RESCUEROD

24hr Emergency Drain Services

CCTV SURVEY

Foul & Surface Water Drainage

SITE ADDRESS

St Stephens Hall, St Stephen's Way, Bournemouth, BH2 6JZ

DATE OF SURVEY

Tuesday 22nd February 2022

N.A.D.C. National Association Drainage Contractors

exor ACCREDITED COMPANY

ISOQAR REGISTERED UKAS MANAGEMENT SYSTEMS 0026

This survey has been prepared by Rescue Rod Group:

Unit 8, 24 Abingdon Road,

Nuffield Industrial Estate,

Poole, BH17 0UG

01202 393541

enquiries@rescuerodgroup.com

And has been completed using:

Mini Cam Solo Pro

ProPipe Report

Contents:

Project:	SURVEY
Manhole Start:	MH1
Manhole End:	GULLY
Direction:	Upstream
Material:	Clay
Diameter:	100mm
Usage:	Combined
Time and Date:	10:48:10 22-FEB-2022
Video Filename:	220222_1046B-Survey.avi

Survey Observations

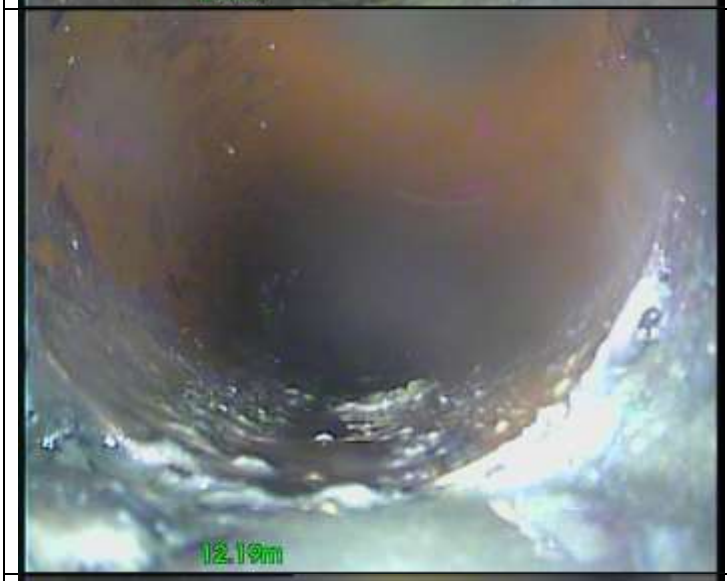
	1. At: 0.40m Junction @ 3 O'clock (100mm)
	2. At: 1.42m Line Deviates Right (LDR)

	3. At: 2.39m Scale 5%
	4. At: 3.30m Gully

Project:	SURVEY
Manhole Start:	MH1
Manhole End:	MH2
Direction:	Downstream
Material:	Clay
Diameter:	100mm
Usage:	Combined
Time and Date:	10:52:49 22-FEB-2022
Video Filename:	220222_1048C-Survey.avi

