NATURAL RESOURCES CONSERVATION SERVICE
CONSTRUCTION SPECIFICATION
FOR
FENCE (FT.)

CODE 382 - CONTAINMENT BARBED WIRE FENCE (PERMANENT CONSTRUCTION)

Wire

Fences will be constructed of at least five wires barbed. Total height to the top wire of the fence is to be not less than 42 inches. Barbed wire shall be double strand 12 1/2 - 15 1/2 gauge or larger. All wire shall be new galvanized or aluminum coated material. Total height and spacing between wires shall be determined on a site specific basis depending upon terrain and livestock species being excluded.

Line Posts

Wooden

Untreated posts of such species as cedar, locust or Osage Orange, or non-durable wood properly treated with a wood preservative may be used. Top diameter for wooden line posts shall be a minimum of 3-4 inches. The length of line posts must be a minimum of 6 feet and sufficient to provide for the construction of at least a 42 inch high fence, permit stapling of the top wire without splitting, and to allow the post to be set in the ground to a minimum depth of 24 inches in deep soils or 18 inches in rocky soils. When line posts are set in depressions or low places, posts should be anchored. Wood preservative should meet industry standard for "ground contact".

Occasionally, a strategically located tree might be utilized where post anchoring is difficult. In these situations, anchor a pressure treated 2X6 to the tree with galvanized screws or nails. Attach wire to the 2X6 instead of directly to the tree so the tree will not grow around the wire. Do not utilize high-value trees planned for harvest. Utilize trees for no more that 20% of the line post needs in any fence.

Steel

Standard "T" or "U" section steel posts may be used in lieu of wooden line posts. Wire shall be attached to the posts by wrapping with 12 1/2 to 14 gauge galvanized wire or by use of the manufacturer's specially designed clips. In rolling terrain, steel posts shall not be used exclusively as line posts. Every third or fourth post shall be wood.

Spacing

Line posts will be spaced at a maximum interval of 14 feet apart, or 18 feet with intervening stays.

Corner, Gate, and Brace Posts

Wooden

Untreated posts of such species as cedar, locust or Osage Orange, or non-durable wood properly treated with a wood preservative may be used. Top diameter for wooden brace and corner posts shall be a minimum of 6-8 inches. Length must be sufficient to provide for the construction of at least a 42 inch high fence. Length must also permit setting brace and corner posts at least 36 inches in the ground. Length must also permit stapling of the top wire without splitting. Gate posts shall be of sufficient construction to support the gate assembly. Gate posts used in brace and corner situations will require the same specifications as mentioned previously for brace and corner posts. Wood preservative should meet industry standard for "ground contact".

