

NYM / 2012 / 0 5 0 5 / NM



Location:
**Keeper Cottage,
Aislaby**

Report Type:
Arboricultural Method Statement

Ref:
ARB/CP/685



Completed By:



Authorised By



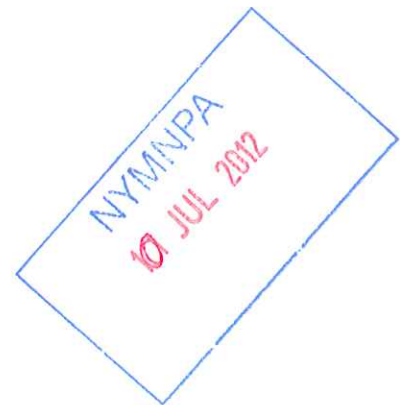
Date June 2012

Contents

- 1 Introduction
- 2 Site Information
- 3 Design Proposals and Arboricultural Implications
- 4 Pre-development Works
- 5 Tree protection measures during development
- 6 Post-Construction Considerations

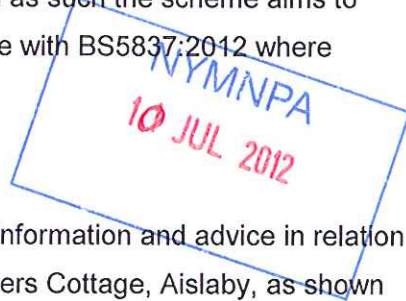
Appendices

- 1 Arboricultural Tasks Sequence Tables
- 2 Tree Works Required
- 3 Tree Protection Plan
- 4 Protective Fence Specification for Construction Exclusion Zone
- 5 Access within Root Protection Areas – Ground Protection
- 6 Excavations within Root Protection Areas
- 7 Construction Exclusion Zone Notice



1 Introduction

- 1.1 This report has been prepared by Charles Prowse of Elliott Consultancy Ltd on behalf of Mr. Hogarth. It will provide details regarding the protection of trees during the redevelopment of Keepers Cottage, Aislaby.
- 1.2 Elliott Consultancy Ltd was commissioned to visit the site to inspect the trees and to produce a tree protection scheme, as requested by the North York Moors Planning Department. The trees were assessed in accordance with British Standard 5837:2012 'Trees in Relation to Design, Demolition & Construction' (BS 5837:2012) and annotated onto the plans provided by the clients architect. It is understood that planning permission has already been granted and as such the scheme aims to protect the trees that can be retained in accordance with BS5837:2012 where possible.
- 1.3 **Scope of the report:**
- This method statement provides arboricultural information and advice in relation to the proposed re-development works at Keepers Cottage, Aislaby, as shown within Appendix 3.
 - It will outline trees to be removed prior to development and those to be retained along with any pruning required. Also provided are details of all measures recommended for adequate tree protection including any special construction measures to be utilised.
 - It should be used to guide the construction process in order to minimise potential damage to retained trees.
 - It will also detail, within the Arboricultural Tasks Sequence Table (Appendix 1), a timescale for implementation of these tree works and protective measures in reference to the development period.
 - Section 3 provides a summary of the design proposals and their implications to the current tree population.
- 1.4 **Prior to site works commencing, including demolition, this Arboricultural Method Statement needs to be passed to the site manager and used as reference during the development period, with particular attention paid Sections 4-6, and Appendices 1-7.**



2 Site Information

- 2.1 The area surveyed and the extent of which that is covered by this method statement is property of Keepers Cottage, Aislaby. Figure 1 shows the extent of the area concerned.

Figure 1: Area covered by method statement (highlighted blue)



- 2.2 The property contains a detached two-storey dwelling set within an enclosed garden. The dwelling is situated towards the northeast section of the garden. A detached garage is located to the northwest of the dwelling.
- 2.3 The topography of the garden slopes from the north to south with an estimated elevation change of 5-7 metres. A bank was cut into in order to erect the existing garage and terraces were built to the south of the dwelling to create a usable garden.
- 2.4 A disused stone quarry is located immediately to the west of the garden with some of the trees inspected situated at the top of the quarry cliff.

