

Hammerstone Road Depot, Manchester

Discharge of Planning Condition 11

Curtins Ref: HRD-CUR-00-XX-T-RE-006

Revision: P01

Issue Date: 02 February 2025

Client Name: Morgan Sindall

Client Address: 10th Floor, Evershot St, London, NW1 2DN

Site Address: Hammerstone Road Depot Gorton Manchester M18 8EQ

Control Sheet

Rev	Description	Checked	Issued	Date
P01	First Issue	ATL	ATL	02/02/25

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1.0 Introduction

1.1 Project Details

1.1.1 Curtins was appointed by Morgan Sindall to assist in the discharge of planning conditions for Hammerstone Road Depot, Manchester, M18 8EQ, National Grid Reference 388216E, 396834N.

1.1.2 Planning Consent was granted 3rd December 2021 – the Planning Reference is 130127/VO/2021.

1.1.3 This report is provided in relation to the requirements of Condition 11:

11) Notwithstanding the drainage information referenced in condition no.1, prior to any above ground works in relation to the proposed new buildings, and the reconfiguration of the parking and servicing areas shall take place until surface water drainage works have been implemented in accordance with Non-Statutory Technical Standards for Sustainable Drainage Systems (March 2015) or any subsequent replacements national standards and details that have been submitted to and approved in writing by the Local Planning Authority. The development shall be implemented in accordance with the approved details.

Reason - To promote sustainable development, secure proper drainage and to manage the risk of flooding and pollution. This condition is imposed in light of national policies within the NPPF and NPPG and policies EN08 and EN14 of the Manchester Core Strategy (2012).

1.1.4 The main purpose of this report is to provide responses to comments received from the Lead local Flood Authority regarding previously issued information.

2.0 Responses to LLFA Comments

2.1 General comments:

- 2.1.1 *Please can the applicant provide a proposed levels plan. (Navigating the site without levels is difficult to follow.)*

Proposed Levels Plan is enclosed within Appendix A

- 2.1.2 *Area 5, MCC Bin store, north of the site. Clarity on Roof Access Stairs construction. Provide Foundation plans. (A potential clash between stair structure and culvert structure).*

The design of the stair access is addressed in the report for Condition 33. The report and confirmation of the Condition Discharge is included in Appendix B

- 2.1.3 *Please note the LLFA do not approve any build overs on culverted watercourses and applicants must maintain appropriate easements.*

Please refer to the report and confirmation of the Condition Discharge is included in Appendix B. The vehicle cleaning ramp is demountable and therefore does not restrict access to the culvert.

- 2.1.4 *Demolition Plan to be provided.*

Updated demolition Information is provided in Appendix C

- 2.1.5 *Kindly supply the CCTV documentation, as it has not been included in this application.*

The CCTV survey information is enclosed within Appendix D

2.2 Proposed Ground Floor Drainage.

- 2.2.1 *MCC LLFA previously advised against siphonic drainage. "We would not permit the use of siphonic in this instance, as this would likely increase the outfall discharge rate from the existing building to the watercourse." Please refer to LLFA response from Oliver Timmins 05 Aug 2021. Please clarify why this option as has been progressed?*

The existing building drainage is served by an extremely large number of rainwater pipes. These rainwater pipes discharge to several different sewers, both inside and outside of the site. It would have not been feasible to provide new gravity drainage for the building and route the surface water drainage to the watercourse.

The use of siphonic drainage allows for a new connection into the watercourse. As shown on the drainage information, the flow into the watercourse is restricted.

2.2.2 *Catchment plans - Errors have been identified regarding hatches and labelling in relation to the provided legend. Please review and update.*

Updated Catchment Plans are enclosed within Appendix A

2.2.3 *Could you please elaborate on the methodology of 33 l/s discharge rate for MH S28?*

The overall discharge for the external works for the site was calculated as the following:

- 1 in 1 year storm: 45 l/s
- 1:30-year storm: 107 l/s
- 1:100-year (+40%CC): 140 l/s

These discharge rates have been calculated using a combination of brownfield and greenfield runoff rates.

The lower ground car park drainage is limited to a discharge of 7 l/s (across all storm events, as agreed with UU)

The washdown drainage is limited to a discharge of 5 l/s (across all storm events, as agreed with UU).

The discharge rates for the main ground floor external drainage have been calculated by subtracting the discharge rates for the lower ground/ washdown areas from the overall drainage allowance:

- 1 in 1 year storm: 45 l/s (48% reduction from existing discharge)
- 1:30-year storm: 107 l/s (48% reduction from existing discharge)
- 1:100-year (+40%CC): 140 l/s (49% reduction from existing discharge)

2.2.4 *We require a sectional view from SRH04 to Tank 4. The LLFA must ensure that there are no clashes or conflicts.*

Section View enclosed in Appendix E – refer to drawing HRD-CUR-XX-00-DR-C-92-540

2.2.5 *The drawing mentions 'rising main by others' and 'RWH by others.' Where can we find this information? Without it, we lack a complete understanding of the system.*

The RWH tank is used to provide water for the vehicle washdown area. Details of the Rainwater harvesting tanks are available in Appendix E

2.2.6 *Once again, "Siphons Break at chambers. Refer to Sapoflow Details" Where might we access this information?*

Sapoflow details are enclosed in Appendix F

2.2.7 *Please provide tank 4 construction details.*

Tank Details are enclosed within Appendix E

2.2.8 *Please provide Vented cover construction details.*

Vented Manhole detail enclosed in Appendix F – refer to drawing HRD-CUR-XX-ZZ-DR-C-92-520.

2.2.9 *Connection north of MH S16 is not hydraulically efficient, please review and update.*

The connection into MH S16 has been detailed in order to bring the pipework into the manhole square to the outlet pipe.

2.2.10 *What is the purpose of having three pipes at SRH06a? Is this configuration the most efficient? Please provide construction details of this MH. Additionally, please provide confirmed 150 dia vent pipe level.*

The triple pipe connection has been used in order to allow the connection into the attenuation tank – the maximum direct connection to the tank is 375mm diameter. Therefore, three pipes have been used in order to provide sufficient capacity from SRH06 into the tank. The triple pipe configuration has been incorporated in the drainage model

2.2.11 *Once more, why are there three pipes at S27 and S28? Is this arrangement the most efficient? Please provide construction details of this MH.*

The reasoning behind triple pipe provision is as per 2.2.10. This also allows for the connection into the Tank access unit channel, which allows inspection and cleaning through the tank.

Construction details of manholes SRH06 and S27 are shown on drawing HRD-CUR-XX-00-DR-C-92-508 in Appendix G

2.2.12 *Please provide manufacturer data sheets for proposed petrol interceptor and "SPEL Detail drawing"*

Spel Interceptor Details are enclosed in Appendix H

2.2.13 *Please provide Gatic channel construction details and manufacturer specification / data sheets.*

Gatic channel construction details drawing HRD-CUR-XX-ZZ-DR-C-92-521 and performance information are shown on drawing in Appendix I.

2.2.14 *The construction specifications for "Connections to culvert" lack clarity. The instruction, "Manholes to be constructed in accordance with typical PCC manhole details shown elsewhere," is insufficient. Please provide comprehensive details, including adherence to BS codes, mortar haunching specifications, kite marking, concrete grade, minimum clear access requirements, and site-specific, special manhole details for the two connections into the watercourse: MH S29 and MH SRH08. Ensure that the provided details are scaled correctly and tailored to the site's requirements.*

Refer to drawing HRD-CUR-XX-ZZ-DR-C-92-528 in Appendix G, which contains details for the watercourse connection manholes.

2.2.15 *A correspondence from Oliver Timmins 09/03/2021 mentions: "If retaining wall structures are to remain on site and if the culverted watercourse is found to be directly beneath this, then it is the landowners responsibility as a riparian owner to ensure that the structural integrity of the culverted watercourse is not compromised by the proposed on site works." No details regarding retaining wall have been provided. Clarity required on any structural implications to the culvert. What happened to the retaining wall?*

This referenced the retaining wall along the southern boundary of the lower ground car park. This work has been completed without causing damage to the culvert. As there are no further works to be undertaken in this area, this is not now considered an issue.

2.2.16 *Kindly supply the CCTV documentation, as it has not been included in this application.*

The CCTV survey information is enclosed within Appendix D

2.2.17 *Method statement for connection to watercourse not provided.*

Method Statement and Risk Assessment is enclosed in Appendix G.

2.2.18 *Hydraulic calcs. Pending review due to clarification on the above points.*

Proposed Drainage Calculations are enclosed in Appendix J

2.3 Washdown Drainage

2.3.1 *Please kindly confirm if you've addressed the requirement for sufficient sediment control in the design to prevent silt from entering the public sewer?*

There are four elements of sediment control within the washdown drainage network:

- The in-situ concrete channels have silt traps at the outlet points to collect heavy sediment from the washdown runoff. (Details of the channels are shown on drawing HRD-CUR-XX-00-DR-C-94-700 in Appendix I)
- The connections from the channels connect into a catchpit chamber, which provides further sediment collection.
- The runoff then passes through a Washdown separator, sized for the estimated number of vehicles. This provides 7,500 litres of silt storage capacity.
- The runoff passes through another catchpit, and on to the Hydrobrake manhole. This manhole also contains a sump to allow for sediment. The effect of the flow control reducing the outflow, will allow for sediment to settle in the separator/ sumps provided.

