Dear Applicant,

The Student Sustainability Committee (SSC) has some additional questions for your project team in order to holistically assess the project at the Step 2 Meeting. Please complete the form below. If you have any questions, please contact the working group via email.

Project Name: **A Living-lab Platform Based on the Campus Instructional Facility Geothermal Project**

Project Lead: **John Zhao**

Project Funding Requested: **$10000 (Can be reduced to $9318.16 if necessary)**

**Budget**

Provide a list of items that your project absolutely requires in order to function during the Spring 2020 semester below.

|  |  |
| --- | --- |
| Item | Item Cost |
| Temperature Sensors (Thermocouple thermometers) (6) | $159.36 |
| Wall-Mounted Digital Display (1) | $1125 |
| Temperature Data Acquisition Device (1) | $199 |
| Installation Cost of Digital Display | $500 |
| Digital Signal Wires | $134.8 |
| Research Assistantship for one full-time PHD Student (Deducted from 11 months to 9 months)  | $8800 (can be reduced to $7200) |
|  |  |
|  |  |

**Timeline**

Will your team be able to sufficiently make progress regardless of COVID-19?

\_✓\_ Yes \_\_ No

What is the anticipated start date of your project?

\_01\_/\_01\_/\_\_2021\_\_ (MM/DD/YYYY)

Please explain your team’s expected progress on the project for Spring 2020:

**Our plan can be summarized as below:**

1. **The first step will be the CIF building information collection, such as thermal properties of envelope, solar radiations, the geological parameters, etc. This process will require about 3 months (To the end of March 2021) to extract all the data from data center.**
2. **After that I will establish 2 models, traditional HVAC model and geothermal HVAC model, and the latter will require the indoor and ground temperature data, which will be monitored by temperature sensors. This process is the key component of the project, which will take around 6 months. During the period, the installation of digital display will probably be finished. We expect to finish all the simulations and calculations at the beginning of 2021 Fall Semester.**
3. **And the last step is to transform the simulation data from the model to the digital display with real time refreshment. Efforts in developing software toolbox will be required. This step would take another 1.5-2 months to finish. The expected completion date of this project is 12/30/2021.**

**Capacity**

What measures is your team planning to ensure safety during COVID-19?

**My team and I will strictly follow the guidelines of university, working remotely as much as possible. Meantime, when it comes to the installation and testing processes, we will always wear a mask keep proper social distancing.**

If you require approval of any kind, but especially to ensure COVID-19 safety guidelines, have you received this approval?

\_✓\_ Yes \_\_ No

If you have not received approval, what steps are preventing you from receiving it?

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**General**

Additional Information

We had a good discussion with Dr. Qu Kim, Mr. Clarence Odom and Ms. Kristin McMurray, who are principals of CIF construction. Research collaborations with them will produce more beneficial progress to improve the university’s environmental sustainability.

Contact Information

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