Arc Arboricultural
Solutions

Tree Survey
Arboricultural Impact Assessment and
Preliminary
Method Statement

Little Paxton Village Hall
High Street
Little Paxton
St Neots
PE19 6EY

(TL 18893 62921)

Job Ref	Version	Author	Agent	Client	Date
AAS/0281	Rev 02	RR	-	Little Paxton Parish Council	31/08//2021

Arc Arboricultural Solutions

Contents

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Client	Little Paxton PC		-	-
Local Authority	Huntingdon District Council	trees@huntingdon.gov.uk	01480 388388	Pathfinder House, St Marys Street, Huntingdon, PE29 3TN

Arc Arboricultural Solutions

Roz Richardson

Relevant Qualifications

Technicians Certificate in Arboriculture (ABC)

Arborist Certificate (International Society Arboriculture)

Certificate Arboriculture (Royal Forestry Society)

LANTRA Professional Tree Inspection

BSc Hon Environment Management (Forestry, Plant Biology & Soils Modules)

HND Environmental Land Management (Forestry, Woodland Management, Soils & Plant Biology modules)

ND Countryside Recreation, (Woodland Management, Soils and Plant Biology modules)

Professional Membership

Professional Member of the Arboricultural Association since 2019

Membership number PR7134

Arboricultural ASSOCIATION Professional Member

Experience

My industry experience comprises 15 yrs. as an Arboricultural/Tree Officer at two local authorities, with a supporting background in land management, soil water management, tree surgery and contract forestry.

1.0 Introduction and Term of Reference

1.1 Arc Arboricultural Solutions Ltd has been instructed by Little Paxton PC to undertake a Tree Survey, Arboricultural Impact Assessment and Preliminary Method Statement to support planning application ref 21/01141/FUL at Little Paxton Village Hall car park: following guidance in BS 5837 2012 Trees in Relation to Demolition, Design and Construction – Recommendations

1.2 The site survey was carried out on 6th August 2021 by Roz Richardson - This survey is based on a preliminary site survey; trees on site and immediately adjacent to the site have been inspected and relative qualitative tree data recorded in the Tree Schedule. Initial constraints upon the prospective development have been determined based on the information provided and the necessary protection and construction specifications required to allow their retention provided.

1.3 The report, any attached documents and subsequent revisions will form part of the supporting documents of any formal planning application in respect of the site and as such will be open to public scrutiny and comment.

Figure 1 – Screen shot from OS Maps showing location of Little Paxton Village Hall, location of development shown in blue.

2.0 Limitations

2.1 The content of this report is valid for one year from the date shown on the title page

2.2 The tree survey has been carried out from ground level using non-invasive methods based on the Visual Tree Assessment (VTA) method developed by Mathheck and Breloer (1994); the survey is for the purpose of categorising tree(s) for future development. Trees are dynamic living organisms whose health and condition can be subject to rapid change depending on internal and external factors. While preliminary tree management recommendations have been provided this document is not a tree safety report.

2.3 The content and layout of this report are owned by the author, this report may not be copied or used without the author's agreement for any purpose other than the purpose indicated in this report.

The report was prepared by the author at the instruction of and for the use by the client named within the report. The author provides the advice without prejudice and bases his opinions on knowledge, experience, qualifications, and published research and cannot be held responsible for the consequences of a difference of opinion held by third parties, for example the Local Planning Authority or Planning Inspector. The author does not accept liability for any loss or damage arising from reliance on the content of this report.

3.0 Statutory Obligations

3.1 Trees

3.1.1 Trees may be afforded statutory protection under a Tree Preservation Order (TPO) or designated Conservation Area (CA).

3.1.2 CA status affords living trees that exceed 75mm at 1.3m above ground level legal protection. Full planning consent (not outline) will override the need for any further application for tree work operations, providing those details of all tree works are included in submission and subsequently approval of any planning application by the local planning authority

3.1.3 TPO status affords individual trees, groups, areas, or woodlands listed on a TPO schedule and plotted on a plan legal protection. Unauthorised works to trees is an offence and carries penalties.

3.1.4 The local planning authority can make new TPOs at any time without advanced notice. It is common for LPAs to make new TPOs on receipt of details of projects that may harm trees. Penalties for offences relating to TPO trees include, but are not exclusive to, lopping, topping, damaging or destroying trees which can be unintentionally caused by such simple means as damaging the soil structure around the trees during site preparation or building work.

