



SWF CONSULTING
CONSULTING CIVIL & STRUCTURAL ENGINEERS

**Aldi Store, Victoria
Road East, Moston**

**Surface Water Drainage
Verification Report**

7th May 2025

9104-SWF-XX-XX-TR-C-0202

S2: Suitable for Information

Version: P01

Classification: PM_70_85



Report Details

Report Title	Surface Water Drainage Verification Report
Report Reference	9104-SWF-XX-XX-TR-C-0202
Client	Aldi Stores Ltd
Author	Daniel Rogers
Approval by	Phil Sarbutts

Revision History

Version	Date	Suitability	Revision
P01	07.05.25	S2: Suitable for Information	Issued For Information

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1. Design Summary

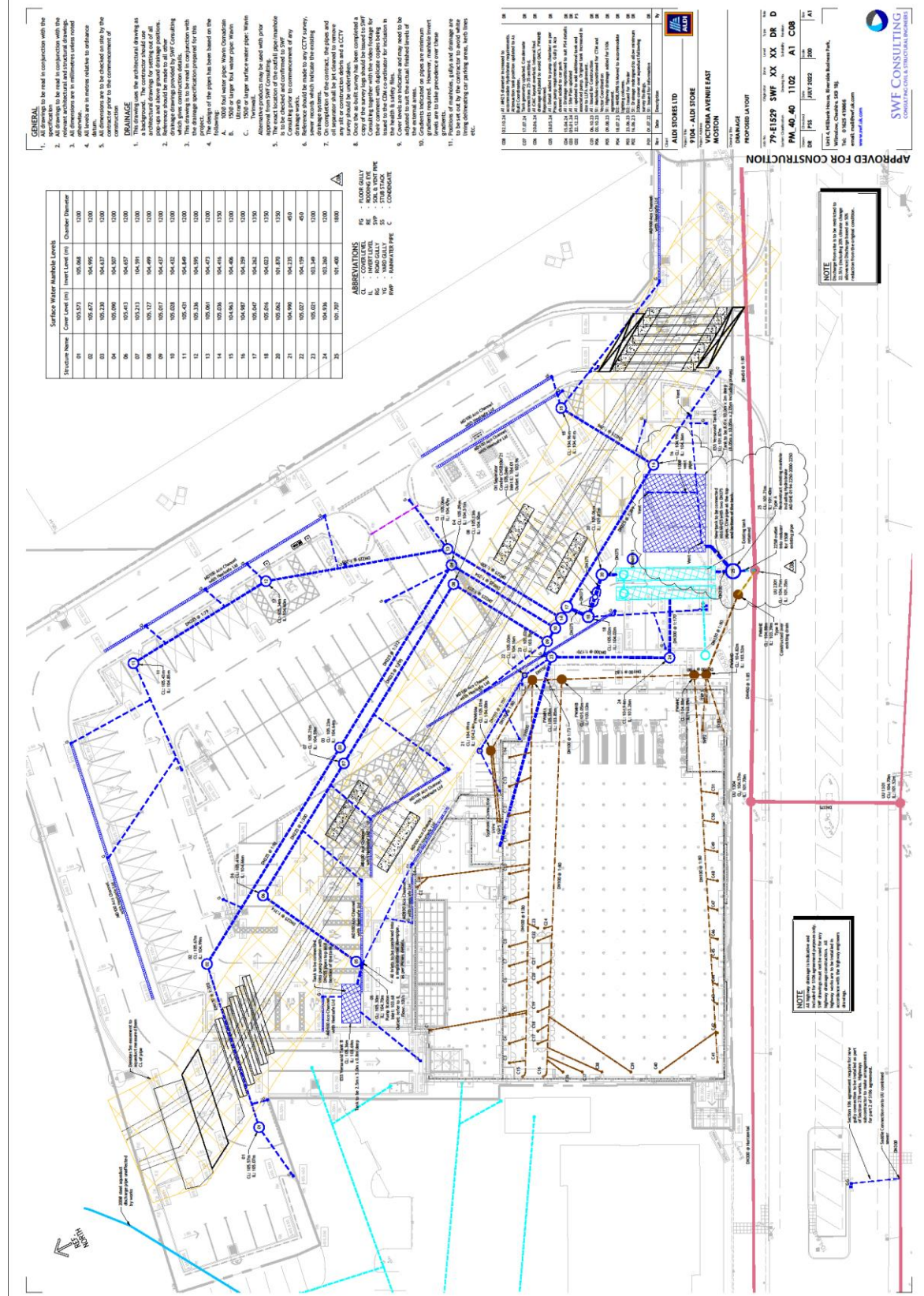
- 1.1. An FRA has been prepared by Integra Consulting and this has indicated that the surface water discharge should be reduced by 50% of the existing off-site flow. A climate change allowance of 40% is also to be applied to any calculations, exceeding the advice noted in the FRA, based on the lifespan of the building.
2. The whole site has the flow restricted to 22.5l/s for all storm event up to and including the 100-year event. This is to be achieved by the introduction of a Hydrobrake flow control at the penultimate manhole which was re-constructed as part of the work.
- 2.1. The design has required the use of an attenuation tank to hold surface water whilst the off-site discharge is controlled by a Hydrobrake flow control device. All drainage from the car park surfacing has been designed to pass through an oil separator with a silt trap which has been sized for the developed area and will treat the initial flush of surface water that may contain oils, whilst the silt trap removes the sediments within the water.
- 2.2. An original Tubosider attenuation tank is present on the site, which has been supplemented by a new Cellular tank to accommodate the increased attenuation requirement.
- 2.3. All ACO channels are required to discharge using a sump unit which will also prevent silts from entering the drainage network and reduce the impact of silts on the adopted sewer network.
3. In addition, a surface water pump has now had to be introduced to control flows at SWMH5. Here a small 3.0m x 3.0m x 1.0m tank is present with pumps discharging at 10l/s on an alternating duty/ standby arrangement.
- 3.1. The site is bisected by the Thirlmere Aqueduct, so all drainage from the car park is kept at a shallow depth to facilitate the crossing of the aqueduct.

4. Verification

- 4.1. Construction was carried out from December 2023 - April 2025 and the surface water system is now in operation.
- 4.2. The works have been inspected throughout the course of the construction and are verified to be in accordance with the approved design.
- 4.3. A CCTV survey of the system was carried out in March 2025 and the records are included in Appendix A.

5. As Built Record Drawings

5.1. Drainage GA



5.2. Manhole Details

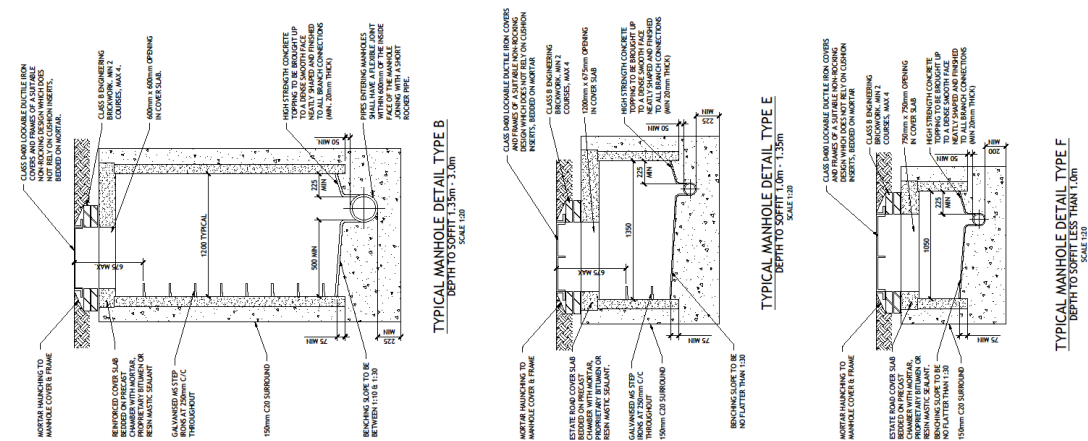
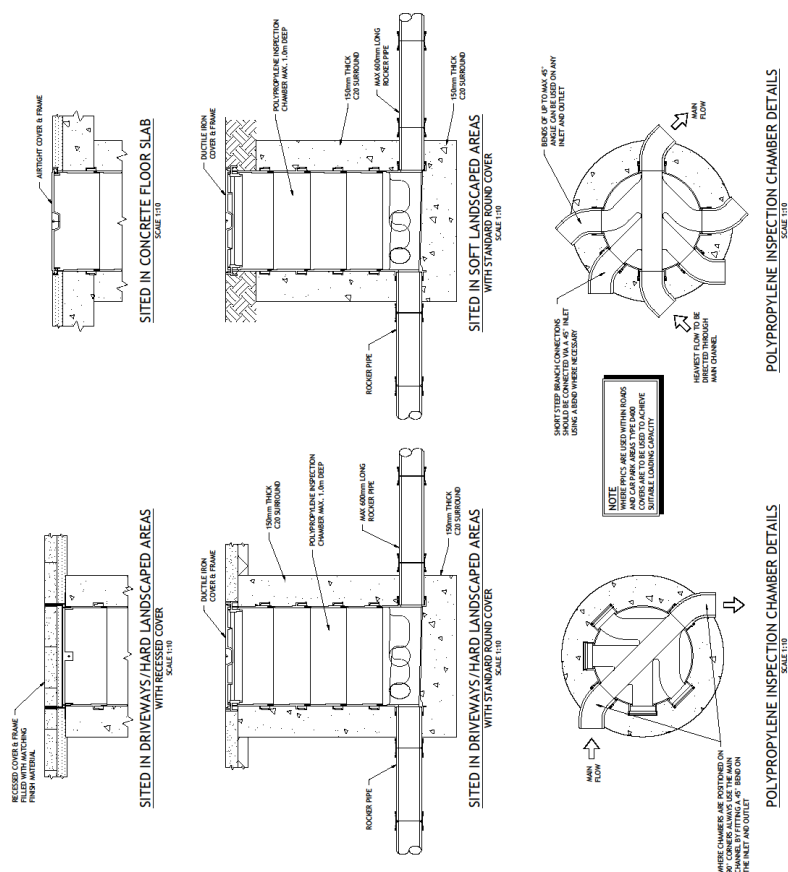
- [illegible]

[illegible]

