Appendix H

CCTV Survey Report

Land at Shafton Barnsley - CCTV Survey Report : 14/02/18

Name :	MIDLAND SURVEY
Contact :	
Location :	
Town :	
Region :	
Postcode :	
Tel :	
Mobile :	
Email :	
Fax :	

Client Information

Name :	WYG Engineering
Contact :	Colin Davidson
Location :	Geneva Building, Lake Veiw Drive
Town :	Annesley, Nottingham
Region :	
Postcode :	NG15 0ED
Tel :	
Mobile :	
Email :	
Fax :	

Site Information

Name :	
Contact :	
Location :	Shafton
Town :	Barnsley
Region :	S72 8PX
Postcode :	
Tel :	
Mobile :	
Email :	
Fax :	

Total grades for project

Grade 1 Defects	0	Grade 2 Defects	2	Grade 3 Defects	5	Grade 4 Defects	0	Grade 5 Defects	0

Graded defect count per section

This section shows the number of graded defects per individual survey. A grade 5 defect being serious and indicating more urgent repair. Grade 3-4 defects are less serious and are less urgent concerning repair. Grade 1-2 defects are relatively minor and could be monitored and/or repaired if thought necessary.

Section: 1 **Start:** mh01 ds mh02 **End:** mh02 **Road:** Shafton
Length: 27.9 **Use:** Surface Water **Depth:** **Place:** Barnsley
Structural Grade: 0 **Operational Grade:** 3 **DRB Grade:** B

From To	Dia	Material	G1 - 2	G3	G4	G5
00.0m - 27.9m	225	Vitrified Clay (i.e. all clayware)	0	2	0	0

Section: 2 **Start:** mh02 ds mh04 **End:** mh04 **Road:** Shafton
Length: 24 **Use:** Surface Water **Depth:** **Place:** Barnsley
Structural Grade: 0 **Operational Grade:** 0 **DRB Grade:**

From To	Dia	Material	G1 - 2	G3	G4	G5
00.0m - 24.0m	225	Vitrified Clay (i.e. all clayware)	0	0	0	0

Section: 3 **Start:** mh03 ds mh05 **End:** mh05 **Road:** Shafton
Length: 28.1 **Use:** Foul **Depth:** **Place:** Barnsley
Structural Grade: 0 **Operational Grade:** 5 **DRB Grade:** C

From To	Dia	Material	G1 - 2	G3	G4	G5
00.0m - 28.1m	150	Vitrified Clay (i.e. all clayware)	1	1	0	0

Section: 4 **Start:** mh06 ds mh osa **End:** mh osa **Road:** Shafton
Length: 45.3 **Use:** Foul **Depth:** **Place:** Barnsley
Structural Grade: 0 **Operational Grade:** 3 **DRB Grade:** B

From To	Dia	Material	G1 - 2	G3	G4	G5
00.0m - 45.3m	150	Vitrified Clay (i.e. all clayware)	1	0	0	0

Section: 5 **Start:** mh07 ds mh osa **End:** mh osa **Road:** Shafton
Length: 43.5 **Use:** Surface Water **Depth:** **Place:** Barnsley
Structural Grade: 0 **Operational Grade:** 0 **DRB Grade:**

From To	Dia	Material	G1 - 2	G3	G4	G5
00.0m - 43.5m	300	Vitrified Clay (i.e. all clayware)	0	0	0	0

Total grades for project

Grade 1 Defects	0	Grade 2 Defects	2	Grade 3 Defects	5	Grade 4 Defects	0	Grade 5 Defects	0

Site: Shafton Barnsley

Section 1

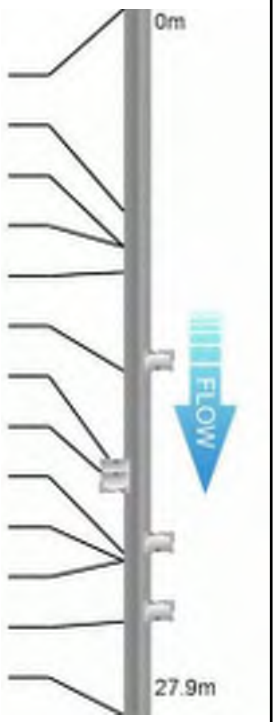
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
WYG Engineering	Shafton	Barnsley			14/02/2018

