

Ascerta

Landscape, Arboricultural & Ecological Solutions
for the Built Environment

Arboricultural Impact Assessment

Land off Clitheroe Road
A59 Roundabout
Whalley
Lancashire
BB7 9AD

Ref: P.1086

August 2018

Revision	Date	Description
A	3 rd September 2018	General amendments
B	3 rd September 2018	General amendments

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P.1086.18

Arboricultural Impact Assessment

**Land off Clitheroe Road
A59 Roundabout
Whalley Lancashire
BB7 9AD**

For

Eric Wright

August 2018

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Appendix 1 **Tree Data Tables in accordance with Table 1 of BS5837: 2012**

Appendix 2 **Drawing P. 1086.18.01 *Tree Survey***
 Drawing P. 1086.18.02 *Tree Constraints & Draft Protection*
 Drawing

EXECUTIVE SUMMARY

A survey of the existing trees on and adjacent land off Clitheroe Road, A59 Roundabout, Whalley, Lancashire, BB7 9AD, has been carried out by a suitably qualified and competent arboriculturist in accordance with British Standard 5837: 2012 *Trees in relation to design, demolition and construction – Recommendations*.

The purpose of the survey and of this report is to identify the impact of the proposed development of the site on trees, both within and immediately adjacent the site, in accordance with the provisions of BS5837: 2012.

The description for the development of the site is as follows:

“Hybrid planning application for mixed use development comprising; in full, the erection of 47 no. retirement bungalows for persons aged 55 and over (Class C3) and a 65+ no. bedroom/unit care home (Class C2/C3) with vehicular and pedestrian access from Clitheroe Road and associated car parking, landscaping and external works; and in outline with all matters reserved except access, a hotel (Class C1), pub/restaurant (Class A3/A4), a gym/health & fitness centre (Class D2) and 2 no. bulky goods/showroom retail units (Class A1) and associated customer car parking, landscaping and external works and vehicular and pedestrian access from the A59”.

This will require the removal of a number of existing trees and in the absence of suitable controls, also has the potential to have an indirect impact on a number of the trees proposed for retention.

Mitigation for the impact of the development can be provided in the form of the following:

- The erection of protective fencing in advance of the commencement of the development to safeguard the root systems of retained trees; and
- The agreement, in advance of the commencement of the development, together with the implementation during the construction phase, of a methodology for the protection of retained trees.

Compensation for the impact of the development, together with landscape and biodiversity enhancements can be achieved by way of the following:

- The planting of trees, shrubs and where applicable hedges as part of a comprehensive landscape scheme to replace any vegetation lost and to integrate the development into the wider landscape; and
- The use of a mixture of native and ornamental species within planting schemes, where those species are suited to the site and local landscape.

1.0 Introduction

- 1.1 Ascerta has been instructed to carry out a survey of the trees within and immediately adjacent land off Clitheroe Road, A59 Roundabout, Whalley, Lancashire, BB7 9AD, and to assess the potential impact of the development as proposed on trees within/adjacent the site in accordance with British Standard 5837: 2012 *Trees in relation to design, demolition and construction – Recommendations*.
- 1.2 The site was originally visited on 10th August, 2017, and subsequently re-visited on 29th August, 2018, by Robert Armitage BSc (Hons) MArborA, a competent and qualified arboriculturist with experience of the UK and European arboricultural and landscape industries within the context of the planning system. During the site visit, a survey was carried out of the trees growing both on and immediately adjacent the site to the standards contained within BS5837: 2012. This report presents the results of the survey, provides an assessment of the impact of the development and includes recommendations for further actions, where applicable, to mitigate any potentially negative effects of the development on tree cover within the local landscape.

2.0 Objectives

- 2.1 Our client's objective is to develop the site by constructing a number of retirement and care homes and public recreational and retail facilities (see full description in Executive Summary).
- 2.2 Our objectives are as follows:
- Identify what arboricultural features exist presently within and adjacent the site and to record and categorise them in a manner consistent with BS5837: 2012;
 - Identify which trees will need to be removed directly as a result of the proposed development of the site;
 - Identify any indirect impact from the proposed development on trees proposed for retention;
 - Provide an indication of what protection measures can be implemented as part of the development of the site to ensure the physical protection of retained trees;
 - Provide recommendations for mitigation and compensation in terms of new planting or enhancement of existing features of arboricultural, landscape or ecological interest or importance; and
 - Provide any other recommendations to assist our clients in achieving their objectives whilst satisfying current legislation or policy guidance in relation to the woody vegetation on site.

3.0 Planning Policy & Relevant Legislation

- 3.1** The National Planning Policy Framework (March 2012) sets out the Government's planning policies for England and how these are expected to be applied. The Framework contains a presumption in favour of sustainable development, with sustainable development in the UK being defined under the UK Sustainable Development Strategy *Securing the Future*. This sets out five 'guiding principles' of sustainable development: living within the planet's environmental limits; ensuring a strong, healthy and just society; achieving a sustainable economy; promoting good governance; and using sound science responsibly.
- 3.2** The Framework seeks to facilitate the approval, without delay, of developments that meet the objectives of up to date Local Plans. Where proposed developments involve net gains for nature and biodiversity, this is to be seen as a positive improvement in the quality of the natural environment and thus in compliance with the objectives of the Framework.
- 3.3** The site lies within the Ribble Valley Borough Council administrative area and is subject to the policies contained within its Local Plan, which have been considered when writing this report.
- 3.4** Checks made with the Local Planning Authority on 10th August, 2017, indicate that none of the trees within our survey are statutorily protected by a Tree Preservation Order and the site is not located within a Conservation Area. Attempts were also made on the 30th August, 2018, to contact the council to see whether any TPO's or new Conservation Areas had been created that affected the site, but the council were unable to provide a response at that time. Therefore, in advance of the commencement of any works to trees within or adjacent the site, those instructing and proposing to carry out such works should satisfy themselves that all appropriate consents are in place to prevent potential breach of legislation.
- 3.5** British Standard 5837: 2012 *Trees in relation to design, demolition and construction – Recommendations* provides current recommendations and guidance on the relationship between trees and design, demolition and the construction processes. It sets out the principles and procedures to be applied to achieve a harmonious and sustainable relationship between trees and structures.
- 3.6** Notwithstanding the aforementioned policies and legislation, consideration should also be given to any impacts from the proposed development in respect of the Hedgerow Regulations 1997 and the Forestry Act 1967 (and specifically the potential need for a felling licence), as well as existing UK and European legislation relating to wildlife and nature conservation.

4.0 Survey & Survey Methodology

- 4.1** We have been supplied with a digital copy of the topographical survey for the site, which satisfies the relevant part of section 4.2 of BS5837: 2012. Features of arboricultural or landscape interest that have been excluded from the original plan (for example trees on or located off site but within a distance from the boundary of the site equal to or less than 12 times the stem diameter of that tree) have been added to the plan manually.
- 4.2** Our assessment of the soils within the site, based on local site conditions, geography, available soil maps and our own experience of soils across the United Kingdom, indicates that the soils on site are likely to contain a clay element, and that this will have a plasticity index in the low range. Any further details or confirmation of the exact nature of soil conditions on site will require further, more rigorous sampling and analysis. It is not however anticipated that the clay content will cause specific issues relating to retention of trees given the impact of the development proposals, providing that consideration is given to this aspect in advance of and during the construction phase of the development. Provision will need to be made for the protection of soil structure in key areas during the construction phase and the repair of any damage post construction. Further details are provided throughout this report and final details can be secured via planning condition.
- 4.3** Our original survey of the trees within and adjacent the site was carried out by a qualified and competent arboriculturist in accordance with sections 4.4 and 4.5 of BS5837: 2012 on 10th August, 2018, and subsequently re-surveyed 29th August, 2018, during sunny weather conditions. Those trees surveyed have been numbered sequentially, although for the purposes of this project they have not been tagged. The trees have also been categorised in accordance with section 4.5 and Table 1 of the Standard.
- 4.4** Where relevant and where the quality of shrub masses and hedges justifies recording, details have been recorded to the tree survey plan and tree data tables.
- 4.5** Where trees are surveyed that require immediate attention, for example to abate a nuisance, prevent a serious hazard to life or property, or are affected by a pathogen or pest that could cause widespread damage unless it is controlled, notification will be issued to the relevant person or organisation such that appropriate action can be taken.
- 4.6** Root Protection Areas for those trees surveyed have been calculated in accordance with the formulas within section 4.6 and Annex C of the Standard and can be found within the tree data tables that accompany this report. The tree data tables also contain a key to abbreviations used and the rationale for determining Root Protection Areas for groups of trees and woodlands (where applicable).

5.0 Survey Results & Impact Assessment

- 5.1 Existing Tree Cover:** Fifteen individual trees, nine groups of trees and three hedges were recorded during our survey, the details of which can be found within Appendix 1 to this report and cross referenced with drawing P.1086.18.01 *Tree Survey*.
- 5.2 Direct Impact on Trees:** The development of the site as proposed will directly require the removal of H1 (in part), G7, G8, H2, T10-T14 and H3. However, there are also a number of poor condition trees along the northern boundary of the site (T2, T3, T4 and G3) that have limited safe retention value within the developed site and therefore it is recommended that agreement is reached to fell these trees. They can then be replaced as part of a landscaping scheme for the site, with better quality trees more suitable to the setting.
- 5.3 Compensation:** Compensation for the loss of trees and the impact on canopy cover can be provided by way of planting new trees at the landscape stage of the project. Given the nature of the proposals, the context of the site in the local landscape and the opportunities for new planting and landscaping, it is considered that in terms of canopy cover, the medium to long term impact of the development will be positive.
- 5.4 Indirect Impact on Trees:** In the absence of suitable controls, the development may well have an indirect impact on a number of trees on and adjacent the site. Measures are therefore required during the construction phase, as described throughout this report and on supporting drawings, to safeguard retained trees for the long-term benefit of the landscape.
- 5.5 Hedgerows:** In accordance with the Hedgerow Regulations 1997, 'important' hedgerows (in the context of the Regulations) should not be removed without a Hedgerow Removal Notice issued by the relevant Local Authority, unless that removal is subject to an appropriate consent under the Town and Country Planning Act 1990. Appropriate checks should be made in advance of the commencement of works to establish the importance or otherwise of hedgerows on or within influencing distance of the site and whether there is a requirement for a Hedgerow Removal Notice distinct from any formal planning consent to be granted.
- 5.6 Potential Mitigation for Development Impacts:** Mitigation of the direct impacts from the development of the site can be provided in the form of the erection of protective fencing as indicated on the attached drawings.

5.0 Survey Results & Impact Assessment (Continued)

- 5.7 Potential for Shading & Nuisance:** Mature trees in urban and suburban areas add significant value and environmental benefits to properties; however, it is acknowledged that some land/property owners are averse to retaining trees close to buildings and areas of public use because of shading and other potential nuisances (leaf/fruit drop for example). Whilst efforts can be made to minimise the impact from shading by trees, it is almost inevitable that in some situations, whether in the short term from existing trees or in the long term from new trees, trees will cast shade on parts of properties, whether that be buildings, garden/open space or other areas of general use during part of the day. Generally, any shade cast from trees will be for relatively short periods and entirely acceptable given the accepted co-existence of large trees in an urban context. The acceptability or otherwise of shade is a somewhat subjective issue driven largely by land or property owner/occupier perceptions and in the majority of cases is not necessarily something that should be determined by a local planning authority. We do not consider in this case that shade will be excessive, or that any other ordinary circumstance arising from the presence of trees, for example from leaf or fruit drop, will constitute an unacceptable nuisance.
- 5.8 Boundary Screening:** Trees located adjacent to site boundaries generally make a welcome contribution to the screening of views, however in some cases there may be valid reasons for opening up views to enhance visibility. Where applicable, the drawings supporting this report indicate opportunities for management of boundaries in line with project aims and objectives.
- 5.9 Long Term Spatial Constraints:** The proposed layout has been designed to meet the standards set by the local planning authority as well as current best practice guidance. Where applicable, and subject to the possibility of an element of acceptable pruning, there should generally be adequate space between new buildings and trees to limit the potential for future pressure to remove trees. Acknowledgement should however be given to the fact that property owners are largely free to plant trees as close to their property as they wish, therefore any requirement for future maintenance of existing or future vegetation should not be given any weight in the determining of this application. Whilst it is not possible to predict what actions future occupiers will seek to take in respect of trees within or adjacent properties, the existing layout, together with any vegetation management prescriptions either at this stage or in the future, is considered acceptable from a design perspective.
- 5.10 Existing Areas of Hard Standing:** There are no existing areas of hard standing located close to trees proposed for retention, therefore subject to the agreement and implementation of physical protection for those trees throughout the ground works/remediation stage of the project, there should be no arboricultural implications associated with the removal of such surfaces.
- 5.11 Existing buildings/structures to be removed:** There are no buildings to be demolished and therefore there are no arboricultural implications associated to demolition.

5.0 Survey Results & Impact Assessment (Continued)

- 5.12 Proposed Areas of Hard Standing:** There are no areas within the proposed development where proposed hard surfaces encroach within root protection areas of retained trees; therefore, there are potentially no indirect impacts from the development process providing that all other recommended safeguards as outlined in this report are implemented.
- 5.13 Proposed Buildings Located Adjacent/Within Root Protection Areas:** The Gym, Bulky Goods/Showroom 2 and the Family Pub are all located marginally within the root protection areas of trees located off-site along the northern boundary and there is therefore the potential for root severance during the construction process. If permission is not given to remove the trees from the owner, construction works that could adversely impact the trees' root systems will need to be carried out carefully to ensure no excessive root damage occurs. This will involve excavations that are supervised by the project arboriculturist to ensure any exposed roots are pruned cleanly back to the soil surface as promptly as possible. The likelihood of significant root loss from the construction works in these areas is low and therefore specialised construction methodologies for the buildings are not considered necessary. However, as stated within the Tree Data Tables at Appendix 1, these trees all contain defects that significantly reduce their safe long-term retention value and it is therefore recommended that T2, T3, T4 and part of G3 are removed, to be replaced with better quality trees more suitable to their setting.
- 5.14 Proposed Drainage & Domestic Services:** There is a proposed drainage ditch within the RPA of T15 and so excavations should be kept as shallow as possible and be overseen by the project arboriculturist to ensure roots are pruned as necessary. If large structural roots are encountered during the works, the drainage channel should be re-directed to allow for the retention of such roots; this can be decided on site. At the planning application stage of the project, details of proposed drainage arrangements and provision of utility services are generally not known. During the installation process however, general guidance can be obtained from the National Joint Utilities Group Publication *Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees – Volume 4* such as to minimise the impact of works on retained trees.
- 5.15 Working Space During the Construction Phase:** The site is of a size such that there will be adequate working space throughout the construction phase, with little if any potential impact on retained trees. However, it is essential that construction exclusion zones created to safeguard retained trees are not breached without prior consideration and implementation of control measures to limit any potentially negative impacts on trees.
- 5.16 Access Facilitation Pruning:** There may be a limited number of areas within the site where an element of access facilitation pruning may be required. Providing that these works are controlled and carried out to a minimum of the standards as contained within BS3998: 2010 *Tree work – Recommendations*, then the visual impact of the work will be minimal and will not detract from the overall landscape value of the site. Our preliminary recommendations for arboricultural works are stated within the Tree Data Tables at Appendix 1 to this report.
- 5.17 Protection of Planting Areas:** In this case, parts of the site that could be planted up at the landscaping stage of the project are effectively excluded from construction activities by the tree protection fencing and therefore there is no need to erect additional fencing to protect the soil structure.

5.0 Survey Results & Impact Assessment (Continued)

- 5.18 Requirement for an Arboricultural Method Statement:** It would be beneficial to agree and implement an Arboricultural Method Statement to ensure that retained trees are adequately protected from the outset and that no unnecessary harm occurs during the construction phase. Section 6 of this report contains further details of the aspects of the development that could successfully be controlled, which can in turn be subject to a suitably worded planning condition.
- 5.19 Planning for New Landscaping:** If not considered carefully at the design stage, new planting and landscaping can have an adverse impact on existing trees and cause long term problems for the built environment. Care should be taken in the design of new landscapes to prevent physical damage to retained trees during the planting process, and to ensure that schemes are designed to survive and thrive rather than compete for resources. Similarly, new trees and shrubs should not be planted where they will cause damage to structures, either directly or indirectly in the future. Table A1 at Annex A of the Standard gives advice on minimum distances for new trees from structures to avoid direct damage from future tree growth. Further advice should be sought from the project arboriculturist and a suitably qualified and experienced engineer as to the potential indirect impact of trees on structures in the long term (from clay shrinkage subsidence).

6.0 Tree Protection Measures

6.1 Based on the proposed layout and those trees proposed for retention, the drawings attached to this report show our preliminary recommendations for the physical protection of retained trees throughout the construction phase. The plans indicate the location of protective barriers, as well as the specification for construction of the protective fencing in accordance with Figures 2 & 3 of the Standard. These barriers will form construction exclusion zones around the retained trees.

6.2 In addition to the erection of protective fencing, the attached drawings show areas where it would be beneficial to agree a tree protection method statement between the project arboriculturist, design & construction teams and the local planning authority tree officer. The method statement will need to address and make allowance for the following:

- All forms of access required to the site;
- Site cabins and storage areas;
- Proposed parking for site personnel;
- Phasing of works;
- Space required for excavations (including foundation excavations);
- Any required special construction techniques (for example provision of porous surfaces);
- The location and construction methodology for installation of services in close proximity to retained trees & hedges;
- Any changes in ground levels and any resulting requirement for retaining structures;
- Proposed root zone enhancement measures;
- Working space for cranes, plant and scaffolding; and
- Management of waste products within the site.

6.3 Over and above the physical tree protection measures that should form the basis for the tree protection method statement, the following details should be provided within the method statement:

- Protection of the soil structure within the proposed planted areas (where applicable);
- Planting operations within the root protection areas of retained trees;
- Any required/additional precautions outside of construction exclusion zones in relation to the treatment & landscaping of garden or open space areas; and
- System of arboricultural site monitoring / schedule of site visits and resulting actions.

7.0 Summary of Impacts & Potential Mitigation Factors

7.1 Table 1 below summarises the impacts of the development as proposed on tree cover within and immediately adjacent the site. Comments are also provided on potential mitigation, compensation or special measures required to minimise the impact of the development and safeguard trees proposed for retention.

Table 1: Summary of the impacts of the development on trees within / adjacent the site.

Issue	Affecting	Mitigation / Compensation / Special Procedures
Trees/hedges to be removed directly for the development proposals	H1 (in part), G7, G8, H2, T10-T14 and H3	Appropriate compensation can be provided by way of new / replacement planting at the landscape stage of the project. Biodiversity enhancements can also be achieved through the landscape proposals.
Trees recommended for removal based on poor condition and limited safe retention value	T2, T3, T4 and G3 (in part)	Agreement to be reached with owner to remove trees. Replacement planting can be provided along this boundary at the landscaping stage of the project, with trees more suitable to the setting.
Indirect physical impact on retained trees	Retained trees	Tree protection fencing should be erected to an agreed specification in advance of the commencement of the development. Key areas where works are proposed within or immediately adjacent root protection areas of retained trees should be subject to arboricultural supervision.
Construction of new buildings/structures	T2, T3, T4 and G3 (in part) <i>(should agreement not be reached to remove the trees).</i>	Sections of foundations within and immediately adjacent root protection areas to be excavated carefully, with machinery located outside of RPAs and roots pruned cleanly back to the soil surface when necessary. Works in these areas of the site to be subject to arboricultural supervision.
Provision of drainage/services	T15	Arboricultural supervision. Channel diverted where structural roots are encountered to allow for their retention. Where existing services cannot be utilised, NJUG principles must be adopted to and adhered to.
Access Facilitation Pruning	T2, T3, G2, T4, G3 and T5	All pruning works should be carried out to a minimum of the standards contained within BS3998: 2010 <i>Tree work – Recommendations</i> .
Protective Fencing	To be erected to an agreed specification in advance of the commencement of the development and retained in-situ throughout the course of the construction phase.	

7.2 On the basis of the above and the contents of this report, it is considered appropriate that an arboricultural method statement be prepared to demonstrate how trees proposed for retention can be suitably safeguarded. It should be secured by way of an appropriately worded planning condition attached to the consent for the development and should be adopted as a control document by site personnel.

8.0 Conclusions & Recommendations

- 8.1** The direct and indirect impacts on tree cover as a result of the development proposals are outlined within this report and mitigation proposed accordingly that seeks where possible to satisfy local and national planning guidance and policy. Where trees are proposed for removal, replacement planting should be undertaken as part of a landscape strategy for the site in line with local plan requirements and to integrate the development into the surrounding landscape. Arrangements for the safeguarding and physical protection of retained trees should be agreed and implemented in a manner consistent with current best arboricultural management practices to minimise any potentially negative effects on long term tree cover.
- 8.2** We recommend that a landscape proposal be prepared for the site, to include where feasible, provision for the planting of a mixture of native as well as ornamental trees, shrubs and hedges, implemented as a condition of planning consent. We also recommend that tree protection measures are implemented in accordance with finalised versions of the drawings appended to this report.

9.0 References

Department for Communities and Local Government (March 2012) *National Planning Policy Framework*;


British Standard 5837: 2012 *Trees in relation to design, demolition and construction – Recommendations*;

National Joint Utilities Group Publication *Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees – Volume 4*.

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Landscape, Arboricultural & Ecological Solutions
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Appendix 1

Site:	Old Whalley Nurseries, Clitheroe Road, Whalley BB7 9AB	Surveyor:	Robert Armitage	 Landscape Trees Ecology
Client:	Eric Wright	Survey Date:	10 th August, 2017 28 th August, 2018 (UPDATED)	
Brief:	Tree Survey to BS5837:2012	Survey Conditions:		

T. No	Species	Ht (m)	Stem DBH (mm)	RPA Radius (m)	Branch Spread				Ht Crown Clearance (m)	Age Class	P Condition	Structural Condition & General Comments	Preliminary Recommendations (not to be actioned without a valid planning consent)	Est. (yrs)	Cat
					N	S	E	W							Grade
H1	Hawthorn	1	200# average	2.40	0.5	0.5	0.5	0.5	0	M	F	Partly maintained linear feature.	Remove specified section for visibility splay. Plant replacement section of hedge elsewhere on site at the landscaping stage of the project.	30+	B2
T1	Oak	9	700#	8.40	6	7	6	6	0S	EM/M	F	Evident chlorosis on majority of foliage (August 2017). Slightly reduced vigour. Large bund and piling within root protection area on site side.	No works required.	30+	B1
G1	Apple and Hawthorn	5	40# average	0.48	1	1	1	1	3	Y	F	Located in adjacent property garden. Planted Apple trees.	No works required.	30+	C2
T2	Ash	18	1360	15.00	9.5	10	9.5	9.5	9s	M	F/P	Several large fruiting bodies of <i>Ganoderma</i> spp. in between most buttress roots (August 2017). Decay cavity at base that extends up into main stem ('eiffel tower' form). Canopy appears full and in relatively good vigour. Some small diameter deadwood. No signs of large branch shedding yet. Epicormic on lower buttress root zone. Bifurcates at 3m with apparent strong union.	Agree removal with owner. Unsuitable condition for long-term retention adjacent residential and commercial development.	20+	C1/U
T3	Oak	8.5	650#	7.80	7	5.5	7	2	1s	M	P	Large longitudinal cavity extending beyond 50% of the overall girth. Evident decline in canopy and large diameter deadwood.	Agree removal with owner. Unsuitable condition for long-term retention in proposed setting.	10+	C1/U


NOTE: The Category Grade applied to trees surveyed is consistent with the recommendations within Table 1 of BS5837: 2012, however this does not necessarily correlate with the visual importance of a tree within the wider landscape, nor does it dictate which trees should be retained at the cost of quality development. Where trees are to be lost to accommodate a development, recommendations will be made such as to provide suitable mitigation and compensation, and to integrate the development into the wider landscape.

Key to Abbreviations & Headings

T. No.: Tree number (T = Tree, G – Group, W = Woodland, H = Hedge, Cpt. = Compartment)
 Stem DBH (Diameter at Breast Height): Measured at 1.5m above ground level*
 Ht Crown Clearance: Canopy ground clearance
 Structural Condition: Description of any observed defects
 Cat. Grade: Tree quality assessment in accordance with BS5837: 2012

Species: Common name used
 Root Protection Area Radius: Root Protection Area as per BS5837: 2012
 Age Class: Y = Young, EM = Early Mature, M = Mature, OM = Over mature, D = Dead
 Preliminary Recommendations: Made in respect of known / intended use of the site
 * For groups of trees, the stem diameter of the largest tree in the group is generally used
 # Denotes estimated DBH where access was not possible

Ht: Approximate height of tree from ground level in metres
 Branch Spread: Extent of canopy spread in metres to each of the four cardinal points
 P (Physiological) Condition: G = Good, F = Fair, P = Poor, D = Dead
 Est. (yrs): Estimated remaining contribution in years

Site:	Old Whalley Nurseries, Clitheroe Road, Whalley BB7 9AB	Surveyor:	Robert Armitage	 Landscape Trees Ecology
Client:	Eric Wright	Survey Date:	10th August, 2017 28th August, 2018 (UPDATED)	
Brief:	Tree Survey to BS5837:2012	Survey Conditions:		

T. No	Species	Ht (m)	Stem DBH (mm)	RPA Radius (m)	Branch Spread				Ht Crown Clearance (m)	Age Class	P Condition	Structural Condition & General Comments	Preliminary Recommendations (not to be actioned without a valid planning consent)	Est. (yrs)	Cat
					N	S	E	W							Grade
G2	Hawthorn	4	200#	2.40	2	2	2	2	1	EM	F	Appears slightly suppressed by adjacent larger Ash trees. Stem located off-site. Relatively low arboricultural importance.	Prune canopies back away from proposed construction area as necessary.	20+	C2
T4	Ash	17	840	10.08	7	5	7	8	0s	M	P	All areas of canopy in evident decline. Main branches beginning to dieback. Dense epicormic shoots from lower stem base. Evident internal basal cavity. No fungal fruiting bodies found. Located immediately site boundary.	Agree removal with owner. Unsuitable condition for long-term retention in proposed setting.	20	C1/U
G3	Ash	14	450#	5.40	5	6	2	2	5	Y/EM	P	Dense Ivy colonisation on main stems and throughout scaffold branches. Most westerly stem in significant decline. Other stems showing signs of decline on most branch tips. Water logged ground at the base of the stems.	Agree remedial pruning to better quality trees with owner. Remove those trees in significant decline.	10+	C1
T5	Ash	16	670	8.04	6	10	9	5	3s	EM/M	F	Some signs of canopy thinning towards top but generally in normal vigour. No evident structural defects. Some small diameter deadwood. Located immediately adjacent boundary fence.	Remove any developing larger diameter dead wood. Inspect annually for further signs of deteriorations in health and/or structural integrity.	30+	B2


NOTE: The Category Grade applied to trees surveyed is consistent with the recommendations within Table 1 of BS5837: 2012, however this does not necessarily correlate with the visual importance of a tree within the wider landscape, nor does it dictate which trees should be retained at the cost of quality development. Where trees are to be lost to accommodate a development, recommendations will be made such as to provide suitable mitigation and compensation, and to integrate the development into the wider landscape.

Key to Abbreviations & Headings

T. No.: Tree number (T = Tree, G = Group, W = Woodland, H = Hedge, Cpt. = Compartment)
 Stem DBH (Diameter at Breast Height): Measured at 1.5m above ground level*
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Client:	Eric Wright	Survey Date:	10 th August, 2017 28 th August, 2018 (UPDATED)	
Brief:	Tree Survey to BS5837:2012	Survey Conditions:		

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					N	S	E	W							Grade
T6	Oak	12	630	7.56	6	5	6	6	0.5	EM/M	F/P	Appears suppressed. Evident areas of decline in canopy. Some larger diameter deadwood. Branches beginning to dieback. Area of missing bark and evident internal wounding on lower stem.	No works required.	30	B2/C2
T7	Ash	18	890	10.68	9	7	9	9	0s	M	F	Canopy appears in good vigour. Canopy is well balanced. No evident structural defects. Some small diameter deadwood.	No works required.	30+	B1
T8	Ash	11	380#	4.56	4.5	4.5	4.5	4.5	0	EM	F	Canopy appears in normal vigour. Well balanced canopy. Ivy beginning to colonise main stem.	No works required.	40+	B2/C2
T9	Oak	9	870	10.44	8	6.5	6.5	6.5	0.5s	M	F/G	Canopy appears full and in good vigour. No evident signs of decline. Some larger deadwood. Typical for species.	No works required.	40+	B1
G4	Ash	16	530+ 660	10.16	7	7	7	7	0	EM/M	F/G	Linear group of Ash trees with most mature trees on the Eastern side. Canopies appear full and in good vigour. Create a good landscape screen feature as a group.	No works required.	30+	B2
G5	Hawthorn	5.5	250# average	3.00	2.5	2.5	2.5	2.5	0	EM/M	F	Linear planted unmaintained Hawthorn. Sparse in areas, never maintained as a hedge.	No works required.	20+	B2/C2


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G6	Hazel and Hawthorn	4.5	150# average	1.80	2	2	2	2	0.5	EM	F/P	Predominantly 4-5m poor condition Hawthorn that show regular areas of decline. Occasional coppiced multi-stemmed Hazel, again not particularly important within the landscape. Planted along boundary fence but not maintained as a hedge. Gappy.	Prune canopy as necessary adjacent new entrance.	20	C2
G7	Hawthorn and English Elm	6	180# average	2.16	2.5	2.5	2.5	2.5	0.5w	Y	F	Predominantly a group of high planting density, self-seeded multi-stemmed young English Elm located approximately 1-2m from assumed site boundary fence. Relatively low value.	Remove to accommodate new entrance road off roundabout. Plant replacement trees elsewhere on site at the landscaping stage of the project.	30+	C2
G8	Hawthorn and English Elm	7	180# average	2.16	2.5	2.5	2.5	2.5	0	Y/EM	F	Predominantly a group of high planting density self-seeded multi-stemmed young English Elm located approximately 1-2m from assumed site boundary fence. Relatively low value.	Remove to accommodate new entrance road off roundabout. Plant replacement trees elsewhere on site at the landscaping stage of the project.		C2
G9	Ash and Hawthorn	6	180# average	2.16	2.5	2.5	2.5	2.5	0	Y	F	Low value, self-seeded, generally multi-stemmed Ash along road side.	No works required.		C2
H2	Hawthorn and Elder	3.5	180# average	1.56	1	1	1	1	0	EM/M	F	Partly maintained linear feature. Unmaintained for possibly two years. Some areas where trees appear in slight decline. Predominantly Hawthorn with occasional Elder.	Remove to accommodate development proposals. Plant replacement sections of hedging elsewhere on site at the landscaping stage of the project.	30+	B2


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T10	Ash	17	1000	12.00	9.5	8	9.5	9.5	0	M	F	Canopy appears full and in good vigour. Some small diameter deadwood. Approximate 3m longitudinal lesion that appears to have been somewhat occluded on main stem. Several relatively small, fresh fruiting bodies of <i>Ganoderma applanatum</i> found at the base of the stem (August 2017). No other evident structural defects. Prominent landscape feature with good arboricultural importance.	Remove to accommodate development proposals. Plant replacement tree at the landscaping stage of the project.	20+	C1/U
T11	Ash	14	460#	5.52	6	6	7	6	1	EM	F	Canopy appears full and in good vigour. Emerging from dense understorey of Hawthorn hedging. No evident structural defects. Located on far side of site fence.	Remove to accommodate development proposals. Plant replacement tree at the landscaping stage of the project.	40	B2/C2
T12	Ash	15	810	9.72	6.5	6.5	8	4	1	M	P	Large area of basal hollowing. Main stem leader now dying back with <i>Daldinia concentrica</i> . Western side of canopy in significant decline. Canopy bias to the west with particularly poorly formed main limbs. Some large wounds on base of large limb attachments. Fungal body of <i>Inonotus hispidus</i> found on main branch approximately 5m up stem.	Remove to accommodate development proposals. Plant replacement tree at the landscaping stage of the project.	20	C1


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T13	Ash	8	250#	3.00	2.5	2.5	2.5	2.5	1	EM	P	In significant decline. Regular large diameter deadwood for size of tree. Low retention value.	Remove to accommodate development proposals. Plant replacement tree at the landscaping stage of the project.	10	C1/U
H3	Hawthorn	3	200# average	2.4	1	1	1	1	0	M	F	Sparse in several areas. Appears in slightly reduced vigour.	Remove to accommodate development proposals. Plant replacement tree at the landscaping stage of the project.	30	B2/C2
T14	Ash	10	400	4.80	4	4	4	4	2	EM	F/P	Evidence of decline at most branch tips. Atypical for age. Appears in decline.	Remove to accommodate development proposals. Plant replacement tree at the landscaping stage of the project.	20	C2
T15	<i>Cupressus macrocarpa</i> (Monterey Cypress)	15	600+ 380#	8.52	2	2	2	2	1n	ME/M	F	Canopy appears slightly sparse and thin in areas. Located immediately adjacent site boundary fence. Bifurcates near base with probable bark inclusion. Unable to measure stem. Prominent from road side.	No works required.	30+	B2

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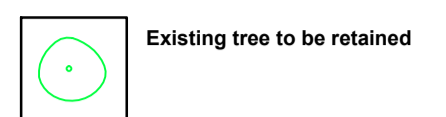
Appendix 2

DO NOT SCALE

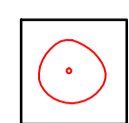
ALL COORDINATES RELATED TO LOCAL GRID LOCATED TO OS N6 BY BEST FIT TO DETAIL. EXTRACTED FROM OS DIGITAL DATA.

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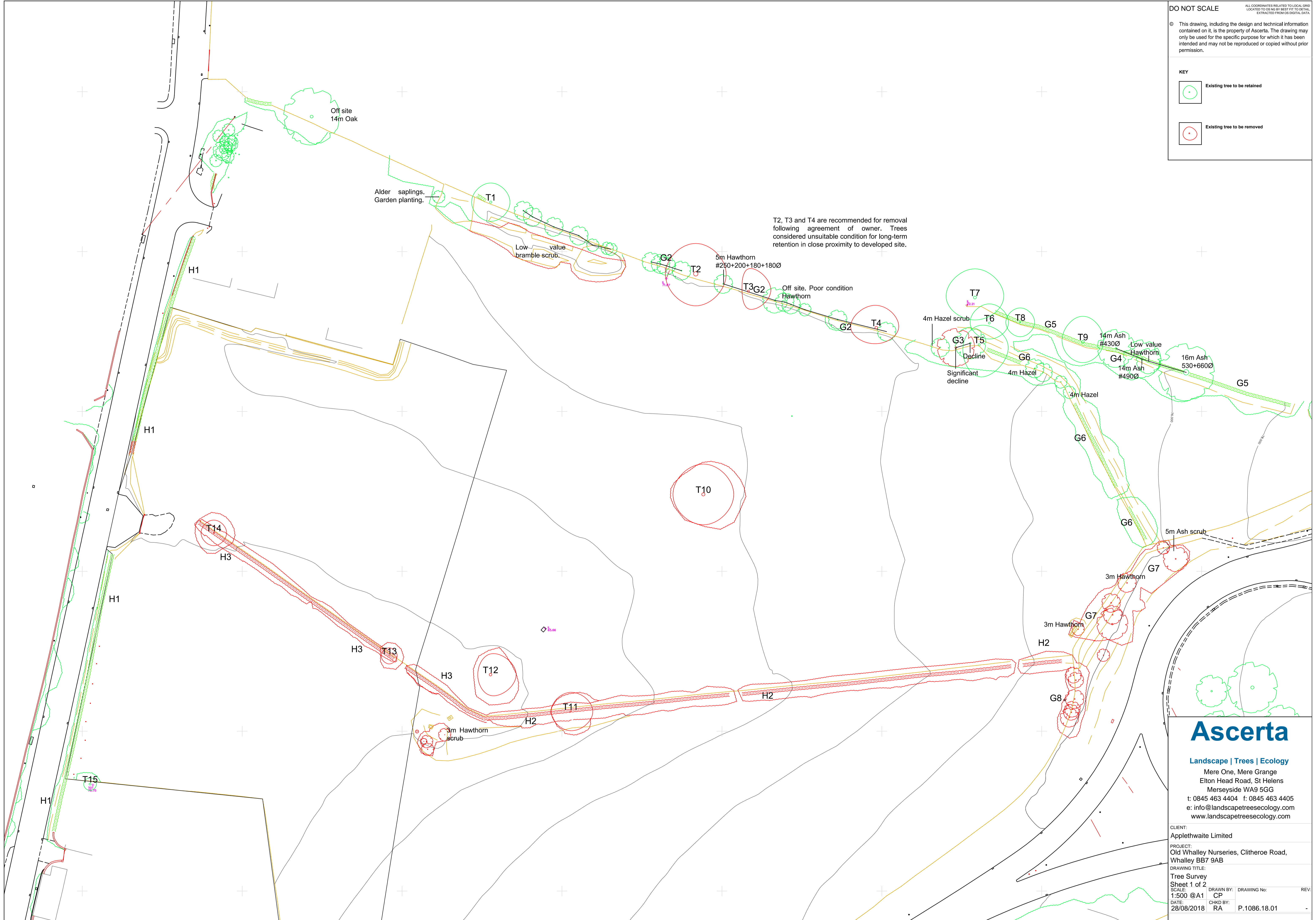
KEY



Existing tree to be retained



Existing tree to be removed



T2, T3 and T4 are recommended for removal following agreement of owner. Trees considered unsuitable condition for long-term retention in close proximity to developed site.

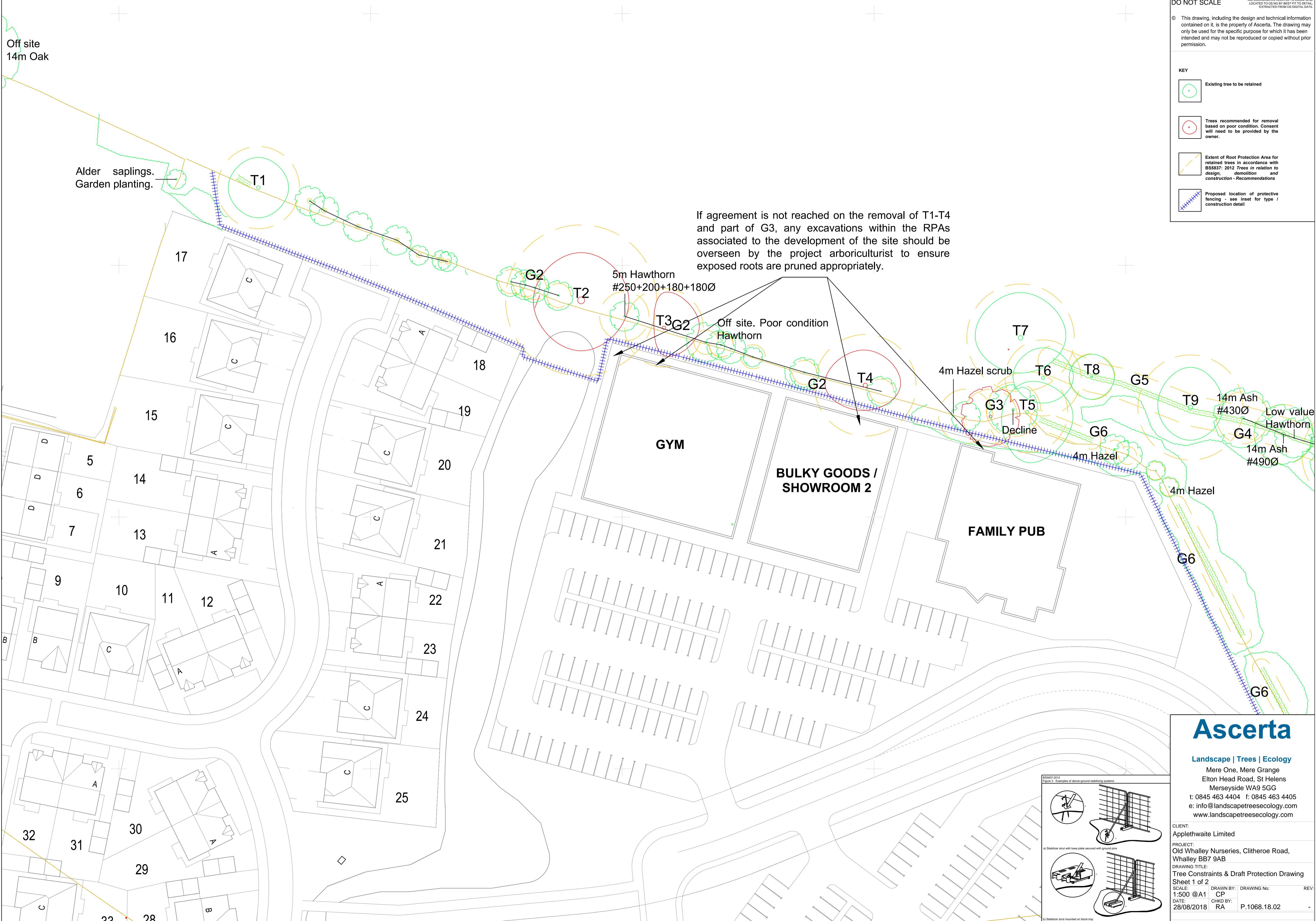
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www.landscapetreeseecology.com

CLIENT:
Applethwaite Limited
PROJECT:
Old Whalley Nurseries, Clitheroe Road,
Whalley BB7 9AB
DRAWING TITLE:
Tree Survey
Sheet 1 of 2
SCALE:
1:500 @ A1
DATE:
28/08/2018
DRAWN BY:
CP
DRAWING No:
CHKD BY:
RA
P.1086.18.01

Off site
14m Oak

Alder saplings.
Garden planting.



DO NOT SCALE

ALL COORDINATES RELATED TO LOCAL GRID LOCATED TO OS N2 BY BEST FIT TO DETAIL. EXTRACTED FROM OS DIGITAL DATA.
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KEY

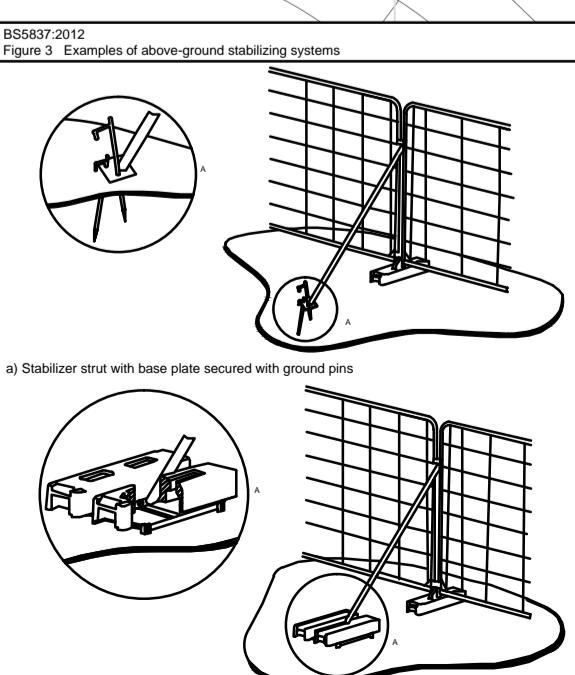
- Existing tree to be retained
- Trees recommended for removal based on poor condition. Consent will need to be provided by the owner.
- Extent of Root Protection Area for retained trees in accordance with BS5837: 2012 Trees in relation to design, demolition and construction - Recommendations
- Proposed location of protective fencing - see inset for type / construction detail

