



## Environment Committee

15 July 2015

|                                       |   |    |  |     |                                    |     |  |    |                              |     |  |    |                              |     |  |    |   |     |  |    |          |    |  |    |  |    |  |    |   |     |   |
|---------------------------------------|---|----|--|-----|------------------------------------|-----|--|----|------------------------------|-----|--|----|------------------------------|-----|--|----|---|-----|--|----|----------|----|--|----|--|----|--|----|---|-----|---|
| <p><b>Title</b></p>                   | <p><b>Highway Network Recovery Planned Maintenance Programme 2015-16 Qtr. 1 Update</b></p>  |    |  |     |                                    |     |  |    |                              |     |  |    |                              |     |  |    |   |     |  |    |          |    |  |    |  |    |  |    |   |     |   |
| <p><b>Report of</b></p>               | <p>Commissioning Director for Environment</p>   |    |  |     |                                    |     |  |    |                              |     |  |    |                              |     |  |    |   |     |  |    |          |    |  |    |  |    |  |    |   |     |   |
| <p><b>Wards</b></p>                   | <p>All</p>  |    |  |     |                                    |     |  |    |                              |     |  |    |                              |     |  |    |   |     |  |    |          |    |  |    |  |    |  |    |   |     |   |
| <p><b>Status</b></p>                  | <p>Public</p>   |    |  |     |                                    |     |  |    |                              |     |  |    |                              |     |  |    |   |     |  |    |          |    |  |    |  |    |  |    |   |     |   |
| <p><b>Enclosures</b></p>              | <p>Appendix A: 27 January 2015 Programme List<br/>                 Appendix B: 2015-16 Budget Schedule<br/>                 Appendix C: Network Recovery 2015-16 Planned Maintenance Schemes (listed alphabetically)</p> <table border="1" data-bbox="544 1133 1302 1872"> <tr> <td>C1</td> <td>Footway Schemes -73 no. 5 no. schemes deferred</td> </tr> <tr> <td>C1a</td> <td>Additional Footway Schemes - 6 no.</td> </tr> <tr> <td>C1b</td> <td>£2m additional flexible footway schemes – to be prepared</td> </tr> <tr> <td>C2</td> <td>Surface Dressing Schemes-138</td> </tr> <tr> <td>C2a</td> <td>Deferred Surface Dressing Schemes- 189 no.</td> </tr> <tr> <td>C3</td> <td>Microasphalt Schemes– 79 no.</td> </tr> <tr> <td>C3a</td> <td>Deferred Microasphalt Schemes– 197 no.</td> </tr> <tr> <td>C4</td> <td>Carriageway Resurfacing Schemes- 27 no.</td> </tr> <tr> <td>C4a</td> <td>Deferred Carriageway Resurfacing Schemes- 40 no.</td> </tr> <tr> <td>C5</td> <td>NOT USED</td> </tr> <tr> <td>C6</td> <td>GIS Map of 2015-16 Planned Schemes Locations</td> </tr> <tr> <td>C7</td> <td>GIS Illustration - Prioritisation based on ONH &amp; Condition/Claim Information</td> </tr> <tr> <td>C8</td> <td>Example of planned maintenance detailed site extent/location plans</td> </tr> <tr> <td>C9</td> <td>Information Leaflet on highway maintenance surface treatments</td> </tr> <tr> <td>C10</td> <td>Surface Dressing Programme – Resident Advance Communication</td> </tr> </table> | C1 | Footway Schemes -73 no. 5 no. schemes deferred | C1a | Additional Footway Schemes - 6 no. | C1b | £2m additional flexible footway schemes – to be prepared | C2 | Surface Dressing Schemes-138 | C2a | Deferred Surface Dressing Schemes- 189 no. | C3 | Microasphalt Schemes– 79 no. | C3a | Deferred Microasphalt Schemes– 197 no. | C4 | Carriageway Resurfacing Schemes- 27 no. | C4a | Deferred Carriageway Resurfacing Schemes- 40 no. | C5 | NOT USED | C6 | GIS Map of 2015-16 Planned Schemes Locations | C7 | GIS Illustration - Prioritisation based on ONH & Condition/Claim Information | C8 | Example of planned maintenance detailed site extent/location plans | C9 | Information Leaflet on highway maintenance surface treatments | C10 | Surface Dressing Programme – Resident Advance Communication |
| C1                                    | Footway Schemes -73 no. 5 no. schemes deferred  |    |  |     |                                    |     |  |    |                              |     |  |    |                              |     |  |    |   |     |  |    |          |    |  |    |  |    |  |    |   |     |   |
| C1a                                   | Additional Footway Schemes - 6 no.  |    |  |     |                                    |     |  |    |                              |     |  |    |                              |     |  |    |   |     |  |    |          |    |  |    |  |    |  |    |   |     |   |
| C1b                                   | £2m additional flexible footway schemes – to be prepared  |    |  |     |                                    |     |  |    |                              |     |  |    |                              |     |  |    |   |     |  |    |          |    |  |    |  |    |  |    |   |     |   |
| C2                                    | Surface Dressing Schemes-138  |    |  |     |                                    |     |  |    |                              |     |  |    |                              |     |  |    |   |     |  |    |          |    |  |    |  |    |  |    |   |     |   |
| C2a                                   | Deferred Surface Dressing Schemes- 189 no.  |    |  |     |                                    |     |  |    |                              |     |  |    |                              |     |  |    |   |     |  |    |          |    |  |    |  |    |  |    |   |     |   |
| C3                                    | Microasphalt Schemes– 79 no.  |    |  |     |                                    |     |  |    |                              |     |  |    |                              |     |  |    |   |     |  |    |          |    |  |    |  |    |  |    |   |     |   |
| C3a                                   | Deferred Microasphalt Schemes– 197 no.  |    |  |     |                                    |     |  |    |                              |     |  |    |                              |     |  |    |   |     |  |    |          |    |  |    |  |    |  |    |   |     |   |
| C4                                    | Carriageway Resurfacing Schemes- 27 no.   |    |  |     |                                    |     |  |    |                              |     |  |    |                              |     |  |    |   |     |  |    |          |    |  |    |  |    |  |    |   |     |   |
| C4a                                   | Deferred Carriageway Resurfacing Schemes- 40 no.  |    |  |     |                                    |     |  |    |                              |     |  |    |                              |     |  |    |   |     |  |    |          |    |  |    |  |    |  |    |   |     |   |
| C5                                    | NOT USED  |    |  |     |                                    |     |  |    |                              |     |  |    |                              |     |  |    |   |     |  |    |          |    |  |    |  |    |  |    |   |     |   |
| C6                                    | GIS Map of 2015-16 Planned Schemes Locations  |    |  |     |                                    |     |  |    |                              |     |  |    |                              |     |  |    |   |     |  |    |          |    |  |    |  |    |  |    |   |     |   |
| C7                                    | GIS Illustration - Prioritisation based on ONH & Condition/Claim Information  |    |  |     |                                    |     |  |    |                              |     |  |    |                              |     |  |    |   |     |  |    |          |    |  |    |  |    |  |    |   |     |   |
| C8                                    | Example of planned maintenance detailed site extent/location plans  |    |  |     |                                    |     |  |    |                              |     |  |    |                              |     |  |    |   |     |  |    |          |    |  |    |  |    |  |    |   |     |   |
| C9                                    | Information Leaflet on highway maintenance surface treatments   |    |  |     |                                    |     |  |    |                              |     |  |    |                              |     |  |    |   |     |  |    |          |    |  |    |  |    |  |    |   |     |   |
| C10                                   | Surface Dressing Programme – Resident Advance Communication   |    |  |     |                                    |     |  |    |                              |     |  |    |                              |     |  |    |   |     |  |    |          |    |  |    |  |    |  |    |   |     |   |
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## **Summary**

