## CITY OF LINCOLN, NEBRASKA, STANDARD SPECIFICATIONS

### CHAPTER 8

**CHAIN LINK FENCE AND PIPE RAILING FENCE**

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CHAPTER 8

CHAIN LINK FENCE AND PIPE RAILING FENCE

8.00 GENERAL

The Work covered in this chapter shall include the installation of chain link fence and pipe railing fence.

8.01 MATERIALS

A. CHAIN LINK FENCE

Materials for chain link fence shall be standard commercial products which meet the general requirements of these Standard Specifications.

Chain link fence fabric shall be No. 9 gauge wire woven in a 2" mesh. Fabric shall be the height indicated on the plans with both edges selvaged, twisted and barbed and shall be zinc-coated by the hot-dip process after fabrication.

End, corner, pull posts and intermediate posts shall be round tubular steel having a nominal outside diameter of 2 3/8" and weight of 3.65 pounds per foot.

Post braces and top rail shall be round tubular steel having a nominal outside diameter of 1 1/2" and weight of 2.72 pounds per foot.

Reinforcing wire shall be No. 7 gauge coiled spring wire.

Stretcher bars shall not be less than 3/16" x 3/4" x the length required for the height of the fabric supplied, but in no case less than 6" shorter than the height of the specified fabric.

Post tops shall be ornamental.

Zinc coating shall be applied to all steel and iron parts after fabrication.

Pipe sleeves shall be round, galvanized steel, have a nominal inside diameter of 2 1/2" and a minimum length of 12".

B. PIPE RAILING FENCE

Materials for pipe railing fence shall be standard commercial products which meet the general requirements of the Standard Specifications.

All pipe used for railing shall be round tubular steel (Schedule 40) galvanized pipe having a nominal outside diameter of 1 3/8".

All end, corner and intermediate posts shall be round tubular steel (Schedule 40) galvanized pipe having a nominal outside diameter of 1 3/8".

The tee, cross, elbow and flange connectors shall be malleable iron connectors as approved by the City’s Project Manager. The connectors are not to be welded or threaded type, but shall be of the reusable type having case hardened set screws to provide connection.
8.01 MATERIALS (Continued)

B. PIPE RAILING FENCE (Continued)

Pipe sleeves shall be round, galvanized steel, have a nominal inside diameter of 1 1/2" and a minimum length of 12".

Zinc coating shall be applied to all steel and iron parts after fabrication.

C. RIGID CELLULAR PLASTIC BACKFILL


D. POLYURETHANE SEALANT

Polyurethane sealant shall be one-part, self leveling, conforming to the requirements of “Standard Specifications for Elastomeric Joint Sealants” ASTM Designation C 920, Type S, Grade P, Class 25.

8.02 CHAIN LINK FENCE INSTALLATION

A. GENERAL

New chain link fence shall be installed at the locations shown and as dimensioned and detailed on the plans.

Post spacing for posts not to be on concrete walls shall not exceed 10’ and shall be set in 3’ of concrete base 12” in diameter. The exposed surface of concrete shall be crowned to shed water.

Post spacing for posts to be set on concrete wall shall not exceed 10’ or shall be at intervals shown on the plans. Posts shall be set into pipe sleeves cast into the wall and shall extend a minimum of 12” into the sleeve.

Posts in wall shall be set using rigid cellular plastic foam backfill. Sufficient material shall be placed in the pipe sleeve to completely fill the annular space to within 3/16” below the top of the sleeve. Care shall be taken to ensure that the annular space is filled in such a manner as to prevent voids in the plastic foam. Excess material shall be cut off and removed so as to leave a 3/16” reservoir. The resulting reservoir shall be filled with one-part, self-leveling polyurethane sealant installed in conformance with the manufacturer’s recommendations.

End, corner, and pull posts shall be braced to nearest point with tubular steel post brace with a 3/8” galvanized steel truss rod with a turnbuckle for adjustment.

Fastening to all terminal posts shall be with stretcher bars and fabric bands at 16” intervals.

Fastening to top rail shall be with wire ties at intervals not exceeding 20”. Fastening to bottom tension wire shall be with wire ties at intervals not exceeding 2’.
8.02  **CHAIN LINK FENCE INSTALLATION** (Continued)

B. BASIS OF PAYMENT

Chain link fence installed in conformance with the plans and these Standard Specifications and accepted by the City’s Project Manager shall be measured and paid for at the contract unit price bid per foot for CHAIN LINK FENCE, ___" for the various sizes called for in the proposal. Such payment shall be full compensation for materials, equipment, tools, labor and incidentals necessary to complete the Work as indicated on the plans.

8.03  **PIPE RAILING FENCE INSTALLATION**

A. GENERAL

New pipe railing fence shall be installed at the locations shown and as dimensioned and detailed on the plans. All Work shall be performed by competent and experienced fence erection workers, whose experience record is satisfactory to the City’s Project Manager.

Post spacing shall not exceed 10’ or shall be at intervals shown on the plans. Posts installed in concrete walls shall be set into pipe sleeves cast into the wall and shall extend a minimum of 12” into the sleeve.

Posts in walls shall be set using rigid cellular plastic foam backfill. Sufficient materials shall be placed in the pipe sleeve to completely fill the annular space to within 3/16" below the top of the sleeve. Care shall be taken to ensure that the annular space is filled in such a manner as to prevent voids in the plastic foam. Excess material shall be cut off and removed so as to leave a 3/16" reservoir. The resulting reservoir shall be filled with one-part, self-leveling polyurethane sealant installed in conformance with the manufacturer’s recommendations.

The tee, cross, elbow and flange connectors shall be set such that the set screw side of the connectors shall be installed on the side opposite the pedestrian traffic.

B. BASIS OF PAYMENT

Pipe railing fence, installed in conformance with the plans and these Standard Specifications and accepted by the City’s Project Manager, shall be measured and paid for at the contract unit price bid per linear foot for PIPE RAILING FENCE, __". Such payment shall be full compensation for all castings, pipe, sleeves, plastic backfill, sealant, caulking, posts, rails, and connectors, materials, equipment, tools, labor and incidentals necessary to complete the Work as indicated on the plans.