

DLZ

07-31-2015 LETTING ITEM 076

FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROJECT IS LOCATED
IN VILLAGE OF NILES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

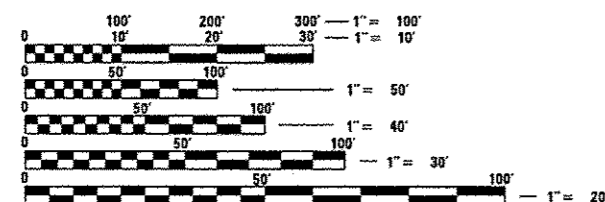
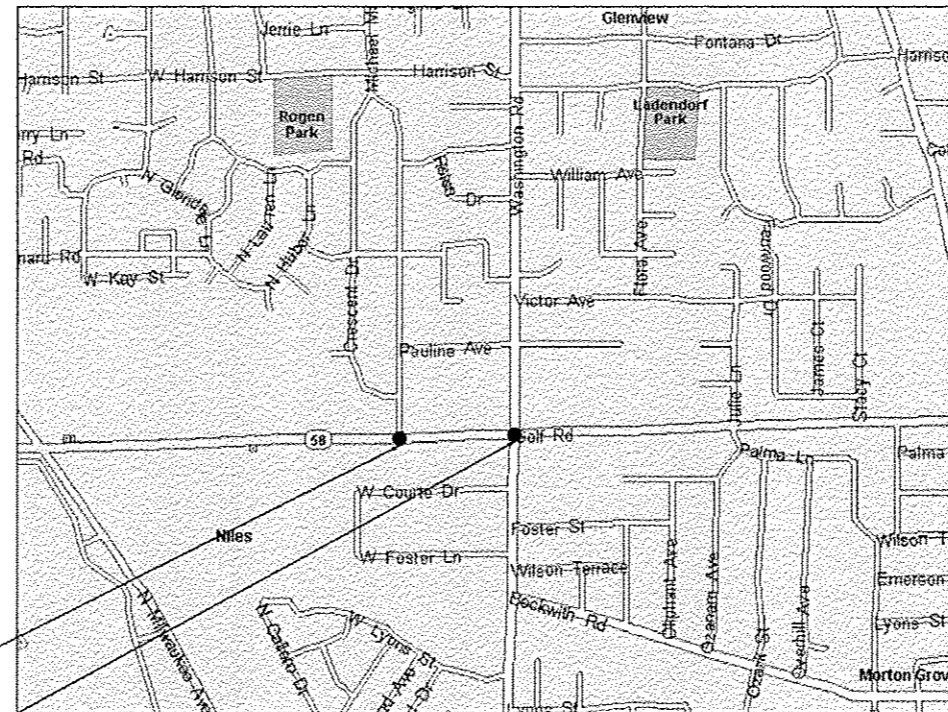
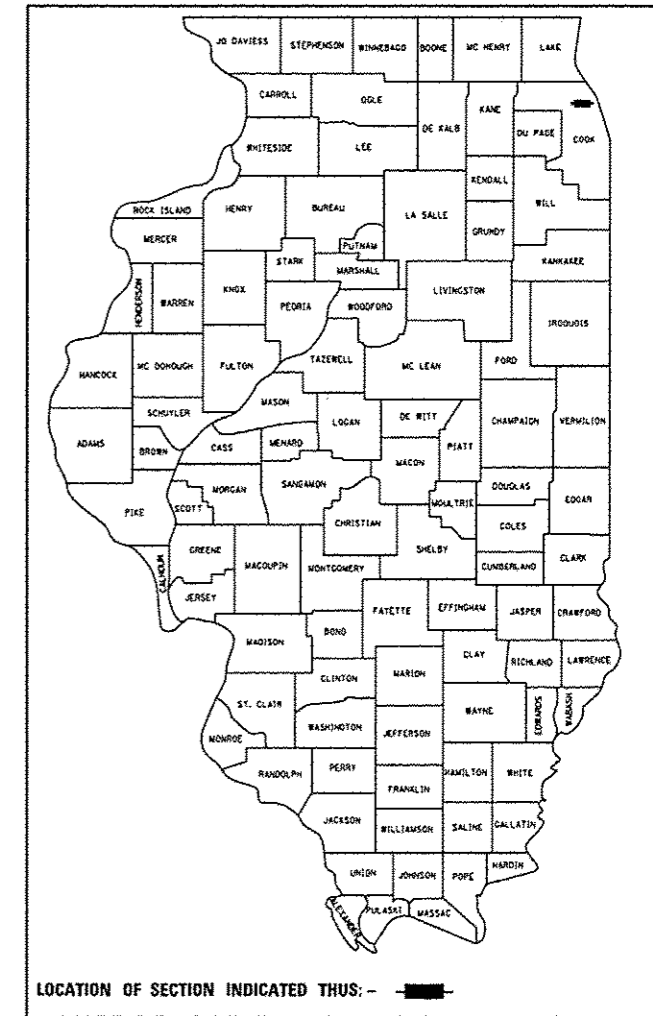
PROPOSED
HIGHWAY PLANS

FAP 339
(IL ROUTE 58 (GOLF RD)) - MICHAEL MANOR TO WASHINGTON RD.

SECTION 2014-073TS
PROJECT: ACHSIP-0339(033)
TRAFFIC SIGNAL MODERNIZATION
COOK COUNTY

C-91-092-15

F.A.P. RITE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	2014-073TS	COOK	31	1
		ILLINOIS	CONTRACT NO. 62A15	
D-91-092-15				



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.

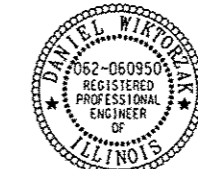
J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER: IOVAN PLASCENCIA
PROJECT MANAGER: SUDUD MAHMOUD
CONTRACT NO. 62A15

IL ROUTE 58 AT
MICHAEL MANOR

IL ROUTE 58 AT
WASHINGTON RD

T41N, R12E



Signed *Daniel Wiktorzak*
DANIEL WIKTORZAK, P.E. IL Lic. No. 062-060950
Expires 11-30-2015
Date 3/18/15

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED March 20 2015

John J. Johnson
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

June 26 2015
John D. Baranzolo, PE
ENGINEER OF DESIGN AND ENVIRONMENT

June 26 2015
Omer Osman, PE
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS

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GENERAL NOTES:

1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. 48 HOUR NOTIFICATION IS REQUIRED.
2. CONTRACTOR SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470, 72 HOURS IN ADVANCE OF BEGINNING WORK.
3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION. THIS SHALL INCLUDE LOCATING THE MAST ARM FOUNDATIONS AND VERIFYING THE MAST ARM LENGTHS.

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

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

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

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

8. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIAN, SIDEWALKS, PAVEMENT ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

FILE NAME = M:\p\proj\1481\2189 P18 175-6 (DOT Ver. For Signal)14-081 IL58 Michael Manor to Washington Rd\Design\CAD\Sheet Files\Index.dgn

Rev. No. STANDARDS

- 05 -701006 : OFF-ROAD OPERATIONS 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
- 04 -701101 : OFF-ROAD OPERATIONS MULTILANE, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
- 06 -701501 : URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
- 10 -701606 : URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
- 09 -701701 : URBAN LANE CLOSURE MULTILANE INTERSECTION
- 05 -701801 : LANE CLOSURE, MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
- 04 -701901 : TRAFFIC CONTROL DEVICES
- 01 -720001 : SIGN PANEL MOUNTING DETAIL
- 01 -805001 : ELECTRICAL SERVICE INSTALLATION DETAILS
- 03 -814001 : HANDHOLES
- 02 -814006 : DOUBLE HANDHOLES
- 01 -857001 : STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
- 01 -862001 : UNINTERRUPTABLE POWER SUPPLY (UPS)
- 02 -873001 : TRAFFIC SIGNAL GROUNDING & BONDING
- 05 -877001 : STEEL MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
- 10 -878001 : CONCRETE FOUNDATION DETAILS
- 01 -880001 : SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION
- 01 -880006 : TRAFFIC SIGNAL MOUNTING DETAILS
- 01 -886001 : DETECTOR LOOP INSTALLATIONS
- 01 -886006 : TYPICAL LAYOUT FOR DETECTOR LOOPS

	USER NAME = USERNAME	DESIGNED - KMM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS & GENERAL NOTES				F.A.P. RATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 2.0000' / 1" =	DRAWN - CDC	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	COOK	31	2
	PLOT DATE = 3/17/2015	CHECKED - DW	REVISED -		CONTRACT NO. 62A15								
		DATE - 10/22/14	REVISED -		[ILLINOIS] FED. AID PROJECT								



FILE NAME: M:\projects\1812189_P18_172-6 (DOT Ver - Var - Signals)\14-B21 IL58 Michael Memor to Washington Rd\Design\CAO\Sheet Files\5001.dgn

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	90% FEDERAL 5% STATE 5% NILES	90% FEDERAL, 5% STATE 2.5% NILES 2.5% MAINE TWP	90% FEDERAL 10% STATE
				IL 58 (GOLF RD) @ MICHAEL MANOR	IL 58 (GOLF RD) @ WASHINGTON RD	INTERCONNECT
					TRAFFIC SIGNAL	
					0021	
					URBAN	
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	4		4	
42001300	PROTECTIVE COAT	SQ YD	68		68	
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	481		481	
* 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	10	10		
44000600	SIDEWALK REMOVAL	SQ FT	395		395	
* 66900450	SPECIAL WASTE PLANS AND REPORTS	L SUM	1	1		
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	3	3	
* 66900530	SOIL DISPOSAL ANALYSIS	EACH	1	1		
67100100	MOBILIZATION	L SUM	1	0.5	0.5	
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	0.5	0.5	
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	0.5	0.5	
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	0.5	0.5	
* * 72000200	SIGN PANEL - TYPE 2	SO FT	84	42	42	
80500020	SERVICE INSTALLATION - POLE MOUNTED	EACH	2	1	1	
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	2066	575	765	726
81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	175	95	80	
81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	155	86	69	

Rev.

* * Specialty Items

USER NAME : USERNAME.	DESIGNED - KMM	REVISED -
PLOT SCALE = 20,0000' / in.	DRAWN - CDC	REVISED -
PLOT DATE = 3/20/2015	CHECKED - DW	REVISED -
	DATE - 10/22/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	2014-0731S	COCK	31	3
CONTRACT NO. 62A15				
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	90% FEDERAL 5% STATE 5% NILES	90% FEDERAL, 5% STATE 2.5% NILES 2.5% MAINE TWP	90% FEDERAL 10% STATE
				IL 58 (GOLF RD) @ MICHAEL MANOR	IL 58 (GOLF RD) @ WASHINGTON RD	INTERCONNECT
					TRAFFIC SIGNAL 0021 URBAN	
81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	589	281	308	
81400100	HANDHOLE	EACH	9	5	4	
81400200	HEAVY-DUTY HANDHOLE	EACH	6	2	4	
81400300	DOUBLE HANDHOLE	EACH	3	1	2	
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1			1
86400100	TRANSCEIVER - FIBER OPTIC	EACH	2	1	1	
87300925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	2252			2252
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1921	611	1310	
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2772	1078	1694	
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	3113	1760	1353	
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	2215	680	1535	
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	3114	1574	1540	
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	155	45	110	
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1365	650	715	

USER NAME = .\USERNAME.	DESIGNED - KMM	REVISED -
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PLOT DATE = 3/20/2015	CHECKED - OW	REVISED -
	DATE - 10/22/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	2014-073TS	COOK	31	4
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62A15	

FILE NAME = M:\proj\181\218\PIB 172-6 IDOT Ver For Signal\14-B21 IL58 Michael Manor to Washington Rd\Design-CAD\Sheet Files\5003.dgn

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	90% FEDERAL 5% STATE 5% NILES	90% FEDERAL, 5% STATE 2.5% NILES 2.5% MAINE TWP	90% FEDERAL 10% STATE
				IL 58 (GOLF RD) @ MICHAEL MANOR	IL 58 (GOLF RD) @ WASHINGTON RD	INTERCONNECT
				TRAFFIC SIGNAL		
				0021		
				URBAN		
87502440	TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	2	2		
87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1	1		
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	5	1	4	
87700160	STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	1	1		
87700200	STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	2	1	1	
87700220	STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1	1		
87700230	STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	3	1	2	
87700240	STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1		1	
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	32	16	16	
87800150	CONCRETE FOUNDATION, TYPE C	FOOT	8	4	4	
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	91.0	50.5	40.5	
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	13.0		13.0	
87900200	DRILL EXISTING HANDHOLE	EACH	1			1
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	15	8	7	

14

USER NAME = .USERNAME.	DESIGNED - KMM	REVISED -
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	DATE - 10/22/14	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	2014-073TS	COOK	31	5
CONTRACT NO. 62A15				
[ILLINOIS] FED. AID PROJECT				

FILE NAME = H:\proj\A181\Z181 P18 172-6 100T Var Var Signal\14-B21 IL58 (Michael) Memo to Washington Rd\Design\CAD\Sheet Files\5004.dgn

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	90% FEDERAL 5% STATE 5% NILES	90% FEDERAL, 5% STATE 2.5% NILES 2.5% MAINE TWP	90% FEDERAL 10% STATE
				IL 58 (GOLF RD) @ MICHAEL MANOR	IL 58 (GOLF RD) @ WASHINGTON RD	INTERCONNECT
				TRAFFIC SIGNAL		
				0021		
				URBAN		
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2	2		
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	6	2	4	
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	6	2	4	
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	12	4	8	
88200410	TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	21	10	11	
88500100	INDUCTIVE LOOP DETECTOR	EACH	17	8	9	
88600100	DETECTOR LOOP, TYPE I	FOOT	1408	583	825	
* 88700200	LIGHT DETECTOR	EACH	4	2	2	
* 88700300	LIGHT DETECTOR AMPLIFIER	EACH	2	1	1	
88800100	PEDESTRIAN PUSH-BUTTON	EACH	12	4	8	
89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	2	1	1	
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1129			1129
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	2	1	1	
89502380	REMOVE EXISTING HANDHOLE	EACH	14	5	9	

* 100% COST TO VILLAGE OF NILES

USER NAME : USERNAME	DESIGNED - KMM	REVISED -
PLLOT SCALE * 20.0000 / in.	DRAWN - CDC	REVISED -
PLLOT DATE * 3/20/2015	CHECKED - DW	REVISED -
	DATE - 10/22/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.
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F.A.P. RATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	2014-0731S	COOK	31	6
			CONTRACT NO. 62A15	
[ILLINOIS] FED. AID PROJECT				

FILE NAME = M:\proj\1481\ZIBR P1B 175-6 (DOT) For Signal\14-801 IL58 (Michael) Minor to Washington Rd\Design\CD\Sheet File\5006.dgn

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	90% FEDERAL 5% STATE 5% NILES	90% FEDERAL, 5% STATE 2.5% NILES 2.5% MAINE TWP	90% FEDERAL 10% STATE
				IL 58 (GOLF RD) @ MICHAEL MANOR	IL 58 (GOLF RD) @ WASHINGTON RD	INTERCONNECT
				TRAFFIC SIGNAL		
				0021		
				URBAN		
89502382	REMOVE EXISTING DOUBLE HANDHOLE	EACH	2	1	1	
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	17	8	9	
* X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	785	454	331	
X0324599	ROD AND CLEAN EXISTING CONDUIT	FOOT	1074			1074
X1400081	FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)	EACH	2	1	1	
X8620200	UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	2	1	1	
X8710024	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	2298			2298
Z0030850	TEMPORARY INFORMATION SIGNING	50 FT	51.4	25.7	25.7	
Z0033044	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1			1
Z0033046	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2	EACH	1			1
Z0004502	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	54		54	
Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	2	1	1	

Rev

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	2014-073TS	COOK	31	7
CONTRACT NO. 62A15				
ILLINOIS FED. AID PROJECT				

TRAFFIC SIGNAL LEGEND

ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED																	
CONTROLLER CABINET				EMERGENCY VEHICLE LIGHT DETECTOR				ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE																				
RAILROAD CONTROL CABINET				CONFIRMATION BEACON				COAXIAL CABLE																				
COMMUNICATIONS CABINET				HANDHOLE				VENDOR CABLE FOR CAMERA																				
MASTER CONTROLLER				HEAVY DUTY HANDHOLE				COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED																				
MASTER MASTER CONTROLLER				DOUBLE HANDHOLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F																				
UNINTERRUPTABLE POWER SUPPLY				JUNCTION BOX				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F																				
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT				UNDERGROUND CONDUIT, GALVANIZED STEEL (UC)				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM24F																				
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT				TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM24F																				
STEEL MAST ARM ASSEMBLY AND POLE				COMMON TRENCH				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM24F																				
ALUMINUM MAST ARM ASSEMBLY AND POLE				COILABLE NONMETALLIC CONDUIT (EMPTY)				GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE																				
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE				SYSTEM ITEM				CONTROLLER CABINET AND FOUNDATION TO BE REMOVED																				
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA				INTERSECTION ITEM				STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED																				
SIGNAL POST				REMOVE ITEM				ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED																				
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM				RELOCATE ITEM				STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED																				
GUY WIRE				ABANDON ITEM				SIGNAL POST AND FOUNDATION TO BE REMOVED																				
SIGNAL HEAD				12" (300mm) TRAFFIC SIGNAL SECTION				INTERSECTION & SAMPLING (SYSTEM) DETECTOR																				
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)				12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE				SAMPLING (SYSTEM) DETECTOR																				
SIGNAL HEAD WITH BACKPLATE				SIGNAL FACE				QUEUE DETECTOR																				
SIGNAL HEAD OPTICALLY PROGRAMMED				SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD				PREFORMED QUEUE DETECTOR																				
FLASHER INSTALLATION (S DENOTES SOLAR POWER)				"RB" INDICATES REFLECTIVE BACKPLATE				PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR																				
PEDESTRIAN SIGNAL HEAD				12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL				PREFORMED SAMPLING (SYSTEM) DETECTOR																				
PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED				<h2>RAILROAD SYMBOLS</h2> <table border="1"> <thead> <tr> <th></th> <th>EXISTING</th> <th>PROPOSED</th> </tr> </thead> <tbody> <tr> <td>RAILROAD CONTROL CABINET</td> <td></td> <td></td> </tr> <tr> <td>RAILROAD CANTILEVER MAST ARM</td> <td></td> <td></td> </tr> <tr> <td>FLASHING SIGNAL</td> <td></td> <td></td> </tr> <tr> <td>CROSSING GATE</td> <td></td> <td></td> </tr> <tr> <td>CROSSBUCK</td> <td></td> <td></td> </tr> </tbody> </table>				EXISTING	PROPOSED	RAILROAD CONTROL CABINET			RAILROAD CANTILEVER MAST ARM			FLASHING SIGNAL			CROSSING GATE			CROSSBUCK		
	EXISTING	PROPOSED																										
RAILROAD CONTROL CABINET																												
RAILROAD CANTILEVER MAST ARM																												
FLASHING SIGNAL																												
CROSSING GATE																												
CROSSBUCK																												
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID																								
ILLUMINATED SIGN "NO LEFT TURN"				PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER																								
ILLUMINATED SIGN "NO RIGHT TURN"				RADIO INTERCONNECT																								
DETECTOR LOOP, TYPE I				RADIO REPEATER																								
PREFORMED DETECTOR LOOP				DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED																								
MICROWAVE VEHICLE SENSOR				GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)																								
VIDEO DETECTION CAMERA																												
VIDEO DETECTION ZONE																												
PAN, TILT, ZOOM CAMERA																												
WIRELESS DETECTOR SENSOR																												
WIRELESS ACCESS POINT																												

