

**ARBORICULTURAL METHOD STATEMENT
to BS 5837:2012
at
Woolgreaves Hall
South Lane
Cawthorne
Barnsley
South Yorkshire
S75 4EF**

Client:
Progressive Design & Build

Client Address:
4 Lewisham Road
Slaithwaite
Huddersfield
HD7 5AL

Client Telephone:
01484 846786

JCA Ref:
13648a/ChC

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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 **Woolgreaves Hall, South Lane, Cawthorne**.

1.2 Terms of Reference

- 1.2.1 JCA Limited is instructed by **Progressive Design & Build** to prepare an Arboricultural Method Statement for the proposed development, based on our arboricultural report dated 26th July 2017 (JCA Ref: **13648/ChC**). 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 The development layout approved by the LPA has been provided by our client and is the basis for the Tree Protection Plan at **Appendix 4**.
- 1.2.3 Planning permission was granted in view of the following conditions:
- No construction works 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 proposed development.
 - An accompanying Tree Protection Plan will be provided detailing the location of the temporary fencing during construction and any ground protection measures, if required.
- 1.2.4 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 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.

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 **T8** for arboricultural reasons.
 - The removal of **G10, T11, T12** and **T13** to facilitate the proposed development.
 - The pruning of **T2, T3, T4** and **T6** for arboricultural reasons.
 - The removal of Ivy from **T2, T3, T4** and **T5** for general maintenance purposes.

2.2 Tree Works During Construction

- 2.2.1 In this case, no 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**.

2.3 Tree Works Post Construction

- 2.3.1 When the construction phase is complete and when the temporary protective barrier 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 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.

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 may comprise of protective fencing only.
- 3.1.2 Once installed, the appointed arboriculturalist will be invited on site to inspect the protective fencing, 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.
- 3.1.3 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, storage of materials, equipment or machinery are allowed within the CEZ unless specified within this Method Statement.**
- 3.1.4 The protective fencing will be installed in accordance with BS 5837: 2012 and will comprise of a vertical and horizontal scaffold framework, well braced to resist impacts. The vertical tubes should be spaced at a maximum interval of 3m and driven securely into the ground, taking care to avoid underground services and structural roots. Finally, weld mesh panels are to be securely fixed on the scaffold framework. Please refer to **Appendix 2 (Fig 1)** for protective fencing details.
- 3.1.5 Once the protective fencing is installed, waterproof signs with the sentence '*Protected tree zone, no storage or operations within this area*' 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 Ground Protection

- 3.2.1 Providing the fencing is erected in the location as shown on the associated plan at **Appendix 4**, no ground protection measures will be required for this project.

3.3 Protective Barrier During Construction

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

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 Local Planning Authority should be invited to inspect the site to give approval for the removal of protective barrier.
- 3.4.2 When this approval has been given the protective barrier may be dismantled and removed from site.
- 3.4.3 It should be noted the same restrictions apply to all RPAs as the CEZ (please refer to **Section 3.1.3**).

4. Construction Phase

4.1 Demolition Works

- 4.1.1 No demolition works are required for this project and as such no specialist demolition techniques are required.

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 for this project. As such, no specialist mitigation actions are required.

4.4 Construction of New Buildings

- 4.4.1 In this case, the proposed building/pool house is located at a sufficient distance from retained trees that no specialist foundation methods are required for arboricultural purposes.

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. All utilities must therefore be located outside the RPA 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.

4.6 Location of the Site Compound

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

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 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 commence.
- 5.2.2 Tree planting has been formalised for this development to mitigate the loss of those specimens which require removal to facilitate the proposed development.
- 5.2.3 The planting of these trees may go ahead in the first tree planting period after construction is complete.
- 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.
- 5.2.5 Heavy machinery is not permitted in the vicinity of retained trees, unless otherwise stated in this method statement.
- 5.2.6 If in doubt, regarding the impact of proposed landscape operations, please contact the appointed arboriculturalist.

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 inspect the fencing measures prior to any on site construction. Once inspected, the protective fencing must not to be moved or breached.		
Stage 5	Undertake the construction of the new building/pool house.		
Stage 6	Following the completion of the construction phase and when all site traffic and machinery has left, the protective fencing can be removed.		
Stage 7	Undertake the re-placement tree planting.		

