

COLOURED SURFACING – need for review

Paper from Spokes to Cllr Jim Orr, Transport Vice-Convener 11 April 2013

1. BACKGROUND

1.1 Coloured surfacing for onroad cycle facilities is important for 2 purposes...

- **It is a safety measure**, given the evidence¹ that motor vehicles are less likely to encroach into a lane which is coloured. This is particularly important at danger points, notably where cyclists are on the right-hand side of parked or moving traffic.
- **It is promotional**, in giving people greater confidence that the roads are intended for cyclists and feel safe to cycle on. Whilst onroad unsegregated lanes are certainly not sufficient to give every category of potential cyclist such confidence, much evidence² points to the widespread provision of coloured onroad facilities in Edinburgh as having been a big factor in the city's success in raising cycle use substantially over the last 20 years, at a time when it was static or declining in most of Scotland and the UK.

If these purposes are to be achieved, the colour must be clearly visible.

1.2 In 2011/2012 the Council reviewed methods of installing coloured surfacing, and decided on the red-chip method, which has the following features as compared to thermoplastic...

- It does not wear out with age and traffic passing over it.
- It is very cheap to install if the road is anyway being resurfaced, as in the Dalry Rd example - but it is costly to install in other cases, as in QBiC.
- It ends disputes with Streetscape in areas where appearance is considered predominant.
- It is simpler for utilities to replace during repair works - all they need is a bucket of red chips to add into their standard mix, rather than a separate operation and equipment.
- ***But these largely positive factors lose their relevance if the colour is insufficiently visible.***

1.3 The review was discussed at the December 2011 Cycle Forum, and our understanding was that the new method would be used for projects over the next few months – notably in QBiC and Dalry Road – and these would be used to assess the reaction of the public. On that basis, and given the cost and maintenance advantages, Spokes representatives agreed that the new system was worth trying, although we expressed our genuine uncertainty as to whether visibility would be adequate.

1.4 Unfortunately feedback from cyclists is strongly of the view that the colour of the new system is inadequate, and indeed is virtually invisible in some lighting conditions. Many prefer the old thermoplastic surfacing, even given its deterioration over time, such that it became very patchy – although often still more visible for a considerable period than the red chip system.

1.5 However, it now appears, from an appendix tucked into a Committee paper³, that the council has taken the review as definitive, contrary to our understanding in 1.3 above.

1 See for example www.spokes.org.uk/wordpress/downloads/technical-and-research/local-transport-research

2 See for example Spokes Bulletin 105 page 7, Spokes Bulletin 107 page 7, and section A of our response to the APPCG Inquiry [linked from the 6.12.12 news item at spokes.or.g.uk].

3 Paper 7.5 at the Jan 15 TEC Committee, which is primarily about the PATAP public transport consultation, includes this new 'Coloured Surfacing Protocol' [for cycle and bus lanes] and takes it as a given.
www.edinburgh.gov.uk/download/meetings/id/37650/item_no_7_5_public_and_accessible_transport_action_plan

2. THE FUTURE

2.1 Spokes urges the Council to revisit the issue.

Our strong preference is for a bright colour to be used for all onroad cycle facilities [2.2 below].

If, for reasons of cost and maintenance, this is not agreed then bright colour should nonetheless always be used at locations of particular risk [2.3 below]. The red chip method should then only be used at other locations and only when a road is anyway being resurfaced – from the experience of QBiC we do not consider it a worthwhile future use of money to install red chips where a road is not anyway being resurfaced.

2.2 **Colouring techniques should be re-assessed** including methods not investigated in the original review, and a method agreed which ensures bright colour. We are not sure, for example, whether any or all of the following were assessed...

- Use of red tarmac and/or red binding material as in the Linlithgow red cycle lanes on Falkirk Road. West Lothian council calls it '*red stone mastic asphalt*,' available from 'any asphalt supplier.' [NB – these lanes were initially badly laid, resulting in some break-up, but we understand that was a fault of the contractor not of the concept].
- Ditto but using a more modern (but more costly) synthetic bitumen, such as Mastertint.⁴ This can be used alone or with red chippings.
- Applying coloured surfacing by a cold method rather than hot. We understand anecdotally that this has been used in London's coloured (blue) lanes and is significantly longer-lasting than Edinburgh's previous hot method.
- The Council's previous thermoplastic approach is of course a further option.

2.3 **The Council should at the least use a bright-colour method** [2.2 above], ***for reasons of road safety, in all areas where cyclists are particularly at risk.***

The criterion for ***locations of greater risk*** is ***anywhere that there may be moving or stationary motor vehicles to the left of the cyclist.*** This includes the following [not an exclusive list] ...

- cycle lanes passing a side-road entry
- cycle lanes on the outside of parked cars
- advance stop areas
- cycle lanes between traffic lanes.

2.4 **If red chipping is still to be used in some areas** then the council should investigate increasing the proportion of red chips. Although we have been told that there is a maximum proportion beyond which the surface may deteriorate, we note that some sections of chipped lane have a significantly higher density than others – thus the maximum permissible density is often not attained. Clearly ***stricter quality control is vital***, and similarly during road repair by utilities.

2.5 **Finally, we stress the importance of maintaining white-lining in good condition.** We also emphasise that this is in no way an alternative to the provision of effective colour as in 2.2-2.3 above, but a necessary addition. The council should consider regular full repainting of such lining, possibly every 2 or 3 years, as happened in 2012, rather than relying on reports of deterioration. This would be a worthwhile use of a small part [£30k??] of the revenue cycling budget.

4 www.tarmac.co.uk/case_studies_ideas/solution_finder/coloured_asphalt_cycle_paths.aspx and www.tarmac.co.uk/case_studies_ideas/solution_finder/coloured_asphalt_for_bus_lanes.aspx