# Georgia Department of Transportation

### Office of Materials and Research

# Standard Operating Procedure (SOP) 11 Inspection of Steel H-Piles and Metal Shell Piles

#### I. General

This Standard Operating Procedure presents an outline of the responsibilities of producers intending to provide steel H-piles or metal shell piles and the duties of GDOT personnel assigned to perform the inspection.

It is a function of the Office of Materials and Research Inspection Services Branch to certify each producer and list each on Qualified Products List (QPL) 44, "Steel Pile Producers and Suppliers". Producers will furnish steel pile which conforms to the specification and provide certified mill test reports for each heat number represented. Construction inspectors will verify each heat number by comparing the identification on the actual piling with a corresponding certified mill test report from an approved producer.

# II. Acceptance Requirements

Each manufacturer must furnish the Inspection Services Branch of the <u>Office of Materials and Research</u> a notarized yearly guarantee that all piling furnished to State of Georgia construction projects will meet the governing specifications. A <u>"Yearly Certification and Guarantee"</u> is attached for your completion and submittal to the Department.

The guarantee shall be sworn to for the manufacturer by a person having legal authority to bind the company.

#### A. Steel H-Piles

Each length of steel H-piling must be permanently marked in one place with the heat number during the rolling process. Heat numbers must be transferred and legible on each cut off section. If the Contractor transfers the cut off sections to another project and the heat numbers are not legible, the Engineer, at the time the piling is transferred, shall assign a lot number to each ten (IO) pieces. Sampling will be based on three samples per lot and each sample shall be tested and approved prior to using.

1. Domestic Piling

Steel H-piles produced in the United States will be accepted on the basis certified mill test reports corresponding to an identifying "Heat Number" as shown on each piece. These certified mill test reports will be furnished to the contractor who will in turn furnish copies to the construction inspector. Random samples of steel H-piling may be selected by the inspector and submitted to the Office of Materials and Research for quality assurance testing purposes.

#### 2. Non-Domestic Piling

Prior to furnishing materials, non-domestic manufacturers must establish approval of their written quality control program. Certified mill test reports printed in English and clearly identifiable to the lot of materials tested must be furnished for all non-domestic materials. Imported steel H-piling must be delivered to a distribution point within the State of Georgia where the piling shall be retained for a sufficient period of time to permit inspection, sampling and testing by the Engineer. Frequency of sampling will be on the basis of one complete test per heat and size, on heats representing 1500 linear feet (457 linear meters) of piling or less. Heats representing more than 1500 linear feet (457 linear meters) will be sampled on the basis of two specimens per heat and size, per 10,000 linear feet (3048 linear meters) or fraction thereof. Each of the two samples shall be cut from separate piling. After a heat number has been tested and found to conform to the governing specifications, each piling rolled from that heat number must be stamped with a numbered GDT stamp.

#### B. Domestic and Non-Domestic Metal Shell Piles

Each spiral welded pile must be marked at least once with the heat number or coil number used in fabrication, and each longitudinally welded pile, if not identifiable by heat number, shall be prominently marked with the appropriate lot number.

Prior to furnishing materials, non-domestic manufacturers must establish approval of their written quality control program.

#### 1. Produced Under a Heat Number or Coil Number

Metal shell piling produced from a domestic mill and identified by heat number or coil number will be accepted on the basis of certified mill test reports corresponding to the identifying "Heat Number" or "Coil Number" as shown on each piece. Metal shell piling produced from a non-domestic mill and identified by heat number or coil number will be accepted on the basis of certified mill test reports printed in English corresponding to the identifying "Heat Number" or "Coil Number" as shown on each piece supplemented by satisfactory test data obtained on samples of each heat or coil number sampled and tested by the Engineer. Certified mill test reports will be furnished to the Office of Materials and Research Inspection Services Branch by the Contractor or vendor.

#### 2. Produced Under a Lot Number

Metal shell piling produced from either domestic or non-domestic mills and not identified by heat number or coil number will be accepted on the basis of inspection, sampling and testing by the Department. The Engineer shall assign a lot number to the quantity being sampled and tested. Frequency of sampling will be on the basis of one complete test per size on lot numbers representing 1500 linear feet (457 linear meters) of piling or less. Lot numbers representing more than 1500 linear

## Standard Operating Procedure (SOP) 11

feet (457 linear meters) will be sampled on the basis of two specimens per size, per 10,000 linear feet (3048 linear meters) or fraction thereof. Each of the two samples shall be cut from separate piling. Piling having satisfactory dimensions, workmanship and for which satisfactory chemical and physical test results have been obtained must be prominently marked with the appropriate lot number and the numbered GDT stamp.

# **III. Project Acceptance**

The Engineer may accept and permit the driving of all steel piling from producers listed on <u>Qualified Products</u>
<u>List (QPL) 44</u> after verification of each heat number with the certified mill test report. Piling supplied from sources not listed on <u>Qualified Products List (QPL) 44</u> should be rejected and immediately reported to the <u>Office</u> of <u>Materials and Research Inspection Services Branch at 404-363-7616.</u>

	Georgene M. Geary, P.E.  State Materials and Research Engineer
	Character D. F.
	Glenn W. Durrence, P.E. Director of Construction
Ann	ual Guarantee
s to guarantee that all	

(Company Name and Location)

during the next twelve (12) months will meet the appropriate governing requirements of the Georgia Department of Transportation Specifications. I further warrant that material furnished to State of Georgia Projects will be replaced without cost to the purchaser and State of Georgia when found not in conformity with any of the specified requirements. I accept full responsibility for determining the governing Specifications and details which apply to each order.

I do hereby affirm that as	
(Typed Name)	(Official Title)
of	I am legally responsible to bind said
organization to	
(Company Name)	
the above warranty and certification.	
	Signed
	Date
Notary Public	
Date	