

# Penn State Beaver



Campus Exterior Architectural Plan  
Spring 2010

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# Introduction and purpose

## Penn State's Mission:

Penn State is a multi-campus public land-grant university that improves the lives of the people of Pennsylvania, the nation, and the world through integrated, high-quality programs in teaching, research, and service.

To assist in achieving this mission, a Campus Exterior Architecture Plan, known as a CEAP, is developed to suggest ways to improve the exterior aesthetic qualities of campus with low-cost and easy-to-implement concepts that can have meaningful impacts. The CEAP is a planning tool that is an outgrowth of the campus master planning process.

The CEAP includes graphic and narrative descriptions of existing conditions on campus and approximately 15-20 improvement concepts. Positive features may also be identified as elements to emulate.

The improvement concepts are ranked or prioritized according to their visual impact and estimated cost. The concepts are not final designs. Further study and design are required prior to implementation.

# Existing Conditions Inventory

## Background:

A detailed site analysis, campus vision and future development strategy are fully documented in the campus master plan process. In addition to the analysis performed during the master planning process, a focused visual assessment of the campus exterior is conducted which establishes the foundation for the recommendations and concepts contained in this CEAP document.

A thorough site development document for Beaver campus was prepared by LaQuatra Bonci Associates in September 2009. Most of the recommendations from that document are consistent with typical CEAP recommendations. This CEAP will therefore focus on other low-cost and easy-to-implement concepts at Beaver campus.

## General Observations:

This forty-five year old campus has occupied its present site since 1965 with a donation of land and buildings from the Beaver County Board of Commissioners. This 100 acre commuter campus lies 35 miles west of Pittsburgh in Beaver County.

The brick buildings on campus are modern, surrounded by rolling lawns punctuated by mature tree groupings. A few remnant landscape features and walkways remain from buildings that have been razed. The campus is surrounded by rural residences and forest canopy and lies about a half mile from the Ohio River.

Parking is suitably relegated to the campus perimeter. Pedestrian circulation in the campus core is functional however the opportunity exists to modify alignments and materials, as proposed in the LaQuatra Bonci study. Existing exterior gathering spaces can be enhanced to be more inviting. Upgraded signage and wayfinding for the campus has been developed and is being implemented.

# Architecture

## Existing Conditions Inventory

Major architectural modifications, additions, and new construction are beyond the scope of this CEAP.

However, the aesthetic character of campus is defined to a great extent by the structures that comprise it. Brick masonry is the predominant building material of most buildings on campus.



# Site Furnishings

## Existing Conditions Inventory

Benches, trash receptacles, tables and bike racks across the campus are varied in design, color and material.

It is recommended that a standard design for furnishings be selected that will aid in unifying the campus aesthetic.

In addition to aesthetic appropriateness, the longevity and maintenance of site furnishings should be considered when specifying.



# Lighting

## Existing Conditions Inventory

Exterior light fixture types are relatively uniform on campus. Fixtures and poles appear to be in good condition and are appropriately scaled. Inappropriate wall-mounted fixtures on buildings should be replaced.

The fixtures at the Brodhead Cultural Center are in need of replacement.



# Signage

Existing Conditions Inventory

Consistent design and placement of directional and identification signs is key to a unified aesthetic as well as an intuitive and clear means of way finding. Consistent utilization of Penn State graphic standards throughout the commonwealth system strengthens the University's identity.

Signage upgrades prompted by CEAP recommendations made at other Commonwealth campuses has resulted in a complete renovation program at Beaver as well. The program has been recently implemented at Beaver campus.



# Landscape

## Existing Conditions Inventory



The landscape aesthetic of the campus can be characterized as park-like with groves of large, quality specimen trees and vast open grassy lawns.

Ornamental plantings beds are well-maintained.

Opportunities exist for the limited use of perennial and annual flower color. Any and all invasive plant species should be eradicated. Turf areas appear to be weed-free and well maintained.



Both formal and informal outdoor gathering spaces exist on campus though there is opportunity for more.



# Pedestrian Circulation

## Existing Conditions Inventory

Some redundancies exist in the current network of concrete sidewalks on campus. This was studied by LaQuatra Bonci in 2009 and their recommendations were reviewed by the Campus Planning and Design office.



# Unique Features

## Existing Conditions Inventory



The character and aesthetic of the campus is defined primarily by the central green and the views across campus from pedestrian walkways. Groves of heritage trees dot the campus.

Dramatic changes in topography maximize views into and out from campus.

The entrance into campus is memorable with the new entrance sign, pond and surrounding landscape.



## Paint doors of Study-Learning Center

Improvement Recommendation

The color of the exterior doors on the Study-Learning Center should match the trim elements on the rest of the building.



Existing



Proposed



Existing



Proposed

## Demolish Hartenbach Residence

Improvement Recommendation

The ramshackle Hartenbach residence has become an attractive nuisance that should be demolished and cleared.



