
By: Kim Hills, Head of Community Operations
To: Highways Advisory Board – 5 May 2009
Subject: Concrete Roads
Classification: Unrestricted

Summary: The purpose of this report is to describe the progress made in developing the approach and to promote a programme of repairs to concrete roads.

1. Introduction

- 1.1 This report is in response to the issues concerning Magnolia Avenue, Cliftonville reported to the Board on 8 July 2008 (minute 3) and the subsequent discussions about the new KHS approach to maintaining the authority's minor concrete roads asset on 6 January 2009 (minute 6).
- 1.2 The purpose of this report is to describe the progress made in developing the approach and to promote a programme of repairs to concrete roads.

2. Survey Approach

- 2.1 The condition assessment of Kent's minor roads is achieved by a visual survey carried out on a two-year cycle. Six Districts are surveyed one year with the remaining Districts surveyed the next.
- 2.2 In order to make an assessment of the condition of the concrete road asset, the 2008/09 survey was extended to cover concrete roads in the other six Districts that the local Highway Inspector considered were in urgent need of attention. Concrete roads in those same six districts which were not considered in need of attention will be surveyed by default in 2009/10.
- 2.3 This year's visual survey was enhanced to enable a comprehensive assessment of the needs for maintaining the Authority's concrete roads. As a result, the concrete road survey has been separately analysed to develop a specific programme of repairs for the County's concrete estate roads.

3. Approach to Programme Development

- 3.1 The visual survey data has been analysed to identify potential schemes and to calculate a Road Condition Index (RCI) for each scheme. Thresholds are applied to the RCI values for every 10m of the County's minor roads and each section is colour-coded red, amber or green depending on the severity of defects recorded in the survey.
- 3.2 This approach has enabled all minor concrete roads surveyed to be included in the Carriageway Asset Manager system (JCAM). JCAM identifies clusters of red and amber 10m sections to identify potential schemes across the minor road network. JCAM then lists potential schemes in a priority order, suggests an outline treatment and provides a broad cost of repair for each scheme.
- 3.3 The outline treatments included in JCAM are:
 - Concrete roads: Strengthening, Localised Repair and Micro-asphalt

- Covered concrete roads: as for bituminous roads
- Block-paved roads: Strengthening and Relay Blocks

3.4 The construction type was recorded during the visual survey, and this information has been included in JCAM. This enables KHS to provide, for the first time, potential scheme programmes targeted for concrete, covered concrete and block-paved minor roads. These programmes will be finalised in June/July 2009 using the JCAM data published on the Kent Gateway.

3.5 The role of the Highway Resurfacing Team is to now carry out detailed assessments of each of the high priority schemes to develop specific treatment requirements for each scheme. However, the outputs from JCAM allow for the overall investment needs to be assessed, and to target concrete roads for detailed assessment and repair.

4. Assessment of Need for Concrete Roads

4.1 The separate programmes of work have been collated and assessed to provide the following summary of value of schemes identified:

Road Type Treatment	Concrete Roads (£k)	Covered Concrete Roads (£k)	Block-paved Roads (£k)	Totals (£k)
Strengthening	12	0	0	12
Localised Repair	134	N/A	N/A	134
Micro-asphalt	3	926	N/A	929
Surface Dressing	0 Due to 1km rule*	0 Due to 1km rule*	N/A	0
Thin Surfacing	N/A	445	N/A	445
Relay blocks	N/A	N/A	0	0
Totals	149	1,371	0	1,520

* Surface Dressing schemes are currently restricted to those 1km in length or greater. Schemes on concrete roads tend to be shorter than this minimum length and therefore are treated with Micro Asphalt, Thin Surfacing or localised repairs in the model.

4.2 The above table indicates that the total cost of repairing all potential schemes identified on concrete, covered concrete and block-paved minor roads is £1.52m.

4.3 The cost of all schemes identified on the minor network is £18.37m – this includes a majority of schemes on bituminous roads.

4.4 The schemes on concrete, covered concrete and block-paved minor roads make up 8.5% of the total minor roads schemes by cost.

5. Recommendation

5.1 It is recommended that HAB accepts the new approach to identifying investment needs for the minor concrete road network in Kent, and that the Highway Resurfacing team now assess detailed requirements for repair of the top priorities to finalise the programme of repairs for 2010/11 onwards.

5.2 It is also recommended that, on the basis of the need for investment in concrete roads as demonstrated by the table above, £0.34m (8.5% of the indicated minor roads allocation) is dedicated to the repair of concrete roads annually from the 2010/11 programme onwards.

Background Documents:

None.

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