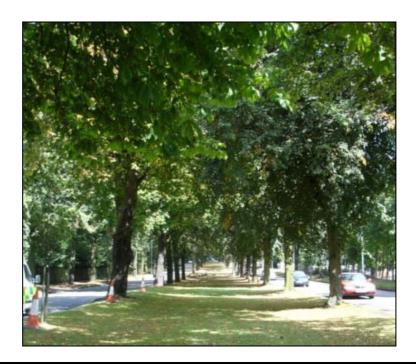


Report to the City Council

# Trees in the Public Highway



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# Preface

**By Councillor Ray Hassall** Chairman, Leisure, Sport & Culture Overview and Scrutiny Committee



Visitors to our city are often surprised by the numbers and beauty of trees on our highways, but many of us have noted the amount of trees that have been removed due to various factors. There are about 100,000 trees on our highways. Last year, about 1,200 of these were felled. Many of these were diseased or dangerous - lots of the mature trees that we take for granted around the city were planted in Victorian times and as they get older, some have to be felled. Some trees have to be removed to improve the road system and many of us will have noticed that dropped kerbs have been installed across the city, but in doing so hundreds of trees have been removed from the street scene. About the same number of trees have been planted to replace the lost trees, but not always on our streets. Regrettably we are not increasing the numbers of street trees in the city at the moment. We now need to be more imaginative on the way forward to replace trees back on the public highway and increase our total number of trees.

I think that this Scrutiny Review turned out to be one great learning curve for many of us and it was only when we started talking to people that we became aware not only of the importance of trees to our health, to regeneration and to our environment, but also of the many threats to our trees and the problems that the city was encountering in replacing them back on the highway.

During our many discussions and in drawing up our recommendations, we always needed to keep in our minds the ongoing talks regarding the Private Finance Initiative proposed for our Highways and the possible long term effect that it may have on our trees.

The last few months have really made me appreciate the wonderful trees in our city and the urgent need to protect them. We have to thank the foresight of the Councillors in Victorian times who decided to invest nearly £60 (a lot of money in those days!) in planting lots of trees in our city. They planted the first street trees in 1870 in Pershore

Street, Edgbaston Street and Broad Street. I feel we have an obligation to the people of our city in the years to come to ensure they have the same enjoyment from trees that we have had.

Our thanks go to the many people who came in their own time to give evidence. I would like to thank the Overview and Scrutiny Members especially those who joined the Review Group - Cllr David Pears, Cllr Margaret Waddington, Cllr Anita Ward, Cllr Martin Mullaney, Cllr Peter Hollingworth and Clllr Mohammed Fazal — and attended the many sessions that were necessary to hear a great deal of evidence. My thanks also go to Sue Griffith and Amanda Simcox for the great deal of hard work done behind the scenes to ensure that everything went smoothly.

Finally a vote of thanks to Geoff Cole and Gordon Richards of Local Services - their incredible amount of knowledge regarding trees was a great asset to all of us.



# 1 Summary

- 1.1.1 Many people visiting the city remark how green it is and they notice the tree lined streets leading to the City Centre. Residents in many areas of the city enjoy their "green" outlook. Years ago in late Victorian times, City Councillors ensured that trees were planted along new main roads and in streets where houses were springing up. These trees now give Birmingham its tree lined image.
- 1.1.2 The Council owns about 1,000,000 trees and it is estimated that 100,000 of these are street trees. These street trees have a strong impact on everyone in the city as they go about their daily life.
- 1.1.3 However Members of the Leisure, Sport and Culture Overview & Scrutiny Committee became concerned that our street trees are under threat at a time when their importance to the environment and climate is increasingly relevant. They asked colleagues from the Transportation and Street Services Overview & Scrutiny Committee to join a Review Group to take evidence on the issues.
- 1.1.4 In the short term the Review Group wanted to make Recommendations as to how current policies and processes could be improved to safeguard our street trees. In the longer term they wanted to ensure that the proposed Highways Maintenance and Management Private Finance Initiative would not lead to additional threats and challenges to our street trees.
- 1.1.5 First of all the Review Group heard from environmental experts on the wider benefits trees bring to the city. They heard how trees help keep us healthier by absorbing pollution and reducing stress; bring environmental benefits by helping to reduce climate change and provide wildlife habitats and contribute to environmental regeneration by improving perceptions of the city. The Review concludes that an understanding of the significance of trees needs to be much more actively promoted in the city.
- 1.1.6 The Review Group looked at street trees in residential areas and considered the threats to them which sometimes led to their removal. They also heard how replacing street trees is very difficult. The Review concludes that we need to be much more vigilant in recording when street trees have been removed and more active in finding new ways to replace them.

- 1.1.7 The Review Group considered the importance of street trees on our major routes. They were pleased to see new tree planting where new roads are being constructed. They became aware of the choices that sometimes have to be made between improving traffic flows and preserving trees close to major roads. They looked at two case studies to illustrate the way development can affect existing trees. The Review concludes that there are major concerns regarding the Council's apparent difficulty in controlling the activities of contractors working in the vicinity of trees. In addition, Members thought that the process for ensuring co-ordination across Council services during development needs attention.
- 1.1.8 The management of the Council's million trees is a corporate service. The Review Group heard about the objectives of the service in particular the imperative of ensuring public safety, and the way the service was run. They acknowledged the balance to be struck between maintaining a stock of mature street trees without jeopardising the safety and serviceability of a live and dynamic highway network. The review concludes that the completion and enhancement of a high quality database on City Council trees is a high priority. Not only will this enable the efficiency of tree husbandry to be improved but it will also ensure that the needs of our street trees are apparent in the years ahead.
- 1.1.9 Finally, the Review Group considered in two sessions, the effect of the proposed Private Finance Initiative on our street trees. The Group were unified in their belief that should the management and maintenance of street trees become the responsibility of the successful PFI Contractor, then a strong policy statement is necessary from the City Council to protect our heritage. Members welcomed the opportunity created to update the existing Tree Management Policy (in so far as it affects street trees) and thought that the outcomes of this Scrutiny Review should be fed into it.
- 1.1.10 The Group were very concerned about whether sufficient Tree Officers will be retained by the City Council to advise Members on tree matters should the PFI go ahead. They referred back to the Cabinet Decision of December 2004 when it was decided to include trees within the PFI subject to a number of safeguards. One of these safeguards was that "client to contain appropriate tree officer capacity to ensure compliance". They spent some time discussing what the appropriate capacity would be.
- 1.1.11 They were also aware that Birmingham could be in the unfortunate position of testing out the law should an accident happen due to a tree falling on the highway. Therefore they recommend that further advice is needed for Members on the legal issues surrounding the transfer of risk.

- 1.1.12 Many of the members involved in this review said they learnt a great deal about trees during the months of the evidence gathering sessions. They had not realised the great importance of trees to the health and wellbeing of the city.
- 1.1.13 Members realised that this review has generated a relatively large number of recommendations. However, they considered that this was a result of several Cabinet Members and Chairmen and many Directorates and services being involved in issues affecting street trees. It also reflected the importance which they placed on the outcome of their wide ranging discussions with experts and officers.



# 2 Summary of Recommendations

	Recommendation	Responsibility	Completion Date
R1	That consideration be given to supporting the setting up of a Birmingham branch of the charity 'Trees for Cities'.	Cabinet Member for Leisure, Sport & Culture & Cabinet Member for Transportation and Street Services	September 2006
R2	That if a street tree is to be removed for any reason, Ward Councillors be informed and a register of such trees be set up within the existing 'Confirm Abor' database.	Cabinet Member for Leisure, Sport & Culture & Cabinet Member for Transportation and Street Services	September 2006
R3	That a summary report of Street Trees Removed and Replaced be submitted to the Leisure, Sport and Culture Overview & Scrutiny Committee on a six monthly basis.	Cabinet Member for Leisure, Sport & Culture	September 2006
R4	That a report of the evaluation of street tree planting proposals within the Pilot Projects in Selly Oak and Edgbaston Districts to identify ways of increasing tree planting in residential areas, be submitted to the Leisure, Sport & Culture Overview & Scrutiny Committee.	District Chairs for Selly Oak and Edgbaston	March 2007
R5	That consideration be given to setting up a pilot project to identify ways of using street trees in traffic calming schemes.	Cabinet Member for Transportation & Street Services	September 2006
R6	That a process be introduced to require developers, utilities and their contractors to obtain a Permit to Work Adjacent to Trees before consent is granted to open up the highway.	Cabinet Member for Transportation & Street Services	September 2005
R7	That a report on the internal review of the effectiveness of the protocol 'Building a Better Birmingham – A Charter for Development' be submitted to the Leisure, Sport and Culture Overview & Scrutiny Committee.	Cabinet Member for Regeneration	September 2006
R8	That a review of the process and content of the S278 Highways Act Agreement be undertaken including:	Cabinet Member for Transportation & Street Services	September 2006
	<ul> <li>Development of the highway affecting any tree in the city, on any street.</li> <li>The connections between the Planning Control process and the S278 Highways Act process.</li> <li>The process for obtaining arboricultural advice.</li> <li>The measures and resources currently in place to supervise contractors working in the vicinity of street trees.</li> </ul>		

9	That a seminar be organised for the officers and Members involved in development planning to provide advice on the processes within the City Council for securing arboriculture advice. The proceedings of the seminar should be written up and made widely available, including a report to the Leisure, Sport and Culture Overview & Scrutiny Committee.	Cabinet Member for Leisure, Sport & Culture	June 2006
R10	That consideration be given to upgrading and enhancing the 'Confirm Arbor' database as an urgent priority.	Cabinet Member for Leisure, Sport & Culture	July 2006
R11	That a business case be prepared that sets out the scope for and the consequences of transferring the role of the Tree Contact Centre to the City Council's call centre.	Cabinet Member for Leisure, Sport & Culture & Deputy Leader	September 2006
R12	That the Council's current Tree Management Policy Statement (in so far as it affects street trees) be revised and included in the 'Best & Final Offer' PFI documentation. The revisions should include the conclusions and recommendations from this Scrutiny Review.	Cabinet Member for Leisure, Sport & Culture & Cabinet PFI Committee	March 2006
R13	That all necessary steps are taken to give the best opportunity for the existing Tree Officer posts to be retained within the City Council.	Cabinet PFI Committee	September 2006
R14	That a business case be prepared that supports the provision of additional Tree Officers to ensure that local areas have access to adequate arboricultural advice.	Cabinet Member for Leisure, Sport & Culture	March 2006
R15	That a report be submitted to the Leisure, Sport and Culture Overview & Scrutiny Committee on the legal position regarding the transfer of risk to the PFI Contractor and the implications of this to Elected Members should they be involved in advising on the management of street trees.	Cabinet PFI Committee	May 2006
R16	Progress towards achievement of these recommendations should be reported to the Leisure, Sport and Culture Overview & Scrutiny Committee in September 2006.	Cabinet Member for Leisure, Sport & Culture	September 2006
	Subsequent progress reports will be scheduled by the Committee thereafter, until all recommendations are implemented.		



#### 3.1 Reasons for Conducting this Review

- 3.1.1 In late Victorian times, the city forefathers realised the importance of trees to the quality of life of the growing city and many street trees were planted along major roads and in residential streets. However, this legacy is threatened by the need to service a changing modern city. In addition, whilst the Victorians held trees in high esteem, some people now see them as inconvenient and potentially dangerous.
- 3.1.2 Members of the Leisure, Sport and Culture Overview & Scrutiny Committee decided to undertake this review because they wanted to find out how our street trees could be protected at this difficult time.
- 3.1.3 In the short term, they wanted to make recommendations as to how the current policies and processes could be improved.
- 3.1.4 In the longer term, they wanted to ensure that the proposed Highways Maintenance and Management Private Finance Initiative (PFI) would not lead to additional threats and challenges to our street trees.
- 3.1.5 Members were concerned that the proposed Highways PFI would change the way that the street scene is managed. They thought that should the maintenance and management of trees pass out of the direct control of the City Council, effective measures (including policy guidance) would need to be put in place to protect our heritage of street trees.
- 3.1.6 Therefore the objective of the review was to provide the research and background information to enable policy guidance to be drawn up for the maintenance, management, husbandry and planting of trees in the public highway, which could be used to ensure that organisations other than the City Council, who may have responsibility for the city's tree heritage, cherish and protect this legacy.



