

29 Flatwoods Road  
Bath  
BA2 7AQ

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Jane Brewer  
Planning Department  
Bath and North East Somerset Council

17<sup>th</sup> April 2012

Dear Ms Brewer



**Re TPO at 29 Flatwoods Road** NO. 267A

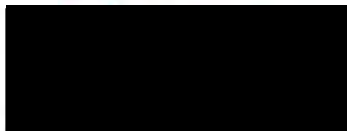
Further to your formal notice of a temporary TPO on the beech trees on the northern boundary of our home, Garry and I have now taken additional advice and instructed Aspect Tree Consultancy to complete a full site visit and survey.

As we have previously stated, we love this line of beeches and are absolutely committed to guardianship of 13 out of the 14. The one closest to the house, however, worries us greatly, as it is very close to the house, which is why we have sought further advice.

The resulting report is now enclosed, and we believe it makes a strong case for excluding this one tree from the TPO.

I would also like to highlight at this point the fact that our neighbours at number 30 wrote to you last year, unbeknownst to us, saying that they would have no problem with this tree being felled if we felt it necessary.

Yours sincerely



Siobhain Archer and Garry Pratt



**Arboricultural Assessment for trees subject  
to a provisional Tree Preservation Order:**

Site Ref:	<b><i>29 Flatwoods Road, Bath.</i></b>
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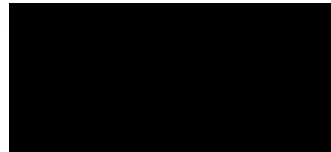
Client:	<b>Ms Siobhain Archer</b>
Aspect Ref:	03767 TPO OBJ 16.4.12



**VERIFICATION**

Status: FINAL  
Date of Issue: 16/04/2012  
Job Ref. No.: 03767 TPO OBJ 16.4.12

Prepared by: D.Scanlon  
*F.Arbor.A, CEnv., HND Arb.*



Checked by:  
1) J Kiely  
M.Arbor.A., CEnv., HND  
Arb.  
2) S Archer - client



## **Summary**

Aspect Tree Consultancy Ltd has been engaged to supply arboricultural advice and to raise an objection to the Bath and North East Somerset Council Tree preservation Order 2012 (29 Flatwoods Road, Claverton Down, Bath No. 267A).

The inclusion of G1 within the Tree Preservation Order is not disputed as the feature is attractive and has an amenity value.

The eastern tree (01) is a minor component of the group and is only partially visible from public locations within close proximity to the tree. This tree has a limited amenity value and is not a fundamental component of the group.

The loss of the tree would not be detrimental to the local amenities or the health and long term viability of the remaining trees.

The tree has an unsustainable spatial relationship with the adjacent building. The Council has granted consent to: 'reduce crown by 2-3m, thin crown by 10%, remove dead and dying limbs'. Condition no 1 of the consent requires that the works be carried out in accordance with BS3998:2010. The approved specification is contrary to the advice in BS3998:2010 and it cannot be undertaken without effectively topping the tree. The approved specification, issued by the Council, does not seek to minimise the potential negative impact on the trees health or long term viability, as advised in BS3998.

The tree has a structural weakness at the base of two branches that extend toward the property. The tree has a compromised form and its removal would favour the adjacent tree and allow it to develop a full crown without any requirement to prune to clear the nearby house. The removal of the easterly tree would provide a sustainable solution without a significant loss of amenity.

Therefore an objection to the TPO is made on the grounds detailed in this report.





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**ARBORICULTURAL REPORT****1.0 Instruction**

- 1.1 I have been instructed by Siobhain Archer, with regards to a provisional Tree Preservation Order (TPO) relating to trees on her property; to report on the following:
1. To assess the quality of the trees on the site.
  2. To assess the amenity value of the trees.
- 1.2 Following a site visit/survey the following arboricultural information is provided to raise an objection to the TPO.
- 1.3 The report is based on the following drawings and documents, which have been supplied by the client or their agent:
- i. Preliminary TPO – Bath and North East Somerset Council Tree preservation Order 2012 (29 Flatwoods Road, Claverton Down, Bath No. 267A).
  - ii. Approved layout for alterations to the house and planning approval decision notice (ref. no. 11/04230/FUL).
  - iii. Approval by Bath and North East Somerset Council for crown reduction for a Beech tree (ref. no. 11/05037/TPO).

**2.0 Limitations / Methodology*****SCOPE OF SURVEY***

- 2.1 The survey is concerned with the arboricultural aspects of the site only.
- 2.2 The baseline survey was undertaken using the Visual Tree Assessment [VTA<sup>1</sup>] methodology to conduct a preliminary assessment of the above ground portion of the tree.
- 2.4 Trees are large dynamic organisms whose health and condition can change rapidly, therefore due to the changing nature of trees and other site considerations, this report and any recommendations made are only valid for the 12 month period following the site survey, 2<sup>nd</sup> April 2012.

***SURVEY METHOD***

- 2.5 The survey was undertaken from ground level with the aid of binoculars, no excavations were carried out nor soil or root samples taken. Where a more

<sup>1</sup> VTA – Visual Tree Assessment. Mattheck & Breloer 1994. 'Principals of Tree Hazard Assessment', Lonsdale.

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detailed assessment/inspection of a particular feature is deemed necessary it has been recommended in the survey schedule. No aerial inspection nor invasive probing or drilling has been undertaken.

- 2.6 The canopy spread of the tree was measured on four compass points using laser survey equipment – where access was restricted the spread was estimated and marked as such on the survey schedule. The height of the subject tree was estimated using a clinometer.

**THIRD PARTY LIABILITY**

- 2.8 The limit of Aspect Tree Consultancy indemnity over any matter arising out of this report extends only to the instructing Client, namely Ms Siobhain Archer. Aspect Tree Consultancy cannot be held liable for any third party claim that arises following this report. The content and format of this Report are for the exclusive use of the Client. It may not be sold, lent, hired out or divulged to any third party not directly involved in the subject matter without the written permission of Aspect Tree Consultancy Ltd.