Bracing

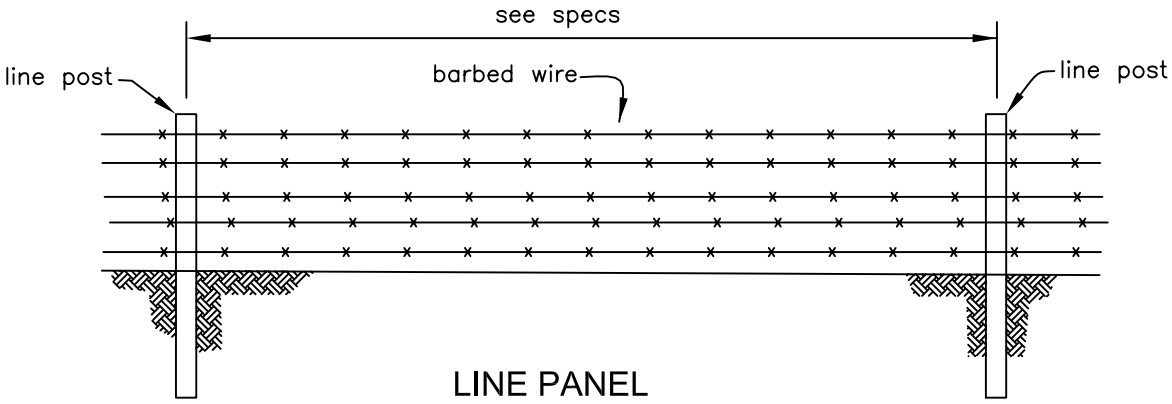
Brace Assemblies

Bracing is required at all corners, gates, ends and at all angles greater than 20 degrees. (In an 8-foot long section, 20 degrees is approximately 3 feet off the straight line). All fence/bracing post assemblies and stretch distances must be installed in consideration of fence type, terrain, soil conditions and other site specific conditions.
Generally stretch distances for all fencing shall be reduced on rough terrain. Brace assemblies should normally be installed at distances not to exceed 1,320 feet apart. All fence bracing/pull post assemblies and stretch distances must be installed consistent with the wire manufacturers' recommendations.

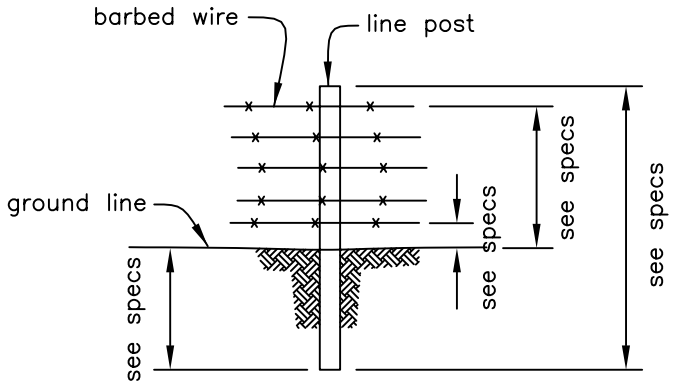
The brace wire shall be tightened to secure the brace and pull post assemblies. If a wide stream or gully is to be crossed, the fence section will be terminated on one bank with a brace assembly and a new section started on the other bank. A floodgate or water gap will be installed across the stream or gully to restrain livestock and constructed so as to minimize debris buildup and prevent structural damage to the line fence on either side during flooding events.

Brace Rails

Brace rails (horizontal brace) shall be either 2 inch diameter by 10 foot long galvanized steel tubing, or a 4 inch by 4 inch square eight foot long timber, or a 3 1/2 inch minimum diameter long round post or pole. Horizontal braces will be attached to posts using galvanized steel pins.



LINE PANEL



BARBED WIRE DETAIL

TABLE 1: CONTAINMENT FENCE (PERMANENT)

TYPE FENCE	TYPICAL WIRE SPACING 1/	TYPICAL TYPE OF WIRE	MAXIMUM DISTANCE BETWEEN PULL ASSEMBLIES 2/	MAXIMUM LINE POST SPACING 3/	MINIMUM LINE POST DIAMETER (D) POST LENGTH (L) AND DEPTH (d)
Barbed Wire	5 or More Wires, Min. 42" high (8, 14, 22, 32, 42)	15.5 Gauge Type III Galvanized	<= 1,320' Apart 3 1/2" Horizontal Brace 6-8" Brace and Corner Posts, 8' L	14' Apart 18' with Stays on 9' Spacing	Wood 3-4" D, 6' L, 24" d Steel 5.5' L, 18" D

1/ Actual installed wire spacing will be as needed to contain the livestock. 2/ Corner and brace posts shall be 6" minimum and driven or set in the ground and tamped around 36" deep or set in 30" of concrete. 3/ Closer post spacing may be needed to accommodate certain situations such as steep landscapes, fragile soils, deer crossings and other concerns.

SPECIAL INSTRUCTIONS

Drawing not to scale.
Standardized drawing must
be adapted to the specific site.

