

Drainage Report

Prepared For

Surfacing Standards Ltd
Office 2, Empingham House,
Ayston Road
Uppingham
Rutland
LE15 9NY

Site

Jubilee Park
Jubilee Park, Dinas Lane
Liverpool
L36 2NW

MIDLAND SURVEY LTD.

Total Defects for Project



Total DRB Grades for Project



102678 Jubilee Park - CCTV Survey Report : 09/11/23

Name : MIDLAND SURVEY LTD.
 Contact :
 Location : Cromwell House, Westfield Road
 Town : Southam
 Region : West Midlands
 Postcode :
 Email :
 Contact Number :
 Surveyor :
 Valid Certification No :

Client Information

Name : Surfacing Standards Ltd
 Contact :
 Location : Office 2, Empingham House, Ayston Road
 Town : Uppingham
 Region : Rutland
 Postcode : LE15 9NY
 Tel :
 Mobile :
 Email :
 Fax :

Site Information

Name : Jubilee Park
 Contact :
 Location : Jubilee Park, Dinas Lane
 Town : Liverpool
 Region :
 Postcode : L36 2NW
 Tel :
 Mobile :
 Email :
 Fax :

Total Defects for Project



Total DRB Grades for Project



Report interpretation.

Overview:

Each section of the drainage system is allocated a score indicating areas that require attention. These areas are detailed in the overview section on the following page and also at the bottom right of the first few pages. We use colour coding as an indicator of severity. Additional information concerning rehabilitation options/recommendations is included in the overview page, which can also be used as an "at a glance" indication of system condition. More in depth information for each section, including images can be found later in the report. Grade conditions are as follows:

Grade A: Drain is serviceable no recommendations are required.

Grade B: There is an issue that might require remedial works but is not imperative.

Grade C: There is a defect that require immediate remedial works, the drain is not serviceable.

Observations:

Each section of drainage reported on (manhole to manhole for example), contains detailed information about that drain and any observations made concerning conditions are detailed below the header section. The observations are colour coded and given a score, with the more significant defects being given a higher score, using a scale of 1 to 5 as detailed below:

Grades 1 to 2: These defects may require remedial monitoring.

Grades 3 to 4: These defects may require some form of remedial works

Grade 5: These are defects that will require remedial repair or replacement.

Observations that Require immediate attention are also noted on the accompanying CAD a PDF files Relating to the site.

General:

The information provided is relevant at the time of survey. The coding system in this report is based on the Manual sewer condition classification, 5th edition (MSCC5) domestic codes (BS EN 13508-1:2003). This is the official standard for the water industry.

The grading system is based on the drain repair book 4th edition recommendations as provided

Total Defects for Project



Total DRB Grades for Project



Overview

Section: 1 From: mh01 photo To: mh01 photo	DRB Grade A	Structural Grade: 0 Service Grade: 0 DRB Grade: A Pipe Size: 100 Material: Vitrified Clay (i.e. all clayware) Use: Surface Water
Section: 2 From: mh02 photo To: mh02 photo	DRB Grade A	Structural Grade: 0 Service Grade: 0 DRB Grade: A Pipe Size: 100 Material: Vitrified Clay (i.e. all clayware) Use: Surface Water
Section: 3 From: mh03 ds To: sa	DRB Grade B	Structural Grade: 1 Service Grade: 3 DRB Grade: B Pipe Size: 100 Material: Vitrified Clay (i.e. all clayware) Use: Foul
Section: 4 From: mh04 photo To: mh04 photo	DRB Grade A	Structural Grade: 0 Service Grade: 0 DRB Grade: A Pipe Size: 100 Material: Vitrified Clay (i.e. all clayware) Use: Foul
Section: 5 From: mh05 photo To: mh05 photo	DRB Grade A	Structural Grade: 0 Service Grade: 0 DRB Grade: A Pipe Size: 100 Material: Vitrified Clay (i.e. all clayware) Use: Foul
Section: 6 From: mh06 photo To: mh06 photo	DRB Grade A	Structural Grade: 0 Service Grade: 0 DRB Grade: A Pipe Size: 100 Material: Vitrified Clay (i.e. all clayware) Use: Surface Water
Section: 7 From: imh01 ds To: imh02	DRB Grade A	Structural Grade: 0 Service Grade: 0 DRB Grade: A Pipe Size: 100 Material: Vitrified Clay (i.e. all clayware) Use: Foul
Section: 8 From: imh02 ds To: mh03	DRB Grade B	Structural Grade: 3 Service Grade: 2 DRB Grade: B Pipe Size: 100 Material: Vitrified Clay (i.e. all clayware) Use: Foul