**SUBSIDENCE RISK**

- 2.9 This report is primarily concerned with the condition of existing trees and the application of current guidance for their retention. Any discussion of soil characteristics is only presented where this may have a direct effect on tree growth. This report does not seek to address the specific area of subsidence risk assessment.

**3.0 Site Description**

- 3.1 The site is located in Claverton Down on the south eastern edge of Bath. Claverton Down Road is located to the south of Flatwoods Road but curves and runs to the east of the road, finally running to the north of the property.
- 3.2 The site (no. 29 Flatwoods Road) is at the northern end of the road and adjacent to open fields and woodland, to the north and west. A public footpath runs adjacent to the western boundary of the property.
- 3.3 The property is a semi-detached dwelling with a small front garden and a long rear garden located to the west of the house.



#### **4.0 Tree Preservation Order (TPO)**

- 4.1 The TPO was made on 7<sup>th</sup> March 2012 and replaces a previous TPO made in September 2011.
- 4.2 The TPO relates to a group of 14 Beech trees located on the northern boundary of the site.
- 4.3 The Council made the Order because they feel "the trees make a significant contribution to the local amenity and the landscape character of the area contributing to the Cotswold Area of Outstanding Natural Beauty and visible from the Bath Skyline Walk".

#### **5.0 Objection to the TPO**

- 5.1 The objection to the TPO relates to the beech tree at the eastern end of the group (G1). No objection is raised to the protection of the remaining 13 beech trees.
- 5.2 The objection can be summarised as follows:
  - a. The eastern tree is a minor component of the group and is only partially visible from public locations within close proximity to the tree.
  - b. The loss of the tree would not be detrimental to the local amenities or the health and long term viability of the remaining trees.
  - c. The tree has an unsustainable spatial relationship with the adjacent building. The Council has granted consent to: 'reduce crown by 2-3m, thin crown by 10%, remove dead and dying limbs'. Condition no 1 of the consent requires that the works be carried out in accordance with BS3998:2010. The approved specification is contrary to the advice in BS3998:2010 and it cannot be undertaken without effectively topping the tree. The approved specification, issued by the Council, does not seek to minimise the potential negative impact on the tree's health or long term viability, as advised in BS3998.
  - d. The tree has a structural weakness at the base of two branches that extend toward the property. The tree has a compromised form and its removal would favour the adjacent tree and allow it to develop a full crown without any requirement to prune to clear the nearby house. The removal of the easterly tree would provide a sustainable solution without a significant loss of amenity.
- 5.3 The following sections provide the detail to support the above reasons.



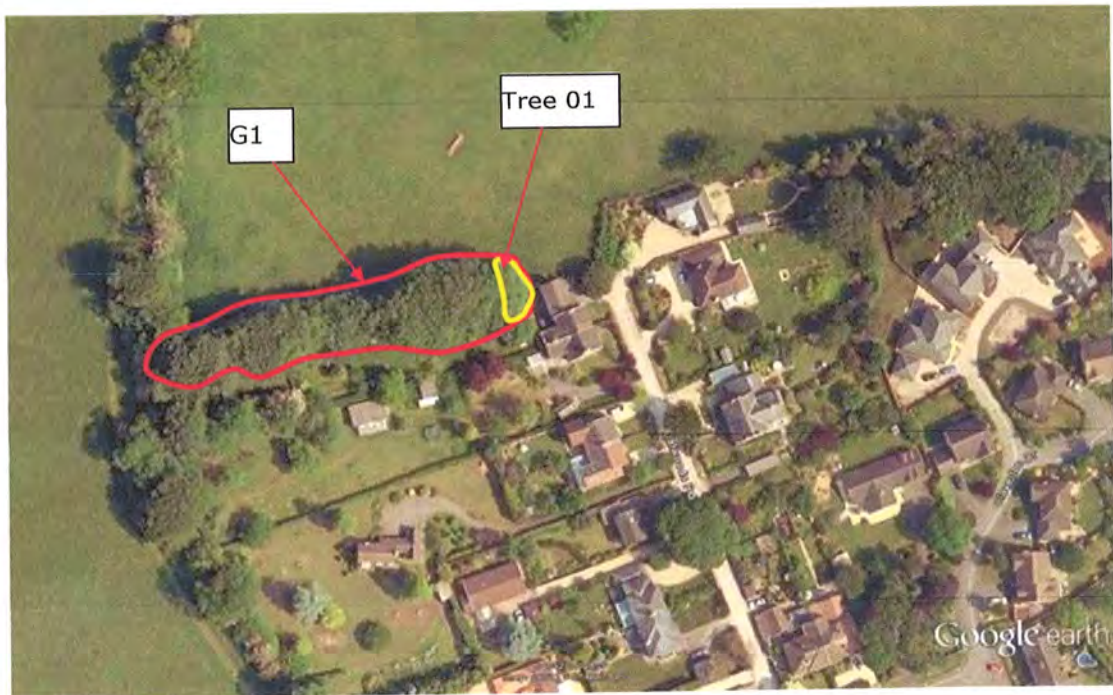




## 6.0 Tree Details

### *THE TREE GROUP (G1)*

- 6.1 G1 comprises of 14 mature common beech trees (*Fagus sylvatica*) in a linear formation along the northern boundary of the site. The tree heights vary in size from approximately 15m up to 23m. The trees have been subjected to minimal pruning and have average crown spreads over the garden and field of 8.5m (north and south). The group contains several smaller trees that have been naturally suppressed by the adjacent ones.



**Figure 1 - Showing the location of G1 (the trees are on the northern boundary of the property).**

- 6.2 Figure 2 shows how the Group fits into the surrounding landscape. Nearby woodlands and linear tree belts limit its impact despite the elevated location of the site.

