SITE INVESTIGATION
FACTUAL REPORT

[redacted]

Client: Sedgwick International UK - Maidstone

Site: 58 Fellows Road

[redacted]

Date of Visit: 20/06/2019

[redacted]

Investigation Layout Plan

Sheet: 1 of 1

[redacted]

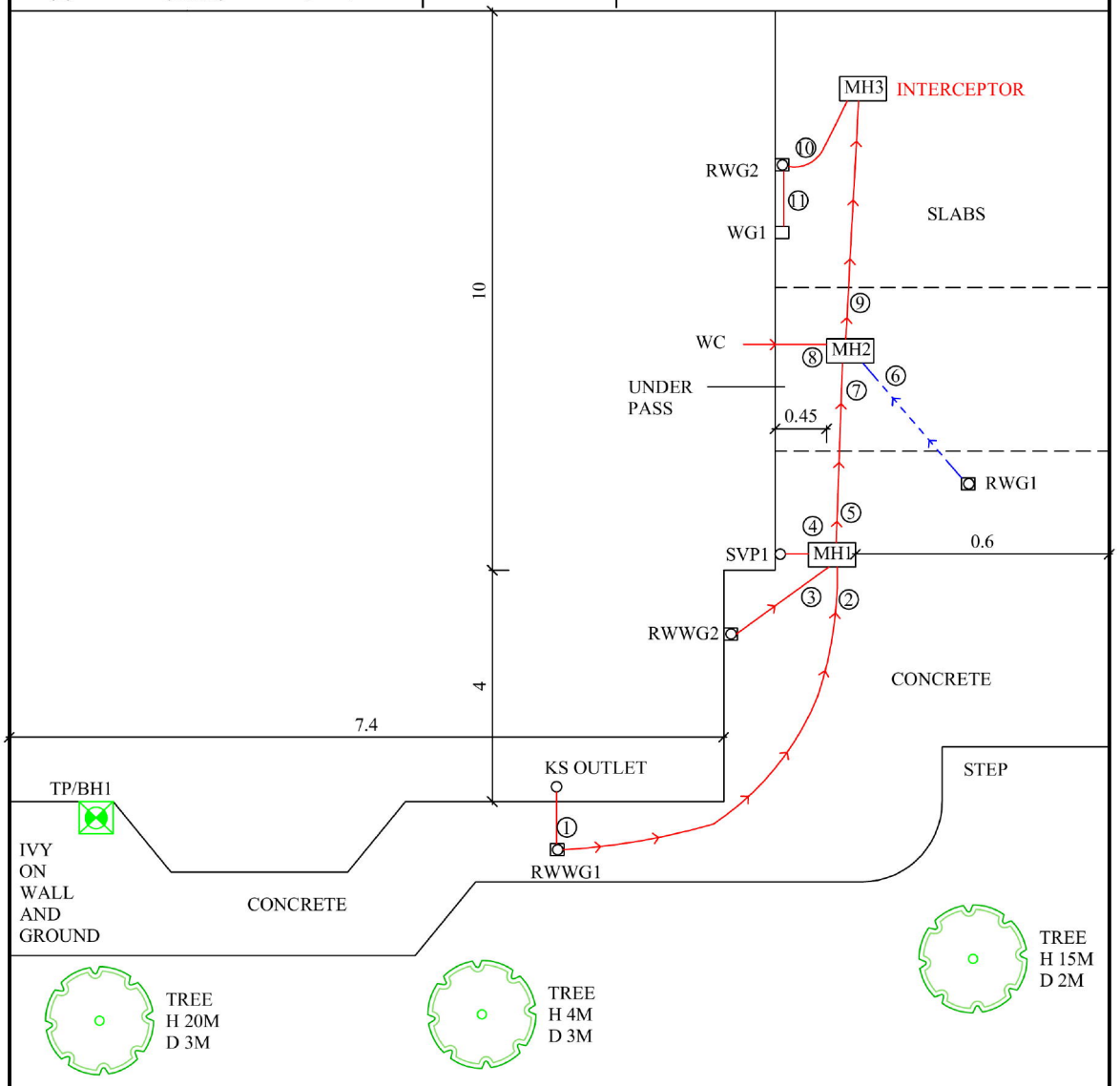
Date: 20/06/2019

Site: 58 Fellows Road

Work carried out for: Sedgwick International UK

Weather: DRY

(SI) PS (Checked) CFT (Drawn)



ON SITE TREE IDENTIFICATION FOR GUIDANCE ONLY. NOT AUTHENTICATED.

