ARBORICULTURAL METHOD STATEMENT
to BS 5837:2012
for
6 Woodroyd Gardens
Barnsley
South Yorkshire
S73 0HB

Client:
Mr & Mrs Tranter

Client Address:
6 Woodroyd Gardens
Barnsley
West Yorkshire
S73 0HB

JCA Ref:
14900d/PH



JCA Limited
Arboricultural & Ecological Consultants

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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 **6 Woodroyd Gardens, Wombwell**.

1.2 Terms of Reference

1.2.1 JCA Limited is instructed by **Mr & Mrs Tranter** to prepare an Arboricultural Method Statement for the proposed development, based on our arboricultural impact report dated 17th May 2021 (JCA Ref: **14900c/PH**). The arboricultural survey 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 a new garage attached to the existing building and a single storey extension to the rear of the property.

1.2.3 The following drawings/construction details have been provided and these are the basis of the Arboricultural Method Statement and the Tree Protection Plan at **Appendix 5**:

- Development Layout (Drawing Ref. **202028 SL BLk Plans Clean.dwg**).

1.2.4 The development layout has been provided by our client and is the basis for the Tree Protection Plan at **Appendix 4**.

- No construction work is to proceed until an arboricultural method statement is formalised and agreed upon with the Local Planning Authority.
- The method statement shall include a detailed programme for timescales for carrying out works before, during and after the construction phase of the proposed development.

1.2.5 Therefore, planning consent is subject to this method statement being agreed upon in advance by the Local Planning Authority. The contents of this report must be adhered to, before, during, and after the construction phase.

1.3 Status of the Method Statement

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

1.3.2 This Arboricultural Method Statement should be available on site for inspection by the local authority, contractors and any 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 pruning of **G2**, for arboricultural reasons.

2.2 Tree Works During Construction

2.2.1 In this case, no above ground tree works are envisaged to be required during 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 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 the structure within the RPA of **G2** and **T3**. This operation will be undertaken during the construction phase and will be carried out by the appointed arboriculturalist.

2.2.5 For this method, the closest point of the proposed structure 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 hand-dug trench will then be excavated along this line, to a minimum depth of 500mm and to a width of approximately 300mm. Any roots exposed during this operation will be cleanly severed using appropriate hand tools (e.g. sanitised hand saws or bypass secateurs), where less than 25mm in diameter. Roots greater than 25mm in diameter will be retained in situ until the required excavation depth has been completed. Once the excavations are completed, any roots greater than 25mm will be retained wherever it is viable to do so. Those roots which are not deemed viable for retention will be cleanly severed, as above.

2.2.6 Once this operation is complete and the protective measures re-aligned, no further arboricultural supervision will be required.

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2.3 Tree Works Post Construction

2.3.1 When the construction phase is completed and when the temporary protective fencing has been removed, some minor remedial works may be required. This may be for aesthetic purposes, to give clearance for new paths or to provide ground clearance for landscaping schemes.

2.3.2 Any post construction remedial works must be applied for via a tree work application submitted to the Local Planning Authority.

2.3.3 No post construction remedial works are to be carried out on the trees until permission has been granted by the Local Planning Authority.

2.4 Recommendations For Tree Works

2.4.1 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.

2.4.2 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.

2.4.3 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.

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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 may comprise of protective fencing, ground protection, or a combination of both, 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 1)** 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**.

3.2 Checking the Protective Barrier Prior to Construction

3.2.1 Once installed, the appointed arboriculturalist will be invited on site to inspect the protective fencing, ensuring that it is 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.

3.2.2 It is important that the protective fencing be checked by an 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.**

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3.3 Protective Barrier During Construction

3.3.1 To accommodate root pruning within the RPA of **G2** and **T3**, the protective fencing will be temporarily set back from the position marked on the Tree Protection Plan at **Appendix 4**, to provide at least 1m of suitable working space for the required operations. Once work is complete in this area, the protective fencing will be re-aligned back to its original position.

3.3.2 The protective fencing 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**.

3.4 Removal of the Protective Barrier

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

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

4. Construction Phase

4.1 Demolition Works

4.1.1 No 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 In this case, no new hard surfaces are proposed within the RPA of retained trees. As such, no specialist mitigation actions are required.

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4.4 Construction of New Buildings

4.4.1 In this case, no specialist foundation methods are considered necessary for arboricultural purposes. However, the RPAs of **G2** and **T3** are situated within the footprint of proposed structure, and as such root pruning will be required in accordance with **Section 2.2**, to avoid the need for specialist foundations.

4.5 Excavations and Services

4.5.1 Utilities should be situated to the south side of the dwelling to avoid encroachment into the RPA's of retained trees. 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.

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

4.6 Location of the Site Compound

4.6.1 The site compound, typically including the site office, 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 Completion Meeting

5.1.1 Upon completion of the works as specified in **Section 4**, a JCA consultant will invite the Local Planning Authority representative to meet with them on site to agree on any remedial works which may be required.

5.1.2 Any necessary remedial tree works will be confirmed in writing and must be carried out in accordance with BS 3998: 2010 - *Recommendations for tree work*.

5.1.3 Due to the large potential penalties for illegally carrying out work to protected trees, JCA recommend that a further check is carried out prior to any works being undertaken post development.

5.2 Post Construction Landscaping

5.2.1 Following completion of the main construction phase, the protective fencing may be removed, and the landscaping phase can begin.

5.2.2 The proposals include for the installation of new boundary fencing. 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 and be driven in by hand.

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

5.2.4 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.

5.3 Mycorrhizal Fungi Inoculation

5.3.1 As the proposed development will encroach into the RPA of **G2** and **T3**, likely 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.

5.3.2 Certain *mycorrhizae* 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	Have the Local Planning Authority or Arboricultural Consultant inspect the fencing **prior** to any on site construction activity.		
Stage 5	After marking out the garage buiolding, the fencing will be set back by 1m to enable excavations 500mm wide by 500mm deep to be undertaken to determine the presence or absence of roots. Any roots encountered will be cleanly severed by the appointed arboriculturalist.		
Stage 6	Following excavations, the protective fencing will be returned to its original location and must not to be moved or breached.		
Stage 7	***Construction Phase:*** Undertake the construction of the new garage and extension building whilst undertaking suitable measures to avoid damage and soil compaction.		
Stage 8	Completion Meeting (see **Section 5**).		
Stage 9	Following the completion of the construction phase and when all site traffic and machinery has left, the protective fencing can be removed.		
Stage 10	Post construction remedial tree works to be undertaken including *Mycorrhizal* inoculation.		

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7. Relevant Contact Details

Contact Name	Organisation/Detail	Contact Number
Phil Humeniuk Arboricultural Consultant	JCA Limited	01422 376335
TBC Tree Officer	Barnsley Metropolitan District Council	01226 770770
TBC Site Manager	TBC	TBC
John Early Architect	JE Architectural Ltd	01226 754507

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Appendices

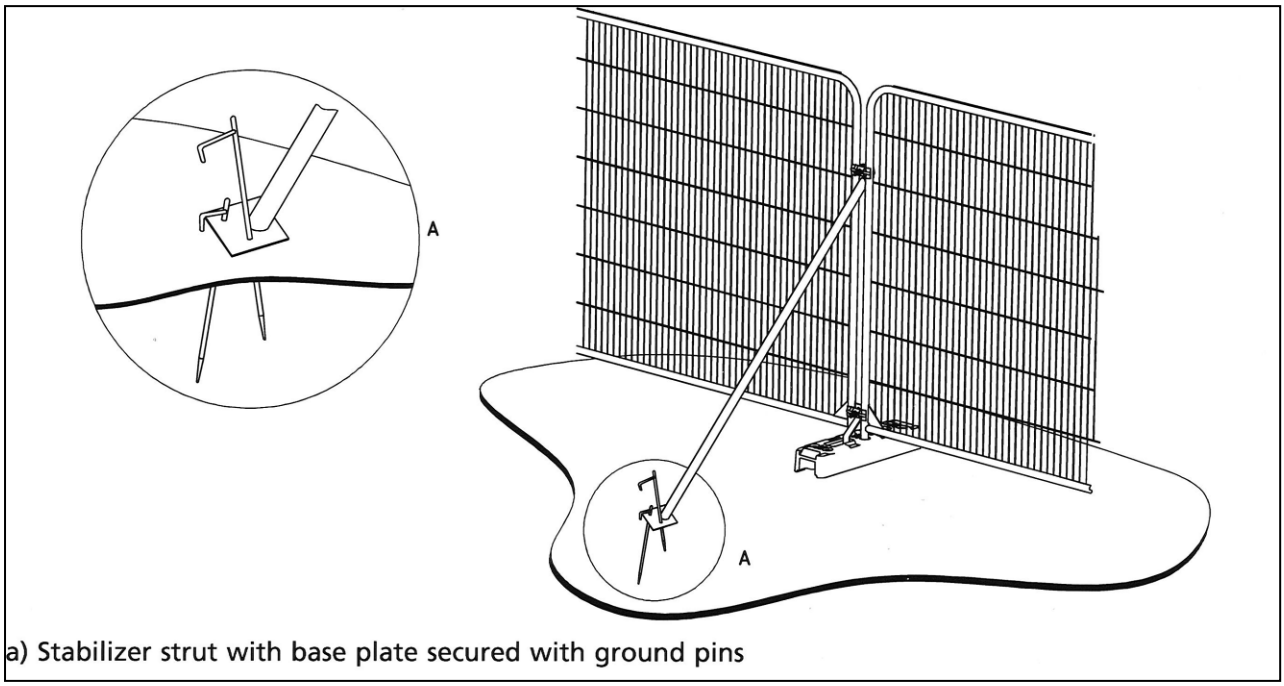
Appendix 1: Tree Works Schedule

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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	Early-mature Magnolia *Magnolia sp*	6.5	2.5	3 SW	15 14	2.5 3.5 5 4.5	Multi-stemmed with an unbalanced canopy due to competition. Occasional historic pruning wounds noted. Good vitality.	No action required n/a	GOOD	GOOD	LOW	MOD	40+	B 2
G 2	Early-mature Mixed *Details in observations*	7	3	4 N	10 11 9 12	See plan	Species include variegated Holly, Birch, Purple Filbert, Camellia, Cypress & Yew. No evidence of significant pruning.	Coppice Filbert at 0.2m *Potential for root pruning*	GOOD	GOOD	LOW	LOW	20+	C 2
T 3	Early-mature Magnolia *Magnolia sp*	7	3	3 W	15 19	2 4 0 4.5	Twin-stemmed at 0.1m with an unbalanced canopy due to historic competition. Occasional historic pruning wounds noted.	No action required *Potential for root pruning*	GOOD	GOOD	LOW	MOD	40+	B 2
T 4	Early-mature Beech *Fagus sylvatica*	18	6	7 N	59	7.5 8 #6 8.5	Single stemmed becomes twin-stemmed at 4m with a good union and slightly asymmetric canopy. Potential ground level increase.	Re-inspect biennially to assess for signs of decline High	GOOD	FAIR	MOD	MOD	20+	B 2
G 5	Semi to early-mature Mixed *Details in observations*	to 17	4	4 W	up to 38	See plan	Predominantly Beech & Holly with Purple Beech and occasional Oak noted further south. Occasional Ivy and Cherry Laurel observed. Potential ground level increase.	Re-inspect biennially to assess for signs of decline High	GOOD	FAIR	MOD	MOD to HIGH	20+	B 2
T 6	Early-mature Beech *Fagus sylvatica*	19	6	2 S	79	10 11.5 #9 9.5	Single stemmed with a balanced canopy. Occasional pruning wounds and stubs noted. Potential ground level increase.	Re-inspect biennially to assess for signs of decline High	GOOD	FAIR	MOD	MOD	40+	B 2

Appendix 2: Protective Barrier

A2.1 Figure 1: An example of above-ground stabilisation systems. To be used on this site.