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**Figure 2 - showing the tree in the wider landscape. Glimpse – shows locations where the tree / group is visible but with restricted visibility due to surrounding vegetation.**

***EASTERN TREE (TREE 01)***

- 6.3 The eastern tree is a mature common beech that is 18m tall with a crown spread of 8.5m except with a 2-3.5m spread west and a 9.5m spread south east (toward the house). The tree has a stem diameter of 640mm at 1.5m above ground level. The lower crown clearance above ground is 2m on average. The tree has been highlighted on the above aerial photo (Figure 1 with yellow outline).
- 6.4 The tree is in a good physiological condition with an average of 5cm branch end extension growth during the last season. The buds (carrying this year's leaves) are located primarily in the outer one third of the crown. A minimal number of leaf bearing buds are present on the inner crown.
- 6.5 The tree's structural condition is of moderate to poor quality. The tree has two main leaders (dominant trunks) from 6.5m above ground level. The following notable structural defect was visible:
  - The tree has a pair of crossing and rubbing branches in the south eastern crown at 9m (arising on the southern stem). The branches are approximately 20mm in diameter at the point of contact, which starts to rub at the base of the branches running for 0.5m. There is a clear bark inclusion (bark to bark contact between the branches, rather than anatomically joined wood, that is inherently weak structurally) at the point of contact. The branches are in contact at two separate points. The movement of the two branches has prevented the contact points from fusing and will be prone to fail especially during high winds. The defect is well established and it is too late to formatively prune the tree to correct



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the defect. The branches account for 10-12% of the overall foliage bearing crown.



Figure 3 - showing the structurally weak branches in the SE crown (taken from the east).



Figure 4 - the defect taken from the SW. The branches have not fused together and failure is increasingly likely.





## **7.0 Objection to the Order - Amenity Value**

- 7.1 The amenity value of the trees has been assessed using the TEMPO system (developed by Forbes Laired Arboricultural Consultancy). This system is similar to other preparatory systems and has been chosen because it is widely available and used by many Local Planning Authorities. Every system has subjective elements but TEMPO allows for the transparency of the assessor's thought processes. The calculations used are included in Appendix 1.

### ***AMENITY VALUE OF THE TREE GROUP (G1)***

- 7.2 The tree group (G1) is a publicly visible feature. However, due to the surrounding topography the trees are part of the general landscape rather than being a distinct feature of high amenity value. The site is located in an elevated location but many long views are restricted by nearby woodland and plantation and key long view points are limited.
- 7.3 The trees provide a visual benefit in the immediate locality with glimpses toward the group from Claverton Down Road between other blocks of vegetation. Passing traffic would struggle to see the trees as other hedges and individual trees obscure the view toward them. Claverton Down Road dips to a lower ground level to the east of the site removing any visibility of the site and/or trees from this location and this is compounded by a linear belt of trees that is located adjacent to the road.
- 7.4 The views toward the trees from public roads will be diminished during summer months due to the foliage cover of surrounding features (trees and hedges). There are a limited number of dwellings that can see the group. The attached plan shows the points where the group can be glimpsed.
- 7.5 Woodland to the south west of the site also limits views toward the trees. The buildings and trees within properties in Flatwoods Road screen views from the south despite the elevated location of the site.
- 7.6 The group is visible from specific locations on the adjacent public footpath. Visibility is limited by surrounding vegetation. It is reasonable to conclude that the group is of large size but with limited views from specific locations only and not readily visible in the wider landscape.
- 7.7 When assessed using the TEMPO system (see appendix 1) G1 definitely merits inclusion within a TPO and the inclusion of the group is not under dispute.

### ***AMENITY VALUE OF THE EASTERLY TREE (TREE 01)***

- 7.8 The easterly tree has a partly suppressed crown due to the presence of the adjacent trees. It is one of the smaller trees within the group. The tree is less readily visible than the adjacent trees and is only directly visible from the footpath with only limited glimpses of the upper part of the tree from other locations.



**SUITABILITY FOR TPO INCLUSION EASTERLY TREE (TREE 01)**

- 7.9 Although part of group G1 – tree 01 doesn't make a significant contribution to the group. The crown is suppressed to the east so only makes up 5-8% of the total canopy area of the canopy area of the whole group.
- 7.10 The tree also has a different interaction with the local environment compared to the wider group given its juxtaposition in relation to the adjacent dwelling – as acknowledged by the LPA in allowing its canopy to be very heavily pruned to improve the spatial relationship. This individual treatment justifies separating the tree from the larger group when assessing its value and importance.
- 7.11 When assessed using the TEMPO system the individual tree does not score highly and falls into the category of 'TPO indefensible' (or does not merit TPO if the scores are adjusted to account for potential subjectivity). Section b) of the system defines 'Unsuitable (score 0)' as follows: "includes trees which are an existing or near future nuisance, including those clearly outgrowing their context, or which are significantly negating the potential of other trees of better quality". I have applied a score of 1 but it could be reasonably argued that the tree falls into the lower (0) category for this section of the assessment. The consent for pruning (see below) implies that the Council recognises the effect that the tree has on the adjacent property. Mature beech trees are sensitive to pruning and the approved works are highly likely to send the tree into decline or instigate serious stress that the tree will struggle to recover from, affecting its long term viability.
- 7.12 The current Government guidance relating to TPO (Tree Preservation Orders – A guide to the law and good practice DETR March 2000 and subsequent updates referred to as 'The Blue Book') states in Section 3.3 (2) that "the mere fact that a tree is publicly visible will not in itself be sufficient to warrant a TPO".
- 7.13 The guidance relating to tree retention in the *Blue Book* clearly states in section 5.11:
- "As well as assessing the amenity value of the trees as they stand, a range of other factors will need to be considered, including:*
- (1) ***the size and position of the trees as envisaged after the development, taking into account future growth. The proximity of trees to buildings is an important consideration because:***
    - (i) *of the potential damage that a tree may cause to buildings, particularly on clay soils, unless precautions are taken in the design of foundations, and*
    - (ii) ***incoming occupiers of properties will want trees to be in harmony with their surroundings without casting excessive shade or otherwise unreasonably interfering with their prospects of reasonably enjoying their property.***
- 7.14 The tree could be removed without affecting the amenity value of the whole group or the amenities of the area but would provide a significant improvement to the relationship between the tree group and the house. Therefore, an objection is





made to the order on this basis. This objection needs to be considered in conjunction with the other reasons listed below.

