TREE CONSULTANTS

# ARBORICULTURAL REPORT

## & Impact Assessment

to **BS 5837:2012** at:

***The Blue Bell Inn,***
***Low Street,***
***East Drayton,***
***Retford,***
***Nottinghamshire***
***DN22 0LN***

Prepared for:
***AM2 Architects***
*Suite 2,*
*The Navigation Business Centre,*
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Date: *April 2021*

Reference: *AWA3690*

Institute of Chartered Foresters
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# Contents

# 1. Introduction

## 1.1 Instructions and Brief

1.1.1 We were instructed by AM2 Architects to visit the site and prepare our findings in a report.

1.1.2 The report is required in accordance with BS 5837:2012 *Trees in relation to design, demolition and construction – Recommendations,* to provide detailed, independent, arboricultural advice on the trees present, in the context of potential development.

## 1.2 Survey Details

1.2.1 The survey took place during March 2021.

1.2.2 The trees were surveyed visually from the ground using "Visual Tree Assessment" techniques and in accordance with the guiding principles of British Standard 5837:2012.

1.2.3 Any additional off-site trees that could impact a new development design have been included in the tree survey parameters.

1.2.4 We have been provided with a topographical survey with tree positions plotted. Where surveyed trees were not included on the topographical survey the tree positions were plotted using enhanced GPS technology (1-2m accuracy) and laser distance measurer.

1.2.5 This report has been prepared by Mr Adam Winson Chartered Arboriculturist, MSc, BSc (Hons), MICFor, MArborA, Principle and Director of AWA Tree Consultants Ltd. The tree survey data collection was carried out by Mr James Brown BSc (Hons) Arboriculture, MArborA, PTI (Lantra) Arboriculturist at AWA Tree Consultants Ltd.

1.2.6 Full qualifications and experience are included within **Appendix 1**. Explanatory details regarding the survey methodology are included within **Appendix 2**. A full explanation of the tree data can be found at **Appendix 3**. Full details of all the trees surveyed are found in **Appendix 4**. For tree locations refer to the Tree Constraints Plan at **Appendix 5** and for detail of the impacts of the new development refer to the Tree Impacts Plan at **Appendix 6**.

# 2. The Site

## 2.1 Location and Description

2.1.1 The site is located on Low Street in East Drayton, a village in Nottinghamshire.

2.1.2 The site comprises an area of land to the rear of The Blue Bell Inn public house. Neighbouring residential properties are situated to the east, south and west of the site, Low Street borders the site's northern boundary and The Blue Bell Inn public house is situated at the site's north western corner.

# 3. The Trees

## 3.1 Legal

3.1.1 Due to the large potential penalties for illegally carrying out work to protected trees, before authorising any tree works a check should be made with the Local Planning Authority to see if the trees are covered by a Tree Preservation Order or if they are within a Conservation Area. If either applies, then statutory permission is required before any works can take place (unless such works are approved by planning permission).

3.1.2 When appointing a tree surgeon, only properly qualified and experienced companies should be used, who have adequate Public Liability and Employer's Liability Insurance.

3.1.3 All tree work should be carried out according to British Standard 3998:2010 *Tree Work - Recommendations*.

## 3.2 Tree Survey Results

3.2.1 The tree survey revealed 41 items of woody vegetation, comprised of 38 individual trees and 3 tree groups.

3.2.2 Of the surveyed trees: 5 trees are retention category 'B' and 36 trees or tree groups are retention category 'C' (explanatory details regarding the retention categories are included at Appendix 3).

3.2.3 The most significant trees within site boundaries are early mature Ash T1, T2, T3, T6 and T7. T1, T2 and T3 are situated in relatively prominent positions bordering the existing site access road, while T6 and T7 situated in less prominent positions to the site's eastern boundary. The crowns of T1, T2, T3, T6 and T7 significantly overhang the gardens of neighbouring residential properties. Boundary fences are situated immediately to the east of the stems of T1, T2, T3, T6 and T7 and the roots of trees T1, T2 and T3 appear to be lifting the surrounding hardstanding at their base. There appears to be minor dieback in the crown of T2, with lots of minor deadwood and snapouts. T1, T2 and T3 are single stemmed, while T6 and T7 are of more multiple stemmed form and have included bark in the unions of their stems.

3.2.4 Many of the Ash trees in the area show symptoms consistent with the fungal disease Ash Dieback. Once a tree is infected, the disease is usually fatal, either directly or indirectly. While the identified Ash trees at the site including T1, T2, T3, T6 and T7 and T10, T14, T15, T18, T19, T20, T22 to T25 may continue to provide landscape and wildlife benefits for some time, their long-term prospects are likely to be limited as a result of Ash Dieback.

3.2.5 Apples T11, T12 and T13 are established early mature trees and collectively provide some amenity to the site but are of relatively low arboricultural value. The trees have occasional pruning wounds to their stems and lots of minor deadwood and snapouts from their crowns. The eastern stems of T11 have been previously removed at around 1m, leaving significant pruning wounds.

3.2.6 The remaining trees within site boundaries are all of very low value and should not pose significant constraints on development at the site.

3.2.7 It was unclear when undertaking the survey whether boundary trees and tree groups G16 to T20, T36 and G37 were situated within site boundaries or were adjacent.

3.2.8 G37 forms a linear group of shrubby trees and saplings bordering the site's south western boundary, separating the site from a neighbouring residential property. The group provides established screening between the site and

the neighbouring residential property but is degraded in parts, with deadwood, snapouts, dead standing stems, cavities and decay throughout.

3.2.9 The other boundary trees are of low value but provide some screening between the site and the neighbouring properties.

3.2.10 Trees and tree groups T4, T9, T10, T21 to T35, T38, T39, T40 and G41 are situated in adjacent gardens and were inaccessible, so were only given cursory inspections with measurements estimated and condition values indicative only.

3.2.11 Of these adjacent trees T21 to T35 collectively form a significant linear landscape feature and provide screening between the site and the neighbouring property. Sycamore T21 and Pines T29, T31, T33 and T34 appear of moderate individual value, while the other adjacent trees appear of lower individual value. T21 to T25 and T29 to T34 appear to have been previously or historically topped.