APPROVED FOR CONSTRUCTION

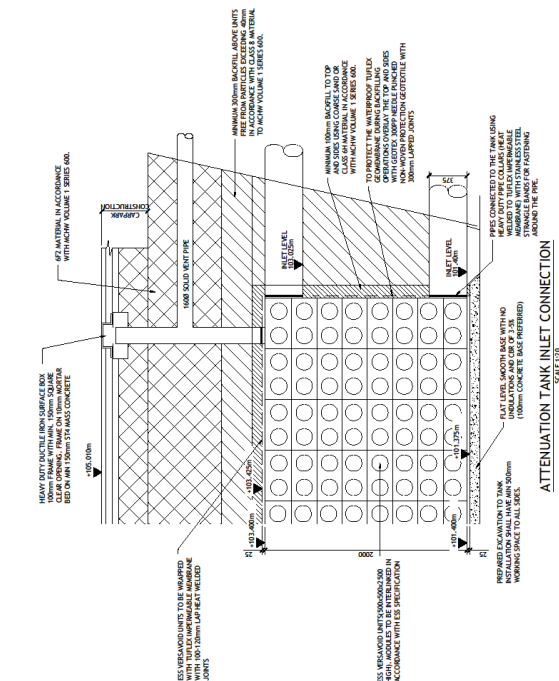
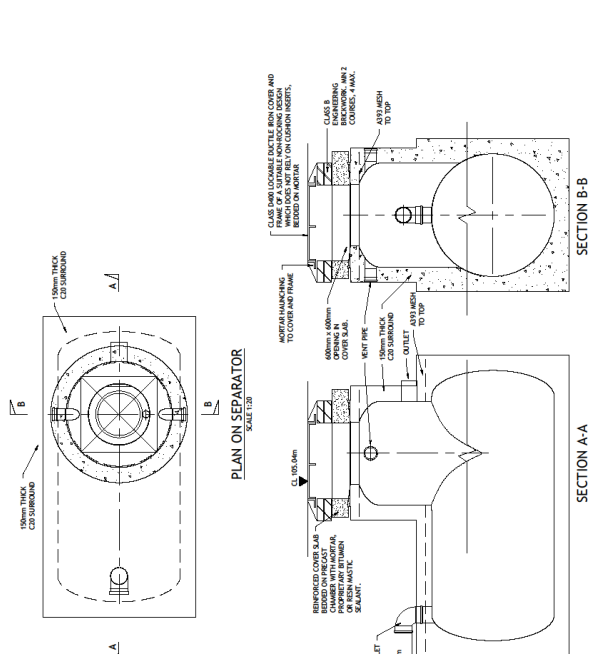
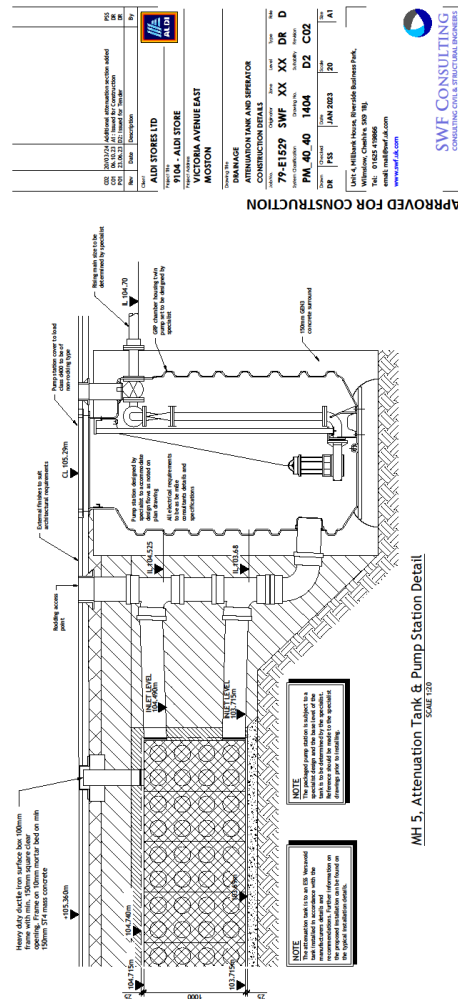
- GENERAL**
ALL DRAWINGS
ARCHITECTURAL

NOTE
THE ARCHITECTURAL BACKGROUNDS ARE A VISUAL REPRESENTATION OF THE PROPOSED BUILDING LAYOUTS AND ARE NOT NECESSARILY DIMENSIONALLY ACCURATE AND MAY NOT RELATE TO THE LOCATION OF THE STRUCTURE.



5.3. Attenuation Tank and Seperator Details

- [illegible]

[illegible]

MH 5, Attenuation Tank & Pump Station Detail
SCALE 1/20



6. Site Photographs

6.1. Attenuation Tank Photographs





Appendix A: CCTV Survey

CCTV Survey Report

Drain Condition
Reporting
Software
PT/430/0918



Prepared For

H & H Construction Ltd
12 Methley Road
Castleford

WF10 1LX

Site

ALDI Moston
412 Victoria Avenue
Moston
Manchester
M40 5SH



FLOWMASTER PLUMBING AND DRAINAGE LTD.

Surveyor: Danny O'Hara

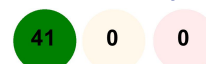
info@flowmasterplumbinganddrainage.com

07919893969

Total Defects for Project



Total DRB Grades for Project



ALDI Moston - CCTV Survey Report : 31/03/25

Prepared by:

Name : FLOWMASTER PLUMBING AND DRAINAGE LTD.
Contact : Danny O'Hara
Location : AES Orchard, Sunderland Street
Town : Keighley
Region : West Yorkshire
Postcode : BD21 5LE
Email : info@flowmasterplumbinganddrainage.com
Web : www.flowmasterplumbinganddrainage.co.uk
Contact Number : 07919893969
Surveyor : Danny O'Hara
Valid Certification No :

Client Information

Client Name : H & H Construction Ltd
Contact : Scott Biggs
Location : 12 Methley Road
Town : Castleford
Region :
Postcode : WF10 1LX
Tel : 01977 667294
Mobile :
Email :
Fax :

Site Information

Site Name : ALDI Moston
Contact : Scott Biggs
Location : 412 Victoria Avenue
Town : Moston
Region : Manchester
Postcode : M40 5SH
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 indicators are as follows:

Grade A: Drain is serviceable no recommendations required

Grade B: There is an issue that might require remedial works

Grade C: There is a defect that requires 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 condition are detailed below the header section. The observations are colour coded and given a severity score, with more significant defects being given a higher score, using a scale from 1 to 5 as detailed below:

Severity 1 to 2: These defects may require remedial monitoring

Severity 3: These defects probably require some form of remedial works

Severity 4 to 5: Defects that will require remedial repair or replacement

General:

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

The severity system is based on significant experience in general practice and the 1 -5 grades represent the severity of individual defects: 5 representing a more serious defect.

Please feel free to contact us for further explanation or pricing for remedial works required.

Total Defects for Project



Total DRB Grades for Project



Overview

Section: 1 From: FWMHA To: FWMHB		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 100 Material: Polyvinyl Chloride Use: Foul
MH	Cover Benching Channel	Grade A	
Section: 2 From: FWMHA To: GULLY		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 100 Material: Polyvinyl Chloride Use: Foul
MH	Cover Benching Channel	Grade A	
Section: 3 From: FWMHAa To: FWMHA		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 100 Material: Polyvinyl Chloride Use: Foul
MH	Cover Benching Channel	Grade A	
Section: 4 From: FWMHAa To: SVP4		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 100 Material: Polyvinyl Chloride Use: Foul
MH	Cover Benching Channel	Grade A	
Section: 5 From: FWMHAa To: SVP5		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 100 Material: Polyvinyl Chloride Use: Foul
MH	Cover Benching Channel	Grade A	
Section: 6 From: FWMHB To: FWMHC		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 100 Material: Polyvinyl Chloride Use: Foul
MH	Cover Benching Channel	Grade A	
Section: 7 From: FWMHB To: GULLY		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 100 Material: Polyvinyl Chloride Use: Foul
MH	Cover Benching Channel	Grade A	

Total Defects for Project

Total DRB Grades for Project



Section: 8 From: FWMHC To: FWMHD		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 100 Material: Polyvinyl Chloride Use: Foul
MH	Cover Benching Channel	Grade A	
Section: 9 From: FWMHC To: GULLY		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 100 Material: Polyvinyl Chloride Use: Foul
MH	Cover Benching Channel	Grade A	
Section: 10 From: FWMHD To: FWMHE		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 150 Material: Polyvinyl Chloride Use: Foul
MH	Cover Benching Channel	Grade A	
Section: 11 From: FWMHD To: SVP1		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 100 Material: Polyvinyl Chloride Use: Foul
MH	Cover Benching Channel	Grade A	
Section: 12 From: FWMHD To: SVP2		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 100 Material: Polyvinyl Chloride Use: Foul
MH	Cover Benching Channel	Grade A	
Section: 13 From: FWMHD To: SVP3		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 100 Material: Polyvinyl Chloride Use: Foul
MH	Cover Benching Channel	Grade A	
Section: 14 From: SW01 To: GULLY		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 150 Material: Reinforced Plastic Matrix Use: Surface Water
MH	Cover Benching Channel	Grade A	

Total Defects for Project

Total DRB Grades for Project



Section: 15 From: SW01 To: SW02		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 150 Material: Reinforced Plastic Matrix Use: Surface Water
MH	Cover Benching Channel	Grade A	
Section: 16 From: SW02 To: SW03		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 225 Material: Reinforced Plastic Matrix Use: Surface Water
MH	Cover Benching Channel	Grade A	
Section: 17 From: SW03 To: SW04		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 225 Material: Reinforced Plastic Matrix Use: Surface Water
MH	Cover Benching Channel	Grade A	
Section: 18 From: SW04 To: SW10		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 225 Material: Reinforced Plastic Matrix Use: Surface Water
MH	Cover Benching Channel	Grade A	
Section: 19 From: SW06 To: SW07		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 225 Material: Reinforced Plastic Matrix Use: Surface Water
MH	Cover Benching Channel	Grade A	
Section: 20 From: SW07 To: SW08		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 225 Material: Reinforced Plastic Matrix Use: Surface Water
MH	Cover Benching Channel	Grade A	
Section: 21 From: SW08 To: SW09		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 225 Material: Reinforced Plastic Matrix Use: Surface Water
MH	Cover Benching Channel	Grade A	

