

#### arborecoconsultancy@gmail.com

Tel: 07542093882

9<sup>th</sup> September 2024

Report Number MB240803-01

1

## KNOWLE VILLAGE RECREATION GROUND AND VILLAGE HALL ARBORICULTURAL METHOD STATEMENT

#### **INTRODUCTION**

Arbor-Eco Consultancy was commissioned by the Clerk & RFO to Wickham & Knowle Parish Council, to provide an Arboricultural Method Statement following a survey of trees at Knowle Village Recreation Ground.

#### **Project Brief**

The Arboricultural Method Statement provides the methodology to support the construction of an additional 10 (ten) parking bays and to include an extension to the existing Village Hall.

During the process, Arbor-Eco Consultancy engaged with the architects at Axis Architecture Limited to discuss the positioning of the proposed car parking bays and the final layout in order to avoid any impact to the trees at this site. It is worthwhile mentioning that Axis Architecture Limited should be congratulated on their proposed layout as it avoids all impacts for this work.

#### **METHOD STATEMENT**

The method statement is enclosed within this letter.

Due to the low impact work at this site and the fact that the works to complete the proposed development has been designed so as not to impact any tree, the Arboricultural Method Statement has been written in this format for ease.

#### **Car Parking Bays**

A single tree within G1 has an RPA that has been shown to be encroached by a small amount. BS5837:2012 Para 7.4.2.3 states; New permanent hard surfacing should not exceed 20% of any existing unsurfaced ground within the RPA. This allowance may be permitted in the case of the parking bays or other sections of hard surfacing where encroachment into an RPA is at the periphery. Therefore, the work around the RPA of the tree within G1 is permitted and justified.

#### **Village Hall Extension**

It is deemed that there will be no impact to the trees surrounding the Village Hall as they are such a distance from the construction area that no conflict is anticipated. The tree protection measures are detailed on the accompanying AMS and Tree Protection Drawing.

Arbor-Eco Consultancy

## The methodology for the installation of the tree protection measures required are shown on Drawing Number MB240803-01-02.

Prior to any works being carried out on site the location and suitability of the tree protection installed will be approved by the Project Arboriculturist

#### **CONTACT DETAILS**

If any issues arise in relation to the retained trees the Project Arboriculturist will be contacted for advice. The Project Arboriculturist for the development is:

#### **Arbor-Eco Consultancy**

Name: Marco Bartolini

Position: Arboricultural Consultant

Mobile: 07542 093882

Should you have any further questions please do not hesitate to contact us.

Yours sincerely,

Marco Bartolini

Arboricultural Consultant TechArborA, PTI, FdScWM, Dip Mgmt

For and On Behalf of Arbor-Eco Consultancy

#### **Enclosures:**

**Tree Constraints Plan** 

Tree Protection Plan

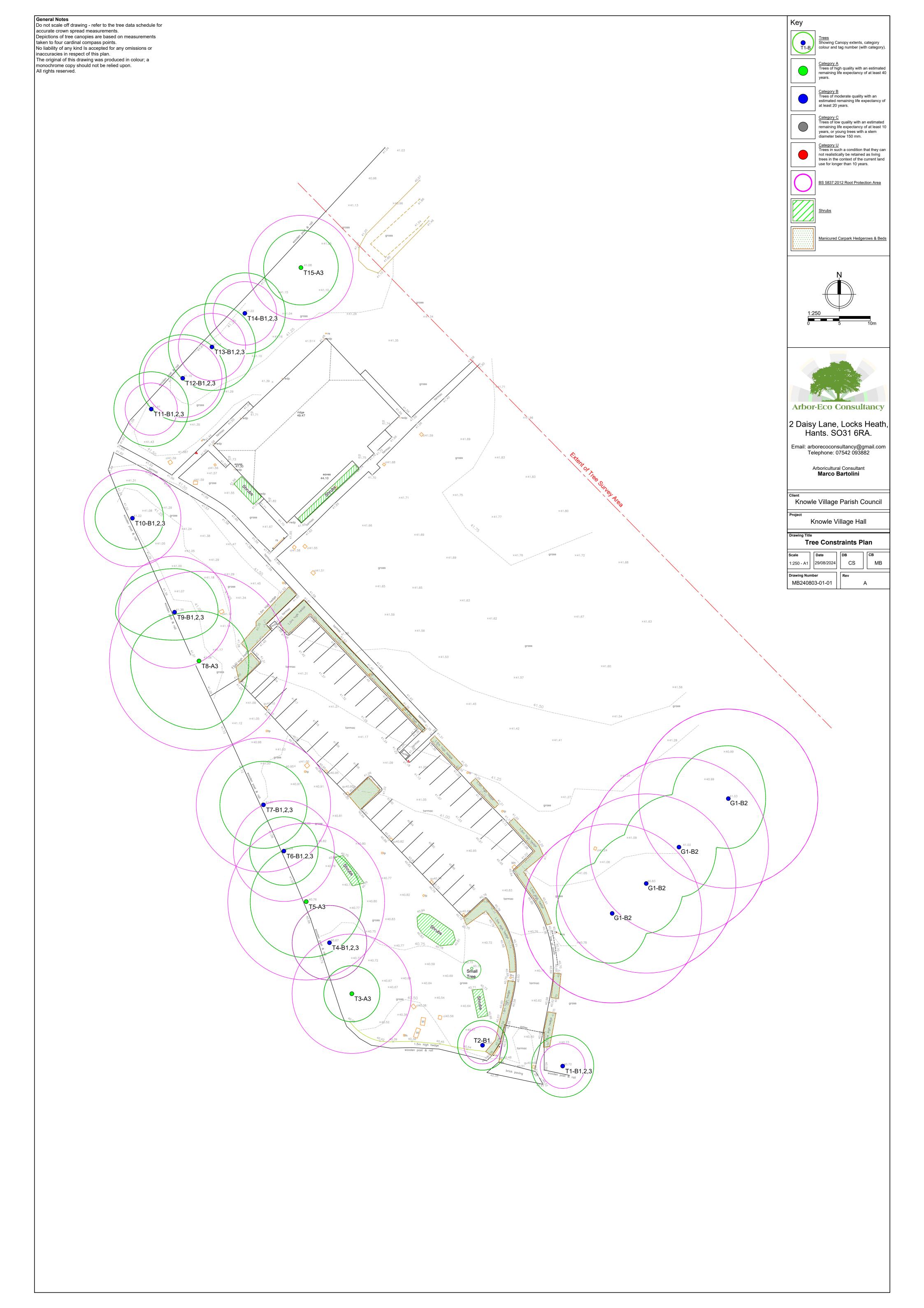
Arboricultural Methodology for the Proposed Development