- 2.3.2 *Supply information of enquiry to UU trade effluent team regarding any potential chemical discharge into the public sewer and determining the necessary treatment and licensing procedures.*

The Trade Effluent Consent is enclosed in Appendix K.

- 2.3.3 *Provide Sub-meter details*

Please refer to e-mail enclosed in Appendix K

- 2.3.4 *Please provide manufacturer data sheets / details for proposed silt-separator.*

The Separator details are enclosed in Appendix H

- 2.3.5 *Evidence of Klargest confirmation.*

An e-mail from the manufacturer (Spel), confirming the sizing of the separator is enclosed in Appendix H

- 2.3.6 *Please provide S106 approval in principle.*

S106 Part 1 Approval – Ref 02926533, and the Trade Effluent Consent are enclosed in Appendix K

- 2.3.7 *Regarding the correspondence from Oliver Timmins dated 17/08/2022, could you kindly confirm whether the ramp's impact or abnormal loading on the culvert has been thoroughly assessed and addressed? We seek clarity on whether this matter has been checked and resolved.*

The vehicles ramp will carry one vehicles at a time, and contains a number of supporting columns. As such, the loading on any individual column will be lower than the equivalent loading created by a single wheel load from the vehicle.

- 2.3.8 *Please confirm S106 south-east of the site is only for foul?*

Refer to S106 Part 1 Approval – Ref 02926533, in Appendix K

- 2.3.9 *Hydraulic calcs. Pending review due to clarification on the above points.*

Proposed Drainage Calculations are enclosed in Appendix J

2.4 Proposed Lower Floor Drainage

- 2.4.1 *No objections in principle, however S106 was issued 06/05/2022 and is only valid for 12 months. Has UU been re-consulted or has this been built out already?*

The Lower Ground Floor Drainage was completed in May 2024.

- 2.4.2 *Please provide tank 3 construction details.*

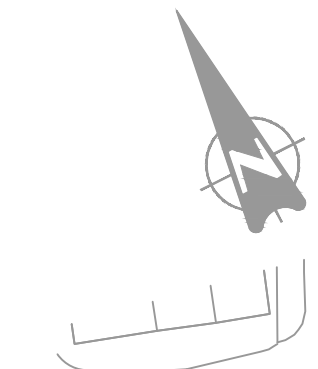
Construction Records for the Lower Ground Floor drainage, including Tank 3, are included in Appendix L

Appendices

Appendix A

Levels Plan

Catchment Plans



- KEY**
- SITE BOUNDARY
 - PHASE 1 WORKS BOUNDARY
 - PHASE 2 WORKS BOUNDARY
 - BOUNDARIES TAKEN FROM DRAWING HRD-FRA-00-XX-DR-A-90-0200
 - 64.00 MAJOR CONTOUR
 - MINOR CONTOUR
 - INDICATIVE GRADIENT (ARROW POINTS DOWN)
 - PROPOSED LINEAR DRAINAGE CHANNEL LOCATION
 - PROPOSED KERB LOCATION
 - RIDGE LINE

IN-SITU CONCRETE CHANNELS FOR WASHDOWN AREA

COCA COLA BUILDING SLAB TO BE RETAINED - PROPOSED LEVELS TO BE BATTERED BACK TO EXISTING LEVELS

EXISTING WALLS TO BE RETAINED

EXISTING RETAINING WALL TO REMAIN

LEVELS REDUCED ADJACENT TO RETAINING WALL

THIS DRAWING IS BASED ON:

PROPOSED SITE PLANS

- HRD-FRA-00-XX-DR-A-90-0200 REV C11 GA
- HRD-FRA-00-XX-DR-A-90-0207 REV C06 EXTERNAL WORKS SETTING OUT SHEET 1
- HRD-FRA-00-XX-DR-A-90-0208 REV C08 EXTERNAL WORKS SETTING OUT SHEET 2
- HRD-FRA-00-XX-DR-A-90-0210 REV C10 EXTERNAL WORKS

TOPOGRAPHICAL & BUILDING SURVEYS

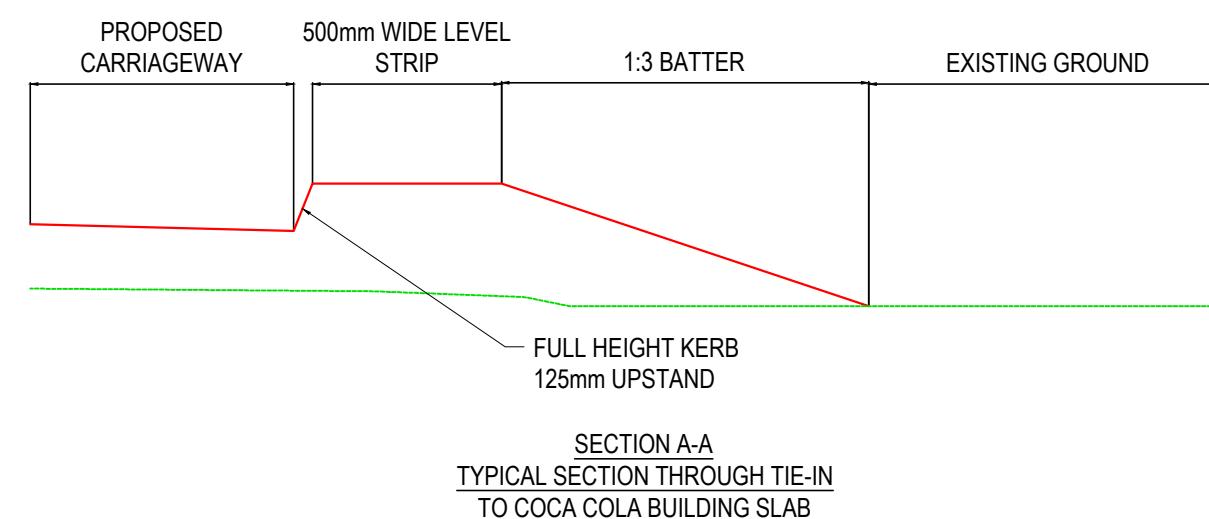
- S15724-1F-01 REV - BUILDING SURVEY
- S15724-GF-03 REV A BUILDING SURVEY
- S15724-T-01 REV - TOPO SURVEY

PHASE 2 SITE INVESTIGATION REPORT

068065-CUR-00-XX-RP-GE-002-V01

CBR RESULTS

785148.R01(00) - PLATE LOADING TEST REPORT



- NOTES**
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS AND SPECIFICATIONS.
 - DO NOT SCALE FROM THIS DRAWING. ANY AMBIGUITIES, OMISSIONS AND ERRORS ON THIS DRAWING SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IMMEDIATELY. ALL DIMENSIONS MUST BE VERIFIED ON SITE.
 - ALL LEVELS ARE IN METRES ABOVE ORDINANCE DATUM UNLESS NOTED OTHERWISE.
 - ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.

- PROPOSED LEVELS NOTES**
- ALL AMBIGUITIES, ERRORS OR OMISSIONS ON DRAWINGS SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IMMEDIATELY.
 - THE ASSUMPTION HAS BEEN MADE THAT ALL MATERIAL BELOW SITE STRIP IS SUITABLE FOR RE-USE.
 - ALL KERBS ASSUMED TO HAVE 100MM UPSTAND EXCEPT FOR DROPPED KERBS AS NOTED:
 - 6mm UPSTAND FOR PEDESTRIAN CROSSINGS
 - 25mm UPSTAND FOR VEHICULAR CROSSINGS
 - THE CUT/FILL VOLUMES HAVE BEEN CALCULATED USING A COMPARISON BETWEEN THE FINISHED SITE STRIP LEVELS AND PROPOSED FINISHED LEVEL FORMATIONS.
 - THE TOPO HAS BEEN ASSUMED TO BE REPRESENTATIVE OF THE SITE UPON WORKS COMMENCEMENT OF EARTHWORKS OPERATIONS. CURTINS ACCEPT NO LIABILITY FOR VARIATION FROM THE PROVIDED TOPOGRAPHICAL SURVEY.

