DESIGN GUIDELINE 4.4.1
LANDSCAPING MATERIALS

Introduction

This section includes guidelines regarding the preservation of existing plant materials and standards for the design and installation of new plantings.

In general, plantings should be used to:

- Enhance the campus tree canopy (too much science for a landscape design guideline) Accentuate key focal points, including campus gateways, nodes, building facades and entrances and special exterior features such as artwork installations
- Define special areas such as plazas and seating/gathering points
- Buffer unattractive views to service areas, dumpsters and mechanical equipment
- Create green buffer zones between parking areas and campus
- Control pedestrian access and circulation as needed
- Achieve sustainable design goals such as water conservation, storm water filtering and absorption, urban heat sink reduction, and energy savings with the appropriate use of plants.

Related Sections

U-M Design Guidelines

6.0 DG 310000 Site Requirements
6.0 DG 312500 Soil Erosion and Sedimentation Control
6.0 DG 328400 Irrigation
6.0 DG 013639 Tree Preservation

Related Documents

LEED Reference Guide for Green Building Design and Construction
4.4.3 University Planner's Office Stormwater Best Management Practices

Design Requirements

Planting designs should reflect the institutional scale of the campus and the particular setting in which they are located. Landscape plantings should be designed for maximum effect with limited maintenance, emphasizing broad sweeps of similar material. Areas of high visibility, such as the Central Campus Diag, should have a rich palette of native plants; areas of lower visibility, such as service docks, should minimize the use of turf grass by using native grasses and plantings. Detailed and complex plantings should be reserved for courtyards and other areas of smaller scale. High maintenance planting displays should be limited to high visibility areas where such maintenance is warranted.

Conservation of the mature and healthy native flora is essential in areas of campus where mature vegetation stands remain. Native vegetation should be used where additional plant materials are needed to highlight the natural edge. Native plantings should follow the Grounds Department's priority designations guidelines. See 013639 Tree Preservation Design Guidelines for additional information.

The University of Michigan is committed to using native or near native plantings whenever possible to protect and enhance the integrity of native plant communities, and to reduce the amount of water used for irrigation, maintenance requirements and chemical treatments.

Reduce the amount of manicured lawn in favor of landscaping with native plants and groundcovers. The site's soil type and topology will guide plant selection; performing a soil survey is necessary.

Consider the impact of new construction/renovations on existing landscape materials. Avoid damage to significant vegetation by careful routing of walkways, placement of parking lots and utilities to incorporate existing specimen trees and preventing damage to existing landscape material during construction through robust tree protection.

Avoid plantings within parking lot islands where heat and snow removal activities prohibit healthy growth. Instead emphasize perimeter landscape treatments to buffer views and to provide shade.

Design Manager should always consult with Plant Utilities and Grounds and Waste Management during design phase and ensure Miss Dig contact is noted on all construction drawings.

Plant Selection

Plants will be selected to thrive in the conditions of the site. Consider the cultural and maintenance requirements for each plant before locating on a planting plan. Soil type, Ph. and topology along with water requirements, sun/shade requirements, hardiness, disease resistance and maintenance requirements will guide plant selection.

The A/E's site designer/AEC Design Manager should consult with the Grounds Department for a list of recommended native and other plants. Or, submit for review a plant list of hardy materials with an emphasis on native plants.

In general, removing and or planting trees or significant vegetation within the City of Ann Arbor's R.O.W. is not allowed. However, if approved, the A/E must use t the City of Ann Arbor's approved plants list when specifying planting plans within the ROW. In addition, they must work with the University Forester for any proposed tree removals. Tree value costs for trees removed will to be factored into the project budget.

Include the following installation requirements in the specifications:

- Perform a thorough weeding before planting the native vegetation. Adequate stabilization will be necessary to help establish the new plantings.

- Remove invasive species when encountered. Hand removal should be implemented wherever possible. (Note: Burning may be utilized for large areas where absolutely necessary. This must be discussed with the Design Manager during design.)

Security and Safety Issues

Plantings should be designed to provide open and unobstructed views and to eliminate concealment opportunities. For personal and safety and security considerations, avoid planting arrangements that create zones of entrapment, limit visual access into gathering spaces or along walkways or otherwise impede visibility from public view.

Deciduous trees should be selected that when mature provide views beyond at a height of 6 to 7 feet from the ground plane to the canopy. Evergreen, ornamental, or shade trees with lower canopy heights should not be used adjacent to walks, vehicular and bike parking areas, or building entrances.

Shrubs that are proposed adjacent to walks, vehicular and bike parking areas, or building entrances should generally be less than 36" tall at mature height. Larger shrubs should be limited to areas where they will not limit visual access or should be used in arrangements that do not create large masses. Plantings that are intended to be hedges should be selected so that mature heights do not exceed 36"

New trees should not be planted adjacent to proposed or existing light poles to avoid disrupting light levels.

Always consider a given plant material's mature state when developing plant spacing diagrams to avoid creating zones of entrapment and/or concealment. The spacing of new plants should be no less than 3/4 the mature spread of the plant.

Existing trees should be scheduled for trimming to remove any branches that impede adequate lighting or obstruct views between the grounds and the canopy.

Designs shall incorporate trimming or removal of shrubs that screen or limit views.