

Appendix A

IIT Stormwater Best Management Practice Demonstration Park

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A Proposal to the IAFSM

The Illinois Institute of Technology (IIT) recently launched their Sustainable Urban Campus Initiative. One phase of the initiative will be to address resource utilization on campus and stormwater management will be part of the plan. This proposal briefly describes two efforts that would lay the foundation for IIT's stormwater management efforts:

- IAFSM Graduate Research Fellowship
- IAFSM support of an Interprofessional Project (IPRO)

Project Goals for 2009 - 2010

The first year of funding will support work to assess current stormwater issues and management at the IIT Main Campus, including the development of a hydrologic model of stormwater runoff under existing campus conditions. We plan to use results from this work to collaborate with the IIT Department of Facilities on stormwater management. In addition, the information will be used to prepare an application to the EPA 319 program for additional funding to develop a Best Management Practice (BMP) Stormwater Research and Demonstration Park on campus.

The purpose of the proposed IAFSM University Project Grant Scholarship is to complete the preliminary design for the ultimate development and construction of a Best Management Practice Stormwater Research and Demonstration Park on the IIT Main Campus in Chicago.

As envisioned, the demonstration park will provide:

- An educational opportunity for students from a variety of disciplines including architecture, engineering, and chemistry.
- A living research resource for undergraduate and graduate students conducting research in stormwater management practices.
- An outreach and educational tool to encourage others in the community to understand and adopt stormwater best management practices.

The method for achieving these goals will involve one or both of the following approaches:

- IAFSM Graduate Research Fellowship. A graduate student enrolled in an appropriate program of study who has demonstrated outstanding scholarship will be offered a research assistantship to work on this project.
- IAFSM support of an Interprofessional Project (IPRO). An IPRO course is a team-based approach to learning where from 5 to 15 students from various disciplines work together to solve a real-world problem.

As a research resource, the park can be used to help us understand the near- and long-term performance characteristics of a variety of stormwater best management practices in an urban setting. Examples of controls that could be part of the demonstration park include rain gardens, vegetated swales, various types of porous pavement, commercial separator systems, and innovative approaches such as super-absorbent polymers.