1.6. ***Corrections.*** In lieu of rejection of an entire piece or member containing welding which is unacceptable, defective welds shall be corrected as required in ANSI/AWS D1.2.

(b) **Welding Requirements for Steel.** All welding material and methods, including qualification of welders, shall conform to the requirements of ANSI/AWS D1.1.

720.04. FABRICATION.

A type A certification covering all component parts of the structure shall be submitted prior to fabrication. The structure shall be free from all sharp edges and irregularities and shall be free from any misfits or structural deficiencies. All members must fit and make for any easy and quick erection.
Prior to shipment, the completed structure will be inspected at the place of fabrication.

720.05. SHIPPING AND ERECTION.

The structures must be protected on all surfaces so that no injury or defacement takes place during transportation or handling to point of destination.

The structure will be visually inspected when delivered to the project. Any defects shall be repaired or replaced in a manner approved by the Engineer.

NOTE: The use of metal tie-downs in direct contact with the structure will not be permitted.

For galvanized steel structures, such injury or defacement shall be cause for rejection unless in the opinion of the Engineer such injury or defacement is so slight that it may be quickly and efficiently regalvanized or metalized in accordance with " American Welding Society Standard C2.2 Recommended Practices for Metalizing."

720.06. ELECTRICAL REQUIREMENTS.

All electrical equipment, materials, and installation methods shall conform to the latest requirements of the National Electrical Code and to the Electrical Code in the area having jurisdiction.

In the event provision has not been made for furnishing electrical power at the site, then Contractor shall be responsible for furnishing temporary power to demonstrate that all fixtures and equipment are properly installed.

SECTION 721
GALVANIZED STEEL SIGN POSTS

Description. This Section establishes the requirements for galvanized steel sign posts in Section 851. A type A or type B certification will be required for posts greater than 2 inches (50mm) in diameter. Samples and a type D certification will be required for posts 2 inches (50 mm) or less in diameter. Galvanized specimens shall be submitted for testing in accordance with Section 8, ASHTO M 111.

721.01. PIPE POSTS.

Galvanized steel pipe posts shall be made from new galvanized steel pipe of the size shown on the Plans and shall conform to ASTM A 53 or F 1083. When the wall thickness or mass is not designated,

standard weight pipe, Schedule 40, shall be used. Galvanizing shall be done after fabrication and punching or drilling of holes that may be permitted on the Plans, except as provided herein. Cap plates shall be structural steel, AASHTO M 183 galvanized, in accordance with AASHTO M 111 or other materials when shown on the Plans.

Sign posts used for signs that are minor items or incidental construction, when approved by the Engineer, may have holes drilled or punched and one end cut to length after galvanizing— provided that the exposed metal surfaces shall be regalvanized, metalized, or painted with an approved zinc dust-zinc oxide paint.

721.02. WIDE FLANGE BEAM POSTS.

Galvanized steel wide flanged beams shall be new material of the size shown on the Plans and shall conform to the requirements of AASHTO M 183. Galvanizing shall be in accordance with AASHTO M 111 and shall be done after punching or drilling of any holes or cutting that may be permitted by the Plans or by the Engineer.

721.03. SQUARE TUBE POSTS.

Square tube posts shall be made from new hot- rolled carbon sheet steel, structural quality, ASTM A 570-79. The finish shall be in-line, hot- dip galvanized zinc coating per AASHTO M-120, followed by a chromate conversion coating and a clear organic exterior coating. The posts shall have 7/16 inch (11.1 mm) diameter holes or perforated holes spaced 1 inch (25.4 mm) on center along the center of each of the four sides. A type C certification from an approved manufacturer shall be provided with each lot or shipment and shall be completed by the supplier for each project quantity.

721.04. FLANGE CHANNEL POSTS.

Galvanized flange channel posts shall be new material of the size shown on the Plans and shall conform to the requirements of AASHTO M-183. Galvanizing shall be in accordance with ASTM A 123 and shall be done after punching or drilling of any holes or cutting that may be permitted by the Plans or by the Engineer.

SECTION 723
REINFORCING STEEL

723.01. BAR STEEL REINFORCEMENT - (BILLET STEEL).

This Specification covers plain and deformed billet steel bars for concrete reinforcement and dowels used in the work. The billet steel bars shall meet the Specification requirements of AASHTO M 31, grade 40 (300) or grade 60 (400). Furnish reinforcing steel bars of structural grade 60 (400) unless otherwise specified and shown on the Plans.

Sample two bars, not less than 24 inches (600 mm) in length, from each lot of bars in the shipment and furnish the chemical analysis report with each lot. The term “lot” used in this paragraph means all bars of one size up to 10 ton (10 metric ton) bearing one manufacturer’s roll mark.