

Arboriculture Assessment & Method Statement

Proposed Parking
Paddocks, Days Lane, Fontwell

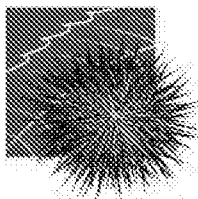


Date: 16th April 2021 Revision: 00

PLANNING ISSUE

Author: Andrew Ramsay BA (Hons) MALA CMLI

Ref: RCo375 / Paddocks / Rev00 / Planning / 16-04-21



Ramsay & Co
Landscape Architecture

The Studio, 68 Cuckfield Road, Hurstpierpoint, West Sussex, BN6 9SB

1.0 INTRODUCTION

1.1 The Brief and Scope of the Report

1.1.1 Ramsay & Co has been commissioned by The Amicus Group to provide a Tree Protection package in relation to new vehicular parking bays for Paddocks, a former residential dwelling.

1.1.2 This report has been prepared by Andrew Ramsay (BA Hons) MALA who is a Landscape Architect and a chartered member of the Landscape Institute (CMLI).

1.1.3 This report should be read in conjunction with the following Drawings:

- *RCo375 / 02 / Tree Protection Drawing;*
- *RCo375 / Tree Schedule.*

1.1.4 The purpose of this report is to assist in the planning process with regard to existing trees / vegetation and likely impact of new car parking areas (and associated extension of existing gravel area) on existing trees. The report has been prepared in line with the guidelines laid out within *BS5837-2012: Trees in Relation to Design, Demolition and Construction – Recommendations*. Where appropriate, the impact on existing trees has been considered with regard to the following:

- *The direct and indirect effects of the proposed scheme on the surveyed trees in relation to the proposed parking layout.*

1.1.5 This Arboriculture Report and Tree Survey is for planning purposes only and is not intended as a safety survey / audit or a long-term management plan and should not be used as such. All trees should undergo a regular and full safety inspection as defined by both civil law and the Occupiers' Liability Acts of 1957 & 1984.

Method Statement

1.1.6 The Method Statement (Refer to Section 04) is intended to provide guidance as to how the retained trees and shrubs are to be protected throughout the construction phase of the proposed residential development scheme in line with the recommendations contained within *BS5837-2012: Trees in Relation to Design, Demolition and Construction – Recommendations*.

1.1.7 Tree protection measures required to be implemented before the start of any construction / demolition activities include:

- *Designated tree and shrub removal;*
- *Positioning and installation of tree protection fencing.*

1.2 Paddocks: Site Appraisal

- 1.2.1 Paddocks is located to the west of Days Lane and north of the A27 dual carriageway. The site was formally a residential dwelling and associated garden but now forms part of The Coach House (located immediately south) which provides therapeutic residential care and education to vulnerable and traumatised children.

Existing Soils

- 1.2.2 The existing soils according to the Cranfield University Soils website is: *Freely draining slightly acid loamy soils* - fertility described as: *Low*.

1.3 Proposed New Parking

- 1.3.1 The new parking would provide space for an additional 3 no. spaces with 3 no. identified spaces to an area of existing gravel.

2.0 TREE SURVEY SUMMARY

- 2.1.1 The tree survey was carried out on the 29th March 2021. A total of 35 no. tree specimens / tree / shrub groups / hedgerows were surveyed – information regarding the trees and shrubs is contained within the accompanying Tree Schedule.
- 2.1.2 A total of 3 tree specimens were assessed as being category 'A' trees:

<i>Table 01: Tree / Shrubs / Hedgerow Categorisation Summary</i>		
Cat.	Tree/Shrub Specimens	Formal Hedgerows
A	3	
B	17	1
C	13	1

3.0 ARBORICULTURE IMPACT ASSESSMENT

3.1 Trees / Shrubs / Hedgerows Proposed to be Removed

- 3.1.1 Two 'B' Grade trees: TG 20 are proposed to be removed due to proximity to the new parking area. 1 no. 'C' Grade Beech shrub (S 19) would also be removed.

3.2 Tree Protection Measures

Tree Protection Measures: Temporary Fencing

- 3.2.1 The trees and vegetation designated for retention would be protected with temporary tree protection fencing in accordance with *BS5837: 2012 Trees in Relation to Design, Demolition and Construction – Recommendations*.

