TPS

TREE PROTECTION SCHEME

(INC. ARBORICULTURAL METHOD STATEMENT & TREE PROTECTION PLAN)

PROJECT - Braye House
CLIENT - C/O Julian McIntosh Architects
DOC. REF - P3678–TPS01 V2
PLANNING REF - n/a
CREATION DATE - 13/03/2024

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PURPOSE OF DOCUMENT

This document details the methodology behind the installation of any required tree protection measures, and any demolition and construction activities with the potential to cause harm to the site's trees.

The methods outlined in this document must be implemented as per this document. Failure to do so may result in a breach of planning or significant fines.

ARBORICULTURAL DOCUMENT REGISTER

Technical Documents		Version Issued	
Document	Ref.	Current Version	Document Date
Tree Protection Scheme	P3678-TPS01	V2	13/03/2024

1 GENERAL INFORMATION

1.1 BRIEF

1.1.1 Ligna Consultancy Ltd were instructed by the client, C/O Julian McIntosh Architects, to prepare a Tree Protection Scheme, comprising of an Arboricultural Method Statement and Tree Protection Plan/s for the proposed scheme at Braye House.

1.2 PROPOSED DEVELOPMENT

1.2.1 Remodeling the existing house, including the reconstruction of the conservatory and the creation of a loft extension, and the erection of a new boundary fence.

1.3 USE OF DOCUMENT

1.3.1 This document has been produced to assist key design and construction personnel in ensuring the satisfactory protection of all important trees present within the development site.

1.4 SITE

1.4.1 The site discussed within this report is located at:

Braye House, Sutton Valence, Maidstone, ME17 3HT

1.5 SCOPE OF DOCUMENT

1.5.1 This document consists of the following:

- Arboricultural Method Statement

1.5.2 Appendices included with this report are:

- Tree Protection Plan (P3678-TPP01)
- CEZ Notice
- Schedule of Arboricultural Supervision

1.5.3 The following documents were submitted to Ligna Consultancy Ltd for consideration:

- Proposed Site Plan

1.6 PROJECT CONTACTS

Role	Name	Telephone	Email
Arboricultural Consultant	Ben Hallinan	01284 598008	benjamin@lignaconsultancy.co.uk

1.7 AUTHOR

1.7.1 Benjamin Hallinan is a professional member of the Arboricultural Association. He has worked in arboriculture for over a decade, including management and supervisory roles undertaking both domestic and commercial arboricultural work. He possesses a FdSc in arboriculture, LANTRA Professional Tree Inspection training, and has also received advanced training in tree related subsidence and BS 5837. A full CV and list of experience and CPD is available on request.

1.8 LIMITATIONS

1.8.1 Detailed inspections and recommendations relating to tree condition and health are not included within this report.

1.8.2 Any engineering solutions presented within this document are recommendations for their suitability from an arboricultural viewpoint. The architect and structural engineers should make the final decision on the suitability of the methods advised.

1.8.3 Information provided by third parties, considered in the creation of this report, is assumed to be correct.

1.9 PROTECTED TREES

1.9.1 Details of trees (if any) that are protected by Tree Preservation Orders (TPOs) or are situated within Conservation Area are available upon request.

1.9.2 It is the standard approach of Ligna Consultancy not to obtain this information from the LPA prior to an application, as the LPA will provide details of nearby protected trees as part of the consultation.

1.9.3 It should also be noted that granted planning permission that includes tree work specifications overrides Tree Preservation Orders and Conservation Area protections (approved works only).

1.10 NESTING BIRDS / BATS

1.10.1 Officially, the 'Bird Nesting Season' is between February and August (Natural England). During this time, it is recommended that vegetation works (tree or hedge cutting) or site clearance is avoided if there is a reasonable potential for the disruption of nesting birds.

1.10.2 All parties involved in the management and/or development of a site must actively avoid causing disturbance and disruption to nesting birds. Failure to do this may result in an infringement of the *Wildlife and Countryside Act 1981* and the *European Habitats Directive 1992 / Nesting Birds Directive*.

1.10.3 When tree or vegetation clearance work has to be undertaken during the nesting season, a pre works survey needs to be carried out by a suitably competent person.

