INTRODUCTION
Focus Group 3

Group 3 Urban, Architectural & Landscape Design Guidelines

Kenneth Jessell, Steering Committee Advocate

- John Stuart (Architectural Design)
- Adam Drisin (Urban Design)
- Roberto Rovira (Landscape Design)
- Mark Salemi (Landscape Maintenance)
- Marilys Nepomechie (Architecture)
- Oscar Irigoyen (Construction/Architecture)
- Alex Casas (FIU Police Department)
- Marsha McDonald (FIU Student-Architecture)
- Chris Cabeza (FIU Student Landscape Architecture)
- FIU Museum Board Member
Focus Group 3

Group 3 Urban, Architectural & Landscape Design Guidelines

Today’s Agenda
• Welcome Introductions
• Overview of Master Plan Process
• Review of Latest Master Plan (2010-2015)
• EAR Comments – Open Discussion
• Best Practices Presentation – What are other universities doing?
• Open Discussion of Key Issues that FIU faces in this arena
• Closing Remarks and Homework Assignment!
Schedule/Process
## Master Planning Schedule

<table>
<thead>
<tr>
<th>Task</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory &amp; Analysis</td>
<td>July-Oct 2012</td>
</tr>
<tr>
<td>Preliminary Alternative Concepts</td>
<td>Nov-Dec 2012</td>
</tr>
<tr>
<td>Concept Plan Development</td>
<td>Jan 2013</td>
</tr>
<tr>
<td>Draft Comprehensive Master Plan</td>
<td>Feb-July 2013</td>
</tr>
<tr>
<td>Final Comprehensive Master Plan</td>
<td>Aug-Dec 2013</td>
</tr>
<tr>
<td>BOT Approval of Master Plan</td>
<td>Dec 2013</td>
</tr>
</tbody>
</table>
University-Wide Campus Master Plan Elements

- Academic Mission & Program
  - Academic
  - Research
  - Support
  - Housing Facilities

- Future Land Use
  - Open Space / Recreation / Conservation / Coastal Management

- Capital Improvements

- Urban Design
  - Architectural
  - Landscape
  - Facilities Maintenance

- Infrastructure Utilities

- Circulation / Transportation / Parking

- State Required Elements
  - Optional Elements
Major Planning Challenges

• Develop a Sustainable Campus Environment

• Develop better options with Transportation and Access

• Establish better Connectivity with Neighboring Communities

• Meeting Increased Enrollment-Housing, Academic & Research

• Land Use Constraints at MMC, EC, and BBC
Major Issues: 2012 Evaluation / Appraisal Report

- Overcrowding at Modesto Maidique Campus
- Accountability Measures to Exceptions to the Campus Master Plan
- Parking Availability / Accessibility & Transportation Options
- Traffic Congestion / Roadway Capacity
- Student Housing Demand
- Recreation & Open Space Preservation
- Land Use Constraints
- Future of Biscayne Bay Campus & Engineering Center
- Campus Identity: Architecture and Landscaping
- Improved Relations with Host Communities
FIU 2005-2015 Campus Guiding Principles

- Develop a **sustainable** campus environment.
- Develop forward looking, **innovative and interdisciplinary** learning and research environments.
- **Reinforce FIU’s identity** through the articulation of landmarks, precincts, edges, buildings, and open spaces.
- Create a more **compact urban environment**.
- Develop comprehensive **multi-modal solutions to transportation & infrastructure**.
- Establish better **connectivity with neighboring communities**.
- Create a safe, connected, **pedestrian-friendly campus**.
- Site core academic programs along **main axes**.
- Develop **student life mixed use communities**.
- Foster learning through **multipurpose open space**.
FIU 2005-2015 Urban Design Element

URBAN DESIGN GOAL:

Florida International University shall create high quality, memorable campus environments suited to education and a sense of collegiality, comprising a compact formal development pattern within a rich outdoor subtropical environment.

1.1 Regulating Axis
1.2 Campus Spaces
1.3 Campus Streets
1.4 Campus Edges
1.5 Functional Linkages
1.6 Service and Loading
1.7 Energy Efficiency
1.8 Compliance
1.9 Implementation
Modesto Maidique Campus
2015 Urban Design Concept Plan
Modesto Maidique Campus
Vision Plan
Biscayne Bay Campus
2015 Urban Design Concept Plan

LEGEND

Open space
\[\text{Gathering Space}\]
\[\text{Special Purpose Landscape}\]

Connectivity
\[\text{Primary Entrance}\]
\[\text{Secondary Entrance}\]
\[\text{Regulating Line - Major Axis}\]
\[\text{Regulating Line - Secondary Axis}\]
\[\text{Green Space}\]

Edges
\[\text{Bay Walk}\]
\[\text{Landscape Edge}\]

KEY MAP

FIGURE: 3.3
Biscayne Bay
2015 Urban Design Concept Plan

FIU
FLORIDA INTERNATIONAL UNIVERSITY
Campus Master Plan - March 15, 2010

PERKINS + WILL
Biscayne Bay Campus
Vision Plan
Engineer Center
2015 Landscape Design Concept Plan

Landscape Edge:
Two rows of canopy trees should improve the character and define the edge of the campus while buffering the academic core from the street.

