



Cornwall Drains Ltd

Penzance Council Penlee House Gallery & Museum 280125

12 February 2025

The WinCan v8 logo is superimposed over a photograph of a circular metal drain cover. The cover has a central circular emblem and radial lines. The background is a blurred, golden-brown surface, possibly water or a wet pavement, reflecting light.

www.wincan.com

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GRADE 3,4 & 5 Summary

STRUCTURAL DEFECTS

Structural defects			
Section	PLR	Grade	Fault description
1	CWMH01 X	3	Multiple defects at 4.5m
2	CWMH02 X	3	Fracture, circumferential, from 12 to 12 o'clock

Grade 3; Best practice suggests consideration be given to repair in the medium term

Grade 4; Best practice suggests consideration be given to a repair to avoid potential collapse

Grade 5; Best practice suggests this pipe is at risk of collapse at any time; urgent consideration should be given to a repair to avoid collapse

SERVICE / OPERATIONAL DEFECTS

Service defects			
Section	PLR	Grade	Fault description
1	CWMH01 X	3	Multiple defects at 7.6m
2	CWMH02 X	5	Multiple defects at 0.1m
3	Gully X	3	Multiple defects at 2.7m
4	CWMH03 X	5	Multiple defects at 20.5m

Grade 3; Best practice suggests consideration be given to maintenance activities in the medium term

Grade 4; Best practice suggests consideration be given to maintenance activity to avoid potential blockage

Grade 5; Best practice suggests this pipe is at immediate risk of backing up / causing flooding

Abandoned Surveys

Camera no access		
Section	PLR	Fault description
3	Gully X	Settled deposits, fine, 10% cross-sectional area loss, End

Information

These summaries are based on the SRM grading from the WRC

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Service / Operational Defects (SRM 4)

Project name : PenzanceCouncilPenleeHouseGaller	Project Number :	Contact :	Date : 07/02/2025
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No.	PLR	Dir.	Use	Shape / Size	Date	Mat.	Total Length	Insp. Length	Peak HWG	Peak Score	Grade	Mean Score	Total Score
1	CWMH01X	D	C	C 100/100	04/02/2025	VC	9.40	7.60	3	2	3	1.62	15.2
2	CWMH02X	D	C	C 100/100	04/02/2025	VC	8.60	8.60	3	12	5	1.4	12
3	GullyX	U	C	C 100/100	04/02/2025	PVC	7.30	7.30	3	4.2	3	2.3	16.8
4	CWMH03X	D	C	C 100/100	07/02/2025	PVC	29.60	29.60	3	11	5	3.86	114.3

Structural Defects (SRM 4)

Project name : PenzanceCouncilPenleeHouseGaller	Project Number :	Contact :	Date : 07/02/2025
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No.	PLR	Dir.	Use	Shape / Size	Date	Mat.	Total Length	Insp. Length	Peak HWG	Peak Score	Grade	Mean Score	Total Score
1	CWMH01X	D	C	C 100/100	04/02/2025	VC	9.40	7.60	3	40	3	5.32	50
2	CWMH02X	D	C	C 100/100	04/02/2025	VC	8.60	8.60	3	40	3	4.65	40
3	GullyX	U	C	C 100/100	04/02/2025	PVC	7.30	7.30	4	1	1	0.27	2
4	CWMH03X	D	C	C 100/100	07/02/2025	PVC	29.60	29.60	-	0	1	0	0

Project-informationProject name :
PenzanceCouncilPenleeHouseGaller

Project Number :

Contact :

