



Tree Survey and Arboricultural Impact Assessment in accordance with BS5837:2012

Project No 12011	Horsham Enterprise Park, Wimblehurst Road, Horsham, RH12 2ED (Former Novartis Site)		
Client:		Lovell	
Date of Report:	01/10/2025	Revision:	Original



Summary

In this circumstance it is intended to deliver a residential development that shall include a mixture of houses and apartments. The arboricultural related implications of the proposal are summarised in Tables 1 and 2 below and detailed where necessary within the report.

All trees and landscape features that are to remain as part of the development should suffer no structural damage provided that the findings within this report are complied with in full.

Table 1 - Construction and ongoing constraints from an arboricultural perspective (subject to necessary tree work being completed):

Potential Design/Build Constraints	Arboricultural Impact?	Comments/Solution
Construction Access	No	No implications, as per item 4.1
Demolition	Yes	Removal of existing hard surfacing within RPA to be undertaken by hand or with lightweight machinery, as per item 4.2.
New Structures	Yes	Root pruning proposed where residential unit and retaining wall encroach within the RPA of T009. Outbuildings to be constructed on above ground foundations and fence posts to be secured with met posts where installed within RPAs, as per item 4.3.
New Hard Surfaces	Yes	No-dig surfacing to be installed in RPA of T009 and T045. Root pruning proposed in RPA of T048 to facilitate installation of hard surfacing, as per item 4.4
Services	Yes	Services to be located outside of RPA of retained trees wherever possible, as per item 4.5
Drainage	Yes	Drainage to be located outside of RPA of retained trees wherever possible, as per item 4.6
Compound	No	Compound to be located outside of retained trees RPAs, as per item 4.7
Phasing	Yes	See item 4.8



Table 2 - Tree work necessary to facilitate the proposal:

Tree No	Tree work	Reason for work	BS Category
A001	Fell	To facilitate construction of residential dwellings	U
H001	Fell	To facilitate installation of fencing and proposed landscaping	C
H002	Fell	To facilitate construction of residential dwellings	C
T001	Fell	To facilitate construction of residential dwellings	C
T003	Fell	To implement landscaping proposal	B
T008	Fell	To facilitate construction of residential dwellings	B
T009	Crown lift to 5m and root prune at location shown on drawing no. 12011-D-AIA	To facilitate construction of residential dwelling and installation of footpath.	B
T013	Fell	To facilitate construction of residential dwellings	B
T014	Fell	To facilitate construction of residential dwellings and apartments	C
T015	Fell	To facilitate construction of residential apartments	C
T016	Fell	To facilitate construction of residential apartments	B
T018	Fell	To facilitate construction of residential apartments	C
T019	Fell	To facilitate construction of residential apartments	C
T020	Fell	To facilitate construction of residential apartments	B
T032	Fell	To implement landscaping proposal	C
T033	Fell	To implement landscaping proposal	C
T035	Fell	To facilitate construction of residential dwellings	C
T036	Fell	To facilitate construction of residential dwellings	B
T037	Fell	To facilitate construction of residential dwellings	C
T038	Fell	To facilitate construction of residential dwellings	B
T039	Fell	To facilitate construction of residential dwellings	B
T040	Fell	To facilitate construction of residential dwellings	C
T041	Fell	To facilitate construction of residential dwellings	B



Feature No	Surgery or Fell	Reason for Works	BS Category
T042	Fell	To facilitate construction of residential dwellings	B
T044	Fell	To facilitate construction and provide adequate clearance over parking bays	C
T048	Root prune at location shown on drawing no. 12011-D-AIA	To facilitate construction of parking bays	B



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1.0 Introduction

1.1 Purpose

- 1.1.1 As part of the United Kingdom planning process, applicants are required to supply Local Planning Authorities (LPAs) with a detailed evaluation of how their proposals will impact trees. The nationally recognised procedure for doing this is laid out in *BS5837:2012 “Trees in relation to design, demolition and construction – Recommendations”*. This must include the following information as a minimum:
 - A Tree Survey and Tree Constraints Plan
 - An Arboricultural Impact Assessment of sufficient detail to confirm the feasibility of the design from a tree perspective
 - A scaled Tree Retention and Removal drawing showing retained trees and their root protection area on the proposed layout
- 1.1.2 This report has been prepared to ensure that this information is provided to the LPA in a straightforward and clear way so that they can make an informed decision about how (if at all) trees are affected.
- 1.1.3 When planning permission is granted it is typically the case that the LPA will require specific conditions to be fulfilled. This means that a subsequent detailed Arboricultural Method Statement and Tree Protection Plan may be required. This will be detailed on the LPA's decision notice.

1.2 Scope

- 1.2.1 In accordance with the above, Lovell have commissioned Hayden's Arboricultural Consultants to prepare a Tree Survey and Constraints Plan, Arboricultural Impact Assessment and scaled Tree Retention and Removal drawing for the existing trees at Horsham Enterprise Park, Wimblehurst Road, Horsham, RH12 2ED (Former Novartis Site).
- 1.2.2 Unless stated within the survey, all trees were inspected from ground level with no climbing inspections undertaken. As such, the findings are of a preliminary nature. It is not always possible to access every tree and therefore some measurements may have to be estimated.
- 1.2.3 The trees were inspected on the basis of “*Visual Tree Assessment*” (Mattheck & Breloer - 1994) and “*Common Sense Risk Management of Trees*” National Tree Safety Group guidance – 2011.
- 1.2.4 Whilst this is an arboricultural report, comments relating to non arboricultural matters are given, such as built structures and soil data. Any opinion thus expressed should be viewed as provisional and confirmation from an appropriately qualified professional sought. Such points are clearly identified within the body of the report.



1.3 Documentation

1.3.1 The following documentation was provided prior to the commencement of the production of this report:

- Email of instruction from William McKay dated 22nd September 2025
- Topographical survey - dwg no. MSL25515-T-01 to 05
- Proposed layout - dwg no. HOR-ACG-XX-XX-DR-A-1060-Site Plan-Overall-Lovell Site

2.0 The Site

2.1 Overview

2.1.1 The site is Horsham Enterprise Park, Wimblehurst Road, Horsham, RH12 2ED (Former Novartis Site). The site is accessed via Wimblehurst Road on its western aspect, Parsonage Road borders its northern aspect and a railway its eastern and southern aspect. All bar one of the historic structures within the site's curtilage have been demolished. The trees surveyed were found to be of mixed age and condition and to provide a variety of amenity benefits.

2.2 Soils

2.2.1 The soil type commonly associated with this site are slightly acidic loams and clays with impeded drainage. They are of moderate to high fertility and support a wide range of pasture and woodland type habitats. This soil type constitutes approximately 10.6% the total English land mass.

2.2.2 The data given was obtained from a desktop study which provides indications of likely soil types. By definition, this information is not comprehensive and therefore any decisions taken with regards the management, usage or construction on site should be based on a detailed soil analysis.

2.2.3 Further to item 2.2.2, this report provides no information on soil plasticity. It may be necessary for practitioners in other disciplines (e.g. engineers considering foundation design) to obtain this data as required.

2.3 Statutory Tree Protection

2.3.1 Information on any LPA or Forestry Commission controlled statutory tree protection (Tree Preservation Orders, Conservation Areas and Felling Licenses etc) is recorded on the attached drawing no. 12011-D-AIA.

2.3.2 Further details regarding any existing Statutory Tree Protection is recorded at Appendix B.



3.0 Tree Survey

- 3.1 The tree survey was carried out on 15/01/2025 in accordance with *BS5837:2012 “Trees in relation to design, demolition and construction – Recommendations”*, the relevant qualitative and quantitative tree data was recorded in order to assess the condition of the existing trees and their constraints upon the proposed development.
- 3.2 A topographical survey was provided which showed the position of the trees on site. However, it should be noted that topographical surveys are not always comprehensive and sometimes it is considered appropriate to record details of trees and landscape features omitted from or beyond the scope of the plan. If this circumstance occurs, the location of the individual tree or landscape feature is estimated. The position of each tree is shown on the attached drawing no. 12011-D-AIA.
- 3.3 To provide a systematic, consistent and transparent evaluation of the trees included within this survey, they have been assessed and categorised in accordance with the method detailed in item 4.3 of *BS5837:2012 “Trees in Relation to Design, Demolition and Construction - Recommendations”*. For further information, please see the attached Explanatory Notes.
- 3.4 The detailed assessment of each tree and its work requirements with priorities are listed in the attached Schedule of Trees.
- 3.5 Several items would benefit from tree surgery or additional investigation, be it for health and safety, cultural, aesthetic or structural reasons as detailed in the attached Schedule of Trees. Including the trees recommended for felling, the items requiring the **most urgent** intervention are as follows:

As soon as possible:

T017	Fell.
T049	Remove Ivy and reinspect. Remove adjacent, smaller dead Pine.

