

Arboricultural Impact Assessment Report

Relating to development proposal at
Land at Lynchmead Farm

Mead Realisations Ltd

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	1 Summary
	The arboricultural impacts are low.
Existing trees and hedges are poor	The existing tree cover on the site is of low to moderate quality with heavily degraded hedges and trees with limited viability.
The effects of tree loss are low in the short term	The outline residential proposal retains the most significant trees and hedges with only the loss of a small number of minor insignificant trees. Several sections of hedge will be removed to allow access into the site and between fields. The impact of this will be low.
Minor impacts will arise from the proposed layout	The indicative layout shows some minor impacts arising from the layout and the proposed attenuation. There is scope to limit the impacts arising from this through the detailed design and via the production of arboricultural method statements to control operations at the construction stage.
Tree cover will be improved, and hedges enhanced	The layout shows that there is ample space for new tree planting as well as opportunities to improve the quality of the retained hedgerows. This will lead to a significant positive long-term impact in the sites' vegetation cover.
The proposal accords with policy	The proposal accords with national policy as well as locally adopted policy relating to trees and development.

Arboricultural Impact Assessment Report

Land at Lynchmead Farm

2 Introduction

Instruction

- 2.1 I have been instructed by Mead Realisations Ltd (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:

<i>Document/Drawing:</i>	<i>Name/Ref:</i>	<i>Produced by:</i>
Tree Survey	05201.TreeSurvey.Dec 2018	Aspect Tree Consultancy
Tree Constraints Plan	05201.TCP.Dec 2018	Aspect Tree Consultancy
Tree Protection Plan	05201.TPP.02.04.2019	Aspect Tree Consultancy
Master plan layout	180809 L 02 02 A Illustrative Masterplan With drainage attenuation details	Clifton Emery Design

Table 1 - Supporting plan & documents

3 Relevant Background Information

Statutory Designations

- 3.1 The presence of Tree Preservation Orders (TPOs) and/or Conservation Area status has been checked with the Local Planning Authority via their on-line mapping system on 2nd April 2019.
- 3.2 There are no TPOs covering trees on or directly adjacent to the site.
- 3.3 The site does not fall within a Conservation Area.

4 Baseline information and data collection

Brief site overview

- 4.1 The site is located to the north of Ebdon Road on the edge of Western Super Mare.
- 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 is a series of level fields with wide water filled drainage ditches separating them. Mature hedges with trees are present along the field boundaries.

Site survey

- 4.4 I undertook the site visit and tree survey assessment on the 07 March 2019.
- 4.5 The survey methodology and the tree quality assessment criteria are described in the accompanying Tree Survey document (see 2.3); which includes the survey data schedule.

Key trees & features

- 4.6 The site contains numerous willows, poplar and ash trees within the mature hedges. The species are typical of those found in the surrounding landscape.
- 4.7 The overall quality of the trees on site is moderate with numerous poor-quality specimens present. The hedges are over mature, degraded and recently pruned to bring them back into proactive management.
- 4.8 Several trees are present that have significant structural defects and require pruning if they are to be retained safely.

5 Proposed Development

- 5.1 The proposal is outline for residential development. The scheme includes an indicative master plan layout.
- 5.2 The master plan includes details of attenuation system locations linked into the existing ditch system.
- 5.3 A detailed access layout has been provided.

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 draft / indicative Tree Protection Plan (TPP) with a dashed canopy outline and included on the following table:

Tree Ref:	Species/Description of feature:	BS5837 category	Reason for removal & Impact:
H2 Part	Mixed native species Degraded hedge with limited species mix.	C2	Remove section to provide main western access point with visibility splay. Limited value with significant scope to improve. LOW IMPACT of limited magnitude.
H11 Part	Mixed native species. Degraded hedge with limited species mix.	C2	Remove 14m section to provide internal road connection. Limited value with significant scope to improve. LOW IMPACT of limited magnitude.
G12	Hawthorn & Apple Minor hedge feature with limited value.	C2	Limited landscape value – impact low of limited magnitude.
H13	Mixed species – native and non-native species. Degraded hedge with limited species mix.	C2	Remove 14m section to provide internal road connection and attenuation. Internal section of hedge – remove to provide sensible layout design. Limited value with significant scope to improve. LOW IMPACT of limited magnitude.
H29 Part	Blackthorn and hawthorn hedge. Degraded feature.	C2	Remove 9m section to allow house to be built. Low value feature with limited magnitude. LOW IMPACT.
T30	Ash – pollarded stem only	C1	Low value feature with no visual amenity value and limited life expectancy. LOW IMPACT.
H31	Blackthorn and hawthorn hedge. Degraded feature.	C2	Remove 14m section to provide internal road connection. Limited value and low magnitude impact. LOW IMPACT.
H32	Blackthorn, ash and hawthorn hedge. Degraded feature.	C2	Remove 15m to provide main eastern access point and visibility splay. Impact limited in magnitude. LOW IMPACT.