Start Node Ref:	mh01 ds mh02	Finish Node Ref:	mh02	Direction:	D	Height/Dia:	225
Start Node Depth:		Finish Node Depth:		Use:	S	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	VC	Cleaned	N

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	Remarks
A				D	N	27.9	

Structural Peak Grade	0	Operational Grade	3	DRB Grade	B

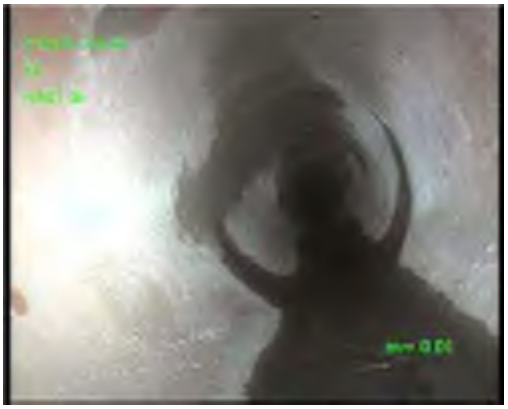
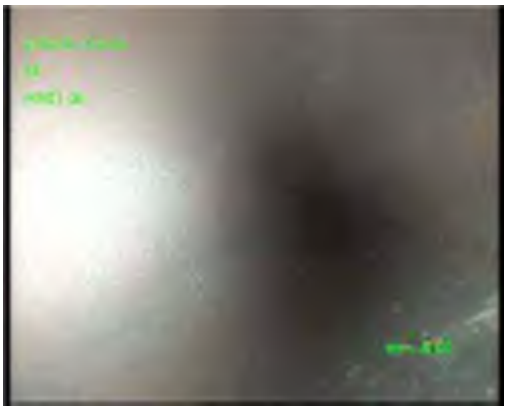
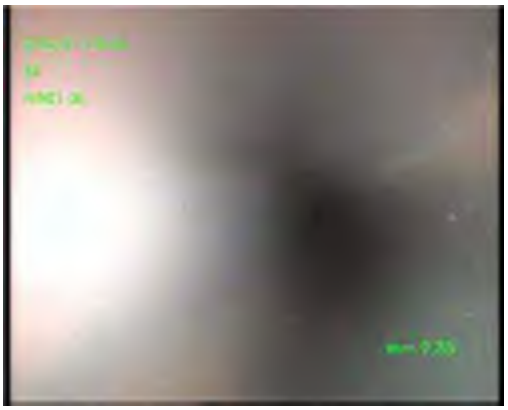
Position	Code	Description	CD	Pic	Grade
00.0	MH	Start node type, manhole		0_0	0
08.0	DER	S1 Settled deposits coarse 10%	S1	0_1	3
09.4	DER	F1 Settled deposits coarse 10%	F1	0_-	3
09.4	WL	S2 Water level 10%	S2	0_2	0
10.4	DER	S3 Settled deposits coarse 10%	S3	0_3	3
14.3	JN	Junction 09 : 150mm Diameter		0_4	0
18.6	JN	Junction 03 : 150mm Diameter		0_5	0
19.1	JN	Junction 03 : 150mm Diameter		0_6	0
21.5	JN	Junction 09 : 150mm Diameter		0_7	0
21.8	DER	F3 Settled deposits coarse 10%	F3	0_-	3
21.8	WL	F2 Water level 10%	F2	0_-	0
24.2	CN	Connection other than junction 09 : 225mm Diameter		0_8	0
27.9	MHF	Finish node type, manhole		0_9	0