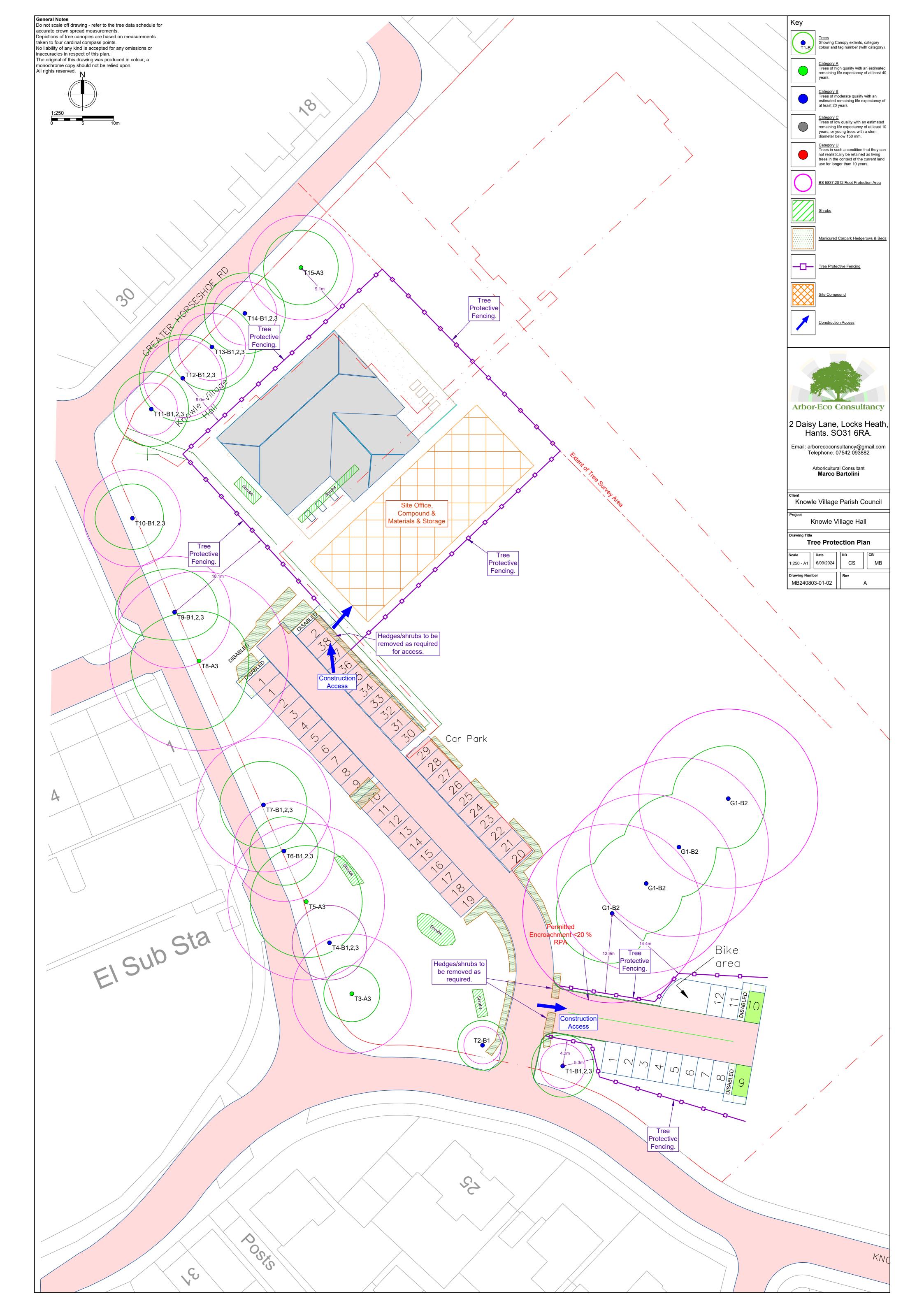
**CEZ Example Sign** 

Poster – Causes of Death to Trees during Construction Tree

**Protection Design examples** 

Arbor-Eco Consultancy 2





Knowle Village Hall, Knowle MB240803-01

#### **Appendix 1: Arboricultural Method Statement**

The majority of the trees at this site are the subject of a Tree Preservation Order and neglecting this fact can attract a criminal record, fines (up to £20,000 per tree) and in extreme cases a court judgement made against a 'developer'. Unlimited fines based on assets or future sale potential is not unusual. In addition, under Section 171E of the Town and Country Planning Act 1990, the local authority also has the powers to issue a temporary stop notice to cease activity.

A pre-commencement meeting prior to the start of any works between the Local Planning Authority (LPA) Arboricultural Officer, appointed Arboricultural Consultant and Site Manager must take place to clarify any additional protection measures required. The purpose of the pre-commencement site meeting is to:

- Confirm the position of the tree protective fencing and ground protection on site;
- Discuss any potential conflict with the tree protection measures and identify acceptable solutions;
- Understand the timeframe for the site clearance, demolition and construction phases;
- Identify and agree the frequency of Arboricultural site monitoring, recording process and reporting procedure to the Local Planning Authority to aid discharge of any relevant planning conditions (appointed Arboricultural Consultant to issue written report to Site Manager and Local Planning Authority discussing findings from site monitoring).

