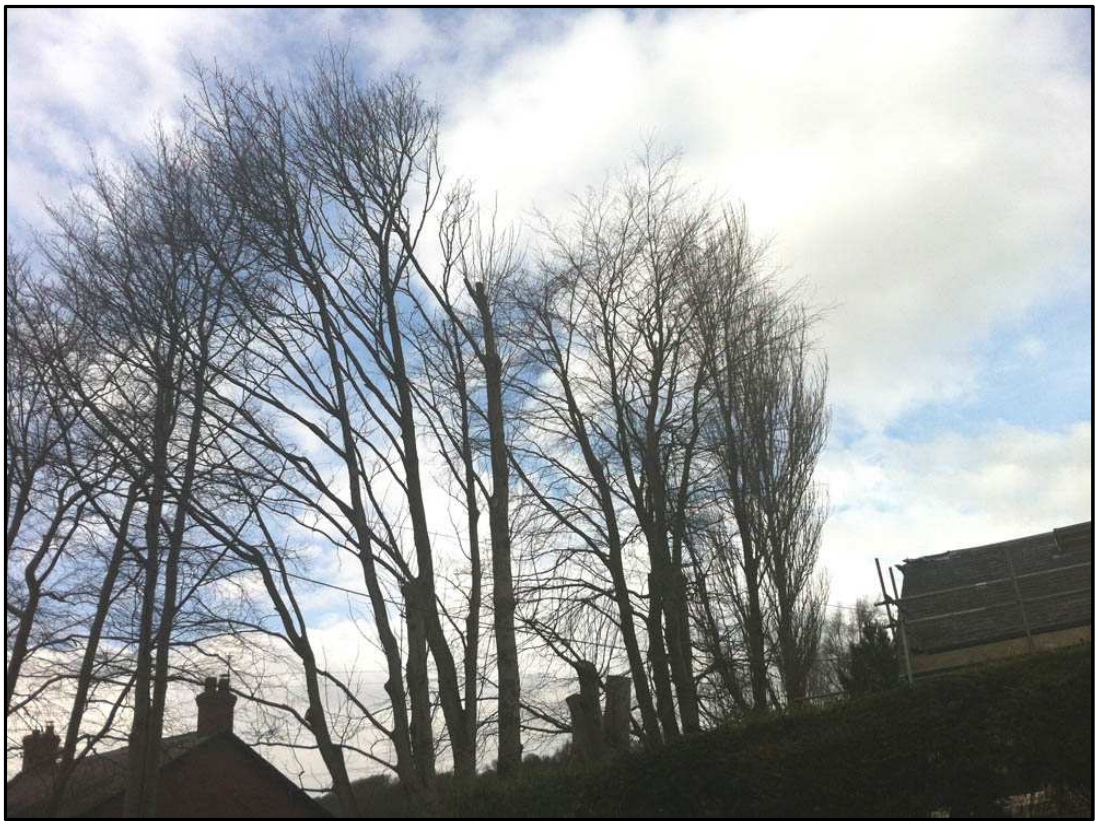
URBAN FORESTRY GROUP
BS: 5837 - 2012
Arboricultural Impact Assessment
of Proposed Residential Development at:



150 Long Lane, Broadbottom, Charlesworth, Derbyshire, SK13 5ES

Prepared for:

Mr. & Mrs. G Mainwaring C/o Planman3D

Drawing ref:

DW/PM/LL/BSTS_r2

Planning Ref:

HPK/2016/0047

17th · April · 2016

Revision details: 18th April 16 – Minor revision to the text to clarify tree protective fencing on section 8.11

Control Sheet:

Project no:	-
Project Title:	Arboricultural Impact Assessment
Client:	Mr. & Mrs. G Mainwaring C/o Planman3D
Architect:	Planman3D
Local Authority:	High Peak Borough Council
Prepared by:	Mr. David Winlo
Date of Issue:	18th April 2016
Status: Final / Draft:	Final
Version:	-
Revision:	-
Revision details:	-

