



ARBORICULTURAL REPORT & Impact Assessment to BS5837:2012 at:

Land at:
***Northorpe Lane,
Mirfield,
West Yorkshire,
WF14 0QN***

Prepared for:
Newett Homes

Date: *March 2021*

Reference: AWA3667



Contents

1. Introduction.....	3
1.1 Instructions and Brief	3
1.2 Survey Details	3
2. The Site	4
2.1 Location and Description	4
3. The Trees	5
3.1 Legal.....	5
3.2 Tree Survey Results.....	6
3.3 Photographs	8
4. Arboricultural Impact Assessment.....	9
4.1 Proposed New Development	9
4.2 Direct Impacts.....	9
4.3 Indirect Impacts.....	9
4.4 Suitable Mitigation.....	10
4.5 Protection of the Retained Trees.....	10
5. Signature.....	11
Appendix 1: Authors Qualifications & Experience	13
Appendix 2: Survey Methodology and Limitations of Report.....	14
Appendix 3: Explanation of Tree Descriptions	15
Appendix 4: Tree Data	16
Appendix 5: Tree Constraints Plan.....	17
Appendix 6: Tree Impacts Plan	18

1. Introduction

1.1 Instructions and Brief

- 1.1.1 We have been instructed by Newett Homes 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.
- 1.2.1 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 and data collection was carried out by Mr Tom Readman Cert Arb L3, Level 4 Forestry and Arboriculture, TechArborA, Arboriculturist at AWA Tree Consultants Ltd.
- 1.2.2 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 to the rear of 28 Northorpe Lane, Mirfield, West Yorkshire. It is predominantly comprised of managed grass, with occasional small, self-set trees situated throughout the managed grass area. A residential dwelling is situated at the northern boundary, with associated landscaping and a small, disused fishery. Beyond the northern boundary is an open field, to the east is a disused, wooded railway embankment, and to the south and west are residential properties.
- 2.1.2 The approximate area of the survey is highlighted in the image below (Google Earth, 2020):



3. The Trees

3.1 Legal

- 3.1.1 An online search has been carried out with Kirklees Council on 22/03/21 to ascertain whether any trees at the site are located within a Conservation area or are protected by a Tree Preservation Order (TPO). As of this date no trees within the site are legally protected, as indicated on the image below (Kirklees Council, 2021)



- 3.1.2 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. Statutory permission is not required for the removal of deadwood.
- 3.1.3 When appointing a tree surgeon, only properly qualified and experienced companies should be used, who have adequate Public Liability and Employer's Liability Insurance.
- 3.1.4 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 45 items of woody vegetation, comprised of 38 individual trees and 7 groups of trees or shrubs or hedges.
- 3.2.2 Of the surveyed trees: 5 trees are retention category 'U', 4 trees and 1 group are retention category 'B', and the remaining 39 trees and groups are retention category 'C' (explanatory details regarding the retention categories are included at Appendix 3).
- 3.2.3 Species diversity is reasonable, including Ash, Beech, Birch, Cherry, Cypress, Hawthorn, Oak, Pine and Sycamore. Most of the trees are semi-mature, with only occasional early-mature trees situated beyond the east and southern boundaries.
- 3.2.4 Beyond the eastern boundary is steep banking, leading to a disused railway. Situated on the banking is a dense, shelterbelt woodland group G1. G1 is predominantly comprised of semi-mature trees, with occasional inaccessible larger trees toward the top of the banking. Most individual trees within G1 have limited individual value, with smaller trees situated at the boundary being particularly low value. However, collectively the group has moderate amenity value in the wider landscape. At the edge of the woodland is a small ditch, which extends along the eastern boundary.
- 3.2.5 Situated within G1, there are a number of early-mature trees, T2 to T7. These trees are typically of more moderate amenity value, being larger and more prominent within the woodland.
- 3.2.6 Situated close to the southern boundary, in adjacent gardens, are Birch T11, Willow T12 and Rowan T13. Of these trees, T11 and T12 are of more moderate amenity value, with T11 being an ornamental, cultivated Birch and T12 being a large, early-mature tree that will be prominent from neighbouring gardens. Close to T12 there is a prominent root causing minor displacement of the boundary dry-stone wall. While displacement was insignificant at time of survey, future repairs or rebuilding may be required if the wall is displaced further.
- 3.2.7 A number of trees are situated within the managed grass; T14 to T26, and T32. These trees are predominantly self-set Ash, with two smaller ornamental Willow trees T16 and T17, and occasional larger trees Birch T19, Beech T24 and T25, and multi-stemmed Oak T32. These trees are typically of low amenity value, with limited value in the wider landscape, with a number having defects or features, including tight unions and large, old pruning wounds, that suggest more limited long-term value.

