Co Op Travel 14 Market Place. Leek ST13 5HH

Arboricultural Method Statement

1.0 SUMMARY

- 1.1 The purpose of this report is to aid the preservation of trees shown to be retained at and adjacent to the site shown on the relevant plan. Trees can easily be retained and effectively protected during the proposed redevelopment of the site, by clearly setting out the tree protection methods, construction techniques and working practices. This document provides this information; principles that are approved and enforced by the local planning authority.
- 1.2 The following points are explained and qualified in more detail in this report and this summary is intended for quick reference only. Any actions consequent to this summary should be discussed with the Tree Officer at Staffordshire Moorlands District Council (SMDC) before being undertaken in order to prevent potential breach of tree protection legislation, whether by planning condition, area planning designation or specific tree preservation order (which may apply to individual trees, groups, hedges of any size).
- 1.3 This document will give site specific instructions on the methods required to protect the existing tree stock agreed to be retained. These methods are set out in a logical sequence of operations and include:
 - a) Pre-construction meeting: (If required) to run through the arboricultural method statement (AMS) and ensure all relevant parties are familiar with its contents and show the trees concerned and where protection will be required.
 - b) Execute Tree works to BS3998:2010 'Tree Work': These works are contained in the tree schedule and may comprise crown raising, crown reduction, crown thinning, dead wood removal, removal of crossover branches, weak fork treatment, pollarding etc. See Schedule for a tree by tree list of works. If these need to be scheduled as formal schedule of works, please contact the Tree Officer at SMDC.
 - c) Tree protection fencing and exclusion signage: To BS5837:2012 or other agreed approach.
 - d) Root pruning
 - e) General tree care measures and awareness
 - f) Site monitoring

1.4 The BS recommendations are made for appropriate barriers to exclude construction from RPA's: The RPA for each tree or hedge will be provided in the tree survey schedule. However, the distance protective barriers are calculated at within BS5837 would in this instance not be feasible as it would restrict access to the site. The fencing in this instance will incorporate 3No.Heras type fence panels positioned at approximately 1.8m from the tree to cordon off the north-west corner of the site containing the stem of the Lime tree - this should more or less coincide with the shale/gravel area surrounding the tree as shown on DBD "Site Plan as Proposed" Drg. No. PL03. This is predominantly intended to protect the trunk of the tree from accidental impact during construction operations etc. the fence panels are to be placed in proprietary weighted 'fence feet' and not resting against/secured to the tree. The panels will need to be in position prior to any demolition or construction and be maintained in position for the duration of the development process.

Prior and during any required construction operations within the RPA a combination of barriers and ground protection should be adopted. Where the construction of permanent hard surface is considered acceptable within the RPA, a non-dig design solution should be used to avoid root loss caused by excavation - all details for these measures are set out in this document.

1.5 The Tree Protection Plan (TPP) will indicate retained trees, the precise location of protective barriers and ground protection, service routing and specifications, areas designated for structural landscaping to be protected. This document and the associated TPP will be endorsed by planning conditions, agreement or obligation as appropriate.

3.0 Methodology

3.1 References may include: British Standard 5837:2012 'Trees in Relation to Construction - Recommendations'; British Standard 3998:2010 'Tree Work' and National Joint Utilities Group 'Guidelines for the planning, installation and maintenance of utility services in proximity to trees' 1995.

3.2 Sequenced Methods of Construction and Tree Protection

3.2.1 Phase 1

P1.0 Pre Contract Meeting

P1.1 If required an onsite meeting will be held with all relevant parties including the developer, appointed arboricultural supervisor and Local Planning Authority (LPA) representative. The purpose of this meeting is to record site features including tree condition, agree tree works (detailed below), location of permanent and temporary access, location of site storage and the location of tree protection barriers.

3.2. Phase 2

P2.0 Tree Protection Barriers

P2.1 In order to exclude the CEZ from significant demolition and construction activity, protection barriers will be erected.

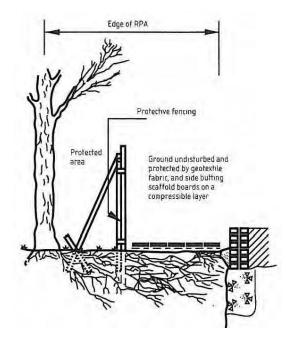
P2.2 Protection barriers will comprise weld mesh (Heras or similar) panels securely fixed / anchored with wire or scaffold clamps. P2.3 Once the barriers have been properly erected in position, they are to be considered as sacrosanct and are not to be removed or altered in any way without prior approval from the LPA.

