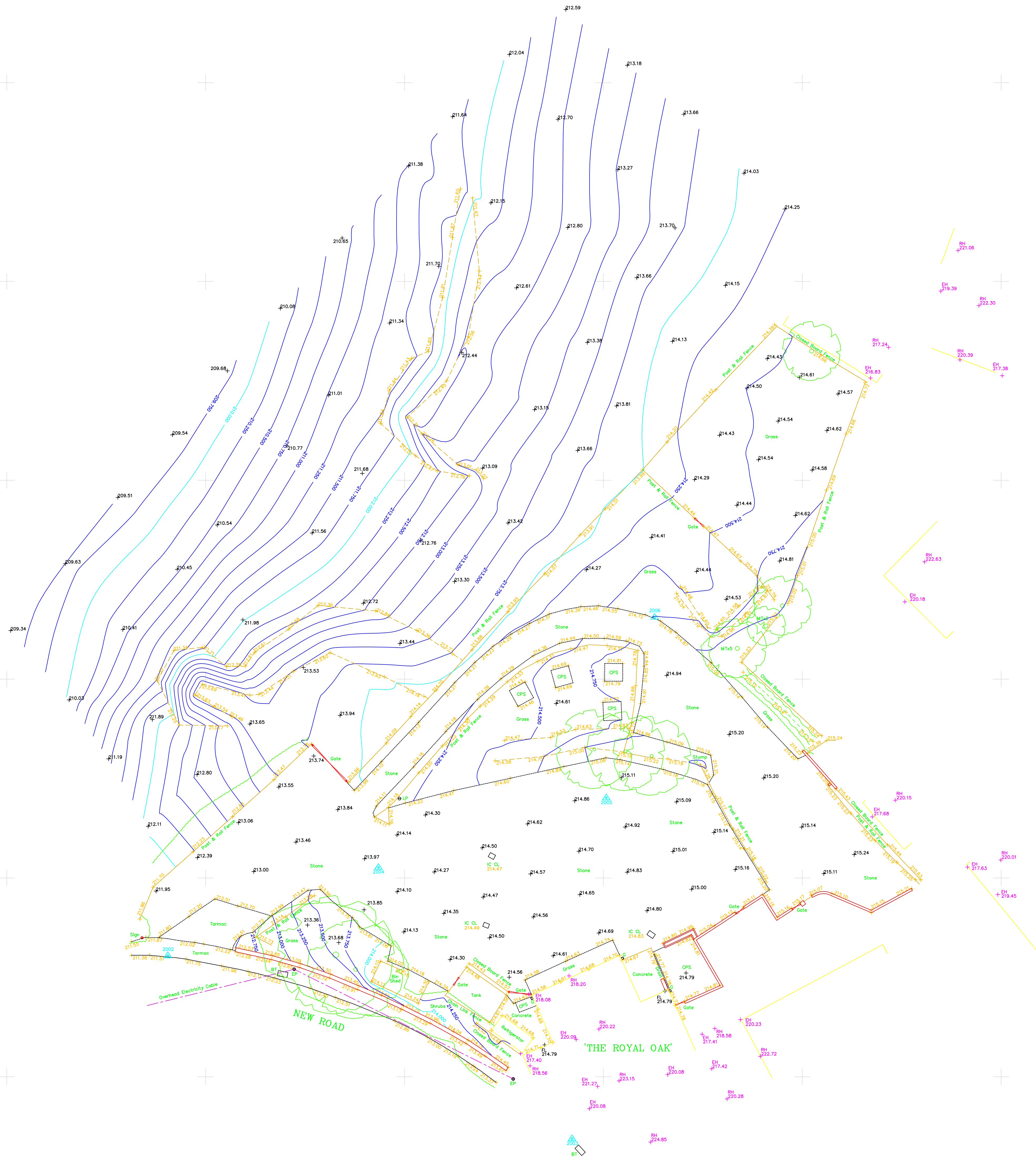
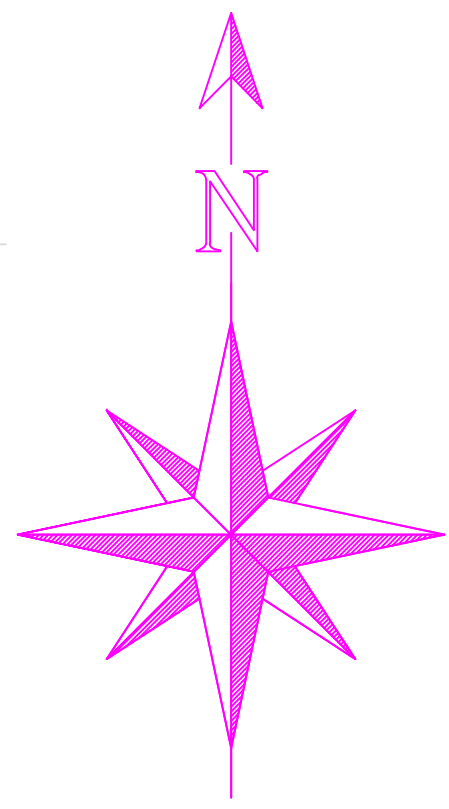