Remarks: BOTH FOUNDATION ARE SIMILAR

Scale: N.T.S.

Key:

Combined Gulley	RWWG
Manhole	MH
Rain Water Pipe	RWP
Rain Water Gulley	RWG
Soil Vent Pipe	SVP
Waste Gulley	WG
Waste Pipe	WP

Surface Water Drain

Foul Water Drain

Tree / Bush (approx. ht in m)

Trial Pit

Borehole

O/D - Open Discharge

Trial Pit No: 1

Sheet: 1 of 1

[redacted]

Date: 20/06/19

Site: 58 Fellows Road

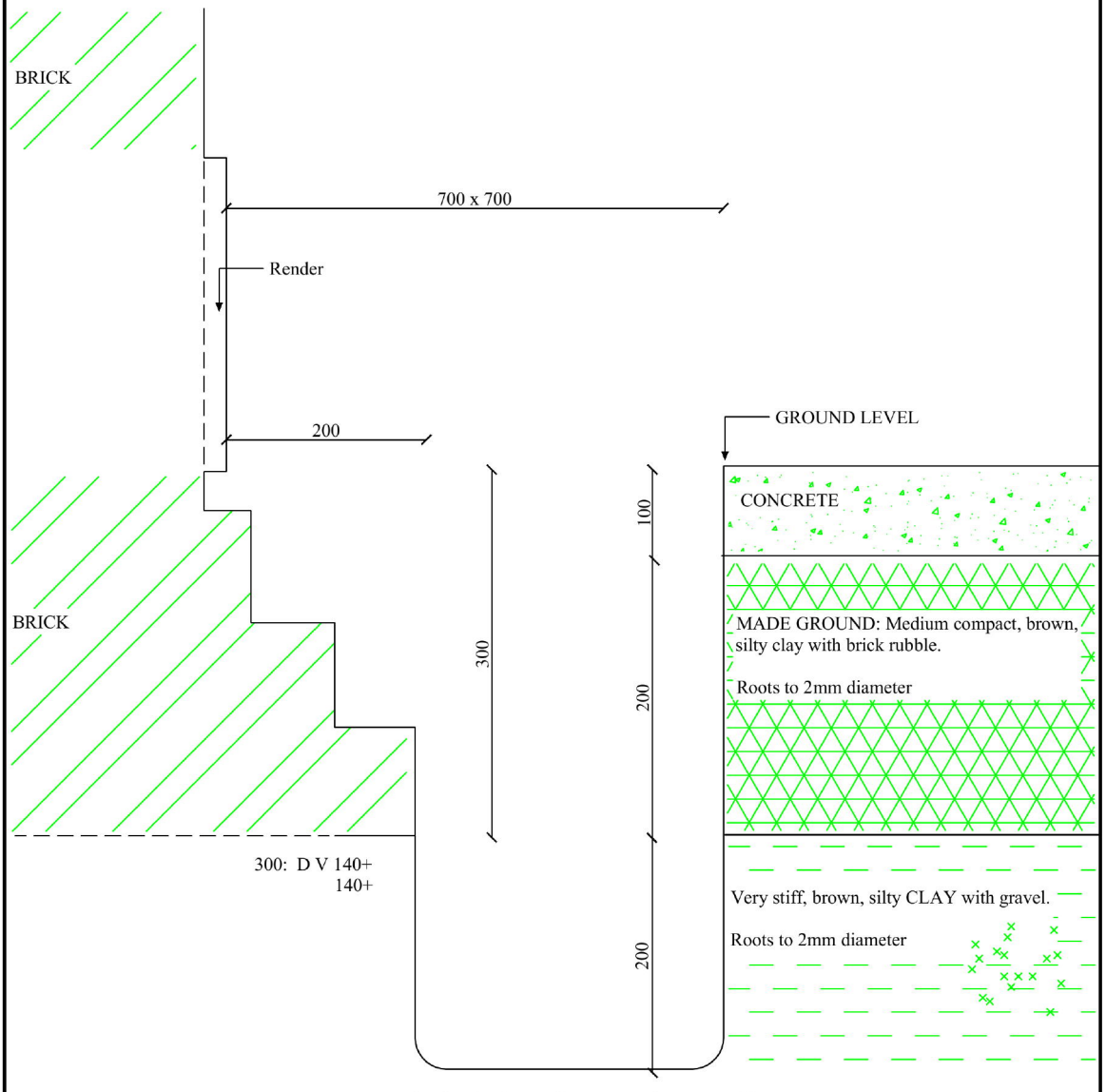
Work carried out for: Sedgwick International UK

Hand Tools

Drawn by: DVC

Weather: DRY

Ground Level mOD:



FOR STRATA BELOW 500mm SEE BH LOG 1

Remarks: All measurements in millimetres.