7. Relevant Contact Details

Contact Name	Organisation/Detail	Contact Number
Charles Cocking Arboricultural Consultant	JCA Limited	01422 376335
Edward Jowett Tree Officer	Barnsley Council	01226 770770
TBC Site Manager	TBC	TBC
Ian Whitworth Architect	Progressive Design & Build	01484 846786

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	Physiological Condition	Structural Condition	Amenity Value	NHBC Water Demand	Life Expectancy (yrs)	Retention Category
T 1	Mature Sycamore <i>Acer pseudoplatanus</i>	15	5	3 S	66	2.5 6 7 7	Single-stemmed and vertical with a slightly unbalanced crown. The canopy, which contains moderate deadwood, is overhanging the adjacent road. Offers good screening for the property. Acceptable condition at present.	Crown clean by removing any deadwood/stubs.	FAIR	GOOD	MOD	MOD	20+	1 B 2
T 2	Early-mature Sycamore <i>Acer pseudoplatanus</i>	14	8	n/a n/a	37	2.5 3 2 3.5	Single-stemmed with a slight lean and a reasonably balanced crown. The canopy is overhanging the adjacent road. Slender form and slightly suppressed due to competition. Ivy is growing on the main stem. Offers some screening value for the property. Acceptable condition at present.	Remove the Ivy.	FAIR	FAIR	MOD	MOD	10+	C 2
T 3	Early-mature Sycamore <i>Acer pseudoplatanus</i>	14	3	n/a n/a	57	7.5 4 4.5 7	Single-stemmed with a slight lean and a reasonably balanced crown. The canopy, which contains moderate deadwood, is overhanging the adjacent road. Offers screening value for the property. Ivy is growing on the main stem. Acceptable condition at present.	Crown clean by removing any deadwood/stubs. Remove the Ivy.	FAIR	GOOD	MOD	MOD	20+	1 B 2
T 4	Early-mature Sycamore <i>Acer pseudoplatanus</i>	13	3	3 N	51	8 4 3 7	Twin-stemmed at 1m with a balanced crown. The canopy, which contains minor deadwood, is overhanging the adjacent road. Ivy is growing on the main stem. Offers some screening value for the property. Acceptable condition at present.	Crown clean by removing any deadwood/stubs. Remove the Ivy.	FAIR	GOOD	MOD	MOD	20+	1 B 2
T 5	Mature Sycamore <i>Acer pseudoplatanus</i>	16	4	n/a n/a	#50 x 2 stems	9.5 5 4.5 7.5	Twin-stemmed at 1m with a balanced crown. The canopy is overhanging the adjacent road. Dense Ivy on the main stem prevented a detailed inspection. Offering good screening value for the property. Acceptable condition at present.	Remove the Ivy.	FAIR	GOOD	MOD	MOD	20+	1 B 2
T 6	Early-mature Sycamore <i>Acer pseudoplatanus</i>	13	3	3 NW	42	7.5 6 3 6	Single-stemmed and vertical with a slightly unbalanced crown. The canopy, which contains minor deadwood, is overhanging the adjacent road. Offering screening value for the property. Acceptable condition at present.	Crown clean by removing any deadwood/stubs.	FAIR	GOOD	MOD	MOD	20+	1 B 2
G 7	Semi-mature to early-mature Mixed	to 7	0+	n/a n/a	Avg. 15	See Plan	Species include Hawthorn, Elder and Elm sp. An insignificant group of self-seeded specimens offering little arboricultural value.	No action required at present.	FAIR	FAIR	LOW	LOW to HIGH	10+	C 2
T 8	Early-mature Elm <i>Ulmus sp.</i>	10	4	n/a n/a	42	3.5 5 6 6	In serious decline with little live growth and no long term future.	Remove.	POOR	POOR	LOW	HIGH	<10	U
G 9	Semi-mature Mixed	to 9	2	n/a n/a	Avg. 10	See Plan	Species include Hawthorn, Elder and Sycamore. Four trees offering little arboricultural value.	No action required at present.	FAIR	FAIR	LOW	MOD to HIGH	10+	C 2
G 10	Semi-mature Hawthorn <i>Crataegus monogyna</i>	6	3	n/a n/a	30 + 15	See Plan	Two trees of low value.	Remove and replace to facilitate the proposed development.	FAIR	FAIR	LOW	HIGH	10+	C 2

Tree Ref.	Age	Height (m)	Crown Height (m)	Height (m) and Direction of the Lowest Branch	Diameter (cm)	Crown Spread			Observations	Recommendations	Physiological Condition	Structural Condition	Amenity Value	NHBC Water Demand	Life Expectancy (yrs)	Retention Category
	Common Name <i>Botanical Name</i>					N	W	E								
T 11	Semi-mature Sycamore <i>Acer pseudoplatanus</i>	7.5	2	2 SW	32	3.5 4 5		3	Single-stemmed with a slight lean and a reasonably balanced crown. Acceptable condition at present.	Remove and replace to facilitate the proposed development.	FAIR	FAIR	LOW	MOD	10+	C 2
T 12	Semi-mature Hawthorn <i>Crataegus monogyna</i>	6	2.5	n/a n/a	Avg. 12 x 5 stems	2.5 2 2.5		3	Multiple-stemmed specimen of little arboricultural value.	Remove and replace to facilitate the proposed development.	FAIR	FAIR	LOW	HIGH	10+	C 2
T 13	Early-mature Apple <i>Malus sp.</i>	5	2	n/a n/a	48	4 1.5 3.5		4	Single-stemmed and leaning with an unbalanced crown. Large cavity noted. Little arboricultural value.	Remove and replace to facilitate the proposed development.	FAIR	FAIR	LOW	MOD	10+	C 2

Appendix 2: Protective Barrier

A2.1 The protective barrier will be installed in accordance with BS5837: 2012. The default specification of BS 5837: 2012 (pictured below for reference) recommends a vertical and horizontal, scaffold framework, well braced to resist impacts, with vertical tubes at no more than 3m intervals. These should be driven into the ground. Weld mesh panels should be affixed to this framework with scaffold clamps - See Figure 1.

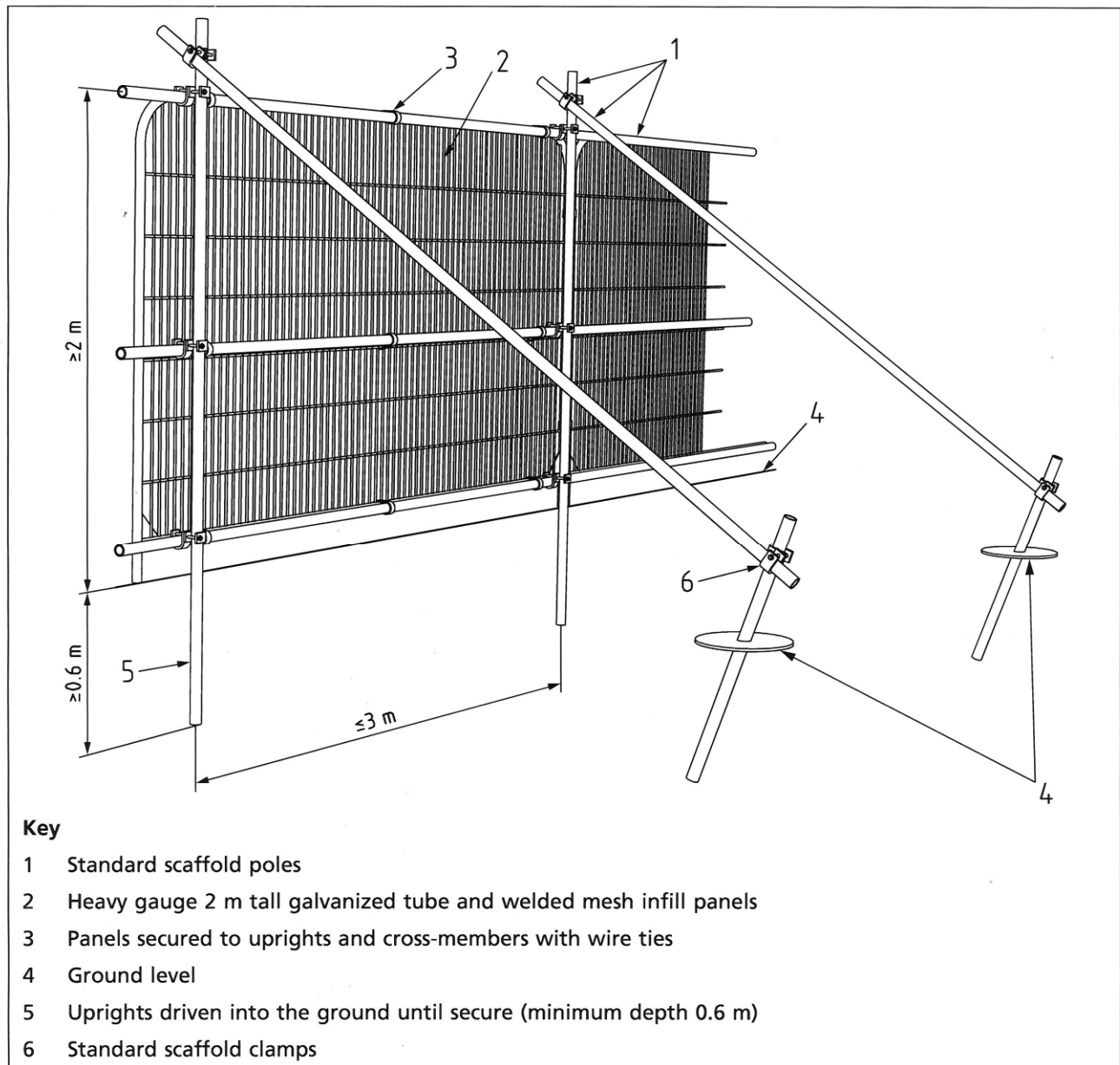


Figure 1: 'Protective Barrier to BS 5837: 2012'. To be used where situated in open ground.

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

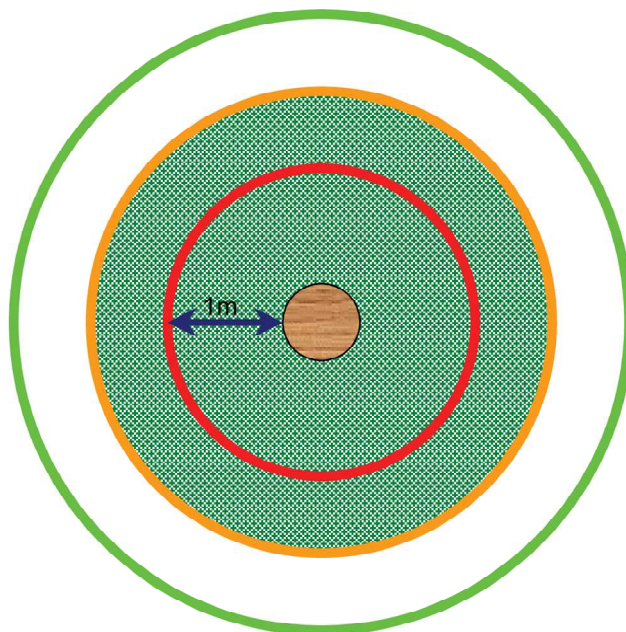
REPORT TREE DAMAGE TO JCA LIMITED ON
01422 376 335

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.



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



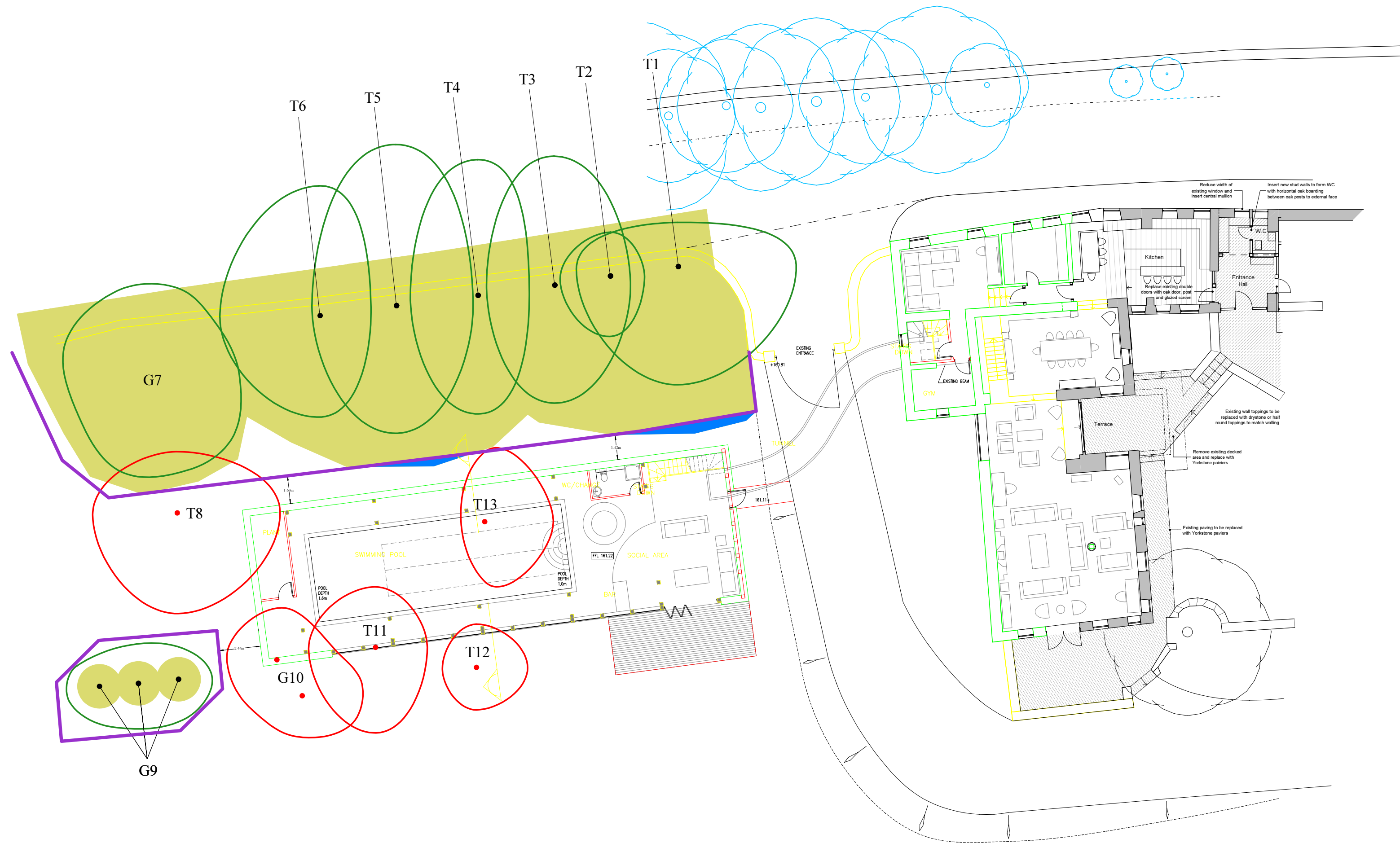
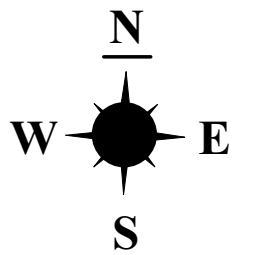
PROHIBITED ZONE – 1m from trunk. Excavations of any kind must not be undertaken within this zone unless full consultation with Local Authority Tree Officer is undertaken. Materials, plant and spoil must not be stored within this zone.



