TREE CONSULTANTS

ARBORICULTURAL METHOD STATEMENT

to BS 5837:2012 at:

Merchant Fields, Kilroyd Drive, Cleckheaton BD19

Prepared for: *Harron Homes Ltd*

Date: *August 2025*

Planning Reference: *2024/70/91260/E*

AWA Reference: *AWA6904*

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Executive Summary

This Arboricultural Method Statement has been prepared in accordance with BS 5837:2012 – Trees in Relation to Design, Demolition and Construction – Recommendations to outline how retained trees will be protected throughout the proposed development.

Drawing on the findings of a detailed tree survey (Ref: AWA2797), this document sets out a clear timeline for the implementation of tree management and protection measures before, during, and after construction. It includes specifications for required tree works, protective fencing and ground protection, and detailed guidance for any activities within or adjacent to Root Protection Areas (RPAs).

A copy of this document must remain on site for the duration of all development activities and must be adhered to in full to ensure compliance with planning conditions and to safeguard the long-term health of retained trees.

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1. Introduction

1.1 Instruction

1.1.1 We were instructed by Harron Homes Ltd to prepare an arboricultural method statement for the proposed development at: Merchant Fields, Kilroyd Drive, Cleckheaton BD19

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 August 2019, 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, parking, landscaping and facilities. The proposed development layout has been provided by my client and is the basis for the Tree Works Plan at Appendix 4 and the Tree Protection Plan at Appendix 5.

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.

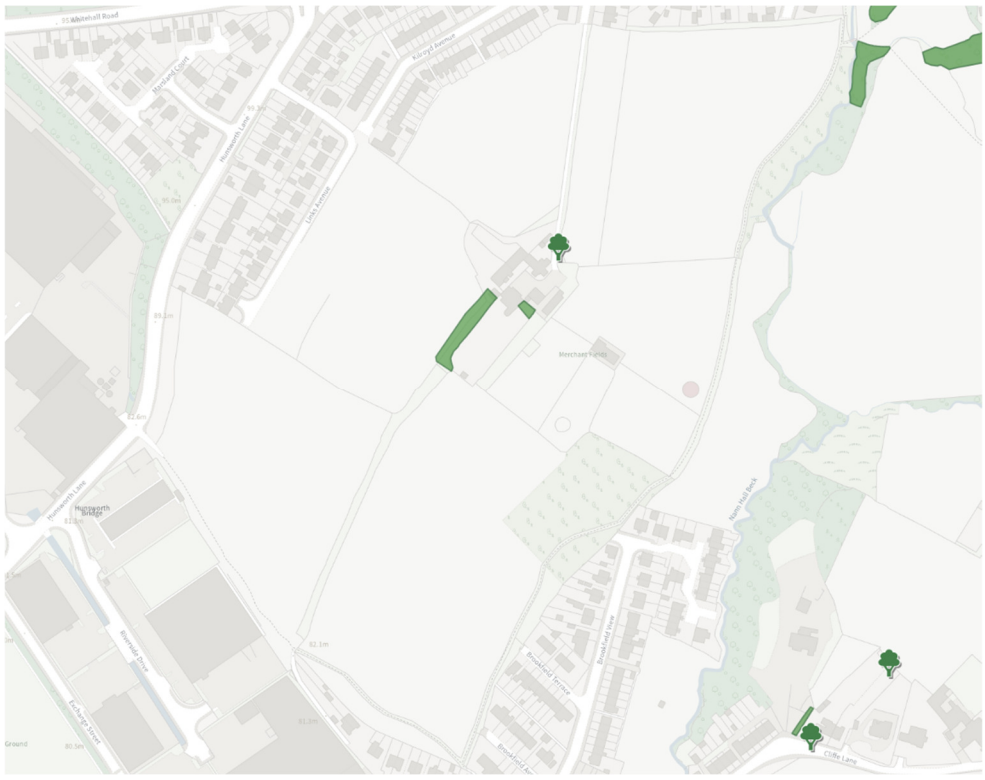
1.5 Legal

1.5.1 The following advice is for guidance purposes only. Some trees are protected by legislation, and it is essential that the legal status of trees is established prior to carrying out works to them.

1.5.2 Unauthorised work to protected trees could lead to prosecution, resulting in enforcement action such as fines or a criminal record. Tree Preservation Orders, Conservation Areas, Planning Conditions, Felling Licences or Restrictive Covenants legally protect many trees in the UK.

1.5.3 An online search was undertaken with Kirklees Council on the 5th of August 2025 to check whether any trees at the site are protected by a Tree Preservation Order or are located within a Conservation Area. Trees at the site are protected by a Tree Preservation Order (Ref: SP2/70). The site is not situated within a Conservation Area.

1.5.4 The accessed map image from mapping.kirklees.gov.uk is detailed below:



1.5.5 Before carrying out any works to the protected trees the permission of the local planning authority is required (unless such work is approved as part of full planning permission). There are large potential penalties for illegally carrying out work to protected trees. Statutory permission is not required for the removal of deadwood.

1.5.6 The Multi-Agency Geographical Information for the Countryside (MAGIC) website was used to search for areas of ancient woodlands listed on the Ancient Woodland (DEFRA 2021), and a check for catalogued Ancient and Veteran trees using the woodland trust ancient tree inventory (ATI) (Woodland Trust 2021). It was confirmed that there are no designated ancient woodlands or veteran or ancient trees within the survey area.

1.5.7 Trees provide a wide range of habitats for many species, some of which are legally protected such as bats, nesting birds, badgers and dormice. It is essential that appropriate care is taken to ensure that this legislation is not contravened.

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

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

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 tree removals and pruning works

3 Install tree protection fencing

4 Pre commencement meeting/ confirm fencing is as specified

5 Construct new development

6 Remove tree protection fencing

7 Undertake landscaping works within RPAs

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 and pruning works shall be carried out as the first operation on site, in accordance with Appendices 3 and 4 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	Installation of the tree protection fencing will take place as shown at Appendix 5, prior to any storage of plant, materials and machinery.	If necessary, liaise with the contractor installing the tree protection fencing until completed to the standard specified in this method statement.
4 Site Meeting	Following installation of tree protection 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 tree protection fencing and tree works are as specified by taking photographs.
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 protection fencing must only be undertaken when all site traffic and machinery has left the site.	If acceptable to the LPA, the contractor can take photographs of the site to give to the LPA to gain approval for the removal of the tree protection fencing.
7 Landscaping	Undertake post construction landscaping works within RPAs of retained trees, as detailed at sections 5.1 and 5.2.	If necessary, liaise with the local authority and the site foreman to ensure any issues are adequately resolved.

3. Tree Management

3.1 Tree Works

3.1.1 G11 and T25 to G30 require removal to facilitate the development.

3.1.2 The trees and tree groups requiring removal are detailed in the Tree Data and Works Schedule at Appendix 3 and are detailed in red on the Tree Works Plan at Appendix 4.

3.1.3 T5, G8 and G31 require pruning works to facilitate the development (as detailed in the Tree Data and Works Schedule at Appendix 3 and on the Tree Works Plan at Appendix 4).

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

3.1.5 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

4.1.2 The tree protection fencing will be appropriate to the degree and proximity of likely construction works. In this instance, the default BS 5837:2012 tree protection fencing (see Figures 1, 2 and 3 at Appendix 1 for examples) will be used to protect the high and moderate value retained trees and tree groups at the site, and Heras type fencing, of welded mesh panels on rubber or concrete feet (see Figures 4 and 5 at Appendix 1 for examples) will be used to protect the lower value retained trees and tree groups at the site.

4.1.3 The BS 5837:2012 tree protection fencing will be positioned as detailed with a thick purple line on the Tree Protection Plan at Appendix 5.

4.1.4 The Heras tree protection fencing will be positioned as detailed with a thick orange line on the Tree Protection Plan at Appendix 5.

4.1.5 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 Tree Protection Plan. The final fencing position must be agreed on by the LPA before the commencement of any site works.

4.1.6 The tree protection 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.

4.1.7 The Heras tree protection 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 (see Figure 6 at Appendix 1 for an example). 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 Figures 4 and 5 at Appendix 1 for examples).

4.1.8 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 within the CEZ unless specified in this method statement. The site manager must ensure that all personnel are aware of the restrictions that apply to the fenced-off area.

4.1.9 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 Figures 7 and 8 at Appendix 1 for example signs).

4.1.10 The tree protection 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.

5. Works Close To Retained Trees

5.1 New Footpaths Within RPAs

5.1.1 New footpaths are to be installed within the RPAs of retained trees T3, T5, T7 and T43.

5.1.2 The tree protection fencing will require removal to install the new footpaths within the RPAs - the new footpaths will therefore be installed as part of the post construction landscaping phase, installed only when all main construction phase works are complete and when all site traffic and machinery has left the site.

5.1.3 The installation of the new footpaths within the RPAs will be installed using a 'minimum dig' geocell method of construction.

5.1.4 The design and construction of the hard surfaces needs to be sensitive to the requirements of tree roots, substantial enough to withstand the expected levels of traffic and practicable in terms of ease of fabrication.

5.1.5 The finished surface must be porous in order to allow air and water to reach the tree roots, whilst at the same time being able to withstand the load applied. Toxic substances which could leach into the ground must be avoided. Severance of roots and soil compaction should be avoided. Any minor excavations in these areas to remove the existing surface vegetation/turf layer must be done so using hand tools only and under arboricultural supervision.

5.1.6 No vehicles or machinery will be permitted within the RPAs of the retained trees at the site when installing the new footpaths within the RPAs.

5.1.7 The proposed 'minimum dig' construction method is to be submitted separately to the LPA for approval prior to implementation.

5.2 New Boundary Fencing Within RPAs

5.2.1 New boundary fencing is to be installed within the RPAs of retained trees T12 to T21.

5.2.2 The tree protection fencing will require removal to install the new boundary fencing within the RPAs - the new boundary fencing will therefore be installed as part of the post construction landscaping phase, installed only when all main construction phase works are complete and when all site traffic and machinery has left the site.

5.2.3 The installation of the new boundary fencing within the RPAs of the retained trees should not significantly adversely impact on the health or future condition of the trees, provided posts and panels type footings are used as opposed to strip footings, with the holes for the posts dug by hand, avoiding significant tree roots where possible.

5.2.4 No vehicles or machinery will be permitted within the RPAs of the retained trees at the site when installing the new boundary fencing within the RPAs.

5.3 Drainage and Utilities

5.3.1 New drainage and underground utilities are to be positioned outside of the RPAs of retained trees, and above ground utilities will be routed away from areas where they are likely to interfere with the retained trees' crowns.

5.3.2 NJUG 10: Guidelines for the Planning, Installation and Maintenance of Utility Services in Proximity to Trees should be considered when installing services.

5.4 Additional Precautions

5.4.1 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.

5.4.2 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.

5.4.3 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.

6. Signature

I trust this report provides all the required information.

Signed

.....

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

5th August 2025

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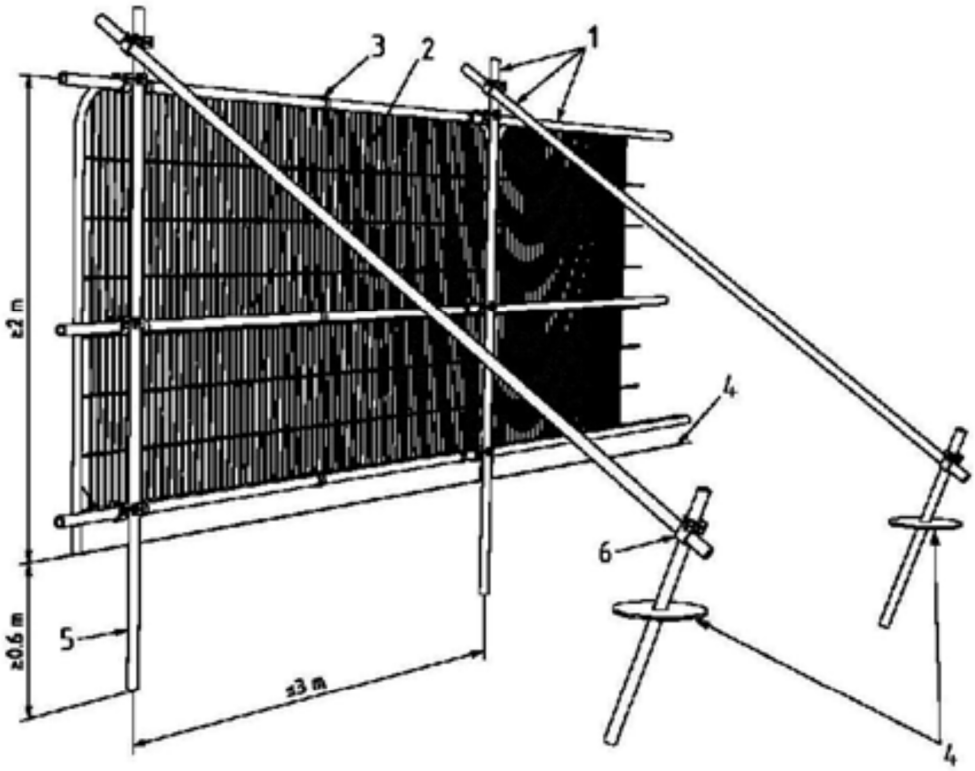
Our Charity Partner: Kids Plant Trees

At AWA Tree Consultants, we are proud to partner with the local charity, Kids Plant Trees. This collaboration allows us to support a cause that reflects our commitment to trees and the environment while making a positive impact on local communities.

Kids Plant Trees is a grassroots charity dedicated to improving tree equity by planting trees in underserved areas with limited green spaces, often in communities facing higher levels of deprivation.

We are proud to support their mission to create greener, healthier environments for future generations.

Appendix 1: Images and Figures



Key

1 Standard scaffold poles
2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
3 Panels secured to uprights and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground until secure (minimum depth 0.6 m)
6 Standard scaffold clamps

Figure 1: Fencing to BS 5837:2012

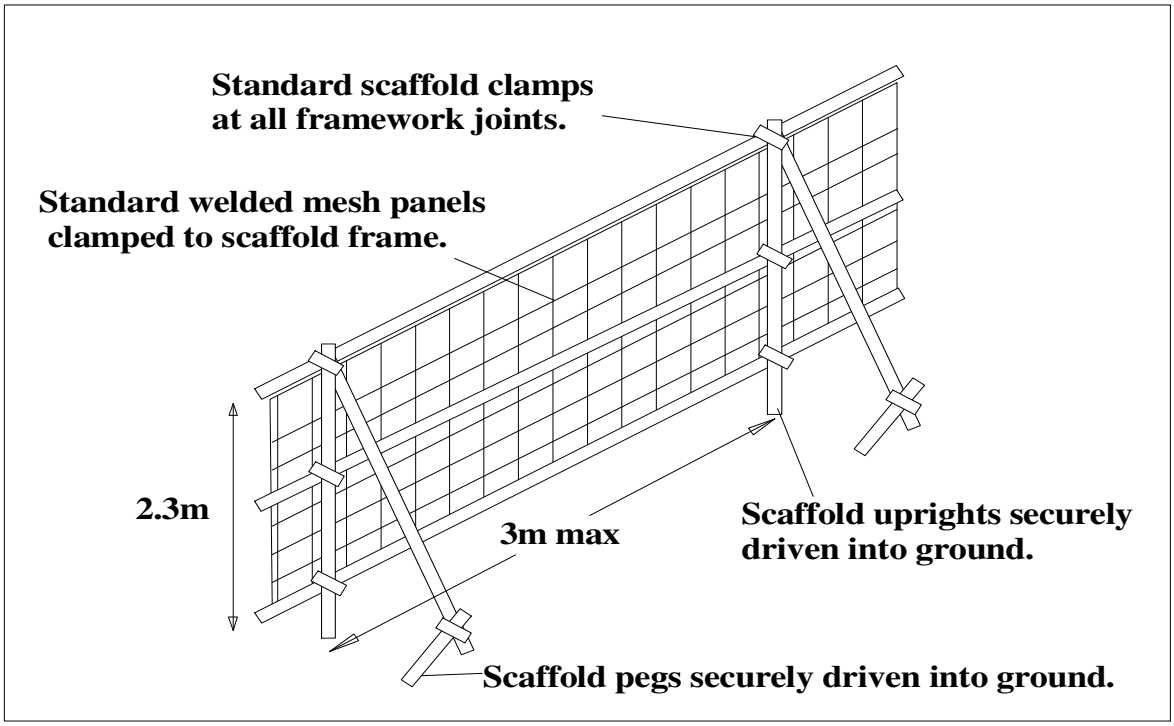


Figure 2: Fencing to BS 5837:2012

Figure 3: Fencing to BS 5837:2012

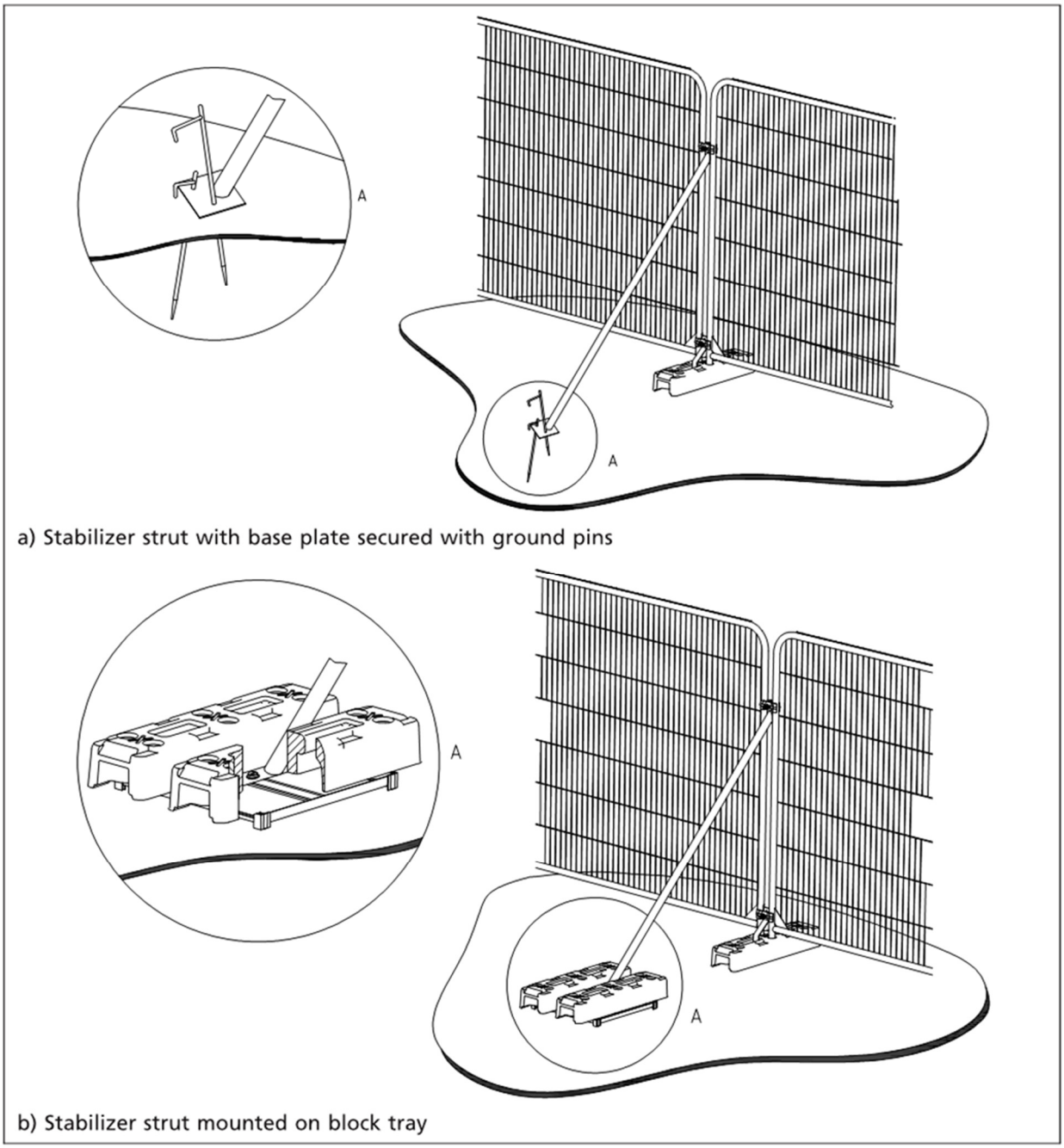


Figure 4: Secured 'Heras' type fencing with stabilizing system and fixed central pins (©BSI)

Figure 5: Secured 'Heras' type fencing with stabilizing system and anti-tamper couplers

Figure 6: Anti-tamper couplers to secure fencing and avoid unauthorised access

Figure 7: Warning sign for fencing

Figure 8: 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
Jon Beeson	Harron Homes Ltd	0113 204 4670	jonbeeson@harronhomes.co.uk
Adam Winson	AWA Tree Consultants Ltd	0114 272 1124	adam@awatrees.com
Tree Officer	Kirklees Council	01484 414 909	dc.admin@kirklees.gov.uk

	Tree Species			Measurements				Crown (m)					Tree Condition								Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Crown height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Category*	*Works*
T1	Goat Willow	*Salix caprea*	Mature	5	1	450	Yes	2	4	3.5	2.5	2.5	No visual defects	Single stemmed. Multiple stemmed at 2m. Epicormic growths. Stubs. Old pruning wounds.	50% dead/ absent	Previously topped at 5m. Situated in adjacent land. No access.	Fair	Fair	20 to 40 yrs	**C**	No works required
T2	Leyland Cypress	*x Cupressocyparis leylandii*	Early-mature	11	6	150 avg	Yes	2	2	2	2	2	No visual defects	Multiple stemmed at 1m. Stubs. Tight union. Old pruning wounds.	Unbalanced crown. Minor deadwood.	1 tree that was previously part of a linear group. No live crown to north east of canopy.	Fair	Fair	20 to 40 yrs	**C**	No works required
T3	Hawthorn	*Crataegus monogyna*	Semi-mature	6	8	100 avg	No	2	2.5	2.5	3.5	2.5	Soil compaction. Soil erosion. Exposed roots. Root damage/ loss.	Multiple stemmed at base. Slight lean. Old pruning wounds. Stubs. Epicormic growths. Tight union.	Normal. Minor deadwood.		Good	Fair	>40 yrs	**C**	No works required
T4	Sycamore	*Acer pseudoplatanus*	Young	5	2	90, 60	No	1.5	1	1	1	1.5	No visual defects. Soil compaction.	Twin stemmed at base. Vertical. Bark damage.	Normal		Fair	Good	>40 yrs	**C**	No works required

	Tree Species			Measurements				Crown (m)					Tree Condition								Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Crown height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Category*	*Works*
T5	Goat Willow	*Salix caprea*	Mature	8	3	210, 400, 330	No	2	6	2	6	5	Soil compaction. Soil erosion. Exposed roots.	Multiple stemmed at base. Stubs. Old pruning wounds. Bark damage. Minor cavities. Minor decay.	Unbalanced crown	Boundary tree	Fair	Fair	20 to 40 yrs	**C**	Pruning works required to facilitate development - Reduce and lift crown from north west to provide 2m clearance from new residential property - Do not prune beyond site boundary
G6	Hawthorn. Privet. Cotoneaster.	*Crataegus sp. Ligustrum sp. Cotoneaster sp.*	Semi-mature	2	10	50	No	0	See plan				Well managed garden boundary hedge. Good screening value.				Fair	Good	20 to 40 yrs	**C**	No works required
T7	Sycamore	*Acer pseudoplatanus*	Mature	17	1	520	No	4	6.5	5	5	5.5	No visual defects	Single stemmed. Vertical. Epicormic growths. Stubs. Old pruning wounds	Minor deadwood	Self set saplings at base	Good	Good	>40 yrs	**B**	No works required
G8	Hawthorn. Elder. Ash. Oak.	*Crataegus sp. Smabucus sp. Fraxinus sp. Quercus sp.*	Semi-mature	6	10	100	Yes	0	See plan				Sparsely situated shrubby group of Hawthorn and Elder bordering footpath. Occasional gaps. Occasional Ash and Oak saplings throughout.				Fair	Fair	>40 yrs	**C**	Pruning works required to facilitate development - Reduce from north east to boundary as required - Do not prune beyond site boundary
T9	Ash	*Fraxinus excelsior*	Mature	21	2	510, 390	No	4	5	5	8	6.5	No visual defects	Twin stemmed at base. Slight lean. Stubs. Old pruning wounds.	Moderate deadwood	Some large sections of deadwood overhanging public footpath	Fair	Fair	>40 yrs	**B**	No works required

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	Tree Species			Measurements				Crown (m)					Tree Condition								Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Crown height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Category*	*Works*
G10	Birch	*Betula sp.*	Semi-mature	6	3	140, 140, 120	No	1.5	See plan				No visual defects	Multiple stemmed at 1.5m. Vertical. Stubs.	Minor dieback. Minor deadwood.	3 trees forming a single canopy.	Fair	Fair	20 to 40 yrs	**C**	No works required
G11	Hawthorn	*Crataegus monogyna*	Mature	1.5	10	60	No	0	See plan				Sparse field boundary group of Hawthorn and Elder. Heavily pruned in the past.				Fair	Fair	20 to 40 yrs	**C**	Removal required to facilitate development
T12	Sycamore	*Acer pseudoplatanus*	Mature	15	6	200	Yes	3	4	4	4	4	No visual defects	Multiple stemmed at base. Vertical. Stubs. Old pruning wounds. Tight union.	Minor deadwood	Situated in adjacent land. No access.	Good	Fair	>40 yrs	**B**	No works required
T13	Sycamore	*Acer pseudoplatanus*	Mature	10	1	440	No	2.5	1	5	6	5	Decay. Damage to buttress roots.	Single stemmed. Significant lean. Stubs. Major cavities. Minor decay.	Minor deadwood	Large cavity at base on western side of stem. Barbed wire fence nailed to stem.	Fair	Fair	20 to 40 yrs	**C**	No works required
T14	Sycamore	*Acer pseudoplatanus*	Mature	14	1	580	No	2	5.5	5.5	6	7	No visual defects	Single stemmed. Multiple stemmed at 2.5m. Vertical. Stubs.	Minor deadwood	Barbed wire fence nailed to stem	Good	Good	>40 yrs	**B**	No works required
T15	Hawthorn	*Crataegus monogyna*	Semi-mature	8	6	100	No	0	2	1.5	2.5	2	No visual defects	Multiple stemmed at base. Vertical. Stubs. Old pruning wounds.	Slightly unbalanced. Minor deadwood.	Suppressed by surrounding trees	Fair	Good	>40 yrs	**C**	No works required

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	Tree Species			Measurements				Crown (m)					Tree Condition								Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Crown height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Category*	*Works*
T16	Sycamore	*Acer pseudoplatanus*	Mature	16	1	640	No	2	7	8	7	7.5	Exposed roots	Single stemmed. Vertical. Stubs.	Minor deadwood	Barbed wire fence nailed to stem	Good	Good	>40 yrs	**B**	No works required
T17	Sycamore	*Acer pseudoplatanus*	Mature	15	1	470	No	2	6.5	3	3	6	Soil compaction. Exposed roots.	Single stemmed. Vertical. Stubs. Old pruning wounds.	Minor deadwood	Barbed wire fence nailed to stem	Fair	Good	>40 yrs	**B**	No works required
T18	Sycamore	*Acer pseudoplatanus*	Mature	16	1	730	No	2.5	8	6	5	8.5	Soil compaction	Single stemmed. Vertical. Stubs. Old pruning wounds. Minor cavity. Minor decay.	Minor deadwood	Barbed wire fence nailed to stem. Minor decay from old pruning wound at 3m on south side of stem.	Fair	Fair	>40 yrs	**B**	No works required
T19	Sycamore	*Acer pseudoplatanus*	Mature	15	1	700	No	2	6	7	8	6	Exposed roots. Soil compaction	Single stemmed. Slight lean. Epicormic growths. Stubs. Old pruning wounds. Bark damage.	Minor deadwood	Barbed wire nailed to stem	Fair	Good	>40 yrs	**B**	No works required
T20	Oak	*Quercus cerris*	Semi-mature	9	1	300	Yes	2	4	3.5	3.5	3	No visual defects	Single stemmed. Vertical.	Minor deadwood	Good future prospects	Good	Good	>40 yrs	**C**	No works required

	Tree Species			Measurements				Crown (m)					Tree Condition								Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Crown height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Category*	*Works*
T21	Birch	*Betula sp.*	Early-mature	10	1	280	No	2	4	4	3.5	3	Soil compaction	Single stemmed. Twin stemmed at 2m. Vertical. Stubs. Old pruning wounds.	Minor deadwood		Good	Fair	20 to 40 yrs	**B**	No works required
T22	Ash	*Fraxinus excelsior*	Semi-mature	7.5	1	160	No	2	3	2.5	2.5	3	No visual defects	Single stemmed. Vertical. Stubs. Bark damage.	Minor deadwood	Long thin wound from base to 2m on eastern side of stem	Fair	Good	20 to 40 yrs	**C**	No works required
T23	Hawthorn	*Crataegus monogyna*	Early-mature	6.5	1	220	No	1	2.5	2.5	2.5	2.5	No visual defects	Single stemmed. Vertical. Stubs.	Minor deadwood		Fair	Fair	>40 yrs	**C**	No works required
T24	Sycamore	*Acer pseudoplatanus*	Early-mature	10	1	340	No	2.5	3.5	3.5	3.5	3.5	No visual defects	Single stemmed. Vertical. Stubs. Old pruning wounds.	Minor deadwood	Good future prospects	Good	Good	>40 yrs	**B**	No works required
T25	Sycamore	*Acer pseudoplatanus*	Semi-mature	8	1	230	No	2	1.5	2	2.5	2	No visual defects	Single stemmed. Vertical. Bark damage. Stubs.	Minor deadwood	Bark damage from base to 2m on western side of stem	Fair	Good	>40 yrs	**C**	Removal required to facilitate development
G26	Ash	*Fraxinus excelsior*	Semi-mature	8	6	150	No	1.5	See plan				Soil compaction	Multiple stemmed at base. Stubs. Bark damage.	Moderate deadwood	2 trees in generally poor condition	Poor	Fair	20 to 40 yrs	**C**	Removal required to facilitate development

	Tree Species			Measurements				Crown (m)					Tree Condition								Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Crown height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Category*	*Works*
T27	Hawthorn	*Crataegus monogyna*	Semi-mature	5	5	80	No	0	2	2	2	2	No visual defects	Multiple stemmed at base. Vertical.	Normal		Fair	Good	>40 yrs	**C**	Removal required to facilitate development
T28	Hawthorn	*Crataegus monogyna*	Semi-mature	5	5	80	No	0	2	2	2	2	No visual defects	Multiple stemmed at base. Vertical.	Normal		Fair	Good	>40 yrs	**C**	Removal required to facilitate development
T29	Hawthorn	*Crataegus monogyna*	Semi-mature	5	5	80	No	0	2	2	2	2	No visual defects	Multiple stemmed at base. Vertical.	Normal		Fair	Good	>40 yrs	**C**	Removal required to facilitate development
G30	Hawthorn. Elder.	*Crataegus sp. Sambucus sp.*	Semi-mature	2	10	80	No	0	See plan				Well managed Hawthorn and Elder boundary hedge bordering an access road				Fair	Good	>40 yrs	**C**	Removal required to facilitate development
G31	Hazel. Hawthorn. Laurel. Cherry. Elder. Holly. Maple.	*Corylus sp. Crataegus sp. Prunus sp. Sambucus sp. Ilex sp. Acer sp.*	Semi-mature	3	10	100	Yes	0	See plan				Mixed species boundary group separating site from neighbouring residential properties. Good screening value.				Fair	Good	>40 yrs	**C**	Pruning works required to facilitate development - Reduce from south to boundary as required - Do not prune beyond site boundary

AWA TREE CONSULTANTS

	Tree Species			Measurements				Crown (m)					Tree Condition								Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Crown height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Category*	*Works*
T32	Hawthorn	*Crataegus monogyna*	Mature	8.5	1	260	Yes	2	2.5	2.5	2.5	2.5	No visual defects	Single stemmed. Vertical.	Minor deadwood	Situated in adjacent land. No access.	Fair	Good	>40 yrs	**C**	No works required
T33	Hawthorn	*Crataegus monogyna*	Mature	7	6	100	No	2	2	2	2.5	2.5	Soil compaction	Multiple stemmed at base. Vertical. Epicormic growths. Stubs.	Minor deadwood		Fair	Good	>40 yrs	**C**	No works required
T34	Ash	*Fraxinus excelsior*	Mature	14	3	200, 230, 180	No	3	3.5	3.5	2.5	3.5	Waterlogged. Soil erosion.	Multiple stemmed at 1m. Vertical. Stubs. Bark damage.	Moderate deadwood	Growing from base of wall. Extensive bark damage from base to 2.5m.	Fair	Fair	20 to 40 yrs	**C**	No works required
G35	Ash	*Fraxinus excelsior*	Semi-mature	10	7	170 avg	No	2	See plan				Waterlogged. Soil erosion.	Multiple stemmed at 1m. Vertical. Stubs. Bark damage.	Minor dieback. Moderate deadwood.	Dense group of stems with extensive bark damage.	Fair	Fair	20 to 40 yrs	**C**	No works required
T36	Ash	*Fraxinus excelsior*	Early-mature	9	2	170, 240	No	2.5	3	3	5	4	Waterlogged	Twin stemmed at 1m. Stubs. Bark damage.	Small/ sparse. Moderate deadwood.	Extensive bark damage from base to 2m	Fair	Fair	20 to 40 yrs	**C**	No works required
G37	Alder	*Alnus glutinosa*	Semi-mature	9	6	180	No	2	See plan				Group of individual trees on stream bank. Bark damage on main stems from base to 2m.				Fair	Good	20 to 40 yrs	**C**	No works required

	Tree Species			Measurements				Crown (m)					Tree Condition								Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Crown height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Category*	*Works*
T38	Oak	*Quercus robur*	Semi-mature	10	1	260	No	2.5	4	4	4	4	Soil compaction. Soil erosion. Exposed roots. Damage to buttress roots.	Single stemmed. Vertical. Bark damage.	Minor deadwood	Bark damage on stem from 1m to 2m	Fair	Good	>40 yrs	**C**	No works required
T39	Hawthorn	*Crataegus monogyna*	Mature	7	6	100	No	2	2	2	2.5	2.5	Soil compaction	Multiple stemmed at base. Vertical. Epicormic growths. Stubs.	Small/sparse. Moderate deadwood. Moderate dieback.		Fair	Good	>40 yrs	**C**	No works required
G40	Alder	*Alnus glutinosa*	Mature	14	10	200	No	2	See plan				Waterlogged	Multiple stemmed at base. Vertical. Stubs. Bark damage.	Minor deadwood		Good	Good	>40 yrs	**B**	No works required
G41	Hawthorn. Elder.	*Crataegus sp. Sambucus sp.*	Early-mature	7	10	140	No	1.5	See plan				Group of Hawthorn and Elder shrubs forming an understorey under larger mature trees. Exposed roots and soil compaction throughout. Bark damage and deadwood throughout.				Fair	Fair	>40 yrs	**C**	No works required
T42	Alder	*Alnus glutinosa*	Mature	14	1	580	No	3	1.5	8	7	1.5	Waterlogged	Single stemmed. Significant lean. Epicormic growths. Stubs. Old pruning wounds.	Unbalanced. Minor deadwood.		Good	Fair	>40 yrs	**B**	No works required

AWA TREE CONSULTANTS

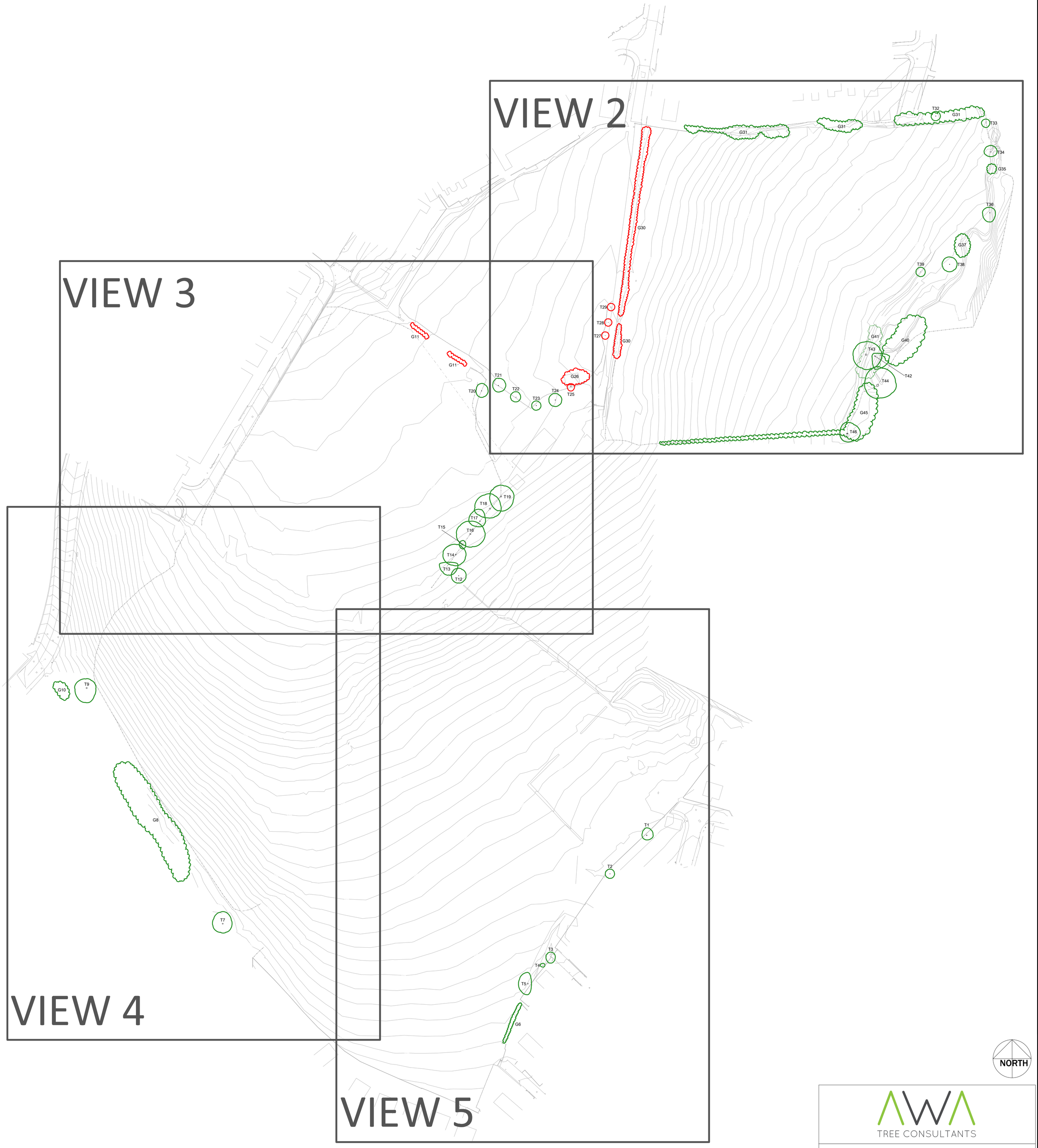
	Tree Species			Measurements				Crown (m)					Tree Condition								Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Crown height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Category*	*Works*
T43	Oak	*Quercus robur*	Mature	17	1	840	Yes	2.5	7	8.5	8	7	Soil erosion. Exposed roots. Soil compaction. Damage to buttress roots.	Single stemmed. Vertical. Stubs.	Minor deadwood		Good	Good	>40 yrs	**A**	No works required
T44	Poplar	*Populus x canadensis*	Mature	20	2	1100, 510	No	3	10	10	7	7	Soil erosion. Exposed roots. Waterlogged.	Twin stemmed at 1m. Significant lean. Epicormic growths. Stubs. Ivy covered.	Moderate deadwood	Minor fungal fruiting bodies low on main stem	Fair	Fair	>40 yrs	**B**	No works required
G45	Hawthorn. Elder.	*Crataegus sp. Sambucus sp.*	Mature	2	10	60	No	1	See plan				Boundary group of Hawthorn and Elder shrubs. Heavily pruned in the past.				Fair	Good	>40 yrs	**C**	No works required
T46	Alder	*Alnus glutinosa*	Mature	11	1	580	No	3	6	7	4.5	4	Soil compaction. Exposed roots. Damage to buttress roots.	Single stemmed. Vertical. Stubs. Old pruning wounds. Epicormic growths.	Minor deadwood	Barbed wire fence and nails embedded in stem	Fair	Good	>40 yrs	**B**	No works required

VIEW 2

VIEW 3

VIEW 4

VIEW 5



NORTH

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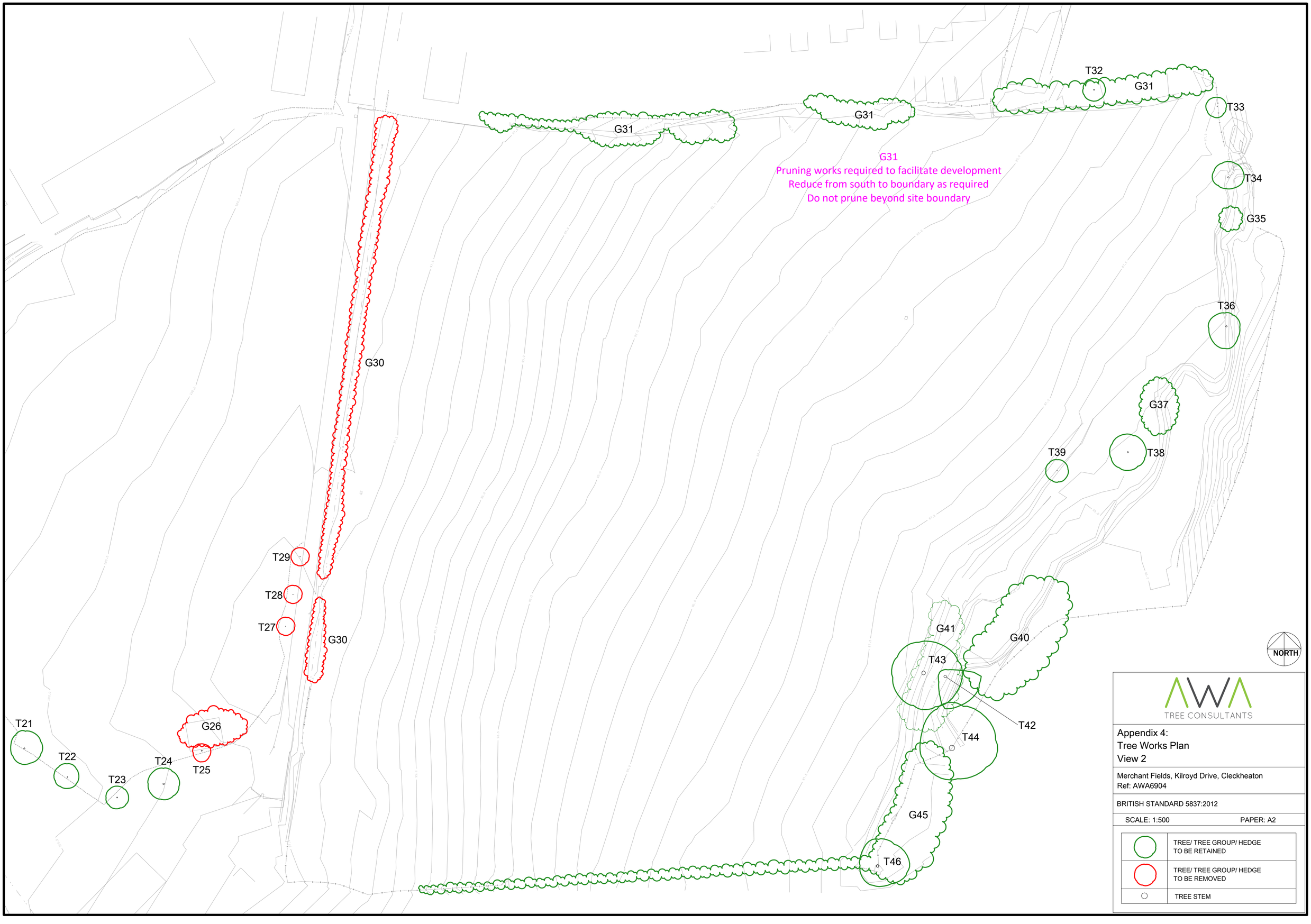
Appendix 4:
Tree Works Plan
View 1

Merchant Fields, Kilroyd Drive, Cleckheaton
Ref: AWA6904

BRITISH STANDARD 5837:2012

SCALE: 1:1000 PAPER: A1

	TREE/ TREE GROUP/ HEDGE TO BE RETAINED
	TREE/ TREE GROUP/ HEDGE TO BE REMOVED
	TREE STEM



G31
Pruning works required to facilitate development
Reduce from south to boundary as required
Do not prune beyond site boundary

TREE CONSULTANTS

Appendix 4:
Tree Works Plan
View 2

Merchant Fields, Kilroyd Drive, Cleckheaton
Ref: AWA6904

BRITISH STANDARD 5837:2012

SCALE: 1:500 PAPER: A2

	TREE/ TREE GROUP/ HEDGE TO BE RETAINED
	TREE/ TREE GROUP/ HEDGE TO BE REMOVED
	TREE STEM

G11

G11

T21

G26

T20

T22

T24

T25

T23

T19

T18

T17

T15

T16

T14

T13

T12

NORTH

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Appendix 4:
Tree Works Plan
View 3

Merchant Fields, Kilroyd Drive, Cleckheaton
Ref: AWA6904

BRITISH STANDARD 5837:2012

SCALE: 1:500 PAPER: A2

	TREE/ TREE GROUP/ HEDGE TO BE RETAINED
	TREE/ TREE GROUP/ HEDGE TO BE REMOVED
	TREE STEM

G10

T9

G8

G8
Pruning works required to facilitate development
Reduce from north east to boundary as required
Do not prune beyond site boundary

T7

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Appendix 4:
Tree Works Plan
View 4

Merchant Fields, Kilroyd Drive, Cleckheaton
Ref: AWA6904

BRITISH STANDARD 5837:2012

SCALE: 1:500 PAPER: A2

	TREE/ TREE GROUP/ HEDGE TO BE RETAINED
	TREE/ TREE GROUP/ HEDGE TO BE REMOVED
	TREE STEM

T1

T2

T3

T4

T5

T5
Pruning works required to facilitate development
Reduce and lift crown from north west
to provide 2m clearance from new residential property
Do not prune beyond site boundary

G6

NORTH

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Appendix 4:
Tree Works Plan
View 5

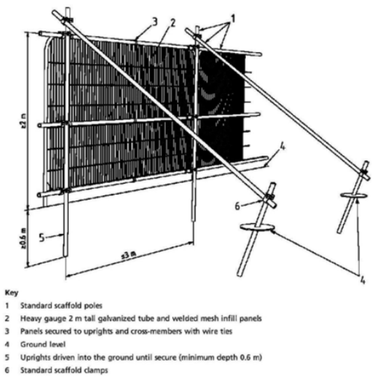
Merchant Fields, Kilroyd Drive, Cleckheaton
Ref: AWA6904

BRITISH STANDARD 5837:2012

SCALE: 1:500 PAPER: A2

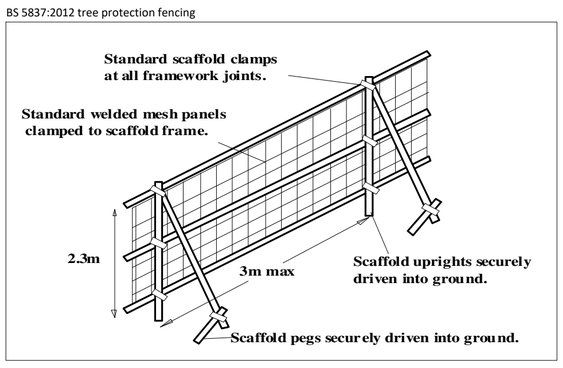
	TREE/ TREE GROUP/ HEDGE TO BE RETAINED
	TREE/ TREE GROUP/ HEDGE TO BE REMOVED
	TREE STEM

BS 5837:2012 tree protection fencing



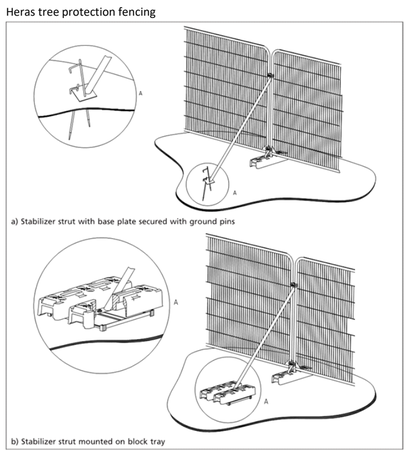
Key
1 Standard scaffold poles
2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
3 Panels secured to uprights and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground until secure (minimum depth 0.6 m)
6 Standard scaffold clamps