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

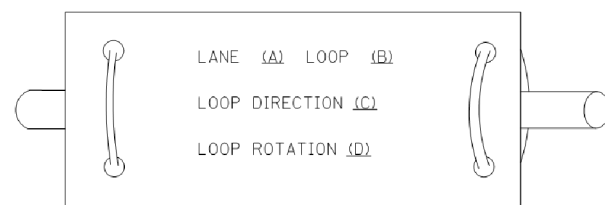
DISTRICT ONE	
STANDARD TRAFFIC SIGNAL DESIGN DETAILS	
SCALE: NONE	SHEET NO. 1 OF 7 SHEETS
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 62A15				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

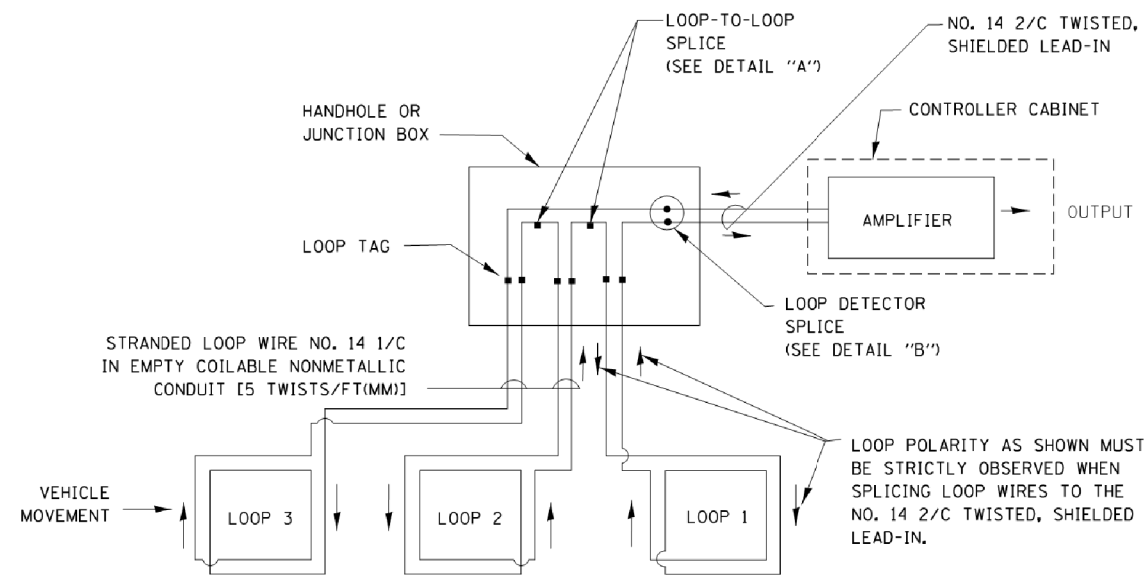
LOOP DETECTOR NOTES

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

LOOP LEAD-IN CABLE TAG

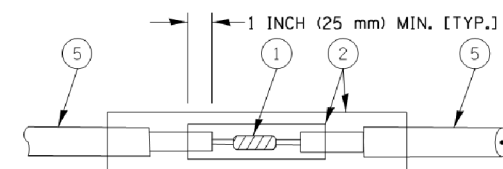


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

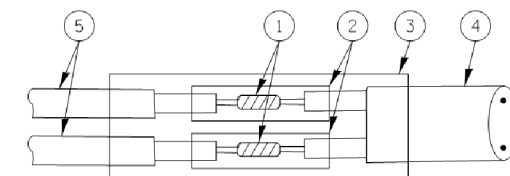


DETECTOR LOOP WIRING SCHEMATIC

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

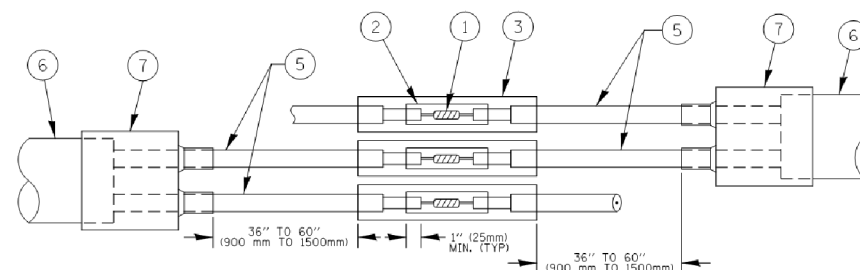


DETAIL "A"
LOOP-TO-LOOP SPLICE

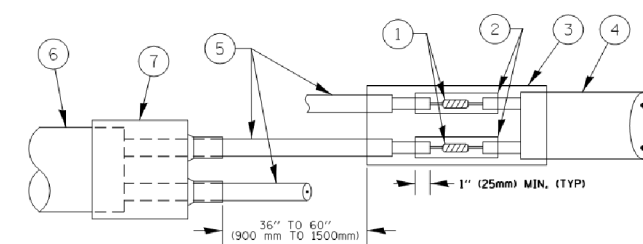


DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE



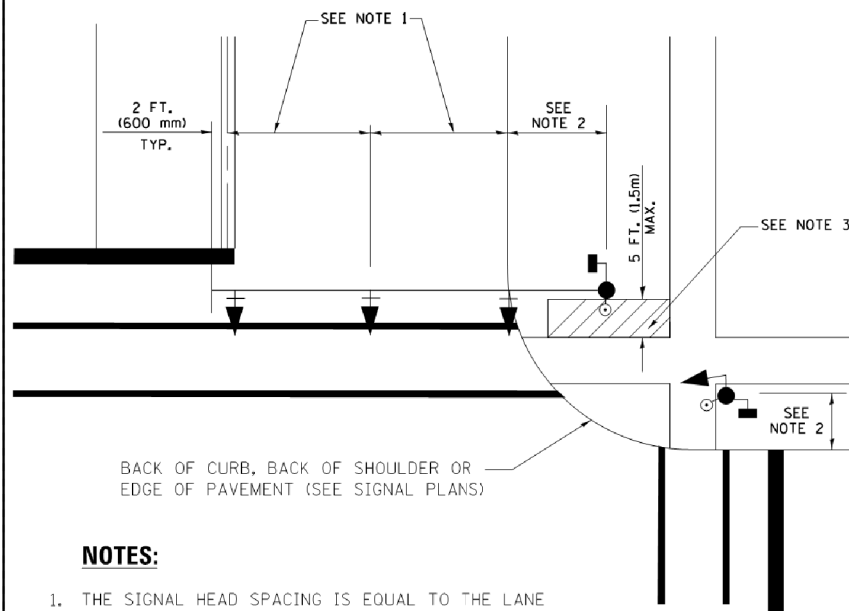
DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

PREFORMED LOOP

LOOP DETECTOR SPLICE

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

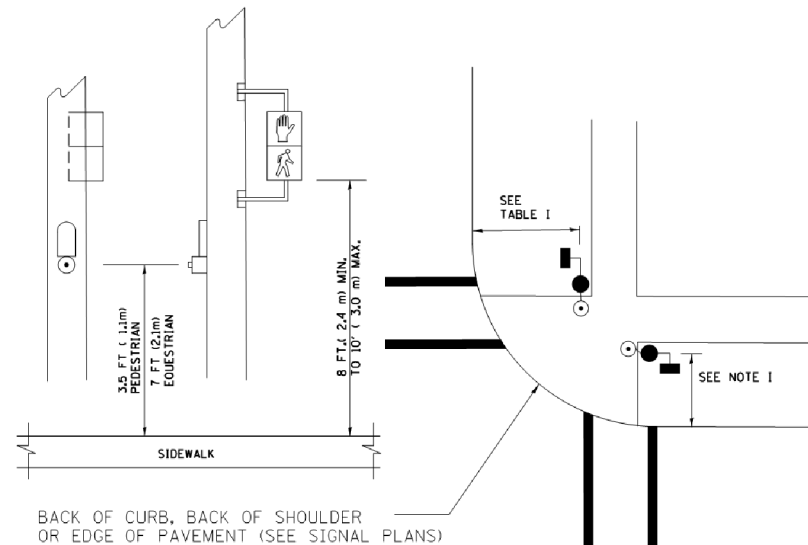
**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR
FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN
WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.**



NOTES:

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

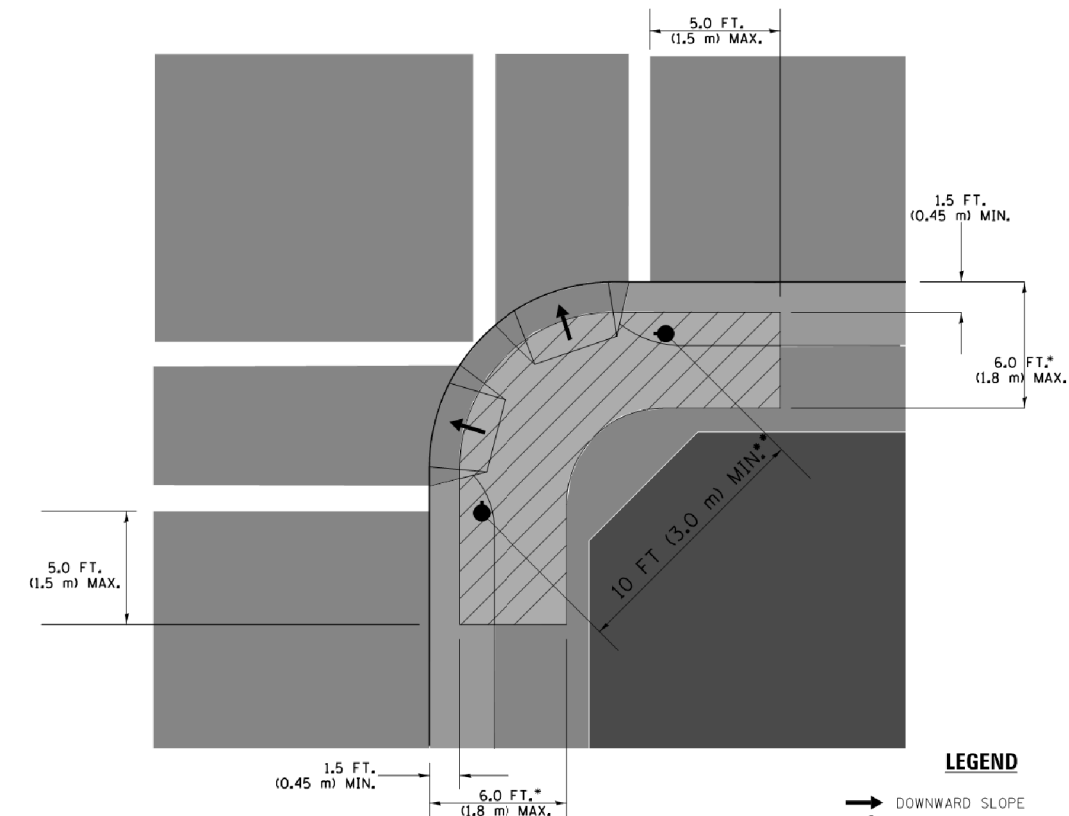
**PEDESTRIAN SIGNAL POST
AND
PEDESTRIAN PUSH BUTTON POST**



NOTES:

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

RECOMMENDED PUSHBUTTON LOCATIONS



LEGEND

- DOWNWARD SLOPE
- PEDESTRIAN PUSHBUTTON
- ▨ RECOMMENDED PUSHBUTTON LOCATIONS

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

NOTES:

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

TRAFFIC SIGNAL EQUIPMENT OFFSET

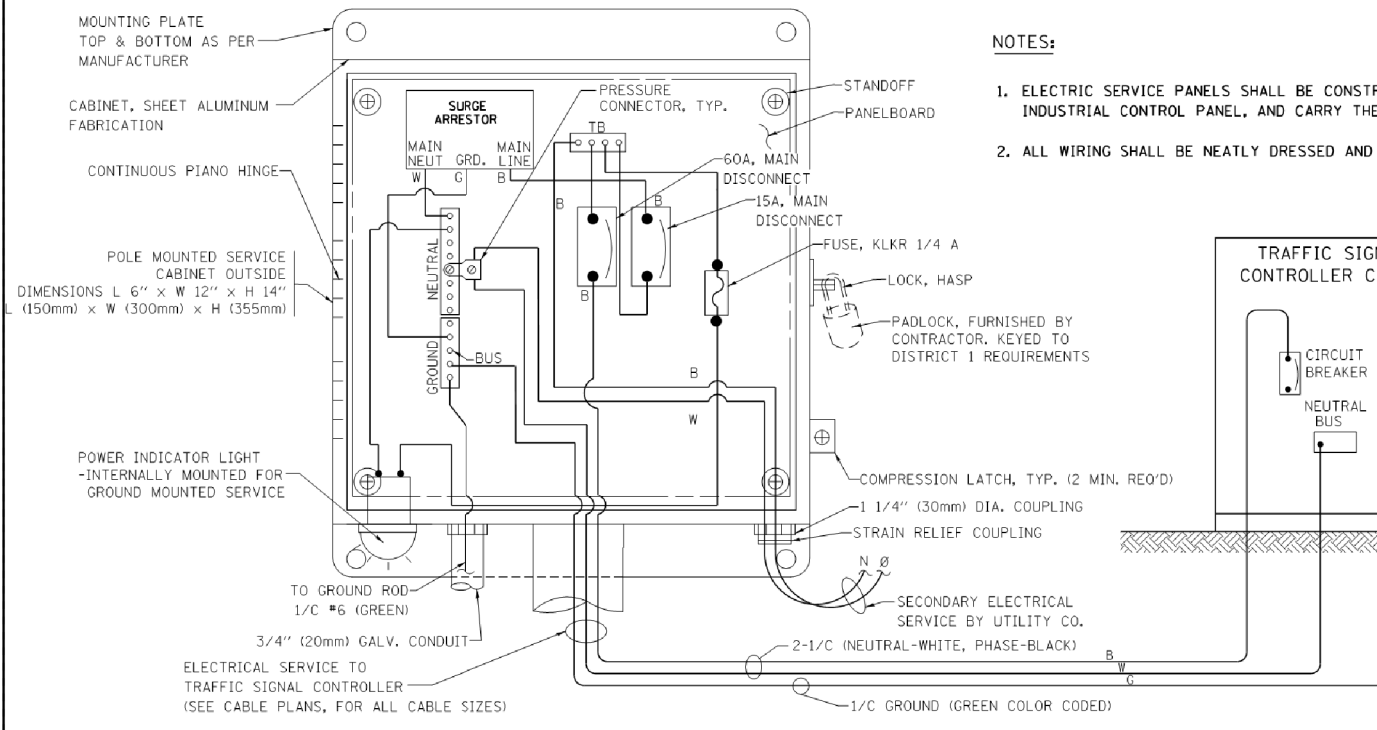
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10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

NOTES:

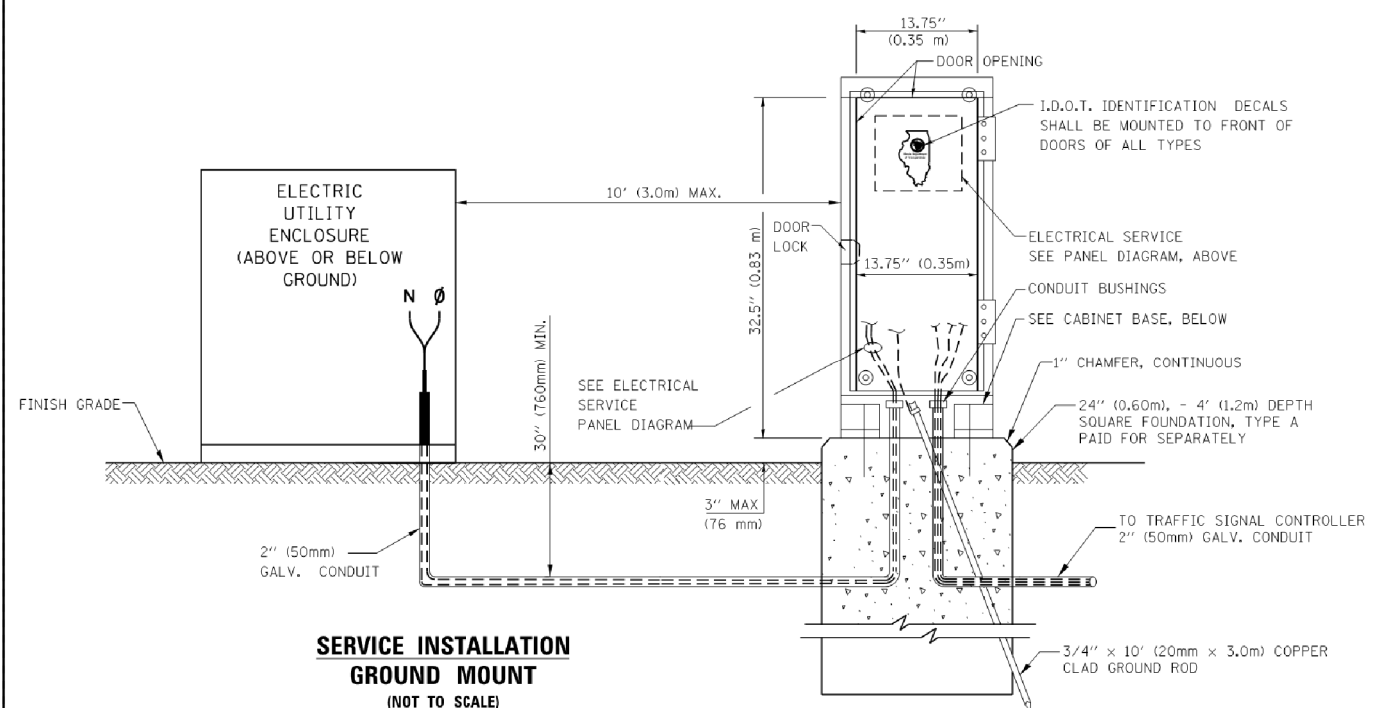
1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM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

