



Manhole Record Card

Number	MH2	Date Of Survey	01/11/2023
Status	PR	Function	C
		Type	

Cover Details:

Square Recta	☒	Double Triang	☐	Single Triangl	☐	Circular	☐	Multiple	☐	Hinged	☐	Lockable	☐
CoverLevel	0.00	Cover Load Class	L										

Cover	600 X 400	Chamber	0 X 0	EvidenceOfSurcharge	☐
Shaft	0 X 0	ShaftDepth	0	ToxicAtmosphere	☐
Brick	☒	Precast Concrete	☐	PVC	☐
Reducing Slab	☐	Taper	☐	Side Entry	☐
		No.Land	0	Step Irons	☐
				Ladder	☐

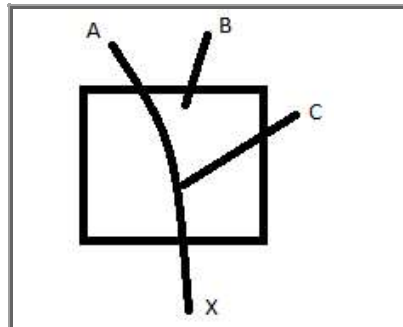
PlanPhoto



LocationPhoto



PlanofManhol



Chamber Conditions:

Cover	OK	Shaft	OK
Irons/Ladder	OK	Chamber	OK
Benching/Channel	OK		

Pipe	Invert L	DepthFr	UpstreamRe	Downstream	Pipe Sh	SizeHeight	SizeWidth	Pipe Material	Lin
A	-0.480	0.48	RWP		C		100	VC	
B	-0.280	0.28	RWP		C		100	PVC	
C	-0.480	0.48	RWP		C		100	VC	
X	-0.530	0.53		MH1	C		150	VC	

Disclaimer - Any dimensions and levels provided on this form should be checked before being relied upon. It is the responsibility of the customer to verify all information given with regards to the drainage prior to designing or commencing any work on site.



Manhole Record Card

Number	MH1	Date Of Survey	01/11/2023
Status	PR	Function	C
		Type	M

Cover Details:

Square Recta	☒	Double Triang	☐	Single Triangl	☐	Circular	☐	Multiple	☐	Hinged	☐	Lockable	☐
CoverLevel	0.00	Cover Load Class	H										

Cover	600	X	400	Chamber	0	X	0	EvidenceOfSurcharge	☐
Shaft	0	X	0	ShaftDepth	0	ToxicAtmosphere	☐		
Brick	☒	Precast Concrete	☐	PVC	☐	Segments	☐	No.RegCourses	
Reducing Slab	☐	Taper	☐	Side Entry	☐	No.Land	0	Step Irons	☒
								Ladder	☐

