



Inspection Report

Section Number : 1	Date : 14/11/2016	Client's Ref :	Weather : Rain	Critical Drain/Sewer:	PLR : MH01X
Operator : SDS ST	Vehicle : NA64 LXX	Camera : Mainline	Preset : 0.00	Cleaned : no	Type of Drain : Gravity drain/sewer

Place: IGHTHAM	Direction: MH02 ← MH01	US MH: MH01	
Road: BOROUGH GREEN ROAD	Catchment: HAM HILL	US Depth: 2.70	
Location: Gardens	Total Length: 8.40	DS MH: MH02	
Surface Cover: OTHER	Pipe Length: 2.00	DS Depth: 2.72	

Use: Surface water	Pipe Shape: Rectangular
Year Laid: 1980	Width / Height: 1000 / 1350
Purpose: Sample survey to determine asset condition	Flow Control: No flow control
Lining:	Pipe Material: Concrete segments

Comment: **CCTV COMPLETED**
 Recommendation: **NO RECOMMENDATIONS REQUIRED**

1:71	Position m	Code	Observation	MPEG	Photo	Grade			
Depth: 2.72									
MH02									
	0.00	MH	Start node type, manhole, reference number: MH02	00:00:00		0			
	0.00	WL	Water level, 5% of the vertical dimension	00:00:01		0			
	4.76	JN	Junction at 09 o'clock, diameter: 300mm: TQ5956785X	00:01:07		0			
	8.40	MHF	Finish node type, manhole, reference number: MH01	00:01:54		0			
MH01									
Depth: 2.70									
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 - 14/11/2016 - MH01X

Section Number : 1	Survey Direction : MH02 ← MH01	PLR : MH01X	Client's Ref :	Contractor's Ref : SDS 205179
------------------------------	--	-----------------------	----------------	---



MH01X_b7e2ec72-e2e6-4f4b-b2c2-663589d0c304_20161114_094246_561.jpg, 00:01:07, 4.76m
Junction at 09 o'clock, diameter: 300mm



MH01X_1f7062c0-f8a2-4e4a-8660-cb3a70676c46_20161114_094257_413.jpg, 00:01:07, 4.76m
Junction at 09 o'clock, diameter: 300mm



MH01X_6b46b157-8b61-4d00-bb57-7cfaf524f3d9_20161114_094340_165.jpg, 00:01:54, 8.40m
Finish node type, manhole, reference number: MH01



Inspection Report

Section Number : 2	Date : 14/11/2016	Client's Ref :	Weather : Rain	Critical Drain/Sewer:	PLR : INLETX
Operator : SDS ST	Vehicle : NA64 LXX	Camera : Mainline	Preset : 0.00	Cleaned : no	Type of Drain : Gravity drain/sewer

Place: IGHTHAM	Direction: MH01 ← INLET	US MH: INLET
Road: BOROUGH GREEN ROAD	Catchment: HAM HILL	US Depth: 0.00
Location: Gardens	Total Length: 15.81	DS MH: MH01
Surface Cover: ASPHALT FOOTWAY	Pipe Length: 2.00	DS Depth: 2.70

Use: Surface water	Pipe Shape: Arched (with flat bottom)
Year Laid: 1980	Width / Height: 1200 / 1800
Purpose: Sample survey to determine asset condition	Flow Control: No flow control
Lining:	Pipe Material: Brick

Comment: **CCTV COMPLETED**
 Recommendation: **CLEANING OF SYSTEM RECOMMENDED**

1:134	Position m	Code	Observation	MPEG	Photo	Grade			
Depth: 2.70									
MH01									
	0.00	MH	Start node type, manhole, reference number: MH01	00:00:00		0			
	0.00	WL	Water level, 10% of the vertical dimension	00:00:02		0			
	1.51	JN	Junction at 11 o'clock, diameter: 100mm: LIVE	00:00:24		0			
	2.44	DEX	Settled deposits, other, 10% cross-sectional area loss: LOOSE BRANCHES WASHED DOWN SYSTEM	00:00:46		3			
	9.77	CXI	Connection intruding at 01 o'clock, diameter: 150mm, intrusion: 5%: LIVE	00:01:39		1			
	11.76	LL	Line deviates left: SHARP 90 DEGREES	00:02:43		0			
	14.16	DER	Settled deposits, coarse, 20% cross-sectional area loss	00:03:15		4			
	14.83	LR	Line deviates right: SHARP 90 DEGREES	00:03:37		0			
	15.81	OCF	Finish node type, other special chamber, reference number: INLET: HEADWALL AT DITCHLINE	00:04:00		0			
INLET									
Depth: 0.00									
STR no def	STR peak	STR mean	STR total	STR grade	SER no def	SER peak	SER mean	SER total	SER grade
0	0.0	0.0	0.0	1.0	3	5.0	0.4	7.0	4.0

