

Implementation Parameters

A practical way to implement the goals, design principles and objectives detailed earlier in this master plan is through design guidelines and standards. Guidelines constitute qualitative parameters within which site work, new buildings and remodels should be designed so that the master plan vision will be consistently maintained. Standards are similar, but are quantitative in their parameters. The guidelines which follow have been framed to carry through policy recommendations without curtailing the ingenuity or imagination of designers. The purpose is to give specificity to the numerous factors that contribute to achievement of the campus master plan goals.

Building Siting, Orientation and Massing Guidelines

- 1. Develop the edges of campus as connections that encourage community rather than separating neighbors from the College.
- 2. Respond to the character of the historic campus east of College Street.
- 3. Site and orient buildings to respect established axial relationships to other buildings and to features of the landscape.
- 4. Orient buildings to minimize solar gain, maximize usable daylight and to optimize energy efficiency and other opportunities to improve sustainability.
- 5. Site, orient and configure buildings to take advantage of natural ventilation opportunities.
- 6. Favor defined and recessed window openings to ameliorate the apparent scale of walls and limit solar gain.
- 7. Limit use of highly reflective materials.
- 8. Ensure that refinement of building siting and configuration does not compromise the siting of future facilities.
- 9. Acknowledge the primacy of people on foot in the design of buildings and associated open spaces throughout the campus.
- 10. Locate service access so that vehicular routes conflict minimally with pedestrians and bicycles.
- 11. Locate secondary and support functions, such as archival storage, print shops or recycling, in inconspicuous locations where noise is not a problem and where service access is available.
- 12. Align buildings with relevant setback lines, acknowledging street grids where appropriate.
- 13. Orient building entrances and building façades with view corridors.
- 14. Identify potential views from within proposed buildings, and orient windows to take full advantage of them.
- Limit blank walls at ground level, to increase visual interest and to provide oversight of walkways for safety.

Building Uses and Activity Guidelines

- 1. Distinguish the use of each building type by its architecture, yet relate each to its neighbor; a human scale should be common to all.
- Address active outdoor recreation areas and walkways with active building frontage uses wherever possible.
- 3. Locate primary building entrances in conspicuous places and provide them with shade, shelter and seating to encourage informal gatherings.
- 4. Provide bike storage conveniently near, but clear of building entrances and emergency vehicle routes.
- Complement neighboring facilities and contribute to the completion of campus-wide systems as each project is undertaken. These systems include the landscape master plan, fiber and utility systems as well as driveways and footpaths.
- Prohibit the use of temporary buildings on campus.

Building Configuration and Appearance Guidelines

- 1. Use the massing and orientation of buildings to define outdoor space.
- 2. Articulate the massing of new buildings so that volumes and surfaces are consistent in scale with those of neighboring structures, and fit the character of the campus as a whole.
- 3. Limit sheer building height to that of 'classic' and adjacent buildings on campus, with taller elements stepping back from frontages.
- 4. Use roof forms that effectively screen rooftop equipment from views from taller buildings.
- 5. Integrate screening of equipment in, on or adjacent to buildings with the architecture of each building.
- 6. Use quality building materials of known longevity, such as stone, other masonry, tile, pre-cast concrete, glass, and metal.
- 7. Exceptions to long-life building materials may be made for reasons of consistency with historic structures, and in the cases of lesser, utilitarian structures.
- 8. Select building material colors that enhance the quality and efficiency of the built environment.
- Decrease the visual intrusion of parked vehicles into the campus. Find parking solutions that make it convenient yet unobtrusive.

Building Stewardship and Sustainability Guidelines

- 1. Evaluate materials and systems based on life cycle costs rather than on capital costs alone.
- 2. Evaluate systems that use natural ventilation, heating, and cooling during certain periods of the year.
- 3. Orient buildings to minimize solar gain and maximize usable daylight.
- 4. Consider the placement, eventual size and density of trees planted near buildings in relation to solar gain and natural daylight use.
- 5. Progressively replace existing fixtures with water conserving fixtures.
- 6. Treat and reuse storm runoff from roofs and other surfaces.
- 7. Select locally manufactured materials to limit transport-related costs and impacts.
- 8. Specify materials manufactured using environmentally sound production processes and renewable material sources. Favor certified wood products and recycled content materials.
- 9. Use materials that are durable, require limited maintenance, and are recyclable.
- 10. Eliminate CFCs, HCFC, halons and volatile organic compounds in building materials, mechanical systems, paints and adhesives.
- 11. Accommodate reclamation and recycling of chemicals in buildings; accommodate solid waste recycling within all new and remodeled buildings; protect indoor environmental quality.
- 12. Increase building materials salvage and construction waste recycling rates; encourage energy auditing by suppliers.
- 13. Increase on-site effluent treatment from laboratories to protect the campus environment.
- 14. Make consistent use of performance measures to determine the environmental and cost effectiveness of energy reduction and sustainability investments.
- 15. Use a consistent and tested set of guidelines to achieve project-wide sustainability.
- 16. Meet or exceed standards endorsed by the American College and University Presidents' Climate Commitment (ACUCCP).

Building Clusters Guidelines

- 1. Site adjacent buildings so that neither interferes unduly with the other in personal privacy, access to natural light or views.
- Configure groups of buildings so that they
 complement and create coherent open spaces
 between them. Do not allow parking convenience to
 compromise these relationships; ensure that parking
 lots and structures are located and configured to
 complement the whole.
- 3. Relate buildings in a cluster to one-another visually by relating the architecture of each to its neighbor. This does not dictate uniformity in design, but does require either consistency in scale, colors and materials, or thoughtful transitions from one building to the next.

Building Structure Guidelines

- To the extent possible, address structural stability needs within the core and perimeter walls of buildings, to maximize flexibility in the use of assignable space. Avoid load-bearing partitions.
- 2. Select structural systems and floor-to-floor heights that will accommodate future remodeling for other uses, and replacement of HVAC and other equipment.

Recreational Facilities Guidelines

- 1. Design facilities that can meet the needs of academic, competitive and intramural recreation programs.
- 2. Locate parking resources for every day campus users close enough to spectator venues to serve the needs of off-campus visitors.
- 3. Recognize the particular recreational needs of students who are resident on campus, with safe and convenient access to recreational facilities.
- 4. Integrate facilities for passive recreation (video and TV, table games, reading, socializing) with student housing and in the HUB.

Housing and Student Life Guidelines

- 1. to be added
- 2.

Public Art Guidelines

- 1. Use public art to identify, define and enhance streetscape, open space and building clusters.
- Encourage all new building and open space developments to collaborate with artists and incorporate artwork that is visible to the public when appropriate.
- Find opportunities to integrate both permanent and temporary art installations with architecture and landscape design.
- 4. Develop criteria for acceptance of art gifts, especially those memorializing persons by name, covering maintenance, future relocation etc.

Implementation Parameters

Circulation Guidelines

- 1. Give priority to walking over all other circulation modes within the campus and on its district approaches. Pedestrian safety is the first priority.
- 2. Give second priority to safe bicycle circulation
- Provide circulation routes for service vehicles that conflict as little as possible with pedestrian circulation.
- 4. Accommodate vehicular access for visitors and emergency vehicles. Limit on-campus parking to inconspicuous locations.
- 5. Maintain a comprehensive way-finding and signage system that is in keeping with the character of the campus, and is legible by day and after dark.
- 6. Preserve and create views and vistas that help to orient visitors on and near the campus.
- 7. Integrate both barrier-free design and safety-in-design with all campus improvements.

Pedestrian Access Guidelines

- 1. Provide pedestrian amenities in public rights-of way, including shelter, seating, lighting, street trees, planters, and other street furniture.
- 2. Provide safe and direct pedestrian access to and between streets, open spaces, and popular destinations.
- 3. Construct paths with widths and materials that will accommodate expected uses, in conformance with the Dickinson pathways hierarchy. Paths adjacent to heavily used buildings, for example, may need to be larger than usual. Add width to accommodate site furnishings, lights, and other amenities that are placed on walkways.
- 4. Provide planting strips between sidewalks and major roadways to provide a safety buffer between pedestrians and autos.
- 5. Avoid indirect connections that encourage shortcutting.

Bicycle Guidelines

- 1. Provide secure and weather-protected bicycle racks at major bicycle destinations.
- 2. On bikeways, maintain sight distance clearances appropriate to design speeds for bicycle traffic. (For example, on the railroad trail to Dickinson Park).
- 3. Establish continuous bike lanes along West High St.
- 4. Integrate all bicycle paths with site contours and other landscape features.
- 5. Ensure clear sight lines at intersections with footpaths and driveways.

Public Transit Guidelines

- 1. Collaborate with Borough of Carlisle on enhancing transit service access.
- 2. Provide enhanced transit stop amenities to encourage use of transit.
- 3. Accommodate bus dimensions and turning requirements in the design of all transit stops.
- 4. Provide for future transit routes and stops that will give priority over other vehicles for college shuttle vehicles and buses.

Parking Facilities Guidelines

- 1. Provide convenient but inconspicuous parking away from central parts of the campus.
- 2. Provide landscape buffers to screen all parking areas from the campus core and from sensitive viewpoints.
- 3. Provide walkways to campus buildings. Walkways should be safe and convenient by day and after dark. They should be distinct from snow storage areas.
- 4. Provide convenient and efficient garage design with safe entries and exits for vehicles and pedestrians.
- 5. Where feasible, locate stair and elevator cores at the street edge for increased visibility. Provide a high degree of transparency in all vertical circulation.
- Adhere to safety-in-design guidelines for parking structures. Maintain good, uniform lighting and minimize opportunities for personal concealment.

Roadways Guidelines

- 1. Update road designs to encourage driving at speeds appropriate to an environment where pedestrians are present.
- 2. Maintain sight distance clearances appropriate to design speeds for vehicular traffic.
- 3. Use curb radiuses appropriate to slow moving vehicles on campus. Smaller radii lanes provide safer pedestrian environments and reduce the visual dominance of large paved areas at intersections.
- 4. Provide clearly marked crossings at all locations at which pedestrians frequently cross streets.

Accessibility for the Disabled Guidelines

- 1. Adhere to all current Americans with Disabilities Act [ADA] standards.
- 2. Continue to upgrade access to historically excepted structures as opportunities occur.
- 3. Provide barrier-free routes to all campus facilities.
- 4. Design exterior walkways with grades and surfaces that permit wheelchair access.
- 5. Provide edge definition on paths.
- 6. Provide power-actuated opening devices at primary entrance doors.

Service Areas Guidelines

- Locate service roads and service areas so they do not create traffic hazards for other vehicles, pedestrians or bicycles.
- Locate service areas for convenient access by large vehicles, but minimize conflicts with pedestrian circulation, views, building functions, and other activities.
- 3. Use landscaping to screen anticipated visual problems associated with service roads and service areas.
- 4. Provide a fenced, paved yard for vehicle maneuvering, materials storage and other uses adjacent to the HUB and other major shipping and receiving areas.

