

## Antenna mounting using pulleys and cable

This is an example loop and dipole antenna mounting to trees. Key points:

- The installed the pully and cable system allows for maintenance, adjustments, and repair of the antenna system from the ground, eliminating future climbing.
- The springs accommodate movement of trees in strong winds and storms.
  - The system has been operational for years through many storms without failure.
  - The only failure occurring resulted from a large tree falling onto a section of wire. The spring stretched to their limits, and the open eye bolts released preventing damage to the T3FD.
  - After clearing the tree from the antenna reinstallation occurred in about 2 hours, back on the air.
- Most project parts can be obtained at Home Depot and Tractor Supply.
  - Select springs based upon required tension, longer better.





Here is a failure example when a large tree fell onto my longer DIPOLE USA T3FD . The antenna is very robust sustaining virtually no damage. You can see how the hardware released the antenna preventing serious damage.





Springs



Stainless Steel Cable



Pulleys



Other Hardware



## DIPOLE END LOOP CORNER



### NOTES:



Open eye(s) release if overstressed and prevents antenna damage.

Springs must be selected that maintain desired tension, allowing for maximum possible movement of all trees in a storm.

Safety rope is attached to facilitate antenna maintenance, adjustment, and repair.



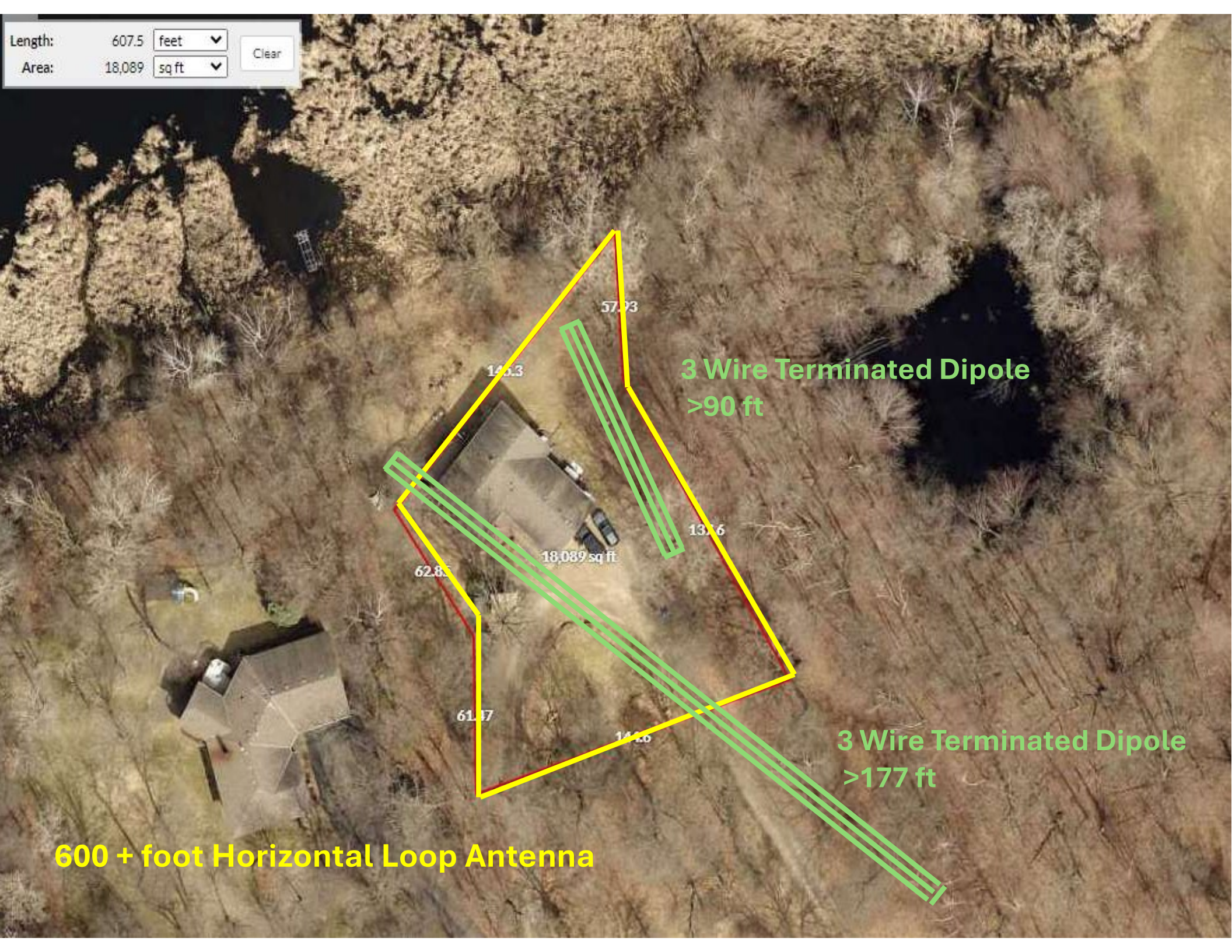






Length: 607.5 feet

Area: 18,089 sq ft



600 + foot Horizontal Loop Antenna

3 Wire Terminated Dipole  
>90 ft

3 Wire Terminated Dipole  
>177 ft

18,089 sq ft