

Project

Project Name 18-03-9223 SLH 37-43 Grasmere Crescent Kendal LA9 6LP
Project Description
Start Date 08/03/2018
Project Status
Inspection Standard MSCC4 Sewers & Drainage (GB) (SRM4 Scoring)





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Scoring Summary

 Project Name :
 18-03-9223 SLH 37-43 Grasmere Crescent Kendal LA9 6LP

Project Number :

 Date :
 14/03/2018

Structural Defects

Section	Pipe Ref	Grade	Description
2	MH1X	3	Fracture, circumferential from 9 o'clock to 4 o'clock
3	MH2X	4	Hole in drain or sewer at 11 o'clock

Grade 3: Best practice suggests consideration should be given to repairs in the medium term.

Grade 4: Best practice suggests consideration should be given to repairs to avoid a potential collapse.

Grade 5: Best practice suggests that this pipe is at risk of collapse at any time. Urgent consideration should be given to repairs to avoid total failure

Service / Operational Defects

Section	Pipe Ref	Grade	Description
Acceptable Service / Operational Condition			

Grade 3: Best practice suggests consideration should be given to maintenance activities in the medium term.

Grade 4: Best practice suggests consideration should be given to maintenance activity to avoid potential blockages.

Grade 5: Best practice suggests that this pipe is at a high risk of backing up or causing flooding.

Abandoned Surveys

Section	Pipe Ref	Description
All Surveys Completed		

Information

These summaries are based on the SRM grading from the WRC.



Project Information

Project Name: 18-03-9223 SLH 37-43 Grasmere Crescent Kendal LA9	Client's Ref:	Project Date: 14/03/2018
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Project Description:

Client

Name: South Lakes Housing
Contact:
Department:
Street: Bridge Mills Stramongate
Town or City: Kendal
Phone:
Fax:
Mobile:
Email:

Site

Name: SLH
Contact:
Department:
Street: 37-43 Grasmere Crescent
Town or City: Kendal LA9 6LP
Phone:
Fax:
Mobile:
Email:

Contractor

Name: Drain Doctor
Contact:
Department:
Street:
Town or City:
Phone: 0800 026 6623
Fax:
Mobile:
Email: reports@draindoctornw.co.uk



Project Information

Project Name: 18-03-9223 SLH 37-43 Grasmere Crescent Kendal LA9	Client's Ref:	Project Date: 14/03/2018
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Project Description:

Project Notes

CCTV Survey report & recommendations

We were instructed to conduct a CCTV survey to investigate if the drainage is the cause of the water logging at the rear of No 39.

The gully grate to the left hand side of the door was found to be blocked with loose debris. The debris was removed and the gully was jetted and left free flowing.

The CCTV survey was then carried out which highlighted defects including fractured pipes and settled deposits.

In order to rectify these faults I would recommend that the following remedial works are carried out

