

Arboricultural Impact Assessment Report

Relating to development proposal at
Land at Tidcombe Hall, Tiverton

Client:
Land Value Alliance Limited

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	1 Summary
KEY features have been retained & identified for management	This report considers the direct and indirect effects of the proposed development in relation to the existing trees; evaluates the magnitude and significance of arboricultural impacts and makes recommendations for control measures applicable throughout the construction stages of the project.
The arboricultural impacts are localised and generally low	The overall arboricultural impacts of the proposed outline residential development within the eastern field are low.
The layout design has been led by tree and landscape constraints	The layout design has considered the trees and the landscape setting from the beginning. The re-designed layout revision successfully incorporates the key features and shows how they can be successfully retained during the construction stage.
The most significant impacts arise from the access point, but the design has minimised these, and includes proposals to improve soil & rooting environments	<p>The proposal includes a new access point in the NW corner and the realignment of the road into the site. The proposed access will entail the loss of several trees around the entrance point leading to a neutral highly localised impact. The trees proposed for removal are implicated in structural instability of a boundary wall – the trees require removal regardless of the development proposals. All tree removals are approved under a Section 211 notification.</p> <p>The new road has been re-designed to avoid below ground impacts to high quality trees. It is recommended that mitigation measures are conditioned and implemented – the proposals include improving the rooting conditions to ensure impacts stay at acceptable levels.</p> <p>The internal road has been re-designed and moved north to avoid negative impacts on retained trees, trial hole investigations revealed historical impacts resulting in a modification to the RPA of T171. Protection measures can ensure key trees are retained and below ground conditions improved to ensure they can be retained over the long-term. The residual impact is assessed as positive over the medium to long-term.</p>
The layout has minimised tree loss	The loss of minor internal trees and sections of hedge to provide access will have a highly localised impact of a very limited magnitude. The retention of the key trees will help to assimilate the scheme into the local landscape.
The landscape strategy will provide a substantial improvement to the vegetation on site	The proposal includes a landscaping led master plan that includes high level of open space with extensive new tree planting. This will lead to a significant long-term improvement to the site with a substantial increase in its tree cover. A suitably conditioned planning condition relating to tree planting with aftercare will provide a positive impact over the long-term.

<p>The proposal accords with local policy and national policy and guidance</p>	<p>The proposal will accord with locally adopted policy relating to green infrastructure. The proposal accords with national policy and guidance relating to trees and development.</p>
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Arboricultural Impact Assessment Report

Land at Tidcombe Hall, Tiverton

2 Introduction

Instruction

- 2.1 I have been instructed by Land Value Alliance Limited (Client) to provide an arboricultural impact assessment, professional opinion and advice in relation to the proposed development.
- 2.2 This report includes evaluation of the direct and indirect effects of the proposed development and the resulting impacts on trees and local amenity.

Scope

- 2.3 Details of the report author, a general disclaimer and the limitations of this report are included as *Appendix 1*.

Accompanying Documents

- 2.4 This report must be read in conjunction with the following plan(s) and document(s); also instructed by the client and/or produced as part of the design stage process:

Document/Drawing:	Name/Ref:	Produced by:
Tree Survey	05141.Tree Survey Rev A. 18.5.2023	Aspect Tree Consultancy
Tree Constraints Plan	05141.TCP Rev C. 28.5.2024	Aspect Tree Consultancy
Tree Removal & Retention Plan	05141.TRRP Rev C. 4.7.2024	Aspect Tree Consultancy
Master plan layout	230301 L 00 00 F Illustrative Layout	Clifton Emery Design

Table 1 - Supporting plan & documents

3 Relevant Background Information

Statutory Designations

- 3.1 The presence of Tree Preservation Orders (TPOs) and Conservation Area status has been checked with the Local Planning Authority.
- 3.2 A request has been made to the LPA to check the status of TPO. No response was received at the time of writing the report.
- 3.3 The site does fall within a Conservation Area.

4 Baseline information and data collection

Brief site overview

- 4.1 The site is located on the southern edge of Tiverton, with Tidcombe lane adjacent to the northern and western boundaries.
- 4.2 The general layout and juxtaposition of the existing site features are shown on the following aerial image.

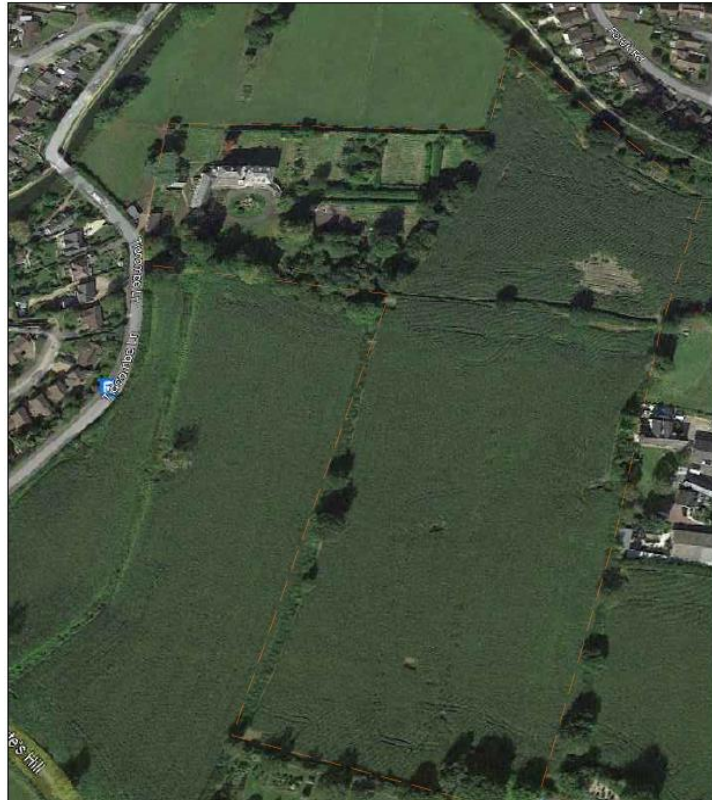


Image 1: Aerial site photo

- 4.3 The site contains Tidcombe Hall in the NW corner with associated gardens immediately around the building. The remaining site comprises of two open arable fields to the south east & east with mature hedges and scrub vegetation around their edges.