a) Stabilizer strut with base plate secured with ground pins

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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

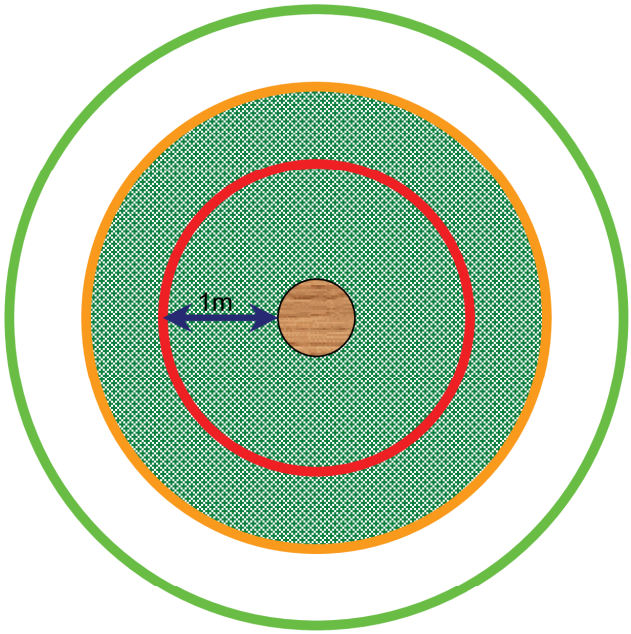
A3.1 Over-ground services should be routed away from areas where they are likely to interfere with the crowns of trees. Similarly any landscaping should take account of over-ground services and mature tree size.

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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Appendix 4: Tree Protection Plan

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N
W E
S

T1
G2
Denotes Garage
T3
T4
G5
92
T6
6
WOODROYD
Denotes Single
Storey Extension
GARDENS

TREE PROTECTION MEASURES

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

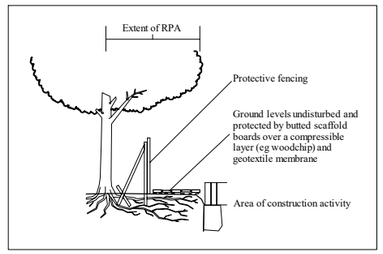
UNLESS OTHERWISE STATED IN THE ARBORICULTURAL METHOD STATEMENT, THE RPA NEEDS TO REMAIN UNDISTURBED.

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

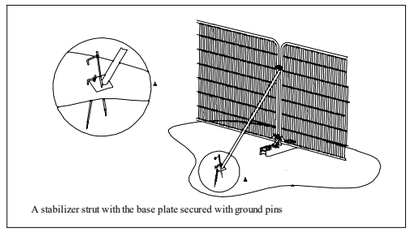
THIS AREA IS TO BE CONSIDERED A RESTRICTED AREA; NO PEDESTRIANS, VEHICLES, THE STORAGE OF MATERIALS, EQUIPMENT OR MACHINERY ARE ALLOWED WITHIN THE CEZ. UNLESS SPECIFIED WITHIN THE ARBORICULTURAL METHOD STATEMENT.

IT IS IMPORTANT THAT THE PROTECTIVE FENCING 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.

An example of a walkway within the RPA



An example of an above-ground stabilizing system



A stabilizer strut with the base plate secured with ground pins

Appendix 4: Tree Protection Plan

ADDRESS: 6 WOODROYD CLOSE WOMBWELL, BARNSLEY, S73 0HB
JCA REF: 14900d/PH

SCALE: 1:200	PAPER SIZE : A3

SURVEYED BY: PH	DRAWN BY: PH	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)
	AREA OF RPA ENCROACHED BY THE DEVELOPMENT: POTENTIAL FOR ROOT PRUNING UNDER ARBORICULTURAL SUPERVISION
	PROTECTIVE FENCE LINE (CEZ)
	PROPOSED NEW DEVELOPMENT

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

P. Humeniuk

.....

Phil Humeniuk *FdSc (Arboriculture)*, *LANTRA Accredited PTI.*

18th May 2021

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

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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)



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