

ELECTRICAL GENERAL NOTES

- ALL VEHICLE AND PEDESTRIAN SIGNAL HEADS SHALL HAVE 12" SECTIONS. MOUNTING HARDWARE SHALL BE UNPAINTED ALUMINUM. ALL BOLTS, SCREWS, NUTS AND WASHERS SHALL BE STAINLESS STEEL. ANTI -SEIZE PASTE COMPOUND SHALL BE USED ON ALL MOUNTING HARDWARE FIELD CONNECTIONS.
- BACK PLATES SHALL BE ABS PLASTIC.
- THE LOCATION OF MAST ARM SUPPORTS SHALL BE APPROVED BY THE ENGINEER BEFORE FOUNDATIONS ARE CONSTRUCTED. MAST ARM POLES SHALL BE LOCATED A MINIMUM OF 10 FEET FROM THE EDGE OF PAVEMENT OR 2 FEET FROM THE EDGE OF SHOULDER, WHICHEVER DISTANCE IS GREATER. IN CURBED SECTIONS, THE MAST ARM POLES SHALL BE LOCATED A MINIMUM OF 5 FEET FROM THE FACE OF THE CURB. THESE DISTANCES ARE TO THE NEAR FACE OF THE MAST ARM POLE.
- ALL TRAFFIC SIGNAL CABLES SHALL BE #14 A.W.G. STRANDED COPPER UNLESS OTHERWISE SPECIFIED. TERMINAL ENDS SHALL HAVE CRIMPED- ON RING TONGUE CONNECTORS.
- THE LOCATION OF ALL DETECTOR LOOPS SHALL BE APPROVED BY THE ENGINEER BEFORE ANY SLOTS ARE SAWED IN THE PAVEMENT.
- DETECTOR LOOP LEAD-IN SPLICES SHALL BE MADE IN A HANDHOLE PER SECTION 873 OF THE STANDARD SPECIFICATIONS. CONDUCTORS SHALL BE SPLICED IN A RIGID MOLD FILLED WITH NON -HARDENING EPOXY FILLER. ROSIN-CORE SOLDER SHALL BE USED.
- CALL DELAY SHALL NOT FUNCTION WHEN THE RELATED PHASES ARE IN THE GREEN MODE.
- CALL CARRYOVER SHALL FUNCTION ONLY WHEN THE RELATED PHASES ARE IN THE GREEN MODE.
- ALL INDUCTIVE LOOP DETECTORS SUPPLIED FOR THIS PROJECT SHALL HAVE THE CAPACITY OF OPERATING WITH BOTH DELAY AND EXTENSION MODES ACTIVE, IF A TIME SETTING IS PROGRAMMED. THEY SHALL BE RACK MOUNTED.
- ALL HANDHOLES SHALL BE CAST-IN-PLACE PORTLAND CEMENT CONCRETE (PER ARTICLE 814.03(a)). THE CAST IN PLACE LEGEND IN THE COVER SHALL BE "TRAFFIC SIGNALS".
- ACTUAL DEPTHS OF THE CONCRETE FOUNDATIONS FOR THE MAST ARM SUPPORT POLES ARE AS FOLLOWS:

<u>E. WICKLIFFE AVE.</u>	<u>E. PARK AVE./SPRING ST.</u>
NE CORNER, 48' M.A.: 15'-0" DEEP, 36" DIA.	NE CORNER, 55' M.A.: 18'-6" DEEP, 42" DIA.
NW CORNER, 46' M.A.: 13'-0" DEEP, 36" DIA.	NW CORNER, 52' M.A.: 18'-0" DEEP, 36" DIA.
SE CORNER, 52' M.A.: 20'-0" DEEP, 36" DIA.	SE CORNER, 22' M.A.: 13'-6" DEEP, 30" DIA.
SW CORNER, 48' M.A.: 18'-0" DEEP, 36" DIA.	SW CORNER, 52' M.A.: 15'-0" DEEP, 36" DIA.

THESE DEPTHS HAVE BEEN DETERMINED BY THE DEPARTMENT FROM THE SOIL BORING DATA.