Tree Protection Measures: Hand Dig

- 3.2.2 A small area to the northern edge of a designated TRP area: T 17 would be hand dug to minimize any impacts on existing tree roots.

Underground Services

- 3.2.3 All proposed underground service routes should be located outwith of the existing tree root protection areas (it is not envisaged new service routes will form part of proposed parking).

Hazardous Materials

- 3.2.4 All hazardous materials should be strictly controlled in order to ensure that the risk of accidental spillage and thus risk of damage to existing tree root systems is minimised.

Inspections

- 3.2.5 It is not considered necessary to ensure the proposed tree protection measures are inspected prior to any works due to the small-scale nature of the proposed development (additional parking).

3.3 Summary & Conclusions

Proposed Planting

- 3.3.1 The new parking area would be edged with a Beech hedgerow and 1 no. tree specimen (fastigate Birch) delineating the additional parking from the garden area to the north.
- 3.3.2 Two 'B' grade trees are proposed to be removed to facilitate the new parking area however it is considered this would have a minimal impact with regard to public amenity being located within the garden area. Likewise, adverse effects with regard to the removal of the 'C' Grade Beech shrub with regard to public amenity would be negligible.
- 3.3.3 The small-scale nature of the proposed additional parking areas means all the existing trees to the north of Paddocks with the exception of TG 20 and S 19 could be retained. The loss of the two Birch trees and Beech shrub would be in part mitigated by new hedgerow and tree specimen planting.

4.0 METHOD STATEMENT

4.1 Phasing of Operations and Contractors Compound

- 4.1.1 All the measures described in this section are intended to ensure the protection of existing trees during the construction of the proposed development. All construction personnel, including sub-contractors and delivery drivers should be made aware of the elements within this report. (For all details refer to *RCo375 / 02 / Tree Protection Drawing* and the accompanying *Existing Tree Schedule*).

Phasing of Tree Protection Measures

- 4.1.2 The phasing of the tree protection measures are to be as follows;
- *Phase 01– Removal of designated shrubs and trees (Refer to RCo375 / 02 Tree Protection Drawing and Existing Tree Schedule);*
 - *Phase 02– Installation of Tree Protection Fencing;*
 - *Phase 03 – Commencement of construction activities on site;*
 - *Phase 04 - Removal of Tree Protection Fencing following the completion of major construction activities;*
 - *Phase 05 – Landscaping and associated works.*

Contractor Movements / Site Access and Egress / Site Office, Facilities and Storage Areas

- 4.1.3 The contractor site compound is to be located outwith of any existing tree root protection areas and will be located so as to avoid damage to any trees or canopies which are located within, or adjacent to the site boundaries. All operations which are associated with the construction / installation and use of the site compound will be undertaken so as to avoid any damage to existing trees and vegetation.
- 4.1.4 All access to and from the construction site will be via the existing entrance off Days Lane. No vehicular movements are to be permitted over unmade ground within the existing tree root protection areas of trees to be retained.
- 4.1.5 All site operations and construction activities will be conducted with due regard for the protection and long-term viability of the existing trees and vegetation which are to be retained according to the guidelines laid out within *BS5837: 2012 Trees in Relation to Demolition, Design and Construction – Recommendations*.

4.2 Tree Removal

- 4.2.1 The trees and shrubs to be removed are indicated on *RCo375 / 02 / Tree Protection Drawing*. All tree / shrub works to be carried out prior to the erection of tree protection fencing and construction site activities and great care should be taken to avoid any damage to existing trees / shrubs which are scheduled to be retained. Trees and shrubs should not be felled during the bird nesting season. (normally

considered to be 1st March – 31st July however depending on seasonal temperatures, some birds may continue breeding into August and September).

- 4.2.2 Stumps are to be removed and cut away so that the top of the stump is at least 450 mm below the final topsoil level in order that the site can be reinstalled in accordance with the existing site levels. Stumps are to be treated with an approved herbicide to be agreed with the Landscape Architect. Where the depth is greater than 450 mm the areas are to be backfilled with topsoil to the required level.
- 4.2.3 The removal of shrub vegetation within the existing tree root protection areas (as designated within *RCo375 / 02 / Tree Protection Drawing*) is to be undertaken by a manual method utilising hand tools only to minimise potential damage to the tree roots / tree architecture. Adjacent trees are not to be used as anchors or levers to assist in the removal of vegetation.