Total Defects for Project



Total DRB Grades for Project



Section: 9 From: re01 ds To: imh01	DRB Grade B	Structural Grade: 3 Service Grade: 2 DRB Grade: B Pipe Size: 100 Material: Vitrified Clay (i.e. all clayware) Use: Foul
Section: 10 From: gy01 photo To: gy01 photo	DRB Grade A	Structural Grade: 0 Service Grade: 0 DRB Grade: A Pipe Size: 100 Material: Vitrified Clay (i.e. all clayware) Use: Surface Water

Total Defects for Project



Total DRB Grades for Project



Scores

Start Ref	End Ref	Dia.	Material	Peak Structural Grade	Peak Operational Grade	Mean Operational Score	Peak Operational Score	Peak Structural Score
mh01 photo	mh01 photo	100	Vitrified Clay (i.e. all clayware)	0	0	0	0	0

Start Ref	End Ref	Dia.	Material	Peak Structural Grade	Peak Operational Grade	Mean Operational Score	Peak Operational Score	Peak Structural Score
mh02 photo	mh02 photo	100	Vitrified Clay (i.e. all clayware)	0	0	0	0	0

Start Ref	End Ref	Dia.	Material	Peak Structural Grade	Peak Operational Grade	Mean Operational Score	Peak Operational Score	Peak Structural Score
mh03 ds	sa	100	Vitrified Clay (i.e. all clayware)	1	3	0.24	2	2

Start Ref	End Ref	Dia.	Material	Peak Structural Grade	Peak Operational Grade	Mean Operational Score	Peak Operational Score	Peak Structural Score
mh04 photo	mh04 photo	100	Vitrified Clay (i.e. all clayware)	0	0	0	0	0

Start Ref	End Ref	Dia.	Material	Peak Structural Grade	Peak Operational Grade	Mean Operational Score	Peak Operational Score	Peak Structural Score
mh05 photo	mh05 photo	100	Vitrified Clay (i.e. all clayware)	0	0	0	0	0

Start Ref	End Ref	Dia.	Material	Peak Structural Grade	Peak Operational Grade	Mean Operational Score	Peak Operational Score	Peak Structural Score
mh06 photo	mh06 photo	100	Vitrified Clay (i.e. all clayware)	0	0	0	0	0

Start Ref	End Ref	Dia.	Material	Peak Structural Grade	Peak Operational Grade	Mean Operational Score	Peak Operational Score	Peak Structural Score
imh01 ds	imh02	100	Vitrified Clay (i.e. all clayware)	0	0	0	0	0

Start Ref	End Ref	Dia.	Material	Peak Structural Grade	Peak Operational Grade	Mean Operational Score	Peak Operational Score	Peak Structural Score
imh02 ds	mh03	100	Vitrified Clay (i.e. all clayware)	3	2	0.13	1	40

Start Ref	End Ref	Dia.	Material	Peak Structural Grade	Peak Operational Grade	Mean Operational Score	Peak Operational Score	Peak Structural Score
re01 ds	imh01	100	Vitrified Clay (i.e. all clayware)	3	2	0.87	1	40

Total Defects for Project

Total DRB Grades for Project



Start Ref	End Ref	Dia.	Material	Peak Structural Grade	Peak Operational Grade	Mean Operational Score	Peak Operational Score	Peak Structural Score
gy01 photo	gy01 photo	100	Vitrified Clay (i.e. all clayware)	0	0	0	0	0