- CENTER TO CENTER DISTANCE BETWEEN THE CONDUITS, WHERE TWO OR MORE LOOP LEAD -IN CONDUITS ARE INSTALLED FROM THE EDGE OF THE PAVEMENT TO THE NEAREST HANDHOLE, SHALL BE SIX INCHES MINIMUM AT THE EDGE OF PAVEMENT.
- ABANDON EXISTING CONDUIT AND CABLES IN PLACE.
- THE BOTTOM OF THE HOUSING OF A SIGNAL HEAD SHALL BE AT LEAST 8' ABOVE THE SIDEWALK.
- ANCHOR BOLTS, NUTS, AND WASHERS REQUIRED WITH TYPE D FOUNDATION SHALL BE INCLUDED IN THE PAY ITEM, "FULL -ACTUATED CONTROLLER AND TYPE IV CABINET".
- THE CONTRACTOR SHALL INSTALL FOUR (4) GROUND RODS (3/4" X 12') AND #6 A.W.G. BARE COPPER GROUND CONDUCTOR IN THE CONTROLLER FOUNDATION AS PER SPECIAL PROVISION, "CONCRETE FOUNDATION TYPE D".
- AN UNDERGROUND CABLE MARKING TAPE SHALL BE INSTALLED WITH ALL TRENCH AND BACK FILL FOR ELECTRICAL WORK IN ACCORDANCE WITH THE ARTICLES 810.04 (a) AND 1066.05 OF THE STANDARD SPECIFICATIONS.
- ALL DETECTOR LOOPS SHALL BE INSTALLED IN THE BINDER COURSE.
- GROUNDING CONDUCTOR SHALL BE TYPE XLP, NO.6 A.W.G., STRANDED COPPER, GREEN COLOR CODED AND IN ACCORDANCE WITH STANDARD 873001 AND SECTION 873 OF THE STANDARD SPECIFICATIONS.
- THE DESIRABLE LATERAL DISTANCE BETWEEN WATER MAIN, FIRE HYDRANT ETC. WITH ELECTRICAL UNDERGROUND CONDUITS SHALL BE MINIMUM EIGHTEEN (18") INCHES FACE TO FACE .
- PROPOSED CONTROLLER EQUIPMENT SHALL BE COMPATIBLE WITH EXISTING DISTRICT ECONOLITE TRAFFIC SIGNAL EQUIPMENT MONITORING EQUIPMENT AND SOFTWARE.

REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

MID BLOCK CROSSING:

- STA. 168+98, 30.6' LT.:**
 1. 24' MAST ARM ASSEMBLY AND POLE
 2. 1 FACE, 3 SECTION, SIGNAL FACE, MAST ARM MOUNTED
 3. 1 FACE, 3 SECTION, SIGNAL FACE, BRACKET MOUNTED
 4. 1 FACE, 2 SECTION, PEDESTRIAN SIGNAL FACE, BRACKET MOUNTED
- STA. 169+25, 19.0' RT.:**
 1. 24' MAST ARM ASSEMBLY AND POLE
 2. 1 FACE, 3 SECTION, SIGNAL FACE, MAST ARM MOUNTED
 3. 1 FACE, 3 SECTION, SIGNAL FACE, BRACKET MOUNTED
 4. 1 FACE, 2 SECTION, PEDESTRIAN SIGNAL FACE, BRACKET MOUNTED
 5. CONTROLLER, TYPE 3

IL RTE. 159 AND E. MAIN ST

- SW CORNER**
 1. FULL ACTUATED CONTROLLER (ASC 8000) & TYPE IV CABINET
 A. CONFLICT MONITOR
 B. INDUCTIVE LOOP DETECTORS, 2-CHANNELS- 4 EACH.

- STA. 176+85, 59' LT.:**
 1. 30' MAST ARM ASSEMBLY AND POLE
 2. 1 FACE, 3 SECTION, SIGNAL FACE, MAST ARM MOUNTED
 3. 1 FACE, 5 SECTION, SIGNAL FACE, MAST ARM MOUNTED
 4. 1 FACE, 4 SECTION, SIGNAL FACE, BRACKET MOUNTED
 5. 2 FACE, 2 SECTION, PEDESTRIAN SIGNAL FACE, BRACKET MOUNTED
 6. 2-PEDESTRIAN PUSH BUTTONS
 7. SIGN PANEL-TYPE 1 (3 EA.)& 2 (1 EA.)

- STA. 177+44, 60' LT.:**
 1. 22' MAST ARM ASSEMBLY AND POLE
 2. 1 FACE, 3 SECTION, SIGNAL FACE, MAST ARM MOUNTED
 3. 1 FACE, 4 SECTION, SIGNAL FACE, MAST ARM MOUNTED
 4. 1 FACE, 5 SECTION, SIGNAL FACE, BRACKET MOUNTED
 5. 2 FACE, 2 SECTION, PEDESTRIAN SIGNAL FACE, BRACKET MOUNTED
 6. 2-PEDESTRIAN PUSH BUTTONS
 7. SIGN PANEL-TYPE 1 (2 EA.)

