

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**

(1.2m) (1.2m)		56' (16.8 m) and 10 65' (19.8 n
(1.2m)		Greater than or 65' (19.8 m) and 75' (22.9 m
		NOTES:
	1	. These foundation de

4'-0''

4'-0''

## DEPTH OF MAST ARM FOUNDATIONS, TYPE E

	USER NAME = poclechal	DESIGNED - DAG	REVISED - DAG 1-1-14		DISTRICT ONE	F.A.P. SECTION	COUNTY TOTAL SHEET SHEETS NO.
c:\pw_work\pwidot\pociechal\d0381630\D12	,	DRAWN - BCK	REVISED -	STATE OF ILLINOIS	STANDARD TRAFFIC SIGNAL DESIGN DETAILS	332 (10&0910-PT_1)TS-1(14)	) WILL 33 12
	PLOT SCALE = 100.0000 '/ in.	CHECKED - DAD	REVISED -	DEPARTMENT OF TRANSPORTATION			CONTRACT NO. 60X89
	PLOT DATE = 3/19/2014	DATE - 10-28-09	REVISED -		SCALE: NONE SHEET NO. 5 OF 7 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED	AID PROJECT

TYPE D - CONTROLLER

SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE

**DEPTH OF FOUNDATION** 

ength	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
′ (9 <b>.</b> 1 m)	10'-0'' (3.0 m)	30'' (750mm)	24'' (600mm)	8	6(19)
r equal to less than m)	13'-6" (4.1 m)	30'' (750mm)	24'' (600mm)	8	6(19)
	11'-0'' (3.4 m)	36'' (900mm)	30'' (750mm)	12	7(22)
r equal to less than m)	13'-0'' (4.0 m)	36'' (900mm)	30" (750mm)	12	7(22)
r equal to nd up to m)	15'-0'' (4.6 m)	36'' (900mm)	30" (750mm)	12	7(22)
r equal to less than m)	21'-0'' (6.4 m)	42'' (1060mm)	36'' (900mm)	16	8(25)
r equal to nd up to m)	25'-0'' (7.6 m)	42'' (1060mm)	36'' (900mm)	16	8(25)

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 (OU) > 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.

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.