NYM/NPA
10 JUL 2012

3 Approved Design and Arboricultural Implications

- 3.1 This section concentrates on the approved development and how it relates to the current tree population within the site.
- 3.2 Figures 2 and 3 shows the approved structures (in yellow) in relation to the existing trees and extent of their canopies and root protection area (RPA). Referring to Figure 2 there are encroachments within the RPA (highlighted circles) of Trees 2 and 3. Trees 2 and 3 are located upon a raised bank that would need to be excavated into and as such the trees should be removed. Tree 4, a small eucalyptus, would be difficult to retain due to the ground works required to create the basement area and its position to the finished building would be too close for it to reach maturity; as such it is recommended for removal. Figure 3, overleaf, shows the proximity of the approved garage to the stem of Tree 12 and the level of excavation into the raised bank that will be required to construct the subterranean structure. The structural integrity of the tree could not be guaranteed following the excavations and it is therefore recommended for removal.

Figure 2: Encroachments within RPA & Proximity of Trees to Approved Structures

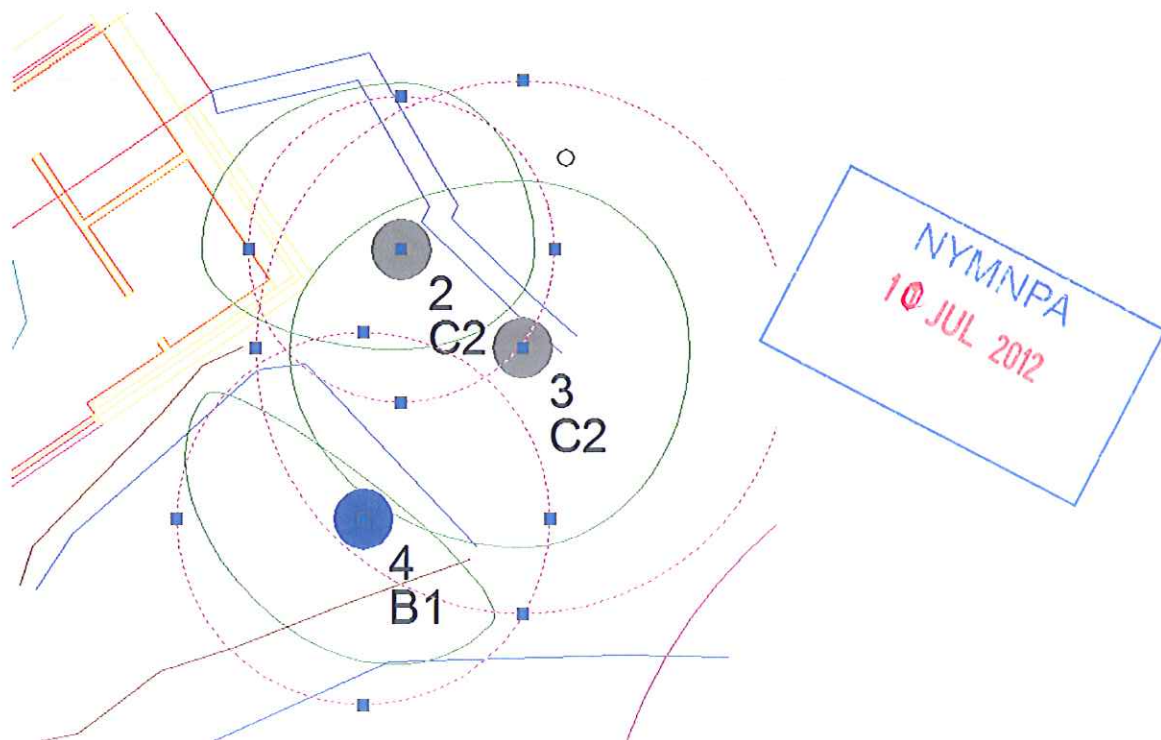
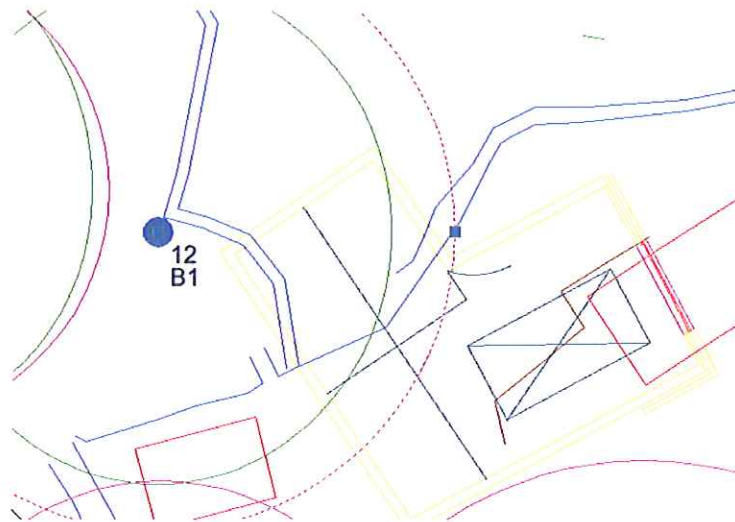