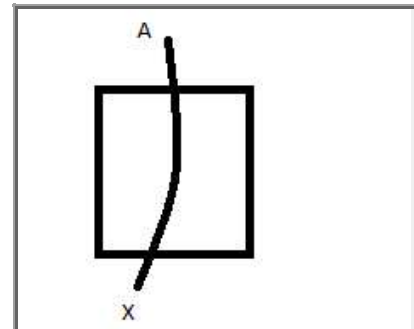
PlanPhoto



LocationPhoto



PlanofManhol

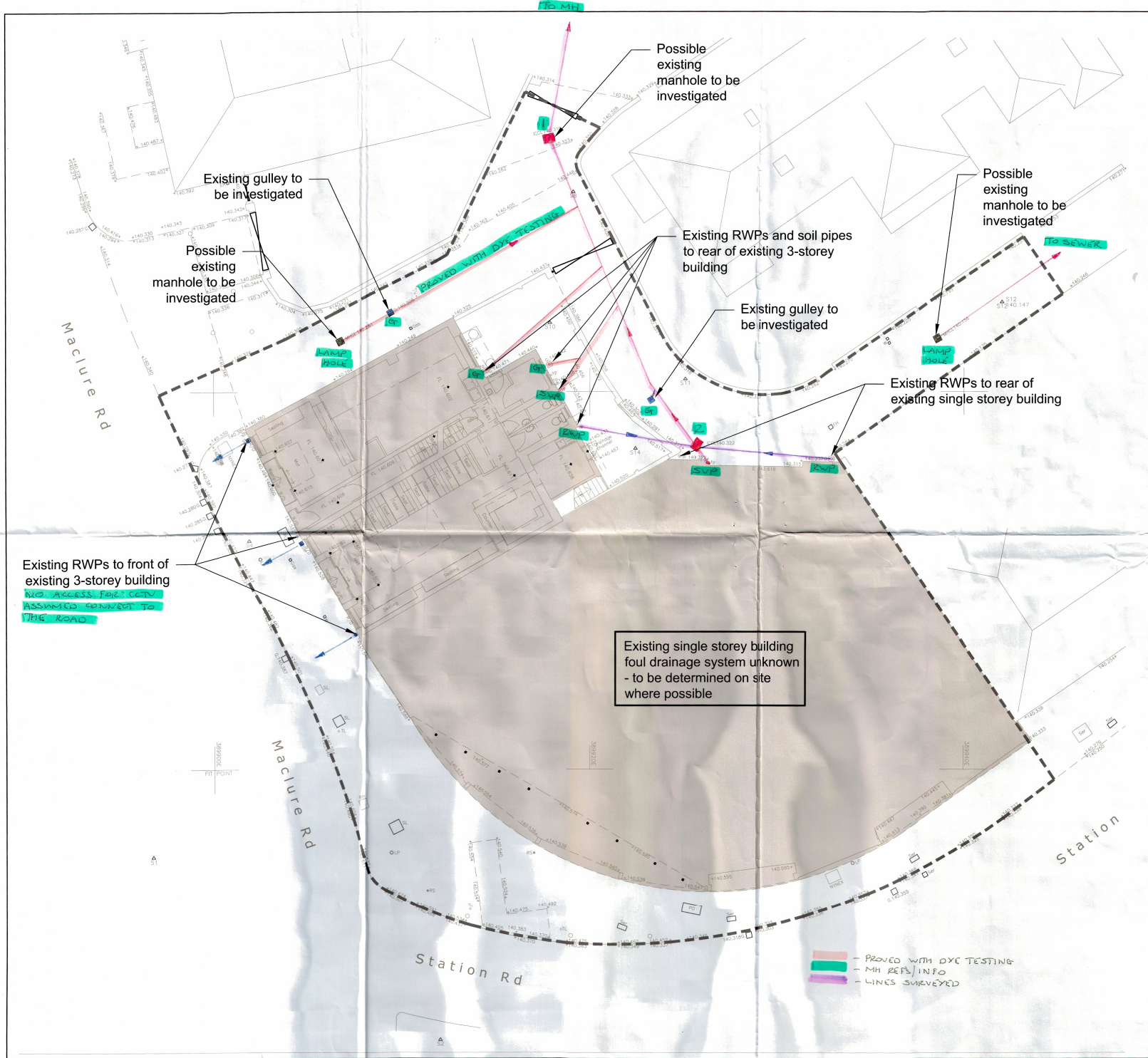


Chamber Conditions:

Cover	OK	Shaft	OK
Irons/Ladder	OK	Chamber	OK
Benching/Channel	OK		

Pipe	Invert L	DepthFr	UpstreamRe	Downstream	Pipe Sh	SizeHeight	SizeWidth	Pipe Material	Lin
A	-1.800	1.80	MH2		C		225	VC	
X	-1.860	1.86		MH	C		225	VC	

Disclaimer - Any dimensions and levels provided on this form should be checked before being relied upon. It is the responsibility of the customer to verify all information given with regards to the drainage prior to designing or commencing any work on site.



