



Adopted April 20, 2021

**JUPITER CAMPUS
MASTER PLAN UPDATE**

2019

acknowledgements

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executive summary

PRINCIPLES, PROGRAM, PLACE

“A Strategic Plan for the Race to Excellence” is a bold institutional vision that inspired this plan for the future of the campus. The 2019 Campus Master Plan will provide direction for physical improvements to help realize the vision of the strategic plan.

The 2019 Campus Master Plan is the result of an 18-month collaborative process with the campus community and the University’s host community. The principles, program, and place-making strategies outlined in the plan represent an intentional synthesis of interrelated ideas and goals in order to begin the process of physically embodying the goals of the University’s strategic plan. The Campus Master Plan is a roadmap for future growth, while allowing flexibility in its implementation. The plan is based on a framework that guides the recommendations laid out in this document.

Data collection and research for the Master Plan commenced in the spring of 2018. Over the following year, the planning team developed multiple iterations of analysis and options informed by input from the Executive Committee and broader university community. The Board of Trustees gave final approval on March 26th, 2019.

strategic plan

The Campus Master Plan seeks to support FAU's aspiration and goals laid out in "A Strategic Plan for the Race to Excellence 2015-2025".

THE ASPIRATION

Florida Atlantic will pursue, with unbridled ambition, the intention of becoming the country's fastest-improving public research university.

The institution developed this plan to attract many collaborators for the mutual benefit of Florida Atlantic and its external constituents. The plan captures the direction that the University can follow to nationally differentiate itself.

- We will recruit and retain the highest talent in faculty, staff and students.
- Our programs will develop in focal areas, known as *Pillars and Platforms*.
- We will concentrate on very strategic capital facilities projects.
- The organizational efficiency of the university will be greatly enhanced.
- Most importantly we will "budget to the plan" not "plan to the budget."



goals

1

BOLDNESS

A uniquely competitive and globalized student body

Build a geographically—diverse population of students who excel in focused academic areas and engage in enriching activities that drive them to timely graduation and successful futures.

2

SYNERGY

Prominent teams of researchers and scholars

Invest in focused pillars and platforms—connecting the most talented faculty, staff and students to expand on the robust culture of nationally respected research and inquiry.

3

PLACE

Deep engagement with South Florida's global communities

Partner with a diverse set of local stakeholders and enhance the physical spaces to build upon the unique cultural, demographic and environmental characteristics of each campus community—striving for leadership in developing the South Florida culture and economy.

4

QUALITY

Continuously-assessed and evolving best practices

Design a resilient, lean organization—based on best logistical practices—that identifies economies of scale and incorporates new technologies to promote institutional development.

5

BRAND

National reputation for excellence

Communicate the incredible stories of the University to an increasingly eGlobal audience, so that key internal stakeholders can link with external consistency groups.

6

STRATEGY

Wise and innovative allocation of resources

"Budget to the plan" and pursue new revenue streams in order to make FAU self-reliant and thriving in the midst of competitive public and private funding opportunities.

process overview

The planning team led over fifty meetings and on-campus workshops to gather input on FAU's current status and future needs. The workshops included sessions with campus committees, focus groups, leadership, faculty, and staff. This input was combined with site analysis, observation of existing conditions and facilities, input from the Facilities Staff regarding existing utilities and infrastructure, and a macro level space needs analysis.

The Space Needs Analysis Summary can be found in Appendix A of this document. In order to support 2028 enrollment growth goals, the analysis identified an additional need of approximately 240,000 assignable square feet, with the greatest future needs in Residential Life (71,000 ASF), Office/Computer (60,000 ASF), Student Life (27,000 ASF) and Teaching Lab (21,000 ASF) space. The need for Residential Life space is required to enable the growth to 600 on-campus residential students; double the existing residential population.

Early in the process, the planning team worked closely with the FAU Executive Committee to develop a list of guiding principles for the master plan in support of FAU's strategic goals. These planning principles are outlined on the right.



Campus Open Forums and Input Sessions

master plan principles

PROMOTE ACADEMIC EXCELLENCE

- Design for 21st century learning environments to enhance engagement
- Provide more meeting/study spaces to promote peer to peer and faculty to student interaction
- Site flexible interdisciplinary spaces to promote collaborative inquiry

ENHANCE THE LIVING/LEARNING ENVIRONMENT

- Create a more residential character for Boca Raton and Jupiter Campuses
- Expand facilities and services to enhance student life and embrace diversity
- Enhance the open space network for activities to invigorate campus life

EXPAND RESEARCH CAPABILITIES

- Focus on the Four Pillars: Healthy Aging, Neuroscience, Ocean Science and Engineering / Environmental Sciences, Sensing and Smart Systems
- Capitalize on synergistic opportunities for interdisciplinary collaboration

PROMOTE ATHLETICS EXCELLENCE + WELLNESS

- Increase competitiveness in Directors Cup to enhance FAU pride and identity
- Expand recreational facilities to promote holistic growth
- Enhance community engagement on campus through the fan experience and recreational opportunities

LEVERAGE CAMPUS LOCATIONS + PARTNERSHIP OPPORTUNITIES

- Promote synergistic partnerships within Boca Raton, Abacoa/Jupiter, and the South Florida region
- Maximize research partnerships to drive innovation and spur economic development
- Develop mixed-use opportunities on campus to create a cultural destination for the host communities

PROMOTE HIGH PERFORMING CAMPUS SYSTEMS

- Focus on sustainable solutions to enhance natural systems and long term ROI in built systems
- Make the most of existing resources: efficient and effective utilization of space
- Promote flexibility and technology in campus spaces to maximize investment and usability

key recommendations

The campus master plan provides a comprehensive vision to meet long-term goals for the growth of the Jupiter campus. While a master plan typically provides for the needs of a campus within a ten-year horizon, the Campus Framework Diagram (Figure 0.1) provides broad guidelines for the campus to guide development and growth beyond the specific program needs identified. In the case of the Jupiter campus, much of the land use strategy simply completes the diagram from the original campus master plan. Key recommendations include:

- » Programmatic infills organized around reinforced north-south and east-west pedestrian circulation paths and nodes. Properly situated new facilities will help stitch the overall campus together while addressing space needs to support enrollment growth.
- » The plan provides for research space accommodations on campus property and also recognizes the potential to leverage research partnerships with the adjacent Max Planck and Scripps Institutes. Additionally, the plan sites the new Florida Atlantic University Planck Academy.
- » A new Science, Technology, Engineering, and Mathematics (STEM) facility in the southeast area of campus to support partnership and research opportunities with the Scripps Institute and Max Planck.
- » Growth in on-campus housing accommodations to strengthen the residential campus environment. The plan locates new housing adjacent to existing residential communities and close to complementary student life amenities such as dining and other support spaces.
- » A new parking structure on the north side of the campus as a partnership opportunity to maximize open space, valuable building sites, and to enhance the pedestrian experience in the walkable core campus.
- » Preserves and enhances natural systems and open space areas as primary components of the campus.



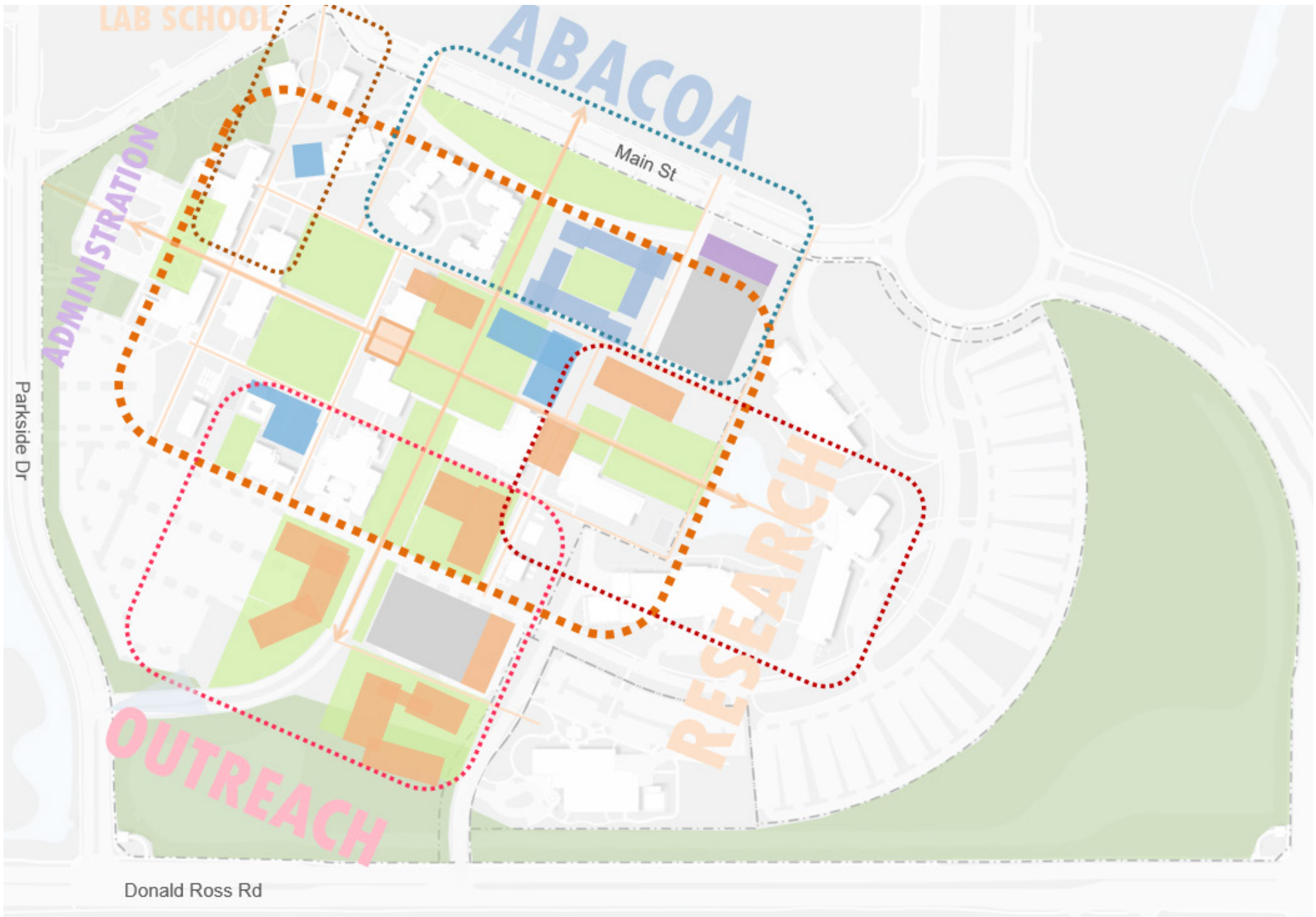


Figure 0.1: Campus Framework Diagram

priority projects

5 year horizon

- Ⓐ Residence Hall Phase II
- Ⓑ Wellness Center & Outdoor Recreation Upgrades
- Ⓒ Neurology Research & Clinic
- Ⓓ Parking Deck 1 & Office / Retail
- Ⓔ Lifelong Learning Addition



- New Construction
- Previous Phase Project
- Existing Building

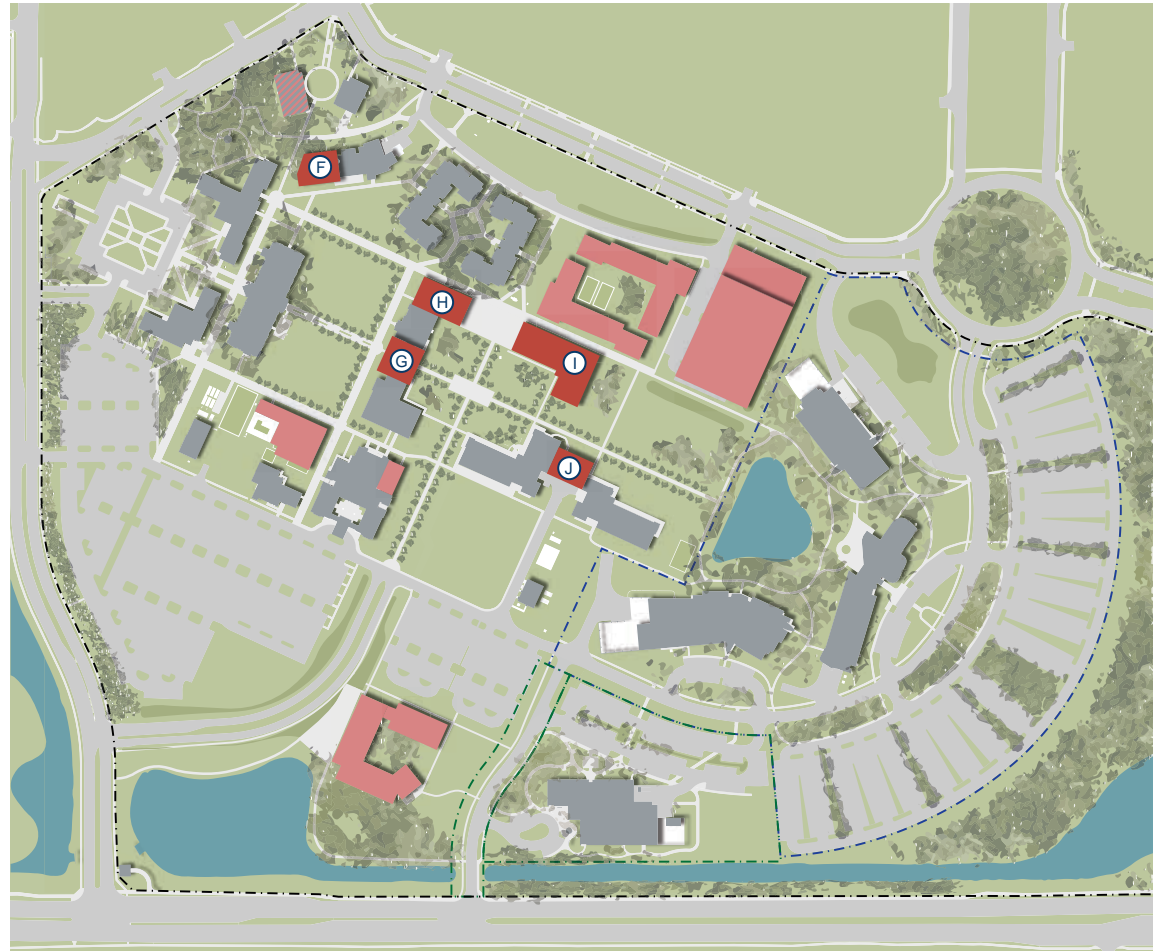


Priority Projects Plan Diagram, Not to Scale

near-term projects

10 year horizon

- ⓕ Expanded Dining
- ⓐ Study / Library / Atrium
- ⓗ Academic / Office / Auditorium
- ⓓ Student Center
- ⓙ Academic Collaboration Space



- New Construction
- Previous Phase Project
- Existing Building

Near-Term Projects Plan Diagram, Not to Scale

long-term projects

beyond 10 year planning horizon

- i Future Academic Growth
- ii Outreach / Research / Clinic
- iii Parking Deck



- New Construction
- Previous Phase Project
- Existing Building

Long-Term Projects Plan Diagram, Not to Scale



Master Plan Concept Aerial Rendering

- | | | |
|---|------------------------------------|-----------------------------------|
| (A) Residence Hall Phase II | (F) Expanded Dining | (i) Future Academic Growth |
| (B) Wellness Center & Outdoor Recreation Upgrades | (G) Study / Library / Atrium | (ii) Outreach / Research / Clinic |
| (C) Neurology Research & Clinic | (H) Academic / Office / Auditorium | (iii) Parking Deck |
| (D) Parking Deck 1 & Office / Retail | (I) Student Center | |
| (E) Lifelong Learning Addition | (J) Academic Collaboration Space | |



MASTER PLAN ELEMENTS

This master plan consists of 18 Elements, as outlined in the State Guidelines for the Campus Master Plan System. These Elements include Goals, Objectives, and Policies for their respective subject.

mission statement

Florida Atlantic University is a public research university with multiple campuses along the southeast Florida coast serving a uniquely diverse community. It promotes academic and personal development, discovery, and lifelong learning. FAU fulfills its mission through excellence and innovation in teaching, outstanding research and creative activities, public engagement and distinctive scientific and cultural alliances, all within an environment that fosters inclusiveness.

vision statement

Florida Atlantic University aspires to be recognized as a university of first choice for excellent and accessible undergraduate and graduate education, distinguished for the quality of its programs across multiple campuses, emulated for its collaborations with regional partners, and internationally acclaimed for its contributions to creativity and research.



fau values

Florida Atlantic University values an academic environment that facilitates intellectual growth through open and honest expression. The University is committed to excellence at all levels of the educational and creative experience, to success for all students, and to development of the capacity to make reasoned and discriminating judgments with respect for differences and diversity in ideas. The University values lifelong learning because it encourages the continual use of the mind. The University values the vital role it plays in the life of the surrounding community, in society, and as an engine for economic development. More specifically, the University is committed to:

- Preparing students to fulfill productive destinies in the workplace and in society;
- Promoting academic freedom and an atmosphere of free and open inquiry;
- Recognizing and rewarding superior performance, innovation and creativity in all facets of University activity;
- Supporting all those who rely on the University, such as families, employers of students and graduates, and community partners;
- Accounting for the sound use and careful stewardship of its resources, ensuring responsibility for its mission;
- Providing equal access and equal rights and justice for all persons and encouraging mutual regard for the rights and liberties of all persons;
- Respecting all persons and displaying civility in all interactions;
- Providing a secure environment for the pursuit of learning;
- Fostering community service and social responsibility;
- Promoting honesty in all spheres, social and moral development, and ethical standards in all areas of human activity; and
- Assuring clear and open communication and sharing of information.
- Assuring clear and open communication and sharing of information.

academic program

The University's Accountability Plan establishes institutional goals for the future and is regularly updated to reflect the University's progress and trajectory. This master plan update has been developed using the goals established in the University's 2018 Accountability Plan. The current Accountability Plan can be found at the Office of the Provost webpage at: <http://fau.edu/provost>

The data contained in Table 2.1 represents the enrollment projections for Fall 2018-2021 approved in FAU's 2018 Accountability plan. The projections for Fall 2022-2028 use the growth percentages approved in the 2018 Accountability Plan, except for a more modest growth rate of undergraduate transfer students after 2021. The University routinely updates its enrollment projections; please refer to the University website for the most current projections.



Table 2.1 10 Year Projection of Headcount Enrollment 2018-2028

	FALL 2017 ACTUAL	FALL 2018 PLAN	FALL 2019 PLAN	FALL 2020 PLAN	FALL 2021 PLAN	FALL 2022 PLAN	FALL 2023 PLAN	FALL 2024 PLAN	FALL 2025 PLAN	FALL 2026 PLAN	FALL 2027 PLAN	FALL 2028 PLAN
Undergraduate	23,766	24,257	25,563	26,092	26,636	27,402	27,402	27,795	28,193	28,597	29,008	29,426
Graduate	4,901	4,950	5,000	5,050	5,100	5,151	5,203	5,255	5,307	5,360	5,414	5,468
Unclassified	1,644	1,660	1,706	1,751	1,768	1,786	1,804	1,822	1,840	1,858	1,877	1,896
Total	30,311	30,867	32,269	32,893	33,504	34,339	34,409	34,872	35,340	35,815	36,299	36,790
% growth over previous year		101.83%	104.54%	101.93%	101.86%	102.49%	100.20%	101.35%	101.34%	101.34%	101.35%	101.35%
Jupiter Campus	720	820	933	1,063	1,210	1,377	1,568	1,785	2,033	2,314	2,635	3,000

3 urban design

“... enhance the physical spaces to build upon the unique cultural, demographic and environmental characteristics of each campus community ...”

*From: A Strategic Plan for the Race to Excellence 2015-2025
Goal #3 Place*

The 2019 FAU John D. MacArthur Campus Master Plan Update creates recommendations for growth that builds on the civic framework of the existing campus. It provides a road map for physically implementing FAU's Strategic Plan. The Urban Design Element establishes conceptual principles for the organization of future development, including buildings and open spaces on the Jupiter campus.

The Element is structured around four main goals:

1. Strengthen Campus Districts
2. Enhance and clarify the overall Campus Framework
3. Implement Sustainable Growth Strategies
4. Maintain Community Coordination of Proposed Projects

GOAL 1: Strengthen Campus Districts

Campus Districts are described by the intended primary use and do not have strict boundaries. Services such as parking, utilities and other needs are contained in each use zone. Some overlap of program or functional use may occur between or within districts and serves to both maximize efficient use of facilities and enrich the campus experience through multi-use opportunities. Clear connections between use zones should be maintained or created.

Objective 1A: Enhance and Expand the Civic Framework of the Campus Core

- **Policy 1A-1:** Create a series of usable outdoor spaces framed by academic and support buildings to accommodate compact, connected, and coherent growth.
- **Policy 1A-2:** Create and enhance usable outdoor areas immediately adjacent to building entries and between buildings.
- **Policy 1A-3:** Utilize infill sites for future academic facilities to increase campus density and create logical connections between buildings and spaces.

- **Policy 1A-4:** Enhance the entry plaza west of the administration/classroom and Honors College buildings as the historic campus gateway.
- **Policy 1A-5:** Create an institutional presence at the corner of University Boulevard and Main Street for the FAU Max Planck Academy through signage, prominent entry, and landscape.
- **Policy 1A-6:** Expand dining and outdoor plaza to enhance as a primary social gathering space on campus.
- **Policy 1A-7:** Build a new student recreation and wellness facility, creating a strong presence south of the recreation fields.
- **Policy 1A-8:** Build a new student center anchoring the northeast corner of the new Central Green and adjacent to the Student Village.

Objective 1B: Expand and Enhance the Student Village and Main Street District

- **Policy 1B-1:** Expand residences to house students in a centralized district at the edge of the campus core.
- **Policy 1B-2:** Create new courtyards and enhance existing greenspace to encourage outdoor passive recreation and socializing.
- **Policy 1B-3:** Enhance the housing district's frontage along the landscape buffer at Main Street with an event lawn, shade, seating, and connected sidewalks.
- **Policy 1B-4:** Front the event lawn at the ground level with public space for the residences or with institutional support space.
- **Policy 1B-5:** Construct new parking deck with ground floor retail to promote a continuous walkable streetscape.

Objective 1C: Expand and Enhance the Outreach District

- **Policy 1C-1:** Create a mixed-use district including academic, research, and clinical uses. Use Lifelong Learning as a learning hub for the district.
- **Policy 1C-2:** Add new parking structure on the northwest corner of Scripps Way and Max Planck Way to accommodate growth on the south side of campus.
- **Policy 1C-3:** Enhance the primary campus gateway entry drive from Parkside Drive and terminate in a new campus green space with views to the Central Green.
- **Policy 1C-4:** Utilize Max Planck Way as a primary campus gateway and connect to Scripps Way.

