# Arboricultural Impact Assessment, Tree Protection Plan, Method Statement
# Extension to Woodlands, Holt Road, Aylmerton

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## Contents

## 1. Introduction

1.1. This report is intended to assess the implications for existing trees and hedging within and surrounding the site of a proposed extensions to the existing house at Woodlands, Holt Road, Aylmerton. The development concerns the construction of a new large single story attached extension to the northern side of the house and works and alterations to the front elevation of the house (south). The development proposals are as indicated on the plans 4823/01 and 4823/02 with arboricultural information added April 2023 and developed from plans by Howes Designs Ltd. The report and plans are intended to provide sufficient information to address the required submission of arboricultural impact, tree protection and construction method details for a proposed Planning Application for the development. This report assesses the impacts of the proposed development (as set out in the plans accompanying this document) on the trees / large shrubs on, and where relevant, adjacent to the site, and uses this information to provide details of any proposed tree protection and construction methodology in relation to trees that may be recommended. The report was commissioned by Mr and Mrs Amis.

N. B. This survey is not intended to be a tree condition survey and should not be used to identify tree hazard/risk or provide information for risk indemnity purposes. The survey was carried out at a time of year when some pathogens / faults may be visible but it should be recognised that such pathogens (fungal fruiting bodies / issues with leafing etc.) are transitory and seasonal and that they may not be present when the survey was carried out. A full inspection for Health and Safety purposes would identify faults / make relevant recommendations on appropriate seasonal inspections for faults that may not be presenting at the time of the survey.

### 1.2. How to Use this Document

1.2.1. The document is divided into four main sections

1 - Introduction and Executive Summary of Findings

2 - Table of Trees (and Hedging if relevant) covered by the survey

3 - Assessment of Arboricultural Impacts of the proposed development

4 - Tree Protection Plan and Method Statement

1.2.2. The Executive Summary sets out the main points to consider in relation to this report and is intended to assist the Planning Officer / applicant in knowing what impacts the development will have and the general scope of tree protection and mitigation measures which we consider are necessary to employ to protect trees which are to be retained after development

1.2.3. The Impact Assessment considers the detail of what impacts we consider the development will have on the trees on the site (both in terms of trees / hedging removed and the impacts on the trees to be retained). This section provides the basis on which we then devise the Tree Protection Plan and Method Statement and is a justification for the elements which we have included in this section.

1.2.4. The Tree Protection Plan and Method Statement are the 'important / actionable' part of the document which should be presented to ALL persons who are to work on the site. It is of great importance that this part of the document AND the Tree Protection Plan which accompanies it (and which due to size may be a separate sheet) is held by the architect, the engineers (if present) and the site manager. The document should be available for inspection by all persons working on the site and held in the Site Office or on site in a suitable place. A toolbox talk should be held between the Site Manager and ALL those working on the site (as and when needed but certainly at the commencement of development and certainly at the commencement of any works which are in areas which are clearly indicated to be specially worked upon in this report) to identify working practices as recommended in this document and make sure that all those working on the site know exactly what they are doing and why. If there are any doubts over the actions to be taken please refer IMMEDIATELY to the arborist who can either attend the site / and or provide advice.

NOTE; If this document is part of a Planning Application/ or deals with works near to or within TPO/ Conservation Areas, it is likely to form a legally binding part of any Planning Permission/Tree Works Application, and failure to adhere to the recommendations in the document can either lead to prosecution (in the case of trees covered by a TPO / Conservation Area) or invalidate the Planning Permission. If in any doubt about anything related to development and trees - contact the Arboricultural Consultant…

1.2.5. This report is based upon the recommended procedure outlined in the revised version of the British Standard (5837:2012). The procedure requires that a survey of all the trees on the site is conducted which includes consideration of the following:

- The location, species, height, crown spread, condition, likely future development and projected lifespan (where appropriate) of all the trees on or adjacent to (and thereby potentially impacted on by any proposed development) the proposal site.

1.2.6. This data is then used to produce plans and document showing;

1. The Root Protection Area (RPA) for each tree based upon a formula (Diameter of trunk at 1.5m height in mm x 12 shown as a radiused circle from the base of the tree with or as a formula based on trunk diameter x number of trunks in the case of multiple trunked trees. The RPA may be offset or altered only for certain existing physiological issues within the growth area of the tree. The area of the rooting zone will not be less than that calculated.

2. The Tree Constraints Plan (TCP) - showing the RPA + any relevant other information such as tree shading issues / future growth potential of the trees.

3. The factors contained in the TCP are intended to inform the layout of the development proposals. The TCP is not a development exclusion zone, but imposes certain constraints and restrictions (in order to achieve the BS) on what can and cannot be constructed within the zones.

4. From the TCP and any submitted development layout, the arboriculturalist is intended to produce an Arboricultural Implications Assessment. This document uses the data produced to assess the risk of damage to the trees both during construction and into the future. Liveability issues should also be considered within this survey.

5. A Tree Protection Plan (TPP) will then be drawn up to show the finalised layout of the site development plan together with the location of all the trees to be removed / retained and the location and nature of any protective fencing. This will be in plan form and will constitute part of any future Arboricultural Method Statement.

6. Finally an Arboricultural Method Statement (AMS) may be required to be produced to say how any works which may impact on tree health will be undertaken to ensure that they minimise damage and comply with the standards set in the BS.

The survey was carried out on 21st March 2023 by C.J Yardley and represents a consideration of the condition of the site and trees at that time.

## 1.3. Executive Summary

The application will have the following impacts on trees and requires the following tree protection measures;

1. A single large Rhododendron T4 next to the western gable of the house is proposed to be removed to facilitate the development of the extension. The bush is classified as low amenity value. It is noted that there is a current tree works application for works to various trees throughout the site to address health and safety / arboricultural management objectives.

2. As required by the policy guidance in the NPPF (2021) and NERC Act 2006, mitigation planting should be considered if there are changes to the ecological value of the site. In our opinion, the removal of T4 does not materially alter the ecological value of the site and this element is not triggered. However, replacement planting is likely to be required for works carried out under the tree work application (see report by David Gillett 5th January 2022)

3. No works are proposed to be undertaken to the canopies of trees to facilitate the development of the new extensions although it should be noted that there are works proposed by the separate tree works application (these works are not repeated in this report)

4. The development of the northern extension will be close to, but will not enter into the root protection area of T3 the large Sweet Chestnut. This would technically not enter the RPA but it is probable that roots will be encountered. The works will need to conform to the recommendations in Section 4 of this report to avoid harm to the tree. If the works are carried out as recommended, the impact is assessed as NEGLIGIBLE on the tree.

5. No information on the location of services was provided to us but from an assessment of the internal layout of the building and likely roof water discharge provision we would conclude that it would be possible to locate all such features in positions on the property well beyond the RPA of trees. **Therefore if any such features are proposed within the RPA of trees, this would require the submission of the route / type of service and suitable installation methodology prior to the works commencing in order to vary the findings of this report/ provide a suitable tree protection method should the report**

**form part of a Planning Consent or should they affect trees in a Conservation Area / TPO. It should be noted that there is no 'deemed consent' for such works as part of a Planning Consent unless otherwise expressly shown on documents which form part of that consent. Installation of any services to the WEST of the house would require separate consent as they would be likely to impact on the RPA of T3.**

6. The development does not propose any additional surfacing or boundary treatment issues within the RPA of trees. If any such works – or other structures are proposed within the RPA of trees on / adjacent the site, this would invalidate the findings of this report and would require a separate application to vary the findings of this report should the report form part of a Planning Consent or should they affect trees in a TPO/Conservation Area

7. The proposed development will experience additional shading to the western aspect of the new proposed rear extension area. This is mitigated by the small windows / secondary outlook from this elevation and the primary elevation is to the north which cannot by reason of its aspect, be shaded.