3.2.12 Ivy covering the stems or crowns of T11, T12, T13, T22, T23, T27, T28, T36 and G37 prevented detailed inspections of the trees being undertaken.

3.2.13 The tree Root Protection Area (RPA) for each tree has been plotted as a polygon centred on the base of the stem. Due to the presence of roads, structures, topography (and past tree management) the RPA is likely to be a simplified representation of the tree roots actual morphology and disposition. However, detailed modifications to the shape of the RPA would largely be based on conjecture and so have been avoided.

3.2.14 Some lower value tree, hedge and shrub groups do not have RPAs detailed on tree plans. The detailed extent and spread of these low value groups, in conjunction with the tree schedule, is sufficient to assess the associated potential constraints.

## 3.3 Photographs

Photo 1: T1, T2 and T3 from north west

Photo 2: T4 to T9 from west

Photo 3: T11, T12 and T13 from north west

Photo 4: T21 to T25 from north east

Photo 5: T29 to T35 from south east

Photo 6: G37 from north west

# 4. Arboricultural Impact Assessment

## 4.1 Proposed New Development

4.1.1 It is proposed to build a new residential development with associated access, landscaping and facilities. The development proposals have been provided by my client and inform this arboricultural impact assessment and the Tree Impacts Plan at Appendix 6.

## 4.2 Direct Impacts

4.2.1 From assessing the new development proposals, 11 trees and 1 tree group will require removal to facilitate the proposed development as they are situated in the footprint of the development or their retention and protection throughout the development is not suitable.

4.2.2 The trees and tree group that require removal to facilitate the proposed development are T1, T2, T3, T6, T7, T8, T11 to T14, T36 and G37.

4.2.3 The removal of the early mature Ash T1, T2, T3, T6 and T7 will have some negative impact in the short term, however, the trees may have limited long term value regardless of development at the site due to the prevalence of Ash Dieback in the area. T2 appears to have minor dieback in its crown and T6 and T7 have included bark in the unions of their main stems which are structural weak points and may limit their future prospects regardless of development at the site.

4.2.4 Cherry T8 and Apples T11, T12 and T13 and Ash T14 are of relatively low value and are not visible from any easily accessible public vantage points and their removal will have little negative impact. T14 likely has limited long term value regardless of development at the site due to Ash Dieback.

4.2.5 The development of the site provides an excellent opportunity to undertake new tree planting throughout the site as part of a soft landscaping scheme. As such, suitable new tree planting has the potential to mitigate for the required tree removals and, in the longer term, has the potential to improve the site's tree cover.

4.2.6 T36 and G37 which require removal to facilitate the proposed development currently provide screening between the site and a neighbouring residential property. The screening provided by T36 and G37 could be replaced with new boundary tree, shrub or hedge plantings or boundary treatments.

## 4.3 Indirect Impacts

4.3.1 The tree Root Protection Area (RPA) detailed on the Tree Plans at Appendices 5 and 6, has been used as a layout design tool, to inform on the area around a tree where the protection of the roots and soil structure is treated as a priority.

4.3.2 There are to be no significant level changes within the RPAs of retained trees.

4.3.3 New boundary fencing is proposed within the RPA of several retained trees and tree groups at the site. The encroachment into the trees' RPAs should not significantly adversely impact on the health or future condition of the trees, provided posts and panels type footings are used as opposed to strip footings, with the holes for the posts dug by hand, avoiding significant tree roots where possible.

4.3.4 The design of the new development has considered tree crown positions in relation to the proposed new dwellings. Some shade from trees may be beneficial. In particular, deciduous trees give shade in summer but allow access to sunlight in winter. However, the design proposals avoid excessive shading, and give adequate provision for future tree growth.

4.3.5 The buildability of the proposed development has been assessed in terms of access, adequate working space and provision for the storage of materials, including topsoil, in relation to the trees.

## 4.4 Protection of the Retained Trees

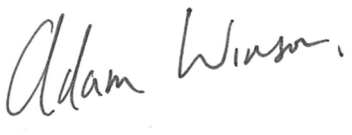
4.4.1 The retained trees will require protection by fencing in accordance with BS 5837: 2012, during the development phase.

4.4.2 If required by the Local Planning Authority, an associated Arboricultural Method Statement, detailing protective fencing specifications and construction methods close to the retained trees can be provided.

# 5. Signature

I trust this report provides all the required information.

Signed



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**Adam Winson**, *Chartered Arboriculturist, MSc, BSc (Hons), MICFor, ACIEEM.*

**26th April 2021**

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# Appendices

# Appendix 1: Authors Qualifications & Experience

**Mr Adam Winson** *Chartered Arboriculturist, MSc, BSc (Hons), MICFor, MArborA, ACIEEM, QTRA Registered*

Adam is the company Director and Principle Consultant. He has a mix of the highest level academic qualifications and relevant work experience. He has worked within the tree care profession for over 20 years, and was awarded an MSc in Arboriculture and Urban Forestry, with distinction. Adam is a Chartered Arboriculturist and a Registered Consultant with the Institute of Chartered Foresters, a Professional Member of the Arboricultural Association and has original research published by the UK Forestry Commission. His work ranges from individual expert tree inspections to managing trees on major multimillion pound housing developments and infrastructure projects. His work often involves trees with preservation orders or litigation, and he has appeared as a tree expert, at planning appeal hearings up to the Crown Court.

**Mr James Brown** *BSc (Hons) Arboriculture, MArborA, PTI (Lantra)*

James has a BSc (Hons) in Arboriculture, attaining first class honours, as well as being awarded the Institute of Chartered Forester's Student award. He is a Professional Member of the Arboricultural Association and an Associate of the Institute of Chartered Foresters. James previously worked in Europe's largest tree nursery and has experience of Local Authority tree officer work. His main work consists of tree surveys for development projects and preparing Tree Protection Schemes to BS 5837:2012.

