

USDA FENCE – NET WIRE

Conservation Practice Jobsheet

382

Natural Resources Conservation Service (NRCS)

February 2010

Landowner



GENERAL CRITERIA AND CONSIDERATIONS

Fencing materials, type and design of fence installed shall be of a high quality and durability. The fence design and installation should have the life expectancy appropriate for management objectives and shall follow all federal, state and local laws and regulations.

The fence design and location should consider: topography, soil properties, livestock management and safety, livestock trailing, wildlife class and movement, location and

adequacy of water facilities, development of potential grazing systems, human access and safety, landscape aesthetics, erosion problems, moisture conditions, flooding potential, stream crossings, and durability of materials. When appropriate, natural barriers should be utilized instead of fencing.

Inspection of fences after storms and other disturbance events is necessary to insure the continued proper function of fence. Maintenance and repairs will be performed in a timely manner as needed, including tree/limb removal.

POST REQUIREMENTS

1. **Line Post** - Shall have a minimum length of 6 feet; set approx. 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.

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.

- a. Untreated wood (Red cedar, mulberry, boise d 'arc, 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-5711 (.4 retention).
 - c. Metal - Standard T or U section steel post (1.25 lbs/ft) 6 ft. long or equivalent metal rod or pipe. All metal components must be painted or galvanized.
2. **H-Brace Post** - Minimum of 8 feet in length be set approximately 3 ft. in the ground, spaced a minimum of 6 ft. apart.
 - a. Wood - A minimum of 3 ½ inch (i.e. 4 inch nominal scale) 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 2 inch diameter. 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.
 - c. All brace post assemblies shall have a minimum of two (2) posts 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.
 3. **Corner and End/Gate Posts**
 - a. Wood - (Pressure treated or durable wood) shall have minimum top diameter of 5 inches, (Posts should be designated as 6" posts when purchased) 8 ft. in length, and be set firmly 3 ft. in the ground. Cross post will be minimum 3 ½ diameter (i.e. 4 inch nominal scale).
 - b. Metal - Minimum 2-3/8 inch steel pipe or equivalent, 8 ft. in length, set 3 ft. in ground. 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 2 inch diameter. 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.
 - c. All corner and end/gate post assemblies shall have a minimum of two (2) posts in line to provide a suitable anchor for the fence.

WIRE REQUIREMENTS - All net wire will have Class III galvanized coating.

1. At least 32" of woven (net) wire set at ground level having at least 12 ½ gauge top and bottom strands, 14 ½ gauge intermediate and stay wires with stay wires spacing 24" or less.
2. If cattle are grazed in addition to sheep and/or goats, include two strands of 12 ½ gauge barbed wire or equivalent in tensile strength on top of the 32" net wire. The first strand of barbed wire should be set 3" above the net wire and the second strand be set 10" above the first barbed wire.
3. If cattle are grazed in addition to sheep and/or goats, include 1 strand of 12 ½ gauge barbed wire or equivalent in tensile strength of top of 35" net wire. The net wire should be set at ground level. The barbed wire should be set 10" above the net wire.
4. When high tensile net wire with 48" or higher is used, no additional barbed or smooth wires are required above the net wire.
5. For sheep and goats alone, 39" net wire set at ground level will suffice.
6. Staples and Fasteners – Staples shall be at least 9 gauge and should be 1 ½ inch long for soft woods and 1 inch long for hardwood posts. Drive staples diagonally, so wire can slip with the wood grain and an angle which allows staple to open. Wire clips or fasteners must be galvanized and similar to strength of fence wire.

GENERAL FENCING SPECIFICATIONS

Boundary and exclusion fences shall be constructed so that wire is on the side of the post facing the animals to be controlled. Wire may be on either side of post when cross fencing.

Allow newly installed braces and assemblies to settle and/or pack dirt sufficiently around all post, do not over-tighten wires.

