTRIAN SIGNAL HEAD, I-FACE EACH PEDESTRIAN PUSHBUTTON

\$ \$ o ≺ ¬¬ ( ) ( ) ( ) ( ) ( ) WOLF ROAD G ≺ 🇷 \_<del>3\*</del>20-DEMPSTER/THACKER STREET ~ ~ ㅇ ţ ţ C CABLE PLAN

RETROFIT ALL EXISTING TRAFFIC SIGNAL HEADS

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

### SCHEDULE OF QUANTITIES

QUAN.	UNIT	ITEM

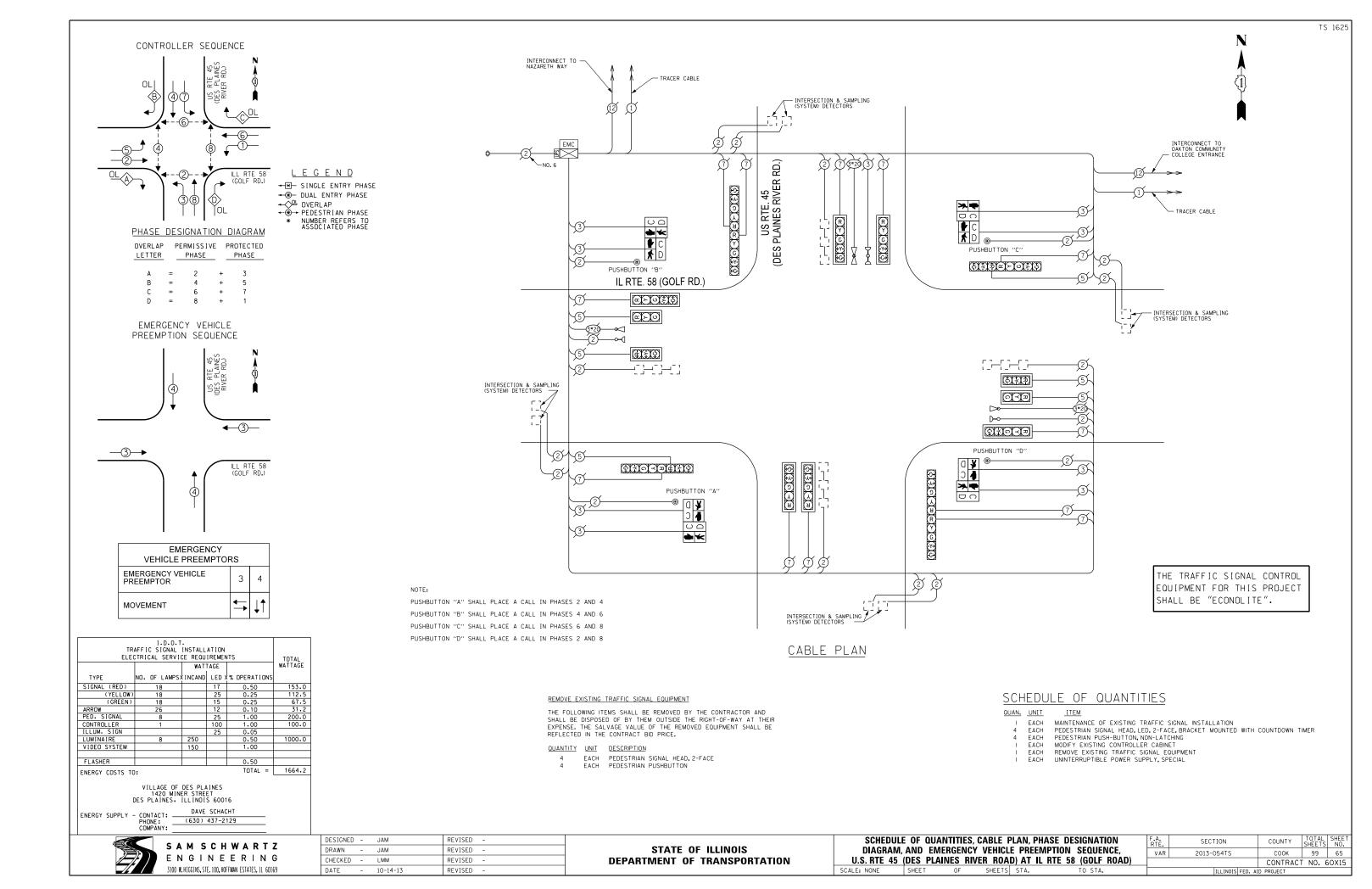
EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
EACH PEDESTRIAN SIGNAL HEAD, LED, I-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
EACH PEDESTRIAN PUSH-BUTTON
EACH MODIFY EXISTING CONTROLLER CABINET
EACH REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
EACH UNINTERRUPTIBLE POWER SUPPLY, SPECIAL
EACH SIGNAL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

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

DESIGNED	-	JAM	REVISED	-
DRAWN	-	JAM	REVISED	-
CHECKED	-	LMM	REVISED	-
DATE	-	10-14-13	REVISED	-

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION							
DIAGRAN	DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE,						
1	<b>NOLF ROAD</b>	AND	DEMPSTE	R/THA	CKER STREET		
SCALE: NONE	SHEET	OF	SHEETS	STA.	TO STA.		

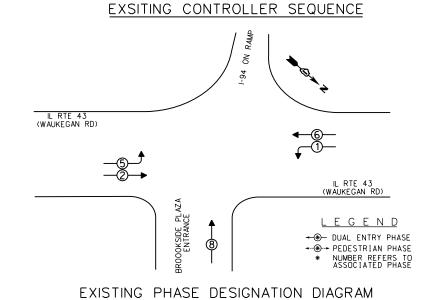
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-054TS	COOK	99	64
		CONTRACT	NO. 6	0X15
	ILLINOIS FED. A	ID PROJECT		



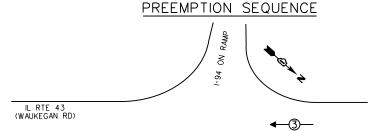


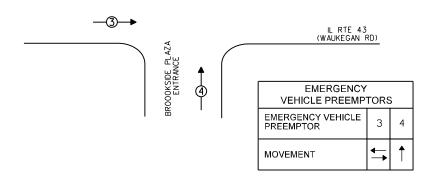
EXISTING INTERSECTION -AND SAMPLING (SYSTEM) DETECTORS

IL RTE 43 (WAUKEGAN RD)



# EXISTING EMERGENGY VEHICLE





	TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS						
			WAT	TAGE		WATTAGE	
	TYPE	NO. OF LAMPS	INCAND	LED >	% OPERATIONS		
	SIGNAL (RED)	10		17	0.50	85.00	
	(YELLOW)	10		25	0.25	62.50	
	(GREEN)	10		15	0.25	37.50	
	ARROW	8		12	0.10	9.60	
Services	PED. SIGNAL			25	1.00		
3	CONTROLLER	1		100	1.00	100.00	
	ENERGY COSTS TO	ENERGY COSTS TO: TOTAL =					
Professional	VILLAGE OF NORTHBROOK 1225 CEDAR LANE NORTHBROOK, IL 60062						

SCHEDULE OF QUANTITIES

EACH

MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION EACH MODIFY EXISTING CONTROLLER CABINET

UNINTERRUPTIBLE POWER SUPPLY, SPECIAL

IL RTE 43 (WAUKEGAN RD)

NO. 6-

EXISTING INTERSECTION AND SAMPLING (SYSTEM) DETECTORS

THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET

INTERCONNECT TO IL RTE 43 / I-94 OFF RAMP

CABLE PLAN

BROOKSIDE PLAZA ENTRANCE

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

1-94 ON RAMP

59

-----

-NO. 6

## NOTE:

DUE TO DOUBLE HANDHOLE ON THE RIGHT SIDE OF THE CONTROLLER CABINET, UPS SHALL BE INSTALLED ON THE LEFT.

2600 Warrenville Road, Suite 203, Downers Grove, IL 60515-1761 630.705.0110 voice, 630.839.2566 fax

REVISED DRAWN JNP REVISED CHECKED TVN REVISED 10/22/2013 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE IL RTE 43 (WAUKEGAN ROAD) AT I-94 ON RAMP SHEETS STA. · TO STA.

TOTAL SHEET NO. 99 66 SECTION D-91-020-14 соок CONTRACT NO. 60X15 FED. ROAD DIST. NO. 1 JULINOIS FED. AID PROJECT

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

MILLENNIA PROFESSIONAL SERVICES

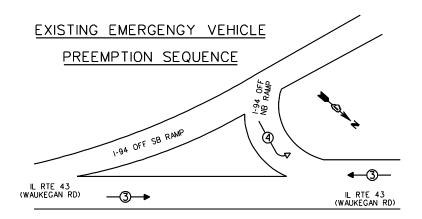
<u>L E G E N D</u>

● DUAL ENTRY PHASE

• ● PEDESTRIAN PHASE

\* NUMBER REFERS TO ASSOCIATED PHASE

# EXISTING PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	თ	4		
MOVEMENT	<b>+</b>	Ĺ <sub>⊳</sub>		

	TOTAL						
		WATTAGE					
TYPE	NO. OF LAMPS	INCAND	LED >	% OPERATIONS			
SIGNAL (RED)	10		17	0.50	85.00		
(YELLOW)	10		25	0.25	62.50		
(GREEN)	10		15	0.25	37.50		
ARROW			12	0.10			
PED, SIGNAL			25	1.00			
CONTROLLER	1		100	1.00	100.00		
ENERGY COSTS TO	ENERGY COSTS TO: TOTAL = 285.00						
VILLAGE OF NORTHBROOK 1225 CEDAR LANE NORTHBROOK, IL 60062							
TERRI DI COV							

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION** 

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE IL RTE 43 (WAUKEGAN ROAD) AT I-94 OFF RAMP SCALE: •N/A SHEET SHEETS STA. •

TOTAL SHEET NO. 99 67 SECTION D-91-020-14 СООК CONTRACT NO. 60X15 FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

EXISTING INTERSECTION AND SAMPLING (SYSTEM) DETECTORS

- TRACER CABLE

TS-61

CABLE PLAN

2

IL RTE 43 (WAUKEGAN RD)

# SCHEDULE OF QUANTITIES

QUANTITY UNIT ITEM

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS SIGNAL SHALL BE "EAGLE" TO MATCH

THE EXISTING ADJACENT SYSTEM.

1-94 OFF SB RAMP

IL RTE 43 (WAUKEGAN RD)

EXISTING INTERSECTION AND SAMPLING (SYSTEM) DETECTORS

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

2600 Warrenville Road, Saite 283, Downers Grove, IL 60515-1761 630.705.0110 voice, 630.839.2566 faz www.mps-il.com

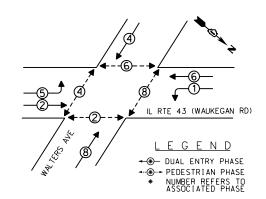
MILLENNIA PROFESSIONAL SERVICES

DRAWN JNP REVISED CHECKED TVN REVISED DATE 10/11/2013 REVISED

REVISED

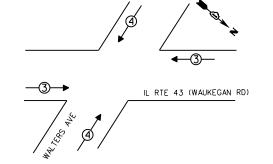
DESIGNED -

# EXISTING CONTROLLER SEQUENCE



# EXISTING PHASE DESIGNATION DIAGRAM

# EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMP		6
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	<b>_</b>	<b>↓</b> ↑

		I.D.O.					
		TOTAL					
			WAT	TAGE		WATTAGE	
	TYPE	NO. OF LAMPS	INCAND	LED >	% OPERATIONS		
	SIGNAL (RED)	12		17	0.50	102.00	
	(YELLOW)	12		25	0.25	75.00	
	(GREEN)	12		15	0.25	45.00	
	ARROW	8		12	0.10	9.60	
/Ices	PED. SIGNAL	8		25	1.00	200.00	
2	CONTROLLER	1		100	1.00	100.00	
90 T	ENERGY COSTS TO	):			TOTAL =	531.60	
19210101							
10 1101	ENERGY SUPPLY - CONTACT:TERRIBLECK						
uu en i		<u>'</u>					

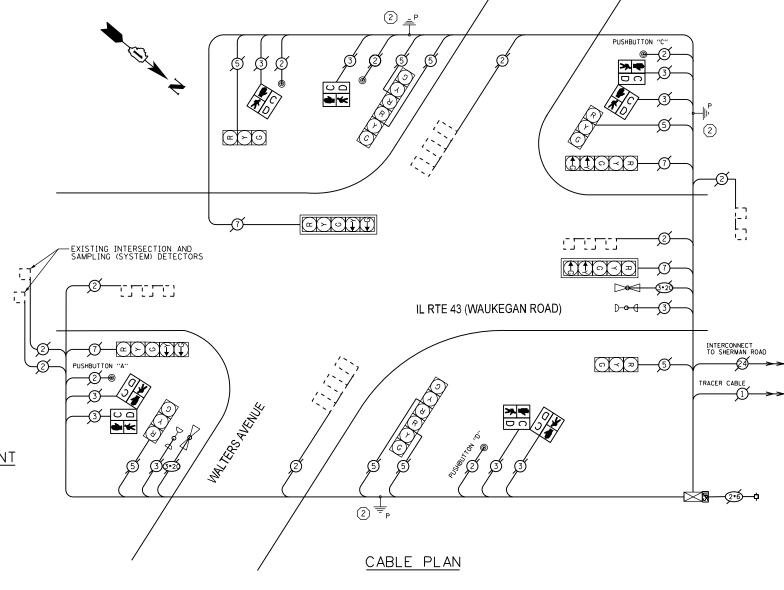
# REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

QUANTITY	<u>UNIT</u>	DESCRIPTION
3	EACH	TRAFFIC SIGNAL POST
2	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
3	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
5	EACH	PEDESTRIAN PUSHBUTTON

# SCHEDULE OF QUANTITIES

JANTITY	UNIT	<u>ITEM</u>
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
3	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIM
3	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIME
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL
5	EACH	PEDESTRIAN PUSH-BUTTON, NON LATCHING



# NOTE:

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

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

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

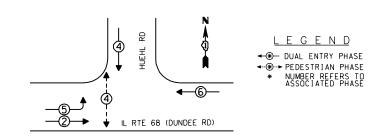
2600 Warrenville Road, Suite 203, Downers Grove, IL 60515-1761	DESIGNED - JNP	REVISED -
630.705.0110 voice, 630.839.2566 fax	DRAWN - JNP	REVISED -
www.mps-il.com	CHECKED - TVN	REVISED -
MILLENNIA PROFESSIONAL SERVICES	DATE - 10/22/2013	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

	SCHE						SIGNATION DIAGRAM,	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ı	AND EMERGENCY VEHICLE PREEMPTION SEQUENCE						VAR	D-91-020-14	соок	99	68	
L	IL RTE 43 (WAUKEGAN ROAD) AT WALTERS AVENUE								CONTRACT	NO. 6	0X15	
ı	SCALE:	·N/A	SHEET	OF	SHEETS	STA. ·	TO STA.	FED. R	DAD DIST. NO. 1   ILLINOIS FED. A	D PROJECT		

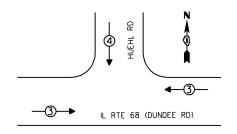
FED. ROAD DIST. NO. 1 | ILLINOIS FED. AID PROJECT TO STA.

