

# Subsidence Investigation Report



**Darren Spence and Anne Thirlwall**  
**15 Leaside Avenue**  
**London**  
**N10 3BT**

**Report Date:** 6<sup>th</sup> January 2026

**Client:** BVS – Lloyds Banking Group

**Client Claim Reference:** 0901402

**Catalyst Claim Number:** 136114

**Description of Risk Address**

Terraced Property

**Circumstances**

We were asked to perform investigations in relation to reported subsidence.

**Works Completed**

- Excavate 2 x Trial Pits and 2 x Boreholes.
- Shear Vane
- 15 x Moisture Contents, 8 x Atterberg testing and 6 Soil Suctions
- Root samples taken.
- Tested incoming water supply - Pass
- Performed CCTV survey to accessible drainage.
- Datum Installation

**Description of Drainage System**

100mm Vitrified Clay Foul System

**Engineers Findings – Drainage**

See CCTV Survey Report

**Further Action**

Not Applicable

**Reserve**

**Investigation Cost:** £1,527.70+VAT

**Sample costs:** £767.57+VAT

**Roots:** £518.93+VAT

**Total:** £2,814.20+VAT

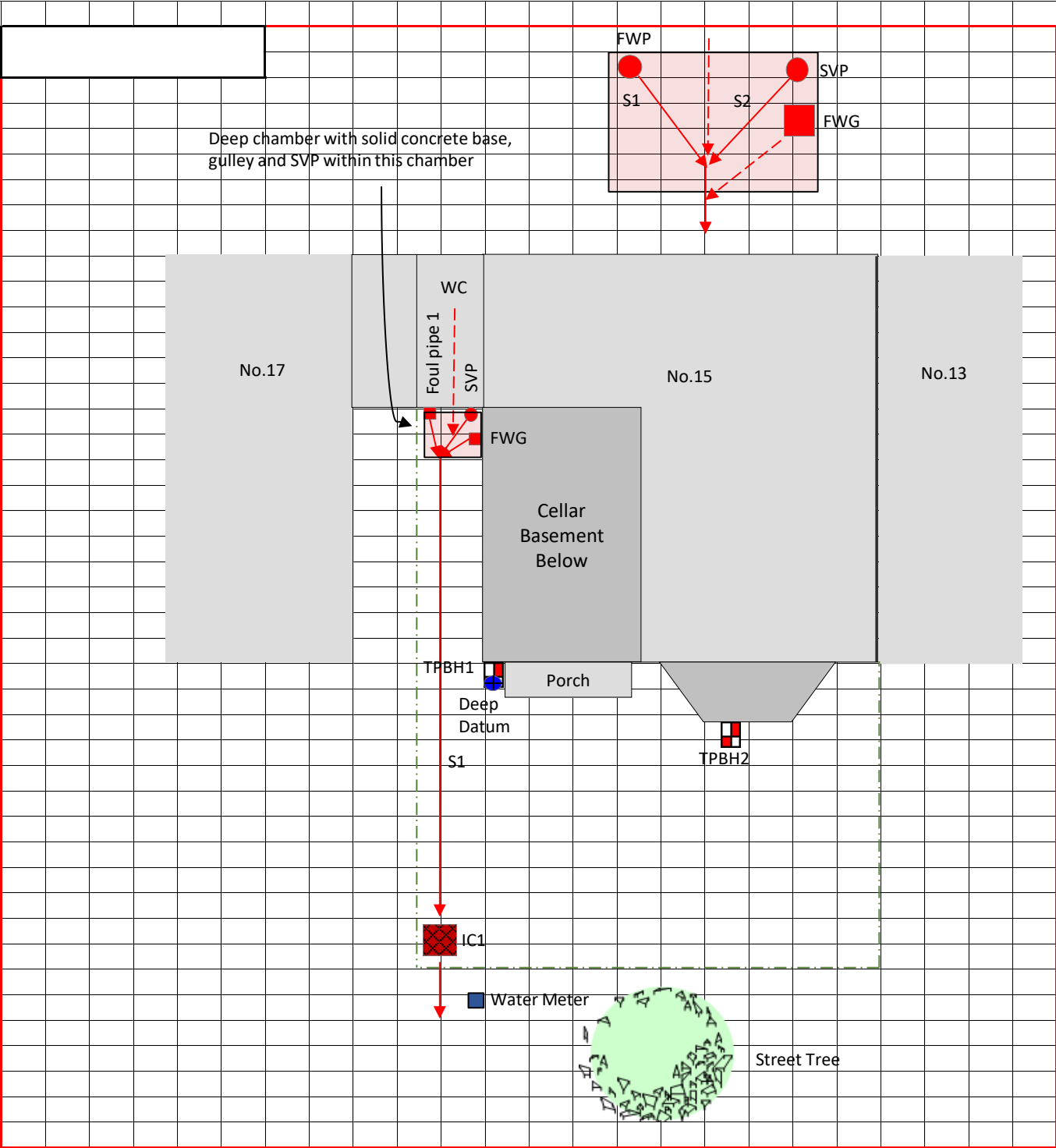
# Site Investigation Report

## Site Plan



### Site Plan Not to Scale

This plan is diagrammatic only and has been prepared to illustrate the general position of the property and its relationship to nearby drains and trees etc. The boundaries are not accurate, and do not infer or confer any rights of ownership or right-of-way.



| Storm Surveyed                                                                      | Storm Assumed                                                                       | Foul Surveyed                                                                       | Foul Assumed                                                                        | TPBH                                                                                | RBH                                                                                 | FWIC                                                                                  | SWIC                                                                                  | Area of Damage                                                                        |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |  |  |
| FWG                                                                                 | RWG                                                                                 | SVP                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |

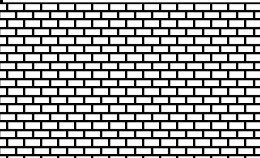
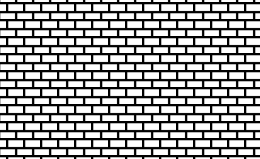
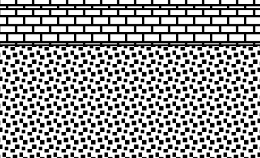
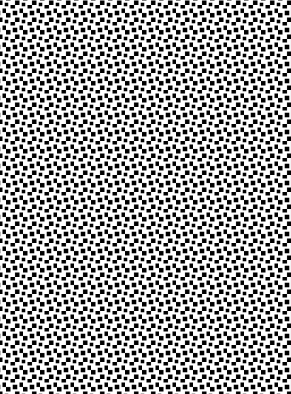
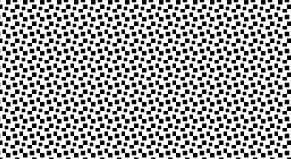
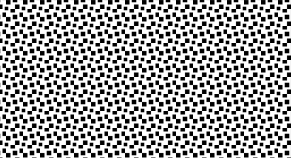
« 15 Leaside Avenue, London, N10 3BT »  
136114