Figure 3: Proximity of Subterranean Garage to Tree 12



3.3 Figure 4 shows the encroachments of approved structures within the RPA of Tree 6, a mature sycamore. The actual encroachment is not too severe and the works to create the basement level will take place on an existing terrace. Whilst the loss of root tissue is inevitable the degree of loss is not thought likely to have an adverse affect upon the physiological or structural condition of the tree. Access for construction contractors will need to be created within sections of Tree 6's RPA as shown on the Tree Protection Plan, Appendix 3; a specification for how these areas should be protected can be found in Appendix 5.

Figure 4: Encroachments within RPA & Proximity of Tree 6 to Approved Structures



3.4 The remaining trees within the site have no encroachments and can be adequately protected in accordance with BS5837:2012.

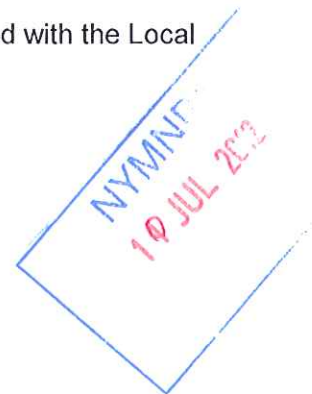
4 Pre-Development Works

- 4.1 Refer to Appendix 1 for stage specific tasks.
- 4.2 Once planning permission has been granted and prior to **any** site works commencing, the following arboricultural specific actions need to be implemented:
- a) An arboricultural contractor should be sought and the tree works recommended within Appendix 2 undertaken.
 - b) A supplier needs to be sought to provide the tree protection fencing, as specified within Appendix 4.
- 4.3 Once the aforementioned tasks have been completed and prior to any further site works the Construction Exclusion Zone needs to be created in order to protect the trees and the soil structure from damage; this must remain in situ during the entire build process. The construction exclusion zone encompasses the root protection areas and crown extents of the retained trees, and is enclosed by erecting fencing, and installing ground protection where necessary, to ensure that these areas remain free from disturbance.
- 4.3.1 The fencing needs to be erected according to the locations found on the Tree Protection Plan, Appendix 3. The fence should conform to the specification within Appendix 4, unless a similarly immovable alternative is agreed with the Local Planning Authority. All weather notices should be attached to the fencing marked with the following: '*Construction Exclusion Zone - Keep Out*' (a notice is provided within Appendix 7).
 - 4.3.2 The ground protection should be installed as per the locations upon the Tree Protection Plan, Appendix 3, and in accordance with the specification in Appendix 5.
- 4.4 An area suitable to store construction materials and the soil excavated to create the garage needs to be identified. This must not be within the Construction Exclusion Zones.



5 Tree protection measures during development

- 5.1 Refer to Appendix 1 for stage specific tasks.
- 5.2 All ground levels where trees are located should be maintained. Changes to soil levels adjacent to trees can severely affect the trees structural integrity and its ability to gain moisture and nutrients from the surrounding soil. Unavoidable level changes that may affect retained trees, and not already accounted for within this method statement, should be assessed by a qualified arboriculturalist so that any remedial works can be undertaken.
- 5.3 Building material storage and operations that can contaminate soil, such as cement mixing, must be confined to areas outside the construction exclusion zone.
- 5.4 Fires should not be lit within 5m of the foliage or drip line of the tree. Care should be taken and the fire should not be allowed to become large, and the wind direction noted.
- 5.5 The trees should not be used to attach notices, cables or other services.
- 5.6 The installation of any underground services near or adjacent to trees on the site shall conform to the requirements of National Joint Utilities Group publication Volume 4 (November 2007).
- 5.7 At the beginning of the construction phase, the site manager will appoint a delegated site representative who shall be responsible for continued checking of the protective fencing to ensure it is compliant with the exclusion zone.
- 5.8 As recommended within BS 5837:2012, and specified within the Arboricultural Tasks Sequence Table, the development sites should be visited by an arboriculturalist on a regular basis. This is to undertake inspections of the tree protective fencing to ensure that no incursions have been made and to advise on any tree related matters that may have arisen. The frequency of such visits should be discussed with the Local Planning Authority.



