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- TRAFFIC SIGNAL MODIFICATION PLAN 17 **ILLINOIS ROUTE 38 AT WESTMORE AVENUE / MEYERS ROAD**
- CABLE PLAN MODIFICATION, PHASE DESIGNATION DIAGRAM, AND SCHEDULE OF QUANTITIES ILL. RTE. 38 AT WESTMORE AVE. / MEYERS RD.

STANDARD DRAWINGS

	701011				
424001	720001)	813001	814001	814006	
(857001)	720001) 6 01 877001 51 880001	877006	(8770112)	04	
(878001)	000001	(000000)	⁶¹ 886001		
606001	(862001) ⁶	880001			

701201	701316	701321	701406
701421	701501	701502	(7016012)015
701606	(701701)	701801	

NOTE: STANDARD DRAWINGS REQUIRED (CIRCLED)

PREPARED BY: Stille James Per 12 200 TRAFFIC ENGINEER DATE

GROSS LENGTH= 1,898 FEET = 0.359 MILES NET LENGTH = 1.898 FEET = 0.359 MILES

CONTRACT NO. 60F54

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

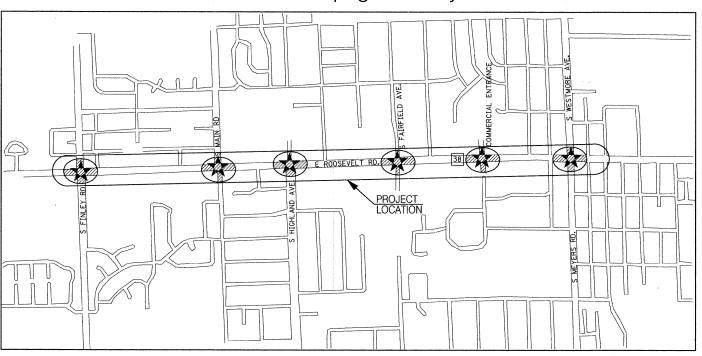
PLANS FOR PROPOSED FEDERAL AID HIGHWAY

PROFILE HORIZ. N/A PROFILE VERT. CROSS SECTIONS NA

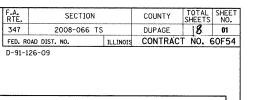
DISTRICT 1

Traffic Signal Modernization Plans For F.A.P. Route 347 – Illinois Route 38 (Roosevelt Road) from Finley Road to Westmore Road Meyers Road PROJECT NO. HSIP-0347 (020)

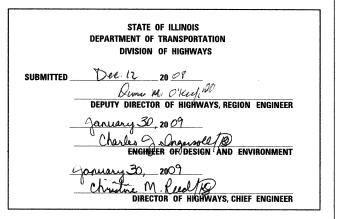
Section: 2008-066 TS Contract: 60F54 C-91-126-09 **Dupage County**



Ra. Snolli







PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

DUPAGE COUNTY SECTION NUMBER 2008-066 TS F.A.P. ROUTE 347

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				Karatanan mangada karatan kara	901. FED. / 10:1. STATE		90% FED- 100: 10% STATE LOMBA	90% F		
			SUMMARY	OF TRAFFIC SIGNAL	QUANTITIES					
					TRAFFIC SIGNAL CONSTRUCTION	N CODE - Y031 1F		4-	The second secon	
CODE NUMBER	DESIGNATION	UNIT	TOTAL QUANTITIES URBAN	ILL. RTE. 38 @ (ROOSEVELT RD.) FINLEY ROAD	ILL. RTE. 38 ₪ (ROOSEVELT RD.) MAIN STREET	ILL. RTE. 38 ⊚ (ROOSEVELT RD.) HIGHLAND AVE	ILL. RTE.38 © (ROOSEVELT RD. FAIRFIELD AVE		ILL. RTE 38 @ (ROOSEVELT RD.) MEYERS ROAD	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	2	0.35	0.33	0.33	0.33	0.33	0.33	
67100100	MOBILIZATION	L SUM	1	0.20	0.16	0.16	0.16	0,16	0.16	
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	0.20	0.16	0.16	0.16	0.16	0.16	
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	0.20	0.16	0.16	0.16	0.16	0.16	
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	0.20	0.16	0.16	0.16	0.16	0.16	
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	6	·1	1	1	1	1	1	
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	167	_	167	-		-	1988	
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2252		* 271	* 289	652 * 5/	* 274	* 250	
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	399	-	-		73	326	-	
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1840	706	664	262	-	_	208	
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	20	4	4	4	4	4		
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	24	4	4	4	7	4	3	
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	19	4	4	2	1	4	2	
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	25	4	4	4	2	4	5	
88030210	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2		-	-	2	-	-	
88030220	SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	12	4	2	2	1	-	3	
88030240		EACH	2	-	. -		1	-	1	
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED TOWN TIMER	EACH	26	4	8	6	-		8	
88102747	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED F WITH COUNT-	EACH	1	-	-	1	-	-	-	
88200100	TRAFFIC SIGNAL BACKPLATE	EACH	49	8	8	8	9	8	8	
88800100	PEDESTRIAN PUSH-BUTTON	EACH	11	2	4	4	1			
89502200		EACH	1	-	-	-	1	-	-	
89502375		EACH	- 6	1	1	1	1	1	1	
78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	F00T	690	375	-	· 	-	-	315	
X0301023	CONFIRMATION BEACON	EACH	11	-	2	2.	3	2	2	
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	102	51		-	-	-	51	