1.10.4 All bats and their roosts are protected by domestic and international legislation. They are protected by the Wildlife and Countryside Act 1981 (as

amended) and the Conservation of Habitats and Species Regulations (2017 – as amended). This means you may be committing a criminal offence if you: Deliberately take, injure or kill a wild bat; Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats; Damage or destroy a place used by bats for breeding or resting (roosts) (even if bats are not occupying the roost at the time); Intentionally or recklessly obstruct access to a bat roost.

1.10.5 Prior to carrying out any tree works it is recommended that a survey of the tree/ trees is carried out to confirm whether there are any nesting birds or bat roosts. This should be carried out by a suitably trained person.

1.11 SUMMARY OF TERMS

Term	Definition
Species	The type of tree.
Stem	The main woody upright portion of a tree that is supported by the roots and supports the crown.
Branch Spread	The length of a tree's branches from stem to tip measured from the north, east, south and western sides of the crown.
BS 5837	The commonly used name for the official guidance document relating to trees and development *(BS 5837:2012 - Trees in relation to design, demolition and construction – Recommendations)*
Canopy / Crown	The branches, leaves, and reproductive structures extending from the trunk or main stems of a tree/trees.
DBH	Diameter of a tree's stem, measured as per BS 5837:2012
RPA	The root protection area (RPA) is a layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority.
Facilitation Tree Works	Tree pruning/felling required in order to facilitate the implementation of the proposed development.
Tolerance	The relative tolerance the species can show to construction related activities such as root-loss, soil compaction and other development pressures.
Category (Cat.)	Categorisation of the tree's value based on the methodology shown in Appendix 1, A1.4. This rating takes into account the size, quality, condition, estimated remaining life expectancy and legal status of each tree.

1.12 LIMITATIONS

1.12.1 Any engineering solutions presented within this document are recommendations for their suitability from an arboricultural viewpoint. The architect and structural engineers should make the final decision on the suitability of the methods advised.

1.12.2 Information provided by third parties, considered in the creation of this report, is assumed to be correct.

1.13 COPYRIGHT

1.13.1 This report was prepared for use by the Clients and their contractors for planning purposes. The report and its appendices may not be copied, modified, or distributed beyond the necessary parties without the written consent of Ligna Consultancy Ltd

2 RESPONSIBILITIES

2.1 DISTRIBUTION

2.1.1 It is important to ensure everyone involved in the planning and design of the proposed development is aware of this report and has access to a copy as soon as it is released.

2.2 RESPONSIBILITIES

2.2.1 Successful implementation of tree protection measures and long-term tree retention depends on coordination between the client and key personnel involved in the development.

2.2.2 The client and agent shall ensure that:

• The site manager and all other personnel are provided with this document.
• All planning conditions relating to underground works, services, trees, and landscaping are cleared before development commences.
• All requirements of this Tree Protection Plan are adhered to.
• The site manager is updated of any approved changes or variations to this document

2.2.3 The client and site manager shall ensure that:

• A copy of this document with the plan is easily accessible for site personnel to refer to before and during the time construction activity is taking place.
• All personnel working on the site are made aware of the tree protection plan and arboricultural method statements covering any activities they will undertake. This duty includes delegating the task of briefing personnel in the absence of the site manager.
• The tree protection measures are left in place until the construction phase of development is completed, except with the written consent of the LPA.
• Site personnel are updated of any approved changes or variations to the approved tree protection measures.
• All personnel must work in accordance with this document at all times, or in accordance with approved variation.

2.3 PROCEDURES FOR INCIDENTS

2.3.1 If any breach of the approved tree protection measures occurs the site manager must:

• The Local Planning Authority Tree officer or other Planning Officer and the Author of this report shall be notified.
• The site manager must be informed immediately.
• Swift action must be taken to halt the breach and prevent any further breach.
• Damage mitigation measures appropriate to the scale of the incident will be deployed where required.

2.4 PROHIBITED ACTIVITIES

2.4.1 The following must not be carried out under any circumstances:

• Cutting down, uprooting, damaging or otherwise destroying any retained tree.
• Lighting a fire within 10 metres of the canopy of any retained tree.
• Equipment, signage, fencing, tree protection barriers, materials, components, vehicles or structures shall not be attached to or supported by a retained tree.
• Mixing cement, chemical toilets and other use or storage of anything that would be harmful to trees shall not take place within, or close to a Root Protection Area (RPA). The distance away from the RPA must be sufficient, and the slope of the site must be such that contamination of soil in the RPA would not occur if there were spillage, seepage or displacement.
• No plant or equipment or vehicle with a hydraulic arm such as a mini digger shall be operated within striking distance of the stem and branches or the RPA of any retained tree unless otherwise specified in this report.