The effect of a Tree Preservation Order is that a formal application will normally need to be submitted to the local planning authority (LPA) (subject to exceptions) for tree works. Such an application may be refused, approved, or approved subject to conditions. There is a right of appeal against refusals, conditions, or non-determination.

Unauthorised work, wilful damage, or destruction etc is a criminal offence, on summary conviction leading to fines of up to £20,000 per tree and on indictment, to an unlimited fine and/or imprisonment. All trees are a 'material consideration' in the town planning context and extra weight is normally given to those the subject of the above statutory protection. If TPOs are applied, it is imperative that the LPA is consulted with respect to any activities that affect trees whether directly or indirectly.

3.2 Hedges

3.2.1 Hedges may be protected under the Hedgerow Regulations 1997 and a requirement for a hedgerow removal notice required. Where a hedgerow is 20m or more in length and meets another hedgerow, if the hedge is located on or alongside one of the following: -

- Agricultural land, grazing/paddock land
- Common land, including town or village greens.
- Land used for forestry or the breeding or keeping of horses, ponies, or donkeys; or
- A Local Nature Reserve or Site of Special Scientific Interest.

Full planning consent (not outline) will override the need for any further application for a hedgerow notification, providing no 'conditions' are applied on a decision notice being issued.

3.3 Wildlife

3.3.1 Wildlife – prior to undertaking any tree works the laws in respect of protected species and habitats needs to be observed. Where tree works are required advice may be required from a suitably qualified person prior to being able to proceed, this may require tree works being scheduled outside of the bird nesting period, typically March – August inclusive.

The following legislation protects various habitats and species of animals in the UK: -

- Wildlife and Countryside Act 1981(as amended)
- Natural Environment and Rural Communities Act 2006 (NERC Act)
- Conservation of Habitats and Species Regulations 2010 (as amended)
- Protection of Badgers Act 1992
- The Hedgerows Regulations 1997
- Countryside and Rights of Way Act 2000

4.0 Executive Summary

4.1 A total of three individual trees have been surveyed T1 – T3, summary of findings is shown in the table below.

Table 1 – Tree categorisation

Retention Category	Individual Trees (T)
A High Quality	0
B Moderate Quality	2
C Low Quality	1
U Unsuitable for retention	0
Total	3

4.2 A planning application ref 21/01141/FUL has been submitted to Huntingdon District Council to construct a new Parish Council office building with public toilet.

4.3 It is understood that consultation with officers has identified a large 'Sycamore' as being potentially in conflict with the new structure.

Table 2 - Development impacts and mitigation measures.

Potential Development Impact	Tree(s) Affected	Mitigation Measures
Final ridge height of new building	T3	Crown lift and crown reduction of T1

Table 3 - Tree Works to facilitate development

Tree ID	Proposed Works
T3	Reduce canopy by up to 2m.on east side

5.0 Survey Methodology

5.1 Trees on or adjacent to the site have been attributed a retention category as detailed in British Standard 5837 2012 'Trees in Relation to Design, Demolition & Construction – Recommendations'. The Root Protection Area (RPA) of individual trees or the largest tree within a group has been calculated based on its stem diameter and this has been used to produce a Tree Constraints and Protection Plan – see Appendix 2

5.2 Individually surveyed trees have been given a notional identification e.g. T1, T2, groups of trees G1, G2, woodland W1, W2 and hedgerows H1, H2. Full survey details and work recommendations.

5.3 Tree Categorisation - Trees of A and B category should be considered as constraints to development, informing layout and design every attempt should be made to provide space for category A and B trees to enhance and flourish within a design while not placing post development pressure upon any retained tree. Trees of a C category will not usually be retained where they would impose a significant constraint to development. U category trees are in such a condition that they will be lost within 10 years and may be removed as good arboricultural practice.

All survey data is presented in the tree schedule– Appendix 1.

6.0 Site Overview and Project details.

6.1 Little Paxton Village Hall is in the centre of the Village of Little Paxton, accessed off the High Street.

Figure 2 – Google Earth screen shot of Little Paxton Village Hall and recreation area – proposed location of new building outlined blue.

6.2 The planning application seeks to construct a new parish office and public toilet facility to be located in the car park.