Survey Observations

	1. At: 3.47m Junction @ 9 O'clock (100mm)
	2. At: 4.84m Junction @ 9 O'clock (100mm)

	3. At: 8.00m Junction @ 9 O'clock (100mm)
	4. At: 12.19m Material Change (MC) CLAY TO PLASTIC
	5. At: 15.19m MH2

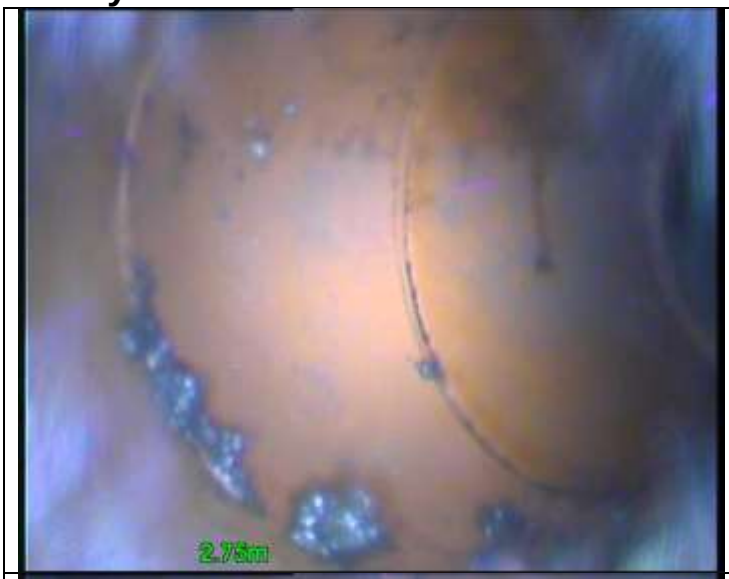
Project:	SURVEY
Manhole Start:	MH2
Manhole End:	MH3
Direction:	Downstream
Material:	Clay
Diameter:	100mm
Usage:	Combined
Time and Date:	11:29:26 22-FEB-2022
Video Filename:	220222_1128B-Survey.avi

Survey Observations

1. At: 0.70m
MH3 (Buried & Roots in Chamber)

Project:	SURVEY
Manhole Start:	MH4
Manhole End:	MH5
Direction:	Downstream
Material:	Clay
Diameter:	100mm
Usage:	Combined
Time and Date:	11:51:38 22-FEB-2022
Video Filename:	220222_1147B-Survey.avi

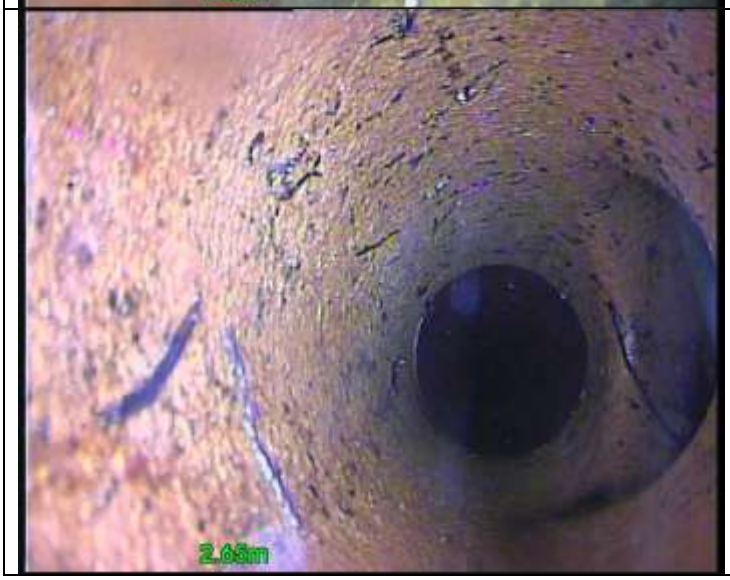
Survey Observations

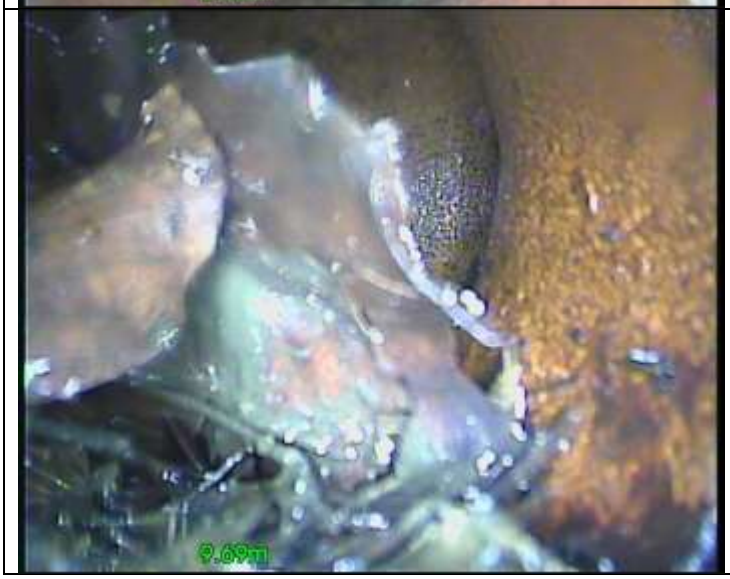
	1. At: 2.73m Line Deviates Right (LDR)
	2. At: 3.30m Line Deviates Left (LDL)

