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Planning Inspectorate.
Temple Quay House,
2 The Square,
Bristol,
BS1 6PN.

31 March 2011

Our ref : Mins/ATCorr/31311

Re : Proposed Development at 42-44 Crabtree Lane, Lancing. BN15 9PQ
Planning Application Reference : ADC-048-10

I have been instructed by Mr N. Minsky of J Minsky & Sons Ltd, to consider the 4 Silver Birch trees located at the above site, in relation to the proposed development scheme the subject of this appeal.

I understand that Adur District Council (ADC) have recently refused planning permission for this development, on arboricultural grounds;
01. The group of 4 trees subject to Tree Preservation Order on the site are an important feature of the locality and the removal of 2 of these trees to build the proposed house would be detrimental to the visual amenities and character of the area and conflict with the policies of the ADLP (AG1, AB23, AB25).

02. Having regard to the close proximity of the remaining 2 trees to the proposed house, resulting in overshadowing and other detriment to residential amenity, the remaining 2 trees would be under future threat of removal or substantial reduction in a manner that would spoil their appearance. This would pose further risk of detriment to the visual amenities of the locality and the site is concluded to be of insufficient size to accommodate the proposed house in a satisfactory manner that would meet the requirements
It is therefore understood that the Council are satisfied with all other related tree protection measures on this site relating to the appeal scheme as submitted at the time of application.

Background Information :
- The four Silver Birch trees are the subject of a Group Tree Preservation Order.
- Adur District Council Assistant Parks Manager, Mr Jeremy Sergeant (Memo ref : JS/69.42 dated 14-01-11), raised no objection to the reduction of the lower limbs of T4 subject to more information being provided.
- Arboricultural Report submitted with planning application : Tree Survey, Arboricultural Impact Assessment and Method Statement for Tree Protection during demolition and construction (*Arbortech (Consultancy) November 2010*).

It was deemed appropriate and proportionate to the small scale of this site to assess these trees as individuals (not group) to differentiate between them, particularly as they did not contain a variety of species and age classes (that could aid long-term management).

The four Silver Birch trees T1 – T4 were assessed prior to the placement of the Tree Preservation Order and irrespective of any development design proposal for the site, in accordance with the Tree Survey Method set out in BS 5837:2005 *Trees in relation to construction - Recommendations*, and categorised using Table 1 Cascade chart for tree quality assessment.

In consideration of the outcome of this assessment the planning sequence (BS 5837 Figure 1 – Flow diagram) for trees on development sites was followed and in collaboration with the client and architect a suitable development design was decided with quality tree care at the centre of the process.

Prior to submission of the planning application for development on this site a provisional Tree Preservation Order was served on trees T1 – T4 (October 2010).

The tree comments included in this appeal statement were outlined in a TPO objection letter dated 8th November 2010, by Arbortech (Consultancy) on behalf of Mr N. Minsky and subsequently considered by Adur District Council in their decision to confirm the TPO on these trees.

In summary, the outcome of theBS 5837 Tree Quality Assessment is as follows; T1 B/C, T2 and T3 C' and T4 B Category.

Whilst we realise that the BS 5837:2005 document is not used by Local Authorities for assessing trees for a Tree Preservation Order, a similar criteria for this category grading forms part of the TPO suitability evaluation. Other necessary factors also require assessment to ensure that all the implications of a TPO have been considered.

In addition BS 5837 states that '*C category trees will usually not be retained where they would impose a significant constraint upon development'.*

Here follows the reasoning behind the BS 5837 Tree Survey categorisation of the four Silver Birch trees on this site and the justification and limitations that presented themselves.

T1 Silver Birch 'B/C' category tree **& T4 Silver Birch** 'B' category tree.

The BS 5837 : 2005 category and definition:
B category ="*In such a condition to make a significant contribution".*
C category="*Currently in adequate condition to remain until new planting could be established" (a minimum of 20 & 10 years is suggested respectively).*

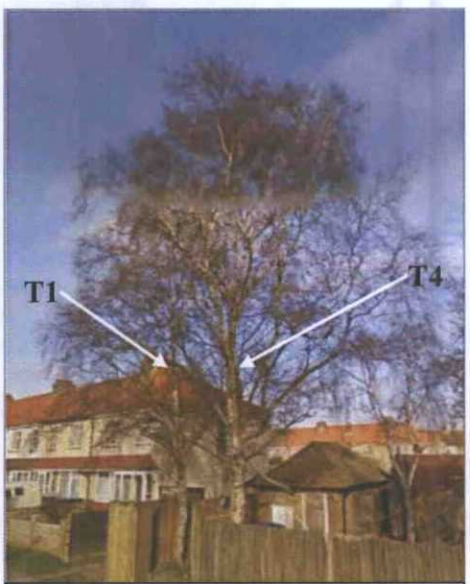

Image 1. Trees **viewed from South** along First Avenue.
T1(left) and T4 (right) are the most dominant trees in the street scene.



