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SPECIALISTS IN ENVIRONMENTAL MANAGEMENT AND RESEARCH

MEMO

TO: Judith Perlman, Conservare, LLC

FROM: John L. Larson, Ph.D.

DATE: March 16, 2007

RE: Hika Park (#07-0131)

Dear Judith,

After our brief site assessment of the several acre parcel adjacent to Lake Michigan I have the following comments and suggestions.

- 1) While small in size, this site represents a significant open space area along the Lake Michigan shoreline, with an easily accessible beach.
- 2) Beach can be thought of as a front beach where Lake Michigan wave action currently dominates. This is characterized by sands with interspersed rocks and cobbles. A 2-4" cobble/rock line has developed at the beach water interface, quite common for these shorelines. The second area farther up the beach is dominated by a sparse line of 6-10" year old cottonwood trees, trunks of which have been buried somewhat from beach action. It is this upper beach that could be restored quite easily. First there are some highly invasive non-natives located here. The most conspicuous of which is Knapweed (*Centaurea maculosa*). While quite a problematic species, the presence in sand should allow for pulling or perhaps digging of all the existing plants. Other species such as tansy (*Tanacetum vulgare*) would also be handled in the same manner.

Once these are removed, install native dune species. A brief list of potential species are listed below:

Table 1. Beach species.

Common Name	Scientific Name
Sea rocket	<i>Cakile edentula</i>
Beach pea	<i>Lathyrus maritimus</i>
Seaside spurge	<i>Euphorbia polygonifolia</i>
Black grass	<i>Juncus gerardii</i>
Silverweed	<i>Potentilla anserina</i>
Calamint	<i>Satureja</i> sp.
Beach grass	<i>Ammophila breviligulata</i>
Sand reed	<i>Calamovilfa longifolia</i>
Canada wild rye	<i>Elymus canadensis</i>
Prairie pea	<i>Lathyrus venosus</i>
Starry Solomon's seal	<i>Smilacina stellata</i>

Evening primrose	Oenothera biennis
Green-yellow sedge	Carex viridula
Bottlebrush sedge	Carex hystericina
Beggar's ticks	Bidens sp.
Rushes	Juncus sp.
Ditch stonecrop	Penthorum sedoides
Mild water pepper	Polygonum hydropiperoides
Bristly buttercup	Ranunculus pensylvanicus
Beach wormwood	Artemisia caudata
Common milkweed	Asclepias syriaca
Sand coreopsis	Coreopsis lanceolata
Winged pigweed	Cycloloma atriplicifolium

Small Wooded Area

This area is dominated by a non-native honeysuckle (*Lonicera tatarica*) throughout most of the area. The second most abundant shrub is red osier dogwood (*Cornus stolonifera*). The trees are mostly ash and range from 2-6' DBH, representative of a young woods. The groundstory vegetation appears sparse. The following restoration activities are proposed:

- 1) Cut and stump treat with Garlon 4 all honeysuckle shoots in dormant season
- 2) Overseed and/or plant native mesic woods species in drier areas and let the several small wetland areas develop/expand with increased light resulting from brushing. Evaluate in a year or two as to whether seeding or planting necessary in wetland portions of small woods.

Table 2. Species appropriate for mesic wooded area.

Common Name	Scientific Name
White baneberry	Actaea alba
Anemome	Anemone quinquefolia
Sarsaparilla	Aralia nudicaulis
Large-leaf aster	Aster macrophyllus
Bluebead	Clintonia borealis
Wild lily-of-the-valley	Maianthemum canadense
Sweet cicely	Osmorhiza claytonii
False Solomon's seal	Smilacina racemosa
Large-leaf trillium	Trillium grandiflorum
Bellwort	Uvularia grandiflora
Toothwort	Dentaria laciniata
Squirrel corn	Dicentra canadensis
White trout lily	Erythronium albidum
Jack-in-the-pulpit	Arisaema triphyllum
Pennsylvania sedge	Carex pensylvanicum
Wild geranium	Geranium maculatum
May apple	Podophyllum peltatum
Bloodroot	Sanguinaria canadensis
Woodland phlox	Phlox divaricata

Moved Lawn

A small area adjacent to the road is comprised of cool-season non-native lawn species. It is recommended that the linear edge of the lawns/woods area be broken up by planting trees in pods to eventually develop a more natural edge. It may be nice to plant some sugar maples and beech trees to begin to develop a mesic woods look and feel. The remainder of the lawn area closest to the road could be restored to prairie.

Table 3. Typical Prairie Species.

Common Name	Scientific Name
Grasses	
Big blue stem	<i>Andropogon gerardii</i>
Little blue stem	<i>Andropogon scoparius</i>
Canada wild rye	<i>Elymus canadense</i>
Switch grass	<i>Panicum virgatum</i>
Flowers	
Smooth blue aster	<i>Aster laevis</i>
New England aster	<i>Aster novae-angliae</i>
False sunflower	<i>Heliopsis helianthoides</i>
Bergamot	<i>Monarda fistulosa</i>
Stiff goldenrod	<i>Solidago rigida</i>
Spiderwort	<i>Tradescantia ohiensis</i>
Yellow coneflower	<i>Ratibida pinnata</i>
Black-eyed Susan	<i>Rudbeckia hirta</i>