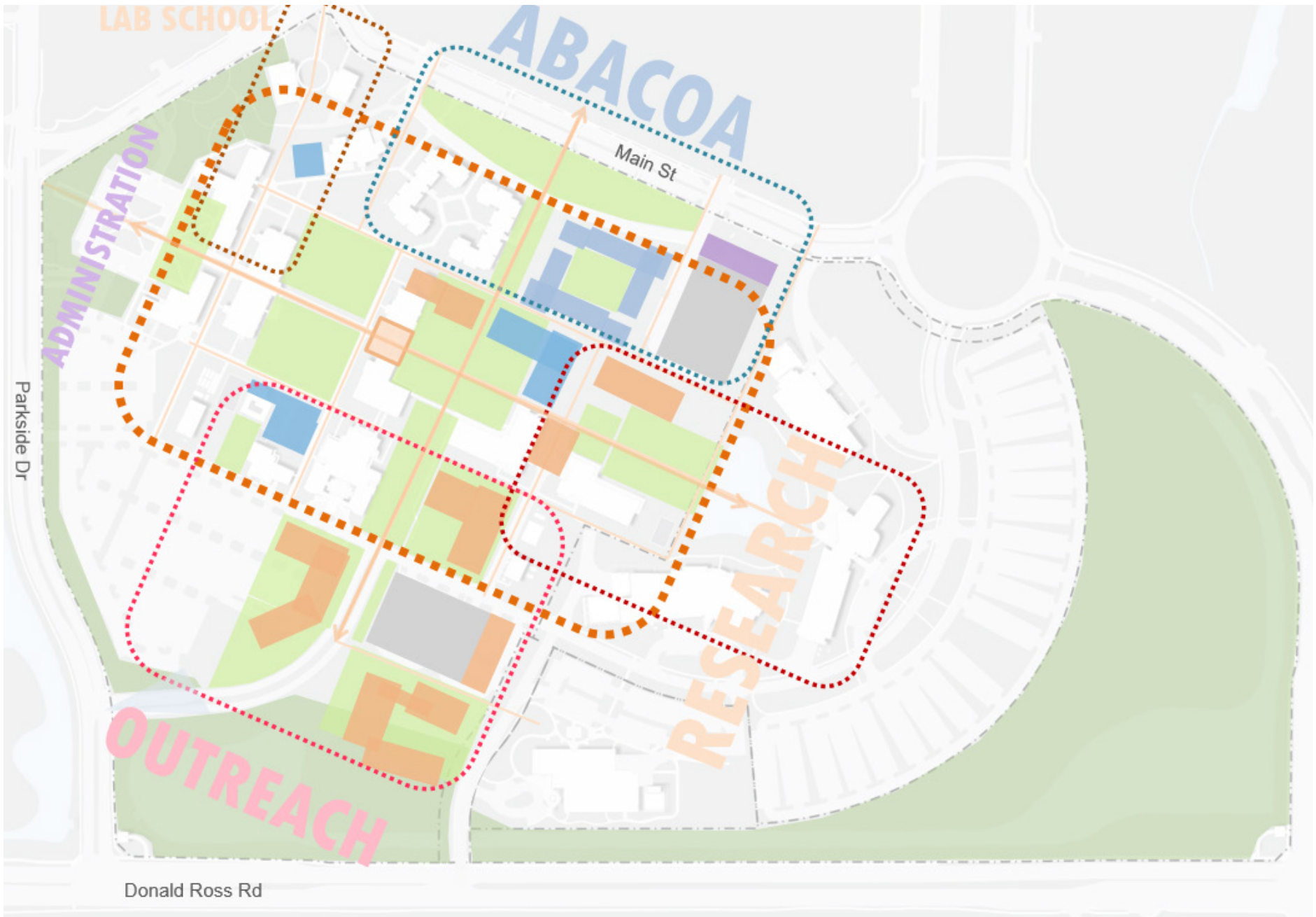


Figure 3.1 Campus Zones

urban design

- **Policy 1C-5:** Utilize signage and/or banners at the landscape buffer along Donald Ross Road to enhance FAU identity.

Objective 1D: Leverage Partnership Opportunities with the Research District and the Abacoa Development

- **Policy 1D-1:** Work with Research District partners to explore academic, research, and clinic locations and other entrepreneurial ventures.
- **Policy 1D-2:** Create a new academic quad west to the Scripps lake to connect the academic campus and the research institute.
- **Policy 1D-3:** Explore opportunities to share resources with the Abacoa Development such as parking and open space.

GOAL 2: Enhance and Clarify the Overall Campus Framework

Objective 2A: Structure growth around primary east-west and north-south axes

- **Policy 2A-1:** Create continuous pedestrian paths, formalized green spaces, and framed views connecting the historic campus entry at the west with Scripps Institute on the east and from the current main campus entry northward to Downtown Abacoa.
- **Policy 2A-2:** Create the Central Green as the core campus hub to accommodate campus scale events.

Objective 2B: Maintain and Enhance the Functional Linkages and Quality of the Campus

- **Policy 2B-1:** Extend the pedestrian systems within the core campus, to serve pedestrians better. The University shall add extensions to the pedestrian-way system as needed that encourage walking and provide the armature for future campus facilities and infrastructure.
- **Policy 2B-2:** Extend secondary east-west pedestrian pathways:
 - from Wilkes Honors College (MC0) to the northern Scripps building
 - from the MacArthur Administration/Classroom Building (MC02) to the south Scripps building

Objective 2C: Protect and enhance campus open spaces.

- **Policy 2C-1:** For all existing courtyards/green spaces, allocate a portion of each facility construction budget to fund enhancements to the courtyard or to fund completion of the courtyard.

- **Policy 2C-2:** For new courtyards/green spaces, develop courtyards prior to or simultaneous with the construction of the first facility adjacent to that courtyard.

- **Policy 2C-3:** New green spaces will vary to meet the needs of facility programs but will relate physically to the campus pedestrian-way system, provide a variety of spatial experiences, and be of a humanistic scale.

- **Policy 2C-4:** Courtyards will be physically well-defined by future facilities.

- **Policy 2C-5:** Maintain the landscape buffer surrounding campus on the west, south, and east edges. Promote a connected trail system.

Objective 2D: Organize Service network in a functional and unobtrusive manner

- **Policy 2D-1:** Organize service and loading functions away from the core campus visual, vehicular, and pedestrian axes.

- **Policy 2D-2:** Place service and loading functions and facilities in enclosures so that they are screened from view.

GOAL 3: Implement Sustainable Growth strategies

Objective 3A: Utilize urban design best practices to prevent campus sprawl.

- **Policy 3A-1:** Site new facilities on infill sites to promote a compact campus.

- **Policy 3A-2:** Implement traffic demand management strategies to reduce the number of new parking spaces needed.

Objective 3B: Support the development of energy-efficient facilities.

- **Policy 3B-1:** Design facilities to meet or exceed current state energy design guidelines and to site facilities, utilize materials, shading devices, and landscaping to improve energy efficiency.

- **Policy 3B-2:** Utilize passive energy conservation techniques, such as the planting of shade trees, shade structures, and the solar orientation of buildings and windows.

GOAL 4: Implement systems for regular community coordination



Objective 4A: Work together with the host town to continue/develop compatible land uses in the context area of the campus. See also Element 12, Intergovernmental Coordination.

- **Policy 4A-1:** Along campus borders, develop land use guidelines, aesthetic controls, and signage decisions together with the host town. The Vice President of Administrative Affairs or delegate will meet with town representatives to review existing controls and establish new ones if appropriate.
- **Policy 4A-2:** Through the mechanisms of the development agreement, the University will work with the Town of Jupiter to develop the appropriate scale and density within the context area. The Vice President of Administrative Affairs or delegate will meet with town representatives to review existing controls and establish new ones if appropriate.
- **Policy 4A-3:** Through the mechanisms of the development agreement, the University will work with the host community to ensure that buildings adjacent to the context area will be compatible in scale and mass to University development. The Vice President of Administrative Affairs or delegate will meet with town representatives to review existing controls and establish new ones if appropriate.
- **Policy 4A-4:** The University shall work closely with the Town of Jupiter to coordinate the integration of bike paths, walkways, transit, and other linkages to the community into the Town's plans for similar facilities.

4 future land use

Land use guidelines establish and maintain land use patterns for the long-range development of the campus to maximize program efficiencies and synergistic relationships while allowing for future growth.

GOAL 1: To establish and follow land use patterns for the long-range development of the campus.

Objective 1A: Establish core campus infill development land use to promote functional adjacencies and a pedestrian oriented environment.

- **Policy 1A-1:** Concentrate academic, first and second year student housing, and support facility development within the existing core campus. Increased density will strengthen the campus' "sense of place" and provide a more connected pedestrian environment.
- **Policy 1A-2:** Expand and enhance a well-defined open space framework to complement land use functions, strengthen campus connections, and provide usable outdoor spaces that activate a rich campus experience.

Objective 1B: Reinforce the urban streetscape development pattern along Main Street with new development fronting the street.

- **Policy 1B-1:** Create mixed-use opportunities along the south side of Main Street encompassing housing above FAU institutional support functions and/or administrative offices.
- **Policy 1B-2:** Develop streetscape enhancements to support a pedestrian oriented environment with outdoor amenities.

Objective 1C: Enhance and expand the landscape buffer along the Parkside Drive and Donald Ross Road campus edges.

- **Policy 1-C1:** Create landscaped gateway features at each campus entry.

Objective 1D: Define and enhance Academic land use on campus.

- **Policy 1-D1:** Continue to augment and create academic zones to foster interdisciplinary and research collaboration such as at the Max Planck Way campus entry west of the Max Planck institute.

- **Policy 1D-2:** Extend Academic land use eastward along the roughly east-west axis formed between the Student Resources & Classroom Building (MC03) and Scripps Florida Building.
- **Policy 1D-3:** Utilize infill sites within the Academic Core for new facilities when possible to promote program adjacencies and to support appropriate density suitable for a pedestrian environment.
- **Policy 1D-4:** Site new Academic facilities and spaces to enhance and expand the open space network to create clear connections and aid in campus orientation.

Objective 1E: Define and enhance campus Support land use.

- **Policy 1E-1:** Continue to locate Student Life programs within the core campus. As future academic uses expand eastward, additional support functions will be needed.
- **Policy 1E-2:** Campus Service facilities should be located at the perimeter of the campus.

Objective 1F: Define and enhance Residential land use on campus.

- **Policy 1F-1:** Consolidate Housing to create a housing village along the Main Street frontage.
- **Policy 1F-2:** Enhance outdoor spaces in all housing locations to promote outdoor activities and community building.

Objective 1G: Define and expand Recreation and Open Space land use on campus.

- **Policy 1G-1:** Continue to enhance and expand student recreation facilities south of recently renovated field space in the heart of campus.
- **Policy 1G-2:** Locate additional recreation facilities throughout campus, including near residential facilities, where appropriate.
- **Policy 1G-3:** Expand and enhance campus open space along both the east-west and north-south campus axes. Optimize green space design for active and passive recreation.
- **Policy 1G-4:** Create a continuous recreation trail around the perimeter of campus.
- **Policy 1G-5:** Create outdoor classrooms.



Figure 4.1 Future Land Use

future land use

Objective 1H: Ensure the availability of suitable land on-campus for future Utilities needs.

- **Policy 1H-1:** Current major utility locations to remain in place.

Objective 1I: Expand Parking capacity to accommodate future growth and clarify campus Road network.

- **Policy 1I-1:** Utilize parking demand reduction strategies to minimize the number of new spaces constructed.
- **Policy 1I-2:** As campus growth occurs, much of it will displace existing surface parking lots. Utilize structured parking to accommodate new demand and conserve land resources.
- **Policy 1I-3:** Continue to site parking at the core campus perimeter to reduce traffic flow on campus and to promote a pedestrian oriented campus core.
- **Policy 1I-4:** Connect Max Planck Way to Scripps Way to clarify the campus road network and provide a more functional gateway from Donald Ross Road.

Objective 1J: Preserve and enhance Conservation land use on campus.

- **Policy 1J-1:** Create and manage habitat zones that provide a proper environment for on-campus native plants and animal species at risk, consistent with policies outlined in Element 13, Conservation.
- **Policy 1J-2:** The University shall adopt and adhere to policies regarding environmental management outlined in Element 13, Conservation, and shall require adherence to these standards by all parties performing design and construction of facilities on University property.
- **Policy 1J-3:** Preserve and demarcate the campus arboretum.

Objective 1K: Define and enhance Research land use on campus.

- **Policy 1K-1:** Co-locate research spaces to promote interdisciplinary collaboration.
- **Policy 1J-2:** Pursue partnerships to grow the FAU research enterprise in the south and east portions of the MacArthur Campus.
- **Policy 1J-3:** House low intensity research space in underutilized academic or office space.



GOAL 2: To maintain, manage, and review land use plan intent and guidelines.

Objective 2A: Encourage careful use of the University's existing land resources and minimize deviations from the land use plan.

- **Policy 2A-1:** The President and Executive Committee shall annually coordinate land use and development decisions with the current schedule of capital improvements.
- **Policy 2A-2:** Continue development of facilities on the current FAU Jupiter campus. No additional property is required during this planning period.
- **Policy 2A-3:** Locate unforeseen facilities according to schematic sites and zones as delineated on the Future Land Use graphic, Figure 4.1.

Objective 2B: Coordinate future land uses with the availability of facilities and services.

- **Policy 2B-1:** The Vice President of Administrative Affairs will coordinate future land uses with the availability of facilities and services to ensure that utilities and infrastructure will be provided at adopted levels of service prior to occupancy. The Department of Engineering and Utilities shall review and evaluate all future construction projects to ensure that adequate provisions for infrastructure and utilities have been incorporated into the design by documenting:
 - o The provision and maintenance of necessary utility easements, corridors, and points of connection;
 - o The provision of adequate supply lines to accommodate future development and facility expansion; and
 - o The provision of open space and convenient and safe traffic flow and parking at established levels of service.
- **Policy 2B-2:** The University will continually monitor the adequacy of stormwater management facilities and policies, open space, and the safety and convenience of on-campus traffic flow to maintain adopted levels of service. Amendments to the adopted plan will be pursued, if necessary, to implement required changes.
- **Policy 2B-3:** Provisions for stormwater management, open space, and safe and convenient on-campus traffic flow, considering needed vehicle parking, are included in the development density guidelines and should be provided at the adopted level of service as part of each facility development. Refer to Element 9 for related stormwater policies, to Element 3 and Element 8 for open space policies, and to Element 11 for parking related policies.

Objective 2C: Protect any identified historic and archeological resources on campus from the adverse impacts of development.

- **Policy 2C-1:** The University shall maintain an inventory and evaluation of all archaeological and historic properties under University ownership.
- **Policy 2C-1:** The University shall consult and coordinate with the Florida Division of Historical Resources and the Town of Jupiter Historic Resources Board prior to any land clearing, ground disturbing, or rehabilitation activities which may disturb or otherwise affect any property with historic or archeological significance.

Objective 2D: Protect natural resources on campus from the adverse impacts of development.

- **Policy 2D-1:** The University shall require the integration of natural features in project designs to develop University property in harmony with its natural environment.
- **Policy 2D-2:** The Director of Facilities Planning will coordinate future land uses and the design of all future construction projects with appropriate topography and soil conditions in continuation of BOT standard practices.
- **Policy 2D-3:** The Vice President of Administrative Affairs or delegate shall review all future construction projects for consistency with existing topographic and soil data. As part of the design process for any programmed improvement and prior to approval and acceptance of the design by the University, FAU shall require that geotechnical testing be conducted to determine relevant soil characteristics of the site and to ensure that the design(s) reflect consideration of these conditions.
- **Policy 2D-4:** The University shall maintain a database of existing topographic and soil conditions, which will be updated with as-built and survey data developed for future construction projects.
- **Policy 2D-5:** The University shall ensure that appropriate methods of controlling erosion and sedimentation be used during site development and use. Such methods shall include, but not be limited to:
 - o Phasing and limiting the removal of vegetation
 - o Minimizing the amount of land area that is cleared
 - o Limiting the amount of time bare land is exposed to rainfall
 - o Use of temporary ground cover on cleared areas if construction is not imminent
 - o Special consideration shall be given to maintaining vegetative cover on areas of high soil erosion potential (i.e. steep or long slopes, stormwater conveyances).

GOAL 3: To coordinate University land use patterns with the host community and other local entities for the mutual benefit of the institution and broader community.

Objective 3A: Eliminate land use compatibility problems and constraints between the University and the host community.

- **Policy 3A-1:** Coordinate on-campus development and development within the campus context area as outlined in Element 12, Intergovernmental Coordination.

5 academic facilities

GOAL 1: It is the goal of the University to ensure appropriate provision of academic facilities to meet enrollment projections and University needs. To this end, the plan established specific planning principles early in the master planning process to support academic excellence:

PROMOTE ACADEMIC EXCELLENCE

- Design for 21st century learning environments to enhance engagement
- Provide more meeting/study spaces to promote peer to peer and faculty to student interaction
- Site flexible interdisciplinary spaces to promote collaborative inquiry

EXPAND RESEARCH CAPABILITIES

- Focus on the Four Pillars: Healthy Aging, Neuroscience, Ocean Science and Engineering/Environmental Sciences, Sensing and Smart Systems
- Capitalize on synergistic opportunities for interdisciplinary collaboration

In support of the above goals, the plan proposes a long term land use concept that continues to fill in the original campus master plan for the Jupiter campus. Properly situated new academic facilities will help stitch the overall campus together while addressing academic space needs to support enrollment growth.

The University strategic plan outlines ambitious research goals. The plan provides for research space accommodations on campus property and also recognizes the potential to leverage research partnerships with the adjacent Max Planck and Scripps Institutes. Additionally, the plan sites the new Florida Atlantic University Max Planck Academy.

Objective 1A: Construct new academic facilities to support the mission of the University and to provide for space needs dictated by enrollment growth.

- **Policy 1A-1:** Locate future academic and research facilities in accordance with Figure 5.1 which illustrates new academic facilities planned for the five and ten year horizons.
- **Policy 1A-2:** The University shall continue to utilize space needs projections (as defined and established by State Requirements for Educational Facilities) to determine future academic facility programs and to plan the renovation of existing academic facilities.

Objective 1B: Promote synergy and collaboration among academic disciplines and strengthen the sense of community on campus.

- **Policy 1B-1:** In order to achieve the desired goals above, the plan also recommends that academic programming include complementary study spaces and interdisciplinary spaces as well as informal gathering areas outside of classrooms and labs.
- **Policy 1B-2:** Additionally, each academic building should be designed to contribute to the broader campus environment. Strategies include:
 - Siting, orienting and shaping buildings to create and enhance outdoor campus spaces
 - Providing flexible study and collaboration spaces at the ground level with views to the outdoors
 - Promoting visibility to and from collaboration spaces and activities, particularly adjacent to pedestrian circulation
 - Providing shaded outdoor areas adjacent to buildings

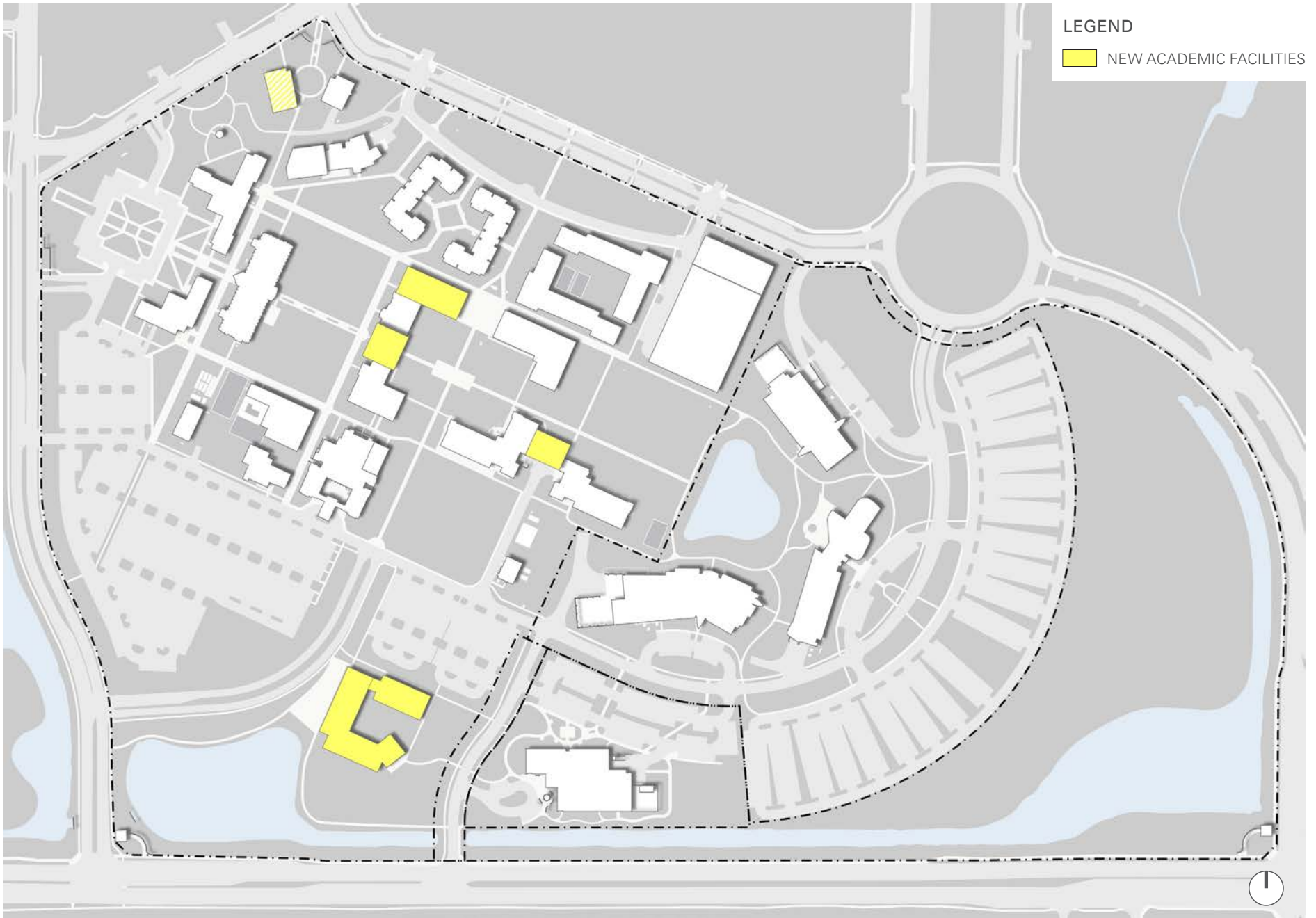


Figure 5.1 Academic Facilities

6 support facilities

GOAL 1: It is the goal of the University to ensure appropriate provision of support facilities to meet enrollment projections and University needs. To this end, the plan established specific planning principles early in the master planning process to support facilities:

ENHANCE THE LIVING/LEARNING ENVIRONMENT

- Create a more residential character for Boca Raton and Jupiter Campuses
- Expand facilities and services to enhance student life and embrace diversity
- Enhance the open space network for activities to invigorate campus life

EXPAND RESEARCH CAPABILITIES

- Focus on the Four Pillars: Healthy Aging, Neuroscience, Ocean Science and Engineering/Environmental Sciences, Sensing and Smart Systems
- Capitalize on synergistic opportunities for interdisciplinary collaboration

PROMOTE ATHLETICS EXCELLENCE + WELLNESS

- Increase competitiveness in Directors Cup to enhance FAU pride and identity
- Expand recreational facilities to promote holistic growth
- Enhance community engagement on campus through the fan experience and recreational opportunities

LEVERAGE CAMPUS LOCATIONS + PARTNERSHIP OPPORTUNITIES

- Promote synergistic partnerships within Boca Raton, Abacoa/Jupiter, and the South Florida region
- Maximize research partnerships to drive innovation and spur economic development
- Develop mixed-use opportunities on campus to create a cultural destination for the host communities

In support of the above goals, the plan proposes a long term land use concept that locates support facilities in the respective appropriate land use zones. The plan also outlines renovation/expansion strategies to maximize the use of existing space as suitable for support facilities.

Objective 1A: Provide new support facilities to support the mission of the University and to provide for space needs dictated by enrollment growth.

- **Policy 1A-1:** Locate future support facilities in accordance with Figure 6.1 which illustrates new support facilities planned for the five and ten year horizons as well as renovations/additions to existing spaces.
- **Policy 1A-3:** The University shall apply currently practiced space standards (formerly established in Rule Chapter 6A-2, F.A.C.), to determine future academic facility programs and to plan the renovation of existing academic facilities.
- **Policy 1A-4:** Commence programming and planning efforts as necessary to ensure appropriate dining, recreation and other student life space are provided to support the on-campus housing expansion. Amend the adopted campus master plan as necessary to include the results of these studies.
- **Policy 1A-5:** Continue to fund support facilities, both new construction and remodeling/renovation projects, based on legislatively allocated and PECO funding processes. At the same time, actively seek alternative or additional private funding for new support facilities.
- **Policy 1A-6:** Develop strategies for marketing available parcels for support/research (including office, R&D, light industrial, etc., that generally support University programs) and support/commercial (including bookstore, copy shop, dry cleaners, etc., that generally support resident and non-resident students, faculty and staff).
- **Policy 1A-8:** The University will continue to update as necessary, a consolidated support facility priority listing to combine all new support facility construction/renovation programs, whatever the source of funding.
- **Policy 1A-9:** The University's President and the Executive Committee will continue to develop an annual program that addresses the allocation of funds for the development of future support facilities.
- **Policy 1A-10:** Locate unforeseen facilities according to schematic sites and land use zones as delineated on the Future Land Use graphic, Figure 4.1.