House and Bay foundations are similar

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: AH | Checked: PS | Approved: | Scale: N.T.S.

Borehole	1		Sheet:	1 of 1	Site:	58 Fellows Road
			Job No:	[redacted]		
			Date:	20/06/2019		
Boring Method:	Hand Auger		Ground Level:		Client:	Sedgwick International UK - Maidstone
Diameter (mm):	75	Weather:	Dry			

Depth	Soil Description	Thickness	Legend	Samples and Tests		
(m)				Depth	Type	Result
0.00	See Trial Pit	0.50				
0.50	Very stiff fragmented brown silty CLAY with claystone nodules	1.20		0.50	DV	140+
						140+
				1.00	DV	140+
						140+
				1.50	DV	140+
						140+
1.70	End of BH					

Remarks:
BH ends at 1.7m too stiff/hard to hand auger. BH dry and open on completion. No roots observed below 1.7m. Only able to extract a small sample at 1.5m.

Key:

		To Depth (m)	Max Dia (mm)
D - Disturbed Sample			
B - Bulk Sample			
W - Water Sample	Roots	1.70	1
J - Jar Sample	Roots		
V - Pilcon Shear Vane (kPa	Roots		
M - Mackintosh Probe	Depth to Water (m)		

TDTD - Too Dense To Drive

Logged:	AH	PS	Checked:	Approved:	Version	V1.0 28/01/16	N.T.S.

Laboratory Summary Results

Our Ref : [redacted]

Location : 58 Fellows Road, London, NW3

Client: Sedgwick International UK - Maidstone

Address: [redacted]

Date Sampled: 20/06/2019

Date Received : 24/06/2019

Date Tested : 25/06/2019

Date of Report : 05/07/2019

Sample Ref TP/BH No	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) SO_3 [14]	Sulphate Content * (g / l) SO_4 [15]	* Class [16]
1	U/S 0.30	D	23	14	68	23	45	0.01	39	CH	168	762			> 140					
	0.5	D	26	<5	73	24	49	0.03	49	CV	168	892			> 140					
	1.0	D	23	<5	73	23	50	0.01	50	CV	168	1390			> 140					
	1.5	D	24	<5	75	23	52	0.01	52	CV	Insufficient sample for further testing				> 140					

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 240 : 1993

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

[8] In-house method S5a adapted from BRE IP 4/93

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

[10] Estimated Heave Potential (Dd)

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

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

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

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

[15] $SO_3 = 1.2 \times SO_4$

[16] BRE Special Digest One (Concrete in Aggressive Ground) August 2005 Note that if the SO4 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

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

UKAS TESTING

Test results reported relate only to the items tested.

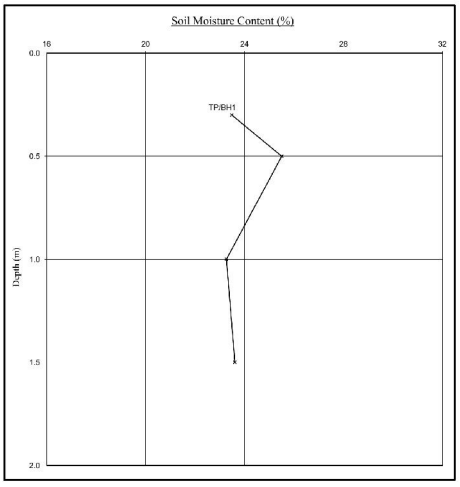
[redacted]

Version: 5BH V1.6 - 26.02.19

8618

Moisture Content Profiles

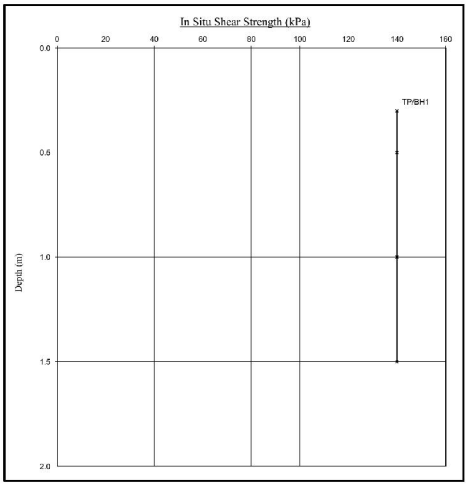
Our Ref : [redacted]
Location : 58 Fellows Road, London, NW3
Work carried out for: Sedgwick International UK - Maidstone



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

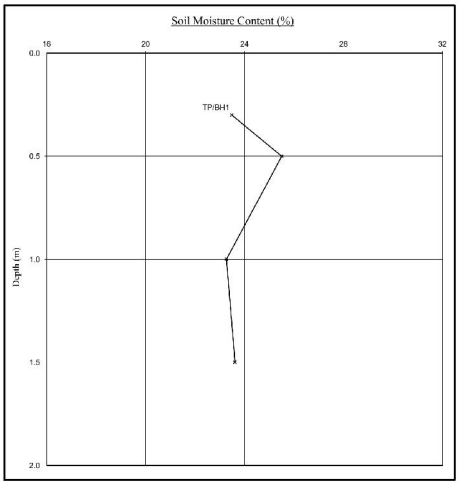
Date Sampled : 20/06/2019
Date Received : 24/06/2019
Date Tested : 25/06/2019
Date of Report : 05/07/2019



Note
1. Unless otherwise stated, values of Shear Strength were determined in situ by CPT using a Pilcon Hand Vane the calibration of which is limited to a maximum reading of 140 kPa.
2. Unless specifically noted the profiles have not been related to a site datum.

Moisture Content Profiles

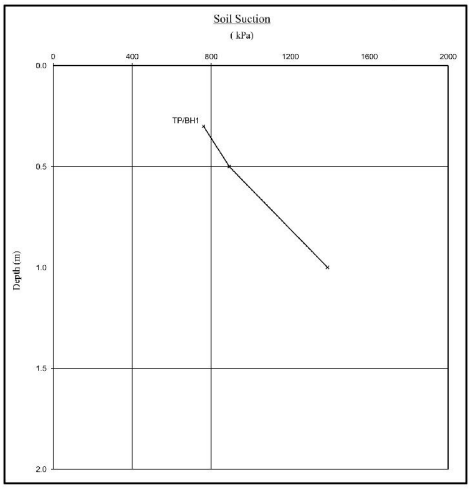
Our Ref : [redacted]
Location : 58 Fellows Road, London, NW3
Work carried out for: Sedgwick International UK - Maidstone



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 : 20/06/2019
Date Received : 24/06/2019
Date Tested : 25/06/2019
Date of Report : 05/07/2019



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 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.

EPSL ***European Plant Science Laboratory***	Sheet: 1 of 1 [redacted] Date: **15/07/2019** [redacted]	Site: **58 Fellows Road,** Work carried out for: **Sedgwick International UK**

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**
TP1A (USF)	2 mm	Fraxinus spp. 3 roots	Positive
TP1B (USF)	4 mm	Fraxinus spp. 3 roots	Positive
BH1 (1.7m)	1.5 mm	Fraxinus spp. 3 roots	Positive

Fraxinus spp. include common ash.

[redacted]

MDM

[redacted]

Head of Laboratory Services : M D Mitchell B.Sc. (Hons), M.Phil.
Plant Anatomist : Dr G S Turner B.Sc. (Hons), M.Sc., Ph.D
Plant Anatomist : Dr R J Shaw B.Sc. (Hons), Ph.D
Consultant: Dr M P Denne B.Sc. (Hons), M.Sc., Ph.D

[redacted]

To: Sedgwick International UK - Maidstone

[redacted]

[redacted]

Date: **24-Jul-19**

Fao: Mark Wood

ESTIMATE

Site:- 58 Fellows Road

[redacted]

Item		
1.0	Location	**MH 1 downstream to MH 2 - Runs 5&7**
	Shared System	No
	Condition Grade	B
	Drain Serviceability	Unserviceable
	Work Spec	From MH 1 excavate and replace 1 metre of pipe work downstream to clear blockage.
2.0	Location	**MH 2 upstream to WC - Run 8.**
	Shared System	No
	Condition Grade	B
	Drain Serviceability	Unserviceable
	Work Spec	From manhole line run upstream to WC with flexi liner.
3.0	Location	**MH 2 downstream to MH 3 - Run 9.**
	Shared System	No
	Condition Grade	B
	Drain Serviceability	Unserviceable
	Work Spec	From manhole 2 patch line run at 1.2m downstream. From MH 3 line run upstream 3 metres. Install a structural liner in a localised format.
4.0	Location	**RWG2 downstream to MH 3 - Run 10.**
	Shared System	No
	Condition Grade	B
	Drain Serviceability	Unserviceable
	Work Spec	From MH 3 line the run upstream to RWG2 with flexi liner.

Notes

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

[redacted]

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:- **58 Fellows Road**

Client :- **Sedgwick International UK - Maidstone**
Attention of:- **Mark Wood**

Client ref [redacted]
Job Number :-
Insurer Allianz Insurance Plc
Date:- 24-Jul-19
Recommendation 1

Item No	Description MH 1 downstream to MH 2 - Runs 5&7	Unit	Quantity	[redacted]
1.0	**Emergency Drain Blockage Clearance**			
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	**CCTV Surveys**			
2.2	Undertake CCTV survey 8am-6pm (up to 3 hours)	Item		
2.3	Additional 1/2 hr survey charge	Item		
3.0	**Replacing Underground Drainage**			
3.1	**Gullies**			
3.2	Take out and replace gulley (100mm outlet)	Item		
3.3	Take out and replace rodding point (100mm outlet)	Item		
3.4	**Bends/junctions**			
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	**Pipes**			
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	**Surface Reinstatement of Trenches**			
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	1	
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	**Lining**			
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		
	Super Flex Liner 100mm drain	m		
4.3	Line 150mmØ drain	m		
	Super Flex Liner 150mm drain	m		
4.4	Post lining CCTV survey	no		
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		
5.0	**Miscellaneous**			
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	**Additional items**			
6.1	De-scaling (fat/grime)	hr		
6.2	De-scaling (scale using chain flails)	hr		
6.3	Gully surround	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	1	
6.9	Shoring	m	0	
	Total Estimate Price For Recommendation Number		1.0	
	Subject to discount		**0.00**	
	Total subject to VAT @ 20%			

Note: Subject to the attached Terms and Condtions
A - When calculating prices, all measurements are rounded up
B - Depths are taken to the base of excavations
C - Every effort will be made to match existing surfaces where disturbed although this cannot be guaranteed
D - All rates exclude VAT
G - Daywork rates do not include for materials that are charged at cost plus 25%
F - The above rates are subject to re-measurement
KEY: ne = not exceeding, eo = extra over rate, m = linear metre, nr = number, hr = hour
E - Depths are taken to the base of excavations

ESTIMATING & COSTING SHEET - DOMESTIC DRAINAGE

Site:- **58 Fellows Road**

Client :- **Sedgwick International UK - Maidstone**
Attention of:- **Mark Wood**

Client ref [redacted]
Job Number :-
Insurer Allianz Insurance Plc
Date:- 24-Jul-19
Recommendation 2

Item No	Description MH 2 upstream to WC - Run 8.	Unit	Quantity
1.0	**Emergency Drain Blockage Clearance**		
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	**CCTV Surveys**		
2.2	Undertake CCTV survey 8am-6pm (up to 3 hours)	Item	
2.3	Additional 1/2 hr survey charge	Item	
3.0	**Replacing Underground Drainage**		
3.1	**Gullies**		
3.2	Take out and replace gulley (100mm outlet)	Item	
3.3	Take out and replace rodding point (100mm outlet)	Item	
3.4	**Bends/junctions**		
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	**Pipes**		
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	**Surface Reinstatement of Trenches**		
3.27	Excavate through and reinstate turf.		
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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	**Lining**		
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	
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	**Miscellaneous**		
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	**Additional items**		
6.1	De-scaling (fat/grime)	hr	1
6.2	De-scaling (scale using chain flails)	hr	
6.3	Gully surround	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	
	Total Estimate Price For Recommendation Number		2.0
	Subject to discount		0.00
	Total subject to VAT @ 20%		

