ARBORICULTURAL REPORT AND ARBORICULTURAL IMPACT ASSESSMENT to BS 5837:2012 at Highmoor Lane Cleckheaton West Yorkshire BD19 6LW

Client:
Thirteen Group

Client Address:
2 Hudson Quay
Windward Way
Middlesborough
Cleveland
TS2 1QG

JCA Ref:
22114c-Rev2/LW

JCA Limited
Arboricultural & Ecological Consultants

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1. Introduction

1.1 Purpose of the Report

1.1.1 JCA Limited has been instructed by **Thirteen Group** to survey the trees at **Highmoor Lane**, **BD19 6LW** and prepare the findings in a report.

1.1.2 This report provides detailed, independent, arboricultural advice on the trees in the context of potential development, conducted in accordance with the guidelines contained within BS5837: 2012 *'Trees in relation to design, demolition and construction – Recommendations' (BS5837:2012).*

1.1.3 This report will categorise the trees in accordance with the British Standard, which will help guide the design of potential development in terms of constraints and opportunities related to trees, and provide details of which trees should be retained and which could be removed.

1.1.4 The specific design of the proposed development has been considered within the Arboricultural Impact Assessment in **Section 4** and is detailed on the Arboricultural Implications Plan at **Appendix 6**.

1.1.5 Where necessary, recommendations will be given with a view to the long-term management of sustainable tree cover and to uphold the interests of health and safety.

1.2 Terms of Reference

1.2.1 For this purpose, a topographical survey (Ref: **THG-HL8270**) has been supplied, which forms the basis for the Tree Constraints Plan at **Appendix 5**. The topographical survey, along with all other documents supplied to JCA, is assumed to be correct. No checking of such documents will be undertaken and JCA cannot be held responsible for incorrect data supplied by other parties. Tree positions not marked on the topographic survey have been plotted by the surveyor on site. Whilst not as accurate as a topographical survey, our estimations are considered to provide a fair representation of the positions of the trees surveyed. Tree positions should, however, be considered indicative on the Tree Constraints Plan.

1.3 Tree Survey Details and Methodology

1.3.1 The survey took place during **November 2022** and was conducted by **Andrew McPhaden** *BSc. (Hons.).*

1.3.2 During this survey, all trees were inspected from ground level. Further investigations, such as a climbed inspection or a decay detection survey, have not been undertaken.

1.3.3 Only those trees within the site boundary with a stem diameter above 75mm have been included. Where applicable, trees outside the site boundary, but close enough to be affected by a proposed development, are also included.

1.3.4 Tree data was collected in accordance with **Section 4.4** and **Section 4.5** of BS5837: 2012. Full details of all trees surveyed are recorded in the tables at **Appendix 1** which can be cross referenced with the Tree Constraints Plan at **Appendix 5**. A full explanation of the tables can be found at **Appendix 2**.

1.3.5 Measurements were obtained using clinometers, specialist tapes or electronic distometers. Where this was not possible, due to restricted access or other mitigating circumstances, measurements were estimated to the best ability of the surveyor. Where measurements have been estimated, these are clearly highlighted at **Appendix 1** with a '#' symbol.

1.3.6 A **Reliance Letter** (JCA Ref: 22114/JC) was produced in **July 2024** covering the site.

2. Status of the Trees

2.1 A check was made with **Kirklees Metropolitan Council** in **August 2022** to determine whether any of the trees surveyed as part of this report are subject to any statutory controls.

2.2 We are informed that **T1**, **T3**, **T10**, **T11**, **T12**, **T13**, **T14**, **T15**, **T16**, **T17**, **T18**, **T19**, **T24**, **T30**, **T31**, **T32**, **T33**, **T34**, **T35**, **T37**, **T38**, **T46**, **T48**, **T49** and **T91** are subject to a Tree Preservation Order (TPO Ref's: **03/17/t1**, **03/17/t2**, **03/17/t3**, **03/17/t4**, **03/17/t5**, **03/17/t6**, **03/17/g1**, **03/17/g2** and **03/17/g3**).

2.3 **No work must be undertaken to those trees subject to a Tree Preservation Order until an approved Works to Protected Trees application has been granted, or until planning permission has been granted which includes accurately specified tree works.**

2.4 Prior to any works being undertaken to trees, those instructing and proposing to carry out the work should satisfy themselves that all appropriate consents are in place to prevent potential breach of legislation.

2.5 The presence of a Tree Preservation Order (TPO) represents the Local Authority's desire to retain trees within the landscape. As such, trees covered by a TPO are generally more likely to require retention within a proposed scheme and this should be taken into account during the design process. In some cases, the removal of TPO trees may be agreed upon, providing the benefits of the proposed development are deemed greater than the material loss of the trees. The value of existing vegetation is just one factor in the decision making process; all benefits of the proposed development will be taken into consideration in the usual manner.

3. Tree Survey Details

3.1 Tree Retention Categories

3.1.1 Below is a summary of the surveyed vegetation with retention categories identified in accordance with BS5837: 2012. For a full explanation of the retention categories, please refer to **Appendix 2 (Section A2.3)**.

Retention Category	Trees	Groups	Hedges	Totals
A	3	0	0	3
B	48	7	2	57
C	22	15	3	40
U	2	0	0	2
Totals	**75**	**22**	**5**	**102**

3.1.2 As a general rule, those trees listed as retention category 'A' or retention category 'B' are the most valuable items of vegetation and as such the removal of these is likely to be met with resistance by the Local Planning Authority (LPA).

3.1.3 Those items listed as retention category 'C' are of lesser value and the removal of these is generally less likely to be met with resistance by the LPA.

3.1.4 Items listed as retention category 'U' comprise of dead trees or trees of limited safe life expectancy and are often recommended for removal, irrespective of any proposals.

3.1.5 The above information should guide the design in terms of which trees could be removed and which trees should be retained. However, due to changing attitudes with regards to environmental awareness, it should be noted that all trees are considered to have value. As such, it is advised that as many trees as possible be retained, regardless of their BS5837: 2012 retention category status. The retention of trees is further advised to avoid the need to plant replacement specimens, which are usually required to be planted on a 2:1 or 3:1 ratio, and due to their ecological value, which will be assessed as linear habitat units within Biodiversity Metric 3.1.

3.2 Recommended Work for Arboricultural Reasons

3.2.1 Where necessary, recommendations have been prescribed for reasons of public safety, to benefit the trees and/or for general maintenance purposes. Such recommendations have been made for Arboricultural reasons and should be undertaken irrespective of development, as follows.

Arboricultural Recommendations				
Ref Number	**Species**	**Height (m)**	**Stem Diameter (cm)**	**Recommendations**
T1	Ash	20	79	**Remove to ground level.**
T3	Sycamore	20	77	**Remove Elders growing around the stem. Remove Ivy**
T5	Alder	6	23	**Remove young trees growing around the stem.**
T6	Rowan	7	21	**Remove young trees growing around the stem.**
T8	Sycamore	13	36	**Remove young trees growing around the stem. Remove epicormic growth.**
T11	Silver Birch	14	61	**Reduce major limb to the NE, growing over garden, by ~3m.**
T13	Sycamore	14	57	**Remove deadwood. Remove young Sycamores growing around the stem.**
T15	Sycamore	11	38	**Remove epicormic growth.**
T16	Lime	12	39	**Sever Ivy and remove epicormic growth.**
T17	Lime	14	59	**Crown lift over bus stop to clear by 2m and clear street signs. Sever Ivy.**
T23	Sycamore	13	42	**Remove epicormic growth on stem.**
T28	Poplar	20	115	**Advise owner of need to reassess tree. Remove.**
T30	Sycamore	19	51	**Remove epicormic growth on stem.**
T31	Whitebeam	9	29	**Remove Elder growing against stem.**
T37	Wild Cherry	10	51	**Reinspect biennially.**
T41	Poplar	25	103	**Reinspect biennially.**
T46	Poplar	25	131	**Reinspect biennially.**
H56	Hawthorn	To 8	Avg. ≤15	**Remove collapsed tree.**
T71	Elm	14	Avg. 23	**Reinspect biennially.**
G81	Rowan	To 9	Avg. 21	**Cut back vegetation around stems.**

Arboricultural Recommendations				
Ref Number	**Species**	**Height (m)**	**Stem Diameter (cm)**	**Recommendations**
G82	Mixed Species	To 8	Avg. 18	**Remove Rowan.**
T84	Rowan	8	18	**Remove rowan growing against stem.**
T94	Lawson Cypress	10	45	**Clear phone lines by 2m.**
T95	Western Red Cedar	8	27	**Reduce to height of 6m.**

3.2.3 Full details of all recommended works are detailed in the 'Recommendations Column' of the Tree Data Tables at **Appendix 1**.

3.2.4 For an explanation of the priority ratings, see **Appendix 2 (A2.2.5)**.

3.2.5 All trees which are to be retained within the proposed development should be inspected on a regular basis in the interests of risk management. They should have a biennial re-inspection regime, ideally with each inspection being undertaken during a different season, in order to observe any defects, pests and diseases that are only evident at certain times of year.

4. Arboricultural Impact Assessment (AIA)

4.1 Proposed Development

4.1.1 The proposed development will consist of the construction of a housing estate with associated hard standing, access roads and green areas.

4.1.2 We have been supplied with drawing **Proposed Site Layout - Planning Layout Final**, which details the proposed development. The tree data has been overlaid onto the proposed designs to create the Arboricultural Implications Plan, which can be found at **Appendix 6.** This provides the basis for which this Arboricultural Impact Assessment has been prepared.

4.1.3 All tree works required to accommodate the proposals are detailed in *italics* in the recommendation columns of the tables at **Appendix 1.** Please note that any required Arboricultural works recommended during the initial survey are also listed in these tables in non-italics.

4.2 Tree Removals for Development

4.2.1 There is little room for development within this site without the removal of some trees.

4.2.2 **57** items of vegetation require removal to accommodate the proposals. These include **29** category 'B' trees/groups and **28** category 'C' trees/groups.

4.2.3 Some of the trees requiring removal are retention category 'C' and can be removed without significantly affecting the visual amenity of the surrounding area.

4.2.4 **Multiple trees** (see **Appendix 1**) are category 'B' trees/groups and have been recommended for removal to facilitate the proposed development. On this instance, based on the proposals, the removal of these trees is unavoidable. Whilst the removal of these trees will be of detriment to the arboricultural values of the site, it is recognised that the retention of trees is only one consideration in the design process. The loss of these trees must be weighed against the benefits of the proposed development in the usual manner.

4.2.5 The removal of trees for development can often be mitigated (either partially or entirely) by the replacement of suitable specimens within a planting scheme. Whilst not always necessary, the planting of trees can improve the aesthetic value of the surrounding area and may be conditioned in the usual manner.

4.3 Pruning for Development

4.3.1 To accommodate the proposals, it will be necessary to prune some of the retained trees, in order to provide suitable access and working distances for pedestrians and vehicles and to afford reasonable clearances from buildings, (if applicable). Also known as 'access facilitation pruning' this is relevant to **T23**, **T24**, **T76** and **T91**.

4.3.2 Where the footprint of proposed hard surfacing pass within the RPA of retained trees, root pruning will be required, under the supervision of an appointed arboriculturist. Root pruning will accommodate the proposed roads whilst preventing any 'ripping' damage, a problem commonly associated with mechanical excavations. Root pruning is relevant to **G73**, **T76** and **G101**.

4.4 Temporary Protection Measures

4.4.1 The Protective Barrier

4.4.1 In order to ensure the effective protection of retained trees during development, a protective barrier will be installed, in accordance with BS5837: 2012 and may comprise of protective fencing and ground protection. This will be the first job on site following the tree removal and pruning works. The fencing should ideally be positioned to protect the entire **Root Protection Area** (**RPA**) of the retained trees, in order to create a **Construction Exclusion Zone** (**CEZ**).

4.4.2 Routes for pedestrian and site traffic will be located outside, and diverted away from, the RPAs of the retained trees wherever possible. Where this is not practicable, temporary protective surfaces (ground protection) must be laid over the exposed RPAs to reduce/limit soil compaction. The ground protection must therefore distribute the weight of site vehicles, machinery or pedestrians whilst allowing moisture to reach the tree rooting area beneath. Such surfaces must be constructed in accordance with BS5837: 2012.

4.5 Implications for Retained Trees

4.5.1 Works within the RPA

4.5.1.1 Where the proposals require work to be undertaken within the RPA of a tree which is to be retained, specialist measures must be adopted during the construction phase to avoid ground compaction and minimise root damage.

4.5.1.2 Such areas are highlighted in **blue** and magenta on the Arboricultural Implications Plan at **Appendix 6** and are addressed in the following sections.

4.5.2 Demolition

4.5.1.1 It is proposed to remove existing hard surfaces within the RPA of **T91.** This operation will require the supervision of an arboriculturalist.

4.5.1.2 For this method, the existing hard surface will first be broken by mechanical means. Care will be taken to only break the existing hard surface and not to disturb the underlying soil (where the tree roots are located). Once the surfacing has been broken into manageable sizes, it will be carefully removed from the area.

4.5.1.3 Once all the rubble has been removed from the area, it will be re-instated with topsoil.

4.5.3 Access/Construction of Hard Surfacing

4.5.3.1 The proposed development entails the construction of hard surfacing within the RPAs of **T23**, **T24**, **T91** and **T97**. This takes the form of pedestrian footpaths. In order to prevent foreseeable damage to tree roots, a 'no-dig' method of construction will be utilised.

4.5.3.2 The chosen system must be fit for purpose and of suitable construction to dissipate compaction damage to tree roots, allow gaseous diffusion to/from the soil and the percolation of water to the soil surface. This may require the use of specialist materials and sensitive edging systems to prevent damage to tree roots. It is recommended that this surfacing be constructed as a final phase of construction, in order to afford the maximum protection throughout development.

4.5.3.3 Design principles must be confirmed by an appropriately qualified engineer and should be included in an Arboricultural Method Statement.

4.5.3.4 Proposed hard surfacing is located within the RPAs of **G73**, **T76** and **G101**. Due to the minimal nature of the incursion, it is not considered necessary to install specialised surfaces. Instead, root pruning will be undertaken under the supervision of an appointed arboriculturist to minimise potential damage to tree roots and prevent 'ripping' damage, which is commonly associated with mechanical excavation.

4.5.4 Construction / Foundation Design

4.5.4.1 The footprints of the proposed structures do not encroach into the RPA of retained trees. As such no specialist construction or foundation methods are considered necessary for the sole purpose of preventing damage to trees.

4.5.4.2 However, proposed netting adjacent to the cricket field impedes the RPAs of **H63** and **G68** which will require specialist designs.

4.5.4.3 The water demand of trees can be an important consideration when determining the appropriate foundation design. Because of this, water demands for the trees identified on this site are included at **Appendix 1**, in accordance with **NHBC Chapter 4.2**, for use by the appointed structural expert.

4.5.5 Tree Shade

4.5.5.1 Due to the location of the trees, and their distance to the proposed buildings, issues related to shading are considered to be unlikely and do not require mitigation.

4.5.6 Utilities

4.5.6.1 In this case the routing of proposed utilities is situated outside the RPAs of retained trees. As such, no mitigation actions are considered necessary to mitigate potential damage to tree roots.

4.5.7 Site Compound

4.5.7.1 The site compound, which typically includes the site office, mess facilities, toilets, storage of materials and parking, must be located away from the trees and outside the RPAs.

4.5.7.2 Care should also be taken to prevent soil contamination with chemical spillages, including petrol, diesel and oils.

4.5.8 Landscaping

4.5.8.1 Proposed fence lines may be constructed within the RPA of a tree if necessary, providing that appropriate considerations are taken with regards to the well-being of the effected tree. As such, no continual trenching is to be undertaken within the RPA (e.g. for small walls onto which panel fencing is installed). Excavations must be kept to a minimum and therefore only fence designs requiring intermittent posts will be acceptable within the RPA. Fences should also be kept as far away from the main stems of the trees as is reasonably possible.

4.5.8.2 Any patios, garden paths or other hard surfaces within RPAs which may not be shown on the projected layout (**Appendix 6),** and in addition to those mentioned in **Section 4.5 (hard surfaces)** may be constructed using no-dig techniques, providing that they do not cover more than 20% of the RPA and are implemented in accordance with BS5837: 2012. Such surfaces are to be kept as far away from the main stems of the trees as is reasonably practicable. If there is any concern of damaging retained trees, further advice should be sought from a qualified Arboriculturalist.

4.5.8.3 No ground level changes are to be undertaken within the RPAs of retained trees, unless otherwise stated or agreed with the appointed Arboricultural Consultant or the LPA. The requirement to raise/lower ground levels within RPAs must be communicated to these parties at the earliest practical convenience.

4.6 Remedial Measures

4.6.1 Protective fencing specifications and on-site positioning, along with details of any necessary specialist construction methods, can be provided in an Arboricultural Method Statement (AMS).

4.6.2 Part of the proposed development will encroach into the RPAs of retained trees, resulting in possible root loss. It would therefore be prudent to apply appropriate mycorrhizae fungi to the soils around these trees after the construction phase is complete. Certain mycorrhiza fungi form a symbiotic relationship with tree roots. A tree root associated with such mycorrhiza will take up nutrients more effectively and this will therefore help the tree to produce new roots more effectively, so benefitting their recovery.

4.6.3 The site offers scope for landscaping and tree planting. All areas identified for the new planting should also be protected by fencing during the construction phase to prevent the compaction of the soil.

5. Summary

5.1 **Multiple trees** (see section 2.2) are subject to a Tree Preservation Order. Prior to any works being undertaken to protected trees, those instructing and proposing to carry the work should satisfy themselves that all appropriate consents are in place to prevent potential breach of legislation.

5.2 Recommendations have been prescribed for reasons of public safety, to benefit the trees and/or for general maintenance purposes. Such recommendations have been made for Arboricultural reasons and should be undertaken irrespective of development.

5.3 The arboricultural implications of the development have been considered and discussed in **Section 4**.

5.4 Some trees require removal in order to facilitate the proposed development. These are discussed in **Section 4.2** and detailed on the Arboricultural Implications Plan at **Appendix 6**.

5.5 All development work carried out in close proximity to trees must be executed in a manner sympathetic to their needs. Otherwise, the condition of the trees may deteriorate in the months and years following development, leading to a loss of amenity and resulting in potentially hazardous trees. Care must therefore be taken to ensure that the retained trees are suitably protected.

5.6 In accordance with **Section 6.1** of **BS 5837: 2012**, the next stage on this site should be the preparation of an **Arboricultural Method Statement (AMS)**, to ensure that all the retained trees survive the development process. An **AMS** details which trees are to be removed, which trees are to be retained and any other tree works which are required to facilitate development. The **AMS** will also advise on temporary protective barriers, temporary ground protection, site supervision, location of services and it will detail specialist construction techniques.

5.7 It is advised that in accordance with **Section 5.6** of **BS 5837: 2012** that a **Tree Planting Scheme** is prepared which will help to ensure that the site retains a sustainable tree cover. A carefully designed **Tree Planting Scheme** will incorporate tree species in harmony with the development whilst seeking to improve the overall age range and species diversity.

5.8 In accordance with **Section 6.3** of **BS 5837: 2012**, site supervision at key stages of the development is likely to be advisable.

5.9 The data gained during the survey provides an indication of the health of the trees. However, it does not enable a comprehensive assessment of their condition over time. Trees are living organisms which are affected by many factors including weather conditions, diseases/disorders, light levels and human activities. Due to this, this report is only valid for a period of 1 year from the date of issuing. Should an update or revision of this report be required outside of this time period, JCA may require a further site visit to ensure that the condition of the trees has not significantly changed. It is advised that the trees are inspected regularly, in the interests of risk management.