Total Defects for Project



Total DRB Grades for Project



Section 1

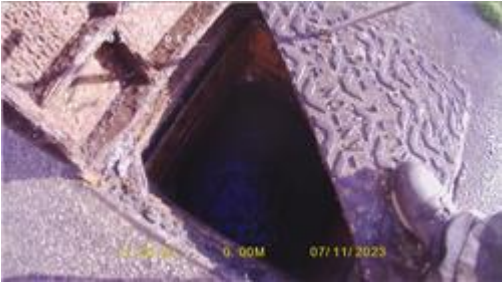
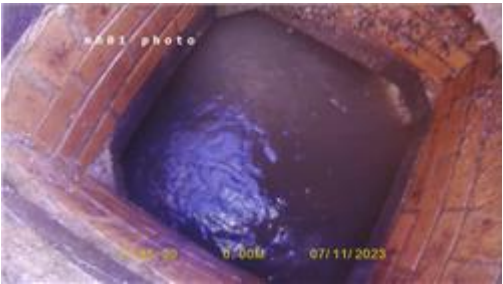
Position	Code	Description	CD	Pic	Video	Ref
00.0	MH	Start node type, manhole		0_0	0:00:00	—
00.0	MHF	Finish node type, manhole		0_9		—

DRB Grade for Section



Descriptive Report with Remarks and Observation Images

Section 1

Pos	Video Ref	Code	Cont.	Description	Image
00.0m	0:00:00	MH		Start node type, manhole, reference mh01 photo mh01 photo	Image Provided - Ref: 0_0 
00.0m		MHF		Finish node type, manhole, reference mh01 photo mh01 photo	Image Provided - Ref: 0_9999 

Total Defects for section

DRB Grade for Section



Site: Jubilee Park, Dinas Lane, Liverpool

Section 2

Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
Surfacing Standards Ltd	Jubilee Park, Dinas Lane	Liverpool		Adam Cliffords	09/11/2023

Start Node Ref:	mh02 photo	Finish Node Ref:	mh02 photo	Direction:	Z	Height/Dia:	100
Start Node Depth:	0.00	Finish Node Depth:	0.00	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	0	

Structural Peak Grade	0	Operational Grade	0	DRB Grade	A
-----------------------	---	-------------------	---	-----------	---

Position	Code	Description	CD	Pic	Video Ref	
00.0	MH	Start node type, manhole		1_0	0:00:00	—
00.0	MHF	Finish node type, manhole		1_9		—
						0m 0m

Total Defects for section

DRB Grade for Section



Descriptive Report with Remarks and Observation Images

Section 2

Pos	Video Ref	Code	Cont.	Description	Image
00.0m	0:00:00	MH		Start node type, manhole, reference mh02 photo mh02 photo	Image Provided - Ref: 1_0 
00.0m		MHF		Finish node type, manhole, reference mh02 photo mh02 photo	Image Provided - Ref: 1_9999 

Total Defects for section

DRB Grade for Section



Site: Jubilee Park, Dinas Lane, Liverpool

Section 3

Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
Surfacing Standards Ltd	Jubilee Park, Dinas Lane	Liverpool		Adam Cliffords	09/11/2023

Start Node Ref:	mh03 ds	Finish Node Ref:	sa	Direction:	D	Height/Dia:	100
Start Node Depth:	0.00	Finish Node Depth:	0.00	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	8.2	

Structural Peak Grade	1	Operational Grade	3	DRB Grade	B
-----------------------	---	-------------------	---	-----------	---

Position	Code	Description	CD	Pic	Video Ref
00.0	MH	Start node type, manhole		2_0	0:00:00
00.3	JDM	Joint displaced medium		2_2	0:00:01
08.2	SA	Survey abandoned		2_9	

Total Defects for section

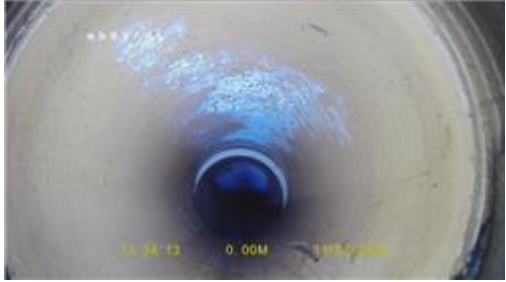
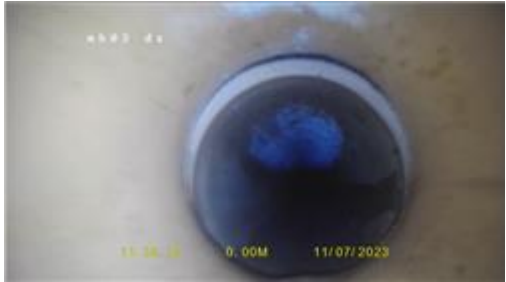
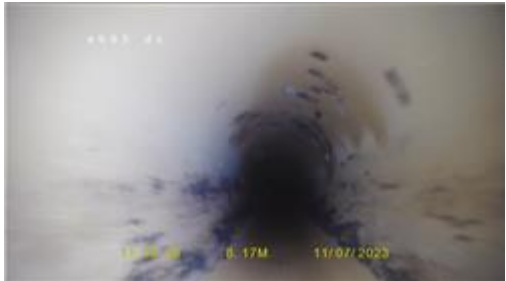


DRB Grade for Section



Descriptive Report with Remarks and Observation Images

Section 3

Pos	Video Ref	Code	Cont.	Description	Image
00.0m	0:00:00	MH		Start node type, manhole, reference mh03 ds	Image Provided - Ref: 2_0 
00.3m	0:00:01	JDM		Joint displaced medium - Severity 2	Image Provided - Ref: 2_2 
08.2m		SA		Survey abandoned Survey Abandoned - Unable to Push Camera Further	Image Provided - Ref: 2_9999 

Total Defects for section



DRB Grade for Section



Site: Jubilee Park, Dinas Lane, Liverpool

Section 4

Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
Surfacing Standards Ltd	Jubilee Park, Dinas Lane	Liverpool		Adam Cliffords	09/11/2023

Start Node Ref:	mh04 photo	Finish Node Ref:	mh04 photo	Direction:	Z	Height/Dia:	100
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	F	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	VC	Cleaned	N

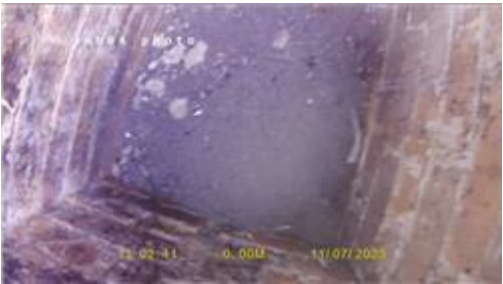
Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	Remarks
A				D	N	0	

Structural Peak Grade	0	Operational Grade	0	DRB Grade	A
-----------------------	---	-------------------	---	-----------	---

Position	Code	Description	CD	Pic	Video Ref	
00.0	MH	Start node type, manhole		3_0	0:00:00	—
00.0	MHF	Finish node type, manhole		3_9		—
						0m
						0m

Descriptive Report with Remarks and Observation Images

Section 4

Pos	Video Ref	Code	Cont.	Description	Image
00.0m	0:00:00	MH		Start node type, manhole, reference mh04 photo mh04 photo	Image Provided - Ref: 3_0 
00.0m		MHF		Finish node type, manhole, reference mh04 photo mh04 photo	Image Provided - Ref: 3_9999 

Total Defects for section

DRB Grade for Section



Site: Jubilee Park, Dinas Lane, Liverpool

Section 5

Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
Surfacing Standards Ltd	Jubilee Park, Dinas Lane	Liverpool		Adam Cliffords	09/11/2023

Start Node Ref:	mh05 photo	Finish Node Ref:	mh05 photo	Direction:	Z	Height/Dia:	100
Start Node Depth:	0.00	Finish Node Depth:	0.00	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	0	

Structural Peak Grade	0	Operational Grade	0	DRB Grade	A
-----------------------	---	-------------------	---	-----------	---