Total grades for project

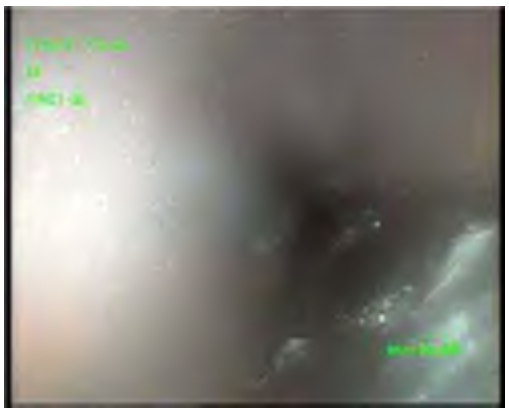
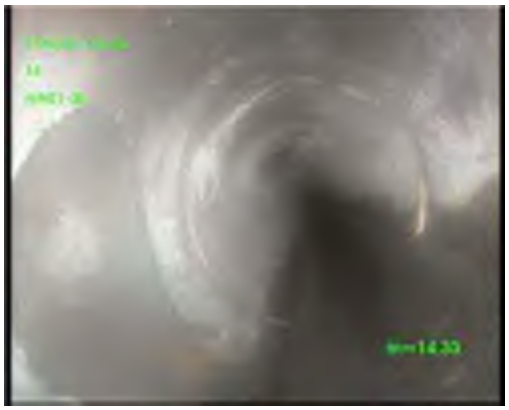
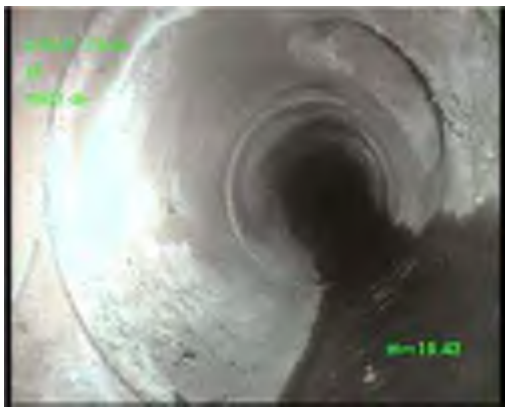
Grade 1 Defects	0	Grade 2 Defects	2	Grade 3 Defects	5	Grade 4 Defects	0	Grade 5 Defects	0

Descriptive Report with Remarks and Observation Images

Pos	Video Ref	Code	Cont.	Description	Image
00.0m	00:00:00	MH		Start node type, manhole, reference mh01 ds mh02 mh01 ds mh02	Image Provided - Ref: 0_0 
08.0m	00:01:42	DER	S1	Settled deposits coarse8m - 9.4m: 10% cross-sectional area loss - Grade 3	Image Provided - Ref: 0_1 
09.4m	00:01:42	DER	F1	Settled deposits coarse Defect End: 10% cross-sectional area loss - Grade 3	
09.4m	00:02:00	WL	S2	Water level9.4m - 21.8m: 10% Height/Diameter	Image Provided - Ref: 0_2 

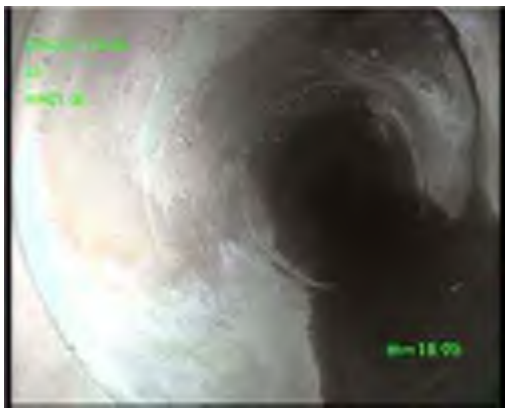
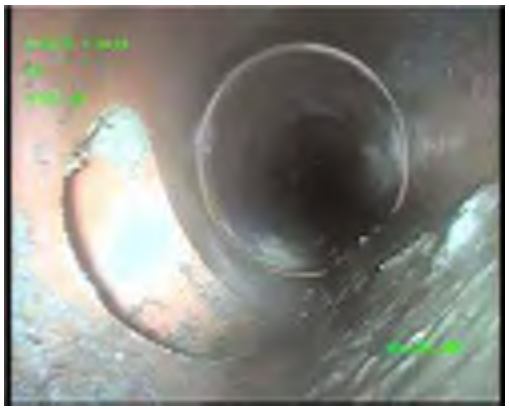
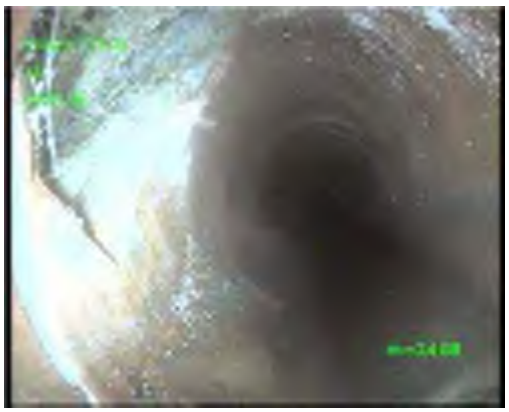
Total grades for project