Site Investigation Report

TPBH1 (A)



|                                        |  |                                                   |                           |                                                                |                                  |
|----------------------------------------|--|---------------------------------------------------|---------------------------|----------------------------------------------------------------|----------------------------------|
| Client                                 |  | Catalyst Services UK                              |                           | Ref                                                            | 136114                           |
| Name                                   |  | Darren Spence & Anne Thirlwall                    |                           |                                                                |                                  |
| Address                                |  | 15 Leaside Avenue<br>City London Postcode N10 3BT |                           |                                                                |                                  |
| Logged By:<br>John Bonney              |  | Date                                              | Started:<br>25/11/2025    | Trial Pit/Borehole Location<br>Front Left-Hand Corner of House |                                  |
| Site Team:<br>John Bonney              |  |                                                   | Completed:<br>25/11/2025  | Bore Type<br>Hand Auger                                        | Total Depth of Boring:<br>4000mm |
| Trial Pit: 1 (A)<br>Borehole No: 1 (A) |  |                                                   | Backfilled:<br>25/11/2025 | Groundwater Depth<br>None Observed                             | Roots:<br>Observed               |

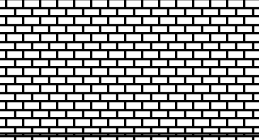
| Depth (m) | Sample Type | Sample Number | Shear Vane Reading | Blow Counts (blows/75mm) | Graphic Log                                                                         | <div>Key:<br/>D - Disturbed sample</div>                  |                                                 |
|-----------|-------------|---------------|--------------------|--------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------|-------------------------------------------------|
| 0.0       |             |               |                    |                          |    | Brickwork 1400mm below ground level                       |                                                 |
| 0.1       |             |               |                    |                          |                                                                                     |                                                           |                                                 |
| 0.2       |             |               |                    |                          |                                                                                     |                                                           |                                                 |
| 0.3       |             |               |                    |                          |                                                                                     |                                                           |                                                 |
| 0.4       |             |               |                    |                          |                                                                                     |                                                           |                                                 |
| 0.5       |             |               |                    |                          |                                                                                     |                                                           |                                                 |
| 0.6       | D           | 1             | 140+               |                          | Roots, HL at FL                                                                     | Brown Clay at 570mm                                       |                                                 |
| 0.7       |             |               |                    |                          |   |                                                           |                                                 |
| 0.8       |             |               |                    |                          |                                                                                     |                                                           |                                                 |
| 0.9       |             |               |                    |                          |                                                                                     |                                                           |                                                 |
| 1.0       | D           | 2             | 140+               |                          |                                                                                     | Roots, HL-3mm at 1000mm                                   | Brown Silty Clay at 1000mm                      |
| 1.1       |             |               |                    |                          |  |                                                           |                                                 |
| 1.2       |             |               |                    |                          |                                                                                     |                                                           |                                                 |
| 1.3       |             |               |                    |                          |                                                                                     |                                                           |                                                 |
| 1.4       |             |               |                    |                          |                                                                                     |                                                           |                                                 |
| 1.5       | D           | 3             | 140+               |                          |  | One-brick corbel foundation, 140mm thickness, 60mm spread |                                                 |
| 1.6       |             |               |                    |                          |  | Brown silty clay with chalk fragments at 1540mm           |                                                 |
| 1.7       |             |               |                    |                          |                                                                                     |                                                           |                                                 |
| 1.8       |             |               |                    |                          |                                                                                     |                                                           |                                                 |
| 1.9       |             |               |                    |                          |                                                                                     |                                                           |                                                 |
| 2.0       | D           | 4             | 140+               |                          |                                                                                     | Roots, HL-1mm at 2000mm                                   | Brown Silty Clay with Chalk Fragments at 2000mm |
| 2.1       |             |               |                    |                          |                                                                                     |                                                           |                                                 |
| 2.2       |             |               |                    |                          |  |                                                           |                                                 |
| 2.3       |             |               |                    |                          |                                                                                     |                                                           |                                                 |
| 2.4       |             |               |                    |                          |                                                                                     |                                                           |                                                 |
| 2.5       | D           | 5             | 140+               |                          |                                                                                     | Roots, HL-1mm at 2500mm                                   | Brown Silty Clay with Chalk Fragments at 2500mm |
| 2.6       |             |               |                    |                          |  |                                                           |                                                 |
| 2.7       |             |               |                    |                          |                                                                                     |                                                           |                                                 |
| 2.8       |             |               |                    |                          |                                                                                     |                                                           |                                                 |
| 2.9       |             |               |                    |                          |                                                                                     |                                                           |                                                 |
| 3.0       | D           | 6             | 140+               |                          | Roots, HL at 3000mm                                                                 | Brown Silty Clay with Chalk Fragments at 3000mm           |                                                 |
| 3.1       |             |               |                    |                          |  |                                                           |                                                 |
| 3.2       |             |               |                    |                          |                                                                                     |                                                           |                                                 |
| 3.3       |             |               |                    |                          |                                                                                     |                                                           |                                                 |
| 3.4       |             |               |                    |                          |                                                                                     |                                                           |                                                 |
| 3.5       | D           | 7             | 140+               |                          |                                                                                     | Brown Silty Clay with Chalk Fragments at 3500mm           |                                                 |
| 3.6       |             |               |                    |                          |  |                                                           |                                                 |
| 3.7       |             |               |                    |                          |                                                                                     |                                                           |                                                 |
| 3.8       |             |               |                    |                          |                                                                                     |                                                           |                                                 |
| 3.9       |             |               |                    |                          |                                                                                     |                                                           |                                                 |
| 4.0       | D           | 8             | 140+               |                          |                                                                                     | Brown Silty Clay with Chalk Fragments at 4000mm           |                                                 |
| 4.1       |             |               |                    |                          |                                                                                     |                                                           |                                                 |
| 4.2       |             |               |                    |                          |                                                                                     |                                                           |                                                 |
| 4.3       |             |               |                    |                          |                                                                                     |                                                           |                                                 |
| 4.4       |             |               |                    |                          |                                                                                     |                                                           |                                                 |
| 4.5       |             |               |                    |                          |                                                                                     |                                                           |                                                 |
| 4.6       |             |               |                    |                          |                                                                                     |                                                           |                                                 |
| 4.7       |             |               |                    |                          |                                                                                     |                                                           |                                                 |
| 4.8       |             |               |                    |                          |                                                                                     |                                                           |                                                 |
| 4.9       |             |               |                    |                          |                                                                                     |                                                           |                                                 |
| 5.0       |             |               |                    |                          |                                                                                     |                                                           |                                                 |

