

SECTION 9.13 CHAIN LINK FENCE

9.13.01--Description: Work under this item shall consist of furnishing and installing woven wire fencing and gates of the type and height specified and supported by metal posts erected where indicated on the plans or as ordered and in conformity with these specifications.

9.13.02--Materials: The materials for this work shall conform to the requirements of Article M.10.05.

When aluminum-coated steel fabric is used, the posts and hardware will be galvanized.

When aluminum fabric is used, the posts and hardware will be aluminum.

When polyvinyl chloride-coated steel fabric is used, the posts and hardware will be polyvinyl chloride-coated.

Where the item "Chain Link Fence" is called for, the Contractor shall have the option of using either aluminum chain link fence or aluminum-coated chain link fence. However, only one type of chain link fence shall be used on the project under the "Chain Link Fence" item.

9.13.03--Construction Methods: The posts shall be spaced in line of fence not further than 3 m on centers. Intermediate or line posts, except where indicated on the plans, may be driven by mechanical means. A suitable driving cap shall be used to insure that no damage is caused to the post, galvanization or polyvinyl chloride coating. Posts not driven, and all other type posts shall be set in Portland Cement Concrete acceptable to the Engineer.

In earth, the hole for the concrete footing shall extend at least 100 mm below the bottom of the post but not less than 225 mm in diameter for all line posts and 300 mm in diameter for terminal, pull or corner posts. The tops of the concrete footings shall be crowned to shed water.

When ledge rock is encountered, the posts shall be set in holes drilled into rock at least 300 mm in depth and grouted or otherwise firmly held in correct position.

For fence 1.5 m in height or less where runs of fence are 30 m or over, end posts shall be braced. All corner posts where runs are over 30 m in either direction shall have two braces. For fence more than 1.5 m in height, end posts shall be braced; and corner posts shall have two braces.

Pull posts with two braces shall be provided for all heights where changes in horizontal or vertical alignment of ten (10) degrees or more occur.

Where braces are required, they shall be spaced as indicated on the plans.

Braces shall be securely fastened to posts by suitable connections and trussed from line post back to post requiring bracing with 9.5 mm round rod, having a turnbuckle adjustment.

Where a top rail is used, it shall pass through the base of the line post cap and form a continuous brace from end to end of fence. The rail shall be provided with couplings approximately every 6 m. The couplings shall be of the outside-sleeve type and at least 175 mm long, one coupling in every five to have a heavy spring to take up expansion and contraction in the top rail.

Fabric shall be fastened to line posts with bands or wire clamps of No. 6-gage aluminized or PVC coated steel wire 120 mm long. These bands shall be spaced approximately 350 mm apart. The fabric shall be fastened to the top rail with tie wires. These tie wires shall be 160 mm long, spaced approximately 600 mm apart.

If a top rail is not specified, a top tension wire shall be provided. The tension wire shall be one continuous length between pull posts. Sufficient tension shall be applied to provide a wire without a visible sag between posts. Tension wires shall be tied or otherwise fastened to end, gate, corner or pull posts by a method acceptable

to the Engineer. Ties or clips shall be provided for attaching the tension wire to the fabric at intervals not exceeding 600 mm.

Where it is not practicable to conform the fence to the general contour of the ground, as at ditches, channels, etc., the opening beneath the fence shall be enclosed with chain link fabric and sufficiently braced to preclude access, but not to restrict the flow of water.

Fabric shall be fastened to the end of the gate frames by stretcher bars and fabric bands, and to the top and bottom of the gate frames by tie wires in the same manner as specified for the chain link fence fabric.

The drop bar locking device for the gate shall be provided with a footing of Portland Cement Concrete crowned at the top to shed water and provided with a hole to receive the locking bar. A heavy duty padlock with (2) keys shall be furnished by the Contractor for each gate or set of double gates. The size of the footing and depth of penetration of the locking bar into the footing shall be as specified by the manufacturer of the locking device.

9.13.04--Method of Measurement: This work will be measured for payment by the number of meters of completed and accepted chain link fence or polyvinyl chloride chain link fence of the height specified, measured from outside to outside of terminal posts.

Gates will be measured for payment by the number of gates installed, of the type and size specified, completed and accepted.

9.13.05--Basis of Payment: This work will be paid for at the contract unit price per meter for "Chain Link Fence" or "Polyvinyl Chloride Chain Link Fence" of the height specified, complete in place, which price shall include all materials, equipment, tools, excavation, backfill, disposal of surplus material and labor incidental thereto. Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
(Height) Chain Link Fence	m
(Height) Polyvinyl Chloride Chain Link Fence	m

Gate work will be paid for at the contract unit price each for "Chain Link Gate" or "Polyvinyl Chloride Chain Link Gate" of the type and size specified; complete in place, which price shall include gate frame, gate posts, chain link fabric, lock, concrete, excavation, backfill, fabrication, installation, disposal of surplus material, and all materials, equipment, tools, labor and any work incidental thereto. Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
(Type) (Size) Chain Link Gate	EA.
(Type) (Size) Polyvinyl Chloride Chain Link Gate	EA.