# 1c

## Screen General Classroom Building Utilities

Improvement Recommendation

The rooftop mechanical equipment on the General Classroom Building are plainly visible to passers-by. Recommend that the equipment be screened from view.



Existing



Proposed

# 1D

## Pressure Wash Improvement Recommendation

A cost effective strategy for freshening the appearance of existing buildings is the use of pressure washing to remove dirt and mildew stains. Propose the implementation of an annual cleaning program campus wide. Hand-cleaning may be necessary on certain finishes to avoid damage.



# Replace Railings on Student Union Building “Bridge”

Improvement Recommendation

The north entrance to the Student Union Building, with its concrete bridge and precipitous slope, is uninviting and hazardous to maintain. A glass panel railing that echoes the window trim treatment would open up this side of the building. Low shade tolerant plantings are proposed. The design should accentuate the vantage point provided by the bridge.



Existing



Proposed

# Backfill and Remove Library "Bridge"

Improvement Recommendation

An alternative to a library entrance plaza, as conceptualized in the LaQuantra Bonci study, would be to backfill the grade, remove the bridge, provide a generous entry walk and landscape.



Proposed



Existing



Existing

## Relocate Electrical Service and Regrade Around Communications Facility

Improvement Recommendation

Electrical lines for generator service during power outages can be re-routed to the parking area next to the Baker Engineering Building. This would allow for the removal of the wooden shed next to the communications facility. Low brick walls constructed as illustrated will contain the condensing unit and camouflage the access doors. Regrade the surrounding earth to minimize the visual impact of the roof of the facility in the center of the campus green.

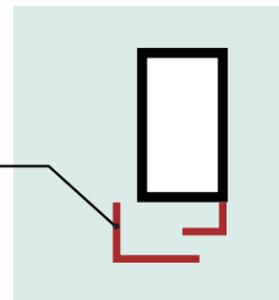


Existing view from Baker Engineering Building



Proposed view from Baker Engineering Building

Elevation at top of brick wall surrounds same as top of Communications Facility



Existing view from Library



Proposed view from Library

## Complete an Architectural Study of Campus Building Entrances

Improvement Recommendation

The entrances into some campus buildings are dark and uninviting. Building heating and cooling is also impacted by the lack of entrance vestibules. An architectural analysis of the floor plan and site plan at campus building entrances should be completed to determine the best architectural remedy for these deficiencies. Both interior and exterior options, budget, timing and aesthetic implications should be considered. The University Architect can help with this process.

The outcomes of an entrance study will impact exterior landscape plans and should be considered as projects are prioritized and scheduled.



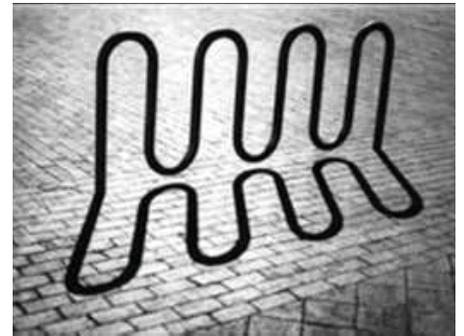
# 2A

## Site Furnishings Improvement Recommendation



Site furnishings designed in a style “family” are aesthetically unifying. The examples shown here will compliment the contemporary architectural style present on the campus. Powder coated metal is attractive, comfortable and durable.

Planters should be appropriately sized for the space they occupy and be constructed of durable, quality material.



# 3A Lighting

## Improvement Recommendation

Replacement of any antiquated, inefficient pedestrian walkway and parking lot lighting is recommended.

Metal halide or LED lamps in cut-off luminaires mounted to poles are recommended for pedestrian walkways. High pressure sodium lamping is acceptable for parking lot lights. Color/finish for all fixtures should be consistent campus wide. Avoid the use of bollards due to vulnerability to snow removal operations and vandalism.



Site Light

Parking Lot Light

# Plant Stormwater Basin

Improvement Recommendation

Retrofitting the stormwater basin with native plantings will beautify this utilitarian landscape element, reduce the grass-cutting burden, and promote Penn State's commitment to environmentally sustainable landscape practices.



Existing



Proposed

## Plant Along Waterway

Improvement Recommendation

An opportunity exists to stabilize the slopes of the waterway/swale between the entrance drive and the Brodhead Cultural Center. Native plants with ornamental qualities would beautify this highly visible area.



# Baker Dungan Museum Stairs Rebuild

Improvement Recommendation

If the Museum is to remain in operation, the stairs to the Brodhead Cultural Center need to be rebuilt. The current configuration does not meet ADA requirements or provide a safe route from the Giusti Amphitheater.



## Consider Turf Replacement Improvement Recommendation

Beaver campus has a large turf-mowing burden. Areas of campus that are not regularly used by students can be converted to warm-season meadows to decrease the mowing burden and increase wildlife habitat. Once established, warm season meadows require minimal mowing and deep roots encourage stormwater infiltration.