## **8.0 Objection to the Order – Impacts of the pruning consent**

### **11/05037/TPO**

- 8.1 The consent to prune the tree includes a vague specification for works that, possibly inadvertently, allow for a considerable quantity of the trees foliage bearing canopy to be removed. The level of pruning exceeds the advice in BS3998 and the level that will be tolerated by a mature beech tree. If undertaken the consented works will have a seriously detrimental effect on the trees physiological and structural health. Furthermore there are negative visual issues generated by inappropriately pruning trees – they look ugly and out of place in the landscape, and perhaps set a precedent for future applications on other trees.
- 8.2 The consent is for a 2-3m reduction and a thin by 10%. The tree is 18m tall with an average branch spread of 8.5m. A 3m reduction would leave branches of 5.5m long and a height of 15m. The vast majority of the leaf bearing twigs are located on the outer part of the crown. Therefore, a reduction of 2-3m will remove most of the leaf bearing parts and entail exposing a large combined surface area of branches.
- 8.3 BS3998 section 7.1 (para 2) states: In order to help ensure that the tree has enough energy and remains sufficiently intact to resist disease and decay satisfactorily, the amount of leaf-bearing twig structure removed and the size of pruning cuts – both individually and collectively – should be kept to a minimum required to achieve the objectives. The number of cuts required to remove 2-3m lengths of the branches will equate to a large combined surface area and in excess of the general advice in Table 1 of BS3998 (page 22). Whilst this table is of limited use it does indicate an acceptable quantity of branch removal that is acceptable.
- 8.4 In Section 7.7.2 Note 1 of BS3998 provides important information relating to the amount of volume of the crown that is removed "A 30% reduction in crown volume can be considered to be approximately equivalent to a 12% reduction in overall branch length (i.e. radial distance)". The approved specification states that 2-3m radial spread can be removed but this equates to **70% reduction in the volume** of the crown (based on the calculations for the volume of a sphere or a truncated ellipsoid). In short this means that a small radial reduction equates to a large volume reduction and this is described by Dr Lonsdale in Principles of Tree Hazard Assessment and Management (DETR 1999) in Figure 6.2 page 198.
- 8.5 The above does not include the additional thinning by 10% (of the remaining branches) and BS3998 states (Section 7.7.1 fourth paragraph) that thinning would not normally be carried out in conjunction with other pruning operations. In this instance the thinning would remove a significant part of the remaining crown and lead to further physiological stress.



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- 8.6 Inappropriate pruning will denude the importance of the whole group. It would be less visually obvious to remove the whole tree.

### **9.0 Existing structural weakness**

- 9.1 The tree has an inherently weak pair of branches. The branches are first order limbs and carry approximately 10-12% of the whole foliage cover. The weakness is predisposed to failure and the larger the girth and the longer the branches get the more likely they are to fail.
- 9.2 The branches are growing toward the house but the risk of harm is relatively low. However, the failure will leave a significant gap in the canopy leaving the remaining branches exposed to further wind damage. This means that the branches are too large to remove and that the defect cannot be successfully mitigated for. In addition its removal will damage the aesthetic quality of the trees crown – which is already rather poor.
- 9.3 The tree could be pruned to shorten the branches but this would require regular surgery to maintain the branches at a reasonable length. The tree is too old for formative pruning and surgery provides a limited solution. The consented pruning would address the structural defect but, as stated above, will leave the tree in a seriously compromised condition.
- 9.4 The structural weakness highlights the tree's unsuitability for inclusion in the TPO.

### **10.0 Options and Solutions:**

- 10.1 The removal of the tree may lead to increased exposure of the adjacent beech in the line. However, the adjacent tree has sufficient young growth on the eastern edge of its canopy to allow the crown to fill the gap. This would benefit the tree and the group. In addition the tree is much further away from the house (approximately 15m) and is unlikely to ever require pruning to clear the house. This tree has a much more sustainable relationship with the dwelling than the tree 01. This option is the most satisfactory.
- 10.2 Tree 01 could be pruned as consented and then removed completely within 5 years. This would provide adequate clearance of the building but allow the adjacent tree to expand its canopy to fill the gap. Tree 01 will look unsightly during this period.
- 10.3 An alternative option is to plant a fastigate beech tree (a beech with a naturally upright, compact canopy – not a spreading canopy as common beech produce). The disadvantages of this option are that the adjacent retained beech is likely to suppress its growth limiting its viability and full potential. This would also be out of keeping with the visual nature of the remaining trees in G1.
- 10.4 I would recommend that a dialogue is opened up with the Councils Tree Officer to allow options to be explored and to ensure that both sides' cases are fully

understood. This would accord with advice in the Blue Book and be more likely to lead to a reasonable outcome.

## **10.0 Conclusions**

- 10.1 The inclusion of G1 within the Tree Preservation Order is not disputed as the feature is attractive and has an amenity value.
- 10.2 The eastern tree (01) is a minor component of the group and is only partially visible from public locations within close proximity to the tree. This tree has a limited amenity value and is not a fundamental component of the group.
- 10.3 The loss of the tree would not be detrimental to the local amenities or the health and long term viability of the remaining trees.
- 10.4 The tree has an unsustainable spatial relationship with the adjacent building. The Council has granted consent to: 'reduce crown by 2-3m, thin crown by 10%, remove dead and dying limbs'. Condition no 1 of the consent requires that the works be carried out in accordance with BS3998:2010. The approved specification is contrary to the advice in BS3998:2010 and it cannot be undertaken without effectively topping the tree. The approved specification, issued by the Council, does not seek to minimise the potential negative impact on the trees health or long term viability, as advised in BS3998.
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- 10.6 Therefore an objection to the TPO is made on the grounds detailed in this report.

