

# STUDENT DESIGN CHARRETTE

## SUSTAINABLE TINY HOUSE DESIGN FOR TEMPLE

### Competition Objective:

design a sustainable tiny house that will be sited at Temple Community Gardens located at Broad and Diamond.

SATURDAY, JANUARY 31st, 9AM-5PM  
Architecture Room 104

The design concept and deliverables will be judged by a multidisciplinary jury.

**\$1,000** will be awarded to first place team

**\$500** will be awarded to second place team

[sustainability.temple.edu/design](http://sustainability.temple.edu/design)



TEMPLE UNIVERSITY®  
Office of Sustainability

## The Tiny House Design Charrette for Temple Community Gardens

### Overview

Temple Community Gardens (TCG) is a student run organization that operates two urban gardens near Main Campus: the main vegetable garden located at Broad and Diamond and the Sonia Sanchez flower garden at Diamond and Carlisle. The main garden currently has two, non-permanent structures including a shed and a trailer. While both structures are meeting TCG's storage needs, they are not suitable to be used as a meeting space or to host demonstrations. TCG wants to expand their community programming and needs a non-permanent structure, such as a tiny house, to serve as a meeting and demonstration space. This tiny house will be sited on the Diamond and Carlisle garden location.

### TCG Design Parameters

The tiny house will be a non-permanent structure not to exceed 120 sf. The structure will not be connected to electrical or domestic water services. The tiny house will need to be portable in the event it has to be relocated on site or to a different site. (Due to permitting and costs, the tiny house cannot be constructed on a trailer). The existing site features (sheds and beds) can be moved within the site boundaries to create a cohesive design.

TCG design wish list:

- Mini greenhouse to start seedlings;
- Composting toilet;
- Solar for power needs;
- Meeting space including seating;
- Storage space for TCG member personal belongings.

### Competition

#### *Timeline*

The competition will begin promptly at 9am and will conclude at 5pm. Breakfast and lunch will be provided. Coffee and soda will also be provided, but please bring a reusable bottle for water. Faculty and TCG representatives will be on hand throughout the day to address questions.

#### *Teams*

Teams will consist of students from different disciplines. Teams will be created the morning of the competition by the Office of Sustainability.

#### *Materials*

Basic materials, such as paper, trace, pencils, color pencils, and tape, will be provided. Architecture Room 104 is equipped with pin-up boards, tables and seating. Teams will also have access to the computer lab on the 4th floor. Participants can bring their own materials and computers.

A basic site plan with boundaries defined and site photos will be provided.

### ***Charrette Deliverables***

At the conclusion of the design charrette competition, teams will submit two deliverables: PDF document presentation and a short video.

The first deliverable will contain all design materials in one cohesive PDF document presentation. The document should be no longer than 25 pages and should include the following elements:

- Narrative describing the design and design approach;
- Site plan addressing the following elements: access requirements, existing site features and relocation plan, building site placement, building relocation requirements and any new site features (paths, outdoor meeting space, fencing, etc.);
- Site rendering (at least one);
- Floor Plan and at least one interior rendering;
- Elevation drawings of each structure side and at least one exterior building rendering;
- Wall section;
- Detailed description and preliminary design of any proposed sustainable building component (such as solar, passive features, stormwater management, etc.). The building must have at least one engineered sustainable building component;
- Description and plan addressing structure relocation;
- Building cost estimate;
- Marketing plan which should appeal to potential funding sources;
- Programming plan (for example: how physical space will be used, specific programming geared towards students or the community, curriculum, etc.);
- Innovation component credit: this credit really speaks to the interdisciplinary spirit of the competition and is expected to draw on the team's strengths. This component can include virtually anything as long as it compliments or enhances the design or design strategy. Some examples include (but are not limited to), a business plan, a program evaluation tool or a public art piece.

This is a one-day competition, and therefore, deliverables at a conceptual/schematic design phase are acceptable. Teams are encouraged to think outside the box in terms of sustainability and sustainable components. For example, creative use of materials can not only increase the sustainable aspect of the design, but can also help reduce the cost of the project (see RAIR at [rairphilly.org](http://rairphilly.org)).

The second deliverable is a short video. The video should clearly communicate design ideas and be no longer than 10 minutes. The video can be of smartphone quality and can be either a video presentation or a documentary.

The competition will end promptly at 5pm and teams will be required to provide digital media via Owlbox or TU Safe Send. Files should be shared/sent to [kelmhurst@temple.edu](mailto:kelmhurst@temple.edu). All files must be received by 5:30pm on 1/31 or the team will be disqualified. Teams are also encouraged to use the pin-up boards in room 104 to display their work. This work will remain up for one week and can be viewed by the Temple community.

### **Judging**

#### ***Jury***

Charrette deliverables will be evaluated by a jury consisting of the following members:

1. Temple University Director of Sustainability Education;
2. City of Philadelphia Director of Sustainability;
3. DVGBC Executive Director; and,
4. TCG President.

## ***Evaluation Criteria***

Each design will be evaluated on the following parameters (scale of 1-5):

### 1. Design:

- Was site access effectively addressed?
- How well does the structure demonstrate overall coherence among architectural, sustainable and site features and proposed programming?
- How effectively did the team integrate sustainable elements into the design?
- To what extent does the structure take an innovative approach to design and sustainability (such as material reuse or innovative features)?
- How effectively did the charrette deliverables convey the design concepts of the structure?

### 2. Market Appeal:

- How well does the design offer TCG a safe, functional and comfortable space?
- How successfully does the design meet the unique needs and desires of TCG?
- How successfully does the structure demonstrate exterior and interior appeal for the target client?
- How appropriate are the materials and detailing choices to the desires of TCG and the parameters of the competition?
- How effectively does the team use sustainability features and strategies to make a positive contribution to the structure's marketability to TCG and funding sources?

### 3. Communications:

- How well did the team's deliverables work together to convey a comprehensive, consistent and integrated communications strategy?
- How effective is the narrative at conveying the team's design approach?
- How effective is the marketing plan in generating support for funding?

### 4. Affordability:

- How cost effective is the team's design concept?
- How does the team's project cost compare with other design concepts presented?

### 5. Innovation:

- How well does the innovation credit enhance the overall design?
- How well does the programming plan meet the future needs of an organization like TCG?

The jury will be given one week to evaluate the designs and deliverables. The winners will be announced on Tuesday, February 10th.