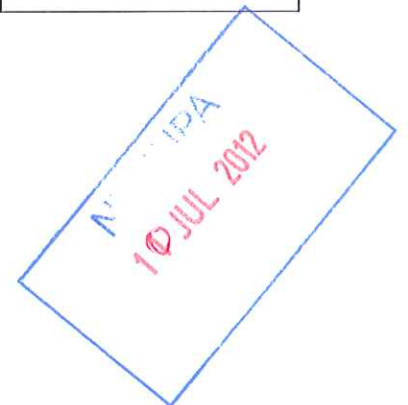
6 Post-Construction Considerations

- 6.1 Refer to Appendix 1 for stage specific tasks.
- 6.2 Only once all construction works have been completed can the protective fencing and any ground protection be removed.
- 6.3 Post development landscaping should be kept to a minimum within the root protection areas of retained trees.
- 6.4 Since trees are capable of influencing soil hydrology newly planted trees need to be situated where they will not interfere with built structures. Refer to NHBC Chapter 4.2 'Building near Trees' and Arboriculture Research and Information Note 'Tree Roots and Foundations' for further information.



Appendix 1: Arboricultural Tasks Sequence Tables

Tree or Group Number	Pre-Demolition & Construction Stage	Construction Stage	Post Construction Stage
Trees 2, 3, 4 and 12	Fell to enable the development		
Tree 6	<p>Adhere to specification within Section 4.</p> <p>Set out and erect protective fencing as per Appendices 3 and 4. Attach notice in Appendix 7.</p> <p>Install ground protection as per Appendices 3 and 5.</p>	<p>Adhere to specification within Section 5.</p> <p>Monitor integrity of Construction Exclusion Zone.</p> <p>Site to be visited by arboriculturalist – frequency to be determined by LPA.</p>	<p>Adhere to specification within Section 6.</p> <p>Remove tree protection measures.</p> <p>Complete landscape works adjacent to trees.</p>
Trees 1, 5, 7-11 and 13	<p>Adhere to specification within Section 4.</p> <p>Set out and erect protective fencing as per Appendices 3 and 4. Attach notice in Appendix 7.</p>	<p>Adhere to specification within Section 5.</p> <p>Monitor integrity of Construction Exclusion Zone.</p> <p>Site to be visited by arboriculturalist – frequency to be determined by LPA.</p>	<p>Adhere to specification within Section 6.</p> <p>Remove tree protection measures.</p> <p>Complete landscape works adjacent to trees.</p>