Within six months:

T007	Reduce lowest two primary branches extending north over Parsonage Road by 3m in length. Remove first two secondary branches from lowest primary branch extending south to alleviate weight from union. Remove deadwood.
T013	Undertake climbing inspection to assess cavity and union at circa. 4m agl.
T018	Remove basal epicormic growth and deadwood. Reinspect.
T019	Remove basal epicormic growth and deadwood. Reinspect.
T020	Remove deadwood. Reduce lowest primary branch extending south by 2m.
T037	Undertake climbing inspection to ascertain extent of decay in cavity.
T038	Undertake climbing inspection to ascertain if there is a cavity and decay at topping point. Inspect stem wounds.
T040	Undertake climbing inspection to assess stem wound at circa. 10.5m agl. Inspect bracing.
T042	Undertake climbing inspection to ascertain if cavities at woodpecker Holes. Remove deadwood.



3.6 Over and above the general and prudent recommendation that all trees are inspected on an annual basis, the following items have been identified as requiring enhanced monitoring to assess any changes in faults and weaknesses etc as detailed in the Schedule of Trees:

T002	Monitor annually (bark inclusion).
T018	Monitor annually (vigour and dieback).
T019	Monitor annually (vigour and dieback).
T035	Monitor annually (vigour and dieback).
T038	Monitor annually (vigour and dieback).
T042	Monitor annually (vigour and dieback).

3.7 In accordance with item 4.2.4 (c) of BS5837:2012, the items inspected and detailed within this report have been selected for inclusion due to the likely influence of any proposed development on the trees, rather than strictly adhering to the curtilage of the site. However, it must be understood that there may be trees beyond the site and not included in this survey which may exert an influence on the development. Where works for cultural, health and safety, quality of life or development purposes have been recommended on trees outside the ownership of the site, these can only progress with the agreement of the owner except where it involves portions of the trees overhanging the boundary.

4.0 Arboricultural Impact Assessment (Additional or Specific Comments)

4.1 Construction Access

4.1.1 Site access is unencumbered by the Root Protection Areas (RPA) of any trees to be retained. From a purely arboricultural perspective, it will therefore not be necessary to install a temporary, load bearing road to protect tree roots.

4.2 Demolition

4.2.1 An area of existing hard surfacing within the RPA of T006 is to be returned to soft landscaping, as shown on the attached drawing no. 12011-D-AIA. Prior to the topsoil being imported, the existing hard surface and sub-base will be removed by hand or with lightweight machinery. Sharp sand will then be laid over any roots that are exposed, onto which good quality debris free topsoil will be laid.

4.2.2 The existing low retaining wall and its associated foundation within the RPA of T007 will also be removed by hand or with lightweight machinery, as shown on the attached drawing no. 12011-D-AIA.



4.3 New Structures

- 4.3.1 Construction of one dwelling's foundations marginally encroach within the RPA of T009. Given the minor extent of the encroachment that is proposed at the periphery of its RPA, 3.27%, it is considered appropriate to undertake linear root pruning at the location shown on the attached drawing no. 12011-D-AIA. This operation will obviate the need for specialised foundation construction methods in this situation. However, dependent on the soil type, species and topography, trees may have an influence on the soil beyond their calculated RPA. Given the proximity of the proposed construction to the trees to be retained, it is recommended that a Structural Engineer is consulted to assess the implications of the tree retention on the required foundation design.
- 4.3.2 Construction of one block of apartments foundations encroach within the RPA of the central and westernmost tree in G002. In this instance it is considered the presence of T016, T017 and T018, all of which are to be felled, are likely to have impeded notable root encroachment into the site's curtilage as shown on the attached drawing no. 12011-D-AIA. Consideration should also be given to the adjacent offsite highway improvement works and associated service installation between G002 and the proposed apartments, which are likely to have resulted in root disturbance to G002.
- 4.3.3 Construction of the remaining residential units do not encroach within the RPA of retained trees. From an arboricultural perspective, no specialised construction or foundation techniques will therefore be required to protect tree roots. However, dependent on the soil type, species and topography, trees may have an influence on the soil beyond their calculated RPA. Given the proximity of the proposed construction to the trees to be retained, it is recommended that a Structural Engineer is consulted to assess the implications of the tree retention and planting on the required foundation design.
- 4.3.4 Construction of a retaining wall's foundation marginally encroaches within the RPA of T009. Given the minor extent of the encroachment that is proposed at the periphery of its RPA, 5%, it is considered appropriate to undertake linear root pruning at the location shown on the attached drawing no. 12011-D-AIA. This operation will obviate the need for specialised foundations in this situation.
- 4.3.5 Construction of outbuildings encroach within the RPA of T002, T006 and T007, as shown on the attached drawing no. 12011-D-AIA. In this instance the outbuildings will be erected on either "no dig" surfacing or a base and beam foundation, both of which will ensure root disturbance is kept to a minimum.
- 4.3.6 Installation of garden boundary fencing encroaches within the RPA of retained trees T002, T004, T006, T007 and T048, as shown on the attached drawing no. 12011-D-AIA. Where fencing is to be erected within the RPA of retained trees, it is proposed that the fence posts will be secured by the use of "Met-Posts" or a similar design to keep root disturbance to a minimum.



4.4 New Hard Surfaces

4.4.1 Installation of new hard surfaces encroach within the RPA retained trees T009 and T045. Provided that these work with finished levels and required load bearings without cutting into the ground the surfaces will be attended to by the use of “no dig” construction methods, as shown on the attached drawing no. 12011-D-AIA. In the detailed Arboricultural Method Statement & Tree Protection Plan, Hayden’s Arboricultural Consultants will supply a sample design of “no dig” surfacing. However, the exact specification (adhering to the principles of the sample design) must be designed by a Civil Engineer who can confirm that the finished levels and load bearings are achievable with this type of design without cutting into the ground. To protect the RPA of the affected trees, the no dig surfacing should be constructed as a final phase of development with the RPA initially protected by fencing and / or ground protection.

4.4.2 Installation of new hard surfaces also encroach within the RPA of T048. Given the minor extent of the encroachment that is proposed at the periphery of its RPA, 3.27%, in this instance it is considered appropriate to undertake linear root pruning at the location shown on the attached drawing no. 12011-D-AIA. This operation will obviate the need for “no dig” construction methods in this situation.

4.5 Services

4.5.1 Final information about new service routes is not available at this stage. However, it is important to establish the principle that wherever possible all underground service runs will be placed outside the RPA of the retained trees. Where it is not possible to achieve this, any infringement must be addressed by hand digging or trenchless technology and agreed with the LPA.

4.6 Drainage

4.6.1 Final information about the proposed drainage scheme is not available at this stage. However, it is important to establish the principle that wherever possible all foul and surface water runs and attenuation tanks will be placed outside the RPA of the retained trees. Where it is not possible to achieve this, any infringement must be addressed by hand digging or trenchless technology and agreed with the LPA.

4.7 Compound

4.7.1 The site provides adequate internal space to locate a construction compound outside the RPA of any trees and landscape features that are to be retained.

4.8 Phasing

4.8.1 The proposal involves the integration of several aspects that affect tree protection (e.g. – but not exclusively – installation of no dig surfacing, services and root pruning). For this reason, the project must be carefully phased to ensure the highest level of protection is maintained for retained trees. As part of the detailed Arboricultural Method Statement & Tree Protection Plan, Hayden’s Arboricultural Consultants will produce an in-depth phasing recommendation to cover the major operations on site as they affect retained trees.



5.0 Limitations & Qualifications

Tree inspection reports are subject to the following limitations and qualifications.

General exclusions

Unless specifically mentioned, the report will only be concerned with above ground inspections. No below ground inspections will be carried out without the prior confirmation from the client that such works should be undertaken.

The validity, accuracy and findings of this report will be directly related to the accuracy of the information made available prior to and during the inspection process. No checking of independent third-party data will be undertaken. Hayden's Arboricultural Consultants Limited will not be responsible for the recommendations within this report where essential data are not made available or are inaccurate.

This report will remain valid for one year from the date of inspection subject to the recommendations specified within being adhered to. It must also be appreciated that recommendations proposed within this report may be superseded by extreme weather, or any other unreasonably foreseeable events.

Tree surgery should be completed as detailed in the Schedule of Trees. Where this has been identified for reasons other than to permit development, this work should be completed within the advised timescales irrespective of any development proposals.

Tree surgery works may also be proposed as part of this Survey to mitigate any identified problems that may be caused by trees in close proximity to the proposed development. To this end, should these recommendations be overruled, this Survey stands as the opinion of Hayden's Arboricultural Consultants Limited, and therefore any damage or injury caused by trees recommended by this practice for felling or tree surgery works, to which the proposed schedule of works has been altered or the tree has been requested to be retained by the Local Planning Authority, cannot be the responsibility of this practice.

Moreover, if any additional alterations to the property or soil levels are carried out and/or further tree works undertaken other than specified within the report, it will become invalid and a new tree inspection required.

It will be appreciated, and deemed to be accepted by the client and their insurers, that the formulation of the recommendations for the management of trees will be guided by the following: -

1. The need to avoid reasonably foreseeable damage.
2. The arboricultural considerations - tree safety, good arboricultural practice (tree work) and aesthetics.

