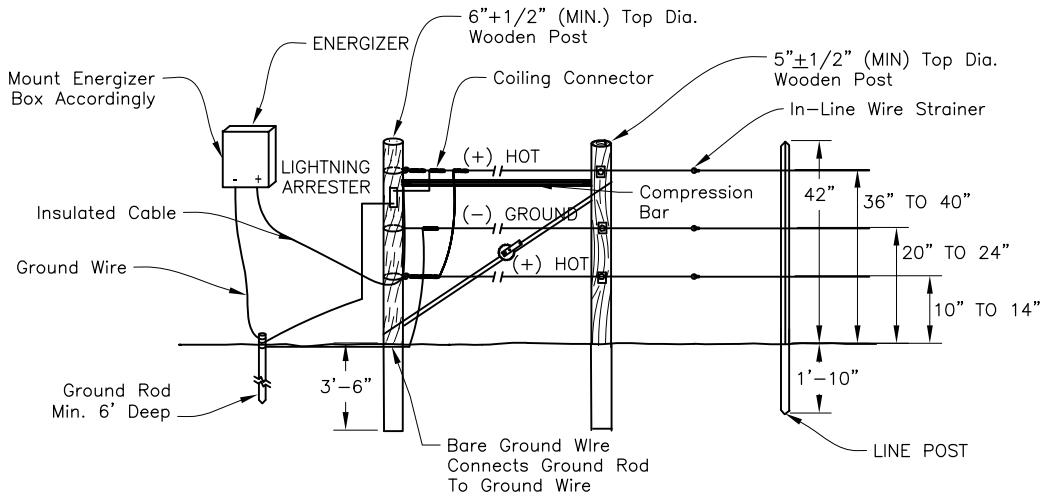
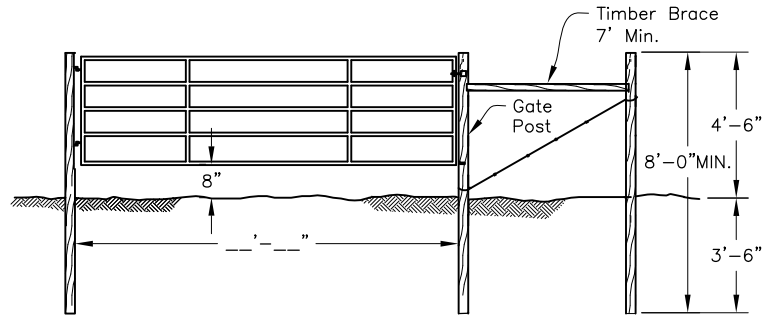


THREE–STRAND ENERGIZED FENCE DETAIL

(SEE TABLE 1 FOR TWO AND FIVE WIRE SPACING)

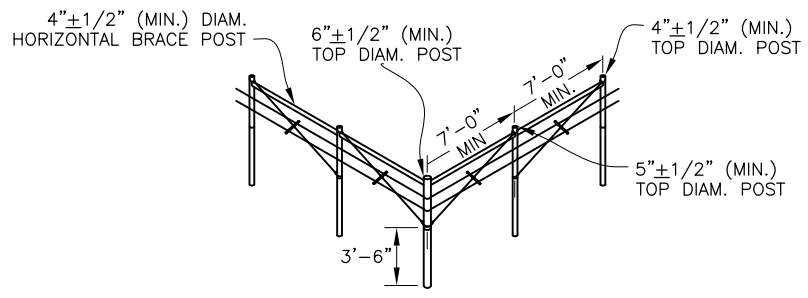
n.t.s.



2" diam. galvinized steel pipe gate(s). Standard hardware for hanging and latching gate(s) to double latched. Underground insulated cable or overhead wire will be used to carry current through gate area.

GATE PANEL DETAIL

n.t.s.



ALTERNATE 1 DOUBLE BRACE CORNER GATE AND/OR BRACE DETAIL

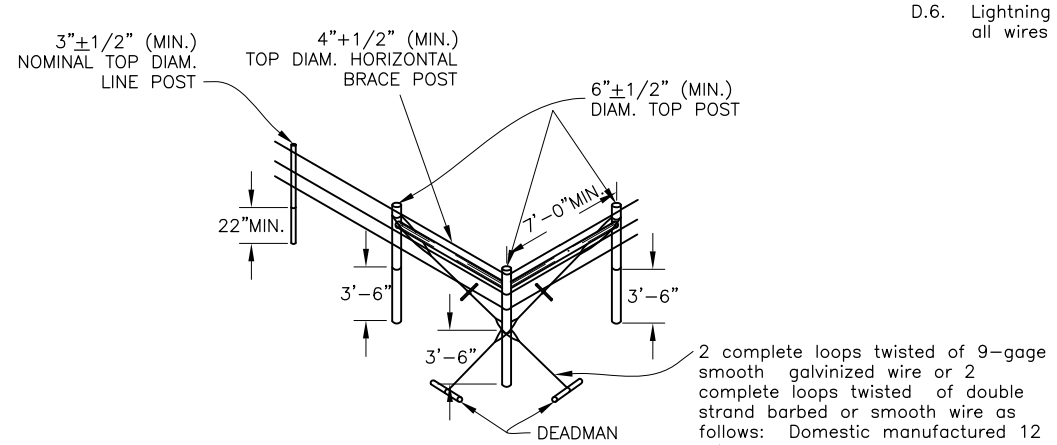
n.t.s

WESTERN UNION SPLICE

(ALL SPLICES)