Grade 1 Defects	0	Grade 2 Defects	2	Grade 3 Defects	5	Grade 4 Defects	0	Grade 5 Defects	0

Pos	Video Ref	Code	Cont.	Description	Image
10.4m	00:02:22	DER	S3	Settled deposits coarse10.4m - 21.8m: 10% cross-sectional area loss - Grade 3	Image Provided - Ref: 0_3 
14.3m	00:03:13	JN		Junction at 09 o'clock: 150mm Diameter	Image Provided - Ref: 0_4 
18.6m	00:04:22	JN		Junction at 03 o'clock: 150mm Diameter	Image Provided - Ref: 0_5 

Total grades for project

Grade 1 Defects	0	Grade 2 Defects	2	Grade 3 Defects	5	Grade 4 Defects	0	Grade 5 Defects	0

Pos	Video Ref	Code	Cont.	Description	Image
19.1m	00:04:28	JN		Junction at 03 o'clock: 150mm Diameter	Image Provided - Ref: 0_6 
21.5m	00:05:03	JN		Junction at 09 o'clock: 150mm Diameter	Image Provided - Ref: 0_7 
21.8m	00:02:22	DER	F3	Settled deposits coarse Defect End: 10% cross-sectional area loss - Grade 3	
21.8m	00:02:00	WL	F2	Water level Defect End: 10% Height/Diameter	
24.2m	00:05:49	CN		Connection other than junction at 09 o'clock: 225mm Diameter	Image Provided - Ref: 0_8 

Total grades for project

Grade 1 Defects	0	Grade 2 Defects	2	Grade 3 Defects	5	Grade 4 Defects	0	Grade 5 Defects	0

Pos	Video Ref	Code	Cont.	Description	Image
27.9m	00:06:51	MHF		Finish node type, manhole, reference mh02 mh02	Image Provided - Ref: 0_9999 

Total grades for project

Grade 1 Defects	0	Grade 2 Defects	2	Grade 3 Defects	5	Grade 4 Defects	0	Grade 5 Defects	0

Site: Shafton Barnsley

Section 2

Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
WYG Engineering	Shafton	Barnsley			14/02/2018

Start Node Ref:	mh02 ds mh04	Finish Node Ref:	mh04	Direction:	D	Height/Dia:	225
Start Node Depth:		Finish Node Depth:		Use:	S	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	VC	Cleaned	N

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	Remarks
A				D	N	24	

Structural Peak Grade	0	Operational Grade	0	DRB Grade	

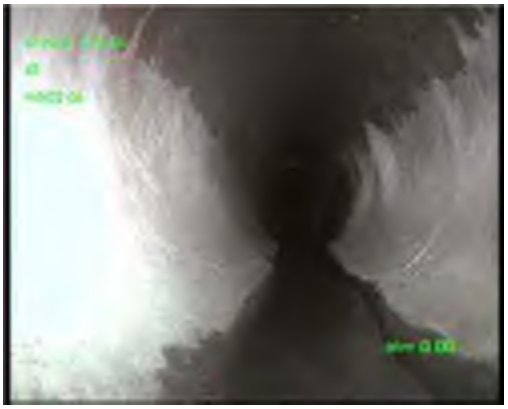
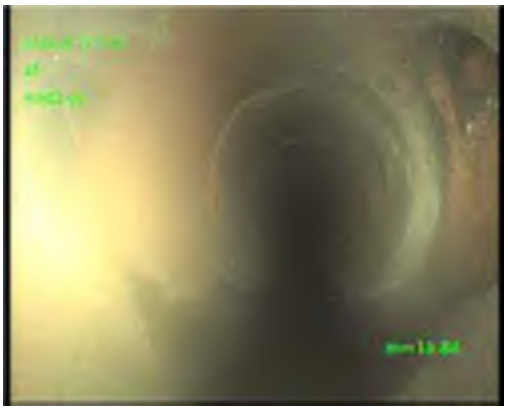
Position	Code	Description	CD	Pic	Grade
00.0	MH	Start node type, manhole		1_0	0
16.9	JN	Junction 03 : 225mm Diameter		1_1	0
17.2	JN	Junction 03 : 150mm Diameter		1_2	0
17.7	JN	Junction 09 : 150mm Diameter		1_3	0
18.1	JN	Junction 09 : 225mm Diameter		1_4	0
24.0	MHF	Finish node type, manhole		1_9	0



