



ARBORICULTURAL IMPACT ASSESSMENT

**Former Goodfellows School
Spalding Common**

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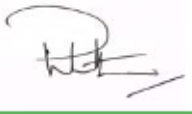
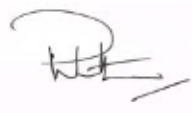
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QUALITY ASSURANCE

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SUMMARY

This survey and tree report includes records of 32 individual trees and one group of trees. These comprise of 3no. B category, 28no. C category and 3no. U category. This application considers all trees located on or within influencing distance of the proposed development area.

It has been considered desirable wherever possible that trees and groups of trees should be retained, although care has been exercised over misplaced tree preservation. In terms of the current site layout plan, due to the size and scale of building requirement there is conflict with the trees that cannot be avoided and therefore mitigation proposals are considered.

In total a combination of five individual and part of one group of trees comprising of B Category, C category U category trees will be removed in order to implement the design proposal or as part of good site management. This includes the loss of one TPOed tree T9. This tree is to be removed due to the design of the building in order to accommodate sufficient room space and to retain the other TPOed trees on site.

The justification for these removals should be referenced to the new opportunities for employment and the requirement for the development proposal. Section 5.1.1 of BS5837:2012 recognises that the competing needs of development mean that trees are only one factor requiring consideration. It also states that misplaced tree retention can be detrimental on a site where it will cause excessive pressure on those trees being retained and could necessitate their removal in the future.

There have been previous incursions into the RPAs of existing trees and this will not alter. There are to be new incursions into the RPAs of T10, T11 and T29 for the new care home, which equates to no more than 5% into any of the RPAs. These incursions have all been deemed acceptable and unlikely to cause detrimental impact in this instance. This is all subject to the ACoW being in attendance on site through the course of the footpath installation. If no roots greater than 25mm in diameter are identified this will be the preferred method.

The preparation and suitable working methodology for this should be subject to a pre-commencement planning condition, along with continued site monitoring for the course of development.

The onsite trees to be retained should be proactively managed to ensure that they enhance the development and the wider environment. Therefore, this impact assessment provides detail of the measures and steps required to retain trees through and post development specifically through adequate supervision, tree protection and construction techniques. In the first instance it is recommended that the tree works are undertaken as specified in the associated Tree Schedule.

It is critical that all protective fencing is installed and erected and the CEZ enforced prior to the commencement of any works on site. Following installation of tree protection a site meeting will be undertaken with the Tree Officer to ensure satisfaction of all parties prior to any on site works commencing.

It is recommended that a suitable competent arboriculturist, undertakes the site supervision and monitoring works.

In order for tree and root protection measures to work effectively all personnel associated with the construction process must be familiar with the Tree Protection Plan.



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1. INTRODUCTION/BACKGROUND

1.1 Terms of Instruction

- 1.1.1 This Arboricultural Impact Assessment has been commissioned by Country Court Care Group and is prepared in relation to the proposed development of a care home at the Former Goodfellows School, Spalding Common (see aerial photograph at Appendix 1).
- 1.1.2 The instruction is to fulfil the initial requirements of South Holland District Council, who require an arboricultural impact assessment to make an informed decision on a future planning application.
- 1.1.3 The document is also intended as a reference point for all site operatives and a copy will remain with the site manager for the duration of the development.
- 1.1.4 This document may be used as a point of reference if there were to be a dispute over compliance with related planning decisions.

1.2 Scope of Project

- 1.2.1 The scope of this project is threefold:
- I. Undertake a re-survey of trees on the site and within influencing distance of the site without prior reference to the proposed development.
 - II. Provide a tree constraints plan for the site including root protection areas, canopy spreads and shading arcs if necessary (orientation dependant).
 - III. Provide an arboricultural impact assessment (AIA) in relation to the design proposal, providing comment in relation to the building orientation. The AIA will assess the trees in relation to the proposals and the potential impacts the trees will have.

1.3 Documents Provided

- 1.3.1 As background information the following documentation has been provided.

Table 1: Document and Plans Provided

Document Description	Reference No.	Prepared By	Date
Topographical survey (.DWG format)	2019	BluePlan	15 th December 2014
Design & Access Statement and Planning Statement	PH/009/15	The Planning Hub	December 2015
Tree Preservation Order	No. 68 2005	South Holland District Council	2005
Site Location Plan	0176 (10)001 Rev A00	LineStyle Architecture	17 th September 2015



Proposed Site Plan (.DWG & PDF format)	0074 (10)002 Rev A00	LineStyle Architecture	4 th October 2016
Proposed Floor Plans (.PDF format)	0074 (20)001 Rev A01 - 0074 (20)003 Rev A01	LineStyle Architecture	4 th October 2016
Proposed Elevations Plan (.PDF format)	0074 (21)001 Rev A00 - 0074 (21)003 Rev A00	LineStyle Architecture	26 th September 2016
Drainage Constraints and Proposals Plan	2014.5563.SK03B	Construction Design Solutions	March 2016
Planning Decision Notice (refusal)	H16-0003-16	South Holland District Council	4 th July 2016

1.4 Planning Policies/Documents and Statutory Legislation

1.4.1 It is appreciated that the trees could provide a constraint and therefore a detailed tree survey and arboricultural report was commissioned to fulfil the requirements of BS5837:2012 *Trees in Relation to Design, Demolition and Construction: Recommendations*. It considers trees directly on site or within influencing distance of the site.

1.4.2 *National Planning Policy Framework (NPPF)*: When determining planning applications, LPA's should aim to conserve and enhance biodiversity. If significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused. Opportunities to incorporate biodiversity in and around developments should be encouraged (Paragraph 118).

1.4.3 When determining planning applications, local planning authorities should aim to by applying the following principles:

*Planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, **unless the need for, and benefits of, the development in that location clearly outweigh the loss (paragraph 118).***

1.4.4 The trees proposed for removal within this report are neither considered aged or veteran and therefore the principles for refusal within the NPPF would not be considered applicable.

1.5 Previous Application

1.5.1 A planning application was submitted with South Holland District Council reference H16-0003-16. The application was refused on 4th July 2016. In refusing the application the Council provided 3no. main reasons, for which one was attributed to the impact on the trees on site:



The proposal would have an adverse impact on trees within the site, which would result in the loss of protected trees preserved through Spalding Tree Preservation Order No. 68 2005. The loss of these protected trees would have an unacceptable impact upon the character and appearance of the local area. Also with tree canopies potentially overhanging or touching the proposed building due to future growth, it is highly likely that the applicant would want further trees removed or severely pruned due to overshadowing or concerns regarding safety or damage including potential structural damage. The proposed development therefore conflicts with Local Plan Policy SG14 as the loss of the trees would adversely effect the character and appearance of the locality and section 11 of the National Planning Policy Framework 2012, as the benefits of the proposed development are not considered to outweigh the harm to the natural environment.

1.5.2 The local planning policy is detailed below. With the above comments in mind a number of alterations have been made to the design to address the issues raised in relation to future growth.

1.5.3 It is noted that the refusal decision does not include reference to paragraph 118 of the NPPF and therefore it is assumed that the Council does not consider this relevant to the trees on site.

1.6 Local Planning Policies

1.6.1 Policy SG14 - Design and Layout of New Development

New development should be designed to ensure that it makes a positive contribution to the architectural and visual quality of its surroundings. It should normally respect the vernacular architecture of the area in which it is located although high quality contemporary design will be supported in appropriate contexts. In assessing the design and layout of new development the following matters will be taken into consideration:-

- 1) local distinctiveness;*
- 2) the choice of materials;*
- 3) the historic pattern of development in the locality;*
- 4) the relationship of the development to the character, form and scale of existing buildings nearby;*
- 5) the scale, form and height of the proposed development;*
- 6) architectural detailing;*
- 7) the effect of the development on the amenity of nearby residents in terms of noise, smell, general disturbance, overlooking and loss of light;*
- 8) planting and measures to promote biodiversity;*
- 9) the layout of vehicular access, parking and manoeuvring facilities and the provision of facilities for cyclists and pedestrians;*
- 10) the needs of disabled persons;*
- 11) the use of sustainable materials and methods of construction;*
- 12) measures to reduce the potential for crime and disorder.*

Development that would have an adverse effect on the character and appearance of the locality, or which would prejudice the comprehensive development or redevelopment of an area, will not be permitted.



- 1.6.2 The above policy does not reference trees specifically in relation to their retention but the providing new planting to promote biodiversity.

1.7 Tree Preservation Orders

- 1.7.1 The Local Planning Authority (LPA) has been contacted to establish whether any trees contained within the survey are protected by either a Tree Preservation Order (TPO) or are within a Conservation Area.
- 1.7.2 It has been confirmed by South Holland District Council that the site is covered by a TPO. TPO No. 68 of 2005 and entitled South Holland District Council (Spalding) Tree Preservation Order 2005. The TPO protects a total of 23no. individual trees.
- 1.7.3 A number of trees within the TPO are in either a declining condition or are dead. The condition of the trees and TPO references are provided within the Tree Schedule at Appendix 3.
- 1.7.4 If full planning is granted, trees to be removed in order to implement the site layout are accepted. However, if only outline consent is granted this does not override the TPO or other statutory legislation.

1.8 Felling Licence

- 1.8.1 Tree felling is also restricted under the Forestry Act 1967. Under this act, there is an exemption from the need for a felling licence for "*Felling necessary for the prevention of danger or the prevention or abatement of a nuisance (e.g. which may involve threat of danger to a third party).*"
- 1.8.2 The remedial work recommendations highlighted in this report would fall under this exemption. However, it is strongly recommended that the Forestry Commission is contacted in advance so that it is able to deal with any concerns raised by the general public.
- 1.8.3 If full planning consent is granted for the current proposal, then any trees which require felling to implement the approved plans are exempt from this statutory protection. It should also be considered that any proposed tree works detailed in the tree schedule are also implemented as part of the planning decision consent.

1.9 Trees and Wildlife

- 1.9.1 The Wildlife and Countryside Act 1981 as amended, the Countryside and Rights of Way Act 2000 and the Conservation of Species and Habitat Regulations 2010 provides statutory protection of birds, bats and other species that can inhabit trees.
- 1.9.2 Great care is required to avoid disturbance and consideration should be given to the timing of tree works in order to avoid disturbance. Where the presence of such species is suspected, the project ecologist or Natural England should be contacted for advice.

2. QUALIFICATIONS

- 2.1.1 The principal author of this report is Peter Wharton *BSc(Hons) Arb. FArborA MICFor (Chartered Arboriculturist)*. Peter is a Fellow of the Arboricultural Association, a Professional member and registered consultant of the Institute of Chartered Foresters and Consulting Arborist Society. He is also a member and licensed user of Quantified Tree Risk Assessment and is LANTRA certified to undertake Professional Tree Inspections.



- 2.1.2 Peter is currently sits on Consultants Working Group and Midlands Regional Branch Committee of the Arboricultural Association. He was previously the vice-chair and Trustee of the Arboricultural Associated, and a board member of the Midlands Tree Officer Association.
- 2.1.3 Wharton Tree & Ecology Consultants Ltd is ISO 9001:2008 accredited and is a recognised and approved member of CHAS.
- 2.1.4 As an arboricultural consultant at Wharton Tree & Ecology Consultants Ltd, Peter specialises in dealing with trees in relation to risk management and planning and development issues.