Site survey(s)

- 4.4 The site visit and tree survey assessment were undertaken on the 18 June 2023.
- 4.5 A site visit was undertaken in May 2024 to investigate the extent of RPA from tree 171 (A category lime). Trial holes were excavated north of 171 – The findings resulted in a modification to the northern radial section of RPA.
- 4.6 A site visit was undertaken on 19th March 2024 with the Local Authority tree officer (MDDC) to assess and submit a section 211 notification for structurally poor trees adjacent to the site entrance.
- 4.7 The survey methodology and the tree quality assessment criteria are described in the accompanying Tree Survey document (see 2.4); which includes the survey data schedule.

Key trees & features

- 4.8 The most significant trees are located in the area around the main house in the NW & NE corners of the site. This area contains several specimen ornamental trees (oak, cedar, walnut, yew and lime) in amongst smaller trees and hedges / younger growth.
- 4.9 The fields contain mainly semi-mature trees and overgrown hedges around their perimeters. Oak, sycamore, elm and ash are the dominant tree species within the field boundaries. Several ash show advancing levels of ash dieback infection and canopy dieback.

5 Proposed Development

- 5.1 The proposed development is an outline application, with all matters reserved bar the main point of access and its associated works, for the conversion of Tidcombe Hall and outbuildings and the erection of dwellings to provide up to 100 dwellings in total, provision of community growing areas, public open space, associated infrastructure and ancillary works.

6 Arboricultural Impact Assessment

Terms & Definitions

- 6.1 When describing impacts on arboricultural features; reference is made to the following parameters, as appropriate or relevant to the specific issue:
 1. **Positive or negative**
 2. **Magnitude:** Refers to the ‘size’ or ‘amount’ of an impact, determined on a quantitative basis where possible.
 3. **Duration:** The time for which the impact is expected to last prior to recovery or replacement of the resource of feature, (defined in relation to the feature - rather than human time frames). The duration of an activity may differ from the duration of the resulting impact caused by the activity. For example, if short-term construction activities cause soil compaction around mature trees, there may be longer-term implications for tree health.
 4. **Reversibility:** An irreversible (permanent) impact is one from which recovery is not possible within a reasonable timescale or for which there is no reasonable chance of action being taken to reverse it. A reversible (temporary) impact is one from which spontaneous recovery is possible or for which effective mitigation, is both possible and an enforceable commitment has been made.
 5. **Timing and frequency:** Some changes may only cause an impact if they happen to coincide with the critical life-stages or seasons (for example, the bird nesting season). This may be avoided by careful scheduling of the relevant activities.
 6. **Compensation:** Measures taken to make up for the loss of, or permanent damage to, arboricultural resources through the provision of replacements.
 7. **Enhancement:** A new benefit - unrelated to any negative impact.
 8. **Impact:** The way in which an arboricultural resource is affected by the project.
 9. **Mitigation:** Measures taken to avoid or reduce negative impacts.

6.2 Individual trees, hedgerows, groups, woodland and other vegetative features have been assessed in relation to the submitted layout. Issues identified are evaluated in the following sub-sections.

Tree Removal & Retention

6.3 Trees which make a positive contribution to the layout have been retained wherever possible. Trees to be removed are shown on the accompanying Tree Removal & Retention Plan (TRRP) with a dashed canopy outline and included on the following table:

Tree Ref:	Species/Description of feature:	BS5837 category	Reason for removal & Impact:
166	Norway maple	U	Remove to allow main access road. Minor tree with declining physiological and structural condition. Limited visual benefit – provides internal benefit only. POSITIVE IMPACT
178	Ash – 25% living crown remains. Split stem from ground level to 2m- partial stem failure at 1m east.	U	Remove as the tree has no retention benefits. Declining physiological and structural condition. Ash dieback disease – class 3. NEUTRAL IMPACT
180	Ash – suppressed by better quality walnut.	C1	Remove to provide garden space. Limited viability resulting in impact of low duration. LOW IMPACT
181	Mulberry – numerous weak unions and failed stem	U	Remove to provide garden space. Limited viability as U category resulting in impact of low duration. LOW IMPACT
TG12	Lime – two trees within the group have failed. T912 forms part of group.	U	Removal of T912 is recommended due to poor structural / physiological condition due to a known decay fungus - neutral impact of low magnitude and duration. Approved for removal under Section 211 notification. NEUTRAL IMPACT
TG13	Laurel, elm, ash and hazel	B2	Prominent due to location next to road but limited quality - unmanaged vegetation. Vegetation is implicated in the structural instability of the retaining wall. Approved for removal under Section 211 notification. NEUTRAL IMPACT of limited duration.
TG13.1	Beech	B2	Prominent tree but of limited quality due to close proximity of adjacent vegetation and built structure to the north. Damaging existing retaining wall (wall collapsed). Approved for removal under Section 211 notification. NEUTRAL IMPACT of limited duration.
TG18	Persian Ironwood, Sugar Maple, Magnolia, Tibetan Cherry, Robinia.	C2	Small young trees growing close to proposed parking area. Remove due to root loss close to trunks. Low external amenity value LOW IMPACT