LEGEND

- CONTROL STATIONS
MANHOLE
BUSH
TREE
DROP KERB
EMBANKMENT
OVERHEAD ELECTRICITY LINE
OVERHEAD TELEPHONE LINE
FOOTPATH
FENCE
HEDGE
FOUJAGE
DITCH
VERGE
EXISTING BUILDING
MAIN CONTOUR
CONTOUR
SW SEWER
FW SEWER
AV Air Valve
BH Benchhole
BS Bench
BM Bench Mark
BT BT Inspection Chamber
CL Chain Link
C/L Chain Link Fence
CPS Concrete Paving Slab
CSB Electricity Control Box
EH Building Eaves Level
ER Earthing Rod
FB Flower Bed
FH Fire Hydrant
FL Floor Level
GT Greenhouse
GR Gate Post
GR Grate
GV Gas Valve
G Gully
IC Inspection Chamber
IL Invert Level
KO Kerb Outlet
JB Junction Box
Lamp Post
MH Man Hole
MK Marker Post
MS Mils Stone Marker
NS Street Name Plate
O/H Overhead
PB Post Box
PI Pole
PM Parking Meter
P/B Post & Rail Fence
P/W Post & Wire Fence
P/L Electricity Pylon
RE Roadside Eye
RSJ Reinforced Steel Joist
R/W Retaining Wall
RWP Reinforced Pipe
SPS Stone Paving Slabs
SL Slab Level
SP Sign Post
SV Stop Valve
ST Stop Sign
SY Stop Wire
TC Tactile Crossing
TOW Top Of Wall Level
TH True Hole
TL Traffic Light
T/L Drainage Hole
UL Unusable To Lift
WM Water Meter
VH Building Valley Level

Disclaimer
Main Entry to sewers has not been undertaken. Depths, Pipelines etc are measured from the ground. All sewers and inverts to be checked prior to any works commencing on site. Geomatic Surveys Limited are not responsible for manholes, services, information not surveyed which may have an impact on site development.
Boundaries shown are physical and may not represent legally conveyed ownership.
Tree species have only been identified using basic identification techniques. For precise tree species identification, it is recommended that a qualified arboriculturist is used prior to tree removal.

A	08.12.23	Survey extended to the West as requested.	SD
REV	DATE	DESCRIPTION	BY APP.
Sheet Layout			

Sheet 1

Survey Information
The Survey has been orientated to Ordnance Survey National Grid and datum using one central control station. No Scale Factor has been applied to the coordinates meaning that the survey is arbitrary and not true Ordnance Survey Coordinates.

