CCTV REPORT FOR: **SPINNEY HOUSE**
RUSTS LANE
HUNTINGDON
PE28 4DN

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Client: 360Globalnet
Regus House
Herald Way
Pegasus Business Park
Castle Donington
DE74 2TZ

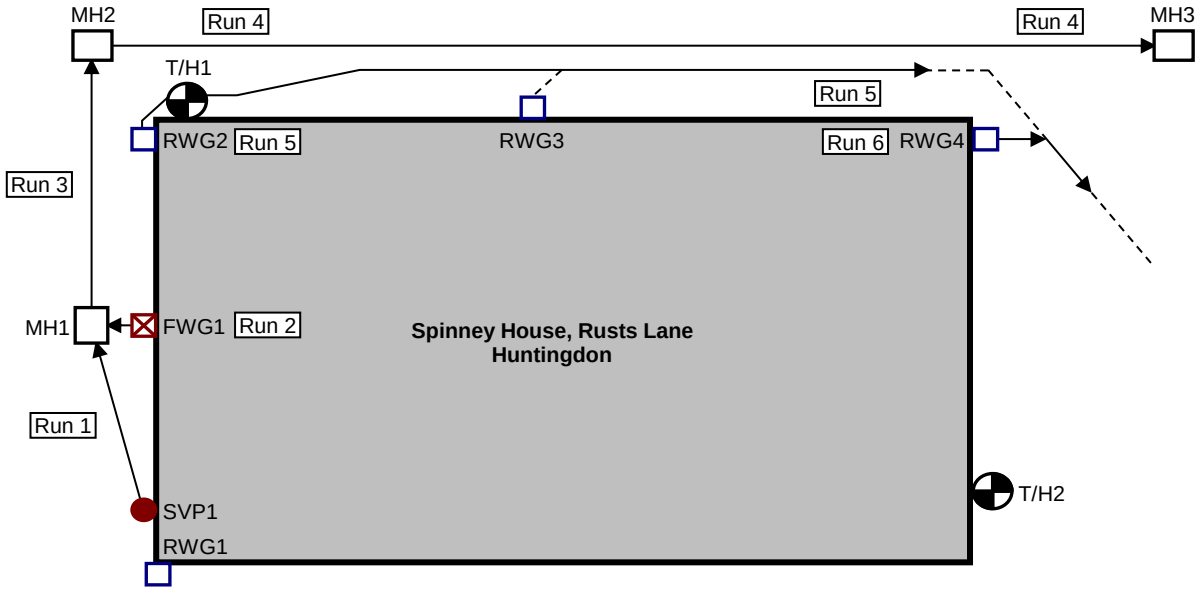
Insured: Mr Roland Ash
Reference: 087203279

Site Visit: 01-Sep-23
Report Date: 19-Sep-23

Drainage Repair Company

SITE LAYOUT

Site Crew: TLR	Date: 01-Sep-23



FRONT

(This plan is not to be scaled and is provided to illustrate general layout only)

General Comments:

Note: Runs shown in red have been adopted by the local water authority.

Key : = Storm Gully; = Storm Pipe; = Foul Gully; = W/C or Soil Pipe; = Inspection Chamber; = Rodding Eye; = Surveyed pipe indicating flow; = Unsurveyed pipe; = Exploratory Hole (hand dug pit and/or hand auger); = Boundary line; = Hedges & Shrubs; = Trees & bushes; = Area of damage

Address: **SPINNEY HOUSE, RUSTS LANE, HUNTINGDON, PE28 4DN**

Drainage Repair Company

CCTV SURVEY DETAILS

Site Crew: TLR	Date: 01-Sep-23

RUN: 1 **Pipe Dia. (mm):** 100 **System:** Foul Water **Made of:** Glazed Clay
From: MH1 **Inv (m):** 0.30 Upstream **To:** SVP1 **Inv (m):** -

Metres	Faults / Defects	Remarks
0.00		At MH1
		Start of liner repair
0.40		Creasing to liner
		Pipe bends left
1.84		End of liner repair
		Material changes to plastic
2.00		Pipe bends left
2.34	No Visible Defects	At SVP1
		End of survey

RUN: 2 **Pipe Dia. (mm):** 100 **System:** Foul Water **Made of:** Glazed Clay
From: MH1 **Inv (m):** 0.30 Upstream **To:** FWG1 **Inv (m):** -

