



Illinois Department of Transportation

Memorandum

To: Regional Engineers
From: Maureen M. Addis *MA*
Subject: Special Provision for Sloped Metal End Section for
Pipe Culverts
Date: September 29, 2017

This special provision was developed by the Bureau of Design and Environment to establish construction requirements, a method of measurement and a basis of payment for the Highway Standards for sloped metal end sections and sloped metal end section with grate for pipe culverts.

This special provision should be inserted into contracts utilizing Highway Standards 542411 or 542416.

The districts should include the BDE Check Sheet marked with the applicable special provisions for the January 19, 2018 and subsequent lettings. The Project Development and Implementation Section will include a copy in the contract.

This special provision will be available on the transfer directory September 29, 2017.

80395m

SLOPED METAL END SECTION FOR PIPE CULVERTS (BDE)

Effective: January 1, 2018

Description. This work shall consist of furnishing and installing sloped metal end sections and sloped metal end sections with traversable pipe grate for pipe culverts. Work shall be according to Section 505 and 542 of the Standard Specifications except as modified herein.

Materials. Materials shall be according to the following:

- (a) Sloped Metal End Section. The sloped metal end sections shall be fabricated of steel and all component parts shall be of the same material. The base metal, bolts, and spelter coating shall be according to AASHTO M 36 (M 36M). Toe plates shall be furnished and the metal thickness shall be the same as that used in the end section.
- (b) Traversable Pipe Grate. Traversable pipe grate components shall be according ASTM A 53, (Type E or S), Grade B, or ASTM A 500 Grade B, standard weight Schedule 40. All steel components of the grating system shall be galvanized according to AASHTO M 111 or M 232 as applicable.

Construction Requirements

General. Fabrication shall be according to the dimensions and details shown on Highway Standard 542411 or 542416.

Assembly, hardware, and rods for sloped metal end sections shall be according to the manufacturer's specifications.

Galvanizing, assembly, and hardware for traversable pipe grate shall be according to the manufacturer's specifications.

Method of Measurement. This work will be measured for payment as each, with each end of each culvert being one each.

Basis of Payment. This work will be paid for at the contract unit price per each for SLOPED METAL END SECTION, STANDARD 542411, SLOPED METAL END SECTION WITH GRATE, STANDARD 542411, SLOPED METAL END SECTION, STANDARD 542416, or SLOPED METAL END SECTION WITH GRATE, STANDARD 542416, of the pipe diameter and slope specified.