8. The new northern extension will also move the habitation area of the property slightly closer to the large Silver Birch T5 but would not alter the relationship of the house with the large Sweet Chestnut T3. Overall, our assessment is that overbearing issues will be moderately increased (in relation to proximity to T5), but actual target potential (risk factor presented by the trees to property) will be largely unchanged.

9. Construction access to the site will be via the existing driveway access to the property from to the south side of the area of the building affected. There are significant tree constraints operating on this which will require the use of a weight restriction on access in the vicinity of several large trees beside the driveway and the provision of protective fencing

10. In general, the works will require tree protection fencing, ground protection matting for access to the rear of the dwelling for the construction of the new rear extension, a suitable methodology for the installation of footings together with suitably located service routes to avoid the need to work within / adopt additional special installation methodology for, working with trees. The areas for materials storage and handling will be designated to be areas to the east or west of the main house and outside the Root Protection Areas of trees

11. Subsequent landscaping to the site will need to be undertaken with due regard for the root protection areas of trees

## 1. 4. Site Description.

1.4.1. The site is located in a group of houses outside the main village area and distributed along the A148 Holt Road. This property is positioned to the northern side of the roadway and is the first of a group of several such properties (easternmost). The property consists of a large detached post war brick and tile house set well back from the roadway and accessed by a driveway off the main road to a large gravelled turning and parking area to the front of the house. A garage is located to the eastern side and

there is a swimming pool / building to the rear. The property stands within large grounds which are largely wooded but with some lawned areas to the south, south west and north

1.4.2. To the western side of the site, the property adjoins another large detached dwelling also set within woodland and to the north and east, the property adjoins open arable land. To the south is the A148

1.4.3. The extent of the site is shown very approximately in plan below


1.5. Development Proposal for Site

1.5.1. The development proposals concern the construction of a new northern single story extension and various works to remodel the front and interior of the dwelling. These are shown in more detail on plans 4823/01 and 4823/02 by Howes Designs Ltd.

1.5.2. It is not known what service routes may be affected by or installed to service the new extensions. We have assumed that no works to install/alter or upgrade/connect to service would be required within the RPA of trees. Other works within the RPA of trees would require additional consents under the Planning legislation if not included in this report if the report forms part of a Planning Approval.

1.6. Current Ground Cover and Boundary Treatments

1.6.1. The existing site comprises areas of lawns, shrubberies, flower beds, woodland and hard surfaced driveway / access areas

1.6.2. The relevant boundaries of the site are as follows;

1. The eastern boundary is formed by a mixed native species hedge – thin in places, together with a new close boarded fence to the north eastern side of the house
2. Other boundaries are too far from the development area to be relevant

1.6.3. There are no hedges on or adjacent to the site which would be subject to the Hedgerow Regulations 1997

1.7. Levels

1.7.1. The site has some moderate to significant level changes. The land falls slightly to the south west and west of the main house, rising again towards the northern side and then steeply rising to a raised grassed terrace approx. 9m from the rear of the existing dwelling which appears to date from the period when the house was constructed (1950s)

1.8. Soil Type

1.8.1. The soil type across the site is a complex structure of sands and gravels interspersed possibly and occasionally with layers (which could give localised shrink ability) – British Geological Society online maps. On site discharge of water to ground soakaways should be functional. Detailed investigation of the soil structure on the site should inform construction footings depths, and should be aware of the potentially shrinkable soils especially near trees

1.9. Trees on/adjacent to the Site

1.9.1. There are 19 individual trees and groups of trees, together with 4 hedges on the site which are potentially affected by the proposed development and which are included within the survey. The trees near to the proposed development will need to be protected by suitable ground protection / fencing during the construction process to the requirements of BS5837:2012 - and or by other mitigation and protection measures as considered necessary.

1.9.2. We have been made aware by the property owner that all the trees on the site are subject to a Tree Preservation Order. The site is not within a Conservation Area and therefore is not subject to the Conservation Area Regulations as affecting trees which require all works to above and below ground features of trees (including general excavation / installation of services / installation of surfacing as well as above ground lopping of boughs) to be notified to the Council a minimum of 6 weeks prior to commencement. It is not known if the trees are subject to any residual Planning Condition affecting their retention or management. **These factors are not fixed and may be liable to change, and it is therefore recommended that prior to any works commencing on trees on or adjacent to the site - above or below ground (including excavating trenching for services or installing surfacing) - that reference is made to the Council to ascertain if consents are required. This is particularly important where known TPOs /Conservation Areas are present which would affect the installation of surfacing, boundary treatments and any service installations which required excavation**

Local Policies

1.9.5. The Council has planning policies in place to protect important trees as part of the planning process (by the serving of Tree Preservation Orders or placing of Planning Conditions on Permissions) as part of planning policy within the emerging Local Plan (formerly LDF) Development Control policy structure.

1.9.6. Normally accepted scope of inclusion of trees to 15m from the site boundaries have been included in this survey unless otherwise agreed due to relevance.

## 2. Tabulated Assessment of the Trees on the Site - Tree Constraints Details

2.1. The trees on the site have been assessed in relation to the provisions in the BS and the information is presented in tabular format. The tables include all the relevant data required to assess the constraints (in construction terms) that the trees present and this data has been used to develop the Tree Protection Plan which accompanies this document. Details of the features included in the data collection and assessment are set out below in the Notes.

*Notes on Tables*

- All measurements are given in metres.
- 'DBH' is the diameter of the trunk/s at breast height (1.5m)
- Crown Spread is the limit of the crown of the tree at its maximum and is recorded as a diameter. On the plans the crown spread is shown in its actual form i.e. frequently asymmetrical.
- Age Class is assessed and described as set out in BS 5837 Table 1, where; Young Trees are aged less than 1/4 life expectancy; semi-Mature Trees are between ¼ and ½ life expectancy; Early Mature Trees are over ½ life expectancy, Mature trees are over 2/3ds life expectancy and Over Mature are effectively in decline.
- Tree Vigour is assessed as being either Good, Fair, Poor or Dead as set out in BS 5837
- Root Protection Distance (as shown as a dashed and dotted line on accompanying plans) is assessed based on the BS 5837 section 4.6 based on the diameter of the trunk at 1.5m height in mm x 12 and shown as an area based on the premise that the distance - diameter x 12 = radius of circle of RPA area. Trees with more than one stem are calculated differently. Trees with 2 - 5 stems are calculated as the square root of the combined (added) stem diameters all of which are individually squared. For more than five stems, the result is the square root of the mean stem diameter squared which has been multiplied by the number of stems.
- Canopy Spread is shown at the four cardinal points and is also shown as a constraint (continuous or repeated line on accompanying plans).

- Shading issues (as described in Section 5.3.1) are shown on accompanying plans as a ‘segment with its centre at the centre of the tree and radiating outwards as straight lines to the North West and east with the area between them radiused with a dashed line.

- The Useful Life Expectancy of the tree is shown in periods ranging between <10 yrs, 10+, 20+, 40+yrs (in accordance with Section 4.4.2)

- Where any work that may, in the opinion of the surveyor, be required to the tree in order to enable the proposed development to take place, or where changes to the use of the land (i.e. to garden) may change the risk posed by the tree/s, such work is indicated in the Comments section of the table. All work recommended will accord to BS 3998:2010, and be based on the principle that the tree takes primacy over the proposed development (unless it is adjudged to be of poor amenity value), and works will only be recommended that accord with the retention of the tree in good health.