Geomatic Surveys Ltd
LAND SURVEYORS AND CONSULTING ENGINEERS
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SK9 3HQ
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Web: www.geomaticsurveys.co.uk

Client
HEWITT & CARR ARCHITECTS

Project Title
**'THE ROYAL OAK'
DILHORNE
STOKE ON TRENT**

Drawing Title TOPOGRAPHICAL SURVEY			
Drawn	MRW	Checked	IRH
Date	21/11/2022	Scale	1:200 @ A0
Dwg. No.	02913/Topo	Sheet No.	SHEET 1 OF 1
Rev	A	Rev	A

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SURVEY CONTROL STATIONS			
STN	EASTING	NORTHING	HEIGHT
2001	297250.126	243626.970	207.130
2003	297316.194	243625.185	211.660
2004	297350.844	243630.772	213.869
2004	297337.373	243661.064	213.980
2005	297360.888	243668.068	214.980
2006	297365.150	243686.229	214.760

Appendix B – CCTV and Utility Survey



ABBREVIATION KEY

UTILITY SURVEY NOTES

AMBER UTILITI



SITE LOG/CHK

The Royal Oak, High Str
Dilhorne, Stoke on Trent
ST10 2PE

DRAWING TITLE:
CCTV Survey

SURVEYED BY: WC	DRAWN BY: WC
--------------------	-----------------

DRAWING NO:	U24-10880	SURVEY D:
SCALE:		SHEET NO:

1:250 @ A1	She
------------	-----

CCTV Survey Report

Drain Condition
Reporting
Software
PT/430/0918



Prepared For

**The Royal Oak
High Street
Dilhorne
Stoke-on-Trent
ST10 2PE**

Site

**The Royal Oak
High Street
Dilhorne
Stoke-on-Trent
ST10 2PE**

**AMBER UTILITIES LTD
Surveyor: Werno Claassen
info@amberutilities.co.uk
01788 577426**

Total Defects for Project



Total DRB Grades for Project



Royal Oak - CCTV Survey Report : 15/05/24

Prepared by:

Name : AMBER UTILITIES LTD
 Contact : Ross Morley
 Location : Top Floor 22 Regent Street
 Town : Rugby
 Region : Warwickshire
 Postcode : CV21 2PY
 Email : info@amberutilities.co.uk
 Web :
 Contact Number : 01788 577426
 Surveyor : Werno Claassen
 Valid Certification No :

Client Information

Client Name : The Royal Oak
 Contact : Andrew Cunningham
 Location : High Street
 Town : Dilhorne
 Region : Stoke-on-Trent
 Postcode : ST10 2PE
 Tel :
 Mobile :
 Email :
 Fax :