Remedial works

Survey section 2 MH1 -MAINS

Remove all settled deposits with Warthog nozzle

Insert a 100mm x 600mm localised patch liner to repair fractured pipe

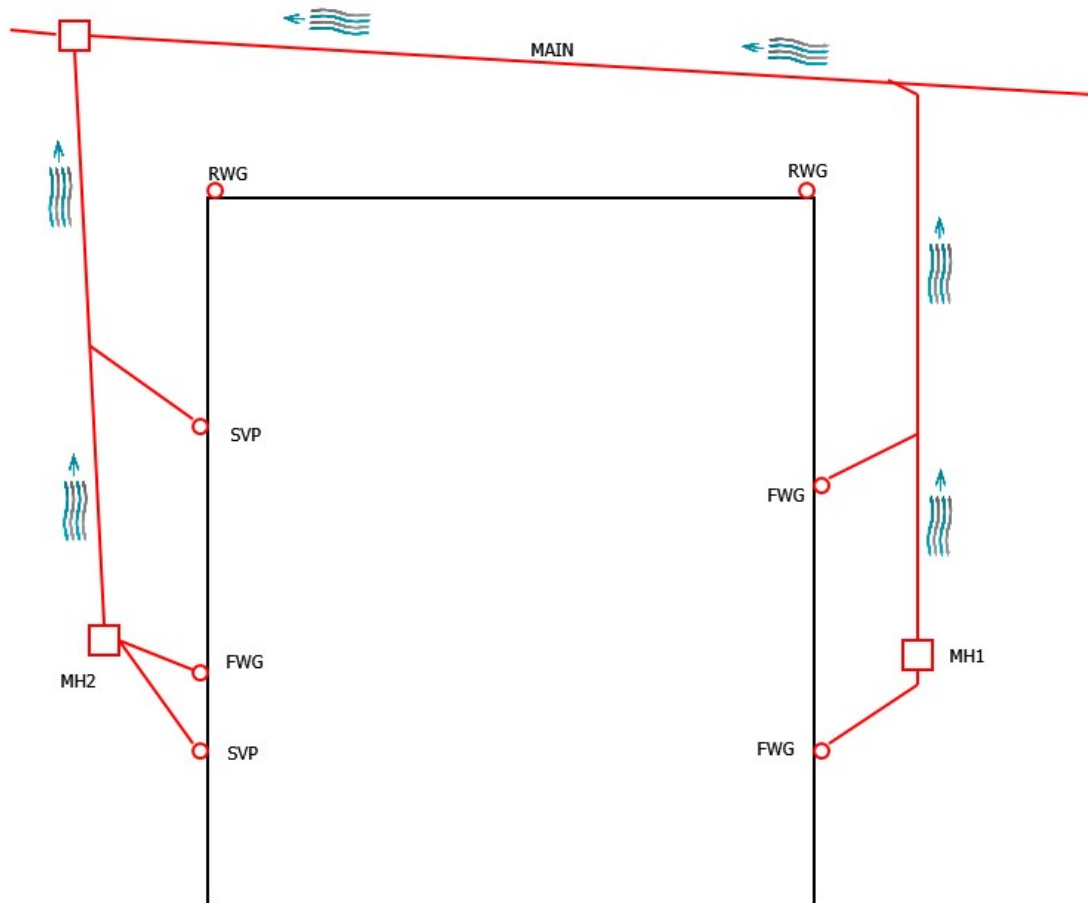
Survey section 3 MH2 - MH MAINS

Insert two 100mm x 1000mm localised patch liners

Project Information

Project Name: 18-03-9223 SLH 37-43 Grasmere Crescent Kendal LA9	Client's Ref:	Project Date: 14/03/2018
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Project Description:





Section Inspection - 14/03/2018 - USX

Section: 1	Inspection: 1	Date: 14/03/18	Time: 11:05	Client's Ref:	Weather: No Rain Or Snow	Pre Cleaned:	PLR: USX
Operator: Nr		Vehicle:		Camera:	Preset Length:	Criticality Grade:	Alternative ID:

Town or Village: KENDAL	Insp Dir: MH1 << US	US MH: US
Road: Grasmere Crescent	Inspected Length: 1.50 m	US Depth:
Location: Property with buildings	Total Length: 1.50 m	DS MH: MH1
Surface Cover:	Pipe Length: 0.00 m	DS Depth: 0.470 m

Use: Foul	Pipe Shape: Circular
Type of Pipe: Gravity drain/sewer	Height / Width: 100 mm
Year Constructed:	Pipe Material: Vitrified clay pipe (i.e. all clayware)
Inspection Purpose: Routine inspection of condition	Lining Type: None
Flow Control: No flow control	Lining Material: None

Comment:
Recommendation:

1:50	Position m	Code	Observation	MPEG	Photo	Grade
	0.00	IC	Start node type, inspection chamber, reference number: MH1	00:00:00		
	0.00	WL	Water level, 0% of the vertical dimension	00:00:02		
	1.50	GYF	Finish node type, gully, reference number: US	00:00:22		

Structural Defects					Constructional Features				
Service and Maintenance Defects					Miscellaneous Features				
Note: In line with the WRc SRM, plastic pipes are not scored against structural defects.									
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0



Section Inspection - 14/03/2018 - MH1X

Section: 2	Inspection: 2	Date: 14/03/18	Time: 11:06	Client's Ref:	Weather: No Rain Or Snow	Pre Cleaned:	PLR: MH1X
Operator: Nr		Vehicle:		Camera:	Preset Length:	Criticality Grade:	Alternative ID:

Town or Village: KENDAL	Insp Dir: MH1 >> MAIN	US MH: MH1
Road: Grasmere Crescent	Inspected Length: 10.48 m	US Depth:
Location: Property with buildings	Total Length: 10.48 m	DS MH: MAIN
Surface Cover:	Pipe Length: 0.00 m	DS Depth:

Use: Foul	Pipe Shape: Circular
Type of Pipe: Gravity drain/sewer	Height / Width: 100 mm
Year Constructed:	Pipe Material: Vitrified clay pipe (i.e. all clayware)
Inspection Purpose: Routine inspection of condition	Lining Type: None
Flow Control: No flow control	Lining Material: None

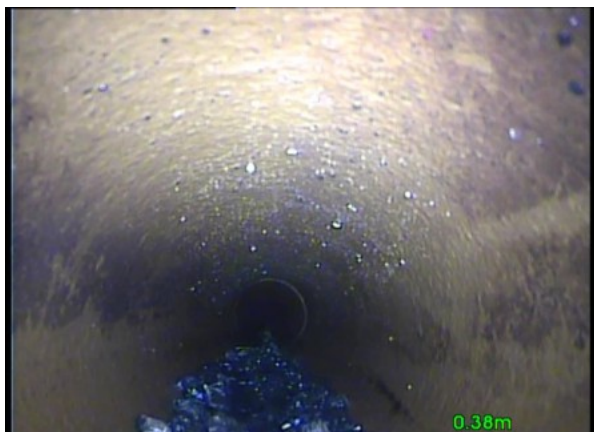
Comment:
Recommendation:

1:95	Position m	Code	Observation	MPEG	Photo	Grade
	0.00	IC	Start node type, inspection chamber, reference number: MH1	00:00:00		
	0.00	WL	Water level, 0% of the vertical dimension	00:00:01		
	0.38	S01	DER Settled deposits, coarse, 5% cross-sectional area loss, start	00:00:11	1	
	2.10	F01	DER Settled deposits, coarse, 5% cross-sectional area loss, finish	00:00:19		2
	2.32	JN	Junction at 9 o'clock, diameter: 100mm	00:00:21		
	2.80	S02	DER Settled deposits, coarse, 5% cross-sectional area loss, start	00:00:25	2	
	4.39	F02	DER Settled deposits, coarse, 5% cross-sectional area loss, finish	00:00:34		2
	8.86	FC	Fracture, circumferential from 9 o'clock to 4 o'clock	00:00:58	3, 4	3
	9.90	LL	Line deviates left	00:01:03		
	10.10	LD	Line deviates down	00:01:07		
	10.48	OCF	Finish node type, other special chamber, reference number: MAIN: Reached main	00:01:10		

Structural Defects					Constructional Features				
Service and Maintenance Defects					Miscellaneous Features				
Note: In line with the WRc SRM, plastic pipes are not scored against structural defects.									
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
1	40.0	3.8	3.8	3.0	2	1.0	0.2	2.0	2.0

Section Pictures - 14/03/2018 - MH1X

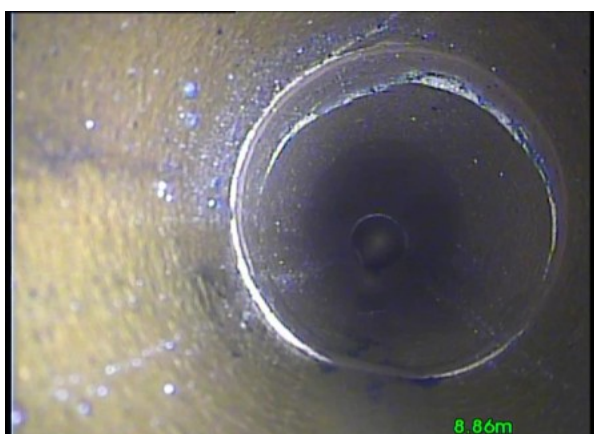
Section Number: 2	Inspection Direction: MH1 >> MAIN	PLR: MH1X	Client's Ref:	Contractor's Ref:
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1, 00:00:11, 0.38m
Settled deposits, coarse, 5% cross-sectional area loss, start



2, 00:00:25, 2.80m
Settled deposits, coarse, 5% cross-sectional area loss, start



3, 00:00:58, 8.86m
Fracture, circumferential from 9 o'clock to 4 o'clock



4, 00:00:58, 8.86m
Fracture, circumferential from 9 o'clock to 4 o'clock



Section Inspection - 14/03/2018 - MH2X

Section: 3	Inspection: 3	Date: 14/03/18	Time: 11:11	Client's Ref:	Weather: No Rain Or Snow	Pre Cleaned:	PLR: MH2X
Operator: Nr		Vehicle:		Camera:	Preset Length:	Criticality Grade:	Alternative ID:

Town or Village: KENDAL	Insp Dir: MH2 >> MAIN MH	US MH: MH2
Road: Grasmere Crescent	Inspected Length: 18.28 m	US Depth: 0.440 m
Location: Property with buildings	Total Length: 18.28 m	DS MH: MAIN MH
Surface Cover:	Pipe Length: 0.00 m	DS Depth:

Use: Foul	Pipe Shape: Circular
Type of Pipe: Gravity drain/sewer	Height / Width: 100 mm
Year Constructed:	Pipe Material: Vitrified clay pipe (i.e. all clayware)
Inspection Purpose: Routine inspection of condition	Lining Type: None
Flow Control: No flow control	Lining Material: None

Comment:
Recommendation:

1:166	Position m	Code	Observation	MPEG	Photo	Grade
Depth: 0.44 MH2						
	0.00	IC	Start node type, inspection chamber, reference number: MH2	00:00:00		
	0.00	WL	Water level, 0% of the vertical dimension	00:00:04		
	0.57	FC	Fracture, circumferential from 12 o'clock to 12 o'clock	00:00:17	1	3
	0.75	JN	Junction at 3 o'clock, diameter: 100mm	00:00:18		
	1.64	H	Hole in drain or sewer at 11 o'clock	00:00:22	2, 3	4
	3.22	JN	Junction at 3 o'clock, diameter: 100mm	00:00:34		
	4.86	JN	Junction at 3 o'clock, diameter: 100mm	00:00:41		
	5.50	JN	Junction at 3 o'clock, diameter: 100mm	00:00:44		
	17.30	LL	Line deviates left	00:01:34		
	18.28	ICF	Finish node type, inspection chamber, reference number: MAIN MH: mains manhole	00:01:45		
			MAIN MH			
			Depth:			

Structural Defects					Constructional Features				
Service and Maintenance Defects					Miscellaneous Features				
Note: In line with the WRc SRM, plastic pipes are not scored against structural defects.									
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
2	80.0	6.6	6.6	4.0	0	0.0	0.0	0.0	1.0

Section Pictures - 14/03/2018 - MH2X

Section Number: 3	Inspection Direction: MH2 >> MAIN MH	PLR: MH2X	Client's Ref:	Contractor's Ref:
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1, 00:00:17, 0.57m
Fracture, circumferential from 12 o'clock to 12 o'clock



2, 00:00:22, 1.64m
Hole in drain or sewer at 11 o'clock



3, 00:00:22, 1.64m
Hole in drain or sewer at 11 o'clock

Standard Notes & Conditions

Thank you for choosing to Drain Doctor to carry out your drainage investigation works. The results and views carried in this report are those of the engineer(s) appointed to carry out the investigation and are considered relevant on the day of the survey. Drain and sewer performance is known to alter over time, so liability cannot be accepted for differences between the recorded data and the actual data at a time after this report was generated. This survey has been created in accordance with the Manual of Sewer Condition Classification (4th Ed, WRc, 2004), the Sewer Rehabilitation Manual (WRc) and BS EN13508:2. If a DVD has been supplied with this report, please note that it can only be used in a Windows based PC. Please browse the DVD and navigate to the PDF folder to find project-based documents such as drawings, engineer's site notes and survey specifications amongst others. CCTV subsidence investigations do not account for the water tightness of the pipes and are merely a visual inspection of inside of the drains. CCTV drainage engineers are generally not qualified to comment on the causes of subsidence, and can only suggest required remedial actions for the pipes, and not the affected buildings. Subsidence is a building structural failure, which can occur for many reasons. Although drainage failures can contribute to subsidence problems, other causes should always be investigated as part of a considered approach. In order to eliminate drains from suspicion, Drain Doctor suggests that all pipes within at least 10m of the subsidence area be pressure tested over and above a CCTV inspection, and remedial suggestions considered based on the findings. Unless otherwise specified in an associated task order (or similar), the data gathered in this report may not be suitable for use as a pre-lining investigation. Drain Doctor are happy to carry out such surveys, but this must be agreed prior to the commencement of the works, and the client must specify the data they wish to capture and the acceptable tolerances. Survey meterage is used as a guide for the issuing of a report only and should not be used as an accurate distance for excavation. If an excavation is needed the defect should be pinpointed using a sonde.