This report seeks the Committee’s approval for the delivery of the 2017/18 Highway Planned Maintenance and Network Recovery Plan (NRP) Work Programme listed in Appendix A, totalling £8 million to be funded from the agreed NRP Capital allocation of £50 million over 5 years.

The work programme has been primarily developed based on condition assessment survey data and deterioration modelling. The proposed schemes have been identified and prioritised in consultation with local ward Councillors using whole life costing and good asset management principles to ensure that investment is targeted where it is most needed.

The investment split for 2017/18 will be as follows:- 55% footway, 35% carriageway and 10% structures, drainage, road markings and other highway assets.
Recommendations

1. That the Committee approves the capital expenditure of £8 million for the delivery of the 2017/18 Planned Maintenance and Network Recovery Plan work programme consisting of carriageway and footway renewal works as listed in Appendix A of this report.

2. That the Committee agrees the proposed investment proportions detailed in paragraph 5.2.3 of this report.

3. That subject to the overall costs being contained within agreed budgets, the Commissioning Director for Environment is authorised to instruct Re to implement the schemes proposed in Appendix A by placing orders with the Council’s term maintenance contractors or specialist contractors appointed in accordance with the public procurement rules and or the Council’s Contract Procedure Rules as appropriate.

1. WHY THIS REPORT IS NEEDED

1.1 This report is needed to provide the appropriate Council authority to instruct Re, approve the planned maintenance programme for 2017/18 and agree the proposed investment proportions for the planned maintenance programme for 2017/18.

1.2 This report provides a list of schemes for delivery in Year 3 of the Network Recovery Plan Programme which will continue to substantially increase the percentage of carriageway and footway treated every year by using more planned preventative type treatments and less costly, reactive treatments. The aim was to treat at least 10% of the whole of the carriageway network and 5% of the footway network per year over the five year programme by using optimum maintenance strategies and treatments such as Surface Dressing and Micro-Asphalt thereby substantially reducing highway maintenance service requests. However, the decision to avoid the use of surface dressing and increase the percentage of spend on footways instead of carriageways will now no longer provide the percentages originally forecast.

2. REASONS FOR RECOMMENDATIONS

2.1 The recommendations are required to enable the Council to deliver the planned maintenance programme for 2017/18 and also develop the planned maintenance programme for future years.

2.2 The Highways Act 1980 (HA 1980) sets out the main duties of highway authorities in England and Wales. Highway maintenance policy is set within a legal framework. Section 41 of the HA 1980 imposes a duty to maintain highways which are maintainable at public expense and almost all claims against authorities relating to highway functions arise from an alleged breach
of this section. The HA 1980 sits within a much broader legislative framework specifying powers, duties and standards for highway maintenance.

2.3 The Council has a duty to ensure that the statutory functions and responsibilities in relation to those highways for which the local authority is responsible are discharged. The Authority also has a duty to ensure a safe passage for the highway user through the effective implementation of the legislation available to it, principally the HA 1980, and in particular Section 41, of the Act.

2.4 Planned highway maintenance is generally funded by Capital Funding. Capital allocations are also made by Central Government through the Local Implementation Plan (“LIP”) process taking into account factors such as road lengths, classification, traffic figures and road condition data derived from the condition indicators, UK Pavement Management System (UKPMS), National Road Maintenance Condition Survey (NRMCS) and condition surveys. Revenue allocations funding, which covers mostly reactive maintenance, is generally provided from a combination of local council tax and other Government Revenue Support Grants. Funding is further sought from Private Developers, secured as planning obligation under S106 of the Town and Country Planning Act 1990. It is important to ensure that realistic benefit is obtained for highway maintenance from contributions in respect of new developments.

2.5 The programme proposed in this report was developed using an independent condition assessment survey company, Highway Surveyors, who undertook a survey of every footway and carriageway in the borough and recorded the data to a defined national standard of all footways and carriageways within the borough. This data was added to that of the Operational Network Hierarchy, defects scores from the highway safety inspectors with the local knowledge they have from walking the streets regularly as part of their routine inspection, and insurance claims to the council and by applying guidance on Network Recovery Plan whole life cost principles it resulted in the list of those footways and carriageways to be in the worst condition.

2.6 Schemes have been prioritised based on their known condition. In order to achieve best value for the investment, the proposed carriageway treatments include micro asphalt with patching as required, as well as a resurfacing programme. Surface dressing of carriageways has not been proposed again for year 3. The independent condition assessment scores combined with the hierarchy scores (defined in the Operational Network Hierarchy) have been used to prioritise and compile Appendix A. All ward councillors have been consulted over the proposed lists and their comments where appropriate have been used to finalise that shown in Appendix A. However, the final programme will be subject to review and possible change to ensure that future developments and statutory undertaker works within the borough do not conflict with that proposed and result in abortive works. Any schemes which are unable to be progressed or delayed due to the above will be replaced in the programme with those next on the priority list.
2.7 Under Section 58 of the New Roads and Street Works Act 1991, the Highway Authority is required to issue a statutory three-month Notice to Utility companies of its intention to carry out substantial road works on the public highway. This requirement is aimed at preventing or restricting streets being dug up soon after they have been resurfaced for major works. This is a legal notice which is served on all the statutory undertakers who carry out work in the Borough. The Highways Authority is required to commence the works within one month of the date specified in the notice. The restriction on statutory undertakers carrying out street work applies for a period of 36 months after the works have been implemented. However, Utility companies can still carry out emergency and service connection works by just notifying the Highway Authority. The Notice will be published in the London Gazette and sent to all the utility companies for co-ordination.

2.8 The Traffic Management Act 2004 introduced a new hierarchy of Strategic Roads for London where the London Boroughs retain highway and traffic authority responsibilities, but for which Transport for London (TfL) has oversight. This requires the Council to notify TfL, or both TfL and neighbouring boroughs, if the proposed maintenance works are likely to affect traffic operations on a strategic road in its own area. The Council aims to implement all the schemes safely, with minimum traffic congestion and TfL will be provided with the necessary information within the stipulated timescales. The contractor will have in place a Health and Safety Plan for implementing these schemes safely.

2.9 Appendix A lists all the proposed carriageway treatments and footway relay schemes in each ward to be undertaken in 2017/18. Where appropriate, the table shows the section of the street that will be treated. Relevant information about the work in each location will be provided in advance to residents by letter along with advanced signing. In order to maximise improvement to the street scene, action will be taken to tidy up associated infrastructure and generally reduce street clutter. Local ward councillors will be given revised ward packs of the final schemes showing treatment types for both footways and carriageways in their ward and be notified in advance of that of residents of the proposed extent of works for each scheme.

2.10 The highways maintenance backlog has been estimated, based on the 2011/12 condition surveys, at £97.3 million and the funding required to address this maintenance backlog using the traditional maintenance treatments was estimated at £19.6 million per year, over a five year period. Clearly, under the current tough economic climate this level of funding is not available. Adopting Highway Asset Management Principle (HAMP) marks a move away from “worst first” approach to maintenance operated by the Council so far. Officers reviewed the highway maintenance treatments to focus on a preventative approach to maintenance, as explained to a Members’ working Group on the 2nd of October 2014. Therefore, alternative treatments, cheaper than the traditional treatments, which will preserve and extend the life of carriageway for a number of years, by minimising the whole life costs of the highways, have been considered and recommended. These treatments include the sealing of carriageway cracks and joints, other
localised treatments of carriageway cracks, surface dressing, patching, micro surfacing/micro asphalt-preceded by localised patching, if appropriate. It should be emphasised that, in accordance with highway asset management principles, the preventative type treatments (carriageway sealing, surface dressing, micro asphalt) are targeted on roads with an Amber or Green indicator on the deterioration curve to stop them deteriorating into Red, which will require a more expensive treatment. All these treatments are incorporated in the current term maintenance contract and Appendix A identifies the treatment types for year 3 of the Network Recovery Programme.

2.11 A subsequent report will address the proposed programme of continued works as part of the Network Recovery Programme for year 3 on the Council’s highway structures along with proposed drainage works which will target the “Critical Drainage Areas” where the risk of flooding is higher. This will also take in to account the Local Flood Risk Management Strategy which has recently been sent to stakeholders for comment before being circulated for full consultation. A programme of roadmarking refresh and other treatments will be included in this subsequent report.

2.12 Year 1 and 2 of the Network Recovery Programme

2.12.1 A total of 308 schemes comprising 125 carriageway surface dressing, 43 carriageway micro asphalt, 57 carriageway resurfacing and 83 footway were completed in year 1 of the Network Recovery Programme. A total of 124 schemes comprising 23 carriageway micro asphalt, 47 carriageway resurfacing and 54 footway are due for completion in year 2 of the NRP.

2.12.2 The council has commissioned an independent condition assessment which is being undertaken by Highways Surveyors of all of the surface dressing and micro asphalt schemes programmed in year 1 of the Network Recovery Programme in order to identify any areas of failure before final acceptance and completion of the 24 month defect period where the contractor is still responsible for the works. The LoHAC contractor has already agreed to resurface 12 to 15 of the worst carriageway schemes as acknowledgement of failure and the perception of poor workmanship and these will be resurfaced by using either Stone Mastic Asphalt (SMA) or Dense Bitumen Macadam (DBM), whichever is deemed appropriate. The LoHAC contractor will also be required to provide an extended warranty on the remaining schemes, thereby extending the 24 month defect period.

2.12.3 Following the completion of the year 2 micro asphalt works the LoHAC contractor has agreed to revise their method statement to address the issue of loose chippings on the micro asphalt works and additional sweeping will be included in the year 3 programme of micro asphalt schemes.
3 ALTERNATIVE OPTIONS CONSIDERED AND NOT RECOMMENDED

3.1 The alternative option of undertaking planned maintenance based on the previous approach of “worst first” has been considered and rejected because this is an unsustainable approach associated with expensive short term reactive repairs.

4 POST DECISION IMPLEMENTATION

4.1 Once the Committee approves the recommendations, officers will plan, consult and implement the approved planned maintenance schemes by raising relevant orders with the Council’s term contractor or specialist contractors if there are financial benefits in doing so. As part of year 3 of the Network Recovery Programme a further independent condition assessment will be commissioned towards the latter part of the year to assist in preparation of the year 4 programme.

5 IMPLICATIONS OF DECISION

5.1 Corporate Priorities and Performance

5.1.1 The proposed planned maintenance programme will contribute directly to two of the three Corporate Objectives of the Council’s 2013 - 16 Corporate Plan by:
   - Promoting responsible growth, development and success across the borough;
   - Improving the satisfaction of residents and businesses within the London Borough of Barnet as a place to live, work and study.

5.1.2 The proposed planned maintenance programme will also contribute to the Council’s Health and Wellbeing Strategy by making Barnet a great place to live and enable the residents to keep well and independent.

5.1.3 The Highway network is the Council’s most valuable asset and is vital to the economic, social and environmental wellbeing of the Borough as well as the general image perception. They provide access for business and communities, as well as contribute to the area’s local character and the resident’s equality of life. Highways really do matter to people and often public opinion surveys continually highlight dissatisfaction with the condition of local roads and the way they are managed. Public pressure can often result in short term fixes such as potholes for example, rather than properly planned and implemented longer term solutions. The proposed 2016/17 Programme aims to stop short term repairs that provide poor value for money and often undermine the structural integrity of the asset.

5.2 Resources (Finance & Value for Money, Procurement, Staffing, IT, Property, Sustainability)
5.2.1 Funding is being sought from all possible sources to address the on-going deterioration of non-principal local roads, to improve the condition of footways and eliminate the backlog of repairs. An examination of the Planned Maintenance Budgets over the last 10 years shows a gradual reduction of the level of investment over recent years. This reduction of planned maintenance, the result of the tough economic climate, has contributed to the planned maintenance backlog. In addition, as funding reduces, the ability to provide a satisfactory level of investment in the road network decreases and this in turn generates increasing levels of reactive cost and works.

5.2.2 A bid for carriageway resurfacing works on the Borough’s principal roads was included in the Local Implementation Plan (LIP) 2017/18 bid submitted to Transport for London (TfL) and the council has been allocated £1.344 million for carriageway resurfacing works which will be included in the programme of planned highway maintenance.

5.2.3 The total Council budget allocation for planned maintenance carriageway and footway works in the combined areas for 2017/18 is £8 million. The Council agreed on the 16th of December 2014 to invest £50 million, spread over 5 years, in highways maintenance. The funding for each year is shown in the table below:

<table>
<thead>
<tr>
<th>Proposal</th>
<th>2015/16 £’000</th>
<th>2016/17 £’000</th>
<th>2017/18 £’000</th>
<th>2018/19 £’000</th>
<th>2019/20 £’000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borough wide highways maintenance incl. Borough wide signs and lines programme.</td>
<td>15,000</td>
<td>13,000</td>
<td>8,000</td>
<td>8,000</td>
<td>6,365</td>
</tr>
<tr>
<td>(15,365 actual spend) Revised to 10,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>£50,365</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The amount of the available funding will determine the extent of the schemes that would be delivered in the year and schemes that exceed this figure and those next in order of priority will feature in years 4 and 5 of the Network Recovery Programme, subject to available funding and the next year’s condition assessment. The LIP funded allocation for principal roads will be additional to the above figures.

Bearing in mind the need of the road network and the current maintenance backlog, the following percentage split between footways, carriageways, structures, drainage, signs, roadmarkings and other assets is proposed:

<table>
<thead>
<tr>
<th>Asset</th>
<th>Proposed Approximate Percentage Spent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carriageways</td>
<td>35 %</td>
</tr>
<tr>
<td>Footways</td>
<td>55 %</td>
</tr>
</tbody>
</table>
5.2.4 The following two main treatments are included in the Appendix A:

Micro Asphalt: Involves overlaying a thin surface layer of 15-30 mm and may involve removing or planing some of the old surface, particularly at the channels. Some carriageway patching may be required before this treatment is applied, but essentially this treatment is applicable where the road surface is still sound. In addition to sealing the carriageway and providing a new running surface this treatment can also restore some of the shape of the road. This treatment is not really applicable to heavily trafficked roads. A typical life expectancy is 10 years plus.

Carriageway Resurfacing: This requires the removal and replacement of the surface layer with hot rolled asphalt, dense bitumen macadam or stone mastic asphalt, and the specific treatment will be decided by the highway officers. The treatment depth is between 30 and 40 mm, but it can be more if the underlying layer also needs replacing. A typical life expectancy is 15-20 years.

Other treatments may also be proposed such as carriageway patching, joint sealing and use of reflective membranes where considered necessary by experienced highway officers.

5.2.5 The majority of the footways in Barnet are laid in pre-cast paving slabs which are labour intensive and expensive to renew. It is estimated that the cost of replacing just 3% of the Borough footways in a year will be in excess of £8 million. It is therefore proposed that the same asset management principles are also applied on the footways and, where appropriate, laying footways in asphalt is considered. This will allow treatments, similar to those mentioned above, to be used on footways to seal and protect the footways, reducing responsive maintenance costs and insurance payments. The standardisation of footway materials has already been agreed and a separate report has been produced on the treatment types being used to date.

5.2.6 The carriageway and footway estimates given in Appendix A are provisional and may be subject to change following completion of the individual scheme designs. The estimates are based on the contract rates of the London Highways Alliance Contract (LoHAC), which the Council adopted to use as a means to deliver all the highway maintenance works. A cost comparison exercise has confirmed that the LoHAC rates offer a saving of some 15% compared to the previous highways term contracts.

5.2.7 Some of the proposed schemes may not be delivered due to future utility or development works as previously stated and some schemes have already been omitted following consultation with ward councillors and others. Updates of any changes or variations to the highway schemes scheduled in Appendix
A will be reported back to this Committee at quarterly intervals, as and when required.

5.2.8 There are no staffing ICT or property implications.

5.3 Social Value

5.3.1 The Public Services (Social Value) Act 2012 requires people who commission public services to think about how they can also secure wider social, economic and environmental benefits. This report does not relate to procurement of services contracts.

5.4 Legal and Constitutional References

5.4.1 The Council’s Constitution (Responsibility 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. These are contained in the main body of the report.

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

5.4.3 The Traffic Management Act 2004 places obligations on authorities to ensure the expeditious movement of traffic on their road network. Authorities are required to make arrangements as they consider appropriate for planning and carrying out the action to be taken in performing the duty.

5.4.4 The Council’s Constitution (Responsibility 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 extreme weather encountered over previous winters has resulted in a rapid deterioration of the core fabric of many patched and heavily deteriorated carriageways. The whole life condition of these carriageways is susceptible to further reduction by increased frequency of future extremes of weather unless timely intervention is carried out by a planned programmed of appropriate highway maintenance treatments. The reactive attention to defects or filling of pot-holes has been technically proven to be only a short-term and a superficial remedy to highway damage.

5.5.2 Based on the 2011 condition surveys, the current highway maintenance backlog has been estimated to be £97.3 million. The funding required to address this backlog, based on traditional maintenance treatments, has been
assessed to be £20 million per year over a 5 year period. Given the current economic climate this is clearly unsustainable and there is therefore the risk that continuing deterioration of the highway will substantially increase the backlog and/or result in closure of roads. In order to reduce this risk Re officers are proposing the use of preventative type treatments which cost considerably less than the traditional maintenance treatments and are cost effective in extending the life of the highway.