Total Defects for Project

Total DRB Grades for Project



Section: 22 From: SW09 To: ACO		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 150 Material: Reinforced Plastic Matrix Use: Surface Water
MH	Cover Benching Channel	Grade A	
Section: 23 From: SW09 To: SW10		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 225 Material: Reinforced Plastic Matrix Use: Surface Water
MH	Cover Benching Channel	Grade A	
Section: 24 From: SW10 To: SW14		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 300 Material: Reinforced Plastic Matrix Use: Surface Water
MH	Cover Benching Channel	Grade A	
Section: 25 From: SW11 To: GULLY		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 150 Material: Reinforced Plastic Matrix Use: Surface Water
MH	Cover Benching Channel	Grade A	
Section: 26 From: SW11 To: SW12		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 225 Material: Reinforced Plastic Matrix Use: Surface Water
MH	Cover Benching Channel	Grade A	
Section: 27 From: SW12 To: ACO1		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 150 Material: Reinforced Plastic Matrix Use: Surface Water
MH	Cover Benching Channel	Grade A	
Section: 28 From: SW12 To: ACO2		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 150 Material: Reinforced Plastic Matrix Use: Surface Water
MH	Cover Benching Channel	Grade A	

Total Defects for Project

Total DRB Grades for Project



Section: 29 From: SW12 To: SW13		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 225 Material: Reinforced Plastic Matrix Use: Surface Water
Grade A			
MH	Cover Benching Channel		

Section: 30 From: SW13 To: GULLY		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 150 Material: Reinforced Plastic Matrix Use: Surface Water
Grade A			
MH	Cover Benching Channel		

Section: 31 From: SW13 To: SW14		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 225 Material: Reinforced Plastic Matrix Use: Surface Water
Grade A			
MH	Cover Benching Channel		

Section: 32 From: SW14 To: SW17		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 375 Material: Reinforced Plastic Matrix Use: Surface Water
Grade A			
MH	Cover Benching Channel		

Section: 33 From: SW15 To: ACO2		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 150 Material: Reinforced Plastic Matrix Use: Surface Water
Grade A			
MH	Cover Benching Channel		

Section: 34 From: SW15 To: SW16		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 225 Material: Reinforced Plastic Matrix Use: Surface Water
Grade A			
MH	Cover Benching Channel		

Section: 35 From: SW16 To: GULLY		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 150 Material: Reinforced Plastic Matrix Use: Surface Water
Grade A			
MH	Cover Benching Channel		

Total Defects for Project

Total DRB Grades for Project



Section: 36 From: SW16 To: SW17		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 225 Material: Reinforced Plastic Matrix Use: Surface Water
MH	Cover Benching Channel	Grade A	
Section: 37 From: SW17 To: SW18		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 375 Material: Reinforced Plastic Matrix Use: Surface Water
MH	Cover Benching Channel	Grade A	
Section: 38 From: SW18 To: INTERCEPTOR		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 375 Material: Reinforced Plastic Matrix Use: Surface Water
MH	Cover Benching Channel	Grade A	
Section: 39 From: SW23 To: GULLY		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 150 Material: Reinforced Plastic Matrix Use: Surface Water
MH	Cover Benching Channel	Grade A	
Section: 40 From: SW23 To: SW24		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 300 Material: Reinforced Plastic Matrix Use: Surface Water
MH	Cover Benching Channel	Grade A	
Section: 41 From: SW24 To: TANK		Purpose of Inspection: Post completion inspection of new sewers	DRB Grade: A Pipe Size: 300 Material: Reinforced Plastic Matrix Use: Surface Water
MH	Cover Benching Channel	Grade A	

Total Defects for Project

Total DRB Grades for Project



Site: 412 Victoria Avenue, Moston

Section 1

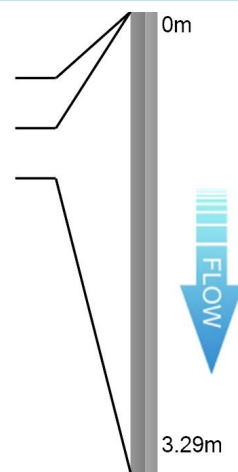
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	FWMHA	Finish Node Ref:	FWMHB	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:	PVC	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	03.3	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
03.29m	MHF	Finish node type, manhole		0_99		



Total Defects for section

DRB Grade for Section

0 0 0 0 0



Descriptive Report with Remarks and Observation Images

Section 1

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole FWMHA	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
03.29m		MHF	Finish node type, manhole FWMHB	Image Provided - Ref: 0_9999 

Total Defects for section

DRB Grade for Section

0 0 0 0 0



Site: 412 Victoria Avenue, Moston

Section 2

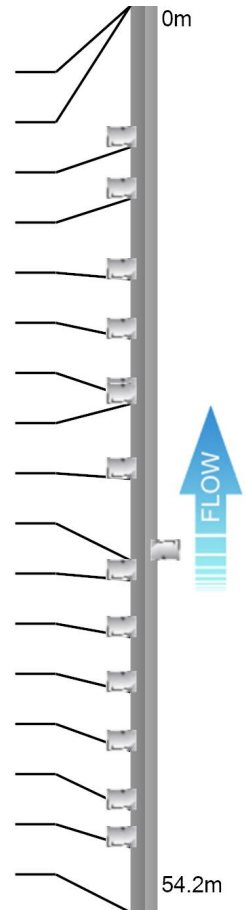
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	FWMHA	Finish Node Ref:	GULLY	Direction:	U	Height/Dia:	100
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	F	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	PVC	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	54.2	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				0m
00.00m	WL	Water level 0%			0:00:00	
08.45m	JN	Junction 03 : 100mm Diameter	1_2		0:00:31	
11.53m	JN	Junction 03 : 100mm Diameter	1_3		0:00:42	
16.35m	JN	Junction 03 : 100mm Diameter	1_4		0:00:55	
19.90m	JN	Junction 03 : 100mm Diameter	1_5		0:01:06	
23.46m	JN	Junction 03 : 100mm Diameter	1_6		0:01:15	
23.80m	JN	Junction 03 : 100mm Diameter	1_7		0:01:19	
28.27m	JN	Junction 03 : 100mm Diameter	1_8		0:01:32	
33.16m	JN	Junction 11 : 100mm Diameter	1_9		0:01:48	
34.34m	JN	Junction 03 : 100mm Diameter	1_10		0:01:52	
37.74m	JN	Junction 02 : 100mm Diameter	1_11		0:02:04	
41.03m	JN	Junction 02 : 100mm Diameter	1_12		0:02:17	
44.55m	JN	Junction 03 : 100mm Diameter	1_14		0:02:44	
48.07m	JN	Junction 03 : 100mm Diameter	1_15		0:02:55	
50.30m	JN	Junction 03 : 100mm Diameter	1_16		0:03:03	
54.20m	MHF	Finish node type, manhole	1_99			54.2m



Total Defects for section

DRB Grade for Section



Descriptive Report with Remarks and Observation Images

Section 2

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole FWMHA	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
08.45m	0:00:31	JN	Junction at 03 o'clock: 100mm Diameter	Image Provided - Ref: 1_2
11.53m	0:00:42	JN	Junction at 03 o'clock: 100mm Diameter	Image Provided - Ref: 1_3
16.35m	0:00:55	JN	Junction at 03 o'clock: 100mm Diameter	Image Provided - Ref: 1_4

Total Defects for section

DRB Grade for Section



Pos	Video Ref	Code	Description	Image
19.90m	0:01:06	JN	Junction at 03 o'clock: 100mm Diameter	Image Provided - Ref: 1_5
23.46m	0:01:15	JN	Junction at 03 o'clock: 100mm Diameter	Image Provided - Ref: 1_6
23.80m	0:01:19	JN	Junction at 03 o'clock: 100mm Diameter	Image Provided - Ref: 1_7
28.27m	0:01:32	JN	Junction at 03 o'clock: 100mm Diameter	Image Provided - Ref: 1_8

Total Defects for section

DRB Grade for Section

0 0 0 0 0



Pos	Video Ref	Code	Description	Image
33.16m	0:01:48	JN	Junction at 11 o'clock: 100mm Diameter	Image Provided - Ref: 1_9 
34.34m	0:01:52	JN	Junction at 03 o'clock: 100mm Diameter	Image Provided - Ref: 1_10 
37.74m	0:02:04	JN	Junction at 02 o'clock: 100mm Diameter	Image Provided - Ref: 1_11 
41.03m	0:02:17	JN	Junction at 02 o'clock: 100mm Diameter	Image Provided - Ref: 1_12 

Total Defects for section

DRB Grade for Section

0 0 0 0 0



Pos	Video Ref	Code	Description	Image
44.55m	0:02:44	JN	Junction at 03 o'clock: 100mm Diameter	Image Provided - Ref: 1_14 
48.07m	0:02:55	JN	Junction at 03 o'clock: 100mm Diameter	Image Provided - Ref: 1_15 
50.30m	0:03:03	JN	Junction at 03 o'clock: 100mm Diameter	Image Provided - Ref: 1_16 
54.20m		MHF	Finish node type, manhole GULLY	Image Provided - Ref: 1_9999 

Total Defects for section

DRB Grade for Section

0 0 0 0 0



Site: 412 Victoria Avenue, Moston

Section 3

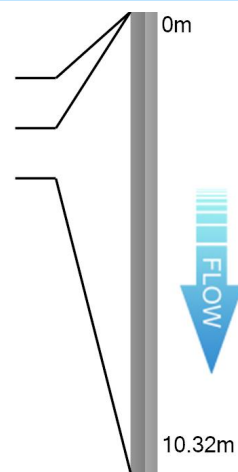
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	FWMHAa	Finish Node Ref:	FWMHA	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:	PVC	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	10.3	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
10.32m	MHF	Finish node type, manhole		2_99		



Total Defects for section

DRB Grade for Section

0 0 0 0 0



Descriptive Report with Remarks and Observation Images

Section 3

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole FWMHAA	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
10.32m		MHF	Finish node type, manhole FWMHA	Image Provided - Ref: 2_9999 

Total Defects for section

DRB Grade for Section

0 0 0 0 0



Site: 412 Victoria Avenue, Moston

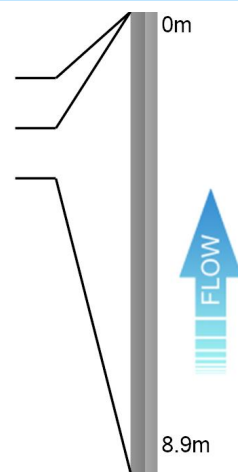
Section 4

Client: H & H Construction Ltd	Location (Street Name): 412 Victoria Avenue	City/Town/Village Moston	Cust Job Ref.	Surveyors Name: Danny O'Hara	Date: 31/03/2025
Start Node Ref: Start Node Depth: Start Node Coordinate:	FWMHAa 0.00	Finish Node Ref: Finish Node Depth: Finish Node Coordinate:	SVP4 0.00	Direction: U Use: F Material: PVC	Height/Dia: 100 Shape: C Cleaned Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	08.9	

Position	Code	Description	CD	Pic	Video Ref
00.00m	MH	Start node type, manhole			
00.00m	WL	Water level 0%			0:00:00
08.90m	MHF	Finish node type, manhole		3_99	



Total Defects for section

DRB Grade for Section

0 0 0 0 0



Descriptive Report with Remarks and Observation Images

Section 4

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole FWMHAA	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
08.90m		MHF	Finish node type, manhole SVP4	Image Provided - Ref: 3_9999 

Total Defects for section

DRB Grade for Section

0 0 0 0 0



Site: 412 Victoria Avenue, Moston

Section 5

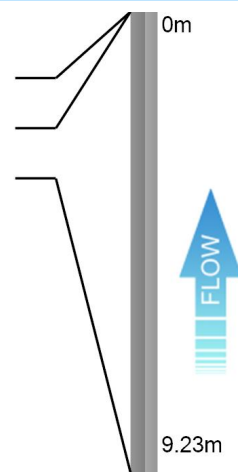
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	FWMHAa	Finish Node Ref:	SVP5	Direction:	U	Height/Dia:	100
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	F	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	PVC	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	09.2	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
09.23m	MHF	Finish node type, manhole		4_99		



Total Defects for section

DRB Grade for Section



Descriptive Report with Remarks and Observation Images

Section 5

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole FWMHAA	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
09.23m		MHF	Finish node type, manhole SVP5	Image Provided - Ref: 4_9999 

Total Defects for section

DRB Grade for Section

0 0 0 0 0



Site: 412 Victoria Avenue, Moston

Section 6

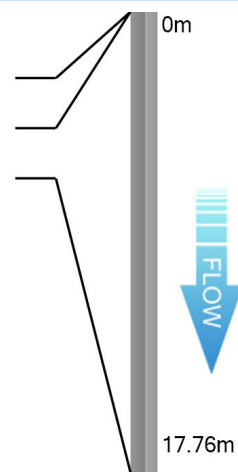
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	FWMHB	Finish Node Ref:	FWMHC	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:	PVC	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	17.8	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
17.76m	MHF	Finish node type, manhole		5_99		



Total Defects for section

DRB Grade for Section

0 0 0 0 0



Descriptive Report with Remarks and Observation Images

Section 6

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole FWMHB	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
17.76m		MHF	Finish node type, manhole FWMHC	Image Provided - Ref: 5_9999 

Total Defects for section

DRB Grade for Section

0 0 0 0 0



Site: 412 Victoria Avenue, Moston

Section 7

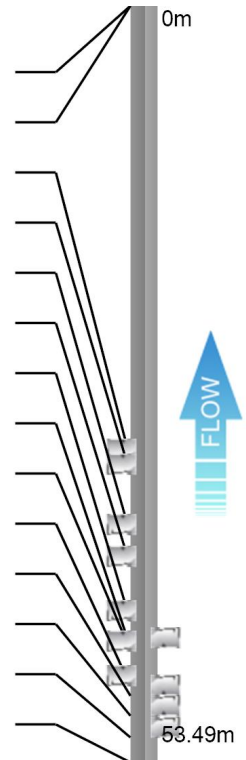
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	FWMHB	Finish Node Ref:	GULLY	Direction:	U	Height/Dia:	100
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	F	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	PVC	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	53.5	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
32.11m	JN	Junction 03 : 100mm Diameter	6_2		0:01:51	
33.14m	JN	Junction 03 : 100mm Diameter	6_3		0:01:57	
37.41m	JN	Junction 03 : 100mm Diameter	6_4		0:02:13	
39.64m	JN	Junction 03 : 100mm Diameter	6_5		0:02:22	
43.51m	JN	Junction 03 : 100mm Diameter	6_6		0:02:37	
45.39m	JN	Junction 09 : 100mm Diameter	6_7		0:02:51	
45.63m	JN	Junction 03 : 100mm Diameter	6_8		0:02:47	
48.09m	JN	Junction 03 : 100mm Diameter	6_9		0:02:56	
48.79m	JN	Junction 09 : 100mm Diameter	6_10		0:03:06	
50.20m	JN	Junction 09 : 100mm Diameter	6_11		0:03:19	
51.73m	JN	Junction 09 : 100mm Diameter	6_12		0:03:33	
53.49m	MHF	Finish node type, manhole	6_99			



Total Defects for section

DRB Grade for Section

0 0 0 0 0



Descriptive Report with Remarks and Observation Images

Section 7

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole FWMHB	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
32.11m	0:01:51	JN	Junction at 03 o'clock: 100mm Diameter	Image Provided - Ref: 6_2 
33.14m	0:01:57	JN	Junction at 03 o'clock: 100mm Diameter	Image Provided - Ref: 6_3 
37.41m	0:02:13	JN	Junction at 03 o'clock: 100mm Diameter	Image Provided - Ref: 6_4 

Total Defects for section

DRB Grade for Section



Pos	Video Ref	Code	Description	Image
39.64m	0:02:22	JN	Junction at 03 o'clock: 100mm Diameter	Image Provided - Ref: 6_5 
43.51m	0:02:37	JN	Junction at 03 o'clock: 100mm Diameter	Image Provided - Ref: 6_6 
45.39m	0:02:51	JN	Junction at 09 o'clock: 100mm Diameter	Image Provided - Ref: 6_7 
45.63m	0:02:47	JN	Junction at 03 o'clock: 100mm Diameter	Image Provided - Ref: 6_8 

Total Defects for section

DRB Grade for Section

0 0 0 0 0



Pos	Video Ref	Code	Description	Image
48.09m	0:02:56	JN	Junction at 03 o'clock: 100mm Diameter	Image Provided - Ref: 6_9 
48.79m	0:03:06	JN	Junction at 09 o'clock: 100mm Diameter	Image Provided - Ref: 6_10 
50.20m	0:03:19	JN	Junction at 09 o'clock: 100mm Diameter	Image Provided - Ref: 6_11 
51.73m	0:03:33	JN	Junction at 09 o'clock: 100mm Diameter	Image Provided - Ref: 6_12 

Total Defects for section

DRB Grade for Section

0 0 0 0 0



Pos	Video Ref	Code	Description	Image
53.49m		MHF	Finish node type, manhole GULLY	Image Provided - Ref: 6_9999  12:10:05 26-03-25 53.49m FWMHB upstream to gully 100mm plastic

Total Defects for section



DRB Grade for Section



Site: 412 Victoria Avenue, Moston

Section 8

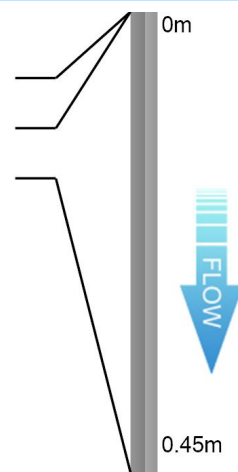
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	FWMHC	Finish Node Ref:	FWMHD	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:	PVC	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	00.5	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
00.45m	MHF	Finish node type, manhole		7_99		



Total Defects for section

DRB Grade for Section

0 0 0 0 0



Descriptive Report with Remarks and Observation Images

Section 8

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole FWMHC	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
00.45m		MHF	Finish node type, manhole FWMHD	Image Provided - Ref: 7_9999 

Total Defects for section

DRB Grade for Section



Site: 412 Victoria Avenue, Moston

Section 9

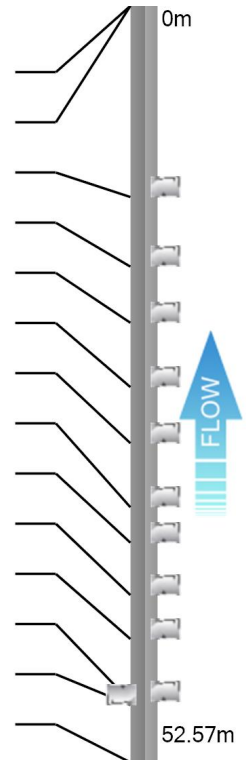
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	FWMHC	Finish Node Ref:	GULLY	Direction:	U	Height/Dia:	100
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	F	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	PVC	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	52.6	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
13.29m	JN	Junction 09 : 100mm Diameter	8_2		0:01:04	
18.13m	JN	Junction 09 : 100mm Diameter	8_3		0:01:20	
22.03m	JN	Junction 09 : 100mm Diameter	8_4		0:01:37	
26.50m	JN	Junction 09 : 100mm Diameter	8_5		0:01:57	
30.40m	JN	Junction 09 : 100mm Diameter	8_6		0:02:16	
34.85m	JN	Junction 09 : 100mm Diameter	8_7		0:02:40	
37.31m	JN	Junction 09 : 100mm Diameter	8_8		0:02:45	
40.95m	JN	Junction 09 : 100mm Diameter	8_9		0:03:14	
44.00m	JN	Junction 10 : 100mm Diameter	8_10		0:03:17	
48.35m	JN	Junction 09 : 100mm Diameter	8_11		0:03:35	
48.58m	JN	Junction 03 : 100mm Diameter	8_12		0:03:38	
52.57m	MHF	Finish node type, manhole	8_99			



Total Defects for section

DRB Grade for Section

0 0 0 0 0



Descriptive Report with Remarks and Observation Images

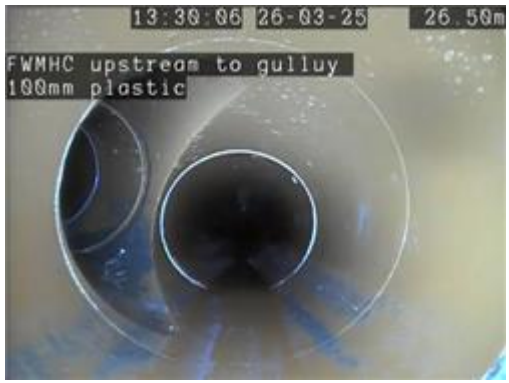
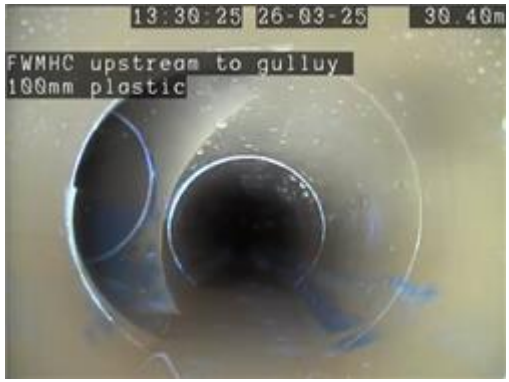
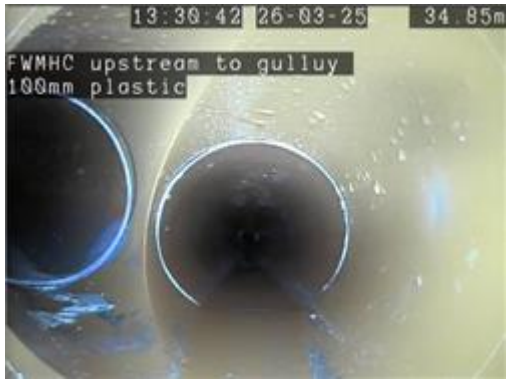
Section 9