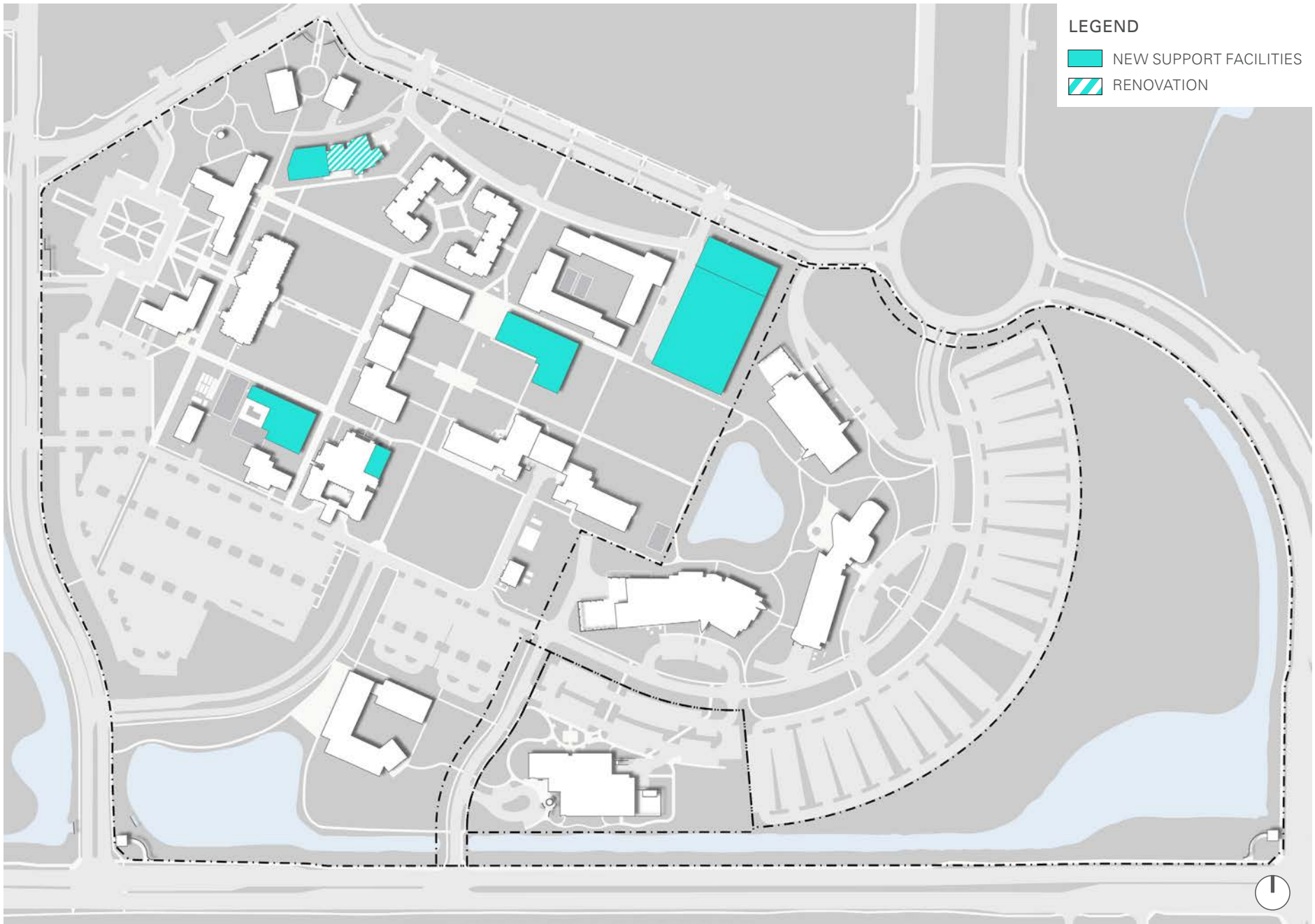


Figure 6.1 Support Facilities

7 housing

GOAL 1: It is the goal of the University to ensure appropriate provision of housing facilities on campus to meet University needs. To this end, the plan established specific planning principles early in the master planning process that relate to housing facilities:

ENHANCE THE LIVING/LEARNING ENVIRONMENT

- Create a more residential character for Boca Raton and Jupiter Campuses
- Expand facilities and services to enhance student life and embrace diversity
- Enhance the open space network for activities to invigorate campus life

LEVERAGE CAMPUS LOCATIONS + PARTNERSHIP OPPORTUNITIES

- Promote synergistic partnerships within Boca Raton, Abacoa/Jupiter, and the South Florida region
- Maximize research partnerships to drive innovation and spur economic development
- Develop mixed-use opportunities on campus to create a cultural destination for the host communities

In support of the above goals, the plan proposes a long term land use concept that locates residence life facilities in land use areas proximate to existing housing and student life facilities on the north side of campus.

Objective 1A: Provide housing facilities to support the mission of the University and to provide for on campus residential growth.

- **Policy 1A-1:** Locate future housing facilities in accordance with Figure 7.1 which illustrates new housing facilities planned for the five and ten year horizons as well as renovations/additions to existing dining and support facilities.
- **Policy 1A-2:** Commence housing programming and planning efforts as necessary to outline specific program and site planning for residential communities to support the Honors College on-campus housing expansion. Amend the adopted campus master plan as necessary to include the results of these studies.
- **Policy 1A-5:** Locate unforeseen facilities according to schematic sites and zones as delineated on the Future Land Use graphic, Figure 4.1.

- **Policy 1A-6:** The University's Department of Housing & Residential Life will continue their annual program that addresses the priorities, amounts of revenue-based funds and the potential for using CITF funds and other private sources and grants, etc. (if available) for the development of future on-campus housing facilities, including parking, recreation facilities, student activities, food, beverage and entertainment, etc. The University's Department of Housing & Residential Life prepares an RPG (Residential Program Guidelines) with assistance from Facilities Planning and Comptroller to be submitted to the Division of Financial Affairs. The Division of Financial Affairs determines if bonding is viable for the project. The Board of Trustees and FAU Foundation approve such projects and sets priorities.
- **Policy 1A-7:** The University's Department of Housing & Residential Life will continue to update internal procedures to ensure the provision of necessary support facilities in new housing development. These procedures shall include the identification of student needs for parking, student activity program facilities, recreation facilities, retailing needs, food and beverage, leisure and entertainment needs, telecommunications and other academic support needs.
- **Policy 1A-8:** The University is open to exploring various options to fund Housing including public/private development.

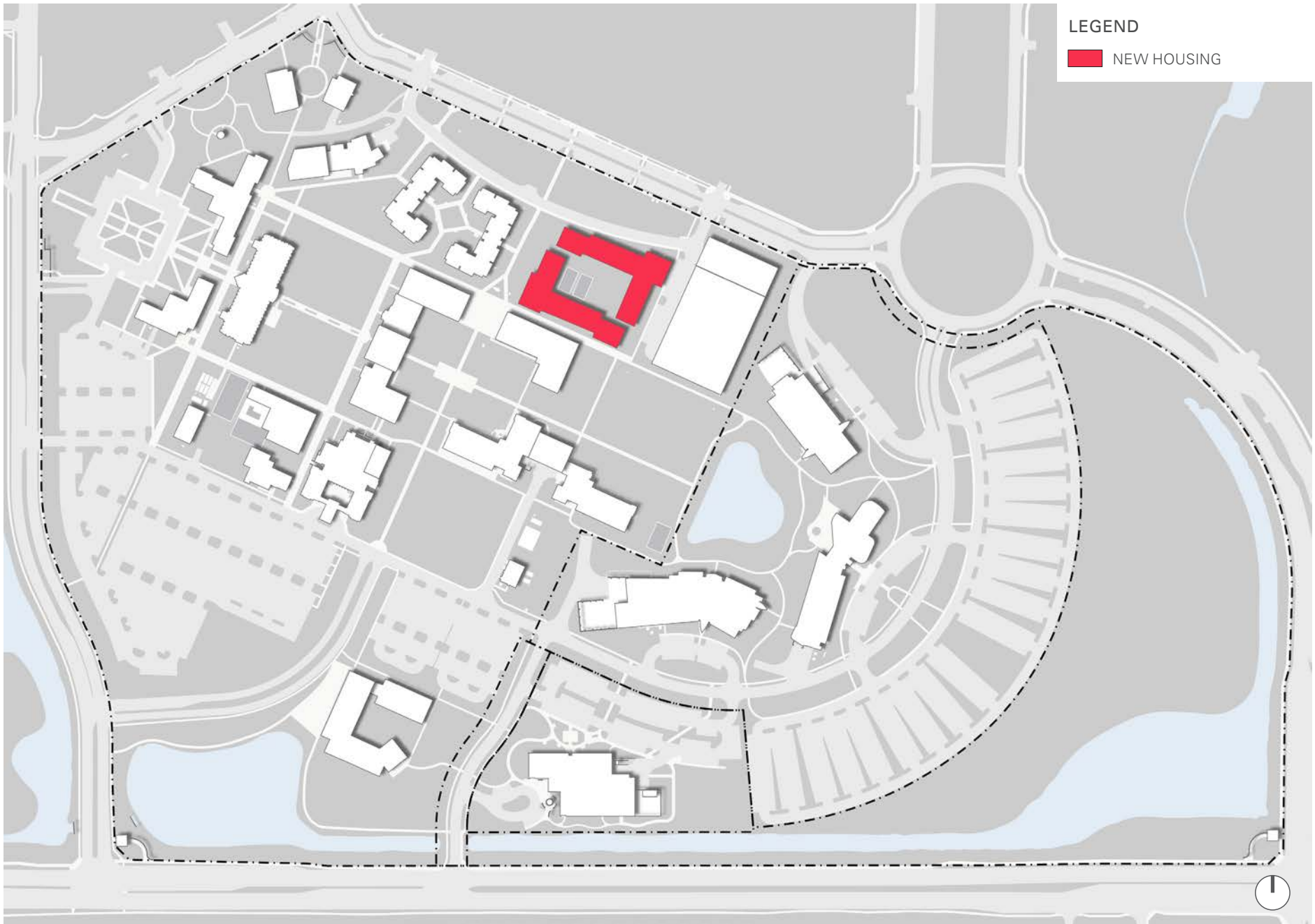


Figure 7.1 Housing

8 recreation and open space

GOAL 1: It is the goal of the University to ensure appropriate provision of support facilities to meet enrollment projections and University needs. To this end, the plan established specific planning principles early in the master planning process to support facilities:

ENHANCE THE LIVING/LEARNING ENVIRONMENT

- Create a more residential character for Boca Raton and Jupiter Campuses
- Expand facilities and services to enhance student life and embrace diversity
- Enhance the open space network for activities to invigorate campus life

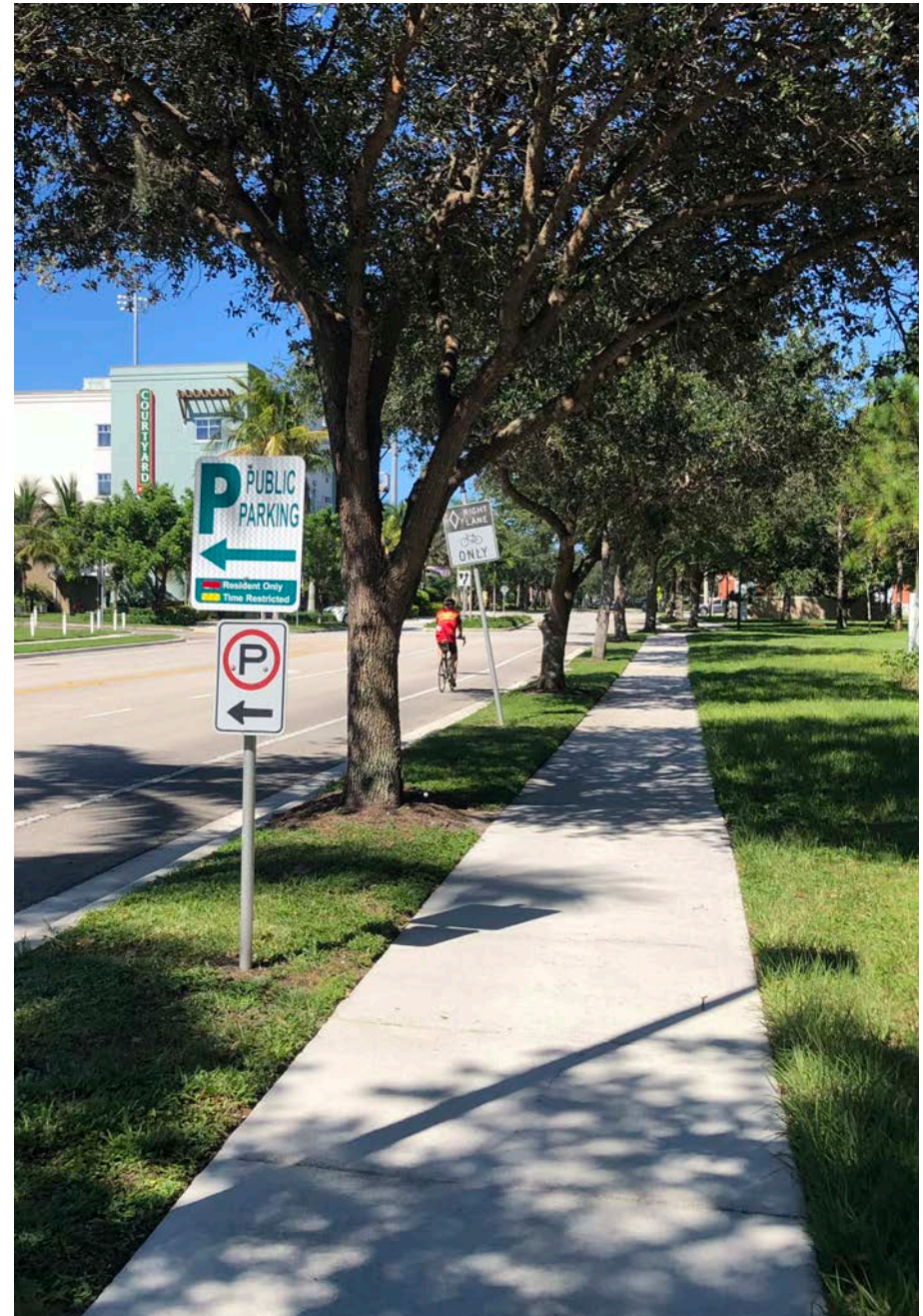
PROMOTE ATHLETICS EXCELLENCE + WELLNESS

- Increase competitiveness in Directors Cup to enhance FAU pride and identity
- Expand recreational facilities to promote holistic growth
- Enhance community engagement on campus through the fan experience and recreational opportunities

In support of the above goals, the plan proposes a long term land use concept that creates a north-south greenway as an organizing element for future campus expansion and as an iconic campus space. Additionally, the plan proposes reinforcement and enhancement to existing open spaces such as the Alumni Plaza area and spaces adjacent to the Breezeway and Diversity Way. The plan also suggests expanding outdoor recreation areas in concert with on-campus housing growth. Moreover, a perimeter walking and biking path is proposed to connect campus with community pedestrian and biking networks as well as walking paths in and around the conservation area. See Landscape component for additional information regarding open space.

Objective 1A: Maintain access for students and surrounding community to recreation facilities and provide additional outdoor recreation space as enrollment and on campus housing increases.

Objective 1B: Expand bike and walking trails as indicated in the plan to promote multi-modal circulation and enhance campus connectivity. Allow for bicycle route connections from the bike storage areas to major destinations and to the existing bike trails around the campus.



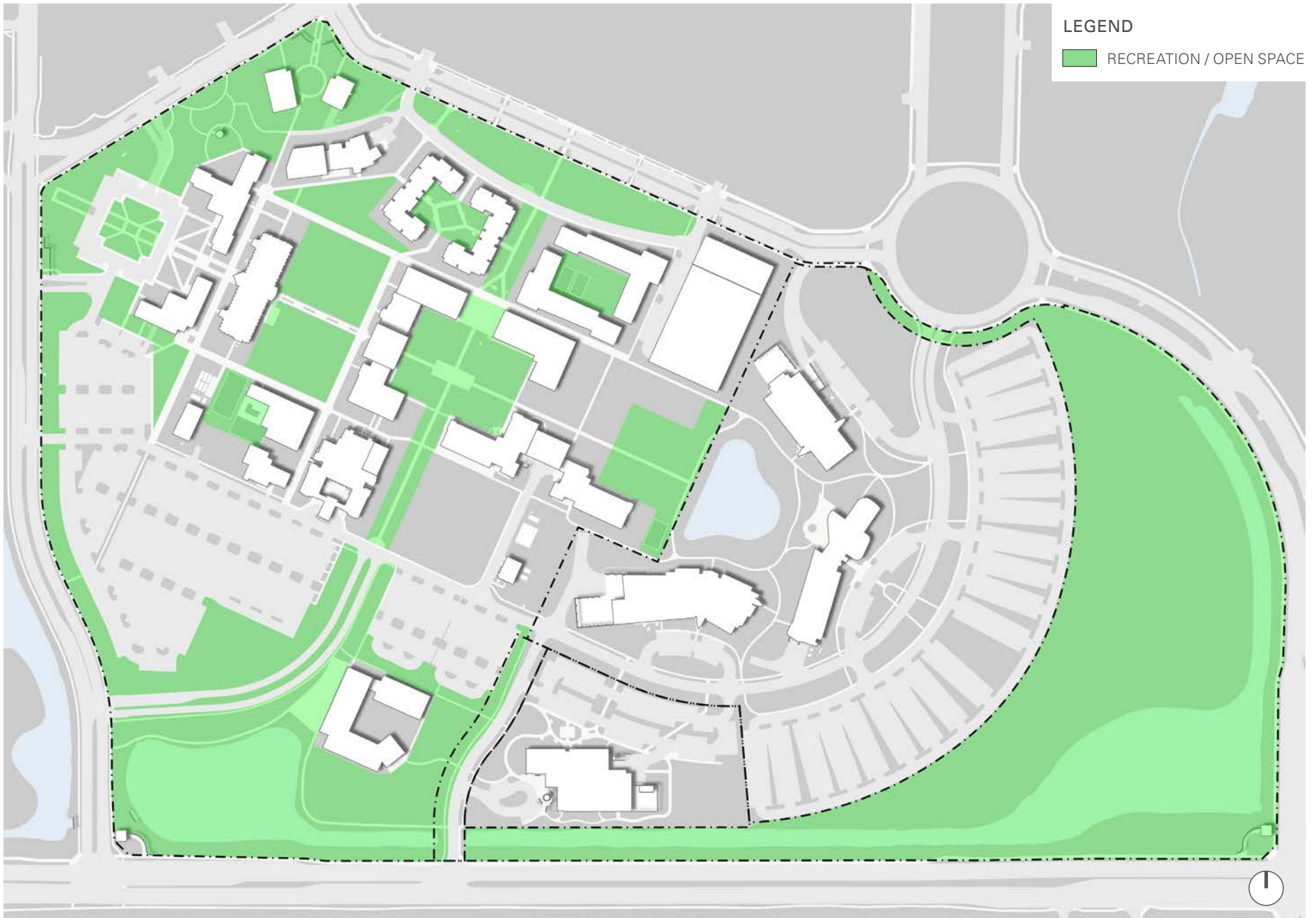


Figure 8.1 Recreation and Open Space

9 general infrastructure

STORMWATER MANAGEMENT

GOAL 1: It is the goal of the University to provide adequate stormwater management facilities and services to meet the present and future needs of the University and to protect the public and property.

The FAU Jupiter campus is under the regulation of the South Florida Water Management District (SFWMD) for Environmental Resource Permitting (ERP) relating to stormwater management. The Jupiter campus is currently a part of Basin 5 within the Abacoa ERP under SFWMD Permit #50-03651-P.

The Northern Palm Beach County Improvement District (NPBCID) also permits drainage improvements in this area, and permits must be obtained for development within their boundaries.

The entire FAU Jupiter campus is within FEMA Flood Zone X, which is outside the 500-year flood.

Objective 1A: Maintain records and permits

- **Policy 1A-1:** Verify, update, and maintain the FAU Infrastructure Drawings for existing and proposed stormwater management facilities, as projects are constructed or areas are reviewed for accuracy. Reserve stormwater management areas from future development or ensure replacement in kind when redeveloped.
- **Policy 1A-2:** Update the Abacoa Environmental Resource Permit (ERP) for the proposed master plan, once accepted. Include stormwater management improvements necessary for the proposed development in accordance with the below noted recommendations.
- **Policy 1A-3:** All new projects shall update the Abacoa ERP and meet the SFWMD and NPBCID requirements.

Objective 1B: Meet or exceed level of service requirements

- **Policy 1B-1:** Runoff from the 100-year storm event in excess of facility capacity will be accommodated by overland flow.
- **Policy 1B-2:** Buildings shall be constructed at or above the 100-year / 3-day (no discharge) maximum flood elevation as determined by the South Florida Water Management District Conceptual Permit for each basin.

- **Policy 1B-3:** Maximum discharge rates to the off-site LWDD canals shall be based on the 25-year / 72-hour storm event as determined by the South Florida Water Management District Conceptual Permit for each basin.
- **Policy 1B-4:** Minimum roadway crown elevations will be designed for a 10-year / 24-hour storm event.
- **Policy 1B-5:** Minimum parking lot elevations will be designed for a 5-year / 24-hour storm event.
- **Policy 1B-6:** Continue to meet or exceed water quality criteria as established by SFWMD when developing and redeveloping the campus.

Objective 1C: Utilize sustainable stormwater management methods

- **Policy 1C-1:** Implement underground storage and water quality treatment, when feasible, potentially including exfiltration trenches, underground storage systems (StormTech or similar) in order to maximize development area and usable green space.
- **Policy 1C-2:** Implement sustainable stormwater management practices, potentially including bioswales, dry retention areas/swales, green roofs (when feasible), pervious pavement, and other green/sustainable design methods to treat and store stormwater.
- **Policy 1C-3:** Expand and improve surface water lakes and dry detention areas where possible.
- **Policy 1C-4:** Stormwater management facilities shall be designed to receive water from the Town of Jupiter's surficial aquifer recharge system when available so that surface water levels can be maintained to the greatest extent possible, thereby minimizing the risks associated with drought and resulting surface water and aquifer drawdowns including but not limited to salt water intrusion and wetland degradation.

Objective 1D: Implement an inspection and maintenance program

- **Policy 1D-1:** Inspect campus-wide stormwater management facilities on a routine basis, no more than five (5) years, in accordance with SFWMD requirements.
- **Policy 1D-2:** Identify areas experiencing frequent local ponding and improve stormwater management facilities and conveyance to reduce or eliminate ponding.



Figure 9.1 Stormwater Management

general infrastructure | stormwater

- **Policy 1D-3:** Implement a maintenance program to uncover buried stormwater management structures; flush and clean all pipes; vacuum out structures on a routine basis; and ensure proper maintenance of stormwater management detention and retention areas.

Objective 1E: Protect and conserve the natural functions of soils

- **Policy 1E-1:** Minimize impacts to downstream waters by utilizing appropriate Best Management Practices for temporary construction and permanent stormwater management systems in accordance with the Florida Department of Environmental Protection (FDEP) standards, such as the LWDD Canals for outfall of stormwater from the FAU campus, to ensure protection of the water quality of those receiving bodies. Development shall not adversely affect adjacent or downstream properties.
- **Policy 1E-2:** Require construction practices that minimize soil erosion in accordance with the National Pollution Discharge Elimination System (NPDES), administered by the Florida Department of Environmental Protection (FDEP). Such practices generally consist of the use of erosion screens; inlet protection; sod, seed, or mulch; phasing and limiting the removal of vegetation; minimizing the amount of land area that is cleared; and wetting soils to prevent wind-borne erosion during construction. Strategies for minimizing soil erosion shall be included in the Soil and Water Resources Protection Guidelines.

POTABLE WATER

GOAL 2: It is the goal of the University to provide adequate water facilities and services, both potable and fire, to support the mission of the University.

The FAU Jupiter campus currently receives water from the Town of Jupiter via three (3) connections to the off-site municipal water system. The water system is master-metered by the Town of Jupiter at those connection locations. Improvements within the FAU Jupiter campus to the water distribution system must be permitted through the Town of Jupiter and the Palm Beach County Health Department, meeting both of their standards. No deficiencies to the on-campus water distribution system have been identified by FAU or are known at this time. The system will be adjusted and expanded in order to serve the proposed future development in this master plan, once approved.

Objective 2A: Maintain records and permits

- **Policy 2A-1:** Verify, update, and maintain the FAU Infrastructure Drawings for existing and proposed water distribution and fire protection facilities, as projects are constructed or areas are reviewed for accuracy.

