

APPENDIX 5

DRAINAGE CCTV REPORT

CCTV survey report

Project Name – Novartis site Horsham - CCTV Survey

Project Number – 60950

Client – TPS Management

Document Register

Rev	Date	Prepared by	Role	Checked by	Role	Revision Reason
A	02/12/24	IF	CCTV Analyst	ER	OM	Original Issue

Introduction

An investigative CCTV survey was carried out at Novartis site, Horsham in order to assist in the redevelopment of the site.

The objective of the CCTV survey was to inspect all private and public drainage systems previously surveyed by Lanes Group in August 2018, as detailed in the report titled *Hampshire CC-Novartis RH12 2EE-PJ00305566* provided by the client.

The relevant manholes, along with their corresponding numbers from the recent utility survey conducted by MGS, are listed in the table below. We were unable to match certain manholes to the new survey due to the absence of a reference plan for cross-checking.

Lanes Group PLC	Murphy Geospatial
MHSW25	MH61
MHSW26	MH52
MHSW27	MH50
MHSW28	MH44
MHSW29	MH33
MHSW30	MH22
MHSW31	MH23
MHSW31A	MH24
MHSW32	Unable to identify
MHSW33	Unable to identify
MHSW34	Unable to identify
MHSW34A	Unable to identify
MHSW35	Unable to identify
MHSW36	Unable to identify
MHSW X	MH92
FW1	MH28
FW2	MH30
FW3	MH31
FW10	MH63
FW11	MH64
FW12	MH69

The following report includes:

- Abbreviated condition summary index with recommendations and associated costings
- Full details condition report with still images
- Full CCTV footage
- Site plan showing the location of inspection chambers and drain runs.

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 MURPHY GEOSPATIAL - HORSHAM

Project Number

Project Date
 25/11/2024

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Scoring Summary

Project Name
MURPHY GEOSPATIAL - HORSHAM

Project Number

Project Date
25/11/2024

Structural Defects

- 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.

Section	PLR	Grade	Description
15	MH66X	5	Collapsed drain or sewer, 100% cross-sectional area loss

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
4	MH30X	4	Joint displaced, large
5	MH31X	3	Joint displaced, medium
9	MH44X	3	Multiple defects
10	MH52X	4	Multiple defects
11	MH61X	4	Settled deposits, coarse, 20% cross-sectional area loss, finish
16	MH33X	3	Settled deposits, hard or compacted, 5% cross-sectional area loss

Abandoned Surveys

Section	PLR	Description
1	MH22X	Survey abandoned
2	MH23X	Survey abandoned
2	MH23X	Survey abandoned
8	MH27X	Survey abandoned
10	MH52X	Survey abandoned
10	MH52X	Survey abandoned
15	MH66X	Survey abandoned

Information

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

Section Profile

Project Name
MURPHY GEOSPATIAL - HORSHAM

Project Number

Project Date
25/11/2024

Circular, 0 mm

Item No.	Upstream Node	Downstream Node	Date	Road	Material	Total Length	Inspected Length
8	MH27	DOWNSTREAM	25/11/2024	WIMBLEHURST ROAD	Unidentified material	10.00 m	0.00 m

Total: 1 Inspection x Circular 0 mm, 0 mm = 10.00 m Total Length and 0.00 m Inspected Length

Circular, 75 mm

Item No.	Upstream Node	Downstream Node	Date	Road	Material	Total Length	Inspected Length
6	MH32	MH31	25/11/2024	WIMBLEHURST ROAD	Polyvinyl chloride	14.78 m	14.78 m

Total: 1 Inspection x Circular 75 mm, 0 mm = 14.78 m Total Length and 14.78 m Inspected Length

Circular, 100 mm

Item No.	Upstream Node	Downstream Node	Date	Road	Material	Total Length	Inspected Length
7	MH29	MH27	25/11/2024	WIMBLEHURST ROAD	Polyvinyl chloride	7.64 m	7.64 m
14	MH70	MH69	25/11/2024	WIMBLEHURST ROAD	Cast iron	0.50 m	0.50 m
15	MH66	UNKNOWN	25/11/2024	WIMBLEHURST ROAD	Vitrified clay	15.00 m	0.00 m

Total: 3 Inspections x Circular 100 mm, 0 mm = 23.14 m Total Length and 8.14 m Inspected Length

Circular, 150 mm

Item No.	Upstream Node	Downstream Node	Date	Road	Material	Total Length	Inspected Length
1	MH22	MH23	25/11/2024	WIMBLEHURST ROAD	Vitrified clay	9.00 m	0.00 m
2	MH23	MH24	25/11/2024	WIMBLEHURST ROAD	Vitrified clay	3.00 m	0.00 m
2	MH23	MH24	25/11/2024	WIMBLEHURST ROAD	Vitrified clay	3.00 m	0.00 m
3	MH28	MH30	25/11/2024	WIMBLEHURST ROAD	Vitrified clay	5.49 m	5.49 m
4	MH30	MH31	25/11/2024	WIMBLEHURST ROAD	Vitrified clay	6.18 m	6.18 m
5	MH31	MH41	25/11/2024	WIMBLEHURST ROAD	Vitrified clay	14.10 m	14.10 m
12	MH64	MH69	25/11/2024	WIMBLEHURST ROAD	Cast iron	12.02 m	12.02 m
13	MH63	MH69	25/11/2024	WIMBLEHURST ROAD	Vitrified clay	7.64 m	7.64 m

Total: 8 Inspections x Circular 150 mm, 0 mm = 57.43 m Total Length and 45.43 m Inspected Length

Circular, 600 mm

Item No.	Upstream Node	Downstream Node	Date	Road	Material	Total Length	Inspected Length
9	MH44	MH33	25/11/2024	WIMBLEHURST ROAD	Concrete	53.36 m	53.36 m
10	MH52	MH50	25/11/2024	WIMBLEHURST ROAD	Concrete	20.00 m	0.10 m
10	MH52	MH50	25/11/2024	WIMBLEHURST ROAD	Concrete	20.00 m	0.21 m

Section Profile

Project Name MURPHY GEOSPATIAL - HORSHAM	Project Number	Project Date 25/11/2024
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11	MH61	MH52	25/11/2024	WIMBLEHURST ROAD	Concrete	32.42 m	32.41 m
16	MH33	MH92	25/11/2024	WIMBLEHURST ROAD	Concrete	29.66 m	29.66 m

Total: 5 Inspections x Circular 600 mm, 0 mm = 135.44 m Total Length and 115.74 m Inspected Length

Total: 18 Inspections = 240.79 m Total Length and 184.09 m Inspected Length

Section Summary

Project Name MURPHY GEOSPATIAL - HORSHAM	Project Number	Project Date 25/11/2024
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Number of sections	16
Total length of sections	240.79 m
Total length of inspected sections	184.09 m
Total length of not inspected sections	56.69 m
Number of abandoned inspections	7
Number of section inspection photos	60
Number of section inspection videos	13
Number of section inspection scans	0
Number of section inclination measurements	0

PLR:	MH22X	Upstream Node:	MH22
Inspection Direction:	Downstream	Downstream Node:	MH23
Inspected Length:	0.00 m	Dia/Height:	150 mm
Total Length:	9.00 m	Material:	Vitrified clay

No.	m+	Code	Observation
1	0.00	MH	Start node, manhole, reference: MH22
2	0.00	WL	Water level, 100% of the vertical dimension
3	0.00	REM	General remark
4	0.00	SA	Survey abandoned

PLR:	MH23X	Upstream Node:	MH23
Inspection Direction:	Upstream	Downstream Node:	MH24
Inspected Length:	0.00 m	Dia/Height:	150 mm
Total Length:	3.00 m	Material:	Vitrified clay

No.	m+	Code	Observation
1	0.00	MH	Start node, manhole, reference: MH24
2	0.00	WL	Water level, 100% of the vertical dimension
3	0.00	REM	General remark
4	0.00	SA	Survey abandoned

PLR:	MH23X	Upstream Node:	MH23
Inspection Direction:	Downstream	Downstream Node:	MH24
Inspected Length:	0.00 m	Dia/Height:	150 mm
Total Length:	3.00 m	Material:	Vitrified clay

No.	m+	Code	Observation
1	0.00	MH	Start node, manhole, reference: MH23
2	0.00	WL	Water level, 100% of the vertical dimension
3	0.00	REM	General remark

Section Summary

Project Name MURPHY GEOSPATIAL - HORSHAM	Project Number	Project Date 25/11/2024
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No.	m+	Code	Observation
4	0.00	SA	Survey abandoned
PLR: MH28X Inspection Direction: Downstream Inspected Length: 5.49 m Total Length: 5.49 m Upstream Node: MH28 Downstream Node: MH30 Dia/Height: 150 mm Material: Vitrified clay			
No.	m+	Code	Observation
1	0.00	MH	Start node, manhole, reference: MH28
2	0.00	WL	Water level, 0% of the vertical dimension
3	5.49	MHF	Finish node, manhole, reference: MH30
PLR: MH30X Inspection Direction: Downstream Inspected Length: 6.18 m Total Length: 6.18 m Upstream Node: MH30 Downstream Node: MH31 Dia/Height: 150 mm Material: Vitrified clay			
No.	m+	Code	Observation
1	0.00	MH	Start node, manhole, reference: MH30
2	0.00	WL	Water level, 0% of the vertical dimension
3	0.28	JDL	Joint displaced, large
4	6.18	MHF	Finish node, manhole, reference: MH31
PLR: MH31X Inspection Direction: Downstream Inspected Length: 14.10 m Total Length: 14.10 m Upstream Node: MH31 Downstream Node: MH41 Dia/Height: 150 mm Material: Vitrified clay			
No.	m+	Code	Observation
1	0.00	MH	Start node, manhole, reference: MH31
2	0.00	WL	Water level, 0% of the vertical dimension
3	9.62	JDM	Joint displaced, medium
4	12.66	LR	Line deviates right
5	14.10	MHF	Finish node, manhole, reference: MH41
PLR: MH32X Inspection Direction: Upstream Inspected Length: 14.78 m Total Length: 14.78 m Upstream Node: MH32 Downstream Node: MH31 Dia/Height: 75 mm Material: Polyvinyl chloride			
No.	m+	Code	Observation
1	0.00	MH	Start node, manhole, reference: MH31
2	0.00	WL	Water level, 0% of the vertical dimension
3	8.53	WL	Water level, 50% of the vertical dimension
4	8.55	WL	Water level, 100% of the vertical dimension
5	8.55	CUW	Loss of vision, camera under water, start
6	14.78	CUW	Loss of vision, camera under water, finish
7	14.78	MHF	Finish node, manhole, reference: MH32

Section Summary

Project Name MURPHY GEOSPATIAL - HORSHAM	Project Number	Project Date 25/11/2024
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PLR:	MH29X	Upstream Node:	MH29
Inspection Direction:	Downstream	Downstream Node:	MH27
Inspected Length:	7.64 m	Dia/Height:	100 mm
Total Length:	7.64 m	Material:	Polyvinyl chloride

No.	m+	Code	Observation
1	0.00	MH	Start node, manhole, reference: MH29
2	0.00	WL	Water level, 0% of the vertical dimension
3	6.44	LL	Line deviates left
4	7.08	REM	General remark
5	7.64	MHF	Finish node, manhole, reference: MH27

PLR:	MH27X	Upstream Node:	MH27
Inspection Direction:	Downstream	Downstream Node:	DOWNSTREAM
Inspected Length:	0.00 m	Dia/Height:	
Total Length:	10.00 m	Material:	Unidentified material

No.	m+	Code	Observation
1	0.00	MH	Start node, manhole, reference: MH27
2	0.00	WL	Water level, 100% of the vertical dimension
3	0.00	REM	General remark
4	0.00	SA	Survey abandoned

PLR:	MH44X	Upstream Node:	MH44
Inspection Direction:	Upstream	Downstream Node:	MH33
Inspected Length:	53.36 m	Dia/Height:	600 mm
Total Length:	53.36 m	Material:	Concrete

No.	m+	Code	Observation
1	0.00	MH	Start node, manhole, reference: MH33
2	0.00	WL	Water level, 5% of the vertical dimension
3	4.19	DEC	Settled deposits, hard or compacted, 5% cross-sectional area loss
4	5.27	LL	Line deviates left
5	8.71	WL	Water level, 10% of the vertical dimension
6	16.29	WL	Water level, 5% of the vertical dimension
7	25.09	LL	Line deviates left
8	37.62	DEC	Settled deposits, hard or compacted, 5% cross-sectional area loss
9	49.61	DEC	Settled deposits, hard or compacted, 5% cross-sectional area loss
10	53.36	MHF	Finish node, manhole, reference: MH44

PLR:	MH52X	Upstream Node:	MH52
Inspection Direction:	Downstream	Downstream Node:	MH50
Inspected Length:	0.10 m	Dia/Height:	600 mm
Total Length:	20.00 m	Material:	Concrete

No.	m+	Code	Observation
1	0.00	MH	Start node, manhole, reference: MH52
2	0.00	WL	Water level, 30% of the vertical dimension
3	0.01	DES	Settled deposits, fine, 30% cross-sectional area loss
4	0.10	REM	General remark