* 100% COST TO VILLAGE OF LOMBARD

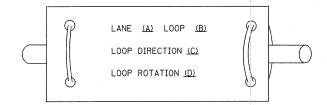
XX SPECIALTY ITEMS

F.A.P. RTE. 347 SECTION 2008-066 TS FILE NAME ≈ DESIGNED -REVISED -STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION SUMMARY OF QUANTITIES DRAWN -PLOT SCALE = 20.0000 '/ IN.
PLOT DATE = 12/11/2008 REVISED -CHECKED DATE REVISED SHEET NO. OF SHEETS STA. TO STA. REVISED SCALE:

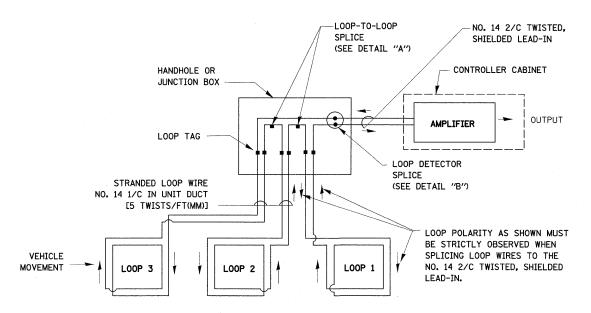
LOOP DETECTOR NOTES

- 1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE UNIT DUCT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). UNIT DUCT 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

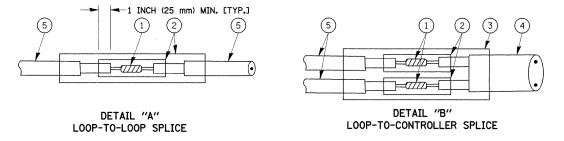


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



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

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

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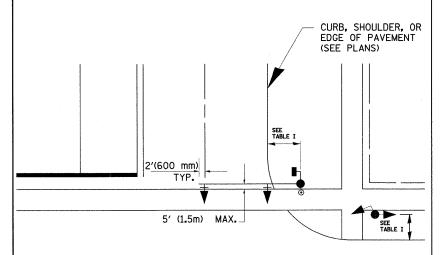
ILLINOIS DEPARTMENT OF TRANSPORTATION

REVISIONS

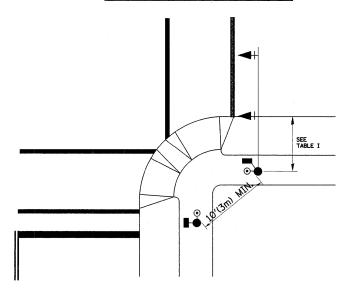
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MAST ARM AND POST

MAST ARM MOUNTED SIGNAL IN PROPOSED & FUTURE SIDEWALK AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNAL AND PUSHBUTTON DETECTOR



PEDESTRIAN SIGNAL PUSHBUTTON



RECOMMENDED PUSHBUTTON LOCATIONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHALL BE IN ACCORDANCE WITH THE CURRENT MUTCD (SEE NOTE 1). TO MEET MUTCD REQUIREMENTS, PEDESTRIAN SIGNAL PUSHBUTTONS MAY HAVE TO BE MOUNTED ON A SEPARATE POST.

NOTES:

1. AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS WITH PEDESTRIAN ACTUATION. EACH PUSHBUTTON SHALL ACTIVATE BOTH THE WALK INTERVAL AND THE ACCESSIBLE PEDESTRIAN SIGNALS.

AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS, PUSHBUTTONS SHOULD CLEARLY INDICATE WHICH CROSSWALK SIGNAL IS ACTUATED BY EACH PUSHBUTTON. PUSHBUTTONS AND TACTILE ARROWS SHOULD HAVE HIGH VISUAL CONTRAST (SEE THE DEPARTMENT OF JUSTICE'S AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN, 1991). TACTILE ARROWS SHOULD POINT IN THE SAME DIRECTION AS THE ASSOCIATED CROSSWALK. AT CORNERS OF SIGNALIZED LOCATIONS WITH ACCESSIBLE PEDESTRIAN SIGNALS WHERE PEDESTRIAN PUSHBUTTONS ARE PROVIDED, THE PUSHBUTTONS SHOULD BE SEPARATED BY THE DISTANCE OF AT LEAST 10 FT (3m). THIS ENABLES PEDESTRIANS WHO HAVE VISUAL DISABILITIES TO DISTINGUISH AND LOCATE THE APPROPRIATE PILSBUILTON.

PUSHBUTTONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHOULD BE LOCATED AS FOLLOWS:

- A: ADJACENT TO A LEVEL ALL-WEATHER SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR, AND WHERE THERE IS AN ALL WEATHER SURFACE, WHEELCHAIR ACCESSIBLE ROUTE TO THE RAMP.
- B: WITHIN 5 FT (1.5m) OF THE CROSSWALK EXTENDED.
- C: WITHIN 10 FT (3m) OF THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- D: PARALLEL TO THE CROSSWALK TO BE USED (SEE MUTCD FIGURE 4E-2).
- E: NORMAL PEDESTRIAN PUSHBUTTON MOUNTING HEIGHT SHOULD BE 3.5 FT (1.05m) ABOVE ADJACENT SIDEWALK
- 2. PEDESTRIAN SIGNAL FACES SHALL BE MOUNTED WITH THE BOTTOM OF THE HOUSING NOT LESS THAN 8 FT (2.4m) NOR MORE THAN 10 FT (3.0m) ABOVE THE SIDEWALK LEVEL AND SO THERE IS A PEDESTRIAN INDICATION IN THE LINE OF PEDESTRIANS' VISION WHICH PERTAINS TO THE CROSSWALK
- 3. THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, NOT MOUNTED OVER A ROADWAY, SHALL BE AT LEAST 10 FT (3.0m) BUT NOT MORE THAN 15 FT (4.5m) ABOVE THE SIDEWALK OR, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE HIGHWAY IF NO SIDEWALKS EXIST.

4. THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, MOUNTED OVER A ROADWAY, SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001 AND 877006. (16 FT (5m) MIN., 18 FT (5.5m) MAX., FROM HIGHEST POINT OF PAVEMENT)

PEDESTRIAN SIGNAL POST

PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN PUSHBUTTON DETECTOR LOCATION

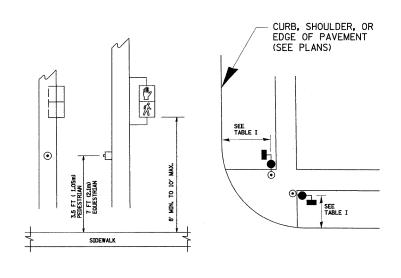


TABLE I

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MIN. DIST. FROM BACK OF CURB)	SHOULDER/NON-CURBED AREA (MIN. DIST. FROM EDGE OF PAVEMENT)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(O.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN PUSHBUTTON	SEE NOTE 1	SEE NOTE 1

SCALE:

SHEET NO. OF SHEETS STA.

	REVISIONS			ILLINOIS DEPARTMENT OF TRANSPORTATION								
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			DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS						-			
				VER LE: HOF	RIZ. NONE -02				DRAWN B DESIGNED CHECKED SHEET 2	BY:	DAD	
				F.A.P. RTE.		SECTIO	N		COUN	ΙΤΥ	TOTAL	SHEET NO.
				347	2008	3-066	TS		DUPA	GE		4
								CON	ITRACT	NO.	60F	54
١.	TO STA.			FED, RO	AD DIST. NO	. ILL	INOIS	FAP	347/ILL	38 (F	ROOSEVEL	T RD.)

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	PLOT SCALE = 20.00000 '/ IN.	CHECKED -	REVISED -
	PLOT DATE = 12/11/2008	DATE -	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