Section Pictures - 14/11/2016 - INLETX

Section Number : 2	Survey Direction : MH01 ← INLET	PLR : INLETX	Client's Ref :	Contractor's Ref : SDS 205179
------------------------------	---	------------------------	----------------	---



INLETX_a19b43a4-2260-443f-b68c-eb487a443455_20161114_095227_122.jpg, 00:00:24, 1.51m
Junction at 11 o'clock, diameter: 100mm



INLETX_d492e8dc-ef9a-45e7-9ac3-ed512f8eeacc_20161114_095241_245.jpg, 00:00:24, 1.51m
Junction at 11 o'clock, diameter: 100mm



INLETX_367b83e1-5855-489c-9d90-cde203426b86_20161114_095304_525.jpg, 00:00:46, 2.44m
Settled deposits, other, 10% cross-sectional area loss



INLETX_dc62b6e1-1a08-4282-a23e-f4690d841a61_20161114_095412_419.jpg, 00:01:39, 9.77m
Connection intruding at 01 o'clock, diameter: 150mm, intrusion: 5%



Section Pictures - 14/11/2016 - INLETX

Section Number : 2	Survey Direction : MH01 ← INLET	PLR : INLETX	Client's Ref :	Contractor's Ref : SDS 205179
------------------------------	---	------------------------	----------------	---



INLETX_72077c10-7042-4751-82e1-27c15a969910_20161114_095435_547.jpg, 00:01:39, 9.77m
Connection intruding at 01 o'clock, diameter: 150mm, intrusion: 5%



INLETX_dbe71eaf-07e2-4776-8e86-9d4848f313a7_20161114_095611_904.jpg, 00:03:15, 14.16m
Settled deposits, coarse, 20% cross-sectional area loss



INLETX_ccb3dfaa-5be9-4866-a748-c41bfcc72aa7_20161114_095723_352.jpg, 00:04:00, 15.81m
Finish node type, other special chamber, reference number:
INLET



Inspection Report

Section Number : 3	Date : 14/11/2016	Client's Ref :	Weather : Rain	Critical Drain/Sewer:	PLR : MH02X
Operator : SDS ST	Vehicle : NA64 LXX	Camera : Mainline	Preset : 0.00	Cleaned : no	Type of Drain : Gravity drain/sewer

Place: IGHTHAM	Direction: MH02 → MH03	US MH: MH02
Road: BOROUGH GREEN ROAD	Catchment: HAM HILL	US Depth: 2.72
Location: Gardens	Total Length: 26.35	DS MH: MH03
Surface Cover: OTHER	Pipe Length: 2.00	DS Depth: 2.35

Use: Surface water	Pipe Shape: Rectangular
Year Laid: 1980	Width / Height: 1000 / 1350
Purpose: Sample survey to determine asset condition	Flow Control: No flow control
Lining:	Pipe Material: Concrete segments

Comment: **CCTV COMPLETED**
 Recommendation: **NO RECOMMENDATIONS REQUIRED**

1:223	Position m	Code	Observation	MPEG	Photo	Grade			
Depth: 2.72									
MH02									
	0.00	MH	Start node type, manhole, reference number: MH02	00:00:00		0			
	0.00	WL	Water level, 10% of the vertical dimension	00:00:06		0			
	2.76	WL	Water level, 20% of the vertical dimension	00:00:42		0			
	8.56	CXI	Connection intruding at 10 o'clock, diameter: 150mm, intrusion: 5%: LIVE	00:01:27		1			
	22.32	CXI	Connection intruding at 10 o'clock, diameter: 150mm, intrusion: 5%: LIVE	00:02:45		1			
	26.35	MHF	Finish node type, manhole, reference number: MH03	00:03:35		0			
MH03									
Depth: 2.35									
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	0.0	0.0	0.0	1.0

Section Pictures - 14/11/2016 - MH02X

Section Number : 3	Survey Direction : MH02 → MH03	PLR : MH02X	Client's Ref :	Contractor's Ref : SDS 205179
------------------------------	--	-----------------------	----------------	---