Warm-season meadow grasses in the highlighted areas along the entrance drive would complement the naturalistic entrance drive island plantings. These relatively small scale plots could serve as pilot test areas for an expanded meadow establishment program at Penn State Beaver.



Sites for Possible Lawn Replacement



Example of a warm season meadow in summer



Example of a warm season meadow in fall/winter

## Screen Parking Improvement Recommendation

Wherever possible, parked cars should be screened from view. The east lot next to the Physical Plant Services Building is a good example. Utility access will impact tree and shrub locations.



4F

# Paint Handrails

Improvement Recommendation

Chipping handrails should be painted.



# Relocate Gas Service Equipment

Improvement Recommendation

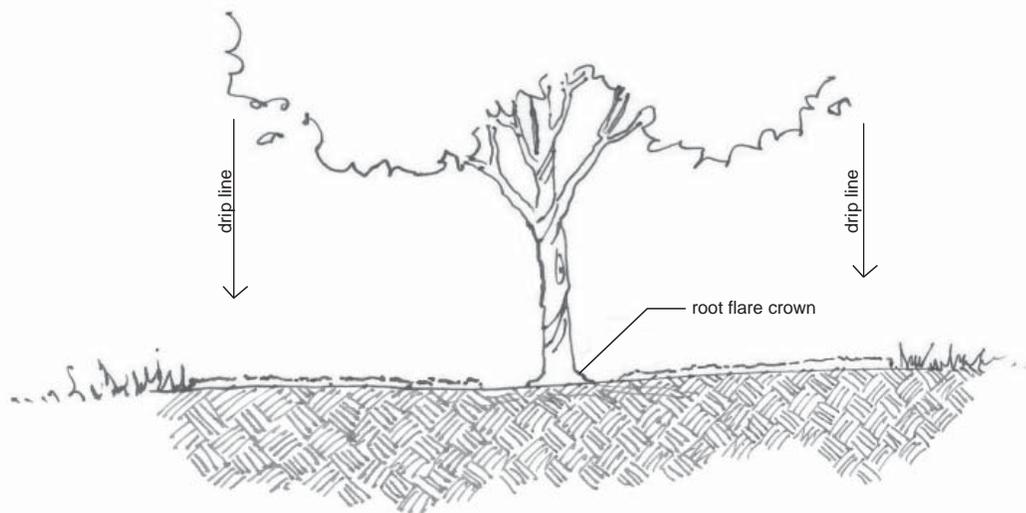
As mentioned in the LaQuantra Bonci study, the gas service equipment should be relocated from its current location on the main campus green. If relocation is not feasible, the equipment should be repainted and the landscape should be replaced to minimize the visual impact.



# Regrade Tree Bases

Improvement Recommendation

The bases of the trees fronting the Baker Engineering & Science Building have been air-spaded for root examination by Bartlett Tree Services. After backfilling with stone, as Bartlett suggests, cover with mulch to the dripline.



# Screen Physical Plant Services Building

Improvement Recommendation

During the planning of the Overlook Pavilion next to the library, care should be taken to screen the view to the Physical Plant Services Building without obscuring the long desirable views to the mountains beyond. This stair and railings are in need of replacement and should be included in plans for the Overlook Pavilion.



# Shade Trees at Laboratory Classroom Building

Improvement Recommendation

The landscaping at the Laboratory Classroom Building is not in scale. Large shade trees are recommended.