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole FWMHC	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
13.29m	0:01:04	JN	Junction at 09 o'clock: 100mm Diameter	Image Provided - Ref: 8_2 
18.13m	0:01:20	JN	Junction at 09 o'clock: 100mm Diameter	Image Provided - Ref: 8_3 
22.03m	0:01:37	JN	Junction at 09 o'clock: 100mm Diameter	Image Provided - Ref: 8_4 

Total Defects for section

DRB Grade for Section



Pos	Video Ref	Code	Description	Image
26.50m	0:01:57	JN	Junction at 09 o'clock: 100mm Diameter	Image Provided - Ref: 8_5 
30.40m	0:02:16	JN	Junction at 09 o'clock: 100mm Diameter	Image Provided - Ref: 8_6 
34.85m	0:02:40	JN	Junction at 09 o'clock: 100mm Diameter	Image Provided - Ref: 8_7 
37.31m	0:02:45	JN	Junction at 09 o'clock: 100mm Diameter	Image Provided - Ref: 8_8 

Total Defects for section

DRB Grade for Section

0 0 0 0 0



Pos	Video Ref	Code	Description	Image
40.95m	0:03:14	JN	Junction at 09 o'clock: 100mm Diameter	Image Provided - Ref: 8_9 
44.00m	0:03:17	JN	Junction at 10 o'clock: 100mm Diameter	Image Provided - Ref: 8_10 
48.35m	0:03:35	JN	Junction at 09 o'clock: 100mm Diameter	Image Provided - Ref: 8_11 
48.58m	0:03:38	JN	Junction at 03 o'clock: 100mm Diameter	Image Provided - Ref: 8_12 

Total Defects for section

DRB Grade for Section

0 0 0 0 0



Pos	Video Ref	Code	Description	Image
52.57m		MHF	Finish node type, manhole GULLY	Image Provided - Ref: 8_9999 

Total Defects for section

DRB Grade for Section

0 0 0 0 0

A

Site: 412 Victoria Avenue, Moston

Section 10

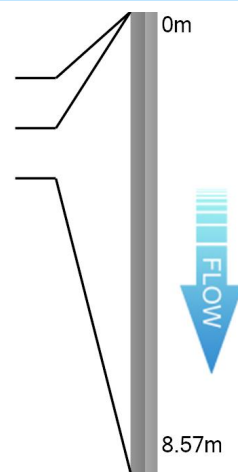
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	FWMHD	Finish Node Ref:	FWMHE	Direction:	D	Height/Dia:	150
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	F	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	PVC	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	08.6	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
08.57m	MHF	Finish node type, manhole		9_99		



Total Defects for section

DRB Grade for Section

0 0 0 0 0



Descriptive Report with Remarks and Observation Images

Section 10

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole FWMHD	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
08.57m		MHF	Finish node type, manhole FWMHE	Image Provided - Ref: 9_9999 

Total Defects for section

DRB Grade for Section

0 0 0 0 0



Site: 412 Victoria Avenue, Moston

Section 11

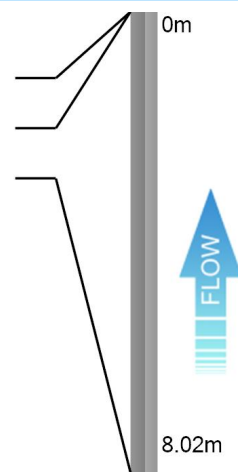
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	FWMHD	Finish Node Ref:	SVP1	Direction:	U	Height/Dia:	100
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	F	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	PVC	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	08.0	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
08.02m	MHF	Finish node type, manhole		10_9		



Total Defects for section

DRB Grade for Section

0 0 0 0 0



Descriptive Report with Remarks and Observation Images

Section 11

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole FWMHD	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
08.02m		MHF	Finish node type, manhole SVP1	Image Provided - Ref: 10_9999 

Total Defects for section

DRB Grade for Section

0 0 0 0 0



Site: 412 Victoria Avenue, Moston

Section 12

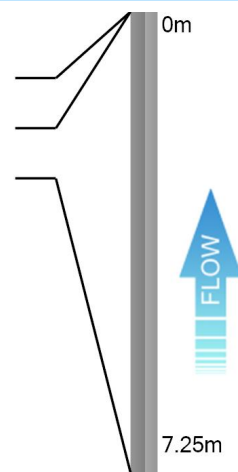
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	FWMHD	Finish Node Ref:	SVP2	Direction:	U	Height/Dia:	100
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	F	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	PVC	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	07.3	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
07.25m	MHF	Finish node type, manhole		11_9		



Total Defects for section

DRB Grade for Section

0 0 0 0 0



Descriptive Report with Remarks and Observation Images

Section 12

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole FWMHD	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
07.25m		MHF	Finish node type, manhole SVP2	Image Provided - Ref: 11_9999 

Total Defects for section

DRB Grade for Section



Site: 412 Victoria Avenue, Moston

Section 13

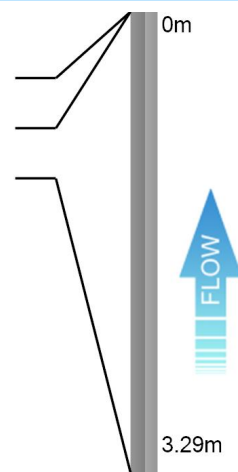
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	FWMHD	Finish Node Ref:	SVP3	Direction:	U	Height/Dia:	100
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	F	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	PVC	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	03.3	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
03.29m	MHF	Finish node type, manhole		12_9		



Total Defects for section

DRB Grade for Section



Descriptive Report with Remarks and Observation Images

Section 13

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole FWMHD	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
03.29m		MHF	Finish node type, manhole SVP3	Image Provided - Ref: 12_9999 

Total Defects for section

DRB Grade for Section

0 0 0 0 0



Site: 412 Victoria Avenue, Moston

Section 14

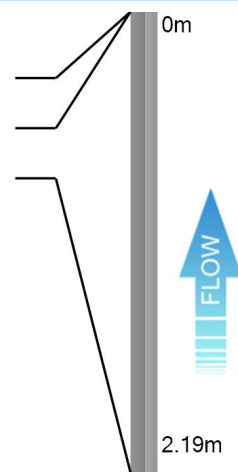
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	SW01	Finish Node Ref:	GULLY	Direction:	U	Height/Dia:	150
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	S	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	RPM	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	02.2	

Position	Code	Description	CD	Pic	Video Ref
00.00m	MH	Start node type, manhole			
00.00m	WL	Water level 0%			0:00:00
02.19m	MHF	Finish node type, manhole		13_9	



Total Defects for section

DRB Grade for Section

0 0 0 0 0



Descriptive Report with Remarks and Observation Images

Section 14

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole SW01	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
02.19m		MHF	Finish node type, manhole GULLY	Image Provided - Ref: 13_9999 

Total Defects for section

DRB Grade for Section

0 0 0 0 0



Site: 412 Victoria Avenue, Moston

Section 15

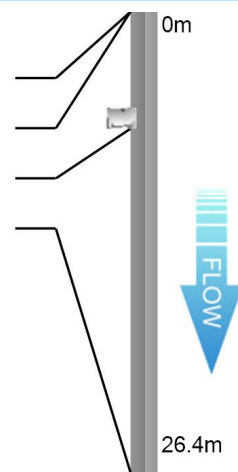
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	SW01	Finish Node Ref:	SW02	Direction:	D	Height/Dia:	150
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	S	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	RPM	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	26.4	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
06.70m	JN	Junction 03 : 150mm Diameter			14_2 0:00:32	
26.40m	MHF	Finish node type, manhole			14_9	



Total Defects for section

DRB Grade for Section

0 0 0 0 0



Descriptive Report with Remarks and Observation Images

Section 15

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole SW01	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
06.70m	0:00:32	JN	Junction at 03 o'clock: 150mm Diameter	Image Provided - Ref: 14_2 
26.40m		MHF	Finish node type, manhole SW02	Image Provided - Ref: 14_9999 

Total Defects for section

DRB Grade for Section



Site: 412 Victoria Avenue, Moston

Section 16

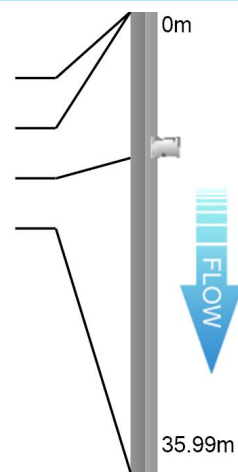
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	SW02	Finish Node Ref:	SW03	Direction:	D	Height/Dia:	225
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	S	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	RPM	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	36.0	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
11.42m	JN	Junction 09 : 150mm Diameter			15_2 0:00:46	
35.99m	MHF	Finish node type, manhole			15_9	



Total Defects for section

DRB Grade for Section

0 0 0 0 0



Descriptive Report with Remarks and Observation Images

Section 16

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole SW02	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
11.42m	0:00:46	JN	Junction at 09 o'clock: 150mm Diameter	Image Provided - Ref: 15_2 
35.99m		MHF	Finish node type, manhole SW03	Image Provided - Ref: 15_9999 

Total Defects for section

DRB Grade for Section



Site: 412 Victoria Avenue, Moston

Section 17

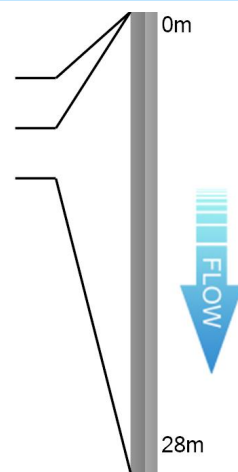
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	SW03	Finish Node Ref:	SW04	Direction:	D	Height/Dia:	225
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	S	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	RPM	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	28.0	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
28.00m	MHF	Finish node type, manhole		16_9		



Total Defects for section

DRB Grade for Section

0 0 0 0 0



Descriptive Report with Remarks and Observation Images

Section 17

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole SW03	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
28.00m		MHF	Finish node type, manhole SW04	Image Provided - Ref: 16_9999 

Total Defects for section

DRB Grade for Section

0 0 0 0 0



Site: 412 Victoria Avenue, Moston

Section 18

Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	SW04	Finish Node Ref:	SW10	Direction:	D	Height/Dia:	225
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	S	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	RPM	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	15.4	

Position	Code	Description	CD	Pic	Video Ref
00.00m	MH	Start node type, manhole			
00.00m	WL	Water level 0%			0:00:00
15.38m	MHF	Finish node type, manhole		17_9	

Total Defects for section

DRB Grade for Section



Descriptive Report with Remarks and Observation Images

Section 18

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole SW04	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
15.38m		MHF	Finish node type, manhole SW10	Image Provided - Ref: 17_9999 

Total Defects for section

DRB Grade for Section

0 0 0 0 0



Site: 412 Victoria Avenue, Moston

Section 19

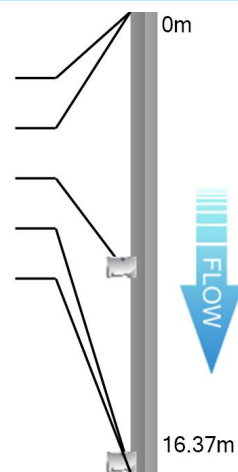
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	SW06	Finish Node Ref:	SW07	Direction:	D	Height/Dia:	225
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	S	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	RPM	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	16.4	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
09.44m	JN	Junction 02 : 150mm Diameter		19_2	0:00:39	
16.37m	JN	Junction 02 : 150mm Diameter		19_3	0:01:05	
16.37m	MHF	Finish node type, manhole		19_9		



Total Defects for section

DRB Grade for Section

0 0 0 0 0



Descriptive Report with Remarks and Observation Images

Section 19

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole SW06	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
09.44m	0:00:39	JN	Junction at 02 o'clock: 150mm Diameter	Image Provided - Ref: 19_2 
16.37m	0:01:05	JN	Junction at 02 o'clock: 150mm Diameter	Image Provided - Ref: 19_3 
16.37m		MHF	Finish node type, manhole SW07	Image Provided - Ref: 19_9999 

Total Defects for section

DRB Grade for Section



Site: 412 Victoria Avenue, Moston

Section 20

Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	SW07	Finish Node Ref:	SW08	Direction:	D	Height/Dia:	225
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	S	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	RPM	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	27.6	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
07.14m	JN	Junction 03 : 150mm Diameter			20_2 0:00:30	
27.55m	MHF	Finish node type, manhole			20_9	

Total Defects for section

DRB Grade for Section



Descriptive Report with Remarks and Observation Images

Section 20

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole SW07	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
07.14m	0:00:30	JN	Junction at 03 o'clock: 150mm Diameter	Image Provided - Ref: 20_2 
27.55m		MHF	Finish node type, manhole SW08	Image Provided - Ref: 20_9999 

Total Defects for section

DRB Grade for Section



Site: 412 Victoria Avenue, Moston

Section 21

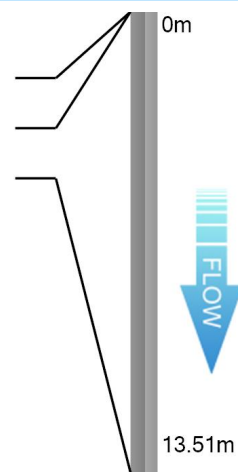
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	SW08	Finish Node Ref:	SW09	Direction:	D	Height/Dia:	225
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	S	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	RPM	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	13.5	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
13.51m	MHF	Finish node type, manhole		21_9		



Total Defects for section

DRB Grade for Section

0 0 0 0 0



Descriptive Report with Remarks and Observation Images

Section 21

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole SW08	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
13.51m		MHF	Finish node type, manhole SW09	Image Provided - Ref: 21_9999 

Total Defects for section

DRB Grade for Section

0 0 0 0 0



Site: 412 Victoria Avenue, Moston

Section 22

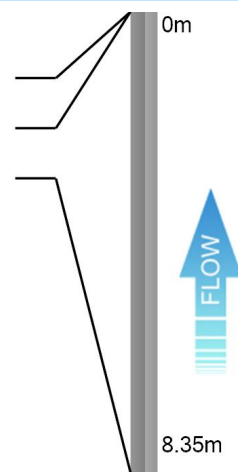
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	SW09	Finish Node Ref:	ACO	Direction:	U	Height/Dia:	150
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	S	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	RPM	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	08.4	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
08.35m	MHF	Finish node type, manhole		22_9		



Total Defects for section

DRB Grade for Section



Descriptive Report with Remarks and Observation Images

Section 22

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole SW09	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
08.35m		MHF	Finish node type, manhole ACO	Image Provided - Ref: 22_9999 

Total Defects for section

DRB Grade for Section

0 0 0 0 0



Site: 412 Victoria Avenue, Moston

Section 23

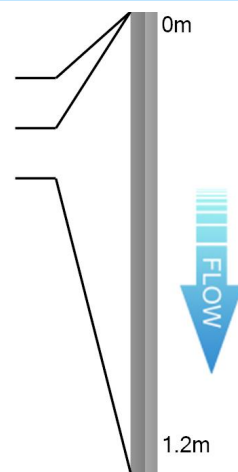
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	SW09	Finish Node Ref:	SW10	Direction:	D	Height/Dia:	225
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	S	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	RPM	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	01.2	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
01.20m	MHF	Finish node type, manhole			23_9	



Total Defects for section

DRB Grade for Section

0 0 0 0 0



Descriptive Report with Remarks and Observation Images

Section 23

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole SW09	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
01.20m		MHF	Finish node type, manhole SW10	Image Provided - Ref: 23_9999 

Total Defects for section

DRB Grade for Section

0 0 0 0 0



Site: 412 Victoria Avenue, Moston

Section 24

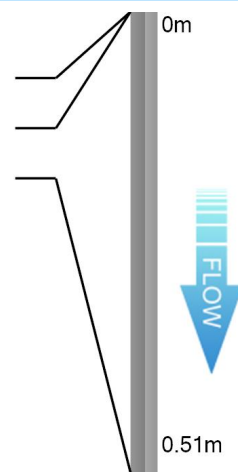
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	SW10	Finish Node Ref:	SW14	Direction:	D	Height/Dia:	300
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	S	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	RPM	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	00.5	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
00.51m	MHF	Finish node type, manhole		24_9		



Total Defects for section

DRB Grade for Section

0 0 0 0 0



Descriptive Report with Remarks and Observation Images

Section 24

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole SW10	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
00.51m		MHF	Finish node type, manhole SW14	Image Provided - Ref: 24_9999 

Total Defects for section

DRB Grade for Section

0 0 0 0 0



Site: 412 Victoria Avenue, Moston

Section 25

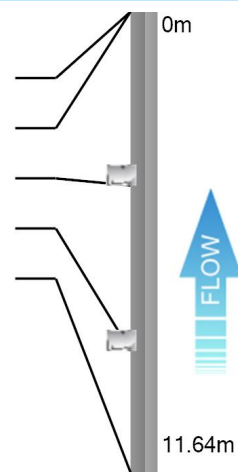
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	SW11	Finish Node Ref:	GULLY	Direction:	U	Height/Dia:	150
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	S	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	RPM	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	11.6	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
04.39m	JN	Junction 03 : 150mm Diameter		25_2	0:00:30	
08.57m	JN	Junction 03 : 150mm Diameter		25_3	0:00:50	
11.64m	MHF	Finish node type, manhole		25_9		



Total Defects for section

DRB Grade for Section

0 0 0 0 0



Descriptive Report with Remarks and Observation Images

Section 25

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole SW11	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
04.39m	0:00:30	JN	Junction at 03 o'clock: 150mm Diameter	Image Provided - Ref: 25_2
08.57m	0:00:50	JN	Junction at 03 o'clock: 150mm Diameter	Image Provided - Ref: 25_3
11.64m		MHF	Finish node type, manhole GULLY	Image Provided - Ref: 25_9999

Total Defects for section

DRB Grade for Section



Site: 412 Victoria Avenue, Moston

Section 26

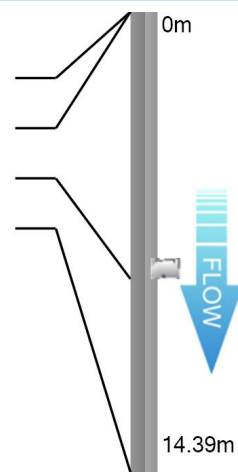
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	SW11	Finish Node Ref:	SW12	Direction:	D	Height/Dia:	225
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	S	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	RPM	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	14.4	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
08.35m	JN	Junction 09 : 150mm Diameter		26_2	0:00:38	
14.39m	MHF	Finish node type, manhole		26_9		



Total Defects for section

DRB Grade for Section



Descriptive Report with Remarks and Observation Images

Section 26

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole SW11	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
08.35m	0:00:38	JN	Junction at 09 o'clock: 150mm Diameter	Image Provided - Ref: 26_2 
14.39m		MHF	Finish node type, manhole SW12	Image Provided - Ref: 26_9999 

Total Defects for section

DRB Grade for Section



Site: 412 Victoria Avenue, Moston

Section 27

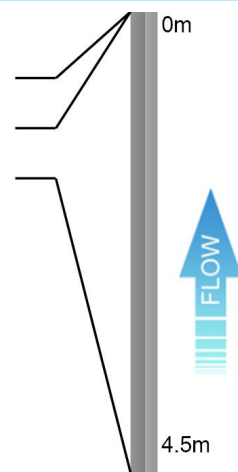
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	SW12	Finish Node Ref:	ACO1	Direction:	U	Height/Dia:	150
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	S	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	RPM	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	04.5	

Position	Code	Description	CD	Pic	Video Ref
00.00m	MH	Start node type, manhole			
00.00m	WL	Water level 0%			0:00:00
04.50m	MHF	Finish node type, manhole		27_9	



Total Defects for section

DRB Grade for Section

0 0 0 0 0



Descriptive Report with Remarks and Observation Images

Section 27

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole SW12	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
04.50m		MHF	Finish node type, manhole ACO1	Image Provided - Ref: 27_9999 

Total Defects for section

DRB Grade for Section

0 0 0 0 0



Site: 412 Victoria Avenue, Moston

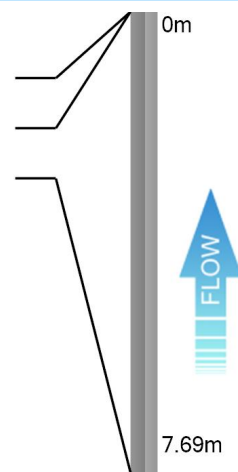
Section 28

Client: H & H Construction Ltd	Location (Street Name): 412 Victoria Avenue	City/Town/Village Moston	Cust Job Ref.	Surveyors Name: Danny O'Hara	Date: 31/03/2025
Start Node Ref: SW12	Finish Node Ref: ACO2	Direction: U	Height/Dia: 150		
Start Node Depth: 0.00	Finish Node Depth: 0.00	Use: S	Shape: C		
Start Node Coordinate:	Finish Node Coordinate:	Material: RPM	Cleaned Y		

