3.0 URBAN DESIGN ELEMENT

PURPOSE

The purpose of this element is to develop an understanding of the overall physical form of the development within the University and its relationship to the surrounding community. Organizational principles are provided for the future development of the campus based on this understanding.

The Urban Design Element is divided into the following sections:

- Data gathering: An assessment of current conditions of the campus, improvements made since the completion of the previous master plan and projects currently under development or design development
- Analysis Requirements A review of the historical development patterns of the campus with areas of future design emphasis or improvement.

(1) DATA REQUIREMENTS. This element shall be based, at a minimum, on the following data and/or information:

a) A description of the spatial form of existing development on the campus and in the context area.

1. Campus open spaces character—a qualitative description of the existing spatial organization, enclosure, activity, and symbolic associations.

MODESTO MAIDIQUE CAMPUS

The Modesto Maidique Campus is located in suburban Miami-Dade County, southeast of the intersection of Homestead Extension of Florida's Turnpike (S.R. 821) and Tamiami Trail (SW 8th Street/U.S. 41). The 342.2-acre campus is bound by the Turnpike and major arterial roads to the west, north and east. Tamiami Park creates a soft edge to the campus to the south. The area around the campus is characterized by 1960s-70s single family residential development in a rectilinear grid, with traditional strip commercial, multifamily homes and apartments along the arterial roads facing the campus. The community of Sweetwater, immediately north of the campus across Tamiami Canal, includes single-family residential with some multi-family homes and apartments and traditional strip commercial along SW 107th Avenue and West Flagler Street. The area of Sweetwater closest to MMC began a transition to being a UniversityCity with multiple high-rise residential towers beginning with 109 Tower's completion in 2017, followed by 4th Street Commons, Identity and The One at University City all now complete. Other high-density student housing projects in nearby Sweetwater are planned.

Within its boundaries, the campus has a typical suburban campus layout featuring a winding loop road around a pedestrianized campus core. The Campus Greenbelt loop road is offset between 500 and 850 feet from the arterial roads to the north and east. A secondary loop gives access to the campus support complex located between the campus core and the Turnpike. Campus buildings housing academic and academic support functions, and most of the on-campus student housing is located inside the campus loop road. The area between the loop road and the arterial roads contains recreational and support facilities, the Performing Arts Center, graduate apartments, and natural areas. Structured parking and surface parking areas are located both inside and outside the Greenbelt.

Modesto A. Maidique Campus has two main entrances, from SW 8th Street at SW 112th Avenue and from SW 107th Street at SW 16th Street. Four secondary entrances feed into the Greenbelt, including two new entrances constructed since 2012. Two additional entrances are located along SW 117th Avenue but is limited access to Carlos Finlay Elementary School and

FIU Campus Support Complex.

The guiding urban design principles of the Modesto A. Maidique Campus are:

- Axial planning
- Open space development
- Continuity of design associations / campus and architectural character

The formation of these elements allows for a denser urban pattern to evolve within the campus core without compromising the collegiate character of the campus.

Axial planning: Axial planning is visible from the bird's-eye view of the campus, with the opportunity to create strong pedestrian vistas and the ability to assist in wayfinding and ADA improvement. All encompassed within the main campus roadway circulation, reassessing accessibility and pedestrian circulation will be vital to future campus planning.

The buildings within the campus core are organized along two major axes:

- Extends east from the Ocean Bank Convocation Center to the Green Library, continuing along the Graham Center to the University Apartments
- Extends diagonally (northeast) from the residential housing district, including Panther Residence Hall / Everglades Hall / Parkview I & II, to the emerging Academic Health Center complex, continuing to the intersection of SW 8th Street and SW 107th Avenue

The two main campus entrances also intersect with the major axes:

- SW 112th Avenue Entrance (at SW 8th Street): This entrance has a double-arched gateway structure leading into the "Mall" planted with Royal Palms. The mall terminates at the Ryder Business Administration Building
- 16th Street Entrance (at SW 107th Avenue): This entrance is flanked by curved symmetrical walls and towers, leading into a wide boulevard lined with Royal Palms. The view terminates on a large modern sculpture placed in a roundabout, Alexander Liberman's 'Argosy' (1980), beyond which the boulevard leads to an axial view of the Management and Research Center (MARC) auditorium.

Quadrangles: Quadrangles are primarily enclosed areas defined by the buildings that surround them. They serve to focus attention on the major facades, direct movement toward entrances and serve as a foreground for buildings. Six quadrangles can be identified: The initial "quad" at Modesto A. Maidique Campus, which is referred to as "Foundation Court", is located at the center of the campus core and is surrounded by four buildings, Charles Perry building (Primera Casa), Graham Center, Green Library and Deuxieme Maison. An irregular defined quad is framed by the Graham Center, the Green Library, Owa Ehan, Chemistry & Physics buildings, and with the newly development Health buildings. An additional quad at the Panther and Everglades Housing defines the end of this axis. Another important quad is the one surrounded by the Green Library, Engineering & Computer Science building, Viertes Haus and Owa Ehan buildings, a lake occupies the east half of the space determining circulation. Additional quads occur adjacent to Rafael Diaz-Balart Hall, Ryder Business building and School of International and Public Affairs and adjacent to the PG1/Gold and PG2/Blue Parking Garages. Over time these spaces have developed varying size, scale of buildings and landscape design.

Courtyards: Another prominent design feature that accentuates the importance of outdoor spaces at Modesto A. Maidique Campus is its building courtyards. Building concepts are often organized around courtyards, and the courtyards express the personality of the facilities. Two courtyards can be found at the Rafael Diaz-Ballart Hall completely enclosed by the building as well as the Ziff Education and Owa Ehan buildings. The College of Business courtyard is defined by two 'L' shape buildings leaving open access and creating diagonal circulation. The

Architecture School courtyard is contained within four buildings and the covered walkways that connect them. The ECS courtyard is defined by an 'H' shape building and an elevated walkway that encloses the south space. The CSC courtyard has two distinct spaces separated by a covered walkway, to the east a more traditional courtyard design with walkways in a cross shape and to the west a radial design that starts at a fountain.

Form, Pattern, Materials, Texture, and Color: The continuity of design associations is an important unifying element for campus development at Modesto A. Maidique Campus. A consistency in form, pattern, materials, texture, and color connects individual architectural and landscape architectural elements to form an overall fabric. Established themes on campus such as arched colonnades, Oolitic Limestone (Keystone) finishes with tan, cream and pastel coral finishes, architectural accents of keystone coral, consistent site furnishings and lighting, and repetition of landscape patterns all contribute to the overall integrity of the campus.

Most of the walkways and plazas on campus are concrete; recently brick pavers began being used to define special gathering and circulation areas such as the Green Library breezeway and within the Foundation Court.

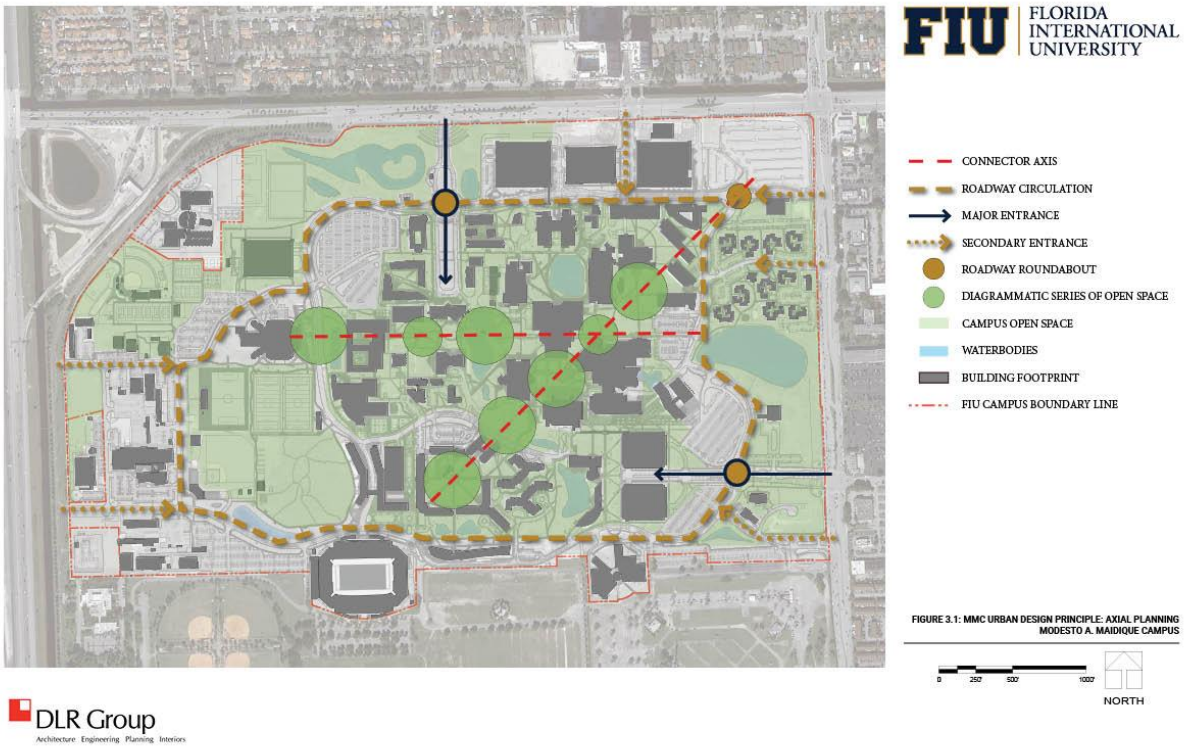

Figure 3.1 Axial Planning (MMC)

