

Arboretum Design Guidelines
University of Illinois Arboretum

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The design guidelines for the University of Illinois Arboretum are intended to encourage a unified approach to the phased implementation of the Arboretum. The guidelines are a companion set of performance criteria to the 2001 updated Master Plan. The guidelines are organized to reflect the three major parts of the Arboretum – the Core Gardens Area, the Pond Area, and the Collections Area.

1.0 THE CORE GARDENS AREA

This area is the northernmost part of the Arboretum and contains the Visitor Center and a series of garden areas organized around the existing Hartley Garden. The area extends from Lincoln Avenue east to Orchard Drive, and from the President’s House property south to St. Mary’s Road extended.

1.1 Core Gardens Area Space Organization:

The primary organizing ideas for the Core Gardens Area are as follows:

- 1.1.1 Consistent with the original 1990 Arboretum Master Plan, the Core Gardens Area consists of a series of square and rectangular garden units aligned with the surrounding street grid. The Hartley Garden is an established element that is framed with a double row of Lindens and corner trellises. The overall character of this part of the Arboretum should be that of rich and varied gardens set within a geometric frame of paths, structures and framing plants.
- 1.1.2 Future garden paths, parking, structures, buildings and framing vegetation should conform to the grid structure established by the Hartley Garden. The exception to this is the vegetation frame along the President’s House boundary, which may depart from the structural geometry. The purpose of employing the grid as a landscape structuring device is to ensure a unified order for the Core Gardens Area, make efficient use of the land, maintain a compact configuration and reasonable walking distances among the Core Gardens Area, facilitate easy wayfinding, and facilitate efficient irrigation and utility distribution systems.

The subscription to a geometric garden structuring system is in no way intended to suggest that the garden designs within the “rooms” defined by the primary organizing paths, buildings, structures and frame plantings need to be geometric. Individual garden designs within the areas defined by the organizing paths, buildings, structures and frame plantings may be highly varied and responsive to individual garden program requirements and designer creativity.

- 1.1.3 Core Gardens Area frame planting and garden structures should be employed to visually define and frame individual garden areas. The degree of separation among the gardens will be determined on an individual basis. For example, a hedge may suffice to separate gardens in some cases, whereas other gardens may require a row of small trees or a trellis to adequately achieve the visual quality objectives of each garden. The design objective is to have the gardens perceived as individual and distinctive gardens unified by their overall organization and the treatment of their edges. The unifying role of the framework should not be ignored.

- 1.1.4 It is recommended that, on the east side of the Visitor Center, a north-south trellis or other space-defining element be developed to create separation between the gardens associated closely with the Visitor Center and parking area, and those to the east. This will help create a pleasant sequence of spaces and landscape interest between the parking area and the Hartley Garden.

1.2 Core Gardens Area Circulation:

- 1.2.1 The primary paths of the Core Gardens Area should be laid out in accordance with the updated Master Plan. A system of secondary paths may be developed within the gardens. The paths should be designed to accommodate both visitors and service vehicles.
- 1.2.2 Space should be provided along the north boundary of the Core Gardens Area for a shared use bicycle and pedestrian path. The path should be separate from paths used by garden visitors.
- 1.2.3 Parking for the Core Gardens Area should be located parallel and adjacent to Lincoln Avenue. Immediately east of the parking, the Visitor Center should be centered on the Hartley Garden. The primary garden access point should be at a Welcome Center in front of the Visitor Center, however, secondary access points should link the parking with the gardens north and south of the Visitor Center.

1.3 Core Gardens Area Land Use:

- 1.3.1 Parking should be kept peripheral on the west edge of the Core Gardens Area.
- 1.3.2 The area designated for the Master Gardener Idea Garden in the Master Plan is based on the idea of incorporating and building upon the existing Master Gardener area. This area also requires close proximity to parking.
- 1.3.3 The area west of the Hartley Garden should be reserved for gardens that will have the highest appeal to public and campus audiences. Their location near parking and Lincoln Avenue will provide for convenient access.
- 1.3.4 The area east of the Hartley Garden should be reserved for gardens with lower all-season appeal to public audiences. These include the trials garden, poisonous plants area, and possibly a youth garden. The maintenance area should be located on the east side of the Core Gardens Area on Orchard Drive.
- 1.3.5 The north edge of the Core Gardens Area should be reserved for lawn and flowering shrub displays, which can serve as an informal buffer between the gardens and the bicycle path.
- 1.3.6 The Master Plan shows several garden areas that are undesignated for use. These areas may be used for future garden types that are yet to be defined.

2.0 THE POND AREA

This area includes the pond and the landscape around it, extending from Lincoln Avenue to Orchard Drive, and from the south edge of the Hartley Garden south to the north end of the Allée.

