



## COMMITTEE REPORT

**LOCATION:** Big Site Allotments – Land between Coleridge Walk, Addison Way, Hogarth Hill, Wordsworth Walk (adjacent 27 Wordsworth Walk) London NW11

**REFERENCE:** TPF/0183/17      **Received:** 4 April 2017

**WARD:** GS      **Expiry:** 30 May 2017

**CONSERVATION AREA** Hampstead      Garden Suburb

**APPLICANT:** MWA Arboriculture Ltd

**PROPOSAL:** 1 x Oak (applicant's ref. T1) – Remove, T7 of Tree Preservation Order.

### RECOMMENDATION:

**That Members of the Planning Sub-Committee determine the appropriate action in respect of the proposed felling of 1 x Oak (applicant's ref T1), T7 of Tree Preservation Order, either:**

REFUSE CONSENT for the following reason:

The loss of the tree of special amenity value is not justified as a remedy for the alleged subsidence damage on the basis of the information provided.

Or:

APPROVE SUBJECT TO CONDITIONS

1. The species, size and siting of the replacement tree(s) shall be agreed in writing with the Local Planning Authority and the tree(s) shall be planted within 6 months (or as otherwise agreed in writing) of the commencement of the approved treatment (either wholly or in part). The replacement tree(s) shall be maintained and / or replaced as necessary until 1 new tree(s) are established in growth.

Reason: To maintain the visual amenities of the area.

2. Within 3 months of the commencement of the approved treatment (either wholly or in part) the applicant shall inform the Local Planning Authority in writing that the work has / is being undertaken.

Reason: To maintain the visual amenities of the area.

Recommended Informative if consent is approved:

The applicant should note that the felling of the tree has ground heave potential which may affect neighbouring properties.

### **Consultations**

Consultation was undertaken in accordance with adopted procedures which exceed statutory requirements:

Date of Site Notice: 27<sup>th</sup> April 2017

Consultees:

Neighbours consulted: 5                      also Hampstead Garden Suburb Trust

Replies: 204                      2\* representations                      4\*\* support                      199 objections

3 of the objections and 1 of the representations were received after the expiry of the consultation period.

\* It should be noted that 1 of the representations submitted via the website as 'Comments neither objecting to or supporting the Planning Application' was listed as such in error, as the respondent's detailed comments were clearly in objection.

\*\* Similarly, 2 'Comments in support of the Planning Application' submitted via the website were listed as such in error, as the respondents' detailed comments were clearly objections.

Because of the volume of consultation responses and the amount of detail some included, a representative selection of extracts has been included at Appendix 1 to this report.

The main grounds are summarised below:

Representations:

- Suggests Oak is 75 – 80 years old
- Tree causes shading and deposits debris in neighbouring gardens and the twitten
- Experts should decide whether the tree should be felled or not – but it does need to be managed

Support:

- Hampstead Garden Suburb Trust has not responded to previous requests to prune the tree to restrict its growth so no surprise that there is an application to fell
- Would support the application that this tree (T1) should either be removed, or at least drastically cut back. It is far too big for a residential area and greatly reduces the light to our house. It has now started to take over the whole of our garden.
- Tree is causing structural damage. It could be preserved, at great expense, either to the taxpayer or to the insurance company. There are consequences in both of these cases. This is not a case of tree-lovers versus faceless, cruel bureaucrats. It's a

question of common sense and practical difficulties for suburb residents and those who look after the suburb's environment.”

#### Objections:

There were a considerable number of objections - some of which provided no detailed comments; some of which were from several different people at the same address; and others included non-existent addresses or were from places as distant as Pretoria and New York. The grounds of objection can be summarised as:

- Oak is an original boundary tree that predate houses
- Presence of trees influenced design and layout of area
- Tree shown on Unwin 1911 plan of Hampstead Garden Suburb
- Oak significant to streetscene and allotments
- Importance in framing streetscene and contribution to quiet rural atmosphere
- Wonderful healthy tree of good size and fine shape at meeting point of two twittens can be viewed from the paths, the roads, and the allotments
- Amenity value increased by its particular accessibility to the many commuters, parents and children who use the path to reach public transport, shops and the Garden Suburb school.
- Quite exceptional public amenity value
- Oak integral part of Suburb's history
- Mature trees essential to unique green character and appearance of Suburb Conservation Area
- Oaks iconic species in Hampstead Garden Suburb
- Tree irreplaceable if removed / take generations to replace
- Importance for wildlife, particularly birds
- Role of tree in filtering pollution and noise
- Provides shade, reduces evaporation
- Tree is splendid / beautiful / magnificent / 'one of the two or three finest trees in the whole Suburb'
- CAVAT value of tree £87,695 – well in excess of the extra £58K for work required if the tree is not removed
- Alternatives to tree removal
- Need to preserve the native trees in the Suburb as much as the houses, and look after both in equal proportions
- Damage is only classed as BRE category 2 “slight”
- Proposed felling is irresponsible and disproportionate
- Inaccuracies in supporting information submitted by applicant
- Risk of heave
- Alternative causes for alleged property damage
- Tree felling is insurance company default position
- Argument based on cost to insurers does not take account of wider cost to community
- Potential setting of precedent
- The Hampstead Garden Suburb Trust submitted their own structural engineer's comments

- A number of detailed technical queries were received from one resident (see Appendix 2) – they have been addressed where appropriate by our Structural Engineer and are discussed in the body of this report.

## **MATERIAL CONSIDERATIONS**

### Relevant Recent Planning History:

#### Oak Tree

(n.b. submitted treeworks applications have not all used the same 'site address' so it is difficult to search the full pruning history)

**TREC12138** – Application to undertake unspecified pollarding of the Oak T7 of Tree Preservation Order

- refused 6<sup>th</sup> September 1995

**TREC12138A** – Oak – Reduce density by 25% (T7 of Tree Preservation Order)

- conditional approval 16<sup>th</sup> November 1995

**TREC12138C/99** – Oak - thin density by 25% and lift clear of footpath by 3m, standing in T7 of Tree Preservation Order.

- conditional approval 31<sup>st</sup> January 2000

**TPO/00119/10/F** – 1 x Oak – Thin by 10% as specified (T7 of Tree Preservation Order)

- conditional approval 20<sup>th</sup> April 2010

**TPO/00285/11/F** – 1 x Oak – Lift to 4m and shorten spreading branches as specified in annotated photographs submitted by the applicant on 15<sup>th</sup> August 2011. T7 of Tree Preservation Order

- refused 24<sup>th</sup> August 2011

**TPO/00215/13/F** – 1 x Oak – Remove deadwood only. T7 of Tree Preservation Order

- Exemption Notice issued 2<sup>nd</sup> May 2013

#### 27 Wordsworth Walk

**C12158** – Alterations to rear elevation

- conditional approval 27<sup>th</sup> September 1995

**C12158A** – Erection of side gate

- conditional approval 30<sup>th</sup> October 1996

**C12158B** – Single storey rear extension

- conditional approval 13<sup>th</sup> December 1999

The 1995 planning permission for alteration to the rear elevation involved enlarging a window to create French doors and semi-circular steps to link with the rear patio. The rear patio itself is built up above the level of the twitten. The 1999 planning permission was for

a single storey infill extension (as a pair with the adjacent property) – because of the sloping site, the ground beam was positioned over the existing combined drains with the new walls built above, inside the floor level is set below that for the rest of the ground floor.

## **PLANNING APPRAISAL**

### 1. Introduction

An application form proposing felling of the Oak tree close to the boundary of the allotments in connection with alleged property damage at 27 Wordsworth Walk was submitted via the Planning Portal in March 2017. The applicant initially believed that the Oak was not subject to a Tree Preservation Order (TPO), so had submitted a s211 Notice of Intent. Although there is only one standard treeworks application form, more supporting information is required for a TPO application. Our Structural Engineer commented that there were discrepancies and shortcomings in the information – clarification was thus requested.

On 4<sup>th</sup> April 2017 an e-mail was received from the applicant noting “You have confirmed that the S211 notification has in effect been accepted by the council as a TPO application and we will therefore treat it as such under the legislation. With regard to the oak roots identified, our survey of the site and immediate environment identified no other potential source of the roots. We are satisfied that the origin of the roots identified is tree T1 of the MWA report. The level monitoring is has been reviewed and the readings are confirmed as recorded. A deep datum was installed in the front garden to ensure stability. Vertical movement of 25mm broadly equates to a crack width of 2.5mm which is consistent with the cracks described in the Crawford Technical report. The Crawford Addendum report states that tree work (removal) can proceed without risk of heave damage being created. Irrespective of this information a heave assessment is not a requirement for TPO applications. All necessary technical information listed within the guidance and legislation pertaining to Tree Preservation Order applications has been submitted and on this basis we ask that the council register the application (as a TPO) and confirm the registration date to us in writing. In the event the council refuses to register the application as submitted, we will be left with no option other to proceed to appeal on the basis of non-determination.”

### 2. Appraisal

#### Tree and Amenity Value

The subject Oak stands just inside the boundary of the almost triangular allotments between Wordsworth Walk, Coleridge Walk, Hogarth Hill and Addison Way (sometimes known as Big Site Allotments), on land owned by Hampstead Garden Suburb Trust. It is located at the apex of the twittens linking Erskine Hill and Willifield Way (via Coleridge Walk and Wordsworth Walk), opposite the junction of the rear garden boundaries of 27 Wordsworth Walk and 28 Coleridge Walk, almost 25 metres from the rear elevation of 27 Wordsworth Walk.

The mature Oak subject of this application is approximately 15 metres in height, with a trunk diameter (at 1.5m above ground level) of 75cm and a girth of 235cm. The tree forks

at approximately 2 metres to form a broad spreading crown. It has been previously lifted and thinned regularly (there is some resultant end-weighting), but the Oak appears to be in reasonable condition with no major faults apparent.

The Hampstead Garden Suburb Tree Survey (undertaken by volunteers in 2012 from the Residents Association with some assistance from Hampstead Garden Suburb Trust and a Tree Officer) notes of the Oak in the Overview of Area 2:

*“The oak in the corner of Big Allotment that can be seen down the twittens leading from both Wordsworth and Coleridge Walks is quite exceptional in its age, condition and beauty. It is certainly one of the two or three finest trees in the whole Suburb.”*

In the survey schedule for Area 2, it is described as:

*“huge healthy oak, magnificent shape. One of the most impressive oaks in the Suburb viewable along twitten in either direction, Exceptionally fine tree”*

The form of the mature Oak indicates that it has been open-grown (rather than having its branching constrained by proximity to competitors) and its size suggests that it is about 100 years old – however, rate of growth is affected by a number of factors, so the only certain method to establish age would be by counting tree rings (e.g. by test bore). Whether or not the tree is marked on the old Suburb map dating from 1911 drawn by Parker and Unwin (the Suburb’s master-planners) or, as seem likely, on the 1909 Charles Paget Wade map, it does seem to be an integral part of the design and layout of this part of the Artisans’ Quarter – the Oak is very clearly aligned as a focal point for both the twittens and allotments as well as the layout of roads and buildings.

The part of the Artisans’ Quarter bounded by parts of Hogarth Hill, Addison Way, Erskine Hill, Asmunds Hill, and Willifield Way is roughly kite-shaped with the large open ground (tennis courts, croquet, allotments) to the rear of Fellowship House forming a square block to the south; the triangular ‘Big Site Allotments’ centred to the north-west; the triangular alignment is continued in the shape of the boundaries of the rear gardens of 27 / 29 / 31 Wordsworth Walk and 28 / 30 / 32 Coleridge Walk; on either side is an almost symmetrical arrangement of cul-de-sacs (Wordsworth Walk and Coleridge Walk) and allotments / gardens between the cul-de-sacs and larger roads; all symmetrically bisected by the twittens. The Oak stands right at the heart of this layout – at the apex of the allotments, by the angle of the twittens, and the line of arrow-shaped garden boundaries; its visibility at the high point of the allotments enhanced by the topography – this is unlikely to be a coincidence.

Although it is difficult to zoom in with sufficient clarity for certainty, the 1935 aerial photograph available on the “Britain from Above” historic collection, does seem to show a mature tree at the apex of the allotments in the position of the subject Oak; similarly, looking at historic photographs available on Google Earth, suggests that the Oak clearly identifiable as the subject Oak in the 2015 and 1999 photographs is present in the 1945 image as well.

Hampstead Garden Suburb is internationally renowned for the way in which mature landscape features have been incorporated into the built environment. The presence of trees such as this Oak was an integral part of the design ethos during the development of

the Garden Suburb. The Hampstead Garden Suburb Character Appraisal Statement is one of many documents setting out the importance of trees to the character and appearance of the area e.g.:

- “Trees and hedges are defining elements of Hampstead Garden Suburb. The quality, layout and design of landscape, trees and green space in all its forms, are inseparable from the vision, planning and execution of the Suburb”.
- “Wherever possible, in laying out the design for “the Garden Suburb” particular care was taken to align roads, paths, and dwellings to retain existing trees and views. Extensive tree planting and landscaping was considered important when designing road layouts in Hampstead Garden Suburb, such that Maxwell Fry, one of the pioneer modernists in British architecture, held that “Unwin more than any other single man, turned the soulless English byelaw street towards light, air, trees and flowers”.
- “Unwin’s expressed intention, which he achieved, was: ‘to lay out the ground that every tree may be kept, hedgerows duly considered, and the foreground of distant views preserved, if not for open fields, yet as a gardened district, the buildings kept in harmony with the surroundings.’”
- “Trees contribute fundamentally to the distinctive character and appearance of the Conservation Area in a number of different ways, including:
  - Creating a rural or semi-rural atmosphere
  - Informing the layout of roads and houses with mature field boundary trees
  - Providing links with pre-development landscape and remaining woodland
  - Creating glades, providing screening and shade, and marking boundaries
  - Framing views, forming focal points, defining spaces and providing a sense of scale
  - Providing a productive, seasonal interest and creating wildlife habitats

As the Conservation Area Character Appraisal Statement notes “The Artisans’ Quarter was designed as a new kind of community in which attractively designed housing for a wide range of income groups was set within a green environment. The provision of large gardens and open recreational spaces was central to the vision.....The density of development is relatively high for the Suburb. However, houses were provided with generous gardens and there are areas of allotments, tennis courts and greens which provide generous open green spaces. Housing layouts were designed to retain existing mature trees.” In describing the overall character of the Artisans’ Quarter it notes “The retention of boundary oak trees from the pre-existing field boundaries, together with the street trees, hedges and the generous gardens, make a lush green setting for the houses.” and included amongst the Principal positive features are “mature oaks from earlier woodlands or field boundaries still thrive, particularly in allotments and back gardens or as focal points in the layout”; “trees and greenery rise above cottages in some areas”; and “there are glimpsed views, between houses, of greenery”.

The Oak is considered to be of special amenity value - in terms of its historical significance in the layout of the Suburb; its importance to the character and appearance of the Hampstead Garden Suburb Conservation Area; its arboricultural value as a tree in its own

right; and its environmental benefits. The number of, and detailed comments in, the objections (see appendices) bear testament to the significance of the tree in the context of the Hampstead Garden Suburb Conservation Area and to many residents – even the consultation responses that were not ‘objections’ referred to the possibility of tree management by pruning as an alternative to felling. If this mature Oak was removed any replacement planting would take many years to attain a similar size and stature and its historic attributes would be lost - thus there would be considerable detriment to public amenity for decades and substantial harm to the character and appearance of the Conservation Area.

### The application

The application submitted by MWA Arboriculture Ltd was registered on 4<sup>th</sup> April 2017. The reasons for the proposed removal of the Oak (applicant’s reference T1) cited on the application form is:

*The above tree has been implicated in a subsidence claim to No. 27 Wordsworth Walk, NW11 6AU*

The supporting documentation comprised:

- MWA Arboricultural Appraisal Report dated 7 April 2015
- Crawford Technical Report dated 5<sup>th</sup> March 2015
- Crawford Addendum Technical Report dated 30<sup>th</sup> January 2017
- CET Site Investigation Factual Report dated 10<sup>th</sup> March 2015
- CET Site Investigation Factual Report dated 27<sup>st</sup> July 2015
- level monitoring 26/1/16 – 25/1/17

Subsequently additional and updated monitoring data was submitted:

- crack monitoring 15/3/16 – 3/4/17
- level monitoring 26/1/16 – 3/4/17

It may be noted that the ‘Instruction date’ on the crack monitoring data sheet is cited as 03 May 2016, whereas the level monitoring ‘Instruction date’ is given as 9/3/15. However, despite repeated requests for monitoring going back to March 2015, the agent stated as recently as 2<sup>nd</sup> June 2017 that “Our client has confirmed that all of the valid monitoring data has been provided to us / you.”

The Council’s Structural Engineer having visited the site and assessed the information, notes:

### **Trees**

The MWA report shows the locations trees of around the property. Their report shows the Oak tree T1 in the adjacent allotment at a distance of 22m from the building and 21m high. The other tree indicated is a Tulip tree, T2, 7m from the building and 3m high.



## **Damage**

The damage to 27 Wordsworth Walk was discovered in October 2014.

The damage consists of cracking to the left hand side of the house.

The damage is classified as category 2 in accordance with BRE Digest 251.

During our inspection of 23/5/17 the owner advised external redecorations and filling of the external cracks was carried out 18 months ago and the cracking has re-occurred.

Repaired cracks were visible to the rear of the adjacent house, no. 25 Wordsworth walk.

There is a 2m high hedge along the boundary opposite the flank wall.

The owner advised that since his occupation in 1990 the Oak tree T1 has increased in overall crown size.

## **Subsoil investigations**

CET carried out a subsoil investigation on 10/3/15. This consisted of one trial pit and borehole at the rear LHS corner of the house TP/BH1, and one borehole(control bore) in the front garden of the property, BH2. Both boreholes are 3m deep.

