

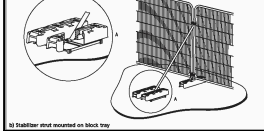
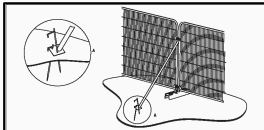
- Trees for removal to be identified from the drawing and marked by an arboriculturist.
- No vehicles to enter the grass verge or root protection zone during tree removal or fencing installation/removal.
- Fencing to be installed prior to any construction works (including demolition, materials delivery, works compounding installation).
- The location of the tree protective fencing is indicative only and must not be directly measured from this plan. Its true location should be surveyed accurately on site and where applicable be measured from the tree centre by the stated dimension value.
- Fencing to remain in place until all construction works have ceased.

BS5837: 2012 Recommendations (extract)

**6.2.2.3** Where the site circumstances and associated risk of damaging incursion into the RPA do not necessitate the default level of protection, an alternative specification should be prepared by the project arboriculturist and, where relevant, agreed with the local planning authority.

### Fencing Specification

For example, 2 metre tall welded mesh panels on rubber or concrete feet might provide an adequate level of protection from cars, vans, pedestrians and manually operated plant. In such cases, the fence panels should be joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from inside the fence. The distance between the fence couplers should be at least 1 m and should be uniform throughout the fence. The panels should be supported on the inner side by stabilizer struts, which should normally be attached to a base plate secured with ground pins. Where the fencing is to be erected on retained hard surfacing or it is otherwise unfeasible to use ground pins, e.g. due to the presence of underground services, the stabilizer struts should be mounted on a block tray. (See Diagram Below)

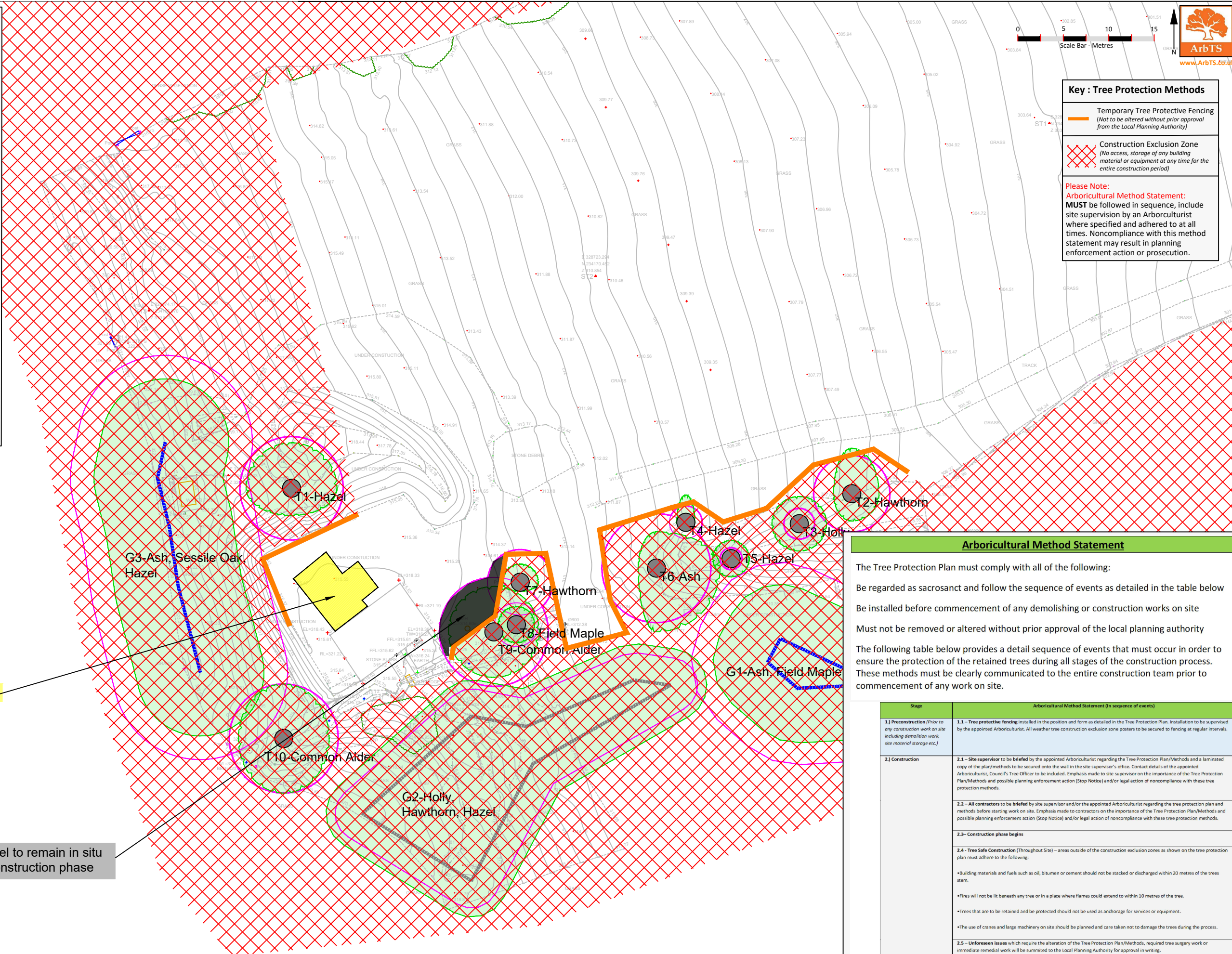


### Why Is Fencing Erected Around Trees?

- The major cause of damage to trees on construction sites is due to soil compaction.
- Roots use the spaces between soil particles to obtain Oxygen, Water and Nutrients.
- Heavy plant and machinery compresses (compacts) the soil, squashing out the air spaces and preventing root function.
- A compacted soil structure will stay compacted.
- Consequently the tree suffers and will show signs of branch die-back.
- Symptoms such as die-back may take several years to appear.
- Soil compaction over roots can be prevented by maintaining a fenced exclusion zone over the tree roots.
- The exclusion zone is calculated using British Standard 5837.
- Protective Fencing is installed around the calculated area.
- Protective fencing is a condition of planning approval. If it is removed or repositioned the construction firm is in breach of a condition and may be subjected to legal action.

