



photo courtesy of Path Partners

ABOVE: On the side of a Maryland home, a raised bed of herbs and local flowers gives way to an indigenous lawn punctuated with sprays of wild buttercups and, beyond, native maple and pine.

RIGHT: This landscape wisely groups plants that prefer to have their feet wet closer to the run-off, while less thirsty ones lay further up the grade.



photo courtesy of BloomingPrairie.net

HOUSING

MAKING THE MOST of the Lay of the Land

First in a two-part series by Glen Salas for the PATH Partners

Becoming a homeowner also means becoming a landowner. Ever since the first American homes were built, having a piece of land to call one's own has been a sign of prosperity, a dream fulfilled. But the dream comes with responsibilities, because the decisions you make about the preparation of your lot and your landscaping will have a lasting impact on the durability of your home, the cost of its upkeep – and the environment.

It helps to understand how your house and yard interact with one another and with the local climate. In this article, we'll look at the land side of the land/house interaction. We'll discuss materials, landscaping ideas, and the general lay of the land. You'll find tips on what to do and what to leave alone, some things to think about, and some important questions to ask your builder or developer.

SMART AESTHETICS Can you make your property more attractive, durable and functional? Yes – and if done properly, it will require less maintenance, and you'll use less water and energy. The key is to combine technology with common sense.

Work with the elements, and they'll work for you. Your house, your lot, and the components of each, act as an integrated system. And your goal should be to allow the parts of this system to work well together, in harmony with surrounding natural forces. After all, the rainfall that hits your roof can replenish your landscaping – or it can wash out your driveway. And the summer sun can power your refrigerator and nourish your hedges – or it can overheat your home and wither your ornamentals.

If you're planning a new house on an undisturbed lot, what does the terrain look like now? If you take advantage of the site's

existing natural features, you'll minimize disturbance and preserve existing habitat. This money-saving principle will make your lot aesthetically pleasing, functional and low-maintenance.

Keep in mind that the existing terrain (builders call it the "existing grade") and the plants that grow on it reflect thousands of years of evolution. When you build your home on it, the only changes you really need are cleared spaces for the house, driveway and construction access, and adjustments that allow the land to better accommodate the rainfall that will run off your roof and paved areas.

Of course you'll also want to clear out dead and dying trees, and you probably want a lawn for play and relaxing. But whatever you do, don't clear and scrape everything around the home site and then plop down high-maintenance, non-native turf [see sidebar on page 18].

The same applies in arid regions—but even more so. Desert plants are very fragile. Once disturbed they are difficult to reestablish, and take a long time to recover.

ASK YOUR BUILDER:

- ✓ How can I preserve the natural beauty of this site?
- ✓ Which trees can you keep?
- ✓ Please flag the trees so I can see your plan on the ground before you cut.
- ✓ Why are you planning to clear such a large area?

THE GRADING PLAN After your home is built, the contractor will establish the final grade. Make sure that the ground slopes away from the house on all sides so that you minimize the foundation's exposure to moisture. Ponded water that seeps into the soil too close to the house can cause mold and, over time, even foundation damage. If your home is built into a hill, the grading should channel water from the hill around—not toward—your foundation. The slope should be continuous, because any low points will hold water and breed mosquitoes – even in arid regions. A gradual slope is best, to allow the soil to evenly and effectively capture moisture.

ASK YOUR BUILDER:

- ✓ How will you avoid leaving any low spots?
- ✓ Will you come back to regrade after every thing has had a chance to settle?

LANDSCAPING Conservation landscaping preserves water quality, provides natural beauty and habitat for local and migratory animals and conserves native plants. The structure, leaves, flowers, seeds, and berries of locally native trees, shrubs and perennials provide food and shelter for native birds and other wildlife. The roots of these larger plants are typically deeper than lawn grass, and better hold soil and capture rainwater.

RIGHT: This Nebraska garden uses drought tolerant Golden Rod "Saldago", along with "Zebra" Miscanthus Grass, and Caryopteris "Blue Mist Spirea" to remain lush, despite the late summer sun.

BELOW: This Southern Arizona home not only uses native plants and flowers to dramatic effect; it also uses reclaimed water for landscaping.



photo courtesy of BloomingPrairie.net

[3 IMPORTANT STEPS] IN DESIGNING

A WATER AND MAINTENANCE-EFFICIENT LANDSCAPE ON A NEW LOT:

- 1) reduce the amount of turf and other irrigated areas;
- 2) ensure water-efficient design of irrigation systems; and
- 3) specify native or climate-appropriate landscape materials. This is called xeriscaping, a practice that saves on water, fertilizer, pruning, maintenance and overall costs.

Remaining landscape areas that require irrigation should use water-efficient irrigation systems to minimize water use and maximize plant health. Such systems depend on efficient system design and layout, optimized irrigation schedules and controls, and low-flow sprinkler heads to reduce water use.

Zero-maintenance? There's no such thing. Even conservation landscaping requires some upkeep. Until they become established, new plants need watering and monitoring, especially during the first season.

ASK YOUR BUILDER:

- ✓ Can we put in a super-efficient irrigation system?
- ✓ Is the grass you're planting native to this area?



photo courtesy of Path Partners

PAVING Driveways and walkways don't have to be monolithic concrete slabs. Consider the following porous alternatives, which reduce water pollution created by stormwater run-off, trap less heat and feel a lot cooler in the summer than traditional paving. In allowing more water to be filtered through the soil, they also reduce the odds of a washout in heavy storms.