NOTES

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5. All dimensions shown on this drawing are in millimeters unless noted otherwise.
6. If the Contractor consider that they do not have sufficient information to safely complete the works detailed on this drawing, they should contact the Engineer.
7. All works are to be carried out in accordance with the Building Regulations (as amended) and to the approval of Building Standards.

ISSUED FOR INFORMATION

REV.	DATE	REVISION DETAILS	INITIALS
161023	P01	ISSUED FOR INFORMATION	LSK

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PROJECT:
Rochdale Corner PLOT

TITLE:
Investigation Works
CCTV Scope

SCALE @ A3:	DRAWN:	DATE:	REVISION:	STATUS:
NTS	LSK	Oct 2023	P01	

DRAWING No:
14834-BKP-V1-XX-SK-C-010



Project

Project Name: 2023_11_01 34410 Rochdale Corner Plot
Project Description: CCTV Drainage Survey
Project Number: 34410
Project Status: Complete
Project Date: 11/1/2023
Inspection Standard: MSCC5 Sewers & Drainage GB (SRM5 Scoring)





Table of Contents

Project Name	Project Number	Project Date
2023_11_01 34410 Rochdale Corner Plot	34410	11/1/2023

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Scoring Summary

Project Name
2023_11_01 34410 Rochdale Corner Plot

Project Number
34410

Project Date
11/1/2023

Structural Defects

Section	PLR	Grade	Description
All inspected pipes are in an acceptable structural condition (< grade 3).			

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.

Section	PLR	Grade	Description
1	Branch AX	4	Settled deposits, hard or compacted, 25% cross-sectional area loss
3	Branch CX	4	Settled deposits, hard or compacted, 35% cross-sectional area loss
4	MH 2X	4	Joint displaced, large

Abandoned Surveys

Section	PLR	Description
1	Branch AX	Survey abandoned
3	Branch CX	Survey abandoned
4	MH 2X	Survey abandoned

Information

These scoring summaries are based on the SRM grading from the WRc.



Legend of Classification (Section)

Project Name		Project Number	Project Date
2023_11_01 34410 Rochdale Corner Plot		34410	11/1/2023
1:	Brick: Minor structural defects. Other: Minor structural defects, i.e. open or displaced joints without additional characteristics. Acceptable structural condition.		
2:	Brick: Circumferential cracking. Single longitudinal crack. Surface mortar loss (depth missing < 15 mm). Surface damage - spalling slight (breaking away of small fragments from the surface). Surface damage - wear slight (increased roughness). Other: Circumferential cracking. Surface damage - spalling slight (breaking away of small fragments from the surface). Surface damage - wear slight (increased roughness). Minimal collapse likelihood in the short term but potential for further deterioration.		
3:	Brick: Total mortar loss (depth missing > 50 mm) without other defects. More than one longitudinal crack (at a single location). Multiple cracking. Single bricks displaced. Deformation < 5%, no fracture and only moderate mortar loss. Surface damage - spalling medium (large areas of chipped brick). Surface damage - wear medium (entire surface of brick is missing). Other: Fracture with no deformation or deformation < 5%. Longitudinal cracking or multiple cracking. Minor loss of level. Severe joint defects i.e. Surface damage - spalling medium. Surface damage - wear medium. Collapse unlikely in the near future but further deterioration likely.		
4:	Brick: Total mortar loss (depth missing > 50mm) with deformation > 10%; deformation up to 10% and fractured; displaced or hanging brickwork; small number of missing bricks; dropped invert (drop > 20mm); moderate loss of level; surface damage - large spalling (entire surface of brick is missing); surface damage - large wear (entire surface of brick is missing). Other: Broken; deformation up to 10% and broken; fracture with deformation 5-10%; multiple fractures; serious loss of level; serious joint defects with voids or soil visible (open joint with > 50mm soil or void visible or joint displacement > 25% of diameter); surface damage - entire area of pipe surface is missing or severely worn. Collapse likely in the foreseeable future.		
5:	Brick: Already collapsed; missing Invert; deformation > 10% and fractured; displaced or hanging brickwork and deformation < 10%; extensive areas of missing brickwork. Other: Already collapsed; deformation > 10% and broken; extensive areas of pipe fabric missing; fractures with deformation > 10% Collapsed or collapse imminent.		



