

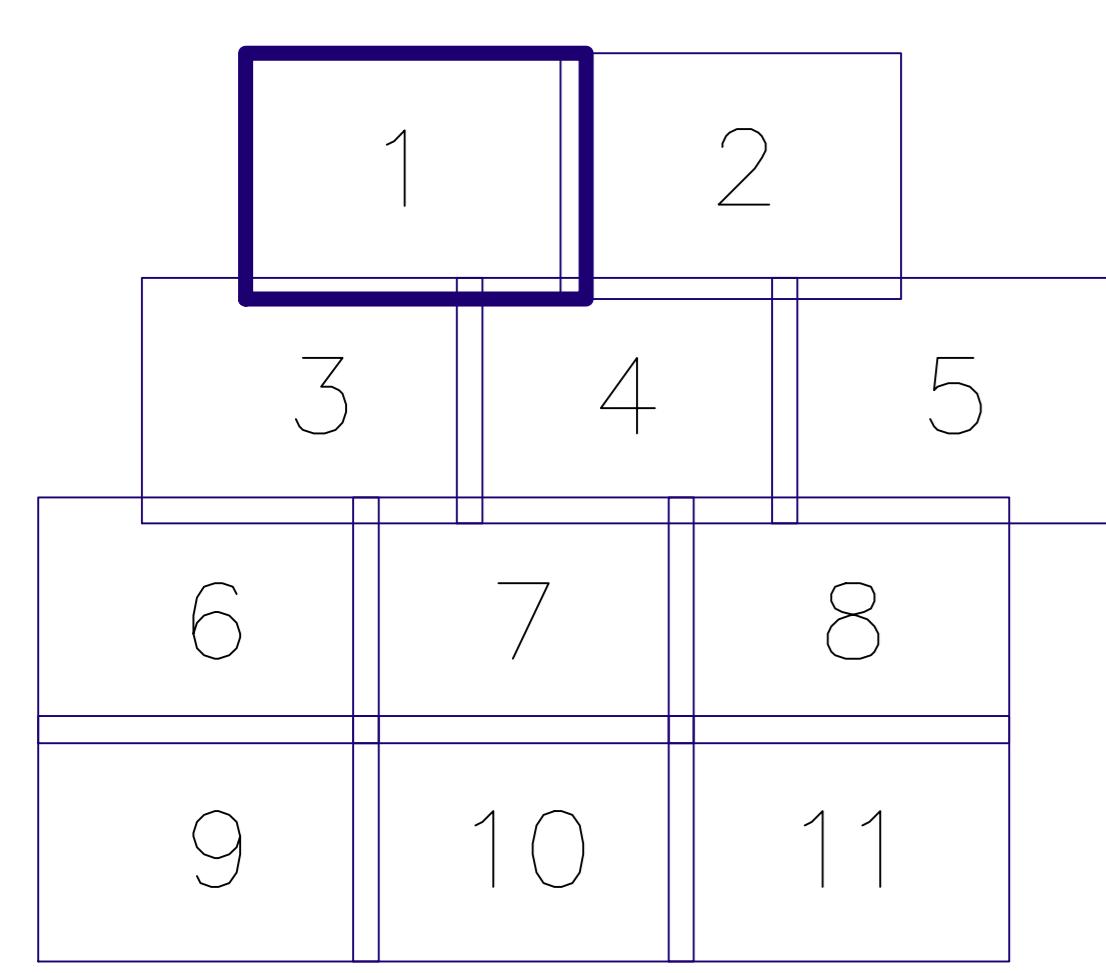



TREE PROTECTION PLAN


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
OVERVIEW SHEET NOT TO SCALE





























Notes:
 Do not scale off dwg - refer to tree survey data schedule for crown spreads etc
 Tree / woodland group outlines follow the topo survey or aerial imagery, as applicable
 All tree positions are indicative unless a topo survey has been provided to FLAC
 Any trees omitted from topo survey are located indicatively
 RPA for hedges or hedgerows to be taken as 3m from the centreline, half the height or width + 2m each side, whichever is the greater
 Note on potential habitat features are for guidance only: ecological assessment is recommended
 Drawn to N unless otherwise indicated



