TREE CONSULTANTS

ARBORICULTURAL METHOD STATEMENT

to BS 5837:2012 at

Moor End Cottages
Moorend Lane
Silkstone Common
Barnsley
S75 4RW

This document describes how the trees will be protected and managed during the development of this site. It explains how and when the protection measures must be installed and maintained throughout the development.

A copy of this document report must be permanently available on site for the duration of all development activity and should be referenced for practical guidance on how to protect the retained trees at this site.

Prepared for:
Garry Greetham Associates
Westwood House
18 Carr Lane
Tankersley
Barnsley
S75 3BE

Date: *April 2020*
Reference: *AWA3116AMS*

Institute of Chartered Foresters
Registered Consultant

Office: 0114 272 1124 Mobile: 0776 631 0880 Email: info@awatrees.com Website: awatrees.com
Union Forge, 27 Mowbray Street, Sheffield, S3 8EN. AWA Tree Consultants Limited. Company No. 8520123. Registered in England & Wales.

Contents

1. INTRODUCTION 3

2. METHOD STATEMENT TIMELINE 4

3. TREE MANAGEMENT 6

4. TREE PROTECTION 6

5. SIGNATURE 9

APPENDIX 1: IMAGES AND FIGURES 10

APPENDIX 2: RELEVANT CONTACT DETAILS 13

APPENDIX 3: TREE DATA 14

APPENDIX 4: TREE PROTECTION PLAN 15

1. Introduction

1.1 Instruction

1.1.1 We have been instructed by Garry Greetham Associates to prepare an arboricultural method statement for the proposed development at:

- **Moor End Cottages, Moorend Lane, Barnsley, S74 4RW**

1.2 Purpose

1.2.1 This method statement has been prepared in order to demonstrate that the development operations at this site can be undertaken with minimal risk of adverse impact on the trees to be retained.

1.2.2 This method statement conforms to BS 5837:2012 *Trees in relation to design, demolition and construction - Recommendations*. It is based on the arboricultural data, collected at a site visit during March 2020, detailed within Appendix 3 of this report.

1.3 Description of Development

1.3.1 It is proposed to build a new residential development with associated access, landscaping and facilities. The proposed development layout has been provided by my client and is the basis for the Tree Protection Plan (TPP) at Appendix 4.

1.4 Details of Consent

1.4.1 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.

1.4.2 As such, no equipment, machinery or materials shall be brought onto the site in connection with the development until this arboricultural method statement detailing tree management and tree protection measures has been submitted to and approved by the Local Planning Authority.

2. Method Statement Timeline

2.1 Overview of Sequence of Operations

2.1.1 In overview, it is necessary to undertake the following sequence of operations in relation to arboricultural input for development operations.

1 Method Statement approved by the LPA.

2 Undertake removal of trees, as detailed in Appendix 3.

3 Install tree protective fencing.

4 Pre commencement meeting / confirm fencing and tree protection is as specified.

5 Construction of new development.

6 Removal of tree protection.

2.2 Specific Sequence of Operations

2.2.1 The following timeline table informs the key principles for development operations proceeding in relation to arboricultural requirements conditioned as part of this method statement.

2.2.2 The actions and timescales within this table must be adhered to in order to discharge the arboricultural method statement planning condition for this site.

2.2.3 The precise timing and order of some of the development operations may need to be changed due to site specific operational requirements, yet any operations that may affect the trees on the site must be done so under arboricultural supervision by a suitably qualified person appointed by the contractor.

Sequence of Operations		
Stages	***Action***	***Arboricultural Input***
1 Approval	This AMS is submitted to and approved in writing by the LPA.	If necessary, liaise with contractor and LPA to discuss methodologies detailed.
2 Tree Works	Tree removals shall be carried out as the first operation on site, in accordance with Appendix 3 and as detailed in section 3.1.	Review the tree work requirements with the tree contractor. If necessary, liaise with the contractor on site during tree works.
3 Tree Protection	Installing the tree protective fencing will take place prior to any storage of plant, materials and machinery. As shown at Appendix 4.	If necessary, liaise with the contractor installing the protective until completed to the standard specified in this method statement.
4 Site Meeting	Following installation of tree protective fencing, the LPA shall be invited to inspect the fencing and tree works, and discuss any other site operations that have implications for trees.	Meeting with a representative of the LPA and the site manager. Alternatively, contractor can confirm the fencing and tree works are as specified by taking photographs of the tree protection measures.
5 Construction	Undertake the construction of the new development.	If necessary, liaise with the local authority and the site foreman to ensure any issues are adequately resolved.
6 Site Finishing	Removal of tree protective fencing must only be undertaken when all site traffic and machinery has left the site.	If acceptable to the LPA, the contractor can take photos of the site to give to the LPA to gain approval for the removal of protective fencing.