4.3 Tree Surgery

- 4.3.1 Any significant tree defects discovered during the scheduled tree works are to be reported to the project Landscape Architect / Arboriculture Consultant. All scheduled and arising tree work will be undertaken by an approved and appropriately qualified tree surgeon in accordance with BS 3998: 2010 *Tree Work: Recommendations*. Branches in confined spaces to be removed and taken down in sections and all arisings are to be transported and disposed of away from site unless advised otherwise.

4.4 Protection and Retention of Existing Trees and Vegetation

- 4.4.1 Where construction works are to be carried out below tree canopies and / or within tree root protection areas, the contractor is to exercise extreme caution in order to avoid any damage to the existing tree roots and / or tree architecture.
- 4.4.2 Any excavation, cultivation and grading scheduled within the designated tree root protection areas or under tree canopies are to be carried out manually using hand tools only, with extreme care exercised at all times to avoid damaging existing tree roots / architecture.
- 4.4.3 Trees scheduled to be retained within the development site are to be protected with tree protection fencing as detailed on *RCo375 / 02 / Tree Protection Drawing* and in accordance with the guidance laid out within *BS5837-2012: Trees in Relation to Design, Demolition and Construction – Recommendations*. The fencing is to be installed prior to any construction activities. The contractor is to be responsible for the installation, protection and maintenance of the tree protection fencing as well as the areas below the tree canopies and within the tree root protection areas.
- 4.4.4 The tree protection fencing is to be 2.0m height Herras welded wire mesh fencing secured to a scaffolding framework, set into the existing ground and positioned to the outside edge of the designated Tree Root Protection Areas. The fencing should

be strained and fixed to appropriate fences, walls, knee rails etc. where possible to provide a robust and completely protected area (*refer to Figures 1 and Figure 2, Section 5.0*). All tree protection fencing to be in accordance with *BS 5837-2012: 'Trees in Relation to Design, Demolition and Construction - Recommendations'* set out as specified within *RCo375 / 02 / Tree Protection Drawing*.

- 4.4.5 Day-Glo ribbons should be attached to the top of the fencing to ensure the fencing can be seen. The fencing should have all weather signs attached (*Refer to Figure 3 - Section 5.0 for example*).
- 4.4.6 All tree root protection fencing will be maintained for the full construction period and inspected and approved by a nominated individual prior to the commencement of any construction site activities. If the tree root protection fencing requires repositioning during the course of the construction programme, prior notification and agreement must be sought by the contractor with the landscape architect.
- 4.4.7 Within the designated tree root protection areas:
- *No vehicles / machinery are to be used;*
 - *No materials / chemicals are to be stockpiled / stored;*
 - *No excavation activities. Ground levels to be maintained;*
 - *No fires are to be lit.*
- 4.4.8 At the end of the contract period the contractor shall remove all protective fencing from the development site. All existing vegetation is to be healthy and thriving at handover.

4.5 Manual Excavation and Demolition

- 4.5.1 Any regrading of existing ground levels should, wherever possible be limited to areas out-with tree root protection areas. Where existing ground levels are to be regraded within tree root protection areas, any excavation should be undertaken manually and with hand tools only. Individual tree roots and root clumps measuring >25mm must not be severed without seeking specialist arboriculture advice. Roots measuring <25mm may be cleanly severed using specialist hand tools only and to the absolute minimum extent. Any roots which are exposed should be immediately covered with hessian sacking and backfilled with existing topsoil or appropriate granular fill (non-injurious to tree roots) as soon as possible in order to minimise and limit drying and desiccation.

4.6 Localised Regrading

- 4.6.1 Any localised regarding within tree root protection areas is to be carried out by hand with any disparity in ground levels to be made good with topsoil and subsequently grass seeded.

