TARMAC
A CRH COMPANY

Client:	Ministry of Defence
Main contractor:	Carillion
Contractor:	Tarmac Contracting
Location:	RAF Waddington, Lincolnshire
Completion:	May 2015

PAVEMENT SOLUTIONS

Proven performance

TARMAC CBGM & ULTIFOAM

The ultimate in high performance pavement solutions

CHALLENGE

The 2.7km long runway at this RAF base near Lincoln required full depth reconstruction as part of a £35 million project. The finished surface would need to withstand long term use by a wide range of military aircraft weighing up to 150 tonnes.

Building the new runway would require large volumes of asphalt and generate thousands of tonnes of asphalt planings. Despite this client wanted to minimise impact on the environment and local people as much as possible, which meant minimising waste and local site traffic. Security restrictions on site, also meant additional challenges when planning transport and logistics.

Our solution

After detailed consultation with the client and main contractor, Tarmac proposed using a cement bound granular material (CBGM) and ULTIFOAM recycled asphalt to build the base of the runway. Tarmac's ULTIFOAM process allowed planings from the old runway to be crushed and screened on site and then combined with cement, bitumen, PFA and used in the base of the new runway.

This process allowed 15,000 tonnes of tar contaminated planings from the site to be safely encapsulated and used, avoiding potential disposal costs of over £2 million. Similarly, using CBGM enabled further reductions in project costs.

Results and benefits

A mobile cold mix recycling mixing plant was installed on site, producing over 35 thousand tonnes of ULTIFOAM recycled asphalt, using up to 86% recycled planings. This was the first time ULTIFOAM had ever been used on a runway. In addition over 32,000m² of CBGM was laid during the project.

Using site-processed recycled asphalt planings and site won aggregate, greatly reduced inbound and outbound haulage requirement. This saved hundreds of vehicle movements over the duration of the project. It generated major savings in the cost of primary aggregate, transport, waste disposal. It also reduced local traffic around the site and meant fewer vehicle emissions for improved sustainability.

For more information contact **email@tarmac.com**

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