H1, H5 & H14, H16 part	Mixed native hedges	B2	Removal of sections to allow for road access between fields and for housing layout. Highly localised impact of low magnitude. LOW IMPACT
H7	Ash – area of dying young trees	C2	Fell due to poor condition – not required as part of the development proposal. Ash dieback class 2-4. LOW IMPACT.
H15	Cherry laurel	C2	Internal unmanaged former hedges / shrubs with limited value. Remove to create access, parking and space for houses. LOW IMPACT

Table 2 - Trees to be removed.

- 6.4 The extent of the proposed tree removal is low. The majority of trees and hedges will be retained within the proposed scheme. The scheme has been designed to allow the framework of hedges to be retained and the most significant / key trees. This allows the proposal to be more readily assimilated into the local landscape with the minimum of negative impacts.
- 6.5 The most significant tree loss will occur where the main access point and new junction will be created. The location of this has been designed to minimise the impact on trees. However, the possible location of the entrance is limited, and as large mature trees are growing adjacent to the existing driveway, any improvement of that access will result in a very high negative impact through tree loss. The new access is to the north of the existing one to prevent the loss of the larger, more significant trees. At the time of writing this impact assessment the trees are still present on site, however there is an existing approval under a section 211 notification for the removal of these trees (see below).
- 6.6 A desk-based search revealed historic Conservation Area notifications have been submitted requesting the removal of a group of two beech (T0222) which grow on top of the retaining wall – *Reference / Application No. 11/01216/CAT*. The trees once formed a formal hedge – management and maintenance has ceased decades ago. The acting arboricultural officer did not recommend protection of the beech trees due to comments made by the Building Control Officer (BCO). The BCO recommended that the beech trees should not be protected as they are affecting the structural stability and integrity of the structure. This tree will have to be removed regardless of the development proposal. Because of the structural damage to the wall the any negative impacts are of a short duration.
- 6.7 The use of the existing primary access has been ruled out due to the potential for very high impacts to existing trees.
- 6.8 The loss of internal trees is of a limited magnitude because these trees provide a limited significance in the wider landscape (see below). The impact of their loss will be very low because of the limited / restricted visual benefit provided by the trees.
- 6.9 The proposal will require specific short sections of hedge to be removed – with the overall hedgerow to be retained. The impact and its magnitude of the loss of the short section of hedge

is low as it amounts to a very small percentage of the overall total hedge and tree cover. The hedges will still function as wildlife corridors and provide a positive landscape impact, helping to screen and soften the development.

- 6.10 There has been limited proactive management on the site vegetation – the illustrative layout shows significant improvements to the boundary and internal vegetation. Actively managing the hedges will increase the diversity, structure, and adequately compensate for the loss of short sections. As a result, the impact arising from this is highly localised, limiting any negative impact to being of very low magnitude with a positive long-term impact.

Proposed works required to manage retained trees and hedges

- 6.11 The field hedges have been unmanaged in recent years / decades leading to overall decline. Some hedges conflict with the layout because they have become over mature and spread out into the fields e.g., H1. Where this has happened, the hedges will be brought back into proactive management by pruning e.g., coppicing, laying and/or flailing (or a mixture of all of these). This work will benefit the long-term retention of the hedges and arrest the current decline (unmanaged hedges is the biggest cause of hedgerow loss according to Natural England). Any negative impact arising from this will be temporary until the hedge regenerates (1 to 2 growing seasons). The long-term impact will be positive by preventing further decline. It is advisable that the hedgerows are managed prior to any construction operations commencing on site.
- 6.12 Some minor tree surgery may be required to provide clearance of the proposed road and access. This can be achieved in accordance with best practice and at a level that will not be detrimental to the trees long-term health or viability.

Impact of proposed development on amenity value

- 6.13 Generally, there will be a short term impact due to the removal of trees. This impact is neutral due to the structural and physiological condition of the trees in this area, the magnitude of the impact is also reduced and limited geographically i.e., the trees are visible from within short distances of the site, therefore highly localised.
- 6.14 Design-led targeted tree removals reduce the magnitude of impact – landscaping with new trees will reduce the duration and magnitude of the amenity loss. A review of the illustrative plan has been undertaken to assist and assess the design and layout of the site. This has ensured that the existing trees on site have been considered in the context of planning policy and have influenced the design proposals submitted as part of this application.
- 6.15 The impact of the loss of TG12 (lime & beech) upon amenity has been assessed as being of a neutral magnitude. Tree 912 is in a poor structural with an impaired physiological condition due to a known fungal colonisation – the tree will require removal. There have been two stem failures within the group since 2018 due to the same fungal pathogen. This reduces the significance, duration and magnitude of the removal of TG12 to low / positive as the feature should not be relied upon over the medium to long-term. Approved for removal under a section 211 notification.