Site Investigation Report

TPBH1 (B)



|                    |                                |             |                                            |                        |
|--------------------|--------------------------------|-------------|--------------------------------------------|------------------------|
| Client             | Catalyst Services UK           |             | Ref                                        | 136114                 |
| Name               | Darren Spence & Anne Thirlwall |             |                                            |                        |
| Address            | 15 Leaside Avenue              |             | Postcode                                   | N10 3BT                |
|                    | City London                    |             |                                            |                        |
| Logged By:         | Date                           | Started:    | Trial Pit/Borehole Location                |                        |
| John Bonney        |                                | 25/11/2025  | Front Left-Hand Corner of Property (Porch) |                        |
| Site Team:         |                                | Completed:  | Bore Type                                  | Total Depth of Boring: |
| John Bonney        |                                | 25/11/2025  | Hand Auger                                 | 4000mm                 |
| Trial Pit: 1 (B)   |                                | Backfilled: | Groundwater Depth                          | Roots:                 |
| Borehole No: 1 (B) |                                | 25/11/2025  | None Observed                              | Observed               |

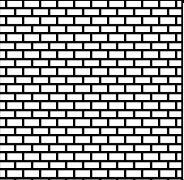
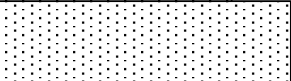
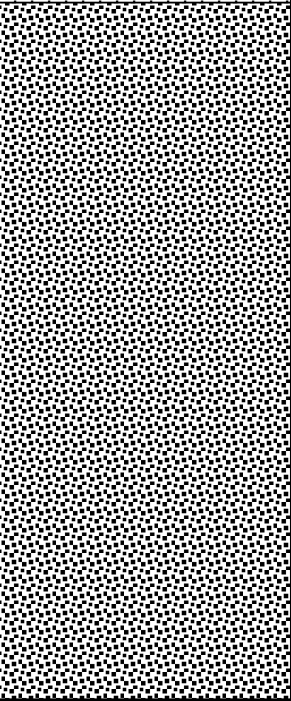
| Depth (m) | Sample Type | Sample Number | Shear Vane Reading | Blow Counts (blows/75mm) | Graphic Log                                                                         | Key:                                                     |
|-----------|-------------|---------------|--------------------|--------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------|
|           |             |               |                    |                          |                                                                                     | D - Disturbed sample                                     |
| 0.0       |             |               |                    |                          |    | Brickwork to 380mm below ground level                    |
| 0.1       |             |               |                    |                          |                                                                                     |                                                          |
| 0.2       |             |               |                    |                          |    | One-brick corbel foundation, 90mm thickness, 60mm spread |
| 0.3       |             |               |                    |                          |                                                                                     | Compacted rubble                                         |
| 0.4       |             |               |                    |                          |   | Roots, HL at FL                                          |
| 0.5       |             |               |                    |                          |                                                                                     |                                                          |
| 0.6       | D           | 1             | 140+               |                          |  | Brown Silty Clay at 570mm                                |
| 0.7       |             |               |                    |                          |                                                                                     |                                                          |
| 0.8       |             |               |                    |                          |  | Roots, HL-3mm at 1000mm                                  |
| 0.9       | D           | 2             | 140+               |                          |                                                                                     | Brown Silty Clay at 1000mm                               |
| 1.0       |             |               |                    |                          |  |                                                          |
| 1.1       |             |               |                    |                          |                                                                                     |                                                          |
| 1.2       |             |               |                    |                          |  |                                                          |
| 1.3       |             |               |                    |                          |                                                                                     |                                                          |
| 1.4       |             |               |                    |                          |  |                                                          |
| 1.5       | D           | 3             | 140+               |                          |                                                                                     | Brown Silty Clay with Chalk Fragments at 1540mm          |
| 1.6       |             |               |                    |                          |  |                                                          |
| 1.7       |             |               |                    |                          |                                                                                     |                                                          |
| 1.8       |             |               |                    |                          |  | Roots, HL-1mm at 2000mm                                  |
| 1.9       | D           | 4             | 140+               |                          |                                                                                     | Brown Silty Clay with Chalk Fragments at 2000mm          |
| 2.0       |             |               |                    |                          |  |                                                          |
| 2.1       |             |               |                    |                          |                                                                                     |                                                          |
| 2.2       |             |               |                    |                          |  | Roots, HL-1mm at 2500mm                                  |
| 2.3       | D           | 5             | 140+               |                          |                                                                                     | Brown Silty Clay with Chalk Fragments at 2500mm          |
| 2.4       |             |               |                    |                          |  |                                                          |
| 2.5       |             |               |                    |                          |                                                                                     |                                                          |
| 2.6       |             |               |                    |                          |  | Roots, HL at 3000mm                                      |
| 2.7       | D           | 6             | 140+               |                          |                                                                                     | Brown Silty Clay with Chalk Fragments at 3000mm          |
| 2.8       |             |               |                    |                          |  |                                                          |
| 2.9       |             |               |                    |                          |                                                                                     |                                                          |
| 3.0       |             |               |                    |                          |  |                                                          |
| 3.1       | D           | 7             | 140+               |                          |                                                                                     | Brown Silty Clay with Chalk Fragments at 3500mm          |
| 3.2       |             |               |                    |                          |  |                                                          |
| 3.3       |             |               |                    |                          |                                                                                     |                                                          |
| 3.4       |             |               |                    |                          |  |                                                          |
| 3.5       | D           | 8             | 140+               |                          |                                                                                     | Brown Silty Clay with Chalk Fragments at 4000mm          |
| 3.6       |             |               |                    |                          |  |                                                          |
| 3.7       |             |               |                    |                          |                                                                                     |                                                          |
| 3.8       |             |               |                    |                          |  |                                                          |
| 3.9       | D           | 8             | 140+               |                          |                                                                                     | Borehole Closed at 4000mm, Dry on Closure                |
| 4.0       |             |               |                    |                          |  |                                                          |
| 4.1       |             |               |                    |                          |                                                                                     |                                                          |
| 4.2       |             |               |                    |                          |  |                                                          |
| 4.3       |             |               |                    |                          |                                                                                     |                                                          |
| 4.4       |             |               |                    |                          |  |                                                          |
| 4.5       |             |               |                    |                          |                                                                                     |                                                          |
| 4.6       |             |               |                    |                          |  |                                                          |
| 4.7       |             |               |                    |                          |                                                                                     |                                                          |
| 4.8       |             |               |                    |                          |  |                                                          |
| 4.9       |             |               |                    |                          |                                                                                     |                                                          |
| 5.0       |             |               |                    |                          |  |                                                          |
|           |             |               |                    |                          |                                                                                     |                                                          |

