

ITEM 16551.1002 M - BITUMINOUS COATING - STEEL PILES

DESCRIPTION:

This work shall consist of furnishing and applying bituminous coating to steel pile surfaces which will be in contact with soil as required in the plans and as specified herein.

MATERIALS:

- A. Bituminous Coating - Bituminous Coating shall be an asphalt type bitumen conforming to Paving Asphalt 702-0500 of the Standard Specifications.
- B. Primer - Primer shall conform to the requirements of AASHTO M116.
- C. Plates - Plates shall conform to the requirements of ASTM A36M.

CONSTRUCTION DETAILS:

Plates shall be welded to the outside of each pile as shown on the Plans and shall be done in accordance with the New York State Steel Construction Manual. These plates shall be welded to the piles prior to applying the bituminous coating.

All surfaces to be coated with bitumen shall be dry and thoroughly cleaned of dust and loose materials. No primer or bitumen shall be applied in wet weather, nor when the temperature is below 18_C.

Application of the primer coat shall be with a brush or other approved means and in a manner to thoroughly coat the surface of the piling with a continuous film of primer. The purpose of the primer is to provide a suitable bond of the bitumen coating to the pile. The primer shall completely dry through before the bituminous coating is applied. The Engineer will determine the dry condition of the primer.

Bitumen shall be applied uniformly at a temperature of not less than 150_C, not more than 175_C and shall be applied either by mopping, brushing, or spraying at the project site. The bituminous coating shall be applied to the minimum thickness shown on the Plans. Whitewashing of the coating may be required, as deemed necessary by the Engineer, to prevent running and sagging of the asphalt coating prior to driving, during hot weather. Hot weather is defined as a day during which the temperature reaches, or is expected to reach 30_C, or greater.

If splices are required, no coating shall be applied for 450 mm on either side of the splice location. After splicing has been completed, the uncoated area shall be coated with bituminous material in accordance with the requirements of this specification. The Contractor is specifically notified that coating the splice area will cause some delay to pile driving operations. He is advised to schedule his work accordingly.

Bitumen coated piles shall be stored before driving, protected from sunlight and heat. Pile coatings shall not be exposed to damage during storage, hauling, or handling. The method of handling piles shall be submitted to the Deputy Chief Engineer (Structures) for approval. The use of steel cables wrapped around the coated part of the pile will not be permitted. The Contractor shall take appropriate measures to preserve and maintain the bituminous coating. At the time of pile driving, the bituminous coating shall have the minimum thickness shown on the Plans.

The Engineer will verify the thickness of the coating at several locations on each pile. If necessary, the Contractor shall recoat the piles, at his expense, to comply with these requirements.

METHOD OF MEASUREMENT:

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Bituminous coating will be measured by the linear meter of pile surface completely coated at the required thickness. No separate payment will be made for the primer.

BASIS OF PAYMENT:

The accepted quantities of bituminous coating will be paid for at the Contract Unit Price Per Linear Meter, which shall be full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in applying the bituminous coating and primer, including furnishing and attaching plates to the pile.