- 3.2.8 At the western boundary of the site, in adjacent gardens, are Cherry T27, Plum T28, groups G29 and G31. These trees and groups have reasonable amenity value as screening for neighbouring properties.
- 3.2.9 Situated at the base of the retaining wall at the western boundary is Hawthorn T30. There is a prominent crack in the wall immediately adjacent to the T30, most likely caused by the trees continued growth.
- 3.2.10 In the landscaped area to the north of the site are a number of trees and groups. Of these, the most significant are T35 and T41, semi-mature Pine trees that are reasonably prominent within the site. The remaining trees and shrubs are of low arboricultural value, being small ornamental, garden trees.
- 3.2.11 A number of the Ash have been impacted by Chalara or Ash dieback disease, including three dead trees. Once a tree is infected, the disease is usually fatal, either directly or indirectly. Due to the presence of Ash dieback, and the age of the remaining Ash trees, it is reasonable to assume the Ash trees on site have limited long-term prospects.
- 3.2.12 T8, T9, T14 and T15 are dead, and T30 is causing significant damage to a boundary wall. These trees should be felled regardless of any new development (as detailed in Appendix 4).
- 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 the low value groups, in conjunction with the tree schedule, is sufficient to assess the associated potential constraints.

3.3 Photographs



Photo 1: Overview of the site, from the north-west



Photo 2: G1, at the eastern boundary



Photo 3: Willow T12, at the southern boundary



Photo 4: T27, T28 and G29, screening at the western boundary



Photo 5: Prominent crack behind T30



Photo 6: Small garden trees T38, T39 and T40

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, 21 trees and 3 tree groups or their retention and protection throughout the development is not suitable.
- 4.2.2 The trees that require removal are T10, T16, T17, T18, T19, T20, T21, T22, T23, T24, T25, T26, T32, T34, T35, G36, G37, T38, T39, T40, T41, T42, G43 and T44.
- 4.2.3 The trees that require removal are all retention category 'C'. These trees are of limited amenity value and, as they are effectively screened by existing topography, have negligible value in the wider landscape. T18, T20, T21, T22, T23 and T26 are Ash trees, and as Ash dieback has been identified on site these trees will have severely limited long-term prospects.
- 4.2.4 Part of G1 will be removed, to facilitate development. Trees at the western aspect of G1 are growing within the curtilage of the development site, and will be removed to facilitate the erection of new boundary treatments. This will be limited to smaller, lower value understory trees and will not impact the overall landscape value of the woodland group.
- 4.2.5 Due to the low value of the trees to be removed, removals will have only a negligible negative arboricultural impact.

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. As such, no significant negative indirect impacts have been identified.

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.

25th March 2021

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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.