Site Investigation Report

TPBH2



|                           |                                |                                    |                                                    |
|---------------------------|--------------------------------|------------------------------------|----------------------------------------------------|
| Client                    | Catalyst Services UK           | Ref                                | 136114                                             |
| Name                      | Darren Spence & Anne Thirlwall |                                    |                                                    |
| Address                   | 15 Leaside Avenue              | Postcode                           | N10 3BT                                            |
|                           | City London                    |                                    |                                                    |
| Logged By:<br>John Bonney | Date                           | Started:<br>25/11/2025             | Trial Pit/Borehole Location<br>Front of Bay Window |
| Site Team:<br>John Bonney |                                | Completed:<br>25/11/2025           | Bore Type<br>Hand Auger                            |
| Trial Pit: 2              |                                | Backfilled:<br>25/11/2025          | Total Depth of Boring:<br>4000mm                   |
| Borehole No: 2            |                                | Groundwater Depth<br>None Observed | Roots:<br>Observed                                 |

| Depth (m) | Sample Type | Sample Number | Shear Vane Reading | Blow Counts (blows/75mm) | Graphic Log                                                                         | Key:<br>D - Disturbed sample                               |
|-----------|-------------|---------------|--------------------|--------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------|
| 0.0       |             |               |                    |                          |    | Brickwork to 690mm below ground level                      |
| 0.1       |             |               |                    |                          |                                                                                     |                                                            |
| 0.2       |             |               |                    |                          |                                                                                     |                                                            |
| 0.3       |             |               |                    |                          |                                                                                     |                                                            |
| 0.4       |             |               |                    |                          |                                                                                     |                                                            |
| 0.5       |             |               |                    |                          |                                                                                     |                                                            |
| 0.6       |             |               |                    |                          |                                                                                     |                                                            |
| 0.7       |             |               |                    |                          |                                                                                     | Two-brick corbel foundation 140mm thickness, 120mm spread  |
| 0.8       |             |               |                    |                          |                                                                                     |                                                            |
| 0.9       |             |               |                    |                          |                                                                                     | Concrete foundation 300mm thickness, 100mm spread          |
| 1.0       |             |               |                    |                          |  | Brown Very Stiff Silty Clay at 1130mm                      |
| 1.1       | D           | 1             | 140+               |                          |                                                                                     |                                                            |
| 1.2       |             |               |                    |                          |                                                                                     | Roots 2mm at FL                                            |
| 1.3       |             |               |                    |                          |                                                                                     |                                                            |
| 1.4       |             |               |                    |                          |                                                                                     |                                                            |
| 1.5       | D           | 2             | 140+               |                          |                                                                                     | Roots HL-1mm at 1500mm                                     |
| 1.6       |             |               |                    |                          |                                                                                     | Brown Very Stiff Silty Clay with Chalk Fragments at 1500mm |
| 1.7       |             |               |                    |                          |                                                                                     |                                                            |
| 1.8       |             |               |                    |                          |                                                                                     |                                                            |
| 1.9       |             |               |                    |                          |                                                                                     |                                                            |
| 2.0       | D           | 3             | 140+               |                          |  | Brown Very Stiff Silty Clay with Chalk Fragments at 2000mm |
| 2.1       |             |               |                    |                          |                                                                                     |                                                            |
| 2.2       |             |               |                    |                          |                                                                                     |                                                            |
| 2.3       |             |               |                    |                          |                                                                                     |                                                            |
| 2.4       |             |               |                    |                          |                                                                                     |                                                            |
| 2.5       | D           | 4             | 140+               |                          |                                                                                     | Brown Very Stiff Silty Clay with Chalk Fragments at 2500mm |
| 2.6       |             |               |                    |                          |                                                                                     |                                                            |
| 2.7       |             |               |                    |                          |                                                                                     |                                                            |
| 2.8       |             |               |                    |                          |                                                                                     |                                                            |
| 2.9       |             |               |                    |                          |                                                                                     |                                                            |
| 3.0       | D           | 5             | 140+               |                          |  | Brown Very Stiff Silty Clay with Chalk Fragments at 3000mm |
| 3.1       |             |               |                    |                          |                                                                                     |                                                            |
| 3.2       |             |               |                    |                          |                                                                                     |                                                            |
| 3.3       |             |               |                    |                          |                                                                                     |                                                            |
| 3.4       |             |               |                    |                          |                                                                                     |                                                            |
| 3.5       | D           | 6             | 140+               |                          |                                                                                     | Brown Very Stiff Silty Clay with Chalk Fragments at 3500mm |
| 3.6       |             |               |                    |                          |                                                                                     |                                                            |
| 3.7       |             |               |                    |                          |                                                                                     |                                                            |
| 3.8       |             |               |                    |                          |                                                                                     |                                                            |
| 3.9       |             |               |                    |                          |                                                                                     |                                                            |
| 4.0       | D           | 7             | 140+               |                          |                                                                                     | Brown Very Stiff Silty Clay with Chalk Fragments at 4000mm |
| 4.1       |             |               |                    |                          |                                                                                     |                                                            |
| 4.2       |             |               |                    |                          |                                                                                     | Borehole Closed at 4000mm, Dry on Closure                  |
| 4.3       |             |               |                    |                          |                                                                                     |                                                            |
| 4.4       |             |               |                    |                          |                                                                                     |                                                            |
| 4.5       |             |               |                    |                          |                                                                                     |                                                            |
| 4.6       |             |               |                    |                          |                                                                                     |                                                            |
| 4.7       |             |               |                    |                          |                                                                                     |                                                            |
| 4.8       |             |               |                    |                          |                                                                                     |                                                            |
| 4.9       |             |               |                    |                          |                                                                                     |                                                            |
| 5.0       |             |               |                    |                          |                                                                                     |                                                            |

# Laboratory Summary Results

Our Ref : BSL374-CAT

Date Sampled<sup>†</sup>: 25/11/2025Location<sup>†</sup> : 15 Leaside Avenue, N10 3BT (136114)

