


<b>TO:</b>  <b>SUPERSEDED BY EI 95-040</b> <b>EFFECTIVE 10/2/95</b>	<h1>ENGINEERING INSTRUCTION</h1> <p>NEW YORK STATE DEPARTMENT OF TRANSPORTATION</p>
<b>Distribution:</b> <div style="display: flex; justify-content: space-around;"> <span>30 Main Office</span> <span>32 Regions</span> <span>34 Special</span> </div>	<b>Code:</b> <u>E.I. 89-24</u>
<b>APPROVED:</b>  <div style="text-align: center;">   <hr/> <b>A. M. SHIROLE, Deputy Chief Engineer (Structures)</b> </div>	<b>Date:</b> <u>08/08/89</u>  <b>Supersedes:</b>

It has been mutually agreed by the Structures Division and the Soil Mechanics Bureau that all holes, predrilled for purposes of pile installation, shall be cased. Accordingly, a specification has been developed to cover the field procedure: Item 16551.03 - PREDRILLING HOLES FOR PILES - CASINGS REQUIRED.

Effective with the letting of December 14, 1989 (P.S.&E. September 21), this item shall be used exclusively for work of this type. All other such items will be disapproved. The following items will no longer be acceptable:

07551.03	11551.0311
11551.03	17551.0312
99551.03	04551.0313
02551.0310	17551.0313
11551.0310	07551.0314
11551.031001	17551.0315

Item 16551.03 will be stocked as a Main Office Insert.

ITEM 16551.03 PREDRILLING HOLES FOR PILES - CASINGS REQUIRED

DESCRIPTION

The work shall consist of drilling, boring, or augering holes for piles at the locations and to the depths indicated on the contract plans, unless otherwise determined by the Engineer.

All pile holes shall be cased, unless an alternate procedure has been approved by the Engineer.

MATERIALS

Casing may be of any material sufficiently rigid to keep the pile hole from collapsing. It is the Contractor's responsibility to choose a material that will prevent collapse.

Backfill shall be as indicated on the Contract Plans.

CONSTRUCTION DETAILS

Holes shall be drilled, bored, or augered through in situ soils, boulders, buried obstacles, debris, footings and concrete slabs whether indicated on the plans or not. It is the Contractor's responsibility to provide equipment capable of penetrating to the required elevation. No jetting will be permitted without the express written permission of the Engineer.

Holes shall be the diameter shown on the plans. If no diameter is shown, then the following diameters shall be provided by the Contractor:

Displacement piles. Four inches (4") greater than the nominal diameter of the pile.

Steel H-piles. Four inches (4") greater than the maximum diagonal axis measurement of the pile in question.

Holes shall be progressed without noticeable subsiding of the surrounding ground surface. Should noticeable subsidence occur, in the Engineer's opinion, work shall be stopped and the Regional Soils Engineer shall be consulted. Upon consultation with the Regional Soils Engineer, the Contractor shall propose a scheme for progressing the work without subsidence, to be approved by the Engineer.

The casing shall be driven no more than five feet ahead of the hole progression.

Holes shall be cleaned out to the elevation required by the contract documents, or established by the Engineer.

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Immediately after each pile has been driven to the required drive criteria, the void between the pile and the sleeve shall be backfilled. The Engineer may require backfill placement after pile placement, but prior to pile driving if, in his opinion, the procedure is required to reduce vibrations.

Unless otherwise required by the contract documents, or the nature of the work, the Contractor may extract the casings or leave them in place after pile installation has been completed. If the casing is extracted prior to pile driving, backfilling shall be done simultaneously with extraction. All extracted casings shall remain the property of the Contractor.

METHOD OF MEASUREMENT

The work will be measured as the number of linear feet of hole progressed. Measurement will be taken along the centerline of the hole. No payment shall be made for any length of hole progressed below the elevation shown on the plans unless so ordered by the Engineer.

BASIS OF PAYMENT

The unit price bid per linear foot shall include the cost of all labor, materials and equipment necessary to complete the work.

Progress payments will be made in accordance with the following:

Eighty percent (80%) of the linear footage for each hole will be authorized for payment upon completion of hole progression as required.

The remainder of the linear footage for each hole will be authorized for payment upon the completion of backfilling, and extraction of casing if extraction is required.