Date :
04/02/2025

Client: Penzance Council
Contact Name: Anna Renton
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County:
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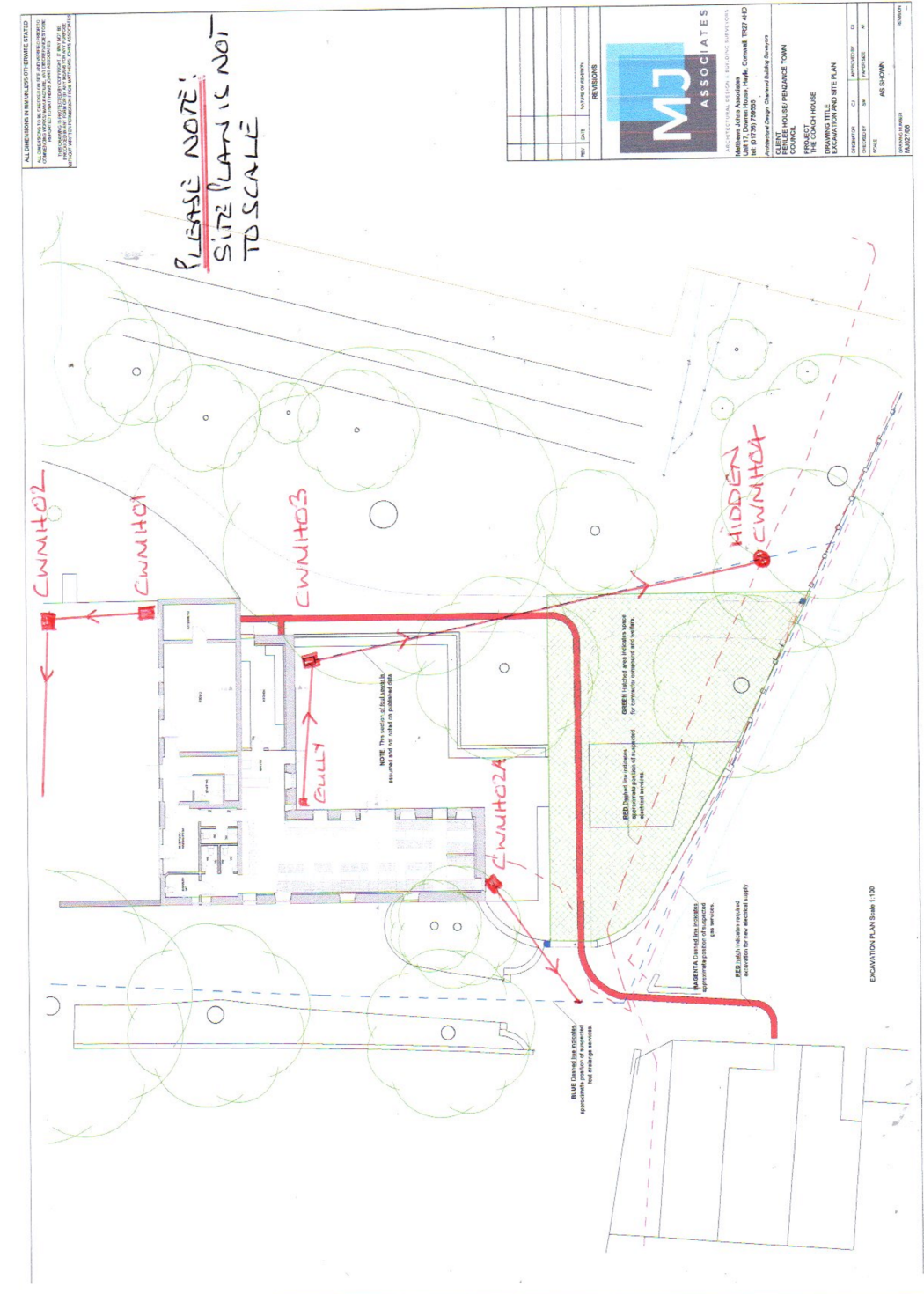
Project-information

Project name :
PenzanceCouncilPenleeHouseGaller

Project Number :

Contact :

Date :
04/02/2025



Inspection report

Date : 04/02/2025	Job number :	Weather : no rain or snow	Operator : Oliver	Section number : 1	PLR SUFFIX: X
Weather no rain or snow	Vehicle :	Camera :	Preset :	Cleaned : no	Operator : Oliver

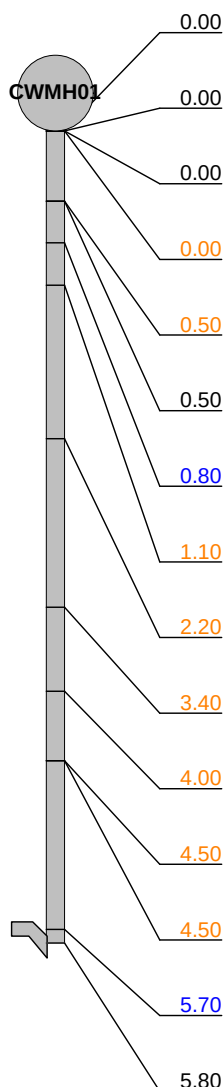
Place : Road : Location Inspection	Penzance Penlee House Gallery & Museum Property with buildings CWMH01 (D/S) CWMH02	Location details: Catchment: Tape number : Pipe Length	U/S MH : U/S Depth : D/S MH : D/S Depth :	CWMH01 0.34 CWMH02 0.84
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Use: Year laid : Purpose : Total length :	Combined Sample survey to determine asset condition 9.40 m	Pipe shape : Pipe size : Pipe material : Lining :	Circular 100 mm Vitrified clay
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Comment :	Fractured,Cracked,Holding Water
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1:54 Position
Depth: 0.34