Site Information

Site Name : The Royal Oak
 Contact : Andrew Cunningham
 Location : High Street
 Town : Dilhorne
 Region : Stoke-on-Trent
 Postcode : ST10 2PE
 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: MH 1 To: MH 2	Purpose of Inspection: Investigation of known structural or service defects Grade B	DRB Grade: B Pipe Size: 100 Material: Vitrified Clay (i.e. all clayware) Use: Foul
Section: 2 From: MH 1 To: MH 10	Purpose of Inspection: Investigation of known structural or service defects Grade B	DRB Grade: B Pipe Size: 100 Material: Polyvinyl Chloride Use: Foul
Section: 3 From: MH 1 To: MH 7	Purpose of Inspection: Investigation of known structural or service defects Grade B	DRB Grade: B Pipe Size: 100 Material: Vitrified Clay (i.e. all clayware) Use: Foul
Section: 4 From: MH 1 To: EOT	Purpose of Inspection: Investigation of known structural or service defects Grade B	DRB Grade: B Pipe Size: 100 Material: Vitrified Clay (i.e. all clayware) Use: Foul
Section: 5 From: MH 2 To: EOT	Purpose of Inspection: Investigation of known structural or service defects Grade C	DRB Grade: C Pipe Size: 100 Material: Pitch fibre Use: Foul
Section: 6 From: MH 2 To: EOT	Purpose of Inspection: Investigation of known structural or service defects Grade B	DRB Grade: B Pipe Size: 100 Material: Vitrified Clay (i.e. all clayware) Use: Foul
Section: 7 From: MH 3 To: EOT	Purpose of Inspection: Investigation of known structural or service defects Grade B	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: 8 From: MH 3 To: EOT	Purpose of Inspection: Investigation of known structural or service defects	DRB Grade: B Pipe Size: 150 Material: Vitrified Clay (i.e. all clayware) Use: Foul								
<table border="1"> <tr> <td data-bbox="108 383 172 416">MH</td><td data-bbox="177 383 331 416">Cover</td><td data-bbox="331 383 379 416"></td></tr> <tr> <td></td><td data-bbox="177 416 331 450">Benching</td><td data-bbox="331 416 379 450"></td></tr> <tr> <td></td><td data-bbox="177 450 331 483">Channel</td><td data-bbox="331 450 379 483"></td></tr> </table>	MH		Cover			Benching			Channel	
MH	Cover									
	Benching									
	Channel									
Section: 9 From: MH 3 To: EOT	Purpose of Inspection: Investigation of known structural or service defects	DRB Grade: B Pipe Size: 100 Material: Vitrified Clay (i.e. all clayware) Use: Foul								
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MH	Cover									
	Benching									
	Channel									
Section: 10 From: MH 4 To: EOT	Purpose of Inspection: Investigation of known structural or service defects	DRB Grade: B Pipe Size: 150 Material: Vitrified Clay (i.e. all clayware) Use: Foul								
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MH	Cover									
	Benching									
	Channel									
Section: 11 From: MH 4 To: EOT	Purpose of Inspection: Investigation of known structural or service defects	DRB Grade: B Pipe Size: 150 Material: Unidentified material Use: Foul								
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MH	Cover									
	Benching									
	Channel									
Section: 12 From: MH 5 To: EOT	Purpose of Inspection: Investigation of known structural or service defects	DRB Grade: B Pipe Size: 100 Material: Polyvinyl Chloride Use: Foul								
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MH	Cover									
	Benching									
	Channel									
Section: 13 From: MH 5 To: RB	Purpose of Inspection: Investigation of known structural or service defects	DRB Grade: B Pipe Size: 100 Material: Polyvinyl Chloride Use: Foul								
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MH	Cover									
	Benching									
	Channel									
Section: 14 From: MH 5 To: Gully	Purpose of Inspection: Investigation of known structural or service defects	DRB Grade: B Pipe Size: 100 Material: Polyvinyl Chloride Use: Foul								
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MH	Cover									
	Benching									
	Channel									

Total Defects for Project



Total DRB Grades for Project



Section: 15 From: MH 5 To: Gully		Purpose of Inspection: Investigation of known structural or service defects	DRB Grade: B Pipe Size: 100 Material: Polyvinyl Chloride Use: Foul
MH	Cover Benching Channel	Grade B	
Section: 16 From: MH 6 To: MH 7		Purpose of Inspection: Investigation of known structural or service defects	DRB Grade: B Pipe Size: 100 Material: Vitrified Clay (i.e. all clayware) Use: Foul
MH	Cover Benching Channel	Grade B	
Section: 17 From: MH 6 To: EOT		Purpose of Inspection: Investigation of known structural or service defects	DRB Grade: B Pipe Size: 100 Material: Vitrified Clay (i.e. all clayware) Use: Foul
MH	Cover Benching Channel	Grade B	
Section: 18 From: MH 6 To: SVP		Purpose of Inspection: Investigation of known structural or service defects	DRB Grade: B Pipe Size: 100 Material: Vitrified Clay (i.e. all clayware) Use: Foul
MH	Cover Benching Channel	Grade B	
Section: 19 From: MH 8 To: EOT		Purpose of Inspection: Investigation of known structural or service defects	DRB Grade: B Pipe Size: 150 Material: Vitrified Clay (i.e. all clayware) Use: Foul
MH	Cover Benching Channel	Grade B	
Section: 20 From: Land Drain To: EOT		Purpose of Inspection: Investigation of known structural or service defects	DRB Grade: B Pipe Size: 100 Material: Polyvinyl Chloride Use: Surface Water
OC	Cover Benching Channel	Grade B	
Section: 21 From: MH 9 To: EOT		Purpose of Inspection: Investigation of known structural or service defects	DRB Grade: B Pipe Size: 150 Material: Polyvinyl Chloride Use: Surface Water
MH	Cover Benching Channel	Grade B	

Total Defects for Project



Total DRB Grades for Project



Section: 22 From: MH 9 To: Chamber			Purpose of Inspection: Investigation of known structural or service defects		DRB Grade: C Pipe Size: 150 Material: Polyvinyl Chloride Use: Surface Water	
MH	Cover		Grade C			
	Benching					
	Channel					

Section: 23 From: MH 9 To: EOT			Purpose of Inspection: Investigation of known structural or service defects		DRB Grade: B Pipe Size: 225 Material: Polyvinyl Chloride Use: Surface Water	
MH	Cover		Grade B			
	Benching					
	Channel					

Total Defects for Project



Total DRB Grades for Project



Site: High Street, Dilhorne

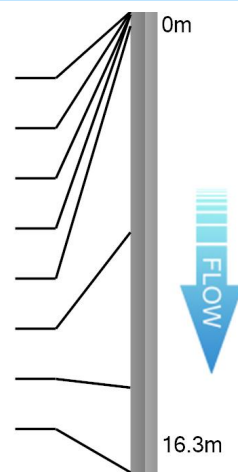
Section 1

Client:	Location (Street Name): High Street	City/Town/Village Dilhorne	Cust Job Ref.	Surveyors Name: Werno Claassen	Date: 15/05/2024
Start Node Ref:	MH 1	Finish Node Ref:	MH 2	Direction:	D
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	F
Start Node Coordinate:		Finish Node Coordinate:		Material:	VC
				Height/Dia:	100
				Shape:	C
				Cleaned	N

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

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	16.3	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%		0_1	0:00:00	
00.10m	CM	Cracks, multiple		0_2	0:00:01	
00.10m	JDM	Joint displaced medium		0_3	0:00:01	
00.50m	MC	Material of drain/sewer changes		0_4	0:00:04	
07.80m	REM	General remark		0_5	0:00:35	
13.30m	REM	General remark		0_6	0:00:53	
16.30m	MHF	Finish node type, manhole		0_99		



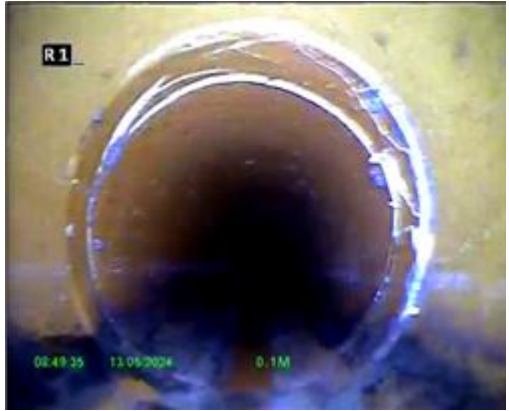
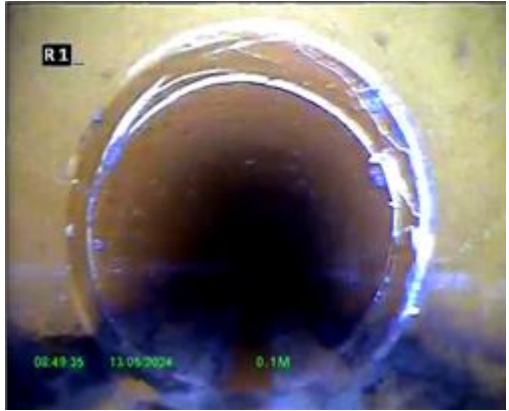
Total Defects for section

