

The roundabout experiences very high volumes of heavy goods vehicles, making surface durability and long term performance essential. This sustained heavy loading was placing significant stress on the roundabout, accelerating wear and increasing the likelihood of failure if not properly addressed.

In response to these demands, Westmorland and Furness Council specified Hardipave™, a high performance cementitious grouted surface course engineered to withstand the pressures of heavily trafficked environments. Its proven strength and durability, along with its resistance to fuel and leachate contamination, made it an ideal solution for this busy roundabout.

Upon inspection, the existing surface was found to be suffering from multiple signs of advanced deterioration. As well as visible cracking at the centre joints, likely caused by years of continuous heavy loading from HGVs. It also displayed widespread HRA chipping loss and rutting. These failures reinforced the need for a robust and long lasting material capable of withstanding the traffic conditions. Hardipave™ was chosen specifically for its jointless construction, which mitigates the risk of future centre joint failure and helps extend the life of the carriageway.

The resurfacing works covered approximately 2,200 m² of the roundabout, using 14 mm Hardipave™. To enhance the structural integrity of the carriageway, a 60 mm binder course was installed across the full area before the application of the surface course. This ensures both strength and flexibility, making it well suited to the demands of this route.