3. Tree Management

3.1 Tree Works

3.1.1 The development will require the removal of 2 trees (T4 and T22).

3.1.2 The trees requiring removal are highlighted in red on the plan at Appendix 4 and as detailed in the tree data schedule at Appendix 3.

3.1.3 All tree work should be carried out according to British Standard 3998:2010 Tree Work - Recommendations.

3.1.4 When appointing a tree surgeon, only properly qualified and experienced companies should be used, who have adequate Public Liability and Employer's Liability Insurance.

4. Tree Protection

4.1 Tree Protection Fencing

4.1.1 The protective fencing for this site should be located as shown on the Tree Protection Plan (TPP) at Appendix 4 (as illustrated with a thick purple line).

4.1.2 The precise fencing location may need to be slightly adjusted on site due to local site conditions, but is not expected to differ from that shown on the TPP. The final fencing position must be agreed on by the LPA before the commencement of any site works.

4.1.3 The tree protective fencing details should be incorporated into relevant subsequent plans, method statements used for design purposes and construction drawings issued for use on site, to ensure that all interested parties are fully aware of the areas in which access and works may and may not take place.

4.1.4 The protective fencing will be appropriate to the degree and proximity of likely construction works. In this instance, the default BS5837:2012 tree protection fencing is deemed disproportionate. It is suggested (if acceptable by the LPA) an adequate level of protection for the trees could be provided by 'Heras' type fencing, of welded mesh panels on rubber or concrete feet.

4.1.5 The fencing should be joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from inside the fence. The fencing panels should be supported on the inner side by stabilizer struts, which should normally be attached to a base plate secured with ground pins or mounted on a block tray (see Appendix 1 for an example).

4.1.6 The area enclosed by the fencing is referred to as the Construction Exclusion Zone (CEZ); this area should be considered a restricted area. No pedestrians, vehicles, storage of materials, equipment or machinery should be allowed with the CEZ unless specified within this method statement. The site manager must ensure that all personnel are aware of the restrictions that apply to the fenced-off area.

4.1.7 Once the fencing is erected, waterproof warning signs labelled '*Tree Protection Area'* should be placed at 3m intervals to ensure that all personnel are aware of the restrictions that apply to the fenced-off area (see Appendix 1 for an example sign).

4.1.8 The protective fencing should 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 should be repaired or replaced as soon as is reasonably practicable. The Tree Protection Fencing shall not be removed, breached or altered without prior written authorisation from the local planning authority and under arboricultural supervision by a suitable named responsible individual appointed by the site manager.

4.2 Drainage and Utilities

4.2.2 Drainage and utilities are to be directed away from the retained trees. Over-ground services should ideally be routed away from areas where they are likely to interfere with the crowns of mature trees. New underground services should be grouped together and routed away from RPAs. *NJUG 10: Guidelines for the Planning, Installation and Maintenance of Utility Services in Proximity to Trees* should be considered when installing services.

4.3 Additional Precautions

4.3.2 Allowance should be made for operations outside of the CEZ that could indirectly impact on trees. Including space for site huts, temporary toilet facilities (including their drainage) and other temporary structures; and space for storing (whether temporary or long-term) materials.

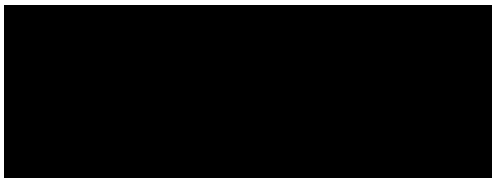
4.3.3 Care must be taken to prevent contamination with chemical spillages, including petrol, diesel and oils. Cement mixers and any other toxic materials should not be permitted within the RPA of the trees. Any materials whose accidental spillage would cause damage to a tree should be stored and handled well away from the outer edge of its RPA.