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	2014-073TS	COOK	31	10
CONTRACT NO. 62A15				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

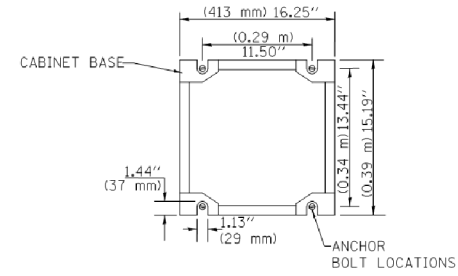


ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE) SERVICE INSTALLATION POLE MOUNT (SHOWN) (NOT TO SCALE)

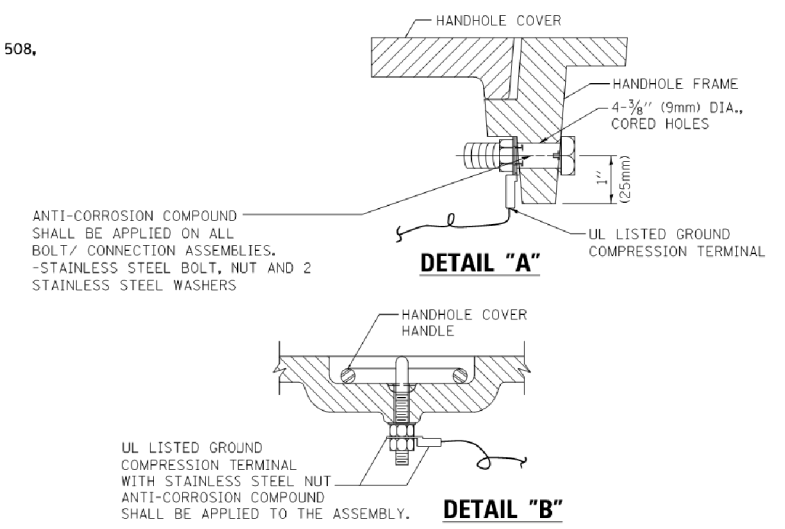
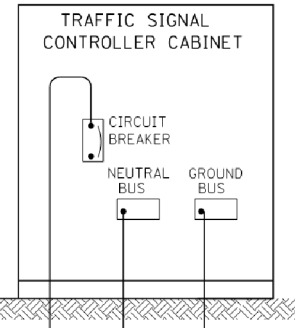


SERVICE INSTALLATION GROUND MOUNT (NOT TO SCALE)

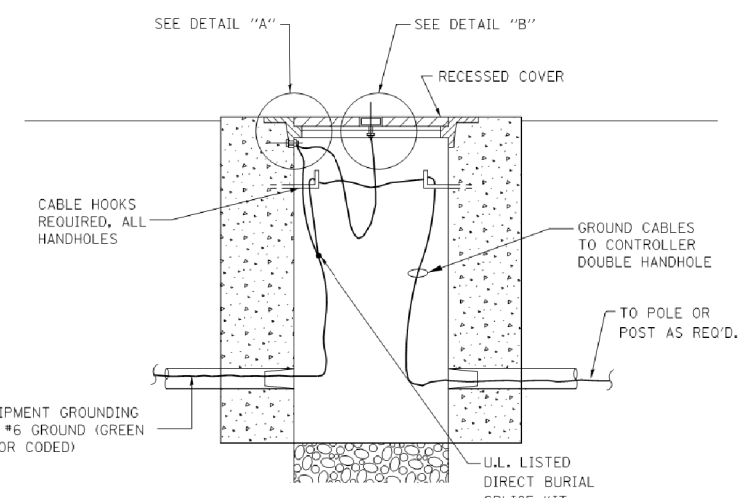
CABINET - BASE BOLT PATTERN (NOT TO SCALE)



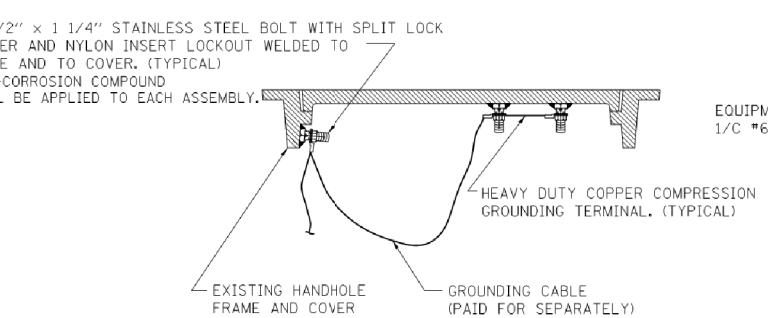
- NOTES:**
1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
 2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.



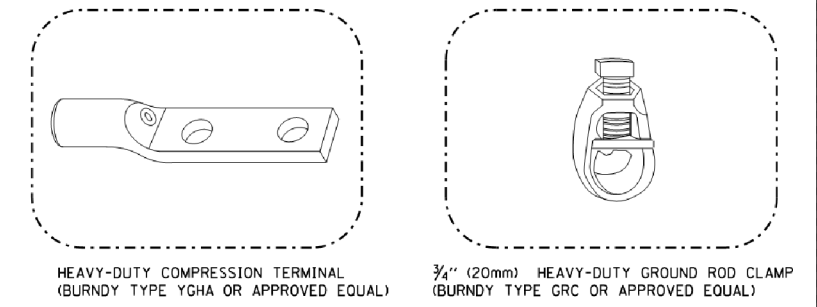
- NOTES:**
- GROUNDING SYSTEM**
1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN ENCLOSED. ALL GROUNDING CONDUCTORS SHALL BE BONDED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



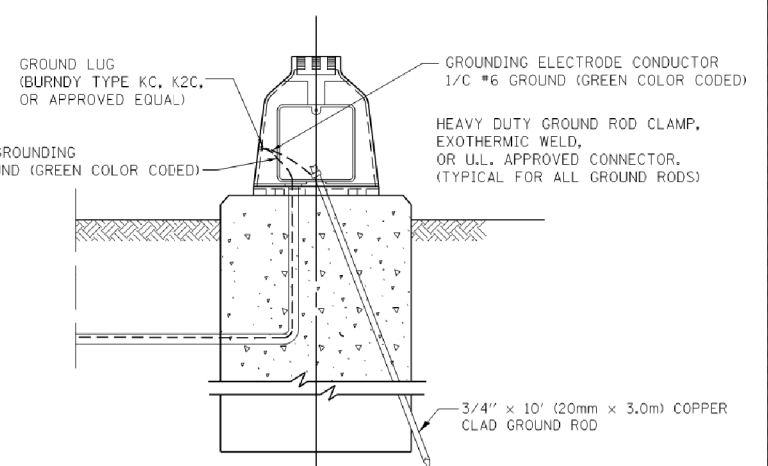
HANDHOLE COVER & FRAME - GROUNDING DETAIL (NOT TO SCALE)



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



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



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

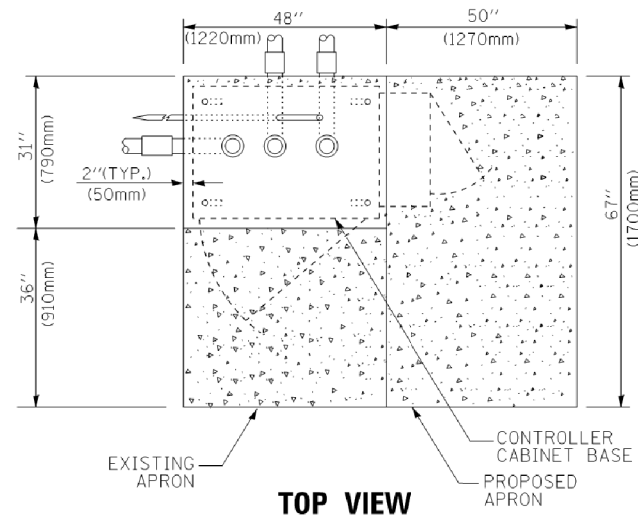
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

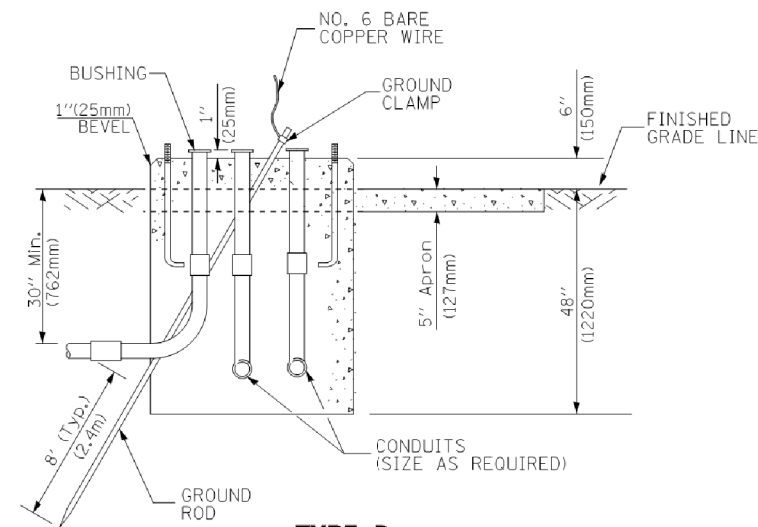
**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

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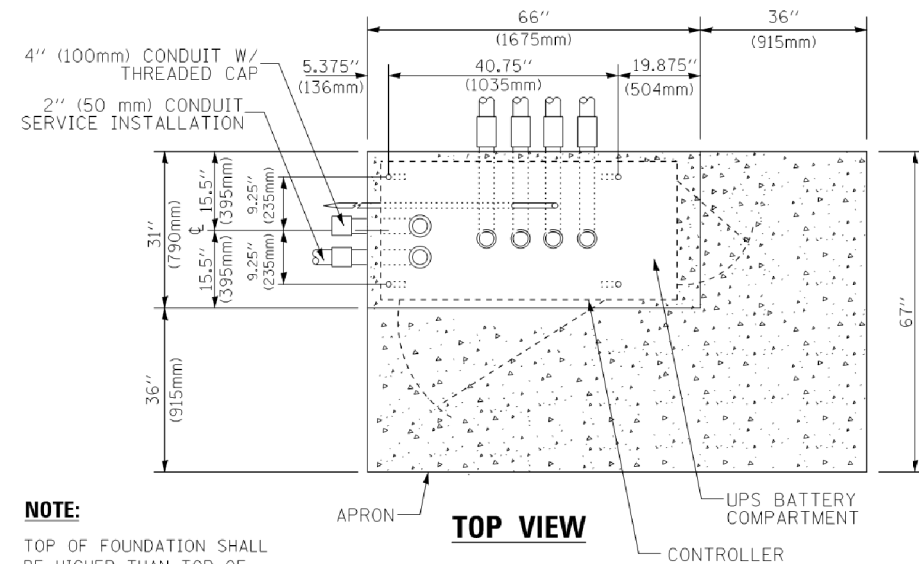
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	2014-073TS	COOK	31	11
CONTRACT NO. 62A15				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



TOP VIEW



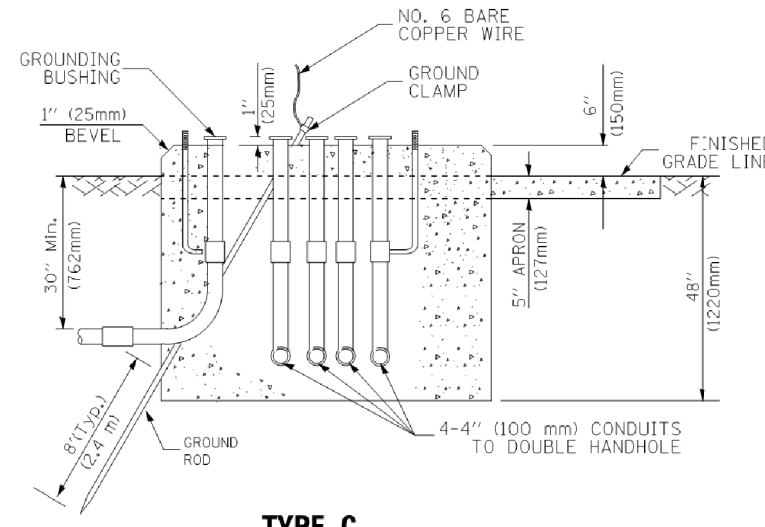
**TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**



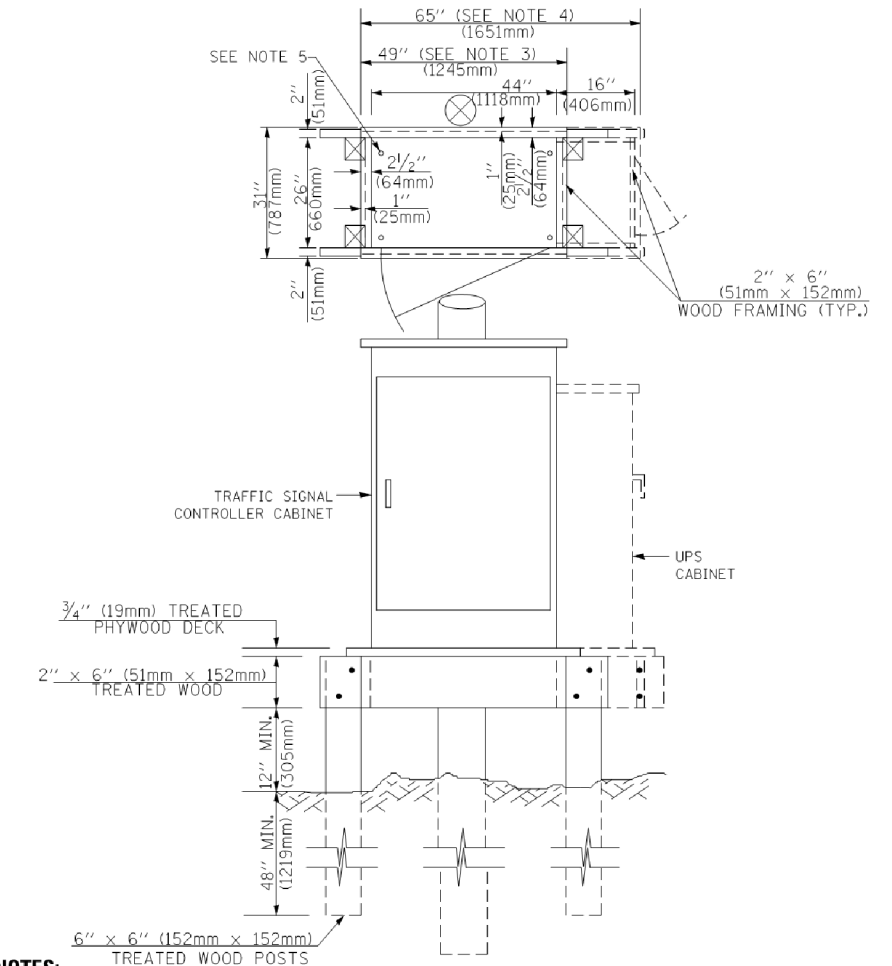
TOP VIEW

NOTE:

TOP OF FOUNDATION SHALL BE HIGHER THAN TOP OF DOUBLE HANDHOLE



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



NOTES:

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

**TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM**

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

CABLE SLACK

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

VERTICAL CABLE LENGTH

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

DEPTH OF FOUNDATION

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

NOTES:

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

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

FILE NAME = M:\pco\1481\2109 PTB 172-6 .IDD1 Ver. Signals\14-001 IL58 (Michael Honor. to Washington, Pa)\Design\Cad\Sheet Files\Detail_5.dgn

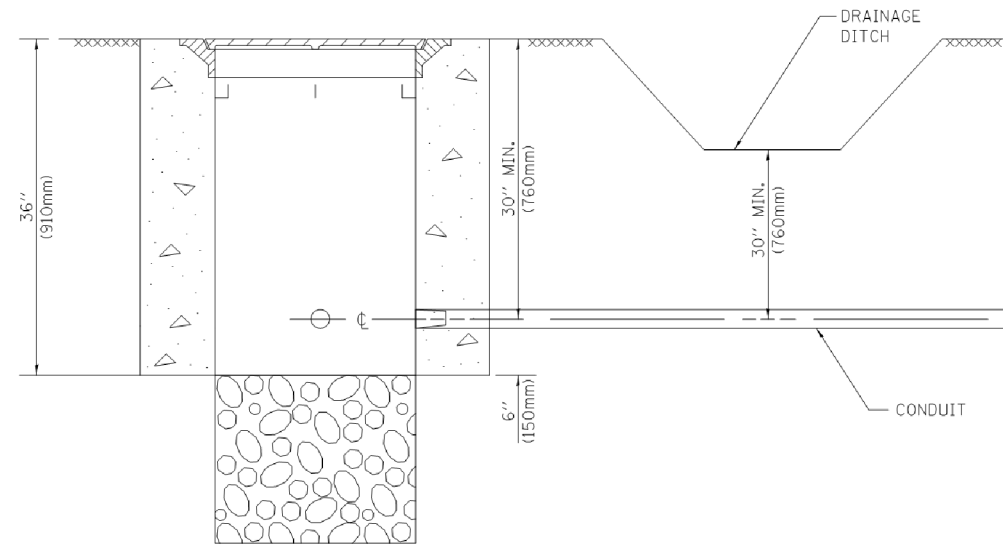
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	DATE - 10/22/14	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE SHEET NO. 5 OF 7 SHEETS STA. TO STA.