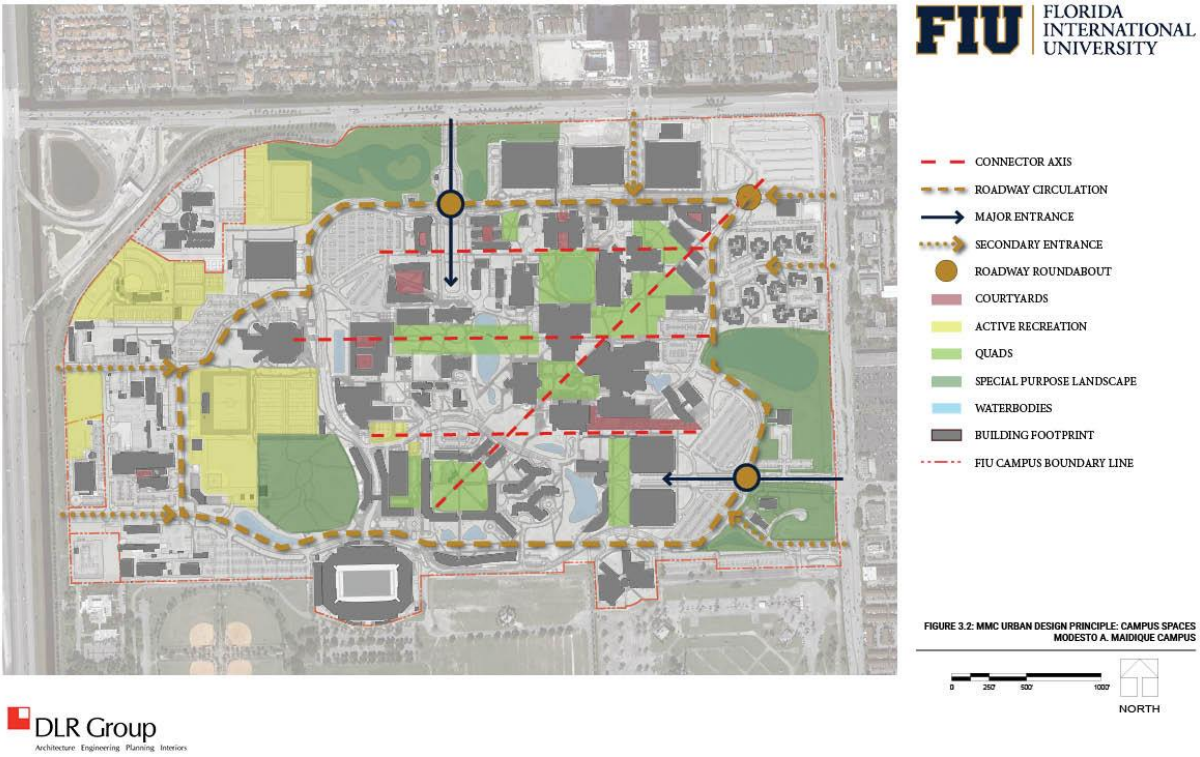

Figure 3.2 Campus Spaces (MMC)

ENGINEERING CENTER

Originally constructed in 1973 as a the headquarters of medical device manufacturer Cordis Corporation, the campus is primarily defined by its surface parking lots and remaining open space. It is bounded by West Flagler Avenue to the south, NW 10th Avenue to the west, existing residential to the north and a public park to the east. The campus has two campus entry points that are a part of a simple automobile circulation. The campus has an opportunity to improve spatial organization and open space amenities.

The guiding principles for urban design at Engineering Center is the development of axial planning, the development of defined open spaces such as quadrangles and courtyards, along with the development of design associations developed at Modesto Maidique Campus. Additionally, creating a connection to the surrounding community through development or public parks should be explored to strengthen the appeal of the campus and integrate into the area.

Quadrangles & Courtyards: There are no existing quads on campus. The existing internal greenspace is bordered by parking with minimal tree cover. Utilizing the open space between the solar power canopy structures is an opportunity to provide a future campus quad or courtyard.

Form, Pattern, Materials, Texture, and Color: The existing form at Engineering Center is that of a traditional office building. Future building placement is imperative in creating a “campus like” environment. "Re- skinning" of the original main building should be considered to develop a similar design association and unifying elements similar to that of the Modesto A. Maidique Campus to conceptually link the campuses but should be weighed against potential environmental and cost impacts.

Figure 3.3 Axial Planning (EC)

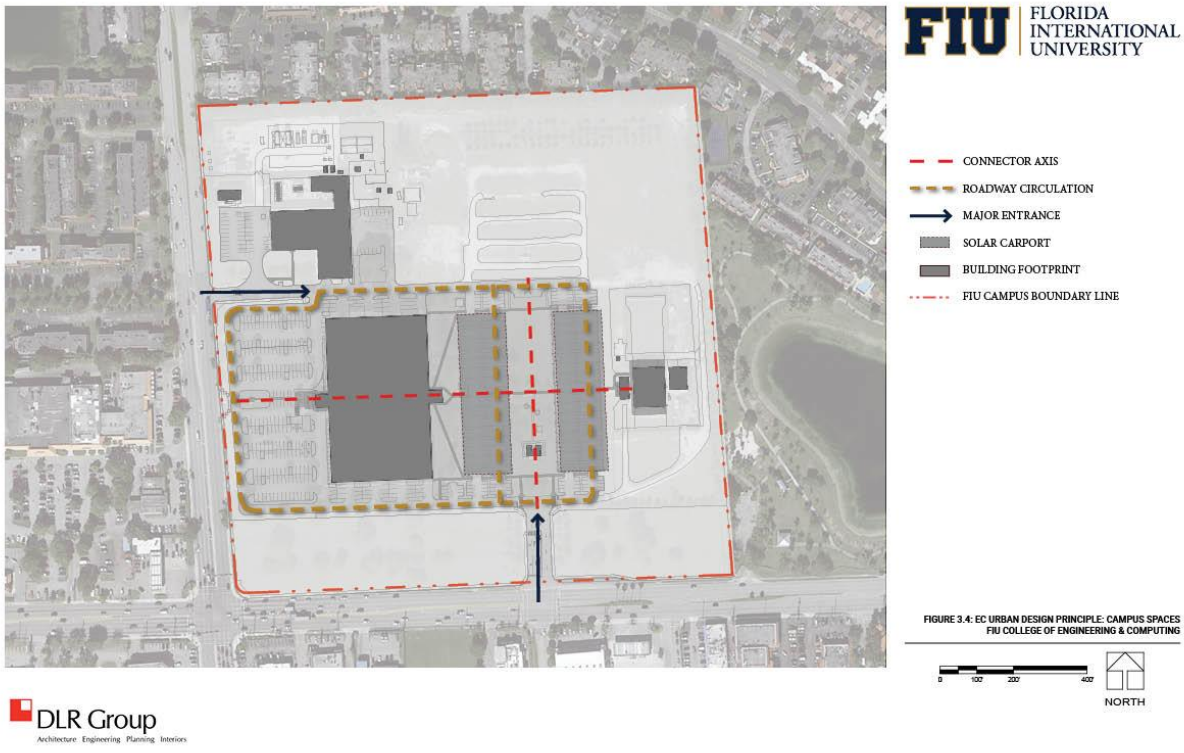

Figure 3.4 Campus Spaces (EC)

BISCAYNE BAY CAMPUS

Biscayne Bay Campus is in a unique location, making it an untraditional campus. Located on the shores of Biscayne Bay, the campus has access to the intra-coastal waterway and is surrounded by Oleta River State Park and a natural preserve.

The core of the campus includes:

- The Hubert Library
- Academic One
- Academic Two
- Gregory B. Wolfe University Center
- Hospitality Management
- Marine Science Building

The area between these buildings is the only defined outdoor space on campus.

Quadrangles: There is a loosely formed Quadrangle formed by the core academic buildings and the covered walkway between the Hospitality Management building and the Hubert Library. Three distinct spaces can be identified, east of the elevated walkway defined by the Wolfe University Center, Hospitality Management and covered walkways contains mature vegetation around a circular pathway that gives the space a relaxing character. West of the elevated walkway the entrance to the loading dock divides the space in two areas, south of the library, the quad has wide walkways with sparse vegetation making it a circulation space with a small gathering area on the edge of the building heavily vegetated. The remaining area north of Academic One and Academic Two serves as an arrival plaza as well as a waiting area for public transportation.

Design and Scale: Architecturally, there is a consistency of scale on the campus. Buildings are typically no higher than three stories and constructed of masonry, cast-in-place and precast concrete with tan, gray or cream stucco finishes. Outside the core academic areas, architectural styles reflect the time period that buildings were constructed. The buildings orientations are generally external, vaguely fronting the adjacent Biscayne Bay rather than internally to the campus.

Although separated from the core of the campus and different architectural style, the Kovens Center is a prominent architectural structure on campus. The more recently constructed RCCL Training Facility and MAST Academy High School are in harmony with the original campus architecture.

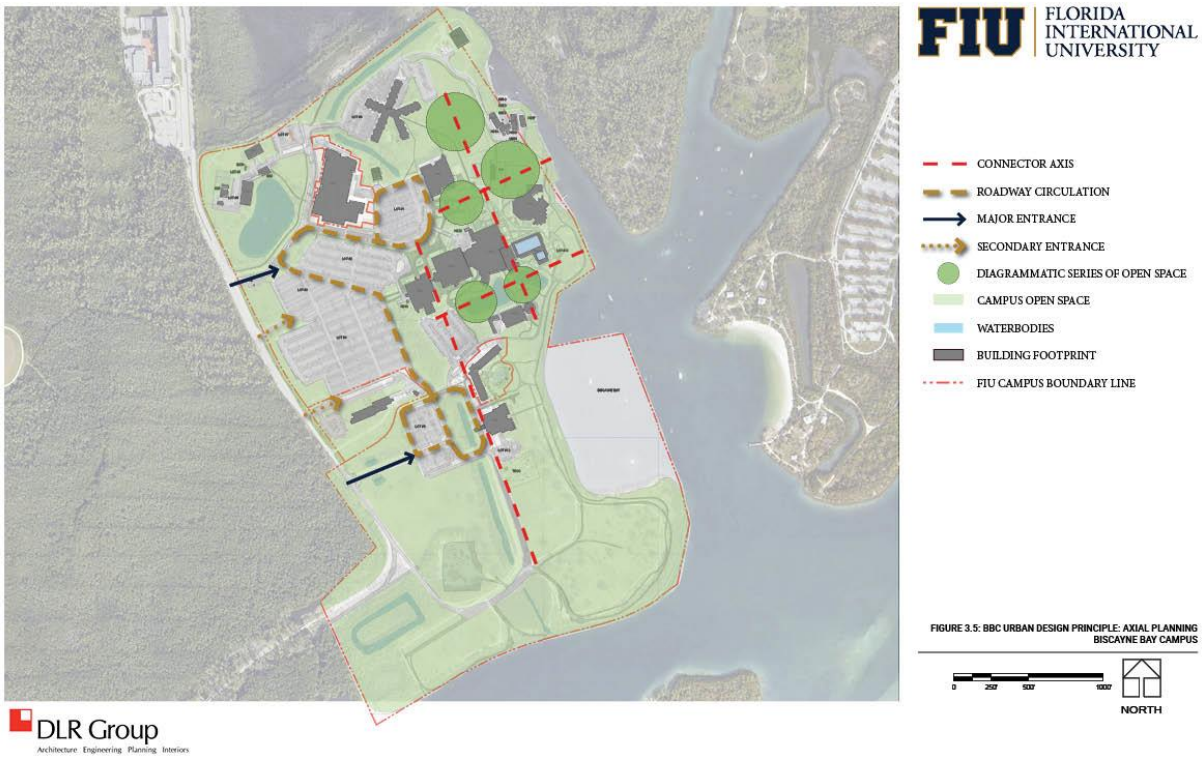

Figure 3.5 Axial Planning (BBC)

