

Introduction

Low Impact Development (LID) techniques are the wave of the future. Polluted stormwater runoff, which can contain oil, grease, metals and sediment, poses a serious threat to our ponds, streams, and rivers. LID is an innovative approach to managing stormwater that uses a variety of small-scale landscape features to keep and treat stormwater on-site. A guiding principle of LID is that, once pollutants are removed, stormwater is a resource, not a nuisance.

Unlike the conventional approach to stormwater management, which is often a huge, unsightly stormwater detention pond that is fed by a system of catch basins and pipes, LID uses a series of small, cost-effective landscape features that are in scale with the site. Many components of a traditional development or redevelopment project can be designed as LID features, including grassed areas, gardens, rooftops, streets, parking lots, and sidewalks. An entire development, from the conceptual design phase through construction, can be planned using LID principles and techniques.

LID techniques help towns and developers create cost-effective and environmentally-friendly residential, commercial, and industrial development sites that deal with the problems of stormwater and pollution.

FOR MORE INFORMATION

This brochure describes the benefits of using LID techniques. It gives local officials basic information that they can use to encourage property owners to use LID techniques or to enact better land use regulations.

For more information about Low Impact Development visit the Massachusetts LID Toolkit web page at www.mapc.org/lid or contact the Planning Department at the Franklin Regional Council of Governments.

Low Impact Site Design



Courtesy Massachusetts LID Toolkit

Orange Riverfront Park Demonstration Site



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Orange Riverfront Park Demonstration Site

LOW IMPACT DEVELOPMENT TECHNIQUES

*Methods and practices for managing
stormwater and preventing pollution*



Orange Riverfront Park on the Millers River

BENEFITS OF USING LID

◆ Less stress on watersheds

LID techniques put stormwater back into the ground, which helps to recharge drinking water aquifers.

◆ Reduced demand on public infrastructure

LID reduces the amount of water that flows into a community's storm sewer system, resulting in fewer overflows, which pollute waterways with sewage.



Riverfront Park Rain Garden

◆ Healthy rivers and streams

LID uses native plants and soil to remove pollutants. LID is often more effective than conventional “pipe and pond” solutions in controlling runoff. By preserving natural systems, LID helps to prevent flooding, erosion, and alteration of aquatic habitat.

◆ More livable communities

With an emphasis on green space, natural systems, and careful site design, LID helps to prevent “cookie cutter” developments that detract from community character.

LID TECHNIQUES

◆ **Bioretention** uses vegetated areas or shallow drainage channels surrounding parking lots and along walkways that collect, treat, and infiltrate rain water and slow runoff.

◆ **Permeable Paving** surfaces for walkways and parking lots allow rainwater to percolate into the ground.



Riverfront Park Permeable Paving

◆ **Rain Gardens and Green Roofs** are vegetated systems that capture rainfall and return it to the atmosphere.

◆ **Cisterns and Rain Barrels** store rainwater for landscaping.



Riverfront Park Gravel Pathway

ORANGE RIVERFRONT PARK SHOWCASES LID ELEMENTS

The Town of Orange constructed its Riverfront Park on a former Brownfield site that was once a gas station and later the town highway garage.

The gardens, grassed areas, and walkways at Riverfront Park are beautiful and functional stormwater management features that mimic natural systems to protect the Millers River, provide wildlife habitat, and make the river accessible to everyone.

The Orange Riverfront Park is the first LID demonstration site in Franklin County, Massachusetts.

The Orange Riverfront Park Design Plan

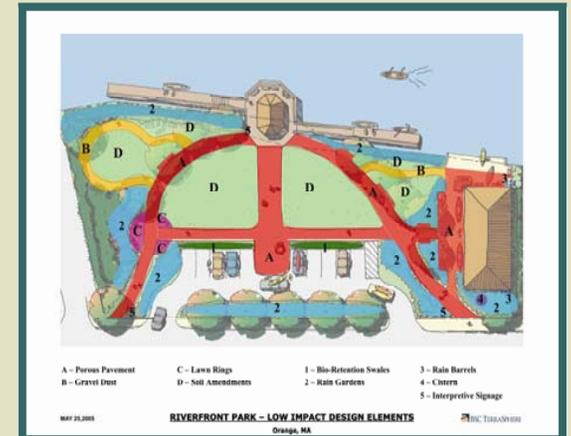


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