

PLOW SCRAPES ON PAVEMENT INFORMATION SHEET

Why are the plows scraping the pavement to the point you see white marks?

The scrape marks occur in areas where the profile of the pavement is slightly high. As a function of resurfacing, the profile of the road is often changed. Centerline joints, mid lane seams, manhole elevations and butt joints are slightly 'high' making plowing with either underbelly or front mounted units will scrape these areas leaving white marks in first season.

Why does the Village use underbelly plows?

Underbelly plows have certain benefits over traditional front mounted plows. Underbelly plows have an ability to adjust the downward pressure of the blades. The benefit to this feature is that freezing rain and snow packed roads can be better scraped which results in less salt applied and clearer streets than a traditional front mounted plow. The Village has lightened the amount of pressure operators can apply to lessen impacts on the road surface.

Additional benefits include:

- increased visibility for the driver as snow is not thrown onto the windshield
- better maneuverability for narrow streets and around parked cars
- trucks are able to go down dead end streets and turn around drivers are able to complete routes faster
- underbelly blades break less and allow for all plows to be available throughout a snowfall
- front mounted plows have a greater chance of running up curbs creating parkway damage

Will the scraping cause the streets to wear out prematurely?

No, the surface scrapes do not impact the structural integrity of the roadway. Bituminous mixtures rely on the sand and asphaltic cement matrix to 'bind' the aggregates together from a structural standpoint and the effects of the plowing are more of an aesthetic concern than a pavement life issue.

Due to local geology, in almost all cases the coarse aggregates (dolomite) used by bituminous mix producers employed on our projects are of the highest quality and exceed IDOT's requirements. As such, the individual stones are not degraded as much as other aggregates if 'exposed' during plowing operations. The asphalt coating the surface of the stone usually abrades off after the first year and the 'salt-and-pepper' visual is less dramatic in subsequent years.

How long should a street last?

It is important to recognize the many factors that impact pavement lifecycle. The number one factor is age. The wearing surface of the road should last fifteen years assuming the road base is solid and preventative maintenance is done. A strong second factor is traffic volume and truck traffic. The third factor to consider is freeze thaw cycles and our ability to keep water from getting under the surface pavement. Crack sealing road centerlines and refraction cracks are key to extending pavement life.

