

**NATURAL RESOURCES CONSERVATION SERVICE  
CONSERVATION PRACTICE STANDARD  
FENCE  
(FEET)  
CODE 382**

**DEFINITION**

A constructed barrier to livestock, wildlife, or people.

**PURPOSE**

This practice may be applied as part of a conservation management system to facilitate the application of conservation practices that treat the soil, water, air, plant, animal, and human resource concern.

**CONDITIONS WHERE PRACTICE APPLIES**

This practice may be applied on any area where livestock and/or wildlife control is needed, or where access to people is to be regulated. Fences are not needed where natural barriers will serve the purpose.

**BASIC CRITERIA**

Fencing materials shall be of high quality and durability, and the construction performed to meet the intended management objectives.

Fences shall be positioned to facilitate management requirements.

Standard or conventional (barbed or smooth wire), suspension, woven wire, or electric fences shall consist of acceptable fencing designs to control the animal(s) or people of concern and meet the intended life of the practice.

Height, number, and spacing of wires will be installed to facilitate control and management of the animal(s) and people of concern.

Height, size, spacing and type of posts will be used that best provides the needs for the style of fence required and is best suited for the topography of the landscape.

**DETAILED CRITERIA**

See TABLE, APPENDICES, AND FIGURES which provide details of the basic criteria.

**CONSIDERATIONS**

Consider installing fences in locations that will facilitate maintenance avoiding irregular terrain and/or water crossings.

Consider wildlife movement needs when locating fences. Where white-tailed deer range, and the height of fence is less than 48 inches, space the top two wires 10 inches apart to reduce the hazard of catching deer in the fence. However, if 47 inch net wire is used, consider not using another wire above the net wire or spacing the top wire(s) about one inch apart.

Consider livestock management, handling, watering and feeding needs when locating fences.

Where applicable, cleared right-of-ways should be established which will facilitate fence construction and maintenance.

Consider soil erosion potential when planning construction of a fence on steep slopes.

Consider introducing animals to electric fencing in a designated training facility. Select a well fenced area and construct an electric fence across or around the area to allow animals to come in contact with the electric fence. Normally, a minimum 12 hour exposure to the electric fence is required. Most animals will be trained in 48 hours.

To facilitate better management, locate fences on boundaries between ecological sites, forage suitability groups, or other significant delineations when possible.

<p>Conservation practice standards are reviewed periodically and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service</p>
--

## **PLANS AND SPECIFICATIONS**

Plans and specifications are to be prepared for specific field sites based on the NRCS National and State Fence Standards and appropriate state or local statutes or laws.

**The Fence Construction Check Sheet WILL BE used for all fences that are planned in a resource management system.**

## **OPERATION AND MAINTENANCE**

Regular inspection of fences should be part of an on-going management program. Inspection of fences after storm events is needed to facilitate the function of the intended use of the fence.

Maintenance and repairs will be performed as needed to facilitate the intended operation of the installed fence. This includes the prevention of growth or removal of woody vegetation in the fence.

Table 1. Construction must meet or exceed this minimum criteria:

Kind of Grazing Animal <u>10/</u>	Kind of Fence	Galvanized Wire (New Only)		Type	Minimum Number of Wires	Maximum Line Posts Spacing With 2 or More Stays	Maximum Line Posts Without Stays <u>7/</u>	Average Height of Top Wire	Wire Spacing	
		Electric	Gauge <u>1/</u>							
<b>Cattle/Horses</b>	Barbed		12 1/2	Malleable	4	30'	20'	44"	<u>a/</u>	
	Barbed		13 1/2	High Tensile	4	30'	20'	44"	<u>a/</u>	
	Barbed		15 1/2	High Tensile	4	30'	20'	44"	<u>a/</u>	
	Woven (net)/ Barbed			Malleable <u>2/</u>		30'	20'	44"	<u>b/</u>	
		Smooth		12 1/2	High Tensile <u>3/</u>	1 <u>9/</u> <u>5/</u>	150'	100'	32"	<u>c/</u>
		Smooth		12 1/2	High Tensile <u>3/</u>	2 <u>9/</u> <u>5/</u>	150'	100'	35"	<u>d/</u>
		Smooth		12 1/2	High Tensile <u>3/</u>	3 <u>9/</u>	150'	100'	39"	<u>e/</u>
		Smooth		12 1/2	High Tensile <u>3/</u>	4 <u>9/</u>	150'	100'	43"	<u>f/</u>
		Smooth		12 1/2	High Tensile <u>3/</u>	5 <u>9/</u>	150'	100'	43"	<u>g/</u>
		Barbed (suspension)		12 1/2 13 1/2 15 1/2	Malleable or High Tensile	4	100' <u>4/</u>		44"	<u>a/</u>
<b>Sheep</b>	Barbed		12 1/2	Malleable	7 <u>8/</u>	30'	20'	36"	<u>j/</u>	
	Barbed		12 1/2 13 1/2	High Tensile	7 <u>8/</u>	30'	20'	36"	<u>j/</u>	
	Woven (net)			Malleable <u>2/</u>	<u>8/</u>	30'	20'	39"	<u>b/</u>	
		Smooth		12 1/2	High Tensile <u>3/</u>	4 <u>9/</u> <u>5/</u>	150'	75'	36"	<u>h/</u>
		Smooth		12 1/2	High Tensile <u>3/</u>	5 <u>9/</u>	150'	75'	46"	<u>i/</u>
	<b>Goats</b>	Barbed		12 1/2	Malleable	7 <u>8/</u>	20'	15'	36"	<u>j/</u>
Barbed			13 1/2	High Tensile	7 <u>8/</u>	20'	15'	36"	<u>j/</u>	
Barbed			15 1/2	High Tensile	7 <u>8/</u>	20'	15'	36"	<u>j/</u>	
Woven (net)				Malleable <u>2/</u>	<u>8/</u>	30'	20'	39"	<u>b/</u>	
		Smooth		12 1/2	High Tensile <u>3/</u>	4 <u>9/</u> <u>5/</u>	150'	75'	36"	<u>h/</u>
		Smooth		12 1/2	High Tensile <u>3/</u>	5 <u>9/</u>	150'	50'	36"	<u>i/</u>
<b>Deer</b>		Woven (net)			Malleable <u>6/</u>		20'	20'	8'	<u>k/</u>

