

SITE INVESTIGATION FACTUAL REPORT

Report No: 263336
Client: Cunningham Lindsey - Maidstone
Site: 40 Elsworthy Road, London
Client Ref: 7941448-
Date of Visit: 03/06/2015

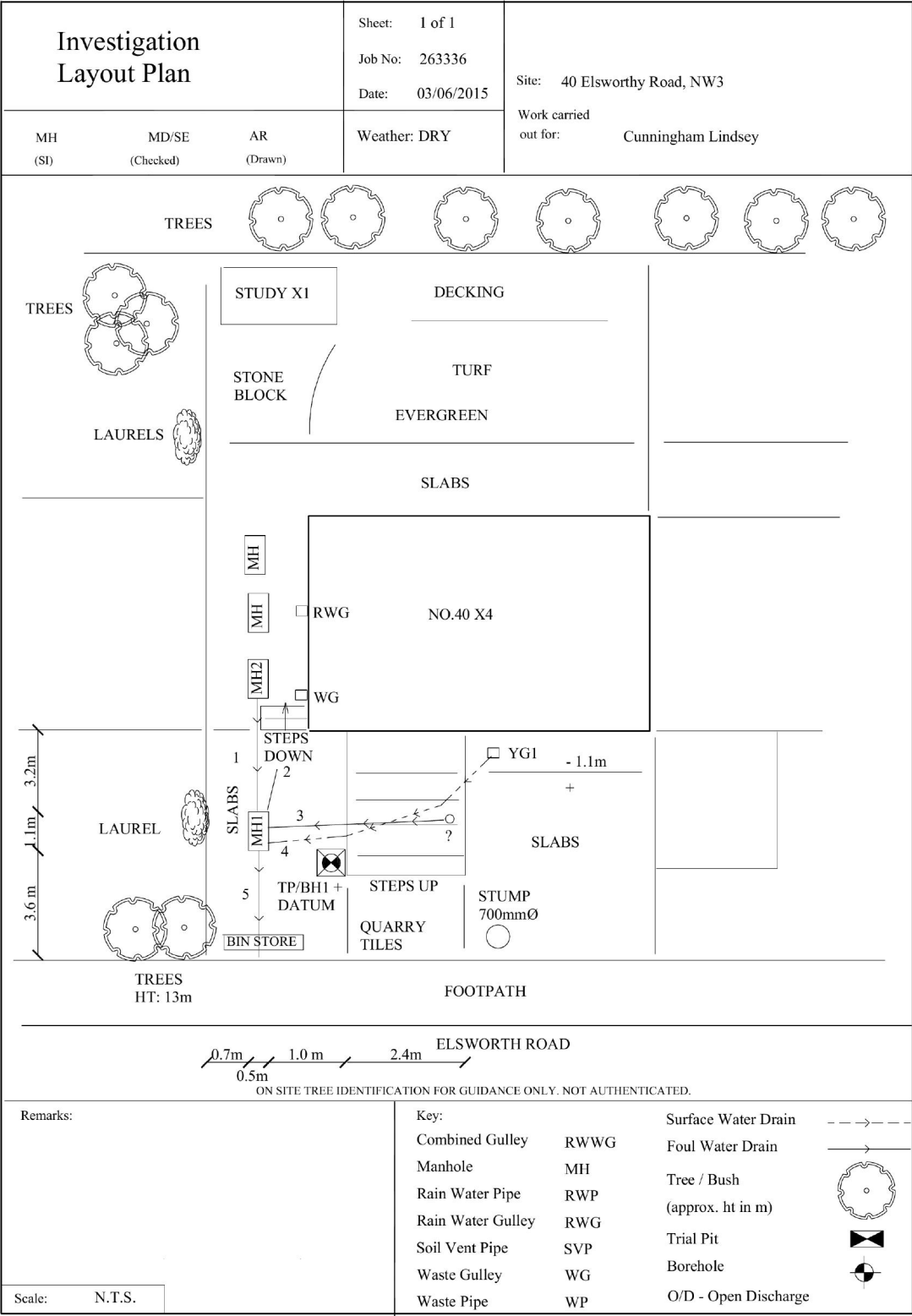


Home Emergency Response - Subsidence Investigation - Drainage Services – Crack & Level Monitoring – Property Video Surveys

Unit E2 First Floor Suite, Boundary Court
Willow Farm Business Park, Castle Donington
Leicestershire, DE74 2NN

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✉ enquiries@cet-uk.com
💻 www.cet-uk.com

CET is the trading name of CET Structures Ltd
Registered in England No. 02527130



Trial Pit No: 1 STEPS		Sheet: 1 of 1 Job No: 263336E Date: 03.06.15	Site: 40 Elsworthy Road Work carried out for: Cunningham Lindsey
		Excavation Method: Hand Tools Drawn by: DVC Ground Level mOD:	
Weather: DRY			

Ground Level

PAVING SLABS

CONCRETE

MADE GROUND: Medium compact, mid to dark brown, sandy, very silty clay with occasional gravel, brick, concrete pieces & clinker fragments.
Roots to 20mm diameter

MADE GROUND: Medium compact, mid to dark brown, sandy, very silty clay with occasional gravel, brick, concrete & clinker fragments.
Roots to 30mm diameter

Firm, moist, mid brown/orange, grey veined, silty CLAY with partings of orange & brown silt & fine sand.
Roots to 40mm diameter with ded & decomposing root fragments.

Remarks: All measurements in millimetres.		Key: D Small disturbed sample J Jar sample B Bulk disturbed sample V Pilcon Vane (kPa) W Water sample M Mackintosh probe TDTD Too dense to drive	
Logged: MH	Checked: SE	Approved:	Scale: N.T.S.

Borehole No: 1 & Datum			Sheet: 1 of 1		Site: 40 Elsworthy Road									
			Job No: 263336E											
Boring Method: CFA			Date: 03.06.15											
Diameter: 100mm		Coordinates:		Ground Level mOD:		Work Carried out for: Cunningham Lindsey								
Depth (m)	Description of Strata	Thickness (m)	Legend	Sample	Type	Test Result	Depth (m)	Field Records/Comments	Depth to water (m)					
1.50	As Trial Pit 1	1.50												
5.00	Stiff, mid brown, grey veined, silty CLAY with partings of orange & brown silt & fine sand & occasional claystone nodules.	3.50	___X					Roots to 4mm diameter to 1.8m						

			___	D	V	78	2.00	Roots to 2mm diameter to 2.5m						
			X___			84								

			___	D			2.50	Roots to 1mm diameter to 4m						
			___X											

			___	D	V	90	3.00							
			___			96								
6.00	Very stiff, as above.	1.00	___											

			X___											
			___	D	V	118	4.00	Dead & decomposing roots to 6m						
			X___			108								

6.00			___											

Remarks: Borehole dry and open on completion. Datum installed at 6m. No samples taken or insitu strength tests carried out below 5m					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: MH	Checked: SE	Typed by: DVC		Scale: NTS		Weather: DRY								

Laboratory Summary Results

Our Ref : 263336
 Location : 40, Elsworth Road, NW3
 Work carried out for: Cunningham Lindsey - Maidstone

Date Sampled: 03/06/2015
 Date Received : 04/06/2015
 Date Tested : 04/06/2015
 Date of Report : 12/06/2015

TP/BH No	Sample Ref Depth (m)	Type	Moisture Content (%) [1]	Soil Fraction > 0.425mm (%) [2]	Liquid Limit (%) [3]	Plastic Limit (%) [4]	Plasticity Index (%) [5]	Liquidity Index [5]	Modified Plasticity Index (%) [6]	Soil * Class [7]	Filter Paper Contact Time (h.)	Soil Sample Suction (kPa) [8]	Oedometer Strain [9]	Estimated Heave Potential (Dd) (mm) [10]	In situ * Shear Vane Strength (kPa) [11]	Organic * Content (%) [12]	pH * Value [13]	Sulphate Content * (g/l)		* Class [16]
																		805	804	
1	U/S 1.30	D	34	<5	61	26	35	0.23	35	CH	168	116			64					
	2.0	D	30	<5											81					
	2.5	D	30	<5	75	27	48	0.07	48	CV	168	459								
	3.0	D	33	<5											93					
	3.5	D	32	<5	77	29	48	0.07	48	CV	168	660								
	4.0	D	32	<5											113					
	4.5	D	32	<5							168	742								
	5.0	D	32	<5							168	711			> 130					

Test Methods / Notes

[1] BS 1377 : Part 2 : 1990, Test No 3.2

[2] Estimated if <5%, otherwise measured

[3] BS 1377 : Part 2 : 1990, Test No 4.4

[4] BS 1377 : Part 2 : 1990, Test No 5.3

[5] BS 1377 : Part 2 : 1990, Test No 5.4

[6] BRE Digest 268 : 1993

[7] BS 5930 : 1981 : Figure 31 - Plasticity Chart for the classification of fine soils

[8] In-house method S90 adapted from BRE IP 493

[9] In-house Test Procedure S175, One Dimensional Swell/Shrink Test

[10] Estimated Heave Potential (Dd)

[11] Values of shear strength were determined in situ by CET using a Picon hand vane or Geoscore vane (GV).

[12] BS 1377 : Part 3 : 1990, Test No 4

[13] BS 1377 : Part 3 : 1990, Test No 9

[14] BS 1377 : Part 3 : 1990, Test No 5.6

[15] $SO_2 = 1.2 \times SO_3$

[16] BRE Special Digest One (Concrete to Aggressive Ground) August 2003

Note that if the SO₂ content falls into the DS-A or DS-B class, it would be prudent to consider the sample as falling into the DS-AM or DS-SM class respectively unless water soluble magnesium testing is undertaken to prove otherwise.

* These tests are not UKAS accredited

Full reports can be provided upon request

Key

D Disturbed sample (small)
 B Disturbed sample (bulk)
 U Undisturbed sample
 W Groundwater sample
 ENP Essentially Non-Plastic by inspection
 US Underside of Foundation

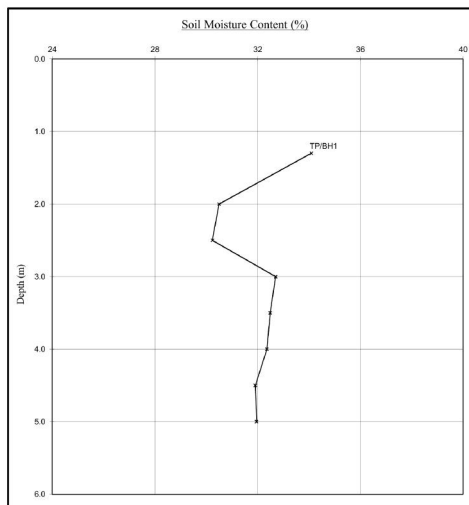
Version: SBH V1.4 - 11/05/15



8618

Moisture Content Profiles

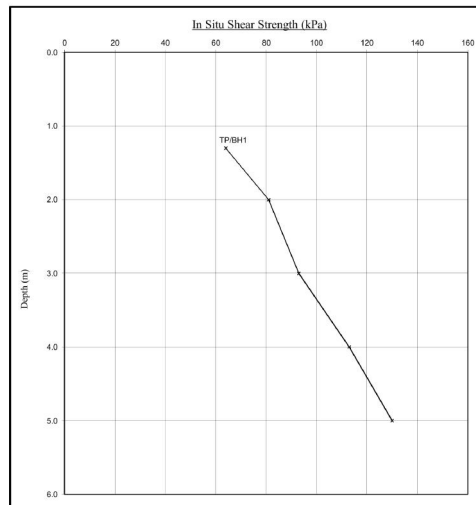
Our Ref : 263336
Location : 40, Elsworth Road, NW3
Work carried out for: Cunningham Lindsey - Maidstone



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

Shear Strength Profiles

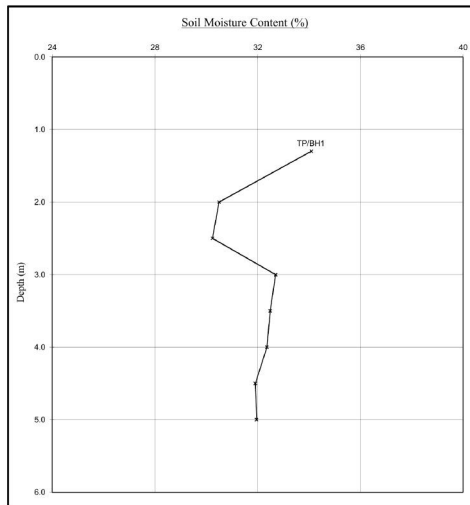
Date Sampled : 03/06/2015
Date Received : 04/06/2015
Date Tested : 04/06/2015
Date of Report : 12/06/2015



Note
1. Unless otherwise stated, values of Shear Strength were determined in situ by CET using a Picon Hand-Vane the calibration of which is limited to a maximum reading of 130 kPa.
2. Unless specifically noted the profiles have not been related to a site datum.

Moisture Content Profiles

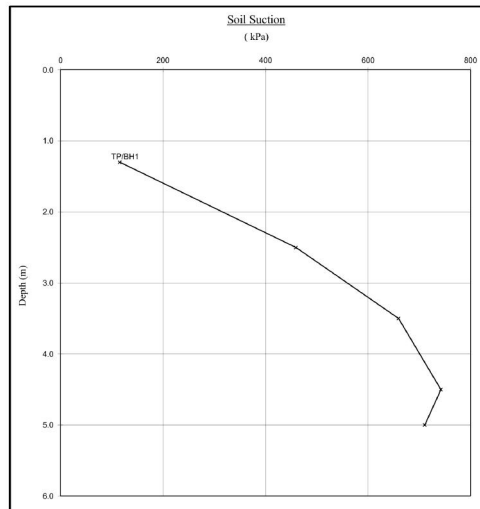
Our Ref : 263336
Location : 40, Elsworth Road, NW3
Work carried out for: Cunningham Lindsey - Maidstone



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

Soil Suction Profiles

Date Sampled : 03/06/2015
Date Received : 04/06/2015
Date Tested : 04/06/2015
Date of Report : 12/06/2015



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.

Tree Root Identification Ltd	Sheet: 1 of 1	Site: 40 Elsworthy Road, London.	
	Job No: 263336	Work carried out for: Cunningham Lindsey	
	Date: 09/06/2015		
	Order No: 706531		
	Our Ref: CET090615		

Certificate of Analysis

The following work was commissioned by CET 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 -

Trial pit/ Borehole number	Root diameter (mm)	Tree, shrub or climber from which root originates	Result of starch test#
TP1 (underside)	30.0	a member of the family Leguminosae* (4 roots)	positive
BH1 (roots to a depth of 4.0m)	2.5	a member of the family Leguminosae* (2 roots)	positive

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

* Members of the Leguminosae include Laburnum, Robinia (false acacia) and the climber, Wisteria.



DR RONALD D MACLEOD
Principal Scientist

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 Principal Scientist: R.D. MacLeod, B.Sc., Ph.D.
 Accounts/Quality Manager: Fergus M. Sinclair, BA English Studies (Merit)
 Registered in Scotland, No. 338068 Registered Office: "Munday's", Highfield Place, Bankfoot, PH1 4AX.

To: Cunningham Lindsey - Maidstone
4 North Court
South Park Business Village
Armstrong Road
Kent
ME15 6JZ

Our Ref: **263336**

Your Ref: **7941448**

Date: **04-Jun-15**

From: Yiu-Shan Wong

ESTIMATE

Site:- **40 Elsworthy Road, London**

Item		Amount
1.0	Location Shared System Condition Grade Drain Serviceability Work Spec	£2,027.50
	Manhole 1 upstream. Run 2. No B Unserviceable From manhole 1 excavate and replace 1 metre of pipe work upstream(to repair faulty liner) and then cctv, repair as necessary. If findings or repair exceptional then discuss with engineer before repair.	
2.0	Location Shared System Condition Grade Drain Serviceability Work Spec	£704.50
	Manhole 1 upstream to yard gully. Run 4. No B Unserviceable Excavate and replace gully plus 0.5 metres of pipe work and then high pressure water jet to clear silt and line run downstream to original liner.	
3.0	Location Shared System Condition Grade Drain Serviceability Work Spec	£489.75
	Manhole 1 downstream to boundary. Run 5. No B Unserviceable From manhole/interceptor high pressure water jet to clear roots and line run downstream 1 metre.	

Notes

Repairs to shared runs and off boundary pipe-work may be the responsibility of the water authority.

Total £3,221.75

Condition Grade

A - Structurally sound with no leakage evident.
B - Cracks and fractures observed.
C - Structurally unsound

plus VAT @20% £644.35

Total + VAT £3,866.10

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 the drainage solutions schedule of rates, apply to this quotation.
CET Structures Ltd 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 visit should the work requested be unrelated to the said repairs.

ESTIMATING & COSTING SHEET - DOMESTIC DRAINAGE

Site:-

40 Elsworthy Road, London

Client :-

Cunningham Lindsey - Maidstone

Attention of:-

Yiu-Shan Wong

Client ref

7941448

Job Number:-

263336

Insurer

Sterling Insurance

Date:-

04-Jun-15

Recommendation

1

Item No	Description	Unit	Quantity	Rate (£)	Price (£)
	Manhole 1 upstream. Run 2.				
1.0	Emergency Drain Blockage Clearance				
1.1	Unblock drain 8am-6pm - First 1/2 Hour	Item		£70.00	£0.00
1.2	Unblock drain 8am-6pm- Subsequent 1/2 Hour	Item		£30.00	£0.00
1.3	Unblock drain 6pm-midnight	Item		£100.00	£0.00
1.4	Unblock drain 6pm-midnight - Subsequent 1/2 hour	Item		£35.00	£0.00
2.1	CCTV Surveys				
2.2	Undertake CCTV survey 8am-6pm (up to 3 hours)	Item	1	£130.00	£130.00
2.3	Additional 1/2 hr survey charge	Item		£30.00	£0.00
3.0	Replacing Underground Drainage				
3.1	Gullies				
3.2	Take out and replace gully (100mm outlet)	Item		£130.00	£0.00
3.3	Take out and replace rodding point (100mm outlet)	Item		£90.00	£0.00
3.4	Bends/junctions				
3.5	Excavate and replace rest bend (100mm outlet)	Item		£90.00	£0.00
3.6	Excavate and replace rest bend (150mm outlet)	Item		£120.00	£0.00
3.7	Excavate and replace junction/bend (100mmØ), Excavation depth 0-1m.	Item		£70.00	£0.00
3.8	Excavate and replace junction/bend (150mmØ), Excavation depth 0-1m	Item		£70.00	£0.00
3.9	Excavate and replace junction/bend (100mmØ), Excavation depth 1-1.5m.	Item		£70.00	£0.00
3.10	Excavate and replace junction/bend (150mmØ), Excavation depth 1-1.5m.	Item		£70.00	£0.00
3.11	Excavate and replace junction/bend (100mmØ), Excavation depth 1.5-2.0m.	Item		£70.00	£0.00
3.12	Excavate and replace junction/bend (150mmØ), Excavation depth 1.5-2.0m.	Item		£70.00	£0.00
3.13	Pipes				
3.14	Excavate trench and replace 100mmØ pipework, Excavation depth 0-1m, First 10m.	m		£95.00	£0.00
3.15	Excavate trench and replace 150mmØ pipework, Excavation depth 0-1m, First 10m.	m		£120.00	£0.00
3.16	Excavate trench and replace 100mmØ pipework, Excavation depth 0-1m.	m		£95.00	£0.00
3.17	Excavate trench and replace 150mmØ pipework, Excavation depth 0-1m.	m		£120.00	£0.00
3.18	Excavate trench and replace 100mmØ pipework, Excavation depth 1-1.5m, First 10m.	m		£150.00	£0.00
3.19	Excavate trench and replace 150mmØ pipework, Excavation depth 1-1.5m, First 10m.	m		£160.00	£0.00
3.20	Excavate trench and replace 100mmØ pipework, Excavation depth 1-1.5m.	m		£150.00	£0.00
3.21	Excavate trench and replace 150mmØ pipework, Excavation depth 1-1.5m.	m		£160.00	£0.00
3.22	Excavate trench and replace 100mmØ pipework, Excavation depth 1.5-2.0m, First 10m.	m		£270.00	£0.00
3.23	Excavate trench and replace 150mmØ pipework, Excavation depth 1.5-2.0m, First 10m.	m		£290.00	£0.00
3.24	Excavate trench and replace 100mmØ pipework, Excavation depth 1.5-2.0m.	m		£250.00	£0.00
3.25	Excavate trench and replace 150mmØ pipework, Excavation depth 1.5-2.0m.	m		£270.00	£0.00
	Excavate trench and replace 100mm pipe work, Excavation depth 2-2.5m.	m	1	£700.00	£700.00
3.26	Surface Reinstatement of Trenches				
3.27	Excavate through and reinstate turf.			£0.00	£0.00
3.28	Excavate through and replace concrete paving slabs	m	2	£30.00	£60.00
3.29	Excavate through and replace block paving	m		£50.00	£0.00
3.30	Excavate through and reinstate plain concrete, maximum thickness 100mm.	m		£47.00	£0.00
3.31	Excavate through and reinstate plain concrete, thickness 100- 200mm.	m		£95.00	£0.00
3.32	Excavate through and reinstate reinforced concrete, maximum thickness 100mm.	m		£90.00	£0.00
3.33	Excavate through and reinstate reinforced concrete, thickness 100-200mm	m		£115.00	£0.00
3.34	Excavate through and reinstate Tarmac - Cold rolled	m		£48.00	£0.00
3.35	Excavate through and reinstate Tarmac - Hot rolled	m		POA	
3.36	Reinstatement of crazy paving	m		£75.00	£0.00
4.0	Lining				
4.1	Set up lining rig for drain lining including first 3m of lining per run, for 100mm or 150mm	Item		£290.00	£0.00
4.2	Line 100mmØ drain	m		£50.00	£0.00
4.3	Line 150mmØ drain	m		£70.00	£0.00
4.4	Post lining CCTV survey	no		£100.00	£0.00
4.5	Minimum lining charge	Item		£290.00	£0.00
4.6	Root cutting of drain prior to lining	hr		£65.00	£0.00
4.7	Set up lining rig for patch lining	Item		£0.00	£0.00
4.8	Patch line 100mmØ drain	no		£250.00	£0.00
4.9	Patch line 150mmØ drain	no		£280.00	£0.00
4.10	Post patch lining CCTV survey	Item		£100.00	£0.00
4.11	Minimum patch lining charge	Item		£250.00	£0.00
4.12	Re-open lateral branch up to 2m length, pipe up to 150mm	no		£190.00	£0.00
4.13	Re-open lateral branch over 2m length, pipe up to 150mm	no		£280.00	£0.00
5.0	Miscellaneous				
5.1	Excavation and backfill of soakaway (1m3) with stone	Item		£400.00	£0.00
5.2	% Uplift on disbursements and suppliers charges	%		125	£0.00
5.3	Daywork - Hourly labour rate	hr		£30.00	£0.00
5.4	Minimum project value	Item		£346.50	£0.00
5.5	Skip hire incl. delivery and collection(estimated cost). Cost + 25%	Item	£1.25	£270	£337.50
5.6					£0.00
5.7					£0.00
5.8					£0.00
6.0	Additional Items				
6.1	De-scaling (fat/grime)	hr		£65.00	£0.00
6.2	De-scaling (scale using chain flails)	hr		£90.00	£0.00
6.3	Gully surround	item		£30.00	£0.00
6.4	Manhole works (up to 1.2m)	item		£80.00	£0.00
6.6	Oversize soakaway (1.5m3)	item		£600.00	£0.00
6.7	Soakaway >1.5m3	item		POA	
6.8	Waste disposal	m	8	£20.00	£160.00
6.9	Shoring	m	16	£40.00	£640.00
Total Estimate Price For Recommendation Number			1.0		£2,027.50
Subject to discount				0.00	£0.00
Total subject to VAT @ 20%					£2,027.50
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					
G - Daywork rates do not include for materials that are charged at cost plus 25%					
KEY: ne = not exceeding, eo = extra over rate, m = linear metre, nr = number, hr = 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		