6.3 The site is currently blacktop car park.

Figure 3 - View of T3 Sycamore

6.4 T1 is located on raised ground approximately 0.40m above the ground level of the car park.

6.5 Details of statutory controls (TPO and CA) have been obtained on-line from Huntingdon District Council– see Appendix 4. The records indicate that the Village Hall car park is not within a Conservation Area, and there is not a TPO on T1.

6.5 Soils data is not considered a requirement for this development.

7.0 Arboricultural Impact Assessment

7.1 Trees impose both above ground and below ground constraints; crowns, branches, and trunks of retained trees (the trees that are kept in-situ as part of any scheme) present a physical constraint and these trees must not be subjected to any impact damage that may be incurred by plant and machinery if they are to survive and continue to contribute to the environment in the long-term.

The root systems of retained trees represent the most critical constraint, albeit an invisible one under normal circumstances. The most valuable part of the root systems for maintaining health and structural anchorage of trees is mostly located in the upper 600 millimetres of a soil profile.

Figure 4 - Diagram showing typical root morphology of a mature tree growing in homogenous ground conditions.

7.2 The Arboricultural Impact Assessment (AIA) uses tree data collected on site and information provided to evaluate direct and indirect effects of the proposed project and where necessary recommend mitigation.

7.2.1 **Access** - Access into the site will utilise the current access off the High Street into the car park for the communal facilities available.

7.2.2 **Demolition** – There is no demolition of any structures

7.2.3 **Services** – No details of services have been provided however services are in situ on site as there are other buildings present.

7.2.4 **Construction** – The new Parish office will be of a brick construction which will require a foundation. There will be minor encroachment into the raised bank to the west which is within the RPA of T3.

One tree will be removed to facilitate the development however this is an 'U' category tree of low amenity.

7.2.5 **Hard Surfacing** – There will be a requirement to remove existing blacktop hard standing to construct the foundations.

7.2.6 **Topography** (Implications of sloping ground) – the site is on a slope, the implications of this are to do with the potential for contamination from liquids e.g. fuel, oils, chemicals e.g. porta-loo and cement mixing and washing moving downhill and/or contaminating high water tables.

This is not considered an issue as the site is flat.

7.2.7 **Protective Tree Fencing/ground protection** – Tree fencing protection will be required during the development to ensure T3 does not suffer accidental damage – see AAS/0281 TPP – Proposed appendix 2.

7.2.8 **Monitoring** – This is not a requirement for this project due tot eh scale and minimal impact upon one tree.

7.2.9 **Cultural Implications** – there are no significant cultural implications,

7.2.10 **Light** – Shading cast by the existing trees on site is not considered to be a constraint on the site, however the leaf fall and twig debris should be considered as it will block gutters and there is the potential for 'honeydew' to become a nuisance in the summer.

8.0 Design advice, Arboricultural Method Statement

8.1 The information provided in this section has been provided based on any plans provided at the time of this report being prepared. Should there be amendments to the site layout in the future the advice provided may not be relevant and require revision prior to the commencement of the development.

8.1.1 **Location of site office/compound/parking/materials** – the scale of the development will not require a formal 'compound, and there is the car park that can be used for material storage without compromising any trees.

8.1.2 **Protective Tree Fencing/ground protection**

Protective tree fencing may be required to provide protection to the stem of T3, this will be in the form of 'heras' or alternative fencing that has been approved.

8.1.4 **Construction**

Foundations – The proposed footprint of the new office and public toilet will fall within the RPA of T3; however, this area is blacktop car park.

There is a level difference of approximately 0.40m with T3 being located on elevated ground. It is generally accepted that tree roots grow where conditions are optimal, it is likely that the car park has a substantial compacted sub-base creating an inhospitable rooting environment. The lack of damage to the blacktop surface also indicates a lack of any root activity. While no foundation details have been provided it would be advisable to adopt a concrete slab rather than a traditional strip foundation to reduce the potential 'if' any roots are at depth.

Height conflict – There is a requirement to reduce the canopy of T3 by up to 2.0m on the eastern aspect of the canopy and ensure a clearance of 5.0m for the construction of the roof. All works will comply with BS 3998 2010 – Tree Works – recommendations.

8.1.3 **Hard Standing –** The removal of the blacktop and associated sub base will be required for foundations and associated services. It is unlikely that any significant

roots from T3 will be present however it is advisable to carry out initial excavations along the western edge of the footprint to the required depth(s). Using a hydraulic jack hammer to carefully break up the substrate and removing the material by hand. If any roots are discovered where they are <25mm these can be pruned back using clean secateurs. Where any roots >25mm are uncovered professional advice must be sort to establish if root pruning is acceptable.