## **11.0 Recommendations**

- 11.1 The tree preservation order is modified to exclude the beech tree on the eastern end of the group (closest to the house). My client supports the protection of the rest of the group.

**The statements made in this Report do not take account of extremes of climate, vandalism or accident, whether physical, chemical or fire. Aspect Tree Consultancy cannot therefore accept any liability in connection with these factors, nor where prescribed work is not carried out in a correct and professional manner in accordance with current good practice. The authority of this Report ceases at any stated time limit within it, or if none stated after two years from the date of the survey or when any site conditions change, or pruning or other works unspecified in the Report are carried out to, or affecting, the Subject Tree(s), whichever is sooner.**

## Appendix 1 – Details of TEMPO Amenity Evaluation System

- 1) Evaluation sheet
- 2) TEMPO Guidance note





TREE EVALUATION METHOD FOR PRESERVATION ORDERS (TEMPO)

SURVEY DATA SHEET & DECISION GUIDE

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Date: 2/4/12 Surveyor: D SCANLON.

Tree details  
 TPO Ref (if applicable): Tree/Group No: G1. Species: BEECH  
 Owner (if known): SARCHER Location: 29 FLATWOODS RD, BATH

REFER TO GUIDANCE NOTE FOR ALL DEFINITIONS

Part 1: Amenity assessment

a) Condition & suitability for TPO

- 5) Good Highly suitable
- 3) Fair Suitable
- 1) Poor Unlikely to be suitable
- 0) Dead Unsuitable
- 0) Dying/dangerous\* Unsuitable

Score & Notes	GROUP SCORE	INDIVIDUAL SCORE
	5	1

\* Relates to existing context and is intended to apply to severe irremediable defects only

b) Retention span (in years) & suitability for TPO

- 5) 100+ Highly suitable
- 4) 40-100 Very suitable
- 2) 20-40 Suitable
- 1) 10-20 Just suitable
- 0) < 10\* Unsuitable

Score & Notes	GROUP SCORE	INDIVIDUAL SCORE
	4	1

\*Includes trees which are an existing or near future nuisance, including those clearly outgrowing their context, or which are significantly negating the potential of other trees of better quality

c) Relative public visibility & suitability for TPO

Consider realistic potential for future visibility with changed land use

- 5) Very large trees with some visibility, or prominent large trees
- 4) Large trees, or medium trees clearly visible to the public
- 3) Medium trees, or large trees with limited view only
- 2) Young, small, or medium/large trees visible only with difficulty
- 1) Trees not visible to the public, regardless of size

- Highly suitable
- Suitable
- Suitable
- Barely suitable
- Probably unsuitable

Score & Notes	GROUP SCORE	INDIVIDUAL SCORE
	3	3

d) Other factors

Trees must have accrued 7 or more points (with no zero score) to qualify

- 5) Principal components of arboricultural features, or veteran trees
- 4) Tree groups, or members of groups important for their cohesion
- 3) Trees with identifiable historic, commemorative or habitat importance
- 2) Trees of particularly good form, especially if rare or unusual
- 1) Trees with none of the above additional redeeming features

Score & Notes	GROUP SCORE	INDIVIDUAL SCORE
	4	1

Part 2: Expediency assessment

Trees must have accrued 9 or more points to qualify

- 5) Immediate threat to tree
- 3) Foreseeable threat to tree
- 2) Perceived threat to tree
- 1) Precautionary only

Score & Notes	GROUP SCORE	INDIVIDUAL SCORE
	16	6

Part 3: Decision guide

- Any 0 Do not apply TPO
- 1-6 TPO indefensible
- 7-10 Does not merit TPO
- 11-14 TPO defensible
- 15+ Definitely merits TPO

Add Scores for Total:	GROUP SCORE	INDIVIDUAL SCORE
	16	6

Decision:

- Planning
- TPO
- Safety Inspection
- Subsidence
- Expert Witness
- Design

# Forbes- Laird Arboricultural Consultancy



*Principal Consultant:*  
**Julian Forbes-Laird**  
BA(Hons), MICFor, MEWI, M.Arbor.A, Dip.Arb.(RFS)

## TEMPO

### Tree Evaluation Method for Preservation Orders

A systematised assessment tool for TPO suitability

### GUIDANCE NOTE FOR USERS

November 2009



*To be read in conjunction with TEMPO pro forma,  
included at the end of this document*

Dendron House  
Barford Road • Blunham  
Bedford • MK44 3ND  
T/F: 01767 641648  
E: [jfl@flac.uk.com](mailto:jfl@flac.uk.com)  
[www.flac.uk.com](http://www.flac.uk.com)





## **Introduction**

### **Background**

The impetus to take a fresh look at existing TPO suitability evaluation methods grew out of the preparation for a local authority of a detailed Method Statement for reviewing Tree Preservation Orders (TPOs) in 2002. The client wanted the Method Statement to include a reliable means of assessing trees for TPO suitability, and asked for a bespoke system.

Having looked closely at what was already available, JFL decided that there was considerable room for improvement, as each of the better-known existing methods has disadvantages.

Accordingly, TEMPO was developed by JFL (whilst working as a Senior Consultant at CBA Trees) as a direct response to the apparent continuing uncertainty about what attributes a tree should have in order to merit statutory protection by TPO.

### **Overview**

TEMPO is designed as a field guide to decision-making, and is presented on a single side of A4 as an easily completed pro forma. As such, it stands as a record that a systematic assessment has been undertaken.

TEMPO considers all of the relevant factors in the TPO decision-making chain. In this connection, it is helpful to revisit the wording of central government advice<sup>1</sup>:

‘Although a tree may merit protection on amenity grounds it may not be expedient to make it the subject of a TPO’

From this, it becomes apparent that most existing methods are inadequate, seeing as they do solely to consider the tree rather than any known threats to its retention. TEMPO corrects this omission by including an expediency assessment within the framework of the method.

