Arboricultural Implication Assessment

Kiss Tree Management Limited

Site Address: 129, West Lane, Hayling Island, Hampshire, PO11 0JL

Ref: KTML-03711-AIA

Date: 8th February 2011

Compiled by Sarah Kiss
Tech.Arbor.A

Kiss
Tree
Management
Limited



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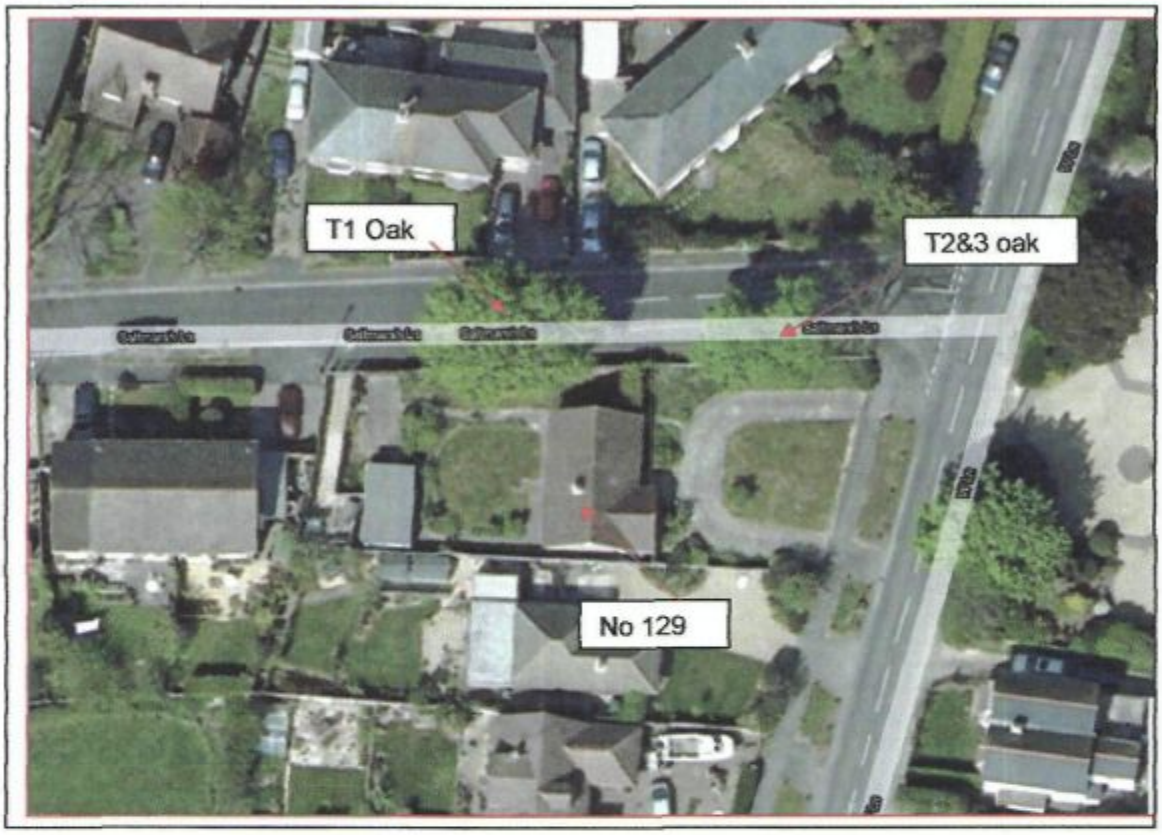
Abbreviations & definitions	CEZ = Construction Exclusion Zone. The area of no access bound by protection fencing RPA = Root Protection Area. The minimum area to be protected from damage. Usually described as a radius centred around the tree stem centre TPP = Tree protection Plan: shows the position of protective fencing and ground protection etc. AIA = Arboricultural Impact Assessment – this report, designed to identify impact of proposal on trees, and to propose ways of mitigating damage or loss. AMS = Arboricultural Method Statement. How to carry out the protection and mitigation proposed on the site. Can only be finalised when the agreed design is finalised, often with arboricultural input.