Metres	Faults / Defects	Remarks
0.00		At MH1
0.23	No Visible Defects	At FWG1
		End of survey

RUN: 3 **Pipe Dia. (mm):** 100 **System:** Foul Water **Made of:** Plastic
From: MH1 **Inv (m):** 0.30 Downstream **To:** MH2 **Inv (m):** 0.40

Metres	Faults / Defects	Remarks
0.00	Root Ingress	At MH1
2.50	Medium Displaced Joint	Material changes to clay
		Water Level 20%
2.76		Pipe bends right
3.00		At MH2
		End of survey

Defects shown in RED relate to runs adopted by the Local Water Authority

Address: **SPINNEY HOUSE, RUSTS LANE, HUNTINGDON, PE28 4DN**

Drainage Repair Company

CCTV SURVEY DETAILS

Site Crew: TLR	Date: 01-Sep-23

RUN: 4 **Pipe Dia. (mm):** 100 **System:** Foul Water **Made of:** Glazed Clay

From: MH2 **Inv (m):** 0.40 Downstream **To:** MH3 **Inv (m):** -

Metres	Faults / Defects	Remarks
0.00		At MH2
		Start of liner repair
		Water Level 30%
1.80		Water Level 10%
5.60		End of liner repair
		Material changes to plastic
		Water Level 0%
12.63		Pipe bends left
12.89	No Visible Defects	At MH3
		End of survey

RUN: 5 **Pipe Dia. (mm):** 100 **System:** Storm Water **Made of:** Plastic

From: RWG2 Access Cut **Inv (m):** 0.10 Downstream **To:** Unknown **Inv (m):** -

Metres	Faults / Defects	Remarks
0.00		At RWG1 access cut
		Water Level 30%
0.16		Pipe bends right
0.28		Water Level 10%
1.38		Pipe bends left
2.34		Water Level 0%
2.97		Pipe bends right
5.26		Inlet at 3 o'clock to RWG3
6.44		Water Level 10%
7.61		Pipe bends right
8.99	Blockage	Unable to proceed
		End of survey

RUN: 6 **Pipe Dia. (mm):** 100 **System:** Storm Water **Made of:** Plastic

From: RWG4 **Inv (m):** 0.10 Downstream **To:** Run 5 **Inv (m):** -

Metres	Faults / Defects	Remarks
0.00		At RWG4
0.81		At junction to Run 5
0.90		Pipe bends right
		Water Level 10%
1.56	Blockage	Unable to proceed
		End of survey

Defects shown in RED relate to runs adopted by the Local Water Authority

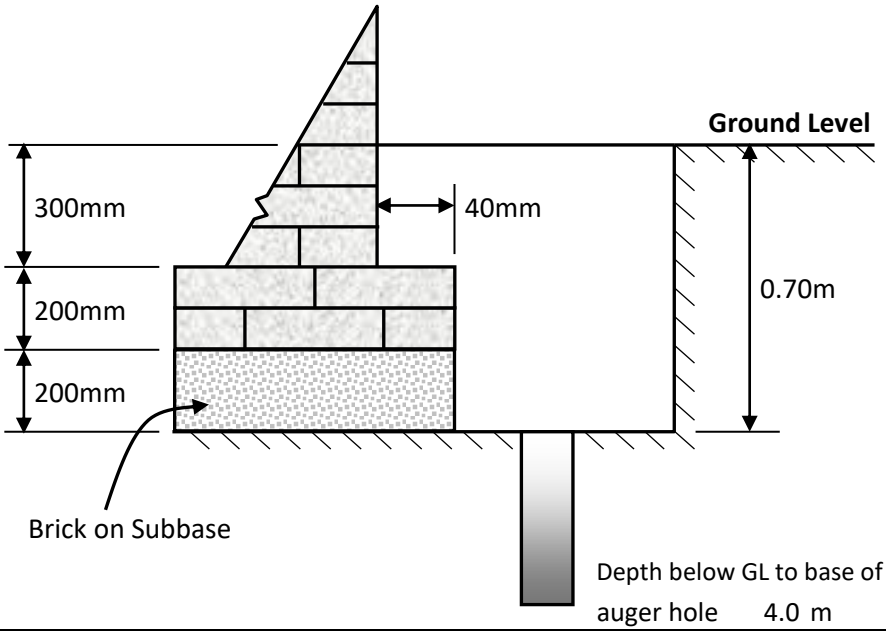
Address: **SPINNEY HOUSE, RUSTS LANE, HUNTINGDON, PE28 4DN**

