

Arboricultural Consultancy for Lloyds Bank



Note: This report is intended for use between the client, Environmental Services and any parties detailed within the report. It is based on the understanding at the time of visiting the property that Engineers are satisfied that damage is attributable to clay shrinkage subsidence exacerbated by vegetation.

1. Case Details

| | | | | | |
|-------------|--------------------------------|------------|--|-------------|------------------------|
| Insured | Dr and Mrs Bennett | Address | Hawthorn House, Main Street, Nocton, LN4 2BH | | |
| Client | Subsidence Management Services | Contact | Ian Domigan | Claim No. | IFS-LBG-SUB-22-0103204 |
| ES Ref | SA-251162 | Consultant | Giles Mercer | Contact No. | 0330 380 1036 |
| Report Date | 28/12/2022 | | | | |

Scope of Report: To survey the property and determine significant vegetation contributing to subsidence damage, make recommendation for remedial action and assess initial mitigation and recovery prospects. The survey does not make an assessment for decay or hazard evaluation.

2. Property and Damage Description

The insured structure is a 2 storey detached house. It has been extended with a single-storey extension to the rear. The property occupies a level site with no adverse topographical features.

We have been advised that the current damage relates to the rear extension, where cracking indicates downward movement.

3. Technical Reports

No technical investigations are available at the time of reporting, therefore assumptions outlined in Note above apply: recommendations may be subject to change following evaluation of any investigations that may be forthcoming.

4. Action Plan

| Mitigation | |
|--|-----|
| Insured involved? | Yes |
| Local Authority involved? | No |
| Other third party Mitigation involved? | Yes |
| Recovery | |
| Is there a potential recovery action? | No |

| Treworks | |
|--|---------------------------------|
| Local Authority | North Kesteven District Council |
| TPO / Conservation Area / Planning Protection Searches | Awaiting Searches from LA |
| Additional Comments | |
| Awaiting Further Instructions. | |

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5. Technical Synopsis

This report is based upon our understanding at the time of visiting the property that Subsidence Management Services have concluded, on a preliminary basis, that the current damage is due to differential foundation movement exacerbated by moisture abstraction from vegetation growing adjacent to the property's foundations.

We have therefore been instructed to assess the potential for vegetation to be influencing soil moisture levels beneath the foundations of the property and, if deemed appropriate provide management proposals which will return long-term stability and allow effective repairs to be undertaken.

The potential drying influence of the vegetation on site, has been considered based on an assessment of overall size, species profile and the proximity of vegetation relative to the advised area of damage.

Based on our observations on site, it is our opinion that the footings of the subject property are within the normally accepted influencing distance of vegetation on site, thereby indicating the potential for the advised damage to be the result of clay shrinkage subsidence exacerbated by the moisture abstracting influence of vegetation.

With due regards to species profile, size and proximity, the Beech (T2) is considered the dominant feature proximate to the focal area(s) of movement and accordingly, where vegetation is confirmed as being causal, we have identified it as the primary cause of the current subsidence damage.

The size and proximity of the above vegetation is consistent with the advised location(s) of damage and it is our opinion, on balance of probability, that roots from the above vegetation will be in proximity to the footings of the insured property.

Note: additional minor vegetation has been noted on site and, depending on trial-pit location may be identified within future site investigations; however, unless specifically identified within this report, these plants are not deemed material to the current claim nor pose a significant future risk.

Given the above and considering the suspected mechanism of movement, in order to mitigate the current damage thereby allowing soils beneath the property to recover to a position such that an effective engineering repair solution can be implemented, we recommend a program of vegetation management as detailed by this report.

Please refer to Section 6 for management prescriptions.

Preliminary recommendations contained within this report are prescribed on the basis that site investigations confirm vegetation to be causal; management advice is designed to offer the most reliable arboricultural solution likely to restore long-term stability and also facilitate liaison with third-party owners and/or Local Authorities where necessary.

Consequently, we have advocated the complete removal of T2 as it will offer the most certain arboricultural solution likely to restore long-term stability.

Replacement planting is considered appropriate with regards mitigating the impact of the works suggested; however, species selection should be appropriate for the chosen site and consideration must be given to the ultimate size of the replacement species and any future management requirements.

We recommend the role of vegetation and the efficacy of management recommendations be qualified by means of monitoring.

Please note that the footing of the insured property fall within the anticipated rooting distance of additional vegetation which we believe presents a foreseeable risk of future damage and accordingly we have made recommendations in respect of this.

| | |
|--|-----|
| Is vegetation likely to be a contributory factor in the current damage? | Yes |
| Is vegetation management likely to contribute to the future stability of the property? | Yes |
| Is replacement planting considered appropriate? | Yes |
| Would DNA profiling be of assistance in this case? | No |

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6.2 Future Risk Recommendations

These recommendations may be subject to review following additional site investigations.

| Tree No. | Species | Age Cat | Approx. Height (m) | Distance to Building (m) * | Ownership | Action | Requirement |
|----------|---|---------|--------------------|----------------------------|--|-----------------------------|--|
| C1 | Honeysuckle | 1 | 2.5 | 0.2 | C - Insured | Action to avoid future risk | Maintain at broadly current dimensions by way of regular pruning. |
| C2 | Hydrangea (Climbing) | 1 | 3.2 | 0.2 | C - Insured | Action to avoid future risk | Maintain at broadly current dimensions by way of regular pruning. |
| CG1 | Mixed species climbers | 1 | 1.9 | 2.5 | C - Insured | Action to avoid future risk | Maintain at broadly current dimensions by way of regular pruning. |
| H1 | Cypress | 1 | 2.5 | 1.6 | E - Boundary Veg (ownership to be confirmed) | Action to avoid future risk | Maintain at broadly current dimensions by way of regular pruning. |
| S1 | Shrub | 1 | 2 | 4.45 | C - Insured | Action to avoid future risk | Maintain at broadly current dimensions by way of regular pruning. |
| S2 | Pyracantha | 1 | 2 | 0.1 | C - Insured | Action to avoid future risk | Maintain at broadly current dimensions by way of regular pruning. |
| SG1 | Mixed species shrubs: including pittosporum, viburnum, spirea, hypericum. | 1 | 2 | 1.9 | C - Insured | Action to avoid future risk | Maintain at broadly current dimensions by way of regular pruning. |
| T1 | Rowan | 1 | 5.8 | 6.1 | C - Insured | Action to avoid future risk | Maintain at broadly current dimensions by way of regular pruning. |
| T3 | Apple (Crab) | 1 | 2 | 7.1 | C - Insured | Action to avoid future risk | Maintain at broadly current dimensions by way of regular pruning. |
| T4 | False Acacia | 1 | 7.5 | 7.6 | C - Insured | Action to avoid future risk | Do not allow to exceed current dimensions by way of regular pruning. |
| T5 | Lime | 3 | 17 | 9 | C - Insured | Action to avoid future risk | Crown reduce overall canopy by 30% (minimum) to achieve a crown volume reduction in line with BRE IP7/06. Maintain at reduced dimensions by re-pruning back to points of previous reduction on a 3 year (max) cycle. |
| T6 | Lime | 3 | 17 | 12 | A - Third Party | Action to avoid future risk | Crown reduce overall canopy by 30% (minimum) to achieve a crown volume reduction in line with BRE IP7/06. Maintain at reduced dimensions by re-pruning back to points of previous reduction on a 3 year (max) cycle. |
| T7 | Alder | 1 | 9.8 | 8.3 | C - Insured | Action to avoid future risk | Maintain at broadly current dimensions by way of regular pruning. |

Age Cat: 1 = Younger than property; 2 = Similar age to the property; 3 = Significantly older than property

* Estimated

Third party property addresses should be treated as indicative only, should precise detail be required then Environmental Services can undertake Land Registry Searches

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6.0 Recommendations

6.1 Current Claim Requirements

These recommendations may be subject to review following additional site investigations.

| Tree No. | Species | Age Cat | Approx. Height (m) | Distance to Building (m) * | Ownership | Action | Requirement |
|----------|---------|---------|--------------------|----------------------------|-------------|--------|---|
| T2 | Beech | 1 | 11.2 | 8.2 | C - Insured | Remove | Remove close to ground level and treat stump to inhibit regrowth. |

Age Cat: 1 = Younger than property; 2 = Similar age to the property; 3 = Significantly older than property

* Estimated

This beech has been removed, with NKDC approval.

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7. Site Plan



Please note that this plan is not to scale. OS Licence No. 100043218

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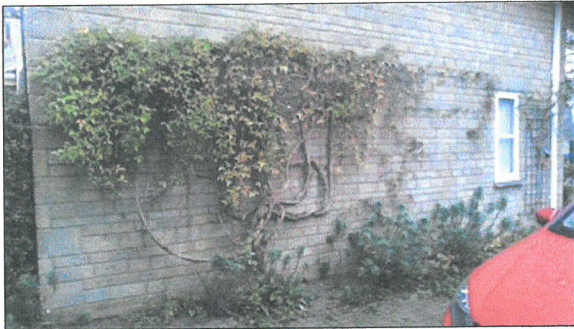
8. Photographs



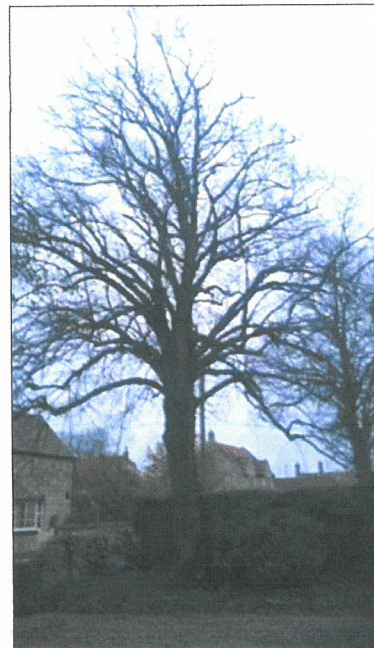
CG1 - Mixed species climbers



Rear



C1 - Honeysuckle



T5 - Lime

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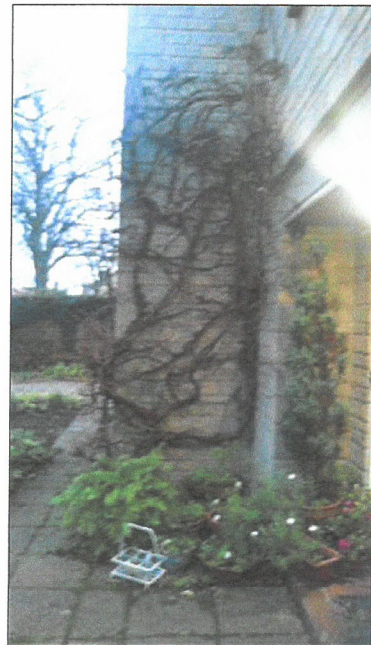
T7 - Alder



T6 - Lime



H1 - Cypress



C2 - Hydrangea (Climbing)

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Front



S1 - Shrub



T1 - Rowan



T2 - Beech

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T3 - Apple (Crab)



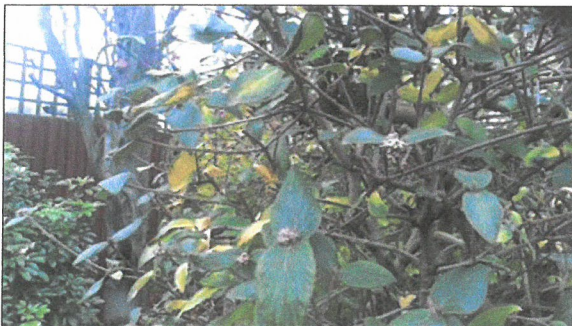
T4 - False Acacia



SG1 - Mixed species shrubs



S2 - Pyracantha



S1 - Shrub

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Date: 28/12/2022

Property: Hawthorn House, Main Street, Nocton, LN4 2BH

9. Tree Works Reserve - Does not include recommendations for future risk.

| | |
|-----------------------------|---------|
| Insured Property Tree Works | £720.00 |
| Third Party Tree Works | £0.00 |
| Provisional Sum | £0.00 |

- The above prices are based on works being performed as separate operations.
- The above is a reserve estimate only.
- Ownerships are assumed to be correct and as per Section 6.
- A fixed charge is made for Tree Preservation Order/Conservation Area searches unless charged by the Local Authority in which case it is cost plus 25%.
- Should tree works be prevented due to statutory protection then we will automatically proceed to seek consent for the works and Appeal to the Secretary of State if appropriate.
- All prices will be subject to V.A.T., which will be charged at the rate applying when the invoice is raised.
- Trees are removed as near as possible to ground level, stump and associated roots are not removed or included in the price.
- Where chemical application is made to stumps it cannot always be guaranteed that this will prevent future regrowth. Should this occur we would be pleased to provide advice to the insured on the best course of action available to them at that time. Where there is a risk to other trees of the same species due to root fusion, chemical control may not be appropriate.

10. Limitations

This report is an appraisal of vegetation influence on the property and is made on the understanding that that engineers suspect or have confirmed that vegetation is contributing to clay shrinkage subsidence, which is impacting upon the building. Recommendations for remedial tree works and future management are made to meet the primary objective of assisting in the restoration of stability to the property. In achieving this, it should be appreciated that recommendations may in some cases be contrary to best Arboricultural practice for tree pruning/management and is a necessary compromise between competing objectives.

Following tree surgery we recommended that the building be monitored to establish the effectiveness of the works in restoring stability.

The influence of trees on soils and building is dynamic and vegetation in close proximity to vulnerable structure should be inspected annually.

The statutory tree protection status as notified by the Local Authority was correct at the time of reporting. It should be noted however that this may be subject to change and we therefore advise that further checks with the Local Authority MUST be carried out prior to implementation of any tree works. Failure to do so can result in fines in excess of £20,000.

Our flagging of a possible recovery action is based on a broad approach that assume all third parties with vegetation contributing to the current claim have the potential for a recovery action (including domestic third parties). This way opportunities do not "fall through the net"; it is understood that domestic third parties with no prior knowledge may be difficult to recover against but that decision will be fully determined by the client.

A legal Duty of Care requires that all works specified in this report should be performed by qualified, arboricultural contractors who have been competency tested to determine their suitability for such works in line with Health & Safety Executive Guidelines. Additionally all works should be carried out according to British Standard 3998:2010 "Tree Work. Recommendations".