- 6.16 The impact of the loss of TG13 & 13.1 (beech & elm) is neutral as the trees are implicated in the structural instability of the retaining wall. Approval has been sought and given for the removal of these trees under a section 211 notice.
- 6.17 The removal of tree 0222 (beech) has been assessed as having a low impact of a limited magnitude because of the limited amenity value in relation to visibility from the road and entrance. The impact of removal is reduced in magnitude due to the location of the tree i.e., the stem is growing from the top of a retaining wall and in close proximity to the existing structure, with restricted space for incremental root and canopy growth. The impact of removal is highly localised. The targeted removal of the tree has led to a more favourable and positive impact upon the key retained A category Lucombe oak and lime.
- 6.18 The removal of a short section of hedgerow, between tree groups TG16 & TG17, to provide vehicle access across the site has been assessed as having a relatively minor and low impact upon local amenity. The impact arising from the loss of this section is of limited magnitude and significance, with the loss of visual amenity being highly localised. Key trees have been considered during the design stage and can be suitably protected during the construction stage. Wildlife habitat connectivity has been considered and the hedge is expected to continue to function as a key site corridor / feature.
- 6.19 This impact is to be limited by the planting and establishment of replacement trees in equally publicly visible locations so that the mid-long-term impact is positive, due to an increase in tree cover on the site.

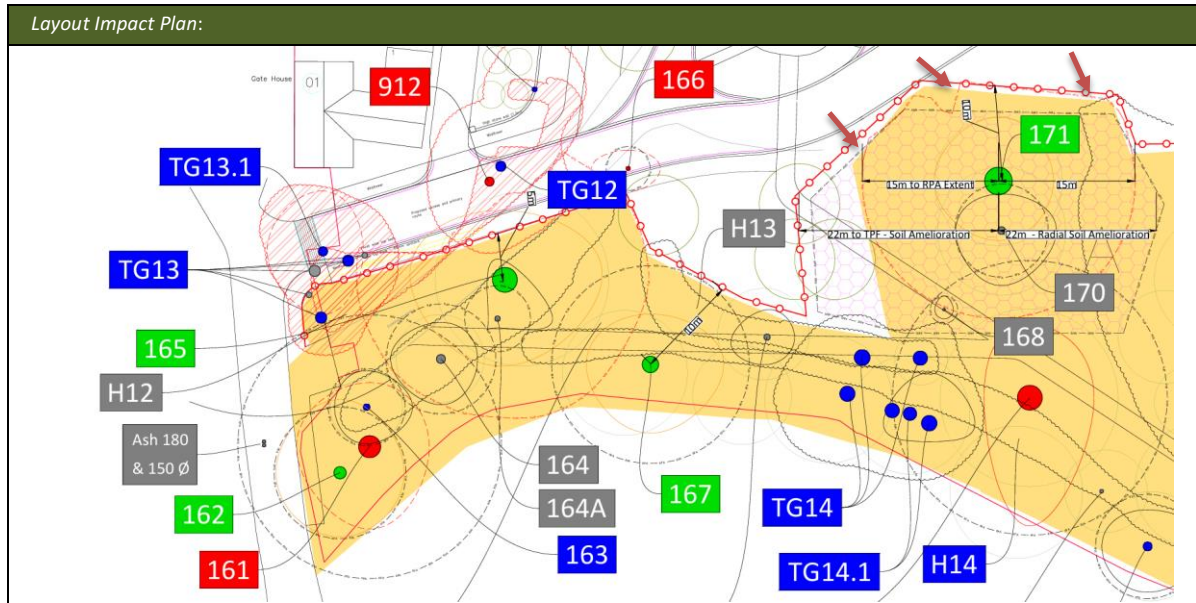
Retained trees - General minor impacts.

- 6.20 There are a number of impacts of no discernible significance which are not discussed in detail in this report. These relatively minor issues are adequately mitigated through standard clause recommendations for construction stage tree protection measures, as indicated on the accompanying TRRP.
- 6.21 The use of roads and paths between retained vegetation and residential boundaries is considered good design practice and will provide sufficient spatial separation. The provision and consideration of future growth will reduce long-term conflicts. Where footpaths cross RPA - these restricted activity zones will be protected with a detailed method statement to show how the impacts can be reduced and brought back to acceptable levels.

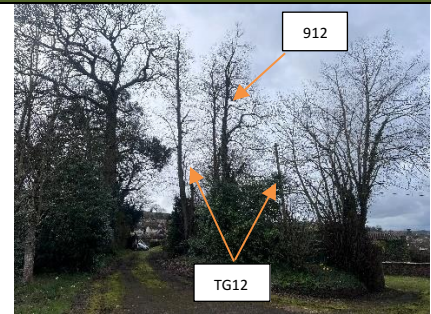
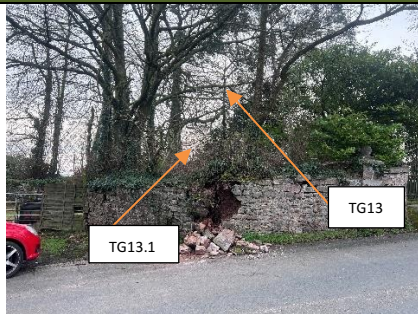
Retained Trees - Key issue(s)

- 6.22 The key impacts relate to the following issues:
- **Key Impact 1:** The primary access road that enters and crosses the site.
 - **Key Impact 2:** Construction works in the vicinity of boundary trees – Tree Protection Fencing and Construction Exclusion Zones.

Key Impact 1 – The primary access road that enters and crosses the site.



Description, magnitude and extent of IMPACT(s):



Photograph 1. showing the collapsed wall east of the new site access.