Observation



Start node type, manhole, reference number : CWMH01 Remarks: downstream to CWMH02

Water level, 0% of the vertical dimension

General photograph taken at this point Remarks: overview

S01 Attached deposits, fouling, from 12 to 12 o'clock, 5% cross-sectional area loss, Start Remarks: vision obscured

S02 Fracture, longitudinal at joint, at 6 o'clock, Start

Water level, 10% of the vertical dimension

Crack, circumferential, from 4 to 10 o'clock

F02 Fracture, longitudinal at joint, at 6 o'clock, End

Fracture, circumferential at joint, from 2 to 7 o'clock

Fracture, circumferential at joint, from 3 to 9 o'clock

S03 Fracture, longitudinal at joint, at 4 o'clock, Start

F03 Fracture, longitudinal at joint, at 4 o'clock, End

Fracture, circumferential, from 12 to 12 o'clock

Crack, circumferential at joint, from 10 to 2 o'clock

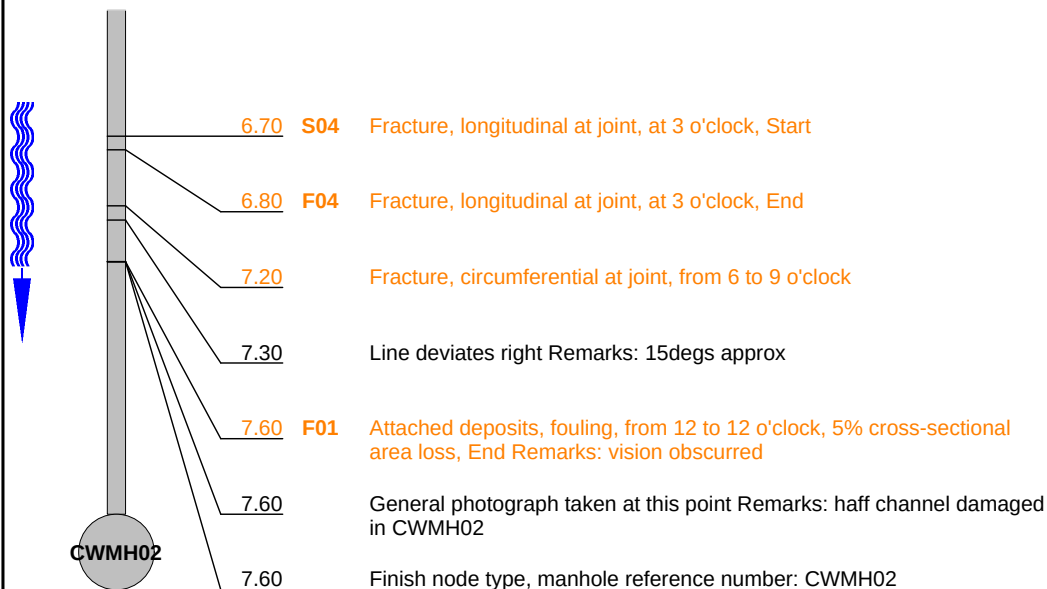
Junction, at 2 o'clock, diameter 100mm Remarks: unconfirmed source



Inspection Report

Date : 04/02/2025	Job number :	Weather : no rain or snow	Operator : Oliver	Section number : 1	PLR : X
Weather no rain or snow	Vehicle :	Camera :	Preset :	Cleaned : no	Grade:

1:54 Position Observation



Depth: 0.84

STR no def	STR peak	STR mean	STR total	STR grade	SER no def	SER peak	SER mean	SER total	SER grade
2	40	5.32	50	3	1	2	1.62	15.2	3

Inspection pictures

 Place :
Penzance

 Road :
Penlee House Gallery & Museum

 Date :
04/02/2025

 Section number :
1

 PLR Suffix :
X


Photo: 1_1_1_A.jpg

 0m, Start node type, manhole, reference number : CWMH01
 Remarks: downstream to CWMH02


Photo: 1_1_4_A.jpg

0m, General photograph taken at this point Remarks: overview



Photo: 1_1_5_A.jpg

 0m, Attached deposits, fouling, from 12 to 12 o'clock, 5%
 cross-sectional area loss, Start Remarks: vision obscured


