

WQ-22 DISCONNECTED IMPERVIOUS AREA AND GREEN SPACE

1.0 Disconnected Impervious Area and Green Space

1.1 Description

Green space preservation and disconnecting impervious areas are low impact development (LID) practice that promotes the conservation of natural vegetated areas, to assist in maintaining pre-development hydrologic and water quality conditions. These non-structural BMPs provides habitat for native vegetation which allows for the treatment and infiltration of stormwater. Green space preservation and Disconnecting Impervious areas provide groundwater recharge, and reduces the generation of stormwater runoff from the site.

1.2 Application

The disconnection of impervious surfaces and preserving green space are appropriate to a variety of land uses such as; residential, commercial, industrial and institutional. The application of these LID practices require pervious vegetated surfaces be located adjacent to the impervious area to be disconnected. Runoff generated from the impervious area is conveyed and discharged to the vegetated pervious surface in sheet flow. Spreading devices or storage structures may be needed depending on site characteristics

1.3 Requirements

1.3.1 Green Space Preservation Requirements

The following bulleted list includes requirements for green space preservation:

- To the extent practicable, conservation areas should be delineated to maximize contiguous land and avoid fragmentation.
- Incorporate critical site features such as wetlands and floodplains into the conserved natural area.
- Proposed green space areas should not be disturbed during construction activities.
- The limits of all proposed conservation areas should be clearly shown on all construction drawings and identified onsite prior to construction.

1.3.2 Disconnect Impervious Area Requirements

A pervious area flow path length must be equal to or greater than the contributing impervious area flow path length. The impervious surface area draining to any single vegetated area will not exceed 1,000 square feet. Vegetated pervious areas used for disconnection of impervious areas will be relatively flat with a 5% maximum slope and have underlying permeable soils.

1.4 References

City of Roanoke Virginia. 2007. Stormwater Design Manual. Department of Planning and Building and Development.