

A discussion about Rain Gardens with Ginny Veach MG'05 (11/11/17)

Thank you Pamela Berstler, <https://greengardensgroup.com/g3-faq/>. She teaches a wonderful class titled "The Watershed Approach to Landscaping". The notes below are based on her class.

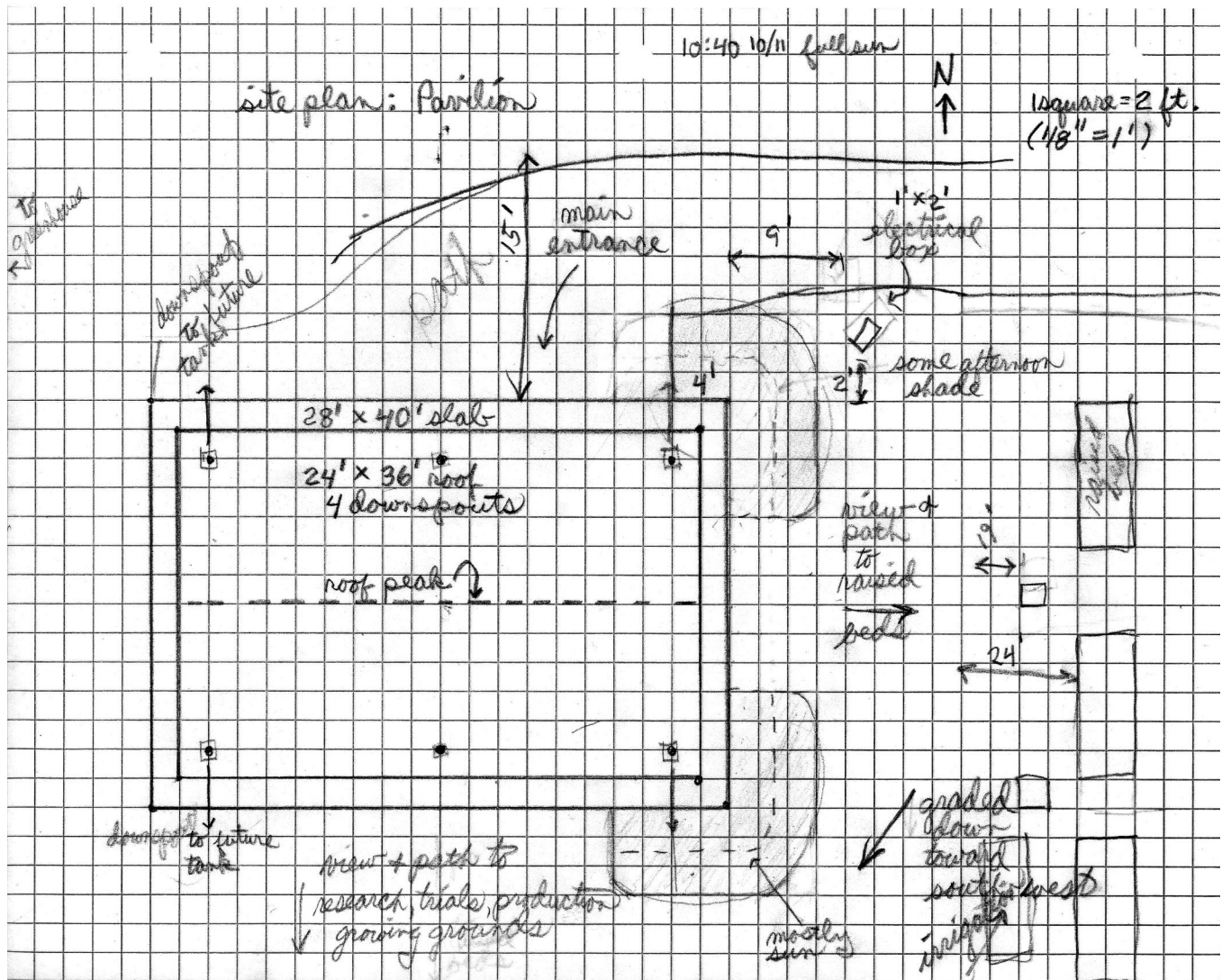
Ultimate goal – to have your garden be your own personal mini-watershed, retaining all the rainfall that falls on it to nourish your own plants.

Steps to get there:

- Build healthy living soil – a soil sponge
- Capture rainwater
- Use climate-appropriate plants
- Use efficient irrigation when necessary

Building a rain garden can help you reach this ultimate goal!

How to design a rain garden:



1. Evaluate your site – make a site plan

Mark north. High and low spots. Downspouts & gutters. Dimensions of home and yard. Roof peak locations. Paths, fences, shade trees, plants to keep. Microclimates.

2. Check soil drainage with a percolation test

Dig hole the size of a one gallon pot near where you plan to put the rain garden.
 Fill with water & note how long it takes to drain completely. (soil is now saturated)
 Fill it again & note time to drain (Lay stick across hole and measure from top of water to stick every hour.)

