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UNITED KINGDOM

Response to Camden Council by Innovation Property (UK) Ltd, June 2016
96 Haverstock Hill (our reference: IFS-AVI-SUB-14-0052426)

Documents enclosed:

1. Amended Arb Report 08 June 2016
2. Addendum Engineering Recovery Report 15 June 2016
3. Geotechnical Report, 27 March 2015
4. Geotechnical Report, 3 November 2014
5. Engineers Original Opinion Report 15 Aug 2014
6. Photographic record of crack damage to Flat A, 96 Haverstock Hill taken 1 June 2016
7. Certificate of Structural Adequacy and supporting drawings for work to the Front Entrance Steps to 96 Haverstock Hill
8. Photographic record of trial pit / borehole investigations
9. Drainage Report, dated 7 April 2016
10. Documentation confirming repairs to Drain Run D (as identified in Drainage Report, dated 7 April 2016) made on 1 August 2015
11. Latest Level Monitoring Report dated 18 May 2016

1. Damage

1.1. The reports that you have provided to Camden Council do not discuss any external cracking, please could we have an explanation for this, as this is quite unusual.

We have noted a number of areas of external crack damage to both the front and rear of the property. During the recent site meeting with the local authority officers, we noted areas of new crack damage to the front elevation of the property to the right side of the front entrance steps, driveway boundary wall and exterior entranceway to the Garden Flat. We consider this is in keeping with foundation related movement i.e. subsidence.

This is less severe than the damage to the interior of the property, however it is evident from the monitoring that has been carried out that the majority of the front elevation has experienced relatively uniform seasonal movement, the exception being point 4 on the front right corner. Where movement is uniform, regardless of magnitude, then cracking does not occur.

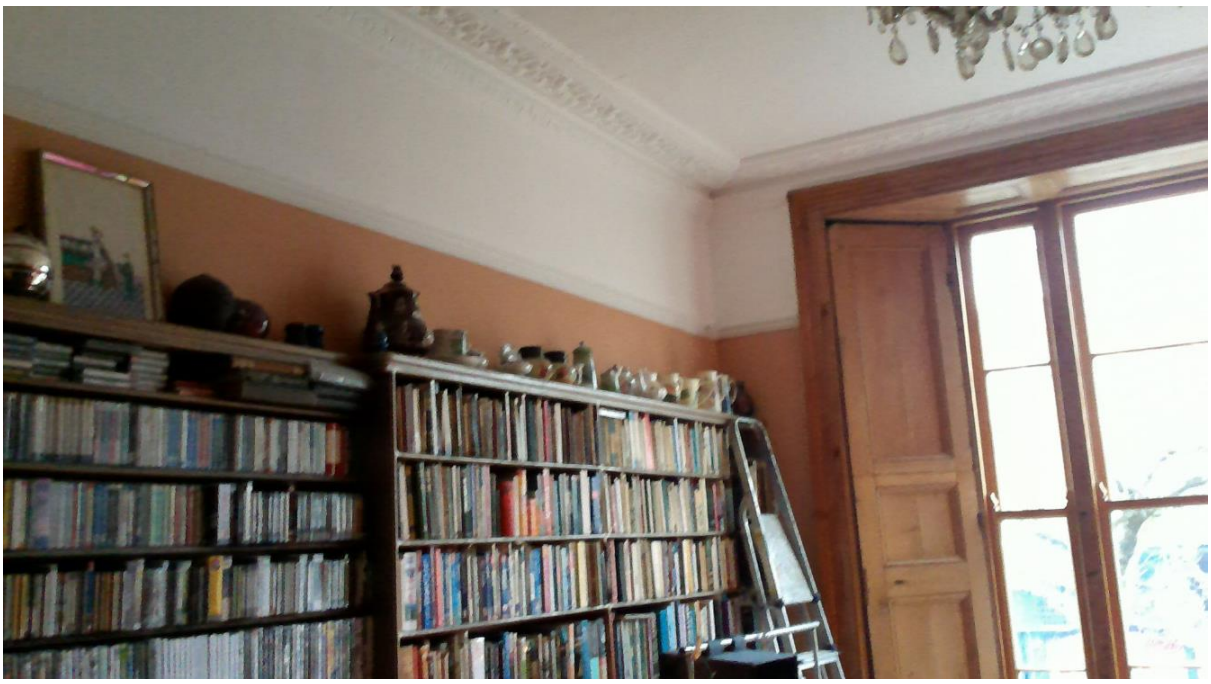
We are also of the opinion that the previous scheme to stabilise the front entrance steps located on the right side of the building utilising a number of piles (Shire Piling) has in part resolved the subsidence movement but not prevented the internal areas of the property being affected by root induced clay shrinkage subsidence. This is supported by greater external damage being observed further away from the steps, such as to the driveway boundary wall and exterior entranceway to the Garden Flat.
The scheme of piling to the front entrance steps has not provided a barrier to prevent tree roots from affecting the shrinkable clay sub soil beneath the building foundations internally to the property.