Emergency Access Guidelines

- 1. Provide clear emergency access routes to every facility on campus that will function effectively in all weather conditions.
- 2. Provide snow storage areas adjacent to and clear of emergency access routes.
- 3. Make adequate provisions in the design of every facility for quick and safe evacuation of all occupants in case of emergency.
- 4. Maintain regular inspection procedures to ensure that emergency vehicle access and occupant evacuation routes are kept clear and operable.
- 5. Structure the surfaces of open spaces adjacent to buildings so that they can support emergency vehicles in all weathers.
- 6. Align utilities, and locate access points to them so that emergency access can be facilitated with a minimum of delay.

Hierarchy of Open Space Guidelines

- Define and design all open spaces on campus as related components of a landscape hierarchy reaching from the largest greens to the smallest plazas, gardens and footpaths. Recognize that streets, trails and footpaths are also components of the open space system.
- 2. Locate and orient each new structure on campus so that it complements the open spaces around it, helping to fulfill the intended functions of each space.
- 3. Create a clear progression between open spaces in terms of function, scale, and elements of continuity such as plant species and outdoor furniture.
- 4. Enclose or otherwise define each open space to support its intended functions.
- 5. Recognize that different open spaces on different parts of the campus will have different and sometimes overlapping functions, including active and passive recreation, distant view capture, foreground view creation, pedestrian circulation, vehicular circulation and parking, natural light harvesting, horticultural research, bio-swales and other uses.
- Acknowledge the value of existing trees and other natural features in defining the character of an open space.
- 7. Plant successors to mature trees that are approaching vulnerable old age.
- 8. Design buildings and open spaces as components of an integral system, the purpose of which is to accommodate and support the changing needs of the College.

Landscape and Amenities Guidelines

- Provide benches, seating walls, and places to lean in diverse, winter sun and summer shade places around the campus. Provide protection from winter winds where practicable.
- 2. Enhance the microclimate in outdoor places where people tend to congregate.
- Extend campus lighting along unlit pathways with sufficient illumination to make facial recognition possible at several paces distance. Avoid glare, light spillage and sharp contrasts in illumination of adjacent spaces.
- 4. Observe the 'Dark Skies' protocols and prevent light trespass into nearby uses.
- 5. Preserve the open character of the site.
- 6. Protect and improve surface water quality through landscape initiatives; avoid management practices that contribute to the degradation of water quality.
- 7. Emphasize native plantings in naturalistic patterns.
- 8. Select plants that have ornamental characteristics but do not require frequent pruning or other intensive maintenance to maintain desired characteristics.
- Maintain campus safety and security through selective trimming and removal of trees and shrubs.
- 10. Restrict pedestrian access to environmentally sensitive areas.
- 11. Minimize impervious surfaces.
- 12. Use sustainable methods, such as bio-swales, to remove sediment and other contaminants from runoff.
- 13. Use appropriate landscape transitions to integrate the campus with its surroundings.
- 14. Make discrete use of interpretive signage to explain the functional mechanisms of landscape, such as storm water treatment.

Landscape Management

Managing Stormwater

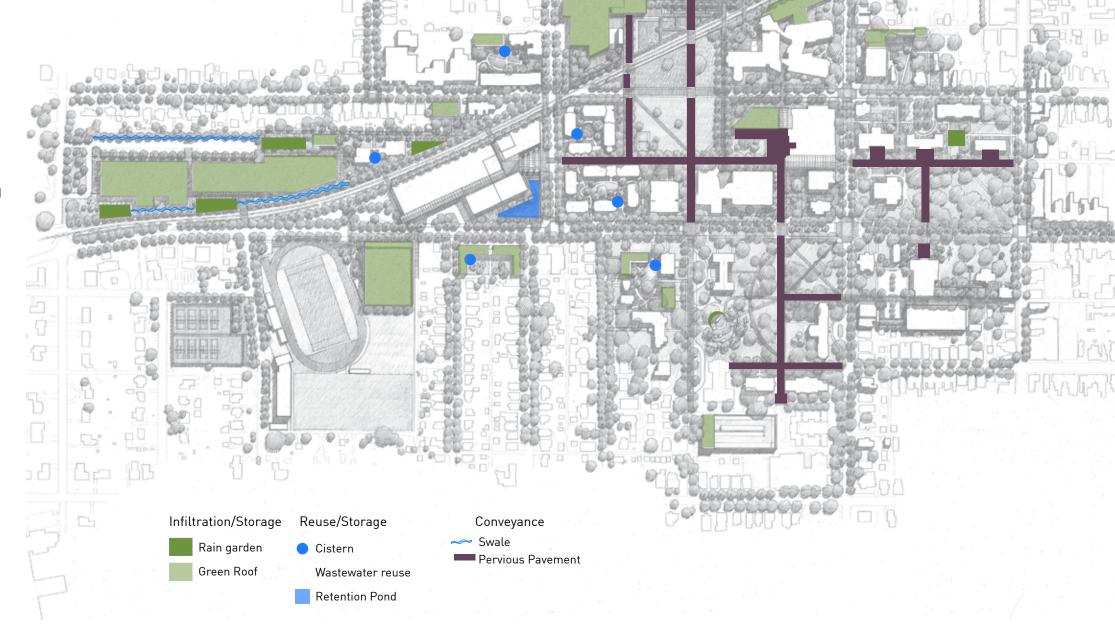
Increased stormwater runoff from developed areas is one of the most pervasive problems of an urbanizing world. While the opportunity exists to capture stormwater runoff and allow it to infiltrate the soil mantle, the conventional approach has been to treat the runoff as a drainage problem and to "solve" the problem with engineering solutions. These solutions are expensive, require a lot of maintenance, remove natural habitat, are usually unattractive, and ultimately not sustainable.

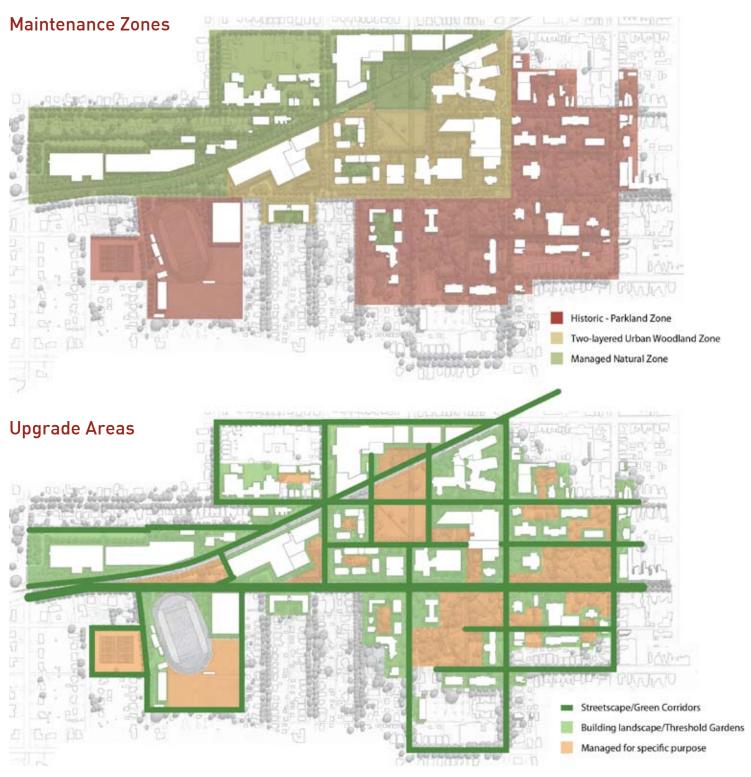
Promoting open space development that is based on sustainable principles will also involve integrating sustainable alternatives to conventional stormwater management. Demonstration projects can be incorporated into site development associated with new buildings as well as retrofits. These projects can be based on models that replicate the natural hydrologic cycle.

Strategies:

- Identify small-scale projects that have the potential to capture and divert existing run-off into landscape features designed for storage, conveyance and reuse. These retrofit opportunities can be made economically viable in conjunction with new buildings, building improvements or site improvement projects.
- Integrate stormwater Best Management Practices (BMP's) like rain gardens, green roofs, cisterns, retention ponds, bio-filtration swales, and pervious pavement into site and building design. These landscape features can be designed to discreetly fit within the urban landscape or integrated into planting areas. For instance, the redesign of the site and landscape behind Alt House can include disconnecting roof drains and diverting them into a rain garden, creating a green roof on the existing footprint of the Central Utility Plant (CUP).
- Develop campus wide landscape "management" strategy to convert lawn areas in parts of the campus into an ecological landscape using native plantings. This will help to reduce storm run-off from these areas and provide screening, ecological, aesthetic, and other intangible benefits to the campus.

Due to the karst geology in this area all the Best Management Practises should be carefully designed to prevent development of sinkholes.





Proposed Landscape Management Zones

A long term management strategy for the Campus requires creating specific "management" zones. This represents a long term vision for the campus. In general, the campus is managed according to whether the landscape is primarily cultural or primarily natural. As shown on the Landscape Management Zones Map (opposite), the historic zone of the campus is treated as a Cultural Landscape fringed by a two-layered urban woodland zone. The Industrial edge can be converted into the managed natural zone.

The gradual transition from the typical campus "green" to a more ecological landscape begins with integration of the "historic parkland" zone with a two-layered urban woodland zone, and managed natural zone. The area of proposed managed natural zone at the campus edge is crucial to the environmental value of the Dickinson campus.

- The Dickinson Campus landscape is almost entirely lawn. Dickinson can replace non-essential turf areas with two-layered urban woodland and managed meadow areas that will increase seasonal interest, provide screening, enhance views, and reduce regular maintenance tasks such as mowing, mulching, etc.
- In an urban campus, the landscape can provide not only the functional and aesthetic resources, but can also provide stormwater benefits and improved microclimate. Benefits to stormwater management (and, by extension, water quality) include the reduction of runoff volumes, since precipitation will be retained on the land surface longer during a storm and allowed to evaporate and soak in to the more absorbent surface layer of organic material. Pollutant loadings will also be reduced since the more diverse plantings generally require fewer chemical inputs, and will filter runoff better than lawn.



Historic - Parkland Zone



Two-layered Urban Woodland Zone



Managed Natural Zone

- The campus landscape should reflect an aesthetic of care. While it is important that the campus have healthy plant communities and hydrological functions, it is also essential that it looks well cared for. Native plant communities can be designed to exhibit a wellmaintained perception by paying more attention to the quality of edges like a narrow but elegant curbing or a flush stone edge. The canopy trees planted in informal groupings along the circulation corridors can act as the "Green Corridors" and help to tie together the outdoor rooms.
- Existing mature trees, in addition to performing vital ecosystem functions are critical to maintaining the identity of Dickinson. This is especially true on the Dickinson and Rush Campuses. The College should preserve and maintain a healthy canopy cover. The first step is to commission a Tree Survey and Assessment to help address priorities for tree maintenance, and with planning for a coordinated tree planting program.