Table 2 - Trees to be removed

- 6.4 The layout requires minimal tree removal with the most significant trees retained within the indicative layout. The impact of tree loss is low as only small trees of purely internal benefit will be removed. This will allow a cohesive layout to be provided. The overall impact of tree loss is low.
- 6.5 Several sections of hedgerow will be removed to provide suitable access points and the internal road network to link the fields. The overall quality of the hedges is poor with most hedges in a degraded state with a very low species mix and limited evidence of ground cover plants being present.
- 6.6 The impact of the loss of individual sections is low as the impact on the wider landscape is very limited. There will be some disruption to the wider hedge network, but the scheme provides a significant opportunity to improve the quality of the retained hedges resulting in an overall net gain.

Impact of proposed development on amenity value

- 6.7 There will be a short term temporary negative impact due to the removal of sections of hedges required to develop the site. The impact of the loss of sections is low in magnitude due to the limited visibility of the hedges in the wider landscape and their heavily degraded quality.
- 6.8 Only three small minor trees with purely internal benefit will be felled to facilitate development. The impact of their loss is very low.
- 6.9 This impact is to be limited by the planting and establishment of replacement trees (shown indicatively on the master plan layout) so that the mid-long term impact will be positive due to the increase in the sites tree cover.

Retained trees - General minor impacts

- 6.10 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 TPP.

Retained Trees - Key issue(s)

- 6.11 The layout is not yet fixed, and this appraisal is based on the draft layout. This does indicate several areas where conflicts between proposed structures may arise.
- 6.12 The key issues relate to:
- Installation of the attenuation system
 - Proximity of houses to retained trees with some development shown in the root protection area of retained trees
- 6.13 The above issues are individually evaluated in the following sub-sections.

Key Impact 1 – excavations with RPA

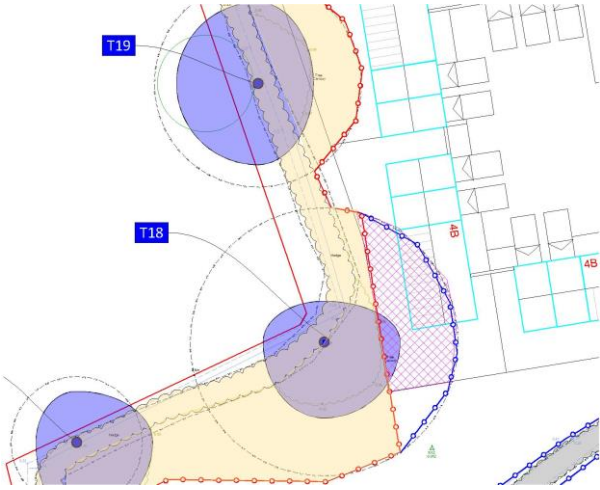
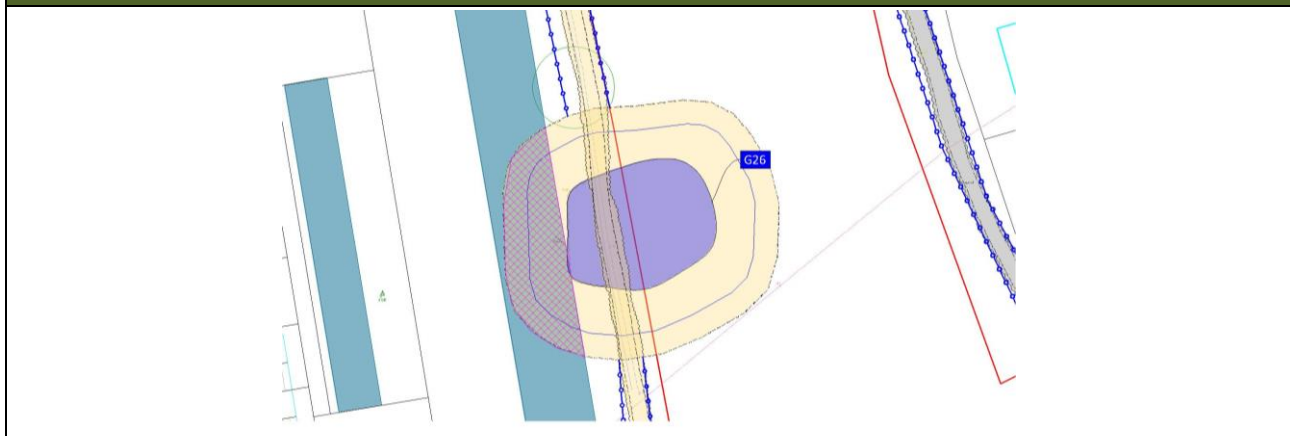
Layout Impact Plan:	
	
