

# Arboricultural Consultancy for Esure

**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     |                                | Address    | 1 Hartwood Gardens, Waterloooville, PO8 8RA |             |                        |
| Client      | Subsidence Management Services | Contact    |                                             | Claim No.   | IFS-ESU-SUB-25-0122071 |
| ES Ref      | SA-256755                      | Consultant | Craig Howe                                  | Contact No. |                        |
| Report Date | 24/10/2025                     |            |                                             |             |                        |

**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 two-storey extension to the left-flank and a single-storey extension to the left-flank. The property occupies a level site with no adverse topographical features.

We understand that the current damage relates to the single attached garage located to the left-flank of the property, where cracking indicates downwards movement.

## 3. Technical Reports

In preparing our report we have had the benefit of the following technical investigations:

Engineers Report ☒

## 4. Action Plan

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

| Treeworks                                                                                                                   |                           |
|-----------------------------------------------------------------------------------------------------------------------------|---------------------------|
| Local Authority                                                                                                             | Havant Borough Council    |
| TPO / Conservation Area / Planning Protection Searches                                                                      | Awaiting Searches from LA |
| Additional Comments                                                                                                         |                           |
| Awaiting Further Instructions.                                                                                              |                           |
| A potential recovery action has been identified.                                                                            |                           |
| Engineers should consider focusing investigations to strengthen factual evidence for disclosure to third party tree owners. |                           |

## 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 proximate 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.

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With due regards to species profile, size and proximity, T3 (Ash) and T4 (Pine (Scots)) are considered the dominant features proximate to the focal area(s) of movement and accordingly, where vegetation is confirmed as being causal, we have identified them 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 both T3 & T4 as it will offer the most certain arboricultural solution likely to restore long-term stability.

Consideration has been given to pruning only, as a means of mitigating the influence of the above, however this has been discounted in this instance.

Whilst it is accepted that pruning in accordance with BRE IP7/06 (and if repeated on a 3-year (max) basis) can be an alternative to removal, it is one with a high residual risk of future movement; in the context of the current claim we consider the above vegetation is too large and/or close for pruning to be viable in this instance.

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.

The extent / impact of vegetation management required to restore and maintain long-term stability at this property is acknowledged. However, we consider the impact on the wider public amenity from the proposed tree works is mitigated by the presence of further trees and the scope for replacement planting.

Whilst replacement planting is considered appropriate, due consideration must be given to the ultimate size of the replacement and future management requirements. 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.

|                                                                                        |     |
|----------------------------------------------------------------------------------------|-----|
| 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?                                     | Yes |

# Arboricultural Consultancy for Esure

## 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                                                                                                                                                        |
|----------|--------------|---------|--------------------|----------------------------|---------------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| T3       | Ash          | 3       | 12                 | 4                          | A - Third Party tp1 | Remove | Remove close to ground level; do not treat stump(s) due to translocation risk. Where such a risk exists, we advise that any emergent regrowth is removed annually. |
| T4       | Pine (Scots) | 3       | 12                 | 2                          | C - Insured         | Remove | Remove close to ground level                                                                                                                                       |