3. SITE ASSESSMENT

3.1 Site Visit

- 3.1.1 The tree assessments were undertaken on 4th April 2016 and the trees inspected from ground level. The weather conditions were good, with partial sunshine and a light prevailing wind; visibility was good throughout the site visit.
- 3.1.2 The owner/managers of the site were informed of my presence on site and prior to undertaking the inspection of trees.

3.2 Site Description

- 3.2.1 The application site is located to the east of Spalding Common Road (the B1173), which serves as an arterial road into the centre of Spalding, to the north, from the A1175, to the south.
- 3.2.2 Spalding town centre is approximately 1.7miles to the north of the application site. Spalding Common feeds into the town between the River Welland to the east and the rail line to the west, creating a build-up of linear development to either side of the road, including industrial and commercial premises, farm buildings, a wide range of residential properties, the community hall and the small cluster of former school buildings. The location of the site can be seen in red on the aerial photograph below.
- 3.2.3 The site forms an elongated, near-triangular parcel of land to the west side of Spalding Common. The aforementioned rail line runs immediately to the west of the site and there is a wide highway verge between the application site and the public highway, which contains several highway trees. To the north of the site is a small copse of trees where the land narrows between the road and the rail line. To the south of the site are the industrial premises of South Lincs Patterns Foundry, where the nearest building to the site, which was formerly a dwelling, forms their associated offices. As can be seen on the photograph below, their access road and car parking areas adjoin the southern edge of the application site.
- 3.2.4 On the opposite side of Spalding Common to the application site are residential properties of varying styles, size and age, ranging from 1920's semi's, 1930's semi-detached and detached properties and a bungalow. All of these properties are set well back from the public highway and, due to the degree of separation, would be at least 30m from the frontage of the application site.
- 3.2.5 The application site itself contains the former school buildings and associated additions and extensions, along with the former Headmaster's House, which is a 2-storey red brick property. The buildings are located in the southern part of the site,



where the site is wider, with the land to the north being open grassland that was formerly the associated playing field. The former school buildings have a ridge height of approximately 8.1m and the Headmaster's House has a ridge height of 9.3m.

- 3.2.6 The trees on the site and within close proximity to it are of a varied maturity and quality. An area of woodland is situated along the northern aspect of site with significant landscape value. Further individuals and groups adjacent to the highway provide important amenity to the site and wider rural environment.

4. ARBORICULTURAL ASSESSMENT

4.1 Method of Data Collection

- 4.1.1 The trees on the site were originally surveyed without reference to site layout as detailed in Clause 4.4.1.1 of BS5837:2012. However, for the purposes of the arboricultural assessment the design proposal for the site has been considered.
- 4.1.2 The survey recorded trees either as individual specimens or as groups, where these trees were aerodynamically, culturally or visually important as groups. The tree numbers associated with each tree are cross-referenced within the schedule and plans at Appendix 3 and 4 respectively. The complete method of data collection for the tree survey is provided at Appendix 2.

4.2 BS5837:2012 Tree Categorisation

- 4.2.1 The BS5837:2012 sets out the methodology for surveying trees on potential development sites in order to identify them within a prioritised system of retention categories, as summarised below:

A Category Trees of high quality and value in such a condition as to be able to make a substantial contribution for a minimum of 40 years;

B Category Trees of moderate quality and value in such a condition as to make a significant contribution for a minimum of 20 years;

C Category Trees of low quality and value currently in adequate condition to remain until new planting could be established and expected to remain for a minimum of 10 years, or young trees with a stem diameter less than 150 mm measured at 1.5 meters above ground level; and

U Category Trees in such a condition that any existing value would be lost within 10 years and which should, in the current context, be removed for reasons of sound arboricultural or forestry management.

- 4.2.2 Retention categories A, B and C are sub-divided into sub-categories 1 – 3 as defined below and are provided in detail within Table 1, extract of BS5837:2012 at Appendix 3.

Subcategory 1	Arboricultural value;
Subcategory 2	Landscaping value; and
Subcategory 3	Cultural and conservation value.

4.3 Summary of Data

- 4.3.1 The overall survey includes records of 32 individual trees and one group. The comments for each tree vary and are given in detail in the BS5837:2012 Tree



Schedule along with root protection areas at Appendix 3. The complete site survey is described within the summary of data below.

- 4.3.2 The location of each tree and their associated constraints including canopy spread, and root protection areas with the proposed development are illustrated on plan numbers DWG 001 Rev B – DWG 002 Rev A & Rev B at Appendix 4.
- 4.3.3 There are no A category retention value tree, considered to be of high quality with a minimum of 40 years life remaining.
- 4.3.4 There are three individual B category retention value trees. The B category trees are T1, T2 and T5, which are a Norway maple, plum and whitebeam respectively. These trees are considered to be of moderate quality with a minimum of 20 years useful life remaining. These trees have been downgraded due to previous pruning and encroachments into their root protection areas and structural condition.
- 4.3.5 There are 27 individual trees and one group considered to be of C category retention value. These trees are all considered to be of low quality and have a limited useful life remaining, with a minimum 10 years. The C category trees should not be considered a constraint on site in terms of development, however should be retained if possible and appropriate.
- 4.3.6 The remaining two individual trees are U category retention value considered to have less than 10 useful years remaining. The trees are to be removed due to impaired structural and/or physiological condition with very limited future contribution.

Table 2: *Distribution of Retention Categorisation for the Tree Survey*

Retention Category	Individual Trees	Groups of Trees	Total
A	0	0	0
B	3	0	3
C	27	1	28
U	2	0	2
Total	32	1	33

- 4.3.7 It should be noted that Table 1 of BS5837:2012 only gives recommendations in relation to remaining years. A tree may be considered to have a longer remaining life, however, still be considered to be of a lower category given its maturity, condition or overall impact to the application site.
- 4.3.8 In line with BS5837:2012, the category A and B trees should be considered as providing a substantial contribution to a site. Therefore, Category A and B trees should be retained and incorporated into the proposed development where possible and feasible.



- 4.3.9 Generally, category C and U trees are considered to be of low quality or are young specimens, which can be readily replaced, therefore, should not be considered a constraint to future development.
- 4.3.10 However, it is considered desirable, wherever possible, that a tree should be retained as it ensures continuity of tree cover and provides a mature landscape to the proposed development.

5. ARBORICULTURAL IMPACT APPRAISAL OF TREE LOSS

5.1 Planning Proposal

- 5.1.1 Following the refusal for the previous planning application on 4th July 2016 a number of alterations have been made to the design and appearance of the proposed care home. This has led to the proposal now being more traditional in architecture, across an entirely 3-storey layout, on a reduced footprint. There is one less bedroom and additional parking provided; DWG 002 Rev A at Appendix 3 provides the overlay of the previous design and the new proposal. This report only considers the new proposed layout and supersedes all previous reports in relation to trees.
- 5.1.2 The proposed development will allow for the provision of 60 bedrooms with associated day-space areas, bathrooms, storage areas, hair salon, gift shop, a café/bar area, cinema room, staff room, managers room, admin and office space, a kitchen area, laundry and a main reception area.
- 5.1.3 The efficient use of the site and the provision of 3-storey development, will ensure that the developable space on the site is maximised in accordance with national planning policy, but not at the expense of either visual amenity or the amenities of the occupiers of the nearby properties.
- 5.1.4 It is considered that the amount of development is acceptable for a site of this size and, due to the scale and massing of the building, will not result in an over-development of the site to the detriment of the character and appearance of this dispersed part of the settlement.
- 5.1.5 The balance of building design, location and new opportunities for training, employability and company start-up has had to be balanced against trees to be retained throughout the site. This balance is considered satisfactory and should not lead to a noticeable long-term loss of trees, with correct implementation of tree protection.
- 5.1.6 The appraisal considers the whole development and the impact that it has on trees, which are to be retained or removed.
- 5.1.7 To aid assessment of the impact and implications of development, the trees and their constraints are given on plans DWG 001 Rev B and with the proposed development on plans DWG 002 Rev B both at Appendix 4.

5.2 Direct Tree Loss: Proposed New Development

- 5.2.1 In order to demolish the existing building and construct the new it is proposed that there will be a loss of three individual trees and part of one group, which are trees T2, T3, T9 and G33.
- 5.2.2 T2 is a semi-mature purple plum, located adjacently to the proposed site access to the south. It has been considered that the removal of this tree to allow access and



to develop a new entrance feature of tree planting on either side of the access is an appropriate solution.

- 5.2.3 T3 is a mature cherry, which requires removal in order to create access into the site from Spalding Common on the southern side of the site. This tree is a declining specimen and of limited longer-term value.
- 5.2.4 T9 is the only TPOed tree to be removed for the proposal. It has been considered that due to the growth habit of the tree coupled with the incursion of 16% into the RPA it is not viable to retain it. The building line has been altered in this area of the site to accommodate the other TPOed trees. The balance to retain the other trees has resulted in the loss of this one.
- 5.2.5 The final trees to be removed are within the southern part of G33 a C category group. The removal of the southern part of the group is to allow for new parking.
- 5.2.6 The principle of the removal of the trees has been discussed at length with both the Planning Officer and Tree Officer at the Council and it has been considered acceptable with suitable mitigation planting proposed.

5.3 Indirect Tree Loss: General Arboricultural Management

- 5.3.1 Beyond the tree removal as a direct consequence to development, other tree felling operations will be undertaken in order to make the site more useable and also due to the condition of a number of trees. This would be undertaken and recommended through general management aside from the planning application.
- 5.3.2 As an indirect loss to development it is recommended that the two individual U category trees are to be removed. These trees are T21 and T28.
- 5.3.3 The loss of the aforementioned trees has been considered acceptable in order to facilitate the development proposal and with suitable mitigation planting to be confirmed within a detailed landscaping and tree planting proposal the direct loss should be of limited impact to the wider local amenity.
- 5.3.4 Due to the location of the trees and requirement for the new buildings in terms of size and scale there is no further alternative solution in order to retain the trees on site.
- 5.3.5 The justification for these removals should be referenced to the new opportunities for employment and requirement for the development proposal. Section 5.1.1 of BS5837:2012 recognises that the competing needs of development mean that trees are only one factor requiring consideration. It also states that misplaced tree retention can be detrimental on a site where it will cause excessive pressure on those trees being retained and could necessitate their removal in the future.



Table 3: *Trees to be removed*

Reason for removal	Proposed works or reason	Tree retention category				Total
		A	B	C	U	
Trees to be removed for proposed development	Fell for development	0	T2	T3, T9 & G33 (part)	0	3 + 1
Indirect tree loss	Fell for general arboricultural management	0	0	0	T21 & T28	2
Total		0	1	2 + 1	2	5 + 1

- 5.3.6 Full specification of tree removal is provided within the complete tree schedule. All trees, which are directly or indirectly impacted upon by the planning application, are illustrated on plan DWG 003 Rev B, at Appendix 4.

5.4 Remedial Tree Works

- 5.4.1 A schedule of tree work has been provided within Appendix 3. All tree work will be carried out prior to commencement of construction activities and prior to the erection of the tree protection measures.
- 5.4.2 Specifically in relation to T10, T11 and T12 the canopies will be reduced on the east and western sides by approximately 3-4m laterally. This is to reduce the likelihood of branch failure.
- 5.4.3 It is likely that any new tree planting will require remedial works consisting of formative pruning whilst the trees establish. This is recommended as part of the three - five year tree management programme for the planting, maintenance and aftercare of the new trees. This will need to be finalised later as the required works and should be detailed within a detailed planning condition, if it is considered that new trees will be planted.
- 5.4.4 All tree pruning should be undertaken to BS3998:2010 '*Tree work – Recommendations*' current arboricultural industry guidelines and best practice; and all relevant Health & Safety standards. Tree work is a specialist task that requires operatives to be appropriately qualified, skilled, and adequately insured. Guidance on selecting an appropriate contractor can be obtained from the Arboricultural Association, who also maintains a directory of Approved Contractors. The Arboricultural Association can be contacted on 01242 522152 or via their website <http://www.trees.org.uk>.