C05	LEVELS UPDATED	22.10.24	KS	ATL
C04	UPDATED TO SUIT LATEST SITE LAYOUT	23.09.24	JC	ATL
P11	UPDATED IN LINE WITH COMMENTS/ UPDATED SITE LAYOUT	04.04.24	KS	ATL
P10	UPDATED FOR NEW TENDER	19/01/24	ATL	MW
C03	STAIR LEVELS AMENDED	15/03/23	ATL	MW
C02	LOWER GROUND CHANNEL LOCATIONS AMENDED	13/02/23	ATL	MW
C01	LEVELS AROUND WASHDOWN AMENDED	25/11/22	ATL	MW
P09	UPDATED IN LINE WITH COMMENTS	05/08/22	ATL	ATL
P08	UPDATED SITE LAYOUT	05/07/22	LK	MW
P07	REFUGE PARKING AREA LEVELS AMENDED	24/11/21	ATL	MW
P06	LOWER CAR PARK LEVELS AMENDED	05/08/21	ATL	MW
P05	DRAWING NUMBER CHANGE	15/04/21	ATL	ATL
P04	STAGE 4 UPDATE	13.04.21	ATL	MW
P03	STAGE 4 ISSUE	12.04.21	ATL	MW
P02	STAGE 3 UPDATE	16.11.20	ATL	MW
P01	STAGE 3 ISSUE	29.01.19	ATL	MW
Rev:	Description:	Date:	By:	Chkd:

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Status:

Project:

Orig Title:

STAGE 5

HAMMERSTONE ROAD

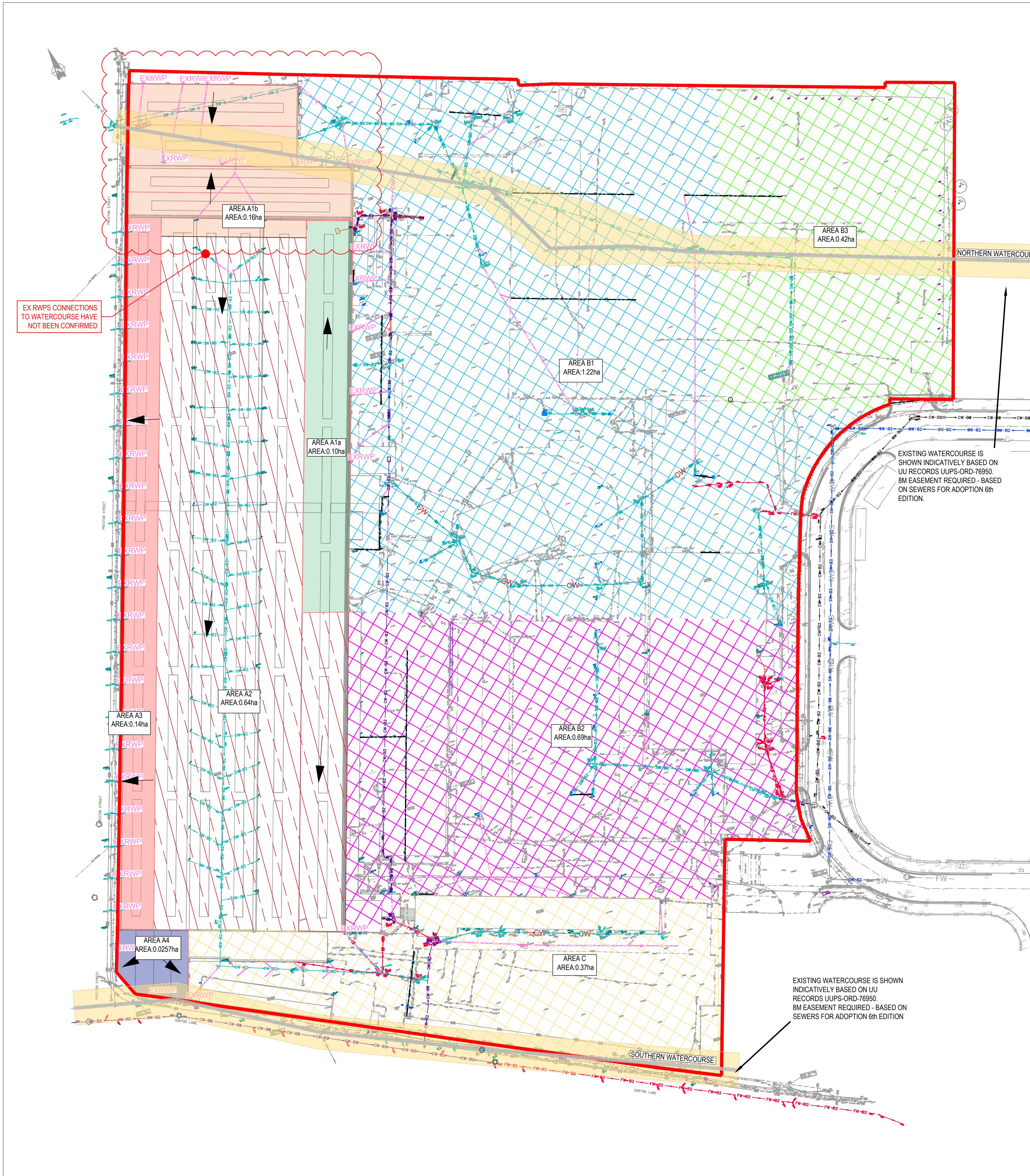
PROPOSED EXTERNAL LEVELS

Size:	Date:	Drawn By:	Designed By:	Checked By:
A1	29.01.19	ATL	ATL	MW

Scale: 1:500

Project No:	Originator:	Zone:	Level:	Type:	Discipline:	Category / Number:	Rev:
HRD	- CUR	- XX	- 00	- DR	- C	- 91-602	-C05

\\ms-b-1\Projects\068065 - Hammerstone Road\Depot\GIS 4 Production\48 Models & Drawings_Col-C0401



EXISTING FLOW: BASED ON THE MODIFIED RATIONAL METHOD				
CATCHMENT	AREA (m²)	FLOW RATE FOR THE 1 IN 1 YEAR EVENT (l/s)	FLOW RATE FOR THE 1 IN 30 YEAR EVENT (l/s)	FLOW RATE FOR THE 1 IN 100 YEAR EVENT (l/s)
A1(a&b)	2603	11	26	34
A2	6420	26	65	84
A3	1413	6	14	19
B1	12236	50	122	161
B2	6889	28	69	90
B3	4229	17	42	55
C	3749	15	37	49
TOTAL EXISTING: B1,B2,B3,C	27103	110	270	355
TOTAL PROPOSED: B1,B2,B3,C	26120	[50% REDUCTION IN DISCHARGE] 55	[50% REDUCTION IN DISCHARGE] 135	[50% REDUCTION IN DISCHARGE] 177

RAINFALL INTENSITY BASED ON MICRODRAINAGE RAINFALL DATA
1 IN 1: 11mm/hr
1 IN 30: 28mm/hr
1 IN 100: 36mm/hr

DRAWING IS BASED ON:
TOPOGRAPHICAL SURVEY BY SEP S15724-T
GPR SURVEY BY SEPT S17480-U JUNE 2018
EXISTING BUILDING SURVEY BY SEPT S15724-GA JUNE 2018
CCTV SURVEYS BY SEP DRAINAGE SURVEYS LTD:
• DEC 2018
• AUG 2020
• MAY, AUG 2021
• JAN 2022
• SEP, NOV 2023
UU RECORDS UUPS-ORD-76950.

- GENERAL NOTES:
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 - FOR GENERAL NOTES REFER TO DRAWING.

LEGEND

PROPOSED SITE BOUNDARY BASED ON 18021-FRA-ZZ-XX-DR-A-1003-P1

INDICATIVE LOCATION OF WATERCOURSE /PRIVATE SURFACE WATER DRAINS BASED ON UU RECORDS.

EXISTING UNSURVEYED DRAINAGE ROUTE ASSUMED

EXISTING DRAINAGE BASED ON CCTV SURVEY DEC 2018

— SW — SURFACE WATER PIPE (EXG)
— CW — COMBINED WATER PIPE (EXG)

EXISTING SERVICES BASED ON GPR SURVEY S17480-U DEC 2018

— FW-B2 — FOUL WATER PIPE
— SW-B2 — SURFACE WATER PIPE

UNITED UTILITIES RECORDS UUPS-ORD-76950
ALL UU ASSETS ARE SHOWN INDICATIVELY

— FW — UU FOUL WATER SEWER
— SW — UU SURFACE WATER SEWER
— CW — UU COMBINED WATER SEWER
— — WATERCOURSE

CATCHMENT

CATCHMENT A1a: EXISTING BUILDING ASSUMED SURFACE WATER DISCHARGE TO NORTHERN WATERCOURSE

CATCHMENT A1b: EXISTING BUILDING ASSUMED SURFACE WATER DISCHARGE TO NORTHERN WATERCOURSE

CATCHMENT A2 EXISTING BUILDING SURFACE WATER DISCHARGE TO PUBLIC COMBINE SEWER

CATCHMENT A3 EXISTING BUILDING ASSUMED DISCHARGE TO SOUTHERN WATERCOURSE

CATCHMENT B: GROUND FLOOR IMPERMEABLE AREA INCLUDING HARD-STANDING AND BUILDINGS

CATCHMENT C: LOWER LEVEL IMPERMEABLE AREA INCLUDING HARD-STANDING AND BUILDINGS

➔ ASSUMED WHERE EXISTING ROOF DISCHARGE

P07	UPDATED FOR NEW TENDER	02.02.24	ATL	MW
C01	CONSTRUCTION ISSUE	23.09.22	ATL	MW
P06	UPDATED CATCHMENTS	15.07.22	MW	MW
P05	UPDATED IN LINE WITH FURTHER CCTV INFORMATION	02/12/21	ATL	MW
P04	UPDATED FOR STAGE 4	17/08/21	MW	MW
P03	ISSUED FOR STAGE 4	05/08/21	MW	MW
P02	ISSUED FOR STAGE 3	18/11/20	MW	MW
P01	ISSUED FOR STAGE 3	29/01/19	MW	CG
Rev:	Description:	Date:	By:	Chkd:

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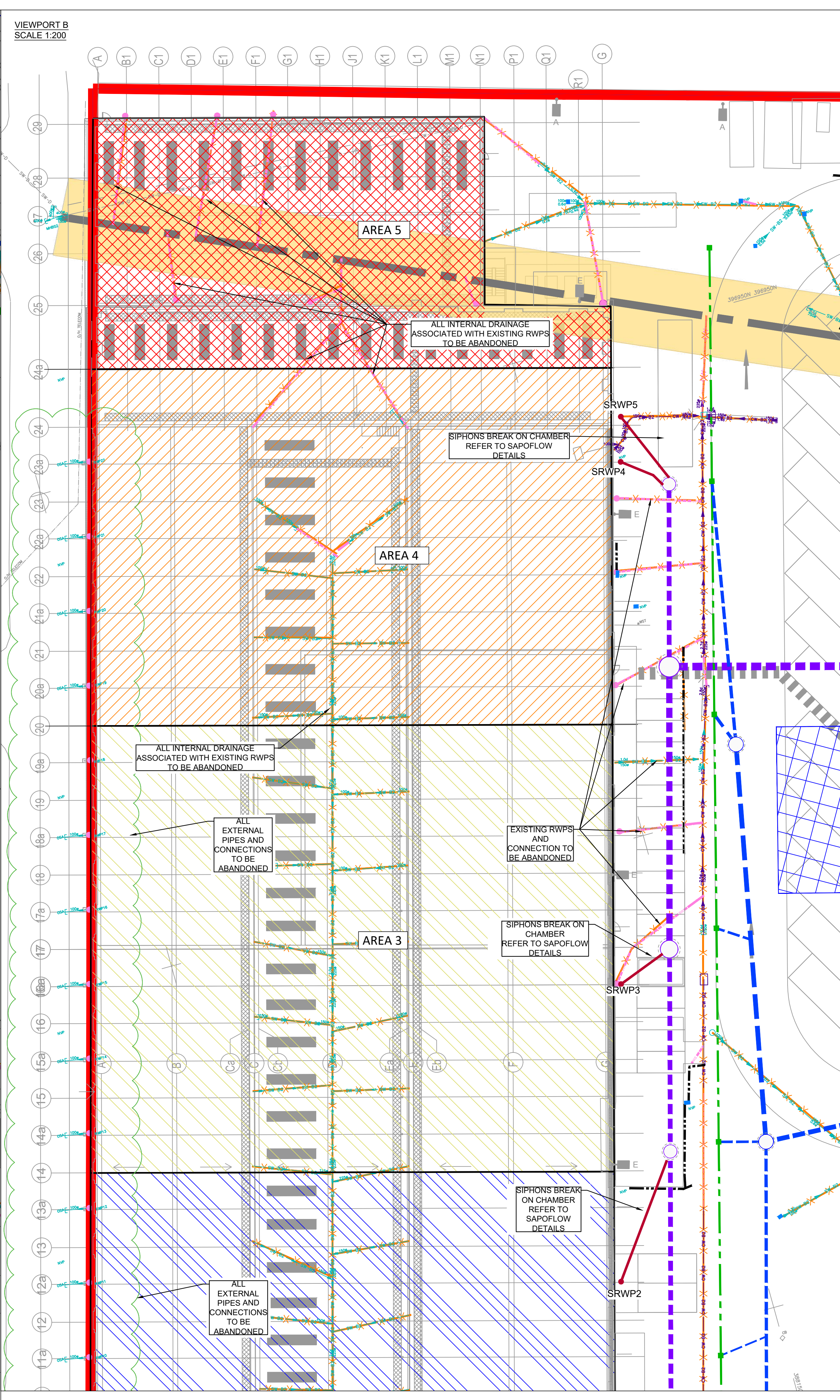
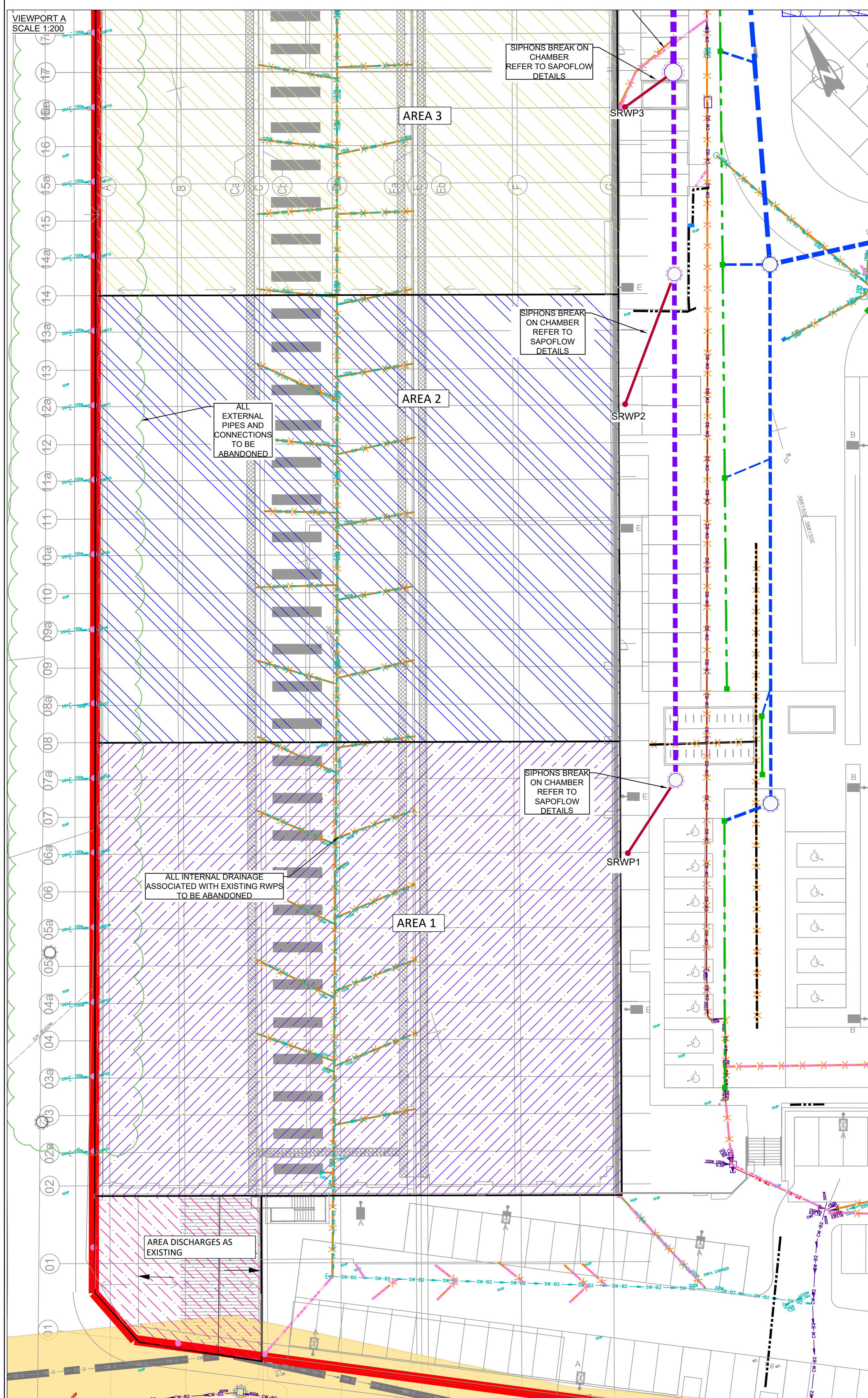
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Status: **STAGE 5**

Project: **HAMMERSTONE ROAD**

Orig Title: **EXISTING CATCHMENT PLAN**

Project No:	Size:	Date:	Drawn By:	Designed By:	Checked By:		
068065	A1	29/01/19	MW	MW	CG		
Scale: 1:500							
Project Code:	Originator:	Zone:	Level:	Type:	Discipline:	Category/Number:	Rev:
HDR	CUR	XX	00	DR	C	92-506	-P07



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LEGEND

SITE BOUNDARY BASED ON
HRD-FRA-00-XX-DR-A-90-0200

EXISTING SERVICES BASED ON CCTV SURVEY AUG 2020

— SW-B2 — SW-B2 — EXISTING SURFACE WATER PIPE
— SW-B1 — SW-B1 — EXISTING COMBINED WATER PIPE
— SW-B3 — SW-B3 — EXISTING UNSURVEYED BUILDING DRAINAGE (ASSUMED ROUTE SHOWN)