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

\* Estimated

### 6.2 Future Risk Recommendations

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

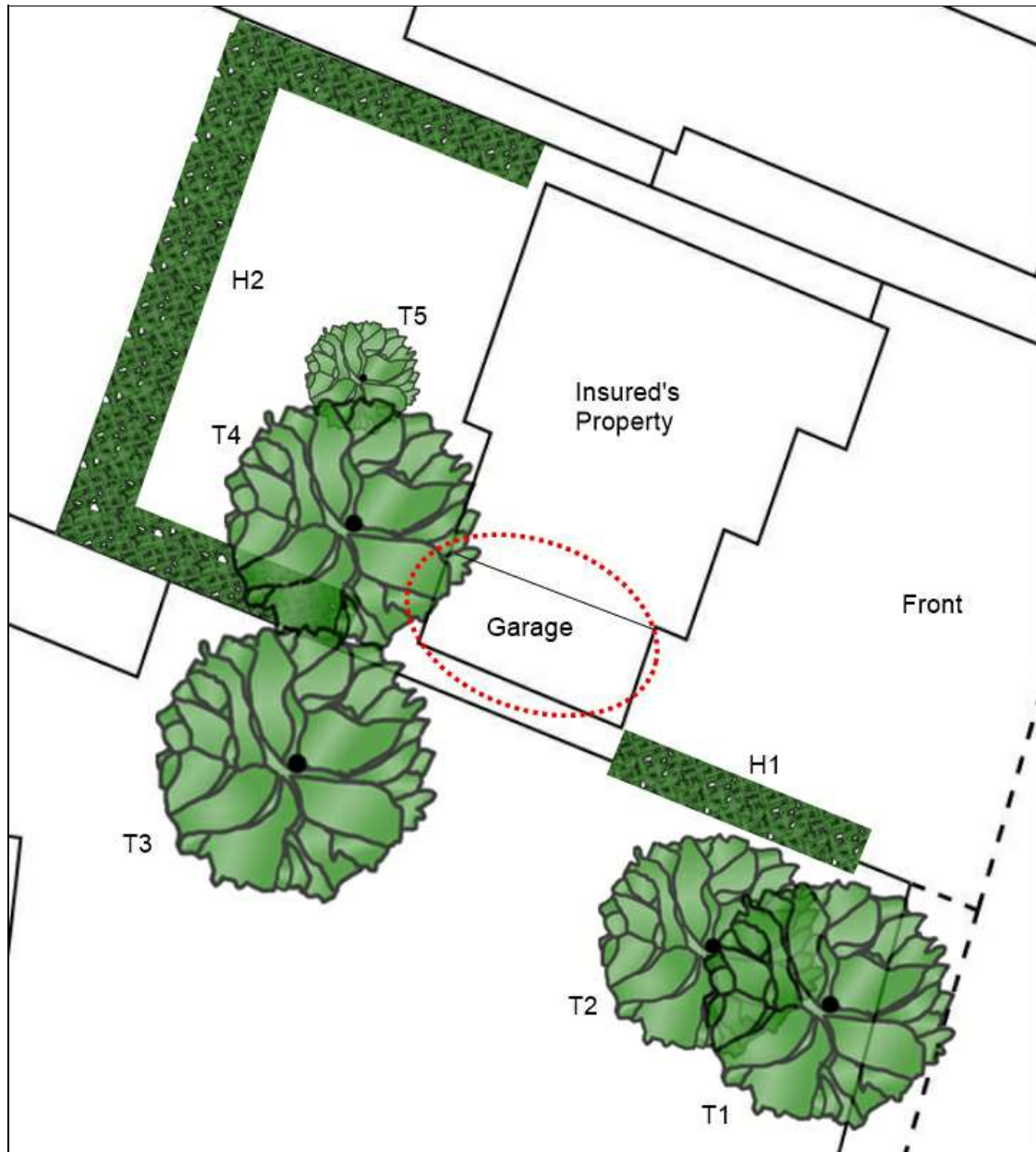
| Tree No. | Species                 | Age Cat | Approx. Height (m) | Distance to Building (m) * | Ownership           | Action                      | Requirement                                                         |
|----------|-------------------------|---------|--------------------|----------------------------|---------------------|-----------------------------|---------------------------------------------------------------------|
| H1       | Laurel                  | 2       | 2.5                | 1.5                        | C - Insured         | Action to avoid future risk | Maintain at, or below current dimensions by way of regular pruning. |
| H2       | Mixed Species Hedge (H) | 2       | 4                  | 3                          | C - Insured         | Action to avoid future risk | Maintain at broadly current dimensions by way of regular pruning.   |
| T1       | Ash                     | 3       | 13                 | 10                         | A - Third Party tp1 | Action to avoid future risk | Maintain at broadly current dimensions by way of regular pruning.   |
| T2       | Elm (Wych)              | 3       | 8                  | 9                          | A - Third Party tp1 | Action to avoid future risk | Maintain at broadly current dimensions by way of regular pruning.   |
| T5       | Palm                    | 2       | 4                  | 5                          | C - Insured         | No action                   | No works.                                                           |