- 3.2.1 A cross-party group of Members were constituted to conduct the review involving Members from the Leisure, Sport and Culture Overview and Scrutiny Committee and the Transportation and Street Services Overview and Scrutiny Committee. The Review Group Members were:
  - Cllr Ray Hassall (Chairman)
  - Cllr David Pears
  - Cllr Margaret Waddington
  - Cllr Anita Ward
  - Cllr Martin Mullaney
  - Cllr Peter Hollingworth
  - Cllr Mohammed Fazal
- 3.2.2 In July, September, October and November 2005, the Review Group took written and verbal evidence from 16 Council Officers, the Cabinet Member for Transportation and Street Services, the Cabinet Member for Leisure, Sport and Culture and representatives from various organisations the Wildlife Trust for Birmingham and the Black Country, the National Urban Forestry Unit (NUFU), the National Forest, the Birmingham Civic Society, Telewest, the City Council's tree contractors Central Trees Services and Gristwood & Toms and Paul Harris an insurance expert who deals with claims against the City Council with regards to trees.

**Trees** 

# Review of Trees in the Public Highway



#### 4.1 Introduction

4.1.1 A series of presentations on the wider benefits of trees were made to the Review Group on 1<sup>st</sup> July 2005.

#### 4.2 Birmingham's Legacy of Street Trees

- 4.2.1 The Review Group heard from the Cabinet Member for Leisure, Sport and Culture how the city needs to be proud of its magnificent heritage of trees. Street trees are fundamental to the city's tree heritage. In late Victorian times, the city forefathers realised the importance of trees to the quality of life of the growing city. They planted the first street trees in 1870 in Pershore Street, Edgbaston Street and Broad Street. Shortly afterwards, the city created its own tree nurseries and planted 1,000 trees in the streets every year (with two interruptions for the two world wars).
- 4.2.2 The Council owns about 1,000,000 trees. It is estimated that there are about 100,000 street trees. These street trees have a strong impact on everyone in the city as they go about their daily life.
- 4.2.3 Not only are they important to the city, but also as part of a regional, national and global ecosystem.

#### 4.3 Trees Help to Keep us Healthier

4.3.1 The Review Group heard from Nerys Jones, the Chief Executive of the National Urban Forestry Unit (NUFU), how important trees are in filtering out harmful polluting particles from vehicle emissions and in absorbing the harmful gases which can trigger respiratory problems including asthma.

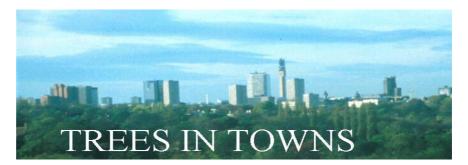
- 4.3.2 She referred to recent research from Lancaster University demonstrating how increasing the extent of the West Midland urban tree canopy could help prevent premature deaths from cardio-respiratory diseases. Respiratory illnesses in the city are a cause for concern and pollution levels along our most heavily trafficked roads are very close to levels which can cause health concerns.
- 4.3.3 Evidence is clear that trees and open spaces reduce the stress of urban living. Members heard that after three minutes exposure to 'green space', actual relaxation can be measured in terms of reduction in muscle tension and blood pressure. With six million working days lost a year due to stress, trees have an important role to play.
- 4.3.4 The value of the shade that trees cast in summer is becoming increasingly recognised as the dangers of direct sunlight on the skin are recognised. Members heard from Nerys Jones that skin cancer claims the lives of 2,000 people per year in the UK and trees in school playgrounds, for example, would help protect children.

#### 4.4 Trees Bring Broad Environmental Benefit

- 4.4.1 Paul Stephenson, Senior Ecologist from the Wildlife Trust for Birmingham and the Black Country reminded the Review Group that whilst some people do not understand the environmental benefits of trees, their value has become apparent in certain countries of the world only after they have been removed. He emphasised how fortunate Birmingham was to have such a legacy but warned that as many trees were becoming old, we could not afford to be complacent.
- 4.4.2 Trees reduce flooding by slowing down the rate at which heavy rain hits the ground. Birmingham has seen an increase in violent storms in the last few years, illustrating that fears of climate change are becoming a reality. Flash flooding following rapid run off causes damage to roads and houses. Nerys Jones reminded the Review Group of the increasing trend of cities being paved over such as front gardens being paved for car parking.
- 4.4.3 Trees provide significant wildlife habitats which contribute to maintaining biodiversity. Whilst this is important locally, wildlife corridors play an essential role in regional and national nature conservation. Paul Stephenson told the Review Group about the Local Biodiversity Action Plan and how important trees were for birdlife in the city.



- 4.5.1 Nerys Jones told Members that research, done by the Government Agency CABE Space, has shown that residential property prices are higher in areas where there is greenspace and trees in comparison with areas of the same type of house, but no green space and trees. There is also a clear correlation between high social deprivation indices and lack of tree cover. Many of our inner city areas of high density housing have fewer trees than lower density suburban areas. As our stocks of street trees become older, their replacement in all types of residential areas is essential to ensure that economically deprived areas are not also deprived of the benefits trees can bring.
- 4.5.2 Paul Stephenson reminded the Review Group that many people "vote with their feet'" and move out the harsh inner city environments to our leafy suburbs as soon as they can.
- 4.5.3 Susan Bell and Viv Astling from the National Urban Forest, in their presentation to the Overview & Scrutiny Committee in October 2005, commented on the importance of trees to the image of the city. They thought that the value of the city's green and leafy environment was underestimated in the marketing of the city. The image of Birmingham as a leafy city is often used in promotional material and there is no doubt that the perception of the city is greatly enhanced by its legacy of street trees.



#### 4.6 Threats to Trees

4.6.1 The Review Group heard how our legacy of trees is now under threat. Many of the street trees planted in Edwardian times are mature and are having to be replaced. Members heard how the primary consideration of the City's Tree Management Service is the safety of members of the public. Absolute safety is arguably not possible in the case of living trees, however the Council has to do everything reasonable to reduce risk. If a tree is damaged in anyway (including the roots), or diseased, it may become a risk and therefore may have to be felled.

- 4.6.2 An increasingly high-tech society has required more services and cables and pipes for gas, electricity, water, cable telephone & broadband are located in pavements. This affects trees in two ways; firstly it is difficult to find locations in the footway to plant replacement and new trees and secondly trenches to insert new services may well damage roots which causes trees to die therefore they have to be removed to prevent accidents happening later.
- 4.6.3 Not only are trees removed because of their age, but also trees are removed due to highway proposals. Junction improvements, road widening, maintaining site lines, enabling access to sites and dropped kerb vehicle crossings all may require the removal of trees. Again finding suitable locations to plant replacement trees is becoming increasingly difficult.
- 4.6.4 The Review Group heard that when mature trees are replaced, for whatever reason, the benefits of a young tree are far less than the benefits of a mature tree. This is because of the size of the leaf canopy and its ability to filter pollutants etc.
- 4.6.5 To obtain the same environmental benefit, one mature tree should be replaced with six young ones.
- 4.6.6 As society has become more sophisticated, the public's attitude to nature has in some way become more intolerant. Residents find leaves, falling fruit, sticky deposits and insects associated with trees inconvenient and messy when they fall on driveways, cars or homes.
- 4.6.7 In high density inner city areas, many people think space for car parking close to their home is more important than street trees.
- 4.6.8 Trees close to houses are viewed with increasing suspicion especially when they grow large. House subsidence problems are frequently (rightly or wrongly) attributed to trees near houses. House insurance companies are increasingly receiving claims from householders which have resulted in a negative attitude to trees close to houses from surveyors, mortgage lenders and estate agents.



#### 5.1 Introduction

- 5.1.1 Presentations were made to the Review Group on Street Trees in Residential Areas on Friday 9<sup>th</sup> September 2005.
- 5.1.2 Street trees have an enormous impact on the appearance of our city streets, especially in residential areas. A tree lined street is seen by most people as a more desirable place to live than one without any trees. Several recent studies have shown that houses in areas with trees are valued at a higher amount than similar properties elsewhere without trees close by.
- 5.1.3 The popular belief that people feel better in green, leafy surroundings is now supported by a growing amount of scientific evidence. The stress of life in urban Britain is a very significant factor in the health of the nation, and many people find a green environment more relaxing. Urban residents suffering from stress have been shown to experience less anxiety and insecurity when they have a view of trees.

#### 5.2 Types of Residential Areas

#### Roads with no Trees

5.2.1 Some streets in the city are devoid of any street trees at all. The footway may never have been planted with trees when the houses were constructed, or trees planted in the past have not been cared for and have died or been damaged and removed. This tree-less street scene is made even worse where there are no trees in front gardens or adjacent open space.



# Roads where the appearance of being tree-lined is created by trees in adjoining gardens or privately owned land

5.2.2 The Calthorpe Estate is well known for its extensive tree cover. Promotional views of the city often show this area to the south west, contrasted with the city skyline. When the Calthorpe Estate was developed in early Victorian times, covenants required the planting of trees in private gardens. Tree lined roads in Edgbaston are the result - the Calthorpe Estate is responsible for their trees: their agents run their own comprehensive Tree Management System. Finance for this is derived from service charges from leaseholders and other income from the estate.



5.2.3 In other areas of the city the streets are similarly "greened" by trees not actually in the highway. These may be in gardens (not the responsibility of the Council) or land in housing areas or near schools which are managed by the Council.

# High density, Victorian/Edwardian terraced housing, often in inner areas of the city

5.2.4 In some streets, trees were planted in the footways when the houses were constructed at the turn of the century. Trees such as lime and poplar were planted. A hundred years later, the size of these trees is considerable.



Albert Road, Handsworth

- 5.2.5 During regeneration programmes such as the Inner City Partnership Programme, enveloping of homes and reconstruction of front walls were complemented by improvements to the highway, including designating parking bays and construction of tree planting bays. Some of these trees have grown well, but others have not.
- 5.2.6 Because of the density of homes and the increases in car ownership, these areas have high levels of car ownership. Front gardens are often too small to enable their use as hard standings. Lack of off-street parking and garages mean the highway is often congested with cars. Trees in the footway may be damaged by the parking of cars. Finding locations for new tree planting is very difficult.

#### Case Study Washwood Heath

The Review Group undertook a Case Study of such an area to examine the impact on the ground of policies and processes. A presentation was made on Monday 7<sup>th</sup> November 2005 on the area of Washwood Heath (Bennett's Road, Chartist Road and Membury Road). Members observed that trees planted in 'tree pits' within 'build outs' as part of Urban Programme Improvements 10 – 15 years ago, had not survived – except for two trees. The local residents however placed more value on space for parking their cars outside their own property, than on retaining the 'tree pits' and replacing the trees.



Cllr Hassall concerned about parking on top of an empty tree pit at the bottom of Bennetts Rd.

Following a site visit with the local residents, the Chairman of the Review Group and the Cabinet Member for Transportation and Street Services reached a compromise – some of the trees would be replaced with mature, well protected specimens and other 'tree pits' would be removed to enable additional car parking.

This case study illustrated that in many of the high density inner areas of the city, car parking is seen by residents as a higher priority

# Lower density housing often without garages where there is increased demand for off street parking

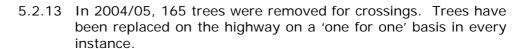
5.2.7 The increases in car ownership and the desire for off-street parking, have led to an increase in parking on footways and verges and the desire of residents to create hard-standings in their front gardens.



- 5.2.8 The creation of a new front garden parking area will lead to a request to the Council to agree to the provision of a "Dropped Kerb Vehicle Crossing". Householders are required to pay for this work which comprises lowering the kerb and laying foundations and tarmac from the road to the house, across the footway and/or grass verge.
- 5.2.9 This has a visual impact on the street scene since plants and grass in front gardens is replaced by hard-standing, and grass verge by tarmac. In addition the verge may contain a tree which would need to be felled for the Dropped Kerb Vehicle Crossing to be achieved.

#### Dropped kerb vehicle crossing

- 5.2.10 The Review Group heard evidence from the Chief Highway Engineer regarding the process used for deciding if a tree should be felled where it prevented the implementation of a Dropped Kerb Vehicle Crossing. He said that no tree on the Highway could be removed without his authorisation.
- 5.2.11 He explained that if a crossing was proposed on a quiet avenue where a car parked on the street would not cause a traffic hazard, then consent to fell a tree for a crossing would be unlikely to be granted. However, where off street parking was desirable for removing parked cars from heavily trafficked routes, then consent may be given to fell a tree to enable a crossing. Each case was dealt with on its merits.
- 5.2.12 A refusal to allow a tree to be felled to enable a crossing is subject to the right of appeal to the Chief Highway Engineer. If a tree is removed without consent then Highways may pursue a claim against the offender for damage to the highway. The intention would be to recover sufficient costs to provide a replacement semi-mature tree to be planted as close to the felled tree as possible.





#### 5.3 Threats to Trees from Utility Cable Laying

- 5.3.1 The area beneath the pavement or footway is the major location for pipes and wires carrying services to homes including, gas, electricity, water and Cable TV/Broadband/telephone. Footways are frequently dug up to access existing services, or lay new ones in trenches. If this is done by machine street tree roots can be damaged. A large street tree has an extensive root system close to the surface of the soil.
- 5.3.2 A tree can withstand a small proportion of its roots being damaged, however root damage often leads to the tree deteriorating in health over a short, or longer period of time. The tree then becomes a risk and has to be removed by the Council on safety grounds.