To aid the site clearance and construction phase for the development of the site, an Arboricultural Consultant (suitably qualified) must be appointed to inspect and monitor the site at the start of the works and on an as required basis throughout the construction works to ensure that the protection procedures are adhered to and to assist with addressing further arboricultural issues that may arise.

It is deemed that there are no tree works required to facilitate the development. A number of small shrub beds will be required to be removed to permit the access required to form the car parking bays and allow construction activities to commence at the Village Hall.

The protective measures, as shown on the drawing "Tree Protection Plan" must be erected after the shrub bed removal but prior to any enabling works or construction works. Once erected, the land beyond the barriers (and any ground protection agreed at the initial site meeting) must be considered sacrosanct, and must not be removed or altered without prior recommendation by the appointed Arboricultural Consultant and written approval by the LPA.

The protective barriers must be erected according to drawing "Tree Protection Plan" survey sheet which is based upon the guidelines within BS5837: 2012 'Trees in relation to demolition, design and construction - recommendations'. Tree protective fencing and ground protection positions are to be identified at the pre-commencement site meeting. Scaling from the Tree Protection Plan should not be used. **There will be no construction activity beyond the line of the tree protection barriers.** There will be no excavation work or other such activity within the RPA of G1 with the exception of the small section identified. Beyond this, no kerbs or any other ground disturbance will occur.

BS5837:2012 Para 7.4.2.3 states; New permanent hard surfacing should not exceed 20% of any existing unsurfaced ground within the RPA. This allowance may be permitted in the case of the parking bays or other sections of hard surfacing where encroachment into an RPA is at the periphery. Therefore, the work around the RPA of the tree within G1 is permitted and justified.

Barriers should be fit for the purpose of excluding construction activity and appropriate to the degree and proximity of work taking place around the retained trees. Special attention should be paid to ensure that the barriers remain rigid, unmoveable when installed and complete. Barriers must consist of a 1.8 m high scaffold framework comprising a vertical and horizontal framework, well braced to resist impacts, with vertical tubes spaced at a maximum interval of 3 m. Onto this frame a 1.8 m high weldmesh panels should be securely fixed with wire or scaffold clamps. Weldmesh panels on rubber or concrete feet are resistant to impact when secured to the ground with 1 m road-pins or a scaffold pole driven through the rubber feet into the ground to at least 0.5 m deep. These must only be used where low-level works are being conducted or there is a risk of damaging underlying roots. This can be agreed at the pre-commencement site meeting. If an alternative specification is preferred then it must be agreed with the appointed Arboricultural Consultant or Local Planning Authority prior to installation.

There is currently no requirement to instal ground protection due to the proposed locations of the proposed development being outside of the influence of the trees. However, where ground protection is subsequently identified and agreed at the precommencement site meeting then the following specification will be used;

- Ground protection has been identified for pedestrian movements (and scaffolding activities) within proximity to the root protection area (RPA) and must be a single thickness of scaffold boards on top of a compressible layer (for instance bark mulch) laid onto a geotextile membrane, or supported by scaffold. If an alternative specification is preferred then it must be agreed with the appointed Arboricultural Consultant or Local Planning Authority prior to installation.
- Ground protection for wheeled or tracked construction traffic movements within the root protection area (RPA) must be designed by an engineer and Arboricultural Consultant to accommodate the likely loading and may involve the use of proprietary systems (for instance www.evetrakway.co.uk) or reinforced concrete slabs or a series of railway sleepers pined together or other suitable system to ensure that the bulk density of the soil remains lower than 1.5g/cm3. If an alternative specification is preferred then it must be agreed with the appointed Arboricultural Consultant or Local Planning Authority prior to installation.

