Master Plan and Capital Project Update

January 31, 2018
Meeting Agenda

• Review and update the community on progress with the implementation of the 2012 Master Plan.

• Discuss the Master Planning Process.

• Principles behind the Master Plan.

• Provide overviews of Capital Projects that the campus has undertaken since the completion of the Master Plan in 2012.
Purpose of the Campus Master Plan

• Creates a shared and supported framework that informs our planning decisions on a campus-wide basis.

• Provides guidance for our decision making processes to assure that they are in concert with a long term vision for the campus.

• Ensures that the look, feel, and function of our campus is compatible and complementary with our missions of outreach, education, and research.

• Creates a document which can help the University meet our goals, helps us to become a destination of choice, and that can be used to secure funding for sustainable growth.
The Master Plan Development Process

• Nearly 200 Events
• Over 350 Hours
• With
  – Consultants
    • Ayer Saint Gross Architects + Planners
    • Wilson Architects
  – Campus Stakeholder Groups
  – CPPC, UPAC, PTAB, Pedestrian Safety, etc.
  – Faculty Senate
  – Student Senate
  – Student Groups
  – Deans and Faculty Presentations
  – Individuals
  – Open Campus Forums
  – Student Poster Sessions
  – Professional Organizations
  – Preserve UMass
  – Local Town Officials and Commissions
  – Local Neighbors
  – Regional Planning Agency
Guiding Principles

1. Understand the Long-Term Growth Potential

2. Build a series of systems as the framework for growth
   • Build an open space framework
   • Create a clear vehicular and pedestrian circulation system
   • Develop an active mixed-use campus core

3. Create growth opportunities and flexibility for the future

4. Respect planning and building heritage

5. Incorporate sustainability into the plan for development

6. Embrace Community Connectivity
Creating Campus, Not Just Buildings

• Open Space
  – Green Space
  – Waugh Arboretum
• Pedestrian Circulation
• Multimodal Transportation
• Land Use
• Utilities
  – Steam
  – Electric
  – Chilled Water
  – Storm Water
  – Sanitary
  – Water
  – Data/Comm
Pedestrian Spines

Existing

2012 Campus Master Plan
Pedestrian Spines

Existing

2012 Campus Master Plan

Master Plan
Roadways

Existing

2012 Campus Master Plan
Roadways

Existing

Master Plan

2012 Campus Master Plan
2012 Campus Master Plan
Master Plan Implementation:
Projects from 2013 to Present –
Completed, in Construction, and in Design
Completed Projects
Life Science Laboratories

Completed 2013. 395,000 SF. When it originally opened, half of the building was fully fitted out with the other half completed as flexible shell space. The building was developed to provide space for interdisciplinary research on the forefront of life sciences. The building contains flexible open research labs with equipment alcoves, enclosed support labs, shared platform labs, faculty offices, conference rooms, and food/breakout areas. Certified LEED Silver (Leadership in Energy & Environmental Design, a building certification program that recognizes sustainable strategies and practices in building and site design).
Lincoln Campus Center Renovations Phase I & II

Phase I was completed 2013. Renovations to the main concourse included a new ceiling, new lighting, acoustical treatments, a new service desk area as well as upgrades to the mechanical, electrical and plumbing systems. Phase II was completed 2014. The renovation of the Blue Wall offers 12 individual food stations including a deli, bakery, tamale stations, Famous Famiglia, Star Ginger, salad and sushi bars. The area has expanded seating capacity in a range of table formats, all in a modern revitalized atmosphere.
McGuirk Alumni Stadium Football Performance Center & the Martin and Richard Jacobson Press & Sky Box Complex

Completed 2014. The new Football Performance Center is located at the north end of the existing stadium with a south facing terrace overlooking the field. It includes locker rooms, a sports medicine suite, strength & conditioning suite, equipment rooms, offices and team meeting rooms, team auditorium, a multi-purpose/function room and a Hall of Fame lobby. The press & Skybox Complex can support all of today’s critical broadcast, media, hospitality and game day operational needs. LEED Gold.
Central Campus Infrastructure Project