Photograph 2. Showing TG12 & 912

- 6.23 The proposed road has been re-aligned and moved north to avoid negative impacts to tree 165 (Lucombe oak). The movement of the road in a northerly position has avoided below ground impacts to tree 171 (lime). The road will entail the loss of insignificant roots at the farthest extent of RPA of tree 165 - this equates to 5% of RPA. However, the RPA does NOT represent a tree's full root system (see below), so disturbance on one side of the tree only will not damage the majority of the root system. The impact of the removal of TG13 & TG13.1 is neutral as the trees have existing approval for their removal (Section 211 notification).
- 6.24 The impact of the road where it passes tree 171 is neutral as no roots will be affected (see RPA modification red arrows) – the scheme also offers significant opportunities to improve the soil and ground conditions (rooting environment) with simple measures (see below). The tree has ample rooting soil volume to the south, extending beyond the RPA, allowing a

<p>large volume of retained soil (see AMS hatch on TRRP) allowing existing tree roots to continue to function. This tree is in a good physiological and structural condition.</p>	
<p>Mitigation achieved / recommended to reduce IMPACT(s):</p>	
<p>6.25</p>	<p>The road has been re-designed following arboricultural design input. The carriageway has been moved north following trial hole investigations which determined the extent of RPA to the north. The RPA was modified following below ground evidence of historical impacts – the RPA modification follows the existing tarmac drive edge (see red arrows above).</p>
<p>6.26</p>	<p>Standard tree protective fencing should be used to protect roots outside the construction zone.</p>
<p>6.27</p>	<p>Improvements to the growing conditions of trees 165 and 171 should be implemented e.g. soil improvement using compressed air (vertical & radial mulching) and introducing composted wood chip as a soil enhancer / ameliorator. This will help improve the trees physiological condition giving them an opportunity to respond favourably to changes in use around the tree over the medium to long-term.</p>
<p>6.28</p>	<p>A full and detailed arboricultural method statement is recommended to show the details and methods of the soil amelioration to the modified RPA of trees 165 & 171.</p>

Table 3 – Key Impact 1

Key Impact 2 – Construction Works in the vicinity of retained boundary trees – Tree protective Fencing & Construction Exclusion zones

Layout Impact Plan:	
Description, magnitude and extent of IMPACT(s):	
6.29	Construction works in the vicinity of retained trees have the potential to have negative impacts upon retained trees and hedgerows.
6.30	Measures are required to ensure that no negative impacts arise, and that all construction works and activities are carried out in separation from retained vegetation.
Mitigation recommended to reduce IMPACT(s):	
6.31	Tree Protection Fencing (red detail 1 TPF) is to be installed to create Construction Exclusion Zones (yellow hatch) so that construction works are carried out in separation from the retained trees and hedgerows.
6.32	The stems, RPAs and crowns will be protected during the construction phase of site works.

Table 4 – Key Impact 2

7 Mitigation Strategy

Tree Protection

- 7.1 No access to the RPA of any retained tree will be permitted before or during construction activity, unless detailed in an approved *Arboricultural Method Statement* or otherwise agreed in advance with the LPA following advice from the appointed specialist.
- 7.2 BS5837 recommends that retained trees (and areas suitable for new planting) are incorporated into CONSTRUCTION EXCLUSION ZONES (CEZs) and suitably protected throughout the development process.
- 7.3 The CEZs are clearly marked on the accompanying TREE PROTECTION PLAN and general details (heads of terms) for an accompanying *Arboricultural Method Statement* are included in the appendices of this report.
- 7.4 The main access point should be installed in accordance with an arboricultural method statement to ensure the operation causes a minimum level of disturbance and to improve the growing conditions of the retained trees.

Soil amelioration to improve the existing and future rooting environment

- 7.5 Once the construction works are complete, the following measures to be carried out as part of the landscaping stage – all works and methodology will be covered in a detailed arboricultural method statement.
- 7.6 Vertical mulching and radial trenching works are to be carried out in the retained and modified RPAs of key trees (T165 & T171). A series of radial trenches will be created on the southern, eastern and western aspects of the tree’s RPA. The trenches will be installed using an air spade and filled with composted woodchip, worm colonies and enriched biochar. The works will promote a more favourable rooting environment and promote fibrous root growth – the ground will be de-compacted to improve aeration. A series of vertical holes will be excavated with an air spade to be then backfilled with composted woodchip mulch and biochar.

Compensatory Planting

- 7.7 The illustrative masterplan shows substantial planting opportunities that will substantially enhance the site. The design has been landscape led and provided substantial open space provision with high levels of new tree planting. This will lead to a substantial increase in tree cover on the site, both in terms of quantity and quality.
- 7.8 The landscaping strategy will provide a positive long-term impact / improvement.
- 7.9 Where new tree planting is planned it is imperative that consideration is given to future management and maintenance. It is recommended that a minimum five-year plan is constructed and submitted with the new landscape proposals.

New planting should be in accordance with the National House Building Council Standards NHBC 4.2 ‘Building near Trees’ – 2006.

8 Trees & Planning Policy

8.1 Trees are a material consideration throughout the planning process and therefore the arboricultural information presented in this report and accompanying plans has been aligned with the objectives of the National Planning Policy Framework (NPPF) and the general tree-related policies and development objectives of the Local Planning Authority (LPA).

Key - LPA planning policies

8.2 The following Mid Devon policies are relevant to this report:

- i. DM28 Green infrastructure in major developments Criteria

8.3 The proposed development accords with the relevant sections of the above LPA policies.

8.4 The master plan design provides substantial green corridors and the level of retention of existing trees is high. This will assimilate the scheme into the local landscape. The proposal will not entail the loss of, or damage to ancient woodland or veteran trees.

