1. This fence to be provided generally in rural areas. For supplemental information see Specifications 550.

2. Fabric shall be woven wire, either galvanized steel, meeting the requirements of ASTM A216, No. 9 Grade 60, Design Number 1047-4-9, with Class 3 zinc coating; No. 12½ Grade 173, Design Number 1047-8-12½, with a 16½ gauge top and bottom wire and with Class 3 zinc coating; or aluminum coated steel, meeting the requirements of ASTM A584, No. 9 Farm, Design Number 1047-8-9, with a minimum coating weight of 0.40 oz./ft.². For additional information see payment note below.

3. Fence shall be installed with wire to private property except on horizontal curves greater than 3°. The fence shall be installed so as to pull against all posts.

4. Posts may be either timber, steel, recycled plastic or concrete. Unless a specific post material is called for in the plans, the Contractor may elect to use either a single material or a combination of timber, steel, recycled plastic or concrete materials, but must comply with the electrical grounding requirements in Specifications 550. Line posts of one material may be used with corner, pull and end post assemblies or a different material. One post of one optional material and pull post assemblies of only one optional material will be permitted between corner and pull post assemblies. Individual corner and end post assemblies only one optional material will be permitted.

5. Remaining posts shall meet the material requirements of Specification 964. Timber line posts are to be a minimum 4” diameter. Timber corner, pull, approach and end posts are to be a minimum 5” diameter. Timber braces are to be minimum 4” diameter.

6. Connections between timber posts and braces to be provided by dowels as shown in fastener details.

7. Steel posts and braces shall be standard steel posts, galvanized at the rate of 2 oz./ft.², together with necessary hardware and wire clamps and meeting the following requirements:
   - A) Line posts: 8" long; 1.13 lbs./ft.; full forming, arched plate attached, ASTM A702 (18 in²).
   - B) Approach posts: 2½”x2½” angles; 8" long; fabricated for attaching brace; with necessary hardware, clamps, etc.
   - C) Pull, end and corner posts: 2½”x2½” angles; 8" long; fabricated for attaching brace; with necessary hardware, clamps, etc.
   - D) Braces: 2½”x2½” angles with necessary hardware and fabricated for attaching to post.
   - E) The pull, corner, approach and end posts are to be set in concrete as per detail. (See General Note 15.)

8. Recycled plastic posts shall be fabricated of two strands of 0.110”-inch wire diameter four-point barbs spaced at approximately 3½”, and at a maximum spacing of 6”. The wire for the strands and for the barbs shall be of ASTM A584, Alloy 302-185BS equal.

9. The woven wire shall be attached to steel and concrete posts by a minimum of four tie wires. The single tie wire shall be applied to the top, bottom and three intermittent line wires. The ends of each wire shall have a minimum of two tight turns around the line wire. Tie wires shall be steel wire not less than 0.120” diameter, zinc coating Class 3, soft temper, in accordance with ASTM A456.

10. Steel Barbed Wire can be either of the following types:
   - Type I: This type shall conform to the requirements of ASTM A121, with two strands of 1½ gauge wire.
   - Type II: This type shall conform to the requirements of ASTM A121 with two strands of 1½ gauge wire.

11. Pull post assemblies shall be installed at approximately 330’ centers except that this maximum interval may be reduced by the Engineer on curvatures where the radius is less than 300’. Corner post assemblies are to be installed at all horizontal and vertical breaks in fence of 15° or more.

12. A maximum length of 1320’ of wire may be installed as a unit. For pulls through a pull post assembly the fabric shall be spliced by crimping sleeves only. Pulls through a corner post assembly will not be permitted.

13. Unless otherwise called for in the plans, gates shall be commercially available metal swing gates assembled and installed in accordance with the manufacturer’s specifications as approved by the Engineer. Chain link swing gates in accordance with index 550-002 may be substituted for metal swing gates as approved by the Engineer. Gate size is full opening width whether single leaf or double leaves. Payment for gates shall include the gate, single or double, all necessary hardware for installation and any additional length and/or size for posts at the gate. Gates shall be paid for under the contract unit price for Fence Gates EA.

14. For construction purposes, assemblies are defined as follows: End post assemblies shall consist of:
   - one end post, one approach post, two braces, four diagonal tension wires and all necessary fittings and hardware.

15. Pull post assemblies shall consist of:
   - one pull post, two braces, four diagonal tension wires and necessary fittings and hardware.

16. Corner post assemblies shall consist of:
   - one corner post, two approach posts. Four braces, eight diagonal tension wires and all necessary fittings and hardware.

17. All posts, braces, tension wires, fabric, tie wires, Class RS concrete, and all miscellaneous fittings and hardware to be included in the cost for Fencing, EA. Fencing shall be inclusive of the lengths of pull, end and corner post assemblies, but exclusive of gate widths.
REV ISIO N
DESCRIPTION:
LAST
of
STANDARD PLANS
SHEET
INDEX
11/01/17
FENCE TYPE A

REVISION

At The Rate Of 0.8 Soft Temper, Galvanized Tightness, Steel Wire, Twisted To Singing Two No. 9 Gage Wires Brace
Ground Line
One Strand Barbed Wire

Illustrates Angle In Fence Alignment

6" Brace

Brace

Illustrates Angle In Fence Alignment

One Strand Barbed Wire
Two No. 9 Gage Wires Twisted To Singing Tightness, Steel Wire, Soft Temper, Galvanized At The Rate Of 0.8 oz./ft.²; ASTM A641 (Typical)

Note: Timber Post Illustrated.

See General Note 2.

DESIGN NOTE

This index details fencing that is constructed with farm fabric 46" (47" nominal) in height and with specific ground clearance and specific barbed wire spacings. For fencing of different height or installation details, the fence shall be fully detailed in the Contract plans.

Note:  Timber Post Illustrated.

LINE POST
PULL POST
LINE POST
LINE POST
LINE POST
LINE POST
APPROACH POST
CORNER OR END POST

PRIVATE PROPERTY

14' Maximum Spacing For Line Posts

10'-0" Min.

3'-3" Min.

3'-0" Min.

2'-9" Min.

2'-0" Min.

12"

10'-0" Min.

6" Or As Indicated In Plans

Private Property

FENCE POSITION AT LOCATIONS WITHOUT FRONTAGE ROADS

(REFER TO DETAIL PLANS FOR FENCE POSITION AT LOCATIONS WITH FRONTAGE ROADS)

CONCRETE BASE FOR ANGULAR STEEL POST

(Pull, Corner, End And Approach Posts)
**FENCE TYPE A**

**DESCRIPTION:**

Revision of Standard Plans FY 2019-20

**LAST REVISON:**

01/01/17

**REVISED:**

01/01/17

**INDEX:**

550-001

**SHEET:**

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**FASTENER FOR CONCRETE POST AND BRACES**

**FASTENER FOR TIMBER POST AND BRACE**

**ALTERNATE CONCRETE POSTS AND BRACES**

**SPLICES**