

WHAT IS LOW IMPACT DEVELOPMENT?

Low Impact Development (LID) seeks to manage rainfall at its source, before it becomes stormwater. The benefits of LID include reducing pollution and erosion in waterways and reducing expenses for stormwater infrastructure. LID's goals are to prevent runoff from increasing when land is developed, and to reduce runoff from already-developed areas. It makes use of design techniques that infiltrate, filter, store, evaporate, and detain stormwater close to its source. LID is not a way to treat stormwater after it has been collected in pipes or channels. It is intended to reduce the amount of water entering pipes and channels. Because vegetation is used to soak up, slow down and evaporate water, LID can improve the attractiveness of streets and neighborhoods.

Non-structural LID techniques include:

- Minimizing soil compaction,
- Minimizing total disturbed area,
- Protecting natural flow pathways,
- Protecting riparian buffers,
- Protecting sensitive areas, and
- Reducing impervious surfaces.

Structural LID techniques include:

- Rain Gardens
- Constructed wetlands
- Vegetated Swales
- Rain Barrels
- Cisterns
- Roof Top Disconnection (disconnecting downspouts from storm sewers and sanitary sewers)
- Infiltration Trenches
- Green Roofs
- Pervious Pavement

The Vermont Agency of Natural Resources has a Low Impact Development Guide and a Rain Garden Manual available on line.

Stormwater Management

The Town Public Works Department is continuing to work on GIS (computer) mapping and evaluation of its drainage systems, building on the culvert and drainage inventory by the Regional Planning Commission and stormwater system review work by ANR. A program of Town drainage system improvements needs to be developed with the stormwater management/treatment needs described in the Natural Resources and Transportation sections of this Plan, and brought into the Public Works/capital improvements planning process. When large infrastructure projects are being considered, this Plan supports finding opportunities to incorporate modern stormwater practices into the design. On a smaller scale, the two rain gardens at the Marble Works provide excellent examples of how green stormwater infrastructure can be incorporated into existing landscaping.

Bike and Pedestrian Facilities

The Town's sidewalk GIS mapping and evaluation needs to be updated by integrating the Public Works sidewalk plowing 'end-of-winter' evaluation, with other bike/ped studies for inclusion in the annual Public Works/capital improvements planning process.

Public Works standards for concrete sidewalks should be maintained. The alternative of wider asphalt sidewalks on a well-prepared base is appropriate for bike/ped shared paths. Examples include those extending out to peripheral areas such as Middle Road/South Ridge and for bike/ped path extension that are needed along Exchange Street and along Route 7 from the Marriott south to Boardman Street and to Stonegate.

The Town should require new sidewalks to be provided by developers of new residential and business projects on collector streets and to connect to existing sidewalk networks.

Sidewalks also need to be expanded/linked with recreation trails so that the development of pedestrian, bicycle and recreation trail systems can be coordinated to serve existing neighborhoods and planned growth areas. Town policy should ensure that streets, highways, and thoroughfares within the Town provide adequate access and safe conditions for walkers and cyclists. Wherever possible lanes should be painted to calm traffic and provide for bicycles and "sharrows" stenciled on Town collector and downtown streets.

Continued attention should be given to handicap access and safety; pedestrian crossings that are properly marked and signed and well-maintained throughout the year; pedestrian and bicycle-actuated traffic control devices that work promptly and reliably; and to the elimination of sidewalk and roadway hazards such as tripping hazards, dangerous drainage grates, and pavement holes and cracks.