Promenade:
Two rows of canopy trees should create a linear connection from the park to the northern parking areas. Groupings of palms should be located adjacent to building facades to soften the exterior.

Park:
Should have a passive open space characteristic with a meandering walkway from east to west. Should be planted with canopy shade trees in groupings. Understory should remain clear with the ground plane being turf.

Buffer:
Canopy trees as well as dense understory planting should be used to visual screen the parking areas from the adjacent residential community.

Wall of Wind
Screening:
Dense understory planting should be used to soften the noise and impact of the Wall of Wind. Should be planted with groupings of canopy trees with the ground plane being turf.

FIGURE: 16.2
Engineering Center
2015 Landscape Design Concept Plan
Engineering Center
Vision Plan
GOAL: UPDATE

Florida International University shall create contextual and sustainable buildings that represent the institution's guiding principles and vision for an innovative, diverse, learning community serving locally and globally. The character and identity of all buildings shall represent FIU’s commitment to student Life, formal and informal learning, promoting collaboration, integration and multidisciplinary education.

- Project Responsibility Checklist
- Sustainable design Guidelines
- Integrated Design Process
- Bldg. Guidelines and Components
- Regulatory Groups and organizational process/structure
GOAL: Create high quality, environmentally sound campus landscape settings which afford outdoor comfort, security, and a rich visual quality, exemplifying the uniqueness and diversity of South Florida's subtropical environments while creating a unifying character that binds the campuses together.

- Landscape Framework: Implement the Landscape Framework for the Modesto A. Maidique Campus, Engineering Center and Biscayne Bay Campus
- Plant Materials: Modify and adopt a revised plant materials list upon Master Plan adoption, eliminating use of invasive exotic species and those which necessitate excessive maintenance; and adding species appropriate to traditional college campus settings.
- Furnishings, Lighting and Graphics: Adopt standards for furnishings, lighting fixtures and signage depicted
- Retention/Storm water Elements: Adopt standards for landscape edge treatments surrounding ponds, lakes and storm water features.
- Phasing: Implement landscape improvements in three phases, consistent with the scheduling of new academic, housing, recreation and support buildings to which landscape improvement components will be allocated.
Campus Landscape Framework
2015 Landscape Design Concept Plan

Campus Spaces
- Guest
- Promenade
- Courtyard
- Place
- Special Purpose Landscape

Campus Streets
- Campus Greenbelt
- Shula Greenway
- Main Street
- Security Campus
- Griffin Gate
- Entry Silver
- Service Street
- Pedestrian & Movement Campus

Campus Spaces
- Guest
- Promenade
- Courtyard + Squares
- Place
- Special Purpose Landscape

Descriptive:
- A guest area is generally located to the north of the quads, adjacent to the building for access to the library and to the northeast, to accommodate the setback. Additional landscaping is provided to the north of the area. Site with trees, shrubs, and vegetation.

Plan: Main Campus, Campus entry, pedestrian flow should be developed to accommodate the pedestrian flow.

Site: Landscape, flowers, and other vegetation should be developed to accommodate the pedestrian flow.

Lighting: Appropriate, tree lighting, light intensity, and color selection for the pedestrian flow.

Special Features: Existing water bodies should be developed to accommodate the pedestrian flow.

This design is a separate vehicle transportation traffic for entry planning zone. The design is based on the principles of the pedestrian flow and includes trees, shrubs, and vegetation to accommodate the pedestrian flow.

Elements:
- Landscaping: This includes the development of pathways, sidewalks, and other landscape features that provide a pedestrian-friendly environment. These features may also include seating areas, shaded areas, and other amenities that contribute to the pedestrian experience.
- Water Management: The design includes the development of rain gardens, detention ponds, and other water management features to manage stormwater runoff and improve the overall sustainability of the landscape.
- Materials: The materials used in the landscape design include native species, permeable pavements, and other sustainable materials that contribute to the overall ecological sustainability of the landscape.

Description:
- A path is a pathway for walking or for the transportation of goods and services. In this context, the path is a pedestrian-friendly environment that provides access to various areas of the campus.