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 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 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
G1	Oak, Sycamore, Hawthorn, Hazel	Quercus sp., Acer sp., Crataegus sp., Corylus sp.	Semi-mature	10	10+	200 avg	Yes	1	See Plan				Access prevented detailed inspection. Woodland shelterbelt on old railway banking, beyond boundary of site. Boundary trees are smaller, understory Hawthorn and Hazel. Small ditch along boundary fence				Good	Good	>40 yrs	Moderate	B	Partial removal at western aspect, to boundary, to facilitate development
T2	Oak	Quercus patraea	Early-mature	12	2	300, 250	Yes	1.5	6	4.5	5	6	Limited access around base, No visual defects	Single stemmed at base, Twin stemmed at 0.5m, Tight union with partially included bark	Minor deadwood	Access prevented detailed inspection. Situated at bottom of banking, good reaction to tight union	Good	Good	>40 yrs	Moderate	C	No works required
T3	Willow	Salix caprea	Early-mature	12	4	250, 200, 200, 150	Yes	2	4.5	2	5	6	Soil erosion, Exposed roots	Single stemmed at base, Multiple stemmed at 0.5m, Slight lean, Ivy covered, Tight union with partially included bark	Suppressed, Unbalanced	Access prevented detailed inspection. Situated on banking	Fair	Fair	20 to 40 yrs	Low	C	No works required
T4	Sycamore	Acer pseudoplatanus	Early-mature	12	1	400	Yes	2	5	5	5	5	Limited access around base, Soil erosion, Exposed roots	Single stemmed, Vertical, Tight union with partially included bark	Minor deadwood	Access prevented detailed inspection. Situated on banking	Good	Fair	>40 yrs	Moderate	B	No works required
T5	Oak	Quercus robur	Early-mature	12	1	350	Yes	2	5	4	5	5	Soil erosion, Exposed roots, Limited access around base	Single stemmed, Vertical	Minor deadwood	Access prevented detailed inspection. Situated on banking	Good	Good	>40 yrs	Moderate	B	No works required

Tree ID	Tree Species		Maturity	Measurements				Crown (m)					Tree Condition							Value		Management
	Common Name	Latin Name		Height (m)	Stems	Stem Diameter (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works
T6	Oak	<i>Quercus robur</i>	Early-mature	14	1	400	Yes	3	6	4	6	6	Soil erosion, Exposed roots, Limited access around base	Single stemmed, Vertical	Minor deadwood	Access prevented detailed inspection. Situated on banking	Good	Good	>40 yrs	Moderate	B	No works required
T7	Sycamore	<i>Acer pseudoplatanus</i>	Early-mature	17	5	350, 350, 150, 150	Yes	1	7	5	7	7.5	Limited access around base, Soil erosion, Exposed roots	Multiple stemmed at base, Vertical and leaning stems, Ivy covered, Tight union	Minor deadwood, Snapped /hanging branches	Access prevented detailed inspection. Situated on banking. Stem at western aspect has snapped, with top of stem hanging low in crown	Good	Fair	20 to 40 yrs	Moderate	B	No works required
T8	Hawthorn	<i>Crataegus monogyna</i>	Semi-mature	8	4	150, 100, 100, 100	Yes	1	2.5	2.5	2.5	3	No visual defects	Single stemmed at base, Multiple stemmed at 1m, Vertical, Tight union with partially included bark	All dead / absent		Dead	Dead	n/a	Dead	U	Removal recommended regardless of development
T9	Ash	<i>Fraxinus excelsior</i>	Semi-mature	8	1	150	Yes	2	2	2	2	2	Limited access around base	Single stemmed, Vertical, Dieback lesions	75% dead/absent	Ash Dieback. Possibly some viable buds at top of crown	Decline	Poor	<10 yrs	Low	U	Removal recommended regardless of development
T10	Oak	<i>Quercus robur</i>	Young	6	1	100	No	1.5	1.5	1.5	1.5	1.5	No visual defects	Single stemmed, Vertical, Bark damage, Twin stemmed at 2m, Tight union	Normal	In fenceline, with wire rubbing on bark	Good	Good	>40 yrs	Low	C	Removal required to facilitate development