# EXISTING CONTROLLER SEQUENCE



# EXISTING PHASE DESIGNATION DIAGRAM

# EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	3	4		
MOVEMENT	<b>_</b>	<b>↓</b>		

I.D.D.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS							
			WAT	TAGE		WATTAGE	
	TYPE	NO. OF LAMPS	INCAND	LED >	% OPERATIONS		
	SIGNAL (RED)	11		17	0.50	93.50	
	(YELLOW)	11		25	0.25	68.75	
	(GREEN)	11		15	0.25	41.25	
	ARROW	4		12	0.10	4.80	
1	PED. SIGNAL	2		25	1.00	50.00	
1	CONTROLLER	1		100	1.00	100.00	
	ENERGY COSTS TO	):			TOTAL =	358.30	
	VILLAGE OF NORTHBROOK 1225 CEDAR LANE NORTHBROOK. IL 60062						
	ENERGY SUPPLY -		ERRI BLE				

HUEHL ROAD **-**€29**------**占 IL RTE 68 (DUNDEE ROAD) TO CHARLEMAGNE RD 077720 (E) 3-PAIRS NO. 18 TO LANDWEHR RD 3 0 0 0 - 3-PAIRS NO. 18

# CABLE PLAN

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

## SCHEDULE OF QUANTITIES

MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION EACH

MODIFY EXISTING CONTROLLER CABINET

UNINTERRUPTIBLE POWER SUPPLY, SPECIAL EACH

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

DESIGNED - JNP REVISED DRAWN JNP REVISED CHECKED TVN REVISED DATE 10/11/2013 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, SECTION AND EMERGENCY VEHICLE PREEMPTION SEQUENCE IL RTE 68 (DUNDEE ROAD) AT HUEHL ROAD SCALE: •N/A SHEET OF SHEETS STA. •

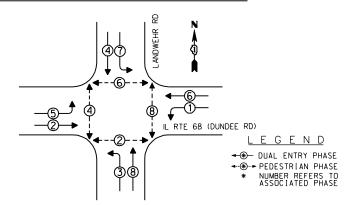
COUNTY SHEETS NO.

COOK 99 69

CONTRACT NO. 60X15 D-91-020-14 TO STA. FED. ROAD DIST. NO. 1 | ILLINOIS FED. AID PROJECT

NO. 10 TRACER CABLE

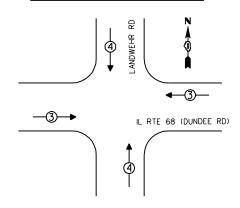
# EXSITING CONTROLLER SEQUENCE



# EXISTING PHASE DESIGNATION DIAGRAM

# EXISTING EMERGENGY VEHICLE

# PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMP		3
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	<b> </b>	<b>↓</b> ↑

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REOUIREMENTS						TOTAL
			WAT	TAGE		WATTAGE
TYPE	NO. OF	LAMPS	INCAND	LED >	% OPERATIONS	
SIGNAL (RED)		12		17	0.50	102.00
(YELLOW)		12		25	0.25	75.00
(GREEN)		12		15	0.25	45.00
ARROW		16		12	0.10	19.20
PED. SIGNAL	8			25	1.00	200.00
CONTROLLER		1		100	1.00	100.00
ENERGY COSTS TO	):				TOTAL =	541.20
VILLAGE OF NORTHBROOK 1225 CEDAR LANE NORTHBROOK, IL 60062						
ENERGY SUPPLY - CONTACT - TERRIBLECK						

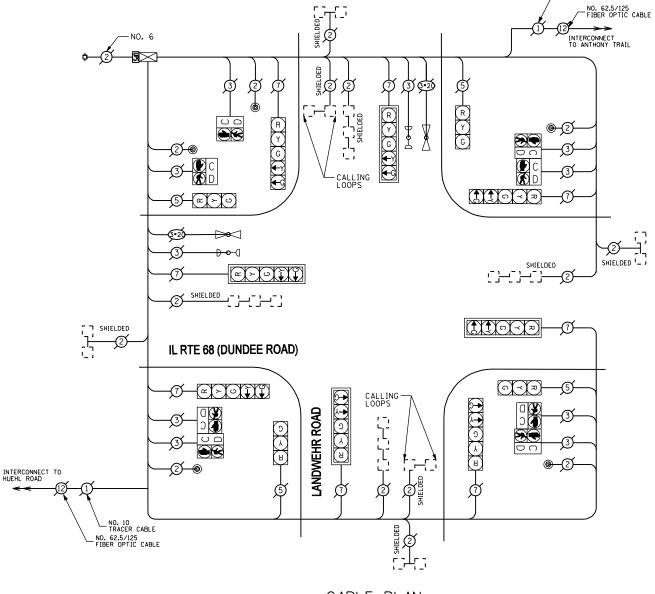
# SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM

MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION

1 EACH MODIFY EXISTING CONTROLLER CABINET

1 EACH UNINTERRUPTIBLE POWER SUPPLY, SPECIAL



# CABLE PLAN

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

2600 Warreaville Road, Suite 203, Downers Grove, IL 60515-1761 630.705.0110 voice, 630.839.2566 faz www.mps-il.com

DESIGNED -REVISED DRAWN JNP REVISED CHECKED TVN REVISED DATE 10/11/2013 REVISED

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION** 

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE IL RTE 68 (DUNDEE ROAD) AT LANDWEHR ROAD SCALE: •N/A SHEET OF SHEETS STA. .

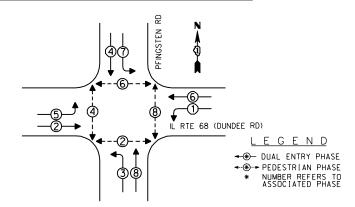
TOTAL SHEET NO. 99 70 SECTION D-91-020-14 СООК CONTRACT NO. 60X15 FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

P:\2012\ME12014\_PTB162\_18\_Schwortz\CADD\W06\_North\_Cook\_LED\Shts\60X15-sht-TS-Dur

NO. 10 TRACER CABLE

NO. 62.5/125 FIBER OPTIC CABLE

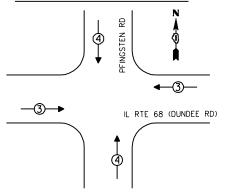
# EXSITING CONTROLLER SEQUENCE



# EXISTING PHASE DESIGNATION DIAGRAM

# EXISTING EMERGENGY VEHICLE

# PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMP		3
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	<b>=</b>	<b>↓</b> ↑

	TOTAL						
		WAT	TAGE		WATTAGE		
TYPE	NO. OF LAMPS	INCAND	LED X	% OPERATIONS			
SIGNAL (RED)	16		17	0.50	136.00		
(YELLOW)	16		25	0.25	100.00		
(GREEN)	16		15	0.25	60.00		
ARROW	16		12	0.10	19.20		
PED. SIGNAL	8		25	1.00	200.00		
CONTROLLER	1		100	1.00	100.00		
ENERGY COSTS TO	615.20						
VILLAGE OF NORTHBROOK 1225 CEDAR LANE NORTHBROOK, IL 60062							
ENERGY SUPPLY -	ENERGY SUPPLY - CONTACT: TERRIBLECK (847) 816-5239						

# SCHEDULE OF QUANTITIES

ANTITY	UNIT	ITE

1 EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION 1 EACH MODIFY EXISTING CONTROLLER CABINET

1 EACH UNINTERRUPTIBLE POWER SUPPLY, SPECIAL

INTERCONNECT TO WESTERN AVENUE SHIELDED 2 IL RTE 68 (DUNDEE ROAD) PFINGSTEN ROAD **—**27-NO. 10 TRACER CABLE NO. 62.5/125 FIBER OPTIC CABLE

## CABLE PLAN

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

COMPANY: COMED

2600 Warrenville Road, Suite 203, Dawners Grove, IL 60515-1761 630.705.0110 voice, 630.839.2566 faz www.mps-il.com

DESIGNED	-	JNP	REVISED -
DRAWN	-	JNP	REVISED -
CHECKED	-	TVN	REVISED -
DATE	-	10/11/2013	REVISED -

STATE OF ILLINOIS

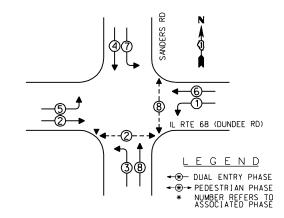
SCHE	DULE	OF QUA	NTITIES,	CABLE I	PLAN, P	HASE DESIG	GNATION	DIAGRAM,	F.A.P RTE.	•	
	AND EMERGENCY VEHICLE PREEMPTION SEQUENCE							VAR			
		IL HIE	68 (DOL	IDEE KU	AU) AI	PFINGSTER	N ROAD				
CALE:	• N / A	SHE	- T	OF	SHEETS	STA. •	TO S	ΤΔ.	EEU	DOAD DICT	_

TOTAL SHEET NO. 99 71 SECTION D-91-020-14 СООК CONTRACT NO. 60X15 NO. 1 ILLINOIS FED. AID PROJECT P:\2012\ME12014\_PTB162\_18\_Schwartz\CADD\W06\_North\_Cook\_LED\Shts\60X15-sht-TS-Dun

MILLENNIA PROFESSIONAL SERVICES

**DEPARTMENT OF TRANSPORTATION** 

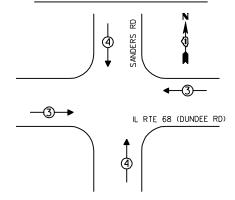
# EXISTING CONTROLLER SEQUENCE



# EXISTING PHASE DESIGNATION DIAGRAM

# EXISTING EMERGENGY VEHICLE

PREEMPTION SEQUENCE



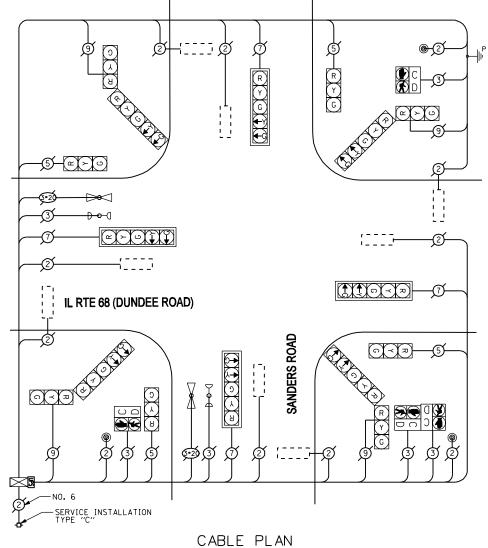
EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	3	4		
MOVEMENT	1	<b>↓</b> ↑		

	TOTAL				
		WAT	TAGE		WATTAGE
TYPE	NO. OF LAMPS)	INCAND	LED X	% OPERATIONS	
SIGNAL (RED)	16		17	0.50	136.00
(YELLOW)	16		25	0.25	100.00
(GREEN)	16		15	0.25	60.00
ARROW	16		12	0.10	19.20
PED. SIGNAL	4		25	1.00	100.00
CONTROLLER 1			100	1.00	100.00
ENERGY COSTS TO	515.20				
VILLAGE OF NORTHBROOK 1225 CEDAR LANE NORTHBROOK, IL 60062					
ENERGY SUPPLY -	PHONE:(	ERRIBLE 347) 816 OMED	CK 5-5239		

# SCHEDULE OF QUANTITIES

YTITNAL	UNIT	ITE

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



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

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

DESIGNED -REVISED DRAWN JNP REVISED CHECKED TVN REVISED DATE 10/11/2013 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

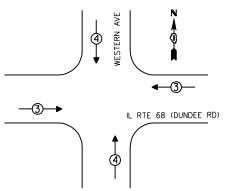
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM,	F./
· · · · · · · · · · · · · · · · · · ·	
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE	V
IL RTE 68 (DUNDEE ROAD) AT SANDERS ROAD	
	_
SCALE: •N/A SHEET OF SHEETS STALE TO STALE	

TOTAL SHEET NO. 99 72 SECTION D-91-020-14 СООК CONTRACT NO. 60X15 FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

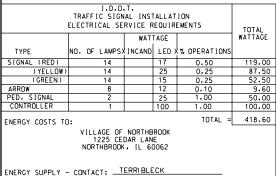
MILLENNIA PROFESSIONAL SERVICES

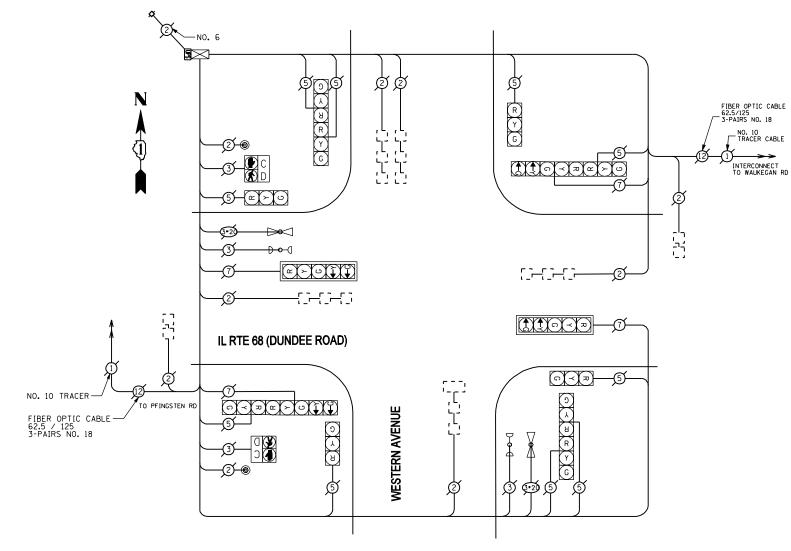
#### EXISTING EMERGENGY VEHICLE

PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	З	4		
MOVEMENT	<b>+</b>	<b>↓</b> ↑		





#### CABLE PLAN

#### SCHEDULE OF QUANTITIES

EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION EACH MODIFY EXISTING CONTROLLER CABINET

1 EACH UNINTERRUPTIBLE POWER SUPPLY, SPECIAL

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

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

MILLENNIA PROFESSIONAL SERVICES

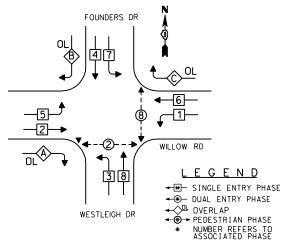
	DESIGNED	-	JNP	REVISED -	
	DRAWN	-	JNP	REVISED -	
_	CHECKED	-	TVN	REVISED -	
	DATE	-	10/11/2013	REVISED -	

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION** 

SCHE							ESIGNATION DIAGRAM,	F.
							I SEQUENCE RN AVENUE	٧
		IL	NIE UO	ADOINDEE	NUAU/ AI	AAESIEL	NA WAELAGE	
CALE:	•N/A		SHEET	OF	SHEETS	STA. ·	TO STA.	F

COUNTY TOTAL SHEET NO. COOK 99 73 SECTION D-91-020-14 CONTRACT NO. 60X15

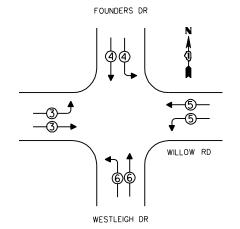
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT



# EXISTING PHASE DESIGNATION DIAGRAM RIGHT TURN OVERLAP PHASE DESIGNATION

PROTECTED PHASE OVERLAP <u>LETTER</u> PHASE

# EXISTING EMERGENGY VEHICLE PREEMPTION SEQUENCE



EMERG VEHICLE PR		-	s	
EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	<b>→</b>	↓↓	₩.	41↑

TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS						TOTAL
			WAT	TAGE		WATTAGE
	TYPE	NO. OF LAMPSX	INCAND	LED >	% OPERATIONS	
	SIGNAL (RED)	22	135	13	0.50	143.00
	(YELLOW)	22	135	25	0.25	137.50
	(GREEN)	22	135	15	0.25	82.50
	ARROW	14	135	12	0.10	16.80
۱	PED. SIGNAL	4	90	25	1.00	100.00
1	CONTROLLER	1	100	100	1.00	100.00
١	ALLUM. SIGN		84		0.05	
TOTAL =						
	ENERGY COSTS TO: VILLAGE OF NORTHBROOK 1225 CEDAR LANE NORTHBROOK IL 60062					
	ENEDGY CHOOLY	CONTACT. T	FRRI BI F	.CK		

# REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

QUANTITY UNIT DESCRIPTION

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

## SCHEDULE OF QUANTITIES

QUANTITY UNIT ITEM

MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION

EACH PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER

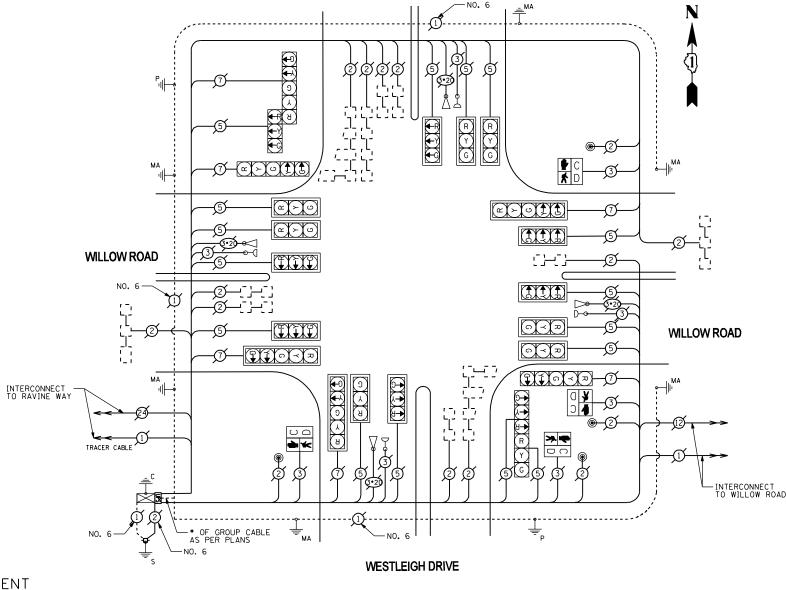
FACH PEDESTRIAN PUSH-BUTTON

EACH MODIFY EXISTING CONTROLLER CABINET

REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

EACH UNINTERRUPTIBLE POWER SUPPLY, SPECIAL

#### **FOUNDERS DRIVE**



#### CABLE PLAN

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

2600 Warrenville Road, Suite 203, Downers Grove, IL 60515-1761 630.705.0110 voice, 630.839.2566 fax

	DESIGNED	-	JNP	REVISED	•
	DRAWN	-	JNP	REVISED	•
_	CHECKED	-	TVN	REVISED	•
1	DATE	-	10/11/2013	REVISED	-

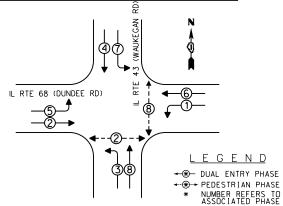
**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION** 

	EMERGE	NCY VEH	ICLE PRE	EMPTION	IGNATION DIAGRAM SEQUENCE NDERS DRIVE	,
SCALE: •N/A	SHEET	OF	SHEETS	STA. ·	TO STA.	