4.3.4 Fires on the site should be avoided if possible. Where they are unavoidable, and approved by the Local environmental health authority, they should not be lit in a position where heat could affect foliage or branches. The potential size of a fire and the wind direction should be considered when determining its location, and it should be attended always until safe enough to leave.

5. Signature

I trust this report provides all the required information.

Signed



…… ……

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

2nd April 2020

AWA Tree Consultants Limited
Union Forge
27 Mowbray Street
Sheffield
S3 8EN

www.awatrees.com

Appendix 1: Images and Figures

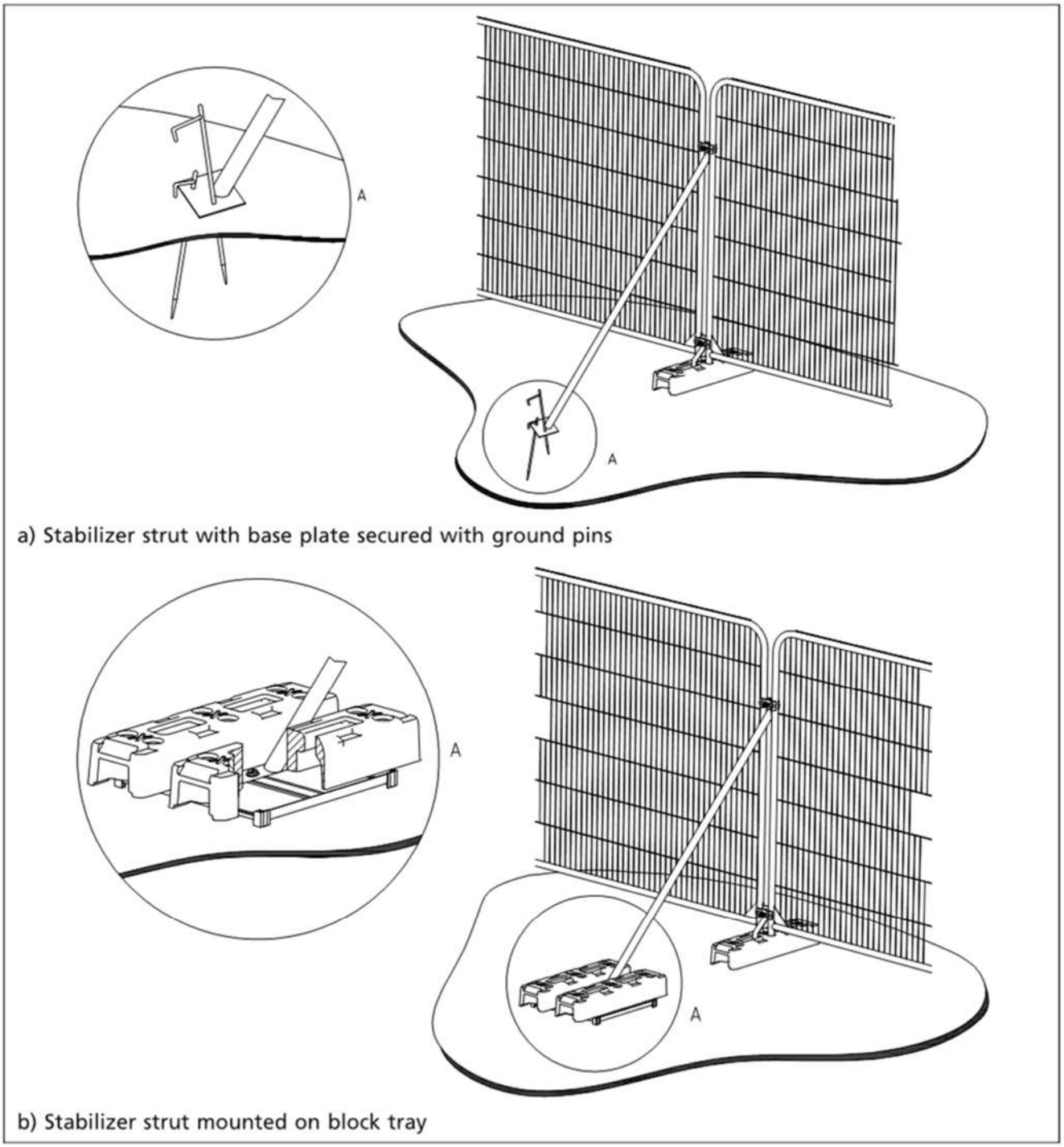


Figure 1: Secured 'Heras' type fencing with stabilizing system and fixed central pins (©BSI)



Figure 2: Secured 'Heras' type fencing with stabilizing system and anti-tamper couplers



Figure 3: Anti-tamper couplers to secure fencing and avoid unauthorised access



Figure 4: Warning sign for fencing



Figure 5: Example of A3 Correx Tree Protection Warning Sign fixed to fencing panel.

Appendix 2: Relevant Contact Details

Contact Name	Organisation/ Details	Contact Number	Contact E-mail
Garry Greetham	Garry Greetham Associates	01226 746573	garry@garrygreethamassociates.co.uk
Adam Winson	AWA Tree Consultants Ltd Aboricultural Consultant	0114 2721124	adam@awatrees.com
Edward Jowett	Barnsley Tree Officer Development Management	01226 772557	edwardjowett@barnsley.gov.uk

TREE DATA

	Tree Species			Measurements				Crown (m)					Tree Condition							Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Ave Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T1	Oak	*Quercus robur*	Mature	15	1	720	No	4	6	6.5	7	5	No visual defects, Limited rooting area	Single stemmed, Vertical, Old pruning wounds, Stubs, Epicormic growths, Moderate cavities, Minor decay	Old pruning wounds, Stubs, Minor cavities, Minor deadwood	Growing in small raised area between roadside & driveway. Several moderate cavities on main stem from large old pruning wounds.	Fair	Fair	>40 yrs	High	**B**	No works required
T2	Sycamore	*Acer pseudoplatanus*	Mature	15	1	520	No	3	4.5	3	2.5	4	No visual defects, Soil erosion	Single stemmed, Vertical, Tight union, Old pruning wounds, Epicormic growths, Ivy covered	Slightly unbalanced, Minor deadwood	Rhododendron shrubs at base.	Good	Fair	>40 yrs	Moderate	**B**	No works required
G3	Hawthorn	*Crataegus monogyna*	Semi-mature	2.5	10+	50 avg	No	0	See Plan				No visual defects	Multiple stemmed at base, Vertical, Old pruning wounds, Stubs, Tight union, Partially included bark	Old pruning wounds, Minor deadwood	Managed hedgerow. Southern side of the eastern half has recently been heavily pruned, down to 1.5m.	Fair	Good	>40 yrs	Low	**C**	No works required
T4	Ash	*Fraxinus excelsior*	Mature	13	1	760	No	3.5	4.5	4.5	6.5	5.5	No visual defects	Single stemmed, Slight lean, Old pruning wounds, Epicormic growths, Bark damage, Major cavity, Major decay	Old pruning wounds, Stubs, Minor cavities, Minor deadwood	Large open central cavity with significant decay on northern side of main stem from 1m to 2m. Barbed wire embedded in stem around the cavity. Limited long term value.	Fair	Poor	10 to 20 yrs	Moderate	**C**	Remove to facilitate development. Could be left as 5m tall habitat pole

AWA TREE CONSULTANTS

	Tree Species			Measurements				Crown (m)					Tree Condition							Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Ave Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
G5	Hawthorn	*Crataegus monogyna*	Semi-mature	2.5	10+	50 avg	No	0	See Plan				No visual defects	Multiple stemmed at base, Vertical, Stubs, Tight union, Partially included bark	Old pruning wounds, Minor deadwood	Managed hedgerow.	Fair	Good	>40 yrs	Low	**C**	No works required
T6	Sycamore	*Acer pseudoplatanus*	Early-mature	12	5	290, 280, 280, 240, 160	No	2	5	5.5	3.5	5	No visual defects, Soil erosion	Multiple stemmed at base, Vertical, Old pruning wounds, Epicormic growths, Minor cavities, Tight union, Bark damage	Normal, Minor deadwood	Growing either side of boundary fence. 2 further stems have been removed near the base, a plank has been nailed across the stumps.	Good	Fair	>40 yrs	Moderate	**C**	No works required
G7	Holly	*Ilex aquifolium*	Semi-mature	9	10+	120 avg	No	0.5	4	4	2	5.5	No visual defects	Single stemmed or Multiple stemmed at base, Vertical, Old pruning wounds, Tight union, Partially included bark	Old pruning wounds	3 trees forming a single crown. Smaller Elder & Holly saplings within the group.	Good	Fair	>40 yrs	Moderate	**C**	No works required
T8	Oak	*Quercus robur*	Semi-mature	7.5	1	180	No	1.5	2.5	3	3	2.5	No visual defects	Single stemmed, Vertical	Normal	Good future prospects.	Good	Good	>40 yrs	Low	**C**	No works required
T9	Ash	*Fraxinus excelsior*	Early-mature	15	1	330	No	3	5.5	3	1.5	2.5	No visual defects, Soil erosion	Single stemmed, Vertical, Old pruning wounds, Epicormic growths	Unbalanced, Minor deadwood	Growing on steep rocky bank.	Fair	Fair	20 to 40 yrs	Moderate	**B**	No works required

AWA TREE CONSULTANTS

	Tree Species			Measurements				Crown (m)					Tree Condition							Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Ave Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T10	Sycamore	*Acer pseudoplatanus*	Mature	18	1	950	No	4	7.5	7.5	2.5	5.5	Soil erosion, Exposed roots	Twin stemmed at 2m, Slight lean, Old pruning wounds, Stubs, Epicormic growths, Tight union, Moderate cavity, Major decay	Unbalanced, Old pruning wounds, Stubs, Minor deadwood	Many large exposed roots to east of stem from significant soil erosion on stream bank. Moderate cavity with decay in stub growing at 5m from eastern stem.	Good	Fair	>40 yrs	High	**B**	No works required
T11	Sycamore	*Acer pseudoplatanus*	Mature	18	1	910	No	2	0.5	9	11	11	No visual defects, Soil erosion	Twin stemmed at 1.5m, Slight lean, Old pruning wounds, Stubs, Epicormic growths, Moderate cavi ies	Unbalanced, Old pruning wounds, Stubs, Major deadwood	Several large dead stubs in the centre of the crown.	Fair	Fair	>40 yrs	Moderate	**B**	No works required
T12	Hawthorn	*Crataegus monogyna*	Semi-mature	8	4	130, 120, 70, 70	No	2	2	1.5	1	2.5	Soil erosion, Exposed roots	Multiple stemmed at base, Slight lean, Stubs, Tight union, Partially included bark	Normal, Minor deadwood	Growing on southern bank of stream.	Fair	Fair	20 to 40 yrs	Low	**C**	No works required
T13	Hawthorn	*Crataegus monogyna*	Semi-mature	7	1	140	No	1	2	2	2.5	3	No visual defects, Soil erosion	Single stemmed, Vertical, Stubs, Epicormic growths, Tight union	Normal, Minor deadwood		Fair	Good	>40 yrs	Low	**C**	No works required
T14	Sycamore	*Acer pseudoplatanus*	Semi-mature	12	4	190, 150, 90, 80	No	1.5	4.5	2	0.5	2.5	No visual defects, Soil erosion	Multiple stemmed at base, Slight lean, Old pruning wounds, Stubs, Tight union	Unbalanced, Snapped / hanging branches, Minor deadwood		Fair	Fair	>40 yrs	Low	**C**	No works required

AWA TREE CONSULTANTS

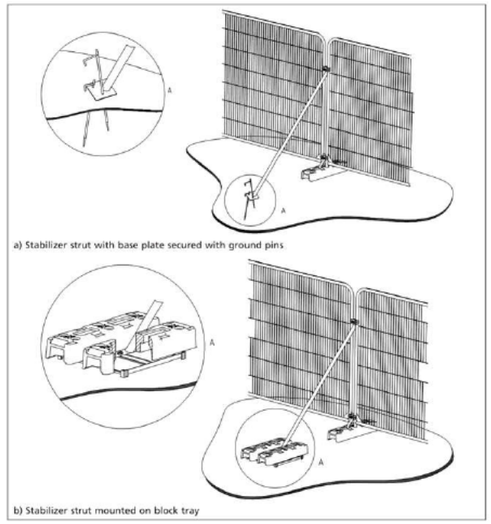
	Tree Species			Measurements				Crown (m)					Tree Condition							Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Ave Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T15	Ash	*Fraxinus excelsior*	Early-mature	16	4	280, 230, 220, 210	No	2	6	2.5	1	3	Soil erosion, Exposed roots	Multiple stemmed at base, Vertical, Old pruning wounds, Stubs, Tight union, Moderate cavity	Slightly unbalanced, Moderate deadwood	Growing on southern stream bank. Cavity at base from previously removed stem.	Fair	Fair	20 to 40 yrs	Moderate	**C**	No works required
T16	Ash	*Fraxinus excelsior*	Mature	19	1	490	No	2.5	5.5	6.5	2	3	No visual defects, Soil erosion	Single stemmed, Significant lean, Old pruning wounds, Stubs, Minor cavities	Slightly unbalanced, Moderate deadwood	Growing on southern stream bank.	Fair	Fair	20 to 40 yrs	Moderate	**B**	No works required
T17	Sycamore	*Acer pseudoplatanus*	Mature	20	2	540, 500	No	4.5	6.5	5	5	1.5	Soil erosion, Exposed roots	Twin stemmed at base, Slight lean, Old pruning wounds, Epicormic growths, Tight union, Partially included bark, Minor cavities	Unbalanced, Minor deadwood, Snapped / hanging branches	Growing on northern stream bank.	Good	Fair	>40 yrs	Moderate	**B**	No works required
T18	Sycamore	*Acer pseudoplatanus*	Mature	20	1	640	No	4	4.5	0.5	3.5	6	Soil erosion, Exposed roots	Single stemmed, Vertical, Old pruning wounds, Epicormic growths, Minor cavi ies	Unbalanced, Moderate deadwood, Snapped / hanging branches	Growing on northern stream bank.	Fair	Fair	>40 yrs	Moderate	**B**	No works required
T19	Ash	*Fraxinus excelsior*	Early-mature	16	1	370	No	3	2.5	0.5	2	11	Soil erosion, Exposed roots, Root damage / loss	Single stemmed, Significant lean, Old pruning wounds, Stubs	Unbalanced, Small / sparse, Old pruning wounds, Stubs, Minor deadwood	Extensive soil erosion at base, exposing much of the rootplate. Stem becomes almost horizontal at 5m, growing towards he roadside. Very limited long term value.	Fair	Poor	10 to 20 yrs	Low	**C**	No works required

AWA TREE CONSULTANTS

	Tree Species			Measurements				Crown (m)					Tree Condition							Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Ave Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
G20	Privet	*Ligustrum ovalifolium*	Semi-mature	1.5	10+	40 avg	No	0	See Plan				No visual defects	Multiple stemmed at base, Stubs, Tight union, Partially included bark	Old pruning wounds, Minor deadwood	Well managed hedge.	Fair	Good	20 to 40 yrs	Low	**C**	No works required
T21	Sycamore	*Acer pseudoplatanus*	Early-mature	14	3	340, 310, 290	No	2.5	3.5	3	3.5	3	Soil compaction, Soil erosion, Exposed roots	Multiple stemmed at base, Vertical, Old pruning wounds, Stubs, Epicormic growths, Tight union, Partially included bark, Ivy covered	Stubs, Minor deadwood, Ivy in crown	Growing against boundary wall. Dense ivy limited detailed inspection.	Fair	Fair	20 to 40 yrs	Moderate	**C**	No works required
T22	Apple	*Malus domestica*	Semi-mature	6.5	1	310	No	1	3	3.5	3	3	No visual defects, Soil erosion	Multiple stemmed at 2m, Vertical, Old pruning wounds, Epicormic growths, Ivy covered	Old pruning wounds, Stubs, Minor deadwood, Ivy in crown	Dense ivy limited detailed inspection.	Fair	Good	>40 yrs	Moderate	**C**	Remove to facilitate development