4.7 Service Routes / Trenches

- 4.7.1 Wherever possible proposed service routes (cables, pipes, service runs etc) should be located outwith of tree root protection areas. Where site constraints dictate this is not possible, the service route should be designed so as to minimise the impact to the existing tree root protection area ie routed in the most direct route to and from the exterior of the radius root protection area and minimising the length of the run. Service trenches within tree root protection areas should be excavated using a manual dig method with hand tools only and routed through tree roots via a ducting sleeve. Service runs should, wherever possible be combined in order to minimise the impact on existing tree roots and not within 1.0m of the tree trunk.
- 4.7.2 Individual tree roots and root clumps measuring >25mm must not be severed without seeking specialist arboriculture advice. Roots measuring <25mm may be severed using specialist hand tools only and to the absolute minimum extent to allow the facilitation of the service route - wherever possible tree roots must be left intact in order to ensure the long term viability of the tree root system. Exposed routes should be immediately wrapped in dry hessian sacking or coconut matting in order to prevent drying and as a temporary measure can be surrounded with a loose granular fill prior to backfilling with the excavated topsoil. Tree roots >25mm, which are not required to be severed, may be carefully retained and protected with washed sharp sand, prior to backfilling with topsoil.
- 4.7.3 In some instances, trenchless insertion methods may be employed in order to facilitate service runs through root protection areas. In such cases the entry and retrieval pits should be located outside of the designated root protection areas and the run should be located below 750mm from the existing ground level in order to limit the potential damage to existing tree roots.

4.8 Lifting of Existing Hard Surfaced Areas

- 4.8.1 The removal of any existing hard surface layer within the tree root protection areas should be undertaken taking care to ensure the existing tree roots remain undamaged. Any operations should be undertaken manually and with hand tools (suitable machinery may be used in consultation with the landscape architect) and should be accomplished by working backwards to ensure the resulting, exposed ground is not compacted.

4.9 Demolition of Structures

- 4.9.1 Trees close to structures which are scheduled to be demolished within RPAs should be selectively pruned (Tying back branches to achieve a clear working space should also be considered as an alternative) in order to prevent accidental damage. Movement of machinery should be restricted to areas outside of the RPA, areas with ground protection or from within the existing building footprint. Where trees are in close proximity to structures they should be demolished using a '*top down pull back*' method. Any below ground structures within existing Tree RPAs (eg foundations) should be left in situ to prevent accidental damage to tree roots.

4.10 Herbicides

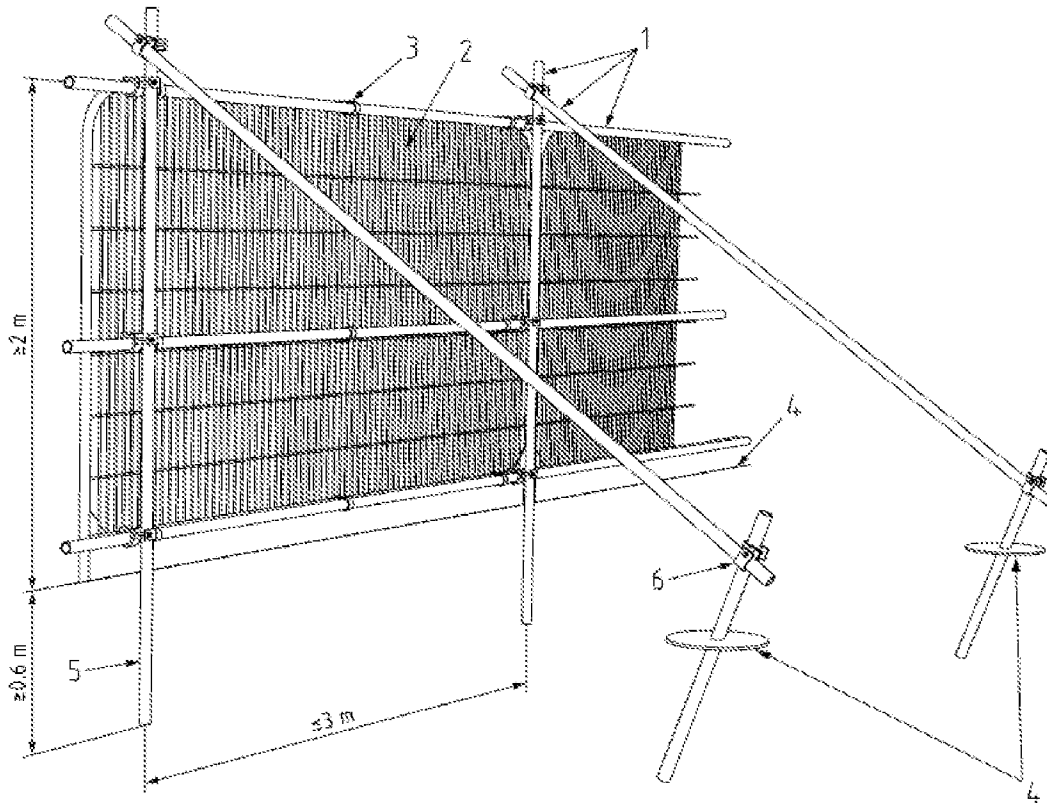
- 4.10.1 Any herbicides which are to be used within the vicinity of existing trees and particularly within designated RPAs should be an appropriate product for the vegetation which is intended to be removed and all instructions and guidance from the manufacturers are to be strictly observed. The following guidance / legislation may be pertinent;
- *Control of Pesticides Regulations 1986*;
 - *The Control of Pesticides Regulations (Amended 2012)*;
 - *Control of Substances Hazardous to Health Regulations 1994*;
 - *HSE Publication 257 (2013)*;
 - *Pesticides Safety Directive (www.pesticides.gov.uk)*.

