

UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN


Division of Public Safety

1110 West Springfield Avenue
Urbana, IL 61801



May 7, 2012

To: Pradeep Khanna
Associate Chancellor
Acting Director, Office of Sustainability
304 Swanlund Administration Building
Champaign, IL 61820 MC-304

From: Jeffrey T. Christensen 
Interim Executive Director of Public Safety
Chief of Police
1110 W. Springfield Ave.
Urbana, IL 61801 MC-240

Re: The Illinois Path Final Report- Comments from Public Safety

This report is extremely comprehensive. It is apparent that much time and thought was involved in this study. In addition to holding a personal appreciation for natural landscapes, professionally I am very much appreciative of the emphasis on personal safety and the quality of life focus within the report.

The importance of quality of life issues and crime prevention (including Crime Prevention Through Environmental Design) are significant components of our community based public safety philosophy on campus. Hence, this study and resulting report blends very well with our mission as these challenges are identified and addressed. It is evident that reducing safety risks was "of paramount importance" in this endeavor. Additionally, the recognition of addressing the community's perceptual element of fear is outstanding.

The Division of Public Safety wishes to remain deeply involved with this project. Please continue to utilize members of our staff and other available resources – especially our Crime Prevention & Analysis Unit, including Sgt. Joan Fiesta.

Dear Associate Chancellor Khanna,

Thank you for this opportunity to provide comments on the final report for the study titled “The Illinois Path” that was prepared by Graduate Students under the guidance of Dr. Anton Endress. The Planning Division supports the Campus Master Plan recommendation to enhance open spaces on campus, utilizing sustainable design practices to the greatest extent possible. As the office on campus with primary responsibility for management and coordination of campus development goals, the Planning Division is very interested in the information that has been collected and assembled in this report. We are pleased to see the level of interest it has generated among faculty, staff and students and believe it has facilitated better understanding and, potentially, stronger support for the concept of implanting a natural landscape along the campuses historic green corridor, the Military Axis. If this transformation can be successfully achieved, it would earn its place on the growing list of icons for sustainability at Illinois.

Construction of managed natural landscape in high-density areas like the Military Axis will not be simple and in fact, may not be practical. Given the prominence of this site, an installation must be carefully programmed, planned and designed if there is any potential for its full establishment and longevity. Critical concerns of safety, fire, accessibility, maintenance, aesthetics, managed implementation and cost will need to be carefully considered and addressed.

The research performed by this study has provided evidence and support for many benefits that can be gained through the installation of sustainable landscape features on our campus and we agree. However, we do not agree with the report’s recommendation that there is no need to wait until all resources are in place to begin the installation. It is important that we know the full extent of design solutions, life cycle cost, project sequencing and effects to the surrounding environment prior to proceeding with any phase of implementation. The intricacies of this design will require the services of a licensed professional to ensure that controlled development, public safety, and informed financial decisions are achieved. We stand by ready to assist Chancellor Wise and the Campus in securing those services, should she decide to proceed with any of the recommendations included in the report.

Additional comments related to specific details in the report are provided by Planning Division Landscape Architect, Matt Edmonson, and Coordinator for Transportation and Sustainability, Morgan Johnston below.

Thank you,

Helen J. Coleman, LEED AP
Director of Planning

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Facilities & Services
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Comments from Matt Edmonson, Landscape Architect:

Helen, I think the study shows some good conceptual ideas, but as the report notes, further analysis/design/estimating needs to be completed by a Landscape Architect and Civil Engineer consultant team before any improvements should be made to the site.

