DESIGNS FOR AHUSKA PARK IN THE CITY OF MONONA

LANDSCAPE ARCHITECTURE 365: PLANTING DESIGN

FALL 2016
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AHUSKA PARK
Monona, WI
BRANDI BACKUS
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LA 365
DEC. 19, 2016

VEHICULAR PATHS
PEDESTRIAN PATHS
NODES
LANDMARKS
EDGES
RECREATION FIELDS
PARKING
OPEN GRASS
EXISTING PATHS
WETLANDS
WOODED BERMS
EXISTING FOUNDATIONS

ZONES

OPPORTUNITIES
1. Open parking provides options for cooling with large shade trees
2. Expand path to connect throughout park and wetland
3. Wetland is a blank slate for boardwalk and educational opportunities
4. Poor draining soil can be used for rain garden plants - additional educational opportunities
5. Good views of wetlands across the highway
6. Swamp white oak grove for user interaction
7. Drainage can be improved throughout park and the water redirected to recreational fields

CONTRASTS
8. Road salt and drought conditions restrict plants for parking lot
9. Need more parking, but not much room for expansion
10. Existing grove of invasive trees and shrubs - need to be removed
11. Poor drainage makes area messy
12. Highway noise
13. Need plants that tolerate wet feet
14. Underlying soil is landfill - limited plant opportunities
AHUSKA PARK
Monona, WI

CONTEXT MAPS

CONCEPTUAL MAP

SCHEMATIC DRAWINGS

PRECEDENT STUDIES

CONCEPTUAL TO SCHEMATIC

-Strong connection between wetland and surrounding park
-Create opportunities to encourage use of park beyond sports
-Educational opportunities with signage

SCHEMATIC PATH 1: Curvy path option

DESIGN DEVELOPMENT

-Buffer zone next to parking creates immediate connection to wetland
-Curvy paths mimic more natural form
-Paths connect throughout entire park providing more user opportunities
-Pull star shape out of memorial - creates a more immersive experience

SCHEMATIC PATH 2: Formal path option

PRECEDENT STUDIES

THE HELIX: Curvilinear and interlocking paths
THE HELIX: Meandering boardwalk
WETLAND SIGNAGE: Vaulted educational signs in Llanelli, Wales
MODERN PAVILLION: Wood accents tie into boardwalk

SCHEMATIC PATH 1: Curvilinear and interlocking paths
THE HELIX: Meandering boardwalk
WETLAND SIGNAGE: Vaulted educational signs in Llanelli, Wales
MODERN PAVILLION: Wood accents tie into boardwalk
This concept involves engaging the local community with the park and its surrounding area. This means that the park has additional uses beyond sports; it is a green space designed with a multitude of users and uses in mind. There is a strong emphasis on connections to the wetland. Educational opportunities are created and experienced throughout the entirety of Ahuska Park. This sustainable design involves using materials that do not require a lot of maintenance and do not rapidly degrade. To create sustainable plantings, invasive species will be removed and hardy plants that require little maintenance will replace them and be planted throughout the site.

**DESIGN CONCEPT:** ECO-PARK

**PROGRAM ELEMENTS**

**BOARDWALK WITH EDUCATIONAL SIGNAGE**

**OUTDOOR CLASSROOM**

**VARIOUS ECOSYSTEMS**

- Mesic Prairie
- Rain Garden
- Oak Savanna

**PARKING BUFFER**

**TENNIS COURT SCREENING**

**CONNECTED PATHS**

**KEY**

1. Outdoor Classroom within Oak Savanna
2. Rain Garden Pocket
3. Proposed Farmers Market Area
4. Terraced Prairie Plantings
5. Shelter
6. Buffer Zone
7. Memorial
8. Burr Oak Specimen Tree
9. Path Connecting to Parking Lot
10. Extended Parking

**NOT TO SCALE**

PROPOSED PARKING LOT: Grasscrete to replace asphalt
PARKING BUFFER: Boardwalk through plants
SEATING NOOKS: “Swollen” parts of boardwalk create nooks for seating and signage
### DECIDUOUS TREES

- **Hinnomelia virginiana**
  - Common witch hazel
  - Zones: 3-8
  - Height: 15'-20'
  - Spread: 15'-20'
  - Desirable Characteristics: horizontal branching & yellow flowers from October to December

### PERENNIALS

- **Allium canum**
  - Redding pink onion
  - Zones: 4-8
  - Height: 3'-5'
  - Spread: 2'-3'
  - Desirable Characteristics: white flowers from June to August

- **Zea phyllochroa**
  - Prairie blazing star
  - Zones: 3-9
  - Height: 2'-3'
  - Spread: 2'-3'
  - Desirable Characteristics: pink flowers from July to September

### GRASSES

- **Elymus virginicus**
  - Virginia wild rye
  - Zones: 3-8
  - Height: 2'-4'
  - Spread: 2'-4'
  - Desirable Characteristics: persistent inflorescence through winter

### RAIN GARDEN PLANTS

- **Solidago octoflora**
  - common arrowhead
  - Zones: 5-10
  - Height: 1'-4'
  - Spread: 1'-2'
  - Desirable Characteristics: white flowers from July to September

- **Helenium 'Helbro'**
  - cardinal flower
  - Zones: 3-9
  - Height: 2'-4'
  - Spread: 1'-2'
  - Desirable Characteristics: red flowers from July to September

- **Helenium 'Skyscrapers'**
  - New England aster
  - Zones: 3-9
  - Height: 3'-5'
  - Spread: 2'-4'
  - Desirable Characteristics: blue flowers from August to September

### TREE PLANTING DETAIL

- **Top of root ball at soil surface or 1-2” above grade.**
- **2” settled layer of mulch.**
- **1” wood stake.**
- **If necessary, fasten trunk to stake using wide nylon webbing. If tree is stable, forgo this step.**

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**AHUSKA PARK**

**Monona, WI**

**DECEMBER 19, 2016**

**BRANDY BACKUS**

**KARLEY BOLZ**

**SARAH LETARSKI**
**TERRACED PRAIRIE PLANT SEED MIX**

### PERENNIALS:
- Lavender
- Hyssop
- Nodding Pink Onion
- Butterfly Weed
- Sky Blue Aster
- Smooth Aster
- New Jersey Tea
- Lance-leaf Coreopsis
- White Prairie Clover
- Purple Prairie Clover
- Shootingstar
- Pale Purple Coneflower
- Purple Coneflower
- Rattlesnake Master
- Roundhead BUSHclover
- Rough Blazingstar
- Prairie Blazingstar
- Wild Quinine
- Smooth Penstemon
- Great Solomon’s Seal
- Black Eyed Susan
- Brown Eyed Susan
- Stiff Goldenrod
- Ohio Spiderwort

### GRASSES:
- Sideoats Grama
- Little Bluestem
- Prairie Dropseed

### DECIDUOUS SHRUBS:
- Clethra alnifolia

### PERENNIALS GRASSES
- Dalea purpurea
- Dalea candida
- Asclepias tuberosa

### GRASSES
- Inyngium yuccifolium
- Dalea candida
- Dalea purpurea
- Andropogon gerardii 'Red October'
- Leucobolus heterolepis
- Bouteloua curtipendula

### ZONES:
- Zones: 4-8
- Zones: 3-8
- Zones: 3-9
- Zones: 3-9
- Zones: 3-8
- Zones: 3-8
- Zones: 3-8
- Zones: 3-8

### HEIGHT:
- Height: 3'-4'
- Height: 1'-2'
- Height: 1'-2.5'
- Height: 1.5'-2.5'
- Height: 4'-5'
- Height: 4'-6'
- Height: 1'-0.75'
- Height: 1.5'-2.5'

### SPREAD:
- Spread: 3'-5'
- Spread: 1'-1.5'
- Spread: 1'-1.5'
- Spread: 2'-3'
- Spread: 2'-3'
- Spread: 3'-5'
- Spread: 0.75'-1.5'
- Spread: 1.5'-2'
- Spread: 1.5'-2.5'

### DESIRABLE CHARACTERISTICS:
- white flowers from May to July
- purple flowers from June to August
- orange flowers from June to August
- white flowers from June to September
- mound-form and fine texture
- attractive seeds

**TERRACE WITH BOARDWALK PRECEDENT**

**WETLAND FEATURES**

- Educational Boardwalk with Signage
- Plant Ecosystems
- Animal Habitats
- Importance of Our Natural Environments
- Seating Nooks
- Mesic Prairie Terrace

**- Potential for Wetland Restoration to Increase Diversity of Native Plant and Animal Species**
PARKING AND TRANSITIONAL ZONE PLANTS

SEED MIX FOR BUFFER AREA

**PERENNIALS:**
- Nodding Pink Onion
- Red Milkweed
- Wild Aster
- Canada Tick Trefoil
- Joe Pye Weed
- Boneset
- Dogtooth Daisy
- Ox Eye Sunflower
- Wild Iris
- Blue Flag Iris
- Prairie Blazingstar
- Dense Blazingstar
- Great Blue Lobelia
- Bergamot
- Yellow Coreopsis
- Black Eyed Susan
- Sweet Black Eyed Susan
- Brown Eyed Susan
- Asters
- Cupplant
- Prairie Dock
- Ohio Goldenrod
- Stiff Goldenrod
- Tall Meadowblue
- Blue Vervain
- Ironweed
- Culver’s Root
- Golden Alexanders

**GRASSES:**
- Big Bluestem
- Bebb’s Sedge
- Bottlebrush Sedge
- Porcupine Sedge
- Axii Sedge
- Fox Sedge
- Canada Wild Rye
- Virginia Wild Rye
- Switchgrass
- Dark Green Bulrush
- Indiangrass
- Prairie Cordgrass
- Annual Rye

DECIDUOUS TREES

- *Betula nigra* ‘Cully’
  - Heritage river birch
  - Zones: 4-9
  - Height: 40’-70’
  - Spread: 40’-70’
  - Desirable Characteristics: exfoliating bark
  - Intended use: buffer between parking lot and park

- *Celtis occidentalis*
  - Common hackberry
  - Zones: 2-9
  - Height: 40’-60’
  - Spread: 40’-60’
  - Desirable Characteristics: dark and rough bark
  - Intended use: buffer and parking lot

- *Quercus muehlenbergii*
  - Chinkapin oak
  - Zones: 5-7
  - Height: 40’-60’
  - Spread: 50’-70’
  - Desirable Characteristics: interesting foliage, branching structure & fall color
  - Intended use: buffer and parking lot