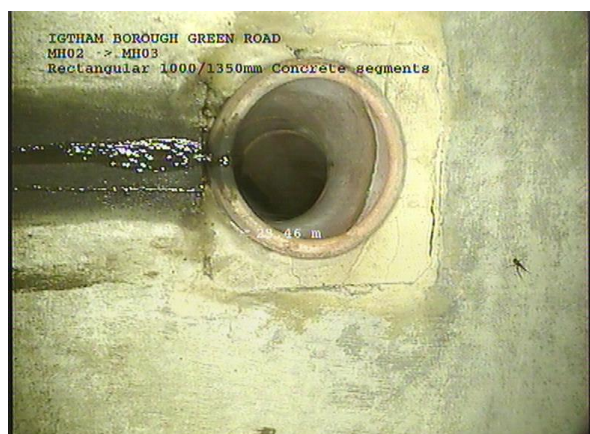
MH02X_d704efd6-ee46-41d1-b0aa-a951260c3a5e_20161114_100459_713.jpg, 00:01:27, 8.56m
Connection intruding at 10 o'clock, diameter: 150mm, intrusion: 5%



MH02X_304ea65e-93e2-4865-a823-9201b6f5fa9b_20161114_100511_780.jpg, 00:01:27, 8.56m
Connection intruding at 10 o'clock, diameter: 150mm, intrusion: 5%



MH02X_9c2c371f-3d1e-429e-88b2-01d9fe6ff60d_20161114_100627_951.jpg, 00:02:45, 22.32m
Connection intruding at 10 o'clock, diameter: 150mm, intrusion: 5%

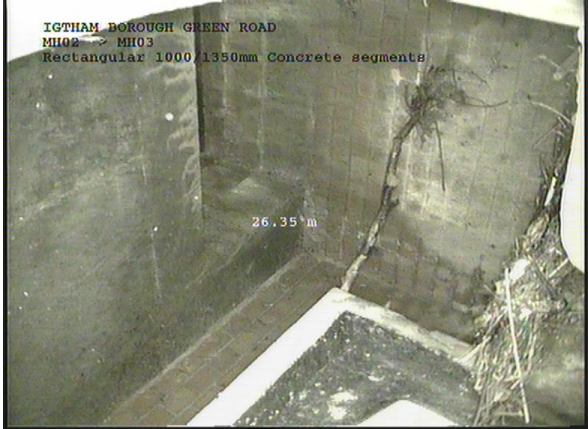


MH02X_5d169d0b-2c6d-45df-87d0-c54eb870ad8c_20161114_100637_132.jpg, 00:02:45, 22.32m
Connection intruding at 10 o'clock, diameter: 150mm, intrusion: 5%



Section Pictures - 14/11/2016 - MH02X

Section Number : 3	Survey Direction : MH02 → MH03	PLR : MH02X	Client's Ref :	Contractor's Ref : SDS 205179
------------------------------	--	-----------------------	----------------	---



MH02X_726460b9-9e4f-474a-bf81-460c10a47e1c_20161114_100754_545.jpg, 00:03:35, 26.35m

Finish node type, manhole, reference number: MH03



Inspection Report

Section Number : 4	Date : 14/11/2016	Client's Ref :	Weather : Rain	Critical Drain/Sewer:	PLR : MH03X
Operator : SDS ST	Vehicle : NA64 LXX	Camera : Mainline	Preset : 0.00	Cleaned : no	Type of Drain : Gravity drain/sewer

Place: IGHTHAM	Direction: MH03 → MH04	US MH: MH03
Road: BOROUGH GREEN ROAD	Catchment: HAM HILL	US Depth: 2.35
Location: Gardens	Total Length: 9.80	DS MH: MH04
Surface Cover: BLOCK PAVED	Pipe Length: 2.00	DS Depth: 2.42

Use: Surface water	Pipe Shape: Rectangular
Year Laid: 1980	Width / Height: 1000 / 1350
Purpose: Sample survey to determine asset condition	Flow Control: No flow control
Lining:	Pipe Material: Concrete segments