ESTIMATING & COSTING SHEET - DOMESTIC DRAINAGE

Site:- 40 Elsworthy Road, London

Client :- Cunningham Lindsey - Maidstone
Attention of:- Yiu-Shan Wong

Client ref	7941448
Job Number :-	263336
Insurer	Sterling Insurance
Date:-	04-Jun-15
Recommendation	2

Item No	Description	Unit	Quantity	Rate (£)	Price (£)
	Manhole 1 upstream to yard gully. Run 4.				
1.0	Emergency Drain Blockage Clearance				
1.1	Unblock drain 8am-6pm - First 1/2 Hour	Item	1	£70.00	£70.00
1.2	Unblock drain 8am-6pm - Subsequent 1/2 Hour	Item		£30.00	£0.00
1.3	Unblock drain 6pm-midnight	Item		£100.00	£0.00
1.4	Unblock drain 6pm-midnight - Subsequent 1/2 hour	Item		£35.00	£0.00
2.1	CCTV Surveys				
2.2	Undertake CCTV survey 8am-6pm (up to 3 hours)	Item		£130.00	£0.00
2.3	Additional 1/2 hr survey charge	Item		£30.00	£0.00
3.0	Replacing Underground Drainage				
3.1	Gullies				
3.2	Take out and replace gully (100mm outlet)	Item	1	£130.00	£130.00
3.3	Take out and replace rodding point (100mm outlet)	Item		£90.00	£0.00
3.4	Bends/junctions				
3.5	Excavate and replace rest bend (100mm outlet)	Item		£90.00	£0.00
3.6	Excavate and replace rest bend (150mm outlet)	Item		£120.00	£0.00
3.7	Excavate and replace junction/bend (100mmØ), Excavation depth 0-1m.	Item		£70.00	£0.00
3.8	Excavate and replace junction/bend (150mmØ), Excavation depth 0-1m	Item		£70.00	£0.00
3.9	Excavate and replace junction/bend (100mmØ), Excavation depth 1-1.5m.	Item		£70.00	£0.00
3.10	Excavate and replace junction/bend (150mmØ), Excavation depth 1-1.5m.	Item		£70.00	£0.00
3.11	Excavate and replace junction/bend (100mmØ), Excavation depth 1.5-2.0m.	Item		£70.00	£0.00
3.12	Excavate and replace junction/bend (150mmØ), Excavation depth 1.5-2.0m.	Item		£70.00	£0.00
3.13	Pipes				
3.14	Excavate trench and replace 100mmØ pipework, Excavation depth 0-1m, First 10m.	m	0.5	£95.00	£47.50
3.15	Excavate trench and replace 150mmØ pipework, Excavation depth 0-1m, First 10m.	m		£120.00	£0.00
3.16	Excavate trench and replace 100mmØ pipework, Excavation depth 0-1m.	m		£95.00	£0.00
3.17	Excavate trench and replace 150mmØ pipework, Excavation depth 0-1m.	m		£120.00	£0.00
3.18	Excavate trench and replace 100mmØ pipework, Excavation depth 1-1.5m, First 10m.	m		£150.00	£0.00
3.19	Excavate trench and replace 150mmØ pipework, Excavation depth 1-1.5m, First 10m.	m		£160.00	£0.00
3.20	Excavate trench and replace 100mmØ pipework, Excavation depth 1-1.5m.	m		£150.00	£0.00
3.21	Excavate trench and replace 150mmØ pipework, Excavation depth 1-1.5m.	m		£160.00	£0.00
3.22	Excavate trench and replace 100mmØ pipework, Excavation depth 1.5-2.0m, First 10m.	m		£270.00	£0.00
3.23	Excavate trench and replace 150mmØ pipework, Excavation depth 1.5-2.0m, First 10m.	m		£290.00	£0.00
3.24	Excavate trench and replace 100mmØ pipework, Excavation depth 1.5-2.0m.	m		£250.00	£0.00
3.25	Excavate trench and replace 150mmØ pipework, Excavation depth 1.5-2.0m.	m		£270.00	£0.00
3.26	Surface Reinstatement of Trenches				
3.27	Excavate through and reinstate turf.			£0.00	£0.00
3.28	Excavate through and replace concrete paving slabs	m		£30.00	£0.00
3.29	Excavate through and replace block paving	m		£50.00	£0.00
3.30	Excavate through and reinstate plain concrete, maximum thickness 100mm.	m	1	£47.00	£47.00
3.31	Excavate through and reinstate plain concrete, thickness 100- 200mm.	m		£95.00	£0.00
3.32	Excavate through and reinstate reinforced concrete, maximum thickness 100mm	m		£90.00	£0.00
3.33	Excavate through and reinstate reinforced concrete, thickness 100-200mm.	m		£115.00	£0.00
3.34	Excavate through and reinstate Tarmac - Cold rolled	m		£48.00	£0.00
3.35	Excavate through and reinstate Tarmac - Hot rolled	m		POA	
3.36	Reinstatement of crazy paving	m		£75.00	£0.00
4.0	Lining				
4.1	Set up lining rig for drain lining including first 3m of lining per run, for 100mm or 150mm	Item	1	£290.00	£290.00
4.2	Line 100mmØ drain	m		£50.00	£0.00
4.3	Line 150mmØ drain	m		£70.00	£0.00
4.4	Post lining CCTV survey	no	1	£100.00	£100.00
4.5	Minimum lining charge	Item		£290.00	£0.00
4.6	Root cutting of drain prior to lining	Item		£65.00	£0.00
4.7	Set up lining rig for patch lining	hr		£0.00	£0.00
4.8	Patch line 100mmØ drain	no		£250.00	£0.00
4.9	Patch line 150mmØ drain	no		£280.00	£0.00
4.10	Post patch lining CCTV survey	Item		£100.00	£0.00
4.11	Minimum patch lining charge	Item		£250.00	£0.00
4.12	Re-open lateral branch up to 2m length, pipe up to 150mm	no		£190.00	£0.00
4.13	Re-open lateral branch over 2m length, pipe up to 150mm	no		£280.00	£0.00
5.0	Miscellaneous				
5.1	Excavation and backfill of soakaway (1m3) with stone	Item		£400.00	£0.00
5.2	% Uplift on disbursements and suppliers charges	%		£1.25	£0.00
5.3	Daywork - Hourly labour rate	hr		£30.00	£0.00
5.4	Minimum project value	Item		£346.50	£0.00
5.5				£270.00	£0.00
5.6				£0.00	£0.00
5.7				£0.00	£0.00
5.8				£0.00	£0.00
6.0	Additional items				
6.1	De-scaling (fat/grime)	hr		£65.00	£0.00
6.2	De-scaling (scale using chain flails)	hr		£90.00	£0.00
6.3	Gully surround	item		£30.00	£0.00
6.4	Manhole works (up to 1.2m)	item		£80.00	£0.00
6.6	Over-size soakaway (1.5m3)	item		£600.00	£0.00
6.7	Soakaway >1.5m3	item		POA	
6.8	Waste disposal	m	1	£20.00	£20.00
6.9	Shoring	m		£40.00	£0.00
Total Estimate Price For Recommendation Number			2.0		£704.50
Subject to discount					£0.00
Total subject to VAT @ 20%					£704.50

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

G - Daywork rates do not include for materials that are charged at cost plus 25%

KEY: ne = not exceeding, eo = extra over rate, m = linear metre, nr = number, hr = 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

ESTIMATING & COSTING SHEET - DOMESTIC DRAINAGE

Site:- 40 Elsworthy Road, London

Client :- Cunningham Lindsey - Maidstone
Attention of:- Yiu-Shan Wong

Client ref	7941448
Job Number :-	263336
Insurer	Sterling Insurance
Date:-	04-Jun-15
Recommendation	3