DRB Grade for Section



Descriptive Report with Remarks and Observation Images

Section 1

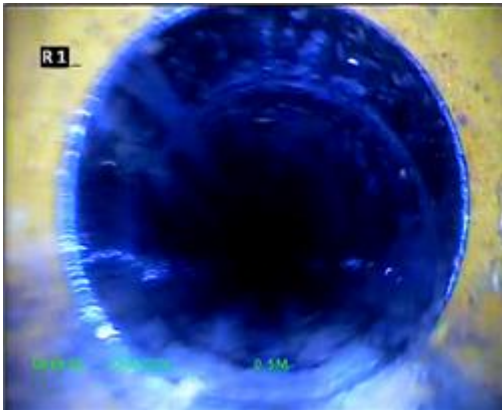
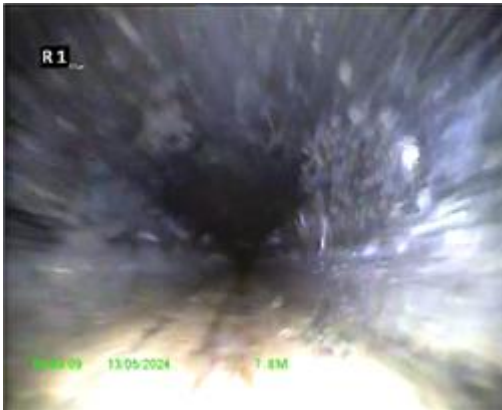
Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole MH 1	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	Image Provided - Ref: 0_1 
00.10m	0:00:01	CM	Cracks, multiple - Severity 2	Image Provided - Ref: 0_2 
00.10m	0:00:01	JDM	Joint displaced medium - Severity 3	Image Provided - Ref: 0_3 

Total Defects for section



DRB Grade for Section



Pos	Video Ref	Code	Description	Image
00.50m	0:00:04	MCPF	Material of pipe changes to Pitch fibre	Image Provided - Ref: 0_4 
07.80m	0:00:35	REM	General remark General Condition Photo	Image Provided - Ref: 0_5 
13.30m	0:00:53	REM	General remark General Condition Photo	Image Provided - Ref: 0_6 

Total Defects for section



DRB Grade for Section



Pos	Video Ref	Code	Description	Image
16.30m		MHF	Finish node type, manhole MH 2 Reached	Image Provided - Ref: 0_9999 

Total Defects for section



DRB Grade for Section



Site: High Street, Dilhorne

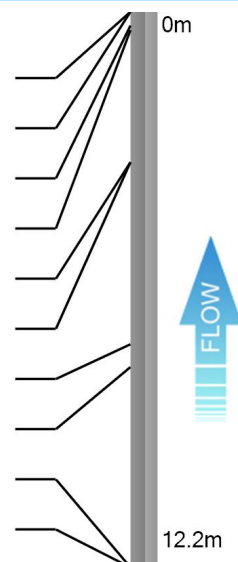
Section 2

Client:	Location (Street Name): High Street	City/Town/Village Dilhorne	Cust Job Ref.	Surveyors Name: Werno Claassen	Date: 15/05/2024
Start Node Ref:	MH 1	Finish Node Ref:	MH 10	Direction:	U
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	F
Start Node Coordinate:		Finish Node Coordinate:		Material:	PVC
				Height/Dia:	100
				Shape:	C
				Cleaned	N

