SITE INVESTIGATION
FACTUAL REPORT

Report No: [redacted]

Client: Crawford Claims Management

Site: The Studio House, 51 Upper Park Road

Client Ref: [redacted]

Date of Visit: 03/01/2020

[redacted]

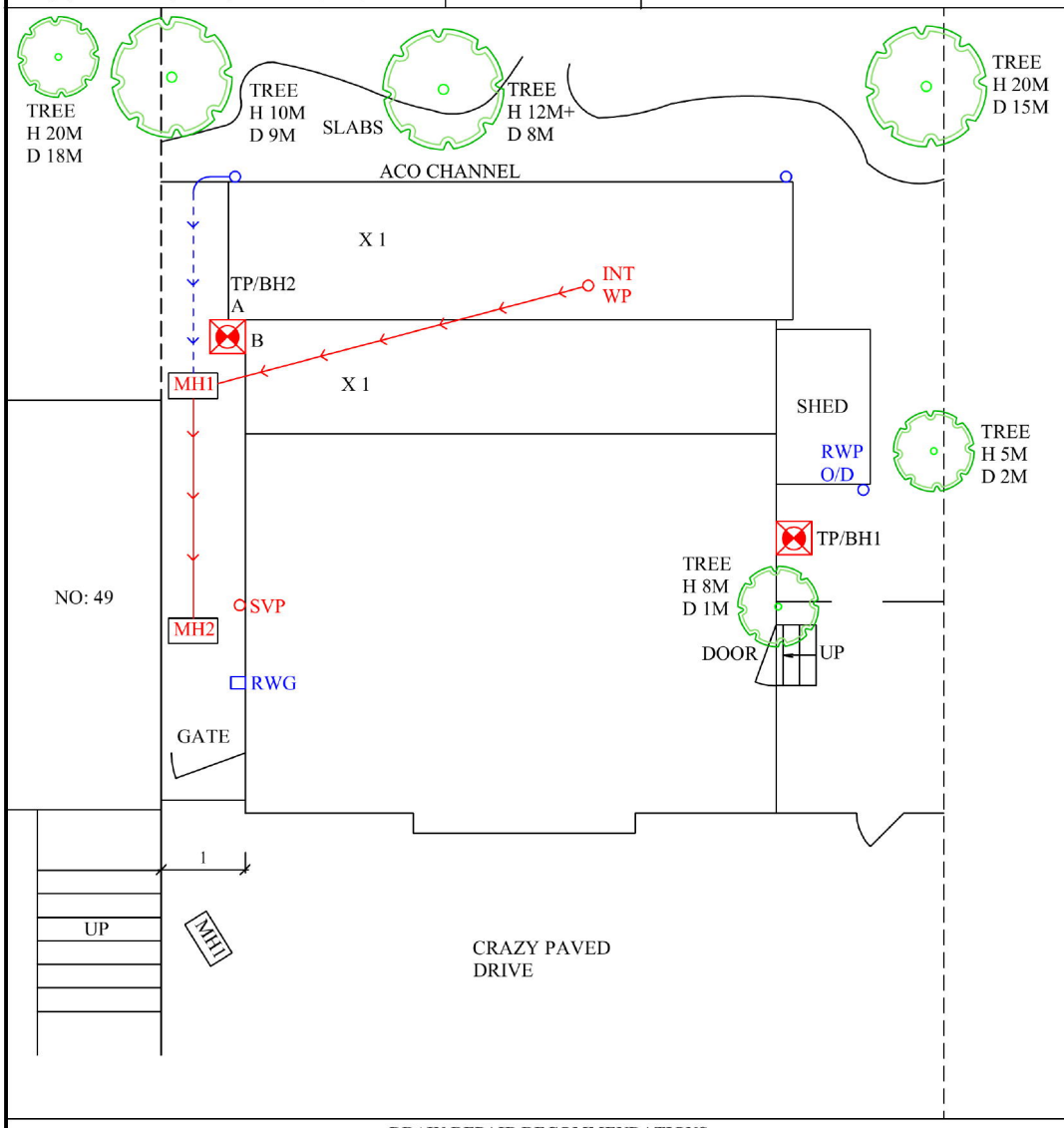
Drainage Layout Plan

Sheet: 1 of 1
Job No: [redacted]
Date: 05/02/2020

Site: 51 Upper Park Rd NW3
Work carried out for: Crawford Claims MGMT SUS

(SI) PS (Checked) CFT (Drawn)