Objective 2B: Meet or exceed level of service requirements

- **Policy 2B-1:** Provide adequate water supply, through coordination with the Town of Jupiter, to provide adequate potable water service and fire protection service for the proposed master plan.
- **Policy 2B-2:** The University shall establish a procedure and assign responsibility for regularly scheduled coordination meetings with appropriate Town officials relative to University water needs and to ensure that off-site water mains are adequately sized to accommodate future expansions. FAU shall pursue any interlocal agreements or memoranda of understanding necessary to ensure that potable water will be supplied to the campus to meet the future needs of the University.
- **Policy 2B-3:** Annually review future construction programs and priorities for deficiency remediation as part of the capital improvements procedures of the BOT to ensure capacity and capital improvements required to meet future University needs are provided when required, based on needs identified in other master plan elements.
- **Policy 2B-4:** Water distribution facilities should be planned and designed at a minimum for the following unit capacities, should be verified against actual usage, and adjusted accordingly:
 - o Average daily use: 10 GPD/ Full Time Student plus 15 GPD / Faculty and Staff
 - o Peak daily rate: Based on a 2.5 peaking factor to the Average Daily Use.
- **Policy 2B-5:** Distribution system shall provide a minimum static pressure in all mains of 65 psi; a minimum residual pressure at building plumbing fixtures of 35 psi; and a minimum fire flow residual pressure of 20 psi.
- **Policy 2B-6:** Expand or relocate the campus water distribution system to accommodate the proposed master plan, serving new buildings.

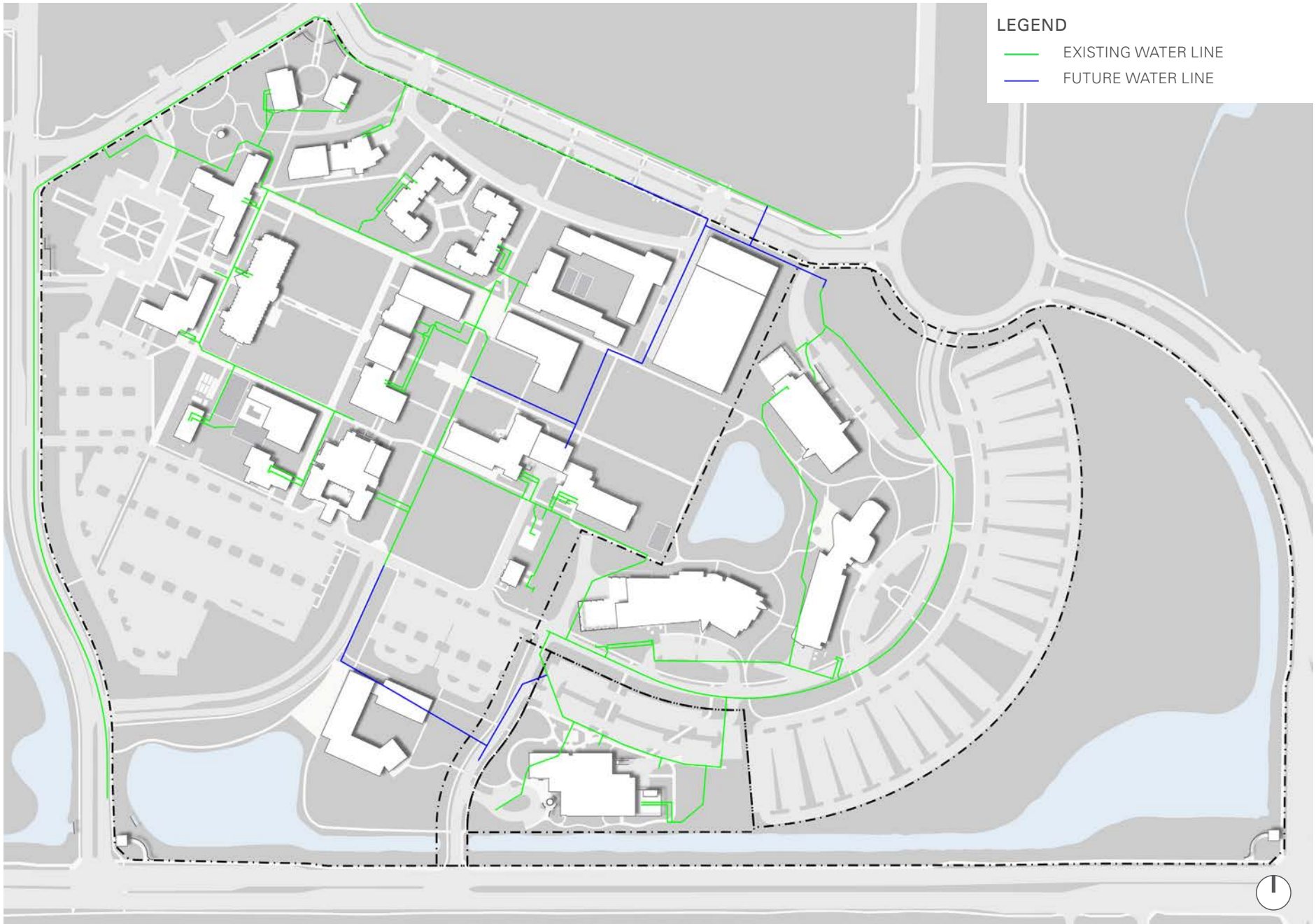


Figure 9.2 Potable Water

general infrastructure | potable water

Objective 2C: Utilize sustainable water management design methods

- **Policy 2C-1:** Implement water-saving measures requirements for new building construction such as use of ultra-low volume fixtures and xeriscape landscaping procedures. See Element 15, Architectural Design Guidelines for further guidance.
- **Policy 2C-2:** Continue to expand the use of the existing reclaimed water (gray water) for irrigation to ensure no use of potable water for irrigation.

Objective 2D: Implement an inspection and maintenance program

- **Policy 2D-1:** Implement a program to operate every valve and flush every fire hydrant within the FAU campus on an annual basis with a written log of the operations.
- **Policy 2D-2:** Maintain leak detection and repair program for existing lines. Monitor meter readings for abnormal data.
- **Policy 2D-3:** Ensure backflow prevention devices are installed on all service lines. Eliminate any cross-connection violations of State requirements.

Objective 2E: Utilize licensed public utility companies for potable water supply and distribution

- **Policy 2E-1:** On-campus water mains and appurtenances are owned and maintained by the University. On-campus meters registered with the Town of Jupiter shall be owned and maintained by the Town of Jupiter Water Department.
- **Policy 2E-2:** The campus distribution system is metered with the Town of Jupiter. The Scripps Florida building cluster is sub-metered on the distribution system master meter with the Town of Jupiter. Said sub-metering shall be the responsibility of the University.
- **Policy 2E-3:** Easements shall be granted and access provided for maintenance to all meters owned by the Town of Jupiter. Easements are not required for other on-campus facilities.
- **Policy 2E-4:** Off-site water mains and appurtenances shall be owned and maintained by the Town of Jupiter Water Department.
- **Policy 2E-5:** An Agreement (CDA) has been executed between the University and the Town of Jupiter for establishing rates, demands, and responsibilities for maintenance, repair, expansion and service.

- **Policy 2E-6:** Maintain close liaison with the Town of Jupiter on campus demands, problems and projected growth.
- **Policy 2E-7:** Invoiced water quantities shall be monitored and checked against prior records and calculated demands to verify meter accuracy and to detect leaks in service lines. The University will review all existing sub-meters with the Town of Jupiter Water Department and replace any existing sub-meters that are not functioning appropriately as projects occur or on an agreed upon schedule between the University and the Town of Jupiter.

SANITARY SEWER

GOAL 3: It is the goal of the University to provide adequate sanitary sewage facilities and services to support the mission of the University.

The FAU Jupiter campus currently discharges sanitary sewer to the Loxahatchee River District (LRD) via one (1) force main connection to the off-site municipal sewer force main system. Improvements within the FAU Jupiter campus to the sewer collection system must be permitted through the LRD and the Palm Beach County Health Department, meeting both of their standards. No deficiencies to the on-campus sewer collection system have been identified by FAU or are known at this time. The system will be adjusted and expanded in order to serve the proposed future development in this master plan, once approved.

Objective 3A: Maintain records and permits

- **Policy 3A-1:** Verify, update, and maintain the FAU Infrastructure Drawings for existing and proposed sewer collection facilities, as projects are constructed or areas are reviewed for accuracy.

Objective 3B: Meet or exceed level of service requirements

- **Policy 3B-1:** Review the existing campus lift station and its current capacity with current and planned projects. Evaluate the need for one or more additional lift station(s) and force main connections to the public system to accommodate the sanitary sewer flow generated by the planned and future development.

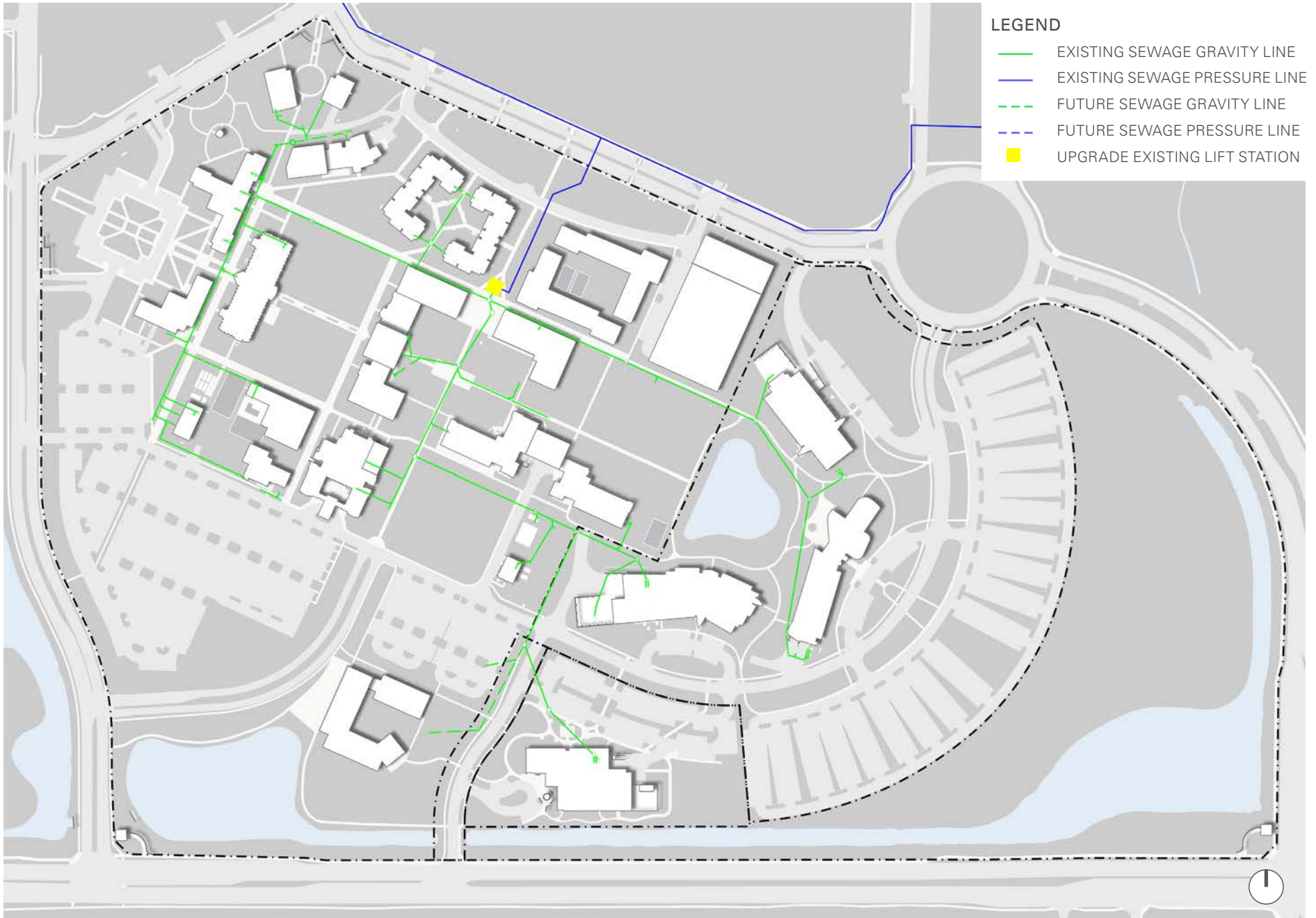


Figure 9.3 Sanitary Sewer

general infrastructure | sanitary sewer

- **Policy 3B-2:** The University shall establish a procedure and assign responsibility for regularly scheduled coordination meetings with appropriate LRD officials relative to University sewer needs and to ensure that off-site sewer force mains are adequately sized to accommodate future expansions. FAU shall pursue any interlocal agreements or memoranda of understanding necessary to ensure that potable water will be supplied to the campuses to meet the future needs of the University.
- **Policy 3B-3:** Annually review future construction programs and priorities for deficiency remediation as part of the capital improvements procedures of the BOT to ensure capacity and capital improvements required to meet future University needs are provided when required, based on needs identified in other master plan elements.
- **Policy 3B-4:** Sewer collection facilities should be planned and designed at a minimum for the following unit capacities, should be verified against actual usage and adjusted accordingly:
 - o Average daily use: 10 GPD/ Full Time Student plus 15 GPD / Faculty and Staff
 - o Peak daily rate: Based on a 2.5 peaking factor to the Average Daily Use
- **Policy 3B-5:** The sewer collection system, including gravity sewer mains and laterals, lift stations, force mains, grease traps, and other sewer collection facilities shall be designed in accordance with the LRD, Florida Department of Environmental Protection (FDEP), Palm Beach County Health Department (PBCHD), Florida Administrative Code Section 64E-6, and 10 States Standards requirements, as applicable.
- **Policy 3B-6:** Expand or relocate the campus sewer collection system to accommodate the proposed master plan, serving new buildings. Facilities remote from the campus core, such as recreation areas and entrance gates, will be served by small satellite pump stations and force mains to the nearest gravity main.

Objective 3C: Implement an inspection and maintenance program

- **Policy 3C-1:** Television (TV) inspect all sewer mains on campus over a five-year span. TV inspection should be performed in order to review the existing sewer main conditions for the following:
 - o Sewer lines must be watertight to prevent ground water inflow and infiltration resulting in capacity reduction and increased pumping costs and to prevent possible contamination of ground water.
 - o Identify and correct leaks, damaged or broken pipe, and other deficiencies in the gravity collection system.
 - o Identify sewer mains with insufficient slopes, mains that are overloaded, clogged, or otherwise not functioning to their full capacity.
- **Policy 3C-2:** Identify and eliminate non-sewer connections to the collection system, such as roof drains, yard drains, swimming pool drains, etc.
- **Policy 3C-3:** Replace older clay pipes with new PVC pipe
- **Policy 3C-4:** Maintain leak detection and repair program for existing lines. Monitor meter readings for abnormal data.



10 utilities

CHILLED WATER

GOAL 1: To provide efficient, reliable, chilled water service to all buildings on campus via district energy distribution.

The FAU Jupiter campus has a combination of water cooled and air-cooled plants in three locations on campus:

- MC04 Plant: 570-ton Air cooled – 2 years old.
- MC20 Plant: 570-ton Trane water cooled centrifugal – 15 years old
- MC20A Plant: two (2) 500-ton air cooled chillers – 5 years old.

The existing chilled water distribution system connects all three plants in a looped system, which in turn feeds each of the buildings on campus. Additionally, the MC04 plant has a thermal energy storage system that has reportedly been decommissioned and is no longer in service.

Objective 1A: Consolidate plants into one single chiller plant at MC20

- **Policy 1A-1:** Provide a new central water-cooled chiller plant at MC20 sized for both existing and future loads.
- **Policy 1A-2:** Master plan building loads for year 2028 is approximated at 1000-tons without diversity. The new / combined plant should be sized for a diversified load of 800 to 900 tons, depending upon owner requirements.

Objective 1B: Distribution Piping

- **Policy 1B-1:** The existing 16" chilled water mains running north and south will serve as main piping for all loads. The maximum flow through this main would be approximately 5500GPM which equates to 2750-tons at a 12-degree building delta T.
- **Policy 1B-2:** The 6" chilled water supply and return loop serving the northern portion of the campus will provide up to 800 GPM of chilled water flow, which equates to 400 tons of cooling at a 12-degree building delta T.

Objective 1C: Thermal energy storage

- **Policy 1C-1:** Provide for and develop a time of use based chilled water storage facility that will save the university on demand charges, while increasing the resiliency and tolerances of the chilled water distribution system.

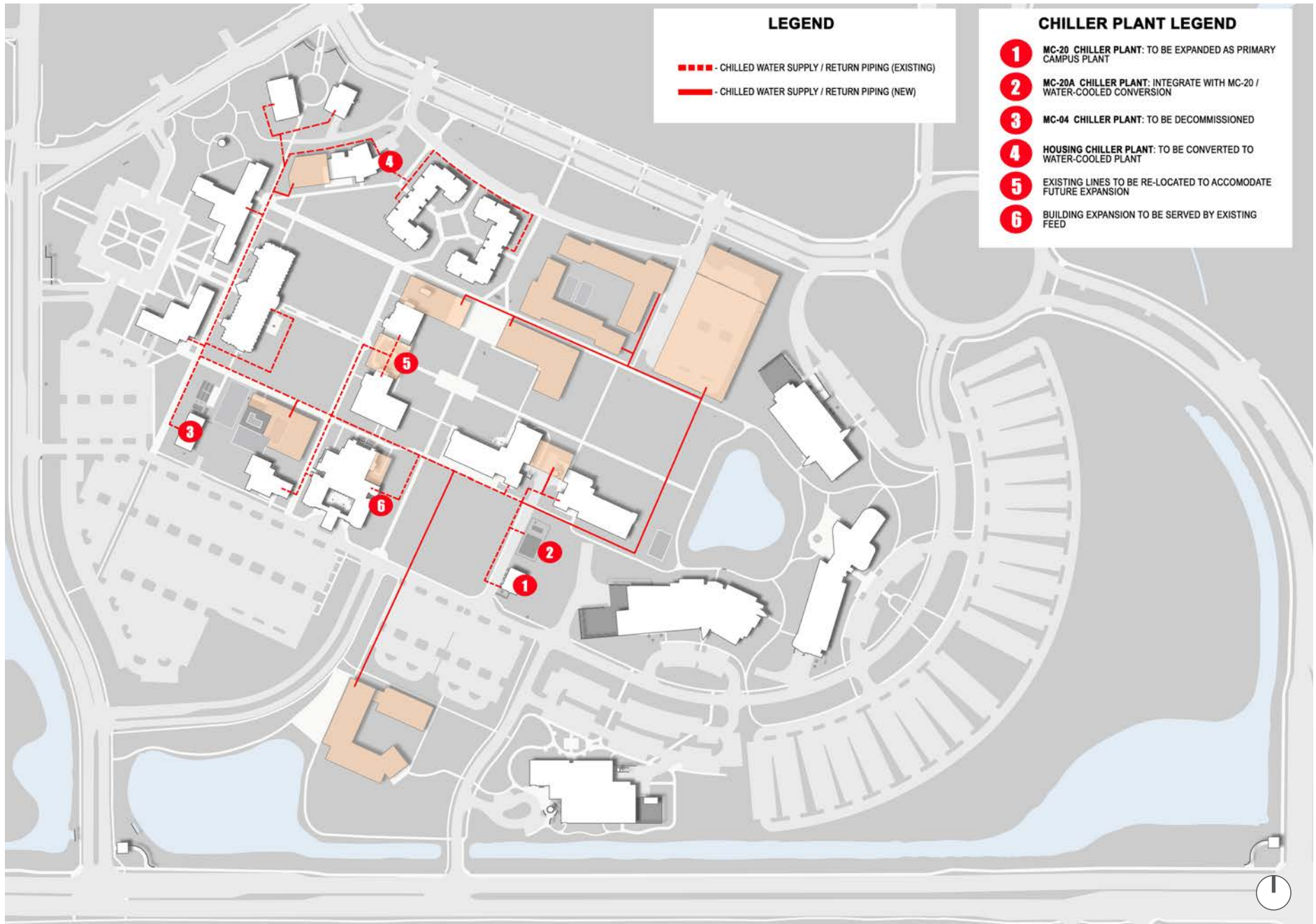


Figure 10.1 Chilled Water

utilities

ELECTRICAL

GOAL 1: It is the goal to provide cost effective, efficient, and reliable electric power to meet the needs of the existing and future Jupiter campus facilities.

The Jupiter campus is supplied electrical power from overhead FP&L distribution lines that traverse along the east edge of campus and then transition to underground distribution just south of the Scripps Research Institute. The underground primary network is owned and operated by FP&L and each building is individually metered on the secondary side of pad-mounted transformers.

Objective 1A: Improve power reliability and continue to expand the capacity of the power distribution network to meet the needs of future campus facilities.

- **Policy 1A-1:** Coordinate with FP&L to develop a dedicated substation to serve as a reliable power source for the campus. Seek improved power quality through redundant primary feeders routed underground to the campus by FP&L.
- **Policy 1A-2:** Coordinate with FP&L to maintain demand loads on primary feeders to within 50% of their rated capacity to allow for redundancy and flexibility in feeder switching during routine maintenance operations.
- **Policy 1A-3:** Coordinate with FP&L to develop additional primary feeder capacity over time in conjunction with planned growth of campus facilities.

Objective 1B: Provide standby power generation capability on the campus to serve as a redundant power source for critical building loads, including research buildings and chilled water plants (partial capacity).

- **Policy 1B-1:** Evaluate opportunities to reduce the number of individual building level standby generators and provide a more centralized approach to providing back up power.
- **Policy 1B-2:** Evaluate opportunities with FP&L to provide centralized power generation capability on the campus to serve as a redundant power source and allow for peak-shaving to reduce electrical demand charges.

Objective 1C: Optimize the efficiency of building level electrical systems through the application of modern technologies and through standardization of components.

- **Policy 1C-1:** Develop capital renewal projects to gradually replace antiquated lighting fixtures across the campus with new solid state LED high efficiency fixtures and provide automatic controls.
- **Policy 1C-2:** Develop campus standards for major electrical products that are installed within new buildings to improve consistency and allow for more efficient operations and maintenance.
- **Policy 1C-3:** Implement use of standardized digital electrical submeters within each building to allow for monitoring of building power consumption. Integrate power meters with the campus-wide building automation system to allow for remote monitoring, trending and reporting.

GOAL 2: It is the goal to meet the electrical demands for the campus with sustainably derived energy.

Objective 2A: Explore renewable energy purchase agreements with FP&L and other utilities to reduce the reliance on energy generated from fossil fuels.

- **Policy 2A-1:** Evaluate campus-wide long term solar power purchase agreements to derive up to 50% of the campus energy supply from off-campus solar power installations.
- **Policy 2A-2:** On new building projects and major building renovations, evaluate long term solar power purchase agreements to derive up to 50% of the building level energy supply from off-campus solar power installations.

Objective 2B: Explore opportunities to integrate solar power and other alternative energy sources in to the design of new projects on the campus.

- **Policy 2B-1:** Evaluate the feasibility and life cycle cost for adding solar power on each new building so that a minimum of 10% of the building energy is derived from the building level solar installation.
- **Policy 2B-2:** Evaluate the feasibility and life cycle cost for integrating solar power with new parking structures and covered walkways.