The client and their insurers are deemed to have accepted the limitation placed on the recommendations by the sources quoted in the attached report. Where sources are limited by time constraints or the client, this may lead to an incomplete quantification of the risk.



October 2025

For and on Behalf of Hayden's Arboricultural Consultants Limited



6.0 References

British Standards Institute. (2010). *Recommendations for Tree Work BS3998:2010* BSI, London.

British Standards Institute. (2012). *Trees in Relation to Design, Demolition and Construction – Recommendations BS5837:2012* BSI, London.

Ministry of Housing, Communities & Local Government. (2014). *Tree Preservation Orders and trees in conservation areas*. London: Ministry of Housing, Communities & Local Government.

Mattheck & Breloer, H. (1994). *Research for Amenity Trees No.4: The Body Language of Trees*, HMSO, London.

NHBC Standards (2007) *Chapter 4.2 'Building Near Trees'*. National House-Building Council.

NJUG 4 Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees. Issued 16 November 2007.

Forestry Commission (2007). *Tree Felling – Getting Permission*. Country Services Division, Forestry Commission, Edinburgh.

Patch, D. Holding, B. (2006) *Arboricultural Practice Note 12 (APN12), Through the Trees to Development*. Arboricultural Advisory and Information Service (AAIS).

Lonsdale, D. (1999). *Research for Amenity Trees No 7: Principles of Tree Hazard Assessment and Management*, HMSO, London.

National Tree Safety Group (2011). *Common Sense Risk Management of Trees*. Forestry Commission.



7.0 Appendices

Appendix	A	Species List & Tree Problems
Appendix	B	Statutory Tree Protection Advice & Tree Preservation Order Enquiry/Response
Appendix	C	Schedule of Trees
Appendix	D	Schedule of Works - Irrespective of Development
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	1.	BS 5837:2012 Figure 1 - Flow Chart – Design and Construction & Tree Care
	2.	European Protected Species and Woodland Operations Checklist (v.4)
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	4.	BS 5837:2012 Figure 3 - Examples of above-ground stabilising systems
Appendix	H	Drawing no. 12011-D-AIA



Appendix A - Species List & Tree Problems

Species List:

Beech	<i>Fagus sp</i>
Cedar	<i>Cedrus sp</i>
Cherry	<i>Prunus sp</i>
Cypress	<i>Cupressus sp</i>
Lime	<i>Tilia sp</i>
Judas Tree	<i>Cercis sp</i>
London Plane	<i>Platanus sp</i>
Oak	<i>Quercus sp</i>
Pine	<i>Pinus sp</i>
Silver Maple	<i>Acer sp</i>

Tree Problems:

This gives a brief description of the problems identified in the attached Tree Survey.

Name: Adventitious Growth	
Symptoms/damage type and cause:	A physiological condition whereby previously dormant buds produce new growth as a reaction to changes in the environment of the affected part of the tree such as changes in crown form and increased light levels caused by limb loss or removal of nearby trees. This is often an attempt to replace any lost energy.
Consequence:	Adventitious growth is sometimes capable of replacing a lost limb over time, however, where it is a reaction to deliberate actions which lead to the production of adventitious growth the new growth may be undesirable.
Control:	Control of new growth may be achievable by remedial tree surgery or formative pruning.
Images:	



Name: Basal Suckers	
Symptoms/damage type and cause:	A profusion of shoots emanating from the base of the main stem close to ground level. Several species of trees but most notably Limes produce suckers as part of their naturalised habit however in some species this can be an indicator of elevated stress upon the tree.
Consequence:	Suckers do not cause direct harm to the tree in their self however they can be problematic where they impede free use of space such as where a tree is adjacent to a footpath or roadway. Where suckers are established, they can impede visibility of the basal area of the stem and prevent identification of more significant defects such as decay cavities or fungal growths. If left unchecked the suckers can establish to become large limbs in their own right and spoil the form of the tree and presenting issues for future management as removal would leave large wounds around the stem base providing opportunity for ingress of decay.
Control:	Regular pruning away of new sucker growth is recommended to prevent the development of the issues mentioned above dependent upon the implications and the tree's location.
Species affected:	Most tree species can be affected.
Images:	

Name: Canker	
Symptoms/damage type and cause:	This is a clearly defined patch of dead and sunken, or malformed bark which can be caused by either bacterial or fungal agents. Affected branches or stems can die due to being girdled by cankers.
Consequence:	Depending upon the affecting organism can cause death of limbs or in extreme cases death of whole tree.
Control:	In some instances, it may be possible to excise the infected area by tree surgery operations however this is dependent upon the distribution of infected tissues and outcomes may vary.
Species affected:	A wide range of tree species



Name: Deadwood	
Symptoms/damage type and cause:	This relates to dead branches in the crown of the tree. In most cases, this is caused by the natural ageing process of the tree or shading due to its close proximity to neighbouring trees. However, in some situations, it may be related to fungal, bacterial or viral infection.
Consequence:	Depending upon the location and mass of dead wood removal of the affected tissue may be necessary to prevent harm to persons or property as the wood will become unstable as it decays and in some circumstances is likely to fall from the tree with little or no warning.
Control:	Detailed monitoring should be undertaken on those trees showing signs of excessive deadwood production to identify the underlying cause.
Species affected:	Most tree species.
Images:	 

Name: Epicormic growth	
Symptoms/damage type and cause:	This is the production of numerous shoots on the main stem and branches of the tree. They are produced by the bursting into life of otherwise dormant buds. It is commonly associated with elevated levels of stress on the tree.
Consequence:	Whilst epicormic growth is usually symptomatic of an issue elsewhere within the tree, heavy proliferation can cause the trees resources to become depleted or may mask significant structural weaknesses within the framework of the tree.
Control:	Pruning off epicormic growth may be necessary to improve the visual amenity of the tree or prevent the development of a hazard or obstruction. No direct means of prevention are available other than therapeutic measures to alleviate stresses on the tree.
Species affected:	Most tree species, including European Lime, Willow species, Sweet Chestnut, and Silver Maple.
Images:	  



Name: <i>Hedera helix</i> (Ivy)	
Symptoms/damage type and cause:	Ivy may grow to varying degrees on all areas of a tree from the base to the upper crown. It is possible that in doing so it will out-compete the host tree for available light thereby suppressing the host.
Consequence:	This is generally only harmful to the tree on already unhealthy specimens which may be constricted by large ivy stems around the trunk or may have their top growth suppressed by a mass of flowering shoots in the crown. Ivy can also mask potentially dangerous faults on a tree.
Control:	Ivy should only be removed if absolutely necessary because it provides abundant cover to wildlife and then by severing twice close to the ground and removing a length of stem thereby causing the gradual dying away of the aerial parts of the plant providing extended benefit to wildlife whilst relieving the pressure on the tree.
Species affected:	Most trees can be affected.
Images:	 

Name: <i>Phytophthora cactorum</i> (Phytophthora Bleeding Canker)	
Symptoms/damage type and cause:	This is a bark killing infection presenting itself as scattered drops of rusty-red, yellow-brown or almost black, gummy liquid oozing from small or large patches on the bark. These run a little down the bark and dry as dark brown or black, often shiny, brittle encrustations or on the underside of branches as little pendulous knobs. The centre of the oozing patch of bark may be cracked and bearing fruit bodies of wood-rotting decay. Further confirmation of the infection can be seen on the inner bark of the oozing patch. This will be a watery orange colour and is often clearly mottled. The underlying wood may be stained blue-black. It has not yet been determined how the spores of the disease reach the aerial parts of trees. Infection does not seem to be dependent on injury to the bark. The exuded gum does not contain the fungus.
Consequence:	The fungus grows through and kills the phloem and cambium and over a number of years may girdle limbs or the main stem leading to death of the host tree.
Control:	The disease is slow spreading as it is confined to the bark and can be excised where infection is localised, although later invasion of the wood by decay fungi can represent a problem.
Species affected:	<i>Aesculus hippocastanum</i>



Name: <i>Sparassis crispa</i> (Cauliflower fungus)	
Symptoms/Damage Type and Cause:	A fungal disease that primarily affects the root system but decay can extend up the stem to 3m above ground level. The fruiting body can be found at the base of affected trees or attached to surface roots some distance from the stem. The ephemeral fungus, typically seen in Autumn, is buff coloured and lobed and resembles a sponge or cauliflower, hence its common name.
Consequence:	Decayed wood has little tensile strength and in advanced stages of decay trees are liable to brittle fracture. This can result in root plate failure or stem breakage at the base.
Control Measures:	No control is available.



Appendix B - Statutory Tree Protection Advice & Tree Preservation Order Enquiry/Response

Statutory Tree Protection Advice

Tree Preservation Order(s)

The LPA have deemed it appropriate to provide statutory protection to trees on this site through the serving of a Tree Preservation Order (TPO), ref. no TPO/0686. The effect of this on anyone wishing to undertake work on preserved trees is to require them to obtain written permission from the LPA prior to actioning any tree work. The purpose of this process is to try to ensure that the works are appropriate, proportionate and in keeping with the long-term aims of the TPO. However, given that trees are living organisms and the locality within which they are set is liable to change, it is often the case that LPA decisions relating to TPO applications require regular review to reflect the current situation rather than the historical perspective of the original date of protection.