FENCE CONSTRUCTION CHECK SHEET (NET WIRE)

Landowner _____	Tract No. _____	Planned _____	Installed _____
Field No. _____	Length _____	By _____	
Fence No. _____		Date _____	

	Unit	Minimum	Planned	Installed
I.Wire				
A. Net Wire (galvanized)	Total Footage	_____	_____	_____
1. Size (Top and Bottom Strand)	Gauge	12 1/2	_____	_____
2. (Intermediate, Stay Strands)	Gauge	14 1/2	_____	_____
3. Spacing of Stay Wire	Inches	≤ 24 in.	_____	_____
4. Height of net wire	Inches	≥ 32 in.	_____	_____
5. Height of fence (top wire)	Inches	≥ 44 in.	_____	_____
6. Strands above/below net	Number	_____	_____	_____

II. Corner, End/Gate, and H-Brace Posts

Corner and End/Gate Post

A. Wood				
1. Length	Feet	8 ft.	_____	_____
2. Top Diameter	Inches	6 in.	_____	_____
3. Depth to Set	Feet	3 ft.	_____	_____
4. Amount	Number	_____	_____	_____
B. Steel				
1. Length	Feet	8 ft.	_____	_____
2. Top Diameter	Inches	2 3/8 in.	_____	_____
3. Depth to Set	Feet	3 ft.	_____	_____
4. Amount	Number	_____	_____	_____

H-Brace Post

A. Wood				
1. Length	Feet	8 ft.	_____	_____
2. Top Diameter	Inches	4 in.	_____	_____
3. Depth to Set	Feet	3 ft.	_____	_____
4. Amount	Number	_____	_____	_____
B. Steel				
1. Length	Feet	8 ft.	_____	_____
2. Top Diameter	Inches	2 3/8 in.	_____	_____
3. Depth to Set	Feet	3 ft.	_____	_____
4. Amount	Number	_____	_____	_____

Cross-member

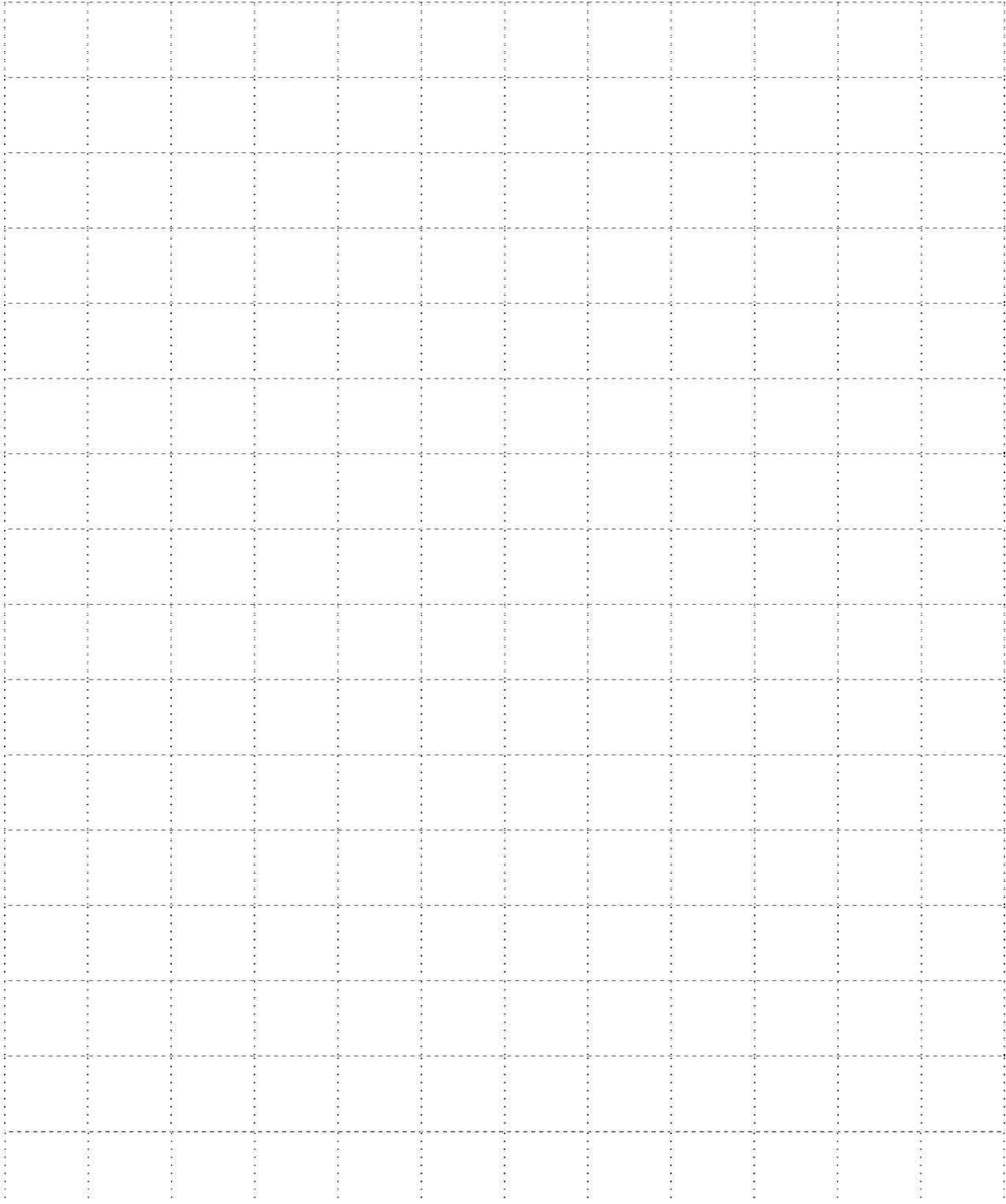
C. Wood				
1. Length	Feet	6 ft.	_____	_____
2. Top Diameter	Inches	4 in.	_____	_____
3. Amount	Number	_____	_____	_____
D. Steel				
1. Length	Feet	6 ft.	_____	_____
2. Top Diameter	Inches	2	_____	_____
3. Amount	Number	_____	_____	_____