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	07.7	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
07.69m	MHF	Finish node type, manhole		28_9		



Total Defects for section

DRB Grade for Section

0 0 0 0 0



Descriptive Report with Remarks and Observation Images

Section 28

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole SW12	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
07.69m		MHF	Finish node type, manhole ACO2	Image Provided - Ref: 28_9999 

Total Defects for section

DRB Grade for Section

0 0 0 0 0



Site: 412 Victoria Avenue, Moston

Section 29

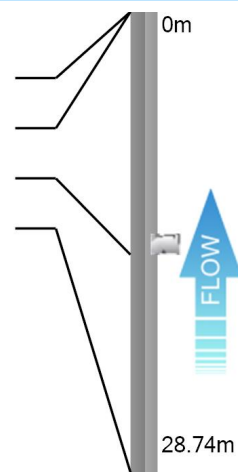
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	SW12	Finish Node Ref:	SW13	Direction:	U	Height/Dia:	225
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	S	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	RPM	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	28.7	

Position	Code	Description	CD	Pic	Video Ref
00.00m	MH	Start node type, manhole			
00.00m	WL	Water level 0%			0:00:00
15.16m	JN	Junction 10 : 150mm Diameter			29_2 0:00:50
28.74m	MHF	Finish node type, manhole			29_9



Total Defects for section

DRB Grade for Section



Descriptive Report with Remarks and Observation Images

Section 29

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole SW12	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
15.16m	0:00:50	JN	Junction at 10 o'clock: 150mm Diameter	Image Provided - Ref: 29_2 
28.74m		MHF	Finish node type, manhole SW13	Image Provided - Ref: 29_9999 

Total Defects for section

DRB Grade for Section



Site: 412 Victoria Avenue, Moston

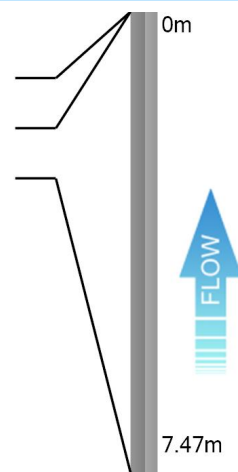
Section 30

Client: H & H Construction Ltd	Location (Street Name): 412 Victoria Avenue	City/Town/Village Moston	Cust Job Ref.	Surveyors Name: Danny O'Hara	Date: 31/03/2025
Start Node Ref: SW13	Finish Node Ref: GULLY	Direction: U	Height/Dia: 150		
Start Node Depth: 0.00	Finish Node Depth: 0.00	Use: S	Shape: C		
Start Node Coordinate:	Finish Node Coordinate:	Material: RPM	Cleaned Y		

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	07.5	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
07.47m	MHF	Finish node type, manhole		31_9		



Total Defects for section

DRB Grade for Section

0 0 0 0 0



Descriptive Report with Remarks and Observation Images

Section 30

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole SW13	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
07.47m		MHF	Finish node type, manhole GULLY	Image Provided - Ref: 31_9999 

Total Defects for section

DRB Grade for Section



Site: 412 Victoria Avenue, Moston

Section 31

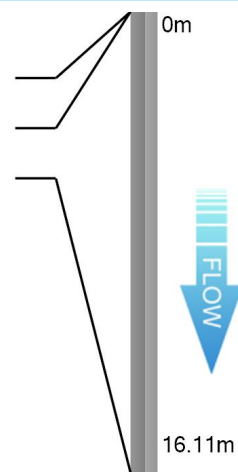
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	SW13	Finish Node Ref:	SW14	Direction:	D	Height/Dia:	225
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	S	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	RPM	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	16.1	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
16.11m	MHF	Finish node type, manhole		32_9		



Total Defects for section

DRB Grade for Section

0 0 0 0 0



Descriptive Report with Remarks and Observation Images

Section 31

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole SW13	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
16.11m		MHF	Finish node type, manhole SW14	Image Provided - Ref: 32_9999 

Total Defects for section

DRB Grade for Section



Site: 412 Victoria Avenue, Moston

Section 32

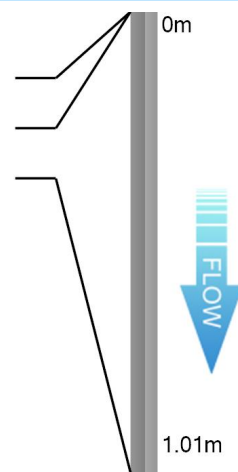
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	SW14	Finish Node Ref:	SW17	Direction:	D	Height/Dia:	375
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	S	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	RPM	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	01.0	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
01.01m	MHF	Finish node type, manhole		33_9		



Total Defects for section

DRB Grade for Section

0 0 0 0 0



Descriptive Report with Remarks and Observation Images

Section 32

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole SW14	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
01.01m		MHF	Finish node type, manhole SW17	Image Provided - Ref: 33_9999 

Total Defects for section

DRB Grade for Section

0 0 0 0 0



Site: 412 Victoria Avenue, Moston

Section 33

Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	SW15	Finish Node Ref:	ACO2	Direction:	U	Height/Dia:	150
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	S	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	RPM	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	20.9	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
03.80m	JN	Junction 03 : 150mm Diameter			35_2 0:00:19	
20.90m	MHF	Finish node type, manhole			35_9	

Total Defects for section

DRB Grade for Section

0 0 0 0 0



Descriptive Report with Remarks and Observation Images

Section 33

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole SW15	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
03.80m	0:00:19	JN	Junction at 03 o'clock: 150mm Diameter	Image Provided - Ref: 35_2 
20.90m		MHF	Finish node type, manhole ACO2	Image Provided - Ref: 35_9999 

Total Defects for section

DRB Grade for Section

0 0 0 0 0



Site: 412 Victoria Avenue, Moston

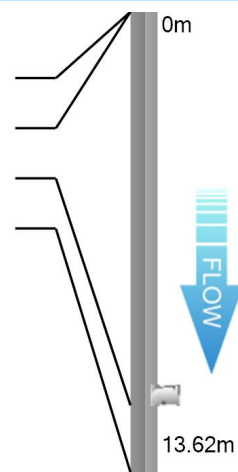
Section 34

Client: H & H Construction Ltd	Location (Street Name): 412 Victoria Avenue	City/Town/Village Moston	Cust Job Ref.	Surveyors Name: Danny O'Hara	Date: 31/03/2025
Start Node Ref: SW15	Start Node Depth: 0.00	Finish Node Ref: SW16	Finish Node Depth: 0.00	Direction: D Use: S Material: RPM	Height/Dia: 225 Shape: C Cleaned: Y
Start Node Coordinate:		Finish Node Coordinate:			

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	13.6	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
11.64m	JN	Junction 09 : 150mm Diameter		36_2	0:00:42	
13.62m	MHF	Finish node type, manhole		36_9		



Total Defects for section

DRB Grade for Section

0 0 0 0 0



Descriptive Report with Remarks and Observation Images

Section 34

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole SW15	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
11.64m	0:00:42	JN	Junction at 09 o'clock: 150mm Diameter	Image Provided - Ref: 36_2 
13.62m		MHF	Finish node type, manhole SW16	Image Provided - Ref: 36_9999 

Total Defects for section

DRB Grade for Section



Site: 412 Victoria Avenue, Moston

Section 35

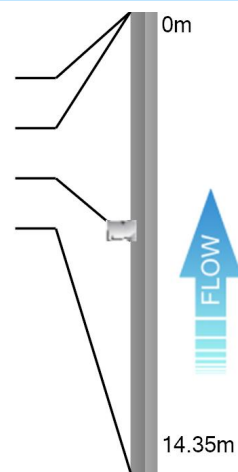
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	SW16	Finish Node Ref:	GULLY	Direction:	U	Height/Dia:	150
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	S	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	RPM	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	14.4	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
07.14m	JN	Junction 03 : 150mm Diameter			37_2 0:00:38	
14.35m	MHF	Finish node type, manhole			37_9	



Total Defects for section

DRB Grade for Section

0 0 0 0 0



Descriptive Report with Remarks and Observation Images

Section 35

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole SW16	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
07.14m	0:00:38	JN	Junction at 03 o'clock: 150mm Diameter	Image Provided - Ref: 37_2 
14.35m		MHF	Finish node type, manhole GULLY	Image Provided - Ref: 37_9999 

Total Defects for section

DRB Grade for Section



Site: 412 Victoria Avenue, Moston

Section 36

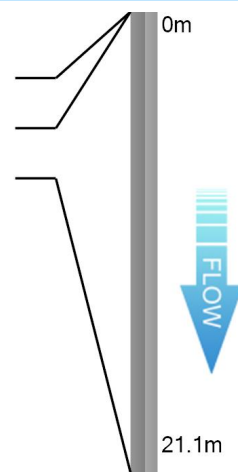
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	SW16	Finish Node Ref:	SW17	Direction:	D	Height/Dia:	225
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	S	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	RPM	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	21.1	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
21.10m	MHF	Finish node type, manhole		38_9		



Total Defects for section

DRB Grade for Section

0 0 0 0 0



Descriptive Report with Remarks and Observation Images

Section 36

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole SW16	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
21.10m		MHF	Finish node type, manhole SW17	Image Provided - Ref: 38_9999 

Total Defects for section

DRB Grade for Section

0 0 0 0 0



Site: 412 Victoria Avenue, Moston

Section 37

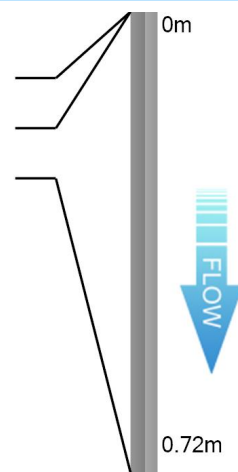
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	SW17	Finish Node Ref:	SW18	Direction:	D	Height/Dia:	375
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	S	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	RPM	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	00.7	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
00.72m	MHF	Finish node type, manhole		39_9		



Total Defects for section

DRB Grade for Section

0 0 0 0 0



Descriptive Report with Remarks and Observation Images

Section 37

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole SW17	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
00.72m		MHF	Finish node type, manhole SW18	Image Provided - Ref: 39_9999 

