

**Decision Maker:** PORTFOLIO HOLDER FOR ENVIRONMENT AND COMMUNITY SERVICES

**Date:** 21st March 2021

**Decision Type:** Non-Urgent                      Executive                      Key

**Title:** PLANNED HIGHWAY MAINTENANCE

**Contact Officer:** Garry Warner, Assistant Director (Highways)  
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**Chief Officer:** Colin Brand, Director of Environment & Public Protection

**Ward:** (All Wards);

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1. Reason for report

This report recommends a programme of planned carriageway maintenance projects to be funded from existing revenue budgets.

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2. RECOMMENDATION(S)

That the Environment Portfolio Holder:

- i) Agrees that the schemes listed in Appendix 'A' and Appendix 'B' are included in a programme of planned highway maintenance for 2022/23, to be undertaken by the Council's existing highway term maintenance contractor;
- ii) Agrees that the decision to include additional schemes in the programme be delegated to the Director of Environment & Public Protection, based on the results of further condition assessments.

## Impact on Vulnerable Adults and Children

1. Summary of Impact: None
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## Corporate Policy

1. Policy Status: Existing Policy:
  2. BBB Priority: Excellent Council Quality Environment Safe Bromley Vibrant, Thriving Town Centres :
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## Financial

1. Cost of proposal: Estimated Cost : £2.5m
  2. Ongoing costs: Recurring Cost : None
  3. Budget head/performance centre: Highways planned maintenance
  4. Total current budget for this head: £2.5m
  5. Source of funding: Revenue budget 2022/23
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## Personnel

1. Number of staff (current and additional): 3 fte
  2. If from existing staff resources, number of staff hours: 3 fte
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## Legal

1. Legal Requirement: Statutory Requirement :
  2. Call-in: Applicable:
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## Procurement

1. Summary of Procurement Implications: None
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## Customer Impact

1. Estimated number of users/beneficiaries (current and projected): Borough wide
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## Ward Councillor Views

1. Have Ward Councillors been asked for comments? Yes
2. Summary of Ward Councillors comments: n/a

### **3. COMMENTARY**

#### **Background**

- 3.1 Bromley's highway assets include 547 miles (880Km) of carriageways and 885 miles (1,425 Km) of footways. It is a highly visible asset used by most residents and businesses daily. A well-maintained highway facilitates safe and reliable travel for pedestrians, cyclists, and motorists, and contributes to the vitality of the borough and the local economy. The highway network has a gross replacement cost of approximately £1.5 bn. according to the most recent submission to HM Treasury.
- 3.2 Prior to 2016/17 revenue budgets for planned maintenance included £1.25m for carriageways and £1.13m for footways, with an additional £1.42m for reactive maintenance and minor repairs. Although this level of funding allowed the non-principal and unclassified road networks to be maintained in a stable condition, it was not sufficient to allow conditions to be improved, which would also allow expenditure in reactive works to be reduced.
- 3.3 In December 2016 the Council approved capital funding of £11.8m for investment in planned highway maintenance to allow the condition of the borough's non-principal and unclassified roads and footways to be improved, reducing the demand for reactive maintenance. This was the equivalent of five years revenue funding for planned maintenance, which has been on hold during the capital investment period.
- 3.4 This capital programme has recently been completed, and a boroughwide condition survey undertaken to assess the success of the project and identify schemes for future projects.
- 3.5 There is a strong case for continued investment in planned maintenance of the highway asset. Maintaining the highway asset through timely intervention reduces the need for more expensive maintenance treatments at a later date, along with the demand for reactive maintenance, such as repairing potholes and broken paving. This improves value for money and customer satisfaction, reduces unplanned network disruption, and contributes to reducing third party claims for damages.
- 3.6 While the Council is responsible for maintenance of roads forming part of the Principal Road Network (PRN) within the borough; classified 'A' roads, planned maintenance, such as resurfacing and reconstruction works have traditionally been funded by Transport for London (TfL). These schemes are usually included within the annual Local Implementation Plan (LIP), although funding for PRN maintenance has been suspended since 2017/18 due to funding issues.
- 3.7 TfL are currently in discussions with the Department for Transport regarding their funding for 2022/23 and beyond, which could include money for borough principal roads. Proposals for future planned PRN projects will be subject to a separate report at a later date.

#### **Condition Monitoring**

- 3.8 The condition of the borough's highway network is carefully monitored through regular inspections to identify safety defects along with carriageways and footways that would benefit from planned maintenance; resurfacing or reconstruction.
- 3.9 Technical surveys are used to calculate condition indices for each class of road, which are the percentage of roads which should be considered for maintenance. These indices are not precise, as they are derived from identifying a wide range of highway defects, although they do provide an appropriate source of trend data over time and in that respect are valuable.