**This report updates the Committee on progress during the first 3 months delivering the 2015-16 Network Recovery Plan (NRP) Highways Planned Maintenance programme, year 1 of an agreed £50m 5 year funded strategy. The year 1 works investment is £13.56m.**

**It explains changes made to the scheme content as a result of a reduction in the percentage apportionment of budget to carriageways and the increase in budget allocation for footways.**

**The report explains the Code of Practice best practice and best value approach to identifying and prioritising planned asset maintenance applying a risk based Operational Network Hierarchy. It proposes an additional £2m allocation to footway maintenance to support the Network Recovery Plan. A key aspect of the Network Recovery approach is the application of cost effective maintenance treatments to not only repair but also take early preventative action, and to take into account not just the initial cost but also the long term whole life cost of ongoing maintenance.**

## **Recommendations**

- 1. That the Committee agree the updated list of planned maintenance carriageway and footway schemes to be progressed in 2015-16 (Appendices C1, C2, C3, and C4 ) within the available Network Recovery Plan budgets be duly noted for information**
- 2. That the Committee agree the recommended additional footway scheme sites (Appendix C1a) be approved.**
- 3. That the Committee note the details for drainage/structures and road marking schemes**
- 4. That the Committee agree the carriageway schemes deferred in 2015-16 (C2a, C3a and C4a) due to revised budget allocations be prioritised as part of a process later in the year to recommend a 2016-17 network recovery plan programme applying the operational network hierarchy and current condition survey information.**
- 5. That the Committee agree an additional programme of flexible footway schemes be prioritised and agreed for implementation. The programme to be prepared using the operational network hierarchy, current condition survey information and guidelines for appropriate asset management treatments and funded from the £2m the current capital budget**

## 1. WHY THIS REPORT IS NEEDED

- 1.1 This report is needed to provide the Committee with an update on the progress of the 2015-2016 Network Recovery Plan Highway Planned Maintenance programme at the end of quarter 1 i.e. the first 3 months of Year 1 of the 5 Year programme. The report explains any significant changes that have occurred since the 27th January 2015 Environment Committee report. Changes to schemes have been required by works planning coordination restrictions, detailed site specific surveys and clarification of actual contractor works costs.
- 1.2 The January Environment Committee report on the Highways Planned Maintenance Programme was presented by the Interim Commissioner for Environment. The report set out a proposed percentage split of budget between carriageways, footways and structures/drainage/Signs & Road Markings (refer. paragraph 5.2.3).
- 1.3 Following discussion and consideration of the item the Committee amended the percentages listed in table 5.2.3 as follows:-

| Asset   | Proposed Approximate Percentage Spent |
|---|---------------------------------------|
| Carriageways (Resurfacing 15%, Micro Asphalt 20% & Surface Dressing 25%- approximately) | <del>60%</del> 40%                    |
| Footways  | <del>30%</del> 50%                    |
| Structures, Drainage, Signs and Road Markings   | 10%                                   |
| Total   | 100%                                  |

- 1.4 The Network Recovery Plan is a substantial 5 year investment with a phased total works allocation in 2015-16 of £13.58m. The footway schemes NRP allocation is £6.8m, the carriageway allocation £5.4m and an allocation of £1.36m for a combination of drainage, structures and road markings.
- 1.5 The budget apportionment change has resulted in the following significant changes to the schedules of schemes that were listed in the 24th January 2015 report appendices.
- (i) The Surface Dressing programme now comprises 138 locations. 189 listed locations will not be progressed in 2015-16 (see Appendices C2 and C2a) but will be considered for the 2016/17 programme.
  - (ii) The Microasphalt programme now comprises 79 locations. 197 listed locations will not be progressed in 2015-16 (see Appendix C3 and C3a)

- (iii) On footways, the Appendix to the report listed 133 locations but a programme containing 78 schemes was confirmed at the time. 73 schemes in the original footway programme will be progressed based on defined priority works extents informed by site inspections with 5 schemes deferred as a result of work clashes. (see Appendix C1)
  - (iv) 6 new additional footway schemes have been identified (see Appendix C1a) that can be funded from the current NRP budget as a result of the increased percentage of budget assigned to footways. These schemes have been identified and prioritised by analysis of actual safety defect repair activity over the last 6 months and insurance claims. This data provides a good indicator of need and relative asset deterioration. This approach will assist in transforming the balance of LBB maintenance expenditure from expensive reactive works to more cost effective planned works. This analysis has been made possible by the investment in the EXOR maintenance management system and GIS analysis tools. Appendix C7 illustrates the data analysis. *Section 1.18 of this report proposes a further investment in planned footway maintenance using the same prioritisation process which will increase the number of additional schemes*
  - (iv) The carriageway surfacing programme now comprises 27 locations. 40 listed locations will not be progressed in 2015-16 (see Appendices C4 and C4a)
- 1.6 Good progress has been to ensure that critical elements of the NRP programme that are weather sensitive are undertaken during the summer/early autumn weather window. The surface dressing programme has already commenced and the microasphalt programme is scheduled to commence in August. These programmes are scheduled for completion in September and October respectively. Since April, regular map view communications have been sent to Members to advise on planned maintenance activity in the forthcoming months and also levels of reactive maintenance activity. The service currently projects that circa £6-6.5m will have been delivered by the end of September. An example of the advance communications is included at Appendix C10.
- 1.7 A key aspect of the Network Recovery approach is the application of cost effective maintenance treatments to not only repair but also take early preventative action and to take into account not just the initial cost but also the long term whole life maintenance cost. Appendix C9 contains a leaflet which helps explain the purpose and role of different maintenance treatments.
- 1.8 Long term maintenance costs are a very important consideration and a critical part of decision making on footway \surfacing type. The two most important considerations are:-
- vehicles parking on the footway either 2 wheel or 4 wheel (and vehicles crossing driveway) and
  - managing tree roots whilst keeping the characteristic treescape.

In addition, practical considerations can dictate choice of material i.e. narrow footways typically less than 1.2m wide are better suited to a flexible tarmac type construction.

Guidelines for reviewing and determining the appropriate footway specification (flexible or slabbed) are being developed to ensure consistency of application.

- 1.9 Some of the changes to the programme content detailed above have been influenced by contractor actual costs and in particular the requirements around the treatment of excavated footway material. The LBB Contractor advised that a U1B cost rate is applicable for excavated materials deemed to be contaminated in construction disposal terms and that even small quantities cannot operationally be segregated. A joint testing programme is in place to validate the U1B classification. Subject to the outcomes of the tests it may be possible to increase the number of additional schemes.
- 1.10 Unit rate costs for footway maintenance treatments based on the current LBB LoHAC contract actual rates have been tabulated. Unusually flexible construction (bitumen) footways and precast concrete slabs (ASP) rates are broadly similar in terms of initial cost. There are however significant concerns over the commercial sustainability of the framework rates for footways based on discussions with the current LBB Contractor. Re, on behalf of LBB, is considering different contractor/sub contractor procurement options for 2016-17 and beyond.
- 1.11 In terms of value for money the unit rate construction costs is only one initial part of the long term whole life costs that will build up over a period of 20-30 years. Transport Road Laboratory TRL reports have validated that in terms of the long term whole life costs, flexible construction in footways is more cost effective long term (and generally at unit cost stage). An important part of the benefit being the reduction in third party claims deriving from paving slab trips mainly due to their propensity to crack if overrun by vehicles. Over running of footways is a common occurrence in urban authorities.
- 1.12 The carriageway surfacing schemes that are not able to be progressed this financial year will be rolled forward as a priority for year 2 of the programme
- 1.13 The prioritisation review for the additional footway schemes has applied the Operational Network Hierarchy (ONH) and data on actual reactive safety defect repair works and insurance claim incidents. This approach will ensure that planned maintenance works on the LBB network objectively achieve best value asset maintenance by targeting those parts of the network that are currently generating the most reactive maintenance service. In addition to regular inspection demands and the need for costly reactive maintenance this risk based approach has a direct link to the reduction in third party insurance claims. It is recommended that any reduction in reactive maintenance should be re-assigned and invested in the planned maintenance programme, in line

with asset management good practice to help sustain the network improvements.

- 1.14 In addition to the carriageway and footway maintenance programmes, programmes are progressing in respect to Drainage, Structures assessments and repairs and a programme of road markings refresh.
- 1.15 Walked inspections and surveys of the Council's three ordinary watercourses are being planned. The Committee should note that the Council has been successful in securing two grants from the Environment Agency, as part of their 6-year investment programme: £20K for a flood alleviation scheme in the Decoy Brook catchment and £25k to carry out a detailed study on a flood alleviation scheme at Mill Hill Circus. Given the additional EA funding, it is proposed that Decoy Brook watercourse should be prioritised with the walked inspections and surveys. This is expected to take place in the next month.
- 1.16 Following a risk assessment the Council's structures requiring load assessment have been grouped into three groups of 20. Competitive quotations are currently been obtained from qualified consultants with a view to carry out the load assessment of the first 40 structures this year. The Committee should note that one of the two structures load assessed last year, Deansbrook Road Bridge, failed its assessment and all available options to strengthen the bridge are currently being considered.
- 1.17 A programme to renew the road markings of all pelican crossings in the Borough, at some 75 locations, has started and is expected to be completed in August. This will be followed by the commencement of a five year cyclic renewal of all road markings in the Borough. This renewal is planned so as to avoid roads that are currently planned for carriageway treatments in the near future.
- 1.18 To support the Network Recovery Plan it is recommended that the allocation of £2m currently in the capital allocation for footways be applied to a programme of flexible treatment footways to address risk based needs and to maximise the total area of the footway network which will benefit from planned maintenance. The proposed programme of footway schemes to benefit from the £2m allocation is currently being prepared as mentioned in Appendix C1b. The schemes to be identified and put forward would follow analysis of the relative condition of parts of the network as informed by actual safety defects being raised over the past 6 months in accordance with the LBB Safety Defect intervention levels, together with claims activity. The list will also be based on prioritisation using the Operational Network Hierarchy to ensure that footways with the highest level of pedestrian activity are tackled first.
- 1.19 LIP funded accessibility schemes will, where appropriate, be incorporated within the planned maintenance programme. The LIP programme is tabulated at Appendix C5

- 1.20 A programme of LBB Parking Policy implementation – formalisation of footway parking schemes is being progressed in coordination with other planned maintenance programme works.
- 1.21 A recommended 2016-17 planned maintenance programme will be presented to the December Committee to ensure that the necessary Permits and contractor programming arrangements will be in place for maintenance works to commence promptly in April 2016.
- 1.22 The effectiveness of the LBB Network Recovery Plan investment will be monitored throughout the 5 year period by reference to key indicators including customer satisfaction, levels of service requests, the balance between reactive and planned maintenance expenditure, and national condition indicators.

## **2. REASONS FOR RECOMMENDATIONS**

- 2.1 The recommendations are required to confirm approval for operational adjustments to the programme content, including deferred and additional schemes, arising from changes to budget apportionments, clarification of operational details and actual contractor costs. The recommendations also request approval for the allocation of a total of £2m to tackle increased footway maintenance.

## **3. ALTERNATIVE OPTIONS CONSIDERED AND NOT RECOMMENDED**

This section of the report does not apply to this report.

## **4. POST DECISION IMPLEMENTATION**

The agreed programme will continue to be implemented.

## **5. IMPLICATIONS OF DECISION**

### **5.1 Corporate Priorities and Performance**

- 5.1.1 The Council's Corporate Plan states in its strategic objectives that it will work with local partners to create the right environment to promote responsible growth, development and success across the Borough. In particular the Council will maintain a well-designed, attractive and accessible place, with sustainable infrastructure across the borough. The plan also acknowledges that the future success of the Borough depends on effective transport networks.

### **5.2 Resources (Finance & Value for Money, Procurement, Staffing, IT, Property, Sustainability)**

- 5.2.1 The £13.6m of highways maintenance programme will be funded from the £15m agreed in the capital programme in March 2015 by Full Council.

5.3 The £2m required for flexible footways will be funded by the current £2m agreed in the capital programme for footways and highways.

5.3.1 The Network Recovery Plan planned maintenance programme as informed by the Operational Network Hierarchy will support optimum value for money from expenditure for LBB Highway Maintenance Managed Budgets.

- cost effective whole life costs (over 20 years) through maintenance treatments suited to the road/footway conditions, in particular instances of footway parking and vehicle overrun.
- cost effective use of preventative treatments that seal the surface and fill in early stage defects– the “stitch in time saves nine” principle.
- a positive transformation from costly and disruptive reactive maintenance ‘patching’ to planned maintenance
- reducing LBB financial risk of insurance claim incidences.

#### 5.4 **Legal and Constitutional References**

5.4.1 Highway Maintenance is a statutory duty under the Highways and Traffic Management Acts.

5.4.2 The Council’s Constitution (Responsibly for Functions, Annex A) gives the Environment Committee certain responsibilities related to the street scene including pavements and all classes of roads, parking provision and enforcement, and transport and traffic management including agreement of the London Transport Strategy Local Implementation Plan.

#### 5.5 **Risk Management**

5.5.1 The Operational Network Hierarchy that is being used to formulate the Network Recovery Plan programme is a key element of the risk management approach.

#### 5.6 **Equalities and Diversity**

5.6.1 Street design should be inclusive, providing for all people regardless of age or ability. There is a general duty for public authorities to promote equality under the 2010 Equality Act. There is also a specific obligation for those who design, manage and maintain buildings and public spaces to ensure that disabled people play a full part in benefiting from, and shaping, an inclusive built environment.

Designers will be required to refer to Inclusive Mobility, The Principles of Inclusive Design and Guidance on the Use of Tactile Paving Surfaces (1999) in order to ensure that the designs are inclusive.

5.6.2 The 2010 Equality Act outlines the provisions of the Public Sector Equalities Duty which requires Public Bodies to have due regard to the need to:

1. eliminate unlawful discrimination, harassment and victimisation and other conduct prohibited by the Equality Act 2010
2. advance equality of opportunity between people from different groups



### 3. foster good relations between people from different groups

The broad purpose of this duty is to integrate considerations of equality into day to day business and keep them under review in decision making, the design of policies and the delivery of services. As part of the consultation development a separate stakeholder management plan is being developed to ensure that equalities issues are incorporated into the policy development, consultation and implementation.

## 5.7 Consultation and Engagement

5.7.1 The Network Recovery Planned Maintenance programme is subject to suitable advanced and ongoing communications with local members and residents in roads or footways affected by the works.

5.7.2 The current planned maintenance programme is included on the LBB Website.

## 6. BACKGROUND PAPERS

6.1 Environment Committee 27<sup>th</sup> January 2015 Highway Planned Maintenance Programme