Section Summary

Project Name MURPHY GEOSPATIAL - HORSHAM	Project Number	Project Date 25/11/2024
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No.	m+	Code	Observation																
5	0.10	SA	Survey abandoned																
<table> <tr> <td>PLR:</td><td>MH52X</td><td>Upstream Node:</td><td>MH52</td></tr> <tr> <td>Inspection Direction:</td><td>Upstream</td><td>Downstream Node:</td><td>MH50</td></tr> <tr> <td>Inspected Length:</td><td>0.21 m</td><td>Dia/Height:</td><td>600 mm</td></tr> <tr> <td>Total Length:</td><td>20.00 m</td><td>Material:</td><td>Concrete</td></tr> </table>				PLR:	MH52X	Upstream Node:	MH52	Inspection Direction:	Upstream	Downstream Node:	MH50	Inspected Length:	0.21 m	Dia/Height:	600 mm	Total Length:	20.00 m	Material:	Concrete
PLR:	MH52X	Upstream Node:	MH52																
Inspection Direction:	Upstream	Downstream Node:	MH50																
Inspected Length:	0.21 m	Dia/Height:	600 mm																
Total Length:	20.00 m	Material:	Concrete																
No.	m+	Code	Observation																
1	0.00	MH	Start node, manhole, reference: MH50																
2	0.00	WL	Water level, 5% of the vertical dimension																
3	0.16	DEC	Settled deposits, hard or compacted, 20% cross-sectional area loss																
4	0.21	REM	General remark																
5	0.21	SA	Survey abandoned																
<table> <tr> <td>PLR:</td><td>MH61X</td><td>Upstream Node:</td><td>MH61</td></tr> <tr> <td>Inspection Direction:</td><td>Upstream</td><td>Downstream Node:</td><td>MH52</td></tr> <tr> <td>Inspected Length:</td><td>32.41 m</td><td>Dia/Height:</td><td>600 mm</td></tr> <tr> <td>Total Length:</td><td>32.42 m</td><td>Material:</td><td>Concrete</td></tr> </table>				PLR:	MH61X	Upstream Node:	MH61	Inspection Direction:	Upstream	Downstream Node:	MH52	Inspected Length:	32.41 m	Dia/Height:	600 mm	Total Length:	32.42 m	Material:	Concrete
PLR:	MH61X	Upstream Node:	MH61																
Inspection Direction:	Upstream	Downstream Node:	MH52																
Inspected Length:	32.41 m	Dia/Height:	600 mm																
Total Length:	32.42 m	Material:	Concrete																
No.	m+	Code	Observation																
1	0.00	MH	Start node, manhole, reference: MH52																
2	0.00	WL	Water level, 30% of the vertical dimension																
3	0.09	DER	Settled deposits, coarse, 20% cross-sectional area loss, start																
4	19.72	WL	Water level, 20% of the vertical dimension																
5	20.52	DER	Settled deposits, coarse, 20% cross-sectional area loss, finish																
6	20.52	DES	Settled deposits, fine, 10% cross-sectional area loss, start																
7	25.95	LL	Line deviates left																
8	32.41	DES	Settled deposits, fine, 10% cross-sectional area loss, finish																
9	32.41	MHF	Finish node, manhole, reference: MH61																
<table> <tr> <td>PLR:</td><td>MH64X</td><td>Upstream Node:</td><td>MH64</td></tr> <tr> <td>Inspection Direction:</td><td>Downstream</td><td>Downstream Node:</td><td>MH69</td></tr> <tr> <td>Inspected Length:</td><td>12.02 m</td><td>Dia/Height:</td><td>150 mm</td></tr> <tr> <td>Total Length:</td><td>12.02 m</td><td>Material:</td><td>Cast iron</td></tr> </table>				PLR:	MH64X	Upstream Node:	MH64	Inspection Direction:	Downstream	Downstream Node:	MH69	Inspected Length:	12.02 m	Dia/Height:	150 mm	Total Length:	12.02 m	Material:	Cast iron
PLR:	MH64X	Upstream Node:	MH64																
Inspection Direction:	Downstream	Downstream Node:	MH69																
Inspected Length:	12.02 m	Dia/Height:	150 mm																
Total Length:	12.02 m	Material:	Cast iron																
No.	m+	Code	Observation																
1	0.00	MH	Start node, manhole, reference: MH64																
2	0.00	WL	Water level, 0% of the vertical dimension																
3	1.74	LL	Line deviates left																
4	12.02	MHF	Finish node, manhole, reference: MH69																
<table> <tr> <td>PLR:</td><td>MH63X</td><td>Upstream Node:</td><td>MH63</td></tr> <tr> <td>Inspection Direction:</td><td>Downstream</td><td>Downstream Node:</td><td>MH69</td></tr> <tr> <td>Inspected Length:</td><td>7.64 m</td><td>Dia/Height:</td><td>150 mm</td></tr> <tr> <td>Total Length:</td><td>7.64 m</td><td>Material:</td><td>Vitrified clay</td></tr> </table>				PLR:	MH63X	Upstream Node:	MH63	Inspection Direction:	Downstream	Downstream Node:	MH69	Inspected Length:	7.64 m	Dia/Height:	150 mm	Total Length:	7.64 m	Material:	Vitrified clay
PLR:	MH63X	Upstream Node:	MH63																
Inspection Direction:	Downstream	Downstream Node:	MH69																
Inspected Length:	7.64 m	Dia/Height:	150 mm																
Total Length:	7.64 m	Material:	Vitrified clay																
No.	m+	Code	Observation																
1	0.00	MH	Start node, manhole, reference: MH63																
2	0.00	WL	Water level, 0% of the vertical dimension																
3	7.20	REM	General remark																

Section Summary

Project Name
MURPHY GEOSPATIAL - HORSHAM

Project Number

Project Date
25/11/2024

No.	m+	Code	Observation
4	7.64	MHF	Finish node, manhole, reference: MH69
PLR: MH70X Inspection Direction: Downstream Inspected Length: 0.50 m Total Length: 0.50 m Upstream Node: MH70 Downstream Node: MH69 Dia/Height: 100 mm Material: Cast iron			
No.	m+	Code	Observation
1	0.00	MH	Start node, manhole, reference: MH70
2	0.00	WL	Water level, 0% of the vertical dimension
3	0.50	MHF	Finish node, manhole, reference: MH69
PLR: MH66X Inspection Direction: Downstream Inspected Length: 0.00 m Total Length: 15.00 m Upstream Node: MH66 Downstream Node: UNKNOWN Dia/Height: 100 mm Material: Vitrified clay			
No.	m+	Code	Observation
1	0.00	MH	Start node, manhole, reference: MH66
2	0.00	WL	Water level, 0% of the vertical dimension
3	0.00	REM	General remark
4	0.00	XP	Collapsed drain or sewer, 100% cross-sectional area loss
5	0.00	REM	General remark
6	0.00	SA	Survey abandoned
PLR: MH33X Inspection Direction: Upstream Inspected Length: 29.66 m Total Length: 29.66 m Upstream Node: MH33 Downstream Node: MH92 Dia/Height: 600 mm Material: Concrete			
No.	m+	Code	Observation
1	0.00	MH	Start node, manhole, reference: MH92
2	0.00	WL	Water level, 10% of the vertical dimension
3	0.62	DEC	Settled deposits, hard or compacted, 5% cross-sectional area loss
4	11.51	WL	Water level, 20% of the vertical dimension
5	20.72	WL	Water level, 10% of the vertical dimension
6	29.66	MHF	Finish node, manhole, reference: MH33

Section Inspection - 25/11/2024 - MH22X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
1	1	25/11/24	9:58	NOVARTIS SITE	No Rain Or Snow	No	MH22X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
Simon		LL72AXU		Pushrod	0.00 m	Private Drain	Not Specified

Town or Village:	Horsham	Inspection Direction:	Downstream	Upstream Node:	MH22
Road:	Wimblehurst Road	Inspected Length:	0.00 m	Upstream Pipe Depth:	2.100 m
Location:	Difficult access	Total Length:	9.00 m	Downstream Node:	MH23
Surface Type:	Concrete Highway	Joint Length:	1.00 m	Downstream Pipe Depth:	1.640 m
Use:	Surface water	Pipe Shape: Circular Dia/Height: 150 mm Material: Vitrified clay Lining Type: No Lining Lining Material: No Lining			
Type of Pipe:	Gravity drain/sewer				
Flow Control:	No flow control				
Year Constructed:	1900				
Inspection Purpose:	Sample condition survey				
Comments:	LINE HOLDING FROM INTERCEPTOR - MH24				
Recommendations:	INTERCEPTOR REQUIRES EMPTYING TO CLEAN				



Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
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 Pictures - 25/11/2024 - MH22X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
1	Downstream	MH22X	NOVARTIS SITE	NOVARTIS SITE



MH22X_85d67e76-ba9a-4451-bc9d-5637e654a12e_20241125_100811.jpg, 00:00:03, 0.00 m
 General remark, LINE HOLDING, MH24 REQUIRES EMPTYING

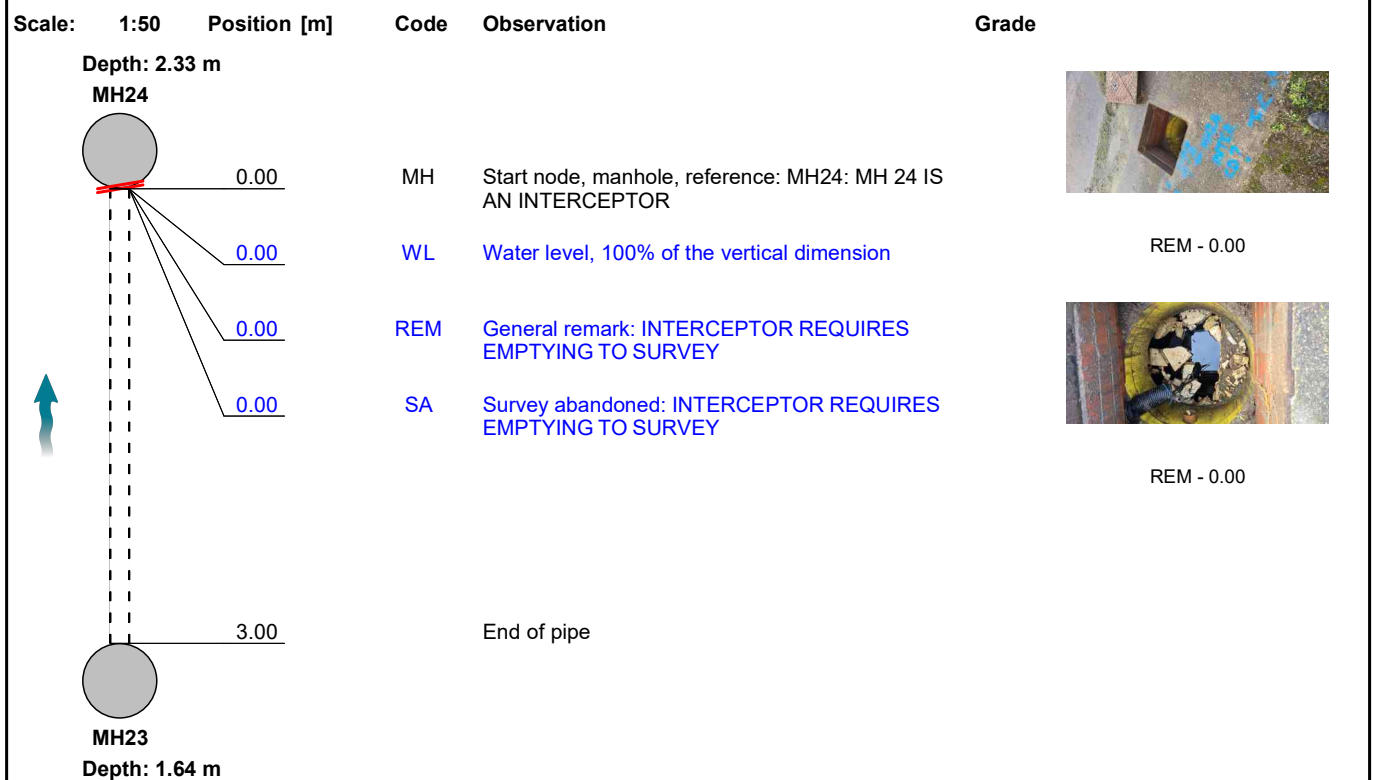


MH22X_36af7140-474c-43e1-a1e5-436e68e3ebf7_20241125_100827.jpg, 00:00:03, 0.00 m
 General remark, LINE HOLDING, MH24 REQUIRES EMPTYING

Section Inspection - 25/11/2024 - MH23X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
2	2	25/11/24	10:09	NOVARTIS SITE	No Rain Or Snow	No	MH23X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
Simon		LL72AXU		Pushrod	0.00 m	Private Drain	Not Specified

Town or Village:	Horsham	Inspection Direction:	Upstream	Upstream Node:	MH23
Road:	Wimblehurst Road	Inspected Length:	0.00 m	Upstream Pipe Depth:	1.640 m
Location:	Difficult access	Total Length:	3.00 m	Downstream Node:	MH24
Surface Type:	Concrete Highway	Joint Length:	1.00 m	Downstream Pipe Depth:	2.330 m
Use:	Surface water	Pipe Shape: Circular Dia/Height: 150 mm Material: Vitrified clay Lining Type: No Lining Lining Material: No Lining			
Type of Pipe:	Gravity drain/sewer				
Flow Control:	No flow control				
Year Constructed:	1900				
Inspection Purpose:	Sample condition survey				
Comments:	REQUIRES SUCKING OUT TO SURVEY				
Recommendations:	REQUIRES SUCKING OUT TO EMPTY				



Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
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 Pictures - 25/11/2024 - MH23X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
2	Upstream	MH23X	NOVARTIS SITE	NOVARTIS SITE



MH23X_1657776c-ee6a-4a16-afa8-c539fb257ac9_20241125_100929.jpg, 00:00:03, 0.00 m
 General remark, INTERCEPTOR REQUIRES EMPTYING TO SURVEY