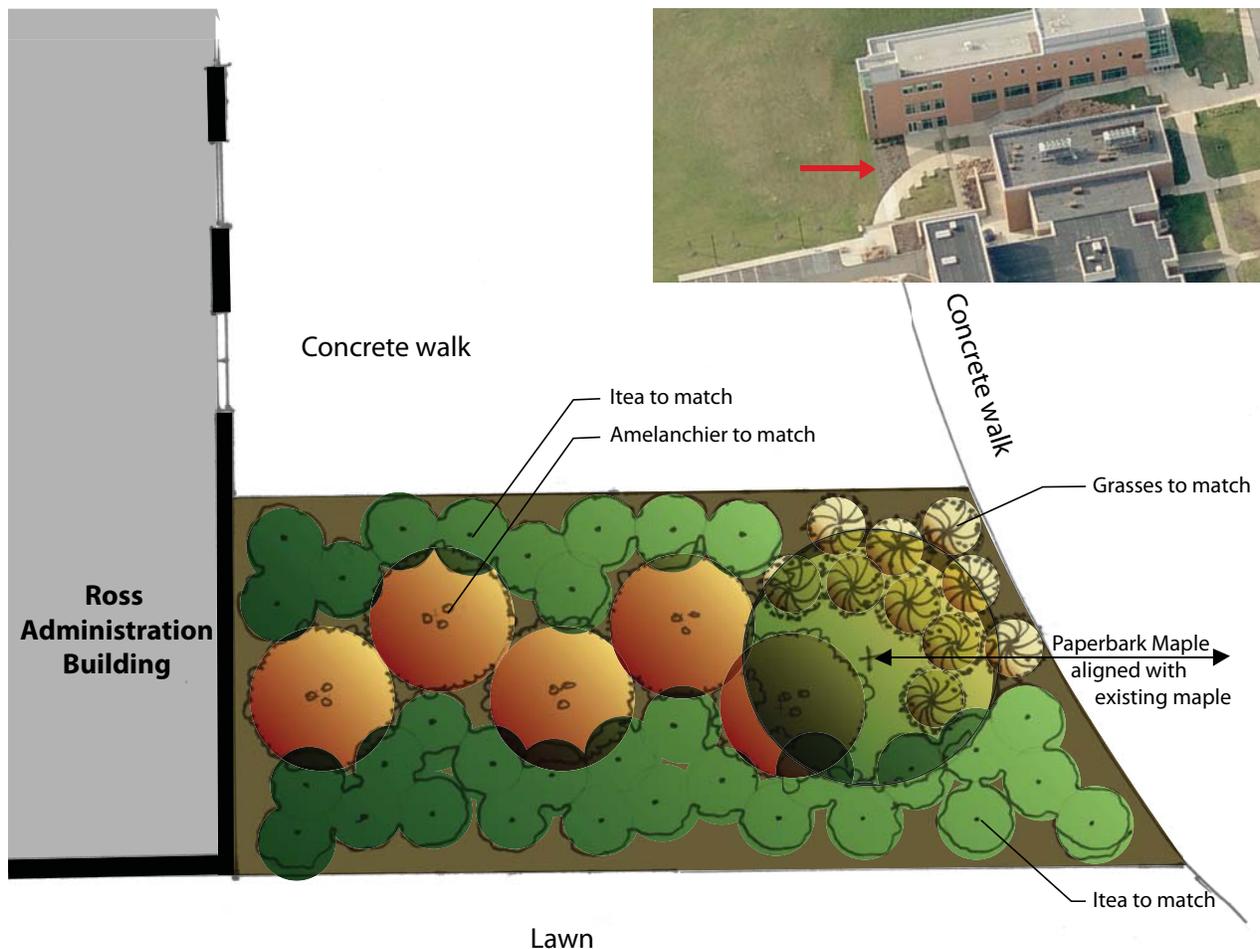


## Planting Bed at Ross Administration Building

Improvement Recommendation



A stronger planting design that is visually tied to the surrounding plantings is recommended for the bed on the southeast corner of Ross Administration Building. Right now the bed is dominated by perennials in need of thinning. The illustrated planting design would provide balance and scale and would unite this overgrown bed with the rest of the elegant plantings within the plaza.