- 1/ Gauge - Foreign made 12 ½ gauge and heavier malleable steel barbed wire (not high tensile) must equal or exceed 950 pounds (lbs.) force break strength. Wire must have minimum Class I galvanization.
- 2/ At least 32" of woven (net) wire having at least, 11 gauge top and bottom strands, 14 ½ gauge intermediate and stay wires with stay wires spacing 12" or less. If cattle are the only livestock being managed, include two strands of 12 ½ gauge barbed wire or equivalent in tensile strength on top, or 35" net wire with 1 strand of 12 ½ gauge barbed wire on top. When managing sheep or goats alone, 39" net wire with 10 gauge top and bottom strands, and 12 ½ gauge intermediate and stay wires with spacing of 12" or less can be used in lieu of the first alternative.
- 3/ 170,000 PSI minimum strength or greater for 3 or more wire fences, 130,000 PSI minimum strength or greater for 2 or less wire fences, and minimum Type III galvanization which has .80 ounces of zinc per square inch of wire surface.
- 4/ Twisted wire stays must be installed at not more than 20 foot intervals between line posts. All stays should swing free of the ground to permit the fence to sway when contacted by animals. Suspension fences shall not be constructed on a curve. Directional changes in the line shall be by definite angles and properly braced. Suspension fences should be constructed with approximately a 3 inch sag in the wire between posts to permit maximum sway of the fence.
- 5/ For use as cross-fence in a grazing system. Introducing animals to electric fencing in a designated training facility is recommended. Not recommended for exterior fences.
- 6/ Bottom section of at least 48" woven wire, 11 gauge or larger top and bottom strands, 12 ½ gauge or larger intermediate and stay wires, and stay wires spaced no more than 6 inches. Top section of at least 35" woven wire and made of 11 gauge or larger top and bottom strands, 14 ½ gauge or larger intermediate and stay wires spaced no more than 12 inches.
- 7/ Line posts must be set at significant high and low points along fence to maintain proper wire height.
- 8/ When cattle are grazed in addition to sheep and/or goats, use one barbed wire above the top wire or above 39 inch net, with approximately a 10 inch spacing between top two wires.
- 9/ In most instances in Louisiana, an all positive charge fence will normally suffice. If experience shows that the soil on the site will dry to the point that it will not cause sufficient shock to the animal, then a combination of positive (+) and negative (-) wires should be used.
- 10/ 12 ½ gauge smooth wire with minimum Type III galvanization can be substituted for barbed wire when fencing is constructed for horses only.