5.5 Future Alteration to the Tree Works Schedule

- 5.5.1 Should the recommended work schedule require modifying, for whatever reason, this will be agreed with the appointed Arboricultural Consultant (when applicable), and also approved in writing by South Holland District Council. Under no circumstances will the appointed contractor deviate from the Tree Work Schedule contained in Appendix 3, unless approved in writing by South Holland District Council.



6. BELOW GROUND CONSTRAINTS

6.1 Root Protection Area

- 6.1.1 The below ground constraints are generally summarised as the root protection areas (RPA). The RPA is an area equivalent to a circle with a radius 12 times the diameter of the trees measured at 1.5 metres for single stemmed trees. For trees with more than one stem, one of the two calculation methods below should be used where there are either 2 - 5 stems or 5 or more stems. In all cases, the stem diameter(s) should be measured in accordance with Annex C, and the RPA should be guided from Annex D of BS5837:2012.
- 6.1.2 The RPA is an area in which no ground works should be undertaken without due care in relation to the retained tree(s) and this is to avoid soil compaction, changes in levels or soil contamination which could alter the trees condition and/or stability. The shape of the RPA and its exact location will depend upon arboricultural considerations and ground conditions.
- 6.1.3 The RPA for the trees have been calculated as prescribed by BS5837:2012 and are shown as circles for polygons on the Arboricultural Impact Plan at Appendix 4. These plans illustrate the relationship between the RPAs associated with the trees and the proposed development.
- 6.1.4 Due to the early involvement, it has been possible to work with the constraints associated with the trees as the building locations have evolved and this has generally enabled buildings to be located outside of the RPAs of those trees to be retained.
- 6.1.5 In addition to the illustration of RPAs on the plans at Appendix 4, the numerical RPA values are provided within the Tree Schedule at Appendix 3. Within the schedule both RPA radius in metres from the main stem and total area for the RPA as square metres.

6.2 Working within the RPAs

- 6.2.1 Through the alterations in design and layout to allow for the TPOed trees to be retained across the site, there will be a slight incursion of the building foundations into the RPAs of four trees located on the eastern and western boundaries. This incursion is considered unavoidable and a variety of feasibility options have been considered prior to achieving this final solution.
- 6.2.2 It is proposed that there will be incursions into the RPA of T9, T10, T11 and T29 in order to erect the building. The incursions are as follows:
- T9 (elm) – 36.5m² incursion, which equate to a 16% total incursion, therefore to be removed.
 - T10 (ash) – 3.5m² incursion, which equate to a 2% total incursion.
 - T11 (ash) – 10.5m² incursion, which equate to a 3.8% total incursion.
 - T29 (ash) – 9m² incursion, which equate to a 5% total incursion.
- 6.2.3 The aforementioned incursions given that the proposal is for a care home is not considered of such significance to alter the overall construction of the development. However specific excavation methodologies will be employed to include full on site supervision by the project arboricultural consultant whilst any of the foundations



within this area are excavated. This will ensure that foreseeable root damage does not occur and that if roots are identified they are considered and necessary action taken to alter the foundation of undertake pruning works.

- 6.2.4 It is considered that with a suitable planning condition site supervision can be successfully implemented and a full method statement of works prepared and agreed prior to any onsite works commencing.
- 6.2.5 This incursion is considered insignificant and it is unlikely that any roots greater than 25mm will be identified. As per clause 7.2.3 of BS5837:2012, this is considered acceptable and unlikely to cause detrimental impact in this instance.

6.3 Construction Scaffolding within the RPAs

- 6.3.1 In order to construct the proposed new building, there will be a requirement to have construction scaffolding within the RPA of T4, T5, T6, T7, T10, T11, T12 and T29 by up to 2m from the elevation. As a result, there will be a requirement for ground protection (Ground-Guards) to be installed as detailed within a Tree Protection Plan. This will be as per the notes set out in BS5837:2012 Clause 6.2.3.3 Note a. It will comprise of either suspended wooden walkway beneath the scaffolding or 100mm of woodchip laid onto geotextile base overlaid with wooden boards. This will significantly reduce the likelihood of ground compaction. All excavation works will have the plant machinery outside of the RPAs.
- 6.3.2 Due to the details provided for this application there is insufficient information relating to below ground infrastructure available at present to comment as to whether or not there would be adequate space for these to be installed outside of RPAs. This is specifically in relation to the proposed relocation of the domestic gas pipe to the southwest of site. However, there is sufficient space outside of the RPAs for services to be located. If services do enter RPAs the use of hand digging as detailed in the National Joint Utilities Group publication '*Guidelines for the Planning, Installation and Maintenance of Utility Services in Proximity to Trees*' (NJUG 10, Volume 4, 2007) will be undertaken to minimise the impact on the tree roots.

6.4 Landscape Operations within the RPA's

- 6.4.1 Following the construction of the apartments, there will be a requirement to alter the landscape layout immediately surrounding the built structure, which will involve working within the RPA of a number of trees on site.
- 6.4.2 The incursions are within the periphery of the RPAs and are of minor overall impact, not considered to have a detrimental impact of tree condition. Nevertheless, the removal of hard surfacing, foundations and existing built up ground in RPAs must be undertaken with hand tools only and/or under the direct supervision/guidance of the Arboricultural Clerk of Works (ACoW). This will ensure that foreseeable damage does not occur to the tree during this phase of works. If any roots with a diameter greater than 25mm are identified, the tree officer will be contacted as recommended within BS5837:2012 clause 7.4.2.7 Note 1.
- 6.4.3 Should the final external surfacing require installation of paving slabs, only sharp sand is to be used and laid on a geotextile membrane. This will ensure that soil contamination does not occur through the use of materials with a high salt content.
- 6.4.4 Further minor surface reconfigurations including seeding/turfing are unlikely to have a negative effect on specimens to be retained. However, to ensure foreseeable



damage does not occur, hand-dig only methods will be adopted when working with the RPA of retained trees as detailed further below.

- 6.4.5 A Tree Protection Plan will be prepared prior to commencement of works on site, which will provide details in relation to construction access, tree protective fencing, construction processes and site storage. This should be prepared as part of a planning condition and a draft version is included at Appendix 4.

7. ABOVE GROUND CONSTRAINTS

- 7.1.1 The above ground constraints predominantly refer to the impact of the canopy of any retained tree on the site either by size and form, shadowing and nuisance factors. As a result it is sometimes required that a canopy protection zone is established to ensure it is not harmed during construction.
- 7.1.2 Where the current and/or ultimate height of a Category A, B or C tree will cause an obstruction to the proposed development, this must be considered as a constraint. This is usually considered in terms of issues relating to shade and light.
- 7.1.3 An Amenity Clearance Zone (ACZ) is used to consider the impact of the proximity of retained trees to structures. The ACZ is defined as an area surrounding the tree that enables a satisfactory relationship to exist between the property and the tree, and as such is equal to two-thirds of the tree's expected mature height. The ACZ is a combination of factors such as:
- Shading (of buildings and open space)
 - Direct damage to structures
 - Future pressure for removal
 - Seasonal nuisance (e.g. leaf fall blocking gutters, fruit fall creating slippery patches and honey dew dripping on vehicles and surfaces)
- 7.1.4 Consideration is also given to species characteristics such as:
- Deciduous or evergreen;
 - Density of foliage;
- 7.1.5 Although not part of BS5837, the ACZ also reflects a more intangible factor of how comfortable the inhabitant of the property is likely to feel by the proximity of the tree to the house. It serves to protect retained trees from pressure to be felled or undergo surgery after occupation of the property.
- 7.1.6 The tree canopies are marked on the attached TCP as a continuous line around each individual tree.
- ### **7.2 Impact on Amenity**
- 7.2.1 There will be an overall loss of four individual trees and part of one group. The additional planned landscaping and tree planting for the site will mitigate for this loss of tree to ensure enhancement and continuity of tree cover.
- 7.2.2 It is likely that with or without development trees T3, T21 and T28 would have to be significantly reduced or removed in the short term due to the overall condition of the trees and likelihood of large branch failure.
- 7.2.3 The loss of the aforementioned trees has been considered acceptable in order to facilitate the development proposal and with suitable mitigation planting to be



confirmed within a detailed landscaping and tree planting proposal the direct loss should be of limited impact to the wider local amenity.

- 7.2.4 The justification for these removals should be referenced to the new opportunities for employment and requirement for the development proposal. Section 5.1.1 of BS5837:2012 recognises that the competing needs of development mean that trees are only one factor requiring consideration. It also states that misplaced tree retention can be detrimental on a site where it will cause excessive pressure on those trees being retained and could necessitate their removal in the future.

7.3 Future Growth

- 7.3.1 The future growth of the trees will not have an impact on the proposed new building as the majority of trees have reached full maturity. Boundary trees may require minor future pruning. This can be addressed with minor pruning of the lateral branches, which encroach towards the built structure.
- 7.3.2 Specifically in relation to T10, T11 and T12 the canopies will be reduced on the east and western sides by approximately 3-4m laterally. This is to reduce the likelihood of branch failure.

7.4 Leaves, Fruit and Honeydew

- 7.4.1 Given the proximity of so many trees on and off site, leaf fall will be a problem across the whole of the site in autumn. Where leaf fall will be a problem to the gutters this can be managed through regular clearance and incorporating grates into the gutters so avoiding regular blockages.
- 7.4.2 Honeydew is most likely to be a significant problem from the lime and maple trees of which there are a number in the area. Given the distance of the proposed built structures from the trees, this is not considered to have a significant impact to the proposal.

8. TREE PROTECTION

8.1 Tree Protective Fencing

- 8.1.1 The successful retention of those trees that will remain on the site will be dependent upon the quality and maintenance of any protection system that is put in place. An Arboricultural Method Statement should be provided to detail how the necessary tree protection will be implemented. An indicative draft tree protection plan has been provided however this is subject to alteration following a final decision notice and a detailed method statement should be provided as part of a robust planning condition.
- 8.1.2 Prior to any construction or vehicular movement tree protective measures must be in place. This will be checked prior to the commencement of works by the Arboricultural Clerk of Works (ACoW) and file note prepared and submitted to the council's tree officer.
- 8.1.3 The construction process is highly unlikely to have a detrimental effect upon the health of the retained trees assuming recommendations made in this report are adhered to at all times by the contractors e.g. the positioning of a stout fence between the retained trees and construction activities is placed prior to commencement of works and remains intact and in position throughout the duration of the works.