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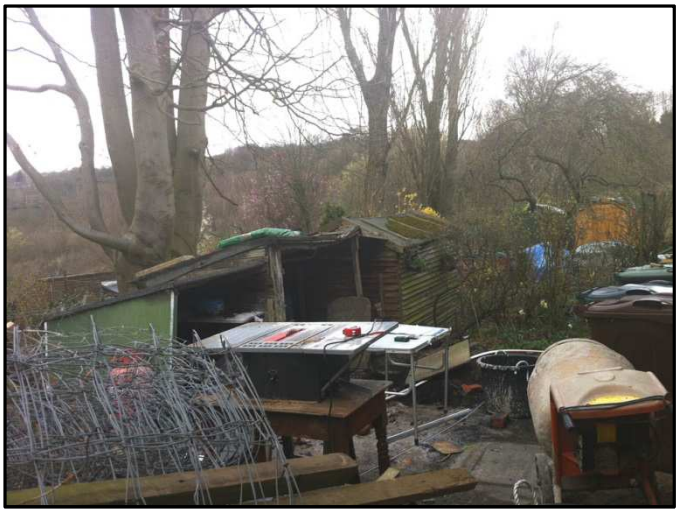
Contents:

1. The Brief:



1.1 Urban Forestry Group [UFG] has been asked by to undertake a BS: 5837 – 2012 Tree Survey for trees within and on the property boundary / [Adjacent property at a lower ground level] the application site that could influence or be affected by the development that includes:

- BS: 5837 - 2012 Tree Survey.
- Tree Constraints Plan.
- Arboricultural Impact Assessment.
- Arboricultural Method Statement.
- Tree Protection Plan.

2. Introduction:

2.1 Site visited on Monday 04th April 2016

Image 1 – View of the development area; where the sheds and materials are to be removed

2.2 This document cross referenced to the attached **BS 5837** Tree Survey site plan and using the information set out in **BS 5837 – 2012 s5.4** Arboricultural Impact Assessment **-** The following information has been completed by the business; with construction information obtained from Vagdia & Holmes.

3. Site description:

3.1 The site represents a detached bungalow set in a rural location. The trees surveyed apart from tree 8 [Apple] all are situated in the adjacent neighbouring property. The property boundary is a loose stone wall and along this boundary there is a drop in level with the trees 1-7 being on the lower ground level which is approx. 400mm lower than that of the development area.

3.2 On the higher open land to the east has surface water running in over the eastern boundary on to the lawn in various levels depending on the level of rainfall. The soil is seen to be free draining as the trial pit only contains 50mm of water at the bottom of a 1m deep pit that has been dug for approx. 1 month.

3.3 In the trial pit 1m x 1m there has been located one tree root [46mm in diameter that has been left in situ.] The applicant is keen to ensure that any tree roots are not cut and dug the trial hole to investigate the level of tree rot activity.

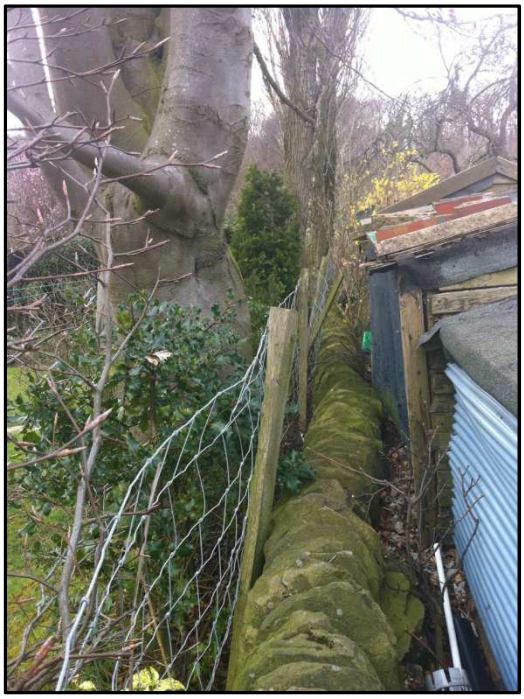


Image 2 – looking North West along the loose stone boundary wall with the drop in ground level on the adjacent land with Tree 4 in the foreground

4. Tree Preservation Order [TPO] Details:

Tree 4 is reported to be the subject of a TPO.

5. Conservation Area Details:

None reported.

