

TREE SOLUTIONS



Arboricultural Method Statement

Land at Tupa, Penley

Prepared for:

MR K BARKER AND MRS T WILSON
C/o Fisher German

Our Ref: 24/AMS/WXM/220

March 2024

TREE SOLUTIONS

SEQUENCE OF OPERATIONS

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

1. Tree surgery works
2. Pre-contract site meeting – ‘Toolbox Talk’
3. Erect temporary tree protective fencing
4. Main construction phase
5. Removal of temporary fencing
6. Landscaping within RPA of trees
7. Arboricultural site supervision

1. Tree Surgery Works

1. Before the erection of the temporary protective fencing, all tree surgery works shall be implemented in accordance with the approved Tree Survey Schedule at **Appendix 1**
2. All possible efforts must be made to prevent damage to retained trees including potential root incursion or compaction caused by vehicle access.
3. All arboricultural works shall conform to the recommendations of BS 3998 (2010) ‘Recommendations for Tree Work’
4. All operatives shall be equipped with and use personal protective equipment (PPE) in accordance with current Health & Safety Executive current directives and industry codes of practice.
5. Performance of all arboricultural operations and use of equipment shall be in accordance with current Health & Safety Executive current directives and industry codes of practice
6. Any additional access facilitation pruning required shall be undertaken by qualified tree contractors and conform to the recommendations of BS 3998 (2010) ‘Recommendations for Tree Work’.

2. Pre-Contract Site Meeting

1. ACoW to undertake a ‘toolbox talk’ outlining working methods in relation to trees prior to any construction activity on site. Those to be present are:
 - Arboricultural Clerk of Works – (ACoW)
 - Client
 - Main Contractor

3. Erect Temporary Tree Protective Fencing

1. Prior to commencement of any construction, ground preparation, excavation, or material deliveries the main contractor shall erect the temporary protective fencing as detailed in the ‘Tree Protection Specification’ and in the location indicated on the Tree Protection Plan.
2. Photographic evidence of tree protective fencing will be issued to Wrexham County Borough Council (WCBC) Tree Officer for approval upon completion. Any damage occurring to protective fencing during the development phase shall be made good by the main contractor.

4. Main Construction Phase

1. There shall be no storage of construction material, site parking, site accommodation or equipment in any area designated as the Root Protection Area (RPA) and Construction Exclusion Zone (CEZ) and enclosed by Temporary Protective Fencing
2. No materials that are likely to have an adverse effect on tree health such as oil, bitumen or cement will be stored or discharged within 10 metres of the trunk of a tree that is to be retained. No fires will be lit
3. The site agent shall supervise deliveries by self-loading crane, with vehicles positioned in such a manner that retained trees are not at risk of damage
4. Any damage to trees because of construction/engineering work will be logged and reported to the project ACoW

Avoiding Damage to Stems and Branches

- Care shall be taken when planning site operations in proximity to trees to ensure that wide or tall loads or plant with booms, jibs and counterweights can operate without coming into contact with retained trees. Such contact can result in serious injury resulting in safe retention impossible

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Cement Mixing

- The cement mixer will be laid on top of plywood boards in a position outside the RPA of any trees. The mixer will be kept in this position throughout all development work.

On Site Storage of Spoil and Building Materials

- Prior to and during all site construction works no spoil will be stored within the Root Protection Area of any tree on or adjacent to the site even if proposed site work is to be within the crown spread. Any encroachment within this protected area will only be by the prior agreement of WCBC Arboricultural Officer

5. Remove all Temporary Tree Protective Fencing

1. Tree protective fencing will only be removed upon completion of all engineering/construction work within each phase and once all machinery associated with the works has left site.

6. Landscaping within RPA of Trees

1. There shall be **no rotovating** of ground within any area designated as a Root Protection Area (RPA) and Construction Exclusion Zone (CEZ) and enclosed by Temporary Protective Fencing.
2. Other than the approved works, there should be no additional hard landscaping works or excavation for cables, or any other service should be installed within the Root Protection Area (RPA) and Construction Exclusion Zone (CEZ) without the written consent of WCBC.

7. Arboricultural Site Supervision

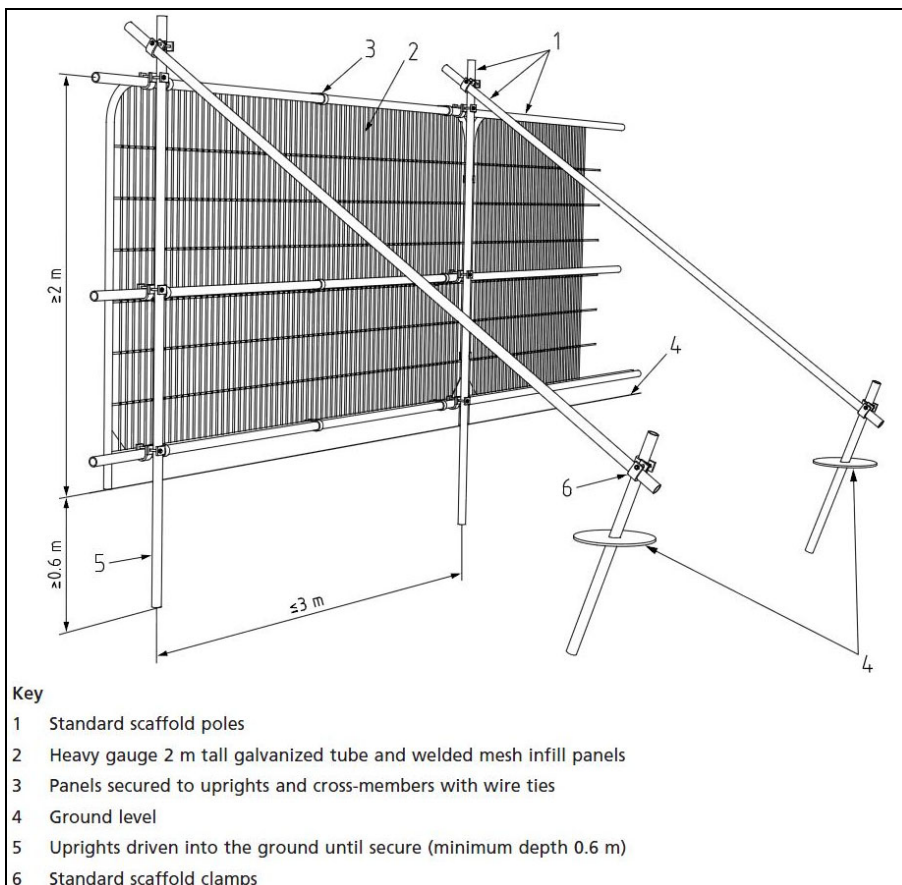
1. The erection of all tree protection measures outlined in this AMS and as indicated on the Tree Protection Plan will be inspected by the contract ACoW immediately after erection. Photographic evidence of the location and specification of all protective fencing will be forwarded to WCBC Tree Officer upon completion.
2. All proposed work within any designated RPA will be overseen by the ACoW with photographic records taken and signed inspection report emailed direct to WCBC Tree Officer for approval

TREE PROTECTIVE FENCING

- 1 Before the commencement of any site excavations and subsequent construction works (other than those set out in the schedule of tree works contained in this document), protective fencing will be erected as detailed on the Tree Protection Plan and as specified below.
- 2 The fencing will consist of a scaffold framework in accordance with Figure 2 of BS 5837 – 2012 (illustration below) comprising a metal framework, both vertical and horizontal, well braced to resist impacts. Vertical tubes will be spaced at a maximum interval of 3m. Onto this, weldmesh panels shall be securely fixed with wire or scaffold clamps. Weldmesh panels on rubber or concrete feet are not considered resistant to impact and for this reason will not be used. The site manager or other suitably qualified appointed person will be responsible for inspecting the protective fencing daily; any damage to the fencing or breaches of the fenced area will be rectified immediately.
- 3 Clearly legible weatherproof signage, stating “Protected Trees – Exclusion Zone” shall be attached to the fencing 1.5m from the ground, facing out of the Tree Protection Zone located at regular intervals along the fence line (as Appendix 3).
- 4 The fencing will remain in place until completion of all site works and then only removed when all site traffic is removed from site
- 5 Other than works detailed within this method statement or approved in writing by the WCBC, no works including storage or dumping of materials shall take place within the exclusion zones defined by the protective fencing.

Protective Fencing Detail

1. **Magenta** - Trees



Arboricultural Clerk of Works (ACoW)

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Mobile: 07766 77450
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Appendix One

Approved Tree Survey

Schedule (Oct 2019)

TREE SURVEY SCHEDULE (BS5837: 2012)

SITE:	LAND AT PENLEY HALL, PENLEY, WREXHAM, LL13 0LU
CLIENT:	MR K BARKER & MRS T WILSON
BRIEF:	STAGE 1 TREE SURVEY & INDICATIVE ARBORICULTURAL IMPACT ASSESSMENT

SURVEYOR:	A. HENDERSON
ASSESSMENT DATE:	10/05/2018
VIEWING CONDITIONS:	GOOD
JOB REFERENCE:	18/AIA/WXM/220 – (UPDATED OCT 2019)

TREE NO. T - Tree G - Group H - Hedge	SPECIES (COMMON NAME)	AGE	HEIGHT (m) + CROWN CLEARANCE/ DIRECTION OF GROWTH (N.S.E.W)	RADIAL CROWN SPREAD (m)				STEM/ MULTI-STEM* DIA.(mm)	VITALITY	COMMENTS	MANAGEMENT	CATEGORY & SUB-CATEGORY GRADING BS 5837	BS 5837 RADIUS (m) RPA (m²)
				N	S	E	W						
T1	Horse Chestnut	M	22 2E	4.5	4	5	3	1000	G	- Tall prominent tree located outside site boundary - Co-dominant stems from 2m with compression union <i>Subject to TPO (WMBC No 20-1985) & listed as T24 in Order</i> - E.R.C. 40	• 3rd party tree - N/A	A2	12 452m²
T2	Oak	FM	17 1S	7	9	2	5	1250+	G	- Veteran Oak - Crown bias west due to proximity to T3 - Dieback & dead wood in crown <i>Subject to TPO (WMBC No 20-1985) & listed as T31 in Order</i> - E.R.C.40+	• N/A	A3	15 707m²
T3	Oak	FM	20 2S	10	8	13	5	1250+	G	- As T2 - Previous large diameter limb failures leaving tear out wounds <i>Subject to TPO (WMBC No 20-1985) & listed as T32 in Order</i>	• N/A	A3	15 707m²
T4	Oak	M	18 2S	6.5	6	7.5	5	700	M	- Located off site with no access to survey - observations are from what was visible from within site - Significant dieback in crown - E.R.C. 20	• 3rd party tree - N/A	B2	8.4 222m²

HEADINGS & ABBREVIATIONS

TREE NO.
SPECIES:
AGE RANGE/LIFE STAGE:
HEIGHT:
CROWN SPREAD:
CROWN CLEARANCE & DIRECTION OF GROWTH:
STEM DIA/MULTI-STEM DIA:
VITALITY:
E.R.C. = ESTIMATED REMAINING CONTRIBUTION:
BS 5837 CATEGORY & SUB-CATEGORY GRADING:
BS 5837 RADIUS & BS 5837 RPA:

REFERENCE NUMBER. REFER TO PLAN OR NUMBERED TAGS WHERE APPLICABLE (T = TREE, G = GROUP, H = HEDGE)
COMMON NAME (LATIN NAMES AVAILABLE ON REQUEST)
Y = YOUNG, SM = SEMI MATURE, EM = EARLY MATURE, M = MATURE, PM = POST MATURE
ESTIMATED AND RECORDED IN METRES. APPROXIMATELY 1 IN 10 TREES ARE MEASURED USING A CLINOMETER AND THE REMAINDER ESTIMATED AGAINST THE MEASURED TREES
MAXIMUM CROWN RADIUS MEASURED TO THE FOUR CARDINAL COMPASS POINTS FOR SINGLE SPECIMENS ONLY (MEASUREMENT FOR TREE GROUPS - MAXIMUM RADIUS OF THE GROUP)
HEIGHT IN METERS OF CROWN CLEARANCE ABOVE ADJACENT GROUND LEVEL (TO INFORM ON GROUND CLEARANCE, CROWN/STEM RATIO AND SHADING)
STEM DIAMETER - MEASURED AT APPROXIMATELY 1.5 METRES ABOVE GROUND LEVEL OR A COMBINATION OF STEMS FOR MULTI-STEMMED TREES
A MEASURE OF PHYSIOLOGICAL CONDITION. D = DEAD, MD = MORIBUND, P = POOR, M = MODERATE, G = GOOD
RELATIVE USEFUL LIFE EXPECTANCY (YEARS)
A = HIGH QUALITY AND VALUE, B = MODERATE QUALITY AND VALUE, C = LOW QUALITY AND VALUE, U = UNSUITABLE FOR RETENTION (SUB-CATEGORY REFERS TO ARBORICULTURAL, LANDSCAPE AND CULTURAL/CONSERVATION VALUES)
PROTECTIVE DISTANCE - RADIUS FROM THE CENTRE OF THE STEM TO THE LINE OF TREE PROTECTION (CONSTRUCTION EXCLUSION ZONE - CEZ) AND PROTECTIVE BARRIER ROOT PROTECTION AREA - BS 5837 (2012) ANNEX D (THE RECOMMENDATIONS STATE THAT THE RPA SHOULD BE CAPPED AT 707 M²) NOTE – ALL CALCULATIONS ROUNDED TO NEAREST DECIMAL

TREE SURVEY SCHEDULE (BS5837: 2012)

Tree Solutions

Arboricultural Consultants

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				N	S	E	W						
T5	Oak	M	16 0.5W	6	5	4.5	5	700	G	- As T4 - no access to survey - Trees appears in good health and vigour - E.R.C. 40	3rd party tree - N/A	A2	8.4 222m²
T6	Oak	FM	15 4W	4.5	3	8	6.5	750	M	- Major past crown failures leaving asymmetric form with excessive end loading - Requires a crown reduction to re-balance canopy & prevent failures <i>Subject to TPO (WMBC No 20-1985) & listed as T30 in Order</i> - E.R.C. 20	3rd party tree	B2	9 255m²
7	Oak	M							P/MD	- In advanced decline - 70% dead <i>Subject to TPO (WMBC No 20-1985) & listed as T29 in Order</i>	Requires pollarding if retained	U	N/A
T8	Willow (Weeping)	M	8 0	3	1.5	5	2	350	G	- Small tree of no visual merit due to location - E.R.C. 10	N/A	C2	4.2 55m²
T9	Birch	FM	12 1E	2	2	5	2	610	G	- Tree of no significant merit/value - E.R.C. 10	N/A	C2	7.3 168m²
T10	Cherry	FM	10 1S	4.5	4	3	2	460	M	- Entirely Ivy clad impeding inspection - Tree of no visual significance - E.R.C. 10	N/A	C2	5.5 96m²
T11	Oak	EM	16 2S	6	5	6	6	570	G	- Good quality well established tree with enormous future potential to the site - E.R.C. 20+	N/A	B2	6.8 147m²

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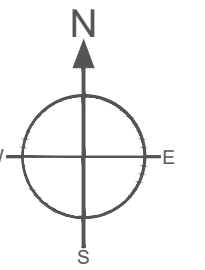
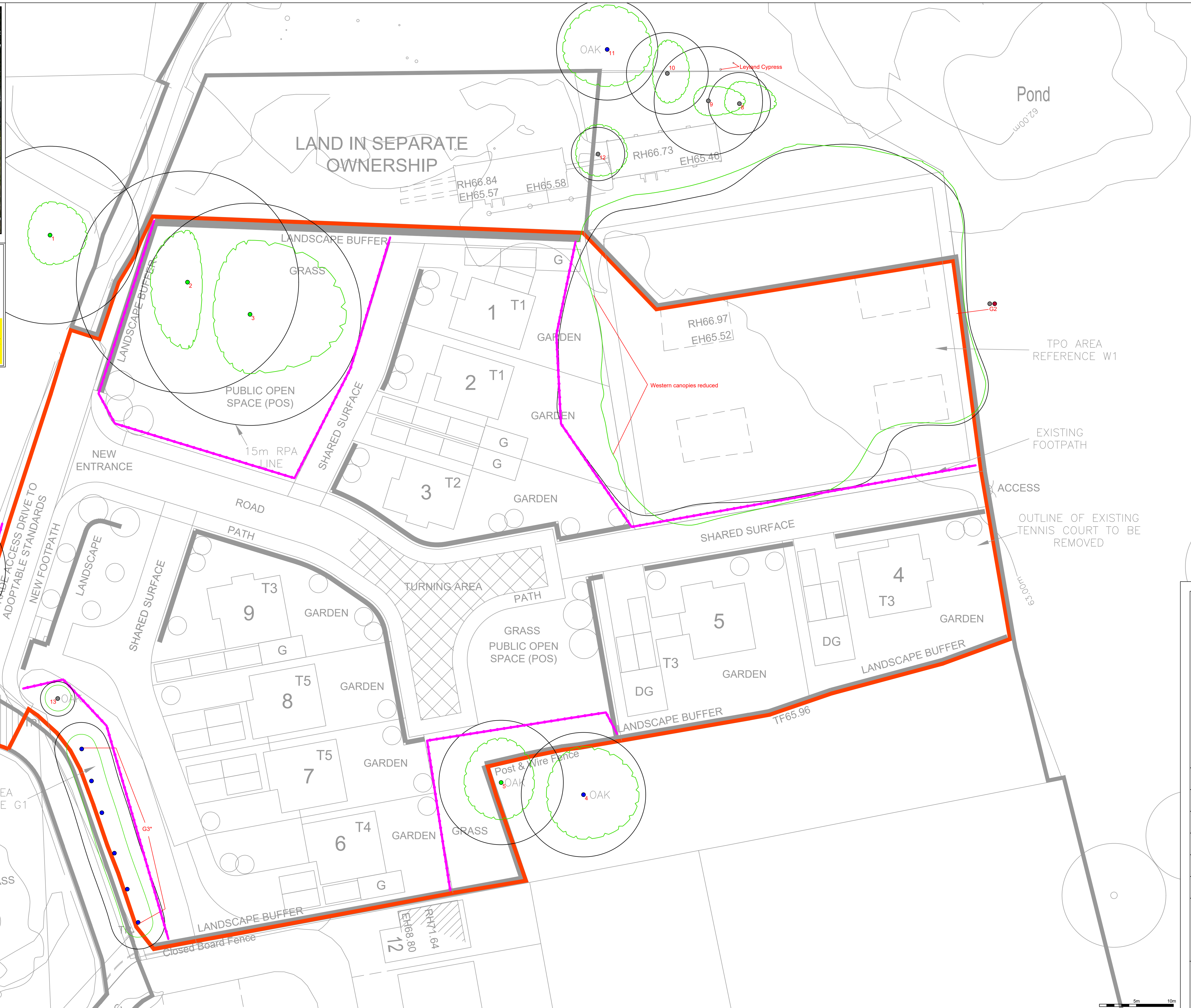
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				N	S	E	W						
T12	Sycamore	EM	13 0	4	3	4	3	300	M	- Self set tree that abuts building - Coppiced in past - E.R.C. 0	Remove	C1	3.6 41m²
T13	Oak	SM	9	1	1	1	1	200	G	- Young tree worth retaining if possible, as has potential to establish well • <i>Subject to TPO WCBC 286/2018</i> - E.R.C. 10	No works	C2	2.4 18m²
G1	Willow (Goat)	EM	≤11	2	2	2	2	≤200	G	- Linear group of past coppice - No value - E.R.C. 0	Remove	C2	2.4 18m
G2	Horse Chestnut Sycamore Birch Willow	EM	≤14					≤450	P	- Mass of naturally colonised overgrown scrub that has been allowed to grow due to no past management - All Horse Chestnuts have Honey Fungus & Horse Chestnut Bleeding Canker & as such require removal for H&S reasons irrespective of any development proposal - Remaining trees are of no individual merit and are not visually prominent - Many trees have failed at the root-plate • <i>Subject to TPO WCBC 286/2018</i> - E.R.C. 10	- Remove all dead, dying and dangerous trees – exempt from TPO application - Reduce western tree canopies by 2m	C2 U	5.4 92m²
G3	Birch	M	≤12	2	2	2	2	≤300	G	- Linear group of trees along the site frontage - No visual defect • <i>Subject to TPO WCBC 286/2018</i> - E.R.C. 20	Retain as attractive landscape feature along site frontage	B2	3.6 41m²

Table 1 Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
Trees unsuitable for retention (see Note)				
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	- Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) - Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline - Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality <i>NOTE</i> Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.			See Table 2
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation	
Trees to be considered for retention				
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	See Table 2
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value	See Table 2
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value	See Table 2

Appendix Two **Tree Protection Plan**



Legend

NOTE: Tree/group numbers marked with an * have approximate locations

2.0M high heavy duty rhino panels (with extra central support bar) mounted on scaffold poles (driven in to the ground) and secured with anti tamper bolts – as illustrated.

Client: Mr K Barker and Mrs T. Wilson	
Project: Land at Tupa, Penley Hall Drive, Penley, LL13 0LU	
Title: Tree Protection Plan	
Scale: 1:250@A1	Date: February 2024
Drawn By: AM	Revision: B
Job Ref: 24/AMS/WXM/220	Drawing No: 03
Do not scale from this drawing all dimensions to be checked on site.	
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TREE SOLUTIONS

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Appendix Three

Tree Protection Sign



**PROTECTIVE FENCING. THIS
FENCING MUST BE
MAINTAINED IN ACCORDANCE
WITH THE APPROVED PLANS
AND DRAWINGS FOR THIS
DEVELOPMENT.**



**TREE PROTECTION AREA
KEEP OUT !**

**(TOWN & COUNTRY PLANNING ACT 1990)
TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY
PLANNING CONDITIONS AND/OR ARE THE SUBJECTS OF A
TREE PRESERVATION ORDER.
CONTRAVENTION OF A TREE PRESERVATION ORDER MAY
LEAD TO CRIMINAL PROSECUTION**

**ANY INCURSION INTO THE PROTECTED AREA MUST BE
WITH THE WRITTEN PERMISSION OF THE LOCAL
PLANNING AUTHORITY**