DROP AND BLOCK WIRING
TREE INTERFERENCE

1. GENERAL

1.01 This practice describes methods of avoiding or correcting tree interference to drop wire runs.

1.02 Tree pruning shall be done in accordance with local and state laws. Consult the proper authorities before trimming any trees.

2. AVOIDING TREE INTERFERENCE

2.01 When making a drop wire run, avoid running drop wires through tree foliage and branches to prevent damage to insulation due to abrasion. Obtain clearance in terms of feet rather than inches between drop wires and tree branches or foliage to avoid contact as a result of tree growth.

2.02 By one of these methods, tree interference can usually be avoided:

a. By locating the first building attachment to obtain tree clearance.

b. By positioning span clamps so that future growth of trees will not cause interference.

c. Providing required joint-use clearances can be obtained, distribute from a different pole or different point on the same pole than would ordinarily be selected.

d. By running drop wire below the bottom branches of the tree.

e. By contacting buildings other than the one to be served, provided that the property owner's permission has been secured in advance and the building is on the same premises.

f. By trimming trees, as per paragraph 4.08, when permission can be obtained from the proper authorities.

g. By obtaining a reassignment to another terminal, provided the length of the drop wire will not exceed the maximum limit.

2.03 Locating first building attachment.

a. Select a location for the first attachments which will be free of tree interference, when possible. A longer span of drop wire (not to exceed 200 feet) or longer building run is perferred to running a drop wire through trees. Drop wires may be run over driveways where adequate clearance is available.

b. Consider the type of tree as some grow very rapidly and could cause damage to drop wires in the future. Since limbs will be lower when weighted down with sleet, snow, or foliage and will be higher during other periods, consider the season when running drop wires over or under branches.

3. WIRE GUARDS

3.01 Wire guards shall be placed on drop wires under the following conditions:

a. When it is otherwise impractical to obtain clearance from branches, twigs, and foliage for a two-year period.

b. Where drop wire runs through a tree or foliage require protection from abrasion.

c. Where drop wires pass adjacent to guy wires or other obstructions liable to cause damage.

3.02 Installing wire guards.

a. Extend wire guard protection at least three feet beyond each side of the tree when protection is required from twigs or foliage in order to provide for future growth. Use care to center a tree guard at the point of contact with tree limbs, trunks, or branches.

b. The "P" wire guard, consisting of a helically wound plastic tape, shall be used to provide protection from tree damage. After the wire guards are positioned, secure them by placing a "D" clip at each end. Do not tape or seal the ends of the tubing. This action allows water to drain out and air to circulate thereby preventing corrosion.

c. Crimp the "D" clip with a pair of pliers as shown in Figure 1.

4. TREE TRIMMING

4.01 Where drop wires cannot be routed to obtain clearance, trimming of trees is generally the preferred method to avoid abrasion of drop wire, rather than the placing of wire guards.

4.02 When trees should be trimmed that are on state highways, county roads or city streets, contact your supervisor for proper authorization before trimming any tree. Where trees are on private property, make every reasonable effort to obtain consent to trim the trees.

4.03 When trimming trees, give attention to good public relations and to complying with safety practices, especially in regard to adequate warning signs. Observe these precautions when trimming trees:

a. Keep street and highways clear of branches.

b. Protect fences, lawns, etc., against damage from falling branches.

c. Keep the public from entering the area in which branches are likely to fall.

d. Do not leave tools where they can cause accidents.

4.04 When requesting permission to trim trees on private property, the owners should be informed of the extent of tree pruning and should be told how the work will be done. In order to maintain the health and good appearance of the tree, only trained and experienced workmen should be assigned to trim trees. Brush shall be removed at the time the tree is trimmed unless other specific arrangements are made.

4.05 When the property owner objects to the trimming of his tree, all reasonable efforts should be made to overcome his objections and, at the same time, to retain his good will. Some of the following subjects may develop his interest and overcome his objections:

a. Reference to other nearby tree trimming which has been satisfactory with the property owner.

b. Poor service or lack of service to himself and possibly his neighbors due to contact of the wires with branches of the tree.

c. The pruning of fruit trees with the thought of improving the yield.

d. The tools provided to do a scientific job.

