



ARBORICULTURAL STATEMENT
ON
PROPOSED DEVELOPMENT
LAND AT CLYWEDOG ROAD NORTH
WREXHAM INDUSTRIAL ESTATE LL13 9XE

ON BEHALF OF
CAULMERT LIMITED

Author: Glyn Thomas
Our Ref: CW/9895-AS
Date: 12 October 2020

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¹ [Guidance Note – Visual Prominence and Retention Values](#)

² [Guidance Note – Statutory Controls](#)

³ [Glossary of Terms](#)

1. SUMMARY

- 1.1. Planning permission is sought for erection of an industrial building and associated works on a vacant plot at the Wrexham Industrial Estate.
- 1.2. Trees on and adjacent to the site have been surveyed, and the arboricultural implications of the development proposal evaluated in accordance with current best practice.
- 1.3. Some moderate and low quality trees will be removed to accommodate the development, and replaced with new boundary landscaping. The residual landscaping details can be resolved by planning condition.
- 1.4. The retained trees can be protected during construction in accordance with current best practice. A protection methodology is included with this statement.
- 1.5. Pruning of a group of off-site trees accords with current best practice. Future pruning where they overhang the site will be a civil matter for the respective landowners.

2. TERMS OF REFERENCE

2.1. Instruction

2.1.1. Cheshire Woodlands is instructed by Caulmert Limited to:

- Survey and prepare a schedule of trees to comply with the general requirements of BS5837⁴
- Annotate a topographical survey drawing and produce a tree survey plan
- Appraise a development proposal in relation to trees and produce an arboricultural statement and tree constraints/protection plan

2.2. Limitations

2.2.1. This statement and associated documents are the copyright of Cheshire Woodlands Limited and there should be no transfer of rights to any third party without express written consent.

2.2.2. Trees are surveyed in sufficient detail to gather data for and inform the current project. Appraisal of structural condition is of a preliminary nature.

2.2.3. The sole purpose of the survey is to collect data to inform the design of the project in relation to trees. Whilst the survey outputs are not a tree safety inspection record, the surveyor may record obvious defects when they are observed and considered to be potentially significant to safety.

2.2.4. Unless otherwise agreed, the survey data are time limited to one year, after which they should be reviewed.

⁴ British Standard BS5837:2012 Trees in relation to design, demolition and construction – Recommendations

2.2.5. Trees are assessed from ground level without invasive investigation and are viewed from within the site or from areas with public access. Assessment may be restricted where site conditions limit access or where trees are wholly or partially off-site or obscured by vegetation. The disclosure of hidden defects cannot be expected.

2.2.6. The potential effects of trees on load-bearing soils beneath existing and proposed structures have not been considered and no soil samples have been taken.

3. INTRODUCTION

3.1. Technical terms used in this statement are included in the Glossary of Terms.

3.2. This assessment evaluates the effects of a development proposal on trees. The comparative values of trees are considered broadly in line with the guidance of BS5837 and their removal, retention, protection and management are informed by this evaluation.

3.3. I am Glyn Thomas, senior consultant with Cheshire Woodlands Limited and my area of expertise is arboriculture. I assessed the trees and evaluated the effects of the development proposal on trees.

3.4. The development proposal comprises erection of an industrial building and associated works as shown on the Tree Protection Plan at Appendix 2 (the Drawing).

3.5. The following documents have been considered in my evaluation:

- Topographical survey drawing SSL:20042:200:1:1
- Proposed site plan 1149.P-003
- Tree survey plan CW/9895-P-TS
- Tree survey schedule CW/9895-SS

3.6. This statement provides sufficient supporting information to enable the local planning authority (LPA) to determine the planning application insofar as it relates to trees.

4. THE SITE

- 4.1. The site is a rectangular-shaped, 0.56 hectare plot to the northwest side of Clywedog Road North, on the Wrexham Industrial Estate. It comprises open ground with an area of hardstanding in the northwest corner, bounded by Clywedog Road North to the southeast, and industrial properties to the other three sides.
- 4.2. The British Geological Survey - *Geology of Britain Viewer*⁵ identifies the underlying soils as 'Till, Devensian – Diamicton'.
- 4.3. Till is a general term referring to any kind of sediment deposited directly from glacier ice; typically unstratified and unsorted and sometimes called boulder-clay.

