ARBORICULTURAL METHOD STATEMENT
to BS 5837:2012
at
33 Woodside Lane
Fixby
Huddersfield
West Yorkshire
HD2 2HA

Client:
Acumen Designers
& Architects

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JCA Limited
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1. Introduction

1.1 Purpose of the Method Statement

1.1.1 This Arboricultural Method Statement has been prepared to ensure good practice in the protection of retained trees during the development at **33 Woodside Lane**, **Fixby**.

1.2 Terms of Reference

1.2.1 JCA Limited is instructed by **Acumen Designers & Architects** to prepare an Arboricultural Method Statement for the proposed development. The arboricultural survey (undertaken in February 2022) and report conforms to the most recent specifications outlined in BS 5837: 2012 *Trees in relation to design, demolition and construction - Recommendations*.

1.2.2 It is proposed to construct three detached dwellings with one of these having a detached garage.

1.2.3 The following drawing has been provided and this are the basis of the Arboricultural Method Statement and the Tree Protection Plan at **Appendix 4**:

- Development Layout (Drawing Ref. **2355 SITE PLAN AND SECTIONS DECEMBER 2018**).

1.3 Status of the Method Statement

1.3.1 This Arboricultural Method Statement should be included as part of the specification and schedule of works issued to the building contractor and can form part of the contract.

1.3.2 This Arboricultural Method Statement should be available on site for inspection by the local authority, contractors and other relevant persons.

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2. Tree Works Prior, During and Post Construction

2.1 Tree Works Prior to Construction

2.1.1 Prior to any construction activity, the first operation on site will be the undertaking of the necessary arboricultural works, as described at **Appendix 1**.

2.1.2 The tree works include:

- The removal of **T19, T27, T31, T33, G44** and **T45**, for arboricultural reasons.
- The removal of two trees within **G5, G21, T22, T23, T24, G25, G26**, a section of **H37, T42** and three trees within **G43**, to facilitate the proposed development.
- The pruning of **G39** and **G43**, for arboricultural reasons.
- The pruning of **G30**, to facilitate the development.

2.2 Tree Works During or Post Construction

2.2.1 In this case, no above ground tree works are envisaged to be required during or after the construction phase.

2.2.2 Damage to trees during the construction phase should be entirely prevented by the installation of the temporary protective barrier (fencing and ground protection), to create a Construction Exclusion Zone (CEZ). All persons on site must be aware of limitations that apply within the CEZ (please refer to **Section 3.1.3**).

2.2.3 If any trees on site are damaged, this must be immediately reported to JCA to agree on appropriate remedial action. Contact numbers for all parties can be found at **Section 7**.

2.2.4 Root pruning is required to enable the construction of a double garage within the RPA of trees within **G30**. This operation will be undertaken during the construction phase and will be supervised throughout by the appointed arboriculturalist.

2.2.5 For this method, the closest point of the proposed double garage in relation to the trees will be marked on-site by an appointed engineer or another qualified person, using an appropriate method (e.g. temporary, biodegradable spray paint or pegs and lines). A trench will then be excavated along this line, to the required depth. Any roots exposed during this operation will be cleanly severed using appropriate hand tools (e.g. sanitised hand saws or bypass secateurs).

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2.3 Recommendations For Tree Works

2.3.1 All work must be undertaken to BS 3998: 2010 - *Recommendations for tree work* and carried out by qualified, experienced and, ideally, Arboricultural Association approved contractors who must be adequately insured.

2.3.2 Any defects seen by a contractor or the client that were not apparent to the consultant must be brought to the attention of JCA immediately.

2.3.3 No liability can be accepted by JCA in respect of the trees unless the recommendations of this Method Statement are carried out under our supervision.

3. The Protective Barrier Prior, During and Post Construction

3.1 Protective Barrier Prior to Construction

3.1.1 The installation of the temporary protective barrier will be the very first job to be undertaken on site following the completion of the tree works (**Section 2.1**). This barrier will comprise of protective fencing and ground protection, as detailed below and in **Section 3.2**.

3.1.2 The protective fencing must be constructed in accordance with BS 5837: 2012 *Trees in relation to design, demolition and construction - Recommendations* and will be located as shown on the Tree Protection Plan at **Appendix 4**. Where possible, the protective barrier will enclose the entire Root Protection Area (RPA) of the trees to make a Construction Exclusion Zone (CEZ); **this area is to be considered a restricted area; no pedestrians, vehicles, equipment or machinery are allowed within the CEZ and the storage of materials is not permitted, unless specified within this Method Statement**.

3.1.3 The protective fencing will be installed in accordance with BS 5837: 2012 and will comprise of weld mesh panel fencing, situated in rubber or concrete feet. Panels will be joined together using a minimum of two anti-tamper couplers, positioned so that they can only be removed from inside the barrier. The fencing will be supported at each joint (where two panels meet) with a stabiliser strut, attached to the fencing at one end and a base plate at the other, which will be secured with ground pins, driven into the underlying soil. Please refer to **Appendix 2 (Fig 2)** for protective fencing details.

3.1.4 Once the fencing is installed, waterproof signs with the sentence '*Protected tree zone, no storage or operations within this are*a' are to be placed at 3m intervals to ensure that all personnel are aware of the restrictions that apply to the cordoned off area. A prepared sign is available at **Appendix 2**.

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3.2 Ground Protection

3.2.1 Where it is not possible to enclose the entire RPA of trees within **G30** with protective fencing, it will be necessary to lay appropriate ground protection which, in combination with the fencing described in **Section 3.1**, will comprise the protective barrier.

3.2.2 The ground protection will be installed in the location shown in brown shade on the pan at **Appendix 4** prior to construction and retained until the material completion of development. The purpose of the ground protection is to enable site traffic to pass over the RPAs of trees, whilst minimizing compaction and disturbance of the underlying soil which can lead to root asphyxiation and damage.

3.2.3 As only pedestrian traffic is required to pass over the RPA, a suspended walkway will be constructed. This will be achieved by constructing a framework of scaffold poles attached to the main scaffolding and may incorporate driven poles at suitable intervals, if necessary. Scaffold boards will be placed over this framework and utilised as a walkway for **pedestrian use only**.

3.3 Checking the Protective Barrier Prior to Construction

3.3.1 Once installed, the appointed arboriculturalist will be invited on site to inspect the protective fencing and ground protection, ensuring that it is located in the correct position and that it has been constructed in accordance with this Method Statement. No other work, including soil stripping, excavation, or the bringing onto site of materials or machinery, shall commence until the barrier is installed and confirmed to be acceptable by the appointed arboriculturalist.

3.3.2 It is important that the protective fencing and ground protection be checked by the arboricultural consultant prior to any construction works being carried out on site. **If at any time during construction the protective fencing or ground protection is not correctly installed, or if it does not comply with BS 5837: 2012, this could result in damage being caused to trees and consequently, a stop notice may be served by the LPA.**

3.4 Protective Barrier During Construction

3.4.1 No operations shall take place which require the removal of part of the protective barrier without prior agreement with the Local Planning Authority.

3.4.2 The protective barrier must be inspected for faults or damage by the site manager or other responsible named person on a regular basis and a written record kept. Any faults or defects must be repaired or replaced as soon as is reasonably practicable. Details of the site manager and relevant contact details can be found at **Section 7**.

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3.5 Removal of the Protective Barrier

3.5.1 When the development phase is complete and the main site machinery has been removed, the protective barrier may be dismantled and removed from site.

3.5.2 It should be noted the same restrictions apply to all RPAs as the CEZ (please refer to **Section 3.1.2**).

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4. Construction Phase

4.1 Demolition Works

4.1.1 With the exception of the removal of light features, no significant demolition works are required adjacent to retained trees.

4.2 Ground Level Changes

4.2.1 No ground level changes are required within the RPA of any tree to be retained on this site. As such no mitigation actions are considered necessary.

4.3 Construction of Hard Surfaces

4.3.1 With the exception of the negligible infringements annotated on the plan at **Appendix 4**, no new hard surfaces are proposed within the RPA of retained trees. As such, no specialist mitigation actions are required.

4.4 Construction of New Buildings

4.4.1 In this case, the three detached houses are located at a sufficient distance from retained trees that no specialist foundation methods are required for arboricultural purposes.

4.4.2 In this case, no specialist foundation methods are required for arboricultural purposes. However, the RPAs of trees within **G30** are situated within the footprint of the proposed double garage, and as such root pruning will be required in accordance with **Section 2.2**, to minimise potential damage to tree roots.

4.5 Excavations and Services

4.5.1 Details on service routes are not available at this time. As such, no provision for the routing of utilities within the RPAs is made within the scope of this report.

4.5.2 If, for whatever reason, incursions into the RPAs are considered unavoidable, the consulting arboriculturalist and/or the LPA must be consulted immediately, to prevent a breach of planning conditions and/or damage to retained trees.

4.5.3 Guidance and methodologies on the installation of underground services whilst minimising damage to tree roots is provided at **Appendix 3**.

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4.6 Location of the Site Compound

4.6.1 The site compound, typically including the mess facilities, toilets, storage of materials and parking, must be located away from, and outside the RPA of retained trees.

4.6.2 Those areas designated for the storage and/or mixing of chemicals, including petrol, diesel and oils must also be located away from, and outside the RPA of retained trees. Such areas should be constructed with consideration to, and contingencies for, the occurrence of spillages, preventing the leaching of chemicals into unprotected, open ground.

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5. Post Construction Phase

5.1 Post Construction Landscaping

5.1.1 Following completion of the main construction phase, the protective fencing and ground protection may be removed and the landscaping phase can commence.

5.1.2 The proposals may include for the installation of wooden boundary fences and gate posts. Where these are located within the RPA of retained trees, post holes will be dug by hand and they are to be as small as practically possible. They may be driven in either by hand or using mechanical means. However, if construction plant is to be used, it must work from outside of the RPA at all times.

5.1.3 The retained trees on site may be subject to some form of landscaping or seeding beneath their canopies after the development phase. At this stage the protective barrier will have been removed.

5.1.4 Landscaping works must be carried out in such a way as to avoid ground level changes or deep digging within RPAs. Tractor mounted rotovation or other mechanised cultivation methods must not be used within the RPAs of retained trees.

5.1.5 Heavy machinery is not permitted in the vicinity of retained trees, unless otherwise stated in this method statement.

5.1.6 Herbicides should be appropriate for the purpose and should not be used in such a way as to damage any retained trees or vegetation.

5.2 Mycorrhizal Fungi Inoculation

5.2.1 As the proposed development will encroach into the RPA of trees within **G30**, possibly resulting in some root loss, the application of an appropriate *mycorrhizae fungi* will be undertaken to the soils around these trees after the construction phase is complete.

5.2.2 Certain *mycorrhizae* fungi form a symbiotic relationship with tree roots. A tree root associated with such *mycorrhizae* will take up nutrients more effectively and this will therefore help the tree to produce new roots more effectively, so benefitting their recovery.

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6. Timescale of Works

6.1.1 The timescale for arboricultural requirements are summarised below:

Timescale	Action	✓	Initial
Stage 1	All requirements listed in the planning consent are approved by the Local Authority planning office.		
Stage 2	Undertake the tree works (as detailed at **Appendix 1)**.		
Stage 3	Install the temporary protective fencing around the trees (as detailed at **Appendix 2** and as shown on the Tree Protection Plan at **Appendix 4**).		
Stage 4	Install ground protection within the RPAs of those trees which are not fully protected by the fencing (as detailed in **Section 4**).		
Stage 5	Have the Arboricultural Consultant inspect the fencing and ground protection measures **prior** to any on site construction. Once inspected, the protective fencing and ground protection must not to be moved or breached.		
Stage 6	Undertake the construction phase. Root pruning to be undertaken in the RPA of **G30** under arboricultural supervision to facilitate the proposed double garage, as detailed at **Section 2.2**.		
Stage 7	Following the completion of the construction phase and when all site traffic and machinery has left, the protective fencing and ground protection can be removed.		
Stage 8	*Mycorrhizal* inoculation to be undertaken within the rooting zone of **G30**, as detailed at **Section 5.2**.		
Stage 9	Undertake any proposed landscaping in line with **Section 5.1**.		

7. Relevant Contact Details

Contact Name	Organisation/Detail	Contact Number
Andrew Bussey Arboricultural Consultant	JCA Limited	01422 376335
Nick Goddard Tree Officer	Kirklees Metropolitan Borough Council	01484 414909
TBC Site Manager	TBC	TBC

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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
G 1	Semi to early-mature Mixed *Details in observations*	To 19	0+	0+ n/a	To 60#	See plan	Situated on adjacent land overhanging the access. A group of Sycamore and Holly of good form. Not fully inspected due to dense vegetation.	No action required. n/a	GOOD	GOOD	MOD	LOW TO MOD	40+	1 B 2
T 2	Early-mature Cedar of Lebanon *Cedrus libani*	14	2	2.5 n/a	44	2.5 4.2 2.3 1.8	Multi-stemmed at 1.5m with an unbalanced crown. Occasional pruning wounds. No major visible defects.	No action required. n/a	GOOD	GOOD	MOD	MOD	20+	1 C 2
T 3	Early-mature Cedar of Lebanon *Cedrus libani*	17	2.5	2.5 n/a	52	5.5 4 5 6.8	Single-stemmed and vertical with a balanced crown. Occasional pruning wounds. No major visible defects.	No action required. n/a	GOOD	GOOD	MOD	MOD	40+	1 B 2
T 4	Early-mature Cedar of Lebanon *Cedrus libani*	17	2.5	2.5 n/a	51	4 4.5 3 5.5	Single-stemmed and vertical with a balanced crown. Occasional pruning wounds. No major visible defects.	No action required. n/a	GOOD	GOOD	MOD	MOD	40+	1 B 2
G 5	Early-mature to mature Sycamore *Acer pseudoplatanus*	To 18	5	5 n/a	To 68	See plan	Four trees of reasonable form located close to the boundary. Included bark and decay noted on stem junctions.	Remove the two trees shown in red on the plan at **Appendix 4**. n/a	GOOD	FAIR	MOD	MOD	20+	1 B 2
T 6	Semi-mature Sycamore *Acer pseudoplatanus*	This tree has been removed since the previous survey which was undertaken in 2019.												
T 7	Semi-mature Sycamore *Acer pseudoplatanus*	This tree has been removed since the previous survey which was undertaken in 2019.												
T 8	Mature Sycamore *Acer pseudoplatanus*	17	7	7 n/a	58	9 6 6 7	Twin-stemmed at 4m with a balanced crown. Occasional pruning wounds. Decay present on a significant bark wound to the lower stem. Moderate deadwood noted. Limited long term future.	Monitor biennially. Low	FAIR	FAIR	LOW	MOD	10+	C 1
T 9	Early-mature Silver Birch *Betula pendula*	15	12	12 n/a	30	0 4 1 6	Single-stemmed and leaning with an unbalanced crown. Poor form.	No action required. n/a	GOOD	FAIR	LOW	LOW	10+	C 1
T 10	Mature Sycamore *Acer pseudoplatanus*	16	5	5 n/a	73	6 6 6 7	Twin-stemmed at 7m with a balanced crown. Occasional pruning wounds, some with decay.	Monitor biennially. Low	GOOD	FAIR	MOD	MOD	20+	1 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
G 11	Early-mature to mature Mixed *Details in observations*	To 18	0+	0+ n/a	To 80#	See plan	Situated on adjacent land. Sycamore and English Oak of good form. Not fully inspected due to limited access.	No action required. n/a	GOOD	GOOD	MOD	MOD TO HIGH	40+	1 B 2
T 12	Early-mature Sycamore *Acer pseudoplatanus*	15	4	4 n/a	48 & 38	5 8 6 7	Twin-stemmed at ground level with a balanced yet sparse crown. Poor form. Possible weak union at the stem junction. Decay cavity at 3.5m.	Monitor biennially. Low	FAIR	FAIR	LOW	MOD	10+	C 1
T 13	Early-mature Common Ash *Fraxinus excelsior*	15	10	10 n/a	39	3 5 1 5	Single-stemmed and leaning with an unbalanced crown. Poor form. Torn branch stub noted.	Monitor biennially. Low	FAIR	FAIR	LOW	MOD	10+	C 1
H 14	Semi-mature Leylandii *X Cupressocyparis leylandii*	To 3	0+	0+ n/a	To 7	See plan	A maintained hedge. No major visible defects.	No action required. n/a	GOOD	GOOD	LOW	HIGH	10+	C 1
H 15	Semi-mature Beech *Fagus sylvatica*	To 2	0+	0+ n/a	To 7	See plan	A maintained hedge. No major visible defects.	No action required. n/a	GOOD	GOOD	LOW	MOD	10+	C 1
T 16	Early-mature Magnolia *Magnolia sp.*	6	1	2 n/a	30	4 5 4 4	Twin-stemmed at 1m with a balanced crown. Occasional pruning wounds. No major visible defects. Minor stubs noted.	No action required. n/a	GOOD	GOOD	LOW	LOW	20+	1 B 2
H 17	Semi-mature Beech *Fagus sylvatica*	To 2	0+	0+ n/a	To 7	See plan	A maintained hedge. No major visible defects.	No action required. n/a	GOOD	GOOD	LOW	MOD	10+	C 1
T 18	Early-mature Cypress sp. *Cupressus sp.*	12	1	1 n/a	30	2.5 2.5 2.5 2.5	Single-stemmed and vertical with a balanced crown. No evidence of significant pruning. No major visible defects.	No action required. n/a	GOOD	GOOD	LOW	HIGH	20+	1 C 2
T 19	Semi-mature Cypress sp. *Cupressus sp.*	6	1	1 n/a	15	1 1 1 1	Single-stemmed and vertical with a balanced crown. Dead tree.	Remove. Low	DEAD	DEAD	DEAD	N/A	Dead	U
T 20	Semi-mature Robinia *Robinia pseudoacacia*	9	4	4 n/a	18	4 3 3.5 2	Single-stemmed and vertical with an unbalanced crown. Poor form.	No action required. n/a	GOOD	FAIR	LOW	MOD	10+	1 C 2

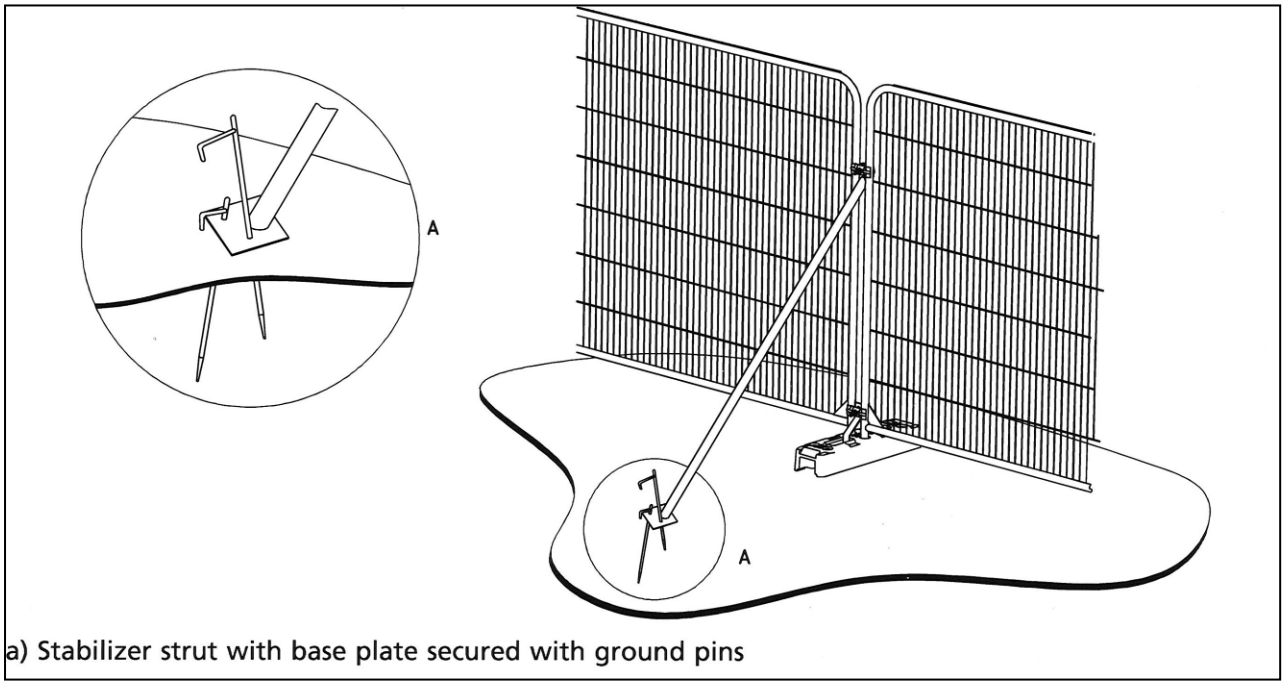
Tree Ref.	Age Common Name *Botanical Name*	Height (m)	Crown Height (m)	Height (m) and Direction of the Lowest Branch	Diameter (cm)	Crown Spread N W E S	Observations	Recommendations Priority	Physiological Condition	Structural Condition	Amenity Value	NHBC Water Demand	Life Expectancy (yrs)	Retention Category
G 21	Semi-mature Mixed *Details in observations*	To 4	0+	0+ n/a	To 20	See plan	Ornamental garden trees. Juniper sp., Japanese Maple and Cypress sp. Of reasonable form.	Remove to facilitate the proposed development. n/a	GOOD	GOOD	LOW	MOD TO HIGH	20+	1 C 2
T 22	Early-mature Cypress sp. *Cupressus sp.*	13	2	2 n/a	32	3.2 3.2 3.2 3.2	Single-stemmed and vertical with a balanced crown. No evidence of significant pruning. No major visible defects.	Remove to facilitate the proposed development. n/a	GOOD	GOOD	LOW	HIGH	20+	1 C 2
T 23	Early-mature Holly *Ilex aquifolium*	14	3	5 n/a	40	3 3 3 3	Twin-stemmed at 2.5m with a balanced crown. Occasional pruning wounds. No major visible defects. Previously topped.	Remove to facilitate the proposed development. n/a	GOOD	GOOD	LOW	LOW	20+	1 C 2
T 24	Early-mature Yew *Taxus baccata*	1.8	0	0 n/a	20	1.5 1.5 1.5 1.5	Multi-stemmed at ground level with a balanced crown. No evidence of significant pruning. No major visible defects.	Remove to facilitate the proposed development. n/a	GOOD	GOOD	LOW	MOD	20+	C 1
G 25	Early-mature Mixed *Details in observations*	To 15	0+	0+ n/a	To 58	See plan	Norway Spruce and Cypress sp. Of vertical and balanced form. No major visible defects.	Remove to facilitate the proposed development. n/a	GOOD	GOOD	MOD	MOD TO HIGH	20+	1 C 2
G 26	Semi-mature Mixed *Details in observations*	To 2.5	0+	0+ n/a	To 10	See plan	A dense mass of trimmed Beech and Rhododendron bushes.	Remove to facilitate the proposed development. n/a	GOOD	GOOD	LOW	LOW TO MOD	20+	1 C 2
T 27	Semi-mature Sycamore *Acer pseudoplatanus*	This tree has been removed since the previous survey which was undertaken in 2019.												
T 28	Semi-mature Holly *Ilex aquifolium*	13	2	2 n/a	18 x 3	3 3 3 3	Multi-stemmed at 1m with a balanced crown. No major visible defects.	No action required. n/a	GOOD	GOOD	LOW	LOW	20+	1 C 2
G 29	Semi-mature Cypress sp. *Cupressus sp.*	To 12	0+	0+ n/a	To 28	See plan	Two trees of vertical and balanced form. No major visible defects.	No action required. n/a	GOOD	GOOD	LOW	HIGH	10+	1 C 2
G 30	Semi-mature to mature Mixed *Details in observations*	To 18	0+	0+ n/a	To 70#	See plan	A linear boundary group of Sycamore, Horse Chestnut, Holly, Common Ash, Yew, Common Lime and Norway Maple of good form. Not fully inspected due to basal vegetation.	Prune back to provide 2m clearance between the canopy and the proposed garage. Root prune the area shown in blue shade on the plan at **Appendix 4** under arboricultural supervision. n/a	GOOD	GOOD	MOD	MOD	20+	1 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 31	Early-mature Apple *Malus sp.*	5	1	1 n/a	20	2 2 2 2	Single-stemmed and vertical with a balanced crown. Dead tree located within G30.	Remove. Low	DEAD	DEAD	DEAD	N/A	Dead	U
G 32	Semi-mature Mixed *Details in observations*	To 6	0	0 n/a	To 15	See plan	Rowan and Sycamore of poor form located within G30. Limited long term future.	No action required. n/a	GOOD	FAIR	LOW	MOD	10+	C 1
T 33	Semi-mature Common Alder *Alnus glutinosa*	15	11	11 n/a	26	3 2 4 4	Single-stemmed and vertical with an unbalanced crown. Significant decay present at 6m. Snapped out leader in high crown.	Remove. Low	FAIR	POOR	LOW	MOD	<10	U
H 34	Semi-mature Beech *Fagus sylvatica*	To 2	0+	0+ n/a	To 7	See plan	A maintained hedge. No major visible defects.	No action required. n/a	GOOD	GOOD	LOW	MOD	10+	C 1
T 35	Early-mature Cypress sp. *Cupressus sp.*	16	2	3 n/a	38	2.5 2.5 2.5 2.5	Single-stemmed and vertical with a balanced crown. No evidence of significant pruning. No major visible defects.	No action required. n/a	GOOD	GOOD	LOW	HIGH	20+	C 1 2
T 36	Early-mature Cypress sp. *Cupressus sp.*	16	1	2 n/a	40	2.6 2.6 2.6 2.6	Twin-stemmed at 2m with a balanced crown. Included bark present at the stem junction.	Monitor biennially. Low	GOOD	FAIR	LOW	HIGH	10+	C 1 2
H 37	Semi-mature Beech *Fagus sylvatica*	To 2	0+	0+ n/a	To 7	See plan	A maintained hedge. No major visible defects.	Remove the section shown in red on the plan at **Appendix 4**. n/a	GOOD	GOOD	LOW	MOD	10+	C 1
G 38	Semi-mature Mixed *Details in observations*	To 13	0+	0+ n/a	To 20	See plan	Pencil Cedar and Juniper sp. of reasonable form. No major visible defects.	No action required. n/a	GOOD	GOOD	LOW	NO DATA	20+	C 1 2
G 39	Semi-mature to mature Mixed *Details in observations*	To 17	0+	0+ n/a	To 55	See plan	Sycamore and Common Alder left unbalanced following the recent removal of adjacent trees. Moderate deadwood noted.	Crown clean to remove the deadwood. Monitor biennially. Low	GOOD	FAIR	LOW	MOD	10+	C 1 2
G 40	Semi to early-mature Holly *Ilex aquifolium*	To 14	0+	0+ n/a	To 28	See plan	A dense mass of trees of generally multiple-stemmed form. No major visible defects.	No action required. n/a	GOOD	FAIR	LOW	LOW	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
G 41	Semi-mature to mature Mixed *Details in observations*	To 13	0+	0+ n/a	To 28	See plan	Three trees of poor individual form.	No action required. n/a	GOOD	FAIR	LOW	LOW	10+	1 C 2
T 42	Semi-mature Cypress sp. *Cupressus sp.*	11	0+	0+ n/a	18	1.6 1.6 1.6 1.6	Single-stemmed and vertical with a balanced crown. No major visible defects.	Remove to facilitate the proposed development. n/a	GOOD	GOOD	LOW	HIGH	20+	1 C 2
G 43	Semi to early-mature Mixed *Details in observations*	To 17	1	2 n/a	To 78	See plan	Located partly in adjacent land. A boundary group of Sycamore, Horse Chestnut, Common Lime and Norway Maple of reasonable form. Deadwood, decay cavities and included bark noted throughout. Some trees have been previously topped.	Crown clean to remove the deadwood. Monitor biennially. Remove the three trees shown in red on the plan at **Appendix 4**. Low	GOOD	FAIR	MOD	MOD	20+	1 B 2
G 44	Early-mature Mixed *Details in observations*	To 9	0+	0+ n/a	T0 38	See plan	Sycamore and Common Lime of very poor form. Decay noted on the Sycamore. Limited long term future.	Remove. Low	FAIR	POOR	LOW	MOD	<10	U
T 45	Mature Cypress sp. *Cupressus sp.*	18	0	0 n/a	50 & 50	3.5 3.5 3.5 3.5	Twin-stemmed at ground level with a balanced crown. Of a very poor form with heavy growth above a weak stem junction which has the potential to split out at the base. Limited long term future.	Remove. Low	FAIR	POOR	MOD	HIGH	<10	U

Appendix 2: Protective Barrier

A2.1 An example of the above-ground stabilisation system recommended for use within this report.



a) Stabilizer strut with base plate secured with ground pins

TREE PROTECTION ZONE

KEEP OUT!

TREES ENCLOSED BY THIS FENCE ARE PROTECTED
BY STRICT PLANNING CONDITIONS

ANY DAMAGE CAUSED TO THESE TREES MAY
RESULT IN **CRIMINAL PROSECUTION**

RESTRICTED AREA:

- THE PROTECTIVE FENCE MUST NOT BE MOVED OR BREACHED
- NO PERSON, MACHINERY, VEHICLE OR PLANT IS PERMITTED WITHIN THE TREE PROTECTION ZONE
- NO MATERIALS SHALL BE STORED WITHIN THE TREE PROTECTION ZONE
- NO EXCAVATIONS ARE PERMITTED WITHIN THE TREE PROTECTION ZONE
- NO SPOIL IS TO BE DEPOSITED WITHIN THE TREE PROTECTION ZONE
- NO FIRES ARE TO BE LIT WITHIN THE TREE PROTECTION ZONE

REPORT TREE DAMAGE TO JCA LIMITED ON
01422 376 335

Appendix 3: Utilities and Drainage

A3.1 Over-ground services should be routed away from areas where they are likely to interfere with the crowns of trees. Similarly any landscaping should take account of over-ground services and mature tree size.

A3.2 Underground services must be routed outside the RPA of retained trees, unless otherwise specified within this report. NJUG Volume 4 Issue 2 (on the next page) is a set of accepted guidelines for installing services in the proximity of trees. Please note that this is not a substitute for site-specific advice by an arboriculturalist and consultation should be made wherever incursions of RPAs are envisaged. The contents of this report, specifically **Section 4.5**, supersede the set of guidelines on the next page, which are only included for reference.

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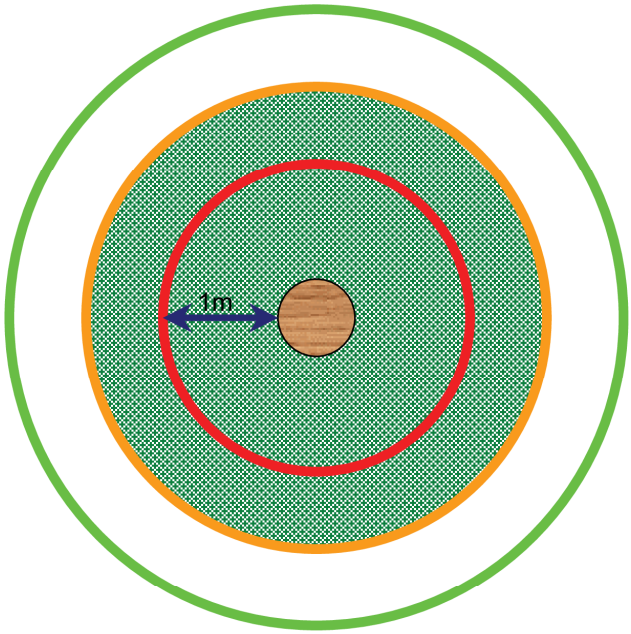
The National Joint Utilities Group

NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees – Issue 2



TREE PROTECTION ZONE

Key to Diagram

Trunk of Tree

Spread of canopy or branches

PROHIBITED ZONE – 1m from trunk. Excavations of any kind must not be undertaken within this zone unless full consultation with Local Authority Tree Officer is undertaken. Materials, plant and spoil must not be stored within this zone.

PRECAUTIONARY ZONE – 4 x tree circumference. Where excavations must be undertaken within this zone the use of mechanical excavation plant should be prohibited. Precautions should be undertaken to protect any exposed roots. Materials, plant and spoil should not be stored within this zone. Consult with Local Authority Tree Officer if in any doubt.

PERMITTED ZONE – outside of precautionary zone. Excavation works may be undertaken within this zone however caution must be applied and the use of mechanical plant limited. Any exposed roots should be protected.

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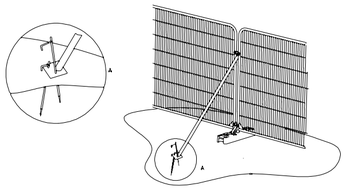
An example of an above-ground stabilizing system

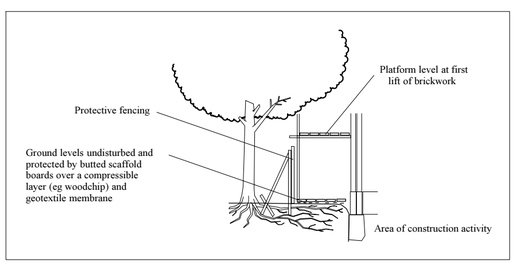


A stabilizer strut with the base plate secured with ground pins





An example of scaffolding within the RPA



THIS PLAN IS TO BE PRINTED IN COLOUR AND READ IN CONJUNCTION WITH THE JCA ARBORICULTURAL REPORT (JCA REF: 18185/AJB)

TREE PROTECTION MEASURES

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

UNLESS OTHERWISE STATED IN THE ARBORICULTURAL METHOD STATEMENT, THE RPA NEEDS TO REMAIN UNDISTURBED.

TO ACHIEVE THIS, PROTECTIVE FENCING WILL BE INSTALLED TO ENCLOSE THE RPA TO MAKE A CONSTRUCTION EXCLUSION ZONE (CEZ);

THIS AREA IS TO BE CONSIDERED A RESTRICTED AREA; NO PEDESTRIANS, VEHICLES, THE STORAGE OF MATERIALS, EQUIPMENT OR MACHINERY ARE ALLOWED WITHIN THE CEZ, UNLESS SPECIFIED WITHIN THE ARBORICULTURAL METHOD STATEMENT.

WHERE IT IS NOT POSSIBLE TO ENCLOSE THE RPA WITH THE PROTECTIVE FENCING, GROUND PROTECTION MEASURES WILL NEED TO BE LAID TO MINIMIZE ANY GROUND COMPACTION AND ANY DISTURBANCE TO THE UNDERLYING SOIL.

THE PROTECTIVE BARRIER WILL BE INSTALLED PRIOR TO ANY CONSTRUCTION ACTIVITIES TAKING PLACE AND WILL BE RETAINED IN PLACE UNTIL THE MATERIAL COMPLETION OF DEVELOPEMNT.

IT IS IMPORTANT THAT THE PROTECTIVE BARRIER IS CHECKED BY THE LPA OR THE ARBORICULTURAL CONSULTANT PRIOR TO ANY CONSTRUCTION WORKS BEING CARRIED OUT. IF THE TREE PROTECTION MEASURES ARE NOT CORRECTLY INSTALLED OR IF THEY DO NOT COMPLY WITH BS 5837: 2012, THIS COULD RESULT IN DAMAGE BEING CAUSED TO TREES AND CONSEQUENTLY A STOP NOTICE MAY BE SERVED BY THE LPA.

Appendix 4: Tree Protection Plan

ADDRESS: 33 Woodside Lane, Fixby, Huddersfield, West Yorkshire, HD2 2HA.
JCA REF: 18185-A/AJB.

SCALE: 1:500	PAPER SIZE : A2

SURVEYED BY: AJB	DRAWN BY: AJB	APPROVED BY: CC

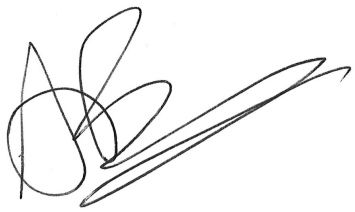
	TREE TO BE RETAINED
	TREE TO BE REMOVED
	STEM OF TREE TO BE RETAINED
	STEM OF TREE TO BE REMOVED
	ROOT PROTECTION AREA (RPA)
	PROTECTIVE FENCE LINE (CEZ)
	LOCATION WHERE GROUND PROTECTION MEASURES ARE REQUIRED
	AREA OF RPA ENCROACHED BY THE PROPOSED GARAGE WHERE ROOT PRUNING UNDER ARBORICULTURAL SUPERVISION MUST BE UNDERTAKEN.

JCA Limited

Arboricultural & Ecological Consultants

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



.....

Andrew Bussey *LANTRA Accredited PTI.*

25th February 2022

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

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JCA Ltd. Arboricultural and Ecological Consultants
Professional Tree and Ecology Advice nationwide

ARBORICULTURAL SERVICES

Guidance for Architects and Developers

- British Standard 5837 Tree Surveys
- Arboricultural Implication Assessments (AIA)
- Arboricultural Method Statements (AMS)

Advice for Engineers, Loss Adjusters and Insurers

- Tree Surveys for Subsidence
- 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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Barkisland,
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