Date Received : 04/12/2025

Client: Catalyst Services UK Ltd

Date Tested : 04/12/2025

Address: Gateshead Business Centre, Delph New Road, Oldham

Date of Report : 31/12/2025

| Sample Ref <sup>†</sup>  |                             | Type | Water     | Soil                  | Liquid    | Plastic   | Plasticity | Liquidity          | Modified   | Soil               | Filter Paper                            | Soil                 | Oedometer | Estimated                   | Roots                                   | In situ                              | Organic           | pH    | Sulphate Content        |                         | Class <sup>*</sup> |
|--------------------------|-----------------------------|------|-----------|-----------------------|-----------|-----------|------------|--------------------|------------|--------------------|-----------------------------------------|----------------------|-----------|-----------------------------|-----------------------------------------|--------------------------------------|-------------------|-------|-------------------------|-------------------------|--------------------|
| TP/BH<br>No <sup>†</sup> | Depth <sup>†</sup><br>( m ) |      | Content   | Fraction<br>> 0.425mm | Limit     | Limit     | Index      | Index <sup>*</sup> | Plasticity | Class <sup>*</sup> | Contact                                 | Sample               | Strain    | Heave                       | Present or                              | Shear Vane                           | Matter            | Value | ( g / l )               |                         |                    |
|                          |                             |      | ( % ) [1] | ( % ) [2]             | ( % ) [3] | ( % ) [4] | ( % ) [5]  | [5]                | ( % ) [6]  | [7]                | Time<br>( d )                           | Suction<br>(kPa) [8] | [9]       | Potential (Dd)<br>(mm) [10] | No Roots Observed <sup>*†</sup><br>[11] | Strength <sup>*†</sup><br>(kPa) [12] | O.M<br>( % ) [13] | [14]  | SO <sub>3</sub><br>[15] | SO <sub>4</sub><br>[16] |                    |
| 1                        | U/S 0.57                    | D    | 20.9      | 32                    | 52        | 23        | 29         | -0.07              | 20         | CH                 | Insufficient sample for suction testing |                      |           |                             |                                         |                                      |                   |       |                         |                         |                    |
|                          | 1.0                         | D    | 19.1      | 16                    |           |           |            |                    |            |                    |                                         |                      |           |                             |                                         |                                      |                   |       |                         |                         |                    |
|                          | 1.5                         | D    | 13.8      | 14                    | 46        | 16        | 30         | -0.07              | 26         | CI                 | Insufficient sample for suction testing |                      |           |                             |                                         |                                      |                   |       |                         |                         |                    |
|                          | 2.0                         | D    | 13.6      | 11                    |           |           |            |                    |            |                    |                                         |                      |           |                             |                                         |                                      |                   |       |                         |                         |                    |
|                          | 2.5                         | D    | 16.0      | 10                    | 44        | 16        | 28         | 0.00               | 25         | CI                 | 7                                       | 388                  |           |                             |                                         |                                      |                   |       |                         |                         |                    |
|                          | 3.0                         | D    | 15.9      | 16                    |           |           |            |                    |            |                    |                                         |                      |           |                             |                                         |                                      |                   |       |                         |                         |                    |
|                          | 3.5                         | D    | 17.1      | 12                    | 42        | 17        | 25         | 0.01               | 22         | CI                 | 7                                       | 219                  |           |                             |                                         |                                      |                   |       |                         |                         |                    |
|                          | 4.0                         | D    | 17.5      | 14                    |           |           |            |                    |            |                    |                                         |                      |           |                             |                                         |                                      |                   |       |                         |                         |                    |

**Test Methods / Notes**

[1] BS EN ISO 17892-1 : 2014 + A1 : 2022

[2] Not recorded if &lt;5%, otherwise measured as agreed with client

[3] BS EN ISO 17892-12 : 2018 + A2 : 2022 Clause 5.3 - 1 Pt Test - Cone 80g/30"

Note: One-Point Correction Factors obtained from Table 1, Clause 5.3.2, BS 1377-2 : 2022

[4] BS EN ISO 17892-12 : 2018 + A2 : 2022 Clause 5.5

[5] BS EN ISO 17892-12 : 2018 + A2 : 2022 Clause 6.5

[6] BRE Digest 240 : 1993

[7] BS 5930 : 2018 : Figure 8 - Plasticity Chart for the classification of fine soils

[8] BRE IP 4/93

[9] DIHM One Dimensional Swell / Strain Test. Oedometer testing by GSTL UKAS no. 2788. Full report provided upon written request.

[10] Estimated Heave Potential calculated by GSTL UKAS no. 2788. Full report provided upon written request.

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[11] Roots present at depth or below. Info taken from logs if provided

[12] Values of shear strength were determined in situ using a picon hand vane.

[13] E010 based on Walkely-Black methodology. Completed by DETS UKAS no. 4480.

[14] BS 1377 : Part 3 : 2018 + A1 2021 Clause 12. PH testing by K4 Soils Ltd UKAS no. 2519. Full report provided upon written request.

[15] BS 1377 : Part 3 : 2018 + A1 2021 Clause 7.6. Sulphate testing by K4 Soils Ltd UKAS no. 2519. Full report provided upon written request.

[16] SO<sub>4</sub> = 1.2 x SO<sub>3</sub>

[17] BRE Special Digest One (Concrete in Aggressive Ground) August 2005

Note: If the SO<sub>4</sub> content falls into the D5-4 or D5-5 class, it would be prudent to consider the sample as falling into the D5-4M or D5-5M

class respectively unless water soluble magnesium testing is undertaken to prove otherwise.

**Key**

|     |                                       |
|-----|---------------------------------------|
| D   | Disturbed sample ( small )            |
| B   | Disturbed sample ( bulk )             |
| U   | Undisturbed sample                    |
| W   | Groundwater sample                    |
| ENP | Essentially Non-Plastic by inspection |
| U/S | Underside of Foundation               |
| H&F | Hair & Fibrous Roots                  |
| D&D | Dead & Decomposing Roots              |
| DEV | Deviation                             |
| *   | Non UKAS accredited testing.          |
| †   | Client supplied information.          |



28443

# Laboratory Summary Results

Our Ref : BSL374-CAT

Date Sampled<sup>†</sup>: 25/11/2025Location<sup>†</sup> : 15 Leaside Avenue, N10 3BT (136114)

Date Received : 04/12/2025

Client: Catalyst Services UK Ltd

Date Tested : 04/12/2025

Address: Gateshead Business Centre, Delph New Road, Oldham

Date of Report : 31/12/2025

| Sample Ref <sup>†</sup>  |                             | Type | Water     | Soil                  | Liquid    | Plastic   | Plasticity | Liquidity          | Modified   | Soil               | Filter Paper  | Soil                 | Oedometer | Estimated                   | Roots                                   | In situ                              | Organic           | pH    | Sulphate Content        |                         | Class <sup>*</sup> |
|--------------------------|-----------------------------|------|-----------|-----------------------|-----------|-----------|------------|--------------------|------------|--------------------|---------------|----------------------|-----------|-----------------------------|-----------------------------------------|--------------------------------------|-------------------|-------|-------------------------|-------------------------|--------------------|
| TP/BH<br>No <sup>†</sup> | Depth <sup>†</sup><br>( m ) |      | Content   | Fraction<br>> 0.425mm | Limit     | Limit     | Index      | Index <sup>*</sup> | Plasticity | Class <sup>*</sup> | Contact       | Sample               | Strain    | Heave                       | Present or                              | Shear Vane                           | Matter            | Value | ( g / l )               |                         |                    |
|                          |                             |      | ( % ) [1] | ( % ) [2]             | ( % ) [3] | ( % ) [4] | ( % ) [5]  | [5]                | ( % ) [6]  | [7]                | Time<br>( d ) | Suction<br>(kPa) [8] | [9]       | Potential (Dd)<br>(mm) [10] | No Roots Observed <sup>*†</sup><br>[11] | Strength <sup>*†</sup><br>(kPa) [12] | O.M<br>( % ) [13] | [14]  | SO <sub>3</sub><br>[15] | SO <sub>4</sub><br>[16] |                    |
| 2                        | U/S 1.13                    | D    | 22.5      | 11                    | 59        | 21        | 38         | 0.04               | 34         | CH                 | 7             | 145                  |           |                             |                                         |                                      |                   |       |                         |                         |                    |
|                          | 1.5                         | D    | 15.8      | 13                    |           |           |            |                    |            |                    |               |                      |           |                             |                                         |                                      |                   |       |                         |                         |                    |
|                          | 2.0                         | D    | 13.9      | 18                    | 40        | 16        | 24         | -0.09              | 20         | CI                 | 7             | 326                  |           |                             |                                         |                                      |                   |       |                         |                         |                    |
|                          | 2.5                         | D    | 14.5      | 18                    |           |           |            |                    |            |                    |               |                      |           |                             |                                         |                                      |                   |       |                         |                         |                    |
|                          | 3.0                         | D    | 16.7      | 14                    | 44        | 16        | 28         | 0.02               | 24         | CI                 | 7             | 561                  |           |                             |                                         |                                      |                   |       |                         |                         |                    |
|                          | 3.5                         | D    | 16.5      | 14                    |           |           |            |                    |            |                    |               |                      |           |                             |                                         |                                      |                   |       |                         |                         |                    |
|                          | 4.0                         | D    | 16.6      | 12                    | 42        | 16        | 26         | 0.02               | 23         | CI                 | 7             | 698                  |           |                             |                                         |                                      |                   |       |                         |                         |                    |

**Test Methods / Notes**

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[16] BRE Special Digest One (Concrete in Aggressive Ground) August 2005

Note: If the SO<sub>4</sub> content falls into the D5-4 or D5-5 class, it would be prudent to consider the sample as falling into the D5-4M or D5-5M

class respectively unless water soluble magnesium testing is undertaken to prove otherwise.

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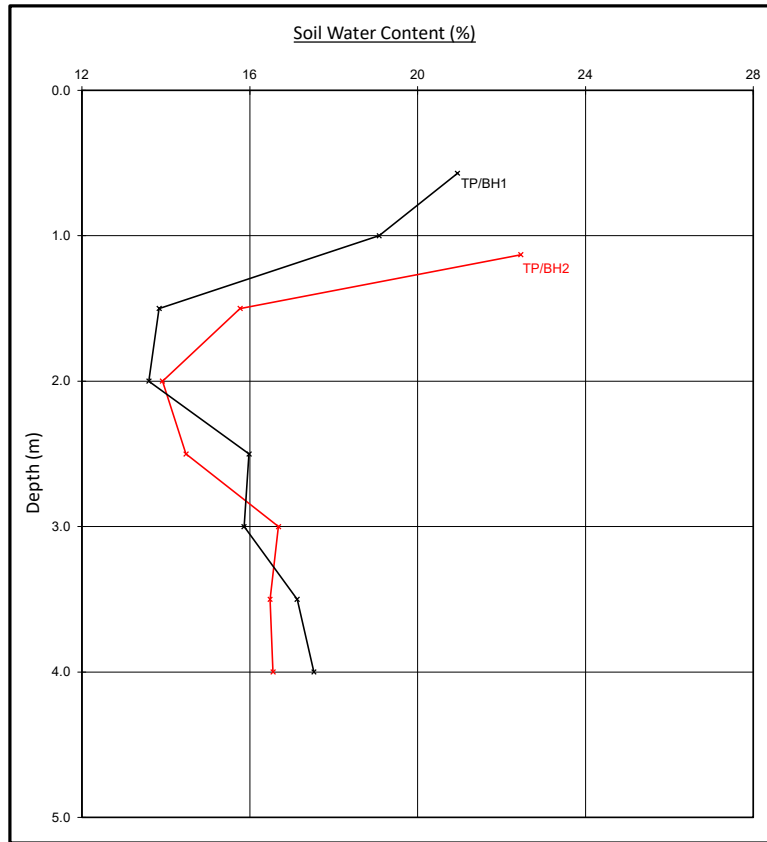


28443

## Water Content Profiles

Our Ref : BSL374-CAT  
 Location<sup>†</sup> : 15 Leaside Avenue, N10 3BT (136114)  
 Work carried out for: Catalyst Services UK Ltd  
 Gateshead Business Centre, Delph New Road, Oldham

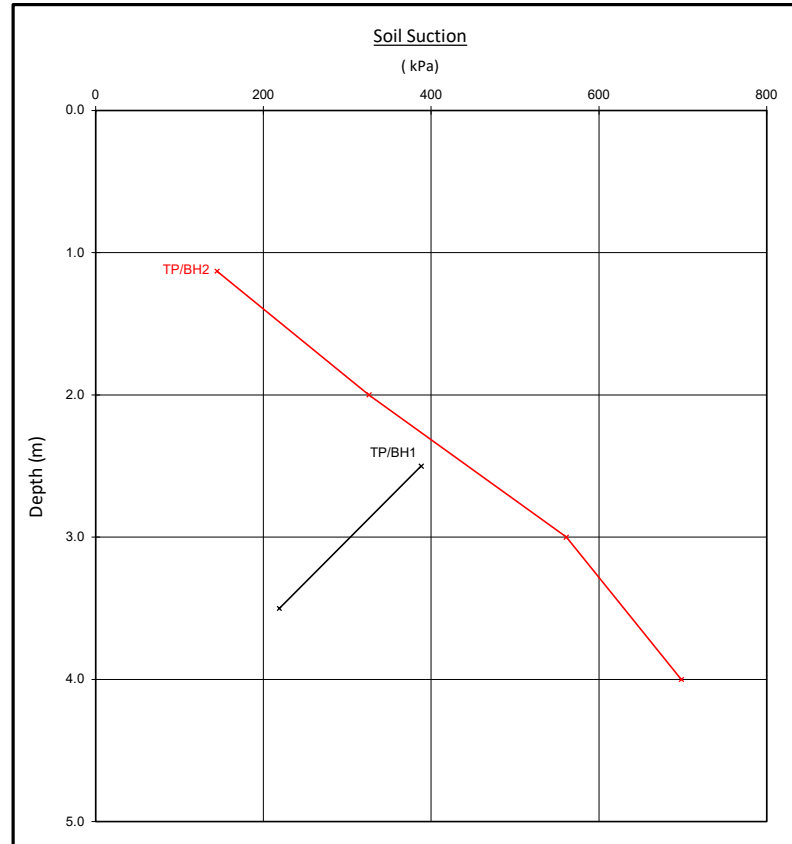
Date Sampled<sup>†</sup> : 25/11/2025  
 Date Received : 04/12/2025  
 Date Tested : 04/12/2025  
 Date of Report : 31/12/2025



### Notes

1. If plotted, 0.4 LL and PL+2 ( after Driscoll, 1983 ) should only be applied to London Clay ( and similarly overconsolidated clay) at shallow depths.

## Soil Suction Profiles



### Note

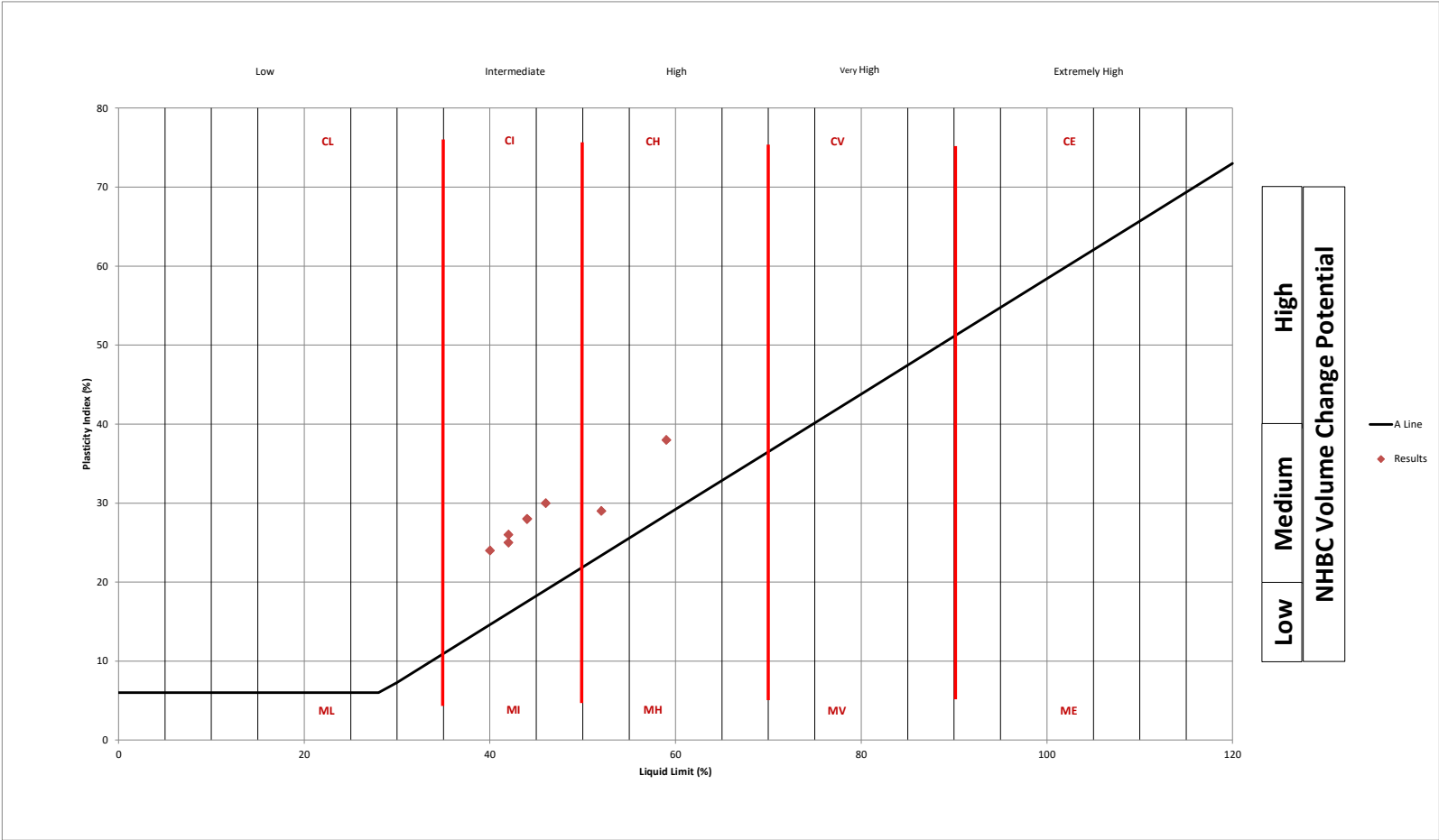
When shown, the theoretical equilibrium suction profiles are based on conventional assumptions associated with London Clay (and similarly overconsolidated clays) at shallow depths. Note that the sample disturbance component is dependant on the method of sampling and any subsequent recompaction. The above plots show this to be 100kPa which is the value suggested by the BRE on the basis of their limited number of tests on recompacted samples. This may or may not be appropriate in this instance and judgement should be exercised.

<sup>†</sup> Client supplied information.

Plasticity Chart

Our Ref : BSL374-CAT  
Location<sup>1</sup> : 15 Leaside Avenue, N10 3BT (136114)  
Work carried out for: Catalyst Services UK Ltd  
Gateshead Business Centre, Delph New Road, Oldham

Date Sampled<sup>1</sup> : 25/11/2025  
Date Received : 04/12/2025  
Date Tested : 04/12/2025  
Date of Report : 31/12/2025



Comments:  
1. Volume Change Potential: NHBC Standards Chapter 4.2 Unmodified Plasticity Index (Non UKAS).

<sup>1</sup> Client supplied information.

End of Report



Root identification  
Vegetation surveys  
Tree/Building investigations  
Plant taxonomy

# Richardson's Botanical Identifications

**Dr Ian B K Richardson**  
*BSc, MSc, PhD, MRSB, FLS*

**James Richardson**  
*BSc (Hons. Biology)*

**Enterprise House**  
**49-51 Whiteknights Road**  
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**Tel: (0118) 986 9552** *(Direct line)*

**E-mail:** [richardsons@botanical.net](mailto:richardsons@botanical.net)

**Web:** [www.botanical.net](http://www.botanical.net)

**Catalyst Claims Management Ltd.**

**Gatehead Business Park**

**Delph New Road**

**OLDHAM**

**OL3 5DE**

15/12/2025

*Your ref:* **Root ID**

*Our ref:* 90/4015

Dear Sirs

**15 Leaside Avenue N10 3BT**

The samples you sent in relation to the above on 25/11/2025 have been examined. Their structures were referable as follows:

| TP2, 1.13m (F.L.) |                                                                    |                                                                               |
|-------------------|--------------------------------------------------------------------|-------------------------------------------------------------------------------|
| 2 no.             | Examined root: PLATANUS (Plane).                                   | <a href="#">Alive, recently*</a> .                                            |
| 1 no.             | Microscopic examination showed insufficient cells for recognition. |                                                                               |
| TP2, 1.50m        |                                                                    |                                                                               |
| 2 no.             | Examined root: PLATANUS (Plane). Only 0.6mm in diameter.           | <a href="#">Dead* (this result can be unreliable with such thin samples).</a> |

Click here for more information: [PLATANUS](#)

I trust this is of help. Please call us if you have any queries; our Invoice is enclosed.

Yours faithfully

Dr Ian B K Richardson

\* Based mainly on the Iodine test for starch. Starch is present in some cells of a living woody root, but is more or less rapidly broken down by soil micro-organisms on death of the root, sometimes before decay is evident. This result need not reflect the state of the parent tree.

\*\* Try out our web site on [www.botanical.net](http://www.botanical.net) \*\*



# Richardson's Botanical Identifications

Root identification  
Vegetation surveys  
Tree/Building investigations  
Plant taxonomy

Dr Ian B K Richardson  
BSc, MSc, PhD, MRSB, FLS

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**OL3 5DE**

**Enterprise House**  
**49-51 Whiteknights Road**  
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**Tel: (0118) 986 9552** (Direct line)

**E-mail: [richardsons@botanical.net](mailto:richardsons@botanical.net)**

**Web: [www.botanical.net](http://www.botanical.net)**

27/12/2025

Your ref: **Root ID**

Our ref: 90/4913

Dear Sirs

**15 Leaside Avenue N10 3BT**

The samples you sent in relation to the above on 25/11/2025 have been examined. Their structures were referable as follows:

| TP1, 0.57m (F.L.) |                                                                                                                                                                                                                                                         |                                                                  |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| 1 no.             | Examined root: less than 0.3mm in diameter. Too thin for confidence; NOT coniferous. We cannot rule out PRUNUS (Cherries, Plums and Damsons, Almonds, Peaches and Apricots, Blackthorn/Sloe, as well as the shrubby Cherry-laurel and Portugal-laurel). | Dead* (this result can be unreliable with such thin samples).    |
| TP1, 1.00m        |                                                                                                                                                                                                                                                         |                                                                  |
| 1 no.             | Examined root: the PRUNUS group (as listed above).                                                                                                                                                                                                      | Alive, recently*.                                                |
| 1 no.             | Microscopic examination showed insufficient cells for recognition.                                                                                                                                                                                      |                                                                  |
| TP1, 2.00m        |                                                                                                                                                                                                                                                         |                                                                  |
| 1 no.             | Examined root: essentially too THIN for identification. Possibly not coniferous.                                                                                                                                                                        | Dead* (as above, this 'dead' result could be an unreliable one). |
| TP1, 2.50m        |                                                                                                                                                                                                                                                         |                                                                  |
| 1 no.             | Examined root: a POOR sample, with NO BARK. In some ways like CARPINUS (Hornbeam) - and also AESCULUS (Horse Chestnut and related Buckeyes). Note - this was under 0.4mm in diameter. A tentative identification                                        | Very decayed*.                                                   |
| 2 no.             | Both samples revealed too few cells for microscopic identification.                                                                                                                                                                                     |                                                                  |
| TP1, 3.00m        |                                                                                                                                                                                                                                                         |                                                                  |
| 1 no.             | Examined root: again very immature. Possibly not coniferous. Tentative.                                                                                                                                                                                 | Dead* (as previously, this 'dead' result could be unreliable).   |

Click here for more information: [AESCULUS](#) [CARPINUS](#) [PRUNUS](#)

I trust this is of help. Please call us if you have any queries; our Invoice is enclosed.

Yours faithfully

Dr Ian B K Richardson

\* Based mainly on the Iodine test for starch. Starch is present in some cells of a living woody root, but is more or less rapidly broken down by soil micro-organisms on death of the root, sometimes before decay is evident. This result need not reflect the state of the parent tree.

Identified with no information on vegetation, on or off site.

## Detailed Findings

**A**

Section  
1

📍 Foul Pipe 1 → Downstream → Downstream 📏 100  
📦 VC- Vitrified Clay 🏠 Foul

4 obs



0.00m

Survey Start Point

-

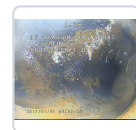


1.30m

Remark

🕒 1:09

Remarks: "Enters 3 lateral connection travels right"



1.40m

Remark

🕒 2:57

Remarks: "Water seen flowing from opposite lateral (SVP)"

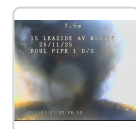


7.50m

Finish Node Point

🕒 5:46

Remarks: "Enters IC1"



A

Section 2 SVP1 → Downstream → Downstream ↻ 100

5 obs

VC- Vitrified Clay Foul



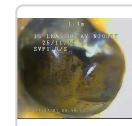
0.00m Survey Start Point



1.40m Remark

🕒 0:33

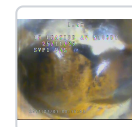
Remarks: "Enters 3 lateral junction (as in section 1)"



1.40m Remark

🕒 0:54

Remarks: "Water flows from opposite lateral (foul pipe 1)"



1.45m Remark

🕒 1:51

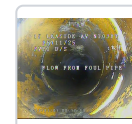
Remarks: "Water flows from right (WC)"



1.80m Finish Node Point

🕒 2:59

Remarks: "Enters main run (section 1 as already surveyed)"



# Site Investigation Report

## Site Images One



|              |                                    |      |            |
|--------------|------------------------------------|------|------------|
| Completed By | John Bonney                        | Date | 25/11/2025 |
| Address      | 15 Leaside Avenue, London, N10 3BT |      |            |
| Name         | Darren Spence & Anne Thirlwall     | Ref  | 136114     |



Front of Property



Front Porch



Left-Hand Side of Property



TPBH1 Location



TPBH1 Excavation



TPBH1 Excavation Probe



TPBH1 Sample(s)



TPBH1 Sample(s) Bagged



TPBH1 Completion (With Deep Datum)



TPBH2 Location



TPBH2 Excavation



TPBH2 Excavation Probe (Close-Up)

# Site Investigation Report

## Site Images Two



|              |                                    |      |            |
|--------------|------------------------------------|------|------------|
| Completed By | John Bonney                        | Date | 25/11/2025 |
| Address      | 15 Leaside Avenue, London, N10 3BT |      |            |
| Name         | Darren Spence & Anne Thirlwall     | Ref  | 136114     |



TPBH2 Sample(s)



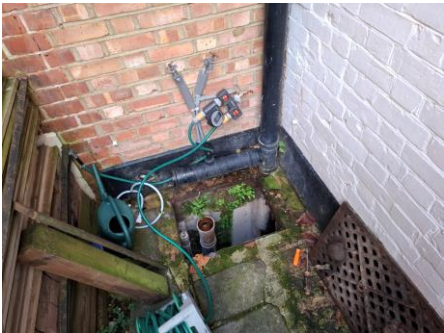
TPBH2 Root(s) Sample



TPBH2 Sample(s) Bagged



TPBH2 Completion



Drainage Access Chamber



Drains Accessed for Survey



IC1



Deep Datum



CCTV Survey



Water Meter Location



Water Meter