It is evident that the damage to the interior of the property is more severe and this is shown by the monitoring, where seasonal movement of almost 5mm has affected point 9. The site investigations have shown that roots exist to a depth of 3 metres at the front of the property. Given that the foundations are typically 1.2 metres deep, it is certain that the roots will extend internally beneath the floor. Combined with the level monitoring, it is clear beyond doubt that the interior of the property has been damaged by root induced clay shrinkage. The damage is more extensive than that shown externally due to the greater degree of differential movement between deeper external foundations and a relatively shallow floor slab. The damage is significant and there is no other explanation as to how this structural damage has occurred.

We do not consider that this situation is unique in the context of subsidence claims for this type of property, and we have seen a number of similar cases. It is common for internal damage to be more severe and certainly not unusual for floor slabs to settle by significant amounts. We have a claim at the moment (in Peterborough) where root induced clay shrinkage has caused floor slabs to subside by up to 60mm.

1.2. Upstairs flats have not reported any new or any existing cracks opening and closing, which shows that all damage is localised to the garden flat. Do you have any explanation for this?

As reported by Flat A, crack damage does exist to the flat situated directly above the Garden Flat and generally this damage is consistent with the internal crack damage and movement to the rest of the property.



2. Past issues

2.1. A tree was removed in 2011 in response to various reports claiming tree related subsidence. Based on the reports that you have provided to the Council, it would appear that the tree removal has not reduced or stopped movement in the property, if anything, movement has increased.

The continued movement recorded at the property is consistent with Camden Council's refusal to remove trees identified as causing subsidence in the previous application in 2011 (and before that, in 2007). In particular, we note:

- **The 2011 application concerned two Acer spp. (Sycamore) at 94 Haverstock Hill (your reference: 2011/1491/T). Only one of the two trees was granted permission by Camden Council for removal.**
- **Under the current application, site investigations have identified functionally active Acer spp. (Sycamore) roots of 1.2mm-2.2mm in BH3 1200 - 2200mm below ground level, with moderate and severe desiccation recorded in accordance with BRE digest 412.**
- **Under the current application, site investigations have identified functionally active roots of Ulmus spp. (Elm) of 1.0-3.0mm at all three trial pit / borehole locations around the property to depths of 1500mm-3000mm below ground level.**
- **Continued growth has occurred since the 2007 and 2011 applications. The 2007 application recorded the Elm at a height of approximately 12.6m, compared with 15.0m in the current application, indicating vertical growth of over 2m (despite a c.20% reduction in the crown, as approved by Camden Council in 2010). The Sycamore was recorded at approximately 13.0m in 2007, compared to approximately 17.0m in the current application, indicating vertical growth of approximately 4m.**

It is not possible to compare accurately the magnitude of movement between 2007, 2011 and 2014 using the data you have referred to. However, these readings are generally consistent with continued downward movement to the building foundations (i.e. subsidence):

- **We note that the 2007 and 2011 application recorded internal and external crack width measurements, in contrast to the level monitoring readings recorded under the current application.**
- **The crack movement recorded in 2007 and again in 2011 was conducted at different locations from the level monitoring under the current application, and therefore are not directly comparable.**

2.2. It appears from the reports you submitted, that underpinning to the front steps in January 2009 has had no impact on the recorded movement. The report shows that the stairs have moved significantly in the past 1-2 years, do you have an explanation for this?

(See response to 2.4)

2.3. Has the Contractor that carried out the Underpinning in 2009 taken responsibility for the failure to stabilise the steps? Were the works signed off by the Insurance Company? Were there any records of inspections during the works by a Structural Engineer?

(See response to 2.4)

2.4. The Council has no record of a certificate of completion for the front steps. If a certificate was issued, please could you provide the Council with a copy.

