## ITEM 607 FENCE

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607.01 Description. This work consists of furnishing and erecting fence and gates of the types designated. Construct fence in a manner that provides a rigid, taut fence closely conforming to the surface of the ground.

Fence is designated by the following types:
A. Type 47 [47-inch $(1195 \mathrm{~mm})$ ] woven wire fence fabric with steel line posts.
B. Type 47RA [47-inch (1195 mm)] woven wire fence fabric with wood line posts.
C. Type CL [60-inch $(1525 \mathrm{~mm})]$ chain-link fence fabric with top rail.
D. Type CLT [60-inch $(1525 \mathrm{~mm})$ ] chain-link fence fabric with tension wire.
607.02 Materials. Furnish materials conforming to:

Concrete, Class C, F, or S.......................... 499 and 511
Reinforcing steel .................................................. 509.02
Barbed wire .......................................................... 710.01
Woven steel wire fence ....................................... 710.02
Chain-link fence................................................... 710.03
Fence posts, braces, and dimension lumber ....... 710.11
Steel line posts and ties, Type 47 fence.............. 710.11
Expansion shield anchors, self drilling............... 712.01
Seeding and Mulching ............................................ 659
607.03 Clearing, Grading, and Seeding. Perform clearing and grading as necessary to construct the fence to the required alignment, and provide a reasonably smooth ground profile at the fence line. Perform Item 607 Fenceline Seeding and Mulching according to Item 659 Seeding and Mulching on all areas disturbed by the clearing and grading of the Item 607 Fence within 8 months of the activity. Item 607 Fenceline Seeding and Mulching will be deducted from Item 659 Seeding and Mulching quantities as described in the plans, if applicable.
607.04 Post Assemblies. Securely brace end, corner, gate, and pull or intermediate anchor posts in position during the curing period of the concrete encasement. The Engineer will not require forms for post encasement.

For Type 47 and Type CLT fence, ensure that the maximum spacing between intermediate anchor post assemblies, or between end post assemblies and intermediate anchor post assemblies, are 660 feet ( 200 m ).
607.05 Horizontal Deflection. At points of horizontal deflection, construct the fence as follows:
A. Type 47 Fence. If the fence changes alignment by more than 1 degree but not more than 4 degrees, install either steel line posts encased in concrete or wood posts without encasement at all horizontal deflection points. If the change in alignment is more than 4 degrees and less than 30 degrees, build an intermediate anchor post assembly at the deflection point. If the change in alignment is 30 degrees or more, build a corner post assembly at the deflection point.
B. Type CL Fence. If the fence changes alignment by more than 1 degree but not more than 4 degrees, install line posts encased in concrete at all horizontal deflection points. If the change in alignment exceeds 5 degrees, provide a post brace and truss rod in each fence panel adjacent to the post located at the angle point. If the change in alignment exceeds 5 degrees, construct the footings for all post located at deflection points as specified for end posts.
607.06 Line Posts. Set line posts according to the following:
A. Type 47 Fence. Space line posts at intervals not to exceed 12 feet ( 3.6 m ). Anchor line posts at the bottom of dips or depressions in the ground surface in concrete. If channels or streams cross the fence line, construct crossings as shown on the plans.

On tangents, place line posts so that the fabric, when installed on the side toward the highway, is 2 feet ( 0.6 m ) from the Right-of-Way line. If adjacent to Right-of-Way lines with less than 5740 feet ( 1750 m ) radius (in excess of 1 degree curvature), construct line posts on chords so that the fabric, when installed on the side toward the highway, is not less than 2 feet $(0.6 \mathrm{~m})$ or more than 8 feet $(2.4 \mathrm{~m})$ from the Right-ofWay line.

Locate posts at points of horizontal deflection so that the fence fabric will bear against the post.
B. Type CL Fence. Protect the tops of driven line posts by drive caps or other method to prevent distortion of the exposed end. Space line posts at not more than 10foot $(3 \mathrm{~m})$ centers, and place them so that, when the wire is fastened on the side toward the highway, it is 1 foot $(0.3 \mathrm{~m})$ from the Right-of-Way line.
607.07 Fabric. If setting posts in concrete, do not erect the fabric until after 5 days from the time of setting the posts when using regular cement, or until after 3 days when using high early strength cement.

Stretch and securely fasten Type 47 fabric to line posts using galvanized ties. At a minimum, use one tie each for the top and bottom horizontal wires and one tie for each alternate horizontal wire below the top horizontal wire.

Fasten chain-link fabric to the line posts using clips or bands spaced approximately 14 inches $(0.4 \mathrm{~m})$ apart, and to the top rail or top tension wire using bands or tie wires at approximately 24 -inch ( 0.6 m ) intervals or less. Join successive rolls of fabric by weaving a single picket into the ends of the rolls to form a continuous mesh.
607.08 Barbed Wire. If barbed wire is specified, stretch and fasten it in the same manner as woven wire fabric.
607.09 Method of Measurement. The City will measure Fence, Type $\qquad$ by the number of feet (meters), complete in place. The City will measure along the top of the fence from outside to outside of end posts, exclusive of gates and other openings.

The City will measure Fenceline Seeding and Mulching by the linear feet of fence. The City will measure along the top of the fence from outside to outside of end posts, exclusive of gates and other openings.

The City will count Gate, Type $\qquad$ by the number of complete units of the size and type specified.
607.10 Basis of Payment. The City will pay for accepted quantities at the contract prices as follows:

The City will pay for Seeding and Mulching under Item 607 Fenceline Seeding and Mulching.

| Item | Unit | Description |
| :--- | :--- | :--- |
| 607 | Foot (Meter) | Fence, Type-_ |
| 607 | Each | Gate, Type- |
| 607 | LF | Fenceline Seeding and Mulching |