2.4.2 No alterations or variations shall be made to the approved tree protection measures without written approval from the LPA.

3 PHASING & SUPERVISION

3.1 PHASING OF DEVELOPMENT

3.1.1 The development should be carried out in the following order (see table 1) unless otherwise agreed in writing with the LPA. Each step should be completed before moving onto the next.

3.1.2 The general responsibilities described in section 3 of the report must be implemented for the entire time that the site is undergoing development related works. However, the additional precautions detailed in the following arboricultural guidance notes (AGN) must be implemented at the stage indicated below.

Stage	Arboricultural Guidance Note	Supervision / Attendance of ACOW	Associated Plan
Facilitative Tree Works	n/a	n/a	n/a
Pre-Commencement	Pre-start meeting	Online teams meeting with contractor to confirm they understand the specification	n/a
Installation of New Fencing	AGN1 – Installation of fencing	n/a	Tree Protection Plan (P3678-TPP01 V2)
Installation of tree protection measures	AGN2 – Installation of Temporary Ground Protection AGN3 – Installation of Tree Protection Barriers	n/a	Tree Protection Plan (P3678-TPP01 V2)
Remodelling works	n/a	n/a	n/a
Removal of Tree Protection Measures	Removal of temporary tree protection measures	n/a	n/a
Landscaping	n/a	n/a	n/a

Table 1 – Timing and implementation of specific arboricultural measures

3.1.3 Failure to abide by the above schedule may result in a breach of planning. Any deviation from the agreed upon protection measures must be reported to the project arboriculturalist immediately.

3.1.4 In addition to the phasing of the scheme's implementation the above table outlines any activities that require supervision/sign-off by the appointed Arboricultural Clerk of Works (ACOW). Where indicated, remote video call or photographic supervision may be suitable in some instances.

4 TREE WORKS

4.1 TREE WORK REQUIREMENTS

4.1.1 No tree works are required as part of the proposed scheme.

5 ARBORICULTURAL GUIDANCE NOTES

AGN1 – INSTALLATION OF FENCING

OUTLINE

The installation of new fencing has the potential to impact the adjacent trees. The new fencing will also help to protect the site's trees during the remodeling works. To avoid harm to the trees, the following methodology must be followed:

INSTALLATION METHODOLOGY

i) During the installation of the fencing, no machinery is permitted within the garden.

ii) The fence posts indicated in red on the Tree Protection Plan are to be installed within 1m of their shown location. This is to allow for the avoidance of notable roots, whereby the indicated post holes will be manually excavated and positioned to avoid the loss of any roots >25 mm diameter. Roots <25 mm may be pruned with loppers.

iii) To avoid chemical damage to the adjacent tree roots from wet concrete, a heavy-duty impermeable plastic sack will be placed within the indicated holes (marked in red on the Tree Protection Plan) prior to its pouring.

iv) No part of the fencing may be directly attached to the tree.

AGN2 – INSTALLATION OF TEMPORARY GROUND PROTECTION

OUTLINE

Prior to the start of any construction activities, temporary ground protection measures must first be installed as per the associated Tree Protection Plan. This will prevent any construction traffic from causing compaction damage to tree roots during the construction process.

INSTALLATION METHODOLOGY

i) A geotextile membrane must be laid over the area to be protected with temporary ground protection.

ii) A compression layer of 100mm deep course building sand or woodchip must be spread over the geotextile membrane.

iii) Interlocking ground protection matting or two overlapping layers of 12mm thick plywood must then be installed atop the compressive layer.

iv) Once installed, this should be signed-off by the project's arboricultural consultant.