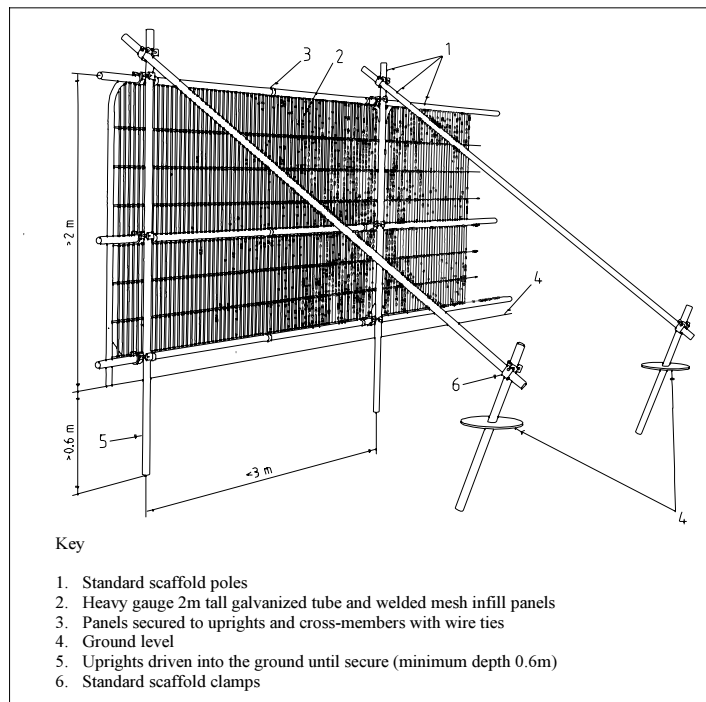
PRECAUTIONARY ZONE – 4 x tree circumference. Where excavations must be undertaken within this zone the use of mechanical excavation plant should be prohibited. Precautions should be undertaken to protect any exposed roots. Materials, plant and spoil should not be stored within this zone. Consult with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



Default specification for a protective barrier



Appendix 4: Tree Protection Plan

ADDRESS: Woolgreaves Hall, South Lane,
Cawthorne, Barnsley, South Yorkshire, S75 4EF.
JCA REF: 13648a/ChC

SCALE: 1:200 PAPER SIZE : A2
SURVEYED BY: CC DRAWN BY: CC APPROVED BY: TT

	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 NOT PROTECTED BY FENCING. NO MATERIALS SHOULD BE STORED HERE AND GROUND COMPACTION MUST BE AVOIDED.
	PROTECTIVE FENCE LINE (CEZ)

JCA Limited
Arboricultural & Forestry 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



.....
Charles Cocking *FdSc (Arboriculture)*.

8th December 2017

For and on behalf of **JCA Ltd**

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- 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,
Halifax, HX4 0AD.

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