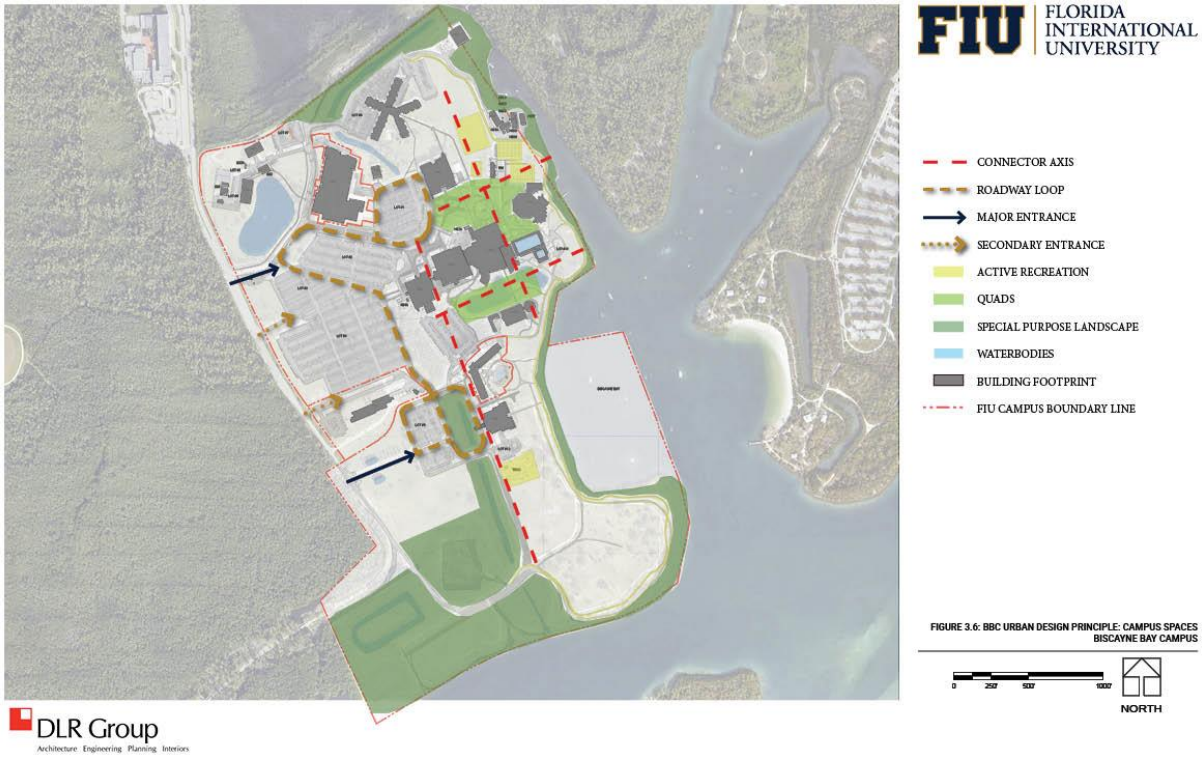

Figure 3.6 Campus Spaces (BBC)

2. Campus visual structure - a qualitative identification of existing visual landmarks, edge conditions, entrances, building location and orientation, mass and scale, landscape character, ground level functional character, etc.

MODESTO MAIDIQUE CAMPUS

Visual Edge: The perimeter of the Modesto A. Maidique Campus is characterized by several different conditions that exist outside the campus. On the west and northwest of the campus, the Florida Turnpike and entrance/exit ramps at SW 8th Street creates a defined visual edge to the campus. The campus is bounded on the north by SW 8th Street, an arterial street. Since residential development along this street is north of a canal running parallel to the road, this corridor has much more open character than other urban arterial streets in the area. SW 107th Avenue, the six-lane divided arterial running along the eastern side of the campus is mostly lined with traditional strip commercial development.

Tamiami Park and the adjacent Fair & Expo, both Miami-Dade County property, are situated immediately south of the campus. Since the previous campus master plan, there has been the development of Parkview 2 Housing to the east of the FIU Riccardo Silva Community Stadium and west of Herbert & Nicole Wertheim Performing Arts Center, creating an established defined edge of the campus separate from the county-owned property. This includes a roadway realignment along SW 17th Street that will improve one of the primary arterial roadways.

Building Location and Orientation: One of the significant features of the Modesto A. Maidique Campus itself is the large land area on the western side and northern perimeter of campus. Much of the area is designated for recreational fields and parking, but there are several prominent campus buildings such as Ocean Bank Convocation Center, Campus Support Complex, NOAA National Hurricane Center, the Carlos Finlay Elementary School and the PG3/Panther Parking Garage. Since the last campus master plan, the addition of recreational fields and the expansion of the Wellness and Recreation Center has added new recreation facilities to the campus, including football practice and play field, a basketball gymnasium, and new state-of-the-art fitness space and strength room. However, in terms of the overall spatial organization of the campus, these buildings and facilities lack connectivity from the rest of the campus, so there is an opportunity to improve pedestrian capabilities, especially in route from on-campus housing.

The northeastern area of the campus is beginning to develop in accordance with Academic Health Sciences strategic plan. The addition of the Nursing & Health Sciences buildings, Academic Health Center Building #4 and #5, the PG4/Red Parking Garage, and the PG5/Market Station Parking Garage have transformed the existing edge of surface parking lots into an academic and research district. The future development of the new Engineering Building on the corner of SW 107th Avenue and SW 8th Street will enhance ongoing and future collaborations between the College of Engineering and Computing and the health sciences colleges of medicine, nursing, and public health. Many of the most significant breakthroughs in health sciences will increasingly be at the interface between these disciplines and engineering and computer science.

While the vision of the eastern perimeter of the campus has yet to be defined, the pattern established by the Wertheim Performing Arts Center, Student Academic Success Center (SASC), PG1/Gold and PG2/Blue Parking Garages, the expansion of Graham Center, the reconfigurations of the former Phi Gamma Delta and Pi Kappa Phi Fraternity houses, and the future development of the Trish and Dan Bell Chapel and, hopefully, CasaCuba will provide prominent campus destinations. Even with the East Loop Road realignment, most of the open space in place will remain in place, including the large open space surrounding the Ronald W. Reagan Presidential House, continuing to provide an attractive and distinctive edge to the campus.

Entrances and Landscape Features: The peripheral open spaces around the academic core are also distinguished in several locations by distinctive landscape features. On the northern perimeter of campus, the formal colonnaded and enhanced landscape entrance from SW 8th Street provides the framework for a dramatic arrival to the Modesto A. Maidique Campus. This dramatic, formal boulevard surrounded by a double row of mature royal palms frames a vista that connects to the heart of the campus. Adjacent to this ceremonial campus entranceway, an informal planting of canopy trees and flowering trees to the east and the Hennington Island ecosystem and masses of palms to the west provide a visual buffer from SW 8th Street.

Many of the predominant design elements in the SW 8th Street entry zone are repeated in the other primary campus entrance for the Modesto A. Maidique Campus off of SW 107th Avenue. Two arched entry towers are constructed of stucco with sidewalks leading through the arches at the base of the towers and an alley of Royal Palms create a formal vista into the campus.

Pedestrian Entrances and Walkways: While there are numerous pedestrian "entrances" to the central academic core, two are more clearly defined. The pedestrian plaza located between the Graham Center and Charles Perry Building serves as a pedestrian entrance from PG1/Gold and PG2/Blue Parking Garages and eastern parking surface areas. This exterior plaza is characterized by large, paved areas, which direct movement toward the central courtyard between the Perry Building and Green Library. The open space between the PG1 and Graham Center is comprised of lawn areas and broad walkways interspersed with planting areas.

On the western edge of the Perry Building, a pedestrian entryway, provides access to the central academic courtyard from the residential district comprised of Panther, Everglades, Lakeview halls and University Tower and parking areas to the south. The Avenue extends northeasterly to the existing surface parking lots provided direct access to commuters. Pedestrian access to the campus core east of the Green Library from the University Apartments is indirect due to the development of the Health and Life sciences buildings. On the western side of the Green Library an additional pedestrian entrance connects the campus core to Ocean Bank Convocation Center and the western parking areas.

Scheduled to be complete in 2024, one additional pedestrian entrance to be added to Modesto A. Maidique will be the pedestrian bridge being built across Tamiami Trail (SW 8th Street, near the corner of East Campus Circle. Working with the Florida Department of Transportation, this bridge will connect the campus with the City of Sweetwater, including several off-campus housing developments. In cohesion with the pedestrian bridge will be the UniversityCity Prosperity Project, which will include a Complete Street project and several pedestrian-oriented transit access improvements along SW 109th Avenue between SW 6th Street within the City of Sweetwater at the northern terminus and the Green Library at the southern terminus within FIU.

Landscape Character: The campus landscape is a mixture of formally planted trees along roadways and axes and informal plantings of canopy trees, flowering trees and palms at campus perimeters, entry zones and open spaces. Detailed plantings are associated with building courtyards and some quadrangles. Some natural vegetation on campus is located on an eight-acre area located immediately east of the Baseball Stadium.