Appendices

Tree Ref.	Age Common Name *Botanical Name*	Height (m)	Crown Height (m)	Height (m) and Direction of the Lowest Branch	Diameter (cm)	Crown Spread N W E S	Observations	Recommendations Priority	Physiological Condition	Structural Condition	Amenity Value	NHBC Water Demand	Life Expectancy (yrs)	Retention Category
T 1	Mature Common Ash *Fraxinus excelsior*	20	1	2.5 SW	79	9.2 8.3 7.1 6.7	Single-stemmed, vertical, with an unbalanced crown. Overhangs the site boundary, Highmoor Lane and the entrance to the neighbouring cricket field. Old pruning wounds, with good callus wood, show a history of crown lifting to clear the road. Shaggy Scalycap (*Pholiota squarrosa*) fruiting bodies present in two locations around the base of the stem. Tree showing early signs of Ash Dieback (*Hymenoscyphus fraxineus*).	Remove to ground level. Moderate	FAIR	FAIR	HIGH	MOD	<10	U
G 2	Early-mature Elder *Sambucus nigra*	To 7	0.5	1 E	40	See Plan	Multi-stemmed at 1.5m with multiple included unions. Suppressed heavily by their larger neighbours. Have been heavily cut back to clear the road.	No action required. ***Remove to accommodate the proposed development.*** N/A	POOR	POOR	LOW	LOW	10+	C 2
T 3	Mature Sycamore *Acer pseudoplatanus*	20	2	2 NW	77	8.4 7.3 7.7 7.3	Single-stemmed, vertical, with a balanced crown. Overhanging the site boundary and Highmoor Lane. Wound on the base of the stem to the north that has developed good callus wood. Ivy starting to grow up the stem. Multiple young Elders growing around the base.	Remove young Elders growing around the stem. Remove Ivy. Low	GOOD	GOOD	HIGH	MOD	40+	A 1 2
T 4	Semi-mature Rowan *Sorbus aucuparia*	8	0.5	2 N	16	3 2 3.4 3.2	Single-stemmed, leaning, with an unbalanced crown. Suppressed by **T3**.	No action required. N/A	GOOD	FAIR	LOW	MOD	20+	C 2
T 5	Semi-mature Alder *Alnus sp.*	6	2	2.5 NE	23	3.5 3.3 3.3 3.1	Single-stemmed, vertical, with a balanced crown. Overhanging the site boundary. Historic wounds from broken branches showing good callus wood. Young Ash, Elder and Sycamore developing around the base. Ivy is starting to grown up the stem.	Remove young trees growing around the stem. ***Remove to accommodate the proposed development.*** Low	GOOD	FAIR	MOD	MOD	40+	B 2
T 6	Semi-mature Rowan *Sorbus aucuparia*	7	2	2 E	21	2.7 2.6 2.5 3	Single-stemmed, vertical, with an unbalanced crown. Overhanging the site boundary. No major visible defects. Young Ash and Elder growing around the base and beginning to push through the crown.	Remove young trees growing around the stem. ***Remove to accommodate the proposed development.*** Low	GOOD	GOOD	MOD	MOD	40+	B 2

Tree Ref.	Age Common Name *Botanical Name*	Height (m)	Crown Height (m)	Height (m) and Direction of the Lowest Branch	Diameter (cm)	Crown Spread N W E S	Observations	Recommendations Priority	Physiological Condition	Structural Condition	Amenity Value	NHBC Water Demand	Life Expectancy (yrs)	Retention Category
T 7	Semi-mature Common Ash *Fraxinus excelsior*	9	1	0 N	20, 21, 10	3.4 2.8 3.5 4	Triple-stemmed at ground level with a balanced crown. Overhanging site boundary. Callus wood on larger stems indicates they may have previously been growing against other objects or plants.	No action required. ***Remove to accommodate the proposed development.*** N/A	GOOD	FAIR	LOW	MOD	20+	C 2
T 8	Early-mature Sycamore *Acer pseudoplatanus*	13	2.5	2.5 W	36	1.6 5 5.5 3.2	Single-stemmed, vertical, with an unbalanced crown. Overhanging the site boundary and Highmoor Lane. No major visible defects. Some epicormic growth developing from the base of the stem. Young Ash and Sycamore growing around the base of the stem.	Remove young trees growing around the stem. Remove epicormic growth. ***Remove to accommodate the proposed development.*** Low	GOOD	GOOD	MOD	MOD	40+	B 2
T 9	Semi-mature Whitebeam *Sorbus aria*	5	1	1.5 S	18, 6, 5, 5	3.8 4.5 3.9 5	Multi-stemmed at ground level with an unbalanced crown due to heavy suppression by **T8** and **T10**. Large wound on main stem. Overhanging site boundary.	No action required. ***Remove to accommodate the proposed development.*** N/A	FAIR	POOR	LOW	MOD	10+	C 1
T 10	Mature Sycamore *Acer pseudoplatanus*	14	2	2 SW	60	5.2 6 6.6 7.4	Single-stemmed, vertical, with a balanced crown. Multiple stubs on branches to NE of the canopy where they were pruned away from new house. Overhanging site boundary and Highmoor Lane. ~20cm wound on NE side of main stem.	No action required. ***Remove to accommodate the proposed development.*** N/A	GOOD	FAIR	MOD	MOD	40+	B 2
T 11	Mature Silver Birch *Betula pendula*	14	2	2 E	61	5 5.8 4.1 6	Limited inspection due to thick understory of brambles. Single-stemmed becoming double-stemmed at 4m, slightly leaning, with a balanced crown. Overhanging site boundary. Stubs in the crown where branches have been pruned back from new houses.	Reduce major limb to the NE, growing over garden, by ~2m. Low	GOOD	FAIR	MOD	LOW	20+	B 2
T 12	Early-mature Lime *Tilia sp.*	13	1	2.5 SW	42	5.8 5.6 5.2 4.2	Single-stemmed, vertical, with an unbalanced crown. Overhanging site boundary. Stubs in the crown where branches have been pruned back from new houses. Epicormic growth on stem. Minor deadwood noted.	No action required. N/A	GOOD	FAIR	MOD	MOD	40+	B 2

Tree Ref.	Age Common Name *Botanical Name*	Height (m)	Crown Height (m)	Height (m) and Direction of the Lowest Branch	Diameter (cm)	Crown Spread N W E S	Observations	Recommendations Priority	Physiological Condition	Structural Condition	Amenity Value	NHBC Water Demand	Life Expectancy (yrs)	Retention Category
T 13	Mature Sycamore *Acer pseudoplatanus*	14	1	3 NE	57	6 5.8 4.7 4.2	Single-stemmed, vertical, with a balanced crown. Overhanging site boundary. Stubs in the crown where branches have been pruned back from new houses. Dieback on some of these branches has left moderate deadwood in the crown. Self-seeded Sycamore growing from base against stem.	Remove deadwood. Remove young Sycamores growing around the stem. Low	GOOD	FAIR	MOD	MOD	40+	B 2
T 14	Early-mature Sycamore *Acer pseudoplatanus*	13	2	3 NE	44	5.6 5.5 4.9 3.8	Single-stemmed, vertical, with a balanced crown. Overhanging site boundary. Stubs in the crown where branches have been pruned back from new houses. Minor deadwood noted.	No action required. n/a	GOOD	FAIR	MOD	MOD	40+	B 2
T 15	Early-mature Sycamore *Acer pseudoplatanus*	11	2	3 E	38	3.6 5 4.3 3.8	Single-stemmed, vertical, with a balanced crown. Overhanging site boundary. Stubs in the crown where branches have been pruned back from new houses. Epicormic growth developing on stem.	Remove epicormic growth. Low	GOOD	FAIR	MOD	MOD	40+	B 2
T 16	Early-mature Lime *Tilia sp.*	12	2	2.5 E	39	4.7 4.3 4.4 3.7	Single-stemmed, vertical, with a balanced crown. Overhanging site boundary. Stubs in the crown where branches have been pruned back from new houses. Ivy starting to grow up the stem. Epicormic growth developing on stem.	Sever Ivy and remove epicormic growth. Low	GOOD	GOOD	MOD	MOD	40+	B 2
T 17	Mature Lime *Tilia sp.*	14	2	2 S	59	6.3 3.9 4.8 3.2	Limited inspection due to dense Ivy. Single-stemmed, vertical, with an unbalanced crown. Overhanging site boundary and bus stop. Stubs in the crown where branches have been pruned back from new houses. Ivy clad to 9m.	Crown lift over bus stop to clear by 2m and clear street signs. Sever Ivy. Moderate	GOOD	FAIR	MOD	MOD	40+	B 2
T 18	Early-mature Lime *Tilia sp.*	10	1.5	2 NW	31	3.8 4.4 3.7 2.3	Single-stemmed, vertical, with an unbalanced crown. Overhanging site boundary. Branch stubs low in the crown from crown lifting.	No action required. N/A	GOOD	GOOD	MOD	MOD	40+	B 2
T 19	Mature Horse Chestnut *Aesculus hippocastanum*	12	1.5	2.5 NE	58	6.1 4.6 6.7 6.1	Single-stemmed, becoming multi-stemmed at 3m, vertical, with a balanced crown. Some tight unions within crown break. No recent management noted.	No action required. ***Remove to accommodate the proposed development.*** N/A	GOOD	GOOD	MOD	MOD	40+	B 1

Tree Ref.	Age Common Name *Botanical Name*	Height (m)	Crown Height (m)	Height (m) and Direction of the Lowest Branch	Diameter (cm)	Crown Spread N W E S	Observations	Recommendations Priority	Physiological Condition	Structural Condition	Amenity Value	NHBC Water Demand	Life Expectancy (yrs)	Retention Category
G 20	Young Goat Willow *Salix caprea*	To 4	0	N/A	Avg. ≤5	See Plan	Self-seeded, multi-stemmed at ground level. No recent management noted.	No action required. ***Remove to accommodate the proposed development.*** N/A	GOOD	FAIR	LOW	HIGH	20+	C 1
G 21	Young Goat Willow *Salix caprea*	To 4	0	N/A	Avg. ≤5	See Plan	Self-seeded, multi-stemmed at ground level. No recent management noted.	No action required. ***Remove to accommodate the proposed development.*** N/A	GOOD	FAIR	LOW	HIGH	20+	C 1
T 22	Mature Hawthorn *Crataegus monogyna*	8	2.5	2.5 W	31	3.1 2.8 1 3.2	Single-stemmed, slightly leaning, with a balanced crown. Multiple included unions noted. Multiple wounds on stem and pruning wounds within the crown. Canopy dense with epicormic growth indicating tree may be under stress.	No action required. ***Remove to accommodate the proposed development.*** N/A	FAIR	FAIR	LOW	HIGH	10+	C 1
T 23	Mature Sycamore *Acer pseudoplatanus*	13	2.5	3 E	42	6 4.1 6 5.7	Single-stemmed, vertical, with a balanced crown. Overhanging site boundary and growing towards overhead phone lines. Epicormic growth developing on base of the stem.	Remove epicormic growth on stem. ***Crown lift the southern extent of the crown to 3m to allow access for the proposed footpath.*** ***'No-Dig' techniques to be utilised.*** Low	GOOD	GOOD	MOD	MOD	40+	B 1
T 24	Mature Sycamore *Acer pseudoplatanus*	13	2.5	2.5 NW	46	5.3 4.9 4.4 5.4	Single-stemmed, vertical, with a balanced crown. Overhanging site boundary. No major visible defects.	No action required. ***Crown lift the southern extent of the crown to 3m to allow access for the proposed footpath.*** ***'No-Dig' techniques to be utilised.*** N/A	GOOD	GOOD	MOD	MOD	40+	B 1

Tree Ref.	Age Common Name *Botanical Name*	Height (m)	Crown Height (m)	Height (m) and Direction of the Lowest Branch	Diameter (cm)	Crown Spread N W E S	Observations	Recommendations Priority	Physiological Condition	Structural Condition	Amenity Value	NHBC Water Demand	Life Expectancy (yrs)	Retention Category
G 25	Young Goat Willow *Salix caprea*	To 4	0	N/A	Avg. ≤5	See Plan	Two self-seeded trees, both multi-stemmed at ground level, with included unions. No recent management noted.	No action required. ***Remove to accommodate the proposed development.*** N/A	GOOD	FAIR	LOW	HIGH	20+	C 1
T 26	Young Goat Willow *Salix caprea*	5	0	0 N	Avg. ≤5	1 1 1.5 1	Self-seeded, multi-stemmed at ground level, with included unions. One stem has died. No recent management noted.	No action required. ***Remove to accommodate the proposed development.*** N/A	FAIR	FAIR	LOW	HIGH	20+	C 1
G 27	Young Mixed Species *Details in Observations*	To 6	0	N/A	Avg. ≤5	See Plan	Group consists of 2 Birch and 7 Goat Willows. All self-seeded. Willows multi-stemmed at ground level with included unions. No recent management noted.	No action required. ***Remove to accommodate the proposed development.*** N/A	GOOD	FAIR	LOW	HIGH	20+	C 2
T 28	Over-mature Poplar *Populus sp*	20	3	2 NE	115	3.1 10.7 14.5 10	Located on the border with the cricket club; tree has been confirmed to be within the development site. Triple-stemmed, leaning, with an unbalanced crown. Overhanging site boundary and entrance to cricket field. There is a large wound, ~0.5m up stem, where a stem has previously broken out, leaving the crown unbalanced. Decay is setting into the included unions between the remaining stems. Build-up of deadwood and significant epicormic growth throughout the crown indicate the tree is under stress.	Advise owner of need to remove tree. Moderate	POOR	POOR	MOD	HIGH	<10	U
T 29	Mature Poplar *Populus sp*	4	1	N/A	95	0.2 0.5 0.2 0.2	3rd party tree belonging to neighbouring cricket club. 1m high stump of removed Poplar producing epicormic growth.	No action required. N/A	POOR	POOR	LOW	HIGH	<10	C
T 30	Mature Sycamore *Acer pseudoplatanus*	19	2.5	3 NE	51	7.6 2.4 7.4 2.5	Single-stemmed, slightly leaning, with an unbalanced crown. Epicormic growth developing around base of stem.	Remove epicormic growth on stem. Low	GOOD	GOOD	MOD	MOD	40+	B 2
T 31	Early-mature Whitebeam *Sorbus aria*	9	1.5	2.5 W	29	5 3.1 3.7 2.7	Single-stemmed, vertical, with a balanced crown. Large wound on the stem at 1.5m with good callus wood. Multiple broken branches and wounds within the crown. Self-seeded Elder growing against stem.	Remove Elder growing against stem. Low	GOOD	POOR	LOW	MOD	10+	C 2

Tree Ref.	Age Common Name *Botanical Name*	Height (m)	Crown Height (m)	Height (m) and Direction of the Lowest Branch	Diameter (cm)	Crown Spread N W E S	Observations	Recommendations Priority	Physiological Condition	Structural Condition	Amenity Value	NHBC Water Demand	Life Expectancy (yrs)	Retention Category
T 32	Early-mature Norway Maple *Acer platanoides*	16	2	2.5 W	42	4.9 5.2 5.8 4.4	Single-stemmed, vertical, with an unbalanced crown. Specimen is growing up between two larger neighbours. Minor deadwood and evidence of crown lifting over cricket field noted.	No action required. N/A	GOOD	FAIR	LOW	MOD	20+	C 2
T 33	Mature Sycamore *Acer pseudoplatanus*	20	2.5	2 W	65	7.4 6.4 5.6 6.3	Single-stemmed, vertical, with a balanced crown. Overhanging site boundary. No major visible defects.	No action required. N/A	GOOD	GOOD	MOD	MOD	40+	A 1 2
T 34	Mature Lime *Tilia sp.*	12	0.5	3 W	49	5.6 7.3 5.6 5.4	Single-stemmed, vertical, with a balanced crown. Multiple included unions within crown break. Epicormic growth developing on stem.	No action required. N/A	GOOD	FAIR	MOD	MOD	40+	B 2
T 35	Mature Sycamore *Acer pseudoplatanus*	13	3	2.5 W	49	6.5 5.4 5 7.1	Single-stemmed, vertical, with a balanced crown. Overhanging site boundary. No major visible defects.	No action required. N/A	GOOD	GOOD	MOD	MOD	40+	A 1 2
H 36	Early-mature Hawthorn *Crataegus monogyna*	1.5	0	N/A	Avg. ≤5	See Plan	Regularly maintained boundary hedge.	No action required. N/A	FAIR	FAIR	LOW	HIGH	20+	C 2
T 37	Mature Wild Cherry *Prunus avium*	10	0.5	3 S	51	4.7 3.1 6.7 5	Single-stemmed, vertical, with an unbalanced crown. Overhanging site boundary. Large wound on stem from 0.5-3m showing heartwood decay and good callus tissue. Regularly crown lifted to clear cricket field.	Reinspect biennially. Low	GOOD	POOR	MOD	MOD	10+	C 2
T 38	Mature Horse Chestnut *Aesculus hippocastanum*	9	1	2.5 SW	51	5.5 4.8 2.6 5.1	Single-stemmed, vertical, with a slightly asymmetric crown. Overhanging site boundary. Multiple wounds on stem some forming good callus wood.	No action required. N/A	FAIR	FAIR	MOD	MOD	10+	C 2
T 39	Young Goat Willow *Salix caprea*	7	0.5	1 E	10	5 1.5 2 1.5	Self-seeded, single-stemmed, leaning, with an unbalanced crown. No recent management noted.	No action required. ***Remove to accommodate the proposed development.*** N/A	GOOD	FAIR	LOW	HIGH	20+	C 1

Tree Ref.	Age Common Name *Botanical Name*	Height (m)	Crown Height (m)	Height (m) and Direction of the Lowest Branch	Diameter (cm)	Crown Spread N W E S	Observations	Recommendations Priority	Physiological Condition	Structural Condition	Amenity Value	NHBC Water Demand	Life Expectancy (yrs)	Retention Category
T 40	Semi-mature Elder *Sambucus nigra*	6	0.5	0 W	Avg. ≤7	1.5 1.5 1.5 1.5	Multi-stemmed at ground level, vertical, with a balanced crown. Multiple included unions. No recent management noted	No action required. ***Remove to accommodate the proposed development.*** N/A	FAIR	POOR	LOW	LOW	10+	C 1
T 41	Over-mature Poplar *Populus sp*	25	3	4 NW	103	14.2 13.1 12.4 13.4	Triple-stemmed at 3m with a spreading, balanced crown. Overhanging site boundary and building on NW corner of cricket field. Deadwood and multiple broken branches noted. Understory heavily dominated by thick Brambles.	Reinspect biennially ***Remove to accommodate the proposed development.*** Moderate	FAIR	FAIR	HIGH	HIGH	20+	B 1 2
T 42	Mature Weeping Willow *Salix babylonica*	17	0.5	2 N	64	11.9 3.6 8.3 4.5	Single-stemmed, leaning, with an unbalanced crown. Deadwood and several broken branches noted. Understory heavily dominated by thick Brambles.	No action required. ***Remove to accommodate the proposed development.*** N/A	GOOD	FAIR	MOD	HIGH	20+	B 2
T 43	Mature Weeping Willow *Salix babylonica*	15	0.5	2 W	52	8.5 10.7 3.2 2	Single-stemmed, leaning, with an unbalanced crown. Deadwood and several broken branches with one branch, not completely severed, still hanging in the crown. Understory heavily dominated by thick Brambles.	No action required. ***Remove to accommodate the proposed development.*** N/A	GOOD	FAIR	MOD	HIGH	20+	B 2
T 44	Semi-mature Norway Maple *Acer platanoides*	8	1	1.5 N	17, 20	2.6 3.5 4.3 4.4	3rd party tree belonging to neighbouring cricket club. Double-stemmed at 1m with an included central union, vertical, with a slightly asymmetric crown. Overhanging site boundary. Suppressed by **T41** but crown is starting to grown through. No recent management noted.	No action required. N/A	GOOD	FAIR	MOD	MOD	40+	B 1
T 45	Early-mature Oak *Quercus robur*	10	1	1.5 E	35	6.4 5.2 6.5 6	3rd party tree belonging to neighbouring cricket club. Single-stemmed, vertical, with a balanced crown. Overhanging site boundary. Pruning wounds from crown lifting to clear cricket field.	No action required. N/A	GOOD	GOOD	MOD	HIGH	40+	B 1
T 46	Over-mature Poplar *Populus sp*	25	2	2 N	131	14.2 6.6 10.8 10.2	Triple-stemmed at 2m, slightly leaning, with a slightly asymmetric crown. Overhanging site boundary. Deadwood and several broken branches noted.	Reinspect biennially. Moderate	GOOD	FAIR	HIGH	HIGH	20+	B 1 2