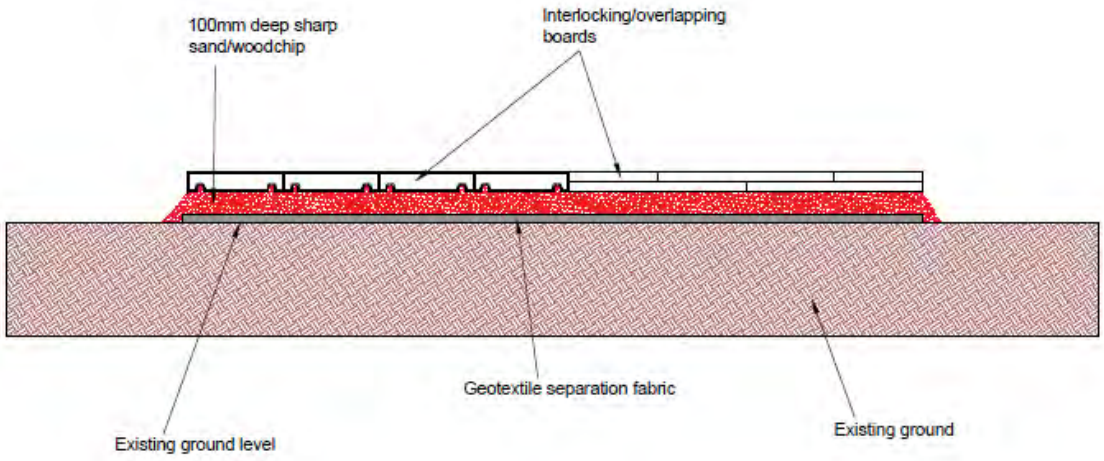


Figure 1 – Diagram of temporary ground protection setup.

AGN3 – INSTALLATION OF TREE PROTECTION BARRIERS

OUTLINE

Tree protection barriers must be installed so as to ensure that damage does not occur to the rooting areas, stems, and canopies of retained trees.

INSTALLATION METHODOLOGY

i) The barriers shall be installed and removed in accordance with the timing of operations in section 4.1 and laid out in accordance with the appended Tree Protection Plan.

ii) The "CEZ Notice" provided, should be used to create weather-proof notices that must be attached to the tree protection barriers at suitable intervals.

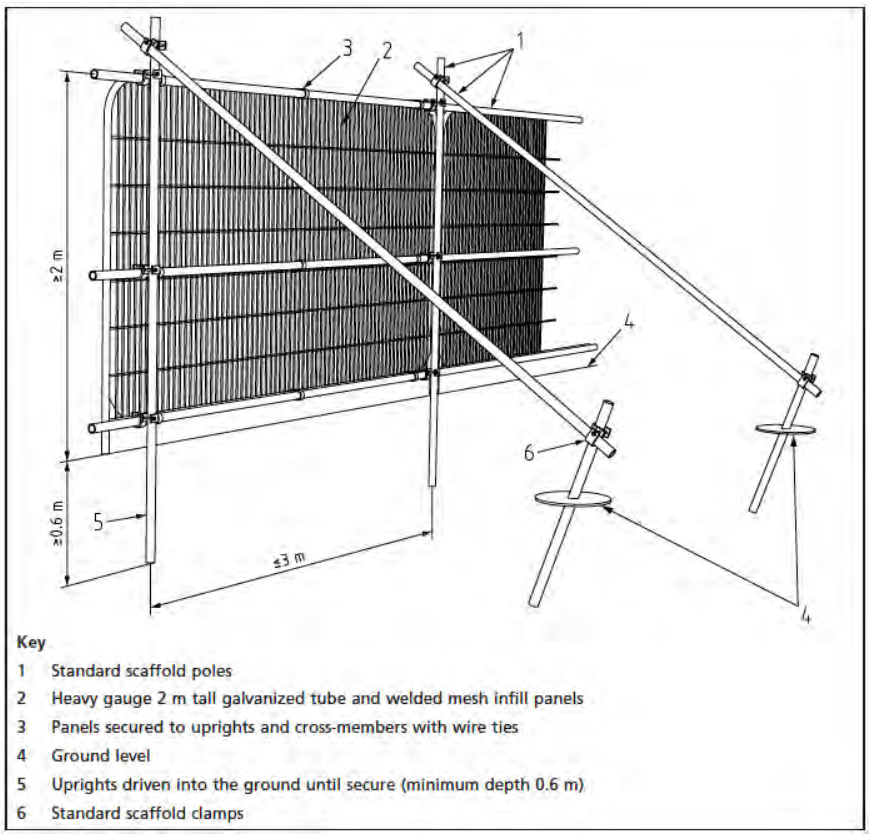
iii) If any panel or support becomes damaged, immediate reinforcement must occur by adding panels in, compliant with the specification detailed below.

iv) The default heavy-duty tree protection barrier specification is a vertical and horizontal scaffold framework, braced to resist impacts, as per *Figure* 2. The vertical tubes are spaced at a maximum interval of 3 metres and these are driven securely into the ground. Welded mesh panels are securely attached to the frame. During installation, it is important to consider the position of below ground services and structural roots, which must not be damaged. Where these constraints prevent the use of this specification, an alternative specification is given below.

v) Alternative heavy-duty tree protection barrier design - 2-metre-tall welded mesh panels standing in rubber or concrete feet joined using a minimum of two anti-tamper couplers installed, so they can only be removed from inside the protected area. The fence couplers should be at spaced least 1 metre apart, but uniformly across the whole barrier. These panels must be supported within the protected area with struts attached to a base plate secured by ground pins as per *Figure 3a*.

vi) Where the fencing is installed above retained hard surfacing and/or it is otherwise not feasible to use ground pins (e.g. due to underlying services or structural roots), the struts can be mounted on a block tray as per *Figure 3b*.

vii) Arboricultural Sign-off – Following the installation of the barriers, the project's arboricultural expert must confirm that they have been correctly laid out.



Key

1 Standard scaffold poles
2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
3 Panels secured to uprights and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground until secure (minimum depth 0.6 m)
6 Standard scaffold clamps

Figure 2 – Conventional tree protection barrier specification (source - BS 5837:2012 Section 6)

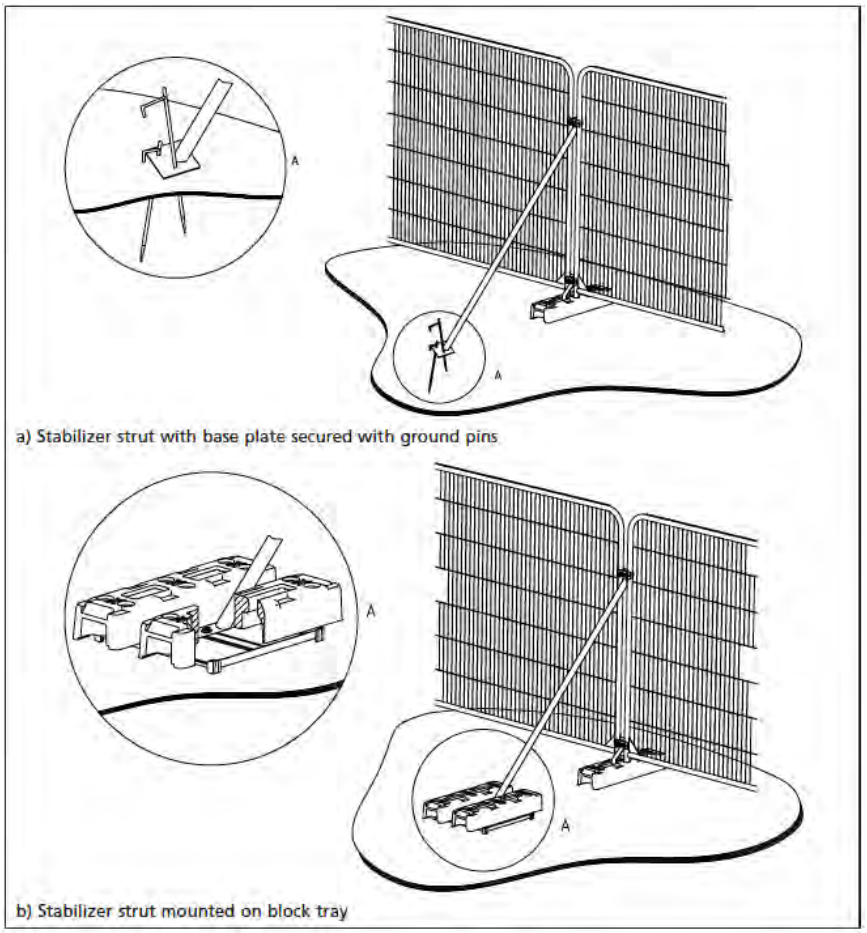


Figure 3 – Above ground stabilising systems (source - BS 5837:2012 Section 6)

