

A BELMONT GUIDE TO PERVIOUS PAVEMENT

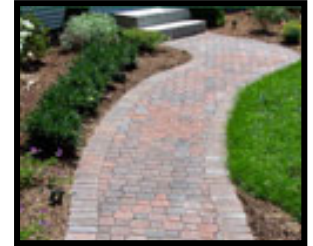
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Are you planning to replace a driveway or build a new patio? If so, this guide has practical advice and links to useful information.

Why Pervious Pavement?

Pervious pavement is an environmentally friendly material that reduces local flooding by redirecting stormwater runoff away from our streets and stormwater sewer system. Stormwater flows **through** the pavement and into a catchment area underneath where it's filtered before it enters the water table. Pervious pavement is highly recommended for driveways, walkways and parking lots.



See What's Possible

Pervious materials vary in appearance, color, texture, cost and ease of installation. So to get started, you may want to familiarize yourself with these options by viewing online catalogs or by visiting a supplier. A few suppliers have exterior showrooms composed of small patios and walkways in different patterns to give you a feel for the possibilities. There are also a few examples in and around Belmont that you may view.

Create a Solid Design

Designer: Even a simple driveway replacement needs a design. However, if your project is more complicated than re-paving with asphalt, you should consider hiring a landscape architect. She will discuss your ideas and needs, visit your property, study the topography and tell you about design possibilities. She will consider existing features specific to your property such as slope, soil type, plantings and immovable elements such as stone walls. In some cases, she may suggest other alterations to your property such as a rain garden or perhaps a dry well or rain barrel to further control stormwater runoff.

If you are simply re-paving with pervious asphalt or concrete, your contractor may be able to create a good design. Both simple and complex designs consist of:

- Construction drawings
- A plot plan with proposed pavement outlined
- A list of all estimated costs including
 - ✓ A bill of materials
 - ✓ Labor
 - ✓ Removal and disposal of existing pavement
 - ✓ Building permit



Surveyor: If you change the amount of paved area around your house, you will need a new plot plan with the proposed change outlined and dimensioned. Consult your existing plot plan and contact the surveyor who created it. You may get a break on the price for an updated one. If you can't connect with him, consult the list of registered surveyors on Belmont's Town web site.

Building Permit: Usually, the contractor applies for a building permit. To apply, he needs the detailed design drawings, cost estimate, plot plan and information about his license and insurance. He also may be



asked a few technical questions about the construction. Permit cost varies with the size and nature of the project. The town web site shows you how this is calculated.

Design for Compliance

Local and State Regulations: It's very helpful if your architect and contractor know details of Belmont zoning bylaws and procedures to avoid rework. In addition to Belmont bylaws, an architect licensed in Massachusetts also will be aware of state environmental regulations and compliance issues.

Regulations are sometimes seen as a nuisance. However, they were created to make sure your paved areas fit harmoniously with the surrounding landscape and the general appearance your neighborhood in addition to benefitting the natural environment.

Non-Compliance: In some cases, you may choose to build a structure that's non-compliant. For example, you may want to widen your driveway because it's too narrow to park more than one car. However the wider driveway will push the total paved area above the maximum allowed on your property.

To obtain a building permit, you will have to apply for a Zoning Variance, attend a meeting of the Appeals Board and describe your need. If approved, you can build. If not, you will have to modify the design to make it compliant and re-apply for a permit.

Build It

Contractor: The contractor will build your project. Construction steps for each type of pavement are essentially the same - excavation, install a sub-base, pave and cleanup. Your contractor must be experienced with pervious pavement installation to be successful. If he has worked in Belmont before, examples of his work will be nearby for you to view.

What is a Landscape Architect?

Licensed Landscape Architects must hold a degree in landscape architecture. The architect's work includes almost everything concerning the outside of a house. She takes into account your individual needs (including physical disability requirements), climate of the area, activities that will take place on the area, as well as figuring out which plants to plant where, modifying slope of the area (for drainage) and designing and constructing out-door buildings on the property.

Questions to Ask Prospective Contractors

An experienced contractor will probably be recommended to you by the architect. However, if finding one is up to you, before hiring, you should ask:

- Do you have experience installing pervious pavement?
- Have you worked in the Town of Belmont before?
- Can you provide me with references, preferably in Belmont?
- How long have you been in business?
- Are you licensed in Massachusetts?
- Do you have liability insurance?
- Can you provide me a written estimate?
- Can you accommodate my special requests to accommodate physical disabilities?
- Do you have a procedure to handle changes in scope or costs?



Finding a Landscape Architect

- [Mass. Board of Registration](#)
- Angie's list

NOTE: 11 architects were listed in Belmont (Aug, 2014)

Search for "Landscape Architects in Boston, MA"

Information About Pervious Paving

- This supplier has a showroom and a comprehensive gallery of photos online
- Site has instructive online videos showing each step of a typical paving block installation.
- In depth information about pervious asphalt and stormwater management
- Example pervious **asphalt** parking lot

Ideal Concrete Block Co. 232 Lexington Street, Waltham, MA
<http://www.idealconcreteblock.com/index.html>

Nicolock interlocking paving stones
There are several dealers in the Boston area
<http://nicolock.com/>

<http://www.asphaltpavement.org>
<http://www.unh.edu>

Search for: "pervious asphalt"

Leader Bank at 363 Pleasant St, Belmont

Finding a Contractor

- Recommendation
- Angie's list
- Belmont Citizen
- Google

Ask your architect or ask a neighbor who recently hired one

Search for: "masonry contractors" or "asphalt paving contractors"

Check the ads for local contractors

Search for: "Belmont MA, masonry contractors" or "Belmont MA, paving contractors"

Belmont Links

- Town Web Site
- Building Department

<http://www.belmont-ma.gov/>

[community-development-building-division](#)

Documents (pdf format)

- Approved List of Surveyors
- Find your house on the map
- Building Permit Guidelines
- Compliance Checklist

If Links below don't work, search the site with the dashed phrase

[Registered-Land-Surveyors](#)

[Zoning Map](#)

[building-permit-applications-guidelines](#)

[Compliance Check list](#)

Stormwater Information

- US Environmental Protection Agency
- MA Dept. of Environmental Protection

<http://www.epa.gov/nps/>

<http://cfpub.epa.gov/npdes/stormwatermonth.cfm>

<http://cfpub1.epa.gov/npdes/stormwater/cgp.cfm>

<http://www.mass.gov/dep/water/laws/p2help.htm>

Local Stormwater Organizations

- Belmont Citizen's Forum
- Charles River Watershed
- Mystic River Watershed

<http://www.belmontcitizensforum.org>

<http://www.crrwa.org/projects/stormwater/stormwater.html>

<http://www.mysticriver.org/>

