Design Guidance for Stormwater Infiltration Systems, in locations where contaminated soils exist, where the required vertical separation to SHGT cannot be met, or in locations with unacceptable horizontal setbacks for infiltration.

**Roofs**

- Direct roof downspouts to pervious vegetated areas (simple disconnection), dry wells or other infiltration systems, or to cisterns for non-potable reuse such as lawn or landscape irrigation.

- Consider use of green roofs to manage runoff from building roof areas.

**Lawn and Landscaped Areas**

- Use low-maintenance LID landscaping techniques to minimize lawn area and maintenance needs (e.g., irrigation, fertilizers, and pesticides).

- Use diverse selection of native vegetation species.

- Incorporate trees in bioretention systems within parking lot islands and around the perimeter of parking lots to provide shade and cooling of impervious surfaces and stormwater runoff during the summer.

- Maintain pre-development flow path lengths in natural drainage patterns.

**LID Site Planning and Design Credits**

Credits are a way of quantifying the benefits of LID site planning and design techniques, providing additional incentive to use non-structural approaches for meeting the runoff volume and pollutant reduction requirements of Standard 1, as described in Chapter 4 - Stormwater Management Standards and Performance Criteria. LID site planning and design credits may be used to reduce the required Water Quality Volume and Required Retention Volume, provided that the proposed measures meet specific minimum criteria. Implementing such LID site planning and design measures (i.e., those that meet the criteria to receive credits) can reduce or eliminate the need for structural stormwater BMPs.

This section presents credits for the following non-structural LID site planning and design techniques for managing impacts at the source:

- Impervious area conversion
- Impervious area (simple) disconnection
  - Roof runoff
  - Driveways, roads, and parking lot runoff
  - Stormwater runoff from solar arrays.
These techniques provide quantifiable runoff volume and pollutant reduction benefits. For each LID site planning and design technique, a description of the credit is provided along with the minimum criteria for receiving credit.

Credits are not provided for the LID site planning and design techniques described in this chapter that are designed to avoid or reduce impacts. Such techniques involve minimizing land disturbance and impervious area and conserving natural site features, all of which contribute to a reduction in runoff volume and pollutant loads. Standard 1 requires project proponents to consider the use of LID site planning and design strategies, to the MEA, prior to consideration of structural stormwater BMPs. Therefore, all of the LID strategies presented in this chapter should be considered for use, regardless of whether LID credits are available.

**Impervious Area Conversion**

Converting impervious surfaces (pavement, buildings, etc.) to pervious vegetated surfaces (lawn, meadow, woods) and restoring the pre-development infiltration rate and storage capacity (i.e., porosity) of the underlying soils can be an effective strategy for reducing existing impervious cover on redevelopment sites. Conversion of the impervious surface to a pervious vegetated surface results in a reduction in runoff volume and pollutant loads and an increase in infiltration and groundwater recharge.

The subgrade below pavement is often highly compacted, with low infiltration and water storage capacity, and lacking organic material in the soil structure to support vegetative growth. An important aspect of converting impervious surfaces to pervious vegetated surfaces is to ensure that the converted area has similar hydrologic functions and characteristics as a natural, undeveloped area in terms of runoff and infiltration. This typically requires modification of the underlying soils to restore the pre-development infiltration rate and soil porosity and improve soil quality to support vegetation.

**Credit Description**

An impervious area conversion credit is available when an existing impervious surface is converted to a pervious vegetated surface and the pre-development infiltration rate and storage capacity of the underlying soils is restored.

If the impervious area conversion meets the minimum criteria presented below, the converted area can be deducted from the total impervious area, reducing the required Water Quality Volume and Required Retention Volume and the size of the structural stormwater BMPs needed to meet the static storage volume and pollutant reduction requirements of Standard 1.

**Minimum Criteria for Credit**

The impervious area conversion credit is subject to the following minimum criteria and restrictions: