TREE CONSULTANTS

ARBORICULTURAL REPORT

& Impact Assessment

to **BS 5837:2012** at:

402 Pontefract Road,
Lundwood,
Barnsley
S71 5JZ

Prepared for:
White Agus

Date: *August 2023*

Reference: *AWA5573*

Institute of Chartered Foresters
Registered Consultant

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Contents

1. Introduction

1.1 Instructions and Brief

1.1.1 We have been instructed by White Agus 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 August 2023.

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 The tree positions were plotted on an Ordnance Survey map base-layer using enhanced GPS technology (1-2m accuracy) and laser distance measurer.

1.2.5 This report has been prepared by Adam Winson, Chartered Arboriculturist, MSc, BSc (Hons), MICFor, MArborA, Principal and Director of AWA Tree Consultants Ltd.

1.2.6 The tree survey data collection was carried out by Joe Thomas, MSci Biology, Level 4 Award Arboriculture, TechArborA, QTRA Registered, Arboriculturist at AWA Tree Consultants Ltd.

1.2.7 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 please 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**.

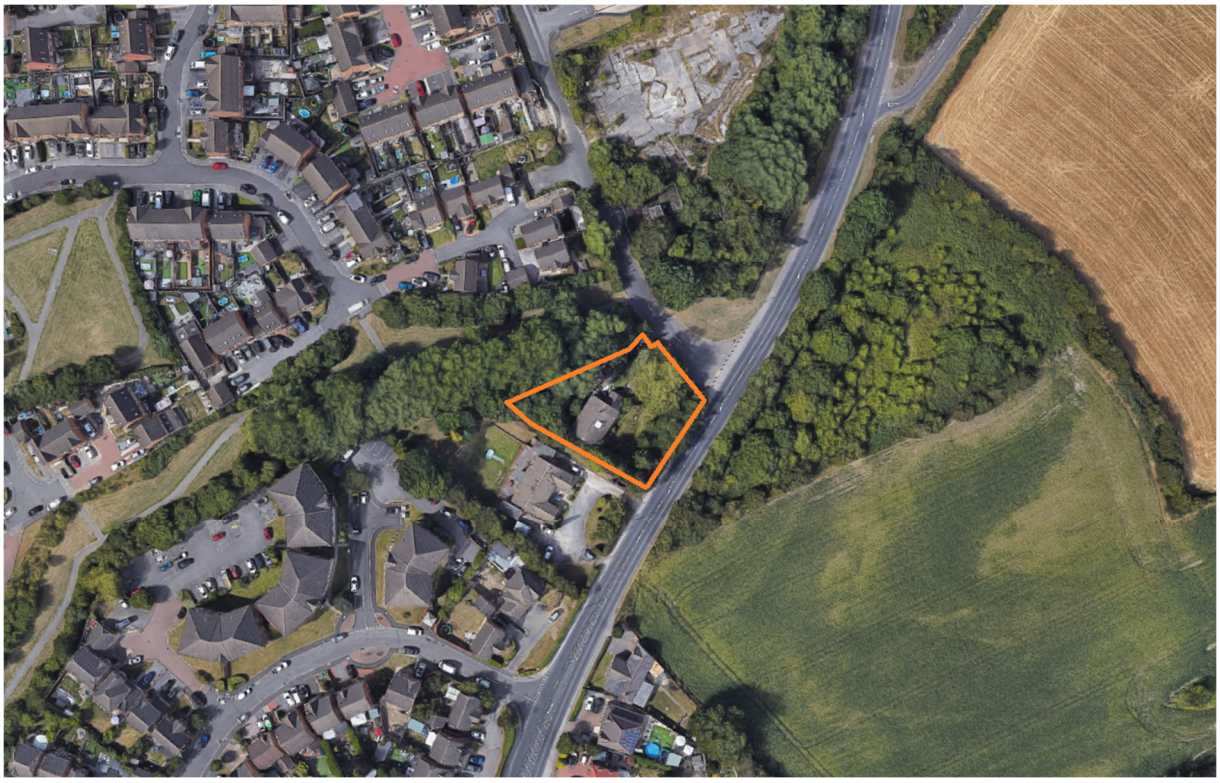
2. The Site

2.1 Location and Description

2.1.1 The site is located on Pontefract Road in Lundwood, Barnsley, South Yorkshire.

2.1.2 The site comprises an empty parcel of land with recently demolished buildings. The site is bordered by a stream and public open space to the north, Tumbling Lane and Pontefract Road to the east and south east, a residential property to the south, and gardens as well as public open space to the west.