Excluding the first section, which is simply the survey record and is thus self-explanatory, TEMPO is a three-part system:

Part 1 is the Amenity Assessment

Part 2 is the Expediency Assessment

Part 3 is the Decision Guide

These parts are set out and function as follows:



**Part 1: Amenity Assessment**

This part of TEMPO is broken down into four sections, each of which are related to suitability for TPO:

- a) Condition
- b) Retention span
- c) Relative public visibility
- d) Other factors

The first three sections form an initial assessment, with trees that 'pass' this going on to the fourth section. Looking at the sections in more detail:

**a) Condition**

This is expressed by five terms, which are defined as follows:

GOOD	Trees that are generally free of defects, showing good health and likely to reach normal longevity and size for species, or they may already have done so
FAIR	Trees which have defects that are likely to adversely affect their prospects; their health is satisfactory, though intervention is likely to be required. It is not expected that such trees will reach their full age and size potential or, if they have already done so, their condition is likely to decline shortly, or may already have done so. However, they can be retained for the time being without disproportionate expenditure of resources or foreseeable risk of collapse
POOR	Trees in obvious decline, or with significant structural defects requiring major intervention to allow their retention, though with the outcome of this uncertain. Health and/or structural integrity are significantly impaired, and are likely to deteriorate. Life expectancy is curtailed and retention is difficult
DEAD	Tree with no indication of life
DYING/ DANGEROUS	Trees showing very little signs of life or remaining vitality, or with severe, irremediable structural defects, including advanced decay and insecure roothold. Death or catastrophic structural failure likely in the immediate future, retention therefore impossible as something worthy of protection

The scores are weighted towards trees in good condition. It is accepted that trees in fair and poor condition should also get credit, though for the latter this is limited to only one point. Dead, dying or dangerous trees should not be placed under a TPO, hence the zero score for these categories, due to exemptions within the primary legislation.

For trees in good or fair condition that have poor form deduct one point.

A note on the pro forma emphasizes that 'dangerous' should only be selected in relation to the tree's existing context: a future danger arising, for example, as a result of development, would not apply. Thus, a tree can be in a state of collapse but not be dangerous due to the absence of targets at risk.

Where a group of trees is being assessed under this section, it is important to score the condition of those principle trees without which the group would lose its aerodynamic or visual cohesion. If the group cannot be 'split' in this way, then its average condition should be considered.

Each of the condition categories is related to TPO suitability.





## b) Retention span

The reason that this is included as a separate category to 'condition' is chiefly to mitigate the difficulty of justifying TPO protection for veteran trees. For example, it is necessary to award a low score for trees in 'poor condition', though many veteran trees that could be so described might have several decades' potential retention span.

This factor has been divided into ranges, which are designed to reflect two considerations:

- It has long been established good practice that trees incapable of retention for more than ten years are not worthy of a TPO (hence the zero score for this category); this also ties in with the R category criteria set out in Table 1 of BS5837:2005
- The further ahead one looks into the future, the more difficult it becomes to predict tree condition: hence the width of the bands increases over time

Scores are weighted towards the two higher longevities (40-100 and 100+), which follow the two higher ranges given by Helliwell<sup>2</sup>.

The Arboricultural Association (AA) publishes a guide<sup>3</sup> to the life expectancy of common trees, which includes the following data:

300 years or more	Yew
200-300	Common [pedunculate] oak, sweet chestnut, London plane, sycamore, limes
150-200	Cedar of Lebanon, Scots pine, hornbeam, beech, tulip tree, Norway maple
100-150	Common ash, Norway spruce, walnut, red oak, horse chestnut, field maple, monkey puzzle, mulberry, pear
70-100	Rowan, whitebeam, apple, wild cherry, Catalpa, Robinia, tree of heaven
50-70	Most poplars, willows, cherries, alders and birches

The above should be considered neither prescriptive nor exclusive, and it is certainly not comprehensive, though it should assist with determining the theoretical overall lifespan of most trees. However, TEMPO considers 'retention span', which is a more practical assessment based on the tree's current age, health and context as found on inspection.

It is important to note that this assessment should be made based on the assumption that the tree or trees concerned will be maintained in accordance with good practice, and will not, for example, be subjected to construction damage or inappropriate pruning. This is because if the subject tree is 'successful' under TEMPO, it will shortly enjoy TPO protection (assuming that it doesn't already).

If a group of trees is being assessed, then the mean retention span of the feature as a whole should be evaluated. It would not be acceptable, for example, to score a group of mature birches based on the presence of a single young pedunculate oak.

A note on the pro forma identifies for inclusion in the less than ten years band trees which are assessed being an existing or near future nuisance, including those clearly outgrowing their context, or which are having an adverse effect on adjacent trees of better quality.



The nuisance element is introduced to cover situations where, for example, a Section 211 Notice has been received by the LPA for removal of a tree causing subsidence damage. In relation to outgrowing context, some common sense is needed here: if the trees are being considered for TPO protection prior to development, and if it is apparent that demolition of existing structures will be a component of this process, then a tree should not be marked down simply because it is standing hard up against one of the existing structures.

As with condition, the chosen category is related to a summary of TPO suitability.

### **c) Relative public visibility**

The first thing to note in this section is the prompt, which reminds the surveyor to consider the 'realistic potential for future visibility with changed land use'. This is designed to address the commonplace circumstance where trees that are currently difficult to see are located on sites for future development, with this likely to result in enhanced visibility. The common situation of backland development is one such example.

The categories each contain two considerations: size of tree and degree of visibility. I have not attempted to be too prescriptive here, as TEMPO is supposed to function as a guide and not as a substitute for the surveyor's judgement. However, I have found that reference to the square metre crown size guide within the Helliwell System<sup>4</sup> can be helpful in reaching a decision.

Reference is made to 'young' trees: this is intended to refer to juvenile trees with a stem diameter less than 75mm at 1.5m above ground level. The reasoning behind this is twofold: this size threshold mirrors that given for trees in Conservation Areas, and trees up to (and indeed beyond) this size may readily be replaced by new planting.