Weather: DRY



DRAIN REPAIR RECOMMENDATIONS

Remarks: **No recommendations required to the private drainage surveyed.**

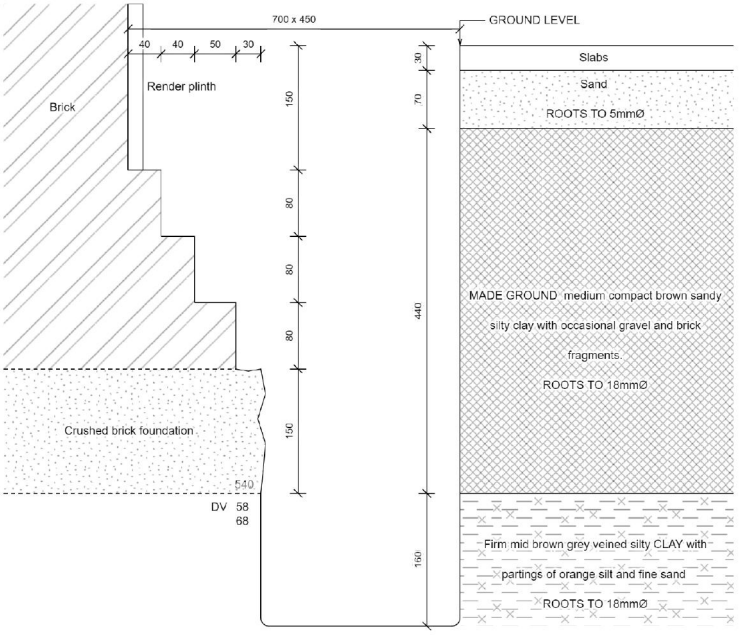
Scale: N.T.S. | Parking: | Power: | Water: | Approx age:

Surface Water Drain
Foul Water Drain

PROPERTY ASSURANCE
Giving our all

TEST REPORT: **Trial Pit**

REPORT NUMBER:	[redacted]		
TRIAL PIT REF:	TP1	DATE:	05/02/2020
CLIENT:	Crawford & Co	SITE:	51 Upper Park Road
JOB NO:	[redacted]	WEATHER:	Dry
EXCAVATION METHOD:	Hand tools		



For Strata below 700mm 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
Phil Snowden - Geotechnical Manager

[redacted]

Approved Signatory
06-Feb-20

Report Format:

[redacted]

[redacted]

[redacted]

Borehole	1		Sheet:	1 of 1	Site:	51 Upper Park Road
			Job No:	[redacted]		
			Date:	05/02/2020		
Boring Method:	Hand Auger		Ground Level:		Client:	Crawford Claims Management
Diameter (mm):	75	Weather:	Dry			

Depth	Soil Description	Thickness	Legend	Samples and Tests		
(m)				Depth	Type	Result
0.00	See Trial Pit	0.70				
0.70	Firm mid brown grey veined silty CLAY with partings of orange silt and fine sand	0.30				
1.00	Stiff mid brown grey veined silty CLAY with partings of orange silt and fine sand	2.00		1.00	DV	78
						84
				1.50	DV	90
						90
				2.00	DV	108
						110
				2.50	DV	118
						120
3.00	End of BH			3.00	DV	130+
						130+

Remarks:
BH ends at 3m. BH dry and open on completion. No roots observed below 2.1m

Key:
D - Disturbed Sample
B - Bulk Sample
W - Water Sample
J - Jar Sample
V - Pilcon Shear Vane (kPa
M - Mackintosh Probe
TDTD - Too Dense To Drive

Roots
Roots
Roots
Depth to Water (m)