**Dr Felicity Stout** *Ph.D, MA, BA (Hons), Cert Ed (Forestry), TechArborA, PTI (Lantra)*

Felicity has worked in the tree care profession for the last 10 years. She has a Certificate in Higher Education in Forestry, with a focus on Urban Forestry. She has practical arboricultural contractor experience and is a qualified and experienced Social Forestry practitioner. Felicity has a PhD in History, with a particular interest in the history of woodland and tree management and has published in The Arboricultural Journal on this subject.

**Mr Tom Readman** *Cert Arb L3, Level 4 Forestry and Arboriculture, TechArborA*

Tom joined AWA from his previous role as a tree risk surveyor with Harrogate Borough Council, where he undertook tree risk surveys at a range of sites and prescribed suitable works. Tom also has extensive previous experience as a climbing arborist. Tom achieved at Distinction Star, and was recognised as the student of the year, in the Extended Diploma in Forestry and Arboriculture and is now completing a Foundation Degree in Arboriculture, while working at AWA. Tom's work focuses on tree risk surveys and accurate tree data collection for development projects to BS 5837:2012.

# Appendix 2: Survey Methodology and Limitations of Report

The survey was undertaken in accordance with British Standard 5837:2012 *Trees in relation to design, demolition and construction – Recommendations.* The trees were assessed objectively and without reference to any proposed site layout. The trees were surveyed from the ground using 'Visual Tree Assessment' (VTA) methodology. VTA is appropriate and is endorsed by industry guidance. It is used by arboriculturists to evaluate the structural integrity of a tree, relying on observation of trees biomechanical and physiological features. Measurements are obtained using a diameter tape, clinometer, laser distometer and loggers tape. Where this is not practical measurements are estimated. Tree groups have been identified in instances as defined in BS 5837:2012. Shrubs and insignificant trees may have been omitted from the survey.

This report represents a BS 5837:2012 tree survey and should not be accepted as a detailed tree safety inspection report; however, tree related hazards are recorded and commented upon where observed, yet no guarantee can be given as to the absolute safety or otherwise of any individual tree. All recommended tree work must be to BS 3998:2010 - '*Tree Work: Recommendations'*.

The findings and recommendations contained within this report are valid for a period of twelve months from the date of survey. The author shall not be responsible for events which happen after this time due to factors which were not apparent at the time, and the acceptance of this report constitutes an agreement with these guidelines and terms.

# Appendix 3: Explanation of Tree Descriptions

**HEIGHT** of the tree is measured from the stem base in metres. Where the ground has a significant slope the higher ground is selected.

**CROWN HEIGHT** is an indication of the average height at which the crown begins and includes information of the first significant branch and direction of growth.

**STEM DIAMETER** is measured at 1.5 metres above (higher) ground level. Where the tree is multi-stemmed at this point; the diameter is measured close to ground level or else a combined stem diameter is calculated.

**CROWN SPREAD** is measured from the centre of the stem base to the tips of the branches in all four cardinal points.

**AGE CLASS** of the tree is described as young, semi-mature, early-mature, mature, or over-mature.

**PHYSIOLOGICAL CONDITION** is classed as good, fair, poor, or dead. This is an indication of the health of the tree and takes into account vigour, presence of disease and dieback.

**STRUCTURAL CONDITION** is classed as good, fair or poor. This is an indication of the structural integrity of the tree and takes into account significant wounds, decay and quality of branch junctions.

**LIFE EXPECTANCY** is classed as; less than 10 years, 10-20 years, 20-40 years, or more than 40 years. This is an indication of the number of years before removal of the tree is likely to be required.

**Retention Categories**

**A (marked in green on Appendix 5) = retention most desirable.** These trees are of very high quality and value with a good life expectancy.

**B (marked in blue on Appendix 5) = retention desirable.** These trees are of good quality and value with a significant life expectancy.

**C (marked in black on Appendix 5) = trees which could be retained.** These trees are of low or average quality and value, and are in adequate condition to remain until new planting could be established.

**U (marked in red on Appendix 5) = trees unsuitable for retention.** These trees are in such a condition that any existing value would be lost within 10 years.

| | Tree Species | | | Measurements | | | | Crown (m) | | | | | Tree Condition | | | | | | | Value | | Management |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Tree ID* | *Common Name* | *Latin Name* | *Maturity* | *Height (m)* | *Stems* | *Stem Diameter (mm)* | *Estimated* | *Ave Height* | *N* | *E* | *S* | *W* | *Roots* | *Stem* | *Crown* | *Comments* | *Physiological* | *Structural* | *Life Expectancy* | *Amenity* | *Category* | *Works* |
| T1 | Ash | *Fraxinus excelsior* | Early-mature | 15 | 1 | 500 | No | 2 | 6.5 | 5.5 | 4 | 5.5 | No visual defects | Single stemmed. Vertical. Bark damage | Minor deadwood. Minor snapouts | Minor bark wound to western side of stem at 0.5m but healing well. Roots lifting surrounding hardstanding and kerbs. Boundary fence against stem to east. | Good | Good | 20 to 40 yrs | Moderate | C | Removal required to facilitate development |
| T2 | Ash | *Fraxinus excelsior* | Early-mature | 14 | 1 | 390 | No | 3.5 | 3 | 3 | 2.5 | 5 | No visual defects | Single stemmed. Vertical. Old pruning wounds | Minor dieback. Minor deadwood. Minor snapouts | Two co-dominant stems at 2.5m but union looks good. Roots lifting surrounding hardstanding. Minor dieback in crown with lots of minor deadwood and numerous minor snapouts in lower crown. Boundary fence against stem to east. | Fair | Good | 20 to 40 yrs | Moderate | C | Removal required to facilitate development |
| T3 | Ash | *Fraxinus excelsior* | Early-mature | 14 | 1 | 350 | No | 3 | 4.5 | 4.5 | 4 | 5 | No visual defects | Single stemmed. Vertical | Minor deadwood. Old pruning wounds. Minor snapouts. *Aceria fraxinivoria* symtpoms | Roots lifting surrounding hardstanding. Occasional minor old pruning wounds in lower crown. Boundary fence against stem to east | Good | Good | 20 to 40 yrs | Moderate | C | Removal required to facilitate development |
| T4 | Willow | *Salix sp.* | Young | 6 | 6 | 50 | Yes | 2 | 2 | 2 | 2 | 2 | Limited access around base | Multiple stemmed at base. Vertical | Normal | Adjacent, no access | Good | Good | 10 to 20 yrs | Low | C | No works required |