1. Page 5: Personal Safety: Lighting is not discussed here, but in later items the report references the Facilities Standards. The interior North-South connector walks are not shown to be lit anywhere in the report. This seems to be problematic.
2. Page 6: fire as a management tool: The report talks about the need for Krannert Art Museum to close HVAC intakes during the burn. Would all surrounding buildings need to do this? What are the risks if the HVAC intakes were not closed on a building, during a burn?
3. Page 6: Accessibility: Report states that pathways will be completely accessible to people with disabilities. Later in the report, the report suggests that the preferred alternative for the North-South connector walks is a mown path. This approach shouldn't be acceptable for this location of campus. The report also calls for some of the area between 4th and 6th to be a wet prairie. The mown paths in this area will not work. I would suggest that concrete walks be used in this part of campus.
4. Page 6: Aesthetics: the report states "it is essential the natural landscape plantings are appropriately tended to avoid an unkempt appearance and invasion of non-native species." I agree with this statement and it is an important statement for the future success of this area. Currently F&S Grounds is not funded, trained, staffed or in possession of all appropriate equipment to care for this proposed landscape. The further investigation of maintenance approach and funding should be part of the Landscape Architect and Civil Engineer team, if this concept becomes a project. Volunteer maintenance approach should not be considered for this large of an area and in this location of campus.
5. Page 6: Resource Limitations: the study did not include an overall budget for this project. Fees, Construction, Contingencies, Owner's Costs, and Maintenance Endowments must all be estimated before this study can become a project.
6. Page 7: Summary: The study states "There is no need to wait until the resources for larger greenway vision are in place before beginning the implementation - smaller scale aspects of the plan can and should begin as soon as possible." I disagree with this statement. This is a major axis for campus and design, funding and estimating for the entire site should be thoroughly thought out and agreed to before any improvements begin.
7. Page 14: 3.2 Maintain the Landscape: Training and funding for future maintenance of the site is most important for the future success of the area.
8. Page 16: 5.2 East of 6th Street: Costs for removal of parking and fire access to buildings in this area need to be considered and included in future design.
9. Page 23: Figure 5. Recommended Lighting: Proposed lighting is not shown along North-South connector walks. This exclusion is inconsistent with recommendations in the UIUC Facility Standards (which are referenced later in this report). I would suggest that these connector walks need to be lit, especially with the future presence of taller plant material.
10. Page 23: Topography: Proposed grades throughout the site will need to be designed by the future consultants. Adequate soil and earthwork for the new proposed hydrology will be a large budget item. Proposed grading should be understood and completed before any improvements are made on the site. This is contrary to the page 7 summary.

11. Page 29: Mown paths through the site: Mown pathways for the North-South connector walks do not seem like a good idea for this campus location. This approach shouldn't be acceptable for this location of campus. The report also calls for some of the area between 4th and 6th to be a wet prairie. The mown paths in this area will not work. I would suggest that concrete walks be used in this part of campus.
12. Page 34: 9.2 Classroom Opportunities: I agree that the proposed space would be an excellent classroom opportunity. This site should not be managed by volunteers. Future Classroom Opportunities should be coordinated with F&S Grounds who will be managing the site.
13. Page 40: 12.2 Prescribed Burning: If this maintenance practice is used in the future, who does it, how it is done, and what adjacent property needs are, should be thoroughly investigated and agreed to by all before any improvements are made.
14. Page 40: 12.3 Facility Standards: UIUC Facility Standards for Lighting and Walks are referenced, but the proposed plan for the interior areas does not follow the standards.
15. Page 57: B.3.2 Lighting, Exterior: Study references UIUC Facility Standards for lighting but the proposed interior plan does not follow the standards.
16. Page 59: B.4.1 Accessible Route: Study references ADA requirements for accessible routes, but the proposed interior plan does not follow the standards.
17. Page 63: Appendix C – Implementation: this section omits earthwork for site preparation. This is a huge undertaking and cost that should be completed before any planting improvements take place.
18. General Comment: Understanding all required maintenance is essential before any improvements are made. Needed maintenance training, funding, increased staff, and acceptance by all for prescribed burns should be understood early in the life of the project. I do think that the campus location and size of the site warrants maintenance be completed by and managed by F&S Grounds in order to ensure the success of the site. F&S Grounds is not currently staffed, trained or funded to manage this proposed site (especially for the first 5 years).
19. General Comment: I would have liked to see more successful examples from other campuses with these types of plantings (and size) within the more developed portions of a campus. I think these examples and learned experiences from other campuses would strengthen any tentative thoughts for creating this proposed landscape within our campus.

Comments from Morgan Johnston, Coordinator for Transportation and Sustainability:

Helen, I have a few additional comments/questions about the Sustainability section.