	3. At: 4.74m Junction @ 12 O'clock (100mm)
	4. At: 6.68m Material Change (MC) PLASTIC TO CLAY
	5. At: 7.12m MH5

Project:	SURVEY
Manhole Start:	MH5 LAT A
Manhole End:	GULLY
Direction:	Upstream
Material:	Clay
Diameter:	100mm
Usage:	Surface
Time and Date:	11:57:47 22-FEB-2022
Video Filename:	220222_1154B-Survey.avi

Survey Observations

	1. At: 1.26m Silt 25%
	2. At: 2.65m Junction @ 3 O'clock (100mm)

	3. At: 8.50m Circumferal Crack (CC) 12 O'clock to 7 O'clock
	4. At: 9.69m Gully

Project:	SURVEY
Manhole Start:	MH5 LAT B
Manhole End:	GULLY
Direction:	Upstream
Material:	Clay
Diameter:	100mm
Usage:	Surface
Time and Date:	11:57:47 22-FEB-2022
Video Filename:	220222_1154B-Survey.avi

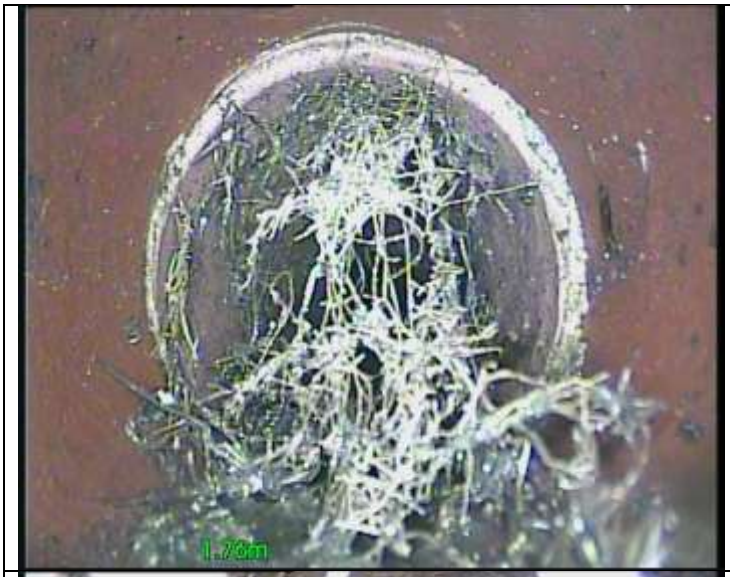
Survey Observations

	1. At: 0.28m Silt 40%
	2. At: 1.03m Silt 80% (Unable to Pass)

Project:	SURVEY
Manhole Start:	MH5
Manhole End:	GULLY
Direction:	Downstream
Material:	Clay
Diameter:	100mm
Usage:	Surface
Time and Date:	12:25:58 22-FEB-2022
Video Filename:	220222_1220B-Survey.avi

Survey Observations

	1. At: 0.08m Roots
	2. At: 0.49m Circumferal Crack (CC) 12 O'clock to 12 O'clock With Fibrous Roots

	3. At: 1.76m Roots
	4. At: 2.69m Roots
	5. At: 3.70m Roots

	6. At: 4.94m Roots
	7. At: 5.71m Roots
	8. At: 7.15m Silt 20%

	9. At: 7.89m Silt 10%
	10. At: 8.54m Circumferal Crack (CC) 6 O'clock to 3 O'clock
	11. At: 12.74m Silt 20%

	12. At: 12.76m Junction @ 3 O'clock (100mm)
	13. At: 14.12m Silt 80% (Unable to Pass)

Project:	SURVEY
Manhole Start:	MH6
Manhole End:	MH5
Direction:	Upstream
Material:	Clay
Diameter:	100mm
Usage:	Surface
Time and Date:	12:42:17 22-FEB-2022
Video Filename:	220222_1240B-Survey.avi