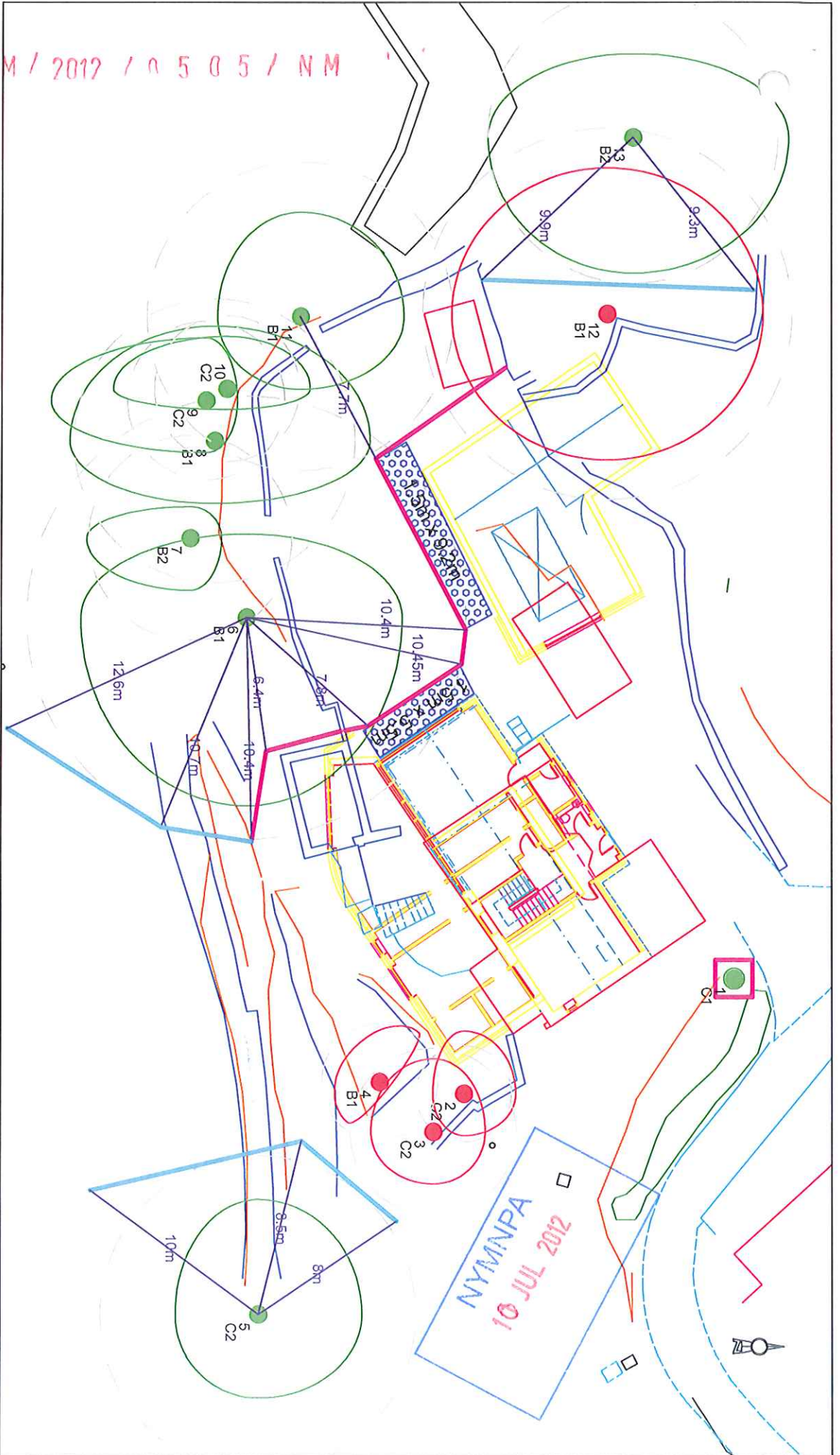


Appendix 2 Tree Works Required - Keepers Cottage, Aislaby

No.	Species	Condition	BS Cat	Recommendation
1	Western Red Cedar	Shaped ornamental.	C1	No work required.
2	Holly	Co-dominant crown. Good health, reasonable form.	C2	Fell.
3	Holly	Multi-stemmed at base. Co-dominant crown.	C2	Fell.
4	Eucalyptus spp	Co-dominant stems at 0.5m. Num Included bark at.	B1	Fell.
5	Elm spp	Old pollarded/coppiced elm adjacent to hedge. Stem cavities present. Terracing between tree base and existing house level.	C2	No work required.
6	Sycamore	Twin-stemmed at base. Pruning wound(s) on stem with limited decay.	B1	No work required.
7	Sycamore	Suppressed form. Pruning wound(s) on stem. Located at top of steep slope which limited access to tree base.	B2	No work required.
8	Sycamore	Located at top of steep slope which limited access to tree base. Good health, reasonable form.	B1	No work required.
9	Sycamore	Located at top of steep slope which limited access to tree base. Suppressed form. Leaf necrosis within lower crown - possible herbicide or insect damage.	C2	Monitor physiological condition.
10	Sycamore	Located at top of steep slope which limited access to tree base. Suppressed form. Leaf necrosis within lower crown - possible herbicide or insect damage.	C2	Monitor physiological condition.
11	Sycamore	Located at top of cliff which limited inspection of the base. 2 stems previously removed leaving stubs with cavities forming within.	B1	No work required.
12	Sycamore	Multi-stemmed at base. Pruning wound(s) on stem with decay.	B1	Fell.
13	Ash	Twin-stemmed at base.	B2	No work required.