Landscape character in quads consists of canopy tree and palms along walkways with minimal to no under-story plantings near building foundations. Most understory plantings are associated with exterior plazas. Palms are used to indicate important access locations to buildings.

ENGINEERING CENTER

Visual Edge: The perimeter of Engineering Center is characterized by open space along West Flagler Street, a six-lane arterial street with palms and some landscaping along SW 107th Avenue a six-lane arterial street with a median divide. Both streets are traditional commercial

corridors with varying forms and ages of retail. One of the main entries onto the Engineering Center location, off West Flagler Street, is lined with palm trees with views of the solar canopies. The existing multi-family to the north of the campus is apartments of three stories and medium density. To the east is a public park (Women's Park), with some landscaping along its edges.

Building Location and Orientation: The large existing building is located internal to the parcel. It is surrounded by surface parking on two sides. Two support facilities are also located on site but not grouped nor linked to one another. The Wall of Wind is adjacent to the Woman's Park and centered to the east-west campus axis. As part of the continued partnership with Florida Power and Light Company (FPL), Engineering Center has a large-scale energy storage renewable resource system on campus. This includes a battery storage system in the northwest corner and more than 5,700 solar panels on canopy structures that are built over the central parking lot and provide shade and some rain protection.

Entrances and Landscape Features: The existing entry from West Flagler is a divided median entrance with minimal landscape plantings including rows of palms on both sides. The existing entry from NW 107th Ave is a two-lane condition with minimal landscape features. Landscape enhancements have been completed at the west entrance to the main building.

Pedestrian Entrances and Walkways: There are few pedestrian connections on-campus. The West Flagler entry provides for a pedestrian connection to the campus from the community.

Landscape Character: There is no existing landscape character on-campus as the site is predominately lawn. The site does contain some good-sized hardwood trees along the boundary of West Flagler St and the western surface parking lot. Future development should minimize impact to these trees when possible.

BISCAYNE BAY CAMPUS

Visual Edge: A distinctive feature of the Biscayne Bay Campus is that it's bounded on three sides by undeveloped land. Biscayne Bay borders the remainder of the campus edge. These campus perimeters provide the campus with a uniquely isolated setting even though it is in an area that is otherwise fully developed. A second significant feature of the campus is its orientation. Unlike the Modesto A. Maidique Campus, that is bounded on all sides by urban conditions, the Biscayne Bay Campus has a distinct linear orientation that is the result of the Biscayne Bay waterfront on the east, and forested land on the west. Buildings, in general, have been placed near the Bay rather than centralized within the campus.

Entrances and Landscape Features: The vehicular entrances to the campus parking areas are located off Bay Vista Boulevard. Two public schools are located along Bay Vista Blvd prior to the campus entrance: The Alonzo and Tracy Mourning Senior High and The David Lawrence Jr. K-8 Center. In addition, along Bay Vista Boulevard is a 183-acre master-planned community called SoLē Mia. In North Miami, the site has been proposed has one of the largest development projects in South Florida and is aimed at transforming the long-vacant site of a former superfund landfill at 15045 Biscayne Blvd into a community with residential towers, upscale retail, and commercial space.

As for the campus, the interior pedestrian "street" that links the Wolfe University Center, Academic One and Academic Two buildings run perpendicular to the bay front. Consequently, one is not fully aware of the extensive shoreline of the campus until having walked through or beyond the academic buildings within the campus core. Along the water's edge, mangroves limit visibility to the bay from ground level. Natural vegetation areas form a linear spine parallel to Biscayne Bay dividing the southern portion of the campus in two.

Building Location and Orientation: Development on the Biscayne Bay Campus is

concentrated in a relatively compact area near the northern limits of the property. The Marine Biology building to the south of the Wolfe University Center is oriented perpendicular to the Bay. The newest student residential building, Bayview, is located southwest of the Marine Biology building. They are separated from the core of the campus by two water bodies. The location of the campus core has maintained the waterfront views on the campus, but with the height of Bayview housing, it is somewhat limited. Continuing to utilize the edge of campus strategically for any future development will be important to the future of the Biscayne Bay campus.

The Kovens Conference Center is located south of the campus and does not have a direct internal pedestrian connection to the academic core. Similar to the other buildings on campus, the building is oriented perpendicular to the Bay.

In 2015, FIU and Royal Caribbean Cruise Ltd. developed a state-of-the-art rehearsal and production studio. Located on the northwest corner of the Biscayne Bay campus, the RCCL Training Facility acts as one of the first buildings someone might notice when driving onto campus, especially from one of the main entries at NW 145th Street. Their partnership also includes the utilization of the former Bay Vista student housing, now known as RCL Entertainment Suites.

Marine Academy of Science and Technology (MAST) is developing a campus on-site along Bay Vista Boulevard. This top rated, public, magnet school is the only public high school in Florida that enjoys a collaborative partnership with a public university and students will have access to certain amenities at the campus.

Visual Landmarks: The obvious visual landmark for the campus is the Biscayne Bay. The extensive shoreline and minimal development are unparalleled in Miami. Internal to the campus, the Biscayne Bay Campus has three lakes that are distinctive visual amenities. The two lakes situated south of the academic buildings visually extends the waters' edge from the bay perimeter into the central portion of the site. The lake at the northwest edge of campus with its fountain and backdrop of Coconut Palms creates a striking entry feature.

The campus quad between the Hubert Library and Wolfe University Center are the primary hubs of activity on campus. New building additions and uses to the southern facade of the Wolfe University Center has increased activity along the lake edges.

b) An inventory of existing building service areas, service entrances, trash collection points, etc. (refer to building plans for specific service area locations).

MODESTO A. MAIDIQUE CAMPUS

In general, service areas in the campus core normally have an outward orientation from pedestrian activity zones and towards the existing loop road. As the campus continues to densify, this will become more of a challenge. Several existing buildings, such as the Green Library service court, creates a non-desired edge condition to the central quad. SW 14th Street provides service to the Charles Perry and Management & Advanced Research buildings, dividing the campus core, delineating between the academic areas and the primary residential district. As the Greenbelt evolves and more buildings are built outside the central core, future service / loading areas will need to adapt to a more urban condition and be screened from public view.

ENGINEERING CENTER

The existing building sits on a pedestal or podium with areas of parking and some classrooms, offices and labs underneath.Service can be accessed from any side of the building.

BISCAYNE BAY CAMPUS

The primary service area for the campus core is screened from public view by a sodded berm located near Central Utilities. The location of the Marine Biology Building Hospitality and Tourism Building requires a circuitous route along between the Kovens Center and then along the Bay in order not to encroach into the pedestrian quad. While this preserves the quad for pedestrians it places service areas between the quad and the Bay.

c) An identification of existing high activity buildings and spaces.

MODESTO A. MAIDIQUE CAMPUS

The activity "center" of the Modesto A. Maidique Campus includes a cluster of four buildings initially constructed on the campus core:

- The Charles Perry Building is the focus of administration functions
- The Ernest R. Graham Center is the student activity center
- The Green Library is the focus of research
- Deuxieme Maison has a large concentration of faculty offices

The importance of the plaza between these buildings as a pedestrian activity area is reflected in the location of building service areas at the outside edges of structures enclosing space and programmed nature of the hardscape with various pedestrian level features. This quad has both through pedestrian traffic and concentrated activity on the gathering areas.

A secondary activity node occurs in the buildings located north of the library. The focus in this area is academic activity centered around the following buildings:

- Owa Ehan
- CASE Building
- Viertes Haus
- School of Architecture
- The Chemistry and Physics Building

Activity on the quad north of the Green Library occurs on the edges of the building itself through a colonnade along its northern facade and through a pedestrian walkway connecting the quad south of the CASE building. The activity is mainly pedestrian circulation coming from the PG3/Panther Parking Garage and parking lot 9 moving into the OE building and Chemistry and Physics building. The quad formed by these two buildings and the developing Academic Health buildings has activity moving on a diagonal axis that is the Avenue of the Sciences directed towards the Graham Center and Green Library.

The Green Library breezeway is an important activity corridor that ultimately connects pedestrian traffic to the Rafael Diaz-Balart Hall and the Ocean Bank Convocation Center.

A third activity node occurs to the west of the Green Library, intersecting several student housing buildings and recreational/athletic facilities. The focus is on campus amenities including dining, health, and recreational facilities.

- School of International and Public Affairs II (SIPA-2)
- Management and New Growth Opportunity (MANGO) Building
- Wellness and Recreation Center
- Student Health Center

Several additional activity nodes occur throughout the campus. At the housing complex south of the campus core, activity occurs on a diagonal axis directed to the campus core. These buildings include:

- Lakeview Residence Hall
- Panther Residence Hall

- University Towers
- Everglades Residence Hall

An evolving activity node centers on the ground floor retail of the PG5/Market Station Parking Garage. This is due to high volumes of foot traffic associated with parking and several new buildings. This will continue to evolve with the completion of the new Engineering Building on the northeast corner of campus. These buildings include:

- PG5/Market Station Parking Garage
- PG6 Parking Garage
- Academic Health Center #3
- Academic Health Center #4
- Academic Health Center #5

The pedestrian traffic coming from the parking lots adjacent to the Performing Arts Center, Patricia and Philip Frost Art Museum, and the PG1/Gold and PG2/Blue Parking Garages, provides activity that is concentrated at the plaza south of the Graham Center, which includes several prominent art sculptures.

ENGINEERING CENTER

There is no area of activity on-campus. Activity happens on the ground level of the main building at the building entrance.

BISCAYNE BAY CAMPUS

The Hubert Library, Wolfe University Center and Academic One are the primary focus of activity at this campus, with a high concentration of students at the library. The plaza in front of the Academic One building is also an important activity node since it has traffic of students coming from the parking lots into the buildings and students waiting for public transportation. Since the last master plan, the plaza north of the Wolfe University Center was redesigned and the adjoining interior space was remodeled to create a large atrium overlooking the plaza.

