

WHAT IS MICRO-SURFACING?

Micro-surfacing was developed in Germany in the 1960s and 1970s for use on the Autobahn. It is a mixture of polymer-modified asphalt emulsion, dense-graded crushed fine stone, mineral filler (typically cement or lime), and water, that are applied to selected pavement surfaces appropriate for the treatment. The mixture is made by a specialized machine on site and placed cold on the pavement surface. The asphalt emulsion dissipates and chemically bonds with the existing pavement to create a durable surface.

The Town of Rocky Hill utilizes Micro-surfacing as one of the tools in our Pavement Management System (PMS) that the Town Council approved in 2013. It is a preventive maintenance sealing treatment used to extend the life of hot mix asphalt roads (HMA) and should not be confused with HMA (“blacktop”). It is a slurry that is applied cold at a depth of about 3/8” versus HMA which is applied at 300° at a depth of 2”, mechanically compacted, and has a structural component to it. (Below, please see a list of the roads in Rocky Hill where this has been used, as well as other communities using this process)

ADVANTAGES OF MICRO-SURFACING FOR ASPHALT ROADS INCLUDE:

Cost-effectiveness: micro-surfacing costs are approximately one-third of the costs of a pure HMA mill and pave.

Easy application: due to the thin depth of the micro-surfacing, no milling or utility adjustments are necessary, further reducing the costs.

Extending the life of the asphalt: We have found that Micro-surfacing extends the pavement’s life by at least 8 years or more.

Suitability for low-volume roads: due to the thin depth of the surface, the material has minimal structural enhancement capabilities, but works exceptionally well for low-volume roads like subdivisions with aging pavements.

CONCERNS OF MICRO-SURFACING INCLUDE:

Smoothness: immediately following installation of the material, the road may not feel as smooth as a new HMA roadway. However, as traffic drives over it and the sun heats the pavement during the hot summer days, the asphalt will begin to smooth itself out.

Stones: immediately following installation of the new surface, the material will appear to be “falling apart” due to the number of small stones that will be present. These small stones are added to the micro-surfacing mix to provide additional durability and increase skid resistance. Since the depth of the mix is so shallow, many of the stones will not adhere and will need to be removed. In order to allow the material to completely set up, the contractor will wait 10 days to return to perform this sweeping operation.

LIST OF ROCKY HILL ROADS:	
BARNYARD ROAD	PERIA DRIVE
BUCKS CROSSING	RACHEL DRIVE
CHRISTOPHER COURT	RAMBLEWOOD DRIVE
COBEY ROAD	SHEA CIRCLE
COLD SPRING ROAD	STOCKTON LANE
FARMS VILLAGE ROAD	STONE HILL DRIVE
FOREST STREET	TEDWIN FARMS ROAD
HIGHVIEW DRIVE	THOMAS COURT
HUNTERS RIDGE	VEXATION HILL DRIVE
MARTIN DRIVE	WEST RIDGE DRIVE
NESSA WAY	WHITEWOOD DRIVE
PEARL LANE	WOODFIELD CROSSING
PEBBLEBROOK DRIVE	

LIST OF CONNECTICUT COMMUNITIES:	
Andover	Meriden
Bethel	Middlebury
Branford	Naugatuck
Darien	Shelton
East Lyme	Tolland
East Windsor	Torrington
Fairfield	Woodbury