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This drawing is to be read in conjunction with RELEVANT CONSULTANT'S DRAWINGS.

**LEGEND:**

- EXISTING TREES WITH TREE NUMBERS AS INDICATED IN TREE SURVEY
- POSITION, NUMBER AND ACTUAL CROWN SPREAD OF TREE
- POSITION, NUMBER AND ACTUAL CROWN SPREAD OF TREES TO BE FELLED AS PER SURVEY RECOMMENDATION
- POSITION, NUMBER AND ACTUAL CROWN SPREAD OF TREES TO FACILITATE CONSTRUCTION
- ROOT PROTECTION AREA (RPA) IN ACCORDANCE WITH BS 5837:2012
- PROPOSED PROTECTIVE BARRIER TO EXISTING TREES TO BE RETAINED
- A PROTECTIVE BARRIER, 2.3M HIGH AND COMPRISING A VERTICAL AND HORIZONTAL FRAMEWORK OF SCAFFOLDING, WELL BRACED TO RESIST IMPACTS AND SECURELY SUPPORTING WELDMESH PANELS, (AS PER FIG 2 OF BS5837) SHALL BE ERECTED AROUND THE BASE OF ALL TREES TO BE RETAINED ON SITE.
- THE LINE OF THIS FENCE SHALL BE ALONG THE TREE ROOT PROTECTION ZONE. NO CONSTRUCTION TRAFFIC, FIRE, MATERIALS OR DEBRIS WILL BE PERMITTED WITHIN THIS ZONE OF PROTECTION.

**NOTE:**

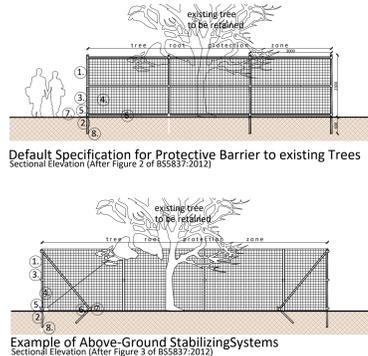
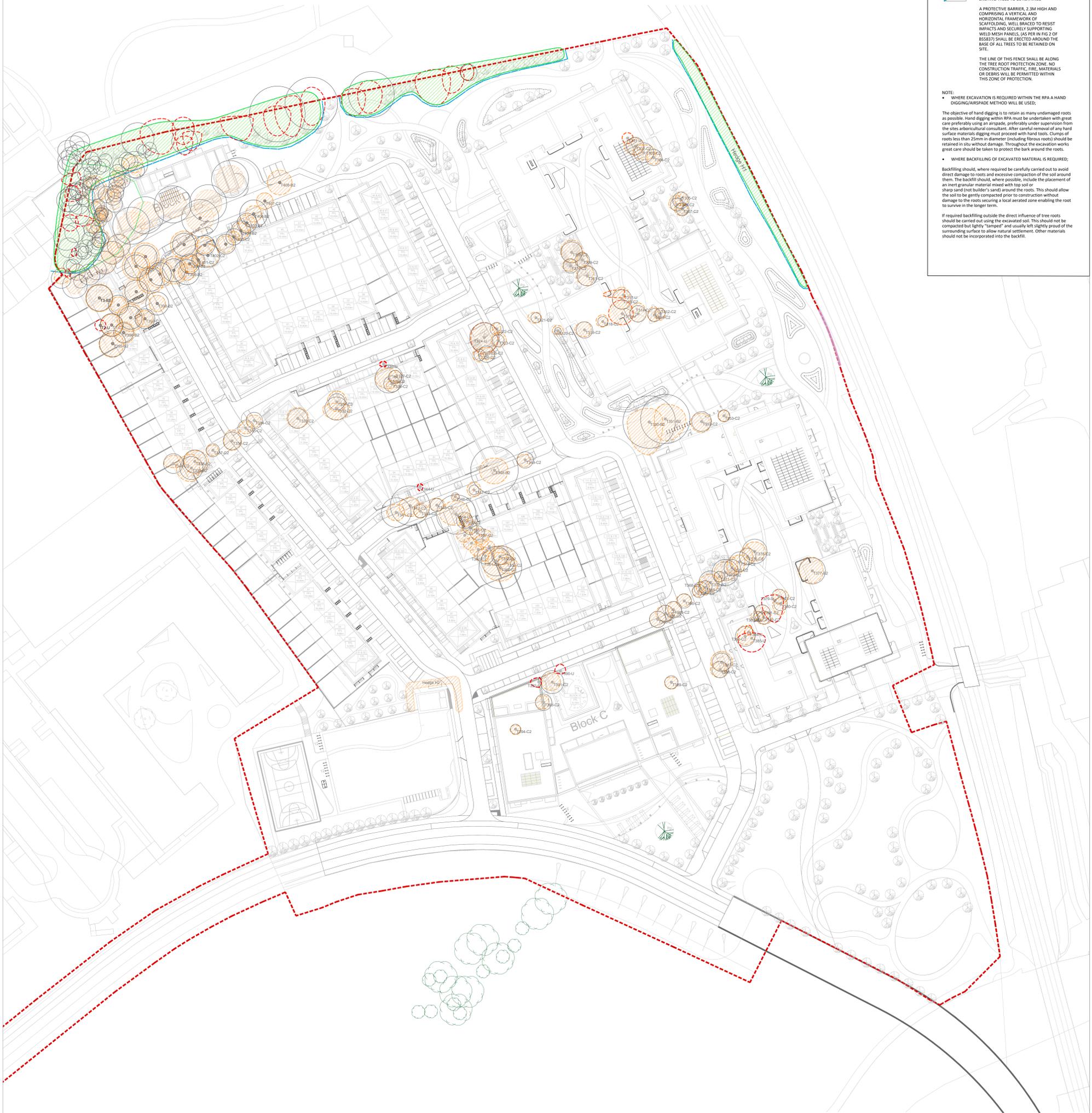
- WHERE EXCAVATION IS REQUIRED WITHIN THE RPA A HAND DIGGING/AIRSPADE METHOD WILL BE USED;

