

## **ATTACHMENT B**

### **SPECIFICATIONS AND GUIDELINES**

#### **INSTALLATION - WOVEN-WIRE DEER FENCE**

##### **A. HAZARD TREES**

After the location of the fence has been determined, all hazard trees that are within a tree length of the fence must be felled before fence is erected. Hazard trees are dead and dying, split, heavily leaning and/or root sprung trees that are in a position to fall across the fence. The Bureau of Forestry representative will consult with the contractor to determine which trees are to be considered hazard trees.

If fence borders a State Forest boundary line, no trees shall be cut off State Forest land and no tops, debris, etc., shall be placed or left on the outside of State Forest lands.

All trees determined by the Bureau of Forestry to be merchantable may be required to be skid to a landing area assigned by the Bureau of Forestry representative.

##### **B. CLEARING FENCE AREA**

It is the responsibility of the contractor to clear and level a path at least six feet wide but not more than eight feet wide, of all brush, stumps, rocks, or other obstructions. If fence borders private lands, no brush, stumps, rocks, fill, or other debris may be pushed or placed on the private lands. Obstructions which, in the opinion of the Bureau of Forestry representative, will cause greater construction or maintenance problems may be left in place. This path will lie on the outside edge of the fence and will serve as the access corridor for equipment during construction, a level location for the fence to be installed, and as a maintenance corridor suitable for ATV/UTV passage. Disturbance of the entire perimeter may not be necessary. In those areas where the ground is naturally level, free of stumps and/or free of rocks, no disturbance will be required.

The contractor will be responsible for, and may be invoiced for, damage to standing trees. Tree damages will be calculated by using the Bureau of Forestry's timber stumpage values. The stumpage value will then be singled or tripled depending upon the severity and/or amount of contractor negligence. The Bureau of Forestry representative will determine the severity of negligence. The Bureau of Forestry reserves the right to make the determination in all damage disputes.

##### **C. EROSION AND SEDIMENTATION CONTROL**

Equipment will not be operated when, in the opinion of the Bureau of Forestry representative, ground conditions are such that excessive damage will result. The contractor will be required to repair areas that become rutted due to work and install water-bars in areas that are of sufficient slope that may be prone to erosion in the opinion of the Bureau of Forestry representative. Small intermittent or perennial streams, adjacent stream banks, or seeps, which are unavoidable, will be cleared by hand. The Bureau of Forestry representative reserves the right to determine which areas are to be cleared by hand.

#### **D. FENCE SUPPORTS**

The contractor will erect the fence by fastening the fence to posts or pole-timber trees. No trees of a diameter of a breast height greater than 6 inches or larger will have fasteners driven into them, unless approved by the Bureau of Forestry representative. All trees will be protected by having a 2" by 4" board of sufficient length placed between the fence and the tree. The fence will be attached to the board.

The Bureau of Forestry reserves the right to waive the above attachment rule in instances it determines tree damage is not a consideration.

Posts that must be added to serve as in-line posts must be 4" by 4" treated square posts, or four inch round treated posts, or steel posts that weigh no less than 2 pounds/foot.

Line posts are to be ten feet long and placed in the ground at least two feet. Corner posts must be at least 6" by 6" treated post or 5" round post and braced or supported in place.

Bracing or guy wires will be used to support the corner post(s) but must be sufficient to prevent the post from bending, leaning, or pulling free of the ground. Corner posts will be at least 12 feet long with 36 inches placed in the ground. This may be waived by the Bureau of Forestry representative if adverse digging, driving, or drilling conditions exist.

All bracing or guy wires outside the fenced area must be clearly marked to prevent a safety hazard to any and all persons.

**ONLY NEW MATERIALS MAY BE USED TO CONSTRUCT FENCE! UNLESS OTHERWISE NOTED BY THE BUREAU OF FORESTRY, RECYCLED MATERIALS ARE PROHIBITED!**

#### **E. FENCE MATERIALS**

The fence will be at least a seven-foot (7) high fence using two 47" high rolls of new galvanized steel woven wire fencing or one eight-foot (8) high roll of new galvanized steel woven wire fencing. Wire fencing materials will have no more than 6 inches between stay wires and have at least 10 graduated line wires. The top and bottom wires will be 12-1/2 gauge or heavier wire and stay wires will be 14 gauge wire or heavier.

No aluminum may be used in the construction of the fences.

#### **F. FENCE STRETCHING**

The fence will be at least seven feet (7) high including overlap and securing. The fence will be stretched so that the wire is pulled against a corner or turning support. Maximum distance between fence supports will be no greater than 30 feet between posts and 40 feet between trees.

If two 47" high rolls are used, the top and bottom rolls of fence will be fastened to each other every 2 feet by twisting, tying, or fastening the bottom wire of the top roll to the top wire of the bottom roll. The rolls will be installed so that the small squares of the top roll are adjacent to the smaller squares of the bottom roll. Where a post is used, the top wire of the top roll must be secured to the post. Each roll of fence will be fastened in three places: top, middle, and bottom.

Ties to secure the fence to metal poles will be 14 gauge or heavier galvanized or stainless steel wire ties or other commercially suitable ties.

Stainless steel or galvanized hog rings may be used to fasten the top fence roll to the bottom fence roll. Twisting the bottom wire of the top fence and the top wire of the bottom fence together may be used. Ties may also be used to secure the two sections together but must be 14 gauge or heavier stainless steel or galvanized wire.

The Bureau of Forestry representative may specify the point where stretching begins to facilitate the driving of deer.

#### **G. FASTNERS**

Staples will be one and one-half inch galvanized steel. **No staples will be driven into trees.** The nails used to fasten the 2" x 4" board to the trees have no specifications but must hold the board securely to the tree while the fence is being stretched.