Landscape Guidelines

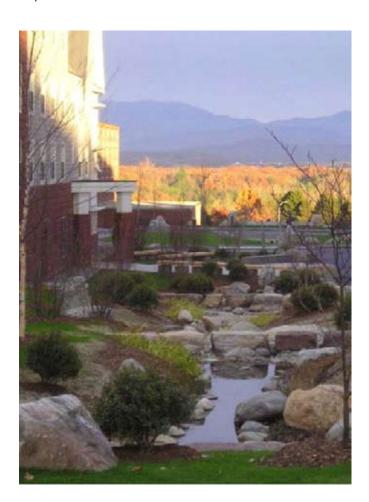
Integrating Education with Landscape

All landscapes teach: they reflect the values of their institutions. As sustainable values receive greater prominence in academic programming and campus life, so the evident sustainability of the campus landscape should increase.

Physical expression of sustainable values is apparent in the examples illustrated. These examples are not intended to convey any particular design solution, but to show a range of possible approaches.

Useable spaces close to buildings allow a high degree of control and can be used as outdoor classrooms or quiet meditative spaces.

The design of new facilities and the retrofit of existing ones can celebrate the movement of water through the landscape, including its steps in water quality improvement.







University of Vermont, Burlington: the stormwater system ties together a new dormitory develoment, integrating open space and stormwater managment. Bioswales (top left) and infiltration ponds follow the campus pathways.



Ross School in Long Island, New York creates small gatherings spaces in conjection with filtration ponds. The details of seating walls, boulders, paving choices, and proximity to water allows students contact with natural systems.

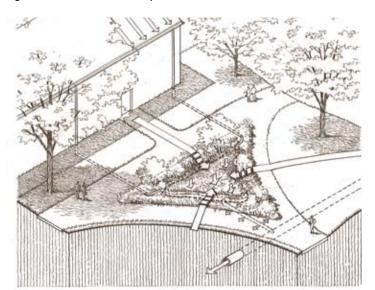


Sidwell Middle School recycles both grey water and stormwater. This LEED Platinum building also has passive heating and cooling systems. The wastewater treatment ponds provide many opportunities for exploration and explanation of water flow and biotic filtration.

Suggested Best Management Practices for Dickinson Campus

Rain Gardens

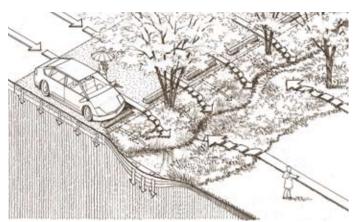
Rain Gardens of many different varieties can be used to absorb water during intense storms and prevent flooding. These can be integrated into building landscapes, greens, and plazas. These Best Management Practices perform valuable ecosystem services slowing runoff, improving water quality, and allowing water to seep slowly into the ground where it can replenish the water table.



Conceptual detail of a rain garden at a pathway crossing.

Bio-Swales

Bio-Swales slow the movement of stormwater runoff, encourage infiltration, and help remove pollutants. They can also give the campus a beautiful flowering landscape that demonstrates the flow of water across the land.



A swale incorporated into a parking lot island.

Urban Swales (integrated into street design)

Urban Swales are hardscapes planted with floodplain and or aquatic vegetation. These channels integrate stormwater management into the edge of the roadway. This runoff can be used to irrigate street plantings and improve micro-climate.





Urban Waste Water Treatment

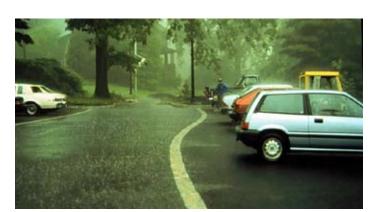
Within buildings living machines can be used to treat wastewater and greywater. With permission of the local water authority, exterior wetlands can be constructed to receive this treated water and "polish" it.



Student Center at Oberlin College, Ohio

Porous Pavement with Storage Basins underneath

Permeable pavements can use infiltration basins. The depth of this storage basin is determined by site conditions and percolation rates.



Runoff from conventional paving in the drive aisle flows onto pervious asphalt within the parking spaces.

Roof Gardens

Roof Gardens use a light weight engineered soil capable of storing stormwater and reducing structural costs. Building structural systems must be evaluated prior to retrofitting an existing roof. Native plantings can be used to create a sustainable environment.



Cistern

Cisterns are structures used to store stormwater which can then be reused at a later time. Roof runoff can be intercepted in a gutter and diverted to cisterns.



Cisterns store rainwater for future irrigation use.

Landscape Guidelines

Path & Material Hierarchy

The pedestrian path system presently reflects the routes used by the Dickinson College community to traverse the campus. The master planning process presents an opportunity to clarify the campus structure, highlight primary movement corridors and building entries, and improve critical connections. The College has begun to upgrade walkways, using the width and the materials to reflect importance. As the College continues to repair walkways and renovate facilities, these efforts will help to distinguish primary walkways from secondary routes as well as highlight building entries. All walkways should be designed with wheelchair users in mind, and all should be built to support emergency and maintenance vehicles.

- Consistent use of materials along circulation routes will help to weave together different landscape characters of the Campus into a cohesive image. The illustrations on this page show how materials can correlate with path widths to convey the hierarchy of the path within the circulation system.
- Asphalt can be used as the primary walkway material.
 Use of special accent materials like concrete, brick
 and granite unit pavers with granite block edgings and
 bands can help to articulate walkways and indicate
 building entrances and plazas.
- The primary walkway can be 18 feet wide and constructed with unit pavers. Dickinson Walk for example can function as the primary walk and act as main cross-campus connector.
- The secondary walks can be 12 feet wide constructed of unit pavers or asphalt with unit paver accents. In some cases this can replace existing service roads.
- The tertiary walks and sidewalks, generally 8 feet wide, can be constructed of asphalt with edgings and bands as shown in the drawings.
- Multiple traffic calming techniques like raised tables (elevated cross-walks) in conjunction with surface treatments can be used at pedestrian crossings.
 These traffic calming techniques can be designed in conjunction with proposed gateways. Their width and materials can reflect their place in the path hierarchy.

Primary Secondary Tertiary Sidewalk Figure 1 Figure 1 Figure 2 Figure 2 Figure 2 Figure 2 Figure 2 Figure 3 Figure 2 Figure 3 Figure 2 Figure 3 Figure 4 Figure 2 Figure 3 Figure 4 Figure

12'



Example of a raised table crossing at a Major Gateway

Reduction of Lawn Areas

A layered woodland garden can increase diversity. This can be achieved by enhancing existing planting beds or creating new beds. These layered beds can provide a dense matrix of woodland canopy trees, flowering understory trees, shrubs, and groundcover and also help to screen unpleasant views and filter traffic noise. A clear visual zone should be maintained for security.





Existing Lawn Area



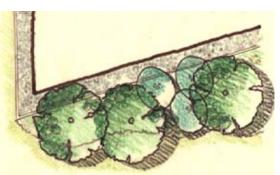
The perimeter of a quadrangle is redesigned with groundcover and trees. (University of Pennsylvania.)



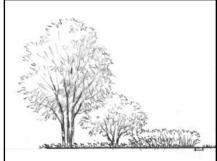
Selected lawn areas may be replaced with groundcover to create a more erosion resistant and diverse groundlayer.

Layered Urban Woodland Zone









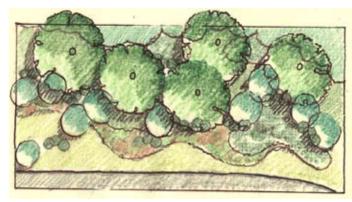
Example of woodland island planting

Wide lawns in tertiary areas may be replaced with 'rough cut' turf or short meadow. The meadow in the photograph has been recently mown; the permanent recreational pathways are still visible.

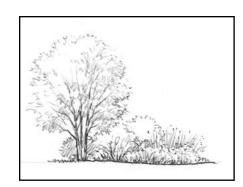


Turf areas adjacent to a building wall are redesigned as small perennial gardens.

Managed Natural Zone



Managed natural zones can have infomal groups of canopy trees with flowering understorey and grasses.



Example of typical planting in a managed natural zone

Landscape Guidelines

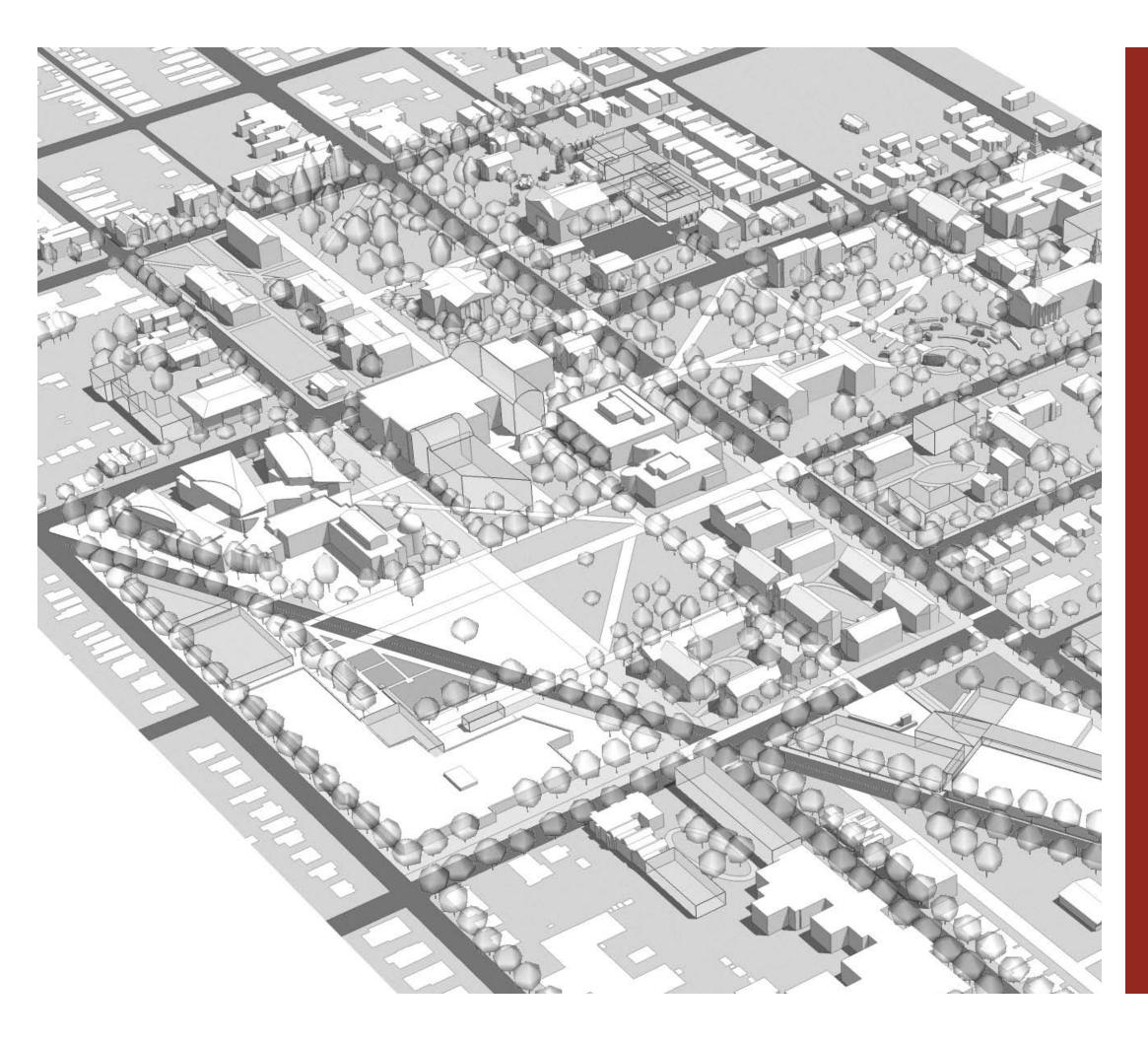
Signage & Wayfinding

Dickinson would benefit greatly from a comprehensive exterior signage and wayfinding system to communicate information clearly and consistently on a campus wide scale. The campaign can combine the existing branding signage with directional and interpretive signs.