The Kovens Center attracts activity from conferences, trainings, and events. The complex is nestled into its site, positioned towards the bay. The landscape blends well with a mangrove-lined canal at the building's entry. Building orientation and design accentuates views of Biscayne Bay. There is not a lot of interaction between the Kovens Center and other areas of campus.

Also, of interest at this campus is the location of the Aquatic Center. Placed adjacent to the Wolfe University Center and Hospitality Management, this facility faces the waterfront and provides views out across the bay from the pool deck. Across the quad the Aquatic center is the campus's outdoor recreation facilities.

There is minimum activity coming from the housing building at the north end of the campus which is now managed by Royal Carribean Cruise Lines.

d) An identification of existing functional linkages, i.e., major pedestrian, auto or other linkages.

MODESTO A. MAIDIQUE CAMPUS

The campus core functions are an inwardly oriented free-standing buildings linked by a pedestrian circulation system that connects the core activities to the perimeter parking areas. A large concentration of pedestrian activity, walking and gathering, between the Graham Center, Green Library and Perry Building is reflected by the amount of paved pedestrian walkways in the south - central portion of the campus.

Pedestrian movements are organized along four main spines which are mostly continuous, but

not clearly defined, across the campus:

- Extends east from the Ocean Bank Convocation Center to the Green Library, continuing along the Graham Center to the University Apartments
- Extends diagonally (northeast) from the residential housing district, including Panther Residence Hall / Everglades Hall / Parkview I & II, to the emerging Academic Health Center complex, continuing to the intersection of SW 8th Street and SW 107th Avenue

Pedestrian Circulation: The central campus is the differentiation of the pedestrian circulation pattern between the northern and southern portions of the core. The southern portion of the campus core, generally situated between Green Library and Perry Building, has pedestrian movement facilities and patterns that extend through the campus. The northern portion of the central campus, generally located between Green Library and CASE Building, is characterized by pedestrian movement facilities that are organized around the perimeter of the space. In this part of the campus, pedestrian movement is also accommodated within the buildings or in covered outdoor walkways such as in Owa Ehan.

Another feature of pedestrian circulation pattern is found in its walkways linking parking to the central academic core and its surroundings. The parking lots and south of the central campus have pedestrian walkways connecting them directly with the main campus activity centers (Green Library, Graham Center and Perry Building). The PG1/Gold Parking Garage has a colonnaded covered walkway that connects it to the campus core. The PG5/Market Station Parking Garage includes an elevated sidewalk separating pedestrians from vehicular traffic.

There is an important pedestrian connection between the parking lots, parking garages and bus station at the southeast of the campus and the campus core. The PG1/Gold and PG2/Blue Parking Garages have a colonnade that provides a covered pedestrian circulation route, and a covered walkway extends from the PG1 to the Charles Perry Building.

Pedestrians coming from the parking garages located at the northeast corner of the campus use sidewalks on the edges of the buildings on the south portion of the Greenbelt or go through the buildings to get to the campus core. There are connected pedestrian pathways between Academic Health Center 1, 2, 3, 4 and 5, as well as the Chemistry and Physics Building. Pedestrians also use the service drive for Owa Ehan to connect with the parking garages. An improved pedestrian link between Green Library, PG4, PG5 and Sweetwater is being constructed at the time of this analysis. This route will clearly define and enhance the pedestrian connection between the Green Library and 109th Avenue in Sweetwater which is the core of the UniversityCity redevelopment there.

Most of the pedestrian circulation on the west side of campus is directed towards the east. Pedestrian traffic coming from the Parking Lots 10 & 11 use the sidewalk along the north side of 11th Street to move east of the campus; those heading to the Ziff Education Building use a sidewalk that runs through the center of the Parking Lot 9 and those heading to the Recreation Center use the sidewalk parallel to 13th Ave. No direct pedestrian route exists between PG3 and academic buildings to the east.

In many areas of the campus, pedestrian circulation is in immediate need of improvement. Many connections are disjointed and indirect adding time and distances between facilities. The added time and distance is particularly burdensome during hot and rainy weather. The disjointed, uncovered and unshaded connections discourage walking creating an increased need to use golf carts and trams or to move cars between various parking areas.Creating directional and accessible pedestrian circulation spines will enhance the overall appearance of the campus, improve wayfinding as well as addressing critical connections. Accessible (ADA) design standards need to be considered for all future campus design and construction process.

Vehicular Circulation: The primary vehicular circulation route within the Modesto A. Maidique

Campus is the Campus Greenbelt, a loop road that encircles most of the campus. The Greenbelt provides access to perimeter parking garages and lots as well as connections to secondary roads and service drives within the campus. The Greenbelt was reconfigured to south of the residential villages with the development of the PG1/Gold and PG2/Blue Parking Garages. This allowed for unimpeded pedestrian circulation from the parking garages and adjacent parking lots to the campus core. Other adjustments to the loop road include an offset to the southern portion of the loop now under construction as part of the Parkview 2 project and a realignment of the north east part of the loop in a section between the 16th Street and 10th Street traffic circles being planned as part of the Bell Chapel project. The east loop realignment will improve access for large vehicles into the Graham Center loading docks and create a better site for the Chapel and generally improve traffic flow on the east side of campus.

SW 14th Street is an internal service street that provides access to various residential buildings and service areas such as the Charles Perry building and Management and Advanced Research (MARC) buildings.

The connection to the campus roadway loop and the surrounding community occurs through two main entrances and six secondary entrances. The loop roadway realignment along SW 17th Street with the development of the new Parkview 2 housing project will provide a distinctive southern edge to campus, bordering Tamiami Park.

Primary Entrances:

- SW 112th Avenue at SW 8th Street
- SW 16th Street at SW 107th Avenue
- SW 109th Avenue (East Campus Circle) at SW 8th Street

Secondary Entrances:

- SW 11th Street at SW 117th Avenue
- SW 17th Street at SW 117th Avenue
- University Drive at SW 107th Avenue
- SW 11th Street at SW 107th Avenue
- SW 16th Street at SW 107th Avenue

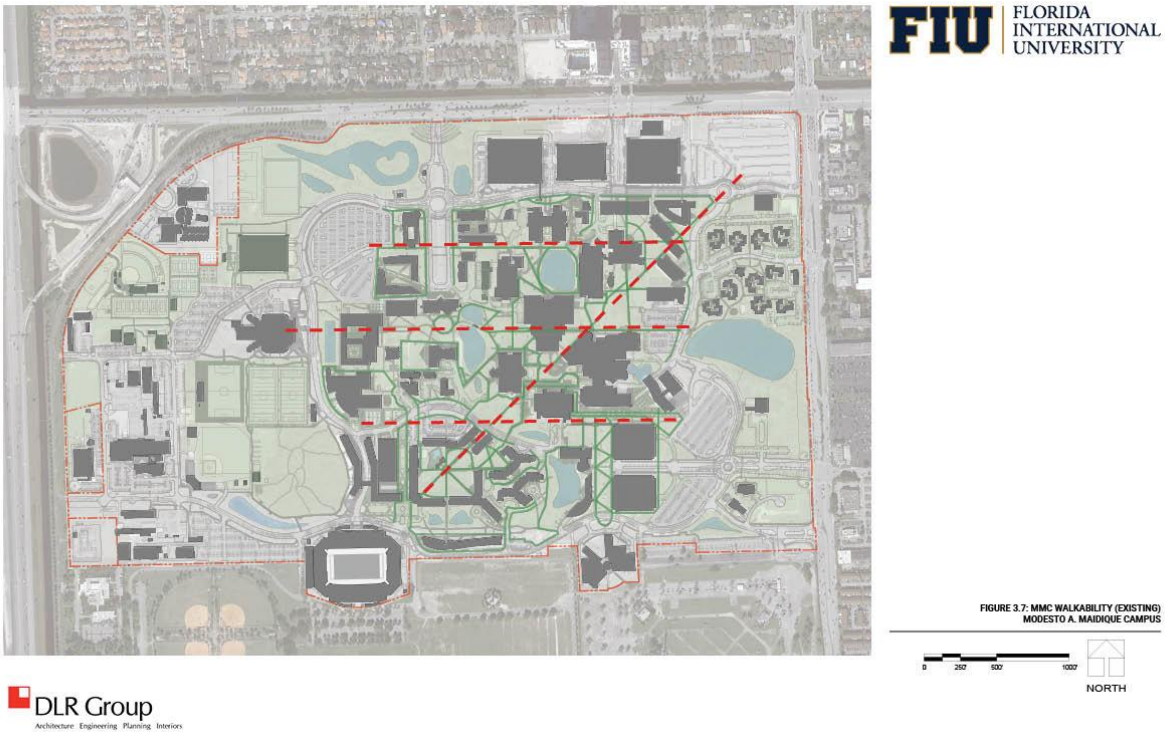

Figure 3.7 Walkability (Existing)