Elements:
- Landscaping: This includes the development of pathways, sidewalks, and other landscape features that provide a pedestrian-friendly environment. These features may also include seating areas, shaded areas, and other amenities that contribute to the pedestrian experience.
- Water Management: The design includes the development of rain gardens, detention ponds, and other water management features to manage stormwater runoff and improve the overall sustainability of the landscape.
- Materials: The materials used in the landscape design include native species, permeable pavements, and other sustainable materials that contribute to the overall ecological sustainability of the landscape.
E.A.R. SUMMARY
### Agenda Items:

#### Urban Design
- Define a better green space framework on both campuses (MMC and BBC)
- Establish greater connectivity and integration with the host communities
- Incorporate new pedestrian walkways and bicycle lanes along roads; enhance and improve the existing pedestrian walkways and bike lanes to facilitate more direct and efficient movement through campus
- Incorporate the waterways surrounding BBC into the campus design; including proposals for designated dock space at BBC
- Consider building “upward” rather than “outward” when constructing academic buildings in such a manner that preserves the overall design of the campuses

<table>
<thead>
<tr>
<th>2010 Master Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>+ (+)</td>
</tr>
<tr>
<td>+ (+)</td>
</tr>
<tr>
<td>+/- (-)</td>
</tr>
<tr>
<td>- (-)</td>
</tr>
<tr>
<td>+ (+)</td>
</tr>
</tbody>
</table>

#### Architecture Design/ Landscaping Design
- Provide strategies to increase the amount of shaded walkways and outdoor gathering spaces through landscaping, covered connectors and outdoor furnishings
- Foster learning about the physical environment by creating opportunities and guidelines for design features and instructional signage that provide information on natural and structural features

<table>
<thead>
<tr>
<th>+/- (-)</th>
</tr>
</thead>
<tbody>
<tr>
<td>+/- (-)</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

**30 August 2012**
Best Practices / Precedents
Best Practices from Other Universities or Communities

**Physical Design**
1. **Identity & Character**
   Unified architectural style, landscape character or unified spatial structure
2. **Sustainability**
   Understanding campus systems - stormwater management
3. **Pedestrian Connectivity**
   Responding to the context conditions and issues

**Project Process**
1. **Design Team**
   Ensuring the right people / integrated design teams are engaged in projects
2. **Design Review**
   Reviewing projects based on compliance with the Master Plan and its goals
3. **Budgeting**
   Allocating funds for both buildings + infrastructure

**Program**
1. **Research + Teaching Integration**
   Incorporating research and teaching opportunities into the campus environment
Best Practices / Precedents

Best Practices from Other Universities or Communities

**Physical Design**

1. **Identity & Character**
   - Unified architectural style, landscape character or unified spatial structure

2. **Sustainability**
   - Understanding campus systems - stormwater management

3. **Pedestrian Connectivity**
   - Responding to the context conditions and issues

**Project Process**

1. **Design Team**
   - Ensuring the right people / integrated design teams are engaged in projects

2. **Design Review**
   - Reviewing projects based on compliance with the Master Plan and its goals

3. **Budgeting**
   - Allocating funds for both buildings + infrastructure

**Program**

1. **Research + Teaching Integration**
   - Incorporating research and teaching opportunities into the campus environment
Best Practices / Precedents

Physical Design
Identity & Character

Harvard University
Unified spatial structure with varying architectural style and high quality

Stanford University
Unified architectural style with high quality
Best Practices / Precedents

Physical Design
Sustainability - USF
Best Practices / Precedents

Physical Design
Sustainability – USF (Greenway Structure)
Best Practices / Precedents

Physical Design
Sustainability – Georgia Tech

30 AUGUST 2012
Best Practices / Precedents

Physical Design
Pedestrian Connectivity

- Provide strategies to increase the amount of shaded walkways and outdoor gathering spaces through landscaping, covered connectors and outdoor furnishings.
Best Practices / Precedents

Physical Design
Pedestrian Connectivity
Best Practices / Precedents

Physical Design
Pedestrian Connectivity
Best Practices / Precedents

Physical Design
Pedestrian Connectivity
Physical Design
Pedestrian Connectivity
Best Practices / Precedents

Physical Design
Pedestrian Connectivity

FREESTANDING ARCADE

[Image of freestanding arcade and aerial view of campus]
Best Practices / Precedents

Physical Design
Pedestrian Connectivity
Best Practices / Precedents

Physical Design
Pedestrian Connectivity
Best Practices / Precedents

Best Practices from Other Universities or Communities

**Physical Design**

1. **Identity & Character**
   Unified architectural style, landscape character or unified spatial structure

2. **Sustainability**
   Understanding campus systems - stormwater management

3. **Pedestrian Connectivity**
   Responding to the context conditions and issues

**Project Process**

1. **Design Team**
   Ensuring the right people / integrated design teams are engaged in projects

2. **Design Review**
   Reviewing projects based on compliance with the Master Plan and its goals

