

ARBORICULTURAL REPORT

& Impact Assessment
to BS 5837:2012 at:

St John's Community Centre, Church Street, Penistone, Barnsley, South Yorkshire S36 6AR

Prepared for:

J Mahoney Architects

25 Millstones,
Oxspring,
Sheffield,
South Yorkshire
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1. Introduction

1.1 Instructions and Brief

- 1.1.1 We were instructed by J Mahoney 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 August 2020.
- 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, Arboriculturist at AWA Tree Consultants Ltd.
- 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 comprises a Community Centre located on Church Street in Penistone, Barnsley, South Yorkshire. Church Street borders the site's southern boundary and a trail borders the site's northern boundary.
- 2.1.2 The approximate area of the survey is highlighted in the (2019 Google Earth) image below:





3. The Trees

3.1 Legal

- 3.1.1 An online check was undertaken with Barnsley Metropolitan Borough Council on the 12th of August 2020 to check whether trees at the site are located within a Conservation Area or are protected by a Tree Preservation Order (TPO). The site is situated within a Conservation Area, and as such all trees within the site are legally protected.
- 3.1.2 Before carrying out any works to protected trees the permission of the local planning authority must be sought. There are large potential penalties for illegally carrying out work to protected trees. Statutory permission is not required for the removal of deadwood.
- 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.
- 3.1.4 When appointing a tree surgeon, only properly qualified and experienced companies should be used, who have adequate Public Liability and Employer's Liability Insurance.
- 3.1.5 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 18 items of woody vegetation, comprised of 17 individual trees and 1 tree group.
- 3.2.2 Of the surveyed trees: 9 trees or tree groups are retention category 'B', and 9 trees are retention category 'C' (explanatory details regarding the retention categories are included at Appendix 3).
- 3.2.3 The mature Sycamore T1 is in good overall condition with good future prospects and provides significant amenity value to the site and the surrounding area due to its prominent position to the centre of the site.
- 3.2.4 The Birch T2, T3 and T4 are of low value but provide some amenity due to their positions bordering the site's car park.



- 3.2.5 The Oak T5 is situated in a prominent position bordering Church Street along the site's southern boundary. There is a retaining wall to the south of the tree with an approximate 2m drop to the footpath and road below.
- 3.2.6 The Willow T6 is situated in adjacent land to the west of the site. The tree is situated on top of a retaining wall with a drop of around 1m to the east of the tree to the site below. The tree is situated in a relatively prominent position but is only of low value and likely has limited long term value regardless of development at the site.
- 3.2.7 Trees G7 to T18 are situated on adjacent banking bordering the trail beyond the site's northern boundary. Collectively the trees form a significant landscape feature and provide screening between the site and the adjacent land to the north. The mixed species group G7 is of moderate collective value and the Sycamores T9, T11, T16 and T18 and Ash T10 and T17 are of moderate individual value. The Elder T8 and Ash T12 to T15 are of low individual value but provide screening between the site and the adjacent land.
- 3.2.8 It is recommended to remove any significant deadwood from the crown of the Ash T17 regardless of development at the site.
- 3.2.9 Access to trees T6 to T11 was limited, and so these trees were only given cursory inspections with measurements estimated and condition values indicative only.
- 3.2.10 Trees G7, T9 to T14 and T16 were covered in dense Ivy which prevented detailed inspections of the trees being undertaken.
- 3.2.11 The tree Root Protection Area (RPA) detailed on the Tree Constraints Plan at Appendix 5 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.
- 3.2.12 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.
- 3.2.13 The 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.



4. Arboricultural Impact Assessment

4.1 Proposed New Development

4.1.1 It is proposed to build an extension to the existing community centre building with associated hard landscaping including new ramp access. 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, no trees require removal to facilitate the proposed development, with all trees able to be retained and protected throughout the development.

4.3 Indirect Impacts

- 4.3.1 The tree Root Protection Area (RPA) detailed on the Tree Plans at Appendix 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 Potentially damaging activities are proposed in the vicinity of retained trees. The proposed new extension encroaches into the detailed RPA of the adjacent Ash T10 and Sycamore T11. Construction within the RPA can have negative impacts on tree roots, however, due to the existing brick outbuilding and hardstanding in this area, and the existing brick retaining wall situated between the trees and the site, T10 and T11 should remain largely unaffected by the works, provided care is taken during construction.
- 4.3.3 The proposed new access ramp is situated within the RPA of the adjacent Sycamore T11 and Ash T12, however, due to the existing hardstanding in this area, and the existing brick retaining wall situated between the trees and the site, T11 and T12 should remain largely unaffected by the works, provided care is taken during construction.
- 4.3.4 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 may 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

Adam Winsm.

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

26th August 2020

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Appendices

Appendix 1: Authors Qualifications and Experience
Appendix 2: Survey Methodology and Limitations
Appendix 3: Explanation of Tree Descriptions
Appendix 4: Tree Data
Appendix 5: Tree Constraints Plan
Appendix 6: Tree Impacts Plan



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.