APPENDICES  
Section A

WIRE SPACING

- a/ Bottom wire set a minimum of 14" above ground with middle two wires set at 10" intervals, and top wire set at not less than 44" above ground.
- b/ At a minimum 32" woven (net) wire set at ground level with one strand of 12 1/2 gauge barbed wire or equivalent set 3" above the woven wire, and another strand of 12 1/2 gauge barbed wire set 10" above the first barbed wire, or 35" woven (net) wire set at ground level with one 12 1/2 gauge barbed wire or equivalent set 10" above the net wire. For sheep and goats alone, 39" net wire set at ground level will suffice.
- c/ One "hot" wire set 24" - 40" above ground level, depending on the size of the animal to be controlled. This spacing also includes offset wire on existing fences.
- d/ Top wire shall be set from 30" - 42" above ground, with second wire set below at 14" - 24" above ground level.
- e/ Top wire shall be set from 34" - 48" above ground, with middle wire set at 24" - 36" above ground, and bottom wire set at 12" - 24" above ground.
- f/ Interior or boundary fence. Top wire shall be set from 42" - 60" above ground, second wire from top set at 34" - 48" above ground, third wire from top set at 20" - 34" above ground, and bottom wire set at 10" - 20" above ground. Wire spacing needs to be constructed in a manner **not** to allow the animal's head to penetrate the fence without being shocked.
- g/ Boundary fence with top wire set 50" - 60" above ground level, 4<sup>th</sup> wire set 40" - 50" above ground level, 3<sup>rd</sup> wire set 30" - 40" above ground level, 2<sup>nd</sup> wire set 20" - 30" above ground level, and bottom wire set 10" - 20" above ground level. Wire spacing needs to be constructed in a manner not to allow the animal's head to penetrate the fence without being shocked.
- h/ Top wire (hot) shall be set at 36" above ground level with the lower wires (grounded or hot) spaced at 24", and 14" above ground, with bottom wire (hot) no higher than 6" above ground level.
- i/ Top wire (hot) shall be set at 36" above ground level with lower wires (hot or alternating ground/hot) spaced at 26", 18", and 12" above ground level, with the bottom wire (hot) no higher than 6" above ground level.
- j/ Top wire shall be set at 34" - 36" above the ground level, with the remaining 6 wires set no more than 5" apart and the bottom wire set no higher than 5" above ground level.
- k/ See Figure 3.

## APPENDICES

## Section B

GENERAL MATERIAL AND INSTALLATION CRITERIA  
APPLICABLE TO ALL NON- ELECTRIC FENCES

1. Staples - Use at least 9 gauge galvanized staples which are at least 1 ½ inches long for softwoods (pine) and 1 inch for hardwoods (Red cedar, oak, mulberry, catalpa, black locust, and bois-d-arc). Drive staple(s) diagonally, so wire can slip with the wood grain and at an angle which allows staple to open.
2. Line Posts - Shall have a minimum length of 6 ft.; be set approximately 15 inches in the ground and spaced not more than 20 ft. apart without stays and 30 ft. apart with 2 or more stays spaced 8 ft. apart.
  - a. Untreated wood (Red cedar, bois-d-arc, mulberry, catalpa or black locust) having a minimum top diameter of 3-1/2 inches.
  - b. Pressure treated wood (Pine most commonly available) with a minimum top diameter of 2-1/2 inches. Wood preservation treatment shall be in accordance with Federal Specifications No. TT-W-571i (.4 retention).
  - c. Metal - Standard T or U section steel post (1.33 lbs/ft) 6 ft. long or equivalent metal rod or pipe.
3. H-Brace Post - Minimum of 8 ft. in length be set approximately 3 ft. in the ground, spaced 6 ft. apart.
  - a. Wood - A minimum of 4 inch top diameter of treated timber or durable wood listed above for upright post and cross post.
  - b. Metal - Minimum 2-3/8 inch metal pipe or equivalent. At least (1) 80 lbs. bag of concrete should be used in each 12 inch post hole to secure brace assembly. Metal cross post must be a minimum of 2 inches in diameter.
  - c. All brace post assemblies shall have a minimum of two (2) post in line to provide a suitable anchor for the fence. They shall be spaced at a maximum of 1320 ft. or at corners and points of extreme changes in slope and at curves (See Figure 1 H-Brace Pull Assembly).
4. Corner and End/Gate Post
  - a. Wood - (Pressure treated or durable wood) shall have minimum top diameter of 6 inches, 8 ft. in length, and be set firmly 3 ft. in the ground. Cross post will have a minimum 4 inch top diameter.
  - b. Metal - Minimum 2-3/8 inch steel pipe or equivalent, 8 ft. in length, set 3 ft. in ground. Metal cross posts must be a minimum 2 inch diameter. At least (1) 80 lbs. bag of concrete will be used for each post.
  - c. All corners and end/gate post assemblies shall have a minimum of two (2) posts in line to provide a suitable anchor for the fence (See Figure 1 for Corner and End/Gate Brace Post).
5. Any metal pipes used must be permanently capped to exclude rainwater and all metal components used must be painted with a durable permanent rust resistant coating or be galvanized; components will be repainted if rusting occurs.
6. Allow newly installed braces and assemblies to settle and/or pack dirt sufficiently around all post; do not over-tighten wires.
7. Wire clips or fasteners must be galvanized and similar to strength of fence wire.
8. Boundary and exclusion fences shall be constructed so that the wire is on the side of the post facing the animals to be controlled. Wire may be on either side of the post when cross fencing.
9. NRCS conservationist must certify variations that meet or exceed this fencing practice standard