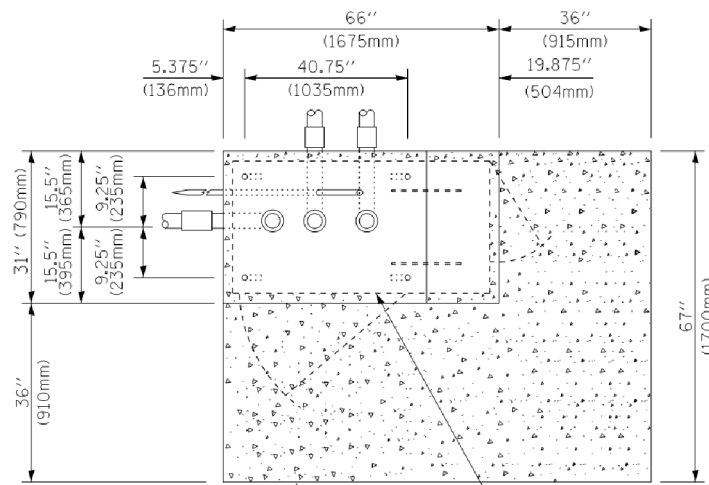
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	2014-073TS	COOK	31	12
CONTRACT NO. 62A15				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



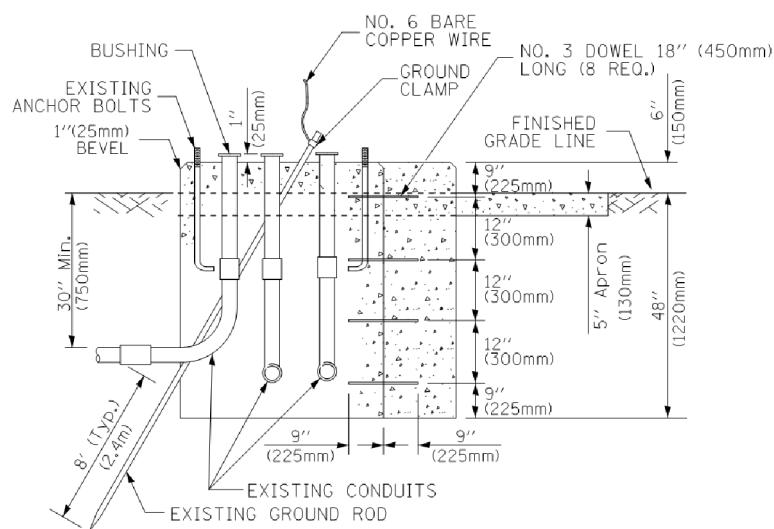
NOTES:

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

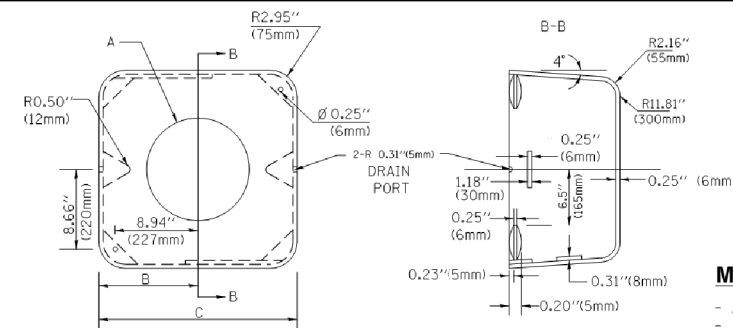
HANDHOLE WITH MINIMUM CONDUIT DEPTH
(NOT TO SCALE)



TOP VIEW
(NOT TO SCALE)



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



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

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

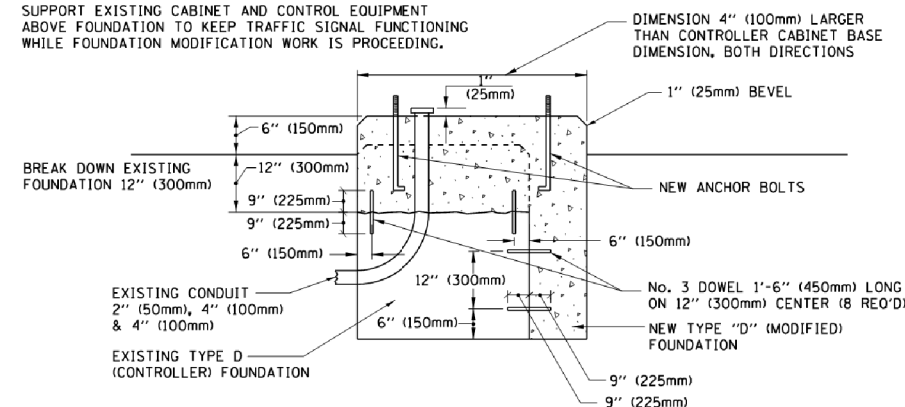
SHROUD

NOTES:

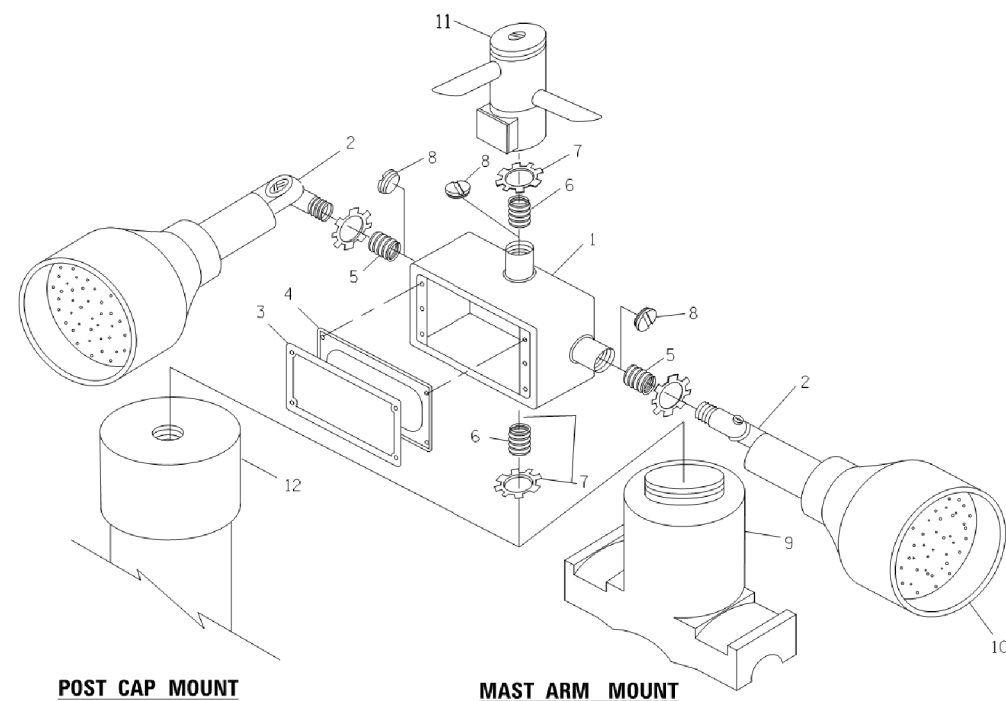
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

NOTE:

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



MODIFY EXISTING TYPE "D" FOUNDATION



POST CAP MOUNT

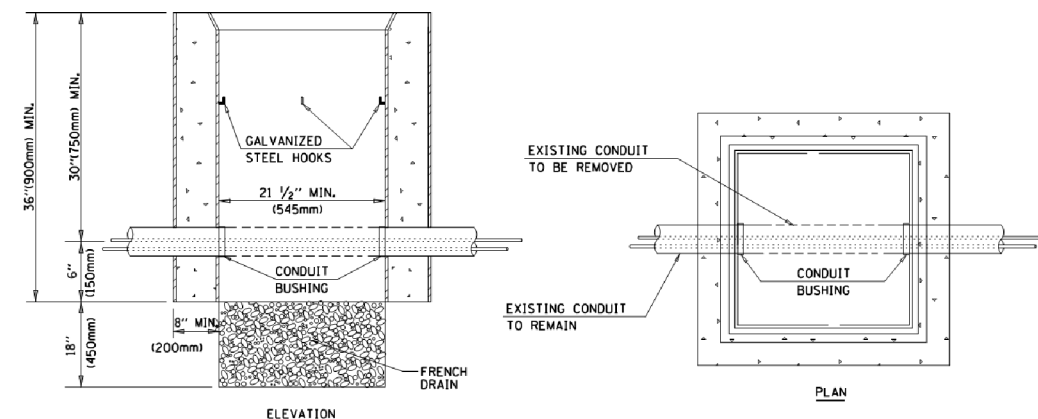
MAST ARM MOUNT

EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0,000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4" (19 mm) CLOSE NIPPLE
7	3/4" (19 mm) LOCKNUT
8	3/4" (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

NOTES:

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



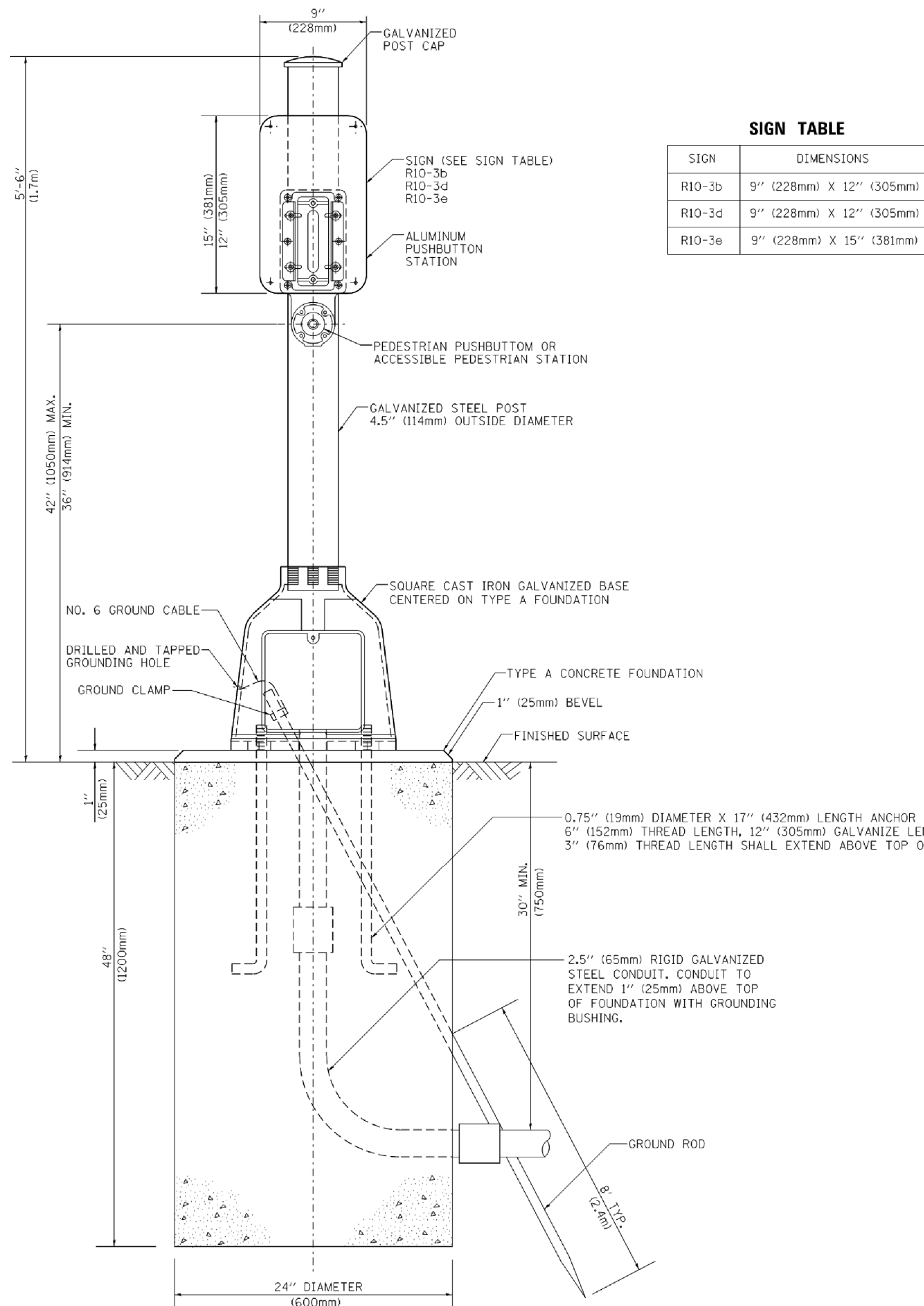
NOTES:

1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

HANDHOLE TO INTERCEPT EXISTING CONDUIT

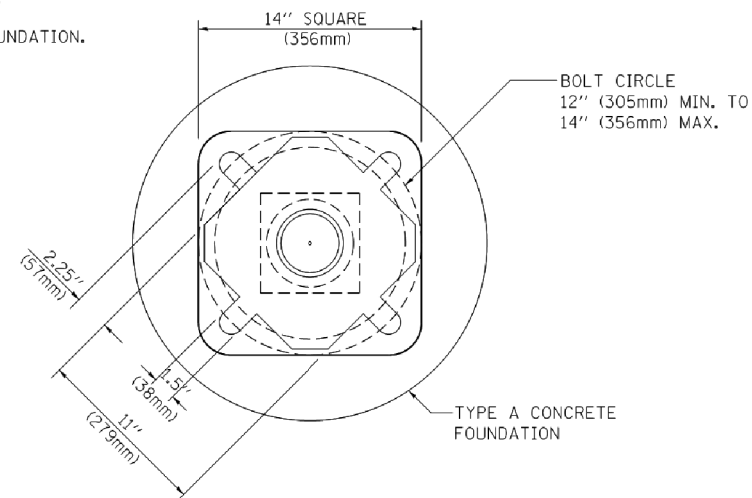
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	DATE - 10/22/14	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	2014-073TS	COOK	31	13
CONTRACT NO. 62A15				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



SIGN TABLE

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



BOLT PATTERN

PEDESTRIAN PUSH BUTTON POST, TYPE A

USER NAME = .USERNAME.	DESIGNED - KMM	REVISED -
	DRAWN - CDC	REVISED -
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PLOT DATE = 3/17/2015	DATE - 10/22/14	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE SHEET NO. 7 OF 7 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	2014-073TS	COOK	31	14
CONTRACT NO. 62A15				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

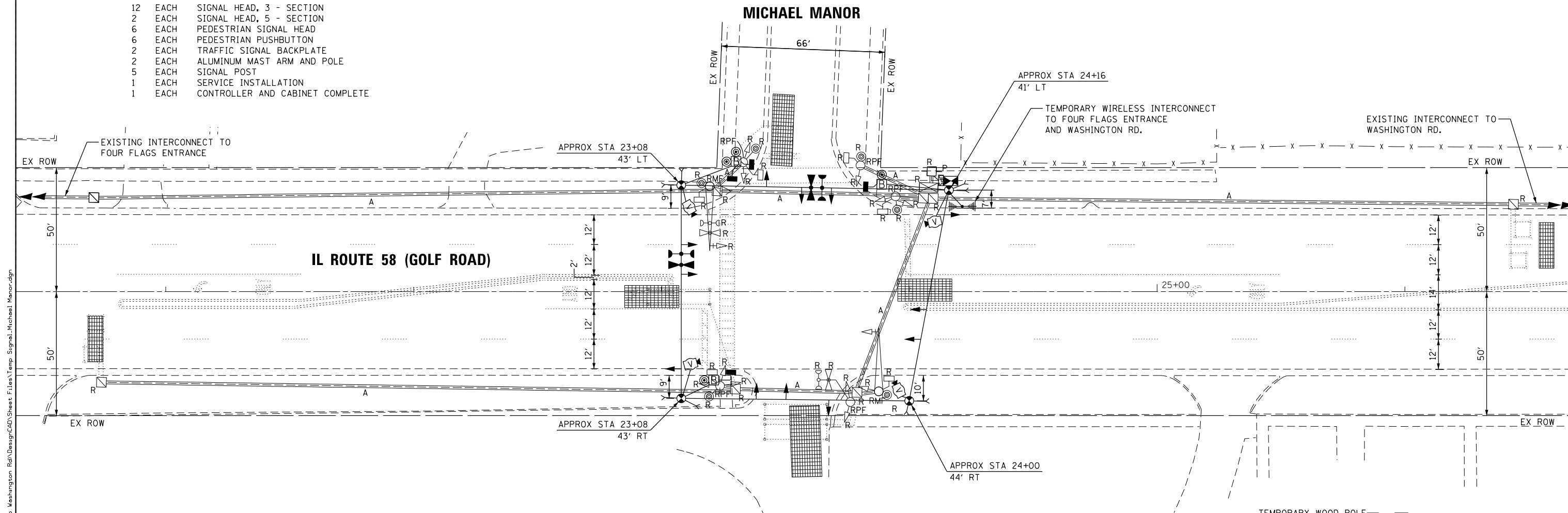
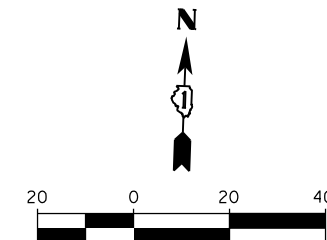
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS. AGENCY: VILLAGE OF NILES

- 2 EACH LIGHT DETECTOR AND BEACON
- 1 EACH LIGHT DETECTOR AMPLIFIER

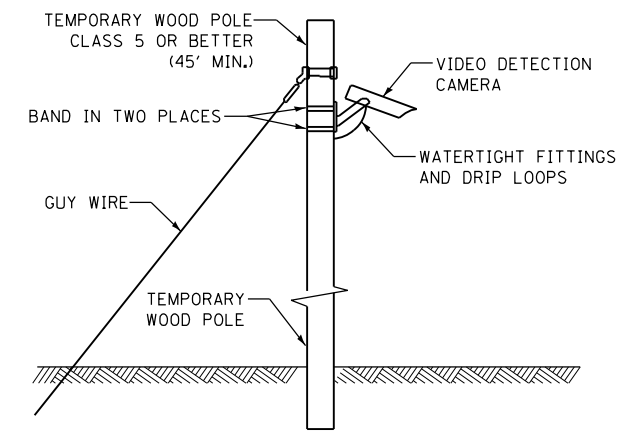
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 12 EACH SIGNAL HEAD, 3 - SECTION
- 2 EACH SIGNAL HEAD, 5 - SECTION
- 6 EACH PEDESTRIAN SIGNAL HEAD
- 6 EACH PEDESTRIAN PUSHBUTTON
- 2 EACH TRAFFIC SIGNAL BACKPLATE
- 2 EACH ALUMINUM MAST ARM AND POLE
- 5 EACH SIGNAL POST
- 1 EACH SERVICE INSTALLATION
- 1 EACH CONTROLLER AND CABINET COMPLETE