There are certain circumstances where written permission from the LPA may not be necessary before undertaking works. These include:

- Making a tree safe if it is an imminent threat to people or property
- Removing deadwood or a dead tree

Anyone wishing to undertake work as an exception to the written permission process **are required** to provide the LPA with 5 days' notice prior to attending to a tree which they deem as being dead or dangerous unless such works are required in an emergency. It is the tree owner's responsibility to provide proof that the tree was indeed dead or dangerous should this exception be challenged; hence, it is advisable always to request an inspection by the LPA prior to carrying out such operations. Furthermore, even in the event of an emergency situation there is still a duty to notify the LPA that work has been completed including supplying an explanation of the necessity. Failure to comply with the requirements of TPO legislation can lead to a maximum fine of up to £20,000 per tree in the Magistrates Court. Fines in the Crown Court are unlimited.

This information was sourced using the LPA's Online Mapping System (as instructed by them) and to our best knowledge was current and accurate at the time the information was accessed. We would advise it prudent that before any tree work commences, this is checked directly with the LPA to confirm that their online mapping system is definitive.

If **detailed planning permission** is granted and as part of the relevant approval works (felling or surgery) to trees protected by a TPO are agreed as acceptable by the LPA, no **additional** written permission to proceed will be required provided that:

- (i) the planning permission remains live
- (ii) the works are in strict accordance with the specification of the extant planning permission
- (iii) the works are being completed solely to implement the detailed planning permission



Felling Licence

All trees within the United Kingdom are protected under the Forestry Acts. In All trees within the United Kingdom maybe subject to protections under the Forestry Acts (principally the Forestry Act 1967). In general, anyone felling more than five cubic metres of timber in any calendar quarter requires a Felling Licence from the Forestry Commission. There are exemptions however and these are as follows:

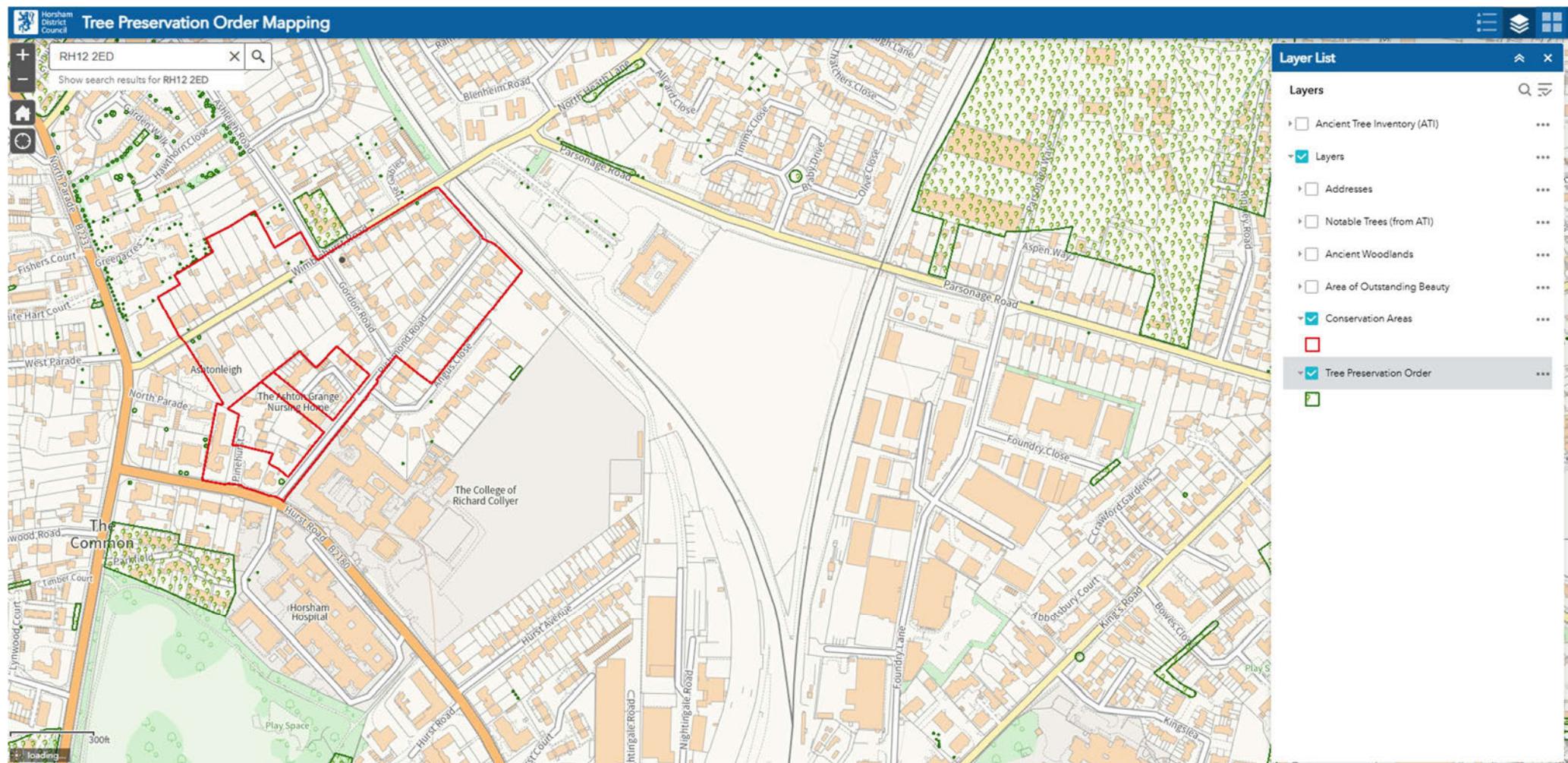
A Felling Licence is not required in the following instances:

- To fell trees in a garden, an orchard, a churchyard, or a designated open space (Commons Act 1899 and Section 9 of the Forestry Act 1967).
- To conduct surgery operations such as pruning, reduction, deadwooding or pollarding.
- To fell less than 5 cubic metres in a calendar quarter. (Please note that not more than two cubic metres in a calendar quarter may be sold).
- To fell trees that are eight centimetres or less in diameter when measured 1.3 metres from the ground. Trees removed for thinning may have a diameter of up to ten centimetres and trees managed under a coppice regime may have a diameter of up to fifteen centimetres.
- To fell trees previously approved for removal under a Dedication Scheme, or where Detailed Planning Permission has been granted.
- To fell trees to prevent danger or abate a legal nuisance.
- To fell trees in compliance with any obligation imposed by or under an Act of Parliament.
- To fell trees at the request of an electricity operator because the trees are or will be in proximity to installed or about to be installed electric line or electrical plant in accordance with paragraph 9(1)(a) or (b) of Schedule 4 to the Electricity Act 1989.

Substantial fines exist for not complying with the requirements of a Felling Licence.



Tree Preservation Order / Conservation Area Online Mapping Extract



Horsham District Council Tree Preservation Order Mapping

RH12 2ED

Show search results for RH12 2ED

+

Layers

Tree Preservation Order

Reference: TPO/0686

Address: Novartis Pharmaceuticals Ltd, Wimblehurst Road, Horsham, West Sussex RH12 5AB

Description: HORSHAM DISTRICT COUNCIL, CIBA GEIGY WIMBLEHURST ROAD, HORSHAM TREE PRESERVATION ORDER 1990

Served: 28-08-1990

Approved: Y

Status: Order Confirmed

Number: T0009

Comments: T9 - Cedar

Documents: [More info](#)

Zoom to: ***

Layer List

- Ancient Tree Inventory (ATI)
- Layers
- Addresses
- Notable Trees (from ATI)
- Ancient Woodlands
- Area of Outstanding Beauty
- Conservation Areas
- Tree Preservation Order

Appendix C

Schedule of Trees

SCHEDULE OF TREES (AIA)

