



Project

Project Name: Highgate Cemetery

Project Date: 06/03/2024

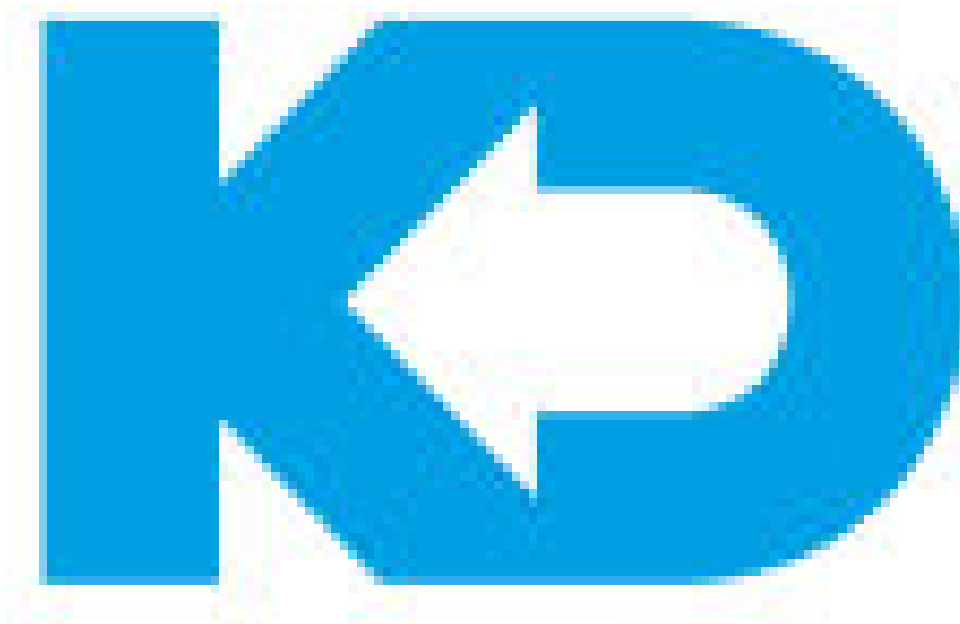




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Project Information

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Client

Company: Friends of Highgate Cemetery Trust
Contact: Mr Bill Marsden
Street: Highgate Cemetery, Swains Lane
Town or City: London
County: London
Post Code: N6 6PJ
Mobile: 07990 595676
Email: bill.marsden-ext@arteliagroup.com

Manager

Company: Friends of Highgate Cemetery Trust
Contact: Mr Bill Marsden
Street: Highgate Cemetery, Swains Lane
Town or City: London
County: London
Post Code: N6 6PJ
Mobile: 07990 595676
Email: bill.marsden-ext@arteliagroup.com

Contractor

Company: KD Drainage and Asbestos
Description: CCTV Inspections
Contact: Mr Luke Healey
Department: Drainage
Street: Matts Hill Farm, Matts Hill Road
Town or City: Siitingbourne
County: Kent
Post Code: ME9 7UY
Phone: 01622919012
Email: www.kddaa.co.uk





Scoring Summary

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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
9	RWG6X	4	Broken pipe at joint from 8 o'clock to 11 o'clock
42	Branch BX	4	Broken pipe at joint from 9 o'clock to 4 o'clock
51	Branch AX	5	Hole in drain or sewer from 8 o'clock to 12 o'clock
52	Branch BX	4	Broken pipe at joint from 10 o'clock to 2 o'clock
92	RWG75X	4	Multiple defects
96	Branch AX	5	Hole in drain or sewer from 10 o'clock to 2 o'clock
98	UpstreamX	4	Broken pipe at joint from 12 o'clock to 12 o'clock
103	MH22X	4	Fractures, multiple at joint from 12 o'clock to 12 o'clock
110	Branch CX	4	Displaced bricks, single brick false from 7 o'clock to 8 o'clock
114	RWG89X	4	Broken pipe at joint from 10 o'clock to 3 o'clock

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
2	MH2X	4	Settled deposits, fine, 20% cross-sectional area loss, finish
3	RWG8X	4	Multiple defects
4	RWG9X	4	Settled deposits, fine, 30% cross-sectional area loss
5	RWG10X	4	Settled deposits, fine, 75% cross-sectional area loss
6	RWG11X	4	Settled deposits, fine, 25% cross-sectional area loss, finish
7	RWG1X	4	Settled deposits, fine, 20% cross-sectional area loss, finish
8	RWG3X	4	Settled deposits, fine, 20% cross-sectional area loss, finish
9	RWG6X	4	Settled deposits, fine, 50% cross-sectional area loss, finish
13	RWG12X	4	Settled deposits, coarse, 40% cross-sectional area loss, finish
14	RWG13X	4	Settled deposits, fine, 60% cross-sectional area loss, finish
15	RWG14X	4	Settled deposits, fine, 50% cross-sectional area loss
16	RWG17X	4	Settled deposits, fine, 60% cross-sectional area loss
17	RWG22X	4	Settled deposits, fine, 30% cross-sectional area loss
19	MH3X	4	Settled deposits, fine, 20% cross-sectional area loss, finish
21	MH5X	4	Multiple defects
23	Branch DX	4	Settled deposits, coarse, 40% cross-sectional area loss, start



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Section	PLR	Grade	Description
24	Branch EX	4	Settled deposits, coarse, 70% cross-sectional area loss
25	MH6X	4	Multiple defects
28	Branch CX	5	Settled deposits, coarse, 90% cross-sectional area loss
29	MH7X	4	Multiple defects
30	MH8X	5	Roots, mass at joint, 20% cross-sectional area loss, finish
33	MH9X	4	Joint displaced, large
36	RWG28X	4	Joint displaced, large
39	RWG26X	4	Joint displaced, large
45	MH10X	3	Multiple defects
48	MH11X	4	Settled deposits, fine, 25% cross-sectional area loss, finish
51	Branch AX	5	Other obstacles, protruding through wall from 9 o'clock to 11 o'clock, 20% cross-sectional area loss
53	MH14X	4	Multiple defects
58	RWG35X	4	Settled deposits, fine, 20% cross-sectional area loss
62	MH17X	5	Other obstacles from 4 o'clock to 6 o'clock, 25% cross-sectional area loss, finish
65	Branch AX	5	Other obstacles from 3 o'clock to 5 o'clock, 25% cross-sectional area loss, start
67	Branch BX	5	Other obstacles at joint from 8 o'clock to 11 o'clock, 20% cross-sectional area loss
71	MH19X	3	Joint displaced, medium
72	Branch AX	5	Roots, mass, 55% cross-sectional area loss
74	RWG54X	5	Roots, mass, 80% cross-sectional area loss, finish
76	RWG41X	4	Attached deposits, encrustation at joint from 3 o'clock to 10 o'clock, 40% cross-sectional area loss
78	RWG40X	5	Settled deposits, fine, 85% cross-sectional area loss
79	RWG42X	4	Joint displaced, large
80	RWG49X	5	Roots, mass, 50% cross-sectional area loss, finish
81	RWG58X	4	Multiple defects
83	RWG56X	4	Multiple defects
84	RWG57X	4	Multiple defects
86	RWG84X	4	Settled deposits, fine, 75% cross-sectional area loss
89	RWG59X	5	Settled deposits, fine, 80% cross-sectional area loss
90	UpstreamX	5	Other obstacles, protruding through wall at joint from 2 o'clock to 4 o'clock, 25% cross-sectional area loss
91	RWG73X	4	Multiple defects
93	RWG83X	4	Settled deposits, fine, 40% cross-sectional area loss, finish
94	MH15X	4	Settled deposits, fine, 25% cross-sectional area loss
100	MH21X	4	Multiple defects
103	MH22X	4	Settled deposits, fine, 20% cross-sectional area loss, finish
107	MH23X	4	Settled deposits, fine, 25% cross-sectional area loss, finish
111	RWG90X	3	Settled deposits, fine, 15% cross-sectional area loss, finish
113	RWG92X	4	Joint displaced, large
114	RWG89X	4	Joint displaced, large



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Abandoned Surveys

Section	PLR	Description
4	RWG9X	Survey abandoned
5	RWG10X	Survey abandoned
6	RWG11X	Survey abandoned
9	RWG6X	Survey abandoned
10	Branch AX	Survey abandoned
11	MH3X	Survey abandoned
12	UpstreamX	Survey abandoned
13	RWG12X	Survey abandoned
14	RWG13X	Survey abandoned
15	RWG14X	Survey abandoned
16	RWG17X	Survey abandoned
17	RWG22X	Survey abandoned
21	MH5X	Survey abandoned
22	Branch CX	Survey abandoned
23	Branch DX	Survey abandoned
24	Branch EX	Survey abandoned
26	UpstreamX	Survey abandoned
27	Branch AX	Survey abandoned
28	Branch CX	Survey abandoned
29	MH7X	Survey abandoned
31	UpstreamX	Survey abandoned
33	MH9X	Survey abandoned
39	RWG26X	Survey abandoned
40	Branch AX	Survey abandoned
41	Branch AX	Survey abandoned
57	UpstreamX	Survey abandoned
64	MH16X	Survey abandoned
65	Branch AX	Survey abandoned
67	Branch BX	Survey abandoned
72	Branch AX	Survey abandoned
73	RWG53X	Survey abandoned
74	RWG54X	Survey abandoned
75	UpstreamX	Survey abandoned
76	RWG41X	Survey abandoned
77	UpstreamX	Survey abandoned
78	RWG40X	Survey abandoned
79	RWG42X	Survey abandoned
80	RWG49X	Survey abandoned
81	RWG58X	Survey abandoned
82	Branch AX	Survey abandoned
83	RWG56X	Survey abandoned



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Section	PLR	Description
84	RWG57X	Survey abandoned
85	RWG59X	Survey abandoned
86	RWG84X	Survey abandoned
87	Branch BX	Survey abandoned
88	UpstreamX	Survey abandoned
89	RWG59X	Survey abandoned
90	UpstreamX	Survey abandoned
91	RWG73X	Survey abandoned
93	RWG83X	Survey abandoned
94	MH15X	Survey abandoned
95	UpstreamX	Survey abandoned
96	Branch AX	Survey abandoned
98	UpstreamX	Survey abandoned
99	Branch AX	Survey abandoned
100	MH21X	Survey abandoned
101	UpstreamX	Survey abandoned
102	Branch AX	Survey abandoned
103	MH22X	Survey abandoned
104	UpstreamX	Survey abandoned

Information

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



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Pipe Summary

No.	Type	PLR	Upstream Node	Downstream Node	Road	Town	Use	Mat.	Profile	Length
1	SEC	Branch AX	BRANCH A	MH2	Swains Lane	Highgate	S	PVC	Circular 100mm	8.54 m
2	SEC	MH2X	MH2	DOWNSTREAM	Swains Lane	Highgate	S	PVC	Circular 100mm	4.99 m
3	SEC	RWG8X	RWG8	DOWNSTREAM	Swains Lane	Highgate	S	VC	Circular 150mm	1.92 m
4	SEC	RWG9X	RWG9	DOWNSTREAM	Swains Lane	Highgate	S	VC	Circular 100mm	0.19 m
5	SEC	RWG10X	RWG10	DOWNSTREAM	Swains Lane	Highgate	S	VC	Circular 100mm	0.57 m
6	SEC	RWG11X	RWG11	DOWNSTREAM	Swains Lane	Highgate	S	VC	Circular 150mm	2.30 m
7	SEC	RWG1X	RWG1	MH1	Swains Lane	Highgate	S	VC	Circular 100mm	0.86 m
8	SEC	RWG3X	RWG3	MH2	Swains Lane	Highgate	S	PVC	Circular 100mm	10.58 m
9	SEC	RWG6X	RWG6	DOWNSTREAM	Swains Lane	Highgate	S	VC	Circular 150mm	0.96 m
10	SEC	Branch AX	BRANCH A	MH3	Swains Lane	Highgate	S	VC	Circular 300mm	8.16 m
11	SEC	MH3X	MH3	DOWNSTREAM	Swains Lane	Highgate	S	BR	Circular 350mm	0.65 m
12	SEC	UpstreamX	UPSTREAM	MH3	Swains Lane	Highgate	S	BR	Circular 350mm	1.41 m
13	SEC	RWG12X	RWG12	DOWNSTREAM	Swains Lane	Highgate	S	VC	Circular 150mm	3.07 m
14	SEC	RWG13X	RWG13	DOWNSTREAM	Swains Lane	Highgate	S	VC	Circular 100mm	0.19 m
15	SEC	RWG14X	RWG14	DOWNSTREAM	Swains Lane	Highgate	S	VC	Circular 100mm	0.67 m
16	SEC	RWG17X	RWG17	DOWNSTREAM	Swains Lane	Highgate	S	VC	Circular 100mm	0.01 m
17	SEC	RWG22X	RWG22	DOWNSTREAM	Swains Lane	Highgate	S	VC	Circular 100mm	0.19 m
18	SEC	RWG24X	RWG24	MH4	Swains Lane	Highgate	S	PVC	Circular 100mm	2.11 m
19	SEC	MH3X	MH3	MH5 BRANCH B	Swains Lane	Highgate	S	CO	Circular 300mm	11.15 m
20	SEC	Branch AX	BRANCH A	MH5	Swains Lane	Highgate	S	PVC	Circular 150mm	1.44 m
21	SEC	MH5X	MH5	DOWNSTREAM	Swains Lane	Highgate	S	CO	Circular 300mm	18.83 m
22	SEC	Branch CX	BRANCH C	MH5	Swains Lane	Highgate	S	PVC	Circular 150mm	0.38 m
23	SEC	Branch DX	BRANCH D	MH5	Swains Lane	Highgate	S	CO	Circular 300mm	0.48 m
24	SEC	Branch EX	BRANCH E	MH5	Swains Lane	Highgate	S	PVC	Circular 150mm	3.16 m
25	SEC	MH6X	MH6	MH7	Swains Lane	Highgate	S	CO	Circular 300mm	22.99 m
26	SEC	UpstreamX	UPSTREAM	MH6	Swains Lane	Highgate	S	CO	Circular 300mm	13.72 m
27	SEC	Branch AX	BRANCH A	MH7	Swains Lane	Highgate	S	CO	Circular 300mm	8.94 m
28	SEC	Branch CX	BRANCH C	MH7	Swains Lane	Highgate	S	PVC	Circular 100mm	0.09 m
29	SEC	MH7X	MH7	DOWNSTREAM	Swains Lane	Highgate	S	CO	Circular 400mm	31.74 m
30	SEC	MH8X	MH8	DOWNSTREAM	Swains Lane	Highgate	S	CO	Circular 400mm	7.25 m



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No.	Type	PLR	Upstream Node	Downstream Node	Road	Town	Use	Mat.	Profile	Length
31	SEC	UpstreamX	UPSTREAM	MH8	Swains Lane	Highgate	S	CO	Circular 400mm	18.10 m
32	SEC	Branch AX	BRANCH A	MH9	Swains Lane	Highgate	S	PVC	Circular 100mm	0.67 m
33	SEC	MH9X	MH9	DOWNSTREAM	Swains Lane	Highgate	S	PVC	Circular 100mm	0.38 m
34	SEC	UpstreamX	UPSTREAM	MH9	Swains Lane	Highgate	S	PVC	Circular 100mm	3.55 m
35	SEC	RWG27X	RWG27	DOWNSTREAM	Swains Lane	Highgate	S	PVC	Circular 150mm	1.15 m
36	SEC	RWG28X	RWG28	DOWNSTREAM	Swains Lane	Highgate	S	PVC	Circular 100mm	1.72 m
37	SEC	RWG29X	RWG29	DOWNSTREAM	Swains Lane	Highgate	S	PVC	Circular 100mm	1.34 m
38	SEC	RWG30X	RWG30	DOWNSTREAM	Swains Lane	Highgate	S	PVC	Circular 100mm	1.34 m
39	SEC	RWG26X	RWG26	DOWNSTREAM	Swains Lane	Highgate	S	PVC	Circular 100mm	1.72 m
40	SEC	Branch AX	BRANCH A	MH1	Swains Lane	Highgate	C	VC	Circular 150mm	0.01 m
41	SEC	Branch AX	BRANCH A	MH10	Swains Lane	Highgate	C	VC	Circular 100mm	1.82 m
42	SEC	Branch BX	BRANCH B	MH10	Swains Lane	Highgate	S	VC	Circular 100mm	0.67 m
43	SEC	Branch CX	BRANCH C	MH10	Swains Lane	Highgate	S	VC	Circular 100mm	2.11 m
44	SEC	Branch DX	BRANCH D	MH10	Swains Lane	Highgate	C	PVC	Circular 100mm	0.28 m
45	SEC	MH10X	MH10	DOWNSTREAM	Swains Lane	Highgate	C	VC	Circular 100mm	5.76 m
46	SEC	Branch AX	BRANCH A	MH11	Swains Lane	Highgate	S	PVC	Circular 100mm	0.01 m
47	SEC	Branch BX	BRANCH B	MH11	Swains Lane	Highgate	S	PVC	Circular 100mm	18.75 m
48	SEC	MH11X	MH11	MH13	Swains Lane	Highgate	S	PVC	Circular 100mm	3.07 m
49	SEC	MH12X	MH12	MH11	Swains Lane	Highgate	S	PVC	Circular 100mm	26.75 m
50	SEC	UpstreamX	UPSTREAM	MH12	Swains Lane	Highgate	C	VC	Circular 100mm	2.78 m
51	SEC	Branch AX	BRANCH A	MH14	Swains Lane	Highgate	S	VC	Circular 100mm	1.34 m
52	SEC	Branch BX	BRANCH B	MH14	Swains Lane	Highgate	S	VC	Circular 100mm	2.11 m
53	SEC	MH14X	MH14	MH13	Swains Lane	Highgate	C	VC	Circular 100mm	0.76 m
54	SEC	RWG31X	RWG31	DOWNSTREAM	Swains Lane	Highgate	S	VC	Circular 100mm	0.01 m
55	SEC	RWG32X	RWG32	DOWNSTREAM	Swains Lane	Highgate	S	VC	Circular 100mm	0.09 m
56	SEC	UpstreamX	UPSTREAM	RWG31	Swains Lane	Highgate	S	PVC	Circular 100mm	1.53 m
57	SEC	UpstreamX	UPSTREAM	RWG32	Swains Lane	Highgate	S	VC	Circular 100mm	0.38 m
58	SEC	RWG35X	RWG35	DOWNSTREAM	Swains Lane	Highgate	S	PVC	Circular 100mm	7.20 m
59	SEC	RWG34X	RWG34	RWG35	Swains Lane	Highgate	S	PVC	Circular 100mm	6.33 m
60	SEC	RWG36X	RWG36	DOWNSTREAM	Swains Lane	Highgate	S	PVC	Circular 100mm	0.48 m
61	SEC	RWG37X	RWG37	DOWNSTREAM	Swains Lane	Highgate	S	PVC	Circular 100mm	2.01 m
62	SEC	MH17X	MH17	MH16	Swains Lane	Highgate	S	PVC	Circular 100mm	3.16 m



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63	SEC	Branch BX	BRANCH B	MH16	Swains Lane	Highgate	S	PVC	Circular 100mm	3.74 m
64	SEC	MH16X	MH16	DOWNSTREAM	Swains Lane	Highgate	S	PVC	Circular 100mm	0.57 m
65	SEC	Branch AX	BRANCH A	MH17	Swains Lane	Highgate	S	PVC	Circular 100mm	5.28 m
66	SEC	Branch AX	BRANCH A	MH18	Swains Lane	Highgate	C	PVC	Circular 100mm	1.44 m
67	SEC	Branch BX	BRANCH B	MH18	Swains Lane	Highgate	S	PVC	Circular 100mm	0.09 m
68	SEC	MH18X	MH18	MH19	Swains Lane	Highgate	C	PVC	Circular 100mm	3.36 m
69	SEC	UpstreamX	UPSTREAM	MH18	Swains Lane	Highgate	C	PVC	Circular 100mm	0.28 m
70	SEC	Branch AX	BRANCH A	MH19	Swains Lane	Highgate	C	PVC	Circular 100mm	1.24 m
71	SEC	MH19X	MH19	DOWNSTREAM	Swains Lane	Highgate	C	VC	Circular 100mm	3.45 m
72	SEC	Branch AX	BRANCH A	RWG53	Swains Lane	Highgate	S	VC	Circular 100mm	0.01 m
73	SEC	RWG53X	RWG53	DOWNSTREAM	Swains Lane	Highgate	S	VC	Circular 100mm	0.48 m
74	SEC	RWG54X	RWG54	DOWNSTREAM	Swains Lane	Highgate	S	VC	Circular 100mm	0.28 m
75	SEC	UpstreamX	UPSTREAM	RWG54	Swains Lane	Highgate	S	VC	Circular 100mm	1.63 m
76	SEC	RWG41X	RWG41	DOWNSTREAM	Swains Lane	Highgate	S	VC	Circular 80mm	0.09 m
77	SEC	UpstreamX	UPSTREAM	RWG41	Swains Lane	Highgate	S	VC	Circular 100mm	0.28 m
78	SEC	RWG40X	RWG40	DOWNSTREAM	Swains Lane	Highgate	S	VC	Circular 100mm	0.01 m
79	SEC	RWG42X	RWG42	DOWNSTREAM	Swains Lane	Highgate	S	VC	Circular 100mm	4.22 m
80	SEC	RWG49X	RWG49	DOWNSTREAM	Swains Lane	Highgate	S	VC	Circular 100mm	1.63 m
81	SEC	RWG58X	RWG58	DOWNSTREAM	Swains Lane	Highgate	S	VC	Circular 100mm	2.01 m
82	SEC	Branch AX	BRANCH A	RWG56	Swains Lane	Highgate	S	VC	Circular 100mm	0.67 m
83	SEC	RWG56X	RWG56	DOWNSTREAM	Swains Lane	Highgate	S	VC	Circular 100mm	6.62 m
84	SEC	RWG57X	RWG57	DOWNSTREAM	Swains Lane	Highgate	S	VC	Circular 100mm	1.05 m
85	SEC	RWG59X	RWG59	DOWNSTREAM	Swains Lane	Highgate	S	VC	Circular 100mm	1.82 m
86	SEC	RWG84X	RWG84	DOWNSTREAM	Swains Lane	Highgate	S	VC	Circular 80mm	0.19 m
87	SEC	Branch BX	BRANCH B	RWG56	Swains Lane	Highgate	S	VC	Circular 100mm	0.19 m
88	SEC	UpstreamX	UPSTREAM	RWG58	Swains Lane	Highgate	S	VC	Circular 100mm	0.09 m
89	SEC	RWG59X	RWG59	DOWNSTREAM	Swains Lane	Highgate	S	VC	Circular 80mm	0.09 m
90	SEC	UpstreamX	UPSTREAM	RWG59	Swains Lane	Highgate	S	VC	Circular 100mm	2.01 m
91	SEC	RWG73X	RWG73	DOWNSTREAM	Swains Lane	Highgate	S	VC	Circular 80mm	0.09 m
92	SEC	RWG75X	RWG75	DOWNSTREAM	Swains Lane	Highgate	S	VC	Circular 80mm	0.28 m
93	SEC	RWG83X	RWG83	DOWNSTREAM	Swains Lane	Highgate	S	VC	Circular 80mm	0.19 m
94	SEC	MH15X	MH15	DOWNSTREAM	Swains Lane	Highgate	S	VC	Circular 100mm	1.82 m



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No.	Type	PLR	Upstream Node	Downstream Node	Road	Town	Use	Mat.	Profile	Length
95	SEC	UpstreamX	UPSTREAM	MH15	Swains Lane	Highgate	S	VC	Circular 100mm	0.19 m
96	SEC	Branch AX	BRANCH A	MH20	Swains Lane	Highgate	S	VC	Circular 100mm	5.18 m
97	SEC	MH20X	MH20	DOWNSTREAM	Swains Lane	Highgate	S	VC	Circular 225mm	0.28 m
98	SEC	UpstreamX	UPSTREAM	MH20	Swains Lane	Highgate	S	VC	Circular 225mm	11.02 m
99	SEC	Branch AX	BRANCH A	MH21	Swains Lane	Highgate	S	VC	Circular 100mm	1.23 m
100	SEC	MH21X	MH21	DOWNSTREAM	Swains Lane	Highgate	S	VC	Circular 150mm	5.56 m
101	SEC	UpstreamX	UPSTREAM	MH21	Swains Lane	Highgate	S	VC	Circular 100mm	8.99 m
102	SEC	Branch AX	BRANCH A	MH22	Swains Lane	Highgate	S	VC	Circular 100mm	0.19 m
103	SEC	MH22X	MH22	DOWNSTREAM	Swains Lane	Highgate	S	VC	Circular 225mm	19.37 m
104	SEC	UpstreamX	UPSTREAM	MH22	Swains Lane	Highgate	S	VC	Circular 225mm	4.99 m
105	SEC	Branch AX	BRANCH A	MH23	Swains Lane	Highgate	S	VC	Circular 100mm	1.05 m
106	SEC	Branch BX	BRANCH B	MH23	Swains Lane	Highgate	S	VC	Circular 100mm	0.76 m
107	SEC	MH23X	MH23	DOWNSTREAM	Swains Lane	Highgate	S	VC	Circular 100mm	2.11 m
108	SEC	Branch AX	BRANCH A	MH24	Swains Lane	Highgate	S	BR	Circular 150mm	2.97 m
109	SEC	Branch BX	BRANCH B	MH24	Swains Lane	Highgate	S	BR	Circular 150mm	0.01 m
110	SEC	Branch CX	BRANCH C	MH24	Swains Lane	Highgate	S	BR	Circular 150mm	1.63 m
111	SEC	RWG90X	RWG90	DOWNSTREAM	Swains Lane	Highgate	S	PVC	Circular 100mm	14.66 m
112	SEC	RWG91X	RWG91	DOWNSTREAM	Swains Lane	Highgate	S	VC	Circular 100mm	0.09 m
113	SEC	RWG92X	RWG92	DOWNSTREAM	Swains Lane	Highgate	S	VC	Circular 100mm	0.76 m
114	SEC	RWG89X	RWG89	DOWNSTREAM	Swains Lane	Highgate	S	VC	Circular 100mm	0.19 m
115	SEC	Branch AX	BRANCH A	MH21	Swains Lane	Highgate	S	PVC	Circular 100mm	0.75 m

Total: 412.10 m

Pipe Levels

No.	PLR	Upstream Node	Upstream C.L.	Upstream I.L.	Upstream I.D.	Downstream Node	Downstream C.L.	Downstream I.L.	Downstream I.D.
1	Branch AX	BRANCH A			0.000 m	MH2			0.520 m
2	MH2X	MH2			0.520 m	DOWNSTREAM			0.000 m
3	RWG8X	RWG8			0.000 m	DOWNSTREAM			0.000 m
4	RWG9X	RWG9			0.000 m	DOWNSTREAM			0.000 m



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No.	PLR	Upstream Node	Upstream C.L.	Upstream I.L.	Upstream I.D.	Downstream Node	Downstream C.L.	Downstream I.L.	Downstream I.D.
5	RWG10X	RWG10			0.000 m	DOWNSTREAM			0.000 m
6	RWG11X	RWG11			0.000 m	DOWNSTREAM			0.000 m
7	RWG1X	RWG1			0.450 m	MH1			0.000 m
8	RWG3X	RWG3			0.280 m	MH2			0.000 m
9	RWG6X	RWG6			0.000 m	DOWNSTREAM			0.000 m
10	Branch AX	BRANCH A			0.000 m	MH3			1.000 m
11	MH3X	MH3			1.000 m	DOWNSTREAM			0.000 m
12	UpstreamX	UPSTREAM			0.000 m	MH3			1.000 m
13	RWG12X	RWG12			0.000 m	DOWNSTREAM			0.000 m
14	RWG13X	RWG13			0.900 m	DOWNSTREAM			0.000 m
15	RWG14X	RWG14			0.900 m	DOWNSTREAM			0.000 m
16	RWG17X	RWG17			0.800 m	DOWNSTREAM			0.000 m
17	RWG22X	RWG22			0.300 m	DOWNSTREAM			0.000 m
18	RWG24X	RWG24			0.000 m	MH4			0.000 m
19	MH3X	MH3			0.000 m	MH5 BRANCH B			0.000 m
20	Branch AX	BRANCH A			0.000 m	MH5			1.070 m
21	MH5X	MH5			1.070 m	DOWNSTREAM			0.000 m
22	Branch CX	BRANCH C			0.000 m	MH5			1.070 m
23	Branch DX	BRANCH D			0.000 m	MH5			1.070 m
24	Branch EX	BRANCH E			0.000 m	MH5			1.070 m
25	MH6X	MH6			1.600 m	MH7			0.000 m
26	UpstreamX	UPSTREAM			0.000 m	MH6			1.600 m
27	Branch AX	BRANCH A			0.000 m	MH7			2.190 m
28	Branch CX	BRANCH C			0.000 m	MH7			0.000 m
29	MH7X	MH7			2.190 m	DOWNSTREAM			0.000 m
30	MH8X	MH8			1.500 m	DOWNSTREAM			0.000 m
31	UpstreamX	UPSTREAM			0.000 m	MH8			1.500 m
32	Branch AX	BRANCH A			0.000 m	MH9			0.600 m
33	MH9X	MH9			0.600 m	DOWNSTREAM			0.000 m
34	UpstreamX	UPSTREAM			0.000 m	MH9			0.600 m
35	RWG27X	RWG27			0.000 m	DOWNSTREAM			0.000 m
36	RWG28X	RWG28			0.000 m	DOWNSTREAM			0.000 m



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No.	PLR	Upstream Node	Upstream C.L.	Upstream I.L.	Upstream I.D.	Downstream Node	Downstream C.L.	Downstream I.L.	Downstream I.D.
37	RWG29X	RWG29			0.000 m	DOWNSTREAM			0.000 m
38	RWG30X	RWG30			0.000 m	DOWNSTREAM			0.000 m
39	RWG26X	RWG26			0.000 m	DOWNSTREAM			0.000 m
40	Branch AX	BRANCH A			0.000 m	MH1			5.150 m
41	Branch AX	BRANCH A			0.000 m	MH10			0.800 m
42	Branch BX	BRANCH B			0.000 m	MH10			0.000 m
43	Branch CX	BRANCH C			0.000 m	MH10			0.000 m
44	Branch DX	BRANCH D			0.000 m	MH10			0.800 m
45	MH10X	MH10			0.800 m	DOWNSTREAM			0.000 m
46	Branch AX	BRANCH A			0.000 m	MH11			0.570 m
47	Branch BX	BRANCH B			0.000 m	MH11			0.570 m
48	MH11X	MH11			0.570 m	MH13			0.000 m
49	MH12X	MH12			0.000 m	MH11			0.570 m
50	UpstreamX	UPSTREAM			0.000 m	MH12			0.400 m
51	Branch AX	BRANCH A			0.000 m	MH14			0.680 m
52	Branch BX	BRANCH B			0.000 m	MH14			0.680 m
53	MH14X	MH14			0.680 m	MH13			0.000 m
54	RWG31X	RWG31			0.000 m	DOWNSTREAM			0.000 m
55	RWG32X	RWG32			0.000 m	DOWNSTREAM			0.000 m
56	UpstreamX	UPSTREAM			0.000 m	RWG31			0.000 m
57	UpstreamX	UPSTREAM			0.000 m	RWG32			0.000 m
58	RWG35X	RWG35			0.000 m	DOWNSTREAM			0.000 m
59	RWG34X	RWG34			0.000 m	RWG35			0.000 m
60	RWG36X	RWG36			0.000 m	DOWNSTREAM			0.000 m
61	RWG37X	RWG37			0.000 m	DOWNSTREAM			0.000 m
62	MH17X	MH17			0.000 m	MH16			1.060 m
63	Branch BX	BRANCH B			0.000 m	MH16			1.060 m
64	MH16X	MH16			1.060 m	DOWNSTREAM			0.000 m
65	Branch AX	BRANCH A			0.000 m	MH17			0.400 m
66	Branch AX	BRANCH A			0.000 m	MH18			0.430 m
67	Branch BX	BRANCH B			0.000 m	MH18			0.430 m
68	MH18X	MH18			0.430 m	MH19			0.000 m



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No.	PLR	Upstream Node	Upstream C.L.	Upstream I.L.	Upstream I.D.	Downstream Node	Downstream C.L.	Downstream I.L.	Downstream I.D.
69	UpstreamX	UPSTREAM			0.000 m	MH18			0.430 m
70	Branch AX	BRANCH A			0.000 m	MH19			0.800 m
71	MH19X	MH19			0.800 m	DOWNSTREAM			0.000 m
72	Branch AX	BRANCH A			0.000 m	RWG53			0.000 m
73	RWG53X	RWG53			0.000 m	DOWNSTREAM			0.000 m
74	RWG54X	RWG54			0.000 m	DOWNSTREAM			0.000 m
75	UpstreamX	UPSTREAM			0.000 m	RWG54			0.000 m
76	RWG41X	RWG41			0.000 m	DOWNSTREAM			0.000 m
77	UpstreamX	UPSTREAM			0.000 m	RWG41			0.000 m
78	RWG40X	RWG40			0.000 m	DOWNSTREAM			0.000 m
79	RWG42X	RWG42			0.000 m	DOWNSTREAM			0.000 m
80	RWG49X	RWG49			0.000 m	DOWNSTREAM			0.000 m
81	RWG58X	RWG58			0.000 m	DOWNSTREAM			0.000 m
82	Branch AX	BRANCH A			0.000 m	RWG56			0.000 m
83	RWG56X	RWG56			0.000 m	DOWNSTREAM			0.000 m
84	RWG57X	RWG57			0.000 m	DOWNSTREAM			0.000 m
85	RWG59X	RWG59			0.000 m	DOWNSTREAM			0.000 m
86	RWG84X	RWG84			0.000 m	DOWNSTREAM			0.000 m
87	Branch BX	BRANCH B			0.000 m	RWG56			0.000 m
88	UpstreamX	UPSTREAM			0.000 m	RWG58			0.000 m
89	RWG59X	RWG59			0.000 m	DOWNSTREAM			0.000 m
90	UpstreamX	UPSTREAM			0.000 m	RWG59			0.000 m
91	RWG73X	RWG73			0.000 m	DOWNSTREAM			0.000 m
92	RWG75X	RWG75			0.000 m	DOWNSTREAM			0.000 m
93	RWG83X	RWG83			0.000 m	DOWNSTREAM			0.000 m
94	MH15X	MH15			4.100 m	DOWNSTREAM			0.000 m
95	UpstreamX	UPSTREAM			0.000 m	MH15			4.100 m
96	Branch AX	BRANCH A			0.000 m	MH20			3.300 m
97	MH20X	MH20			3.300 m	DOWNSTREAM			0.000 m
98	UpstreamX	UPSTREAM			0.000 m	MH20			3.300 m
99	Branch AX	BRANCH A			0.000 m	MH21			0.500 m
100	MH21X	MH21			0.500 m	DOWNSTREAM			0.000 m