5.6 Equalities and Diversity

5.6.1 Good roads and pavements have benefits to all sectors of the community in removing barriers and assisting quick, efficient and safe movement to schools, work and leisure. This is particularly important for older people, people caring for children and pushing buggies, those with mobility difficulties and sight impairments. The state of roads and pavements are amongst the top resident concerns and the Council is listening and responding to those concerns by the proposed planned highways maintenance programme.

5.6.2 The physical appearance and the condition of the roads and pavements have a significant impact on people’s quality of life. A poor quality street environment will give a negative impression of an area, impact on people’s perceptions and attitudes as well as increasing feelings of insecurity. The Council’s policy is focused on improving the overall street scene across the borough to a higher level and is consistent with creating an outcome where all communities are thriving and harmonious places where people are happy to live.

5.6.3 There are on-going assessments carried out on the conditions of the roads and pavements in the borough, which incorporates roads on which there were requests by letter, email, and phone-calls from users, Members and issues raised at meetings such as Forums, Leader listens and Chief Executive Walkabouts, etc. The improvements and repairs aim to ensure that all users have equal and safe access across the borough regardless of the method of travel. Surface defects considered dangerous are remedied to benefit general health and safety issues for all.

5.6.4 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:

a) Eliminate unlawful discrimination, harassment and victimisation and other contact prohibited by the Equality Act 2010.

b) Advance equality of opportunity between people from different groups.

c) 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 policies and the delivery of services. There is an on-going process of regularisation and de-clutter of street furniture and an updating of highway features to meet the latest statutory or technical expectations.
5.7 Consultation and Engagement

5.7.1 No consultation is proposed or appropriate as the list of proposed planned maintenance schemes has been prepared objectively and is based on the condition of the carriageway and footways. All requests for highways maintenance received in the last year are logged and have been considered in preparing the lists of Appendix A. Consultation has already been undertaken with ward councillors and residents will receive notification in advance informing them of any forthcoming maintenance works.

5.7.2 The Council’s Communications Team will be engaged to communicate with the residents via the press, the Council’s Barnet First magazine and other media and highlight the Council’s investment in highway maintenance as a “good news story”. Customer satisfaction surveys have also taken place during year 2 of the Network Recovery Programme and the results circulated in the media coverage listed above.

5.8 Insight

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

6 BACKGROUND PAPERS

6.1 Cabinet 22 July 2002 decision number item 7 - approved the Planned Highway Maintenance Programme – initial Scheme Prioritisation Procedure.

6.2 Task and Finish Groups were subsequently introduced as part of the Overview and Scrutiny arrangements adopted by the Council in May 2009 and the Road Resurfacing Task and Finish Group reported to and agreed by the Cabinet on 12 April 2010 following recommendations: 1) The Council introduce a Highways Asset Management approach to achieve best value for investment in the highway infrastructure. 2) A full survey is undertaken of the borough footways to enable footway schemes to be prioritised effectively. 3) Footway schemes should be carried out, as far as possible, to consistent standard across the network, using the same materials wherever possible.

6.3 The Cabinet on the 4th of November 2013, Item 5.4, approved an additional £4 million of funding to be spent on highway maintenance. A list of all the schemes in this programme has been included in the Area Environment Committee reports on 26th of March 2014. As a result of efficiencies three more footway schemes have been delivered under this programme: Bridge Lane, Daws Lane and Raleigh Drive.

6.4 The Environment Committee on the 24th of July 2014 approved a Draft Network Recovery Plan, a Draft Network Management Plan and a Draft Operational Network Hierarchy.

6.5 The Environment Committee on the 18th of November 2014 considered and agreed in principle a five year Commissioning Plan, involving significant
funding for Borough wide highways maintenance, subject to consultation and agreement by the Policy and Resources Committee.

6.6 The Council on 16th of December agreed, subject to the agreement of the Council's February 2015 Policy and Resources Committee, a capital allocation of £50.365m, spread over the five years 2015/16-2019/20 as shown in paragraph 5.2.3, to be spent on Borough wide highways maintenance.

6.7 The Environment Committees in January, July and November 2015 considered details and progress of the 2015/16 Network Recovery Programme (year 1) and those in January, May and September 2016 for progress of the 2016/17 Network Recovery Programme (year 2).