NOTE:
For complete specifications
see KY-EFOTG FENCE Code 382 (attached)

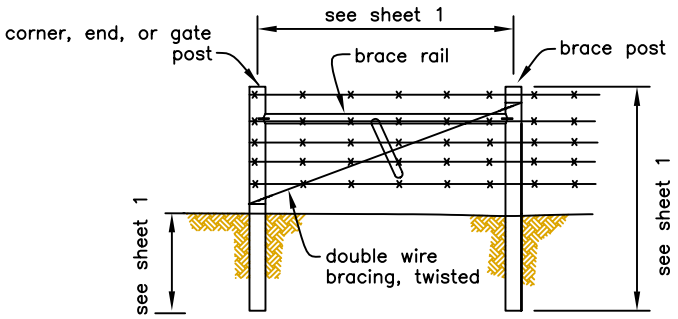
NRCS
Natural Resources Conservation Service
United States Department of Agriculture

BARBED WIRE FENCE

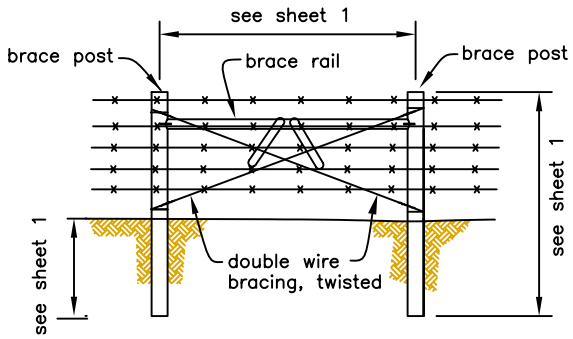
	DATE
DESIGNED	
DRAWN MAG, JD, RCG	11/08
CHECKED	
APPROVED	

FILE NAME

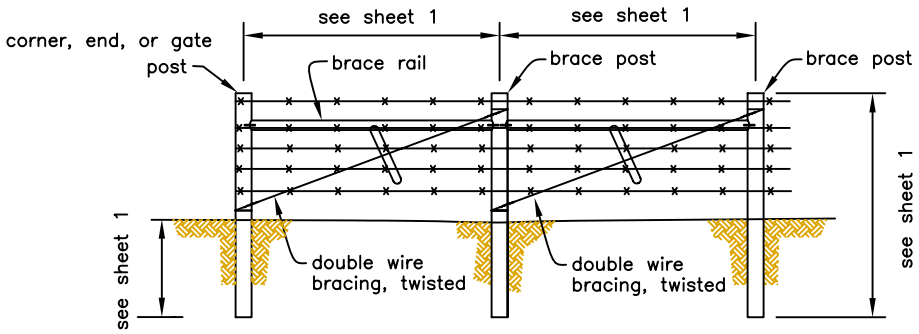
DRAWING NAME
KY-382-11/08



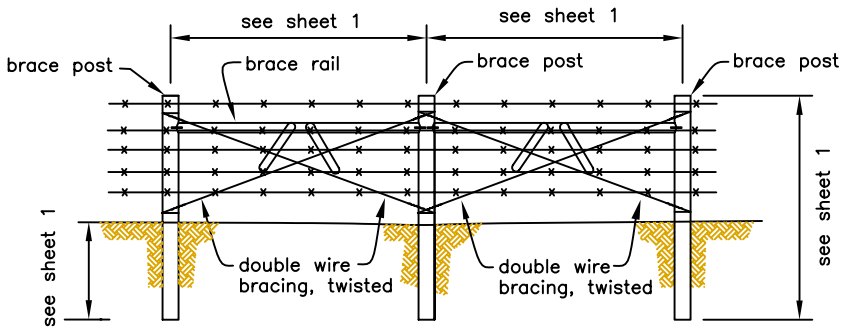
SINGLE SPAN BRACE ASSEMBLY
(at corners, ends, or gates)



SINGLE SPAN LINE BRACE ASSEMBLY



DOUBLE SPAN BRACE ASSEMBLY
(at corners, ends, or gates)



DOUBLE SPAN LINE BRACE ASSEMBLY

SPECIAL INSTRUCTIONS

Drawing not to scale.
Standardized drawing must
be adapted to the specific site.