To Depth (m)	Max Dia (mm)
1.50	3
2.10	1

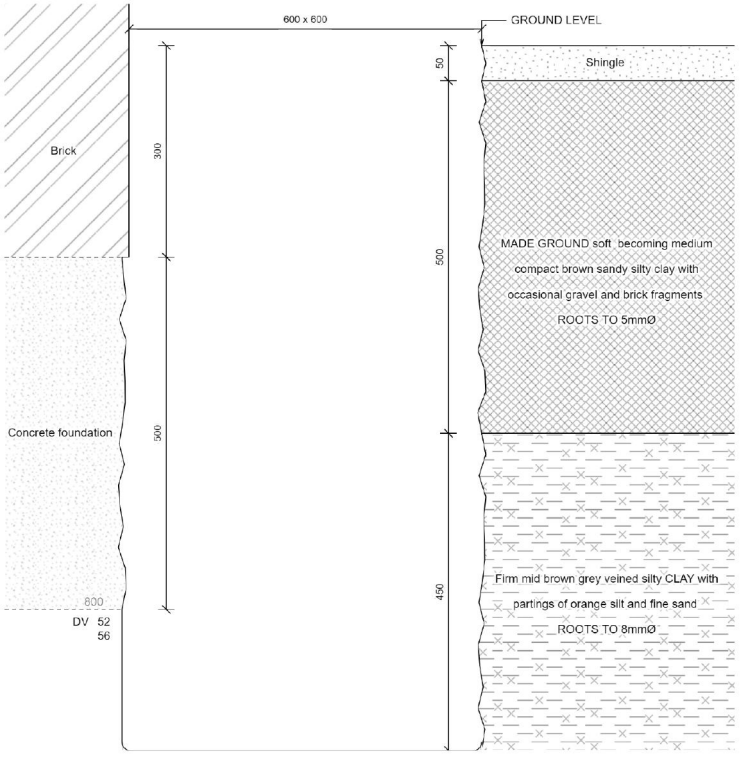
Logged:	LBI	PS	Checked:	Approved:	Version	V1.0 28/01/16	N.T.S.

PROPERTY ASSURANCE
Giving our all

TEST REPORT: **Trial Pit**

REPORT NUMBER: [redacted]

TRIAL PIT REF:	TP2a	DATE:	05/02/2020
CLIENT:	Crawford & Co	SITE:	51 Upper Park Road
JOB NO:	[redacted]	WEATHER:	Dry
EXCAVATION METHOD:	Hand tools		



For Strata below 1000mm see Bore Hole log

Water strike and standing water level at 650mm. BH augered at the rear of the TP to avoid water.

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
Phil Snowden - Geotechnical Manager
[redacted]

Approved Signatory
06-Feb-20

Report Format: [redacted]

[redacted]

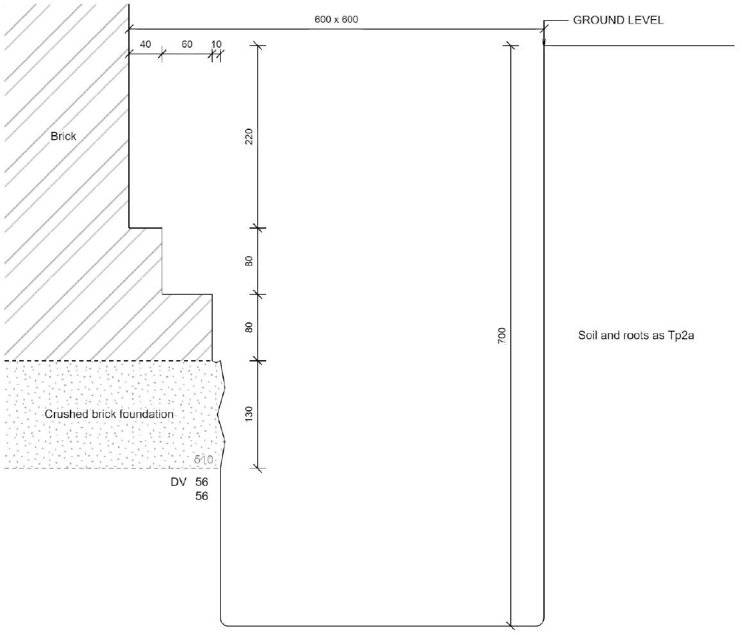
[redacted]

PROPERTY ASSURANCE
Giving our all

TEST REPORT: **Trial Pit**

REPORT NUMBER: [redacted]

TRIAL PIT REF:	TP2b	DATE:	05/02/2020
CLIENT:	Crawford & Co	SITE:	51 Upper Park Road
JOB NO:	[redacted]	WEATHER:	Dry
EXCAVATION METHOD:	Hand tools		



Trial pit ends at 700mm

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
Phil Snowden - Geotechnical Manager
[redacted]

Approved Signatory
06-Feb-20

Report Format:
[redacted]

[redacted]

[redacted]