Villa Road, Handsworth

- 5.3.3 The Review Group heard evidence from Peter Renhard, a representative from Telewest and a member of Birmingham HAUC (Highway Authority & Utilities Committee). He explained that Birmingham HAUC met once a quarter to discuss any utility problems. He described the regulations that govern the way utilities are required to work in the vicinity of trees. These are the National Joint Utilities Group 'Guidelines for the Planning, Installation and Maintenance of Utility Services in Proximity to Trees' Publication No 10 April 1995, known as NJUG10. The guidance is based on establishing a Precautionary Area for protecting the roots in many cases this is the area under the tree canopy. Within this precautionary area care must be taken not to damage tree roots. A copy of these guidelines is attached in the Appendix.
- 5.3.4 However, the Assistant Director, Parks, Sports and Events told the Review Group that whilst the utility companies may have good intentions, sub contractors were sometimes careless. The indiscriminate use of modern machinery, coupled with inadequate site supervision, has led to examples in the city of tree roots being damaged. In Northfield an avenue of trees had to be replaced and payment was provided by the negligent utility company.



#### 5.4 Insurance Claims

5.4.1 Homeowners are increasingly viewing trees near their property with suspicion. There has been an increase in the tendency to blame trees for subsidence of houses. The insurance industry is involved in several ways.

#### When new mortgages are sought

- 5.4.2 When new mortgages are sought on a property with a tree close by, surveyors conducting mortgage reports increasingly recommend the report of a tree specialist.
- 5.4.3 Arboricultural advisors are increasing in number to meet the demand for advice. There have been concerns that reports are prepared after only cursory site visits. Where tree roots are identified in the vicinity of a house, pre-emptive tree felling may well be suggested. If the tree is in a street owned by the Council, felling by the Council is requested.

#### Structural damage blamed on street trees

- 5.4.4 If a house has shown symptoms of subsidence, such as cracks in the internal plaster or in the external brickwork, nearby trees are often blamed. The justification for the blame is usually made by claiming that tree roots have removed water from the subsoil under, or near to the foundations. The volume of clay soil reduces if it dries out significantly and this can cause the seasonal movement of foundations and therefore structures.
- 5.4.5 The Review Group received evidence from a Consulting Engineer, Paul Harris on Monday 9<sup>th</sup> September 2005. He outlined his role as an advisor to the City Council's insurers where residents were claiming against the Council saying that a Council owned tree had caused damage to their property. He dealt with 81 cases for the City Council in 2004.
- 5.4.6 He explained that he dealt with situations where a claim is made that a tree has caused:
  - Direct physical damage by roots to walls and drives
  - Indirect damage. i.e. subsidence

- Physical damage arises where roots lift walls, drives or paving he only looks at cases brought against the Council by private individuals where damage is not covered by household insurance. Where his report assesses that the tree roots have caused the problem, the Council's makes a claim on its insurance although it has to pay an amount defined in the policy as the 'insurance deductible or excess'. This is then paid to the householder in compensation which pays for the repair/replacement of the drives/walls.
- 5.4.8 Any preventative work, such as severing of the roots causing the damage, is carried out by the Council at their own expense. However, the use of a plastic root barrier to restrict future root growth is not normally carried out. Members thought that this would be a good policy to investigate.
- 5.4.9 Paul Harris advised Members that in his opinion there had not been a rise in incidents of direct physical damage, rather an increase in claims to the Council because of the increased focus on household "perfection", decreasing tolerance and an increasingly litigious society.
- 5.4.10 Although it is often claimed that the cause of the structural movement (which may in any case be extremely small) is the tree roots removing water, there are many other reasons for house foundations becoming unstable. The material question is whether or not the subsidence would have happened if the tree had not been there. If the answer is yes, then the owner of the tree must pay all the costs.
- 5.4.11 Paul Harris explained that when structural damage occurs as a result of subsidence, homeowners claim on their home insurance. Where the insurance company suspects a tree owned by the City Council has led to the subsidence, it is likely to make a claim against the Council. He reminded Members that subsidence was a much more significant problem in London because of widespread clay soils such soils are only found in areas in South and West Birmingham and these types of claims are confined to those areas. Most, but not all cases, involve highway trees most, but not all, involve larger and older trees.
- 5.4.12 He said that there were 33 claims due to subsidence against the Council in 2004 (following the 2003 drought). The total cost of settlements was likely to be around £300,000. However, the risk of a specific tree in Birmingham causing subsidence is less than 0.1%. Mr Harris dealt with a further 48 cases for claims due to root damage, although some additional ones were dealt with by the Council direct.

- 5.4.13 Whilst he thought there had been no general increase in numbers of incidents since the late 1980's, the increased number of claims was mainly due to changes in attitudes by household insurers and hardening of the legal position making it easier to claim.
- 5.4.14 He considered that preventative management would involve felling and replacing trees in known "hotspots". Replacement trees should be grown in root restricting pits. Research has shown that pruning does not reduce the impact of root systems.

#### 5.5 Conclusions on Tree Removal

- 5.5.1 Trees need to be removed for a number of reasons. Within the Tree Management & Maintenance Programme, these are:
  - Old trees likely to fail and cause a safety hazard
  - Diseased or dead trees
  - Trees the subject of a successful legal claim that they are causing damage
  - Trees sustaining root damage which may cause tree failure and a public hazard
  - Trees which are too large for the space they are growing in causing damage to footways or walls/buildings
  - 5.5.2 As regards trees affected by Highway Improvement Works and Footway Crossings, these are:
    - Where dropped kerb vehicle crossing is deemed essential
    - Where highway improvements need to be implemented
- 5.5.3 Trees on the public highway can only be removed with the permission of the Chief Highway Engineer. Within the Tree Maintenance and Management Programme, removal permissions are delegated to the Assistant Director (Parks, Sports and Events). Where trees are affected by Highway Improvement Works and Footway Crossings, tree removals are authorised on a scheme by scheme basis by the Chief Highway Engineer.
- 5.5.4 The Leisure, Sport and Culture Overview & Scrutiny Committee heard evidence on Wednesday 12<sup>th</sup> October 2005 from Stephen Hartland of the Birmingham Civic Society regarding his concern about the removal of street trees in the city. Whilst many of the photographic examples he showed the Committee were located in the City Centre, he said that his concern extended to residential areas as well.



Stephen Hartland's concern over trees not replaced on the Hagley Road

- 5.5.5 There are an estimated 100,000 trees on the highways. During 2004/05 the number of these trees felled was 1,209. Of these, 137 were removed as part of the phased removal programme where trees have become too old or outgrown the space available. A further 165 were removed for dropped kerb vehicle crossings. The remaining 907 were felled because they were diseased or dangerous, or affected by highway improvement schemes.
- 5.5.6 Residents of the city have different attitudes towards the removal of trees. Some people want trees near their houses felled because they see them as a danger or a nuisance or because they want to park their cars in the space released. Other people feel strongly that trees should not be removed and campaign for their retention.
- 5.5.7 Trees on the public highway can only be removed with the express permission of the Chief Highway Engineer. He is advised by the city's arboricultural experts the Tree Officers within the Tree Management Service. It is essential that any tree that threatens the safety of the public is removed.

#### 5.6 Planting New Trees in Residential Areas

5.6.1 It is the policy of the City Council to replace trees removed from the public highway. To do this, on average 1100 trees are ordered every year to be planted citywide – which works out at about 100 per District. During 2004/05, 1,209 trees were removed from the highway and 1,200 replacement trees were planted.

- 5.6.2 However planting new trees in the highway is beset with problems. Where a tree has been removed, it is not possible to plant another in the same place. The Review Group heard from the Assistant Director, Parks, Sports and Events that when a tree is felled it is cut off at the level of the footway. Then the trunk area is broken up with a stump grinder machine. The roots are left in situ to slowly rot away since it is impossible to remove them. This is because over time, they would have threaded themselves through service cables root removal would damage the services.
- 5.6.3 Where new street tree planting is desirable, a search has to be made of the utility cables/pipes that run beneath the surface. These plans are produced by the utility companies and copies are available from the Chief Highway Engineer. However, Members heard evidence that these plans are often inaccurate. Once a suitable location appears to have been found, a trial pit may need to be dug. If no services are found, then a tree may be planted.
- 5.6.4 Because of these difficulties, not all removed street trees are replanted on the highway. In 2004/05 only 911 of the 1,200 replacement trees were planted back into the highway. The remainder were planted in parks and open spaces.
- 5.6.5 Therefore, there would be a gradual decline in the total number of street trees were it not for planting within new road schemes, local centres, regeneration projects and local level District planting projects.



One of the Review Group Members, Councillor Mullaney, reported that his District was looking at new ways of increasing the numbers of street trees. He and another Member had been approached by local residents from Moseley, Cotteridge and Stirchley asking if more trees could be planted in their streets. In one area residents hope that planting well protected trees will stop cars parking on footways and verges.

The District Parks Manager has arranged for the local City Highways Depot to excavate the tree pits – locations have been chosen where the Utility Plans show there is space. To prevent horizontal spread of tree roots which could damage utility pipes and cables, a plastic 'service guard' is being laid in the tree pit. This is a new technique, borrowed from Holland, that is being tried out at the local level in response to public interest in seeing more trees in their streets.



Planting in Selly Oak in January 2006

Finance for the planting is being found from within the District Budget. Similarly in the Edgbaston District, Councillor Clarke (who led the pioneering 'Operation Green Up' in the 1980's), is working with local residents in the Quinton Ward to identify sites in the grass verges for tree planting.

#### The concept of 'Home Zones'

5.6.6 In some European countries, traffic calming is achieved by narrowing roads in residential areas and planting trees in parts of the carriageway. This not only slows traffic, but introduces more trees in the street scene. In this way they can be planted away from existing utilities in the footway. There are examples of Home Zones in the UK and the concept is supported by the government.



Northmoor, Manchester - Home Zone

- 5.6.7 However Home Zones are relatively expensive to implement and some residents only feel comfortable if their car is parked immediately outside their house.
- 5.6.8 It may be that some of the principles of Home Zones could be adapted for use to enable more street trees to be incorporated in high density residential areas.

#### Increasing the number of trees in the residential areas

5.6.9 If streets are increasingly hostile places for trees to be, consideration needs to be given for increasing the number of trees on sites next to the highway. This could be on land owned by the Council, or privately owned. Local residents may wish to plant trees in their front gardens (where there is space) but lack the knowledge or ability to do this.



#### 6.1 Introduction

- 6.1.1 Presentations were made to the Review Group on Street Trees on Major Routes on Monday 19<sup>th</sup> September 2005.
- 6.1.2 Dual carriageway roads into the city such as the Bristol Road and the Stratford Road are not only lined with mature trees but the central reservations (where once trams ran) are also the home to large trees. These create very strong green corridors into the city, attractive both to residents and those travelling in and out the city.



Bristol Road, Selly Oak

6.1.3 Other strategic routes have been 'greened' more recently. In the early 1980's, Operation Green-Up was a radical programme, (inspired by work in Germany) which replaced grass on the central reservations of routes such as the then "Middle Ring Road" with intensive shrub and tree planting. The trees at Dartmouth Circus provide a sharp contrast with the concrete of the Aston Expressway at the northern entrance to the city.



6.2.1 The regeneration of the city requires development of a wide variety of sites for employment opportunities, hospitals, shopping areas and homes. Safe and convenient access off major routes is essential. However new access point construction can conflict with the health of our street trees.

#### The requirement of contractors to protect trees

- 6.2.2 Work on the public highway is carried out by contractors on behalf of the City Council. There is a legal contract between the City Council and those companies that carry out the work on our roads and footways. The contractors are working to the designs and the detailed plans agreed with the City Council. Therefore the protection of trees on highways is affected by both the detailed design of the scheme and the way in which those works are carried out by the contractor.
- 6.2.3 There are codes of conduct for contractors working near to street trees. These are "The National Joint Utilities Group Guidelines" and British Standard 5837:1991". Details of these are set out in the Appendix.

#### Section 197 of the Town and Country Planning Act 1990

6.2.4 Under section 197 of the Town and Country Planning Act 1990, local planning authorities are under a duty to ensure that they make adequate provision for the protection and planting of trees when granting planning permission. They do this by a combination of planning conditions and tree preservation orders. Tree Preservation orders cannot be applied to trees owned by the Council.

#### 6.3 Development Affecting Street Trees

- 6.3.1 New developments can affect existing street trees where additional or improved access points are needed off the highway. Planning applications are available for public viewing and the Local Planning Authority consults widely with Members, the public and Council Services.
- 6.3.2 Where a planning application is approved for a development that requires work to the Public Highway, it is subject to a legal agreement to procure the access. Traditionally Section 106 of the Town & Country Planning Act required the developer to fund the highway works which were carried out by the Local Authority. However this process was seen to take too long. Now under an agreement within Section 278 of the Highways Act 1980, the developer carries out the work at their own expense and the Local Authority has an inspection role.