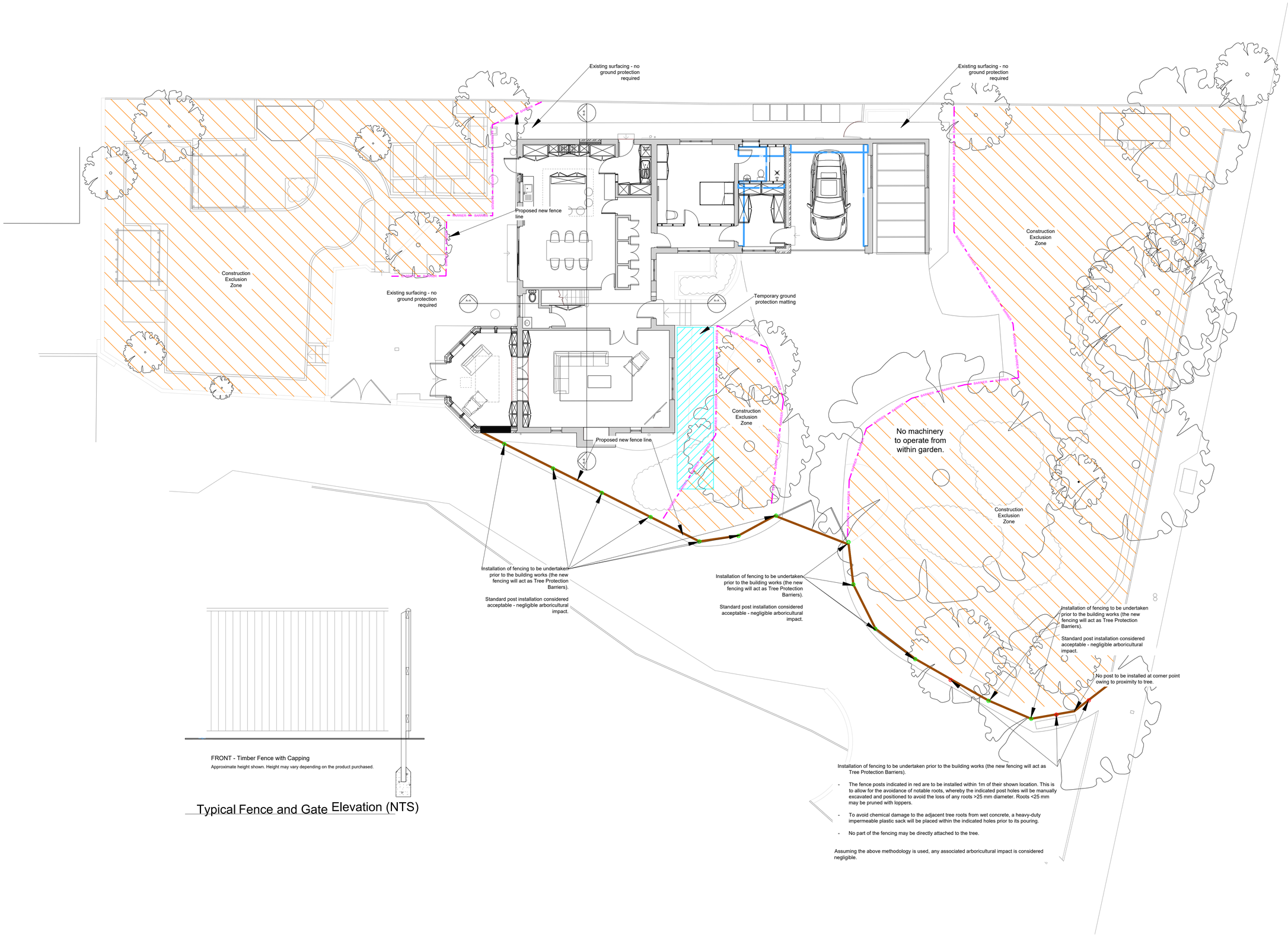
6 APPENDICES

6.1 APPENDICES

6.1.1 The following appendices should be used in conjunction with this document:

Appendix	Document	Reference
1	Tree Protection Plan	P3678-TPP01
2	CEZ Notice	n/a
3	Schedule of Arboricultural Supervision	n/a

APPENDIX 1
TREE PROTECTION PLAN



FRONT - Timber Fence with Capping

Approximate height shown. Height may vary depending on the product purchased.

Typical Fence and Gate Elevation (NTS)

Installation of fencing to be undertaken prior to the building works (the new fencing will act as Tree Protection Barriers).