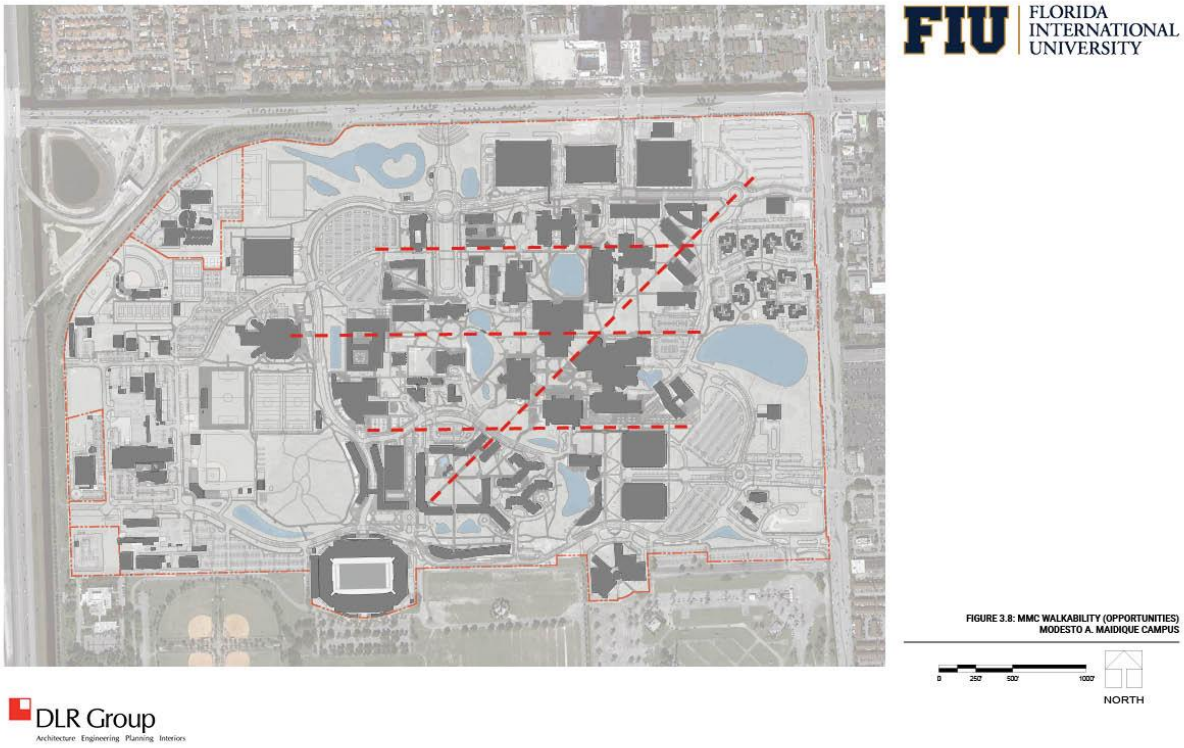

Figure 3.8 Walkability (Opportunities)

ENGINEERING CENTER

Pedestrian Circulation: Pedestrian circulation is limited to movement from the eastern and western parking lots to the main building.

Vehicular Circulation: Vehicular circulation is primarily through the existing parking lots. Entrances exist off West Flagler Street to the south and NW 107th Avenue to the east. Additionally, the University has established a shuttle service with the City of Sweetwater connecting the center to the Modesto Maidique Campus.

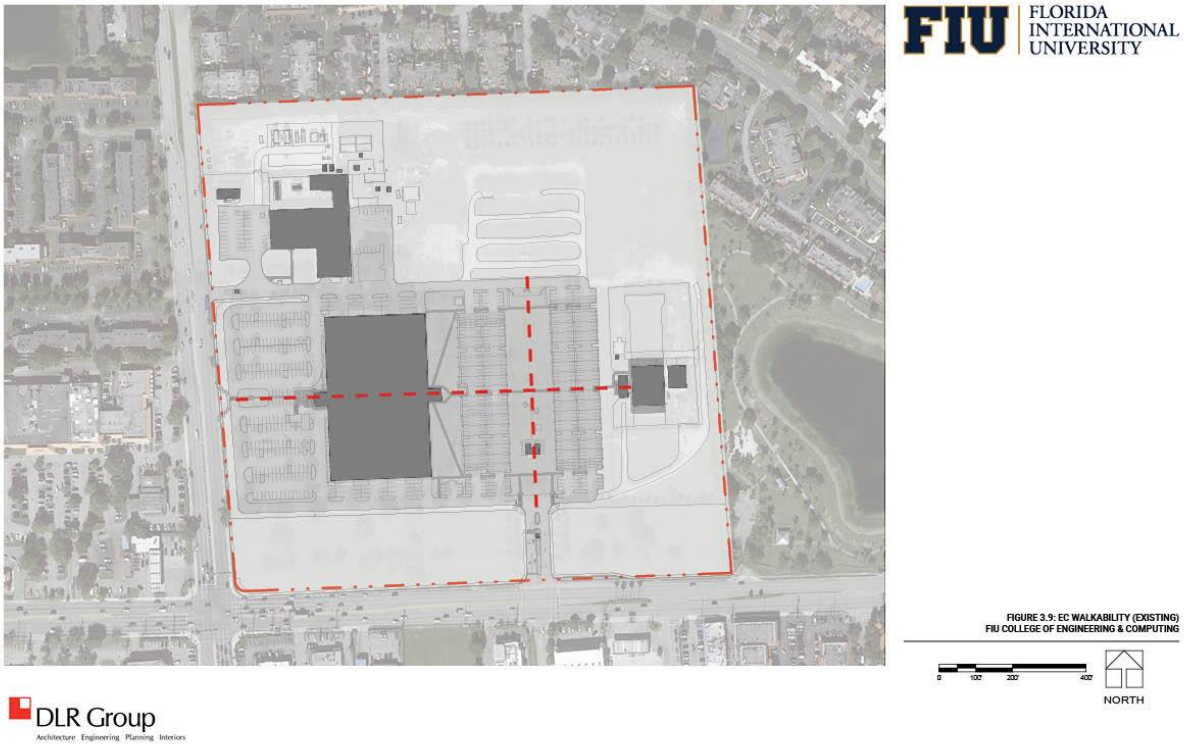

Figure 3.9 Walkability (Existing)

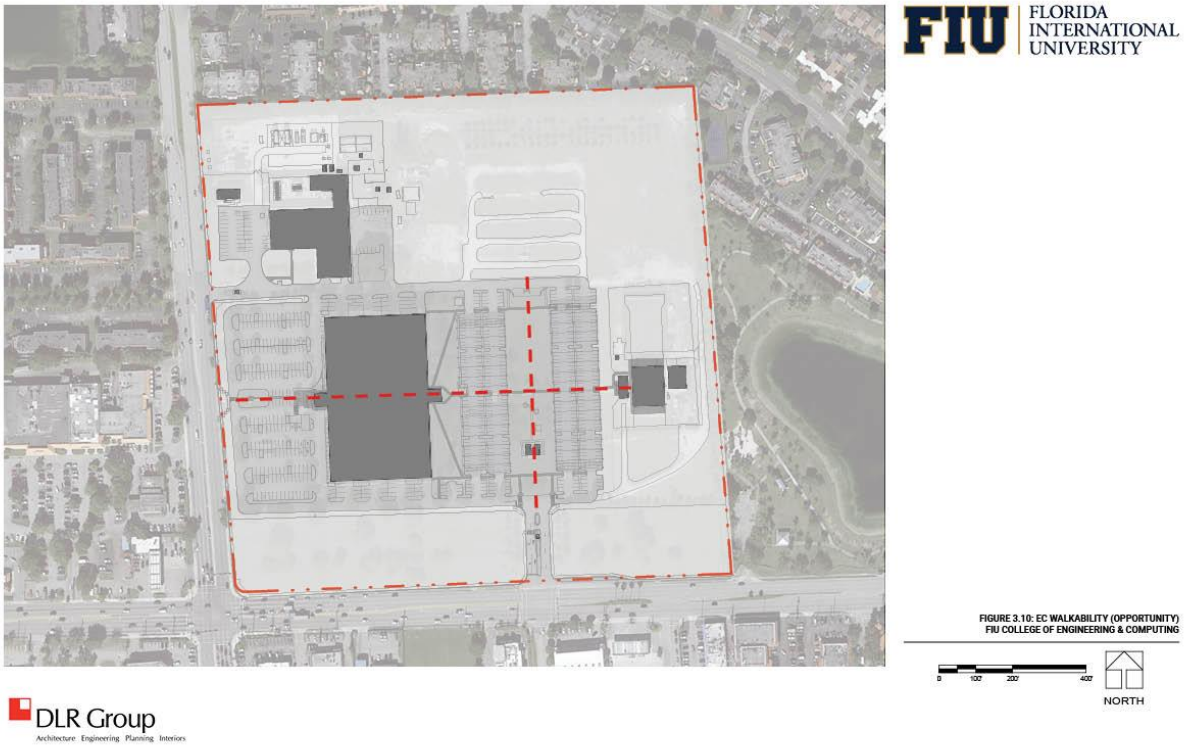

Figure 3.10 Walkability (Opportunity)

BISCAYNE BAY CAMPUS

Pedestrian Circulation: Due to the compact form of development at Biscayne Bay Campus, the major pedestrian activity is concentrated in a relatively small area focused between the Hubert Library on the northern edge of the quad and the Wolfe University Center on the southern edge of the quad. One of the important distinguishing features of this campus is that the Wolfe University Center, Academic One and Academic Two are closely linked by an interior pedestrian “street” which provides a continuous covered connection among these buildings.

Although the library is located approximately three hundred feet from Wolfe University Center, it is provided with a two-level pedestrian walkway offering a covered link between those two buildings. The library is also linked by a ground-level covered walkway to Hospitality Management.

Another distinctive feature of Biscayne Bay Campus is the large hardscaped entrance plazas located between the parking lots and Academic One and Academic Two buildings. These areas with modest landscape "islands" give this area a very urban character. The urban character of this space contrasts with the informally laid out pedestrian walkways that extend south from the main academic buildings and along the bay.

Pedestrian linkages between parking and the academic core of the campus exist in varying degrees. The parking lot located just west of Academic Two has pedestrian walks that provide clear connections to that building. The parking lot west of The Library does not have a separate sidewalk connection to the campus core, resulting in pedestrians walking along the parking lot driveways toward the library.

Two walkways connect the housing building with the academic core; the main one connects with the library and the outdoor recreation facilities. The second walkway connects to the parking lot on the west side of the library. These walks have minimal shading from palm trees.

A generous walkway starts at the northeast end of the housing building parking lot runs parallel to Biscayne Bay all the way to the south portion of the campus. In general, the large surface parking lots at BBC do not have clear pedestrian routes or much shade.