- Tree Retention Category this is the product of the surveyor’s opinion of the importance of the tree in terms of its individual features. The assessment is made on the basis of the criteria set out in BS5837:2012 and is described in the Table 1 summarised from the British Standard on the following page;

Table 1 **Cascade chart for tree quality assessment**

| Category and definition | Criteria (including subcategories where appropriate) | | | Identification on plan |
|---|---|---|---|---|
| **Trees unsuitable for retention** (see Note) | | | | |
| **Category U**<br>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)<br>• Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline<br>• Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality<br>*NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see **4.5.7**.* | | | See Table 2 |
| | **1 Mainly arboricultural qualities** | **2 Mainly landscape qualities** | **3 Mainly cultural values, including conservation** | |
| **Trees to be considered for retention** | | | | |
| **Category A**<br>**Trees of high quality** with an estimated remaining life expectancy of at least 40 years | Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue) | Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features | Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture) | See Table 2 |
| **Category B**<br>**Trees of moderate quality** with an estimated remaining life expectancy of at least 20 years | Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation | Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality | Trees with material conservation or other cultural value | See Table 2 |
| **Category C**<br>**Trees of low quality** with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm | Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories | Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits | Trees with no material conservation or other cultural value | See Table 2 |

**Table 2 -**

How to read the tree table -

The tree table below is split into sections which detail the height, spread and form of the tree together with other important information relating to the diameter of the trunk - DBH - (which provides the data for determining the root protection area (RPA)), age class of the tree (what stage of its development it has reached); its condition and the amenity contribution that it makes together with its formally assessed 'retention category' or amenity rating (see table 1) as assessed using the BS criteria. These factors are used to provide the data which is transposed onto the development plan and which provides the 'Tree Constraints' on this plan. The data is then used to help determine our assessment of the impacts of development, the location of any tree protection and any remedial measures which will help to protect and ensure the health and retention of those trees which are shown to be retained after the development is completed

| **Tree No.**<br><br>The number given to each tree on the plan | **Species**<br><br>Given as the common name unless the Latin name only is known | **Height Metres**<br>The height of the tree | **Crown Spread metres**<br>The spread of the tree either as a radius from the centre (to each cardinal point N, S, E or W) or as a diameter where this is acceptable | **DBH mm /Radius RPA m**<br>The 'diameter of the trunk at breast height' - this is used to work out the radius of the root protection area (in metres) | **Vigour / Age Class**<br><br>The vigour is either low or normal.<br>The age class varies from Young to Over Mature in five more or less equal sections relating to the five 'stages' of development of the tree - varies with the species as to how many years this may be. | **Condition / amenity contribution / under crown clearance**<br><br>A broad guide to the condition of the tree from a superficial ground level inspection. The condition rating is not to be used for health and safety purposes and is not a substitute for a detailed tree condition survey but will indicate the approximate condition of the tree and highlight any major faults if clearly visible. Where these are not visible (ivy obscuring the trunk) this may be highlighted. It is always advisable to have a formal tree condition survey for indemnity purposes.<br>Amenity contribution highlights any special amenity value that the tree/s may present<br>Under crown clearance is intended to provide a guide to allow assessment of whether or not crown lifting would be needed to gain access beneath the tree for development or other purposes | **Retention category**<br><br>The formal British standard amenity classification which ranges from 'A to U' see Table 1 |
|---|---|---|---|---|---|---|---|

**Table 2 – Trees which are included in the Tree Survey**

| | Tree No. | Species | Height metres | Crown Spread metres | DBH/RPA in mm | Vigour / Age Class and remaining years | Comments: | First main branches (N, S, E, W) and minor bough outer canopy clearance (CC). Amenity Classification |
|---|---|---|---|---|---|---|---|---|
| G | 1. | 4 x Holly | 5 | 3S 2E 2W 1N | Av 100 | N/SM | Fair condition – small clump forms with canopy of T2 | CC g/l C2 |
| T | 2. | Holly | 7 | 2S 4E 2W 3N | 270 + 150 | N/M | Reasonable condition | CC 1.5m B2 |
| T | 3. | Sweet Chestnut | 18 | 10E 11S 9N 11W | 1200 | N/M | Reasonable condition – what can be seen. Open spreading forms ivy & shrubs obscure lower trunk & canopy | N @ 2m (500) lat/rising<br>NE @ 3m (450) lat thin rising steeply & turns E<br>SE @ @3m (450) latual<br>CC 5-7E, 12N 3-4 S A2 |
| T | 4. | Rhododendron | 6 | 2E 4S 4W 2N | 6x120 | N/M | Fair condition – large bush form | CC 2m C2 |
| T | 5. | Silver Birch | 20 | 6E 6S 6N 5W | 500 | N/M | Fair condition what can be seen – ivy | CC > 8m all round B2 |
| T | 6. | Holly | 12 | 5E 4S 3W 3N | 2x300 5x160 | N/M | Reasonable condition – complex trunk unions but dense canopy/good form | CC 1.5m B2 |
| T | 7. | Beech | 19 | 9S 10W 8E 7N | 700 + 500 | N/M | Fair condition. Complex main trunk unions @ 1.4 & 2m & 3m – comp forks + inc bark. Minor old cavity @ 2.5E. Canopy has been reduced on S side – poorly with stubs to lessen the weight on the South main trunk (poor union) Electricity box screwed on the SE Trunk | CC 7-8m S 7m E 5m W A2 |
| T | 8. | Oak | 10 | 3S 4E 5W 5N | 450 | L/EM | Fair condition what can be seen. Canopy has been significantly reduced by thinning. Low vigour + canopy density | CC 6m W<br>5m N<br>7m S B2 |
| T | 9. | Oak | 9 | 5S 4E 4W 3N | 500 | L/EM | Fair condition – as above | CC 7m W<br>4m S B2 |
| T | 10. | Oak | 17 | 5W 7E 7W 5S | 600 | L/M | Fair condition – some boughs lost in upper canopy | CC 2m HE 5+ m ……B2 |
| T | 11. | Beech (0873) | 18 | 13E 9N 8S 8W | 750 | N/M | Poor condition – severely decayed. Fire damage | U |
| T | 12. | Oak | 18 | 8E 6N | 500 | N/M | Fair condition what can be seen – ivy Canopy | CC 4m E over drive – |

| | Tree No. | Species | Height metres | Crown Spread metres | DBH/RPA in mm | Vigour / Age Class and remaining years | Comments: | First main branches (N, S, E, W) and minor bough outer canopy clearance (CC). Amenity Classification |
|---|---|---|---|---|---|---|---|---|
| | | | | 6S 3W | | | biased E | can be lifted to 6m < 20m A2 |
| T | 13. | Oak (0872) | 12 | 5S 5E 0N 0W | 380 | L/M | Fair condition what can be seen – ivy Strong grown lean to SE + canopy bias | CC 2.5m over ent – can be lifted to 5m < 20m B2 |
| T | 14. | Beech | 16 | 8S 7W 8N 8E | 750 | N/M | Reasonable condition – well formed. Note phone line @ 5m on W side of canopy | CC 5m NW A1 |
| T | 15. | Beech | 16 | 10 Dia | 400 | N/EM | Reasonable condition | CC 5m W B2 |
| T | 16. | Scots Pine | 17 | 3S 2E 2N 2W | 450 | N/M | Reasonable condition what can be seen – ivy | CC 4m E 10m W B2 |
| T | 17. | Sweet Chestnut | 17 | 8S 2W 2E 0N | 400 | L/EM | Fair condition – strong canopy bias S partly due to previous tree works | CC 3.5m S 3m W < 20m B2 |
| T | 18. | Beech | 17 | 7S 4W 7N 7E | 2x500 | N/M | Fair condition what can be seen – due to ivy – main trunk union @ 1.5 compression fork – canopy has been suppressed to West probably due to tree formerly removed | CC 1.7m N 4.5m W&S A2 |
| T | 19. | Beech | 9 | 5N 4W 4E 5S | 800 | N/M | Fair condition – massively reduced – badly – lots of regrowth. Note position of phone line | CC 5m B2 |
| H | 1. | Conifer | 1.5 | 600 | 100 | N/M | Fair condition | C2 |
| H | 2. | Conifer | 1.4 | 600 | 100 | N/M | Fair condition | C2 |
| H | 3. | Hawthorn | 1.3 | 500 | 70 | N/M | Fair condition | B2 |
| H | 4. | Hawthorn + Conifer + Oak | 2-4 | 1-3 | Av 150 | N/M | Fair condition – sparse on places | B2 |

