CET PROPERTY ASSURANCE Giving our all

SITE INVESTIGATION
FACTUAL REPORT

Report No: [redacted]

Client: Sedgwick International UK - Maidstone

Site: 43 Gondar Gardens

Client Ref: [redacted]

Date of Visit: 05/02/2020

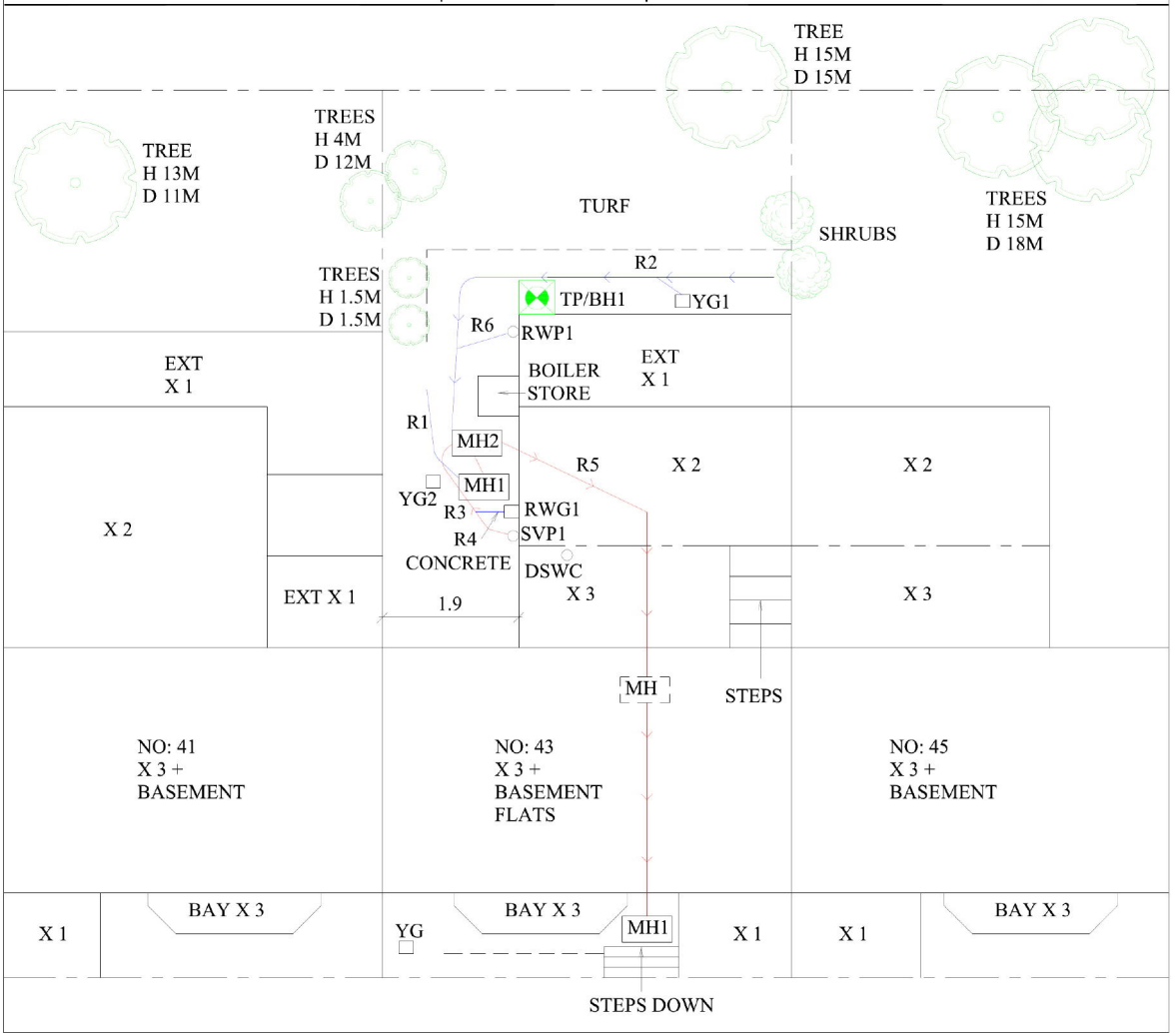
[redacted]

Investigation Layout Plan

Sheet: 1 of 1
Job No: [redacted]
Date: 26/02/2020
Weather: DRY

Site: 43 Gondar Gardens NW6
Work carried out for: Sedgwick International UK

(SI) SA (Checked) CFT (Drawn)



GONDAR GARDENS

Water Supply : Inhouse - outside Tap
Power : Internal - External - None
Parking : Onsite - Road - red Route - Metered - Permit - Other
Site Access : Good - Bad (explain)

FRONT OF PROPERTY
ON SITE TREE IDENTIFICATION FOR GUIDANCE ONLY. NOT AUTHENTICATED.

Remarks: X 3 AT REAR ADDITION IS LOFT CONVERSION

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

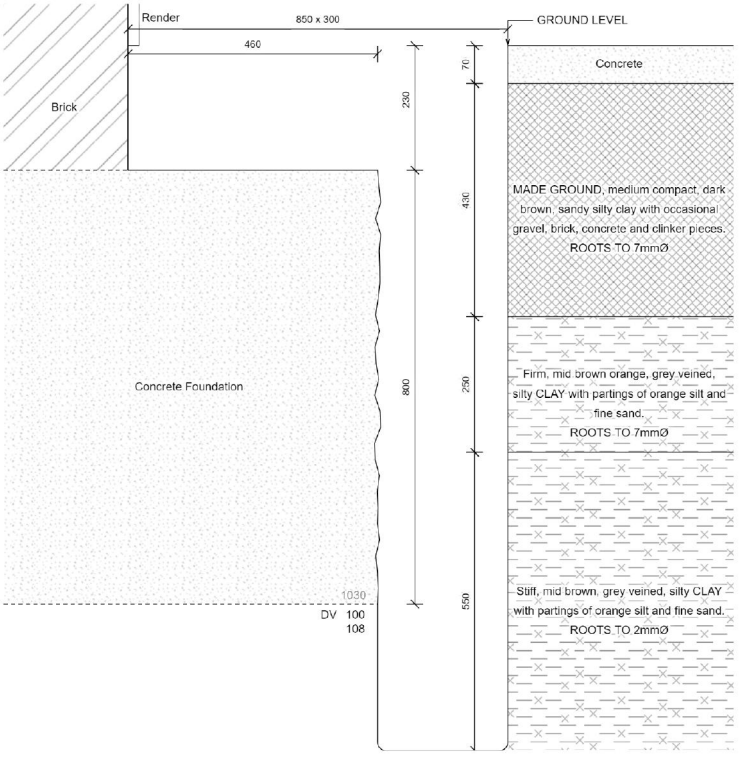
Surface Water Drain
Foul Water Drain
Tree / Bush (approx. ht in m)
Trial Pit
Borehole
O/D - Open Discharge

PROPERTY ASSURANCE
Giving our all

TEST REPORT: **Trial Pit**

REPORT NUMBER: [redacted]
TRIAL PIT REF:

CLIENT:	Sedgwick International UK	DATE:	26/02/2020
JOB NO:	[redacted]	SITE:	43 Gondar Gardens
EXCAVATION METHOD:	Hand tools	WEATHER:	Dry



For Strata below 1300mm see Bore Hole log

Water seepage at 750mm.

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
Scott Alger - Lab

Approved Signatory
27-Feb-20

Report Format:

[redacted]

[redacted]

Borehole	1		Sheet:	1 of 1	Site:	43 Gondar Gardens
			Job No:	[redacted]		
			Date:	26/02/2020		
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	1.30				
1.30	Stiff mid brown, grey veined silty CLAY with partings of orange silt and fine sand.	0.70		1.50	DV	118
						120
2.00	Very stiff mid brown, grey veined silty CLAY with partings of orange silt and fine sand.	1.00		2.00	DV	140+
						140+
				2.50	DV	140+
						140+
3.00	Very stiff mid brown, grey veined silty CLAY with partings of orange silt and fine sand and crystals.	2.00		3.00	DV	140+
						140+
				3.50	DV	140+
						140+
				4.00	DV	140+
						140+
				4.50	DV	140+
						140+
				5.00	DV	140+
5.00	End of BH					140+

Remarks:
BH ends at 5.0m. BH dry and open on completion. No live roots observed below 1.7m. Dead and decomposing root fragments to 5.0m.

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)	4.90	

TDTD - Too Dense To Drive

Logged:	AC	SA	Checked:	Approved:	Version	V1.0 28/01/16	N.T.S.

Laboratory Summary Results

Our Ref : [redacted]

Location : 43, Gondar Gardens, London

Client: [redacted]

Address:

Date Sampled: 26/02/2020

Date Received : 27/02/2020

Date Tested : 27/02/2020

Date of Report : 06/03/2020

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 1.03	D	35	<5	69	21	48	0.29	48	CH	168	118			104					
	1.5	D	32	<5											119					
	2.0	D	31	<5	69	21	48	0.21	48	CH	168	271			> 140					
	2.5	D	31	<5											> 140					
	3.0	D	31	<5	72	26	46	0.12	46	CV	168	308			> 140					
	3.5	D	31	<5											> 140					
	4.0	D	31	<5							168	346			> 140					
	4.5	D	32	<5											> 140					
	5.0	D	32	<5							168	293			> 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