If no roots are discovered, it can be accepted that any potential for further roots being compromised is unlikely and heavier machinery can be used for excavations.

9.0 Conclusion

9.1 The new office building falls within the RPA of T3 however due to the formal blacktop car park and change in levels it is unlikely that any roots will be present and compromised.

9.2 Works to reduce the canopy of T3 will be required to ensure conflict is removed during the construction phase.

9.3 There will be minimal impact upon T3 providing tree protection fencing is installed, initial excavations are caried out on the western edge of the footprint and the canopy is reduced.

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APPENDIX 1

Tree Schedule and Cascade Chart for Categorisation

BS5837:2012 Tree Survey

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Bedfordshire
MK45 5HA
Mobile: 07553870759
arc.arboriculturalsolutions@gmail.com

Client: Little Paxton Parish Council
Project: AAS/0281 PC Office
Survey Date: 05/08/2021
Surveyor: Roz Richardson

Arc Arboricultural Solutions

Tree and Tag No / Species	Hght (m)	Stems No	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations / Survey Comment	Cat ERC
T1											Estimated Measurements
Common Ash *Fraxinus excelsior*	16	1	270	N 4.5 E 4.5 S 4.5 W 4.5	5 5 5 5	M	A: 33 R: 3.24	Fair	C: Good S: Fair B: Fair	No action :: Unspecified No Comments	B.2 10 to 20 yrs
T2											Estimated Measurements
Scots Pine *Pinus sylvestris*	9	1	170	N 2 E 1 S 1.5 W 1		Y	A: 13.1 R: 2.04	Decline	C: Poor S: Fair B: Fair	Fell :: Fell and remove stump(s) Remove	C.2 <10 yrs
T3											Estimated Measurements
Sycamore *Acer pseudoplatanus*	19	1	780	N 7.5 E 7 S 7 W 7	3.5 3.5 3.5 3.5	M	A: 275.3 R: 9.36	Good	C: Good S: Fair B: Good	No action :: Unspecified Co-dominant stem's at 1.5m	B.2 >40 yrs

Age Classifications: N Newly planted; Y Young; SM Semi-mature; EM Early Mature; M Mature; OM Over Mature

Condition: C Crown; S Stem; B Basal area

Stems: Ø Diameter; (Eq) Equivalent stem diameter using BS5837:2012 definition

ERC: Estimated Remaining Contributio

TABLE 1 – Cascade chart for tree categorisation

Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
Trees unsuitable for retention				
Category 'U' Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees Suppressing adjacent trees or better quality			
NOTE: Category U trees can have existing or potential conservation value which might be desirable to preserve see 4.5.7 – trees with identifiable conservation, heritage or landscape value.				
	1 Mainly arboricultural qualities	**2 Mainly landscape qualities**	**3 Mainly cultural values Including conservation**	
TREES TO BE CONSIDERED FOR RETENTION				
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly goodexamples 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. dominant/or principle Trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape feature	Trees, groups or woodlands of significance conservation historical, commemorative or other value e.g. veteran trees or wood-pasture	
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that may be included in 'A' but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, inc unsympathetic past management/storm damage) Such that they are unlikely to be suitable for retention 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 wider locality.	Trees with material conservation or other cultural value	
Category C Trees of low quality with an Estimated remaining life expectancy of at least 10 years, or young trees with a stem dia of below 150mm	Unremarkable trees of very limitedmerit or such impaired conditionthat 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 benefit.	Trees with no material conservation or other cultural value	

APPENDIX 2

Tree Constraints Plan – Existing
(AAS/0281 TCP - Existing Rev 01 August 2021)

Tree Protection Plan – Proposed
(AAS/0281 TPP – Proposed Rev 01 August 2021)