Note: Subject to the attached Terms and Condtions
A - When calculating prices, all measurements are rounded up
B - Depths are taken to the base of excavations
C - Every effort will be made to match existing surfaces where disturbed although this cannot be guaranteed
D - All rates exclude VAT
G - Daywork rates do not include for materials that are charged at cost plus 25%
F - The above rates are subject to re-measurement
KEY: ne = not exceeding, eo = extra over rate, m = linear metre, nr = number, hr = hour
E - Depths are taken to the base of excavations

ESTIMATING & COSTING SHEET - DOMESTIC DRAINAGE

Site:- **58 Fellows Road**

Client :- **Sedgwick International UK - Maidstone**
Attention of:- **Mark Wood**

Client ref [redacted]
Job Number :-
Insurer Allianz Insurance Plc
Date:- 24-Jul-19
Recommendation 3

Item No	Description MH 2 downstream to MH 3 - Run 9.	Unit	Quantity
1.0	**Emergency Drain Blockage Clearance**		
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	**CCTV Surveys**		
2.2	Undertake CCTV survey 8am-6pm (up to 3 hours)	Item	
2.3	Additional 1/2 hr survey charge	Item	
3.0	**Replacing Underground Drainage**		
3.1	**Gullies**		
3.2	Take out and replace gulley (100mm outlet)	Item	
3.3	Take out and replace rodding point (100mm outlet)	Item	
3.4	**Bends/junctions**		
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	**Pipes**		
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	**Surface Reinstatement of Trenches**		
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	**Lining**		
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	
4.3	Line 150mmØ drain	m	
	Super Flex Liner 150mm drain	m	
4.4	Post lining CCTV survey	no	
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	2
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	**Miscellaneous**		
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	**Additional items**		
6.1	De-scaling (fat/grime)	hr	1
6.2	De-scaling (scale using chain flails)	hr	
6.3	Gully surround	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	
	Total Estimate Price For Recommendation Number		3.0
	Subject to discount		**0.00**
	Total subject to VAT @ 20%		

Note: Subject to the attached Terms and Condtions
A - When calculating prices, all measurements are rounded up
B - Depths are taken to the base of excavations
C - Every effort will be made to match existing surfaces where disturbed although this cannot be guaranteed
D - All rates exclude VAT
G - Daywork rates do not include for materials that are charged at cost plus 25%
F - The above rates are subject to re-measurement
KEY: ne = not exceeding, eo = extra over rate, m = linear metre, nr = number, hr = hour
E - Depths are taken to the base of excavations

ESTIMATING & COSTING SHEET - DOMESTIC DRAINAGE

Site:- **58 Fellows Road**

Client :- **Sedgwick International UK - Maidstone**
Attention of:- **Mark Wood**

Client ref [redacted]
Job Number :-
Insurer Allianz Insurance Plc
Date:- 24-Jul-19
Recommendation 4

Item No	Description RWG2 downstream to MH 3 - Run 10.	Unit	Quantity
1.0	**Emergency Drain Blockage Clearance**		
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	**CCTV Surveys**		
2.2	Undertake CCTV survey 8am-6pm (up to 3 hours)	Item	
2.3	Additional 1/2 hr survey charge	Item	
3.0	**Replacing Underground Drainage**		
3.1	**Gullies**		
3.2	Take out and replace gulley (100mm outlet)	Item	
3.3	Take out and replace rodding point (100mm outlet)	Item	
3.4	**Bends/junctions**		
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	**Pipes**		
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	**Surface Reinstatement of Trenches**		
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	**Lining**		
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	4
4.3	Line 150mmØ drain	m	
	Super Flex Liner 150mm drain	m	
4.4	Post lining CCTV survey	no	
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	**Miscellaneous**		
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	**Additional items**		
6.1	De-scaling (fat/grime)	hr	
6.2	De-scaling (scale using chain flails)	hr	
6.3	Gully surround	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	
	Total Estimate Price For Recommendation Number		4.0
	Subject to discount		0.00
	Total subject to VAT @ 20%		

Note: Subject to the attached Terms and Conditions
A - When calculating prices, all measurements are rounded up
B - Depths are taken to the base of excavations
C - Every effort will be made to match existing surfaces where disturbed although this cannot be guaranteed
D - All rates exclude VAT
G - Daywork rates do not include for materials that are charged at cost plus 25%
F - The above rates are subject to re-measurement
KEY: nc = not exceeding, eo = extra over rate, m = linear metre, nr = number, hr = hour
E - Depths are taken to the base of excavations