Condition Key (Vigour / Maturity)

| | | |
|---|---|---|
| Vigour: | L | Low |
| | N | Normal |
| Maturity: | Y | Young |
| | EM | Early Mature |
| | SM | Semi Mature |
| | M | Mature |
| | OM | Over Mature |

- Good condition – no obvious faults which would reduce the life expectancy of the tree, a good form with a full canopy.
- Reasonable condition. Some minor to moderate faults which will reduce the life expectancy of the tree or a tree with some degree of decline but which has good form and reasonable canopy density for the species.
- Fair condition. A tree with significant faults which will reduce the life expectancy. Probably with faults that require surgery and which will reduce the amenity of the tree. A tree with poor form and thin canopy.
- Poor condition. A tree near the end of its life or one with sever faults which may be correctable with surgery or may not but which will probably leave the tree in a form which is poorly structured.

## 3. Arboricultural Implications Assessment of trees on the site from the details contained in Table 2 above

3.0.1. The assessment has considered all the trees and hedges in the vicinity of the proposed development together with those which in our opinion may be affected by the requirements to access the working area to construct the new development, or where new services may be installed - the survey does not include all trees on the site. The trees which are included within the survey area comprise the following groups;

> The trees in the survey area are part of a wider area of woodland associated with land to the north of the A148 – parts of which have been developed for housing where the houses have 'carved out' gardens from what is a continuous area of woodland. Trees therefore tend to be larger mature woodland types including Beech, Chestnut, Birch and Oak

3.0.2. The assessment below has been carried out to the recommendations contained in the British standard BS 5837:2012. Where necessary, and due to the specific nature of the trees and constraints / development imposed, interpretation within the Guidance has been made.

3.0.3. Development proposals contained on the plans 4823/01 and 4823/02 developed from plans by Howes Designs Ltd with arboricultural information added April 2023 show the layout of the proposed development and access etc. and indicates the relationship between the trees and the proposed structures.

3.0.3. These features have all been considered in detail in the following assessment process and have been used to develop protection and mitigation strategies which are included in the final chapter of the report 'Tree Protection Plan and Method Statement'

3.0.4. The plan 4823/01 and 4823/02 developed from plans by Howes Designs Ltd with arboricultural information added April 2023 indicates the location and extent of proposed development of the site. The location and canopy spread of the trees is also indicated together with the Root Protection Area. Additional information is added in the form of the location of protective fencing around the trees and special measures areas (for certain construction processes). This additional information forms the elements of the Tree Constraints Plan and Method Statement.

### 3.1. Overall Conclusions of the Amenity Value of the Trees on the Site/ Tree Constraints

3.1.1. Some indication of the relative amenity value of the trees on and adjacent to the site has been discussed above, this section provides additional detailed assessment of the site and the area.

3.1.2. The individual British Standard amenity classification value of the trees is appended to each tree in Table 2 and varies between tree/s which are of High amenity value as individuals or groups of trees (A1 / A2) together with a larger number of moderate amenity value trees which are members of groups of trees or individuals (B1

and B2). There are a small number of low amenity trees ./ shrubs / hedging and there is also one unclassified condition due poor condition.

3.1.3. The principle trees within the survey group are T3 – a very large / old Sweet Chestnut; T7 – a fine Beech of good form; T14 a mature Beech of good form located in a prominent position and T18 a similarly large Beech in a prominent edge of site position. All are classified as high amenity value for their form, presence in the landscape and contribution to the overall woodland character of the site within the AONB. The woodland as a whole is classified as High amenity value – part of the 'Wooded Ridge' North Norfolk Character Area (see NNDC Landscape Character Assessment 2021)

3.1.4. Other trees on and adjacent to the site provide varying degrees of support or presence to the either the woodland or the garden setting of the property and are mostly rated as moderate amenity value unless of particularly poor form or small size.

**3.2. Future Development of the Trees.**

3.2.1. This assessment has only considered those trees which in the opinion of the surveyor may be impacted upon by the proposed development (constrained).

3.2.2. None of the trees near to the proposed development (particularly T3, T5, T6 and T7) have any significant future growth potential as all are fully mature. Therefore, the proposed development will not constrain their future development and the impact on this aspect of tree impact from development is assessed as NEGLIGIBLE

**3.3. Tree / hedge Removals and Replacements**

3.3.1. A single large Rhododendron T4 next to the western gable of the house is proposed to be removed to facilitate the development of the extension. The bush is classified as low amenity value. It is noted that there is a current tree works application for works to various trees throughout the site to address health and safety / arboricultural management objectives.

3.3.2. As required by the policy guidance in the NPPF (2021) and NERC Act 2006, mitigation planting should be considered if there are changes to the ecological value of the site. In our opinion, the removal of T4 does not materially alter the ecological value of the site and this policy element is not triggered. However, replacement planting is likely to be required for works carried out under the tree work application (see report by David Gillett 5th January 2022)

**3.4. Canopy Spread and Canopy Clearance Issues**

3.4.1. The proposed development does not require the alteration of the canopies of any trees or hedging to facilitate the works.

3.4.2. It should be noted that other tree works associated with the health and safety survey by D Gillett are proposed as a separate and not associated element. These are not repeated in this report.

## 3.5. Root Protection Area

3.5.1. The root protection area of trees is shown as a dotted and dashed circle around trees on the plan. The British Standard default recommendation suggests that no development should be undertaken within the root protection area of trees unless it is unavoidable or unless the tree/s concerned are of low amenity value. The BS does however allow for some works to be undertaken within the RPA of trees subject to the assessment of a suitably qualified arboricultural surveyor but generally assumes that these will be minimal, peripheral and localised, and that the area of the RPA will be part of an exclusion zone (construction exclusion zone CEZ) around the trees which will be fenced off from all access during construction. Therefore, usually such an area will be closed off from works until any which are deemed acceptable (such as driveway constructions) actually need to take place and preferably at the conclusion of other developments on the site.

3.5.2. The development has considered the RPA of the trees adjacent to the site in relation to the proposed development. The key points which are considered relevant are;

Construction of new extension – near trees

3.5.3. The development of the northern extension will be close to, but will not enter into the root protection area of T3 the large Sweet Chestnut. This would technically not enter the RPA, but it is probable that roots will be encountered. The works will need to conform to the recommendations in Section 4 of this report to avoid harm to the tree. If the works are carried out as recommended, the impact is assessed as NEGLIGIBLE on the tree.

