

The Maryland Green Registry promotes and recognizes sustainable practices at organizations of all types and sizes. Members agree to share at least five environmental practices and one measurable result while striving to continually improve their environmental performance.

# Greenbuilders, Inc.



16626 Cedar Grove Road Sparks, MD 21152 (410) 472-7072 www.greenbuilders.com General Contractor MHIC # 86807 *Member since December 2009* 

## **Management and Leadership**

## **Environmentally Preferable Products and Services**

Greenbuilders is a general contractor that does renovations and additions using eco-friendly methods and materials. We specialize in construction using straw bales, a renewable resource. Greenbuilders also offers LEED consultation and contributes to LEED building projects.

We are extreme green in some cases, including straw bale and lime plaster load-bearing walls (no lumber), packed earth floor (no cement), thatch for roofing (using phragmites, no petroleum products). For our services, we use local artisans or craftspeople. We strive for diversity in our subcontractors, employees, and interns, especially encouraging women and minorities to enter the field. We have given talks for ABC's program for women entering construction, for example. We usually have interns in the summer and work hard to provide them with education and experience.

Our projects are typically additions, kitchens and baths. Our goal for our projects is net zero for the project. This means that a client adding space to their home can expect no increase in utility costs. That is accomplished by very efficient heating and cooling and by replacing a drafty section of wall with a new space that is carefully sealed and insulated. It's bigger, but it's more energy efficient, hence we usually achieve net zero for our project.

#### Environmentally Preferable Procurement

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We research before buying and we depend on partners such as the Amicus Greenbuilding Center to assist us in verifying green claims. We track suppliers carefully, knowing for example that Benjamin Moore has a much more robust green research program than Sherwin Williams, though the lines appear similar. Mitsubishi has much more advanced technology to conserve energy than its nearest competitors. Cambria is not only US-produced but has excellent green credentials such as water exiting the plant after use meeting high standards for water quality.

We do not use granite because our research showed the prevalence of child labor even in slabs that claimed to come from Spain or Italy. On close investigation, many of those so-called Italian or Spanish granites were shipped from countries with poor records on child slave labor. There is a Royal Netherlands Commission that documents this, plus other sources. For our soapstone countertops, which are a frequent choice for our projects, we buy only from the US, and we visited the quarry in Albermarle, Virginia to verify that environmental conditions were good. In fact, in some cases we were able to source slabs cut from chunks of soapstone that had been quarried many years ago, thus creating no further disturbance to the land.

We love to buy local or when possible to source from the site. We always try to save trees, but in the case of a recent whole house remodel in Freeland, several walnut trees had already been felled. We milled them, air dried them, and used them for trim. The list of our green products is extensive, including Bonded Logic recycled blue jean insulation when we can get it, recycled wool insulation (from Oregon Shepherd), Sandhill recycled glass tile (now Fireclay).

## **Environmental Restoration or Community Environmental Projects**

Nirvana, our laboratory farm for trying out new products and techniques, is frequently visited by groups such as the American Institute of Architects, USGBC of Maryland, Johns Hopkins University, and the Piedmont Learning Center (where we also volunteer). Nirvana is a certified wildlife habitat with thousands of birds, animals, insects, and native plants. We are host to Spore and Seed, an organic flower farm we provide with free land and water. This has become a successful full-time business for two farmers. A young farmer from a nearby family grows and cuts hay from some of our fields (no herbicides or pesticides); we do not charge him.

We have an extensive program of removing invasives (most recently solarizing a large stand of Japanese Knotweed. We have a nice stand of milkweed in a preserved area we do not mow, and have seen Monarch butterflies for several years. There are over a dozen barn swallow nests in our old red barn, a great habitat for them to raise their young (they are a protected migratory bird species and look lovely swooping over our fields). We keep bees; they love the flower farmer and the honey is excellent. With the help of Baltimore County we have planted hundreds of trees which are flourishing and we care for them by hand, removing vines and staking them as needed. We were the first in the tree program to require organic practices from the County; they agreed to try it and our trees are growing better than many sites using herbicides.

#### <u>Waste</u>

## Solid Waste/Material Use Reduction and Reuse

We shop extensively at Second Chance and also donate frequently there. We sometimes are able to take cabinets or other items from one project and reuse them at another, usually introducing the two homeowner families to each other, sometimes just a few blocks away. This strengthens community and spreads the word about green. We have a very active reuse program on our project sites. This includes piling up wood waste and odd ends and requiring our carpenters to go to the pile first when they need something. Excess materials such as fasteners or insulation leftovers are stored in the red barn for reuse. We encourage our team to look at any items being discarded and with permission from the homeowner, often those items find a new home instantly. We have visited recycling sites to verify that procedures they advertise were being followed.

## Recycling

We divert over 60% of our construction waste for reuse or recycling so it does not go to the landfill.

#### Energy

## Renewable Energy

Nirvana is off-grid eight months of the year (solar). We were the first installation in Baltimore County to be completely off-grid, not grid-tied. The system is Outback, with German panels and Ironridge hardware that we installed in house. We consult on solar, and carefully track the constantly changing landscape of solar companies. We use and recommend pellet stoves.

#### <u>Water</u>

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#### Water Conservation

Greenbuilders installs low flow fixtures. A recent project used an Incinolet toilet, an electric incinerating toilet that uses no water. This provides a savings of 3,760 gallons per year compared to a toilet that uses 1.6 gallons per flush.

Our Nirvana demonstration building has greywater and a composting toilet, no septic. We are a believer in composting toilets and went through several types to find one that works well, is easy to maintain, and was relatively inexpensive (the Separett). We encourage dual flush toilets, usually Toto as they are the market leader and have few problems with function.

We do not water any landscaping at Nirvana, except for our flower farmer fields and those water sparingly and use a drip system. We are creating a meadow, studying with the staff of the Glenstone Museum, also to create a large beautiful area without watering. Our flower farmer, Spore and Seed, does water her plantings, but sparingly and entirely with drip irrigation. We encourage native plantings and ground cover for our clients, combined with stormwater management that directs rainwater to vegetated areas.

## Stormwater Management and Site Design

Greenbuilders used 300 feet of permeable mesh instead of paving on one project. Another project, the Roland Park terrace project, was designed to eliminate runoff through use of drains, permeable stonework (in stone dust rather than concrete), and vegetated areas for drainage.

We love working with onsite stormwater management. We visit projects during heavy rains to observe where the water is going and then design with it, often finding targeted solutions even for major problems. Ideally, we direct surface water to vegetated areas and use stone to outline, shape, and mitigate. We are specialists in permeable pavements using salvaged stone fragments in stone dust rather than concrete. We advocate green roofs and have done at least a dozen residential green roofs in Maryland. Our oldest green roof now produces cuttings we can use to plant new green roofs, saving money and material. It's a granddaddy green roof.

#### Profile Updated April 2024





Help build a greener, more sustainable Maryland through voluntary practices that reduce environmental impacts and save money.