SIGNATION DIAGRAM,	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SEQUENCE	VAR	D-91-020-14	COOK	99	74
JNDERS DRIVE			CONTRACT	NO. 60	X15
TO STA.	FED. R	DAD DIST. NO. 1 ILLINOIS FED. A	D PROJECT		
P:\2012\ME12014_PTB162_18_Schwartz\CADD\W06_North_Cook_LED\Shts\60X15-sht-TS-WillowRd_WestleighDr.dgn					

MILLENNIA PROFESSIONAL SERVICES

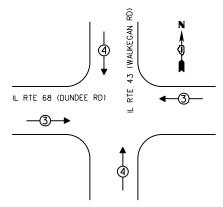
EXISTING LOCAL AND MASTER CONTROLLER



# EXISTING PHASE DESIGNATION DIAGRAM

# EXISTING EMERGENGY VEHICLE

PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMP		3
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↓↑	<b>↓</b> ↑

	TOTAL					
			WAT.	TAGE		WATTAGE
TYPE	NO. OF	LAMPSX	INCAND	LED >	% OPERATIONS	
SIGNAL (RED)		16		17	0.50	136.00
(YELLOW)		16		25	0.25	100.00
(GREEN)		16		15	0.25	60.00
ARROW		16		12	0.10	19.20
PED. SIGNAL		4		25	1.00	100.00
CONTROLLER		1		100	1.00	100.00
ENERGY COSTS TO: TOTAL =						515.20
VILLAGE OF NORTHBROOK 1225 CEDAR LANE NORTHBROOK. IL 60062						

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

2600 Warrenville Road, Suite 203, Downers Grove, IL 60515-1761 630,705,0110 voice, 630,839,2566 fax

REVISED DRAWN JNP REVISED CHECKED TVN REVISED MILLENNIA PROFESSIONAL SERVICES DATE 10/22/2013 REVISED

STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

43 (WAUKEGAN ROAD) INTERCONNECT TO SHERMER ROAD **₹**20 TRACER CABLE R > 0 \( \dagger \dagg INTERSECTION AND SAMPLING (SYSTEM) DETECTORS EB AND WB **>**₩ <u>₹₹₹₹₹</u> . → 5 IL RTE 68 (DUNDEE ROAD) **೧≺ಸ⊄≻७**१₽ PUSHBUTTON "A" **♦ ३ ० ४ ७** NO. 62.5/125 12F FIBER OPTIC CABLE

CABLE PLAN

INTERSECTION AND SAMPLING (SYSTEM) DETECTORS

Ø

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

# REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

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

# SCHEDULE OF QUANTITIES

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

#### NOTE:

QUANTITY UNIT

DUE TO MAST ARM POST ON THE RIGHT SIDE OF THE CONTROLLER CABINET, UPS SHALL BE INSTALLED ON THE LEFT.

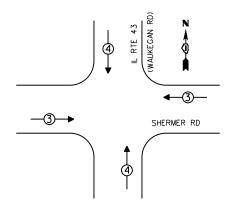
PUSHBUTTON "A" SHALL PLACE A CALL TO PHASES 2 & 8

REPLACE 10 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION

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

TOTAL SHEET NO. 99 75 SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, SECTION AND EMERGENCY VEHICLE PREEMPTION SEQUENCE D-91-020-14 СООК IL RTE 43 (WAUKEGAN ROAD) AT IL RTE 68 (DUNDEE ROAD) CONTRACT NO. 60X15 SCALE: ·N/A SHEET OF SHEETS STA. · TO STA. FED. ROAD DIST. NO. 1 JULINOIS FED. AID PROJECT

# EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTORS					
EMERGENCY VEHICLE PREEMPTOR	3	4			
MOVEMENT	<b>+</b>	<b>↓</b> ↑			

	TOTAL				
		WAT	TAGE		WATTAGE
TYPE	NO. OF LAMPSX	INCAND	LED >	% OPERATIONS	
SIGNAL (RED)	15		17	0.50	127.50
(YELLOW)	15		25	0.25	93.75
(GREEN)	15		15	0.25	56.25
ARROW	12		12	0.10	14.40
PED. SIGNAL	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ENERGY COSTS TO	):			TOTAL =	591.90
VILLAGE OF NORTHBROOK 1225 CEDAR LANE NORTHBROOK∙ IL 60062					
ENERGY SUPPLY - CONTACT: TERRIBLECK PHONE: (847) 816-5239 COMPANY: COMED					

REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

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

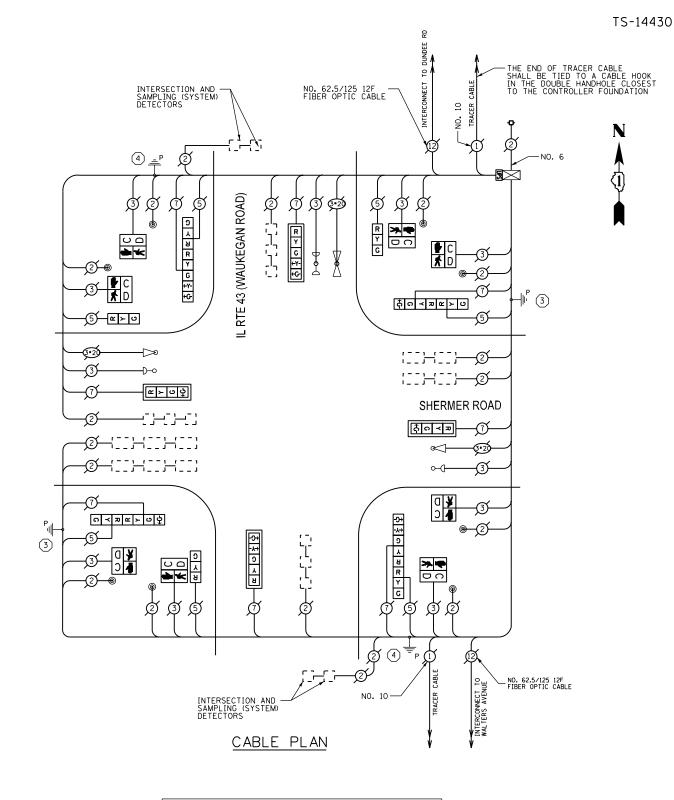
#### REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

QUANTITY	<u>UNIT</u>	DESCRIPTION
4	EACH	TRAFFIC SIGNAL POST
3	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
2	EACH	SIGNAL HEAD, 1-FACE, 4-SECTION
2	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION
2	EACH	SIGNAL HEAD, 2-FACE, 3-SECTION, 4-SECTION
2	EACH	SIGNAL HEAD, 2-FACE, 3-SECTION, 5-SECTION
8	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
4	EACH	TRAFFIC SIGNAL BACKPLATE
8	FACH	PEDESTRIAN PUSHBUTTON

# SCHEDULE OF QUANTITIES

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



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

2600 Warrenville Road, Suite 203, Downers Grove, IL 60515-1761 630,705,0110 voice, 630,839,2566 fax

DESIGNED -REVISED DRAWN JNP REVISED CHECKED TVN REVISED MILLENNIA PROFESSIONAL SERVICES 10/22/2013 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

CONEDULE OF COMMITTEE, CABLE I CAR, I HACE BEGINNION BIAGRAM,	F.A.P. RTE.	SECTION	COUNT
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE	VAR	D-91-020-14	соок
IL RTE 43 (WAUKEGAN ROAD) AT SHERMER ROAD			CONTR
SCALE, N/A SHEET OF SHEETS STA. TO STA	EED D	DAD DIET NO 1 THE INDICE OF A	ID DDO IECT

SCALE: P:\2012\ME12014\_PTB162\_18\_Schwartz\CADD\W06\_North\_Cook\_LED\Shts\60X15-sht-TS-WaukeganRd\_She

TOTAL SHEET NO. 99 76

-FIBER OPTIC 62.5/125

LEGEND

◆

■ SINGLE ENTRY PHASE ←® DUAL ENTRY PHASE

OVERLAP

DEDESTRIAN PHASE NUMBER REFERS TO ASSOCIATED PHASE

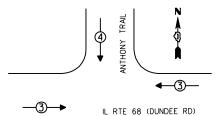
#### EXISTING PHASE DESIGNATION DIAGRAM

#### RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP <u>Letter</u>		PERMISS PHASE	IVE	PROTECT PHASE	ED	DISPLAY	
В	=	4	+	5	_	4	

#### EXISTING EMERGENGY VEHICLE

# PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTORS					
EMERGENCY VEHICLE PREEMPTOR	3	4			
MOVEMENT	<b>-</b>	<b>↓</b>			

REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

QUANTITY UNIT DESCRIPTION

EACH PEDESTRIAN SIGNAL HEAD, 1-FACE EACH PEDESTRIAN PUSHBUTTON

# SCHEDULE OF QUANTITIES

LIANTITY	UNIT	ITFM

MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION

PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER EACH

PEDESTRIAN PUSH-BUTTON

MODIFY EXISTING CONTROLLER CABINET
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT EACH

UNINTERRUPTIBLE POWER SUPPLY, SPECIAL

SIGNAL HEAD, LED. 2-FACE, 1-3-SECTION, 1-5-SECTION, BRACKET MOUNTED, RETROFIT

SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT

EACH SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT

SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT

INTERCONNECT TO PFINGSTEN ROAD ANTHONY TRAIL -NO. 10 TRACER 3 <u>00</u> **> =** おおう –≶——≅৴ত IL RTE 68 (DUNDEE RD) **(**€ > 0 **>>**€20 []\_[] \$\$0 **√** □ IL RTE 68 (DUNDEE RD) <u>□</u>3 ≥ > O €0- $\mathfrak{I}$ INTERCONNECT TO LANDWEHR ROAD -NO. 10 TRACER -FIBER OPTIC 62.5/125 RETROFIT ALL EXISTING CABLE PLAN TRAFFIC SIGNAL HEADS

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

TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS TOTAL						TOTAL	
				WAT	TAGE		WATTAGE
TYPE	NO.	OF	L AMPS)	INCAND	LED >	% OPERATIONS	
SIGNAL (RED)			9		17	0.50	76.50
(YELLOW)			9		25	0.25	56.25
(GREEN)			9		15	0.25	33.75
ARROW			8		12	0.10	9.60
PED. SIGNAL			4		25	1.00	100.00
CONTROLLER			1		100	1.00	100.00
ENERGY COSTS TO	):					TOTAL =	376.10
	٧	TLL	AGE OF	NORTHB	ROOK		

1225 CEDAR LANE NORTHBROOK, IL 60062

2600 Warreaville Road, Suite 203, Dawners Grove, IL 60515-1761 630.705.0110 voice, 630.039.2566 faz www.mps-il.com

MILLENNIA PROFESSIONAL SERVICES

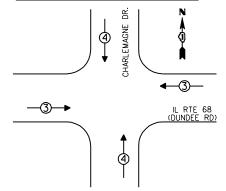
	DESIGNED	-	JNP	REVISED	-
	DRAWN	-	JNP	REVISED	•
.	CHECKED	-	TVN	REVISED	-
	DATE	-	10/11/2013	REVISED	-

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION** 

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM,	F.A.P. RTE.	
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE	VAR	
IL RTE 68 (DUNDEE ROAD) AT ANTHONY TRAIL		
SCALE: •N/A SHEET OF SHEETS STA. • TO STA.	FFD RO	DAD DI

TOTAL SHEET NO. 99 77 SECTION D-91-020-14 СООК CONTRACT NO. 60X15 DIST. NO. 1 ILLINOIS FED. AID PROJECT P:\2012\ME12014\_PTB162\_18\_Schwartz\CADD\W06\_North\_Cook\_LED\Shts\60X15-sht-TS-Dund

#### EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTORS					
EMERGENCY VEHICLE PREEMPTOR	3	4			
MOVEMENT	<b>5</b>	<b>↓</b> ↑			

		TOTAL				
				TAGE		WATTAGE
	TYPE	NO. OF LAMPS)	INCAND	LED >	% OPERATIONS	I
	SIGNAL (RED)	14		17	0.50	119.00
	(YELLOW)	14		25	0.25	87.50
	(GREEN)	14		15	0.25	52.50
_	ARROW	8		12	0.10	9,60
vices	PED. SIGNAL	4		25	1.00	100.00
	CONTROLLER	1		100	1.00	100.00
l ser	ENERGY COSTS TO: TOTAL =					468.60
s Professional	VILLAGE OF NORTHBROOK 1225 CEDAR LANE NORTHBROOK, IL 60062					
2	FNERGY SUPPLY -	· CONTACT:	בעעו פרך	.UN		

## REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

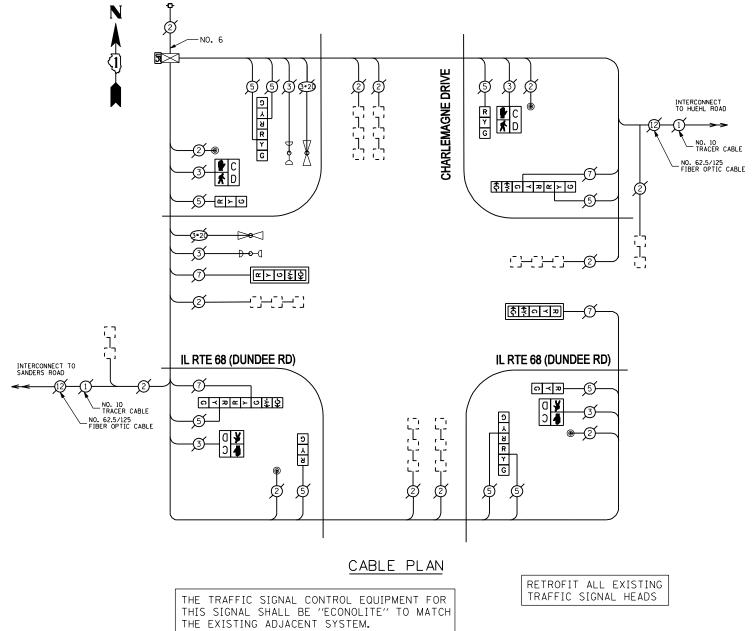
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