Photo: 1_1_6_A.jpg

0.5m, Water level, 10% of the vertical dimension

Inspection pictures

 Place :
Penzance

 Road :
Penlee House Gallery & Museum

 Date :
04/02/2025

 Section number :
1

 PLR Suffix :
X


Photo: 1_1_7_A.jpg
0.5m, Fracture, longitudinal at joint, at 6 o'clock, Start



Photo: 1_1_8_A.jpg
0.8m, Crack, circumferential, from 4 to 10 o'clock



Photo: 1_1_10_A.jpg
2.2m, Fracture, circumferential at joint, from 2 to 7 o'clock



Photo: 1_1_11_A.jpg
3.4m, Fracture, circumferential at joint, from 3 to 9 o'clock

Inspection pictures

 Place :
Penzance

 Road :
Penlee House Gallery & Museum

 Date :
04/02/2025

 Section number :
1

 PLR Suffix :
X


Photo: 1_1_12_A.jpg
4m, Fracture, longitudinal at joint, at 4 o'clock, Start

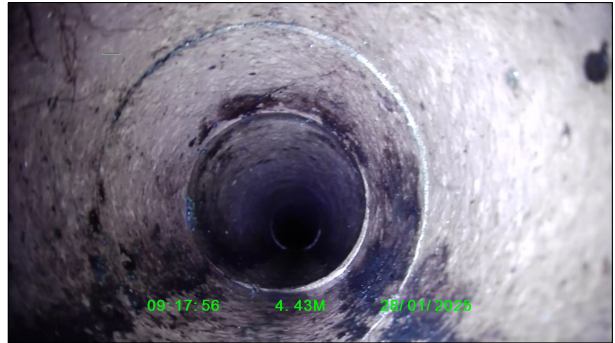


Photo: 1_1_14_A.jpg
4.5m, Fracture, circumferential, from 12 to 12 o'clock



Photo: 1_1_15_A.jpg
5.7m, Crack, circumferential at joint, from 10 to 2 o'clock



Photo: 1_1_16_A.jpg
5.8m, Junction, at 2 o'clock, diameter 100mm Remarks:
unconfirmed source

Inspection pictures

 Place :
Penzance

 Road :
Penlee House Gallery & Museum

 Date :
04/02/2025

 Section number :
1

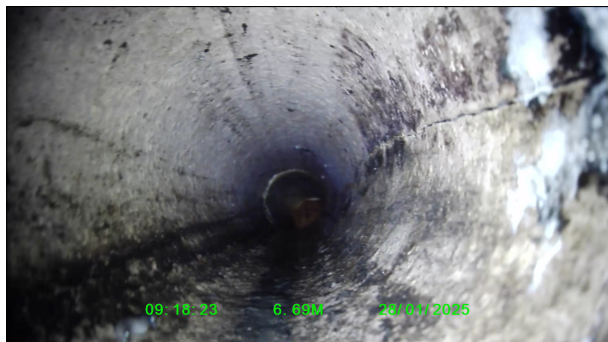
 PLR Suffix :
X


Photo: 1_1_17_A.jpg
6.7m, Fracture, longitudinal at joint, at 3 o'clock, Start



Photo: 1_1_19_A.jpg
7.2m, Fracture, circumferential at joint, from 6 to 9 o'clock



Photo: 1_1_20_A.jpg
7.3m, Line deviates right Remarks: 15deg approx



Photo: 1_1_21_A.jpg
7.6m, Attached deposits, fouling, from 12 to 12 o'clock, 5% cross-sectional area loss, End Remarks: vision obscured

Inspection pictures

 Place :
Penzance

 Road :
Penlee House Gallery & Museum

 Date :
04/02/2025

 Section number :
1

 PLR Suffix :
X


Photo: 1_1_73_A.jpg

 7.6m, General photograph taken at this point Remarks: haff
channel damaged in CWMH02

Inspection report

Date : 04/02/2025	Job number :	Weather : no rain or snow	Operator : Oliver	Section number : 2	PLR SUFFIX: X
Weather no rain or snow	Vehicle :	Camera :	Preset :	Cleaned : no	Operator : Oliver

