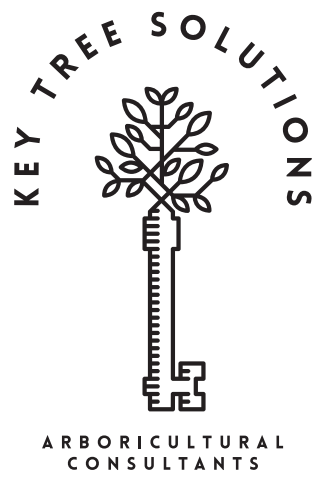




Arboricultural Report

Tolson Court - Penistone

Site Address:	Tolson Court Penistone Barnsley S36 7BU	Client:	Rachael Connolly
Report Ref:	TCPB01-21	Report Date:	20th July 2021
Author:	Laurence Smith BSc (Hons) Arb, M Arbor A	Signed:	<i>Laurence Smith</i>

1. Introduction	3
1.1 About the Author	3
1.1 Intention of the Report	3
1.2 Scope of the Report	3
1.3 Survey Details	3
2. Site Description	4
2.1 Land Use	4
2.2 Topography	4
2.3 Soil	4
2.4 Local Tree Cover	4
2.5 Age Class and Diversity	4
3. Tree Status	4
4. Tree Descriptions and Recommendations	5
5. Conclusions	5
6. Discussion	5
7. Recommendations	6
8. Caveat and Limitations	6
9. References	7
Appendix 1: Survey Reference Information	8
Appendix 2: Arboricultural Survey	9
Appendix 3: Images	10
Appendix 4: Site Plan	11

1. Introduction

1.1 About the Author

This tree survey and report was carried out by Laurence Smith, an Arboricultural Consultant. Laurence has a degree in Arboriculture, along with a BTEC National Diploma in Forestry and Arboriculture. He is a professional member of the arboricultural association with over 10 years of experience within the arboricultural industry, initially as an arborist and for the last 5 years as a consultant.

1.1 Intention of the Report

Rachael Connolly requested that Key Tree Solutions conduct an independent arboricultural survey of the significant trees located within the property in regard to their duty of care for the residents and members of the public.

This report will make recommendations for tree works, where appropriate, to manage risk to acceptable levels, with the view of maintaining a high quality of tree cover.

Narrative comments and recommendations are given in Sections 5 and 6 and where applicable, referenced with a suitable image.

1.2 Scope of the Report

This report has been compiled in line with the primary recommendations given in *BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations (BS 5837:2012)* in order to provide an impartial assessment of the tree currently present on site. This excludes information relevant for site development such as tree classification.

The arboricultural survey this report is based upon was conducted using Visual Tree Assessment (VTA) methodology, as devised by Mattheck (1991). VTA is a ground-level visual assessment of a tree, carried out to identify obvious mechanical defects, signs of ill health, potential mechanical failure and the suitability of a tree to a site. The priority for any recommended works considers the size of the part, potential for failure, and the area's occupancy.

1.3 Survey Details

The arboricultural survey (Appendix 2) was undertaken on the 16th July 2021, which collected information on the tree stock.

The survey took place during the summer season, when the tree was in full leaf. Weather conditions on the day were clear with low wind.

Tree data was collected using an electronic distometer and specialist measuring tape in all reasonable situations. In some circumstances, such as where there was a lack of access, measurements have been estimated and indicated with an asterisk (*).

2. Site Description

2.1 Land Use

Penistone is a market town and civil parish in the metropolitan of Barnsley and situated close to the River Don. Tolston Court can be accessed from Huddersfield Road and has been converted into a number of separate dwellings with modest gardens and car parking for the residents.

2.2 Topography

The underlaying topography slopes downwards towards the River Don from north to south.

2.3 Soil

Information gathered from the British Geological Survey states that the bedrock geology is part of the Grenoside Sandstone Group.

Further data gathered from the Cranfield Soil and Agrifood Institute Soilscape viewer states that the site is located on a slowly permeable seasonally wet acid loamy and clayey soil with a loamy and clayey texture.

2.4 Local Tree Cover

Due to the rural nature of the site, tree cover in the area is relatively high with a large tree population running alongside the River Don.

2.5 Age Class and Diversity

The trees in question are considered to be mature native species.

3. Tree Status

Information obtained from the Barnsley District Council website visited on the 20th July 2021 shows that the trees surveyed are each protected by a Tree Preservation Order (TPO). A screen shot from this search has been given in Figure 1.

