Proposal Details

G Hendrix

Section 1: Summary Information

*** Project Title:**	USF Laurel Garage LED Conversion - Phase III
*** Duration (months):**	12
*** Total Budget ($):**	$372,771.20
*** Requested SGEF Funds ($):**	$352,771.20
*** Matching Funds ($):**	$20,000.00
*** Proposed Starting Date:**	12/1/2017
PI Graduation Date (if applicable):	5/3/2018

Section 2: Applicant Information

	Full Name	Unit/Department	Phone	Email
*** Principal Investigator**	Adam Burrell	Undergraduate Accounting Student	727-417-11	aburrell@usf.edu
Investigator 1	Antonio Lourenco	Planning	813-974-93	alourenc@usf.edu
Investigator 2				
Investigator 3				
Investigator 4				

Section 3: Project Description

*** Project background and purpose (reasons motivating request) (Max 500 words)**

USF Tampa has the potential to dramatically reduce its energy consumption and greenhouse gas contributions by saving energy through amenities the university already has – parking garage lighting. The Beard Parking Garage is an eight-story structure that previously used a lot of electricity but now has LED lighting thanks to the SGEF proposal upon which this proposal is based. USF has the ability to purchase lighting that will last longer and cost less over its lifetime. This proposal aims to improve the energy efficiency of the existing parking garages. The Laurel Parking Facility will have its current lights replaced with LED lights, dramatically decreasing the carbon emissions of the structure. After speaking with Parking and Transportation Services (PATS), it was discovered that they want to update the lighting. PATS does not have the funding needed to make the upgrades that SGEF is capable of doing now, but they are willing to maintain and replace the lights that break. PATS is also willing to contribute $20,000 in matching funds and return 50% of the actual savings to SGEF.

*** Project activities (Max 250 words)**

With funding from SGEF, this project will replace 533 pulse start light fixtures and 60 fluorescent light fixtures in the Laurel garage with LEDs. The light fixtures currently in use will be replaced with new fixtures that are scientifically proven to last longer while costing less to maintain (the majority of the lighting industry approves this as common knowledge). The existing lights and the fixtures that are in good condition will be recycled by PATS. PATS will maintain and fix any of the LED lights that break after this project is finished, and PATS has assumed full responsibility.

*** Project results (Max 500 words)**

The benefits of this project are immediate, with the potential to greatly reduce the energy consumption and carbon footprint of the Laurel parking garage. Based on values arrived at with the help of Chris Ilse (USF electrical engineer) and Frank Granda (of PATS), over the course of 10 years, the project has the potential to save the school $540,477

*** Outcomes of the project (Max 250 words)**

15%

The project is expected to serve as a testament to the funding of SGEF being well-spent, as people coming into the garage will notice the difference and an educational sign can be utilized to educate students on the importance of LED lights. Annual Cost Savings $54,048 saved per year Return on Investment, ~~% 53.21%~~ Ten Year ROI Annual Energy Savings 600,530 KWh saved per year Annual Green House Gas Reduction 447 metric tons of CO2 reduced per year The annual greenhouse gas reduction value was arrived at by using the EPA Greenhouse Gas Equivalencies calculator, found at https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator

*** Annual Energy Savings**	600,530 kWh
Annual Cost Savings	$66,058.30
Return of Investment in %	0.19
Annual Green House Gas Reduction	0.00

*** Project Sustainability (Max 200 words)**

Parking and Transportation Services (PATS) will be recycling the lights and fixtures that they can during this process, and they will be maintaining the fixtures. If fixtures break, they will fix them. PATS will be assuming full ownership of the LED lights, and all the responsibilities that come with the LED lights in the future. SGEF will have signage in the parking garages where the contribution was made, allowing students across the entire university to know that SGEF is ensuring that USF is taking measures to save where it matters most: efficiency.

Section 4: Workplan and Budget Details

*** Detailed work plan/schedule of activities (Max 250 words)**

The project is expected to start with the filing of space impact form with PATS, and project planners will get the construction drawings completed. The bidding for the contractor with the best bid will occur, and then the project will commence construction once necessary permitting is secured. Installation should take 2 or 3 months, depending on how the University Administrators decide to proceed with installation. The Laurel garage will be a straight one to one replacement.

*** Budget breakdown**

Category	Request from SGEF	Applicant contribution	Total
Personnel (include all involved)	$0.00	$0.00	**$0.00**
Equipment	$320,140.00	$20,000.00	**$340,140.00**
Supplies/Materials	$0.00	$0.00	**$0.00**
Contractual	$0.00	$0.00	**$0.00**
Construction	$0.00	$0.00	**$0.00**
Other (specify in budget justification)	$32,631.20	$0.00	**$32,631.20**
Total Project Cost	**$352,771.20**	**$20,000.00**	**$372,771.20**

*** Budget justification (Max 250 words)**

The $320,140 is from quotes received from Himes Electric, the contractor from the Beard Garage LED project. The quotes include all materials and labor. The $32,631.20 in Other is comprised of engineering costs ($6,000), Signage ($500), and an 8% contingency fee (26,131.20)

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