6.3.3 Before any construction on the Highway can take place, detailed plans have to be approved by the Assistant Director (Development Strategy) after consultation with ward Councillors and the Cabinet Members. Plans must show any trees affected. Trees can only be felled with the permission of the Chief Highway Engineer.

# Case Study Access to the Pebble Mill Site off Bristol Road

This site was chosen as a Case Study to illustrate the effectiveness of the current arrangements for protecting street trees where a new access off the Highway is proposed in connection with development.

The site is the former BBC studios at Pebble Mill – a new access was required off the heavily tree lined Bristol Road to enable the development of the site as a science business park.

The Review Group took evidence on Monday 19<sup>th</sup> September 2005 and again on Monday 7<sup>th</sup> November 2005. Officers from several departments explained the processes currently in place for agreeing the works and protecting the street trees.

Members were concerned that the original plans submitted to the Local Planning Authority did not give an accurate picture of the number of trees that would be affected by the new access road. It was only when the detailed plans for the access were marked out on the ground as part of the s278 Agreement, and arboricultural advice obtained, that the full impact of the construction on the trees was realised. At the Planning Application stage the assumption was that three trees would need to be felled.

The Review Group heard that eight trees had been felled by the end of October 2005 and there were concerns about a further three trees.



Central reservation on the Bristol Road at Pebble Mill – August 2005

Members were also very concerned about the lack of respect shown by the contractors to the retained trees on the site. They heard evidence of the obligations imposed on developers to protect street trees including the planning conditions and the S278 Agreement. Despite this, photographs taken of the site showed Members the damage being done to the street trees by contractors.

The Review Group were adamant that the felled trees should be properly replaced and intended to monitor the process to achieve this.



Tree damage - Pebble Mill 14.09.05

#### Case Study Harborne Lane Cycle Path

This site was chosen as a Case Study to illustrate how important it is that both the design of the scheme and the supervision of contractors takes into account the need to protect street trees.

Harborne Lane is a heavily trafficked dual carriageway – part of the Outer Circle Route. The cycleway was proposed as part of the Safer Routes to Work Programme because a demand had been expressed for cycling facilities within the vicinity of Birmingham University.

The Review Group took evidence on Monday 7<sup>th</sup> November 2005 from officers. Members were concerned that a scheme designed by officers from the City Council and implemented by our own 'term contractors' had resulted in the loss of six mature Hawthorn trees.



Existing Hawthorn trees just after the laying of the hardcore

Members were disappointed to hear that the design of the scheme required tarmac to be put down close to the base of the trees and that the contractor cut through the roots with heavy machinery to enable the hardcore to be laid. Since such root damage could cause tree failure and a potential highway hazard, all the trees (except two) had to be removed.



The same view with the cycleway in place.

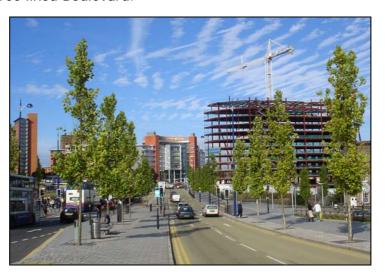
Replacement trees will be planted in the winter planting season 2005/06.

#### 6.4 New Roads in the City

6.4.1 The construction of new roads in the city can both provide opportunities for new tree planting, but also may threaten existing trees. Each scheme is a balance between retaining existing trees and incorporating new trees into the design. Since inserting new trees into existing streets is difficult due to services, new schemes can create planting sites with sufficient soil suitable for good tree growth.



6.4.2 The demolition of Masshouse Circus and the realigning of the Ring Road have enabled a townscape dominated by concrete to be softened by the planting of mature Plane trees to create a tree lined Boulevard.



#### **Northfield Relief Road**

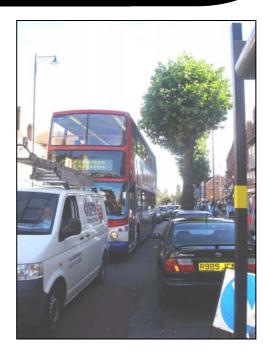
- 6.4.3 Northfield is one of the city's most important shopping centres, however between 25,000 30,000 vehicles use the Bristol Road South everyday. The relief road will divert non-essential traffic from this busy local centre to enable the shopping centre to become a much more pleasant place for people. The scheme is under construction at the present time.
- 6.4.4 The new carriageway is ¾ mile long and is a two lane dual carriageway with a central reservation. Tree planting has been agreed to create an avenue of trees on either side of the road to link up with the existing Bristol Road mature trees. Additional soft landscaping will be provided at suitable locations.



- 6.4.5 The cost of the tree planting will be met from the finance package for the whole project.
- 6.4.6 During the design phase of the project, the city's Landscape Practice Group were commissioned to:
  - Design the tree planting and landscaping
  - Advise on the suitability of the type of street trees
  - Select the individual trees in the tree nursery in late summer 2006
  - Supervise the planting of the trees between November 2006 and March 2007 – the planting season
- 6.4.7 The first two years of the care of the trees will be part of the initial contract to ensure that the trees grow well if they do not then they will be replaced.
- 6.4.8 There will be a significant increase in the number of trees in the locality as there were few trees in this area. Only a small number of trees have been removed as they were in the line of the new road two trees of significant landscape quality have been saved by redesigning the new highway kerb lines and adjusting levels.

#### 6.5 Improving Traffic Flow on Strategic Routes

6.5.1 Street trees on strategic routes have to compete with the priority of improving traffic flow. In addition where strategic routes pass through Local Centres, trees also have to compete with the demands of servicing shops and the need for parking. If these demands outweigh the value placed on trees and if existing trees are not protected, then trees will be lost in these locations.



Sparkhill – Is there room for our trees?

6.5.2 The creation of 'red routes' and 'bus only lanes' are an important part of improving traffic flow on major routes. However creating bus lanes may require a road to be widened, either by the compulsory purchase of privately owned land adjacent to the highway, or by incorporating grass verges into the carriageway. In either case trees may need to be felled. The creation of 'red routes' may lead to increased demand for off street parking.

#### **Stratford Road Red Route**

- 6.5.3 The trees in Sparkhill local centre are under pressure from demands on the highway. The creation of the Red Route to increase traffic flows includes work in the shopping centre to create parking bays, so that cars are not parked in prohibited areas on the main through route. The bays have been constructed by inserting them between the street trees in the former footway. Although the spacing of the trees has allowed spaces for several cars, some shop keepers would prefer the spaces to be longer to allow access to their shops by large lorries.
- 6.5.4 During the construction of the bays, local traders wanted an additional tree removed to allow more parking in front of their shops. A request was turned down by the Chief Highway Engineer to fell the tree to enable a larger service/parking bay to be created. The difference in opinion between the wishes of the residents and the wish of the Council to retain the street tree led to the issue being covered on the local radio and Members being involved in the debate.

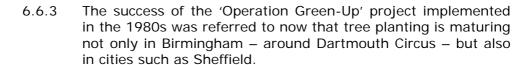
6.5.5 In other locations along the A34 in more residential areas, there will possibly be future pressures to convert grass verges into parking bays to ensure that cars are not parked on the red route carriageway.

#### Bus Iane proposal A456 Kings Head, Bearwood

- 6.5.6 In order to reduce the journey time of buses travelling into the city along the A456, the creation of a bus lane was proposed. The bus lane was to be achieved by retaining the existing two carriageways (albeit narrower) and adding a third lane by widening of the road, or in the area of Lightwoods Park, narrowing the central reservation.
- 6.5.7 The section alongside Lightwoods Park has been successfully implemented. Trees that had to be removed as the road was widened, have been replaced on the central reservation.
- 6.5.8 The section towards the City Centre from the Kings Head Pub in Bearwood was to have taken land on the southern side of the carriageway which has been subject to a longstanding 'road widening line' (land formally reserved for road improvements). Plans were drawn up, however the public became very concerned as several mature trees would have to be felled to make way for the new carriageway. A vigorous public campaign followed and the scheme was dropped.
- 6.5.9 The Review Group heard evidence from the Assistant Director Development (Highways) that this scheme was an illustration of the political choices that the City Council needs to make between reducing congestion and keeping major routes flowing and preserving street trees.

## 6.6 The Need for More Street Trees on Major Routes

- 6.6.1 Street trees on major routes have a big impact on the impression of the city that residents and visitors see on a daily basis, if they are travelling around the City. Evidence suggests that tree lined streets have a positive effect on our health and wellbeing.
- 6.6.2 The Leisure, Sport and Culture Overview & Scrutiny Committee, on Wednesday 12<sup>th</sup> October 2005, received a presentation from Susan Bell and Viv Astling from the National Forest. They were keen to promote the importance of tree planting along the major routes linking the National Forest (to the north of the City in Staffordshire) with the city. Such tree planting would not only create a wildlife corridor, but also improve the image of the approach to the city from the North.



- 6.6.4 The Committee heard a presentation on Wednesday 9<sup>th</sup> November 2005 from Brian Stocks on the effect of the Olympics in London in 2012. He emphasised the opportunities to the city of hosting training camps for athletes and other sportsmen and women. However, the routes to and from these training camps would form an impression of the city and he considered that the Council should be planning ahead with environmental improvements such as tree planting.
- 6.6.5 However increasingly trees are under pressure as traffic levels grow, travel demands increase the number of journeys our radial routes struggle to cope with being both through routes and neighbourhood high streets. Not only are measures necessary to protect existing trees from these pressures, but sites for new planting need to be found.
- 6.6.6 Street trees on major routes are usually planted when they are about eight years old this is old enough for the tree to make an impact straight away. At this age they are 6-7 feet high and have trunks 14-16cm thick. Although they have been specially raised to have a small root ball (to facilitate replanting), a hole with good soil is needed at least 1 metre square. In urban areas finding areas of ground that are not constrained by previous tree roots, previous development or underground services is very difficult.
- 6.6.7 It is City Council policy to replace with another tree in another location any street tree that is felled. However a suitable site has to be found and this may be away from the location of the felled tree. Therefore members of the public may not know that their local tree has been replaced.
- 6.6.8 The only suitable location may be in a city park where the tree can subsequently be maintained within the park management plan.
- 6.6.9 If highway land is increasingly a hostile place for trees to be, consideration needs to be given for increasing the number of trees on land adjacent to the highway. This could either be done in conjunction with the private owners of the land, or land in the ownership of the Council could be identified and used.

#### The process for replacing trees

- 6.6.10 The responsibility for replanting on minor schemes lies with the District Parks Manager. Where specialist advice on tree species etc is required, they may consult with the Tree Officer. The work is carried out by the Council's Horticultural Maintenance Contractors.
- 6.6.11 The responsibility for replanting on major schemes, especially when developer's contractors are involved lies with the Council's Landscape Practice Group (LPG).
- 6.6.12 During the construction of Harborne Lane Cycleway, a number of mature Hawthorn trees were removed. Each area of the city is allocated one of the four Tree Officers and each District has a Parks Manager. The Tree Officers and the Parks Manager visited the site and recommended the size, type and planting location for the replacement trees. The same number of a similar species of tree has been specified.
- 6.6.13 The District Parks manager placed an order with Hilliers Nurseries who supply the City Council with most of its trees. They will be delivered to the site during the winter planting season. They will be planted by the Horticultural Maintenance staff working for the District Parks Manager. The costs will be recharged to the Chief Highway Engineer. If it is considered that the contractor was negligent in failing to protect the trees, then a financial claim could be pursued against the contractor.
- 6.6.14 The trees will be 14 16 cm trunk girth which means they will be about 6 feet high. They will have been grown with a restricted rootball to enable them to be planted in the narrow grass verge adjacent to the new cycleway.
- 6.6.15 During the construction of the new access road to the Pebble Mill site off Bristol Road, a number of large lime trees were removed. The City Council's Landscape Practice Group (LPG) will be working with the developer of the site since the trees were removed as part of work carried out by the developer under S.278 of the Highways Act.
- 6.6.16 The LPG will specify the species and the sites for planting. In this case large 'semi-mature' trees, 8 9 metres tall will be planted. The developer's sub contractor will be planting the trees with advice and supervision from LPG.
- 6.6.17 The developer will meet the cost of the trees, the planting by their sub-contractor and the advice service from the Landscape Practice Group.

6.6.18 The advantage of planting larger trees is not only that they make an impact quickly, but they are more resistant to disease and to vandalism. If a tree dies within the first 2 years of planting, then it is replaced as part of the contract. If it is vandalised, then the replacement cost is not met from the contract.