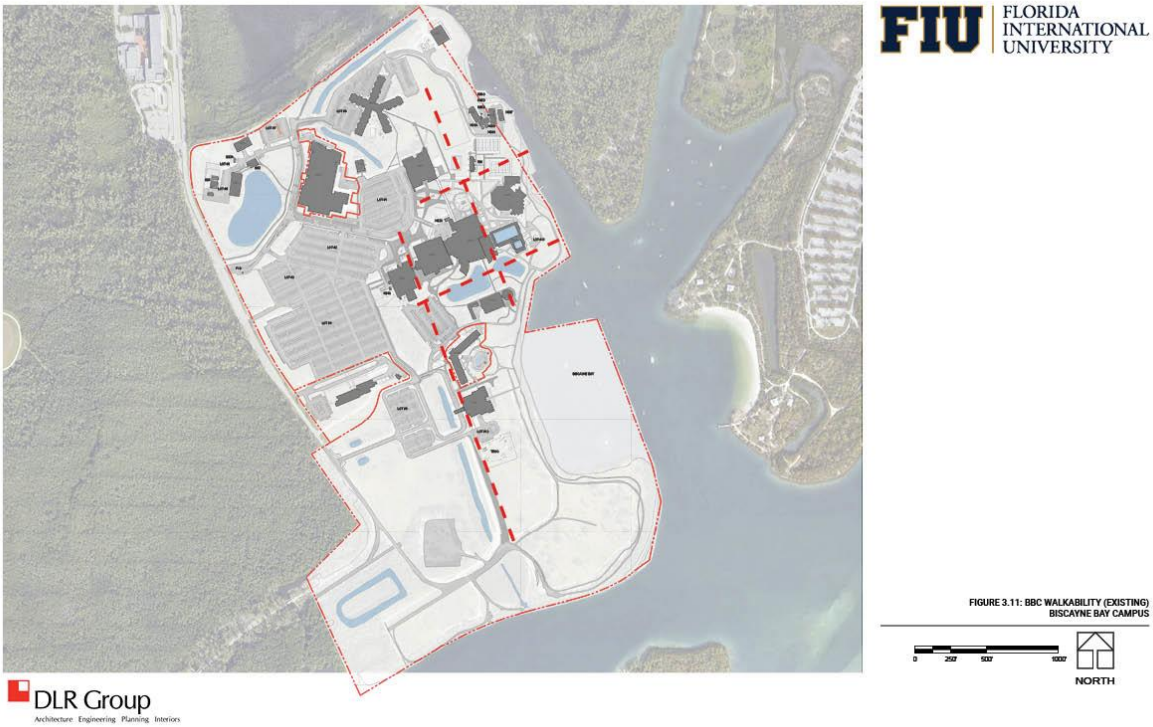

Figure 3.11 Walkability (Existing)

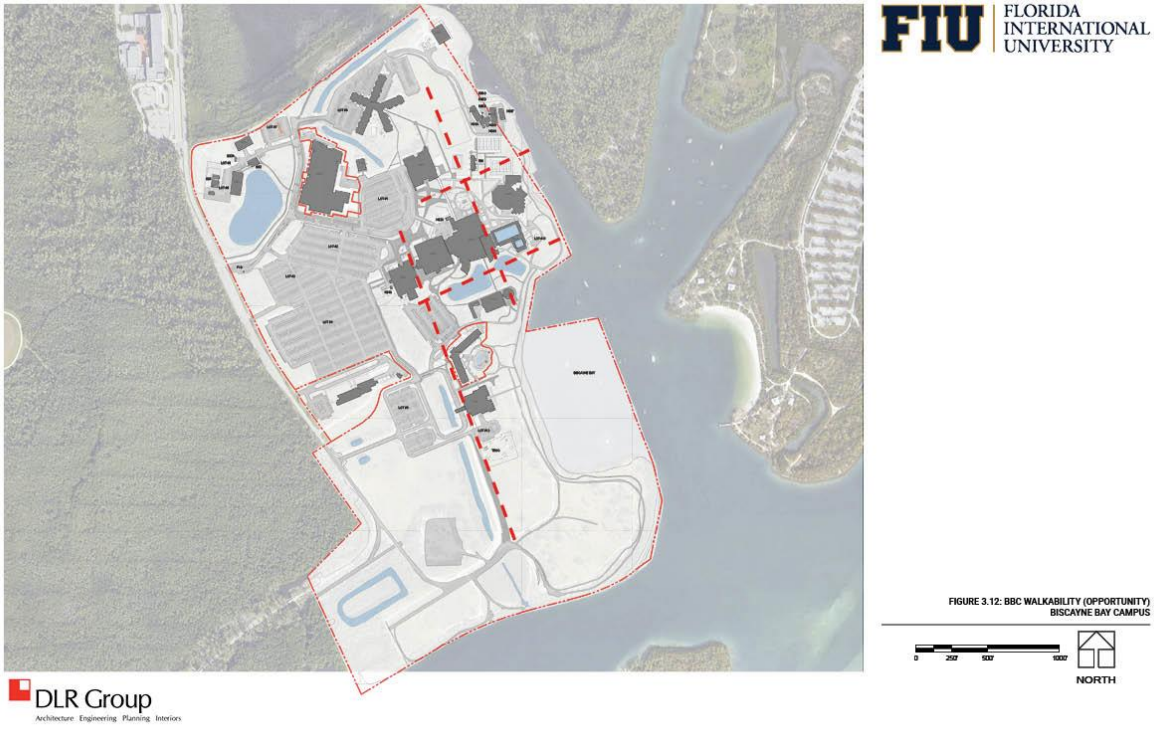

Figure 3.12 Walkability (Opportunity)

e) A description of the character of existing buildings and open spaces within the context area.

MODESTO A. MAIDIQUE CAMPUS

The Modesto A. Maidique Campus context area is a completely urbanized, developed area. The campus is landlocked and bordered with SW 8th Street to the north, SW 107th Avenue to the east, SW 117th Avenue to the west and Tamiami Park to the south. Development consists primarily of single and multi- family residential uses along with traditional strip commercial development along major road corridors. All development within the context area is low-rise construction except for new high-rise student housing that has been constructed as part of UniversityCity in Sweetwater.

Tamiami Park, immediately south of the campus is the largest park/open space in the context area and is a facility that hosts activities of regional significance. Miami-Dade County Fair and Exposition abuts the southern perimeter of the campus along SW 107th Avenue.

The perception of the area, to a large extent, can be described in terms of the character of development along the major roadways. SW 8th Street, SW 107th Avenue and SW 24th Street are the major through-streets in the context area. North of SW 8th Street in the City of Sweetwater, the land use predominantly consists of residential housing. While SW 8th Street and SW 24th Street are characterized primarily by residential development with some commercial uses. SW 107th Avenue is characterized by commercial development along the east side of the campus.

ENGINEERING CENTER

The surrounding buildings to Engineering Center are traditional retail stores to the south and west

of the site with surface parking lots between the street and the building entrances. Garden style apartments are located to the northof the campus. The Woman's Park, a passive recreation space, is located along the eastern boundary of the campus.

BISCAYNE BAY CAMPUS

Although Biscayne Bay Campus is in a region of Miami-Dade County that is completely urbanized, the lands immediately adjacent to the campus remain open and undeveloped. This is in part the result of environmental constraints to development and zoning in which portions of these lands are designated for parks and recreation use.

The Alonzo and Tracy Mourning Senior High School and The David Lawrence Jr K-8 Center are located at the northwest and southwest corner of NE 151st Street near the entrance to Biscayne Bay Campus.

Although there are two entrance roads into the campus, only the northern road is operable. As a result, the vehicular entrance to the campus exists at US 1 (Biscayne Boulevard) located approximately three-quarters of a mile west of the campus. US 1 in this portion of the county is characterized by nearly continuous commercial development. Solé Mia, a 183-acre tract located on the western edge of Oleta Annex State Park, is currently proposed as a large retail center with residential uses. Other portions of the context area are characterized primarily by single family and multi-family residential development. Generally, the residential areas are organized on the grid street system typical of older areas of the county.

(3) ANALYSIS REQUIREMENTS. This element shall provide, at a minimum, the following analyses:

a) An analysis of the evolution of the development pattern of university buildings and open spaces.

MODESTO A. MAIDIQUE CAMPUS

The first increment of development at the Modesto A. Maidique Campus occurred in the period 1972-75, with the construction of five major buildings: Primera Casa (which has been renamed Charles Perry Building), Deuxieme Maison, Viertes Haus, the Green Library and the Graham Center. These structures were grouped in the south-central section of the campus property and formed a compact campus core with a central pedestrian courtyard called Foundation Court.

The construction of Viertes Haus to the north of Green Library established a northerly direction for future growth. The construction of Owa Ehan in the period 1976-85, followed by the construction of Chemistry and Physics and Engineering and Computer Science (now CASE Building) in the period 1986-93, created, and completed a second campus "quadrangle". Also, in the period 1976-85 student housing was constructed east of the academic core along the edge of the campus, as was Ocean Bank Convocation Center, located in the west central part of the campus, away from the existing academic buildings.

In 1992, the Ryder Business Administration was completed. Located between the previously constructed academic buildings to the east, and Ocean Bank Convocation Center to the west, this structure occupies the southern end of the formal vehicular entrance from SW 8th Street. This entrance established the “mall” as a new organizing element for the campus, apart from the "quadrangles" and courtyards established in earlier development.

From 1994 to 2000, development moved toward the southern and western edges of the campus. Three athletic facilities have been constructed, the Baseball Stadium, FIU Ricardo Silva Community Stadium and the Athletic Academics Fitness Center. Additional construction along the southern edge of the campus includes two residential facilities, Panther Residence Hall and University Towers. Wertheim Performing Arts Center was completed in 1996. This facility is located along the southern perimeter of the FIU campus adjacent to the Miami-Dade County Fair

and Exposition. Wertheim Performing Arts Center and the FIU Community Stadium each straddle the Modesto A. Maidique Campus's southern property line and are each joint–use facilities. The FIU Ricardo Silva Community Stadium is shared with Tamiami Park and Wertheim Performing Arts Center is shared with the Miami-Dade County Fair and Exposition.

From 2000 to 2010, there was several projects constructed that were located adjacent to the emerging Academic Health Science District. Those new buildings included the first two buildings of the Academic Health Science District: Academic Health Center #1 and #2.

Since the previous campus master plan update, between 2010 and 2015, several projects were completed at various locations on campus. This includes the completion of the School of International and Public Affairs building (2011), the PG5/Market Station parking garage at SW 109th Avenue (2011), and the improvements of the FIU Ricardo Silva Community Stadium (201?). To support the development of the Academic Health Sciences District, the Satellite Chiller Plant was completed in 2013.

During the last five years, there have been several buildings developed on campus, including the Academic Health Science District in the northeast corner of campus, which includes the construction of Academic Health Center #4 and #5.. The Student Academic Success Building (SASC) was completed east of the Graham Center in 2016. Parkview II housing with the East Loop Road Alignment and the School of International and Public Affairs (SIPA-2) are well into construction at this writing. The Engineering Building and the UniversityCity Prosperity Project with pedestrian bridge are in the design phase.