Results of the investigation were as follows;

1. The house foundations are 950mm deep.
2. Firm/Stiff Clay was encountered under the foundations.
3. Roots extend full depth in BH1.
4. Oak roots were identified at 3m depth in BH1. The most likely source of the oak tree roots is T1. Ligustrum (privet hedge) roots were identified at the underside of the foundation.
5. Roots extended to 1.5m depth in BH 2, not identified but probably privet roots.

## **Soil Testing**

The soil analysis results indicate desiccation at 1.5m to 2.5m depth in BH1.

Soil moisture contents at 1m depth in BH1 are high.

The soil shear strength at the underside of the foundation is slightly low.

Ground heave calculations were not provided.

## **Monitoring**

Level monitoring has been carried out from 26/1/16 to 3/4/17 using a deep datum in the front garden.

Most of the recorded movement is occurring at the rear left corner, with the maximum overall movement of 25mm. The pattern of movement appears to be modified by the dry winter of 2016/17, however the monitoring results do indicate a seasonal trend of movement to the left hand side rear corner of the house.

Crack monitoring has been carried out from 15/3/16 to 3/4/17. The results do not show a closure of crack over the winter which would be expected with seasonal movement, however this may be due to the dry winter of 2016/17.

## **Drainage**

The drains were surveyed 21/7/15, some defects were noted however main runs between manholes passed the water tests.

The gully at the LHS corner of the house appears to have been leaking.

The drains were repaired in October 2015.

## **Conclusion**

The site investigation results indicate that; the clay under the foundation is desiccated, there is seasonal movement to the corner of the house and Oak tree roots were identified beneath the foundations.

On the basis of the above the Oak tree T1 is likely to be implicated in damage to the left hand side of the building.

Other possible contributory factors are the drains next to the flank wall and the large privet hedge.

The condition of the drain is likely to be a contributory factor because the gully next to the flank wall appears to have been leaking, and the relatively low strength clay at the underside of the foundation. Considering the re-occurrence of damage the drains should be re-tested to ensure the repair has been effective.

The privet hedge opposite the flank wall could also be implicated in the damage due to its proximity and privet root at the underside of the foundation.

The severity of the damage is classified as slight. Therefore a reduction of the Oak tree may be sufficient to stabilise the building and allow superstructure repairs only to be carried out. The Oak tree would need to be regularly reduced to maintain at the reduced size.

The Oak tree appears to pre-date the property and this together with the deep desiccation of the clay soil indicates ground heave could cause further damage to no. 27 and other surrounding properties. A ground heave assessment was requested but has not been provided.

The option of a root barrier has been discounted by Crawford on the basis that there is not enough room for machinery to access the rear garden. Access is largely restricted by the privet hedges on the boundaries of the properties, the partial temporary removal of the hedges may be sufficient to allow a root barrier installation to proceed.

To be effective the barrier would need to be installed across the adjacent gardens and pathway, as well as in the garden of no. 27, and be 2.5m to 3m deep subject to ground conditions.

The main damage, as described in the March 2015 Crawford Report and observed on site, is to the rear left hand corner of the property of 27 Wordsworth Walk, taking the form of vertical cracking in the grout joints to ceramic tiles above and below the bathroom window, a tapered crack above the rear bedroom door, a tapered crack to landing wall at the foot of the stairs and a crack along the ceiling line internally; and a diagonal crack above the main entrance arch, cracking of the storm porch outer wall, and cracks below the bathroom window. The damage is reported as first being noted in October 2014. Drain repairs were carried out in October 2015. In May 2017, the householder advised that external filling and redecoration was undertaken about 18 months ago but that cracks had started to reappear

about 9 months ago, albeit not as wide as before. The householder also confirmed that no internal repairs or redecoration had taken place – it is therefore not possible to assess whether the maximum extent of cracking of the bathroom grouting precedes or post-dates the drain repair works.

The cracks are described as being within BRE Category 2 - BRE Digest 251 *Assessment of damage in low-rise buildings* includes a 'Classification of visible damage to walls with particular reference to ease of repair of plaster and brickwork or masonry'. It describes category 2 damage as "*Cracks easily filled. Recurrent cracks can be masked by suitable linings. Cracks not necessarily visible externally; some external repointing may be required to ensure weather-tightness. Doors and windows may stick and require easing and adjusting. Typical crack widths up to 5mm.*" The BRE Digest concludes "Category 2 defines the stage above which repair work requires the services of a builder. For domestic dwellings, which constitute the majority of cases, damage at or below Category 2 does not normally justify remedial work other than restoration of the appearance of the building. For the cause of damage at this level to be accurately identified it may be necessary to conduct detailed examinations of the structure, its materials, the foundations and the local clear ground conditions. Consequently, unless there are clear indications that damage is progressing to a higher level it may be expensive and inappropriate to carry out extensive work for what amounts to aesthetic damage." No information has been provided to suggest that damage has progressed above Category 2.

It appears from the MWA Arboricultural Appraisal Report (April 2015) that their opinion and recommendations are made on the understanding that Crawfords "*are satisfied that the current building movement and associated damage is the result of clay shrinkage subsidence and that other possible causal factors have been discounted.*" However, the March 2015 Crawford Report had not discounted other possible causal factors – it suggested the cracking to be "*indicative of an episode of subsidence*" and causation "*appears to be clay shrinkage*" – recommending "*Unfortunately, current legislation requires certain investigations to be carried out to support an application for the tree works.*" Crawfords seem to have concluded that the tree was implicated in causing the subsidence damage in the absence of any trial pits to determine the depth and type of footings, any borehole information about the nature of subsoil, any monitoring indicating seasonal movement; or any drainage survey data.

The agent declined to provide ground heave calculations. Our Structural Engineer notes that "*ground heave could cause further damage to no. 27 and other surrounding properties*".

Although Crawfords have discounted the option of a root barrier because of there being "*not enough room to get machinery to the rear of the property*", it may be noted that there are techniques currently available that allow for the installation of root barriers in restricted areas – and it has previously been possible to construct a rear extension to the property.

Our Structural Engineer observes "*The severity of the damage is classified as slight. Therefore a reduction of the Oak tree may be sufficient to stabilise the building and allow superstructure repairs only to be carried out. The Oak tree would need to be regularly*

*reduced to maintain at the reduced size.”* The MWA Arboricultural Appraisal Report notes that whilst *“the most predictable solution is to remove T1. The reduction of the tree may reduce the amplitude of movement however this is unpredictable with the risk of damage recurring at some point in the future.”*

Given the importance of the Oak in the streetscene; the apparent presumption that the tree is implicated in subsidence damage; that the damage is assessed as BRE Category 2; and the potential heave implications (especially in the light of the implications for neighbouring properties), it may be questioned whether the proposed removal of the prominent TPO Oak at this juncture is excessive / premature. However, our Structural Engineer has noted that *“Oak tree T1 is likely to be implicated in damage to the left hand side of the building”* - albeit that he suggests *“Other potential contributory factors are the drains next to the flank wall and the large privet hedge”* as well as having concerns about heave potential.

### 3. Legislative background

As the Oak is included in a Tree Preservation Order, formal consent is required for its treatment from the Council (as Local Planning Authority) in accordance with the provisions of the tree preservation legislation. In addition to this statutory requirement, the Hampstead Garden Suburb Trust has a separate contractual mechanism of control over treeworks under its Scheme of Management. Consent is required from both bodies independently (and it is possible for consent to be granted by one and not the other).

Government guidance advises that when determining the application the Council should (1) assess the amenity value of the tree and the likely impact of the proposal on the amenity of the area, and (2) in the light of that assessment, consider whether or not the proposal is justified, having regard to the reasons put forward in support of it. It should also consider whether any loss or damage is likely to arise if consent is refused or granted subject to conditions.

The Town and Country Planning (Tree Preservation) (England) Regulations 2012 provide that compensation is payable for loss or damage in consequence of refusal of consent or grant subject to conditions. The provisions include that compensation shall be payable to a person for loss or damage which, having regard to the application and the documents and particulars accompanying it, was reasonably foreseeable when consent was refused or was granted subject to conditions. In accordance with the 2012 Regulations, it is not possible to issue an Article 5 Certificate confirming that the tree is considered to have ‘outstanding’ or ‘special’ amenity value which would remove the Council’s liability under the Order to pay compensation for loss or damage incurred as a result of its decision.

In this case the applicant has indicated that *“Repairs are estimated to be if the tree is removed total £12,000.00. Underpinning localised to the affected areas of the damaged properties will be needed if tree felling is blocked. The cost of this work is estimated to exceed £70,000.00.”* [sic]

The Court has held that the proper test in claims for alleged tree-related property damage was whether the tree roots were the ‘effective and substantial’ cause of the damage or

alternatively whether they 'materially contributed to the damage'. The standard is 'on the balance of probabilities' rather than the criminal test of 'beyond all reasonable doubt'.