2.1.3 The approximate area of the survey is highlighted in the (2023 Google Earth) image below:



3. The Trees

3.1 Legal

3.1.1 The following advice is for guidance purposes only. Some trees are protected by legislation, and it is essential that the legal status of trees is established prior to carrying out works to them. Unauthorised work to protected trees could lead to prosecution, resulting in enforcement action such as fines or a criminal record. Tree Preservation Orders, Conservation Areas, Planning Conditions, Felling Licences or Restrictive Covenants legally protect many trees in the UK.

3.1.2 An online search was undertaken with Barnsley Metropolitan Borough Council on 16/08/23 to check whether any trees at the site are protected by a Tree Preservation Order or are located within a Conservation Area. As of this date no trees at the site are protected by a Tree Preservation Order or are within a Conservation Area.

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

3.1.4 The Multi-Agency Geographical Information for the Countryside (MAGIC) website was used to search for areas of ancient woodlands listed on the Ancient Woodland (DEFRA 2021), and a check for catalogued Ancient and Veteran trees using the woodland trust ancient tree inventory (ATI) (Woodland Trust 2021).

3.1.5 It was confirmed that there are no designated ancient woodlands or veteran or ancient trees within the survey area.

3.1.6 Trees provide a wide range of habitats for many species, some of which are legally protected such as bats, nesting birds, badgers and dormice. It is essential that appropriate care is taken to ensure that this legislation is not contravened.

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

3.1.8 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 7 items of woody vegetation, comprised of 6 individual trees and 1 tree group.

3.2.2 Of the surveyed trees: 2 trees are retention category 'U', and 4 trees and 1 tree group are retention category 'C' (explanatory details regarding the retention categories are included at Appendix 3).

3.2.3 Full details of the surveyed trees, tree groups and hedges are provided in the attached tree data schedule at Appendix 4. General comments are provided below:

3.2.4 The significant tree cover within the site consists mainly of individual trees and a tree group stretching along the northern and western boundaries. Within these groups is a species mix of varying age categories. The occasional larger tree is situated throughout these groups. The central areas of the site contain little of arboricultural significance.

3.2.5 Most of the trees are young or semi-mature with only occasional early mature trees.

3.2.6 The site's most significant trees are those within tree group G5, situated on the northern boundary of the site. Most of the trees within G5 are situated on banking and lean to the south towards the site. Occasional trees within G5 appear to be within site boundaries, but most of the trees within the group are adjacent, with the group extending further off site to the north. These trees are individually of low value but provide some screening value from an adjacent footpath. G5 is predominantly comprised of Crack Willows, which while suitable for retention in the current site context would be unsuitable for retention close to a new development at the site due to their species characteristics.

3.2.7 Crack Willow T6 is also situated on the adjacent banking on the northern boundary of the site. T6 is particularly poor condition and likely has limited future prospects regardless of development at the site.

3.2.8 T1 is an adjacent moribund Rowan with decay and dieback, the tree has limited long-term prospects but it does not pose any risk in the current site context.

3.2.9 Trees T2 and T3 are adjacent multiple stemmed Hawthorns of little arboricultural interest, however, as a feature they do provide moderate screening value from the adjacent property.

3.2.10 T4 is a low value semi-mature Ash tree of little significance. The tree has Ash dieback symptoms and likely has limited long-term prospects as a result.

3.2.11 T7 is an adjacent semi-mature Sycamore situated to the north east of the site. T7's lower crown has been lifted to provide clearance for access to the site, leaving some flush cut wounds on the stem. The tree is of little Arboricultural value, though it is mostly in good condition.