- 8.1.4 These protective measures ensure suitable protection of trees and associated soils. The key method of tree protection is through the use of barriers/fencing.
- 8.1.5 The tree protection fence/barrier once erected will not be moved or relocated without written approval from the Council. The tree protection area behind the fence/barrier (the Development Exclusion Zone) will be sacrosanct throughout development and no access will be allowed to this area including for example the storage of or moving of materials or machinery. In the Development Exclusion Zone there will be no excavations or increases in soil level without prior written approval from the Council.
- 8.1.6 The barriers will be made from scaffold in a vertical and horizontal framework, as shown as Figure 3 in BS5837:2012. This is not the default specification as in this instance it is more appropriate to place the fencing on rubber feet with a supporting rear strut. This is due to the continued access required through site and the considerable amount of existing hard standing.
- 8.1.7 The non-default specification should consist of a vertical and horizontal scaffold framework, well braced to resist impacts, as illustrated in Figure 3. The vertical 2m tall welded mesh panels on rubber or concrete feet, the panels should be joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from within the fence. The distance between fence couplers should be at least 1m and should be uniform throughout the fence. The panels should be supported on the inner side by stabilizer struts, which should be attached to a base plate secured with ground pins.
- 8.1.8 A detailed A1 laminated Tree Protection Plan should be located within the site office throughout the course of development. This should include details of the fencing specification and location for which the fence will be erected.

9. MITIGATION TREE PLANTING

9.1 Proposed Tree Planting

- 9.1.1 A number of trees are to be planted to provide instant green space and infrastructure. Trees will be planted following the guidance of BS8545:2014 *Trees: from nursery to independence in the landscape - Recommendations*. The trees, size, location and species will be confirmed and submitted as part of a wider landscape planning condition.
- 9.1.2 To mitigate for the tree loss of non-TPOed trees a total of 5no. new trees will be planted. The final species is to be agreed however it is likely that they will be a mix of Liquidambar and sorbus species.
- 9.1.3 The planting of trees which will be extra heavy standard as detailed within table D.1 of BS8545:2014. Therefore the trees will have a stem girth at 1m 14-16cm a clear stem of between 1.7-2.0m and an overall planting height of >3m. The trees to be planted will be container-grown specimens in 75L pots.
- 9.1.4 Following discussion with the Councils' Tree Officer and email dated 6th June 2016 it has been agreed that in order to mitigate for the loss of trees T9 one new tree will be planted. This will be within the grassed area to the east of the development area between the building and rear of highway kerb.
- 9.1.5 To mitigate for the tree loss specifically of the TPOed tree, 1no. Turkish hazel will be planted. The tree will be semi-mature as detailed within table D.1 of



BS8545:2014. Therefore the tree will have a stem girth at 1m 18-20cm a clear stem of between 1.7-2.0m and an overall planting height of 4-6m. The tree to be planted will be container-grown specimens in 100L pot.

- 9.1.6 The tree planting location will be defined in part by the location of existing underground infrastructure. The trees would be guyed underground and have a specific 3-5 year maintenance program applied to ensure its successful establishment. This tree as it matures would be a significant feature to the local area with far greater longevity than any of the surrounding trees.
- 9.1.7 The guidance of BS8545:2014 will be followed in relation to the aftercare of the trees to be planted. The post-planting management and maintenance part of the process should follow the order shown in Figure 8 of the British Standard and will meet the recommendations given in clauses 11.2 to 11.5.
- 9.1.8 This will include amongst general irrigation, formative pruning:
- A formal assessment of young tree health and development should be carried out annually. This assessment should include foliar appearance (i.e. lack of leaf chlorosis and/or necrosis), leaf size and leaf canopy density, extension growth and incremental girth development. Continual assessment on an ad hoc basis should be carried out throughout the year, to inform maintenance requirements.
 - Field testing using both leaf fluorescence and leaf chlorophyll content. These tests should be carried out wherever practicable.
- 9.1.9 All stakes and ties should be checked at least annually to ensure that the root system remains stable and firm in the ground, and that ties are still effective and not causing any damage to the tree. Any stakes and ties that are found to be not fit for purpose should be adjusted, replaced or removed.

10. CONCLUSIONS

- 10.1.1 This survey and tree report includes records of 32 individual trees and one group of trees. These comprise of 3no. B category, 28no. C category and 3no. U category. This application considers all trees located on or within influencing distance of the proposed development area.
- 10.1.2 It has been considered desirable wherever possible that trees and groups of trees should be retained, although care has been exercised over misplaced tree preservation. In terms of the current site layout plan, due to the size and scale of building requirement there is conflict with the trees that cannot be avoided and therefore mitigation proposals are considered.
- 10.1.3 In total a combination of five individual and part of one group of trees comprising of B Category, C category U category trees will be removed in order to implement the design proposal or as part of good site management. This includes the loss of one TPOed tree T9. This tree is to be removed due to the design of the building in order to accommodate sufficient room space and to retain the other TPOed trees on site.
- 10.1.4 The justification for these removals should be referenced to the new opportunities for employment and the requirement for the development proposal. Section 5.1.1 of BS5837:2012 recognises that the competing needs of development mean that trees are only one factor requiring consideration. It also states that misplaced tree



retention can be detrimental on a site where it will cause excessive pressure on those trees being retained and could necessitate their removal in the future.

- 10.1.5 There have been previous incursions into the RPAs of existing trees and this will not alter. There are to be new incursions into the RPAs of T10, T11 and T29 for the new care home, which equates to no more than 5% into any of the RPAs. These incursions have all been deemed acceptable and unlikely to cause detrimental impact in this instance. This is all subject to the ACoW being in attendance on site through the course of the footpath installation. If no roots greater than 25mm in diameter are identified this will be the preferred method.
- 10.1.6 The preparation and suitable working methodology for this should be subject to a pre-commencement planning condition, along with continued site monitoring for the course of development.
- 10.1.7 The onsite trees to be retained should be proactively managed to ensure that they enhance the development and the wider environment. Therefore, this impact assessment provides detail of the measures and steps required to retain trees through and post development specifically through adequate supervision, tree protection and construction techniques. In the first instance it is recommended that the tree works are undertaken as specified in the associated Tree Schedule.
- 10.1.8 It is critical that all protective fencing is installed and erected and the CEZ enforced prior to the commencement of any works on site. Following installation of tree protection a site meeting will be undertaken with the Tree Officer to ensure satisfaction of all parties prior to any on site works commencing.
- 10.1.9 It is recommended that a suitable competent arboriculturist, undertakes the site supervision and monitoring works.
- 10.1.10 In order for tree and root protection measures to work effectively all personnel associated with the construction process must be familiar with the Tree Protection Plan.

11. RECOMMENDATIONS

11.1 Planning Conditions

- 11.1.1 It is recommended that planning conditions be adhered to any approval for a suitable tree planting scheme and for the production of an Arboricultural Method Statement for implementation of tree protection, installation of special surfacing, pre-commencement meetings and on-going site supervision through the processes of excavation within RPAs of trees retained.

12. REFERENCES

- 12.1.1 British Standard 5837:2012 'Trees in Relation to Design, Demolition and Construction - Recommendation'
- 12.1.2 British Standard 3998:2010 '*Tree work – Recommendations*'
- 12.1.3 BS8545:2014 Trees: from nursery to independence in the landscape - Recommendations
- 12.1.4 The Forestry Act 1967
- 12.1.5 The Town and Country Planning Act 1990



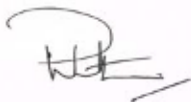
12.1.6 The Town and Country Planning (Tree Preservation)(England) Regulations 2012

13. REPORT CAVEATS AND LIMITATIONS

13.1 Caveats and Limitations

- 13.1.1 The report is for the sole use of the client and its reproduction or use by anyone else is forbidden unless written consent is given by the author.
- 13.1.2 This is an arboricultural report and as such no reliance should be given to comments relating to buildings, engineering or soil.
- 13.1.3 This is not an arboricultural health and safety survey, a more detailed survey of internal decay detection etc can be supplied but would be subject to a further fee.
- 13.1.4 This is a report which should be to accompany a planning application and provides no detail specifically in relation to the health and safety of the trees.
- 13.1.5 All tree inspections were undertaken from ground level and no climbing inspections were undertaken.
- 13.1.6 For the purposes of this survey all dimensions of trees and their associated parts are based on estimation unless otherwise stated.
- 13.1.7 Trees are growing dynamic structures. Whilst reasonable effort has been made to identify defects within the trees inspected, no guarantee can be given as to the absolute safety or otherwise of any individual tree. No tree is ever absolutely safe due to the unpredictable laws and forces of nature. As a result of this, natural failure of intact trees will occur; extreme climatic conditions can cause damage to even apparently healthy trees.
- 13.1.8 Trees are living organisms whose health, condition and structure can change quickly and without warning. Therefore, the contents of this report are valid for a period of one year from the date of this survey.
- 13.1.9 On undertaking the recommended works, the arborist/tree surgeon must without delay report any defects that become apparent while climbing or working on the tree/s in question. Those defects must be reported immediately to the relevant project manager, landowner and/or the author of this report to enable the appropriate remedial action.
- 13.1.10 This is an arboricultural report and therefore does not rely on ecological or archaeological data. If either is commented upon within the report further professional advice should be sought.

Signed



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Peter Wharton BSc(Hons) Arb. FARborA MICFor (Chartered Arboriculturist)



APPENDIX 1: AERIAL PHOTOGRAPH

Former Goodfellows School, Spalding Common





APPENDIX 2: SURVEY METHODOLOGY

- i. The trees on the site were originally surveyed without reference to site layout as detailed in paragraph 4.4.1.1 of BS5837:2012. However, for the purposes of the arboricultural impact assessment the design proposal for the site has been considered.
- ii. The position of each tree was plotted with reference to the supplied ordinance survey plan. Small trees with a stem diameter less than 75mm were generally not surveyed as they would either be easily replaced or relocated.
- iii. Each individual tree has been given a tree identification number, the groups and hedges clearly defined for the purpose of this report. Metal tags have not been used for this survey as identification on site does not require this. The tree numbers associated with each tree are cross referenced within the schedule and plans at Appendix 3 and 4 respectfully.
- iv. The tree species have been recorded with both common and botanical names.
- v. All tree heights have been assessed using a clinometer and where indicated in groups the height of the tallest tree was measured unless otherwise stated. Tree heights are given in metres.
- vi. All stem diameters were measured at 1.5 metres above ground level and are given in millimetre units (unless otherwise stated where "gl" is an abbreviation for ground level where diameter was measured just above root flare, "est" is an estimate and "av" is an average).
- vii. The canopy spread is recorded in either the four cardinal points or is given as an average diameter for the crown, especially in groups or where the crown is evenly weighted. Canopy spreads are measured in metres.
- viii. The height of the ground clearance is given in metres and is an estimate of the height of the first branch above ground level.
- ix. In absence of detailed information on the age the following classification has been used:

Yng	Young trees age less than 1/3 life expectancy;
Mid	Middle age trees 1/3 – 2/3 life expectancy;
Mat	Mature trees over 2/3 life expectancy;
O/mat	Over-mature – declining or moribund trees of low vigour; and
Vet	Veteran trees – specimens exhibiting features of biological, cultural or aesthetic value that are characteristic of, but not exclusive to, individuals surviving beyond the typical age range for the species concerned.
- x. Age class is indicative and will vary between species.
- xi. The structural condition of the trees has been assessed and is summarised as:

Good	Few minor defects of little overall significance;
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- | | | |
|--|-------------|--|
| | Fair | A significant defect or several small defects; and |
| | Poor | Major defect present or many small defects. |
- xii. The physiological condition has been recorded to provide an indication of the tree's general health and vitality. The trees have been described thus:
- | | | |
|--|-------------|---|
| | Good | Generally in good health typical of the species; |
| | Fair | Reasonable health with few defects; |
| | Poor | Trees that exhibit significant defects which are irremediable or moribund tree; and |
| | Dead | Tree has died |
- xiii. Each tree was individually assessed and comments, where appropriate, were recorded for the condition of each tree's roots, main stem and crown.
- xiv. General comments have also been made where appropriate, with recommendations when relatively immediate works are given.
- xv. Estimated remaining contribution has been categorised as: less than 10 years, 10-20 years, 20-40 years or over 40 years, based upon an assessment of the tree's potential safe useful life expectancy. The remaining contribution in years has not always been directly followed in relation to the retention categories of the trees as trees may have a long remaining life however be of little significance in terms of development.



