ALL DISTURBED AREAS WITH THE EXCEPTION OF THE RAIN GARDEN ARE TO BE VEGETATIVELY STABILIZED WITH TURF AND MEDIUM WEIGHT COIR MATTING IN ACCORDANCE WITH THE SEEDING AND LANDSCAPE SPECIFICATIONS.

REMOVE ALL TREES AND GRUB EXISTING BERM TO THE TOE OF THE SLOPE ON BOTH SIDES. FINISH GRADE ALL SURFACES SMOOTH, PREPARE SOIL PER PROJECT LANDSCAPE SPECIFICATIONS AND STABILIZE WITH TURF AND MEDIUM WEIGHT COIR MATTING.

RESTRICT EQUIPMENT TRAFFIC IN RAIN GARDEN TO PREVENT COMPACTION OF ExtG SOIL.

RAIN GARDEN MAINTENANCE GUIDELINES AND SCHEDULE

1. Rain garden area to be kept free of trash.
2. Clean all areas of trash, debris, and litter.
3. Remove any trees, shrubs, or other vegetation that may become obstructions.
4. Avoid compaction of the soil.
5. Maintain a proper water level in the rain garden.
6. Ensure proper drainage of water.
7. Keep the area free of weeds.
8. Check the area regularly for signs of damage or decay.
9. Replace any damaged plants or soil.
10. Mow the area regularly to prevent overgrowth.

RAIN GARDEN CONSTRUCTION REQUIREMENTS

- Rain garden area to be kept free of trash
- Clean all areas of trash, debris, and litter
- Remove any trees, shrubs, or other vegetation that may become obstructions
- Avoid compaction of the soil
- Maintain a proper water level in the rain garden
- Ensure proper drainage of water
- Keep the area free of weeds
- Check the area regularly for signs of damage or decay
- Replace any damaged plants or soil
- Mow the area regularly to prevent overgrowth

SITE BAR SCALE 1"=10'
other techniques

The following are examples of other “best practices” that also help our creeks through the infiltration and retention of stormwater runoff:

- pervious pavement
- rain barrels and cisterns
- vegetated green roofs
- pocket/ backyard wetlands
- disconnecting down spouts
- converting lawns to naturally vegetated areas.

For additional information and to learn more about these techniques consult the resources!

resources [additional information]

NCSU Stormwater Engineering Group
[www.bae.ncsu.edu/stormwater/research.htm]

NCSU backyard rain gardens
[www.bae.ncsu.edu/topic/raingarden/]

Center for Watershed Protection
[www.cwp.org/]

Low Impact Development Center
[www.lowimpactdevelopment.org/]

Low Impact Development Guidebook for NC
[www.ces.ncsu.edu/depts/agecon/WECO/lidguidebook/]

NC Department of Natural Resources
[www.ncstormwater.org/]

Town of Chapel Hill, stormwater management
[www.ci.chapel-hill.nc.us/index.aspx?page=381]

rain gardens [helping our creeks, beautifying our backyards]

improve creek health and the urban environment, create a backyard rain garden TODAY!
**[what is a rain garden?]**

According to the Low Impact Development Guidebook of NC, a rain garden is a depressed landscape that filters and infiltrates stormwater runoff. Rain gardens usually contain an excavated basin, an underdrain, special soil and vegetation.

**[how do rain gardens help creeks?]**

One of the main problems our local creeks, and urban creeks in general, face is the rapid conveyance of rainwater from roofs, pavement, and other surfaces that compromises the natural process of rainwater soaking into the ground. Undisturbed plants intercept the rain water, filter out pollutants and help infiltrate it into the soil profile. Increased urban development with the subsequent roofs and pavement (impervious surfaces) results in increased runoff, higher peak flows, lower groundwater recharge rates, lower streamflow during droughts, and limited capacity for natural pollutant filtration. Rain gardens are designed to address all of these challenges that threaten the health of our creeks, while simultaneously creating attractive landscape features.

**[how to build a rain garden?]**

Backyard rain gardens are easy to design and build with the right information. The main elements to consider when designing a rain garden are as follows: location in relation to the runoff source and the runoff destination, the soil type and drainage, the size of the garden based on drainage area and other site constraints, and the plants. Please refer to the resource provided in this brochure for more detailed information.

**[the town hall rain garden] [before]**

The rain garden by the Town Hall entrance off of Bim Street was installed in May 2010. It is designed to treat the runoff from the roof of the covered walkway and the small area between Town Hall and the Fire Station, out to the sidewalk. The site was chosen because of its visibility, applicability to many buildings in Carrboro, the opportunity to enhance the space, and the presence of the preexisting stormwater drain. The total cost of the materials (gravel, soil certified for rain garden use, fabric, pipe for underdrain and clean out, mulch, plants, rainbarrel, downspout) was about $600. Plants were selected based on adaptation to the unique soil conditions, ranging from very wet to very dry, western exposure, and for their aesthetic appeal and attraction of pollinators. More information is available by contacting Town Planning or Public Works staff.

**[how much do rain gardens cost?]**

Rain gardens are a cost effective tool for managing stormwater runoff and helping our creeks and average between $4.00 – 10.00 per square foot for residential projects. The cost will vary with each rain garden because of different site and design considerations. The factors that impact the cost of rain gardens are as follows: soil amendments, underdrain materials, mulch, plants, tools and labor.

**[after]**

Visit the Town Hall rain garden often and watch it change as the plants grow and mature!