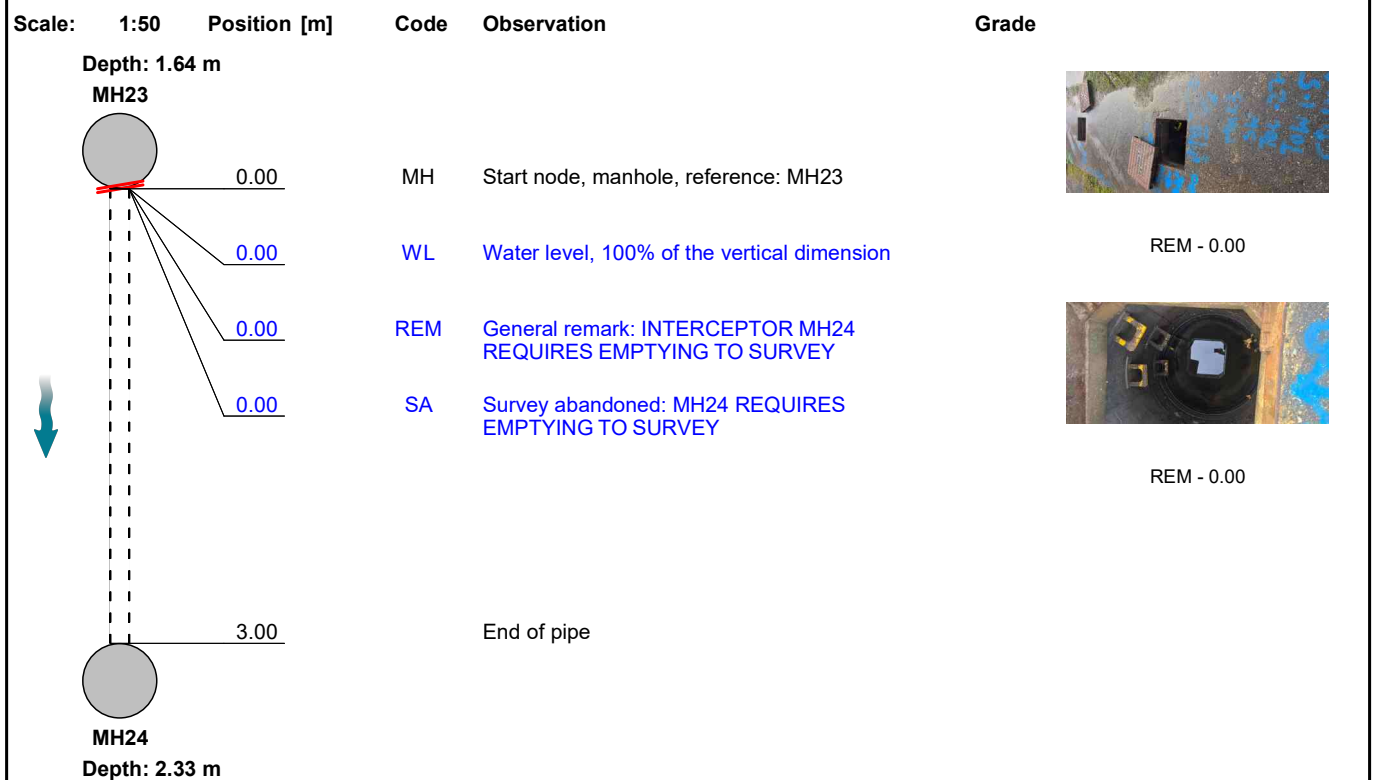


MH23X_b2a02f52-d2a0-40f8-8de7-244e290f80c2_20241125_100934.jpg, 00:00:03, 0.00 m
 General remark, INTERCEPTOR REQUIRES EMPTYING TO SURVEY

Section Inspection - 25/11/2024 - MH23X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
2	1	25/11/24	10:05	NOVARTIS SITE	No Rain Or Snow	No	MH23X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
Simon		LL72AXU		Pushrod	0.00 m	Private Drain	Not Specified

Town or Village:	Horsham	Inspection Direction:	Downstream	Upstream Node:	MH23
Road:	Wimblehurst Road	Inspected Length:	0.00 m	Upstream Pipe Depth:	1.640 m
Location:	Difficult access	Total Length:	3.00 m	Downstream Node:	MH24
Surface Type:	Concrete Highway	Joint Length:	1.00 m	Downstream Pipe Depth:	2.330 m
Use:	Surface water	Pipe Shape: Circular Dia/Height: 150 mm Material: Vitrified clay Lining Type: No Lining Lining Material: No Lining			
Type of Pipe:	Gravity drain/sewer				
Flow Control:	No flow control				
Year Constructed:	1900				
Inspection Purpose:	Sample condition survey				
Comments:	INTERCEPTOR - MH24 REQUIRES EMPTYING TO SURVEY				
Recommendations:	None				



Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
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 Pictures - 25/11/2024 - MH23X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
2	Downstream	MH23X	NOVARTIS SITE	NOVARTIS SITE



MH23X_7e7af6c9-528c-478b-9e05-63c4d5869097_20241125_100835.jpg, 00:00:03, 0.00 m
 General remark, INTERCEPTOR MH24 REQUIRES EMPTYING TO SURVEY



MH23X_6dcffdca-c3d8-4f4e-adff-02b165a218c5_20241125_100841.jpg, 00:00:03, 0.00 m
 General remark, INTERCEPTOR MH24 REQUIRES EMPTYING TO SURVEY

Section Inspection - 25/11/2024 - MH28X

Item No. 3	Insp. No. 1	Date 25/11/24	Time 10:46	Client's Job Ref NOVARTIS SITE	Weather No Rain Or Snow	Pre Cleaned Yes	PLR MH28X
Operator Simon		Vehicle LL72AXU		Camera Pushrod	Preset Length 0.00 m	Legal Status Private Drain	Alternative ID Not Specified

Town or Village:	Horsham	Inspection Direction:	Downstream	Upstream Node:	MH28
Road:	Wimblehurst Road	Inspected Length:	5.49 m	Upstream Pipe Depth:	1.080 m
Location:	Difficult access	Total Length:	5.49 m	Downstream Node:	MH30
Surface Type:	Concrete Highway	Joint Length:	1.00 m	Downstream Pipe Depth:	1.200 m
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	1900	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		
Comments:	SURVEY COMPLETE				
Recommendations:	None				



Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
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 Pictures - 25/11/2024 - MH28X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
3	Downstream	MH28X	NOVARTIS SITE	NOVARTIS SITE



MH28X_e42b9812-bda0-4a33-aaa0-95b41106b23d_20241125_104542.jpg, 00:00:01, 0.00 m
 Start node, manhole, reference: MH28

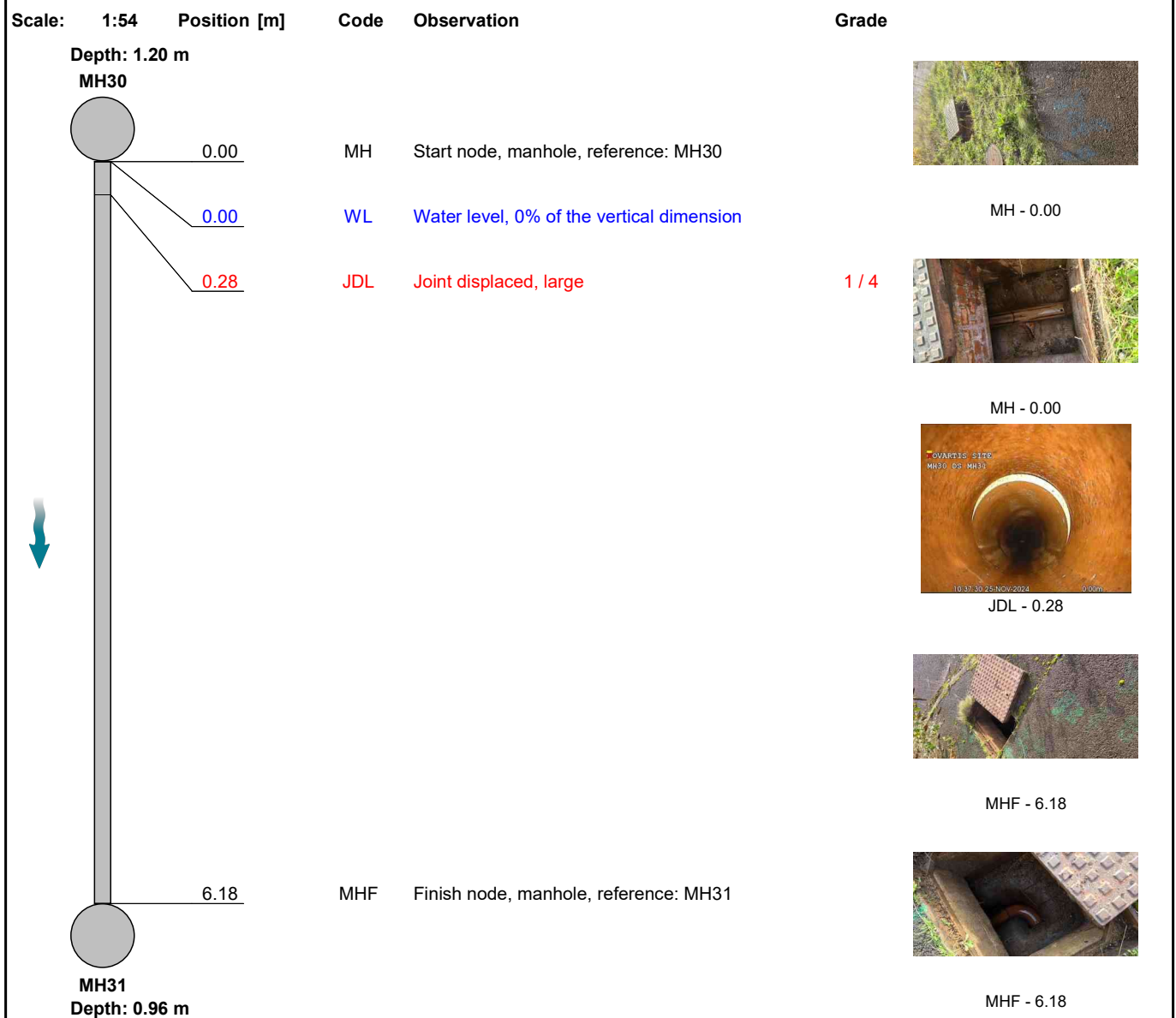


MH28X_122d1d2b-3703-4886-af15-0fd485a07d1e_20241125_104619.jpg, 00:00:01, 0.00 m
 Start node, manhole, reference: MH28

Section Inspection - 25/11/2024 - MH30X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
4	1	25/11/24	10:46	NOVARTIS SITE	No Rain Or Snow	Yes	MH30X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
Simon		LL72AXU		Pushrod	0.00 m	Private Drain	Not Specified

Town or Village:	Horsham	Inspection Direction:	Downstream	Upstream Node:	MH30
Road:	Wimblehurst Road	Inspected Length:	6.18 m	Upstream Pipe Depth:	1.200 m
Location:	Difficult access	Total Length:	6.18 m	Downstream Node:	MH31
Surface Type:	Concrete Highway	Joint Length:	1.00 m	Downstream Pipe Depth:	0.960 m
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	1900	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		
Comments:	SURVEY COMPLETE				
Recommendations:	None				



Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
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	0.3	2.0	1.0	1	5.0	0.8	5.0	4.0

Section Pictures - 25/11/2024 - MH30X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
4	Downstream	MH30X	NOVARTIS SITE	NOVARTIS SITE



MH30X_d83866e5-e9f4-46b6-9dfc-659515171af2_20241125_104625.jpg, 00:00:01, 0.00 m
 Start node, manhole, reference: MH30



MH30X_a250596f-879c-4699-83ad-ff6263b89e11_20241125_104630.jpg, 00:00:01, 0.00 m
 Start node, manhole, reference: MH30



MH30X_be1fa4e2-0bad-4938-8c7d-66491d64b79e_20241125_104944_019.jpg, 00:00:10, 0.28 m
 Joint displaced, large



MH30X_36e63094-db5f-4636-ba2e-040563ca36ee_20241125_105029.jpg, 00:00:41, 6.18 m
 Finish node, manhole, reference: MH31

Section Pictures - 25/11/2024 - MH30X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
4	Downstream	MH30X	NOVARTIS SITE	NOVARTIS SITE