## APPENDICES Section C

### GENERAL MATERIAL AND INSTALLATION CRITERIA APPLICABLE TO PERMANENT ELECTRIC FENCES ONLY

#### ENERGIZERS & COMPONENTS

1. Energizers for permanent electric fences should be high voltage/low impedance short pulse which can produce at least 4000 volts output, with all livestock containment fences charged (on) when under maximum anticipated load.
  - a. Recommended one DIGITAL read out volt meter to be accompanied with energizer.
  - b. For 110 volt or 220 volt energizers, install a voltage spike/surge protector to protect energizer from power surges from the energizer plug.
2. Grounding - A minimum of three (1/2 inch diameter) 6 ft. long galvanized steel rods will be installed near energizer spaced at 10 ft. intervals (See Figure 2).
  - a. Avoid mixing dissimilar materials to prevent electrolysis (do not use copper components).
  - b. For large energizer systems (14 or more joules), use a minimum of 3 additional feet of ground rods per joule of energizer output capacity.
3. Lightning arrestor or lightning choke will be required (See Figure 2). Install an additional set of four 6 ft. ground rods for arresting the lightning. Locate rods 65 ft. away from ground rods set for the energizer. These rods will also be spaced 10 ft. apart. Energizer manufacturers requirements for lightning protection must be met or exceeded.

3. For splicing high tensile strength wire, use only the equivalent of crimping sleeves, figure eight knots or thread through knot. All electrical connections (both ground and positive) must use the equivalent of crimping sleeves or galvanized joint clamps.
4. Underground wire - All underground wire(s) Must be insulated, molded, high tensile strength steel 12-1/2 gauge or larger wire. The insulation must be high density polyethylene or polypropylene with ultraviolet (UV) stabilizer and capable of withstanding a minimum of 10,000 volts.

#### POSTS

1. Line Post - Maximum line post spacing with 2 or more stays will be 150 ft. apart. The maximum line post spacing without stays will be 100 ft.
  - a. Fiberglass sucker rods of no less than 3/8 inch diameter can be used on 1 and 2 wire fences. Fiberglass sucker rods must be at least 3/4 inch in diameter on fences more than 2 wires.
  - b. Fiberglass T-post must be new and at least 1 inch in cross-section for fences with more than 2 wires. Steel T-post and other conductive material post can be used ONLY if polyethylene or polypropylene with ultraviolet (UV) stabilizer insulators are used.
  - c. PVC post can be used as stays if material is UV treated. PVC stays must be at least 1/2 inch in diameter.
  - d. Pull post or pull post assemblies for electric permanent fence shall be spaced no more than 1/2 mile apart on undulating terrain. On flat terrain, spacing may be increased to end of spool (normally 4000 ft.).
2. Corner and End/Gate Post
  - a. Minimum post length will be determined by the number of wires used. The length of the

#### WIRE REQUIREMENTS

1. Galvanized – 12 1/2 gauge high tensile steel wire with Class III galvanized coating. Minimum strength for 3 or more wires should be 170,000 PSI or greater and 130,000 PSI minimum strength for 1 or 2 wires.
2. Wires attached to line post must be allowed to slip and be locked to stay post if applicable.

post should be 36" (below ground) plus 6" above the height of the top wire (For example: a two wire fence with the top wire set at 30"; the minimum post length will be 72" or 6 ft.).

- b. Braces for electric fences with two wires or less can use a Bed Log Brace (Figure 2). A Bed Log Brace shall consist of a wood (pressure treated or durable wood) post with a minimum top diameter of 4" set 3 ft. below ground or steel post with minimum 2 -3/8 inch diameter, capped, set 3 ft. below ground. The bed log shall be 4 ft. long and set a minimum of 3" below ground. Bed logs can be made from landscape timbers or equivalent size posts.
- c. Wood - (Pressure treated or durable wood) Single pole post are for low tension applications only. A single wood post can be used on fences 2 wires or less. Post will have a minimum top diameter of 6 inches and be set firmly in concrete, 3 ft. in the ground. At least (1) 80 lbs. bag of concrete is to be used in each 12 inch post hole to secure brace assembly.
- d. Metal – Single pole post are for low tension applications only. A single steel pipe can be used on fences 2 wires or less. Minimum of 2-3/8 inch steel pipe or equivalent, capped, set 3 ft. in ground in concrete. At least 1 80 lbs. bag of concrete should be used in each 12 inch posthole to secure brace assembly.
- e. For 3 or more wire fences or when heavy duty gates will be installed, a minimum of two (2) posts in line will be installed to provide a suitable anchor for the fence. Post will have a minimum top diameter of 6 inches, 8 ft. in length, and be set firmly 3 ft. in the ground. Cross post will be minimum 4 inch (See Figure 1 for Corner and End/Gate Brace Post).
- f. Allow newly installed braces and assemblies to settle and/or pack dirt sufficiently around all posts, do not over-tighten wires.
- g. Metal pipes must be permanently capped to exclude rainwater and all metal components used must be painted with a durable permanent rust resistant coating or be galvanized; components will be repainted if rusting occurs.