Project Summary

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No.	PLR	Upstream Node	Upstream C.L.	Upstream I.L.	Upstream I.D.	Downstream Node	Downstream C.L.	Downstream I.L.	Downstream I.D.
101	UpstreamX	UPSTREAM			0.000 m	MH21			0.500 m
102	Branch AX	BRANCH A			0.000 m	MH22			4.340 m
103	MH22X	MH22			4.320 m	DOWNSTREAM			0.000 m
104	UpstreamX	UPSTREAM			0.000 m	MH22			4.340 m
105	Branch AX	BRANCH A			0.000 m	MH23			0.670 m
106	Branch BX	BRANCH B			0.000 m	MH23			0.670 m
107	MH23X	MH23			0.670 m	DOWNSTREAM			0.000 m
108	Branch AX	BRANCH A			0.000 m	MH24			2.950 m
109	Branch BX	BRANCH B			0.000 m	MH24			2.950 m
110	Branch CX	BRANCH C			0.000 m	MH24			2.950 m
111	RWG90X	RWG90			0.000 m	DOWNSTREAM			0.000 m
112	RWG91X	RWG91			0.000 m	DOWNSTREAM			0.000 m
113	RWG92X	RWG92			0.000 m	DOWNSTREAM			0.000 m
114	RWG89X	RWG89			0.000 m	DOWNSTREAM			0.000 m
115	Branch AX	BRANCH A			0.000 m	MH21			0.500 m

Pipe Summary by Profile

Profile	Total Length	No. Pipes
Circular 100mm	8.54 m	
Circular 100mm	4.99 m	
Circular 100mm	0.19 m	
Circular 100mm	0.57 m	
Circular 100mm	0.86 m	
Circular 100mm	10.58 m	
Circular 100mm	0.19 m	
Circular 100mm	0.67 m	
Circular 100mm	0.01 m	
Circular 100mm	0.19 m	
Circular 100mm	2.11 m	
Circular 100mm	0.09 m	
Circular 100mm	0.67 m	
Circular 100mm	0.38 m	
Circular 100mm	3.55 m	
Circular 100mm	1.72 m	
Circular 100mm	1.34 m	
Circular 100mm	1.34 m	



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Profile	Total Length	No. Pipes
Circular 100mm	1.72 m	
Circular 100mm	1.82 m	
Circular 100mm	0.67 m	
Circular 100mm	2.11 m	
Circular 100mm	0.28 m	
Circular 100mm	5.76 m	
Circular 100mm	0.01 m	
Circular 100mm	18.75 m	
Circular 100mm	3.07 m	
Circular 100mm	26.75 m	
Circular 100mm	2.78 m	
Circular 100mm	1.34 m	
Circular 100mm	2.11 m	
Circular 100mm	0.76 m	
Circular 100mm	0.01 m	
Circular 100mm	0.09 m	
Circular 100mm	1.53 m	
Circular 100mm	0.38 m	
Circular 100mm	7.20 m	
Circular 100mm	6.33 m	
Circular 100mm	0.48 m	
Circular 100mm	2.01 m	
Circular 100mm	3.16 m	
Circular 100mm	3.74 m	
Circular 100mm	0.57 m	
Circular 100mm	5.28 m	
Circular 100mm	1.44 m	
Circular 100mm	0.09 m	
Circular 100mm	3.36 m	
Circular 100mm	0.28 m	
Circular 100mm	1.24 m	
Circular 100mm	3.45 m	
Circular 100mm	0.01 m	
Circular 100mm	0.48 m	
Circular 100mm	0.28 m	
Circular 100mm	1.63 m	
Circular 100mm	0.28 m	
Circular 100mm	0.01 m	
Circular 100mm	4.22 m	
Circular 100mm	1.63 m	
Circular 100mm	2.01 m	
Circular 100mm	0.67 m	
Circular 100mm	6.62 m	
Circular 100mm	1.05 m	
Circular 100mm	1.82 m	



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Profile	Total Length	No. Pipes
Circular 100mm	0.19 m	
Circular 100mm	0.09 m	
Circular 100mm	2.01 m	
Circular 100mm	1.82 m	
Circular 100mm	0.19 m	
Circular 100mm	5.18 m	
Circular 100mm	1.23 m	
Circular 100mm	8.99 m	
Circular 100mm	0.19 m	
Circular 100mm	1.05 m	
Circular 100mm	0.76 m	
Circular 100mm	2.11 m	
Circular 100mm	14.66 m	
Circular 100mm	0.09 m	
Circular 100mm	0.76 m	
Circular 100mm	0.19 m	
Circular 100mm	0.75 m	
Circular 100mm =	207.53 m	80
Circular 150mm	1.92 m	
Circular 150mm	2.30 m	
Circular 150mm	0.96 m	
Circular 150mm	3.07 m	
Circular 150mm	1.44 m	
Circular 150mm	0.38 m	
Circular 150mm	3.16 m	
Circular 150mm	1.15 m	
Circular 150mm	0.01 m	
Circular 150mm	5.56 m	
Circular 150mm	2.97 m	
Circular 150mm	0.01 m	
Circular 150mm	1.63 m	
Circular 150mm =	24.56 m	13
Circular 225mm	0.28 m	
Circular 225mm	11.02 m	
Circular 225mm	19.37 m	
Circular 225mm	4.99 m	
Circular 225mm =	35.66 m	4
Circular 300mm	8.16 m	
Circular 300mm	11.15 m	
Circular 300mm	18.83 m	
Circular 300mm	0.48 m	
Circular 300mm	22.99 m	
Circular 300mm	13.72 m	



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Profile		Total Length	No. Pipes
Circular 300mm		8.94 m	
Circular 300mm	=	84.27 m	7
Circular 350mm		0.65 m	
Circular 350mm		1.41 m	
Circular 350mm	=	2.06 m	2
Circular 400mm		31.74 m	
Circular 400mm		7.25 m	
Circular 400mm		18.10 m	
Circular 400mm	=	57.09 m	3
Circular 80mm		0.09 m	
Circular 80mm		0.19 m	
Circular 80mm		0.09 m	
Circular 80mm		0.09 m	
Circular 80mm		0.28 m	
Circular 80mm		0.19 m	
Circular 80mm	=	0.93 m	6
Total	=	412.10 m	115

Inspection Summary

Pipe No.	Insp. No.	Upstream Node	Downstream Node	Dir.	Operator	Insp. Date	Insp. Time	Str	Ser	Final Observation	Length
1	1	BRANCH A	MH2	US	Tom Holman	06/03/2024	14:23	1	5	GYF, RWG3	8.54 m
2	1	MH2	DOWNSTREAM	DS	Tom Holman	06/03/2024	14:27	1	5	GYF	4.99 m
3	1	RWG8	DOWNSTREAM	DS	Tom Holman	06/03/2024	14:29	1	5	MHF, Blind Junction	1.92 m
4	1	RWG9	DOWNSTREAM	DS	Tom Holman	06/03/2024	14:31	1	5	SA, Camera unable to pass debris	0.19 m
5	1	RWG10	DOWNSTREAM	DS	Tom Holman	06/03/2024	14:33	1	5	SA, Loss of vision due to debris	0.57 m
6	1	RWG11	DOWNSTREAM	DS	Tom Holman	06/03/2024	14:34	1	4	SA, Loss of vision due to debris	2.30 m
7	1	RWG1	MH1	DS	Tom Holman	06/03/2024	14:36	1	5	MHF	0.86 m
8	1	RWG3	MH2	DS	Tom Holman	06/03/2024	14:40	1	4	MHF	10.58 m
9	1	RWG6	DOWNSTREAM	DS	Tom Holman	06/03/2024	14:41	4	5	SA, Camera unable to push further	0.96 m
10	1	BRANCH A	MH3	US	Tom Holman	06/03/2024	14:43	1	2	SA, Camera unable to pass debris	8.16 m
11	1	MH3	DOWNSTREAM	DS	Tom Holman	06/03/2024	14:45	1	1	SA, Camera unable to push further	0.65 m
12	1	UPSTREAM	MH3	US	Tom Holman	06/03/2024	14:47	1	5	SA, Camera unable to push further	1.41 m



Project Summary

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Pipe No.	Insp. No.	Upstream Node	Downstream Node	Dir.	Operator	Insp. Date	Insp. Time	Str	Ser	Final Observation	Length
13	1	RWG12	DOWNSTREAM	DS	Tom Holman	06/03/2024	14:50	1	4	SA, Camera unable to pass debris	3.07 m
14	1	RWG13	DOWNSTREAM	DS	Tom Holman	06/03/2024	14:51	1	5	SA, Camera unable to pass debris	0.19 m
15	1	RWG14	DOWNSTREAM	DS	Tom Holman	06/03/2024	14:52	1	5	SA, Loss of vision due to debris	0.67 m
16	1	RWG17	DOWNSTREAM	DS	Tom Holman	06/03/2024	14:55	1	5	SA, Camera unable to pass debris	0.01 m
17	1	RWG22	DOWNSTREAM	DS	Tom Holman	06/03/2024	14:57	1	5	SA, Camera unable to push further	0.19 m
18	1	RWG24	MH4	DS	Tom Holman	06/03/2024	14:58	1	1	MHF	2.11 m
19	1	MH3	MH5 BRANCH B	DS	Tom Holman	06/03/2024	15:00	1	4	MHF	11.15 m
20	1	BRANCH A	MH5	US	Tom Holman	06/03/2024	15:02	1	5	GYF	1.44 m
21	1	MH5	DOWNSTREAM	DS	Tom Holman	06/03/2024	15:03	1	4	SA, Camera unable to push further	18.83 m
22	1	BRANCH C	MH5	US	Tom Holman	06/03/2024	15:04	1	5	SA, Further investigation required	0.38 m
23	1	BRANCH D	MH5	US	Tom Holman	06/03/2024	15:05	1	5	SA, Camera unable to pass debris	0.48 m
24	1	BRANCH E	MH5	US	Tom Holman	06/03/2024	15:07	1	4	SA, Camera unable to pass debris	3.16 m
25	1	MH6	MH7	DS	Tom Holman	06/03/2024	15:08	1	5	MHF	22.99 m
26	1	UPSTREAM	MH6	US	Tom Holman	06/03/2024	15:10	1	3	SA, Camera unable to debris	13.72 m
27	1	BRANCH A	MH7	US	Tom Holman	07/03/2024	9:23	1	3	SA, Loss of vision due to debris	8.94 m
28	1	BRANCH C	MH7	US	Tom Holman	07/03/2024	9:25	1	5	SA, Disused	0.09 m
29	1	MH7	DOWNSTREAM	DS	Tom Holman	07/03/2024	9:51	1	5	SA, Camera unable to push further	31.74 m
30	1	MH8	DOWNSTREAM	DS	Tom Holman	07/03/2024	9:52	1	5	MHF, Unknown Chamber	7.25 m
31	1	UPSTREAM	MH8	US	Tom Holman	07/03/2024	9:54	1	4	SA, Camera unable to push further	18.10 m
32	1	BRANCH A	MH9	US	Tom Holman	07/03/2024	9:56	1	4	GYF	0.67 m
33	1	MH9	DOWNSTREAM	DS	Tom Holman	07/03/2024	9:57	1	5	SA, Camera unable to pass JDL	0.38 m
34	1	UPSTREAM	MH9	US	Tom Holman	07/03/2024	10:00	1	1	GYF	3.55 m
35	1	RWG27	DOWNSTREAM	DS	Tom Holman	07/03/2024	10:01	1	1	MHF, Blind connection	1.15 m
36	1	RWG28	DOWNSTREAM	DS	Tom Holman	07/03/2024	10:24	1	4	MHF, Blind junction	1.72 m
37	1	RWG29	DOWNSTREAM	DS	Tom Holman	07/03/2024	10:26	1	1	MHF, Blind connection	1.34 m
38	1	RWG30	DOWNSTREAM	DS	Tom Holman	07/03/2024	10:28	1	2	MHF, Blind junction	1.34 m
39	1	RWG26	DOWNSTREAM	DS	Tom Holman	07/03/2024	10:29	1	4	SA, Camera unable to pass OJL/JDL	1.72 m
40	1	BRANCH A	MH1	US	Tom Holman	07/03/2024	10:30	1	1	SA, Redundant	0.01 m
41	1	BRANCH A	MH10	US	Tom Holman	07/03/2024	10:31	4	5	SA, Camera unable to pass debris	1.82 m
42	1	BRANCH B	MH10	US	Tom Holman	07/03/2024	10:33	4	4	MHF, Capped	0.67 m
43	1	BRANCH C	MH10	US	Tom Holman	07/03/2024	10:34	1	4	MHF, Rest bend	2.11 m



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Pipe No.	Insp. No.	Upstream Node	Downstream Node	Dir.	Operator	Insp. Date	Insp. Time	Str	Ser	Final Observation	Length
44	1	BRANCH D	MH10	US	Tom Holman	07/03/2024	10:35	1	5	MHF, Vent pipe	0.28 m
45	1	MH10	DOWNSTREAM	DS	Tom Holman	07/03/2024	10:36	1	3	MHF	5.76 m
46	1	BRANCH A	MH11	US	Tom Holman	07/03/2024	10:37	1	1	MHF	0.01 m
47	1	BRANCH B	MH11	US	Tom Holman	07/03/2024	10:48	1	4	MHF, Aco	18.75 m
48	1	MH11	MH13	DS	Tom Holman	07/03/2024	10:49	1	4	MHF	3.07 m
49	1	MH12	MH11	US	Tom Holman	07/03/2024	10:50	1	2	MHF	26.75 m
50	1	UPSTREAM	MH12	US	Tom Holman	07/03/2024	10:51	1	1	MHF, Stack	2.78 m
51	1	BRANCH A	MH14	US	Tom Holman	07/03/2024	10:52	5	5	MHF, Redundant	1.34 m
52	1	BRANCH B	MH14	US	Tom Holman	07/03/2024	10:53	4	3	MHF, Redundant	2.11 m
53	1	MH14	MH13	DS	Tom Holman	07/03/2024	10:53	1	5	MHF	0.76 m
54	1	RWG31	DOWNSTREAM	DS	Tom Holman	07/03/2024	10:54	1	1	MHF, Trap	0.01 m
55	1	RWG32	DOWNSTREAM	DS	Tom Holman	07/03/2024	10:55	1	1	MHF, Trap	0.09 m
56	1	UPSTREAM	RWG31	US	Tom Holman	07/03/2024	10:56	1	1	MHF, Aco	1.53 m
57	1	UPSTREAM	RWG32	US	Tom Holman	07/03/2024	10:57	2	5	SA, Camera unable to pass debris	0.38 m
58	1	RWG35	DOWNSTREAM	DS	Tom Holman	07/03/2024	10:58	1	4	MHF, Aco	7.20 m
59	1	RWG34	RWG35	US	Tom Holman	07/03/2024	10:58	1	1	GYF	6.33 m
60	1	RWG36	DOWNSTREAM	DS	Tom Holman	07/03/2024	10:59	1	1	MHF, Blind junction	0.48 m
61	1	RWG37	DOWNSTREAM	DS	Tom Holman	07/03/2024	11:00	1	1	MHF, Blind junction	2.01 m
62	1	MH17	MH16	US	Tom Holman	07/03/2024	11:28	1	5	OBZ, Hose in pipe	0.00 m
63	1	BRANCH B	MH16	US	Tom Holman	07/03/2024	11:35	1	4	GYF	3.74 m
64	1	MH16	DOWNSTREAM	DS	Tom Holman	07/03/2024	11:38	1	1	SA, Loss of vision	0.57 m
65	1	BRANCH A	MH17	US	Tom Holman	07/03/2024	11:40	1	3	SA, Camera unable to pass obstruction/Hose in p	5.28 m
66	1	BRANCH A	MH18	US	Tom Holman	07/03/2024	11:41	1	1	MHF, W C	1.44 m
67	1	BRANCH B	MH18	US	Tom Holman	07/03/2024	11:43	1	5	SA, Camera unable to pass obstruction	0.09 m
68	1	MH18	MH19	DS	Tom Holman	07/03/2024	11:44	1	1	MHF	3.36 m
69	1	UPSTREAM	MH18	US	Tom Holman	07/03/2024	11:46	1	1	REF	0.28 m
70	1	BRANCH A	MH19	US	Tom Holman	07/03/2024	11:48	1	1	MHF, Reducer	1.24 m
71	1	MH19	DOWNSTREAM	DS	Tom Holman	07/03/2024	11:50	1	3	MHF, MH in Road	3.45 m
72	1	BRANCH A	RWG53	US	Tom Holman	07/03/2024	11:55	1	5	SA, Camera unable to pass mass roots/Possibly i	0.01 m
73	1	RWG53	DOWNSTREAM	DS	Tom Holman	07/03/2024	11:57	1	1	SA, Camera under water/Surcharged	0.48 m
74	1	RWG54	DOWNSTREAM	DS	Tom Holman	07/03/2024	11:59	1	5	SA, Camera unable to pass mass roots	0.28 m
75	1	UPSTREAM	RWG54	US	Tom Holman	07/03/2024	12:40	1	4	SA, Camera under water	1.63 m



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Pipe No.	Insp. No.	Upstream Node	Downstream Node	Dir.	Operator	Insp. Date	Insp. Time	Str	Ser	Final Observation	Length
76	1	RWG41	DOWNSTREAM	DS	Tom Holman	07/03/2024	12:42	1	5	SA, Camera unable to pass encrustation	0.09 m
77	1	UPSTREAM	RWG41	US	Tom Holman	07/03/2024	12:44	1	5	SA, Camera unable to pass debris	0.28 m
78	1	RWG40	DOWNSTREAM	DS	Tom Holman	07/03/2024	12:46	1	5	SA, Camera unable to pass debris/Possibly redur	0.01 m
79	1	RWG42	DOWNSTREAM	DS	Tom Holman	07/03/2024	12:48	1	4	SA, Camera unable to pass debris	4.22 m
80	1	RWG49	DOWNSTREAM	DS	Tom Holman	07/03/2024	12:52	1	5	SA, Camera unable to pass roots	1.63 m
81	1	RWG58	DOWNSTREAM	DS	Tom Holman	07/03/2024	12:54	1	5	SA, Camera unable to pass JDL	2.01 m
82	1	BRANCH A	RWG56	US	Tom Holman	07/03/2024	12:56	1	5	SA, Camera under water	0.67 m
83	1	RWG56	DOWNSTREAM	DS	Tom Holman	07/03/2024	12:59	1	5	SA, Loss of vision	6.62 m
84	1	RWG57	DOWNSTREAM	DS	Tom Holman	07/03/2024	13:01	1	5	SA, Camera unable to pass debris	1.05 m
85	1	RWG59	DOWNSTREAM	DS	Tom Holman	07/03/2024	13:02	1	5	SA, Camera under water	1.82 m
86	1	RWG84	DOWNSTREAM	DS	Tom Holman	07/03/2024	13:03	1	5	SA, Camera unable to pass debris	0.19 m
87	1	BRANCH B	RWG56	US	Tom Holman	07/03/2024	13:04	1	5	SA, Camera unable to pass debris	0.19 m
88	1	UPSTREAM	RWG58	US	Tom Holman	07/03/2024	13:06	1	5	SA, Camera unable to pass debris	0.09 m
89	1	RWG59	DOWNSTREAM	DS	Tom Holman	07/03/2024	13:07	1	5	SA, Camera unable to pass debris/Possibly redur	0.09 m
90	1	UPSTREAM	RWG59	US	Tom Holman	07/03/2024	13:08	1	5	SA, Camera unable to pass OJL/Obstruction	2.01 m
91	1	RWG73	DOWNSTREAM	DS	Tom Holman	07/03/2024	13:12	1	5	SA, Camera unable to pass JDL/Debris	0.09 m
92	1	RWG75	DOWNSTREAM	DS	Tom Holman	07/03/2024	13:13	4	1	MHF, Buried MH	0.28 m
93	1	RWG83	DOWNSTREAM	DS	Tom Holman	07/03/2024	13:15	1	5	SA, Camera uable to pass debris	0.19 m
94	1	MH15	DOWNSTREAM	DS	Tom Holman	07/03/2024	13:19	1	4	SA, Loss of vision due to debris	1.82 m
95	1	UPSTREAM	MH15	US	Tom Holman	07/03/2024	13:20	1	5	SA, Loss of vision due to debris	0.19 m
96	1	BRANCH A	MH20	US	Tom Holman	07/03/2024	13:22	5	5	SA, Camera unable to to pass JDL	5.18 m
97	1	MH20	DOWNSTREAM	DS	Tom Holman	07/03/2024	13:28	1	1	MHF, Buried MH	0.28 m
98	1	UPSTREAM	MH20	US	Tom Holman	07/03/2024	13:29	4	4	SA, Loss of vision	11.02 m
99	1	BRANCH A	MH21	US	Tom Holman	07/03/2024	13:30	1	5	SA, Loss of vision due to debris	1.23 m
100	1	MH21	DOWNSTREAM	DS	Tom Holman	07/03/2024	13:34	1	4	SA, Loss of vision due to debris	5.56 m
101	1	UPSTREAM	MH21	US	Tom Holman	07/03/2024	13:35	1	5	SA, Loss of vision due to debris	8.99 m
102	1	BRANCH A	MH22	US	Tom Holman	07/03/2024	13:40	1	1	SA, Loss of vision	0.19 m
103	1	MH22	DOWNSTREAM	DS	Tom Holman	07/03/2024	13:42	4	4	SA, Camera unable to push further due to pipe sz	19.37 m
104	1	UPSTREAM	MH22	US	Tom Holman	07/03/2024	13:42	3	3	SA, Camera unable to push further due to size of	4.99 m
105	1	BRANCH A	MH23	US	Tom Holman	07/03/2024	13:44	1	4	GYF, Gully 87	1.05 m
106	1	BRANCH B	MH23	US	Tom Holman	07/03/2024	13:45	1	1	GYF, Gully 86	0.76 m



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Pipe No.	Insp. No.	Upstream Node	Downstream Node	Dir.	Operator	Insp. Date	Insp. Time	Str	Ser	Final Observation	Length
107	1	MH23	DOWNSTREAM	DS	Tom Holman	07/03/2024	13:46	1	5	MHF, Buried MH	2.11 m
108	1	BRANCH A	MH24	US	Tom Holman	07/03/2024	13:46	4	3	MHF, Buried MH	2.97 m
109	1	BRANCH B	MH24	US	Tom Holman	07/03/2024	13:47	1	1	GYF, Gully 88	0.01 m
110	1	BRANCH C	MH24	US	Tom Holman	07/03/2024	13:48	4	3	MHF, Reducer	1.63 m
111	1	RWG90	DOWNSTREAM	DS	Tom Holman	07/03/2024	13:49	1	3	MHF, Capped	14.66 m
112	1	RWG91	DOWNSTREAM	DS	Tom Holman	07/03/2024	13:51	1	1	MHF, Blind junction	0.09 m
113	1	RWG92	DOWNSTREAM	DS	Tom Holman	07/03/2024	13:54	1	5	MHF, Blind junction	0.76 m
114	1	RWG89	DOWNSTREAM	DS	Tom Holman	07/03/2024	13:55	4	5	MHF, Blind junction	0.19 m
115	1	BRANCH A	MH21	US	Tom Holman	07/03/2024	13:56	1	4	GYF	0.75 m

Total: 408.94 m

Inspection Summary by Profile

Profile	Total Length	No. Inspections
Circular 100mm	8.54 m	
Circular 100mm	4.99 m	
Circular 100mm	0.19 m	
Circular 100mm	0.57 m	
Circular 100mm	0.86 m	
Circular 100mm	10.58 m	
Circular 100mm	0.19 m	
Circular 100mm	0.67 m	
Circular 100mm	0.01 m	
Circular 100mm	0.19 m	
Circular 100mm	2.11 m	
Circular 100mm	0.09 m	
Circular 100mm	0.67 m	
Circular 100mm	0.38 m	
Circular 100mm	3.55 m	
Circular 100mm	1.72 m	
Circular 100mm	1.34 m	
Circular 100mm	1.34 m	
Circular 100mm	1.72 m	
Circular 100mm	1.82 m	
Circular 100mm	0.67 m	
Circular 100mm	2.11 m	
Circular 100mm	0.28 m	
Circular 100mm	5.76 m	



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Profile	Total Length	No. Inspections
Circular 100mm	0.01 m	
Circular 100mm	18.75 m	
Circular 100mm	3.07 m	
Circular 100mm	26.75 m	
Circular 100mm	2.78 m	
Circular 100mm	1.34 m	
Circular 100mm	2.11 m	
Circular 100mm	0.76 m	
Circular 100mm	0.01 m	
Circular 100mm	0.09 m	
Circular 100mm	1.53 m	
Circular 100mm	0.38 m	
Circular 100mm	7.20 m	
Circular 100mm	6.33 m	
Circular 100mm	0.48 m	
Circular 100mm	2.01 m	
Circular 100mm	0.00 m	
Circular 100mm	3.74 m	
Circular 100mm	0.57 m	
Circular 100mm	5.28 m	
Circular 100mm	1.44 m	
Circular 100mm	0.09 m	
Circular 100mm	3.36 m	
Circular 100mm	0.28 m	
Circular 100mm	1.24 m	
Circular 100mm	3.45 m	
Circular 100mm	0.01 m	
Circular 100mm	0.48 m	
Circular 100mm	0.28 m	
Circular 100mm	1.63 m	
Circular 100mm	0.28 m	
Circular 100mm	0.01 m	
Circular 100mm	4.22 m	
Circular 100mm	1.63 m	
Circular 100mm	2.01 m	
Circular 100mm	0.67 m	
Circular 100mm	6.62 m	
Circular 100mm	1.05 m	
Circular 100mm	1.82 m	
Circular 100mm	0.19 m	
Circular 100mm	0.09 m	
Circular 100mm	2.01 m	
Circular 100mm	1.82 m	
Circular 100mm	0.19 m	
Circular 100mm	5.18 m	



Project Summary

Project Name Highgate Cemetery	Project Number	Project Date 06/03/2024
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Profile		Total Length	No. Inspections
Circular 100mm		1.23 m	
Circular 100mm		8.99 m	
Circular 100mm		0.19 m	
Circular 100mm		1.05 m	
Circular 100mm		0.76 m	
Circular 100mm		2.11 m	
Circular 100mm		14.66 m	
Circular 100mm		0.09 m	
Circular 100mm		0.76 m	
Circular 100mm		0.19 m	
Circular 100mm		0.75 m	
Circular 100mm	=	204.37 m	79
Circular 150mm		1.92 m	
Circular 150mm		2.30 m	
Circular 150mm		0.96 m	
Circular 150mm		3.07 m	
Circular 150mm		1.44 m	
Circular 150mm		0.38 m	
Circular 150mm		3.16 m	
Circular 150mm		1.15 m	
Circular 150mm		0.01 m	
Circular 150mm		5.56 m	
Circular 150mm		2.97 m	
Circular 150mm		0.01 m	
Circular 150mm		1.63 m	
Circular 150mm	=	24.56 m	13
Circular 225mm		0.28 m	
Circular 225mm		11.02 m	
Circular 225mm		19.37 m	
Circular 225mm		4.99 m	
Circular 225mm	=	35.66 m	4
Circular 300mm		8.16 m	
Circular 300mm		11.15 m	
Circular 300mm		18.83 m	
Circular 300mm		0.48 m	
Circular 300mm		22.99 m	
Circular 300mm		13.72 m	
Circular 300mm		8.94 m	
Circular 300mm	=	84.27 m	7
Circular 350mm		0.65 m	
Circular 350mm		1.41 m	



Project Summary

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Profile		Total Length	No. Inspections
Circular 350mm	=	2.06 m	2
Circular 400mm		31.74 m	
Circular 400mm		7.25 m	
Circular 400mm		18.10 m	
Circular 400mm	=	57.09 m	3
Circular 80mm		0.09 m	
Circular 80mm		0.19 m	
Circular 80mm		0.09 m	
Circular 80mm		0.09 m	
Circular 80mm		0.28 m	
Circular 80mm		0.19 m	
Circular 80mm	=	0.93 m	6
Total	=	408.94 m	114

Defect Summary				CCTV Drainage Survey Observation Count																				
				General				Structural Condition								Service Condition					Misc			
Sect. No.	Insp. No.	Upstream Node	Downstream Node	Insp. Length (m)	No. Grade 4/5 Obs.	Survey Abandoned	Camera Under Water	Cracks	Fractures	Broken	Deformed	Collapsed	Holes	Surface Damage	Displaced Joints	Open Joints	Roots	Infiltration	Encrustation	Silt	Grease	Obstruction	Water Level	Line Deviates
1	1	BRANCH A	MH2	8.5	2		2													4			2	
2	1	MH2	DOWNSTREAM	5.0	1															2			2	
3	1	RWG8	DOWNSTREAM	1.9	2										2				1	2			1	
4	1	RWG9	DOWNSTREAM	0.2	1	1														1			1	
5	1	RWG10	DOWNSTREAM	0.6	1	1														1			1	
6	1	RWG11	DOWNSTREAM	2.3	1	1														2			1	
7	1	RWG1	MH1	0.9	1															2			1	1
8	1	RWG3	MH2	10.6	1															2			2	
9	1	RWG6	DOWNSTREAM	1.0	2	1				1					1					2			1	
10	1	BRANCH A	MH3	8.2	1	1														1			1	
11	1	MH3	DOWNSTREAM	0.7		1							2										2	



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Sect. No.	Insp. No.	Upstream Node	Downstream Node	Insp. Length (m)	No. Grade 4/5 Obs.	Survey Abandoned	Camera Under Water	Cracks	Fractures	Broken	Deformed	Collapsed	Holes	Surface Damage	Displaced Joints	Open Joints	Roots	Infiltration	Encrustation	Silt	Grease	Obstruction	Water Level	Line Deviates
12	1	UPSTREAM	MH3	1.4	1	1				2										2			1	
13	1	RWG12	DOWNSTREAM	3.1		1																	1	
14	1	RWG13	DOWNSTREAM	0.2	1	1														2			1	
15	1	RWG14	DOWNSTREAM	0.7	1	1									1					1			1	
16	1	RWG17	DOWNSTREAM	0.0	1	1														1			1	
17	1	RWG22	DOWNSTREAM	0.2	1	1														1			1	
18	1	RWG24	MH4	2.1																			1	
19	1	MH3	MH5 BRANCH B	11.2	1															3			1	
20	1	BRANCH A	MH5	1.4	1															2			1	
21	1	MH5	DOWNSTREAM	18.8	3	1									2				7				1	
22	1	BRANCH C	MH5	0.4	1	1														1			1	
23	1	BRANCH D	MH5	0.5		1																	1	
24	1	BRANCH E	MH5	3.2		1																	1	
25	1	MH6	MH7	23.0	2		2								2				8				1	
26	1	UPSTREAM	MH6	13.7		1													2				1	
27	1	BRANCH A	MH7	8.9		1													3				2	
28	1	BRANCH C	MH7	0.1		1																	1	
29	1	MH7	DOWNSTREAM	31.7	6	1	2								4		2		2				1	
30	1	MH8	DOWNSTREAM	7.3	6										2		4		1				1	
31	1	UPSTREAM	MH8	18.1	1	1									3					1			1	
32	1	BRANCH A	MH9	0.7															1				1	1
33	1	MH9	DOWNSTREAM	0.4	1	1									1								1	1
34	1	UPSTREAM	MH9	3.6																			1	3
35	1	RWG27	DOWNSTREAM	1.2																			1	1
36	1	RWG28	DOWNSTREAM	1.7	1										1								1	1
37	1	RWG29	DOWNSTREAM	1.3																			1	1
38	1	RWG30	DOWNSTREAM	1.3													1						1	1
39	1	RWG26	DOWNSTREAM	1.7	1	1									1	1							1	1
40	1	BRANCH A	MH1	0.0		1																	1	



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Sect. No.	Insp. No.	Upstream Node	Downstream Node	Insp. Length (m)	No. Grade 4/5 Obs.	Survey Abandoned	Camera Under Water	Cracks	Fractures	Broken	Deformed	Collapsed	Holes	Surface Damage	Displaced Joints	Open Joints	Roots	Infiltration	Encrustation	Silt	Grease	Obstruction	Water Level	Line Deviates
41	1	BRANCH A	MH10	1.8	2	1				1					2					1			1	2
42	1	BRANCH B	MH10	0.7	1					1									1				1	1
43	1	BRANCH C	MH10	2.1											3				2				1	2
44	1	BRANCH D	MH10	0.3											1								1	1
45	1	MH10	DOWNSTREAM	5.8											2				1				1	1
46	1	BRANCH A	MH11	0.0																			1	
47	1	BRANCH B	MH11	18.8	1															1			1	1
48	1	MH11	MH13	3.1	1															2			1	1
49	1	MH12	MH11	26.8																			1	1
50	1	UPSTREAM	MH12	2.8																			1	1
51	1	BRANCH A	MH14	1.3	5			2	1	1			2		1				1			1	1	
52	1	BRANCH B	MH14	2.1	1				2	1					1								1	1
53	1	MH14	MH13	0.8	2										2								1	
54	1	RWG31	DOWNSTREAM	0.0																			1	1
55	1	RWG32	DOWNSTREAM	0.1																			1	
56	1	UPSTREAM	RWG31	1.5																			1	1
57	1	UPSTREAM	RWG32	0.4	1	1		1												2			1	
58	1	RWG35	DOWNSTREAM	7.2	1															1			1	1
59	1	RWG34	RWG35	6.3																			1	2
60	1	RWG36	DOWNSTREAM	0.5																			1	
61	1	RWG37	DOWNSTREAM	2.0																			1	
62	1	MH17	MH16	0.0	2															1		3	1	
63	1	BRANCH B	MH16	3.7	1															1			1	2
64	1	MH16	DOWNSTREAM	0.6		1	1																1	
65	1	BRANCH A	MH17	5.3	1	1																4	1	1
66	1	BRANCH A	MH18	1.4																			1	1
67	1	BRANCH B	MH18	0.1	1	1																1	1	
68	1	MH18	MH19	3.4																			1	1
69	1	UPSTREAM	MH18	0.3																			1	2



