



## **Grand Rapids Community College Grand Rapids, Michigan Green Jobs Training**

### **SCHOOL**

Grand Rapids Community College, public, 2-year, Grand Rapids, Michigan.

### **GOALS AND OUTCOMES**

#### **Goals**

Students will participate in the remodeling and relocation of a model green home and converting it into a functional learning lab for teaching sustainable construction, energy efficiency and conservation, and renewable energy.

Upon completion of the program students will serve up to 300 hours in a paid Internship related to their training that may lead to full time employment.

#### **Accomplishments and Outcomes**

The January – May session of the Introduction to Construction course is being conducted with 8 students. Students in this course typically learn basic construction skills that are applied to the construction of a shed as a hands-on class project. For this session the Sustainable Home was used as the class project. Students applied their theoretical knowledge in the following activities;

- Construction of a two foot tall “crawl space” foundation for the Sustainable Home.
- Removal of the appliances in preparation for moving the home.
- Assisting in the rigging for movement of the home from inside the Construction Lab to outside of the Construction Lab.
- Connecting the two halves of the Sustainable Home to the foundation using proper joint sealing and fastening techniques.
- Connecting the two halves of the roof to the home using proper joint sealing and sealing techniques.
- Constructing a front deck/stairway on the home that also mounts the Solar Thermal collectors and tank.
- Constructing a rear deck/stairway on the home for access from the Construction Lab.
- Removal of the window facing the front deck and replacing it with a sliding glass access door.
- Mounting of the Solar Thermal frame to the front deck.
- Prepping the interior space for;
  - Relocation of the Washer/Dryer to the utility room
  - Installation of a tub/shower unit where the Washer/Dryer was located in the bathroom
  - Removal of the central gas furnace (to be replaced with electric baseboard heat to supplement the Solar Thermal)
  - Removal of the gas water heater (to be replaced with an electric water heater)

- Removal of the upper trim for installation of dry wall ceiling and insulation
- Installation of a radiant floor in the utility room
- Relocation of the front deck window to the adjacent side wall

### **Challenges and Responses**

The initial phase has progressed like clockwork. The challenge will be completing the next phase, which includes the installation and connection of all of the water lines, drain lines, water pump, and the reservoir. These are the items the Greenforce Initiative grant will provide. It will be a challenge to have these items installed before the current class session ends. If they are not installed by then, the installation will be performed by the next class session. The next class session will have to attain sufficient enrollment (minimum of 8) to be conducted. Plus it will require a licensed Plumbing Apprenticeship instructor to provide the training and oversee the installation of the plumbing systems.

### **ENGAGEMENT AND SUPPORT**

#### **Funding and Resources**

This project received a Greenforce Initiative grant. The Greenforce Initiative, a partnership of Jobs for the Future and National Wildlife Federation, strengthens the capacity of community colleges to green the skills of the modern workforce.

### **CONTACT INFORMATION**

#### **Contacts**

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### **MORE ABOUT YOUR SCHOOL**

#### **Campus Sustainability History**

“We regard sustainability as a crucial form of innovation that provides a framework by which we can improve the well-being of all living things and the health of the planet through education, modeling best practices, networking with other institutions of higher education, while also discovering and developing new methods to elevate sustainability. In order to ensure that our efforts produce the desired outcomes, we focus on achieving new levels of sustainability through the lens of the triple-bottom line: economics, environment, and social equity. Our Sustainability Advisory Council, comprised of faculty, staff, administration, and students, accomplishes this through our efforts in developing curriculum that challenges our students to apply their learning and adopt these practices into their daily lives, integrating sustainability through our facilities management and operations, along with meaningful, long-term community engagement.”—from <http://cms.grcc.edu/sustainability>.