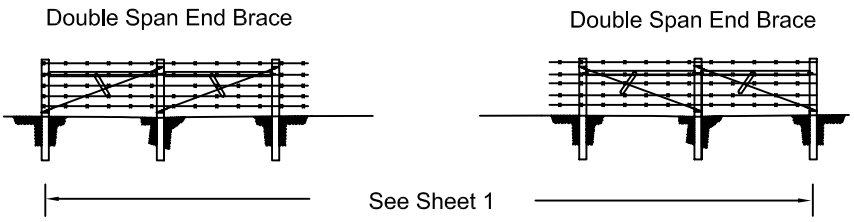
Natural Resources Conservation Service
United States Department of Agriculture

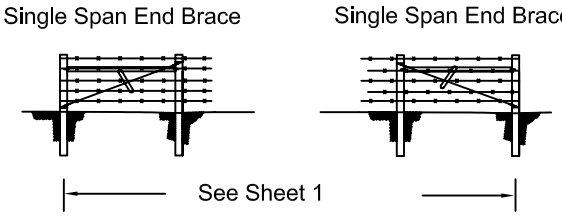
BARBED WIRE FENCE BRACES

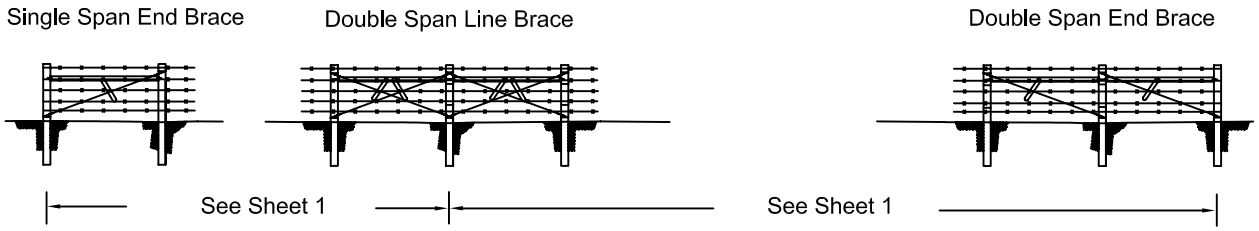
DESIGNED _____ _____
DRAWN MAG, JD, RCG 11/08
CHECKED _____ _____
APPROVED _____ _____

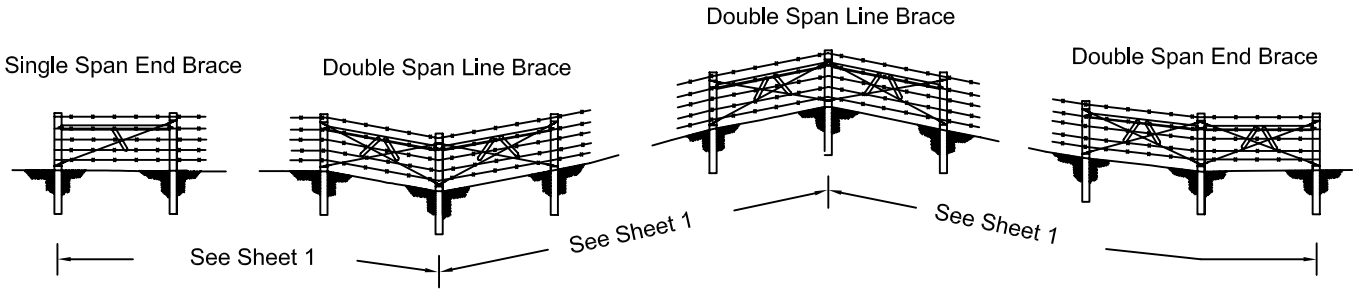
FILE NAME

DRAWING NAME
KY-382-11/08









On uneven terrain, locate line braces at the top and bottom of each hill.

Drawing not to scale.
Standardized drawing must
be adapted to the specific site.

Natural Resources Conservation Service
United States Department of Agriculture

BARBED WIRE FENCE BRACE ASSEM. DISTANCES

DESIGNED _____ _____
DRAWN MAG, JD, RCG 11/08
CHECKED _____ _____
APPROVED _____ _____

FILE NAME

DRAWING NAME
KY-382-11/08

SHEET 3 OF 3