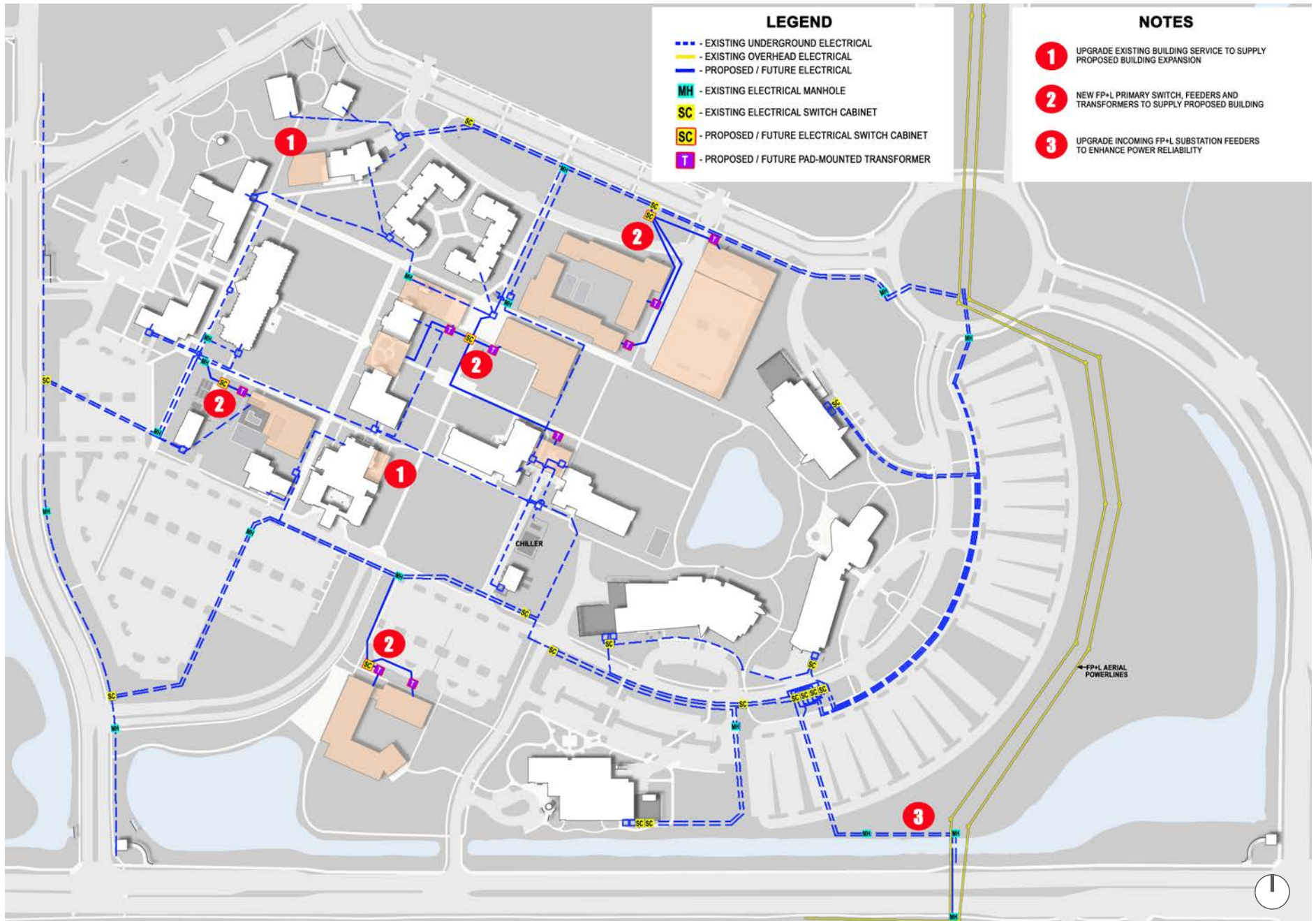


Figure 10.2 Electrical

utilities

TELECOMMUNICATIONS

GOAL 1: Maintain appropriate levels of network service to existing buildings and ensure new buildings meet levels of service required by current campus standards.

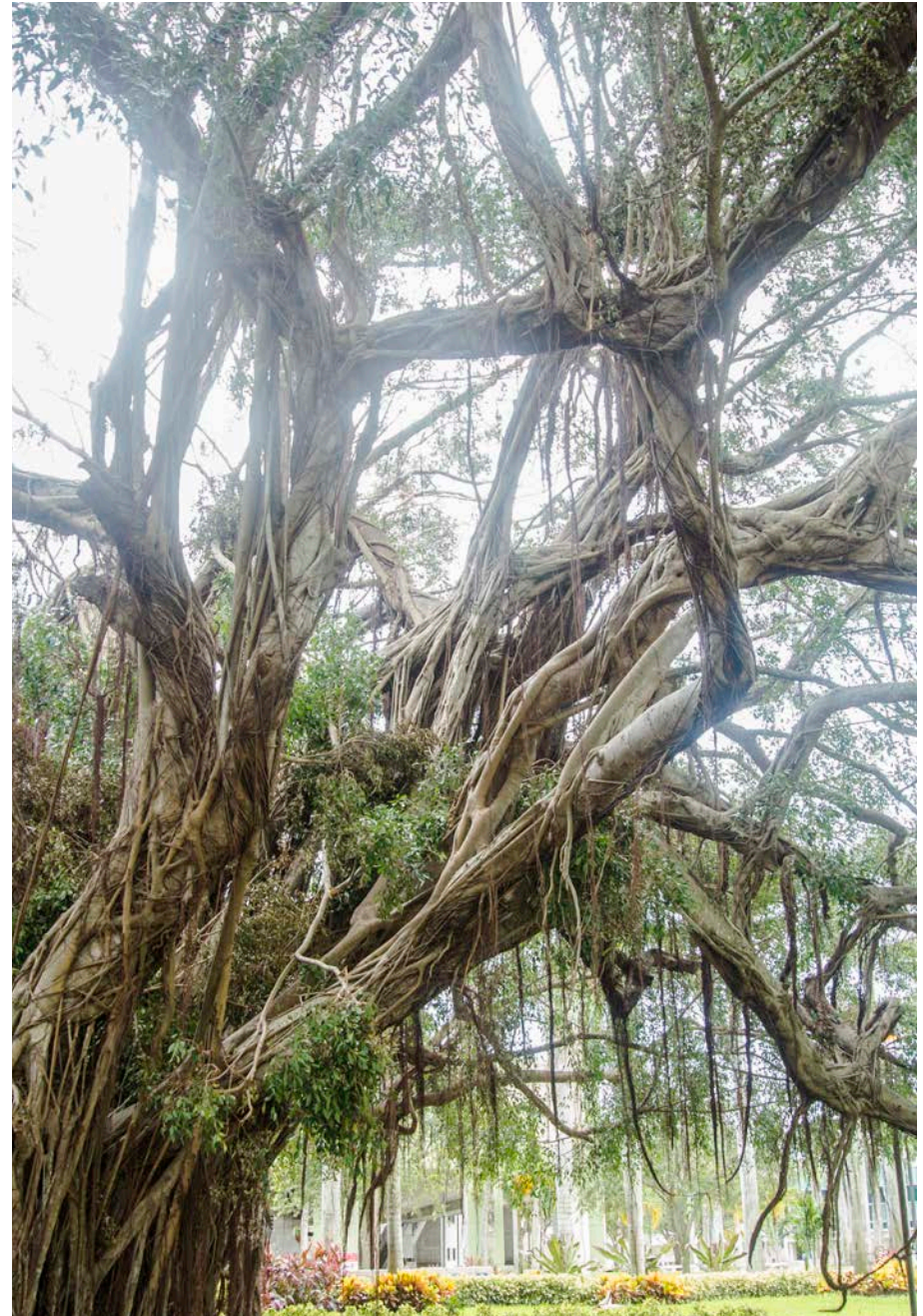
The Jupiter campus has a core data center in building MC-04. Current campus distribution consists of a system of duct banks containing 4" conduits. Each building requires a connection to the primary data center as well as adjacent buildings with single mode fiber.

Objective 1A: Expand the campus local area network infrastructure to accommodate new construction.

- **Policy 1A-1:** Evaluate opportunities to update existing building backbone and horizontal cabling infrastructure to meet or exceed current campus standards.
- **Policy 1A-2:** Extend the existing communications duct bank to the south and north ends of campus for new development.
- **Policy 1A-3:** Coordinate the requirements and projects of the Master Plan to AT&T and Comcast so they may tailor their services to accommodate the Jupiter Campus needs.

Objective 2A: Design and install voice, data and video transport systems that prepare the campus for future growth and for the adoption of newer technologies.

- **Policy 2A-1:** Consider developing campus standards for wirelessly connected devices how they impact the campus network bandwidth.
- **Policy 2A-2:** Consider developing campus standards for emergency responder radio enhancement systems, cellular distributed antenna systems and campus mass notifications systems.



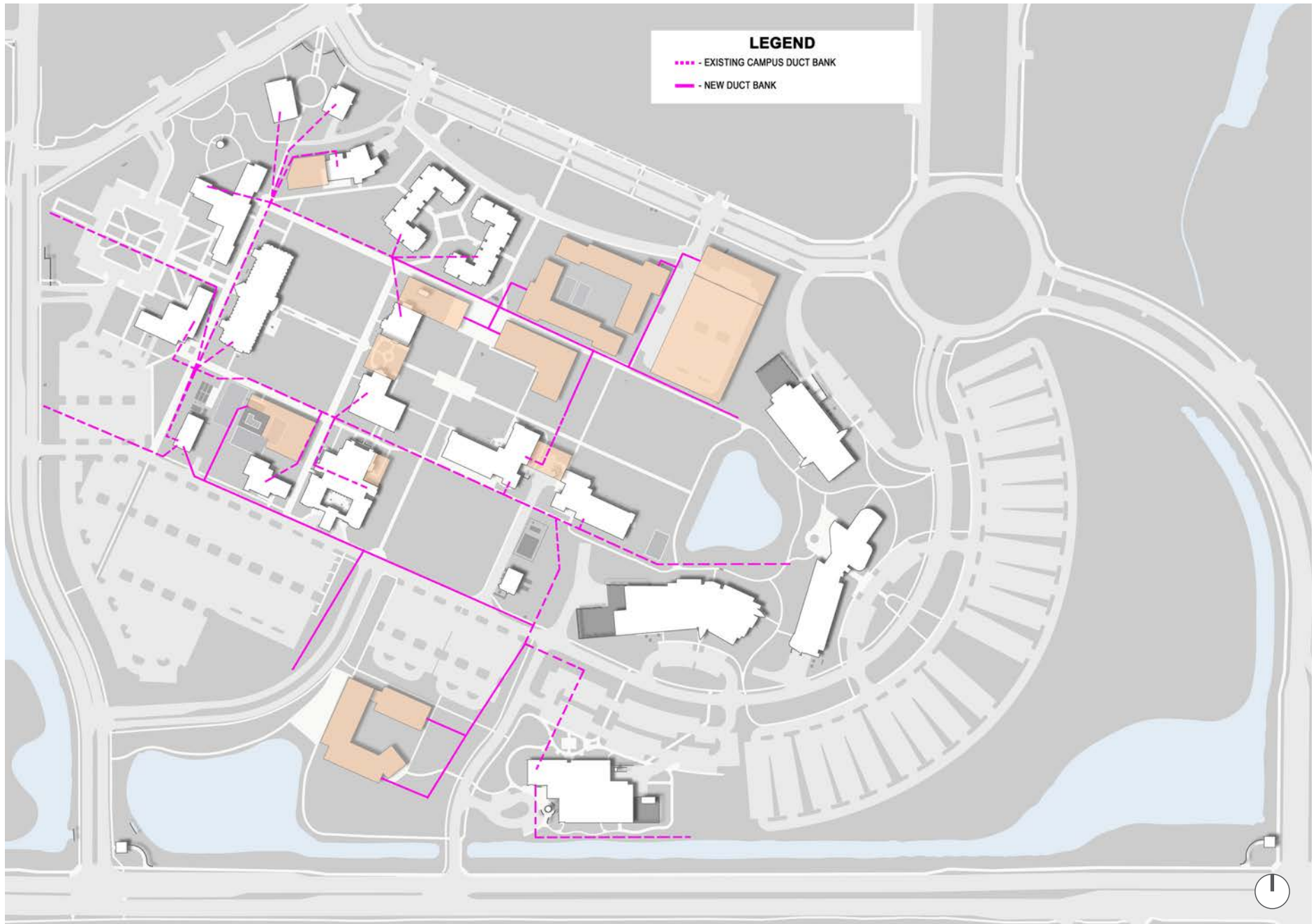


Figure 10.3 Telecommunications

11 transportation

The following narrative describes the concepts on which the transportation plan is based. Goals, Objectives and Policies which implement these concepts follow this narrative.

TRANSIT

Palm Tran provides bus service to the Abacoa Development, including the FAU campus, by way of their Route 10 service. The route begins south at Downtown at the Gardens in Palm Beach Gardens, continues up Military Trail to Donald Ross, heads west on Donald Ross to Central, heads North on Central to the University, then East back to Military Trail and north to Indiantown Road.

There are no current rail services in the area or planned to date. The following goals, objectives and policies provide a basis for active support of transit and alternative modes of travel.

CIRCULATION

Vehicular circulation on campus will be accomplished through an internal roadway system that connects primary parking areas and future parking garages, when necessary. The internal roadways will primarily serve intra-campus movements and quick conveyance of traffic to and from the external roadway accesses.

Access to and from the campus is provided through a series of perimeter accesses to the external roadway network. It is anticipated that the majority of traffic movements will occur at the main entrance on Parkside Drive and the primary entrance to the large parking area from Donald Ross Road. Because these locations are conveniently located near Donald Ross Road, a major arterial connecting I-95, Military Trail and Alt A1A, most students will utilize these entrances. Accesses on Main Street will also satisfy some demand originating north of the campus. A future connection from Max Planck Way to Scripps Way is planned, which will provide for an additional direct access point to the campus at the signalized intersection of Donald Ross Road and Max Planck Way.

PARKING

Campus parking lots are designed in a manner that permits movement from the most remote parking areas to primary academic and administrative buildings in approximately an eight- to ten-minute walk, with most parking areas being less than a five-minute walk to the desired building. This is of particular importance to commuting students, who often times arrive on campus with just enough time to walk to class. Parking areas are designed to surround the campus core area and separate pedestrian movements occurring between academic and administrative buildings from vehicular movements related to parking and campus ingress and egress.

Total existing parking as of this update is 1187 spaces. Total proposed parking for the 10 year buildout of the master plan is 2096 spaces.

LEVEL OF SERVICE

A concurrency traffic impact analysis will be performed at a later date to evaluate the traffic impacts of the proposed Master Plan. This analysis will be performed upon establishing an agreed upon methodology with the Town of Jupiter and Palm Beach County. There has been significant development on the south side of Donald Ross Road since the previous Master Plan, which will be evaluated when performing this updated traffic impact analysis for the Campus Master Plan.



transportation

GOAL 1: It is the goal of the University to provide and promote efficient, safe and accessible local transit service that enhances the mission of the University.

Objective 1A: The University shall, when identified by others, evaluate appropriate future transit systems and revenue streams which support transit servicing the University.

- **Policy 1A-1:** Coordinate operational and planning efforts with Tri-Rail, Palm Tran and private sector efforts within the Abacoa Development to provide efficient and convenient transit connections with the University.
- **Policy 1A-2:** Coordinate operational and planning efforts with other FAU campuses, Palm Beach Community College, Indian River Community College, Broward Community College, and Broward County Transit to provide efficient and convenient transit connections.
- **Policy 1A-3:** The University will designate the stops at appropriate locations on campus in consultation with transit providers. Bus stop location and service shall be reviewed every two years in coordination with the Town of Jupiter and transit providers.

Objective 1B: In order to promote the application of alternative modes of travel and related Transportation Demand Management (TDM) strategies, FAU will implement the following policies:

- **Policy 1B-1:** Review and apply the FAU Transportation Demand Management (TDM) Application Manual (Boca Campus study), when completed, which will include a qualitative and quantitative assessment of various TDM strategies and their timing, phases, and criteria for implementation at the campus.
- **Policy 1B-2:** Develop and distribute a *TDM Facts* brochure to all students, staff and faculty and implement at least one TDM initiative such as a carpool matching service or telecommuting alternative at the campus.

GOAL 2: It is the goal of the University to provide and support safe and efficient campus transportation systems and support context area transportation systems that enhance the mission of the University.

Objective 2A: To continue to plan and provide for vehicular access from campus area roadways to meet FAU's demand and also to mitigate impacts to the extent feasible within Jupiter and the surrounding communities. FAU will implement the following policies:

- **Policy 2A-1:** Coordinate with appropriate agencies and provide the proposed vehicular connections to Parkside Drive, University Boulevard, Main Street, and Donald Ross Road.
- **Policy 2A-2:** Connect Max Planck Way to Scripp's Way to provide enhanced circulation from Donald Ross Road, Max Planck, the future STEM building and other areas to the FAU campus (see Figure 11.2).
- **Policy 2A-3:** Monitor campus access and parking and coordinate future campus development with consideration to potential future access points to Central Boulevard and Donald Ross Road.
- **Policy 2A-4:** Coordinate efforts with the Town of Jupiter, Palm Beach County, the Transportation Planning Agency, and the Florida Department of Transportation regarding transportation improvements and development plans by designating FAU representation and attending regularly scheduled meetings.
- **Policy 2A-5:** Develop and maintain a comprehensive data base for analyzing and documenting vehicular and non-vehicular incidents both within the campus and immediate context area.
- **Policy 2A-6:** Continue to monitor campus development with respect to transportation decision-making and planning.
- **Policy 2A-7:** At regular intervals associated with the Master Plan, the University will update the previously prepared traffic impact analysis for the campus, upon establishing an agreed-upon methodology with the Town of Jupiter and Palm Beach County.
- **Policy 2A-8:** The University will monitor the traffic at the intersection of Donald Ross Road and Central Blvd to evaluate the necessity of turn lane extensions. The University will coordinate with the Town of Jupiter and Palm Beach County for potential needs and improvements.

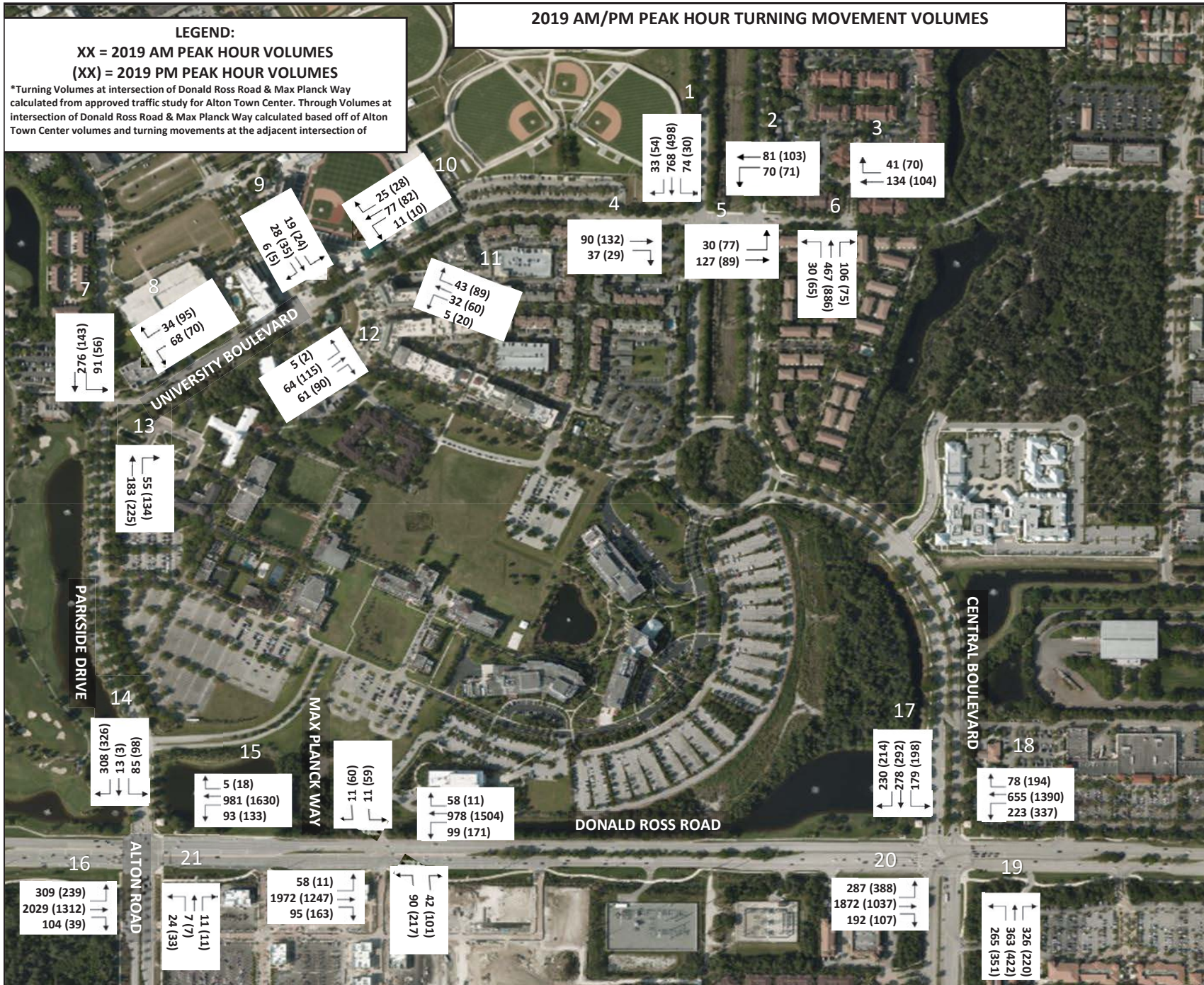


Figure 11.1 Existing Traffic Plan - 2019

transportation

Objective 2B: In order to develop an internal campus roadway network as a low speed, low capacity facility which facilitates the safe movement of automobiles, transit vehicles, bicycles and pedestrians, FAU will implement the following policies:

- **Policy 2B-1:** Develop, implement and improve specific loading zones near existing buildings.
- **Policy 2B-2:** Ensure that all campus transportation facilities consider multi-modal applications including bicycle, pedestrian, and non-automobile vehicles, particularly within the limited access drive/utility loop.
- **Policy 2B-3:** In accordance with the Capital Improvement Program, prioritize and establish and implementation schedule for campus circulation and access enhancement projects based on a phased Master Plan development schedule.
- **Policy 2B-4:** Encourage the use of traffic calming principles where considered useful.
- **Policy 2B-5:** Ensure that roadways can accommodate service and delivery vehicles where needed.
- **Policy 2B-6:** Limit the need for service deliveries in parts of campus that are designed for the pedestrian environment.
- **Policy 2B-7:** Provide information kiosks and campus guidance materials for visitors at appropriate campus entrances to facilitate their conveyance to visitor parking areas and campus buildings.
- **Policy 2B-8:** Provide convenient drop-off areas for Life Long Learners and persons attending public events held at the auditorium and other campus facilities.
- **Policy 2B-9:** Include drop-off areas for future development considering the increase of ride-sharing.
- **Policy 2B-10:** Provide bicycle and pedestrian pathways which provide direct linkage to Abacoa including commercialized town center areas.

Goal 3: It is the goal of the University to provide and support safe, sufficient, cost-effective and accessible parking facilities for students, faculty, staff and visitors that enhance the mission of the University and respect the visual standard of the traditional neighborhood development of the Abacoa Development.

Objective 3A: To ensure a high level of safety within parking facilities with both technology and personnel, FAU will implement the following policies:

- **Policy 3A-1:** Expand the “Code Blue” emergency phone system to include all existing and new parking facilities.
- **Policy 3A-2:** Provide parking facilities which maintain sufficient and energy efficient lighting at all facilities used after dusk.
- **Policy 3A-3:** Enhance University security by continued evaluation of new technologies regarding surveillance and way-finding systems.

Objective 3B: FAU will limit and/or minimize conflicts between vehicular and non-vehicular traffic within University parking facilities by implementing the following policies:

- **Policy 3B-1:** Establish administrative procedures and coordination mechanisms for the comprehensive review of development plans and their impact on the transportation, parking and transit systems. Involve representatives from the following departments and organizations with the review of development plans: grounds, police, traffic and parking, faculty, facilities planning, and administration.
- **Policy 3B-2:** Dedicate, at a minimum, 10 percent of all vehicular parking areas as landscaped non-parking areas not including pervious parking surfaces.
- **Policy 3B-3:** Provide separate and convenient bicycle and motorcycle parking facilities.

Objective 3C: FAU will continually monitor and analyze the demand/supply relationship of parking while providing a sufficient number of spaces for students, faculty, staff and visitors through the implementation of the following policies:

- **Policy 3C-1:** Target parking space to enrolled student ratios of 0.35:1 for residential students and 0.75:1 for commuter students.
- **Policy 3C-2:** Target a faculty/staff parking space to full time employee ratio of 0.75:1.
- **Policy 3C-3:** Target the number of parking spaces for campus visitors at 5% of student & faculty spaces. Continue to increase parking capacity, as funds are made available, to provide for peak requirements of the auditorium, the Lifelong Learning Complex and other venues that may overload the system on a daily basis.

