Performance Contracting
Project: Paving

Nothing lasts forever, and asphalt is no exception. And yet, funding asphalt repair and replacement can be burdensome for school districts which is why so many choose to leverage performance contracting to address paving needs.

Background

Performance Contracting is widely known for its ability to modernize facilities through energy efficiency measures, but that same legislation can also fund necessary capital projects. Through the legislation, traditional energy savings measures are combined with necessary facility capital / infrastructure projects to provide a larger scale facility improvement solution.

Dunmore School District, located in Northeastern Pennsylvania, incorporated asphalt repairs and replacement for their high school into their performance contract project.

Even in normal conditions, asphalt deterioration can begin to take place after 3 to 5 years. If a parking lot is approaching 20 years of age, or if 25-35% of the total surface area is in need of removal due to significant damage, it is generally more economical and effective to completely reconstruct the parking lot.

In addition to offering paving and asphalt repair options under the performance contract project, CM3 can also provide sidewalk repair and replacement, as well as landscaping services, for a comprehensive exterior refurbishment plan.

Most asphalt parking lots and highways are designed to last around 20 years. Even though proper maintenance slows the deterioration process, wear and tear caused by various factors, including constant vehicle traffic, water, and age, can lead to cracks and potholes which increase over time.

Performance Contract Benefits

- A guaranteed level of performance from the chosen partner
- Single-point accountability for the entire project
- No referendum required
- No change orders
- An accelerated timeline for facility improvements
- Minimal disruption to building schedules
- Greater oversight regarding scope of renovations
- Better control over final cost of the project
- Enhanced management of renovation timeline
- Greater flexibility on product selection

Project Summary

To address the asphalt needs for Dunmore High School, CM3 provided a combination of repair and replacement options, based on the condition of the specific asphalt. Among the asphalt solutions provided were:

- Re-coat front two parking lots
- Remove and replace main driveway
- Re-coat side driveway
- Remove and replace two other parking lots
- New striping throughout for safe navigation by pedestrians and motorists

Asphalt Repair Options

Patching

This process is necessary when asphalt pavement has completely deteriorated in a localized area. As potholes develop, a surface patch may be a quick, inexpensive fix

For a longer lasting solution, the full depth of the pavement needs to be removed and replaced. Potholes should be repaired as they appear before they become a safety hazard or cause vehicle damage.

Cracksealing

This process helps protect pavement by preventing water from entering the aggregate base layer. Cracks develop as the asphalt ages, caused by rapid temperature changes or by heavy traffic loads. Cracks should be sealed with a rubberized cracksealer after the edges have been cut to maximize adhesion. Asphalt pavements should be cracksealed approximately every 2-3 years.

Sealcoating

Sealing asphalt improves appearance, extends the service life of the pavement, and lowers maintenance costs by slowing the effects of oxidation and water penetration. Depending on the type of sealcoat, they should be applied approximately every 3-7 years.

Overlaying

An overlay adds a layer of new asphalt 1.5-2.5 inches thick over the existing pavement. Overlays add strength to the pavement. Prior to the overlay, areas that need attention should be repaired first. Overlays should be placed when the pavement is in moderate condition, typically when pavements are between 8-12 years old.