Continued:

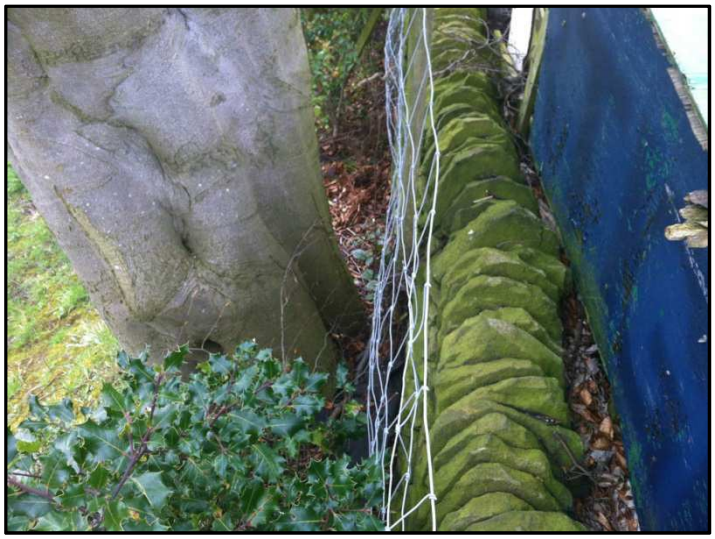


Image 3 – Close up view of the drop in level adjacent to Tree 4

6. Description of the proposed development:

6.1 The applicant is applying to extend the property with a kitchen side extension with services running in a trench central within the kitchen area that are directed to the front of the building. Please refer to Architects drawing: 'Proposed single story extension to the side'. Drawing ref: PM3D/A3/0404 Dated: 26 Jan 16.

7. Trees / Hedges to be removed:

None.

8. Constraints posed by existing trees:

Email dated: 11th Feb 16 [Extract]

From: Ollerenshaw, Mark [mailto:Mark.Ollerenshaw@highpeak.gov.uk]
Sent: 11 February 2016 13:53
to: 'alan@planman3d.co.uk' <alan@planman3d.co.uk>
Subject: HPK/2016/0047 - 150 Long Lane, Charlesworth

The Council's Arboricultural Officer is concerned about the impact that the proposed extension may have on trees at the neighbouring property, No 152 Long Lane. Please can you provide an arboricultural report, which should address how you propose to construct the extension without being detrimental to the neighbour's trees.

Regards,

Mark Ollerenshaw
Planning Officer
High Peak Borough Council and Staffordshire Moorlands District Council

8.1 In reply to the above concern regarding the trees; the proposed side extension overlaps the tree root protection areas of Trees: 3, 4 and 5. Tree 3 has been discounted as it is a standing stump at 4m height with no branch canopy.

8.2 The proposed development occupies less than 25% of the tree root protection of Tree 4.

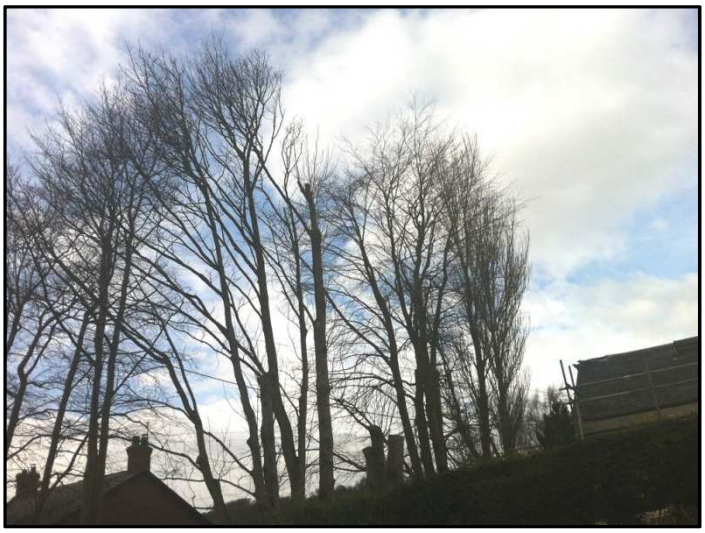
8.3 The trees in particular Tree 4 is 400mm lower at its base than the proposed development area.

Image 4 – View looking down the trial pit adjacent to Tree 4 at the one 46mm in diameter tree root located near the bottom of the 1m x 1m trial pit

8.4 The trial pit excavation which is on the proposed building line, uncovered one 46mm in diameter tree root that is likely to be attached to Tree 4. The depth of this tree root is approx. 400mm under the ground of the adjacent property.

8.5. It appears from the trial pit that the water level is lower than the ground surface surrounding Tree 4 in a free draining soil.

8.6 From the information in points 8.4 & 8.5 above it is probable although not conclusive that any further tree roots of a similar size would be located at approximately this depth.