Completed in 2014. As part of the implementation of the Campus Master Plan’s vision of concentrating new development within the campus core like the Integrative Learning Center and Commonwealth Honors College projects, it was necessary to upgrade utilities within the area. This project replaced old and in some cases abandoned steam lines, sanitary sewers, water lines, and storm lines. Also provided new electrical ductbanks to create additional options for increased capacity across campus, as well as new telecommunications conduits to allow for expansion and upgrades of data and communication lines.
Integrative Learning Center (ILC)

Completed in 2014. 173,000 SF. This building provides 2,000 seats of new classroom space that will meet the high expectations of today’s students. A variety of classroom types are fully equipped with smartboards, audiovisual devices and other integrated technologies to encourage interactive and team learning, critical thinking, and trans-disciplinary learning and research. The building also includes a new broadcast studio and is home to three departments: Communication, Journalism, and Linguistics. The location, adjacent to the Student Union and the Campus Center, has reinforced this area as the heart of campus envisioned in the Campus Master Plan. LEED Gold.
Richard F. Garber Field Resurfacing

Completed in 2015. Garber Field currently serves as the home of the UMass men’s and woman’s lacrosse teams. A new longer field turf was installed during the summer of 2015. The field is named for the late Richard “Dick” Garber, the legendary men’s lacrosse coach who won 300 games as the program’s leader from 1955-90. It was the site of the 2003 NCAA woman’s field hockey championship and served as the home for the Atlantic 10 Field Hockey Championship in 1997, 2000, 2009, 2012, and 2013.
Gladchuck Sports Complex

Completed in 2015 – UMass Field Hockey’s new home facility gives the team its first dedicated competitive arena in program history. The complex features eight water cannons used to dampen the field prior to competition. The eight strategic locations, four along each sideline, allow for 100 percent coverage of the turf surface while a super-efficient underground system allows for recycling of what is sprayed onto the playing field. The complex includes a scoreboard and bleachers. A project currently under construction will install public restroom facilities. This facility will also be used to support field hockey tournaments at both the collegiate and local level.
John Francis Kennedy Champions Center

Completed in 2015. 81,000 SF. The John Francis Kennedy Champions Center houses multiple practice courts for the men’s and women’s varsity basketball teams, and also provides a venue for training camps and intramural events. The facility is connected to the Mullins Arena by an enclosed corridor that provides access during halftime on game days. New locker facilities, strength training area, nutritional and multi-purpose area, sports medicine, and coaching offices round out the building program. The facility includes a legacy hall dedicated to the rich history of UMass basketball.
Tillson Electrical Substation

Completed in 2015. The new 115 kV/13.8 kV, 50 MVA electrical substation was constructed to allow the University to tie into the main power transmission line that runs through the east side of the Tillson Farm property. Additional duct banks were installed to tie it to the East Side substation on Orchard Hill and provide a cross-tie to the West substation located at the CHP. This new infrastructure provides major benefits for the University, modifying our ability to purchase as well as produce and distribute power to the campus, and insures the ability to meet increasing capacity needs and maintain reliability well into the future.
Furcolo Hall Renovation

Completed in 2015. The University completed a complete renovation to the portion of Furcolo that was known as the Mark’s Meadow School that was a laboratory Amherst Elementary School, as well as more modest renovations to the balance of the building, addressing accessibility issues and deferred maintenance issues along with improved architectural finishes. The end result of this project now houses all three departments and the dean’s offices of the entire College of Education.
Montague House Renovation

Completed in June 2016. The University completed a complete renovation to the Montague House, including both interior and exterior renovations and installation of modern mechanical and electrical systems, technology, and structural repairs. This project also addressed accessibility issues and eliminated deferred maintenance issues. The front façade of the house was returned to its pre-1910 look. The Montague House now serves as the home for the Center for International Education.
Life Science Laboratories, Massachusetts Life Sciences Center Grant: Development of IALS Centers/Labs