QUANTITY UNIT DESCRIPTION

EACH PEDESTRIAN SIGNAL HEAD, 1-FACE EACH PEDESTRIAN PUSHBUTTON

#### SCHEDULE OF QUANTITIES

UANTITY	UNIT	<u>ITEM</u>
1	EACH	MAINTENANCE OF EXISTING TRAFFIC ST
4	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE
4	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQU
1	EACH	UNINTERRUPTIBLE POWER SUPPLY, SPE
2	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3-SECTION
4	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION
2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION
2	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION



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MILLENNIA PROFESSIONAL SERVICES

	DESIGNED	-	JNP	REVISED	-
	DRAWN	-	JNP	REVISED	-
_	CHECKED	-	TVN	REVISED	-
,	DATE	-	10/11/2013	REVISED	-

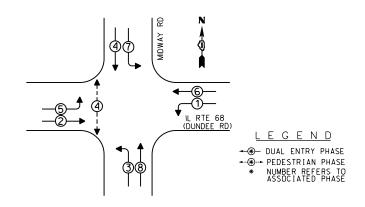
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

	JANTITIES, CABLE PLAN, I		- INIE.	SECTION
AND I	VAR	D-91-020-14		
IL KI	E 68 (DUNDEE RD) AT C	HARLEMAGNE DRIVE		
SCALE: •N/A S	HEET OF SHEETS	STA. TO S	TA. FED	ROAD DIST NO 1 TILLINGIS FE

CONTRACT NO. 60X15 TO STA. FED. ROAD DIST. NO. 1 | ILLINOIS FED. AID PROJECT Pz\2012\ME12014.PTBI62.18.Schwartz\CADD\W06.North.Cook\_LED\Shts\60X15-sht-TS-Dunded

COUNTY TOTAL SHEET NO.
COOK 99 78

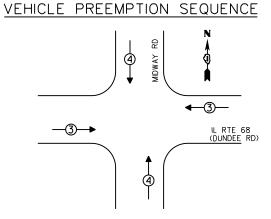
#### EXISTING CONTROLLER SEQUENCE



REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

### EXISTING PHASE DESIGNATION DIAGRAM

# EXISTING EMERGENCY



EMERGENCY VEHICLE PREEMPTORS							
EMERGENCY VEHICLE PREEMPTOR	3	4					
MOVEMENT	<b>_</b>	<b>↓</b> ↑					

	TOTAL				
			TAGE		WATTAGE
TYPE	NO. OF LAMPS	INCAND	LED >	% OPERATIONS	
SIGNAL (RED)	14		17	0.50	119.00
(YELLOW)	14		25	0.25	87.50
(GREEN)	14		15	0.25	52.50
ARROW	16		12	0.10	19.20
PED. SIGNAL	2		25	1.00	50.0
CONTROLLER	1		100	1.00	100.00
ENERGY COSTS TO	) <b>:</b>			TOTAL =	428.20
VILLAGE OF NORTHBROOK 1225 CEDAR LANE NORTHBROOK, IL 60062					
ENERGY SUPPLY -	PHONE: _(8	ERRIBLE 347) 816 OMED	CK -5239	1	

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

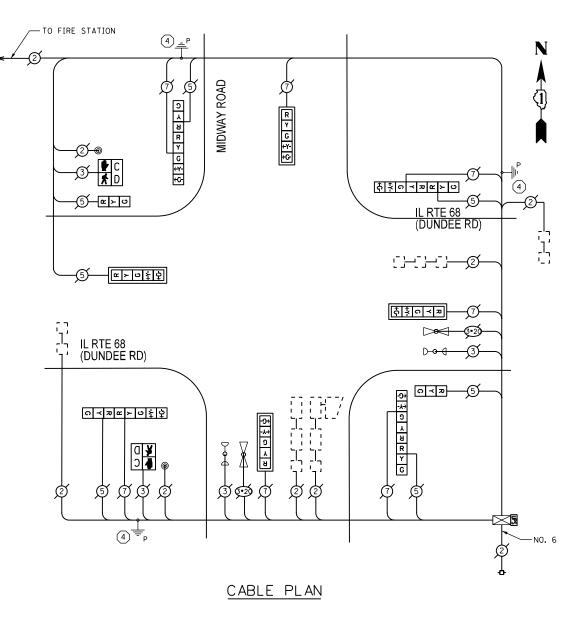
#### REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

<b>QUANTITY</b>	<u>UNIT</u>	DESCRIPTION
3	EACH	TRAFFIC SIGNAL POST
2	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
4	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION
4	EACH	SIGNAL HEAD, 2-FACE, 3-SECTION, 5-SECTION
2	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
4	EACH	TRAFFIC SIGNAL BACKPLATE
2	EACH	PEDESTRIAN PUSHBUTTON

#### SCHEDULE OF QUANTITIES

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



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

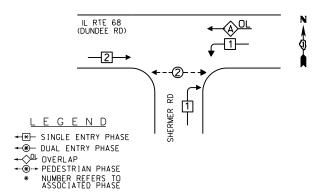
2600 Warrenville Road, Suite 203, Downers Grove, IL 60515-1761 630.705.0110 voice, 630.839.2566 fax

REVISED DRAWN REVISED JNP CHECKED TVN REVISED MILLENNIA PROFESSIONAL SERVICES DATE - 10/22/2013 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

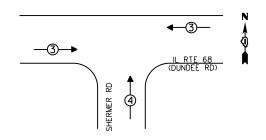
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM,	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE	VAR	D-91-020-14	соок	99	79
IL RTE 68 (DUNDEE RD) AT MIDWAY ROAD			CONTRACT	NO. 60	0X15
SCALE: ·N/A SHEET OF SHEETS STA. · TO STA.	FED. R	DAD DIST. NO. 1 ILLINOIS FED. A	D PROJECT		

P:\2012\ME12014\_PTB162\_18\_Schwartz\CADD\W06\_North\_Cook\_LED\Shts\60X15-sht-TS-DundeeRd\_MidwayRd.dgn



OVERLAP LETTER PERMISSIVE <u>PHASE</u> PROTECTED PHASE 2

# EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMP		3
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	<b>=</b>	<b></b>

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS							TOTAL
				WAT:	TAGE		WATTAGE
TYPE	NO.	OF	LAMPS	INCAND	LED >	% OPERATIONS	
SIGNAL (RED)			10		17	0.50	85.00
(YELLOW)			10		25	0.25	62.50
(GREEN)			10		15	0.25	37.5
ARROW			4		12	0.10	4.80
PED. SIGNAL			2		25	1.00	50.00
CONTROLLER			1		100	1.00	100.00
ENERGY COSTS TO: TOTAL =					339.80		
VILLAGE OF NORTHBROOK 1225 CEDAR LANE NORTHBROOK, IL 60062							

REPLACE 10 FT. PAINTED POST, RE-USE

EXISTING TYPE A CONCRETE FOUNDATION

REPLACE ALL EXISTING

TRAFFIC SIGNAL HEADS

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

#### REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

QUANTITY	<u>UNIT</u>	DESCRIPTION
3	EACH	TRAFFIC SIGNAL POST
5	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
1	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION
1	EACH	SIGNAL HEAD, 2-FACE, 3-SECTION
1	EACH	SIGNAL HEAD, 2-FACE, 3-SECTION, 5-SECTION
2	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
2	EACH	TRAFFIC SIGNAL BACKPLATE
2	EACH	PEDESTRIAN PUSHBUTTON

# SCHEDULE OF QUANTITIES

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

TRACER CABLE NO. 10-

NO. 62.5/125 FIBER OPTIC CABLE

INTERCONNECT TO-WAUKEGAN ROAD

TO MIDWAY ROAD Ø <u>−</u>55<u>−</u>**⋐⋝**□ IL RTE 68 (DUNDEE RD) ㄸㅏㅂ늧ţ "P" MID 5 IL RTE 68 (DUNDEE RD) N ≺ № − — ೧ ≺ ಸ ๕ ≻ ७ ≵ ऐ 1 2 = P CABLE PLAN

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

2600 Warrenville Road, Suite 203, Downers Grove, IL 60515-1761 630,705,0110 voice, 630,839,2566 fax

REVISED DRAWN JNP REVISED CHECKED TVN REVISED 10/22/2013 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE IL RTE 68 (DUNDEE RD) AT SHERMER ROAD SHEETS STA. · TO STA.

COUNTY TOTAL SHEET NO.
COOK 99 80 SECTION D-91-020-14 CONTRACT NO. 60X15 FED. ROAD DIST. NO. 1 | ILLINOIS FED. AID PROJECT

TS-3180

TRACER CABLE NO. 10-

NO. 62.5/125 FIBER OPTIC CABLE ② ₽

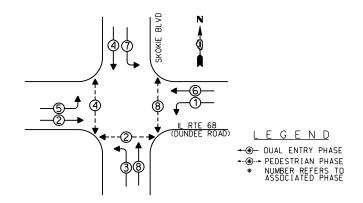
SHEET

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

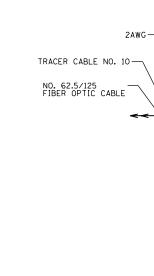
MILLENNIA PROFESSIONAL SERVICES

IL RTE 68 (DUNDEE ROAD)

#### EXISTING CONTROLLER SEQUENCE



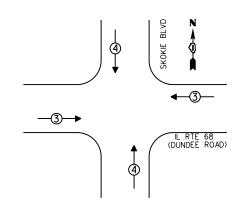
REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS



## EXISTING PHASE DESIGNATION DIAGRAM

#### EXISTING EMERGENCY

#### VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMP		3
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	<b>_</b>	<b>↓</b> ↑

1.0.0.7.										
		TOTAL								
			WATTAGE							
	TYPE									
	SIGNAL (RED)		16		17	0.50	136.00			
	(YELLOW)		16		25	0.25	100.00			
	(GREEN)		16		15	0.25	60.00			
	ARROW		16		12	0.10	19.20			
ŝ	PED. SIGNAL		10		25	1.00	250.00			
1	CONTROLLER		1		100	1.00	100.00			
	ENERGY COSTS TO	665.20								
2	VILLAGE OF NORTHBROOK 1225 CEDAR LANE NORTHBROOK IL 60062									

- CONTACT: TERRIBLECK
PHONE: (847) 816-5239
COMPANY: COMED

#### REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

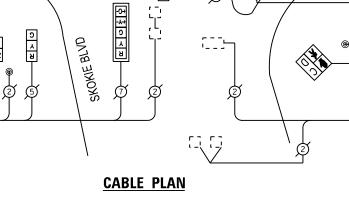
QUANTITY	<u>UNIT</u>	DESCRIPTION
2	EACH	TRAFFIC SIGNAL POST
2	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
4	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION
2	EACH	SIGNAL HEAD, 2-FACE, 1-3-SECTION, 1-5-SECTION
2	EACH	SIGNAL HEAD, 3-FACE, 2-3-SECTION, 1-5-SECTION
5	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
1	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
1	EACH	PEDESTRIAN SIGNAL HEAD, 3-FACE
4	EACH	TRAFFIC SIGNAL BACKPLATE
7	EACH	PEDESTRIAN PUSHBUTTON

#### SCHEDULE OF QUANTITIES

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

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IL RTE 68 (DUNDEE ROAD)



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SKOKIE BLVD

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

#### NOTE:

PUSHBUTTON "A" SHALL PLACE A CALL TO PHASES 2 & 8

- REPLACE 10 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
- REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION



2600 Warrenville Road, Suite 203, Downers Grove, IL 60515-1761 630,705,0110 voice, 630,839,2566 fax MILLENNIA PROFESSIONAL SERVICES

DESIGNED	-	JNP	REVISED	-
DRAWN	-	JNP	REVISED	-
CHECKED	-	TVN	REVISED	-
DATE	-	10/22/2013	REVISED	-

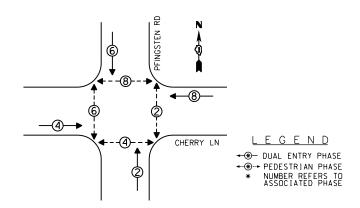
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

CHEDULE	OF QUANT	F.A.P. RTE.	SECTION				
	AND EMER	VAR	D-91-020-14				
	IL RTE 68						
Δ1 F • N / Δ	SHEET	ΩF	SHEETS	STA. ·	TO STA.	EED D	DAD DIST NO 1 THE INDISCRED AT

SC SCALE

TOTAL SHEET NO. 99 81 СООК CONTRACT NO. 60X15 D PROJECT

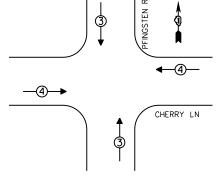
#### EXISTING CONTROLLER SEQUENCE



REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

#### EXISTING PHASE DESIGNATION DIAGRAM

# EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMP		:
VEHIOLET REEMI	-	_
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	<b>↓</b> ↑	<b>+</b>

	TOTAL							
	WATTAGE							
TYPE	NO. OF LAMPS)	INCAND	LED >	% OPERATIONS				
SIGNAL (RED)	12		17	0.50	102.00			
(YELLOW)	12		25	0.25	75.00			
(GREEN)	12		15	0.25	45.00			
ARROW	0		12	0.10	0.0			
PED. SIGNAL	8		25	1.00	200.00			
CONTROLLER	1		100	1.00	100.00			
ENERGY COSTS TO	):			TOTAL =	522.00			
VILLAGE OF NORTHBROOK 1225 CEDAR LANE NORTHBROOK, IL 60062								
ENERGY SUPPLY - CONTACT: TERRIBLECK PHONE: (847) 816-5239								

#### REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

QUANTITY	<u>UNIT</u>	DESCRIPTION

TRAFFIC SIGNAL POST SIGNAL HEAD, 1-FACE, 3-SECTION

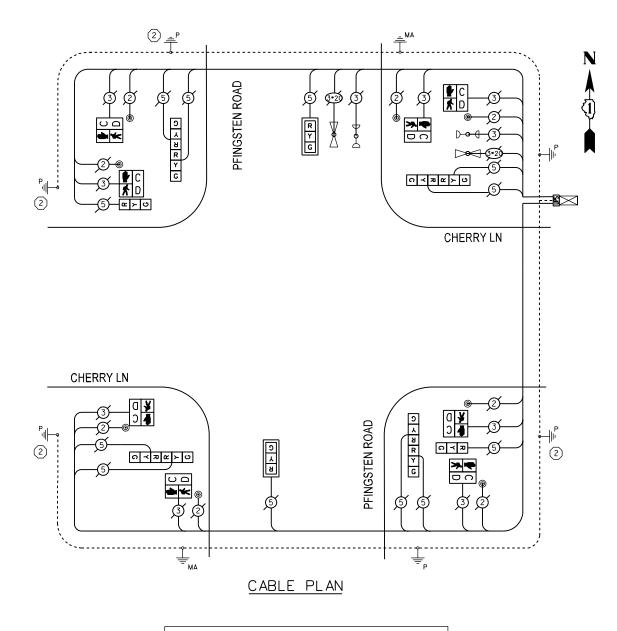
EACH EACH EACH EACH EACH EACH SIGNAL HEAD, 2-FACE, 3-SECTION PEDESTRIAN SIGNAL HEAD, 1-FACE

TRAFFIC SIGNAL BACKPLATE PEDESTRIAN PUSHBUTTON

#### SCHEDULE OF QUANTITIES

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

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



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

COMPANY: COMED

630,705,0110 voice, 630,839,2566 fax

2600 Warrenville Road, Suite 203, Downers Grove, IL 60515-1761

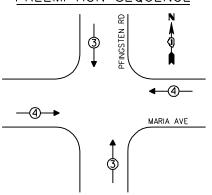
DESIGNED -REVISED DRAWN JNP REVISED CHECKED TVN REVISED MILLENNIA PROFESSIONAL SERVICES DATE 10/22/2013 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SCHEDULE OF				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
AND				VAR	D-91-020-14	СООК	99	82		
	PFINGS	TEN R	OAD AT (	HERRY	LANE			CONTRACT	NO. 60	X15
SCALE: ·N/A	SHEET	OF	SHEETS	STA. ·	TO STA.	FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT				
Pt\2012\ME12014_PTB162_18_Schwortz\CADD\W06_North_Cook_LED\Shts\60X15-sht-TS-Pfingsten_CherryLn.dgn										

#### EXISTING EMERGENGY VEHICLE

### PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMP		;
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	<b>†</b> ↑	<b>†</b>

#### SCHEDULE OF QUANTITIES

ANTITY	UNIT	ITEM

EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
EACH UNINTERRUPTIBLE POWER SUPPLY, SPECIAL
EACH MODIFY EXISTING CONTROLLER CABINET

# PFINGSTEN ROAD R > 0 **O**-S MARIA AVENUE 5-07-0 (A) MARIA AVENUE -S-EX-PFINGSTEN ROAD CABLE PLAN

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

	TOTAL					
		WAT	TAGE		WATTAGE	
TYPE	TYPE NO. OF LAMPSXINCAND LED X % OPERATIONS					
SIGNAL (RED) 13 17 0.50					110.50	
(YELLOW) 13 25				0.25	81.25	
(GREEN)	(GREEN) 13 15 0.25					
ARROW	8		12	0.10	9.60	
PED. SIGNAL	4		25	1.00	100.00	
CONTROLLER	1		100	1.00	100.00	
ENERGY COSTS TO: TOTAL = 450.10						
VILLAGE OF NORTHBROOK 1225 CEDAR LANE NORTHBROOK. IL 60062						

I.D.O.T.