3.2.12 Many of the Ash trees in the local area show symptoms consistent with Chalara or Ash dieback disease. Once a tree is infected, the disease is usually fatal, either directly or indirectly. While the identified Ash trees 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.

3.2.13 Some trees were covered in dense Ivy or were inaccessible (as detailed in Appendix 4). In such cases measurements were estimated and the condition values are indicative only.

3.2.14 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.

3.2.15 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

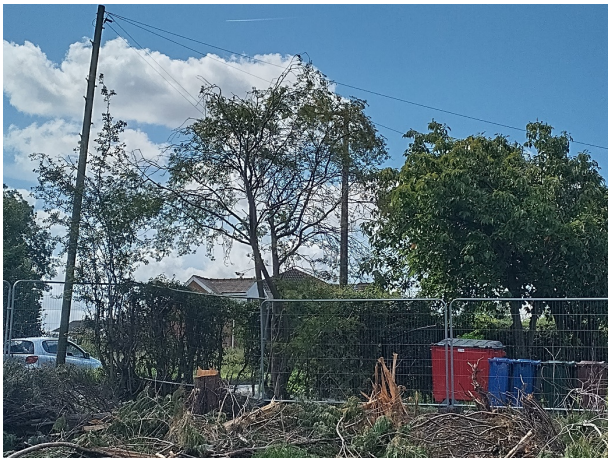


Photo 1: T1 looking south

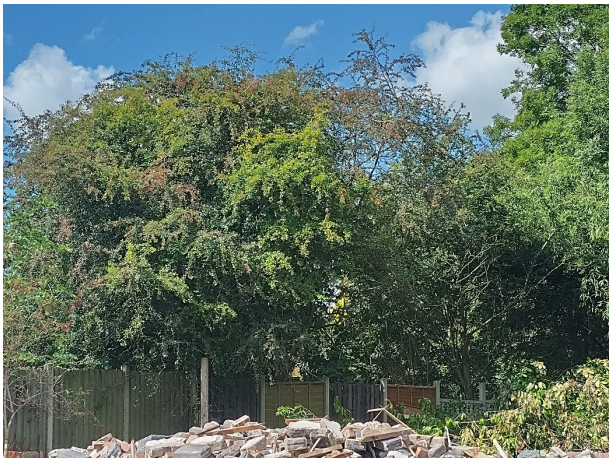


Photo 2: T2 and T3 looking west

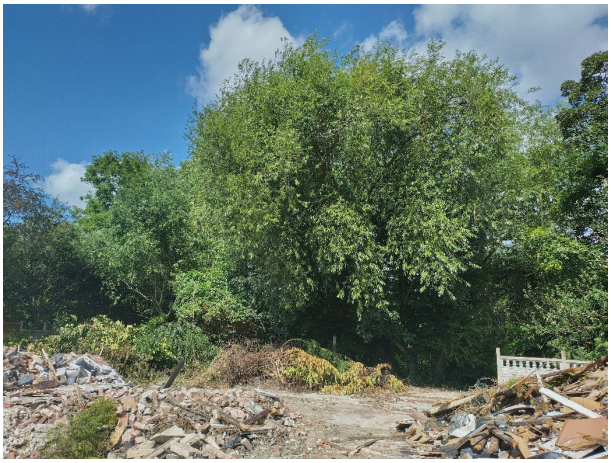


Photo 3: Tree group G5, and trees T4 and T6 looking north west

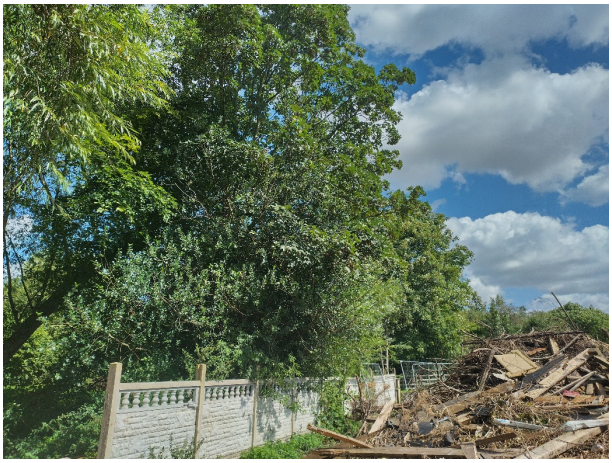


Photo 4: G5 looking east

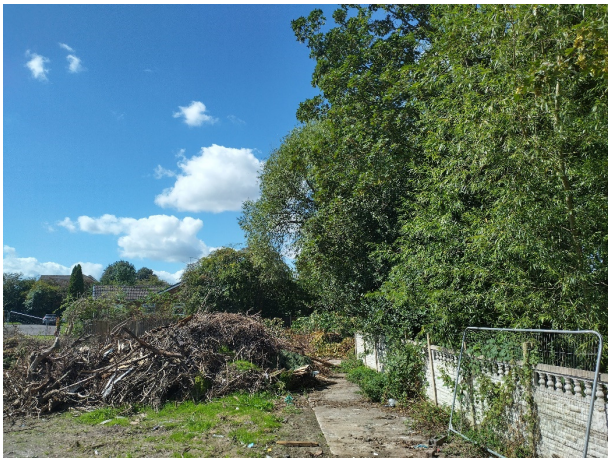


Photo 5: G5 looking west


Photo 6: Stems within G5 and T7 looking north

4. Arboricultural Impact Assessment

4.1 Proposed New Development

4.1.1 It is proposed to build a new residential development with associated access, parking, 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, 2 trees will require removal to facilitate the development and 1 tree group will require partial removal to facilitate the 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 which require removal to facilitate the development are T4 and T6.

4.2.3 The tree group which requires partial removal to facilitate the development is G5.

4.2.4 T4 and the trees within G5 within site boundaries require removal to facilitate the development as they are situated within the footprint of the development.

4.2.5 T6 and occasional trees within G5 outside of site boundaries require removal to facilitate the development as they would be unsuitable to retain close to the proposed new development. The Crack Willows within G5 outside of site boundaries would be unsuitable to retain close to the proposed new development due to their species characteristics.

4.2.6 As T6 and many of the trees in G5 are adjacent and not under site ownership, the tree owner's permission would be required to remove the trees.

4.2.7 T4 likely has limited long-term prospects regardless of development at the site.

4.2.8 The trees within tree group G5 are all low value trees but as a whole the group does provide some screening value from a public walkway.