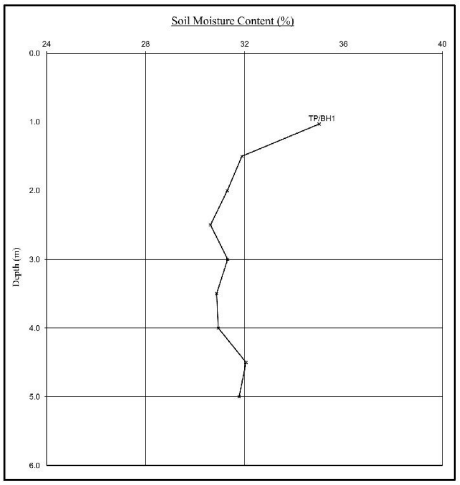
UKAS TESTING

Test results reported relate only to the items tested.

[redacted]

Moisture Content Profiles

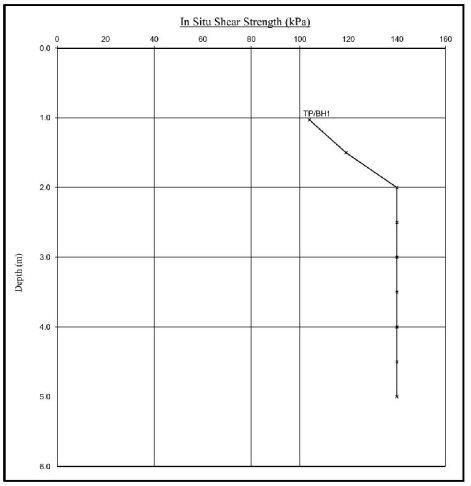
Our Ref : [redacted]
Location : 43, Gondar Gardens, London
Work carried out for: Sedgwick International UK - Maidstone



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 : 26/02/2020
Date Received : 27/02/2020
Date Tested : 27/02/2020
Date of Report : 06/03/2020



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

Soil Suction Profiles

Our Ref : [redacted]

Location : 43, Gondar Gardens, London

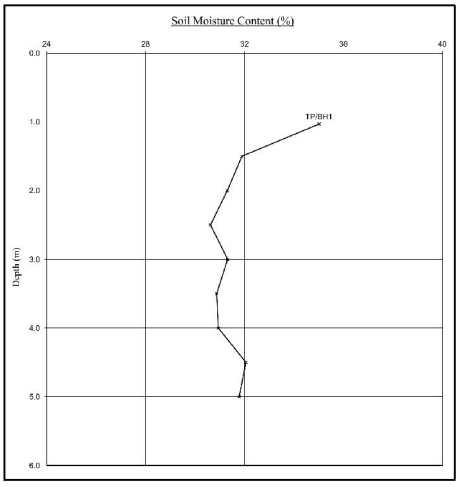
Work carried out for: Sedgwick International UK - Maidstone

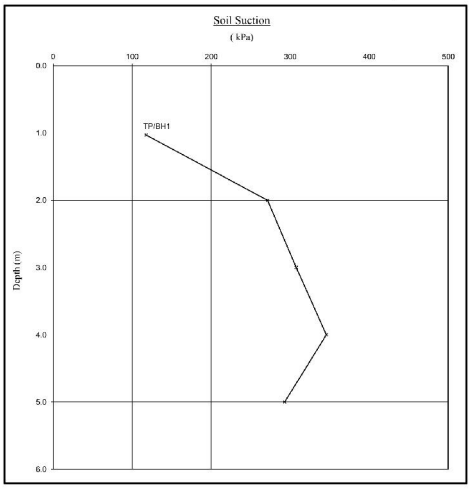
Date Sampled : 26/02/2020

Date Received : 27/02/2020

Date Tested : 27/02/2020

Date of Report : 06/03/2020





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.

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 Job No: [redacted] Date: **28/02/2020** [redacted]	Site: **43 Gondar Gardens,** 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**
TP1 (USF)	2 mm	Rosa spp.	Positive
TP1 (USF)	<1 mm	either Quercus spp. or Castanea spp. * 2 roots	Positive
BH1 (to 1.7m)	<1 mm	either Quercus spp. or Castanea spp. * 3 roots	Positive

* All rather juvenile.

Rosa spp. are roses.
Quercus spp. are oaks. Castanea spp. include sweet chestnut.

[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: **27-Feb-20**

Fao: Michael Robinson

ESTIMATE

Site:- 43 Gondar Gardens

Item	Amount
No recommendations required to the private drainage surveyed.	

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.