#### Tree varieties

- 6.6.19 The Review Group discussed varieties of trees used in new schemes and where trees have to be replaced. On the one hand, they accepted that large forest trees such as Lime are seen by some people as too large for urban areas. On the other they were aware that the ecological benefit of small ornamental trees is very limited.
- 6.6.20 Members agreed that all tree planting needed to take into account the ecological significance of the trees chosen.
- 6.6.21 Members heard that new varieties of trees are being bred which do not have some of the negative features sometimes associated with trees. The major nursery suppliers of street trees are working hard to develop varieties which are of the greatest benefit and which are of the size and shape to suit a variety of locations.
- 6.6.22 The species selected for the Northfield Relief Road planting scheme are as follows:
  - 12 Acer Campestre 'Elsrijk' (Field Maple)
  - 13 Betula Pendula (Silver Birch)
  - 68 Corylus Colurna (Turkish Hazel)
  - 7 Prunus Avium 'Plena' (Double Flowered form of Wild Cherry)
  - 13 Pyrus Calleryana 'Chanticleer' (Callery Pear)
  - 22 Quercus Robur 'Fastigiata Koster' (Columnar form of English Oak)
  - 9 Tilia Tomentosa 'Doorrnik' (European White Lime)

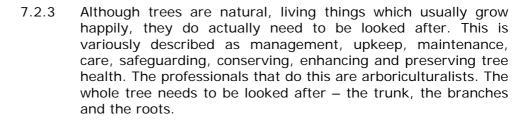


#### 7.1 Introduction

- 7.1.1 A series of presentations on the Tree Management Policy was made to Members of the Scrutiny Review Group on Monday 12<sup>th</sup> September 2005.
- 7.1.2 Birmingham City Council is a major land owner. The Council 'owns' about a million trees. These are located in parks, in housing areas, in school grounds and in the streets. It is estimated that there are about 100,000 street trees.
- 7.1.3 The Tree Management Policy applies to all the trees the Council owns about a million. The estimated 100,000 street trees are numerically a small proportion, however because of the levels of risk involved, their care is a high priority within the service.

#### 7.2 What is Tree Management?

- 7.2.1 In all urban areas, trees are inevitably a compromise. In many cases they lose leaves in the autumn, produce fruit, deflect light and sometimes cause damage to surfaces and very occasionally buildings.
- 7.2.2 Even so, people regard trees as an amenity, providing habitats for wildlife, shelter from sunshine, and adding so much to the visual amenity of an area. Far more important, and often less obvious is the role of trees in terms of our climate. They are massive air filters and purifiers, they create oxygen and help recycle water from the soil into the atmosphere. They provide shelter and shade, and on a macro scale help stabilise the earth's surface from erosion, heavy rain and high wind.



- 7.2.4 Changing climatic conditions including cataclysmic storms, high winds, such as the hurricanes in 1987 and 1991 culminating in the tornado in July 2005, cause severe damage to tree stocks. Climate change may mean that the current tree species may not be suitable. Also physical damage to any one of these can reduce the health, and therefore the life of the tree. Other threats include chemicals in the soil, air pollution, disease (especially fungus) and old age.
- 7.2.5 Without tree management, trees not only die earlier than necessary, but they may become a hazard to people and property as branches may fall off and the whole tree may uproot or break off at the trunk. Falling branches or whole trees is termed 'tree failure' and any tree which has characteristics which could lead to tree failure is called a tree 'at risk'.

#### 7.3 Responsibility for Tree Management

7.3.1 Every tree has an owner and the responsibility for the tree lies with the owner of the land on which it grows. Under legislation, the owner of the tree has a duty of care to ensure that tree(s) on their land do not cause damage to persons or property. Any actions the tree owner takes (or does not take) may be judged in a legal sense as to whether they were "within reason" or "reasonably practicable".

## 7.4 The City Council's Tree Management Service

7.4.1 The Review Group sought clarification on who was responsible for trees in different parts of the Council, since they were under the impression that each Directorate had their own Tree Officer. However, the evidence showed clearly that the Tree Management Service is a corporate service that is responsible for all the trees owned by the Council.

- 7.4.2 Trees on Council owned land is the responsibility of the Cabinet Member who owns the land. However, the responsibility for managing and maintaining all trees has been delegated to the Parks, Sports and Events Division of the Directorate of Local Services. This service is the responsibility of the Cabinet Member for Leisure, Sport and Culture.
- 7.4.3 Members heard that this service is usually achieved through Service Level Agreements between the relevant Portfolios. A Service Level Agreement is in place covering the Tree Management of Highways and Housing trees (the Housing agreement is currently being renegotiated by a group of the relevant officers) and for all other service areas an approved specification provides the basis for the management and maintenance programme.
- 7.4.4 The current basis for the Council's management regime for trees is by way of the criteria set out in the report approved by Cabinet on 21 January 2002 titled 'The Maintenance and Management of the City's Trees'.

#### 7.5 Financing the Tree Management Service

7.5.1 The Assistant Director, Parks, Sports & Events explained to the Review Group that the finance for tree management is located in the budget of the Portfolio holder who owns the trees. This then forms part of the City Council's Integrated Horticultural Maintenance Budget which is administered on behalf of all Portfolios by the Parks, Sports and Events Division in Local Services.

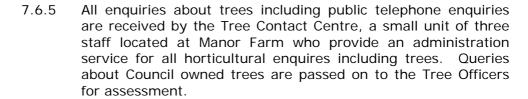
#### **Financial Analysis of Expenditure on Tree Work**

Cabinet Portfolio	2003/4	2004/5	2005/6
	Budget	Budget	Budget
Transportation & Street Services	854,899	887,319	947,927
Housing	144,425	175,085	193,116
Education	100,000	100,000	100,000
Leisure, Sport & Culture	200,000	211,360	225,690
Environmental Health	80,000	80,000	80,000
Totals	1,379,324	1,453,764	1,546,733

- 7.5.2 The budget for the Tree Management Service is administered centrally based on priorities identified by Districts/Wards and proactive/reactive inspections carried out by Tree Officers in accordance with the agreed policy guidelines.
- 7.5.3 In addition some finance may be available through a variety of budgets to carry out additional tree maintenance (one offs). Examples include housing revenue funds for additional tree planting on housing land, planting finance from Local Centres, finance associated with minor road schemes and city centre funds. In addition Districts may have access to funds such as Neighbourhood Renewal Fund (NRF) and SRB6 for tree planting where local Members feel this is particularly important.

#### 7.6 Staffing the Tree Management Service

- 7.6.1 The responsibility for the corporate Tree Management Service rests with the Cabinet Member for Leisure, Sport and Culture and its day to day management is the responsibility of the Assistant Director Parks, Sports and Events.
- 7.6.2 The work of the Tree Management Service falls within the remit of the Horticultural Manager within Parks, Sports and Events Division. A strategic overview of the trees in our parks is maintained by the Council's Parks Managers and professional guidance and advice on all trees is provided by the Urban Forestry Officer.
- 7.6.3 Day to day responsibility for all Council trees lies with four Tree Officers (and one trainee). Each Tree Officer is responsible for a group of Districts the groups are:
  - Edgbaston, Northfield & Selly Oak
  - Erdington, Perry Barr & Sutton Coldfield
  - Hall Green & Sparkbrook
  - Hodge Hill, Ladywood & Yardley
- 7.6.4 The Tree Officers carry out inspections in response to enquiries and complaints and devise work programmes and arrange for their implementation in accordance with the agreed policy. The actual work such as pruning and felling is carried out by specialist contractors. Two firms have been appointed through the tendering process: Gristwood and Toms are a national firm and can carry out surveys and practical work - they tend to work mostly in the south of the city, and Central Trees do practical work in the north of the city. When additional work is needed in the city, such as in the wake of the recent tornado, both Contractors can draft in additional support through their networks or national engage experienced subcontractors.



- 7.6.6 Members of the Review Group expressed different opinions regarding the effectiveness of the Tree Contact Centre. Some said that all calls they (or their constituents) had made were answered promptly and efficiently. Others said they had had complaints about the service.
- 7.6.7 The Review Group were under the impression that several different parts of the Council had their own Tree Officers, however the only other Tree Officers employed by the City Council are in the Planning Division who deal specifically with Tree Preservation Orders (TPOs) and tree matters relating to the Development Control process.
- 7.6.8 In addition, landscape architects with arboricultural skills are located within the Landscape Practice Group within the Parks, Sports & Events Division. The services of this Group are recharged to the Directorates.

## 7.7 The Objectives of the Tree Management Service

#### The safety of members of the public and trees at risk

- 7.7.1 The Assistant Director, Parks, Sports & Events emphasised to the Review Group the paramount importance of safety of members of the public when running the Tree Maintenance Service.
- 7.7.2 He explained that trees growing on Council owned land can be a 'risk' as identified in the Health and Safety at Work Act 1974. This Act provides that every employer has a duty to conduct his undertaking in such a way as to ensure, so far as is reasonably practicable, that members of the public who may be affected are not exposed to risks to their health and safety.

- 7.7.3 The Act imposes absolute criminal liability, subject only to the defence of reasonable practicability, which defence relates only to measures necessary to avert the risk. Nothing is without risk, but the law requires that people and property be guarded from that which is unreasonable. Absolute safety is arguably not possible in the case of trees, it probably could only be achieved by the removal of all of them. However it is the Council's responsibility to ensure that sufficient action is taken to ensure that a tree, or part of a tree in the Council's ownership, does not fall on a person.
- 7.7.4 Other primary legislation affecting the management of highway trees include:
  - The Occupiers Liability Acts (1957 and 1984), concerning duty of care to people when accessing property.
  - Highways Act (1980), deals with maintaining clearance of highway, visibility, removal of dangerous trees affecting the highway etc.
  - Local Government (Miscellaneous Provisions) Act (1957), deals with removal dangerous trees on private property.
- 7.7.5 A review of the Council's tree maintenance and management arrangements was carried out following the accident on 3 December 1999 when three people were killed on Alcester Road South as a result of a large tree being blown down by high winds falling onto cars in stationery traffic. The review and the subsequent revised Tree Policy Statement, were done as a result of an Improvement Notice issued under the Health and Safety Executive (HSE). The current policy is as set out in the report approved by Cabinet on 21 January 2002 titled 'The Maintenance and Management of the City's Trees'.
- 7.7.6 The primary consideration of tree maintenance or management, is the safety of members of the public. Since this is of paramount importance, not only are the requirements of the law satisfied, but the requirements must be significantly improved upon in order to minimise the level of risk to the lowest possible level.
- 7.7.7 In assessing the level of risk to the public, it is considered that street trees, because of their location so close to areas heavily used by the public, are especially important. However, trees in parks and playing fields also need to be assessed for risk.
- 7.7.8 This Scrutiny Review is primarily concerned with street trees.

#### Maintaining the long term health of the Council's tree stock

7.7.9 The Council does all it can to care for all its trees to ensure that our tree stock thrives for the benefit of the people and wildlife of Birmingham.

#### Maintenance of highway Trees

7.7.10 There is a legal duty (various & complex) on the Council to ensure that the highway is kept clear of obstructions. It has to ensure the free and safe passage of pedestrians and vehicles, safe pedestrian passage on footways and passage for parents with buggies, the elderly and the disabled.

#### Tree preservation orders and conservation areas

- 7.7.11 Consent is required for the felling and lopping of any tree protected by a Tree Preservation Order or located within a Conservation Area under the framework of planning legislation. These measures are administered by the Planning Control Division Tree Officers who work within the Portfolio of the Planning Committee.
- 7.7.12 In exceptional cases trees owned by the Council can be the subject of a TPO. These are usually trees that were protected before they came into the Councils ownership. Where land is to be sold by the Council for example for new development, trees may be protected before the transfer of land takes place. A Conservation Area may include Council owned land and trees, for example on the highway. The Council is not required to complete a 'section 211 notice' (application), before carrying out work to such trees.

#### Trees in gardens and private open space near roads

- 7.7.13 Trees in gardens and private open space near to roads are the responsibility of their owners. However where the tree is close to a public footway or road, there could be a risk to public safety if that tree was not adequately maintained.
- 7.7.14 Where it is brought to the attention of the Council that a tree may be in a dangerous condition, it will be inspected. Should the Tree Officer determine that the tree is an imminent threat to public safety and is growing on private property he/she is empowered under the Highways Act (for trees affecting the highway) or the Local Government Miscellaneous Provision Act (other trees i.e. not affecting highway) to serve notice on the landowner to make safe the tree and subsequently recharge them. These are the only instances where Local Authorities are legally empowered to do work on private trees.

#### **Emergencies**

7.7.15 The City Council provides a 24 hours a day, 7 days a week service in respect of tree enquiries. During the normal working day, the Tree Contact Centre at Manor Farm deals with the enquiries. Outside normal working hours all calls are redirected to the Transportation Department's Emergency Call Centre in Lancaster Circus. They will call out the Tree Officers from home who can call out the Tree Contractors to carry out emergency work.

