



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

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

CABLE SLACK

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

### DEPTH OF FOUNDATION

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30′ (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
30' (9.1 m) and less than 40' (12.2 m)	11'-0'' (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0'' (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0'' (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19,8 m) and up to 75' (22,9 m)	25'-0'' (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

TEMPORARY SIGNAL CONTROLLER

WOOD SUPPORT PLATFORM

-SEE NOTE 5

TRAFFIC SIGNAL
CONTROLLER CABINET

¾4" (19mm) TREATED PHYWOOD DECK

2" × 6" (51mm × 152mm) TREATED WOOD

6" x 6" (152mm x 152mm) TREATED WOOD POSTS

# NOTES:

NOTES:

 $2'' \times 6''$   $(51\text{mm} \times 152\text{mm})$ WOOD FRAMING (TYP.)

UPS---

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

# DEPTH OF MAST ARM FOUNDATIONS, TYPE E

FILE NAME =	USER NAME = kanthaphixaybo	DESIGNED - DA	AG	REVISED -			DISTRI	`T 1		F.A.P.	SECTION	COUNTY	TOTAL	SHEET
c:\pw_work\PWIDOT\KANTHAPHIXAYBC\dØ1126	4\traffic_legend_v7.dgn	DRAWN - BO	CK	REVISED -	STATE OF ILLINOIS	CTANDAD	RD TRAFFIC SIG		N DETAILS	337	20R-4	LAKE	232	137
	PLOT SCALE = 20.0000 '/ IN.	CHECKED - DA		REVISED -	DEPARTMENT OF TRANSPORTATION	STANDAR		NAL DESIG				CONTRACT	NO. 6	0860
	PLOT DATE = 10/6/2009	DATE - 10	)/28/09	REVISED -		SCALE:	SHEET NO. 5 OF 6 SHEETS	STA.	TO STA.	FED. ROAD DI	ST. NO. ILLINOIS FED.	AID PROJECT		