NYM / 2012 / 0505 / NM






elliottconsultancy/td.
arboricultural consultants

Wrens Nest, Underhill, Glasdale
North Yorkshire YO21 2PF
01947 897001
enquiries@elliottconsultancy.com

-  Tree to be incorporated into Proposed Development
-  Tree to be Removed
-  Tree Group Number

A1/B1/B2
/C1/C2/U
BSS4337 Retention Category

-  Tree Protection Fence Type 1 (refer to Appendix 4 for specification)
-  Tree Protection Fence Type 2 (refer to Appendix 4 for specification)
-  Distance in Metres of Tree Protection Fence from Tree Stem

Dimensions of Ground Protection for this Area (refer to specification in Appendix 5)

-  Tree Root Protection Area
-  Approved Alterations

APPENDIX 3

Drawing Title: Tree Protection Plan

Project: Keepers Cottage, Aislaby

Drawing Number: ARB/CP/1655/TPP

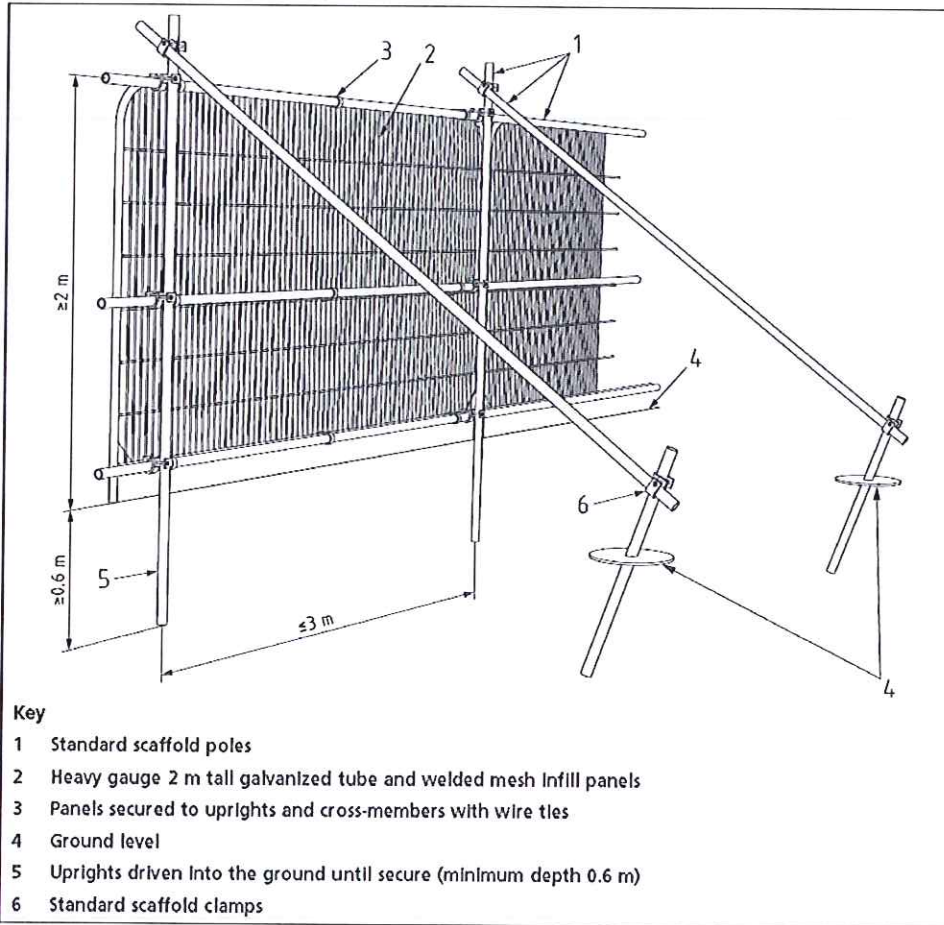
Date: June 2012

Scale: 1:250 @ A4

Client: Mr Hogarth

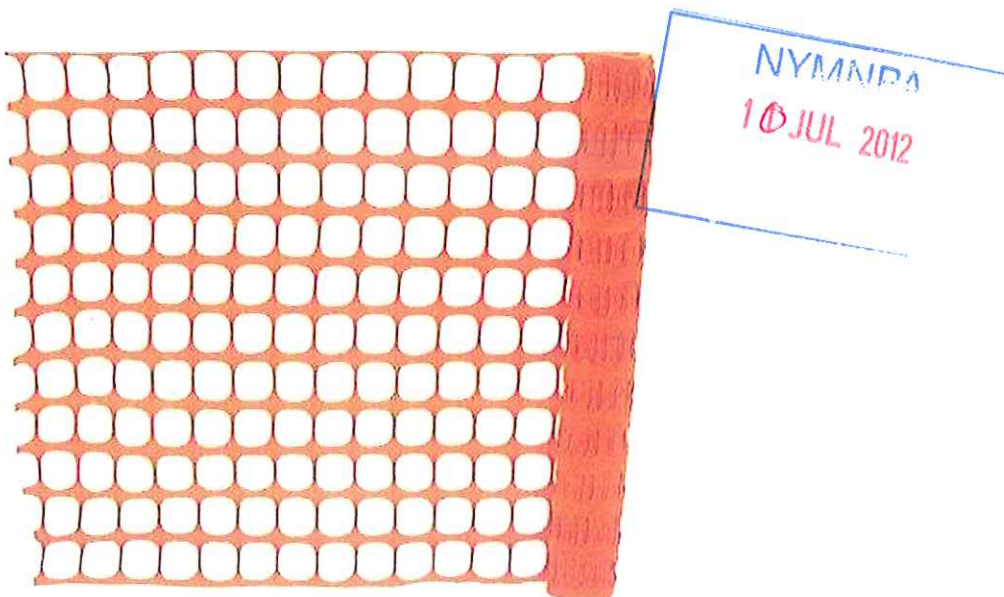
Appendix 4: Protective Fencing Specification

Tree Protection Fence Type 1



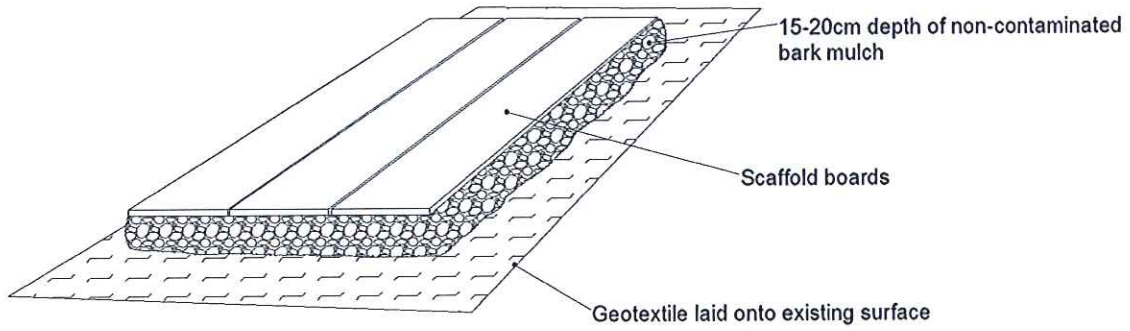
Drawing Source: BS 5837:2012

Tree Protection Fence Type 2



Appendix 5: Access within Root Protection Areas

Ground Protection to Enable Access for Pedestrians within Root Protection Area



NYMNP
10 JUL 2012

Appendix 6: Removing Hard Surfaces & Other Excavations within Root Protection Areas

- All excavations within root protection areas must only be undertaken using hand tools or pedestrian operated machinery.
- The required excavations must be kept to a minimum to avoid unnecessary root damage and ideally undertaken during the presence of an arboriculturalist.
- Great care must be taken not to damage the bark of roots that can be retained in order to avoid wounds which could be exploited by pathogens.
- Exposed roots that can be retained must be wrapped with dry sacking if to be left for extended periods e.g. overnight. Sacking must be removed prior to backfilling.
- All roots >25mm should be preserved and worked around. Where this is not possible, severance should only take place after consultation with the tree officer / appointed arboriculturalist. Roots must be cut using a sharp knife leaving as small a wound and as clean a cut as possible.
- Great care must be taken not to allow contaminants, such as oils, into the excavation.



Appendix 7: Construction Exclusion Zone Notice