## ELECTRICAL ACCESSORIES

1. Insulators - Any plastic or porcelain insulators used in the installation of permanent electric fences shall be capable of withstanding a minimum of 10,000 volts. Any plastic insulators used will be ultra-violet (UV) treated.
2. Warning signs - Electric fence warning signs are recommend every 300 ft. on exterior fences. Warning signs are also recommended to be posted around barns, troughs, and other facilities as specified by any local, state, and/or federal laws or regulations.
3. Gate handles, switches, and other hardware used to conduct current must be galvanized or use aluminum components.
4. NRCS conservationist must certify variations that meet or exceed this fencing practice standard.

### Fence Construction Check Sheet (Non-Electric)

Landowner: \_\_\_\_\_ Tract No: \_\_\_\_\_ By: \_\_\_\_\_  
 Field No: \_\_\_\_\_ Fence No: \_\_\_\_\_ Length: \_\_\_\_\_ Date: \_\_\_\_\_

	<u>Unit</u>	<u>Minimum</u>	Planned	Installed
<b>I. Wire</b>				
A. Barbed wire (galvanized)	Total Footage		_____	_____
1. Size	Gauge	_____	_____	_____
2. Strands	Number	_____	_____	_____
3. Height of top wire	Inches	_____	_____	_____
B. Net Wire (galvanized)	Total Footage		_____	_____
1. Size (Top and bottom strand)	Gauge	_____	_____	_____
(Intermediate and stay strands)	Gauge	_____	_____	_____
2. Spacing of stay wire	Inches	_____	_____	_____
3. Height of net wire	Inches	_____	_____	_____
4. Height of fence (top wire)	Inches	_____	_____	_____
5. Strands above/below net wire	Number	_____	_____	_____
<b>II. Corner, End/Gate, and H-Brace Posts (See attached diagram)</b>				
A. Corner and End/Gate Post				
1. Kind (1)	Material	_____	_____	_____
2. Length	Feet	_____	_____	_____
3. Nominal Top Diameter	Inches	_____	_____	_____
4. Depth to Set	Inches	_____	_____	_____
5. Amount	Number	_____	_____	_____
B. Cross-member				
1. Kind (1)	Material	_____	_____	_____
2. Length	Feet	_____	_____	_____
3. Nominal Top Diameter	Inches	_____	_____	_____
4. Amount	Number	_____	_____	_____
C. H-Brace Post				
1. Kind (1)	Material	_____	_____	_____
2. Length	Feet	_____	_____	_____
3. Nominal Top Diameter	Inches	_____	_____	_____
4. Depth to Set	Inches	_____	_____	_____
5. Amount	Number	_____	_____	_____
<b>III. Line Posts (2)</b>				
A. Wood Posts				
1. Kind (1)	Material	_____	_____	_____
2. Length	Feet	_____	_____	_____
3. Nominal Diameter	Inches	_____	_____	_____
4. Spacing	Feet	_____	_____	_____
5. Amount	Number	_____	_____	_____
B. Steel Posts				
1. Kind	Coating	_____	_____	_____
2. Length	Feet	_____	_____	_____
3. Weight per Foot	Pounds	_____	_____	_____
4. Spacing	Feet	_____	_____	_____
5. Amount	Number	_____	_____	_____

(1) Certificate required for treated posts and metal pipe must be permanently capped and painted or galvanized.

**All gates used must meet or exceed standard for type of fence constructed.**

Vicinity Map/Diagram:

Remarks: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**This practice meets or exceeds USDA/NRCS specifications:**

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Fence Construction Check Sheet (Electric)

Landowner: \_\_\_\_\_ Tract No: \_\_\_\_\_ By: \_\_\_\_\_ Planned \_\_\_\_\_ Installed \_\_\_\_\_
Field No: \_\_\_\_\_ Length: \_\_\_\_\_ Date: \_\_\_\_\_
Fence No. \_\_\_\_\_