9 Conclusions

9.1 The overall arboricultural impacts of the proposed outline residential development are low.

9.2 The proposal includes a new access point in the NW corner and the realignment of the road into the site. The proposed access point will entail the loss of several trees around the entrance point leading to a neutral and localised impact.

9.3 The location of the access point and re-designed road around T171 has been moved north specifically to avoid and minimise negative impacts on key retained trees. The moving of the road in a northerly location is a result of trial holes that determined the extent of roots within this area.

9.4 The alternative option to upgrade the existing drive would lead to extensive tree loss with a very high impact over a longer duration.

9.5 The loss of minor internal trees and sections of hedge to provide access will have a highly localised impact of a very limited magnitude. The retention of the majority of the trees is good and will help to assimilate the scheme into the local landscape.

9.6 Mitigation through design - the residential buildings have been located following design advice to ensure that their footprints have sufficient clearance from key retained trees and hedgerows – future growth has been considered for key landscape features and sufficient space is provided for the planting and establishment of new landscape trees. The use of roads and paths between trees has been utilised where possible which provides good separation between retained features and built structures – an assessment of the illustrative plan shows that the density can be achieved with few long-term conflicts or pressure to remove trees.

9.7 The proposal includes a landscaping led masterplan that includes a high level of open space with extensive planting. This will lead to a significant long-term improvement to the site with a substantial increase in its tree cover.

- 9.8 The site has been designed so that significant arboricultural impacts have been avoided. The development allows for the retention of key trees in a sustainable manner and as such there do not appear to be any policy conflicts.
- 9.9 The proposal and accompanying tree removal and retention plan shows how the development can be controlled throughout the construction phase.

10 Recommendations

- 10.1 The tree protection measures discussed in this report and shown on the accompanying Tree Protection Plan should be implemented at the detailed design stage.
- 10.2 Any residual risk from activities outside RPAs but close enough to have an impact will be assessed during the day-to-day running of the site, and appropriate precautions put in place to reduce that risk. All RPAs that have been identified for protection will be set out as specified but those which lie outside of the protective fencing, must be protected from soil degradation at all times during construction activity.
- 10.3 Where it is not practical to protect the RPA by use of fencing barriers, BS5837 allows for the fencing to be set back and the soil shielded by ground protection. A range of methods are available including retaining existing hard surfaces or structures that already protect the soil, installing new materials, or a combination of both. Whatever the choice of method, the end result must be that the underlying soil (rooting environment) remains undisturbed and retains the capacity to support existing and new root growth. Temporary ground protection has been specified for the ground to the south of the proposed access road – a 2m off-set has been specified to provide sufficient construction space. Temporary ground protection has been marked on the TPP (*5141 TRRP 4.7.2024*) with blue hatching.
- 10.4 The appropriate use of well worded planning condition(s) is considered a key element of successful tree retention during development and construction.
- 10.5 It is important that the tree protection measures are clearly communicated to, and understood by, the entire construction team prior to commencement of any site works – this process should involve the Local Planning Authority so as to ensure any planning conditions are not breached. **This is most effectively managed by monitoring the development on a regular basis, checking tree protection measures in relation to the Tree Removal and Protection Plan plus Arboricultural Method Statement(s) and reporting to the LPA on a monthly basis.**
- 10.6 It is recommended that development is carried out in the following order:
 - a) Remedial tree works undertaken.
 - b) Tree protection measures installed.
 - c) Initial site clearance, demolition and ground works.
 - d) Development of site.
 - e) Removal of tree protection measures.
- 10.7 All items above to be undertaken in accordance with LPA approved arboricultural method statements.

Appendices:

- A1** Appendix 1 - Disclaimer, Limitations & Author
- A2** Appendix 2 - Default Tree Protection Measures
- A3** Appendix 3 - AMS heads of terms
- A4** Appendix 4 - Accompanying Plans

A1.1 Disclaimer

The statements made in this Report do not take account of extremes of climate, vandalism or accident, whether physical, chemical or fire. Aspect Tree Consultancy cannot therefore accept any liability in connection with these factors, nor where prescribed work is not carried out in a correct and professional manner in accordance with current good practice. The authority of this Report ceases at any stated time limit within it, or if none stated after two years from the date of the survey or when any site conditions change, or pruning or other works unspecified in the Report are carried out to, or affecting, the Subject Tree(s), whichever is sooner.

A1.2 Limitations

The survey and report are concerned with the arboricultural aspects of the site only. This report is primarily concerned with the condition of existing trees and the application of current guidance for their retention. No documented information has been provided regarding any site-specific history of ground disturbance, root damage or severance, changes in soil levels, previous utility installations or any changes in site conditions.

Trees are large dynamic organisms whose health and condition can change rapidly, therefore due to the changing nature of trees and other site considerations, this report and any recommendations made are only valid for the 12-month period following the site survey.

Subsidence Risk Assessment: Any discussion of soil characteristics is only presented where this may have a direct effect on tree growth. This report does not seek to address the specific area of subsidence risk assessment.

Foundation Design: The design and construction of foundations should be informed by appropriate soil sampling and laboratory testing in accordance with NHBC Chapter 4.2. This report does not specifically relate to risks associated with subsidence, heave or other forms of disturbance associated with tree root growth or tree removal.

Third Party Liability: The limit of Aspect Tree Consultancy indemnity over any matter arising out of this report extends only to the instructing Client. Aspect Tree Consultancy cannot be held liable for any third-party claim that arises following this report. The content and format of this Report are for the exclusive use of the Client. It may not be sold, lent, hired out or divulged to any third party not directly involved in the subject matter without the written permission of Aspect Tree Consultancy Ltd.