Total Defects for section

DRB Grade for Section

0 0 0 0 0



Site: 412 Victoria Avenue, Moston

Section 38

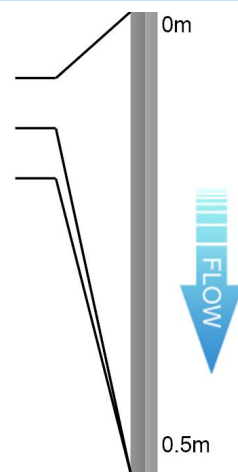
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	SW18	Finish Node Ref:	INTERCEPTOR	Direction:	D	Height/Dia:	375
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	S	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	RPM	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	00.5	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.50m	WL	Water level 50%		40_1	0:00:00	
00.50m	MHF	Finish node type, manhole		40_9		



Total Defects for section

DRB Grade for Section

0 0 0 0 0



Descriptive Report with Remarks and Observation Images

Section 38

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole SW18	
00.50m	0:00:00	WL	Water level: 50% Height/Diameter	Image Provided - Ref: 40_1  10:04:13 27-03-25 0.05m -13.8° SW18 downstream to interceptor 375mm plastic
00.50m		MHF	Finish node type, manhole INTERCEPTOR	Image Provided - Ref: 40_9999  10:04:13 27-03-25 0.05m -13.8° SW18 downstream to interceptor 375mm plastic

Total Defects for section

DRB Grade for Section



Site: 412 Victoria Avenue, Moston

Section 39

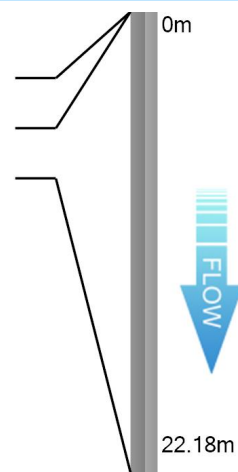
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	SW23	Finish Node Ref:	GULLY	Direction:	D	Height/Dia:	150
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	S	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	RPM	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	22.2	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
22.18m	MHF	Finish node type, manhole		41_9		



Total Defects for section

DRB Grade for Section

0 0 0 0 0



Descriptive Report with Remarks and Observation Images

Section 39

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole SW23	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
22.18m		MHF	Finish node type, manhole GULLY	Image Provided - Ref: 41_9999 

Total Defects for section

DRB Grade for Section

0 0 0 0 0



Site: 412 Victoria Avenue, Moston

Section 40

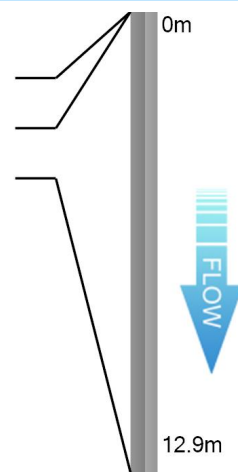
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	SW23	Finish Node Ref:	SW24	Direction:	D	Height/Dia:	300
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	S	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	RPM	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	12.9	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
12.90m	MHF	Finish node type, manhole		42_9		



Total Defects for section

DRB Grade for Section

0 0 0 0 0



Descriptive Report with Remarks and Observation Images

Section 40

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole SW23	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
12.90m		MHF	Finish node type, manhole SW24	Image Provided - Ref: 42_9999 

Total Defects for section

DRB Grade for Section



Site: 412 Victoria Avenue, Moston

Section 41

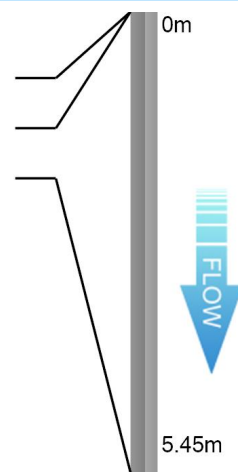
Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
H & H Construction Ltd	412 Victoria Avenue	Moston		Danny O'Hara	31/03/2025

Start Node Ref:	SW24	Finish Node Ref:	TANK	Direction:	D	Height/Dia:	300
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	S	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	RPM	Cleaned	Y

Node Type	Cover Condition	Benching Condition	Channel Condition	Node Condition Remarks
MH				

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	05.5	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%			0:00:00	
05.45m	MHF	Finish node type, manhole		43_9		



Total Defects for section

DRB Grade for Section



Descriptive Report with Remarks and Observation Images

Section 41

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole SW24	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	
05.45m		MHF	Finish node type, manhole TANK	Image Provided - Ref: 43_9999 

Total Defects for section

DRB Grade for Section

0 0 0 0 0



Total Defects for section



DRB Grade for Section



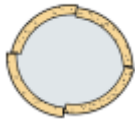
A guide to defects and other observations in drainage systems

More detailed information can be found in the National Standard (BS EN 13508-1:2003) and in the Manual of Sewer Condition Classification (MSCC) 5th Edition, written by the Water Research Centre (WRC).

Use	
Code	Description
C	Combined
F	Foul
S	Surface Water
T	Trade Effluent
W	Culverted Watercourse
Z	Other

Common Materials	
Code	Description
VC	Vitrified Clay
PVC	Polyvinyl Chloride
CO	Concrete
CI	Cast Iron
PF	Pitch Fibre
PE	Polyethylene
DI	Ductile Iron

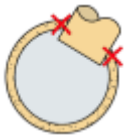
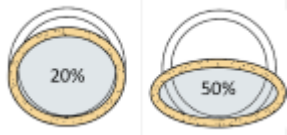
Start Node	Description	Finish Node
MH	Manhole	MHF
IC	Inspection Chamber	ICF
GY	Gulley	GYF
RE	Rodding Eye	REF
SK	Soakaway	SKF
BN	Buchan Trap	BNF
BR	Major Connection without Ref	BRF
CP	Catch Pit	CPF
OC	Other Special Chamber	OCF
OF	Outfall	OFF
OS	Oil Separator	OSF
WR	Winner Trap	WRF
LH	Lamphole	LHF

Code	Observation	Description	Attributes	
B	Broken	Pieces pipe have visibly moved	Defined by clock references. Associated with deformity in rigid pipe	
CC CL CM CR	Cracks	Cracks are break lines that are not visibly open	Defined by clock reference position/s. Longitudinal and radiating cracks attract only one clock reference	
CN	Connection	Lateral pipe has been connected after original construction	Described by clock reference position and diameter	

Total Defects for section

DRB Grade for Section



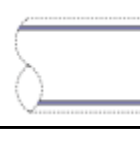
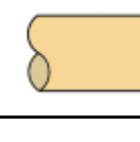
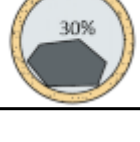
CX(I)	Defective Connection (Intruding)	Defective by intrusion or damage due to factors including: cracks, fractures, obstruction, position etc	Described by clock reference position and diameter (+ % intrusion)	
CU	Loss of Vision	Lens of camera is obscured by debris, water etc. Operator is unable to see drain clearly	"W" can be added if loss of vision is due to water	
D	Deformed	Pipe has lost its structure	Described by percentage loss of height or width. Recorded in 5% increments	
DEE	Deposits Encrustation	Eg. Attached scale deposits evident	Described by clock referenced position and percentage loss of cross-sectional area (5% increments)	
DEG	Deposits Grease	Attached grease deposits evident	Described by clock referenced position and percentage loss of cross-sectional area (5% increments)	
DER DES	Deposits Coarse/Fine	Settled deposits on the invert of the pipe.	Described by percentage loss of height or diameter. Recorded in 5% increments.	
FC FL FM FR	Fractures	Fractures are visibly open. Pieces of pipe have not moved	Defined by clock reference position/s. Longitudinal and radiating fractures attract only one clock reference	
H	Holes	Section of pipe fabric is missing	Defined by clock reference location. Normally two clock references	
I	Infiltration	Water is infiltrating the pipe, normally via a joint but could be via another defect	Can be described in Remarks using terms such as Seeper, Dripper and Runner	
JDL	Joint Displaced Large	Pipe has moved at joint, perpendicular to axis of pipe	More than 1.5 times the pipe wall thickness must be visible	

Total Defects for section

DRB Grade for Section

0 0 0 0 0



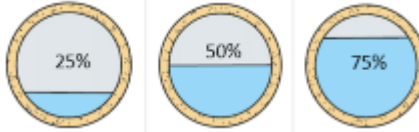
JDM	Joint Displaced Medium	Pipe has moved at joint, perpendicular to axis of pipe	Between 1 and 1.5 times the pipe wall thickness must be visible	
JN	Junction	Lateral pipe was installed at construction	Described by clock reference position and diameter	
JX	Defective Junction	Lateral pipe was installed at construction but is defective in some way	Joint can be defective due to factors including: cracks, fractures, obstruction, position etc	
LD LU LL LR	Line Deviation	LD = Line Down, LU = Line Up, LL = Line Left, LR = Line Right. Not related to CIPP lining.	Additional modifiers are added: Q = Quarter (22.5), H = Half (45), F = Full (90). In degrees.	
LC	Lining Changes	If the drain is lined, the lining material has changed	Position of lining material change	
MC	Material Change	The pipe material has changed	Position of change is noted. Type of material change can be defined	
OB	Obstruction/Obstacle	An obstruction or obstacle is affecting the flow through the pipe	Described in percentage loss of cross-sectional area	
OJL	Open Joint Large	Pipe has moved at joint, along the axis of pipe	More than 1.5 times the pipe wall thickness must be visible	
OJM	Open Joint Medium	Pipe has moved at joint, along the axis of pipe	Between 1 and 1.5 times the pipe wall thickness must be visible	
PC	Pipe Length Changes	Length of individual pipe changes	New length described at this position	

Total Defects for section

DRB Grade for Section

0 0 0 0 0



R	Roots	Evidence of root ingress	Roots will normally infiltrate via bad joints, cracks, fractures, breaks etc	
REM	Remark	General remark	Used for additional information	
S	Surface Damage	This might include corrosion, spalling and chemical attack	Position only. Additional information can be added in Remarks	
SA	Survey Abandoned	Used when a survey cannot continue for any reason	The reason for abandoning a survey should be noted in the remarks area	
SC	Shape Changes	Dimension of drain changes	Diameter dimension change recorded. Second dimension is recorded for no circular pipe changes	
SR	Sealing Ring	Sealing ring intrudes into pipe at joint	Described by clock reference position	
V	Vermin	Evidence of Vermin in pipe	Can also be used for evidence within manhole etc	
WL	Water Level	Used to record changes in water level. Always shown at the beginning of every survey, if dry noted as 00.	Described by percentage of height or diameter. Recorded in 5% increments	
XP	Collapsed	Drain is suffering from complete loss of structural integrity. Always followed by SA - Survey Abandoned	Percentage loss of cross-sectional area is recorded. Other related structural defects are not recorded	