2600 Warreaville Road, Saite 283, Downers Grove, IL 60515-1761 630.705.0110 voice, 630.839.2566 faz www.mps-il.com MILLENNIA PROFESSIONAL SERVICES

DESIGNED	-	JNP	REVISED -	ſ
DRAWN	-	JNP	REVISED -	
CHECKED	-	TVN	REVISED -	
DATE	-	10/11/2013	REVISED -	l

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

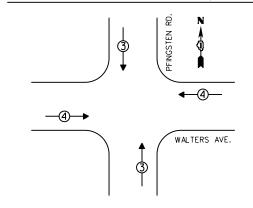
SCHEDULI	E OF	QUANTITIES,	CABLE	PLAN. F	PHASE DE	SIGNATION	DIAGRAM.	F.A.P RTE.
								RTE.
	AND	EMERGENCY						VAR
		PFINGSTEN	ROAL	) AT M	IARIA AVE	NUE		
`ALF. •N//		SHEET (	)F	SHEETS	STA .	TO S	TΛ	EED

TOTAL SHEET NO. 99 83 SECTION D-91-020-14 СООК CONTRACT NO. 60X15 D. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

#### EXISTING PHASE DESIGNATION DIAGRAM

# EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMP		,
VEHICLE FREEIVIF	TORS	
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	<b>↓</b> ↑	<b>_</b>

	TOTAL						
	WATTAGE						
TYPE	NO. OF LAMPS)	INCAND	LED >	% OPERATIONS			
SIGNAL (RED)	12		17	0.50	102.00		
(YELLOW)	12		25	0.25	75.00		
(GREEN)	12		15	0.25	45.00		
ARROW	ARROW 0 12 0.10						
PED. SIGNAL	PED. SIGNAL 4 25 1.00						
CONTROLLER	1		100	1.00	100.00		
ENERGY COSTS TO		NODTUG	DOOK	TOTAL =	422.00		
VILLAGE OF NORTHBROOK 1225 CEDAR LANE NORTHBROOK, IL 60062							
ENERGY SUPPLY - CONTACT: TERRIBLECK PHONE: (847) 816-5239 COMPANY: COMED							

#### REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

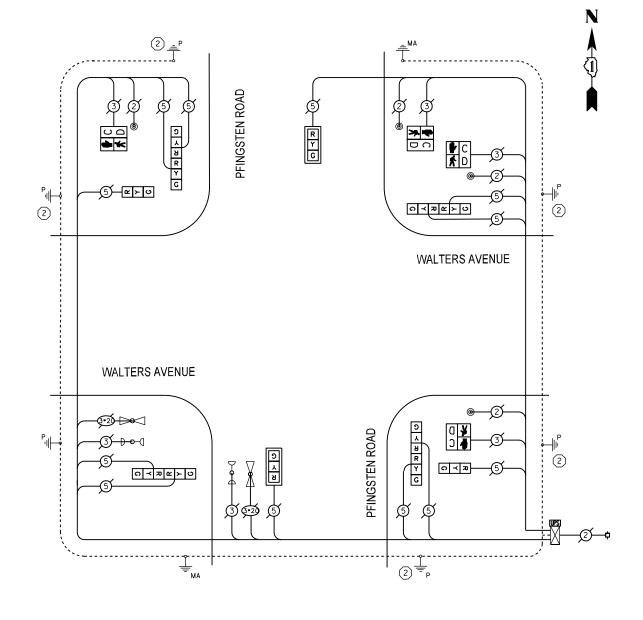
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

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

## SCHEDULE OF QUANTITIES

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

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



#### CABLE PLAN

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

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NAME = SCALE = NAME =

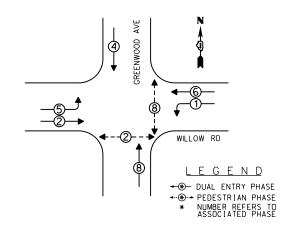
2609 Warrenville Road, Suite 203, Downers Grove, 11. 60515-1761 630.705.0110 voice, 630.839.2566 fax www.mps-il.com

DESIGNED -REVISED DRAWN JNP REVISED CHECKED TVN REVISED MILLENNIA PROFESSIONAL SERVICES DATE 10/22/2013 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

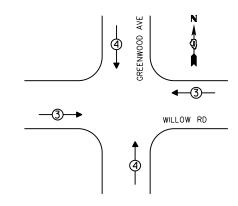
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM,	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE	VAR	D-91-020-14	СООК	99	84
PFINGSTEN ROAD AT WALTERS AVENUE			CONTRACT	NO. 6	JX15
SCALE: ·N/A SHEET OF SHEETS STA. · TO STA.	FED. R	DAD DIST. NO. 1   ILLINOIS FED. AI	D PROJECT		
Pr\2012\ME12014_PTB162_18_Schwertz\CADD\W06_North_Cook_LED\Shts\60X15-sht-TS-Pf ingstenRd_WaltersAve.dgn					

#### EXISTING CONTROLLER SEQUENCE



#### EXISTING PHASE DESIGNATION DIAGRAM

# EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY		
VEHICLE PREEMP	TORS	3
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	1	<b>↓</b> ↑

	I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS TOTAL						
				WAT:	TAGE		WATTAGE
TYPE	NO.	OF	LAMPS	INCAND	LED >	% OPERATIONS	
SIGNAL (RED)			14		17	0.50	119.00
(YELLOW)			14		25	0.25	87.50
(GREEN)			14		15	0.25	52.50
ARROW			8		12	0.10	9.60
PED. SIGNAL			4		25	1.00	100.00
CONTROLLER			1		100	1.00	100.00
ENERGY COSTS TO	):					TOTAL =	468.60
		1	225 CEI	NORTHB DAR LAN IL 60	E		

REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS

#### REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

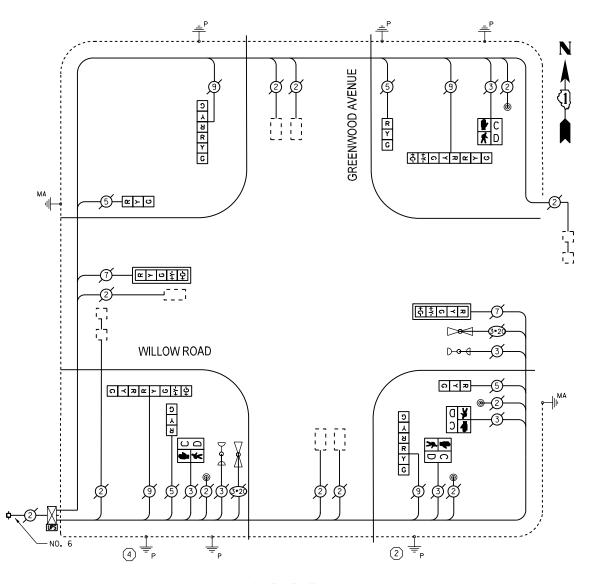
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

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

# SCHEDULE OF QUANTITIES

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

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



CABLE PLAN

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

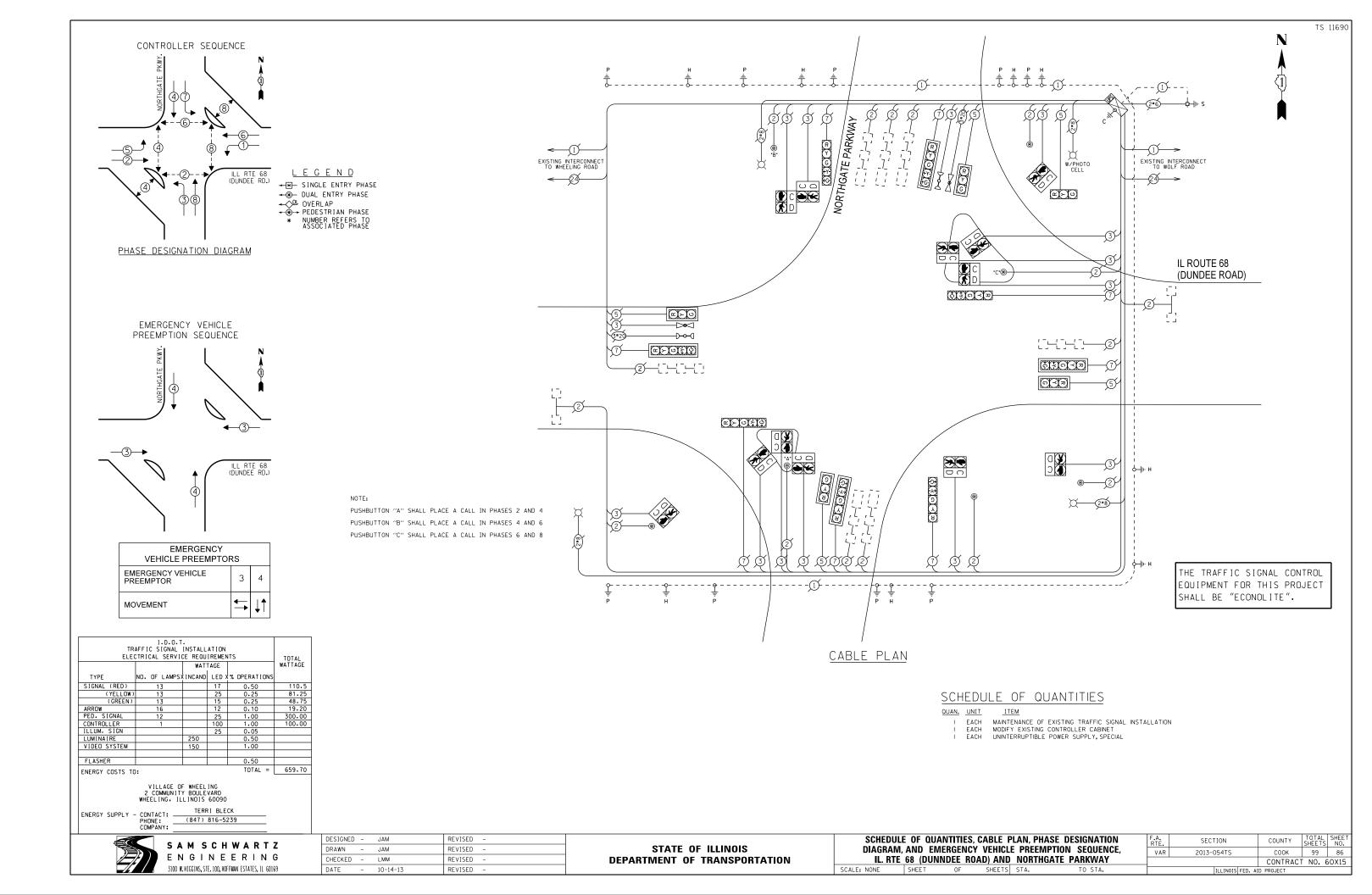
ENERGY SUPPLY - CONTACT: TERRIBLECK
PHONE: (847) 816-5239
COMPANY: COMED

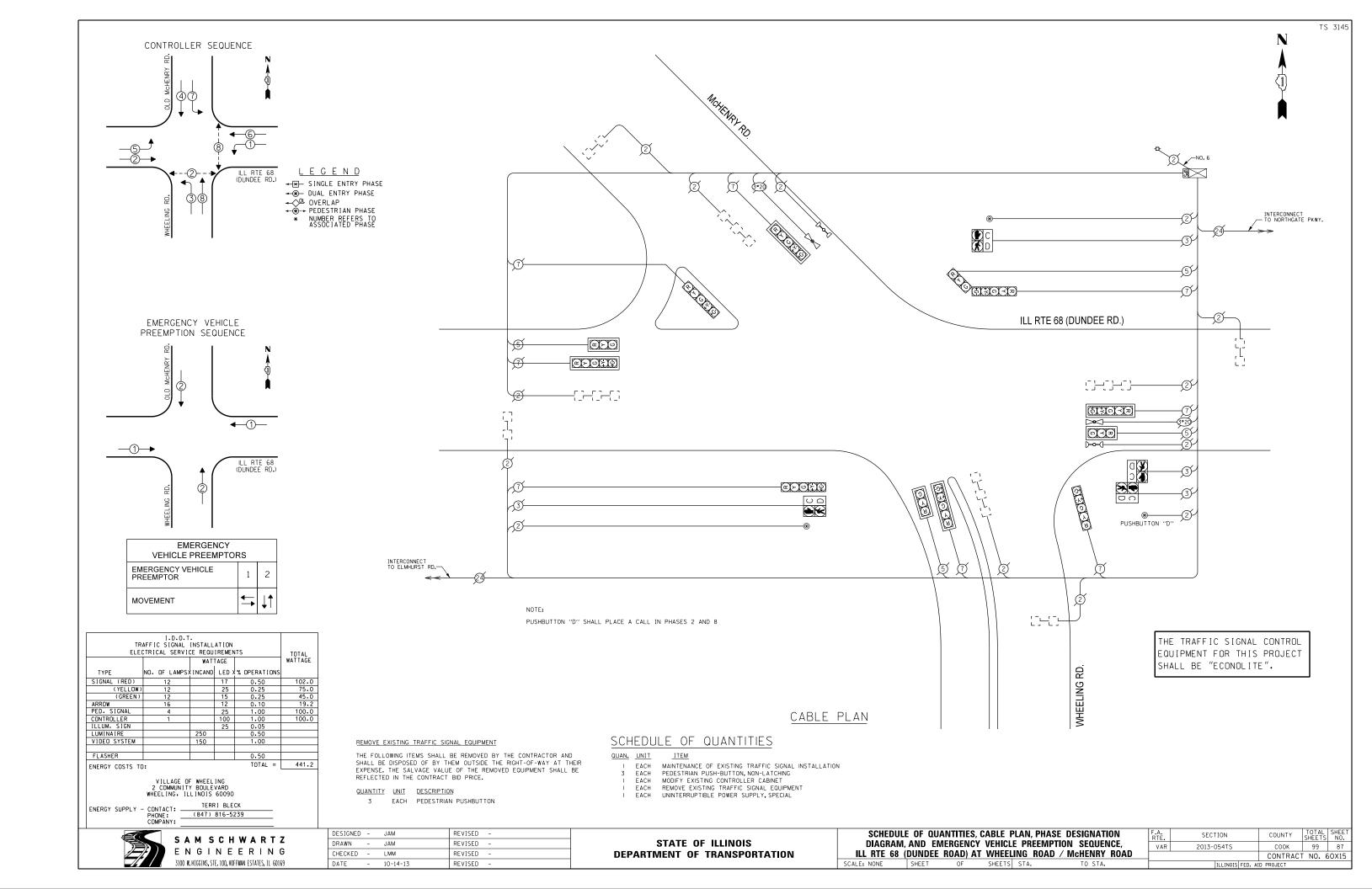
2600 Warrenville Road, Suite 203, Downers Grove, IL 60515-1761 630.705.0110 voice, 630.839.2566 fax