APPENDIX 3: SCHEDULES

BS5837:2012 Cascade Chart

Complete Tree Schedule



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; and/or - 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: Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i>			Dark Red (127-000-000) 
Trees to be considered for retention				
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation	
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).	Light Green (000-255-000) 
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.	Mid Blue (000-000-255) 
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.	Grey (091-091-091) 



BS5837:2012 Tree Schedule

Client Name: Country Court Care Group
 Site: Former Goodfellows School, Spalding Common
 Tags: N/A
 Ref: 101016 0461 TS V2 001

Consultant: P. Wharton
 Survey Date: 4/4/2016

Tree No.	Tag No.	Species (Common Name)	Species (Botanical Name)	Height (m)	Stem Dia (mm)	Crown Spread (m)				Height of Crown Clearance (m)	Age Class	Phys Con	Struc Con	Additional notes	Preliminary works recommendations	Estimated remaining contribution	Ret Cat	RPA (m ²)	RPA Radius (m)
						N	E	S	W										
T1	No tag	Norway Maple	<i>Acer platanoides</i>	10	560	4	4	3	4	0	Mat	Good	Fair	Tree situated on grass verge in service road adjacent bus stop. Tree shows evidence of a small girdling root at base with small mover damage. Structural canopy forms at approximately 2m. Evidence of pruning with occluding wounds. Well balanced canopy with good bud coverage throughout. Small diameter deadwood within canopy.	No works required at time of inspection.	10 to 20 yrs	B1	137	6.60
T2	No tag	Pissards Plum	<i>Prunus cerasifera</i> var. <i>atropurpurea</i>	8	250	2	3	3	3	0	S/Mat	Good	Fair	Tree located within grass verge area adjacent to footpath and growing below power line. Evidence of old pruning. Well balanced canopy with good bud coverage throughout.	Fell for development.	10 to 20 yrs	B1	28	3.00
T3	No tag	Cherry	<i>Prunus</i> Sp.	7	280	2	3	4	4	0	Mat	Fair	Fair	Tree located within grass verge adjacent footpath. Fungal bracket at base of tree, potentially Ganoderma but not yet confirmed. Large wound on main stem southeast side of tree where first branch forks off at approximately 1.5m, with bark peeling off in a large area. Another bark defect on west side of main stem at approximately 1.75m. Sparse crown with some dieback, however still bud coverage throughout crown.	Fell for access.	10 to 20 yrs	C1	34	3.30
T4	No tag	Cherry	<i>Prunus</i> Sp.	9	520	3	4	3	4	0	Mat	Fair	Fair	Tree located within grass verge adjacent footpath. Tree has small girdling root at base. Main stem has lark bark defect from a historic pruning wound on south side. Bacterial ooze present at sporadic intervals on main stem. Another bark defect on northwest side of main stem at approximately 2m. Canopy contains small diameter deadwood, however has good bud coverage throughout.	No works required at time of inspection.	10 to 20 yrs	C1	125	6.30
T5	No tag	Whitebeam	<i>Sorbus aria</i> 'Lutescens'	9	600	3	3	2	4	0	Mat	Good	Fair	Tree located within grass verge adjacent footpath. Small girdling root at base. Tree appears in good health, with a well balanced canopy and good bud coverage throughout. Evidence of pruning. Some small diameter deadwood within canopy.	No works required at time of inspection.	10 to 20 yrs	B1	163	7.20

Tree No.	Tag No.	Species (Common Name)	Species (Botanical Name)	Height (m)	Stem Dia (mm)	Crown Spread (m)				Height of Crown Clearance (m)	Age Class	Phys Con	Struc Con	Additional notes	Preliminary works recommendations	Estimated remaining contribution	Ret Cat	RPA (m ²)	RPA Radius (m)
						N	E	S	W										
T6	No tag	Cherry	<i>Prunus Sp.</i>	9	550	2	4	2	2	0	Mat	Good	Fair	Tree located within grass verge adjacent footpath and outside residential property. Tree separates into 4 stems at approximately 1m, with some included unions at the split. Old pruning wounds present on stems. Small diameter deadwood running throughout crown. Evidence of pruning back crown from residential side of tree + entrance gate into old school. Tree has also previously been height reduce at approximately 7m. Crown is reasonably well balanced with good bud coverage throughout.	No works required at time of inspection.	10 to 20 yrs	C1	137	6.60
T7	No tag	Wild Cherry	<i>Prunus avium</i>	10	630	4	4	4	2	0	Mat	Good	Fair	Coppiced willow located adjacent to warehouses growing over footpath. Coppiced at approximately 0.5m. Low value and low amenity value.	No works required at time of inspection.	10 to 20 yrs	C1	177	7.50
T8	No tag	Whitebeam	<i>Prunus avium</i>	6	190	1	1	2	1	0	Si/Mat	Good	Fair	Tree located within grass verge adjacent footpath. Tree has small bark defect at base, potentially from mechanical damage. Structural canopy forms at approximately 1.5m. Evidence of pruning back from footpath. Small diameter deadwood running throughout crown with sparse bud coverage.	No works required at time of inspection.	10 to 20 yrs	C2	18	2.40
T9	No tag	English Elm	<i>Ulmus procera</i>	15	690	3	6	5	5	0	Mat	Good	Fair	Tree located along site boundary fence. Ivy covering main stem growing up into crown and scaffolds. Large canopy containing small-medium diameter deadwood. Evidence of previous pruning. Tree putting on new growth throughout canopy with good bud coverage throughout.	Fell for development.	10 to 20 yrs	C1	222	8.40
T10	No tag	Common Ash	<i>Fraxinus excelsior</i>	13	610	1	4	5	2	0	Mat	Good	Fair	Tree located within grass verge adjacent footpath. Structural canopy forms at approximately 5m, with evidence of previous failures within canopy. Large diameter deadwood present in crown. Crown asymmetric growing predominantly south.	Reduce lateral branches by 3-4m.	10 to 20 yrs	C1	163	7.20
T11	No tag	Common Ash	<i>Fraxinus excelsior</i>	14	770	4	8	4	5	0	Mat	Good	Fair	Tree located within grass verge adjacent footpath. Some storm damage to upper crown.	Reduce lateral branches by 3-4m.	10 to 20 yrs	C1	272	9.30
T12	No tag	Common Ash	<i>Fraxinus excelsior</i>	14	420	7	2	5	7	0	Mat	Good	Fair	Multi-stemmed tree located within grass verge adjacent footpath. Tree appears in good health at time of inspection, with good bud coverage throughout crown.	Reduce lateral branches by 3-4m.	10 to 20 yrs	C1	82	5.10
T13	No tag	Common Ash	<i>Fraxinus excelsior</i>	13	450	2	5	3	3	0	Mat	Good	Fair	Tree located within group towards northern point of site. Tree has previously been heavily pruned western side. Good bud coverage throughout crown.	No works required at time of inspection.	10 to 20 yrs	C1	92	5.40
T14	No tag	Silver Birch	<i>Betula pendula</i>	14	280	3	2	2	3	0	Mat	Good	Fair	Tree located within group towards northern point of site. Medium diameter deadwood running throughout crown. Sparse crown with some dieback from tips.	No works required at time of inspection.	10 to 20 yrs	C1	34	3.30
T15	No tag	Silver Birch	<i>Betula pendula</i>	12	280	2	5	1	1	0	Mat	Good	Fair	Tree located within group towards northern point of site. Tree growing predominantly towards northeast. Small diameter deadwood within canopy.	No works required at time of inspection.	10 to 20 yrs	C1	34	3.30