The previous subsidence claim was progressed by another firm. The documentation supplied to us (see enclosed Certificate of Structural Adequacy and supporting drawings) indicates that underpinning was not carried out to the front entrance steps and portico; but instead, a scheme of mini piling known as Shire Stabiliser was implemented:

- **These show up to eight piles were installed to the front section of the steps.**
- **It is probable that the Shire scheme, whilst providing additional support to the front step foundations, has not achieved total stability of the steps, as seen from the level monitoring exercise.**
- **We note that this scheme of mini piling would not form a barrier to root damage.**

3. Trial holes / bore holes

3.1. In the reports that you have provided to the Council, there are conflicting drawings of the exact location of TP/BH1 2014. Is it next to the bedroom bay window or is it next to the underpinned steps leading to the properties main front door?

TP/BH 1 is located to the front left side of the property and next to the bedroom bay window. A copy of the site investigation dated 03 November 2014 is attached for further information.

3.2. There is little/no information on the borehole profiles. Please could we have a copy of these profiles, and also an indication on the Trial Hole diagrams of the exact location of the boreholes.

As confirmed in a recent site visit with Gerry Oxford of Camden Council, TP/BH1 is located next to the bedroom bay window as shown in the geotechnical reports (enclosed), dated 27 March 2015 and 3 November 2014. These reports provide further details of the investigations, including the profile of the three trial pits / boreholes, with photographic records of the investigations for BH3 shown below.

Image 1: showing the proposed location of BH3

Image 2: showing the borehole upon completion (note roots visible within the open BH)

Image 3: Showing the BH upon completion

4. Drains

On page 5 of the report titled Subsidence Claim Addendum Report, it concludes that:

> *The drainage investigation contractor carried out a CCTV survey of the drainage system. All runs were cleaned by high pressure water jetting prior to the CCTV survey. All drainage runs surveyed were found to be in a serviceable condition and did not require any repair.*

If this is the case, please explain the following:

In the drain report dated 30/06/15 –

4.1. Why has the survey not continued to the end of the run on run A, E and G? This would be the only way to confidently know and be able to prove that there were no leaking pipes.

We note:

- **In view of the above, a further drainage survey was carried out on 5th April 2016. A copy of the factual report dated 7th April 2016 is attached for information purposes.**
    - **The drainage investigation contractor advised that they attended the property to carry out a CCTV survey. All runs were cleaned by high pressure water jetting prior to the CCTV survey. The survey report presents a summary of the findings with recommendations to repair and/ or return the drains to a serviceable state, where**

necessary.

- **The main drainage runs within the area of subsidence movement are all noted to be in a satisfactory condition and not requiring repair. The contractor has recommended repairs to drainage runs that are all noted to be outside the area of influence of subsidence movement.**
- **Drain inspections of Run E are noted as complete in the report of 30 June 2015, 6.0m from MH2, reaching the en-suite bathroom of the Garden Flat. These have subsequently been re-inspected (Run H in the drainage survey carried out on 5 April 2016) and recorded as Condition Grade A.**
- **Run A was not completed in the report of 30 June 2015 due to being located at the far rear of the property, and well beyond the area of concern. This has subsequently been re-inspected as part of the 5 April 2016 survey, with minor defects noted well beyond the area of concern.**
- **Drain Run G is a redundant pipe pre-dating renovation to the Garden Flat, and is no longer in use. This has subsequently been re-inspected and recorded as Condition Grade A.**

The drainage survey carried out on 5 April 2016 noted that the main drainage runs within the area of subsidence movement are in a satisfactory condition and not requiring repair. Recommended repairs to drainage runs recorded on 5 April 2016 are located outside the area of subsidence movement.

4.2. With run H, the chart records that at 1.14 m there was a displaced joint, medium. It then concludes that the run is condition A, there is no mention of this fault being repaired.

The reports of 30 June 2015 and 7 April 2016 confirm that the drain run is recorded as Condition Grade A and not requiring repair.

4.3. In the 'conclusion/recommendations' chart it records Run D as grade A and concludes that 'no repairs required as line is in a serviceable condition', yet on the last page there is a chart discussing repairs that are required costing a total of 458.56.