DECIDUOUS SHRUBS

- *Dryerella scarsitfolia* ‘UPDC Pontara’
  - Red Spire southern bush honeysuckle
  - Zones: 4-8
  - Height: 2’-3’
  - Spread: 2’-3’
  - Desirable Characteristics: variegated leaves

- *Ilex verticillata* ‘Nana’
  - Red Spire winterberry
  - Zones: 3-9
  - Height: 2.5’-3’
  - Spread: 2.5’-3’
  - Desirable Characteristics: persistent red berries

- *Viburnum dentatum*
  - Arrowwood viburnum
  - Zones: 2-8
  - Height: 6’-10’
  - Spread: 6’-10’
  - Desirable Characteristics: leaf texture & fall color

- *Hydrangea paniculata* ‘Jane’
  - Little Lime panicle hydrangea
  - Zones: 3-8
  - Height: 3’-5’
  - Spread: 4’-6’
  - Desirable Characteristics: white panicles of flowers from July to September, persistent into late fall/early winter

- *Phyocarpus opulifolius* ‘Seward’
  - Summer Wine ninebark
  - Zones: 3-8
  - Height: 4’-6’
  - Spread: 4’-6’
  - Desirable Characteristics: exfoliating bark & purple foliage

- *Schizachyrium scoparium*
  - Little blue stem
  - Zones: 3-9
  - Height: 2’-4’
  - Spread: 1.5’-2’
  - Desirable Characteristics: texture and red fall color

- *Ilex verticillata* ‘Nana’
  - Red Spire winterberry
  - Zones: 3-9
  - Height: 2.5’-3’
  - Spread: 2.5’-3’
  - Desirable Characteristics: persistent red berries

- *Pennisetum alopecuroides* ‘Piglet’
  - Fountain grass
  - Zones: 5-9
  - Height: 0.75’-1.5’
  - Spread: 1’-2’
  - Desirable Characteristics: texture & persistent seeds

- *Ilex verticillata* ‘Nana’
  - Red Sprite winterberry
  - Zones: 3-9
  - Height: 2.5’-3’
  - Spread: 2.5’-3’
  - Desirable Characteristics: persistent red berries

- *Physocarpus opulifolius* ‘Seward’
  - Summer Wine ninebark
  - Zones: 3-8
  - Height: 4’-6’
  - Spread: 4’-6’
  - Desirable Characteristics: exfoliating bark & purple foliage

- *Schizachyrium scoparium*
  - Little blue stem
  - Zones: 3-9
  - Height: 2’-4’
  - Spread: 1.5’-2’
  - Desirable Characteristics: texture and red fall color

PARKING BUFFER DRAINAGE

**GRASSES**

- *Carex bicknellii* copper shouldered oval sedge
  - Zones: 3-7
  - Height: 1’-3’
  - Spread: 1’-1.5’
  - Desirable Characteristics: persistent seed heads

- *Pennisetum alopecuroides* ‘Piglet’
  - Fountain grass
  - Zones: 5-9
  - Height: 0.75’-1.5’
  - Spread: 1’-2’
  - Desirable Characteristics: texture & persistent seeds

- *Schizachyrium scoparium*
  - Little blue stem
  - Zones: 3-9
  - Height: 2’-4’
  - Spread: 1.5’-2’
  - Desirable Characteristics: texture and red fall color
RECREATIONAL AREA TREES

Quercus bicolor
Swamp white oak
Zones: 3-8
Height: 30'-60'
Spread: 30'-60'
Desirable Characteristics: good growing conditions for sight

Quercus macrocarpa
Burr oak
Zones: 3-6
Height: 40'-80'
Spread: 40'-80'
Desirable Characteristics: large shade tree with horizontal branching

Taxodium distichum
Sapling evergreen
Zones: 4-9
Height: 30'-70'
Spread: 20'-40'
Desirable Characteristics: interesting leaf texture and well feet

Nyssa sylvatica
Black gum
Zones: 3-9
Height: 30'-50'
Spread: 20'-30'
Desirable Characteristics: horizontal branching and beautiful fall color

Acer x freemanii
Freeman maple
Zones: 5-9
Height: 40'-60'
Spread: 20'-40'
Desirable Characteristics: bright red fall color

Betula papyrifera
Paper birch
Zones: 2-6
Height: 50'-70'
Spread: 25'-50'
Desirable Characteristics: white, peeling bark and derolate leaves

Betula nigra
River birch
Zones: 4-9
Height: 40'-70'
Spread: 40'-60'
Desirable Characteristics: peeling bark and tolerable to wet soil

Nyssa sylvatica
Black gum
Zones: 3-9
Height: 30'-50'
Spread: 20'-30'
Desirable Characteristics: horizontal branching and beautiful fall color

Pinus strobus
Eastern white pine
Zones: 4-9
Height: 1.5'-2.5'
Spread: 1.5'-2'
Desirable Characteristics: upright form, horizontal branching and foliage texture

TENNIS COURT PLANTS

Juniperus scopulorum 'Skyrocket'
Skyrocket juniper
Zones: 4-9
Height: 6'-10'
Spread: 2'-3'
Desirable Characteristics: bluish green foliage and columnar form

Thuja occidentalis 'Smaragd'
Emerald green arborvitae
Zones: 2-7
Height: 12'-14'
Spread: 3'-4'
Desirable Characteristics: upright form and bright green leaf foliage

Perspective of Memorial Planting

Perspective of Pavilion/Farmer's Market Planting
### PLANT SCHEDULE

#### DECIDUOUS TREES
- **MF2 Monarda fistulosa** Wild bergamot 4” PLUGS 91 Rain Garden
- **QB Quercus bicolor** Swamp white oak 2” CAL B&B 37 Recreation
- **QM2 Quercus macrocarpa** Burr oak 2” CAL B&B 26 Recreation
- **TD Taxodium distichum** Bald cypress 2” CAL B&B 8 Recreation
- **NS2 Nyssa sylvatica** Black gum 2” CAL B&B 9 Recreation
- **QM3 Quercus muhlengergii** Chinkapin oak 2” CAL B&B 48 Shelter/Parking
- **CO2 Celtis occidentalis** Common hackberry 2” CAL B&B 56 Shelter/Parking
- **AH Amsonia hubrichtii** Arkansas bluestar 3 GAL CONT. 485 Parking/Rain Garden

#### EVERGREEN TREES
- **DS Diervilla sessilifolia ‘Cool Splash’**
- **PS Pinus strobus** Eastern white pine 2” CAL B&B 4 Recreation

#### GRASSES/SEDGES
- **CB2 Carex bicknellii**
- **CX Calamagrostis × acutiflora ‘Karl Foerster’** Feather reed grass
- **PA Pennisetum alopecuroides ‘Piglet’** Fountain grass 2 GAL CONT. 885 Shelter/Parking
- **CV Carex vulpinoidea** Fox Sedge 2 GAL CONT. 132 Rain Garden
- **SC Scirpus cyperinus** Woolgrass 2 GAL CONT. 25 Rain Garden
- **EV Elymus virginicus**

#### PERENNIALS
- **AI2 Asclepias incarnata ‘Ice Ballet’**
- **AC2 Allium cernuum** Nodding wild onion 4” PLUGS 758 Rain Garden
- **BL2 Baptisia lactea** White False Indigo 4” PLUGS 103 Rain Garden
- **HH Heliopsis helianthoides**
- **EP Eupatorium perfoliatum** Boneset 4” PLUGS 32 Rain Garden
- **LC Lobelia cardinalis** Cardinal flower 4” PLUGS 93 Rain Garden
- **PI Parthenium integrifolium**
- **LS Lobelia siphilitica** Great blue lobelia 4” PLUGS 247 Rain Garden
- **PD Penstemon digitalis** Smooth Penstemon 4” PLUGS 211 Rain Garden
- **RS Rudbeckia subtomentosa** Sweet black eyed susan 4” PLUGS 215 Rain Garden
- **SL Sagittaria latifolia** Common Arrowhead 4” PLUGS 122 Rain Garden
- **S0 Solidago ohioensis** Ohio Goldenrod 4” PLUGS 130 Rain Garden
- **JE Juncus effusus** Soft rush 4” PLUGS 38 Rain Garden
- **CS Carex stipata**

### SEED MIX PLANT SCHEDULE

#### DECIDUOUS TREES
- **Corylus avellana** Hazel
- **Ptelea trifoliata**
- **Basswood**
- **P. virginiana** White ash
- **Linden**
- **P. nigra** Black locust
- **Sycamore**
- **A. pseudoplatanus** London plane
- **E. ulmoides** Robinia pseudoacacia
- **Paulownia tomentosa** Paulownia
- **P. sinensis** Chinese willow
- **T. cordata** Japanese maple
- **A. saccharinum** Black walnut
- **C. ovata** Chinese chestnut
- **C. xylocarpa** Chinese elm
- **C. sativa** English walnut
- **C. nigra** Black walnut
- **C. orientalis** Chinese elm
- **C. eriobotrya** Loquat
- **C. sieboldii** Japanese maple

#### EVERGREEN TREES
- **Ptelea trifoliata**
- **P. virginiana** White ash
- **Linden**
- **P. nigra** Black locust
- **Sycamore**
- **A. pseudoplatanus** London plane
- **E. ulmoides** Robinia pseudoacacia
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- **T. cordata** Japanese maple
- **C. ovata** Chinese chestnut
- **C. xylocarpa** Chinese elm
- **C. sativa** English walnut
- **C. nigra** Black walnut
- **C. orientalis** Chinese elm
- **C. sieboldii** Japanese maple

### MANAGEMENT PLAN

#### OVERALL FEEL OF SITE:
- Immediate immersion in nature upon arrival at site
- Diverse prairie planting with swaths of purple and yellow
- Seed mix shall be watered until established and then left to grow naturally

#### TERRACED MESIC PRAIRIE:
- Natural planting contained within terraces
- Diverse prairie planting with swaths of purple and yellow

#### RAIN GARDENS:
- Densely planted groups of grasses and perennials with spec imen trees
- Rain garden nooks shall remain densely planted to prevent people walking through rain garden areas

#### PARKING DETENTION BUFFERS:
- Invokes the feeling of a wetland to immediately make con nection to wetlands onsite
- Only limit up trees if they impede with vehicular or pedestrian traffic
- Remove plants only if they crowd out other plants
- Leaf litter should not be allowed to build up as it may pre vent water drainage