ENGINEERING CENTER

The Engineering Center is a former office, laboratory and manufacturing building built in 1980 by the Cordis Corporation. Additional parking was added to the east side of the main building in 2001. The Wall of Wind, located on the eastern portion of the campus, was developed in 2007.

As part of the continued partnership with Florida Power and Light Company (FPL), Engineering Center has a large-scale energy storage renewable resource system on campus. This includes a battery storage system in the north-east corner and solar panels that are built on top of the parking lot, all completed in 2016. The 1.4-megawatt solar array is comprised of more than 4,400 solar panels on canopy-like structures that provide clean electricity to FPL’s grid and shade for about 400 parking spaces.

BISCAYNE BAY CAMPUS

Biscayne Bay Campus retains a more compact physical form than the Modesto Maidique Campus. Development of the campus began in the late 1970's with construction of the Wolfe University Center, the Academic One and Academic Two buildings. Hospitality Management was an existing exhibition building on the property that was taken over by the University along with the campus site.

Unlike the first increment of development at the Modesto A. Maidique Campus, in which buildings were organized around a central circulation courtyard, the first buildings at Biscayne Bay Campus were organized around an internal circulation linkage concept. Consequently, the Wolfe University Center, Academic One and Academic Two buildings were built close to one another, and linked by covered walkways and pedestrian bridges, giving the complex the appearance of one large structure.

The Hubert Library and student housing built in subsequent years during the 1980’s broke the pattern of the closely spaced buildings of earlier phases and extended the campus development toward the north. Although the Library is separated from the other structures it is physically connected to them with a second level pedestrian walkway and a surface pedestrian plaza.

During the 1990’s, buildings constructed on campus included the Student Health and Wellness

Center (1995) and the Kovens Center (1996). Kovens Center is located well to the south of the other existing structures. This remote location allows room for future expansion of academic, research, or support facilities between the conference center and Academic Two. The Student Health and Wellness Center is located west of the Library. The Marine Sciences Building was constructed in 2004, south of the Wolfe University Center.

Since 2015, several buildings have been added to the campus to provide a different variety of amenities, including the RCCL Training Center, Bayview Housing, and a support Facility for the Frost Museum of Science. Aside from the small modular Ecotoxicology and Ecology lab facilities built between 1998 and 2018, the remainder of the buildings are currently subleased. The Bayview student housing, as the tallest building on the Biscayne Bay campus, is located to the southwest of the Marine Sciences building and north of the Kovens Center. The RCCL Training Center, a partnership with Royal Caribbean Cruise Lines, is located at the northern side of the campus, east of the physical plant facilities.

b) An identification of and assessment of the advantages and disadvantages of alternative spatial configurations by which future development on the campus may be organized. This analysis shall include consideration of methods to improve energy efficiency and alternatives for coordinating the pattern of buildings and spaces along the University/community boundary.

MODESTO A. MAIDIQUE CAMPUS

The siting of new facilities should continue to fulfill the historical FIU traditions of forming campus spaces and providing focal elements, such as the main entry to Rafael Diaz-Balart Hall, at the terminus of axes. Future campus growth consists of siting buildings along streets with an outward orientation to the host community as identified, Academic Health Sciences District Master Plan, and the previous Master Plan update. When utilizing this planning scheme, it will be important to overcome the perception that the building façade that faces the campus core is perceived as the back of the facility. This alternative building pattern is most effective near campus entrances or major intersections that provide an opportunity for redevelopment from the private sector to complement the university's efforts in creating a sense of place.

~~Another critical strategy for future growth involves placing buildings on existing surface parking lots. This strategy has begun to be utilized at Modesto Maidique Campus during previous planning periods and with the implementation of the current Parkview Housing project. Parking garages though not as economical as surface parking, are necessary on campuses with a scarcity of developable land. This transition strategy encourages density, creating shorter more pedestrian friendly connections between facilities and preservation of critical open space.~~

~~An additional pattern of campus planning at the Modesto A. Maidique Campus consists of orienting structures along interior vehicular roadways. This planning concept was used effectively at the Education Building and School of Architecture through the use of building entries and facades with fenestration. This strategy of design expands the campus core outward to the Campus Greenbelt. An important element in the success of this concept will require that building exposures oriented toward roadways have a consistency of design that addresses the street. This will slow vehicular traffic and add needed "eyes on the street" resulting in an enhanced the pedestrian experience critical in creating a comfortable campus environment. The architectural edges of such buildings oriented to the campus core will begin to define new quads that surround open spaces. This planning alternative is quite effective when used in conjunction with the construction of perimeter parking garages to define the space and activate the streetscape.~~

~~Another creative concept for future campus organization proposes mixed uses for future buildings. This concept has been utilized in the PG1/Gold Parking Garage, which has office space on the first floor and the PG5/Market Station Garage which incorporates ground floor retail uses. The Parkview Housing development incorporates this approach with ground floor multi-purpose~~

~~rooms with residential above.~~

~~While many of the new buildings and subsequent open spaces have contributed positively to the campus, in many cases design decisions differ from the existing master plan and guidelines, potentially impacting future development patterns. As identified in the E.A.R. findings and subsequent Urban Design/Architectural/Landscape focus group meetings, a need for a clear and transparent design review process that utilizes the master plan and design elements as the foundation for future projects is needed. This process will ensure that future projects adhere to the master plan or if variations from the master plan must be made, there is a forum to discuss those challenges.~~

ENGINEERING CENTER

Due to its small site and surrounding urban context, it will be important to develop an academic campus with open spaces and a sense of either separation from its surroundings or integrating with the surrounding community. Enhanced separation from the surrounding context could be obtained at campus edges through the use of attractive landscaping and decorative fencing. ~~Along the southern border of the campus, South Flagler Street, either preserving the existing open space as a community amenity or the placement of buildings close to the street in a more urban condition are two appropriate approaches. While one concept presents a sense of a traditional college campus with large open spaces the other integrates the campus visually and functionally to the community. The preservation of open space…~~

BISCAYNE BAY CAMPUS

One of the primary issues that should be considered in campus growth is ensuring that orientation of planned facilities maximize views to Biscayne Bay, an unequaled amenity. A significant campus entrance that directs the visual focal point to the bay rather than toward the buildings should be developed. Additional axes and focal points on campus should direct and preserve view corridors to the bay. Vehicular circulation and parking areas should be reconfigured to provide direct and distinct connections to the academic, convention and residential districts and ultimately to the bay.

Future facilities should be planned in a manner to maximize the integration of campus activities with Biscayne Bay. The existing campus is detached from its surrounding uses requiring students and faculty to leave the campus for non- academic activities. New student services and residential buildings should be integrated and located within close proximity of the academic core creating a more viable walking district. The services should include more traditional retail and restaurant opportunities to allow students to stay on-campus and create a more truly sustainable campus while developing an activity node.

c) An identification and assessment of alternative future activity location and linkage concepts for the campus and the context area.

MODESTO A. MAIDIQUE CAMPUS

As discussed in this element and in the previous campus master plan update, the majority of the Modesto A. Maidique Campus has been developed. Physical expansion will continue outward and upward from the present campus core, as well as with future renovations and additions. The University will need to continue its facility expansion through consolidation and densification to increase efficiency within the developable area. Due to the scarcity of available land for expansion on campus, it will be imperative to wisely use the remaining land, maintaining a balance between development and open space. This will require an increase in density and increase in structured parking or alternative transportation options.

It is important that the Modesto A. Maidique Campus foster its relationship with its host community. To maximize the remaining resources of the campus it may be necessary to pursue

partnering opportunities within the context area for certain university functions. Consideration should be given to how the Modesto A. Maidique Campus can influence the planning of physical spaces around the host community and encourage more public/private partnerships. The Academic Health Sciences District with the new addition of the Engineering Building and the future pedestrian bridge across SW 8th Street connecting to UniversityCity will create bold visibility and sense of place to northern and eastern edge of the campus and a welcoming edge to the community, breaking down some of the perceived barriers between the campus and the hosting community.

~~Difficult site conditions such as those that face the Modesto A. Maidique Campus often require creative solutions. One potential strategy to pursue within the host community includes access to off-campus housing. This might include the possibility of off-campus housing in the City of Sweetwater. However, this and other interaction within the context area requires improved linkage to furnish safe and dependable transportation across the physical vehicular boundaries that surround the campus on three sides.~~

ENGINEERING CENTER

Developing the campus as a part of the community is vital in improving the perception of the campus. The existing configuration and character of the campus isolates it from the surrounding context. Pedestrian linkage to the surrounding commercial corridors is difficult and access to the campus is vehicular oriented. Due to its smaller footprint and to create a viable and attractive campus for future student and faculty, the campus must develop a sense of a traditional campus through enhanced open space and new buildings, but it must also engage the local community. The campus is not large enough to be "self-sufficient". Utilizing the surrounding resources, improving the aesthetic edge conditions and providing pedestrian access to the surrounding businesses and public park will help create a sense of place within the community. Public – private partnerships that bring services to the campus that not only serve the University staff and students as well as the community should be considered. Consideration of developing along the edges of the campus should be considered. While the preservation of open space is often a critical element in urban locations, creating a connection to the Sweetwater community will create a vibrant activity node where the University and community engage. While it could be enhanced to create better connections, the existing open space (and extensive surface parking areas) creates a barrier between the host community and the campus.

BISCAYNE BAY CAMPUS

Due to the isolated location of the Biscayne Bay Campus, continuing to improve the perception of the University within the host community is a necessity in “bridging” the gap between the community and the campus. Although significantly separated in distance and adjacent to natural resources, improved physical connections to the community should be considered. The campus offers a connection to the Bay. Enhancing the pedestrian walkways and bike paths from the host community to the campus and access to the bay would increase connectivity and provide a special amenity to the community. The development of the campus as a sustainable campus, with minimized building footprints, restored Mangrove vegetation stands and preserved open space should be highlighted. The natural resources of the campus should be leveraged as a teaching mechanism unique to the campus.