- The sign system can simplify the visitor experience by identifying key destinations and parking.
- A sense of community can be strengthened through a sign system that reflects the history of the College.
- The signage can be expanded to incorporate interpretive elements that not only help with understanding of the natural processes at work but also can help the college to express a distinctive identity within the town.





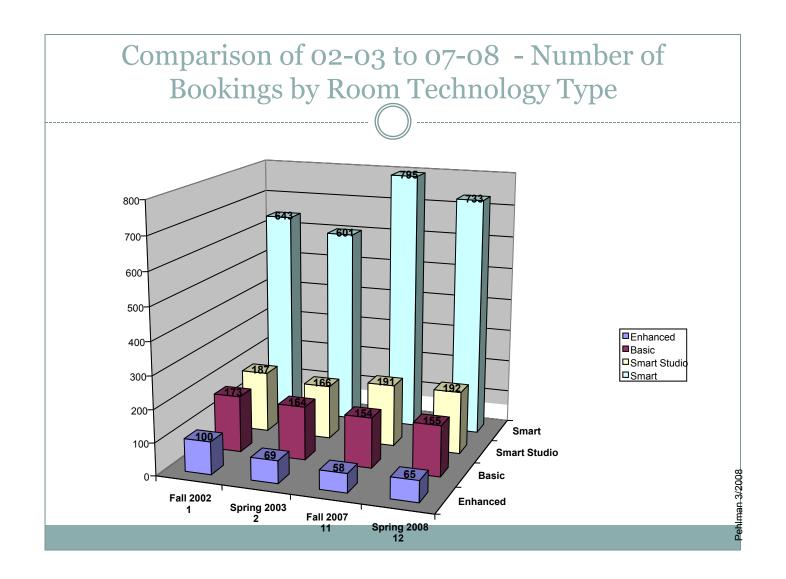


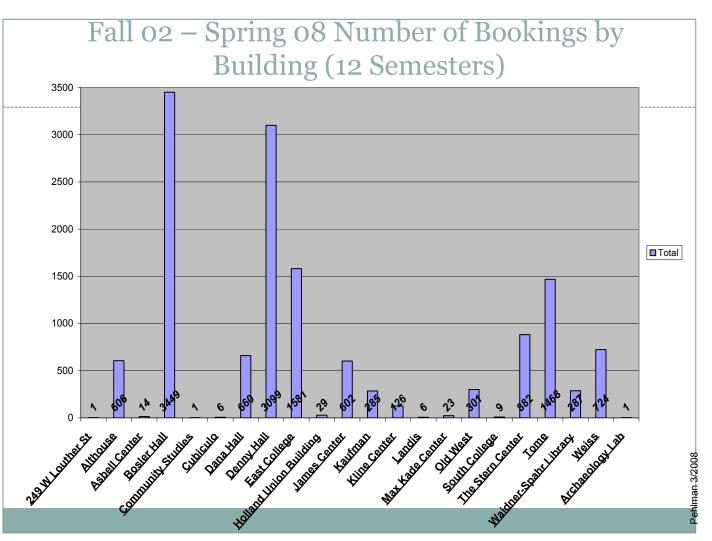
Appendix

Potential Facilities Studies

Existing Facilities Inventory

Text Summary to be added





HUB - Existing

At the center of the campus, and central to campus life are the Holland Union Building and Mathers Theatre. Since its construction half a century ago, demands placed on the HUB have changed many times. Today, the building no longer functions adequately. Furthermore, the mass of the building obstructs views and access across the campus, effectively dividing the historic campus from everything to the west. There is an opportunity to reconfigure the HUB in a number of ways, remodeling some parts and replacing others. A feature common to the alternatives that follow is extension of Dickinson Walk through the HUB as the principal eastwest pedestrian route across campus, reaching uninterrupted from Denny Hall to the Kline Center. Complementing this would be an important new pathway connecting the Rector Science Campus in the north to Morgan Green in the south.

HUB - Scheme 1 - Dickinson Walk

Currently, the HUB and the black box theatre interrupt east-west access across the campus. That interruption is made worse by the climb up from College Street, and down again to Dickinson Walk. Each alternative configuration for the HUB anticipates an indoor street link as a direct extension of Dickinson Walk to the west with the historic campus across College Street. Unimpeded views of the continuous route are as important as the direct access it will provide.

HUB - Scheme 2 - Cafeteria

The Cafeteria and Union Station are necessarily located close to the kitchens. One option is to move the Cafeteria to the northwest, giving it an open, day lit character as it projects into the new open spaces spanning Louther Street and fronting the Library. Another possibility is to expand the existing cafeteria east to the building's College Street frontage, with great windows looking towards the historic campus. In each case, the Cafeteria would become an active contributor to the visible life of the campus. The character of the space would contrast with introspective Union Station. Reconfiguration will provide an opportunity to expand and update the kitchens.

Only Schemes 1 and 2 retain the climb from Dickinson Walk to the Gallery, since this enables continued use of, and access to the basement. The other alternatives change basement space to storage, with offices and other uses relocated to a day lit second floor.

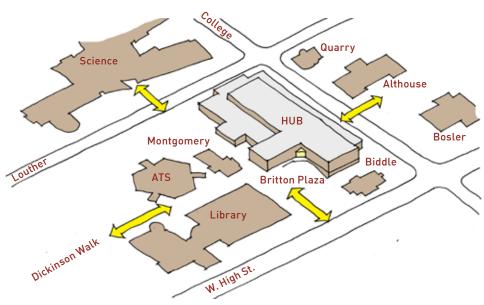
HUB - Scheme 3 - Service Access

The central location of the HUB leaves it without an inconspicuous service access. If the kitchens are to remain where they are, then service access must continue from Louther Street. However, the loading dock and service yard can be retracted behind walls to screen them. Effective screening will be particularly important as the north-south pathway between the Rector Science Campus and Morgan Green grows in importance.

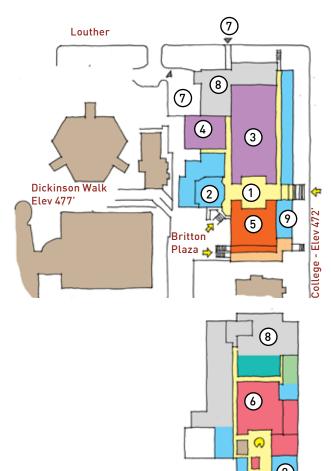
HUB - Scheme 4 - Bookstore

Currently located in the basement of the HUB, the Bookstore is all but invisible to visitors. More than most buildings, the Bookstore has the potential to provide a view into the College for visitors and passers-by, presenting a transparent and engaging glimpse of College life. Possible locations are proposed on Louther and College Streets where they would be convenient and accessible to collegians and visitors alike.

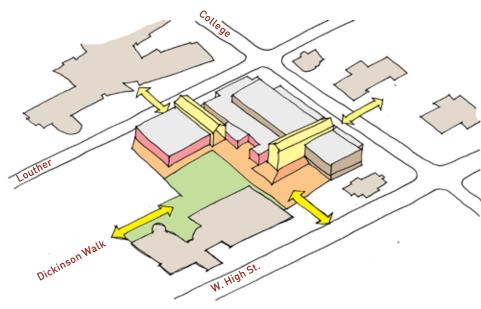
HUB - Existing Massing Diagram - View from Southwest



First Floor Plan (above), Lower Level (below)



HUB - Scheme 1 Massing Diagram - View from Southwest



First Floor Plan

Floor Plans

3 Cafeteria

4 Union Station

5 Social Hall

6 Bookstore

Loading

Service

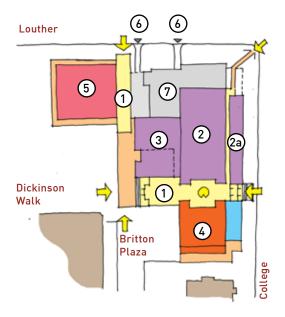
9 Office

10 Lounge

Key of Existing Uses:

1 Corridor (Elev 480')

2 Mathers Auditorium



First Floor Plan Summary Description:

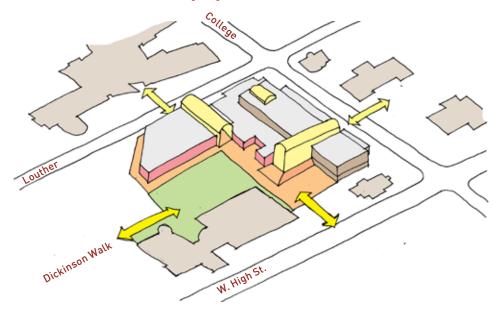
- Mathers Auditorium, ATS, Montgomery Hall removed
- Reconfigured loading dock
- Improved Entrance at College & Louther intersection
- New Pedestrian Gallery through HUB on Dickinson Walk Axis
- Expanded Union Station Snack Bar
- Expanded Cafeteria seating area facing College St.
- New Addition for Bookstore
- Improved Plaza / Green Space

Floor Plan Key:

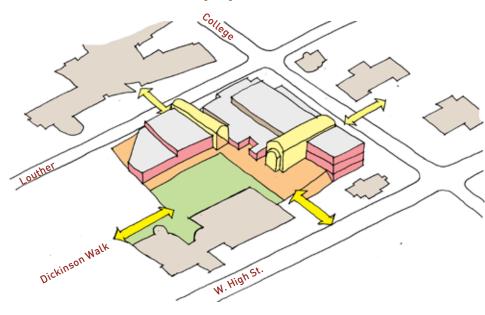
- 1 Gallery (Elev 480')
- 2 Cafeteria
- 2a Cafeteria expansion
- 3 Union Station
- 4 Social Hall
- 5 Bookstore
- 6 Loading
- 7 Service