| | Tree Species | | | Measurements | | | | Crown (m) | | | | | Tree Condition | | | | | | | Value | | Management |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Tree ID* | *Common Name* | *Latin Name* | *Maturity* | *Height (m)* | *Stems* | *Stem Diameter (mm)* | *Estimated* | *Ave Height* | *N* | *E* | *S* | *W* | *Roots* | *Stem* | *Crown* | *Comments* | *Physiological* | *Structural* | *Life Expectancy* | *Amenity* | *Category* | *Works* |
| T5 | Cherry Laurel | *Prunus laurocerasus* | Early-mature | 6 | 6 | 70 | No | 0.5 | 4.5 | 2 | 2 | 2.5 | No visual defects | Multiple stemmed at 0.5m. Slight lean north east. Bark damage | Minor deadwood. Minor snapouts | Situated in slight raised bed on slightly higher ground than land to west. Occasional snapouts from western crown. Boundary fence to east. | Good | Good | 10 to 20 yrs | Low | C | No works required |
| T6 | Ash | *Fraxinus excelsior* | Early-mature | 18 | 1 | 540 | No | 2.5 | 7 | 7 | 3 | 7 | Exposed roots | Single stemmed. Twin stemmed at 2m. Slight lean north west. Tight unions. Partially included bark | Minor deadwood. Minor snapouts | Situated in slight raised bed on slightly higher ground than land to west. Kerb to west. Boundary fence against stem to east. Two co-dominant stems at 2m with minor partially included bark union with reaction growth. | Good | Fair | 20 to 40 yrs | Moderate | C | Removal required to facilitate development |
| T7 | Ash | *Fraxinus excelsior* | Early-mature | 18 | 3 | 310, 290, 330 | No | 2.5 | 3.5 | 6 | 5.5 | 6.5 | No visual defects | Multiple stemmed at 0.5m. Vertical. Tight unions. Partially included bark. Minor cavities. Old pruning wounds | Minor deadwood. Minor snapouts | Situated in slight raised bed on slightly higher ground than land to west. Kerb to west. Boundary fence against stem to east. Multiple stemmed with minor partially included bark unions. Very minor cavities to stem. | Good | Fair | 20 to 40 yrs | Moderate | C | Removal required to facilitate development |
| T8 | Cherry | *Prunus sp.* | Young | 6.5 | 1 | 110 | No | 1.5 | 1.5 | 2 | 2.5 | 3 | No visual defects | Single stemmed. Vertical. Ivy covered | Minor deadwood | Situated on slight raised ground. Ivy prevented detailed inspection. | Good | Good | 10 to 20 yrs | Low | C | Removal required to facilitate development |
| T9 | Cypress | *Cupressus arizonica* | Semi-mature | 10 | 1 | 250 | Yes | 2 | 2 | 2 | 2 | 2 | Limited access around base | Single stemmed. Vertical. Ivy covered | Minor deadwood. Ivy covered | Adjacent, no access | Good | Good | 20 to 40 yrs | Low | C | No works required |

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| | Tree Species | | | Measurements | | | | Crown (m) | | | | | Tree Condition | | | | | | | Value | | Management |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Tree ID* | *Common Name* | *Latin Name* | *Maturity* | *Height (m)* | *Stems* | *Stem Diameter (mm)* | *Estimated* | *Ave Height* | *N* | *E* | *S* | *W* | *Roots* | *Stem* | *Crown* | *Comments* | *Physiological* | *Structural* | *Life Expectancy* | *Amenity* | *Category* | *Works* |
| T10 | Ash | *Fraxinus excelsior* | Semi-mature | 10 | 1 | 200 | Yes | 2 | 3.5 | 3 | 2.5 | 3.5 | Limited access around base | Single stemmed. Vertical | Minor deadwood. Minor snapouts | Adjacent, no access | Good | Good | 10 to 20 yrs | Low | C | No works required |
| T11 | Apple | *Malus sp.* | Early-mature | 8 | 3 | 200, 150, 80 | No | 3 | 4 | 2.5 | 2.5 | 5 | Soil compaction. Ground disturbance | Multiple stemmed at 1m. Vertical. Old pruning wounds. Bark damage. Ivy covered | Minor deadwood. Minor snapouts | Minor soil compaction around base from clearance works. Ivy prevented detailed inspection and accurate stem measurement. Eastern stems removed at 1m with moderate pruning wounds. Lots of minor deadwood and minor snapouts in crown. | Fair | Fair | 20 to 40 yrs | Low | C | Removal required to facilitate development |
| T12 | Apple | *Malus sp.* | Early-mature | 9 | 2 | 200, 250 | No | 3 | 2 | 3 | 5 | 2 | Soil compaction. Ground disturbance | Twin stemmed at 1m. Vertical. Old pruning wounds. Ivy covered. Cankers | Minor deadwood. Minor snapouts. Ivy covered | Minor soil compaction around base from clearance works. Ivy prevented detailed inspection and accurate stem measurement. Occasional old pruning wounds to stem. Lots of minor deadwood and minor snapouts in crown. | Fair | Fair | 20 to 40 yrs | Low | C | Removal required to facilitate development |
| T13 | Apple | *Malus sp.* | Early-mature | 9 | 4 | 320, 150, 90, 160 | No | 2 | 6 | 3.5 | 5.5 | 6 | No visual defects | Multiple stemmed at 0.5m. Vertical. Old pruning wounds. Ivy covered | Minor deadwood. Minor snapouts. Old pruning wounds | Ivy prevented detailed inspection and accurate stem measurement. Occasional old pruning wounds to stem. Lots of minor deadwood and minor snapouts in crown. | Fair | Fair | 20 to 40 yrs | Low | C | Removal required to facilitate development |