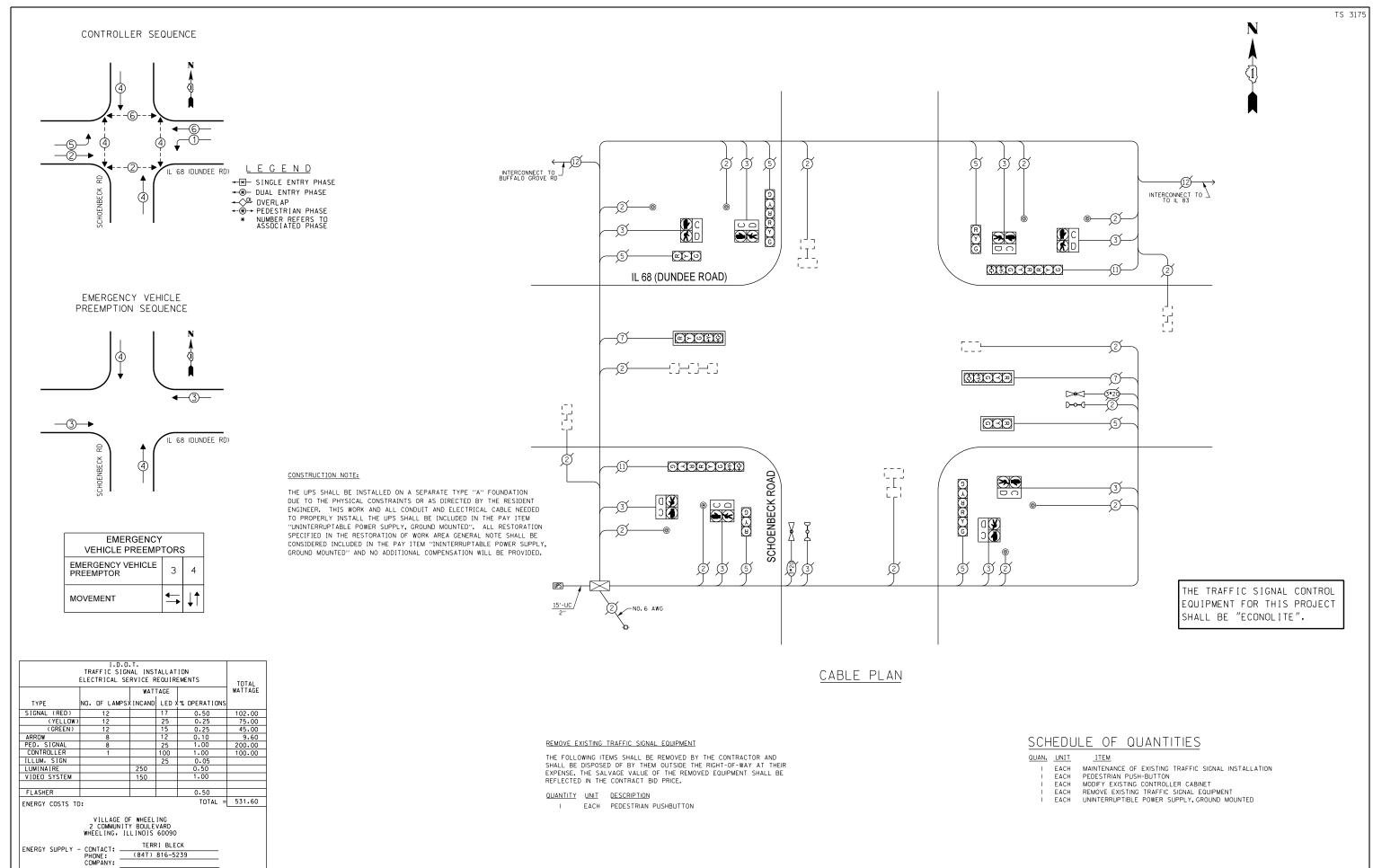
REVISED DRAWN JNP REVISED CHECKED TVN REVISED MILLENNIA PROFESSIONAL SERVICES DATE 10/22/2013 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

I	SCHEDULE OF					DESIGNATION DIAGRAM,	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I	AND	AND EMERGENCY VEHICLE PREEMPTION SEQUENCE					VAR	D-91-020-14	соок	99	85
l		WILLLOW	KUAD	AT GREE	NWUUD	AVENUE			CONTRACT	NO. 60	0X15
ı	SCALE: ·N/A	SHEET	OF	SHEETS	STA. ·	TO STA.	FED. RO	DAD DIST. NO. 1   ILLINOIS FED. AI	D PROJECT		







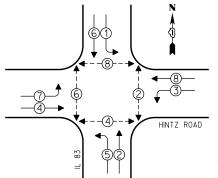
SAM SCHWARTZ
ENGINEERING
3100 M. HIGGINS, STE. 100, HOFFMAN ESTATES, IL 60169

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, IL 68 (DUNDEE ROAD) AT SCHOENBECK ROAD

ENONE SHEET OF SHEETS STA. TO STA.

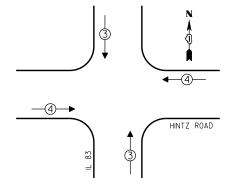




LEGEND

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMP		 S
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	<b>↓</b> ↑	<b>_</b>

	I.D.D TRAFFIC SIGN ELECTRICAL SE	NAL INST			TOTAL
		WAT.	TAGE		WATTAGE
TYPE	NO. OF LAMPS	INCAND	LED >	% OPERATIONS	
SIGNAL (RED)	12		17	0.50	102.00
(YELLOW)	12		25	0.25	75.00
(GREEN)	12		15	0.25	45.00
ARROW	16		12	0.10	19.20
PED. SIGNAL	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDEO SYSTEM		150		1.00	
FLASHER				0.50	
ENERGY COSTS TO	) <b>:</b>			TOTAL =	541.20

VILLAGE OF WHEELING 2 COMMUNITY BOULEVARD WHEELING, ILLINOIS 60090

ENERGY SUPPLY - CONTACT: PHONE: COMPANY:

TERRI BLECK (847) 816-5239 NOTE:

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

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

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

**3** 20 PUSHBUTTON "C" **≯** ₹ \$ 3 0 ≺ **₽**-HINTZ ROAD **>**∞< G ≺ ₽  $\Box$ JSHBUTTON "A REPLACE ALL EXISTING TRAFFIC SIGNAL HEADS THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

CABLE PLAN

#### REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

#### QUANTITY UNIT DESCRIPTION

EACH SIGNAL HEAD, I-FACE, 3-SECTION

EACH EACH SIGNAL HEAD, I-FACE, 5-SECTION PEDESTRIAN SIGNAL HEAD, 2-FACE

EACH PEDESTRIAN PUSHBUTTON
EACH TRAFFIC SIGNAL BACKPLATE

SCHEDULE OF QUANTITIES

QUAN. UNIT

EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION

FACH

MAINTENANCE OF EAST ING TRAFFIC SIGNAL INSTALLATION
SIGNAL HEAD, LED, I-FACE, 3-SECTION, MAST ARM MOUNTED
SIGNAL HEAD, LED, I-FACE, 5-SECTION, BRACKET MOUNTED
SIGNAL HEAD, LED, I-FACE, 5-SECTION, MAST ARM MOUNTED
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER EACH

TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM PEDESTRIAN PUSH-BUTTON, NON-LATCHING EACH EACH

EACH EACH

MODIFY EXISTING CONTROLLER CABINET REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT UNINTERRUPTIBLE POWER SUPPLY, SPECIAL



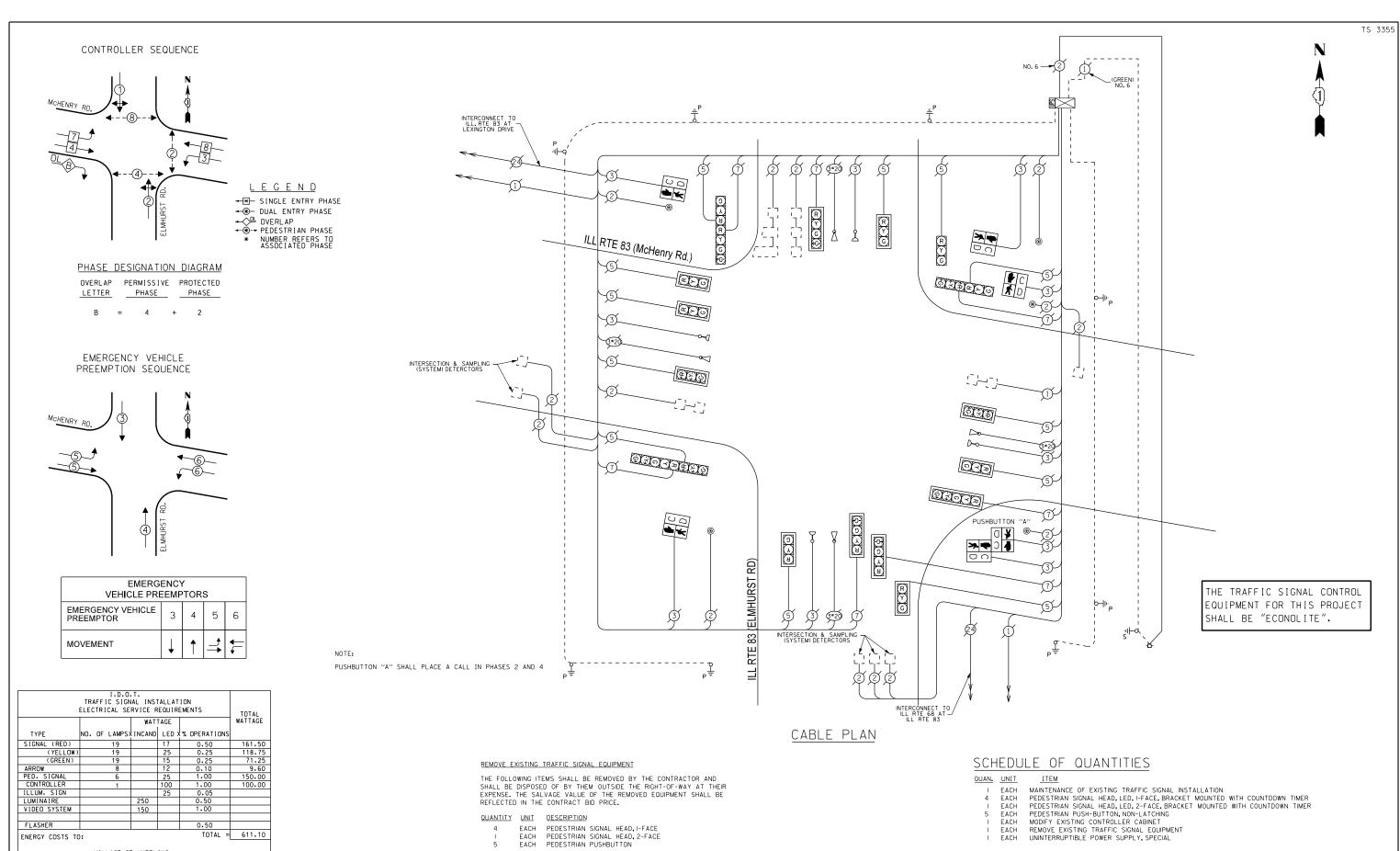
DESIGNED	-	JAM	REVISED	-
DRAWN	-	JAM	REVISED	-
CHECKED	-	LMM	REVISED	-
DATE	-	10-14-13	REVISED	-

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

					PHASE DESIGNATION EMPTION SEQUENCE,
l II	L RTE 83	3 ELMHUR	ST ROAD	) AT	HINTZ ROAD
SCALE: NONE	SHEET	OF	SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-054TS	COOK	99	89
		CONTRACT	NO. 6	0X15
	ILLINOIS FED. AI	ID PROJECT		

TS 3430



VILLAGE OF WHEELING 2 COMMUNITY BOULEVARD WHEELING. ILLINOIS 60090 TERRI BLECK

ENERGY SUPPLY - CONTACT: \_\_ PHONE: COMPANY: \_\_ (847) 816-5239

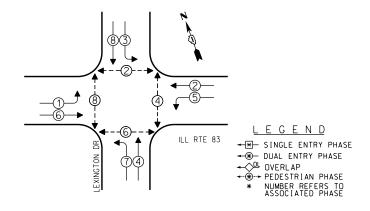


DESIGNED	-	JAM	REVISED	-
DRAWN	-	JAM	REVISED	-
CHECKED	-	LMM	REVISED	-
DATE	-	10-14-13	REVISED	-

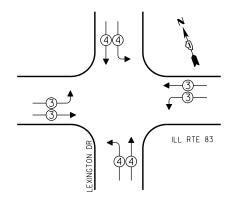
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

			•	•	ASE DESIGNATION	F.A RT
	83 (ELMH				PTION SEQUENCE, McHenry)	٧
SCALE: NONE	SHEET	OF	SHEETS	STA.	TO STA.	

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-054TS	COOK	99	90
		CONTRACT	NO. 6	0X15
	THE TWO IS EED. A.	IN DROIECT		



#### EMERGENCY VEHICLE PREEMPTION SEQUENCE



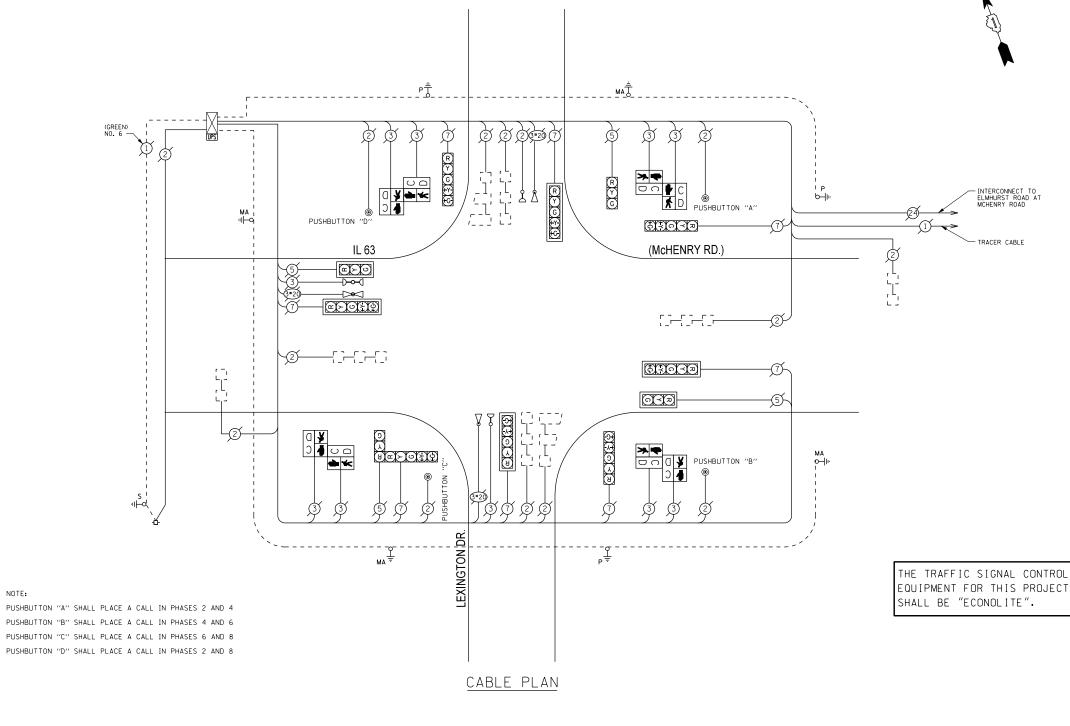
EMERGENCY VEHICLE PREEMP		6
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	<b>=</b>	<b>↓</b> ↑

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL	
	WATTAGE			WATTAGE		
TYPE	NO. OF I	LAMPSX	INCAND	LED >	% OPERATIONS	
SIGNAL (RED)	12			17	0.50	102.00
(YELLOW)	12			25	0.25	75.00
(GREEN)	12			15	0.25	45.00
ARROW	16			12	0.10	19.20
PED. SIGNAL	8			25	1.00	200.00
CONTROLLER	1			100	1.00	100.00
ILLUM. SIGN				25	0.05	
LUMINAIRE			250		0.50	
VIDEO SYSTEM			150		1.00	
FLASHER					0.50	
ENERGY COSTS TO	):				TOTAL =	541.20