Tree ID	Tree Species		Maturity	Measurements				Crown (m)					Tree Condition							Value		Management
	Common Name	Latin Name		Height (m)	Stems	Stem Diameter (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works
T11	Birch	<i>Betula youngii</i>	Early-mature	6	1	250	Yes	1	3.5	3.5	3.5	3.5	Limited access around base	Single stemmed at base, Vertical	Stubs, Minor deadwood	Access prevented detailed inspection	Good	Good	20 to 40 yrs	Moderate	C	No works required
T12	Willow	<i>Salix caprea</i>	Early-mature	15	2	450, 450	Yes	6	7	7	7	6.5	Limited access around base	Twin stemmed at base, Vertical, Old pruning wounds, Epicormic growths, Minor cavity, Minor decay	Overhanging into the site, Minor deadwood	Access prevented detailed inspection. Minor cavity north aspect of north stem. Roots under wall	Good	Fair	20 to 40 yrs	Moderate	C	No works required
T13	Rowan	<i>Sorbus aucuparia</i>	Semi-mature	6.5	4	100, 100, 100, 100	Yes	2.5	2	2	2	2	Limited access around base	Single stemmed at base, Multiple stemmed at 1m, Stubs, Tight union with partially included bark	25% dead / absent, Old pruning wounds, Stubs, Crossing branches	Access prevented detailed inspection	Poor	Fair	10 to 20 yrs	Low	C	No works required
T14	Ash	<i>Fraxinus excelsior</i>	Young	6.5	1	120	No	2	2	2	2	2	Suckering growth	Single stemmed, Slight lean west corrected, Dieback lesions	50% dead / absent	Ash dieback	Poor	Fair	<10 yrs	Low	U	Removal recommended regardless of development
T15	Ash	<i>Fraxinus excelsior</i>	Young	5.5	1	90	No	2	1	1	1	1	No visual defects	Single stemmed, Vertical, Dieback lesions	50% dead / absent	Ash dieback	Poor	Fair	<10 yrs	Low	U	Removal recommended regardless of development

Tree ID	Tree Species		Maturity	Measurements				Crown (m)				Tree Condition								Value		Management
	Common Name	Latin Name		Height (m)	Stems	Stem Diameter (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works
T16	Willow	<i>Salix babylonica</i>	Semi-mature	3	4	80, 80, 80, 70	No	2	3	3	1.5	3	No visual defects	Single stemmed at base, Multiple stemmed at 1m, Vertical, Tight union with partially included bark, Old pruning wounds	Normal		Good	Fair	20 to 40 yrs	Low	C	Removal required to facilitate development
T17	Willow	<i>Salix babylonica</i>	Semi-mature	3	2	90, 70	No	2	3	3	2.5	2.5	No visual defects	Single stemmed at base, Twin stemmed at 1m, Vertical, Old pruning wounds	Normal		Good	Fair	20 to 40 yrs	Low	C	Removal required to facilitate development
T18	Ash	<i>Fraxinus excelsior</i>	Semi-mature	6	1	120	No	1	2	1.5	1.5	1	No visual defects	Single stemmed, Vertical	Low vigour	Very short incremental growth	Fair	Fair	10 to 20 yrs	Low	C	Removal required to facilitate development
T19	Birch	<i>Betula papyrifera</i>	Early-mature	10	1	330	No	2	4	4	4	4	Girdled roots, Exposed roots, Slightly waterlogged	Single stemmed, Vertical, Old pruning wounds, Pruning wounds from crown lifting, Minor decay	Normal		Good	Good	20 to 40 yrs	Low	C	Removal required to facilitate development
T20	Ash	<i>Fraxinus excelsior</i>	Semi-mature	6.5	1	140	No	2.5	1.5	2	2	2	Exposed roots	Single stemmed at base, Vertical, Old pruning wounds	Low vigour	Very short incremental growth	Fair	Good	10 to 20 yrs	Low	C	Removal required to facilitate development

