

Product: Client: Contractor: Location: Completion: ULTILAYER London Borough of Enfield Marlborough Highways Hyde Park Gardens and Avenue May 2018

Proven performance

Durable resurfacing for concrete overlays, Hyde Park Gardens & Avenue, Enfield

THE CHALLENGE

These tree lined avenues in North London were suffering from reflective cracking in the asphalt road surface. Regular traffic movements, on street parking and underlying movement in the jointed concrete base were causing failure in the asphalt overlay. Simply replacing the overlay using a conventional asphalt would result in the reflective cracking appearing again over time. This would mean additional cost for the local authority and repeated disruption for residents. The client, London Borough of Enfield, was keen to find an innovative, long term solution to break this cycle of repeated failure and repair. Resurfacing work would also need to be completed quickly to avoid disruption to local residents.

OUR SOLUTION

After discussing the available options, Tarmac's Technical Product Support Manager recommended using 6mm ULTILAYER in a single 25mm layer with recycled steel slag aggregate. ULTILAYER contains a high performance polymer modified binder (PMB) for a flexible and durable surface with proven resistance to cracking and deformation. This durability and long term crack resistance has been proven on some of the UK's busiest and most challenging roads, including Oxford Street in central London. It can be laid quickly in a single layer up to 70mm thick for fast, cost effective resurfacing and as an alternative to full depth reconstruction.

RESULTS AND BENEFITS

Once the existing overlay had been removed, around 140 tonnes of 6mm ULTILAYER asphalt was supplied and laid over 1800m² on Hyde Park Avenue and 540m² on Hyde Park Gardens. Using this innovative approach provides a long term solution to the persistent problem of cracking which should result in reductions in long term maintenance expenditure and disruption for local people. Using a 6mm aggregate meant that a thin overlay could be laid to maintain the existing levels on the street and has resulted in a significantly quieter road surface. Using a recycled slag instead of a primary aggregate also helped to improve sustainability. Following the success of this scheme, this approach has been adopted on other roads in the Borough.