Tree Ref.	Age Common Name *Botanical Name*	Height (m)	Crown Height (m)	Height (m) and Direction of the Lowest Branch	Diameter (cm)	Crown Spread N W E S	Observations	Recommendations Priority	Physiological Condition	Structural Condition	Amenity Value	NHBC Water Demand	Life Expectancy (yrs)	Retention Category
T 47	Early-mature Weeping Willow *Salix babylonica*	5	2	2.5 NE	38	1 0.2 1.5 0.5	Remaining stem of a failed tree. Producing epicormic growth. No recent management noted.	No action required. N/A	POOR	POOR	LOW	HIGH	<10	C
T 48	Mature Poplar *Populus sp*	25	6	5 E	73	3.4 6.6 8 10	Single-stemmed, vertical, with an unbalanced crown. Minor deadwood noted. No major visible defects.	No action required. N/A	GOOD	GOOD	MOD	HIGH	20+	B 1 2
T 49	Mature Poplar *Populus sp*	25	2.5	2.5 NE	74	13.4 8.6 4.5 9.5	Single-stemmed, vertical, with an unbalanced crown. Minor deadwood noted. No major visible defects.	No action required. N/A	GOOD	GOOD	MOD	HIGH	20+	B 1 2
T 50	Early-mature Weeping Willow *Salix babylonica*	10	2	2.5 S	38	10.1 3.2 3.6 4.4	Single-stemmed becoming double-stemmed at 2.5m, leaning, with an unbalanced crown. Suppressed by neighbouring trees. Significant deadwood in the lower crown. Cavities on stem from lost limbs.	No action required. ***Remove to accommodate the proposed development.*** N/A	FAIR	FAIR	LOW	HIGH	10+	C 2
T 51	Mature Weeping Willow *Salix babylonica*	14	3.5	2 W	42	6.2 3.1 2.7 2.2	Single-stemmed, leaning, with an unbalanced crown. Secondary stem previously failed at 2m. Minor deadwood noted.	No action required. ***Remove to accommodate the proposed development.*** N/A	FAIR	POOR	LOW	HIGH	10+	C 2
T 52	Early-mature Sycamore *Acer pseudoplatanus*	10	3	2.5 S	36	#6.5 6.3 6.4 5.9	Single-stemmed, vertical, with a balanced crown. No major visible defects.	No action required. ***Remove to accommodate the proposed development.*** N/A	GOOD	GOOD	MOD	MOD	40+	B 2
G 53	Semi to Early Mature Mixed Species *Details in Observations*	To 8	0	N/A	Avg. ≤5	See Plan	Hawthorn, Elder and Goat Willow. Limited inspection due to dense surrounding vegetation. Unmanaged hedge with self-seeded Willow. Willows multi-stemmed at ground level.	No action required. ***Remove to accommodate the proposed development.*** N/A	FAIR	FAIR	LOW	HIGH	10+	C 2
T 54	Early-mature Field Maple *Acer campestre*	11	1.5	3 N	34	#5 #2.5 5.5 5.5	Limited inspection due to dense vegetation. Single-stemmed, becoming double-stemmed at 2.5m, vertical, with a slightly asymmetric crown. Wounds on stem occluding well.	No action required. ***Remove to accommodate the proposed development.*** N/A	GOOD	GOOD	MOD	MOD	40+	B 2

Tree Ref.	Age Common Name *Botanical Name*	Height (m)	Crown Height (m)	Height (m) and Direction of the Lowest Branch	Diameter (cm)	Crown Spread N W E S	Observations	Recommendations Priority	Physiological Condition	Structural Condition	Amenity Value	NHBC Water Demand	Life Expectancy (yrs)	Retention Category
T 55	Early-mature Field Maple *Acer campestre*	11	1.5	2 NW	36	#6 #5.5 2.1 2.2	Limited inspection due to dense vegetation. Single-stemmed, becoming double-stemmed at 2.5m, slightly leaning, with an unbalanced crown. Suppressed by **T50**. No major visible defects.	No action required. ***Remove to accommodate the proposed development.*** N/A	GOOD	GOOD	MOD	MOD	40+	B 2
H 56	Mature Hawthorn *Crataegus monogyna*	To 8	1	0 S	Avg. ≤15	See Plan	Unmanaged hedge. Single and multi-stemmed at ground level with included unions. 1 specimen is dead and has collapsed.	Remove collapsed tree. ***Remove to accommodate the proposed development.*** Low	FAIR	FAIR	LOW	HIGH	20+	C 2
H 57	Early-mature Hawthorn *Crataegus monogyna*	5	0.5	0.5 E	Avg. ≤10	See Plan	Regularly maintained boundary hedge.	No action required. ***Specialist foundations required to accommodate proposed cricket netting.*** N/A	FAIR	FAIR	MOD	HIGH	20+	C 2
G 58	Early-mature Grey Willow *Salix cinerea*	To 9	0.5	0 N	Avg. ≤17	See Plan	4 trees set around an old pond. 1 specimen triple-stemmed at ground level with stems lying horizontal to the ground. Crown has adjusted to grow vertically. Other Willows single stemmed, vertical, and slightly leaning with slightly asymmetric crowns. Pruning wounds and minor associated decay pockets.	No action required. ***Remove to accommodate the proposed development.*** N/A	GOOD	FAIR	LOW	HIGH	20+	C 2
T 59	Mature Grey Willow *Salix cinerea*	10	0	0 N	26, 26, 24, 22, 21	8.2 5.2 4.5 5.4	Multi-stemmed at ground level with a spreading, slightly asymmetric crown. Several major unions have failed. Significant epicormic growth along stems and branches indicating tree may be under stress. Multiple stubs left from pruning and deadwood within crown.	No action required. ***Remove to accommodate the proposed development.*** N/A	FAIR	POOR	LOW	HIGH	10+	C 1
T 60	Mature Field Maple *Acer campestre*	12	3	0.5 S	35, 19	6.6 5.9 4.4 6.4	Multi-stemmed at 0.5m, vertical, with an unbalanced crown. Included bark zones present between central stems. Pruning wounds from historic crown lifting. Multiple wounds on stem occluding well.	No action required. ***Remove to accommodate the proposed development.*** N/A	GOOD	FAIR	LOW	MOD	20+	B 1

Tree Ref.	Age Common Name *Botanical Name*	Height (m)	Crown Height (m)	Height (m) and Direction of the Lowest Branch	Diameter (cm)	Crown Spread N W E S	Observations	Recommendations Priority	Physiological Condition	Structural Condition	Amenity Value	NHBC Water Demand	Life Expectancy (yrs)	Retention Category
T 61	Semi-mature Plum *Prunus sp*	5	0.5	1 N	18	3.8 3.4 2.1 1.2	Single-stemmed, leaning, with an unbalanced crown. Multiple stubs and pruning wounds. Tree sits on slightly raised ground; some roots are exposed. Growing into **T60**.	No action required. ***Remove to accommodate the proposed development.*** N/A	FAIR	POOR	LOW	MOD	10+	C 1
T 62	Semi-mature Plum *Prunus sp*	6	1	1.5 S	14	2.6 3.4 2 2.9	Single-stemmed, slightly leaning, with an asymmetric crown. Multiple pruning wounds occluding well. Tree sits on slightly raised ground; some roots are exposed.	No action required. ***Remove to accommodate the proposed development.*** N/A	GOOD	FAIR	LOW	MOD	20+	B 1
H 63	Early-mature Western Red Cedar *Thuja plicata*	13	0	N/A	Avg. ≤40	See Plan	3rd party hedge belonging to neighbouring cricket club. Regularly maintained spread on the cricket field side.	No action required. ***Specialist foundations required to accommodate proposed cricket netting.*** N/A	GOOD	FAIR	MOD	MOD	20+	B 2
G 64	Early-mature Mixed Species *Details in Observations*	To 6	0	N/A	Avg. ≤5	See Plan	Buddleia, Elder, Privet and Barberis. No recent management noted.	No action required. ***Remove to accommodate the proposed development.*** N/A	FAIR	FAIR - POOR	LOW	LOW - MOD	10+	C 2
T 65	Mature Coast Redwood *Sequoia sempervirens*	16	2	2 E	56, 48	6.5 5.1 5.8 2.3	Double-stemmed at ground level, vertical, with an unbalanced crown. Stubs and deadwood in the lower crown. No major visible defects.	No action required. **Specialist foundations required to accommodate proposed cricket netting.** N/A	GOOD	GOOD	MOD	MOD	40+	B 1 2
G 66	Semi-mature Mixed Species *Details in Observations*	To 6	0	0 S	Avg. ≤5	See Plan	Yew and Privet. Multi-stemmed at ground level. No recent management noted.	No action required. ***Remove to accommodate the proposed development.*** N/A	GOOD	FAIR	LOW	MOD	10+	C 2

Tree Ref.	Age Common Name *Botanical Name*	Height (m)	Crown Height (m)	Height (m) and Direction of the Lowest Branch	Diameter (cm)	Crown Spread N W E S	Observations	Recommendations Priority	Physiological Condition	Structural Condition	Amenity Value	NHBC Water Demand	Life Expectancy (yrs)	Retention Category
G 67	Semi-mature Rhododendron *Rhododendron sp.*	To 7	0	0.5 E	Avg. ≤5	See Plan	Multi-stemmed at 0.5m. Pruning wounds and stubs noted.	No action required. ***Remove to accommodate the proposed development.*** N/A	FAIR	FAIR	LOW	NO DATA	10+	C 2
G 68	Early-mature Western Red Cedar *Thuja plicata*	13	1	1.5 SE	36, 33	See Plan	Two trees in group. Both single-stemmed, vertical, with unbalanced crowns. Both sit near the site boundary where the ground is raised above that of the cricket field. Some roots have been severed.	No action required. N/A	GOOD	GOOD	MOD	MOD	20+	B 2
H 69	Early-mature Mixed Species *Details in Observations*	To 13	0.5	N/A	Avg. ≤15	See Plan	Hawthorn and Red Cedar. Unmanaged western boundary hedge. Overhanging site boundary. Mostly Hawthorn with 5 Western Red Cedar on the southern end. Provides some screening to the M62.	No action required. N/A	FAIR	FAIR	MOD	MOD - HIGH	20+	B 2
G 70	Young to Mature Mixed Species *Details in Observations*	To 15	0.5	N/A	To # 30	See Plan	Lime, Elm, Sycamore, Dogwood, Field Maple, Ash, Aspen, Alder, Bird Cherry, Oak and Birch. Area of natural regeneration dominated by Aspen.	No action required. ***Remove to accommodate the proposed development.*** N/A	GOOD - FAIR	GOOD - FAIR	LOW	MOD - HIGH	20+	B 1 2
T 71	Mature Elm *Ulmus sp.*	14	0.5	1 NW	30, 30, 29, 22, 21	5.8 4.4 6.1 7.1	Multi-stemmed at ground level with a spreading, balanced crown. Multiple included unions. Multiple large wounds on E side of tree with good callus wood but decay spreading up stems. There is further decay developing within the central included unions.	Reinspect biennially. ***Remove to accommodate the proposed development.*** Moderate	FAIR	POOR	MOD	HIGH	10+	C 1 2
T 72	Mature Alder *Alnus sp.*	15	3	3.5 S	32, 24	2.6 4.5 5.6 4.9	Double-stemmed at ground level, leaning, with an unbalanced crown. Minor deadwood in the lower crown. Included union forming at main fork.	No action required. ***Remove to accommodate the proposed development.*** N/A	GOOD	FAIR	MOD	MOD	20+	B 1 2
G 73	Mature Whitebeam *Sorbus aria*	To 10	3	2 NE	40, 40, 38	See Plan	Group consists of 3 trees. All single-stemmed, vertical, with balanced crowns. Overhanging site boundary. Multiple large wounds on stems with callus wood formation. Significant deadwood formation in lower crown. Trees provide some screening from the M62.	No action required. ***Undertake root pruning, under arboricultural supervision, to accomodate the proposed access road.*** N/A	FAIR	FAIR	MOD	MOD	10+	C 2