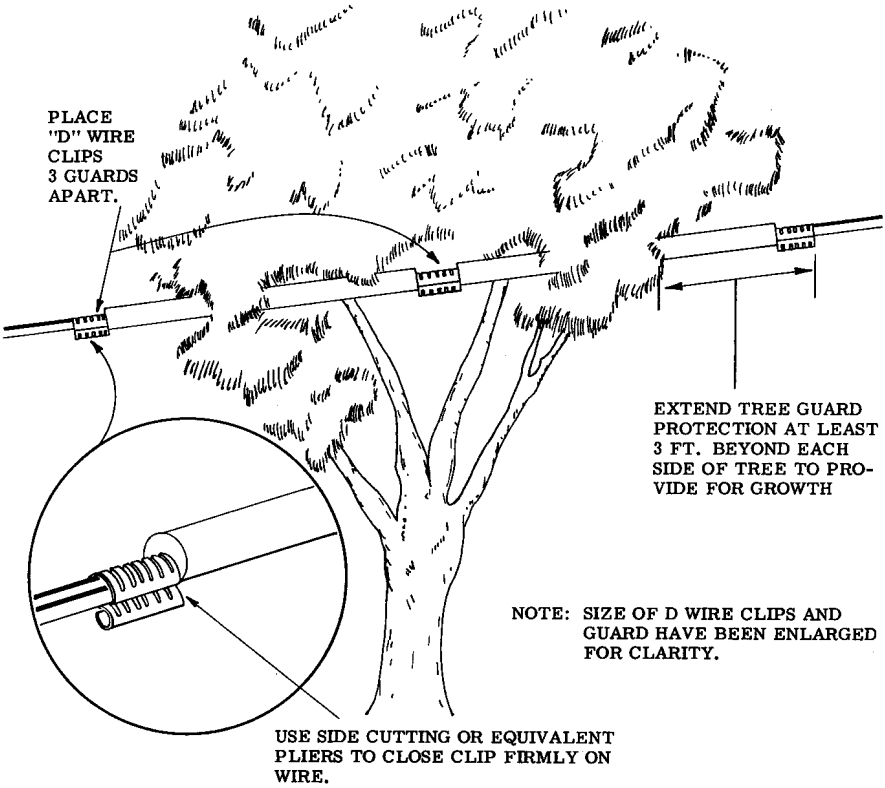

Figure 1. Positioning P Wire Guards

4.06 It is better to approach the property owner for the privilege of pruning fruit trees during the dormant season. When trimming these trees, the shape is secondary to the health of the tree and every effort shall be made to do the work in a careful and scientific manner.

4.07 Trimming trees in the fall and winter permits branches to be removed easily, and trees which require heavy trimming will not bleed excessively during the dormant season. Although the dormant period is the most favorable trimming time, summer pruning has the following advantages:

a. Cuts heal more rapidly and therefore, there is less chance for injurious agents to become established.

b. Opening of the tree to sunlight often retards some insects and fungus diseases.

c. Pruning will often stimulate fruit growth.

d. Often the clearance obtained during this season is more lasting.

4.08 Well shaped trees are a good advertisement of workmanship. If a little extra time is required to produce good results, it is time well spent. When trimming trees, observe the following methods:

a. Use a flush cut on a limb at the point of intersection with the main branch or trunk. (A flush cut is one having the cut surface parallel to the remaining limb so that no stub remains.) A treated flush cut will prevent or retard sprout growth, make the cut inconspicuous, and will heal more rapidly. Where upright limbs are cut, an angle should be made on the final cut to provide a watershed. Such cuts shall be made at crotches or joints.

b. Large limbs should be roped first to prevent breaking off at the cut. If the limb is very large, it should be taken down in sections. Use care not to underestimate the weight of limbs. Use a block and tackle, if necessary, to eliminate a safety hazard.

c. On large limbs, the cut is made from the top side with a preliminary cut on the underside to prevent splitting or peeling of the bark. The final cut should be flush with the supporting surface and without a rough surface. Do not attempt to make an undercut meet the top cut, but complete the top cut to leave a smooth surface. Use a top cut whenever conditions permit, because it produces less strain on the butt and supporting ropes.

d. Make a bottom saw cut when it is necessary to raise a large limb during the sawing operations (where wires are underneath the limb).

e. Where it is necessary to swing a limb sideways because of obstructions, make a side cut on the opposite side on which the limb is to be swung. This action will allow the bark and remaining wood to serve as a hinge. If there is a possibility of the limb splitting, wrap a few turns of rope beneath the cut to prevent splitting beyond that point.

f. Shade trees should be trimmed to provide not less than one year's clearance, as they are weakened by repeated loss of foliage. Shade trees should be rounded off symmetrically and without holes to detract from the tree's beauty. Some irregularities will result from trimming vertical growth on lateral branches; however, when leaves come out, a more even appearance will result.

g. Particular attention should be given to trimming those vertical or horizontal branches which grow in the direction of the drop wire. If practical, provide as much as three years' clearance.

h. Fruit trees should be trimmed so that they will produce more fruit on the smaller outside branches; therefore, as few as possible of these branches should be removed.

i. The ultimate object in tree trimming should be to train the branches to grow either above or below the drop wire.