2.1 Space Organization for the Pond Area:

The primary organizing ideas for the Pond Area are as follows:

- 2.1.1 With the exception of the Lincoln Avenue edge where a formal row of street trees is proposed, the order of the plantings within the Pond Area should be informal and naturalistic. This approach is consistent with the existing patterns of trees in the Illini Meadows area and on the small hill near Orchard Drive. The overall character of this part of the Arboretum should be a parkland of spacious lawns surrounded and accented by masses of beautiful trees.
- 2.1.2 Trees and shrubs should be massed to frame open lawn areas to the north, south and east of the Pond. The Prairie School landscape idea of “sun openings” alternating with masses of mature trees casting shade should be developed. The spoil pile hill immediately east of the pond should remain open to maintain views from the hilltop. West and north of Japan House, tree planting should be denser to create a wind barrier, provide visual backdrop for Japan House, and to screen Lincoln Avenue and nearby parking.
- 2.1.3 The gardens at Japan House should be designed to relate to the building. Garden walking sequences and views should be considered primarily from the perspective of the house and its immediate outdoor porches and viewing stations. Planting on the east side of the Pond and on the conifer hill should be designed with an understanding of its role in the composition of views from Japan House.
- 2.1.4 Conifers should be massed along the Orchard Drive edge to provide a visual edge to the Arboretum.
- 2.1.5 The center of the lawn immediately north of the Allée should be free of trees between the Allée and the Pond. This will provide an appropriately spacious feeling at the north end of the Allée and a filtered visual connection across the Pond to the Hartley Garden Lindens.

2.2 Pond Area Circulation:

- 2.2.1 Two primary paths should link the Core Gardens Area, through the Pond Area, to the Arboretum to the south. The two primary north-south paths should be located east and west of the Pond, be curvilinear in character and be fitted to the existing contour of the land. The paths should be designed to serve as the primary service vehicle route as well as the primary pedestrian path.
- 2.2.2 Secondary cross connector paths should be developed between the two primary paths. The connector on the south side of the Pond should reach its southernmost apex at the Allée.

- 2.2.3 The access to Japan House should be from the west, through a series of garden gates between the primary path and Japan House. Access to Japan House from the east should be discouraged. It is recommended that the gardens around Japan House be developed in association with the building and experienced from that perspective and sequence.
- 2.2.4 A path up the hill adjacent to Orchard Downs Apartments should generally conform to the lay of the land, and follow a smooth and gently curving alignment to the summit of the hill.

2.3 Pond Area Land Use:

- 2.3.1 Parking should be confined to the area immediately adjacent to Lincoln Avenue.
- 2.3.2 An amphitheater should be developed on the south slope of the hill adjacent to Orchard Drive, taking advantage of the natural contour of the land.
- 2.3.3 Existing mature trees in the northwest corner of the Pond Area should be employed as the canopy for a shade garden. The shade garden is an important link garden between Japan House and the Core Gardens Area. Its size permits extensive collections and massing of shade-tolerant herbaceous and woody plants.
- 2.3.4 Service activity for Japan House should be confined to the south side of the building and screened from view.

3.0 THE COLLECTIONS AREA

The Collections Area consists of the area between the Pond Area and Windsor Road. It is defined on the east by an existing farm road and on the west by Lincoln Avenue.

3.1 Collections Area Space Organization:

The primary organizing ideas for the Collections Area are as follows:

- 3.1.1 The Collections Area is divided along a central north-south line into an East Area and a West Area. The center dividing line is to be developed as a powerful tree-lined avenue, or Allée. The overall character of the Collections Area will be naturalistic both east and west of the axis, and dramatically formal along its center axis in the fashion of the grand avenues of trees that grace such world-renowned naturalistic parks as Kensington Gardens in London and Central Park in New York City.
- 3.1.2 The Allée should be planned and planted with the long-term effect in mind. That effect should be of a grand and awe-inspiring avenue of trees, powerful in its scale and unity. It is the landscape element that will tie together half a mile of Arboretum collections. It needs to be bold and clear. The grand Elms of the early 20th century along Burrill Avenue from the Union to Mumford House are a comparable example of the unambiguous effect that is sought.

The Allée trees should be approximately forty feet apart east-west and north-south. The area beneath the tree canopy should be lawn. The trees employed should be monocultures for each of the four segments of the Allée defined by crossing paths. The trees employed should be deciduous and capable of reaching large size. Based on stature and form, potential Allée trees include:

- Sugar Maple
- Hackberry
- Honeylocust
- Black Walnut
- Tulip Poplar
- Sycamore
- Bur Oak
- White Oak
- Chinkapin Oak
- Swamp White Oak
- Silver Linden
- American Elm (Valley Forge or New Harmony)

It is understood that in youth the trees will be branched low, however, as they mature and their canopies overlap, the interior branches will be shaded out and removed. The long-term result will be an open space corridor between a colonnade of trees stretching for the full length of the Allée.

