

## SITE INVESTIGATION FACTUAL REPORT

Report No: [REDACTED]  
Client: Sedgwick International UK - Morley (Leeds)  
Site: 45 Gondar Gardens  
Client Ref: [REDACTED]  
Date of Visit: 13/05/2019



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



Investigation Layout Plan		Sheet: 1 of 1	Job No: [REDACTED]	Site: 45 Gondar Gardens, NW6
		Date: 24/06/2019	Work carried out for: Sedgwick International UK	
(SI)	PS (Checked)	CFT (Drawn)	Weather: DRY	

Diagram labels and dimensions:

- TREE H 15M+ D 15M+
- SHRUBS
- GRASS
- TREE H 4M D 7M
- TP/BH1
- CONCRETE
- 3.7
- 3.6
- MAIN HOUSE NO: 45
- RWP/1
- SVP/1
- RWWG1
- 2
- MH1
- ①
- ②
- ③

ON SITE TREE IDENTIFICATION FOR GUIDANCE ONLY. NOT AUTHENTICATED.

Remarks: UNABLE TO SURVEY RWP/1 DUE TO LACK OF ACCESS. GARDEN WAS FULL OF STUFF

<p>Key:</p> <p>Combined Gully      RWWG</p> <p>Manhole              MH</p> <p>Rain Water Pipe      RWP</p> <p>Rain Water Gully    RWG</p> <p>Soil Vent Pipe        SVP</p> <p>Waste Gully          WG</p> <p>Waste Pipe           WP</p>	<p>Surface Water Drain    - - - - -</p> <p>Foul Water Drain       - - - - -</p> <p>Tree / Bush (approx. ht in m)</p> <p>Trial Pit</p> <p>Borehole</p> <p>O/D - Open Discharge</p>
--	---

Scale: N.T.S.

TEST REPORT: Trial Pit

REPORT NUMBER:

TRIAL PIT REF:

CLIENT: Sedgwick International UK

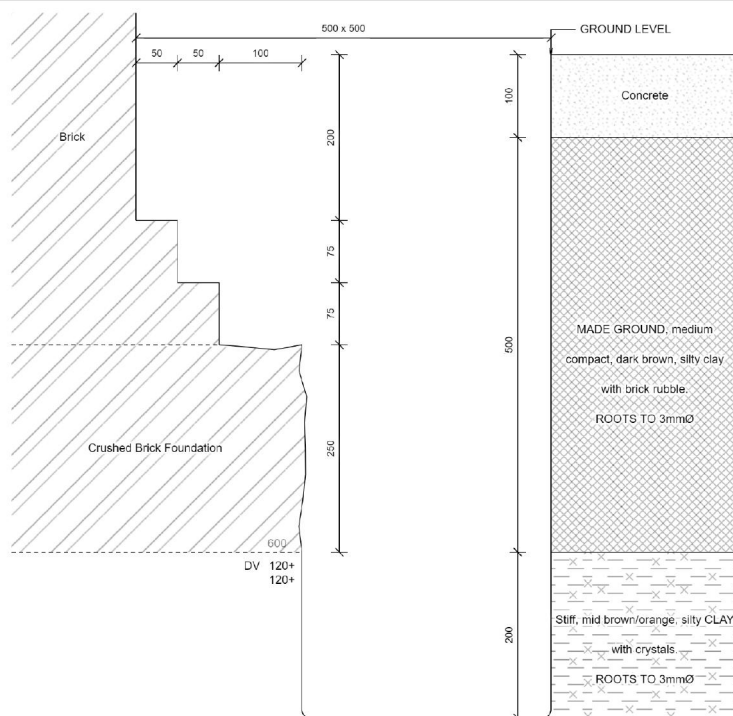
JOB NO:

EXCAVATION METHOD: Hand tools

DATE: 15/07/2019

SITE: 45 Gondar Gardens

WEATHER: Dry



For Strata below 800mm see Bore Hole log

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

Remarks:

Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

For and on behalf of CET

Mark Duffield - SI

Approved Signatory  
15-Jul-19

Report Format:

[illegible]

## Laboratory Summary Results

Our Ref :

Location : 45, Gondar Gardens, London

Client: Sedgwick International UK - Morley (Leeds)

Address:

Date Sampled: 24/06/2019

Date Received : 08/07/2019

Date Tested : 09/07/2019

Date of Report : 17/07/2019

Sample Ref.		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]
TP/HH No	Depth (m)																	60s [14]	30s [15]	
1	U/S 0.60	D	27	<5	75	28	47	-0.02	47	CV	168	575			> 120					
	1.0	D	27	<5	74	26	48	0.02	48	CV	168	704			> 120					
	1.5	D	28	<5	74	27	47	0.02	47	CV	Insufficient sample for further testing				> 120					