Position	Code	Description	CD	Pic	Video Ref	
00.0	MH	Start node type, manhole		4_0	0:00:00	—
00.0	MHF	Finish node type, manhole		4_9		—
						0m 0m

Total Defects for section

DRB Grade for Section



Descriptive Report with Remarks and Observation Images

Section 5

Pos	Video Ref	Code	Cont.	Description	Image
00.0m	0:00:00	MH		Start node type, manhole, reference mh05 photo mh05 photo	Image Provided - Ref: 4_0 
00.0m		MHF		Finish node type, manhole, reference mh05 photo mh05 photo	Image Provided - Ref: 4_9999 

Total Defects for section

DRB Grade for Section



Site: Jubilee Park, Dinas Lane, Liverpool

Section 6

Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
Surfacing Standards Ltd	Jubilee Park, Dinas Lane	Liverpool		Adam Cliffords	09/11/2023

Start Node Ref:	mh06 photo	Finish Node Ref:	mh06 photo	Direction:	Z	Height/Dia:	100
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	S	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	VC	Cleaned	N

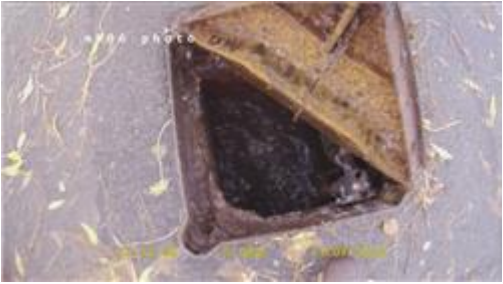
Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	Remarks
A				D	N	0	

Structural Peak Grade	0	Operational Grade	0	DRB Grade	A
-----------------------	---	-------------------	---	-----------	---

Position	Code	Description	CD	Pic	Video Ref	
00.0	MH	Start node type, manhole		5_0	0:00:00	—
00.0	MHF	Finish node type, manhole		5_9		—
						0m
						0m

Descriptive Report with Remarks and Observation Images

Section 6

Pos	Video Ref	Code	Cont.	Description	Image
00.0m	0:00:00	MH		Start node type, manhole, reference mh06 photo mh06 photo	Image Provided - Ref: 5_0 
00.0m		MHF		Finish node type, manhole, reference mh06 photo mh06 photo	Image Provided - Ref: 5_9999 

Total Defects for section

DRB Grade for Section



Site: Jubilee Park, Dinas Lane, Liverpool

Section 7

Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
Surfacing Standards Ltd	Jubilee Park, Dinas Lane	Liverpool		Adam Cliffords	09/11/2023

Start Node Ref:	imh01 ds	Finish Node Ref:	imh02	Direction:	D	Height/Dia:	100
Start Node Depth:	0.00	Finish Node Depth:	0.00	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	3.7	

Structural Peak Grade	0	Operational Grade	0	DRB Grade	A
-----------------------	---	-------------------	---	-----------	---

Position	Code	Description	CD	Pic	Video Ref
00.0	MH	Start node type, manhole		6_0	0:00:00
03.7	MHF	Finish node type, manhole		6_9	

Total Defects for section

DRB Grade for Section



Descriptive Report with Remarks and Observation Images

Section 7

Pos	Video Ref	Code	Cont.	Description	Image
00.0m	0:00:00	MH		Start node type, manhole, reference imh01 ds imh01 ds	Image Provided - Ref: 6_0
03.7m		MHF		Finish node type, manhole, reference imh02 imh02	Image Provided - Ref: 6_9999

Total Defects for section

DRB Grade for Section



Site: Jubilee Park, Dinas Lane, Liverpool

Section 8

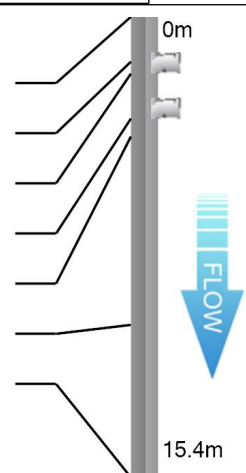
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
Surfacing Standards Ltd	Jubilee Park, Dinas Lane	Liverpool		Adam Cliffords	09/11/2023

