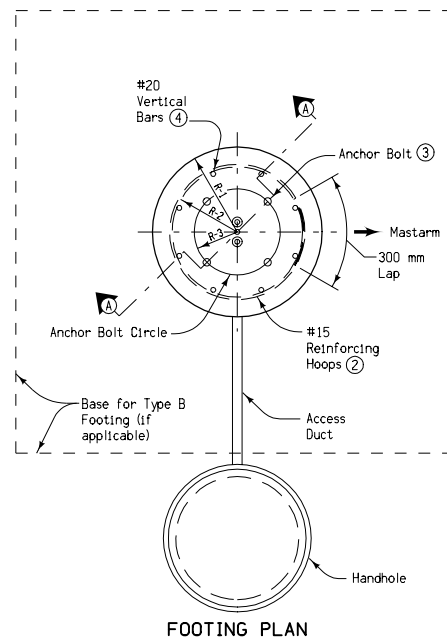
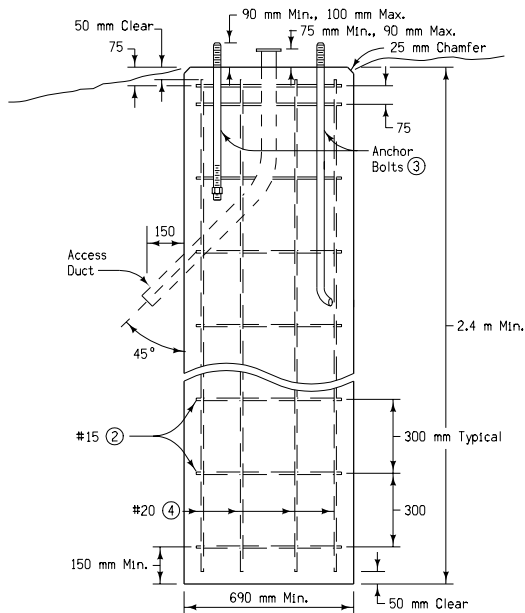


ANCHOR BOLT DETAILS

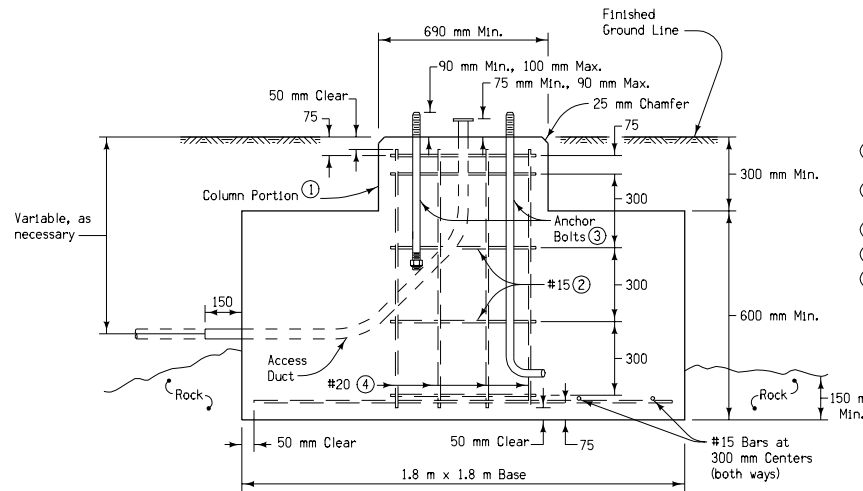
| HARDWARE CLASSIFICATION | | | | |
|--|--------------------------------|-----------------------|------------|--------------------|
| Bolt Size | Bolt Grade | Nuts (Heavy Hex) | Washers | Galvanizing |
| 25.4 mm x Various Full Length Galvanized | ASTM F-1554 Grade 105 Class 2A | ASTM A563-DH Class 2B | ASTM F-436 | ASTM A-153 Class C |



FOOTING PLAN



SECTION A-A
TYPE A FOOTING



SECTION A-A
TYPE B FOOTING

The details indicated hereon are for the construction of a concrete footing for light poles with a mounting height of 15 meters or less. Where poles with greater mounting heights are specified, footings of different design may be required.

The Type A Footing shall be the normally required footing construction. Where rock, shale, sandstone, broken or shattered rock, or other similar material is encountered, the Engineer may approve the use of the Type B Footing. All excavations shall be disposed in the area adjacent to the footing and shaped to the natural ground contour unless otherwise directed by the Engineer.

Diameter of footing is determined by the Anchor Bolt Circle required for the diameter of the pole being installed. Where dimensional requirements indicated cannot be met with normal footings, it shall be enlarged as necessary to accommodate the required diameter of the Contractor's expense.

R-1 Radius of the outside of the footing shall be 345 millimeters minimum unless anchor bolt circle requires a larger radius.

R-2 Radius of the reinforcing hoop shall be a maximum of 50 millimeters less than R-1 and a minimum of 25 millimeters greater than R-3.

R-3 Radius of the anchor bolt circle.

Open ends of conduit shall be appropriately capped during construction to prevent infiltration of foreign material. After the cable is installed, the upper end of the ducts shall be sealed against entry of moisture by a method approved by the Engineer. The access ducts shall have a 63 millimeter Nominal Outside Diameter, with a minimum of two access ducts per footing unless otherwise specified. The ground wire duct shall have a 27 millimeter Nominal Outside Diameter.

No welding of the anchor bolts is permitted. The contractor shall obtain a template from the light pole manufacturer for placement of the anchor bolts.

- ① Footing base may be thickened and column portion omitted at the Contractor's option.
- ② Horizontal reinforcing hoops shall be #15 bars lapped a minimum of 300 millimeters as indicated. Hoops may be welded to vertical bars.
- ③ Either type of bolt shown may be used at the option of the Contractor.
- ④ This bar is to be a #25 when the mounting height is greater than 13.5 meters.
- ⑤ When transformer base is required, refer to Standard Road Plan RM-43.

All dimensions given in millimeters unless noted.

| | | |
|-----------------------------------|---|--------------------------|
| M METRIC VERSION | Iowa Department of Transportation | REVISION 3 04-17-07 |
| | | RM-39 |
| | STANDARD ROAD PLAN | |
| | REVISIONS: Added note to prohibit welding on galvanized anchors and require anchor bolt templates. Renamed standard. <i>Deanna Mayfield</i> APPROVED BY DESIGN METHODS ENGINEER | |
| LIGHT POLE FOOTINGS | | |