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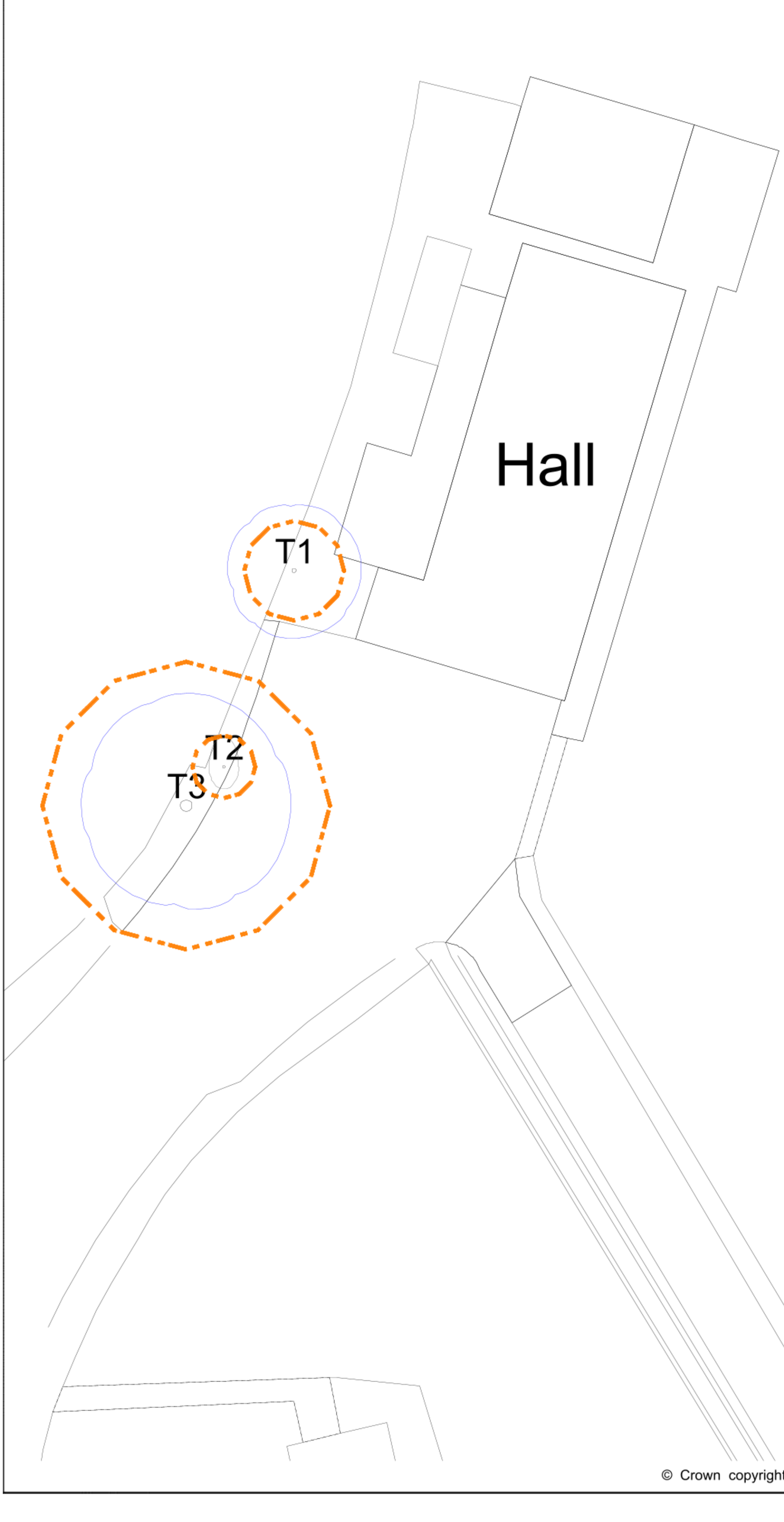
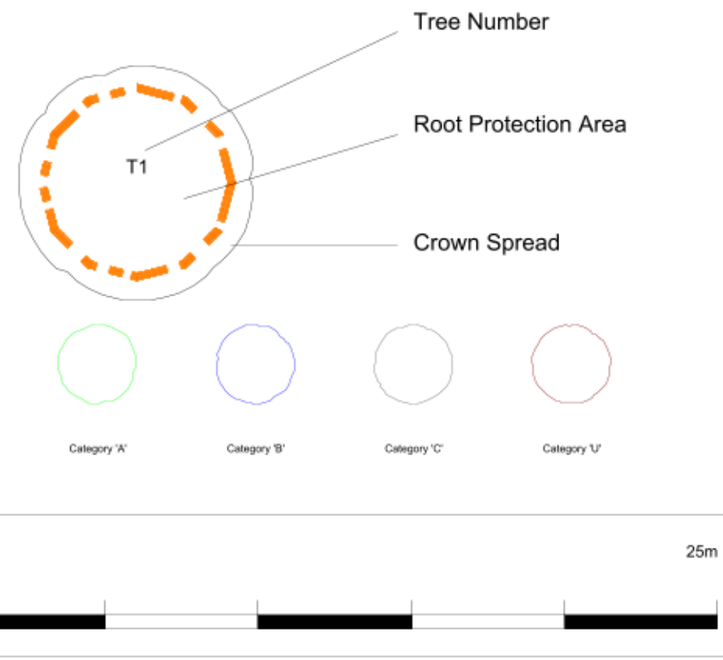