Unit Minimum

I. Wire

A. Size (12 1/2 gauge) Gauge \_\_\_\_\_
B. Strands Number \_\_\_\_\_
C. Average height of wires Inches \_\_\_\_\_

II. Brace Assemblies (See attached diagram)

A. Post
1. Kind (1) Material \_\_\_\_\_
2. Length Feet \_\_\_\_\_
3. Nominal Top Diameter Inches \_\_\_\_\_
4. Depth to Set Inches \_\_\_\_\_
5. Concrete (80 lbs. bag) Number \_\_\_\_\_
6. Amount Number \_\_\_\_\_
B. Cross-member (when required)
1. Kind (1) Material \_\_\_\_\_
2. Length Feet \_\_\_\_\_
3. Nominal Top Diameter Inches \_\_\_\_\_
4. Amount Number \_\_\_\_\_

III. Line Posts

A. Wood and Fiberglass Posts
1. Kind (1) Material \_\_\_\_\_
2. Length Feet \_\_\_\_\_
3. Nominal Top Diameter Inches \_\_\_\_\_
4. Spacing Feet \_\_\_\_\_
5. Amount Number \_\_\_\_\_
B. Steel Posts
1. Kind Coating \_\_\_\_\_
2. Length Feet \_\_\_\_\_
3. Weight per Foot Pounds \_\_\_\_\_
4. Spacing Feet \_\_\_\_\_
5. Amount Number \_\_\_\_\_

IV. Accessories (All conducting materials will be galvanized)

1. Strainers or wire tightners Number \_\_\_\_\_
2. Pull post insulators Number \_\_\_\_\_
3. Line post insulators Number \_\_\_\_\_
4. Ground Rods Number \_\_\_\_\_
5. Lightning arrestors Number \_\_\_\_\_
6. Insulated cable Feet \_\_\_\_\_
7. Offset brackets Number \_\_\_\_\_
8. Warning Signs Number \_\_\_\_\_
9. Cut off switches Number \_\_\_\_\_
10. Digital Volt Meter Number \_\_\_\_\_
11. \_\_\_\_\_
12. \_\_\_\_\_

V. Power Unit

A. The energizer selected must be high voltage/low impedance, short pulse which can produce at least 4000 volts
Output with all livestock containment fences charged (on) when under maximum anticipated load.
(1) Certificate required for treated posts and metal pipe must be permanently capped and painted or galvanized.

Vicinity Map/Diagram

Remarks: \_\_\_\_\_
\_\_\_\_\_
\_\_\_\_\_

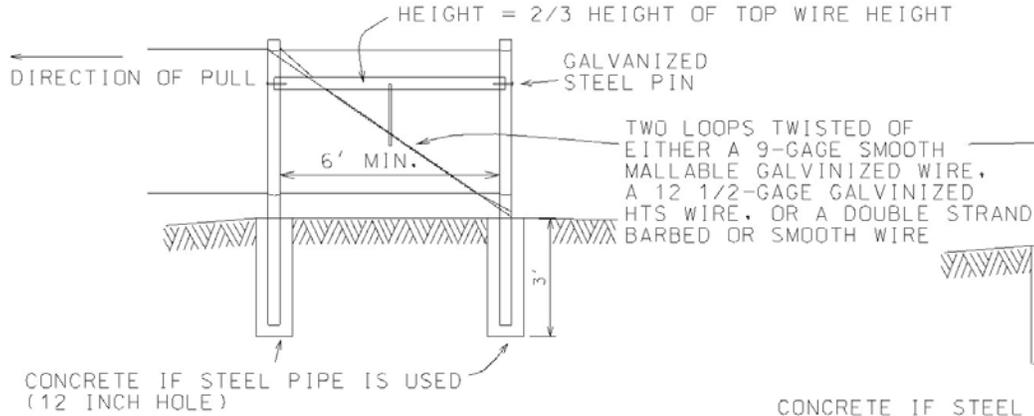
This practice meets or exceeds USDA/NRCS specifications:

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## 2 POST END/CORNER BRACE

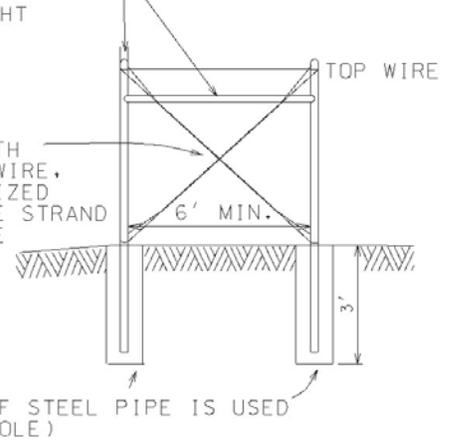
POSTS-  
6" TOP IF WOODEN  
2 3/8" NOMINAL PIPE, CAPPED

HORIZONTAL-  
4" NOMINAL WOODEN  
2 3/8" NOMINAL PIPE

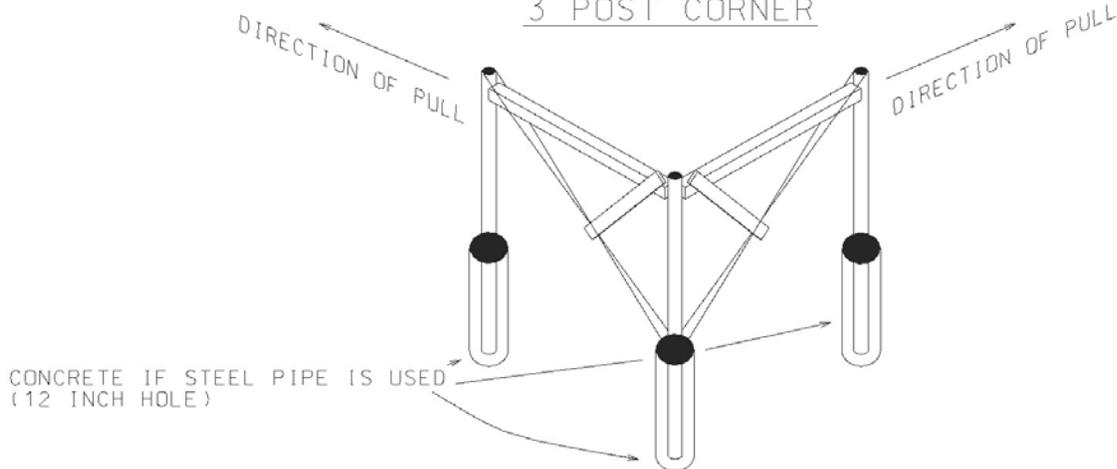


## H BRACE

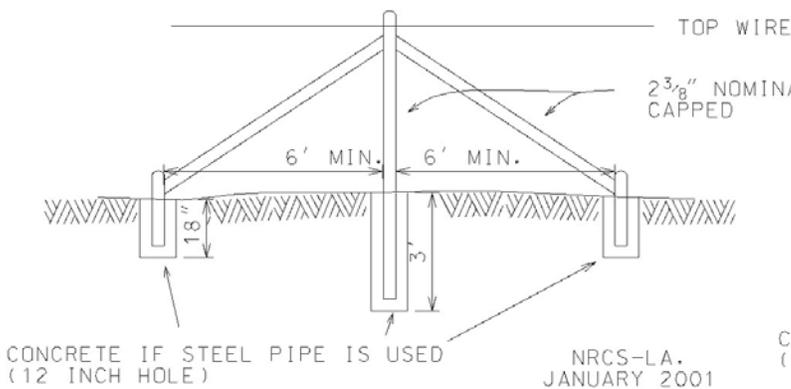
4" NOMINAL WOODEN  
2 3/8" NOMINAL PIPE, CAPPED



## 3 POST CORNER

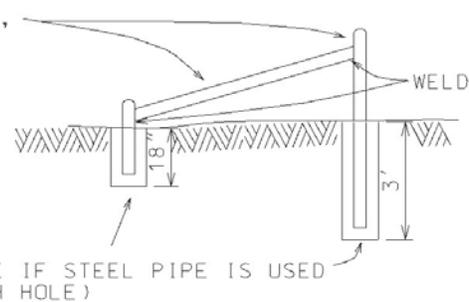


## 3 POST WELDED PULL ASSEMBLY



## STEEL, WELDED SINGLE POST END BRACE

MATERIALS MUST BE PAINTED OR GALVINIZED



NRCS-LA.  
JANUARY 2001

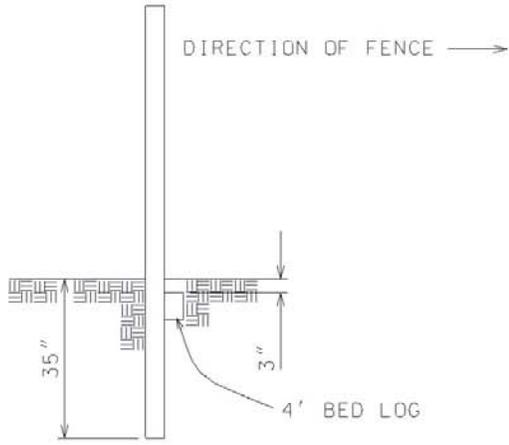
NO.	REVISIONS		TITLE
	DATE	APPR.	