Project Summary

Project Name
Highgate Cemetery

Project Number

Project Date
06/03/2024

Sect. No.	Insp. No.	Upstream Node	Downstream Node	Insp. Length (m)	No. Grade 4/5 Obs.	Survey Abandoned	Camera Under Water	Cracks	Fractures	Broken	Deformed	Collapsed	Holes	Surface Damage	Displaced Joints	Open Joints	Roots	Infiltration	Encrustation	Silt	Grease	Obstruction	Water Level	Line Deviates
70	1	BRANCH A	MH19	1.2																			1	
71	1	MH19	DOWNSTREAM	3.5											1								1	
72	1	BRANCH A	RWG53	0.0	2	1									1		1						1	
73	1	RWG53	DOWNSTREAM	0.5		1	1																2	1
74	1	RWG54	DOWNSTREAM	0.3	1	1											3						1	
75	1	UPSTREAM	RWG54	1.6	1	1	2								1								1	
76	1	RWG41	DOWNSTREAM	0.1	1	1													1				1	
77	1	UPSTREAM	RWG41	0.3	1	1														1			1	
78	1	RWG40	DOWNSTREAM	0.0	1	1														1			1	
79	1	RWG42	DOWNSTREAM	4.2	1	1									3				4	1			2	
80	1	RWG49	DOWNSTREAM	1.6	1	1											2						2	
81	1	RWG58	DOWNSTREAM	2.0	5	1									4					3			1	
82	1	BRANCH A	RWG56	0.7	2	1	2								1					2			2	
83	1	RWG56	DOWNSTREAM	6.6	5	1	4								2		3		1	3			3	
84	1	RWG57	DOWNSTREAM	1.1	2	1									1					3			1	
85	1	RWG59	DOWNSTREAM	1.8	3	1	1								2		2			1			3	
86	1	RWG84	DOWNSTREAM	0.2	1	1														1			1	
87	1	BRANCH B	RWG56	0.2	1	1														2			1	
88	1	UPSTREAM	RWG58	0.1	1	1														1			1	
89	1	RWG59	DOWNSTREAM	0.1	1	1														1			1	
90	1	UPSTREAM	RWG59	2.0	4	1									3	1	1					1	1	1
91	1	RWG73	DOWNSTREAM	0.1	2	1									1					1			1	
92	1	RWG75	DOWNSTREAM	0.3	2					2													1	
93	1	RWG83	DOWNSTREAM	0.2	1	1														2			1	
94	1	MH15	DOWNSTREAM	1.8	1	1														1			1	
95	1	UPSTREAM	MH15	0.2	1	1														1			1	
96	1	BRANCH A	MH20	5.2	8	1				2			1		6	1							1	1
97	1	MH20	DOWNSTREAM	0.3																			1	



Project Summary

Project Name
Highgate Cemetery

Project Number

Project Date
06/03/2024

Sect. No.	Insp. No.	Upstream Node	Downstream Node	Insp. Length (m)	No. Grade 4/5 Obs.	Survey Abandoned	Camera Under Water	Cracks	Fractures	Broken	Deformed	Collapsed	Holes	Surface Damage	Displaced Joints	Open Joints	Roots	Infiltration	Encrustation	Silt	Grease	Obstruction	Water Level	Line Deviates
98	1	UPSTREAM	MH20	11.0	2	1		4	1	1					2		1		5				5	
99	1	BRANCH A	MH21	1.2	1	1									1					1			1	
100	1	MH21	DOWNSTREAM	5.6	3	1									7					3			1	
101	1	UPSTREAM	MH21	9.0	1	1									1					2			1	
102	1	BRANCH A	MH22	0.2		1																	1	
103	1	MH22	DOWNSTREAM	19.4	2	1			1											2			3	1
104	1	UPSTREAM	MH22	5.0		1	2		1						1				2				3	
105	1	BRANCH A	MH23	1.1	1															2			1	
106	1	BRANCH B	MH23	0.8																			1	
107	1	MH23	DOWNSTREAM	2.1	1															2			1	
108	1	BRANCH A	MH24	3.0																1			1	
109	1	BRANCH B	MH24	0.0																			1	
110	1	BRANCH C	MH24	1.6																2			1	
111	1	RWG90	DOWNSTREAM	14.7																2			1	
112	1	RWG91	DOWNSTREAM	0.1																			1	1
113	1	RWG92	DOWNSTREAM	0.8	1										1								1	1
114	1	RWG89	DOWNSTREAM	0.2	2					1					1								1	1
115	1	BRANCH A	MH21	0.8																1			1	
Total:				408.9	125	60	19	7	6	13			5		72	3	20		42	86		10	136	42



Legend of Classification (Section)

Project Name Highgate Cemetery	Project Number	Project Date 06/03/2024
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1:	<p>Brick: Minor structural defects.</p> <p>Other: Minor structural defects, i.e. open or displaced joints without additional characteristics.</p> <p>Acceptable structural condition.</p>
2:	<p>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).</p> <p>Other: Circumferential cracking. Surface damage - spalling slight (breaking away of small fragments from the surface). Surface damage - wear slight (increased roughness).</p> <p>Minimal collapse likelihood in the short term but potential for further deterioration.</p>
3:	<p>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).</p> <p>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.</p> <p>Collapse unlikely in the near future but further deterioration likely.</p>
4:	<p>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).</p> <p>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.</p> <p>Collapse likely in the foreseeable future.</p>
5:	<p>Brick: Already collapsed; missing Invert; deformation > 10% and fractured; displaced or hanging brickwork and deformation < 10%; extensive areas of missing brickwork.</p> <p>Other: Already collapsed; deformation > 10% and broken; extensive areas of pipe fabric missing; fractures with deformation > 10%</p> <p>Collapsed or collapse imminent.</p>



Section Profile - 06/03/2024 - Branch AX

Project Name
Highgate Cemetery

Project Number

Project Date
06/03/2024

Circular, 80 mm

Item No.	Upstream Node	Downstream Node	Date	Road	Material	Total Length	Inspected Length
76	RWG41	Downstream	07/03/2024	Swains Lane	Vitrified clay	0.09 m	0.09 m
86	RWG84	Downstream	07/03/2024	Swains Lane	Vitrified clay	0.19 m	0.19 m
89	RWG59	Downstream	07/03/2024	Swains Lane	Vitrified clay	0.09 m	0.09 m
91	RWG73	Downstream	07/03/2024	Swains Lane	Vitrified clay	0.09 m	0.09 m
92	RWG75	Downstream	07/03/2024	Swains Lane	Vitrified clay	0.28 m	0.28 m
93	RWG83	Downstream	07/03/2024	Swains Lane	Vitrified clay	0.19 m	0.19 m

Total: 6 Inspections x Circular 80 mm, 0 mm = 0.93 m Total Length and 0.93 m Inspected Length

Circular, 100 mm

Item No.	Upstream Node	Downstream Node	Date	Road	Material	Total Length	Inspected Length
1	Branch A	MH2	06/03/2024	Swains Lane	Polyvinyl chloride	8.54 m	8.54 m
2	MH2	Downstream	06/03/2024	Swains Lane	Polyvinyl chloride	4.99 m	4.99 m
4	RWG9	Downstream	06/03/2024	Swains Lane	Vitrified clay	0.19 m	0.19 m
5	RWG10	Downstream	06/03/2024	Swains Lane	Vitrified clay	0.57 m	0.57 m
7	RWG1	MH1	06/03/2024	Swains Lane	Vitrified clay	0.86 m	0.86 m
8	RWG3	MH2	06/03/2024	Swains Lane	Polyvinyl chloride	10.58 m	10.58 m
14	RWG13	Downstream	06/03/2024	Swains Lane	Vitrified clay	0.19 m	0.19 m
15	RWG14	Downstream	06/03/2024	Swains Lane	Vitrified clay	0.67 m	0.67 m
16	RWG17	Downstream	06/03/2024	Swains Lane	Vitrified clay	0.01 m	0.01 m
17	RWG22	Downstream	06/03/2024	Swains Lane	Vitrified clay	0.19 m	0.19 m
18	RWG24	MH4	06/03/2024	Swains Lane	Polyvinyl chloride	2.11 m	2.11 m
28	Branch C	MH7	07/03/2024	Swains Lane	Polyvinyl chloride	0.09 m	0.09 m
32	Branch A	MH9	07/03/2024	Swains Lane	Polyvinyl chloride	0.67 m	0.67 m
33	MH9	Downstream	07/03/2024	Swains Lane	Polyvinyl chloride	0.38 m	0.38 m
34	Upstream	MH9	07/03/2024	Swains Lane	Polyvinyl chloride	3.55 m	3.55 m
36	RWG28	Downstream	07/03/2024	Swains Lane	Polyvinyl chloride	1.72 m	1.72 m
37	RWG29	Downstream	07/03/2024	Swains Lane	Polyvinyl chloride	1.34 m	1.34 m
38	RWG30	Downstream	07/03/2024	Swains Lane	Polyvinyl chloride	1.34 m	1.34 m
39	RWG26	Downstream	07/03/2024	Swains Lane	Polyvinyl chloride	1.72 m	1.72 m
41	Branch A	MH10	07/03/2024	Swains Lane	Vitrified clay	1.82 m	1.82 m
42	Branch B	MH10	07/03/2024	Swains Lane	Vitrified clay	0.67 m	0.67 m
43	Branch C	MH10	07/03/2024	Swains Lane	Vitrified clay	2.11 m	2.11 m
44	Branch D	MH10	07/03/2024	Swains Lane	Polyvinyl chloride	0.28 m	0.28 m
45	MH10	Downstream	07/03/2024	Swains Lane	Vitrified clay	5.76 m	5.76 m
46	Branch A	MH11	07/03/2024	Swains Lane	Polyvinyl chloride	0.01 m	0.01 m
47	Branch B	MH11	07/03/2024	Swains Lane	Polyvinyl chloride	18.75 m	18.75 m
48	MH11	MH13	07/03/2024	Swains Lane	Polyvinyl chloride	3.07 m	3.07 m
49	MH12	MH11	07/03/2024	Swains Lane	Polyvinyl chloride	26.75 m	26.75 m
50	Upstream	MH12	07/03/2024	Swains Lane	Vitrified clay	2.78 m	2.78 m
51	Branch A	MH14	07/03/2024	Swains Lane	Vitrified clay	1.34 m	1.34 m
52	Branch B	MH14	07/03/2024	Swains Lane	Vitrified clay	2.11 m	2.11 m
53	MH14	MH13	07/03/2024	Swains Lane	Vitrified clay	0.76 m	0.76 m
54	RWG31	Downstream	07/03/2024	Swains Lane	Vitrified clay	0.01 m	0.01 m
55	RWG32	Downstream	07/03/2024	Swains Lane	Vitrified clay	0.09 m	0.09 m
56	Upstream	RWG31	07/03/2024	Swains Lane	Polyvinyl chloride	1.53 m	1.53 m
57	Upstream	RWG32	07/03/2024	Swains Lane	Vitrified clay	0.38 m	0.38 m
58	RWG35	Downstream	07/03/2024	Swains Lane	Polyvinyl chloride	7.20 m	7.20 m
59	RWG34	RWG35	07/03/2024	Swains Lane	Polyvinyl chloride	6.33 m	6.33 m
60	RWG36	Downstream	07/03/2024	Swains Lane	Polyvinyl chloride	0.48 m	0.48 m
61	RWG37	Downstream	07/03/2024	Swains Lane	Polyvinyl chloride	2.01 m	2.01 m



Section Profile - 06/03/2024 - Branch AX

Project Name Highgate Cemetery	Project Number	Project Date 06/03/2024
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62	MH17	MH16	07/03/2024	Swains Lane	Polyvinyl chloride	3.16 m	0.00 m
63	Branch B	MH16	07/03/2024	Swains Lane	Polyvinyl chloride	3.74 m	3.74 m
64	MH16	Downstream	07/03/2024	Swains Lane	Polyvinyl chloride	0.57 m	0.57 m
65	Branch A	MH17	07/03/2024	Swains Lane	Polyvinyl chloride	5.28 m	5.28 m
66	Branch A	MH18	07/03/2024	Swains Lane	Polyvinyl chloride	1.44 m	1.44 m
67	Branch B	MH18	07/03/2024	Swains Lane	Polyvinyl chloride	0.09 m	0.09 m
68	MH18	MH19	07/03/2024	Swains Lane	Polyvinyl chloride	3.36 m	3.36 m
69	Upstream	MH18	07/03/2024	Swains Lane	Polyvinyl chloride	0.28 m	0.28 m
70	Branch A	MH19	07/03/2024	Swains Lane	Polyvinyl chloride	1.24 m	1.24 m
71	MH19	Downstream	07/03/2024	Swains Lane	Vitrified clay	3.45 m	3.45 m
72	Branch A	RWG53	07/03/2024	Swains Lane	Vitrified clay	0.01 m	0.01 m
73	RWG53	Downstream	07/03/2024	Swains Lane	Vitrified clay	0.48 m	0.48 m
74	RWG54	Downstream	07/03/2024	Swains Lane	Vitrified clay	0.28 m	0.28 m
75	Upstream	RWG54	07/03/2024	Swains Lane	Vitrified clay	1.63 m	1.63 m
77	Upstream	RWG41	07/03/2024	Swains Lane	Vitrified clay	0.28 m	0.28 m
78	RWG40	Downstream	07/03/2024	Swains Lane	Vitrified clay	0.01 m	0.01 m
79	RWG42	Downstream	07/03/2024	Swains Lane	Vitrified clay	4.22 m	4.22 m
80	RWG49	Downstream	07/03/2024	Swains Lane	Vitrified clay	1.63 m	1.63 m
81	RWG58	Downstream	07/03/2024	Swains Lane	Vitrified clay	2.01 m	2.01 m
82	Branch A	RWG56	07/03/2024	Swains Lane	Vitrified clay	0.67 m	0.67 m
83	RWG56	Downstream	07/03/2024	Swains Lane	Vitrified clay	6.62 m	6.62 m
84	RWG57	Downstream	07/03/2024	Swains Lane	Vitrified clay	1.05 m	1.05 m
85	RWG59	Downstream	07/03/2024	Swains Lane	Vitrified clay	1.82 m	1.82 m
87	Branch B	RWG56	07/03/2024	Swains Lane	Vitrified clay	0.19 m	0.19 m
88	Upstream	RWG58	07/03/2024	Swains Lane	Vitrified clay	0.09 m	0.09 m
90	Upstream	RWG59	07/03/2024	Swains Lane	Vitrified clay	2.01 m	2.01 m
94	MH15	Downstream	07/03/2024	Swains Lane	Vitrified clay	1.82 m	1.82 m
95	Upstream	MH15	07/03/2024	Swains Lane	Vitrified clay	0.19 m	0.19 m
96	Branch A	MH20	07/03/2024	Swains Lane	Vitrified clay	5.18 m	5.18 m
99	Branch A	MH21	07/03/2024	Swains Lane	Vitrified clay	1.23 m	1.23 m
101	Upstream	MH21	07/03/2024	Swains Lane	Vitrified clay	8.99 m	8.99 m
102	Branch A	MH22	07/03/2024	Swains Lane	Vitrified clay	0.19 m	0.19 m
105	Branch A	MH23	07/03/2024	Swains Lane	Vitrified clay	1.05 m	1.05 m
106	Branch B	MH23	07/03/2024	Swains Lane	Vitrified clay	0.76 m	0.76 m
107	MH23	Downstream	07/03/2024	Swains Lane	Vitrified clay	2.11 m	2.11 m
111	RWG90	Downstream	07/03/2024	Swains Lane	Polyvinyl chloride	14.66 m	14.66 m
112	RWG91	Downstream	07/03/2024	Swains Lane	Vitrified clay	0.09 m	0.09 m
113	RWG92	Downstream	07/03/2024	Swains Lane	Vitrified clay	0.76 m	0.76 m
114	RWG89	Downstream	07/03/2024	Swains Lane	Vitrified clay	0.19 m	0.19 m
115	Branch A	MH21	07/03/2024	Swains Lane	Polyvinyl chloride	0.75 m	0.75 m

Total: 80 Inspections x Circular 100 mm, 0 mm = 207.53 m Total Length and 204.37 m Inspected Length

Circular, 150 mm

Item No.	Upstream Node	Downstream Node	Date	Road	Material	Total Length	Inspected Length
3	RWG8	Downstream	06/03/2024	Swains Lane	Vitrified clay	1.92 m	1.92 m
6	RWG11	Downstream	06/03/2024	Swains Lane	Vitrified clay	2.30 m	2.30 m
9	RWG6	Downstream	06/03/2024	Swains Lane	Vitrified clay	0.96 m	0.96 m
13	RWG12	Downstream	06/03/2024	Swains Lane	Vitrified clay	3.07 m	3.07 m
20	Branch A	MH5	06/03/2024	Swains Lane	Polyvinyl chloride	1.44 m	1.44 m
22	Branch C	MH5	06/03/2024	Swains Lane	Polyvinyl chloride	0.38 m	0.38 m
24	Branch E	MH5	06/03/2024	Swains Lane	Polyvinyl chloride	3.16 m	3.16 m
35	RWG27	Downstream	07/03/2024	Swains Lane	Polyvinyl chloride	1.15 m	1.15 m
40	Branch A	MH1	07/03/2024	Swains Lane	Vitrified clay	0.01 m	0.01 m
100	MH21	Downstream	07/03/2024	Swains Lane	Vitrified clay	5.56 m	5.56 m



Section Profile - 06/03/2024 - Branch AX

Project Name Highgate Cemetery	Project Number	Project Date 06/03/2024
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108	Branch A	MH24	07/03/2024	Swains Lane	Brick	2.97 m	2.97 m
109	Branch B	MH24	07/03/2024	Swains Lane	Brick	0.01 m	0.01 m
110	Branch C	MH24	07/03/2024	Swains Lane	Brick	1.63 m	1.63 m

Total: 13 Inspections x Circular 150 mm, 0 mm = 24.56 m Total Length and 24.56 m Inspected Length

Circular, 225 mm

Item No.	Upstream Node	Downstream Node	Date	Road	Material	Total Length	Inspected Length
97	MH20	Downstream	07/03/2024	Swains Lane	Vitrified clay	0.28 m	0.28 m
98	Upstream	MH20	07/03/2024	Swains Lane	Vitrified clay	11.02 m	11.02 m
103	MH22	Downstream	07/03/2024	Swains Lane	Vitrified clay	19.37 m	19.37 m
104	Upstream	MH22	07/03/2024	Swains Lane	Vitrified clay	4.99 m	4.99 m

Total: 4 Inspections x Circular 225 mm, 0 mm = 35.66 m Total Length and 35.66 m Inspected Length

Circular, 300 mm

Item No.	Upstream Node	Downstream Node	Date	Road	Material	Total Length	Inspected Length
10	Branch A	MH3	06/03/2024	Swains Lane	Vitrified clay	8.16 m	8.16 m
19	MH3	MH5 Branch B	06/03/2024	Swains Lane	Concrete	11.15 m	11.15 m
21	MH5	Downstream	06/03/2024	Swains Lane	Concrete	18.83 m	18.83 m
23	Branch D	MH5	06/03/2024	Swains Lane	Concrete	0.48 m	0.48 m
25	MH6	MH7	06/03/2024	Swains Lane	Concrete	22.99 m	22.99 m
26	Upstream	MH6	06/03/2024	Swains Lane	Concrete	13.72 m	13.72 m
27	Branch A	MH7	07/03/2024	Swains Lane	Concrete	8.94 m	8.94 m

Total: 7 Inspections x Circular 300 mm, 0 mm = 84.27 m Total Length and 84.27 m Inspected Length

Circular, 350 mm

Item No.	Upstream Node	Downstream Node	Date	Road	Material	Total Length	Inspected Length
11	MH3	Downstream	06/03/2024	Swains Lane	Brick	0.65 m	0.65 m
12	Upstream	MH3	06/03/2024	Swains Lane	Brick	1.41 m	1.41 m

Total: 2 Inspections x Circular 350 mm, 0 mm = 2.06 m Total Length and 2.06 m Inspected Length

Circular, 400 mm

Item No.	Upstream Node	Downstream Node	Date	Road	Material	Total Length	Inspected Length
29	MH7	Downstream	07/03/2024	Swains Lane	Concrete	31.74 m	31.74 m
30	MH8	Downstream	07/03/2024	Swains Lane	Concrete	7.25 m	7.25 m
31	Upstream	MH8	07/03/2024	Swains Lane	Concrete	18.10 m	18.10 m

Total: 3 Inspections x Circular 400 mm, 0 mm = 57.09 m Total Length and 57.09 m Inspected Length

Total: 115 Inspections = 412.10 m Total Length and 408.94 m Inspected Length



Section Summary

Project Name Highgate Cemetery	Project Number	Project Date 06/03/2024
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Number of sections	115
Total length of sections	412.10 m
Total length of inspected sections	412.10 m
Total length of not inspected sections	0.00 m
Total abandoned inspections	60
Number of section inspection photos	428
Number of section inspection videos	115
Number of section inspection scans	0
Number of section inclination measurements	0

PLR:	Branch AX	Upstream Node:	Branch A
Inspection Direction:	Upstream	Downstream Node:	MH2
Inspected Length:	8.54 m	Dia/Height:	100 mm
Total Length:	8.54 m	Material:	Polyvinyl chloride

No.	m+	Code	Observation
1	0.00	WL	Water level, 25% of the vertical dimension
2	0.19	DES	Settled deposits, fine, 20% cross-sectional area loss, start
3	1.15	CUW	Loss of vision, camera under water, start
4	2.68	DES	Settled deposits, fine, 20% cross-sectional area loss, finish
5	3.55	WL	Water level, 15% of the vertical dimension
6	3.55	DES	Settled deposits, fine, 20% cross-sectional area loss, start
7	3.93	CUD	Loss of vision, silt, start
8	5.37	CUW	Loss of vision, camera under water, finish
9	5.37	DES	Settled deposits, fine, 20% cross-sectional area loss, finish
10	5.37	CUD	Loss of vision, silt, finish
11	8.54	GYF	Finish node, gully, reference: Branch A

PLR:	MH2X	Upstream Node:	MH2
Inspection Direction:	Downstream	Downstream Node:	Downstream
Inspected Length:	4.99 m	Dia/Height:	100 mm
Total Length:	4.99 m	Material:	Polyvinyl chloride

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	DES	Settled deposits, fine, 20% cross-sectional area loss, start
3	3.07	WL	Water level, 20% of the vertical dimension
4	4.99	DES	Settled deposits, fine, 20% cross-sectional area loss, finish
5	4.99	GYF	Finish node, gully, reference: Downstream



Section Summary

Project Name Highgate Cemetery	Project Number	Project Date 06/03/2024
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PLR: RWG8X	Upstream Node: RWG8
Inspection Direction: Downstream	Downstream Node: Downstream
Inspected Length: 1.92 m	Dia/Height: 150 mm
Total Length: 1.92 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.19	REM	General remark
3	0.48	DES	Settled deposits, fine, 25% cross-sectional area loss, start
4	0.67	JDL	Joint displaced, large
5	0.96	JDM	Joint displaced, medium
6	1.53	DEEJ	Attached deposits, encrustation at joint from 3 o'clock to 4 o'clock, 15% cross-sectional area loss
7	1.92	DES	Settled deposits, fine, 25% cross-sectional area loss, finish
8	1.92	MHF	Finish node, manhole, reference: Downstream

PLR: RWG9X	Upstream Node: RWG9
Inspection Direction: Downstream	Downstream Node: Downstream
Inspected Length: 0.19 m	Dia/Height: 100 mm
Total Length: 0.19 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	DES	Settled deposits, fine, 30% cross-sectional area loss
3	0.09	CUD	Loss of vision, silt
4	0.19	SA	Survey abandoned

PLR: RWG10X	Upstream Node: RWG10
Inspection Direction: Downstream	Downstream Node: Downstream
Inspected Length: 0.57 m	Dia/Height: 100 mm
Total Length: 0.57 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.28	DES	Settled deposits, fine, 75% cross-sectional area loss
3	0.28	CUD	Loss of vision, silt
4	0.57	SA	Survey abandoned

PLR: RWG11X	Upstream Node: RWG11
Inspection Direction: Downstream	Downstream Node: Downstream
Inspected Length: 2.30 m	Dia/Height: 150 mm
Total Length: 2.30 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.38	REM	General remark
3	0.67	DES	Settled deposits, fine, 25% cross-sectional area loss, start
4	0.96	CUD	Loss of vision, silt, start
5	2.30	DES	Settled deposits, fine, 25% cross-sectional area loss, finish
6	2.30	CUD	Loss of vision, silt, finish
7	2.30	SA	Survey abandoned



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PLR: RWG1X	Upstream Node: RWG1
Inspection Direction: Downstream	Downstream Node: MH1
Inspected Length: 0.86 m	Dia/Height: 100 mm
Total Length: 0.86 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.09	DES	Settled deposits, fine, 20% cross-sectional area loss, start
3	0.67	LD	Line deviates down
4	0.86	DES	Settled deposits, fine, 20% cross-sectional area loss, finish
5	0.86	MHF	Finish node, manhole, reference: MH1

PLR: RWG3X	Upstream Node: RWG3
Inspection Direction: Downstream	Downstream Node: MH2
Inspected Length: 10.58 m	Dia/Height: 100 mm
Total Length: 10.58 m	Material: Polyvinyl chloride

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.48	WL	Water level, 20% of the vertical dimension
3	0.86	DES	Settled deposits, fine, 20% cross-sectional area loss, start
4	1.05	CUD	Loss of vision, silt, start
5	9.21	DES	Settled deposits, fine, 20% cross-sectional area loss, finish
6	9.21	CUD	Loss of vision, silt, finish
7	10.58	MHF	Finish node, manhole, reference: MH2

PLR: RWG6X	Upstream Node: RWG6
Inspection Direction: Downstream	Downstream Node: Downstream
Inspected Length: 0.96 m	Dia/Height: 150 mm
Total Length: 0.96 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	BJ	Broken pipe at joint from 8 o'clock to 11 o'clock
3	0.09	REM	General remark
4	0.19	DES	Settled deposits, fine, 50% cross-sectional area loss, start
5	0.29	JDM	Joint displaced, medium
6	0.96	DES	Settled deposits, fine, 50% cross-sectional area loss, finish
7	0.96	SA	Survey abandoned

PLR: Branch AX	Upstream Node: Branch A
Inspection Direction: Upstream	Downstream Node: MH3
Inspected Length: 8.16 m	Dia/Height: 300 mm
Total Length: 8.16 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	7.49	DES	Settled deposits, fine, 20% cross-sectional area loss, start
3	8.16	SA	Survey abandoned



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PLR: MH3X	Upstream Node: MH3
Inspection Direction: Downstream	Downstream Node: Downstream
Inspected Length: 0.65 m	Dia/Height: 350 mm
Total Length: 0.65 m	Material: Brick

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	H	Hole in drain or sewer from 10 o'clock to 2 o'clock, start
3	0.57	WL	Water level, 20% of the vertical dimension
4	0.65	H	Hole in drain or sewer from 10 o'clock to 2 o'clock, finish
5	0.65	SA	Survey abandoned

PLR: UpstreamX	Upstream Node: Upstream
Inspection Direction: Upstream	Downstream Node: MH3
Inspected Length: 1.41 m	Dia/Height: 350 mm
Total Length: 1.41 m	Material: Brick

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.41	B	Broken pipe from 8 o'clock to 9 o'clock, start
3	0.57	DES	Settled deposits, fine, 20% cross-sectional area loss, start
4	1.41	B	Broken pipe from 8 o'clock to 9 o'clock, finish
5	1.41	DES	Settled deposits, fine, 20% cross-sectional area loss, finish
6	1.41	DER	Settled deposits, coarse, 30% cross-sectional area loss
7	1.41	SA	Survey abandoned

PLR: RWG12X	Upstream Node: RWG12
Inspection Direction: Downstream	Downstream Node: Downstream
Inspected Length: 3.07 m	Dia/Height: 150 mm
Total Length: 3.07 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.96	REM	General remark
3	1.05	MCBR	Pipe material changes to brick at this point
4	1.15	DER	Settled deposits, coarse, 20% cross-sectional area loss, start
5	1.24	DB	Displaced bricks, single brick false from 10 o'clock to 3 o'clock, start
6	2.69	DER	Settled deposits, coarse, 40% cross-sectional area loss, change
7	2.69	DB	Displaced bricks, single brick False from 9 o'clock to 3 o'clock, change
8	3.07	CUD	Loss of vision, silt, start
9	3.07	DER	Settled deposits, coarse, 40% cross-sectional area loss, finish
10	3.07	DB	Displaced bricks, single brick False from 9 o'clock to 3 o'clock, finish
11	3.07	CUD	Loss of vision, silt, finish
12	3.07	SA	Survey abandoned

PLR: RWG13X	Upstream Node: RWG13
Inspection Direction: Downstream	Downstream Node: Downstream
Inspected Length: 0.19 m	Dia/Height: 100 mm
Total Length: 0.19 m	Material: Vitrified clay



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No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	DES	Settled deposits, fine, 60% cross-sectional area loss, start
3	0.19	DES	Settled deposits, fine, 60% cross-sectional area loss, finish
4	0.19	CUD	Loss of vision, silt, finish
5	0.19	CUD	Loss of vision, silt, start
6	0.19	SA	Survey abandoned

PLR: RWG14X	Upstream Node: RWG14
Inspection Direction: Downstream	Downstream Node: Downstream
Inspected Length: 0.67 m	Dia/Height: 100 mm
Total Length: 0.67 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.19	JDM	Joint displaced, medium
3	0.28	DES	Settled deposits, fine, 50% cross-sectional area loss
4	0.67	SA	Survey abandoned

PLR: RWG17X	Upstream Node: RWG17
Inspection Direction: Downstream	Downstream Node: Downstream
Inspected Length: 0.01 m	Dia/Height: 100 mm
Total Length: 0.01 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	DES	Settled deposits, fine, 60% cross-sectional area loss
3	0.01	CUD	Loss of vision, silt
4	0.01	SA	Survey abandoned

PLR: RWG22X	Upstream Node: RWG22
Inspection Direction: Downstream	Downstream Node: Downstream
Inspected Length: 0.19 m	Dia/Height: 100 mm
Total Length: 0.19 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.09	DES	Settled deposits, fine, 30% cross-sectional area loss
3	0.19	SA	Survey abandoned

PLR: RWG24X	Upstream Node: RWG24
Inspection Direction: Downstream	Downstream Node: MH4
Inspected Length: 2.11 m	Dia/Height: 100 mm
Total Length: 2.11 m	Material: Polyvinyl chloride

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.86	REM	General remark
3	2.11	MHF	Finish node, manhole, reference: MH4



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PLR: MH3X	Upstream Node: MH3
Inspection Direction: Downstream	Downstream Node: MH5 Branch B
Inspected Length: 11.15 m	Dia/Height: 300 mm
Total Length: 11.15 m	Material: Concrete

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.19	DES	Settled deposits, fine, 15% cross-sectional area loss
3	0.59	JXB	Junction, blocked at 10 o'clock, 150mm dia
4	8.55	DES	Settled deposits, fine, 20% cross-sectional area loss, start
5	11.15	DES	Settled deposits, fine, 20% cross-sectional area loss, finish
6	11.15	MHF	Finish node, manhole, reference: MH5 Branch B

PLR: Branch AX	Upstream Node: Branch A
Inspection Direction: Upstream	Downstream Node: MH5
Inspected Length: 1.44 m	Dia/Height: 150 mm
Total Length: 1.44 m	Material: Polyvinyl chloride

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	DES	Settled deposits, fine, 20% cross-sectional area loss, start
3	1.20	DES	Settled deposits, fine, 20% cross-sectional area loss, finish
4	1.44	GYF	Finish node, gully, reference: RWG25

PLR: MH5X	Upstream Node: MH5
Inspection Direction: Downstream	Downstream Node: Downstream
Inspected Length: 18.83 m	Dia/Height: 300 mm
Total Length: 18.83 m	Material: Concrete

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.28	JDM	Joint displaced, medium
3	0.38	JDM	Joint displaced, medium
4	8.28	DEEJ	Attached deposits, encrustation at joint from 12 o'clock to 5 o'clock, 15% cross-sectional area loss
5	9.68	DEEJ	Attached deposits, encrustation at joint from 3 o'clock to 8 o'clock, 20% cross-sectional area loss
6	10.00	DEE	Attached deposits, encrustation from 3 o'clock to 6 o'clock, 30% cross-sectional area loss, start
7	11.07	DEE	Attached deposits, encrustation from 3 o'clock to 6 o'clock, 30% cross-sectional area loss, finish
8	13.16	DEEJ	Attached deposits, encrustation at joint from 3 o'clock to 8 o'clock, 25% cross-sectional area loss
9	14.65	DEEJ	Attached deposits, encrustation at joint from 3 o'clock to 7 o'clock, 25% cross-sectional area loss, start
10	17.84	JN	Junction at 2 o'clock, 150mm dia
11	18.83	JN	Junction at 11 o'clock, 100mm dia
12	18.83	DEEJ	Attached deposits, encrustation at joint from 3 o'clock to 7 o'clock, 25% cross-sectional area loss, finish
13	18.83	SA	Survey abandoned

PLR: Branch CX	Upstream Node: Branch C
Inspection Direction: Upstream	Downstream Node: MH5
Inspected Length: 0.38 m	Dia/Height: 150 mm
Total Length: 0.38 m	Material: Polyvinyl chloride



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No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	DES	Settled deposits, fine, 30% cross-sectional area loss, start
3	0.38	SA	Survey abandoned