The objective of hand digging is to retain as many undamaged roots as possible. Hand digging within RPA must be undertaken with great care preferably using an airspade, preferably under supervision from the sites arboricultural consultant. After careful removal of any hard surface materials digging must proceed with hand tools. Clumps of roots less than 20mm in diameter (including fibrous roots) should be retained in situ without damage. Throughout the excavation works great care should be taken to protect the bark around the roots.

- WHERE BACKFILLING OF EXCAVATED MATERIAL IS REQUIRED;

Backfilling should, where required be carefully carried out to avoid direct damage to roots and excessive compaction of the soil around them. The backfill should, where possible, include the placement of an inert granular material mixed with top soil or sharp sand (not builder's sand) around the roots. This should allow the soil to be gently compacted prior to construction without damage to the roots securing a local aerated zone enabling the root to survive in the longer term.

If required backfilling outside the direct influence of tree roots should be carried out using the excavated soil. This should not be compacted but lightly 'tampered' and usually left slightly proud of the surrounding surface to allow natural settlement. Other materials should not be incorporated into the backfill.



**Protection of trees**  
 A protective barrier, 2.3m high and comprising a vertical and horizontal framework of scaffolding, well braced to resist impacts and securely supporting weldmesh panels, (as BS5837:2012) shall be erected around the base of all trees to be retained on site.

No construction traffic, fire, materials or debris will be permitted within this zone of protection.

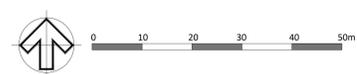
- 1 Standard Scaffold Poles
- 2 Uprights to be driven into the ground
- 3 Panels secured to uprights with wire ties and where necessary standard scaffold clamps
- 4 Weldmesh wired to the uprights and horizontals
- 5 Standard Clamps
- 6 Wire twisted & secured on inside face of fencing to avoid easy dismantling
- 7 Ground level
- 8 Approx. 0.6m driven into the ground

Tree Protection Fences based on Figures 2 and 3 as per BS 5837:2012

**Scaffolding within zone of protection**  
 Where scaffolding is to be established within the 'zone of protection' surrounding retained trees, the existing undisturbed ground surfaces will be protected by a layer of sharp sand, approx. 50 mm thick, overlaid with a geotextile membrane. Stout planks, such as closely side-butted scaffold boards, will be laid over the geotextile membrane and scaffolding will be constructed on these planks (as BS5837:2012). Additional stays, as directed by a competent person, will be considered where scaffolding is constructed on suspect or un-consolidated ground. Adequate protective fencing, as BS5837:2012, will be maintained between scaffolding and adjacent trees.



Warning Signage to Protective Fencing Typical Detail



Revision Details		By	Date	Rev
Status: PLANNING		Check		
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