In addition to gravel, good options include porous asphalt and porous concrete, which are very similar to conventional paving products, and are mixed and poured with the same equipment. Also consider block pavers, which allow water to be absorbed through the sand joints between the pavers. They are often used to striking effect for driveways, entryways and walkways.

Plastic grid systems are often selected for gardens or recreational areas that must support vehicular or pedestrian traffic. High strength plastic grids, often made from recycled materials, are placed on a structural material and filled with gravel, or on a topsoil mix and filled with a sand/soil mixture that allows grass to be planted on the surface. The grids provide a support structure for vehicles and prevent erosion while allowing water to be absorbed into the soil below.

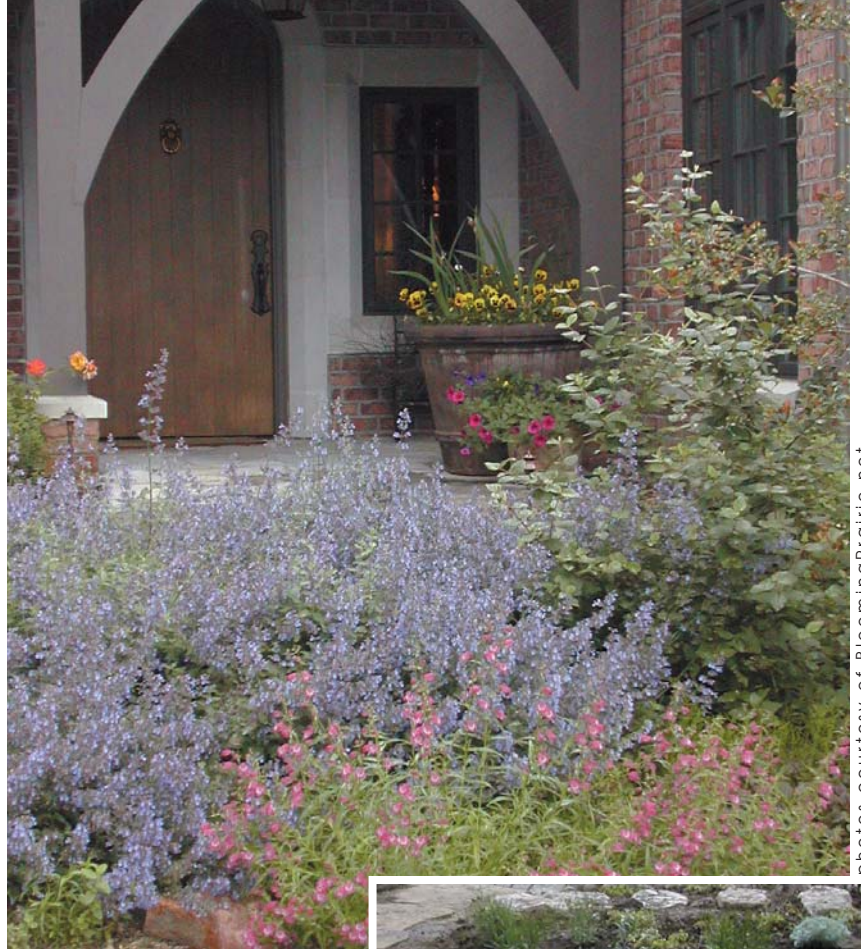
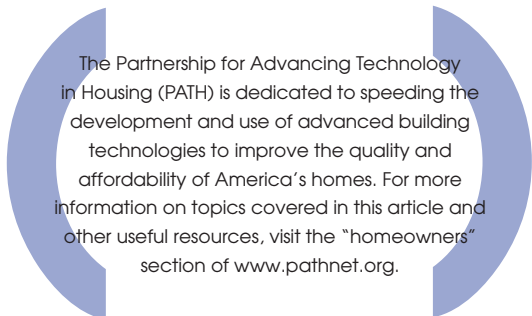
ASK YOUR BUILDER:

- ✓ Can you put in a porous driveway at the same cost?
- ✓ When you excavate for the foundation, can you put aside any flat stones to use for walkways?

The first choices you make about your land and lawn will follow you for years to come. Choose wisely to reap the advantages of an attractive, low maintenance landscape. ■

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*Next issue:
The elements and your home.*



photos courtesy of BloomingPrairie.net

ABOVE: Instead of the standard sea of bluegrass, a colorful arrangement of hardy perennials cuts down on water usage, while greatly enhancing this home's curb appeal.

RIGHT: Hardscaping can be both beautiful and functional; reinforcing this newly planted garden's structure, while providing easy accessibility and maintenance.



[IS THE GRASS REALLY GREENER]

Consider the impacts of conventional lawn and garden care. You decide: is it worth the cost?

- Americans manage 30 million acres of lawn, spending \$750 million/year on grass seed, and apply over 100 million tons/year of fertilizer and 80 million pounds/year of pesticide.
- A 1/4-acre yard requires 10,000 gallons of water each summer to stay green. Thirty percent of the drinking water consumed on the East Coast goes to watering lawns.
- Per hour of operation, lawnmowers emit 10 times as much hydrocarbon pollution as a typical automobile; trimmers emit 21 times as much as autos and blowers emit 30 times as much.
- Grass clippings consume 25 to 40% of landfill space during the growing season.

Source: *Native Plants for Wildlife Habitat and Conservation Landscaping*, U.S. Fish and Wildlife Service