Completed in Spring 2016. Fit out 60,500 GSF. When it originally opened, half of the LSL was fully fitted out with the other half completed as flexible shell space. The shell space was recently fit out and is now the home for the Institute for Applied Life Sciences (IALS). These additional laboratories will enhance the university’s research in the life sciences with the intent to translate this research into products that improve human health. These facilities are generally broken down into three centers, the Center for Bioactive Delivery, Models to Medicine Center, and the Center for Personalized Health Monitoring.
South College Academic Facility

Completed in Fall 2016. 97,000 gsf. The South College Academic Facility includes about 67,000 GSF of new construction combined with a historically sensitive renovation of the 30,000 GSF of South College (1885). The complex is comprised of a new building sited along its south wing attached by an enclosed atrium. The project contains academic program space for four departments within the College of Humanities and Fine Arts: English, Philosophy, Art History, and Women, Gender, Sexuality Studies.
South College Academic Facility – Enables Future Demolition of Bartlett Hall

The development of the South College Academic Facility, along with a number of smaller “enabling” projects to move other functions into better space in other buildings, will allow for the future demolition of Bartlett Hall. Bartlett Hall was built as an academic classroom and office building in 1960. Due to issues with the building infrastructure, it is not a good candidate for renovation. Demolition allows for the reduction of deferred maintenance on campus as well as allowing for the future redevelopment of the site.
Morrill Courtyard Utilities

Completed November in 2016. The University replaced steam and other underground utility systems in the corridor between Morrill II and IV. This extensive project addresses structurally deficient manholes, deteriorated asbestos-insulated steam lines, and failing electrical and data line. Upon completion of the utility work, the courtyard was made accessible and it received new hardscape and landscape.
The Old Chapel Restoration

Completed Fall 2016. The Old Chapel had been uninhabited for years and this project has made it usable again as space for the campus community with a focus on student-centric space. Design includes a new glass entry pavilion on the south elevation that will be integrated into the existing building aesthetic while providing modern accessible egress and energy efficiency. The lobby is adjacent to a new multipurpose space with a video wall. The 2nd floor Great Hall will be renovated to support multiple functions from exhibits and lectures to performances and formal gatherings. The existing rose window on the north elevation has been uncovered and restored and is viewable from the Great Hall for the first time since 1936. This is the only building on the UMass campus listed on the National Register of Historic Places.
Robsham Memorial Center for Visitors Solar Canopies

Completed in 2016. Three solar photovoltaic parking canopies were installed over the visitor’s parking lot on Massachusetts Avenue that cover three islands or six rows of parking spaces in the lot. The innovative design includes three Level 2 dual charging stations, and each canopy provides up to 64 kW of AC power for a total of 192 kW. It is estimated that they’ll result in yearly cost savings to the University of $160-$170,000 with a seven- to ten-year payback schedule.
Completed 2016. The project installed over 15,000 photovoltaic panels across campus, providing about five megawatts of clean electrical power for the campus to use for a heavily discounted rate. The major solar energy initiative will reduce greenhouse gas emissions by the equivalent of 31,000 tons of carbon dioxide and cut the university's electric bills by more than $6 million over 20 years. Solar panels have been installed on five buildings: the Recreation Center, Computer Science building, Champions Center, Fine Arts Center, and the Police Station. Solar canopies were also installed at parking lots 25 and 44 providing shade for parked cars. The university will buy all of the electricity from the $16 million project for direct use on campus through a power purchasing agreement with Brightergy LLC, the installer and operator of the systems.
John W. Olver Design Building

Completed in the Fall 2016. 82,000 gsf. The Design Building (DB) consolidates three interrelated programs that are from three different colleges previously spread across campus. The DB consolidated the Architecture + Design department, Landscape Architecture & Regional Planning department, and the Building and Construction Technology program. The building is comprised of offices, conference rooms, studio spaces, shops, and computer labs. The DB is intended to be a showcase of integrated design that is expressive of today’s state-of-the-art building technology and features an engineered wood frame construction. The finishes are limited to reveal various components of the building systems as a showcase for the home of the built environment.
Design Building & Furcolo Hall Renovation – Enables Demolition of Hills House