#### PARKING BARRIERS:
- Immediate immersion in nature upon arrival at site
- Seed mix shall be watered until established and then left to grow naturally
- Prairie plants shall be contained to terraces – remove if they spread outside terraces
- Allow plants to spread, but remove if they crowd out other plants
Ahuska Park
City of Monona, WI
Cameron Braatz
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LA 365
Final Project
Dec 20, 2016

Site Analysis Precedent Studies

Legend
- Deciduous Trees
- Evergreen Trees
- Planting Bed

Opportunities
- Natives Plantings
- Bioswale
- Farmer’s Market
- Turf
- Ornamental Plantings

Constraints
- Wet Soils
- Noise
- Road Salt

Context
- Wetland and Boardwalk
- Farmer’s Market Earthwork
- Boardwalk Overlook
- Native Planting
- Noise Wall

To Madison
Lake Monona
Beltline Hwy
E Broadway
S Stoughton Rd

LA 365
Final Project
Dec 20, 2016

Ahuska Park
City of Monona, WI
Cameron Braatz
Yunjing Hu
Amelia Switz
Design Process

Program Statement

Community Involvement: inclusion and diversity
native and non-native plants
farmer’s market
athletic fields
Veteran’s Memorial: anchor point of wing shaped
farmer’s market terrace

Concept

The People &
The Landscape

Woodland Garden: oaks and Wisconsin native
woodland flowers
Oak Savanna: Wisconsin oak savanna planting with
native grasses, light tree, and forb densities
Wetland with Boardwalk: Wisconsin wetland for-
est and marsh, reflection of out regional wetland
communities sounding Madison, with informational
boards explaining native plants for the native com-
munities
Ahuska Park
City of Monona, WI
Cameron Braatz
Yunjing Hu
Amelia Switz
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Dec 20, 2016
Ahuska Park
City of Monona, WI
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Yunjing Hu
Amelia Switz
LA 365
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Planting Plan

3/16" = 1" - 0"

Entrance Zoom-In

Memorial Zoom-In

Woodland Garden Zoom-In

Planting Detail 1

Planting Detail 2
### Southern Savanna Restoration and Woodland Garden:
The southern portion of Ahuska Park, currently overgrown with weedy invasive species, has been proposed to be a native oak savanna and woodland garden. The woodland garden will be located beneath the existing grove of Swamp White Oak and Burr Oak trees on the southwest corner of the property. The specified woodland garden species will not be able to establish prior to ample development of the oak canopy cover. Prior to this it shall receive the same treatment as the oak savanna area.

The invasive plants in the savanna area must be dealt with prior to planting. Suggested methods of invasive removal would be burning and/or herbicidal applications. For burning, schedule burns yearly until successful weed succession, be sure to contact the local fire department for acceptable burn conditions, seasons, and permits required to burn safely and responsibly. It is suggested that groundcover plants be raked in a 6’ buffer ring from oak trees in this area to prevent fires from reaching too close to tree trunks. It is recommended that the oak savanna trees be planted following successful removal of invasive species. For herbicidal application, be sure to use Round Up, Rodeo, Garlon 4, or similar product. Be sure to take proper precautions to prevent pollution of the adjacent wetland areas. The nature of the invasive plants in this area require repeated treatments until the species have been totally eradicated.

Once invasive species are brought under control, plant oak savanna seed mix, burr and swamp white oaks, and witch hazels. Oak and witchhazels should be left to grow naturally, limbing only to remove dead or dying branches, allowing for a natural branching structure. The seed mix shall be 80% an equal seed mix of little bluestem, big bluestem, and Indian grass; and 20% equal seed mix leadplant, rough blazing star, wild indigo, and butterfly weed. See site map and planting plan for specific seeding areas; as previously mentioned the woodland garden shall initially be planted with the same savanna seed mix. If immediate aesthetic impact is desired; decrease grass seed mix percentage to 50-60%, while increasing the wildflower percentage to 40-50%. Inspect oak canopy coverage in woodland area yearly until it has reached 50-60% average canopy coverage, at which point proceed to plant woodland garden.

To plant woodland garden, savanna plantings must be removed and replaced with woodland matrix plants and seasonal interest plants. The specified shade tolerant matrix plant species shall be planted 2’ on center in a grid pattern, subsequent species will be chosen at random to ensure a uniform mix of matrix ground cover. The seasonal interest flowering species will be planted as 4” plugs in and amongst matrix plants. Plants in this area do well with moist soil and should be irrigated if summer conditions become uncharacteristically dry. Oak trees in this area may be limbed up to 6 feet to allow for pedestrian traffic beneath branching, while retaining shade coverage.

#### Memorial Garden:
The planting bed surrounding the memorial is to be planted with a similar arrangement as the aforementioned woodland garden. This area may be planted during the first phase of landscape installation. The matrix plants, little bluestem and Indian grass will be placed as 4” plugs on a 2 foot grid pattern. The perennial seasonal interest plants will be placed according to the planting plan on center between the ornamental grasses. Take specific care to place plants as specified to ensure an even dispersion of flowering species throughout the flowering season. At the end of fall, refrain from cutting back perennials to avoid detracting from their winter interest form and texture. Cut back remaining stems come spring.

#### Boardwalk Area:
During construction of the boardwalk, necessary trees shall be removed but leave all that do not restrict construction or threaten pedestrians. For the boardwalk viewing platform, be sure to remove trees that block the view shed directly east. When possible leave trees that block views of the belttine highway to the south. Existing trees must be removed to make room for the specified birch trees, which will line the pathway to the overlook. Both new and existing trees must be limbed sparingly to create a hallway effect with enclosed views above and to either side of the pedestrian, ultimately opening at the terminus of the overlook walking path.

#### Parking area
The parking lot trees shall be limbed up 6’ off the ground and lightly trimmed to keep good growing form and prevent any intrusion with vehicles and pedestrians. For trees lining the parking lot, trim branches obstructing light poles. Maintain bark mulch under trees to prevent weeds and keep rot areas protected in extreme environment.

#### Entrance
Keep planting beds free from litter. The median trees shall be lightly pruned to prevent interference with vehicles. Maintain mulch rings around trees. Thin perennial plants annually to prevent overgrown species.
AHUSKA PARK - MONONA, WI

**SITE CONTEXT**

- **Opportunities**
  - Abundance of open, underutilized green space for improved facility expansion and redevelopment
  - Significant sunlight to the site for increased plant selection options
  - Centrally located near commercial districts for increased walkability to the site

- **Constraints**
  - Inadequate parking space
  - Significant drainage issues throughout the site
  - Limited ADA accessible pathways throughout
  - Isolated play fields
  - Unideal subsurface conditions

**Legend**

- **Play Field District**
- **Parking District**
- **Green Space District**
- **Wooded District**
- **Marsh District**
- **Gathering District**
- **Vehicular Traffic**
- **Major Pedestrian Traffic**
- **Secondary Pedestrian Traffic**
- **Nodes**
- **Major Landmarks**
- **Secondary Landmarks**
- **Underutilized Open Spaces**
- **Significant Noise Pollution**
- **Disconnected Marsh Area** - Potential for recreational path
- **Non-cohesive planting scheme throughout back lot**

**Site Context - Site Analysis**

- **Large depression** - Potential for water purification and educational opportunity
- **Winter winds**
- **Serious ponding and drainage issues**
- **Ahuska Park Main Sign**
- **Poor quality deciduous tree plantings**
- **Tennis courts**
- **Football field**
- **Soccer field**
- **Baseball field**

**Summer sun pattern**

**Significant noise pollution from highway**

**Winter sun pattern**

**Scale: NTS**
Reconnection is a reaction to an awareness of the disjointed nature of Ahuska Park. It seeks to reintegrate all aspects of the site - the pathways, the plantings, the outdoor rooms and open spaces, and the user - to the surrounding landscapes, to nature, to experiences, to the past, to each other, and to the City of Monona.

**MEMORIAL CONCEPT**
- 'The Musical Garden'
- Concentric Plantings
- Protected, Not Enclosed
- Accent Plantings
- Contrasting Textures, Colors

**RAIN GARDEN CONCEPT**
- Brooklyn Botanic Garden
- Interpretive Signage
- Educational Opportunity
- Saturated to Mesic Plantings
- Connecting Paths

**WOODLAND CONCEPT**
- Chanticleer Garden
- Winding, Accessible Paths
- Bulb Plantings
- Dynamic Tree and Understory Plantings
- Four Season Interest

**LEGEND**
- MAJOR CONNECTIONS / AXES -
- RAIN GARDENS -
- MARSH CONNECTIONS -
- OFF-SITE CONNECTIONS -
- MEMORIAL POCKET -
- WOODLAND PLANTINGS -
- MAIN GATHERING / CENTRAL EMPHASIS -

**CONCEPT DEVELOPMENT & PRECEDENTS**
PROGRAM STATEMENT

This project is part of a proposal to redesign and rehabilitate Ahuska Park in Monona, Wisconsin. The project goals include: the improvement of visitor experience through increased pedestrian access, parking, and an updated passive recreation trail, the restoration and revitalization of the site’s green space and overall planting quality, and the enhancement of the site’s structure, function and management.