Description, magnitude and extent of IMPACT(s):	
6.15	The layout shows a residential unit within the RPA of tree T18, an ash. The tree is a pollard with a reduced crown volume – whilst the RPA is based on stem diameter the extent of the root system is more closely linked to the size of the crown. In addition, the tree has some fungal decay present within the crown and branch structure that may limit its life expectancy.
6.16	The tree will have ample undisturbed soil volume retained / undisturbed to sustain a tree of this size. There is scope to limit the impact through the production of an arboricultural method statement at the detailed design stage.
6.17	The impact is low to moderate and the tree can be managed to ensure its retention within a detailed scheme.
6.18	The spatial relationship between the tree and the proposed building is manageable and the unit will have ample daylight from the east and south. The tree has a very limited potential to increase in size due to the presence of decay fungus.
Mitigation recommended to reduce IMPACT(s):	
6.19	Pruning of the crown should be investigated to ensure the tree can be retained with a low risk of failure.
6.20	Foundation design and / or level design to minimise impacts from excavations should be investigated.

Table 3 – Key Impact 1

Key Impact 2 – Attenuation system

Layout Impact Plan:



Description, magnitude and extent of IMPACT(s):

- 6.21 The images above and below show the indicative locations of attenuation (blue, shaded strips). Several of these are within the RPA of retained trees and groups (G26 and G33).
- 6.22 The full magnitude of the impact is unknown at this stage. I have assumed that the attenuation comprises of under ground storage tanks or excavated swales.
- 6.23 Only a proportion of the trees RP will be affected by the proposal. Both areas will leave trees with a large undisturbed soil volume to allow root growth and function to continue.
- 6.24 G33 is located the other side of existing water filled ditches and the extent of rooting across them is uncertain and at least will be reduced compared to the land to the south. The impact from this will be tolerable and unlikely to lead to the loss or decline of the trees.

Mitigation recommended to reduce IMPACT(s):

- 6.25 Controlled excavations should be implemented as well as trial trenches to fully assess the extent of root spread prior to a detailed layout being produced.
- 6.26 A detailed arboricultural method statement should be produced, at the detailed design stage, to control the construction works on site and to limit any negative impacts arising from the attenuation system.

Extract from accompanying Tree Protection Plan:



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 draft TREE PROTECTION PLAN and general details (heads of terms) for an accompanying *Arboricultural Method Statement* are included in the appendices of this report. This should feed into the detailed layout design for the site.

Compensatory Planting

- 7.4 The indicative master plan shows that there is scope for extensive planting within the proposed scheme. There is ample space for large tree species as well as smaller trees within the layout. The indicative planting demonstrates that there will be a significant net gain in the sites tree cover.
- 7.5 There is also significant potential to manage and improve the species diversity within the retained hedgerows. This will also lead to a long-term net gain.
- 7.6 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 North Somerset policies are relevant to this report (specific policy wording included in *Appendix 2*):
 - i. CS4 Nature Conservation
 - ii. CS5: Landscape and the historic environment Landscape
- 8.3 The proposed development accords with the relevant sections of the above LPA policies.
- 8.4 The proposals will not lead to the loss of veteran trees or damage to ancient woodland. The master plan layout has retained the most significant trees and the larger hedge network.

