CASE STUDY: Ref 189



A14 Trunk Road, Beyton, Suffolk, UK Glasstex to retard Reflective Cracking, 2006

Reflective Cracking of the existing dual carriageway



BENEFITS TO CLIENT

- Use of Glasstex avoided reconstruction of the total road structure (including lean mix concrete base)
- Works were undertaken using overnight carriageway closures and a diversion route
- Minimal transport management costs and disruption to the travelling public
- Works will extend the life of the pavement
- Glasstex was fast to install and did not delay the resurfacing, road marking and crack sealing works

THE PROBLEM

Transverse reflective cracking had occurred over about an 1800m length of the 2 lane west bound dual carriageway of the A14. Cores showed the construction to comprise 150mm of asphalt over approximately 250mm of lean mix concrete.

THE SOLUTION

Plane off the top 100mm of asphalt, inlay with Glasstex P100 geocomposite, machine laid for speed and place a 60mm binder course and 40mm surfacing.

PROJECT DESCRIPTION

The site is located within the Highways Agency's Maintenance Area 6 where it is believed geosynthetics had not previously been used to retard reflective cracking. The Managing Agent for Area 6, Atkins obtained a departure from standard from the HA for the works to use the reinforcing geocomposite consisting of a grid of glass fibres stitch bonded on to a needle punched fabric.

The works were completed in 5 nights between 28th March and 3rd April 2006 and consisted of:

- 11285 m2 of 40mm surface course.
- 7094 m2 of 60mm binder course.
- 6903 m2 of Tensar Glasstex P100 Geocomposite.
- 3.3km of road marking and reflecting road stud refreshment/replacement.
- 114 m2 of crack sealing.

All works were completed to programme with no snagging or outstanding issues. The installation of the geocomposite by specialist installer Foster Contracting Ltd was efficient and did not delay the resurfacing process.



Glasstex is bonded onto the planed surface



Binder course placed directly onto Glasstex

CONTRACT DETAILS

Client: Highways Agency

Specifier: Atkins

Contractor: Amey Mouchel

Paving Contractor: Lafarge

Asphalt Reinforcement Installer: Foster Contracting Limited



Tensar International Limited Cunningham Court Shadsworth Business Park Blackburn BB1 2QX United Kingdom

Telephone: +44 (0) 1254 262431 Facsimile: +44 (0) 1254 266867 Email: info@tensar.co.uk www.tensar-international.com



Foster Contracting Limited

Foster Contracting Limited Head Office and Southern Depot Maldon Road

Kelvedon

Colchester CO5 9BA

Essex

Telephone: 01376 570345

 ${\bf Email: kelvedon@fostercontracting.co.uk}$

www.fostercontracting.co.uk