8.7 If at 1.2m from Tree 4 only one tree root of 46mm in diameter has been identified and that this tree root is to be retained, then the trenching impact for the building line on Tree 4 is so far seen to be reasonably low.

8.8 It is impossible to say without further investigation as to the tree root layout. If a trench foundation is to be put in place, excavation will have to proceed carefully so that any roots greater than 50mm in dimeter are to be retained and any tree roots less than 50mm in diameter can be cut cleanly with hand tools. It is however recommended that no tree roots are cut until the trench has been dug in its entire length to further evaluate the level of any tree rooting. Where possible tree roots are to be bridged allowing room for further tree growth and if any clusters of tree roots are located greater than 50mm in diameter; then these too are to be bridged.

Image 4 – Overview of the surveyed trees with Tree 3 the stump seen central in the picture

8.9 The same recommendation applies to the central kitchen service trench within the proposed side extension.

8.10 The alternative to a trench foundation is using mini piles if it is seen that there are a substantial number of tree roots within the proposed building line, then this may be an option and it is important to maintain the trees secure holding on the ground.

8.11 No tree protective fencing plan is included as the stone boundary wall which is to remain in situ including the drop in ground level; make this a natural site barrier for tree protection and no further tree protective fencing is recommended.

8.12 These details should be incorporated into relevant subsequent plans, method statements, [tree protection plans] used for design purposes and construction drawings issued for use on site, to ensure that all interested parties are fully aware of the areas in which access and works may and may not take place.

9. Site construction access:

Through the existing site driveway.

10. Contractor's car parking:

On the existing site driveway.

11. Phasing of construction works:

Single phase construction.

12. Use of any heavy plant:

Heavy Plant [Please circle]**:** **YES** / NO
If **YES** please give details:

A mini-digger using a toothless bucket can be carefully used to excavate both the foundation channel and the service trench.

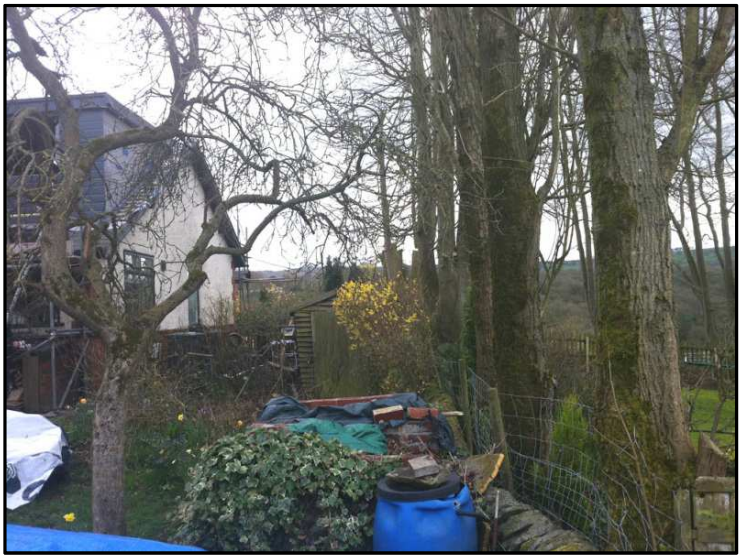


Image 5 – View looking South East with tree 8 [Apple on the left]

13. The availability of special construction techniques:

Dependent on the findings of further trench excavation and any possible tree root activity.

14. Any construction proposals for bridging tree roots or inserting tree root barriers:

None at present.

15. The location and space including any proposed trenching for all:

A. Service runs	**G.** Water
B. Foul and surface water drains	**H.** Electricity
C. Land drains	**I.** Telephone
D. Soakaways	**J.** Television
E. Gas	**K.** Communications cables
F. Oil	**L.** Other

Where applicable to run off the existing service points situated centrally in the proposed kitchen running to the front of the building.