Coding Sheet

Sheet:		Site:	58 Fellows Road
[redacted]			
		Client:	Sedgwick International UK - Maidstone

Run: 1

From:	RWWG/1	Invert Level:		Direction:	U/S
To:	KS OUTLET	Invert Level:		Function:	Comb
Pipe Material:	VC	Pipe Dia:	100		
Water/Pressure Test:		Drain Break-In:		Gully Condition:	As Built
				Shared Run:	
				If Shared How:	

Distance (m)	Code	Clock Ref at	Clock Ref to	Dia mm	Intrusion %	Intrusion mm	Remarks	Surface Material	Length (m)
0.00	ST								
0.80	FH						REACHED KITCHEN SINK	CONCRETE	

Comments:

Run: 2

From:	MH1	Invert Level:	625	Direction:	U/S
To:	RWWG/1	Invert Level:		Function:	Comb
Pipe Material:	VC	Pipe Dia:	100		
Water/Pressure Test:		Drain Break-In:		Gully Condition:	
				Shared Run:	No
				If Shared How:	

Distance (m)	Code	Clock Ref at	Clock Ref to	Dia mm	Intrusion %	Intrusion mm	Remarks	Surface Material	Length (m)
0.00	ST								
3.30	LR						Line deviates right		
4.60	LR						Line deviates right		
6.40	FH						REACHED RWWG/1		

Comments:

Run: 3

From:	MH1	Invert Level:	625	Direction:	U/S
To:	RWWG2	Invert Level:		Function:	Comb
Pipe Material:	VC	Pipe Dia:	100		
Water/Pressure Test:		Drain Break-In:		Gully Condition:	As Built
				Shared Run:	No
				If Shared How:	

Distance (m)	Code	Clock Ref at	Clock Ref to	Dia mm	Intrusion %	Intrusion mm	Remarks	Surface Material	Length (m)
0.00	ST								
0.50	LR						Line deviates right	CONCRETE	
0.90	FH						REACHED RWWG/2		

Comments:

Run: 4

From:	MH1	Invert Level:	625	Direction:	U/S
To:	SVP/1	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	Clock Ref to	Dia mm	Intrusion %	Intrusion mm	Shared Run: / If Shared How:	Remarks	Surface Material	Length (m)
							Shared Run:		No	
							If Shared How:			
0.00	ST									
0.10	LU							Line deviates up	CONCRETE	
0.50	FH							REACHED SVP/1		

Comments:

Run: 5

From:	MH1	Invert Level:	625	Direction:	D/S
To:	MH2	Invert Level:		Function:	Comb
Pipe Material:	VC	Pipe Dia:	100		
Water/Pressure Test:		Drain Break-In:		Gully Condition:	

Distance (m)	Code	Clock Ref at	Clock Ref to	Dia mm	Intrusion %	Intrusion mm	Shared Run: / If Shared How:	Remarks	Surface Material	Length (m)
							Shared Run:		No	
							If Shared How:			
0.00	ST									
0.40	CC	12	12					Crack circumferential	CONCRETE	
0.80	GO							OBJECT IN RUN		
0.80	SA							UNABLE TO PASS OBJECT		

Comments:

Run: 6

From:	MH2	Invert Level:	780	Direction:	U/S
To:	RWG/1	Invert Level:		Function:	S/W
Pipe Material:	VC	Pipe Dia:	100		
Water/Pressure Test:		Drain Break-In:		Gully Condition:	As Built

Distance (m)	Code	Clock Ref at	Clock Ref to	Dia mm	Intrusion %	Intrusion mm	Shared Run: / If Shared How:	Remarks	Surface Material	Length (m)
							Shared Run:		No	
							If Shared How:			
0.00	ST									
2.20	FH							REACHED RWG/1	CONCRETE	

Comments:

Run: 7

From:	MH2	Invert Level:	780	Direction:	U/S
To:	MH1	Invert Level:		Function:	Comb
Pipe Material:	VC	Pipe Dia:	100		
Water/Pressure Test:		Drain Break-In:		Gully Condition:	

Distance (m)	Code	Clock Ref at	Clock Ref to	Dia mm	Intrusion %	Intrusion mm	Shared Run: / If Shared How:	Remarks	Surface Material	Length (m)
							Shared Run:		No	
							If Shared How:			
0.00	ST									
1.90	SA							UNABLE TO PUSH PAST OBJECT	CONCRETE	