Total grades for project

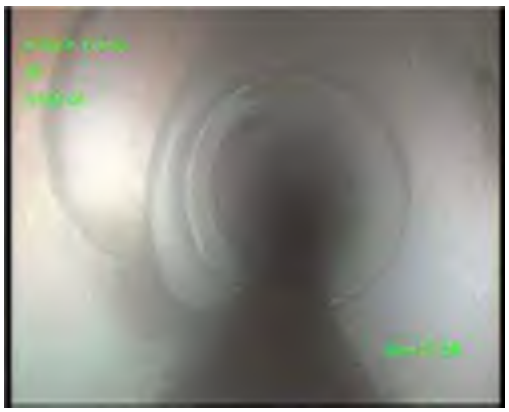
Grade 1 Defects	0	Grade 2 Defects	2	Grade 3 Defects	5	Grade 4 Defects	0	Grade 5 Defects	0

Descriptive Report with Remarks and Observation Images

Pos	Video Ref	Code	Cont.	Description	Image
00.0m	00:00:00	MH		Start node type, manhole, reference mh02 ds mh04 mh02 ds mh03	Image Provided - Ref: 1_0 
16.9m	00:03:45	JN		Junction at 03 o'clock: 225mm Diameter	Image Provided - Ref: 1_1 
17.2m	00:03:59	JN		Junction at 03 o'clock: 150mm Diameter	Image Provided - Ref: 1_2 

Total grades for project

Grade 1 Defects	0	Grade 2 Defects	2	Grade 3 Defects	5	Grade 4 Defects	0	Grade 5 Defects	0

Pos	Video Ref	Code	Cont.	Description	Image
17.7m	00:04:05	JN		Junction at 09 o'clock: 150mm Diameter	Image Provided - Ref: 1_3 
18.1m	00:04:11	JN		Junction at 09 o'clock: 225mm Diameter	Image Provided - Ref: 1_4 
24.0m	00:05:29	MHF		Finish node type, manhole, reference mh04 mh03	Image Provided - Ref: 1_9999 

Total grades for project

Grade 1 Defects	0	Grade 2 Defects	2	Grade 3 Defects	5	Grade 4 Defects	0	Grade 5 Defects	0

Site: Shafton Barnsley

Section 3

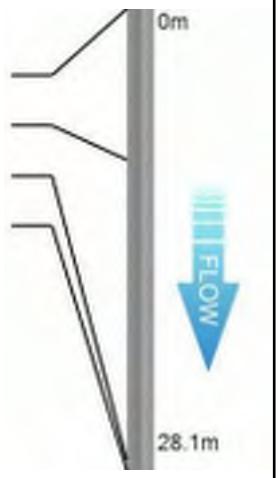
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
WYG Engineering	Shafton	Barnsley			14/02/2018

Start Node Ref:	mh03 ds mh05	Finish Node Ref:	mh05	Direction:	D	Height/Dia:	150
Start Node Depth:		Finish Node Depth:		Use:	F	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	VC	Cleaned	N

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	Remarks
A				D	N	28.1	

Structural Peak Grade	0	Operational Grade	5	DRB Grade	C

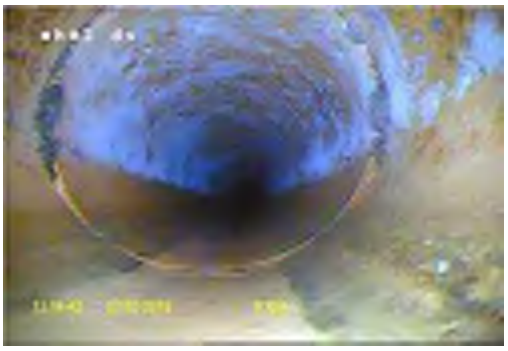
Position	Code	Description	CD	Pic	Grade
00.0	MH	Start node type, manhole			0
09.2	DESJ	Settled deposits fine 5% at joint		2_1	2
27.5	OBX	Other obstacles, other object in invert 04-08 20%		2_2	3
28.1	MHF	Finish node type, manhole		2_9	0