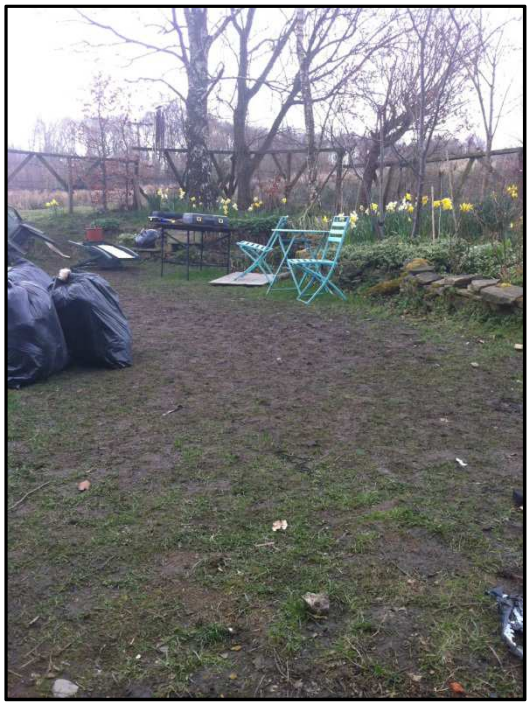
16. Depth and foundation type for driveways:

Not applicable.

17. All changes in ground level, including the location of retaining walls, steps, and making adequate allowance for foundations of such walls and back fillings:

No change in ground level.

18. Space for cranes, plant, scaffolding and access during works:



At either the front of the building or at the rear of the property on the lawn area on pallets or exterior plywood as required.

19. Space for site huts, temporary latrines [including their drainage] and other temporary structures:

Not required.

20. Safe storage of materials:

The appointed Contractor is to provide a plan for the location of material storage, ensuring that they are located in positions that do not conflict with the location of existing trees to be protected during the works. This information is to be issued to both the architect and the local authority for approval prior to any works commencing.

21. If there is a slope/s on site; how are any materials or harmful liquids to be stored so that they don't seep into the ground and damage trees and tree root systems? This includes washing out cement mixers and construction equipment:

No harmful liquids to be used**.** Cement mixers to be washed out into containers and cleaned out outside the tree root protection areas.

Image 6 – View looking North at the rear garden which is an estimated 400mm higher level than that of the development area. The bare ground is mainly caused by the water run-off from the higher ground to the East.

22. Specifications for tree root pruning:

To be confirmed and as a general principle where tree roots are located less than 50mm in diameter then they should be cut cleanly using hand tools; so that the tree roots are not pulled or dragged out of the ground using mechanical devices.

23. An indication of potential direct obstruction of sunlight:

The trees situated on the west side of the property are unlikely to cause any significant shading as the sun will be lower in the sky by the time it casts any direct sunlight of the proposed development.

24. Road safety and visibility splays:

Information at this stage in the planning application is unavailable.

25. Wildlife considerations:

Site clearance including the pruning of trees should be undertaken outside the bird nesting season: Jan – Aug and should where applicable take into account the recommendations of any ecological surveys.

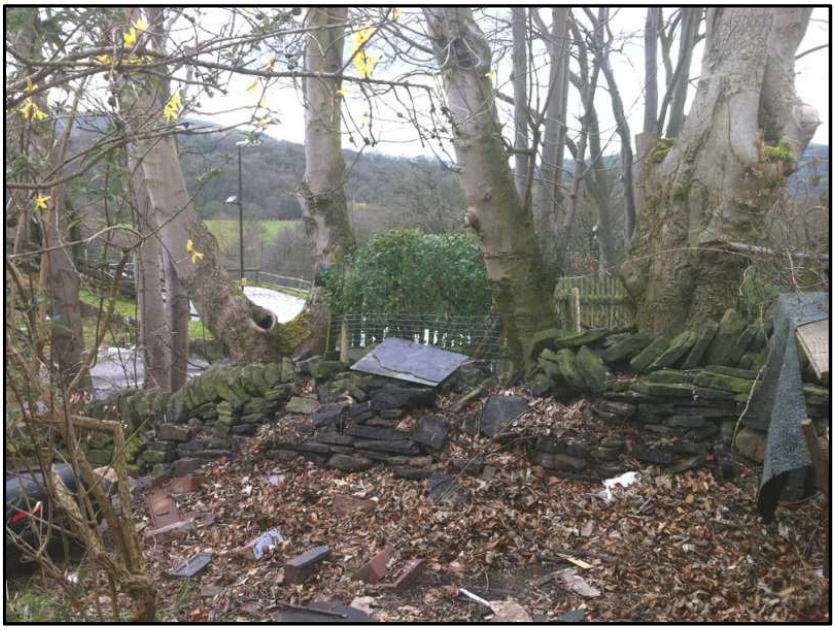


Image 7 – View looking South at Trees 1 [Left] 2 and 3 behind the stone boundary wall