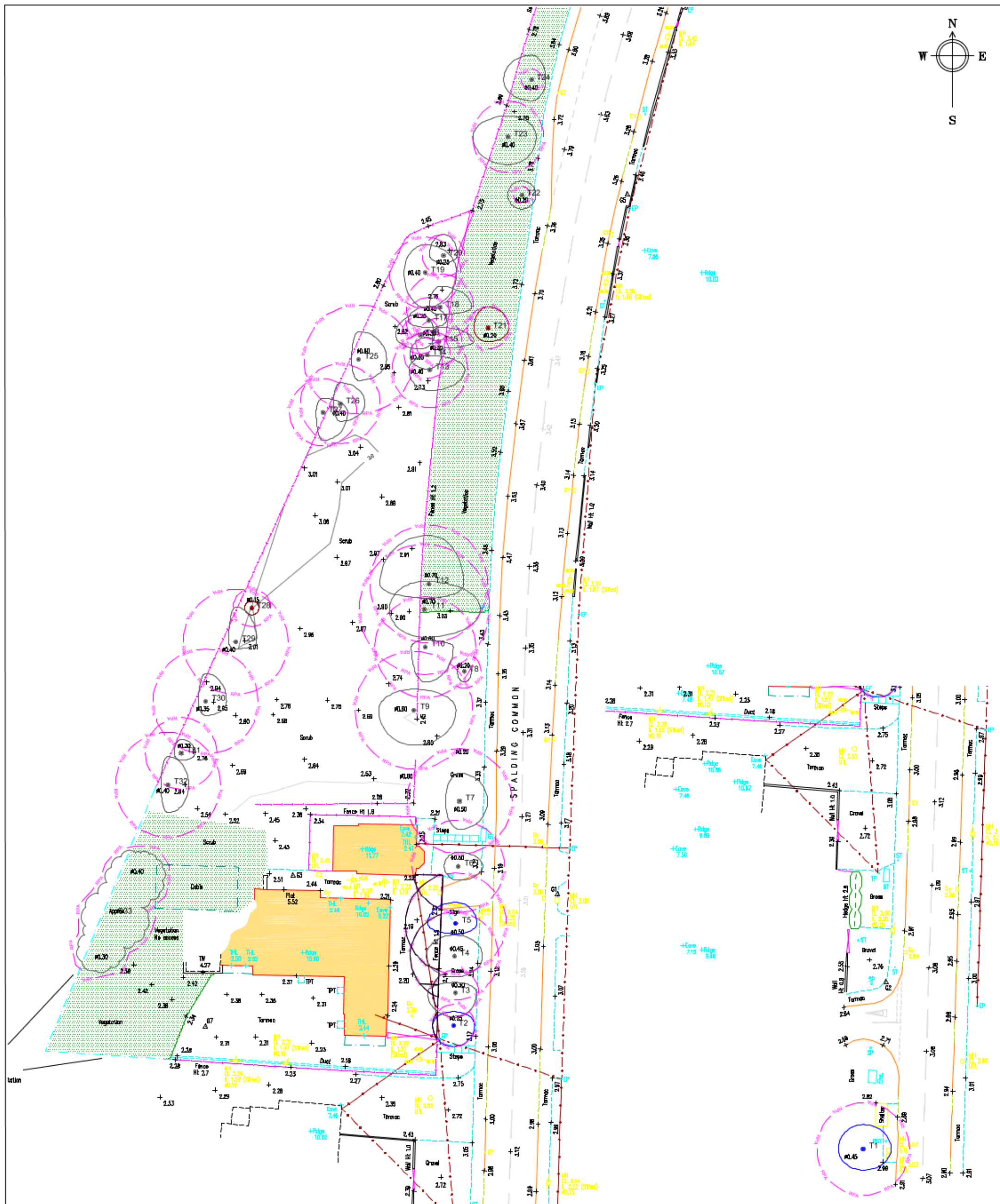
Tree No.	Tag No.	Species (Common Name)	Species (Botanical Name)	Height (m)	Stem Dia (mm)	Crown Spread (m)				Height of Crown Clearance (m)	Age Class	Phys Con	Struc Con	Additional notes	Preliminary works recommendations	Estimated remaining contribution	Ret Cat	RPA (m ²)	RPA Radius (m)
						N	E	S	W										
T16	No tag	Common Ash	<i>Fraxinus excelsior</i>	13	230	3	2	2	4	0	Mat	Good	Fair	Tree located within group towards northern point of site. Ivy growing up main stem from base. Mechanical damage present at 0.75m southeast side of main stem. Evidence of heavy pruning on western side. Small diameter deadwood running throughout crown however canopy has good bud coverage throughout.	No works required at time of inspection.	10 to 20 yrs	C1	23	2.70
T17	No tag	Wild Cherry	<i>Prunus avium</i>	10	270	2	3	1	3	0	Mat	Good	Fair	Tree located within group towards northern point of site. Epicormic growth from main stem. Evidence of pruning on western side. Small diameter deadwood within canopy with good bud coverage throughout crown.	No works required at time of inspection.	10 to 20 yrs	C1	34	3.30
T18	No tag	Silver Birch	<i>Betula pendula</i>	12	410	3	5	1	2	0	Mat	Good	Fair	Tree located within group towards northern point of site. Western side of tree suppressed with evidence of pruning. Reasonably well balanced crown with good bud coverage throughout. Small diameter deadwood running throughout crown.	No works required at time of inspection.	10 to 20 yrs	C1	72	4.80
T19	No tag	Common Ash	<i>Fraxinus excelsior</i>	10	420	4	5	5	3	0	Mat	Good	Fair	Tree located within group towards northern point of site. Large occluding wound on main stem southwest side. Tree has been heavily pruned western side, as well as height reduced at approximately 10m. Good bud coverage throughout crown.	No works required at time of inspection.	10 to 20 yrs	C1	82	5.10
T20	No tag	Whitebeam	<i>Sorbus ana' Lutescens'</i>	6	260	3	2	1	2	0	Mat	Good	Fair	Tree located within group towards northern point of site. Canopy suppressed on western side, with small diameter deadwood within canopy.	No works required at time of inspection.	10 to 20 yrs	C1	28	3.00
T21	No tag	Cherry	<i>Prunus Sp.</i>	4	260	3	3	2	2	0	Mat	Good	Poor	Tree located adjacent to footpath and road situated in a wooded/ low lying vegetated area of the site. Tree exhibits a severely decayed stem with dieback from tips. A structurally poor specimen of low value and low amenity.	Fell as part of general management.	<10 yrs	U	28	3.00
T22	No tag	Goat Willow	<i>Salix caprea</i>	5	100	2	2	2	2	0	S/Mat	Good	Fair	Coppiced willow located adjacent to warehouses growing over footpath. Coppiced at approximately 0.5m. Low value and low amenity value.	No works required at time of inspection.	10 to 20 yrs	C1	5	1.20
T23	No tag	Norway Maple	<i>Acer platanoides</i>	8	430	3	4	4	5	0	S/Mat	Good	Fair	Tree located within grass verge adjacent footpath and road layby. Evidence of pruning back from pathside. Tree appears in good health at time of inspection with good bud coverage throughout dense crown.	No works required at time of inspection.	10 to 20 yrs	C1	82	5.10
T24	No tag	Norway Maple	<i>Acer platanoides</i>	10	130	4	2	3	4	0	S/Mat	Good	Fair	Multi-stemmed tree located within grass verge adjacent footpath and road layby. Evidence of pruning back from pathside. Tree appears in good health at time of inspection with good bud coverage throughout dense crown.	No works required at time of inspection.	10 to 20 yrs	C1	7	1.50

Tree No.	Tag No.	Species (Common Name)	Species (Botanical Name)	Height (m)	Stem Dia (mm)	Crown Spread (m)				Height of Crown Clearance (m)	Age Class	Phys Con	Struc Con	Additional notes	Preliminary works recommendations	Estimated remaining contribution	Ret Cat	RPA (m ²)	RPA Radius (m)
						N	E	S	W										
T25	No tag	Common Ash	<i>Fraxinus excelsior</i>	11	640	4	4	3	1	0	Mat	Good	Fair	Tree located within group towards northern point of site. Main stem forks at approximately 2m. Tree has been heavily pruned western side with occluding wounds present. Previously height reduced at approximately 10m. Good bud coverage throughout crown with small-medium diameter deadwood present.	No works required at time of inspection.	10 to 20 yrs	C1	191	7.80
T26	No tag	Common Ash	<i>Fraxinus excelsior</i>	12	480	3	4	3	1	0	Mat	Good	Fair	Tree located within group towards northern point of site. Tree has been heavily pruned western side with occluding wounds present. Previously height reduced at approximately 10m. Good bud coverage throughout crown with small-medium diameter deadwood present.	No works required at time of inspection.	10 to 20 yrs	C1	102	5.70
T27	No tag	Common Ash	<i>Fraxinus excelsior</i>	14	410	2	4	4	1	0	Mat	Good	Fair	Tree located outside of boundary fence towards the north point of the site adjacent the railway track. Tree seems in good health with a well balanced canopy with good bud coverage throughout.	No works required at time of inspection.	10 to 20 yrs	C1	72	4.80
T28	No tag	Wild Cherry	<i>Prunus avium</i>	7	220	1	1	1	1	0	Dead	Good	Poor	Tree located along western boundary of site adjacent train tracks. Dead specimen and holds no value or amenity value.	Fell as part of general management.	n/a	U	23	2.70
T29	No tag	Common Ash	<i>Fraxinus excelsior</i>	11	630	5	3	1	1	0	Mat	Good	Fair	Tree located along western boundary of site adjacent train tracks. Tree has been heavily pruned western side and previously height reduced at approximately 14m.	No works required at time of inspection.	10 to 20 yrs	C1	177	7.50
T30	No tag	Common Ash	<i>Fraxinus excelsior</i>	11	630	4	3	2	1	0	Mat	Good	Fair	Tree located along western boundary of site adjacent train tracks. Signs of previous work carried out including a height reduction at approximately 12m.	No works required at time of inspection.	10 to 20 yrs	C1	177	7.50
T31	No tag	Wild Cherry	<i>Prunus avium</i>	10	420	2	2	1	1	0	Mat	Good	Fair	Tree located along western boundary of site adjacent train tracks. Signs that the tree has been pruned in the past, predominantly on the west side.	No works required at time of inspection.	10 to 20 yrs	C1	82	5.10
T32	No tag	Silver Birch	<i>Betula pendula</i>	11	620	4	3	4	1	0	Mat	Good	Fair	Tree located along western boundary of site adjacent train tracks. Specimen forks at approximately 1m, with a stem growing towards the south. Signs of previous pruning work carried out, predominantly western side of tree. Good bud coverage throughout crown.	No works required at time of inspection.	10 to 20 yrs	C1	177	7.50
G33	No tag	A Group	A Group	17	400	0	0	0	0	0	Mat	Good	Fair	Trees located along south western boundary of site adjacent train tracks. Group contains 3 trees including one birch and two cherry's. Southern most cherry in decline. All trees have been previously heavily pruned back from railway line.	Fell southern tree of group for parking.	11 to 20 yrs	C2	72	4.80

APPENDIX 4: PLANS

Tree Constraints Plan
Arboricultural Implications Plan
Tree Retention and Removal Plan
Draft Tree Protection Plan

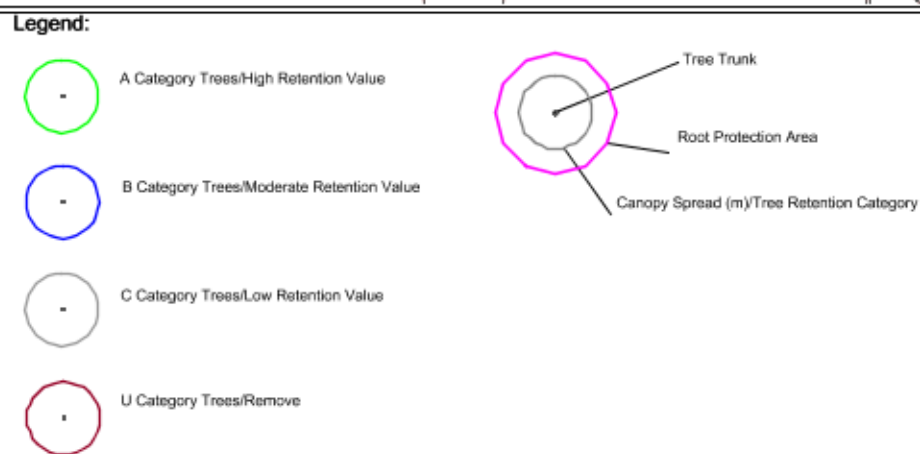
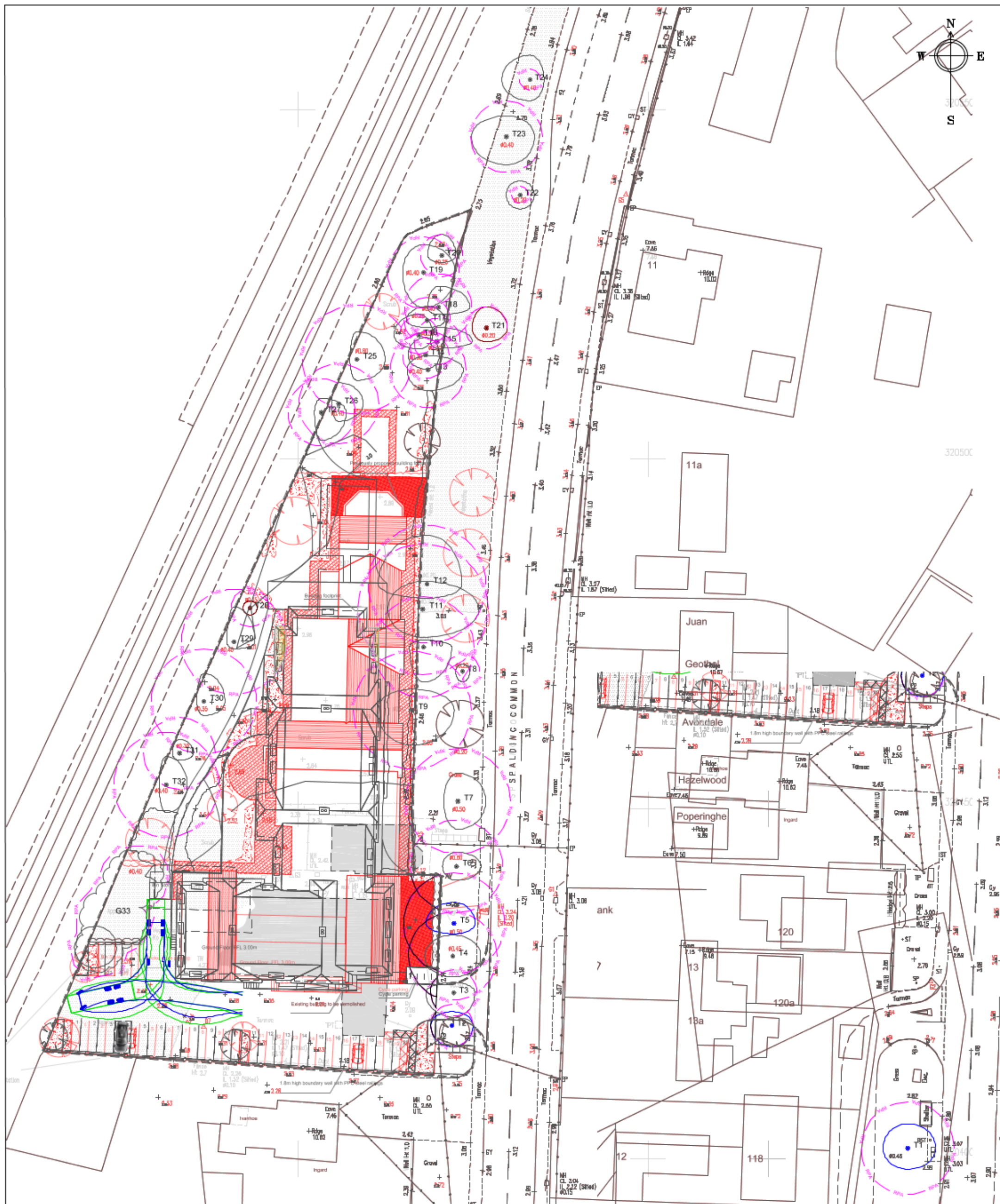