| | Tree Species | | | Measurements | | | | Crown (m) | | | | | Tree Condition | | | | | | | Value | | Management |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Tree ID* | *Common Name* | *Latin Name* | *Maturity* | *Height (m)* | *Stems* | *Stem Diameter (mm)* | *Estimated* | *Ave Height* | *N* | *E* | *S* | *W* | *Roots* | *Stem* | *Crown* | *Comments* | *Physiological* | *Structural* | *Life Expectancy* | *Amenity* | *Category* | *Works* |
| T14 | Ash | *Fraxinus excelsior* | Semi-mature | 9 | 1 | 190 | No | 1.5 | 3.5 | 4.5 | 3.5 | 1 | Soil compaction. Ground disturbance | Single stemmed. Slight lean east | Minor deadwood | Overhanging derelict outbuilding to east. Minor soil compaction around base from clearance works. | Good | Good | 10 to 20 yrs | Low | C | Removal required to facilitate development |
| T15 | Ash | *Fraxinus excelsior* | Semi-mature | 9 | 1 | 190 | No | 1.5 | 3.5 | 3.5 | 4 | 1.5 | Exposed roots. Ground disturbance | Single stemmed. Vertical | Minor deadwood. Minor snapouts | Minor soil compaction around base from clearance works | Good | Good | 10 to 20 yrs | Low | C | No works required |
| G16 | Hawthorn. Buddleia. | *Crataegus sp. Buddleia sp.* | Semi-mature | 3.5 | 10 | 30 | No | 0.5 | See plan | | | | Boundary tree group. Degraded and sporadic. Predominantly Hawthorn with occasional Buddleia. Topped at 1.5m to 2m. | | | | Fair | Fair | 20 to 40 yrs | Moderate | C | No works required |
| T17 | Sycamore | *Acer pseudoplatanus* | Young | 7 | 2 | 100, 90 | No | 3 | 2 | 2.5 | 2 | 1 | No visual defects | Single stemmed. Vertical | Old pruning wounds. Previously topped | Previously topped at approximately 1.5m | Fair | Fair | 10 to 20 yrs | Low | C | No works required |
| T18 | Ash | *Fraxinus excelsior* | Young | 8 | 1 | 90 | No | 5 | 3 | 4 | 0.5 | 0.5 | No visual defects | Single stemmed. Slight lean. Bark damage | Minor deadwood. Minor snapouts | Significant lean west then slight lean east. String and barbed wire around stem. | Fair | Fair | 10 to 20 yrs | Low | C | No works required |
| T19 | Ash | *Fraxinus excelsior* | Semi-mature | 7 | 2 | 230, 210 | No | 2.5 | 2.5 | 4 | 4 | 3 | Exposed roots | Twin stemmed at 0.5m. Vertical. Tight unions | Minor deadwood. Minor snapouts | | Good | Good | 10 to 20 yrs | Low | C | No works required |

| | Tree Species | | | Measurements | | | | Crown (m) | | | | | Tree Condition | | | | | | | Value | | Management |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Tree ID* | *Common Name* | *Latin Name* | *Maturity* | *Height (m)* | *Stems* | *Stem Diameter (mm)* | *Estimated* | *Ave Height* | *N* | *E* | *S* | *W* | *Roots* | *Stem* | *Crown* | *Comments* | *Physiological* | *Structural* | *Life Expectancy* | *Amenity* | *Category* | *Works* |
| T20 | Ash | *Fraxinus excelsior* | Semi-mature | 9 | 1 | 100 | Yes | 2.5 | 0.5 | 0.5 | 1.5 | 2 | Limited access around base | Single stemmed. Slight lean west | Minor deadwood | No access | Fair | Fair | 10 to 20 yrs | Low | C | No works required |
| T21 | Sycamore | *Acer pseudoplatanus* | Early-mature | 19 | 1 | 400 | Yes | 4 | 3.5 | 5 | 5 | 5 | Limited access around base | Single stemmed. Vertical | Minor deadwood. Previously topped | Adjacent, no access. Historically topped at approximately 14m. Soil piled at base to north west. | Good | Fair | >40 yrs | Moderate | B | No works required |
| T22 | Ash | *Fraxinus excelsior* | Early-mature | 15 | 1 | 400 | Yes | 4 | 0.5 | 5.5 | 7 | 0.5 | Limited access around base | Single stemmed. Significant lean south east. Bark damage. Ivy covered | Minor deadwood. Minor snapouts. Previously topped. Old pruning wounds | Adjacent, no access. Ivy covering stem. Previously topped at approximately 11m. Metalwork embedded in stem. Soil piled at base to north west. | Fair | Fair | 10 to 20 yrs | | C | No works required |
| T23 | Ash | *Fraxinus excelsior* | Early-mature | 20 | 1 | 400 | Yes | 12 | 6 | 4 | 3 | 5 | Limited access around base | Single stemmed. Vertical. Dead Ivy covered | Minor deadwood. Minor snapouts. Previously topped | Adjacent, no access. Historically topped at approximately 14m. Soil piled at base to west. Dead Ivy covering stem. | Fair | Fair | 20 to 40 yrs | Moderate | C | No works required |
| T24 | Ash | *Fraxinus excelsior* | Early-mature | 14 | 1 | 350 | Yes | 2 | 3 | 8.5 | 2 | 4 | Limited access around base | Single stemmed. Vertical | Old pruning wounds. Minor deadwood. Minor snapouts. Previously topped | Adjacent, no access. Soil piled at base to west. Previously topped at approximately 11m. Large low south western limb significantly overhangs site. | Fair | Fair | 10 to 20 yrs | | C | No works required |