- STA. 177+40, 18' RT.:**
 1. 34' MAST ARM ASSEMBLY AND POLE
 2. 1 FACE, 3 SECTION, SIGNAL FACE, MAST ARM MOUNTED
 3. 1 FACE, 5 SECTION, SIGNAL FACE, MAST ARM MOUNTED
 4. 1 FACE, 4 SECTION, SIGNAL FACE, BRACKET MOUNTED
 5. 2 FACE, 2 SECTION, PEDESTRIAN SIGNAL FACE, BRACKET MOUNTED
 6. 2-PEDESTRIAN PUSH BUTTONS
 7. SIGN PANEL-TYPE 1 (3 EA.) AND 2 (1 EA.)

- STA. 176+65, 13' RT.:**
 1. 40' MAST ARM ASSEMBLY AND POLE
 2. 1 FACE, 3 SECTION, SIGNAL FACE, MAST ARM MOUNTED
 3. 1 FACE, 4 SECTION, SIGNAL FACE, MAST ARM MOUNTED
 4. 1 FACE, 5 SECTION, SIGNAL FACE, BRACKET MOUNTED
 5. 2 FACE, 2 SECTION, PEDESTRIAN SIGNAL FACE, BRACKET MOUNTED
 6. 2-PEDESTRIAN PUSH BUTTONS
 7. SIGN PANEL-TYPE 1 (2 EA.)

REMOVE EXISTING CONCRETE FOUNDATION

MIDBLOCK CROSSING:

- STA. 168+98, 30.6' LT.:**
 1. TYPE E, 24"DIA.
STA. 169+25, 19.0' RT.:
 1. TYPE E, 24"DIA.

IL RTE 159 @ E WICKLIFFE AVE.

- STA. 176+85, 59' LT.:**
 1. TYPE E, 30"DIA.
STA. 177+44, 60' LT.:
 1. TYPE E, 30"DIA.
STA. 177+40, 18' RT.:
 1. TYPE E, 30"DIA.
STA. 176+65, 13' RT.:
 1. TYPE E, 30"DIA.
SW CORNER:
 1. TYPE D

REMOVE EXISTING HANDHOLE

- @ E WICKLIFFE AVE.:**
 1. STA. 176+79, 18' RT.
 2. STA. 177+24, 34' RT.
 3. STA. 177+48, 41' LT.

REMOVE EXISTING DOUBLE HANDHOLE

- @ E WICKLIFFE AVE.:**
 1. STA. 176+89, 57' LT.

TRAFFIC SIGNALS LEGEND

	PVCC	POLYVINYL CHLORIDE CONDUIT
		EXISTING SIGNAL POST
		EXISTING SIGNAL POST WITH BACK PLATE
		EXISTING TRAFFIC SIGNAL MAST ARM
		EXISTING HANDHOLE
		EXISTING DOUBLE HANDHOLE
		EXISTING DETECTOR LOOP
		EXISTING CONTROLLER
		EXISTING STREET NAME SIGN/TRAFFIC SIGN
		EXISTING SERVICE INSTALLATION
		EXISTING SIGNAL HEAD, PEDESTRIAN
		EXISTING PEDESTRIAN PUSH BUTTON DETECTOR
		EXISTING UNDER GROUND CONDUIT
		PROPOSED HANDHOLE
		PROPOSED DOUBLE HANDHOLE
		PROPOSED DETECTOR LOOP
		PROPOSED CONTROLLER
		PROPOSED PEDESTRIAN PUSH BUTTON DETECTOR
		PROPOSED SIGNAL HEAD, PEDESTRIAN
		PROPOSED CONDUIT: "T" TRENCH, "P" PUSH, SIZE SPECIFIED
		PROPOSED STREET NAME SIGN/TRAFFIC SIGN
		PROPOSED SERVICE INSTALLATION
		PROPOSED SIGNAL POST
		PROPOSED SIGNAL HEAD W/O BACK PLATE
		PROPOSED SIGNAL HEAD W/ WITH BACK PLATE
		PROPOSED JUNCTION BOX, TRAFFIC SIGNAL

FILE NAME =	USER NAME = prestonme	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNALS - GENERAL NOTES & LEGENDS			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pw\work\p\dot\prestonme\d0138454\0876885-sh1-ts.dgn		DRAWN -	REVISED -		600	60-(30,31,128)-3	MADISON	529	293			
	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -		CONTRACT NO. 76B85							
	PLOT DATE = 2/11/2013	DATE -	REVISED -		SCALE: 1" = 20'	SHEET NO. 4 OF 12 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT			