

Landscape, Arboricultural & Ecological Solutions for the Built Environment

> Arboricultural Impact Assessment

Former Ambulance Centre Upper Denbigh Road St Asaph

Ref: P.1766.22

October 2022

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Ascerta Mere One, Mere Grange, Elton Head Road, St Helens WA9 5GG T: 0845 463 4404 E: info@landscapetreesecology.com www.landscapetreesecology.com

P.1766.22

Arboricultural Impact Assessment

Former Ambulance Centre, Upper Denbigh Road, St Asaph

For

Castle Green Homes

October 2022

Field Work by	Kevin Pope
Document Author	Kevin Pope
Technical Review	Stuart Randle
QA Review & Approval	Ciaran Power, Office Manager

Contents

EXEC	UTIVE SUMMARY	3	-
1.0	Introduction	4	-
2.0	Objectives	4	-
3.0	Planning Policy & Relevant Legislation	5	-
4.0	Survey & Survey Methodology		
5.0	Survey Results & Impact Assessment	7	-
5.1	Existing Tree Cover:		
5.2	Direct Impact on Trees	7	-
5.3	Compensation		
5.4	Indirect Impact on Trees		
5.5	Hedgerows		
5.6	Potential Mitigation for Development Impacts		
5.7	Potential for Shading & Nuisance	7	-
5.8	Boundary Screening	8	-
5.9	Long Term Spatial Constraints		
5.1			
5.1	1 Existing buildings/structures to be removed	8	-
5.1			
5.1	3 Proposed Buildings Located Adjacent / Within Root Protection Areas	8	-
5.1	4 Proposed Drainage & Domestic Services:	8	-
	5 Working Space During the Construction Phase:		
	6 Access Facilitation Pruning		
	7 Protection of Planting Areas		
	8 Requirement for an Arboricultural Method Statement		
5.1	9 Planning for New Landscaping		
6.0	Tree Protection Measures		
7.0	Summary of Impacts & Potential Mitigation Factors1		
8.0	Conclusions & Recommendations 1		
9.0	References 1	2	-

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

Appendix 2 Drawing P.1766.22.01 *Tree Survey* Drawing P.1766.22.02 *Tree Constraints & Draft Protection Drawing*

EXECUTIVE SUMMARY

A survey of the existing trees on and adjacent the former ambulance centre, Upper Denbigh Road, St Asaph, 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 development of the site will involve the construction of an extra 22 residential dwellings which 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.

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 the former ambulance centre, Upper Denbigh Road, St Asaph 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 visited on 26th October 2022 by Kevin Pope, 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 the construction of an extra 22 residential dwellings.
- **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** Planning Policy Wales (PPW) sets out the land use planning policies of the Welsh Government. It is supplemented by a series of Technical Advice Notes (TANs), Welsh Government Circulars, and policy clarification letters, which together with PPW provide the national planning policy framework for Wales. PPW, the TANs, Minerals Technical Advice Notes (MTANs) and policy clarification letters comprise national planning policy.
- **3.2** The primary objective of PPW is to ensure that the planning system contributes towards the delivery of sustainable development and improves the social, economic, environmental and cultural well-being of Wales, as required by the Planning (Wales) Act 2015, the Well-being of Future Generations (Wales) Act 2015 and other key legislation and resultant duties such as the Socio-economic Duty. A well-functioning planning system is fundamental for sustainable development and achieving sustainable places.
- **3.3** The site lies within the Denbighshire 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 have been made with the Local Planning Authority and using the DEFRA Magic Map resource. At the time of writing this report, the results of those checks are as follows:

Conservation Area:	N/A
Tree Preservation Order(s):	N/A
Ancient Woodlands:	N/A

Irrespective of the above and the outcome of the planning application, in advance of the commencement of any works to trees within or adjacent the site however, 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 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 26th October 2022 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:** One individual and two groups of trees were recorded during our survey, the details of which can be found within Appendix 1 to this report and cross referenced with drawing P.1766.22.01 *Tree Survey*.
- **5.2 Direct Impact on Trees:** The development of the site as proposed will directly require the removal of T1 and G1.
- **5.3** Landscape 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. Where applicable, opportunities for new planting are indicated on the drawings accompanying this report. 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, in order 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. In this instance however, there are no hedgerows within or immediately adjacent the site that could be considered important in the context of the regulations.
- **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.
- 5.7 Potential for Shading & Nuisance: Mature trees in urban and suburban areas add significant value and environmental benefits to sites; 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 sites, 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 a development 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.

5.0 Survey Results & Impact Assessment (Continued)

- **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, or to carry out additional planting to screen views. 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 where 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 sites, 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: Providing that protective fencing is erected in advance of the commencement of demolition / site clearance works, and retained in-situ during the entire construction phase, the potential for unnecessary damage to retained trees should be limited.
- **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:** Appropriate measures for the safeguarding of G2 can be found in the previously approved planning application for the wider site.
- **5.14 Proposed Drainage & Domestic Services:** 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.*

5.0 Survey Results & Impact Assessment (Continued)

- **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: The proposed layout is such that access facilitation pruning will not be required for trees located within / adjacent the site.
- **5.17 Protection of Planting Areas:** It is often desirable to fence off areas that are to be newly planted to protect the soil structure for future planting; however, works will be required across the majority of the site, therefore there is little scope to set aside areas for such treatment. Provided that adequate provisions are made for ground preparations in advance of the landscape stage, there is unlikely to be a negative impact on the viability of newly planted stock.
- **5.18 Requirement for an Arboricultural Method Statement:** Provided that protective fencing is erected in advance of the commencement of the development and retained intact throughout the construction phase, there should be no specific requirement for an Arboricultural Method Statement in this case. The erection of protective fencing in accordance with a suitable tree protection plan should however be subject to a suitably worded condition attached to the planning consent notice.
- **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. Provided that these measures are implemented in advance of, and throughout the course of the construction phase, there should be no specific requirement for an Arboricultural Method Statement.

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	T1 and G1	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.					
Provision of drainage / services	Unknown	Where existing services cannot be utilised, NJUG principles must be adopted to and adhered to.					
Protective Fencing	To be erected to an agreed specification in advance of the commencent the development and retained in-situ throughout the course of the const phase.						

7.2 On the basis of the above and the contents of this report, we do not consider the production of an Arboricultural Method Statement necessary at this stage. The erection of tree protection fencing in advance of the commencement of the development, ensuring it is retained in-situ throughout the entire construction phase, with works carried out carefully within the influencing distance of retained trees, should ensure no particular adverse impact on retained trees from the proposed development.

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 the landscape proposal prepared for the site includes, 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

Planning Policy Wales;

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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Appendix 1

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Site	St Asaph			re, Upper	Denk	oigh	Roa	d,	Surveyor:			Kevin Pope			
-	Client: Castle Green Homes								Survey Date:		e:	26-Oct-2022 09:34		certa	
Brie	Brief: Tree Survey to BS5837:2012							Survey		ey 🛛	Sunny				
								Conditions:		s:	Landscape		Trees Ecology		
													· · · · · · · · · · · · · · · · · · ·		e 1 of 1
Т.	Species	Ht	Stem	RPA Radius	Branch Spread			d	Ht Crown Age		Р	Structural Condition & General	Preliminary	Est.	Cat
No		(m)	DBH (mm)	(m)	N	S	E	w	Clearance (m)	Class	Condition	Comments	Recommendations (not to be actioned without a valid planning consent)	(yrs)	Grade
T1	Lime	8 5	#300 +200	4.33	5.5	5.5	5.5	5.5	3.0	D	Poor	Dead standing.	Remove due to condition. Replace with suitable specimen at the landscaping stage of the project.	<10	U
G1	Paper Bark Birch	8-10	#350 max	4.20	4.0	4.0	4.0	4.0	3.0	Y /EM	Fair	Form and condition typical of tree species. Located in overgrown area in courtyard. Unable to access stems.	Remove to accommodate development proposals. Replace with suitable specimens at the landscaping stage of the project.	20+	C2
G2	Oak	9 - 11	#650 Avg	7.80	8	8	8	8	3	М	Fair	Slight signs of dieback. Small - medium sized diameter deadwood. Previous pruning work roadside. Located outside the assumed site boundary fence line. No access to stems.	No works required at this stage.	30+	B2

NOTE: The Category Grade applied to trees surveyed is consistent with the recommendations within Table 1 of BS5837: 2012, <u>however</u> 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

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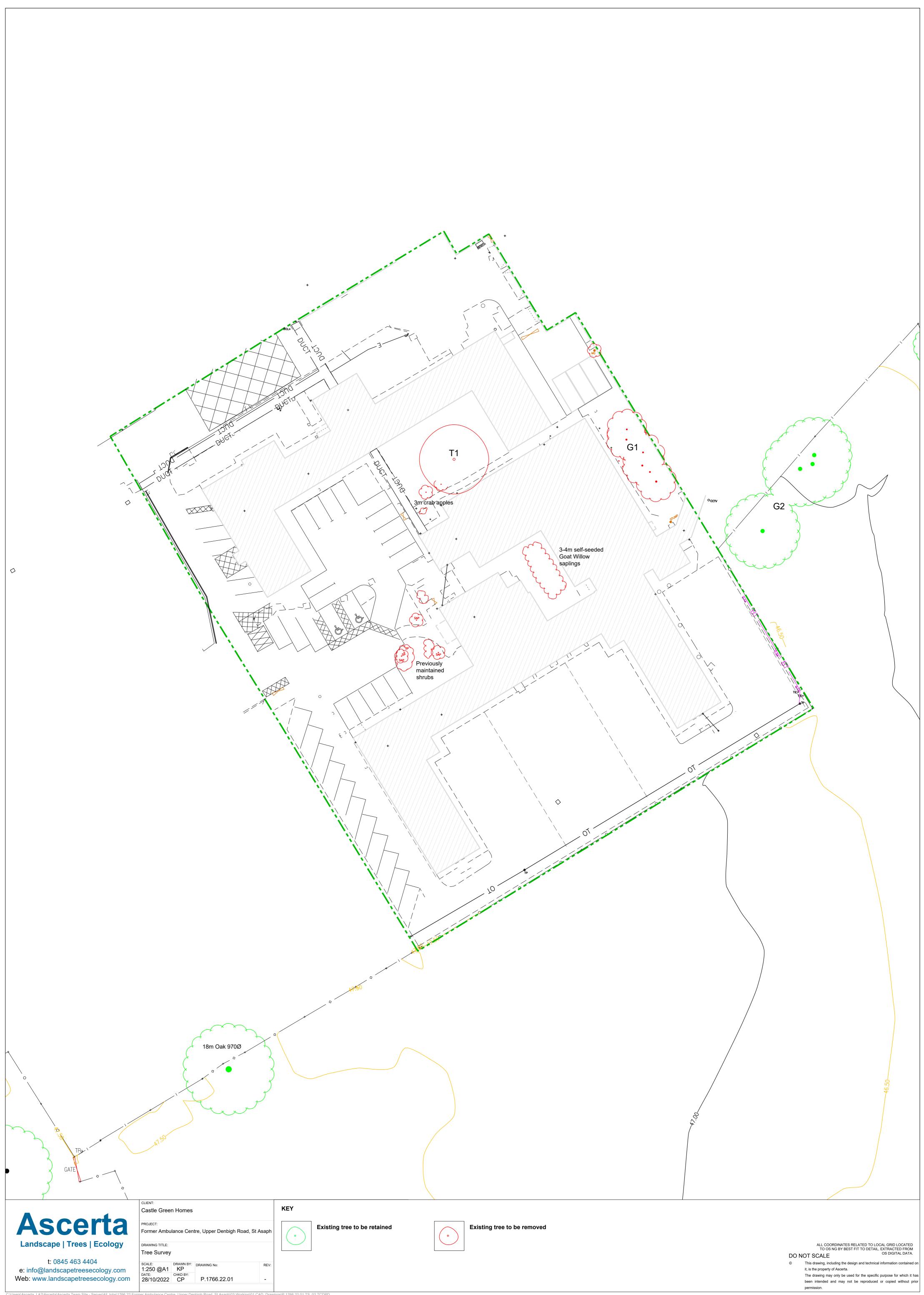
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Appendix 2

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