

DEFINITION of IMPERVIOUS AREA

Classification of gravel driveways/roadways as impervious area is common to many stormwater utilities and is supported by a variety of state and federal sources. As you know, the Town's bylaw language includes language that addresses this, as follows:

- "...Impervious surfaces include, without limitation, roads, paved parking lots, rooftops, buildings or structures, sidewalks, driveways, and other surfaces which prevent or impede the natural infiltration of stormwater runoff which existed prior to development."

Gravel driveways are manmade structures and clearly change the drainage patterns that existed prior to development. The Town's approach which includes gravel driveways as part of the IA delineation is consistent with the federal/state Municipal Separate Storm Sewer System (MS4) General Permit, to which the Town is subject, which defines impervious surface as follows:

- "Any surface that prevents or significantly impedes the infiltration of water into the underlying soil. This can include but is not limited to: roads, driveways, parking areas and other areas created using non-porous material; buildings, rooftops, structures, artificial turf and ***compacted gravel or soil***" (bold italics added).

In addition, at the state level, MassGIS applied a similar definition when creating the Impervious Surface data layer currently in use:

- "The Impervious Surface raster layer represents impervious surfaces covering the Commonwealth of Massachusetts. The surfaces were extracted using semi-automated techniques...Impervious surfaces are defined as: All constructed surfaces such as buildings, roads, parking lots, brick, asphalt, concrete. Also included are areas of ***man-made compacted soil*** or materials such as mining or ***unpaved parking lots...***" (bold italics added).

The description can be found in full here:

<https://docs.digital.mass.gov/dataset/massgis-data-impervious-surface-2005? ga=2.228771292.1129477817.1547139765-233944295.1537538239>