At the south end of the Allée, a circular garden should be developed as the terminal space that receives and resolves the central corridor space of the Allée. An outer ring of large coniferous trees such as Norway Spruce and an inner ring of flowering trees such as Crabapples is recommended.

At the points along the Allée where paths cross the axis, simple development of benches or seat walls should take place. The purpose of such elements will be to provide places to sit at key nodes along the Allée without interrupting the continuity of the open space corridor.

The importance of maintaining the clarity and simplicity of the Allée and Circle Garden cannot be overstated. These elements, in time, will be among the most memorable iconic landscapes on the campus.

- 3.1.3 East of the Allée, the collections of woody trees and shrubs should be planted in masses that become more open along the pathways. The pathway openings will create linear serpentine spaces of varying width that will offer unlimited opportunities for attractive sequences, views and plant combinations. Sun-loving flowering plants may be emphasized along the edges of the spaces. Some areas within the denser tree plantings may eventually be allowed to evolve to a leaf mulch ground plane. Lawn maintained at a coarse height would be continuous along the pathways.

- 3.1.4 West of the Allée, the Collections Area will consist of naturalistic communities of plants composed to replicate the character of woodlands, savanna and prairie landscapes. A plant buffer should be developed along the Lincoln Avenue edge to provide visual separation and a shelterbelt. The buffer should be composed of native trees and shrubs that would naturally occur at prairie edges.

3.2 Collections Area Circulation:

- 3.2.1 The primary paths of the Collections Area shall consist of the Allée path, two other major north-south paths, and several east-west paths connecting the three north-south paths as shown on the updated Master Plan. Paths should be designed to accommodate both visitors and service vehicles.
- 3.2.2 With the exception of the Allée path and Hazelwood Drive extended, all of the paths should be curvilinear in their alignment.
- 3.2.3 The points at which the east-west paths cross the central Allée path should be synchronized to occur at topographic high points along the Allée path.
- 3.2.4 The path at Hazelwood Drive extended should be designed as a shared use path for bicycles and pedestrians.
- 3.2.5 Parking should be kept to the west perimeter of the Collections Area in two locations. One parking area is to be located in the south and be combined with a Campus Information Center. Another should be located near the proposed Environmental Education Center.
- 3.2.6 Service road connections should be made at proper functional intervals between the farm road along the east edge of the Collections Area and the primary north-south path on the east side of the Collections Area.

3.3 Collections Area Land Use:

- 3.3.1 Parking should be limited to the Lincoln Avenue edge. The south parking area should be developed in association with a Campus Information Center.
- 3.3.2 The Bee Laboratory should remain in its present location.
- 3.3.3 The Environmental Education Center should be located along Lincoln Avenue. This location will allow for public visibility, access and convenient proximity to available parking.
- 3.3.4 The west side of the Collections Area should be devoted to native plant collections composed to replicate natural communities. The north and south extremes of the West Collections Area should be devoted to woodlands. The central section of the West Collections Area should be devoted to prairie and savanna communities.

- 3.3.5 The east side of the Collection Area should be devoted to woody plant collections composed by genera, family or other systematic method deemed appropriate to the teaching, research and outreach purposes of the collections. The difference between the East Collections Area and the West Collections Area is that the west area is organized to replicate natural communities and the east is not. The east area may include a broader range of introduced genera and species that would not be appropriate in the west area.

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MASTER PLAN

University of Illinois Arboretum

Urbana - Champaign, Illinois



Key

1. Visitor Center
2. Parking Lot
3. Welcome Garden
4. Master Gardener Idea Garden
5. Home Demonstration Garden
6. Prairie Plants
7. Butterfly Garden
8. Youth Garden
9. Herb Garden
10. Perennial Border Walk
11. Enabling Garden
12. Vine Arbor
13. Systematic Garden
14. Presidents Greenhouse
15. All American Trials Garden
16. Turf Demonstration
17. Flowering Shrub Border
18. Maintenance Area
19. Economic /Poisonous / Medicinal Plants
20. Conifers
21. Amphitheater
22. Event Lawn
23. Shade Garden
24. Japan House and Garden
25. Pond
26. Woodland Habitat
27. Living Collections
28. Environmental Education Center
29. Prairie Habitat
30. Savanna Habitat
31. Bee Laboratory
32. Maintenance Area
33. Campus Information Center
34. Circle Garden
35. Shade Tree Alle'e
36. Bicycle Path
37. Main Perimeter Trail

