Stylized, Low-maintenance, Biodiversity-supporting

# The Designed Native Forest

Part 1. Overview
Features of the Designed Native Forest
Soil test form

# "Designed Native Forest?"

What is it?

- **Stylized**
  - Not same as "restoration landscaping"
  - Tamer-looking
  - Goal: Wider application and acceptance
    - corporate campus
    - public settings
    - suburban neighborhood settings
- **Low maintenance**
  - Goal: less maintenance than a lawn
- **Native**
  - Goal: close to 100% native plants
  - Broad, regional definition (not restoration work)

TRADITIONAL, DESIGNED LANDSCAPE

NATURAL, WILD LANDSCAPE

**Your own, unique, "designed native forest"**

# Trials ongoing

Client in McLean, VA

- Support biodiversity
- Reduce maintenance
- Forest appeal

- Help a new-looking house connect and blend with this older neighborhood's existing trees

McLean, VA
"BEFORE"

# Trials ongoing

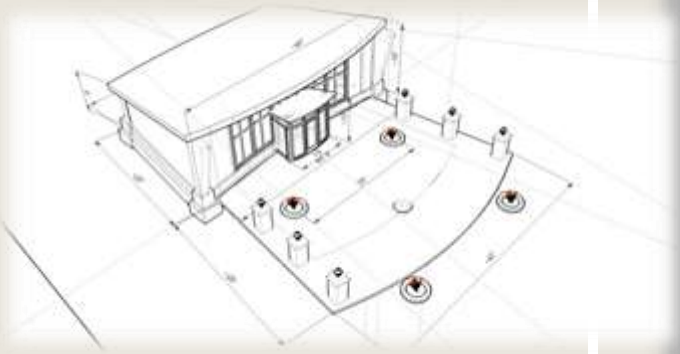
Corporate campus in Leesburg, VA

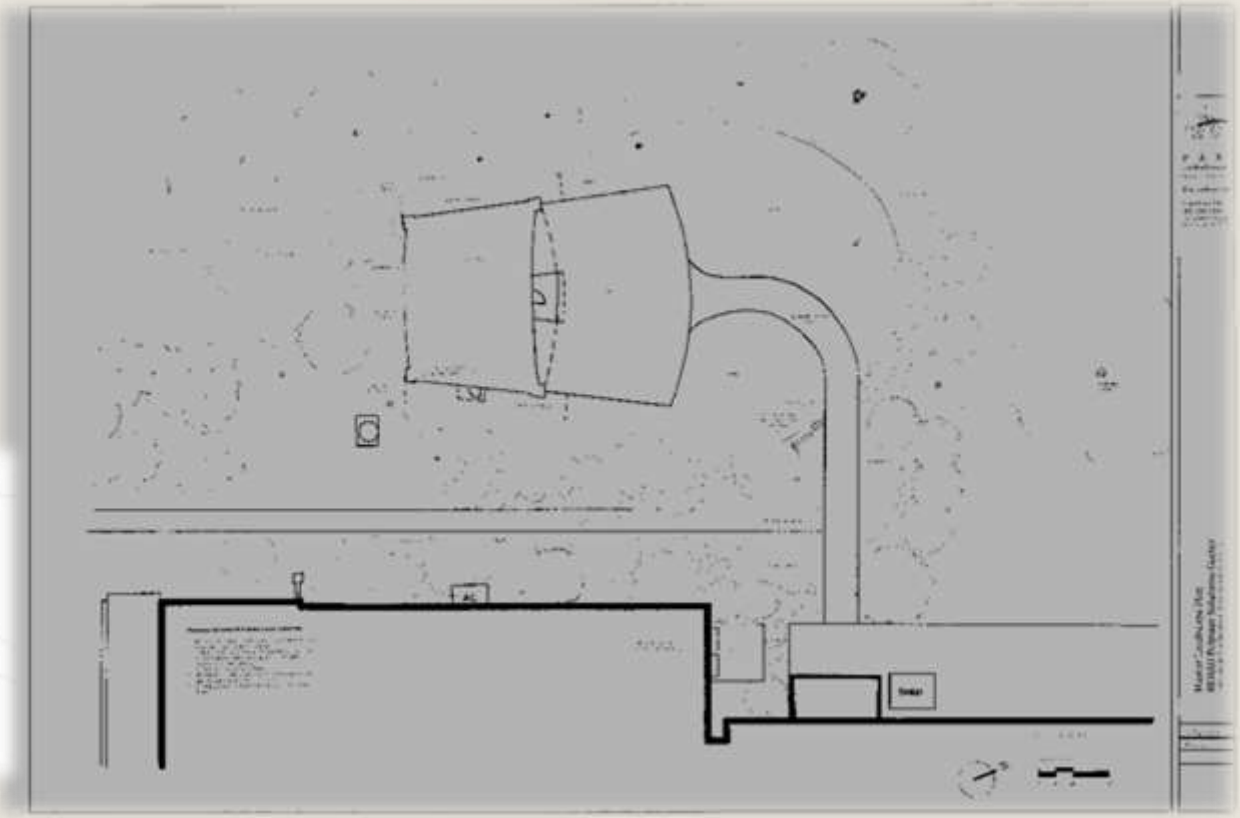
New building to showcase earth-friendly product line.