- 3.10 The road condition indices used for the 2016 business case were based on latest qualifying road survey data. The non-principal (B/C) road network is 58 miles (93Km) in length, and these roads had a condition index of 3%. The remaining 447 miles (720 Km) of carriageway form the unclassified road network with a road condition index of 17%.
- 3.11 Until recently carriageway condition surveys of the boroughs non-principal and unclassified roads have been undertaken through visual inspection of the road surfaces by experienced inspectors, as part of either a walked or driven survey. Advances in technology have recently allowed surveys to be automated through the analysis of video surveys using artificial intelligence (AI). A boroughwide AI survey has been completed during the last four months using vehicle mounted cameras along with GPS location technology. This data has been processed using the Visalia RoadAI web-based software with initial results providing good correlation between the video evidence, identified defects and calculated condition indices.
- 3.12 As carriageways deteriorate through weathering and the acts of traffic, the requirement for protective or more structural maintenance can be predicted with some accuracy. Most of the footways in the borough are surfaced with paving slabs, and the main causes of their deteriorate is root damage from street trees, utility company excavations and over-running vehicles, all of which have been effectively managed through reactive and minor works. This was verified in the results of surveys which confirmed that, as an asset, Bromley's footways are in a better structural condition than the carriageways.
- 3.13 The carriageway survey data has been collected and the condition indices for each class of road are due to be calculate in the summer once the latest RoadAI software is available. Although the overall condition of the network would have been improved during the capital project, subsequent and ongoing deterioration is likely to result in similar condition indices to those reported in 2016. This data will be reported to Members in the autumn and used in preparing the business case for any future investment project.

### **Proposed Planned Works Programme**

- 3.14 An annual revenue budget of £2.5m has been reinstated for planned highway maintenance from 2022/23, to include carriageway and footway resurfacing / reconstruction.
- 3.15 Results of recent treatment surveys confirm that future investment should be focussed on maintaining those carriageways with the highest priority to obtain long-term benefits, with footway maintenance continuing to rely on reactive and minor works to deal with the short-term damaging factors. However, footways with a blacktop surface known as 'mastic asphalt' have proved to be a maintenance liability in recent years, as the very rigid material suffers from cracking and deformation, leading to a high number of reactive repairs. Several 'mastic asphalt' footways were resurfaced using conventional asphalt materials during the capital investment project, and it is proposed that those roads shown in Appendix 'A' are resurfaced as part of the 2022/23 programme.
- 3.16 As discussed in para 3.10, at the time of the last survey 17% of the unclassified carriageway network needed maintenance, which equates to a maintenance backlog of approximately £14m. With the limited revenue budgets available it is not possible to resurface all roads identified as being in need of maintenance. Priorities for carriageway planned works have therefore been identified using the RoadAI survey results, along with factors such as use and location on the network. Those roads with the highest overall priority have been put forward for planned works programmes in accordance with annual budget provision, as detailed in Appendix 'B'.
- 3.17 If existing budgets allow additional schemes to be completed during 2022/23 it is proposed that the decision to include schemes in the programme be delegated to the Director of

Environment & Public Protection, in consultation with the Portfolio Holder, based on the results of further condition assessments.

## **4 POLICY IMPLICATIONS**

- 4.1 The Environment Portfolio Plan includes the key aim “To continue to invest in a timely and effective manner in our roads and pavements to maintain the value of our highway asset”. The Plan (item 4.4) identifies the Council will “Improve the condition of the of the highway network by completing an approved major programme of road and pavement resurfacing”.

## **5 FINANCIAL IMPLICATIONS**

- 5.1 The highways maintenance revenue budget has been reinstated from April 2022 to the value of £2.5m, as approved by the Executive at its meeting on 9th February when agreeing the Council’s overall budget for 2022/23. This was on the basis that a further review and business case will be undertaken, taking into account an updated borough-wide condition survey to determine the state of the footway and carriageway assets. This will allow an assessment to be made of the requirement and funding options for future planned and reactive works. As stated in 3.13, the outcome of this review and a business case for future investment will be reported to Members later in the year which will allow for the latest data to be incorporated.
- 5.2 In the meantime, this report proposes a programme of schemes to progress this financial year for Members’ consideration, to be funded from the available revenue budget of £2.5m in 2022/23.

## **LEGAL IMPLICATIONS**

- 6.1 Under the Highways Act 1980, the Council, as Highway Authority, has duties to ensure the safe passage of highway users and to maintain the highway.

<b>Non-Applicable Sections:</b>	Impact on vulnerable adults and children Personnel implications Procurement implications
Background Documents: (Access via Contact Officer)	