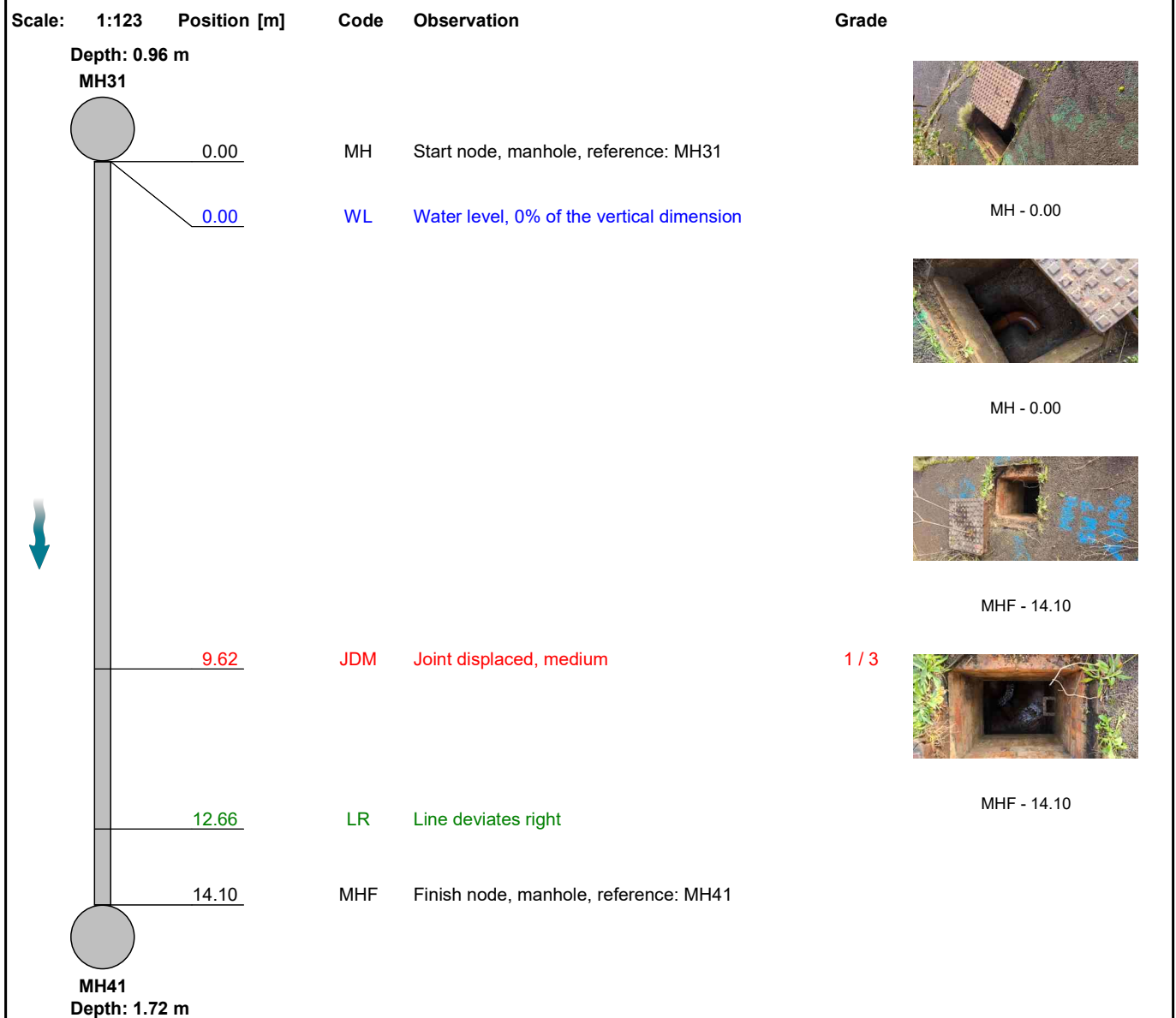


MH30X_b643d12d-21e5-451e-830b-d44a5a618a26_20241125_105037.jpg, 00:00:41, 6.18 m
 Finish node, manhole, reference: MH31

Section Inspection - 25/11/2024 - MH31X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
5	1	25/11/24	10:46	NOVARTIS SITE	No Rain Or Snow	Yes	MH31X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
Simon		LL72AXU		Pushrod	0.00 m	Private Drain	Not Specified

Town or Village:	Horsham	Inspection Direction:	Downstream	Upstream Node:	MH31
Road:	Wimblehurst Road	Inspected Length:	14.10 m	Upstream Pipe Depth:	0.960 m
Location:	Difficult access	Total Length:	14.10 m	Downstream Node:	MH41
Surface Type:	Concrete Highway	Joint Length:	1.00 m	Downstream Pipe Depth:	1.720 m
Use:	Foul		Pipe Shape:	Circular	
Type of Pipe:	Gravity drain/sewer		Dia/Height:	150 mm	
Flow Control:	No flow control		Material:	Vitrified clay	
Year Constructed:	1900		Lining Type:	No Lining	
Inspection Purpose:	Sample condition survey		Lining Material:	No Lining	
Comments:	SURVEY COMPLETE				
Recommendations:	None				



Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
1	1.0	0.1	1.0	1.0	1	2.0	0.1	2.0	3.0

Section Pictures - 25/11/2024 - MH31X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
5	Downstream	MH31X	NOVARTIS SITE	NOVARTIS SITE



MH31X_1b539d62-dc46-4c8c-884b-19607f4dc15a_20241125_104636.jpg, 00:00:01, 0.00 m
 Start node, manhole, reference: MH31



MH31X_692cda61-f981-4fc9-8050-62c47045bd7c_20241125_104641.jpg, 00:00:01, 0.00 m
 Start node, manhole, reference: MH31



MH31X_ebb73134-f690-408e-8e0d-5e6dd5cd9f5c_20241125_104914.jpg, 00:01:07, 14.10 m
 Finish node, manhole, reference: MH41

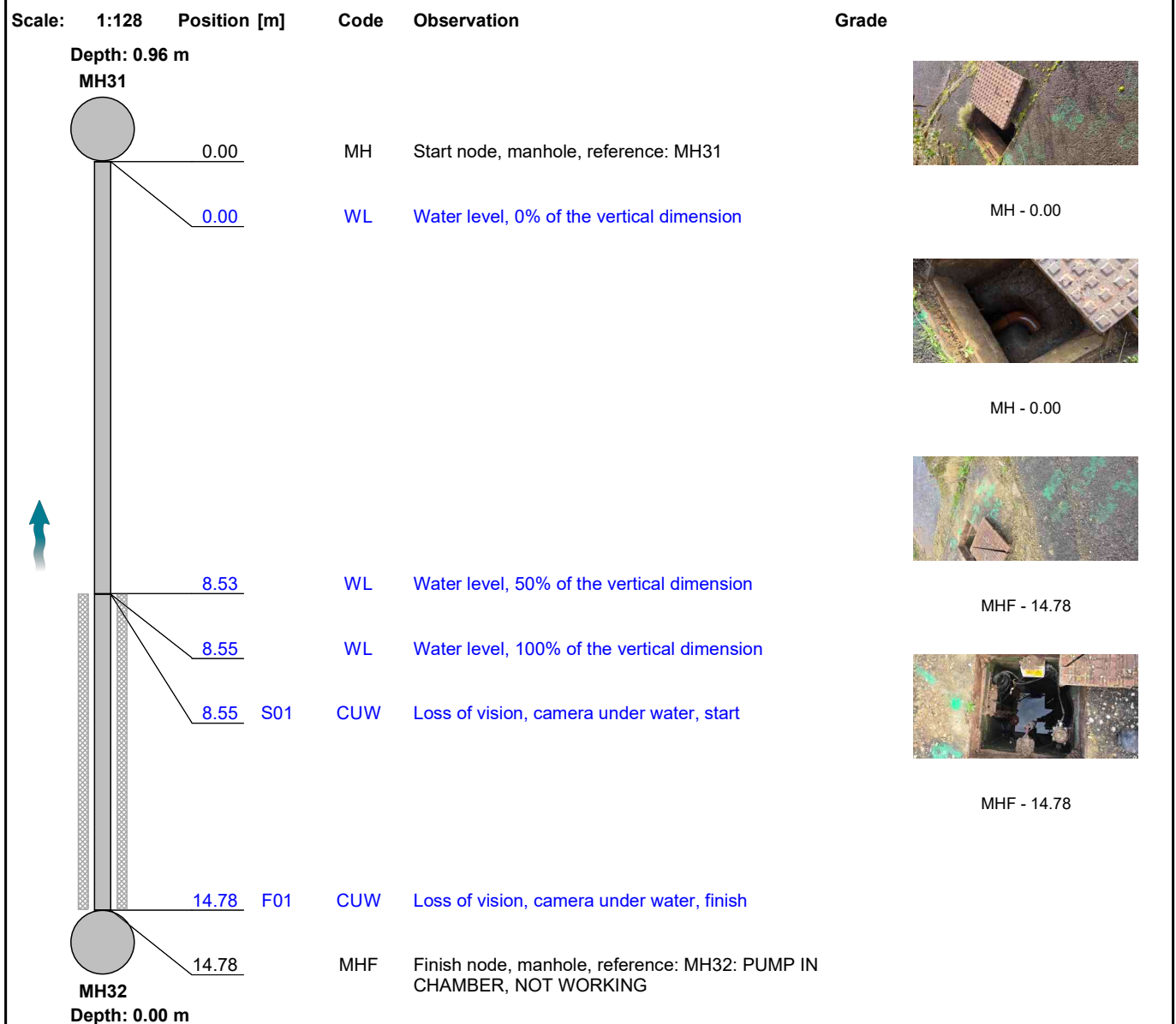


MH31X_a5845c64-2fc7-405d-9f44-63ba8d392b8f_20241125_104917.jpg, 00:01:07, 14.10 m
 Finish node, manhole, reference: MH41

Section Inspection - 25/11/2024 - MH32X

Item No. 6	Insp. No. 1	Date 25/11/24	Time 11:23	Client's Job Ref NOVARTIS SITE	Weather No Rain Or Snow	Pre Cleaned No	PLR MH32X
Operator Simon		Vehicle LL72AXU		Camera Pushrod	Preset Length 0.00 m	Legal Status Private Drain	Alternative ID Not Specified

Town or Village:	Horsham	Inspection Direction:	Upstream	Upstream Node:	MH32
Road:	Wimblehurst Road	Inspected Length:	14.78 m	Upstream Pipe Depth:	0.000 m
Location:	Difficult access	Total Length:	14.78 m	Downstream Node:	MH31
Surface Type:	Concrete Highway	Joint Length:	2.50 m	Downstream Pipe Depth:	0.960 m
Use:	Foul		Pipe Shape:	Circular	
Type of Pipe:	Gravity drain/sewer		Dia/Height:	75 mm	
Flow Control:	No flow control		Material:	Polyvinyl chloride	
Year Constructed:	1900		Lining Type:	No Lining	
Inspection Purpose:	Sample condition survey		Lining Material:	No Lining	
Comments:					
Recommendations:	None				



Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
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 Pictures - 25/11/2024 - MH32X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
6	Upstream	MH32X	NOVARTIS SITE	NOVARTIS SITE



MH32X_84aef4aa-2e4e-4b57-8957-3d9b8e573ac4_20241125_105257.jpg, 00:00:01, 0.00 m
 Start node, manhole, reference: MH31



MH32X_9cfc2b80-a715-4459-88b9-deff1fcf4eab_20241125_105303.jpg, 00:00:01, 0.00 m
 Start node, manhole, reference: MH31



MH32X_7bcfddd9-202f-4e2b-82db-48c6380e95e6_20241125_112750.jpg, 00:00:55, 14.78 m
 Finish node, manhole, reference: MH32, PUMP IN CHAMBER, NOT WORKING

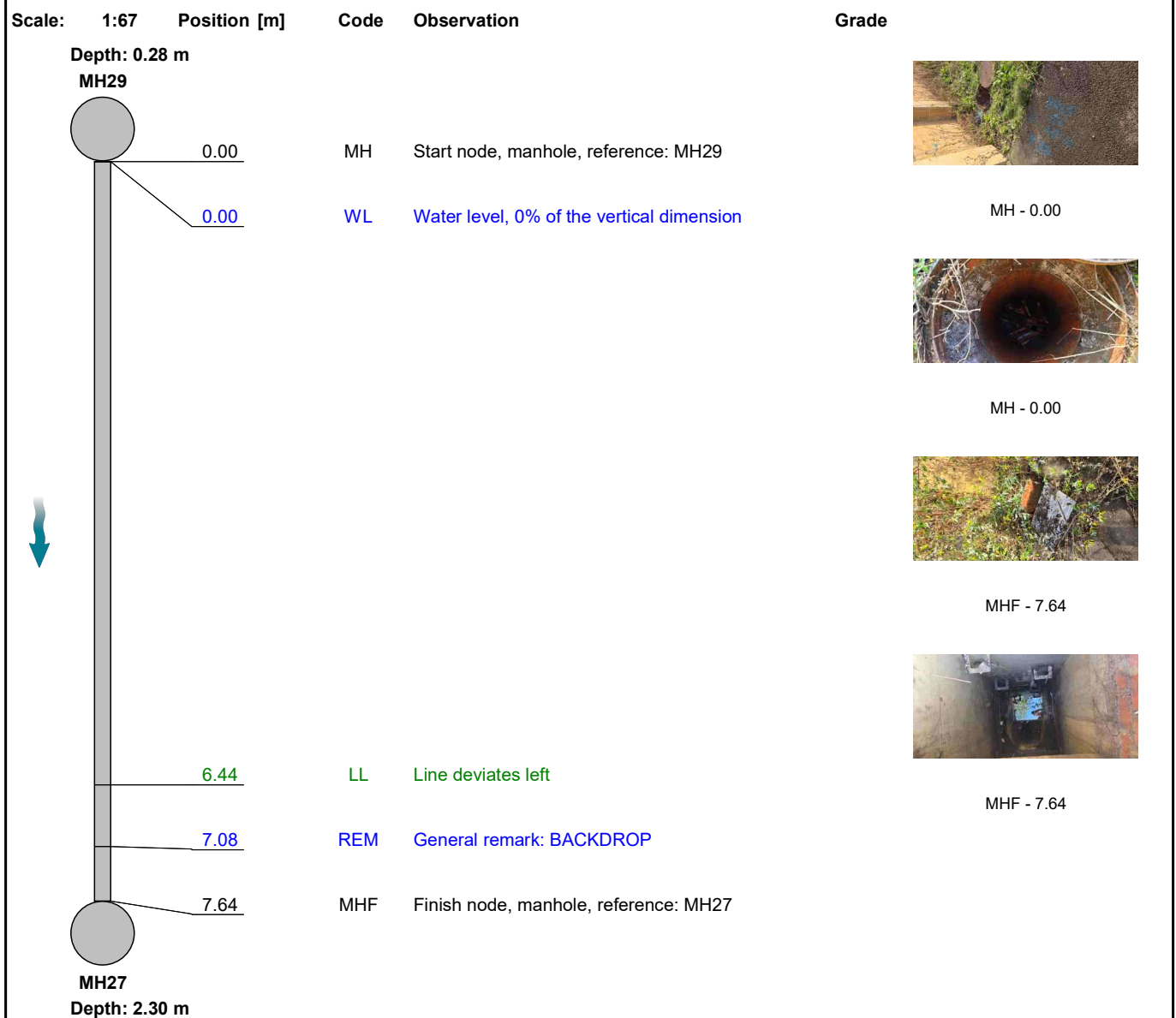


MH32X_6476d4ac-80fb-4081-a5f3-cf29dca6fb3d_20241125_112757.jpg, 00:00:55, 14.78 m
 Finish node, manhole, reference: MH32, PUMP IN CHAMBER, NOT WORKING