| | Tree Species | | | Measurements | | | | Crown (m) | | | | | Tree Condition | | | | | | | Value | | Management |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Tree ID* | *Common Name* | *Latin Name* | *Maturity* | *Height (m)* | *Stems* | *Stem Diameter (mm)* | *Estimated* | *Ave Height* | *N* | *E* | *S* | *W* | *Roots* | *Stem* | *Crown* | *Comments* | *Physiological* | *Structural* | *Life Expectancy* | *Amenity* | *Category* | *Works* |
| T25 | Ash | *Fraxinus excelsior* | Early-mature | 18 | 1 | 400 | Yes | 2.5 | 6 | 6 | 0.5 | 5 | Limited access around base | Single stemmed. Slight lean north east. Minor cavities | Minor deadwood. Minor snapouts. Old pruning wounds | Adjacent, no access. Historically topped at approximately 12m. More recent pruning works undertaken to lower crown. Soil piled at base to south west. Shed at base to north. | Fair | Fair | 20 to 40 yrs | Moderate | C | No works required |
| T26 | Robinia | *Robinia pseudoacacia* | Young | 8 | 1 | 120 | Yes | 5 | 3.5 | 3.5 | 0.5 | 2 | Limited access around base | Single stemmed. Slight lean north east | Minor deadwood. Minor snapouts | Adjacent, no access | Fair | Fair | 10 to 20 yrs | Low | C | No works required |
| T27 | Hawthorn | *Crataegus monogyna* | Semi-mature | 7 | 1 | 150 | Yes | 1.5 | 3 | 2.5 | 2 | 2.5 | Limited access around base | Single stemmed. Vertical. Tight unions. Ivy covered | Minor deadwood. Ivy covered | Adjacent, no access. Very Ivy covered. | Good | Good | >40 yrs | Low | C | No works required |
| T28 | Robinia | *Robinia pseudoacacia* | Early-mature | 12 | 1 | 400 | Yes | 3.5 | 3.5 | 3 | 2.5 | 3 | Limited access around base | Single stemmed. Vertical. Bark damage. Ivy covered | Minor deadwood. Minor snapouts. Ivy covered | Adjacent, no access. Very Ivy covered. | Fair | Fair | 10 to 20 yrs | Low | C | No works required |
| T29 | Pine | *Pinus sylvestris* | Early-mature | 17 | 1 | 400 | Yes | 3.5 | 1 | 4.5 | 3 | 3.5 | Limited access around base | Single stemmed. Vertical | Minor deadwood. Minor snapouts. Previously topped | Adjacent, no access. Previously topped at approximately 16m. Recent construction work to west. | Good | Fair | >40 yrs | Moderate | B | No works required |
| T30 | Pine | *Pinus sylvestris* | Semi-mature | 13 | 1 | 250 | Yes | 1.5 | 1.5 | 2 | 1.5 | 2 | Limited access around base | Single stemmed. Vertical | Minor deadwood. Minor snapouts. Previously topped | Adjacent, no access. Previously topped at approximately 11m. Suppressed. Recent construction work to south west. | Good | Fair | >40 yrs | Moderate | C | No works required |

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| | Tree Species | | | Measurements | | | | Crown (m) | | | | | Tree Condition | | | | | | | Value | | Management |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Tree ID* | *Common Name* | *Latin Name* | *Maturity* | *Height (m)* | *Stems* | *Stem Diameter (mm)* | *Estimated* | *Ave Height* | *N* | *E* | *S* | *W* | *Roots* | *Stem* | *Crown* | *Comments* | *Physiological* | *Structural* | *Life Expectancy* | *Amenity* | *Category* | *Works* |
| T31 | Pine | *Pinus sylvestris* | Early-mature | 18 | 1 | 400 | Yes | 3 | 1.5 | 5.5 | 3 | 4.5 | Limited access around base | Single stemmed. Vertical. Old pruning wounds | Minor deadwood. Minor snapouts. Previously topped | Adjacent, no access. Previously topped at approximately 17m. Recent construction work to south west. | Good | Fair | >40 yrs | Moderate | B | No works required |
| T32 | Pine | *Pinus sylvestris* | Early-mature | 16 | 1 | 300 | Yes | 3 | 2.5 | 1.5 | 1.5 | 2.5 | Limited access around base | Single stemmed. Vertical | Minor deadwood. Minor snapouts. Previously topped | Adjacent, no access. Previously topped at approximately 15m. Snapouts from lower north western crown. | Good | Fair | 20 to 40 yrs | Moderate | C | No works required |
| T33 | Pine | *Pinus sylvestris* | Early-mature | 18 | 1 | 350 | Yes | 1.5 | 2 | 3.5 | 3 | 0.5 | Limited access around base | Single stemmed. Vertical | Minor deadwood. Moderate deadwood. Previously topped. Minor snapouts | Adjacent, no access. Previously topped at approximately 17m. Minor to moderate deadwood in lower eastern crown overhanging site. | Good | Fair | >40 yrs | Moderate | B | No works required |
| T34 | Pine | *Pinus sylvestris* | Early-mature | 18 | 1 | 450 | Yes | 5 | 3 | 4.5 | 2 | 5 | Limited access around base | Single stemmed. Vertical. Old pruning wounds | Minor deadwood. Moderate deadwood. Minor snapouts. Previously topped | Adjacent, no access. Previously topped at approximately 17m. One low moderate eastern dead limb overhanging site. | Good | Fair | >40 yrs | Moderate | B | No works required |
| T35 | Ash | *Fraxinus excelsior* | Mature | 19 | 1 | 600 | Yes | 5 | 8.5 | 6.5 | 8 | 8 | Limited access around base | Single stemmed. Vertical. Minor cavities. Tight unions | Minor deadwood. Minor snapouts | Adjacent, no access. Two co-dominant main stems at 3.5m with tight union and minor cavity at union. Lots of minor deadwood and minor snapouts in crown. Recent construction work to west. | Fair | Fair | 20 to 40 yrs | Moderate | C | No works required |

