Part 1 General

1.1 RELATED SECTIONS

.1 **Section 01 33 00** – Submittal Procedures

.2 **Section 31 61 13** – Pile Foundations, General Requirements

.3 **Section 31 62 16.13** – Steel Sheet Piles

1.2 MEASUREMENT AND PAYMENT

.1 Payment for this item shall be as per Section 01 10 00.

1.3 REFERENCES

.1 All reference standards in this section shall be current issue or latest revision at the first date of project tender advertisement.

.2 American Society for Testing and Materials International (ASTM)

.1 ASTM A252-98 (2002), Standard Specification for Welded and Seamless Steel Pipe Piles.

.2 ASTM A307-04, Standard Specification for Carbon Steel Bolts and Studs, 60,000 PSI Tensile.

.3 ASTM A325M-05, Standard Specification for Structural Steel Bolts, Steel, Heat Treated 830 Mpa Minimum Tensile Strength Metric.

.4 ASTM A490M-04a, Standard Specification for High-Strength Steel Bolts, Classes 10.9 and 10.9.3 for Structural Steel Joints Metric.

.3 Canadian Standards Association (CSA International)

.1 CAN/CSA-G40.20-13/G40.21-13, General Requirements for Rolled or Welded Structural Quality Steel/Structural Quality Steels.

.2 CAN/CSA-S16-14, Design of Steel Structures.

.3 CSA W47.1-09, Certification of Companies for Fusion Welding of Steel Structures.

.4 CSA W48-14, Filler Metals and Allied Materials for Metal Arc Welding.

.5 CSA W59-13, Welded Steel Construction (Metal Arc Welding) (metric version).

.6 CAN/CSA S6-14, Canadian Highway Bridge Design Code (CHBDC).

.4 Canadian General Standards Board (CGSB)

.1 CAN/CGSB-1.171-98, Inorganic Zinc Coating.

.2 CAN/CGSB-1.184-98, Coal Tar-Epoxy Coating.

.5 The Master Painters Institute (MPI)/Architectural Painting Specification Manual, (ASM-[February 2004]).

.1 MPI #19, Inorganic Zinc Rich Primer.

.6 The Society of Protective Coatings (SSPC)

.1 SSPC-SP 5/NACE No.1-[2000], White Metal Blast Cleaning Joint Surface Preparation Standard.

1.4 SYSTEM DESCRIPTION

.1 Design Requirements: design templates to safely withstand following loads:

.1 Gravity loads to which template are subjected.

.2 Lateral loads to firmly hold pile in position when driving.

1.5 SUBMITTALS

.1 Provide submittals in accordance with Section 01 33 00 – Submittal Procedures.

.2 Product Data: submit manufacturer’s printed product literature, specifications and datasheet.

.1 Include product characteristics, performance criteria, and limitations.

.3 Submit shop drawings and indicate following items:

.1 Material.

.2 Anchorage, field control and alignment methods.

.3 Design parameters.

.4 Tolerance for driving pile.

.5 Removable method.

1.6 WASTE MANAGEMENT AND DISPOSAL

.1 Separate waste materials for disposal in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.

Part 2 Products

2.1 MATERIALS

.1 Steel sections and plates: to CAN/CSA-G40.20/G40.21-Type 350W.

.2 Welding materials: to CSA W48 and CSA W59.

.3 Bolts, nuts and washers: to ASTM A325.

2.2 FABRICATION

.1 Fabricate structural steel for templates: to CAN/CSA-S16.

.2 Welding: to CSA W59.

.3 Use welding companies qualified under CSA W47.1.

Part 3 Execution

.1 The design of pile templates are the responsibility of the Contractor. All pile template designs shall be stamped by a Professional Engineer Licensed to Practice in the Province of Prince Edward Island, Canada.

3.2 POSITIONING

.1 Position and hold template in location to receive piles.

.1 Ensure pile positions are within tolerances specified.

.2 Secure templates to piles in accordance with shop drawings

3.3 REMOVAL OF TEMPLATES

.1 Avoid damage to piling when removing templates.

.2 When instructed by Departmental Representative, remove templates from Project site.

3.4 TEMPLATES TO REMAIN

.1 Remove perishable materials when directed by Departmental Representative and fasten templates to piles to become part of permanent structure.

3.5 PROTECTION

.1 Protect templates from damage.

.2 Repair damage to templates, formwork or concrete arising from operations as reviewed by Departmental Representative at no extra cost.

END OF SECTION