UNITED UTILITIES RECORDS UUPS-ORD-76950 ALL UU ASSETS ARE SHOWN INDICATIVELY

— UU FOUL WATER SEWER
— UU SURFACE WATER SEWER
— UU COMBINED WATER SEWER
— WATERCOURSE
— 8M EASEMENT BASED ON SEWER FOR ADOPTION 6TH EDITION

PROPOSED DRAINAGE

— PROPOSED GRAVITY SURFACE WATER DRAIN
— PROPOSED SIPHON DRAINAGE BY SAPOFLOW
— GATIC CHANNEL
— SRWP SIPHON RAIN WATER PIPE

DRAWING BASED ON PROVIDED BY SAPOFLOW SIPHON ROOF STRATEGY ON 29.06.22

PROPOSED SIPHON MAX RATES
SRWP1 151 L/S AREA1-0.247ha
SRWP2 151 L/S AREA2-0.245ha
SRWP3 151 L/S AREA3-0.244ha
SRWP4 151 L/S AREA4-0.195ha
SRWP5 66 L/S AREA5-0.112ha

- SIPHON BREAK ON EXTERNAL CHAMBER, SAPOFLOW IS RESPONSIBLE TO ROUTE SIPHON TO PROVIDED GRAVITY CUTINS CHAMBER
- 25MM CUT IN/CUT OF HEIGHT

ASSUMED FOR MICRODRAINAGE MODEL
900MM DEPTH TO SOFFIT OF SIPHON PIPE ON GF

- SIPHON INVERT AND SLOPES TOWARDS GRAVITY CHAMBER

SRWP1 63.43 225Ø1:100
SRWP2 63.21 225Ø1:100
SRWP3 63.45 225Ø1:100
SRWP4 63.29 225Ø1:100
SRWP5 63.28 225Ø1:100

SIPHON SPECIALIST SHOULD INFORM CURTINS ENGINEER IF ANY INFORMATION HAS BEEN CHANGED OR ANY ASSUMPTIONS ARE NOT CORRECT

P06	UPDATED FOR NEW TENDER	02/02/24	ATL	MW
C01	ISSUED FOR CONSTRUCTION	23.09.22	ATL	MW
P05	DRAINAGE LAYOUT AMENDED	22.08.22	ATL	MW
P04	UPDATED ROOF STARTGEY	20.07.22	TH	MW
P03	DRAINAGE NOTE ADDED	25.04.22	ATL	MW
P02	UPDATED IN LINE WITH COMMENTS	07.04.22	ATL	MW
P01	FIRST ISSUE	22.03.22	ATL	MW

Rev:	Description:	Date:	By:	Chkd:

STAGE 5

HAMMERSTONE ROAD

MAIN BUILDING ROOF CATCHMENT PLAN

Project No:	Size:	Date:	Drawn By:	Designed By:	Checked By:
068065	A1	22/03/22	ATL	ATL	MW

Project Code:	Originator:	Zone:	Level:	Type:	Discipline:	Category / Number:	Rev:
HRD	CUR	XX	00	DR	C	92-507	-P06

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Status:

Project:

Orig Title:

Time & IP Project 068065 - Hammerstone Road Depot DMS 4 Production 04 Models & Drawings - C:\068065

Appendix B

Access Roof Stairs - Condition 33 Report

Condition 33 - Confirmation of Condition Discharge

Town & Country Planning Act 1990 (as amended)
Planning (Listed Building & Conservation Area) Act 1990 (as amended)

Approval of details reserved by condition

Applicant

Anna Lucas
Manchester City Council
Major Projects, Capital Programmes
Corporate Core Directive
PO Box 532
Town Hall
Manchester
M60 2LA

Agent (if used)

Mr Andrew Thompson
Fletcher-Rae
Level 12
Tower 12
18-22 Bridge Street
Manchester
M3 3BZ

Part 1 – Particulars of the application/development

Proposal: Discharge of condition 33 (Roof Access Stairs) from planning approval reference 137572/JO/2023

Location: Hammerstone Road Depot, Hammerstone Road, Manchester, M18 8EQ

Date of application: 23 May 2024

Application number: CDN/24/0436

Part 2 – Particulars of decision

Manchester City Council gives notice that the detail(s) referred to in Part 1 are **Approved** in accordance with the information set out below.

Condition 33 Roof access stairs

The information and foundation designs in the Condition 33 Report ref: HRD-CUR-ZZ-XX-RP-S-00010 revision C02 dated 17 May 2024 are considered to be acceptable.

On the basis that the installation of the roof access stairs is implemented in accordance with Proposed Site Plan GA ref: HRD-FRA-00-XX-DR-A-90-0200 rev. C06, and with the information and foundation designs in the Condition 33 Report ref: HRD-CUR-ZZ-XX-RP-S-00010 revision C02 dated 17 May 2024, condition 33 is discharged.

It is, however, recommended that the condition of the Corn Brook Culvert is regularly monitored to ensure it remains free-flowing and proactively address any potential issues and maintain optimal performance of the culvert.

Date: 4 July 2024

Signed:

A handwritten signature in black ink, appearing to read 'Julie Roscoe', written in a cursive style.

Julie Roscoe
Director of Planning, Building Control & Licensing

Manchester City Council, P O Box 532, Town Hall, Manchester M60 2LA

Notes

1. This permission refers only to that required under the Town and Country Planning Act 1990 (as amended) or Planning (Listed Building & Conservation Area) Act 1990 (as amended) does not include any consent or approval under any other enactment, byelaw, order or regulation.

2 If the applicant is aggrieved by the decision of the local planning authority to refuse permission or approval for the proposed development, or to grant permission or approval subject to conditions, they may appeal to the Secretary of State in accordance with Section 78(1) of the Town and Country Planning Act 1990 or sections 20 and 21 of the Planning (Listed Building & Conservation Area) Act 1990 within six months of the date of the notice of the decision.

The Planning Inspectorate have introduced an online appeals service that can be used to make appeals online. This service is available through the gov.uk website – www.gov.uk/appeal-planning-inspectorate. The Inspectorate will publish details of your appeal on the internet.

Alternatively, appeals can be made on a form which is obtainable from Planning Inspectorate, Customer Support Unit, Room 3/15, Eagle Wing, Temple Quay House, 2 The Square, Temple Quay, Bristol BS1 or by telephone 0117 372 6372.

The Secretary of State has power to allow a longer period for the giving of a notice of appeal but they will not normally be prepared to exercise this power unless there are special circumstances that excuse the delay in giving notice of appeal.

3. The statutory requirements are those set out in Section 79(6) of the Town and Country Planning Act 1990, namely Sections 70(1) and 72(1) of the Act.

4. If either the local planning authority or the Secretary of State refuses permission to develop land or grants it subject to conditions, the owner may claim that they can neither put the land to a reasonably beneficial use in its existing state nor render the land capable of a reasonably beneficial use by the carrying out of any development which has been or would be permitted.

In these circumstances, the owner may serve a purchase notice on the Council in whose area the land is situated. This notice will require the Council to purchase his interest in the land in accordance with the provisions of Part VI of the Town and Country Planning Act 1990

5. In certain circumstances, a claim may be made against the local planning authority for compensation, where permission is refused or granted subject to conditions by the Secretary of State on appeal or on a reference of the application to them. The circumstances in which such compensation is payable are set out in Section 114 of the Town and Country Planning Act 1990.

MCC, Hammerstone Road

Planning Condition 33 Report

CR - CONSTRUCTION RECORD

Curtins Ref: HRD-CUR-ZZ-XX-RP-S-00010

Revision: C02

Issue Date: 17 May 2024

Client Name: Morgan Sindall Construction

Client Address: 6th Floor, Anchorage 2, Salford Quays, Manchester

Site Address: Hammerstone Road Depot, Gorton, Manchester, M18 8EQ

Control Sheet

Rev	Description	Checked	Issued	Date
C01	First Issue		JR	17/05/2024
C02	CR – CONSTRUCTION RECORD		JR	01.11.2024

This report has been prepared for the sole benefit, use, and information for the client. The liability of Curtins Consulting Limited with respect to the information contained in the report will not extend to any third party.

Author	Signature	Date
John R Rasberry IEng IMIStructE Senior Engineer		17/05/2024

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2.0 Sectional View 6

3.0 Foundation Plan 10

 3.1 Subheading 1 Error! Bookmark not defined.

 3.2 Subheading 2.....Error! Bookmark not defined.

4.0 Section 4.....Error! Bookmark not defined.

 4.1 Subheading.....Error! Bookmark not defined.

Appendix Error! Bookmark not defined.

Figures

Figure 2.1 – Sectional View 6

Figure 3.1 – Foundation Plan 10

Table 3.1 - Sustainable Travel Information Error! Bookmark not defined.

Table 4.1 - Title.....Error! Bookmark not defined.

Appendices

- Appendix A
- Appendix B

Executive Summary

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Your second paragraph could be regular, size 10.

To update the project reference in the footer, type F9.