## “Cowpath” Behind Baker Engineering Building

Improvement Recommendation

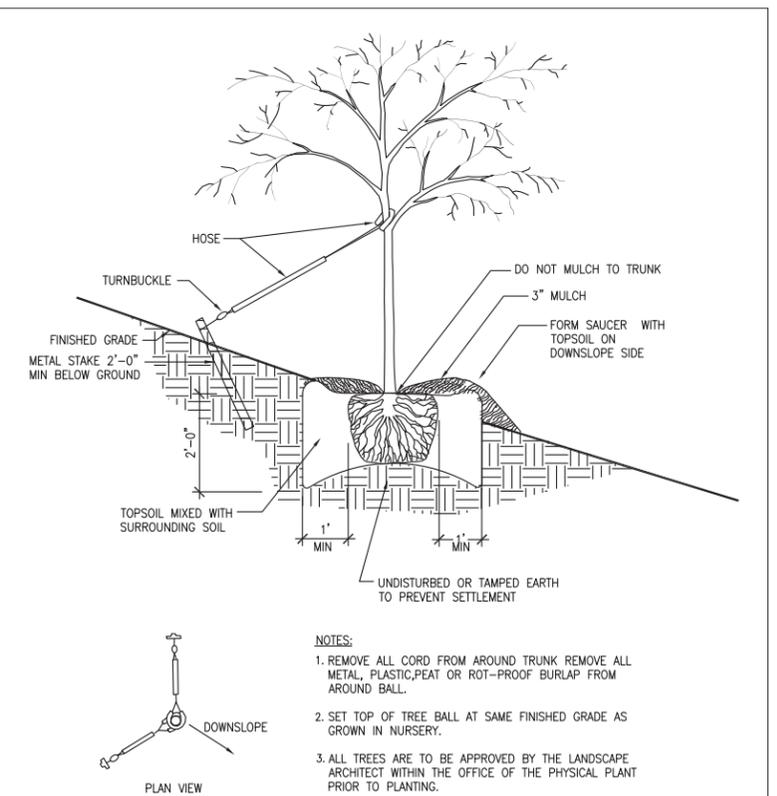
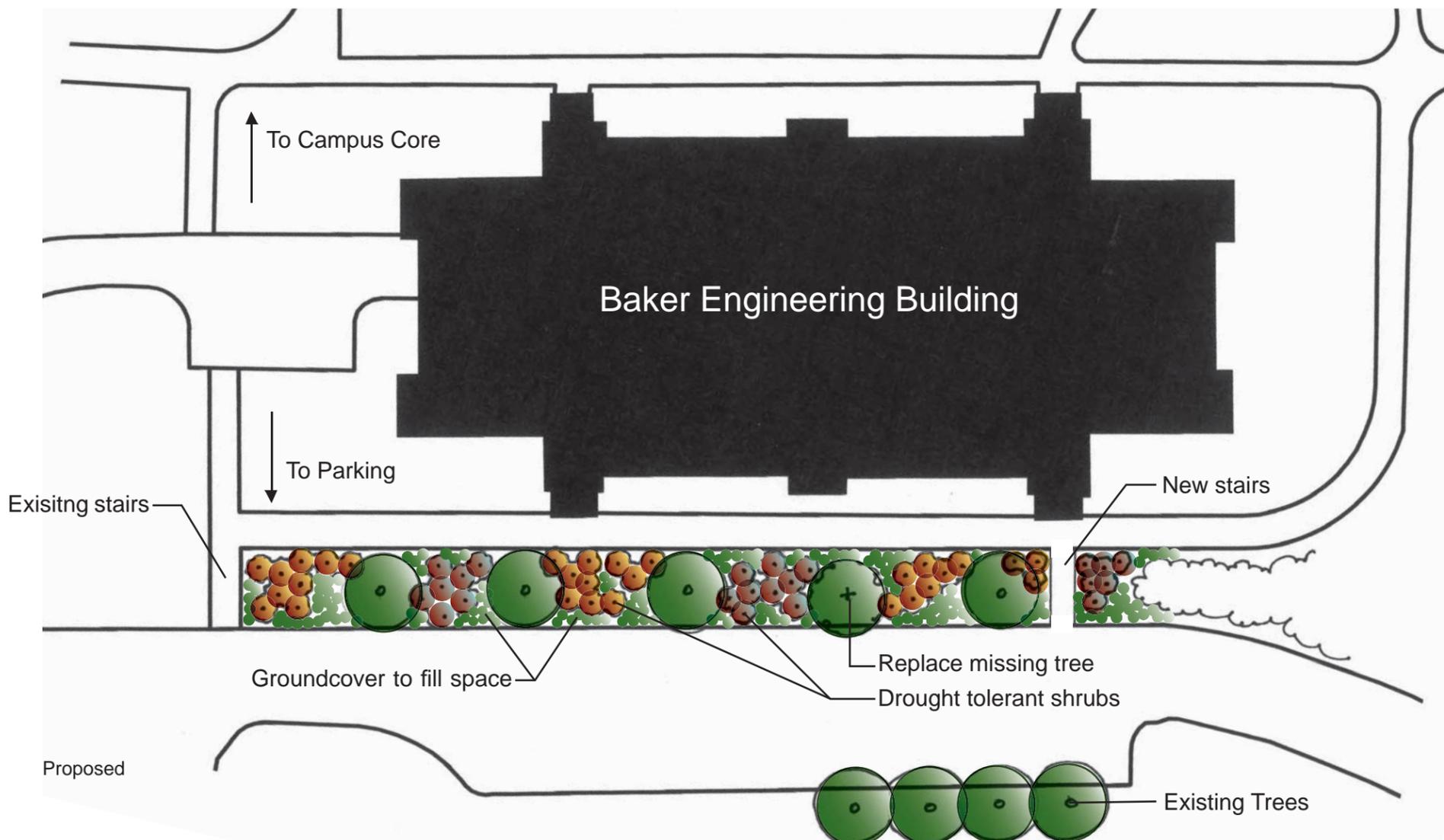
Install stairs at north end of parking lot behind Baker Engineering at site of existing “cowpath” desire line. Plant the remainder of the space between stairs to encourage use of stairs.



Existing



Existing desire line - site for new stairs



- NOTES:**
1. REMOVE ALL CORD FROM AROUND TRUNK REMOVE ALL METAL, PLASTIC, PEAT OR ROT-PROOF BURLAP FROM AROUND BALL.
  2. SET TOP OF TREE BALL AT SAME FINISHED GRADE AS GROWN IN NURSERY.
  3. ALL TREES ARE TO BE APPROVED BY THE LANDSCAPE ARCHITECT WITHIN THE OFFICE OF THE PHYSICAL PLANT PRIOR TO PLANTING.