These tree protective measures are identified and marked on the 'Tree Protection Plan' and all the approved engineering drawings to be used on site shall be in full view of all contractors and sub-contractors displayed on a noticeboard.

Any encroachment within the RPA (other than that permitted within G1) or breaches of the tree protection measures must be reported to the appointed Arboricultural Consultant to enable them to provide recommendations to mitigate the encroachment / breach and to allow the issue and mitigation to be reported to the Local Planning Authority for their approval.

All site personnel must be briefed by the Site Manager or the Arboriculturalist on the importance of the trees to be retained and the protective measures implemented to aid their retention into the future. The Site Manager is responsible for the implementation of all tree protection measures.

Once the construction exclusion zone has been protected by barriers then then the Project Arboriculturist will be consulted prior to the construction work commencing to verify their positions and confirm suitability. All-weather notices should be erected on the barriers with words such as "Construction exclusion zone - keep out" (see recommended sign on the Tree Protection Plan).

Knowle Village Hall, Knowle MB240803-01

Care should be taken when planning site operations to ensure that wide or tall loads or plant with booms, jibs and counterweights can operate without coming into contact with retained trees. Such contact can result in serious damage to the equipment and retained trees, and have the potential to make the safe retention of the retained trees impossible. Consequently, any transit or transverse of plant in close proximity to trees should be conducted under the supervision of a banksman to ensure that adequate clearance from trees is maintained at all times. In some circumstances it may be impossible to maintain adequate clearance thus requiring tree works to clear the necessary access.

Material which will contaminate the soil, e.g. concrete (dry or mixed), diesel, oil, vehicle washings, etc. must not be discharged within the root protection area. It is essential that an allowance should be made for any gradient change of the ground so that damaging materials such as concrete washings, mortar, diesel or oil cannot run towards the trees.

There must be no fires on the site.

Notice boards, telephone cables or other services must not be attached to any part of the tree.

The advice of the appointed Arboricultural Consultant must be sought where underground structures present within the RPA are / will become redundant. In general, it is preferable to seal these off as this avoids the need for significant excavation. In accordance with the proposed layout, there is no requirement to carry out excavations in proximity to the retained trees.

Any excavation within the RPA of retained trees must be agreed with the Arboricultural Consultant and under supervision.

There are no services to be installed within the RPA of the retained trees as there are ample opportunities to provide connections without making new trenches.

There should be no changes in gradient within the RPA without prior recommendation by the appointed Arboricultural Consultant and approval of the LPA.

Following completion of the construction and hard landscaping works a site meeting between the Local Planning Authority Arboricultural Officer, appointed Arboricultural Consultant and Site Manager must take place to assess whether the protective barriers and ground protection can be removed to allow soft landscaping works.

Following the completion of the soft landscaping works a tree survey must be undertaken to identify whether additional tree works are required for the safe use of the site and adjacent land users.