Comment: **CCTV COMPLETED**
 Recommendation: **NO RECOMMENDATIONS REQUIRED**

1:83	Position m	Code	Observation	MPEG	Photo	Grade												
<div style="display: flex; align-items: flex-start;"> <div style="margin-right: 20px;"> <p>Depth: 2.35</p> <p>MH03</p> </div> <table border="1" style="margin-left: 20px;"> <tr> <td style="width: 15%;">0.00</td> <td style="width: 5%;">MH</td> <td style="width: 45%;">Start node type, manhole, reference number: MH03</td> <td style="width: 10%;">00:00:00</td> <td style="width: 5%;"></td> <td style="width: 5%;">0</td> </tr> <tr> <td>0.00</td> <td>WL</td> <td>Water level, 20% of the vertical dimension</td> <td>00:00:04</td> <td></td> <td>0</td> </tr> </table> </div>							0.00	MH	Start node type, manhole, reference number: MH03	00:00:00		0	0.00	WL	Water level, 20% of the vertical dimension	00:00:04		0
0.00	MH	Start node type, manhole, reference number: MH03	00:00:00		0													
0.00	WL	Water level, 20% of the vertical dimension	00:00:04		0													
<div style="display: flex; align-items: flex-start;"> <div style="margin-right: 20px;"> </div> <table border="1" style="margin-left: 20px;"> <tr> <td style="width: 15%;">9.80</td> <td style="width: 5%;">MHF</td> <td style="width: 45%;">Finish node type, manhole, reference number: MH04</td> <td style="width: 10%;">00:01:45</td> <td style="width: 5%;"></td> <td style="width: 5%;">0</td> </tr> </table> </div>							9.80	MHF	Finish node type, manhole, reference number: MH04	00:01:45		0						
9.80	MHF	Finish node type, manhole, reference number: MH04	00:01:45		0													
<div style="display: flex; align-items: flex-start;"> <div style="margin-right: 20px;"> <p>MH04</p> <p>Depth: 2.42</p> </div> </div>																		
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 - 14/11/2016 - MH03X

Section Number : 4	Survey Direction : MH03 → MH04	PLR : MH03X	Client's Ref :	Contractor's Ref : SDS 205179
------------------------------	--	-----------------------	----------------	---



MH03X_668c9a38-c250-4486-88d0-57d7477305dd_2016111

4_101502_099.jpg, 00:01:45, 9.80m

Finish node type, manhole, reference number: MH04



Inspection Report

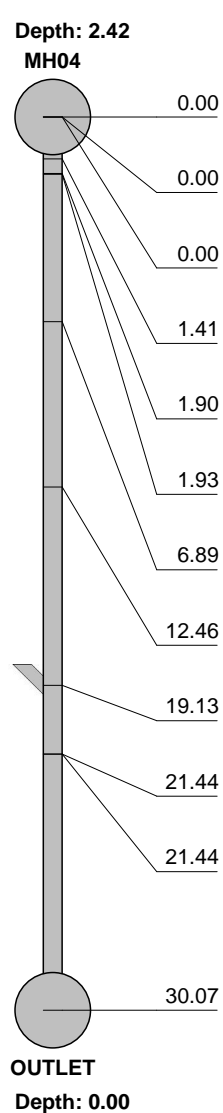
Section Number : 5	Date : 14/11/2016	Client's Ref :	Weather : Rain	Critical Drain/Sewer:	PLR : MH04X
Operator : SDS ST	Vehicle : NA64 LXX	Camera : Mainline	Preset : 0.00	Cleaned : no	Type of Drain : Gravity drain/sewer

Place: IGHTHAM	Direction: MH04 → OUTLET	US MH: MH04
Road: BOROUGH GREEN ROAD	Catchment: HAM HILL	US Depth: 2.42
Location: Gardens	Total Length: 30.07	DS MH: OUTLET
Surface Cover: OVERGROWN	Pipe Length: 2.00	DS Depth: 0.00

Use: Surface water	Pipe Shape: Square
Year Laid: 1980	Width / Height: 1800 / 1800
Purpose: Sample survey to determine asset condition	Flow Control: No flow control
Lining:	Pipe Material: Brick

Comment: **CCTV COMPLETED**
 Recommendation: **CLEANING OF SYSTEM RECOMMENDED**

1:254	Position m	Code	Observation	MPEG	Photo	Grade
Depth: 2.42						
MH04						
	0.00	MH	Start node type, manhole, reference number: MH04	00:00:00		0
	0.00	WL	Water level, 20% of the vertical dimension	00:00:02		0
	0.00	REM	General remark: STRUCTURE APPEARS TO HAVE TIMBER FRAMED ROOF HELD UP BY ACRO/JOIST	00:00:20		0
	1.41	OBS	Other obstacles built into structure from 11 o'clock to 02 o'clock, 5% cross-sectional area loss: POSSIBLE GAS OR WATER MAINS	00:01:15		5
	1.90	WL	Water level, 30% of the vertical dimension	00:01:42		0
	1.93	SC	Dimension of drain/sewer changes, 1200mm high, 1800mm wide	00:01:45		0
	6.89	DEC	Settled deposits, hard or compacted, 20% cross-sectional area loss	00:02:21		4
	12.46	WL	Water level, 30% of the vertical dimension	00:04:24		0
	19.13	CN	Connection other than junction at 03 o'clock, diameter: 100mm: LIVE	00:05:18		0
	21.44	REM	General remark: ROOF HELD UP BY TIMBER	00:05:51		0
	21.44	DEC	Settled deposits, hard or compacted, 30% cross-sectional area loss	00:06:27		4
	30.07	OFF	Finish node type, outfall, reference number: OUTLET: END POINT AT HEADWALL	00:07:52		0