Section Inspection - 25/11/2024 - MH29X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
7	1	25/11/24	11:23	NOVARTIS SITE	No Rain Or Snow	No	MH29X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
Simon		LL72AXU		Pushrod	0.00 m	Private Drain	Not Specified

Town or Village:	Horsham	Inspection Direction:	Downstream	Upstream Node:	MH29
Road:	Wimblehurst Road	Inspected Length:	7.64 m	Upstream Pipe Depth:	0.280 m
Location:	Difficult access	Total Length:	7.64 m	Downstream Node:	MH27
Surface Type:	Grass	Joint Length:	2.50 m	Downstream Pipe Depth:	2.300 m
Use:	Surface water		Pipe Shape:	Circular	
Type of Pipe:	Gravity drain/sewer		Dia/Height:	100 mm	
Flow Control:	No flow control		Material:	Polyvinyl chloride	
Year Constructed:	1900		Lining Type:	No Lining	
Inspection Purpose:	Sample condition survey		Lining Material:	No Lining	
Comments:	SURVEY COMPLETE				
Recommendations:	None				



Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
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 Pictures - 25/11/2024 - MH29X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
7	Downstream	MH29X	NOVARTIS SITE	NOVARTIS SITE



MH29X_175b347a-573a-4b10-8026-45d9110113f6_20241125_113020.jpg, 00:00:01, 0.00 m
 Start node, manhole, reference: MH29



MH29X_900c1148-395f-4970-9e14-bc5ba8ed2804_20241125_113025.jpg, 00:00:01, 0.00 m
 Start node, manhole, reference: MH29



MH29X_70c4b88e-c05f-4202-9809-390d6086d4fd_20241125_113035.jpg, 00:00:47, 7.64 m
 Finish node, manhole, reference: MH27



MH29X_d4099cf8-2af2-4cb6-8f57-635ec8cf874a_20241125_113040.jpg, 00:00:47, 7.64 m
 Finish node, manhole, reference: MH27

Section Inspection - 25/11/2024 - MH27X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
8	1	25/11/24	11:31	NOVARTIS SITE	No Rain Or Snow	No	MH27X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
Simon		LL72AXU		Pushrod	0.00 m	Private Drain	Not Specified

Town or Village:	Horsham	Inspection Direction:	Downstream	Upstream Node:	MH27
Road:	Wimblehurst Road	Inspected Length:	0.00 m	Upstream Pipe Depth:	2.300 m
Location:	Difficult access	Total Length:	10.00 m	Downstream Node:	DOWNSTREAM
Surface Type:	Block Paved	Joint Length:	1.00 m	Downstream Pipe Depth:	0.000 m
Use:	Surface water		Pipe Shape:	Circular	
Type of Pipe:	Gravity drain/sewer		Dia/Height:		
Flow Control:	No flow control		Material:	Unidentified material	
Year Constructed:	1900		Lining Type:	No Lining	
Inspection Purpose:	Sample condition survey		Lining Material:	No Lining	
Comments:	LINE HOLDING WATER, REQUIRES SUCKING OUT TO SURVEY				
Recommendations:	REQUIRES SUCKING OUT				



Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
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 Pictures - 25/11/2024 - MH27X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
8	Downstream	MH27X	NOVARTIS SITE	NOVARTIS SITE



MH27X_576a0bc6-2da8-46f8-a3c9-27a2f49a2934_20241125_113251.jpg, 00:00:01, 0.00 m
 Start node, manhole, reference: MH27



MH27X_fe3962d4-d31e-4d1b-9c03-24360ed70b05_20241125_113255.jpg, 00:00:01, 0.00 m
 Start node, manhole, reference: MH27

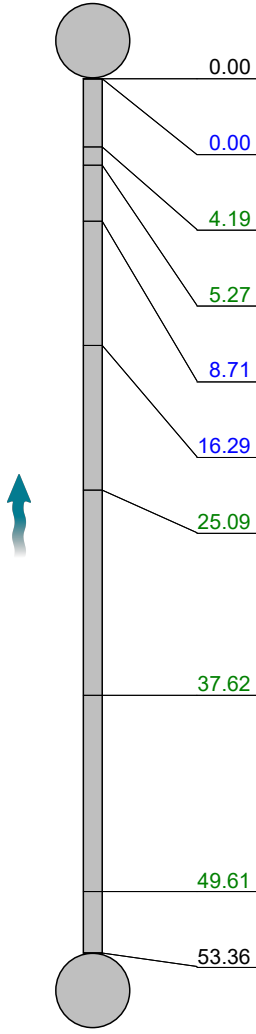


MH27X_752d7050-5c7c-4b6d-8922-7f7d2ea637d2_20241125_113301.jpg, 00:00:03, 0.00 m
 General remark, REQUIRES SUCKING OUT TO SURVEY

Section Inspection - 25/11/2024 - MH44X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
9	1	25/11/24	12:01	NOVARTIS SITE	No Rain Or Snow	No	MH44X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
Simon		LL72AXU		Crawler	0.00 m	Private Drain	Not Specified

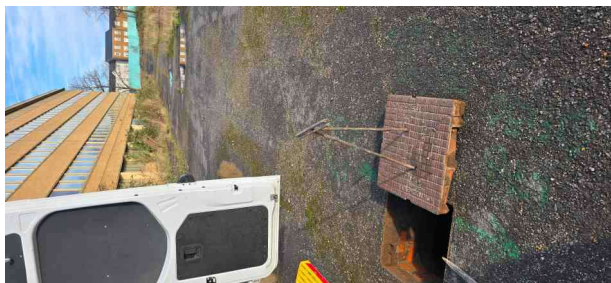
Town or Village:	Horsham	Inspection Direction:	Upstream	Upstream Node:	MH44
Road:	Wimblehurst Road	Inspected Length:	53.36 m	Upstream Pipe Depth:	2.600 m
Location:	Difficult access	Total Length:	53.36 m	Downstream Node:	MH33
Surface Type:	Asphalt Highway	Joint Length:	1.50 m	Downstream Pipe Depth:	1.710 m
Use:	Surface water		Pipe Shape:	Circular	
Type of Pipe:	Gravity drain/sewer		Dia/Height:	600 mm	
Flow Control:	No flow control		Material:	Concrete	
Year Constructed:	1900		Lining Type:	No Lining	
Inspection Purpose:	Sample condition survey		Lining Material:	No Lining	
Comments:	SURVEY COMPLETE				
Recommendations:	None				

Scale: 1:462	Position [m]	Code	Observation	Grade
Depth: 1.71 m MH33  0.00 0.00 4.19 5.27 8.71 16.29 25.09 37.62 49.61 53.36 MH WL DEC LL WL WL LL DEC DEC MHF Start node, manhole, reference: MH33 Water level, 5% of the vertical dimension Settled deposits, hard or compacted, 5% cross-sectional area loss Line deviates left Water level, 10% of the vertical dimension Water level, 5% of the vertical dimension Line deviates left Settled deposits, hard or compacted, 5% cross-sectional area loss Settled deposits, hard or compacted, 5% cross-sectional area loss Finish node, manhole, reference: MH44 3 3 3  MH - 0.00  MH - 0.00  MHF - 53.36  MHF - 53.36				
Depth: 2.60 m MH44				

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
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	3	2.0	0.1	6.0	3.0

Section Pictures - 25/11/2024 - MH44X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
9	Upstream	MH44X	NOVARTIS SITE	NOVARTIS SITE



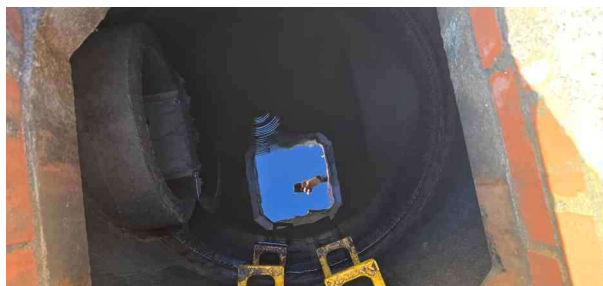
MH52X_b8ac1623-3da2-441b-b635-002b183b4d09_20241125_115548.jpg, 00:00:01, 0.00 m
 Start node, manhole, reference: MH33



MH52X_db8eb618-e844-4224-9c42-6bb9f034aebd_20241125_115553.jpg, 00:00:01, 0.00 m
 Start node, manhole, reference: MH33



MH44X_d64cf025-dbc9-4133-a46d-00c98a737c01_20241125_123359.jpg, 00:05:06, 53.36 m
 Finish node, manhole, reference: MH44

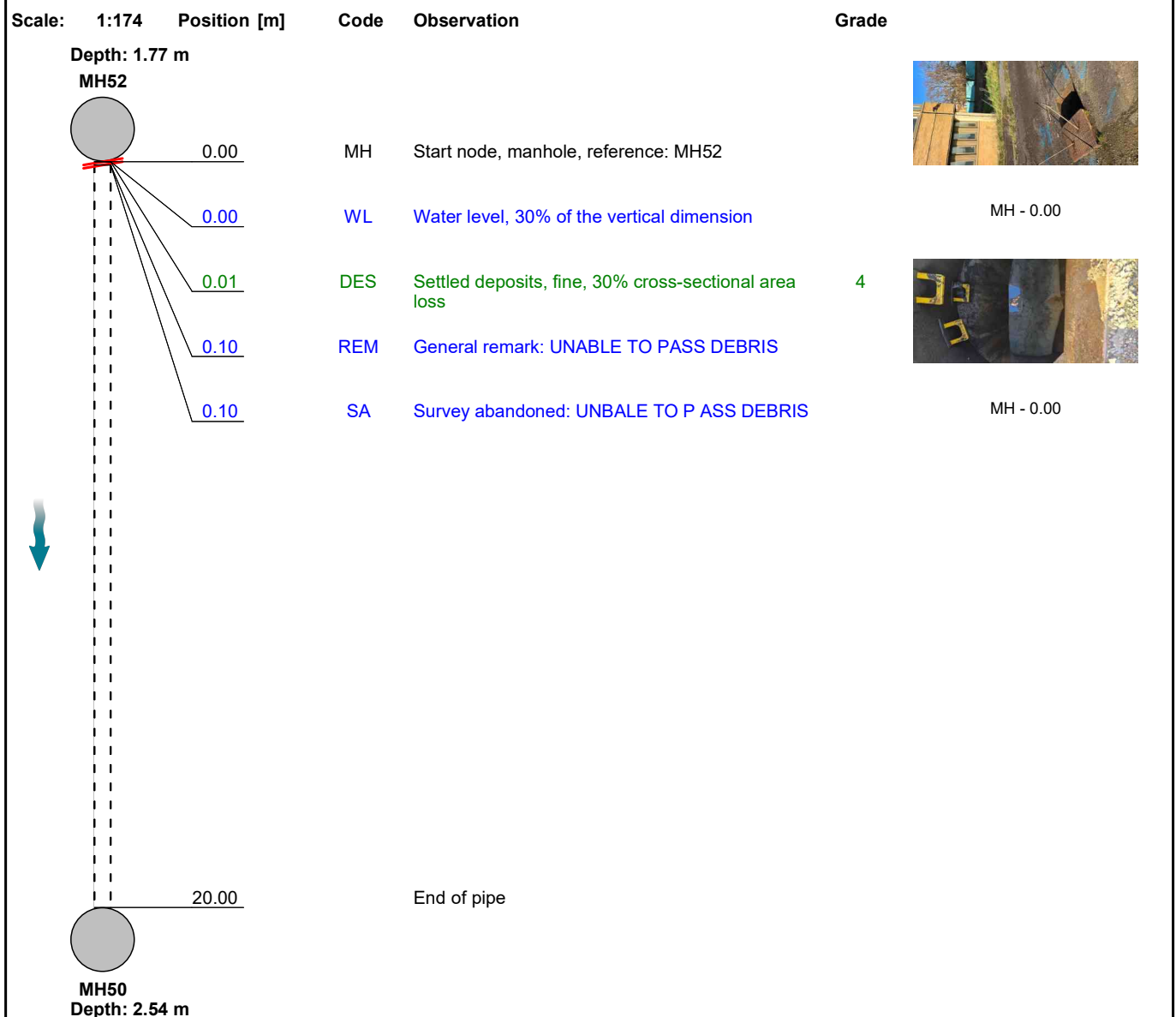


MH44X_be8a8903-f169-4e8b-877d-ae4e4c6f9674_20241125_123410.jpg, 00:05:06, 53.36 m
 Finish node, manhole, reference: MH44

Section Inspection - 25/11/2024 - MH52X

Item No. 10	Insp. No. 2	Date 25/11/24	Time 12:46	Client's Job Ref NOVARTIS SITE	Weather No Rain Or Snow	Pre Cleaned No	PLR MH52X
Operator Simon		Vehicle LL72AXU		Camera Crawler	Preset Length 0.00 m	Legal Status Private Drain	Alternative ID Not Specified

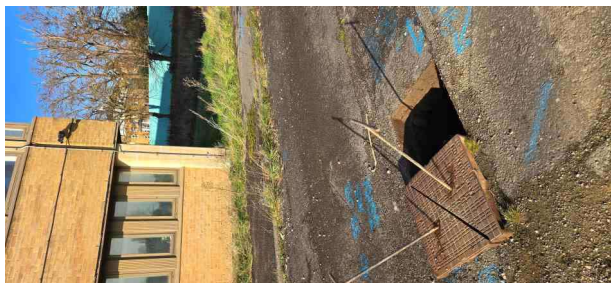
Town or Village:	Horsham	Inspection Direction:	Downstream	Upstream Node:	MH52
Road:	Wimblehurst Road	Inspected Length:	0.10 m	Upstream Pipe Depth:	1.770 m
Location:	Difficult access	Total Length:	20.00 m	Downstream Node:	MH50
Surface Type:	Asphalt Highway	Joint Length:	1.50 m	Downstream Pipe Depth:	2.540 m
Use:	Surface water	Pipe Shape: Circular Dia/Height: 600 mm Material: Concrete Lining Type: No Lining Lining Material: No Lining			
Type of Pipe:	Gravity drain/sewer				
Flow Control:	No flow control				
Year Constructed:	1900				
Inspection Purpose:	Sample condition survey				
Comments:	REQUIRES HEAVY JETTING TO SURVEY				
Recommendations:	REQUIRES HEAVY JETTING				



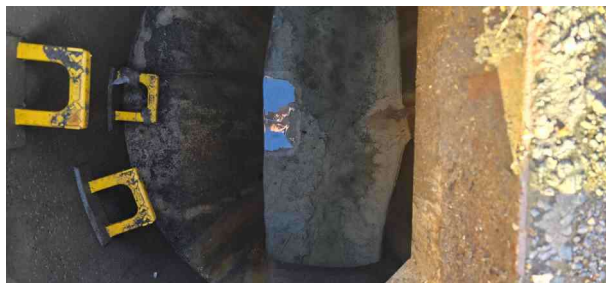
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	1	5.0	23.8	5.0	5.0

Section Pictures - 25/11/2024 - MH52X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
10	Downstream	MH52X	NOVARTIS SITE	NOVARTIS SITE



MH52X_7571958b-8a3e-4ec2-8951-4559cdfecfbd_20241125_124136.jpg, 00:00:01, 0.00 m
 Start node, manhole, reference: MH52



MH52X_2c7201a1-f51b-4798-85e9-0d0e50f1a274_20241125_124142.jpg, 00:00:01, 0.00 m
 Start node, manhole, reference: MH52

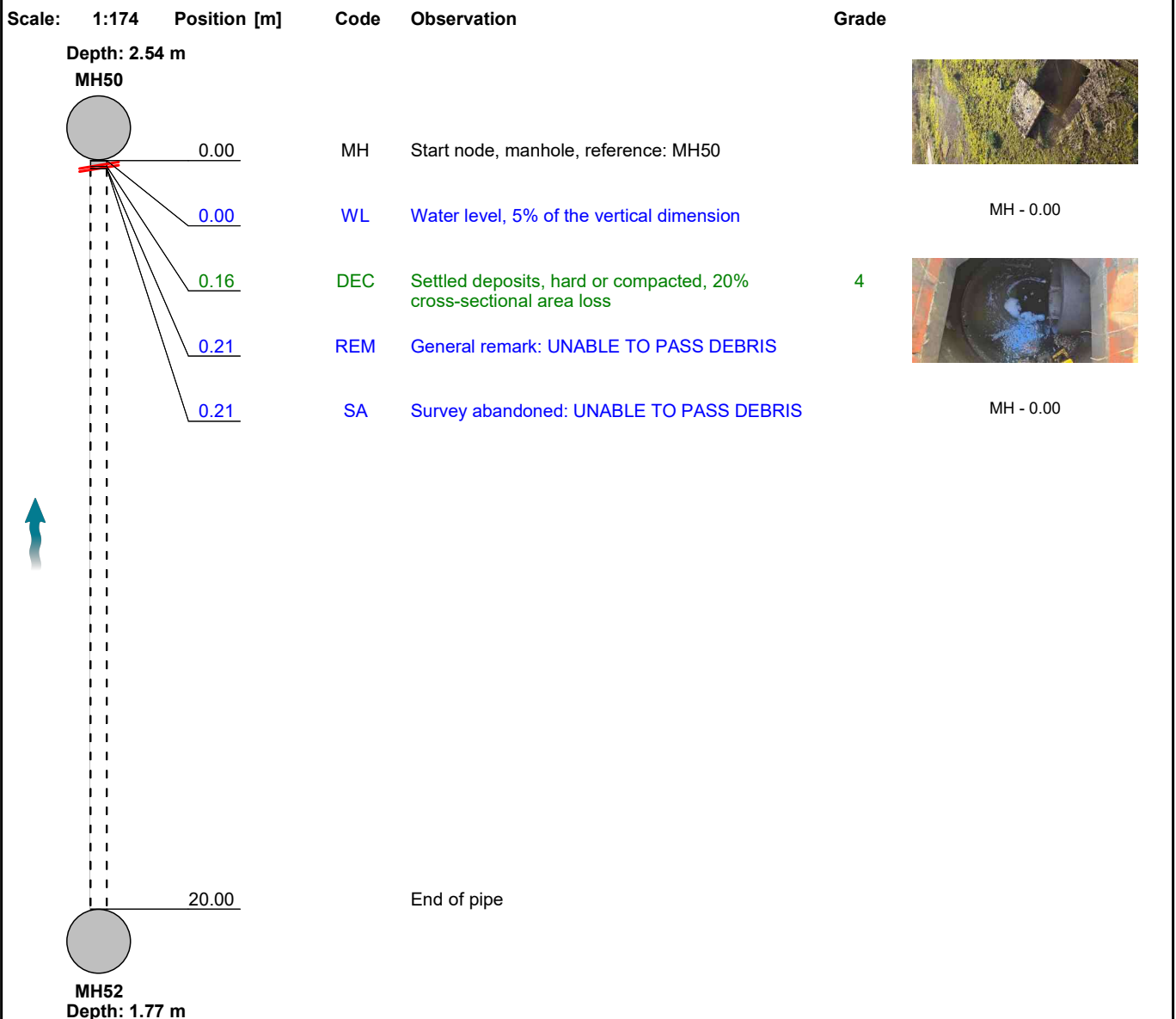
Section Inspection - 25/11/2024 - MH52X

Item No. 10	Insp. No. 1	Date 25/11/24	Time 12:40	Client's Job Ref NOVARTIS SITE	Weather No Rain Or Snow	Pre Cleaned No	PLR MH52X
Operator Simon		Vehicle LL72AXU		Camera Crawler	Preset Length 0.00 m	Legal Status Private Drain	Alternative ID Not Specified

Town or Village:	Horsham	Inspection Direction:	Upstream	Upstream Node:	MH52
Road:	Wimblehurst Road	Inspected Length:	0.21 m	Upstream Pipe Depth:	1.770 m
Location:	Difficult access	Total Length:	20.00 m	Downstream Node:	MH50
Surface Type:	Asphalt Highway	Joint Length:	1.50 m	Downstream Pipe Depth:	2.540 m
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	600 mm		
Flow Control:	No flow control	Material:	Concrete		
Year Constructed:	1900	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:

Recommendations:



Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
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	23.8	5.0	5.0

Section Pictures - 25/11/2024 - MH52X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
10	Upstream	MH52X	NOVARTIS SITE	NOVARTIS SITE



MH50X_f7da4275-0fb1-49b8-89da-72c9da125b0b_20241125_123421.jpg, 00:00:01, 0.00 m
 Start node, manhole, reference: MH50

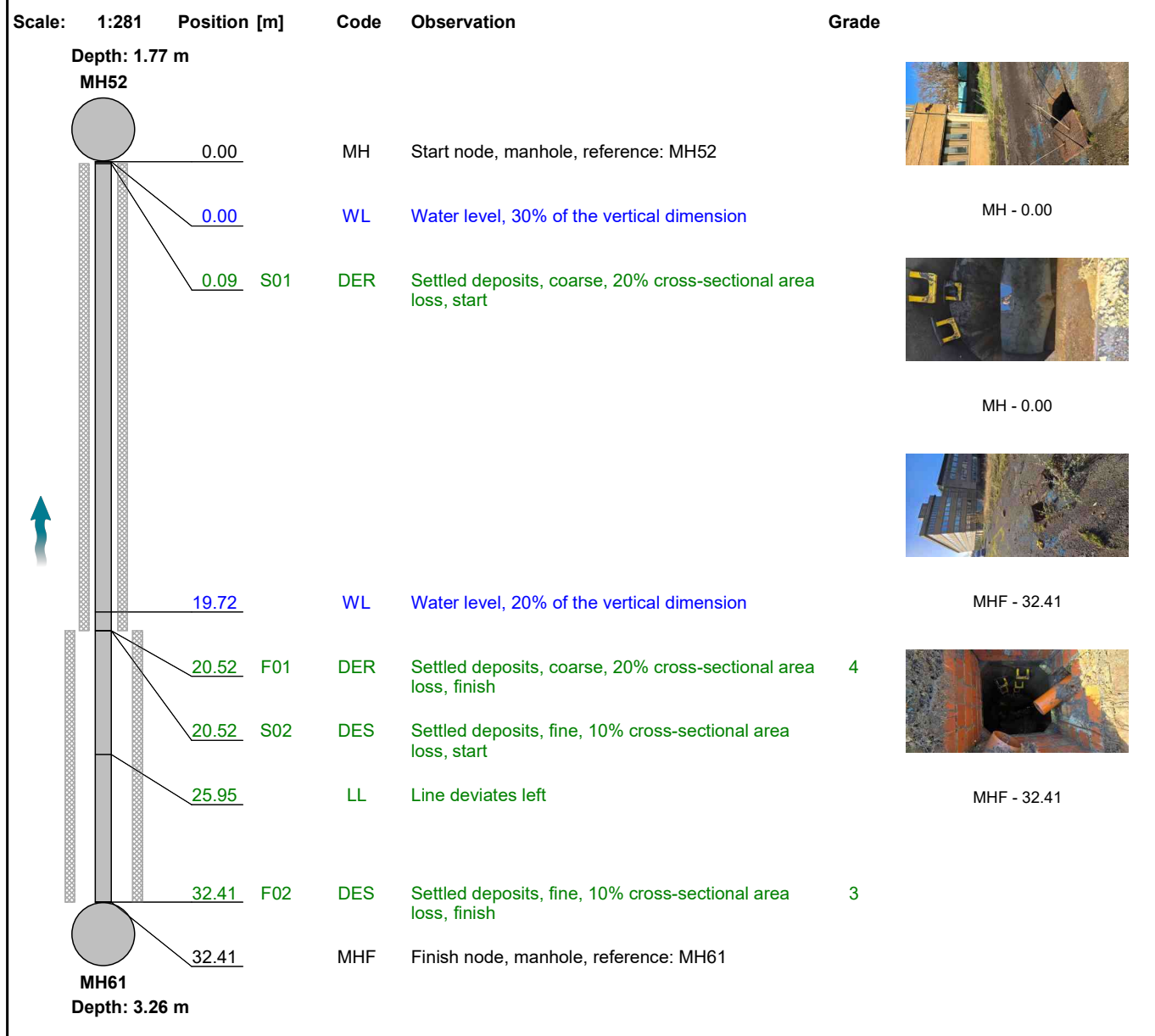


MH50X_3d1301d5-ca3e-409b-a436-1ac2832fe5e6_20241125_123435.jpg, 00:00:01, 0.00 m
 Start node, manhole, reference: MH50

Section Inspection - 25/11/2024 - MH61X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
11	1	25/11/24	12:54	NOVARTIS SITE	No Rain Or Snow	No	MH61X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
Simon		LL72AXU		Crawler	0.00 m	Private Drain	Not Specified

Town or Village:	Horsham	Inspection Direction:	Upstream	Upstream Node:	MH61
Road:	Wimblehurst Road	Inspected Length:	32.41 m	Upstream Pipe Depth:	3.260 m
Location:	Difficult access	Total Length:	32.42 m	Downstream Node:	MH52
Surface Type:	Asphalt Highway	Joint Length:	1.50 m	Downstream Pipe Depth:	1.770 m
Use:	Surface water		Pipe Shape:	Circular	
Type of Pipe:	Gravity drain/sewer		Dia/Height:	600 mm	
Flow Control:	No flow control		Material:	Concrete	
Year Constructed:	1900		Lining Type:	No Lining	
Inspection Purpose:	Sample condition survey		Lining Material:	No Lining	
Comments:	SURVEY COMPLETE				
Recommendations:	REQUIRES HEAVY JETTING TO CLEAN				



Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
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	2	7.0	4.0	129.0	4.0

Section Pictures - 25/11/2024 - MH61X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
11	Upstream	MH61X	NOVARTIS SITE	NOVARTIS SITE



MH61X_e9efd8cd-0511-4080-8fd8-b2573383b329_20241125_135532.jpg, 00:00:01, 0.00 m
 Start node, manhole, reference: MH52



MH61X_449bec40-dc47-42f4-b402-821d3b46e9b5_20241125_135540.jpg, 00:00:01, 0.00 m
 Start node, manhole, reference: MH52



MH61X_272adc5c-e3b7-4cf9-9421-c9fd14ab4772_20241125_135430.jpg, 00:03:38, 32.41 m
 Finish node, manhole, reference: MH61

