

<b>TITLE</b>	<b>Wokingham Highway Maintenance</b>
<b>FOR CONSIDERATION BY</b>	Community and Corporate Overview and Scrutiny Committee on 2 September 2020
<b>WARD</b>	None specific
<b>LEAD OFFICER</b>	Director, Place and Growth - Chris Trill

**OUTCOME / BENEFITS TO THE COMMUNITY**

Adoption of the UK Pavement Management System approach means that Wokingham has a well managed highway network.

**RECOMMENDATION**

That the Committee notes that the Council manages the Wokingham highways network in accordance with UK Pavement Management System recommendations which is the national standard for a well-managed highway infrastructure.

**SUMMARY OF REPORT**

The selection of roads to be included in the annual planned structural maintenance programme is based upon UK Pavement Management System (UKPMS) which includes annual Network Condition Surveys and our own internal design process (including site visits to check the condition survey scores and where required core sampling to establish the scale of intervention to be recommended). This is recognised by central government and the wider industry through its code of practice as the national standard for a well-managed highway infrastructure. It is the adoption of this system that establishes what parts of the network are prioritised for maintenance and what kind of resurfacing treatment are appropriate for each situation. This approach ensures that the annual structural maintenance programme is based on meeting the highest priority needs on WBC network within the funding available.

## Background

The maintenance of highways is a statutory duty for the Council under the Highways Act 1980. The maintenance of the Wokingham Highways network is made up of three main works streams, reactive maintenance (i.e. potholes etc.), winter maintenance (gritting) and planned structural maintenance (resurfacing, surface dressing and micro-asphalt). Under our new term maintenance contract with VolkerHighways reactive maintenance is guided by the Wokingham Highways Inspection Policy. The contractor has the responsibility to undertake the required inspection regime, to 'find and fix' any safety defects and to assess and fix any safety defects reported by the public (up to a certain size as larger defects are passed back to WBC for ordering).

Selection of roads to be included in the annual planned structural maintenance programme is based upon UKPMS (which includes annual Network Condition Surveys) and our own internal design process (which includes site visits to check the condition survey scores and where required core sampling to establish the scale of intervention to be recommended. For the avoidance of confusion the word pavement is used here to cover carriageways, footways and cycle tracks.

The UKPMS not only prioritises which roads should be included on the programme but also identifies which type of treatment would be appropriate for each location. Like most other highways authorities Wokingham Borough Council makes use of a range materials such as micro-asphalt and surface dressing to extend the lifespan of the road network before it requires a more expensive full resurfacing treatment. The full life expectancy of the new plane and inlay treatment (using Hot Rolled Asphalt (HRA), Stone Mastic Asphalts (SMA) or Asphalt Concrete (AC)) of up to 20 years is usually only achieved through the application of a surface dressing or micro asphalt treatment after 8 to 10 years. All these materials are of course approved by the Highways Authority Product Approval Scheme (HAPAS) which was developed by market experts to offer consistent and clear testing methods for products and systems designed for use in the highways industry. In addition both micro-asphalt and surface dressing treatments benefit from having a low carbon footprint and are is quick to apply, which means less disruption to road users, residents, local businesses and the emergency services.

In general a plane and inlay resurfacing treatment is recommended where a road surface has reached the end of its useful life, whereas surface dressing or micro asphalt treatments are used where underlying structure of the road surface is sound and the surface itself is showing signs of superficial wear. Plane and inlay treatments are the most expensive types of intervention and on average costs between 6-10 times more than surface dressing or micro-asphalt treatments.

Where underlying structure of the road surface is sound and the surface itself is showing signs of superficial wear it is likely to be identified for either surface dressing or Micro Asphalt treatment. Both surface dressing and micro-asphalt treatments rely on

traffic to roll it to the final surface and micro-asphalt particularly can look very rough in the initial months after laying.

Winter maintenance is guided by the WBC Winter Maintenance Plan.