Abandoned section inspection

Item No. 1	Insp. No. 1	Date 01/11/23	Time 9:59	Client's Job Ref Not Specified	Weather No Rain Or Snow	Pre Cleaned No	PLR BRANCH AX
Operator L Hilton		Vehicle PK65 HFB		Camera P235 Flexi-Rod	Preset Length Not Specified	Legal Status Private Drain	Alternative ID Not Specified

Town or Village:	Rochdale	Inspection Direction:	Upstream	Upstream Node:	BRANCH A	
Road:	Station Road	Inspected Length:	4.30 m	Upstream Pipe Depth:		
Location:	Footway	Total Length:	4.30 m	Downstream Node:	MH 2	
Surface Type:		Joint Length:		Downstream Pipe Depth:		
Use:	Combined	Pipe Shape:	Circular			
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm	Width:	100 mm	
Flow Control:	No flow control	Material:	Vitrified clay			
Year Constructed:	Not Specified	Lining Type:	No Lining			
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining			

Comments:

Recommendations:

Scale:	1:50	Position [m]	Code	Observation	Grade																				
Depth: m MH 2 0.00 MH Start node, manhole, reference: MH 2 2.90 JN Junction at 9 o'clock, 100mm dia 4.30 DEC Settled deposits, hard or compacted, 25% cross-sectional area loss: Concrete 4 4.30 SA Survey abandoned: Due to Hard Debris 4.30m Settled deposits, hard or compacted, 25% cross-sectional area loss: Concrete 0004.3m DEC - 4.30																									
<table><tr><th>STR No. Def</th><th>STR Peak</th><th>STR Mean</th><th>STR Total</th><th>STR Grade</th><th>SER No. Def</th><th>SER Peak</th><th>SER Mean</th><th>SER Total</th><th>SER Grade</th></tr><tr><td>0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>1.0</td><td>1</td><td>5.0</td><td>1.2</td><td>5.0</td><td>4.0</td></tr></table>						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	1	5.0	1.2	5.0	4.0
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	1	5.0	1.2	5.0	4.0																



Completed section inspection

Item No. 2	Insp. No. 1	Date 01/11/23	Time 10:15	Client's Job Ref Not Specified	Weather No Rain Or Snow	Pre Cleaned No	PLR BRANCH BX
Operator L Hilton		Vehicle PK65 HFB		Camera P235 Flexi-Rod	Preset Length Not Specified	Legal Status Private Drain	Alternative ID Not Specified

Town or Village:	Rochdale	Inspection Direction:	Upstream	Upstream Node:	BRANCH B
Road:	Station Road	Inspected Length:	1.20 m	Upstream Pipe Depth:	
Location:	Footway	Total Length:	1.20 m	Downstream Node:	MH 2
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Combined	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm	Width:	100 mm
Flow Control:	No flow control	Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:

1:50

Position [m]

Code

Observation

Grade

Depth: m

MH 2

0.00

MH

Start node, manhole, reference: MH 2

1.20

MHF

Finish node, manhole, reference: Branch B: SVP

Branch B

Depth: m

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



Abandoned section inspection

Item No. 3	Insp. No. 1	Date 01/11/23	Time 10:39	Client's Job Ref Not Specified	Weather No Rain Or Snow	Pre Cleaned No	PLR BRANCH CX
Operator L Hilton		Vehicle PK65 HFB		Camera P235 Flexi-Rod	Preset Length Not Specified	Legal Status Private Drain	Alternative ID Not Specified