4.2.9 Occasional retained adjacent trees within G5 will require pruning works to facilitate the development, lifting and reducing their crowns from the south to provide adequate clearance from a proposed new residential property, not pruning beyond the site boundary. The retained trees would likely

tolerate the required pruning works, but the pruning works would likely be required on a regular basis in future to maintain adequate clearance between the retained trees and the proposed new residential property.

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 A proposed new access drive is situated within the RPAs of adjacent retained trees at the eastern end of G5, however, there is already existing hardstanding within the RPAs of the retained trees at the location of the proposed new access drive, therefore, provided the existing hardstanding sub base can be left in place with the new access drive surface laid on top, with no excavation lower than the existing hardstanding sub base, the retained trees should remain largely unimpacted by the works provided care is taken during construction.

4.3.3 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 Suitable Mitigation

4.4.1 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 sites tree cover.

4.5 Protection of the Retained Trees

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

4.5.2 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*

18th August 2023

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Appendices

Appendix 1: Authors Qualifications & Experience

Adam Winson, *Chartered Arboriculturist, MSc, BSc (Hons), MICFor, MArborA, ACIEEM, QTRA Registered*
Adam is the company Director and Principal 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 he has original research published by the UK Forestry Commission. His work ranges from individual expert tree inspections to managing trees on major 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. Adam also regularly undertakes locum Tree Officer work for several Local Planning Authorities.

James Brown, *BSc (Hons) Arboriculture, MArborA, PTI (Lantra), QTRA Registered*
James is a highly experienced and qualified Arboricultural Consultant. He has a BSc (Hons) in Arboriculture, attaining first class honours, as well as being awarded the Institute of Chartered Foresters student award. He is a Professional Member of the Arboricultural Association, an Associate of the Institute of Chartered Foresters, and he is working towards becoming a Chartered Arboriculturist. James joined AWA in 2016, he has many years' experience as an Arboricultural Consultant, he previously worked in Europe's largest container tree nursery and he has experience of local authority Tree Officer work.