Image 2. Trees **viewed from North** along First Avenue.
T1(left) and T4 (right) are the most dominant trees in the street scene.

T1 and T4 make an unquestionably significant contribution to the visual amenity of the locality.

T4 - Reasons for BS 5837 categorisation :
This tree is the better specimen on this site, having strong upright conformation. The main stem however has minor mechanical damage and there is scope for improvement of tree form. The crown has minimal extension to the East (1m towards the proposed dwelling) and over-extending branches within the lower crown, particularly to the South (4.5m extension).

As part of the planning application on this site it was proposed, in line with good arboricultural practice, to reduce the over-extending branches in the crown to avoid the risk of limb failure/damage. Adur District Council Assistant Parks Manager, Mr Jeremy Sergeant, raised no objection subject to more information being provided.

These resulting works would limit the risk of limb failure/damage, improve tree form by balancing the crown (North-South) and further alleviate late afternoon shade onto the site of existing Garage (see Image 3 and related information).

T1 - Reasons for BS 5837 categorisation :
This tree is a reasonable specimen, although it has struggled to realise its potential due to overcrowding by its neighbours. The main stem has a slight lean to the North and there is scope for improvement of tree form.

It is suggested that in time this tree could attain a higher category if it was afforded more space and light to develop, together with minor tree surgery to improve form in the short-term. For more detail refer to Image 5 and related information.

Trees on site in relation to shading.

T1 and T4 are located to the far North West of the site and consequently are not likely to constitute a shading issue upon the proposed development.



Image 3. Trees during dormant season i.e October-March during period of winter sun.

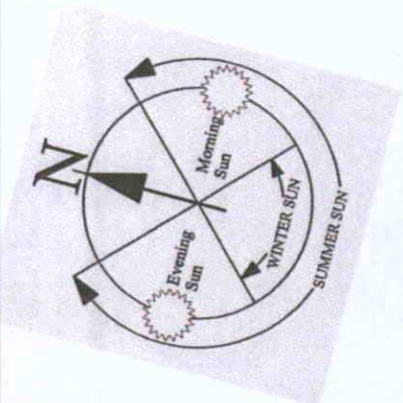

Image 3 (left) and the sun indicator (above - *orientated in line with First Avenue*), go some way to providing a visual 'snapshot' of the light levels available to the site during a time of year with least sunshine and longest shadows.

Note the direction of shadows in the foreground in relation to the shadow cast by T4 on to the existing dwellings offsite (left) and existing Garage on site. The shadow cast onto the neighbouring outbuilding (centre) can only be cast by T3 and the Elder tree (C/R category) in the foreground, which is proposed for removal.

As already stated; it is proposed (without objection) that the crown extension of T4 be pruned, particularly to the South to alleviate the risk of limb failure/damage. This necessary pruning operation will only serve to improve the light levels available to the site further.

T3 – Silver Birch 'C' category tree.
"Currently in adequate condition to remain until new planting could be established" (a minimum of 10 years is suggested).

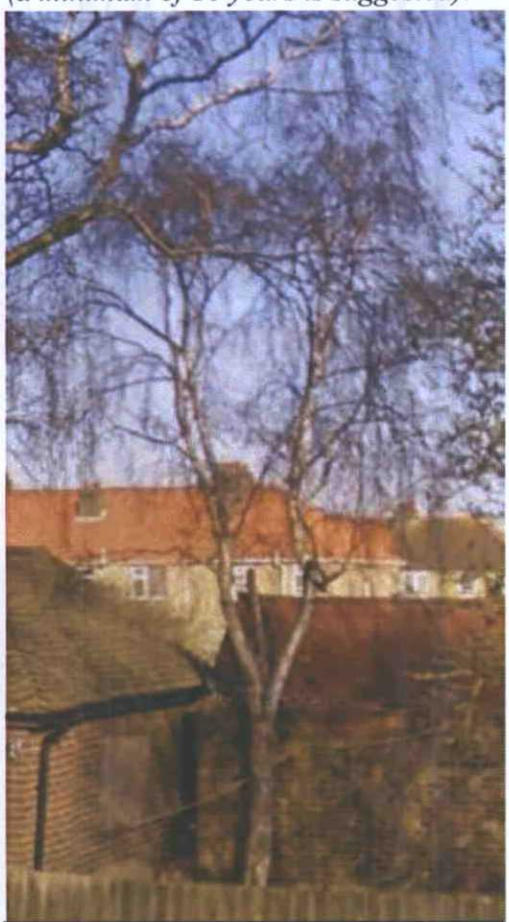

Image 4 : Tree T3

Reasons for BS 5837 categorisation :
This tree is not considered to qualify in the higher categories and is not deemed to be sustainable in the long term for two main reasons.