PLR: Branch DX	Upstream Node: Branch D
Inspection Direction: Upstream	Downstream Node: MH5
Inspected Length: 0.48 m	Dia/Height: 300 mm
Total Length: 0.48 m	Material: Concrete

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.09	MCBR	Pipe material changes to brick at this point
3	0.09	DER	Settled deposits, coarse, 40% cross-sectional area loss, start
4	0.48	SA	Survey abandoned

PLR: Branch EX	Upstream Node: Branch E
Inspection Direction: Upstream	Downstream Node: MH5
Inspected Length: 3.16 m	Dia/Height: 150 mm
Total Length: 3.16 m	Material: Polyvinyl chloride

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	2.88	DER	Settled deposits, coarse, 70% cross-sectional area loss
3	3.16	SA	Survey abandoned

PLR: MH6X	Upstream Node: MH6
Inspection Direction: Downstream	Downstream Node: MH7
Inspected Length: 22.99 m	Dia/Height: 300 mm
Total Length: 22.99 m	Material: Concrete

No.	m+	Code	Observation
1	0.01	WL	Water level, 15% of the vertical dimension
2	0.19	CUW	Loss of vision, camera under water, start
3	0.38	JDM	Joint displaced, medium
4	0.38	CUW	Loss of vision, camera under water, finish
5	2.30	DEEJ	Attached deposits, encrustation at joint from 12 o'clock to 12 o'clock, 15% cross-sectional area loss
6	3.74	DEE	Attached deposits, encrustation from 6 o'clock to 9 o'clock, 30% cross-sectional area loss, start
7	3.74	CXI	Connection defective, connecting pipe is intruding at 10 o'clock, 150mm dia, intrusion: 20%
8	5.11	DEEJ	Attached deposits, encrustation at joint from 12 o'clock to 12 o'clock, 10% cross-sectional area loss
9	6.80	CXI	Connection defective, connecting pipe is intruding at 1 o'clock, 150mm dia, intrusion: 50%
10	7.80	DEEJ	Attached deposits, encrustation at joint from 12 o'clock to 12 o'clock, 15% cross-sectional area loss
11	9.09	DEEJ	Attached deposits, encrustation at joint from 4 o'clock to 8 o'clock, 20% cross-sectional area loss
12	10.48	DEEJ	Attached deposits, encrustation at joint from 7 o'clock to 9 o'clock, 20% cross-sectional area loss
13	12.87	DEEJ	Attached deposits, encrustation at joint from 4 o'clock to 11 o'clock, 30% cross-sectional area loss
14	17.05	JDM	Joint displaced, medium
15	22.99	DEE	Attached deposits, encrustation from 6 o'clock to 9 o'clock, 30% cross-sectional area loss, finish
16	22.99	MHF	Finish node, manhole, reference: MH7



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PLR: UpstreamX	Upstream Node: Upstream
Inspection Direction: Upstream	Downstream Node: MH6
Inspected Length: 13.72 m	Dia/Height: 300 mm
Total Length: 13.72 m	Material: Concrete

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	4.60	JN	Junction at 2 o'clock, 150mm dia
3	4.70	DEE	Attached deposits, encrustation from 3 o'clock to 5 o'clock, 20% cross-sectional area loss, start
4	5.96	JN	Junction at 10 o'clock, 150mm dia
5	13.72	DEE	Attached deposits, encrustation from 3 o'clock to 5 o'clock, 20% cross-sectional area loss, finish
6	13.72	SA	Survey abandoned

PLR: Branch AX	Upstream Node: Branch A
Inspection Direction: Upstream	Downstream Node: MH7
Inspected Length: 8.94 m	Dia/Height: 300 mm
Total Length: 8.94 m	Material: Concrete

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	1.34	DEE	Attached deposits, encrustation from 5 o'clock to 7 o'clock, 20% cross-sectional area loss, start
3	1.63	CUD	Loss of vision, silt, start
4	5.85	WL	Water level, 20% of the vertical dimension
5	5.85	MCBR	Pipe material changes to brick at this point
6	5.85	CUD	Loss of vision, silt, finish
7	7.05	DEE	Attached deposits, encrustation from 3 o'clock to 7 o'clock, 30% cross-sectional area loss, change
8	8.84	CUD	Loss of vision, silt, start
9	8.94	DEE	Attached deposits, encrustation from 3 o'clock to 7 o'clock, 30% cross-sectional area loss, finish
10	8.94	CUD	Loss of vision, silt, finish
11	8.94	SA	Survey abandoned

PLR: Branch CX	Upstream Node: Branch C
Inspection Direction: Upstream	Downstream Node: MH7
Inspected Length: 0.09 m	Dia/Height: 100 mm
Total Length: 0.09 m	Material: Polyvinyl chloride

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.09	DER	Settled deposits, coarse, 90% cross-sectional area loss
3	0.09	SA	Survey abandoned

PLR: MH7X	Upstream Node: MH7
Inspection Direction: Downstream	Downstream Node: Downstream
Inspected Length: 31.74 m	Dia/Height: 400 mm
Total Length: 31.74 m	Material: Concrete

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.96	DEEJ	Attached deposits, encrustation at joint from 2 o'clock to 7 o'clock, 20% cross-sectional area loss, start
3	2.59	CUW	Loss of vision, camera under water, start



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No.	m+	Code	Observation
4	3.07	CUW	Loss of vision, camera under water, finish
5	4.13	DEEJ	Attached deposits, encrustation at joint from 2 o'clock to 7 o'clock, 20% cross-sectional area loss, finish
6	15.31	RTJ	Roots, tap at joint
7	15.51	JDL	Joint displaced, large
8	17.89	RTJ	Roots, tap at joint
9	17.89	JDL	Joint displaced, large
10	24.65	JDL	Joint displaced, large
11	25.28	JN	Junction at 1 o'clock, 150mm dia
12	26.32	JDL	Joint displaced, large
13	31.74	SA	Survey abandoned

PLR:	MH8X	Upstream Node:	MH8
Inspection Direction:	Downstream	Downstream Node:	Downstream
Inspected Length:	7.25 m	Dia/Height:	400 mm
Total Length:	7.25 m	Material:	Concrete

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.48	JDL	Joint displaced, large
3	0.48	DEEJ	Attached deposits, encrustation at joint from 5 o'clock to 8 o'clock, 25% cross-sectional area loss
4	0.48	RMJ	Roots, mass at joint, 20% cross-sectional area loss, start
5	1.63	JDL	Joint displaced, large
6	1.82	RTJ	Roots, tap at joint
7	4.41	RTJ	Roots, tap at joint
8	7.25	RMJ	Roots, mass at joint, 20% cross-sectional area loss, finish
9	7.25	MHF	Finish node, manhole, reference: Downstream

PLR:	UpstreamX	Upstream Node:	Upstream
Inspection Direction:	Upstream	Downstream Node:	MH8
Inspected Length:	18.10 m	Dia/Height:	400 mm
Total Length:	18.10 m	Material:	Concrete

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.28	DES	Settled deposits, fine, 20% cross-sectional area loss
3	0.67	JDM	Joint displaced, medium
4	7.25	JN	Junction at 9 o'clock, 150mm dia
5	11.03	JDM	Joint displaced, medium
6	12.32	JDM	Joint displaced, medium
7	18.10	SA	Survey abandoned

PLR:	Branch AX	Upstream Node:	Branch A
Inspection Direction:	Upstream	Downstream Node:	MH9
Inspected Length:	0.67 m	Dia/Height:	100 mm
Total Length:	0.67 m	Material:	Polyvinyl chloride

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension



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No.	m+	Code	Observation
2	0.09	DES	Settled deposits, fine, 15% cross-sectional area loss
3	0.19	LU	Line deviates up
4	0.67	GYF	Finish node, gully, reference: Branch A

PLR:	MH9X	Upstream Node:	MH9
Inspection Direction:	Downstream	Downstream Node:	Downstream
Inspected Length:	0.38 m	Dia/Height:	100 mm
Total Length:	0.38 m	Material:	Polyvinyl chloride

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	LD	Line deviates down
3	0.28	REM	General remark
4	0.28	MCVC	Pipe material changes to vitrified clay at this point
5	0.28	JDL	Joint displaced, large
6	0.38	SA	Survey abandoned

PLR:	UpstreamX	Upstream Node:	Upstream
Inspection Direction:	Upstream	Downstream Node:	MH9
Inspected Length:	3.55 m	Dia/Height:	100 mm
Total Length:	3.55 m	Material:	Polyvinyl chloride

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.67	LL	Line deviates left
3	0.96	JN	Junction at 3 o'clock, 100mm dia
4	1.63	LR	Line deviates right
5	2.78	LR	Line deviates right
6	3.55	GYF	Finish node, gully, reference: Upstream

PLR:	RWG27X	Upstream Node:	RWG27
Inspection Direction:	Downstream	Downstream Node:	Downstream
Inspected Length:	1.15 m	Dia/Height:	150 mm
Total Length:	1.15 m	Material:	Polyvinyl chloride

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.09	LD	Line deviates down
3	0.57	REM	General remark
4	1.15	MHF	Finish node, manhole, reference: Downstream

PLR:	RWG28X	Upstream Node:	RWG28
Inspection Direction:	Downstream	Downstream Node:	Downstream
Inspected Length:	1.72 m	Dia/Height:	100 mm
Total Length:	1.72 m	Material:	Polyvinyl chloride

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.48	LD	Line deviates down
3	1.44	MCVC	Pipe material changes to vitrified clay at this point



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No.	m+	Code	Observation
4	1.44	JDL	Joint displaced, large
5	1.72	MHF	Finish node, manhole, reference: Downstream

PLR:	RWG29X	Upstream Node:	RWG29
Inspection Direction:	Downstream	Downstream Node:	Downstream
Inspected Length:	1.34 m	Dia/Height:	100 mm
Total Length:	1.34 m	Material:	Polyvinyl chloride

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.09	LD	Line deviates down
3	1.34	MHF	Finish node, manhole, reference: Downstream

PLR:	RWG30X	Upstream Node:	RWG30
Inspection Direction:	Downstream	Downstream Node:	Downstream
Inspected Length:	1.34 m	Dia/Height:	100 mm
Total Length:	1.34 m	Material:	Polyvinyl chloride

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.19	LD	Line deviates down
3	1.05	MCVC	Pipe material changes to vitrified clay at this point
4	1.05	RFJ	Roots, fine at joint
5	1.34	MHF	Finish node, manhole, reference: Downstream

PLR:	RWG26X	Upstream Node:	RWG26
Inspection Direction:	Downstream	Downstream Node:	Downstream
Inspected Length:	1.72 m	Dia/Height:	100 mm
Total Length:	1.72 m	Material:	Polyvinyl chloride

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.09	LD	Line deviates down
3	1.72	MCVC	Pipe material changes to vitrified clay at this point
4	1.72	JDL	Joint displaced, large
5	1.72	OJL	Open joint, large
6	1.72	SA	Survey abandoned

PLR:	Branch AX	Upstream Node:	Branch A
Inspection Direction:	Upstream	Downstream Node:	MH1
Inspected Length:	0.01 m	Dia/Height:	150 mm
Total Length:	0.01 m	Material:	Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	SA	Survey abandoned

PLR:	Branch AX	Upstream Node:	Branch A
Inspection Direction:	Upstream	Downstream Node:	MH10
Inspected Length:	1.82 m	Dia/Height:	100 mm
Total Length:	1.82 m	Material:	Vitrified clay



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No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.38	JDM	Joint displaced, medium
3	0.57	LR	Line deviates right
4	0.76	BJ	Broken pipe at joint from 1 o'clock to 5 o'clock
5	1.15	LL	Line deviates left
6	1.15	DES	Settled deposits, fine, 20% cross-sectional area loss
7	1.82	JDM	Joint displaced, medium
8	1.82	DER	Settled deposits, coarse, 30% cross-sectional area loss, start
9	1.82	SA	Survey abandoned

PLR: Branch BX	Upstream Node: Branch B
Inspection Direction: Upstream	Downstream Node: MH10
Inspected Length: 0.67 m	Dia/Height: 100 mm
Total Length: 0.67 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.09	DEEJ	Attached deposits, encrustation at joint from 7 o'clock to 11 o'clock, 15% cross-sectional area loss
3	0.09	BJ	Broken pipe at joint from 9 o'clock to 4 o'clock
4	0.09	LR	Line deviates right
5	0.67	MHF	Finish node, manhole, reference: Branch B

PLR: Branch CX	Upstream Node: Branch C
Inspection Direction: Upstream	Downstream Node: MH10
Inspected Length: 2.11 m	Dia/Height: 100 mm
Total Length: 2.11 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.09	JDM	Joint displaced, medium
3	0.19	LR	Line deviates right
4	0.19	DEEJ	Attached deposits, encrustation at joint from 4 o'clock to 8 o'clock, 20% cross-sectional area loss
5	0.28	JDM	Joint displaced, medium
6	0.76	DEEJ	Attached deposits, encrustation at joint from 4 o'clock to 7 o'clock, 15% cross-sectional area loss
7	1.15	JDM	Joint displaced, medium
8	1.15	MCPVC	Pipe material changes to polyvinyl chloride at this point
9	1.72	LU	Line deviates up
10	2.11	MHF	Finish node, manhole, reference: Branch C

PLR: Branch DX	Upstream Node: Branch D
Inspection Direction: Upstream	Downstream Node: MH10
Inspected Length: 0.28 m	Dia/Height: 100 mm
Total Length: 0.28 m	Material: Polyvinyl chloride

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	LU	Line deviates up
3	0.19	JDM	Joint displaced, medium



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No.	m+	Code	Observation
4	0.19	MCPF	Pipe material changes to pitch fibre at this point
5	0.28	MHF	Finish node, manhole, reference: Branch D

PLR:	MH10X	Upstream Node:	MH10
Inspection Direction:	Downstream	Downstream Node:	Downstream
Inspected Length:	5.76 m	Dia/Height:	100 mm
Total Length:	5.76 m	Material:	Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.09	JN	Junction at 6 o'clock, 100mm dia
3	0.19	SC	Pipe size changes, new size(s), 150mm high
4	2.78	JDM	Joint displaced, medium
5	3.45	JDM	Joint displaced, medium
6	3.45	LL	Line deviates left
7	4.41	DEE	Attached deposits, encrustation from 5 o'clock to 7 o'clock, 20% cross-sectional area loss
8	5.76	MHF	Finish node, manhole, reference: Main line

PLR:	Branch AX	Upstream Node:	Branch A
Inspection Direction:	Upstream	Downstream Node:	MH11
Inspected Length:	0.01 m	Dia/Height:	100 mm
Total Length:	0.01 m	Material:	Polyvinyl chloride

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	MHF	Finish node, manhole, reference: Capped

PLR:	Branch BX	Upstream Node:	Branch B
Inspection Direction:	Upstream	Downstream Node:	MH11
Inspected Length:	18.75 m	Dia/Height:	100 mm
Total Length:	18.75 m	Material:	Polyvinyl chloride

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.48	LR	Line deviates right
3	8.64	JN	Junction at 3 o'clock, 100mm dia
4	9.99	JN	Junction at 3 o'clock, 100mm dia
5	18.75	DES	Settled deposits, fine, 45% cross-sectional area loss
6	18.75	MHF	Finish node, manhole, reference: Branch B

PLR:	MH11X	Upstream Node:	MH11
Inspection Direction:	Downstream	Downstream Node:	MH13
Inspected Length:	3.07 m	Dia/Height:	100 mm
Total Length:	3.07 m	Material:	Polyvinyl chloride

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.36	DES	Settled deposits, fine, 25% cross-sectional area loss, start
3	1.15	CUD	Loss of vision, silt, start
4	2.97	DES	Settled deposits, fine, 25% cross-sectional area loss, finish



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No.	m+	Code	Observation
5	2.97	CUD	Loss of vision, silt, finish
6	3.07	LD	Line deviates down
7	3.07	MHF	Finish node, manhole, reference: MH13

PLR:	MH12X	Upstream Node:	MH12
Inspection Direction:	Upstream	Downstream Node:	MH11
Inspected Length:	26.75 m	Dia/Height:	100 mm
Total Length:	26.75 m	Material:	Polyvinyl chloride

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.48	LR	Line deviates right
3	0.65	SR	Sealing ring intruding, not hanging from 10 o'clock to 12 o'clock
4	18.32	JN	Junction at 3 o'clock, 100mm dia
5	26.75	MHF	Finish node, manhole, reference: MH12

PLR:	UpstreamX	Upstream Node:	Upstream
Inspection Direction:	Upstream	Downstream Node:	MH12
Inspected Length:	2.78 m	Dia/Height:	100 mm
Total Length:	2.78 m	Material:	Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	2.68	LU	Line deviates up
3	2.78	MHF	Finish node, manhole, reference: Upstream

PLR:	Branch AX	Upstream Node:	Branch A
Inspection Direction:	Upstream	Downstream Node:	MH14
Inspected Length:	1.34 m	Dia/Height:	100 mm
Total Length:	1.34 m	Material:	Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.09	JDM	Joint displaced, medium
3	0.09	DEEJ	Attached deposits, encrustation at joint from 4 o'clock to 9 o'clock, 30% cross-sectional area loss
4	0.48	CC	Crack, circumferential from 8 o'clock to 3 o'clock
5	0.48	H	Hole in drain or sewer from 12 o'clock to 1 o'clock
6	0.96	FCJ	Fracture, circumferential at joint from 7 o'clock to 4 o'clock
7	1.15	BJ	Broken pipe at joint from 1 o'clock to 9 o'clock
8	1.24	OBI	Other obstacles, protruding through wall from 9 o'clock to 11 o'clock, 20% cross-sectional area loss
9	1.24	CC	Crack, circumferential from 12 o'clock to 3 o'clock
10	1.24	H	Hole in drain or sewer from 8 o'clock to 12 o'clock
11	1.34	MHF	Finish node, manhole, reference: Branch A

PLR:	Branch BX	Upstream Node:	Branch B
Inspection Direction:	Upstream	Downstream Node:	MH14
Inspected Length:	2.11 m	Dia/Height:	100 mm
Total Length:	2.11 m	Material:	Vitrified clay



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No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	1.24	BJ	Broken pipe at joint from 10 o'clock to 2 o'clock
3	1.24	FCJ	Fracture, circumferential at joint from 12 o'clock to 6 o'clock
4	1.72	FC	Fracture, circumferential from 2 o'clock to 6 o'clock
5	1.72	JDM	Joint displaced, medium
6	1.72	LU	Line deviates up
7	2.11	MHF	Finish node, manhole, reference: Branch B

PLR:	MH14X	Upstream Node:	MH14
Inspection Direction:	Downstream	Downstream Node:	MH13
Inspected Length:	0.76 m	Dia/Height:	100 mm
Total Length:	0.76 m	Material:	Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.09	JDL	Joint displaced, large
3	0.48	JDL	Joint displaced, large
4	0.76	MHF	Finish node, manhole, reference: MH13

PLR:	RWG31X	Upstream Node:	RWG31
Inspection Direction:	Downstream	Downstream Node:	Downstream
Inspected Length:	0.01 m	Dia/Height:	100 mm
Total Length:	0.01 m	Material:	Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	LD	Line deviates down
3	0.01	MHF	Finish node, manhole, reference: Downstream

PLR:	RWG32X	Upstream Node:	RWG32
Inspection Direction:	Downstream	Downstream Node:	Downstream
Inspected Length:	0.09 m	Dia/Height:	100 mm
Total Length:	0.09 m	Material:	Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.09	MHF	Finish node, manhole, reference: Downstream

PLR:	UpstreamX	Upstream Node:	Upstream
Inspection Direction:	Upstream	Downstream Node:	RWG31
Inspected Length:	1.53 m	Dia/Height:	100 mm
Total Length:	1.53 m	Material:	Polyvinyl chloride

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	1.06	LU	Line deviates up
3	1.53	MHF	Finish node, manhole, reference: Upstream



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PLR: UpstreamX	Upstream Node: Upstream
Inspection Direction: Upstream	Downstream Node: RWG32
Inspected Length: 0.38 m	Dia/Height: 100 mm
Total Length: 0.38 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	DES	Settled deposits, fine, 35% cross-sectional area loss, start
3	0.19	CCJ	Crack, circumferential at joint from 12 o'clock to 3 o'clock
4	0.38	DES	Settled deposits, fine, 35% cross-sectional area loss, finish
5	0.38	SA	Survey abandoned

PLR: RWG35X	Upstream Node: RWG35
Inspection Direction: Downstream	Downstream Node: Downstream
Inspected Length: 7.20 m	Dia/Height: 100 mm
Total Length: 7.20 m	Material: Polyvinyl chloride

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.19	LL	Line deviates left
3	7.20	DES	Settled deposits, fine, 20% cross-sectional area loss
4	7.20	MHF	Finish node, manhole, reference: Downstream

PLR: RWG34X	Upstream Node: RWG34
Inspection Direction: Upstream	Downstream Node: RWG35
Inspected Length: 6.33 m	Dia/Height: 100 mm
Total Length: 6.33 m	Material: Polyvinyl chloride

No.	m+	Code	Observation
1	0.01	WL	Water level, 20% of the vertical dimension
2	1.82	LR	Line deviates right
3	2.40	LR	Line deviates right
4	6.33	GYF	Finish node, gully, reference: RWG34

PLR: RWG36X	Upstream Node: RWG36
Inspection Direction: Downstream	Downstream Node: Downstream
Inspected Length: 0.48 m	Dia/Height: 100 mm
Total Length: 0.48 m	Material: Polyvinyl chloride

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.48	MHF	Finish node, manhole, reference: Downstream

PLR: RWG37X	Upstream Node: RWG37
Inspection Direction: Downstream	Downstream Node: Downstream
Inspected Length: 2.01 m	Dia/Height: 100 mm
Total Length: 2.01 m	Material: Polyvinyl chloride

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	2.01	MHF	Finish node, manhole, reference: Downstream



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PLR: MH17X	Upstream Node: MH17
Inspection Direction: Upstream	Downstream Node: MH16
Inspected Length:	Dia/Height: 100 mm
Total Length: 3.16 m	Material: Polyvinyl chloride

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	REM	General remark
3	0.01	OBZ	Other obstacles from 1 o'clock to 3 o'clock, 25% cross-sectional area loss, start
4	0.48	OBZ	Other obstacles from 4 o'clock to 6 o'clock, 25% cross-sectional area loss, change
5	1.72	JN	Junction at 3 o'clock, 100mm dia
6	3.16	DES	Settled deposits, fine, 30% cross-sectional area loss
7	3.16	OBZ	Other obstacles from 4 o'clock to 6 o'clock, 25% cross-sectional area loss, finish

PLR: Branch BX	Upstream Node: Branch B
Inspection Direction: Upstream	Downstream Node: MH16
Inspected Length: 3.74 m	Dia/Height: 100 mm
Total Length: 3.74 m	Material: Polyvinyl chloride

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	2.20	DES	Settled deposits, fine, 20% cross-sectional area loss
3	2.40	LL	Line deviates left
4	3.16	LR	Line deviates right
5	3.74	GYF	Finish node, gully, reference: Branch B

PLR: MH16X	Upstream Node: MH16
Inspection Direction: Downstream	Downstream Node: Downstream
Inspected Length: 0.57 m	Dia/Height: 100 mm
Total Length: 0.57 m	Material: Polyvinyl chloride

No.	m+	Code	Observation
1	0.01	WL	Water level, 30% of the vertical dimension
2	0.01	CUW	Loss of vision, camera under water, start
3	0.57	SA	Survey abandoned

PLR: Branch AX	Upstream Node: Branch A
Inspection Direction: Upstream	Downstream Node: MH17
Inspected Length: 5.28 m	Dia/Height: 100 mm
Total Length: 5.28 m	Material: Polyvinyl chloride

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	OBZ	Other obstacles from 3 o'clock to 5 o'clock, 25% cross-sectional area loss, start
3	0.28	OBZ	Other obstacles from 5 o'clock to 7 o'clock, 25% cross-sectional area loss, change
4	3.16	OBZ	Other obstacles from 6 o'clock to 8 o'clock, 25% cross-sectional area loss, change
5	4.60	OBZ	Other obstacles from 6 o'clock to 8 o'clock, 25% cross-sectional area loss, change
6	4.99	LL	Line deviates left
7	5.28	SA	Survey abandoned



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PLR: Branch AX	Upstream Node: Branch A
Inspection Direction: Upstream	Downstream Node: MH18
Inspected Length: 1.44 m	Dia/Height: 100 mm
Total Length: 1.44 m	Material: Polyvinyl chloride

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.09	REM	General remark
3	1.05	LU	Line deviates up
4	1.44	MHF	Finish node, manhole, reference: Branch A

PLR: Branch BX	Upstream Node: Branch B
Inspection Direction: Upstream	Downstream Node: MH18
Inspected Length: 0.09 m	Dia/Height: 100 mm
Total Length: 0.09 m	Material: Polyvinyl chloride

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	OBZJ	Other obstacles at joint from 8 o'clock to 11 o'clock, 20% cross-sectional area loss
3	0.09	SA	Survey abandoned

PLR: MH18X	Upstream Node: MH18
Inspection Direction: Downstream	Downstream Node: MH19
Inspected Length: 3.36 m	Dia/Height: 100 mm
Total Length: 3.36 m	Material: Polyvinyl chloride

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	1.05	JN	Junction at 3 o'clock, 100mm dia
3	2.78	JN	Junction at 2 o'clock, 100mm dia
4	2.97	LL	Line deviates left
5	2.97	MVCV	Pipe material changes to vitrified clay at this point
6	3.36	MHF	Finish node, manhole, reference: MH19

PLR: UpstreamX	Upstream Node: Upstream
Inspection Direction: Upstream	Downstream Node: MH18
Inspected Length: 0.28 m	Dia/Height: 100 mm
Total Length: 0.28 m	Material: Polyvinyl chloride

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.09	LL	Line deviates left
3	0.19	LU	Line deviates up
4	0.28	REF	Finish node, rodding eye, reference: Upstream

PLR: Branch AX	Upstream Node: Branch A
Inspection Direction: Upstream	Downstream Node: MH19
Inspected Length: 1.24 m	Dia/Height: 100 mm
Total Length: 1.24 m	Material: Polyvinyl chloride

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension



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No.	m+	Code	Observation
2	0.09	REM	General remark
3	0.67	REM	General remark
4	1.24	JN	Junction at 12 o'clock, 100mm dia
5	1.24	MHF	Finish node, manhole, reference: Branch A

PLR: MH19X	Upstream Node: MH19
Inspection Direction: Downstream	Downstream Node: Downstream
Inspected Length: 3.45 m	Dia/Height: 100 mm
Total Length: 3.45 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.57	JDM	Joint displaced, medium
3	3.45	MHF	Finish node, manhole, reference: Downstream

PLR: Branch AX	Upstream Node: Branch A
Inspection Direction: Upstream	Downstream Node: RWG53
Inspected Length: 0.01 m	Dia/Height: 100 mm
Total Length: 0.01 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	JDL	Joint displaced, large
3	0.01	RM	Roots, mass, 55% cross-sectional area loss
4	0.01	SA	Survey abandoned

PLR: RWG53X	Upstream Node: RWG53
Inspection Direction: Downstream	Downstream Node: Downstream
Inspected Length: 0.48 m	Dia/Height: 100 mm
Total Length: 0.48 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	LD	Line deviates down
3	0.09	WL	Water level, 50% of the vertical dimension
4	0.48	CUW	Loss of vision, camera under water
5	0.48	SA	Survey abandoned

PLR: RWG54X	Upstream Node: RWG54
Inspection Direction: Downstream	Downstream Node: Downstream
Inspected Length: 0.28 m	Dia/Height: 100 mm
Total Length: 0.28 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	RM	Roots, mass, 40% cross-sectional area loss, start
3	0.28	RM	Roots, mass, 80% cross-sectional area loss, change
4	0.28	RM	Roots, mass, 80% cross-sectional area loss, finish
5	0.28	SA	Survey abandoned



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PLR: UpstreamX	Upstream Node: Upstream
Inspection Direction: Upstream	Downstream Node: RWG54
Inspected Length: 1.63 m	Dia/Height: 100 mm
Total Length: 1.63 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 50% of the vertical dimension
2	0.09	JDL	Joint displaced, large
3	0.19	CUW	Loss of vision, camera under water, start
4	1.63	CUW	Loss of vision, camera under water, finish
5	1.63	SA	Survey abandoned

PLR: RWG41X	Upstream Node: RWG41
Inspection Direction: Downstream	Downstream Node: Downstream
Inspected Length: 0.09 m	Dia/Height: 80 mm
Total Length: 0.09 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	DEEJ	Attached deposits, encrustation at joint from 3 o'clock to 10 o'clock, 40% cross-sectional area loss
3	0.09	SA	Survey abandoned

PLR: UpstreamX	Upstream Node: Upstream
Inspection Direction: Upstream	Downstream Node: RWG41
Inspected Length: 0.28 m	Dia/Height: 100 mm
Total Length: 0.28 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.09	DES	Settled deposits, fine, 70% cross-sectional area loss
3	0.28	SA	Survey abandoned

PLR: RWG40X	Upstream Node: RWG40
Inspection Direction: Downstream	Downstream Node: Downstream
Inspected Length: 0.01 m	Dia/Height: 100 mm
Total Length: 0.01 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	DES	Settled deposits, fine, 85% cross-sectional area loss
3	0.01	SA	Survey abandoned

PLR: RWG42X	Upstream Node: RWG42
Inspection Direction: Downstream	Downstream Node: Downstream
Inspected Length: 4.22 m	Dia/Height: 100 mm
Total Length: 4.22 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.38	DES	Settled deposits, fine, 15% cross-sectional area loss
3	0.45	JDM	Joint displaced, medium
4	1.34	JDM	Joint displaced, medium



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No.	m+	Code	Observation
5	1.44	DEE	Attached deposits, encrustation from 2 o'clock to 10 o'clock, 20% cross-sectional area loss, start
6	1.72	WL	Water level, 30% of the vertical dimension
7	2.01	DEE	Attached deposits, encrustation from 2 o'clock to 10 o'clock, 35% cross-sectional area loss, change
8	2.49	DEE	Attached deposits, encrustation from 2 o'clock to 10 o'clock, 45% cross-sectional area loss, change
9	2.97	JDL	Joint displaced, large
10	4.00	DEE	Attached deposits, encrustation from 2 o'clock to 10 o'clock, 75% cross-sectional area loss, change
11	4.22	SA	Survey abandoned

PLR:	RWG49X	Upstream Node:	RWG49
Inspection Direction:	Downstream	Downstream Node:	Downstream
Inspected Length:	1.63 m	Dia/Height:	100 mm
Total Length:	1.63 m	Material:	Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.09	RM	Roots, mass, 50% cross-sectional area loss, start
3	0.09	WL	Water level, 40% of the vertical dimension
4	0.28	CUZ	Loss of vision, other, start
5	1.63	RM	Roots, mass, 50% cross-sectional area loss, finish
6	1.63	CUZ	Loss of vision, other, finish
7	1.63	SA	Survey abandoned

PLR:	RWG58X	Upstream Node:	RWG58
Inspection Direction:	Downstream	Downstream Node:	Downstream
Inspected Length:	2.01 m	Dia/Height:	100 mm
Total Length:	2.01 m	Material:	Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	DES	Settled deposits, fine, 25% cross-sectional area loss, start
3	0.09	JDL	Joint displaced, large
4	0.67	JDL	Joint displaced, large
5	1.05	DES	Settled deposits, fine, 60% cross-sectional area loss, change
6	1.15	JDL	Joint displaced, large
7	2.01	JDL	Joint displaced, large
8	2.01	DES	Settled deposits, fine, 75% cross-sectional area loss, change
9	2.01	SA	Survey abandoned

PLR:	Branch AX	Upstream Node:	Branch A
Inspection Direction:	Upstream	Downstream Node:	RWG56
Inspected Length:	0.67 m	Dia/Height:	100 mm
Total Length:	0.67 m	Material:	Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	JDL	Joint displaced, large
3	0.01	DES	Settled deposits, fine, 20% cross-sectional area loss, start
4	0.01	WL	Water level, 70% of the vertical dimension



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No.	m+	Code	Observation
5	0.09	CUW	Loss of vision, camera under water, start
6	0.67	DES	Settled deposits, fine, 20% cross-sectional area loss, finish
7	0.67	CUW	Loss of vision, camera under water, finish
8	0.67	SA	Survey abandoned

PLR:	RWG56X	Upstream Node:	RWG56
Inspection Direction:	Downstream	Downstream Node:	Downstream
Inspected Length:	6.62 m	Dia/Height:	100 mm
Total Length:	6.62 m	Material:	Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.19	DESJ	Settled deposits, fine at joint, 20% cross-sectional area loss
3	0.19	JDL	Joint displaced, large
4	0.86	DES	Settled deposits, fine, 60% cross-sectional area loss, start
5	2.30	DEEJ	Attached deposits, encrustation at joint from 12 o'clock to 12 o'clock, 35% cross-sectional area loss
6	2.30	DES	Settled deposits, fine, 50% cross-sectional area loss, finish
7	2.49	CUD	Loss of vision, silt, start
8	2.78	RFJ	Roots, fine at joint
9	3.26	CUW	Loss of vision, camera under water, start
10	4.32	CUD	Loss of vision, silt, finish
11	4.32	CUW	Loss of vision, camera under water, finish
12	4.60	RFJ	Roots, fine at joint
13	4.60	JDL	Joint displaced, large
14	4.80	WL	Water level, 25% of the vertical dimension
15	4.99	RFJ	Roots, fine at joint
16	5.37	WL	Water level, 55% of the vertical dimension
17	5.85	CUW	Loss of vision, camera under water, start
18	6.62	CUW	Loss of vision, camera under water, finish
19	6.62	SA	Survey abandoned

PLR:	RWG57X	Upstream Node:	RWG57
Inspection Direction:	Downstream	Downstream Node:	Downstream
Inspected Length:	1.05 m	Dia/Height:	100 mm
Total Length:	1.05 m	Material:	Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	DES	Settled deposits, fine, 25% cross-sectional area loss, start
3	0.48	JDL	Joint displaced, large
4	0.48	DES	Settled deposits, fine, 45% cross-sectional area loss, change
5	0.76	CUD	Loss of vision, silt, start
6	1.05	DES	Settled deposits, fine, 45% cross-sectional area loss, finish
7	1.05	CUD	Loss of vision, silt, finish
8	1.05	SA	Survey abandoned