In general, it is important to note that, when choosing the appropriate category, the assessment in each case should be based on the minimum criterion.

Whilst the scores are obviously weighted towards greater visibility, we take the view that it is reasonable to give some credit to trees that are not visible (and/or whose visibility is not expected to change: it is accepted that, in exceptional circumstances, such trees may justify TPO protection<sup>5</sup>).

Where groups of trees are being assessed, the size category chosen should be one category higher than the size of the individual trees or the degree of visibility, whichever is the lesser. Thus a group of medium trees would rate four points (rather than three for individuals) if clearly visible, or three points (rather than two) if visible only with difficulty.

Once again, the categories relate to a summary of TPO suitability.

### **Sub-total 1**

At this point, there is a pause within the decision-making process: as the prompt under 'other factors' states, trees only qualify for consideration within that section providing that they have accrued at least seven points. Additionally, they must not have collected any zero scores.

The total of seven has been arrived at by combining various possible outcomes from sections a-c.





The scores from the first three sections should be added together, before proceeding to section d, or to part 3 as appropriate (i.e. depending on the accrued score). Under the latter scenario, there are two possible outcomes:

- 'Any 0' equating to 'do not apply TPO'
- '1-6' equating to 'TPO indefensible'

#### **d) Other factors**

Assuming that the tree or group qualifies for consideration under this section, further points are available for four sets of criteria, however only one score should be applied per tree (or group):

- 'Principle components of arboricultural features, or veteran trees' – The latter is hopefully self-explanatory (if not, refer to Read 2000<sup>6</sup>). The former is designed to refer to trees within parklands, avenues, collections, and formal screens, and may equally apply to individuals and groups
- 'Members of groups of trees that are important for their cohesion' – This should also be self-explanatory, though it is stressed that 'cohesion' may equally refer either to visual or to aerodynamic contribution. Included within this definition are informal screens. In all relevant cases, trees may be assessed either as individuals or as groups
- 'Trees with significant historical or commemorative importance' – The term 'significant' has been added to weed out trivia, but we would stress that significance may apply to even one person's perspective. For example, the author knows of one tree placed under a TPO for little other reason than it was planted to commemorate the life of the tree planter's dead child. Thus whilst it is likely that this category will be used infrequently, its inclusion is nevertheless important. Once again, individual or group assessment may apply
- 'Trees of particularly good form, especially if rare or unusual' – 'Good form' is designed to identify trees that are fine examples of their kind and should not be used unless this description can be justified. However, trees which do not merit this description should not, by implication, be assumed to have poor form (see below). The wording of the second part of this has been kept deliberately vague: 'rare or unusual' may apply equally to the form of the tree or to its species. This recognises that certain trees may merit protection precisely because they have 'poor' form, where this gives the tree an interesting and perhaps unique character. Clearly, rare species merit additional points, hence the inclusion of this criterion. As with the other categories in this section, either individual or group assessment may apply. With groups, however, it should be the case either that the group has a good overall form, or that the principle individuals are good examples of their species

Where none of the above apply, the tree still scores one point, in order to avoid a zero score disqualification (under part 3).

#### **Sub-total 2**

This completes the amenity assessment and, once again, there is a pause in the method: the scores should be added up to determine whether or not the tree (or group) has sufficient amenity to merit the expediency assessment.



The threshold for this is nine points, arrived at via a minimum qualification calculated simply from the seven-point threshold under sections a-c, plus at least two extra points under section d. Thus trees that only just scrape through to qualify for the 'other factor' score, need to genuinely improve in this section in order to rate an expediency assessment. This recognises two important functions of TPOs:

- TPOs can serve as a useful control on overall tree losses by securing and protecting replacement planting
- Where trees of minimal (though, it must be stressed, adequate) amenity are under threat, typically on development sites, it may be appropriate to protect them allowing the widest range of options for negotiated tree retention

### **Part 2: Expediency assessment**

This section is designed to award points based on three levels of identified threat to the trees concerned. Examples and notes for each category are:

- 'Immediate threat to tree' – for example, Tree Officer receives Conservation Area notification to fell
- 'Foreseeable threat to tree' – for example, planning department receives application for outline planning consent on the site where the tree stands
- 'Perceived threat to tree' – for example, survey identifies tree standing on a potential infill plot

However, central government advice<sup>7</sup> is clear that, even where there is no expedient reason to make a TPO, this is still an option. Accordingly, and in order to avoid a disqualifying zero score, 'precautionary only' still scores one point. This latter category might apply, rarely for example, to a garden tree under good management.

Clearly, other reasons apply that might prevent/usually obviate the need for the making of a TPO. However, it is not felt necessary to incorporate such considerations into the method, as it is chiefly intended for field use: these other considerations are most suitably addressed as part of a desk study.

As a final note on this point, it should be stressed that the method is not prescriptive except in relation to zero scores: TEMPO merely recommends a course of action. Thus a tree scoring, say, 16, and so 'definitely meriting' a TPO, might not be included for protection for reasons unconnected with its attributes.

### **Part 3: Decision Guide**

This section is based on the accumulated scores derived in Parts 1 & 2, and identifies four outcomes, as follows:

- Any 0 Do not apply TPO



Where a tree has attracted a zero score, there is a clearly identifiable reason not to protect it, and indeed to seek to do so is simply bad practice

- 1-6 TPO indefensible  
This covers trees that have failed to score enough points in sections 1a-c to qualify for an 'other factors' score under 1d. Such trees have little to offer their locality and should not be protected
- 7-11 Does not merit TPO  
This covers trees which *have* qualified for a 1d score, though they may not have qualified for Part 2. However, even if they have made it to Part 2, they have failed to pick up significant additional points. This would apply, for example, to a borderline tree in amenity terms that also lacked the protection imperative of a clear threat to its retention
- 12-15 Possibly merits TPO  
This applies to trees that have qualified under all sections, but have failed to do so convincingly. For these trees, the issue of applying a TPO is likely to devolve to other considerations, such as public pressure, resources and 'gut feeling'
- 16+ Definitely merits TPO  
Trees scoring 16 or more are those that have passed both the amenity and expediency assessments, where the application of a TPO is fully justified based on the field assessment exercise

#### Notation boxes

Throughout the method, notation space is provided to record relevant observations under each section. For local authorities using TEMPO, it may even be helpful to include a copy of the TEMPO assessment in with the TPO decision letter to relevant parties, as this will serve to underline the transparency of the decision-making process.