Total grades for project

Grade 1 Defects	0	Grade 2 Defects	2	Grade 3 Defects	5	Grade 4 Defects	0	Grade 5 Defects	0

Descriptive Report with Remarks and Observation Images

Pos	Video Ref	Code	Cont.	Description	Image
00.0m	00:00:00	MH		Start node type, manhole, reference mh03 ds mh05 mh03 ds mh04	
09.2m	00:01:18	DES		Settled deposits fine: 5% cross-sectional area loss at joint - Grade 2	Image Provided - Ref: 2_1 
27.5m	00:03:25	OBX		Other obstacles, other object in invert from 04 o'clock to 08 o'clock: 20% cross-sectional area loss - Grade 3 Settled fouling and tissue	Image Provided - Ref: 2_2 
28.1m	00:03:38	MHF		Finish node type, manhole, reference mh05 mh04	Image Provided - Ref: 2_9999 

Total grades for project

Grade 1 Defects	0	Grade 2 Defects	2	Grade 3 Defects	5	Grade 4 Defects	0	Grade 5 Defects	0

Site: Shafton Barnsley

Section 4

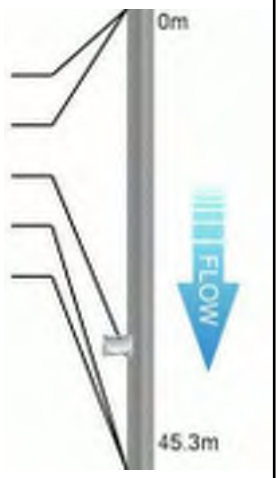
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
WYG Engineering	Shafton	Barnsley			14/02/2018

Start Node Ref:	mh06 ds mh osa	Finish Node Ref:	mh osa	Direction:	D	Height/Dia:	150
Start Node Depth:		Finish Node Depth:		Use:	F	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	VC	Cleaned	N

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	Remarks
A				D	N	45.3	

Structural Peak Grade	0	Operational Grade	3	DRB Grade	B

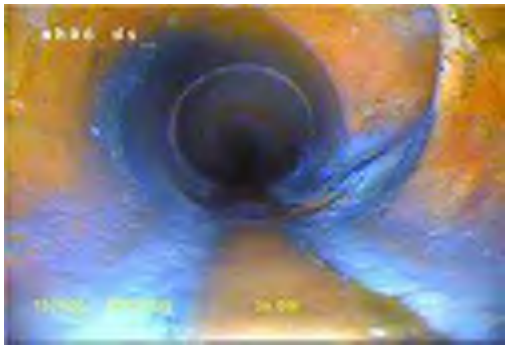
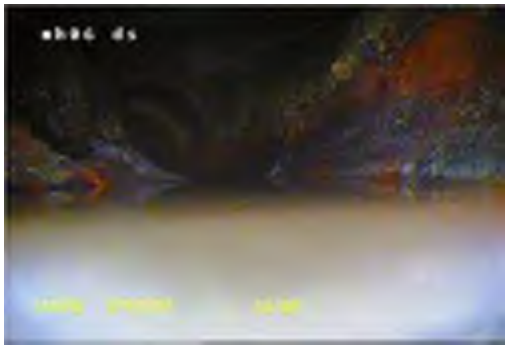
Position	Code	Description	CD	Pic	Grade
00.0	MH	Start node type, manhole		3_0	0
00.0	DEZ	S1 Other 04-08 5%	S1	3_1	2
34.1	JN	Junction 03 : 150mm Diameter		3_2	0
45.3	WL	Water level 20%		3_3	0
45.3	MHF	Finish node type, manhole		3_9	0



Total grades for project

Grade 1 Defects	0	Grade 2 Defects	2	Grade 3 Defects	5	Grade 4 Defects	0	Grade 5 Defects	0