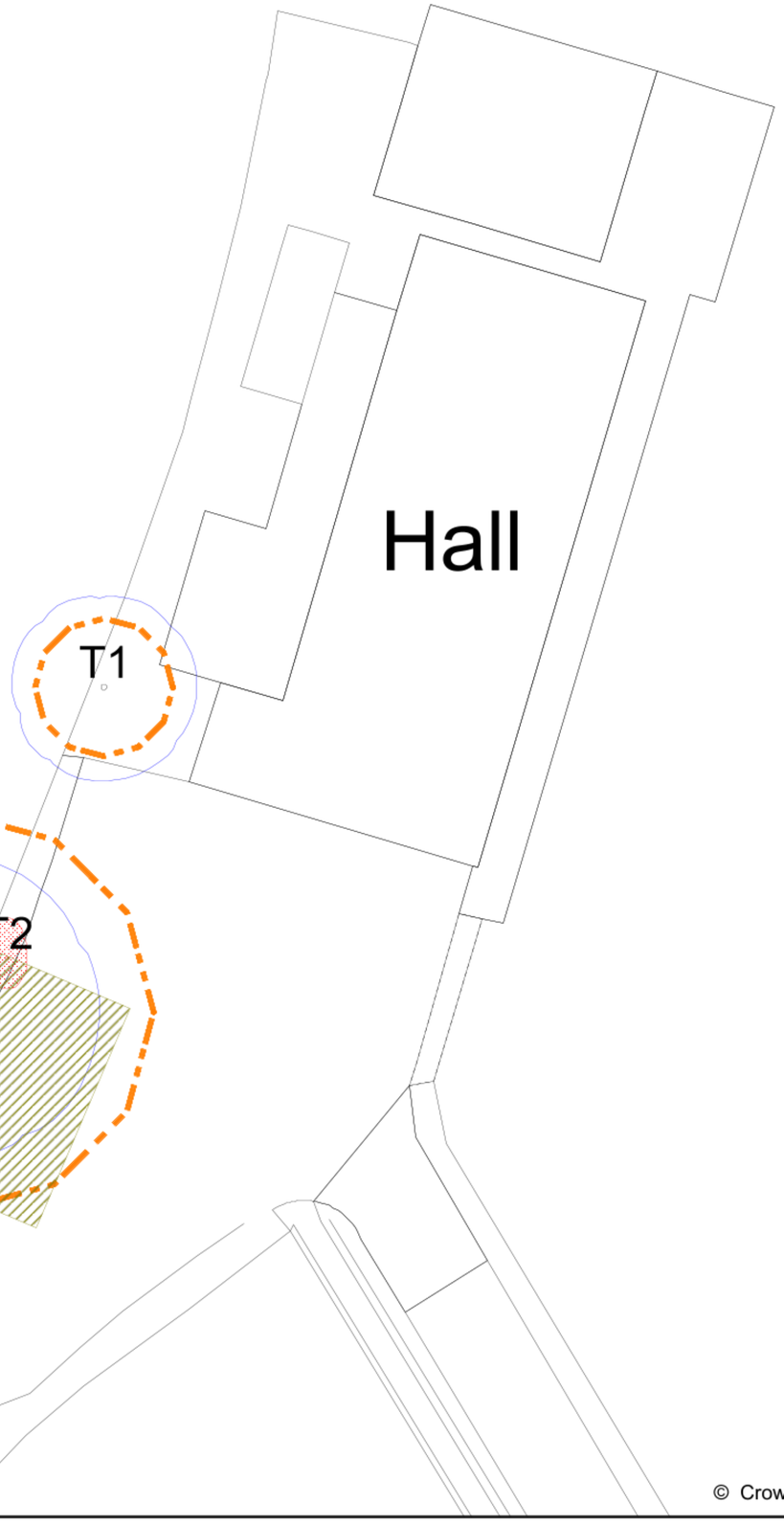
Little Paxton Village Hall
Tree Constraints Plan - Existing

