



## Environment Committee

11 March 2021

<b>Title</b>	<b>Highways Tree Root Policy</b>
<b>Report of</b>	Chairman of the Environment Committee
<b>Wards</b>	All
<b>Status</b>	Public
<b>Urgent</b>	No
<b>Key</b>	No
<b>Enclosures</b>	Appendix A – Tree Root Policy Process Flow
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## Summary

This report seeks the Committee's approval for a draft Highways Tree Root Policy to respond effectively to tree root damage to the footway asset through the delivery of a proportionate risk-based management approach.

The draft policy focuses on:

- a detailed and clear approach to responsive repair of damage to footways by tree roots and the materials options for this repair.
- seeking to ensure that adequate areas of permeable surface exist around trees as part of promoting the use of Sustainable Urban Drainage Systems (SUDS).
- ultimately where it is necessary to remove a tree due its condition, aligned to the Councils adopted Tree Policy.

The draft policy will be subject to consultation in line with the Councils procedures.

## **Officers' Recommendations**

- 1. That the Committee approves the draft Highway Tree Root Policy as set out in this report, subject to consultation. This policy be delegated to the Executive Director for Environment for finalisation of any changes as a result of the consultation and implementation.**

### **1. WHY THIS REPORT IS NEEDED**

- 1.1 Within the Public Highway, which is managed and maintained by the council at public expense, the Footway Asset provides a safe and 'green' means of travel for pedestrians, both residents and visitors to Barnet. In addition, footway safety and accessibility are critical to appraising and holistically planning and maintaining the whole highway network to enable all travel types as most trips begin, end or include access to some part of the footway network.
- 1.2 Further to the safe and sustainable travel mode provided by our footway assets, they also contribute significantly to the unique character, environment and feel of the places in Barnet where our residents and visitors live, work, and play and, therefore, the overall experience they enjoy.
- 1.3 Barnet has a significant and varied tree population planted within the constraints of the public highway, specifically on the footway network. The council is responsible for approximately 30,000 street trees and this population provides many benefits to residents.
- 1.4 Although trees bring many benefits, they also bring potential and locally significant problems, specifically footway heave resulting from root growth which can eventually break and significantly deform the footway surface if this is applied close to the base of trees. This can eventually cause accessibility issues and result in defects identified through the councils approved Highways Safety Inspection regime.
- 1.5 The location, age, and historic planting practices, including species selection, can have a detrimental impact on the structure of the footway asset at a significant number of street tree sites throughout the borough. The essential maintenance works that result have affected the continuity of the footway surfaces in many areas and this is reflected by the type and frequency of both highway safety and environmental 'place' issues which are raised as customer enquiries or complaints on a regular basis. As a result, footway maintenance, together with street tree root issues have, individually and together, become an increasingly scrutinised element of the Highways.
- 1.6 Specifically, trees on the footway asset may create hazards as they and their root systems mature therefore affecting the safety of pedestrians. Unfortunately, due to the nature of the urban environment, as tree roots grow, they can severely affect the level, construction and durability of the surface and lead to potential trip hazards both on the roots themselves and on the surface construction where defects are identified for remedial works.
- 1.7 Where the footway has historically been flag paved the displacement is invariably caused by roots reaching the upper surface of the footway construction. As a result, it is not

possible to simply relay the paving to line and level and it is essential to consider the following options, as part of a risk-based escalation process, at each site:

- Relay existing flag paving to line and level with minimal works to the immediate area
  - Relay new flag paving to line and level with minimal works to the immediate area
  - Relay asphalt to line and level with minimal works to the immediate area
  - Reprofile the footway line and levels within existing limits
  - Remove the tree and grind out the roots as a last resort (providing an appropriate replacement nearby)
- 1.8 The above works can all be emotive and require extensive, time consuming consultations with colleagues and partners, residents and Ward Members followed by expensive and potentially disruptive works on the footway network in order to resolve safety related issues on site. It is therefore proposed to introduce this cost effective, sustainable risk-based Highways Tree Root Policy to the management of tree root damage to footways across the Borough.
- ## 2. REASONS FOR RECOMMENDATIONS
- 2.1 The term 'street tree' refers to any tree situated adjacent to the carriageway of roads and footways. Street trees can negatively impact the footway network and roots can, and regularly do cause damage to traditional materials such as slabbed or block paving, block paving, asphalt and concrete kerbs.
- 2.2 After now extensive site trials' and subsequent programmes of work the council has progressed new methods of footway repair around trees using 'bound rubber crumb' which is designed to provide a firm finish for pedestrian traffic combined with permeability for air and water to penetrate to the roots. The material itself, often constructed using recycled rubber tyres, is in some cases similar to the surfaces often used in play areas which remain highly flexible.
- 2.3 This characteristic allows tree root growth and movement without the resultant deformation of the footway typically seen with slabbed or blocked paving or when asphalt has been laid close to the base of a tree. This reduces the potential for trip hazards requiring additional ad-hoc highway inspections and repeated repairs.
- 2.4 Bound 'rubber crumb' has the additional benefit of acting as a Sustainable Underground Drainage System (SUDS), effectively receiving excess runoff from the footway and hardstanding into nearby tree pits and away from the traditional highway drainage systems which may surcharge during severe weather events. It does need to be noted that bound 'rubber crumb' is an expensive material as a result officers are exploring substitute materials with the Council's new Term Maintenance Contractor.
- 2.5 Trees also help to improve air quality by absorbing and dispersing Carbon Dioxide (CO<sup>2</sup>), Nitrogen Dioxide (NO<sup>2</sup>) and other harmful pollution from the atmosphere as well as benefitting people's overall health and wellbeing. In addition, trees help moderate temperature extremes and assist with the issue of urban flooding. As a result, it is now widely acknowledged that trees are a highly valuable asset and the only highway asset to appreciate in environmental and financial value as they mature.



*Positive benefits of street trees to the environment*

### 3. RECOMMENDED OPTION

- 3.1 This proposed Highways Tree Root Policy focuses in on the delivery of a cost-effective risk-based management approach using the following criteria:
- Prioritising work on areas of the highway which may be unsafe or may potentially become a hazard to residents and infrastructure; for example, in areas where footway heave has occurred, and tree roots are prominent, note that this approach will reduce costs and allow savings to be made over time.
  - Driving an Engineering Approach to repair options, unless unachievable the default position is a 'Like for Like' material selection as the i.e., replacement in keeping with the surrounding material such as paving, block or asphalt, or as an alternative utilisation of 'Rubber Crumb' in either black or grey dependent upon the

- location. Or such other material as is agreed with the term maintenance contractor.
- Maintaining the safety, integrity, continuity, and aesthetics of the footway through the correct application of materials.
  - Seek to ensure that adequate areas of permeable surface exist around trees as part of promoting the use of Sustainable Urban Drainage Systems (SUDS).
  - Introducing a Joint Engineering and Arboricultural approach to difficult tree root issues including engagement with Elected Ward Members.
  - Introducing the concept of a photographic specification to ensure consistency and repeatability of engineering approach.
  - Where it is necessary to remove a tree due its condition, as aligned to the Councils Tree Policy:
    - Replant in the same or appropriate alternative location using a tree species with less invasive root systems, and
    - Install root deflectors to reduce damage in the future.
- 3.2 Due to our statutory and contractual obligations which manifest through our insurance covenants which then flow through to our Intervention Criteria we must address the Category 1 defects within a 24hr period. To ensure that we:
- Meet the footway expectations and specifications of LBB/Members and residents
  - Provide a safe and sustainable asset that is collaboratively managed for the long term
- 3.3 Recent experience of bound 'rubber crumb' materials in Barnet has identified that this material meets the criteria regarding sustainability, safety, and permeability suitable to support both residential and town centre locations. As will a requirement of any substitute material.
- 3.4 To ensure the Councils legal and statutory obligations are discharged in line with the intervention criteria Officers propose the process set out in Appendix 1 of this report.
- 3.5 Aligned to the introduction of the Highways Tree Root Policy the intention is to review the Councils Highways Maintenance Inspection Manual to ensure the intervention criteria align with the emerging Highways Infrastructure Asset Management Plan. This will include the approach to tree roots in the footway.
- 4. ALTERNATIVE OPTIONS CONSIDERED AND NOT RECOMMENDED**
- 4.1 The alternative option of reverting to the blanket application of asphalt where paving has failed due to tree root damage fails to address the Councils approach to the quality of the environment, conservation, and sustainability. In addition, the Councils tree policy significantly restricts the removal of trees except as a last resort.
- 5. POST DECISION IMPLEMENTATION**
- 5.1 Once the Committee approves the recommendations, the policy will be subject to twelve weeks consultation with residents, businesses and appropriate stakeholders from March 2021, in conjunction with the communication team. A consultation plan will be developed and implemented. This policy be delegated to the Executive Director for Environment for

finalisation of any changes as a result of the consultation and implementation. This timetable is proposed so that the Highways Tree Root Policy can be in place from early June 2021.