5. STATUTORY PROTECTION

- 5.1. An email enquiry with Wrexham County Borough Council confirmed that:
 - Trees on and adjacent to the site are not protected by a tree preservation order; and
 - The site is not in a conservation area
- 5.2. See Appendix 4 for further guidance on the statutory protection of trees, hedgerows and wildlife.

6. SURVEY METHODOLOGY

- 6.1. I surveyed the trees on 19 June 2020 and my data are set out in the Tree Survey Schedule at Appendix 1 (the Schedule) and on the Drawing.
- 6.2. I measured stem diameters and canopy spreads using a tape and tree heights using a tape and clinometer. Where dimensions are estimated this is identified in the Schedule.

⁵ [Geology of Britain viewer](#)

- 6.3. I assessed the structural condition of the trees using the 'visual tree assessment method'⁶.
- 6.4. I assessed the trees for 'visual prominence' and broadly categorised them in accordance with Table 1 of BS5837. See Appendix 3 for further guidance.
- 6.5. During the survey, I carried out a brief assessment for obvious signs of wildlife habitat in trees and hedges on the site. No protected or exceptional habitats were identified and details were not recorded. See Appendix 4 for further guidance.
- 6.6. The topographical survey overlaid with the proposed site plan is the base for the Drawing.
- 6.7. Below-ground constraints are represented on the Drawing as Root Protection Areas (RPA), calculated in accordance with section 4.6 and Table D.1 of BS5837.

7. THE TREES

- 7.1. I surveyed five individual trees (T1 to T5) and nine tree groups (G1 to G9).
- 7.2. T3 is off-site and within the applicant's control. G1 and G2 are off-site in third-party ownership. T1, T2, T4, T5 and G3 to G9 are within the site or on the boundaries.
- 7.3. T3 is a 'high quality' A category tree. G1 to G4 and G6 to G8 are 'moderate quality' B category. T1, T2, T4, T5, G5 and G9 are 'low quality' C category.

⁶ Mattheck, M, and Breloer, H., 1994. The Body Language of Trees A handbook for failure analysis. Research for Amenity Trees No. 4.

ARBORICULTURAL IMPLICATIONS

7.4. BS5837 recommends that trees be evaluated and categorised as set out in Table 1, which also provides a summary of the impact of the development proposal on trees.

7.5. Table 1

	To be retained and protected	To be removed for development	To be removed for other reasons
Category A High quality with life expectancy of at least 40 years	Tree T3	None	None
Category B Moderate quality with life expectancy of at least 20 years	Groups G1 and G2	Groups G3, G4, and G6 to G8	None
Category C Low quality with life expectancy of at least 10 years, or small young trees	Tree T1, and group G9	Trees T2, T4 and T5, and group G5	None
Category U Cannot be retained in context of current land-use for longer than 10 years	None	None	None
Hedges and Shrubs	None	None	None

7.6. Trees to be removed

7.6.1. T2, T4, T5 and G3 to G8 will be removed to accommodate the development.

7.7. Trees to be retained

7.7.1. T1, T3, G1, G2 and G9 will be retained and can be protected during construction in accordance with BS5837. A protection methodology is included on the Drawing and comprises installation of tree protection barriers to create construction exclusion zones.

7.8. Pruning

- 7.8.1. G1 and G2 will be pruned, as detailed in the 'management' column of the Schedule, to provide working space.
- 7.8.2. The proposed works are minor and in accordance with BS3998⁷.
- 7.8.3. Periodic ongoing pruning of G2 may be required to maintain clearances from the new building. In the absence of any statutory restrictions, this will be a civil matter for the applicant and the owner of the trees.

7.9. Mitigation

- 7.9.1. The arboricultural mitigation will comprise new tree, shrub and hedge planting at the front of the site and around the boundaries.
- 7.9.2. The residual landscaping details can be resolved by the imposition of a suitably worded planning condition.

8. CONCLUSIONS

- 8.1. The B and C category trees T2, T4, T5 and G3 to G8 will be removed to accommodate the development and replaced with new soft landscaping. The residual landscaping details can be resolved by planning condition.
- 8.2. The A, B and C category trees T1, T3, G1, G2 and G9 can be protected during construction in accordance with BS5837 and retained in a sustainable manner. A protection methodology is included at Appendix 2.
- 8.3. Minor pruning of G1 and G2 accords with BS3998 and will not harm their health or detract from their visual qualities.

⁷ British Standard BS3998:2010 *Tree work - Recommendations*

- 8.4. Periodic ongoing pruning of overhanging branches from G2 will be a civil matter for the applicant and the owner of the trees.

9. RECOMMENDATIONS

- 9.1. No tree or hedge pruning or removal work should be carried out until the requisite consents have been obtained from the LPA as part of a detailed planning permission.
- 9.2. All tree pruning and removal work should be implemented in accordance with the management recommendations in the Schedule and in compliance with BS39989.
- 9.3. Statutory protection of wildlife should be taken into account in the planning and implementation of the tree pruning and removal.
- 9.4. All retained trees should be protected during construction in accordance with the Tree Protection Plan and Arboricultural Method Statement at Appendix 2 and in compliance with BS5837.
- 9.5. Underground services should be installed in accordance with a scheme of work to be agreed with the LPA and in compliance with BS5837 and NJUG Volume 4⁸.
- 9.6. Landscaping should be implemented in accordance with a scheme of work to be agreed with the LPA and in accordance with the Arboricultural Method Statement at Appendix 2.
- 9.7. Foundation design should take into consideration the juxtaposition of existing and proposed trees and the nature of the load-bearing soils.

⁸ NJUG Volume 4. 2007. *NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees*. National Joint Utilities Group, Millbank, London. 34pp.

APPENDIX 1

TREE SURVEY SCHEDULE

PROJECT: CLYWEDOG ROAD NORTH, WREXHAM INDUSTRIAL ESTATE, WREXHAM
CLIENT: CAULMERT LIMITED
REF: CW/9895-SS-2

SURVEYED BY: G THOMAS
DATE: 19 JUNE 2020
PAGE: 1

REVISIONS:

No.	Species	Age Range	Height (m)	Crown Spread (m)	Stem Dia. (mm)	Vitality	Comments	Management	Visual	Retention Value Existing	Retention Value Proposed	BS5837 RPA Radius (m)
T1	Ash	Y	4.5	2	100	N	<ul style="list-style-type: none"> Probably natural colonisation 	<ul style="list-style-type: none"> Retain and protect during development 	1G	C	C	1.2
T2	Ash	Y	4.5	2	150	N	<ul style="list-style-type: none"> Probably natural colonisation Signs of colonisation by Ash Dieback fungus 	<ul style="list-style-type: none"> Remove for development Grub out or grind stump to a depth of 0.3m 	1G	C	U	N/A
T3	Oak	EM/M	14	10	600	N	<ul style="list-style-type: none"> Off-site 1m ground clearance and could be raised to 4m by removal of epicormic growth and low lateral and sub-lateral branches of up to 100mm diameter First main branch at 3.5m Will benefit from removal of T4 	<ul style="list-style-type: none"> Protect during development 	2G	A	A	7.2
T4	Ash	Y	10	6	200	N	<ul style="list-style-type: none"> Partially suppressed by T3 1m ground clearance 	<ul style="list-style-type: none"> Remove for development Grind stump to a depth of 0.2m 	2G	C	U	N/A
T5	Crab apple	SM	4.5	5.5	180	N	<ul style="list-style-type: none"> 1m ground clearance 	<ul style="list-style-type: none"> Remove for development Grub out or grind stump to a depth of 0.3m 	1G	C	U	N/A

Data in this schedule are time limited and subject to limitations described elsewhere.

HEADINGS & ABBREVIATIONS

Age Range

Y = young SM = semi-mature EM = early-mature M = mature PM = post-mature V = veteran

Stem Dia

Stem diameter (measured in accordance with Figure C.1 of BS5837: 2012) (MS = multi-stemmed EST = estimated)

Crown Spread

Maximum crown spread (EST = estimated)

Vitality

A measure of physiological condition. N = normal range for the species and age R = reduced, P = poor, MD = moribund, D = dead

Visual (Visual Prominence)

Broad indication of prominence in the landscape (1 = low up to 4 = very high) (G = contributes to a wider group)

Retention Category Existing

Broadly in accordance with Table 1 of BS5837: 2012 (considers the merits of the tree or group in the context of the existing land-use)

Retention Category Proposed

Broadly in accordance with Table 1 of BS5837: 2012 (considers the merits of the tree or group in the context of a development proposal)

BS5837 RPA Radius

Calculated in accordance with Table D.1 of BS5837: 2012

Common Plant names

Only common names are used in this schedule. For scientific names refer to Mitchell, A. 2001. *Collins Field Guide – Trees of Britain & Northern Europe*. Harper Collins, London. pp. 420.

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TREE SURVEY SCHEDULE

PROJECT: CLYWEDOG ROAD NORTH, WREXHAM INDUSTRIAL ESTATE, WREXHAM
CLIENT: CAULMERT LIMITED
REF: CW/9895-SS-2

SURVEYED BY: G THOMAS
DATE: 19 JUNE 2020

PAGE: 2

No.	Species	Age Range	Height (m)	Crown Spread (m)	Stem Dia. (mm)	Vitality	Comments	Management	Visual	Retention Value Existing	Retention Value Proposed	BS5837 RPA Radius (m)
G1	2 Norway maple 1 Ash	Y	≤10	≤10 (EST)	200 - 250 (EST)	N	<ul style="list-style-type: none"> Off-site 2.5m crown overhang to site with 1.8m ground clearance and could be raised to around 4m by removal or shortening of minor low lateral and sub-lateral branches 	<ul style="list-style-type: none"> Protect during development Prune on southwest side by removal or shortening of minor low lateral and sub-lateral branches to obtain 4m ground clearance over site 	2	B	B	2.4 – 3.0 (EST)
G2	1 Oak 2 Norway maple 2 Ash	Y-SM	≤11	≤8 (EST)	200 - 300 (EST)	N	<ul style="list-style-type: none"> Off-site 1-2m crown overhang to site with 1.8m ground clearance and could be raised to around 4m by removal or shortening of minor low lateral and sub-lateral branches Close to side elevation of neighbouring industrial building 	<ul style="list-style-type: none"> Protect during development Prune on southwest side by removal or shortening of minor low lateral and sub-lateral branches to obtain 4m ground clearance over site 	2	B	B	2.4 – 3.6 (EST)
G3	3 Field maple	SM	≤10	≤10	160 - 360	N	<ul style="list-style-type: none"> Closely spaced linear group Central tree is suppressed Low ground clearance of between ground level and 1.5m and could be raised to around 3m by removal of low lateral and sub-lateral branches 	<ul style="list-style-type: none"> Remove for development Grub out or grind stumps to a depth of 0.3m 	2G	B	U	N/A
G4	4 Field maple	Y-SM	≤10	≤9	160 - 300	N	<ul style="list-style-type: none"> Closely spaced linear group Low ground clearance of between ground level and 1.8m and could be raised to 3m by removal of minor low lateral and sub-lateral branches Two central trees are suppressed 	<ul style="list-style-type: none"> Remove for development Grub out or grind stumps to a depth of 0.3m 	2G	B	U	N/A
G5	Goat willow	EM	≤5	≤6 (EST)	100 - 350	N	<ul style="list-style-type: none"> Closely spaced linear group which extends off-site to the southwest Topped several years ago at 1.5m Several small diameter broken branches Decay to stems 	<ul style="list-style-type: none"> Remove for development Grub out or grind stumps to a depth of 0.3m 	1G	C	U	N/A
G6	8 Whitebeam	SM	≤6	≤6	150 - 240	N	<ul style="list-style-type: none"> Closely spaced linear group on a low raised bank Extends off-site to southwest Several trees with reduced vigour and dense basal shoots 	<ul style="list-style-type: none"> Remove for development Grub out or grind stumps to a depth of 0.3m 	2G	B	U	N/A

TREE SURVEY SCHEDULE

PROJECT: CLYWEDOG ROAD NORTH, WREXHAM INDUSTRIAL ESTATE, WREXHAM
 CLIENT: CAULMERT LIMITED
 REF: CW/9895-SS-2

SURVEYED BY: G THOMAS
 DATE: 19 JUNE 2020

PAGE: 3

No.	Species	Age Range	Height (m)	Crown Spread (m)	Stem Dia. (mm)	Vitality	Comments	Management	Visual	Retention Value Existing	Retention Value Proposed	BS5837 RPA Radius (m)
G7	3 Field maple 1 Norway maple	SM	≤11	≤7 (EST)	200 - 300	N	<ul style="list-style-type: none"> Closely spaced group on a southeast facing bank Dense understorey of scrub damson Would benefit from thinning Low ground clearance on southeast side over highway footway General ground clearance of between ground level and 2m Would benefit from removal of adjacent scrub vegetation 	<ul style="list-style-type: none"> Remove for development Grub out or grind stumps to a depth of 0.3m 	2G	B	U	N/A
G8	9 Whitebeam	Y-SM	≤6	≤6	≤290	N	<ul style="list-style-type: none"> Closely spaced linear group on a raised bank Several trees with reduced vigour and dense basal shoots Ground clearance to 1m 	<ul style="list-style-type: none"> Remove for development Grub out or grind stumps to a depth of 0.3m 	2G	B	U	N/A
G9	4 Goat willow	EM	≤6	≤6 (EST)	≤300 (EST)	N	<ul style="list-style-type: none"> Closely spaced group on a raised bank Topped several years ago between 1 and 1.5m Decay to stems Several failed and partially failed branches 	<ul style="list-style-type: none"> Retain and protect during development 	2G	C	C	≤3.6 (EST)

APPENDIX 2

ARBORICULTURAL METHOD STATEMENT

From commencement of the development, the following methodology shall be implemented in the manner and sequence described below

SEQUENCE OF WORKS

1. Pre-commencement site meeting
2. Tree removal and pruning
3. Erection of 'tree protection barriers'
4. Main construction phase
5. Removal of 'tree protection barriers'
6. Landscaping

1. PRE-COMMENCEMENT SITE MEETING

To outline working methods in relation to trees, a site meeting of the following shall take place prior to commencement of any demolition or construction activity:

- Client
- Structural engineer
- Main contractor
- Site agent
- Project arboriculturist

Before the site meeting, existing incoming services and drainage shall be accurately located both on site and on a copy of this drawing

2. TREE REMOVAL AND PRUNING

- a. All tree removal and pruning work shall be implemented in accordance with Tree Survey Schedule CW/9895-SS-2 and this drawing
- b. All reasonable care shall be taken to avoid damage to retained trees
- c. All tree stumps within any area designated as a 'tree protection area' or otherwise protected on this drawing shall be removed by mechanical stump grinder and shall not be excavated in their entirety by mechanical excavator
- d. All tree removal and pruning works shall be carried out in compliance with British Standard 3998: 2010 Tree work - Recommendations

3. ERECTION OF TREE PROTECTION BARRIERS

- a. The main contractor shall erect 'tree protection barriers' as detailed on this drawing
- b. The 'project arboriculturist' shall inspect installation of the 'tree protection barriers' prior to commencement of any construction works, site preparation, excavation or delivery of plant and materials

4. MAIN CONSTRUCTION PHASE

- a. There shall be no storage of construction equipment, plant or materials within any area designated as a 'tree protection area' or otherwise protected on this drawing
- b. No fires shall be lit within 20m of any retained tree
- c. The site agent shall supervise all deliveries by self-loading crane, with vehicles positioned in such a manner that retained trees are not at undue risk of damage
- d. There shall be no excavation within 300mm of a 'tree protection barrier'
- e. There shall be no new excavation for the installation, renewal or repair of underground services within any area designated as a 'tree protection areas' or otherwise protected on this drawing
- f. The integrity of the 'tree protection barriers' shall be maintained for the duration of the main construction phase
- g. Any damage occurring to 'tree protection barriers' during the main construction phase shall be reported to the project arboriculturist and immediately made good by the main contractor
- h. Site drainage and washings from concrete and mortar mixings shall be directed away from all 'tree protection areas'
- i. The 'project arboriculturist' shall visit the site monthly to assess the integrity of the tree protection
- j. The 'project arboriculturist' shall complete a report to be sent to the site owner and main contractor following each visit. In this regard, the site owner will instruct the 'project arboriculturist' prior to any works commencing on site

5. REMOVAL OF TREE PROTECTION BARRIERS

- a. The 'tree protection barriers' shall be removed only on completion of construction works and in compliance with all relevant planning conditions

6. LANDSCAPING

- a. Landscaping works shall be implemented in accordance with a scheme approved by the LPA
- b. There shall be no rotovation of ground within any area designated as a 'tree protection area' or otherwise protected on this drawing
- c. Sandy topsoil may be spread within the 'tree protection areas' to a depth of not more than 150mm to facilitate the establishment of new vegetation. No other addition of soil or other material shall be carried out within any area designated as a 'tree protection area' or otherwise protected on this drawing without prior consultation with the LPA
- d. No hard landscaping works or excavation for cables or any other service shall be carried out within the 'tree protection area' without the prior written consent of the LPA. All such excavations shall be carried out in accordance with the guidance set out in National Joint Utilities Group Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees (Volume 4 2007)

TREE PROTECTION SPECIFICATION

Tree Protection Areas shall:-

1. Be secured prior to commencement of any construction works, delivery of site accommodation or materials and shall remain intact for the duration of the construction works
2. Preclude all construction activity with the exception of specified arboricultural works and such works as have been agreed by all parties and to be carried out under supervision
3. Be protected by 'tree protection barriers' and other measures as specified on this drawing
4. Preclude the storage or tipping of all materials and substances. Toxic substances such as fuels, oils, additives and cement shall not be stored within 5m of any area designated as a 'tree protection area' or otherwise protected on this drawing
5. Any incursion into 'tree protection areas' must be by prior arrangement, following consultation with the Local Planning Authority

Phase 1 and Phase 2 Tree Protection Barriers

1. The Phase 1 and Phase 2 'tree protection barriers' shall comprise 2m high weldmesh 'Heras' type fencing
2. The fencing panels shall butt together and be securely fixed to 2.7m x 100mm x 100mm timber posts, set or concreted into 600mm deep, 150mm diameter augured holes at 3.5m centres
3. No fixing shall be made to any tree and all reasonable care shall be taken to avoid damage to tree roots when locating posts
4. An A3 warning sign reading as per figure 1 shall be fixed to every 10m of 'tree protection barrier'
5. The 'project arboriculturist' shall direct erection of the 'tree protection barriers'