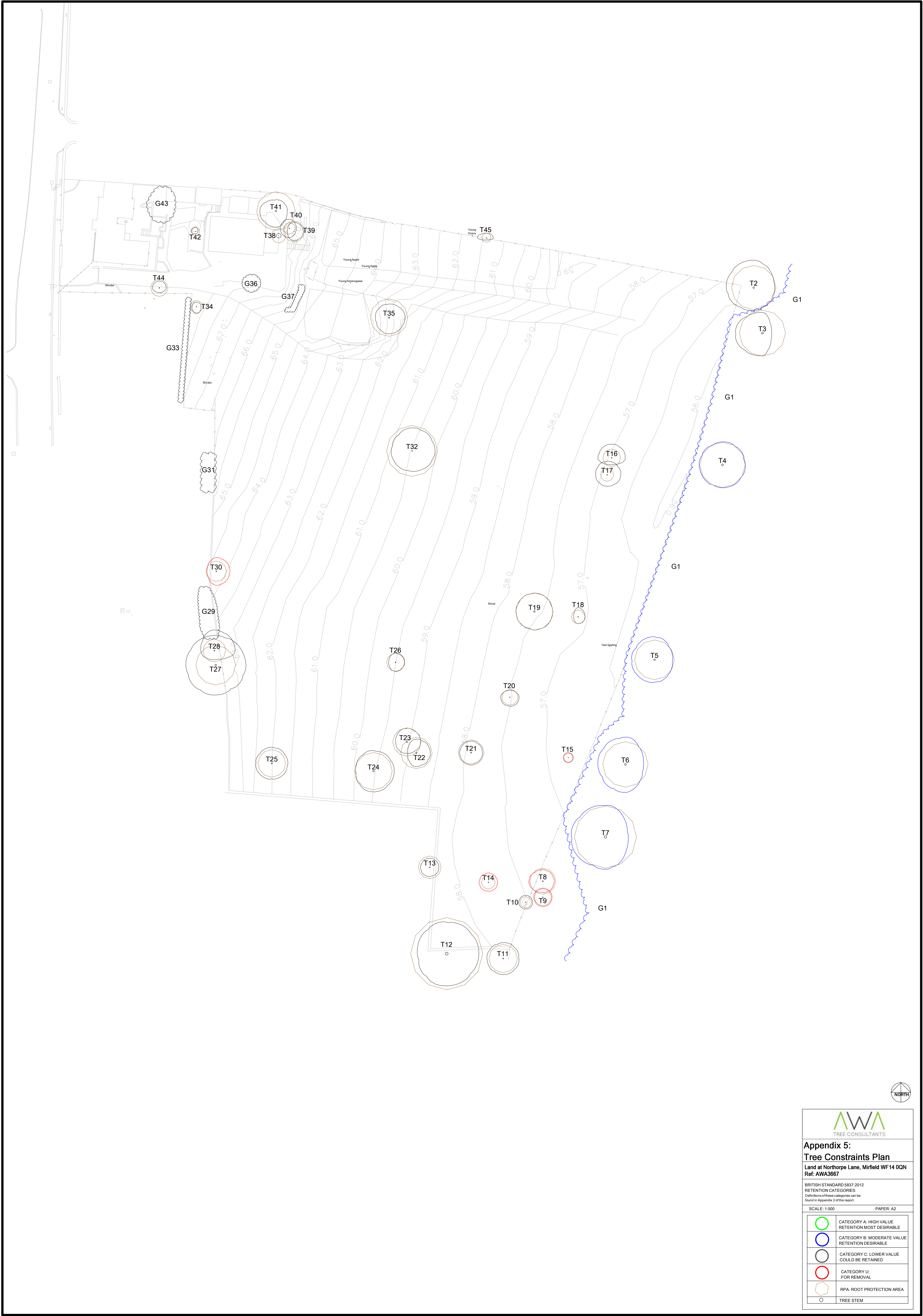
Tree ID	Tree Species		Maturity	Measurements				Crown (m)				Tree Condition								Value		Management
	Common Name	Latin Name		Height (m)	Stems	Stem Diameter (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works
T21	Ash	<i>Fraxinus excelsior</i>	Semi-mature	7.5	2	160, 160	No	2	2.5	2.5	2.5	2.5	Exposed roots	Single stemmed at base, Twin stemmed at 0.5m, Vertical, Old pruning wounds, Pruning wounds from crown lifting, Pruning wounds - healing poorly with some decay, Tight union, Cup-like union collecting dirt/water	Low vigour	Very short incremental growth	Fair	Fair	10 to 20 yrs	Low	C	Removal required to facilitate development
T22	Ash	<i>Fraxinus excelsior</i>	Semi-mature	7.5	2	240, 140	No	1	3	3	3	2	No visual defects	Single stemmed at base, Twin stemmed at 1m, Pruning wounds from crown lifting, Tight union	Low vigour	Early symptoms of Ash Dieback	Fair	Fair	10 to 20 yrs	Low	C	Removal required to facilitate development
T23	Ash	<i>Fraxinus excelsior</i>	Semi-mature	7	1	250	No	2	3	3	2.5	2.5	No visual defects	Single stemmed, Vertical, Pruning wounds from crown lifting	Normal		Good	Good	10 to 20 yrs	Low	C	Removal required to facilitate development
T24	Beech	<i>Fagus sylvatica</i>	Semi-mature	9.5	1	330	No	2	4.5	4.5	4.5	4	Exposed roots	Single stemmed, Vertical, Pruning wounds from crown lifting	Minor deadwood		Good	Good	>40 yrs	Low	C	Removal required to facilitate development