1.0 Feasibility of Avoiding Loading to the Structure

Planning Condition 33 relates to the Roof Access Stair Culvert Build Over.

Initial information submitted and uploaded onto the Planning Portal on 19th February 2023 has been considered.

A review of the details regarding the proposed access staircase and its relationship to the existing Corn Brook Culvert has been undertaken.

It has been determined that the information currently provided is insufficient for a thorough evaluation of the project's impact on the culvert's integrity and safety.

Additional information is required.

The proposed location of the Roof Access Stair has been determined to provide the most advantageous access location to the roof areas of the existing buildings.

Access is required for periodic maintenance and cleaning of the roof surface and associated guttering together with periodic maintenance of the new solar roof panels.

The location provides access to the main shed roof and adjoining smaller shed roof resulting in the need for a single Roof Access Stair.

Unfortunately, this will result in the requirement for the Roof Access Stair to be constructed over the Corn Brook Culvert and the following pages will describe the arrangements, loadings and risks that are to be considered.

2.0 Sectional View and Loadings

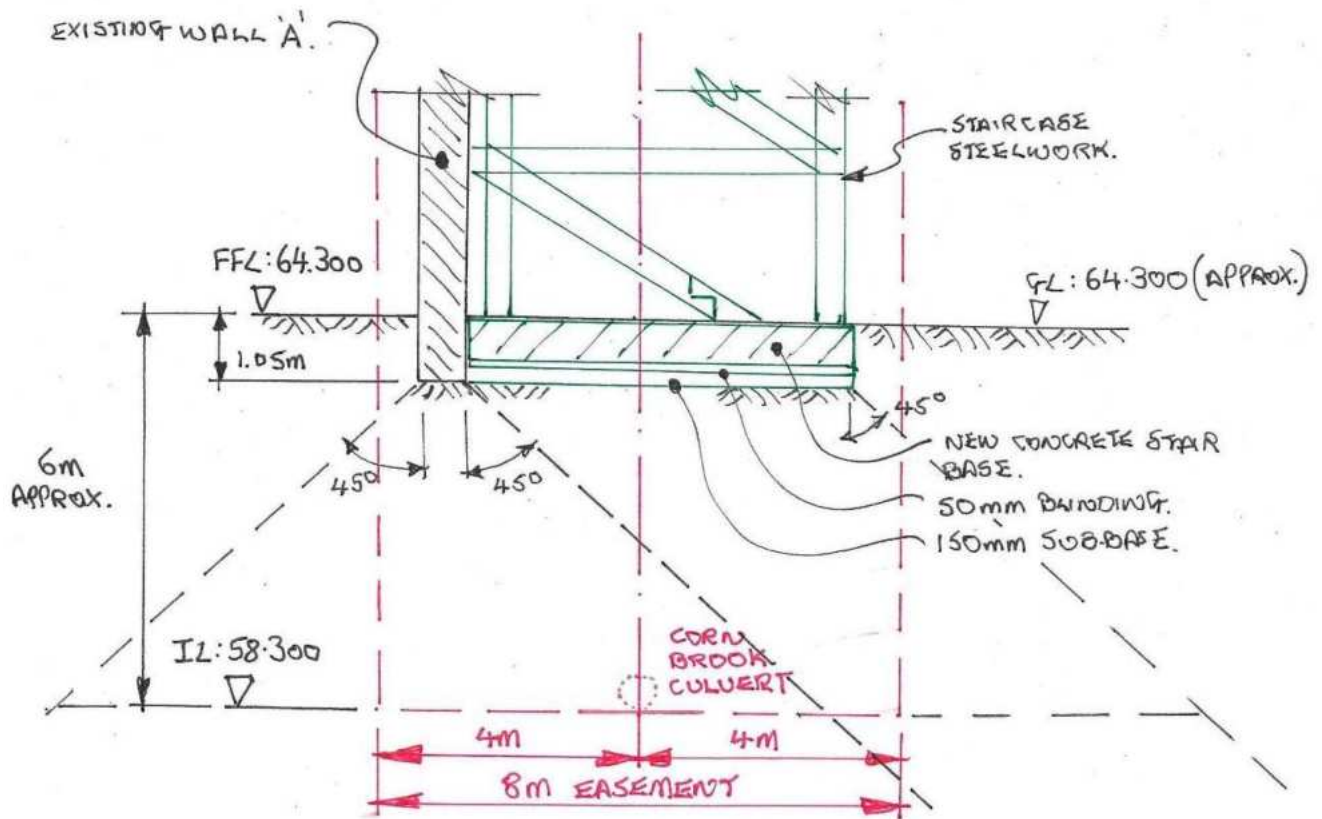


Figure 2.1 – Sectional View

The Sectional View above shown in Figure 2.1 indicates the arrangements of the existing building and proposed staircase and associated concrete slab in relation to the existing Corn Brook Culvert.

The Plan View location of the Section View above is indicated on Figure 3.1 in Section 3.0 Plan View.

The Corn Brook Culvert at the section location has an invert level of 58.300 AOD which equate to approximately 6.0m below the existing ground floor level of the existing building.

The existing building referenced 'Existing Wall 'A'', currently imposed a load on to the Corn Brook Culvert. The underside of the wall at this location has been determined by intrusive investigation as being 1.05m below ground level. The loading of this wall related to the existing and roof loadings.

It is to be noted that in this load assessment the omission of the existing crane load is NOT considered, however, it should be advised that the imposed loads from these very heavy crane loads would impose an even greater load than the load which is to be considered for the purposes of this assessment.

The existing solid brickwork wall is 13.5m high with an average width of 0.6m.

The roof spans approximately 10.0m on top of this wall.

Existing Uniformly Distributed Load (UDL) :

Existing Masonry : $13.5\text{m} \times 0.6\text{m} \times 18.0\text{kN/m}^3 = 145\text{ kN/m}$

Existing Roof : $10.0\text{m} \times 2.1\text{kN/m}^2 = 21\text{ kN/m}$

Total UDL : $145 + 21 = \underline{\underline{166\text{ kN/m}}}$

The bearing pressure located directly below the underside of the existing wall foundation equates to the above Total UDL divided by the width of the existing wall. In this case the average width will be used of 0.6m.

Bearing Pressure at Foundation : $166\text{ kN/m} / 0.6\text{m} = \underline{\underline{276\text{ kN/m}^2}}$

As referenced on the Sectional View within Figure 1, this existing bearing pressure is spread over a 45-degree angle, and it is this load that is directly imposed on to the existing Corn Brook Culvert and its surrounding soils.

Based upon the depth of 6.0m to the Corn Brook Culvert, this spread equates to 12.0m.

The existing loading imposed on the Corn Brook Culvert from Existing Wall 'A' and the associated roof is : $276\text{ kN/m}^2 / 12.0\text{m} = \underline{\underline{23\text{ kN/m run}}}$

The proposed additional loadings applied to the Corn Brook Culvert occur from the proposed new reinforced concrete pad foundation and the steel staircase and its components installed over.

The new concrete : $3.2\text{m} \times 5.8\text{m} \times 0.6\text{m} \times 24\text{kN/m}^3 = 268\text{ kN}$

The new staircase : $310\text{kN} \times 4 = 1240\text{ kN}$ (4No stair column loads)

Total new load : $268\text{kN} + 1240\text{kN} = \underline{\underline{1508\text{ kN}}}$

The bearing pressure located directly below the concrete slab on to the existing ground equates to the above total new load divided by the plan area of the pad foundation.

Bearing Pressure of New Concrete = $1508\text{kN} / (3.2\text{m} \times 5.8\text{m}) = \underline{\underline{81.25 \text{ kN/m}^2}}$

As referenced on the Sectional View within Figure 1, this new bearing pressure is spread over a 45-degree angle, and it is this load that is directly imposed on to the existing Corn Brook Culvert and its surrounding soils.

Based upon the depth of 6.0m to the Corn Brook Culvert, this spread equates to 12.0m plus 5.8m equalling 17.8m.

The new loading imposed on the Corn Brook Culvert from the new pad foundation and staircase is : $81.25 \text{ kN/m}^2 / 17.8\text{m} = \underline{\underline{4.5 \text{ kN/m run}}}$

The above determination of existing and proposed loads results in an increase of applied loading to the Corn Brook Culvert of 4.5 kN/m run which is approximately a 20% increase.

This increase could be considered as being excessive, however, there are three items of note that must be taken into consideration of this result.

Firstly, as indicated earlier in this document, the former crane loads have NOT been considered. These loads would have been very large, imposing very large concentrated and moving loads directly to the existing steelwork embedded within the masonry structure which in turn would have resulted in these large moving loads being applied to the Corn Brook Culvert. These loads have now been omitted. The cranes are no longer in the building with the crane rails being retained for overall stability of the existing building only.

Secondly, the use of the building has changed. The previous use of the building as a foundry for the manufacture of railway steam engines has now gone. The imposed loading criteria for foundry buildings, referring to current British Standards, is a minimum of 20 kN/m². For the purposes of the new building use for refuse collection lorries, the current British Standards note a general industrial imposed load of 5 kN/m².