Start Node Ref:	imh02 ds	Finish Node Ref:	mh03	Direction:	D	Height/Dia:	100
Start Node Depth:	0.00	Finish Node Depth:	0.00	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	15.4	

Structural Peak Grade	3	Operational Grade	2	DRB Grade	B
-----------------------	---	-------------------	---	-----------	---

Position	Code	Description	CD	Pic	Video Ref	
00.0	MH	Start node type, manhole		7_0	0:00:00	
01.5	LL	Line of drain/sewer deviates left		7_2	0:00:05	
01.9	JN	Junction 10 : 100mm Diameter		7_3	0:00:08	
03.4	JN	Junction 09 : 100mm Diameter		7_4	0:00:15	
04.0	FC	Fracture circumferential 12-12		7_5	0:00:18	
10.3	FC	Fracture circumferential 12-12		7_6	0:00:41	
15.4	MHF	Finish node type, manhole		7_9		



Total Defects for section

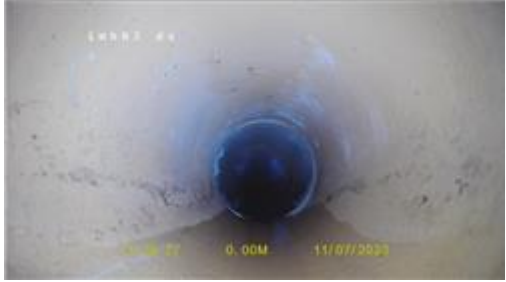
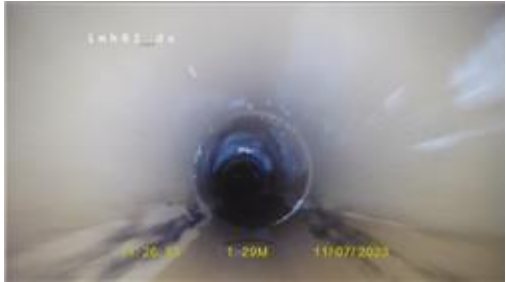
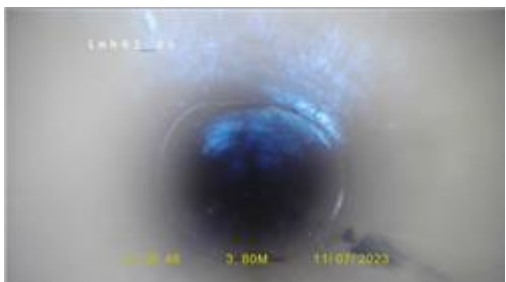


DRB Grade for Section



Descriptive Report with Remarks and Observation Images

Section 8

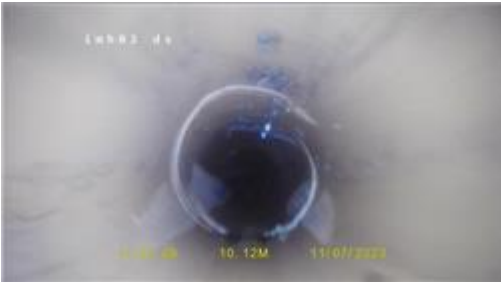
Pos	Video Ref	Code	Cont.	Description	Image
00.0m	0:00:00	MH		Start node type, manhole, reference imh02 ds imh02 ds	Image Provided - Ref: 7_0 
01.5m	0:00:05	LL		Line of drain/sewer deviates left	Image Provided - Ref: 7_2 
01.9m	0:00:08	JN		Junction at 10 o'clock: 100mm Diameter	Image Provided - Ref: 7_3 
03.4m	0:00:15	JN		Junction at 09 o'clock: 100mm Diameter	Image Provided - Ref: 7_4 
04.0m	0:00:18	FC		Fracture circumferential from 12 o'clock to 12 o'clock - Severity 3	Image Provided - Ref: 7_5 

Total Defects for section



DRB Grade for Section



Pos	Video Ref	Code	Cont.	Description	Image
10.3m	0:00:41	FC		Fracture circumferential from 12 o'clock to 12 o'clock - Severity 3	Image Provided - Ref: 7_6 
15.4m		MHF		Finish node type, manhole, reference mh03	Image Provided - Ref: 7_9999 