If more than 4 inches per hour_ sand! Add organic matter to improve soil.

If less than 1 inch per hour_ brick! Try sheet mulching to improve soil.

If 1 inch to 4 inches per hour_a soil sponge! Hooray!

Other ways to improve the soil sponge

Loosen by pressing pitchfork into soil,

If heavy clay, auger holes and fill with good compost. Water thoroughly.

3. Contour land to hold the first inch of rain after a dry period

Calculate water from each downspout for 1" rain:

(Area roof covers in square ft) X (1/12 ft of rain) = (water in cubic ft)

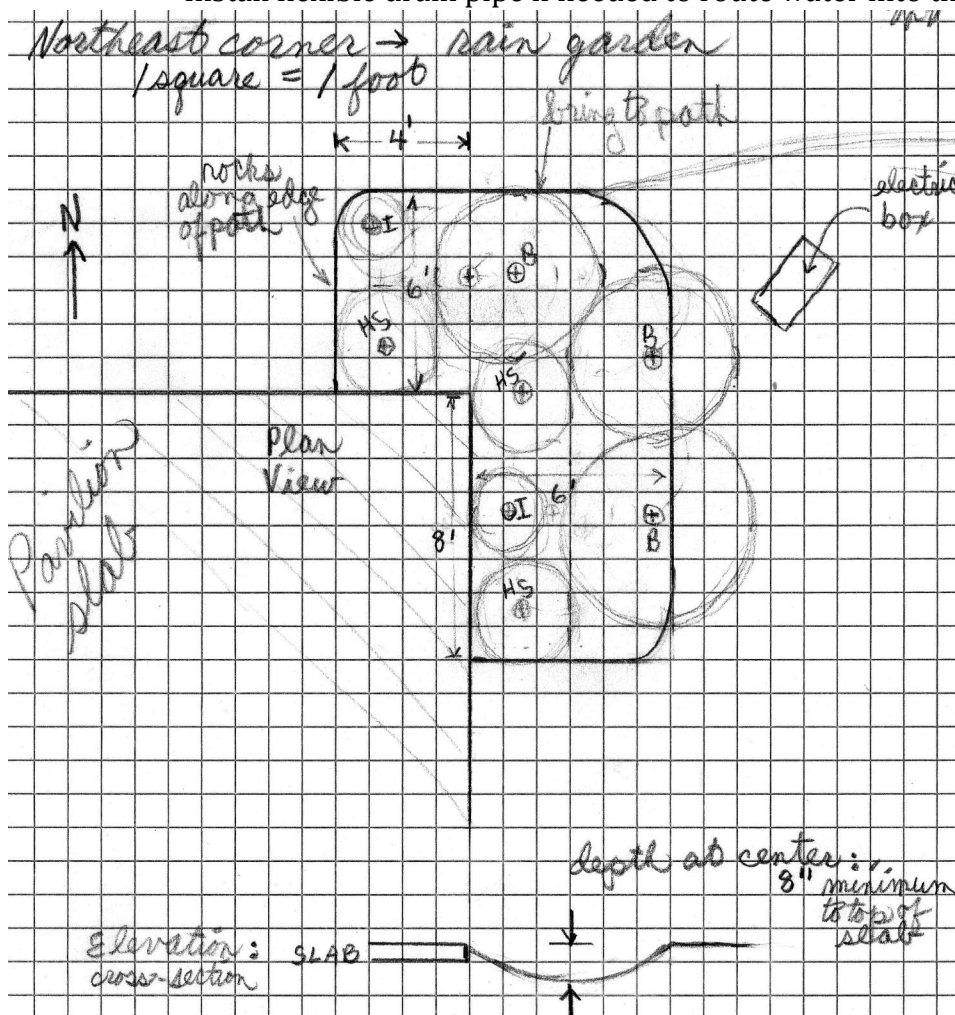
Example from above plan for four downspouts = (24' x 36') x (1/12 ft) = 72

Divide this by 4 for one downspout = 72/4 = 18 cubic feet

So... rain garden for one downspout has to be shaped to hold 18 cubic feet of water!

Remove 18 cubic feet of soil and use it to build up berms around the perimeter of each rain garden. Slope garden soil to draw water 5 to 9 feet from buildings and 3 feet from sidewalks.

Install flexible drain pipe if needed to route water into the rain garden.



4. Plant with microclimates and mature plant size in mind

Consider sun and shade conditions, mature plant height and width.

Choose drought tolerant plants to minimize summer water. (California natives, Mediterranean)
 Good places to browse for plants:

www.laspilitas.com,

www.yerbabuenanursery.com

CA Native Plants were used in this garden, which receives morning sun & afternoon shade:

3 Berberis repens - Creeping barberry (2h x 5w)

3 Salvia spathacea - Hummingbird sage (2h x 3w)

2 Iris fernaldii - Fernald's iris (1h x 2w)