Thirdly, the size of the new staircase and its relation to the existing building. The existing buildings mass is considerable. The above loadings for the existing building have only considered the affect of Existing Wall 'A'. In addition to this wall, as indicated on Figure 3.1, Existing Wall 'B' imposes a similar load to the Corn Brook Culvert. This load occurs in same line as the Corn Brook Culvert, transferring

its loads along the length. The location of the new staircase and its pad foundation are small in relation to the size and mass of the existing building.

3.0 Foundation Plan

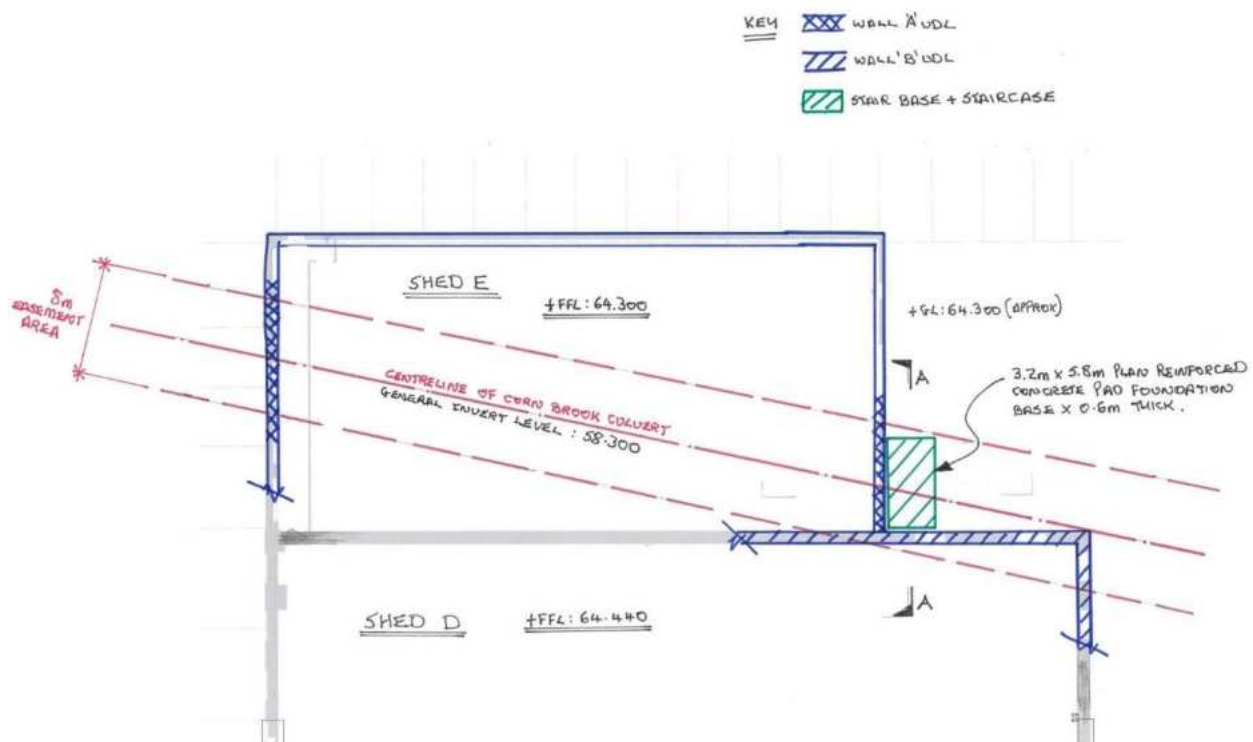


Figure 3.1 – Foundation Plan

With reference to Figure 3.1 above and Figure 2.1 and associated notes, loadings and descriptions within Section 2.0, the relationship between the existing building, existing Corn Brook Culvert and the proposed new staircase and pad foundation are indicated and explained.

As discussed previously, Existing Walls 'A' and 'B' are built directly over the existing Corn Brook Culvert, imposing considerable loads. The new staircase and pad foundation are small in comparison not only in scale but also in actual applied load.

The reduction in the buildings use imposed load and omission of the existing crane load reduce the effects of loading on to the Corn Brook Culvert.

As determined within Section 2.0, the existing building load applied at the Corn Brook Culvert level is 23 kN/m run, the new staircase and pad foundation create an additional 4.5 kN/m run, and approximate 20% increase. The reduction of the building use-imposed load from 20 kN/m² to 5 kN/m² is a reduction in load of 75%.

To conclude, the overall load to be applied to the Corn Brook Culvert is **REDUCED**.

4.0 Evidence, Assurance, Risk

The new steel staircase is formed of steelwork sections that are assembled on site using bolts. The principal of construction reflects the ability of this structure to be taken down in a controlled manner through a similar method.

The steel staircase is, therefore, considered to be a demountable structure.

The concrete pad foundation is constructed incorporating steel reinforcement.

The footprint of the new concrete has been designed to be no more than is required to support the new steel staircase.

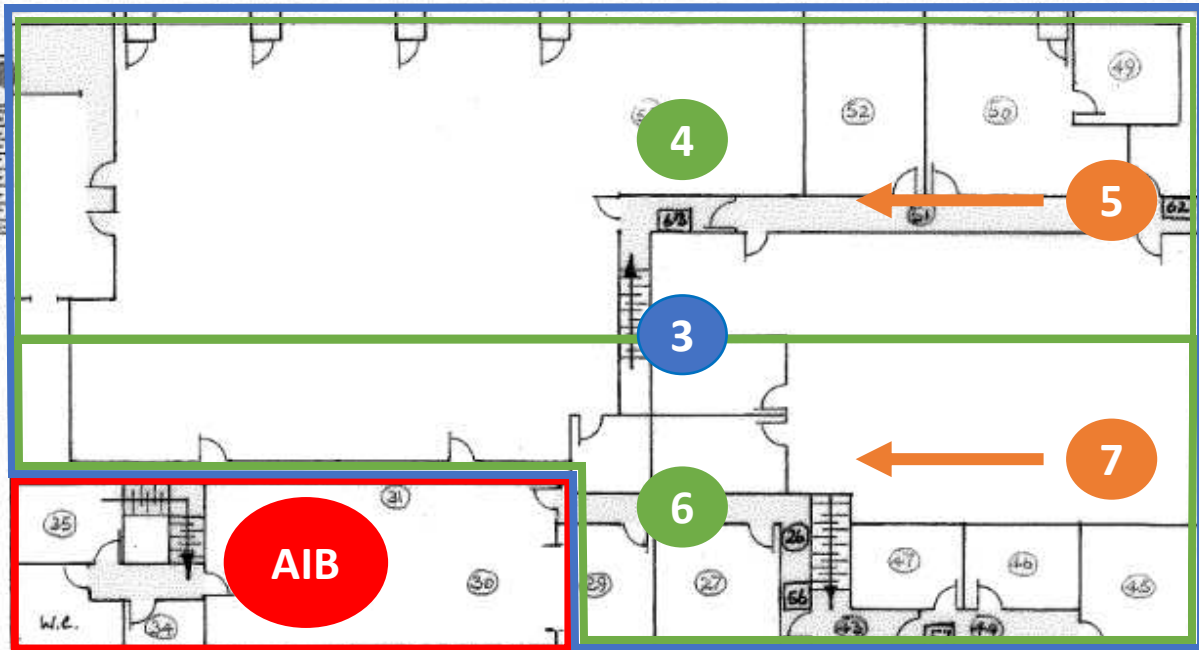
The design of the concrete pad foundation has been determined to spread the steel staircase loads over its area ($3.2\text{m} \times 5.8\text{m} = 18.56\text{m}^2$) to ensure that the load applied to the ground are kept to a minimum and evenly over the area.

These measure have been incorporated into the design of the staircase and support base to ensure that the loads applied over the Corn Brook Culvert are as low as possible (4.5 kN/m run).

The additional reductions in imposed load that have been incorporated into he designs and usage of the building reduce the current loads applied to the Corn Brook Culvert and, therefore, we would conclude that the above construction, load reductions, load spread are adequate to ensure that the resulting risk to the Corn Brook Culvert are reduced to the absolute minimum but ensuring that the required access staircase can be used safely and, in the event of any requirement for access to the Corn Brook Culvert, can be taken down and removed safely.

