

PROPOSED LANDSCAPING AND SITE DEVELOPMENT

NATIONAL HEADQUARTERS AND EDUCATIONAL CENTER  
OF WILD ONES NATURAL LANDSCAPERS LTD.

2285 Buttes de de Morts Beach Drive, Town of Menasha, WI

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**Terraforma LLC** · Terry Marvel, Principal and Landscape Designer

Ecological Site Development and Landscape Design

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Plan © Terry Marvel 2008

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**Plant Key**

<b>Symbol</b>	<b>Common Name</b>	<b>Botanical Name</b>
<b>Trees</b>		
A	Alleghany Serviceberry	Amelanchier laevis
B	Red Maple	Acer rubrum
C	Sugar Maple	Acer saccharum
D	Pagoda Dogwood	Cornus alternifolia
E	Musclewood	Carpinus caroliniana
F	Shagbark Hickory	Carya ovata
G	American Beech	Fagus americana
H	Witchhazel	Hamamelis virginiana
I	Red Cedar	Juniperus virginiana
J	American Hophornbeam	Ostrya virginiana
K	Quaking Aspen	Populus tremuloides
L	Swamp White Oak	Quercus bicolor
M	Red Oak	Quercus rubra

## Shrubs

N	Gray Dogwood	<i>Cornus racemosa</i>
O	Hazelnut (American Filbert)	<i>Corylus americana</i>
P	Northern Bush Honeysuckle	<i>Diervilla lonicera</i>
Q	Staghorn Sumac	<i>Rhus hirta</i> (typhina)

## Grasses, Wildflowers and Turf

### Area R:

Little Bluestem	<i>Schizachyrium scoparium</i>
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### Area S (Meadow Grasses and Wildflowers):

Big Bluestem	<i>Andropogon gerardii</i>
Switch Grass	<i>Panicum virgatum</i>
Little Bluestem	<i>Schizachyrium scoparium</i>
Wild Columbine	<i>Aquilegia canadensis</i>
Common Milkweed	<i>Asclepias syrica</i>
Smooth Aster	<i>Aster laevis</i>
White Indigo	<i>Baptisia alba</i> (leucantha)
Purple Coneflower	<i>Echinacea purpurea</i>
Wild Strawberry	<i>Fragaria virginiana</i>
False Sunflower (Oxeye)	<i>Heliopsis helianthoides</i>
Bee Balm (Wild Bergamot)	<i>Monarda fistulosa</i>
Smooth Penstemon	<i>Penstemon digitalis</i>
Yellow Coneflower	<i>Ratibida pinnata</i>
Black-Eyed Susan	<i>Rudbeckia hirta</i>
Compassplant	<i>Silphium laciniatum</i>
Prairie Dock	<i>Silphium terebinthinaceum</i>
Stiff Goldenrod	<i>Solidago rigida</i>

Notes: Meadow plantings shall include a mixture of 40% grasses and 60% wildflowers. The preferred method of installation: 1) thoroughly eliminate existing sod and weeds by smothering or applying herbicide, 2) apply 2"-3" of finely shredded wood mulch (not wood chips) to planting areas, 3) install live plants (2 1/2" plugs-1 quart pots) 18"-24" apart, and 4) water regularly and thoroughly during the first growing season. Plant groupings of 3 or more plants of the same species; interweave groupings. Establish plantings in small-to-moderate areas only as adequate resources and labor are available to properly weed and water plants until they are well-established. Mow established plantings annually in mid spring before plants emerge. Rake off cuttings and compost. Do not leave cuttings on meadow.

Area S (Green Roof):

Due to cost and engineering restrictions, an extensive green roof system—that is to say a design that employs no more than 4" of soil for planting—is much more practical to construct than a heavier and more complicated intensive system with a deeper planting substrate. The challenging growing conditions due to a shallow root zone, however, greatly restrict plant choices. Non-native sedums are most commonly used, but these species have escaped into the wild and are persisting in Wisconsin’s landscapes. Although the literature on using native American plants for green roofs is very limited, the following criteria for choosing species have been identified: 1) tolerance to drought due to exposure to sun and wind, 2) plants with fibrous root systems (not tap roots) that are adapted to rapidly draining soils, 3) tolerance to alternate deep freezing and thawing (particularly in the case of open garden structures), and 4) preference for plants that quickly spread and cover the ground. Potential, suitable plants most likely include those from sand and limestone prairies; sand barrens; bracken grasslands; dry, exposed cliffs; and bedrock communities. The green roof proposed in this plan provides an interesting opportunity to experiment with regional native plants and promote their use in place of the commonly recommended non-native species.

Area T (Woodland Grass, Sedge, Wildflowers, Ferns and Vine):

Bottlebrush Grass	<i>Elymus hystrix</i> ( <i>Hystrix patula</i> )
Pennsylvania Sedge	<i>Carex pensylvanica</i>
Wild Columbine	<i>Aquilegia canadensis</i>
Heart-Leaved Aster	<i>Aster cordifolius</i>
Big-Leaved Aster	<i>Aster macrophyllus</i>
Wild Geranium	<i>Geranium maculatum</i>
Pale-Leaved Woodland Sunflower	<i>Helianthus strumosus</i>
False Solomon’s Seal	<i>Smilicina racemosa</i>
Zigzag Goldenrod	<i>Solidago flexicaulis</i>

Early Meadow Rue	Thalictrum dioicum
Lady Fern	Athyrium filix-femina
Interrupted Fern	Osmunda claytoniana
Virginia Creeper	Parthenocissus quinquefolia

Note: As woodland areas become shadier and humus soil levels increase, species requiring mesic woodland conditions may be added, including the following:

Blue Cohosh	Caulophyllum thalictroides
Mayapple	Podophyllum peltatum
Bloodroot	Sanguinaria canadensis
Large-Flowered Trillium	Trillium grandiflorum
Common Blue Violet	Viola sororia

Area U (Sedges, Wildflowers and Ferns for Rain Garden):

Crested Oval Sedge	Carex cristatella
Graceful Sedge	Carex gracillima
Long-Beaked Sedge,	Carex sprengei
Jack-in-the-Pulpit	Arisaema triphyllum
Wild Ginger	Asarum canadense
Wild Geranium	Geranium maculatum
Lady Fern	Athyrium filix-femina
Sensitive Fern	Onoclea sensibilis
Interrupted Fern	Osmunda claytoniana

Area V (Turf):

“No-Mow” Fine Fescue Turf Mix

Notes: Restrict mowing to pathways, access and activity areas. Allow fallen leaves and natural woody debris to accumulate under trees and shrubs planted in fescue. Introduce savanna and woodland wildflowers as favorable conditions develop.