Tree Ref.	Age Common Name *Botanical Name*	Height (m)	Crown Height (m)	Height (m) and Direction of the Lowest Branch	Diameter (cm)	Crown Spread N W E S	Observations	Recommendations Priority	Physiological Condition	Structural Condition	Amenity Value	NHBC Water Demand	Life Expectancy (yrs)	Retention Category
T 74	Early-mature Sycamore *Acer pseudoplatanus*	12	1	1.5 NE	29	4.7 2.6 4.8 1	Single-stemmed, leaning, with a balanced crown. No major visible defects. No recent management noted.	No action required. ***Remove to accommodate the proposed development.*** N/A	GOOD	GOOD	LOW	MOD	40+	B 1 2
T 75	Early-mature Hawthorn *Crataegus monogyna*	10	2.5	2 W	18, 13	1.7 3.5 2.1 1.7	Double-stemmed at 0.5m, leaning, with an unbalanced crown. Overhanging site boundary. Multiple pruning wounds and branch stubs with associated pockets of decay. Provides some screening from M62.	No action required. N/A	FAIR	POOR	MOD	HIGH	20+	C 2
T 76	Mature Whitebeam *Sorbus aria*	10	1.5	2.5 W	33	4.1 #4.5 4.3 2.3	Single-stemmed, becoming multi-stemmed at 2.5m, vertical, with an unbalanced crown. Overhanging site boundary. Multiple pruning wounds on stem occluding well. Minor deadwood noted. Provides some screening from M62.	No action required. ***Crown lift the eastern extent of the crown to 4.5m to accommodate the proposed access road.*** ***Undertake root pruning, under arboricultural supervision, to accomodate the proposed access road.*** N/A	GOOD	GOOD	MOD	MOD	20+	B 2
T 77	Mature Whitebeam *Sorbus aria*	9	2	1.5 W	33	3.3 2.7 3.2 3.5	Single-stemmed, becoming double-stemmed at 2.5m, slightly leaning, with an unbalanced crown. Suppressed by **T76**. Overhanging site boundary. Multiple pruning wounds on stem occluding well. Minor deadwood noted. Provides some screening from M62.	No action required. ***Remove to accommodate the proposed development.*** N/A	GOOD	GOOD	MOD	MOD	20+	B 2
T 78	Mature Whitebeam *Sorbus aria*	11	2.5	2 E	45	4.3 2.8 3.7 4.3	Single-stemmed, becoming double-stemmed at 2.5m, vertical, with a balanced crown. Overhanging site boundary. Multiple pruning wounds on stem occluding well. Minor deadwood noted. Provides some screening from M62.	No action required. ***Remove to accommodate the proposed development.*** N/A	GOOD	GOOD	MOD	MOD	20+	B 2

Tree Ref.	Age Common Name *Botanical Name*	Height (m)	Crown Height (m)	Height (m) and Direction of the Lowest Branch	Diameter (cm)	Crown Spread N W E S	Observations	Recommendations Priority	Physiological Condition	Structural Condition	Amenity Value	NHBC Water Demand	Life Expectancy (yrs)	Retention Category
T 79	Mature Whitebeam *Sorbus aria*	11	2	2 SW	44	3.6 4.2 #6 3.4	Single-stemmed, becoming multi-stemmed at 2.5m, vertical, with an unbalanced crown. Overhanging site boundary. Multiple pruning wounds on stem occluding well. Minor deadwood noted. Provides some screening from M62.	No action required. ***Remove to accommodate the proposed development.*** N/A	GOOD	GOOD	MOD	MOD	20+	B 2
T 80	Mature Whitebeam *Sorbus aria*	8	2	2 S	34	3.8 3.6 5 2.1	Single-stemmed, becoming multi-stemmed at 2.5m, slightly leaning, with an unbalanced crown. Suppressed by **T79**. Overhanging site boundary. Multiple pruning wounds on stem occluding well. Minor deadwood noted. Provides some screening from M62.	No action required. ***Remove to accommodate the proposed development.*** N/A	GOOD	FAIR	MOD	MOD	20+	B 2
G 81	Early-mature Rowan *Sorbus aucuparia*	To 9	2	2.5 S	25, 16	See Plan	2 trees in group. Both single-stemmed becoming double-stemmed at 2.5-3m, vertical, with slightly asymmetric crowns. Multiple pruning wounds present with associated decay. Good callus wood closing wounds. Brambles beginning to engulf stem. Provide some screening from M62.	Cut back vegetation surrounding stems. ***Remove to accommodate the proposed development.*** Low	GOOD	FAIR	MOD	MOD	20+	B 2
G 82	Semi to Early Mature Mixed Species *Details in Observations*	To 8	2	2.5 S	27, 13, 13	See Plan	2 Elder and 1 Rowan. Crown of rowan 80% dead with bark peeling and cambium dying on stem. Elders single-stemmed, leaning, with unbalanced crowns. Multiple cavities present on larger specimen. Provides some screening from M62.	Remove Rowan. ***Remove to accommodate the proposed development.*** Low	FAIR	POOR	LOW	LOW - MOD	10+	C 2
T 83	Early-mature Silver Birch *Betula pendula*	12	2	3.5 E	39	4.8 5.5 5.5 4.5	Single-stemmed, becoming double-stemmed at 5m, vertical, with a balanced crown. Evidence of recent pruning, assumed to be crown lifting to provide access for recent site investigations. No major visible defects. Provides some screening from M62.	No action required. ***Remove to accommodate the proposed development.*** N/A	GOOD	GOOD	MOD	LOW	20+	B 1
T 84	Early-mature Rowan *Sorbus aucuparia*	8	0.5	2 S	18	2.7 2.1 2.5 3.3	Single-stemmed, vertical, with a slightly asymmetric crown. Self-seeded Rowan growing from base through crown. Provides some screening from M62.	Remove Rowan growing against stem. ***Remove to accommodate the proposed development.*** Low	GOOD	GOOD	MOD	MOD	20+	B 1

Tree Ref.	Age Common Name *Botanical Name*	Height (m)	Crown Height (m)	Height (m) and Direction of the Lowest Branch	Diameter (cm)	Crown Spread N W E S	Observations	Recommendations Priority	Physiological Condition	Structural Condition	Amenity Value	NHBC Water Demand	Life Expectancy (yrs)	Retention Category
G 85	Sem-mature to Mature Hawthorn *Crataegus monogyna*	To 7	2	0 E	Avg. ≤15	See Plan	Unmanaged hedge. Specimens multi-stemmed from ground level to 0.5m with included unions. Deadwood and pruning wounds noted. Provides some screening from M62.	No action required. ***Remove to accommodate the proposed development.*** N/A	FAIR	POOR	LOW	HIGH	10+	C 2
T 86	Mature Silver Birch *Betula pendula*	11	1	1.5 SE	61	5.4 5.1 #5.5 #6	Single-stemmed, vertical, with a balanced crown. Evidence of recent pruning, assumed to be crown lifting to provide access for recent site investigations. Provides some screening from M62.	No action required. ***Remove to accommodate the proposed development.*** N/A	GOOD	GOOD	MOD	LOW	20+	B 1
T 87	Early-mature Rowan *Sorbus aucuparia*	8	0.5	1.5 E	26	2.8 3 #4 2.2	Single-stemmed, vertical, with an unbalanced crown. Suppressed by **T86**. Multiple suckers growing from the base through the crown.	No action required. ***Remove to accommodate the proposed development.*** N/A	GOOD	FAIR	LOW	MOD	20+	B 1
T 88	Mature Sycamore *Acer pseudoplatanus*	14	4	3.5 SE	46	3.3 4.8 4.5 4.8	Single-stemmed becoming multi-stemmed at 4m, vertical, with a balanced crown. Multiple stubs and pruning wounds within lower canopy. Significant wound, beginning to occlude, on the western stem base.	No action required. ***Remove to accommodate the proposed development.*** N/A	GOOD	FAIR	LOW	MOD	20+	B 1
T 89	Mature Sycamore *Acer pseudoplatanus*	14	2	2 NW	42	3.2 3.7 3 3.3	Single-stemmed, vertical, with a balanced crown. Historic crown lifting has resulted in the removal of several large limbs from low on the stem. Wounds beginning to occlude. Epicormic growth around wounds beginning to form new lower canopy.	No action required. ***Remove to accommodate the proposed development.*** N/A	GOOD	FAIR	LOW	MOD	20+	B 1
G 90	Young to Early-mature Mixed Species *Details in Observations*	To 9	0	N/A	Avg. ≤10	See Plan	Grey Willow and Silver Birch. Single and multi-stemmed specimens. Multiple included unions noted. Old coppice and self-seeded growth. Evidence of pruning to clear paths through site. Some overhanging site boundary.	No action required. ***Remove to accommodate the proposed development.*** N/A	GOOD	FAIR	LOW	LOW - HIGH	20+	C 2