Survey Observations

	1. At: 1.29m Silt 10%
	2. At: 1.62m Silt 40%

	3. At: 1.62m Circumferal Fracture (FC) 12 O'clock to 12 O'clock
	4. At: 2.33m Junction @ 10 O'clock (100mm)
	5. At: 2.33m Silt 80% (Unable to Pass)

Project:	SURVEY
Manhole Start:	MH6
Manhole End:	
Direction:	Downstream
Material:	Clay
Diameter:	100mm
Usage:	Surface
Time and Date:	12:45:05 22-FEB-2022
Video Filename:	220222_1242C-Survey.avi

Survey Observations

	1. At: 2.65m Circumferal Crack (CC) 12 O'clock to 12 O'clock
	2. At: 3.40m Silt 20%

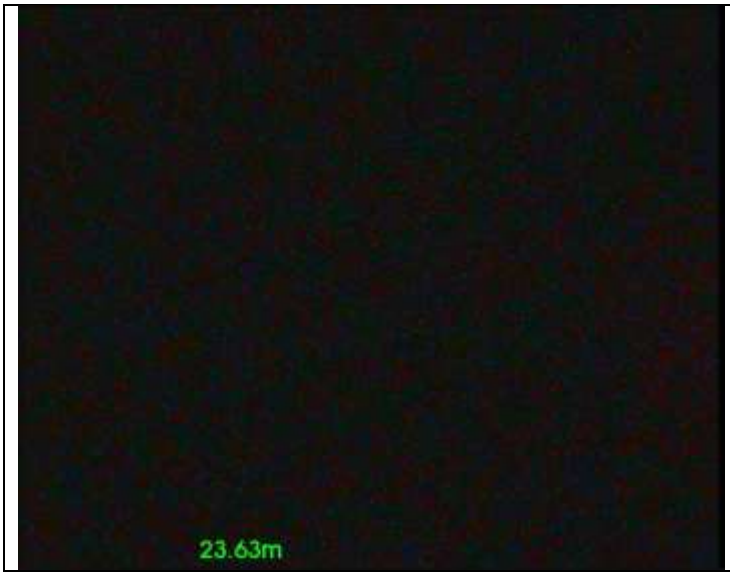
	3. At: 4.86m Silt 40%
	4. At: 5.14m Silt 80% (Unable to Pass)

Project:	SURVEY
Manhole Start:	MH7
Manhole End:	
Direction:	Downstream
Material:	Clay
Diameter:	100mm
Usage:	Combined
Time and Date:	13:05:35 22-FEB-2022
Video Filename:	220222_1257B-Survey.avi

Survey Observations

	1. At: 0.99m Enter Main Run @ 'Y' Junction
	2. At: 2.71m Buried Manhole

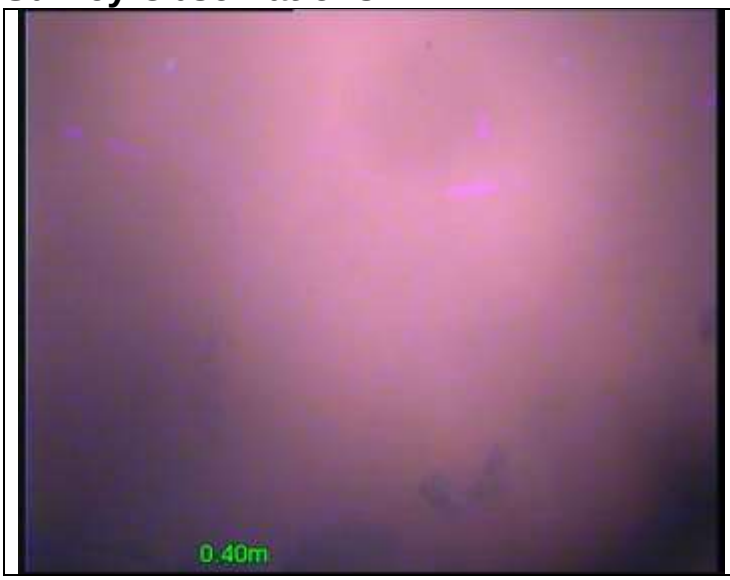
	3. At: 15.91m Connection @ 12 O'clock
	4. At: 20.11m Junction @ 9 O'clock (100mm)
	5. At: 22.71m Camera Underwater (CU)



