

Sun angle profile and Rainwater collection design

Part One

1. Using your 44degree sun angle chart, you are to draw your site plan.
2. Plot your site to scale using 1" = 10' (for a common lot of 50 x 100 this should equal 5 inches by 10 inches)
3. draw your house plan onto the site also to scale.
4. Lay the solar profile for winter solstice, winter solstice and equinox(s) over the house profile as in the example.
5. show any trees and what kind whether they are deciduous or evergreen.
6. note summer winds and winter winds on the plan

Part Two

Determine your rainwater collection potential for the structure that you live in

1. measure the roof, multiply the area times the rain potential for Portland
2. convert to gallons
3. decide whether you are going to collect rainwater for your household or for your garden and follow the examples on the sheet given to you in class.
4. design a system to collect your rainwater and determine how much of your needs can be met with what you have designed.

Format: 11 x 17 sheet of paper (2)
one for the site plan, & the other for the rainwater collection design
site plan scale 1" = 10'-0"
use color, and creative design ideas for your project