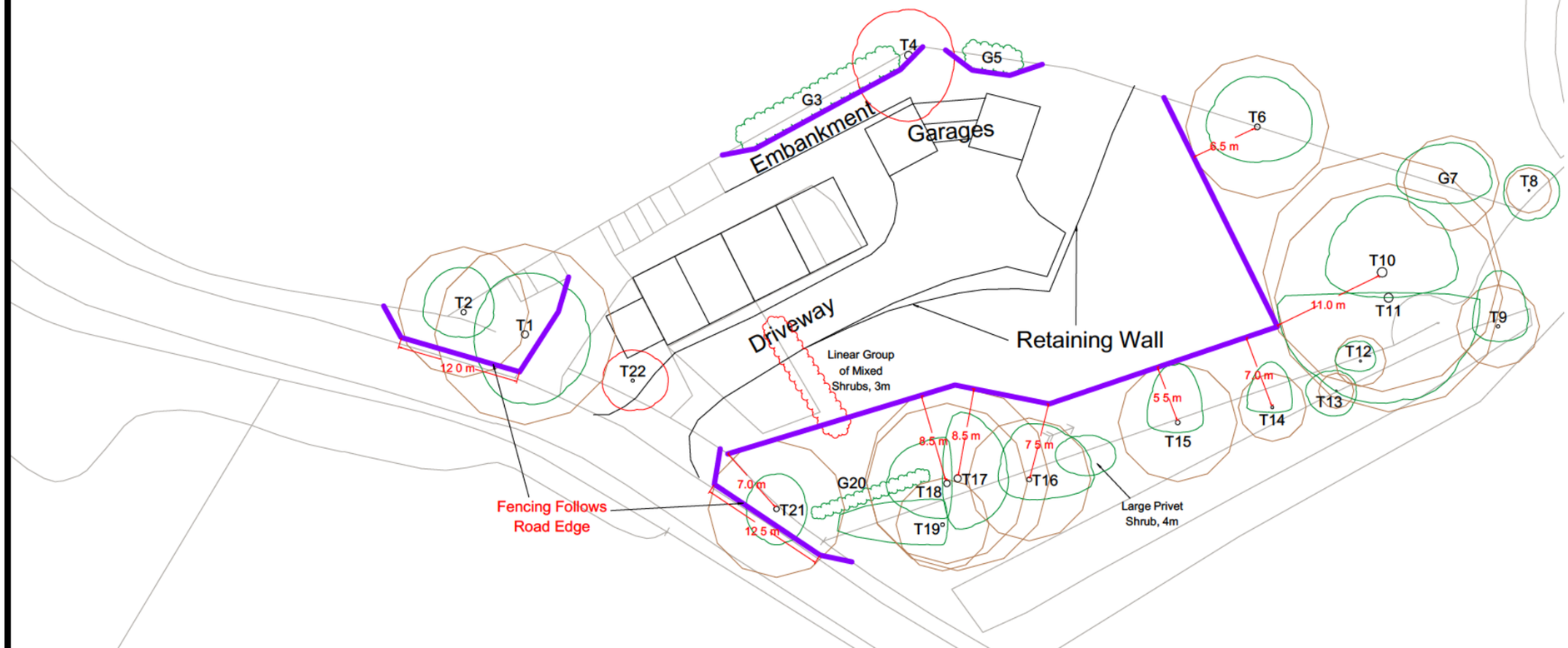
AWA TREE CONSULTANTS

Inset 1: Example of Tree Protection Fencing



Inset 2: Example of Tree Protection Signage





NORTH

AWA TREE CONSULTANTS

Appendix 4:
TREE PROTECTION PLAN

Moor End Cottages, Barnsley, S75 4RW
Ref: AWA3116AMS

BRITISH STANDARD 5837:2012

SCALE: 1:500 PAPER: A3

	TREES TO BE RETAINED
	TREES FOR REMOVAL
	SHRUBS TO BE RETAINED
	TREE STEM
	TREE PROTECTION FENCING
	RPA: ROOT PROTECTION AREA