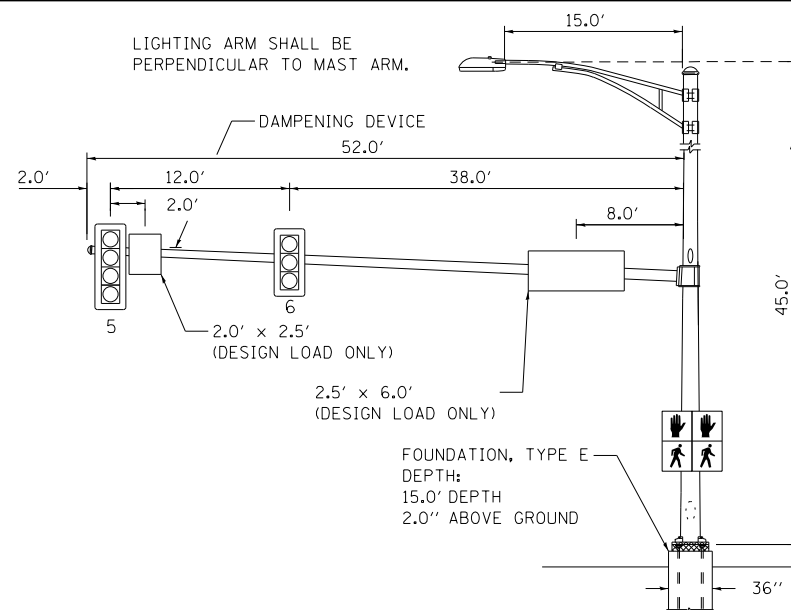
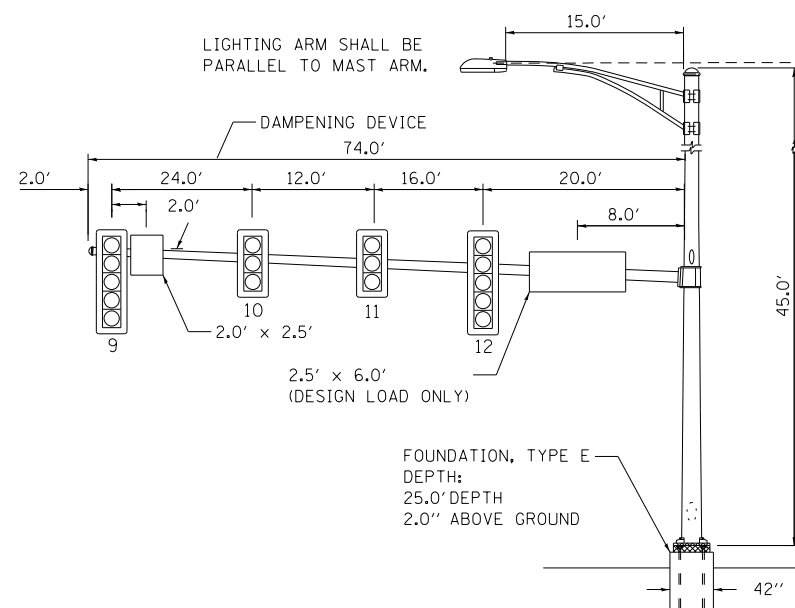