TEMPORARY BARREL MOUNTED PUSHBUTTONS AND PEDESTRIAN HEADS TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

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



TEMPORARY VIDEO DETECTION MOUNTING DETAIL
(NOT TO SCALE)

TS #11170

FILE NAME = M:\pco\1481\2109 PTB 172-6 [DOT] Var. Signals\14-001 IL58 (Michael Manor to Washington Rd)\Design\CD\Sheet Files\Temp_Signal_Michael Manor.dgn

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

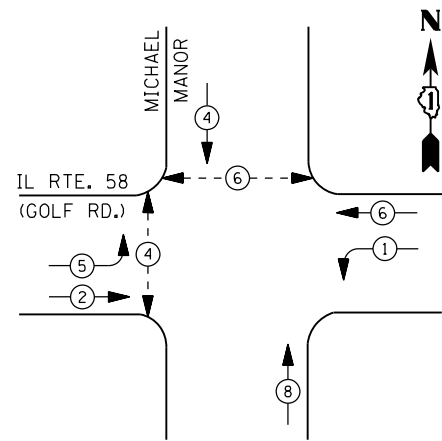
**TEMPORARY TRAFFIC SIGNAL INSTALLATION & REMOVAL PLAN
IL ROUTE 58 (GOLF ROAD) AT MICHAEL MANOR**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	2014-073TS	COOK	31	16
CONTRACT NO. 62A15				
ILLINOIS FED. AID PROJECT				

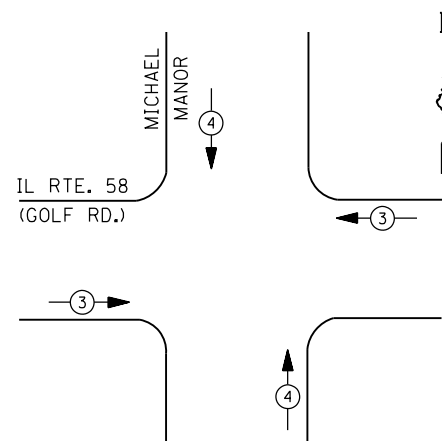


TEMPORARY CONTROLLER SEQUENCE



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

TEMPORARY PHASE DESIGNATION DIAGRAM



TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		

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

TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	12		17	0.50	102
(YELLOW)	12		25	0.25	75
(GREEN)	12		15	0.25	45
ARROW	8		12	0.10	10
PED. SIGNAL	4		25	1.00	100
CONTROLLER	1		100	1.00	100
ILLUM. SIGN			25	0.05	
VIDEO SYSTEM	1		150	1.00	150
UPS	1		25	1.00	25
FLASHER LED					
TOTAL =					607

ENERGY COSTS- BILLED TO: VILLAGE OF NILES
1000 CIVIC CENTER DR.
NILES, IL 60714

ENERGY SUPPLY - CONTACT TERRI BLECK
PHONE 847-816-5239
COMMONWEALTH EDISON

USER NAME = .USERNAME.	DESIGNED - KMM	REVISED -
PLOT SCALE = 2.0000' / in.	DRAWN - CDC	REVISED -
PLOT DATE = 3/17/2015	CHECKED - DW	REVISED -
	DATE - 10/22/14	REVISED -

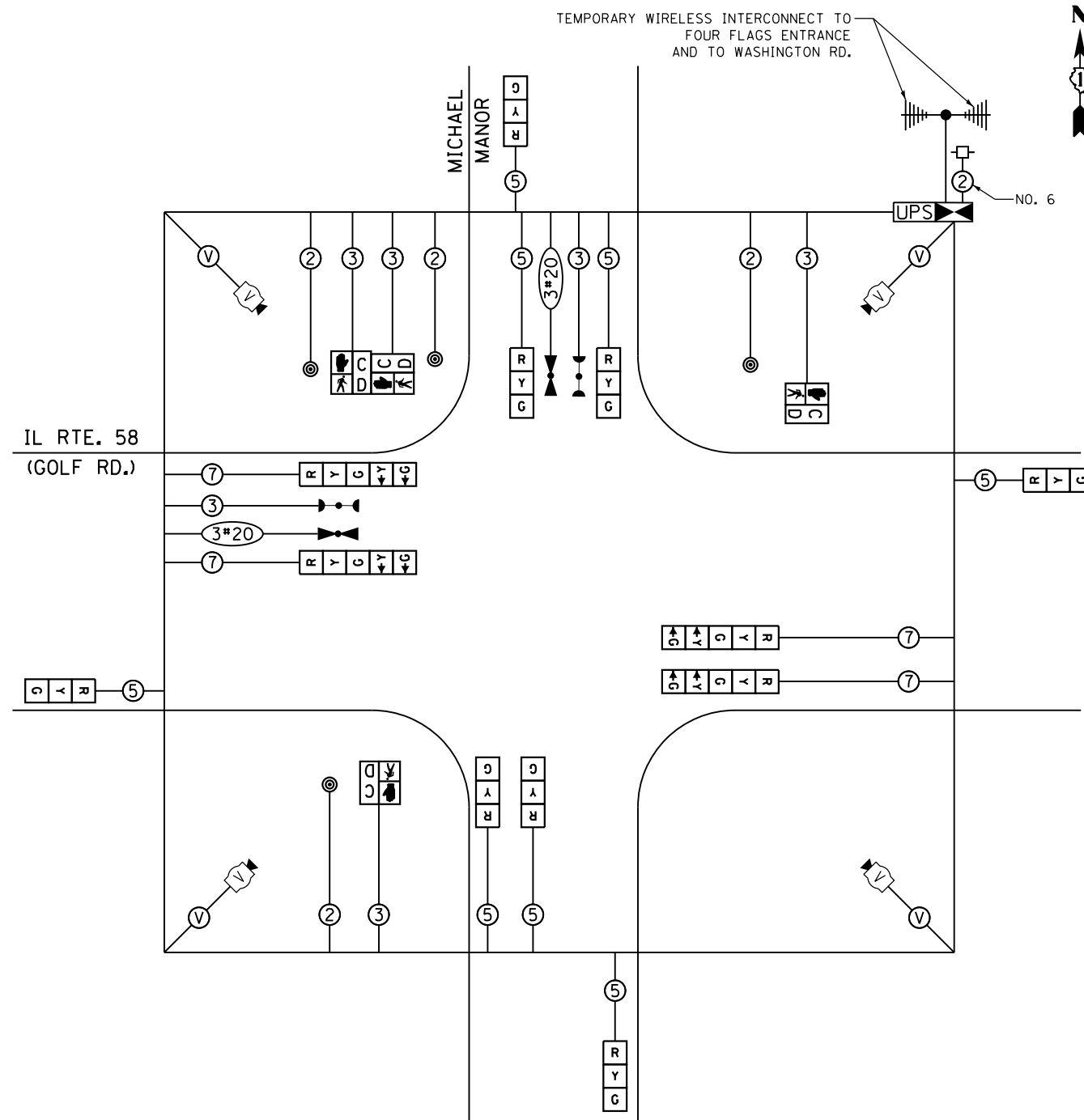
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM
& TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL ROUTE 58 (GOLF ROAD) AT MICHAEL MANOR**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	2014-073TS	COOK	31	17
CONTRACT NO. 62A15				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

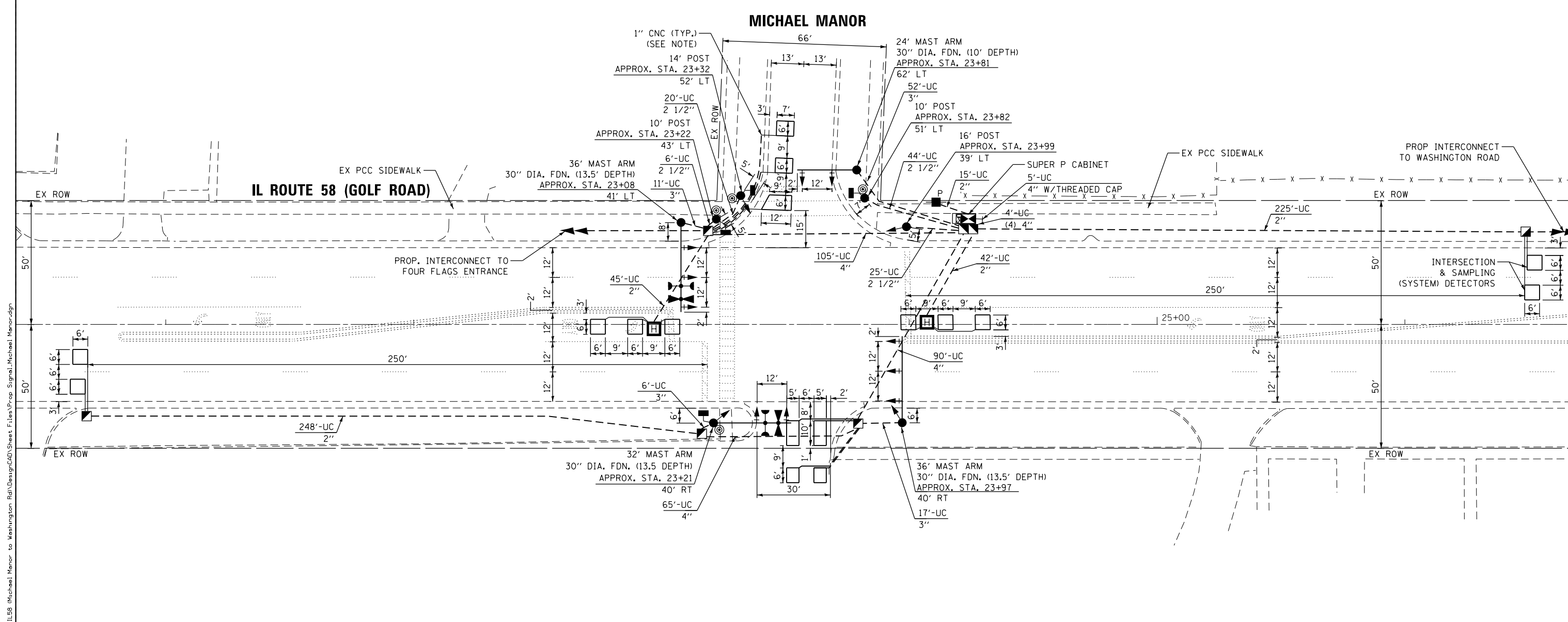
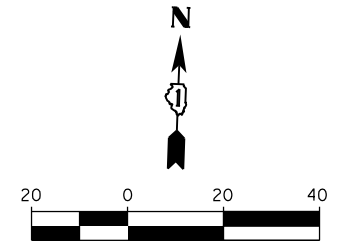
TS #11170



TEMPORARY CABLE PLAN

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

FILE NAME = M:\pco\1481\2109 PTB 172-6 .IDD Var. Signals\14-001 IL58 (Michael Manor to Washington Rd)\Design\CD\Sheet Files\Cable Plan_Temp_Michael Manor.dgn



THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE CURRENT MODEL "OPTICOM" TO MATCH THE EXISTING VILLAGE SYSTEM.

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

NOTE: EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.

FILE NAME = M:\pco\1481\2109 PTB 172-6 [DOT] Var - Signals\14-001 IL58 (Michael Manor to Washington Rd)\Design\CD\Sheet Files\Prop Signal_Michael Manor.dgn

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

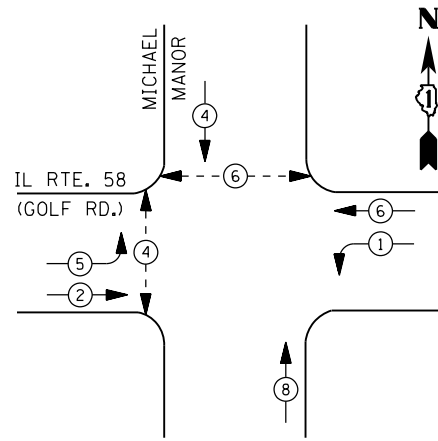
**TRAFFIC SIGNAL MODERNIZATION PLAN
IL ROUTE 58 (GOLF ROAD) AT MICHAEL MANOR**

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

TS #11170			
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS
339	2014-073TS	COOK	31
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CONTRACT NO. 62A15			
ILLINOIS FED. AID PROJECT			

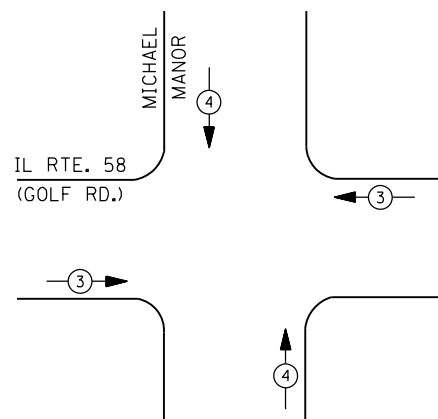


PROPOSED CONTROLLER SEQUENCE



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

PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



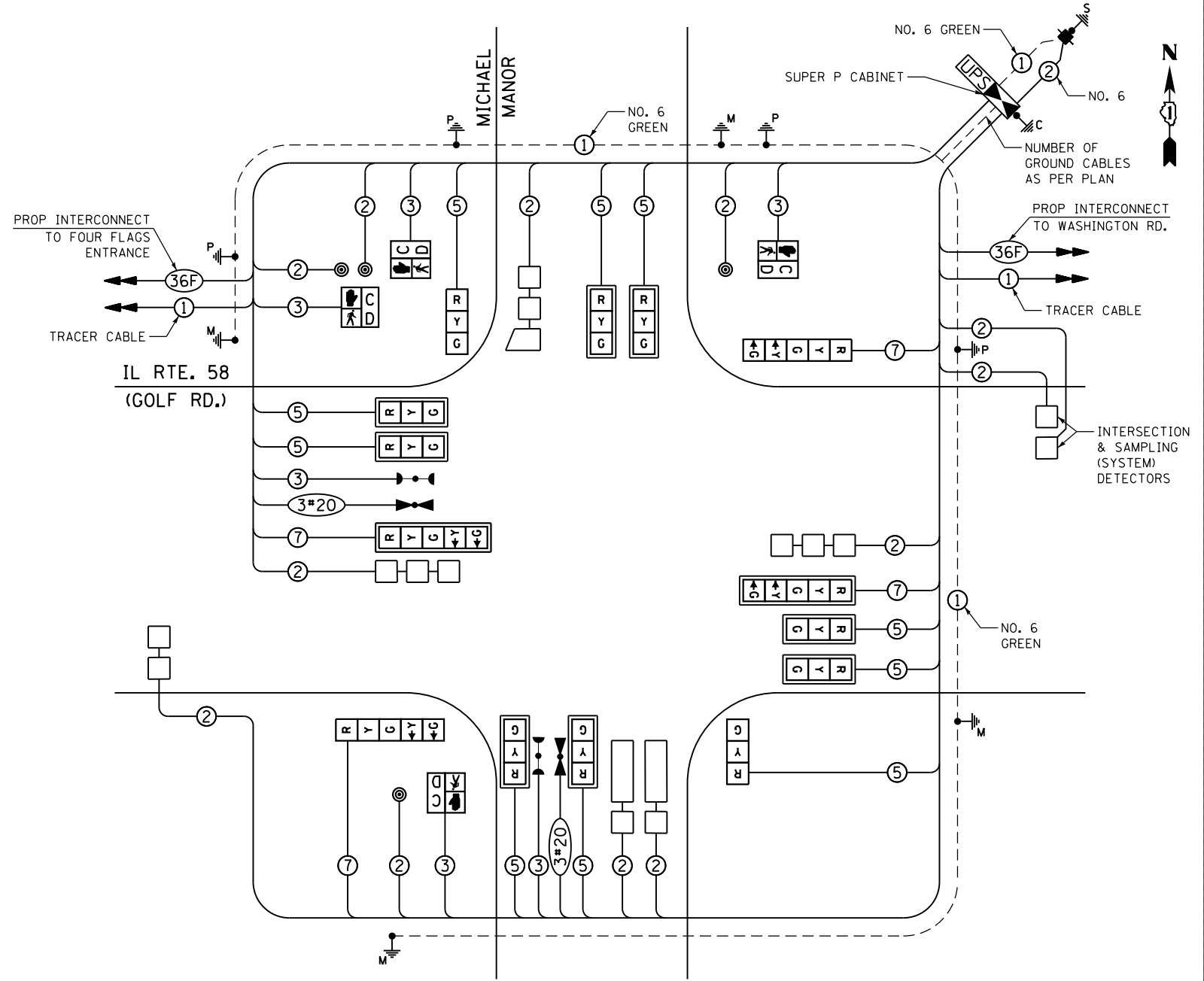
EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	←	↗

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

TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	14		17	0.50	119
(YELLOW)	14		25	0.25	88
(GREEN)	14		15	0.25	53
ARROW	8		12	0.10	10
PED. SIGNAL	4		25	1.00	100
CONTROLLER	1		100	1.00	100
ILLUM. SIGN			25	0.05	
VIDEO SYSTEM					
UPS	1		25	1.00	25
FLASHER LED					
TOTAL =					495

ENERGY COSTS- BILLED TO: VILLAGE OF NILES
1000 CIVIC CENTER DR.
NILES, IL 60714

ENERGY SUPPLY - CONTACT TERRI BLECK
 PHONE 847-816-5239
COMMONWEALTH EDISON



CABLE PLAN

THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE CURRENT MODEL "OPTICOM" TO MATCH THE EXISTING VILLAGE SYSTEM.

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

TS #11170

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM & EMERGENCY VEHICLE PREEMPTION SEQUENCE IL ROUTE 58 (GOLF ROAD) AT MICHAEL MANOR

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	2014-073TS	COOK	31	19
CONTRACT NO. 62A15				

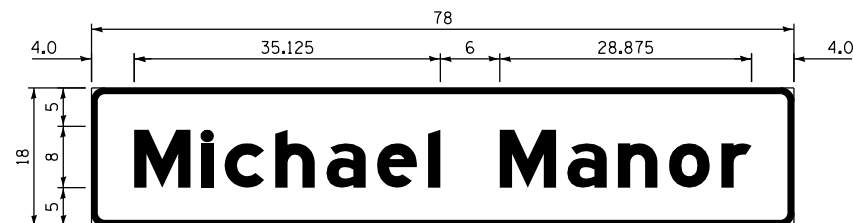
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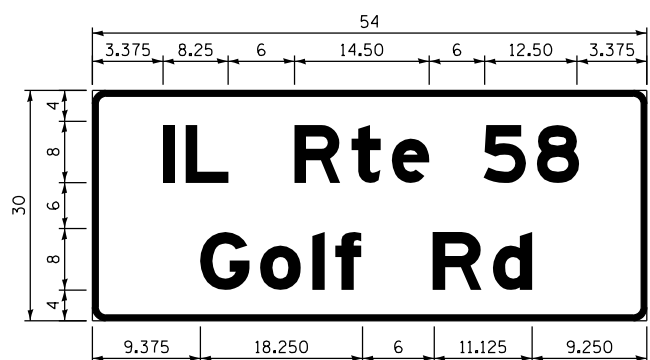
SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.