### Extension-

Existing gravel to remain in situ during the construction phase



## Site - Porth

Project Ref - 1051.1

**Scale 1:400 @ A3**

**KEY** BS 5837:2012 Tree Quality (Colour Coded)

**Category A (High)**  
(\*Highly desirable for retention\*)

Category B (Moderate)

Category C (Low)

(\*Optional for retention\*)

**category 3 (Poor)**  
(\*Unsuitable for retention\*)

### Tree Key - Individual Trees

Diagram illustrating the components of a tree record:

- Branch Spread** (Measured on the North, East, South and West sides of Tree)
- Tree Species** (Common Tree Name Shown)
- T3-Beech**
- Tree ID#** (T-Individual Tree)

**Root Protection Area (RPA)** (A layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority.)

Tree Key - Group/Area/Woodland/Hedgerow

**Tree ID# (G-Tree Group, A-Tree Area, W-Woodland, H- Hedgerow)**

**Tree Species**  
(Common Tree Name Shown)

G3-Ash

The diagram shows a cross-section of a tree trunk. A green line indicates the 'BS 5837:2012 Tree Quality' (Colour Coded as for individual trees). A black line indicates the 'Average Branch Spread'.

**Shade Pattern** - shade pattern not shown on plan (Early morning shade starting North West through to evening shade to the East)

**Definitions of BS5837:2012 Categories for Trees, Woodlands and Hedgerows (Colour Coded):**

**A** - Those of high quality with an estimated remaining life expectancy of at least 40 years.  
(\*Highly desirable for retention\*)

**B** - Those of moderate quality with an estimated remaining life expectancy of at least 20 years. (\*Desirable for retention\*)

C - Those of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.  
(\*Optional for retention\*)

**U** - Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.  
(\*Unsuitable for retention unless provides high conservation value\*)

## Arboricultural Method Statement

The Tree Protection Plan must comply with all of the following:

Be regarded as sacrosanct and follow the sequence of events as detailed in the table below

Be installed before commencement of any demolishing or construction works on site

Must not be removed or altered without prior approval of the local planning authority

The following table below provides a detail sequence of events that must occur in order to ensure the protection of the retained trees during all stages of the construction process. These methods must be clearly communicated to the entire construction team prior to commencement of any work on site.

Stage	Arboricultural Method Statement (In sequence of events)
<b>1.) Preconstruction</b> ( <i>Prior to any construction work on site including demolition work, site material storage etc.</i> )	<b>1.1 – Tree protective fencing</b> installed in the position and form as detailed in the Tree Protection Plan. Installation to be supervised by the appointed Arboriculturist. All weather tree construction exclusion zone posters to be secured to fencing at regular intervals.
<b>2.) Construction</b>	<p><b>2.1 – Site supervisor</b> to be <b>briefed</b> by the appointed Arboriculturist regarding the Tree Protection Plan/Methods and a laminated copy of the plan/methods to be secured onto the wall in the site supervisor's office. Contact details of the appointed Arboriculturist, Council's Tree Officer to be included. Emphasis made to site supervisor on the importance of the Tree Protection Plan/Methods and possible planning enforcement action (Stop Notice) and/or legal action of noncompliance with these tree protection methods.</p> <p><b>2.2 – All contractors</b> to be <b>briefed</b> by site supervisor and/or the appointed Arboriculturist regarding the tree protection plan and methods before starting work on site. Emphasis made to contractors on the importance of the Tree Protection Plan/Methods and possible planning enforcement action (Stop Notice) and/or legal action of noncompliance with these tree protection methods.</p> <p><b>2.3– Construction phase begins</b></p> <p><b>2.4 - Tree Safe Construction</b> (Throughout Site) – areas outside of the construction exclusion zones as shown on the tree protection plan must adhere to the following:</p> <ul style="list-style-type: none"> <li>• Building materials and fuels such as oil, bitumen or cement should not be stacked or discharged within 20 metres of the trees stem.</li> <li>• Fires will not be lit beneath any tree or in a place where flames could extend to within 10 metres of the tree.</li> <li>• Trees that are to be retained and be protected should not be used as anchorage for services or equipment.</li> <li>• The use of cranes and large machinery on site should be planned and care taken not to damage the trees during the process.</li> </ul> <p><b>2.5 – Unforeseen issues</b> which require the alteration of the Tree Protection Plan/Methods, required tree surgery work or immediate remedial work will be submitted to the Local Planning Authority for approval in writing.</p>
<b>3.) Post Construction</b> ( <i>Once all construction work has been completed, this includes all utility services</i> )	<p><b>3.1 – Removal of all tree protection fencing</b></p> <p><b>3.2 – Hard and soft landscaping commence</b> All landscape team members to be briefed regarding tree protections by an Arboriculturist.</p> <p><b>3.3 – Any required remedial tree action taken</b>, such as removal of any soil around tree trunks back to root collar, Leaf Mulch Application, soil de-compaction methods, contamination clean up etc. to be carried out.</p>