| | Tree Species | | | Measurements | | | | Crown (m) | | | | | Tree Condition | | | | | | | Value | | Management |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Tree ID* | *Common Name* | *Latin Name* | *Maturity* | *Height (m)* | *Stems* | *Stem Diameter (mm)* | *Estimated* | *Ave Height* | *N* | *E* | *S* | *W* | *Roots* | *Stem* | *Crown* | *Comments* | *Physiological* | *Structural* | *Life Expectancy* | *Amenity* | *Category* | *Works* |
| T36 | Field Maple | *Acer campestre* | Semi-mature | 11 | 3 | 250, 150, 200 | No | 3 | 4 | 5 | 3.5 | 4.5 | No visual defects | Multiple stemmed at base. Moderate cavity. Moderate decay. Bark damage. Ivy covered | Minor deadwood. Minor snapouts. Ivy covered | Ivy prevented detailed inspection and accurate stem measurement. Moderate decayed cavity at base to north. | Fair | Fair | 20 to 40 yrs | Moderate | C | Removal required to facilitate development |
| G37 | Prunus. Hawthorn. Elder. Ash. Holly. | *Prunus sp. Crataegus sp. Sambucus sp. Fraxinus sp. Ilex sp.* | Semi-mature | 10 | 10 | 80 | No | 1.5 | See plan | | | | Boundary group of shrubby trees and saplings. Predominantly Prunus and Hawthorn with occasional Elder, Ash and Holly. Degraded in parts. Deadwood, snapouts and dead standing stems throughout. Minor cavities and minor decay throuhgout. Old pruning wounds. Exposed roots. Very Ivy covered. | | | | Fair | Fair | 10 to 20 yrs | Moderate | C | Removal required to facilitate development |
| T38 | Apple | *Malus sp.* | Early-mature | 8 | 3 | 300, 200, 200 | Yes | 4 | 4.5 | 3.5 | 4.5 | 6 | Limited access around base | Multiple stemmed at base. Slight lean west. Old pruning wounds. Stubs | Minor deadwood. Minor snapouts. Old pruning wounds | Adjacent, no access | Fair | Fair | >40 yrs | Moderate | C | No works required |
| T39 | Apple | *Malus sp.* | Early-mature | 8 | 2 | 250, 300 | Yes | 3 | 3.5 | 0.5 | 4 | 5 | Limited access around base | Twin stemmed at base. Significant lean south west. Bark damage. Stubs. Old pruning wounds. Minor cavities. Moderate cavity. Moderate decay | Minor deadwood. Old pruning wounds | Adjacent, no access. Moderate decayed cavities at base. | Fair | Fair | >40 yrs | Moderate | C | No works required |

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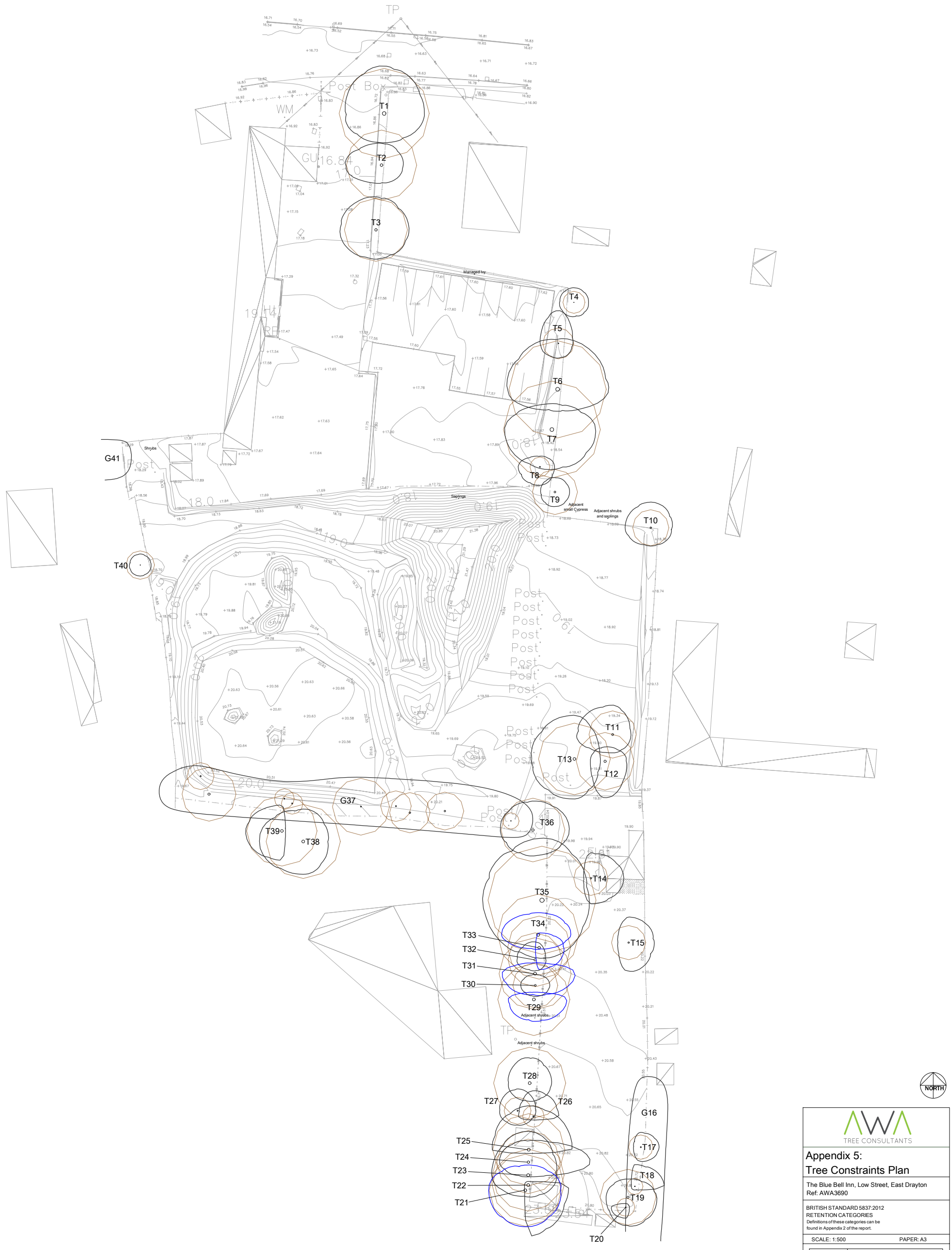
| | Tree Species | | | Measurements | | | | Crown (m) | | | | | Tree Condition | | | | | | | Value | | Management |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Tree ID* | *Common Name* | *Latin Name* | *Maturity* | *Height (m)* | *Stems* | *Stem Diameter (mm)* | *Estimated* | *Ave Height* | *N* | *E* | *S* | *W* | *Roots* | *Stem* | *Crown* | *Comments* | *Physiological* | *Structural* | *Life Expectancy* | *Amenity* | *Category* | *Works* |
| T40 | Yew | *Taxus baccata* 'Fastigiata' | Semi-mature | 6 | 10 | 50 | Yes | 0.5 | 1.5 | 1.5 | 1.5 | 1.5 | Limited access around base | Multiple stemmed at base. Vertical. Tight unions | Minor deadwood | Adjacent, no access | Good | Good | 20 to 40 yrs | Low | C | No works required |
| G41 | Cherry Laurel. Cypress. | *Prunus sp. Cupressus sp.* | Semi-mature | 6 | 10 | 60 | Yes | 1 | See plan | | | | Adjacent, no access. Group of Cherry Laurel and Cypress. | | | | Good | Good | 20 to 40 yrs | Low | C | No works required |