P2.4 Clear notices are to be fixed to the outside of the fencing with words such as PROTECTED AREA – NO ACCESS AND NO STORAGE OR WORKING WITHIN THIS AREA'.

P2.5 All operatives and other relevant personnel are to be informed of the role of the exclusion barriers and their importance. A copy of the Tree Protection Plan will be displayed on site at all times during construction.

P2.6 It may be necessary to remove existing shrubs and other vegetation from under the canopy of trees or remove lower branches prior to erecting the fencing.

P2.7 Where it has been agreed that access for construction operations can be located within a tree's RPA a combination of barriers and ground protection should be adopted to form the CEZ. For temporary pedestrian access the installation of a single thickness of scaffold boards over a compressible layer laid on to a geotextile membrane or supported by scaffold will be sufficient.



P2.8 The location of the protection barriers is indicated on the TPP. The position of the barriers is to be marked out with biodegradable marker paint on site and agreed with appropriate representatives from the LPA and Contractor. The barriers will be erected prior to any works on site in the vicinity of retained trees, including demolition or the delivery of machinery, materials, plant or equipment to the site or any adjacent land. The barriers will remain in situ until final completion or a time agreed by the LPA and Contractor.

3.2.5 Phase 3

P3.0 Construction Phase

P3.1 Pile foundations are to be utilised to support the rear end of the building at the tree end of the development site to support the floor slab.

P3.2 Prior to forming these, top soil will be carefully scraped back to remove grass and any other surface vegetation, trial holes will then be hand dug to ensure no major roots are severed. A cellweb tree root protection system will then be laid to further reduce the risk of compaction from construction activity.

P4.0 Dismantling Protection Barriers and Landscaping Works

P4.1 A minimum of seven days' notice will be given to the LPA prior to the dismantling of the protection barriers.

P4.2 All landscaping once the barriers have been removed will avoid soil regrading and disturbance within the CEZ and no soil levels be altered after the protection barriers have been removed.

P4.3 Where fencing is required within the CEZ post holes must be dug by hand and be no more than 10% larger than the post. All spoil is to be distributed evenly around surrounding area to avoid a change in soil levels. Consideration must be given to planning of works with regards to starting and end points and how this may be affected by tree locations, fencing should also be deviated as appropriate to avoid conflict with trees.

5.0 General Principles for Tree Protection

5.1 A copy of this AMS and the TPP is to be retained on site at all times and all personnel associated with the construction process will be made familiar with the principles within.

5.2 If 360-degree excavators are to be used during construction, at no time is the excavating arm to encroach over the position of the protection barriers.

5.3 No fires are to be lit on site at any stage during the construction process.

5.4 A designated storage area is to be created away from retained trees. All materials for construction purposes are to be stored in this compound. Care must be taken to avoid the leakage or leaching of noxious materials into the soil. Limited space for dry materials can be provided on site on the existing parking area but addition off site space is expected to be required.

5.5 No materials will be stored or left stacked in positions around the site other than within the storage compound area.

5.6 No mechanical cultivators are to be used within RPA's at any time; hand cultivation to a depth of 100mm will be acceptable.

All excavations within the Root Protection Zone of those trees to be retained are to be excavated by hand in accordance with clause 11.3.5 of BS 5837:2005.

a) Any excavations which have to be undertaken within the root protection area should be carried out carefully by hand, avoiding damage to the protective bark covering larger roots.

b) Roots, whilst exposed, should be wrapped in dry, clean hessian sacking to prevent desiccation and to protect from rapid temperature changes.

c) Roots smaller than 25mm diameter may be pruned back, preferably to a side branch, using a proprietary cutting tool such as bypasss secateurs or handsaws.

d) Roots larger than 25mm should only be severed following consultation with an arboriculturalist, as they may be essential to the trees health and stability.

e) Prior to backfilling, any hessian wrapping should be removed and retained roots should be surrounded with sharp sand, or other loose granular fill before soil or other material is replaced.

5.0 Summary

- 1. Pre-contract site meeting to disseminate information between all parties active on site
- 2. Pre-construction tree works, including access facilitation pruning.
- 3. Installation of all tree protection fences.
- 4. Local authority informed and check requested.
- 5. Main construction phase including any ground works and installation of services as per approved plan
- 6. Completion and removal of construction equipment
- 7. Landscaping works outside protective fences using machinery where required
- 8. Approval to remove tree protection for final landscaping works.
- 9. Final landscaping works inside Root Protection Areas of trees to be carried out by hand