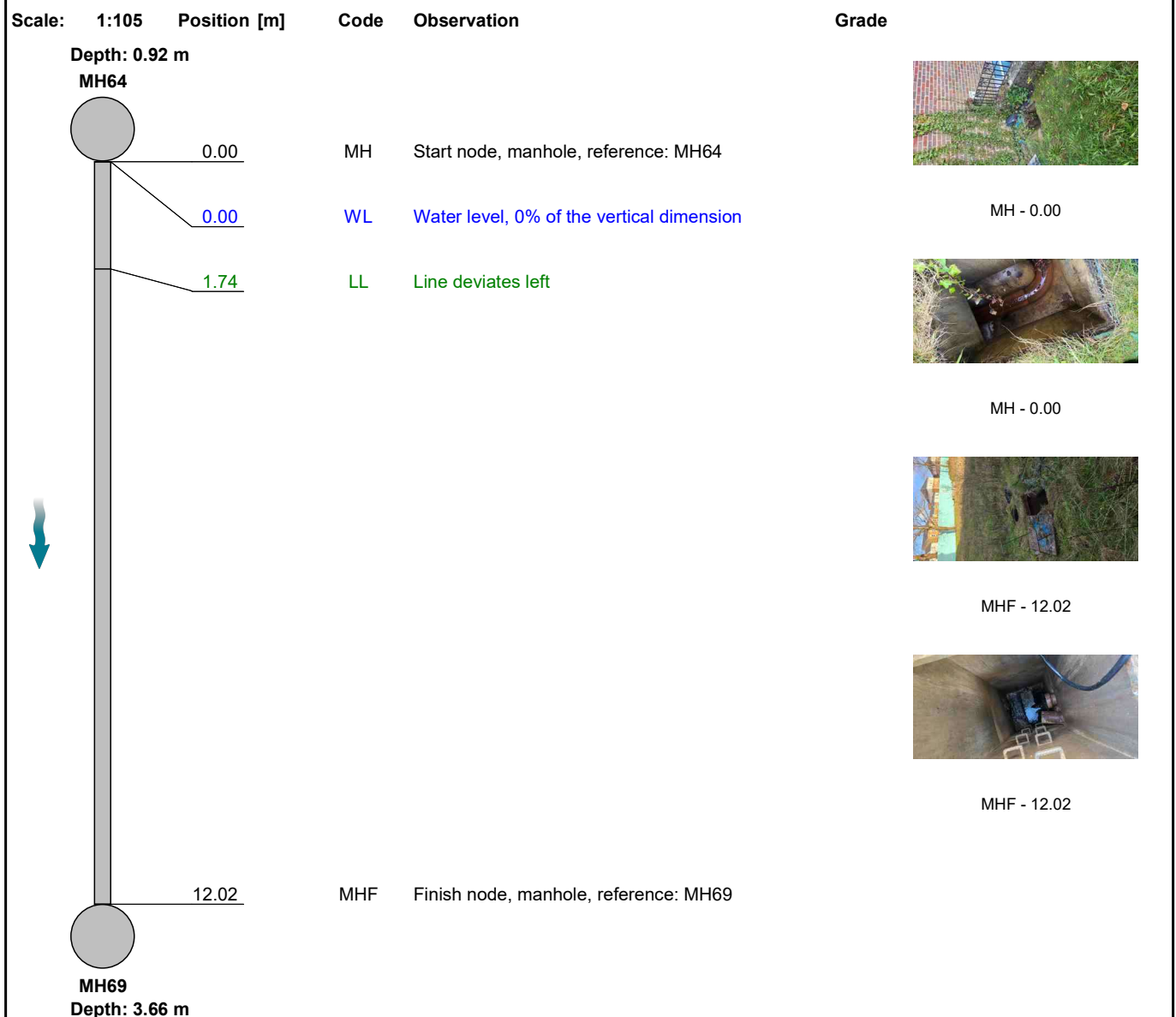


MH61X_95386cbb-045a-4908-ae61-5f8a9d181394_20241125_135443.jpg, 00:03:38, 32.41 m
 Finish node, manhole, reference: MH61

Section Inspection - 25/11/2024 - MH64X

Item No. 12	Insp. No. 1	Date 25/11/24	Time 14:22	Client's Job Ref NOVARTIS SITE	Weather No Rain Or Snow	Pre Cleaned Yes	PLR MH64X
Operator Simon		Vehicle LL72AXU		Camera Pushrod	Preset Length 0.00 m	Legal Status Private Drain	Alternative ID Not Specified

Town or Village:	Horsham	Inspection Direction:	Downstream	Upstream Node:	MH64
Road:	Wimblehurst Road	Inspected Length:	12.02 m	Upstream Pipe Depth:	0.920 m
Location:	Difficult access	Total Length:	12.02 m	Downstream Node:	MH69
Surface Type:	Grass	Joint Length:	1.50 m	Downstream Pipe Depth:	3.660 m
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Cast iron		
Year Constructed:	1900	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		
Comments:	SURVEY COMPLETE				
Recommendations:	None				



Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
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 Pictures - 25/11/2024 - MH64X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
12	Downstream	MH64X	NOVARTIS SITE	NOVARTIS SITE



MH64X_c13aa89b-c7d0-4460-9c15-158c411df083_20241125_142620.jpg, 00:00:01, 0.00 m
 Start node, manhole, reference: MH64



MH64X_d5373b3c-21a3-474c-b060-ec25bf1d1ca6_20241125_142625.jpg, 00:00:01, 0.00 m
 Start node, manhole, reference: MH64



MH64X_d30f4c3b-6a8c-4047-97a1-0165e4aa9c35_20241125_142601.jpg, 00:00:50, 12.02 m
 Finish node, manhole, reference: MH69

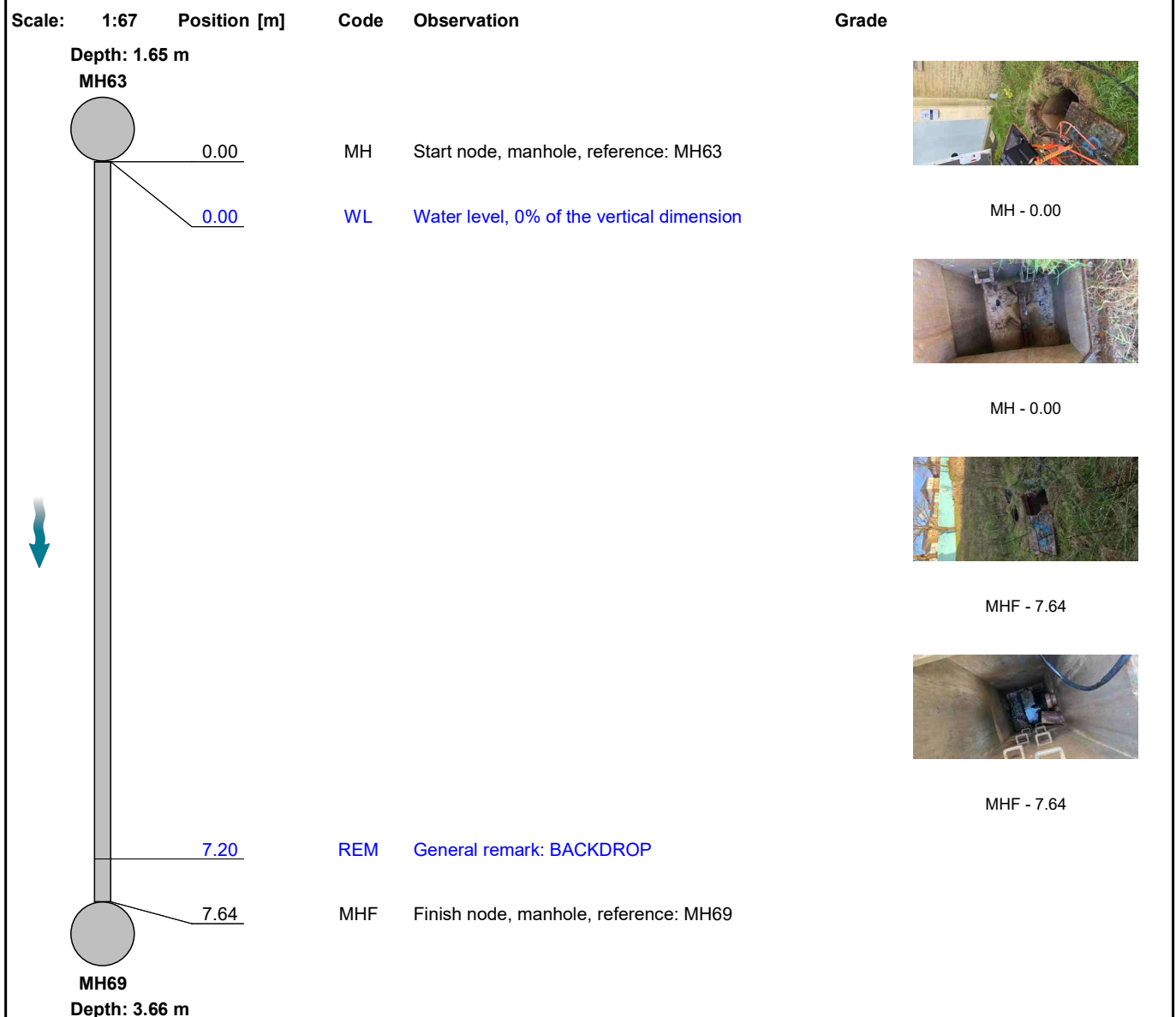


MH64X_b008573f-6747-4f00-aa6c-8ff2cf7564c6_20241125_142612.jpg, 00:00:50, 12.02 m
 Finish node, manhole, reference: MH69

Section Inspection - 25/11/2024 - MH63X

Item No. 13	Insp. No. 1	Date 25/11/24	Time 14:22	Client's Job Ref NOVARTIS SITE	Weather No Rain Or Snow	Pre Cleaned Yes	PLR MH63X
Operator Simon		Vehicle LL72AXU		Camera Pushrod	Preset Length 0.00 m	Legal Status Private Drain	Alternative ID Not Specified

Town or Village:	Horsham	Inspection Direction:	Downstream	Upstream Node:	MH63
Road:	Wimblehurst Road	Inspected Length:	7.64 m	Upstream Pipe Depth:	1.650 m
Location:	Difficult access	Total Length:	7.64 m	Downstream Node:	MH69
Surface Type:	Grass	Joint Length:	1.00 m	Downstream Pipe Depth:	3.660 m
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	1900	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		
Comments:	SURVEY COMPLETE				
Recommendations:	None				



Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
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 Pictures - 25/11/2024 - MH63X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
13	Downstream	MH63X	NOVARTIS SITE	NOVARTIS SITE



MH63X_84e43519-7d21-40aa-bcb9-b75b2af84fb4_20241125_142650.jpg, 00:00:01, 0.00 m
 Start node, manhole, reference: MH63



MH63X_f4076f48-0765-4e20-82e3-76d467fc6afd_20241125_142655.jpg, 00:00:01, 0.00 m
 Start node, manhole, reference: MH63



MH63X_d33e356d-36db-4550-8fac-a52281a523c4_20241125_142801.jpg, 00:00:41, 7.64 m
 Finish node, manhole, reference: MH69



MH63X_fc3eee03-1a09-4fa9-a55e-c192e3ece00d_20241125_142804.jpg, 00:00:41, 7.64 m
 Finish node, manhole, reference: MH69

Section Inspection - 25/11/2024 - MH70X

Item No. 14	Insp. No. 1	Date 25/11/24	Time 14:23	Client's Job Ref NOVARTIS SITE	Weather No Rain Or Snow	Pre Cleaned Yes	PLR MH70X
Operator Simon		Vehicle LL72AXU		Camera Pushrod	Preset Length 0.00 m	Legal Status Private Drain	Alternative ID Not Specified

Town or Village:	Horsham	Inspection Direction:	Downstream	Upstream Node:	MH70
Road:	Wimblehurst Road	Inspected Length:	0.50 m	Upstream Pipe Depth:	2.920 m
Location:	Difficult access	Total Length:	0.50 m	Downstream Node:	MH69
Surface Type:	Grass	Joint Length:	1.50 m	Downstream Pipe Depth:	3.660 m
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Material:	Cast iron		
Year Constructed:	1900	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		
Comments:	SURVEY COMPLETE				
Recommendations:	None				

Scale:	1:50	Position [m]	Code	Observation	Grade
Depth: 2.92 m MH70  0.00 0.00 0.50 Depth: 3.66 m MH69 MH Start node, manhole, reference: MH70 WL Water level, 0% of the vertical dimension MHF Finish node, manhole, reference: MH69					
					 MH - 0.00
					 MH - 0.00
					 MHF - 0.50
					 MHF - 0.50

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
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 Pictures - 25/11/2024 - MH70X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
14	Downstream	MH70X	NOVARTIS SITE	NOVARTIS SITE



MH70X_952ce354-e7cf-4cab-a660-69bb7fe629e2_20241125_142811.jpg, 00:00:01, 0.00 m
 Start node, manhole, reference: MH70



MH70X_16ffa554-662e-4a19-806b-834db8797b30_20241125_142815.jpg, 00:00:01, 0.00 m
 Start node, manhole, reference: MH70



MH70X_70be9e61-a083-4eb8-9561-a24162f15128_20241125_142836.jpg, 00:00:26, 0.50 m
 Finish node, manhole, reference: MH69