# 7.8 The Tree Management Service and Highway Trees

7.8.1 The Chief Highway Engineer gave a presentation to the Review Group on the Aims and Challenges of managing highway trees.

#### **Objectives**

- 7.8.2 He said that the aim is:
  - To preserve the environmental benefits enjoyed through the presence of trees on the highway.

#### The challenges are:

- To maintain a mature stock of appropriate highway trees without jeopardising the safety, serviceability or sustainability of our live and dynamic highway network,
- To strike a publicly acceptable compromise between the level of tree preservation and the standards of other street services.

#### Issues

- 7.8.3 The major issues were identified as:
  - Demanding tree maintenance standards the need to keep mature stock healthy and safe through controls and procedures such as codes of practice, guidelines and agreements.
  - Interface with public utility services the need to prevent tree roots damaging services balanced with the need to protect tree roots whilst working on services.
  - Interference to street lighting from trees caused by low tree canopies / overgrowth and residue obscuring signs requiring management processes for optimum locations for new lamps and coordinated pruning work.
  - Risks for pedestrian safety due to tripping hazard of exposed roots, slips from moss/leaves and high wind blow downs requiring adjustments to footway levels and



- surfaces, a risk register and emergency response service.
- Maintaining clear pedestrian footway routes requiring basal growth obstruction, minor improvements and public consultation.
- Retaining drive sight lines at junctions and for signals and signs requiring inspections and pruning.
- Projecting vehicular access for cars, buses and parking requiring processes for tree removal and pruning where needed
- Facilitating clear drainage requiring maintenance of pipes threatened by roots or leaves.
- Preventing damage to property directly by roots/branches or indirectly by subsidence involving inspections and reports.
- Reducing nuisance to residents from aphid mess in gardens, branches close to houses and leaves requiring customer care and arboricultural advice.

#### 7.9 Mature and Old Trees

7.9.1 Since many street trees were planted in late Victorian and Edwardian times, many are mature and often very large.



These trees in Grove Lane, Handsworth are included in the 2005/06 Pruning Plan

7.9.2 Large street trees may cause residents to complain when they block out light or when leaves and branches touch properties. The Annual Tree Pruning Plan addresses these problems. This Plan is drawn up by the Tree Officers in response to concerns from the public and with reference to the age and size of street trees across the city.



Trees in Holly Road, Handsworth pruned in the 2004/05 Plan

- 7.9.3 However severe pruning of mature trees, such as London Plane or Lime can cause concern with residents. In Hall Green some residents were particularly proud of their Lime trees and insisted that the type of pruning was discussed with them prior to the work going ahead:
- 7.9.4 Some streets may have individual trees that need replacing because they are old and becoming unsafe, or whole streets of trees may need replacing. This is managed within the Council's Annual Highway Tree Pruning Programme trees are usually replaced in sequence rather than all trees being felled at once and replanted.



7.9.5 Mature street trees also have large trunks and root systems which may reduce the width of footways - roots can damage paving and kerbs. These are some of the factors that have to be taken into account when deciding when trees need to be replaced.





7.9.6 People are concerned about crime and street lighting makes a contribution to residents feeling safe outside their homes. Tree branches can reduce the levels of lighting and hamper access to the light by maintenance contractors. Pruning is managed within the Annual Tree Pruning Programme.

# 7.10 The Implementation of the Tree Management Service

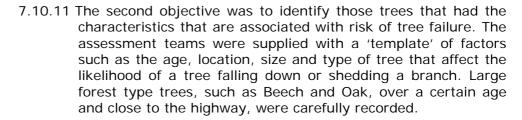
#### Computerised tree database 'Confirm Arbor'

- 7.10.1 Prior to the year 2000, the Council's inspection records for Highways Trees were kept in paper form as part of the service's ISO 9002 Quality Management System for Data Management.
- 7.10.2 From 2000 onwards, Highway Tree Inspection Records have been kept electronically on the computerised system called 'Confirm Arbor'. This is a software package used by many Local Authorities. The database has the capacity to record the location, type, age and condition of Council owned trees together with information affecting tree health or its safety risk assessment.
- 7.10.3 The setting up of this database was part of the measures put in place to meet the requirements of the HSE Improvement Notice, as set out in the report to Cabinet in January 2002.
- 7.10.4 The priority has been to collate and manage information on trees presenting the greatest potential risk of causing harm, using the principles of risk-assessment i.e. the probability of a tree or branch striking someone if it should fall.
- 7.10.5 Those trees currently on the computerised system are as follows:

- All street trees that have been inspected over the last 5 years
- All street trees on the 'At Risk Register'
- Street Trees within the regular Tree Pruning Programme (within the last five years) such as large limes
- Trees within the City Council's Housing areas
- Trees on Education sites including school grounds
- Trees on Social Care sites a pilot study so far
- 7.10.6 In total about 35,000 of the 94,000 street trees are on the computerised system. The ones that are not on the system are either those covered by the original paper records or young trees, small ones or ornamental species that are unlikely to pose any risk to public safety.
- 7.10.7 The intention is to extend the electronic data to include the existing paper records on street trees and also the records of all other Council owned trees. Maintaining accurate data on Council owned trees is essential and requires that re-inspection schedules (as determined at the time of inspection) are adhered to. Data held on each tree allows information to be accessed and manipulated allowing enquiries to be dealt with and future actions/ priorities to be determined.
- 7.10.8 However further data entry is required to input the information from the paper record system as well as data from new inspections. In addition upgrading and enhancement of the data base is needed. This will make the manipulation of data and the production of information reports easier and also assist in dealing with day to day tree enquires from officers, Members and the public. The appointment of a dedicated System Manager has been identified as a key priority to enable development of the `Confirm Arbor' system.

#### Tree inspection and risk assessment

- 7.10.9 As a result of the Health & Safety Executive Improvement Notice issued in August 2001, a street by street assessment of all Highway Trees was undertaken by the City's Tree Officers and consultants during 2002. This was in addition to all the existing inspection regimes already in place.
- 7.10.10 One objective of the exercise was to increase the accuracy of the estimate of the total number of street trees in 2002 the survey showed 94,000 street trees.



- 7.10.12 These trees were then subject to a full survey by experts. Depending on the condition of the tree, some of these were entered onto the At Risk Register. This Register includes trees deemed to present a risk to public safety as defined in the January 2002 Cabinet Report The Maintenance and Management of the City's Trees. Specific inspection programmes and frequencies were established. The trees on the Register were categorised into three types:
  - Dangerous and to be felled immediately
  - Requiring immediate attention such as pruning
  - Satisfactory at the time of survey but needing reinspection at specific intervals such as 2, 3 or 4 years
- 7.10.13 Since the 2002 survey, specialist consultants have re-inspected those trees 'At Risk' which required re-inspection. The report on each of these trees sets out the level of risk associated with the tree, the maintenance required and the future inspection interval necessary. Clearly the principles of risk assessment are used to determine tree maintenance priorities.
- 7.10.14 There are currently 4,218 trees on the At Risk Register.
- 7.10.15 It is intended to re-inspect those trees that are listed only in the paper records (pre 2000) and not included on the At Risk Register plus the Annual Pruning Programme, within the next year. The results of the inspections will be included on the 'Confirm Abor' database.
- 7.10.16 The survey of the City Council's trees has been extended to trees in lower risk locations. A survey of trees on Housing sites has been undertaken, and includes 33,166 trees. A survey of trees on Education sites has been undertaken, and includes 24,041 trees. A survey of trees on Social Service sites has been undertaken (pilot only), and includes 33 trees.
- 7.10.17 Trees in parks are subject to an annual inspection and risk assessment included with the management of the park, undertaken by parks staff.



#### Annual highway tree pruning programme

- 7.10.18 Each year a programme of highway tree management is drawn up and agreed with the Cabinet Member for Transportation and Street Services. The programme includes work to be done in each ward. Once is it agreed it is circulated to the Districts and is available to the public on the Council's website.
- 7.10.19 The roads to be included in the annual maintenance programme are suggested by the Tree Management Service using the following criteria::
  - Age, size & species of tree
  - Proximity to highways and buildings
  - Public concern, levels of enquiries received
  - Length of time since previous pruning
  - **Budgetary requirements**

#### Tree felling

- 7.10.20 'At Risk' trees: the decision is made by the Tree Management Service, often with advice from specialist contractors. The felling is carried out by the appointed contractors under the management of the Tree Officers.
- 7.10.21 'Healthy' trees: these can be felled for the following reasons:
  - If they are in the path of an approved road/junction improvement scheme, subject to the approval of the Cabinet Member for Highways and Transportation
  - If they are in the path of a 'dropped kerb vehicle crossing' fall within the approved policy and the Tree Management Service have been consulted
  - If they have outgrown their location
  - If a successful legal claim has been made

#### Tree replacement

- 7.10.22 It is the Council's policy to replace street trees that have been removed for whatever reason. Tree replacement is carried out within the Annual Highway Tree Pruning Programme. The current policy is as follows:
  - Location, as close to the original location as practicable
  - Type of tree, appropriate for location, site specific
- 7.10.23 'Fell and replant' programmes are developed for streets in the city. These are set out in the Highway Tree Maintenance Pruning Programme. In drawing up the programme consideration is given to roads where:
  - Residents consider certain tree species are unsuitable for their locations
  - Where trees have outgrown their location leading to



- damage to footways or road surface
- Where trees have been lost to disease or storm damage
- 7.10.24 Such a programme aims to remove the trees in a particular road, or road length, over a specified period of years on a phased basis and replace them with more appropriate species. This ensures that the replacement trees planted at the beginning of the programme are well established by the time the final phase trees are removed and replaced.

#### Provision of advice to contractors and utility companies

7.10.25 Where contractors and/or utility companies are carrying out work in the highway/footway, advice is given to ensure that the principles of tree care are adhered to and there is an understanding that the desired outcome is the preservation of tree health. Advice includes ensuring that sufficient precautions are taken in the vicinity of trees to ensure that work is sympathetic and to provide care of trees and their roots. Ensuring that National Joint Utilities Group, Guidance Note 10 (NJUG10), is adhered to.

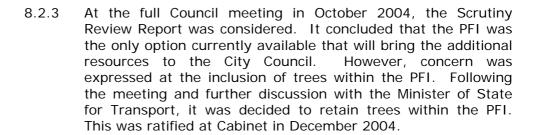


#### 8.1 Introduction

- 8.1.1 A series of presentations on The Effect on Street Trees of the Highways PFI was made to Members of the Scrutiny Review Group on Monday 10<sup>th</sup> October 2005 and specific queries followed up on Monday 7<sup>th</sup> November 2005.
- 8.1.2 The Review Group were aware that in the short term the Council would manage and maintain its street trees, but in the long term this responsibility may well be transferred to the successful PFI Contractor. Therefore Members sought information on how the PFI would affect trees and what preparation work was underway.

#### 8.2 The Background to the Highways PFI Proposal

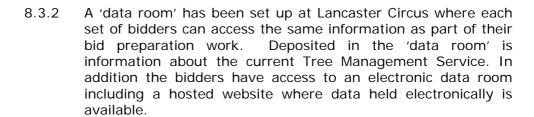
- 8.2.1 The proposal to look at the PFI (Private Finance Initiative) mechanism to fund the highways maintenance services originated in the Best Value Review. In March 2001 the outline Business Case was commenced and by July of that year a submission was made to the Government for funding. At about the same time the Audit Commission reported that the Highways Maintenance Service was providing a 'fair' 1 star service that was unlikely to make a step change improvement.
- 8.2.2 In November 2003 the City Council's Cabinet decided to accept the award by the Department of Transport of PFI credits for a future Highways Maintenance and Management Service. The Executive agreed to work with Overview & Scrutiny and a Scrutiny Review was commenced.



- 8.2.4 The executive decision making body within the City Council for the PFI process is now the Cabinet Committee on Highways Maintenance and Management Private Finance Initiative. This is supported by a Project Board its membership includes technical, legal, financial, human resource advisors and external consultants, and it is chaired by the Chief Highway Engineer in his role as Project Director.
- 8.2.5 As regards the timetable, at the time of evidence gathering for this Scrutiny Review, Members were advised that discussions were underway with three short listed bidders as part of the Invitation to Negotiate (ITN) stage of the procurement process.
- 8.2.6 Subsequently bids were received on the 30<sup>th</sup> December 2005. From January to early March 2006 the bids will be evaluated. An evaluation report will be prepared by the end of March and submitted to the Transportation and Street Services Overview & Scrutiny Committee in addition to the Cabinet PFI Committee. At the beginning of April, one or more bidders will be deselected and during April/May 2006 negotiations will continue with the remaining bidder(s) prior to them submitting Best and Final Offers in June 2006. The preferred bidder will be selected in July/August 2006 and the contract is due to start in April 2007. The contract is for 25 years.
- 8.2.7 The preferred bidder will need to appoint their own arboricultural advisors and the successful bidder will need to sub-contract the management of the city's 100,000 street trees to a professional arboricultural contactor with appropriate and skilled staffing capacity. The Council will need to be assured that the contractor selected will be competent to look after our trees in the way that Members and residents expect.