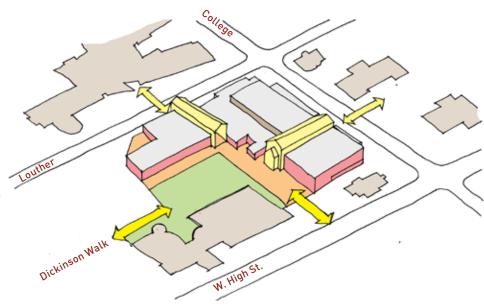
HUB - Scheme 2 Massing Diagram - View from Southwest



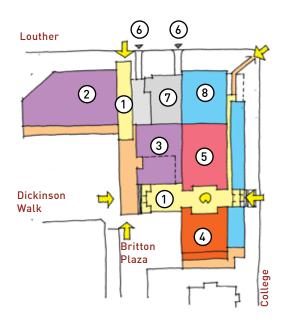
HUB - Scheme 3 Massing Diagram - View from Southwest



HUB - Scheme 4 Massing Diagram - View from Southwest



First Floor Plan



Floor Plans Summary Description:

- Mathers Auditorium, ATS,
- Reconfigured loading dock
- HUB on Dickinson Walk Axis
- New Addition for Social Hall and
- New Bookstore and Second Floor Offices constructed in place of Social Hall

Floor Plan Key:

- 1 Gallery (Elev 480')
- 2 Cafeteria
- 5 Bookstore 6 Loading

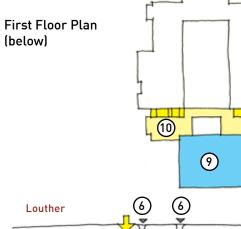
- Montgomery Hall removed
- Improved Entrance at College & Louther intersection
- New Pedestrian Gallery through
- Expanded Union Station Snack Bar
- Auditorium

- 3 Union Station
- 4 Social Hall

- Service 8 Auditorium
- 9 Office
- 10 Lounge

(above)

Second Floor Plan



(7)4 (1)(2) 3 Dickinson 1 Walk **Britton** Plaza

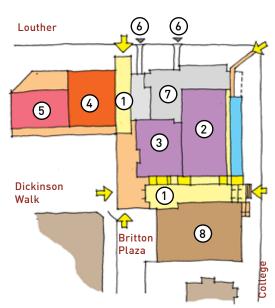
First Floor Plan Summary Description:

- Mathers Auditorium, ATS, Montgomery Hall removed
- Reconfigured loading dock
- Improved Entrance at College & Louther intersection
- New Pedestrian Gallery through HUB on Dickinson Walk Axis
- Expanded Union Station Snack Bar
- New Addition for Cafeteria
- Existing Cafeteria renovated for **Bookstore and Offices**
- Improved Plaza / Green Space

Floor Plan Key:

- 1 Gallery (Elev 477')
- 2 Cafeteria with Lower Level Kitchen
- 3 Union Station
- 4 Social Hall
- 5 Bookstore
- Loading Service
- 8 Office

First Floor Plan



First Floor Plan Summary Description:

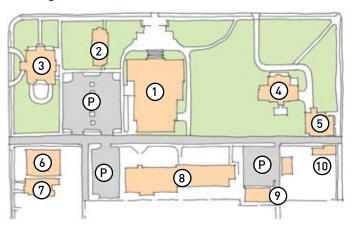
- Mathers Auditorium, ATS, Montgomery Hall removed
- · Reconfigured loading dock
- Improved Entrance at College & Louther intersection
- New Pedestrian Gallery through HUB on Dickinson Walk Axis
- Expanded Union Station Snack Bar
- New Addition for Bookstore and Social Hall
- New Auditorium built in place of Social Hall

Floor Plan Key:

- 1 Gallery (Elev 477')
- 2 Cafeteria
- 3 Union Station
- 4 Social Hall
- 5 Bookstore
- 6 Loading
- 7 Service
- 8 Auditorium

Weiss Arts Center Complex

Existing Site Plan



Existing Site Key (Left)

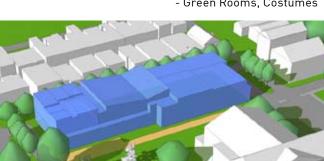
- Weiss
- Asbell
- Waidner Admissions
- President's House
- Reed
- Todd
- 49/51 College Street
- South College
- Information Services
- 34 West Street
- Parking
- Loading & Drop-off

Key for Alternatives **Ground Level**

- A Sculpture Garden
- Arts Alley
- Entry Prefunction Auditorium - 250 Seat
- Auditorium Fly Space
- Black Box Theater
- Back Stage Scenery
- Rehearsal Theater
- Rehearsal Music

Second and Third Floors

- Seminar & Teaching Potential Lower Level
- Green Rooms, Costumes



Alternative 1 - Aerial View

Alternative 1 - Ground Floor

(1)

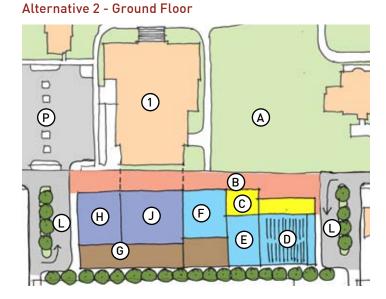
(A)

(J)

B

(C)

0





Alternative 2 - Aerial View

PERFORMING ARTS FACILITY **OUTLINE DESIGN PROGRAM FOR REVIEW**

250 seat proscenium theatre space with 30'x 40' stage, with thrust addition:

- wing space, fly area, loading dock, control booth, lighting and sound equipment
- make-up and dressing rooms, (could be below shop and performance areas)
- public restrooms, performer restrooms (the latter for students, 15 M, 15 F)
- showers, greenroom, (could be below shop and performance areas)
- lobby, box office
- secure piano room and storage space.

'Black Box' Space - 90-125 seat with various seating and stage configurations:

• grid, high ceiling, softwood or sprung floor, wellequipped control booth, lighting and sound equipment.

Rehearsal Spaces (requiring further definition)

- Music one exclusive use (Choir risers etc)
- Theatre 40'x 60' (full stage space)

Media Center including facilities and equipment for the creation of video and sound recordings:

- Classrooms seating 25 with AV and computer
- Classroom seating 30 open for movement activities

Storage Area with Lockers near performance and practice spaces for Music.

Conference Room with attached lounge space for students and faculty, copiers and other facilities.

Faculty Offices

• Music - three?, Theatre - five?

Performing Arts Library

• Scores, recordings and scripts only, with other volumes in Library?

Costume Shops for Theatre

- could be below shop and performance areas Scene Shop for Theatre with direct access to the stage and loading dock.
- could be shared between two theatre spaces, proscenium and Black Box

EXCLUSIVE USE SPACES INCLUDED IN PROGRAM

MUSIC DEPARTMENT SPACES

Rubendall Recital Hall

Six Instrumental and Voice sound-proofed studios large enough for chamber music rehearsal

Six Piano practice studios sound-proofed

Rehearsal and Recording Space for amplified instruments and percussion: 'super sound-proofed'

Music Classroom with piano and AV

Music Computer Lab

Instrument Storage Lockers

THEATER DEPARTMENT SPACES

'Black Box' Space - 90-125 seat with various seating and stage configurations:

- grid, high ceiling, well-equipped control booth, lighting and sound equipment.
- total space 3,500 to 4,000 SF

Costume Shop with secure storage, laundry and dye shop

Secure Storage for Scenery, Platforms & Props

Design Studio with natural and full-spectrum lighting for teaching and execution of design, equipped with:

- Four CAD stations, Scanner, Plotter or 24"x 36" printer, Four drafting tables, Plan chests,
- Storage for modeling materials and reference books, Work tables, Pin boards, chalk- and white boards.

Anita Tuvin Schlechter Auditorium - Usage

Text Summary to be added

Reporting Period: 5/20/2007 thru 5/17/2008

Building	Room	Bookings	Reserved Hours	Event Hours	Estimated Attendance	Actual Attendance
Anita Tuvin Schlechter Aud.						
	ATS- All	96	899.00	391.00	10,557	0
	ATS Outside Front Entrance Patio Area	6	9.25	7.25	200	0
	ATS Stage	0	0.00	0.00	0	0
	ATS Upper Lobby Area	10	87.00	38.00	620	0
	ATS-B	31	294.50	51.00	4,833	0
	ATS-B/C	61	437.83	164.25	8,801	0
	ATS-C	0	0.00	0.00	0	0
	ATS-Lobby	63	632.75	257.75	7,576	0
	Total	267	2,360.33	909.25	32,587	0
	Total	267	2,360.33	909.25	32,587	0

Kline Center

Kline Center - Existing

Demands for both competitive and recreational Athletics have grown faster than enrollment for many years, leaving insufficient capacity and equipment at the Kline Athletic Center. The opportunity is to address this shortfall, and at the same time, re-assert the center as a place of continuous, healthful and engaging activity with direct access to the center of campus. The opportunity should be taken to make the vitality of the Kline Center a visible part of the campus.

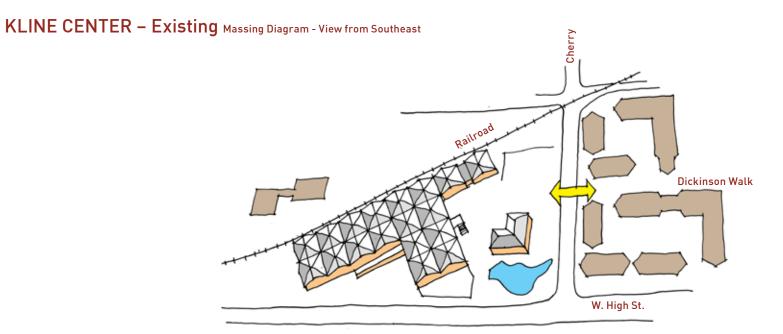
Kline Center - Scheme 1

The Depot is a fondly remembered building from Dickinson's past which has failed to find a worthwhile use in recent years. A new possibility is to treat it as a component in the expansion of Athletics facilities, pairing it with expansion of the Kline Center. Parking would be displaced to accommodate the expansion, and an open plaza would connect the Depot to a new lobby and concourse.

Kline Center - Scheme 2

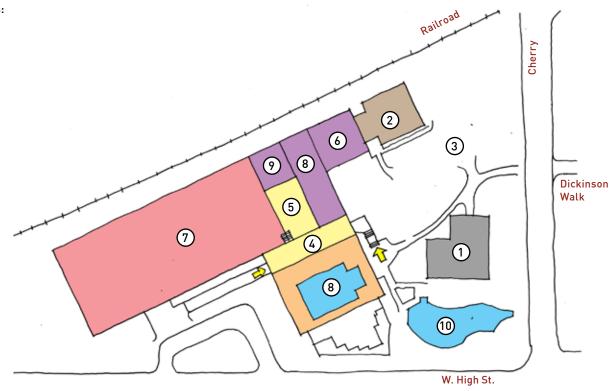
Removal of the Depot would allow creation of a new glassy east frontage to the Kline Center, with activities visible to those approaching along Dickinson Walk or along Cherry Street. Dickinson Walk would terminate in a new lobby and concourse, giving access to all the Center's facilities. Some space would be reserved on the site for future expansions, should they be necessary.

