806 Douglas Rd.
Suite 300
Coral Gables, FL 33134
AA-C000180

t: 305.569.1333
f: 305.569.1334
www.perkinswill.com

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Meeting Minutes

By:	Perkins+Will - GK	Date:	9/16/2012
Meeting Date:	8/28/2012	Project Name:	BT-857 FIU-Campus Master Plan Update 2010-2020
Meeting Time:	3:00pm-5:00pm	Project No.:	810369.000
Meeting Location:	FIU CSC Rm 1123	Attendees:	*Focus Group Members:* *-Amir Mirmiran, Steering Committee Advocate* *-Bobby Grillo (FIU-Information Technology)* *-Danny Paan (FIU-FMCD)* *-Sergio Garcia (MD-WASD)* *-Jose Soto (MD-WASD)* *-Jose Rodriguez (AHC)* *-Robert Herrada, (City of Sweetwater)* *-Amaris Beza (FIU Student-Civil Engineering)* *-Devon Barroso (FIU Student-MEP Engineering)* *-Bob Griffith, FIU* *-Stuart Grant, FIU* *-Sarah Mazorra, FIU* *-Rodrigo Pigna, ML* *-Mike Kroll, ML* *-Eric Czerniejewski, ML* *-James Tatone, AEI* *-Daniel Cesar, AEI* *-Ben Sporer, P+W* *-Larry Page, P+W* *-Gene Kluesner, P+W*
Next Meeting Date:	Focus Group Meetings on Oct 2, 3, and 4.		

The attached are meeting notes for Work Session #1

FOCUS GROUP 5 – Infrastructure, Utilities, & Maintenance

Item No.	Description
1.1	**Introduction and Campus Master Plan Process Overview:** Focus group members were introduced and an overview of the Campus Master Plan Update process, project schedule, and meetings were reviewed. Focus Group Meetings will be concurrent and immediately after the six planned Steering Committee Meetings. Infrastructure is a state required element in the final master plan.
1.2	**Project Schedule**: • Inventory & Analysis — July-Oct 2012 • Preliminary Alternative Concepts — Nov-Dec 2012 • Concept Plan Development — Jan 2013 • Draft Comprehensive Master Plan — Feb-July 2013 • Final Comprehensive Master Plan — Aug-Dec 2013 • BOT Approval of Master Plan — Dec 2013
1.3	**Update to Current Campus Master Plan:** This plan will be an update of the current 2005-2015 Campus Master Plan (which was approved by the FIU-BOT in 2010) to 2010-2020 timeframe. Updates on new Building and Infrastructure projects since 2010 were reviewed.
1.4	**Evaluation and Appraisal Report (EAR)**: The major issues affecting FIU and recommended by the FIU Metropolitan Center to be addressed in the Campus Master Plan are: • Overcrowding at Modesto Maidique Campus • Accountability Measures to Exceptions to the Campus Master Plan • Parking Availability / Accessibility & Transportation Options • Traffic Congestion / Roadway Capacity • Student Housing Demand • Recreation & Open Space Preservation • Land Use Constraints • Future of Biscayne Bay Campus & Engineering Center • Campus Identity: Architecture and Landscaping • Improved Relations with Host Communities
1.5	Review and Prioritize EAR issues affecting this Focus Group Elements 9, 10, and 17: <u>Infrastructure</u> 1. Address old infrastructure to correct existing deficiencies and to meet the future needs of the University 2. Make sustainable building techniques and enforcement of smoke free areas a best practice in the Campus Master Plan

Item No.	Description
	3. Facilitate LEED Certification for new construction and for renovation, operation and maintenance; to help ensure competitive recruitment and retention 4. Develop best Practice plans and procedures for storm water control and treatment to prevent pollution of groundwater, untreated runoff into surrounding waterways and to prevent flooding of low-lying areas and adjacent properties. 5. As part of the solid waste goals, objectives and policies, attention should be given to policies which lead to the implementation of programs for the recycling of white materials goods. 6. Develop partnerships, goal, objectives, and policies for the University to participate in the Solid Waste Management Trust Fund. <u>Utilities/Facilities Maintenance</u> 1. Consider the use of photovoltaic installations on flat rooftops to reduce utility cost. 2. Ensure that future chilled water, electrical power, and telecommunications facilities are developed to serve the needs of planned capital improvements projects and correct existing deficiencies. 3. Require a review of energy utilization in order to eliminate costs associated with increasing capacity of infrastructure; reduce loads where possible to reduce demand on utilities. 4. Modify and maintain building standards to comply with FPL-recommendations and participate in FP&L's energy saving incentive programs. 5. Address the quality of Wi-Fi on all campuses; correct connectivity processes that are too cumbersome or are outdated.
1.6	Utilities/Facilities Maintenance Issues: • Chilled water pumping capacity upgrades: with completion of satellite chiller plant in AHC there will be 12,500 tons total MMC capacity by Feb 2013. Room for three more units at AHC satellite plant. Major weakness is on south side of campus routing. • It is assumed that any future Fair Grounds development will have its own satellite chiller plant. • EC chilled water capacity is in excess of current development. (2,600 ton) • BBC chilled water capacity issues are not clear, will require more research. • Natural Gas Service on MMC will allow FIU to use steam generation for future clinical and research needs.