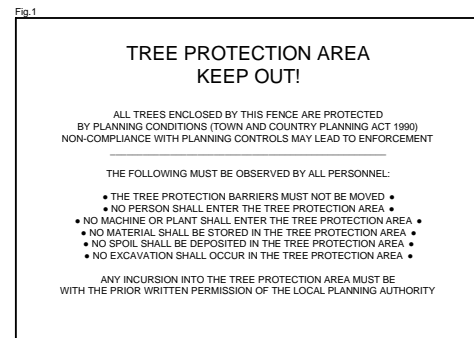
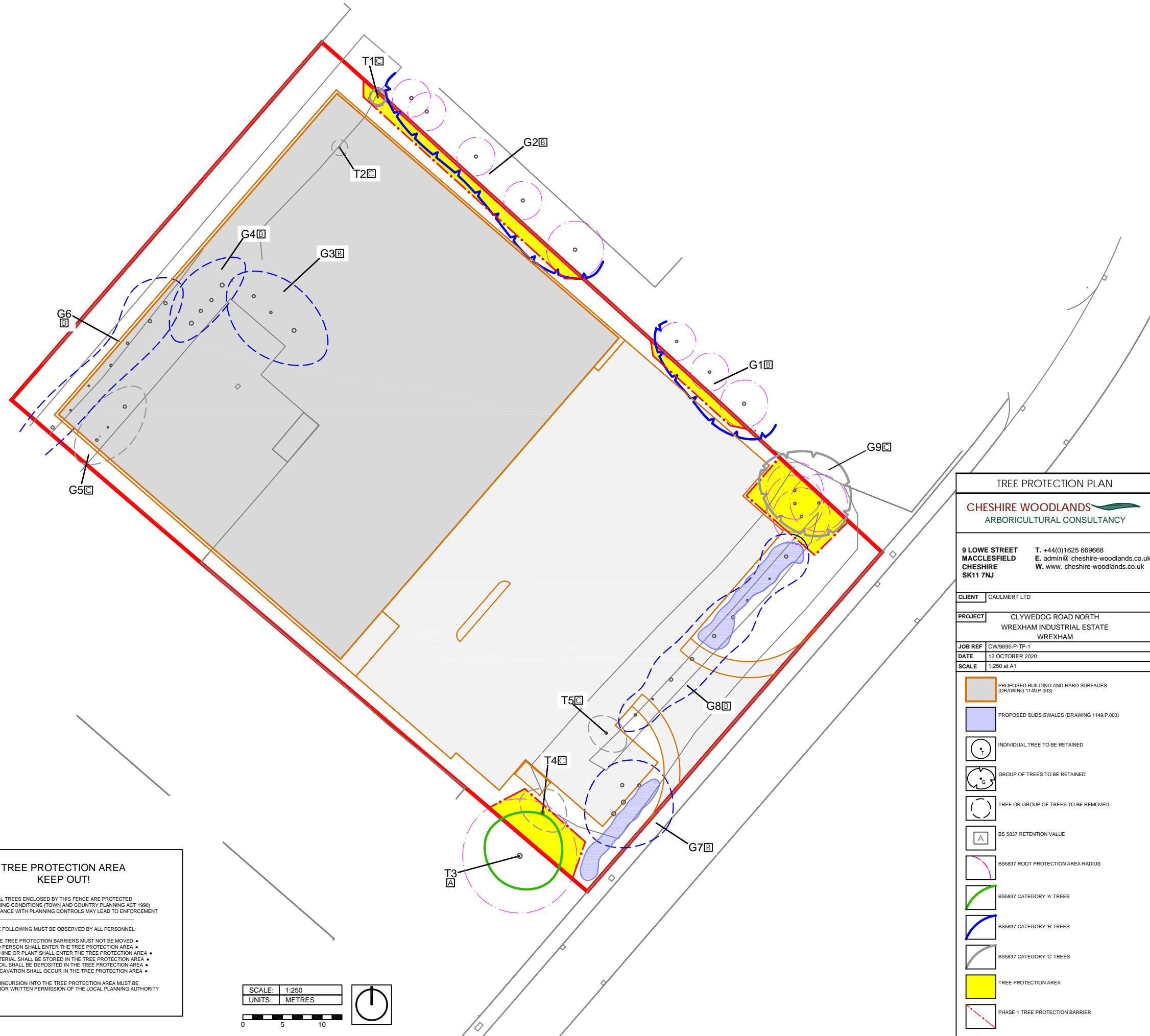
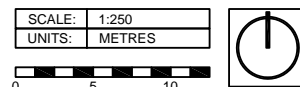


Fig.1



TREE PROTECTION PLAN	
CHESHIRE WOODLANDS ARBORICULTURAL CONSULTANCY	
9 LOWE STREET MACCLESFIELD CHESHIRE SK11 7NJ	
T. +44(0)1625 669668 E. admin@cheshire-woodlands.co.uk W. www.cheshire-woodlands.co.uk	
CLIENT	CAULMERT LTD
PROJECT	CLYWEDOG ROAD NORTH WREXHAM INDUSTRIAL ESTATE WREXHAM
JOB REF	CW/9895-P-TP-1
DATE	12 OCTOBER 2020
SCALE	1:250 at A1
<ul style="list-style-type: none"> PROPOSED BUILDING AND HARD SURFACES (DRAWING 1149.P.003) PROPOSED SUDS SWALES (DRAWING 1149.P.003) INDIVIDUAL TREE TO BE RETAINED GROUP OF TREES TO BE RETAINED TREE OR GROUP OF TREES TO BE REMOVED BS 5837 RETENTION VALUE BS5837 ROOT PROTECTION AREA RADIUS BS5837 CATEGORY 'A' TREES BS5837 CATEGORY 'B' TREES BS5837 CATEGORY 'C' TREES TREE PROTECTION AREA PHASE 1 TREE PROTECTION BARRIER 	