Installation of Services near trees

3.5.4. No information on the location of services was provided to us, but from a provisional assessment of the internal layout of the building and likely roof water discharge provision we would conclude that it would be possible to locate all such features in positions on the property beyond the RPA of trees – directing services to the eastern side of the house as existing. **Therefore if any such features are proposed within the RPA of trees, this would require the submission of the route / type of service and suitable installation methodology prior to the works commencing in order to vary the findings of this report/ provide a suitable tree protection method should the report form part of a Planning Consent or should they affect trees in a Conservation Area / TPO. It should be noted that there is no 'deemed consent' for such works as part of a Planning Consent unless otherwise expressly shown on documents which form part of that consent. Installation of any services to the WEST of the house would require separate consent as they would be likely to impact on the RPA of T3.**

Installation of new surfacing or other features near trees

3.5.5. The development does not propose any additional surfacing or boundary treatment issues within the RPA of trees**. If any such works – or other structures are proposed within the RPA of trees on / adjacent the site, this would invalidate the findings of this report and would require a separate application to vary the findings of this report should the report form part of a Planning Consent or should they affect trees in a TPO/Conservation Area**

Construction Access in relation to Trees

3.5.6. Construction access to the site will be via the existing driveway access to the property from to the south side of the area of the building affected. There are significant tree constraints operating on this which will require the use of a weight restriction on access in the vicinity of several large trees beside the driveway and the provision of protective fencing around trees

**If for any reason this is altered, this will invalidate this report and a revised report and Tree Protection Plan will need to be submitted and agreed with the LPA prior to commencement of development**.

3.5.7. The use of ground protection matting will be necessary for the construction of the new northern extension (to access the area via the western side of the existing house) for working access in addition to tree protection fencing to exclude access to other areas not directly associated with access to the working zone around the extension (as to be shown on the Tree Protection Plan).

3.5.8. Materials storage should be located outside the RPA of retained trees – possibly to either the south western or eastern side of the house but not on areas of the driveway unless ground protection matting is applied and NOT for sand / cement products which present a contamination problem to the rooting areas of trees

## 3.6. Shading Issues

3.6.1. The issue of liveability - particularly shading and perceived tree hazard - to occupants' resident within the properties should be considered carefully. Whist these are not physical constraints to development of the properties, they should inform the nature of the development. The BRE have produced a considerable amount of guidance upon shading related issues which is distilled in two booklets (Environmental Site Layout Planning – Littlefair P. J. et al 2000; and Site Layout Planning for Daylight and Sunlight – a guide to good practice; Littlefair P. J 1991 revised 2011. The BS 5837:2012 makes reference to seeking guidance from these sources. However it remains as 'guidance' and does not confer rules even to the same degree as that for root protection areas, nevertheless they are good starting points for considering the relationship between housing, gardens and peoples reaction to trees within their proximity.

3.6.2. The main issues that tend to present with liveability of trees in relation to property are;

- Shading – direct and indirect light obstruction by trees.
- Overbearing and the 'fear' of trees falling or being 'close'

3.6.3. The proposed development will experience additional shading to the western aspect of the new proposed rear extension area. This is mitigated by the small windows / secondary outlook from this elevation and the primary elevation is to the north which cannot by reason of its aspect, be shaded.

3.6.4. The new northern extension will also move the habitation area of the property slightly closer to the large Silver Birch T5 but would not alter the relationship of the house with the large Sweet Chestnut T3. Overall our assessment is that overbearing

issues will be moderately increased (in relation to proximity to T5), but actual target potential (risk factor presented by the trees to property) will be largely unchanged.

## 4. Method Statement and Tree Protection Plan

4.0. The tree protection plan details set out below provide information on how to protect and avoid damage to trees on and adjacent to the site during and after the development process. Damage to trees occurs in several main ways from construction processes and these are set out below.

- Tracking of vehicles over root protection areas
- Excavating within root protection areas
- Storage of materials within root protection areas
- Leakage of toxic chemicals within root protection areas - or near to them
- Physical damage to above ground parts of the trees by collision with vehicles or equipment

4.0.1. The tree protection plan therefore sets out to provide information which can be followed to avoid the risk of damage occurring, and / or where damage is inevitable (such as where vehicles have to cross over a root protection area of a tree) minimise the amount of damage occurring.

4.0.2. The tree protection operations below relate to specific items on the site in specific locations and this should therefore be read with the plans, as each area within the site is unique and presents different tree protection requirements.

4.0.3. These physical constraints have been taken into account as far as practicable, the relevant sections of the Tree Protection / Method Statement recommendations below. To a large extent, the constraints actively militate to assist in protecting trees by restricting the size and type of vehicle and construction process that can be used. The development requires a number of specific procedures and these have been considered in relation to the tree protection issues discussed in Section 3 above. The main points are set out in the summary below with each point being expanded upon in the following text;

### 4.1. Summary of Construction Method Processes in relation to Trees on and Adjacent to the Site

1. Prior to any other development occurring on the site including storage of materials, access the site with construction vehicles, scraping the surface vegetation from the site or undertaking site level changes, protective fencing and or ground protection will be erected around the trees and hedging to be retained as indicated by the YELLOW HATCHED area on the plans for ground protection (to specification BS5837) and SOLID YELLOW line indicates where existing or Herras type fencing must be retained or installed to prevent access into areas within the RPA of trees which do not have ground protection measures. This will

ensure that the trees are protected adequately from accidental damage. The construction of the ground protection and fencing is detailed below.

2. Where shown by the BLUE OUTLINE on the plans, the installation of the footings for the new building close to the tree rooting areas will be installed as set out below

3. The installation of any services (excepting those which conform to the statements in the text section below) to and from the new building will be agreed in writing with the District Council prior to installation (if applicable).

4. No other structures or surfacing will be installed within the RPA of trees unless otherwise agreed in writing with the District Council.

5. All post development landscaping to the site will be carried out as set out in the Landscaping Section below.

**4.2. Protective Fencing/ Construction Exclusion Zone site Access**.

4.2.1. Prior to the commencement of any development on the site including site clearance, access by vehicles, storage of materials or demolition, ground protection and or temporary protective fencing (as shown on the plans by the YELLOW HATCHED / YELLOW LINE areas respectively) will be installed where shown. **Both shall conform to BS5837:2012 specifications as shown in the Appendix.**

Ground Protection Specification - summary

4.2.2. Ground protection will be provided which is adequate for the type of usage to which it will be subjected and must conform to the specification set out in the Appendix – a summary is set out below.

- For pedestrian access and vehicles up to approx. 3.5 tons, either scaffold boards or plywood sheeting approx. 20mm thick will be laid over an impermeable plastic membrane (DPM sheeting is adequate) and layer (min 100mm) of wood chippings or washed aggregate to level the ground and ensure that the pressure of traffic is evenly distributed over the ground.

- For larger vehicles a proprietary system such as Rola Trac, Ground Guards or similar (including steel sheeting of min 8mm thick) can be used - again over a bedding layer of aggregate or wood chippings (min 150mm) to ensure that the pressure is evenly distributed over the area of the panels

Fencing Specification - summary

4.3.3 Where new temporary protective fencing is required to provide an exclusion zone around the Root Protection Areas of trees, this is shown as a SOLID YELLOW line on the plans. Only at the completion of the main works to construct the development (or where it is necessary to remove existing features within CEZs such as surfacing as discussed in the section below) and where it is necessary to remove the fencing in order to construct specific features within the CEZ (e.g. garden works/fencing – see Boundary Features and Landscaping Sections below) the fencing can be moved or dismantled ONLY after all other construction works on the site have been largely completed.

4.3.4. No materials, chemicals, machinery or access shall be stored or gained within this fenced off area during the entire period of the subsequent development of the site.