Tree Ref.	Age Common Name *Botanical Name*	Height (m)	Crown Height (m)	Height (m) and Direction of the Lowest Branch	Diameter (cm)	Crown Spread N W E S	Observations	Recommendations Priority	Physiological Condition	Structural Condition	Amenity Value	NHBC Water Demand	Life Expectancy (yrs)	Retention Category
T 91	Mature Horse Chestnut *Aesculus hippocastanum*	12	2.5	2.5 E	67	6.6 6 6.4 7.7	Single-stemmed becoming multi-stemmed at 3m, vertical, with a balanced crown. Pruning wounds indicate a history of crown lifting to clear paths. No major visible defects.	No action required. ***Crown lift the northern extent of the crown to 3m to allow access for the proposed footpath.*** ***'No dig' techniques required.*** N/A	GOOD	FAIR	MOD	MOD	20+	B 1
G 92	Young to Semi-mature Bird Cherry *Prunus padus*	To 8	0.5	N/A	Avg. ≤10	See Plan	Area of natural regeneration consisting of single and multi-stemmed specimens. No recent management noted.	No action required. ***Remove to accommodate the proposed development.*** N/A	GOOD	FAIR	LOW	MOD	20+	C 2
G 93	Semi to Early Mature Mixed Species *Details in Observations*	To 7	0	N/A	Avg. ≤5	See Plan	Firethorn, Tree Heath, Juniper, Barberry, Dogwood, Bird Cherry, Horse Chestnut and Grey Willow. Unmanaged boundary shrubs and self-seeded trees.	No action required. ***Remove to accommodate the proposed development.*** N/A	GOOD	FAIR	MOD	LOW - MOD	20+	B 2
T 94	Early-mature Lawson Cypress *Chamaecyparis lawsoniana*	10	2.5	1.5 SW		3.5 #3.5 #3.5 #3.5	Limited inspection; located within **G93**. Single-stemmed, vertical with a balanced crown. Has been previously topped. Beginning to grow into overhead phone lines.	Clear phone lines by 2m. ***Remove to accommodate the proposed development.*** Moderate	GOOD	FAIR	LOW	HIGH	20+	C 2
T 95	Semi-mature Western Red Cedar *Thuja plicata*	8	2.5	2 N	27	1.3 #1.3 #1.3 #1.3	Limited inspection; located within **G93**. Single-stemmed becoming double-stemmed at 1.5m, vertical with a balanced crown. Included bark at 1.5m with some reaction wood forming around union. No recent management noted.	Reduce to height of 6m. ***Remove to accommodate the proposed development.*** Low	GOOD	FAIR	LOW	MOD	20+	C 2
G 96	Young to Early-mature Mixed Species *Details in Observations*	To 8	0	N/A	Avg. ≤20	See Plan	Field Maple, Goat Willow, Elder and Hawthorn. Block planting for M62 boundary with developing, self-seeded, understory. Planting starts ~2m from site boundary. Trees overhanging boundary into site in sections. Provides screening from M62.	No action required. N/A	GOOD	GOOD	MOD	LOW - HIGH	20+	B 2

Tree Ref.	Age Common Name *Botanical Name*	Height (m)	Crown Height (m)	Height (m) and Direction of the Lowest Branch	Diameter (cm)	Crown Spread N W E S	Observations	Recommendations Priority	Physiological Condition	Structural Condition	Amenity Value	NHBC Water Demand	Life Expectancy (yrs)	Retention Category
T 97	Mature Whitebeam *Sorbus aria*	11	2	2 W	57	4 5.3 5.1 5	3rd party, council maintained street tree. Single-stemmed, vertical, with a balanced crown. History of crown lifting to clear road and pavement.	No action required. ***'No-Dig' techniques to be utilised.*** N/A	GOOD	FAIR	MOD	MOD	20+	B 1
T 98	Early-mature Norway Maple *Acer platanoides*	9	2.5	2.5 E	42	3.9 3.1 4.9 4.5	3rd party, council maintained street tree. Single-stemmed, becoming multi-stemmed at 2m, vertical, with an unbalanced crown. Middle of the crown suppressed by the surrounding stems. Large wound to the NW from a previously broken out limb which has left the heartwood and main unions open to decay.	No action required. N/A	FAIR	POOR	MOD	MOD	<10	C 1
T 99	Early-mature Sycamore *Acer pseudoplatanus*	12	2.5	3 NE	35	4.5 3.9 5.1 #4.5	3rd party, council maintained street tree. Single-stemmed, vertical, with a balanced crown. History of crown lifting to clear road and pavement.	No action required. N/A	GOOD	GOOD	MOD	MOD	40+	B 1
T 100	Early-mature Sycamore *Acer pseudoplatanus*	12	2.5	2 SE	39	4.2 5.1 4.9 #4	3rd party, council maintained street tree. Single-stemmed, vertical, with a balanced crown. History of crown lifting to clear road and pavement.	No action required. N/A	GOOD	GOOD	MOD	MOD	40+	B 1
G 101	Semi to Early Mature Mixed Species *Details in Observations*	To 10	1	N/A	Avg. ≤25	See Plan	Ash, Sycamore, Field Maple and Goat Willow. 3rd party, council maintained trees on verge of Halifax Road. Single and multi-stemmed specimens. Provide screening from the road. No recent management noted.	No action required. ***'No-Dig' techniques to be utilised.*** N/A	GOOD	GOOD	MOD	#N/A	20+	B 2
G 102	Semi to Early Mature Mixed Species *Details in Observations*	To 10	2.5	N/A	Avg. ≤25	See Plan	Sycamore and Ash. Group consists of 8 trees. 3rd party, council maintained street trees. Single-stemmed, vertical, with balanced crowns.	No action required. ***Remove section, as indicated at Appendix 6, to accommodate the proposed development.*** N/A	GOOD	GOOD	MOD	#N/A	20+	B 1 2

Appendix 2: Explanation of Tree Descriptions

A2.1 Measurements/ Reference Information

A2.1.1 *REF NUMBER.* All items surveyed are allocated a reference number preceded with a letter, identifying the type of vegetation surveyed: T = an individual tree, G = a group of trees or an area of vegetation, W = woodland, H = a hedgerow.

A2.1.2 *SPECIES: COMMON AND BOTANICAL NAME*. The common and botanical names of the species present are noted. If the species is not clear or identifiable, then a general common name and genus will be noted.

A2.1.3 *AGE CLASS* of the tree is described as young, semi-mature, early-mature, mature, over-mature, veteran or dead.

A2.1.4 *HEIGHT* of the tree is measured in metres from the stem base to the top of the crown.

A2.1.5 *CROWN HEIGHT* is an indication of the height above ground level at which the crown begins.

A2.1.6 *STEM DIAMETER* is measured at 1.5 metres above (higher) ground level. Where the tree is multi-stemmed at this point; diameter measurements are taken for each stem. If more than five stems are present, an average stem diameter is taken. If for whatever reason it is not practical to measure multiple-stemmed trees in this way, the diameter is measured close to ground level, just above the root buttress.

A2.1.7 *CROWN SPREAD* is measured from the centre of the stem base to the tips of the branches to all four cardinal points.

A2.1.8 *HEIGHT AND DIRECTION OF LOWEST BRANCH.* The height and direction of the lowest significant branch is noted because of potential issues relating to clearances and the need for tree pruning.

A2.1.9 *NHBC WATER DEMAND.* The water demand of each tree, as listed in NHBC Standards 2010 Chapter 4.2 ‘Building near trees’. This is included to aid structural engineers, architects and other members of the design team as it determines foundation depth and other considerations with regard to trees.

A2.2 Evaluations

A2.2.1 *PHYSIOLOGICAL CONDITION* is classed as good, fair, poor, or dead. This is an indication of the health and vitality of the tree and takes into account vigour, presence of disease and dieback.

A2.2.2 *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.

A2.2.3 *LIFE EXPECTANCY* is classed as; 0, less than 10 years, 10+ years, 20+ years, or 40 + years. This is an indication of the minimum number of years before removal of the tree is likely to be required.

A2.2.4 *AMENITY VALUE.* A general indication is given in respect to the amenity/landscape value of the tree/group within the surrounding area.

A2.2.5 *PRIORITIES.* A priority rating is given concerning the time periods in which the recommended works should be undertaken. LOW priority works should be undertaken within 12 months of the survey, MOD (moderate) priority works should be undertaken within 6 months and HIGH priority works should be completed as soon as practically possible. If no works are recommended, N/A (not applicable) will be used.

A2.3 Retention Categories

A2.3.1 ***A (marked green on the Tree Constraints Plan) = Trees of high quality.***

These trees are of high quality and value with a good life expectancy (usually with an estimated remaining life expectancy of 40 years).

A2.3.2 ***B (marked in blue on the Tree Constraints Plan) = Trees of moderate quality.***

These trees are of moderate quality and value with a reasonable life expectancy (usually with an estimated life expectancy of at least 20 years).

A2.3.3 ***C (marked in grey on the Tree Constraints Plan) = Trees of low quality.***

These trees are of low quality and value but which are in adequate condition to remain or are young trees with a stem diameter below 15cm (usually with an estimated life expectancy of at least 10 years).

A2.3.4 Trees categorised as retention category 'A', 'B' or 'C' are then justified by being further divided into 3 subcategories:

1 = Mainly arboricultural qualities.

2 = Mainly landscape qualities.

3 = Mainly cultural values, including conservation value.

A2.3.5 ***U (marked in red on the Tree Constraints Plan) = Trees usually unsuitable for retention due to poor condition.***

These trees are in such a condition that they cannot be realistically retained as living trees in the context of the current land use for longer than 10 years. This may be due to any of the following:

1) Failure is likely due to serious, irredeemable, structural defects.
2) Removal of other category U trees will render them exposed and unstable.
3) They are in serious, overall decline or are dead.
4) They are of low quality and suppressing adjacent trees of better quality.
5) Diseases are present which may affect the health of adjacent trees.

These trees are to be removed or managed in a way which reduces their risk of failure, where they have high ecological value, such as in a woodland setting.

Appendix 3: General Guidelines

A3.1 All tree work must be undertaken to BS 3998: 2010 '*Recommendations for tree work'* or other recognised industry practice.

A3.2 Staff carrying out the work must be qualified, experienced and ideally be Arboricultural Association approved contractors. They should be covered by adequate public liability insurance.

A3.3 This report is based upon a visual inspection. The consultant 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 the guidelines and the terms listed in this report.

A3.4 Any defects seen by a contractor or the employer that were not apparent to the consultant must be brought to the consultant's attention immediately.

A3.5 No liability can be accepted by JCA in respect of the trees unless the recommendations of this report are carried out under the supervision of JCA and within JCA's timescale.

A3.6 It is advisable to have trees inspected by an arboricultural consultant regularly.

Appendix 4: Author Qualifications

Principal Consultant and Managing Director

Jonathan Cocking *F.R.E.S., Tech. Cert. (Arbor.A), PDipArb (RFS) FArborA CBiol MSB. MICFor.* Jonathan is a Registered Consultant and Fellow of the Arboricultural Association and sits on its Professional Committee. He has 31 years' experience in the Arboricultural profession and served for eight years as Senior Arboriculturist with a large local authority before establishing JCA in 1997. Jonathan has since developed JCA's portfolio of services and its extensive client base. He is a Chartered Biologist, a Chartered Arboriculturalist and an Expert Witness with much experience of litigation work.