**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

7. Site Plan



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

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## 8. Photographs



T1 - Ash



T2 - Elm



H1 - Laurel



T3 - Ash



T4 - Pine (Scots)



T5 - Palm

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T4 - Pine (Scots)



H2 - Mixed Species Hedge (H)



H2 - Mixed Species Hedge (H)

# Arboricultural Consultancy for Esure

Date: 24/10/2025

Property: 1 Hartwood Gardens, Waterlooville, PO8 8RA

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

|                             |          |
|-----------------------------|----------|
| Insured Property Tree Works | £1450.00 |
| Third Party Tree Works      | £1450.00 |
| 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.

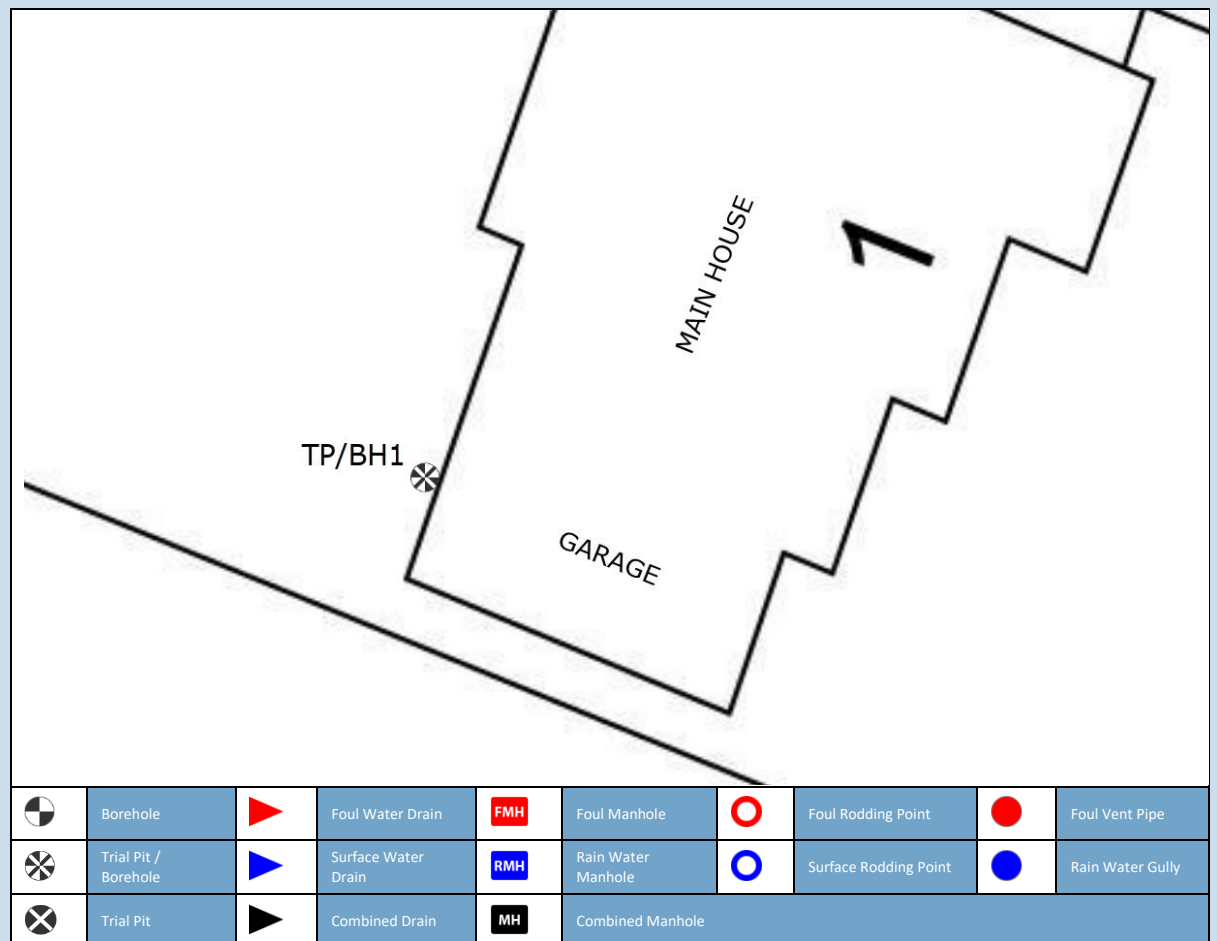
**A legal Duty of Care requires that all works specified in this report should be performed by qualified, arboricultural contractors who have been competency tested to determine their suitability for such works in line with Health & Safety Executive Guidelines. Additionally all works should be carried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