Section Summary

Project Name Highgate Cemetery	Project Number	Project Date 06/03/2024
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PLR: RWG59X	Upstream Node: RWG59
Inspection Direction: Downstream	Downstream Node: Downstream
Inspected Length: 1.82 m	Dia/Height: 100 mm
Total Length: 1.82 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.09	JDL	Joint displaced, large
3	0.48	RFJ	Roots, fine at joint
4	1.15	RFJ	Roots, fine at joint
5	1.15	JDL	Joint displaced, large
6	1.24	REM	General remark
7	1.44	WL	Water level, 70% of the vertical dimension
8	1.53	WL	Water level, 100% of the vertical dimension
9	1.53	CUW	Loss of vision, camera under water
10	1.53	DES	Settled deposits, fine, 40% cross-sectional area loss
11	1.82	SA	Survey abandoned

PLR: RWG84X	Upstream Node: RWG84
Inspection Direction: Downstream	Downstream Node: Downstream
Inspected Length: 0.19 m	Dia/Height: 80 mm
Total Length: 0.19 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	DES	Settled deposits, fine, 75% cross-sectional area loss
3	0.01	CUD	Loss of vision, silt, start
4	0.19	SA	Survey abandoned

PLR: Branch BX	Upstream Node: Branch B
Inspection Direction: Upstream	Downstream Node: RWG56
Inspected Length: 0.19 m	Dia/Height: 100 mm
Total Length: 0.19 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	DES	Settled deposits, fine, 25% cross-sectional area loss, start
3	0.09	CUD	Loss of vision, silt, start
4	0.19	DES	Settled deposits, fine, 25% cross-sectional area loss, finish
5	0.19	CUD	Loss of vision, silt
6	0.19	SA	Survey abandoned

PLR: UpstreamX	Upstream Node: Upstream
Inspection Direction: Upstream	Downstream Node: RWG58
Inspected Length: 0.09 m	Dia/Height: 100 mm
Total Length: 0.09 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	DES	Settled deposits, fine, 60% cross-sectional area loss



Section Summary

Project Name Highgate Cemetery	Project Number	Project Date 06/03/2024
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No.	m+	Code	Observation
3	0.09	CUD	Loss of vision, silt
4	0.09	SA	Survey abandoned

PLR:	RWG59X	Upstream Node:	RWG59
Inspection Direction:	Downstream	Downstream Node:	Downstream
Inspected Length:	0.09 m	Dia/Height:	80 mm
Total Length:	0.09 m	Material:	Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.09	DES	Settled deposits, fine, 80% cross-sectional area loss
3	0.09	SA	Survey abandoned

PLR:	UpstreamX	Upstream Node:	Upstream
Inspection Direction:	Upstream	Downstream Node:	RWG59
Inspected Length:	2.01 m	Dia/Height:	100 mm
Total Length:	2.01 m	Material:	Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.38	JDL	Joint displaced, large
3	1.05	JDL	Joint displaced, large
4	1.05	LR	Line deviates right
5	1.34	RFJ	Roots, fine at joint
6	1.92	OJL	Open joint, large
7	1.92	JDL	Joint displaced, large
8	2.01	OBIJ	Other obstacles, protruding through wall at joint from 2 o'clock to 4 o'clock, 25% cross-sectional area loss
9	2.01	SA	Survey abandoned

PLR:	RWG73X	Upstream Node:	RWG73
Inspection Direction:	Downstream	Downstream Node:	Downstream
Inspected Length:	0.09 m	Dia/Height:	80 mm
Total Length:	0.09 m	Material:	Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.09	DES	Settled deposits, fine, 20% cross-sectional area loss
3	0.09	JDL	Joint displaced, large
4	0.09	SA	Survey abandoned

PLR:	RWG75X	Upstream Node:	RWG75
Inspection Direction:	Downstream	Downstream Node:	Downstream
Inspected Length:	0.28 m	Dia/Height:	80 mm
Total Length:	0.28 m	Material:	Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	B	Broken pipe from 10 o'clock to 4 o'clock
3	0.01	B	Broken pipe from 12 o'clock to 12 o'clock
4	0.28	MHF	Finish node, manhole, reference: Downstream



Section Summary

Project Name Highgate Cemetery	Project Number	Project Date 06/03/2024
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PLR: RWG83X	Upstream Node: RWG83
Inspection Direction: Downstream	Downstream Node: Downstream
Inspected Length: 0.19 m	Dia/Height: 80 mm
Total Length: 0.19 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	DES	Settled deposits, fine, 40% cross-sectional area loss, start
3	0.19	DES	Settled deposits, fine, 40% cross-sectional area loss, finish
4	0.19	SA	Survey abandoned

PLR: MH15X	Upstream Node: MH15
Inspection Direction: Downstream	Downstream Node: Downstream
Inspected Length: 1.82 m	Dia/Height: 100 mm
Total Length: 1.82 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	DES	Settled deposits, fine, 25% cross-sectional area loss
3	0.19	CUD	Loss of vision, silt, start
4	1.82	SA	Survey abandoned

PLR: UpstreamX	Upstream Node: Upstream
Inspection Direction: Upstream	Downstream Node: MH15
Inspected Length: 0.19 m	Dia/Height: 100 mm
Total Length: 0.19 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	DES	Settled deposits, fine, 20% cross-sectional area loss
3	0.09	CUD	Loss of vision, silt
4	0.19	SA	Survey abandoned

PLR: Branch AX	Upstream Node: Branch A
Inspection Direction: Upstream	Downstream Node: MH20
Inspected Length: 5.18 m	Dia/Height: 100 mm
Total Length: 5.18 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	B	Broken pipe from 8 o'clock to 3 o'clock
3	0.48	LR	Line deviates right
4	0.48	JDL	Joint displaced, large
5	1.15	H	Hole in drain or sewer from 10 o'clock to 2 o'clock
6	1.15	B	Broken pipe from 10 o'clock to 2 o'clock
7	1.92	JDM	Joint displaced, medium
8	2.68	JDL	Joint displaced, large
9	4.03	JDL	Joint displaced, large
10	4.51	JDL	Joint displaced, large
11	5.18	OJL	Open joint, large



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Project Name Highgate Cemetery	Project Number	Project Date 06/03/2024
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No.	m+	Code	Observation
12	5.18	JDL	Joint displaced, large
13	5.18	SA	Survey abandoned

PLR:	MH20X	Upstream Node:	MH20
Inspection Direction:	Downstream	Downstream Node:	Downstream
Inspected Length:	0.28 m	Dia/Height:	225 mm
Total Length:	0.28 m	Material:	Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.28	MHF	Finish node, manhole, reference: Downstream

PLR:	UpstreamX	Upstream Node:	Upstream
Inspection Direction:	Upstream	Downstream Node:	MH20
Inspected Length:	11.02 m	Dia/Height:	225 mm
Total Length:	11.02 m	Material:	Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.19	CC	Crack, circumferential from 1 o'clock to 6 o'clock
3	0.19	FCJ	Fracture, circumferential at joint from 12 o'clock to 12 o'clock
4	0.19	BJ	Broken pipe at joint from 12 o'clock to 12 o'clock
5	0.19	RFJ	Roots, fine at joint
6	2.11	CCJ	Crack, circumferential at joint from 8 o'clock to 3 o'clock
7	2.11	DEEJ	Attached deposits, encrustation at joint from 5 o'clock to 7 o'clock, 15% cross-sectional area loss
8	3.16	DEEJ	Attached deposits, encrustation at joint from 7 o'clock to 8 o'clock, 15% cross-sectional area loss
9	3.63	CLJ	Crack, longitudinal at joint at 3 o'clock
10	3.64	DEEJ	Attached deposits, encrustation at joint from 4 o'clock to 7 o'clock, 15% cross-sectional area loss
11	4.22	WL	Water level, 15% of the vertical dimension
12	4.22	DEEJ	Attached deposits, encrustation at joint from 4 o'clock to 8 o'clock, 30% cross-sectional area loss
13	4.41	WL	Water level, 15% of the vertical dimension
14	4.80	CCJ	Crack, circumferential at joint from 4 o'clock to 8 o'clock
15	6.44	DEEJ	Attached deposits, encrustation at joint from 4 o'clock to 6 o'clock, 15% cross-sectional area loss
16	7.53	JDM	Joint displaced, medium
17	8.13	WL	Water level, 20% of the vertical dimension
18	9.03	WL	Water level, 30% of the vertical dimension
19	9.62	JDM	Joint displaced, medium
20	9.92	CUD	Loss of vision, silt, start
21	11.02	SA	Survey abandoned

PLR:	Branch AX	Upstream Node:	Branch A
Inspection Direction:	Upstream	Downstream Node:	MH21
Inspected Length:	1.23 m	Dia/Height:	100 mm
Total Length:	1.23 m	Material:	Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	DES	Settled deposits, fine, 20% cross-sectional area loss, start



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Project Name Highgate Cemetery	Project Number	Project Date 06/03/2024
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No.	m+	Code	Observation
3	0.41	JDM	Joint displaced, medium
4	0.49	CUD	Loss of vision, silt, start
5	1.23	SA	Survey abandoned

PLR:	MH21X	Upstream Node:	MH21
Inspection Direction:	Downstream	Downstream Node:	Downstream
Inspected Length:	5.56 m	Dia/Height:	150 mm
Total Length:	5.56 m	Material:	Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	DES	Settled deposits, fine, 25% cross-sectional area loss, start
3	0.09	JDM	Joint displaced, medium
4	0.19	DES	Settled deposits, fine, 25% cross-sectional area loss, finish
5	0.19	JDM	Joint displaced, medium
6	0.48	DES	Settled deposits, fine, 25% cross-sectional area loss, start
7	1.92	JDM	Joint displaced, medium
8	2.40	JDL	Joint displaced, large
9	2.88	JDM	Joint displaced, medium
10	3.55	JDM	Joint displaced, medium
11	5.37	JDM	Joint displaced, medium
12	5.56	CUD	Loss of vision, silt, start
13	5.56	SA	Survey abandoned

PLR:	UpstreamX	Upstream Node:	Upstream
Inspection Direction:	Upstream	Downstream Node:	MH21
Inspected Length:	8.99 m	Dia/Height:	100 mm
Total Length:	8.99 m	Material:	Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	DES	Settled deposits, fine, 20% cross-sectional area loss, start
3	0.16	JDM	Joint displaced, medium
4	0.35	CUD	Loss of vision, silt, start
5	8.99	DES	Settled deposits, fine, 20% cross-sectional area loss, finish
6	8.99	CUD	Loss of vision, silt, finish
7	8.99	SA	Survey abandoned

PLR:	Branch AX	Upstream Node:	Branch A
Inspection Direction:	Upstream	Downstream Node:	MH22
Inspected Length:	0.19 m	Dia/Height:	100 mm
Total Length:	0.19 m	Material:	Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	CUD	Loss of vision, silt, start
3	0.19	CUD	Loss of vision, silt, finish
4	0.19	SA	Survey abandoned



Section Summary

Project Name Highgate Cemetery	Project Number	Project Date 06/03/2024
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PLR: MH22X	Upstream Node: MH22
Inspection Direction: Downstream	Downstream Node: Downstream
Inspected Length: 19.37 m	Dia/Height: 225 mm
Total Length: 19.37 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	FMJ	Fractures, multiple at joint from 12 o'clock to 12 o'clock
3	0.48	DES	Settled deposits, fine, 20% cross-sectional area loss, start
4	0.57	WL	Water level, 20% of the vertical dimension
5	1.63	LL	Line deviates left
6	10.35	WL	Water level, 20% of the vertical dimension
7	19.37	DES	Settled deposits, fine, 20% cross-sectional area loss, finish
8	19.37	SA	Survey abandoned

PLR: UpstreamX	Upstream Node: Upstream
Inspection Direction: Upstream	Downstream Node: MH22
Inspected Length: 4.99 m	Dia/Height: 225 mm
Total Length: 4.99 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.19	WL	Water level, 20% of the vertical dimension
3	0.57	CUW	Loss of vision, camera under water, start
4	2.11	DEE	Attached deposits, encrustation from 5 o'clock to 7 o'clock, 20% cross-sectional area loss, start
5	3.55	WL	Water level, 50% of the vertical dimension
6	4.99	FC	Fracture, circumferential from 7 o'clock to 9 o'clock
7	4.99	JDM	Joint displaced, medium
8	4.99	CUW	Loss of vision, camera under water, finish
9	4.99	DEE	Attached deposits, encrustation from 5 o'clock to 7 o'clock, 20% cross-sectional area loss, finish
10	4.99	SA	Survey abandoned

PLR: Branch AX	Upstream Node: Branch A
Inspection Direction: Upstream	Downstream Node: MH23
Inspected Length: 1.05 m	Dia/Height: 100 mm
Total Length: 1.05 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.48	DES	Settled deposits, fine, 30% cross-sectional area loss, start
3	1.05	DES	Settled deposits, fine, 30% cross-sectional area loss, finish
4	1.05	GYF	Finish node, gully, reference: Branch A

PLR: Branch BX	Upstream Node: Branch B
Inspection Direction: Upstream	Downstream Node: MH23
Inspected Length: 0.76 m	Dia/Height: 100 mm
Total Length: 0.76 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension



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Project Name Highgate Cemetery	Project Number	Project Date 06/03/2024
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No.	m+	Code	Observation
2	0.76	GYF	Finish node, gully, reference: Branch B

PLR:	MH23X	Upstream Node:	MH23
Inspection Direction:	Downstream	Downstream Node:	Downstream
Inspected Length:	2.11 m	Dia/Height:	100 mm
Total Length:	2.11 m	Material:	Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	DES	Settled deposits, fine, 25% cross-sectional area loss, start
3	0.19	SC	Pipe size changes, new size(s), 150mm high
4	1.05	DB	Displaced bricks, single brick false from 5 o'clock to 7 o'clock, start
5	2.11	DES	Settled deposits, fine, 25% cross-sectional area loss, finish
6	2.11	DB	Displaced bricks, single brick False from 5 o'clock to 7 o'clock, finish
7	2.11	MHF	Finish node, manhole, reference: Downstream

PLR:	Branch AX	Upstream Node:	Branch A
Inspection Direction:	Upstream	Downstream Node:	MH24
Inspected Length:	2.97 m	Dia/Height:	150 mm
Total Length:	2.97 m	Material:	Brick

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	DB	Displaced bricks, single brick false from 5 o'clock to 8 o'clock, start
3	2.11	DES	Settled deposits, fine, 15% cross-sectional area loss
4	2.97	DB	Displaced bricks, single brick False from 5 o'clock to 8 o'clock, finish
5	2.97	MHF	Finish node, manhole, reference: Branch A

PLR:	Branch BX	Upstream Node:	Branch B
Inspection Direction:	Upstream	Downstream Node:	MH24
Inspected Length:	0.01 m	Dia/Height:	150 mm
Total Length:	0.01 m	Material:	Brick

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	GYF	Finish node, gully, reference: Branch B

PLR:	Branch CX	Upstream Node:	Branch C
Inspection Direction:	Upstream	Downstream Node:	MH24
Inspected Length:	1.63 m	Dia/Height:	150 mm
Total Length:	1.63 m	Material:	Brick

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.19	DB	Displaced bricks, single brick false from 7 o'clock to 8 o'clock
3	0.19	DES	Settled deposits, fine, 15% cross-sectional area loss, start
4	1.63	DES	Settled deposits, fine, 15% cross-sectional area loss, finish
5	1.63	MHF	Finish node, manhole, reference: Branch C



Section Summary

Project Name Highgate Cemetery	Project Number	Project Date 06/03/2024
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PLR: RWG90X	Upstream Node: RWG90
Inspection Direction: Downstream	Downstream Node: Downstream
Inspected Length: 14.66 m	Dia/Height: 100 mm
Total Length: 14.66 m	Material: Polyvinyl chloride

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	DES	Settled deposits, fine, 15% cross-sectional area loss, start
3	3.16	REM	General remark
4	12.97	REM	General remark
5	14.66	DES	Settled deposits, fine, 15% cross-sectional area loss, finish
6	14.66	MHF	Finish node, manhole, reference: Downstream

PLR: RWG91X	Upstream Node: RWG91
Inspection Direction: Downstream	Downstream Node: Downstream
Inspected Length: 0.09 m	Dia/Height: 100 mm
Total Length: 0.09 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	LD	Line deviates down
3	0.09	MHF	Finish node, manhole, reference: Downstream

PLR: RWG92X	Upstream Node: RWG92
Inspection Direction: Downstream	Downstream Node: Downstream
Inspected Length: 0.76 m	Dia/Height: 100 mm
Total Length: 0.76 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.09	LD	Line deviates down
3	0.67	JDL	Joint displaced, large
4	0.76	MHF	Finish node, manhole, reference: Downstream

PLR: RWG89X	Upstream Node: RWG89
Inspection Direction: Downstream	Downstream Node: Downstream
Inspected Length: 0.19 m	Dia/Height: 100 mm
Total Length: 0.19 m	Material: Vitrified clay

No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.09	LD	Line deviates down
3	0.09	JDL	Joint displaced, large
4	0.09	BJ	Broken pipe at joint from 10 o'clock to 3 o'clock
5	0.19	MHF	Finish node, manhole, reference: Downstream

PLR: Branch AX	Upstream Node: Branch A
Inspection Direction: Upstream	Downstream Node: MH21
Inspected Length: 0.75 m	Dia/Height: 100 mm
Total Length: 0.75 m	Material: Polyvinyl chloride



Section Summary

Project Name Highgate Cemetery	Project Number	Project Date 06/03/2024
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No.	m+	Code	Observation
1	0.00	WL	Water level, 0% of the vertical dimension
2	0.01	DES	Settled deposits, fine, 15% cross-sectional area loss
3	0.75	GYF	Finish node, gully, reference: Branch A



Completed section inspection



Item No. 1	Insp. No. 1	Date 06/03/24	Time 14:23	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR BRANCH AX
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Upstream	Upstream Node:	BRANCH A
Road:	Swains Lane	Inspected Length:	8.54 m	Upstream Pipe Depth:	
Location:		Total Length:	8.54 m	Downstream Node:	MH2
Surface Type:		Joint Length:		Downstream Pipe Depth:	0.520 m
Use:	Surface water	Pipe Shape:	Circular	Dia/Height:	100 mm
Type of Pipe:		Material:	Polyvinyl chloride	Lining Type:	No Lining
Flow Control:		Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:					

Comments:
Recommendations: Recommend HPWJ/Investigate possible bellies

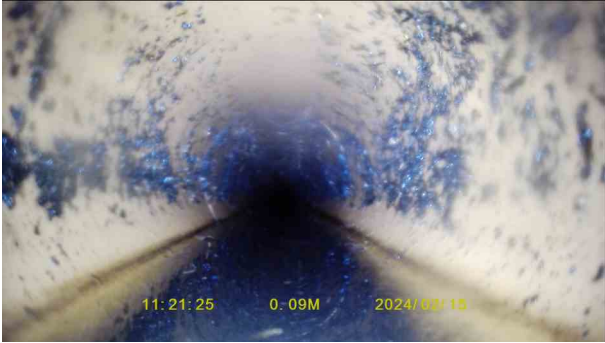
Scale:	1:74	Position [m]	Code	Observation	MPEG	Photo	Grade
		0.00	WL	Water level, 25% of the vertical dimension	00:00:09		
		0.19	S01	DES Settled deposits, fine, 20% cross-sectional area loss, start	00:00:18		
		1.15	S02	CUW Loss of vision, camera under water, start	00:00:29		
		2.68	F01	DES Settled deposits, fine, 20% cross-sectional area loss, finish	00:00:41		4
		3.55	WL	Water level, 15% of the vertical dimension	00:00:45		
		3.55	S03	DES Settled deposits, fine, 20% cross-sectional area loss, start	00:00:47		
		3.93	S04	CUD Loss of vision, silt, start	00:00:49		
		5.37	F02	CUW Loss of vision, camera under water, finish	00:01:03		
		5.37	F03	DES Settled deposits, fine, 20% cross-sectional area loss, finish	00:01:03		4
		5.37	F04	CUD Loss of vision, silt, finish	00:01:03		
		8.54	GYF	Finish node, gully, reference: Branch A: RWG3	00:01:27		

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	10.0	2.9	25.0	5.0

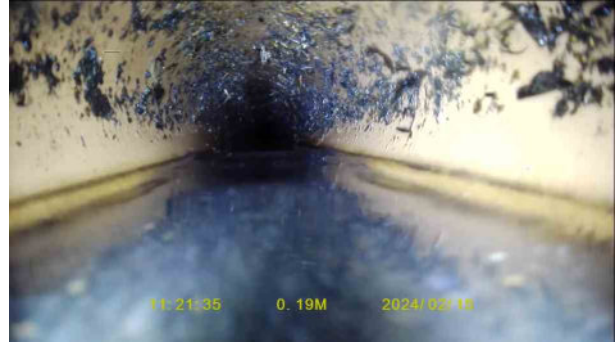


Section Pictures - 06/03/2024 - Branch AX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
1	Upstream	BRANCH AX		



ad7fa88b-5804-47e4-81b7-6510e43d0aae.jpg, 00:00:09, 0.00 m
 Water level, 25% of the vertical dimension



0a57784d-e58e-4407-8287-cf7a23f7a03b.jpg, 00:00:18, 0.19 m
 Settled deposits, fine, 20% cross-sectional area loss, start



45444d20-de98-474d-8e16-df8a5b80f346.jpg, 00:00:29, 1.15 m
 Loss of vision, camera under water, start



ed78403e-130b-4de6-bf97-45cb9d68f741.jpg, 00:00:45, 3.55 m
 Water level, 15% of the vertical dimension



ea51794f-0e49-406f-a021-baaee9d72fa0.jpg, 00:00:47, 3.55 m
 Settled deposits, fine, 20% cross-sectional area loss, start



bb43ae0d-a9b1-4c82-bcf2-6b3e421abd2d.jpg, 00:00:49, 3.93 m
 Loss of vision, silt, start



Section Pictures - 06/03/2024 - Branch AX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
1	Upstream	BRANCH AX		



aff5abb1-d8bc-42d0-b147-c52168b645ee.jpg, 00:01:27, 8.54
m
Finish node, gully, reference: Branch A, RWG3



Completed section inspection



Item No. 2	Insp. No. 1	Date 06/03/24	Time 14:27	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR MH2X
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Downstream	Upstream Node:	MH2
Road:	Swains Lane	Inspected Length:	4.99 m	Upstream Pipe Depth:	0.520 m
Location:		Total Length:	4.99 m	Downstream Node:	DOWNSTREAM
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular	Dia/Height:	100 mm
Type of Pipe:		Material:	Polyvinyl chloride	Lining Type:	No Lining
Flow Control:		Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:					

Comments:
Recommendations: Recommend HPWJ/Investigate possible bellies

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade		
		0.00	WL	Water level, 0% of the vertical dimension	00:00:33				
		0.01	S01	Settled deposits, fine, 20% cross-sectional area loss, start	00:00:11				
		3.07	WL	Water level, 20% of the vertical dimension	00:00:39				
		4.99	F01	Settled deposits, fine, 20% cross-sectional area loss, finish	00:00:59		4		
		4.99	GYF	Finish node, gully, reference: Downstream	00:00:59				
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	5.0	25.0	5.0



Section Pictures - 06/03/2024 - MH2X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
2	Downstream	MH2X		



4ebcb5db-0fa7-472b-9e97-0df6afe2e321.jpg, 00:00:11, 0.01 m
Settled deposits, fine, 20% cross-sectional area loss, start



ea009a75-6651-483a-85b7-7ff205005d5b.jpg, 00:00:39, 3.07 m
Water level, 20% of the vertical dimension



f5072ad4-f0dd-40f9-840f-8552685888fc.jpg, 00:00:59, 4.99 m
Finish node, gully, reference: Downstream



Completed section inspection



Item No. 3	Insp. No. 1	Date 06/03/24	Time 14:29	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR RWG8X
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Downstream	Upstream Node:	RWG8
Road:	Swains Lane	Inspected Length:	1.92 m	Upstream Pipe Depth:	
Location:		Total Length:	1.92 m	Downstream Node:	DOWNSTREAM
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular	Dia/Height:	150 mm
Type of Pipe:		Material:	Vitrified clay	Lining Type:	No Lining
Flow Control:		Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:					

Comments:
Recommendations: Recommend HPWJ/LSR

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
		0.00	WL	Water level, 0% of the vertical dimension	00:00:49		
		0.19	REM	General remark: Deviation in line	00:00:18		
		0.48	S01 DES	Settled deposits, fine, 25% cross-sectional area loss, start	00:00:22		
		0.67	JDL	Joint displaced, large	00:00:23		1 / 4
		0.96	JDM	Joint displaced, medium	00:00:28		1 / 3
		1.53	DEEJ	Attached deposits, encrustation at joint from 3 o'clock to 4 o'clock, 15% cross-sectional area loss	00:00:34		3
		1.92	F01 DES	Settled deposits, fine, 25% cross-sectional area loss, finish	00:00:49		4
		1.92	MHF	Finish node, manhole, reference: Downstream: Blind Junction	00:00:49		

STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
2	2.0	1.6	3.0	1.0	4	10.0	9.9	19.0	5.0



Section Pictures - 06/03/2024 - RWG8X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
3	Downstream	RWG8X		



20c95e4e-6e9c-4eee-b96d-9d31401beb11.jpg, 00:00:22, 0.48 m
 Settled deposits, fine, 25% cross-sectional area loss, start



afcd81bb-6da3-4ec1-b5c4-cda859859e55.jpg, 00:00:23, 0.67 m
 Joint displaced, large



7b959420-30df-46fe-8b1c-021aa6c8dd4c.jpg, 00:00:28, 0.96 m
 Joint displaced, medium



f1f2450b-46f3-4ac6-8aa2-235a2dc617f9.jpg, 00:00:34, 1.53 m
 Attached deposits, encrustation at joint from 3 o'clock to 4 o'clock, 15% cross-sectional area loss



ac05824a-b069-45db-b62a-b17bfb3209f.jpg, 00:00:49, 1.92 m
 Finish node, manhole, reference: Downstream, Blind Junction



Abandoned section inspection



Item No. 4	Insp. No. 1	Date 06/03/24	Time 14:31	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR RWG9X
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Downstream	Upstream Node:	RWG9
Road:	Swains Lane	Inspected Length:	0.19 m	Upstream Pipe Depth:	
Location:		Total Length:	0.19 m	Downstream Node:	DOWNSTREAM
Surface Type:		Joint Length:		Downstream Pipe Depth:	

Use:	Surface water	Pipe Shape:	Circular
Type of Pipe:		Dia/Height:	100 mm
Flow Control:		Material:	Vitrified clay
Year Constructed:	Not Specified	Lining Type:	No Lining
Inspection Purpose:		Lining Material:	No Lining

Comments:
Recommendations: Recommend HPWJ/Resurvey

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
		0.00	WL	Water level, 0% of the vertical dimension	00:01:07		
		0.01	DES	Settled deposits, fine, 30% cross-sectional area loss	00:00:19		4
		0.09	CUD	Loss of vision, silt	00:00:43		
		0.19	SA	Survey abandoned: Camera unable to pass debris	00:00:58		

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	26.3	5.0	5.0



Section Pictures - 06/03/2024 - RWG9X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
4	Downstream	RWG9X		



7ba87c9a-6b39-42d4-ae10-ec3c1a5078b6.jpg, 00:00:19, 0.01
m
Settled deposits, fine, 30% cross-sectional area loss



1f425de4-3b74-4eae-be3e-b771f1efb006.jpg, 00:00:43, 0.09
m
Loss of vision, silt



b3d517be-2c67-4ef1-a381-ccbc479d77ed.jpg, 00:00:58, 0.19
m
Survey abandoned, Camera unable to pass debris



Abandoned section inspection



Item No. 5	Insp. No. 1	Date 06/03/24	Time 14:33	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR RWG10X
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Downstream	Upstream Node:	RWG10
Road:	Swains Lane	Inspected Length:	0.57 m	Upstream Pipe Depth:	
Location:		Total Length:	0.57 m	Downstream Node:	DOWNSTREAM
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular	Dia/Height:	100 mm
Type of Pipe:		Material:	Vitrified clay	Lining Type:	No Lining
Flow Control:		Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:					

Comments:
Recommendations: Recommend HPWJ/Resurvey

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
		0.00	WL	Water level, 0% of the vertical dimension	00:01:07		
		0.28	DES	Settled deposits, fine, 75% cross-sectional area loss	00:00:22		4
		0.28	CUD	Loss of vision, silt	00:00:33		
		0.57	SA	Survey abandoned: Loss of vision due to debris	00:00:42		

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	8.0	14.0	8.0	5.0



Section Pictures - 06/03/2024 - RWG10X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
5	Downstream	RWG10X		



0b747a0b-873a-46c3-b4fc-464612ea82f8.jpg, 00:00:22, 0.28 m
Settled deposits, fine, 75% cross-sectional area loss



9f2c88fc-44d8-418c-afb1-97731eff954.jpg, 00:00:33, 0.28 m
Loss of vision, silt



7e3b7bc0-30c8-42e8-9e52-30451373290b.jpg, 00:00:42, 0.57 m
Survey abandoned, Loss of vision due to debris



Abandoned section inspection



Item No. 6	Insp. No. 1	Date 06/03/24	Time 14:34	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR RWG11X
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Downstream	Upstream Node:	RWG11
Road:	Swains Lane	Inspected Length:	2.30 m	Upstream Pipe Depth:	
Location:		Total Length:	2.30 m	Downstream Node:	DOWNSTREAM
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular	Dia/Height:	150 mm
Type of Pipe:		Material:	Vitrified clay	Lining Type:	No Lining
Flow Control:		Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:					

Comments:
Recommendations: Recommend HPWJ/Resurvey

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m RWG11							
		0.00	WL	Water level, 0% of the vertical dimension	00:00:00		
		0.38	REM	General remark: Deviation in line	00:00:20		
		0.67	S01 DES	Settled deposits, fine, 25% cross-sectional area loss, start	00:00:28		
		0.96	S02 CUD	Loss of vision, silt, start	00:00:31		
		2.30	F01 DES	Settled deposits, fine, 25% cross-sectional area loss, finish	00:01:07		4
		2.30	F02 CUD	Loss of vision, silt, finish	00:01:07		
		2.30	SA	Survey abandoned: Loss of vision due to debris	00:01:07		

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	4.3	10.0	4.0



Section Pictures - 06/03/2024 - RWG11X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
6	Downstream	RWG11X		



ccde89bb-de1f-44ef-bd98-8822d6aa2ec0.jpg, 00:00:28, 0.67
m
Settled deposits, fine, 25% cross-sectional area loss, start



39d35123-f694-4239-b562-f053c1a3d53b.jpg, 00:00:31, 0.96
m
Loss of vision, silt, start



e73f62a2-d0e7-4ab9-9641-e84caed7f7be2.jpg, 00:01:07, 2.30
m
Survey abandoned, Loss of vision due to debris



Completed section inspection



Item No. 7	Insp. No. 1	Date 06/03/24	Time 14:36	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR RWG1X
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Downstream	Upstream Node:	RWG1
Road:	Swains Lane	Inspected Length:	0.86 m	Upstream Pipe Depth:	0.450 m
Location:		Total Length:	0.86 m	Downstream Node:	MH1
Surface Type:		Joint Length:		Downstream Pipe Depth:	

Use:	Surface water	Pipe Shape:	Circular
Type of Pipe:		Dia/Height:	100 mm
Flow Control:		Material:	Vitrified clay
Year Constructed:	Not Specified	Lining Type:	No Lining
Inspection Purpose:		Lining Material:	No Lining

Comments:
Recommendations: Recommend HPWJ

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
<p>Depth: 0.45 m RWG1</p> <p>0.00 WL Water level, 0% of the vertical dimension 00:00:01</p> <p>0.09 S01 DES Settled deposits, fine, 20% cross-sectional area loss, start 00:00:10</p> <p>0.67 LD Line deviates down 00:00:18</p> <p>0.86 F01 DES Settled deposits, fine, 20% cross-sectional area loss, finish 00:00:26 4</p> <p>0.86 MHF Finish node, manhole, reference: MH1 00:00:26</p> <p>MH1</p> <p>Depth: m</p>							

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	5.8	5.0	5.0



Section Pictures - 06/03/2024 - RWG1X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
7	Downstream	RWG1X		



7d9258fa-146f-4850-be93-c5bf5397d76f.jpg, 00:00:10, 0.09 m
Settled deposits, fine, 20% cross-sectional area loss, start



95952fe2-18de-4e60-bd62-6f9d13e47e82.jpg, 00:00:26, 0.86 m
Finish node, manhole, reference: MH1



