

ITEM 551.3001nn11 - REMOVABLE PILE

DESCRIPTION

This work shall consist of furnishing and installing unfilled steel pipe piles, removable sleeves, and appurtenances at locations shown in the contract plans. All aspects of the work shall be in conformance with NYSDOT Standard Specification Section 551 PILES AND PILE DRIVING EQUIPMENT except as follows:

MATERIALS

Split pile and removable sleeve shall be composed of hot-dipped galvanized Schedule 40 pipe conforming to ASTM A252.

Steel plates shall be ASTM A572M Grade 345 and conform to Section 715-01, Structural Steel, of the NYSDOT Standard Specifications. Plates shall be hot-dipped galvanized.

Welds shall be performed by a NYSDOT Certified Welder in conformance with the New York State Steel Construction Manual (NYSSCM), and shall be completed prior to galvanizing.

Galvanizing shall be performed as per Section 719-01, Galvanized Coatings and Repair Methods, of the NYSDOT Standard Specifications.

CONSTRUCTION DETAILS

A. Fabrication and Installation:

Galvanizing shall be applied to the outer surface of each pile and sleeve after fabrication.

A pilot hole shall be drilled in the proposed location of the removable pile to assess the rock depth. The pilot hole shall be drilled and results submitted to the Engineer prior to fabrication of the removable pile. The Engineer may make adjustments to the length of the removable pile on the results of the pilot hole.

Piles shall be driven to the indicated depths. Driving mechanism shall not damage the in-place portion of the Removable Pile. A driving cap/cover shall be used. The removable portion of the pile shall not be used for driving.

Security rod locking mechanism shall be fabricated to function freely after galvanization. Final fit-up shall be checked before the piles are installed.

Plastic covers for the in-place portion of the pile, to be once the upper section is removed, shall be fabricated to be tight-fit, neutrally buoyant, and shall be provided with a tether line.

Submerged marking buoys for remain-in-place portion of the piles shall be furnished and installed at 0.30M below the surface of the water at MLW.

Dynamic pile tests are not required.

B. Submittals:

The Contractor shall submit to the Engineer for approval, shop drawings of the entire removable pile assembly prior to fabrication, which shall conform to the requirements of the New York State Steel Construction Manual. The Contractor shall allow the Engineer not less than thirty (30) working days to review the shop drawings.

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C. Qualifications:

The installing contractor shall be a qualified Marine Contractor and shall have a minimum of five (5) years continuous experience in underwater pile driving and be required to submit a list of previous experience on similar projects.

METHOD OF MEASUREMENT

This work will be measured as the number of Removable Piles satisfactorily furnished and installed.

No additional measurement shall be made for fabricating and furnishing additional spare components such as the upper portions of the removable piles, security rods, and plastic pile cap. Payment for Removable Pile shall be based on the number of lower, or remain-in-place, portions of piles irrespective of the number of additional components to be furnished.

No measurement will be made for for the Contractor's field-assessment of rock location and riverbed strata depths.

BASIS OF PAYMENT.

The unit price bid for each pile assembly and associated and spare components shall include the cost of furnishing all labor, materials, and equipment necessary to field measure bedrock location, fabricate and furnish material, install all components to the satisfaction of the Engineer as detailed in the Specifications, Contract Drawings, or as ordered by the Engineer.