Descriptive Report with Remarks and Observation Images

Pos	Video Ref	Code	Cont.	Description	Image
00.0m	00:00:02	MH		Start node type, manhole, reference mh06 ds mh osa mh06 ds mh osa	Image Provided - Ref: 3_0 
00.0m	00:00:03	DEZ	S1	Other0m - 0m from 04 o'clock to 08 o'clock: 5% cross-sectional area loss - Grade 2 Scale	Image Provided - Ref: 3_1 
34.1m	00:04:06	JN		Junction at 03 o'clock: 150mm Diameter	Image Provided - Ref: 3_2 
45.3m	00:05:15	WL		Water level: 20% Height/Diameter	Image Provided - Ref: 3_3 

Total grades for project

Grade 1 Defects	0	Grade 2 Defects	2	Grade 3 Defects	5	Grade 4 Defects	0	Grade 5 Defects	0

Pos	Video Ref	Code	Cont.	Description	Image
45.3m	00:05:18	MHF		Finish node type, manhole, reference mh osa mh osa	Image Provided - Ref: 3_9999 

Total grades for project

Grade 1 Defects	0	Grade 2 Defects	2	Grade 3 Defects	5	Grade 4 Defects	0	Grade 5 Defects	0

Site: Shafton Barnsley

Section 5

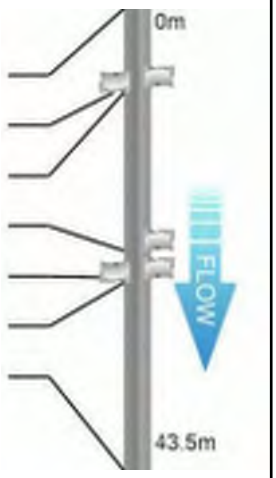
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
WYG Engineering	Shafton	Barnsley			14/02/2018

Start Node Ref:	mh07 ds mh osa	Finish Node Ref:	mh osa	Direction:	D	Height/Dia:	300
Start Node Depth:		Finish Node Depth:		Use:	S	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	VC	Cleaned	N

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	Remarks
A				D	N	43.5	

Structural Peak Grade	0	Operational Grade	0	DRB Grade	

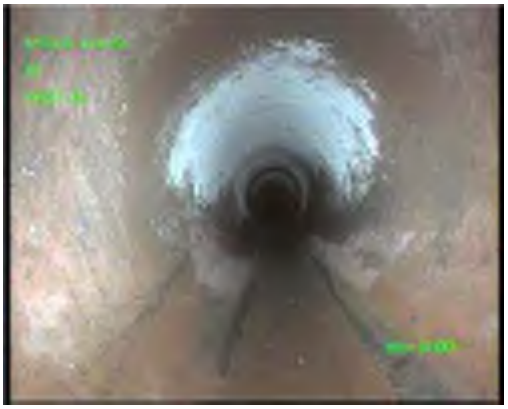
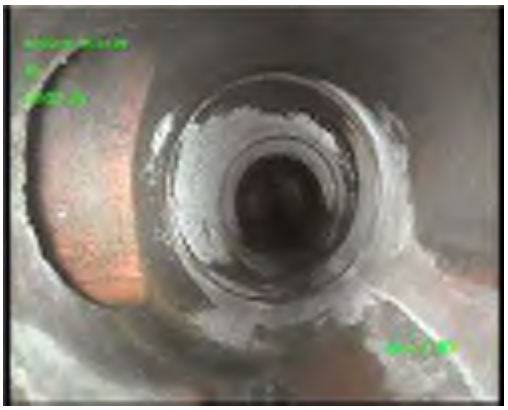
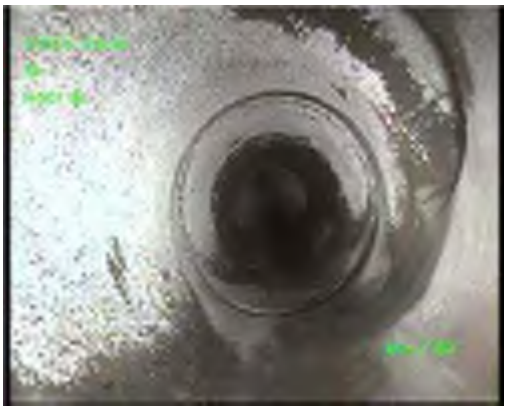
Position	Code	Description	CD	Pic	Grade
00.0	MH	Start node type, manhole		4_0	0
07.4	JN	Junction 09 : 225mm Diameter		4_1	0
07.9	JN	Junction 03 : 150mm Diameter		4_2	0
22.8	JN	Junction 09 : 300mm Diameter		4_3	0
25.4	JN	Junction 09 : 225mm Diameter		4_4	0
25.8	JN	Junction 03 : 150mm Diameter		4_5	0
43.5	MHF	Finish node type, manhole		4_9	0