A1.3 Author

Jim Greig

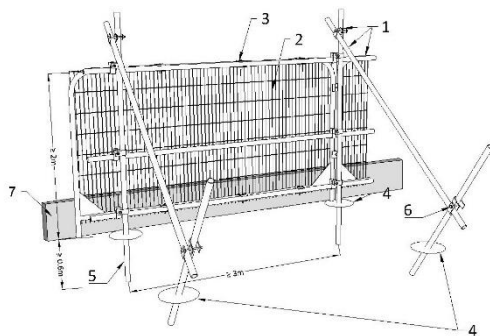
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I am a professional tree specialist and have the skills and experience directly relating to the management of trees through the planning, development and construction processes such that I am a suitably qualified and experienced competent person as defined by **BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations [BS5837]**.

A3.1 Tree Protection Measures

Retained trees should be protected by barriers and/or ground protection before any materials are brought onto site, and before any demolition, development or stripping of soil commences. Where all activity can be excluded from the RPA, vertical barriers should be erected to create a Construction Exclusion Zone (CEZ). Where, due to site constraints, construction activity cannot be fully or permanently excluded in this manner from all or part of a tree's RPA, appropriate ground protection should be installed.

A3.2 Default Tree Protective Fence (TPF) – Type1:

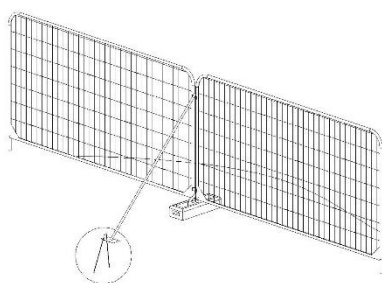


Key

- 1 Standard scaffold poles
- 2 Heavy gauge 2m 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 0.6m)
- 6 Standard scaffold clamps
- 7 Toe board 600mm to prevent soil running through fence (In timber or fabric)

A3.3 Default TPF – Type2a:

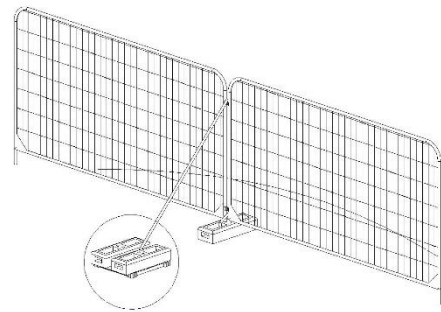
Examples of above-ground stabilizing systems



a) Stabilizer strut with base plate secured with ground pins

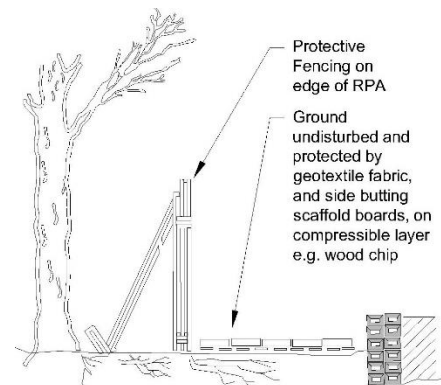
A3.4 Default TPF – Type2b:

Examples of above-ground stabilizing systems

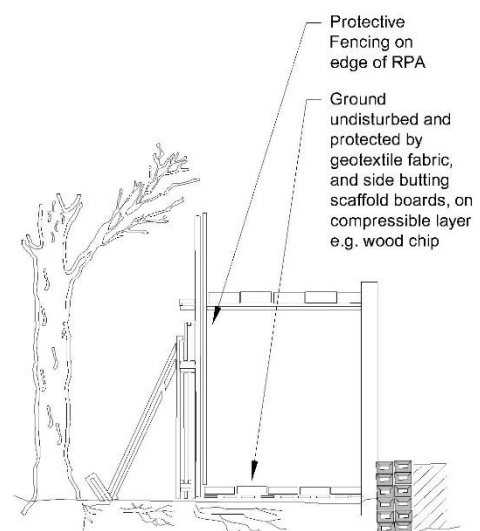


b) Stabilizer strut mounted on block tray

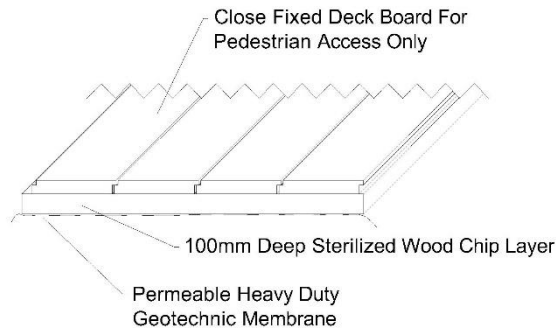
A3.4 TPF + Ground Protection in RPA:



A3.5 TPF + Scaffolding in RPA:



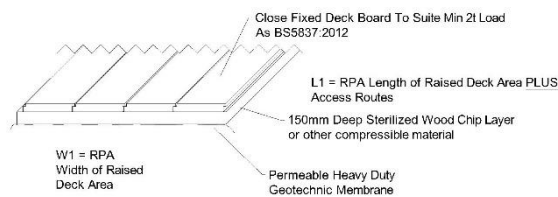
A3.6 Ground Protection in RPA – pedestrian:



A3.6 Ground Protection in RPA – up to 2 ton:

Ground Level Protection

Provide As Plan For Whole Extent of Area Within The RPA



A3.7 Example Warning Sign for TPF:



The final construction stage **Tree Protection Plan** shall be accompanied by a detailed **Arboricultural Method Statement** which will include details necessary to ensure the protection of trees throughout the demolition and construction stages of the proposed development.