James Godfrey, *BA (Hons), FdSc Arboriculture and Tree Management, TechArborA, PTI (Lantra), QTRA Registered*
James has had extensive arboricultural experience working as an arborist within the public and private sector. While working at AWA, James completed his FdSc in Arboriculture and Tree Management, graduating with a distinction and was also awarded for achieving the highest overall mark in his year. James has used his arboricultural knowledge to inform and carry out accurate tree surveys and produce detailed reports that aim to balance appropriate tree retention with the requirements of landowners.

Joe Thomas, *MSci Biology, Award L4 Arboriculture, TechArborA, QTRA Registered*
Joe achieved a first class degree in Biology with an integrated Masters (MSci) from the University of Sheffield. Additionally, he has a Level 4 Award in Arboriculture. Joe joined AWA after an Urban Forestry role with the Sheffield and Rotherham Wildlife Trust and Sheffield City Council, where he gained a variety of experience in different aspects of the arboriculture sector.

James Boyle, *HND Level 5 Arboriculture and Urban Forestry, QTRA Registered*
Jim joined AWA after having worked within the tree care profession for several years, alongside studying at college and university. During this time he gained a wealth of experience and achieved a variety of practical qualifications within the tree care industry. Jim has studied Arboriculture and Urban Forestry at Merrist Wood College in Surrey, Plumpton College in Sussex and University of Highlands and Islands in the Scottish Highlands, where he achieved a distinction in the Higher National Diploma Level 5.

Lucy Garbutt, *MSc Animal Behaviour, BSc (Hons) Biology, CIEEM membership*
Lucy graduated with a masters degree in Animal Behaviour from the UK's highest rated university, St Andrews of Scotland, immediately following the completion of her BSc degree in Biology from Lancaster University. Lucy has experience in botany and plant science and moved into arboriculture after previous experience of protected species and botanical surveys with a large environmental consulting company.

Sophie Beckerman, *BA (Hons), Dip Arboriculture Level 4, TechArborA*
Sophie has more than 10 years' experience as an arborist, working for a variety of private companies as well as undertaking tree management with Sheffield City Council Ranger Service and The Wildlife Trust. Her expertise in arboriculture is demonstrated in the practical NPTC qualifications gained, and her excellent knowledge is reflected in the L4 diploma in Arboriculture, which she completed while working. Her roles as a climbing arborist and team leader included estimating for jobs and project management, supervising tree contracting teams - ensuring that work is carried out safely and efficiently and that health and safety standards are adhered to, and risk assessments are carried out.

Appendix 2: Survey Methodology and Limitations

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.