4.3.5. This fencing shall be either the existing boundary fencing type or to a specification as indicated in BS 5837:2012 and shall comprise weldmesh (Herras type) fencing attached to the ground by posts driven into it to hold the fence rigidly and semi-permanently during construction. Notices shall be attached to the fencing stating that no access, machinery, equipment or materials will be allowed within the fenced off area during the construction period.

***NOTE - it is not acceptable to erect fencing only and leave ground protection measures until the commencement of the development of the specific feature nearby. IF ground protection is NOT provided then the temp protective fencing MUST be located at the outer edge of where the ground protection WOULD have been provided until such time as the ground protection is installed.***

4.3.6. All chemicals including cement, together with the mixing of cement, must be located at least 3m beyond the root protection areas (dotted and dashed circles around trees) (this is to prevent spillages / leeching of chemicals into the soil). They may not be placed within areas which are provided with temp ground protection unless agreed in writing with the District Council

**Construction traffic weight limits**

**4.3.7. All construction access will be via the existing entrance to the site from Holt Road and will not enlarge this access for vehicular access to the working area. A weight limit of 18tons (mini-mix lorry size) to the WESTERN side of T19 will apply. To the EASTERN side of T19 a weight limit of 3.5 tons will apply. This to apply in both cases where shown YELLOW HATCHED, UNLESS ground protection measures as set out in the Appendix – on fully compressible materials – are installed prior to use by any vehicles over these weights**

**Materials storage and cement mixing area will be located outside the RPA of all trees.**

**4.4. Excavation and installation of footings near trees**

4.4.1. Where the new footings for the building shown outlined in BLUE are to be installed, these features will be installed as set out below

1. The ground protection matting must be retained in situ whilst excavation is being undertaken

2. The footings will be dug by hand digging or use of a mini-digger with toothless bucket. All roots will be cleanly severed back to the sides of the trench by lopper or saw.

3. **The works will be overseen by a suitably qualified arborist who will also be required to check and confirm that all other suitable tree protection measures are in place and that the statements in this report are being complied with. A photographic report will be sent to the District Council to confirm compliance**

4. Immediately on completion of the excavation work for any one trench run in any one day, the side of the trench nearest to the tree/s will be lined with a damp proof plastic membrane to prevent the soils / rooting area exposed from drying out.

This membrane will be retained in situ after completion of the excavation work and will act as a barrier membrane between the cement based products in the concrete and the tree roots.

**4.5. Installation of new Services**

4.5.1. No information on services was provided to us prior to the development of this report. We have assumed that there will NOT be a requirement to alter or connect to any existing or new services within the RPA of trees.

**Note; There is no 'deemed' consent to install services within the Root Protection Areas of trees as a result of grant of planning unless this is specifically indicated. If it is proposed to install/open/connect to or modify any services within or closer to the RPA of trees or hedging than that indicated on the plans this will require the prior written consent of the District Council**

## 4.6. Post Construction Landscaping Procedures

4.6.1. Following the completion of the construction of the development, when landscaping to the site is undertaken, special procedures will be carried out where these might conflict with trees. Where landscaping impinges within the Root Protection Area of trees to be retained, the following procedures will be adopted;

4.6.2. Only glyphosate based weed killers will be used on any surface vegetation. All use of weed killers will be restricted to pre-physical clearance of the area within the RPAs of trees to be retained in order to prevent spray contacting exposed tree roots.

4.6.3. All removals of existing landscaping, hedging etc. will be carried out by hand operated machinery and tools only. The use of backactors etc. to remove items will not be used. No excavation beyond that absolutely necessary to remove existing plants and structures (fence posts etc.) will be used.

4.6.4. Following removals of existing landscaping, **no use of rotorvators will be undertaken within the RPA of trees, all levelling and tilthing will be carried out by hand to a maximum depth of 100mm.** Any importation of topsoil will be restricted to a maximum of 150mm above previous ground levels. No topsoil to be made up within 500mm radius of the base of any tree (to prevent 'rotting off')

## Appendix

**Inc;**

**Photographs of trees on the site**

Schematic of protective fencing to BS 5837:2012 Type 1 and 2 versions as necessary

NJUG Guidance Note 4 - Installation of Services near trees

Arboricultural Impact Assessment Plan / Tree Protection Plan / Development Plan shown superimposed on plan 4823/01 and 4823/02 with arboricultural information added April 2023 Developed from plans by Howes Designs Ltd

## Photographs of Site Features

Figure 1 – G1, T2 – T6 looking at the western side of the existing property

Figure 2 – T4, T2, T3, T5 and T6 from left to right – looking west along the rear northern side of the existing house

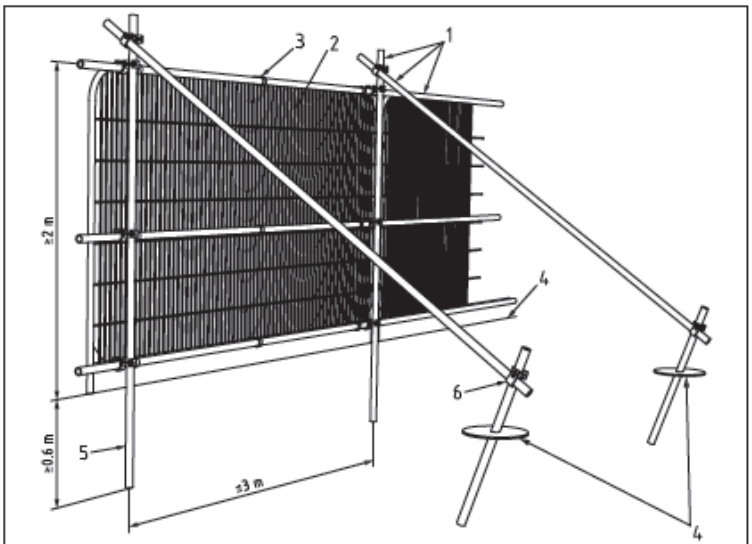
Figure 3 – T7 – looking north west from the terrace/pool area

Figure 4 – T14 and entrance to the site off Holt Road

Figure 5 – From left to right – T18, T17, T19 and T15 – looking east from within the site

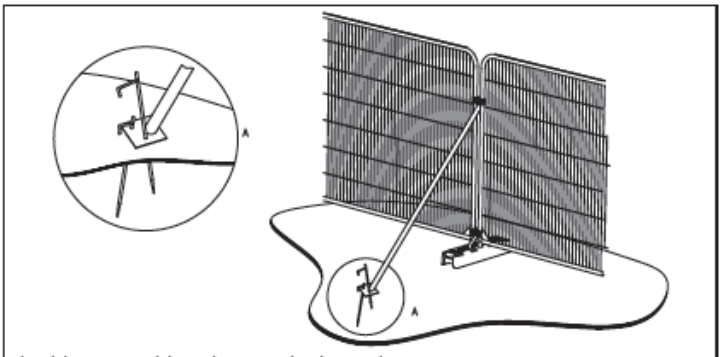
Tree Protection Barriers - Type 1 designs

The standard design which BS5837:2012 now requires as the ‘default’ design is shown below. In certain circumstances (where there is hard surfacing or other physical features which prevent the use of this type)