Borehole	2		Sheet:	1 of 1	Site:	51 Upper Park Road
			Job No:	[redacted]		
			Date:	05/02/2020		
Boring Method:	Hand Auger		Ground Level:		Client:	Crawford Claims Management
Diameter (mm):	75	Weather:	Dry			

Depth	Soil Description	Thickness	Legend	Samples and Tests		
(m)				Depth	Type	Result
0.00	See Trial Pit	1.00				
1.00	Firm mid brown grey veined silty CLAY with partings of orange silt and fine sand	0.50		1.00	DV	62
						68
1.50	Stiff mid brown grey veined silty CLAY with partings of orange silt and fine sand	0.70		1.50	DV	76
						82
				2.00	DV	110
						110
2.20	Stiff mid brown grey veined silty CLAY with partings of orange silt and fine sand and claystone nodules	0.80				
				2.50	DV	118
						124
3.00	End of BH			3.00	DV	130+
						130+

Remarks:
BH ends at 3m. BH dry and open on completion.

Key:

		To Depth (m)	Max Dia (mm)
D - Disturbed Sample			
B - Bulk Sample			
W - Water Sample	Roots	2.50	2
J - Jar Sample	Roots	3.00	1
V - Pilcon Shear Vane (kPa	Roots		
M - Mackintosh Probe	Depth to Water (m)		

TDTD - Too Dense To Drive

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

Laboratory Summary Results

Our Ref : [redacted]

Location : The Studio House, 51, Upper Park Road, London

Client: Crawford Claims Management

Address: [redacted]

Date Sampled: 05/02/2020

Date Received : 06/02/2020

Date Tested : 06/02/2020

Date of Report : 12/02/2020

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 0.54	D	25	<5	60	21	39	0.10	39	CH					63					
	1.0	D	26	<5											81					
	1.5	D	28	<5											90					
	2.0	D	27	<5	65	25	40	0.05	40	CH					109					
	2.5	D	31	<5											119					
	3.0	D	33	<5	73	26	47	0.15	47	CV					> 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 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
UIS	Underside of Foundation

[redacted]

Our Ref : [redacted]

Laboratory Testing Results

Date Sampled : 05/02/2020

Location : The Studio House, 51, Upper Park Road, London

Date Received : 06/02/2020

Client: Crawford Claims Management

Date Tested : 06/02/2020

Address: [redacted]

Date of Report : 12/02/2020

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]
2	(B) U/S 0.51 (A) U/S 0.80	D	35	<5	75	27	48	0.17	48	CV					56					
		D	38	<5	73	27	46	0.23	46	CV					54					
	1.0	D	33	<5											65					
	1.5	D	30	<5											79					
	2.0	D	27	<5	69	24	45	0.07	45	CH					110					
	2.5	D	32	<5											121					
	3.0	D	37	<5	79	31	48	0.13	48	CV					> 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 240 : 1993.

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

[8] In-house method S9a 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
U/S	Underside of Foundation

UKAS TESTING

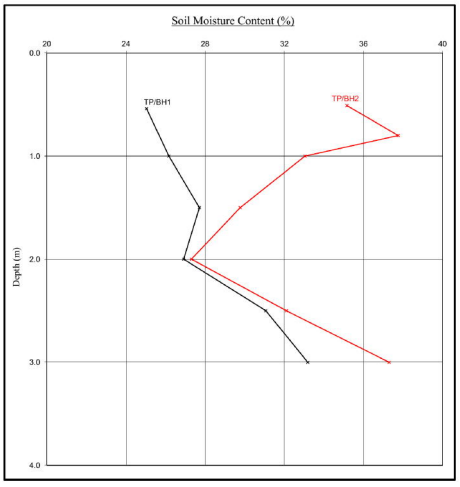
Test results reported relate only to the items tested.

[redacted]

Version: 5BH V1.5 - 26.06.18

Moisture Content Profiles

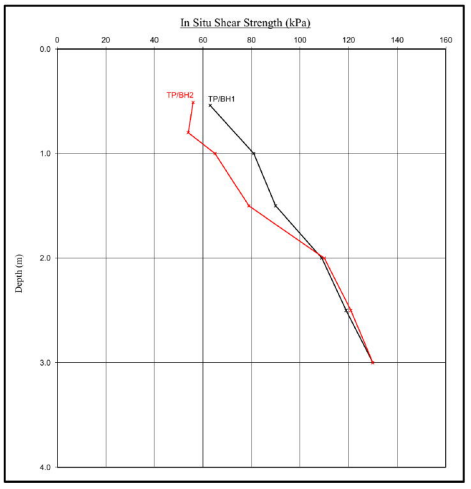
Our Ref : [redacted]
Location : The Studio House, 51, Upper Park Road, London
Work carried out for: Crawford Claims Management



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 : 05/02/2020
Date Received : 06/02/2020
Date Tested : 06/02/2020
Date of Report : 12/02/2020



Note
1. Unless otherwise stated, values of Shear Strength were determined in situ by CET using a Pilcon 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.