Tree ID	Tree Species		Maturity	Measurements				Crown (m)					Tree Condition							Value		Management
	Common Name	Latin Name		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	Beech	<i>Fagus sylvatica</i>	Semi-mature	7.5	3	150, 140, 130	No	2	3.5	3.5	3.5	3.5	Exposed roots	Single stemmed at base, Multiple stemmed at 0.5m, Vertical, Pruning wounds from crown lifting, Tight union, Cup-	Normal		Good	Fair	>40 yrs	Low	C	Removal required to facilitate development
T26	Ash	<i>Fraxinus excelsior</i>	Young	5	3	100, 90, 80	No	1.5	2	2	2	1.5	No visual defects	Single stemmed at base, Multiple stemmed at 1m, Vertical, Tight union with partially included bark, Crossing stems	Normal		Good	Fair	10 to 20 yrs	Low	C	Removal required to facilitate development
T27	Cherry	<i>Prunus avium</i>	Mature	11	1	350	Yes	3	6.5	6.5	6.5	6.5	No visual defects, Limited access around base	Single stemmed, Vertical, Old pruning wounds, Stubs, Epicormic growths	Overhanging into the site, Stubs, Minor deadwood	Access prevented detailed inspection. Occasional poor pruning but mostly well maintained. Retaining wall at base	Fair	Fair	20 to 40 yrs	Moderate	C	No works required
T28	Plum	<i>Prunus cerasifera</i>	Semi-mature	7.5	1	200	Yes	3	4.5	4.5	2	3	No visual defects, Limited access around base	Single stemmed at base, Vertical, Twin stemmed at 2m, Tight union	Suppressed, Overhanging into the site, Stubs	Has previously been heavily pruned, now with full crown	Fair	Fair	20 to 40 yrs	Low	C	No works required
G29	Cypress, Holly, Privet	<i>Cupressus sp.</i> , <i>Ilex sp.</i> , <i>Ligustrum sp.</i>	Semi-mature	7.5	10+	100 avg	Yes	2.5	See Plan				Access prevented detailed inspection. Mixed tree and shrub group at bottom of adjacent garden. On opposite side of retaining wall, with a minor crack but no visible roots				Good	Fair	20 to 40 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
T30	Hawthorn	Crataegus monogyna	Semi-mature	6.5	2	150, 100	Yes	1.5	3	3	3	2	Limited access around base	Single stemmed at base, Slight lean, Twin stemmed at 0.5m, Vertical, Stubs, Old pruning wounds, Tight union, Epicormic growths	Stubs, Crossing branches	Dense epicormic and thorns prevented detailed inspection. Situated at base of retaining wall. Prominent crack in wall by tree. Limited long-term value	Fair	Poor	>10 yrs	Low	U	Removal recommended regardless of development
G31	Birch, Cherry, Maple, Sorbus	Betula sp., Prunus sp., Acer sp., Sorbus sp.	Young	7	5	100 avg	Yes	2	See Plan				Access prevented detailed inspection. Group of ornamental trees in adjacent garden, occasional branch coming through fence. Undisturbed retaining wall at base				Good	Good	20 to 40 yrs	Low	C	No works required
T32	Oak	Quercus robur	Early-mature	9	7	170	Yes	2.5	5	5	4.5	4.5	No visual defects	Multiple stemmed at base, Vertical, Slight lean, Epicormic growths, Tight union with partially included bark, Stubs	Minor deadwood	Occasional large pruning wounds at base of tree	Fair	Fair	>40 yrs	Low	C	Removal required to facilitate development
G33	Cypress	Cupressus sp.	Semi-mature	2	10+	50 avg	Yes	0.5	See Plan				Well-maintained Cypress hedge				Good	Fair	20 to 40 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
T34	Laurel	<i>Prunus laurocerasus</i>	Young	3	5	50, 50, 50, 50, 50	Yes	0.5	1	1	1.5	1	Soil compaction from logs and stones	Multiple stemmed at base, Vertical, Slight lean, Tight union	Normal	Situated in pebbles	Good	Fair	20 to 40 yrs	Low	C	Removal required to facilitate development
T35	Pine	<i>Pinus sylvestris</i>	Semi-mature	8.5	1	330	No	1	3	3.5	3.5	3	Soil erosion, Exposed roots	Single stemmed, Vertical, Stubs	Normal	Situated on banking	Good	Good	>40 yrs	Low	C	Removal required to facilitate development
G36	Cypress	<i>Cupressus sp.</i>	Young	2.5	4	100, 70, 70, 70	Yes	0.5	See Plan				Small group of well maintained, distinct Cypress trees, possibly dwarf cultivars				Good	Fair	>40 yrs	Low	C	Removal required to facilitate development
G37	Beech, Hawthorn	<i>Fagus sp.</i> , <i>Crataegus sp.</i>	Young	3	10+	70 avg	Yes	0.5	See Plan				Managed hedge, between old pond and polytunnel				Good	Fair	>40 yrs	Low	C	Removal required to facilitate development
T38	Cypress	<i>Cupressus sp.</i>	Young	4	10+	40	Yes	0.5	0.5	0.5	0.5	0.5	No visual defects	Multiple stemmed at base, Vertical, Tight union with partially included bark	Normal	Situated in paving	Good	Fair	20 to 40 yrs	Low	C	Removal required to facilitate development
T39	Laurel	<i>Prunus laurocerasus</i>	Semi-mature	4	7	70	Yes	0.5	2	2	2	1.5	Soil erosion, Exposed roots, Limited access around base	Multiple stemmed at base, Slight lean, Significant lean, Tight union	Suppressed	Suppressed by T40. Situated on banking, at top of short retaining wall	Good	Fair	20 to 40 yrs	Low	C	Removal required to facilitate development