SCALE :	DATE :	N
1 : 200 @ A2	06/08/2021	
AAS/0281 - TCP - Rev 01 August 2021r		

PLAN TO BE READ IN COLOUR







Arc Arboricultural Solutions

Little Paxton Village Hall
Tree Protection Plan - Proposed

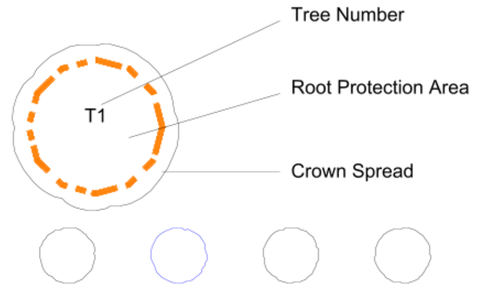
SCALE : 1 : 200 @ A2

DATE : 30/08/2021

N

AAS/0281 - TPP - Rev 01 August 2021

PLAN TO BE READ IN COLOUR



Category 'A' Category 'B' Category 'C' Category 'U'

0 25m

Tree for removal

Indicative location of new building

Tree Protection Fencing

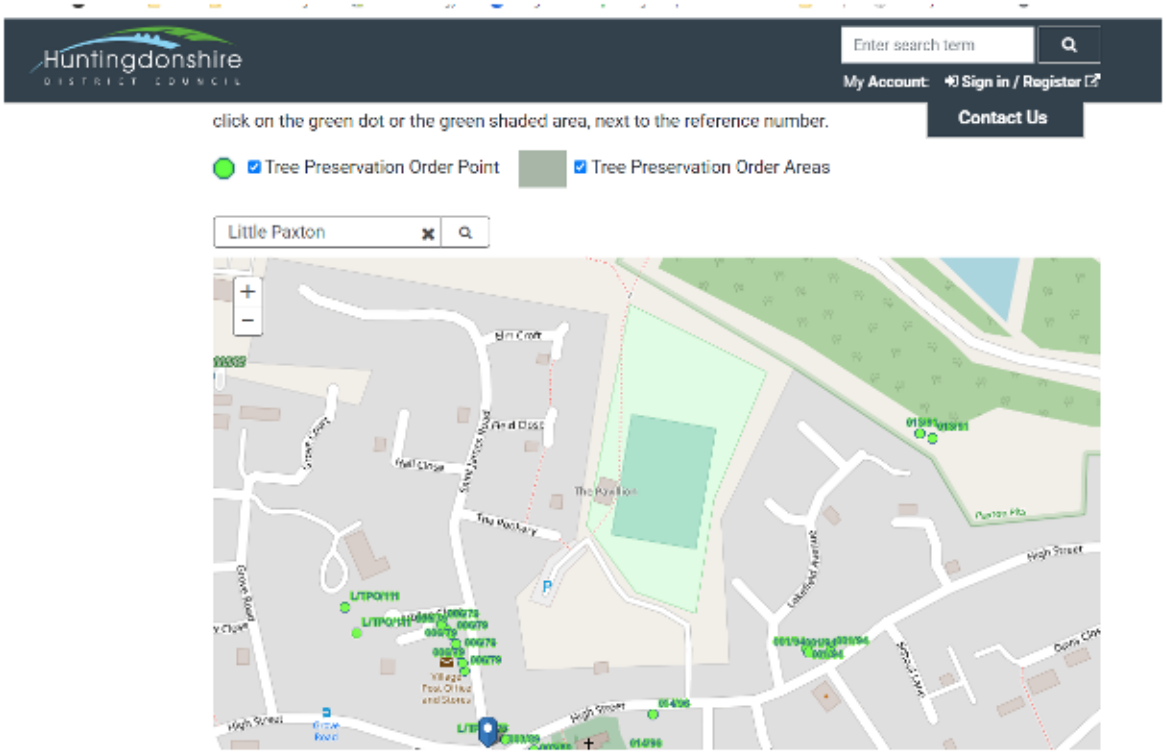
APPENDIX 3 - Terms of Reference to Tree Survey Form

