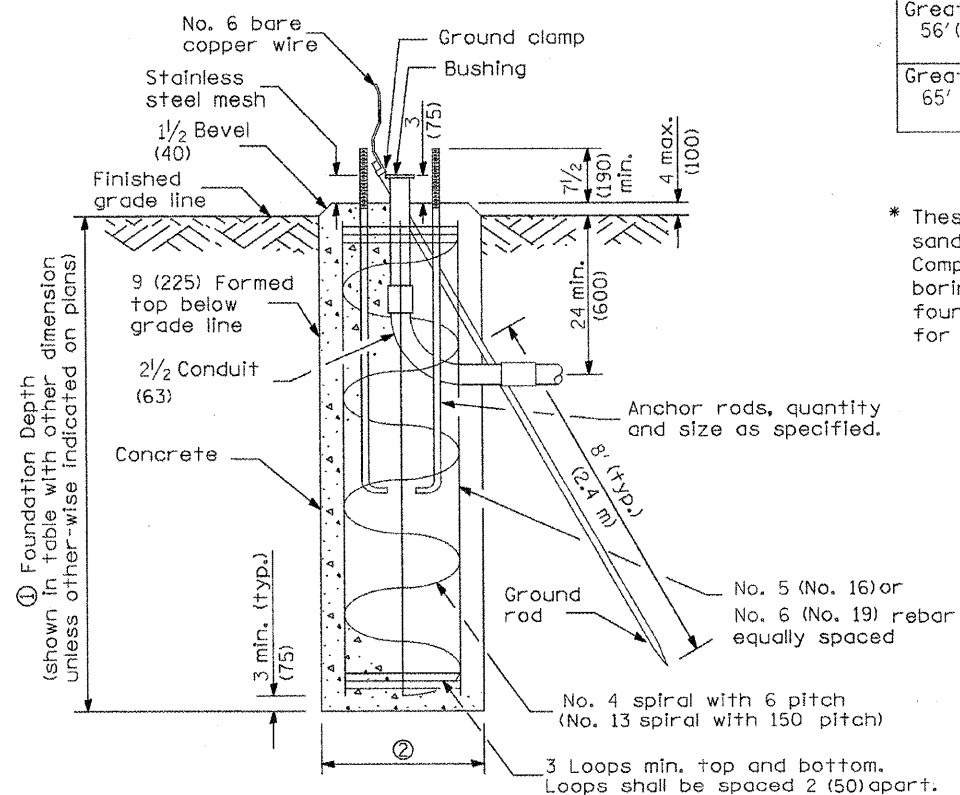


TOP VIEW



TYPE E

For standard and combination mast arm assemblies. Mast arm assemblies with dual arms require a special foundation design.

Mast Arm Length	① Foundation Depth*	② Foundation Diameter	③ Spiral Diameter	④ Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30 (750)	24 (600)	8	5 (16)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30 (750)	24 (600)	8	5 (16)
	11'-0" (3.4 m)	36 (900)	30 (750)	12	5 (16)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (4.0 m)	36 (900)	30 (750)	12	5 (16)
	15'-0" (4.6 m)	36 (900)	30 (750)	12	6 (19)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0" (4.6 m)	36 (900)	30 (750)	12	6 (19)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42 (1060)	36 (900)	16	6 (19)
	25'-0" (7.6 m)	42 (1060)	36 (900)	16	6 (19)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0" (7.6 m)	42 (1060)	36 (900)	16	6 (19)

* 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 (Q_u) > 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.

CONCRETE
FOUNDATION DETAILS
(Sheet 2 of 2)

STANDARD 878001-07

INFRASTRUCTURE ENGINEERING, INC.
33 W. MONROE ST., SUITE 1540
CHICAGO, IL 60603-5322
PHONE 312.425.9560
FAX 312.425.9564

FILE NAME =	USER NAME = (1224.user)	DESIGNED - LC	REVISED -
P:\P-00\1224\Task 8\DDN\Sheets\31-1224-S-Standard-15.dgn		DRAWN - BID	REVISED -
	PLOT SCALE = 1.0000" / IN.	CHECKED - ER	REVISED -
	PLOT DATE = 1/23/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
IL 31	2001-125R	Mc HENRY	31	31
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60F79	