Mr Dave Farmer FdSc (Arb), MArborA, PTI (Lantra)

Dave has a Foundation Degree in Arboriculture (with Distinction) and is qualified in Professional Tree Inspection. He is a Professional Member of the Arboricultural Association and an Associate of the Institute of Chartered Foresters. Dave has many years of experience within the tree care profession, including lecturing in arboriculture. His work focuses on diagnosing potential tree risk problems, and recommending appropriate treatments and work programmes.

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 Drew Leeper Cert Arb L3, TechArborA

Drew has over 10 years' experience within the arboricultural sector and was awarded Distinction in the Extended Diploma in Forestry & Arboriculture. From working abroad in Canada as a climbing arborist and returning home to running his own tree care firm. Drew has also been fortunate enough to gain valuable experience working at the Royal Botanical Gardens of Kew. He now uses his work and education experience at AWA, focusing on accurate tree data collection for tree surveys for development projects and assisting the team in the preparation of tree reports and tree plans 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 BS5837 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 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 for removal. These trees are in such a condition that any existing value would be lost within 10 years.

	Tree S	pecies		N	/ leasu	rement	s		Cro	own (m)				Tree Condition					Val	lue	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	Sycamore	Acer pseudoplatanus	Mature	14	4	320, 370, 350, 490	No	2	5.5	5.5	7.5	6.5	Exposed roots. Soil erosion	Multiple stemmed at base. Vertical. Tight unions. Old pruning wounds	Minor deadwood	Situated on slight banking with retaining walls to south and east. Moderate old pruning wounds to southern side of stem with minor decay.	Good	Fair	>40 yrs	Moderate	В	No works required
Т2	Birch	<i>Betula utilis</i> 'Jacquemontii'	Semi- mature	10	3	100, 130, 120	No	1	3	3.5	2	1.5	Exposed roots. Mower damage	Multiple stemmed at 1m. Slight lean east. Old pruning wounds. Stubs. Bark damage	Minor deadwood	On banking. Exposed shallow roots with mower damage.	Good	Good	20 to 40 yrs	Moderate	С	No works required
Т3	Birch	<i>Betula utilis</i> 'Jacquemontii'	Semi- mature	12	1	150	No	1	2.5	4	2	2	Exposed roots. Mower damage	Single stemmed. Vertical. Old pruning wounds	Old pruning wounds	On banking. Exposed shallow roots with mower damage.	Good	Good	20 to 40 yrs	Moderate	С	No works required
Т4	Birch	Betula utilis 'Jacquemontii'	Semi- mature	11	1	150	No	1	3	3	2	2.5	Mower damage. Exposed roots	Single stemmed. Vertical. Old pruning wounds	Normal	On banking. Exposed shallow roots with mower damage.	Good	Good	20 to 40 yrs	Moderate	С	No works required



	Tree S	pecies		Measurements Crown (m)									Tree Condition								lue	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
Т5	Oak	Quercus robur	Early- mature	17	1	600	No	1.5	6	9	6.5	5.5	No visual defects	Single stemmed. Vertical. Epicormic growths	Minor deadwood. Minor snapouts. Moderate snapouts. Epicormic growths. Old pruning wounds	On roadside banking with retaining wall to south with an approx. 2m drop to footpath and road below. Epicormic growths to stem and throughout crown. Moderate snapout from northern crown at 6m approx.	Good	Good	>40 yrs	High	В	No works required
Т6	Willow	Salix caprea	Early- mature	15	2	400, 500	Yes	3	7	6.5	6	6	Limited access around base	Twin stemmed at base. Vertical. Old pruning wounds. Stubs. Tight unions. Partially included bark. Bark damage. Minor decay	Minor deadwood. Intertwined limbs	Adjacent, no access. On raised ground on top of retaining wall. Poorly pruned from east.	Good	Fair	20 to 40 yrs	Moderate	С	No works required
G7	Ash. Sycamore. Willow. Elder.	Fraxinus sp. Acer sp. Salix sp. Sambucus sp.	Semi- mature	15	10+	250	Yes	3		See	plan			group situated on ba emi to early mature A shrubb			Fair	Fair	20 to 40 yrs	Moderate	В	No works required
Т8	Elder	Sambucus nigra	Semi- mature	6	10	60	Yes	0.5	4	2	2	3	Exposed roots	Multiple stemmed at base. Significant lean north. Stubs. Bark damage. Tight unions. Minor decay	Moderate dieback. Minor deadwood. Moderate deadwood. Minor snapouts. Moderate snapouts. Bark damage	Adjacent. Limited access due to dense undergrowth. Situated on banking. In poor condition.	Poor	Fair	10 to 20 yrs	Moderate	С	No works required