Former Novartis Site, Wimblehurst Road, Horsham,

Surveyed By: Nick Hayden

Date: 15/01/2025

Managed By: Nick Hayden

Tree No	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required (TS)	Priority (TS)	Work Required (AIA)	Priority (AIA)						
			Min Dist	Crown Base			Age	Water Demand										
On site			RPA (m ²)	Aspect	Aspect	SULE	Ground Cover											
A001		Cypress	450	20		High	N3.5, E3.5, S3.5, W3.5	January 2025 - No notable changes since previous inspection.	U	No work required.	4	Fell						
			5.4	0-2m		M	High	October 2022 - Poor form and condition. Multi-stemmed Cypress. Topped. Bark inclusions.										
Yes			91.6			<10 years	Grass, Light undergrowth											
G002	3x Oak	50	21			High	N6, E6, S6, W6	January 2025 - Offsite trees maintained by the LPA. DBH and crown spread of trees adjacent to site recorded and plotted on drawing no. 12011-D-AIA to show constraints. Detailed inspection of trees not undertaken.	A2	No work required.	4							
		0.6	4.1-6m			M	High											
		1.1				40+ years	Grass, Tarmac											
H001	Cypress	150	11			Moderate	N2.5, E2.5, S2.5, W2.5	January 2025 - No notable changes since previous inspection.	C2	No work required.	4	Fell						
		1.8	0-2m			SM	High	October 2022 - Lapsed hedge, comprised of 10x stems. Average DBH provided. Reasonable vigour.										
Yes		10.2				10+ years	Bare earth, Grass											
H002	Beech, Cypress	300	12			Moderate	N2.5, E2.5, S2.5, W2.5	January 2025 - Topped at circa. 8m agl. No notable changes since previous inspection.	C2	No work required.	4	Fell						
		3.6	0-2m			EM	High	October 2022 - Multi-stemmed hedgerow. Ivy clad. No stems plotted on TOPO.										
Yes		40.7				10+ years	Light undergrowth											

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required (TS)	Priority (TS)	Work Required (AIA)	Priority (AIA)
		Min Dist	Crown Base	Lowest Branch								
		On site	RPA (m ²)	Aspect	Aspect	SULE						
T004	Lime	590	18.5		High	N6, E6, S6, W6	January 2025 - Exposed buttress roots. Epicormic basal growth. No evidence of any fungal fruiting bodies around base or on lower stem. Tapping lower stem with a nylon sounding hammer did not reveal the presence of notable decay. Fusing stems at circa. 3m agl. Nest no longer present in crown.	B2	No work required.	4		
		7.08	0-2m		M	Moderate						
		157.5			20+ years	Bare earth, Grass						
							October 2022 - No evidence of fungal bodies around base or on lower stem. Old pruning wounds display good occlusion. Minor bark inclusion at union of lowest primary / sub-dominant stem. Historically pollarded at circa. 13m agl, dense regrowth at pollard points with nests between. Reasonable vigour. Not plotted on TOPO.					

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required (TS)	Priority (TS)	Work Required (AIA)	Priority (AIA)		
		Min Dist	Crown Base	Lowest Branch			Age	Water Demand						
			RPA (m ²)	Aspect	Aspect	SULE								
T007	Lime	700	20		High	N8, E8, S7.5, W6	January 2025 - Low retaining wall circa. 6m to south / south east. Deep buttress roots. No evidence of any fungal fruiting bodies around base or on lower stem. Tapping lower stem with a nylon sounding hammer did not reveal the presence of notable decay. Moderate deadwood with broken hanging branch upper crown over the highway. No notable changes since previous inspection.	B2	Reduce lowest two primary branches extending north over Parsonage Road by 3m in length. Remove first two secondary branches from lowest primary branch extending south to alleviate weight from union. Remove deadwood.	2				
		8.4	2.1-4m		M	Moderate								
Yes		221.7			20+ years	Grass								
							October 2022 - No evidence of fungal bodies around base or on lower stem. Fluted lower stem. Old pruning wounds displays good occlusion. Small opening / cavity on southeast aspect at circa. 3m agl, good woundwood development at edges. Decay appears localised. Bark inclusion at union of lowest primary branch extending south, most prominent on southern aspect of union. Over extended lowest primary branch to north over highway and primary branch above have bark inclusions at unions. Reasonable vigour. Low retaining wall to south.							

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required (TS)	Priority (TS)	Work Required (AIA)	Priority (AIA)
		Min Dist	Crown Base	Lowest Branch								
		RPA (m ²)	Aspect	Aspect	SULE	Ground Cover						
T011	Silver Maple	790	20		High	N10.5, E10.5, S10.5, W6.5	January 2025 - Dense bramble impeded a detailed inspection of base and lower stem. Multiple woodpecker holes on south and east aspects of stem at circa. 10m agl and foreseeable a column of decay has formed at this point. Removal of the affected stem will open up and expose the remaining crown. Dieback throughout the crown has also progressed since the previous visit. Limited SULE. Downgraded to a category U from previous inspection.	U	Fell.	3		
		9.48	0-2m		M	Moderate						
Yes		282.3			<10 years	Grass, Dense undergrowth						
							October 2022 - No evidence of fungal bodies around base or on lower stem. Dominant companion. Multi-stemmed from circa. 4m agl, unions appear stable. Poorly pruned / truncated lower branches. Possible woodpecker nest / hole at circa. 10m agl on east aspect of dominant central stem. Reduced vigour with smaller than expected foliage size throughout crown. Deadwood and areas of branchtip dieback throughout.					

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required (TS)	Priority (TS)	Work Required (AIA)	Priority (AIA)
			Min Dist	Crown Base								
		RPA (m ²)	Aspect	Aspect	SULE	Ground Cover						
T034	Cedar	1040	17.5		Moderate	N9.5, E11.5, S11.5, W11.5	January 2025 - No notable changes since previous inspection.	U	Fell.	3		
		12.48	2.1-4m		M	Moderate	December 2022 - During site visit with LPA Tree Officer it was confirmed that <i>Sparassis crispa</i> fruiting bodies have been observed around the base of this tree's stem. Given the nature of decay caused by this pathogen, it SULE is limited and it is no longer considered safe to retain.					
Yes		489.3			<10 years	Tarmac	October 2022 - Restricted rooting environment. Hard surfacing to north, east and south. Recent burrowing activity around base on northern aspect. No evidence of fungal fruiting bodies around base or on lower stem. Recently crown lifted and deadwood removed. Occluding stem wounds on northeast aspect at circa. 9 and 10m agl, with woodpecker hole at circa. 11m agl above. Bifurcates at circa. 12m agl, union appears stable. Historic tear out wounds / storm damage throughout crown. Small broken, hanging branch lower crown northern aspect. Deadwood in lower and mid crown that has most likely occurred since deadwood last removed. Crown displays reduced vigour / thinning. Given the species characteristics, the tree's age, visible evidence of multiple failures throughout its crown and the foreseeability of further failures occurring, consideration should be given to the proximity of any proposed development and the potential risks to persons and property in the immediate vicinity.					

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required (TS)	Priority (TS)	Work Required (AIA)	Priority (AIA)
			Min Dist	Crown Base								
		RPA (m ²)	Aspect	Aspect	SULE	Ground Cover						
T036	Lime	780	19		Moderate	N8, E7, S7.5, W7.5	January 2025 - No evidence of any fungal fruiting bodies around base or on lower stem in sections that could be observed. Tapping lower stem with a nylon sounding hammer did not reveal the presence of notable decay. No notable changes since previous inspection.	B2	No work required.	4	Fell	0
		9.36	0-2m		M	Moderate	October 2022 - Tarmac car park to east within circa. 1.5m of stem. Exposed buttress roots. No evidence of fungal fruiting bodies around base or on lower stem. Bifurcates at circa. 4m agl, union appears stable. Moderate deadwood. Reasonable vigour. Low crown.					
Yes		275.2			20+ years	Grass, Tarmac						

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required (TS)	Priority (TS)	Work Required (AIA)	Priority (AIA)				
		Min Dist	Crown Base	Lowest Branch		Age	Water Demand									
			RPA (m ²)	Aspect	Aspect	SULE	Ground Cover									
T043	Cedar	1060	18		Moderate	N8, E10.5, S9, W10	January 2025 - Protective fencing restricted access and therefore impeded a detailed inspection. Dieback has increased notably since previous inspection, with much of the lower to mid-crown on the south and west aspects now dead. October 2022 - Impeded rooting environment with hard surfacing to north, east and south east. No evidence of fungal fruiting bodies around base or on lower stem. However, tapping lowers stem with a nylon sounding hammer revealed the presence of decay on the stem's southern aspect. Vigour poor with dieback throughout crown. Lower crown on southern and western aspects is almost dead. Tear out wounds throughout crown. Limited SULE and removal therefore recommended.	U	Fell.		3					
		12.72	2.1-4m		M	Moderate										
Yes		508.3			<10 years	Grass, Tarmac										
T044	Oak	340	11		Moderate	N2.5, E7, S7, W0.5	January 2025 - No notable changes since previous inspection. October 2022 - Suppressed specimen with heavily asymmetric crown. Branchtip dysfunction and dieback throughout crown.	C2	No work required.		4	Fell	0			
		4.08	0-2m		SM	High										
Yes		52.3			10+ years	Light undergrowth										
T045	Oak	640	17		Moderate	N9, E7.5, S8, W8	January 2025 - No notable changes since previous inspection. October 2022 - Dominant companion. Exposed buttress roots. No evidence of fungal fruiting bodies around base or on lower stem. Bifurcates at circa. 3m agl, union appears stable. Minor deadwood. Reasonable vigour.	B2	No work required.		4					
		7.68	0-2m		EM	High										
Yes		185.3			20+ years	Light undergrowth										