#### 8.3 Specific Preparation Work required to Protect Street Trees

8.3.1 All discussions with the short listed bidders regarding trees are managed by the PFI Board, chaired by the Chief Highway Engineer and including the Head of Parks from the Division of Parks Sports and Events.



- 8.3.3 As regards the items around which Scrutiny discussion needs to take place the Cabinet Report of 13 December 2004, set out the agreed position regarding Highway Trees:
  - The PFI Contractor will be required to work in partnership with City Council to develop and implement the highway aspects of tree husbandry which has been previously agreed with the relevant local Members
  - A legally binding method statement will be agreed detailing the PFI contractor's procedures as well as a tree development and management plan
  - Policy remains with the City Council
  - No tree shall be removed without prior Member approval
  - A clear and strong specification will be produced and heavy financial penalties being included for infringement
  - Client to contain appropriate Tree Officer capacity to ensure compliance

#### 8.4 Evidence Gathered on Preparation Work

- 8.4.1 The Review Group heard evidence from a number of officers and from Andy Toms from Gristwood and Toms the City Council's current arboricultural contractors. Andy Toms was familiar with Portsmouth City Council the only Llocal Authority that has entered into a PFI contract for the management and maintenance of roads in an urban environment.
- 8.4.2 Members assessed progress on several key issues including:
  - Tree Management Policy Statement, as referred to in the Cabinet Report as "tree husbandry" and "policy remains with the City Council".
  - The role of Members in developing and monitoring policy as referred to in the Cabinet Report as "tree husbandry which has been previously agreed with the relevant local Members" and "no tree shall be removed without prior Member approval".
  - The retention by the Council of Tree Officers as referred to in the Cabinet Report as "client to contain appropriate Tree Officer capacity to ensure compliance".

#### Tree management policy statement

- 8.4.3 The Cabinet Report of 13 December 2004 states that 'Policy remains with the City Council.' In addition it states that work is required to develop a programme of tree husbandry and a tree development management plan.
- 8.4.4 The Review Group heard from Andy Toms that he was concerned that not enough information would be available to potential bidders (and their arboricultural advisors) to enable them to appreciate the work required to maintain and manage the 100,000 street trees. He was of the opinion that the amount of data held on individual trees and the levels of tree inspection were not as great as he would have thought was desirable.
- 8.4.5 Comparing the city with other areas he was familiar with, he said that many London Boroughs spend considerably more on their Tree Management Service and employed more Tree Officers within the Tree Management Service (in proportion to the number of trees) than Birmingham.
- 8.4.6 Officers of the Division of Parks, Sports & Events are currently updating the existing Tree Management Policy Statement (in so far as it affects Street Trees) to make it suitable for inclusion in the PFI documentation.
- 8.4.7 Members heard that it is intended to produce this document by March 2006 so that the evaluation of the bids received can take place in the context of the Policy Statement.
- 8.4.8 The Statement will include:
  - Objectives of tree management including the need to ensure the safety of members of the public and trees at risk
  - Measures to maintain the long term health of the tree stock – both in terms of quantity and quality
  - Tree inspection and risk assessment requirements, including an assessment of the appropriateness of current tree inspection
  - Details of the computerised database of trees
  - Criteria and process for justifying the removal of any tree
  - Criteria for the Annual Pruning Programme, Tree Replacement Programme and provisions for new tree planting, including an assessment of the adequacy of current levels of service
  - Horticultural standards and specifications
- 8.4.9 The Cabinet Committee PFI will need to be reassured that the wording of the PFI Contract makes it clear that Tree Management will need to comply with the policy rather than just take it into account.

- 8.4.10 The Cabinet Report of 13 December refers to 'a legally binding method statement will be agreed detailing the PFI contractor's procedures ......' The bidders have submitted their 'method statement' as part of their ITN bid return in December 2005. These includes their intended Annual Landscape Action Plan and their intended maintenance programme (including pruning), together with their tree replacement programme and new planting proposals. Appraisal of these is taking place by the City's Tree Officers as part of the technical evaluation of the bids.
- 8.4.11 The evaluation results will be presented to the Cabinet PFI Committee at the end of March 2006.

#### The role of Members

- 8.4.12 The Cabinet Report of 13 December 2004 states that '....the PFI Contractor will be required to work with the City Council to develop and implement the highway aspects of a programme of tree husbandry which has been previously agreed with relevant local members'. This suggests that the detailed plans and programmes drawn up by the successful contractor will need to be approved, not just by the Cabinet Member for Highways and Street Services, but also by Ward Members and District Chairs.
- 8.4.13 Following localisation and the increased involvement of Members in their local areas through the District Committees, the District Members will be involved in the approval of the Tree Management Programme and Tree Replacement programme for their District (Member approval of this is required). This will have the advantage that the involvement of local residents could be channelled through the District structures.
- 8.4.14 The Review Group Members discussed the role that local Members would be expected to take on. Whilst they welcomed the involvement, they emphasised that they would need adequate arboricultural advice from Tree Officers employed by the City Council. They thought that if there was a Tree Officer clearly identified with a District, a good local relationship could be developed. Districts could then be actively involved in working with residents on all local tree matters.

#### The transfer of risk

8.4.15 In his letter of the 29 October 2004, the Minister of State for Transport referred to the transfer of 'risk' implied by including highway trees in the PFI:

"On highway trees, you are right to note the important part they play in the PFI business case. So I am pleased you believe there is a way to address concerns through specification and client controls, and that – on this basis – they would remain part of the PFI deal. I would be grateful if you would keep DfT officials in touch with the detailed work here, to ensure that it does not undermine risk transfer."

- 8.4.16 Members discussed at length the legal position regarding trees. They heard that responsibilities for accidents were being debated currently due to the case of the Hatfield rail disaster. They realised that as the first Highways PFI contracting authority of a major size (Portsmouth is the only other authority) Birmingham could be in the position of testing out the law should an accident happen. Members were very concerned that it appeared that they could be held personally criminally liable if their representations affected the PFI contractors management of a tree that subsequently failed and caused an accident.
- 8.4.17 The following advice was subsequently given by the Chief Legal Officer:
- 8.4.18 "The Output Specification in the PFI contract sets out in Performance Standard PS3B obligations in respect of Tree Management and Maintenance for trees on the Council's highway network (Project Network). The PS3B obligations include;
  - Ensuring that the trees on the Project Network do not cause a danger or obstruct the Project Network and/or any land and/or property in the possession of a third party.
  - Ensuring that the trees on the Project Network shall not damage any land and/or property in the possession of a third party and where any damage occurs be responsible for any costs associated with any such damage.
  - Ensuring every tree on the Project Network is free from disease and decay.
  - Not removing a tree from the Project Network without the prior written consent of the Authority unless such removal is a Highway Emergency (a highway emergency includes any unplanned occurrences which may affect safety on the Project Network including trees which have blown over, fallen over or are in imminent danger of the same).

The consequence of a failure by the PFI contractor to comply with the PS3B obligations is that the PFI contractor has to indemnify the Council from all liability for:-

- death and personal injury;
- loss or damage to property;

- breach of statutory duty;
- actions, claims, demands, costs, charges and expenses;
- ("the Indemnified Losses") which may arise a result.

This means that the PFI contractor has a contractual responsibility for the performing the PS3 obligations. If the contractor breaches these obligations the Council has an effective remedy against any civil claim it may face as a consequence.

The Council cannot contract out of any criminal liability which it may have.

There will not be a transfer of any highways infrastructure assets to the PFI contractor. Therefore street lighting and **highway trees** remain in the Council's ownership. Ultimately legal responsibility for the trees remains with the Council as highway authority. The PFI contractor is still liable to indemnify the Council in respect of claims arising out of a breach of the PS3B obligations as referred to above.

There is an exception to the indemnity principle where the PFI contractor properly acts on the instructions of the Council. In those circumstances the PFI contractor is not responsible for the Indemnified Losses. If therefore the PFI contractor requests permission to remove a tree on a highway because the PFI contractor considers it is at risk of falling as it is diseased, but the Council refuses consent, then if the tree falls and causes damage and is found to have been diseased then the PFI contractor is not at fault and does not have to indemnify the Council."

- 8.4.19 Members were concerned about the possibility that the PFI Contractor may want to minimise risk to a very low level by requesting the removal of any tree that may have a potential problem. This could result in widespread requests to remove trees adjacent, or near to the highway on public safety grounds. Pressure could be considerable to replace mature trees with small ornamental trees. This would have a damaging effect on wildlife in the city and also change the visual appearance of many streets.
- 8.4.20 Discussions referred to the widespread clearance of trees near railway lines following changes to the way the railway network is managed and concerns to minimise risk.

#### The retention of Tree Officers

8.4.21 The Cabinet Report of 13 December 2004 states that 'Client to contain appropriate tree officer capacity to ensure compliance.' Therefore sufficient Tree Officers will need to be retained by the Council to ensure that this function can be carried out effectively.

- 8.4.22 Tree Officers will be required to advise Members so that they can effectively carry out the work in their local areas as set out above. Members heard that finance is available within the Partnership Priorities Budget for additional Tree Officers in recognition of the demands on Tree Officers implied by the Cabinet report of 13 December 2004. This would enable a dedicated Tree Officer to be available to each area of the city to advise local Members, build relationships with the local residents and ensure all City Council trees are respected.
- 8.4.23 However the Review Group heard that current negotiations ongoing with potential bidders have included a reference to the possible transfer of the City's Tree Officers to the successful PFI Contractor under the Transfer of Undertakings / Protection of Employment Regulations (TUPE).
- 8.4.24 The Review Group were very concerned and asked for further advice at another session. Representatives from the Council's Legal and Human Resources Services attended the next session on Monday 7<sup>th</sup> November. They indicated to the Review Group that the Council was entitled to retain the services of staff in a 'client role' if it could be proved that the transfer of such staff would be detrimental to the Council.
- 8.4.25 They were further advised that, for the TUPE regulations to apply, an employee must spend 50% of more of their time on the undertaking which is to be transferred in this case the inspection of street trees and the formulation of maintenance programmes. However Tree Officers could spend less than 50% of their time on street trees in any one year, since they also advise on trees in parks, schools and housing estates.
- 8.4.26 Members thought that if the Tree Officers are transferred to the PFI contractor, their responsibility will be to the contractor, not to City Council and local residents the city will have no resource left to undertake the supervision, monitoring and technical advisory role.
- 8.4.27 The following further advice was subsequently received from the Chief Legal Officer:
- 8.4.28 "The Council will prior to the service commencement date of the PFI contract, 1st April 2007, have set up a retained client function. This has the following attributes/consequences: The retained client will comprise a group of staff with the skills and expertise and local knowledge to manage the performance of the contract/the PFI contractor. It is important therefore that the Council retains/recruits staff to perform the range of functions that the retained client will need to undertake.

Staff within the retained client will not transfer under TUPE as their job is the management of the PFI contract not the performance of the Output Specification within the PFI contract. If therefore Council employees who would otherwise transfer to the PFI contractor under TUPE are offered and take up positions within the retained client prior to the service commencement date, then they will not transfer to the PFI contractor under TUPE.

There are a number of tests to determine whether an employee is within an undertaking (ie whether the employee performs work that is comprised within the Output Specification in the PFI contract) and transfers under TUPE or whether the employee is engaged on non-PFI work (eg work in parks, schools). The test which is the easiest to apply is to determine where the employee spends the greater part of his/her time (the 51% rule). Clearly this may vary from month to month in accordance with the Council's priorities. The other tests include considering the employee's job specification in terms of whether duties are in/outside the scope of PFI specification, and evaluating how important/valuable to the employer are the respective duties.

If it is clear that for a tree officer that the majority of his/her time is spent on performing work in respect of non-highway trees then there will be a basis for concluding that such tree officer will not transfer under TUPE."



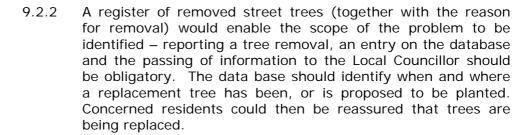
#### 9.1 The Wider Benefits of Trees

- 9.1.1 The Review Group concluded that understanding of the significance of trees needs to be much more actively promoted in the city. The importance of trees to health, the environment and to economic regeneration may not be widely understood. Members were concerned that threats to trees are increasing and replacing trees is becoming more and more difficult.
- 9.1.2 Members thought that one way of getting the "trees matter" message across to local people would be to set up a Birmingham branch of the charity "Trees for Cities". This would undertake a high profile campaign in the city, (as has taken place in London) attract sponsorship from business and involve children, communities (especially those from Black, Minority and Ethnic Communities) and companies in tree planting events.

