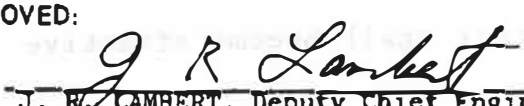


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| TO: | | ENGINEERING INSTRUCTION NEW YORK STATE DEPARTMENT OF TRANSPORTATION | |
| SUPERSEDED BY EI 93-001 EFFECTIVE 5/6/93 | | | |
| | | SUBJECT: ROW FENCING | |
| | | Subject Code: 7.27-2-607; 7.27-1-710-30 | |
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| APPROVED: | | Date: 9/17/91 | |
|  | | Supersedes: Std Sheet 607-2 | |
| J. R. LAMBERT, Deputy Chief Engineer (Facilities Design) | | | |

Standard Sheet 607-2R1 and a proposal insert titled "ROW Fencing" are attached. This standard sheet is a revision of Standard Sheet 607-2, and supersedes it. The proposal insert is a revision of SS607-2.03 and SS710-30 of the Standard Specifications.

The revised standard sheet incorporates the following changes:

1. All references to "ASTM A116 Design 1047-6-9 #9 Gauge Class 3 coating" have been changed to "710-30 of the Standard Specifications."
2. Note 3 has been split into two new notes, Note 4 and Note 5, for clarity. The new Note 4 covers the use of intermediate post assemblies. The new Note 5 covers the use of corner post assemblies.
3. The requirements for gate frames, bracing, and fittings in the old Note 4 are now incorporated into SS710-30.
4. Notes 5, 6, and 7 on old Standard Sheet 607-2 have been deleted in their entirety. Information in deleted notes 6 and 7 is contained in the materials specifications.

The proposal insert incorporates the following revisions:

1. The specifications for fence fabric have been revised to permit the use of ASTM A584 "Aluminum-Coated Steel Woven Wire Fence Fabric."
2. The specifications for galvanized steel posts and braces now conform to the requirements of ASTM A702 "Steel Fence Posts and Assemblies, Hot Wrought".
3. Requirements for acceptable materials for fittings have been added to the specification.
4. Requirements for fasteners have been added to the specifications.
5. Requirements for right-of-way fence gates, hinges, and latches have been added to the specification.

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6. Specifications for gate posts have been added that permit an option between Class A Schedule 40 Pipe and Class B Steel Tubing for steel gate posts. This specification for gate posts also references the wood gate posts to the fence post and braces subsection of the revised SS710-30.

This standard sheet and proposal insert shall become effective with the letting of February 20, 1992.

If any questions arise regarding this instruction or Standard Sheet 607-2R1 you may contact William E. Hopkins at (518) 457-4092.

RIGHT-OF-WAY FENCING

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Under §607-2.03 Fence Gates. Add the following immediately after the title of this subsection:

"Fence gates for Right-of-Way Fencing shall conform to the requirements for Right-of-Way Fence Gates of §710-30. Fence gates for Chain-Link Fence shall conform to the requirements of the following:"

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Delete §710-30 in its entirety and substitute the following:

§710-30 RIGHT-OF-WAY FENCING

SCOPE. These specifications cover the material requirements required for the construction of right-of-way fences comprised of (a) galvanized steel or aluminum coated steel fence fabric, and (b) posts, braces and hardware designed to support and retain the fencing.

MATERIAL REQUIREMENTS

Fence Fabric. Right-of way fencing fabric shall conform to the requirements of ASTM A116 "Zinc Coated (Galvanized) Steel Woven Wire Fence Fabric" or ASTM A584 "Aluminum-Coated Steel Woven Wire Fence Fabric." The fabric shall be woven in accordance with Design Number 1047-6-9 or 1047-6-11 as shown in Table 1 of both ASTM A116 and ASTM A584. The weight of the coating on the Zinc-Coated (Galvanized) Fence Fabric shall conform to the coating weight requirements of Class 3 shown in Table 3 of ASTM A116.

Fence Posts and Braces. Posts and brace sizes shall be as indicated on the Standard Sheets.

Galvanized steel posts and braces shall conform to the requirements of ASTM A702, and be galvanized in conformance with the requirements of §719-01 Type I.

Wood posts and braces shall be southern yellow pine or native pine. Other suitable wood species may be used when approved by the Deputy Chief Engineer (Construction). Application for approval shall contain the following information:

- A. Species of wood proposed for use.
- B. Type of preservative and minimum retention in pounds per cubic foot.
- C. Pressure preservative treatment method used.

All wood posts and braces shall be pressure treated with creosote oil complying with the requirements of §708-30, or

RIGHT-OF-WAY FENCING (CONTINUED)

pentachlorophenol in accordance with §708-32. The wood posts shall be subject to inspection before and during treatment at the option of the Department. They shall be sound, free from loose knots or decay, and with no through checks on tops or butts. Posts shall be machine peeled to a smooth uniform appearance and free from all inner bark. The preservative pressure treatment shall be by the empty cell process in accordance with C5 of the American Wood-Preserves Association Standards.

Fittings. Fittings shall be manufactured of weldable steel, malleable iron, cast steel, cast iron, or aluminum alloy. Fittings other than aluminum shall be galvanized in accordance with the requirements of §719-01 Type II.

Fasteners. Bolts, nuts, and washers shall conform to the following, unless specified otherwise in the contract documents:

| | |
|---------|-----------------------------|
| Bolts. | ASTM A307 Grade B |
| Nuts | ASTM A563 Grade A or better |
| Washers | ASTM F844 |

The fasteners shall be galvanized in accordance with the requirements of §719-01 Type II.

Right-Of-Way Fence Gates

A. Gates. Gates shall be constructed of Class A Schedule 40 Pipe conforming to §710-10.03 of the Standard Specifications welded at all corners or assembled with corner fittings. The size of the pipe used to fabricate the gate shall be as shown on the Standard Sheets. When corner fittings are used the gates shall have 3/8"Ø truss rods to prevent sag or twist. Gates leaves shall have vertical intermediate bracing so that no vertical members are more than 8 feet apart. Gate leaves over 10 feet shall have a 3/8"Ø truss rod even though the corners are welded. The fence fabric used on the gate shall conform to the fence fabric in the remainder of the fence.

B. Hinges. Hinges shall be weldable steel, cast steel, or malleable iron 180° offset industrial type. The hinges shall not twist or turn under the action of the gate. The gate shall be able to be opened by one person. The hinges shall be galvanized in accordance with the requirements of §719-01 Type I.

C. Latches. Latches, stops, and keepers shall be provided for all gates. Latches for single leaf gates may be a forked latch type. Double leaf gates shall have a plunger bar type latch arranged to engage a stop. Latches shall be

RIGHT-OF-WAY FENCING (CONTINUED)

capable of being locked and the Contractor shall provide a lock with triplicate keys for each gate. Keepers shall consist of a mechanical device for securing the free end of a gate when in the full open position.

D. Gate Posts. Gate posts shall conform to the dimensions shown on the Standard Sheets.

Steel gate posts shall be fabricated from either Class A Schedule 40 Pipe or Class B Steel Tubing conforming to the requirements of §710-10.03 of the Standard Specifications.

Wood gate posts shall be made from wood conforming to the requirements for wood posts and braces as specified in the subsection titled "Fence Posts and Braces" of this specification.

BASIS OF ACCEPTANCE. Fabric acceptance will be based on sampling and testing conducted by the Materials Bureau, in accordance with procedural directives of the Department. The acceptance of all other materials specified in this specification for use in the construction of Right-of Way Fencing will be based on the Manufacturers certification with supplementary sampling and testing at the direction of the Materials Bureau."