Coding Sheet

Sheet:		Site:	43 Gondar Gardens
Job No.:	[redacted]		
Date:	#########	Client:	Sedgwick International UK - Maidstone

Run: 1

From:	MH1	Invert Level:	1400	Direction:	U/S
To:	U/S	Invert Level:		Function:	S/W
Pipe Material:	PVC	Pipe Dia:	100		
Water/Pressure Test:		Drain Break-In:	No	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								
0.00	WL				20		Water level	concrete	1.8
0.10	LR						Line deviates right		
0.40	LR						Slight		
1.80	DE				100		Debris		
1.80	FH						Capped end		

Comments:

Run: 2

From:	MH2	Invert Level:	670	Direction:	U/S
To:	U/S	Invert Level:		Function:	S/W
Pipe Material:	PVC	Pipe Dia:	100		
Water/Pressure Test:		Drain Break-In:	No	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								
0.10	JN	9		100			Run 3	concrete	11.7
0.40	LR						Line deviates right		
4.50	JN	2		100			RWP1		
6.00	WL				5		Water level		
6.00	DES				5		Debris silt		
6.50	LR						Line deviates right		
7.00	DES				10		Debris silt		
8.50	JN	3		100			YG1		
9.40	DES				10		Debris silt		
11.70	FH						Reached capped off run		

Comments:

Pipework appears to have been slotted to take ground water

Run:	3								
From:		JN in Run 2		Invert Level:			Direction:	U/S	
To:		SVP1		Invert Level:			Function:	Comb	
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 %	mm	Shared Run:	No	
							If Shared How:		
0.00	ST						Remarks	Surface Material	Length (m)
0.40	LL						Line deviates left	concrete	3.1
0.80	JN	3		100			YG2		
1.90	JN	10		100			RWG1		
2.40	LL						Line deviates left		
2.80	LU						Line deviates up		
3.10	FH						Reached SVP1		
Comments:									

Run:	4								
From:		JN in Run 3		Invert Level:			Direction:	U/S	
To:		RWG1		Invert Level:			Function:	S/W	
Pipe Material:		PVC		Pipe Dia:		100			
Water/Pressure Test:				Drain Break-In:		No	Gully Condition:	As Built	
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)
0.00	LU						Line deviates up	concrete	0.2
0.20	FH						Reached RWG1		
Comments:									

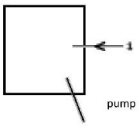
Run:	5								
From:		MH2		Invert Level:		670	Direction:	D/S	
To:		MH4		Invert Level:			Function:	Comb	
Pipe Material:		VC		Pipe Dia:		100			
Water/Pressure Test:				Drain Break-In:		No	Gully Condition:		
Distance (m)	Code	Clock Ref at	to	Dia mm	Intrusion %	mm	Shared Run:	No	
							If Shared How:		
0.00	ST						Remarks	Surface Material	Length (m)
0.10	MC						to Liner	concrete	0.2
3.90	MC						to Cast	under house	
4.00	LR						Line deviates right		
7.00	MC						to VC		
7.80	MC						to Cast		
9.80	MC						to VC		
9.90	MH						Manhole		
10.30	MC						to Liner		
15.00	FH						Reached MH4		
Comments:									

Run:	6								
From:		RWP1		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:		Yes	Gully Condition:		
Distance (m)	Code	Clock Ref at	Clock Ref to	Dia mm	Intrusion %	Intrusion mm	Shared Run:	No	
							If Shared How:		
0.00	ST						Remarks	Surface Material	Length (m)
0.00	LD						Line deviates down	concrete	1.1
0.40	GO						line levels		
1.10	FH						Reached Run 2		
Comments:									

Manhole Details

Sheet:	1 of 1	Site:	43 Gondar Gardens
Job No.:	[redacted]		
Date:	26/02/20	Client:	Sedgwick International UK - Maidstone

MH:- MH1 Depth:- 1400 (mm)



Depths of run if different to invert level:-

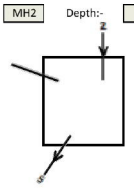
Run	Depth (mm)
1	650

Manhole Condition:- Good

Reasons for poor condition.

Chamber Dimension:- 450 / 450 (mm)

MH:- MH2 Depth:- 670 (mm)



Depths of run if different to invert level:-

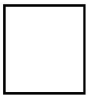
Run	Depth (mm)

Manhole Condition:- Good

Reasons for poor condition.

Chamber Dimension:- 600 / 450 (mm)

MH:- Depth:- (mm)



Depths of run if different to invert level:-

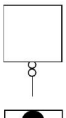
Run	Depth (mm)

Manhole Condition:-

Reasons for poor condition.

Chamber Dimension:- / (mm)

Key



Interceptor

Internal Back Drop.

External Back Drop.

Additional Comments for Poor Condition

MH1 has a pumping system, pumping into MH2 through a 30mm diameter pipe at 100mm below GL.