Tree number/Tag	Number on tag fixed to tree or given number on plan where no tag has been used. Given number for groups (G), hedges (H) or shrubs (S). Individual tree will have no tag if located on adjoining land or inaccessible
Species	Tree species - Common name or botanical name if no common name is in common use
Tree height	Height in metres where measurement is possible. Estimated where tree is inaccessible
Stem Dia(s)	Trunk diameter measured at 1.5 metres above ground level (on the side of the tree where the ground is highest). A formula applies to multiple stemmed trees
RPA radius	Root Protection Area radius in metres (linear) measured from centre of tree trunk
RPA m2	Root Protection Area in square metres
Crown spread	Spread of tree crown in metres at each cardinal point (NESW) measured from tree trunk
Crown Clearance (1st large branch)	The height in metres on the tree of the lowest major branch and its direction (where relevant)
Canopy height above ground	Headroom - The height above ground in metres of the lowest part of the tree crown / branch ends (where relevant)
Life stage	The estimated stage of life of the tree in relation to its speciesstated as young, semi-mature, early mature, mature, over-mature e.g. A Silver Birch may be considered 'mature' at 40 years, but Oak may only be considered 'semi-mature' at the same chronological age
Structural &Physiological Condition and any management recommendations	The condition of the tree in relation to the presence of any notable structural defects or ill-health and any recommendations that may be relevant to good arboricultural management or in relation to a proposed development
Estimated remaining contribution	An estimated range of the minimum number of years a tree may make a positive contribution before it falls into decline (senescence). <10, 10+, 20+, 40+
Category &Sub category	A qualitative gradingA to C or U recorded on tree survey plan and assigned a colour, see Table 1 in report

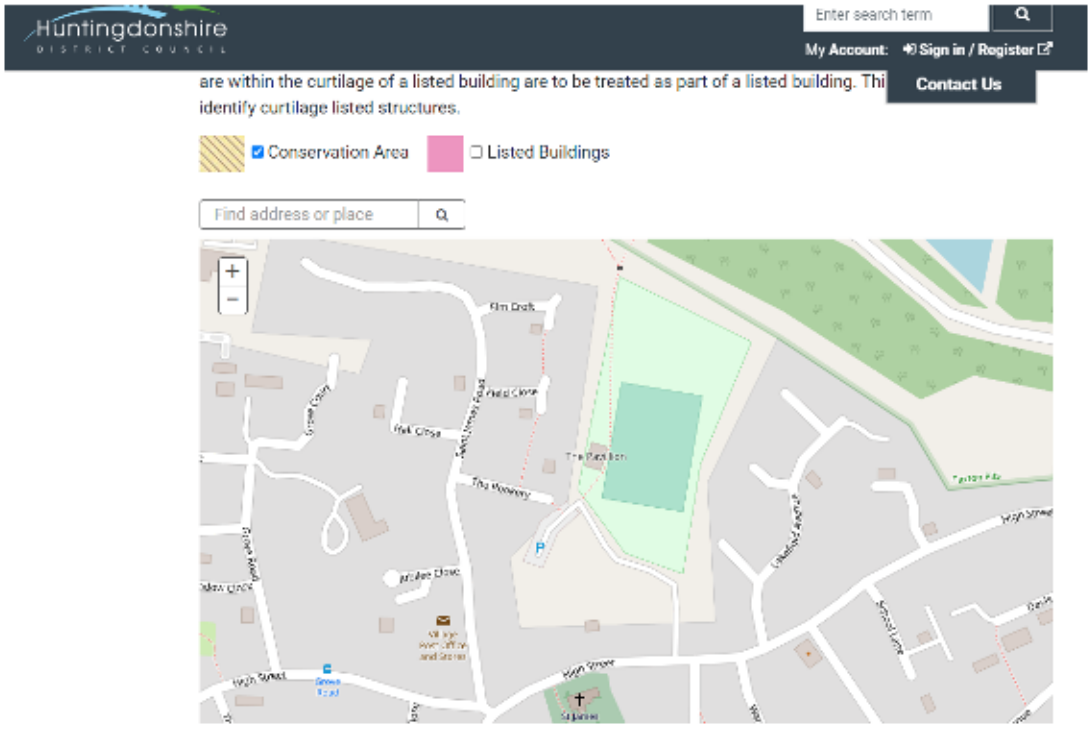
APPENDIX 4 - Statutory Protection of trees on and off site and other constraints

Screen shot from Huntingdon District Council online TPO and Conservation area interactive maps.

Tree Preservation Order status



Conservation Area status



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