NE NRCS STATE OFFICE NATURAL RESOURCES CONSERVATION SERVICE

CONSERVATION PRACTICE STANDARD

FENCE

(Ft.)

CODE 382

DEFINITION

A constructed barrier to animals or people.

PURPOSE

This practice facilitates the accomplishment of conservation objectives by providing a means to control movement of animals and people, including vehicles.

CONDITIONS WHERE PRACTICE APPLIES

This practice may be applied on any area where management of animal or human movement is needed.

CRITERIA

General Criteria Applicable to All Purposes

Fencing materials, type and design of fence installed shall be of a high quality and durability. The type and design of fence installed will meet the management objectives and site challenges. Based on need, fences may be permanent, portable, or temporary.

Fences shall be positioned to facilitate management requirements. Ingress/egress features such as gates and cattle guards shall be planned. 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.

Height, size, spacing and type of materials used will provide the desired control, life expectancy, and management of animals and people of concern.

Additional Criteria to Provide Big Game Wildlife Passage

Total height of fence (top wire) should be 42 inches or less. Distance between top two wires should be no less than 12 inches to prevent leg entanglement as big game jump the fence.

Fence bottom wire should be 16 inches or more from ground level; or smooth wire should be used when the distance is less than 16 inches. The minimum distance between bottom wire and ground should always be greater than 12 inches to allow pronghorn and juvenile big game to crawl under the fence.

No woven wire can be used.

CONSIDERATIONS

General Considerations:

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.

Where applicable, cleared rights-of-way may be established which would facilitate fence construction and maintenance. Avoid clearing of vegetation during the nesting season for migratory birds.

Fences across gullies, canyons or streams may require special bracing, designs or approaches.

Fence design and location should consider ease of access for construction, repair and maintenance.

Fence construction requiring the removal of existing unusable fence should provide for the proper disposal of scrap materials to prevent harm to animals, people and equipment.

Considerations for Wildlife-Friendly Fence:

Avoid using woven wire fencing materials when not needed to restrict livestock class due to severe impact on passage of pronghorn and juvenile deer, elk, and bighorn sheep and the increased risk of entanglement when big game jump the fence.

Identify travel corridors for big game and install modified fence segments in those locations including gates to be left open when livestock are not present or “let-down” fences, adjustable wires, or top rails. Additional information can be found with the Nebraska Biology Technical Note 82.

Prevent the installation of fence in common flight patterns for select bird species. Examples include: across stream channels and wetlands due to impacts to herons and near leks or breeding grounds for grouse.

Use adaptations to increase visibility of wires, especially with electric fences. These techniques include high-visibility, white poly-tape, flagging, and other methods. Refer to Nebraska Biology Technical Note 82 for more information on using PVC pipe, “clips” made from vinyl siding, and other materials.

Considerations for Organic Transition-Livestock Fence:

Avoid using treated lumber in the construction of the fence. Wood fence posts and braces shall be osage orange (Bois d'Arc), Black or Honey Locust, Catalpa, mulberry, pitch pine, juniper, or red cedar.

PLANS AND SPECIFICATIONS

Plans and specifications are to be prepared, using the Conservation Practice Specification S-382 and NE-CPA-1 (Job Sheet for Fence Construction Plan) with drawings, for all fence types, installations and specific sites. Requirements for applying the practice to achieve all of its intended purposes shall be described.

The following 12 page size drawings are included in file at this link.

PAGE SIZE FENCE DRAWINGS (FOTG 382)

NE500-10-001 3 Strand Standard Post and Wire Fence
NE500-10-002 4 Strand Standard Post and Wire Fence
NE500-10-003 Woven Wire Fence
NE500-20-001 Suspension Fence
NE500-30-001 Permanent Electric Fence
NE500-40-001 Wire Fence Braces
NE500-40-002 Wire Fence Braces
NE500-40-003 Wire Fence Braces
NE500-50-001 Barbed Wire Fence Crossings
NE500-60-001 Staples and Wire Attachment
NE500-60-002 Metal Gate Closer
NE500-60-003 Metal Gate Closer

OPERATION AND MAINTENANCE

Regular inspection of fences should be part of an ongoing maintenance program. Inspection of fences after storms and other disturbance events is necessary to insure the continued proper function of the fence. Maintenance and repairs will be performed in a timely manner as needed, including tree/limb removal and water gap replacement.

Remove and properly discard all broken fencing material and hardware. All necessary precautions should be taken to ensure the safety of construction and maintenance crews.

REFERENCES

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