VILLAGE OF WHEELING 2 COMMUNITY BOULEVARD WHEELING, ILLINOIS 60090

ENERGY SUPPLY - CONTACT: PHONE: COMPANY:

TERRI BLECK (847) 816-5239



#### REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

QUANTITY UNIT DESCRIPTION

EACH PEDESTRIAN SIGNAL HEAD, 2-FACE

EACH PEDESTRIAN PUSHBUTTON

#### SCHEDULE OF QUANTITIES

QUAN.	UNIT	ITE

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

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

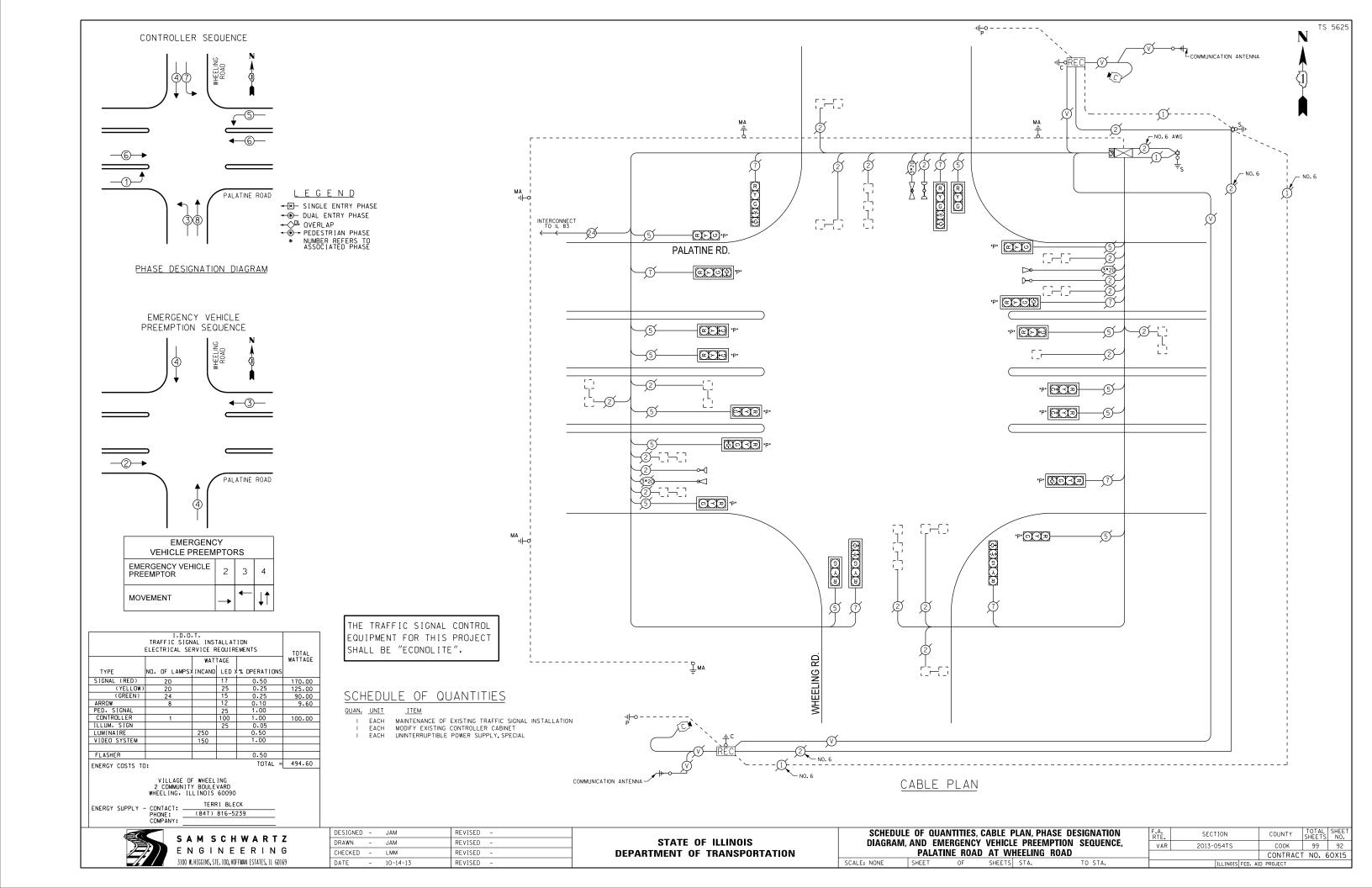
DESIGNED	-	JAM	REVISED -
DRAWN	-	JAM	REVISED -
CHECKED	-	LMM	REVISED -
DATE	-	10-14-13	REVISED -

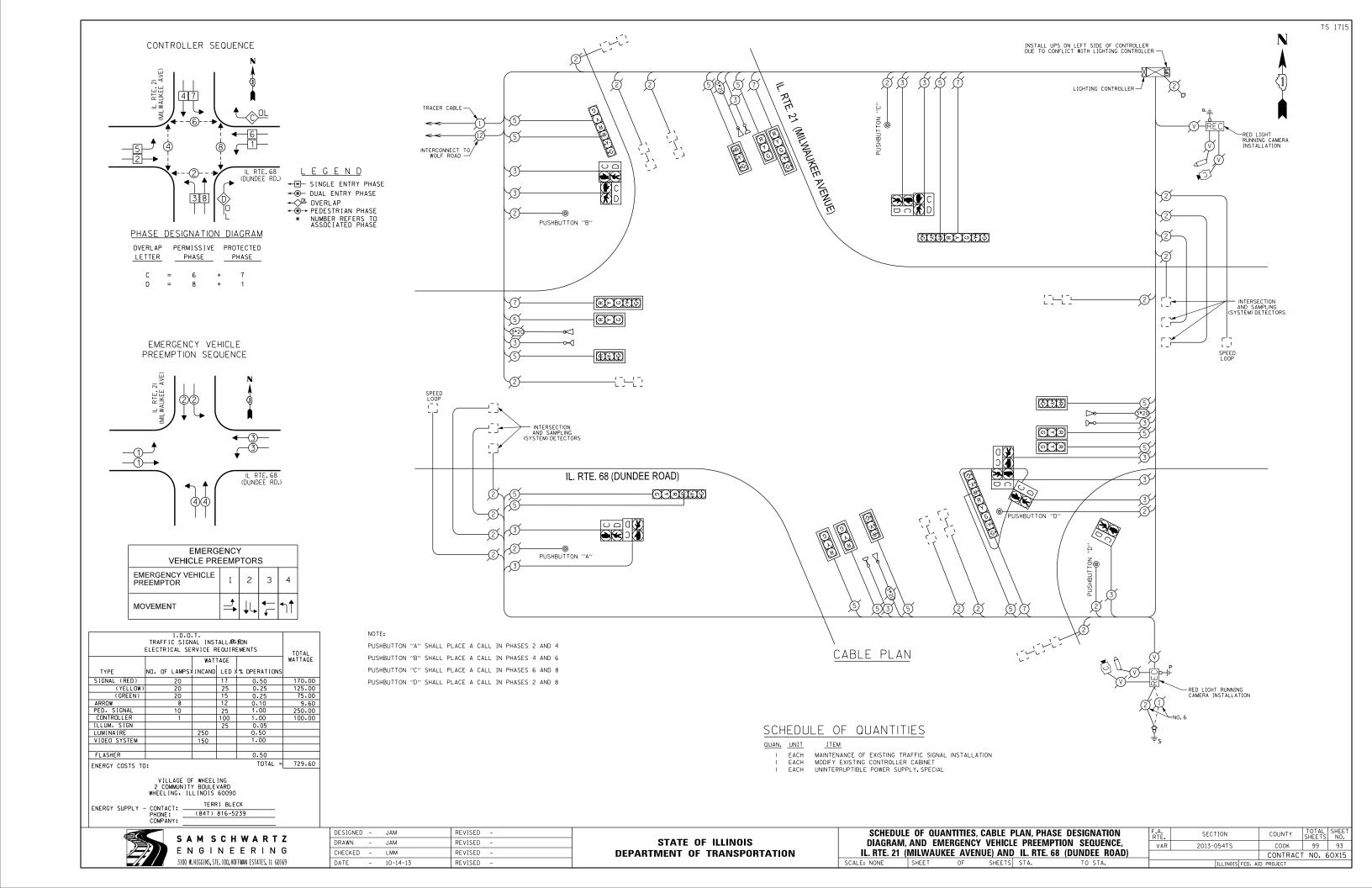
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

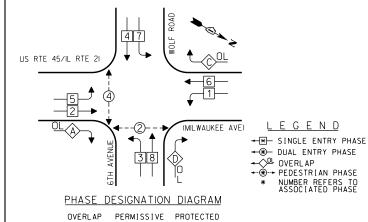
SCHED	JLE OF QU	ANTITIES.	CABLE P	LAN. F	HASE DESIGNATION	F
						'
DIAGKA	IVI, AND EI	VIEKGENCY	VEHICLE	: PKE	EMPTION SEQUENCE,	
II	I RTF 83	McHFNRY	RD) ANI	) IFX	INGTON DRIVE	Н
	00	(	,		HOIOI DINIE	_
SCALE: NONE	SHEET	OF	SHEETS	STA.	TO STA.	Г

F.A. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-054TS		COOK	99	91
		CONTRACT	NO. 6	0X15	
	ILLINOIS FEE	. A	ID PROJECT		

TRACER CABLE



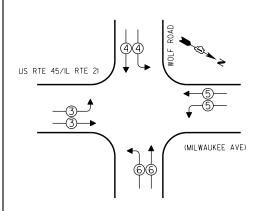




PHASE PHASE

#### EMERGENCY VEHICLE PREEMPTION SEQUENCE

LETTER



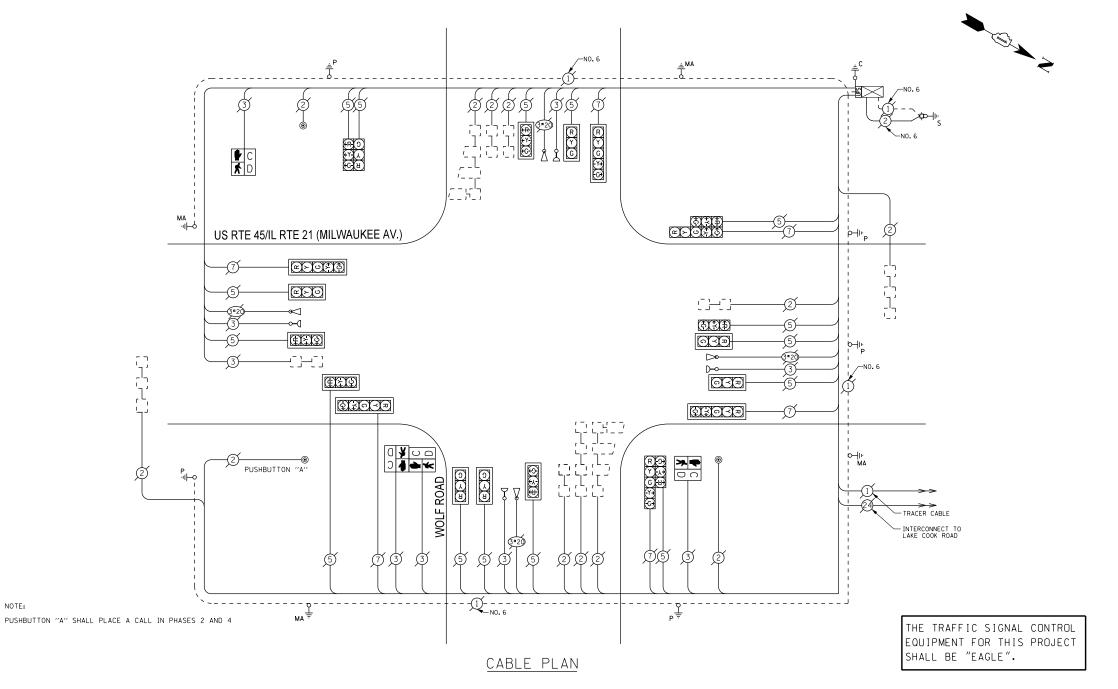
EMERGENCY VEHICLE PREEMPTORS						
EMERGENCY VEHICLE PREEMPTOR	3	4	5	6		
MOVEMENT	<b>→</b>	↓L.	Ţ	ኅ†		

TRAFFIC SIGNAL INSTA ELECTRICAL SERVICE RE						TOTAL	
			WAT.	TAGE		WATTAGE	
TYPE	NO. OF	LAMPS)	INCAND	LED >	% OPERATIONS		
SIGNAL (RED)		21		17	0.50	178.50	
(YELLOW)		21		25	0.25	131.25	
(GREEN)		21		15	0.25	78.75	
ARROW		12		12	0.10	14.40	
PED. SIGNAL		4		25	1.00	100.00	
CONTROLLER		1		100	1.00	100.00	
ILLUM. SIGN				25	0.05		
LUMINAIRE			250		0.50		
VIDEO SYSTEM			150		1.00		
FLASHER					0.50		
ENERGY COSTS TO	):				TOTAL =	602.90	

VILLAGE OF WHEELING 2 COMMUNITY BOULEVARD WHEELING, ILLINOIS 60090

ENERGY SUPPLY - CONTACT: PHONE: COMPANY:

TERRI BLECK (847) 816-5239



#### REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

QUANTITY UNIT DESCRIPTION

EACH PEDESTRIAN SIGNAL HEAD, I-FACE EACH PEDESTRIAN SIGNAL HEAD, 2-FACE EACH PEDESTRIAN PUSHBUTTON

#### SCHEDULE OF QUANTITIES

QUAN. UNIT

EACH

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 EACH EACH

PEDESTRIAN PUSH-BUTTON, NON-LATCHING MODIFY EXISTING CONTROLLER CABINET REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT EACH

EACH

UNINTERRUPTIBLE POWER SUPPLY, SPECIAL

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

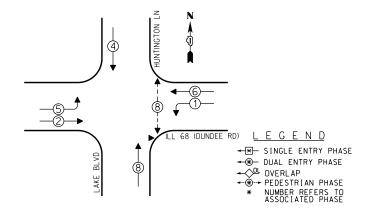
DESIGNED	-	JAM	REVISED -	
DRAWN	-	JAM	REVISED -	
CHECKED	-	LMM	REVISED -	
DATE	-	10-14-13	REVISED -	

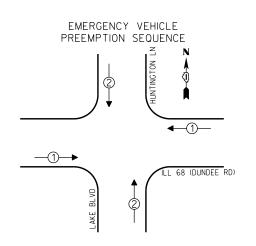
NOTE:

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION						
					MPTION SEQUENCE, ) AT WOLF ROAD	
SCALE: NONE	SHEET	OF	SHEETS		TO STA.	