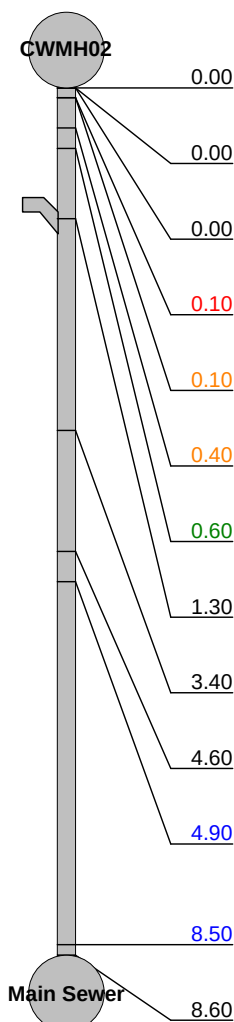
Place : Road : Location Inspection	Penzance Penlee House Gallery & Museum Property with buildings CWMH02 (D/S) Main Sewer	Location details: Catchment: Tape number : Pipe Length	U/S MH : U/S Depth : D/S MH : D/S Depth :	CWMH02 0.84 Main Sewer
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Use: Year laid : Purpose : Total length :	Combined Sample survey to determine asset condition 8.60 m	Pipe shape : Pipe size : Pipe material : Lining :	Circular 100 mm Vitrified clay
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Comment :	Fractured,Displaced,Roots
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1:75 Position
Depth: 0.84

Observation



Start node type, manhole, reference number : CWMH02 Remarks: downstream to suspected Main Sewer

Water level, 0% of the vertical dimension

General photograph taken at this point Remarks: overview

Other obstacles, other object in invert, from 5 to 6 o'clock, 5% cross-sectional area loss Remarks: stone

Attached deposits, fouling, from 12 to 12 o'clock, 5% cross-sectional area loss Remarks: vision obscured

Fracture, circumferential, from 12 to 12 o'clock

Joint displaced, medium Remarks: with flow

Junction, at 1 o'clock, diameter 100mm Remarks: unconfirmed source

Line deviates right Remarks: 15deg approx

General remark Remarks: approximate position of property boundary

Roots, fine at joint

Roots, fine at joint

Finish node type, manhole reference number: Main Sewer Remarks: suspected Main Sewer in Carpark



0 m



0 m



0.1 m



0.1 m



0.4 m

STR no def	STR peak	STR mean	STR total	STR grade	SER no def	SER peak	SER mean	SER total	SER grade
1	40	4.65	40	3	2	12	1.4	12	5

Inspection pictures

 Place :
Penzance

 Road :
Penlee House Gallery & Museum

 Date :
04/02/2025

 Section number :
2

 PLR Suffix :
X


Photo: 3_3_23_A.jpg

0m, Start node type, manhole, reference number : CWMH02

Remarks: downstream to suspected Main Sewer



Photo: 3_3_25_A.jpg

0m, General photograph taken at this point Remarks: overview



Photo: 3_3_26_A.jpg

0.1m, Other obstacles, other object in invert, from 5 to 6 o'clock, 5% cross-sectional area loss Remarks: stone



Photo: 3_3_34_A.jpg

0.1m, Attached deposits, fouling, from 12 to 12 o'clock, 5% cross-sectional area loss Remarks: vision obscured

Inspection pictures

 Place :
Penzance

 Road :
Penlee House Gallery & Museum

 Date :
04/02/2025

 Section number :
2

 PLR Suffix :
X


Photo: 3_3_27_A.jpg
0.4m, Fracture, circumferential, from 12 to 12 o'clock



Photo: 3_3_28_A.jpg
0.6m, Joint displaced, medium Remarks: with flow



Photo: 3_3_29_A.jpg
1.3m, Junction, at 1 o'clock, diameter 100mm Remarks: unconfirmed source



Photo: 3_3_30_A.jpg
3.4m, Line deviates right Remarks: 15deg approx

Inspection pictures

 Place :
Penzance

 Road :
Penlee House Gallery & Museum

 Date :
04/02/2025

 Section number :
2

 PLR Suffix :
X


Photo: 3_3_31_A.jpg
4.9m, Roots, fine at joint

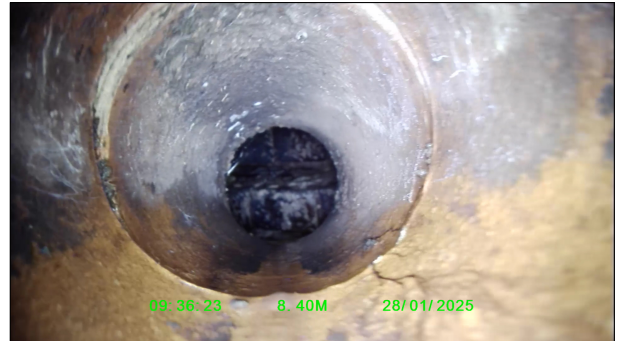


Photo: 3_3_33_A.jpg
8.5m, Roots, fine at joint



Photo: 3_3_36_A.jpg
8.6m, Finish node type, manhole reference number: Main
Sewer Remarks: suspected Main Sewer in Carpark