1. Tree Location.
The face of the main stem is located at a distance of 350mm from the neighbouring outbuilding.

BS 5837:2005 Table 3 – *Minimum distance (m) between young trees and structure to avoid direct damage to a structure from future tree growth,* states that a distance of 0.7m should be allowed between a tree having a stem diameter of 30-60cms at 1.5m above ground level at maturity i.e T3, and a lightly loaded structure such as a Garage i.e neighbouring outbuilding.

A further consideration is that Silver Birch are a surface rooting species.

2. Tree Conformation/Condition.
- The main stem bifurcates at approximately 2.5m (originally trifurcated at this point, see below).
- A dead/decayed limb stub arises from the point of the main union to the East - *It appears likely that action has previously been taken to abate a nuisance of crown encroachment upon the neighbouring property.*

The critical location of the degrading limb at the main structural union of T3, situated fairly low down on the stem when combined with wind loading, intensifies the future potential for stem failure at this point.

It has been pointed out by David Lonsdale (1999) that*" a fork comprising co-dominant leaders is somewhat weaker than a junction between a main stem and a subsidiary branch"*. The situation with T3 is compounded further in that *"stem breakage at the junction with a dead branch is more prone to failure (*Mattheck and Breloer (1994))

A further consideration is that *"Members of this genus generally have an exceptionally poor ability to form barriers against the development of dysfunction and decay in the xylem" (Lonsdale1999).*

The disbenefits of this tree, questions the justification of it being included within a Tree Preservation Order.

1. Proximity of tree to a structure – Risk of future damage being reasonably foreseeable.
2. Largely irremediable tree defect intensifying the future potential for stem failure.

Given the structure and location of this tree, in close proximity to a building, future conflict may be expected.

T2 – Silver Birch 'C' category tree.
"Currently in adequate condition to remain until new planting could be established" (a minimum of 10 years is suggested).

Reasons for BS 5837 categorisation :
This tree is not considered to qualify in the higher categories and is not deemed to be sustainable in the long term mainly due to its suppression by the neighbouring specimen T1.

T2 displays an imperfect stem (and branch) structure i.e acute kink in main stem at approximately 1.8m. It is likely that this formed due to suppression by the more dominant specimen T1 located to the West. The upper crown is inclined towards the East together with a large low limb extending to East over the existing garage. The estimated crown dimensions confirm this suppression i.e 1m extension to West and 4m extension to East. It is considered likely that the suppressed form of this tree will become compounded with time.



Image 5. Trees T1 and T2 viewed from West

The close proximity (overcrowding) of trees T1 and T2 to each other, distorts the potential for either tree to become a good specimen. They are in competition with each other for space, light, nutrients and water availability.

A further consideration due to the surface rooting nature of this species, is that they are particularly susceptible to drought stress, which makes water availability an issue when considering the trends towards drier summers.

It is suggested that T1 would benefit in the absence of T2, thus creating a two-fold opportunity to :

1. Favour and improve the quality of the better more dominant and indeed more prominent specimen T1.

2. Plant a more sustainable replacement specimen, to bring about not only a mixed age group to maintain continuity of tree presence in the locality, but mixed species, by selection for climatic adaption.

Upon removal of T2 there would be little change to visual tree presence when viewed from the East. In addition Image 1 and 2 provide an indication of the minimal visual loss that would be incurred to the street scene in First Avenue upon removal of T2 and T3, particularly when considering the future benefits of sustainably improved tree replacements.

PROPOSAL

Tree Retention.
It is proposed that the superior specimens T1 and T4 are to be retained in good health and condition for the benefit of continued visual amenity.

Tree Pruning.

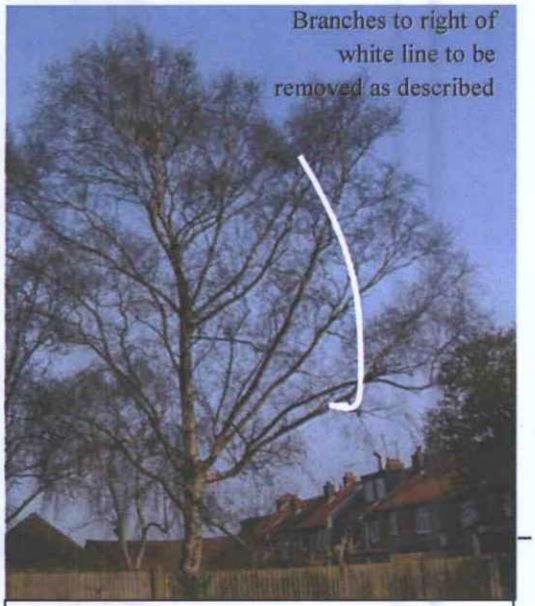

Image 6: T4 - Desired tree pruning result.

T4 Selective pruning.

Works to be carried out by a competent arborist in accordance with BS 3998 : 2010 *Tree Work Recommendations*.

Section 7.8: "*Shortening of branches which would otherwise probably fail*".

Reduce over-extending branches in crown to South, back by a maximum of 1.5m to strong growing points as described in the image (left).
Note : Tree height to remain unchanged.

Timing of works :
Avoid the active growing season, to avoid the risk of sap bleeding.
Avoid the exposure of tissues to severe conditions.

T1
In the absence of T2, it is likely that tree T1 will require minor tree surgery to improve form in the short-term.

As the retained trees would be covered by a Tree Preservation Order; In general any works could not be carried out without the permission of the Local Planning Authority, Therefore, it is highly likely that only works in line with current good arboricultural practice would be permitted.

In addition, as with any tree subject of a Tree Preservation Order, sound justification would be required to permit the felling of a TPO tree. In certain circumstances expert reports are required to substantiate any claims i.e tree condition or damage.

Retained Tree Protection during Construction.
The comprehensive arboricultural report submitted with the planning application for this site, sets out in detail, the intentions to successfully integrate and protect the retained trees prior to, during and post construction of the development in accordance with BS 5837 : 2005 *Trees in relation to construction*. It is intended that this be achieved in collaboration with the Local Planning Authority and they will have free access to the site.

In addition employed arboricultural monitoring is to be undertaken during 'sensitive tasks' within RPAs to ensure that works in progress comply with best practice.

Foundations in proximity to trees should be specified by a structural engineer taking into account the current guidance set out in National House Building Council Chapter 4.2 (Foundations) Building near trees.

Providing the above is adhered to, I see no reason why the trees should have a detrimental impact upon the development.

Tree Removal.
T1 is to be removed as it is not considered sustainable in the context of development.
T2 is to be removed to favour the better specimen T1 and it is not considered sustainable in the context of development.

Tree Planting.
See attached :
Appendix 1 - Tree Planting Proposal.
Appendix 2 – Tree Planting Plan.

Yours Sincerely

J. A Hayes

Mrs Jacqueline Hayes

References :

- British Standard 5837 : 2005 *'Trees in relation to construction - Recommendations'* .
- British Standard 3998 : 2010 '*Recommendations for Tree Work'*.
- The Body Language of trees – A handbook for failure analysis. (*Claus Mattheck and Helge Breloer 1994*). HMSO.
- Principles of Tree Hazard Assessment and Management. (*David Lonsdale 1999). HMSO.*







APPENDIX 1 - TREE PLANTING PROPOSAL.

Planting locations.

It is proposed that two trees are planted in the locations indicated at Appendix 2 'Tree Planting Plan'. The tree species and locations have been selected to improve amenity whilst avoiding shading on to the proposed dwelling.

Tree Species : Pyrus calleryana 'Chanticleer' (Ornamental Pear).

Species Characteristics.

Tree Features	:	Deciduous : Glossy green foliage Autumn :Colour. Spring : White Scented Flower
Genus	:	Pyrus
Soil Type		Any
Aspect		Any, sheltered or Exposed
Seasons of Interest	:	Spring Interest,Autumn Interest
Shape	:	Columnar/Upright
Mature Size	:	Medium (10-15m)
Tree Type	:	Deciduous Broad Leaf
Tolerances	:	Pollution. Salty coastal winds. Damp. Dry.

It won the RHS 'Award of Garden Merit' as its green lush foliage is so early to appear in spring and so late to fall in autumn it has excellent screening uses.

Tree Planting and Aftercare.

- Select quality plants from a reputable nursery.
- Not to be planted in frozen or waterlogged soil conditions.
- Dig large enough hole to accommodate roots and break up ground below.
- Trees to be planted no deeper than 'tide mark' on stem.
- If required drive stake into hole (1m stake sufficient).
- Soak roots in water, spread roots.
- Mix 2oz of Bonemeal with topsoil and carefully backfill hole, firming during fill.
- When at final level check tree is firm.
- Attach tree tie at top of stake.
- Spread bark mulch or place mulch mat at base.
- **Water immediately after planting and at weekly intervals in first growing season (10-20 litres) thereafter during dry weather conditions.**

APPENDIX 2 – TREE PLANTING PLAN.

Site Layout as Existing.