- Page 30: 8.1.1 Energy Reduction: How far does the temperature differential extend beyond the site boundaries? That is, which buildings can we expect to see impacted with more moderate temperatures, and is there a way to get an estimate for the anticipated change in outdoor cooling?
- Page 31: 8.1.3 Carbon Sequestration: In the Climate Action Plan reporting for ACUPCC, we can report on carbon sequestration projects on campus. The scope of an A/E feasibility study should include identification of how much sequestration this area would account for.
- General Transportation Comment: If the pathways are concrete, they need to either be impermeable or they need to have underdrains for pervious pavement options. This is an expensive option for a six foot wide concrete pathway, but pervious surfaces on campus have been shown to deteriorate very quickly if not built with an underdrain to a storm sewer.

Associate Chancellor Khanna,

My input was sought on this project with regards to the fire safety and prescribed burn aspects of the Illinois Path. I have been a firefighter locally for 20 years, have worked for the UI overseeing statewide firefighter training for the last 12. In 2003 I created and continue to direct the program in Illinois that trains firefighters and other persons to manage prescribed fire and to combat hostile outdoor fires. With the creation of the Prescribed Fire Act, the program was expanded to train prescribed burn managers to meet the state open prescribed fire statutes referenced in the project plan.

Both of these areas, fire safety and prescribed fire use, are at best understated in this report, and at worst not genuinely represented after the original data was challenged during the evolution of the project. I specifically notice that the original comments I made to the committee in a phone interview and at the first presentation, as well as some of the committee's original data that was included in their initial presentation that showed the potential for uncontrolled fire, have now been omitted. Specifically, with regards to how often an area like this will naturally burn, the project originally described it happening every 2-3 years whether intentional or not. That data is no longer mentioned after it was challenged in the initial presentation. The problem hasn't gone away or been addressed- it simply is no longer shared.

Other specific issues with going forward with this project from my department's viewpoint and expertise:

- The aspects of smoke management are not well addressed. While the report notes that the predominant wind direction is from SW to NE, it only addresses smoke entering the KAM, and not the buildings such as the BIF or the Newman Hall housing unit that are directly downwind from the burn area. It does not address the impact of blinding smoke across 6th Street, which has been identified as the first- or second- most heavily traveled arterial road on campus. Smoke management is a daily challenge at IFSI for both structural, acquired structure, and wildland burns, and the abatement of smoke from prescribed fires is not as simple as indicated in the report.
- The comparisons to similar areas at other institutions are not sound. The project proposal is for a newly constructed area in a narrow urban strip, not an open prairie as is found at NIU. Additionally comparisons between wooded areas and prairie are not sound, as the fire characteristics of each area are not analogous. The location of this strip in relation to buildings also creates a wind-tunnel effect with winds over 5 MPH in the prevailing direction, which makes the travel of flaming brands and smoke much less predictable and more dangerous, and that risk will increase as new buildings are added on the west end of the Military Axis.
- The requirements of training, equipping, and staffing costs for a prescribed fire burn team are not addressed. The local fire departments do not have training to deal with this specific hazard, and the structural fire fighting gear worn locally is neither safe nor adequate to be worn for exterior or prairie fire fighting.

I want to go on record that I am NOT opposed to having a dedicated prairie on campus. As an Eagle Scout and avid outdoorsman, I wish we did a better job incorporating the original land features of Illinois into our beautiful campus. Prescribed fire can be safely planned, managed, and executed in areas near our campus. However, in this case, it's a well-rounded idea that is being fit into the wrong square plot of land.

It is my recommendation, and the position of the Fire Service Institute, to continue to develop such a project, but in a location that does not juxtapose fire with historic educational structures, busy roadways, or high population density.

Thank you for the opportunity to comment on this project.

-Brian

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Pradeep,

A prairie is not just plants, but is a whole ecosystem, with invertebrates, vertebrates, bacteria, fungi, etc., in addition to the more obvious and visible plants. Even soil types are important in defining prairie ecosystem characteristics. So, when the University does a prairie planting, it is really just a garden, not a prairie.

Thus, if folks are arguing for making a prairie, they should integrate the complete ecosystem. Otherwise, a natural planting, or sustainable native planting, might make more sense, and certainly this is what you will end up with, no matter what you call it.

Above may be enough. But I was also talking about prairie remnants in Illinois - prairies are, historically, maintained by fire. But when you have a "postage stamp" remnant, and you burn it, there is no place for the invertebrates and other native prairie organisms to re colonize FROM. You've effectively killed off a whole component of the ecosystem - an ecosystem that developed over long periods of time to be stable at larger scales than many of Illinois' remaining prairie habitat.

Best,
Steve Taylor

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