1. **Summary.** The proposal is to build an extension to the Northern end of an existing bungalow. The proposed footprint will encroach into the root protection area of an oak tree, and almost require limited ongoing pruning in future to keep rooflines clear. It is felt that given the average condition of T1 the proposal should not be refused on grounds of the conflict with the tree, but that alternative methods of build and mitigation (succession) planting be considered.

Aerial view from Google StreetView™ of plot at 129, West Lane, Hayling Island.



2. Instructions: purpose, client and site

2.1. Purpose of report. This report is compiled as an aid to the planning process and is conducted in line with British Standard 5837 'Trees in Relation to Construction' 2005.

2.2. I was instructed by the owners Mr & Mrs Jones to carry out the report post design & outline planning application.

2.3. The site and tree are located at 129 West Lane, Hayling Island, and was visited on January 15th 2011 by the author accompanied by Tim Dean, the owners and (later) Paul Haywood.

3. Report Limitations

3.1. Trees are living organisms and can alter in condition and vitality very quickly. This report is based on findings of a single site visit, and assume that soil, temperature and prevailing weather conditions will stay the same for the duration of validity of this report shown in para 3.2

3.2. Validity. This report is valid for a period of one year from the date shown in the validation on the basis that the conditions in 2.1 have not changed, and makes no allowance for Acts of God – e.g. extreme weather conditions where even healthy trees may fail.

3.3. Insurance. Kiss Tree Management Limited (hereafter KTML) is insured to the sum of £500,000 Professional Indemnity through Catlin via Angel Underwriting Limited for suitably qualified personnel to carry out tree inspections and reports.

3.4. The survey was done from the ground and used existing access points: no trees were climbed. Th[redacted]e.

3.5. Canopy spreads have [redacted]d to be sufficiently accurate for

3.6. Appropriate equipment [redacted]urate enough for the purpose[redacted] accurate to nearest 0.5m, stem diameters to nearest 5mm. Pear Technology TreeMapper pro v2.3 software has been used to plot tree stems, canopy spreads, shadow patterns and root protection areas and has been designed specifically for the production of such surveys.

3.7. The plans produced for this survey have been based on plot plan supplied by the owners and approved for this use. This canopy spreads are indicated by four cardinal points and are superimposed over the plotted canopies indicated by circles to give a more accurate reflection of their shape.

3.8. This report therefore covers the potential impact to trees and how this might be mitigated. It is based on verbal information supplied by the owners and makes recommendations on construction method and protection for trees that have not been discussed with the contractor or architect.

3.9. Soil type has not been tested on this site.

4. General description of site and surroundings (BS para 6.1)

4.1. General description of site & setting. The site is bounded to the North by Salt Marsh Lane, to the East by the front garden mostly used as an In/Out vehicle access, to the South by the adjoining plot and the West by rear garden, garage and an electricity sub station.

4.2. Existing buildings. A single story dwelling in the central South portion of the plot.

4.3. Existing trees. There are three key trees influenced by the proposal – all three are located offsite to the Northern boundary: Trees 1 & 2 are affected above ground, with all three potentially affected by construction traffic and material movements/mixing.

Tree No	Species	Stem dia @1.5m	Retention Category	Comments
T1	Oak (*Quercus robur*)	64cms	B2	Previous pruning including reduction cuts on both North, East & South canopy. Several occluding wounds on stem. Stem leaning to North.
T2	Oak	43cms	C1,2	Poor form due to extensive pruning. Recent epicormic removal.
T3	Oak	41cms	C1,2	Poor form due to extensive pruning. Recent epicormic removal.

4.4. Contribution to landscape – These are some of the relatively few large species trees in the immediate area. The location is close to agricultural land and 2 small copses to the West.

4.5. Soil type (BS Para 5.2.4 c) Not tested

4.6. Topography and Drainage. (BS para 5.2.4.d). The site is generally level. tarmac, cambered surfaces to

5. Description of proposed development

5.1. It is proposed to build a single story extension to the North of the property extending the existing roofline and extending to the East to mirror the existing front elevation.

5.2. Purpose of structure. Domestic dwelling.

5.3. Construction method (BS para 6.2.3 d)

5.3.1. Foundations. Existing proposal is for trenching: I propose this is changed to hand dig in the root protection area and use of pile & beam construction to the Northern boundary of the build.