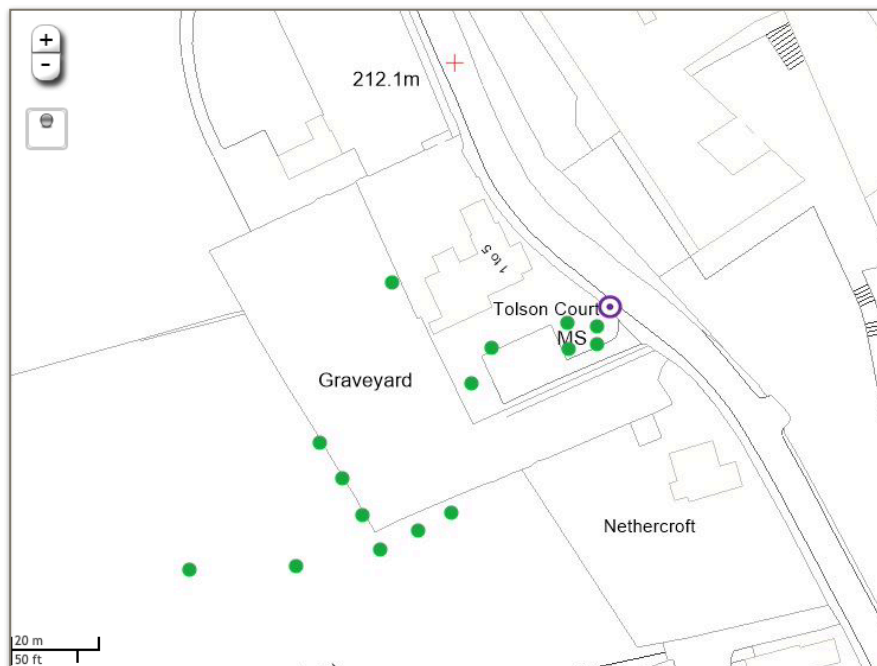


Figure 1

4. Tree Descriptions and Recommendations

Where appropriate, the tree has been described and allocated an ID alongside comments and relevant recommendations within the arboricultural survey found in Appendix 2. This can be cross-referenced with any images (Appendix 3), where applicable, and the site plan found in Appendix 4.

An explanation for the arboricultural survey, including any shorthand or acronyms, can be found in Appendix 1.

5. Conclusions

The trees located within the property are all protected by individual TPOs and therefore no significant works can be undertaken without first obtaining permission from the local planning authority. This excludes the removal of deadwood, Ivy and young epicormic growth.

With the exception of the Ash (T2) the trees are in good/fair condition and play an important role in both the local and site aesthetic.

6. Discussion

The mature Beech (T1) is in excellent condition for its age with only very minor defects observed. These are predominantly focused around tight unions, many of which have become naturally braced (Figure 2) and some instances of minor deadwood, however this is as a result of self shading and not due to crown dieback. Minor pruning wounds are visible which are assumed to be part of on-going management in order to facilitate canopy clearance over the highway, driveway and footpath. These wounds are showing signs of occlusion growth.

The Ash tree (T2) is suffering from the early signs of Ash Dieback and is considered to be at class 2 level infection using the categories from The Tree Council's document "Ash dieback disease: a guide for tree owners". While this isn't justification for action per se, the large diameter deadwood at the crown (Figure 4) suggests that this tree was already in a natural decline before infection. This is further compounded by the desiccated fungal body at the base, assumed to be Dryad's Saddle (*Polyporus squamosus*). The presence of this fungi along with the stem swelling would point towards internal cavitation. In respect of these three findings alongside the tree's position with large limbs extending towards the highway and a stem lean over the small garden, the justification for retention is somewhat limited.

T3 is a relatively well-formed tree in close proximity to the building. The union at the main bifurcation is becoming tight with a minor bark inclusion, however Sycamore trees are typically more resilient to this form of defect and the lack of swelling around the union would suggest that stress or strain at this point is minimal. The canopy is in good health with no observed significant deadwood, however, the health of this canopy is causing some complaints from the occupant, stating that the tree is blocking a considerable volume of light from the lower windows. This could easily be remedied by removing the lower three limbs to generate a 4m canopy raise (Figure 5).

The final tree surveyed (T4) is in fair condition despite a number of cavities. While only the lower of these could be investigated, this was assumed to be the most significant. Probing of this cavity suggests that decay extent is roughly 1/3 of the tree's diameter which is, as of yet, not justification for any significant remedial works.

The client has enquired if light penetration through this tree can be improved.

7. Recommendations

As part of ongoing management, minor canopy lifting works have been recommended for T1. These should be conducted to thin weeping leaders and not to scaffold limbs (Figure 3).

T2 is considered no longer suitable for retention due to the high likelihood for further decline, compromising site safety.

T3's lowest three limbs have developed from epicormic growth and are out of character with the 'typical' growth form. Furthermore they are blocking light from the ground floor of the building. These limbs should be removed to improve form and improve light penetration. Pruning wounds would be small and likely to fully occlude before decay can become established.

In reference to light interception by T4, a 15% thin consisting of the removal of internal smaller branches below 50mm in diameter from the stem would allow for a more layered canopy and improve light penetration. Raising the canopy to 5m over the parking spaces would also further improve light quality beneath the tree.

These recommendations have been summarised within the survey data sheet found in Appendix 2.

8. Caveat and Limitations

7.1

Climate conditions including storm, drought and temperature-related factors can cause damage and failure in apparently healthy trees. The client should consider that all trees potentially pose a hazard with the justification for action based on the risk level and target's value. While every effort has been made to detect any significant defects in inspected trees, it is impossible to guarantee a tree's safety.