Tree ID	Tree Species		Maturity	Measurements				Crown (m)					Tree Condition							Value		Management
	Common Name	Latin Name		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	Maple	<i>Acer sp.</i>	Semi-mature	4	2	80, 60	No	2.5	2	1.5	2	2	Limited access around base	Twin stemmed at base, Slight lean west, Ivy covered, Tight union with partially included bark, Bark damage	Normal	Bark damage on underside of branches, in west crown aspect	Fair	Fair	20 to 40 yrs	Low	C	Removal required to facilitate development
T41	Pine	<i>Pinus sylvestris</i>	Semi-mature	11	1	340	No	2.5	2.5	2.5	3.5	3.5	No visual defects	Single stemmed, Slight lean south that becomes corrected, Stubs	Snapped /hanging branches	Minor hanging branch at south-west aspect	Good	Good	>40 yrs	Low	C	Removal required to facilitate development
T42	Camellia	<i>Theaceae sp.</i>	Semi-mature	3	1	70	No	0.5	1	0.5	0.5	1	No visual defects	Single stemmed, Vertical	Normal		Good	Good	10 to 20 yrs	Low	C	Removal required to facilitate development
G43	Cypress	<i>Cupressus sp.</i>	Semi-mature	7	7	150 avg	Yes	2	See Plan				Group situated at edge of patio, managed for access. Appears to be lifting old patio				Fair	Fair	20 to 40 yrs	Low	C	Removal required to facilitate development
T44	Cypress	<i>Cupressus sp.</i>	Semi-mature	3	1	150	Yes	0.5	1.5	1.5	1	1.5	Limited access around base	Single stemmed at base	Stubs	Pruned to clear driveway. Situated in pebbles	Good	Good	20 to 40 yrs	Low	C	Removal required to facilitate development
T45	Cherry	<i>Prunus avium</i>	Young	4.5	1	80	No	1	1	1.5	0.5	2	No visual defects	Single stemmed, Vertical	Normal	Situated in fence line	Good	Good	20 to 40 yrs	Low	C	No works required





**Appendix 6:
Tree Impacts Plan**

Land at Northorpe Lane, Mirfield WF14 0QN
Ref: AWA3667

BRITISH STANDARD 5837:2012

SCALE: 1:500

PAPER: A2

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