5.3.2. Main structure will be block & brick built to match existing finish.

5.3.3. Flooring or gro[redacted]rfacing is used in the root [redacted] to install any porous or pe[redacted]

5.3.4. Services – belo[redacted]wn from existing internal [redacted]nderground services propose[redacted]

5.3.5. Access will be along existing front drive only.

5.4. Demolition. No major demolition is proposed: any existing will to come down will be removed on a take down/pull back basis onto existing footprint.

5.5. The effect these development proposals (BS para 6.2.3) may have on the amenity value of the trees is low. There will be a need to adjust build method to work within the RPA and there is potential ongoing pruning on one branch to maintain clearance to prevent direct damage of the new roofline as the tree grows closer. The tree may also need future pruning to maintain highway clearances and to mitigate any risk posed by regrowth from poor previous reduction cuts, but these are not related to the development. Pruning for light should not be necessary as the tree is to the North of the proposal and its presence is known and accepted.

5.6. Modification of Design proposals in relation to retain/safeguard trees (BS para 6.2.3 e). The proposed design for this site should be amended to remove the need for trenching in the RPA.

5.7. Infrastructure requirements (BS para 6.2.3 f):

5.7.1. Underground or above ground services. No new services runs required.

5.7.2. Highway safety and visibility splays will not be affected by the proposals.

5.7.3. Other infrastructure provisions (substations, refuse storage, lighting, signage, CCTV) should not be affected by the proposals.

6. Designations relating to trees (BS para 6.2.3.a)

6.1. T1 is owned/managed by Hampshire County Council Highways. It will be pruned as necessary to maintain highway clearances.

6.2. T1 is subjec [redacted] ree Preservation Order. No c [redacted]

7. Implications of proposed development

7.1. **Implications of proposal.** It is anticipated that one branch of about 70mm [redacted] gth will need to [redacted] or [redacted]. There are no [redacted] that if pruned back to the secondary branch to which it is attached, should cause no long term threat that would not already be present by the highway pruning requirements or has already happened.

7.2. **Trial pit.** A hand-dug trial pit was placed in the approximate position of the South West corner of the proposed extension – about 4.2m from the tree. The trial pit showed no sizeable roots (nothing over 10mm diameter) present and relatively few fibrous roots.

7.3. **Implications of demolition.** No demolition proposed.

7.4. **Potential for damage on development sites.** The development of this site may have the following impact on the trees through:

i) Direct damage to trees through equipment impact, unnecessary surgery to the trees opening wounds and removing live material

ii) Indirect damage through soil compaction (vehicle and footfall) reducing the air and water available to the tree's roots

iii) Severance of the roots through digging, excavation or piling in the area of the root plate

iv) Ongoing pruning in future to allow trees and new developments to exist side by side. For example, pruning to maintain distance of branches from rooflines, guttering or windows; reducing height of trees to maintain light levels. In this case, ongoing pruning represents a minor issue as removal of one branch should give clearance for the foreseeable future. It is possible longer term management may be required to clear ridge line.

v) Choosing the right time in the tree's growth cycle can increase or reduce the impact any works may have on the trees. Pruning on trees to be carried out during times recommended for the species.

vi) positive impact can be brought about where works allow trees suppressed by close growth to buildings or other trees to have more space to grown an open form, by management techniques where none have previously been employed or have been allowed to lapse, or by replacement species being more appropriate to the location than before, or by tree planning being an active and integral part of the development with suitable aftercare programmes implemented.

7.5. **Direct loss of trees (BS para 6.2.3 h).** It is proposed to remove NO trees to allow development of the site.

7.6. **Indirect impacts.**
Changes in soil level. There are no significant changes in soil level in the areas close to other retained trees, so no special measures are required to maintain them beyond enforcing the Construction Exclusion Zone.

Structures within exclusion zone. The development proposed is within the CEZ: special attention must be paid to the materials and methods to be used as laid out in the method statement.

Underground, overground and overhead services. There are no services to be routed through the exclusion zones.

8. Proximity of trees to structures (BS para 6.3).

Future management requirements are minimally increased as described above.

9. Additional considerations (BS para 4.4)

9.1. **Trees requiring immediate attention (BS para 4.4.1).** None

9.2. **Young trees (BS para 4.4.2)** None

9.3. **Veteran trees (BS para 4.4.3)** none

10. Change in site use and tree management implications (BS para 6.3)

10.1. General. The trees on site are all species that appear to have been planted with the intention of softening the edge of the garden or for screening, or are self set. There are none on site of significant arboricultural interest or rarity.

10.2. Future management requirements and probable impact. (BS para 6.3.1) resulting from the proposed development are slightly different: removal of one slightly larger diameter (c.70mm) branch may be better long term than regular ongoing pruning of several smaller branches. No significant impact will result on the tree population or landscape/amenity value. It may be improved if a succession tree is conditioned. There may be an option to place a succession tree on the highway to improve the remains of the row if insufficient room is available on site.

10.3. Access and parking, highway visibility splays footpaths and lighting. There are no trees that may need future pruning regimes to maintain visibility/light levels/access. There are no anticipated problems associated with species and parking, footpaths or street lights.

10.4. Shade and light issues (BS para 6.3.2) Windows, shading, use of rooms etc. don't forget street lights if relevant.

10.5. Honeydew & leaf litter (BS para 6.3.5) Gullies, gutters, fruit, honeydew and parking

10.6. Potential root damage to infrastructure. Large areas of SE England are on a clay soil: /species present/future species. Therefore problems with root related subsidence is/is not anticipated: the construction method used must take account of this.

10.7. Damage to trees and structures (BS para 6.3.3). The site plans allow sufficient distance from trees to be retained or in neighbouring plots.

10.8. Large trees (BS para 6.3.4). T1 has probably achieved nearly it's full potential size given clearance requirements and position.

10.9. Exposure due to tree removal. No trees to be removed.

10.10. Areas for future tree planting are limited on site – see para 11 below.

11. Mitigation &/or future tree planting.

(BS para 6.2.2). Planting may be required where trees will be adversely affected, where planning (including TPO) conditions demand. Species must be appropriate for the site conditions and space available to avoid the need for ongoing pruning or to abate nuisance. There must be sufficient above and below ground space to allow for healthy growth. Smaller trees (Acer campestre for example) might be planted to the front of the property. Or alternatively Hampshire County Council or the Havant could be approached to provide a local planting site.

On this site the following planting is suggested:

Tree no	Species	Stock size	Location on plan/reason
T1	Field maple (*Acer campestre*) or similar size	10/12 cm standard	Within curtilage - perhaps to front inside turning circle
or			
T1	Oak (*Quercus robur*)		Offsite (with highway/local Borough approval & checks) on verge to North of site.

12. Conclusion.

The proposed scheme should not significantly affect the retained trees if proper care is taken during the pre-construction and construction phases. Mitigation planting will provide a succession tree, potentially of better form than existing trees and planted where less intervention will be required to maintain clearances for all reasons. Suggest to front of property within turning circle area.

13. Summary of findings.

Table 1: Summary of works to trees as a **direct** result of development

Tree no	Species	Class	Works required
T1	Oak	B2	Removal of one branch

Table 2: Summary of works to trees as an **indirect** result of development

Tree no	Species	Class	Works required
None			

14. Contacts

14.1. Site owner: Mr & Mrs Jones.

14.2. Sarah Kiss, Kiss Tree Management Limited, 348 Priory Road, St. Denys, Southampton SO17 2LQ. Answerphone 02380 554109 Mobile: 07800 575552, www.sarahlkiss@googlemail.com

14.3. Architect: Not known

14.4. Contractor: Not known

14.5. Local Planning Authority: Havant Borough Council

15. Validation & qualifications

15.1. I confirm that the findings and opinions contained in this report are those based on my own judgement and experience and after careful inspection of the tree in person. I hold the following relevant *qualifications:*

Technician's Certificate in Arboriculture (level 4 qualification)

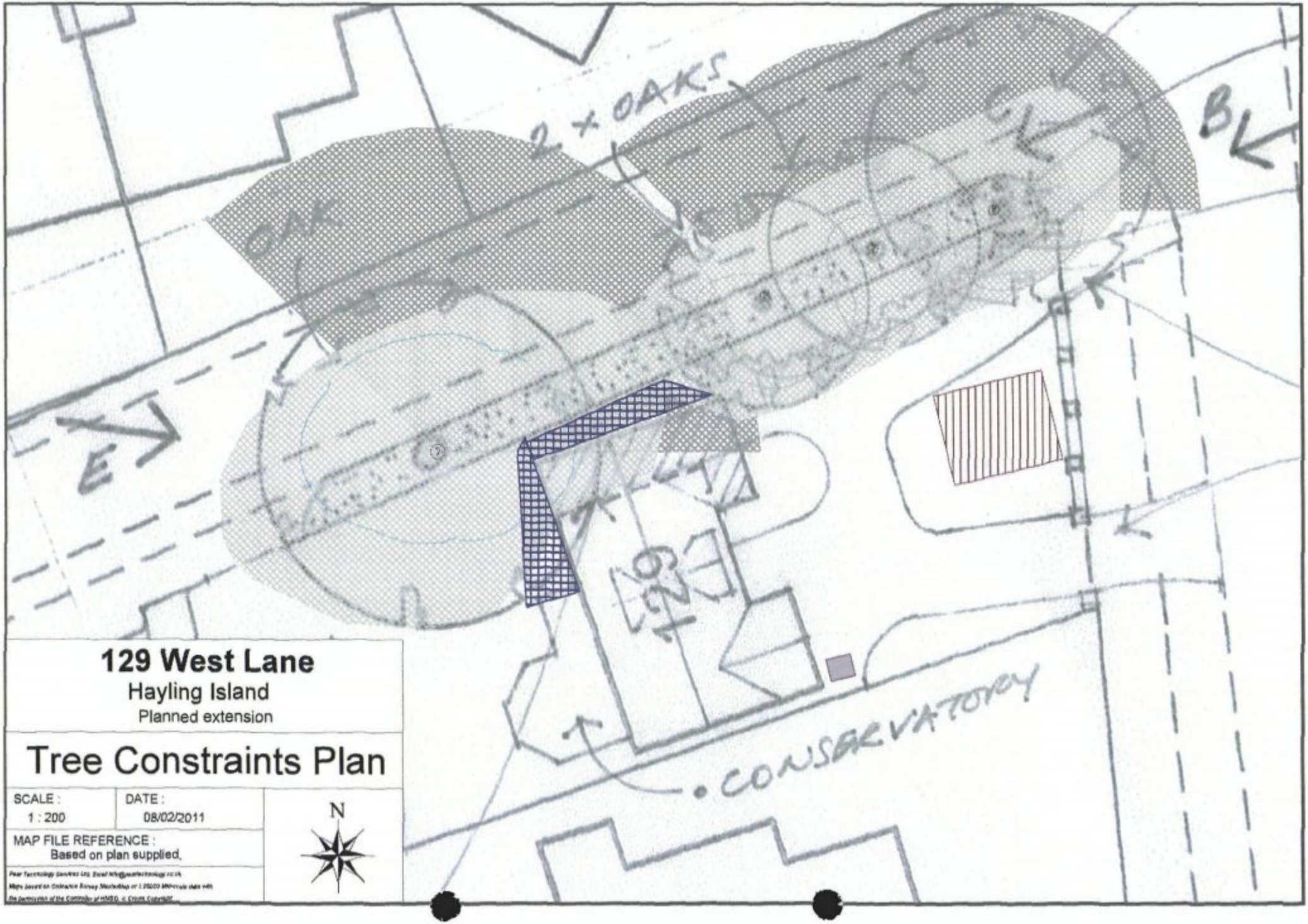
Certificate in Professional Tree Inspection awarded By Lantra Awards.

Licence holder for Quantified Tree Risk Assessment (QTRA)

I am currently studying for the RFS Profession Diploma in Arboriculture Level 6 as part of continuing professional development.



Sarah Kiss, 8th February January 2011



129 West Lane

Hayling Island

Planned extension

Tree Constraints Plan

SCALE :	DATE :
1 : 200	08/02/2011

MAP FILE REFERENCE :
Based on plan supplied.

Pear Technology Services Ltd. Email info@peartechnology.co.uk
Maps based on Ordnance Survey Mastermap or 1:25000 Millimetre data with
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