3. **Budgeting**
   Allocating funds for both buildings + infrastructure

**Program**

1. **Research + Teaching Integration**
   Incorporating research and teaching opportunities into the campus environment
Best Practices / Precedents

Project Process

Purpose
• To monitor and ensure that all design projects comply with the intent of the Campus Master Plan

Precedents
• University of Florida, Georgia Tech, University of Arkansas, Texas A&M University, University of Washington, University of North Texas

Committee Structure
• Generally (includes design faculty, practicing design professionals, at large faculty, administration and physical plant representation)

Committee Types
• Architectural
• Landscape
• Land Use + Facilities
• Transportation
Design Team Structure

- Ensure interdisciplinary approach

Review Periods

- Initial Meeting: Project + Master Plan review
- Concept Plan
- Preliminary Design
- Detailed Design
- Post Construction Assessment

Tools

- Instructions to Design Team Presenters
- Instructions to Committee Members
- Campus Master Plan Checklist
- Architectural Guidelines / Checklist
- Landscape Guidelines / Checklist

Budget

- Buildings + Infrastructure
“The accumulation of small projects can add up to serious degradation of the physical environment”. Texas A & M
Best Practices from Other Universities or Communities

**Physical Design**

1. **Identity & Character**
   - Unified architectural style, landscape character or unified spatial structure
2. **Sustainability**
   - Understanding campus systems - stormwater management
3. **Pedestrian Connectivity**
   - Responding to the context conditions and issues

**Project Process**

1. **Design Team**
   - Ensuring the right people / integrated design teams are engaged in projects
2. **Design Review**
   - Reviewing projects based on compliance with the Master Plan and its goals
3. **Budgeting**
   - Allocating funds for both buildings + infrastructure

**Program**

1. **Research + Teaching Integration**
   - Incorporating research and teaching opportunities into the campus environment
Best Practices / Precedents

Program
Teaching + Research Integration

FIU Strengths

- Tree Campus USA
- Nature Preserve (MAMC)
- Hennington Island
- Sculpture Park at FIU
- Others
Best Practices / Precedents

Program
Teaching + Research Integration

FIU Opportunities
• Ongoing Research / Test Plots
• Outdoor Classrooms
• Galleries – Art, Architecture
• Outdoor Performance Spaces
• Active Interpretive Learning

Urban Plaza
Bartlett Research Laboratory
July 3, 2008
4 + years

Suspended Pavement
Program
Teaching + Research Integration – Campus Arboretum

University of Georgia

- Utilizes the campus as a natural extension of the classroom
- Serves classes in Botany, Forestry, Ecology, Horticulture and Landscape Architecture, Art and Photography
- Three distinct areas of the entire campus, North, Central, South,
- Organization focused on mapping, labeling and otherwise promoting the extant and future tree and shrub collections
Program
Teaching + Research Integration – Campus Arboretum

Harvard University
• 265 acre Arnold Arboretum is a unique blend of respected research institution and beloved public park in Boston’s Emerald Necklace
• Founded as a public-private partnership between the City of Boston and Harvard University

University of Illinois
• 57 acre UI Arboretum is a living laboratory maintained by the University
• The plant collections and facilities support the teaching, research, and public service programs of several units throughout campus

University of Central Florida
• 80 acres

University of Wisconsin-Madison
• Site of historic research in ecological restoration
• The Arboretum includes the oldest and most varied collection of restored ecological communities in the world
• 1,200 acres and 513 acres in outlying properties are managed by scientists, students and volunteers

University of California Santa Cruz
• Arboretum is a research and teaching facility committed to plant conservation
• Serves both the campus and the public

University of Miami
• Organized for teaching and research purposes, with interpretive signage as well as individual identification tags on each plant
• Managed by the Department of Biology and the Friends of the Gifford Arboretum Committee (faculty, students, administrators, and community members)
Best Practices / Precedents

Program
Teaching + Research Integration Test Plots

30 AUGUST 2012
Best Practices / Precedents

Program
Teaching + Research Integration – Campus Sustainability

University of South Florida

- Patel School of Sustainability
- Ties campus initiatives to research and teaching
- Currently researching: A Methodology For University Campuses to Become More Sustainable
- Courses in: College of the Arts, College of Arts and Sciences, College of Business Administration, College of Engineering
Homework
Focus Group 3

**Homework:**

**Data Collection**
- Photographs, Documentation (3-5 examples)
  - Identify precedents from other University's by element:
    - Physical Design
    - Project Process
    - Program
  - Identify Strengths & Weaknesses on FIU campuses
    - Physical Design

University Standards Focus:
- Project Responsibility Checklist
- Sustainable Design Guidelines
- Integrated Design Process
- Bldg. Guidelines and Components
- Regulatory Groups and Organizational process/structure

- Due: Two weeks

**Next Meeting**
- First Week of October