SLOPE TREE PLANTING AND GUYING  
SCALE: NONE

## Planters

### Improvement Recommendation

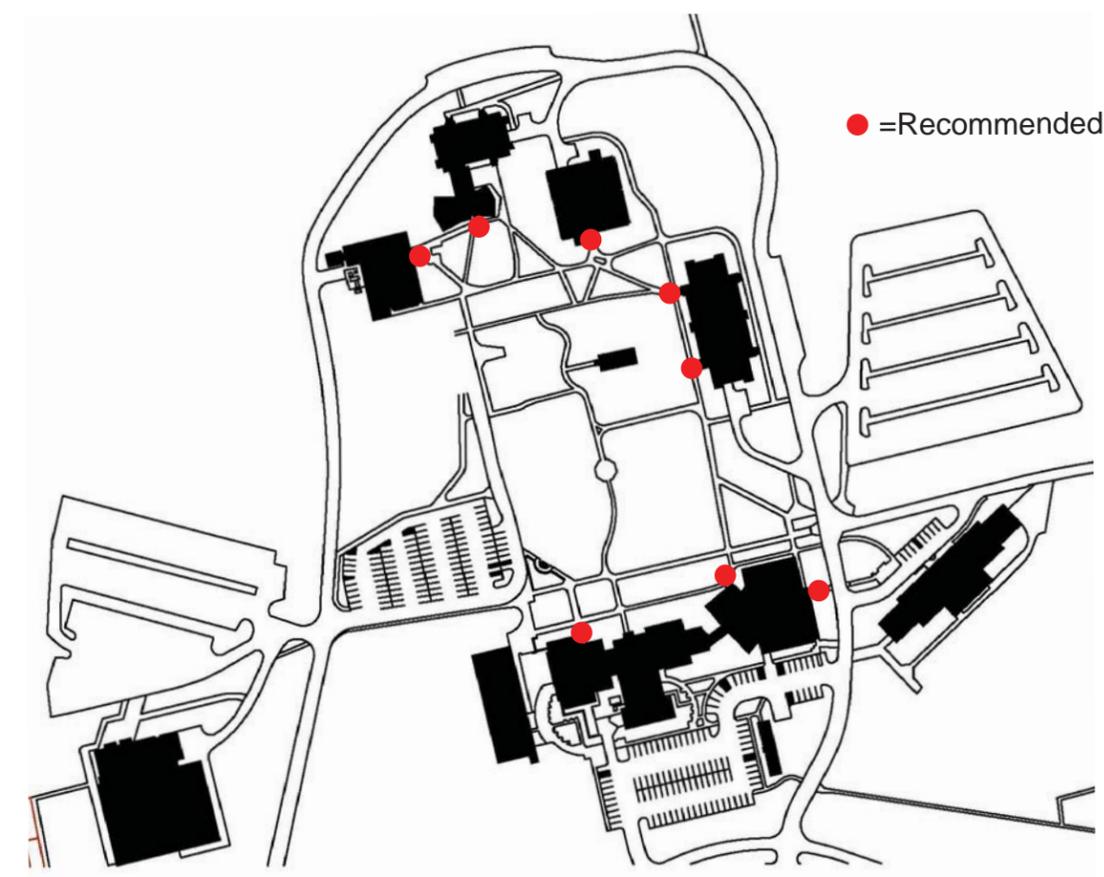
The use of perennial plant and ornamental grass beds near Ross Administration Building has a dramatic impact.

A dramatic visual effect can also be achieved by annual and perennial plantings in appropriately scaled containers placed strategically near building entrances and outdoor gathering spaces.

Recommend the placement of planters at various building entrances.



Examples of container plantings designed to incorporate all types of vegetation with dramatic visual effect



● =Recommended planter locations

# Parking Lot Trees <sup>4N</sup>

Improvement Recommendation

Campus representatives are considering a redesign of the parking lot east of the campus core. Plant island shade trees as part of existing or new configuration.



Existing



Proposed

# Extend Campus Tree Program <sup>40</sup>

Improvement Recommendation



Establish a database accounting of campus trees to ensure a net gain of significant trees over time. A campus inventory should include a ranking of value to encourage appropriate replacements for lost specimens when opportunities arise for new installations.



