

Krannert Center for the Performing Arts

## **Green Roof Project**

RESPONSE TO STUDENT SUSTAINABILITY COMMITTEE

The Student Sustainability Committee, while supportive of your project, requests that you provide additional clarification on the following:

### **1) Will the roof (trays, equipment, etc), be University property?**

Yes.

### **Who will own the roof when KCPA's roof will be replaced?**

Krannert Center for the Performing Arts.

### **When will KCPA's roof be replaced?**

Krannert Center does not know when the roof will be replaced. This is dependent upon the availability of funds and F&S planning and scheduling.

### **Will the green roof remain until the actual roof replacement work begins?**

Yes.

### **2) Can you work to identify a specific location to install the green roof, after KCPA's roof is replaced?**

At this moment there is no firm and planned location to install the green roof, after KCPA's roof is replaced. The only assurance that KCPA can offer at this moment is that the green roof will be moved to a designated location on another part of the roof at KCPA, after that part of the roof has been replaced. This will depend on construction schedules and plans for roof replacement when the time comes. We don't anticipate that the entire roof will be replaced at the same time (we anticipate that the roof will be worked on in stages).

### **3) What are sodium varieties - Typo? Why are you using an irrigation system? Can this roof be installed without irrigation?**

Likely the "sodium" variety was referring to "sedum" varieties. A typo. The irrigation system originally planned was to take care of concerns F&S had regarding watering. Now that we have testing showing the true ability of the system to go without watering this system will not be needed.

**Note:** After speaking with F&S they will be requiring us to hire a landscaping service to "take care" of the installation since it is such a public site, and also install a couple of anti-theft precautions (connecting the modules together in a sense) along with edging treatments and some pavers. Although we will not be needing the irrigation unit, it would be preferable to use that money for the landscaping (Ingram's Nursery) and edging/connection treatments we now need to add in due to F&S's concerns. A table below shows the exact costs I have obtained for each of these additions, and then the table below that shows the additions inserted into the current budget template.

*Summary: A landscaping company will maintain and install the system, even though the maintenance and installation requirements will be minimal. We will also install edging and pavers for aesthetic reasons, and we will be fastening the modules together (included in the cost of the edging) for security concerns.*

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Item	Quantity	Unit Cost	Total Cost
<b>Module Production</b>	240		
- <b>Manufacture + Production</b>	- 960 ft <sup>2</sup>	\$11.35 + Mfg	\$10024
<b>Engineered GR Soil</b>	252 ft <sup>3</sup>	\$4.70	\$1185
<b>Sedum Varieties</b>	480gs - Fully Grown	\$7.25	\$5825
<b>Sprinkler System</b>	2 Rotors, 1000 ft <sup>2</sup>	-	\$1230
<b>Installation</b>	Shipping & Labor	-	\$4825
<b>Maintenance</b>	4 hr / wk, 2 yr	\$20	\$2400
	1 hr/2 wk, 4 yr	\$20	\$2400
<b>Landscaping</b>	Edging	6.67/ft	1600.80
	Pavers	5.40/20in <sup>2</sup>	\$324.00
			<b>\$28,583.80</b>

**4) Maintenance - We hear Andy is leaving campus this summer. Is his company continuing? Who will handle maintenance? What are different short term and long term requirements?**

Andy is indeed leaving campus, but his company is growing and will have a presence on campus. His company plans to continue for years to come. Due to F&S’s concerns about the aesthetics of this project, we have hired a local landscaper (Ingram’s Nursery) to check on the site once every two weeks or so to make sure everything is in order as a landscaper would. The short and long term requirements are exactly the same.

- 1) Ensure the site looks clean and professional, and nothing is out of place
- 2) If there are any problems with the plants, contact Urban Envirosapes
- 3) If there are any problems with the trays, contact Urban Envirosapes
- 4) Make sure no harm comes to the edging treatments or pavers, and if so contact Urban Envirosapes

Since the installation is meant to be maintenance free outside of quarterly drain checks, these requirements are really quite lax.

**5) Please clarify the storm water benefits. The predicted benefits do not seem realistic.**

The numbers given here were correct except one, sizeable, calculation error. As it was stated, it can be estimated that around 3,281 ft<sup>3</sup> of rain will be absorbed by this installation per season. Some seasons this number may be more like 2,000 ft<sup>3</sup>, but in the end it is not a sizeable amount of money due to the miscalculation of the missed “100 ft<sup>3</sup>” in the sewage fee of \$1.79 per 100 ft<sup>2</sup>. This means the actual savings from this partial installation will be more on the order of \$58.73.