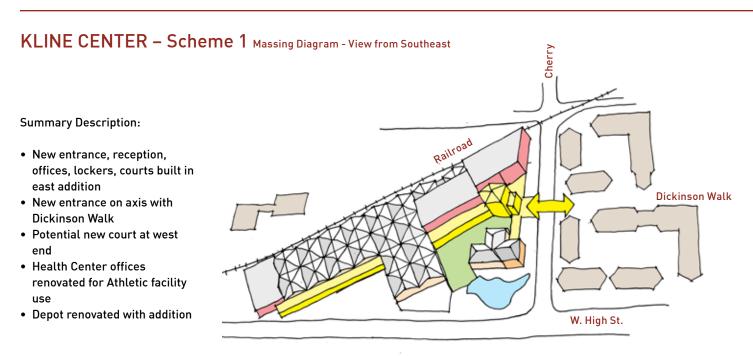
Potential Program is on A-10.

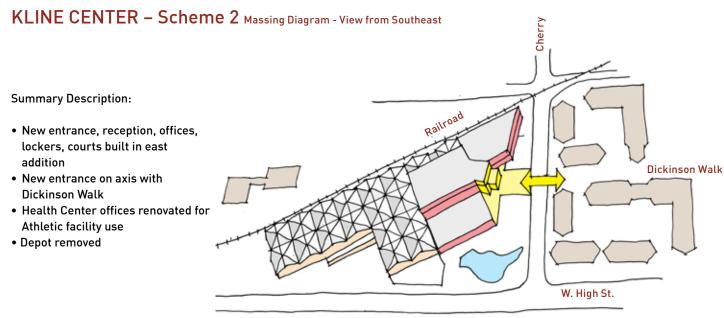


Floor Plans Key of Existing Uses:

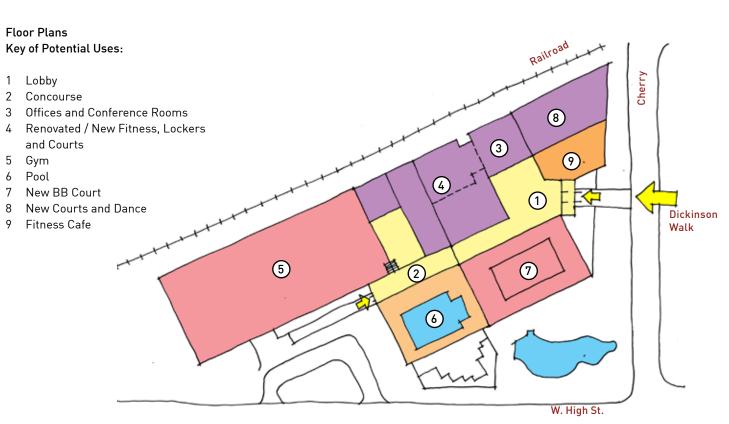
- 1 Depot
- 2 Health Center
- 3 Parking
- 4 Concourse
- 5 Lobby
- 6 Fitness
- 7 Gym
- 8 Pool
- 9 Offices 10 Lockers
- and Courts
- 11 Pond









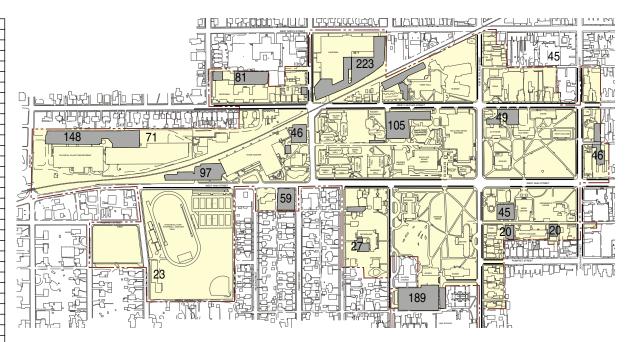


Preliminary Athletic Facility Program

	Existing				Projected 10-Year Ne		
Function	Facilities	Floor Area	Comments		Facilities	Floor Area	Comments
ne Center							
Fieldhouse		38 600	130'-Span Roof Units	Ħ			
Basketball Courts		00,000	Intercollegiate & Practice	H	Basketball Arena		1500 Seats with Concession
Tennis Practice Courts	4		Intercollegiate & Practice	Н	Dasketball Aleria		Sports Training & Medicine
				\vdash	V - II II II - A		
Volleybal Courts	3		Intercollegiate & Practice	\vdash	Volleyball Arena		Share with Basketball
Badminton Courts	6			Ш			
Indoor Golf							
Batting Cage (B'bl, S'bl.)				П			
				П			
200 metre Track	4 Lanes		When foldaway bleachers	\Box			
	+ Lanes		-	+			
Long/Triple Jump Pit			retracted.	\vdash			
Pole Vault				Ш			
Indoor Throws				Ш			
Inramural & Club Sports			When Available	П			
				Ħ			
Swimming Pool				\vdash			
	0.1			\vdash			
25-Tard Pool	8 Lanes	-	Intercollegiate, Classes	\sqcup		-	1
Diving Well			and Recreation	Ш			
Bleachers	300		Foldaway at Mezzanine				
Enclosed Outdoor Pool Patio			Social & Cookouts	\sqcap			
in the second of			2 2 3 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3	H		<u> </u>	†
Labby Arcs	Controls all A	-	Overlanda Fieldher	\vdash	Lobby	-	May or Irrania
Lobby Area	Controls all Access	-	Overlooks Fieldhouse		Lobby	-	New or Improved
Lounge & Reception			Social Events	Ш	Info Desk		Informal seating
Sports Hall of Fame			Too Small	11			New & Larger
Rock Climbing Wall				П	Sports Hall of Fame		
Restrooms	2		M&F	\Box			
Offices	20		IVI & I	+			
	20			\vdash	D)/D 0 T 1:		
Recruiting Room					DVD & Trophies		
					Café		
					Study Lounge		For visiting students
				Ħ	, ,		
Ground Floor Uses				\forall			
Sports Medicine Classroom			Charadina	₩	Additional Classrooms	_	Different sized with violes 0
			Shared use of one	-			Different sized with video &
Athletics Training Classroom			classroom	\sqcup	Conference Room	1	appropriate seating & equip
Equipment Storage Room							
Equipment Storage Cage							
Staff Locker Rooms	2		M & F	Ħ			
Team Locker Rooms	4		M & F	\forall	Visitor Locker Rooms		M & F, Intercollegiate teams
			IVI Q F		New Courts	4	W & F, Intercollegiate teams
Racquetball Courts	2					4	
Squash Courts	2		Non-Legal US Size	Ш	Replacement Courts	4	
Storage Closet							
				П	Steam Sauna		
					Dry Sauna		
		 		\vdash	Diy Jauria	 	
10		-		\sqcup		 	+
Dance		ļ	Mezzanine Level	\sqcup		ļ	1
Dance Studio			Maple floor, mirrors, barres	ĹĬ		L	
			Also used by fencing, martial	П			
		1	arts, spinning, aerobics	\sqcap		1	
Offices	?	 	Converted seminar room	\forall		 	1
Onices	!	1	Converted settling 100111	H		1	+
-				\sqcup			
Fitness Center		8,000	1998 addition	Ш	Expansion	4,000	12,000 SF total needed
Strength Training Equipment		_	Ground floor	1 [_	
Cardi-Respiratory & Aerobic			Second floor	\sqcap			
		1		H		1	
Pagraptional Cumpasium		 	Doop not oviet yet	\vdash	Now Gum	 	1
Recreational Gymnasium		-	Does not exist yet		New Gym	-	1
					Multipurpose		Connected rooms, Sprung
		<u> </u>			Different Sized		floors, Sound system,
					Rooms Needed		Mirrors, Barres etc.
				H			1 1, 1 22 2121
wa Tannia Courta		 		\vdash		 	
ays Tennis Courts				\vdash		-	+
				Ш			
erman Bosler Biddle Field Buildir	ngs						