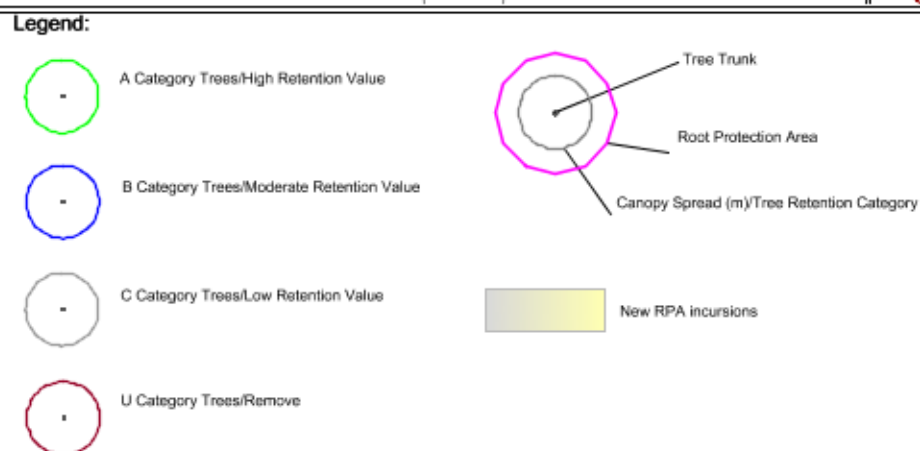
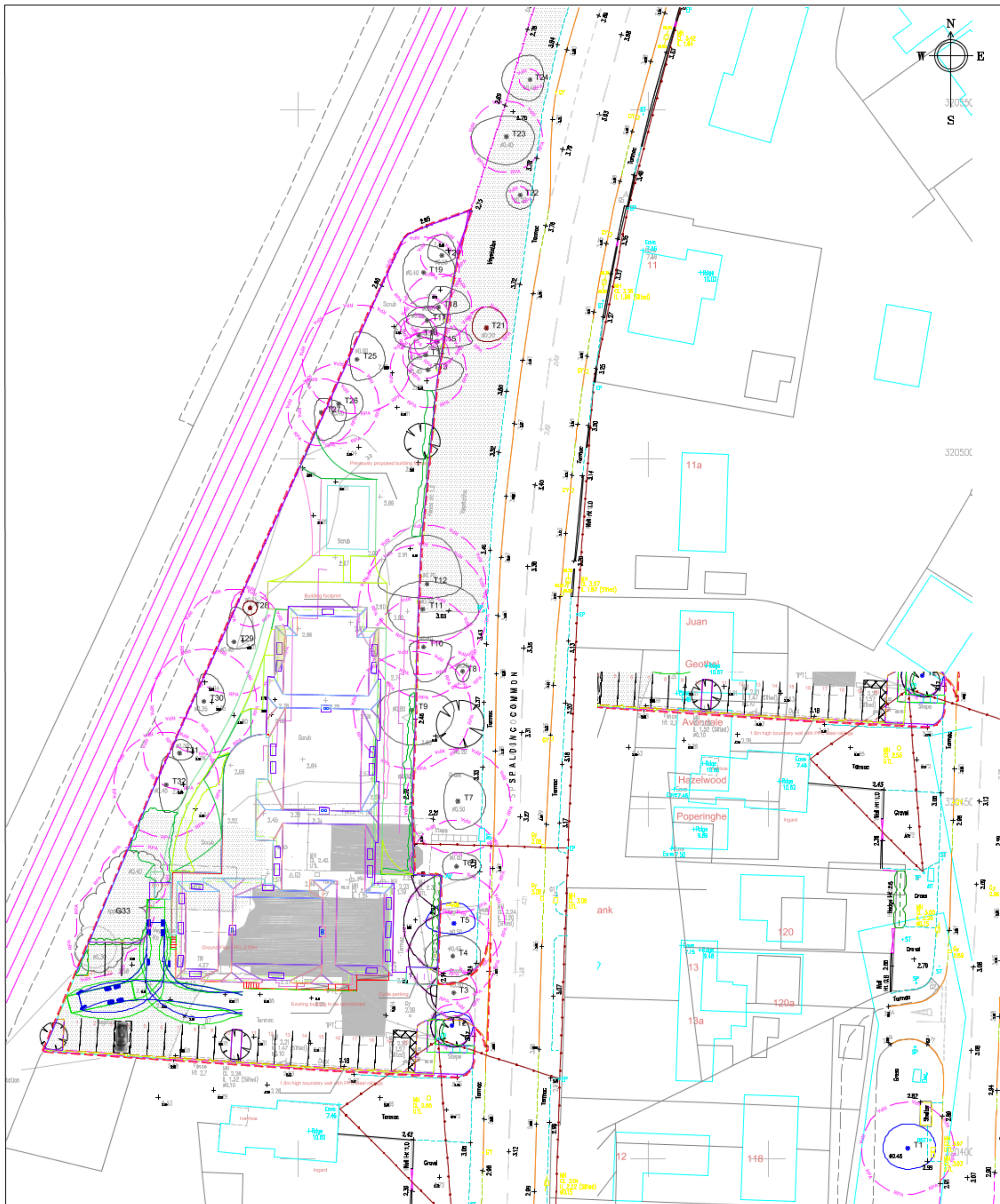
The diagram illustrates four categories of trees based on retention value and canopy spread. On the left, four circles represent different retention categories: A (green), B (blue), C (grey), and U (red). On the right, a detailed diagram of a tree shows the 'Tree Trunk' at the center, the 'Root Protection Area' as a concentric circle, and the 'Canopy Spread (m)/Tree Retention Category' as the outer boundary.



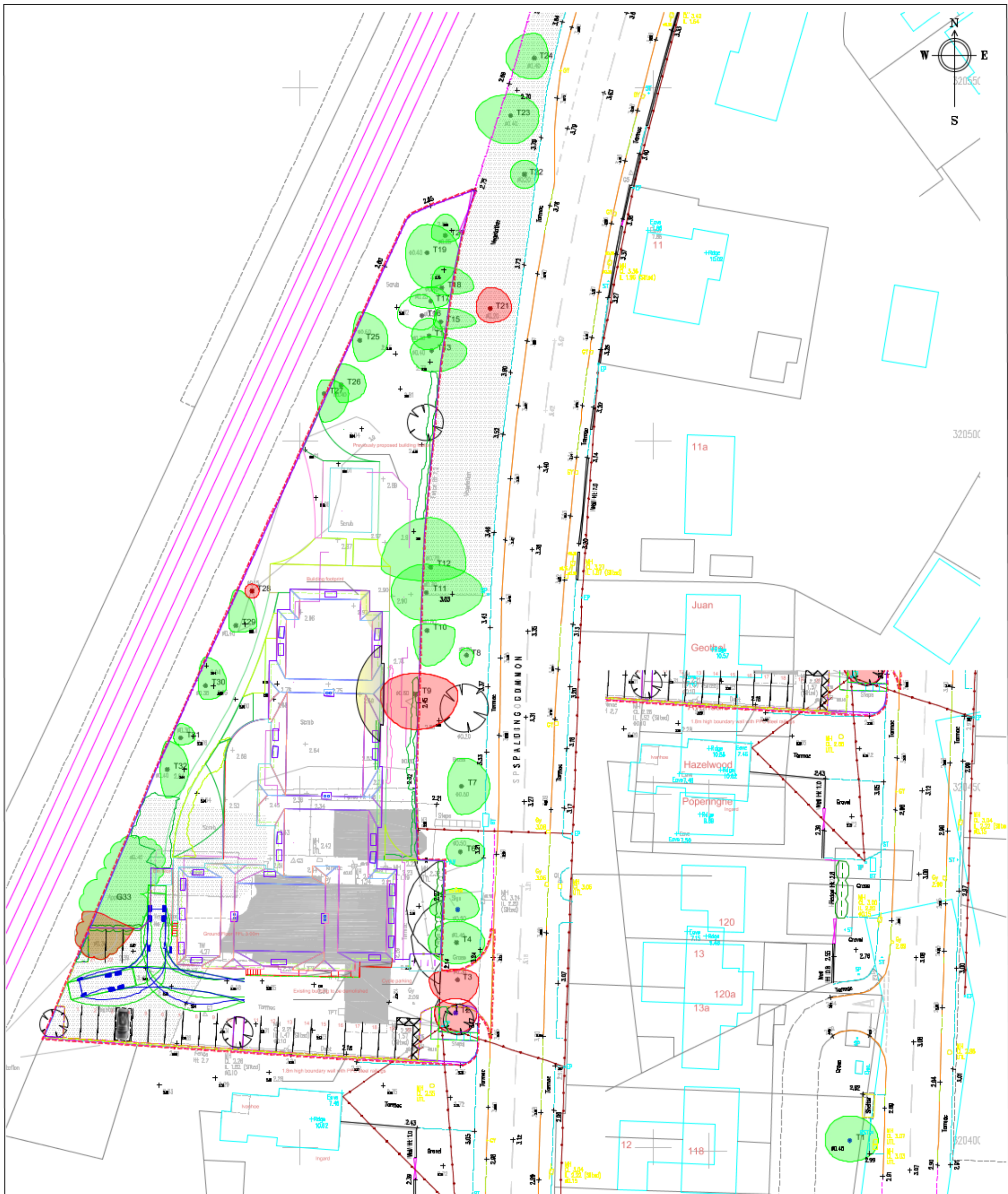
Date: April 2016



Client: Country Court Care Group
Title: Arboricultural Impact Plan (Previous & New)
Project Site: Former Goodfellows School, Spalding
WHARTON TREE & ECOLOGY CONSULTANTS Minerva Mill Station Road Alconlee Warrickshire B49 5ET Tel: 01799 456456 Fax: 01799 470997 Email: info@whartontrees.co.uk Web: www.whartontrees.co.uk
Map File Reference: 101016 0461 AIP V1 003
Dwg No: 002 Rev A
Scale: 1/500 @ A3
Date: October 2016



