

Worksheets for:

one square = one square foot

Sketching your rain garden

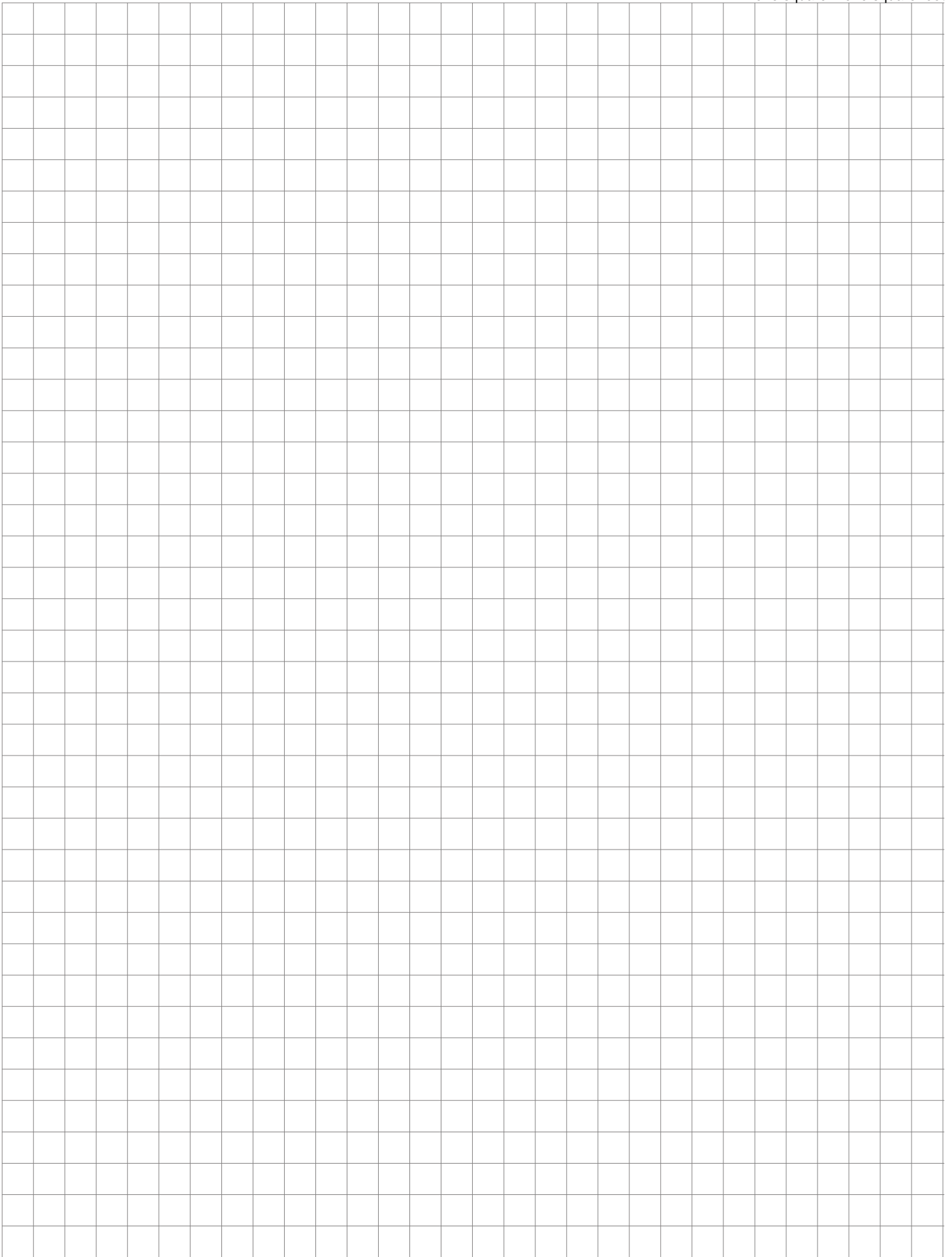
Soil observations (from pg.8)

Infiltration rate (inches per hour)(from pg. 9) _____

Drainage area (from pg. 10) _____

Area available for the rain garden (from pg. 11) _____

A large grid of graph paper, consisting of 20 columns and 30 rows of squares, intended for sketching and calculations.



Web sites

Conservation at home

http://www.seattle.gov/util/Directory/Conservation_Index/

Natural garden care

<http://www.metrokc.gov/soils>

<http://dnr.metrokc.gov/yardtalk>

Water conservation

<http://www.savingwater.org>

Compost sources and protecting water resources

<http://www.soilsforsalmon.org>

Native plants

<http://www.wnps.org>

<http://gardening.wsu.edu/nwnative/>

Water-wise landscaping

<http://nativeplantsalvage.org>

Landscaping plants

<http://oregonstate.edu/dept/ldplants>

Planting guide (go to “Plant it Right: Restoration Planting Techniques”)

<http://wawater.wsu.edu>

Stewardship gardening

<http://gardening.wsu.edu/stewardship>

Portland stormwater solutions

<http://www.portlandonline.com/bes/index.cfm?c=43110>

Rain gardens in west Michigan

<http://www.raingardens.org/Index.php>

Rain gardens in Illinois

<http://www.raingardennetwork.com/>

Seattle Public Utilities Natural Drainage Systems

<http://www.seattle.gov/util/naturalsystems>

Low impact development in Puget Sound

<http://psp.wa.gov>

<http://www.pierce.wsu.edu>

Cost

Example 1: Large rain garden (deep excavation to provide additional capacity) located on very poor-draining soil. Excavated soil is mixed with compost and replaced in rain garden.

Area: approximately 250 square feet

Depth: 24 inches (18 inches of rain garden soil mix with a 6-inch ponding depth)

| | | |
|---|------------------------|----------------|
| Excavator: | 2 days @ \$175.00/day | \$350.00 |
| Compost: | 5 yards @ \$20.00/yard | \$100.00 |
| Compost delivery: | | \$75.00 |
| Drain pipe and fittings (15 foot from house to rain garden): | | \$70.00 |
| Chipped mulch from tree service: | | free |
| 233 plants (combination of 1 gallon pots, bareroot, and tubes): | | \$800.00 |
| Help of five friends: | | priceless |
| Drain rock: | | <u>\$15.00</u> |
| Total: | | \$1,410.00 |

Example 2: Shallow rain garden located on well-draining soil. Rain garden is excavated to 9 inches and 3 inches of compost incorporated into soil.

Area: 200 square feet

Depth: 9 inches

| | | |
|---|------------------------|----------------|
| Rototiller: | 1 day @ \$110/day | \$110.00 |
| Compost: | 2 yards @ \$20.00/yard | \$40.00 |
| Compost delivery: | | \$75.00 |
| Drain pipe and fittings (15 feet from house to rain garden): | | \$70.00 |
| Chipped mulch from tree service: | | free |
| 200 plants (combination of 1 gallon pots, bareroot, and tubes): | | \$700.00 |
| Help of five friends: | | priceless |
| Drain rock: | | <u>\$15.00</u> |
| Total: | | \$1,010 |

Plant costs

You can save money on plants by purchasing smaller stock such as 4-inch and 1-gallon pots. Look for bareroot plant sales offered by local conservation districts and join conservation groups who salvage plants from new development sites. Emergents, which can be used in planting zone 1, are sold in tubes for about \$1.00 each—a great way to stretch your budget.