Technical Director

Toby Thwaites *BSc (Hons), HND (Arboriculture), MArborA.* Toby joined JCA in 1998 after graduating in Ecology at the University of Huddersfield and has since graduated in Arboriculture at the University of Central Lancashire. A former JCA team leader and Consulting Arboriculturist, Toby is now Technical Director and oversees all office and on-site activities at JCA and is on hand to offer technical support and advice.

Operations Director

Charles Cocking *FdSc (Arboriculture), MArborA.* Charles joined JCA in January 2014 having previously worked for the company on a part time basis during 2013. Charles obtained his Foundation Degree in Arboriculture at Askham Bryan College, York, and is a Professional Member of the Arboricultural Association. Charles now oversees all internal operations for the company.

Consulting Staff: Arboriculture

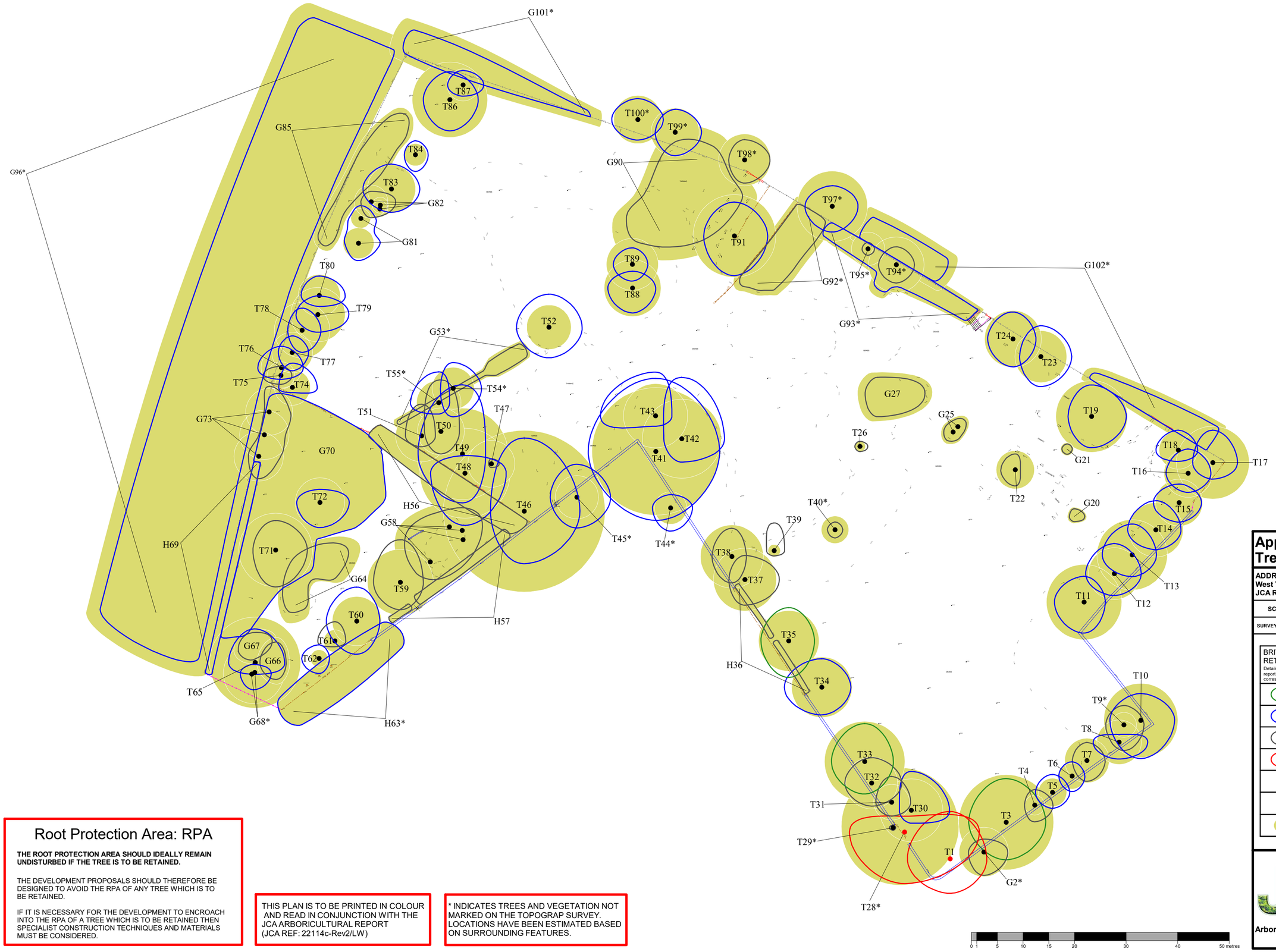
Andrew Bussey. Andrew started working in consultancy at JCA in 2006 having spent 12 years working as an arborist for various private companies before joining a Local Authority forestry team. He has various NPTC qualifications, is QTRA qualified and is a LANTRA Accredited Professional Tree Inspector.

Emily Wilde *FdSc (Arboriculture).* Emily joined JCA having previously worked for various private tree surgery and consultancy companies over the past 8 years. She initially obtained a ND in Forestry & Arboriculture, followed by a FdSc in Arboriculture at Askham Bryan College, York. Emily has various NPTC certificates and is QTRA qualified.

Mick Eltringham *ND (Forestry).* Mick joined JCA after spending 12 years working in the industry for various private companies in the north and south of England. He has also spent the last five years working as a consultant for two canopy research projects in the Amazon Rainforest, working with Oxford University and the University of Arizona. He has various NPTC Qualifications.

Dan Kemp *FdSc (Arboriculture).* Dan joined JCA with nearly 30 years' experience in arboriculture. He worked as a London Tree Officer for 12 years and in several arboricultural and horticultural management posts, specialising particularly in tree risk assessments and tree related subsidence.

Luke Wickham *FdSc (Arboriculture and Urban Forestry).* Luke joined JCA in 2021 after obtaining his Foundation Degree in Arboriculture and Urban Forestry at Askham Bryan College. Having previously worked within the industry for the past 4 years, running his own small business and sub-contracting for local firms, Luke brings a sound knowledge and understanding of the practical and academic sides of the industry.



Root Protection Area: RPA

THE ROOT PROTECTION AREA SHOULD IDEALLY REMAIN UNDISTURBED IF THE TREE IS TO BE RETAINED.

THE DEVELOPMENT PROPOSALS SHOULD THEREFORE BE DESIGNED TO AVOID THE RPA OF ANY TREE WHICH IS TO BE RETAINED.

IF IT IS NECESSARY FOR THE DEVELOPMENT TO ENCROACH INTO THE RPA OF A TREE WHICH IS TO BE RETAINED THEN SPECIALIST CONSTRUCTION TECHNIQUES AND MATERIALS MUST BE CONSIDERED.

THIS PLAN IS TO BE PRINTED IN COLOUR AND READ IN CONJUNCTION WITH THE JCA ARBORICULTURAL REPORT (JCA REF: 22114c-Rev2/LW)

* INDICATES TREES AND VEGETATION NOT MARKED ON THE TOPOGRAP SURVEY. LOCATIONS HAVE BEEN ESTIMATED BASED ON SURROUNDING FEATURES.

0 1 5 10 15 20 30 40 50 metres

Appendix 5: Tree Constraints Plan

ADDRESS: Highmoor Lane, Cleckheaton, West Yorkshire, BD19 6LW.
JCA REF: 22114c-Rev2/LW

SCALE : 1:500	PAPER SIZE : A2

SURVEYED BY: AM	DRAWN BY: AM	APPROVED BY: AJB

BRITISH STANDARD 5837:2012: 4.5 RETENTION CATEGORIES

Detailed definitions of these catagories are at Appendix 2 of our report. N.B. These categories do not necessarily represent or correspond to recommendations for action made in this report.

	CATEGORY A: 'RETENTION MOST DESIRABLE'
	CATEGORY B: 'RETENTION DESIRABLE'
	CATEGORY C: 'TREE WHICH COULD BE RETAINED'
	CATEGORY U: 'TREE FOR REMOVAL'
•	STEM OF TREE TO BE RETAINED
•	STEM OF TREE TO BE REMOVED
	ROOT PROTECTION AREA

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THIS PLAN IS TO BE PRINTED IN COLOUR AND READ IN CONJUNCTION WITH THE JCA ARBORICULTURAL REPORT (JCA REF: 22114c-Rev2/LW)

Appendix 6: Arboricultural Implications Plan

ADDRESS: Highmoor Lane, Cleckheaton, West Yorkshire, BD19 6LW.
JCA REF: 22114c-Rev2/LW

SCALE 1:1000 | **PAPER SIZE A3**

JCA Limited
Arboricultural & Ecological Consultants

	TREE TO BE RETAINED
	TREE TO BE REMOVED
	STEM OF TREE TO BE RETAINED
	STEM OF TREE TO BE REMOVED
	ROOT PROTECTION AREA
	ROOT PROTECTION AREA ENCROACHED: NO-DIG TECHNIQUE TO BE EMPLOYED
	ROOT PROTECTION AREA ENCROACHED: ROOT PRUNING TO BE EMPLOYED

I hope that this report provides all the necessary information, but should any further advice be needed please do not hesitate to contact the author.

Signed

.....

Luke Wickham *FdSc (Arboriculture and Urban Forestry), TechArborA.*

6th October 2025

For and on behalf of ***JCA Ltd***

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- Heave Assessment
- Tree Root Identification

Advice for Local Authorities and Social Housing

- Tree Safety Surveys
- Specialist Decay Detection
- Landscape and Orchard Design

Tree Advice for the Legal Profession

- Subsidence Litigation
- Personal Injury and Accident Investigation
- Expert Witness, Planning Inquiries and Appeals

Veteran Tree Management

- Ancient Woodland Management
- Veteran Tree Management

Tree Health and Pest and Disease Management

- Pest and Disease Surveys
- Tree Health Checks
- Disease Mitigation and Control

ECOLOGICAL SERVICES

Ecological Pre-Planning Services

- Phase 1 Habitat Surveys
- Great Crested Newt eDNA Sampling
- Protected Species: Bat, Wintering and Nesting Bird, Badger, Amphibian, Otter, Water Vole, White-Clawed Crayfish, Dormice and Reptile Surveys.
- Preparation for Environmental Impact Assessment (EIA)
- Invasive Species Surveys
- Code for Sustainable Homes

Ecological Post-Planning Services

- Biodiversity Enhancement Plans
- Protected Species Mitigation
- Ecological Management (Bat and Bird box installation and inspection)

HEAD QUARTERS:

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