Town or Village:	Rochdale	Inspection Direction:	Upstream	Upstream Node:	BRANCH C		
Road:	Station Road	Inspected Length:	3.00 m	Upstream Pipe Depth:			
Location:	Footway	Total Length:	3.00 m	Downstream Node:	MH 2		
Surface Type:		Joint Length:		Downstream Pipe Depth:			
Use:	Combined			Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer			Dia/Height:	100 mm	Width:	100 mm
Flow Control:	No flow control			Material:	Vitrified clay		
Year Constructed:	Not Specified			Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey			Lining Material:	No Lining		

Comments:

Recommendations:

Scale:	1:50	Position [m]	Code	Observation	Grade																				
Depth: m MH 2 0.00 MH Start node, manhole, reference: MH 2 2.70 JN Junction at 9 o'clock, 100mm dia 3.00 DEC Settled deposits, hard or compacted, 35% cross-sectional area loss: Concrete 3.00 SA Survey abandoned: Due to Hard Debris DEC - 3.00																									
<table><tr><th>STR No. Def</th><th>STR Peak</th><th>STR Mean</th><th>STR Total</th><th>STR Grade</th><th>SER No. Def</th><th>SER Peak</th><th>SER Mean</th><th>SER Total</th><th>SER Grade</th></tr><tr><td>0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>1.0</td><td>1</td><td>5.0</td><td>1.7</td><td>5.0</td><td>4.0</td></tr></table>						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	1	5.0	1.7	5.0	4.0
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	1	5.0	1.7	5.0	4.0																



Abandoned section inspection

Scale: 1:50 Position [m] Code Observation Grade

Depth: m
MH 2

0.00 MH Start node, manhole, reference: MH 2

2.50 JN Junction at 12 o'clock, 100mm dia: Road Gully

3.00 JDL Joint displaced, large 1 / 4

3.00 SA Survey abandoned: Due to Displacement

STR No.	Def	STR Peak	STR Mean	STR Total	STR Grade	SER No.	Def	SER Peak	SER Mean	SER Total	SER Grade
1		2.0	0.7	2.0	1.0	1		5.0	1.7	5.0	4.0



Completed section inspection

Item No. 5	Insp. No. 1	Date 01/11/23	Time 11:12	Client's Job Ref Not Specified	Weather No Rain Or Snow	Pre Cleaned No	PLR MAIN LINEYX
Operator L Hilton		Vehicle PK65 HFB		Camera P235 Tractor	Preset Length Not Specified	Legal Status Private Drain	Alternative ID Not Specified

Town or Village:	Rochdale	Inspection Direction:	Upstream	Upstream Node:	MAIN LINEY		
Road:	Station Road	Inspected Length:	12.40 m	Upstream Pipe Depth:			
Location:	Footway	Total Length:	12.40 m	Downstream Node:	MH 1		
Surface Type:		Joint Length:		Downstream Pipe Depth:			
Use:	Combined			Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer			Dia/Height:	225 mm	Width:	225 mm
Flow Control:	No flow control			Material:	Vitrified clay		
Year Constructed:	Not Specified			Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey			Lining Material:	No Lining		

Comments:

Recommendations:

Scale: 1:108 Position [m] Code Observation Grade

Depth: m

MH 1



0.00

MH

Start node, manhole, reference: MH 1

2.20

JN

Junction at 3 o'clock, 225mm dia: Lamp Hole/Road Gully

7.10

JN

Junction at 3 o'clock, 100mm dia: RWP/Gully

11.30

JN

Junction at 2 o'clock, 100mm dia: SVP/Gully

11.80

JN

Junction at 12 o'clock, 150mm dia: Lamp Hole

12.40

MHF

Finish node, manhole, reference: Main LineY:
Overlap Covered

Main LineY
Depth: m

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



Completed section inspection

Item No. 6	Insp. No. 1	Date 01/11/23	Time 11:20	Client's Job Ref Not Specified	Weather No Rain Or Snow	Pre Cleaned No	PLR MH 1X
Operator L Hilton		Vehicle PK65 HFB		Camera P235 Tractor	Preset Length Not Specified	Legal Status Private Drain	Alternative ID Not Specified