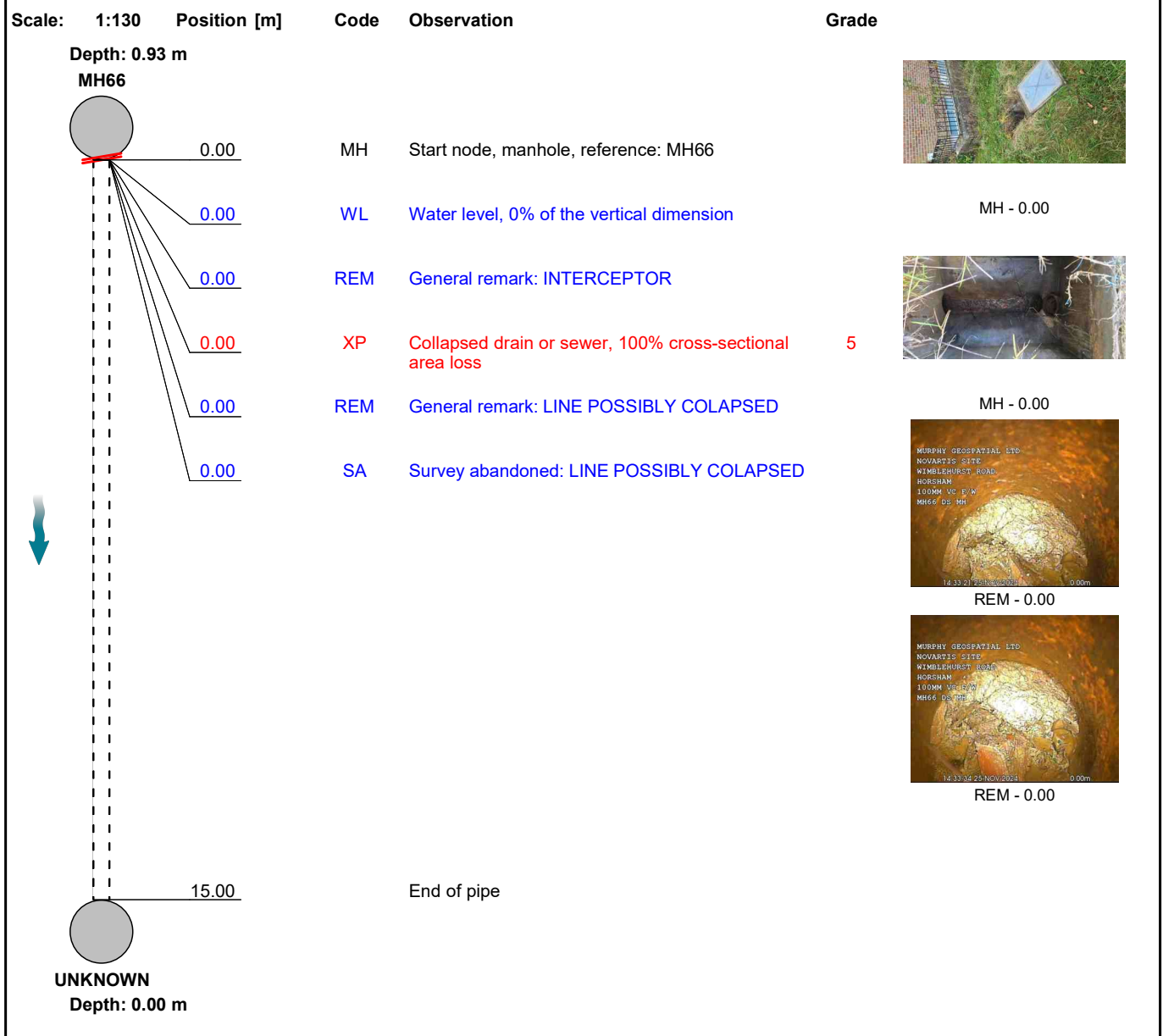


MH70X_482b3a68-3968-4f9b-934f-2755644c4826_20241125_142839.jpg, 00:00:26, 0.50 m
 Finish node, manhole, reference: MH69

Section Inspection - 25/11/2024 - MH66X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
15	1	25/11/24	14:29	NOVARTIS SITE	No Rain Or Snow	Yes	MH66X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
Simon		LL72AXU		Pushrod	0.00 m	Private Drain	Not Specified

Town or Village:	Horsham	Inspection Direction:	Downstream	Upstream Node:	MH66
Road:	Wimblehurst Road	Inspected Length:	0.00 m	Upstream Pipe Depth:	0.930 m
Location:	Difficult access	Total Length:	15.00 m	Downstream Node:	UNKNOWN
Surface Type:	Grass	Joint Length:	1.00 m	Downstream Pipe Depth:	0.000 m
Use:	Foul	Pipe Shape: Circular Dia/Height: 100 mm Material: Vitrified clay Lining Type: No Lining Lining Material: No Lining			
Type of Pipe:	Gravity drain/sewer				
Flow Control:	No flow control				
Year Constructed:	1900				
Inspection Purpose:	Sample condition survey				
Comments:	LINE POSSIBLY COLLAPSED				
Recommendations:	LINE REQUIRES DIG UP TO REPAIR				



Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
1	165.0	11.0	165.0	5.0	0	0.0	0.0	0.0	1.0

Section Pictures - 25/11/2024 - MH66X

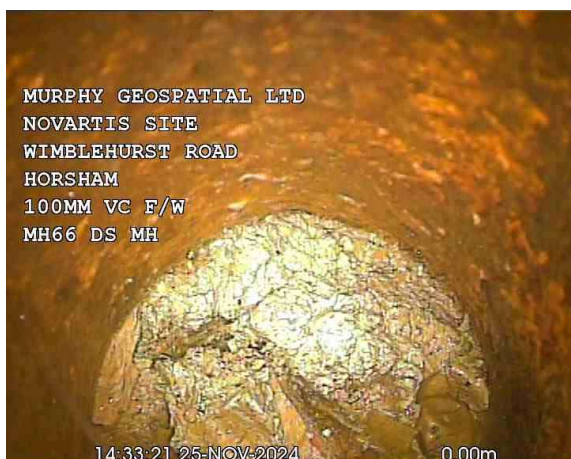
Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
15	Downstream	MH66X	NOVARTIS SITE	NOVARTIS SITE



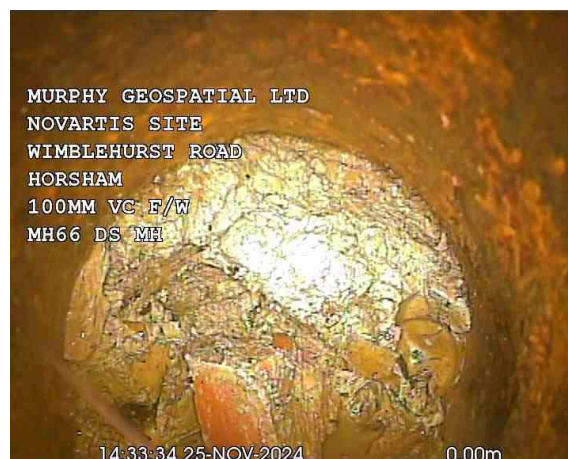
MH66X_af767249-9a80-4ee8-a502-89d04811b755_20241125_143053.jpg, 00:00:01, 0.00 m
 Start node, manhole, reference: MH66



MH66X_2dc65504-d53d-443b-888b-a4185d0b8c0d_20241125_143058.jpg, 00:00:01, 0.00 m
 Start node, manhole, reference: MH66



MH66X_d5676fce-9e23-49c5-bd5e-e499d8c206ac_20241125_143652.jpg, 00:00:04, 0.00 m
 General remark, LINE POSSIBLY COLAPSED

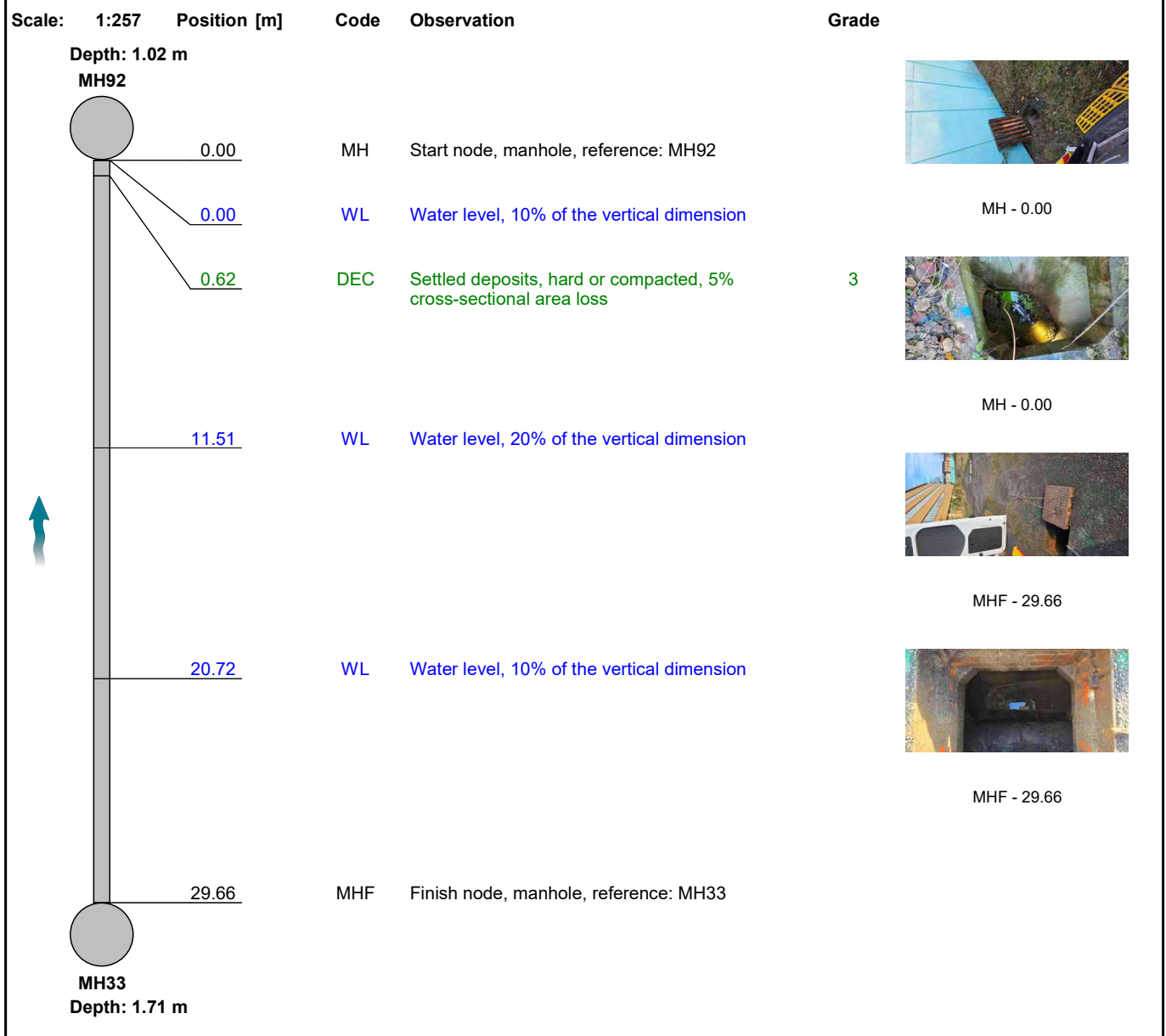


MH66X_4c909935-10b8-4717-9372-7c1483778b32_20241125_143657.jpg, 00:00:04, 0.00 m
 General remark, LINE POSSIBLY COLAPSED

Section Inspection - 25/11/2024 - MH33X

Item No. 16	Insp. No. 1	Date 25/11/24	Time 14:49	Client's Job Ref NOVARTIS SITE	Weather No Rain Or Snow	Pre Cleaned No	PLR MH33X
Operator Simon		Vehicle LL72AXU		Camera Crawler	Preset Length 0.00 m	Legal Status Private Drain	Alternative ID Not Specified

Town or Village:	Horsham	Inspection Direction:	Upstream	Upstream Node:	MH33
Road:	Wimblehurst Road	Inspected Length:	29.66 m	Upstream Pipe Depth:	1.710 m
Location:	Difficult access	Total Length:	29.66 m	Downstream Node:	MH92
Surface Type:	Grass	Joint Length:	1.50 m	Downstream Pipe Depth:	1.020 m
Use:	Surface water		Pipe Shape:	Circular	
Type of Pipe:	Gravity drain/sewer		Dia/Height:	600 mm	
Flow Control:	No flow control		Material:	Concrete	
Year Constructed:	1900		Lining Type:	No Lining	
Inspection Purpose:	Sample condition survey		Lining Material:	No Lining	
Comments:	SURVEY COMPLETE				
Recommendations:	None				



Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
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	2.0	0.1	2.0	3.0

Section Pictures - 25/11/2024 - MH33X

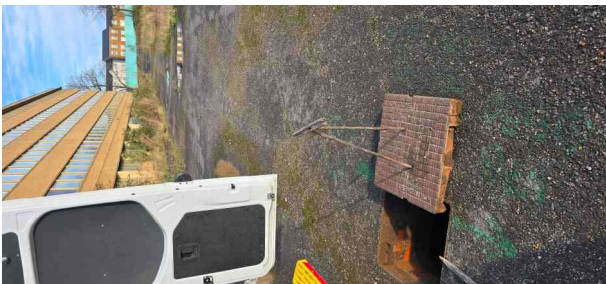
Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
16	Upstream	MH33X	NOVARTIS SITE	NOVARTIS SITE



X_2586be45-4d85-47f3-9d48-08431449bb65_20241125_144824.jpg, 00:00:01, 0.00 m
 Start node, manhole, reference: MH92



X_eef80fef-569a-412d-a87a-84c72ef6bb35_20241125_144828.jpg, 00:00:01, 0.00 m
 Start node, manhole, reference: MH92



MH33X_2ca10918-82b4-4f2f-bf51-7afa06732a2f_20241125_145333.jpg, 00:03:02, 29.66 m
 Finish node, manhole, reference: MH33



MH33X_115bf01f-265c-4dc9-b4e9-34a2b1cad7e3_20241125_145344.jpg, 00:03:02, 29.66 m
 Finish node, manhole, reference: MH33