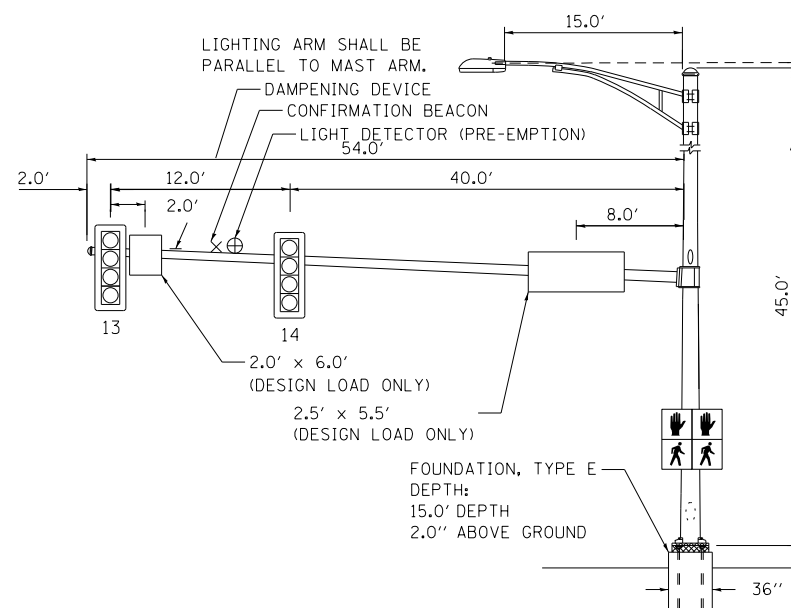
MAST ARM SOUTHWEST QUADRANT (A)



MAST ARM NORTHWEST QUADRANT (B)



MAST ARM NORTHEAST QUADRANT (C)



MAST ARM SOUTHEAST QUADRANT (D)

ELECTRICAL LOAD CHART

IL RTE. 47

INDICATION	NUMBER	WATTAGE EACH	BURN TIME (%)
RED	11	10	60
YELLOW	11	17	5
GREEN	11	11	35
YELLOW ARROW	6	6	5
GREEN ARROW	6	5	10
Hand icon	2	5	5
Hand icon	2	5	95

GRANVILLE RD.

RED	6	10	60
YELLOW	6	17	5
GREEN	6	11	35
GREEN ARROW	4	6	10
Hand icon	2	5	5
Hand icon	2	5	95

TRAFFIC SIGNAL CABINET

ITEM	NUMBER	WATTAGE EACH	BURN TIME (%)
CONTROLLER	1	6	100
INDUCTIVE LOOP DETECTOR UNINTERRUPTABLE	12	1.5	100
POWER SUPPLY	1	50	100
LIGHT DETECTOR AMPLIFIER	1	1.5	100

HIGHWAY LIGHTING

ITEM	NUMBER	WATTAGE EACH	BURN TIME (%)
CONTROLLER	1	6	100
LUMINAIRE	4	400	45

THE TRAFFIC SIGNAL EQUIPMENT FOR THIS CONTRACT SHALL BE EAGLE BRAND. THE CONTROLLERS FURNISHED SHALL BE THE MOST CURRENT EAGLE BRAND.

NOTIFY THE TRAFFIC SIGNAL SECTION AT (815) 434-8506 72 HOURS IN ADVANCE TO REDESIGN THE DETECTOR LOOPS, IF POSSIBLE, TO AVOID CONSTRUCTION JOINTS.

NOTES:

- WORD "GRADE" IS TO BE INTERPRETED AS TOP OF CURB. TOP OF FOUNDATION SHALL NOT BE EXPOSED MORE THAN 4 in ABOVE THE SURROUNDING GROUND.
- ALL SIGNAL HEADS SHALL HAVE BACKPLATES.
- FOUNDATION SHOULD BE 2 in ABOVE GROUND OR 1.0 in ABOVE CENTERLINE OF ROADWAY, WHICHEVER IS HIGHER.

DETECTOR LOOP INDUCTANCE CHART

DETECTOR LOOP SYSTEM	TURNS PER LOOP	INDUCTANCE READING (MICROHENRIES)	FREQUENCY (HERTZ)	J PIN STATUS
A	4	819	21,312	ON
B	6	639	24,128	ON
C	4	555	25,890	OFF
D	4	567	25,614	ON
E	4	563	25,705	ON
F	4	529	26,518	ON
G	4	526	26,594	ON
H	4	791	21,686	ON
I	6	639	24,128	ON
J	4	553	25,936	OFF
K	4	565	25,659	ON
L	4	560	25,774	ON

STREET SIGN DETAIL

THESE STREET NAME SIGNS SHALL BE PLACED ON THE MAST ARMS PARALLEL TO THE RESPECTIVE ROUTE AS DIRECTED BY THE ENGINEER.