Appendix D

Schedule of Works – Irrespective of Development

SCHEDULE OF WORK IRRESPECTIVE OF DEVELOPMENT

Former Novartis Site, Wimblehurst Road, Horsham,

Surveyed By: Nick Hayden

Surveyed: 15/01/2025

Managed By: Nick Hayden

Tree No.	Species	Work required	Priority
T017	Lime	Fell.	1
T049	Pine	Remove Ivy and reinspect. Remove adjacent, smaller dead Pine.	1
T007	Lime	Reduce lowest two primary branches extending north over Parsonage Road by 3m in length. Remove first two secondary branches from lowest primary branch extending south to alleviate weight from union. Remove deadwood.	2
T013	Lime	Undertake climbing inspection to assess cavity and union at circa. 4m agl (2). Remove basal epicormic growth and deadwood. Reinspect (3).	2
T018	Lime	Remove basal epicormic growth and deadwood. Reinspect (2).	2
T019	Lime	Remove basal epicormic growth and deadwood. Reinspect (2).	2
T020	Lime	Remove deadwood. Reduce lowest primary branch extending south by 2m.	2
T037	Cedar	Undertake climbing inspection to ascertain extent of decay in cavity.	2
T038	Cedar	Undertake climbing inspection to ascertain if there is a cavity and decay at topping point. Inspect stem wounds (2).	2
T040	Cedar	Undertake climbing inspection to assess stem wound at circa. 10.5m agl. Inspect bracing.	2
T042	Cedar	Undertake climbing inspection to ascertain if cavities at woodpecker holes Remove deadwood.	2
T001	Lime	Undertake secondary investigations with a Resi Micro Drill from base to 2.5m agl.	3
T010	Silver Maple	Fell.	3
T011	Silver Maple	Fell.	3
T012	Lime	Remove basal epicormic growth and reinspect.	3
T014	Lime	Pollard at 7.5m.	3
T034	Cedar	Fell.	3
T035	Cedar	Remove deadwood.	3
T043	Cedar	Fell.	3
T046	Silver Maple	Fell.	3
T047	Silver Maple	Fell.	3

Schedule of Enhanced Monitoring

Former Novartis Site, Wimblehurst Road, Horsham,

Surveyed By: Nick Hayden

Surveyed: 15/01/2025

Managed By: Nick Hayden

Tree No.	Species	Work required	Priority
T002	Lime	Monitor annually (bark inclusion).	3
T018	Lime	Monitor annually (vigour and dieback).	2
T019	Lime	Monitor annually (vigour and dieback).	2
T035	Cedar	Monitor annually (vigour and dieback).	3
T038	Cedar	Monitor annually (vigour and dieback). Reinspect August / September to ascertain if there is a fruiting body on the lower stem (3).	2
T042	Cedar	Monitor annually (vigour and dieback).	2

Appendix E

Preliminary Schedule of Works to Allow Development

SCHEDULE OF WORKS (AIA)

Former Novartis Site, Wimblehurst Road, Horsham,

Surveyed By: Nick Hayden

Surveyed: 15/01/2025

Managed By: Nick Hayden

Tree No.	Species	Work required	Priority
A001	Cypress	Fell	0
H001	Cypress	Fell	0
H002	Beech, Cypress	Fell	0
T001	Lime	Fell	0
T003	Cypress	Fell	0
T008	Lime	Fell	0
T009	London Plane	Crown lift to 5m and root prune at location shown on drawing no. 12011-D-AIA	0
T013	Lime	Fell	0
T014	Lime	Fell	0
T015	Cherry	Fell	0
T016	Lime	Fell	0
T018	Lime	Fell	0
T019	Lime	Fell	0
T020	Lime	Fell	0
T032	Judas Tree	Fell	0
T033	Judas Tree	Fell	0
T035	Cedar	Fell	0
T036	Lime	Fell	0
T037	Cedar	Fell	0
T038	Cedar	Fell	0
T039	Cedar	Fell	0
T040	Cedar	Fell	0
T041	Cedar	Fell	0
T042	Cedar	Fell	0
T044	Oak	Fell	0
T048	Beech	Root prune at location shown on drawing no. 12011-D-AIA	0

Appendix F

Explanatory Notes

Explanatory Notes

Categories

No	Identifies the tree on the drawing.
Species	Common names are given to aid understanding for the wider audience.
BS 5837 Main Category	Using this assessment (BWS 5837:2012, table 1), trees can be divided into one of the following simplified categories, and are differentiated by cross-hatching and by colour on the attached drawing. Category A - Those of high quality with an estimated remaining life expectancy of at least 40 years; Category B - Those of moderate quality with an estimated life expectancy of at least 40 years; Category C - Those of low quality with an estimated remaining of at least 10 years, or young trees with a stem diameter below 150 mm; Category U - Those trees in such condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.
BS 5837 Sub Category	Table 1 of BS 5837:2012 also requires a sub category to be applied to the A, B, C, and U assessments. This allows for a further understanding of the determining classification as follows: Sub Category 1 - Mainly arboricultural qualities; Sub Category 2 - Mainly landscape qualities; Sub Category 3 - Mainly cultural values, including conservation. Please note that a specimen or landscape feature may fulfil the requirements of more than one Sub Category.
DBH (mm)	Diameter of main stem in millimetres at 1.5 metres from ground level. Where the tree is a multi-stem, the diameter is calculated in accordance with item 4.6.1 of BS 5837:2012.
Height	Recorded in metres, measured from the base of the tree.
Crown Base	Recorded in metres, the distance from ground and aspect of the lowest branch material.
Lowest Branch	Recorded in metres, the distance from ground and aspect of the emergence point of the lowest significant branch.

Age

Recorded as one of seven categories:

Y Young. Recently planted or establishing tree that could be transplanted without specialist equipment, i.e. less than 150 mm DBH.

S/M Semi-mature. An established tree, but one which has not reached its prospective ultimate height.

E/M Early-mature. A tree that is reaching its ultimate potential height, whose growth rate is slowing down but if healthy, will still increase in stem diameter and crown spread.

M Mature. A mature specimen with limited potential for any significant increase in size, even if healthy.

O/M Over-mature. A senescent or moribund specimen with a limited safe useful life expectancy. Possibly also containing sufficient structural defects with attendant safety and/or duty of care implications.

V Veteran. A tree considered a 'survivor' having endured injury, disease and/or decay, developing important habitat features such as decay, trunk hollowing, deadwood, fungal fruiting bodies (plus others) not solely as a consequence of time. Veteran trees are afforded additional protection within the planning system where they may be influenced by change.

A Ancient. A tree that has the features of a Veteran tree but has also surpassed the typical lifespan for its species. These trees may differ in appearance from a Veteran tree, such as having a thick/wide trunk and a small crown. Ancient trees are usually considered to have exceptional cultural significance. Ancient trees are afforded additional protection within the planning system where they may be influenced by change.

Safe Useful Life Expectancy (SULE)

Relates to the prospective life expectancy of the tree and is given as 4 categories:

1 = 40 years+;

2 = 20 years+;

3 = 10 years+;

4 = less than 10 years.

Crown Spread

Indicates the radius of the crown from the base of the tree in each of the northern, eastern, southern and western aspects.

Minimum Distance

This is a distance equal to 12 times the diameter of the tree measured at 1.5 metres above ground level for single stemmed trees and 12 times the average diameter of the tree measured at 1.5 metres above ground level tree for multi stemmed specimens. (BS 5837:2012, section 4.6).

RPA

This is the Root Protection Area, measured in square metres and defined in BS5837:2012 as "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". The RPA is shown on the drawing.. Ideally this is an area around the tree that must be kept clear of construction, level changes of construction operations. Some methods of construction can be carried out within the RPA of a retained tree but only if approved by the Local Planning Authority's tree officer.

Water Demand

This gives the water demand of the species of tree when mature, as given in the NHBC Standards Chapter 4.2 "Building Near Trees".