## Test Methods / Notes

*111* 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 240 : 1993

[7] BS 5930 : 2

[8] In-house method S9a adapted from NRE IP 4/93

[9] In-house Test Procedure S17a: One Dimensional Swell/Strain Test

[10] Estimated Heave Potential (D0)

[11] Values of shear strength were determined in situ by CFT using

a Pileco hand vine or Greener vine (GV),

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

[13] BS 1377 : Part 2 : 1990, Test No 9

[14] RS 1377 : Part 3

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

Note that if the SO<sub>4</sub> content falls into the DS-4 or DS-5 class, it would be prudent to consider the sample as falling into the DS-4M or DS-5M 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**

Key	
D	Disturbed sample / small

D	Disturbed sample (small)
B	Disturbed sample (bulk)

D	Disturbed sample (1)
U	Undisturbed sample

W	Groundwater sample
---	--------------------

E.N.P.      Essentially Non-Plastic by inspection

UDS Underside of Foundation



Test results reported relate only to the items tested.

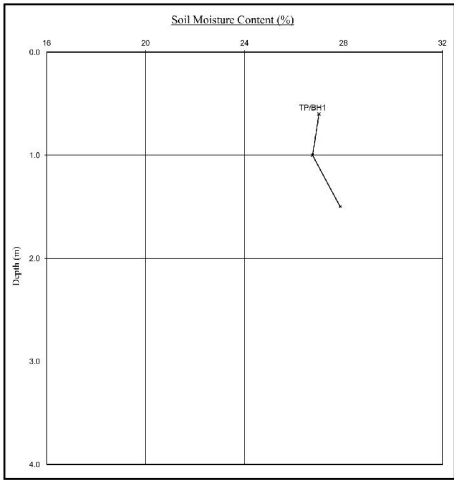
This report shall not be reproduced except in full without approval of the laboratory.

Version: SBII V1.6 - 26.02.19

8618

Moisture Content Profiles

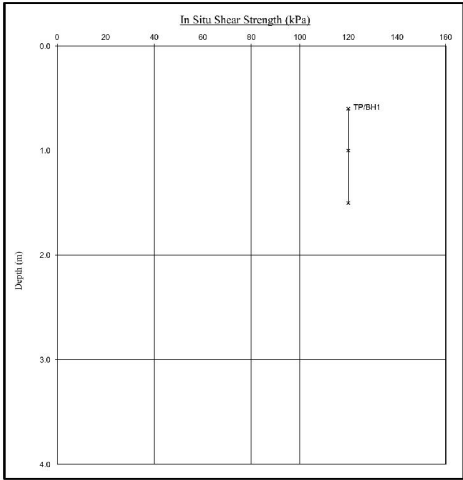
Our Ref: [redacted]  
Location: 45, Gonslar Gardens, London  
Work carried out for: Sedgwick International UK - Morley (Leeds)



Notes:  
1. If plotted, 0.4 LL and PI -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

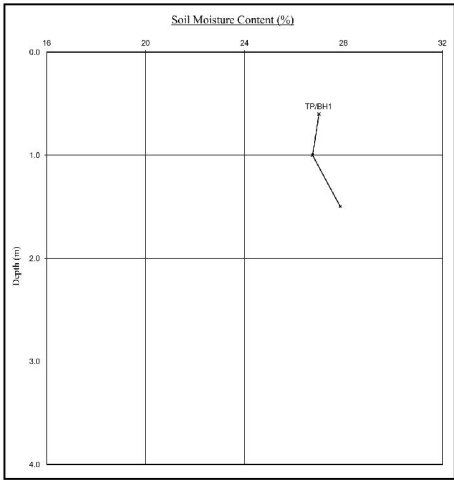
Date Sampled: 24/06/2019  
Date Received: 08/07/2019  
Date Tested: 09/07/2019  
Date of Report: 17/07/2019



Note:  
1. Unless otherwise stated, values of Shear Strength were determined in situ by CPT using a Pkane Hand Vane the calibration of which is limited to a maximum reading of 120 kPa.  
2. Unless specifically noted the profiles have not been related to a site datum.

Moisture Content Profiles

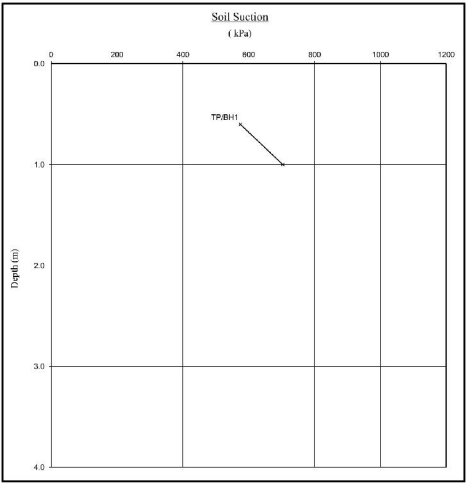
Our Ref: [redacted]  
Location: 45, Conislar Gardens, London  
Work carried out for: Sedgwick International UK - Morley (Leeds)



Notes:  
1. If plotted, 0.4 LL and PI = 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: 24/06/2019  
Date Received: 08/07/2019  
Date Tested: 09/07/2019  
Date of Report: 17/07/2019



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 BS7 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.

MIDM

To: Sedgwick International UK - Morley (Leeds)

Date: 24-Jul-19

From: David Billington

## ESTIMATE

Site:- 45 Gondar Gardens

### Item

1.0	Location	MH 1 upstream - Run 2.
	Shared System	No
	Condition Grade	B
	Drain Serviceability	Unserviceable
	Work Space	From manhole high pressure water jet to clear silt and line run to junction at 12.7m with flex liner.
2.0	Location	RWWG1 downstream - Run 3.
	Shared System	No
	Condition Grade	B
	Drain Serviceability	Unserviceable
	Work Space	Excavate and replace poly plus 1 metre of pipe work downstream and then complete CCTV (high pressure water jet if required), repair as necessary. If findings or repair exceptional then discuss with engineer before repair.

### Notes

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

### Condition Grade

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

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:-

45 Gondar Gardens

Client :-

Sedgwick International UK - Morley (Leeds)

Attention of:-

David Billington

Client ref

Job Number :-

Insurer

Date:-

Recommendation

1

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

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:-

45 Gondar Gardens

Client :-

Sedgwick International UK - Morley (Leeds)

Attention of:-

David Billington

Client ref

Job Number

Insurer

Date:-

Recommendation

2

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

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, ex = 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

<b>Coding Sheet</b>		Sheet:		Site:	45 Gondar Gardens		
		Job No.:					
		Date:	#####	Client:	Sedgwick International UK - Morley (Leeds)		

<b>Run:</b>	<b>1</b>								
From:	SVP/1		Invert Level:			Direction:	D/S		
To:	Run 2		Invert Level:			Function:	S/W		
Pipe Material:	PVC		Pipe Dia:	100					
Water/Pressure Test:			Drain Break-In:	No		Gully Condition:			
Distance (m)	Code	Clock Ref at to	Dia mm	Intrusion %		Shared Run:	No		
						If Shared How:			
0.00	ST					Remarks	Surface Material	Length (m)	
0.00	LD					Line deviates down	UNDER HOUSE		
0.10	MC					VC			
0.20	GO					LINE LEVELS,			
0.50	JN	3	9			Run 2			
0.50	FH					End of survey			
Comments:									

<b>Run:</b>	<b>2</b>								
From:	MH1		Invert Level:	525		Direction:	U/S		
To:	U/S		Invert Level:			Function:	F/W		
Pipe Material:	VC		Pipe Dia:	100					
Water/Pressure Test:			Drain Break-In:			Gully Condition:			
Distance (m)	Code	Clock Ref at to	Dia mm	Intrusion %		Shared Run:	No		
						If Shared How:			
0.00	ST					Remarks	Surface Material	Length (m)	
0.10	DES			10		Debris silt	UNDERHOUSE		
2.00	CC					Crack circumferential			
2.80	CM	12	12			Cracks multiple			
4.00	CC	12	12			Crack circumferential			
5.00	DES					Debris silt			
5.80	CC					Crack circumferential			
9.10	JDM					Joint displaced medium			
9.20	LR					Line deviates right			
10.30	CC					Crack circumferential			
12.70	JN	12				Junction at			
13.00	LR					Line deviates right			
14.10	JDM					Joint displaced medium			
14.10	FH					possible dis-used gully			
Comments:									
Found that run terminates upstream at a gully. Could not locate ar rear but garden is full of bits and pieces. Could do with being cleared.									

<b>Run:</b>	<b>3</b>										
From:	RWWG/1		Invert Level:				Direction:	D/S			
To:	D/S		Invert Level:				Function:	Comb			
Pipe Material:	VC		Pipe Dia:		100						
Water/Pressure Test:			Drain Break-In:		Yes		Gully Condition:	Poor			
Distance (m)	Code	Clock Ref at to		Dia mm	Intrusion % mm		Shared Run:	No			
							If Shared How:				
0.00	ST						Remarks	Surface Material	Length (m)		
0.10	SA						100% BLOCKED	CONCRETE			
Comments:											
Run blocked. Not sure if this runs to soak-away as all foul head towards front. Unless surface water system at rear. Think waste has been put into it at later date. There is a rwp next to SVP but items needs removing to undertake a break in.											