Existing Parking Inventory - June 2006

QUICK CODE	BUILDING / LOCATION NAME	STREET	DIRECTION	ADDRESS	STAFF	STDNT	HP	SERVICE	BUSNS	VIS	RESV	GEN	TOTAL
PRACTICE FIELD LOT	PRACTICE FIELD PARKING LOT	BELVEDERE		1 BLOCK	0	0	2	0	0	0	0	21	23
GY PK LOT CDR ST	GOODYEAR BUILDING, STUDENT PARKING AREA - CEDAR ST	CEDAR ST		100 BLOCK	0	12	0	0	0	0	0	0	12
DEPOT LOT	CHERRY STREET PARKING LOT	CHERRY ST		1 BLOCK	44	0	2	0	0	0	0	0	46
CHURCH AVE LOT - EAST	CHURCH AVENUE, EAST PARKING LOT	CHURCH AVE	w	210	19	0	0	1	0	0	0	0	20
CHURCH AVE LOT - CNTR	CHURCH AVENUE, CENTER PARKING LOT	CHURCH AVE	w	211	5	0	0	0	0	0	0	0	5
CHURCH AVE LOT - WEST	CHURCH AVENUE, WEST PARKING LOT	CHURCH AVE	w	270	20	0	0	0	0	0	0	0	20
COLLEGE ST 135/139 LOT	135 / 139 NORTH COLLEGE STREET RESIDENTIAL PK AREA	COLLEGE ST	N	135/139REAR	0	4	0	0	0	0	0	0	4
LANDIS LOT	LADNIS HOUSE PARKING AREA	COLLEGE ST	s	101 REAR	5	0	0	0	0	0	0	0	5
STRAYER LOT	STRAYER HOUSE RESIDENTIAL PARKING AREA	COLLEGE ST	s	131 REAR	0	2	0	1	0	0	0	0	3
COLLEGE ST LOT 49/51 S	49 / 51 SOUTH COLLEGE STREET RESIDENTIAL PARKING	COLLEGE ST	s	49/51 REAR	0	5	0	0	0	0	0	0	5
COLLEGE ST LOT 57 S	57 SOUTH COLLEGE STREET, STAFF PARKING	COLLEGE ST	s	57 REAR	2	0	0	0	0	0	0	0	2
CONWAY St 103	KING HOUSE RESIDENTIAL PARKING	CONWAY ST		103	0	0	0	0	0	0	2	0	2
DICKINSON AVE LOT	DICKINSON AVENUE, 400 BLOCK PARKING AREA @ KW	DICKINSON AVE		400 BLOCK	1	5	1	4	0	0	0	0	11
CHILDREN CNTR LOT	CHILDREN'S LEARNING DEVELOPMENT CENTER PARKING LOT	GARLAND AVE		28	0	0	1	0	15	0	0	0	16
GARLAND AVE LOT	GARLAND AVENUE PARKING AREA	GARLAND AVE		1 BLOCK	0	25	0	0	0	0	0	0	25
PRESIDENT'S HOUSE	PRESIDENT'S HOSUE RESIDENTIAL PARKING	HIGH ST	w	202	0	0	0	0	0	0	2	0	2
MORGAN HALL CIR&DR	MORGAN HALL TRAFFIC CIRCLE & DRIVE	HIGH ST	w	360	0	0	0	2	0	0	0	0	2
ROTC ADMIN LOT	CONWAY STREET PARKING LOT	HIGH ST	w	450	12	0	0	0	0	0	0	0	12
KLINE SOUTH LOT	PARKER STREET / SOUTH KLINE PARKING LOT	HIGH ST	w	560	0	47	2	0	0	0	0	10	59
BIDDLE FIELD LOT	BIDDLE FIELD PARKING LOT	HIGH ST	w	610	7	0	0	1	0	0	0	0	8
HIGH ST LOT 146	146 WEST HIGH STREET RESIDENTIAL PARKING LOT	HIGH ST	w	146 REAR	0	20	0	0	0	0	0	0	20
HIGH ST LOT 150	150 WEST HIGH STREET RESIDENTIAL PARKING LOT	HIGH ST	w	150 REAR	0	0	0	0	0	0	0	0	0
HIGH ST LOT 155	155 WEST HIGH STREET RESIDENTIAL PARKING LOT	HIGH ST	w	155 REAR	0	10	0	0	5	0	0	0	15
HIGH ST LOT 159-171	159-171 WEST HIGH STREET RESIDENTIAL PARKING LOTS	HIGH ST	w	159-171REAR	2	44	0	0	0	0	0	0	46
HIGH ST LOT 19 / 23	19 / 23 WEST HIGH STREET RESIDENITAL PARKING LOT	HIGH ST	w	19 / 23	0	10	0	0	0	0	0	0	10
ADMISSIONS LOT	WAIDNER ADMISSION HOUSE PARKING LOT	HIGH ST	w	270 REAR	32	0	1	1	0	11	0	0	45
HIGH ST BUSINES LOT	HIGH STREET BUSINESS COMPLEX PARKING LOTS	HIGH ST	w	596-598 1/2	0	0	2	0	20	0	0	0	22
KLINE WEST LOT	KLINE LIFE SPORTS LEARNING CENTER, WESTERN PARKING LOT	HIGH ST	w	600 BLOCK	0	0	1	2	0	0	0	94	97
LOCUST AVE LOT	LOCUST AVENUE, 200 BLOCK PARKING AREA	LOCUST AVE	w	200 BLOCK	21	0	0	2	0	0	0	0	23
DICKINSON LOT	DICKINSON CAMPUS, PRIMARY PARKING LOT	LOUTHER ST	w	232	32	0	1	0	0	4	0	0	37
DICKINSON ALT LOT	DICKINSON CAMPUS, ALTHOUSE / QUARRY PARKING LOT	LOUTHER ST	w	242	12	0	0	0	0	0	0	0	12
LOUTHER ST LOT 505	505 WEST LOUTHER STREET PARKING LOT	LOUTHER ST	w	505	5	0	0	0	0	0	0	0	5
LOUTHER ST LOT 554	554 WEST LOUTHER STREET RESIDENTIAL PARKING AREA	LOUTHER ST	w	554	0	3	0	0	0	0	0	0	3
LOUTHER ST LOT 556	556 WEST LOUTHER STREET RESIDENTIAL PARKING AREA	LOUTHER ST	w	556	0	0	0	1	0	0	0	0	1
DANA LOT	DANA HALL OF BIOLOGY PARKING LOT	LOUTHER ST	w	277 REAR	7	0	0	0	0	0	0	0	7
HUB/ATS LOT	HOLLAND UNION BUILDING (HUB) / ATS PARKING LOT	LOUTHER ST	w	300 BLOCK	92	0	2	0	0	4	7	0	105
RECTOR SCI CAMPUS LOT	RECTOR SCIENCE CAMPUS PARKING LOTS	LOUTHER ST	w	300 BLOCK	0	0	0	0	0	0	0	0	0
LOUTHER ST LOT 400	400 BLOCK WEST LOUTHER STREET, RESIDENTIAL PARKING	LOUTHER ST	w	400 BLOCK	0	2	0	0	0	0	0	0	2
LOUTHER ST LOT 500	500 BLOCK WEST LOUTHER STREET, RESIDENTIAL PARKING	LOUTHER ST	w	500 REAR	0	10	0	0	0	0	0	0	10
GY PK LOT	GOODYEAR BUILDING, RESIDENTIAL PARKING LOT	LOUTHER ST	w	551 REAR	0	65	2	0	0	0	0	0	67
MATTHEWS LOT	MATTHEWS HOUSE RESIDENTIAL PARKING AREA	MOORELAND AVE	**	60	0	4	0	0	0	0	0	0	4
MOORELAND LOT	MOORELAND AVENUE / RUSH CAMPUS PARKING LOT	MOORELAND AVE	+	100 BLOCK	1	172	4	0	7	0	5	0	189
50 MOORELAND LOT	50 MOORELAND AVENUE PARKING LOT	MOORELAND AVE	+	50 REAR	26	0	1	0	0	0	0	0	27
FACTORY APTS LOT	FACTORY APARTMENTS RESIDENTIAL PARKING LOT	NORTH ST	w	230/36REAR	0	45	0	0	0	0	0	0	45
KAUFFMAN LOT - E			w	400 REAR	0	160	0	0	0	0	0	0	160
KAUFFMAN LOT - W	KAUFFMAN BUILDING COMPLEX PARKING LOT - EASTERN KAUFFMAN BUILDING COMPLEX PARKING LOT - WESTERN	NORTH ST NORTH ST	W	400 REAR	25	0	2	0	0	0	1	0	28
KAUFFMAN FLEET LOT		NORTH ST	W	400 REAR	0	0	0	0	0	0	35	0	35
CPYB LOT	KAUFFMAN BUILDING COMPLEX FLEET PARKING AREA ORANGE STREET COMPLEX - CPYB PARKING LOT	ORANGE ST	N	5	0	0	1	0	70	0	0	0	71
			_	5	+		<u> </u>					_	103
FMS PK LOT WEST CAMPUS	ORANGE STREET COMPLEX - FMS PARKING LOT ORANGE STREET COMPLEX - WEST CAMPUS PARKING LOT	ORANGE ST ORANGE ST	N N	5	47 0	0	0	54 0	0 35	0	10	0	45
			IN	500 BLOCK									9
REED ST LOTS	500 BLOCK REED STREET RESIDENTIAL PARKING AREAS	REED	+	1240	0	9	0	0	0	0	0	0	_
DICKINSON PARK LOT	DICKINSON PARK PARKING LOT - NO OVER NIGHT PARKING	RITNER HIGHWAY	+	1240	0	0	2	-	0	0	0	100	103
WENTZELS PK LOT	WENTZEL'S BUILDING - PARKING LOT - NO OVER NIGHT PK	RITNER HIGHWAY	+		0	0	1	0	45	0	0	0	46
STUART LOT	STUART HOUSE - PARKING LOT	WEST ST	N	49 REAR 46 REAR	0	0	2	1	2	0	7	0	12
WEST ST LOT 34 S	34 SOUTH WEST STREET PARKING AREA	WEST ST	S	46 REAR	0	0	0	1	0	0	0	0	1
WEST ST LOT 46 S	46 SOUTH WEST STREET RESIDENTIAL PARKING AREA	WEST ST	S	50 REAR	0	2	0	0	0	0	0	0	2
WEST ST LOT 50	50 SOUTH WEST STREET PARKING AREA	WEST ST	S		2	0	0	0	0	0	0	0	2
WEST ST LOT 58	58 SOUTH WEST STREET PARKING AREA	WEST ST	S	58 REAR	2	0	0	0	0	0	0	0	2
Z TOTALS:			+		421	656	32	72	199	19	69	225	1693
Z % of total:				l	25	39	2	4	12	1	4	13	100



The timing of construction of new student housing on the campus is directed by immediacy of need, funding for upgrades of existing housing, and funding availability for new housing. The purpose of this paper is to begin to quantify the demand for beds, and to give some indication of the order in which increments of need might be fulfilled.

Sources of Housing Demand

Students granted off campus permission	180 to 200	
Students living in leased spaces	+/- 205	
Beds lost when lounges are restored to community use	45	
Beds lost when ground floor space in the Quads is restored to other uses		
Beds displaced as residence halls are remodeled for fewer, improved beds		

Phase 1

(Note that the estimated number of beds is very approximate)	
Beds displaced by improvements made during summer 2008	Approximately 40 beds
Reclamation of lounges	Approximately 45 beds
Housing for un-met on-campus demand (partial only)	Approximately 40 beds
	Total for Phase 1 - 125 beds

Phase 2

(Note that the estimated number of beds is very approximate)	
Removal of town houses from Louther Street New Science Green	Approximately 50 beds
Housing for seniors living off-campus (partial only)	Approximately 40 beds
	Total for Phase 2 - 90 beds

Phase 3

Remodel Malcolm Hall (79 beds), assuming 25% reduction	20 beds
Remodel Adams Hall (184 beds), assuming 20% reduction	37 beds
Remodel Drayer Hall (184 beds), assuming 20% reduction	37 beds
Remodel Witwer Hall (81 beds), assuming 20% reduction	16 beds
	Total for Phase 3 - 110 beds

Phase 4

Demolish Kisner-Woodward Hall (94 beds)	94 beds
	Total for Phase 4 - 94 beds

There will be other replacements and renewals beyond these, including approximately 100 students living off campus who would presumably be accommodated on campus if there was room for them. The assumption here is a combination of improving existing housing and construction of some new housing in the early phases so that the College can compete successfully against its peers with a modest outlay of funds, compared to new housing additions alone.

Of the existing residence halls, only 6 contain more than a hundred beds. The average size of the other 15 halls is 48 beds. The yield of the first four phases is approximately 450 beds. It will be important to come to a decision on the optimum residence hall size from a community point of view and from a financial point of view. The campus master plan can then anticipate an appropriate number and size of potential residence sites on, and perhaps adjacent to the campus.