Client
 University of Reading
 Instruction
 Loddon Garden Village
 Instruction ref.
 45-1011
 Dwg title
 Tree Protection Plan (Outline)
 Dwg no.
 45-1011.04
 Date
 25.07.25
 Scale
 Overview plan NTS
 Detail sheets 1:1000 @ A0

Quality & value grades:
 Category A ● High
 Category B ● Moderate
 Category C ● Low
 Category U ● Unretainable

● Retained trees
 FLAC ref. for Very High Quality trees inc. Framework veterans

● Notional tree root protection area - RPA

● Veteran tree buffer per Natural England Standing Advice 15x stem dia.

● Veteran tree crown hatch (NPFF definition)

■ Areas of ancient woodland (MAGIC data)

■ 15m offset ancient woodland buffer zone

■ FLAC Type 1 tree protection fencing (TPF), see Inset sketch 1

■ FLAC Type 2 tree protection fencing (TPF), see Inset sketch 2

■ FLAC Type 3 tree protection fencing (TPF), see Inset sketch 3

■ New permanent hard surfacing constructed to no-dig principles

● Relocated monotypy to Sylvan detail (3n) positions indicative
 The Old Rectory, Park Lane, Blunham
 BEDFORD, MK44 3N
 Tel: 01767 600 400
 email: info@flac-uk.com
 www.flac-uk.com

ARBORICULTURAL METHOD STATEMENT

A) PRELIMINARY MATTERS

1. Prior to commencement of any work on site, including preparation for demolition, a pre-start site meeting shall take place attended by FLAC, the tree contractor and the demolition & construction contractors. This meeting shall inform demolition/construction personnel of the requirements of the tree protection plan during site's redevelopment, and shall identify any requirement for additional access facilitation pruning and/ or tree tying. A specification for all such tree work shall subsequently be prepared by FLAC.

2. Prior to any ground works, demolition or construction work on site, the approved tree works (see FUG dwg. no. 45-1011.03 or as superseded by full planning consent **NB** Not Outline consent) shall be undertaken by tree contractors (not unskilled personnel).

3. No plant access is permitted for tree work operations within the root protection areas (RPAs) of retention trees, including areas identified for temporary ground protection

4. All approved tree removals shall be undertaken by tree contractors. Each tree shall be cut down to a low stump

5. Trees for removal within the RPA of retention trees shall have their stumps ground out (also by tree contractors)

6. Stumps from felled trees outside of RPAs of retained trees shall be grubbed out

B) INSTALLATION OF PHYSICAL TREE PROTECTION MEASURES

7. Following completion of felling tree works, each phase shall be within its full or part physical tree protection measures (borders and ground protection) installed (i.e. not in piecemeal) in line with the provisions of BS5837:2012. These measures comprise:

- Tree Protection Fencing (TPF) to BS5837:2012 Figure 2 (see FLAC Type 1 at Inset Sketch 1) fitted with all-weather warning signs (see elsewhere on plan)

- FLAC Type 2 TPF (see Inset Sketch 2), on secondary alignments to provide access for a) works behind the primary alignment but within the RPAs and b) where proximity to site boundary does not allow on-site space for a) works behind the primary alignment and b) access

FLAC Type 3 TPF (see Inset Sketch 3) comprising double height Type 1 TPF for enhanced protection of confirmed veteran trees in proximity to significant construction operations. Type 3 TPF to exclude construction access from Veteran Tree Buffers (VTBs)

8. The TPF to be installed on the primary alignment (as per the dwg key) prior to any demolition, ground works and construction works shall be the responsibility of the tree contractor throughout the redevelopment phase. Site secure fencing may take the place of tree protection fencing if it is a) suitably robust and b) provides no less protection for above and below ground tree constraints with the exception of Type 3 TPF, which will be installed wherever specified