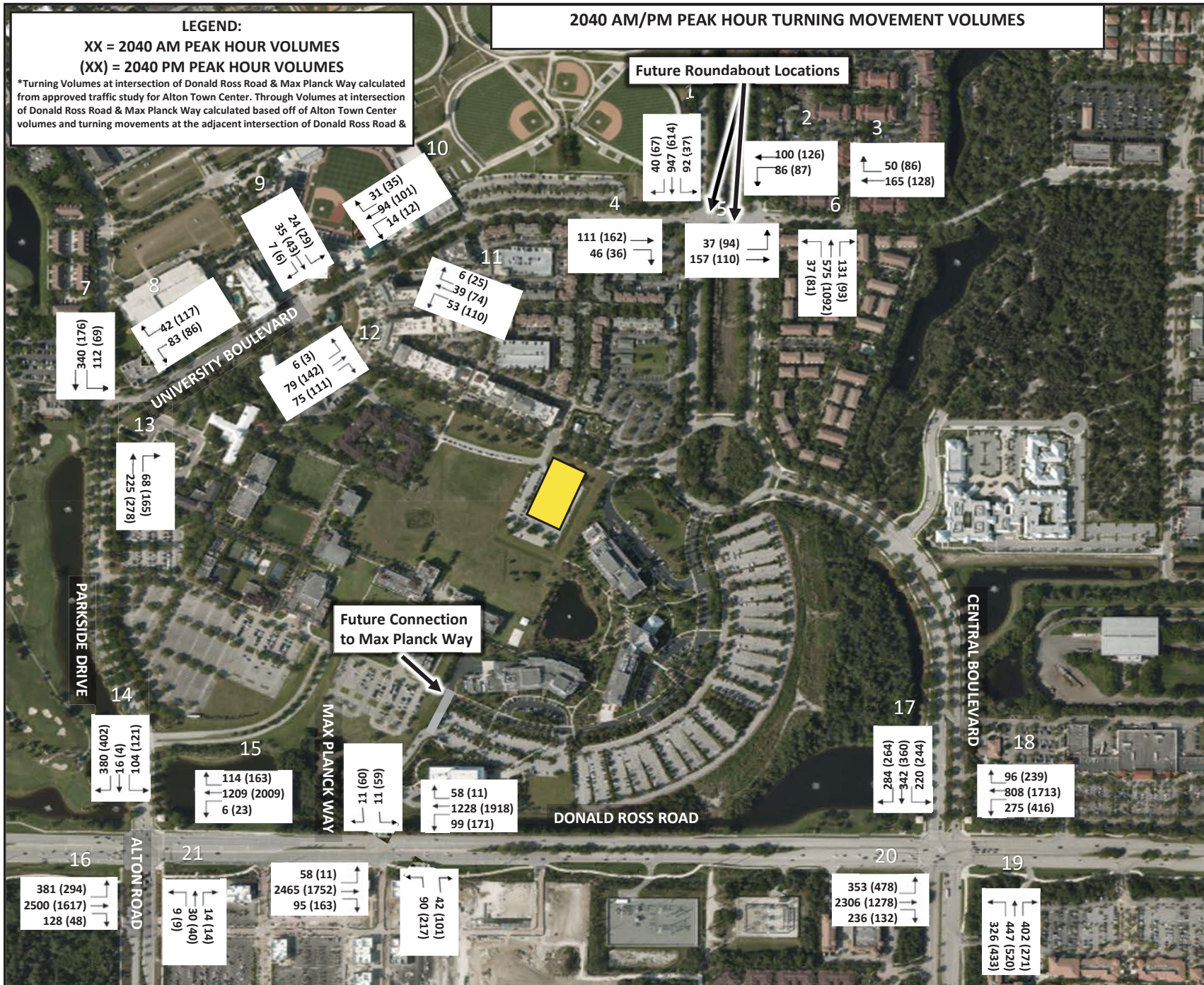


Figure 11.2 Future Traffic Plan - 2040

- **Policy 3C-4:** Allow available parking space not being used by the University for their purposes to be used by other entities by means of an Agreement. Any such agreement shall not interfere with the University mission. Provide parking for other guest functions such as Life Long Learning and Scripps Research Laboratories.

- **Policy 3C-5:** Prior to construction of new parking facilities or structures, the University will perform an overall parking study to evaluate the potential impacts of the new facility.

Objective 3D: The University shall minimize the visual impact of parking areas by implementing the following policy:

- **Policy 3D-1:** Mask parking spaces with berms, where appropriate. Subdivide parking areas with large islands with mature trees and landscaped walkway “fingers”.

Goal 4: To provide adequate pedestrian and non-vehicular circulation facilities on campus to meet the needs of the University.

Objective 4A: Develop and maintain a pedestrian atmosphere for the campus, and provide a system of safe and convenient pedestrian and non-vehicular facilities designed to meet the needs of the University through implementation of the following policies:

- **Policy 4A-1:** Create naturally shaded, uncovered pedestrian ways on campus, including a major connection from the Plaza to the Forum.
- **Policy 4A-2:** Expand the “Code Blue” emergency phone system to include all new pedestrian and bicycle paths on campus.
- **Policy 4A-3:** Coordinate the locations for future pedestrian circulation facilities with campus safety guidelines.
- **Policy 4A-4:** Coordinate the locations for additional lighting along campus pedestrian circulation routes with campus safety guidelines.

Objective 4B: In order to provide convenient and safe bicycle facilities on the campus, implement the following policies:

- **Policy 4B-1:** Provide and maintain bicycle paths on the campus.
- **Policy 4B-2:** Include clear and visible signage to encourage campus bicycle utilization.
- **Policy 4B-3:** Provide convenient, covered bicycle parking.
- **Policy 4B-4:** Include provisions for bicycle parking facilities in all new construction.

Goal 5: To coordinate the location of on-campus pedestrian and non-vehicular circulation facilities with those planned by the host community.

Objective 5A: Coordinate planned on-campus pedestrian and non-vehicular circulation facilities with those proposed in future circulation systems as described in local Comprehensive Plans through implantation of the following policies:

- **Policy 5A-1:** Create a pedestrian and non-vehicular circulation network that clearly, safely, and easily connects with the host community’s networks.
- **Policy 5A-2:** Coordinate with affected local governments to ensure that the University’s proposed pedestrian and non-vehicular circulation network is coordinated with and not in conflict with facilities proposed in local government comprehensive plans.



12 intergovernmental coordination

GOAL 1: Florida Atlantic University will strive to achieve the goals of the master plan through the use of joint processes for collaborative planning, decision making, and development review with the host town, host county, and other regional, state, federal, and special authority agencies. The University is concerned with the impact of its campus development on its context area, as well as the impact of development within the context area on the campus. The context area for the FAU Jupiter Campus is defined to be the area bounded by Donald Ross Rd on the south, Parkside Drive on the west, Main Street on the north, and Central Blvd on the east.

DEVELOPMENT REVIEW

Objective 1A: The University will aim to establish a process for the reciprocal review of University campus master plans and local government comprehensive plans and their amendments. In order to accomplish this, FAU will implement the following policies:

- **Policy 1A-1:** The Vice President of Administrative Affairs or delegate shall arrange a series of meetings with the host local government planning officials for the purpose of negotiating the terms and conditions of this reciprocal review process. Every effort shall be made to formalize these terms and conditions through an interlocal agreement or memorandum of understanding.
 - **Policy 1A-2:** Proposed amendments to the adopted campus master plan which exceed the thresholds established in s. 1012.30, F.S., should be submitted to the appropriate local, regional, and state agencies for review.
 - **Policy 1A-3:** Proposed amendments to the adopted campus master plan which do not exceed the thresholds established in s. 1012.30, F.S. and have the potential effect of impacting off-site facilities, services, or natural resources should be submitted to the appropriate local, regional, and state agencies for a courtesy review.
 - **Policy 1A-4:** Proposed amendments to local government comprehensive plans which have the potential effect of changing land uses or policies that guide the development of land within the designated context area, affect the provision of local services, or otherwise impact University facilities and resources should be submitted to the Vice President of Administrative Affairs or delegate for review.
 - **Policy 1A-5:** University planning officials shall continue to meet with officials from the host town and host county on a regular basis, or as the need arises, for the purpose of coordinating planning activities. Other agencies shall be invited to participate in these meetings as necessary.
- Objective 1B:** The University will aim to establish a process for the reciprocal review of proposed development activities both on-campus and in the campus context area. The following policies should be implemented:
- **Policy 1B-1:** Upon adoption of the campus master plan update, the University shall negotiate and enter into a campus development agreement as established in s.1013.30, F.S. University planning officials shall cooperate with local officials in the review of proposed campus development to assess potential impacts on local, regional, and state resources and facilities until execution of the campus development agreement.
 - **Policy 1B-2:** Once the campus development agreement is executed, all campus development may proceed without further review by the host local government if it is consistent with the adopted campus master plan and associated campus development agreement.
 - **Policy 1B-3:** The University and host local government will coordinate to plan for and implement compatible development along the boundaries of the campus. Compatibility issues include land use, aesthetics and signage, and development restrictions.
 - **Policy 1B-4:** FAU shall be informed of and permitted opportunities for review and comment on proposed development activities within the University's context areas to assess potential impacts on University resources and facilities.
 - **Policy 1B-5:** Within the negotiated Interlocal Agreement or Memorandum of Understanding shall be provisions requiring the town to transmit to the Vice President of Administrative Affairs or delegate any application for development order or construction permit within the designated context area which exceeds criteria or standards established therein.
 - **Policy 1B-6:** The Vice President of Administrative Affairs or delegate shall assess the potential impacts of proposed projects on FAU facilities and resources. Findings and proposed mitigation of any impacts noted shall be reitted in writing to the appropriate local government planning and development department.

intergovernmental coordination

- **Policy 1B-7:** University and local officials shall cooperate in the identification of appropriate strategies to mitigate the impacts of campus development on local, regional, and state resources and facilities, and to mitigate the impacts of proposed development within the context area on University resources and facilities.
- **Policy 1B-8:** Any dispute between the University and a host local government regarding the assessment or mitigation of impacts shall be resolved in accordance with the process established in s.1013.30, F.S.

INFRASTRUCTURE AND PUBLIC SERVICES

Objective 1C: FAU will endeavor to ensure adequate infrastructure services are coordinated with local government providers to support University functions and facilities.

- **Policy 1C-1:** The University shall participate when requested with local government advisory groups, citizens committees, task forces, local regulatory authorities, and similar groups where issues relating to general infrastructure are considered in order to ensure that University interests are coordinated with local entities.
- **Policy 1C-2:** The appropriate University representatives shall meet with representatives of local and state utilities to resolve issues relating to the maintenance and operation of the utility and infrastructure distribution system and provisions for future capacity.

Objective 1D: FAU will establish level of service standards and concurrency requirements for public facilities, services that interconnect with town facilities, and services for which the town has operational and maintenance responsibility, which are not in conflict with the host town's level of service standards.

- **Policy 1D-1:** These standards shall include the following items (Standards are established in Element 9, General Infrastructure):
 - o Stormwater quantity (Stormwater Management Sub-element)
 - o Stormwater quality (Stormwater Management Sub-element)
 - o Potable water capacity (Potable Water Sub-element)
 - o Sanitary sewage collection and treatment capacity (Sanitary Sewer Sub-elementary)
 - o Solid waste collection and disposal facility capacity (Solid Waste Sub-Element)

PUBLIC USE OF CAMPUS FACILITIES

Objective 1E: FAU shall continue to coordinate with civic and local government groups concerning the use of University facilities for recreational, entertainment, and other public service events.

- **Policy 1E-1:** The University will continue to support events consistent with availability of resources and facilities.
- **Policy 1E-2:** The University shall continue its policy to recover the cost of special events sponsored by non-University groups, except in those cases where it is determined by the Vice President for Administrative Affairs that the event is of benefit to and in the best interests of the University and the expenditure of University resources is appropriate.

TRANSPORTATION

Objective 1F: The University will endeavor to provide an effective multi-mode transportation system for the University community in cooperation with appropriate local and state government agencies. See element 11, Transportation for further guidance.

SAFETY

Objective 1G: FAU endeavors to provide a safe campus environment for students, faculty, staff, and visitors.

- The University will coordinate long-range planning efforts with fire, public safety, and environmental departments and agencies to maintain and enhance the safety of the campus and its population.

13 conservation

GOAL 1: It is the University's goal to ensure the conservation, protection, and wise use of all natural ecosystems and natural resources on University property.

Objective 1A: Protect the natural ecosystem

- **Policy 1A-1:** Areas of development shall be reviewed for evidence of plant and animal species that are listed as endangered, threatened, rare, or as species of special concern by federal, state, regional, or local agencies. If found, these areas shall remain protected from development and all other activities that may diminish their natural value and functions.
- **Policy 1A-2:** Continue to remove all non-native invasive plants identified in the Florida Exotic Pest Plant Council List of Invasive Plant Species from the grounds.

Objective 1B: Conserve, appropriately use, and protect the quantity and quality of current and projected water sources.

- **Policy 1B-1:** Continue to expand the use of the existing reclaimed water (gray water) for irrigation to reduce the use of well groundwater with the goal of ultimately eliminating the use of groundwater wells for irrigation.
- **Policy 1B-2:** Conserve water resources and reduce chemical use through the use of xeriscape design principles including use of drought tolerant non-invasive and native plant material, zoned irrigation systems, low volume irrigation systems, moisture sensors and rain switches, drought tolerant ground cover, and soil amendments and mulch to retain soil moisture. See Element 16, Landscape Design Guidelines for further guidance.
- **Policy 1B-3:** Continue to comply with South Florida Water Management District (SFWMD) water conservation program requirements and implement voluntary initiatives when feasible.
- **Policy 1B-4:** Complete a basic water usage audit with the help of resources such as the SFWMD Self-Assessment Guide for Commercial and Institutional Water Efficiency Improvement.
- **Policy 1B-5:** Implement water-saving measures requirements for new building construction such as use of ultra-low volume fixtures and xeriscape landscaping procedures. See Element 15, Architectural Design Guidelines for further guidance.
- **Policy 1B-6:** Protect water quality in campus lakes by providing vegetated littoral zones composed of native vegetation.

Objective 1C: Mitigate University-generated stormwater and minimize Stormwater-born pollutants

- **Policy 1C-1:** Establish procedures to properly dispose of contaminants and guard against accidental dumping or spillage of soils, solvents, paints, or other byproducts by Physical Plant.
- **Policy 1C-2:** Minimize the development of facilities within the 100-year floodplain. Limit, or mitigate for, impacts to the 100-year floodplain with all developments and redevelopments on campus.
- **Policy 1C-3:** Continue to meet or exceed water quality criteria as established by SFWMD when developing and redeveloping the campus.
- **Policy 1C-4:** Update the SFWMD Environmental Resource Permit with the future improvements and implement stormwater improvements in conjunction with projects to meet those requirements.
- **Policy 1C-5:** Continue to implement Best Management Practices for Stormwater in coordination with SFWMD and the Northern Palm Beach County Improvement District (NPBCID). See Element 9, General Infrastructure, Sub-Element Stormwater Management for further guidance.
- **Policy 1C-6:** Require construction practices that minimize soil erosion in accordance with the National Pollution Discharge Elimination System (NPDES), administered by the Florida Department of Environmental Protection (FDEP). Such practices generally consist of the use of erosion screens; inlet protection; sod, seed, or mulch; phasing and limiting the removal of vegetation; minimizing the amount of land area that is cleared; and wetting soils to prevent wind-borne erosion during construction. Strategies for minimizing soil erosion shall be included in the Soil and Water Resources Protection Guidelines.

Objective 1D: Reduce air emissions and preserve the quality of air on campus.

- **Policy 1D-1:** Reduce use of single occupant internal combustion vehicles for commuting to and from campus and encourage the use of public transportation by the campus community (students, faculty, and staff), including continued and expanded relationships with Tri-Rail, PalmTran, on-site shuttles, and other public transportation services. Continue to provide shuttle services to mitigate single occupant vehicle trips within campus. See Element 11, Transportation for further guidance.

conservation

- **Policy 1D-2:** Implement additional parking garages to reduce the number of standalone surface parking lots. Implement additional parking strategies to reduce the number of students with cars on campus.
- **Policy 1D-3:** Transition FAU's vehicle fleet to less polluting fuels (i.e. electric, LNG, hydrogen, etc) by 2028.
- **Policy 1D-4:** Encourage walking, biking, and skateboarding as the preferred forms of transportation within the campus by providing appropriate infrastructure, shade, and landscape elements that encourage these forms of travel. See Element 16, Landscape Design Guidelines for further guidance.
- **Policy 1D-5:** Continue to increase the number of trees on campus. See Element 16, Landscape Design Guidelines for further guidance.
- **Policy 1D-6:** Design and maintain facilities that use exhaust ducts for air discharge to minimize the discharge of pollutants. Install appropriate filtering devices on fume hoods and minimize the storage and use of volatile and hazardous materials in campus buildings.
- **Policy 1D-7:** Implement a program for the monitoring of indoor and outdoor air quality. Indoor sampling shall occur at chemistry laboratories, kitchens, and other sites where fumes are produced. Outdoor sampling sites shall include parking lots and congested intersections. Failure to meet air quality standards established by the Florida Department of Environmental Protection (FDEP) shall result in an assessment of the probable cause and the preparation and implementation of a plan to improve and maintain air quality.

Objective 1E: Conserve and appropriately use energy.

- **Policy 1E-1:** Continue to reduce campus-wide energy consumption expenditures through a combination of reducing the cost of the energy consumed and reducing total energy usage to comply with State and Federal mandates for energy use reductions.
- **Policy 1E-2:** Invest in energy conservation measures such as those outlined in 1013.23, F.S.
- **Policy 1E-3:** Continue to use campus-wide Energy Management Control System to monitor, control, and optimize energy usage.
- **Policy 1E-4:** Transition all campus lighting to LED technology.

- **Policy 1E-5:** Require all new buildings to incorporate energy conservation fixtures, systems, and other energy use and management techniques. See Element 15, Architectural Design Guidelines for further guidance.
- **Policy 1E-6:** Institute review procedures for mechanical and electrical equipment replacement that guarantee improved energy efficiency with the incorporation of new equipment.
- **Policy 1E-7:** Upgrade campus chillers and boilers to more efficient equipment.
- **Policy 1E-8:** Pursue cogeneration of electricity and generation of steam from waste heat where it can be demonstrated that energy savings will result.
- **Policy 1E-9:** Pursue grants to assist in the implementation, study, and development of renewable energy and energy conservation technologies and procedures (eg. The Renewable Energy and Energy Efficient Technologies Grant Program)
- **Policy 1E-10:** Consider use of photovoltaics in the development of new facilities and implement when appropriate.

Objective 1F: Maximize on-campus reclamation of consumer products and hazardous materials.

- **Policy 1F-1:** Determine and implement appropriate measures to assist compliance by all University community members with the Florida Solid Waste Management Act (SWMA), including efforts to expand, enhance, and promote existing programs to recycle suitable materials collected on campus.
- **Policy 1F-2:** Integrate facilities to accommodate collection, storage, and disposal of recycled materials in all new buildings.
- **Policy 1F-3:** Coordinate on-campus recycling programs with those of local government in regard to materials collected, and disposal/ collection procedures.
- **Policy 1F-4:** Provide on-campus facilities for the collection and storage of hazardous materials used in University operations as required by federal, state and local regulations.
- **Policy 1F-5:** Implement hazardous materials handling and storage procedures to include as a minimum the proper containerization, classification and labeling of all hazardous waste.
- **Policy 1F-6:** Utilize only licensed hazardous waste transportation and disposal companies.

14 capital improvements

GOAL 1: Florida Atlantic University is committed to the provision of a plan for facilities consistent with needs established by its mission and concomitant with sound financial planning.

Objective 1A: To provide facilities necessary to accommodate future growth, replace obsolete facilities, and correct existing deficiencies as identified in the Five-Year Capital Improvement Plan, FAU will implement the following policies:

- **Policy 1A-1:** The University, in cooperation with the State University System’s Board of Governors and in conformance with the priorities outlined in this element of the master plan, shall schedule and fund capital improvements identified in the University’s Capital Improvement Plan.
- **Policy 1A-2:** The University Board of Trustees, in conjunction with the University President and the Vice President for Administrative Affairs, shall evaluate, rank, and revise as necessary the order of priorities for facilities and projects set forth in the University’s Capital Improvement Plan.
- **Policy 1A-3:** The following criteria should be utilized to evaluate and rank proposed capital improvements in order of priority:
 - o Elimination of existing capacity deficits as determined by the level of service standards adopted as part of this plan
 - o Consistency with the frameworks established as part of this master plan
 - o Locational placement consistent with the Future Land Use Element adopted as part of this plan
 - o Consideration and consistency with approved development agreements and plans of other entities that use facilities at FAU
 - o Identification and availability of adequate funding for the project
 - o Incorporation of additional study findings regarding the replacement, renewal and construction of capital facilities (e.g. educational plant survey, housing master plan)

Objective 1B: The University will continue to incorporate in its facility planning the elements necessary to ensure annual review of capital renewal, ADA, fire safety, and other projects related to code compliance and health and safety matters. The following policies will be implemented to support this objective:

- **Policy 1B-1:** Facilities Management, in coordination with Physical Plant, will continue to provide an annual submission of Minor Projects that lists refurbishing, renovation, and remodeling projects to correct existing deficiencies, accommodate growth, and replace worn out facilities as part of the University facility planning process.
- **Policy 1B-2:** Individual projects shall continue to be recommended through established procedures for special appropriation consistent with established University priorities and goals.
- **Policy 1B-3:** Emergency projects or unanticipated projects resulting from enrollment or programmatic changes shall be reviewed using the same process as the annual budget, stressing participation and communication.

Objective 1C: The University shall create a participative environment for review of facility plans on an annual basis, incorporating input from all appropriate segments of the University community to ensure operational capabilities are consistent with facility plans.

- **Policy 1C-1:** The operational needs for each facility, whether new construction or remodeling/ renovation of an existing facility, shall be incorporated in the annual fiscal/ educational planning process.

Objective 1D: In order to ensure adherence to sound fiscal policies in providing the capital improvements identified in this campus master plan, the University shall not proceed with new capital improvements, expansions, or replacements until adequate funding sources have been identified and committed.

- **Policy 1D-1:** FAU shall continue to follow established University policies to integrate capital improvements funding in its annual budgeting process.

capital improvements



15 architectural design guidelines

INTRODUCTION

Architectural Design Guidelines are focused on design principles as opposed to prescriptive standards. The intent is to guide strategic future growth that creates long term value and rich campus experiences through functional and inspiring architectural responses to climate, context, and program. The design of future facilities should aspire to embody the six goals of the strategic plan: Boldness, Synergy, Place, Quality, Brand, and Strategy in the interest of creating a sustainable and cohesive civic realm where the unique identity of the whole is greater than the sum of its parts. The Guidelines describe design principles associated with developing the Civic Realm of campus and are related to Element 3: Urban Design. They also describe principles related to the Architectural Character of campus buildings.