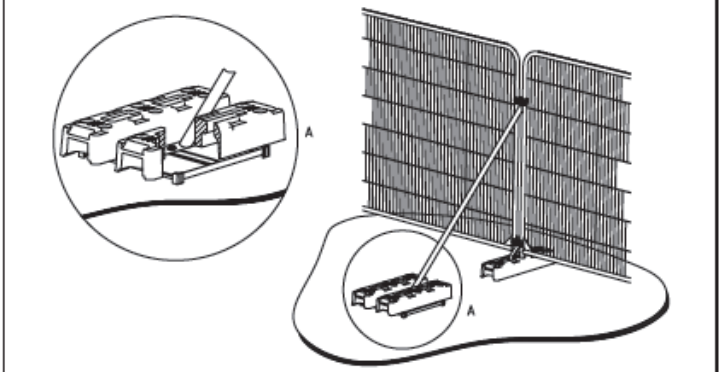



Key

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




a) Stabilizer strut with base plate secured with ground pins




b) Stabilizer strut mounted on block tray

## Ground protection during demolition and construction

Designs for Ground protection in relation to construction can vary considerably according to the location and terrain. These can be simple scaffolding boards over a plastic membrane where scaffolding or other pedestrian access is required, more sophisticated and heavy duty arrangements such as plywood sheeting which may be suitable for locations where a mini-digger up to 2.5 tons is working / light vehicle access is required, up to heavy vehicle access provision where a proprietary system such as Ground Guards or Rola Track is required. In all cases three main principles apply and these are set out in more detail below

1. The ground support must be adequate to prevent compaction of the ground type being tracked over – soft ground requires better protection than hard / wet than dry etc.

2. The ground support must be adequate for the weight of traffic using it

3. There must be both a compression layer of wood chippings / washed aggregate to distribute the loading and a plastic membrane to prevent cement or other leachate spills from contaminating the soil under the ground protection surface.

Where construction working space or temporary construction access is Justified within the RPA, this should be facilitated by a set-back in the alignment Of the tree protection barrier. In such areas, suitable existing hard surfacing that Is not proposed for re-use as part of the finished design should be retained to act as temporary ground protection during construction, rather than being removed during demolition. The suitability of such surfacing for this purpose should be evaluated by the project arboriculturist and an engineer as appropriate.

Where the set-back of the tree protection barrier would expose unmade ground to construction damage, new temporary ground protection should be installed as part of the implementation of physical tree protection measures prior to work starting on site.

New temporary ground protection should be capable of supporting any traffic entering or using the site without being distorted or causing compaction of underlying soil.

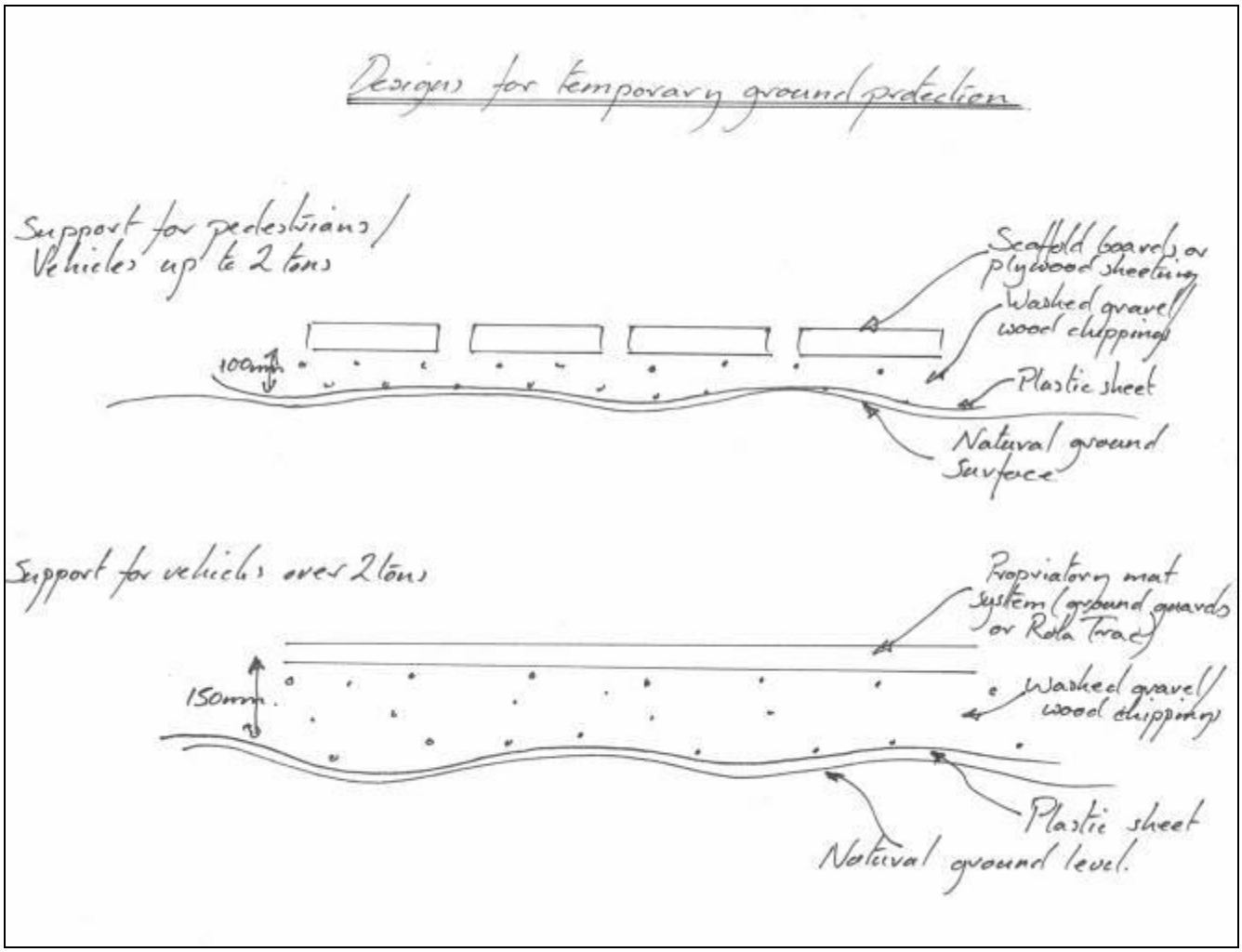
*NOTE The ground protection might comprise one of the following:*

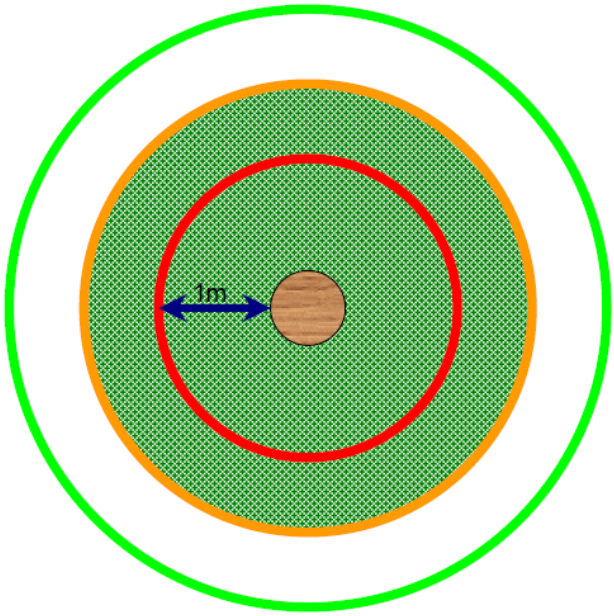
> *a) for pedestrian movements only, a single thickness of scaffold boards placed either on top of a driven scaffold frame, so as to form a suspended walkway, or on top of a compression-resistant layer (e.g. 100 mm depth of woodchip), laid onto a geotextile membrane;*
>
> *b) for pedestrian-operated plant up to a gross weight of 2 t, proprietary, inter-linked ground protection boards placed on top of a compression-resistant layer (e.g. 150 mm depth of woodchip), laid onto a geotextile membrane;*
>
> *c) for wheeled or tracked construction traffic exceeding 2 t gross weight, an alternative system (e.g. proprietary systems or pre-cast reinforced concrete slabs) to an engineering specification designed in conjunction with arboricultural advice, to accommodate the likely loading to which it will be subjected.*

The locations of and design for temporary ground protection should be shown on the tree protection plan and detailed within the arboricultural method statement (see **6.1**). – see overleaf

In all cases, the objective should be to avoid compaction of the soil, which can arise from the single passage of a heavy vehicle, especially in wet

conditions, so that tree root functions remain unimpaired.






