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Green practices applied to parking lots provide economic benefit and environment sustainability

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For many companies, thinking green has moved beyond a trend and buzzword to become an essential part of their growth strategies. Accordingly, green practices should be a vital part of your organization's business plan. Green practices can provide greater efficiency, better long-term economic choices, and they are environmentally sustainable. The parking lot should be the first place property owners and facility managers implement green practices and reduce costs, through the use of recycled asphalt. U.S. Pavement Services Inc. is a New England-based company that is incorporating these sustainable processes into their daily business, and passing on the benefits of green practices to their clients. Eco-friendly paving methods can save you energy, reduce long term costs, minimize pollution and waste, and may qualify your project for LEED credits.

Infrared Asphalt Repairs Save Both Material and Energy

A new green innovation in asphalt repair, now offered by U.S. Pavement Services, is infrared asphalt repair. Infrared light is long-wave light just beyond the visible portion of the electromagnetic spectrum. It is invisible to the eye and passes through air without heating it, but is very effective at transmitting thermal energy to and heating solid objects. Infrared radiation can heat and soften asphalt to a depth of several inches without creating damaging high surface temperatures that would occur with direct flame heating of the asphalt.

For asphalt repair applications, an infrared heater is used to heat and soften the asphalt to a distance of about a foot around any broken pavement. Deteriorated asphalt is removed and the repair area is filled to grade with new asphalt and compacted with a vibratory roller. The compaction process creates a thermal bond between the old asphalt and new. The repair is literally "seamless" and not subject to joint failure.

Why Are Infrared Repairs More Cost Effective Than Other Methods?

Asphalt repairs have typically been done by the cut and patch paving method. Sections of damaged pavement are cut square, ripped out, regraded, and then repaved with bituminous binder and bituminous topcoat asphalt. Edges are emulsified to bond the new pavement to the old. This method results in a cold bond between old asphalt and new, which is a potential weak point over time. Infrared repairs result in a seamless and highly durable thermal bond between old asphalt and new. As an in-place reclamation process, less old asphalt has to be hauled away for disposal and less new asphalt brought to the site, resulting in less energy consumed by transportation of materials and production of virgin asphalt, as well as less impact on the property. Infrared pavement repairs are frequently up to 23% less expensive than the cut and patch method, and the finished product has the same or better life expectancy as the surrounding asphalt. Infrared repair is arguably the best asphalt patching method available.

Environmentally Friendly New Materials

Asphalt alternatives, such as Permeable Pavers, help to maximize groundwater recharge. This method is recognized as one of the best management practices by the Environmental Protection Agency (EPA). When properly designed and installed, permeable pavers can provide parking lots with a life span of more than 20 years. These are interlocking blocks with open areas or channels so that water can drain through the surface into a stone recharge bed and infiltrate into the soils beneath.

New options to traditional tar sealcoats are now available, including Solar Reflective Coating. This high-performance coating is fuel resistant and non-fading. Solar Reflective Coating is also LEED compliant, extremely durable and efficient. Cementitious Surface Treatment is an EPA-approved modified composite micro-overlay designed for asphalt surfaces. It has all the benefits of a sealcoat, but, once applied, it protects the surface for 20 years or more, saving you energy by reducing the need for sealcoating, resurfacing, and replacement. This treatment also dries fast and is odor free. Additionally U.S. Pavement can then utilize new pavement marking paints. Low Volatile Organic Compounds (VOC) Striping Paints are fast drying, highly durable and dirt resistant. These markings cure consistently regardless of ambient temperature.

Your pavement contractor can be the best resource in determining what new materials are best for your pavement investment. At U.S. Pavement Services, we provide our customers with free pavement inspection and consultation services, and regularly provide innovative cost effective solutions to a variety of pavement problems. Our team is available 24-hours a day at www.USPavement.com.

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