# GEOTECHNICAL for SMS (ESU)

## 1 Hartwood Gardens, Waterlooville, PO8 8RA

Client: SMS (ESU)  
Client Contact: Refer to iSubs  
Client Ref: IFS-ESU-SUB-25-0122071  
Policy Holder: XXXXXXXXXX  
Report Date: 13 November 2025  
Our Ref: C83563G36544

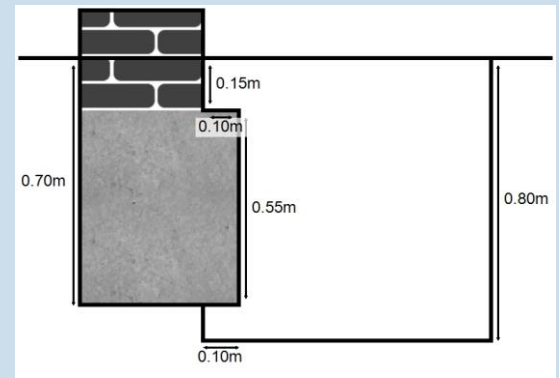
### Site Plan



## TP/BH1 Foundation Detail and Borehole Log

### Foundation Detail

Garage foundation comprised of brick wall to 150mm bgl, bearing on concrete to 700mm bgl, with a total projection of 100mm from the elevation. Underside of foundation (USF) was exposed to 100mm back from the face of the foundation and probed 500mm back from the face of the foundation.



| WS                                                                                                             | Samples |                            | Tests |           | Legend                       | Stratum Description and Observations                                                   |     |
|----------------------------------------------------------------------------------------------------------------|---------|----------------------------|-------|-----------|------------------------------|----------------------------------------------------------------------------------------|-----|
|                                                                                                                | Type    | Depth (m)                  | Type  | Depth (m) |                              |                                                                                        |     |
|                                                                                                                |         |                            |       |           |                              |                                                                                        |     |
|                                                                                                                |         |                            |       |           | 0                            | TOPSOIL                                                                                | 0   |
|                                                                                                                |         |                            |       |           |                              | Firm brown CLAY.                                                                       |     |
|                                                                                                                |         |                            |       |           | 0.5                          |                                                                                        | 0.5 |
|                                                                                                                | R<br>D  | 0.80 - 1.80<br>0.80 - 1.30 | PEN   | 0.80      | HP=2.1 (2.0,2.0,2.0,2.0,2.5) | Firm orangish brown mottled grey silty gravelly CLAY. Gravel is fine to medium gravel. | 1.0 |
|                                                                                                                | D       | 1.30 - 1.80                | PEN   | 1.30      | HP=2.2 (2.0,2.5,2.0,2.5,2.0) | Firm orangish brown mottled grey silty CLAY.                                           | 1.5 |
|                                                                                                                | D       | 1.80 - 2.30                | PEN   | 1.80      | HP=2.4 (2.5,2.5,2.0,2.5,2.5) |                                                                                        | 2.0 |
|                                                                                                                | D       | 2.30 - 2.80                | PEN   | 2.30      | HP=2.5 (2.5,2.5,2.5,2.5,2.5) |                                                                                        | 2.5 |
|                                                                                                                | D       | 2.80 - 3.30                | PEN   | 2.80      | HP=2.0 (2.0,2.0,2.0,2.0,2.0) |                                                                                        | 3.0 |
|                                                                                                                | D       | 3.30 - 3.80                | PEN   | 3.30      | HP=2.3 (2.0,2.5,2.0,2.5,2.5) |                                                                                        | 3.5 |
|                                                                                                                | D       | 3.80 - 4.00                | PEN   | 3.80      | HP=2.5 (2.5,2.5,2.5,2.5,2.5) |                                                                                        | 4.0 |
| -- End of borehole at 4.00m --<br>Trial pit excavated to 0.80m bgl. Borehole completed by mech window sampler. |         |                            |       |           |                              |                                                                                        |     |