#### **H. SECURING FENCE BOTTOM**

The fence must be constructed so that deer will be unable to crawl under the fence by leaving a one-foot overlap on the ground on the outside of the fence or by making it flush with the ground as determined by the Bureau of Forestry representative. The fence is to be anchored to the ground with stakes or stapled to sound wood every ten feet. Stakes must be driven into the ground 12 inches. Gaps between the ground and the fence of over three inches in height and six inches in length will be filled with sound wood and the fence stapled at the bottom to the wood. Other means may be used if approved by the Bureau of Forestry representative.

#### **I. ACCESS**

If walk-through and vehicle drive-through gates are required for a fence, the number and placement will be determined by the Bureau of Forestry representative on an individual fence basis.

On fences where vehicle drive-through gates are required, the openings will require two (2) metal cattle type gates each with a width of 8 feet and height of at least 7 feet. Gates must be provided by the contractor. A keeper will be installed to keep the gate held open and the Bureau of Forestry will provide the locking system.

All gate locations will be determined by the Forest District where fencing is being installed.

Pictures and a diagram of walk-through gate specifications are shown below.

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**J. OPERATING AREA**

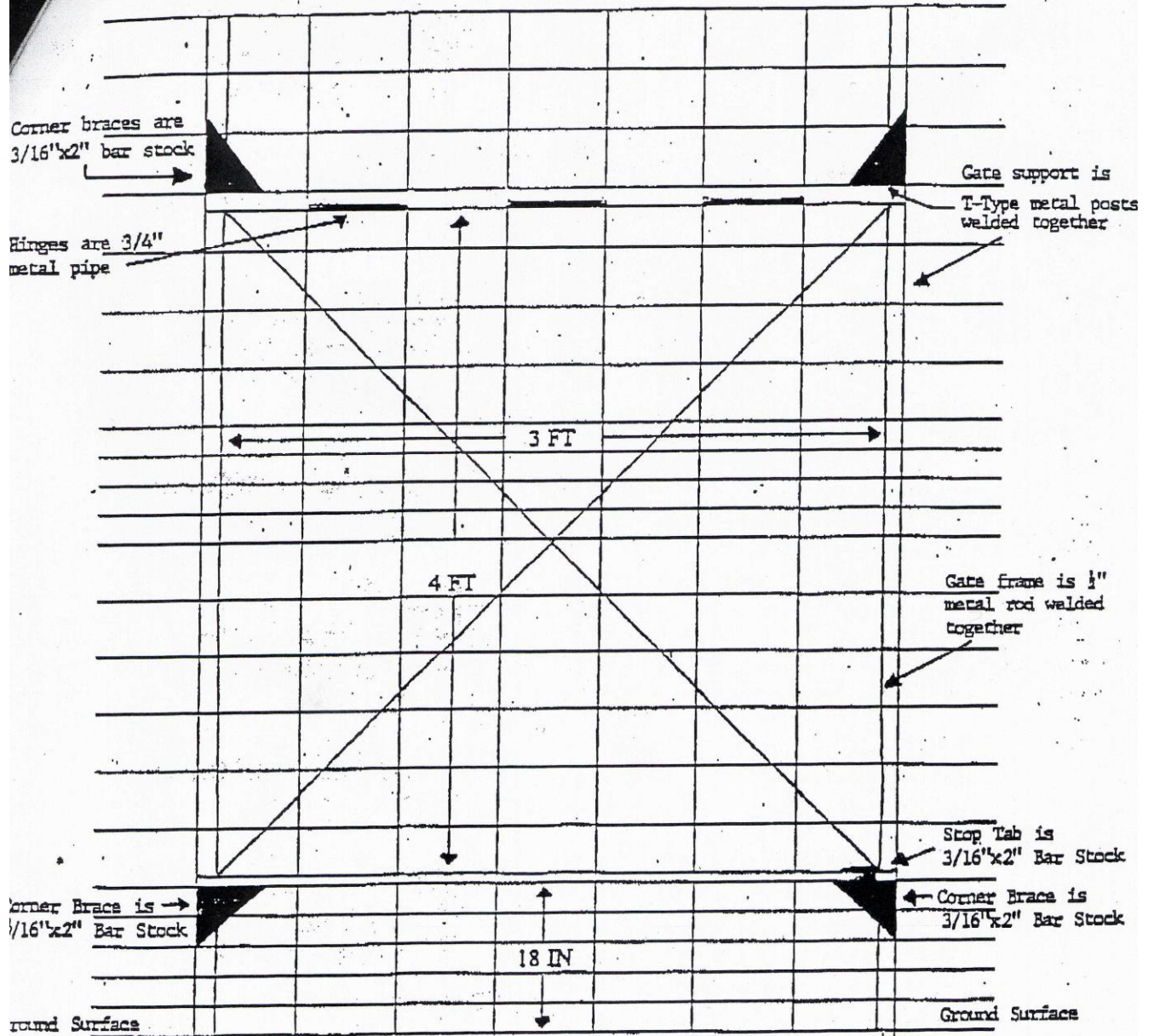
The contractor may operate vehicles on the cleared fence path. Vehicles may not cross over the area to be fenced without approval of the Bureau of Forestry representative.

**K. DEER DRIVE**

The contractor must drive all deer from the fenced area prior to closing of the fence. The contractor will notify the Bureau of Forestry representative two days prior to conducting the deer drive. The fence will be closed the same day that the deer drive takes place.



# WALK-THRU METAL GATE



Cover gate frame with piece of fencing wire.

Build gate to swing outward only. Tab or length of gate stops gate from swinging inward.