## Remove Gravel and Landscape at Study Learning Center

Improvement Recommendation

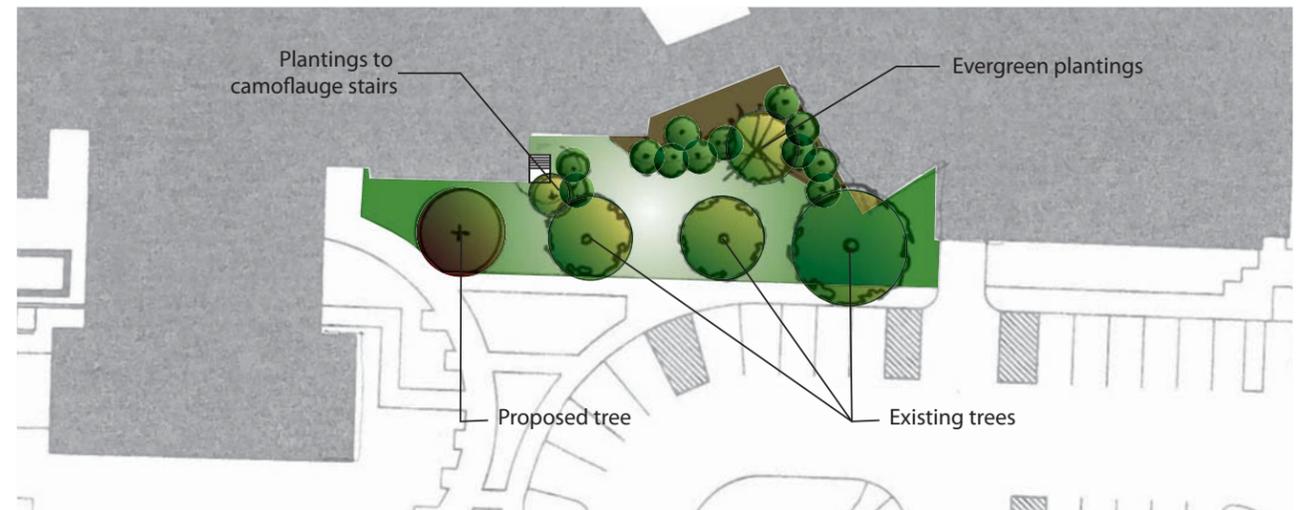
Campus representatives state that water does not flow from drainage pipes during storm events. Replace gravel with turf. Engineering plans of drainage system should be studied to determine if further plantings can be supported. If so, evergreen trees and shrubs such as American Holly and Inkberry Holly should be planted in corner and surrounding pipes. Screen the support for the stairs.



Existing



Proposed



# 5B

## Reconfigure Parking at Harmony Hall

### Improvement Recommendation



Overabundance of pavement contributes to excess water runoff and solar heat island effect. Green space is more visually pleasing than paved surfaces. The opportunity exists to reduce pavement and provide a more functional handicapped parking area outside Harmony Hall.

Existing



Proposed



# 5c

## Remove Telephone Base

Improvement Recommendation

Remove the non-functioning phone booth as soon as possible.



# 5D

## Screen Dumpsters Improvement Recommendation

Unsightly transformers, AC units and other utility infrastructure are necessary for the operation of the campus.

Recommend that landscape planting and/or view obstructing fence material be installed to diminish the negative visual impact of utilities.