Desire to incorporate existing trees.

Must be low maintenance, with limited staffing and steep budget cuts.

Desire for LEED platinum rating.





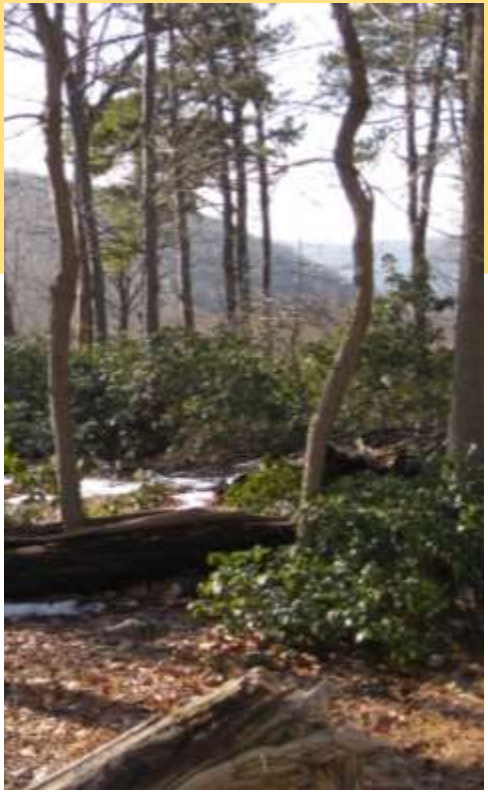
# Features of the Eco forest

| Feature | Cost benefit | Ecological benefit |
| --- | --- | --- |
| ***1. Trees are planted in groves, not as isolated specimens.*** | Eye is drawn to pleasing qualities of similarity and repetition, creating impression of orderliness even when forms are not identical. Reduced need for perfection, pruning. | Greater habitat quality as well as quantity. |

A young grove of loblolly pine and persimmon trees.

# Features of the Eco forest

| Feature | Cost/Maintenance benefit | Ecological benefit |
|---|---|---|
| ***2. Shrubs are encouraged to form colonies.*** | Shrub groups create a pleasing, horizontal line, again enhancing feeling of orderliness without expending maintenance energy. | Ideal nesting situation for many bird species. |



Natural colony of mountain laurel. (*Kalmia latifolia)*

# Features of the Eco forest

| Feature | Cost/Maintenance benefit | Ecological benefit |
|---|---|---|
| ***3. Groundcovers are planted in thick, naturalistic sweeps, not on equi-distant spaced grid, and selected for toughness and ability to suppress weeds.*** | Working with naturally vigorous species and allowing these plants to suppress competition means much less weeding and/or herbicide application. Huge savings. | Large swaths of bloom make easier targets for butterflies and hummingbirds to find. Attractive feeding and reproduction area for many species. |

Hayscented fern,
*Dennstaedtia punctilobula*

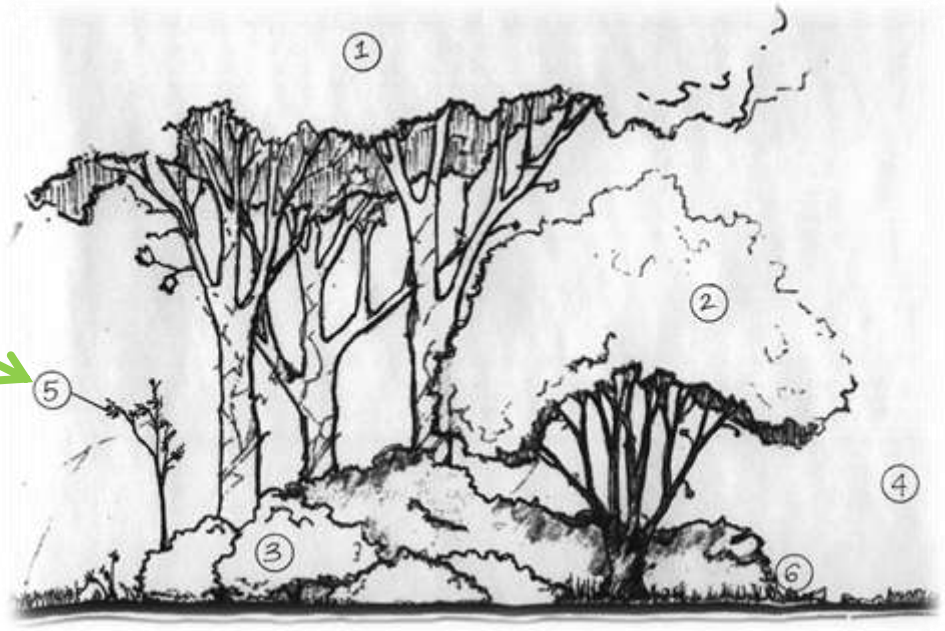
# Features of the Eco forest

| Feature | Cost/Maintenance benefit | Ecological benefit |
|---|---|---|
| ***4. All plants are native and selected to closely match site conditions, especially soil pH, texture, and moisture levels.*** | Reduced need for watering after establishment (water only during prolonged draught after first year). Healthy plants are better able to defend themselves against pests and disease without human intervention. | Using native plants helps boost biodiversity of the larger region. May even help to connect green corridor s (check local planning maps for more info on green corridors). |

# Features of the Eco forest

| Feature | Cost/Maintenance benefit | Ecological benefit |
|---|---|---|
| ***5. Small "baby trees" are tucked within the forest to ensure future canopy.*** | Small native trees cost a fraction of the price of adult trees, establish with fewer issues, and are likely to live longer than adult transplants of the same species. | Future generation of mature hickories and other canopy trees are best insurance of support for future generations of birds, small mammals, pollinators, and butterflies. |

Ex: Small mockernut hickory will grow into future canopy tree.



# Features of the Eco forest

| Feature | Cost/Maintenance benefit | Ecological benefit |
|---|---|---|
| ***6. Trees are chosen to have leaves that will decompose quickly**** | Leaves can be left in place after they fall, no raking or blowing necessary. | Light leaf cover protects groundcover thru winter, decomposes, and enriches the soil. |

***Quercus phellos*, Willow oak**

*-This can be ignored in less "tidy" areas, as most native ground layer plants are well adapted to poke through leaf litter.

# Aesthetics

Stuyvesant Town
In Manhattan,
New York City

# Orcas Project

# Comparisons…

**TRADITIONAL LANDSCAPE**

- It's easy to find invasive exotic plants that are currently industry standard
- Dominance of lawn—easy mowing maintenance

**NATIVE PLANT LANDSCAPE**

- With natives, a little more legwork involved, learning
- Availability may cause installation in stages
- Planted beds… weeding requires some intelligence, but do you do it EVERY WEEK…?

# The lawn concept

- Mowing
  - Dangerous
  - Most polluting engine in use
  - Requires some number of hours per week during growing season
  - But, anybody can do it

# MAINTENANCE TASK COMPARISONS OVER THREE YEARS*

* Based on April through October growing season (7 months)

| | YEAR 1 | | YEAR 2 | | YEAR 3 | |
|---|---|---|---|---|---|---|
| Month | Lawn | Eco-Forest | Lawn | Eco-Forest | Lawn | Eco-Forest |
| APR | Mow lawn.[2]<br>Mow lawn.<br>Mow lawn.<br>Mow lawn. | Mulch with installation.[1] | Mow lawn.<br>Mow lawn.<br>Mow lawn.<br>Mow lawn. | Weed. | Mow lawn.<br>Mow lawn.<br>Mow lawn.<br>Mow lawn. | Weed. |
| MAY | Mow lawn.<br>Mow lawn.<br>Mow lawn.<br>Mow lawn. | Weed.[3] | Mow lawn.<br>Mow lawn.<br>Mow lawn.<br>Mow lawn. | Renew mulch only where growth does not cover by May 15.[1] | Mow lawn.<br>Mow lawn.<br>Mow lawn.<br>Mow lawn. | Check for small, spot-mulching needs. [1] |
| JUN | Mow lawn.<br>Mow lawn.<br>Mow lawn.<br>Mow lawn. | | Mow lawn.<br>Mow lawn.<br>Mow lawn.<br>Mow lawn. | Weed. | Mow lawn.<br>Mow lawn.<br>Mow lawn.<br>Mow lawn. | |
| JUL | Mow lawn.<br>Mow lawn.<br>Mow lawn.<br>Mow lawn. | Weed. | Mow lawn.<br>Mow lawn.<br>Mow lawn.<br>Mow lawn. | | Mow lawn.<br>Mow lawn.<br>Mow lawn.<br>Mow lawn. | Weed. |
| AUG | Mow lawn.<br>Mow lawn.<br>Mow lawn.<br>Mow lawn. | | Mow lawn.<br>Mow lawn.<br>Mow lawn.<br>Mow lawn. | | Mow lawn.<br>Mow lawn.<br>Mow lawn.<br>Mow lawn. | |
| SEP | Mow lawn.<br>Mow lawn.<br>Mow lawn.<br>Mow lawn.<br>Fertilize if needed.[2] | Weed. | Mow lawn.<br>Mow lawn.<br>Mow lawn.<br>Mow lawn.<br>Fertilize if needed. [2] | Weed. | Mow lawn.<br>Mow lawn.<br>Mow lawn.<br>Mow lawn.<br>Fertilize if needed. [2] | |
| OCT | Mow lawn.<br>Mow lawn.<br>Mow lawn.<br>Mow lawn. | | Mow lawn.<br>Mow lawn.<br>Mow lawn.<br>Mow lawn. | | Mow lawn.<br>Mow lawn.<br>Mow lawn.<br>Mow lawn. | |