Drainage Repair Company

FOUNDATION RECORD

Location: **Rear Left Corner of House**		T/H No. **1**
Ground Surface: Damp	Weather: Dry	Date: 01-Sep-23

Foundation Cross Section (Not to Scale)



Roots Depth & Diameter:
From 0.7m
Down to 2.0m
up to 5mm diameter

Water Depth Hit & Rise:
None observed on site

Reason for Termination:
Hole at instructed depth

Depth (m)	Soil Descriptions (NB: Field crew description only)	Test Type	Depth (m) From	Depth (m) To
G.L.				
0.70	Stiff grey/brown CLAY with some medium gravel & rare roots	P.P. 4.5	0.700	
1.00	Stiff grey/brown slightly sandy CLAY with some medium gravel (inc. chalk)	P.P. 4.5	1.000	
1.50	Stiff grey/brown CLAY with occasional medium gravel	P.P. 4.5	1.500	
2.00	Stiff grey/brown CLAY with rare medium gravel	P.P. 4.5	2.000	
2.50	Stiff grey/brown CLAY with rare medium gravel & gypsum	P.P. 4.5	2.500	
4.00	End of Borehole	P.P. 4.5	3.000	
		P.P. 4.5	3.500	
	Photograph	P.P. 4.5	4.000	



General Comments :

Key: Mac=Macintosh Probe, V(n)=Natural Shear Vane, P.P. = Pocket Penetrometer

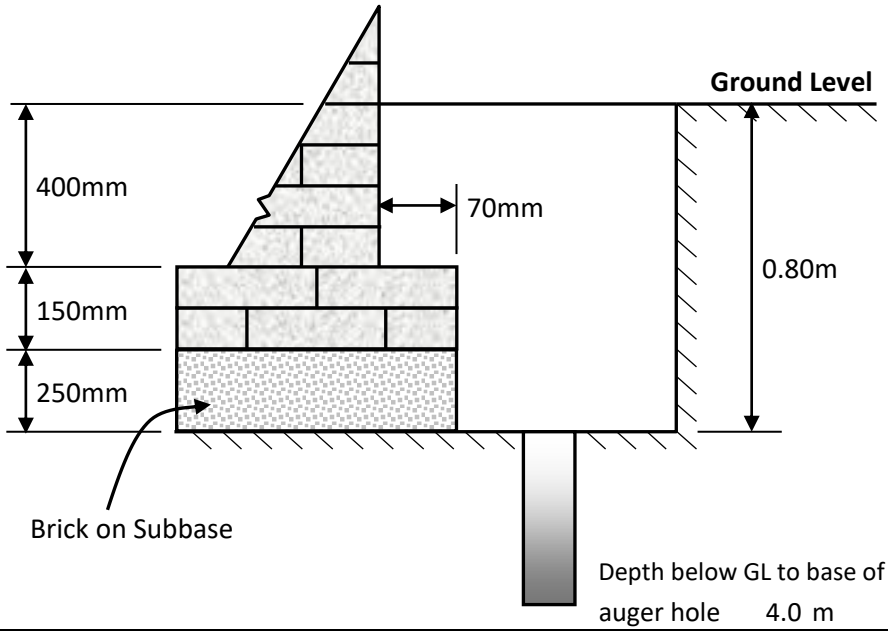
Address: **SPINNEY HOUSE, RUSTS LANE, HUNTINGDON, PE28 4DN**

Drainage Repair Company

FOUNDATION RECORD

Location: **Rear Left Corner of House**		T/H No. **2**
Ground Surface: Damp	Weather: Dry	Date: 01-Sep-23

Foundation Cross Section (Not to Scale)



Depth below GL to base of auger hole 4.0 m

Roots Depth & Diameter:
From 0.8m
Down to 1.8m
up to 5mm diameter

Water Depth Hit & Rise:
None observed on site

Reason for Termination:
Hole at instructed depth

Depth (m)	Soil Descriptions (NB: Field crew description only)	Test Type	Depth (m) From	Depth (m) To
G.L.				
0.80	Stiff brown slightly sandy CLAY with some medium gravel (inc. brick)	P.P. 4.5	0.800	
1.00	Stiff brown slightly sandy CLAY with some medium gravel (inc. chalk)	P.P. 4.5	1.000	
1.50	Firm/stiff grey/brown CLAY with occasional medium gravel	P.P. 4.5	1.500	
2.00	Stiff grey/brown CLAY with occasional medium gravel	P.P. 4.5	2.000	
2.50	Stiff grey/brown CLAY with rare medium gravel	P.P. 4.5	2.500	
3.00	Stiff grey/brown CLAY with rare medium gravel & gypsum	P.P. 4.5	3.000	
4.00	End of Borehole	P.P. 4.5	3.500	
	Photograph	P.P. 4.5	4.000	



General Comments :

Key: Mac=Macintosh Probe, V(n)=Natural Shear Vane, P.P. = Pocket Penetrometer

Address: **SPINNEY HOUSE, RUSTS LANE, HUNTINGDON, PE28 4DN**

Drainage Repair Company

INVESTIGATION SUMMARY

EXECUTIVE SUMMARY

Brief:	The Drainage Repair Company Ltd were commissioned to undertake a CCTV survey / inspection of the drainage at the property.
Specific Area of Interest:	Accessible drainage at the property.
System Access:	Inspection chambers on property, access cut to RWG2, RWG4.
Visual Survey:	N/A
Water Pressure Test:	No - unable to locate stop valve.

SUMMARY OF FINDINGS

Defects requiring repair:	See Recommendations
Is any damaged section shared:	No
No. of properties sharing:	N/A
Age of property / system:	Drainage system appears to be of mixed age.
Cause of damage:	N/A

Drainage Repair Company

INVESTIGATION SUMMARY

GENERAL SUMMARY

The results of the CCTV / inspection survey to the underground drainage system at the above address are as follows:

Run 1 - Foul - Private:
Some creasing to installed liner. No visible pipework defects.

Run 2 - Foul - Private:
No visible pipework defects.

Run 3 - Foul - Private:
Medium displaced joint where material changes from uPVC to clay, root ingress where pipework connects to MH1.

Run 4 - Foul - Private:
No visible pipework defects.

Run 5 - Storm - Private:
Survey abandoned at 8.99m due to blockage.

Run 6 - Storm - Private:
Survey abandoned at 1.56m due to blockage, camera is in Run 5 pipework at this point.

RWG1:
Gully blocked, no survey possible.

RWG3:
No access to gully due to planks of wood stored against wall with antenna balanced on top.

MH2:
The chamber is holding water and the water levels in Run 3 and Run 4 are between 20% and 30% in the pipework closest to it suggesting the chamber may have dropped slightly.

Address: **SPINNEY HOUSE, RUSTS LANE, HUNTINGDON, PE28 4DN**

RECOMMENDATIONS

We would recommend returning the system to a watertight condition by repairing the defects as follows:

Run 1:
No recommendations are required.

Run 2:
No recommendations are required.

Run 3 & Run 4:
See recommendations for MH2.

Run 5 & Run 6:
Carry out high pressure water jetting as required before performing a CCTV survey of the remaining drainage downstream, reporting further on the condition and destination of the pipework.

Should the pipework be found to discharge to soakaway then carry out flow tests to determine whether this is functioning adequately.

MH2:
Break out and replace MH2 with new preformed uPVC chamber. Renew pipework up and downstream as required to restore the correct gradient.

RWG1:
Excavate and replace RWG1 allowing for up to 1.0m of pipework downstream. Carry out high pressure water jetting as required before performing a CCTV survey of the remaining drainage downstream, reporting further on the condition and destination of the pipework.

Should the pipework be found to discharge to soakaway then carry out flow tests to determine whether this is functioning adequately.

RWG3:
Attempt CCTV survey from gully downstream to Run 5. In order to gain access the stored wood will need to be removed from the area around the gully and the antenna made safe.

Drainage Repair Company

QUOTATION

QUOTATION

MH2:

- Break out existing chamber
- Install new pre-formed uPVC chamber
- Renew pipework up and downstream as required to restore gradient
- Backfill excavation, reinstate surface, remove spoil from site

Total ex.VAT	**£658.35**
VAT	**£131.67**
Total inc.VAT	**£790.02**

Run 5 & Run 6:

- Carry out high pressure water jetting
- Perform CCTV survey
- Carry out flow test if discharge is to soakaway
- Further report on condition and destination of pipework

Total ex.VAT	**£352.88**
VAT	**£70.58**
Total inc.VAT	**£423.46**

RWG1:

- Excavate and replace FWG
- Excavate and replace up to 1.0m of pipework downstream
- Carry out high pressure water jetting
- Perform CCTV survey
- Carry out flow test if discharge is to soakaway
- Further report on condition and destination of pipework
- Backfill excavation, reinstate surface, remove spoil from site

Total ex.VAT	**£598.77**
VAT	**£119.75**
Total inc.VAT	**£718.52**

RWG3:

- Safe access to gully to be provided
- Attempt CCTV survey through gully
- Further report on condition of pipework

Total ex.VAT	**£95.00**
VAT	**£19.00**
Total inc.VAT	**£114.00**

Grand Total - All Works ex.VAT	**£1,705.00**
VAT	**£341.00**
Grand Total - All Works inc.VAT	**£2,046.00**

Address: **SPINNEY HOUSE, RUSTS LANE, HUNTINGDON, PE28 4DN**

Drainage Repair Company

PHOTOGRAPHS



MH1



MH2



FWG1 and SVP1



RWG1

Address: **SPINNEY HOUSE, RUSTS LANE, HUNTINGDON, PE28 4DN**

Drainage Repair Company

PHOTOGRAPHS



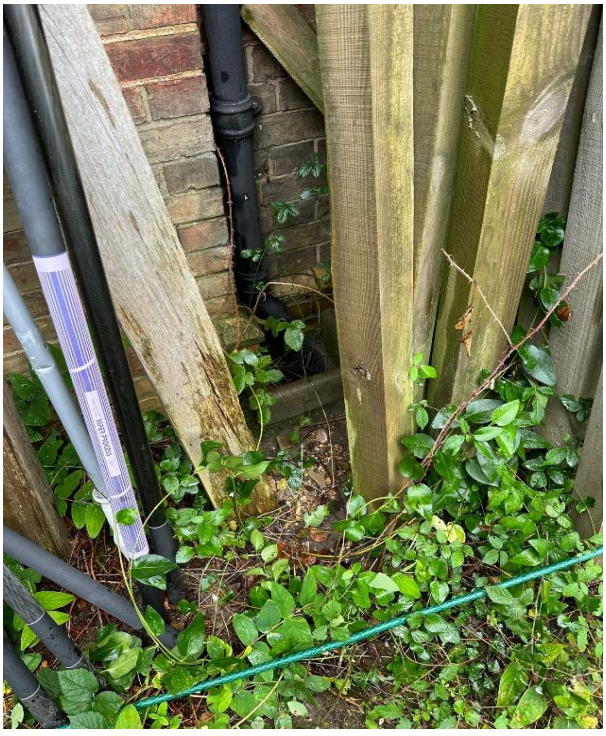
RWG2



RWG2 access cut



RWG3



RWG3

Address: **SPINNEY HOUSE, RUSTS LANE, HUNTINGDON, PE28 4DN**

Drainage Repair Company

PHOTOGRAPHS



T/H1



T/H1



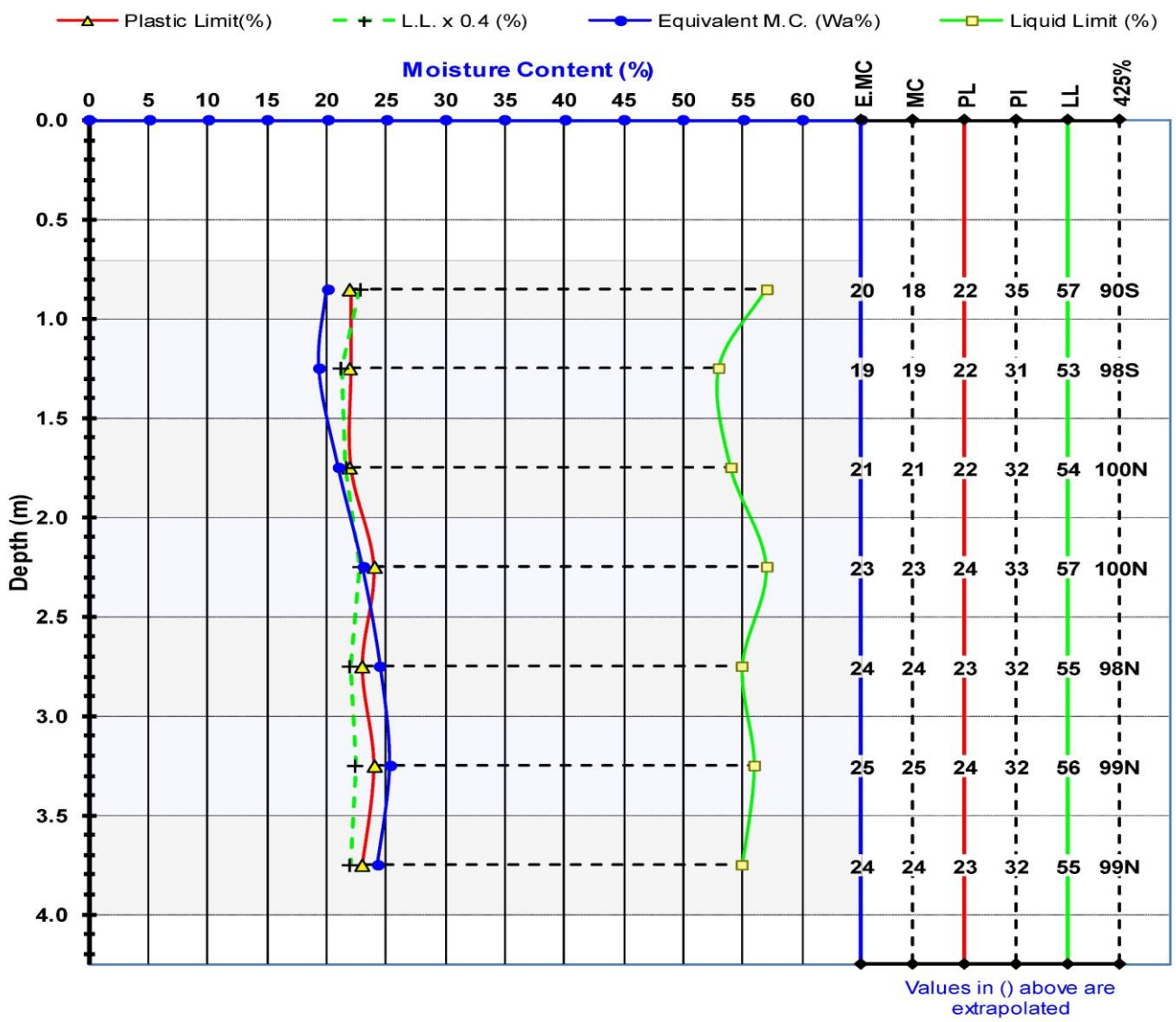
T/H2

Address: **SPINNEY HOUSE, RUSTS LANE, HUNTINGDON, PE28 4DN**

Drainage Repair Company

LABORATORY TESTING RESULTS

Depth T (m)	Depth B (m)	1 - RHS of house Brief Soil Description	Plasticity (BS 5930)	Volume Change M.PI	Volume Change (BRE 240)
0.7	1	Stiff grey/brown CLAY with some medium gravel & rare roots	High CH	32%	Medium
1	1.5	Stiff grey/brown slightly sandy CLAY with some medium gravel (inc. chalk)	High CH	30%	Medium
1.5	2	Stiff grey/brown CLAY with occasional medium gravel	High CH	32%	Medium
2	2.5	Stiff grey/brown CLAY with rare medium gravel	High CH	33%	Medium
2.5	3	Stiff grey/brown CLAY with rare medium gravel & gypsum	High CH	31%	Medium
3	3.5	Stiff grey/brown CLAY with rare medium gravel & gypsum	High CH	32%	Medium
3.5	4	Stiff grey/brown CLAY with rare medium gravel & gypsum	High CH	32%	Medium



Opinions and interpretations expressed in the chart above are outside the scope of UKAS accreditation.

Key:

MC = Natural Moisture Content (%)
E.MC = Equivalent Moisture Content (%) = **MC** x 100 / **425%**
M.PI = Modified Plasticity Index (%) = **PI** x **425%** / 100
425% = Material passing the 425µm sieve (%) + (**N** = Natural or **S** = Sieved)
Notes: *All samples received as Disturbed unless noted below in the comments.*

PL = Plastic Limit (%)
PI = Plasticity Index (%) = **LL - PL**
LL = Liquid Limit (%)
LL x 0.4 = 40% of the **LL** (%)
NP = Non Plastic

Samples prepared in accordance to BS1377:Part 1:1990 Section 7 & described in general accordance with BS5930:1999.

Samples tested *in accordance to BS1377:Part 2:1990 Section 3.2, 4.4 & 5.*

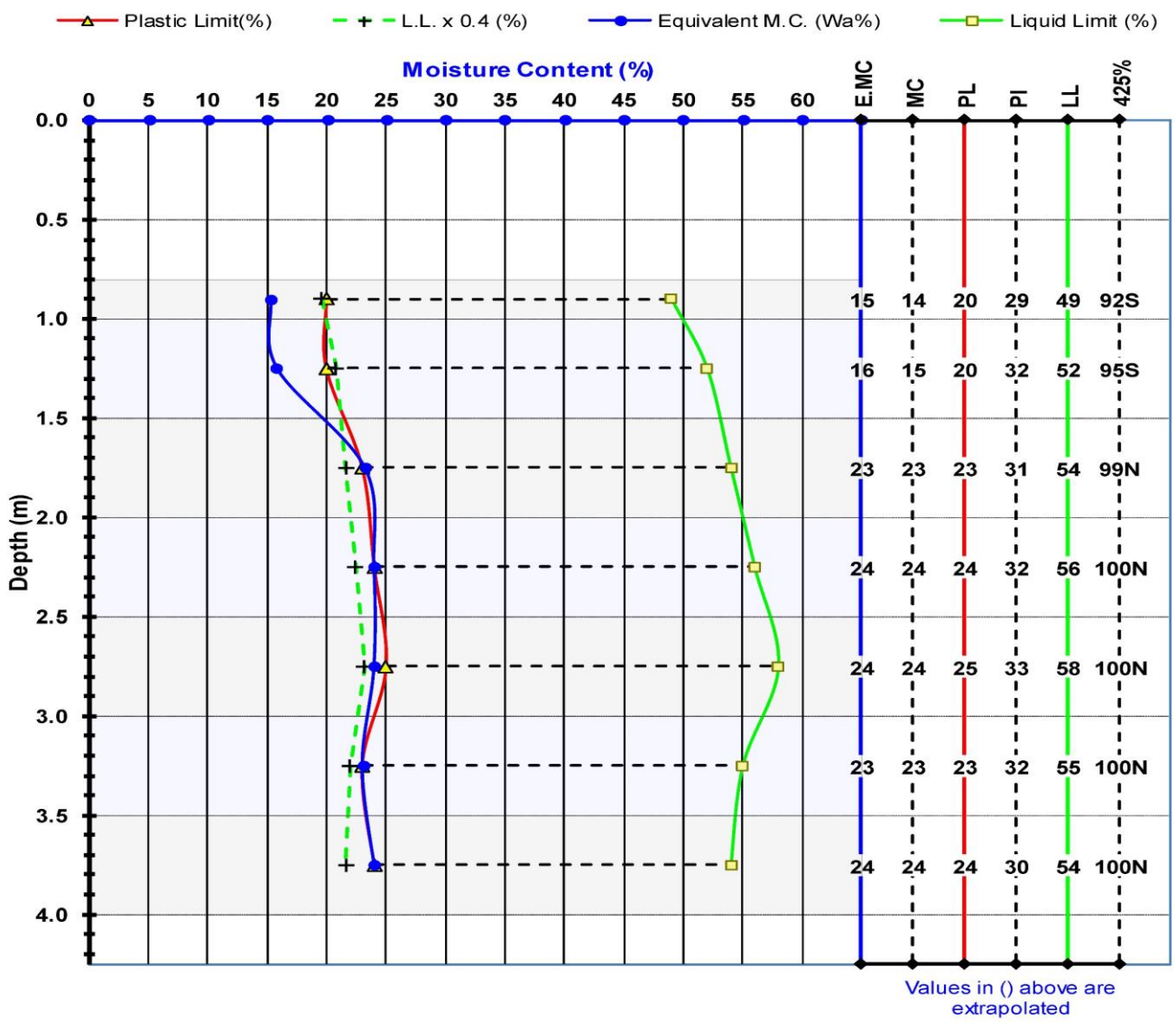
Comments:

Address: **SPINNEY HOUSE, RUSTS LANE, HUNTINGDON, PE28 4DN**

Drainage Repair Company

LABORATORY TESTING RESULTS

Depth T (m)	Depth B (m)	2 - Rear LHC Brief Soil Description	Plasticity (BS 5930)	Volume Change M.PI	Volume Change (BRE 240)
0.8	1	Stiff brown slightly sandy CLAY with some medium gravel (inc. brick)	Intmd. CI	27%	Medium
1	1.5	Stiff brown slightly sandy CLAY with some medium gravel (inc. chalk)	High CH	30%	Medium
1.5	2	Firm/stiff grey/brown CLAY with occasional medium gravel	High CH	31%	Medium
2	2.5	Stiff grey/brown CLAY with occasional medium gravel	High CH	32%	Medium
2.5	3	Stiff grey/brown CLAY with rare medium gravel	High CH	33%	Medium
3	3.5	Stiff grey/brown CLAY with rare medium gravel & gypsum	High CH	32%	Medium
3.5	4	Stiff grey/brown CLAY with rare medium gravel & gypsum	High CH	30%	Medium



Values in () above are extrapolated

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Samples prepared in accordance to BS1377:Part 1:1990 Section 7 & described in general accordance with BS5930:1999.

Samples tested *in accordance to BS1377:Part 2:1990 Section 3.2, 4.4 & 5.*

Comments:

Address: **SPINNEY HOUSE, RUSTS LANE, HUNTINGDON, PE28 4DN**

Drainage Repair Company

ROOT IDENTIFICATION

Richardson's Botanical Identifications

Root identification
Vegetation surveys
Tree/Building investigations
Plant taxonomy

Dr Ian B K Richardson
BSc, MSc, PhD, MRSB, FLS
James Richardson
BSc (Hons. Biology)

Enterprise House
49-51 Whiteknights Road
Reading
RG6 7BB

Tel: (0118) 986 9552 *(Direct line)*
E-mail: richardsons@botanical.net
Web: www.botanical.net

The Drainage Repair Company
Suite 15, Leatherline House
71 Narrow Lane
AYLESTONE
Leicester LE2 8NA

Your ref: **Root ID**

Our ref: 87/4116

15/09/2023

Dear Sirs

Spinney House PE28 4DN

The samples you sent in relation to the above on 05/09/2023 have been examined. Their structures were referable as follows:

TP/BH1, 0.7-1.5m		
6 no.	Examined root: ACER (Maples, Sycamores).	Alive, recently*.
8 no.	Examined root: FRAXINUS (Ash).	Alive, recently*.
6 no.	Unfortunately all with insufficient cells for identification.	
TP/BH1, 1.5-2.0m		
2 no.	Examined root: a very THIN sample (under 0.2mm in diameter). Could be the family Rosaceae, subfamily POMOIDEAE (a group of closely related trees: Malus (Apple), Pyrus (Pear), Crataegus (Hawthorn), Sorbus (Rowan, Whitebeam, Service tree), Mespilus (Medlar), and some shrubs (Pyracantha (Firethorn), Chaenomeles (Japonica), Cydonia (Quince), Amelanchier, Cotoneaster)). Tentative.	Alive, recently*.
3 no.	Unfortunately all with insufficient cells for identification.	
TP/BH2, 0.8-1.8m		
10 no.	Examined root: a conifer - particularly like the family CUPRESSACEAE (cypresses ('macrocarpa', 'Leylandii' etc.), Thuja (Western Red Cedar), Junipers).	Alive, recently*.
2 no.	Both pieces of BARK only - insufficient material for recognition.	
18 no.	Unfortunately all with insufficient cells for identification.	

Click here for more information: ACER CUPRESSACEAE FRAXINUS POMOIDEAE

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.

Report commissioned by Drainage Repair Company

Address: **SPINNEY HOUSE, RUSTS LANE, HUNTINGDON, PE28 4DN**

Drainage Repair Company

LIMITATION OF REPORT

We were commissioned to carry out an inspection of the accessible areas of the drainage to the property, identifying any major defects and recommending any repair works that may be necessary. It should be appreciated that the exact layout of the system cannot be confirmed without the exposure of inaccessible branches and connections etc.

The lack of any significant defects within the main drainage line should not be regarded as a guarantee of water tightness. Defects may be encountered upon exposure of inaccessible branches and gullies etc.

The contents of this report are strictly confined to comments concerning those terms outlined above. It is not a structural survey and must not be construed as such.

The views expressed in this report are based entirely upon a visual examination of the drainage, supported by information obtained from a CCTV inspection / water pressure test.