Comments:

Run: 8

From:	MH2	Invert Level:	780	Direction:	U/S
To:	WC/1	Invert Level:		Function:	F/W
Pipe Material:	VC	Pipe Dia:	100		
Water/Pressure Test:		Drain Break-In:		Gully Condition:	
				Shared Run:	No
				If Shared How:	

Distance (m)	Code	Clock Ref at	Clock Ref to	Dia mm	Intrusion %	Intrusion mm	Remarks	Surface Material	Length (m)
0.00	ST								
1.10	CM	5					Cracks multiple	CONCRETE	0.2
1.50	JDM						Joint displaced medium	UNDER HOUSE	
1.60	CC	12	12				Crack circumferential		
1.80	LU						Line deviates up		
2.00	FH						REACHED WC		

Comments:

Run: 9

From:	MH2	Invert Level:	780	Direction:	D/S
To:	MH3	Invert Level:		Function:	Comb
Pipe Material:	VC	Pipe Dia:	100		
Water/Pressure Test:		Drain Break-In:		Gully Condition:	
				Shared Run:	No
				If Shared How:	

Distance (m)	Code	Clock Ref at	Clock Ref to	Dia mm	Intrusion %	Intrusion mm	Remarks	Surface Material	Length (m)
0.00	ST								
1.20	CC	12	12				Crack circumferential	SLABS	
7.00	CL	7					Crack longitudinal		
7.20	CC	12	12				Crack circumferential		
8.20	CL	2					Crack longitudinal		
8.40	RF								
8.50	CM	12	12				Cracks multiple		
8.90	CM	12	12				Cracks multiple		
9.60	FH						REACHED INTERCEPTOR		

Comments:

Run: 10

From:	RWG/2	Invert Level:		Direction:	D/S
To:	Mh3	Invert Level:		Function:	S/W
Pipe Material:	VC	Pipe Dia:	100		
Water/Pressure Test:		Drain Break-In:	Yes	Gully Condition:	As Built
				Shared Run:	
				If Shared How:	

Distance (m)	Code	Clock Ref at	Clock Ref to	Dia mm	Intrusion %	Intrusion mm	Remarks	Surface Material	Length (m)
0.00	ST								
0.30	RF							SLABS	
0.30	CL	3					Crack longitudinal		
0.50	CC	9	3				Crack circumferential		
1.30	LL						Line deviates left		
1.30	CL	3					Crack longitudinal		
5.10	CL	3					Crack longitudinal		
5.30	CM	12	12				Cracks multiple		
6.00	CM	12	12				Cracks multiple		
6.50	FH						MH3		

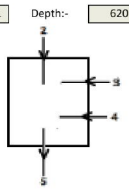
Comments:

Run:	11								
From:		RWG2		Invert Level:			Direction:	U/S	
To:		WG1		Invert Level:			Function:	F/W	
Pipe Material:		VC		Pipe Dia:		100			
Water/Pressure Test:				Drain Break-In:			Gully Condition:	As Built	
Distance (m)	Code	Clock Ref at	to	Dia mm	Intrusion %	mm	Shared Run: / If Shared How:		
0.00	ST						Remarks	Surface Material	Length (m)
1.00	FH						WG1		
Comments:									

Manhole Details

Sheet:		Site:	58 Fellows Road
Date:	20/06/19	Client:	Sedgwick International UK - Maidstone

MH:- MH1 Depth:- 620 (mm)



Depths of run if different to invert level:-

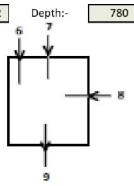
Run	Depth (mm)

Manhole Condition:- Good

Reasons for poor condition.

Chamber Dimension:- / (mm)

MH:- MH2 Depth:- 780 (mm)



Depths of run if different to invert level:-

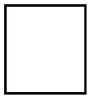
Run	Depth (mm)

Manhole Condition:- Good

Reasons for poor condition.

Chamber Dimension:- / (mm)

MH:- Depth:- (mm)



Depths of run if different to invert level:-

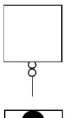
Run	Depth (mm)

Manhole Condition:-

Reasons for poor condition.

Chamber Dimension:- / (mm)

Key



Interceptor

Internal Back Drop.

External Back Drop.

Additional Comments for Poor Condition