The development of the Design Building, along with the renovation of Furcolo Hall and a number of smaller “enabling” projects to move other groups, will allow for the demolition of Hills House. Hills House was built as a residence hall in 1960. Due to issues with the building façade and infrastructure, it is not a good candidate for renovation. This demolition allows for the reduction of deferred maintenance on campus as well as allowing for the future redevelopment of the site.
Projects in Construction
Hills Demolition

Estimated demolition completion spring 2018. Following demolition, the site will become a parking lot. Additional student recreation space may also be provided on the site.
North Regional Chiller Plant Replacement Project

Completed at end of 2017. This new regional facility provides chilled water for cooling and lab processes to the northern portion of the campus. Its increased capacity, along with additional underground piping, allows the campus to provide central chilled water to more existing and new buildings on campus.
Physical Sciences Building

Estimated completion 2018. 100,000 gsf. The project includes construction of a new Physical Sciences Building, housing laboratory and office space for the departments of Chemistry and Physics. The project will provide labs, lab support, and offices for 20 faculty (9 chemists and 11 physicists) and approximately 130 bench positions. The project improves the loading dock for Lederle, Goessmann, and PSB, and also includes the deconstruction and reconstruction of the West Experiment Station laboratory building.
Isenberg School of Management Addition

Estimated completion late 2018. 74,000 gsf. The addition provides an exciting new visual identify to the school and provides flexible design for growth for executive-in-residence programs and experiential learning spaces. The 5,000 sf learning commons will double as an event center. The courtyard in the center of the addition provides a unique outdoor gathering space.
**Student Union Renovation**

Completion projected by fall 2020. The project will update and rejuvenate the building, with replacement of building systems, renovation and reorganization of the interior, and exterior envelope improvements. The programs in the building will shift to be more student-centered.
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Central Core Landscape

Estimated completion fall 2019. The project will start in summer 2018 with replacement of Campus Center waterproofing, followed by utility replacement throughout the project area. The final phase of landscape restoration will be completed by the end of 2019 and will include re-creation of the historic Ellis Way from the Student Union to North Pleasant St.
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Hasbrouck Steam Line Replacement

Estimated completion summer 2019. The project will replace an existing steam line under Hasbrouck Laboratory, create an associated steam pit structure adjacent to Hasbrouck Laboratory, and add stairs and an accessible ramp connecting Hasbrouck to the Campus Center and ILC.
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Worcester Commons

Estimated completion fall 2020. ~68,000 gsf. Initially envisioned as a gut renovation, the project has been shown to be more cost-effective as new construction. Studying siting options to the west of existing dining commons, closer to North Pleasant street. The campus is also evaluating inclusion of a Residential Life “Community Center” with a fitness center, meeting/seminar rooms, and music practice rooms – a space need identified in the Student Experience Master Plan. The project will include replacement parking for any spaces lost due to the new construction.
Artificial Turf Fields on Boyden Field

Estimated completion fall 2019. Requested by students during the Student Experience Master Plan process, the fields will allow student Clubs and Recreation to extend their outdoor activity season, which is now limited due to the damp soil of Boyden Field.
Tesla Battery Project

Estimated completion fall 2018. The project will provide a 1 MW/4 MW-hr lithium ion battery storage system from Tesla Energy that will provide power to the campus electrical grid at times when peak energy rates are in effect. The system will be used to balance loads between the campus heating plant and solar arrays, as well as demonstrate the role that energy storage can play within a system with multiple power sources. The system will be available for academic research investigation. Funding also provides for student internship opportunities with Tesla. Funded with a MassCEC ACES (Advancing Commonwealth Energy Storage) grant.
Horse Barn Relocation

Estimated completion in spring 2018. 3,600 gsf. The original building was considered the home of the Bay State Morgan breeding line of horses. The original heavy wood trusses and horse stalls were reused in this new replica. The Agricultural Learning Center will use the building to process produce grown on site for distribution to local CSA (Community Supported Agriculture) operations.
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Potential P3 Projects

No project timeline or completion date. In summer 2017, UMBA obtained expressions of interest from multiple developer teams in response to its Request for Information. Project types under consideration include housing, hotel, conference center, athletic facilities, retail/entertainment venue, and health services facility. The UMBA is now conducting housing demand studies.
Questions?