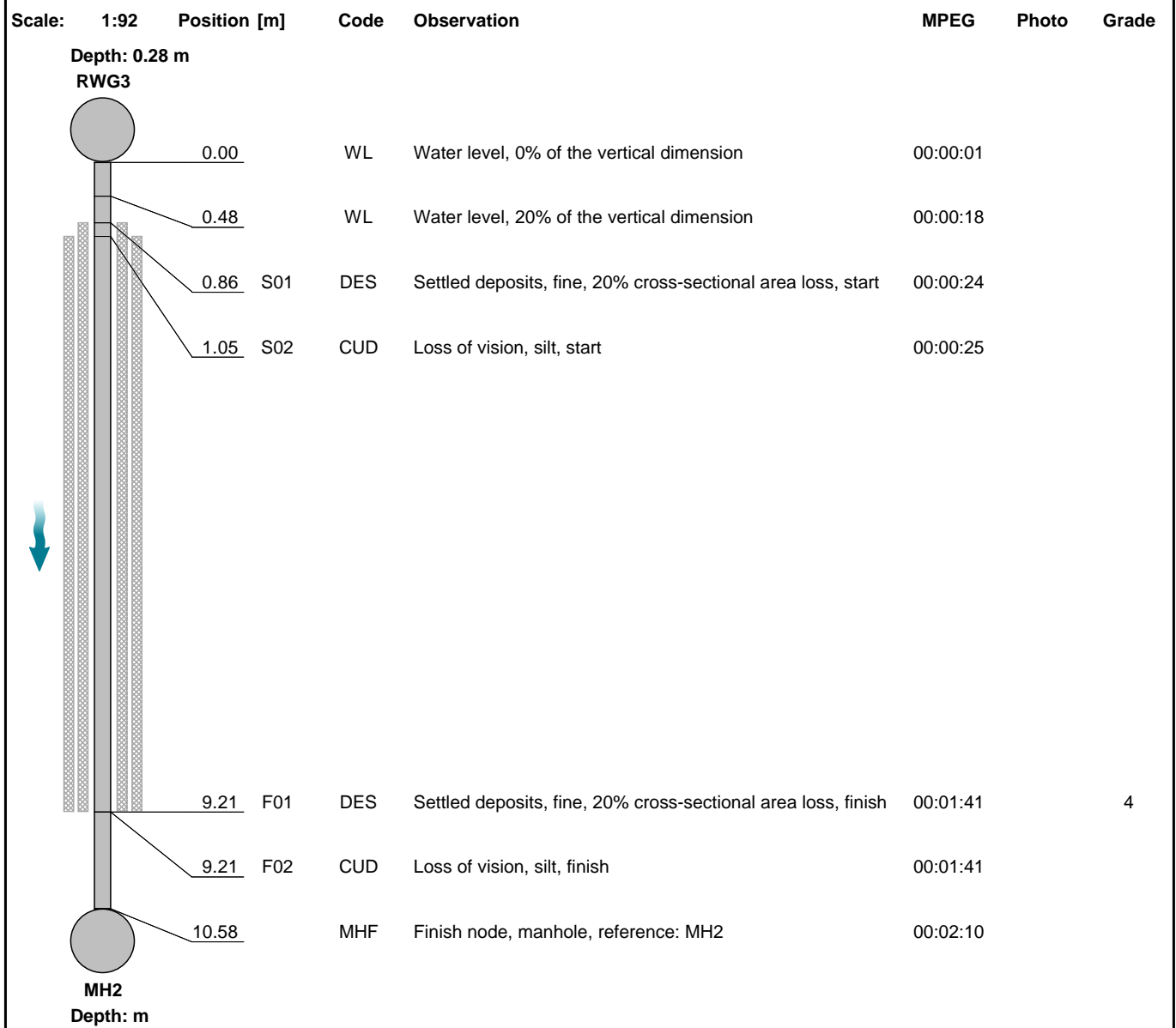
Completed section inspection



Item No. 8	Insp. No. 1	Date 06/03/24	Time 14:40	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR RWG3X
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Downstream	Upstream Node:	RWG3
Road:	Swains Lane	Inspected Length:	10.58 m	Upstream Pipe Depth:	0.280 m
Location:		Total Length:	10.58 m	Downstream Node:	MH2
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular	Dia/Height:	100 mm
Type of Pipe:		Material:	Polyvinyl chloride	Lining Type:	No Lining
Flow Control:		Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:					

Comments:
Recommendations: Recommend HPWJ/Investigate possible bellies



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	4.3	45.0	4.0



Section Pictures - 06/03/2024 - RWG3X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
8	Downstream	RWG3X		



Off1c506-107e-4789-9f66-13d1d4ee3e82.jpg, 00:00:18, 0.48 m
Water level, 20% of the vertical dimension



9139b476-f04d-427c-b933-e8b7d94a1fc7.jpg, 00:00:24, 0.86 m
Settled deposits, fine, 20% cross-sectional area loss, start



90cd2590-729c-4f09-8783-98986f2134e9.jpg, 00:00:25, 1.05 m
Loss of vision, silt, start



5c05eb00-58fe-4748-9f19-052cce5bfb2e.jpg, 00:02:10, 10.58 m
Finish node, manhole, reference: MH2



Abandoned section inspection



Item No. 9	Insp. No. 1	Date 06/03/24	Time 14:41	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR RWG6X
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Downstream	Upstream Node:	RWG6
Road:	Swains Lane	Inspected Length:	0.96 m	Upstream Pipe Depth:	
Location:		Total Length:	0.96 m	Downstream Node:	DOWNSTREAM
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular	Dia/Height:	150 mm
Type of Pipe:		Material:	Vitrified clay	Lining Type:	No Lining
Flow Control:		Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:					

Comments:
Recommendations: Recommend HPWJ/Further investigation required

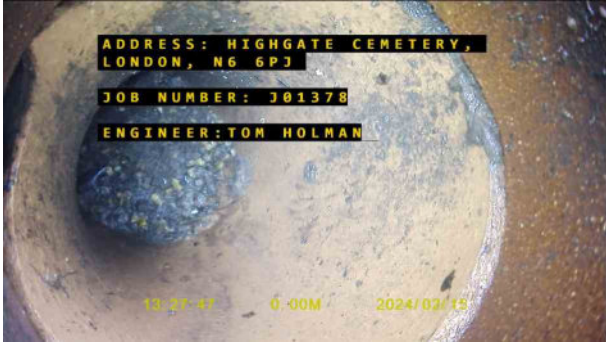
Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
		0.00	WL	Water level, 0% of the vertical dimension	00:00:00		
		0.01	BJ	Broken pipe at joint from 8 o'clock to 11 o'clock	00:00:01		4
		0.09	REM	General remark: Deviation in line	00:00:15		
		0.19	S01 DES	Settled deposits, fine, 50% cross-sectional area loss, start	00:00:20		
		0.29	JDM	Joint displaced, medium	00:00:21		1 / 3
		0.96	F01 DES	Settled deposits, fine, 50% cross-sectional area loss, finish	00:00:41		4
		0.96	SA	Survey abandoned: Camera unable to push further	00:00:41		

STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
2	80.0	84.4	81.0	4.0	2	10.0	10.4	10.0	5.0



Section Pictures - 06/03/2024 - RWG6X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
9	Downstream	RWG6X		



397b982f-a76e-453f-83c7-2e7946c7e29a.jpg, 00:00:01, 0.01 m
 Broken pipe at joint from 8 o'clock to 11 o'clock



1c44eae0-37b6-4678-8aee-5aa4b04f4063.jpg, 00:00:20, 0.19 m
 Settled deposits, fine, 50% cross-sectional area loss, start



506d008a-a4ca-4920-9f11-68f6314c14b6.jpg, 00:00:21, 0.29 m
 Joint displaced, medium



f0cc2763-8207-4804-a4ab-e36e04128bba.jpg, 00:00:41, 0.96 m
 Survey abandoned, Camera unable to push further



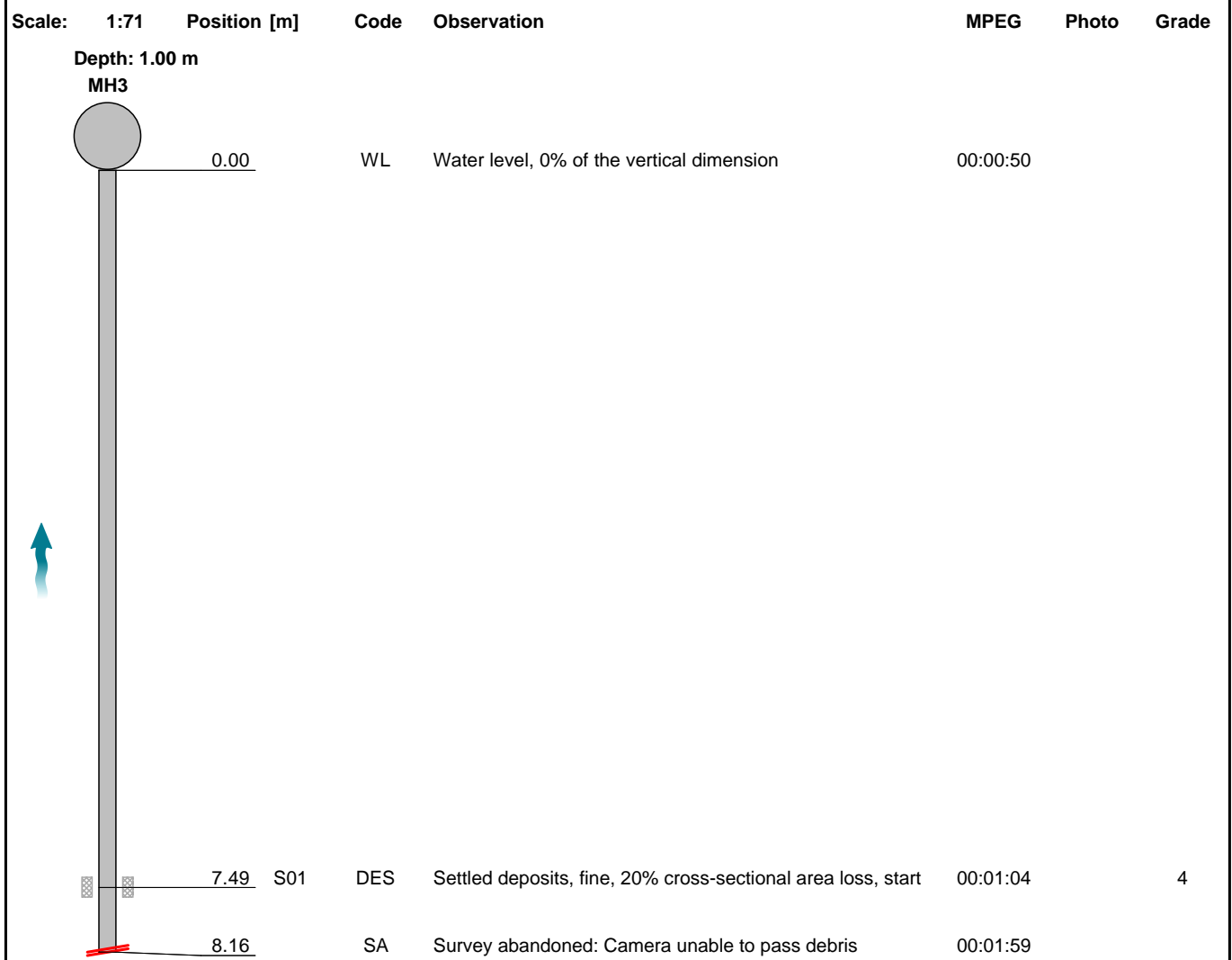
Abandoned section inspection



Item No. 10	Insp. No. 1	Date 06/03/24	Time 14:43	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR BRANCH AX
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Upstream	Upstream Node:	BRANCH A
Road:	Swains Lane	Inspected Length:	8.16 m	Upstream Pipe Depth:	
Location:		Total Length:	8.16 m	Downstream Node:	MH3
Surface Type:		Joint Length:		Downstream Pipe Depth:	1.000 m
Use:	Surface water	Pipe Shape:	Circular	Dia/Height:	300 mm
Type of Pipe:		Material:	Vitrified clay	Lining Type:	No Lining
Flow Control:		Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:					

Comments:
Recommendations: Recommend HPWJ/Resurvey



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	0.0	0.6	5.0	2.0



Section Pictures - 06/03/2024 - Branch AX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
10	Upstream	BRANCH AX		



3d1525e2-dcc1-4be8-9519-7761d187d133.jpg, 00:01:04, 7.49 m
Settled deposits, fine, 20% cross-sectional area loss, start



a0e355cb-3626-4767-b647-5fba654fe9cd.jpg, 00:01:59, 8.16 m
Survey abandoned, Camera unable to pass debris



Abandoned section inspection



Item No. 11	Insp. No. 1	Date 06/03/24	Time 14:45	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR MH3X
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Downstream	Upstream Node:	MH3
Road:	Swains Lane	Inspected Length:	0.65 m	Upstream Pipe Depth:	1.000 m
Location:		Total Length:	0.65 m	Downstream Node:	DOWNSTREAM
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular	Dia/Height:	350 mm
Type of Pipe:		Material:	Brick	Lining Type:	No Lining
Flow Control:		Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:					

Comments:
Recommendations: Further investigation required

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	WL		Water level, 0% of the vertical dimension	00:00:00		
	0.01	S01	H	Hole in drain or sewer from 10 o'clock to 2 o'clock, start	00:00:09		
	0.57	WL		Water level, 20% of the vertical dimension	00:00:45		
	0.65	F01	H	Hole in drain or sewer from 10 o'clock to 2 o'clock, finish	00:01:00		
	0.65	SA		Survey abandoned: Camera unable to push further	00:00:54		

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 - 06/03/2024 - MH3X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
11	Downstream	MH3X		



fe6ca740-4cf9-47e2-9136-ef9903ed7e3e.jpg, 00:00:09, 0.01
 m
 Hole in drain or sewer from 10 o'clock to 2 o'clock, start



3827b171-7a46-40b8-8e18-5303ecc50257.jpg, 00:00:45, 0.57
 m
 Water level, 20% of the vertical dimension



884ca6ea-9957-4bcf-a443-224242517dbb.jpg, 00:00:54, 0.65
 m
 Survey abandoned, Camera unable to push further



Abandoned section inspection



Item No. 12	Insp. No. 1	Date 06/03/24	Time 14:47	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR UPSTREAMX
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Upstream	Upstream Node:	UPSTREAM
Road:	Swains Lane	Inspected Length:	1.41 m	Upstream Pipe Depth:	
Location:		Total Length:	1.41 m	Downstream Node:	MH3
Surface Type:		Joint Length:		Downstream Pipe Depth:	1.000 m

Use:	Surface water	Pipe Shape:	Circular
Type of Pipe:		Dia/Height:	350 mm
Flow Control:		Material:	Brick
Year Constructed:	Not Specified	Lining Type:	No Lining
Inspection Purpose:		Lining Material:	No Lining

Comments:
Recommendations: Further investigation required

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
		0.00	WL	Water level, 0% of the vertical dimension	00:00:23		
		0.41	S01	B Broken pipe from 8 o'clock to 9 o'clock, start	00:00:14		
		0.57	S02	DES Settled deposits, fine, 20% cross-sectional area loss, start	00:00:18		
		1.41	F01	B Broken pipe from 8 o'clock to 9 o'clock, finish	00:00:58		
		1.41	F02	DES Settled deposits, fine, 20% cross-sectional area loss, finish	00:01:01		4
		1.41	DER	DER Settled deposits, coarse, 30% cross-sectional area loss	00:01:04		4
		1.41	SA	SA Survey abandoned: Camera unable to push further	00:01:04		

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	5.0	7.1	10.0	5.0



Section Pictures - 06/03/2024 - UpstreamX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
12	Upstream	UPSTREAMX		



4ef6300e-2f9d-4306-95ef-b6cd0994d147.jpg, 00:00:14, 0.41
 m
 Broken pipe from 8 o'clock to 9 o'clock, start



548a9801-4d4e-4b9c-8021-e88d28ad1322.jpg, 00:00:18, 0.57
 m
 Settled deposits, fine, 20% cross-sectional area loss, start



0231ad88-5588-41bb-b1e0-f9aa52024e8c.jpg, 00:01:04, 1.41
 m
 Settled deposits, coarse, 30% cross-sectional area loss



e442f1d8-f945-4c7a-9174-83f5532d3724.jpg, 00:01:04, 1.41
 m
 Survey abandoned, Camera unable to push further



Abandoned section inspection



Item No. 13	Insp. No. 1	Date 06/03/24	Time 14:50	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR RWG12X
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Downstream	Upstream Node:	RWG12
Road:	Swains Lane	Inspected Length:	3.07 m	Upstream Pipe Depth:	
Location:		Total Length:	3.07 m	Downstream Node:	DOWNSTREAM
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular	Dia/Height:	150 mm
Type of Pipe:		Material:	Vitrified clay	Lining Type:	No Lining
Flow Control:		Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:					

Comments:
Recommendations: Further investigation required

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m RWG12							
		0.00	WL	Water level, 0% of the vertical dimension	00:00:22		
		0.96	REM	General remark: Deviation in line	00:00:17		
		1.05	MCBR	Pipe material changes to brick at this point	00:00:18		
		1.15	S01	DER	Settled deposits, coarse, 20% cross-sectional area loss, start	00:00:19	
		1.24	S02	DB	Displaced bricks, single brick false from 10 o'clock to 3 o'clock, start	00:00:32	
		2.69	C01	DER	Settled deposits, coarse, 40% cross-sectional area loss, change	00:00:44	
		2.69	C02	DB	Displaced bricks, single brick False from 9 o'clock to 3 o'clock, change	00:00:44	
		3.07	S03	CUD	Loss of vision, silt, start	00:01:11	
		3.07	F01	DER	Settled deposits, coarse, 40% cross-sectional area loss, finish	00:01:28	4
		3.07	F02	DB	Displaced bricks, single brick False from 9 o'clock to 3 o'clock, finish	00:01:28	
		3.07	F03	CUD	Loss of vision, silt, finish	00:01:28	
		3.07	SA	Survey abandoned: Camera unable to pass debris	00:01:29		

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	3.3	10.0	4.0



Section Pictures - 06/03/2024 - RWG12X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
13	Downstream	RWG12X		



84b0b716-2f8d-4276-9b3f-552035c7ef7e.jpg, 00:00:19, 1.15 m
 Settled deposits, coarse, 20% cross-sectional area loss, start



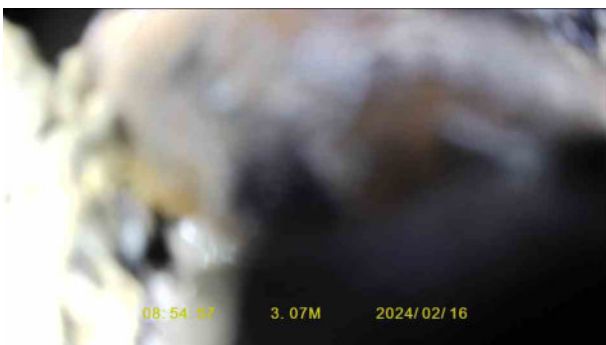
6dfa7ba2-8ce3-4a62-89f8-06e017bbc96c.jpg, 00:00:32, 1.24 m
 Displaced bricks, single brick false from 10 o'clock to 3 o'clock,



e31a2e52-a6f1-4f0a-b689-c60b44c4b2d1.jpg, 00:00:44, 2.69 m
 Settled deposits, coarse, 40% cross-sectional area loss,



7935c141-1592-43c0-a41b-1905a285488e.jpg, 00:00:44, 2.69 m
 Displaced bricks, single brick False from 9 o'clock to 3 o'clock,



e9102b8b-30c3-494a-b751-db1916b8d585.jpg, 00:01:11, 3.07 m
 Loss of vision, silt, start



4968c8fc-aa45-4da5-a1a5-ef71bcf6ede3.jpg, 00:01:29, 3.07 m
 Survey abandoned, Camera unable to pass debris



Abandoned section inspection



Item No. 14	Insp. No. 1	Date 06/03/24	Time 14:51	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR RWG13X
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Downstream	Upstream Node:	RWG13
Road:	Swains Lane	Inspected Length:	0.19 m	Upstream Pipe Depth:	0.900 m
Location:		Total Length:	0.19 m	Downstream Node:	DOWNSTREAM
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular	Dia/Height:	100 mm
Type of Pipe:		Material:	Vitrified clay	Lining Type:	No Lining
Flow Control:		Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:					

Comments:
Recommendations: Recommend HPWJ/Resurvey

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: 0.90 m RWG13 							
		0.00	WL	Water level, 0% of the vertical dimension	00:00:22		
		0.01	S01	DES Settled deposits, fine, 60% cross-sectional area loss, start	00:00:10		
		0.19	F01	DES Settled deposits, fine, 60% cross-sectional area loss, finish	00:00:02		4
		0.19	F02	CUD Loss of vision, silt, finish	00:00:05		
		0.19	S02	CUD Loss of vision, silt, start	00:00:17		
		0.19	SA	Survey abandoned: Camera unable to pass debris	00:00:41		

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	8.0	42.1	8.0	5.0



Section Pictures - 06/03/2024 - RWG13X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
14	Downstream	RWG13X		



ba401d94-9d63-4eab-954e-07c8f4bf1f0e.jpg, 00:00:10, 0.01
m
Settled deposits, fine, 60% cross-sectional area loss, start



d8e7e00b-3377-4f8a-87de-c07b6ee4c321.jpg, 00:00:17, 0.19
m
Loss of vision, silt, start



73afe08c-7a2a-4d40-8ce3-037b55db0272.jpg, 00:00:41, 0.19
m
Survey abandoned, Camera unable to pass debris



Abandoned section inspection



Item No. 15	Insp. No. 1	Date 06/03/24	Time 14:52	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR RWG14X
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Downstream	Upstream Node:	RWG14
Road:	Swains Lane	Inspected Length:	0.67 m	Upstream Pipe Depth:	0.900 m
Location:		Total Length:	0.67 m	Downstream Node:	DOWNSTREAM
Surface Type:		Joint Length:		Downstream Pipe Depth:	

Use:	Surface water	Pipe Shape:	Circular
Type of Pipe:		Dia/Height:	100 mm
Flow Control:		Material:	Vitrified clay
Year Constructed:	Not Specified	Lining Type:	No Lining
Inspection Purpose:		Lining Material:	No Lining

Comments:
Recommendations: Recommend HPWJ/LSR/Possible excavation

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: 0.90 m RWG14 							
		0.00	WL	Water level, 0% of the vertical dimension	00:00:01		
		0.19	JDM	Joint displaced, medium	00:00:20		1 / 3
		0.28	DES	Settled deposits, fine, 50% cross-sectional area loss	00:00:26		4
		0.67	SA	Survey abandoned: Loss of vision due to debris	00:00:43		

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	1.5	1.0	1.0	2	8.0	14.9	10.0	5.0

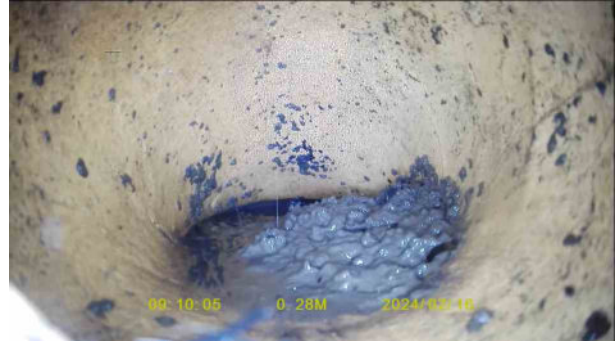


Section Pictures - 06/03/2024 - RWG14X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
15	Downstream	RWG14X		



8f0bf5e6-2d78-4aa6-8b3c-8a2c8bccca296.jpg, 00:00:20, 0.19 m
Joint displaced, medium



1e9cdfba-3271-4d31-a2cf-48931d3b215d.jpg, 00:00:26, 0.28 m
Settled deposits, fine, 50% cross-sectional area loss



cf300823-77a8-4ef8-b55a-cd2ccd0def01.jpg, 00:00:43, 0.67 m
Survey abandoned, Loss of vision due to debris



Abandoned section inspection



Item No. 16	Insp. No. 1	Date 06/03/24	Time 14:55	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR RWG17X
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Downstream	Upstream Node:	RWG17
Road:	Swains Lane	Inspected Length:	0.01 m	Upstream Pipe Depth:	0.800 m
Location:		Total Length:	0.01 m	Downstream Node:	DOWNSTREAM
Surface Type:		Joint Length:		Downstream Pipe Depth:	

Use:	Surface water	Pipe Shape:	Circular
Type of Pipe:		Dia/Height:	100 mm
Flow Control:		Material:	Vitrified clay
Year Constructed:	Not Specified	Lining Type:	No Lining
Inspection Purpose:		Lining Material:	No Lining

Comments:
Recommendations: Recommend HPWJ/Resurvey

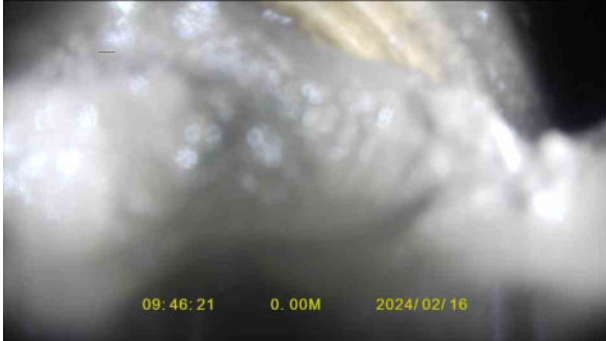
Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: 0.80 m RWG17 							
		0.00	WL	Water level, 0% of the vertical dimension	00:00:18		
		0.01	DES	Settled deposits, fine, 60% cross-sectional area loss	00:00:20		4
		0.01	CUD	Loss of vision, silt	00:00:37		
		0.01	SA	Survey abandoned: Camera unable to pass debris	00:00:40		

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	8.0	800.0	8.0	5.0



Section Pictures - 06/03/2024 - RWG17X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
16	Downstream	RWG17X		



18120b9a-0332-4f18-8b9b-99e803de7c2f.jpg, 00:00:20, 0.01 m
Settled deposits, fine, 60% cross-sectional area loss



a2453bc1-c0a7-47a5-841f-7e6745990ffc.jpg, 00:00:37, 0.01 m
Loss of vision, silt



44046d3b-b0a8-408e-ac10-c46087f17622.jpg, 00:00:40, 0.01 m
Survey abandoned, Camera unable to pass debris



Abandoned section inspection



Item No. 17	Insp. No. 1	Date 06/03/24	Time 14:57	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR RWG22X
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Downstream	Upstream Node:	RWG22
Road:	Swains Lane	Inspected Length:	0.19 m	Upstream Pipe Depth:	0.300 m
Location:		Total Length:	0.19 m	Downstream Node:	DOWNSTREAM
Surface Type:		Joint Length:		Downstream Pipe Depth:	

Use:	Surface water	Pipe Shape:	Circular
Type of Pipe:		Dia/Height:	100 mm
Flow Control:		Material:	Vitrified clay
Year Constructed:	Not Specified	Lining Type:	No Lining
Inspection Purpose:		Lining Material:	No Lining

Comments:
Recommendations: Further investigation required

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: 0.30 m RWG22 							
		0.00	WL	Water level, 0% of the vertical dimension	00:00:22		
		0.09	DES	Settled deposits, fine, 30% cross-sectional area loss	00:00:26		4
		0.19	SA	Survey abandoned: Camera unable to push further	00:00:48		

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	26.3	5.0	5.0

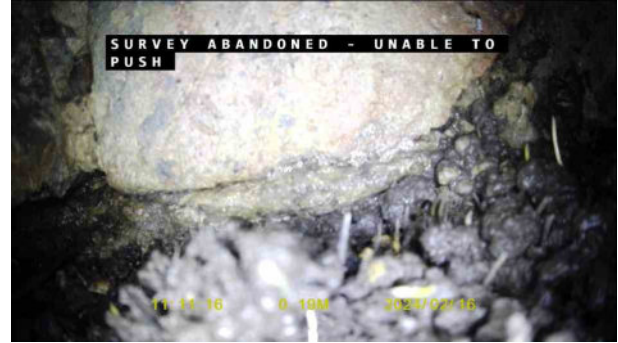


Section Pictures - 06/03/2024 - RWG22X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
17	Downstream	RWG22X		



f02a77e9-e2f1-4c09-8064-3d1f006b46ec.jpg, 00:00:26, 0.09
m
Settled deposits, fine, 30% cross-sectional area loss



b87e7292-ab06-4944-8366-2333d7a9a573.jpg, 00:00:48, 0.19
m
Survey abandoned, Camera unable to push further



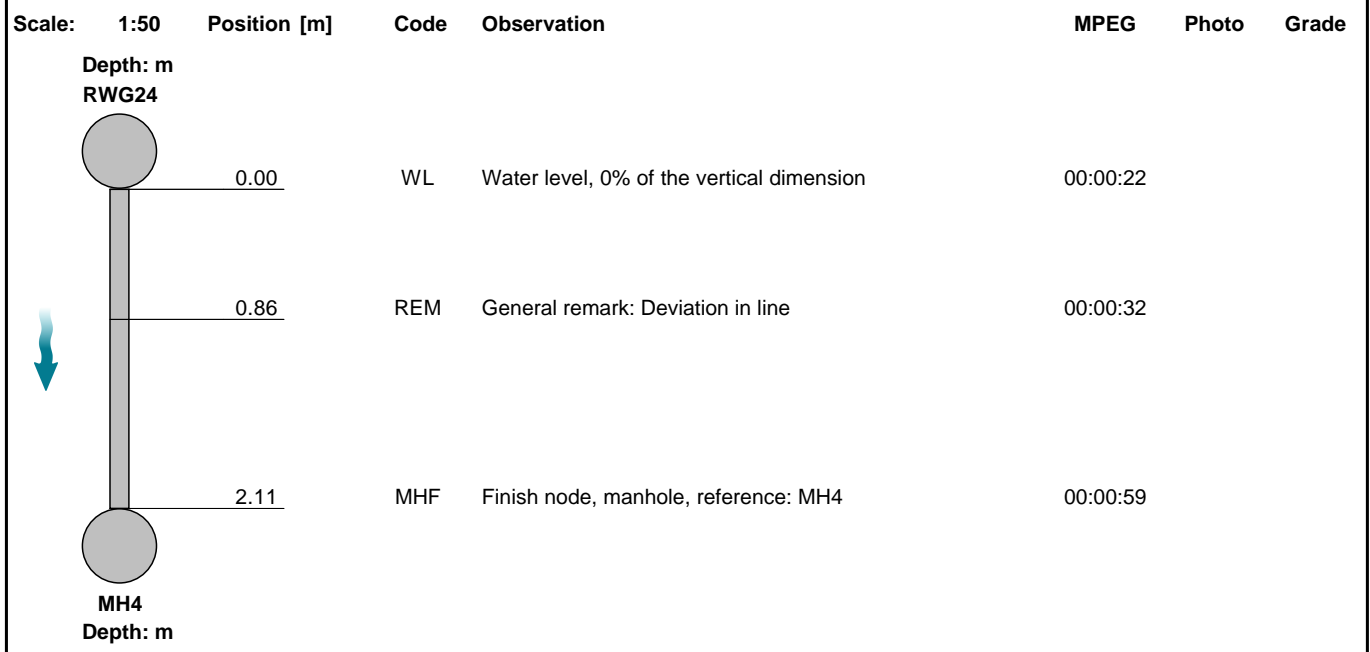
Completed section inspection



Item No. 18	Insp. No. 1	Date 06/03/24	Time 14:58	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR RWG24X
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Downstream	Upstream Node:	RWG24
Road:	Swains Lane	Inspected Length:	2.11 m	Upstream Pipe Depth:	
Location:		Total Length:	2.11 m	Downstream Node:	MH4
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular	Dia/Height:	100 mm
Type of Pipe:		Material:	Polyvinyl chloride	Lining Type:	No Lining
Flow Control:		Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:					

Comments:
Recommendations: None



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 - 06/03/2024 - RWG24X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
18	Downstream	RWG24X		



013e92c3-14a1-478c-99df-9637fabe5c0f.jpg, 00:00:59, 2.11 m
Finish node, manhole, reference: MH4



Completed section inspection



Item No. 19	Insp. No. 1	Date 06/03/24	Time 15:00	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR MH3X
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Downstream	Upstream Node:	MH3
Road:	Swains Lane	Inspected Length:	11.15 m	Upstream Pipe Depth:	
Location:		Total Length:	11.15 m	Downstream Node:	MH5 BRANCH B
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular	Material:	Concrete
Type of Pipe:		Dia/Height:	300 mm	Lining Type:	No Lining
Flow Control:		Material:	Concrete	Lining Material:	No Lining
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:		Lining Material:	No Lining		

Comments:
Recommendations: Recommend HPWJ

Scale:	1:97	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	WL		Water level, 0% of the vertical dimension	00:01:06		
	0.19	DES		Settled deposits, fine, 15% cross-sectional area loss	00:00:14		3
	0.59	JXB		Junction, blocked at 10 o'clock, 150mm dia	00:00:16		
	8.55	S01	DES	Settled deposits, fine, 20% cross-sectional area loss, start	00:01:00		
	11.15	F01	DES	Settled deposits, fine, 20% cross-sectional area loss, finish	00:01:19		4
	11.15		MHF	Finish node, manhole, reference: MH5 Branch B	00:01:19		

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	5.0	1.5	17.0	4.0



Section Pictures - 06/03/2024 - MH3X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
19	Downstream	MH3X		



a193fc46-fa23-471b-ba4e-6ba2f7f41d1e.jpg, 00:00:14, 0.19 m
Settled deposits, fine, 15% cross-sectional area loss



7d35edb2-a981-4e3e-9490-ae5dee594a66.jpg, 00:00:16, 0.59 m
Junction, blocked at 10 o'clock, 150mm dia



1cdcae68-ac06-4b81-8169-bb18b55dd423.jpg, 00:01:00, 8.55 m
Settled deposits, fine, 20% cross-sectional area loss, start



5594bd12-d4fa-41d8-b5f4-3b3c3d60c35d.jpg, 00:01:19, 11.15 m
Finish node, manhole, reference: MH5 Branch B



Completed section inspection



Item No. 20	Insp. No. 1	Date 06/03/24	Time 15:02	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR BRANCH AX
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Upstream	Upstream Node:	BRANCH A
Road:	Swains Lane	Inspected Length:	1.44 m	Upstream Pipe Depth:	
Location:		Total Length:	1.44 m	Downstream Node:	MH5
Surface Type:		Joint Length:		Downstream Pipe Depth:	1.070 m

Use:	Surface water	Pipe Shape:	Circular
Type of Pipe:		Dia/Height:	150 mm
Flow Control:		Material:	Polyvinyl chloride
Year Constructed:	Not Specified	Lining Type:	No Lining
Inspection Purpose:		Lining Material:	No Lining

Comments:
Recommendations: Recommend HPWJ

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
		0.00	WL	Water level, 0% of the vertical dimension	00:00:00		
		0.01	S01	DES Settled deposits, fine, 20% cross-sectional area loss, start	00:00:11		
		1.20	F01	DES Settled deposits, fine, 20% cross-sectional area loss, finish	00:00:31		4
		1.44	GYF	Finish node, gully, reference: RWG25	00:00:31		