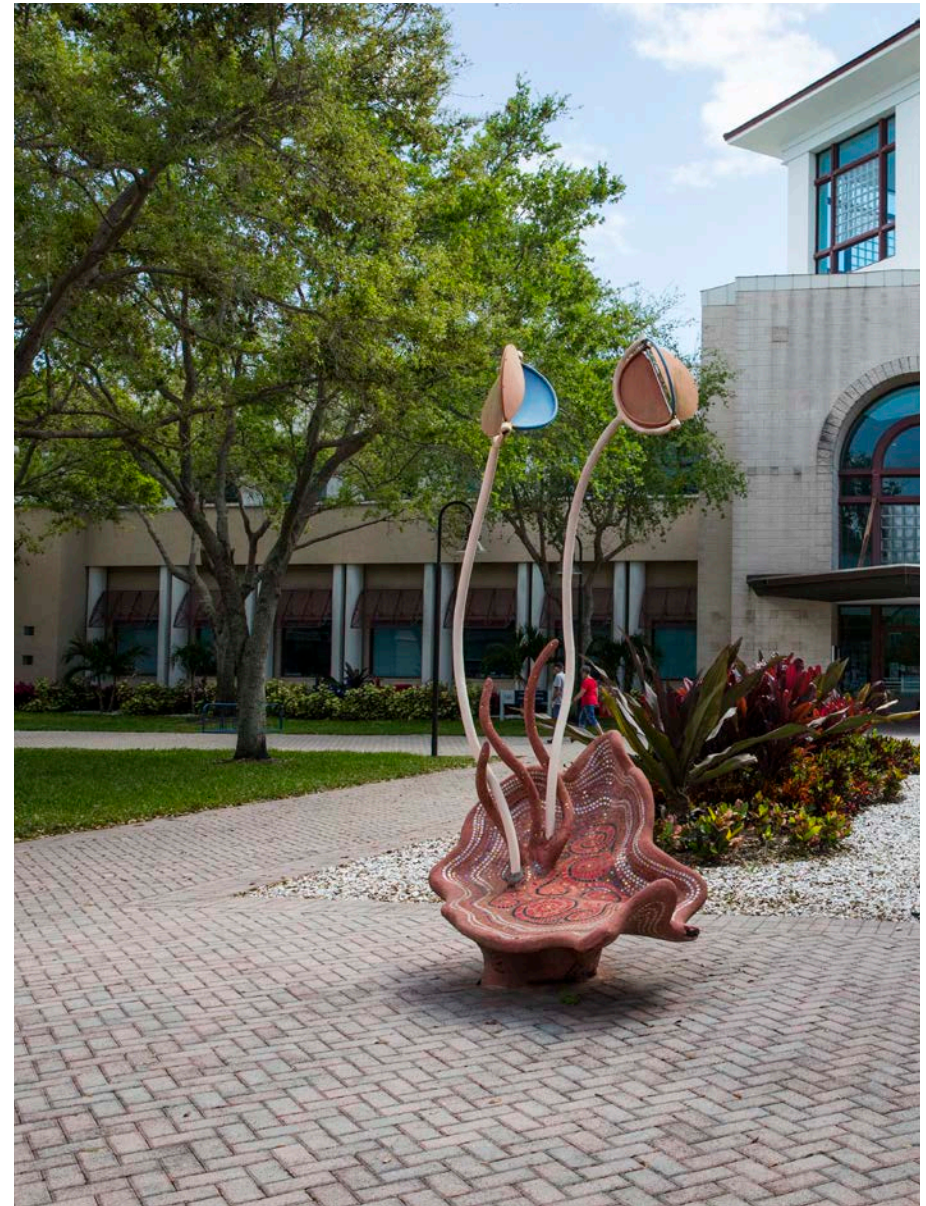
GOAL 1: Enhance and expand the function and aesthetics of the Civic Realm

Objective 1A: Promote stewardship of valued natural, built and historic resources

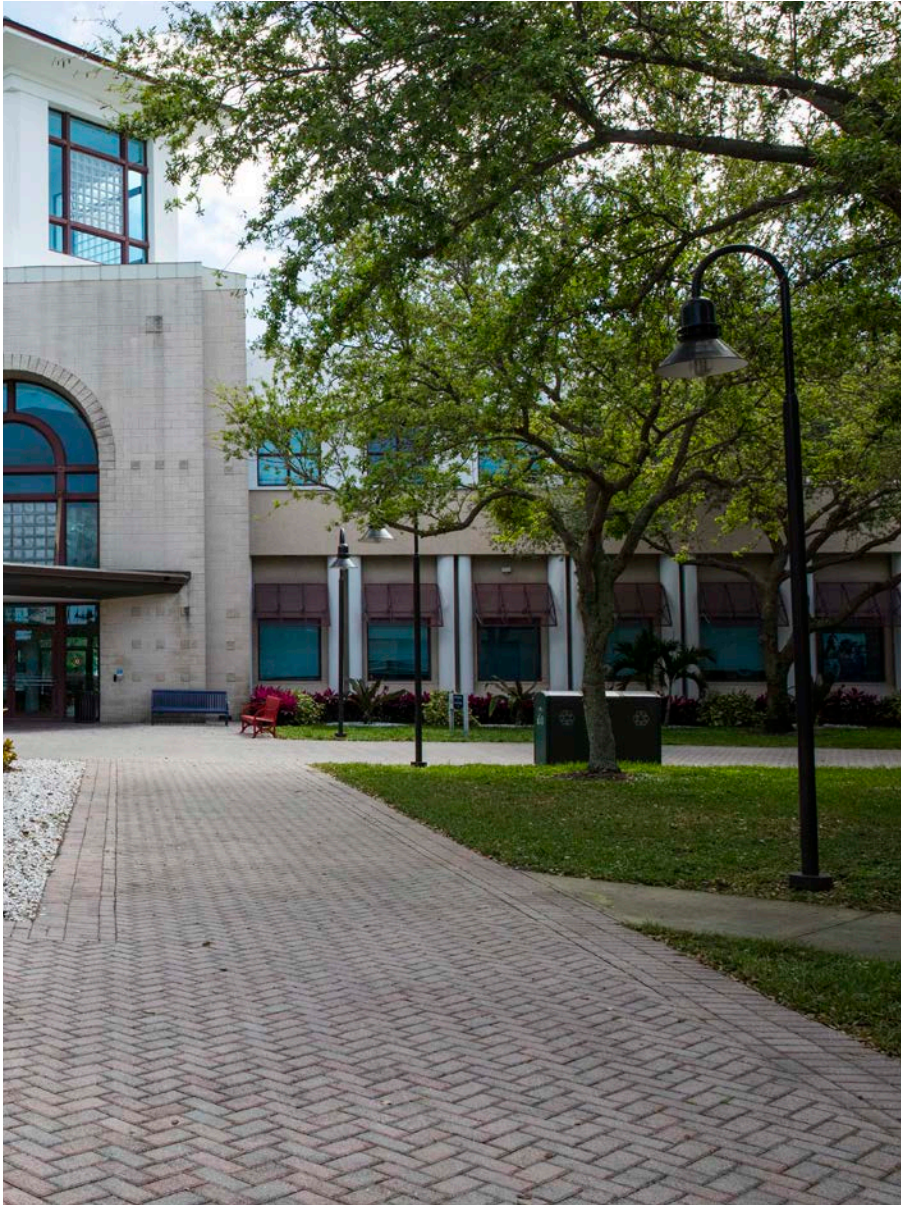
- **Policy 1A-1:** Preserve historic landscapes and structures.
- **Policy 1A-2:** Promote the installation of exhibits telling the story of the history of the FAU Jupiter Campus.
- **Policy 1A-3:** Preserve and expand the arboretum.
- **Policy 1A-4:** Promote the notion of the campus as living lab through outdoor classrooms, interpretive educational exhibits, and signage.

Objective 1B: Buildings and landscape should positively relate to the surrounding context

- **Policy 1B-1:** Campus edge development should be compatible to adjacent community development.
- **Policy 1B-2:** Functional building design should be compatible with district level framework and service needs.
- **Policy 1B-3:** Campus buildings should front open spaces and contribute to the campus open space network.



architectural design guidelines



- **Policy 1B-4:** Campus buildings should be designed to offer functional and aesthetic compatibility with neighboring buildings.
- **Policy 1B-5:** Accessibility across campus and into the surrounding community should be a priority.

Objective 1C: Utilize Place-making concepts to create a memorable and coherent campus

- **Policy 1C-1:** Site buildings to reinforce edges to open space with consistent setbacks: retain larger setbacks along important landscapes like the Main Street frontage.
- **Policy 1C-2:** Utilize smaller setbacks to reinforce more intimate courtyards. Consistent building setback will be critical to creating new green spaces in the core campus.
- **Policy 1C-3:** Increase campus density through infill to create more cohesiveness and more defined open spaces.
- **Policy 1C-4:** Promote a variety of space typologies that are functional, safe, and beautiful.
- **Policy 1C-5:** Transitional spaces are important for continuity and connections on campus.

Objective 1D: Shape the campus civic framework experience through hierarchy

- **Policy 1D-1:** Utilize size, shape, and formality of open spaces to project hierarchy at appropriate locations.
- **Policy 1D-2:** Site icon buildings at positions of prominence and fronting major spaces within the campus framework.
- **Policy 1D-3:** Site infill buildings to provide a background to campus space.
- **Policy 1D-4:** Preserve and shape views to spaces and architectural elements to aid orientation.
- **Policy 1D-5:** Variety in building heights will help reinforce hierarchy and orientation.

architectural design guidelines

GOAL 2: Foster a contemporary Architectural Character that remains contextual through consistent application of design principles

Objective 2A: Build on the framework of the original campus plan promoting climatically responsive and connected facilities that balance built form and open space.

- **Policy 2A-1:** Promote architectural qualities associated with permanence.
- **Policy 2A-2:** Design facilities to be sustainable and promote healthy lifestyles.
- **Policy 2A-3:** Site, orient and shape buildings to create and enhance outdoor campus spaces.
- **Policy 2A-4:** Reflect building typology in architectural form through strategic use of mass, proportion, fenestration, and detail.
- **Policy 2A-5:** Design facilities to be inviting and clearly organized.

Objective 2B: Incorporate environmentally responsive design elements

- **Policy 2B-1:** Follow *The 2018 Florida Statutes for Education Facilities 1013.23 Energy efficiency contracting* recommending investment in energy conservation measures and reinvestment of savings.
- **Policy 2B-2:** Implement low-energy use design, solar energy systems as described in s.1013.44 including: high efficiency chillers and boilers, thermal storage tanks, solar energy systems, waste heat recovery systems, and facility load management systems.
- **Policy 2B-3:** Implement passive design elements as defined in s.1013.01 (15) including: building orientation, landscaping, earth bermings, insulation, thermal windows and doors, overhangs, skylights, thermal chimneys, and other design elements.
- **Policy 2B-4:** Utilize shading strategies on building envelope and in open spaces to reduce mechanical loading and provide a more comfortable environment. Architectural elements include: building setbacks and overhangs, columns, floor slabs, balconies, arcades, and attached aluminum sunshades.
- **Policy 2B-5:** Balance window and wall composition and shade devices on building façades to maximize daylighting.

- **Policy 2B-6:** Balance the building's envelope efficiency with the indoor air quality. Be cautious of making too tight a building which could cause the so-called "sick building" syndrome because of high humidity levels.
- **Policy 2B-7:** Shade campus walkways using architectural structures or tree canopy.

Objective 2C: Incorporate design strategies for height and mass

- **Policy 2C-1:** Building mass for facilities housing larger footprint programs should be "broken down" to articulate functional program zones.
- **Policy 2C-2:** Consider "breaking down" mass to provide identifiable base, middle and top to buildings.
- **Policy 2C-3:** Height and mass should relate to the building's status as an icon or supporting structure.

Objective 2D: Incorporate design strategies to promote appropriate scale and proportion.

- **Policy 2D-1:** Utilize elements to relate to human scale at the ground level – fenestration, materials, and datum lines.
- **Policy 2D-2:** Activate the building base with transparency at the ground floor and public spaces generally to connect inside and outside.
- **Policy 2D-3:** Provide flexible study and collaboration spaces with views to the outdoors.
- **Policy 2D-4:** Promote visibility to and from collaboration spaces and activities, particularly adjacent to pedestrian circulation areas.

Objective 2E: Strategically incorporate architectural elements to reinforce the campus framework and aid in orientation.

- **Policy 2E-1:** Clearly articulate building entries through the use of overhead canopies, transparency, signage and detail. Connect to the walkway system.
- **Policy 2E-2:** Utilize porches or arcades to create a usable threshold between outdoor space and indoor lobby space.
- **Policy 2E-3:** Develop covered walkways which architecturally respond to building entries, activity spaces, and landscape architecture. Covered walkways should follow the overall scale of the existing system but should explore and exploit shade and shadow.

architectural design guidelines



- **Policy 2E-4:** Utilize “architectural lanterns” to mark building entry and terminate walkways. Explore shade and shadow expression for daytime interest and lighting strategies at night.
- **Policy 2E-5:** Roofs should be generally flat, with strategically placed pitched red roofs to highlight important buildings, axis or spaces.
- **Policy 2E-6:** Incorporate visual interest in the ground plane with paving material; particularly in small courtyard spaces.

Objective 2F: Incorporate consistent use of materials and color to promote a unified campus and to maximize resource efficiency

- **Policy 2F-1:** Materials should be durable, with minimal maintenance needs. The basic building material is concrete, either cast-in-place architectural, pre-cast architectural, concrete with a plaster finish or a ground face concrete masonry unit.

- **Policy 2F-2:** Continue the use of light-colored building materials for consistency and climate response. Concrete mix should be developed to achieve a color range from a light cream to a bright white. When natural stones are used, they also should be limited to light-colored stones such as limestone. The FAU pallet of approved colors for building exteriors are as follows:

Primary Neutral Colors: SW6385 – Dover White, SW6139 – Netsuke, SW7690 – Townhall Tan, SW7543 – Avenue Tan, SW6136 –Harmonic Tan, SW7713 – Towny Tan.

Secondary Accent & Trim Colors: SW7655 – Stamped Concrete, SW6340 – Baked Clay, SW6144 – Dapper Tan, SW2834 – Birdseye Maple, SW6179 – Artichoke, SW7513 – Sanderling.

Additional colors recommended by the architect or engineer may be considered through the Vice President of Administrative Affairs.

- **Policy 2F-3:** Added color should be limited to ground plane materials such as brick paving or colored concrete and to building accents such as entry canopies, handrails, graphics, and site furniture.
- **Policy 2F-4:** Glass should be clear or tinted, but not reflective or mirrored finish, and should not be so heavily tinted that it becomes opaque. Tinted or lightly tinted glass may need additional shading by using exterior shading devices and interior shades. Tinted glass on buildings should be of green tint set within clear anodized aluminum mullions. Additional colors recommended by the architect or engineer may be considered through the Vice President of Administrative Affairs.

Goal 3: Establish policies and procedures to protect the long-term rights of the University for all non-owned facilities constructed on University land.

- **Policy 3A-1:** Facilities to be built by non-University entities on land leased from the University will comply with all codes and standards applicable to the University’s own facilities.
- **Policy 3A-2:** All facilities to be built by non-University entities on land leased from the University will be reviewed and approved by the University for compliance with University guidelines.

16 landscape design guidelines

GOAL 1: To enhance the existing landscape character and landscape structure of the campus, by providing a sense of place, introducing more shade and drought-tolerant plants, and creating a safe environment for students.

PLANTING

The Jupiter campus boasts large open spaces that can be used for passive and active recreation for FAU students. The campus also boasts a wide variety of trees that offer character to the overall campus experience. All of these qualities are to be enhanced and are a priority initiative.

Objective 1A: In order to improve and expand upon the campus aesthetic, experience, and identity, FAU will implement the following policies:

- **Policy 1A-1:** The University shall promote conservation and reduce environmental impacts by complementing the existing plant palette by utilizing a percentage that meets or exceeds 50% native plants. Other drought tolerant species are also encouraged to be used. The University will develop a detailed landscape plan to address the quantity and percentage of native species.
- **Policy 1A-2:** Group plants in the landscape according to their water requirements so their irrigation system shall not over- or under-water some plants at the expense of others.
- **Policy 1A-3:** Reduce campus water needs by reducing the amount of turf on campus and replacing it with drought tolerant species wherever possible.
- **Policy 1A-4:** Avoid planting grass and other turf in areas that are too shady, dry, wet, or steep to be mowed safely. Use ground covers and other plants better suited to these areas.
- **Policy 1A-5:** Planting beds should be added around foundations of buildings for aesthetic improvement of the campus.
- **Policy 1A-6:** Enhance campus wayfinding and create focal points by placing planting beds with more ornamental plants around building entrances and main thoroughfares.
- **Policy 1A-7:** Use mulch in the plant beds to decrease water evaporation and reduce watering frequency.
- **Policy 1A-8:** Use a cohesive plant palette throughout the campus.



landscape design guidelines

- **Policy 1A-9:** Strive to incorporate campus-wide stormwater management into the overall landscape improvements.
- **Policy 1A-10:** Screen utilities by using hedges.
- **Policy 1A-11:** Non-native, unique, or other plants not listed below can be added in an effort to diversify the campus planting palette with prior approval from FAU. Planting should include but is not limited to the list below:

TREES AND PALMS

Cabbage Palm	<i>Sabal palmetto</i>
Gumbo Limbo	<i>Bursera simaruba</i>
Pigeonplum	<i>Coccoloba diversifolia</i>
Satin Leaf	<i>Chrysophyllum oliviforme</i>
South Florida Slash Pine	<i>Pinus elliotii</i>
Strangler Fig	<i>Ficus aurea</i>
Virginia Live Oak	<i>Quercus virginiana</i>

SHRUBS AND GROUNDCOVERS

Wax Myrtle	<i>Myrica cerifera</i>
American Beautyberry	<i>Callicarpa americana</i>
Coontie	<i>Zamia pumila</i>
Eastern Gamagrass	<i>Tripsacum dactyloides</i>
Firebush	<i>Hamelia patens</i>
Giant Leather Fern	<i>Acrostichum danaeifolium</i>
Saw Palmetto	<i>Serenoa repens</i>
Shiny-leaved Wild Coffee	<i>Psychotria nervosa</i>
Swamp Lily	<i>Crinum asiaticum</i>
Adam's Needle	<i>Yucca filamentosa</i>
Cocoplum	<i>Chrysobalanus icaco</i>

- **Policy 1A-12:** Plants listed as prohibited and invasive in Palm Beach County shall not be used on campus, and any existing such plants shall be removed. The University will develop a detailed landscape plan to address selection of plant materials, and management and prevention of invasive plants. Following is the list of Palm Beach County Prohibited Plants:

Air Potato	<i>Dioscorea bulbifera</i>
Australian Pine	<i>Casuarina spp.</i>
Brazilian Pepper	<i>Schinus terebinthifolius</i>
Carrotwood	<i>Cupaniopsis anacardioides</i>
Earleaf acacia	<i>Acacia auriculiformis</i>
Kudzu	<i>Pueraria montana var. lobate</i>
Old World Climbing Fern	<i>Lygodium microphyllum</i>
Melaleuca	<i>Melaleuca quinquenervia</i>
Queensland Umbrella Tree	<i>Schefflera actinophylla</i>

- o For more information on Palm Beach County invasive species, refer to the following links:

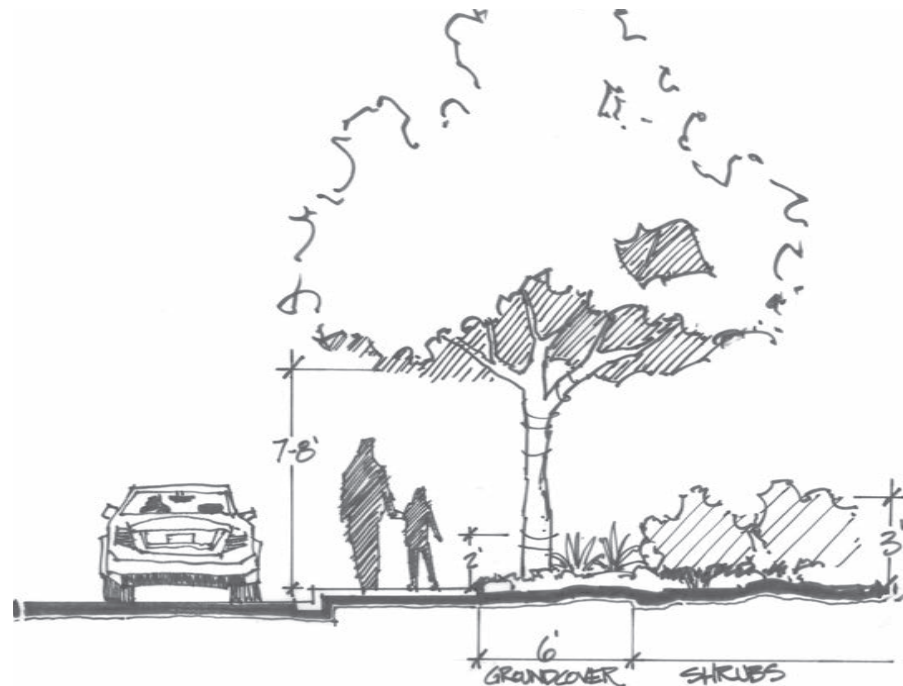
<http://discover.pbcgov.org/erm/Publications/ProhibitedPlantsBrochure.pdf#search=invasive>

<http://discover.pbcgov.org/parks/NaturalAreas/InvasivePlants.aspx>

- **Policy 1A-13:** Enhance planting variety at the existing campus entrances, providing flowering plants or plants with a contracting texture, in order to highlight the entrances into the campus.
- **Policy 1A-14:** For the proposed campus gateways, use flowering or shade tree accents, in conjunction with signage to highlight a sense of arrival.
- **Policy 1A-15:** For the south arrival road, complement the existing median planting with shade trees on both sides of the road, and palm trees, flowering or shade trees in the median at the beginning and end of the road. Add decorative columns or art pieces at the intersection with the loop road. Highlight the intersection with concrete pavers.

landscape design guidelines

- **Policy 1A-16:** For primary pedestrian promenades, use a continuous row of drought-tolerant shade trees to provide a pleasant walking environment throughout the year. The walk shall be complemented with site furniture and updated lighting fixtures, and shall be at least 20 feet wide.
- **Policy 1A-17:** For secondary pedestrian promenades, use a continuous row of drought-tolerant shade trees or palms. The width shall be at least 12 feet wide.
- **Policy 1A-18:** For formal spaces on campus, use planting layouts with a strong geometric structure. The planting palette should be drought tolerant and easy to maintain. The hardscape areas can include special treatments, such as pavers or natural stone.



**Please refer to CPTED policy for more information*

- **Policy 1A-19:** For the residential areas, the landscape shall provide shaded areas, but also flowering trees and shrubs and plants with year-round interest. Plants shall not block lines of site and shall not create unsafe spaces. A variety of site furniture should also be provided.
- **Policy 1A-20:** Enhance campus safety by following CPTED (Crime Prevention Through Environmental Design) planting guidelines:
 - o 2' maximum groundcover height along pedestrian pathways
 - o 3' maximum shrub height (placed minimum 6' away from walks)
 - o 7'-8' minimum tree canopy clearance
- **Policy 1A-21:** General Planting Notes:
 1. All planting materials shall be Florida Fancy or Florida Grade #1 as defined by the "Florida State Plant Board Standards for Nursery Stock" and "Grades and Standards for Nursery Plants," State of Florida, Department of Agriculture.
 2. All trees are to be planted according to the following standards:
 - a. Shade trees must be installed at least 4 feet away from all hardscape areas.
 - b. Palm trees must be installed at least 2 feet away from hardscape areas
 3. Planting soil mix for trees, shrubs, and groundcover shall consist of a thoroughly blended mixture of:
 - a. Palms:
 - 90% clean D.O.T. sand
 - 10% approved topsoil/Florida Peat mixture
 - b. Royal Palms:
 - 60% clean D.O.T. sand
 - 40% approved topsoil/Florida Peat mixture
 - c. Trees/Shrubs/Groundcover
 - 70% clean D.O.T. sand
 - 30% approved topsoil/Florida Peat mixture
- **Policy 1A-22:** The flexible open spaces along Main Street shall be graded in such a way to be able to host festivals and "Town and Gown" outdoor events. A planted pathway shall line the new proposed N-S primary promenade with Abacoa.
- **Policy 1A-23:** The existing lift station shall be screened by a vegetative buffer.

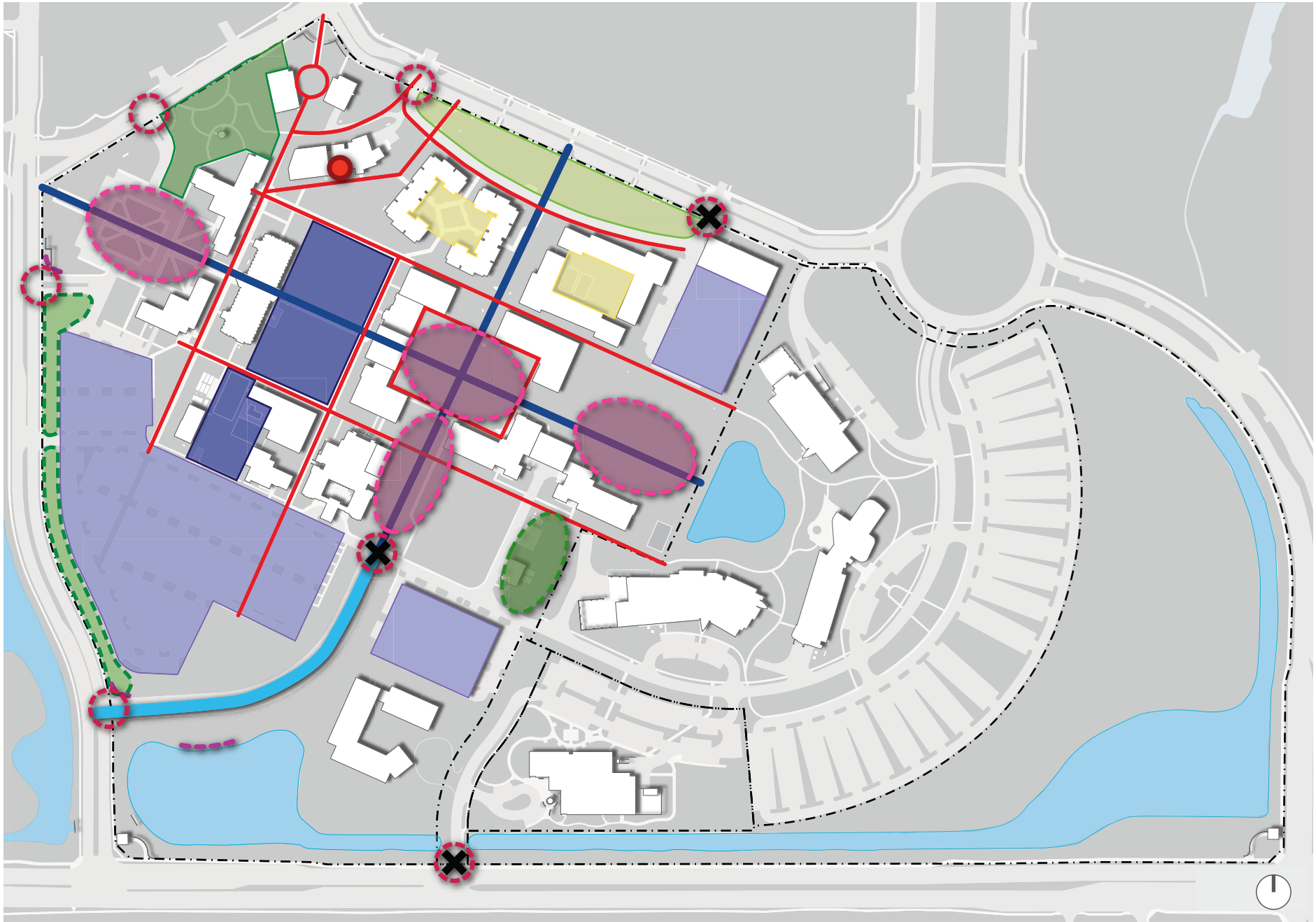


Figure 16.1 Landscape Typologies

landscape design guidelines

SHADING

Objective 1B: In order to enhance the outdoor experience, FAU will implement the following policies:

- **Policy 1B-1:** Enhance outdoor experience and learning by providing ample shade opportunities through use of planting and overhead features (covered walk, trees, shade sails, etc.).
- **Policy 1B-2:** Maximize canopy cover in all surface parking lots to create a comfortable outdoor environment and to reduce the urban heat island effect. This can be achieved by locating islands every 10-12 spaces and plant with a canopy tree and groundcover.
- **Policy 1B-3:** Replenish existing trees and palms along tree-lined promenades.



