Growing Green Architecture
By Lisa Piliaris (published in the June/July 2007 issue of the South Sound Green Pages)

GRuB (Garden Raised Bounty) is a leader in community sustainability. Now, GRuB is embracing sustainability in a new way with plans to build a farmhouse at its Elliott Avenue site, on Olympia's west side. But this will not be your typical farmhouse. You guessed it — it will be as "green" as GRuB's metaphorical thumbs!

Green Begins with "Place"
Currently, the Elliott Avenue property has a 1917 residential building that has no foundation, insulation or central heating system. Due to its small size, the majority of staff members are housed elsewhere. The farm property is central to GRuB's mission of bringing good food to all people. It also supports the Cultivating Youth Program, a successful drop-out prevention, mentoring and nutrition program for low-income youth. After construction of the new farmhouse, the 1917 home will be demolished, salvaging as much material for reuse as possible.

The new 2,928-square-foot farmhouse will provide adequate indoor classroom space for the Cultivating Youth Program, enough office space for the GRuB staff to work under one roof, and have a kitchen designed to effectively host cooking and nutrition workshops. The farm is already on the city bus line, and youth as well as staff predominately ride the bus or bike to the farm, eliminating the need for extensive parking, while encouraging more sustainable transportation choices.

Considering the history of the property and the residential surroundings, the farmhouse is being designed to complement the neighborhood. The historic architecture of the site is Arts and Crafts Bungalow, and the new farmhouse will adopt this style, honoring the legacy of Bonnie Turner who was an avid gardener and supporter of GRuB.

Sustainable Community
The staff at GRuB is a group of dynamic, energetic, compassionate folks. They recognize the opportunity to further enhance awareness of our interconnectedness to each other and the environment through their building-construction choices. With much community involvement (i.e. volunteers, donors and hired hands) in the design and building process, a higher level of intimacy is forged. More than just a building, GRuB will also build a stronger community holding the intent of a healthier planet.

GRuB's visions of sustainability extend to the local economy. Kim Gaffi, co-director of GRuB, says, "We want to support the economy growing up around green architecture." This is why GRuB has sought out local designers, contractors and building materials for this project.

Cultivating Architecture

It all started with an organic process of preparing the soil (they purchased the farmland with their highly successful fundraising); collecting the seeds (a collaborative process of conceptual design involving the youth in the program, staff and some folks at Living Shelter of Seattle); planting the seeds (more fundraising, grant writing, public outreach and forming the design team: Barrett Burr of Polar Bear Construction, Joseph Becker and Craig Lawrence of ION and myself, Lisa Piliaris of Lucid 9 Design); and watering and mulching (many design meetings).

The next steps will be adding the sunshine (that's where the community volunteers step in); watching the farmhouse take root and grow; and then harvesting the empowerment of individuals in our community and enjoying the bounty of a place the public can visit as a model for sustainability.

The farmhouse GRuB envisions is a structure that will endure much use and many generations; enhance and protect ecosystems and biodiversity; improve air and water quality; reduce solid waste; conserve natural resources; reduce operating costs; enhance asset value; improve employee productivity and satisfaction; reduce energy use; improve air, thermal and acoustic environments; enhance occupant comfort and health; and contribute to overall quality of life.

Here are some of the planned features of the residential structure:

- A covered porch will encourage all-weather outdoor use, providing greater opportunities to connect with the outdoor environment.
- The walls and foundation walls will be Faswall, a regionally manufactured insulated concrete form (ICF) product with great R rating and none of the thermal bridging that conventional wood framing has. It is highly fire and pest resistant, uses wood fiber wastes from milling industry, is breathable, extremely durable and non-toxic. It is also labor friendly. (Visit www.faswall.com.)
- A conditioned crawl space to reduce heat loss through the HVAC ductwork, which will be installed below the floor. This also eliminates the need for fiberglass batts to be installed under the floor, as the foundation walls will be so well insulated.
- Advanced framing will be used for the second floor kneewall and attic gable ends to reduce thermal bridging and save on lumber.
- Metal roofing will be used for longevity and potential for rainwater collection. Plenty of room is available for solar panels. Wiring for grid-tied solar will be installed and the panels will depend upon donations (here's your chance to help!) or grant money.

- Roof insulation will be R-38 with rigid foam and cellulose batt, with consideration given for “cradle to cradle” re-use of materials sometime down the road.
- All finish work will be as natural as possible for indoor air quality and ecosystem protection. For example floor coverings will include Marmoleum, paper composite countertops, reclaimed wood for trim details, earthen plaster on the ICF and interior walls, and low- or no-VOC paints.
- Lighting and appliances will be Energy Star or greater in efficiency. On-demand hot water and high-efficiency heating systems will be installed.
- Rainwater from the roof, any overflow from future rainwater catchments and footing drains will flow to rain gardens.

There is a great opportunity for the community to dig in and help nurture GRuB’s growth by volunteering time, materials and financial resources. GRuB’s Taking Root Capital Campaign has already raised at least $323,000 and is likely to gain an additional $281,000 in grant support. GRuB is well on its way to reaching its remaining goal of $231,850 by the end of 2007.

In order to realize the dream of a farmhouse as green as the kale they grow, GRuB needs community support. Important features, such as solar electricity, can be added to the project if enough money is raised. (To help, contact GRuB at 360-753-5522 or visit www.goodgrub.org.) As the GRuB folks like to say, “Without yoU, we'd just be grb.”

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