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-054TS	соок	99	94
		CONTRACT	NO. 6	0X15
	ILLINOIS FED. A	ID PROJECT		





EMERGENCY VEHICLE PREEMPTORS						
EMERGENCY VEHICLE PREEMPTOR	1	2				
MOVEMENT	<b>=</b>	1				

	TOTAL					
	WATTAGE					
TYPE	NO. OF LAMPS	INCAND	LED >	% OPERATIONS		
SIGNAL (RED)	12		17	0.50	102.00	
(YELLOW)	12		25	0.25	75.00	
(GREEN)	12		15	0.25	45.00	
ARROW	8		12	0.10	9.60	
PED. SIGNAL	2		25	1.00	50.00	
CONTROLLER	1		100	1.00	100.00	
ILLUM. SIGN			25	0.05		
LUMINAIRE		250		0.50		
VIDEO SYSTEM		150		1.00		
FLASHER				0.50		
ENERGY COSTS TO	381.60					
VILLAGE OF WHEELING						

2 COMMUNITY BOULEVARD WHEELING. ILLINOIS 60090

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

# TRACER CABLE — TRACER CABLE HUNTINGTON LANE INTERCONNECT TO --BUFFALO GROVE RD. INTERCONNECT TO SCHOENBECK ROAD R Y G ैं **२ ० ≺** ⊅ − ILL 68 (DUNDEE ROAD) \_5<u>~</u>~ - INTERSECTION & SAMPLING (SYSTEM) DETECTORS \$\$0<\nu Y G CABLE PLAN

#### REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

QUANTITY UNIT DESCRIPTION

EACH PEDESTRIAN SIGNAL HEAD, I-FACE EACH PEDESTRIAN PUSHBUTTON

#### SCHEDULE OF QUANTITIES

#### QUAN. UNIT

EACH

MINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
PEDESTRIAN SIGNAL HEAD, LED, I-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
PEDESTRIAN PUSH-BUTTON
MODIFY EXISTING CONTROLLER CABINET
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL
SIGNAL HEAD, LED, 2-FACE, I-3 SECTION, I-5 SECTION, BRACKET MOUNTED, RETROFIT
SIGNAL HEAD, LED, I-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT
SIGNAL HEAD, LED, I-FACE, S-SECTION, MAST ARM MOUNTED, RETROFIT
SIGNAL HEAD, LED, I-FACE, S-SECTION, MAST ARM MOUNTED, RETROFIT
SIGNAL HEAD, LED, I-FACE, S-SECTION, BRACKET MOUNTED, RETROFIT
SIGNAL HEAD, LED, I-FACE, S-SECTION, BRACKET MOUNTED, RETROFIT
SIGNAL HEAD, LED, I-FACE, S-SECTION, BRACKET MOUNTED, RETROFIT

EACH EACH

EACH EACH

EACH EACH

EACH

FACH



DESIGNED	-	JAM	REVISED	-
DRAWN	-	JAM	REVISED	-
CHECKED	-	LMM	REVISED	-
DATE	-	10-14-13	REVISED	-

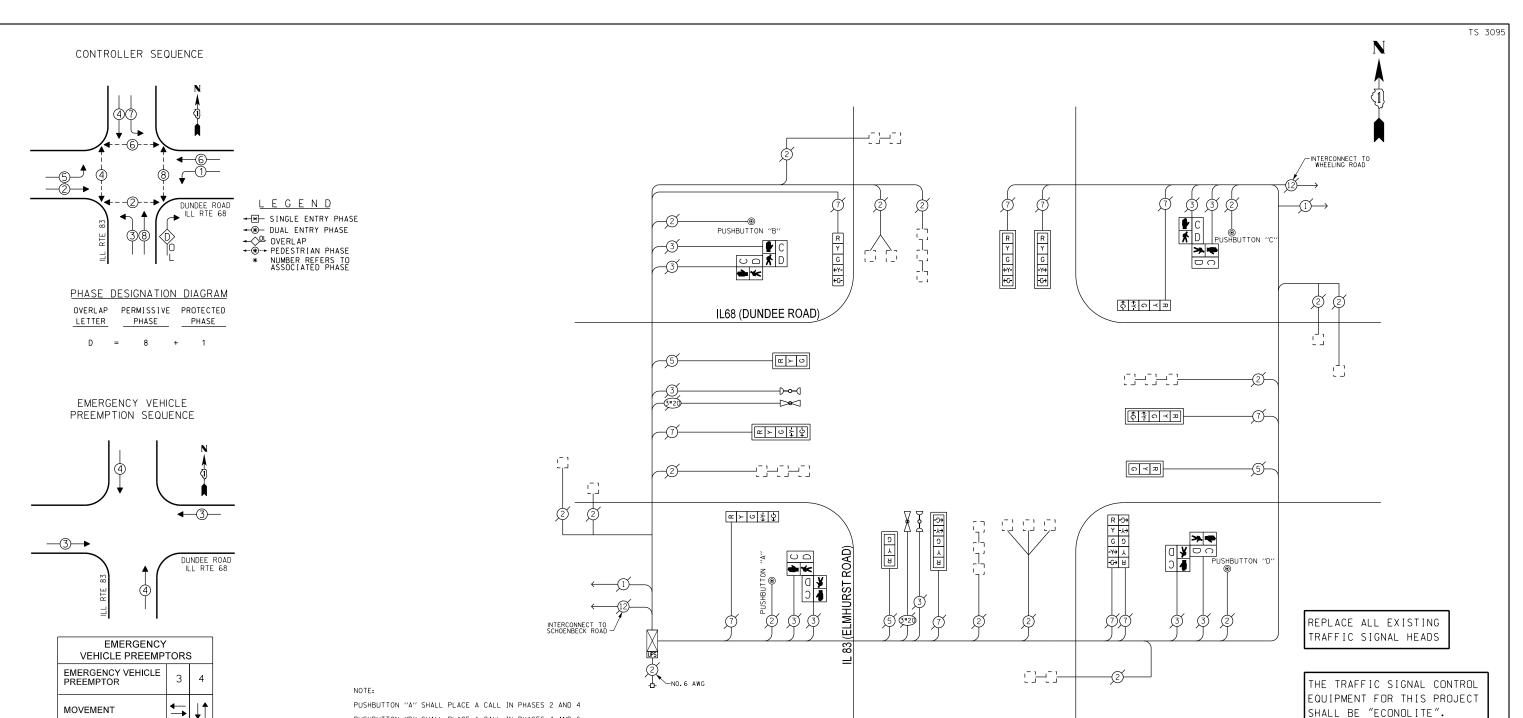
STATE 0	F ILLINOIS
<b>DEPARTMENT OF</b>	TRANSPORTATION

SCHEDULI	E OF QUA	NTITIES, (	Cable Plan, Pi	HASE DESIGNATION
DIAGRAM,	AND EM	ERGENCY	VEHICLE PREE	MPTION SEQUENCE,
ILL 68	(DUNDEE	RD) AND	HUNTINGTON	LN /LAKE BLVD
SCALE: NONE	SHEET	OF	SHEETS STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2013-054TS	COOK	99	95
		CONTRACT	NO. 6	0X15
	ILLINOIS FED. A	ID PROJECT		

RETROFIT ALL EXISTING TRAFFIC SIGNAL HEADS

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



EMERGENCY VEHICLE PREEMP		6
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	<b>=</b>	<b>↓</b> ↑

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS						TOTAL	
			WAT.	TAGE		WATTAGE	
TYPE	NO. OF	10. OF LAMPSXINCAND LED X% OPERATIO			% OPERATIONS		
SIGNAL (RED)		13		17	0.50	110.50	
(YELLOW)		13		25	0.25	81.25	
(GREEN)		13		15	0.25	48.75	
ARROW	2	20		12	0.10	24.00	
PED. SIGNAL		8		25	1.00	200.00	
CONTROLLER		1		100	1.00	100.00	
ILLUM. SIGN				25	0.05		
LUMINAIRE			250		0.50		
VIDEO SYSTEM			150		1.00		
FLASHER					0.50		
ENERGY COSTS TO	ENERGY COSTS TO: TOTAL =						

VILLAGE OF WHEELING 2 COMMUNITY BOULEVARD WHEELING. ILLINOIS 60090

ENERGY SUPPLY - CONTACT: PHONE: COMPANY:

TERRI BLECK (847) 816-5239

DESIGNED - JAM

JAM

10-14-13

DRAWN -

CHECKED -

DATE

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

REVISED

REVISED

#### REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

YTITMAUC	UNIT	DESCRIPTION
JUMINITI	OIVII	DESCIMI HOI

SIGNAL HEAD, I-FACE, 3-SECTION

EACH SIGNAL HEAD, 1-FACE, 5-SECTION EACH SIGNAL HEAD, 2-FACE, 5-SECTION EACH PEDESTRIAN SIGNAL HEAD, 2-FACE

PEDESTRIAN PUSHBUTTON

# SCHEDULE OF QUANTITIES

Q	UAN.	UNII	11FW

MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION

SIGNAL HEAD, LED, I-FACE, 3-SECTION, MAST ARM MOUNTED SIGNAL HEAD, LED, I-FACE, 5-SECTION, BRACKET MOUNTED

FΔCH

SIGNAL HEAD, LED, I-FACE, 5-SECTION, MAST ARM MOUNTED SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED

PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER EACH

EACH PEDESTRIAN PUSH-BUTTON
MODIFY EXISTING CONTROLLER CABINET

I EACH I EACH REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT UNINTERRUPTIBLE POWER SUPPLY, SPECIAL

REVISED STATE OF ILLINOIS REVISED

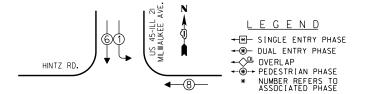


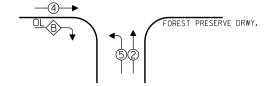
**DEPARTMENT OF TRANSPORTATION** 

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, IL 68/DUNDEE ROAD AT IL 83/ELMHURST SHEETS STA. SHEET

CABLE PLAN

SECTION COUNTY VAR 2013-054TS COOK 99 96 CONTRACT NO. 60X15

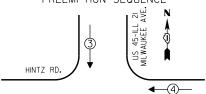


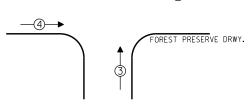


#### PHASE DESIGNATION DIAGRAM

OVERLAP	F	PERMISSIVE		PROTECTE
LETTER		PHASE		PHASE
В	=	4	+	5

# EMERGENCY VEHICLE PREEMPTION SEQUENCE





EMERGENO VEHICLE PREEMF		 S
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	1	<b>+</b>

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS						TOTAL
WATTAGE						WATTAGE
TYPE	NO.	OF LAMPS	INCAND	LED >	% OPERATIONS	
SIGNAL (RED)		14		17	0.50	119.00
(YELLOW)		14		25	0.25	87.50
(GREEN)		14		15	0.25	42.00
ARROW		12		12	0.10	14.40
PED. SIGNAL				25	1.00	
CONTROLLER		1		100	1.00	100.00
ILLUM. SIGN				25	0.05	
LUMINAIRE			250		0.50	
VIDEO SYSTEM			150		1.00	
FLASHER					0.50	
ENERGY COSTS TO	):				TOTAL =	362.90

VILLAGE OF WHEELING 2 COMMUNITY BOULEVARD WHEELING. ILLINOIS 60090

TERRI BLECK ENERGY SUPPLY - CONTACT: PHONE: COMPANY:

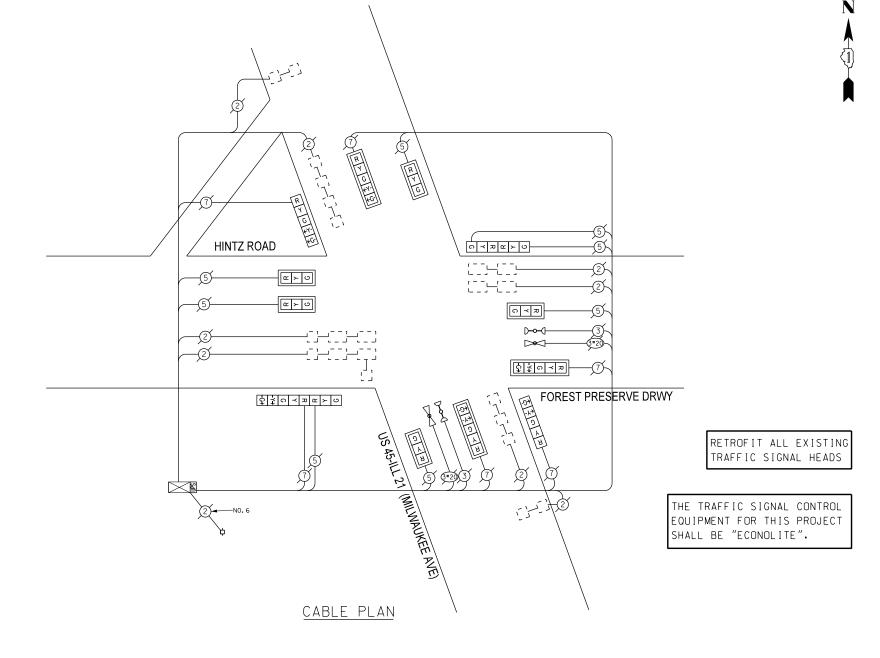
s	A	М	s	СН	W	Α	R	т	z
Ε	Ν	G	1.1	١E	Ε	R	1	Ν	G
310	0 W.H	HIGGIN	IS, STE.	100 <b>,</b> H0	FMAN	ESTA	TES,	IL 60	169

DESIGNED	-	JAM	REVISED -
DRAWN	-	JAM	REVISED -
CHECKED	-	LMM	REVISED -
DATE	-	10-14-13	REVISED -

#### STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

#### SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE, US 45 - ILL 21 (MILWAUKEE AVE) AND HINTZ RD /FOREST PRESERVE DW SCALE: NONE SHEET OF SHEETS STA.

SECTION COUNTY COOK VAR 2013-054TS 99 97 CONTRACT NO. 60X15



#### REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

QUANTITY UNIT DESCRIPTION

8 EACH TRAFFIC SIGNAL BACKPLATE

### SCHEDULE OF QUANTITIES

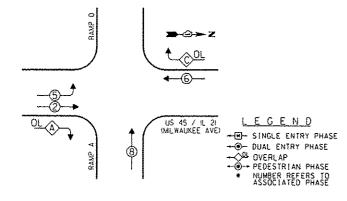
QUAN.	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
8	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
1	EVCH	MODIEV EVICTING CONTROLLED CARINET

EACH EACH

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

1 EACH SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT 2 EACH SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT

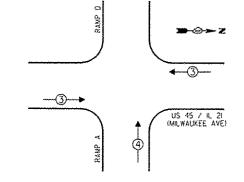




# PHASE DESIGNATION DIAGRAM OVERLAP PERMISSIVE PROTECTED

OVERLAP PERMISSIVE PROTECTED LETTER PHASE PHASE

# EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTORS						
EMERGENCY VEHICLE PREEMPTOR	3	4				
MOVEMENT	<del></del>	•				

		WATTAGE			TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND	LED :	% DPERATIONS	
SIGNAL (RED)	18		17	0.50	153.0
(YELLOW)	1.8		25	0,25	112.
(GREEN)	19		15	0.25	71.
ARROW	4		12	0.10	4.1
PED. SIGNAL			25	1,00	
CONTROLLER	1		100	1.00	100.0
ILLUM. SIGN			25	0.05	
LUMINAIRE		250		0.50	
VIDED SYSTEM		150		1,00	
FLASHER				0,50	<del></del>
ENERGY COSTS TO				TOTAL =	441.

VILLAGE OF WHEELING 2 COMMUNITY BOULEVARD WHEELING: ILLINOIS 60090

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

# \$15m \$\tau\_{\nu} ar 5 7 3 US. RTE. 45/IL. 21 (MILWAUKEE AVE.) a> 5 REPLACE PROGRAMMED HEAD WITH STANDARD LED HEAD -1,1,1 RETROFIT ALL EXISTING ्रि र क TRAFFIC SIGNAL HEADS EXCEPT AS NOTED ু ≺ ৯ S Y R THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE". THE TRAFFIC SIGNAL HOUSINGS SHALL BE YELLOW TO MATCH EXISTING EQUIPMENT.

#### REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

QUANTITY UNIT DESCRIPTION

EACH SIGNAL HEAD, I-FACE, 3-SECTION

#### SCHEDULE OF QUANTITIES

QUAN.	UNIT	M311
ł	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	MODIFY EXISTING CONTROLLER CABINET
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL
3	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT
8	EACH	SIGNAL HEAD. LED, I-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT
5	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT
3	EACH	SIGNAL HEAD, LED, I-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT
ŧ	EACH	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED, RETROFIT

SAM SCHWARTZ ENGINEERING 1100 MIRIOCINS, STE. 100, ROFFWAY STAIRS, IS 60169

DESIGNED	-	JAM	REVISED	•
DRAWN	-	MAL	REVISED	*
CHECKED	-	LIMM	REVISED	2
DATE	~	10-14-13	REVISED	7

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN

			ABLE PLAN, PHAS		F,A.
			/EHICLE PREEMPT RAMPS A AND	TON SEQUENCE, D (LAKE COOK ROAD	V 4
SCALE: NONE	SHEET	OF	SHEETS STA.	TO STA.	1

	F.A. RTE.	SECTION	COUNTY	TOTAL	SHEE					
	VAR	2013-Q54TS	COOK	99	98					
)			CONTRACT	NO. 6	0X15					
	ILLINOIS FED. ATO PROJECT									