## PERMANENT FENCE BRACING

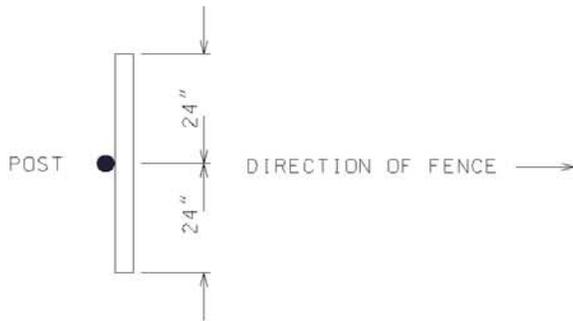
Designed	S. GARDNER	Date	01/01	Approved by	R. MARCANTEL	Date	01/01
Drawn	D.J. WILMORE	Date	01/01	Title	ASST. STATE CON.		
Traced							
Checked	S. GARDNER	Date	01/01	Title			

U.S. DEPARTMENT OF AGRICULTURE - NATURAL RESOURCES CONSERVATION SERVICE

FIGURE 2 - ELECTRIC FENCE COMPONENTS

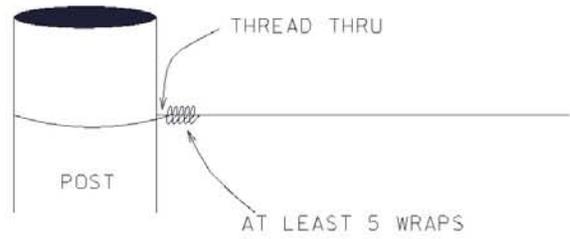


BED LOG BRACE



OVERHEAD VIEW

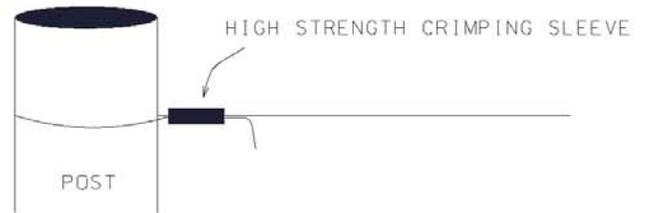
METHODS OF TYING HTS WIRE



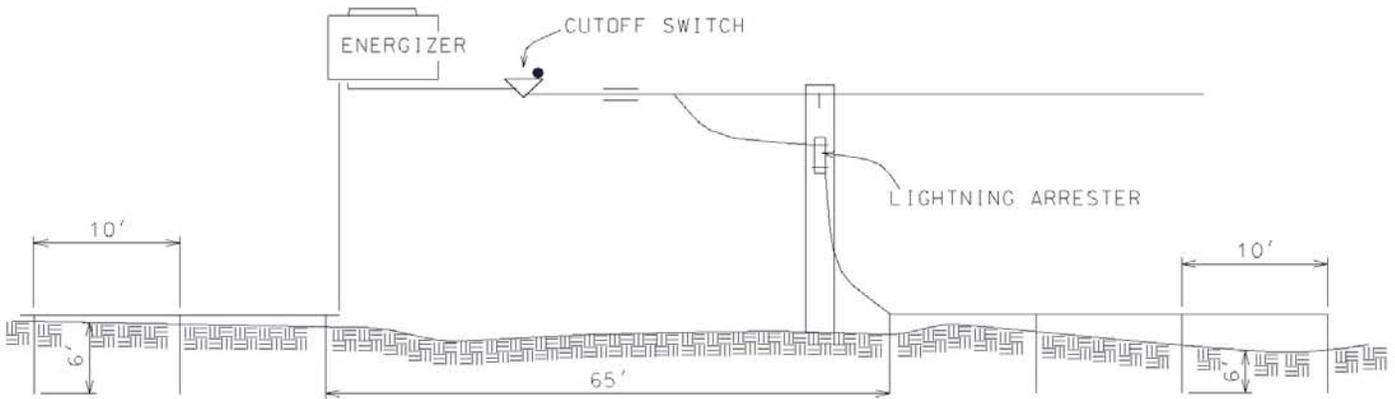
THREAD THRU KNOT



FIGURE EIGHT KNOT



CRIMPED SLEEVE



ENERGIZER EARTH/GROUND SYSTEM

LIGHTNING DIVERTER EARTH/GROUND SYSTEM

GROUNDING OF ENERGIZER

NRCS, LA.  
JANUARY 2001

PROJECT NO.	CAD FILENAME GROUNDING.DGN	REVISIONS				ELECTRIC FENCE COMPONENTS	Designed S. GARDNER Date 01/01	Approved by R. MARCANTEL Date 01/01
		NO.	DATE	APPR.	TITLE			
						Drawn D.J. WILMORE Date 01/01	Title ASST. STATE CON.	
						Traced		
						Checked S. GARDNER Date 01/01	Title	

U.S. DEPARTMENT OF AGRICULTURE - NATURAL RESOURCES CONSERVATION SERVICE