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

SIGN PANEL – TYPE 1 OR TYPE 2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	9.75	2	ZZ	2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	11.25	2	ZZ	2

NOTE: FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGNS DETAIL

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY.
SIGN PANEL - TYPE 2	SQ FT	42
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	575
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	95
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	86
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	281
HANDHOLE	EACH	5
HEAVY-DUTY HANDHOLE	EACH	2
DOUBLE HANDHOLE	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	611
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1078
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1760
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	680
ELECTRIC CABLE IN CONDUIT, LEAD-IN NO. 14 1 PAIR	FOOT	1574
ELECTRIC CABLE IN CONDUIT, SERVICE NO. 6 2 C	FOOT	45
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	650
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	16
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	50.5
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	10
INDUCTIVE LOOP DETECTOR	EACH	8
DETECTOR LOOP, TYPE I	FOOT	583
* LIGHT DETECTOR	EACH	2
* LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	4
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	5
REMOVE EXISTING DOUBLE HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	8
* EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	454
FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
TEMPORARY INFORMATION SIGNING	SQ FT	25.7
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

* 100% COST TO THE VILLAGE OF NILES

THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE CURRENT MODEL "OPTICOM" TO MATCH THE EXISTING VILLAGE SYSTEM.

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

TS #11170

USER NAME = .USERNAME.	DESIGNED - KMM	REVISED -
	DRAWN - CDC	REVISED -
PLOT SCALE = 2.0000' / in.	CHECKED - DW	REVISED -
PLOT DATE = 3/20/2015	DATE - 10/22/14	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MAST ARM MOUNTED STREET NAME SIGNS
AND SCHEDULE OF QUANTITIES
IL ROUTE 58 (GOLF ROAD) AT MICHAEL MANOR**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	2014-073TS	COOK	31	20
CONTRACT NO. 62A15				

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

ILLINOIS FED. AID PROJECT

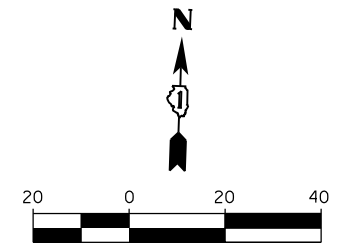
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS. AGENCY: VILLAGE OF NILES

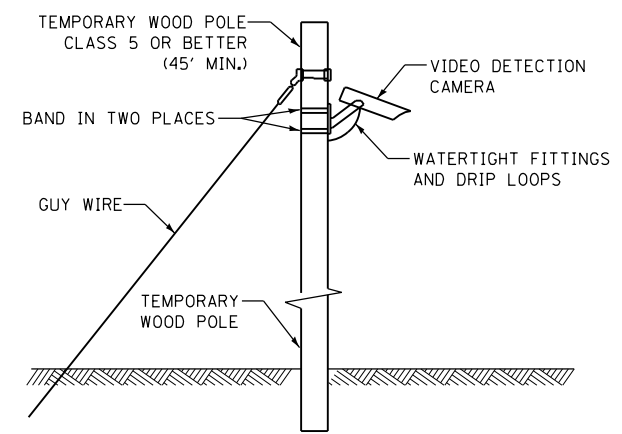
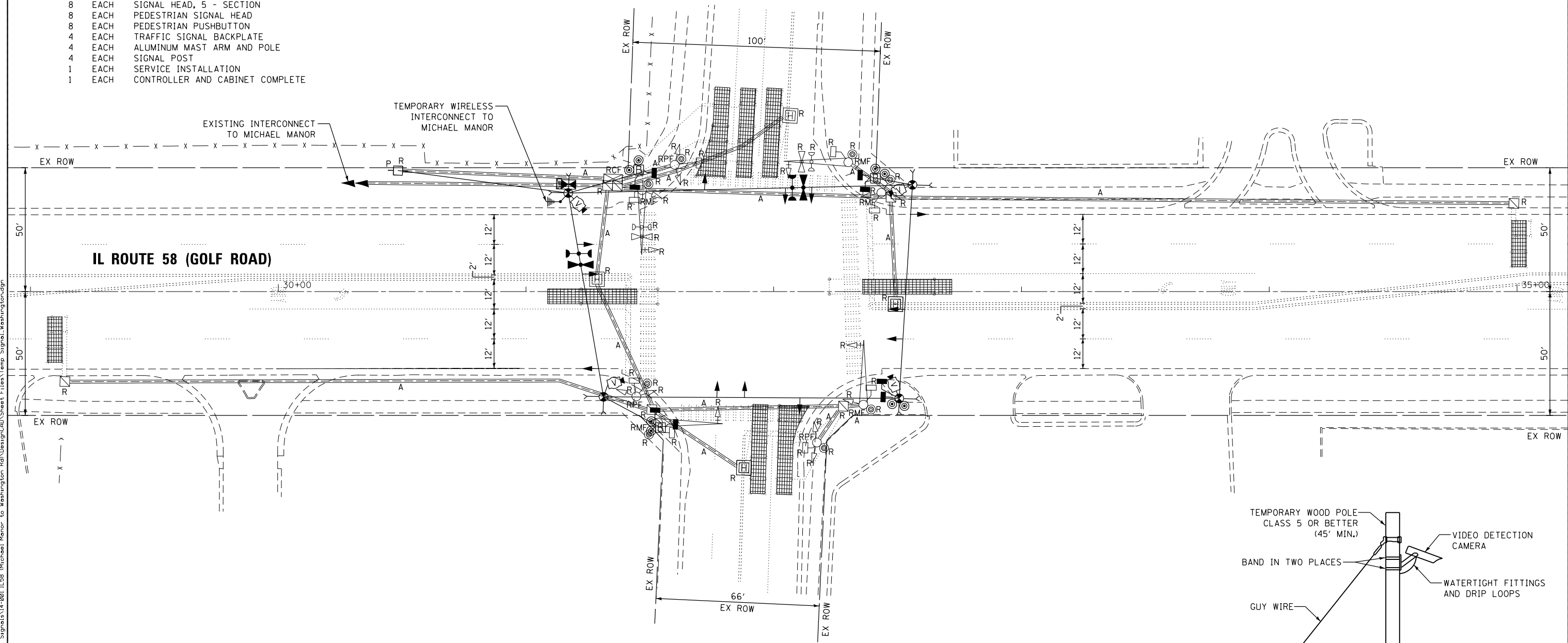
- 2 EACH LIGHT DETECTOR AND BEACON
- 1 EACH LIGHT DETECTOR AMPLIFIER

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

- 6 EACH SIGNAL HEAD, 3 - SECTION
- 8 EACH SIGNAL HEAD, 5 - SECTION
- 8 EACH PEDESTRIAN SIGNAL HEAD
- 8 EACH PEDESTRIAN PUSHBUTTON
- 4 EACH TRAFFIC SIGNAL BACKPLATE
- 4 EACH ALUMINUM MAST ARM AND POLE
- 4 EACH SIGNAL POST
- 1 EACH SERVICE INSTALLATION
- 1 EACH CONTROLLER AND CABINET COMPLETE



WASHINGTON ROAD



TEMPORARY BARREL MOUNTED PUSHBUTTONS AND PEDESTRIAN HEADS TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

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

TEMPORARY VIDEO DETECTION MOUNTING DETAIL
(NOT TO SCALE)

TS #2850

FILE NAME = M:\pco\1481\2109 PTB 172-6 .DDT Ver. Signals\14-001 IL58 (Michael Manor to Washington, Rab)\Design\CAD\Sheet_Files\Temp_Signal_Washington.dgn

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	DRAWN - CDC	REVISED -
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PLOT DATE = 3/17/2015	DATE - 10/22/14	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

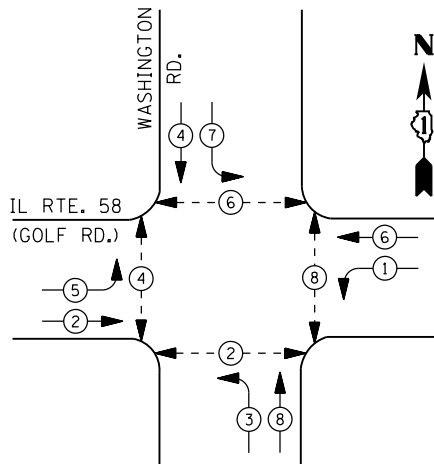
**TEMPORARY TRAFFIC SIGNAL INSTALLATION & REMOVAL PLAN
IL ROUTE 58 (GOLF ROAD) AT WASHINGTON ROAD**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	2014-073TS	COOK	31	21
CONTRACT NO. 62A15				
ILLINOIS FED. AID PROJECT				

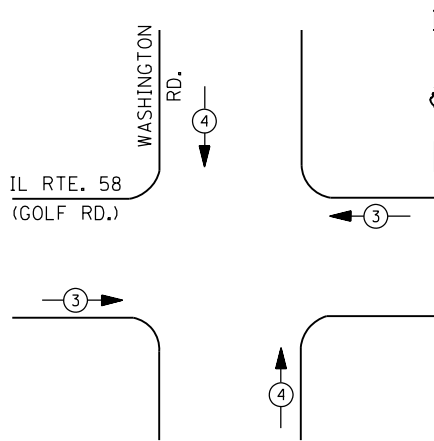


TEMPORARY CONTROLLER SEQUENCE



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

TEMPORARY PHASE DESIGNATION DIAGRAM



TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		

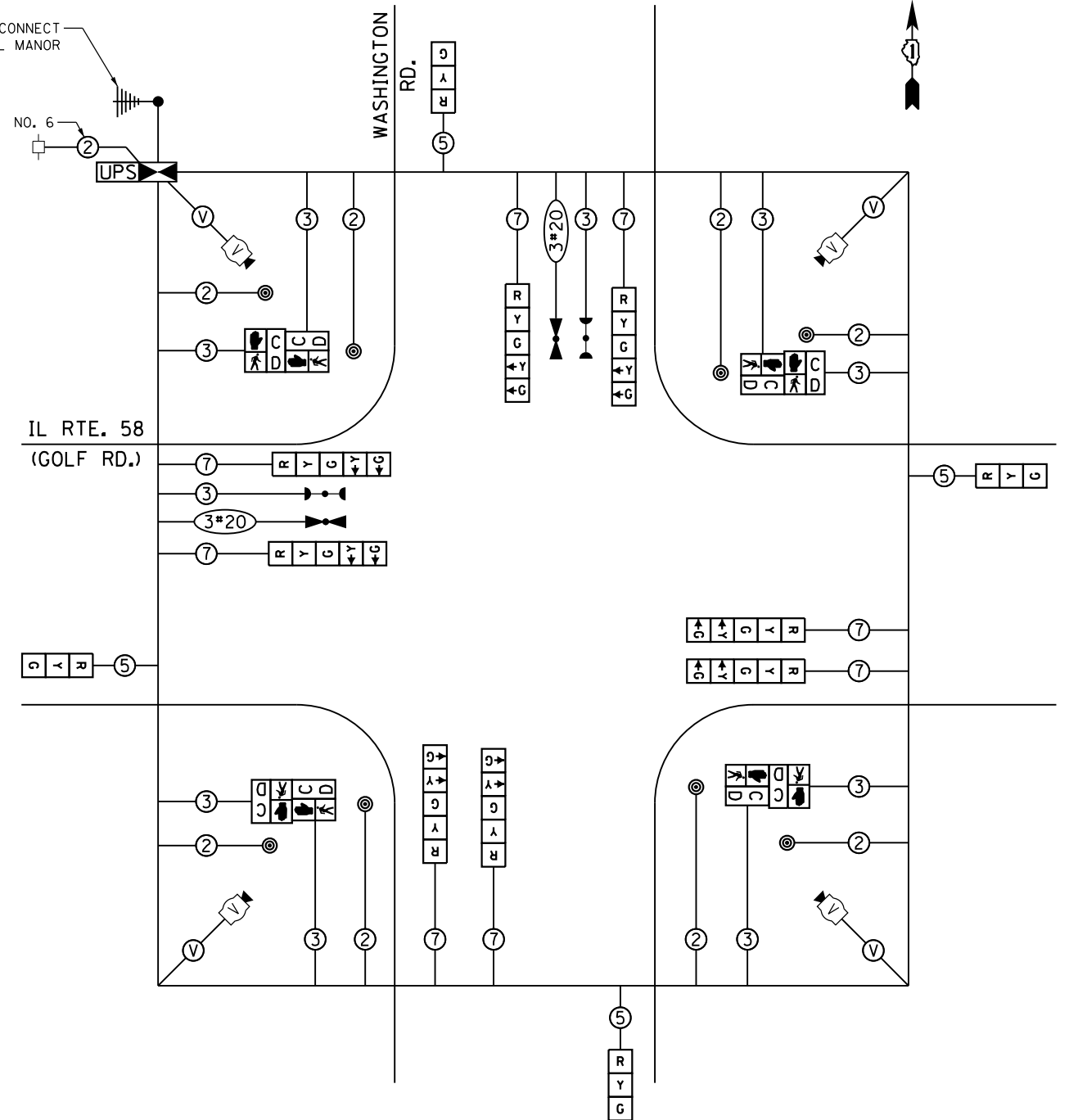
**I. D. O. T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	12		17	0.50	102
(YELLOW)	12		25	0.25	75
(GREEN)	12		15	0.25	45
ARROW	16		12	0.10	20
PED. SIGNAL	8		25	1.00	200
CONTROLLER	1		100	1.00	100
ILLUM. SIGN			25	0.05	
VIDEO SYSTEM	1		150	1.00	150
UPS	1		25	1.00	25
FLASHER LED					
TOTAL =					717

ENERGY COSTS- BILLED TO: VILLAGE OF NILES
1000 CIVIC CENTER DR.
NILES, IL 60714

ENERGY SUPPLY - CONTACT TERRI BLECK
PHONE 847-816-5239
COMMONWEALTH EDISON

TEMPORARY WIRELESS INTERCONNECT
MICHAEL MANOR



TEMPORARY CABLE PLAN

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

TS #2850

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

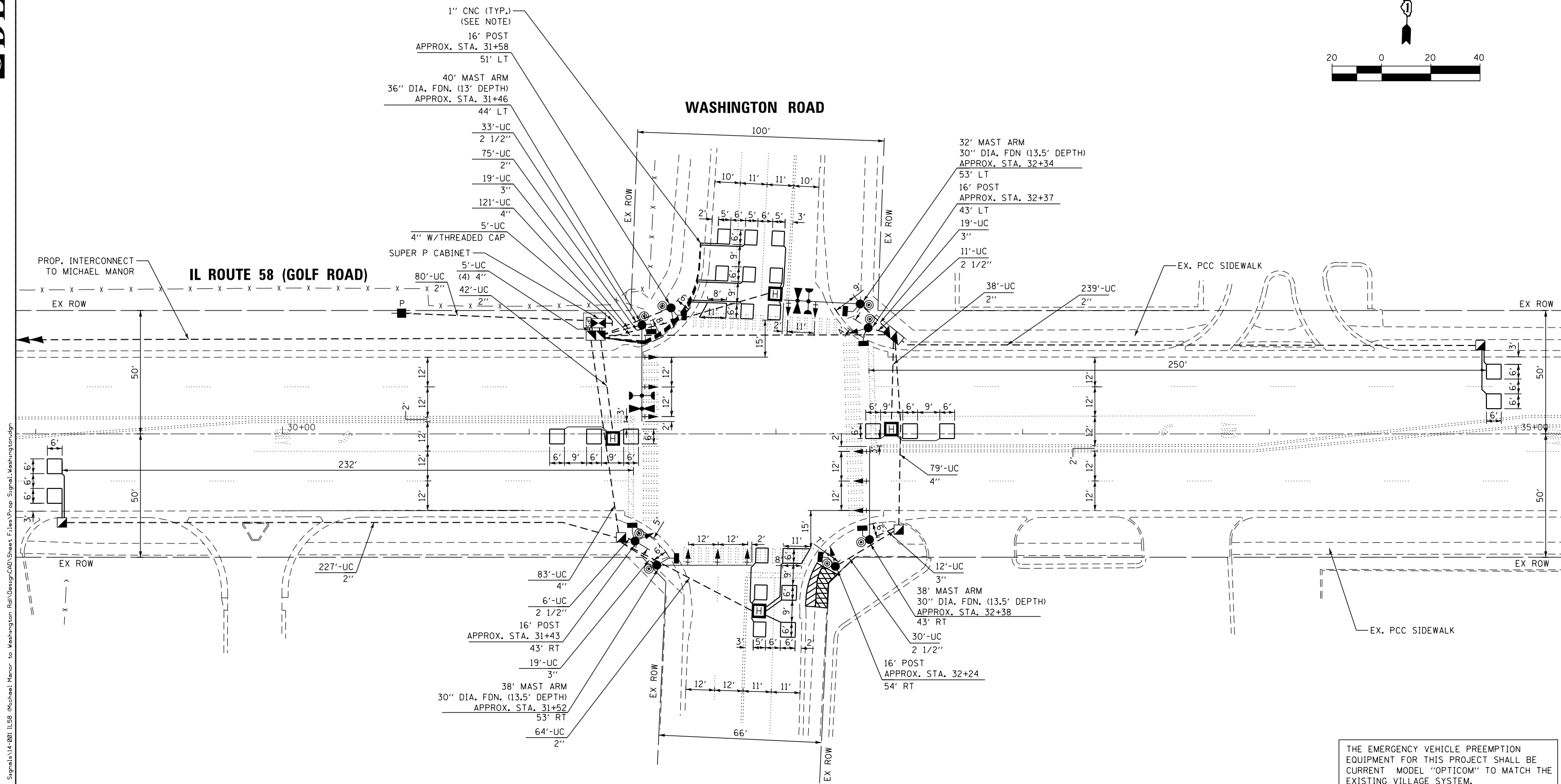
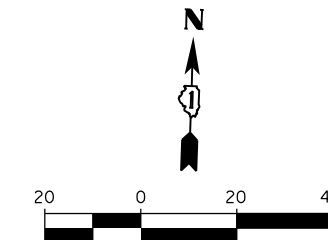
**TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM
& TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL ROUTE 58 (GOLF ROAD) AT WASHINGTON ROAD**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	2014-073TS	COOK	31	22
CONTRACT NO. 62A15				

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

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

FILE NAME = M:\pco\1481\2109 PTB 72-6 .IDOT Var. Signals\14-001 IL58 (Michael Manor to Washington Rd)\Design\CAD\Sheet Files\Cable Plan_Temp_Washington.dgn



THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE CURRENT MODEL "OPTICOM" TO MATCH THE EXISTING VILLAGE SYSTEM.

