SECTION 02831 - CHAIN LINK FENCES AND GATES

City of San Diego, CWP Guidelines

PART 1 -- GENERAL

- 1.1 WORK OF THIS SECTION
 - A. The WORK of this Section includes providing chain link fencing, gates and appurtenances.
- 1.2 RELATED SECTIONS
 - A. The WORK of the following Section applies to the WORK of this Section. Other Sections of the Specifications, not referenced below, shall also apply to the extent required for proper performance of this WORK.
 - 1. Section 03310 Cast-in-Place Sitework Concrete
- 1.3 STANDARD SPECIFICATIONS
 - A. Except as otherwise indicated in this Section of the Specifications, the CONTRACTOR shall comply with the Standard Specifications for Public Works Construction (SSPWC), as specified in Section 01090 REFERENCE STANDARDS.
- 1.4 CODES
 - A. The WORK of this Section shall comply with the current editions of the following codes as adopted by the City of San Diego Municipal Code:
 - 1. Uniform Building Code
- 1.5 SPECIFICATIONS AND STANDARDS
 - A. Except as otherwise indicated, the current editions of the following apply to the WORK of this Section:
 - 1. ASTM A 90 Test Method for Weight of Coating on Zinc-Coated (Galvanized) Iron or Steel Articles
 - 2. ASTM A 392 Specification for Zinc-Coated Steel Chain-Link Fence Fabric
 - 3. ASTM F 668 Specification for PVC Coated Steel Chain-Link Fence Fabric
- 1.6 SHOP DRAWINGS AND SAMPLES
 - A. The following shall be submitted in compliance with Section 01300 prior to fabrication and construction.
 - 1. Manufacturer's product information including catalog cuts indicating materials.
 - 2. The layout of the chain link fence and gates indicating fence height, post sizes, bracing configurations, corner construction, and accessories.

1.7 FACTORY TESTING

- A. Wire fabric shall be factory tested for weight of zinc coating in accordance with method specified in ASTM A 90.
- [B. Wire fabric shall be factory tested for determining the thickness of PVC coating in accordance with the provisions of ASTM F 668.]

PART 2 -- PRODUCTS

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NTS: Select appropriate specification for posts, rails, braces, and chain-link fabric compatible with the corrosivity of environment and location of the fencing.

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2.1 GENERAL

- A. **General**: Materials for chain link fencing, gates and appurtenances shall conform to the requirements of SSPWC, Subsection 206-6 and as indicated herein.
- 2.2 POSTS, [RAILS] AND BRACES
 - A. Materials for posts, rail and braces shall be Class [] [1 or 1A] complying with SSPWC Subsection 206-6.2.
 - [B. Materials shall be coated with polyvinyl chloride (PVC) in accordance with Subsection 210-5 of SSPWC.]
- 2.3 WIRE FABRIC
 - [A. Chain link fabric shall be galvanized fabric conforming to Subsection 206-6.3.1 of SSPWC. Fabric wire shall be 9 gauge prior to coating.]
 - [A. Chain link fabric shall be polyvinyl chloride (PVC) coated fabric conforming to Subsection 206-6.3.2 of SSPWC.]
- 2.4 FOOTINGS
 - A. Concrete for post footings shall conform to Subsection 201-1 of SSPWC, Class 520-C-2500 concrete.

PART 3 -- EXECUTION

3.1 INSTALLATION OF FENCING

- A. All earth, brush, or other obstructions which interfere with the proper alignment of construction of fences shall be removed.
- B. Line posts shall be spaced at not more than 10-foot intervals, measured from center to center of the posts and generally parallel to the ground slope. Posts shall be set plumb and shall be centered in concrete foundation.
- C. Gate post shall be provided with concrete foundation.
- D. Changes in the fence lines, where the horizontal angle is 15 degrees or more, shall be considered as corners and corner posts shall be installed.
- E. Corner, end, and gate posts shall be braced to the nearest line post. Corner and end posts shall be diagonally braced. Bracing for gate posts shall be horizontal braces with truss rods. Line posts shall be braced horizontally and trussed in both directions with truss rods at 1000 feet maximum intervals.
- [F. Top rails shall be in lengths not less than [] feet and shall be fitted with couplings for connecting lengths into continuous runs. Couplings shall be not less than 6 inches long and allow for expansion and contraction of the rail.]
- G. Chain link fabric shall be taut and shall be attached to posts, stretcher bars, [rails,] and wires with galvanized fabric bands or tie wires at a maximum spacing of 12 inches on posts and 18 inches on the [rails and] tension wires. The tension wires shall be stretched tight with turnbuckles at the end and corner posts. The bottom tension wire shall be installed on a straight grade between posts.
- H. The fabric shall be fastened to the end, corner, and gate posts with stretcher bars and stretcher bar bands spaced at approximately 12 inches.
- 3.2 GATES
 - A. Gate frames shall be fabricated with welded joints or rigid connectors. The fabric shall be the same as that used for the fence and shall be rigidly attached to the frames. Frames shall be suitably braced and trussed. Gates shall be equipped with suitable offset hinges to permit a 180 degree swing and a drop bar locking device with provision for padlocking. A stop to hold the gate open and a center rest with catch shall be provided.

3.3 CONCRETE FOOTINGS

A. Encasement concrete for footings shall be placed in accordance with Section 03310. Concrete for footings may be placed without forms, providing the ground is firm enough to permit excavation to neat line dimensions. Prior to placing the concrete, the earth around the hole shall be thoroughly moistened. The concrete shall completely fill the hole and top surfaces of the concrete encasement shall be sloped outward to shed water and shall have a neat appearance. Fence fabric [and the barbed wire] shall not be fastened to the post until a minimum period of 7 days has elapsed after the placement of concrete footing.

** END OF SECTION **