#### Method statement for the removal of the existing hard surfaces to join with new hard surfaces.

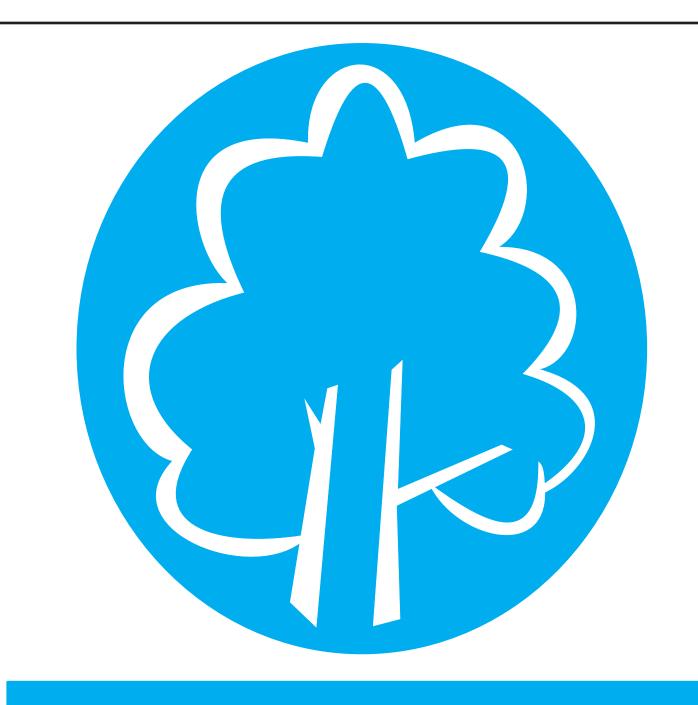
- RPA refers to the Root Protection Area as detailed in Appendix 2: BS5837 Tree Survey.
- The existing hard surface should be broken up, lifted and removed from the RPA from outside the RPA where feasible, or from exiting hard surfaces within the RPA.
- The excavation of the hard surface must not extend into the soil underneath unless specifically determined by the Arboricultural Consultant. In reality this would mean that the 'toothless' excavator bucket should be kept horizontal so that any disturbance to the soil is kept to a minimum. When the hard surface is thin or close to the soil level, the works must be carried out by hand to prevent avoidable unnecessary damage to the tree roots.
- All material, once lifted, must be transported to outside the RPA to prevent compaction or contamination of the tree roots. No material should be stored within the RPA.
- Due care and attention must be undertaken to ensure that machinery or other operations do not cause damage to the above ground parts of the tree.
- Where an existing hard surface is removed and replaced the hardcore base layer should be retained and a permeable finish applied to ensure that water, oxygen and nutrients can percolate to the roots.

#### **Hard Surfacing of Car Parking Bays**

It is not for the Project Arboriculturist to determine the methodology for the construction of the parking bays but it is suggested that a form of three-dimensional surface is considered such as grass-crete or similar to prevent the unnecessary compaction of the soil near to trees as this can cause localised flooding issues of permitted to run-off. In addition, it would allow the grass to continue to grow and 'hide' the otherwise hostile environment.

#### **Village Hall Extension**

The proposed new extension will not impact or encroach any tree and therefore, with the site being so vast where no trees are growing, the construction traffic and activity will be at such a distance as to not be in conflict with the trees as they will all be protected by tree protection barriers as stated above for the car parking bays.



PROTECTIVE FENCING. THIS
FENCING MUST BE
MAINTAINED IN ACCORDANCE
WITH THE APPROVED PLANS
AND DRAWINGS FOR THIS
DEVELOPMENT.