In accordance with the Tree Preservation legislation, the Council must either approve or refuse the application i.e. proposed felling. The Council as Local Planning Authority has no powers to require lesser works or a programme of cyclical pruning management that may reduce the risk of alleged tree-related property damage. If it is considered that the amenity value of the tree is so high that the proposed felling is not justified on the basis of the reason put forward together with the supporting documentary evidence, such that TPO consent is refused, there may be liability to pay compensation. It is to be noted that the Council's Structural Engineer has noted that "*Oak tree T1 is likely to be implicated in damage to the left hand side of the building*" - albeit having significant concerns about other factors and heave implications.

However, although the Council may not have the powers to require lesser treeworks, it should be noted that the Oak is owned by the Hampstead Garden Suburb Trust – there would be no reason why the Trust could not submit application(s) to prune the Oak as part of a programme of cyclical management that may lessen the risk of alleged tree-related property damage – indeed, there is an arboricultural argument for some reduction to address the end-weighting regardless of other potential concerns.

The statutory compensation liability arises for loss or damage in consequence of a refusal of consent or grant subject to conditions - a direct causal link has to be established between the decision giving rise to the claim and the loss or damage claimed for (having regard to the application and the documents and particulars accompanying it). Thus the cost of rectifying any damage that occurs before the date of the decision would not be subject of a compensation payment.

As noted above, for treatment of this Oak, which is owned by the Trust, consent would be required both in accordance with statutory provisions and contractual obligations. Liability for any compensation arising from the tree preservation legislation would be borne by the Council; however, there would be a separate liability for damages if the Trust were to refuse consent.

Underpinning appears an excessive remedy on the basis of current information for BRE category 2 crack damage – for which BRE guidance notes "For domestic dwellings, which constitute the majority of cases, damage at or below Category 2 does not normally justify remedial work other than restoration of the appearance of the building ..... Unless there are clear indications that damage is progressing to a higher level it may be expensive and inappropriate to carry out extensive work for what amounts to aesthetic damage."

If it is concluded that addressing other factors together with pruning would resolve the alleged problem, regardless of the proposed tree removal; or if the removal would create even greater problems due to heave; it may be argued that loss or damage would not be in consequence of a refusal of TPO consent to fell.

However, if it is concluded on the balance of probabilities that the Oak's roots are the 'effective and substantial' cause of the damage or alternatively whether they 'materially contributed to the damage' and that the damage would be addressed by the tree's removal, there is likely to be a compensation liability (the applicant indicates repair works would be an extra £58,000 if the tree is retained) if consent for the proposed felling is refused.

## **COMMENTS ON THE GROUNDS OF OBJECTION**

Matters addressed in the body of the report.

## **CONCLUSION**

The applicant, MWA Arboriculture Ltd, proposes to fell the significant mature Oak standing at the apex of the Big Site Allotments because of its alleged implication in subsidence damage to 27 Wordsworth Walk.

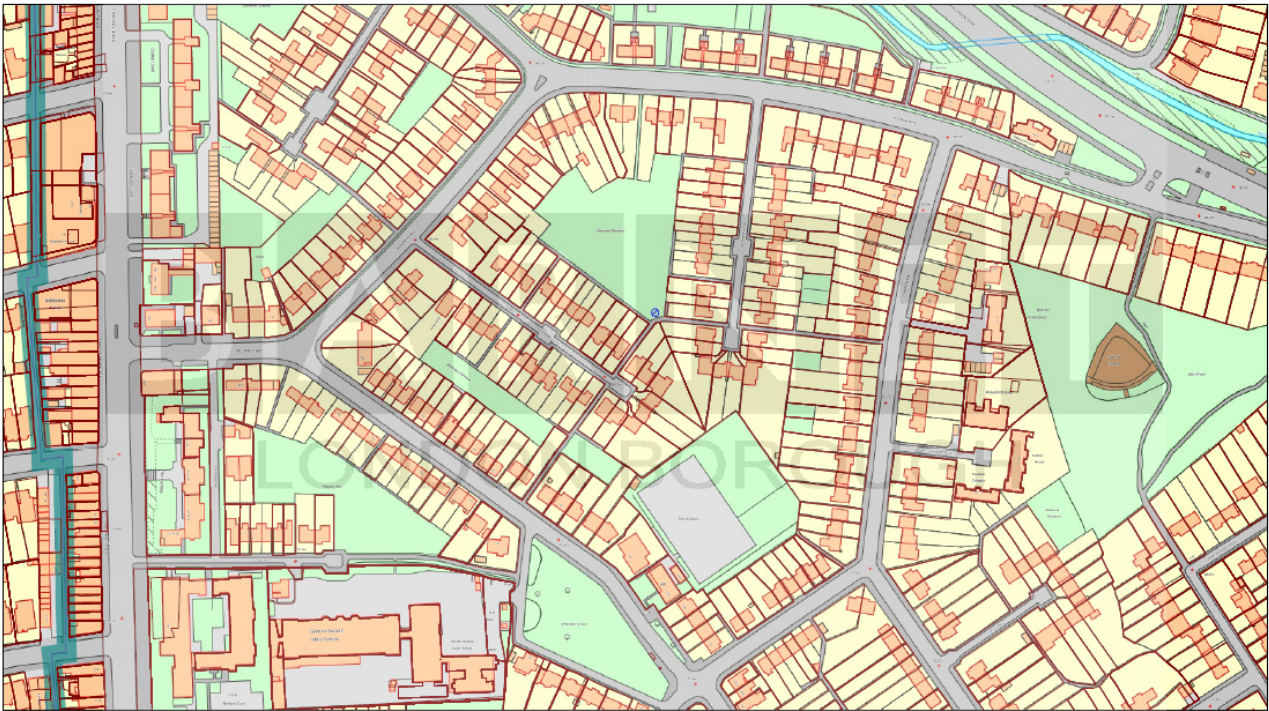
The proposed felling of the Oak would be significantly detrimental to the streetscene and would fail to preserve or enhance the character or appearance of the Hampstead Garden Suburb Conservation Area.

The Council's Structural Engineer has assessed the supporting documentary evidence and has noted that the subject Oak is the closest to the property and the most likely source of roots found at the underside of the foundations. However, there are shortcomings in the information provided. There are also concerns about other possible contributory factors and about heave implications.

Bearing in mind the potential implications for the public purse, as well as the public amenity value of the tree and its importance to the character and appearance of the Hampstead Garden Suburb Conservation Area, it is necessary to consider whether or not the proposed felling is justified as a remedy for the alleged subsidence damage on the basis of the information provided, particularly in the light of the Structural Engineer's concerns about other contributory factors, heave, and the potential that lesser works may address the BRE category 2 damage.

If it is concluded on the balance of probabilities that the Oak's roots are the 'effective and substantial' cause of the damage or alternatively whether they 'materially contributed to the damage' and that the damage would be addressed by the tree's removal, there is likely to be a compensation liability (the applicant indicates repair works would be an extra £58,000 if the tree is retained) if consent for the proposed felling is refused.

However, particularly given the amenity value of the tree, if it is concluded that on the basis of available information that removal of the Oak is excessive and has not been demonstrated to be necessary; or if the removal would create even greater problems due to heave; it may be argued that loss or damage would not be in consequence of a refusal of TPO consent to fell, and that it would be justifiable to refuse the application.



This product includes mapping data licensed from Ordnance Survey with the permission of the Controller of Her Majesty's Stationery Office. © Crown copyright and database right 2017. All rights reserved. London Borough of Barnet Licence No. 100017674

## APPENDIX 1

### Illustrative extracts from consultation responses

#### Representations

One of the representations can be summarised as:

- I live [in] one of the four houses directly affected by the oak tree under discussion. My wife and I have lived here since 1973 and have watched the tree grow from around 20 feet high, with a correspondingly restricted coverage of the ground area, to its considerable size today. Indeed in 1973 the area around the tree was so unrestricted that ..... used the area close to the tree to grow his prize vegetables. I give this information solely to make the point that comments made to you by many objectors on the age of the tree are totally inaccurate. The tree has a circumference of 6 feet 8 inches and using the Woodland Trusts "Ready Reckoner" for aging oak trees would put its age around 75-80 years. This would account for the fact that the Hampstead Garden Trust says that it was not an "Unwin" tree, i.e. a tree in place when the Suburb was built.
- When we purchased [our property] we enjoyed a sunny S.W. facing garden with sun lasting until 9 o'clock in mid summer, unaffected by what was then a small oak tree. Over the years steady encroachment by the tree has curtailed that to 5 o'clock. With a view to restoring at least some of the sunlight I approached the HGST to consider some judicious pruning of the southern side of the tree, where the tree is growing strongest. After inspection by Mr George the Trusts tree advisor he agreed that reasonable pruning was possible. This was over-ruled by council staff who did not inform me of their decision.