Visual Amenity	Concerns the planning and landscape contribution to the development site made by the tree, hedge or tree group, in terms of its amenity value and prominence on the skyline along with functional criteria such as the screening value, shelter provision and wildlife significance. The usual definitions are as follows:
Low	An inconsequential landscape feature.
Moderate	Of some note within the immediate vicinity, but not significant in the wider context.
High	Item of high visual importance.
Problems/ Comments	May include general comments about growth characteristic, how it is affected by other trees and any previous surgery work; also, specific problems such as deadwood, pests, diseases, broken limbs, etc.
Works Required (TS)	Identifies the necessary tree work to mitigate anticipated problems and deal with existing problems identified in the “Problems/comments” category.
Work Required (AIA)	Identifies the tree work specifically necessary to allow a proposed development to proceed.
Priority	<p>This gives a priority rating to each tree allowing the client to prioritise necessary tree works identified within the Tree Survey.</p> <p>1 Urgent – works required immediately;</p> <p>2 Works required within 6 months;</p> <p>3 Works required within 1 year;</p> <p>4 Re-inspect in 12 months,</p> <p>0 Remedial works as part of implementation of planning consent.</p>

BS 5837:2012 Terms and Definitions

Access Facilitation Pruning	One-off tree pruning operation, the nature and effects of which are without significant adverse impact on tree physiology or amenity value, which is directly necessary to provide access for operations on site.
Arboricultural Method Statement	Methodology for the implementation of any aspect of development that is within the root protection area, or has the potential to result in loss of or damage to a tree to be retained.
Arboriculturist	Person who has, through relevant education, training and experience, gained expertise in the field of trees in relation to construction.
Competent Person	Person who has training and experience relevant to the matter being addressed and an understanding of the requirements of the particular task being approached. NOTE - a competent person is expected to be able to advise on the best means by which the recommendations of this British Standard may be implemented.
Construction	Site-based operations with the potential to affect existing trees.
Construction Exclusion Zone	Area based on the root protection area from which access is prohibited for the duration of a project.
Root Protection Area (RPA)	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.
Service	Any above or below ground structure or apparatus required for utility provision. NOTE - examples include drainage, gas supplies, ground source heat pumps, CCTV and satellite communications.
Stem	Principal above ground structural component(s) of a tree that supports its branches.
Structure	Manufactured object, such as a building, carriageway, path, wall, service run, and built or excavated earthwork.
Tree Protection Plan	Scale drawing, informed by descriptive text where necessary, based upon the finalized proposals, showing trees for retention and illustrating the tree and landscape protection measures.

Veteran/Ancient Tree Buffer

A diagrammatic representation of the additional protection measures afforded to Veteran and Ancient Trees by the imposing of a geographical 'buffer' space between the Veteran/Ancient Trees and any potential activity such as construction, that may affect the trees. The buffer zones are calculated as follows:

For ancient woodlands, the proposal should have a buffer zone of at least 15 metres from the boundary of the woodland to avoid root damage (known as the root protection area). Where assessment shows other impacts are likely to extend beyond this distance, the proposal is likely to need a larger buffer zone. For example, the effect of air pollution from development that results in a significant increase in traffic.

For ancient or veteran trees (including those on the woodland boundary), the buffer zone should be at least 15 times larger than the diameter of the tree. The buffer zone should be 5 metres from the edge of the tree's canopy if that area is larger than 15 times the tree's diameter. This will create a minimum root protection area.

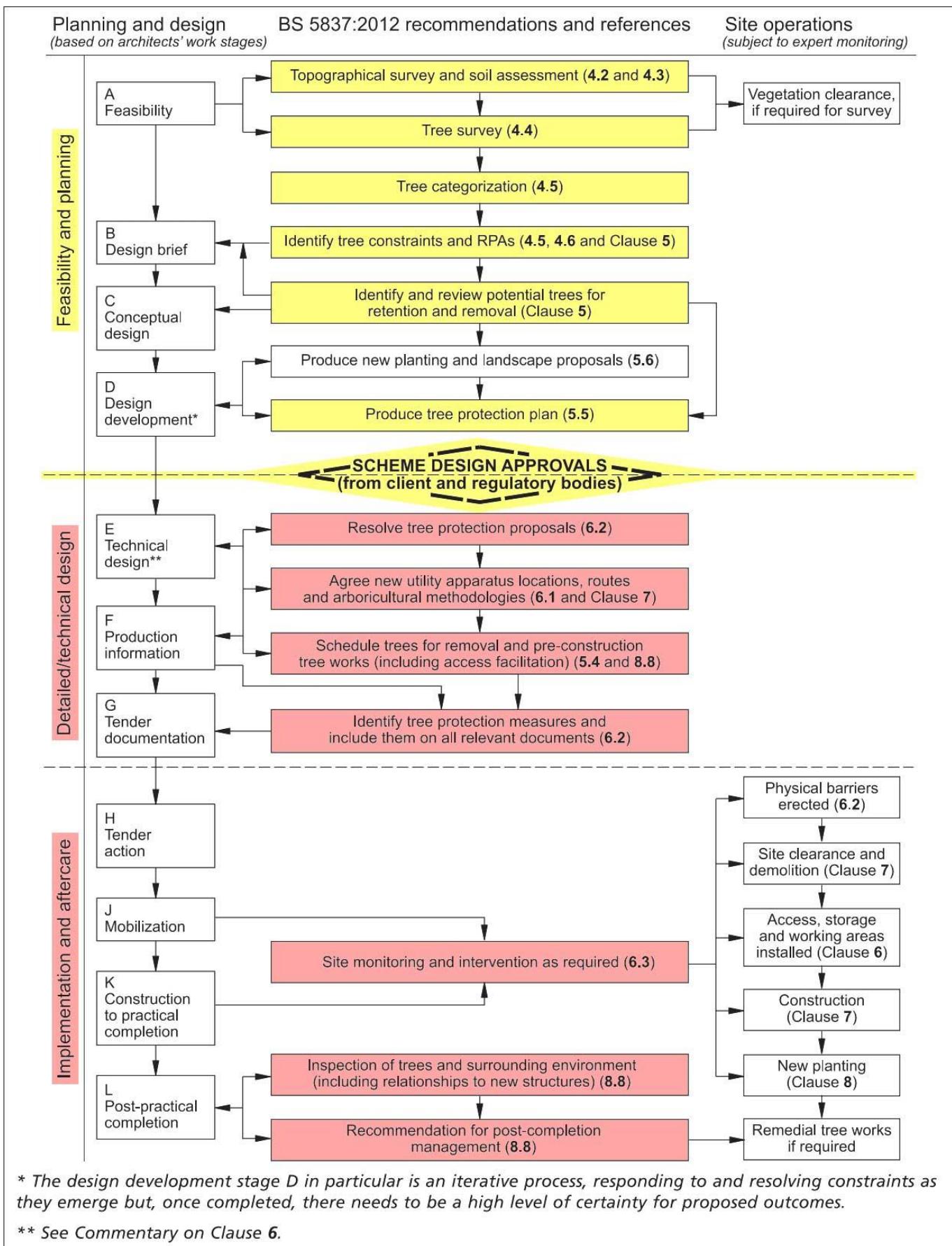
Where assessment shows other impacts are likely to extend beyond this distance, the proposal is likely to need a larger buffer zone.

Source: Natural England; The Forestry Commission; The UK Government Dept. for The Environment.

Appendix G

Advisory Information & Sample Specifications

1. BS 5837:2012 Figure 1 - Flow Chart – Design and Construction & Tree Care

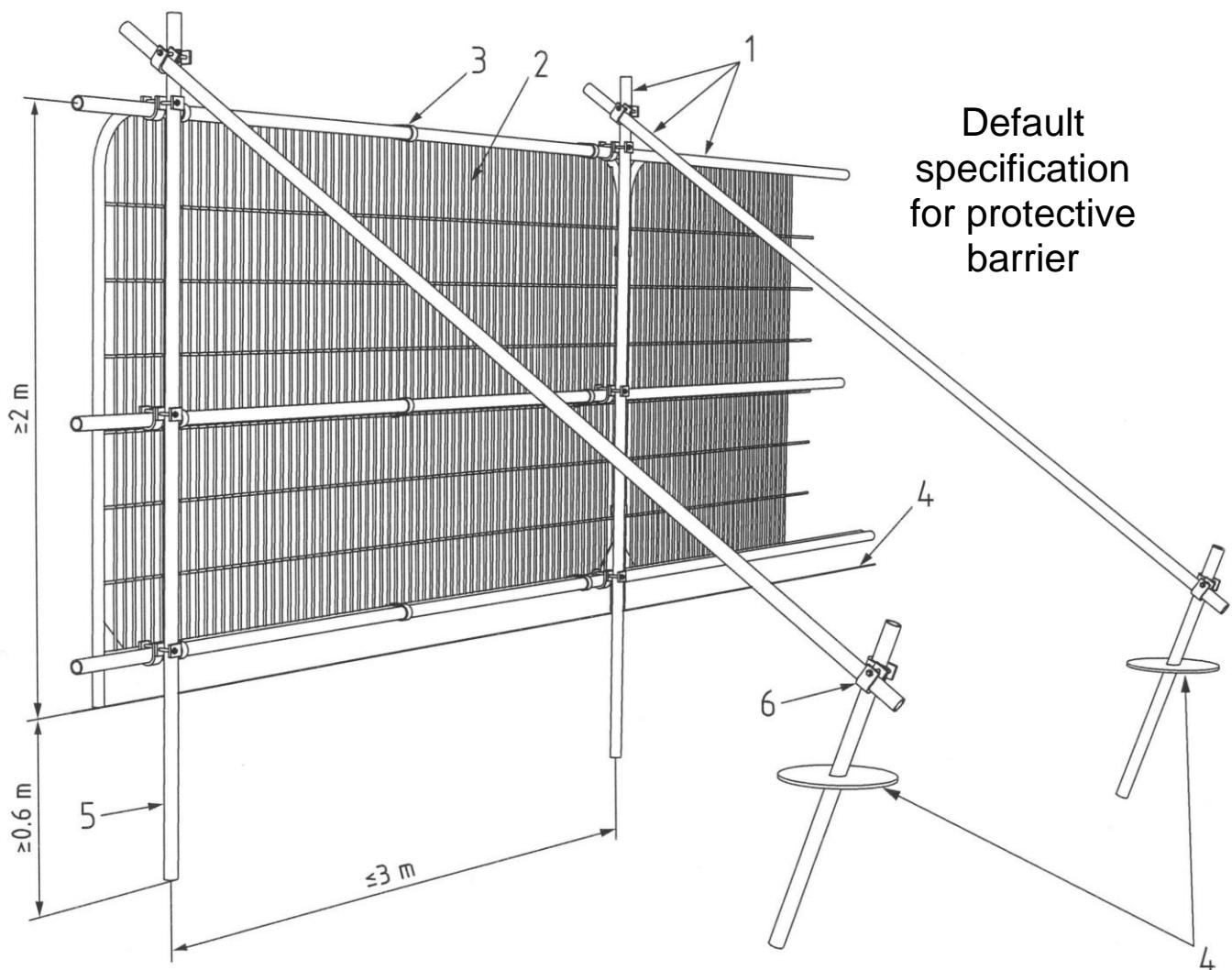


European Protected Species and woodland operations. (V4)