## Conclusion

TEMPO is a quick and easy means of systematically assessing tree or group suitability for statutory protection. It may be used either for new TPOs or for TPO re-survey, especially where Area TPOs are being reviewed.

From the consultants' perspective, it is also an effective way of testing the suitability of newly applied TPOs, to see whether they have been misapplied, or it can be used to support a request to make a TPO in respect of trees at risk, for example from adjacent development.

TEMPO does not seek to attach any monetary significance to the derived score: the author recommends the use of the Helliwell System where this is the objective.

CBA Trees owns the copyright for TEMPO, however the method is freely available, including via internet download through the FLAC website ([www.flac.uk.com](http://www.flac.uk.com)) and the Arboricultural Information Exchange [www.aie.org.uk](http://www.aie.org.uk)

TEMPO has undergone a number of minor revisions since its inception, many of which are due to helpful comments received from users. Any feedback on the method is gratefully received by the author.

JFL



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## *References*

- 1 'Tree Preservation Orders: A Guide to the Law and Good Practice', DETR 2000
- 2 'Visual Amenity Valuation of Trees and Woodlands', DR Helliwell, Arboricultural Association 2003 [the Helliwell System]
- 3 'Tree Management', Leaflet No. 4, Arboricultural Association 1991
- 4 Helliwell op. cit.
- 5 DETR 2000 op. cit. at para. 3.3 (1)
- 6 'Veteran Trees: A Guide to Good Management', Helen Read, English Nature 2000
- 7 DETR 2000 op. cit. at para. 3.5



# TREE EVALUATION METHOD FOR PRESERVATION ORDERS - TEMPO

## SURVEY DATA SHEET & DECISION GUIDE

Date:	Surveyor:	<div style="border: 2px solid green; padding: 5px; color: green; font-weight: bold; font-size: 1.2em;">RECEIVED</div> <div style="border: 2px solid green; padding: 5px; color: green; font-weight: bold; font-size: 1.2em; margin-top: 10px;">19 APR 2012</div> <div style="border: 2px solid green; padding: 5px; color: green; font-weight: bold; font-size: 1.2em; margin-top: 10px;">LEWIS HOUSE</div>
<b>Tree details</b> TPO Ref (if applicable): _____ Tree/Group No: _____ Species: _____ Owner (if known): _____ Location: _____		

REFER TO GUIDANCE NOTE FOR ALL DEFINITIONS

### Part 1: Amenity assessment

**a) Condition & suitability for TPO; where trees in good or fair condition have poor form, deduct 1 point**

- |                          |                         |
|--------------------------|-------------------------|
| 5) Good                  | Highly suitable         |
| 3) Fair                  | Suitable                |
| 1) Poor                  | Unlikely to be suitable |
| 0) Dead/dying/dangerous* | Unsuitable              |

Score & Notes

*\* Relates to existing context and is intended to apply to severe irremediable defects only*

**b) Retention span (in years) & suitability for TPO**

- |           |                 |
|-----------|-----------------|
| 5) 100+   | Highly suitable |
| 4) 40-100 | Very suitable   |
| 2) 20-40  | Suitable        |
| 1) 10-20  | Just suitable   |
| 0) <10*   | Unsuitable      |

Score & Notes

*\*Includes trees which are an existing or near future nuisance, including those clearly outgrowing their context, or which are significantly negating the potential of other trees of better quality*

**c) Relative public visibility & suitability for TPO**

*Consider realistic potential for future visibility with changed land use*

- |   |                     |
|---|---------------------|
| 5) Very large trees with some visibility, or prominent large trees  | Highly suitable     |
| 4) Large trees, or medium trees clearly visible to the public       | Suitable            |
| 3) Medium trees, or large trees with limited view only              | Suitable            |
| 2) Young, small, or medium/large trees visible only with difficulty | Barely suitable     |
| 1) Trees not visible to the public, regardless of size              | Probably unsuitable |

Score & Notes

**d) Other factors**

*Trees must have accrued 7 or more points (with no zero score) to qualify*

- |  |  |
|--|--|
| 5) Principal components of arboricultural features, or veteran trees                           | <div style="border: 1px solid black; padding: 10px;">Score &amp; Notes</div> |
| 4) Tree groups, or members of groups important for their cohesion                              |  |
| 3) Trees with identifiable historic, commemorative or habitat importance                       |  |
| 2) Trees of particularly good form, especially if rare or unusual                              |  |
| 1) Trees with none of the above additional redeeming features (inc. those of indifferent form) |  |

### Part 2: Expediency assessment

*Trees must have accrued 9 or more points to qualify*

- |                               |  |
|-------------------------------|--|
| 5) Immediate threat to tree   | <div style="border: 1px solid black; padding: 10px;">Score &amp; Notes</div> |
| 3) Foreseeable threat to tree |  |
| 2) Perceived threat to tree   |  |
| 1) Precautionary only         |  |

### Part 3: Decision guide

- |       |                       |  |  |
|-------|-----------------------|--|--|
| Any 0 | Do not apply TPO      | <div style="border: 1px solid black; padding: 10px;">Add Scores for Total:</div> | <div style="border: 1px solid black; padding: 10px;">Decision:</div> |
| 1-6   | TPO indefensible      |  |  |
| 7-11  | Does not merit TPO    |  |  |
| 12-15 | TPO defensible        |  |  |
| 16+   | Definitely merits TPO |  |  |