## Site Observations

### GENERAL:

Site Investigation works (TP/BH 1) undertaken on 10 November 2025 during dry weather (i.e. no rain).

### HEALTH AND SAFETY:

Negative signal obtained in Power, Radio and Genny mode on the Cable Avoidance Tool (CAT) (TP/BH1).

### FOUNDATIONS:

Garage foundation was exposed and the underside of foundation (USF) recorded to be 0.7m bgl (TP/BH 1).

### ROOTS:

Roots encountered to 1.8m bgl (TP/BH 1).

### IN SITU TESTING:

Hand Penetrometer (PEN) undertaken at 0.8m bgl (TP/BH 1) within the window sampler and thereafter in the window sampler at maximum 0.5m intervals.

### WATER STRIKES:

No water strikes (NWS) encountered (TP/BH 1).

# SOIL ANALYSIS

## for Subsidence Management Services

### 1 Hartwood Gardens, Waterlooville, PO8 8RA

Client: Subsidence Management Services  
Claim Number: 1000043560  
Policy Holder: [REDACTED]  
Report Date: 08/12/2025  
Our Ref: L29721

Compiled By:

| Name         | Position              | Signature                                                              |
|--------------|-----------------------|------------------------------------------------------------------------|
| Saira Dougan | Laboratory Supervisor | <span style="background-color: black; color: black;">[REDACTED]</span> |

Checked By:

| Name       | Position           | Signature                                                              |
|------------|--------------------|------------------------------------------------------------------------|
| Bob Walker | Laboratory Manager | <span style="background-color: black; color: black;">[REDACTED]</span> |

Date samples received: 12-Nov-25  
Water Content Test Date: 15-Nov-25  
Atterberg Limits Test Date: 04-Dec-25  
Suction Test Date: 08-Dec-25



9265

### Notes relating to soils testing

Unless otherwise stated, all soil testing was undertaken by Environmental Services at 21 Coventry Road, Coleshill, B46 3BB for Subsidence Management Services, Bembridge House, 1300 Parkway, Solent Business Park, Whiteley, Fareham, Hampshire, England, PO15 7AE and all testing at these premises currently falls outside of UKAS accreditation.

Soil samples have been prepared in accordance with BS1377:Part 1: 2016 Section 7

Descriptions of soil samples within the laboratory have been undertaken generally in accordance with BS5930:2015. Descriptions of soil samples fall outside of the scope of UKAS accreditation and may have been shortened to remove tertiary components for ease of reference.

The graphical representation of 40% of the LL and the numerical representation of the modified plasticity index (mod. PI) fall outside of the scope of UKAS accreditation.

Following the issue of this soil analysis report, samples will be retained for at least 28 days should additional testing, or referencing, be required. It should be noted that any tests undertaken on soils retained subsequent to the issue of this report may not give an accurate indication of the in-situ conditions of the sample.

This Soil Analysis Report may not be reproduced, in part or in full, without written approval of the laboratory.

The results contained herein relate only to items tested and no others. Additionally as the laboratory is not responsible for the sampling process it takes no responsibility for the condition of the samples and all samples are tested "as received".

Where samples of the same test type are not tested on the same day, or the testing spans multiple days, the test date states the day of the final test or the test date of the final sample.

All information above the laboratory reference on the cover page of this report are as provided by the customer and the laboratory is not responsible for any errors or omissions therein.

Water Content Tests are undertaken in accordance with ISO 17892:Part 1:2014

The Liquid Limit test is undertaken in accordance with BS1377:Part 2:2022 using an 80g cone with a 30° tip. Sieve percentages reported in blue denote that the sample has been sieved otherwise it has been prepared from its natural state. Sieve percentage reported in BOLD denote that the sample has been oven-dried prior to testing.

Unless otherwise specified herein, the one-point cone penetrometer method has been used.

The Plastic Limit test and the determination of the Plasticity Index is undertaken in accordance with BS1377:Part 2:2022. Where a plastic limit has been denoted with an asterisk (\*) then it has been derived from the liquid limit and has not been tested.

The Filter Paper Suction Test is undertaken in accordance with the BRE paper IP4/93 (corrected) 'A Method of Determining the State of Desiccation in Clay Soils'

Unless otherwise stated the moisture content of the filter paper was determined after 7 days contact with the sample and the test was prepared from a remoulded disturbed sample.

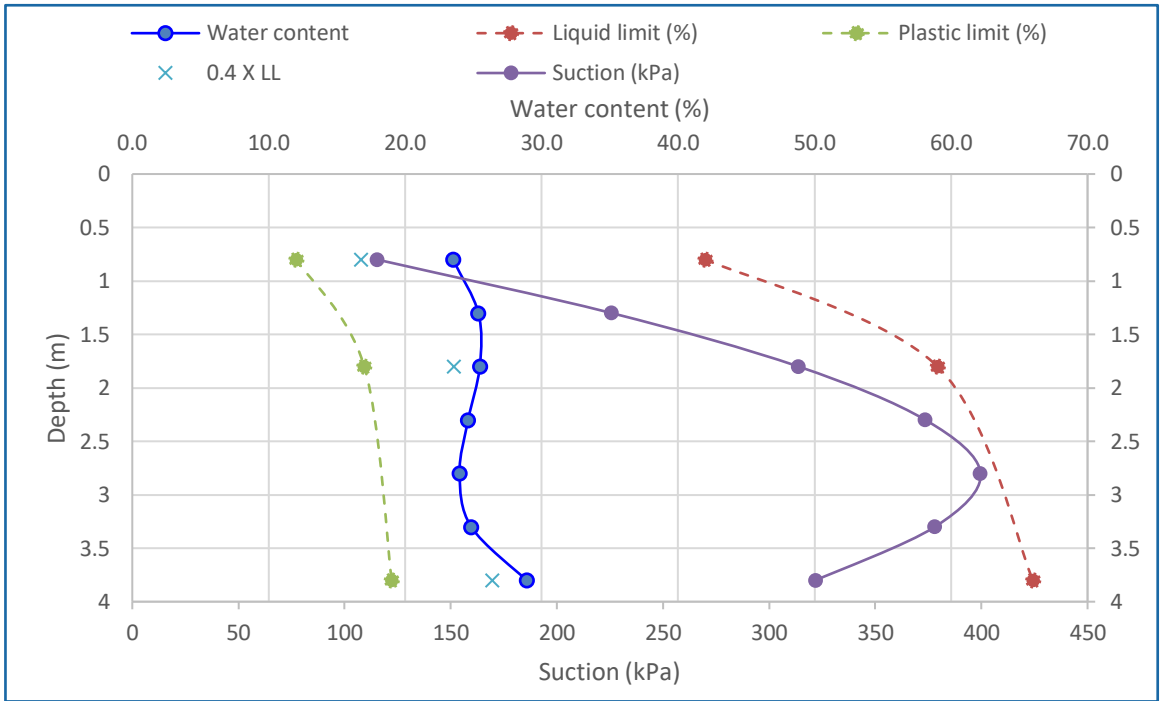
The Filter Paper Suction Tests are conducted in a controlled environment within a temperature range of 18°C and 22°C

If you would like to provide feedback on this report or any laboratory services or performance, please complete the form below. All appropriate feedback will be used in the continual improvement of laboratory services.

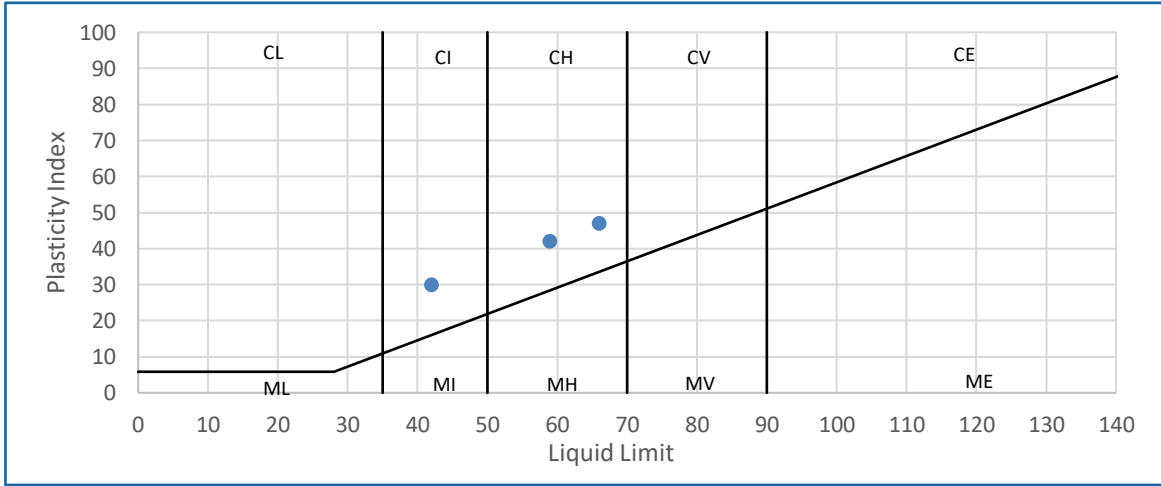
[Laboratory feedback form](#)

Samples from BH1

| Lab Ref | Depth (m) | WC (%) | LL (%) | PL (%) | PI (%) | .425 mm(%) | mod. PI (%) | Av. Suc. (kPa) | Description                                                       |
|---------|-----------|--------|--------|--------|--------|------------|-------------|----------------|-------------------------------------------------------------------|
| 1       | 0.8       | 23.5   | 42     | 12     | 30     | 90         | 27          | 115            | Firm greyish orange slightly sandy, slightly gravelly, silty CLAY |
| 2       | 1.3       | 25.4   |        |        |        |            |             | 226            | Firm greyish orange slightly gravelly, silty CLAY with rare sand  |
| 3       | 1.8       | 25.5   | 59     | 17     | 42     | 100        | 42          | 314            | Firm greyish brown silty CLAY with rare sand and rare gravel      |
| 4       | 2.3       | 24.6   |        |        |        |            |             | 374            | Firm greyish brown silty CLAY with rare gravel                    |
| 5       | 2.8       | 24.0   |        |        |        |            |             | 400            | Firm greyish brown silty CLAY with rare gravel                    |
| 6       | 3.3       | 24.8   |        |        |        |            |             | 378            | Firm greyish brown silty CLAY with rare gravel                    |
| 7       | 3.8       | 28.9   | 66     | 19     | 47     | 99         | 47          | 322            | Firm greyish orange slightly gravelly, silty CLAY with rare sand  |



Plasticity Chart for Casagrande Classification



### Deviating Samples

The table below details any samples deviating from laboratory procedure or deviating in condition to an extent whereby the validity of results may be affected. A test denoted "I" is likely to have had testing abandoned but where a test result has been provided a non-standard procedure may have been used, details of which will be provided upon request.

| LAB REF | CONDITION | WC | ATT | SUC | OED |
|---------|-----------|----|-----|-----|-----|
| 1       |           |    |     |     |     |
| 2       |           |    |     |     |     |
| 3       |           |    |     |     |     |
| 4       |           |    |     |     |     |
| 5       |           |    |     |     |     |
| 6       |           |    |     |     |     |
| 7       |           |    |     |     |     |

#### Key

- D Delay in sample receipt
- C Contaminated sample
- B Sample not bagged correctly
- S Sample too sandy (unsuitable for testing)
- G Sample too gravelly (unsuitable for testing)
- V Sample too soft (unsuitable for preparation)
- L Sample too silty
- I Insufficient sample
- O Too much organic content (unsuitable for testing)
- N Non-standard procedure used
- H Sample depth too shallow
- X Testing result too similar to above sample

### References

The following provides a brief interpretation of the test results by comparison of the results to published classifications. The Atterberg Limit test may be used to classify the plasticity of soils; the plasticity classes defined in BS5930:2015 "Code of Practice for Site Investigations" are as follows.

|         |                                                                                            |
|---------|--------------------------------------------------------------------------------------------|
| CL (ML) | CLAY and CLAY/SILT of Low plasticity                                                       |
| CI (MI) | CLAY and CLAY/SILT of Intermediate plasticity                                              |
| CH (MH) | CLAY and CLAY/SILT of High plasticity                                                      |
| CV (MV) | CLAY and CLAY/SILT of Very High plasticity                                                 |
| CE (ME) | CLAY and CLAY/SILT of Extremely High plasticity                                            |
| O       | The letter O is added to prefixes to symbolise a significant proportion of organic matter. |
| NP      | Non-plastic                                                                                |

The Plasticity Index (PI) Result obtained from the Atterberg Limit tests may also be used to classify the potential for volume change of fine soils, in accordance with the National House Building Council's standards - Chapter 4.2 (2003) "Building Near Trees", as summarised below.

|                             |                                 |
|-----------------------------|---------------------------------|
| Modified PI < 10            | Non Classified.                 |
| Modified PI = 10 to <20     | Low volume change potential.    |
| Modified PI = 20 to <40     | Medium volume change potential. |
| Modified PI = 40 or greater | High volume change potential.   |

The 2003 edition of Chapter 4.2 also permits use of the Plasticity Index without modification. The classifications for this are grouped by soil type (soils with similar visual soils description and using unmodified Plasticity Indices).

# ROOT IDENTIFICATION

## for SMS (ESU)

**1 Hartwood Gardens, Waterlooville, PO8 8RA**

Client: SMS (ESU)  
Client Contact: Refer to iSubs  
Claim Number: 1000043560  
Client Reference: IFS-ESU-SUB-25-0122071  
Policy Holder: [REDACTED]  
Report Date: 19 November 2025  
Our Ref: R62470



Intec  
Parc Menai, Bangor,  
Gwynedd, North Wales  
LL57 4FG  
Tel: 01248 672652

| Sub Sample | Species Identified |   | Root Diameter | Starch   |
|------------|--------------------|---|---------------|----------|
| TP/BH1:    |                    |   |               |          |
| 0.8-1.8m   | Fraxinus spp.      | 1 | 3 mm          | Abundant |

### Comments:

1 - Plus 3 others also identified as *Fraxinus* spp.

*Fraxinus* spp. include common ash.

**Signed:** R. Shaw

Unless we are otherwise instructed in writing, the above sample material will normally be disposed of 6 years after the date of this report.