Total Defects for section



DRB Grade for Section



Site: Jubilee Park, Dinas Lane, Liverpool

Section 9

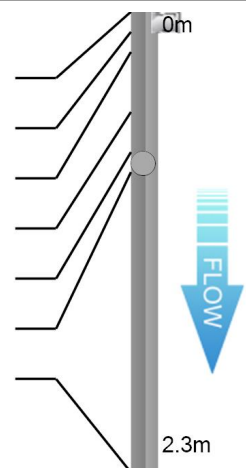
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
Surfacing Standards Ltd	Jubilee Park, Dinas Lane	Liverpool		Adam Cliffords	09/11/2023

Start Node Ref:	re01 ds	Finish Node Ref:	imh01	Direction:	D	Height/Dia:	100
Start Node Depth:	0.00	Finish Node Depth:	0.00	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	2.3	

Structural Peak Grade	3	Operational Grade	2	DRB Grade	B
-----------------------	---	-------------------	---	-----------	---

Position	Code	Description	CD	Pic	Video Ref
00.0	RE	Start node type, rodding eye		8_0	0:00:00
00.1	JN	Junction 09 : 100mm Diameter		8_1	0:00:00
00.2	OJM	Open joint medium		8_2	0:00:01
00.5	FC	Fracture circumferential 12-12		8_3	0:00:02
00.7	FC	Fracture circumferential 03-12		8_4	0:00:06
00.8	CN	Connection other than junction 12 : 100mm		8_5	0:00:06
02.3	MHF	Finish node type, manhole		8_9	



Total Defects for section

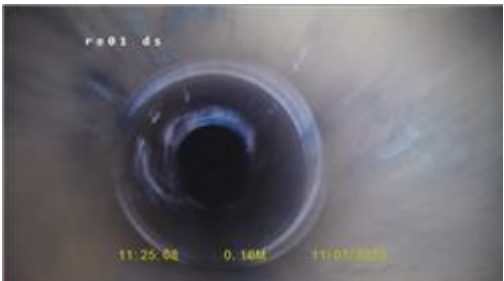


DRB Grade for Section



Descriptive Report with Remarks and Observation Images

Section 9

Pos	Video Ref	Code	Cont.	Description	Image
00.0m	0:00:00	RE		Start node type, rodding eye, reference re01 ds	Image Provided - Ref: 8_0 
00.1m	0:00:00	JN		Junction at 09 o'clock: 100mm Diameter	Image Provided - Ref: 8_1 
00.2m	0:00:01	OJM		Open joint medium - Severity 2	Image Provided - Ref: 8_2 
00.5m	0:00:02	FC		Fracture circumferential from 12 o'clock to 12 o'clock - Severity 3	Image Provided - Ref: 8_3 
00.7m	0:00:06	FC		Fracture circumferential from 03 o'clock to 12 o'clock - Severity 3	Image Provided - Ref: 8_4 

Total Defects for section



DRB Grade for Section



Pos	Video Ref	Code	Cont.	Description	Image
00.8m	0:00:06	CN		Connection other than junction at 12 o'clock: 100mm Diameter	Image Provided - Ref: 8_5 
02.3m		MHF		Finish node type, manhole, reference imh01 imh01	Image Provided - Ref: 8_9999 

Total Defects for section



DRB Grade for Section



Section 10

Position	Code	Description	CD	Pic	Video Ref
00.0	GY	Start node type Gully		9_0	0:00:00 —
00.0	GYF	Finish node type Gully		9_9	—

DRB Grade for Section



Descriptive Report with Remarks and Observation Images

Section 10

Pos	Video Ref	Code	Cont.	Description	Image
00.0m	0:00:00	GY		Start node type Gully, reference gy01 photo gy01 photo	Image Provided - Ref: 9_0 
00.0m		GYF		Finish node type Gully, reference gy01 photo gy01 photo	Image Provided - Ref: 9_9999 