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	6.9	10.0	5.0



Section Pictures - 06/03/2024 - Branch AX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
20	Upstream	BRANCH AX		



a2dc3797-f61a-4ba7-bb9a-1e1d3a959971.jpg, 00:00:11, 0.01
m
Settled deposits, fine, 20% cross-sectional area loss, start



e48578f7-9577-432d-8bea-c8f437d28e42.jpg, 00:00:31, 1.44
m
Finish node, gully, reference: RWG25



Abandoned section inspection



Item No. 21	Insp. No. 1	Date 06/03/24	Time 15:03	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR MH5X
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Downstream	Upstream Node:	MH5
Road:	Swains Lane	Inspected Length:	18.83 m	Upstream Pipe Depth:	1.070 m
Location:		Total Length:	18.83 m	Downstream Node:	DOWNSTREAM
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular	Material:	Concrete
Type of Pipe:		Dia/Height:	300 mm	Lining Type:	No Lining
Flow Control:		Material:	Concrete	Lining Material:	No Lining
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:		Lining Material:	No Lining		

Comments:
Recommendations: Recommend HPWJ/LSR/Resurvey

Scale:	1:164	Position [m]	Code	Observation	MPEG	Photo	Grade		
Depth: 1.07 m MH5 									
		0.00	WL	Water level, 0% of the vertical dimension	00:00:00				
		0.28	JDM	Joint displaced, medium	00:00:39		1 / 3		
		0.38	JDM	Joint displaced, medium	00:01:03		1 / 3		
		8.28	DEEJ	Attached deposits, encrustation at joint from 12 o'clock to 5 o'clock, 15% cross-sectional area loss	00:02:26		3		
		9.68	DEEJ	Attached deposits, encrustation at joint from 3 o'clock to 8 o'clock, 20% cross-sectional area loss	00:02:34		3		
		10.00	S01 DEE	Attached deposits, encrustation from 3 o'clock to 6 o'clock, 30% cross-sectional area loss, start	00:02:43				
		11.07	F01 DEE	Attached deposits, encrustation from 3 o'clock to 6 o'clock, 30% cross-sectional area loss, finish	00:03:25		4		
		13.16	DEEJ	Attached deposits, encrustation at joint from 3 o'clock to 8 o'clock, 25% cross-sectional area loss	00:03:44		4		
		14.65	S02 DEEJ	Attached deposits, encrustation at joint from 3 o'clock to 7 o'clock, 25% cross-sectional area loss, start	00:04:53				
		17.84	JN	Junction at 2 o'clock, 150mm dia	00:05:39				
		18.83	JN	Junction at 11 o'clock, 100mm dia	00:06:04				
		18.83	F02 DEEJ	Attached deposits, encrustation at joint from 3 o'clock to 7 o'clock, 25% cross-sectional area loss, finish	00:07:00		4		
		18.83	SA	Survey abandoned: Camera unable to push further	00:07:00				
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	0.1	2.0	1.0	7	7.0	2.5	48.0	4.0



Section Pictures - 06/03/2024 - MH5X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
21	Downstream	MH5X		



665fee94-ec28-4250-ae46-7b492f39d699.jpg, 00:00:39, 0.28 m
 Joint displaced, medium



577c0377-0c71-499c-9544-72f3aa53bc83.jpg, 00:01:03, 0.38 m
 Joint displaced, medium



40adf8c3-9121-4654-9bc3-ba28ca5e23bb.jpg, 00:02:26, 8.28 m
 Attached deposits, encrustation at joint from 12 o'clock to 5



ec57c0d9-4e86-40a5-b827-5f5e43b77d41.jpg, 00:02:34, 9.68 m
 Attached deposits, encrustation at joint from 3 o'clock to 8



4af5cef2-5db1-4131-aa13-0ebe6428aa7f.jpg, 00:02:43, 10.00 m
 Attached deposits, encrustation from 3 o'clock to 6 o'clock,



f43cf5ae-dbc6-46d7-a8e2-2457b71d9616.jpg, 00:03:44, 13.16 m
 Attached deposits, encrustation at joint from 3 o'clock to 8



Section Pictures - 06/03/2024 - MH5X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
21	Downstream	MH5X		



9b1df465-ba5a-4281-bed4-713f3c375753.jpg, 00:04:53, 14.65
m
Attached deposits, encrustation at joint from 3 o'clock to 7



3d116580-de87-4474-93a6-ef091f7398f8.jpg, 00:05:39, 17.84
m
Junction at 2 o'clock, 150mm dia



5fc6656d-dacf-4208-bb80-f0a318aef99e.jpg, 00:06:04, 18.83
m
Junction at 11 o'clock, 100mm dia



de9b4cd7-f0d2-432a-b32e-be68fcb09be2.jpg, 00:07:00, 18.83
m
Survey abandoned, Camera unable to push further



Abandoned section inspection



Item No. 22	Insp. No. 1	Date 06/03/24	Time 15:04	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR BRANCH CX
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Upstream	Upstream Node:	BRANCH C
Road:	Swains Lane	Inspected Length:	0.38 m	Upstream Pipe Depth:	
Location:		Total Length:	0.38 m	Downstream Node:	MH5
Surface Type:		Joint Length:		Downstream Pipe Depth:	1.070 m
Use:	Surface water	Pipe Shape:	Circular	Dia/Height:	150 mm
Type of Pipe:		Material:	Polyvinyl chloride	Lining Type:	No Lining
Flow Control:		Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:					

Comments:
Recommendations: Recommend HPWJ/Further investigation required

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	WL		Water level, 0% of the vertical dimension	00:00:02		
	0.01	S01	DES	Settled deposits, fine, 30% cross-sectional area loss, start	00:00:11		4
	0.38	SA		Survey abandoned: Further investigation required	00:00:26		

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	0.0	13.2	5.0	5.0



Section Pictures - 06/03/2024 - Branch CX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
22	Upstream	BRANCH CX		



bd3cb6e8-d3e1-4268-9cfc-2e375bdc3a05.jpg, 00:00:11, 0.01
m
Settled deposits, fine, 30% cross-sectional area loss, start



3c00efde-69b7-42c1-98b3-cf335e25a556.jpg, 00:00:26, 0.38
m
Survey abandoned, Further investigation required



Abandoned section inspection



Item No. 23	Insp. No. 1	Date 06/03/24	Time 15:05	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR BRANCH DX
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Upstream	Upstream Node:	BRANCH D
Road:	Swains Lane	Inspected Length:	0.48 m	Upstream Pipe Depth:	
Location:		Total Length:	0.48 m	Downstream Node:	MH5
Surface Type:		Joint Length:		Downstream Pipe Depth:	1.070 m
Use:	Surface water	Pipe Shape:	Circular	Year Constructed:	Not Specified
Type of Pipe:		Dia/Height:	300 mm	Inspection Purpose:	
Flow Control:		Material:	Concrete		
Lining Type:		Lining Material:	No Lining		

Comments:

Recommendations: Recommend HPWJ/Further investigation required

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
		0.00	WL	Water level, 0% of the vertical dimension	00:00:11		
		0.09	MCBR	Pipe material changes to brick at this point	00:00:14		
		0.09	S01 DER	Settled deposits, coarse, 40% cross-sectional area loss, start	00:00:14		4
		0.48	SA	Survey abandoned: Camera unable to pass debris	00:00:39		

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	0.0	10.4	5.0	5.0



Section Pictures - 06/03/2024 - Branch DX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
23	Upstream	BRANCH DX		



2749778e-e127-4fee-85d2-547ac9196837.jpg, 00:00:14, 0.09
m
Settled deposits, coarse, 40% cross-sectional area loss, start



d284b3ad-28d3-422e-9f95-585843d0d021.jpg, 00:00:39, 0.48
m
Survey abandoned, Camera unable to pass debris



Abandoned section inspection



Item No. 24	Insp. No. 1	Date 06/03/24	Time 15:07	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR BRANCH EX
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Upstream	Upstream Node:	BRANCH E
Road:	Swains Lane	Inspected Length:	3.16 m	Upstream Pipe Depth:	
Location:		Total Length:	3.16 m	Downstream Node:	MH5
Surface Type:		Joint Length:		Downstream Pipe Depth:	1.070 m
Use:	Surface water	Pipe Shape:	Circular	Dia/Height:	150 mm
Type of Pipe:		Material:	Polyvinyl chloride	Lining Type:	No Lining
Flow Control:		Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:					

Comments:
Recommendations: Recommend HPWJ/Resurvey

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
		0.00	WL	Water level, 0% of the vertical dimension	00:00:00		
		2.88	DER	Settled deposits, coarse, 70% cross-sectional area loss	00:00:36		4
		3.16	SA	Survey abandoned: Camera unable to pass debris	00:00:49		

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	8.0	2.5	8.0	4.0



Section Pictures - 06/03/2024 - Branch EX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
24	Upstream	BRANCH EX		



f4d6a904-8467-4fc3-94f9-5545c6fd43c2.jpg, 00:00:36, 2.88 m
Settled deposits, coarse, 70% cross-sectional area loss



0f000214-7f3c-4309-82b6-efbfe00a12e8.jpg, 00:00:49, 3.16 m
Survey abandoned, Camera unable to pass debris



Completed section inspection



Item No. 25	Insp. No. 1	Date 06/03/24	Time 15:08	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR MH6X
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Downstream	Upstream Node:	MH6
Road:	Swains Lane	Inspected Length:	22.99 m	Upstream Pipe Depth:	1.600 m
Location:		Total Length:	22.99 m	Downstream Node:	MH7
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular	Dia/Height:	300 mm
Type of Pipe:		Material:	Concrete	Lining Type:	No Lining
Flow Control:		Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:					

Comments:
Recommendations: Recommend Picote/2XLSR's/Investigate possible bellies

Scale: 1:174	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: 1.60 m MH6						
	0.01	WL	Water level, 15% of the vertical dimension	00:00:08		
	0.19	S01	CUW	Loss of vision, camera under water, start	00:00:09	
	0.38	JDM	Joint displaced, medium	00:00:13		1 / 3
	0.38	F01	CUW	Loss of vision, camera under water, finish	00:00:15	
	2.30	DEEJ	Attached deposits, encrustation at joint from 12 o'clock to 12 o'clock, 15% cross-sectional area loss	00:00:41		3
	3.74	S02	DEE	Attached deposits, encrustation from 6 o'clock to 9 o'clock, 30% cross-sectional area loss, start	00:00:48	
	3.74	CXI	Connection defective, connecting pipe is intruding at 10 o'clock, 150mm dia, intrusion: 20%	00:00:53		4
	5.11	DEEJ	Attached deposits, encrustation at joint from 12 o'clock to 12 o'clock, 10% cross-sectional area loss	00:01:17		3
	6.80	CXI	Connection defective, connecting pipe is intruding at 1 o'clock, 150mm dia, intrusion: 50%	00:01:37		4
	7.80	DEEJ	Attached deposits, encrustation at joint from 12 o'clock to 12 o'clock, 15% cross-sectional area loss	00:01:49		3
	9.09	DEEJ	Attached deposits, encrustation at joint from 4 o'clock to 8 o'clock, 20% cross-sectional area loss	00:02:00		3
	10.48	DEEJ	Attached deposits, encrustation at joint from 7 o'clock to 9 o'clock, 20% cross-sectional area loss	00:02:11		3
	12.87	DEEJ	Attached deposits, encrustation at joint from 4 o'clock to 11 o'clock, 30% cross-sectional area loss	00:02:31		4
	17.05	JDM	Joint displaced, medium	00:03:02		1 / 3



Completed section inspection



Item No. 25	Insp. No. 1	Date 06/03/24	Time 15:08	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR MH6X
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Scale:	1:174	Position [m]	Code	Observation	MPEG	Photo	Grade		
<p>MH7 Depth: m</p>	22.99	F02	DEE	Attached deposits, encrustation from 6 o'clock to 9 o'clock, 30% cross-sectional area loss, finish	00:03:59		4		
	22.99		MHF	Finish node, manhole, reference: MH7	00:03:59				
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	0.1	2.0	1.0	11	13.0	5.7	132.0	5.0



Section Pictures - 06/03/2024 - MH6X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
25	Downstream	MH6X		



8baffc00-1084-4684-bc2b-f94469492d02.jpg, 00:00:08, 0.01 m
 Water level, 15% of the vertical dimension



6f737828-695c-49ea-bcf3-75edf94a7ba3.jpg, 00:00:09, 0.19 m
 Loss of vision, camera under water, start



43fb38b2-6110-4a95-8fd4-09d5dc22a300.jpg, 00:00:13, 0.38 m
 Joint displaced, medium



32e4f982-7d43-48bf-8c44-f932a7952cc4.jpg, 00:00:41, 2.30 m
 Attached deposits, encrustation at joint from 12 o'clock to 12 o'clock, 15% cross-sectional area loss



e94015b3-ed59-45f9-848b-a6e22f99c630.jpg, 00:00:48, 3.74 m
 Attached deposits, encrustation from 6 o'clock to 9 o'clock,



25429ab5-a586-4df5-9b40-2c0439df4630.jpg, 00:00:53, 3.74 m
 Connection defective, connecting pipe is intruding at 10



Section Pictures - 06/03/2024 - MH6X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
25	Downstream	MH6X		



d7657106-80da-4f98-885f-3660c731a98d.jpg, 00:01:17, 5.11 m
 Attached deposits, encrustation at joint from 12 o'clock to 12



9fe7f2ed-5c9a-4730-af14-163464b89487.jpg, 00:01:37, 6.80 m
 Connection defective, connecting pipe is intruding at 1 o'clock,



2e4e80b4-c8d3-4cd7-ae00-f610bb2f986c.jpg, 00:01:49, 7.80 m
 Attached deposits, encrustation at joint from 12 o'clock to 12



25845356-a660-487b-aea4-d6a70e377d5f.jpg, 00:02:00, 9.09 m
 Attached deposits, encrustation at joint from 4 o'clock to 8



974cc9ab-f178-4677-8b46-f403d2fa1616.jpg, 00:02:11, 10.48 m
 Attached deposits, encrustation at joint from 7 o'clock to 9



22f12925-390f-4c45-80db-538b3d662c09.jpg, 00:02:31, 12.87 m
 Attached deposits, encrustation at joint from 4 o'clock to 11



Section Pictures - 06/03/2024 - MH6X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
25	Downstream	MH6X		



26c73e70-8711-4829-a15d-ed0453455f97.jpg, 00:03:02,
17.05 m
Joint displaced, medium



83ddbfa6-0a53-4e15-a2e9-e86f43170ad6.jpg, 00:03:59, 22.99
m
Finish node, manhole, reference: MH7



Abandoned section inspection



Item No. 26	Insp. No. 1	Date 06/03/24	Time 15:10	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR UPSTREAMX
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Upstream	Upstream Node:	UPSTREAM
Road:	Swains Lane	Inspected Length:	13.72 m	Upstream Pipe Depth:	
Location:		Total Length:	13.72 m	Downstream Node:	MH6
Surface Type:		Joint Length:		Downstream Pipe Depth:	1.600 m

Use:	Surface water	Pipe Shape:	Circular
Type of Pipe:		Dia/Height:	300 mm
Flow Control:		Material:	Concrete
Year Constructed:	Not Specified	Lining Type:	No Lining
Inspection Purpose:		Lining Material:	No Lining

Comments:
Recommendations: Recommend HPWJ/Resurvey

Scale:	1:119	Position [m]	Code	Observation	MPEG	Photo	Grade
		0.00	WL	Water level, 0% of the vertical dimension	00:00:00		
		4.60	JN	Junction at 2 o'clock, 150mm dia	00:00:48		
		4.70	S01	Attached deposits, encrustation from 3 o'clock to 5 o'clock, 20% cross-sectional area loss, start	00:01:01		
		5.96	JN			Junction at 10 o'clock, 150mm dia	00:01:14
		13.72	F01	Attached deposits, encrustation from 3 o'clock to 5 o'clock, 20% cross-sectional area loss, finish	00:02:14		3
		13.72	SA	Survey abandoned: Camera unable to debris	00:02:14		

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	1.5	20.0	3.0



Section Pictures - 06/03/2024 - UpstreamX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
26	Upstream	UPSTREAMX		



ea7c058d-daaaf-4996-92bc-a8d505804fc6.jpg, 00:00:48, 4.60 m
 Junction at 2 o'clock, 150mm dia



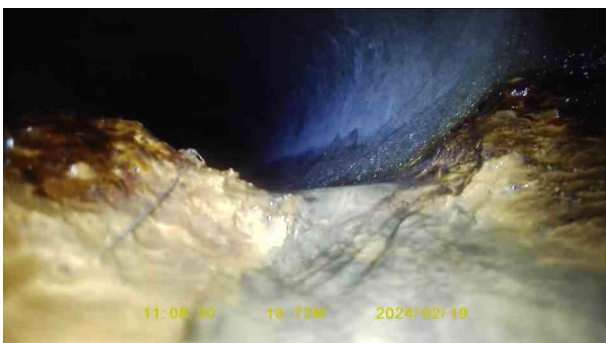
ac3e9b83-6581-407c-a00c-a1c81769c22a.jpg, 00:01:01, 4.70 m
 Attached deposits, encrustation from 3 o'clock to 5 o'clock,



884efa80-ca89-4eb6-874e-267426a38cd7.jpg, 00:01:14, 5.96 m
 Junction at 10 o'clock, 150mm dia



73255367-82f0-46a0-ae9f-d90a988d73ae.jpg, 00:02:14, 13.72 m
 Attached deposits, encrustation from 3 o'clock to 5 o'clock,



dbcb47f1-233f-4917-8141-105e614008ea.jpg, 00:02:14, 13.72 m
 Survey abandoned, Camera unable to debris



Abandoned section inspection



Item No. 27	Insp. No. 1	Date 07/03/24	Time 9:23	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR BRANCH AX
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Upstream	Upstream Node:	BRANCH A
Road:	Swains Lane	Inspected Length:	8.94 m	Upstream Pipe Depth:	
Location:		Total Length:	8.94 m	Downstream Node:	MH7
Surface Type:		Joint Length:		Downstream Pipe Depth:	2.190 m
Use:	Surface water	Pipe Shape:	Circular	Flow Control:	
Type of Pipe:		Dia/Height:	300 mm	Material:	Concrete
Year Constructed:	Not Specified	Lining Type:	No Lining	Lining Material:	No Lining

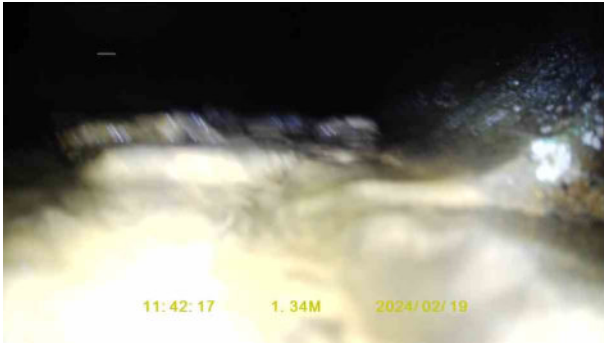
Comments:
Recommendations: Recommend HPWJ/Further investigation required

Scale:	1:78	Position [m]	Code	Observation	MPEG	Photo	Grade		
Depth: 2.19 m MH7 									
	0.00	WL		Water level, 0% of the vertical dimension	00:00:59				
	1.34	S01	DEE	Attached deposits, encrustation from 5 o'clock to 7 o'clock, 20% cross-sectional area loss, start	00:00:22				
	1.63	S02	CUD	Loss of vision, silt, start	00:00:23				
	5.85	WL		Water level, 20% of the vertical dimension	00:01:43				
	5.85	MCBR		Pipe material changes to brick at this point	00:01:43				
	5.85	F02	CUD	Loss of vision, silt, finish	00:01:46				
	7.05	C01	DEE	Attached deposits, encrustation from 3 o'clock to 7 o'clock, 30% cross-sectional area loss, change	00:02:16				
	8.84	S03	CUD	Loss of vision, silt, start	00:02:39				
	8.94	F01	DEE	Attached deposits, encrustation from 3 o'clock to 7 o'clock, 30% cross-sectional area loss, finish	00:02:56		3		
	8.94	F03	CUD	Loss of vision, silt, finish	00:02:56				
	8.94	SA		Survey abandoned: Loss of vision due to debris	00:02:56				
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	1.8	16.0	3.0



Section Pictures - 07/03/2024 - Branch AX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
27	Upstream	BRANCH AX		



9756b4a2-deb9-45bb-8b75-6d662cbf43ec.jpg, 00:00:22, 1.34 m
 Attached deposits, encrustation from 5 o'clock to 7 o'clock,



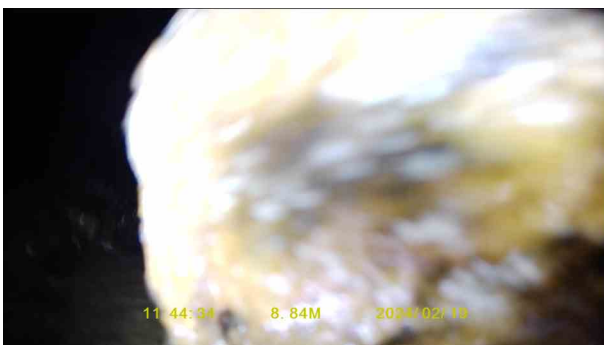
62d1bf32-a877-49a6-b3d0-e06bfbbea642.jpg, 00:00:23, 1.63 m
 Loss of vision, silt, start



35093da4-12c9-48a7-943c-8b2002ff15c3.jpg, 00:01:43, 5.85 m
 Water level, 20% of the vertical dimension



ed780d85-16dd-4e26-8e1c-0f15d63ba222.jpg, 00:02:16, 7.05 m
 Attached deposits, encrustation from 3 o'clock to 7 o'clock,



3d2fe9d2-192c-4a78-a9c2-36f27d820f41.jpg, 00:02:39, 8.84 m
 Loss of vision, silt, start



68a5d1b3-0594-4ad7-8c6b-f537cc0fd414.jpg, 00:02:56, 8.94 m
 Survey abandoned, Loss of vision due to debris



Abandoned section inspection



Item No. 28	Insp. No. 1	Date 07/03/24	Time 9:25	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR BRANCH CX
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Upstream	Upstream Node:	BRANCH C
Road:	Swains Lane	Inspected Length:	0.09 m	Upstream Pipe Depth:	
Location:		Total Length:	0.09 m	Downstream Node:	MH7
Surface Type:		Joint Length:		Downstream Pipe Depth:	

Use:	Surface water	Pipe Shape:	Circular
Type of Pipe:		Dia/Height:	100 mm
Flow Control:		Material:	Polyvinyl chloride
Year Constructed:	Not Specified	Lining Type:	No Lining
Inspection Purpose:		Lining Material:	No Lining

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
		0.00	WL	Water level, 0% of the vertical dimension	00:01:13		
		0.09	DER	Settled deposits, coarse, 90% cross-sectional area loss	00:00:10		5
		0.09	SA	Survey abandoned: Disused	00:00:12		

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	10.0	111.1	10.0	5.0



Section Pictures - 07/03/2024 - Branch CX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
28	Upstream	BRANCH CX		



63c30535-253e-4492-9378-4942cecf6de7.jpg, 00:00:10, 0.09
m
Settled deposits, coarse, 90% cross-sectional area loss



77bd05ec-a575-4cef-8f06-9d9bc9e019ed.jpg, 00:00:12, 0.09
m
Survey abandoned, Disused



Abandoned section inspection



Item No. 29	Insp. No. 1	Date 07/03/24	Time 9:51	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR MH7X
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Downstream	Upstream Node:	MH7
Road:	Swains Lane	Inspected Length:	31.74 m	Upstream Pipe Depth:	2.190 m
Location:		Total Length:	31.74 m	Downstream Node:	DOWNSTREAM
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular	Dia/Height:	400 mm
Type of Pipe:		Material:	Concrete	Lining Type:	No Lining
Flow Control:		Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:					

Comments:
Recommendations: Recommend HPWJ/Root cut/Relining/Investigate possible bellies

Scale: 1:275	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: 2.19 m MH7 						
	0.00	WL	Water level, 0% of the vertical dimension	00:00:12		
	0.96	S01 DEEJ	Attached deposits, encrustation at joint from 2 o'clock to 7 o'clock, 20% cross-sectional area loss, start	00:00:14		
	2.59	S02 CUW	Loss of vision, camera under water, start	00:00:24		
	3.07	F02 CUW	Loss of vision, camera under water, finish	00:00:32		
	4.13	F01 DEEJ	Attached deposits, encrustation at joint from 2 o'clock to 7 o'clock, 20% cross-sectional area loss, finish	00:00:46		3
	15.31	RTJ	Roots, tap at joint	00:01:44		4
	15.51	JDL	Joint displaced, large	00:01:44		1 / 4
	17.89	RTJ	Roots, tap at joint	00:02:08		4
	17.89	JDL	Joint displaced, large	00:02:08		1 / 4
	24.65	JDL	Joint displaced, large	00:02:49		1 / 4
	25.28	JN	Junction at 1 o'clock, 150mm dia	00:02:54		
	26.32	JDL	Joint displaced, large	00:03:03		1 / 4
	31.74	SA	Survey abandoned: Camera unable to push further	00:03:44		

STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
4	2.0	0.3	8.0	1.0	7	10.0	1.2	38.0	5.0



Section Pictures - 07/03/2024 - MH7X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
29	Downstream	MH7X		



7a5d2fc7-f41c-4101-9c53-568f3bec3a03.jpg, 00:00:14, 0.96 m
 Attached deposits, encrustation at joint from 2 o'clock to 7 o'clock, 20% cross-sectional area loss, start



b11b167a-f225-49e8-8c7f-4c5b5233f6a4.jpg, 00:00:24, 2.59 m
 Loss of vision, camera under water, start



cfd37089-f5b5-48ce-ac96-437949ebdf9e.jpg, 00:01:44, 15.31 m
 Roots, tap at joint



5bc5e9c3-7372-459e-bec9-e99023f639ba.jpg, 00:01:44, 15.51 m
 Joint displaced, large



6aaf9e92-ed2e-4459-af05-5463ec3b53e4.jpg, 00:02:08, 17.89 m
 Roots, tap at joint



077590d8-4c9b-4e1f-9992-55e9dadfdb62.jpg, 00:02:08, 17.89 m
 Joint displaced, large



Section Pictures - 07/03/2024 - MH7X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
29	Downstream	MH7X		



48778814-9246-4c73-ba73-c912ead5b075.jpg, 00:02:49,
24.65 m
Joint displaced, large



5c7aa283-64f9-4da0-b400-cf3cc3160b30.jpg, 00:02:54, 25.28
m
Junction at 1 o'clock, 150mm dia



510d2746-6122-4fdc-ac3b-1094141f82cf.jpg, 00:03:03, 26.32
m
Joint displaced, large



fad08eb9-8ce5-4b49-812a-45c4178156dd.jpg, 00:03:44,
31.74 m
Survey abandoned, Camera unable to push further



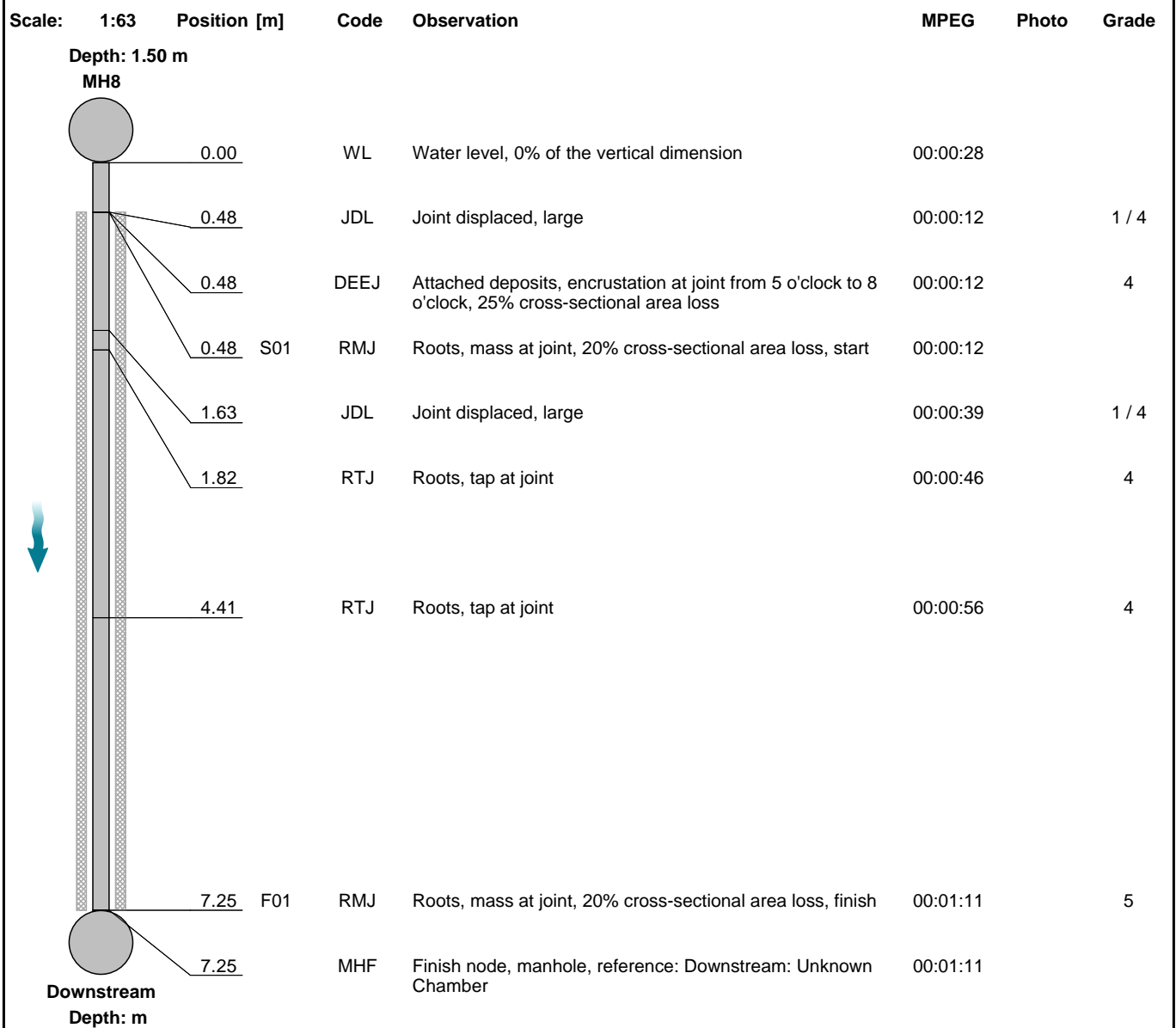
Completed section inspection



Item No. 30	Insp. No. 1	Date 07/03/24	Time 9:52	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR MH8X
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Downstream	Upstream Node:	MH8
Road:	Swains Lane	Inspected Length:	7.25 m	Upstream Pipe Depth:	1.500 m
Location:		Total Length:	7.25 m	Downstream Node:	DOWNSTREAM
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular	Material:	Concrete
Type of Pipe:		Dia/Height:	400 mm	Lining Type:	No Lining
Flow Control:		Material:	Concrete	Lining Material:	No Lining
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:		Lining Material:	No Lining		

Comments:
Recommendations: Recommend HPWJ/Root cut/Relining



STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
2	2.0	0.6	4.0	1.0	6	20.0	13.1	95.0	5.0



Section Pictures - 07/03/2024 - MH8X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
30	Downstream	MH8X		



9ef8f719-6f34-4061-9c71-530c3ecf69fb.jpg, 00:00:12, 0.48 m
Joint displaced, large



66386fb9-964f-40e2-b990-b4504dcca0eb.jpg, 00:00:12, 0.48 m
Attached deposits, encrustation at joint from 5 o'clock to 8



2e89adef-f018-4708-8a79-ba4d7296c35f.jpg, 00:00:12, 0.48 m
Roots, mass at joint, 20% cross-sectional area loss, start



979dab86-6af4-43fd-83df-ea5f15483789.jpg, 00:00:39, 1.63 m
Joint displaced, large



5769829f-e1f7-44b6-84d6-26706f8fbbf2.jpg, 00:00:46, 1.82 m
Roots, tap at joint



2cc2f0bb-4106-4f9a-aa5e-a43e4c66eafe.jpg, 00:00:56, 4.41 m
Roots, tap at joint



Section Pictures - 07/03/2024 - MH8X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
30	Downstream	MH8X		



864f9b02-5ca8-4ca5-943a-17c41c45fed0.jpg, 00:01:11, 7.25
m

Finish node, manhole, reference: Downstream, Unknown



Abandoned section inspection



Item No. 31	Insp. No. 1	Date 07/03/24	Time 9:54	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR UPSTREAMX
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Upstream	Upstream Node:	UPSTREAM
Road:	Swains Lane	Inspected Length:	18.10 m	Upstream Pipe Depth:	
Location:		Total Length:	18.10 m	Downstream Node:	MH8
Surface Type:		Joint Length:		Downstream Pipe Depth:	1.500 m
Use:	Surface water	Pipe Shape:	Circular	Dia/Height:	400 mm
Type of Pipe:		Material:	Concrete	Lining Type:	No Lining
Flow Control:		Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:					

Comments:
Recommendations: Recommend HPWJ/Relining/Resurvery

Scale: 1:157	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: 1.50 m MH8 						
	0.00	WL	Water level, 0% of the vertical dimension	00:01:12		
	0.28	DES	Settled deposits, fine, 20% cross-sectional area loss	00:00:15		4
	0.67	JDM	Joint displaced, medium	00:00:24		1 / 3
	7.25	JN	Junction at 9 o'clock, 150mm dia	00:01:22		
	11.03	JDM	Joint displaced, medium	00:01:41		1 / 3
	12.32	JDM	Joint displaced, medium	00:01:47		1 / 3
	18.10	SA	Survey abandoned: Camera unable to push further	00:02:29		

STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
3	1.0	0.2	3.0	1.0	4	5.0	0.6	11.0	4.0