4.11 General Notes

- 4.11.1 The guidance and principles within *BS5837: 2012 - Trees In Relation to Design, Demolition and Construction – Recommendations* are to be followed at all times to prevent undue damage and / or stress on the tree root systems of trees within and adjacent to the proposed development site.
- 4.11.2 The integrity of the existing soil structures are fundamental to the long term health and viability of trees and therefore soil compaction, excavation and contamination is to be avoided at all times within the RPAs. Great care is to be taken to avoid damage to tree roots, stems, boles, branches and canopies.
- 4.11.3 All tree protection measures are to be carried out on site in accordance with the relevant drawings and schedules which accompany this method statement.

5.0 FIGURES

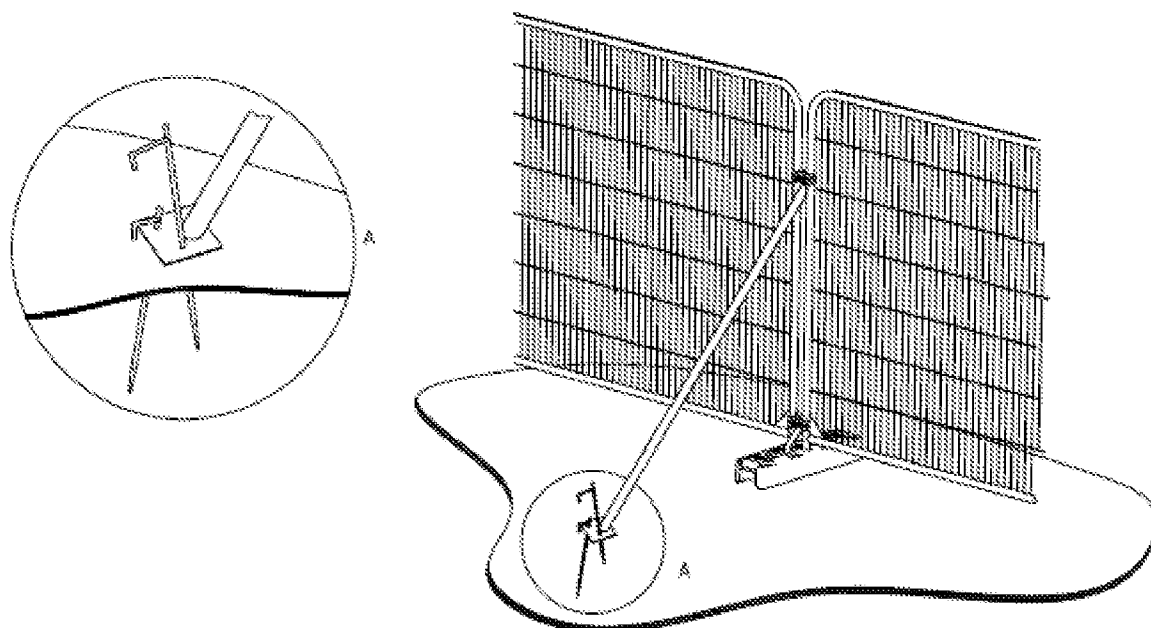
Figure 01. Tree Protective Fencing. Default specification for protective barrier
(© The British Standards Institution 2012)



