



Growing Edible Arizona Forests, An Illustrated Guide

Excerpt from *leafnetworkaz.org*

Edible Tree Guide

CHOOSE Planting Site and Design

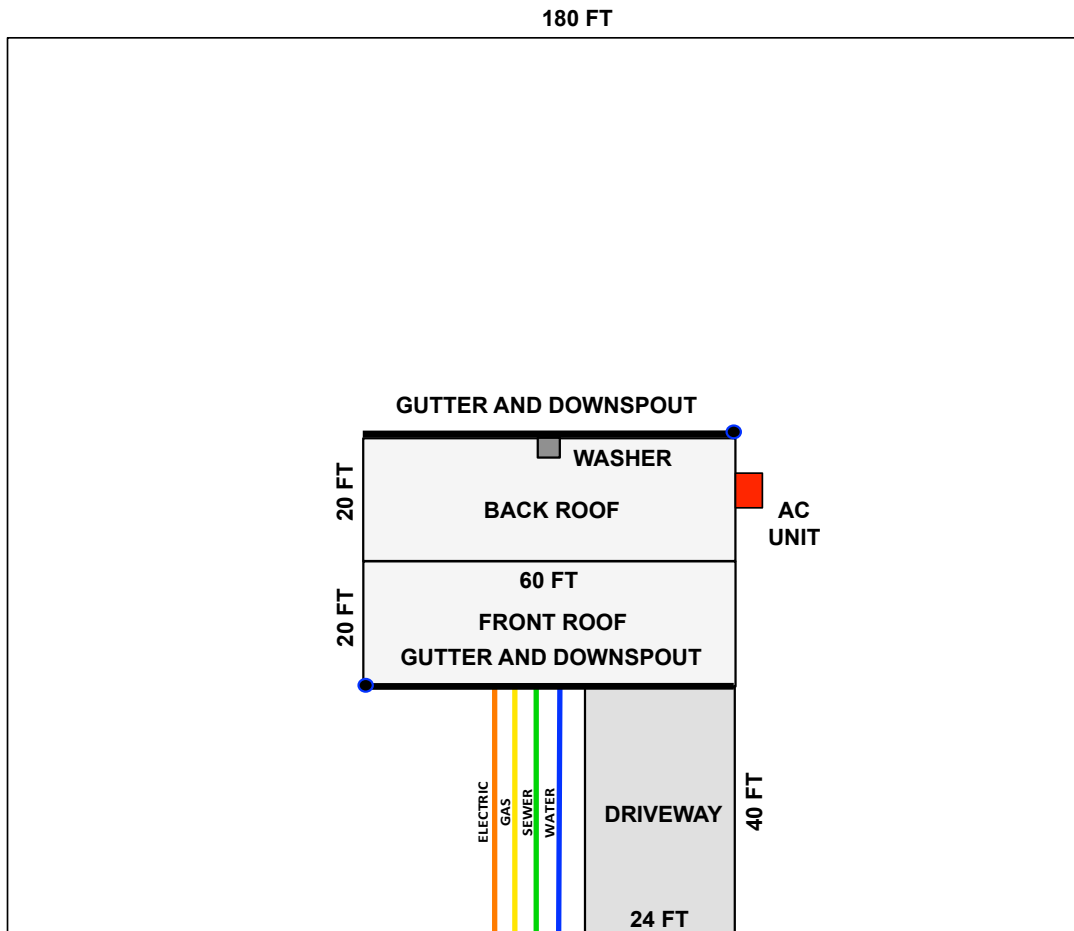
- Understanding Site Conditions and Microclimates

Linking Edible Arizona Forests

Understanding Site Conditions and Microclimates

Walk around your site. Take a close look at land slope, sun, shade, soil, signs of strong winds, patterns of water flow and other site characteristics. Imagine your site on freezing nights, in windstorms and when it is raining hard. Feel the difference on the sunny and shady sides of buildings.

Microclimates are small, localized climatic conditions that may be warmer, colder, dryer, wetter, windier or calmer than other areas of a site. They are formed by patterns of sun, shade, wind, soil and water flow along with the natural and built landscape of hills, valleys, vegetation, buildings and paved surfaces. Microclimates are created when these features change airflow; increase or decrease day length or sunlight intensities; accumulate heat during the day which is released slowly at night and in other ways modify local temperature, light, wind and moisture. Soil conditions also affect microclimates.



Example of a simple site base map with dimensions and utilities marked. You can use a base map to help you draw site conditions and future tree planting locations.

Trees have different sensitivities to temperature, rainfall, humidity, wind, day length and sunlight intensity—among other conditions. People can both harness and modify microclimates using tree placement, structure placement, irrigation, mulching, sun protection, frost protection and many other strategies. When choosing and placing trees, observe site conditions and microclimates and determine how to modify these to benefit trees and help trees benefit you.



An underground utility line is marked here in red.

One way to help you visualize site conditions and select appropriate places to plant trees is to start with a site base map. This can be a simple sketch, or an aerial photo or site plan with written notes added. It is helpful to show property boundaries, roofs, driveways, vegetation, walls, and other physical features, along with which direction is north (south, east or west). You can use the site base map to understand and illustrate conditions at your site, including those discussed in the sections that follow.

Always find out and mark where utility lines are located. **Do not plant trees over buried utility lines or under overhead utility lines. Use extreme caution if you are digging near buried utility lines.**

Before you dig, CALL Arizona 811 (aka Blue Stake) to mark buried utility lines between the street and your property line.

ADDITIONAL RESOURCES

Mapping

- Simply “Google” your site address and a road map will typically appear. Select ‘satellite’ view on the road map to get an aerial photo of your site. Zoom in and out with the ‘+ and –’ buttons
- <https://www.google.com/earth/>
- <https://mapguide.osgeo.org/>

Utility line safety in Arizona

- <http://www.azbluestake.com/homeowners/>
- <https://www.tep.com/vegetation-management/>
- <http://www.srpnet.com/electric/trees.aspx>
- <https://www.aps.com/en/globalservices/safety/Pages/vegetation-and-power-lines.aspx>