

Demo Rain Garden

Lake County – Crown Point

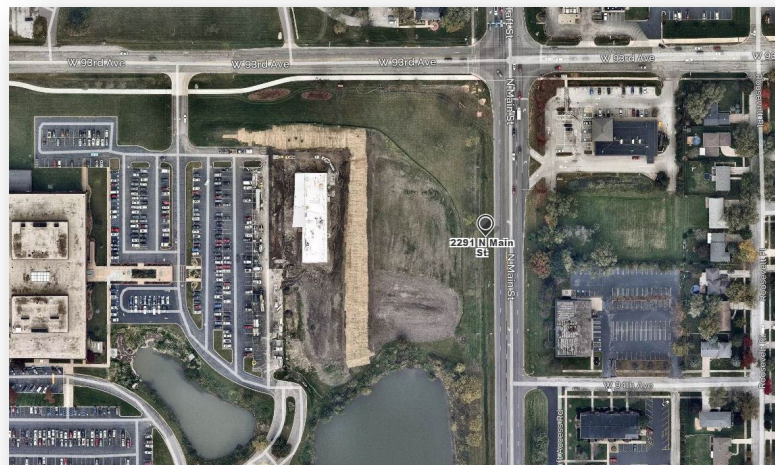


Background Information

Before this rain garden was implemented, this area was a lower area where water ran through to reach a pond. The water came from gutters of a building and also was directed into a nearby pipe and drain. This area was chosen due to the high levels of flowing water into the pond. The intention was to purify the stormwater and prevent a majority of it from reaching the pond.

Obstacles realized during the creation of the rain garden include the discovery of the poor soil quality in the area. Riprap rocks were discovered underneath the upper level of soil due to erosion from the northern side of the site and improper maintenance.

The creation of the rain garden allowed for the area to have a more aesthetic appeal. The area suffered from a lack of proper maintenance, which caused it to become visually unappealing. Invasive weeds, tall grasses, and cattails were removed. Maintenance has become simpler since the installation. The mulch stays in place better due to the application of rocks that block water flow. The plants help with keeping the soil and mulch in place as well. The plants are healthy due to the water flow. The area also is hoped to improve the water quality of the lake, as much of the water is intercepted by the rain garden.



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Garden Design: Plantings and Information

New Plants

Plant Scientific Name	Common Name	Spread	Height	Bloom Time	Color	Price	Number Used	Code
<i>Cephalanthus occidentalis</i> 'Bailoptics'	Buttonbush Fiber Optics	5-6'	5-6'	Summer to Fall	White	\$77.70	3	Dr
<i>Cornus sericea</i> 'Isanti'	Redtwig Dogwood	8-10'	5-6'	Spring	White	\$31.50	1	B
<i>Hibiscus</i> hybrid 'Mars Madness'	Rose Mallow	4'	4-4.5'	Late-Summer to Early Fall	Magenta Red	\$52.50	3	Hi
<i>Hydrangea arborescens</i> 'Abetwo'	Incrediball Smooth Hydrangea	4-5'	4-5'	Summer	White	\$107.10		Hy
<i>Spiraea japonica</i> 'Neon Flash'	Neon Flash Spirea	3-4'	3-4'	Spring	Light Pink	\$24.50	5	Sp
<i>Viburnum dentatum</i> 'Christom'	Viburnum Blue Muffin	5-8'	5-7'	Spring	White	\$98.70	3	V

Garden Design: Plantings and Information

Existing Plants

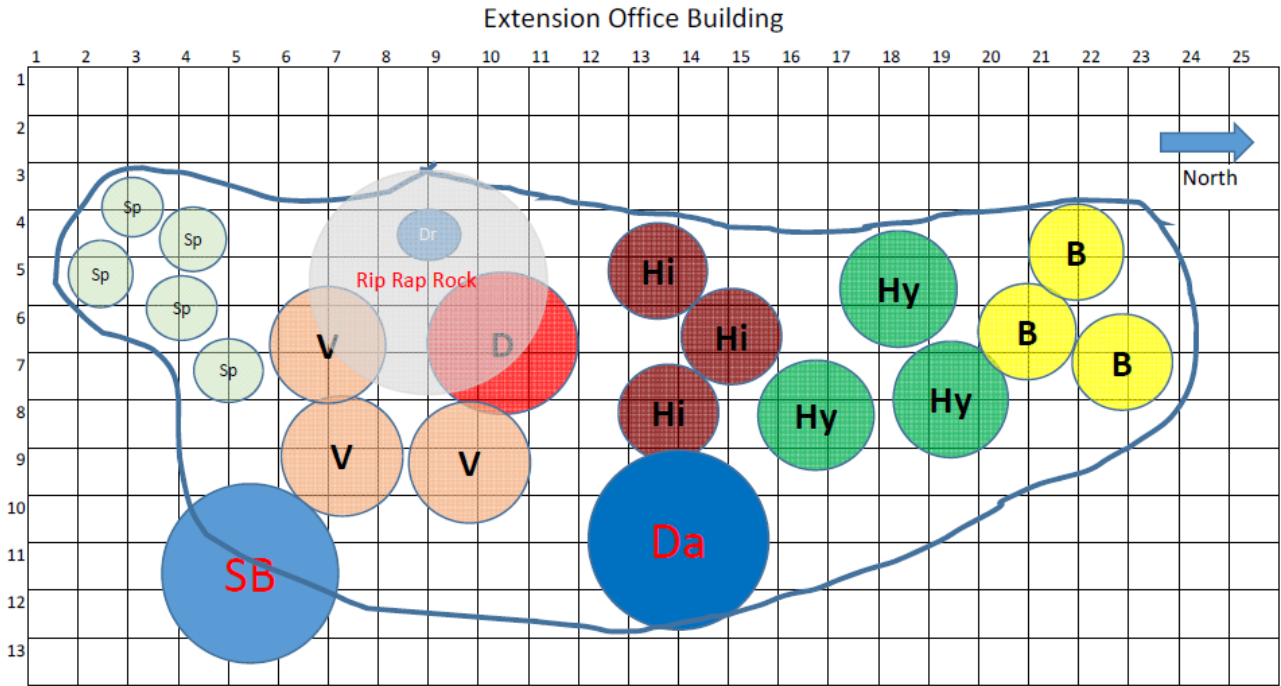
Plant Scientific Name	Common Name	Spread	Height	Bloom Time	Color	Code
<i>Amelanchier</i>	Service Berry	4-15'	4-25'	Spring to Summer	White	SB
<i>Metasequoia</i>	Dawn Redwood	25'	70-100'	N/A	Green	Da

