

500 STRUCTURES

ITEM 522 - STRUCTURAL PLATE CORRUGATED METAL STRUCTURES ON FOOTINGS

522.01 Description

522.02 Materials

522.03 General

522.04 Method of Measurement

522.05 Basis of Payment

522.01 Description. This work consists of furnishing structural plate corrugated metal structures of specified dimensions, including metal bearing angles or channels as required, and erecting same on concrete footings.

522.02 Materials. Furnish plates and bolts conforming to 707.03 or 707.23. Furnish steel bearing angles or channels conforming to 707.03 or 711.01. Furnish aluminum bearing angles or channels conforming to 707.23.

522.03 General. Properly support the metal bearing angle or channel in the position shown on the plans before placing footing concrete.

Erect the plates according to the manufacturer's assembly instructions. Hold the unsupported edges of all plates in position using temporary props. Progressively install a sufficient number of bolts to hold the plates in position. Do not tighten bolts until tightening will not interfere with the adjustment and matching of additional sections. If using drift pins or pry bars, take care to prevent chipping or injury to the galvanized coating. Tighten the bolts to a final minimum torque of 100 foot-pounds (140 Nm).

Within the limits of backfill, field coat the exterior of the 707.03 conduit above the limits of the bedding. The coating material and application shall conform to AASHTO M 243M. Thoroughly seal around all plate seams and bolts. Allow asphalt mastic material to dry for 48 hours and tar base material to dry for 28 hours before placing the conduit backfill.

Excavate under Item 203 or 503 as shown on the plans. Backfill according to the requirements for 603.08. Construct concrete footings according to Item 511.

522.04 Method of Measurement. The Engineer will measure the actual number of linear feet (meters) of the corrugated metal structure, installed in place. The Engineer will determine the length by taking the average of the two side measurements, end to end, at the point of bearing.

522.05 Basis of Payment. The Engineer will pay for accepted quantities at the contract price as follows:

Item	Unit	Description
522	Linear Foot (Meter)	___' (m) ___" (mm) Structural Plate Corrugated Metal Structure, ___ inch (mm).