

## **CONCRETE FOUNDATION (LCDOT)**

Effective: October 1, 2016

Revised:  
LC878.01

**Description:** This work shall consist of constructing a concrete foundation for a traffic signal post, controller base, or mast arm at locations shown on the plans and/or as directed by the Traffic Engineer.

**General:** This work shall be performed according to Section 878 of the "Standard Specifications" and the following:

All anchor bolts shall be according to Article 1006.09 of the "Standard Specifications", except all anchor bolts shall be hot dipped galvanized the full length of the anchor bolt including the hook.

Concrete Foundations, Type A for Traffic Signal Posts shall provide anchor bolts with the bolt pattern specified within the District 1 "Standard Traffic Signal Design Details" as shown on the plans. All Type A foundations shall be a minimum of 48 inches deep.

Concrete Foundations, Type C (Special) for Traffic Signal Cabinets with Uninterruptable Power Supply (UPS / Battery Back-Up) cabinet installations shall constructed be according to the latest version of IDOT Standard 878001, except as modified herein. The constructed foundation shall be a minimum of 48 inches long by 31 inches wide, and shall have a minimum depth of 48 inches. An integral concrete pad foundation for the UPS cabinet shall be constructed a minimum of 31 inches long by 20 inches wide by 10 inches deep. The UPS cabinet pad foundation shall be integral to the side of the signal cabinet foundation, and shall be constructed on the same side as the signal cabinet power panel. Anchor bolts shall be provided and spaced according to the cabinet manufacturer's specifications. The conduits shall be the number and size as shown in the plans and placed at minimum depth of 30 inches. An L-Shaped concrete apron shall be constructed along the entire front of the signal cabinet foundation, the entire side of the UPS cabinet foundation, and the entire front of the UPS cabinet foundation. This concrete apron shall be a minimum of 36 inches wide by five inches deep. Perpendicular grooves shall be installed in each direction in the concrete apron according to Article 424.06 of the "Standard Specifications", beginning at the interior corner of the L shaped apron.

Concrete Foundations, Type D for Traffic Signal Cabinets shall be constructed according to the latest version of IDOT Standard 878001, except as modified herein. The constructed foundation shall be a minimum of 48 inches long by 31 inches wide, and shall have a minimum depth of 48 inches. Anchor bolts shall be provided and spaced according to the cabinet manufacturer's specifications. The conduits shall be the number and size as shown in the plans and placed at minimum depth of 30 inches.

The concrete apron at the signal cabinet shall be constructed a minimum of 36 inches wide by 48 inches long by five inches deep.

Concrete Foundations, Type E for Mast Arm and Combination Mast Arm Poles shall be constructed according to the latest version of IDOT Standard 878001. The foundation shall be 15 feet deep, except when deeper foundations are called for in IDOT Standard 878001.

The Engineer shall approve the foundation excavation prior to placing any concrete.

**Basis of Payment:** This work will be paid for at the contract unit price per foot of depth for CONCRETE FOUNDATION, of the type specified.