III. Line Posts

A. Wood Posts				
1. Kind	Material	_____	_____	_____
2. Length	Feet	6 ft. +	_____	_____
3. Top Diameter	Inches	3 1/2 in.	_____	_____
4. Spacing	Feet	20 ft.	_____	_____
5. Depth in Ground	Inches	15 in.	_____	_____
6. Amount	Number	_____	_____	_____
B. T-Post (new high carbon painted steel)				
1. Length	Feet	6 ft. +	_____	_____
2. Weight per Foot	Pounds/Fee	1.25 lb/ft	_____	_____
3. Spacing	Feet	20 ft.	_____	_____
4. Amount	Number	_____	_____	_____

If applicable, provide a site view of the practice design and application in area below or as an attached diagram. Location of other relevant information and complimentary practices may be included.

Scale 1"= _____ ft. (NA indicates sketch not to scale: grid size=1/2" by 1/2")



Additional Specifications and Notes

Practice Design Certification (To be completed after jobsheet is complete and before practice installation)

By signing below, I certify that:

- the site specific requirements for the installation, operation, and maintenance of the practice on the client's treatment unit, as recorded in this jobsheet, have been prepared in accordance with the 382 Fence Standard and the guidance in the 382 Fence Practice Specification.

Signature

Date

Practice Installation Certification (To be completed after practice installation and check out)

By signing below, I certify that:

- The practice has been installed according to the site specific installation requirements

Signature

Date

This practice requires a current Louisiana One Call Dottie Confirmation Number.

Call before you dig, wait 48 hours for the site to be marked, observe the marks and dig with care. The service is free. It's the law! Civil Penalties range up to \$25,000 for violations of the "Dig" law



Failure to notify Louisiana One Call before installing this practice may delay or terminate NRCS assistance.

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**NRCS, LA
FEBRUARY 2010**