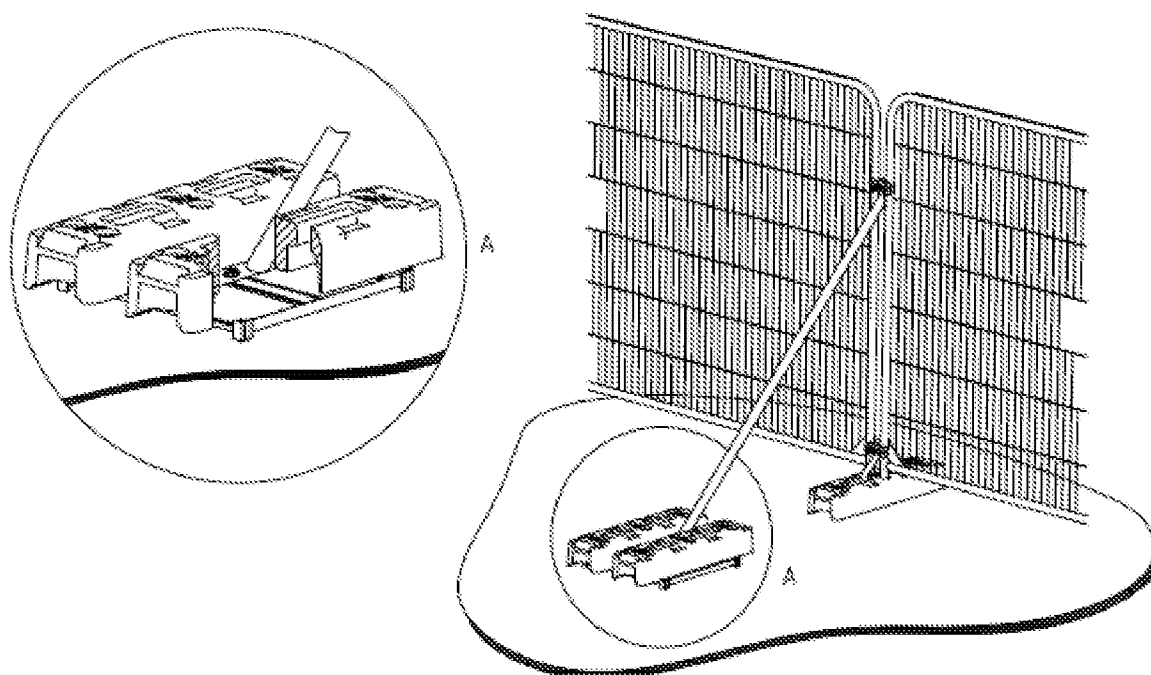
Key

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

Figure 02. Tree Protective Fencing Support - Alternative support specification for protective barrier.
(© The British Standards Institution 2012)



a) Stabilizer strut with base plate secured with ground pins



b) Stabilizer strut mounted on block tray

Figure 03. Tree Protection Fencing - Signage

TREE PROTECTION ZONE KEEP OUT

**TREES ENCLOSED BY THIS FENCING ARE PROTECTED BY
PLANNING CONDITIONS
(Town & Country Planning Act 1990)**

THE FOLLOWING MUST BE OBSERVED AT ALL TIMES;

- **TREE PROTECTION FENCING MUST NOT BE REMOVED OR ALTERED**
- **NO PERSONS SHALL ENTER THE PROTECTED AREA**
- **NO MACHINE OR PLANT SHALL ENTER THE PROTECTED AREA**
- **NO MATERIALS SHALL BE STORED IN THE PROTECTED AREA**
- **NO SPOIL SHALL BE DEPOSITED IN THE PROTECTED AREA**
- **NO EXCAVATION SHALL OCCUR IN THE PROTECTED AREA**

**ANY INCURSION WITHIN THE PROTECTED AREA MUST BE WITH THE WRITTEN
APPROVAL OF THE LOCAL PLANNING AUTHORITY**