- The fence posts indicated in red are to be installed within 1m of their shown location. This is to allow for the avoidance of notable roots, whereby the indicated post holes will be manually excavated and positioned to avoid the loss of any roots >25 mm diameter. Roots <25 mm may be pruned with loppers.
- To avoid chemical damage to the adjacent tree roots from wet concrete, a heavy-duty impermeable plastic sack will be placed within the indicated holes prior to its pouring.
- No part of the fencing may be directly attached to the tree.

Assuming the above methodology is used, any associated arboricultural impact is considered negligible.

Note - A tree survey has not been undertaken, as it is not considered reasonable given the nature of the project. As an alternative, it has been assumed that the installation of the fence (which is largely within RPAs, will be installed in an arboriculturally sensitive manner (as per this plan).

Use of This Document

This document should be **viewed in conjunction with the relevant arboricultural method statement** and must be implemented as stated for the duration of the site's development. Failure to do so may result in a breach of planning, and damage to protected trees; potentially resulting in fines. Any queries regarding the trees on site should be addressed by Ligna Consultancy Ltd: 01284 598008 / info@lignaconsultancy.co.uk

Root Protection Areas

The enforcement of root protection areas (RPAs) is vital for the successful retention of a site's trees during the development process. RPAs that are not covered by ground protection must not be subjected to the following activities unless otherwise stated within the Tree Protection Plan or Arboricultural Method Statement:

- materials storage
- pedestrian / vehicular movement
- excavation or soil level increase
- installation of new surfacing
- car parking
- mixing of cement
- any other infringement

Should any issues arise from the enforcement of root protection areas restricting necessary site works, the site manager should be informed, and the project's arboriculturalist contacted.

Incursions within RPAs

Excavation

Arb. Sensitive Demolition / Removal

Specialist Foundations/Surfacing and Site Features

Specialist Foundations

Pile / Screw Pile

Cellweb TRP

Demolished Building

Tree Protection Measures (Refer to Technical Specification)

Barriers - Stake and Mesh

Barriers - Metal Fencing

Stem Protection

Temporary Ground Protection

CEZ - Construction Exclusion Zone

Ligna Consultancy

Project: Braye House

Client: C/O Julian McIntosh Architects

Drawing: Tree Protection Plan

Drawing Ref:	Rev:	Date:
P3678-TPP01	V2	13/03/2024
Scale: 1:100 - A1		Drawn By: B. Hallinan

Based on: Proposed Site Plan

All dimensions should be checked on site. No dimensions to be scaled from this drawing. Please notify us of any discrepancies found. Ligna Consultancy Ltd. cannot be held responsible for inaccuracies in the base drawing in which this plan is based. This drawing is designed to reflect the principles of the layout or design only, and relates only to the protection of retained trees.

An architect or structural engineer should be contacted over any matters of construction, detailing or specification and for any standards or regulatory requirements relating to proposed structures, hard surfacing or underground services.

This drawing was produced in colour - a monochrome copy should not be relied upon.

APPENDIX 2
CEZ NOTICE

NO ENTRY

CONSTRUCTION EXCLUSION ZONE

This area contains trees which must be protected as part of the planning permission. Additional legal protection may also apply e.g. a Tree Preservation Order.

Removing or damaging trees in this area may be a breach in planning permission. Damage to protected trees may lead to a criminal conviction and / or a fine.

Should any issues arrive regarding the tree protection or its layout, please contact Ligna Consultancy Ltd for advice:

info@lignaconsultancy.co.uk
01284 598008

APPENDIX 3
SCHEDULE OF SUPERVISION

APPENDIX 3 – SCHEDULE OF ARBORICULTURAL SUPERVISION

Date: **Planning Ref:**

This statement is to confirm that …… of …….. has undertaken the following supervision activities for the development at Braye House; ensuring that any deviation from the approved tree protection scheme is recorded and appropriate action is undertaken.

Liability for any failure of compliance will remain with the client.

Arboricultural Sign-Off

The correct installation of the approved tree protection measures must be confirmed by the project's arboriculturalist in the table below. No further demolition or construction activities may occur until approval has been given by the project's arboriculturalist.

Failure to abide by the following schedule may result in a breach of planning. Any deviation from the agreed upon protection measures must be reported to the project arboriculturalist immediately.

Activity	Type of Supervision	Date	Protection Measures Compliant	Remedial Action Required
Pre-start meeting	Online teams meeting with contractor to confirm they understand the specification			

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