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

NOTE: EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.

- LEGEND**
- PROPOSED PORTLAND CEMENT CONCRETE SIDEWALK, 5"
 - REMOVE AND REPLACE SIDEWALK

TS #2850

FILE NAME = M:\pco\1481\2109 PTB 172-6 [DDT] Var Ver Signals\14-001 IL58 (Michael Manor to Washington Rd)\Design\CD\Sheet Files\Prop Signal_Washington.dgn

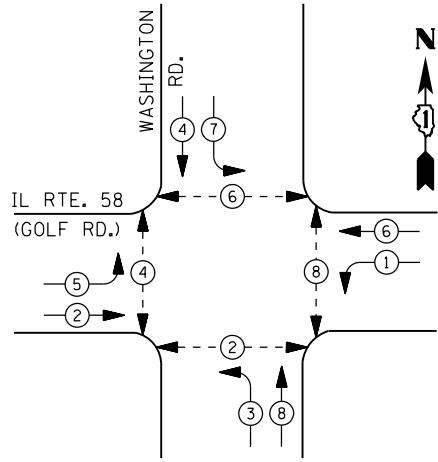
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	DRAWN - CDC	REVISED -
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PLOT DATE = 3/18/2015	DATE - 10/22/14	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TRAFFIC SIGNAL MODERNIZATION PLAN			
IL ROUTE 58 (GOLF ROAD) AT WASHINGTON ROAD			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

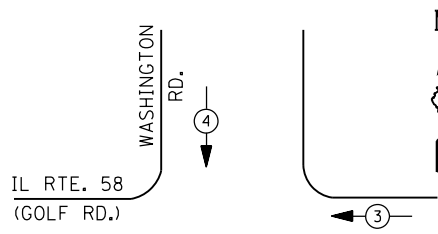
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	2014-073TS	COOK	31	23
CONTRACT NO. 62A15				
ILLINOIS FED. AID PROJECT				

PROPOSED CONTROLLER SEQUENCE



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

PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



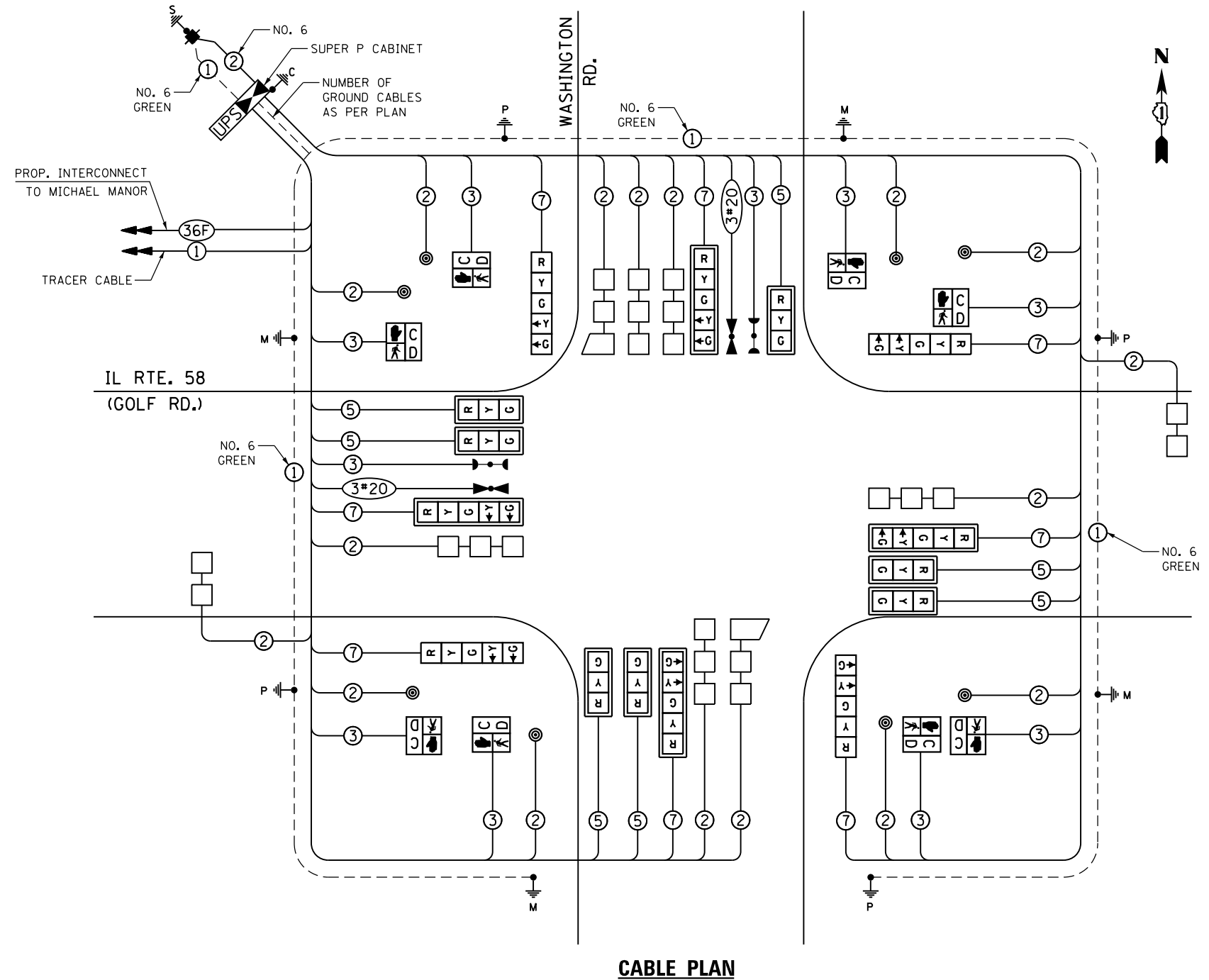
EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		

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

TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	15		17	0.50	128
(YELLOW)	15		25	0.25	94
(GREEN)	15		15	0.25	57
ARROW	16		12	0.10	20
PED. SIGNAL	8		25	1.00	200
CONTROLLER	1		100	1.00	100
ILLUM. SIGN			25	0.05	
VIDEO SYSTEM					
UPS	1		25	1.00	25
FLASHER LED					
TOTAL =					624

ENERGY COSTS- BILLED TO: VILLAGE OF NILES
1000 CIVIC CENTER DR.
NILES, IL 60714

ENERGY SUPPLY - CONTACT TERRI BLECK
 PHONE 847-816-5239
COMMONWEALTH EDISON



CABLE PLAN

THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE CURRENT MODEL "OPTICOM" TO MATCH THE EXISTING VILLAGE SYSTEM.

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

TS #2850

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

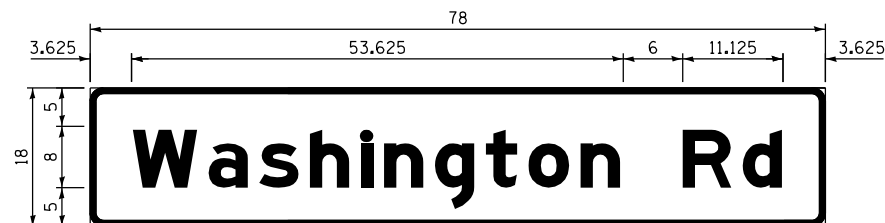
CABLE PLAN, PHASE DESIGNATION DIAGRAM & EMERGENCY VEHICLE PREEMPTION SEQUENCE IL ROUTE 58 (GOLF ROAD) AT WASHINGTON ROAD

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	2014-073TS	COOK	31	24
CONTRACT NO. 62A15				

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

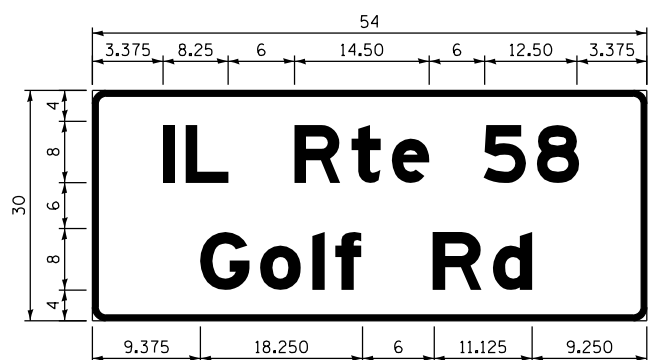
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

SIGN PANEL – TYPE 1 OR TYPE 2



Washington Rd

DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	9.75	2	ZZ	2



**IL Rte 58
Golf Rd**

DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	11.25	2	ZZ	2

NOTE: FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGNS DETAIL

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY.
REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	3
PROTECTIVE COAT	SQ YD	16
PORTLAND CEMENT CONCRETE SIDEWALK, 5"	SQ FT	145
SIDEWALK REMOVAL	SQ FT	85
SIGN PANEL - TYPE 2	SQ FT	42
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	765
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	80
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	69
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	308
HANDHOLE	EACH	4
HEAVY-DUTY HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	2
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1310
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1694
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1353
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1535
ELECTRIC CABLE IN CONDUIT, LEAD-IN NO. 14 1 PAIR	FOOT	1540
ELECTRIC CABLE IN CONDUIT, SERVICE NO. 6 2 C	FOOT	110
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	715
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4
STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	16
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	40.5
CONCRETE FOUNDATION, TYPE E, 36-INCH DIAMETER	EACH	13
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	7
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	11
INDUCTIVE LOOP DETECTOR	EACH	9
DETECTOR LOOP, TYPE I	FOOT	825
* LIGHT DETECTOR	EACH	2
* LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	8
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	9
REMOVE EXISTING DOUBLE HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
* EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	331
FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
TEMPORARY INFORMATION SIGNING	SQ FT	25.7
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

* 100% COST TO THE VILLAGE OF NILES

THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE CURRENT MODEL "OPTICOM" TO MATCH THE EXISTING VILLAGE SYSTEM.

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

TS #2850

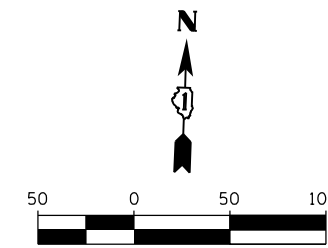
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PLOT DATE = 3/20/2015	DATE - 10/22/14	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MAST ARM MOUNTED STREET NAME SIGNS
AND SCHEDULE OF QUANTITIES
IL ROUTE 58 (GOLF ROAD) AT WASHINGTON ROAD**

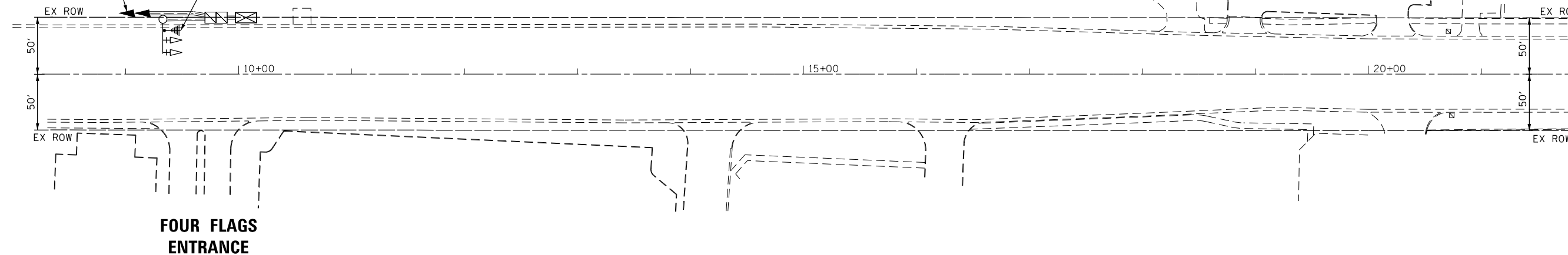
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	2014-073TS	COOK	31	25
CONTRACT NO. 62A15				
ILLINOIS FED. AID PROJECT				



EXISTING FIBER OPTIC INTERCONNECT TO GOLF MILL PLAZA
 PROPOSED TEMPORARY WIRELESS INTERCONNECT TO MICHAEL MANOR

IL ROUTE 58 (GOLF ROAD)

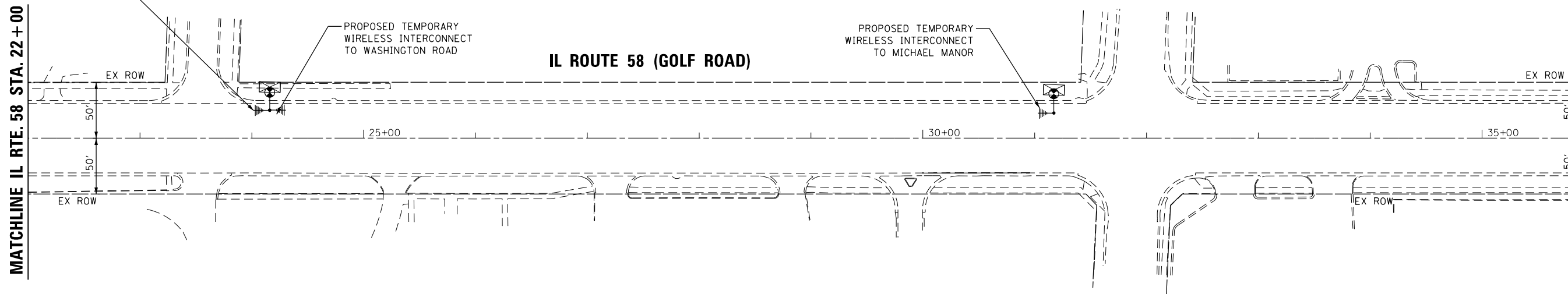


PROPOSED TEMPORARY WIRELESS INTERCONNECT TO FOUR FLAGS ENTRANCE

MICHAEL MANOR

WASHINGTON ROAD

IL ROUTE 58 (GOLF ROAD)



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

ECON 12

FILE NAME = M:\pco\1481\2109 PTB 172-6 .DDT Ver. Signals\14-001 IL58 (Michael Manor to Washington, Rab)\Design\CD\Sheet Files\Temp Interconnect.dgn

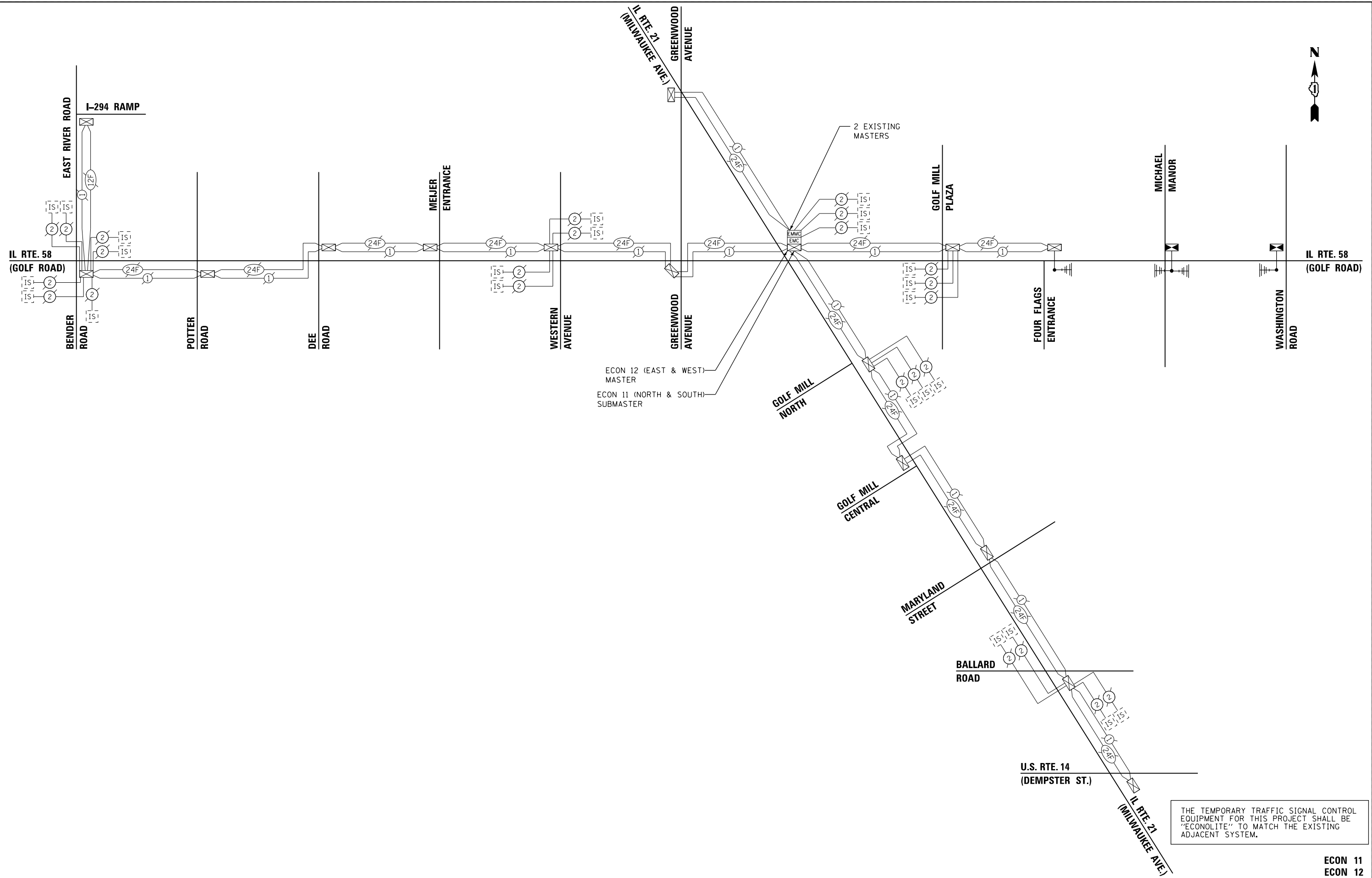
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PLOT DATE = 3/17/2015	DATE - 10/22/14	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**TEMPORARY INTERCONNECT PLAN
 IL ROUTE 58 (GOLF ROAD)
 FOUR FLAGS TO WASHINGTON ROAD**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	2014-073TS	COOK	31	26
CONTRACT NO. 62A15				
ILLINOIS FED. AID PROJECT				