BS 5837:2012 tree protection fencing

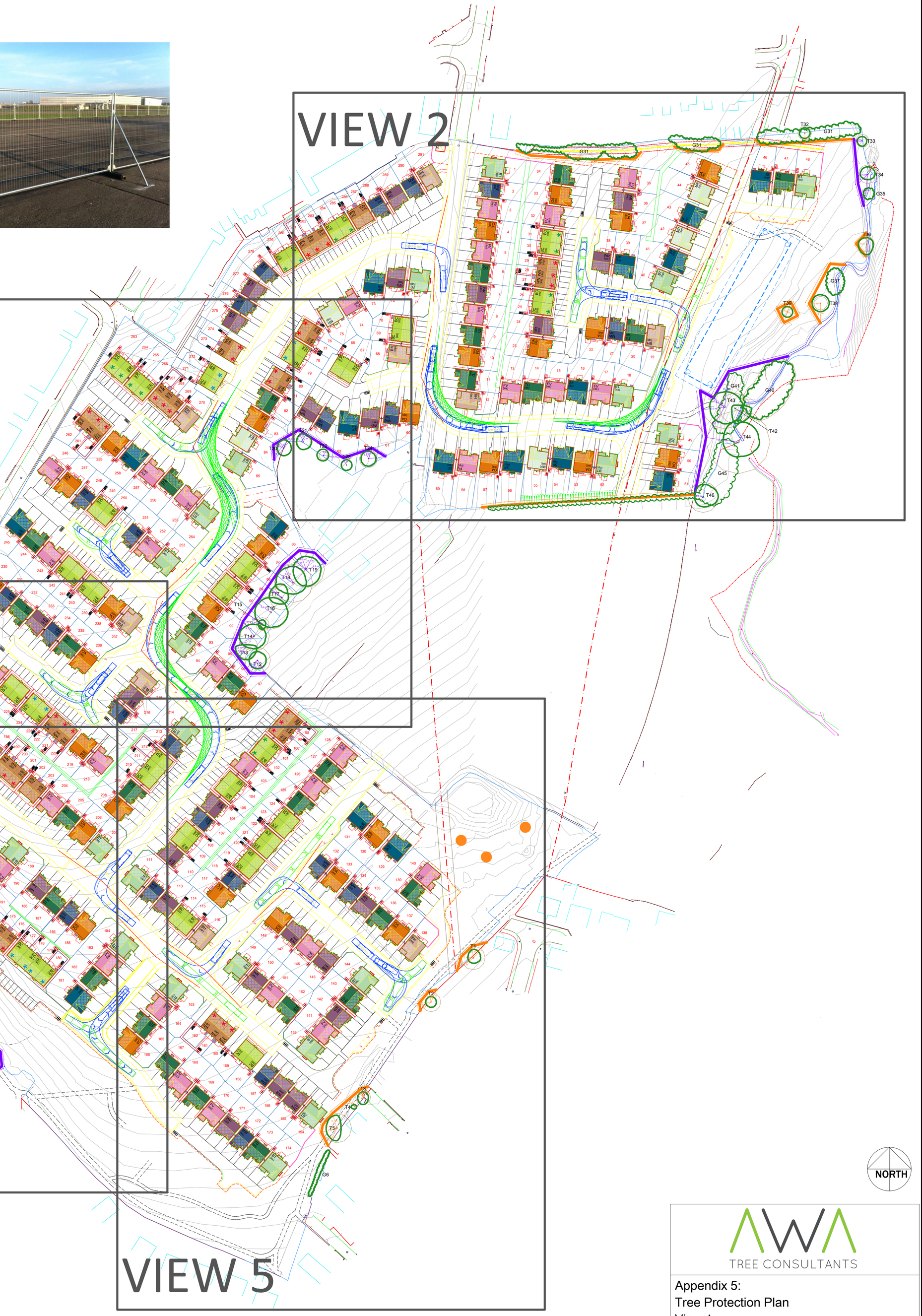


BS 5837:2012 tree protection fencing

Heras tree protection fencing



Heras tree protection fencing



Anti-tampler couplers

Warning sign for fencing

Warning sign for fencing

TREE CONSULTANTS

Appendix 5:
Tree Protection Plan
View 1

Merchant Fields, Kilroyd Drive, Cleckheaton
Ref: AWA6904

BRITISH STANDARD 5837:2012

SCALE: 1:1000 PAPER: A1

	TREE/ TREE GROUP/ HEDGE TO BE RETAINED
	TREE STEM
	RPA: ROOT PROTECTION AREA
	BS 5837:2012 TREE PROTECTION FENCING
	HERAS TREE PROTECTION FENCING

Installation of new footpath within RPA of T43
undertaken as detailed at section 5.1
as part of post construction landscaping phase

NORTH

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Appendix 5:
Tree Protection Plan
View 2

Merchant Fields, Kilroyd Drive, Cleckheaton
Ref: AWA6904

BRITISH STANDARD 5837:2012

SCALE: 1:500 PAPER: A2

	TREE/ TREE GROUP/ HEDGE TO BE RETAINED
	TREE STEM
	RPA: ROOT PROTECTION AREA
	BS 5837:2012 TREE PROTECTION FENCING
	HERAS TREE PROTECTION FENCING

Installation of new boundary fencing within RPA of T12 to T21
undertaken as detailed at section 5.2
as part of post construction landscaping phase

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Appendix 5:
Tree Protection Plan
View 3

Merchant Fields, Kilroyd Drive, Cleckheaton
Ref: AWA6904

BRITISH STANDARD 5837:2012

SCALE: 1:500 PAPER: A2

	TREE/ TREE GROUP/ HEDGE TO BE RETAINED
	TREE STEM
	RPA: ROOT PROTECTION AREA
	BS 5837:2012 TREE PROTECTION FENCING
	HERAS TREE PROTECTION FENCING

G10

T9

G8

T7

ATTENUATION CRATE

15.6 m

8.4 m

7.8 m

13.9 m

7.8 m

7.2 m

7.0 m

7.4 m

6.9 m

Installation of new footpath within RPA of T7
undertaken as detailed at section 5.1
as part of post construction landscaping phase

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Appendix 5:
Tree Protection Plan
View 4

Merchant Fields, Kilroyd Drive, Cleckheaton
Ref: AWA6904

BRITISH STANDARD 5837:2012

SCALE: 1:500 PAPER: A2

	TREE/ TREE GROUP/ HEDGE TO BE RETAINED
	TREE STEM
	RPA: ROOT PROTECTION AREA
	BS 5837:2012 TREE PROTECTION FENCING
	HERAS TREE PROTECTION FENCING

Installation of new footpath within RPA of T3 and T5
undertaken as detailed at section 5.1
as part of post construction landscaping phase

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Appendix 5:
Tree Protection Plan
View 5

Merchant Fields, Kilroyd Drive, Cleckheaton
Ref: AWA6904

BRITISH STANDARD 5837:2012

SCALE: 1:500 PAPER: A2

	TREE/ TREE GROUP/ HEDGE TO BE RETAINED
	TREE STEM
	RPA: ROOT PROTECTION AREA
	BS 5837:2012 TREE PROTECTION FENCING
	HERAS TREE PROTECTION FENCING