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 grey 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*	*Crown height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T1	Mountain Ash	*Sorbus aucuparia*	Semi-mature	5.5	4	160, 150, 150, 130	No	2	0.5	3	2.5	2.5	Damage to buttress roots	Multiple stemmed at base. Vertical. Epicormic growths. Old pruning wounds. Stubs. Bark damage. Tight union. Partially included bark. Minor cavities. Major decay	Moderate dieback. Small / sparse. Low vigour. Old pruning wounds. Minor deadwood. Overhanging into the site. 50% dead / absent	Adjacent Rowan with sunken bark and decay to stems. Dieback in crown with some stems dead. Limited long term prospects	Poor	Poor	<10 yrs	Low	U	No works required
T2	Common Hawthorn	*Crataegus monogyna*	Semi-mature	7.5	6	160	No	2.5	3	4	3	4	No visual defects. Limited access around base	Multiple stemmed at base. Vertical. Epicormic growths. Old pruning wounds. Stubs. Tight union	Minor deadwood. Minor dieback. Old pruning wounds	Adjacent Hawthorn situated behind fence. Overhanging into site. Some stems dead but overall has good vigour	Good	Good	20 to 40 yrs	Low	C	No works required
T3	Common Hawthorn	*Crataegus monogyna*	Semi-mature	7.5	1	210	No	3.5	2	2.5	2	2.5	No visual defects. Limited access around base	Single stemmed. Vertical. Epicormic growths. Old pruning wounds. Stubs. Tight union	Minor deadwood. Old pruning wounds	Adjacent Hawthorn situated behind wall. Overhanging into site. Upright form and reasonable vigour	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*	*Crown height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T4	Common Ash	*Fraxinus excelsior*	Semi-mature	8.5	1	180	No	5	0.5	2.5	3.5	2	No visual defects. Limited access around base	Single stemmed. Vertical. Old pruning wounds. Stubs	Old pruning wounds. Minor deadwood. Minor dieback	Situated within site. One stem recently removed. Multiple curves to the stem. Crown has minor Ash dieback symptoms	Fair	Fair	10 to 20 yrs	Low	C	Removal required to facilitate development
G5	Willow, Sycamore, Elder, Ash, Holly and Beech	*Salix sp., Acer sp., Sambucus sp., Fraxinus sp., Ilex sp., Fagus sp.*	Semi-mature	14	10	200	No	2	See plan				Adjacent group of trees following ditch. Mainly Crack Willows with the occasional Sycamore, Elder, and Ash. One Holly bush and one semi-mature Beech tree. Stems displayed where accessible. Most of group inaccessible due to undergrowth, limiting detailed inspection. Most Crack Willows lean south away from the ditch and into the site. Most trees are semi-mature with occasional early-mature trees, most of which are Crack Willows. Occasional dead standing stem. Provides some screening value				Fair	Fair	20 to 40 yrs	Moderate	C	Partial removal required to facilitate development - Adjacent trees within group not under site ownership - Tree owner's permission required to remove adjacent trees. Pruning works required to retained trees to facilitate development - Reduce and lift crowns from south to provide adequate clearance from proposed new residential property - Do not prune beyond site boundary
T6	Crack Willow	*Salix fragilis*	Early-mature	16	1	440	No	2.5	3	3	9	3	Limited access around base. Soil erosion. Exposed roots	Single stemmed. Significant lean. Old pruning wounds. Stubs. Bark damage	Minor deadwood. Minor dieback. Old pruning wounds	Large adjacent Crack Willow. Historically partially failed with evidence of root heave. Major lean south into site. Partially held by Sycamore in G5, which has sustained damage as a result	Fair	Poor	<10 yrs	Low	U	Removal required to facilitate development - Adjacent and not under site ownership - Tree owner's permission required to remove tree
T7	Sycamore	*Acer pseudoplatanus*	Semi-mature	7	1	150	No	2.5	1.5	1.5	2	2	No visual defects. Limited access around base	Single stemmed. Vertical. Old pruning wounds. Stubs. Pruning wounds from crown lifting	Minor deadwood. Old pruning wounds	Adjacent Sycamore situated next to site entrance. Lifted crown above entrance leaving some flush cuts	Fair	Good	20 to 40 yrs	Low	C	No works required

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T7

Hawthorn

Crack Willow

Sycamore

Beech

Holly

Crack Willow

Dead Crack Willow

Crack Willow

T6

Crack Willow

Crack Willow

Sycamore

Sycamore

Sycamore

Cypress

Ash

Elder

G5

Adjacent Hawthorn Saplings

T4

T3

Saplings

T2

Elder sapling

Adjacent Ash sapling

Adjacent Dead Elder

T1

Hawthorn sapling

NORTH

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Appendix 5:
Tree Constraints Plan

402 Pontefract Road, Lundwood, Barnsley
Ref: AWA5573

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

SCALE: 1:200 PAPER: A2

	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

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Appendix 6:
Tree Impacts Plan

402 Pontefract Road, Lundwood, Barnsley
Ref: AWA5573

BRITISH STANDARD 5837:2012

SCALE: 1:200 PAPER: A2

🟢	TREE/ TREE GROUP/ HEDGE TO BE RETAINED
🔴	TREE/ TREE GROUP/ HEDGE TO BE REMOVED
⬡	RPA: ROOT PROTECTION AREA
○	TREE STEM