A3.8 Tree Protection Plan (TPP)

The final TPP shall include details covering the following site-specific items:

- 1) Site Construction Access.
- 2) All hard surfacing within RPAs.
- 3) Construction Exclusion Zones.
- 4) Precise location of TREE PROTECTION FENCING - dimensioned – including temporary fencing & set back positions.
- 5) Barriers & Ground protection details – dimensioned.
- 6) Special protection measures (see AMS A4.2)
- 7) Location of utilities routes.
- 8) Areas for drainage / attenuation.
- 9) Working space for cranes, plant, scaffolding and access during works.
- 10) Position of site huts & welfare facilities.
- 11) Contractor car-parking.
- 12) Materials storage areas.
- 13) Build sequence/phasing of construction works.

A3.9 Arboricultural Method Statement (AMS)

The final AMS will be prepared and agreed with the LPA prior to start. The AMS may cover the following:

- 1) Pre-start Meeting.
- 2) Contact details for key personnel.
- 3) Site Monitoring Schedule.
- 4) Detailed Tree Work Schedule & Pruning Specification.
- 5) Final details of all operations within RPAs.
- 6) Utilities: methods of installation near trees.
- 7) Emergency Procedures.

A4.1 General / Standard AMS information

Pre-commencement site meeting: Prior to the commencement of the development, site clearance or groundworks a site meeting shall be arranged and held between the Site Manager, the Arboriculturist, and the Tree Protective Fence contractor.

Any defective tree protection measures will be reported to the site manager immediately and made good in the same day.

The site manager is responsible for informing the LPA or an appointed arboricultural specialist of any damage to or breaches of the Tree Protection Measures immediately.

Construction Exclusion Zone – CEZ: The CEZs are to be afforded protection at all times and will be protected by robust FENCING and/or GROUND PROTECTION as detailed. No works will be undertaken within any CEZ that causes compaction to the soil or severance of tree roots.

Tree Protective Fences (TPF): Protective fencing will be erected in accordance with the TPP prior to the commencement of any site works i.e. before any materials or heavy machinery is brought on site. The fencing may only be removed following completion of all construction works or with the formal agreement of the LPA. The location of the TPF will be as accurate as possible to the approved TPP. Any change to the position or construction of the fencing must be approved by the Arboriculturist and subsequently agreed by the LPA. No vehicles will drive or be parked within the CEZ. No materials will be stored within the CEZ.

Warning Notices will be affixed to every third panel or at 12m centres and will be made of all-weather signs.

After installation of the TPF the CEZ must be considered sacrosanct and off limits for any access or construction activity without the formal consent of the LPA or otherwise detailed on the TPP.

On-site environmental good practice guidelines:

Storage and use of Liquids and Hazardous Materials.

Liquids (fuel etc.) should be stored as far away from CEZ areas as is reasonably practicable. Spill kits and drip trays should be provided and maintained in close proximity to where liquids are stored, dispensed and used. Materials should be stored in accordance with manufacturer’s Safety Data Sheets.

Drip trays or absorbent mats should be placed under filling points during the transfer/dispensing of liquids e.g. during the refuelling of plant to avoid any form of soil contamination in or immediately adjacent to CEZs or area for new landscape planting.

Responsibilities:

It is the responsibility of the Building Contract Manager (TBC) to ensure that the planning conditions attached to planning consent are adhered to at all times.

The Building Contract Manager will be responsible for contacting the LPA at any time issues are raised related to the trees on site. If at any time pruning works are required permission must be sought from the Local Planning Authority first and then carried out in accordance with BS 3998 2010.

The Building Contract Manager will ensure the build sequence is appropriate to ensure that no damage occurs to the trees during the construction processes.

Protective fences will remain in position until completion of ALL construction works on the site.

The fencing and signs must be maintained in position at all times and checked on a regular basis by an on-site person designated that responsibility.

Emergency Departures & Incident Reporting:

The contractor shall contact an appointed arboricultural specialist or the LPA Tree Officer if any breaches of the CEZ and tree protection measures occur.

An action plan to incorporate mitigation measures where necessary will be agreed and effectively implemented.

Contingency Plan - Water is readily available on site and will be used to flush spilt materials through the soil and avoid contamination to tree roots. At the time of any spillage the main contractor will contact the arboriculturist for advice.

Arboricultural Site Monitoring: Monitoring will be undertaken at a frequency agreed with the construction site manager during the initial pre-commencement site meeting.

The arboriculturist shall be present during the following

Key Stages:

- 1) Pre-start meeting & initial positioning of the TPF & ground protection measures.
- 2) Minimum bi-monthly monitoring visit by specialist.
- 3) All operations near trees (as detailed in AMS) are supervised.

A4.2 Detailed specific AMS required.

Where the accompanying TPP shows specific AMS areas outline details covering the identified issues are included on the plan.

Accompanying plans produced as part of this report are referenced to and/or attached as the following pages:

Plan Title:	Plan Ref:	Size:
Tree Retention / Removal Plan	05141.TRRP Rev C. 4.7.2024	A1

Important Notes:

Digital plans may be issued as separate documents.

Reduced scale/size plan(s) may have been bound into hard paper copies of this report e.g. at paper size A3.

All plans should be viewed in full colour.