## **Analysis of Issues**

### **UK pavement Management System**

The use of a highway asset management system is essential to deliver an effective and efficient approach to asset management. UKPMS is the national standard for pavement management systems for the assessment of local road network condition and for the planning of investment and maintenance on paved areas of roads, kerbs, footways and cycle tracks on local roads within the UK.

Systems accredited to the UKPMS standard have demonstrated that they meet the current national standards with respect to maintenance highway asset inventory as well as condition data, data processing, condition reporting and financial reporting.

UKPMS accreditation is governed by the Road Condition Management Group (RCMG) on behalf of the UK Roads Board.

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### **Network Condition Surveys**

WBC undertakes a range of annual network condition surveys and uses a UKPMS accredited WDM Web PMS/UKPMS system to assist in the planning of maintenance through the systematic collection and analysis of condition data.

WBC network condition surveys data is collected by carrying out a combination of visual surveys (CVI and DVI) and footway network surveys (FNS), and machine surveys such as Scanner, SCRIM and deflectographs surveys.

WBC Network Condition Surveys are undertaken by accredited organizations. Inspectors for the visual surveys are accredited as per "UKPMS volume 2, chapter 2: Inspector Accreditation". Visual surveys are carried out on unclassified WBC carriageway network and footway network surveys (FNS) are carried out on footways. Machine survey (Scanner) is carried out on A, B and C roads. All Scanner vehicles meet the accreditation requirements outlined in the UK Roads Board specification "SCANNER surveys for local roads".

## **Structural Maintenance Design and Delivery**

The data collected from the network condition surveys is uploaded to UKPMS which then generates provisional priority programme. WBC highways designers then undertake a programme of material testing on all those schemes prioritised on the provisional programme for full plane inlay resurfacing in order to understand current carriageway composition and to ensure that resurfacing design is appropriate to the specific conditions. All provisional priority programme schemes including those identified for micro asphalt or surface dressing are walked on site to confirm treatment types and scheme extents by a design engineer.

Schemes are then designed and drawings prepared based upon the network condition surveys, material testing and site walkover. The detailed design will confirm the extent and scope of all resurfacing work and will produce and updated estimated cost of each of the schemes. The revised estimates are used to match the proposed programme against the available budget and to generate the annual structural maintenance programme, which is based on meeting the highest priority needs on WBC network within the funding available.

The confirmed programme is sent to a contractor for delivery who draws up detailed programme of works including securing streetworks permits for the dates for each of the schemes. It is likely that each of the different treatments will be delivered by different sub-contractors/Teams and it is usual for there to be three separate programmes for surface dressing, micro-asphalt and plane inlay. Surface dressing and micro-asphalt treatments are weather dependent and generally undertaken in the late spring/early summer, whereas plane and inlay schemes are less sensitive and can be carried out at any time of the year. The delivery of the structural maintenance programme is regularly reviewed as we work through the schemes and actual costs of schemes is known and it is not uncommon to add in or take out a few schemes towards the end of the programme in order to ensure that we are on budget.

Once the works are complete the contractor is tied into a defects period and a joint WBC/Contractor snagging inspection is undertaken to identify any remedial issues. Addressing remedial issues on surface dressing or micro-asphalt can be problematic within the same year as specialist contractors tend to be fully booked in the summer months and it is usual to include remedial works in to the following years programme.

## FINANCIAL IMPLICATIONS OF THE RECOMMENDATION

*The Council faces severe funding pressures, particularly in the face of the COVID-19 crisis. It is therefore imperative that Council resources are focused on the vulnerable and on its highest priorities.*

	How much will it Cost/ (Save)	Is there sufficient funding – if not quantify the Shortfall	Revenue or Capital?
Current Financial Year (Year 1)	0	0	N/A
Next Financial Year (Year 2)	0	0	N/A
Following Financial Year (Year 3)	0	0	N/A

<b>Other financial information relevant to the Recommendation/Decision</b>
N/A as no decision is being taken

<b>Cross-Council Implications</b>
None

<b>Public Sector Equality Duty</b>
Not required

<b>Reasons for considering the report in Part 2</b>
N/A

<b>List of Background Papers</b>
N/A

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