Existing

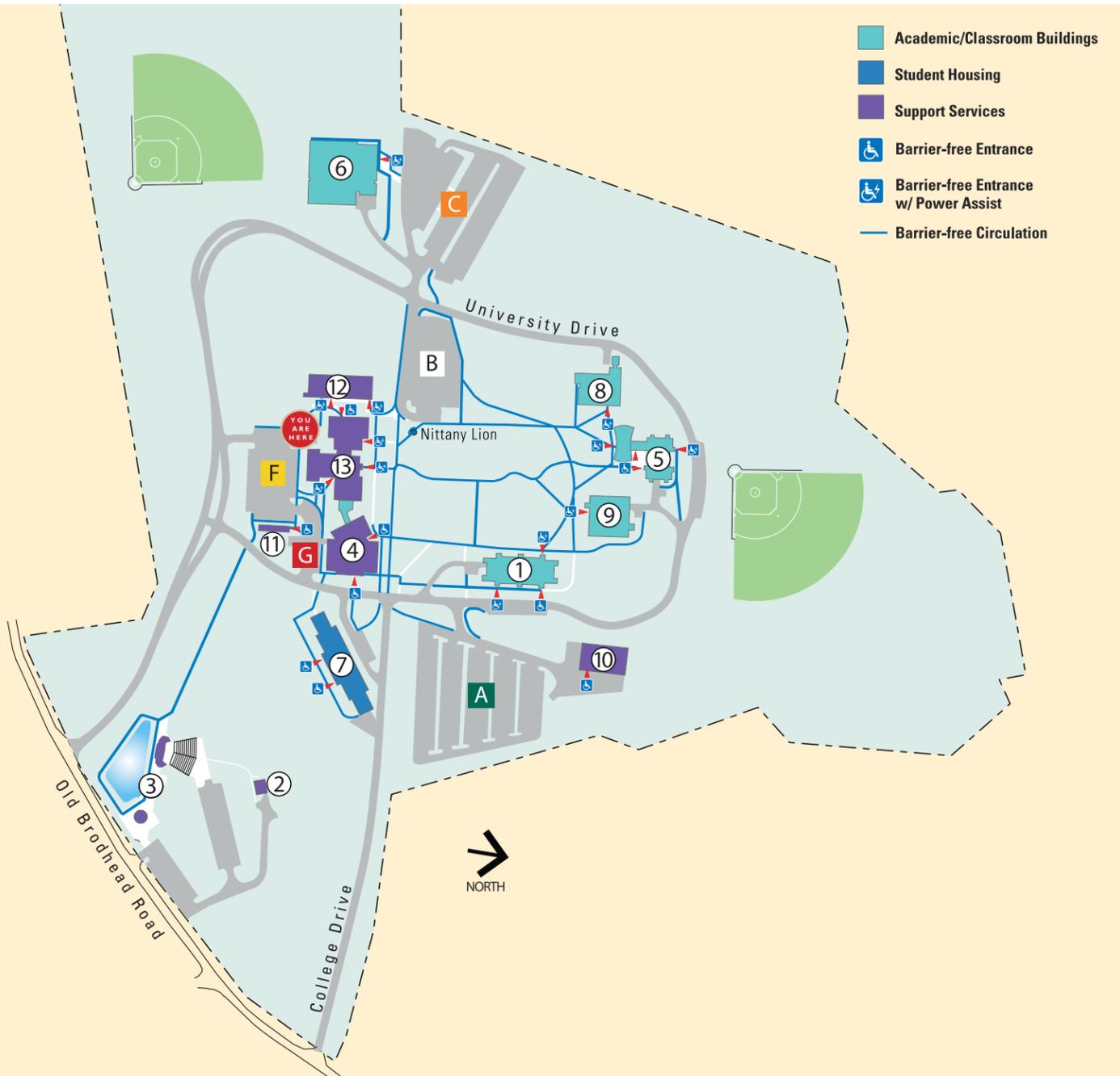


Proposed



### CAMPUS BUILDINGS

- 1 Baker Engineering & Science Building
- 2 Baker-Dungan Museum
- 3 Brodhead Cultural Center  
J. P. Giusti Amphitheater
- 4 Dining Commons  
Brodhead Bistro  
Housing and Food Services Offices  
Special Events Room
- 5 General Classroom Building
- 6 Gymnasium
- 7 Harmony Hall
- 8 Laboratory/Classroom Building
- 9 Library
- 10 Physical Plant Services Building
- 11 Police Services Building
- 12 Ross Administration Building  
Academic Affairs Office  
Bursar  
Business and Finance Office  
Campus and Community Relations  
Continuing Education  
Health Center  
Institutional Advancement  
Office of the Chancellor  
Registrar
- 13 Student Union Building  
Admissions Office  
Auditorium/ Theater  
Bookstore  
Educational Opportunity Center  
Financial Aid Office  
Residence Life Office  
Student Affairs



*Welcome to Penn State*

Penn State Beaver  
Campus Exterior Architectural Plan  
Project Prioritization Matrix

Monday, February 01, 2010

Proposed exterior improvement projects have been assessed with respect to the following criteria and assigned an implementation priority value.

Criteria include:

**Visual Impact** - degree to which the project improves the visual quality of the campus

**Cost** - level of capital investment required to implement the project (assumes no volunteer or donor contribution)

The projects with the highest numeric score should be given the highest priority for implementation

**VISUAL IMPACT**  
1 - Little or no impact  
2 - Minor Impact  
3 - Moderate Impact  
4 - Major Impact

**COST**  
1 - Greater than \$25,000  
2 - \$15,001 to \$25,000  
3 - \$5,001 to \$15,000

#	PROJECT	IMPACT				COST			SCORE
		1	2	3	4	1	2	3	
1A	Paint Doors of Study Learning Center	X						X	5
1B	Demolish Hartenbach Residence				X	X			5
1C	Screen General Classroom Building Utilities		X			X			4
1D	Pressure Wash	X						X	5
1E	Replace Railings on Student Union Building "Bridge"		X				X		5
1F	Backfill and Remove Library "Bridge"		X			X			4
1G	Relocate Electrical Service @ Communications Facility				X			X	7
1H	Campus Building Entrance Study		X					X	6
2A	Site Furnishings			X			X		5
3A	Lighting	X					X		4
4A	Plant Stormwater Basin	X						X	5
4B	Plant Along Waterway			X				X	7
4C	Baker Dungan Museum Stairs Rebuild		X			X			4
4D	Consider Turf Replacement	X				X			3
4E	Screen Parking			X			X		6
4F	Paint Handrails		X				X		7
4G	Relocate Gas Service Equipment		X				X		6
4H	Regrade Tree Bases			X				X	7
4I	Screen Physical Plant Services Building		X				X		5
4J	Shade Trees at Laboratory Classroom Building		X				X		5
4K	Planting Bed at Ross Administration Building		X					X	6
4L	"Cowpath" Behind Baker Engineering Building		X					X	6
4M	Planters		X					X	6
4N	Parking Lot Trees		X					X	5
4O	Extend Campus Tree Program			X				X	7
5A	Remove Gravel and Landscape at Study Learning Center			X				X	7
5B	Reconfigure Parking at Harmony Hall		X				X		5
5C	Remove Telephone Base		X					X	7
5D	Screen Dumpsters			X		X			5

Note:

Cost ranges identified in this matrix are for planning purposes only. Actual costs will be dependent upon fully developed plans for the respective project. Some of the projects listed above can be broken down into smaller pieces and implemented in phases.