	Tree S	pecies		N	/leasu	rement	ts		Cro	own (m)				Tree Condition					Va	lue	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
Т9	Sycamore	Acer pseudoplatanus	Semi- mature	13	4	150, 200, 250, 250	Yes	2	4	3	3	3.5	Limited access around base. Exposed roots	Multiple stemmed at base. Vertical. Mower damage. Bark damage. Tight unions	Minor deadwood. Ivy covered	Adjacent. Limited access due to dense undergrowth. Situated on banking. Stem and crown very lvy covered. lvy prevented detailed inspection and accurate stem measurement.	Good	Fair	>40 yrs	Moderate	В	No works required
T10	Ash	Fraxinus excelsior	Semi- mature	11	2	300, 350	Yes	1	6	5	5	5	Limited access around base. Exposed roots	Twin stemmed at base. Slight lean north. Ivy covered. Tight unions	Minor deadwood. Minor snapouts. Ivy covered	Adjacent. Limited access due to dense undergrowth. Situated on banking. Stem and crown very lvy covered. lvy prevented detailed inspection and accurate stem measurement.	Good	Fair	20 to 40 yrs	Moderate	В	No works required
T11	Sycamore	Acer pseudoplatanus	Early- mature	14	8	200	Yes	1.5	6.5	6	3.5	5	Exposed roots. Limited access around base	Multiple stemmed at base. Vertical. Ivy covered. Tight unions		Adjacent. Limited access due to dense undergrowth. Situated on banking. Stem and crown very lvy covered. lvy prevented detailed inspection and accurate stem measurement.		Fair	>40 yrs	Moderate	В	No works required



	Tree S	pecies		N	/leasu	rement	:s		Cro	wn (m)				Tree Condition					Val	lue	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
T12	Ash	Fraxinus excelsior	Semi- mature	14	7	180	No	4	6	2	3.5	5	Soil erosion. Exposed roots	Multiple stemmed at base. Vertical. Tight unions. Bark damage. Ivy covered. Old pruning wounds. Stubs. Dead Ivy covered	Minor deadwood	Adjacent but accessible. Situated on banking. Partially lvy covered. lvy prevented detailed inspection.		Fair	20 to 40 yrs	Moderate	С	No works required
T13	Ash	Fraxinus excelsior	Semi- mature	14	2	220, 120	No	7	2	2	4.5	1	Exposed roots. Soil erosion	Twin stemmed at base. Slight lean east. Bark damage. Ivy covered. Tight unions. Old pruning wounds. Stubs. Dead Ivy covered	Minor deadwood. Minor dieback	Adjacent but accessible. Situated on banking. Partially lvy covered. lvy prevented detailed inspection.		Fair	20 to 40 yrs	Moderate	С	No works required
T14	Ash	Fraxinus excelsior	Semi- mature	14	2	150, 400	No	5	5	5.5	3.5	5	Soil erosion. Exposed roots	Twin stemmed at base. Vertical. Old pruning wounds. Stubs. Ivy covered. Bark damage. Dead Ivy covered	Minor deadwood. Minor snapouts. Ivy covered	Adjacent but accessible. Situated on banking. Partially lvy covered. lvy prevented detailed inspection. Pruned from south.	Good	Fair	20 to 40 yrs	Moderate	С	No works required
T15	Ash	Fraxinus excelsior	Semi- mature	15	1	180	No	10	3	5	3	0.5	Exposed roots	Single stemmed. Slight lean east. Old pruning wounds. Stubs. Dead Ivy covered	Minor deadwood. Minor dieback	Adjacent but accessible. Situated on top of banking. Partially lvy covered.	Fair	Fair	20 to 40 yrs	Moderate	С	No works required



	Tree S	pecies		N	/leasu	rement	s		Cro	wn (ı	m)				Tree Condition					Value		Management
I ree 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	6 Sycamore	Acer pseudoplatanus	Early- mature	15	2	390, 400	No	3	4.5	5	4	5	No visual defects	Twin stemmed at 1m. Vertical. Tight unions. Ivy covered	Minor deadwood	Adjacent but accessible. Situated on banking. Ivy prevented detailed inspection.	Good	Fair	>40 yrs	Moderate	В	No works required
T1	7 Ash	Fraxinus excelsior	Early- mature	18	1	420	No	2.5	8	5	4.5	5.5	Soil erosion	Single stemmed. Vertical	Minor deadwood. Moderate deadwood. Minor snapouts	On banking in between steps and ramp. Roots lifting hardstanding. Occasional minor to moderate deadwood in crown.	Good	Good	20 to 40 yrs	Moderate	В	Recommended to remove significant deadwood from crown regardless of development
T1	8 Sycamore	Acer pseudoplatanus	Mature	16	1	600	No	3	6	5.5	6	5	Increase in soil level	Single stemmed. Twin stemmed at 2m. Tight unions. Partially included bark. Bark damage	Minor deadwood. Bark damage	Soil piled around base of stem. Two co-dominant stems at 2m with included bark union but with lots of reaction growth. Rope tied around stem.		Fair	>40 yrs	Moderate	В	No works required