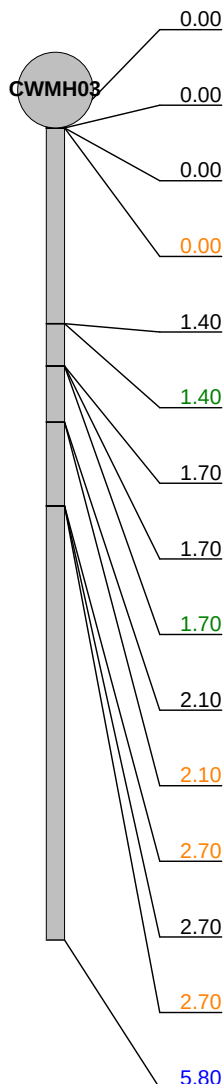
Inspection report

Date : 04/02/2025	Job number :	Weather : no rain or snow	Operator : Oliver	Section number : 3	PLR SUFFIX: X
Weather no rain or snow	Vehicle :	Camera :	Preset :	Cleaned : no	Operator : Oliver

Place : Road : Location Inspection	Penzance Penlee House Gallery & Museum Property with buildings CWMH03 (U/S) Gully	Location details: Catchment: Tape number : Pipe Length	U/S MH : U/S Depth : D/S MH : D/S Depth :	Gully CWMH03 0.52
Use: Year laid : Purpose : Total length :	Combined Sample survey to determine asset condition 7.30 m	Pipe shape : Pipe size : Pipe material : Lining :	Circular 100 mm Polyvinyl chloride	
Comment :	Fractured, Cracked, Broken, Open joint			

1:54 Position

Depth: 0.52



Observation

Start node type, manhole, reference number : CWMH03 Remarks: upstream to Gully

Water level, 0% of the vertical dimension

General photograph taken at this point Remarks: overview

S01 Attached deposits, fouling, from 3 to 9 o'clock, 5% cross-sectional area loss, Start Remarks: vision obscured

Line deviates left Remarks: joint pulled

Open joint, medium Remarks: joint pulled

Material changes, vitrified clay

Line deviates left Remarks: joint pulled

Open joint, medium Remarks: joint pulled

Shape changes to circular, 75mm high

S02 Settled deposits, fine, 15% cross-sectional area loss, Start

Fracture, circumferential at joint, from 9 to 4 o'clock

Line deviates up Remarks: joint pulled

F02 Settled deposits, fine, 15% cross-sectional area loss, End

Crack, circumferential at joint, from 4 to 11 o'clock



0 m



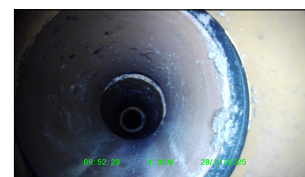
0 m



0 m



1.4 m

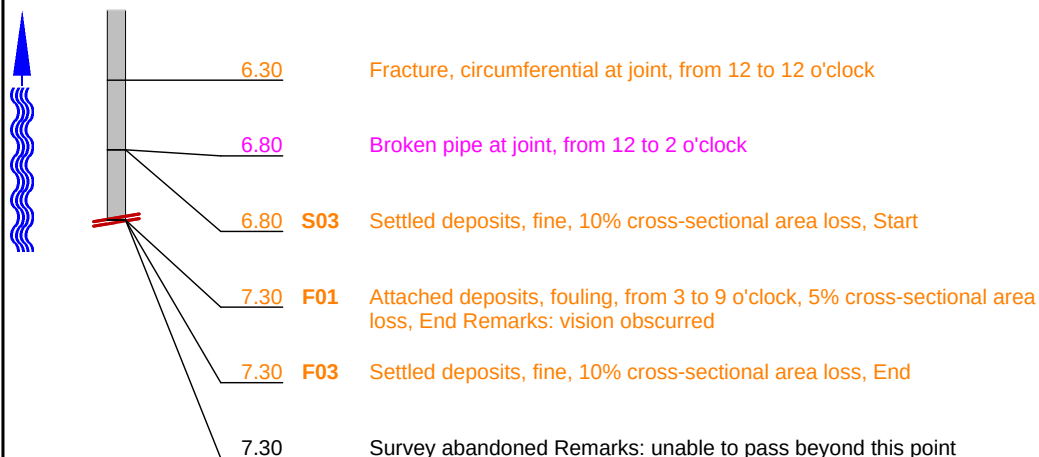


1.4 m

Inspection Report

Date : 04/02/2025	Job number :	Weather : no rain or snow	Operator : Oliver	Section number : 3	PLR : X
Weather no rain or snow	Vehicle :	Camera :	Preset :	Cleaned : no	Grade:

1:54 Position Observation



STR no def	STR peak	STR mean	STR total	STR grade	SER no def	SER peak	SER mean	SER total	SER grade
2	1	0.27	2	1	3	4.2	2.3	16.8	3

Inspection pictures

 Place :
Penzance

 Road :
Penlee House Gallery & Museum

 Date :
04/02/2025

 Section number :
3

 PLR Suffix :
X


Photo: 4_4_37_A.jpg

0m, Start node type, manhole, reference number : CWMH03

Remarks: upstream to Gully



Photo: 4_4_39_A.jpg

0m, General photograph taken at this point Remarks: overview



Photo: 4_4_40_A.jpg

0m, Attached deposits, fouling, from 3 to 9 o'clock, 5% cross-sectional area loss, Start Remarks: vision obscured



Photo: 4_4_41_A.jpg

1.4m, Line deviates left Remarks: joint pulled

Inspection pictures

 Place :
Penzance

 Road :
Penlee House Gallery & Museum

 Date :
04/02/2025

 Section number :
3

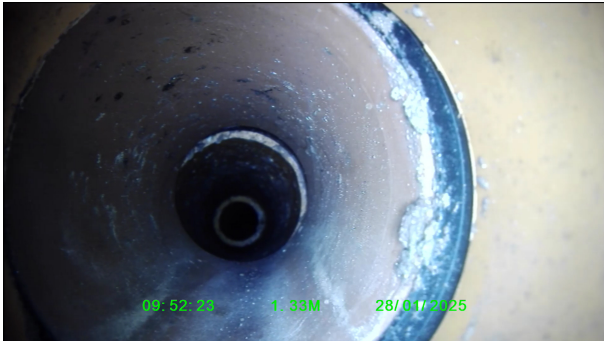
 PLR Suffix :
X


Photo: 4_4_42_A.jpg
1.4m, Open joint, medium Remarks: joint pulled



Photo: 4_4_43_A.jpg
1.7m, Material changes, vitrified clay



Photo: 4_4_45_A.jpg
1.7m, Open joint, medium Remarks: joint pulled



Photo: 4_4_46_A.jpg
2.1m, Shape changes to circular, 75mm high

Inspection pictures

 Place :
Penzance

 Road :
Penlee House Gallery & Museum

 Date :
04/02/2025

 Section number :
3

 PLR Suffix :
X


Photo: 4_4_48_A.jpg
2.1m, Settled deposits, fine, 15% cross-sectional area loss, Start



Photo: 4_4_49_A.jpg
2.7m, Fracture, circumferential at joint, from 9 to 4 o'clock



Photo: 4_4_50_A.jpg
2.7m, Line deviates up Remarks: joint pulled



Photo: 4_4_52_A.jpg
5.8m, Crack, circumferential at joint, from 4 to 11 o'clock

Inspection pictures

 Place :
Penzance

 Road :
Penlee House Gallery & Museum

 Date :
04/02/2025

 Section number :
3

 PLR Suffix :
X


Photo: 4_4_53_A.jpg
6.3m, Fracture, circumferential at joint, from 12 to 12 o'clock



Photo: 4_4_54_A.jpg
6.8m, Broken pipe at joint, from 12 to 2 o'clock



Photo: 4_4_56_A.jpg
6.8m, Settled deposits, fine, 10% cross-sectional area loss, Start



Photo: 4_4_75_A.jpg
7.3m, Survey abandoned Remarks: unable to pass beyond this point

Inspection report

Date : 07/02/2025	Job number :	Weather : no rain or snow	Operator : Oliver	Section number : 4	PLR SUFFIX: X
Weather no rain or snow	Vehicle :	Camera :	Preset :	Cleaned : no	Operator : Oliver

Place : Road : Location Inspection	Penzance Penlee House Gallery & Museum Property with buildings CWMH03 (D/S) CWMH04	Location details: Catchment: Tape number : Pipe Length	U/S MH : U/S Depth : D/S MH : D/S Depth :	CWMH03 0.52 CWMH04
Use: Year laid : Purpose : Total length :	Combined Sample survey to determine asset condition 29.60 m	Pipe shape : Pipe size : Pipe material : Lining :	Circular 100 mm Polyvinyl chloride	
Comment :	Grease, Silt			