Root damage was found to Run D. Repairs were made after the drain report of 30 June 2015. We note:

- **A cured in place repair to Drain Run D was made on 1 August 2015.**
- **This repair is in evidence in the subsequent drain survey of 7 April 2016.**

- **The Arboricultural Report dated 16 October 2015 states: "*We note that drain investigations have been carried out and that damage was found in the immediate vicinity of the area of damage in drain run D, however, Atterberg / Suction tests demonstrate that the load bearing capacity of the soil has not been compromised by excessive water content due to leaking drains and is therefore capable of bearing the imposed load.*"**

Geotechnical report dated 03/11/14, page titled 'site observations' -
Under the drainage sub title.

4.4. Please clarify why the downpipe has not been directed into a drain, at present any water from the downpipe will be running across the ground and potentiality saturating the ground.

As confirmed in a recent site visit with Gerry Oxford of Camden Council, this downpipe drains into an ACO drain. Consequently, any water from the downpipe will not be running across the ground and saturating it; this view is supported by site investigations which confirm the soil is desiccated (which would not be the case if additional water was being introduced into the soil, be it from discharge from drains or any alternative source (underground streams etc.)

As set out in more detail in the arboricultural consultancy report, damaged or leaking drains could not explain the soil analysis seen; only vegetation can be the cause of this pattern of moisture content:

- **Atterberg testing for soils recovered in both TP/BH1 and TP/BH2 (SubsNet ref: C18151G7214) show the soil moisture content to be below to plastic limit for the full depth of testing (500mm – 1800mm) below ground level.**
- **Moisture content comparison with plastic limit is a reliable indicator of desiccation, whilst moisture depletion at the depths identified are beyond that to which ambient soil drying can be influential and thereby indicate a vegetative influence in the movement / damage. Soil suction testing (within TP/BH1 and TP/BH2) 2014 also confirms the presence of Very Severe, desiccation in accordance with BRE digest 412 from 500mm to 1800mm below ground level.**
- **BRE Digest 412; Desiccation in Clay Soils states that '*soil sample suctions, since they will reflect any changes in in-situ pore water pressures due to desiccation, provide the most fundamental indicator of desiccation of all of the techniques'*.**
- **Further site investigations (BH3) undertaken in March 2015 (SubsNet Ref: C18151G9987) confirmed similar soil conditions as found in TP/BH1 and TP/BH2 i.e.**

a medium – high shrinkable clay substrate.

- **Atterberg testing for soils recovered in BH3 show the soil moisture content to be at / close (within 3% max) of plastic limit for the full depth of testing 1200mm – 3200mm below ground level.**
- **Soil suction testing (within BH3) indicates the presence of Moderate - Severe, desiccation in accordance with BRE digest 412 from 1200mm to 3700mm below ground level.**
- **The time of testing (winter 2015) is likely to explain the reduced soil desiccation noted when compared to TP/BH1 & TP/BH2; April being the point in the season where soil rehydration reaches its peak; winter rainfall has likely masked any previous evidence of severe desiccation.**

4.5. No information has been found in the reports about MH1 being unblocked to allow water to freely move. This too will be causing all water to find the easiest route away and potentially flooding the surrounding area, i.e. the area of damage.

MH1 has never been found to be "blocked" and "flooding to the surrounding area" of MH1 has never been recorded. Drain Reports dated 18 December 2014, 30 June 2015 and 7 April 2016 show that no defects were reported to MH1. We understand that one inspection identified debris in the emergency storm overflow of MH1; this was removed through high pressure water jetting.

4.6. It is the Council's understanding that there was a major leaking clay drain pipe (MH1) for many years that was repaired in 2006/7. There has been no reference to this in any of the reports. Is it not feasible that the ground would have been extremely saturated in this area from many years of water ingress and this has now dried out causing movement?

We do not, in our professional experience, believe this to be feasible. We note:

- **A survey of the drainage system at the property has been undertaken (in both 2014 and 2016) and whilst some minor defects noted; Engineers have confirmed that they do not consider damaged or leaking drains to be a material cause of the current subsidence damage and site investigations (soils analysis / monitoring) confirms this position.**
- **The drainage survey carried out on 5 April 2016 records Drain Run P as Condition Grade A. A copy of the report (dated 7 April 2016) is enclosed.**

- **It should also be noted that runs G and H (which lie under the main property (bathroom / lounge / kitchen) are free from defects; as such, the evidence available does not support the possibility that damage is a result of damaged or leaking drains.**
- **We also note that site investigations have established that the available site investigations have concluded that the soil is dry (desiccated) and consequently defective drains (introducing excessive water content) is not deemed to be a factor.**
- **Atterberg / Suction tests (2014 and 2015) demonstrate that the load bearing capacity of the soil has not been compromised by excessive water content due to leaking drains and is therefore capable of bearing the imposed load.**
- **In addition, level monitoring has confirmed soil recovery over the winter period; soil recovery serves to confirm that defective drainage is not a material cause of the subsidence.**

In the opinion of expert engineers, defective drainage can be eliminated as a material factor in this instance; vegetation is therefore deemed to be causal to the current movement / damage.

5. Roots

5.1. The reports you have provided to the Council contain conflicting information on how close the trees (sycamore and Elm) are from the property. One report says the Elm is 5m from the affected property the other says 10.5 m. This needs clarifying.

We can confirm that the stem of T3 (*Ulmus spp*. (Elm)) stands at a distance of 10.5m from the front elevation of the main property (measured using a Leica laser disto).

As noted in the Engineers report T3 (*Ulmus spp*. (Elm)) stands 5m from the front entrance steps (also correct).

The perceived discrepancy lies in the fact that the Arb report has recorded the tree to damage distance; whereas the initial engineers report advises the distance to the closest point of the property. Both are however, factually accurate.

5.2. The Council considers that the level change between the base of the tree and the underside of the building foundations is too great for roots to be found. The majority of tree roots are found in the top 100 cm of ground. In this instance, the documents submitted have reported roots at 1.2-1.9m

(TP/BH2) below lower ground level, there is a 2m level change between the tree growing level and the start of the lower ground level. This would indicate that roots were found nearly 4 m below the growing level of the tree.

We note:

- **There are significant variations in ground level in the front garden and entrance area of the property. As such, the difference in ground level between the base of T3 (*Ulmus spp*. (Elm)), which is planted on a sharp downward slope, and the ground level of TP/BH2 at the end of an upward sloping driveway, is significantly less than 2m (as noted in question 5.3).**
- **Site investigations on 22 October 2014 at TP/BH2 (noted in the Geotechnical Report of 3 November 2014) show functionally active roots at a depth of between 1200mm-1900mm below ground level, and below the depth of the foundations.**
- **This is also consistent with the site investigations conducted separately on 25 March 2015 (noted in the Geotechnical Report of 27 March 2015) of the adjacent BH3, with functionally active roots of *Ulmus spp*. (Elm) found 1200-2200m below ground level.**
- **The variability of soil conditions and the presence of obstacles / barriers (such as entrance steps) will inevitably result in variable and unpredictable root distribution; root growth is opportunistic and roots will proliferate wherever the soil environment can sustain them.**
- **Roots meeting obstacles will often be deflected by them, but once clear of the obstruction resume their original direction of growth; the entrance steps will not, in our opinion, offer anything approaching a significant 'root barrier'**
- **Whilst it is agreed that generally tree roots proliferate in the upper soil horizons, all trees can develop deeper root system of typically 2-3m below ground level where conditions allow (Dobson, 1995) it is also accepted that in some circumstances tree roots can extend to depths of (exceptionally) 5m.**
- **Root spread is not confined to the limits of branch spread (as is often supposed) but will grow for a considerable distance beyond branch spread.**
- **Typically root spread will often equate to at least tree height and in some cases (particularly in infertile or compacted soils (e.g. underneath an urban driveway)) up to 3 times tree height.**

5.3. In BH3 the report discusses three roots (with starch) between 1.2 and 3m, this equates to roots

being found 4 m below the tree growing level. In BH2 roots are recorded to have been found at 1.9 m in stiff brown clay, the Council considers that the conditions found in a clay soil, at such depth, would be unfavorable to roots, which require oxygen to grow and survive. The Council would like to see pictures clearly showing any roots found in the trial holes.

We note:

- **The reports submitted to Camden clearly provide evidence that roots of the genus *Ulmus spp*. (Elm) were recovered from TP/BH1, TP/BH2 & BH3, all below confirmed foundation depths.**
- **The above roots were noted to be functionally active (alive), and we are satisfied that these samples were collected at the stated depths.**
- **The above roots are held by the laboratory (EPSL Ltd) should the L.A require further validation; images of TP/BH1 and TP/BH2 are shown below.**

Image 4: showing TP/BH2 open prior to completion

Image 5 showing TP/BH2 once finished

Image 6: showing the location of TP/BH1 upon completion

- **The findings of the root analysis are consistent with our professional experience of other, similar cases, especially noting the steady linear progression of the fall noted in**

the the recent site visit with Gerry Oxford of Camden Council.

- **Site topography is not so extreme that roots would not proliferate in / below the footing of the subject property.**
- **It should be noted that soils vary enormously in characteristics, but the size of the particles that make up a soil will define its characteristics.**
- **Clay particle size is typically less than 0.002mm and a clay soil is any soil which has over 25 percent clay; clay soils are potentially very fertile as they hold high levels of nutrients bound to the clay minerals in the soil.**
- **A clay soil also holds a high proportion of water due to the capillary attraction of the tiny spaces between the numerous clay particles.**
- **Given that tree roots need air, water and nutrients to survive, we disagree with the Local Authority that the presence of clay precludes roots exploring to the depths noted.**

5.4. With the applicant's agreement, the Council is considering employing a contractor to dig new trial holes next to the foundations of the property to ascertain whether roots will be found.

We note:

- **Two separate geotechnical site investigations were made on 22 October 2014 (noted in the Geotechnical Report of 3 November 2014) and on 25 March 2015 (noted in the Geotechnical Report of 27 March 2015), together covering three separate trial pits / boreholes.**
- **All three trial pits / boreholes have recovered functionally active roots which, under strict laboratory conditions, traditional light microscopy has confirmed the roots to be predominately *Ulmus spp.* (Elm), as well as *Acer spp.* (Sycamore) at BH3 only.**
- **All root samples are sent to EPSL which is a commercial laboratory formed in 2001 and staffed by highly qualified scientists, each with extensive experience in wood science research and consultancy.**
- **EPSL provides a range of root and timber identification services for samples such as tree roots, shrub roots, solid wood, charcoal, veneer, plywood, chipboard and fibres in some pulp products.**
- **Identifications are made using high powered light microscopy, with reference to published keys, their own sample collections, and the University of Bangor's collection of world timbers.**
- **The laboratory is managed in accordance with international quality standards**

ISO9001 certification.

- **The Geotechnical Reports also note separate soil moisture and suction tests that indicate soil desiccation consistent with soil drying by vegetation and consistent with the seasonal movement identified in level monitoring of the property.**
- **These investigations are consistent with documentation relating to the applications made to Camden Council in 2011 and 2007:**
    - **The Arboricultural Assessment Report dated 21 February 2011 submitted to Camden Council stated: *"Roots were noted throughout the trial pit and to a maximum depth of 2m in the borehole. Samples of these roots were tested using light microscopy techniques and have been formally identified as Acer (Sycamore, Maple)"* (NB: the trial pit referred to in 2011 is indicated as being located adjacent to BH3 under the current application).**
    - **Evidence collected in respect of the 2007 application noted: *"Roots that almost certainly emanate from the subject trees have been observed beneath foundations and to depths of 1700mm below ground level (where the borehole became too dense to hand augur)* (NB: the trial pit referred to in 2007 is indicated as being located to the front of the entrance steps to the property)**

On this basis, we would require Camden Council to provide significant further justification if the veracity of these investigations is under question and why further trial pits / boreholes are necessary to the application.

We would also note that no other Local Authority / Tree Officer (including any former Officers within London Borough of Camden) has ever had cause to question the results of any previous submission.

6. Considerations

6.1. Council engineers have reviewed this case and concluded that further investigations are necessary to discover how and why the concrete/stone floors of the garden flat have dropped significantly within a week or two period; i.e. while the owners were on holiday. Do you consider this could be a catastrophic failure of the floor?

(See response to 6.2)

6.2 Further investigations may involve digging trial holes at various locations in the flat through the

floor construction. This should give some indication as to the underlying floor conditions which may have contributed to the ground floor subsidence.

We note:

- **A small amount of movement of the floor had been observed by the residents of the Garden Flat before July 2014. We consider the increase in movement in July 2014 to be consistent with the pattern of movement influenced by vegetation. We note that this period coincided with very hot and dry weather, with temperatures above 30 degrees recorded in London.**
- **Level monitoring between October 2014 and February 2016 has shown seasonal movement at this location in the property (monitoring point 9 in the Level Monitoring Report dated 18 May 2016), consistent with a pattern of movement influenced by vegetation. As noted in the Arboricultural Report dated 16 October 2015: "*Where vegetation is involved it produces a characteristic 'seasonal' pattern of foundation movement (subsidence through the summer, recovery through the winter); no other cause produces a similar pattern. If it is occurring soil drying by vegetation must be involved, unless the foundations are less than 300mm in depth, which in this case they are not.*"**
- **Isolated movement of the floor would not provide an explanation of the crack damage to walls, including structural walls, identified throughout the property, including to Flat A above. Nor would it be consistent with level monitoring readings throughout the property.**
- **We note that the Subsidence Claim Addendum Report refers to hallway movement of 25-75mm. This is a typographical error. Seasonal movement of almost 5mm has affected point 9.**

On this basis, as discussed in a recent site visit with Gerry Oxford of Camden Council, we would require Camden Council to provide significant further justification for why further trial pits / boreholes are necessary. We do not currently consider that further site investigation internally to the Garden Flat are necessary, nor do we consider it proportionate to take up the wooden floor (laid on to a concrete slab) given the significant additional disruption this would cause the residents of the Garden Flat.

<u>Additional information:</u>

Costs:

1. **As requested in the recent site visit by Gerry Oxford of Camden Council on 3 June 2016, we provide the following updated costings should the two trees remain in situ:**
    - **We estimate that the cost to provide an engineering solution to the front and right side of the property is £125,000. The scheme will comprise of a partial underpinning scheme located internally to the Garden Flat.**
    - **The works would require the residents of the Garden Flat to relocate for an estimated 12 months while the works are undertaken. An assessment of comparable properties (in terms of floor space and decorative condition) in the local area shows a median annual rental cost of £78,800. This assumes that only the residents of the Garden Flat are relocated during the period of the works, and excludes additional costs of storage and relocation, and any costs borne to the residents due to significant disruption and inconvenience of these works.**
    - **These costings exclude ongoing costs to the residents as a result of underpinning, including higher ongoing average insurance premiums that are typically associated with this work and the impact on the value of the four residential properties located at 96 Haverstock Hill.**
2. **We note that the property, which is subject to damage, holds considerable amenity value itself. This is identified in Camden Council's 'Parkhill and Upper Park Conservation Area Appraisal and Management Strategy, 2011': *"102-96 are stuccoed semi-detached villas in William Lund's italianate style. Unusual to the conservation area, number 96 has an exceptional coach house with a faceted elevation with a monogram, dated 1890".***

Other issues:

3. **We note that a petition was submitted to Camden Council in relation to this application. We believe the petition should not form part of the evidence being considered by Camden Council on the basis that:**
    - **The petition was submitted on 14 March 2016, after the consultation period closed on 29th February 2016.**
    - **The petition contains a number of factual inaccuracies, including the statement that "*The Elm tree is a local landmark and the only one left in North London*". Camden's website records at least 8 Elm trees in conservation areas where maintenance requests have been made since 2008, as well as a further 18 that**

have been granted permission for removal in conservation areas since 2008. Several Elm trees of historic significance are recorded by the Conservation Foundation in several other north London locations.

4. **As discussed in the recent site visit by Gerry Oxford of Camden Council on 3 June 2016, should the application for removal of the two trees be accepted, the residents would work with Camden Council to replant more suitable mature tree specimens (i.e. that will not cause future damage to the long-term stability of 96 Haverstock Hill), and in keeping with historic planting in the area.**

5. **Replacement planting of appropriate species could be carried out, the following trees being deemed suitable for this site / location: Acer ginnala, Acer griseum, Catalpa bignonioides 'Aurea' or Gleditsia triacanthos 'Ruby Lace'.**

6. **We would ask Camden Council to respond quickly to the evidence submitted, including in this document. We note that there was six-week delay between the date of submission of the application on 23 December 2015 and registration on 8th February 2016. Camden has acknowledged that this was due to an administrative error.**

7. **For clarity and as advised to Mr Oxford (who seemed unaware of any timescales for determining TPO applications) under the Town and Country Planning (Tree Preservation) (England) Regulations 2012 we can appeal for non-determination where:**

19.—(1) Where the authority—

(c) fail to determine any such application as is referred to in sub-paragraphs (a) and (b) within the period of 8 weeks beginning with the day after the date on which the application was received by the authority.