TABLE 1. WIRE SPACING AND CHARGE			
NUMBER OF WIRES	2	3	5
BOTTOM WIRE	⊖ 24"–32"	⊕ 10"–14"	⊖ 10"–14"
SECOND	⊕ 36"–40"	⊖ 20"–24"	⊕ 18"–22"
THIRD	–	⊕ 36"–40"	⊖ 26"–30"
FOURTH	–	–	⊕ 32"–36"
FIFTH	–	–	⊖ 40–44"

CHARGE ⊕ HOT ⊖ GROUND



2 complete loops twisted of 9–gage smooth galvinized wire or 2 complete loops twisted of double strand barbed or smooth wire as follows: Domestic manufactured 12 1/2 gage or domestic or foreign manufactured high tensile 13 1/2 or 15 1/2 gage.

ALTERNATE 2–DEADMAN CORNER GATE AND/OR BRACE DETAIL

n.t.s.

NOTES:

All Fences shall meet NRCS Practice standards for fence. Code 382 in the local NRCS Field Office technical Guide.

A. WIRE

A.1. Wire will be new, smooth, and meet or exceed the following:
Tensile Strength – 170,000 PSI
Galvanizing – Type III
Gage – 12
For Spacing, refer to Table 1. "Wire Spacing and Charge"

A.2. Insulated Cable –– Use galvanized wire with two layers of insulation for underground burial or overhead transmission. Do not use copper or insulated wire due to corrosion factor and tensile strength.

A.3. In–Line wire strainers should be used on each wire so the proper tension can be maintained or adjusted. Generally 200–300 pounds of tension should be maintained on each wire.

B. POST

B.1. Corner, gate, and brace posts shall be constructed as shown in alternate 1 or 2 on this street. Horizontal Braces are required at all corners, gates and definite angles in the fence. Horizontal bracing shall be installed at intervals not to exceed 1320 feet.

B.2. Line post shall be 3 1/2" inch nominal dia. pressure treated wood or fiberglass. The fiberglass should be the "T" shaped post at least 1 inch (cross section) with notches or holes on 2 inch maximum spacing for the fence wire. Also insultimber type posts, 1 1/2" x 1 1/2" square having notches or holes at 2 inch spacing for wire attachment may be used. Posts shall be long enough for fence design and in the ground at least 22 inches. Line posts are not to exceed 50 foot centers.

B.3. Insulators –– Ceramic or polyethylene insulators must be used where needed. Fence fasteners or clips for fiberglass and insultimber type posts should be galvanized. Insulators and fasterners shall be allow the fence wire to move past the posts as necessary.

C. ENERGIZERS –– Electronics energizers or power fence controllers will meet the following criteria:

C.1. High power, low impedence with a 5,000 to 6,000 volt peak outlet with a pulse that is finished within 300 millionths of a second.

C.2. Have a high impact weather resistant case.

C.3. Have safety fuses.

C.4. Be 110 volt, 220 volt, or 12 volt battery powered systems.

C.5. Must have a lightening arrestor.

D. GROUND

D.1. Fences must be grounded.

D.2. Energizer ground wire must be connected to a galvanized pipe or rod 3/4 inch diameter or larger and driven into the ground a minimum of 6 feet. If soil depth prohibits this 6 foot depth, two or more galvanized pipes or rods shall be used.

D.3. Ground wires attached to the fence will be the same insulation material as for the energizer.

D.4. Do not place ground rods any closer than 10 feet to any other electrical ground or water pipes.

D.5. Do not install ground stakes near milking barns, water pipes, or any other metal item leading into the barn or working area.

D.6. Lightning arresters should be installed on all fence systems, grounding all wires at least every 3,000 feet on the fence.

Date
Designed
Drawn
Checked
Approved

Permanent Energized Fence Detail

NRCS
Natural Resources Conservation Service
United States Department of Agriculture

File No.
FL–382C.dwg

Drawing No.

6/5/2012

Sheet of

Permanent Energized Fence Detail

Standard DWG. No. FL–382C

Date: 11/08

Sheet of

REVISIONS		
DATE	APPROVED	TITLE
11/08	J.T. Wilson	St. Con. Eng