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

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	12.2	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%		1_1	0:00:00	
00.30m	LRQ	Line of drain/sewer deviates right [quarter]		1_2	0:00:01	
00.40m	DEG	S1 Attached deposits, grease 05-07 5%	S1	1_3	0:00:03	
03.30m	WL	Water level 5%		1_4	0:00:12	
03.30m	WL	Water level 15%		1_5	0:00:14	
07.30m	REM	General remark		1_6	0:00:31	
07.80m	JDM	Joint displaced medium		1_7	0:00:35	
12.20m	DEG	F1 Attached deposits, grease 05-07 5%	F1	1_-3	0:00:03	
12.20m	MHF	Finish node type, manhole		1_99		

0m

 12.2m

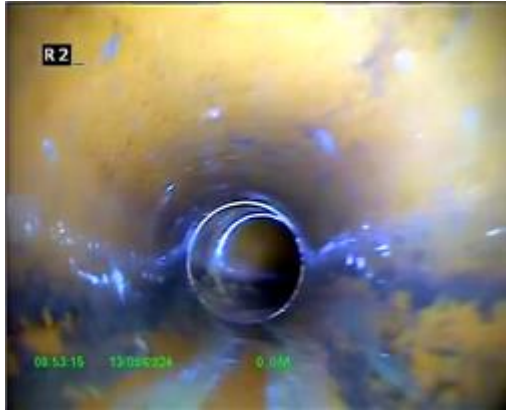
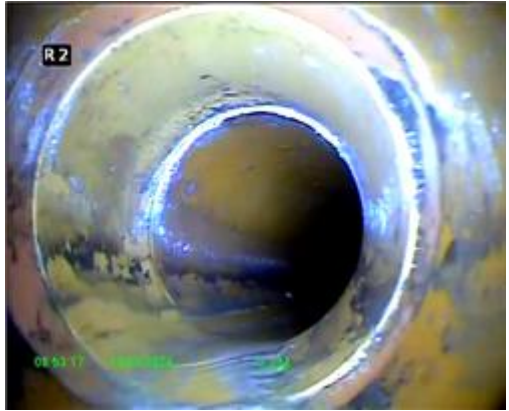
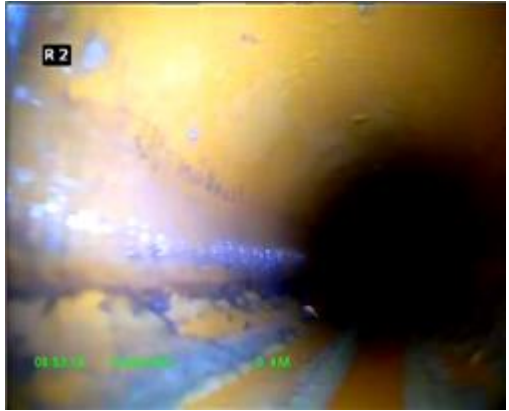
Total Defects for section

DRB Grade for Section



Descriptive Report with Remarks and Observation Images

Section 2

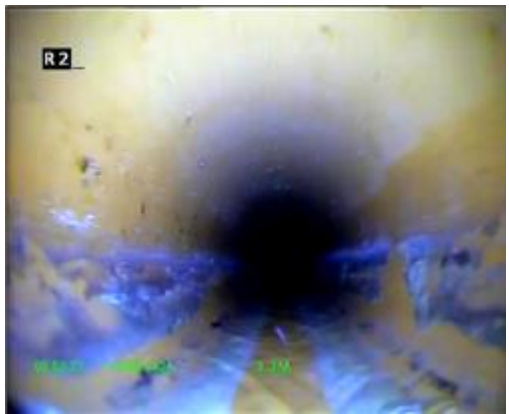
Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole MH 1	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	Image Provided - Ref: 1_1 
00.30m	0:00:01	LRQ	Line of drain/sewer deviates right [quarter]	Image Provided - Ref: 1_2 
00.40m	0:00:03	S1 DEG	Attached deposits, grease 0.4m - 12.2m from 05 o'clock to 07 o'clock: 5% Cross sectional area loss - Severity 3	Image Provided - Ref: 1_3 