- The present size of the tree means it produces considerable quantities of leaves and twigs which need to be collected to avoid making use of the twitten (pathway) unpleasant or even hazardous in winter. ....
- You will recognise from the tone of this message my frustration that management of this tree and its effects on our homes is totally absent. Most of the objections to this application are from people with no knowledge of the tree, its history and in some cases even its location. I do not know if the tree should be felled, that is for experts to decide, but a tree in a residential area needs to be properly managed. Its ever increasing impact ..... needs attention.

\* It may be noted that the other representation submitted via the website as 'Comments neither objecting to or supporting the Planning Application' was listed as such in error, as the respondent's detailed comments were clearly in objection:

- "This is a beautiful well preserved fine oak tree Trees such as these must be preserved not destroyed. It seems to be far enough away from the nearest two houses that would not cause structural damage. Removing the tree would in all likelihood cause more damage to the ground and surrounding areas. I strongly object to the proposal to fell this tree".

### Support

The grounds of support can be summarised as:

- "We have approached Hampstead Garden Trust for several years to request this tree be pruned to restrict its growth. We have had no response what so ever from the Trust. It does not surprise me that a request from another neighbour...has been submitted to the Council to have the tree cut down. .... So I would support the application that this tree (T1) should either be removed, or at least drastically cut back. It is far too big for a residential area and greatly reduces the light to our house. It has now started to take over the whole of our garden."
- "I too love this beautiful oak tree, as I do all the great oaks in the suburb and on the Heath. However, this tree is causing structural damage to one of the cottages in the Suburb, a cottage which has been beautifully preserved for many years by its owners. The tree also casts another property into darkness during the summer months. Trees, like all of nature's bounties with which we share our environment, can sometimes cause unnecessary distress and expense. This tree could be preserved, at great expense, either to the taxpayer or to the insurance company. There are consequences in both of these cases: Barnet services are already starved for funds and have been drastically cut back, and insurance premiums go up and up and up. If it is removed, another tree will hopefully be planted, a sapling to be nurtured and treasured by all those who watch it grow to maturity. This is not a case of tree-lovers versus faceless, cruel bureaucrats. It's a question of common sense and practical difficulties for suburb residents and those who look after the suburb's environment."

\*\*It may be noted that 2 'Comments in support of the Planning Application' submitted via the website were listed as such in error, as the respondents' detailed comments were clearly objections:

- "whatever the reason given for removing this tree, please don't do it think about its beauty, shade and contribution to fresh air"



- “Do not cut that old tree! Its precious!”

## Objections

The grounds of objection can be summarised as:

### Importance to character and appearance of Hampstead Garden Suburb Conservation Area

- There is a splendid view of this magnificent Oak as one walks down the tway from Willifield Way
- “The tree is part of the Suburb flora, framing the street view, and the surrounding houses would have been deliberately designed and built to enable the tree to be seen by the public. These magnificent trees make the Suburb what it is – a unique and green environment.”
- “This Oak is a beautiful specimen and should not be felled, it graces the Suburb and possibly predates the building of the houses around it. It is not in anybody’s garden and neither is it close enough to houses to be a problem.”
- “Oak trees are what gives the Suburb its flavour”
- “Whatever the technical arguments, it is simply unacceptable to fell a historic oak tree dating from the time of the original farmland on which Hampstead Garden Suburb (HGS) was built. Raymond Unwin's master plan expressly took into account the locations of important existing trees and intended them to serve as landmarks and to enhance the environment of HGS for the rest of their natural lives, which in many cases could well stretch into the 22nd century.”
- “The oak in question is a fine tree, in a splendid position, and gives pleasure each time I walk through from Wordsworth Walk to Coleridge Walk.”
- “This particular tree has enormous amenity value: it is near a path and so can be seen by everyone living nearby and also by all passers by. Indeed, it is one of the original Unwin oaks that grew here long before the Suburb was created, and was incorporated into the plans. If this tree is destroyed, the visual impact of the loss will be colossal, to everyone living nearby and to everyone who is used to seeing it as they pass by. The whole area will suffer the aesthetic loss. I would think everyone would be horrified and hugely saddened at such outrageous vandalism.”
- “As a resident of Erskine Hill, I often walk down the hill and through the tway where this magnificent oak is situated, towards Willifield Way. My main reason for doing so is to enjoy the quiet rural atmosphere generated by the gardens and mature trees. It would be a crying shame to remove this wonderful tree in particular, which must have been here long before the Suburb was even thought of.”
- “Tree has great visual amenity. It is vastly more important to the neighbourhood than any neighbouring buildings, which can also be repaired or replaced for more easily”
- “It is a significant public amenity, by dint of its beauty, position, provision of shade, provision of wildlife habitat and so on..... The damage inflicted by destroying one of the most beautiful Oaks in the Trust protected area of Hampstead Garden Suburb is in no way outweighed by the relatively low level of damage. Trees of this kind are central to the character of the Suburb and are protected for good reason.”
- “This tree is one of the finest in the area and its removal would greatly diminish the amenity value of the area for residents. This young mature oak should remain for the benefit of all residents for perhaps over another 150 years.”

- “The Garden Suburb was laid out with great sensitivity for the pre-existing landscape retaining major trees in key locations. There is no valid justification for removing the tree. It makes a significant contribution to the character, appearance and amenity of the conservation area, which is of national importance. There is an overwhelming case for its retention.”
- “Trees like this oak help make the suburb unique.”
- “I object strongly to the proposal to fell this magnificent, much-loved oak tree. It is in a commanding position by the meeting point of the Wordsworth and Coleridge Walk twittens and its removal would be a great loss to the neighbourhood. Houses with subsidence issues can be underpinned if necessary; it's what we pay our insurance premiums for. The insurance company is just trying to save itself money. The fine shape, health and position of this great mature tree, one of the best on the suburb, make it absolutely irreplaceable.”
- “This oak tree must not be felled as it is an integral part of the landscape - ie Hampstead Garden Suburb. It is the quick, easy and lazy option to remove. The correct way is, firstly, find out who is responsible for this tree and then, they are required to have it pruned to restrict it's growth..... We all appreciate the beauty of our environment and likewise, we must all be responsible in protecting it. That includes the Trust (which is their raison d'etre).”
- “As a resident of Hampstead Garden Suburb I am extremely concerned about the proposed felling of one of our finest oak trees. The whole raison d'être of the Suburb was to preserve as much of the country within the town, and this is what makes it such special place in which to live. Those who object to having trees near their houses should not live here. The risk of subsidence, regularly put forward by insurance companies as a reason for removing a tree, is often spurious.”
- “I grew up in Hampstead Garden Suburb and am an old girl of the Henrietta Barnett School. The emblem of the school is the mature oak tree. How paradoxical that you would want to fell an iconic tree in the garden suburb, an area which was founded to preserve the natural environment for its residents. This tree should be protected at all costs.”
- “This wonderful tree, at the meeting point of two twittens, can be viewed from the paths, the road and the allotments. It therefore has very high amenity value and is, moreover, healthy, of good size and fine shape. Other trees in the Suburb are closer to houses than this one without any apparent deleterious effect and indeed the cracks are minimal. I urge the Council to save this tree from needless destruction, so that it can continue to give pleasure for centuries to come.”
- “This is such an outstanding tree, I pass it every day bringing my children to school and even in an area where we are surrounded by trees, this is one that immediately catches your eye because it is so beautiful. It had the chance to grow "in all directions" due to it's location showing it's full beauty. All the direct neighbours benefit from seeing it as well as passers by (or a little more distant neighbours like me). It is not replaceable. It gives protection to the pathway when it's raining, makes the school run feel special, it relaxes the eye to walk towards it. My ten year old daughter comments: "they want to cut this down, they can't, it is perfect, I love it" - walk the pathway towards it and you'll understand, it's like cutting down the secret garden.”
- “Far too many trees are being cut down, and without good enough reason. These parts of London are treasured for having retained beautiful greenery

throughout. Take away that, and all we would be left with is another part of London that is nothing but buildings, greys, and smog. Every tree counts in this present, avoidable destruction. And this tree, being apposed to be cut down, doesn't just represent this, it also represents our respect, in retaining the wonderful history of which we know it. This tree is a very old tree, a significant landmark for most of us, something many of us have seen every day for many years, something that makes the place our home. It's far more than 'just a tree'."

- "This magnificent oak, which from its size must be contemporary with the establishment of the Suburb in 1907 or earlier, is a key feature of the landscape and the original planners clearly intended trees of this stature to be visible between the cottages and seen from their gardens as part of their design. It is an important contributor to the visual amenity of the area. Design features such as this are especially valuable because they give the Suburb the appearance of having developed organically over the centuries, with dwellings giving way to important trees such as this fine specimen. Trees of this age are particularly valuable for their contribution to environmental diversity and habitats as well as for their visual amenity."
- "This tree is of exceptionally high and significant special public amenity value. Its loss would result in a significant and irreversible detrimental effect on public amenity and the environment, and contribute further to the erosion of the unique character of the Suburb. It is irreplaceable, certainly for the next 2 to 3 generations. It is a total privilege to have this tree in our area, and felling it would be an act of sheer vandalism."
- "This is an iconic tree in an iconic location & is likely one of the boundary oaks that was designed into the Garden Suburb scheme as were "big site" allotments in which it stands. This tree has been enjoyed by generations of local residents walking their children to the local school in a safe car free environment. All will have stopped under it at some point to either take shelter or watch one of its many inhabitants. My children have seen their first, tree creeper, nuthatch, woodpecker, carrion crow, tawny owl, sparrow hawk & even a gold crest over the years of walking to & from school. There is no reason to deprive future generations, it has a TPO for good reason."
- "The Big Allotments Oak is a tree of quite exceptional public amenity value. Already significant on a map of 1913, over the intervening century it has attained a form and majesty that few other areas can boast. The oak is in good health and may well continue to ornament the Suburb for another hundred years. The presence of such trees exemplifies the very intention and purpose of the Garden Suburb and their preservation typifies the duties of the local authority towards the conservation areas under its care. Located on the angle of a well used twitten, the amenity value of the oak is increased by its particular accessibility to the many commuters, parents and children who use the path to reach public transport, shops and the Garden Suburb school. Any passer-by will notice the meaning that the tree has to small children. As some comments here show, the Big Allotments Oak is a landmark not only to current but also to former Suburb residents, remaining with them in memory long after they have left the area."
- "This tree has enormous amenity value to the surrounding area. Its removal would have a significant negative impact on the local environment and its enjoyment by the public. Its particular importance is due to its great size and remarkable form, its

potential to continue to be a valuable amenity for future generations, its cultural and historical value (many regard it as symbolic of the Suburb and it appears on a map from 1913), its position at the top of Big Allotment and its visibility from both ends of the Coleridge Walk-Wordsworth Walk twittens. It is "one of the two or three finest trees in the whole Suburb" (HGS tree survey)."

- "Looking at all the objections received, there is no question that this is an iconic tree in the Suburb. This is the kind of tree that adds wonder and majesty to people's daily lives. Its situation on the bend in the twitten also marks it out as special. This is not just any old tree."
- We must as a community have the vision to celebrate and continue to protect this tree. .... Having such a magnificent tree on a public pathway to be enjoyed by all is exactly what makes the Suburb so special."
- "By cutting down the tree you are taking away part of the neighbourhood. The tree should stay in place as it is as much a part of this community as the people."
- "In June 2016 the Hampstead Garden Suburb Trust, supported by Barnet, completed their Tree Survey of the whole Suburb to provide information to assist the Trust and Barnet in the work relating to their respective responsibilities in the Suburb. The Overview of Area 2 of this survey makes particular note of this tree saying:

*The oak in the corner of Big Allotment that can be seen down the twittens leading from both Wordsworth and Coleridge Walks is quite exceptional in its age, condition and beauty. It is certainly one of the two or three finest trees in the whole Suburb."*

#### Arboricultural considerations

- "This particular one is the most beautiful shape"
- "It has great aesthetic value, having a majestic and near-perfect form, which is admired by myself (daily) and all my visitors, and I expect by all passersby."
- "I agree it should perhaps be thinned at the appropriate time but not felled"
- "This particular one is old, protects so much bird life and is much loved. Please do not ruin this."
- "It sounds to me as though this tree should get a good prune but not be felled."
- "Please invest in saving our trees and the wildlife of this area. Pruning and managing rather than destroying should be the primary motive of the Council."
- "A mature tree of this age is irreplaceable.....It has high amenity value; its needless loss would be a travesty."
- "It is always possible to consider whether the beauty of a tree is outweighed by any inconvenience it might cause when purchasing a house."
- "Apparently this tree is sound and has many more years of healthy life ahead of it. It has created no problems that I am aware of. But it has created beauty and shade and a host of benefits to our environment."
- "I understand that nearby householders object to its impact - but two things here: (a) the tree would have been there when they bought the house, and (b) the tree could be pruned to make it airy and thus reduce its shade considerably. .... Compulsory (and careful, expert) pruning could be a possible solution here.
- "I strongly oppose the removal of such an amazing native tree. There are many native trees in in the suburb that could cause structural damage or light issues to

the houses, but the least invasive route of active pruning and management should always be taken. We need to preserve the native trees in suburb as much as we preserve the houses, and look after both in equal proportions.”

- “It's beauty and age is loved by passers by. Green that can be seen by all is important for our mental health. I understand that removal may result in more problems for houses than leaving the trees and managing their growth.”

#### Nature and extent of property damage

- “I note that the damage to 27 Wordsworth Walk is only categorized as “slight”. Some subsidence is the price we pay for living on clay soil with the abundant vegetation that makes the Suburb so special.”
- “I believe the costs quoted for underpinning are inflated deliberately to cause alarm (£70,000) and am unclear why removal of the tree is considered to be ‘without risk of heave’.”
- “Hairline cracks appear in houses on clay soil, regardless of nearby trees – it does not mean a house needs to be underpinned, there are other solutions, especially as this seems to be a very small and recent problem.”
- “It is up to residents and the HGS Trust in cases of proven subsidence to find engineering solutions that protect properties from further damage, after making good and/or consolidating any damage already suffered. Felling protected trees in one of the most important Conservation Areas in England cannot form part of such solutions.”
- “There is also the potential of heave. When a tree is chopped down, the roots shrink as they die and the steadiness of the whole surrounding ground changes. This is always unpredictable and the time scale can be long drawn out, making lasting solutions tricky. The impact on neighbouring houses is an unknown and could be bad.”
- “The full economic cost of the tree should be considered, not just the cost to the insurance company for their work. The University of Nottingham had to redesign its sports centre as Nottingham Council disallowed the felling of a few oak trees as the trees were deemed too valuable to cut down. Barnet Council should uphold this view too and protect its precious oak trees.”
- “It is sad that the insurance companies look for a quick ‘fix’ and deem that “vegetation” must be removed. Most of the oak trees in the suburb predate the houses. Apart from ignoring the potential impact of heave, we enjoy living in this green garden suburb because of the trees and plants and need to preserve these great oaks for us and future generations.”
- “The arguments of the insurance company that Barnet would have to pay for the extra underpinning costs if the tree is preserved should be resisted as the felling would probably result in “heave” problems for all the surrounding houses over the next up to 20 years.”
- “This is not the first time that wonderful trees have been threatened or destroyed due to insurers not willing to “risk” the so called potential problems they might cause a property. We should insist that every possible avenue be investigated, even if costly, to save this wonderful tree. There are not many of these magnificent trees left in London, it would be a great shame to destroy one, just because someone is too lazy or miserly to find an alternative solution. Please don't take the easy option!”

- “I would urge the council to reconsider removing this beautiful and irreplaceable tree - perhaps there is a less costly way of maintaining structural integrity of the adjoining structures. Surely a good pruning would reduce the water uptake of the tree and then the situation could be monitored over time.”
- “If it is causing any damage, solutions other than felling must be found to deal with it, even if they are not the cheapest or most expedient. On the basis of the information in the application, the removal of the TPO and the felling of the tree is not remotely justified, neither is underpinning. The application refers to the damage as being Category 2 of Table 1 Building Research Establishment Digest 251 which is 'slight' (typical crack widths up to 5 mm)..... The action proposed in this case is therefore wholly disproportionate in any event and I would ask you accordingly to refuse the application.”
- “In my view slight subsidence does not warrant an over ruling of a TPO. Those of us who choose to live near trees take the risk of some subsidence, and factor this in to our decisions to choose this area to reside. Whilst the removal of some trees may on occasion be justified, the felling of magnificent trees such as this need to be extremely carefully and thoroughly considered. It is a ridiculous to say 'replacement planting maybe considered'. There is no replacement, to something unique, which people in the local area have a personal relationship with. Reading the reports, I felt there was an overall lack of determined effort to find an alternative solution. The minimal was done. For example, an estimate of 70k for underpinning. It seems exaggerated to me. How was the estimate drawn up, was there a second or third estimate sought? If not, why not? Or is it not at least worth trying to prune and maintain the tree, and monitor the impact of this, rather than just concluding the outcome of this would be unpredictable, and therefore let's not bother? In conclusion, from what I have seen the damage does not warrant the distraction of this tree. Additionally alternatives to minimise further damage do not seem to have been explored with the necessary depth and thoroughness.”
- “Felling it for only cat.2 (slight) damage with cracks reported to be 1-2mm that can be "easily filled" according to the BRE would make a mockery of the TPO system setting an unwelcome precedent putting all the trees in the area at risk.”
- “This application arises from subsidence damage, described as "slight", affecting an old house on clay soil. This is a common issue in London and elsewhere. The companies applying for the destruction of the Big Allotments Oak, RSA Insurance and Crawford & Company, are large concerns who will be able to call upon an abundance of resources, experience and techniques in handling such common cases. It is therefore quite unacceptable that RSA and Crawford, while presenting publicly as "responsible" companies, should propose such destructive and disproportionate action. While the documentation of the problem is copious, far less attention seems to have been paid to risks and alternative solutions, e.g. the possibility of "heave" subsequent to felling has apparently been dismissed out of hand. Discounting then technical incompetence, the impression created is frankly of companies who are trying it on, in an attempt to pass off their responsibilities onto the local authority.”
- “For 100 years this tree has coexisted happily with the neighbouring houses..... Throughout this period it has been a mature tree, and has not caused inconvenience to neighbouring properties. The reason given for subsidence in the property affected is dry soil - we have had a series of dry summers and droughts

which have no doubt affected moisture levels in the soil. A much better and simpler solution would seem to be for the property owners to ensure the ground is properly irrigated, making for moister soil and less stressed trees. This would allow the tree to remain and rectify the subsidence problem.”

- “Pressurising Barnet to remove the TPO, override conservation area regulations and fell a magnificent, healthy tree is an irresponsible and disproportionate response to subsidence. The Arboricultural Survey itself defines the damage as 'slight'. Subsidence is common, especially in old houses on clay soil. Insurers, loss adjusters and specialist advisers must investigate alternative technical solutions e.g. underpinning, CAREFUL pruning that maintains the crown, and root barriers (ways can be found to bring in the equipment).”
- “The bigger and older a tree when it is removed, the greater the risk of heave occurring over a long period, leading to further damage. This has not even been addressed in the documents attached to the application. Granting permission to fell this Oak could set a worrying precedent. Would it lead to many more applications, pertaining to far less significant trees?”
- “Inaccuracies. The house and street was built in 1911, not 1930 as stated in the expert's report. The oak was already large at the time, not younger than the house, as stated in the report. It was the express vision of the founder of the Suburb that mature trees on the original farm land be retained. Therefore, the oak and this property have coexisted for over 100 years, yet subsidence was first noted in 2015, after the house and the Oak had spent a century together. Secondly, the tree diagrams by the arboriculturalist show spreading roots to all 3 trees. Oak trees have a tap root. The tree is 22 m from the houses in question. I find it hard to credit that the oak tree's roots are the cause of the minimal subsidence noted. More likely it is recent dry summers (and winters) which may well self correct as the clay re-hydrates. Thirdly, cost: It would be far cheaper to provide localised root barrier to the foundation than the £70,000 quoted, and more expensive to remove the tree than the £12,000 quoted. Other objectors have given detailed comment on the cost of removing the tree; as an architect I can say that a barrier system to protect the foundation does not require heavy machinery as stated in the report.”
- “Key points: The very recent and minor amount of subsidence in contrast to the magnificence of the oak tree; the fact that no other remedies have been tried (e.g. watering in dry weather or directing storm water to it); misleading cost information; lack of any evidence of effect of recent dry seasons on trees and buildings generally in London clay - the more likely cause of the subsidence.”
- “I object to the removal of this ancient tree (one of the finest in the Suburb) unless and until it has been definitively demonstrated by an independent expert that the tree is the sole cause of cracks in, and subsidence of, nearby buildings. An oak tree takes 100 years or more to grow to its full height. This tree should not be cut down without full, professional and, above all, unhurried investigation of all the issues. Once removed, it can never be replaced. TPOs are there for a purpose and should never be lightly overridden.”
- “A tree of this magnificence needs to be the cause of very major damage before it may be felled. However page 8 of the Crawford Technical Report shows the damage to be only category 2 (slight) which, according to the Building Research Establishment Digest 251, is easily filled. This level of damage does not justify felling such a fine tree, especially as the reported damage range from 1 to 2mm is

all well within the lower half of category 2. This 'slight' damage also questions why the estimated necessary cost of £70k for repair, given on page 3 of the Crawford Addendum Technical Report should the tree remain, is so much higher than the £12k with the tree removed. Even if those costs are realistic, with a trunk circumference of about 8ft., this tree is in CAVAT Stem Diameter band 12 (70-84.9cm) giving it a CAVAT Quick Method value of £87,695 – well in excess of the extra £58k for work required if the tree is not removed.

- The Hampstead Garden Suburb Trust noted: “The evidence that has been supplied in support of the application to Barnet has, for the most part, been previously reviewed by the Trust's consultant engineer. The additional information provided has also been reviewed by the Trust's engineer. .... In summary, the information supplied suggests that the movement may be due to soft soil in the rear left hand of the building (as viewed from Wordsworth Walk) causing consolidation settlement. This could be caused by leaking drains in that area as identified by a drainage report dated 21 July 2015, which showed the inspector was unable to fill a nearby drainage run. To date, the insurers have refused to carry out the reasonable and economic suggestion to repair this drain and then monitor the movement to establish whether the apparent downward movement is eliminated. If drain repairs rectified the apparent movement, there would be no need to remove such a significant tree that could not be replaced in anything less than many decades. Additionally a heave analysis should be provided to assess potential upward movement should the tree be removed. For the reasons above, the Trust suggests the application should be refused until such time as repairs to the drains and subsequent monitoring have eliminated the drains as a potential cause of the damage, and a heave analysis provided.”
- “Concerns about the accuracy of the Applicant’s Report materials. In particular, concerns about the thoroughness and quality of the Applicant’s research and the validity of the conclusions built upon that research. Some things I have noted include:
  - Wrongly identified tree as belonging to local authority; it belongs to the HGS Trust.
  - Wrongly identified age of tree as younger than the properties that it alleges to affect; it is much older, being an original oak on-site when the Suburb was built, as is documented elsewhere.
  - My property is a similar distance from the tree as No 27 Wordsworth Walk. There is no subsidence at my property, leading me to question the way that the applicant’s Report portrays the tree’s root system, and it’s alleged importance in the “slight” damage reported at No 27 Wordsworth Walk.
  - Heave: From my experience .... there is no question but that heave will result. There is currently a balance in the sub-soil structure around the locality of the tree that will be affected by its removal and there can be no way of predicting the outcome and how it will affect neighbouring properties (including mine) – contrary to the Report’s statement. In my experience, trees are removed very carefully over a 3 year period (with monitoring) to minimise this effect. I presume that Barnet is insured against the legal actions that may result from heave damage to the neighbouring properties.
  - Size of cracks in reported damage and their cited cause. Shallow foundations are a problem and a contributing factor that is independent of on-site vegetation, and I do not think has been properly addressed in the Applicant’s research. ... it is my



understanding that the majority of properties across the suburb are built with shallow foundations on clay ..... and this may well be the case at Wordsworth Walk which has many cottages. The clay is subject to seasonal movement, from shrinkage and expansion, as its water content varies. This movement, when applied to buildings and structures having shallow foundations, produces fine cracks of the same order as quoted in the Applicant's Report. ....My point is that there are multiple factors that

influence seasonal movement of clay, and risk of damage cannot be completely eliminated anyway if the building has shallow foundations. For example, the tree could be removed but No 27 may still experience damage due to shallow foundations affected by clay movement originating from mains water flooding, summer drought, etc.

-Therefore the tree cannot be uniquely identified as being the main cause of the damage to No 27 Wordsworth Walk, contrary to the Applicant's Report statement.

- In my experience, the "slight" damage reported (1-2 mm) is consistent with seasonal clay movement due to multiple factors, including consequences of shallow foundations, and is something many HGS Suburb property owners experience and handle without felling trees."

- A number of detailed technical queries were received from one resident (see Appendix 1) – they have been addressed where appropriate by our Structural Engineer and are discussed in the body of this report.

#### Environmental benefits

- Important to birdlife, transition site between Big Wood, Hampstead Heath Extension and other surrounding trees.
- "This is such a beautiful majestic Oak that is home to so many creatures: insects, birds, fungi and a wonderful oxgenat[or] that we need in the Suburb and London with the pollution levels of concern as highlighted in recent news reports"
- "Oak trees support more wildlife habitat than any other British tree and this is a wonderful specimen from the days when the land here was still undeveloped farmland."
- "Oak trees are exceptionally beneficial to our environment. They support over 400 different kinds of wildlife (the next most beneficial is hawthorn which supports only half that number)."
- "ALL large trees have a huge effect on air quality, especially crucial in a city - and London air quality is particularly poor, leading to around 20,000 deaths a year (particularly respiratory diseases but also as a contributory factor in other diseases such as cancer and heart disease). Various cities around the world have been transformed by enlightened and substantial tree planting. The last thing we should be doing is chopping down any large trees! Every one is valuable."
- "This is our favourite Oak tree. Even my kids (6 and 9) were horrified and their first comment was that they are taking away the air that the tree makes for us to breath."
- "I'd add to other objections made by local people about the beneficial effect this tree has in the neighbourhood. It's located very near the A1 and North Circular roads. The London Mayor has alerted us all to the toxic effect of nitrous oxide emissions. There's no indication that anyone has thought about the proximity of the tree to Garden Suburb School, as well as to properties nearby."

- "... this tree has coexisted happily with the neighbouring houses, reducing road noise for those houses to its south and providing shade, beauty and a rich habitat for wildlife. I often hear owls in it at night."
- "It helps to keep the air clean and recycle carbon. It provides much-needed shade during summer, and protects the soil from water evaporation that would result from direct exposure to the sun. It provides a habitat for diverse forms of wildlife; I recently noted the presence of a stag beetle, which I believe is a protected species."

#### Other matters

- "As the tree is within the area of the HGS Trust, which also must give consent for any work on the tree, it would be inappropriate for the LB Barnet to undermine the standing of the HGS Trust by reducing the protection given by the Borough to this special tree which is situated in the Article IV Conservation Area."
- "I have an unwin oak that is similar to this tree. It must be similar in age. If you pass this application on such spurious grounds I shall apply for the same treatment cite the same stupid rationale. You won't be able to reject having established precedent."
- "Lack of consultation..... I only found out about it because a concerned person put up a couple of notices in the twitten yesterday, with a deadline to comment today."

#### APPENDIX 2

##### Resident's detailed technical queries

However, as an ordinary member of the public with no technical knowledge, I did not understand all the results of the investigations which were provided, and there were a number of issues and points arising out of the application which I did not understand, or could not find the answers to, and which I would appreciate knowing about as follows (in no particular order of priority). If they are inappropriate please excuse this.

1. What is the current level of damage? I cannot see this stated.

- In March 2015 it was categorised as Category 2 of Table 1 of the B.R.E Digest, which I understand is slight. The damage appeared at the lower end of this Category. Is this in fact still the case?

2. I understand Category 2 damage requires only such remedial treatment as 'filling cracks, masking recurrent cracks by suitable linings, possibly some external repointing, and easing or adjusting of doors and windows'.

- I therefore do not understand why they are proposing the drastic action of removing the tree and referring to underpinning, rather than the appropriate works for this type of damage. This seems extraordinary.

- Why are costs of £12,000 and £70,000 being quoted for the remedial works apparently required. How are these actions or figures applicable in, or relevant to, this case.

3. Even if such action and works were appropriate, which in no way do they seem to be, no evidence is provided as to how these figures are arrived at - they appear to have been just randomly plucked out of the air.

4. I am not clear as to where the damage is. There seems to be a conflict between what is stated in the Arboricultural Appraisal and what is stated in the Technical Report.

5. There is apparently some confusion as to whether the house is older than the tree, younger or possibly they are of a similar age. Significance?

6. Were the investigations in 2015 comprehensive enough to establish conclusively that the damage is related to clay shrinkage subsidence and that the tree is the cause of the movement.

- I understand that the presence of roots in trial pits under foundations is not conclusive evidence of damage being caused by the tree whose roots they are.

- Given the importance of this tree, surely a thorough investigation should have been made, using all possible tests.

- It may be that some or all of these tests are inappropriate, but I could see no mention of:-

\* DNA test on root found under foundations.

\* Brick course level survey, if relevant.

\* Tests on current situation of drains or in fact previous condition of drains . Evidence of the impact of the drains is not set out, it is only alluded to. Was there drain damage and leakage prior to the end of 2014 which gave an incentive for roots to go beneath the foundations in the first place, or which resulted in the presence of more roots than there would have been otherwise.

\* It is not clear why although the house and tree appear to have co-existed without problem for very many decades, there was suddenly a problem. This issue has not been addressed.

\* There are no doubt other tests available of which a lay person would not be aware.

7. The original investigations appear perfunctory and inadequate in the circumstances in 2015 and appear even more so in 2017.

- It seems that, apart from the level monitoring, no further investigations have been carried out since those in 2015, to see whether between March 2015 and January 2017, ( about 23 months) the damage has progressed to a higher category, if at all, or higher within category 2. All the other papers I could see refer to the 2015 investigation.

- The technical Report of 2015 states in the 'Recommendations' that 'certain investigations' were required and that it might be necessary to carry out monitoring for up to a 12 month period.

- However, apart from the level monitoring, the Addendum technical report appears to refer to the investigations carried out in 2015 some 23 months ago, although this is not expressly stated. In fact the implication is that the investigations referred to in the Addendum report are to 'further' ones, not the original 2015 ones.

- I would have thought that investigations should be considerably more current. Is this in fact the case, or have they done enough.

- The Addendum technical report refers to 'further investigations' but apart from the level monitoring, there appear to be none.

- Was there a new CET report as referred to in the Addendum technical report - I could not find this.

8. With regard to the level monitoring report itself, to my amateur eye this did not appear to show a great deal of change.

- Only one row (row 8) shows movement between the beginning and end of the period in the first 2 places after the decimal point - 10.0015 to 9.9814. Is this significant?
- Does it in fact show what is claimed in the 4th paragraph of the Investigations section of the Addendum Report?

9. They are proposing to remove an in effect irreplaceable, magnificent tree of exceptionally high amenity value, which will be a great loss and detriment to the suburb, which was an action clearly not justified by the 2015 investigations,

- In these circumstances should they not have:

- repeated all previous investigations to monitor extensively for change, and to establish whether the level of damage merits such drastic action, and
- carried out a more detailed and thorough set of investigations to establish exactly what is going on.

10. No other possible causes of the movement seem to have been considered except, in passing, comments re drains.

- For example:

a. If there has been movement, could it have been caused by seasonal factors rather than subsidence i.e. the pattern of movement found in any normal structure on shrinkable clay soils whether or not trees are present.

b. Had any changes been made to the property its curtilage or the surrounding area prior to the cracks appearing which could have affected the equilibrium between the house and the tree. e.g. total or substantial clearance of vegetation resulting in gradual rehydration and swelling of the ground, laying of hard standings etc.

c. They are alleging that the situation appeared in October 2014 and worsened in the winter of 2014- 2015. However, I understand that dry soils rehydrate in winter months causing clays to swell and cracks to close.

- I do not understand what has happened here. Does it indicate that the cause is not abstraction of water and desiccation of the ground by trees or was it an exceptionally dry winter. Presumably the tree was dormant during this period.

d. The tree seems quite far from the building i.e. 19 m, rather than the 9.5 m Kew say is the area within which 50% of damage is found.

e. There is reference to a single story extension, but I am not clear where this is, when it was added or whether it is the part of the house affected, although it seems not. Could this be relevant?

- There is no evidence that any of the above were considered

11. There is no reference in any of the papers to 25 Wordsworth Walk that I could see, yet the Addendum states 'The oak is also seen to be the cause of subsidence damage at 25 Wordsworth Walk' No evidence whatsoever is provided for this glib statement.

12. There is reference in the EPSL Certificate of Analysis to 'oaks (both deciduous and evergreen)'. Does this mean there was evidence of the roots of more than one tree.

- If so, it is not clear where the evergreen oak is/was. There is only one shown on the plans and referred to in the papers.

13. Is what they say in the Discussion section of the Technical Report justified by the evidence they have produced or could there be other causes not considered

- Assuming the tree is the cause of significant damage, and I do not see how this has currently been shown in the first place, little, if any, attention seems to have been given to other ways of dealing with the problem other than removing the tree or underpinning.

- For example:

a. root pruning if appropriate

b. the possibility of using a root barrier is casually dismissed in the sentence 'Unfortunately there is not enough room to get machinery to the rear of the property to install a root barrier'. Is this even true?

- I do not know how big the equipment required is, but depending on this it appears that access to the twitten could be widened by the temporary removal of the hedges and pathways bordering 27 Wordsworth Walk. These could then be reinstated after completion of the root barrier works easily and relatively inexpensively.

c. There is no mention of using 'piled rafts' - this may be because it is inappropriate in this case.

- No doubt there are other technical solutions, of which I am unaware.

14. On the issue of adverse consequences of removing the tree, these have been dismissed in a sentence '.. the tree work can proceed without heave damage being created' - no reason or evidence being provided for this assertion.

- Even if this is correct are there no other possible adverse consequences of the tree removal e.g.

a. excessive re-hydration

b. root decay over a number of years could result in collapse of as support for the ground from the root weakens and eventually goes altogether with consequent damage to property.

15. The application contains a number of 'general' observations, statements and information not relevant to this case, and appears to be based on a standard precedent in which a few details are changed. Removal of a tree seems to be a standard solution regardless of the specific circumstances of each case.

- I find it incomprehensible that an application to fell any tree, let alone one of this importance and significance, is considered to be appropriate on the basis of what appears to be extremely slight damage to a property, easily rectified at reasonable cost by any competent builder. It does not make sense, and is almost beyond belief.

- If the TPO legislation cannot protect this tree, then the legislation is totally unfit for purpose.

- It should not be possible to obtain consent to fell TPO trees, even if the application to fell has little or no merit, by the simple expedient of threatening to make large claims for costs for damage allegedly caused by the tree, if consent is refused.

- Quite apart from the fact that in the case of this tree (for all the reasons stated in the objections on your website) felling should not be an option in any event, and other solutions to any problem there may be should be found, agreeing to lift the TPO will set a disastrous precedent, in effect giving the green light to the lifting of the TPO and the felling of any tree in the Suburb.

This application is a disgrace, and the system which allows it to be entertained is in serious and urgent need of review and reform.