Section Pictures - 07/03/2024 - UpstreamX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
31	Upstream	UPSTREAMX		



c90c49cb-90c8-4c29-b9e6-25c9edb953bc.jpg, 00:00:15, 0.28 m
 Settled deposits, fine, 20% cross-sectional area loss



ef996390-ddfa-4960-9671-61ea9d940e87.jpg, 00:00:24, 0.67 m
 Joint displaced, medium



ed25be0b-d9fb-40a3-b387-61b8707a9e33.jpg, 00:01:22, 7.25 m
 Junction at 9 o'clock, 150mm dia



c0b29321-b805-4a0e-ad8a-f4155bced4b7.jpg, 00:01:41, 11.03 m
 Joint displaced, medium



e3ef380b-964e-4a72-a3f0-f538712dbf1e.jpg, 00:01:47, 12.32 m
 Joint displaced, medium



bd9add86-3620-47fd-a734-39fc3966ba3d.jpg, 00:02:29, 18.10 m
 Survey abandoned, Camera unable to push further



Completed section inspection



Item No. 32	Insp. No. 1	Date 07/03/24	Time 9:56	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR BRANCH AX
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Upstream	Upstream Node:	BRANCH A
Road:	Swains Lane	Inspected Length:	0.67 m	Upstream Pipe Depth:	
Location:		Total Length:	0.67 m	Downstream Node:	MH9
Surface Type:		Joint Length:		Downstream Pipe Depth:	0.600 m

Use:	Surface water	Pipe Shape:	Circular
Type of Pipe:		Dia/Height:	100 mm
Flow Control:		Material:	Polyvinyl chloride
Year Constructed:	Not Specified	Lining Type:	No Lining
Inspection Purpose:		Lining Material:	No Lining

Comments:
Recommendations: Recommend HPWJ

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
		0.00	WL	Water level, 0% of the vertical dimension	00:02:00		
		0.09	DES	Settled deposits, fine, 15% cross-sectional area loss	00:00:10		3
		0.19	LU	Line deviates up	00:00:48		
		0.67	GYF	Finish node, gully, reference: Branch A	00:00:48		

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	3.0	2.0	4.0



Section Pictures - 07/03/2024 - Branch AX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
32	Upstream	BRANCH AX		



f07e7265-1a78-4885-83d7-e3071f993674.jpg, 00:00:10, 0.09 m
Settled deposits, fine, 15% cross-sectional area loss



ff52969e-2672-47c1-9aef-976348bccb2d.jpg, 00:00:48, 0.67 m
Finish node, gully, reference: Branch A



Abandoned section inspection



Item No. 33	Insp. No. 1	Date 07/03/24	Time 9:57	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR MH9X
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Downstream	Upstream Node:	MH9
Road:	Swains Lane	Inspected Length:	0.38 m	Upstream Pipe Depth:	0.600 m
Location:		Total Length:	0.38 m	Downstream Node:	DOWNSTREAM
Surface Type:		Joint Length:		Downstream Pipe Depth:	

Use:	Surface water	Pipe Shape:	Circular
Type of Pipe:		Dia/Height:	100 mm
Flow Control:		Material:	Polyvinyl chloride
Year Constructed:	Not Specified	Lining Type:	No Lining
Inspection Purpose:		Lining Material:	No Lining

Comments:
Recommendations: Recommend LSR/Resurvey

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
		0.00	WL	Water level, 0% of the vertical dimension	00:00:02		
		0.01	LD	Line deviates down	00:00:09		
		0.28	REM	General remark: Deviation in line	00:00:14		
		0.28	MCVC	Pipe material changes to vitrified clay at this point	00:00:18		
		0.28	JDL	Joint displaced, large	00:00:18		1 / 4
		0.38	SA	Survey abandoned: Camera unable to pass JDL	00:00:29		

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	5.3	2.0	1.0	1	5.0	13.2	5.0	5.0



Section Pictures - 07/03/2024 - MH9X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
33	Downstream	MH9X		



19414010-d444-4786-ba73-fbb897affb06.jpg, 00:00:18, 0.28
m
Joint displaced, large



dc8cd36c-e0e8-45ce-b8dd-c6d740336fe6.jpg, 00:00:29, 0.38
m
Survey abandoned, Camera unable to pass JDL



Completed section inspection

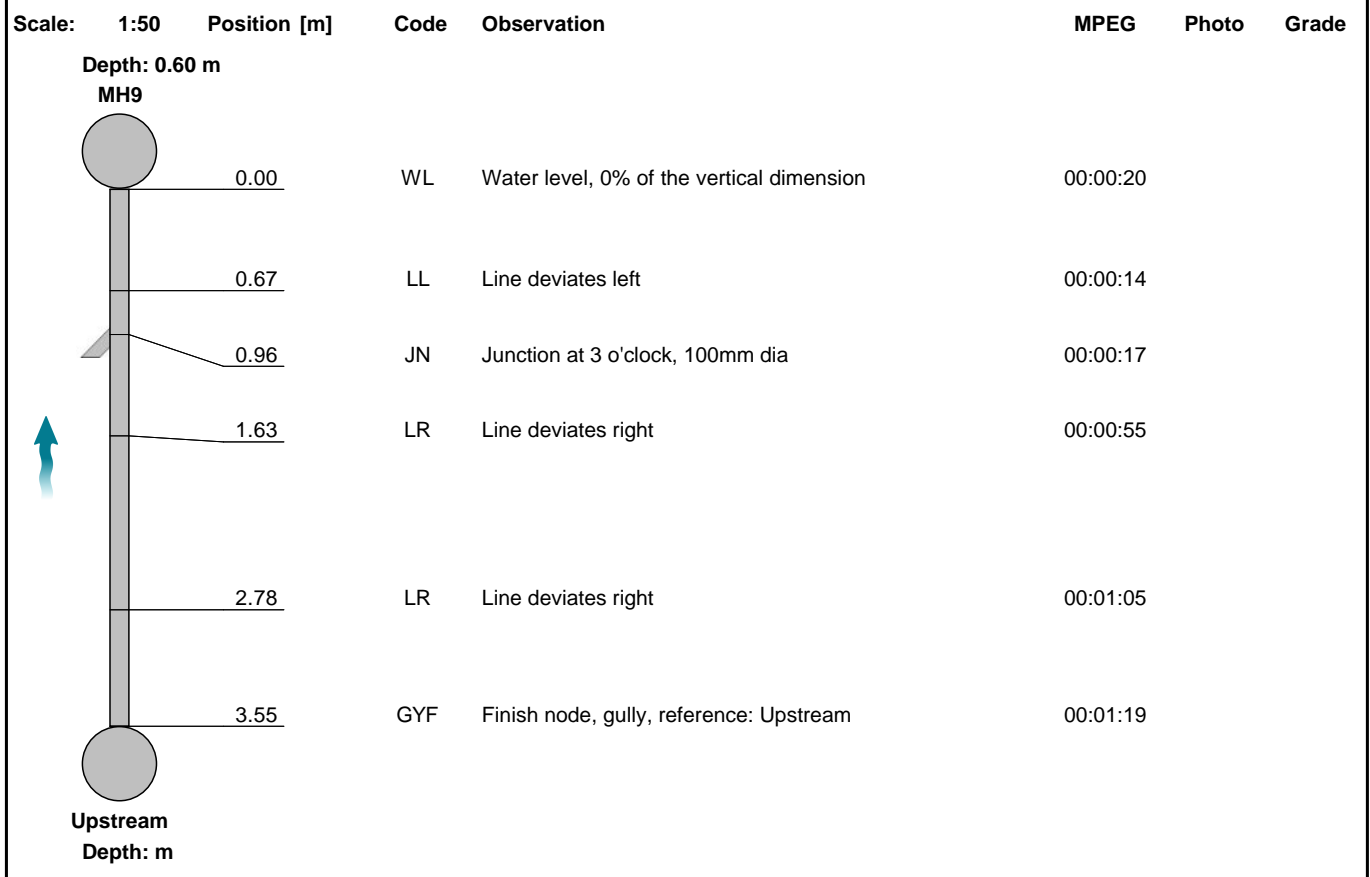


Item No. 34	Insp. No. 1	Date 07/03/24	Time 10:00	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR UPSTREAMX
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village: Highgate	Inspection Direction: Upstream	Upstream Node: UPSTREAM
Road: Swains Lane	Inspected Length: 3.55 m	Upstream Pipe Depth:
Location:	Total Length: 3.55 m	Downstream Node: MH9
Surface Type:	Joint Length:	Downstream Pipe Depth: 0.600 m

Use: Surface water	Pipe Shape: Circular
Type of Pipe:	Dia/Height: 100 mm
Flow Control:	Material: Polyvinyl chloride
Year Constructed: Not Specified	Lining Type: No Lining
Inspection Purpose:	Lining Material: No Lining

Comments:
Recommendations: None



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 - 07/03/2024 - UpstreamX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
34	Upstream	UPSTREAMX		



41f72c97-9439-41e7-b088-fc9b7d6f4cbe.jpg, 00:00:17, 0.96 m
Junction at 3 o'clock, 100mm dia



3cb6016e-00e2-42e6-84af-f0a38952b4d5.jpg, 00:01:19, 3.55 m
Finish node, gully, reference: Upstream



Completed section inspection



Item No. 35	Insp. No. 1	Date 07/03/24	Time 10:01	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR RWG27X
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Downstream	Upstream Node:	RWG27
Road:	Swains Lane	Inspected Length:	1.15 m	Upstream Pipe Depth:	
Location:		Total Length:	1.15 m	Downstream Node:	DOWNSTREAM
Surface Type:		Joint Length:		Downstream Pipe Depth:	

Use:	Surface water	Pipe Shape:	Circular
Type of Pipe:		Dia/Height:	150 mm
Flow Control:		Material:	Polyvinyl chloride
Year Constructed:	Not Specified	Lining Type:	No Lining
Inspection Purpose:		Lining Material:	No Lining

Comments:
Recommendations: None

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
		0.00	WL	Water level, 0% of the vertical dimension	00:00:33		
		0.09	LD	Line deviates down	00:00:13		
		0.57	REM	General remark: Deviation in line	00:00:21		
		1.15	MHF	Finish node, manhole, reference: Downstream: Blind connection	00:00:30		

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 - 07/03/2024 - RWG27X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
35	Downstream	RWG27X		



1dea0eed-7dfc-4c31-91b7-6f84a9db01eb.jpg, 00:00:30, 1.15
m
Finish node, manhole, reference: Downstream, Blind



Completed section inspection



Item No. 36	Insp. No. 1	Date 07/03/24	Time 10:24	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR RWG28X
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Downstream	Upstream Node:	RWG28
Road:	Swains Lane	Inspected Length:	1.72 m	Upstream Pipe Depth:	
Location:		Total Length:	1.72 m	Downstream Node:	DOWNSTREAM
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular	Dia/Height:	100 mm
Type of Pipe:		Material:	Polyvinyl chloride	Lining Type:	No Lining
Flow Control:		Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:					

Comments:
Recommendations: Recommend LSR

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
		0.00	WL	Water level, 0% of the vertical dimension	00:00:33		
		0.48	LD	Line deviates down	00:00:10		
		1.44	MCVC	Pipe material changes to vitrified clay at this point	00:00:17		
		1.44	JDL	Joint displaced, large	00:00:17		1 / 4
		1.72	MHF	Finish node, manhole, reference: Downstream: Blind junction	00:00:25		

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	1.2	2.0	1.0	1	5.0	2.9	5.0	4.0



Section Pictures - 07/03/2024 - RWG28X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
36	Downstream	RWG28X		



77433b44-5b3a-43c0-89b1-d2bb0d35f7f7.jpg, 00:00:17, 1.44
m
Joint displaced, large



d49db12e-7dcc-40d2-ac65-b00e8a8d0aed.jpg, 00:00:25, 1.72
m
Finish node, manhole, reference: Downstream, Blind junction



Completed section inspection



Item No. 37	Insp. No. 1	Date 07/03/24	Time 10:26	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR RWG29X
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Downstream	Upstream Node:	RWG29
Road:	Swains Lane	Inspected Length:	1.34 m	Upstream Pipe Depth:	
Location:		Total Length:	1.34 m	Downstream Node:	DOWNSTREAM
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular	Dia/Height:	100 mm
Type of Pipe:		Material:	Polyvinyl chloride	Lining Type:	No Lining
Flow Control:		Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:					

Comments:
Recommendations: None

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
		0.00	WL	Water level, 0% of the vertical dimension	00:00:29		
		0.09	LD	Line deviates down	00:00:11		
		1.34	MHF	Finish node, manhole, reference: Downstream: Blind connection	00:00:30		

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 - 07/03/2024 - RWG29X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
37	Downstream	RWG29X		



308ae893-16fb-4795-88ba-b6aba68d58e3.jpg, 00:00:30, 1.34
m
Finish node, manhole, reference: Downstream, Blind



Completed section inspection



Item No. 38	Insp. No. 1	Date 07/03/24	Time 10:28	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR RWG30X
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Downstream	Upstream Node:	RWG30
Road:	Swains Lane	Inspected Length:	1.34 m	Upstream Pipe Depth:	
Location:		Total Length:	1.34 m	Downstream Node:	DOWNSTREAM
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular	Dia/Height:	100 mm
Type of Pipe:		Material:	Polyvinyl chloride	Lining Type:	No Lining
Flow Control:		Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:					

Comments:
Recommendations: Recommend root cut/LSR

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
		0.00	WL	Water level, 0% of the vertical dimension	00:00:36		
		0.19	LD	Line deviates down	00:00:10		
		1.05	MCVC	Pipe material changes to vitrified clay at this point	00:00:21		
		1.05	RFJ	Roots, fine at joint	00:00:21		2
		1.34	MHF	Finish node, manhole, reference: Downstream: Blind junction	00:00:29		

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	1.0	0.7	1.0	2.0



Section Pictures - 07/03/2024 - RWG30X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
38	Downstream	RWG30X		



75738fd2-057a-42e3-8af6-84ea17b29526.jpg, 00:00:21, 1.05
m
Roots, fine at joint



baeccc9c-6492-4e2f-8d1a-066f5c7e8907.jpg, 00:00:29, 1.34
m
Finish node, manhole, reference: Downstream, Blind junction



Abandoned section inspection



Item No. 39	Insp. No. 1	Date 07/03/24	Time 10:29	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR RWG26X
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Downstream	Upstream Node:	RWG26
Road:	Swains Lane	Inspected Length:	1.72 m	Upstream Pipe Depth:	
Location:		Total Length:	1.72 m	Downstream Node:	DOWNSTREAM
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular	Dia/Height:	100 mm
Type of Pipe:		Material:	Polyvinyl chloride	Lining Type:	No Lining
Flow Control:		Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:					

Comments:
Recommendations: Recommend excavation/Resurvey

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m RWG26 							
		0.00	WL	Water level, 0% of the vertical dimension	00:00:35		
		0.09	LD	Line deviates down	00:00:14		
		1.72	MCVC	Pipe material changes to vitrified clay at this point	00:00:21		
		1.72	JDL	Joint displaced, large	00:01:00		1 / 4
		1.72	OJL	Open joint, large	00:01:00		1
		1.72	SA	Survey abandoned: Camera unable to pass OJL/JDL	00:00:58		

STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
2	4.0	2.3	4.0	1.0	1	5.0	2.9	5.0	4.0



Section Pictures - 07/03/2024 - RWG26X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
39	Downstream	RWG26X		



46a9c229-a384-4b90-8825-e392ff907ccf.jpg, 00:00:21, 1.72 m
Pipe material changes to vitrified clay at this point



46a9c229-a384-4b90-8825-e392ff907ccf.jpg, 00:01:00, 1.72 m
Joint displaced, large



a12f9621-363e-4716-a179-4259851e7146.jpg, 00:01:00, 1.72 m
Open joint, large



644f0a5a-3b8e-45d1-9ddd-94a4859114db.jpg, 00:00:58, 1.72 m
Survey abandoned, Camera unable to pass OJL/JDL



Abandoned section inspection



Item No. 40	Insp. No. 1	Date 07/03/24	Time 10:30	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR BRANCH AX
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Upstream	Upstream Node:	BRANCH A
Road:	Swains Lane	Inspected Length:	0.01 m	Upstream Pipe Depth:	
Location:		Total Length:	0.01 m	Downstream Node:	MH1
Surface Type:		Joint Length:		Downstream Pipe Depth:	5.150 m
Use:	Combined	Pipe Shape:	Circular	Dia/Height:	150 mm
Type of Pipe:		Material:	Vitrified clay	Lining Type:	No Lining
Flow Control:		Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:					

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: 5.15 m MH1 							
		0.00	WL	Water level, 0% of the vertical dimension	00:01:00		
		0.01	SA	Survey abandoned: Redundant	00:00:33		

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 - 07/03/2024 - Branch AX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
40	Upstream	BRANCH AX		



35029dbd-931a-4a6e-b368-7022e0edb8a7.jpg, 00:00:33, 0.01
m
Survey abandoned, Redundant



Abandoned section inspection



Item No. 41	Insp. No. 1	Date 07/03/24	Time 10:31	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR BRANCH AX
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Upstream	Upstream Node:	BRANCH A
Road:	Swains Lane	Inspected Length:	1.82 m	Upstream Pipe Depth:	
Location:		Total Length:	1.82 m	Downstream Node:	MH10
Surface Type:		Joint Length:		Downstream Pipe Depth:	0.800 m

Use:	Combined	Pipe Shape:	Circular
Type of Pipe:		Dia/Height:	100 mm
Flow Control:		Material:	Vitrified clay
Year Constructed:	Not Specified	Lining Type:	No Lining
Inspection Purpose:		Lining Material:	No Lining

Comments:
Recommendations: Recommend HPWJ/LSR/Resurvey

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: 0.80 m MH10 							
		0.00	WL	Water level, 0% of the vertical dimension	00:00:34		
		0.38	JDM	Joint displaced, medium	00:00:15		1 / 3
		0.57	LR	Line deviates right	00:00:22		
		0.76	BJ	Broken pipe at joint from 1 o'clock to 5 o'clock	00:00:23		4
		1.15	LL	Line deviates left	00:00:32		
		1.15	DES	Settled deposits, fine, 20% cross-sectional area loss	00:00:39		4
		1.82	JDM	Joint displaced, medium	00:00:42		1 / 3
		1.82 S01	DER	Settled deposits, coarse, 30% cross-sectional area loss, start	00:00:47		4
		1.82	SA	Survey abandoned: Camera unable to pass debris	00:01:04		

STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
3	80.0	45.1	82.0	4.0	4	5.0	7.7	14.0	5.0



Section Pictures - 07/03/2024 - Branch AX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
41	Upstream	BRANCH AX		



94c4cd49-8989-4d64-ba70-694f6b00c783.jpg, 00:00:15, 0.38 m
 Joint displaced, medium



b1ec5c73-cb1b-4989-bafa-742f6e4b7188.jpg, 00:00:39, 1.15 m
 Settled deposits, fine, 20% cross-sectional area loss



d2831d65-8e38-403f-8a5f-c8cc4d858d74.jpg, 00:00:42, 1.82 m
 Joint displaced, medium



2972d6b0-2d48-4596-bb9a-7648fd527920.jpg, 00:00:47, 1.82 m
 Settled deposits, coarse, 30% cross-sectional area loss, start



1dff81b8-6366-44e7-99e8-c7580857e882.jpg, 00:01:04, 1.82 m
 Survey abandoned, Camera unable to pass debris



Completed section inspection



Item No. 42	Insp. No. 1	Date 07/03/24	Time 10:33	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR BRANCH BX
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Upstream	Upstream Node:	BRANCH B
Road:	Swains Lane	Inspected Length:	0.67 m	Upstream Pipe Depth:	
Location:		Total Length:	0.67 m	Downstream Node:	MH10
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular	Dia/Height:	100 mm
Type of Pipe:		Material:	Vitrified clay	Lining Type:	No Lining
Flow Control:		Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:					

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
		0.00	WL	Water level, 0% of the vertical dimension	00:00:24		
		0.09	DEEJ	Attached deposits, encrustation at joint from 7 o'clock to 11 o'clock, 15% cross-sectional area loss	00:00:13		3
		0.09	BJ	Broken pipe at joint from 9 o'clock to 4 o'clock	00:00:13		4
		0.09	LR	Line deviates right	00:00:15		
		0.67	MHF	Finish node, manhole, reference: Branch B: Capped	00:00:36		

STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
1	80.0	119.4	80.0	4.0	1	2.0	3.0	2.0	4.0



Section Pictures - 07/03/2024 - Branch BX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
42	Upstream	BRANCH BX		



c9179bda-0f0a-4f25-a2db-2d0fef5be277.jpg, 00:00:13, 0.09 m
Attached deposits, encrustation at joint from 7 o'clock to 11 o'clock, 15% cross-sectional area loss



e02efbb9-b02d-404c-88dc-d7230a88ceff.jpg, 00:00:13, 0.09 m
Broken pipe at joint from 9 o'clock to 4 o'clock



aea4d164-a499-4ccc-8d45-8b070c3022a0.jpg, 00:00:36, 0.67 m
Finish node, manhole, reference: Branch B, Capped



Completed section inspection



Item No. 43	Insp. No. 1	Date 07/03/24	Time 10:34	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR BRANCH CX
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Upstream	Upstream Node:	BRANCH C
Road:	Swains Lane	Inspected Length:	2.11 m	Upstream Pipe Depth:	
Location:		Total Length:	2.11 m	Downstream Node:	MH10
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular	Dia/Height:	100 mm
Type of Pipe:		Material:	Vitrified clay	Lining Type:	No Lining
Flow Control:		Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:					

Comments:
Recommendations: Recommend HPWJ/LSR

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
		0.00	WL	Water level, 0% of the vertical dimension	00:00:21		
		0.09	JDM	Joint displaced, medium	00:00:10		1 / 3
		0.19	LR	Line deviates right	00:00:11		
		0.19	DEEJ	Attached deposits, encrustation at joint from 4 o'clock to 8 o'clock, 20% cross-sectional area loss	00:00:14		3
		0.28	JDM	Joint displaced, medium	00:00:18		1 / 3
		0.76	DEEJ	Attached deposits, encrustation at joint from 4 o'clock to 7 o'clock, 15% cross-sectional area loss	00:00:26		3
		1.15	JDM	Joint displaced, medium	00:00:34		1 / 3
		1.15	MCPVC	Pipe material changes to polyvinyl chloride at this point	00:00:42		
		1.72	LU	Line deviates up	00:00:42		
		2.11	MHF	Finish node, manhole, reference: Branch C: Rest bend	00:00:45		

STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
3	1.0	1.4	3.0	1.0	5	2.0	4.7	10.0	4.0



Section Pictures - 07/03/2024 - Branch CX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
43	Upstream	BRANCH CX		



7076801a-6240-41d9-a416-603246e932b2.jpg, 00:00:10, 0.09 m
 Joint displaced, medium



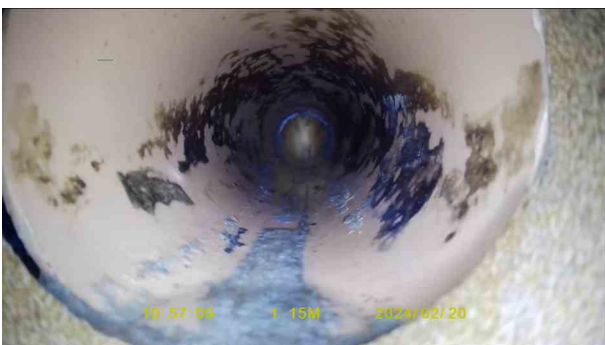
4bff65e0-e500-4552-8682-5a6f3d023944.jpg, 00:00:14, 0.19 m
 Attached deposits, encrustation at joint from 4 o'clock to 8



205e2d51-6137-455f-aa65-6f6f489f32b0.jpg, 00:00:18, 0.28 m
 Joint displaced, medium



c49eab87-a58d-4fd3-9800-c705466255a4.jpg, 00:00:26, 0.76 m
 Attached deposits, encrustation at joint from 4 o'clock to 7



e1fee4e-ddbc-41e9-ba9a-edbfcf9cc6e2.jpg, 00:00:34, 1.15 m
 Joint displaced, medium



c6a34fc5-3739-4efc-8d4c-76213357c26a.jpg, 00:00:45, 2.11 m
 Finish node, manhole, reference: Branch C, Rest bend



Completed section inspection



Item No. 44	Insp. No. 1	Date 07/03/24	Time 10:35	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR BRANCH DX
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Upstream	Upstream Node:	BRANCH D
Road:	Swains Lane	Inspected Length:	0.28 m	Upstream Pipe Depth:	
Location:		Total Length:	0.28 m	Downstream Node:	MH10
Surface Type:		Joint Length:		Downstream Pipe Depth:	0.800 m

Use:	Combined	Pipe Shape:	Circular
Type of Pipe:		Dia/Height:	100 mm
Flow Control:		Material:	Polyvinyl chloride
Year Constructed:	Not Specified	Lining Type:	No Lining
Inspection Purpose:		Lining Material:	No Lining

Comments:
Recommendations: Recommend LSR

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
		0.00	WL	Water level, 0% of the vertical dimension	00:00:22		
		0.01	LU	Line deviates up	00:00:11		
		0.19	JDM	Joint displaced, medium	00:00:16		1 / 3
		0.19	MCPF	Pipe material changes to pitch fibre at this point	00:00:19		
		0.28	MHF	Finish node, manhole, reference: Branch D: Vent pipe	00:00:19		

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	3.6	1.0	1.0	1	2.0	7.1	2.0	5.0



Section Pictures - 07/03/2024 - Branch DX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
44	Upstream	BRANCH DX		



fe861bff-7a5c-4310-831e-8180078c008e.jpg, 00:00:16, 0.19
m
Joint displaced, medium



e4e9475f-69f9-45d8-8f38-04630cbdbdc6.jpg, 00:00:19, 0.28
m
Finish node, manhole, reference: Branch D, Vent pipe



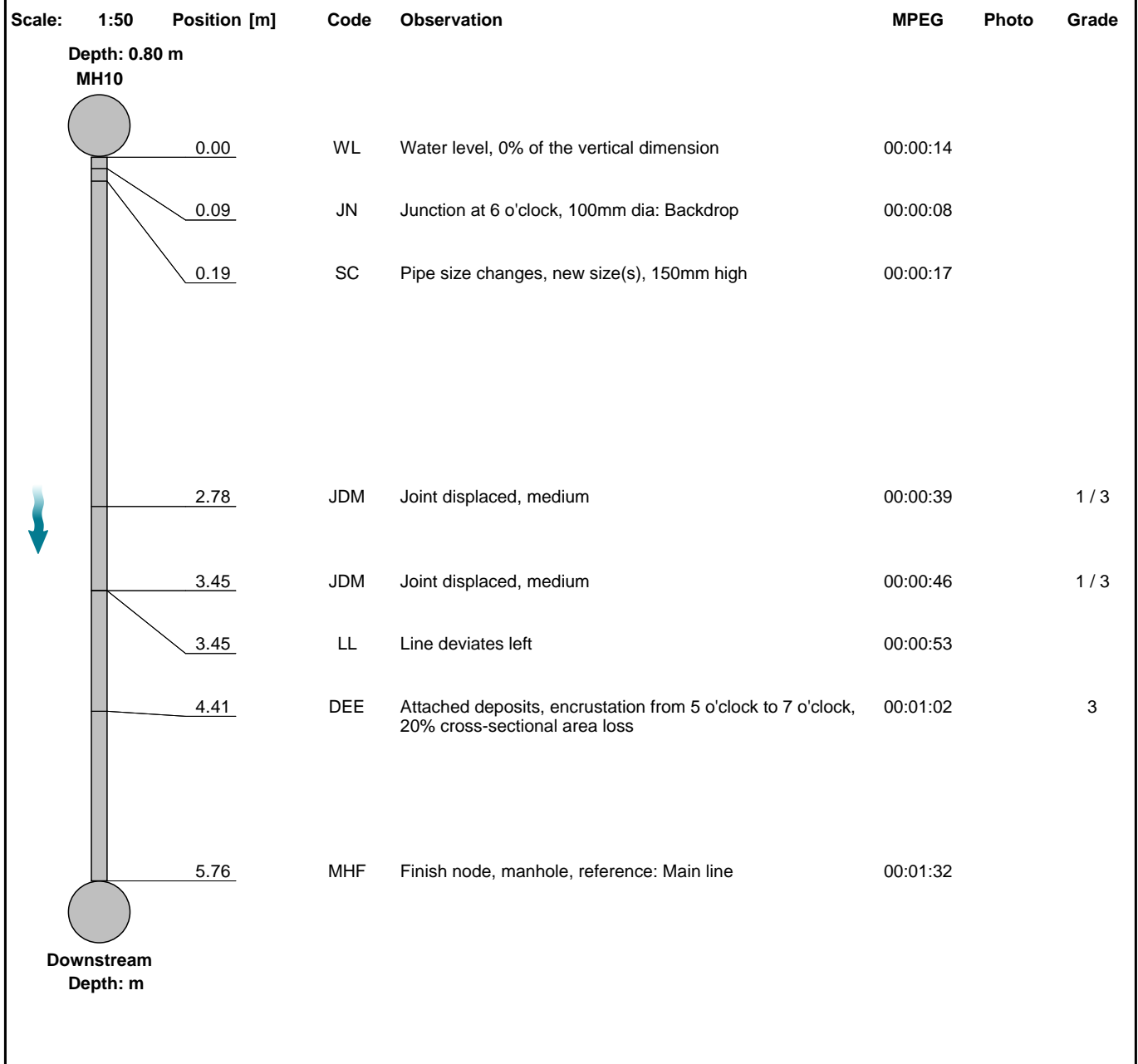
Completed section inspection



Item No. 45	Insp. No. 1	Date 07/03/24	Time 10:36	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR MH10X
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Downstream	Upstream Node:	MH10
Road:	Swains Lane	Inspected Length:	5.76 m	Upstream Pipe Depth:	0.800 m
Location:		Total Length:	5.76 m	Downstream Node:	DOWNSTREAM
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Combined	Pipe Shape:	Circular	Flow Control:	
Type of Pipe:		Dia/Height:	100 mm	Material:	Vitrified clay
Year Constructed:	Not Specified	Lining Type:	No Lining	Lining Material:	No Lining
Inspection Purpose:					

Comments:
Recommendations: Recommend HPWJ/LSR



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	0.3	2.0	1.0	3	2.0	1.0	6.0	3.0



Section Pictures - 07/03/2024 - MH10X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
45	Downstream	MH10X		



11f4fc9c-ba19-4aad-aca7-5fdd34d41401.jpg, 00:00:08, 0.09 m
 Junction at 6 o'clock, 100mm dia, Backdrop



f655621c-2490-4b57-b90c-2478f909dfd8.jpg, 00:00:39, 2.78 m
 Joint displaced, medium



81136733-b89d-435f-a60c-a6bc873af195.jpg, 00:00:46, 3.45 m
 Joint displaced, medium



46a8db89-2395-4346-b1ab-494535b5cd78.jpg, 00:01:02, 4.41 m
 Attached deposits, encrustation from 5 o'clock to 7 o'clock,



e878b872-6e34-410d-afb7-adb481f5e729.jpg, 00:01:32, 5.76 m
 Finish node, manhole, reference: Main line



Completed section inspection



Item No. 46	Insp. No. 1	Date 07/03/24	Time 10:37	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR BRANCH AX
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Upstream	Upstream Node:	BRANCH A
Road:	Swains Lane	Inspected Length:	0.01 m	Upstream Pipe Depth:	
Location:		Total Length:	0.01 m	Downstream Node:	MH11
Surface Type:		Joint Length:		Downstream Pipe Depth:	0.570 m

Use:	Surface water	Pipe Shape:	Circular
Type of Pipe:		Dia/Height:	100 mm
Flow Control:		Material:	Polyvinyl chloride
Year Constructed:	Not Specified	Lining Type:	No Lining
Inspection Purpose:		Lining Material:	No Lining

Comments:
Recommendations: None

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
		0.00	WL	Water level, 0% of the vertical dimension	00:00:12		
		0.01	MHF	Finish node, manhole, reference: Capped	00:00:39		

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 - 07/03/2024 - Branch AX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
46	Upstream	BRANCH AX		



fc91452-5e55-4616-9fb5-a1479d9cbaa1.jpg, 00:00:39, 0.01
m
Finish node, manhole, reference: Capped



Completed section inspection



Item No. 47	Insp. No. 1	Date 07/03/24	Time 10:48	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR BRANCH BX
Operator Tom Holman		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Highgate	Inspection Direction:	Upstream	Upstream Node:	BRANCH B
Road:	Swains Lane	Inspected Length:	18.75 m	Upstream Pipe Depth:	
Location:		Total Length:	18.75 m	Downstream Node:	MH11
Surface Type:		Joint Length:		Downstream Pipe Depth:	0.570 m
Use:	Surface water	Pipe Shape:	Circular	Dia/Height:	100 mm
Type of Pipe:		Material:	Polyvinyl chloride	Lining Type:	No Lining
Flow Control:		Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:					

Comments:
Recommendations: Recommend HPWJ

Scale:	1:163	Position [m]	Code	Observation	MPEG	Photo	Grade		
Depth: 0.57 m MH11									
	0.00	WL	Water level, 0% of the vertical dimension	00:00:40					
	0.48	LR	Line deviates right	00:00:17					
	8.64	JN	Junction at 3 o'clock, 100mm dia	00:01:28					
	9.99	JN	Junction at 3 o'clock, 100mm dia	00:01:41					
	18.75	DES	Settled deposits, fine, 45% cross-sectional area loss: Aco	00:02:46			4		
	18.75	MHF	Finish node, manhole, reference: Branch B: Aco	00:02:46					
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	0.3	5.0	4.0



Section Pictures - 07/03/2024 - Branch BX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
47	Upstream	BRANCH BX		



1cff4279-29bc-41d9-a284-c0b1df4fa83c.jpg, 00:01:28, 8.64 m
 Junction at 3 o'clock, 100mm dia



f28f0d2e-5a81-457a-95b7-6385d09598fa.jpg, 00:01:41, 9.99 m
 Junction at 3 o'clock, 100mm dia



863abe23-34c2-4e95-8c46-44d1baf7e004.jpg, 00:02:46, 18.75 m
 Settled deposits, fine, 45% cross-sectional area loss, Aco



22bee4a0-d2d3-4263-8716-67b4931eaa3c.jpg, 00:02:46, 18.75 m
 Finish node, manhole, reference: Branch B, Aco