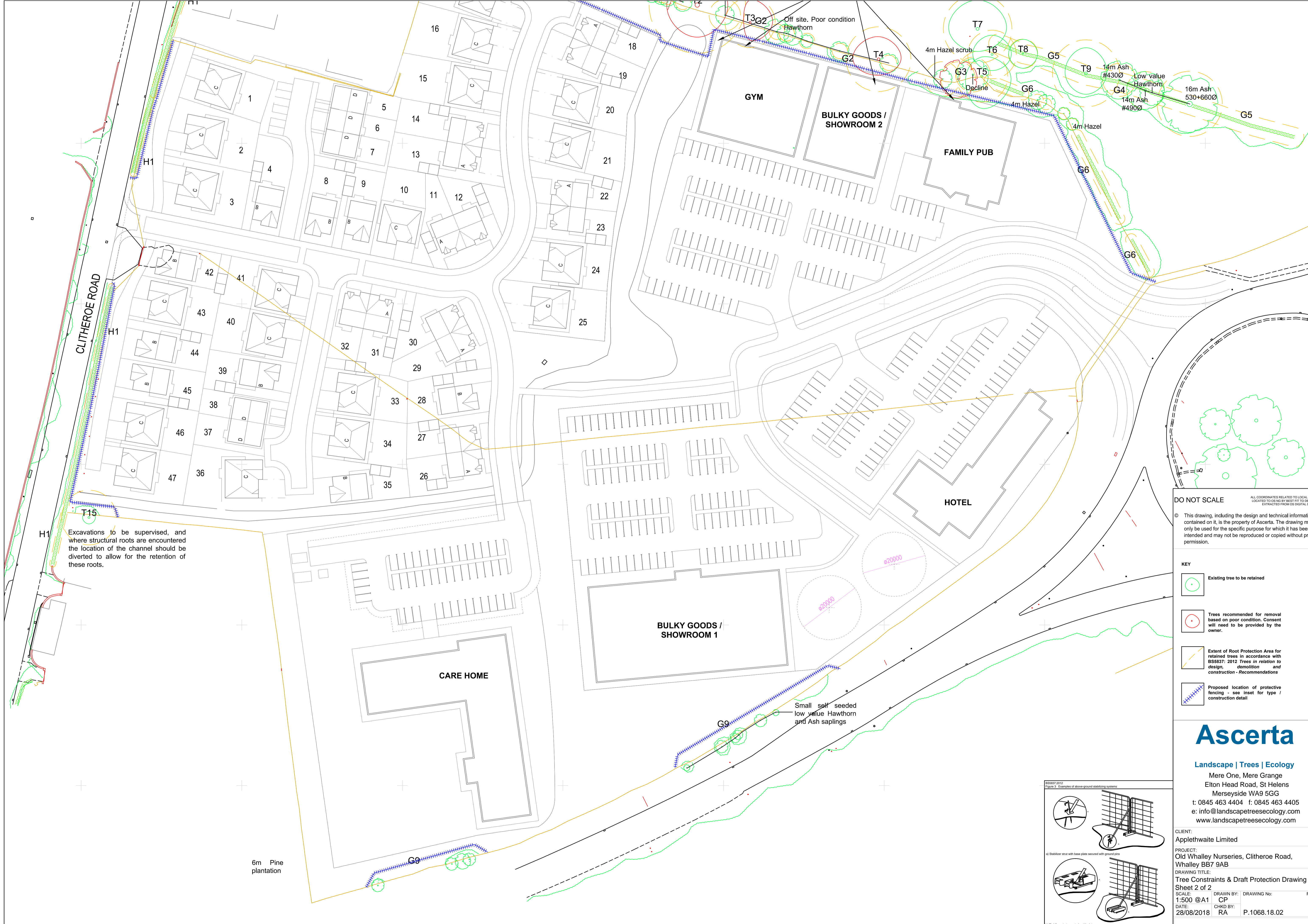
If agreement is not reached on the removal of T1-T4 and part of G3, any excavations within the RPAs associated to the development of the site should be overseen by the project arboriculturist to ensure exposed roots are pruned appropriately.

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CLIENT: Applethwaite Limited
PROJECT: Old Whalley Nurseries, Clitheroe Road, Whalley BB7 9AB
DRAWING TITLE: Tree Constraints & Draft Protection Drawing
Sheet 1 of 2
SCALE: 1:500 @A1
DATE: 28/08/2018
DRAWN BY: CP
CHECKED BY: RA
DRAWING NO: P.1068.18.02
REV: -

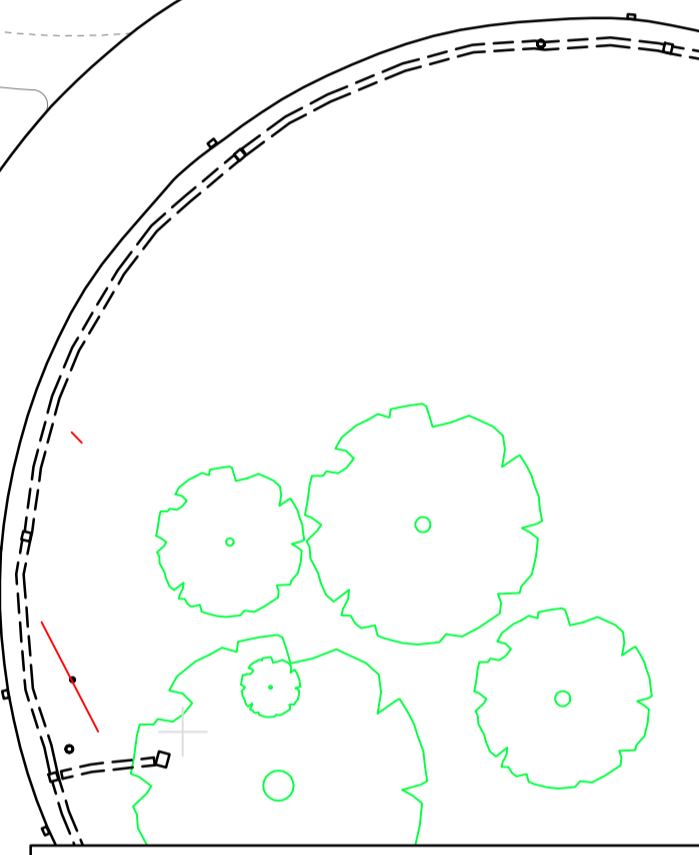




H1 Excavations to be supervised, and where structural roots are encountered the location of the channel should be diverted to allow for the retention of these roots.

6m Pine plantation

Small self seeded low value Hawthorn and Ash saplings



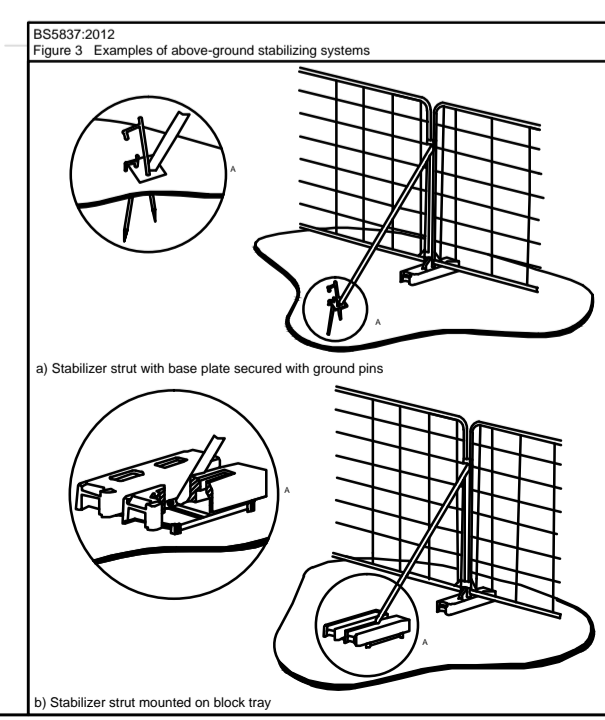
DO NOT SCALE ALL COORDINATES RELATED TO LOCAL GRID LOCATED TO OS NG BY BEST FIT TO BE TAKEN EXTRACTED FROM OS DIGITAL DATA.

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CLIENT: Appletwhaite Limited
 PROJECT: Old Whalley Nurseries, Clitheroe Road, Whalley BB7 9AB
 DRAWING TITLE: Tree Constraints & Draft Protection Drawing Sheet 2 of 2
 SCALE: 1:500 @ A1 DRAWN BY: CP DRAWING NO: DATE: 28/08/2018 RA P.1068.18.02