

Retread is a cold in-situ road recycling process



## Retread Carriageway, Norfolk

Retread is a cold in-situ road recycling process. We have been operating this process for over 40 years for both carriageways and footways and have highly experienced teams working across the UK using specifically adapted plant and equipment. The process is versatile in its application and the benefits of it being an in-situ process means access and movements to and from the site are significantly reduced.



### Application Details

The carriageway contract was undertaken by Colas in May 2009 and completed over three consecutive weeks. Unlike conventional Retread projects Norfolk differs in that large quantities of aggregates are imported onto the majority of sites. This is because many of the sites identified for the Retread process often have little or no foundation, and as a rule, the existing material uncovered is often unsuitable and of a poor condition. Colas offers the option of utilising road planings acquired from local works as an

alternative to importing virgin aggregates onto site. However, this is dependent on the surfacing operations taking place within the vicinity at the same time. Alternatively, planings can be stored prior to Colas' arrival on site and used as and when they are needed. We reuse and recycle as many road planings as possible to further contribute to the environmental benefits offered by the process.

Client: May Gurney

Date: May 2009

Area: 36,315m<sup>2</sup>

Duration: 17 days

Location: Norfolk



Before



After

## Total energy consumption and greenhouse gas emissions

### Total energy consumption, MJ/m<sup>2</sup>

Structure	Binder	Aggregates	Manufacture	Transport	Laying	Retread Equipment	Total	Saving
75 mm DBM	35.0	8.9	40.2	31.0	6.9		122.1	
Retread Southery	25.4	1.9		2.8	3.8	16.4	50.3	58.8%
Retread Outwell	26.4	1.9		3.0	4.8	16.4	52.5	57.1%

**58.8%** total energy saved using Retread

### GHG emission in equivalent CO<sub>2</sub>, kg/m<sup>2</sup>

Structure	Binder	Aggregates	Manufacture	Transport	Laying	Retread Equipment	Total	Saving
75 mm DBM	2.06	0.32	3.09	2.48	0.53		8.49	
Retread Southery	1.37	0.07		0.23	0.30	1.23	3.20	62.3% 49,462 kg
Retread Outwell	1.43	0.07		0.25	0.38	1.23	3.36	60.4% 11,517 kg

**60,979 kg** total saved using Retread

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