

CASE STUDY

NORTHAMPTONSHIRE COUNTY COUNCIL, UK



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Northamptonshire is part of the 'Golden Triangle' for warehousing and logistics and is a fast-growing county. New housing and commercial developments cause ever-growing vehicle numbers whilst increasing pressure on council budgets requires more effective and efficient highways network management.

ASSET MANAGEMENT

Northamptonshire County Council is responsible for maintaining over 500km of 'A' Roads and nearly 3,900km of minor roads which serve local residents and support the county's growing economy.

Several major routes cross the county, which is home to a large warehouse and logistics sector. A well-maintained highway network is essential to support growth and attract increased investment.

THE CHALLENGE

The fourth longest road in England, the A6 varies between single and dual carriageway. This project involved a 2.4km dual carriageway section of the Rushden - Higham Ferrers bypass, completed in 2003 and currently used by an estimated 20,000 vehicles per day per carriageway, 20% of which is commercial vehicle traffic.

After 16 years, the SMA surface course was at the end of its serviceable life, having been extensively patched and on the cusp of ravelling failure. With insufficient budget for resurfacing, Northamptonshire County Council needed a cost-effective way to extend surface life.

The successful solution needed to be:

Fast and Efficient - capable of being applied in a single pass, at night, to minimise traffic disruption

Quiet - because of the proximity of the road to a nearby housing estate

Proven - over many years to extend surface life and delay the need for resurfacing.

I was looking for a cost-effective solution to extend the life of the asset at a difficult site. Rhinophalt was the right fit for our requirements at this stage as it offered a speedy and efficient solution.

Martin Smith

Kier/WSP (on behalf of Northamptonshire Highways)

THE SOLUTION

RHINOPHALT® is an asphalt preservative designed to extend the life of asphalt.

Fast and Efficient

RHINOPHALT® was spray applied to 38,500m² over several night shifts in October 2019, with 24,000m² treated in a single shift. The work was completed under full road closure, working behind the patching contractors. This enabled patching and preservation works to be completed in the same closure minimising disruption. With road closures in place from 22:00 to 06:00, application could begin once the road had been swept clean and the gullies masked off.

Line marking was replaced after the RHINOPHALT® had fully cured, and the road was re-opened well in advance of the 06:00 deadline. No revisits were required following application.

SUMMARY

Life Cycle Planning

RHINOPHALT® forms part of a planned, cost-effective surface treatment strategy reducing the rate of future deterioration resulting in increased service life.

Extended Pavement Life

RHINOPHALT® treated surfaces are more resistant to stone loss, water ingress and the severe ageing effects of weathering and oxidation. One application of RHINOPHALT® on older asphalt surfaces can extend pavement life by up to 5 years. RHINOPHALT® provides an alternative road surface maintenance treatment where surface dressing isn't the preferred option and allows for night-time working.