Town or Village:	Rochdale	Inspection Direction:	Downstream	Upstream Node:	MH 1
Road:	Station Road	Inspected Length:	7.80 m	Upstream Pipe Depth:	
Location:	Footway	Total Length:	7.80 m	Downstream Node:	MAIN LINEX
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Combined	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm	Width:	225 mm
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:

Recommendations:

Scale: 1:68 Position [m] Code Observation Grade

Depth: m
MH 1



0.00

MH

Start node, manhole, reference: MH 1

0.20

JN

Junction at 11 o'clock, 100mm dia

3.90

JN

Junction at 11 o'clock, 100mm dia

7.80

MHF

Finish node, manhole, reference: Main LineX:
Manhole

Main LineX
Depth: m

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



Cripplegate Lane, Hoghton, Preston. PR5 0RR
Tel: 01254 851500 Fax: 01254854004 service@drain-alert.co.uk

Booth King Partnership Ltd
Civil and Structural Engineers
Tollgate House
9c Bridge Street
Ramsbottom
BL0 9AB

6th November 2023

Dear Lee,

Reference: - CCTV Report, JN34410, Rochdale

May we thank you for your valued custom. As requested, we have conducted a CCTV inspection at the above premises. We have emailed a link to you to access the Wincan VX video clips and documents via the cloud.

We trust that the report is to your satisfaction; however, should you have any queries then please do not hesitate to contact me.

Yours sincerely,

Mr S W Ormisher, B.A.(Hons.),
Technical Services Consultant

Service areas: Preston • Bolton • Wigan • Salford • Tameside • Rochdale • Cheshire • Fylde • Burnley
Company Reg. No. 02950360 • VAT Reg. No. 448 2116 57





Plan of the drainage system, not to scale.

Enclosed

Conclusion

As requested, a CCTV survey and investigation of the drainage system serving the buildings and surrounding areas was carried out as instructed by client.

Upon arrival, visible inspection found numerous manholes to be located in the alleyway area to the rear of the buildings. Further investigation found silt and wastewater debris to be minimal, therefore due to this, no high-pressure water jetting was undertaken to remove debris prior to CCTV taking place. The survey was conducted upstream and downstream from manholes marked and identified on plan accordingly. Evidence from the survey found the drainage system to be combined foul and surface water serving various rwp's, gullies, svp's and other drainage lines around the building. The drainage lines were seen to be of various diameters and material construction throughout. The general condition of the lines surveyed was found to be reasonable and in expected working order throughout. Although a few faults were found in certain areas which will require remedial work to be carried out to prevent further deterioration and problems occurring in the future if drainage lines are to be retained.

Faults found

Section 1 MH 2 Branch A

Settled deposits seen at 4.30m causing restriction in flow through the drainage line.

Section 3 MH 2 Branch C

Settled deposits seen at 3.00m causing restriction in flow through the drainage.

Section 4 MH 2 Main Line X

Displaced joint seen at 3.00m causing structural weakness and restriction in flow through the drainage line.

Recommendations

Section 1 MH 2 Branch A

Carry out high pressure water jetting with specialised descaling equipment to remove debris as necessary from the drainage line. CCTV carried out upon completion.



Section 3 MH 2 Branch C

Carry out high pressure water jetting with specialised descaling equipment to remove debris as necessary from the drainage line. CCTV carried out on completion.

Section 4 MH 2 Main Line X

Installation of 1 x 150mm localised patch liner repair at 3.00m to restore structural integrity to the drainage line.

We trust that the above is acceptable; however, should you require any further information, please do not hesitate to contact me.

Yours sincerely,

Mr S W Ormisher,
Technical Services Consultant

Disclaimer - Please note that any dimensions, levels, and drainage layout drawings that are provided by Drain Alert, should be checked before being relied upon. All updated drawings are not to scale. It is the responsibility of the client to verify all information given with regards to the drainage prior to commencing any design or work site.