- 8.5 The indicative layout demonstrates that the site can be developed with minimal impacts on trees.
- 8.6 There is substantial potential to enhance the sites tree cover and hedgerow quality – the master plan layout shows ample space for new tree planting leading to an overall long-term net gain in the sites tree cover.

9 Conclusions

- 9.1 The arboricultural impacts are low.
- 9.2 The existing tree cover on the site is of low to moderate quality with heavily degraded hedges and trees with limited viability.
- 9.3 The outline residential proposal retains the most significant trees and hedges with only the loss of a small number of minor insignificant trees. Several sections of hedge will be removed to allow access into the site and between fields. The impact of this will be low.
- 9.4 The indicative layout shows some minor impacts arising from the layout and the proposed attenuation. There is scope to limit the impacts arising from this through the detailed design and via the production of arboricultural method statements to control operations at the construction stage.
- 9.5 The layout shows that there is ample space for new tree planting as well as opportunities to improve the quality of the retained hedgerows. This will lead to a significant positive long-term impact in the sites' vegetation cover.
- 9.6 The proposal accords with national policy as well as locally adopted policy relating to trees and development.

10 Recommendations

- 10.1 The tree protection measures discussed in this report and shown on the accompanying Tree Protection Plan should be implemented.
- 10.2 The appropriate use of well worded planning condition(s) are considered a key element of successful tree retention during development and construction.
- 10.3 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 Protection Plan & Arboricultural Method Statement(s) and reporting to the LPA on a monthly basis.
- 10.4 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 and ground works.

d) Development of site.

e) Removal of tree protection measures.

10.5 All items above to be undertaken in accordance with LPA approved arboricultural method statements.

Appendices:

A1 Appendix 1 - Disclaimer, Limitations & Author

A2 Appendix 2 - Relevant Planning Policy (details)

A3 Appendix 3 - Default Tree Protection Measures

A4 Appendix 4 - AMS heads of terms

A5 Appendix 5 - 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

D Scanlon

MICFor, F.Arbor.A, CEnv

I am a professional tree specialist and Institute of Chartered Foresters Registered Consultant. I am a Fellow Member of the Arboricultural Association, Chartered Arboriculturist and Chartered Environmentalist.

I have 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]**.

A2.1 National Planning Policy Framework NPPF

Paragraph 11. Plans and decisions should apply a presumption in favour of sustainable development.

15. Conserving and enhancing the natural environment

Paragraph 170 (relevant parts only). Planning policies and decisions should contribute to and enhance the natural and local environment by:

- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
- d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;

Habitats and biodiversity:

175. When determining planning applications, local planning authorities should apply the following principles:

- a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;
- c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and
- d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged,

especially where this can secure measurable net gains for biodiversity.

A2.2 LPA Planning Policy

The following policies are considered relevant to this report:

North Somerset Local Plan:

CS4: Nature conservation

North Somerset contains outstanding wildlife habitats and species. These include limestone grasslands, traditional orchards, wetlands, rhynes, commons, hedgerows, ancient woodlands and the Severn Estuary. Key species include rare horseshoe bats, otters, wildfowl and wading birds, slow-worms and water voles.

The biodiversity of North Somerset will be maintained and enhanced by:

- 3) seeking to protect, connect and enhance important habitats, particularly designated sites, ancient woodlands and veteran trees;
- 4) promoting the enhancement of existing and provision of new green infrastructure of value to wildlife;
- 5) promoting native tree planting and well targeted woodland creation, and encouraging retention of trees, with a view to enhancing biodiversity.

CS5: Landscape and the historic environment

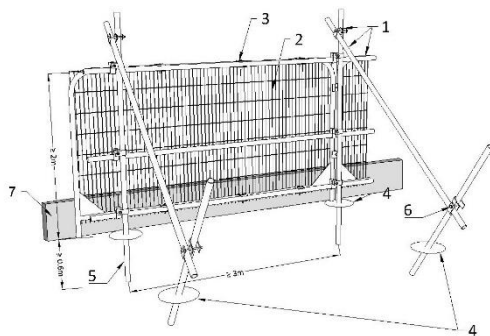
Landscape

The character, distinctiveness, diversity and quality of North Somerset’s landscape and townscape will be protected and enhanced by the careful, sensitive management and design of development. Close regard will be paid to the character of National Character Areas in North Somerset and particularly that of the 11 landscape types and 31 landscape character areas identified in the North Somerset Landscape Character Assessment.