Existing Residence Halls

9		
	Over 100 beds: 891 total	
	Adams	184
	Drayer	184
	Morgan	161
	Davidson-Wilson	123
	Baird-McClintock	121
	Goodyear	118
	50 to 100 beds: 352 total	
	McKenney	98
	Kisner-Woodward	94
	Witwer	81
	Malcolm	79
	Fewer than 50 beds: 371 total	
	Conway	49
	Buchanan	48
	Atwater	45
	Cooper	42
	Longsdorff	40
	Stuart	31
	Matthews	26
	Todd	26
	Reed	25
	Curtilage	22
	Strayer	12
	Carriage House	5
	(No numbers recorded for Scott)	

Bed Analysis - June 2007

Inventory of Existing Facilities

Facility	Full Beds	Vacancies	Permanent Beds	Rate	(S)	(D)	(T)	(Q)	Comments
128 Cherry	2	0	2	apt	2	0	0	0	Rental
130 Cherry	2	0		apt	0	1	0	0	Rental
-									
136 Cherry	4	0		apt	2	2	0	0	Rental
140 Cherry	4	0		apt	0	2	0	0	Rental
133N. College	7	0		std	0	2		0	
135 Cedar	5	0		apt	1	2			
139 N. College	6	0		apt	0			0	
143 1/2 W. Louther	2	0		apt	0				Rental
145 W. Louther	3	1		apt	1	2			Rental
19 W. High	3	0		apt	1	1	0		Rental
23 W. High	9	0		apt	1	4			Rental
146 W. High	15	1		apt	2	5			Rental
150 W. Louther	10	0		apt	4	3			Rental
155 W. High	6	0		apt	0				Rental
159 W. High	18	0		apt	6	6		0	
163 W. High	14	3		apt	7	5		0	
165 W. High	13	0		apt	3	5			
169 W. High	14	0		apt	2	6		0	
170 W. Louther 171 W. High	12 16	0		std std	1	0 6		0	
217 N. College 230 W. North	3	0		apt	1	1			Rental
230 W. North	31 18	0		apt apt	9	11	0		Rental Rental
34 S. West		0		apt std	6	3		0	
373 W. Louther	11 8	0		apt	1 2	3		0	
377 W. Louther	8	0		apt	2	3		0	
379 W. Louther	8	0		apt	2	3		0	
381 W. Louther	8	0		apt	2	3		0	
383 W. Louther	8	0		apt	2	3		0	
417 W. Louther	5	0		std	3			0	
425 W. Louther	5	0		std	3	1		0	
429 W. Louther	6	0		apt	2	2			Rental
433 W. Louther	5	0		std	1	2			Rental
435 W. Louther	2	0		std	0				Rental
448 W. High	6	0		std	2	2		0	
46 S. West	7	0		std	2	1	1	0	
49/51 S. College	6	0		std	6	0		0	
502 Reed	4	0		apt	0			0	Rental
504 Reed	4	0		apt	0				Rental
505 W. Louther	5	0		apt	1	2	0	0	
506 Reed	3	0		std	1	1	0	0	Rental
508 Reed	3	0	3	apt	1	1	0	0	Rental
510 Reed	3	0	3	apt	1	1	0	0	Rental
512 Reed	3	0	3	std	1	1	0	0	Rental
519 W. Louther	4	0	4	std	0	2	0	0	
521 W. Louther	4	0	4	std	2	1	0	0	
527 W. Louther	3	0		std	1	1		0	
529 W. Louther	5	0		std	1	2		0	
531 W. Louther	4	0		apt	2		0	0	
532 W. Louther	14	0		std	2	6			
538 W. Louther	3			std	3				Std for 06-07 only
554 W. Louther	3			std	3	0		0	
556 W. Louther	4	0		std	2	1		0	
24 Parker	4	0		std	2	1	_		Rental
26 Parker	4	0		apt	2				Rental
Adams	184	1	174		17	71	5		(11 temp beds)
1 A 1	48	4	48	std	4	14	4	1	001 is a converted lounge into quad
Armstrong									
Atwater	45	0	45	std	2	14		0	
			45 118		2 4 4	14 45 18	0	6	(3 temp beds) 2 lounges (8 beds)

Facility	Full Beds	Vacancies	Permanent Beds	Rate	(S)	(D)	(T)	(Q)	Comments
Buchanan	48	1	40	std	4	18			2 lounges (8 beds)
Carriage House	5	0	5	std	1	2	0	0	
Conway	49	0	41	std	3	19	0	2	2 lounges (8 beds)
Cooper	42	0	34	std	4	15	0	2	2 lounges (8 beds)
Curtilage	22	2	22	std	14	4	0		Rental
Davidson-Wilson	123	0	123	std	5	59	0		1 lounge (2 beds)
Drayer	184	1	173	std	26	57	11	2	2 lounges (8 beds)
Goodyear	118	0	118	apt	62	26	0	1	
KW	94	2	96	std	48	24	0	0	
Longsdorff	40	0	40	std	4	16	0	1	
Malcolm	79	2	79	std	5	37	0	0	
Mathews	26	0	26	std	3	5	3	1	
McKenny Suites	98	4	98	std	4	47	0	0	
Morgan	161	4	161	std	29	66	0	0	
Reed	25	0	25	std	5	7	2	0	
Strayer	12	0	12	std	1	4	1	0	
Stuart	31	2	31	std	9	8	2	0	
Todd	26	0	26	std	4	11	0	0	
Unassigned	0	0	0						
Witwer	81	0	81	std	4	37	1	0	
Total	2049	30	2001		362	726	45	19	

Total Full Beds	2049		Off-Camp
Total Vacancies		30	Abroad
Total Permanent Beds		2001	Commute
Total Permanent Beds w/out Rentals		1835	

Housing Occupancy	102.4%
Housing Occupancy w/o Rentals	111.7%

Cost per Bed Analysis

STUDENT HOUSING IMPROVEMENT STRATEGY

The need to improve student housing and the Campus Life facilities associated with it is ongoing; so too is the need to replace some housing and create more to keep pace with changing needs. Valuable guidance on the kinds of housing that currently serve the College best from a financial point of view can be gleaned from recent cost analysis of operation and maintenance summarized here. For example, maintenance costs per bed in small houses, such as those on the north side of Louther Street between Tome Hall and Cherry Street are double those of beds in town houses and the Quads.

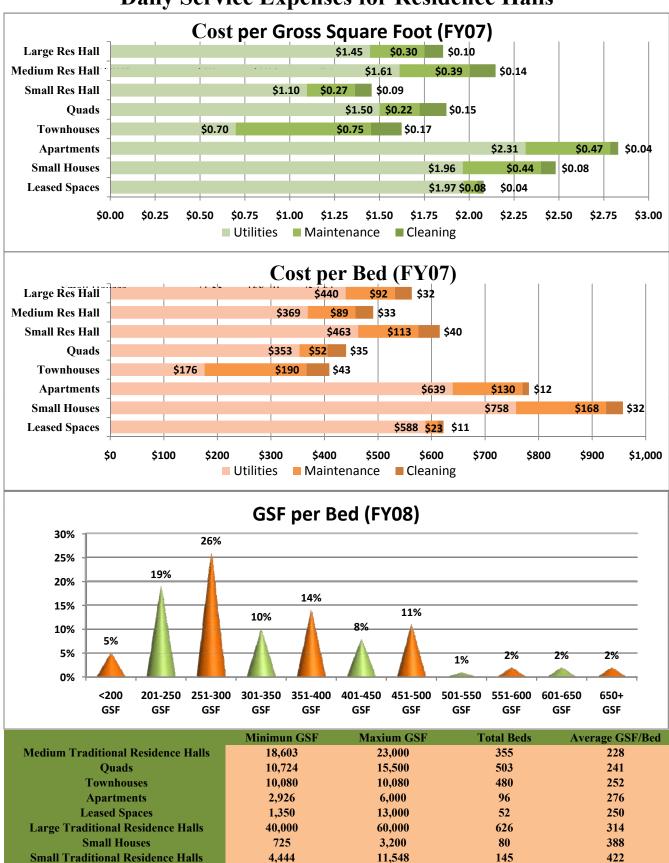
The mix of housing types to be maintained and built on campus is driven partly by costs: construction cost, operation and maintenance costs; but also by student preferences. Community may be a high priority for freshmen, while autonomy is more often the aim of upperclassmen. Are there ways to build apartments efficiently and economically so that they do not reflect historically high operation and maintenance costs? If so, these are most likely to attract upperclassmen back onto campus.

A caveat is that the cost analysis is drawn from buildings of various ages and conditions. The College's commitment to sustainable development means that both operations and maintenance costs should be markedly less in all new construction.

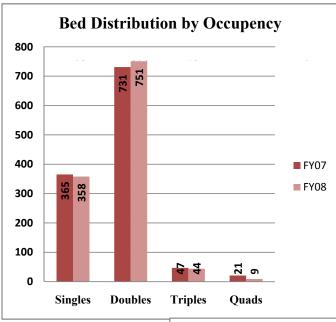
Another caveat is that older residence halls that are scheduled for remodeling will have fewer beds as lounge spaces are returned to community use. As a consequence, operations and maintenance costs per bed will increase.

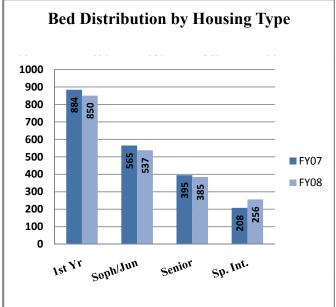
The analysis is valuable in that it gives an accurate summary of the disposition and relative costs of existing campus housing. However, one should not infer too much from it where new construction is concerned. A particular challenge for the student housing improvement strategy is to take out of service no more beds than have been added as new housing. Remodeling of some residence halls is very pressing, but will result in a net reduction in beds – so must be balanced with provision of new beds elsewhere on campus.

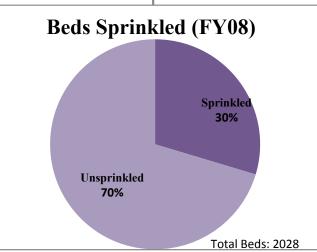
Daily Service Expenses for Residence Halls

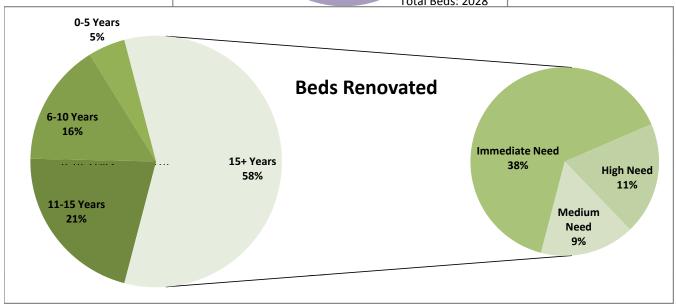


Res Hall Data









Site Inventory – Existing Materials

Observations

- Absence of clear hierarchy in use of materials throughout the campus
- Inconsistency of material use resulting in a quilt work of hardscape surfaces
- Use of some materials that have high life cycle and replacement costs
- Maintenance and accessibility issues with regards to vegetation, hardscape material and stormwater management
- Lack of materials and elements that reinforce and/ expose environmental processes in the landscape

Entrances





















Walls











Walks and Plazas





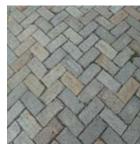




















Edging















Stairs, Ramps, Handrails









































Signage





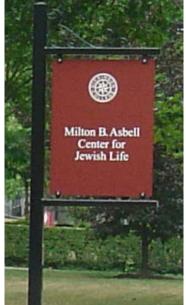
















Directing Water













Fencing and Screens

















Lighting

















