

Report to the Cabinet

Meeting to be held on Thursday, 7 September 2023

Report of the Director of Highways and Transport

Part I

Electoral Division affected:
(All Divisions);

Corporate Priorities:
Delivering better services;

Determination of Polished Stone Values and High Friction Surfacing Requirements - Code of Practice

(Appendix 'A' refers)

Contact for further information:

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Brief Summary

A Code of Practice has been written in conjunction with national guidance to provide a clear methodology for the determination of the correct Polished Stone Values and the use of High Friction Surfacing when resurfacing the carriageway. Application of this will seek to ensure long term skid resistance is not compromised while reducing whole life maintenance costs and improving the overall sustainability of road surfacing.

Recommendation

Cabinet is asked to approve the 'Determination of Polished Stone Value and High Friction Surfacing Requirements' Proposed Code of Practice as set out at Appendix 'A'.

Detail

Lancashire County Council as Highway Authority is responsible for maintaining highways maintainable at public expense. In certain locations there is a greater need for a higher skid resistance material for the surface. These locations generally are high speed roads, the approaches to pedestrian crossings and/or major traffic signalised junctions in line with National Guidance.



The contribution of the road surface to the overall friction available between the tyre and the road surface is known as skid resistance. Under the action of traffic, the microtexture of the aggregate becomes “polished”, leading to a reduction in skid resistance. This code of practice aims to prescribe the components of the surfacing mixture in relation to their resistance to polishing, so that surfacing materials generally provide adequate skid resistance during their service lifetimes. This component is referred to as the Polished Stone Value.

Natural aggregates that possess a high Polished Stone Value, that is, a high resistance to polishing, are a high value, finite resource, and while the majority of which are available within the UK, they are not available within Lancashire and must be hauled from other parts of the UK. In cases where very high levels of retained skid resistance are required a specialist High Friction Surface system may be required. It is not available locally and is typically imported from China or Guyana, and as such coupled with the manufacturing process incurs a high cost and carbon footprint. The high friction surfacing systems, given that their locations are typically in high risk, and high traffic stress areas, tend to have a shorter life span than traditional road surfacing. Their use therefore increases the life cycle cost of the surfacing.

As such, this Code of Practice, written in conjunction with national guidance aims to provide a clear methodology for the determination of correct Polished Stone Values, and use of High Friction Surfacing. Application of this will seek to ensure long term skid resistance is not compromised while reducing whole life maintenance costs and improving the overall sustainability of road surfacing.

Appendix

Appendix 'A' is attached to this report. For clarification it is summarised below and referenced at relevant points within this report.

Appendix	Title
Appendix 'A'	Determination of Polished Stone Value and High Friction Surfacing Requirements: Proposed Code of Practice

Consultations

N/A

Implications:

This item has the following implications, as indicated:

Risk management

Legal

By adopting this code of practice for use within Lancashire, it will seek to inform that the most appropriate Polished Stone Value material is laid for the location, speed and traffic volume of the carriageway taking all factors into account. Applying the methodology will seek to ensure long term skid resistance is not compromised while



reducing whole life maintenance costs and improving the overall sustainability of road surfacing.

Financial

High Friction Surfacing is an expensive material, and the Code of Practice determines where High Friction Surfacing should be implemented in line with National Guidance and determines where it may not be required, costings for each individual scheme will be presented as part of the programme to be approved, the relevant surfacing being used in each case in line with this code of practice. Use of expensive materials may limit the amount of work to be carried out within a set grant amount awarded each year, and programmes will be selected with due note given to the costings of each scheme and the overall funding envelope.

List of Background Papers

Paper	Date	Contact/Tel
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None

Reason for inclusion in Part II, if appropriate

N/A