AWA TREE CONSULTANTS

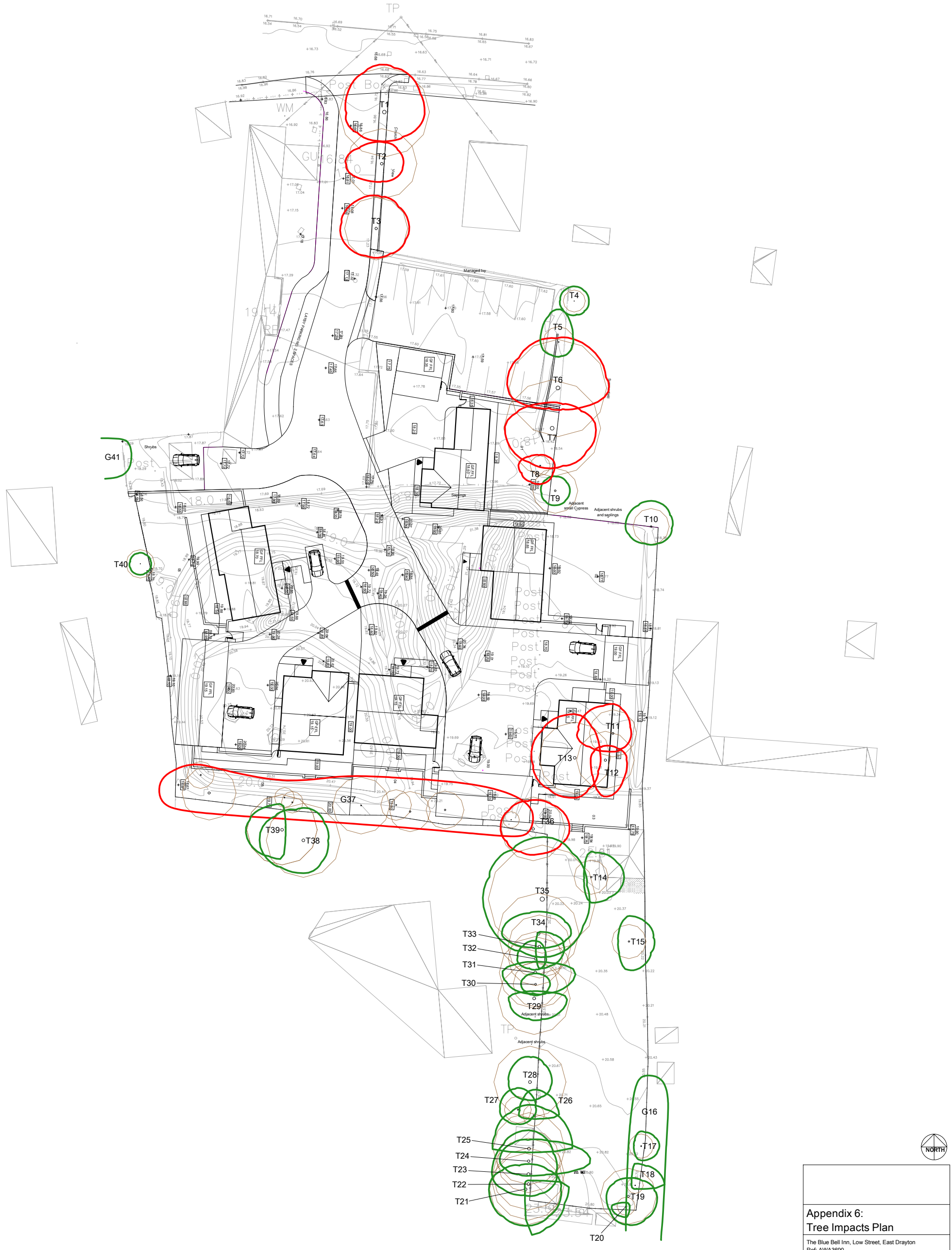
# Appendix 5: Tree Constraints Plan

The Blue Bell Inn, Low Street, East Drayton
Ref: AWA3690

BRITISH STANDARD 5837:2012
RETENTION CATEGORIES
Definitions of these categories can be found in Appendix 2 of the report.

SCALE: 1:500 PAPER: A3

| | |
|---|---|
| | CATEGORY A: HIGH VALUE RETENTION MOST DESIRABLE |
| | CATEGORY B: MODERATE VALUE RETENTION DESIRABLE |
| | CATEGORY C: LOWER VALUE COULD BE RETAINED |
| | CATEGORY U: UNSUITABLE FOR RETENTION |
| | RPA: ROOT PROTECTION AREA |
| | TREE STEM |




## Appendix 6:
## Tree Impacts Plan

The Blue Bell Inn, Low Street, East Drayton
Ref: AWA3690

BRITISH STANDARD 5837:2012

SCALE: 1:500 PAPER: A3

| | |
|---|---|
| | TREE/ TREE GROUP/ HEDGE TO BE RETAINED |
| | TREE/ TREE GROUP/ HEDGE TO BE REMOVED |
| | RPA: ROOT PROTECTION AREA |
| | TREE STEM |