1:240 Position
Depth: 0.52

Observation

CWMH03

0.00

Start node type, manhole, reference number : CWMH03 Remarks: downstream to hidden manhole

0.00

Water level, 0% of the vertical dimension

0.00

General photograph taken at this point Remarks: overview

0.00

S01

Settled deposits, fine, 15% cross-sectional area loss, Start

6.90

S02

Attached deposits, grease, from 2 to 10 o'clock, 5% cross-sectional area loss, Start Remarks: vision obscured

9.70

S03

Attached deposits, grease, from 2 to 10 o'clock, 15% cross-sectional area loss, Start Remarks: vision obscured

20.50

F02

Attached deposits, grease, from 2 to 10 o'clock, 5% cross-sectional area loss, End

20.50

F03

Attached deposits, grease, from 2 to 10 o'clock, 15% cross-sectional area loss, End

25.70

S04

Settled deposits, fine, 25% cross-sectional area loss, Start Remarks: vision obscured

27.00

F04

Settled deposits, fine, 25% cross-sectional area loss, End Remarks: vision obscured

29.50

F01

Settled deposits, fine, 15% cross-sectional area loss, End

29.60

CWMH04

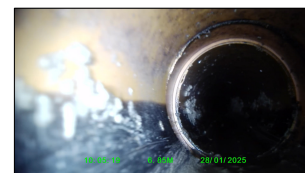
Finish node type, manhole reference number: CWMH04 Remarks: hidden manhole



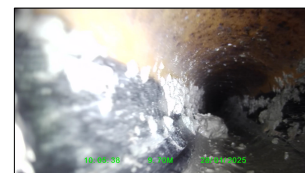
0 m



0 m



6.9 m



9.7 m



25.7 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	1	4	11	3.86	114.3	5

Inspection pictures

 Place :
Penzance

 Road :
Penlee House Gallery & Museum

 Date :
07/02/2025

 Section number :
4

 PLR Suffix :
X


Photo: 5_5_60_A.jpg

0m, Start node type, manhole, reference number : CWMH03

Remarks: downstream to hidden manhole



Photo: 5_5_62_A.jpg

0m, General photograph taken at this point Remarks: overview



Photo: 5_5_67_A.jpg

6.9m, Attached deposits, grease, from 2 to 10 o'clock, 5% cross-sectional area loss, Start Remarks: vision obscured



Photo: 5_5_68_A.jpg

9.7m, Attached deposits, grease, from 2 to 10 o'clock, 15% cross-sectional area loss, Start Remarks: vision obscured

Inspection pictures

 Place :
Penzance

 Road :
Penlee House Gallery & Museum

 Date :
07/02/2025

 Section number :
4

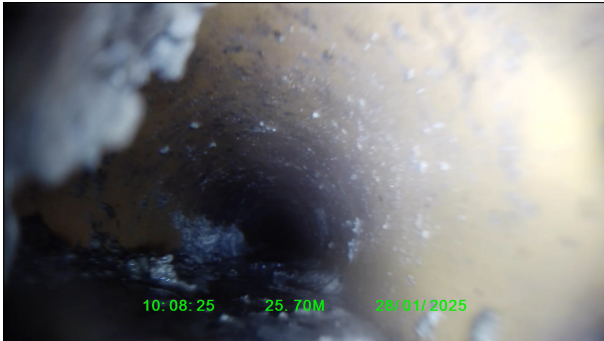
 PLR Suffix :
X


Photo: 5_5_71_A.jpg

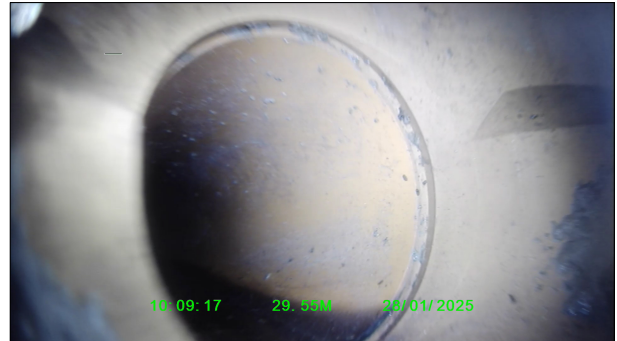
 25.7m, Settled deposits, fine, 25% cross-sectional area loss,
Start Remarks: vision obscured


Photo: 5_5_64_A.jpg

 29.6m, Finish node type, manhole reference number: CWMH04
Remarks: hidden manhole