Item No	Description	Unit	Quantity	Rate (£)	Price (£)
	Manhole 1 downstream to boundary. Run 5.				
1.0	Emergency Drain Blockage Clearance				
1.1	Unblock drain 8am-6pm - First 1/2 Hour	Item		£70.00	£0.00
1.2	Unblock drain 8am-6pm- Subsequent 1/2 Hour	Item		£30.00	£0.00
1.3	Unblock drain 6pm-midnight	Item		£100.00	£0.00
1.4	Unblock drain 6pm-midnight - Subsequent 1/2 hour	Item		£35.00	£0.00
2.1	CCTV Surveys				
2.2	Undertake CCTV survey 8am-6pm (up to 3 hours)	Item		£130.00	£0.00
2.3	Additional 1/2 hr survey charge	Item		£30.00	£0.00
3.0	Replacing Underground Drainage				
3.1	Gullies				
3.2	Take out and replace gully (100mm outlet)	Item		£130.00	£0.00
3.3	Take out and replace rodding point (100mm outlet)	Item		£90.00	£0.00
3.4	Bends/junctions				
3.5	Excavate and replace rest bend (100mm outlet)	Item		£90.00	£0.00
3.6	Excavate and replace rest bend (150mm outlet)	Item		£120.00	£0.00
3.7	Excavate and replace junction/bend (100mmØ), Excavation depth 0-1m.	Item		£70.00	£0.00
3.8	Excavate and replace junction/bend (150mmØ), Excavation depth 0-1m	Item		£70.00	£0.00
3.9	Excavate and replace junction/bend (100mmØ), Excavation depth 1-1.5m.	Item		£70.00	£0.00
3.10	Excavate and replace junction/bend (150mmØ), Excavation depth 1-1.5m.	Item		£70.00	£0.00
3.11	Excavate and replace junction/bend (100mmØ), Excavation depth 1.5-2.0m.	Item		£70.00	£0.00
3.12	Excavate and replace junction/bend (150mmØ), Excavation depth 1.5-2.0m.	Item		£70.00	£0.00
3.13	Pipes				
3.14	Excavate trench and replace 100mmØ pipework, Excavation depth 0-1m, First 10m.	m		£95.00	£0.00
3.15	Excavate trench and replace 150mmØ pipework, Excavation depth 0-1m, First 10m.	m		£120.00	£0.00
3.16	Excavate trench and replace 100mmØ pipework, Excavation depth 0-1m.	m		£95.00	£0.00
3.17	Excavate trench and replace 150mmØ pipework, Excavation depth 0-1m.	m		£120.00	£0.00
3.18	Excavate trench and replace 100mmØ pipework, Excavation depth 1-1.5m, First 10m.	m		£150.00	£0.00
3.19	Excavate trench and replace 150mmØ pipework, Excavation depth 1-1.5m, First 10m.	m		£160.00	£0.00
3.20	Excavate trench and replace 100mmØ pipework, Excavation depth 1-1.5m.	m		£150.00	£0.00
3.21	Excavate trench and replace 150mmØ pipework, Excavation depth 1-1.5m.	m		£160.00	£0.00
3.22	Excavate trench and replace 100mmØ pipework, Excavation depth 1.5-2.0m, First 10m	m		£270.00	£0.00
3.23	Excavate trench and replace 150mmØ pipework, Excavation depth 1.5-2.0m, First 10m	m		£290.00	£0.00
3.24	Excavate trench and replace 100mmØ pipework, Excavation depth 1.5-2.0m.	m		£250.00	£0.00
3.25	Excavate trench and replace 150mmØ pipework, Excavation depth 1.5-2.0m.	m		£270.00	£0.00
3.26	Surface Reinstatement of Trenches				
3.27	Excavate through and reinstate turf			£0.00	£0.00
3.28	Excavate through and replace concrete paving slabs	m		£30.00	£0.00
3.29	Excavate through and replace block paving	m		£50.00	£0.00
3.30	Excavate through and reinstate plain concrete, maximum thickness 100mm.	m		£47.00	£0.00
3.31	Excavate through and reinstate plain concrete, thickness 100-200mm.	m		£95.00	£0.00
3.32	Excavate through and reinstate reinforced concrete, maximum thickness 100mm.	m		£90.00	£0.00
3.33	Excavate through and reinstate reinforced concrete, thickness 100-200mm	m		£115.00	£0.00
3.34	Excavate through and reinstate Tarmac - Cold rolled	m		£48.00	£0.00
3.35	Excavate through and reinstate Tarmac - Hot rolled	m		POA	
3.36	Reinstatement of crazy paving	m		£75.00	£0.00
4.0	Lining				
4.1	Set up lining rig for drain lining including first 3m of lining per run, for 100mm or 150mm	Item	1	£290.00	£290.00
4.2	Line 100mmØ drain	m		£50.00	£0.00
4.3	Line 150mmØ drain	m		£70.00	£0.00
4.4	Post lining CCTV survey	no		£100.00	£0.00
4.5	Minimum lining charge	Item		£290.00	£0.00
4.6	Root cutting of drain prior to lining	hr	1	£65.00	£65.00
4.7	Set up lining rig for patch lining	Item		£0.00	£0.00
4.8	Patch line 100mmØ drain	no		£250.00	£0.00
4.9	Patch line 150mmØ drain	no		£280.00	£0.00
4.10	Post patch lining CCTV survey	Item		£100.00	£0.00
4.11	Minimum patch lining charge	Item		£250.00	£0.00
4.12	Re-open lateral branch up to 2m length, pipe up to 150mm	no		£190.00	£0.00
4.13	Re-open lateral branch over 2m length, pipe up to 150mm	no		£280.00	£0.00
5.0	Miscellaneous				
5.1	Excavation and backfill of soakaway (1m3) with stone	Item		£400.00	£0.00
5.2	% Uplift on disbursements and suppliers charges	%		£1.25	£0.00
5.3	Daywork - Hourly labour rate	hr		£30.00	£0.00
5.4	Minimum project value	Item		£346.50	£0.00
5.5	Confined space equipment	Item	1	£134.75	£134.75
5.6				£0.00	£0.00
5.7				£0.00	£0.00
5.8				£0.00	£0.00
6.0	Additional Items				
6.1	De-scaling (fat/grime)	hr		£65.00	£0.00
6.2	De-scaling (scale using chain flails)	hr		£90.00	£0.00
6.3	Gully surround	Item		£30.00	£0.00
6.4	Manhole works (up to 1.2m)	Item		£80.00	£0.00
6.6	Oversize soakaway (1.5m3)	Item		£600.00	£0.00
6.7	Soakaway >1.5m3	Item		POA	
6.8	Waste disposal	m		£20.00	£0.00
6.9	Shoring	m		£40.00	£0.00
Total Estimate Price For Recommendation Number			3.0		£489.75
Subject to discount				0.00	£0.00
Total subject to VAT @ 20%					£489.75
<p>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 G - Daywork rates do not include for materials that are charged at cost plus 25% KEY: ne = not exceeding, eo = extra over rate, m = linear metre, nr = number, hr = hour</p> <p>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</p>					