EPSL ***European Plant Science Laboratory***	Sheet: 1 of 1 Job No: [redacted] Date: **07/02/2020** Order No: [redacted] EPSL Ref: [redacted]	Site: **The Studio House, 51 Upper Park Road,** Work carried out for: **Crawford Claims MGMT SUS**

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)	8 mm	Forsythia spp. or related shrub species 2 roots	Positive
TP1 (USF)	17 mm	Ficus spp.	Positive
BH1 (to 2.1m)	3 mm	Ficus spp. 4 roots	Positive
TP2 (USF)	9 mm	Salix spp. † 3 roots	Positive
TP2B (USF)	1 mm	Jasminum spp.	Positive
BH2 (to 3m)	1.5 mm	Salix spp. † 5 roots	Positive

Forsythia spp. are common flowering shrubs.
Ficus spp. are figs.
Salix spp. are willows.
Jasminum spp. include Jasmine.

† EPSL research has developed a unique ability to differentiate Willows from Poplars. We believe no other laboratory in the UK can currently provide this service. We now offer this benefit at no extra cost.

[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: **Crawford Claims Management**
Ftao: Philip Gardner

[redacted]

Site: **51 Upper Park Road**

Date: 07-Feb-20

ESTIMATE

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:	51 Upper Park Road
Job No.:	[redacted]		
Date:		Client:	Crawford Claims Management

Run: 1

From:	MH1	Invert Level:	450
To:	Aco	Invert Level:	
Pipe Material:	PVC	Pipe Dia:	100
Water/Pressure Test:		Drain Break-In:	No

Direction: U/S
Function: S/W
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								
2.80	LR						Line deviates right	Shingle	
3.10	LU						Line deviates up		
3.30	FH						Reached Aco		

Comments:

Run: 2

From:	MH1	Invert Level:	450
To:	U/S	Invert Level:	
Pipe Material:	PVC	Pipe Dia:	100
Water/Pressure Test:		Drain Break-In:	No

Direction: U/S
Function: F/W
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	LR						Line deviates right	Shingle	0.5
3.30	DEG				10		Debris grease		
4.90	LU						Line deviates up	Under building	
5.10	FH						Reached int waste		

Comments:

Run: 3

From:	MH1	Invert Level:	450
To:	MH2	Invert Level:	
Pipe Material:	PVC	Pipe Dia:	100
Water/Pressure Test:		Drain Break-In:	No

Direction: D/S
Function: Comb
Gully Condition:
Shared Run: No
If Shared How:

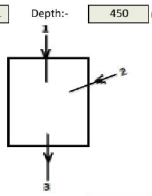
Distance (m)	Code	Clock Ref at	Clock Ref to	Dia mm	Intrusion %	Intrusion mm	Remarks	Surface Material	Length (m)
0.00	ST								
2.30	JN	11		100			Unknown	Shingle	
6.00	FH						Reached Mh 2		

Comments:

Manhole Details

Sheet:	1 of 1	Site:	51 Upper Park Road
Job No.:	[redacted]		
Date:	05/02/20	Client:	Crawford Claims Management

MH:- MH1 Depth:- 450 (mm)



Depths of run if different to invert level:-

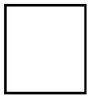
Run	Depth (mm)

Manhole Condition:- Good

Reasons for poor condition.

Chamber Dimension:- 300 / Dia (mm)

MH:- Depth:- (mm)



Depths of run if different to invert level:-

Run	Depth (mm)

Manhole Condition:-

Reasons for poor condition.

Chamber Dimension:- / (mm)

MH:- Depth:- (mm)

Depths of run if different to invert level:-

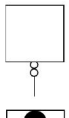
Run	Depth (mm)

Manhole Condition:-

Reasons for poor condition.

Chamber Dimension:- / (mm)

Key



Interceptor

Internal Back Drop.

External Back Drop.

Additional Comments for Poor Condition