PLANT HIGHLIGHTS

CELERIUM OCCIDENTALIS
- 40-60' TALL, 40-60' WIDE
- FULL SUN - PART SHADE
- ZONES 2-9
- APRIL: GREEN
- URBAN TOLERANT, GOOD FORM, ATTRACTS BIRDS, EDIBLE FRUIT

ULMUS 'MORTON GLOSSY'
- 50-60' TALL, 35-40' WIDE
- FULL SUN - PART SHADE
- ZONES 4-7
- INSIGNIFICANT BLOOM
- GOOD FALL COLOR, NICE FORM, DED RESISTANT CULTIVAR

PLATANUS OCCIDENTALIS
- 75-100' TALL, 75-100' WIDE
- FULL SUN
- ZONES 4-9
- APRIL: YELLOW, RED
- INTERESTING BARK AND FRUIT, NICE STRUCTURE

PLATANUS X ACERIFOLIA
- 75-100' TALL, 60-75' WIDE
- FULL SUN
- ZONES 4-8
- APRIL: YELLOW, RED
- INTERESTING BARK, WINTER INTEREST

BLACK GUM SPECIMEN
- W/ WET SEED MIXES

MESIC PRAIRIE SEED MIXES

SATURATED AND MESIC SEED MIXES

ACCESSIBLE BOARDWALK W/ SEATING AND EDUCATIONAL SIGNAGE

MEMORIAL GROVE

SILVA CELL SUPPORT BLOCKS FOR SOIL & VEGETATIVE STABILIZATION
**PLANT HIGHLIGHTS**

**AMELANCHIER X GRANDIFLORA**
- 15-25' TALL, 15-25' WIDE
- FULL SUN - PART SHADE
- ZONES 4-9
- APRIL: WHITE
- FOUR SEASON INTEREST, ATTRACTS BIRDS

**CARPINUS CAROLINIANA**
- 20-25' TALL, 20-25' WIDE
- PART - FULL SHADE
- ZONES 3-9
- FALL: HOP-SHAPED FRUIT
- GOOD FALL COLOR, INTERESTING BARK, NICE STRUCTURE

**SOLIDAGO RUGOSA 'FIREWORKS'**
- 2-3' TALL, 2-3' WIDE
- FULL SUN
- ZONES 4-8
- SEPT-OCT: YELLOW
- NICE FORM, SHOWY BLOOM, NATURALIZES

**IRIS VERSICOLOR**
- 2-3.5' TALL, 2-3.5' WIDE
- FULL SUN - PART SHADE
- ZONES 3-9
- MAY-JUNE: VIOLET
- TOLERATES WET SOILS, NATIVE, NATURALIZED, SHOWY FLOWER COLOR

**C. X ACUTIFLORA 'KARL FOERSTER'**
- 3-5' TALL, 1.5-2.5' WIDE
- FULL SUN
- ZONES 5-9
- MAY-FEB: PINK TO PURPLE
- GOOD STRUCTURE, WINTER INTEREST

**ASTER AZUREUS**
- 2-3' TALL, 1.5-2' WIDE
- FULL SUN
- ZONES 3-8
- SEPT-OCT: AZURE BLUE
- ATTRACTS POLLINATORS, DROUGHT TOLERANT, EXTENDED BLOOM TIME

**ILEX VERTICILLATA 'NANA'**
- 2.5-3' TALL, 2.5-3' WIDE
- FULL SUN - PART SHADE
- ZONES 3-9
- JUNE-JULY: WHITE
- WINTER INTEREST, SHOWY FRUIT, CLUMPING HABIT, ATTRACTIVE FORM

**CLETHRA ALNIFOLIA**
- 3-8' TALL, 4-6' WIDE
- FULL SUN - PART SHADE
- ZONES 3-9
- JULY-AUG: WHITE
- ATTRACTS POLLINATORS, TOLERATES WET SOIL, UNIQUE FLOWERS

**BETULA NIGRA**
- 40-70' TALL, 40-60' WIDE
- FULL SUN - PART SHADE
- ZONES 3-9
- APRIL-MAY: GREEN
- SHOWY BARK, TOLERANT TO WET SOILS, WINTER INTEREST

**SALVIA AZUREA**
- 3-5' TALL, 2-4' WIDE
- FULL SUN
- ZONES 3-9
- JULY-OCT: AZURE BLUE
- ATTRACTS POLLINATORS, DROUGHT TOLERANT, EXTENDED BLOOM TIME

**IRIS VERSICOLOR**
- 3-8' TALL, 4-6' WIDE
- FULL SUN - PART SHADE
- ZONES 3-9
- MAY-JUNE: VIOLET
- TOLERATES WET SOILS, NATIVE, NATURALIZED, SHOWY FLOWER COLOR

**BETULA NIGRA**
- 40-70' TALL, 40-60' WIDE
- FULL SUN - PART SHADE
- ZONES 3-9
- APRIL-MAY: GREEN
- SHOWY BARK, TOLERANT TO WET SOILS, WINTER INTEREST

**SALVIA AZUREA**
- 3-5' TALL, 2-4' WIDE
- FULL SUN
- ZONES 3-9
- JULY-OCT: AZURE BLUE
- ATTRACTS POLLINATORS, DROUGHT TOLERANT, EXTENDED BLOOM TIME
**TENNIS COURT PLANTINGS**

- **Deschampsia Cespitosa** (*'Goldtau'*)
  - 1'-2' tall, 2'-3' wide
  - Full Sun - Partial Sun
  - Zones 4-9
  - July-Oct: Gold
  - Good Fall Interest, Nice Form, Compact

- **Aster Oblongifolius** (*'October Skies'*)
  - 1.5'-2' tall, 1'-2' wide
  - Full Sun
  - Zones 3-4
  - Aug-Oct: Lavender
  - Fragrant, Attracts Pollinators

**ENTRANCE MEDIAN PLANTINGS**

- **Amsonia Hubrichtii** (*'Evan Saul'*)
  - 2.5'-3' tall, 1.5'-2' wide
  - Full Sun - Partial Shade
  - Zones 4-8
  - July-Sept: Orange, Pink
  - Attracts Pollinators, Colorful Bloom

**BULB HILLSIDE & NYSSA PLANTINGS**

- **Nyssa Sylvatica**
  - 30'-50' tall, 20'-30' wide
  - Full Sun - Part Shade
  - Zones 3-9
  - May-June: Green, White
  - Good Fall Color, Horizontal Form, Specimen Planting

- **Caltha Palustris**
  - 1.5'-2' tall, 1'-1.5' wide
  - Full Sun - Part Shade
  - Zones 3-4
  - Apr-Oct: Yellow
  - Tolerant of Wet Soil, Showy Flower, Naturalizes

- **Mertensia Virginica**
  - 1.5'-2' tall, 1.5'-2' wide
  - Full Sun - Part Shade
  - Zones 3-8
  - March: Blue
  - Pest Tolerant, Naturalizes, Nice Color

- **Allium Cernuum**
  - 1'-1.5' tall, 25'-35' wide
  - Full Sun - Part Shade
  - Zones 4-8
  - June-Aug: Pink
  - Naturalizes, Attracts Pollinators, Interesting Form

- **Echinacea Purpurea** (*'Evans Blue'*)
  - 2.5'-3' tall, 1.5'-2' wide
  - Full Sun - Part Shade
  - Zones 4-8
  - July-Sept: Orange, Pink
  - Attracts Pollinators, Colorful Bloom

**PLANTING DETAILS**

- Trees shall be pruned immediately after planting to remove dead, broken, diseased, dying, or rubbing branches. Co-dominant stems less than 4 inches in diameter at the fork shall be pruned off and one main stem should remain. Tree topping or heading is not permitted at any time.

- Staking is not required, but if installed it shall be removed no later than one year after planting.

- Mark the north side of the tree in the nursery, and rotate tree to face north at the site whenever possible.

- Trees should be planted no deeper than it was growing in the container or field and the trunk flare shall be visible above the ground. Trees where the trunk flare is not visible shall be rejected. Do not cover the top of the root ball with soil.

- Remove all twine, rope, wire, and burlap from top 12'' of root ball.

- If tree is delivered with a wire basket around the root ball, cut the wire basket in four places and fold down 12'' into planting hole.

- Place root ball on unexcavated or tamped soil. 3''-4'' of organic mulch, mulching should have a minimum radius of 2.5'. Mulch is not allowed closer than 6'' to trunk.

- In undisturbed soils and prepared soils, the planting hole should be two times as wide and no deeper than the root ball of the tree. Sides should slope in towards the bottom. In compacted soils, the planting hole shall be at least 3'' three times as wide as the root ball of the tree.

- Shrubs shall be pruned immediately after planting to remove dead, broken, diseased, dying, or rubbing branches. Do not prune leader.

- Plant shrub plumb. Top of root ball to bear same relationship to finish grade as to previous existing grade.

- Certified organic compost layer, create saucer for water retention around entire pit edges.

- If natural or burlap root ball, remove top 1/3 and lay down sides.

- Remove all nails, staples, pins, etc. prior to installation.

- Continuous planting soil or biosoil mix around the entire length and width of shrub.

- Loosen soil around sides of pit prior to installation.

- 6'' deep drainage trough around bottom of pit.

- Note: If container grown, split or fray roots to edge of plants prior to planting without damaging soil.
### PLANTING SCHEDULE

#### PHASE ONE

<table>
<thead>
<tr>
<th>Trees Symbol</th>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Quantity</th>
<th>Size</th>
<th>Root Condition</th>
<th>Spacing</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>AME APR</td>
<td>Amelanchier x grandiflora</td>
<td>Apple Serviceberry</td>
<td>15</td>
<td>2.5&quot; Cal B &amp; B</td>
<td>Multi-stemmed</td>
<td>12' o.c.</td>
<td>Multi-stemmed</td>
</tr>
<tr>
<td>BET RIV</td>
<td>Betula nigra</td>
<td>River Birch</td>
<td>10</td>
<td>2.5&quot; Cal B &amp; B</td>
<td>Multi-stemmed</td>
<td>12' o.c.</td>
<td>Multi-stemmed</td>
</tr>
<tr>
<td>CAR ARI</td>
<td>Carpinus caroliniana</td>
<td>American Hornbeam</td>
<td>8</td>
<td>2.5&quot; Cal B &amp; B</td>
<td>Multi-stemmed</td>
<td>17' o.c.</td>
<td>Multi-stemmed</td>
</tr>
<tr>
<td>CEL OCC</td>
<td>Celtis occidentalis</td>
<td>Common Hackberry</td>
<td>65</td>
<td>2.5&quot; Cal B &amp; B</td>
<td>Multi-stemmed</td>
<td>17' o.c.</td>
<td>Multi-stemmed</td>
</tr>
<tr>
<td>NYS SYL</td>
<td>Nyssa sylvatica</td>
<td>Black Gum</td>
<td>3</td>
<td>2.5&quot; Cal B &amp; B</td>
<td>Multi-stemmed</td>
<td>17' o.c.</td>
<td>Multi-stemmed</td>
</tr>
<tr>
<td>PPI STR</td>
<td>Pinus strobus</td>
<td>Eastern White Pine</td>
<td>3</td>
<td>2.5&quot; Cal B &amp; B</td>
<td>Multi-stemmed</td>
<td>17' o.c.</td>
<td>Multi-stemmed</td>
</tr>
<tr>
<td>PLA OCC</td>
<td>Platanes occidentalis</td>
<td>American Sycamore</td>
<td>19</td>
<td>2.5&quot; Cal B &amp; B</td>
<td>Multi-stemmed</td>
<td>17' o.c.</td>
<td>Multi-stemmed</td>
</tr>
<tr>
<td>PLA ACE</td>
<td>Platanes x acerifolia</td>
<td>London Plane Tree</td>
<td>10</td>
<td>2.5&quot; Cal B &amp; B</td>
<td>Multi-stemmed</td>
<td>17' o.c.</td>
<td>Multi-stemmed</td>
</tr>
<tr>
<td>PDP TRE</td>
<td>Populus tremuloides</td>
<td>Quaking Aspen</td>
<td>29</td>
<td>2.5&quot; Cal B &amp; B</td>
<td>Multi-stemmed</td>
<td>17' o.c.</td>
<td>Multi-stemmed</td>
</tr>
<tr>
<td>QUE MUE</td>
<td>Quercus muehlenbergii</td>
<td>Chinkapin Oak</td>
<td>17</td>
<td>2.5&quot; Cal B &amp; B</td>
<td>Multi-stemmed</td>
<td>17' o.c.</td>
<td>Multi-stemmed</td>
</tr>
<tr>
<td>UAM X</td>
<td>Ulmus x Mortonii</td>
<td>Triumph Elm</td>
<td>17</td>
<td>2.5&quot; Cal B &amp; B</td>
<td>Multi-stemmed</td>
<td>17' o.c.</td>
<td>Multi-stemmed</td>
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</tbody>
</table>