Underground Drainage Report	Sheet: 1 of 3	Site: 40 Elsworthy Road, London Work carried out for: Cunningham Lindsey - Maidstone
	Job No: 263336	
	Date: 3-Jun-15	
<u>MANHOLE DETAILS</u>		
Manhole	Depth to Invert	Condition
MH1	2300mm	As built
<u>CCTV Survey:-</u>		
1. Drainage Run:		
From manhole 1 run 1 to manhole 2 - 100mm clay combined - upstream (not shared)		
Metres:	Code:	Observations:
		Surface Material/Condition:
0.0		Start
1.1	WL	10%
4.4	FH	Survey ends - reached MH2
		Slabs for 4.4m
2 Drainage Run:		
From manhole 1 run 2 to upstream - 100mm lined foul water - upstream (not shared)		
Metres:	Code:	Observations:
		Surface Material/Condition:
0.0		Start
0.6	GO	Liner failure
0.7	SA	Survey abandoned - unable to push
		Slabs
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 3	Site: 40 Elsworthy Road, London Work carried out for: Cunningham Lindsey - Maidstone																																																								
	Job No: 263336																																																									
	Date: 3-Jun-15																																																									
3 Drainage Run: From manhole 1 run 3 to upstream - 100mm lined foul water - upstream (not shared) <table><thead><tr><th>Metres:</th><th>Code:</th><th>Observations:</th><th>Surface Material/ Condition:</th></tr></thead><tbody><tr><td>0.0</td><td></td><td>Start</td><td>Slabs for 1m</td></tr><tr><td>0.7</td><td>LL</td><td></td><td>then steps x1 for 2.1m</td></tr><tr><td>3.1</td><td>MC</td><td>To clay</td><td></td></tr><tr><td>3.1</td><td>LU</td><td></td><td></td></tr><tr><td>3.6</td><td>FH</td><td>Survey ends - reached unknown</td><td></td></tr></tbody></table> 4 Drainage Run: From manhole 1 run 4 to yard gully - 100mm lined foul water - upstream (not shared) <table><thead><tr><th>Metres:</th><th>Code:</th><th>Observations:</th><th>Surface Material/ Condition:</th></tr></thead><tbody><tr><td>0.0</td><td></td><td>Start</td><td></td></tr><tr><td>0.7</td><td>LL</td><td></td><td></td></tr><tr><td>3.5</td><td>DES</td><td></td><td></td></tr><tr><td>3.6</td><td>MC</td><td>To clay</td><td></td></tr><tr><td>3.8</td><td>FC</td><td>From 12 o'clock to 12 o'clock</td><td></td></tr><tr><td>4.5</td><td>OJM</td><td></td><td></td></tr><tr><td>4.6</td><td>FH</td><td>Survey ends - reached YG</td><td></td></tr></tbody></table>			Metres:	Code:	Observations:	Surface Material/ Condition:	0.0		Start	Slabs for 1m	0.7	LL		then steps x1 for 2.1m	3.1	MC	To clay		3.1	LU			3.6	FH	Survey ends - reached unknown		Metres:	Code:	Observations:	Surface Material/ Condition:	0.0		Start		0.7	LL			3.5	DES			3.6	MC	To clay		3.8	FC	From 12 o'clock to 12 o'clock		4.5	OJM			4.6	FH	Survey ends - reached YG	
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Water Test Grade: <table><tbody><tr><td>0 - Unable to fill</td><td>2 - Medium Loss over 2 minutes</td></tr><tr><td>1 - Heavy Loss</td><td>3 - Slow Loss over 5 minutes</td></tr><tr><td></td><td>4 - No Loss</td></tr></tbody></table>			0 - Unable to fill	2 - Medium Loss over 2 minutes	1 - Heavy Loss	3 - Slow Loss over 5 minutes		4 - No Loss																																																		
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Underground Drainage Report	Sheet: 3 of 3		
	Job No: 263336	Site: 40 Elsworthy Road, London	
	Date: 3-Jun-15	Work carried out for: Cunningham Lindsey - Maidstone	
5 Drainage Run:			
From manhole 1 run 5 to boundary - 100mm clay combined - downstream (not shared)			
Metres:	Code:	Observations:	
		Surface Material/Condition:	
0.0		Start	Slab / bin store for 3.6m
0.0	JN	At 6 o'clock interceptor	
0.4	JDM		
0.4	FC	From 12 o'clock to 12 o'clock	
0.8	RTJ		
1.4	MC	To plastic	
1.8	MC	To lined	
1.8	V		
3.6	FH	Survey ends - reached boundary	
- End of Survey -			
<div>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.</div>			
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	

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
EHJ	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)
EMJ	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	SWM	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	Vermin (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		

Contract: 263336

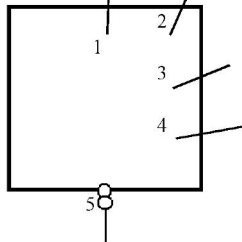
Date: 03-Jun-15

Site Address: 40 Elsworthy Road, London

Operative Initial: SA

Page: 1 of 1

M/H: 1 Depth: 2300mm



Chamber Dimension (mm): 500 X 1100

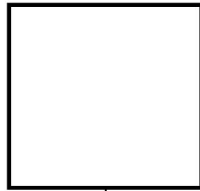
Depths of run if
different to invert level:-

Run _____

Manhole Condition

As built

M/H: Depth:



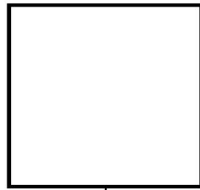
Chamber Dimension (mm):

Depths of run if
different to invert level:-

Run _____

Manhole Condition

M/H: Depth:



Chamber Dimension (mm):

Depths of run if
different to invert level:-

Run _____

Manhole Condition

KEY...



Internal Back Drop



External Back Drop



Interceptor

Water Pressure Test Results

From:

To:

Pass / Fail