6. At: 23.63m
Unable to Push Further

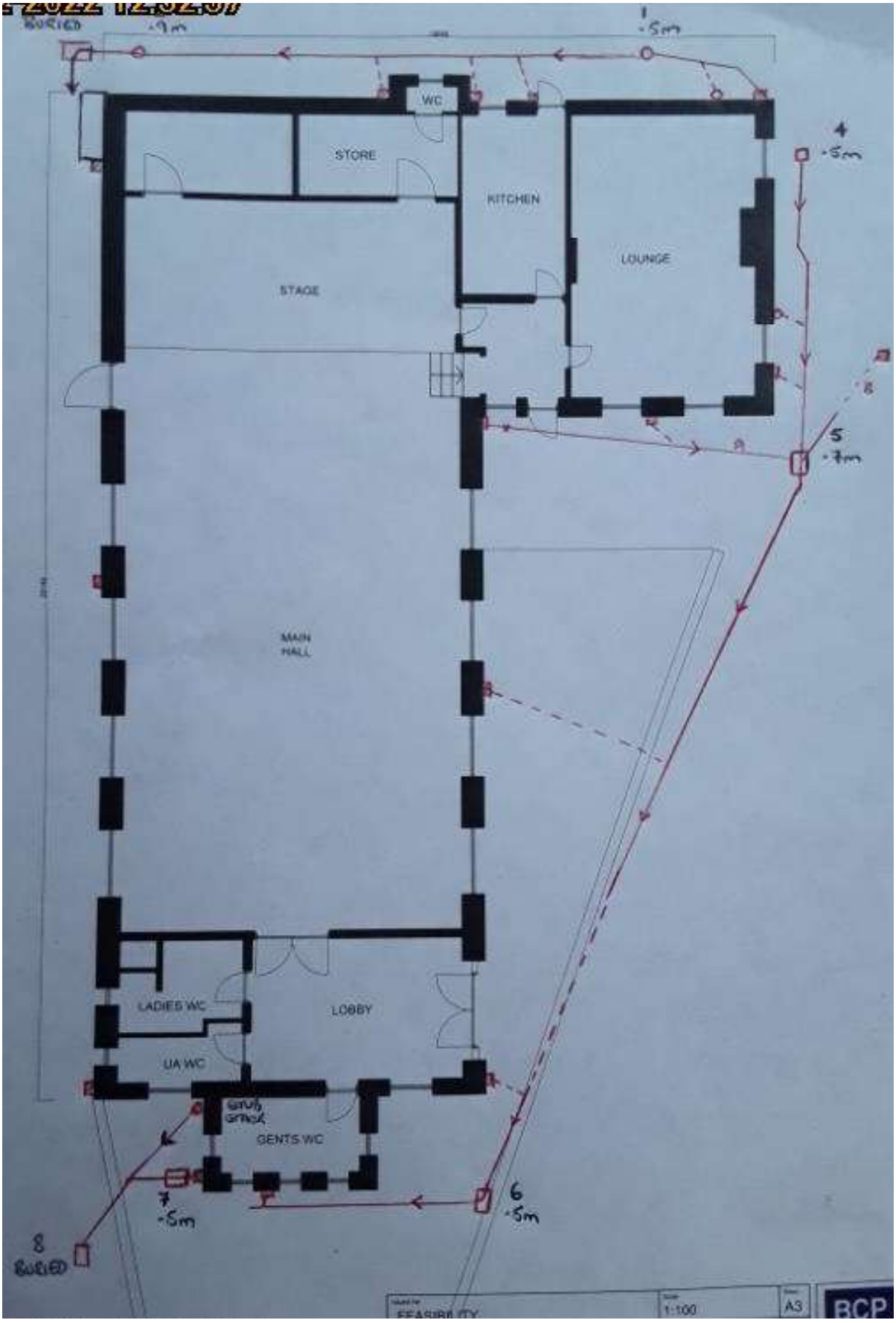
Project:	SURVEY
Manhole Start:	STUB STACK
Manhole End:	MH8
Direction:	Downstream
Material:	Plastic
Diameter:	100mm
Usage:	Foul
Time and Date:	13:23:16 22-FEB-2022
Video Filename:	220222_1321B-Survey.avi