	Recommendation	Responsibility	<b>Completion Date</b>
R1	That consideration be given to supporting the	Cabinet Member for	September 2006
	setting up of a Birmingham branch of the charity	Leisure, Sport &	
	'Trees for Cities'.	Culture & Cabinet	
		Member for	
		Transportation and	
		Street Services	

#### 9.2 Street Trees in Residential Areas

9.2.1 The Review Group concluded that we need to be much more vigilant in recording when street trees have been removed. Members accepted that there were many legitimate reasons for removing street trees; however they understood the concerns of local residents and the Civic Society that these trees appear not to being replaced. Several Members said that residents contacted them (often in a state of anxiety) when they saw a street tree being removed, with an expectation that they would know the reasons for its removal and when it would be replaced.



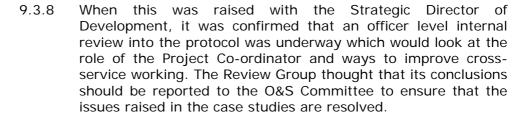
- 9.2.3 Members realised that there appeared to be many difficulties associated with replacing trees in the highway, however they did not agree that this was sufficient justification for a gradual decline in the numbers of street trees. They felt that the success of the two Pilot Projects in Selly Oak and Quinton Districts should be monitored closely to enable lessons to be learnt regarding local street tree planting involving residents.
- 9.2.4 Members suggested that street trees could be introduced into traffic calming schemes in order to improve the environment whilst reducing traffic speeds along the lines illustrated in the Home Zones projects.

	Recommendation	Responsibility	Completion Date
R2	That if a street tree is to be removed for any reason, Ward Councillors be informed and a register of such trees be set up within the existing 'Confirm Arbor' database.	Cabinet Member for Leisure, Sport & Culture & Cabinet Member for Transportation & Street Services	September 2006
R3	That a summary report of Street Trees Removed and Replaced be submitted to the Leisure, Sport and Culture Overview & Scrutiny Committee on a six monthly basis.	Cabinet Member for Leisure, Sport & Culture	September 2006
R4	That a report of the evaluation of street tree planting proposals within the Pilot Projects in Selly Oak and Edgbaston Districts to identify ways of increasing tree planting in residential areas, be submitted to the Leisure, Sport and Culture Overview & Scrutiny Committee.	District Chairs for Selly Oak and Edgbaston	March 2007
R5	That consideration be given to setting up a pilot project to identify ways of using street trees in traffic calming schemes.	Cabinet Member for Transportation & Street Services	September 2006

#### 9.3 Street Trees on Major Routes

9.3.1 The Review Group were very concerned about the City Council's apparent difficulty in controlling the activities of contractors working in the vicinity of street trees. Despite a whole range of safeguards, including guidelines, agreements and contracts, the case studies demonstrated a lack of respect for trees from some contractors, resulting in damage to and subsequent removal of trees on Council owned land.

- 9.3.2 Therefore the Review Group felt that an additional safeguard was necessary to protect Council owned trees. This would require a Permit to Work Adjacent to Trees to be issued to developers, utility companies and contractors prior to consent being granted for opening up of the Highway.
- 9.3.3 The issuing of the permit would be dependant on the submission and agreement of a signed risk assessment statement prepared by the developer or utility company in conjunction with the Council's Tree Officer. The risk assessment would include details of any trees to be affected by the proposed works and what tree protection measures would be put in place.
- 9.3.4 Since consent is already required from the Highway Authority to open up any public highway by any persons other than those with statutory powers the issuing of the Permit could be part of the same process. Members also thought that consideration should be given to requiring a bond which would be forfeited should trees be subsequently damaged. Work on site would be monitored by the Council's Tree Officer.
- 9.3.5 The case studies were on major routes, however the same principles apply to any tree in any street of the city, whether they are on major routes or in residential areas. Agreements under S 278 of the Highways Act are not limited to major routes they are used throughout the city.
- 9.3.6 Where major development is taking place affecting street trees on major routes, the Review Group expected that the current City Council Protocol "Building a Better Birmingham A Charter for Development" would ensure that all City Council departments involved in the development process would be working together with the developer facilitated by a Project Co-ordinator.
- 9.3.7 Evidence collected on the Pebble Mill Access Case Study suggested that the protocol had not achieved its desired aim in this case. In particular, Members regretted the lack of arboricultural advice early in the development process and thought that the coordination of the different stages of the scheme could have been smoother. It was only after the two Evidence Gathering Sessions had been concluded that it came to light that in fact a Project Co-ordinator had been appointed within the protocol. The Chairman of the Review Group was disappointed that from the evidence, the role of the Project Co-ordinator appears not to have been fulfilled in this particular case.



- 9.3.9 However the protocol would only be used on a relatively small number of development proposals some 30-40 at any one time in comparison with some 8,000 planning applications a year.
- 9.3.10 In addition Members thought is was essential that the confusion around which tree people in the organisation did what was removed to enable advice on trees to be coordinated across the Council. Therefore they welcomed the idea of a seminar and will encourage all officers and Members involved with trees and development to attend.

	Recommendation	Responsibility	Completion Date
R6	That a process be introduced to require developers, utilities and their contractors to obtain a Permit to Work Adjacent to Trees before consent is granted to open up the highway.	Cabinet Member for Transportation & Street Services	September 2005
R7	That a report on the internal review of the effectiveness of the protocol 'Building a Better Birmingham – A Charter for Development' be submitted to the Leisure, Sport and Culture Overview & Scrutiny Committee.	Cabinet Member for Regeneration	September 2006
R8	That a review of the process and content of the S278 Highways Act Agreement be undertaken including:	Cabinet Member for Transportation & Street Services	September 2006
	<ul> <li>Development of the highway affecting any tree in the city, on any street.</li> <li>The connections between the Planning Control process and the S278 Highways Act process.</li> <li>The process for obtaining arboricultural advice.</li> <li>The measures and resources currently in place to supervise contractors working in the vicinity of street trees.</li> </ul>		
R9	That a seminar be organised for the officers and Members involved in development planning to provide advice on the processes within the City Council for securing arboriculture advice. The proceedings of the seminar should be written up and made widely available, including a report to the Leisure, Sport and Culture Overview & Scrutiny Committee.	Cabinet Member for Leisure, Sport & Culture	June 2006

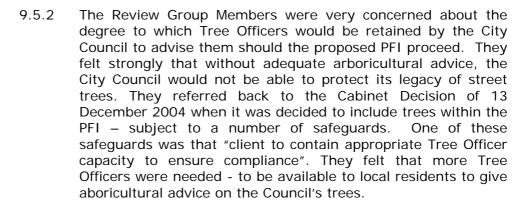


- 9.4.1 The Review Group agreed that a high priority should be given by the City Council to the completion, upgrading and enhancement of the computerised tree management system 'Confirm Arboriculture'. The setting up of the database was one of the measures put in place to meet the requirements of the Health & Safety Executive Improvement Notice. In addition, a high quality database is essential to ensure that the bidders for the Highway Private Finance initiative are aware of the needs of our street trees.
- 9.4.2 However dedicated system management and sufficient data entry staff are not available at the moment to support the database and only less than half of all our street trees are entered onto the system. Therefore upgrading and enhancement of the system is recommended as an urgent priority.
- 9.4.3 The Review Group thought that insufficient support was being given to the Tree Contact Centre, bearing in mind the number and complexity of phone calls from the public and Members regarding trees. The Review Group understood the importance of ensuring that all tree enquiries are dealt with efficiently because of the essential requirement to minimise risk to the public from old or damaged trees.

	Recommendation	Responsibility	Completion Date
R10	That consideration be given to upgrading and enhancing the 'Confirm Arbor' database as an urgent priority.	Cabinet Member for Leisure, Sport & Culture	July 2006
R11	That a business case be prepared that sets out the scope for and the consequences of transferring the role of the Tree Contact Centre to the City Council's Call Centre.	Cabinet Member for Leisure, Sport & Culture & Deputy Leader	September 2006

## 9.5 The Effect on Street Trees of the Highway PFI

9.5.1 The Review Group were unified in their belief that should the Highways Maintenance and Management PFI Contract take place and the management and maintenance of street trees become the responsibility of the successful PFI contractor, then a strong policy statement is necessary from the City Council to protect our heritage. Members welcomed the opportunity created to update the existing Tree Management Policy (in so far as it affects Street Trees) and thought that the research and evidence gathering undertaken for this review would provide valuable background information. Within this Policy Statement, Members were particularly interested in a section clarifying the role of Members in their local areas through the District or Constituency Committees.



9.5.3 Members were also very concerned about the legal position regarding the transfer of risk. They were aware of the current debates regarding responsibilities for accidents prompted by the Hatfield rail disaster. They realised that as the first major PFI contracting authority Birmingham could be in the unfortunate position of testing out the law should an accident happened.

	Recommendation	Responsibility	Completion Date
R12	That the Council's current Tree Management Policy Statement (in so far as it affects street trees) be revised and included in the 'Best & Final Offer' PFI documentation. The revisions should include the conclusions and recommendations from this Scrutiny Review.	Cabinet Member for Leisure, Sport & Culture & Cabinet PFI Committee.	March 2006
R13	That all necessary steps are taken to give the best opportunity for the existing Tree Officer posts to be retained within the City Council.	Cabinet PFI Committee	September 2006
R14	That a business case be prepared that supports the provision of additional Tree Officers to ensure that local areas have access to adequate aboricultural advice.	Cabinet Member for Leisure, Sport & Culture	March 2006
R15	That a report be submitted to the Leisure, Sport and Culture Overview & Scrutiny Committee on the legal position regarding the transfer of risk to the PFI Contractor and the implications of this to Elected Members should they be involved in advising on the management of street trees.	Cabinet PFI Committee	May 2006

9.5.4 All scrutiny decisions taken by the City Council need to be tracked to ensure that implementation is proceeding smoothly.

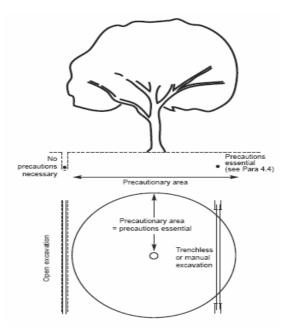
 Recommendation	Responsibility	Completion Date
Progress towards achievement of these recommendations should be reported to the Leisure, Sport and Culture Overview and Scrutiny Committee in September 2006.  Subsequent progress reports will be scheduled by the Committee thereafter, until all recommendations are implemented.	Cabinet Member for Leisure, Sport & Culture	September 2006
recommendations are implemented.		



# Appendix 1 Guidance for Contractors Working Near to Trees

The National Joint Utilities Group GUIDELINES FOR THE PLANNING, INSTALLATION AND MAINTENANCE OF UTILITY SERVICES IN PROXIMITY TO TREES — Publication No 10 April 1995

- 9.5.5 The "NJUG 10" guidance is specifically directed at the installation of new services, however in addition it states that "The principles set out in these guidelines also have relevance in respect of work carried out to highways near trees (e.g. kerbing, footway reinstatement)." The guidelines state that:
- 9.5.6 "Trees play an essential role in the environment and visual amenity of both rural and urban landscapes. They may take decades to grow, but can be destroyed in minutes. Wherever they are growing, whether in public footpaths, private gardens, rural verges or elsewhere, they require space for the adequate development of their root systems and to allow the branches to develop an attractive and natural shape."
- 9.5.7 Their guidance is based on establishing a Precautionary Area for protecting roots.





- 9.5.8 Within this Precautionary Area the guidance states:
  - Don't excavate with machinery. Use trenchless techniques where possible. Otherwise dig only by hand.
  - When hand digging, carefully work around roots, retaining as many as possible.
  - Don't cut roots over 25mm in diameter, unless the council's Tree Officer agrees beforehand.
  - Prune roots which have to be removed using a sharp tool (e.g. secateurs or handsaw). Make a clean cut and leave as small a wound as possible.
  - Backfill the trench with an inert granular material and top soil mix. Compact the backfill with care around the retained roots. On non highway sites backfill only with excavated soil.
  - Don't repeatedly move/use heavy mechanical plant except on hard standing.
  - Don't store spoil or building material, including chemicals and fuels."

## British Standard 5837:1991, 'Guide for Trees in Relation to Construction

- 9.5.9 British Standard 5837:1991, 'Guide for Trees in Relation to Construction' gives advice on the integration of new development amongst trees.
- 9.5.10 It advocates identifying an area around the trees which can remain free of any disturbance, and the erection of protective fencing around this area. Wherever possible the installation of new services should be outside the protected areas. If the new services must pass through the area, they should be laid in accordance with section 4 of these guidelines.