C) PROHIBITIONS & PRECAUTIONS

9. The fencing, ground protection and any existing hard surfaces within the root protection area comprise the Construction Exclusion Zone. Within this zone, the following activities are strictly prohibited during primary demolition (other than as described below):

- Excavation / lowering of levels into rootable soil: removal of ground surface is acceptable;
 - Stripping or reduction in depth of topsoil is not;
 - Existing ditches within either RPAs or VTBs that are to be used for proposal drainage must not be cleaned, improved, re-graded or re-profiled
 - Removal of hard ground surfaces (= 'secondary demolition': see below)
 - Grubbing out of redundant buried structures (see below)
 - Operation, transit or storage of plant, and storage of materials within the demolition arisings, other than on ground protection
 - Storage or handling of any chemical substance injurious to trees, including fuels, oils, lubricants and cement
 - No services/drainage to be aligned through RPAs except by trenchless methods
 - No level changes within RPAs
 - Boring features to avoid continuous excavations or trenching within RPAs

10. The Construction Exclusion Zone shall be established site-wide as set out above, and shall remain in place throughout the redevelopment process. No elements of the physical tree protection shall be removed or altered during the demolition phase without written consent from the local planning authority.

11. Demolition of superstructures within 3m of tree canopies and / or the construction exclusion zone is an operation with a high potential to damage retention trees ('high-risk operation'), and requires on-site arboricultural supervision within RPAs

12. Within the Construction Exclusion Zone, break-out and replacement of existing hard surfaces, including drainage structures, are also high risk operations and shall be undertaken under site supervisor by FLAC

D) METHODS FOR TREE FRIENDLY WORKING

13. Redundant buried structures are preferably disconnected / backfilled and retained in situ; further advice should be sought from FLAC before consideration is given to grubbing them out. Existing hard surfaces within RPAs shall be removed by hand tools only, and not demolished / removed until completion of primary construction (see Phasing Schedule)

14. The recommendations of BS5837:2012 6.2.4.1 shall be strictly observed throughout the demolition and construction process

BS5837:2012 6.2.4.1

Planning of site operations should take sufficient account of wide loads, tall loads and plant operations, jibs and overhead power lines, and other potential hazards, in order that they can operate without coming into contact with retained trees. Such contact can result in serious damage to the trees and might make their safe retention impossible. Work should be carried out in a way that minimizes risk to trees to be conducted under the supervision of a banksmans, to ensure that adequate clearance from trees is maintained at all times. Access facilitation pruning should be undertaken where necessary to maintain this clearance.

Note: In some instances local planning authority consent for pruning might be required

E) ARBORICULTURAL SUPERVISION & REPORTING

15. All high-risk operations (i.e. intra-RPA) require arboricultural supervision. Additionally ongoing inspection of the tree protection measures shall be provided whilst works are in progress. A schedule of supervision is provided elsewhere on this drawing.

A WRITTEN & PHOTOGRAPHIC REPORT WILL BE PROVIDED WITHIN 5 WORKING DAYS OF EACH MONITORING VISIT

TREE PROTECTION PHASING SCHEDULE

The following phasing schedule shall be strictly adhered to:

1. Pre-start site meeting (refer to Arboricultural Method Statement)
2. Implementation of physical tree protection (= establishment of Construction Exclusion Zone)
3. Audit of adjustments to/installation of secondary tree protection measures by FLAC
4. Primary construction
5. Secondary construction including hard landscaping
6. ARB OVERWATRED BY FLAC FOR ANY OPERATIONS WITHIN CONSTRUCTION EXCLUSION ZONE (see Arboricultural Supervisor)
7. Removal of physical tree protection measures
8. Soft landscaping
9. Post-completion tree condition check by FLAC

ARBORICULTURAL SUPERVISION SCHEDULE

General
 - Pre-start meeting with contractors
 - Audit of enabling tree works & tree protection system, fencing and ground protection

- 2x weekly
- 2x fortnightly visits
- 3x monthly
- Quarterly visits until completion, inc. of soft landscaping
- Adjustments of TPF from primary to secondary alignments
- All/any works within the root protection areas (RPAs) (see specific tasks below) including excavations for retaining wall north of access

LANDSCAPING WITHIN RPAs

After primary construction has been completed the Tree Protection Fencing shall be removed to allow landscaping to take place.