Survey Observations



1. At: 0.40m
Rest Bend

	2. At: 2.71m Junction @ 9 O'clock (100mm)
	3. At: 4.70m MH8 (Buried)


WC
STORE
KITCHEN
LOUNGE
STAGE
MAIN HALL
LADIES WC
LOBBY
UA WC
GENTS WC
1:100
A3
BCP


22-02-2022 13:14:23
5505
5509
225
5507
5503
5508
5506
5502
300
Hall
ST STEPHEN'S WAY
5501
50.723899,-1.880545


01202 393541

General Observations & Recommendations

Surveyed all accessible drains to confirm the following issues:

- **MH3** was found to be buried and has root ingress within the chamber
- **MH5 Lat A** – Circumferal cack @ 8.50 meters
- **MH5 Lat B** – Silt build-up, unable to pass approx. one meter
- **MH5 Downstream** – Several instances of root and cracks, unable to pass silt build-up
- **MH6 Upstream** – Circumferal fracture @ 1.62 meters, unable to pass silt at 2.33 meters
- **MH8** was found to be buried
- **MH7** – This serves the adjacent rainwater gully, but drops down to 'Y' junction onto the main run within this chamber.

We are unsure, at this present time as to where these drains are eventually discharging. There is a Wessex Water combined sewer running directly beneath the hall but it does not appear that the drains discharge to this sewer.

The next closest combined sewer is in Braidley Road, approx. 60 meters away. Obviously, once MH8 has been exposed and accessed, we can survey and track / trace downstream to ascertain the course of the remaining drain, and subsequent discharge location.

Recommendations

MH3
Track / trace required to accurately locate before raising to ground level. This chamber, and possibly the downstream pipework, has root ingress and possible silt build up so will require extensive jetting, resurveying and probable lining works.

MH5 Upstream Lateral A
Requires high pressure jetting to clean and remove silt then installation of a 100mm structural patch liner at approx. 9 meters.

MH5 Upstream Lateral B
Requires high pressure jetting to remove silt build up

MH5 Downstream
Requires extensive high pressure jetting to clear roots and silt build up before resurveying, 8x 100mm structural patch liners can then be installed to seal cracks and root damaged areas already noted, we can then quote for any further repairs needed on this section.

MH8
Track / trace accurate location of MH8 then expose and raise. Survey all pipework serving this chamber to check for any further faults.

MH7
This main run requires dye testing from the internal WCs to check if still in use. We would require access to the hall to enable us to carry out these dye tests.

If this run is found to be redundant then MH7 can be done away with and the gully re-routed into MH8. The reasoning behind this is that channel and 'Y' junction within this chamber are broken and leaking.

Quotation

On the above basis please find below quotation for your perusal for recommended works:

1) Engineer(s) to attend site
2) Carry out risk assessment and method statement
3) Set up safe working area
4) Track and trace locations of buried chambers
5) Excavate down to uncover
6) Raise chambers to surface height and install new frames and covers
7) Remove roots from within MH3 and treat chamber walls with copper sulphate
8) Carry out extensive high pressure jetting to remove silt build-ups
9) Re-survey various lines as required and report back any further faults
10) Supply and install a total of 9x 100mm structural patch liners
11) Access hall and carry out dye tests to confirm if MH7 still live
12) Report back findings and further quote dependant on findings
13) Uplift and remove all excess material and dispose of at a licensed transfer station
14) Leave site clean and tidy on completion

[redacted]

Many Thanks

Claire Bignell
Operations Manager