

Paving Projects FY 2013/2014

The following roads are to be resurfaced during the 2013/2014 Fiscal Year. There are five different methods we will use for road resurfacing: Overlay, Heat Scarification, Shim and Chip Seal, Crack Seal, and Chip Seal and Overlay. Each road has been evaluated to determine which method is the most appropriate for the road surface. Following the list of roads to be resurfaced by each method, there is a brief description of how each method is performed.

1.5 Inch Overlay

Drumlin Road	Talisman Drive
Winterset Lane	Westcott Road

Chip Seal and Overlay (Cape Seal)

Rocklyn Court	Rockspray Lane
Rocklyn Drive	Banbury Drive

Heat Scarification and 1 Inch Overlay

Arrowhead Drive	Pinnacle Mountain
Canaan Way	Winthrop Street
David Drive	

*The above paving projects may be modified based upon weather, or other factors impacting schedule, including installation of water mains, sanitary sewers, etc.

**Additional roads may be added to this year's schedule if the above can be completed ahead of schedule.

Paving Methods

1.5 Inch Overlay is the process that begins with raising existing catch basins on the edge of the road. A thin layer of bituminous asphalt is installed known as shimming. Shimming prepares the roadway for final paving by filling in holes and leveling out the existing road surface. With the shimming work completed, a one and one-half inch thick overlay of new asphalt is placed upon the road surface, creating a smooth roadway surface.

Heat Scarification is a two step process where the first process is heating the road surface to a point where the asphalt becomes softened allowing the existing surface to be "peeled off" in a layer 1½ to 2" thick. This upper layer is then recycled by adding liquid asphalt to rejuvenate the material before it is reapplied to the roadway and compacted with rollers. This recycled material will become the base layer for a new roadway surface that will be applied as the second step in this process.

When the heat scarification process is completed, most of the roadway will look as if it has been re-paved; some areas around corners or in cul-de-sacs may be missed by the process due to equipment limitations. This is normal for this process and will not impact the quality and longevity of the final product.

With the first phase completed town crews will repair and/or replace any catch basins along the roadway. We do this work after the heat scarification is complete to insure the final elevation of the basins will be correct to allow for proper drainage. Completing this work after the road has been recycled allows for better conditions for repairing/preparing the roadway for the final surface.

The final phase of this work is the addition of a traditional 1” thick layer of asphalt.

Shim and Chip Seal is a two part process which is used to rehabilitate rural roads. The first step is called shimming and involves filling potholes and leveling out the road surface using bituminous asphalt. This step is followed by the chip seal. Chip sealing is a process in which an adhesive is placed upon the road surface and then covered over with loose gravel or aggregate. This differs from traditional road surfacing in that the aggregate and adhesive are not mixed prior to being placed on the road. For the first week after the work is completed, the roadway will essentially be a gravel road and will require slower driving speeds. After one week town crews will sweep up all of the loose stone. The final result is typically a more course surface than traditional pavement, however in some cases this may lead to slower traveling speeds on rural roads and increase safety.

Crack Sealing is the process of sealing cracks in roads with hot bituminous sealant. The main function for crack sealing is to prevent moisture from entering into road pavement leading to significant roadway damage. Crack sealing is the best investment the town can make to maintain the condition of our roadways. We try to crack seal 4 to 5 years after our initial paving and then a second time 6 or 7 years later.

Chip Seal and Overlay (Cape Seal) is a two part process which is used to rehabilitate neighborhood roads. The first step is chip seal as described above. The chip seal fills in cracks, potholes and imperfections on the existing roadway. The chip seal will be a stone surface which will remain in place for four to six weeks allowing for cracks and potholes to be filled naturally with the daily traffic. This surface may seem rough however this layer will be covered after four to six weeks with a traditional asphalt overlay placed on the chip seal creating a smooth roadway surface. This two-step process is referred to as a cape seal.