Total grades for project

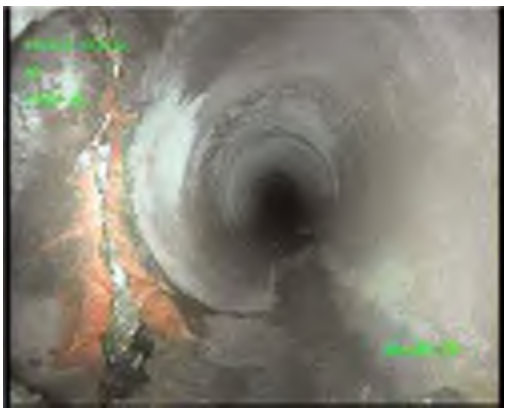
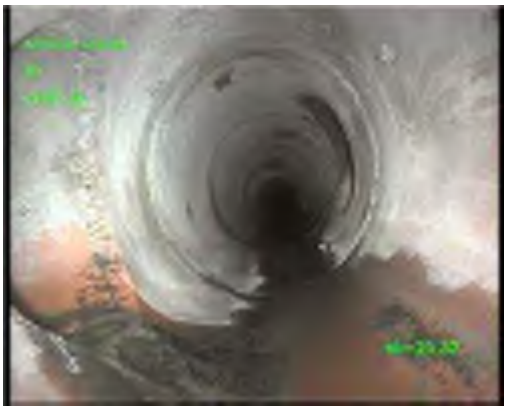
Grade 1 Defects	0	Grade 2 Defects	2	Grade 3 Defects	5	Grade 4 Defects	0	Grade 5 Defects	0

Descriptive Report with Remarks and Observation Images

Pos	Video Ref	Code	Cont.	Description	Image
00.0m	00:00:00	MH		Start node type, manhole, reference mh07 ds mh osa mh07 ds mh osa	Image Provided - Ref: 4_0 
07.4m	00:01:42	JN		Junction at 09 o'clock: 225mm Diameter	Image Provided - Ref: 4_1 
07.9m	00:01:48	JN		Junction at 03 o'clock: 150mm Diameter	Image Provided - Ref: 4_2 

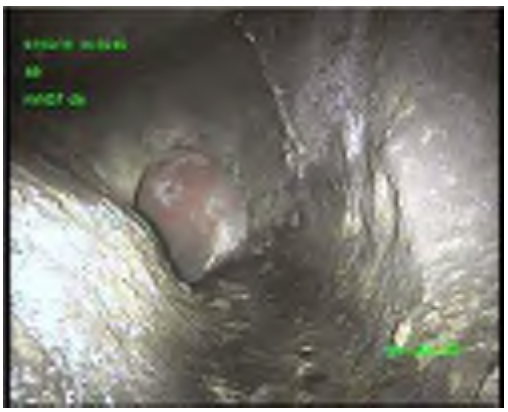
Total grades for project

Grade 1 Defects	0	Grade 2 Defects	2	Grade 3 Defects	5	Grade 4 Defects	0	Grade 5 Defects	0

Pos	Video Ref	Code	Cont.	Description	Image
22.8m	00:05:15	JN		Junction at 09 o'clock: 300mm Diameter	Image Provided - Ref: 4_3 
25.4m	00:05:57	JN		Junction at 09 o'clock: 225mm Diameter	Image Provided - Ref: 4_4 
25.8m	00:06:02	JN		Junction at 03 o'clock: 150mm Diameter	Image Provided - Ref: 4_5 

Total grades for project

Grade 1 Defects	0	Grade 2 Defects	2	Grade 3 Defects	5	Grade 4 Defects	0	Grade 5 Defects	0

Pos	Video Ref	Code	Cont.	Description	Image
43.5m	00:11:50	MHF		Finish node type, manhole, reference mh osa mh osa	Image Provided - Ref: 4_9999 

Total grades for project

Grade 1 Defects	0	Grade 2 Defects	2	Grade 3 Defects	5	Grade 4 Defects	0	Grade 5 Defects	0