LAKES, WATERWAYS & STORMWATER PONDS AND CANALS

Objective 1C: In order to enhance and protect the water quality, FAU will implement the following policies:

The land along the water's edge is called the riparian zone and is often a wetland.

- **Policy 1C-1:** Establish shoreline vegetation to attract native wildlife and reduce erosion. The planting will meet or exceed 10 square feet of planting for every linear foot (1') of shoreline for a minimum of 50% of the total shoreline.
- **Policy 1C-2:** Use native aquatic plants in the riparian zone, and remove invasive, exotic species.
- **Policy 1C-3:** Establish a 'no maintenance' zone 10' back from the riparian zone to protect water from runoff and keep the waterways healthy. This area will not be mowed, fertilized, or have pesticides applied.
- **Policy 1C-4:** Use plants for riparian and 'no maintenance' zones that do well without fertilization or irrigation after establishment.
- **Policy 1C-5:** Plant native, flood-tolerant species that are known to help reduce contaminants in water.

Arrow Arum	<i>Peltandra virginica</i>
Golden Canna	<i>Canna flaccida</i> **
Lemon Bacopa	<i>Bacopa caroliniana</i>
Blue-Eyed Grass	<i>Sisyrinchium angustifolium</i>
Cardinal Flower	<i>Lobelia cardinalis</i>
Duck Potato	<i>Sagittaria lancifolia</i>
Mexican Water Lily	<i>Nymphaea Mexicana</i> **
Fragrant Water Lily	<i>Nymphaea odorata</i> **
Skyflower	<i>Hydrolea corymbosa</i>

**=Species that clean contaminants from the water



landscape design guidelines

FURNITURE AND LIGHTING

Objective 1D: In order to create a unified campus brand, FAU will implement the following policies:

- **Policy 1D-1:** The University shall implement standardized, consistent furniture throughout the campus to unify the campus brand.
- **Policy 1D-2:** Using similar materials and colors of furniture shall promote campus identity.
- **Policy 1D-3:** Outdoor study areas shall include a variety of seating options (study cabanas, benches, lounge furniture, tables with chairs and umbrellas, etc.), which also include charging stations and/or solar charging stations.
- **Policy 1D-4:** The University shall use the same types of lighting fixtures throughout the campus to create a cohesive feel for the campus.
- **Policy 1D-5:** The light fixtures should be optimized for efficiency and be full cut-off in order to respond to the night sky policy.

PUBLIC ART AND SIGNAGE

Objective 1E: In order to create a unique and iconic campus experience, FAU will implement the following policies:

- **Policy 1E-1:** Continue to use public art installations and signage to create campus focal points as a method of wayfinding and hierarchy of spaces.
- **Policy 1E-2:** The use of public art creates a lasting impression and an iconic campus experience.
- **Policy 1E-3:** Introduce historical markers, signage and art.
- **Policy 1E-4:** Maintain signage standards to create cohesive signs both across the campus and throughout all campuses.
- **Policy 1E-5:** Use art and signage at main entrance to create sense of place and draw people into the center of campus.

CAMPUS SAFETY

Objective 1F: In order to enhance safety on campus, FAU will implement the following policies:

- **Policy 1F-1:** The University shall follow CPTED (Crime Prevention Through Environmental Design) principles in all aspects of design improvements on campus. The principles of CPTED are as follows:
 - o Territoriality: Clearly delineating public and private space
 - o Natural surveillance: Keeping intruders under observation
 - o Access control: Decreasing criminal accessibility
 - o Activity support: Presence of planned activity for the space
 - o Maintenance: Maintain spaces to avoid neglected-looking areas which attract criminal activity
- **Policy 1F-2:** The CPTED principles shall be accomplished through the following recommendations:
 - o A choice of paths to get to one destination
 - o Adequate lighting
 - o Conveniently placed emergency telephones
 - o Creation of an escort service on campus
 - o Transport service
 - o Campus patrols
 - o Safe access to buildings
 - o Placement of parking in a way that increases safety and visibility

landscape design guidelines

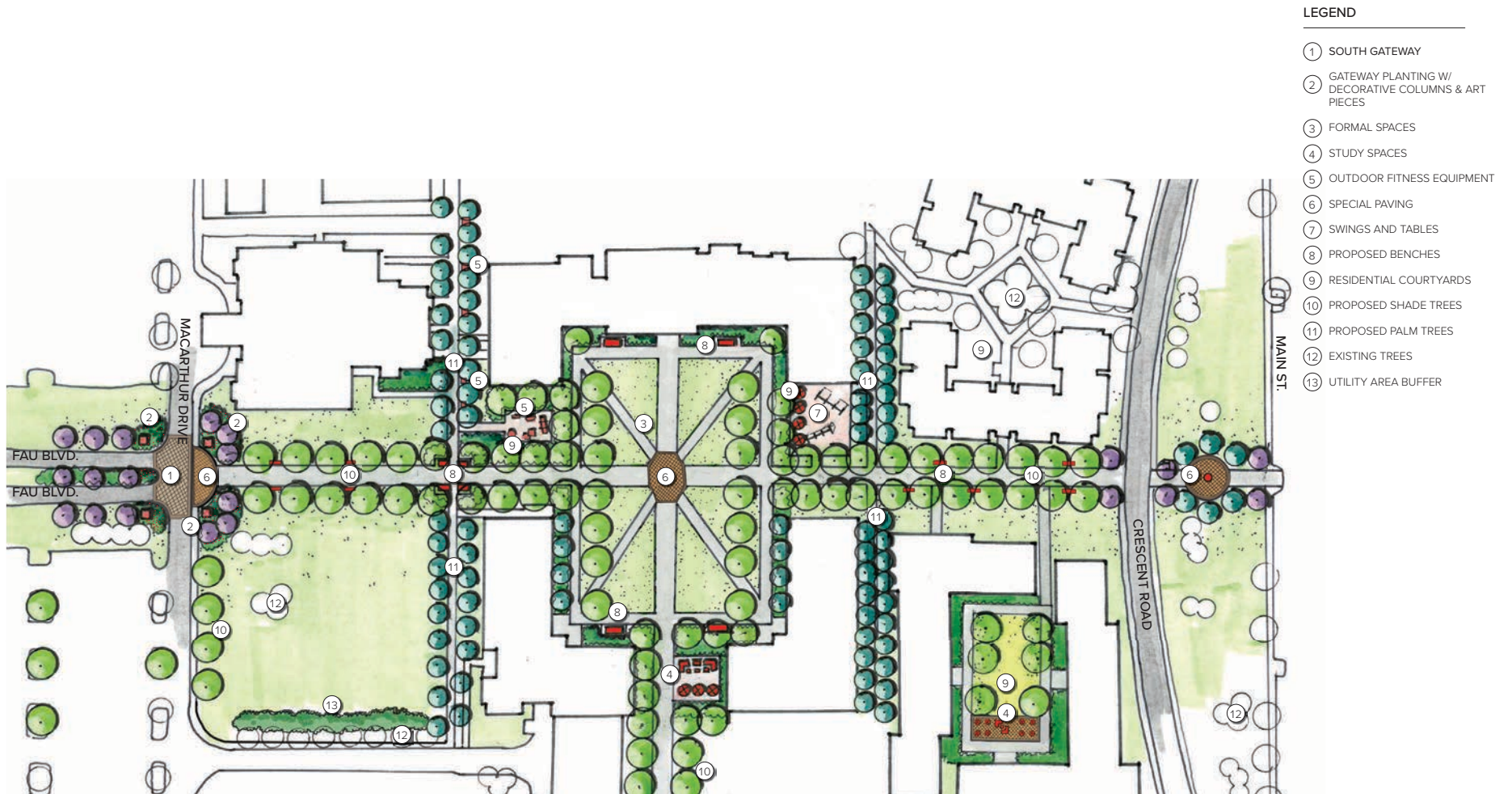


Figure 16.2 Conceptual Landscape Plan for Central Green and North-South Axis



17 facilities maintenance

GOAL 1: Florida Atlantic University endeavors to ensure the provision of attractive buildings, with properly functioning components and systems, that are properly maintained and that provide conditions conducive to quality instruction and learning.

Objective 1A: The University aims to identify and correct facility deficiencies and needs through periodic review of existing systems and system components. To achieve this, FAU will continue to implement the following policies:

- **Policy 1A-1:** Inspect and assess the interior, exterior, and systems of all campus buildings as required to ensure compliance with applicable standards and codes, and to ensure the proper planning of repairs and replacements of building components needed to provide fully functional and efficient buildings at all times.
- **Policy 1A-2:** Ensure all campus building envelopes are inspected a minimum of once per year and components needing repairs and replacement are identified.
- **Policy 1A-3:** Ensure all campus building interior spaces and structural components are inspected on a regular basis and components needing repairs and replacement are identified.
- **Policy 1A-4:** Ensure all building systems (including but not limited to electrical, plumbing, HVAC, voice data, fire, security, and signage) are inspected as deemed appropriate by recognized industry standards for each respective system and components needing repairs and replacement are identified.
- **Policy 1A-5:** Determine priorities for maintenance and improvement projects annually based on availability of funding and review of Capital Improvement Plan. General work priorities and budget allocations shall be determined in the following order:
 - (1) health, fire safety, code requirements, universal accessibility
 - (2) instruction/research needs
 - (3) student needs
 - (4) administrative support function needs
 - (5) other needs



- **Policy 1A-6:** Develop annually a schedule for eliminating deficiencies related to conformance of University facilities with current standards based on the availability of funding and the priorities of work identified in Policy 1A-5.

Objective 1B: FAU strives to maintain all campus buildings at a level that ensures facilities that are aesthetically pleasing, clean, sanitary, and safe. To achieve this, the University will continue to implement the following policies:

- **Policy 1B-1:** Establish and follow routine and preventative maintenance procedures for all building envelope components which ensures the continued integrity of each, prevents moisture intrusion, and provides adequate insulation values throughout.
- **Policy 1B-2:** Establish and follow routine and preventative maintenance procedures for all interior components necessary to ensure aesthetically pleasing, clean, sanitary, and safe environments.
- **Policy 1B-3:** Establish and follow routine and preventative maintenance procedures for all building systems to ensure the full and efficient operation of each upon demand.

- **Policy 1B-4:** Continue to utilize a scheduled maintenance program for mechanical and electrical components and systems.
- **Policy 1B-5:** Prioritize and fund maintenance and improvement projects required to maintain adopted level of service standards and to correct any identified code or standards deficiencies based on the following criteria in order of importance:
 - (1) safety
 - (2) impact on instructional activities
 - (3) impact on administrative functions
 - (4) impact on student activities

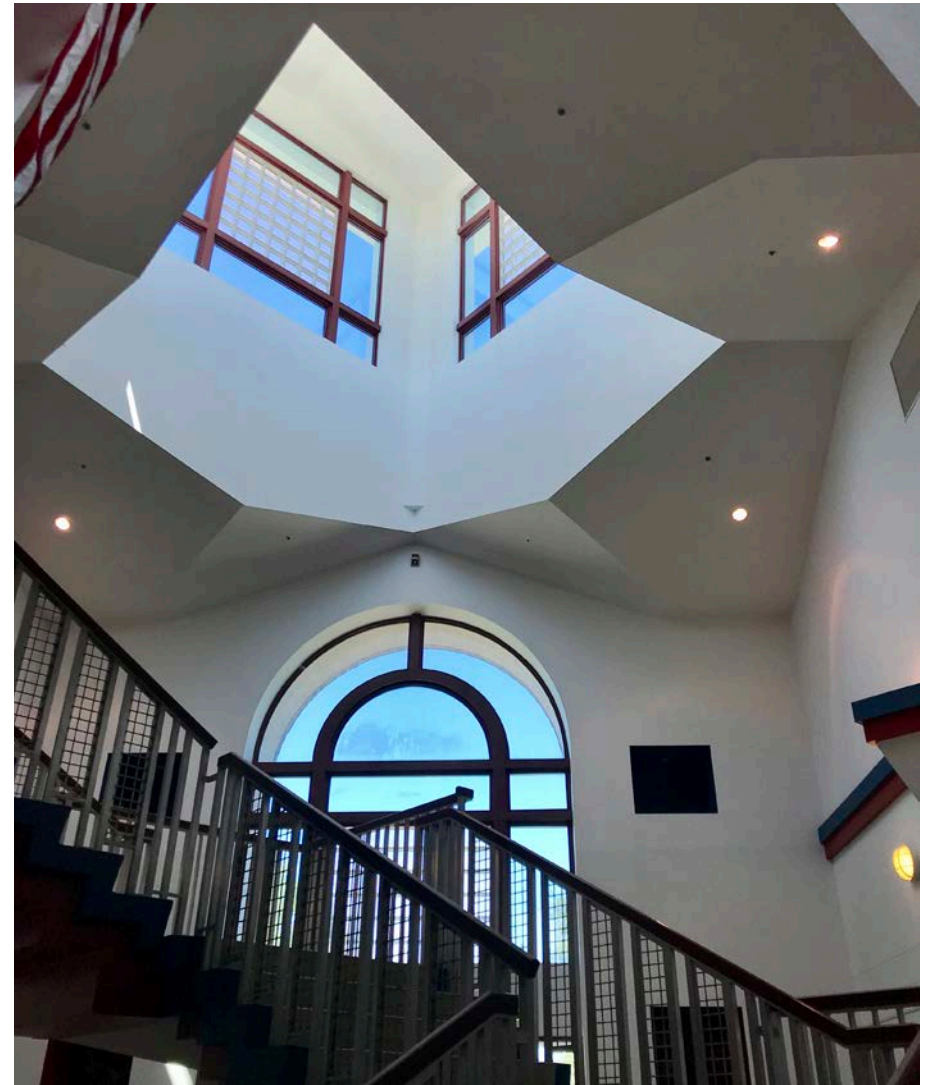
Objective 1C: FAU strives to manage facilities in a manner which minimizes usage conflicts, overcrowding, and retrofit costs. To achieve this, the University will continue to implement the following policies:

- **Policy 1C-1:** Limit facility use changes which involve uses with significantly different operational, spatial, or mechanical requirements.
- **Policy 1C-2:** The Office of Space Utilization and Analysis will coordinate the use and capacity of buildings on a continuous basis. As requirements for additions, deletions, or renovations are made known, the Office of Space Utilization and Analysis will coordinate with Facilities Management and Physical Plant to identify the scope of work required, its relative priority, and the best means and method to accomplish it to ensure adequate space is available and space is being used to the best benefit of the University.

Objective 1D: The University aims to ensure the availability of sufficient funding and other resources to support projected facility maintenance requirements. To achieve this, the University will continue to implement the following policies:

- **Policy 1D-1:** Include a request for funds necessary to correct identified facility deficiencies and ensure the proper operation and maintenance of University facilities in annual Capital Improvement Plan.
- **Policy 1D-2:** Incorporate within building construction programs and funding requests projected life cycle maintenance expenses.
- **Policy 1D-3:** Pursue adequate staffing and funding necessary to provide for the maintenance of landscaping activities to ensure a reasonable appearance is presented for campus visitors.

- **Policy 1D-4:** Update the adopted campus master plan as necessary to reflect changes in maintenance priorities as identified by inspections, assessments, availability of funding, etc.

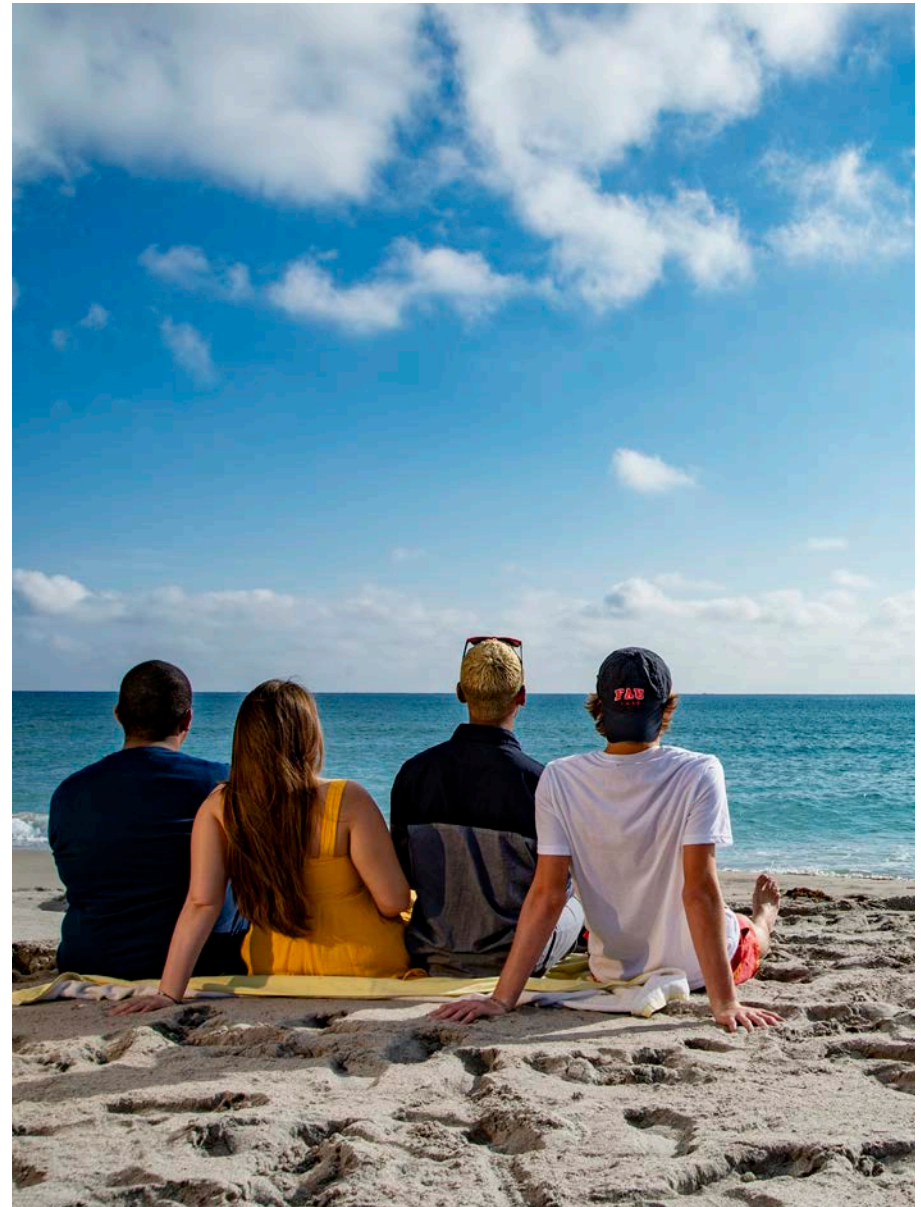


18 coastal management

GOAL 1: Florida Atlantic University endeavors to assist local agencies in protecting public health, safety, and property from the harmful effects of natural disasters.

Objective 1A: The University will, to the best of its ability, provide suitable space in University facilities for students, faculty, and employees expected to require shelter prior to and during a disaster. The University will implement the following policies:

- **Policy 1A-1:** The University recognizes that none of its current facilities are suitable for use as emergency shelters and shall continue to work with local agencies to accommodate students, faculty, and staff expected to require shelter prior to and during a disaster. Palm Beach County has been deemed to have sufficient shelters per the 2018 Statewide Emergency Plan.
- **Policy 1A-2:** New buildings shall be constructed in accordance with the public shelter standards adopted by the Board of Trustees, unless the Board of Trustees, with the concurrence of the State Department of Community Affairs and the County Emergency Management Office, exempts the building or part thereof from compliance.
- **Policy 1A-3:** The University will make available appropriate areas of the University for use by emergency management agencies as staging areas for supplies and equipment. The University shall designate large open areas such as parking lots, recreational fields, and undeveloped fields for this use.
- **Policy 1A-4:** Information regarding University facilities suitable for use as emergency shelters and areas designated for use as staging areas by emergency management agencies shall be made available to local emergency management agencies.
- **Policy 1A-5:** The University shall incorporate procedures for the management and operation of University facility shelters in its Emergency Preparedness and Operations Plan.





appendix a: space needs analysis summary

Space Use Category	2017 Student Headcount = 720 Student FTE = 551				Future Horizon 2028 Student Headcount = 3,000 Student FTE = 2,304			
	Current ASF	Calculated Space Requirement	Difference	Percent Difference	Future Built ASF	Calculated Future Space Requirement	ASF Difference	Percent Difference
Academic & Academic Support								
Classrooms	18,039	5,555	12,484	69%	18,039	23,245	(5,206)	(29%)
Teaching Laboratories	8,105	6,945	1,160	14%	8,105	29,055	(20,950)	(258%)
Research Laboratory	41,414	34,690	6,724	16%	41,414	56,500	(15,086)	(36%)
Office-Computer	37,693	28,710	8,983	24%	37,693	97,980	(60,287)	(160%)
Study/Library	18,848	7,760	11,088	59%	18,848	27,200	(8,352)	(44%)
Instructional Media	128	275	(147)	(115%)	128	1,150	(1,022)	(798%)
Auditorium/Exhibition	2,469	1,650	819	33%	2,469	6,910	(4,441)	(180%)
Student Academic Support	109	109	0	0%	109	109	0	0%
Campus Support	1,263	4,500	(3,237)	(256%)	1,263	13,050	(11,787)	(933%)
Other Assignable	4,252	4,252	0	0%	4,252	4,252	0	0%
Subtotal	132,320	94,446	37,874	29%	132,320	259,451	(127,131)	(96%)
Auxiliary & Auxiliary Support								
Classrooms	3,631	3,631	0	0%	3,631	3,631	0	0%
Research Laboratory	190	190	0	0%	190	190	0	0%
Office-Computer	2,750	2,750	0	0%	2,750	3,070	(320)	(12%)
Gymnasium	341	341	0	0%	341	15,000	(14,659)	(4299%)
Auditorium/Exhibition	13,664	13,664	0	0%	13,664	13,664	0	0%
Student Center	89	6,480	(6,391)	0%	89	27,000	(26,911)	0%
Campus Support	0	1,766	(1,766)	n/a	0	3,555	(3,555)	n/a
Residential Facilities	60,514	64,575	(4,061)	(7%)	60,514	132,075	(71,561)	(118%)
Other Assignable	8,267	8,267	0	0%	8,267	8,267	0	0%
Subtotal	89,446	101,664	(12,218)	(14%)	89,446	206,452	(117,006)	(131%)
TOTAL	221,766	196,110	25,656	12%	221,766	465,903	(244,137)	(110%)

Figure A.1 Space Needs Analysis Summary: Jupiter Campus

The space needs analysis above was performed by applying normative space guidelines using data provided by FAU. Reliability of the findings of any space needs study depends on several factors, including the quality of the data, the appropriateness of the space standards used, and the validity of the enrollment projections. The analysis utilized space needs generation factors, formulas and standards for Florida Colleges as dictated by the State Board of Education when available. The analysis has not been validated and is not intended for use in determining project funding.