#### PHASE TWO

<table>
<thead>
<tr>
<th>Seed Mix Symbol</th>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Quantity</th>
<th>Size</th>
<th>Root Condition</th>
<th>Spacing</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Amelanchier x grandiflora</td>
<td>Apple Serviceberry</td>
<td>25</td>
<td>1'-0&quot; 5 gal</td>
<td>Multi-stemmed</td>
<td>24' o.c.</td>
<td>Multi-stemmed</td>
</tr>
<tr>
<td>B</td>
<td>Betula nigra</td>
<td>River Birch</td>
<td>20</td>
<td>1'-0&quot; 5 gal</td>
<td>Multi-stemmed</td>
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<td>Carpinus caroliniana</td>
<td>American Hornbeam</td>
<td>20</td>
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<td>Populus tremuloides</td>
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</tbody>
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<tr>
<th>Groundcover Symbol</th>
<th>Scientific Name</th>
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<th>Quantity</th>
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</table>
1. Aesthetic planting between individual tennis courts which are viewable from the parking lot and inside the tennis court fence.

2. Juniperus virginiana ‘Corcorcor’ has a pyramidal form to complement the Nyssa sylvatica on the south side of the site. It is a more urban tolerant species to increase longevity since it is close to a parking lot and sidewalk.

3. Branches of the large shade trees shall be maintained to prevent interference with the fence or play once large enough. Any hazardous or dead branches must be removed as soon as possible.

4. Juniperus virginiana ‘Corcorcor’ shall be replaced with the same species, if needed.

5. These areas have wet soil and poor drainage.

6. Plants were chosen to naturalize the space and to create an educational opportunity for visitors to become acquainted with the function and species of rain gardens.

7. Multi-stemmed branches provide dynamic screening opportunity.

8. Remove leaf litter from memorial space to keep a clean, formal sense of place.

The woodlands is a natural zone where all species are intended to grow without human influence. The species close to the pedestrian path may be trimmed to avoid encroachment and all hazardous branches shall be removed.

- 80-90% canopy cover after 20 years
- Must keep open area for recreation
- Remove hazardous and/or dead branches as needed to prevent potential injury
- RTF Sod
  - Moved three times a season to maintain water retention and durability of sod
  - Mower blades to be sharpened prior to cutting to provide a clean, even cut and attractive appearance
- Populus deltoides ‘Siouxland’ is a male cultivar that will not produce seeds
- If some individual trees are removed, do not replace, attempt to promote sense of being in a natural woodland area
- Leaf litter shall be allowed to accumulate and degrade naturally to replenish soil nutrients

- Does not interfere with visibility at ends of rows
- Can burn every other year - Rejuvenates herbaceous species
SITE ANALYSIS

Opportunities
-Varied topography provides different views and recreational opportunities.
-Memorial provides cultural engagement and a sense of place.
-Evergreens provide winter greenery.
-Berms on the southern edge provide views of the entire site.
-Existing trees provide an opportunity for natural engagement, which can be enhanced by re-design.
-Areas for bioswale development that would attract wildlife.
-Additional parking in the shopping center on the west side.

Constraints
-Soil is very poor, was originally a landfill.
-Many wild areas of brush on the south side. Visually unappealing.
-Highway noise from the beltline needs to be abated.
-Swales are scattered on the site. Unsafe, especially for children.
-East side visually unappealing as well, wild areas of brush. No entrance to the wetland.
-Unorganized wayfinding, poor circulation.
-Tennis courts lack a windscreen.
-No appropriate area for the farmer’s market.
-Barren, unguided views.

BELT OF TRANSITION
Replanning of Ahuska Park, Monona, WI

Designers:
SUSAN MANSKE
SHIQI TANG
JARYD SCHIMITZ

CONCEPT DEVELOPMENT

Creation of transition zones
-From natural to urban settings.
-From daily routine to recreation.

Concept sketch
1. Adds a natural wind screen around the tennis court using evergreens.
2. Parking areas are enlarged on the east and west sides.
3. Paved entrance and path are added to provided better access from west side parking, ADA accessible.
4. Farmer’s market is moved out of the parking lot into the unused site center.
5. Eastern wetland entrance added.
6. Secondary paths on the southern berm are created that follow the ridges, creating new spaces and views.
7. Added nodes for gathering/resting zones.
PRECEDENT STUDIES

PARKING LOT PRECEDENT
Show 2 Ways of reducing runoff
- Pavement reduction
- Bioswales to collect runoff
Suggests the following design applications:
- A mature canopy that covers at least 50% of the paved area.
- Use of plants with deep roots to anchor soil.
- Grass paver extension to provide a surface that will increase sustain ability, filtration and decrease runoff.
- Angled parking near the tennis courts to increase parking and improve circulation.

TENNIS COURT WIND SCREEN PRECEDENT
- Provide wind blockage.
- Dark, even background for better ball visibility.
- Combined natural and artificial fence can provide wind blockage and improve ball visibility.
- Evergreen clusters provide a more natural environment.
- More effective to combine the evergreen clusters with a dark green artificial background.

PATHWAYS, CIRCULATION PRECEDENT

WETLAND PRECEDENT
Turenscape Wetland Designs
- Swales serve an aesthetic and ecological purpose
- Both wetland and park area used to create wildlife habitat and recreational areas
- Creates a transition area in the city.
- Combines geometric and natural vegetal forms
Suggests the following design applications:
- A combination/contrast in the plan design. Puts emphasis on our transitions theme.
- Paths and decks through natural areas to provide a pleasant experience.
- Large groups of trees of a single species to create a more manicured feel.
- Variety in elevation to create a richer experience.
- Prairie grasses to help keep people on the path.

Minnesota Univ. Mankato Athletic Master Plan
- Has both an organic and a more geometric circulation plan.
- Combines natural and artificial paving.
Suggests the following design applications:
- A similar circulation design in our plan to provide easier wayfinding and provide a more simple boardwalk design.
- Concrete to provide better ADA accessibility.

BOARDWALK PRECEDENT
- Seating nodes along the boardwalk
- Decks for viewing and gathering.

PATHWAYS, CIRCULATION PRECEDENT

BELT OF TRANSITION
Replanning of Ahuska Park, Monona, WI

Designers:
SUSAN MANSKE
SHIQI TANG
JARYD SCHIMITZ

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FINAL PROJECT
**Notes:**

All boardwalk widths are approximately 7’, slightly elevated from grade to provide a better point of view and for safety.

All swales, except for those next to the playing field, will retain some water during wet seasons to support a mesic/dry planting pattern, which echoes the transitions theme.

Using underground pipes, swales next to the sports fields will drain into the water retention ponds on the west side within 24 hrs.

**SPORTS FIELDS, CENTRAL AREA DEVELOPMENT FEATURES**

- Prairie grass plantings
  - A transitional element between the turf and the wetland.
  - Helps to keep visitors on the paths.
  - Directs the view to the entrance of the playing field on the west side.
  - Reflects the shape of the farmers’ market on the east side.
- Central flagstone path
  - Helps define the edge of the prairie plantings and adds an attractive border.
  - Reflects and strengthens the shape of the winding prairie.
  - Flagstone represents a transition from concrete to the wood of the boardwalk

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  - Flagstone represents a transition from concrete to the wood of the boardwalk

**Enlarged parking lot**

- Tennis court screen
  - Natural and artificial screens are used.
- Use of evergreens provides year-round color and screening.
- Transitional plaza
  - Transitional paving pattern reflects the theme.
  - Tree islands
  - Setbacks for farmers’ market carts.

**EAST PARK DEVELOPMENT FEATURES**

- Clear 3 areas for entrances and views into the wetland.
- Keep most of the trees and shrubs to maintain a visual buffer and background for the park.
- Prairie grass areas
  - Between the shrubs and the boardwalks.
  - Greatly improves the views
  - Provides a transitional element from turf to wetland.
- Trees in groups or as individuals in the prairie plantings
  - Mimic the natural landscape in Wisconsin.
  - Create a fluent transition from the more wooded areas to a more open prairie/savanna-like area.
  - Provide shade.
- Geometric boardwalks
  - Straight/Geometric shape in contrast with the softer shapes and feel of the prairie.
  - Geometric shape reflects the transition theme, from artificial to natural.
  - Decks serve as nodes for resting and viewing.
  - Benches are scattered along the boardwalks.
- Decks as boardwalk entrances
  - Are elevated or below grade, depending on slope.
  - Ramps provide ADA access.
  - Provides wetland views.
- Council ring
  - Gathering/resting place for larger groups.
  - Provides wetland views.
  - Shape reflects that of the Memorial.

**SOUTH PARK DEVELOPMENT FEATURES**

- Natural band w/boardwalk and education nodes
  - Areas planted to attract
    - Pollinators (w/signs)
    - Birds (w/ feeders and signs)
    - Amphibians (with signs)
  - Area planted with trees to create sound (e.g., quaking aspen).

**SECONDARY (UNPAVED) RIDGE PATH FEATURES**

- More natural areas for exploration
- A deck at higher points for viewing
- Existing oak savannah, used for exploration and as an trail’s end marker.

**WESTERN PARK DEVELOPMENT FEATURES**

- Two entrances that connect with the shopping center parking lot on the west side, ADA accessible.
- Concrete paving and grading, TBD.
**PROJECT GOALS:**

Provide a transition zone from
- An urban to a natural environment.
- A working to a recreational setting.

Goal-oriented design features
- Combined artificial, geometric features with natural, planned plantings.
- A transitional paving pattern.
- A transitional, interwoven planting pattern.

**HIGHLIGHTS**

- **Plantings**
  - Mixed prairie plantings featuring
  - Contrasts in height, color, and texture
  - Different flowering seasons to provide spring through fall color
  - Winter interest provided by
    - Dormant plantings,
    - Tree shapes,
    - Bark colors,
    - Retained berries
    - Evergreens.

- **A transitional plaza** provides space for community and recreational gatherings and for a farmer’s market on weekends.

- **The geometric shape** of boardwalks and decking contrast with the softer shapes and texture of the plantings.

- **Benches** along the paths provide resting/observing areas for visitors of all ages and abilities.

- **The educational area** along the south side is focused on attracting and observing wildlife.
**PERSPECTIVE #1:**

**MIXED PRAIRIE BED PATHS**
- Medium height prairie plantings encourage use of the walkways.
- Plants will provide color, texture, and interest all seasons.

**PAVING MATERIALS:**

- Wood panel paving along the ridge
- Boardwalk paving & concrete paths: similar color integrates the design

**EDUCATIONAL BOARDS:**

1. Prairie plantings, pollinator habitat.
2. Oak savanna, squirrel, bird, tree-dwellers.
3. Swale, amphibian habitat.
4. Native Prairie species exhibition zone.

**PERSPECTIVE #2:**

**WETLAND PATH**
- 7’ min. width to provide ADA accessibility
- Strength and width to accommodate maintenance vehicles
- Straight lines contrast with natural shapes
- Scattered seating along the path

**BELT OF TRANSITION**
Replanning of Ahuska Park, Monona, WI

**Designers:**
SUSAN MANSKE
SHIQI TANG
JARYD SCHIMITZ

**(dec, 19th/2016)**
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**Page 5 Perspectives & Details**
**PARKING LOT DESIGN:**
- Intended to extend the maximum parking capacity while maintaining existing circulation and function.
- The East portion of the parking lot is extended to include twenty-two more spots, while the parking south of the tennis courts is now angled to sixty percent on both sides to accommodate traffic entering and exiting.
- Increased parking capacity to thirty available spots adjacent to both the soccer and tennis areas, with a round-about.
- Roundabout enables less congestion and increased traffic flow during multiple events on the site.
- Plantings in the lot will not exceed three feet in maximum height in both sun and shade islands, aside from the honey locust and the coffee tree.
- Promotes safety within the lot and improves circulation, as no viewsheds are blocked when driving.

**ISLAND PLANTER DESIGNS:**
- Islands that include Kentucky coffee tree and thornless honeylocust are going to be receive partial shade.
- Therefore, ‘Gro-Low’ fragrant sumac placed underneath these canopies to enable them to spread and create a groundcover surrounding trees.
- Full sun areas include ‘Autumn Ember’ muhly grass (will grow to three feet) and provide a mix of both sun and shade as the day progresses.
- The two sedges used are similar in height and spread, will contrast with one another in color and texture.
- ‘Autumn Ember’ mucly grasses August into November.

**PLANTING KEY FOR PARKING LOT ADDITION:**

<table>
<thead>
<tr>
<th>Botanical Name</th>
<th>Common Name</th>
<th>Size</th>
<th>Quantity</th>
<th>Roots</th>
<th>Symbol</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gleditsia triacanthos f. inermis 'Skycole'</td>
<td>thornless honeylocust</td>
<td>3&quot; Gal</td>
<td>4</td>
<td>Cont.</td>
<td>GT</td>
<td>match form/size</td>
</tr>
<tr>
<td>Gymnocladus dioicus</td>
<td>Kentucky coffee tree</td>
<td>3&quot; Gal</td>
<td>4</td>
<td>Cont.</td>
<td>GD</td>
<td>Male trees only, match size</td>
</tr>
<tr>
<td>Carex pennsylvanica</td>
<td>Pennsylvania sedge</td>
<td>1 Gal</td>
<td>24</td>
<td>Cont.</td>
<td>CS</td>
<td>Match size/form</td>
</tr>
<tr>
<td>Muhlenbergia reverchonii 'Autumn Embers'</td>
<td>muhly grass</td>
<td>1.5 Gal</td>
<td>12</td>
<td>Cont.</td>
<td>HS</td>
<td>match form/form</td>
</tr>
<tr>
<td>Blue artemisia 'Gro-Low'</td>
<td>'Gro-Low' fragrant sumac</td>
<td>1 Gal</td>
<td>5</td>
<td>Cont.</td>
<td>RA</td>
<td>Match size/form</td>
</tr>
</tbody>
</table>

**PARKING LOT LAYOUT DESIGN:**

- Showed in green on the plan to the right.
- Support any substantial kind of weight for an extended period of time.
- Pavers stabilize the soil, preventing the grass from rutting and improves infiltration.

**GRASS FILLED PAVERS IN PARKING LOT EXTENSION:**

- Shown in green on the plan to the right.
- Support any substantial kind of weight for an extended period of time.
- Pavers stabilize the soil, preventing the grass from rutting and improves infiltration.

**GRASS EXTENSION AREA, SEE LEFT:**

**BELT OF TRANSITION:**

- Replanning of Ahuska Park, Monona WI

**DESIGNERS:**
- SUSAN MANSKE
- SHIQI TANG
- JARYD SCHMITZ
BELT OF TRANSITION
Replanning of Ahuska Park, Monona, WI

Designers:
SUSAN MANSKE
SHIQI TANG
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SYMBOLS:
LATIN NAME
COMMON NAME
QTY.
SPACING
SIZE
COMMENTS

MIXTURE:
- Combination of side oats and prairie sedge
- Black-eyed Susan
- Miscanthus Sinensis ‘Grassillimus’
- Coneflower mix

PERENNIALS:
- Amsonia tabernaemontana (Blue Star)
- Calamintha nepeta (Calamint)
- Convallaria majalis (Lilly of the valley)
- Echinacea purpurea (Coneflower)
- Echinacea purpurea (Pink Poodle)
- Echinacea purpurea (PowWow white)
- Filipendula rubra (Queen of the prairie)
- Geum triflorum (Prairie smoke)
- Iris sibirica (Siberian iris)
- Lythrum virgatum 'Morden’s Gleam' (Loosestrife)
- Monarda fistulosa (Bee balm)
- Oxalis violacea (Wood violet sorrel)
- Phlox paniculata (Phlox)
- Rubeckia goldstrum (Black-eyed Susan)
- Salvia azurea (Blue Sage)
- Solidago caesia (Grod bluestem)
- Miscanthus sinensis (Maiden hair grass)
- Molina caerulea (Moor grass)
- Schizachyrium scoparium (Little bluestem)

GRASSES:
- Bouteloua curtipendula (Side-oats grama)
- Calamagrostis x acutiflora Karl Foerester (Prairie smoke)
- Carex bicknelli (Prairie sedge)
- Carex radiata (Radiate sedge)
- Miscanthus sinensis (Maiden hair grass)
- Molina caerulea (Moor grass)
- Schizachyrium scoparium (Little bluestem)

SHRUBS:
- Acer x freemanii (Freeman maple)
- Betula nigra (River birch)
- Gleditsia triacanthos inermis (Honeylocust)
- Malus 'Pink Princess' (Crabapple)
- Malus 'Spring Snow' (Crabapple)
- Picea pungens (Colorado spruce)
- Pinus nigra (Austrian pine)
- Populus tremuloides (Quaking aspen)
- Prunus 'Snofozam' (Weeping cherry)
- Syringa 'Bailbelle' (Tinkerbelle lilac)

TREES:
- Acer x freemanii (Freeman maple)
- Betula nigra (River birch)
- Gleditsia triacanthos inermis (Honeylocust)
- Malus 'Pink Princess' (Crabapple)
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- Pinus nigra (Austrian pine)
- Populus tremuloides (Quaking aspen)
- Prunus 'Snofozam' (Weeping cherry)

LEGENDS:
- Shaded Grasses
- Boardwalk, 7’W
- Concrete walk, 7’W
- Flagstone or porous paver walk
- Bridge
- Wet soil area
- Rest/observation area
- Views

PLANTING PLAN & DETAILS

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**BELT OF TRANSITION**

Replanning of Ahuska Park, Monona, WI

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**Trees**

- Gleditsia triacanthos, inermis (Thornless honeylocust)
  - Size: 50’H x 50’W
  - Bloom: Yellow fall color
  - Easy to plant, grows fast, nice shape and color. Provides a light, dappled shade that allows grass to grow beneath.
  - Tolerates compact soil.

---

**Bloom schedule**

- Spring
- Summer
- Late summer
- Late fall-winter

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**Designers:**

- SUSAN MANSKE
- SHIQI TANG
- JARYD SCHIMITZ

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**BOARD DESIGNERS:**

- LA 354

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**BLOOM Season**

- Spring
- Late spring
- Late summer
- Late fall-winter

---

**SHRUBS**

- Cornus florida
  - Size: 3’H
  - BLOOM: Spring, Pink
  - Lives 10 to 15 years
  - Dense and spiky growth

---

**GRASSES**

- Stipa gigantea
  - Size: 3’H
  - BLOOM: Summer, Yellow
  - Blooms at the top, creates a yellow carpet
  - Attracts butterflies and bees

---

**Perennials**

- Lychnis viscaria ‘Jacob’s Ladder’
  - Size: 2’H
  - BLOOM: Spring, Pink, Red

---

**Board Members:**

- Barbara Hallock, Bechman
Acer x freemanii ‘Autumn Blaze’
- tough in drought conditions
- no serious insect or disease issues
- no pruning necessary usually
- may need staking when establishing

Betula nigra
- avoid pruning in spring
- one of the most disease resistant birches
- roots in shade and canopy in full sun
- adapts well to heavy soils

Bouteloua curtipendula
- no serious insect or plant problems
- can be mown to 2-4” tall
- cut clumps to the ground in late winter

Carex bicknellii
- during hot summers foliage may die back
- no serious insect or disease problems

Carex radiata
- cut foliage to ground in winter
- propagate by division
- needs supplemental water in hot/dry weather
- no serious insect or disease problems

Convallaria majalis
- can be propagated in spring or fall by root division
- all parts of plant are poisonous
- foliage decline in hot summers

