Asphalt services and repair

Introduction

Asphalt surface repair can run from simple to complex depending on the condition of the structure from surface through base. Rose Paving has the expertise to properly analyze all conditions and develop a repair plan that fits each, unique situation. Primary repair methods include the following:

Infrared

Infrared asphalt repair is a method by which existing asphalt is heated and sprayed with a rejuvenator, using infrared technology. It is an intermediate solution to pavement failure.

The area to be repaired will be swept or blown clean, removing all loose aggregate, sand, and/or water. The surface area will be heated to 325 degrees for 5-10 minutes depending on the depth, season, and existing aggregate (typically 1-to-3 inches). Once the repair area has been heated, it will be raked to remove failed aggregate and a rejuvenator will be applied to replenish lost oils due to oxidation. Additional material will be applied to the area, while raking and grading it to the proper level. Once the fresh material is placed, it will be compacted with a multi-ton vibratory roller and/or vibratory plate.

Since infrared repairs do not address base failures, repair areas are likely to fail again within 12-24 months.

Asphalt Pothole Repair

Potholes will be cleared of all debris and, depending on the season, hot or cold asphalt mix will be applied to fill the deteriorated areas and will be compacted with a multi-ton vibratory roller or vibratory plate. This is usually a remedial repair. Failure will reoccur in a matter of weeks or months after the repair.

Asphalt Resurfacing

If resurfacing, after preparation and cleaning of the area, tack coat will be applied to ensure proper bonding of the old asphalt to the new asphalt. Hot asphalt will then be installed to the approximate specified depth and compacted with a multi-ton vibratory roller to guarantee proper compaction.

Options

Underlayment Fabric: Underlayment fabric is a non-woven, petroleum-based fabric used to retard reflective cracking between the existing pavement and the newly installed asphalt surface. This fabric acts as a waterproofing membrane, while also adding structural support/strength. After existing pavement has been prepared, liquid asphalt cement will be applied prior to underlayment fabric application.

Leveling Binder: In low areas, hot asphalt will be installed at various depths to adjust pitch to enhance existing grades.

Transitional Milling: In areas requiring the resurface to tie into other existing surfaces (i.e., concrete, etc.), asphalt will be milled and replaced along the perimeter to allow proper depth and transitions.

Asphalt Removal and Replacement

If the affected area is too damaged to resurface, the asphalt will need to be removed and replaced. The area(s) will be saw cut or milled and the existing deteriorated asphalt will be removed to the approximate specified depth. Existing stone base will be compacted and tack coat will be applied to the perimeter of patch(es) to guarantee proper bonding. Hot asphalt will be installed and compacted with a multi-ton vibratory roller and/or vibratory plate.