

903.03 DEFINITIONS

Section 903.03 of OPSS 903 is amended by the addition of the following definitions:

Inspector means an individual who is a Canadian Welding Bureau (CWB) certified Level 2 or Level 3 inspector according to the requirements of CSA W178.2 and has documented evidence of professional knowledge, skill, and experience in the inspection of fabrication and erection of steel bridges.

Non-Destructive Testing Technician means an individual who has documented evidence of training, professional knowledge, skill, and experience in non-destructive testing of structural steel welds and material, and has a valid certificate showing qualification to a Level 2 or 3 according to CGSB 48.9712 for the non-destructive testing specified.

903.05 MATERIALS

903.05.02.01 H-Piles

Clause 903.05.02.01 of OPSS 903 is amended by the addition of the following:

Steel H-Piles shall be substituted by a built-up section fabricated from structural steel plates, bar or coil with continuous fillet welds at the flange to web junctions, with the cross-sectional area and second moment of inertia in both axes not more than 5% different than the rolled section.

903.07 CONSTRUCTION

Section 903.07 is amended by the addition of the following clause:

903.07.02.03.03 H-Piles, Tube Piles, and Sheet Piles

Clause 903.07.02.03.03 of OPSS 903 is deleted in its entirety and replaced by the following:

Welding shall be according to CSA W59 and shall be carried out by a qualified welder employed by a firm certified according to CSA W47.1, Division 1 or Division 2.

Steel H-piles and steel tube piles may be spliced providing the pieces being spliced are not less than 3 m long, except for integral abutments' piles, where the splices shall not be located within 4.0 m below the underside of the abutment.

Where piles are located in a waterbody, splices shall be located below the low water level, unless otherwise encased in concrete.

Sheet piles shall not be spliced without approval by the Contract Administrator.

903.07.02.09 Fabricated H-Piles

H-Piles fabricated from structural steel plates, bar or coil shall be welded according to CSA W59. All welding shall be carried out by welders having a CSA W47.1 identification card valid for the type of welding to be done and for the duration of the welding work.

Dimensional and workmanship tolerances shall be according to CSA W59.

903.07.08 Quality Control

Subsection 903.07.08 of OPSS 903 is amended by the addition of the following clause:

903.07.08.01.01 Qualifications of Companies and Individuals

An independent testing organization shall carry out all non-destructive testing by using radiographic, ultrasonic, and magnetic particle test methods as applicable. The independent testing organization shall be certified for testing bridges according to CSA W178.1. The certification shall encompass all test methods used.

The independent testing organization's non-destructive testing technician performing the non-destructive testing of welds shall be certified according to CGSB 48.9712 Level 2 or Level 3 for the methods used.

Visual inspections shall be performed by a welding inspector certified according to CSA W178.2, Level 2 or Level 3.

903.07.08.01.02 Visual Inspection of Welds

Clause 903.07.08.01.02 of OPSS 903 is amended by the addition of the following:

All web-to-flange fillet welds of fabricated H-Piles shall be visually inspected by the Contractor's inspector.

903.07.08.01.03 Non-Destructive Testing of Welds

Clause 903.07.08.01.03 of OPSS 903 is amended by the addition of the following:

Magnetic particle inspection of web-to-flange fillet welds of fabricated H-Piles shall be carried out using procedures according to W59. The frequency of testing shall be as follows:

- a) Mechanised or automatic welds: 25% of length of each weld.
- b) Semi-automatic welds: 50% of length of each weld.
- c) Manual welds: 100% of length of each weld.

WARRANT: Always with OPSS 903, Construction Specification for Deep Foundations.