Total Defects for section



DRB Grade for Section



Pos	Video Ref	Code	Description	Image
03.30m	0:00:12	WL	Water level: 5% Height/Diameter	Image Provided - Ref: 1_4 
03.30m	0:00:14	WL	Water level: 15% Height/Diameter	Image Provided - Ref: 1_5 
07.30m	0:00:31	REM	General remark General Condition Photo	Image Provided - Ref: 1_6 

Total Defects for section



DRB Grade for Section



Pos	Video Ref	Code	Description	Image
07.80m	0:00:35	JDM	Joint displaced medium - Severity 3	Image Provided - Ref: 1_7 
12.20m	0:00:03	F1 DEG	Attached deposits, grease Defect End from 05 o'clock to 07 o'clock: 5% Cross sectional area loss - Severity 3	Image Provided - Ref: 1_-3 
12.20m		MHF	Finish node type, manhole MH 10 Reached	Image Provided - Ref: 1_9999 

Total Defects for section



DRB Grade for Section



Site: High Street, Dilhorne

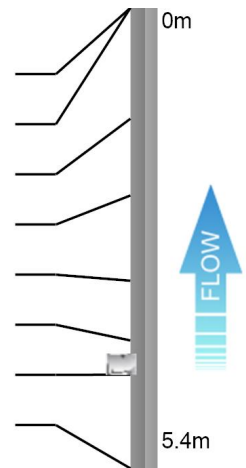
Section 3

Client:	Location (Street Name): High Street	City/Town/Village Dilhorne	Cust Job Ref.	Surveyors Name: Werno Claassen	Date: 15/05/2024
Start Node Ref:	MH 1	Finish Node Ref:	MH 7	Direction:	U
Start Node Depth:	0.00	Finish Node Depth:	0.00	Use:	F
Start Node Coordinate:		Finish Node Coordinate:		Material:	VC
				Cleaned	N

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

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	General Remarks
A				D	N	05.4	

Position	Code	Description	CD	Pic	Video Ref	
00.00m	MH	Start node type, manhole				
00.00m	WL	Water level 0%		2_1	0:00:00	
01.30m	JDM	Joint displaced medium		2_2	0:00:11	
02.20m	JDM	Joint displaced medium		2_3	0:00:14	
03.20m	JDM	Joint displaced medium		2_4	0:00:20	
03.90m	JDM	Joint displaced medium		2_5	0:00:23	
04.30m	JN	Junction 03 : 100mm Diameter			0:00:25	
05.40m	MHF	Finish node type, manhole		2_99		



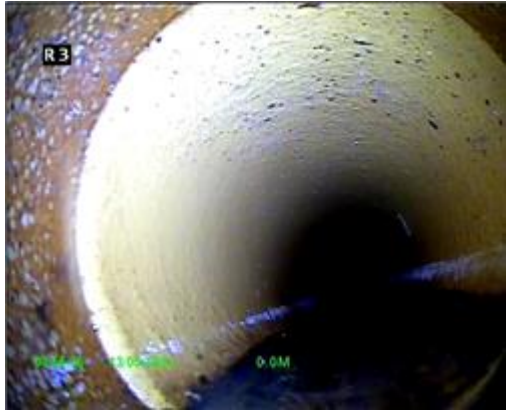
Total Defects for section

DRB Grade for Section



Descriptive Report with Remarks and Observation Images

Section 3

Pos	Video Ref	Code	Description	Image
00.00m		MH	Start node type, manhole MH 1	
00.00m	0:00:00	WL	Water level: 0% Height/Diameter	Image Provided - Ref: 2_1 
01.30m	0:00:11	JDM	Joint displaced medium - Severity 3	Image Provided - Ref: 2_2 
02.20m	0:00:14	JDM	Joint displaced medium - Severity 3	Image Provided - Ref: 2_3 

Total Defects for section



DRB Grade for Section

