## **Asphalt Reinforcement**



Rehabilitation of Fen Grove using Rotaflex, Bexley, London



Key Project Information

Client London Borough of Bexley

Contractor FM Conway

Products • Rotaflex 830SL

**Grid Installer** 

Benefits • Speed of installation

ABG

Reduced pavement thickness

• Extended pavement life

Fen grove is a residential area in the London Borough of Bexley. The road was constructed in the 1930's using concrete slabs with expansion joint and was subsequently overlaid in 1988 with flexible material. The road suffered with reflective cracking from underlying differential settlement, failing expansion joints, poor ride quality and had reached the end of its serviceable life.



Fen Grove before rehabilitation works

Maintenance options were limited due to fixed thresholds, those considered were full reconstruction, inlay, or grid reinforced inlay.

Full reconstruction was dismissed due to cost and time, simple inlay was acknowledged as only providing limited life due to reflective cracking from the underlying differential settlement and expansion joints. Grid reinforced overlay was seen as the best option to give maximum pavement life in a cost effective and rapid treatment. London Borough of Bexley after



Surface milled back to concrete slab

consulting with ABG's technical department selected Rotaflex 830SL as being the solution allowing them to achieve the required finish.

LBB's Term Maintenance Contractor FM Conway carried out the work with ABG supplying and installing the



Rotaflex. The existing failed flexible material was milled back to the concrete slabs, and the Rotaflex was applied directly to the concrete using a bitumen emulsion bond coat. Rotaflex 830SL is a 50 x 50kN glass fibre pavement reinforcement system combined with a polyester paving fabric which provides crack control, reinforcement and waterproofing functions.

The integral polyester paving fabric provides a waterproof barrier when overlaid and absorbs the bond coat. The paving fabric also ensures no pick up or rucking when tracked by delivery lorries and the asphalt paver and gives a strong bond to the receiving surface. A 40mm of 10mm SMA overlay was laid by FM Conway and now the rotaflex is performing completely as expected.

Nigel Threadgold, Highways manager, London Borough of Bexley commented

"The use of Rotaflex on Fen Grove allowed us to rethink the rehabilitation of the surface allowing us to achieve a very favourable finished product which we anticipate will last many more years."

Contact ABG to discover how Rotaflex could help you deliver a sustainable, cost efficient and carbon neutral solution.

## **About ABG**

ABG are a market leading developer of high performance geosynthetic solutions for use in a wide range of civil, environmental and building applications.

Established for 25 years and based in the UK ABG pride themselves of delivering outstanding customer service along with innovative solutions.







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