Designers:
SUSAN MANSKE
SHIQI TANG
JARYD SCHMITZ

Iris ‘Caesar’s Brother’
- can remove seed heads after flowering
- plant rizomes in fall
- can divide as needed as well

JARYD SCHMITZ
SHIQI TANG
SUSAN MANSKE
Designers:

Malus ‘Pink Princess’
- avoid spring pruning due to firelight
- prune in late winter
- scab, fireblight, rusts, leaf spot may be problems

Malus ‘Spring Snow’
- no fruit drop
- very susceptible to apple scab

Oxalis violacea
- no insect or disease problems
- very low maintenance

Picea pungens
- soil should be kept moist in early years
- no serious disease or pest problems

Populus tremuloides
- no pruning usually needed
- susceptible to many diseases like leaf spot, rust, powdery mildew, and cankers

Pinus nigra
- susceptible to Diploida
- no pruning necessary

Quercus bicolor
- no pruning needed
- susceptible to anthracnose
- good drought resistance
- chlorosis if soils not properly acidic

Salvia azurea
- cut down to 2” in late spring to promote stiff stems and tighter form
- no serious insect or disease problems

Thuja occidentalis
- avoid full shade and exposed areas
- no serious insect or disease problems

Coreopsis ‘Tall Form’
- freely self seeds if seed heads are left in place
- susceptible to Japanese beetle and leaf spot

Muhlenbergia reverchonii
- no pruning usually needed
- no serious insect or disease problems

Schizachyrium scoparium
- cut back to ground in late winter or very early spring time
- no serious insect or disease issues

PROJECT PHASING PLAN:

PHASE 1: Layout building structures, parking lot extensions, pave concrete walkway and plaza. Install wooden decks and walks as well. Transplant existing shrubs or take out as needed and grade to lay the walkways as well.

PHASE 2: Install large deciduous and coniferous tree species after removing invasive grass and shrub species. Clean up plants that are to be removed or replaced with other species. Install benches and seating features along the pathways as well.

PHASE 3: Plant remaining prairie grass species and perennials to fill the remaining portion of the specified planting beds according to the planting design.

PROPER TREE PLANTING METHOD

STORM WATER DETENTION POND WITH PIPE OUTLET:

The detention ponds onsite are to be equipped with perforated piping at the bottom of the ponds as to not cause pooling and attract pests such as mosquitos.

STORM WATER DETENTION POND WITH PIPE OUTLET:
**Legend**

- Vehicular Traffic
- Pedestrian Traffic
- Activity Nodes / Common Spaces
- Wetland / Natural Areas, Potential Paths
- Areas with Drainage Difficulty
- Positive Views

### Soil Data:
The soil on the site will be a constraining factor of the design because of its structure and poor drainage. All selected plants will have to be able to tolerate moisture extremes as well as drought extremes.

### Opportunities / Constraints

- Opportunities for the creation of new paths
- Opportunities to add to and modify existing plantings
- Opportunities to create cohesion between the site and adjacent wetlands
- Limited by the existing vegetation, need for removal to modify
- Limited by grade and by proximity to highway

- Opportunities to introduce more plants
- Opportunities to enhance existing drainage options and to collect water on site
- Opportunities to increase circulation and create more connections on site
- Limited by poor drainage
- Limited by existing structures and fields which much be preserved
- Limited by existing grade
Concept: Renewed Recreation

Site Goals
- Bring green design to the park
- Renew the park with new activities / connections
- Reduce the environmental footprint of the site
- Enhance natural drainage / storm-water capacity
- Increase the number and size of trees on the site
- Add new experiences and amplify current ones
- Increase the park’s potential ecological benefits
- Create a strong sense of community
- Increase access throughout the park with new paths
- Encourage visitors to interact with the site in new ways
- Make the park a top destination for Monona residents

Precedent Image: Storm-Water Swale Along Path
Precedent Image: Wetland Educational Sign
Precedent Image: Parking Lot with Shade Trees

Precedent Image: Wetland Board Walk / Planting Terrace

Precedent Image: Nature / Adventure Playground

Schematic Drawings
AHUSKA PARK AND WETLANDS
MONONA, WISCONSIN

JULES WEST, LI ZHUANG,
ZACH MEYER

DECEMBER 18, 2016

Terraced Garden Section

Boardwalk Lookout Perspective

A

A'

A

A'
DECIDUOUS TREES

Betula nigra
River Birch
Zone 4 - 9
Height: 40' - 70'
Spread: 40' - 60'
Fall Color: Yellow
Interest: Exfoliating bark, catkins

Carpinus betulus
'Fastigiata'
Upright European Hornbeam
Zone: 4 - 8
Height: 30' - 40'
Spread: 30' - 50'
Fall Color: Yellow / Orange
Interest: Bark, trunk, size, salt tolerance

Fagus sylvatica
Black Walnut
Zone 4 - 8
Height: 50' - 80'
Spread: 30' - 40'
Fall Color: Yellow / Red
Interest: White flowers (July), showy fruit, salt tolerance

Populus tremuloides
Trembling Aspen
Zone: 3 - 6
Height: 50' - 60'
Spread: 30' - 40'
Fall Color: Purple / Red
Interest: Yellow flowers, white / pink flowers (April)

Gleditsia triacanthos
Hornless Honeylocust
Zone: 5 - 7
Height: 40' - 60'
Spread: 50' - 100'
Fall Color: Yellow / Red
Interest: Foliage, size, salt tolerance

Carya ovata
Shagbark Hickory
Zone: 4 - 8
Height: 60' - 80'
Spread: 40' - 60'
Fall Color: Yellow / Red
Interest: Bark, fruit, size, salt tolerance

Hamamelis virginiana
Ironwood
Zone: 3 - 9
Height: 25' - 40'
Spread: 20' - 30'
Fall Color: Yellow / Red
Interest: Fruit, growth shape

Quercus macrocarpa
Burr Oak
Zone: 3 - 8
Height: 60' - 80'
Spread: 60' - 80'
Fall Color: Yellow / Red
Interest: Bark, trunk, spread, structure, size, salt tolerance

Ulmus 'New Horizon'
New Horizon Elm
Zone: 4 - 9
Height: 30' - 40'
Spread: 20' - 30'
Fall Color: Red
Interest: Growth shape, foliage, size, salt tolerance

Hamamelis virginiana
Ironwood
Zone: 3 - 9
Height: 25' - 40'
Spread: 20' - 30'
Fall Color: Yellow / Red
Interest: Fruit, growth shape

Quercus bicolor
Swamp White Oak
Zone: 3 - 6
Height: 50' - 60'
Spread: 30' - 40'
Fall Color: Yellow / Red
Interest: Bark, trunk, spread, structure, size, salt tolerance

Betula pubescens
Turkey Birch
Zone: 4 - 8
Height: 12' - 15'
Spread: 6' - 12'
Fall Color: Yellow / Red
Interest: Bark, trunk, size, salt tolerance

Quercus macrocarpa
Burr Oak
Zone: 3 - 8
Height: 60' - 80'
Spread: 60' - 80'
Fall Color: Yellow / Red
Interest: Bark, trunk, spread, structure, size, salt tolerance

Pussy Willow
Salix discolor
Zone: 4 - 8
Height: 6' - 12'
Spread: 6' - 12'
Fall Color: Yellow / Red
Interest: Bark, trunk, rapid transpiration

Populus balsamifera
Balsam Poplar
Zone: 3 - 9
Height: 60' - 80'
Spread: 30' - 40'
Fall Color: Yellow / Red
Interest: Bark, trunk, spread, structure, size, salt tolerance

Bog birch
Betula pumila
Zone: 3 - 9
Height: 6' - 10'
Spread: 3' - 6'
Fall Color: Yellow / Red
Interest: Bark, trunk, size, salt tolerance

Taxodium distichum
'Bog Cypress'
Sawtooth Bald Cypress
Zone: 4 - 9
Height: 50' - 75'
Spread: 15' - 20'
Fall Color: Yellow / Red
Interest: Yellow flowers (March), showy fruit, bark

Prunus serotina
Black Haw Viburnum
Zone: 3 - 9
Height: 12' - 15'
Spread: 6' - 12'
Fall Color: Yellow / Red
Interest: Showy fruit, white flowers (May - June)

Pussy Willow
Salix discolor
Zone: 4 - 8
Height: 6' - 12'
Spread: 6' - 12'
Fall Color: Yellow / Red
Interest: Bark, trunk, rapid transpiration

Nyssa sylvatica
Black Gum
Zone: 3 - 9
Height: 30' - 50'
Spread: 20' - 30'
Fall Color: Red
Interest: Fruit, growth shape

Prunus virginiana
Eastern Redbud
Zone: 4 - 8
Height: 10' - 15'
Spread: 5' - 8'
Fall Color: Yellow / Red
Interest: Foliage, growth shape, size, salt tolerance

Viburnum prunifolium
Black Haw Viburnum
Zone: 3 - 9
Height: 12' - 15'
Spread: 6' - 12'
Fall Color: Yellow / Red
Interest: Showy fruit, white flowers (May - June)

Hamamelis virginiana
Ironwood
Zone: 3 - 9
Height: 25' - 40'
Spread: 20' - 30'
Fall Color: Yellow / Red
Interest: Foliage, growth shape, size, salt tolerance

Cornus mas 'Golden Glory'
Golden- DUILE Tree
Zone: 4 - 8
Height: 12' - 15'
Spread: 5' - 10'
Fall Color: Yellow / Red
Interest: Yellow flowers (March), showy fruit, bark

Prunus tomentosa
Nanking Cherry
Zone: 4 - 8
Height: 10' - 15'
Spread: 6' - 10'
Fall Color: Yellow / Red
Interest: Showy fruit, white / pink flowers (April)

DECIDUOUS SHRUBS

Gleditsia triacanthos
Hornless Honeylocust
Zone: 4 - 9
Height: 30' - 50'
Spread: 30' - 50'
Fall Color: Yellow
Interest: Foliage, salt tolerance

Hamamelis virginiana
Ironwood
Zone: 3 - 9
Height: 25' - 40'
Spread: 20' - 30'
Fall Color: Yellow / Red
Interest: Fruit, growth shape

Quercus bicolor
Swamp White Oak
Zone: 3 - 6
Height: 50' - 60'
Spread: 30' - 40'
Fall Color: Yellow / Red
Interest: Bark, trunk, spread, structure, size, salt tolerance