Client: Country Court Care Group
Title: Arboricultural Impact Plan
Project Site: Former Goodfellows School, Spalding
WHARTON TREE & ECOLOGY CONSULTANTS Minerva Mill Station Road Alcester Warwickshire B49 5ET Tel: 01799 456456 Fax: 01799 470987 Email: info@whartontrees.co.uk Web: www.whartontrees.co.uk
Map File Reference: 101016 0461 AIP V2 003
Dwg No: 002 Rev B
Scale: 1/500 @ A3
Date: October 2016



Legend:

- Trees to be retained
- Tree to be removed



Client: Country Court Care Group

Title: Tree Retention & Removal Plan

Project Site: Former Goodfellows School, Spalding

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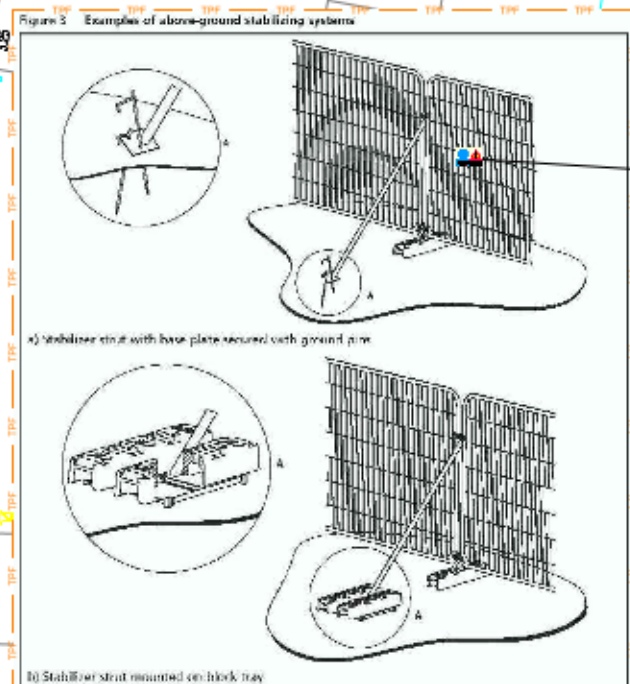
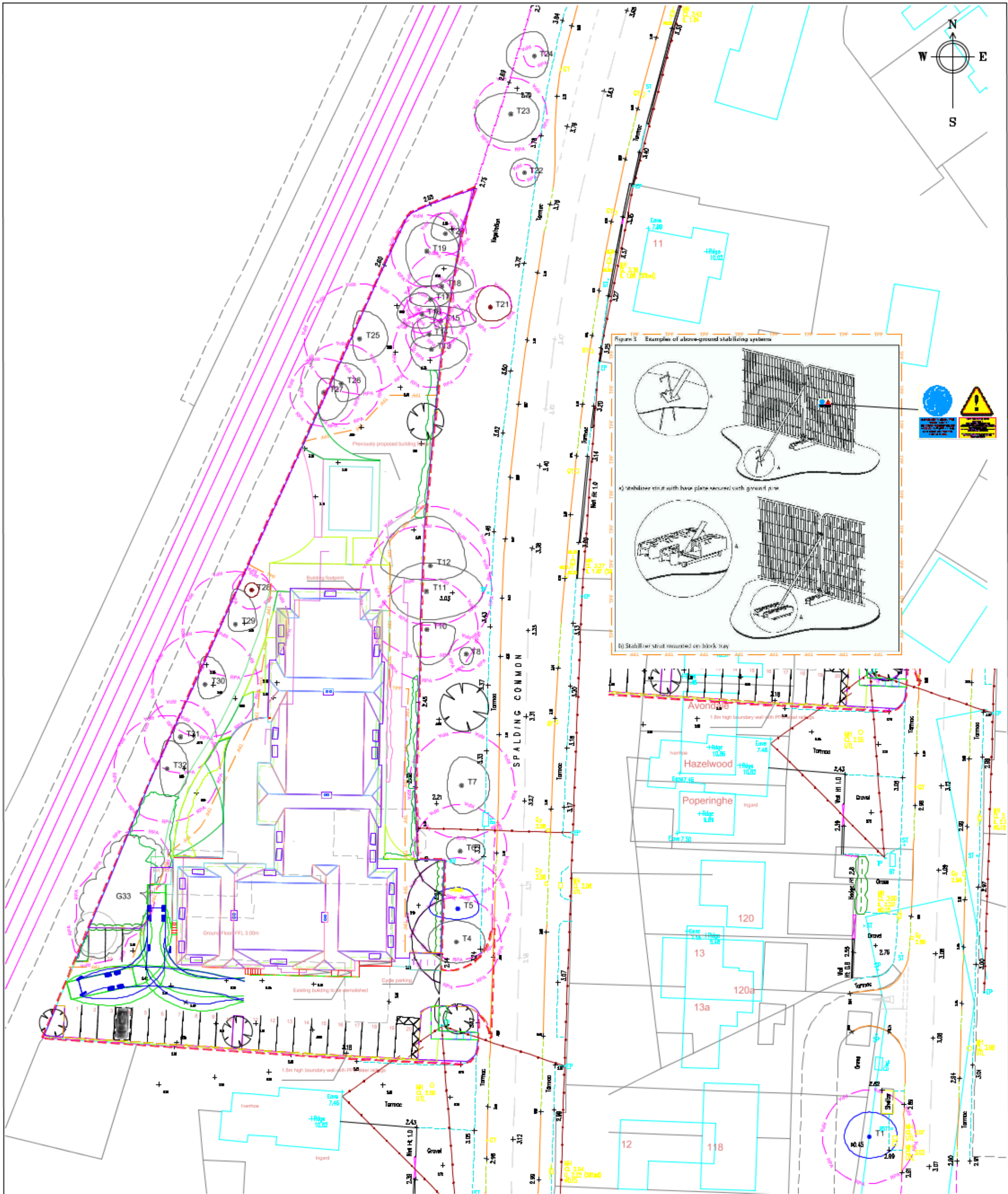


Map File Reference: 101016 0461 TRRP V2 004

Dwg No: 003 Rev B

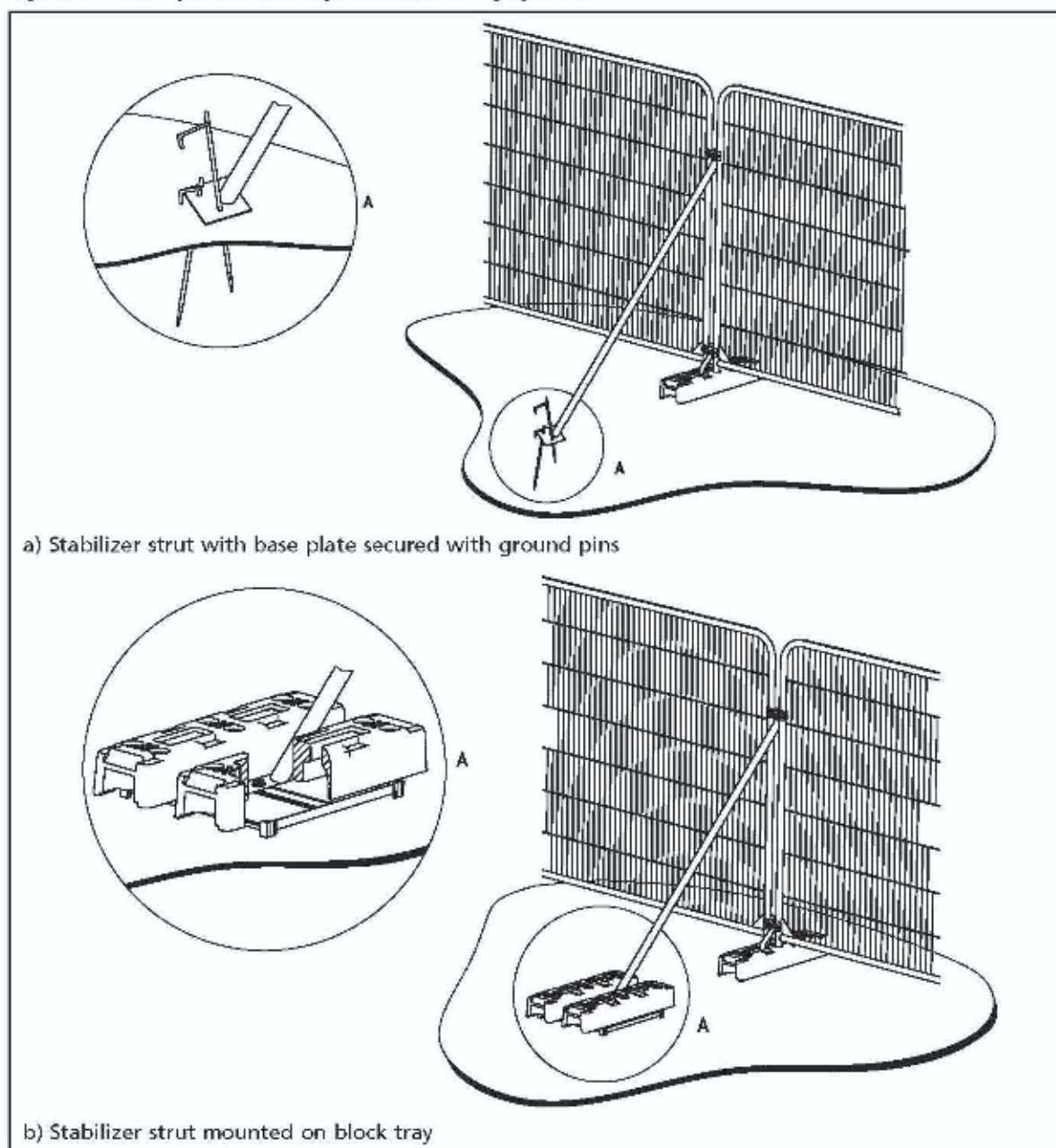
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Date: October 2016



- Legend:**
- A Category Trees/High Retention Value
 - B Category Trees/Moderate Retention Value
 - C Category Trees/Low Retention Value
 - U Category Trees/Remove
 - TPF — Tree protective fencing
 - Tree Trunk
 - Root Protection Area
 - Canopy Spread (m)/Tree Retention Category
 - Proposed new tree planting

Client: Country Court Care Group	
Title: Draft Tree Protection Plan	
Project Site: Former Goodfellows School, Spalding	
WHARTON TREE & ECOLOGY CONSULTANTS Minerva Mill Station Road Alcester Warwickshire B49 5ET Tel: 01789 499458 Fax: 01789 470387 Email: info@whartontrees.co.uk Web: www.whartontrees.co.uk	 WHARTON TREE & ECOLOGY CONSULTANTS
Map File Reference: 160616 0461 TPP V1 006	
Dwg No: 004 Rev A	
Scale: 1/500 @ A3	Date: June 2016

APPENDIX 5: TREE PROTECTION**Fencing Specification****Figure 3 Examples of above-ground stabilizing systems**



WHARTON

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