Fully Itemized Budget

Item(s)	Price
New Plants	\$392
Rock Mulch (white)	\$402.50
Total	\$794.50

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Garden Design: Planned Plantings Arrangement



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Maintenance Plan: Establishment Period

- The garden should be weeded every 2-4 weeks for first six months, then tentatively once a month thereafter.
- Tracking progress of the garden:
 - If desired, a before and after photo of the garden should be taken when it is weeded to help keep track of what should be weeded and what plants should not be removed.
 - Taking a photo of your garden every few weeks will allow one to visually see the maturation of the garden over time; photos could be uploaded to a computer or printed and kept in a photo album to keep as part of the educational display.

Maintenance Plan: General Maintenance

- Fertilizer
 - Some starter fertilizer could be used on the site due to low potassium levels. Otherwise, the native plants should adapt to the soil type on site.
- Watering
 - From installation for about a month – water as weeded; about 30 minutes – make sure everything's moist.
 - Once plants are established, you should not need to water them except during prolonged dry periods (about one week).
 - If excessive rain is experienced, it is advised to temporarily reroute some incoming water away from the garden by cutting a notch in the berm. Large, mature plants handle saturation better than young, small plants.
 - Water from the rain barrels can be used to water the garden, but in case of a dry period a hose and/or sprinkler system may be used.
- Weeding
 - During the first few establishment years, weeding should take place every month as needed. Over time, the plants will fill in and weeding won't be necessary.
 - Hand pulling of weeds should be sufficient.
 - Weeding will be provided by the office or it's grounds crew.
- Mulch
 - It should be coarse, double shredded hardwood or another alternative which does not easily float.
 - Approximately 3 inches should be maintained in the garden at all times.

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Maintenance Plan: Seasonal Maintenance

This is namely for after the two-three year establishment period, but should still be carried out during those first two years.

- Year-round
 - Keep drain clear and garden clean of garbage
 - Weed (except winter)
- Spring:
 - Prune dead vegetation and plants that have grown too large
 - Weed the garden and add mulch if needed
 - Remove excess sediment (i.e. leaves, sticks, debris) that may have collected over winter
 - Remove dead stalks/seed heads from previous season
 - Replenish mulch layer to maintain 3 inch layer
 - Best time to plant new/different plants and replace plants that may have died over winter
 - Plugs establish more successfully than seeds
- Summer
 - Remove weeds (i.e. crabgrass, dandelions etc.)
 - Water during dry periods (based on whether National Weather service declares drought; if no rain for one week)
 - Monitor berm around edge of garden for erosion
- Fall
 - Do not remove (too many) leaves that may have fallen into the garden – leaves will provide compost material for following spring growth; layer of leaves is fine but mounds of leaves are not
 - Remove weeds and diseased plants
 - If fall is dry continue to water until grounds begin to freeze (late October)
- Winter
 - No maintenance is needed; can cut back rain garden to clean up for spring if wanted
 - You should check to make sure garden is clean of garbage, leaves, etc. every few weeks

Resource Contacts:

Purdue Extension-Lake County: 219-755-3240

Soil and Water Conservation District: Julie Duttlinger, 219-663-7042

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About the Purdue Rainscaping Education Program

The Purdue Rainscaping Education Program offers state-wide training for Purdue Master Gardeners, conservation agencies and organizations, stormwater professionals, and landscape companies and consultants.

The two day workshop sessions cover an introduction to rainscaping and rain gardens with specific modules for rain garden site selection, plant selection and garden design, installation, maintenance, and community engagement.

Workshops include hands-on activities, interactive discussions, and field trips to community rainscaping projects. Participants also gain experience through creation of a demonstration rain garden with community partners in a public space.