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	• Updated building standards for mechanical and electrical required. • Reduce energy consumption by 10% per year, per Florida House Bill requirements. Qualifications required….look at per student and per facilities classifications as well. • Create Utility Energy Use index by building. Chilled Water and BTU meters • Consider alternate sources of energy, i.e. co-gen, thermal storage, etc. • Geo-thermal studied for condenser water for chiller plants, but not feasible. • EMS controlled central lighting system (95% of buildings) • Lighting upgrades (T8 lamp replacement) • Increase wireless IT capacity throughout campus. Currently 8-10,000 concurrent users at peak coverage-no open network. Campus wide / Open Space coverage and more user friendly; cellular data 3g and 4g vs. university based wireless coverage. Dash system by AT&T in process of upgrading on campus. • FPL requirements for building standards → FPL incentives • Thermal Energy Storage Feasibility Study → $2,500 incentive $464 - $580 per ton of on-peak period summer cooling load removed $16 - $20 per ton for initial system Cx • High Efficiency Chillers → Incentives vary based on equipment • Demand Control Ventilation → Incentives vary • FPL requirements for building standards → FPL incentives Energy Recovery Ventilation → FPL incentives available if not required by code Lighting upgrades Demand response program. Load shedding and stationary generators. • Create utility/infrastructure corridors, open space and transportation as no build zones. Building locations are flexible but must respect the above corridors. • Network Operations Centers currently in GL and PC. 10G backbone today. Research and clinical buildings require the most network bandwidth capacities. NAP and AMPATH connections on campus. Expansion of a new data center in Student Academic Support Center is planned per a university wide analysis.
1.7	FIU Greenhouse Gas Inventory Report (2010): Most categories are in decline with the major exception of student commuting, which is causing total emissions at university to increase. More public transportation access, inter- campus shuttles, electric charging vehicles, more on campus student housing will all alleviate this growth in emissions.
1.8	Business Model for Utilities: • How are costs of utilities assigned? (i.e. Physical Plant or assigned to each department) • Does FPL bill for each meter at each service on campus or one single primary meter? • Are BTU meters installed at each building to measure chilled water energy consumption? • How is gas service billed on campus, i.e. one main campus meter or per service at each building? • FPL Easements – Blanket or Prescriptive?

Item No.	Description
1.9	Information required by planning team: Any recently performed infrastructure/utility projects and related studies and/or reports for each of the FIU Campuses: 1. Storm Water Master Plan. 2. Water and Sewer Master Plans and/or modeling. 3. Condition Assessment & Utility Inventory for ALL campuses. 4. Chilled Water Capacity Studies at MMC, EC, and BBC. 5. Satellite Chiller plant documents. 6. Utility Bills per campus and buildings. 7. University Data Center Analysis and Studies. 8. Drainage System (RFI Item 5.2 - Inventory of all public and private facilities and natural features which provide storm water management for the campus, including detention and retention structures, storm drainage pipe systems, natural stream channels, rivers, lakes, wetlands, etc.) 9. Water Distribution (RFI Item 5.5 - Inventory of all public and private facilities (including main distribution lines) which provide potable water to the campus) 10. Sanitary Sewer (RFI Item 5.9 - Inventory of all public and private facilities (including main collection lines) which provide sanitary sewer services to the campus)
1.10	Sustainability Programs to Incorporate into Master Plan: - American College and University President's Climate Commitment (ACUPCC) - Association for the Advancement of Sustainability in Higher Education (AASHE) - US Green Building Council, Leadership in Energy and Environmental Design (LEED)
1.11	Infrastructure Issues: • MDWASD – 10 years capacity for FIU. • Conditions assessment of water/storm/sewer lines required. • Separate water meters at each building. • Easements of 6 feet around water mains on each side and 25 feet overhead clearance. Need to ensure minimum separations in utility corridors. • Sewer is private, metered at 8th and 117th streets. • May need to add fire hydrants within areas of MMC • Capacity will become an issue with the future expansion of the County Fair property development.

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	• Brand of each campus could also be applied to storm water management solutions. I.E. Environmental bio swales. • Campus Development Agreements on each campus require review and coordination.
1.12	Discuss university strengths, weaknesses, opportunities and threats: Homework assignment for each focus group member: provide 5 examples of strengths and 5 examples of weakness related to Infrastructure, Utilities, & Maintenance at FIU. These can be in the form of images and/or narratives. Also, bring examples of best practices or models from other universities or communities.
1.13	Next Steps: Work Session #2-Focus Group Meetings are now being scheduled for Oct 2, 3, and 4, 2012

End of Work Session #1 FOCUS GROUP 5 – Infrastructure, Utilities, & Maintenance Meeting Minutes

The foregoing constitutes our understanding of matters discussed and conclusions reached. Other participants are requested to review these items and advise the originator in writing of any errors or omissions.