Prior to landscaping commencing the project arboricultural supervisor shall meet the landscape contractors to discuss what is proposed and precautions required.

The following principles shall be followed **within the RPA of retained trees**:

- No machinery shall pass over the ground unless protected by existing hard surface or temporary ground protection
- If excavation is required, this shall be localised and undertaken carefully by hand tools only ensuring that roots are preserved
- There shall be no changes in levels, unless agreed by the project arboricultural supervisor

NO-DIG FOOTWAY/CYCLEWAY CONSTRUCTION USING THREE-DIMENSIONAL CELLULAR CONFINEMENT SYSTEM

In the position shown on this plan by the orange hatching, construction shall be undertaken over the existing ground **without excavation** using a proprietary three-dimensional cellular confinement system such as Geosynthetics cellweb.

The system shall comprise:

- A porous geotextile membrane laid over the ground
- A three-dimensional cellular confinement system opened out and fixed in place over the membrane
- Edge constraints such as timber sleepers or pinned kerb stones placed on the existing surface
- Crushed, angular stone (20-40mm) with no-fines filled into the cells
- Permeable resin-bonded gravel or other permeable wearing course over the aggregate to allow gaseous exchange and water infiltration

INSET SKETCH 1 - FLAC TYPE 1 TREE PROTECTION FENCING

In the position shown on this plan by the orange hatching, construction shall be undertaken over the existing ground **without excavation** using a proprietary three-dimensional cellular confinement system such as Geosynthetics cellweb.

The system shall comprise:

- A porous geotextile membrane laid over the ground
- A three-dimensional cellular confinement system opened out and fixed in place over the membrane
- Edge constraints such as timber sleepers or pinned kerb stones placed on the existing surface
- Crushed, angular stone (20-40mm) with no-fines filled into the cells
- Permeable resin-bonded gravel or other permeable wearing course over the aggregate to allow gaseous exchange and water infiltration

INSET SKETCH 2 - FLAC TYPE 2 TREE PROTECTION FENCING

The work shall be undertaken during the landscaping phase (see separate box relating to landscaping) after all other construction has been completed

A DETAILED SITE-SPECIFIC CONSTRUCTION DESIGN SHALL BE PREPARED BY AN ENGINEER OR PRODUCT MANUFACTURER PRIOR TO INSTALLATION

LANDSCAPING WITHIN RPAs

After primary construction has been completed the Tree Protection Fencing shall be removed to allow landscaping to take place.

Prior to landscaping commencing the project arboricultural supervisor shall meet the landscape contractors to discuss what is proposed and precautions required.

The following principles shall be followed **within the RPA of retained trees**:

- No machinery shall pass over the ground unless protected by existing hard surface or temporary ground protection
- If excavation is required, this shall be localised and undertaken carefully by hand tools only ensuring that roots are preserved
- There shall be no changes in levels, unless agreed by the project arboricultural supervisor

INSET SKETCH 3 - FLAC TYPE 3 TREE PROTECTION FENCING

Several stages comprising the installation of the fence panels, the base plate and the top rail.

First stage is for Type 1 TPF, second stage is for Type 2 TPF and third stage is for Type 3 TPF.

Panel height is 1.8m, base plate height is 0.15m and top rail height is 0.15m.

Panel height is 2.1m, base plate height is 0.15m and top rail height is 0.15m.

Panel height is 2.4m, base plate height is 0.15m and top rail height is 0.15m.

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