- 5.2 A review is undertaken of the Highways Maintenance Inspection Manual is undertaken for the Borough aligned to the emerging Highways Infrastructure Asset Management Plan.

## **6. IMPLICATIONS OF DECISION**

### **6.1 Corporate Priorities and Performance**

- 6.1.1 The Council's Corporate Plan – Barnet 2024, states in its strategic objectives that it will work with partners to achieve a pleasant, well maintained borough that we protect and invest in.
- 6.1.2 In particular, the proposed policy will improve the highway network, which in turn will contribute to improving the local environment and the quality of life for the residents and help create conditions for a vibrant economy.
- 6.1.3 The proposed policy will 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.
- 6.1.4 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. The Highways provide access for business and communities, as well as contribute to the area's local character and the resident's quality 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 policy aims to improve the quality and safety of the network ensuring the Council's legal and statutory obligations are discharged.

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

#### **6.2.1 Finance & Value for Money**

- 6.2.1.1 The proposed Highways Tree Root Policy will ensure optimum value for money from expenditure on the highway network. Detailed financial impacts will be included in relevant approval reports to Environment Committee.
- 6.2.1.2 To deliver the proposed Highways Tree Root Policy it is proposed to access the capital budget allocation of £585k approved by Policy and Resources Committee along with any slippage that may arise at year end. Please note this capital budget allocation covers the allocation of Rubber Crumb for the NRP programme as well as the reactive maintenance activities proposed by the Highways Tree Root Policy for 2021/22. Any

retrospective application of rubber crumb to those roads that were part of the NRP programme (or batch of footways pre NRP) prior to the rubber crumb solution being applied may require a further funding request.

## 6.2.2 Procurement

- 6.2.2.1 This section does not apply to this report as the service will be delivered through existing and planned resources and contractual frameworks including the DLO and the TfL HMPF Framework.

6.2.3 Staffing - None as a result of this report.

6.2.4 IT - None as a result of this report.

6.2.5 Property - None as a result of this report.

## 6.2.6 Sustainability

- 6.2.6.1 This policy promotes the application of adequate areas of permeable surface around trees as part of promoting the use of Sustainable Urban Drainage Systems (SUDS).

## 6.3 Social Value

6.3.1 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.

## 6.4 Legal and Constitutional References

6.4.1 The Council's Constitution Article 7 – Committees, Forums, Working Groups and Partnerships (Responsibility for Functions, 7.5) gives the Environment Committee responsibility for all borough-wide or cross-constituency matters related to the street scene.

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

6.4.3 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.

## 6.5 Risk Management

6.5.1 Effective management of risk is an integral part of asset management and the Council's Risk Management Framework has established strategic and departmental risk registers.

6.5.2 The Code of Practice 'Well-managed highway infrastructure' (2016) advocates the

adoption of a risk-based approach to the management of highway infrastructure assets, and the proposed Highways Tree Root Policy will align with this approach.

## 6.6 Equalities and Diversity

- 6.6.1 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.
- 6.6.2 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.
- 6.6.3 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 Area Forums. 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.
- 6.6.4 The Equality Act 2010 outlines the provisions of the Public Sector Equalities Duty which requires Public Bodies to have due regard to the need to:
  - a) Eliminate discrimination, harassment and victimisation and other conduct prohibited by the Equality Act 2010.
  - b) Advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it.
  - c) Foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

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.

## 6.7 Corporate Parenting

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

## **6.8 Consultation and Engagement**

6.8.1 As set out in Section 5 of this report A consultation plan will be developed and implemented. This timetable is proposed so that the Highways Tree Root Policy can be in place from 1 June 2021.

## **6.9 Insight**

6.9.1 This section does not apply to this report.

## **7. BACKGROUND PAPERS**

None

# Highways Tree Root Policy

## Process Flow