STREET NAME SIGNS:

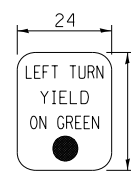
- TYPE ZZ SHEETING REQUIRED
- WHITE/GREEN BACKGROUND
- 3/4 in BORDER
- 8 in SERIES D LETTERS
- ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SHOWN



8.25 SQ. FT. EACH  
2 REQUIRED

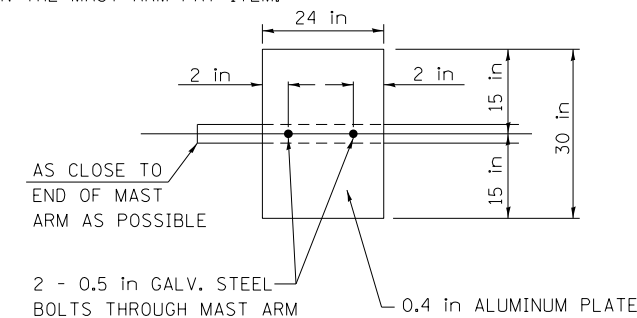


11.25 SQ. FT. EACH  
2 REQUIRED



5.00 SQ. FT. EACH  
2 REQUIRED

NOTE: DAMPENING DEVICE SHALL CONSIST OF A 24in X 30in TYPE 1, UNPAINTED ALUMINUM SIGN STOCK MOUNTED HORIZONTALLY ON TOP OF MAST ARM WITH THE 30in LENGTH PERPENDICULAR TO THE ARM. COST OF THE DAMPENING DEVICE IS INCLUDED IN THE MAST ARM PAY ITEM.



DAMPENING PLATE DETAIL (TOP VIEW) INCLUDED IN COST OF MAST ARM

PEDESTRIAN CROSSING SIGN DETAIL

COUNT-DOWN PEDESTRIAN SIGN R10-3e TO BE USED.

8 REQUIRED.

DIMENSIONS: 9in x 15in (TYP.)  
LEGEND AND BORDER: NON-REFLECTORIZED BLACK  
BACKGROUND: RETROREFLECTIVE WHITE  
NUMBERS AND SYMBOLS: RETROREFLECTIVE ORANGE

ONE SIGN SHALL BE PROVIDED FOR EACH PUSH-BUTTON. ORIENTATION OF DIRECTIONAL ARROWS TO BE DETERMINED BY PUSH-BUTTON LOCATION.

ALL MOUNTING HARDWARE SHALL BE STAINLESS STEEL CONSTRUCTION. ALL MOUNTING BOLTS SHALL BE HEX HEAD.

MATERIALS AND INSTALLATION OF THIS SIGN SHALL BE INCLUDED IN THE COST OF PEDESTRIAN PUSH-BUTTON.

FILE NAME = V:\3195\66883 (South Section)\CADD Sheets\0366883-sht-ts-15.dgn	USER NAME = bdecreane	DESIGNED - AS
		DRAWN - AS
		CHECKED - ST
SHT.PLAN	PLOT DATE = 8/6/2013	DATE - 7/15/2013



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

IL RTE. 47 AT GRANVILLE RD.	
MAST ARM LOADING DIAGRAM, ELECTRICAL LOAD CHART, & SIGN DETAILS	
SCALE: N/A	SHEET NO. 6 OF 20 SHEETS
STA. N/A	TO STA. N/A

F.A.P. RTE. 326	SECTION (110)R, BR & BR-1	COUNTY GRUNDY	TOTAL SHEETS 644	SHEET NO. 283
CONTRACT NO. 66B83				ILLINOIS FED. AID PROJECT