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:

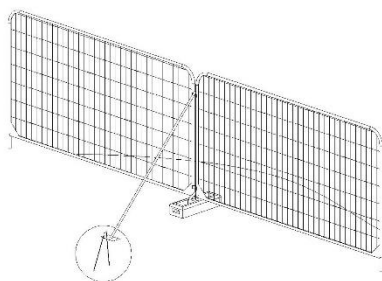


Key

- 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:

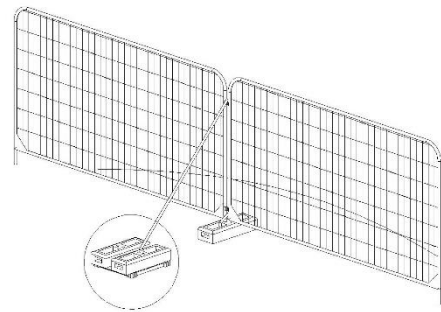
Examples of above-ground stabilizing systems



a) Stabilizer strut with base plate secured with ground pins

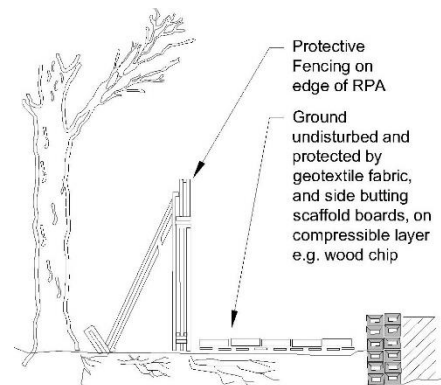
A3.4 Default TPF – Type2b:

Examples of above-ground stabilizing systems

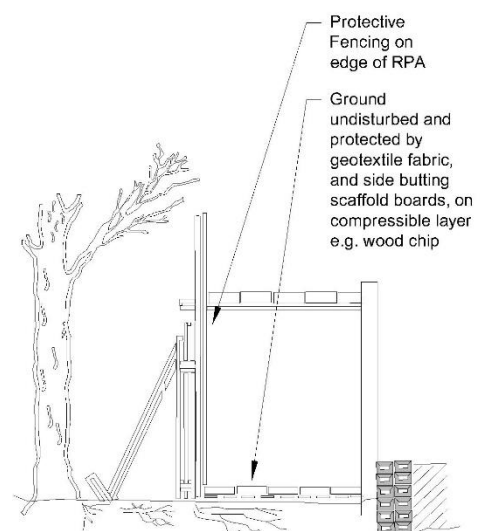


b) Stabilizer strut mounted on block tray

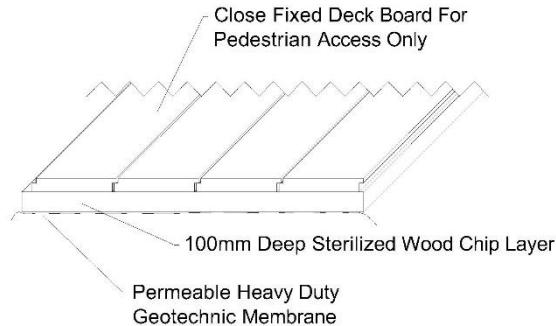
A3.4 TPF + Ground Protection in RPA:



A3.5 TPF + Scaffolding in RPA:



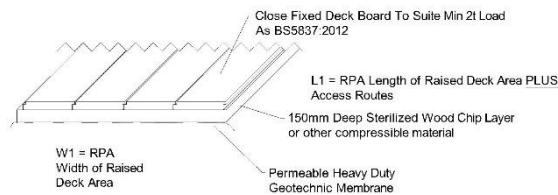
A3.6 Ground Protection in RPA – pedestrian:



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 ground-works 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 Protection Plan	05201.TPP.02.04.2019 Pages 01 & 02	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.