ECON 12 (EAST & WEST) MASTER
 ECON 11 (NORTH & SOUTH) SUBMASTER

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

ECON 11
ECON 12

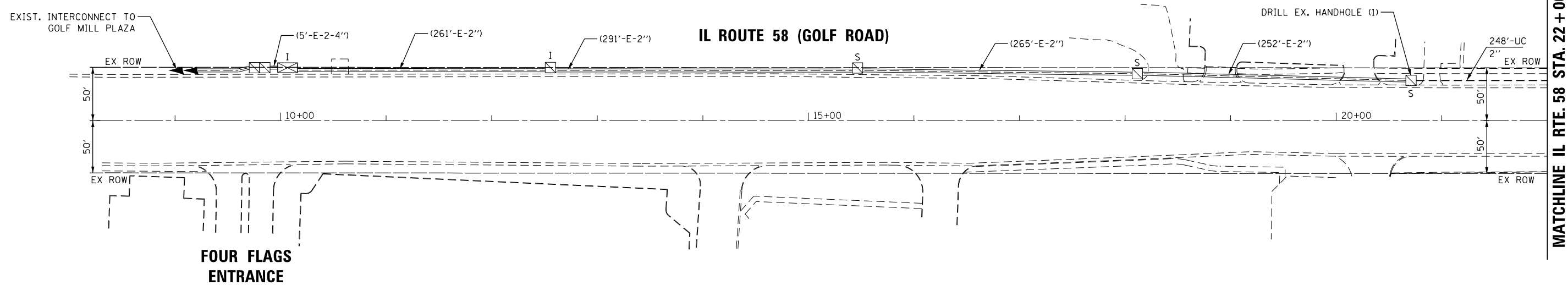
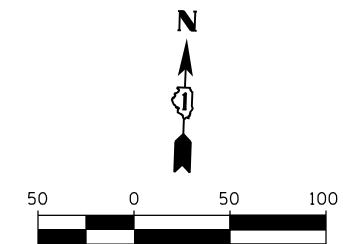
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	DRAWN - CDC	REVISED -
PLOT SCALE = 2.0000' / in.	CHECKED - DW	REVISED -
PLOT DATE = 3/17/2015	DATE - 10/22/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

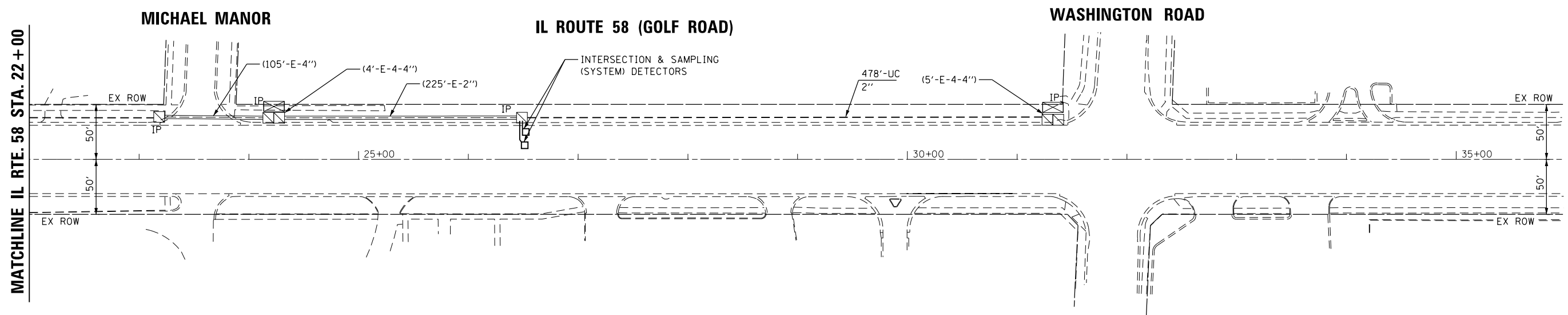
TEMPORARY INTERCONNECT SCHEMATIC
IDOT SYSTEM ECON 11 & ECON 12

SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	2014-073TS	COOK	31	27
CONTRACT NO. 62A15				



MATCHLINE IL RTE. 58 STA. 22 + 00



MATCHLINE IL RTE. 58 STA. 22 + 00

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

FILE NAME = M:\pco\1481\2109 PTB 172-6 .DDT Ver. Signals\14-001 IL58 (Michael Manor to Washington Rd)\Design\CD\Sheet Files\Interconnect.dgn

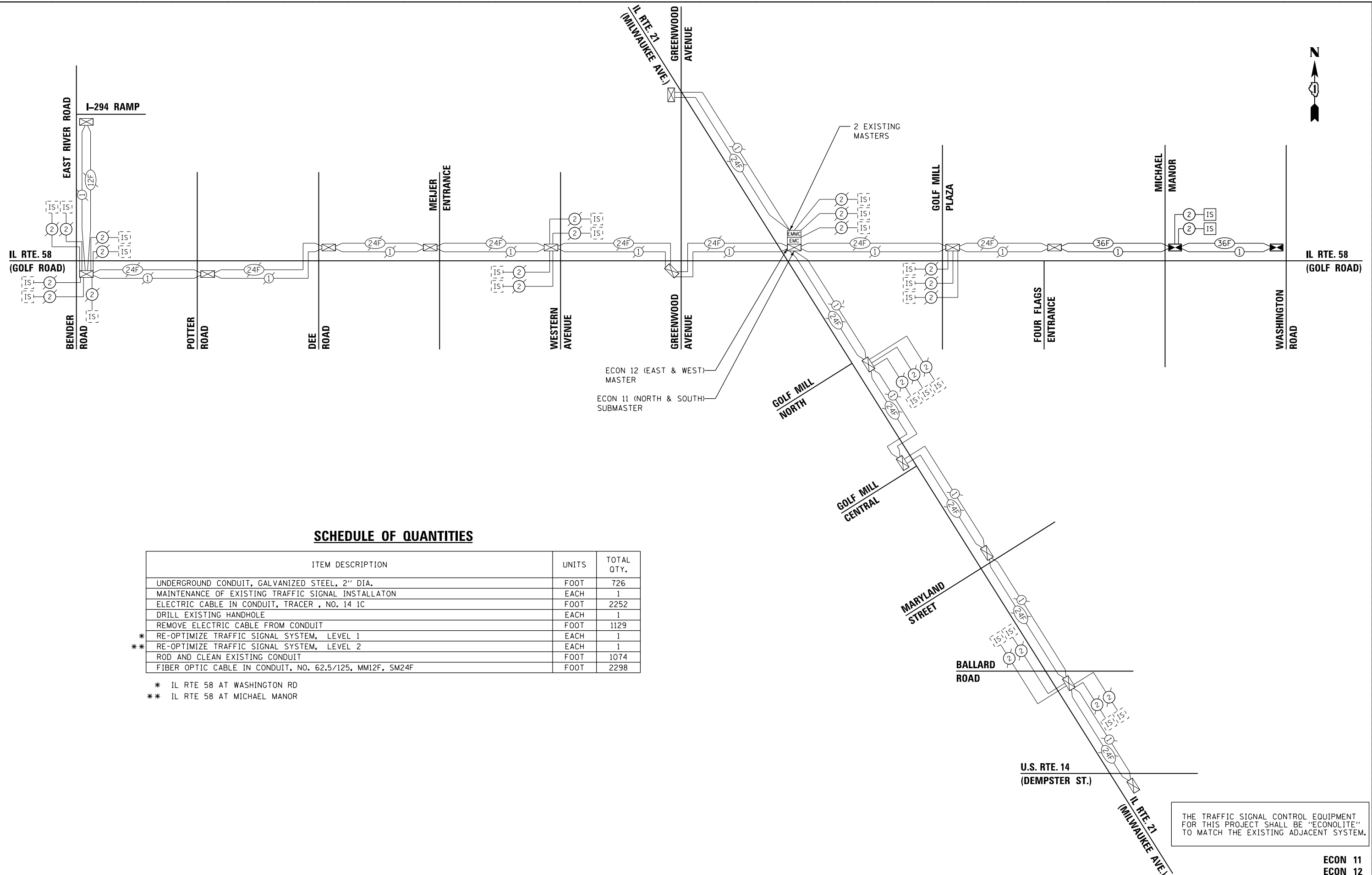
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED INTERCONNECT PLAN IL ROUTE 58 (GOLF ROAD) FOUR FLAGS TO WASHINGTON ROAD		
SCALE: 1"=50'	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	2014-073TS	COOK	31	28
CONTRACT NO. 62A15				
ILLINOIS FED. AID PROJECT				

ECON 12



SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY.
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	726
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	2252
DRILL EXISTING HANDHOLE	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1129
* RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM, LEVEL 1	EACH	1
** RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM, LEVEL 2	EACH	1
ROD AND CLEAN EXISTING CONDUIT	FOOT	1074
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F, SM24F	FOOT	2298

- * IL RTE 58 AT WASHINGTON RD
- ** IL RTE 58 AT MICHAEL MANOR

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

ECON 11
ECON 12

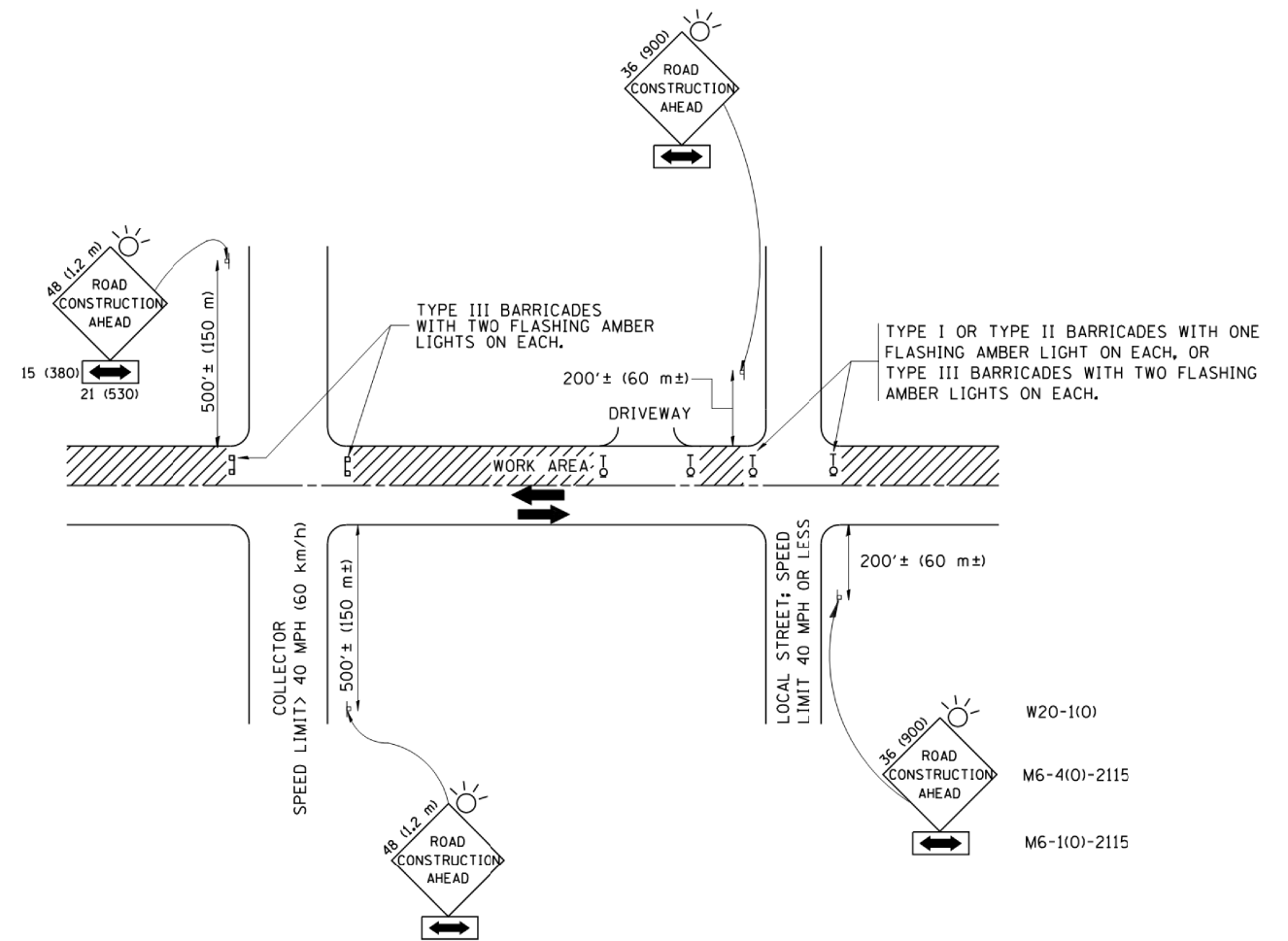
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PLOT DATE = 3/17/2015	DATE - 10/22/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED INTERCONNECT SCHEMATIC
IDOT SYSTEM ECON 11 & ECON 12

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	2014-073TS	COOK	31	29
CONTRACT NO. 62A15				
ILLINOIS FED. AID PROJECT				



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS**
- SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE **ROAD CONSTRUCTION AHEAD** SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
 - SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE **ROAD CONSTRUCTION AHEAD** SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:**
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.**
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.**

All dimensions are in millimeters (inches) unless otherwise shown.

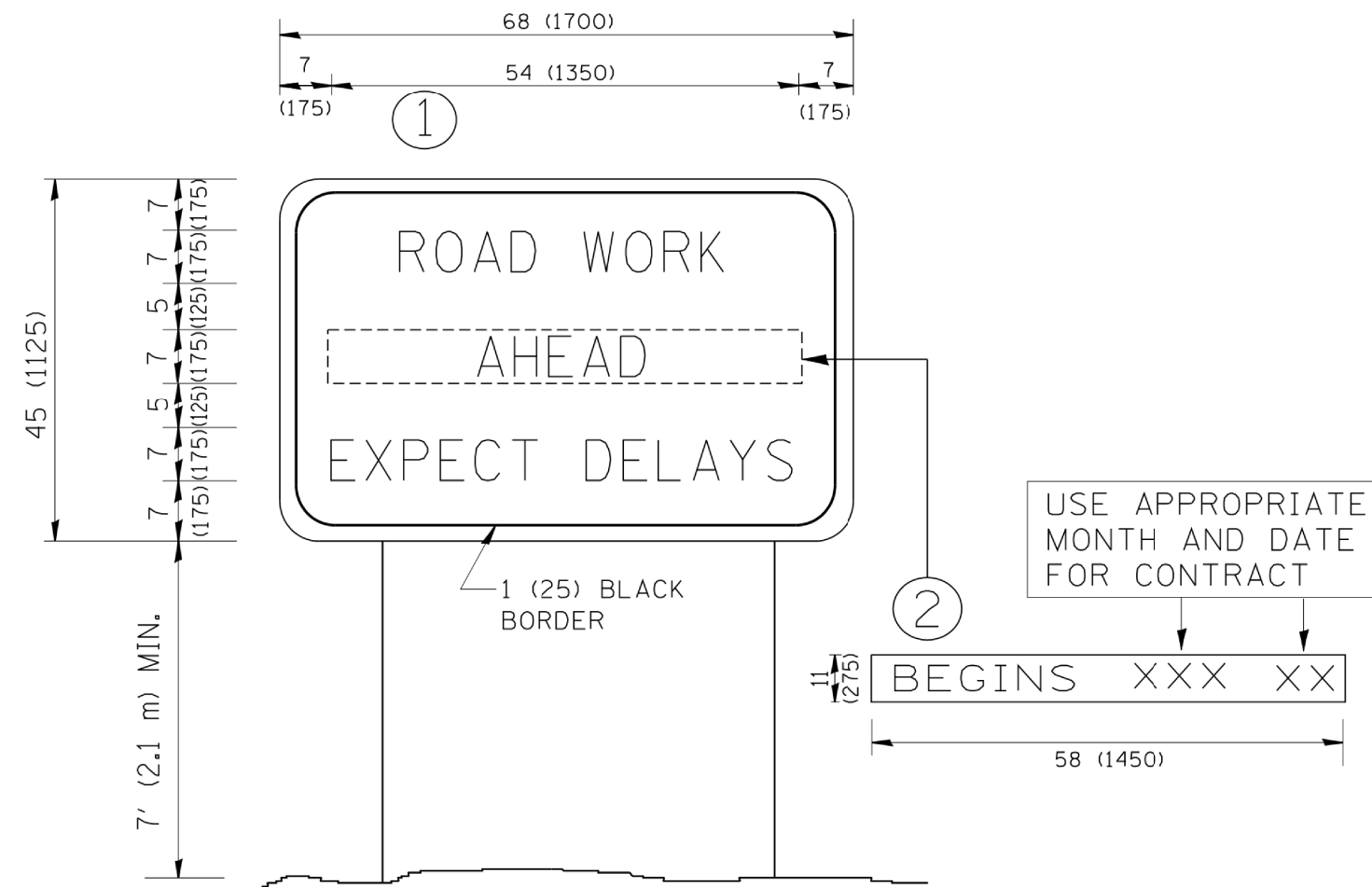
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PLOT DATE = 3/17/2015	DATE - 10/22/14	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC CONTROL AND PROTECTION FOR
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	2014-073TS	COOK	31	30
TC-10			CONTRACT NO. 62A15	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

	USER NAME = .USERNAME.	DESIGNED - KMM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ARTERIAL ROAD INFORMATION SIGN	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN - CDC	REVISED -			339	2014-073TS	COOK	31	31	
	PLOT SCALE = 2.0000' / in.	CHECKED - DW	REVISED -			TC-22		CONTRACT NO. 62A15			
	PLOT DATE = 3/17/2015	DATE - 10/22/14	REVISED -			SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT