

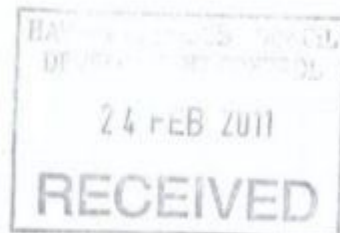
PERMIT

DAVIES

11 January 2011

Our Ref: 71014536

Mrs C Thomas
17 Broadmeadows Lane
Waterlooville
PO7 8QL



Dear Mrs Thomas

**Subsidence Insurance Claim
17 Broadmeadows Lane, Waterlooville, PO7 8QL**

Further to our previous Report and the investigations carried out at your property, we now enclose a copy of the Site Investigation Report by CET Safehouse Ltd for your information.

The presence of clay containing Oak roots below the foundation of the conservatory confirms that the cause of damage is clay shrinkage subsidence.

Yours sincerely



Pp Chris Sreeves BSc, MSc, MIStructE
Regional Technical Manager
Davies Subsidence Administration Unit
PO Box 2958
Stoke on Trent
ST4 9EY

Phone: 0844 856 2002
Fax: 0844 856 2007
General Email: post.dsau@davies-group.com

Cc: LV=

Encs: *Copy of CET Safehouse Ltd Site Investigation Report*
Addendum Technical Report



FACTUAL REPORT
OF
INVESTIGATION



AT:- 17 Broadmeadows Lane, Waterlooville

ON:- 22 November 2010

FOR:- I.V.
c/o Davies Group (Davies Project Managed Subsidence - DPMS)

REF:- 71014536-Thomas

JOB NO:- 95849

REPORT ISSUED:- 15/12/2010

SPECIALIST CONTRACTING DIVISION

CET SAFEHOUSE LIMITED

Lawness Barns, Mountnessing Road, Billericay, Essex CM12 0TS

WWW.CETSAFEHOUSE.COM

Tel: 01277 655377

Fax: 01277 655977

Investigation
Layout Plan

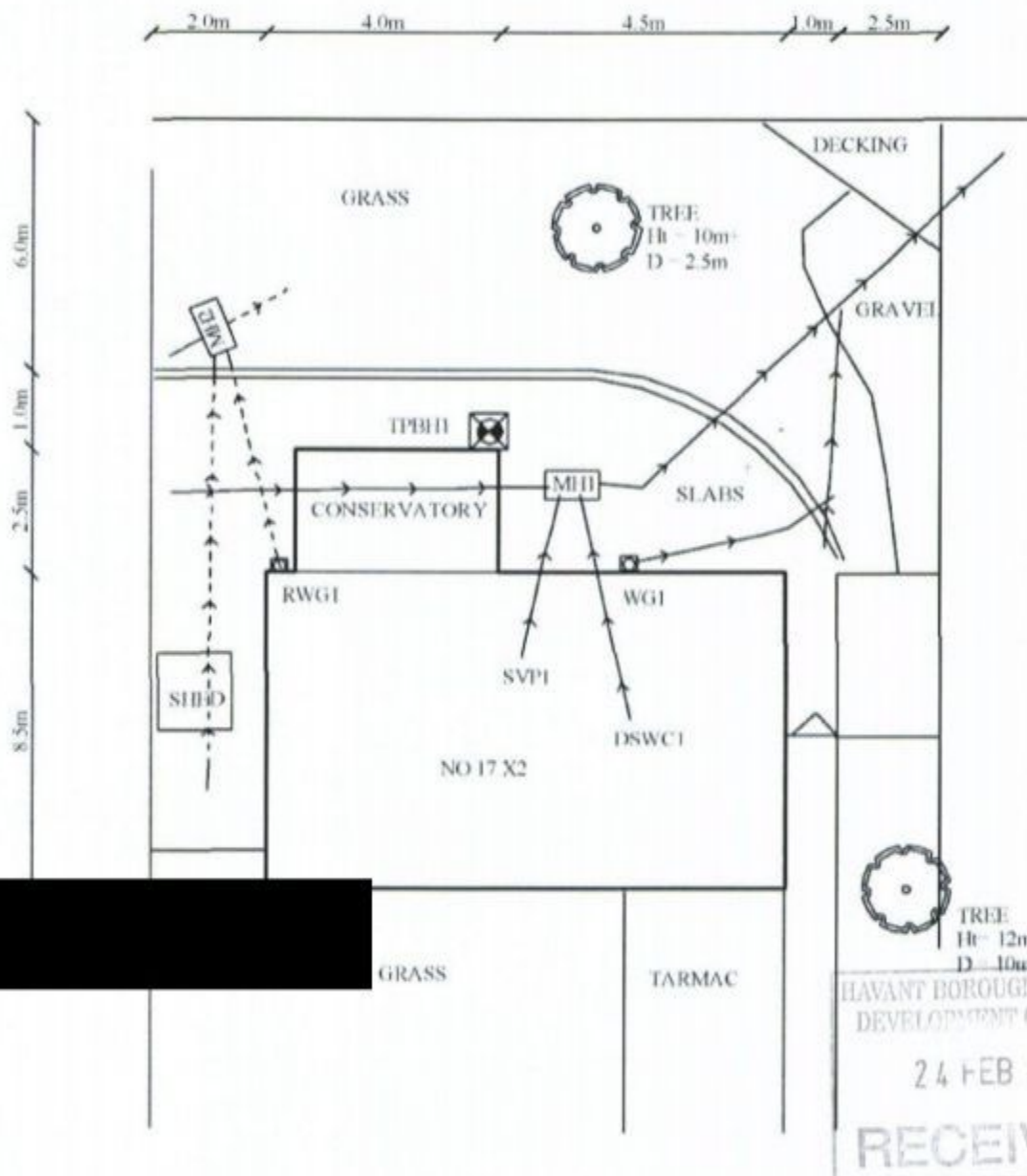
Sheet: 1 of 1
Job No. 95849E
Date: 22/11/1

Site: 17, Broadmeadows Lane,
Waterloooville
Work carried Davies Group

AC (SI)	PS (Checked)	JoF (Drawn)
------------	-----------------	----------------

Weather: Dry

Work carried
out for:



ON SITE TREE IDENTIFICATION FOR GUIDANCE ONLY - NOT AUTHENTICATED

1998

Key:

Combined Gully

RWVG

Surface Water Drain

Manhole

MH

Foul Water Drain

Rain Water Pipe

RWP

Tree Bush

Rain Water Gulley

RWG

(approx. ht in m)

Soil Vent Pipe

SVP

Trial P51

Waste Gulley

WG

Borehole

Waste Pipe

WP¹

DIAMOND
PAPER

Scale: N.T.S.



Trial Pit No: 1	Sheet: 1 of 1 Job No: 95849F Date: 22/11/10	Site: 17 Broadmeadows Lane, Waterlooville Work carried out for: Davies Group
Excavation Method: Hand Tools	Drawn by: NR	
Weather: Dry	Ground Level mOD.	

FOR STRATA BELOW 550mm SEE BH LOG 1

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Remarks: All measurements in millimetres.	Key: <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">D Small disturbed sample</td> <td style="width: 33%;">J Jar sample</td> </tr> <tr> <td>B Bulk disturbed sample</td> <td>V Pilcon Vane (kPa)</td> </tr> <tr> <td>W Water sample</td> <td>M Mackintosh probe</td> </tr> <tr> <td colspan="2">TD/TD Too dense to drive</td> </tr> </table>	D Small disturbed sample	J Jar sample	B Bulk disturbed sample	V Pilcon Vane (kPa)	W Water sample	M Mackintosh probe	TD/TD Too dense to drive	
D Small disturbed sample	J Jar sample								
B Bulk disturbed sample	V Pilcon Vane (kPa)								
W Water sample	M Mackintosh probe								
TD/TD Too dense to drive									
Logged: AC Checked: PS Approved:	Scale: N.T.S.								

Borehole No: 1		Sheet: 1 of 1		Site: 17 Broadmeadows Lane, Waterloooville											
Boring Method: Hand Auger		Job No: 95849E								Date: 22/11/2010					
Diameter: 75mm		Coordinates:								Ground Level mOD:		Work Carried out for: Davies Group			
Depth (m)	Description of Strata	Thick-ness (m)	Legend	Sample	Test Type	Result	Depth (m)	Field Records/Comments	Depth to water (m)						
0.55	As Trial Pit 1	0.55						Roots of live & dead appearance to 2mm diameter to 1.1m							
1.00	Firm, mid brown, grey veined, silty CLAY with partings of orange silt & fine sand occasional gravel & carbon deposits	0.45	— x — — —	D	V	140+ 140+	1.00								
1.10	Very stiff mid brown grey veined silty CLAY with partings of orange silt & fine sand, gravel & carbon flecks	0.10	x — — x — —					Slight water seepage at	1.10						
	BH ends at 1.1m Obstruction: Too dense to hand auger														
Remarks: BH moist & open on completion					Key: T.D.T.D. Too Dense to Drive D Small disturbed sample J Jar sample B Bulk disturbed sample V Pilcon Vane (kPa) W Water sample M Mackintosh Probe										
Logged: AC	Checked: PS	Drawn By: NR	Scale: NTS		Weather: Dry										

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Laboratory Testing Results

Our Ref: 95849
 Location: 17 Broadmeadows Lane
 Work carried out for: Davies Group (Davies Project Managed Subsidence - DPMMS)
 Date Sampled: 22/11/2010
 Date Received: 23/11/2010
 Date Tested: 24/11/2010
 Date of Report: 05/12/2010

Sample Ref TP 164 No	Depth (m)	Moisture Content (%) [11]	Soil Friction (%) [12]	Liquid Limit (%) [3]	Plastic Limit (%) [4]	Plasticity Index (%) [5]	Liquid Index (%) [6]	Soil Class (7)	Filter Paper Contact Time (h) [8]	Soil Sample Suction (kPa) [9]	In situ Shear Vane Strength (kPa) [9]	Organic Content (% w/10)	pH Value (11)	Sulphate Content (g/l)		Class (14)
														w/3	w/4	
1	0.35(U/S)	34	<5	66	27	39	0.17	CH	216	28	49					
	1.0	33	14	69	27	43	0.15	CH	216	29	> 140					

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Test Methods / Notes

[1] BS 1377 - Part 2: 1990, Test No 2.2
 [2] Estimated L_c (%), otherwise estimated
 [3] BS 1377 - Part 2: 1990, Test No 4.4
 [4] BS 1377 - Part 2: 1990, Test No 9
 [5] BS 1377 - Part 2: 1990, Test No 5.3
 [6] BS 1377 - Part 2: 1990, Test No 5.4
 [7] BS 1377 - Part 2: 1990, Test No 5.5
 [8] BS 1377 - Part 2: 1990, Test No 5.6
 [9] BS 1377 - Part 2: 1990, Test No 5.7
 [10] BS 1377 - Part 2: 1990, Test No 5.8
 [11] BS 1377 - Part 2: 1990, Test No 5.9
 [12] BS 1377 - Part 2: 1990, Test No 5.10
 [13] BS 1377 - Part 2: 1990, Test No 5.11
 [14] BS 1377 - Part 2: 1990, Test No 5.12

Key

D Disturbed sample (small)
 B Disturbed sample (bulk)
 U Undisturbed sample
 W Compacted sample
 ESR Essentially Non-Plastic by inspection
 C/N Underlain by Foundation

Moisture Content and Suction Profiles

Our Ref : 95849

Location : 17 Broadmeadows Lane

Work carried out for : Davies Group

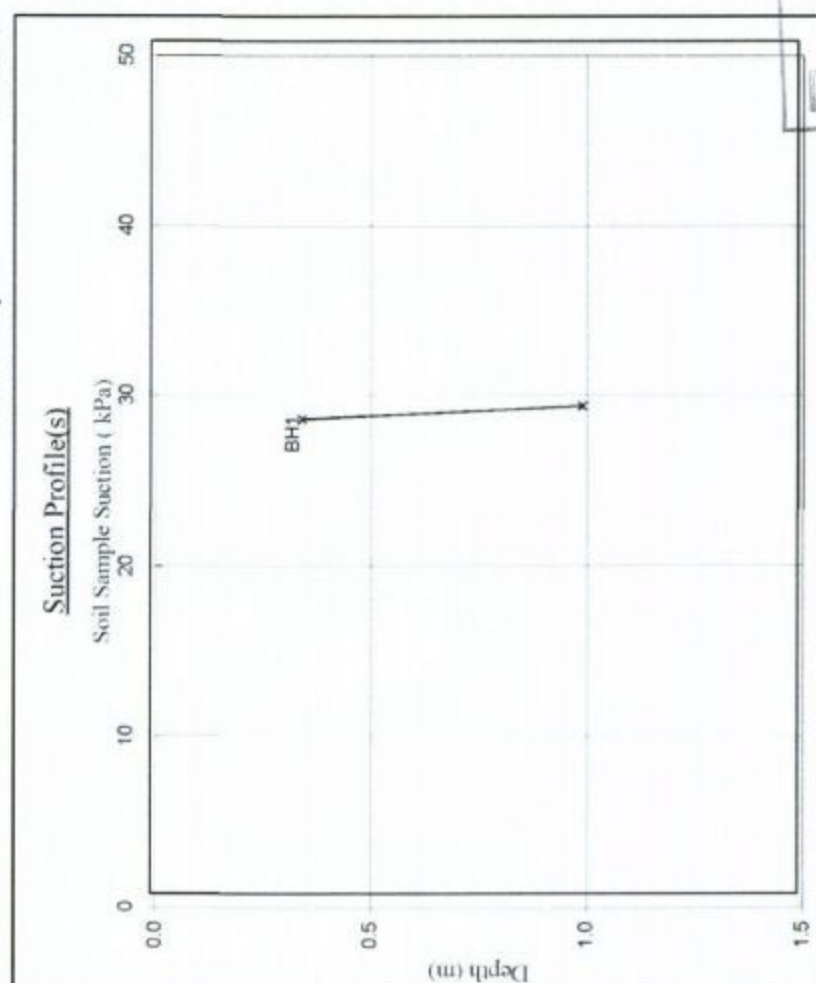
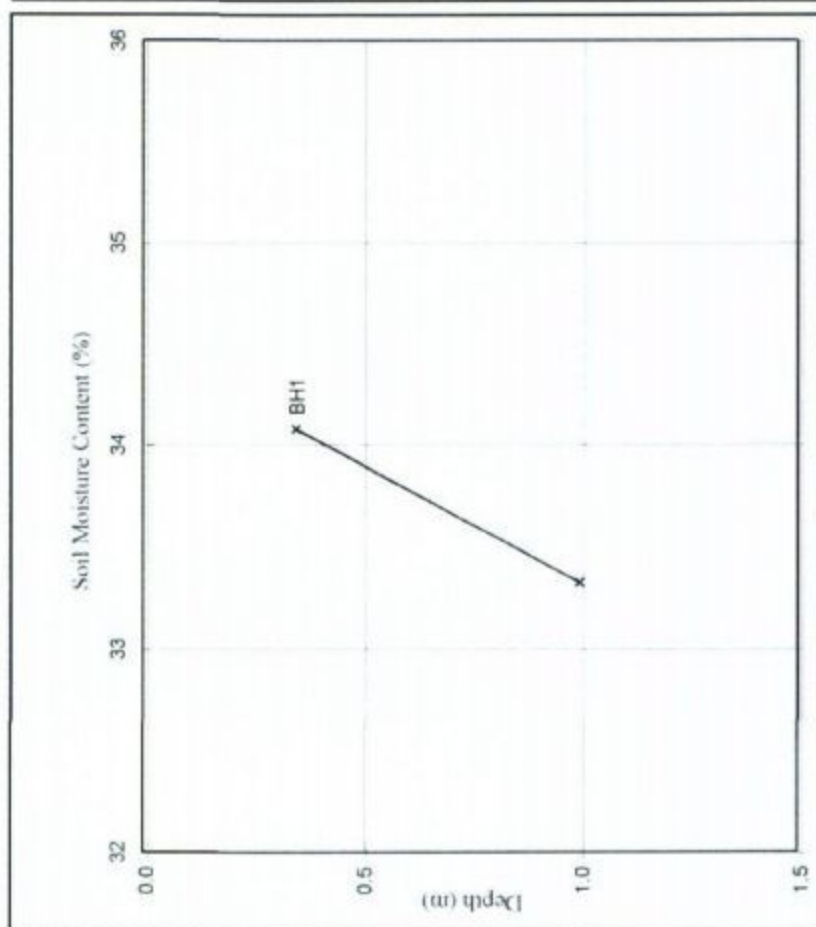
Date Sampled : 22/11/2010

Date Received : 23/11/2010

Date Tested : 24/11/2010

Date of Report : 05/12/2010

Note : Unless specifically noted the profiles have not been related to a site datum



Notes

1. If the Soil Fraction $> 0.425\text{mm}$ exceeds 5% the Equivalent Moisture Content of the remainder (calculated in accordance with BS 1377: Part 2 : 1990, cl.3.2.4 note 1) is also plotted and the alternative profile additionally shown as an appropriately coloured broken line.
2. If plotted, 0.4 LL and $PI_{L:2}$ (after Driscoll, 1983) should only be applied to London Clay (and similarly overconsolidated clays) at shallow depths.

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 dependent on the method of sampling and any subsequent recompaction. The above plots show this to be 100kPa which is the value suggested by the IIRE 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.



Moisture Content and Shear Strength Profiles

Our Ref : 95849

Location : 17 Broadmeadows Lane

Work carried out for : Davies Group

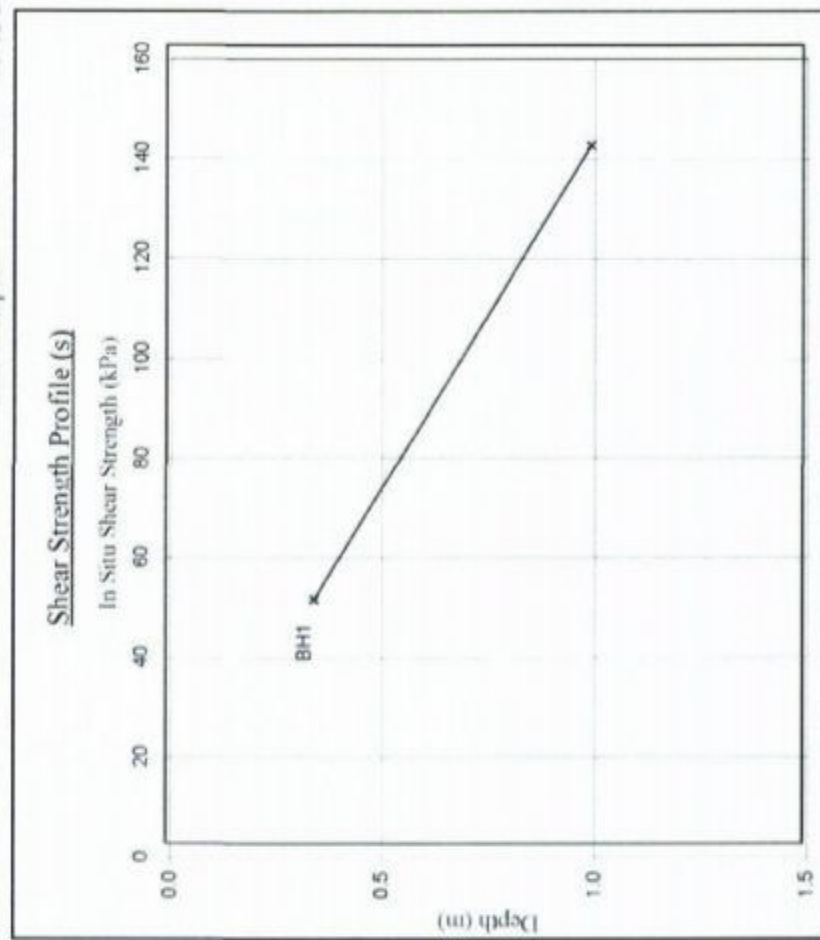
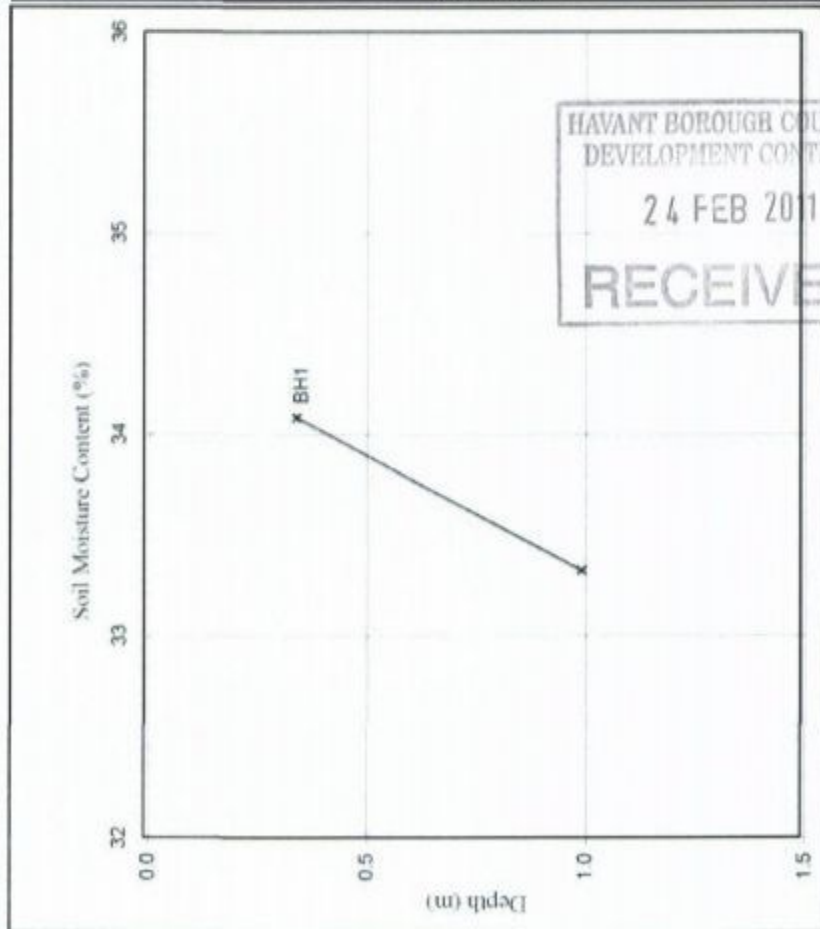
Date Sampled : 22/11/2010

Date Received : 23/11/2010

Date Tested : 24/11/2010

Date of Report : 05/12/2010

Note : Unless specifically noted the profiles have not been related to a site datum.

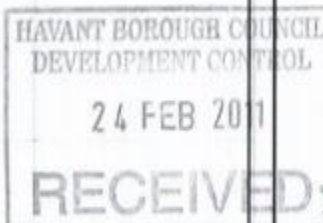


Notes

1. If the Soil Fraction > 0.425mm exceeds 5% the Equivalent Moisture Content of the remainder (calculated in accordance with BS 1377, Part 2 : 1990, cl.3.2.4 note 1) is also plotted and the alternative profile additionally shown as an appropriately coloured broken line.
2. If plotted, 0.4 L.L. and P.L. - 2 (after Driscoll, 1983) should only be applied to London Clay (and similarly overconsolidated clays) at shallow depths.

Note

Unless otherwise stated, values of Shear Strength were determined in situ by CET Group using a Picon Hand Vane the calibration of which is limited to a maximum reading of 140 kPa.



Tree Root Identification Ltd

Sheet 1 of 1

Job No: 95849
Date: 25.11.2010
Order No: 331198
Our Ref: CET251110

Site: 17 Broadmeadows Lane,
Waterlooville.
Work carried out for: Davies Group

Certificate of Analysis

The following work was commissioned by CET Safehouse Limited on behalf of their client. Root samples were obtained in sealed packets from the above site with no reference given as to the types of tree or shrub from which they may have originated.
The results were as follows -

<u>Trial pit/ Borehole number</u>	<u>Root diameter (mm)</u>	<u>Tree, shrub or climber from which root originates</u>	<u>Result of starch test#</u>
TPI (underside)	5.0	Quercus (oak) (4 roots)	positive
BH1 (depth: 550mm to 1.1m)	0.5-1.0	Quercus (oak) (3 roots)	positive

The presence of starch indicates that the root was alive in the recent past.



Ronald Macleod

DR RONALD D MACLEOD
Principal Scientist

Address for correspondence: 3 Langley Drive, Kennell Hill, Perth, PH2 7XA

Telephone: 01738 630873

e-mail: rdm@macleod-jb.com web site: www.treerootidentification.co.uk

Principal Scientist: R.D. Macleod BSc., Ph.D.

Accounts/Quality Manager: Tessa M. Snelton, FRCV (Management)

Registered in Scotland, No. 358696. Registered Office: "Machrie", Highfield Place, Bunkie, FRI 1AX

CET SAFEHOUSE, Unit E2, Boundary Court, Willow Farm Business Park, Castle Donington, DE74 2NS
Telephone - 01332 813700 Fax - 01332 814750 E-mail - drainage.solutions@cetsafehouse.com

To: Davies Group (Davies Project Managed Subsideance - DPMs)

Our Ref: **95849**

Davies Project Managed Subsideance
PO Box 7958
Chas. Sturges
ST4 9EV

Your Ref: 71014536

Date: **23 Nov 10**

From:

ESTIMATE

17 Drainage Items: Watercourse		
Item		Amount
1.0	Location: Manhole 1 upstream to the Down Run a Shared System: No Condition Grade: B Drain Serviceability: Unserviceable Probable Cause: Ground movement Work Spec: Line from manhole 1 upstream for 3.0 metres using slotted liner	£520.00
2.0	Location: Manhole 1 upstream to Sep 1 Run b Shared System: No Condition Grade: B Drain Serviceability: Unserviceable Probable Cause: Ground movement Work Spec: Replace the rockier channel within the manhole	£167.00
3.0	Location: Wg 1 downstream to the main run Shared System: No Condition Grade: B Drain Serviceability: Unserviceable Probable Cause: Ground movement Work Spec: Excavate and replace the gully and 1.0 metres of pipe-work	£560.00
4.0	Location: Manhole 2 upstream to Row 1 Run a Shared System: No Condition Grade: B Drain Serviceability: Unserviceable Probable Cause: Ground movement Work Spec: Excavate and replace the gully and 0.5 metres of pipe-work. Line from manhole 2 upstream to the excavation	£790.00
5.0	Location: Manhole 2 upstream Run b Shared System: No Condition Grade: B Drain Serviceability: Unserviceable Probable Cause: Ground movement Work Spec: Line from manhole 2 upstream for 3.0 metres	£420.00

Notes



Total	£2,397.00
plus VAT @17.5%	£451.48
Total + VAT	£3,051.48

Quotation is binding only if accepted within 28 days from date of issue and is subject to our Standard Terms and Conditions

The price/qualification notes stated on this Schedule of rates apply to this quotation

The CET Safehouse undertakes to return to site free of charge to carry out remedial work to the drainage repairs set out above for a period of 2 months from the date of this invoice. The company standard charge rates will apply to the work should the work requested be unrelated to the said repairs

ESTIMATING & COSTING SHEET - DOMESTIC DRAINAGE

Site:- 17 Broadmeadows Lane, Watlingtonville

Client :- Davies Group (Davies Project Managed Subsidence - DPMS)
Attention of:- Chris Reeves

Client ref	71014536
Job Number	95810
Invoice	1.V
Date	23-Nov-10
Recommendation	1

Item No	Description	Unit	Quantity	Rate	Price
0.01	Manhole 1 upstream to the Dowe. Run a	item			
0.02	Excavate and remove 110mm pipework - 0-1m depth	m		1100.00	
1.00	Site Call Out for CCTV	item		135.00	
1.01	CCTV up to 2 hrs on site - 08.00 to 17.50 hrs	item		1150.00	
1.02	1.0 per 1.2 hour	item		130.00	
2.00	Cut/Join/Replaces/Junctions/Interceptors/excavate and replace	item			
2.01	Cut/Join 110mm	item		1250.00	
2.02	Rejoining eye-end bend 110mm	item		1750.00	
2.03	Rejoin Bend 110mm	item		1265.00	
2.04	Junction bend 110mm 0-1m depth	item		1250.00	
2.05	Junction bend 110mm up to 2m depth	item		1900.00	
2.06	Junction bend 110mm 2m+	item		PCIA	
2.07	Junction bend 110mm 0-1m depth	item		1265.00	
2.08	Junction bend 110mm up to 2m depth	item		1515.00	
2.09	Junction bend 110mm 2m+	item		PCIA	
2.10	Interceptor 110mm connections up to 1m depth	item		1310.00	
2.11	Interceptor 110mm connections up to 1m depth	item		1380.00	
2.12	Interceptor 110mm connections up to 2m depth	item		1560.00	
2.13	Interceptor 110mm connections up to 2m depth	item		1630.00	
2.14	Interceptor 2m+	item		PCIA	
3.00	Pipe Excavation/Replacement/Materials	item			
3.01	Excavate and remove 110mm pipework - 0-1m depth	m		1110.00	
3.02	Excavate and remove 110mm pipework - 1-1.5m depth	m		1190.00	
3.03	Excavate and remove 110mm pipework - 1.5-2.0m depth	m		1250.00	
3.04	Excavate and remove 110mm pipework - 2.0m+ depth	m		PCIA	
3.05	Excavate and remove 110mm pipework - 0-1m depth	m		1160.00	
3.06	Excavate and remove 110mm pipework - 1-1.5m depth	m		1215.00	
3.07	Excavate and remove 110mm pipework - 1.5-2.0m depth	m		1270.00	
3.08	Excavate and remove 110mm pipework - 2.0m+ depth	m		PCIA	
4.00	Supplement for breaking out and reinstatement of surfaces	item			
4.01	Slabs	m		130.00	
4.02	Block Paving	m		175.00	
4.03	Concrete	m		170.00	
4.04	Reinforced Concrete	m		190.00	
4.05	Tarmac (cold lay)	m		140.00	
5.00	Supplement for difficult ground conditions	item			
5.01	Gay Clay	m		120.00	
5.02	Wet Clay	m		130.00	
5.03	Rocky Soil	m		1195.00	
5.04	Barren Road	m		1210.00	
6.00	Supplement for Concrete Pipe Surround	item			
6.01	Breaking Out	m		130.00	
6.02	Repatching	m		134.00	
7.00	Cleaning of Drains	item			
7.01	Cleaning of drains up to 110mm diameter including root cutting & removal of scale	hr		165.00	
7.02	Removing debris in manholes	hr		140.00	
8.00	Lining manholes	item			
8.01	Set up for 110mm diameter drain lining including first 3m lined	m	1.0	1290.00	1290.00
8.02	110mm diameter drain lining - 3m length	m	2.0	165.00	330.00
8.03	Set up for 110mm diameter drain lining including first 3m lined	m		1310.00	
8.04	110mm diameter drain lining - 3m length	m		175.00	
8.05	Pre-clean drain of external silt & debris	hr		165.00	
8.06	Root cutting if required	hr		165.00	
8.07	Post active survey of runs lined	item	1.0	1100.00	1100.00
8.08	Manhole lining charge	item		1290.00	
9.00	"Patch 1 line"	item			
9.01	1st Application 110mm	item		1300.00	
9.02	Each subsequent application	item		1200.00	
9.03	1st Application 110mm	item		1350.00	
9.04	Each subsequent application	item		1210.00	
10.00	Lateral cutting ups to 110mm diameter	item			
10.01	Re-open lateral branch ups to 2m deep	hr		1190.00	
10.02	Re-open lateral branch ups to 3m deep	hr		1280.00	
10.03	Re-open lateral branch ups to 3m+ deep	hr		PCIA	
11.00	Reinstatement	item			
11.01	Reinstatement of other surfaces, cost of materials - 25% (provisional sum)	cost		11.25	
11.02	Days works Labour - 2 man hours	hr		170.00	
12.00	Manholes	item			
12.01	Confined space equipment on manholes between 1.2 - 2.5m	item		1125.00	
12.02	Confined space equipment plus extra man. manholes - 2.5m	item		1350.00	
12.03	Manhole works (boarding etc.)	hr		140.00	
12.04	Excavation & backfill of new soakaway 1.5m x 1m with stone rejects	item		1315.00	
12.05	Spot disposal fee	item		180.00	
12.06	Survey showing charge at cost plus 25%	cost		11.25	
12.07	Estimate based on survey by others. Pre-survey of runs by rigour crew	item		1100.00	
12.08	Shoring up trenches in work exceeding 1.2m depth subject to risk assessment	item		PCIA	
12.09	Highways Work Permit Required	item		PCIA	
Total subject to VAT at 17.5%					1520.00

Note: Subject to the attached Terms and Conditions

A - When calculating prices, all measurements are rounded up

C - Every effort will be made to match existing services - where disturbed although this cannot be guaranteed

D - Driveway rates do not include for materials fee are charged at cost plus 25%

RECY - not exceeding 10 - extra over rate 10 - same rate up - another 10 - hour

B - Depths are taken to the base of excavations

D - All rates exclude VAT

F - The above rates are subject to re-measurement

E - Depths are taken to the base of excavations

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DEVELOPMENT CONTRO

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ESTIMATING & COSTING SHEET - DOMESTIC DRAINAGE

Site:-

17 Broadmeadows Lane, Waterlooville

Client:-

Davies Group (Davies Project Managed Subsidence - DPMS)

Attention of:

Chris Reeves

Client ref

71014536

Job Number

05809

Invoice

LV

Date

23-Nov-10

Recommendation

2

Description						
Item No	Manhole 1 upstream to Syp 1. Run b	Unit	Quantity	Rate	Price	
0.01	Non-spen Initial 1 hr	item		£100.00		
0.02	Subsequent 1.2 hr	item		£25.00		
1.00	Site Call Out for CCTV					
1.01	CCTV up to 2 hrs on site - 08.00 to 17.00 hrs	item		£150.00		
1.02	E.O per 1.2 hour	item		£30.00		
2.00	Gullies/Junctions/Interceptors (excavate and replace)					
2.01	Gully 110mm	item		£250.00		
2.02	Rodding eye cast band 110mm	item		£250.00		
2.03	Rest Band 100mm	item		£265.00		
2.04	Function band 110mm 0-1m depth	item		£250.00		
2.05	Function band 110mm up to 2m depth	item		£500.00		
2.06	Function band 110mm 2m+	item		PCJA		
2.07	Function band 100mm 0-1m depth	item		£265.00		
2.08	Function band 100mm up to 2m depth	item		£515.00		
2.09	Function band 100mm 2m+	item		PCJA		
2.10	Interceptor 100mm connections up to 1m depth	item		£310.00		
2.11	Interceptor 150mm connections up to 1m depth	item		£380.00		
2.12	Interceptor 150mm connections up to 2m depth	item		£560.00		
2.13	Interceptor 150mm connections up to 2m depth	item		£630.00		
2.14	Interceptor 2m+	item		PCJA		
3.00	Pipe Excavation/Replacement/Materials					
3.01	Excavate and remove 110 pipework - 0-1m depth	m	1.0	£140.00	£140.00	
3.02	Excavate and remove 110mm pipework - 1-1.5m depth	m		£190.00		
3.03	Excavate and remove 110mm pipework - 1.5-2.0m depth	m		£250.00		
3.04	Excavate and remove 110mm pipework - 2.0m+ depth	m		PCJA		
3.05	Excavate and remove 100mm pipework - 0-1m depth	m		£165.00		
3.06	Excavate and remove 100mm pipework - 1-1.5m depth	m		£215.00		
3.07	Excavate and remove 100mm pipework - 1.5-2.0m depth	m		£270.00		
3.08	Excavate and remove 100mm pipework - 2.0m+ depth	m		PCJA		
4.00	Supplement for breaking out and reinstatement of surfaces					
4.01	Slabs	m		£30.00		
4.02	Block Paving	m		£75.00		
4.03	Concrete	m		£70.00		
4.04	Reinforced Concrete	m		£90.00		
4.05	Tarmac (cold lay)	m		£40.00		
5.00	Supplement for difficult ground conditions					
5.01	Dry Clay	m		£20.00		
5.02	Wet Clay	m		£30.00		
5.03	Rocky Soil	m		£105.00		
5.04	Running Sand	m		£210.00		
6.00	Supplement for Concrete Pipe Surround					
6.01	Breaking Out	m		£30.00		
6.02	Replaster	m		£34.00		
7.00	Cleaning of Drains					
7.01	Cleaning of drains up to 150mm diameter including root cutting & removal of scale	hr		£65.00		
7.02	Removal of debris in manholes	hr		£89.00		
8.00	Lining works					
8.01	Set up for 100mm diameter drain lining includes first 3m lined	m		£290.00		
8.02	100mm diameter drain lining - 3m length	m		£65.00		
8.03	Set up for 150mm diameter drain lining includes first 3m lined	m		£310.00		
8.04	150mm diameter drain lining - 3m length	m		£75.00		
8.05	Pre-clean drain of normal soil & debris	hr		£65.00		
8.06	Root cutting if required	hr		£65.00		
8.07	Post job survey of manhole	item		£190.00		
8.08	Minimum length charge	item		£290.00		
9.00	"Patrick Laser"					
9.01	For Applications 110mm	item		£300.00		
9.02	Each subsequent application	hr		£290.00		
9.03	For Applications 150mm	item		£330.00		
9.04	Each subsequent application	hr		£210.00		
10.00	Lateral cutting upto 150mm diameter					
10.01	Re-open lateral branch upto 2m deep	hr		£190.00		
10.02	Re-open lateral branch upto 3m deep	hr		£280.00		
10.03	Re-open lateral branch upto 3m+ deep	hr		PCJA		
11.00	Reinstatement					
11.01	Reinstatement of other surfaces, cost of materials - 25% (professional sum)	sqm		£1.25		
11.02	Draw works Labour (2 man team)	hr		£70.00		
12.00	Accessories					
12.01	Confined space equipment on manholes between 1.2 - 2.5m	Sum		£125.00		
12.02	Confined space equipment plus extra man, manholes - 2.5m	Sum		£330.00		
12.03	Mudlay work (bunching etc.)	hr	3.0	£49.00	£147.00	
12.04	Excavation & back fill of new soakaway (1m x 1m) with stone rejects	item		£315.00		
12.05	Spent disposal fee	Sum	1.0	£80.00	£80.00	
12.06	Ferry crossing charge at cost plus 25%	cost		£1.25		
12.07	Estimate based on survey by others. Pre-survey of man by repair crew	item		£100.00		
12.08	Shoring up trenches (rock, exceeding 1.2m depth subject to risk assessment)	item		PCJA		
12.09	Highway Work Permit Required			PCJA		
Total subject to VAT at 17.5%					£367.00	

Note: Subject to the attached Terms and Conditions

A - When calculating prices, all measurements are rounded up

B - Every effort will be made to match existing surfaces, where described although this cannot be guaranteed

C - Only work rates do not include for materials that are charged at cost plus 25%

DEF - m - not exceeding 100 metres over 100m. Item rates are supplied by - house

D - Depths are taken to the base of excavations

E - All rates exclude VAT

F - The above rates are subject to re-measurement

G - Depths are taken to the base of excavations

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24 FEB 2011

ESTIMATING & COSTING SHEET - DOMESTIC DRAINAGE

Site:- 17 Broadmeadows Lane, Waterlooville

Client:- Davies Group (Davies Project Managed Subsidence - DPMS)
Attention of:- Chris Creeves

Client ref	71014536
Job Number	95849
Invoice	LV
Date	23-Nov-10
Recommendation	7

Item No	Description	Unit	Quantity	Rate	Price
Wg 1 downstream to the main run					
0.01	Run open initial 1 hr	item		1100.00	
0.02	Subsequent 1/2 hr	item		425.00	
1.00	Site Call Out for CCTV				
1.01	CCTV up to 2 hrs on site - 08.00 to 17.00 hrs	item		1150.00	
1.02	E.O. per 1/2 hour	item		430.00	
2.00	Gullies/Drains/Functions/Interceptors (excavate and replace)				
2.01	Gully 110mm	item	1.0	4250.00	4250.00
2.02	Bedding (sleeve) band 110mm	item		4250.00	
2.03	Rest Band 160mm	item		4265.00	
2.04	Function band 110mm 0-1m depth	item		4250.00	
2.05	Function band 110mm up to 2m depth	item		4500.00	
2.06	Function band 110mm 2m+	item		POA	
2.07	Function band 160mm 0-1m depth	item		4265.00	
2.08	Function band 160mm up to 2m depth	item		4515.00	
2.09	Function band 160mm 2m+	item		POA	
2.10	Interceptor 110mm connections up to 1m depth	item		4310.00	
2.11	Interceptor 110mm connections up to 1m depth	item		4380.00	
2.12	Interceptor 110mm connections up to 2m depth	item		4560.00	
2.13	Interceptor 110mm connections up to 2m depth	item		4630.00	
2.14	Interceptor 2m+	item		POA	
3.00	Pipe Excavation/Replacement/Materials				
3.01	Excavate and remove 110 pipework - 0-1m depth	m	1.0	1140.00	1140.00
3.02	Excavate and remove 110mm pipework - 1-1.5m depth	m		1190.00	
3.03	Excavate and remove 110mm pipework - 1.5-2.0m depth	m		1250.00	
3.04	Excavate and remove 110mm pipework - 2.0m+ depth	m		POA	
3.05	Excavate and remove 160mm pipework - 0-1m depth	m		1160.00	
3.06	Excavate and remove 160mm pipework - 1-1.5m depth	m		1215.00	
3.07	Excavate and remove 160mm pipework - 1.5-2.0m depth	m		1270.00	
3.08	Excavate and remove 160mm pipework - 2.0m+ depth	m		POA	
4.00	Supplement for breaking out and reinstatement of surfaces				
4.01	Slabs	m	1.0	430.00	430.00
4.02	Block Paving	m		475.00	
4.03	Concrete	m		470.00	
4.04	Reinforced Concrete	m		490.00	
4.05	Tarmac (bed lay)	m		430.00	
5.00	Supplement for difficult ground conditions				
5.01	Dry Clay	m		420.00	
5.02	Wet Clay	m		430.00	
5.03	Rocky Soil	m		1105.00	
5.04	Runaway Sand	m		1210.00	
6.00	Supplement for Concrete Pipe Surround				
6.01	Breaking Out	m		430.00	
6.02	Replacing	m		431.00	
7.00	Cleaning of Drains				
7.01	Cleaning of drains up to 110mm diameter including root cutting & removal of scale	hr		465.00	
7.02	Removal of debris in manholes	hr		485.00	
8.00	Limbs works				
8.01	Set up for 110mm diameter drain lining includes first 3m fixed	m		1290.00	
8.02	110mm diameter drain lining - 3m length	m		165.00	
8.03	Set up for 110mm diameter drain lining includes first 3m fixed	m		1310.00	
8.04	110mm diameter drain lining - 3m length	m		175.00	
8.05	Pre-clean drain of normal soil & debris	hr		465.00	
8.06	Root cutting if required	hr		465.00	
8.07	Post clean survey of new line	item		1190.00	
8.08	Minimum lining charge	item		1290.00	
9.00	"Patch Layer"				
9.01	1st Application 110mm	item		4300.00	
9.02	Each subsequent application	item		1290.00	
9.03	1st Application 160mm	item		4380.00	
9.04	Each subsequent application	item		1210.00	
10.00	Lateral cutting upto 150mm diameter				
10.01	Re-open lateral branch upto 2m deep	re		1190.00	
10.02	Re-open lateral branch upto 3m deep	re		1260.00	
10.03	Re-open lateral branch upto 3m+ deep	re		POA	
11.00	Reinstatement				
11.01	Reinstatement of other surfaces, cost of materials = 25% (professional sum)	cost		11.25	
11.02	Days works Labour (2 man team)	hr		470.00	
12.00	Access/Manholes				
12.01	Confined space equipment on manholes between 1.2 - 2.5m	Sum		1125.00	
12.02	Confined space equipment plus extra manholes - 2.5m	Sum		1330.00	
12.03	Manhole works (benching etc.)	hr		440.00	
12.04	Excavation & back fill of new soakaway (1m) with stone rejects	item		1315.00	
12.05	Sped disposal fee	Sum	1.0	480.00	480.00
12.06	Party charging charge at cost plus 25%	cost		11.25	
12.07	Estimate based on survey by others (Pre-survey of man by expert crew)	item		1100.00	
12.08	Shoring up trenches (work exceeding 1.2m depth subject to risk assessment)	item		POA	
12.09	Highway Work Permit Required			POA	
Total subject to VAT at 17.5%					4500.00
Note: Subject to the attached Terms and Conditions A - When calculating prices, all measurements are rounded up B - Every effort will be made to match existing surface, where disturbed although this cannot be guaranteed C - Day work rates do not include for materials that are charged at cost plus 25% KEY: hr - not exceeding, m - extra over rate, re - basic rates, ar - number, hr - hour D - Depths are taken to the base of excavations E - All rates exclude VAT F - The above rates are subject to re-measurement G - Depths are taken to the base of excavations					

HAVANT BOROUGH COUNCIL
DEVELOPMENT CONTROL
24 FEB 2011
RECEIVED

ESTIMATING & COSTING SHEET - DOMESTIC DRAINAGE

Site:- 17 Broadmeadows Lane, Waterlooville

Client:- Davies Group (Davies Project Managed Subsidence - DPMS)
Attention of:- Chris Sreeves

Client ref	71014536
Job Number	95849
Insurer	LV
Date:-	23-Nov-10
Recommendation	1

Item No	Description	Unit	Quantity	Rate	Price
0.01	Start-up Initial 1 hr	item		£100.00	
0.02	Subsequent 1.7 hr	item		£125.00	
1.00	Site Call Out for CCTV				
1.01	CCTV up to 2 hrs on site - 08.00 to 17.00 hrs	item		£150.00	
1.02	EO per 1-2 hour	item		£30.00	
2.00	Grilles/Bends/Junctions/Interceptors (excavate and replace)				
2.01	Grille 110mm	item	1.0	£250.00	£250.00
2.02	Bedding and rest bend 110mm	item		£250.00	
2.03	Rest Bend 110mm	item		£265.00	
2.04	Junction/bend 110mm 0-1m depth	item		£250.00	
2.05	Junction/bend 110mm up to 2m depth	item		£300.00	
2.06	Junction/bend 110mm 2m+	item		POA	
2.07	Junction/bend 160mm 0-1m depth	item		£265.00	
2.08	Junction/bend 160mm up to 2m depth	item		£315.00	
2.09	Junction/bend 160mm 2m+	item		POA	
2.10	Interceptor 110mm connections up to 1m depth	item		£310.00	
2.11	Interceptor 110mm connections up to 1m depth	item		£380.00	
2.12	Interceptor 160mm connections up to 2m depth	item		£560.00	
2.13	Interceptor 110mm connections up to 2m depth	item		£650.00	
2.14	Interceptor 2m+	item		POA	
3.00	Pipe Excavation/Replacement/Materials				
3.01	Excavate and remove 110mm pipework - 0-1m depth	m	0.5	£140.00	£140.00
3.02	Excavate and remove 110mm pipework - 1-1.5m depth	m		£190.00	
3.03	Excavate and remove 110mm pipework - 1.5-2.0m depth	m		£250.00	
3.04	Excavate and remove 110mm pipework - 2.0m+ depth	m		POA	
3.05	Excavate and remove 160mm pipework - 0-1m depth	m		£160.00	
3.06	Excavate and remove 160mm pipework - 1-1.5m depth	m		£215.00	
3.07	Excavate and remove 160mm pipework - 1.5-2.0m depth	m		£270.00	
3.08	Excavate and remove 160mm pipework - 2.0m+ depth	m		POA	
4.00	Supplement for breaking out and reinstatement of surfaces				
4.01	Slab	m	1.0	£30.00	£30.00
4.02	Block Paving	m		£75.00	
4.03	Concrete	m		£70.00	
4.04	Reinforced Concrete	m		£90.00	
4.05	Tarmac (solid lay)	m		£30.00	
5.00	Supplement for difficult ground conditions				
5.01	Dry Clay	m		£70.00	
5.02	Wet Clay	m		£90.00	
5.03	Rocky Soil	m		£105.00	
5.04	Running Sand	m		£110.00	
6.00	Supplement for Concrete Pipe Surround				
6.01	Breaking Out	m		£30.00	
6.02	Re-laying	m		£34.00	
7.00	Cleaning of Drains				
7.01	Cleaning of drains up to 150mm diameter including root cutting & removal of scale	hr		£65.00	
7.02	Removing debris to market	hr		£49.00	
8.00	Lining works				
8.01	Set up for 150mm diameter drain lining includes first 3m lined	m	1.0	£290.00	£290.00
8.02	150mm diameter drain lining - 3m length	m		£65.00	
8.03	Set up for 150mm diameter drain lining includes first 3m lined	m		£310.00	
8.04	150mm diameter drain lining - 3m length	m		£75.00	
8.05	Pre-clean drains of normal silt & debris	hr		£65.00	
8.06	Root cutting if required	hr		£65.00	
8.07	Post job survey of runs lined	item		£100.00	
8.08	Minimum length charge	item		£290.00	
9.00	Patch Lanes				
9.01	1st Application 110mm	item		£300.00	
9.02	Each subsequent application	item		£200.00	
9.03	1st Application 160mm	item		£330.00	
9.04	Each subsequent application	item		£210.00	
10.00	Lateral cutting upto 150mm diameter				
10.01	Re-open lateral branch upto 2m deep	m		£190.00	
10.02	Re-open lateral branch upto 3m deep	m		£280.00	
10.03	Re-open lateral branch upto 4m+ deep	m		POA	
11.00	Reinstatement				
11.01	Reinstatement of road surfaces, cost of materials = 25% (provisional sum)	cost		£1.25	
11.02	Days works Labour (2 man team)	hr		£70.00	
12.00	Maintenance				
12.01	Certified space equipment on manholes between 1.2 - 2.5m	Sum		£125.00	
12.02	Certified space equipment plus extra man, manholes > 2.5m	Sum		£330.00	
12.03	Manhole works (hauling etc.)	hr		£49.00	
12.04	Excavation & backfill of new soakaway (1m x 1m) with stone rapids	item		£315.00	
12.05	Soil disposal fee	Sum	1.0	£80.00	£80.00
12.06	Early closing charge at cost plus 25%	cost		£1.25	
12.07	Estimate based on survey by others. Pre-survey of runs by night crew	item		£100.00	
12.08	Shoring up trenches (work exceeding 1.2m depth subject to risk assessment)	item		POA	
12.09	Highways Work Permit Required			POA	
Total subject to VAT at 17.5%					£790.00

Note: Subject to the attached Terms and Conditions

A - When calculating prices all measurements are rounded up

C - Every effort will be made to match existing surface where disturbed although this cannot be guaranteed

D - Day work rates do not include for materials that are charged at cost plus 25%

EO/TV - not including for excavation rates, in - hours rates, or - minutes for - hour

B - Depths are taken to the base of excavations

D - All rates exclude VAT

E - The above rates are subject to re-measurement

F - Depths are taken to the base of excavations

HAVANT BOROUGH COUNCIL
DEVELOPMENT CONTROL

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ESTIMATING & COSTING SHEET - DOMESTIC DRAINAGE

Site:- 17 Broadmeadows Lane, Watlington

Client:- Davies Group (Davies Project Managed Subsidence - DPMS)
Attention of:- Chris Sreeves

Client ref	71014530
Job Number	95849
Invoice	LV
Date:-	23-Nov-10
Recommendation	5

Item No	Description	Unit	Quantity	Rate	Price
0.01	Surveyors Initial 1 hr	item		1100.00	
0.02	Subsequent 1.2 hr	item		125.00	
1.00	Site Call Out for CCTV				
1.01	CCTV up to 2 hrs on site - 08.00 to 17.00 hrs	item		1150.00	
1.02	EO per 1.2 hour	item		130.00	
2.00	Gullies/Junctions/Interceptors excavate and replace				
2.01	Gully 110mm	item		1250.00	
2.02	Redding eye test bend 110mm	item		1250.00	
2.03	Rest Bend 100mm	item		1265.00	
2.04	Junction/bend 110mm 0-1m depth	item		1250.00	
2.05	Junction/bend 110mm up to 2m depth	item		1500.00	
2.06	Junction/bend 110mm 2m+	item		POA	
2.07	Junction/bend 100mm 0-1m depth	item		1265.00	
2.08	Junction/bend 100mm up to 2m depth	item		1515.00	
2.09	Junction/bend 100mm 2m+	item		POA	
2.10	Interceptor 100mm connections up to 1m depth	item		1310.00	
2.11	Interceptor 100mm connections up to 1m depth	item		1380.00	
2.12	Interceptor 100mm connections up to 2m depth	item		1560.00	
2.13	Interceptor 100mm connections up to 2m depth	item		1630.00	
2.14	Interceptor 2m+	item		POA	
3.00	Pipe Excavation/Replacement/Materials				
3.01	Excavate and remove 110mm pipework - 0-1m depth	m		1340.00	
3.02	Excavate and remove 110mm pipework - 1-1.5m depth	m		1390.00	
3.03	Excavate and remove 110mm pipework - 1.5-2.0m depth	m		1250.00	
3.04	Excavate and remove 110mm pipework - 2.0m+ depth	m		POA	
3.05	Excavate and remove 100mm pipework - 0-1m depth	m		1160.00	
3.06	Excavate and remove 100mm pipework - 1-1.5m depth	m		1215.00	
3.07	Excavate and remove 100mm pipework - 1.5-2.0m depth	m		1270.00	
3.08	Excavate and remove 100mm pipework - 2.0m+ depth	m		POA	
4.00	Supplement for breaking out and reinstatement of surfaces				
4.01	Slabs	m		130.00	
4.02	Block Paving	m		175.00	
4.03	Concrete	m		170.00	
4.04	Reinforced Concrete	m		190.00	
4.05	Tarmac (cold lay)	m		130.00	
5.00	Supplement for difficult ground conditions				
5.01	Dry Clay	m		120.00	
5.02	Wet Clay	m		130.00	
5.03	Rocky Soil	m		1105.00	
5.04	Running Sand	m		1210.00	
6.00	Supplement for Concrete Pipe Surround				
6.01	Bracking Out	m		130.00	
6.02	Replacng	m		134.00	
7.00	Cleaning of Drains				
7.01	Cleaning of drains up to 150mm diameter including root cutting & removal of snags	hr		165.00	
7.02	Removing debris in manholes	hr		149.00	
8.00	Lining works				
8.01	Set up for 100mm diameter drain lining includes first 3m lined	m	1.0	1290.00	1290.00
8.02	100mm diameter drain lining - 3m length	m	7.0	165.00	1155.00
8.03	Set up for 150mm diameter drain lining includes first 3m lined	m		1310.00	
8.04	150mm diameter drain lining - 3m length	m		175.00	
8.05	Pre-clean drains of normal silt & debris	hr		165.00	
8.06	Root cutting if required	hr		165.00	
8.07	Post job survey of runs lined	item		1100.00	
8.08	Minimum lining charge	item		1290.00	
9.00	Patch Tarmac				
9.01	1st Application 150mm	item		1300.00	
9.02	Each subsequent application	hr		1200.00	
9.03	1st Application 100mm	item		1330.00	
9.04	Each subsequent application	hr		1210.00	
10.00	Lateral cutting upto 150mm diameter				
10.01	Re-open lateral branch upto 2m deep	hr		1190.00	
10.02	Re-open lateral branch upto 3m deep	hr		1280.00	
10.03	Re-open lateral branch upto 4m+ deep	hr		POA	
11.00	Reinstatement				
11.01	Reinstatement of other surfaces, cost of materials + 2% (provisional sum)	cost		11.25	
11.02	Days works Labour (2 man team)	hr		170.00	
12.00	Accessories				
12.01	Confined space equipment on manholes between 1.2 - 2.5m	Sum		1125.00	
12.02	Confined space equipment plus extra man, manholes > 2.5m	Sum		1330.00	
12.03	Manhole works (overhauling etc.)	hr		149.00	
12.04	Excavation & backfill of new soakaway (1m x 1m with stone rejects)	item		1315.00	
12.05	Spill disposal fee	Sum		180.00	
12.06	Heavy crossing charge at cost plus 25%	cost		11.25	
12.07	Estimate based on survey by others. Pre-survey of runs by repair crew	item		1100.00	
12.08	Shoring up trenches (work exceeding 1.2m depth subject to risk assessment)	item		POA	
12.09	Highway Work Permit Required			POA	
Total subject to VAT at 17.5%					1420.00

Note: Subject to the attached Terms and Conditions

A - When calculating prices, all measurements are rounded up

C - Every effort will be made to match existing surfaces where disturbed although this cannot be guaranteed

D - Day work rates do not include for materials that are charged at cost plus 25%

E - 10% inc. not exceeding 100 - extra work rate inc. 100m extra inc. 100m to 1000

B - Depths are taken to the base of excavations

D - All rates exclude VAT

F - The above rates are subject to re-measurement

F - Depths are taken to the base of excavations

HAVANT BOROUGH COUNCIL
DEVELOPMENT CONTROL

24 FEB 2011

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Underground Drainage Report	Sheet: 1 of 4	Site: 17 Broadmeadows Lane, Waterlooville
	Job No: 95849	Work carried out for: Davies Group (Davies Project Managed
	Date: 22-Nov-10	

MANHOLE DETAILS

Manhole	Depth to Invert	Condition
MH1	1050mm	As built
MH2	800mm	As built

CCTV Survey:-

1. Drainage Run:

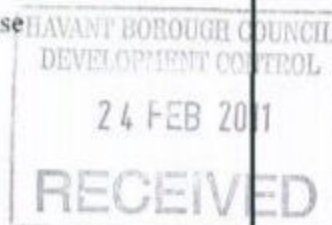
From manhole 1 run A to downstairs WC1 - 100mm clay foul water - Upstream

Metres:	Code:	Observations:	Surface Material/ Condition:
0.0		Start	Slabs
0.7	OJM		
1.6	LL	Slight	
2.0			House
4.1	CC	From 12 o'clock to 12 o'clock	
7.8	LU		
8.1	FH	Reached downstairs WC1	

2. Drainage Run:

From manhole 1 run B to soil vent pipe 1 - 100mm clay foul water - Upstream

Metres:	Code:	Observations:	Surface Material/ Condition:
0.0		Start	Slabs
0.0	CM	From 3 o'clock to 9 o'clock - broken pipe in manhole	
2.0			House
2.4	LU		
2.6	FH	Reached soil vent pipe 1	



Water Test Grade:

0 - Unable to fill	2 - Medium Loss over 2 minutes
1 - Heavy Loss	3 - Slow Loss over 5 minutes
	4 - No Loss

Underground Drainage Report

Sheet: 2 of 4

Job No: 95849

Date: 22-Nov-10

Site: 17 Broadmeadows Lane, Waterlooville

Work carried out for: Davies Group (Davies Project Managed)

3. Drainage Run:

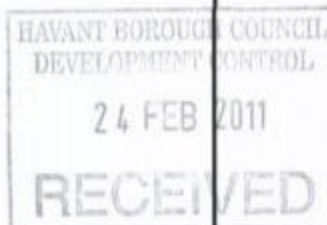
From manhole 1 run C to boundary - 100mm clay foul water - Upstream (shared)

Metres:	Code:	Observations:	Surface Material/ Condition:
0.0		Start	Slabs
0.0	DEG	20%	
0.5	WL	20%	
1.3	DEG	20%	
2.0	WL	20%	
3.0	WL	20%	
4.0			Conservatory
6.0			Slabs
6.1	WL	10%	
7.1	FH	Reached beyond boundary	

4. Drainage Run:

From manhole 1 run X to boundary - 100mm clay foul water - Downstream (shared)

Metres:	Code:	Observations:	Surface Material/ Condition:
0.0		Start	Slabs
0.1	LL		
0.2	ESL	From 4 o'clock to 7 o'clock - 10%	
1.5			Grass/garden
3.2	ESL	At 5 o'clock and 7 o'clock - 20%	
3.2	WL	10%	
6.7	JN	At 3 o'clock - 100mm to waste gully 1	
6.7	WL	10%	
7.4	WL	20%	
7.4	ESL	From 4 o'clock to 7 o'clock - 20%	
7.9	ESL	From 4 o'clock to 8 o'clock - 20%	
8.5			Boundary
9.0	WL	20%	
10.0	FH	Reached beyond boundary	



Water Test Grade:

0 - Unable to fill	2 - Medium Loss over 2 minutes
1 - Heavy Loss	3 - Slow Loss over 5 minutes
	4 - No Loss

Underground Drainage Report	Sheet: 3 of 4	Site: 17 Broadmeadows Lane, Waterlooville
	Job No: 95849	Work carried out for: Davies Group (Davies Project Managed)
	Date: 22-Nov-10	

5. Drainage Run:

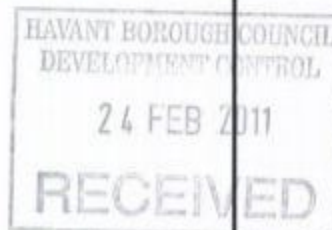
Break in waste gully 1 run X to main run - 100mm clay foul water - Downstream

Metres:	Code:	Observations:	Surface Material/ Condition:
0.0		Start	Slabs
0.0	DEG	70% loss of picture	
0.6	OJM		
1.5	DEG	80%	
2.1	WL	40%	
3.2	LD		
3.6	JN	Joins another run	
3.6	LL		
3.8	LL		
5.0			Garden
6.2	WL	30%	
6.5	WL	40%	
6.5	DEG	40%	
7.9	CU		
9.2	FH	Unable to push any further, possibly at main run	
Gully Condition: Poor - Gully dropped			

6. Drainage Run:

From manhole 2 run A to rain water gully 1 - 100mm clay surface water - Upstream

Metres:	Code:	Observations:	Surface Material/ Condition:
0.0		Start	Grass
0.1	OJM		
0.4			Slabs
2.9	FC	From 12 o'clock to 12 o'clock	
3.0	CL	At 5 o'clock	
3.8	OJM		
4.1	FH	Reached rain water gully 1	



Water Test Grade:

- | | |
|--------------------|--------------------------------|
| 0 - Unable to fill | 2 - Medium Loss over 2 minutes |
| 1 - Heavy Loss | 3 - Slow Loss over 5 minutes |
| | 4 - No Loss |

Underground Drainage Report

Sheet: 4 of 4

Job No: 95849

Date: 22-Nov-10

Site: 17 Broadmeadows Lane, Waterloo

Work carried out for: Davies Group (Davies Project Managed)

7. Drainage Run:

From manhole 2 run B to beyond problem - 100mm clay surface water - Upstream

Metres:	Code:	Observations:	Surface Material/ Condition:
0.0		Start	Slabs
2.7	CC	From 12 o'clock to 12 o'clock	
2.7	CL	At 3 o'clock	
8.0	FH	Reached beyond problem area	

- END OF SURVEY -

Our assessment of the drainage system is based on our visual inspection and on information collated at the time of the survey. Where assumptions have been made these are based on our experience and do not constitute any form of guarantee, nor do we guarantee that further deterioration will not occur following this survey. CCTV video records will be stored for a period of 3 months from date of inspection and then destroyed.

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Water Test Grade:

0 - Unable to fill

1 - Heavy Loss

2 - Medium Loss over 2 minutes

3 - Slow Loss over 5 minutes

4 - No Loss

Water Authority Sewer Condition Codes

B	Broken pipe at... (or from... to...) o'clock	JN	Junction at ... o'clock, diameter... mm
BR	Branch Major	JX	Junction defective at... o'clock, diameter... mm
CC	Crack circumferential from... to... o'clock	LC	Lining of sewer changes/starts/finishes at this point
CL	Crack longitudinal @... o'clock	LD	Line of sewer deviates down
CM	Cracks multiple from... to... o'clock	LL	Line of sewer deviates left
CN	Connection at... o'clock, diameter... mm	LN	Line defect at (or from... to...) o'clock
CNI	Connection at... o'clock, diameter... mm, intrusion... mm	LR	Line of sewer deviates right
CU	Camera under water	LU	Line of sewer deviates up
CX	Connection defective at... o'clock	MB	Missing bricks at... (or from... to...) o'clock
CXI	Connection defective at... o'clock, diameter... mm, intrusion... mm	MC	Material of sewer changes at this point
D	Deformed sewer... %	MH	Manhole/node
DB	Displaced bricks at (or from... to...) o'clock	MM	Mortar missing medium at... (or from... to...) o'clock
DC	Dimension of sewer changes at this point	MS	Mortar missing surface at... (or from... to...) o'clock
DE	Debris (non silt/grease)... % cross-sectional loss	MT	Mortar missing total at... (or from... to...) o'clock
DEG	Debris grease... % cross-sectional area loss	OB	Obstruction... % height/diameter loss
DES	Debris silt... % cross-sectional area loss	OJL	Open joint large
DI	Dropped invert, gap... mm	OJM	Open joint medium
EHU	Encrustation heavy from... to... o'clock % cross-sectional area loss (at joint)	PC	Length of pipe forming sewer changes at this point, new length... mm
ELJ	Encrustation light from... to... o'clock %	RFJ	Roots fine (at joint)
EMU	Encrustation medium from... to... o'clock %, cross-sectional area loss (at joint)	RMJ	Roots mass... % cross-sectional area loss (at joint)
ESH	Scale heavy... % cross-sectional area loss from... to... o'clock	RTJ	Roots tap (at joint)
ESL	Scale light from... to... o'clock	SA	Survey abandoned
ESM	Scale medium... % cross-sectional area loss from... to... o'clock	SC	Shape of sewer changes at this point
FC	Fracture circumferential from... to... o'clock	SSL	Surface damage, spalling large at (or from... to...) o'clock
FL	Fracture longitudinal at... o'clock	SSM	Surface damage, spalling medium at (or from... to...) o'clock
FM	Fractures multiple from... to... o'clock	SSS	Surface damage, spalling slight at (or from... to...) o'clock
GO	General observation at this point	SWL	Surface damage, wear large at... (or from... to...) o'clock
GP	General photograph number... taken at this point	SWN	Surface damage, wear medium at... (or from... to...) o'clock
H	Hole in sewer at... o'clock	SWS	Surface damage, wear slight at... (or from... to...) o'clock
IDJ	Infiltration dripper at (or from... to...) o'clock (at joint)	V	Vermis (rats and mice)
IGJ	Infiltration gusher at (or from... to...) o'clock (at joint)	WL	Water level... % height/diameter
IRJ	Infiltration runner at (or from... to...) o'clock (at joint)	X	Sewer collapsed... % cross-sectional area loss
ISJ	Infiltration seep at (or from... to...) o'clock (at joint)	FH	End of Survey
JDM	Joint displaced medium		
JDL	Joint displaced large		

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Contract: 95849

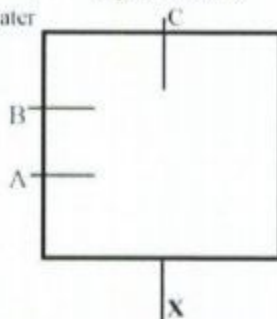
Date: 22-Nov-10

Operative Initial: AC

Site Address: 17 Broadmeadows Lane, Waterloooville

Page: 1 of 1

MH: 1 Depth: 1050mm
Foul water



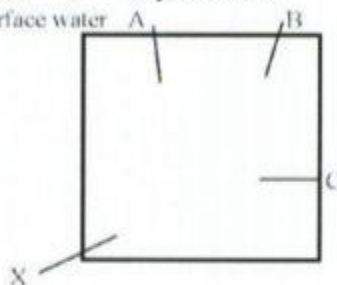
Chamber Dimension (mm): (600 x 450)

Depths of run if
different to invert level:-

A _____
B _____
C _____
D _____
E _____
F _____
G _____
H _____

Manhole Condition
As built

MH: 2 Depth: 800mm
Surface water



Chamber Dimension (mm): (600 x 450)

Depths of run if
different to invert level:-

A _____
B _____
C _____
D _____
E _____
F _____
G _____
H _____

Manhole Condition
As built

MH: Depth:



Chamber Dimension (mm):

Depths of run if
different to invert level:-

A _____
B _____
C _____
D _____
E _____
F _____
G _____
H _____

Manhole Condition

KEY...



Internal Back Drop.



External Back Drop.



Interceptor





Addendum Technical Report

Date of Issue:	11 January 2011
Our Ref:	71014536
Insurer Ref:	46733669009
LV= 3rd Floor 69 Park Lane Croydon London CR9 1BG	Mrs C Thomas 17 Broadmeadows Lane Waterlooville PO7 8QL



Policyholder Home tel.:	02392250668
Policyholder Work tel.:	Not advised
Policyholder Mobile tel.:	Not advised
VAT registered: <i>if yes give details</i>	Standard 20%
Claim Information, History and Timescales:	
Policy number:	21136744131
Policy wording:	FHI Subsidence
Date of construction:	1983
Date of purchase:	01 January 1983
Date of policy inception:	25 April 2002
Date damage first noticed:	28 September 2010
Date claim notified to insurers:	28 September 2010
Date of our initial inspection:	12 October 2010
Start date of main remedial works (est.)	Not applicable
Date of claim finalisation (est.)	11 January 2011





Brief Résumé

The technical and insurance aspects of this claim are being overseen by our Regional Technical Manager Chris Sreeves BSc, MSc, MIStructE in accordance with our Project Managed Service.

This claim concerns damage to a conservatory considered at our initial visit to be likely to be due to clay shrinkage subsidence exacerbated by the effects of tree roots. Site investigations have now been carried out and a Report received.

Site investigations

Foundations at the rear right hand corner of the conservatory were seen to be at 350mm below ground level and founded on firm, silty clay. Roots were noted below foundation level to a depth of 1.1m and were identified as coming from Oak.

Defects were also noted to drainage adjacent to the area of movement to the conservatory.