7.2

Comments on tree conditions and their associated risk relate to the date and time the survey was undertaken. Tree health and structure are subject to development due to the tree's biological nature or other mechanical or physical changes nearby. As such, trees should be inspected at intervals relative to identified site risks and following relevant HSE and Central Government guidance, typically between 1 and 3 years.

7.3

No reports regarding underground utilities or past construction works have been made available to the author. The client should note that such documentation may affect the recommendations of this report.

7.4

As an arboricultural report, the author is not qualified to comment on damage to buildings or underground utilities that may or may not have been caused by roots. Any observations made regarding the condition of such structures are from a lay person's view.

7.5

In instances where trees have been protected by Tree Preservation Orders (TPOs) or other protective acts such as conservation areas, the client should not undertake any tree works without first obtaining permission from the relevant organisation.

7.6

All works should be undertaken following the appropriate Duty of Care and carried out to the standards set out in the British standards document *BS 3998:2010 Tree work - recommendations*.

For example, a contractor should include site-specific risk assessments and due diligence inspections for the presence of protected species, including all nesting birds and bats.

Signed:



Laurence Smith BSc (Hons) Arboriculture, M Arbor A

9. References

Ash dieback disease: a guide for tree owners (Online) <https://treecouncil.org.uk/wp-content/uploads/2020/06/Tree-Council-Ash-dieback-tree-owners-guide-FINAL.pdf>

British Geological Survey (Online) <https://www.bgs.ac.uk>

British standards document BS 5837:2012 *'Trees in relation to design, demolition and construction – Recommendations'*

British standards document BS 3998:2010 *'Tree work - recommendations'*

Cranfield Soil and Agrifood Institute (Online) <http://www.landis.org.uk/soilscapes/>

Barnsley District Council (Online) <https://www.barnsley.gov.uk>

Management of the risk from falling trees or branches - Health & Safety Executive (HSE) Document

Appendix 1: Survey Reference Information

Tree ID

Each tree/group has been given a unique number, which coincides with the plans given in Appendix 4. Each number has been given a letter precursor which represents one of the following. (T) Tree, (G) Group, (H) Hedge, (W) Woodland.

Age Class

The tree is described as young, semi-mature, early-mature, mature, over-mature, veteran or dead.

Species

Where identifiable, the common name and full botanical name has been given. Where a cultivar, variety or species cannot be correctly identified, the genus name has been given only.

Height (m)

An indication of the tree's height measured in metres.

Diameter (mm)

The diameter of the tree when measured at 1.5 metres from ground level.

Observations

Narrative comment on the general condition, significant defects and overall appearance (e.g. the presence of decay).

Recommendations

Recommended works to alleviate or minimise any potential issues.

Priority

The priority for which recommended works should be undertaken. Given as High, Medium or Low.

High priority works should be undertaken as soon as reasonably possible.

Medium priority work should be undertaken within 6-12 months.

Low priority work should be undertaken within 5 years.

Appendix 2: Survey Data

Tree ID	Age Class	Species	Height (m)	Diameter (mm)	N E S W	Observations	Recommendations	Priority
T1	Mature	Beech (<i>Fagus sylvatica</i>)	22	1500	11, 13, 14.5, 12	Significant heavy branching. Unions appear adequate. Branch architecture is good with multiple instances of natural bracing. Canopy at 3m over the drive and 6.5m over the highway. Low branch at 2m over the footpath to property. Very minor deadwood. High vigour canopy. No visible fruiting bodies. Good buttress formation.	Lift non-structural drooping branches to 4.5m over driveway retaining all significant limbs. Raise to 2.5m over the footpath.	Low
T2	Over Mature	Ash (<i>Fraxinus excelsior</i>)	20	950	9, 7.5, 3, 9	Old occluded pruning wounds around the base with decicated fruiting bodies. High volume of internal epicormic growth with apical dieback suggest early signs of ADB (Class 2) with associated deadwood. Large dead central leader. One limb extends towards the highway. Main stem leans towards the house.	Fell	Medium
T3	Over Mature	Sycamore (<i>Acer pseudoplatanus</i>)	20	730	4, 6, 6.5, 5	Bifurcation of main stem at 2.5m with a tight union. Minimal signs of stress at the union. Branches are well developed with adequate unions. Unmanaged epicormic growth has developed into three lower branches at 2m which extend vertically upwards into the crown with wide spreading lateral shoots. These limbs are blocking a significant amount of light from the building.	Remove lower three limbs to lift the canopy by 4m	Low
T4	Mature	Sycamore (<i>Acer pseudoplatanus</i>)	20	690	6, 6.5, 8, 7	Large limb removal at 2.5m with cavitation. Probe extends roughly 1/3 of the tree's diameter. A number of old pruning wounds, 2 of which also show minor cavitation. 2 limb failures on western aspect, 1 at 6m (old with cavity) and a more recent one at 8m. Dense slightly weeping canopy with lowest branch at 3m over the drive. Minor internal deadwood.	No recommendations in regard to health. Client would like more light penetration. Recommend minor thinning of branches with a diameter of 50mm and under extending from the main stem (15%) and raise canopy to 5m over driveway.	Low

Appendix 3: Images



Figure 2.



Figure 3.



Figure 4.



Figure 5.

Appendix 4: Site Plan