Betula pumila
Turkey Birch
Zone: 4 - 8
Height: 12' - 15'
Spread: 6' - 12'
Fall Color: Yellow / Red
Interest: Bark, trunk, size, salt tolerance

Nyssa sylvatica
Black Gum
Zone: 3 - 9
Height: 30' - 50'
Spread: 20' - 30'
Fall Color: Red
Interest: Fruit, growth shape

Viburnum prunifolium
Black Haw Viburnum
Zone: 3 - 9
Height: 12' - 15'
Spread: 6' - 12'
Fall Color: Yellow / Red
Interest: Showy fruit, white flowers (May - June)

Taxodium distichum
'Bog Cypress'
Sawtooth Bald Cypress
Zone: 4 - 9
Height: 50' - 75'
Spread: 15' - 20'
Fall Color: Yellow / Red
Interest: Yellow flowers (March), showy fruit, bark

Nyssa sylvatica
Black Gum
Zone: 3 - 9
Height: 30' - 50'
Spread: 20' - 30'
Fall Color: Red
Interest: Fruit, growth shape

Cornus mas 'Golden Glory'
Golden- DUILE Tree
Zone: 4 - 8
Height: 12' - 15'
Spread: 5' - 10'
Fall Color: Yellow / Red
Interest: Yellow flowers (March), showy fruit, bark

Prunus tomentosa
Nanking Cherry
Zone: 4 - 8
Height: 10' - 15'
Spread: 6' - 10'
Fall Color: Yellow / Red
Interest: Showy fruit, white / pink flowers (April)

Populus tremuloides
Quaking Aspen
Zone: 2 - 7
Height: 60' - 80'
Spread: 60' - 90'
Fall Color: Yellow
Interest: Foliage sound, bark, size, salt tolerance

Quercus bicolor
Swamp White Oak
Zone: 3 - 6
Height: 50' - 60'
Spread: 30' - 40'
Fall Color: Yellow / Red
Interest: Bark, trunk, spread, structure, size, salt tolerance

Betula pumila
Turkey Birch
Zone: 4 - 8
Height: 12' - 15'
Spread: 6' - 12'
Fall Color: Yellow / Red
Interest: Bark, trunk, size, salt tolerance

Nyssa sylvatica
Black Gum
Zone: 3 - 9
Height: 30' - 50'
Spread: 20' - 30'
Fall Color: Red
Interest: Fruit, growth shape

Viburnum prunifolium
Black Haw Viburnum
Zone: 3 - 9
Height: 12' - 15'
Spread: 6' - 12'
Fall Color: Yellow / Red
Interest: Showy fruit, white flowers (May - June)

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Black Gum
Zone: 3 - 9
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Height: 12' - 15'
Spread: 6' - 12'
Fall Color: Yellow / Red
Interest: Showy fruit, white flowers (May - June)
PERENNIALS AND MIXES

Mix A
Insert plugs at random according to following percentages:
- Baptisia lactea: 15%
- Carex bicknellii: 20%
- Carex comosa: 15%
- Carex hirta: 15%
- Cassia hebecarpa: 2%
- Eupatorium perfoliatum: 10%
- Iris versicolor: 4%
- Liatris pycnostachya: 2%
- Leucanthemum vulgare: 20%
- Panicum virgatum: 5%
- Rudbeckia hirta: 15%
- Salvia pratensis: 20%

Mix B
Insert plugs at random according to following percentages:
- Asclepias incarnata: 15%
- Carex bicknellii: 15%
- Clethra alnifolia 'Hummingbird': 15%
- Liatris pycnostachya: 20%
- Panicum virgatum 'Shenandoah': 20%

Mix C
Insert plugs at random according to following percentages:
- Asclepias incarnata: 15%
- Calamagrostis acutiflora 'Karl Foerster': 15%
- Carex bicknellii: 20%
- Clethra alnifolia 'Hummingbird': 15%
- Liatris pycnostachya: 20%
- Panicum virgatum: 20%

Mix D
Insert plugs at random according to following percentages:
- Carex flava: 20%
- Dodecatheon meadia: 20%
- Geum triflorum: 15%
- Iris versicolor: 15%
- Liatris pycnostachya: 10%
- Rudbeckia hirta: 15%

Mix E
Insert plugs at random according to following percentages:
- Asclepias curassavica: 15%
- Calamagrostis acutiflora 'Karl Foerster': 20%
- Eryngium yuccifolium: 10%
- Iris versicolor: 10%
- Liatris pycnostachya: 10%
- Rudbeckia hirta: 15%
- Salvia pratensis: 20%

Mix F
Insert plugs at random according to following percentages:
- Carex bicknellii: 15%
- Carex hickelii: 30%
- Eryngium yuccifolium: 5%
- Iris versicolor: 10%
- Juncus effusus: 10%
- Liatris pycnostachya: 10%
- Lobelia cardinalis: 5%
- Monarda fistulosa: 5%
- Schizachyrium scoparium: 10%

Mix G
Insert plugs at random according to following percentages:
- Carex bicknellii: 10%
- Eryngium yuccifolium: 10%
- Liatris pycnostachya: 10%
- Schizachyrium scoparium: 10%
- Sporobolus heterolepis: 20%
- Symphyotrichum laeve: 5%
- Veronicastrum virginicum: 5%

Parking Lot and East Broadway:
General:
All plants should be allowed to grow into natural forms.
Specific:
- Allow Quaking Aspens to sucker and fill in drainage basins, ensure that trees all have appropriate clearance for pedestrians to pass underneath. Allow oaks, particularly the oak at the end of the drive near the shelter, to develop massive spreading branches and wild shape.

Wet Swales:
General:
All grasses and perennial plants shall be allowed to grow and spread as typical in the wild. Plant percentages were chosen with specific regard to their reproductive tendencies, and therefore will spread proportionally.
Specific:
- These swales will have a distinct perennial flow with several flowing plants kept in the middle and clusters to give the appearance of waves of color. Plants that have a tolerance for wetter conditions were also kept in the center, while plants with drier, more well-drained culture, were kept on the edges.

Dry Swales:
General:
All grasses and perennial plants shall be allowed to grow and spread as typical in the wild. Plant percentages were chosen with specific regard to their reproductive tendencies, and therefore will spread proportionally.
Specific:
- All these dry swales that will not have to harvest large amounts of storm water, dry prairie plants were chosen and are not accustomed prolonged saturation. For long term care, cutting back all growth down to 6” at the end of the growing season every 3 years is advised.

Memorial Area:
General:
The memorial area attempts to have a clean formal look by using rows of Upright European Hornbeam on either side of the walk, along with three Black Gum in a half arc to highlight the circular form of the memorial.
Specific:
- Since the Upright European Hornbeam are in formal rows on both sides of the walk, their foliage shall be limited in hedge like forms and shall not be allowed to grow into irregular shapes. The Black gum however, do not need much care as their habit creates broad horizontal branching, but should be monitored to assure they are growing accordingly.

Wetland Boardwalk and Natural Area:
General:
All trees and shrubs should be allowed to grow into natural forms. The percentage of each perennial plant and ornamental grass should be displayed as planting schedule indicated, medium management and replacement are required when one is species starting to take over another.
Specific:
- Frequently monitor and remove invasive species in wetland area to avoid disturbance with growing of natural species. Apply appropriate treatments to control weeds on natural area, as they may be more flammable and disturb growth of desired plants. Replace any hazard trees with the same species to maintain the original appearance.

Image Sources:
Mix A / Mix A Plugs 1.5` X 1.5` 2" o.c. 1,630,690 See plant board for species and ratios

Betula nigra / River Birch Multi-Trunk B & B 2"Cal 6` trunk ht. 16

Nyssa sylvatica / Sour Gum B & B 2"Cal 6` trunk ht. 3

Pinus strobus / White Pine B & B 2"Cal 6` trunk ht. 8

Salix purpurea `Nana` / Dwarf Arctic Willow 10 gal 3` X 3` 77

Salix discolor / Pussy Willow B & B 6` X 6` 10

Aronia melanocarpa / Chokeberry 10 gal 3` X 3` 75

Taxodium distichum `Mickleson` / SHAWNEE BRAVE Bald Cypress B & B 2"Cal 6` trunk ht. 18 Select for upright single leader and higher growing branches

Common Rush
Little Blue Stem
Bicknell's Sedge
Bebbs Sedge
Prairie Blazing Star
Rattlesnake
Wild Bergamont
Cardinal Flower
Wild Iris
Mix G / Mix G Plugs 1.5` X 1.5` 1" o.c. 528,240 See plant board for species and ratios

Mix B / Mix B Plugs 1.5` X 1.5` 1" o.c. 60,132 See plant board for species and ratios

Mix F / Mix F Plugs 1.5` X 1.5` 1" o.c. 3,093,887 See plant board for species and ratios

Mix E / Mix E Plugs 1.5` X 1.5` 1" o.c. 44,925 See plant board for species and ratios

Mix D / Mix D Plugs 1.5` X 1.5` 1" o.c. 52,045 See plant board for species and ratios

Hamamelis vernalis / Spring Blooming Witchhazel B & B 6` X 6` 13

Nyssa sylvatica / Sour Gum B & B 2"Cal 6` trunk ht. 3

Prunus tomentosa / Nanking Cherry B & B 6` X 6` 21

Pinus strobus / White Pine B & B 2"Cal 6` trunk ht. 8

Salix purpurea `Nana` / Dwarf Arctic Willow 10 gal 3` X 3` 77

Ostrya virginiana / American Hophornbeam B & B 2"Cal 6` trunk ht. 7 Select for upright trunk

Quercus bicolor / Swamp White Oak B & B 2"Cal 6` trunk ht. 20 Select for best branching variety

Aronia melanocarpa / Chokeberry 10 gal 3` X 3` 75

Taxodium distichum `Mickleson` / SHAWNEE BRAVE Bald Cypress B & B 2"Cal 6` trunk ht. 18 Select for upright single leader and higher growing branches

Note: All details have been modified from examples at Caddetails.com
ABOUT THE UNIVERCITY YEAR

UniverCity Year is a year-long partnership between UW-Madison and one community in Wisconsin. The community partner identifies sustainability and livability projects that would benefit from UW-Madison expertise. Faculty from across the university incorporate these projects into their courses with graduate students and upper-level undergraduate students. UniverCity Year staff provide administrative support to faculty, students and the partner community to ensure the collaboration’s success. The result is on-the-ground impact and momentum for a community working toward a more sustainable and livable future.

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