# TREE PROTECTION AREA KEEP OUT!

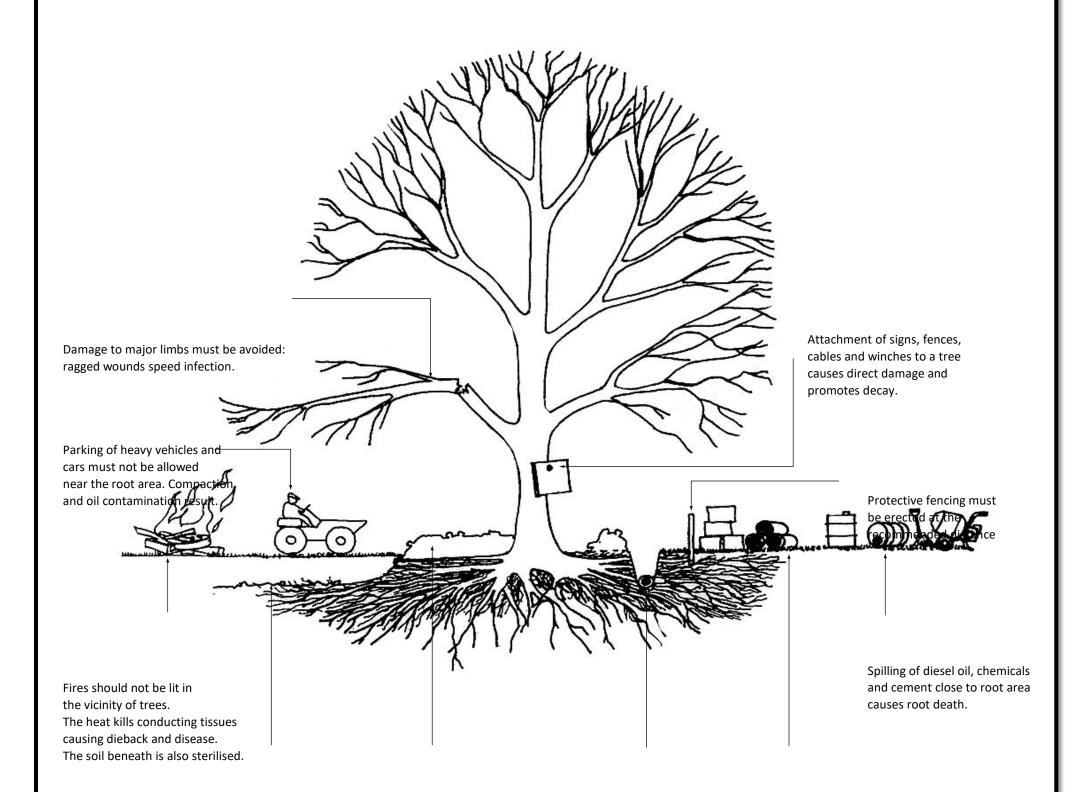
(TOWN & COUNTRY PLANNING ACT 1990)
TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY
PLANNING CONDITIONS AND/OR ARE THE SUBJECTS OF A
TREE PRESERVATION ORDER.

CONTRAVENTION OF A TREE PRESERVATION ORDER MAY LEAD TO CRIMINAL PROSECUTION

ANY INCURSION INTO THE PROTECTED AREA MUST BE WITH THE WRITTEN PERMISSION OF THE LOCAL PLANNING AUTHORITY

### **Common Causes of Tree Death**

The use of properly positioned protective fencing can prevent tree deaths occurring. For site offices and contractors.

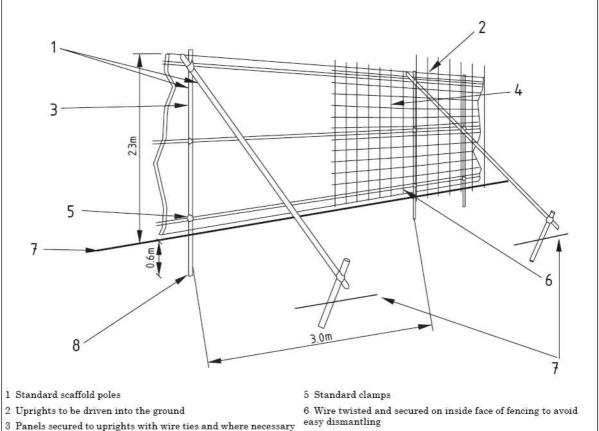


Lowering ground levels severs roots causing severe dieback and Instability.

Raising ground levels even for only a few weeks and by merely several centimetres can suffocate roots, close off the lenticels on the stem causing severe dieback or suffocation.

Trenches dug within root areas may sever roots, causing instability and reduce longevity.

Storage of materials within root area causes compaction and root suffocation.



- $3\,$  Panels secured to uprights with wire ties and where necessary standard scaffold clamps
- 4 Weldmesh wired to the uprights and horizontals
- 7 Ground level
- 8 Approx. 0.6 m driven into the ground

 ${\bf Figure~2-Protective~barrier}$ 

Figure 3 **Examples of above-ground stabilizing systems** 