STR no def	STR peak	STR mean	STR total	STR grade	SER no def	SER peak	SER mean	SER total	SER grade
0	0.0	0.0	0.0	1.0	3	10.0	0.7	20.0	5.0

Section Pictures - 14/11/2016 - MH04X

Section Number : 5	Survey Direction : MH04 → OUTLET	PLR : MH04X	Client's Ref :	Contractor's Ref : SDS 205179
------------------------------	--	-----------------------	----------------	---



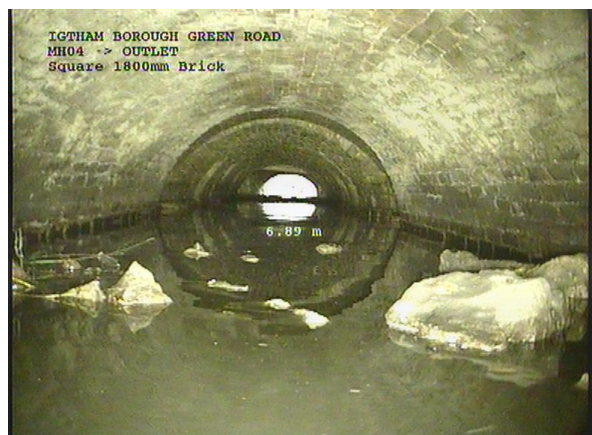
MH04X_1cf2a8e3-cb8e-4883-b937-5c443e11a3dc_20161114_101900_914.jpg, 00:00:20, 0.00m
General remark



MH04X_a1c9acd0-071b-4975-8a95-800183a33cb0_20161114_102032_774.jpg, 00:01:15, 1.41m
Other obstacles built into structure from 11 o'clock to 02 o'clock, 5% cross-sectional area loss



MH04X_c311e819-9a37-46d5-b2de-7bdb7525ef9f_20161114_102037_129.jpg, 00:01:15, 1.41m
Other obstacles built into structure from 11 o'clock to 02 o'clock, 5% cross-sectional area loss



MH04X_bd1003a2-4802-4abb-b612-58cff6101bda_20161114_102302_581.jpg, 00:02:21, 6.89m
Settled deposits, hard or compacted, 20% cross-sectional area loss

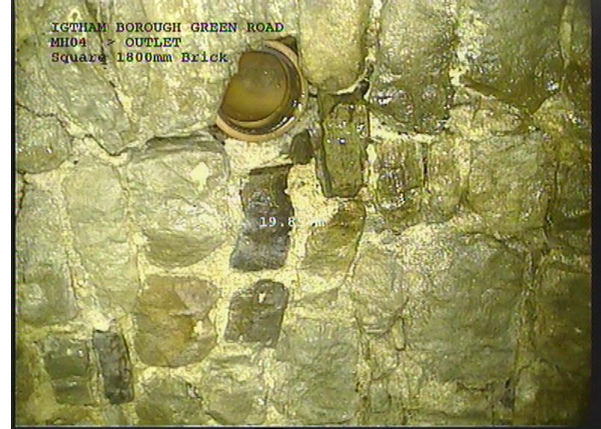


Section Pictures - 14/11/2016 - MH04X

Section Number : 5	Survey Direction : MH04 → OUTLET	PLR : MH04X	Client's Ref :	Contractor's Ref : SDS 205179
------------------------------	--	-----------------------	----------------	---



MH04X_b9e8755f-3052-4963-a466-8bca00524ba2_20161114_102612_724.jpg, 00:05:18, 19.13m
Connection other than junction at 03 o'clock, diameter: 100mm



MH04X_4445bae1-501b-41fb-afd5-1c2879e2d9bf_20161114_102621_162.jpg, 00:05:18, 19.13m
Connection other than junction at 03 o'clock, diameter: 100mm



MH04X_f30cc2db-5ec7-496f-b191-a1a20cd25923_20161114_102658_931.jpg, 00:05:51, 21.44m
General remark



MH04X_35c9d7d8-23ac-489a-82ce-ac516b59a6b6_20161114_102923_549.jpg, 00:07:52, 30.07m
Finish node type, outfall, reference number: OUTLET