**TREE PROTECTION ZONE**

Key to Diagram

Trunk of Tree

Spread of canopy or branches

**PROHIBITED ZONE – 1m from trunk.** Excavations of any kind must not be undertaken within this zone unless full consultation with Local Authority Tree Officer is undertaken. Materials, plant and spoil must not be stored within this zone.

**PRECAUTIONARY ZONE – 4 x tree circumference.** Where excavations must be undertaken within this zone the use of mechanical excavation plant should be prohibited. Precautions should be undertaken to protect any exposed roots. Materials, plant and spoil should not be stored within this zone. Consult with Local Authority Tree Officer if in any doubt.

**PERMITTED ZONE – outside of precautionary zone.** Excavation works may be undertaken within this zone however caution must be applied and the use of mechanical plant limited. Any exposed roots should be protected.

## DAMAGE TO TREES

Tree roots keep a tree healthy and upright. Most roots are found in the top 600mm of soil and often grow out further than the tree's height. The majority of these roots are very fine; even close to a tree few will be thicker than a pencil. Most street tree roots grow under the footway but may also extend under the carriageway. If roots are damaged the tree may suffer irreversible harm and eventually die.

## PROTECTING ROOTS - DO'S and DON'TS

There are three designated zones around a tree each of which has its own criteria for working practices.

### THE PROHIBITED ZONE

**Don't** excavate within this zone.

**Don't** use any form of mechanical plant within this zone

**Don't** store materials, plant or equipment within this zone.

**Don't** move plant or vehicles within this zone.

**Don't** lean materials against, or chain plant to, the trunk.

**Do** contact the local authority tree officer or owner of the tree if excavation within this zone is unavoidable.

**Do** protect any exposed roots uncovered within this zone with dry sacking.

**Do** backfill with a suitable inert granular and top soil material mix as soon as possible on completion of works.

**Do** notify the local authority tree officer or the tree's owner of any damage.

### THE PRECAUTIONARY ZONE

**Don't** excavate with machinery. Where excavation is unavoidable within this zone excavate only by hand or use trenchless techniques.

**Don't** cut roots over 25mm in diameter, unless advice has been sought from the local authority tree officer.

**Don't** repeatedly move / use heavy mechanical plant except on hard standing.

**Don't** store spoil or building material, including chemicals and fuels, within this zone.

**Do** prune roots which have to be removed using a sharp tool (e.g. secateurs or handsaw). Make a clean cut and leave as small a wound as possible.

**Do** backfill the trench with an inert granular material and top soil mix. Compact the backfill with care around the retained roots. On non highway sites backfill only with excavated soil.

**Do** protect any exposed roots with dry sacking ensuring this is removed before backfilling.

**Do** notify the local authority tree officer or the tree's owner of any damage.

### THE PERMITTED ZONE

**Don't** cut roots over 25mm in diameter, unless advice has been sought from the local authority tree officer.

**Do** use caution if it is absolutely necessary to operate mechanical plant within this zone.

**Do** prune roots which have to be removed using a sharp tool (e.g. secateurs or handsaw). Make a clean cut and leave as small a wound as possible.

**Do** protect any exposed roots with dry sacking ensuring this is removed before backfilling.

**Do** notify the local authority tree officer or the tree's owner of any damage.

## Legend for Plans (plans overleaf)

Trees shown with crown extent as continuous black line (circ or cusped) - approx

Trees retained  trees to be removed 

Future canopy growth extent shown 

**Root Protection Area shown as line** — · — · — 

Temporary protective fencing around trees shown 

Temporary ground protection matting shown -see AIA doc for details 

Special footings installation shown (see AIA doc for details) 

**Trees coloured to indicate Tree Retention Category as recommended by BS 5837:2005**

Category A - Trees of high quality and value (shown green on the plan) 

Category B - Trees of moderate quality or value (shown blue on the plan) 

Category C - Trees of low quality or value (shown grey on the plan) 

Category U - Trees in very poor condition or which would be lost within 10 years 

Shading (by the tree) (in accordance with BS 5837:2012) shown as a factor of height - indicated within the area shown as a segment with two solid lines running East and North West from the centre of the tree and a dashed line marking the circumference. Height of tree shown as sides of segment with existing height (EH) solid line and ultimate projected growth height (UH) as broken line


Job Title

**Woodlands, Holt Road, Aylmerton. Tree Protection Plan - to be read with Arboricultural Impact Assessment document**

Plan No.

4823/01 developed from plans Howes Designs - Scale 1:200 at A3

Date

10th April 2023

**C J Yardley Landscape Survey and Design LLP.**
**Larkhill Cottage, Priory Lane, Ingworth, NR116PG**
**07931 434162 / 01263 479691**

llands

N

T1 T2 T3 T4 T5 T6 T7 T8 T9 T10 T11 T12 T13 T14 T15 T16 T17 T18 T19

G1 H1 H2 H3 H4

EH/UH EH UH

Gravelled Driveway.

Concrete Apron

# Holt Road A148

0 5 10m

1:200@A3

Woodlands Holt Road
Aylmerton
Tree Constraints Plan
4823/02
1:200@A3
C.J Yardley
7/4/23

No alterations to ground levels / scrapings / clearing etc of land within the root protection areas of trees

No surfacing is to be installed within the RPA of trees unless otherwise agreed in writing with the District Council

Prior to commencement of construction, delivery of materials or site clearance all protective fencing (shown YELLOW LINE and ground protection matting (shown YELLOW HATCHING – noting weight limit requirements to trigger this for the driveway area only) must be installed

No services to be installed within the root protection areas of trees (dotted and dashed circles). All services to and from the new development must be located outside the RPA of trees including connections to existing services. If services are to be installed within the RPA of trees, this must be agreed in writing with the District Council before commencement of such works

Existing surfacing within the RPA of trees to be retained or to be dressed with additional washed gravel only – no other surface type to be used unless otherwise agreed in writing with the District Council

T4 to be removed

Driveway weight limit to 18tons gross for all construction access where shown by the YELLOW HATCHED area to the WEST of T19 etc unless ground protection matting is installed as specified in Section 4

All materials to be stored outside the canopy spreads / root protection areas of trees (where shown or not if storage were to extend beyond the survey area)

Driveway weight limit to 5 tons gross for all construction access where shown by the YELLOW HATCHED area to the EAST of T19 etc unless ground protection matting is installed as specified in Section 4

T1 T2 T3 T4 T5 T6 T7 T8 T9 T10 T11 T12 T13 T14 T15 T16 T17 T18 T19 G1 H1 H2 H3 H4

Pool

Terrace

Gravelled Driveway

Concrete Apron

EH/UH

UH

EH

N

# Holt Road A148

0 5 10m

1:200@A3

4823/01

Woodlands, Holt Road, Aylmerton. Tree Protection Plan

1:200@A3

10th April 2023

C J Yardley