

Common Pavement Conditions

Raveling: The on-going separation of the aggregate particles from the pavements surface.

Cause: Ultra-violet rays oxidize pavement's binder, cause aggregate to separate from pavement.

Repair: Sealcoating will prevent raveling

Prevention: Application of sealer after new asphalt has cured

Gas & Oil Stains: Unsightly stains that weaken the surface.

Cause: Oil dripping from vehicles, overfilling of fuel tanks

Repair: Depending on the severity, patching or the application of special bonding primer prior to sealcoating.

Prevention: Sealcoat with gas and oil resistant sealer as quickly as possible after new asphalt has been laid.

Alligator Cracks: A series of small blocks, resembling alligator skin or chicken wire, formed by interconnecting cracks.

Cause: Stress results in pavement movement.

Repair: Patching

Prevention: Proper pavement installation, timely crack filling, seal-coating

Potholes: Bowl-shaped holes of various sizes

Cause: Poor drainage, insufficient pavement thickness, negligence of crack sealing and sealing.

Repair: Full-depth patching

Prevention: proper construction, timely crack sealing, sealcoating

Polished Aggregate: Aggregate in pavement has been smoothed resulting in slick unsafe surfaces.

Cause: Repeated traffic polishes / repairs

Repair: Use a special bonding primer to gain adhesion & sealcoat

Prevention: sealcoating

Shrinkage Cracks: Interconnected cracks that form a series of large irregular blocks, usually having sharp angles at the corners.

Cause: Shrinkage of asphalt mix due to oxidation, with resulting loss of flexibility

Repair: Seal cracks and sealcoat

Prevention: Application of sealer after new asphalt has cured

Grade Depressions: localized low areas that are limited in size, often indicated by standing water.

Cause: Traffic may be heavier than the pavement was designed for, or a localized subsurface drainage problem may exist.

Repair: Based on field inspection, either correct drainage problem, and repair pavement, or correct grade by localized leveling.

Prevention: Proper pavement design and construction with emphasis on traffic load and drainage.

Longitudinal Cracks: Cracks spaced even apart and fairly parallel

Cause: Weak or weathered joints between paving lanes, also extreme pavement temperature changes.

Repair: seal cracks

Prevention: sealcoat with highly rubberized sealer

Corrugation or Rutting: A fairly regular pattern of wave-like bumps

Cause: Lack of stability in asphalt layer

Repair: Removal and placement of pavement

Prevention: proper pavement design and construction

Reflection Cracks: Surface crack in new surface overlay

Cause: Movement of pavement below the surface layer

Repair: Seal crack

Prevention: Use a pavement reinforcing fabric prior to resurfacing