Complete all sections of the Checklist

Checklist		Details	
1 Are you within, or close to, the known mapped range of any of the protected species OTHER THAN BATS which are potentially everywhere? Tick any that apply. See distribution maps in the Good Practice Guidance for each species -	<input type="checkbox"/> Dormice <input type="checkbox"/> Otters <input type="checkbox"/> Great crested newts <input type="checkbox"/> Sand lizards <input type="checkbox"/> Smooth snakes	YES NO	Name of Wood: Grid Reference: Area: (ha) Date of Assessment: Name of Assessor:
2 Does your wood contain any of the following habitats? Tick any that apply.	<input type="checkbox"/> Old trees with holes and crevices which might be used bats <input type="checkbox"/> Species rich scrub/coppice, early growth stage plantations and forest interfaces <input type="checkbox"/> Rivers on which otters might be found <input type="checkbox"/> Ponds which might be occupied by great crested newts <input type="checkbox"/> Open areas on healthy soils	YES NO	
3 Have any of the protected species been recorded in this wood or on adjoining sites? Tick any that apply. Indicate which sources of information you have checked:	<input type="checkbox"/> National Biodiversity Network (www.nbn.org.uk) <input type="checkbox"/> Local Biological Records Centre <input type="checkbox"/> Local Wildlife Trust <input type="checkbox"/> Other <i>Specify Other:</i>	YES NO	
4 Have your inspections or any expert surveys found any of the following signs or evidence? Tick any that apply.	<input type="checkbox"/> Signs (e.g. otter spraint, nuts gnawed by dormice, leaves folded by newts) <input type="checkbox"/> Sightings (or echo-location) <input type="checkbox"/> Potential breeding or roosting sites (e.g. veteran trees, old trees with crevices, riverside hollow trees, ponds, timber stacks, large fallen deadwood) <input type="checkbox"/> Confirmed breeding or roosting sites (i.e. evidence of sites actually being used) <i>Details:</i>	YES NO	
CHECK POINT	If you have answered NO to ALL of the above then only bats need to be considered in your operations. If you have answered YES to any of the above then the species concerned must be considered as well as bats.		
5 Do the operations comply with Good Practice for bats and any other species found (or likely to be found in your wood) or can the operations be modified to do so? <i>Details: Use reverse of form to expand as required:</i>	YES NO	A licence is not required but continue to sections 6 and 7 below You will need to obtain a licence BEFORE carrying out the work (see EPS Licence Application Forms and Notes)	
6 <u>Whether or not a licence is required...</u> Has the information been communicated to operators (including the location of breeding sites and sensitive areas)? Tick any that apply.	<input type="checkbox"/> Included in documentation (e.g. contract, letter of instruction, site assessment or other management plan) <input type="checkbox"/> Shown to operators and/or their supervisor <input type="checkbox"/> Marked with paint or hazard tape <input type="checkbox"/> Shown on the site plan <i>Other means:</i>	YES NO	You may commit an offence if you do not tell your operators about the protected species in your wood.
7 Have arrangements for supervision been made to ensure Good Practice guidance is complied with during the operations? <i>Details:</i>	YES NO	You may commit an offence if you do not take steps to ensure that your operators comply with the Good Practice guidance.	

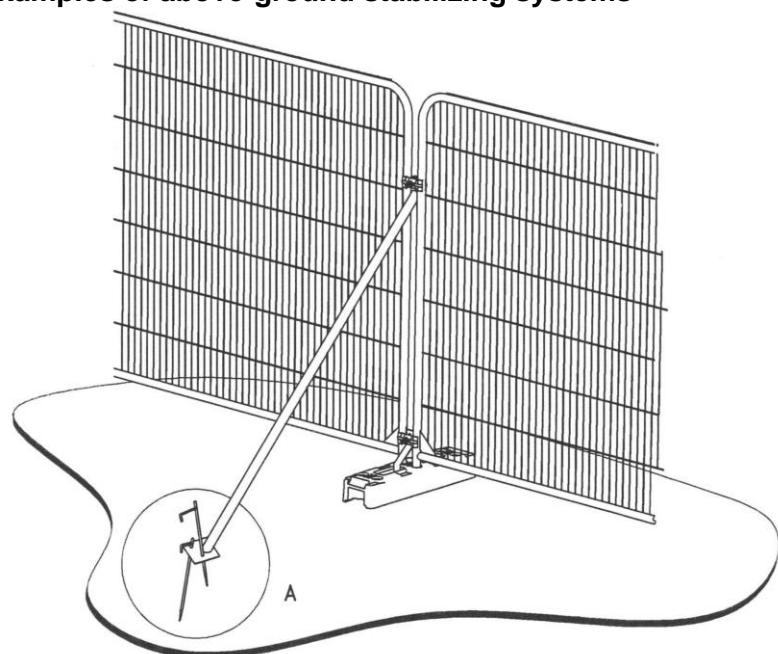
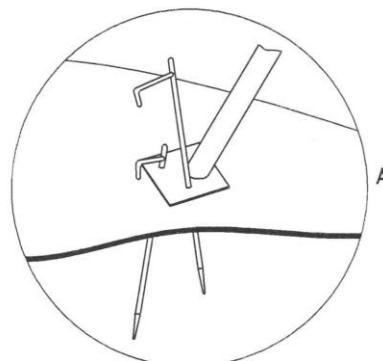
3. BS 5837:2012 Figure 2: Default specification for protective barrier



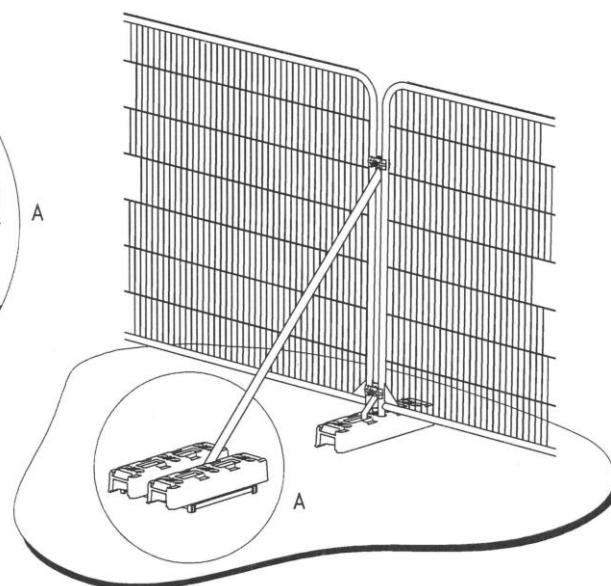
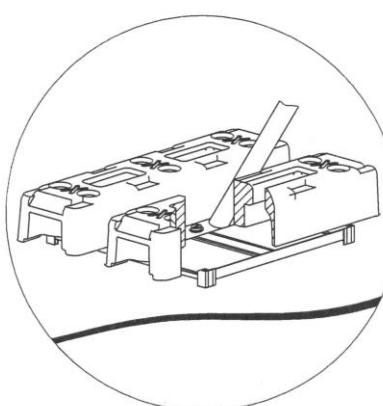
Key

- 1 Standard scaffold pole
- 2 Heavy gauge 2m tall galvanised 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 0.6m)
- 6 Standard scaffold clamps

4. BS 5837:2012 Figure 3: Examples of above-ground stabilizing systems



a) Stabilizer strut with base plate secured with ground pins



b) Stabilizer strut mounted on block tray

Appendix H

Hayden's Drawing

- Arboricultural Impact Assessments
- Arboricultural Method Statements
- Tree Constraints Plans
- Arboricultural Feasibility Studies
- Shade Analysis
- Picus Tomography
- Arboricultural Consultancy for Local Planning Authority**
- Quantified Tree Risk Assessment
- Health & Safety Audits for Tree Stocks
- Tree Stock Survey and Management
- Mortgage and Insurance Reports
- Subsidence Reports
- Woodland Management Plans
- Project Management
- Ecological Surveys