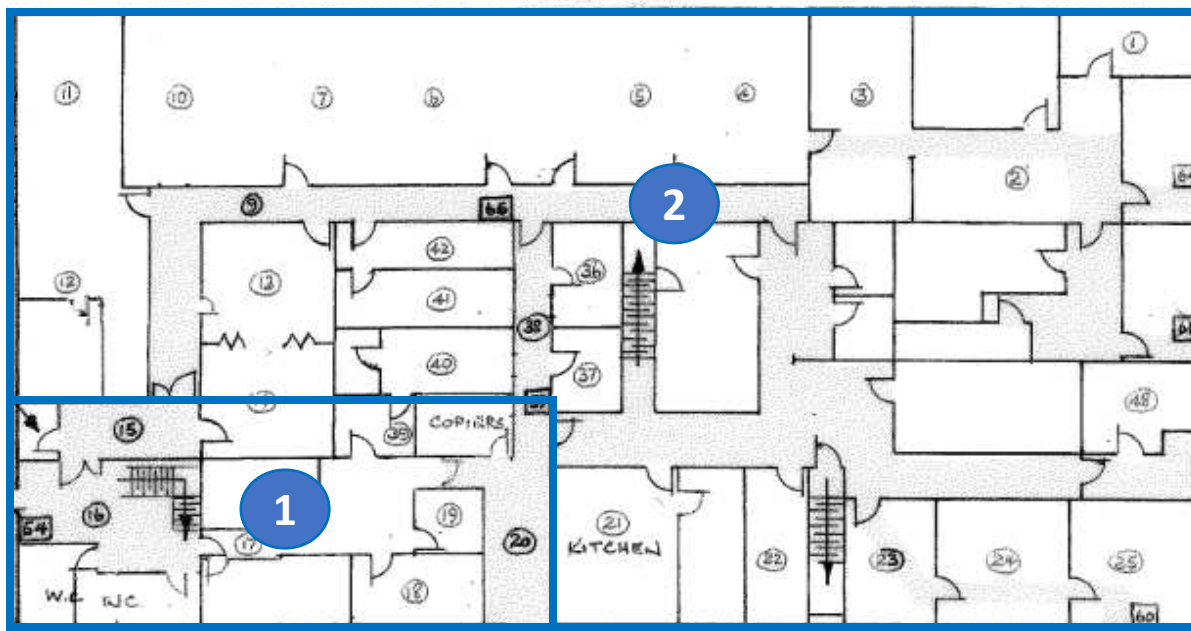
Appendix C

Demolition Plan



FIRST FLOOR

GROUND FLOOR



Option 1 (2 Contractors)

Sequence;

- Area 1 – Soft strip walls & ceilings to underside of the joists below AIB area
- Area 2 – Soft strip walls & ceilings to underside of the joists remaining ground floor
- Area 3 – Soft strip walls & ceilings to first floor
- AIB – Removal of AIB (Subject to HSE notice/temp works agreement)
- Area 4 – Removal of 1st floor joists to West half of the building
- Area 5 – Start Removal of roof cement sheets
- Area 6 – Removal of 1st floor joists to East half of the building
- Area 7 – Start Removal of roof cement sheets
- Demolish Shell to slab

Option 2 (1 Contractor)

- AIB – Removal of AIB (Subject to HSE notice/temp works agreement)
- Area 1&2 Area 4&5 – Soft strip walls & ceilings to underside of the joists remaining ground floor by removal of the North gable end and mechanical removal
- Area 6&7 – Start Removal of roof cement sheets
- Demolish Shell to slab

Appendix D

CCTV Survey Information

**Project****Project Name:** Adana Hammerstone Rd Goreton Manchester projects**Project Description:** WinCan Import in Miraculix Standard**Project Date:** 17/10/2023**Inspection Standard:** MSCC5 Sewers & Drainage GB (SRM5 Scoring)

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Project Information

Project Name	Project Number	Project Date
Adana Hammerstone Rd Goreton Manchester projects		17/10/2023

Client

Company: Adana Construction
Department: Adana House
Street: 140 Higher Hillgate
Town or City: Stockport
County: Cheshire
Post Code: SK1 3QT
Phone: 0161 477 7211



Site

Company: ADANA CONSTRUCTION
Contact: Adana Hammerstone Rd Goreton Manchester projects



Contractor

Company: NRCWWS
Contact: Derek Kearns
Department: Director
Street: unit D. Russell Road
Town or City: Rock Ferry
County: Wirral
Post Code: CH42 1LU
Phone: 0151 643 0800
Email: derek.kearns@nrcwws.co.uk



Section Inspection - 28/06/2023 - FWMH02X



Item No. 1	Insp. No. 2	Date: 28/06/23	Time: 10:28	Client's Job Ref DK0363	Weather No Rain Or Snow	Pre Cleaned No	PLR FWMH02X
Operator JAME G		Vehicle PJ210MA		Camera Atex Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Manchester	Inspection Direction:	Downstream	Upstream Node:	FWMH02
Road:	Hammerstone Road	Inspected Length:	26.32 m	Upstream Pipe Depth:	5.050 m
Location:	Other walkway	Total Length:	26.32 m	Downstream Node:	BRF01
Surface Type:	Concrete Footway	Joint Length:		Downstream Pipe Depth:	
Use:	Combined	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	450 mm		
Flow Control:	No flow control	Pipe Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale: 1:135	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: 5.05 m FWMH02						
	0.00	MH	Start node, manhole, reference: FWMH02	00:00:00		
	0.00	WL	Water level, 5% of the vertical dimension	00:00:06		
	2.08	DEEJ	Attached deposits, encrustation at joint from 8 o'clock to 4 o'clock, 10% cross-sectional area loss	00:00:59	FWMH02X_a7ce946b-a5c9-42	3
	3.51	CCJ	Crack, circumferential at joint from 11 o'clock to 2 o'clock	00:02:00	FWMH02X_e7d97b54-054d-48	2 / 2
	3.51	S02 CLJ	Crack, longitudinal at joint at 12 o'clock, start	00:02:06	FWMH02X_2a4034d0-619c-41	
	4.31	S01 LL	Line deviates left, start	00:02:25	FWMH02X_a9c62bf7-3e55-45f3	
	5.26	F02 CLJ	Crack, longitudinal at joint at 12 o'clock, finish	00:03:07		2 / 2
	6.09	B	Broken pipe at 9 o'clock	00:03:27	FWMH02X_843432e1-3587-4e	4
	8.98	CN	Connection other than junction at 3 o'clock, 150mm dia	00:05:31		
	8.98	F01 LL	Line deviates left, finish	00:05:41		
	10.18	DES	Settled deposits, fine, 15% cross-sectional area loss	00:06:17		3
	11.22	REM	General remark: LOCATING LINE AS WE SURVEY	00:07:29		
	12.17	LL	Line deviates left	00:07:49		
	12.17	FLJ	Fracture, longitudinal at joint at 12 o'clock	00:08:01	FWMH02X_a5d1eb1f-37c1-4bc	3 / 2

Section Inspection - 28/06/2023 - FWMH02X



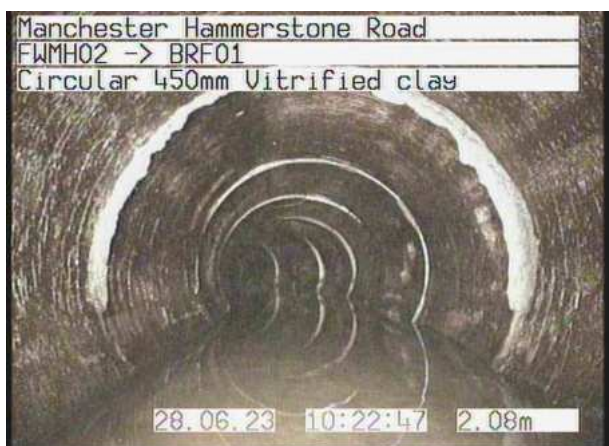
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Operator JAME G		Vehicle PJ210MA		Camera Atex Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Scale:	1:135	Position [m]	Code	Observation	MPEG	Photo	Grade
		18.85	B	Broken pipe from 8 o'clock to 4 o'clock	00:12:19	FWMH02X_7d793936-b1e4-4fb	4
		18.85	D	Deformed sewer or drain, 15%	00:12:30		5 / 3
		19.49	ID	Infiltration, dripping at 12 o'clock	00:12:41	FWMH02X_7c48f7e4-fcd9-4bc9	
		20.54	LL	Line deviates left	00:13:44		
		20.54	CLJ	Crack, longitudinal at joint at 12 o'clock	00:13:50		2 / 2
		25.62	LR	Line deviates right: slight	00:15:50		
		26.31	LD	Line deviates down	00:16:09		
	BRF01	26.32	BRF	Finish node, major connection without manhole, reference: BRF01	00:16:21		
Depth: m							

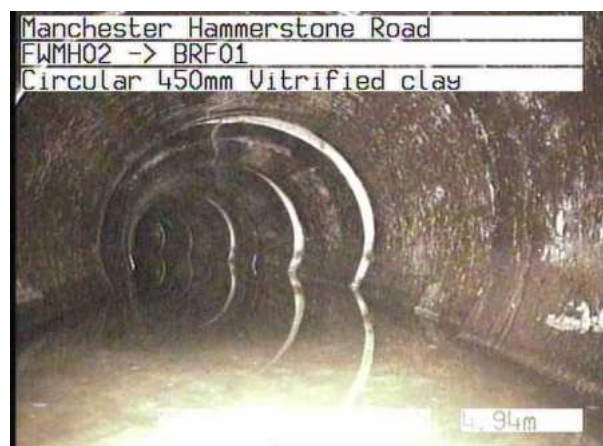
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
7	245.0	15.4	405.0	5.0	7	2.0	0.4	11.0	3.0

Section Pictures - 28/06/2023 - FWMH02X

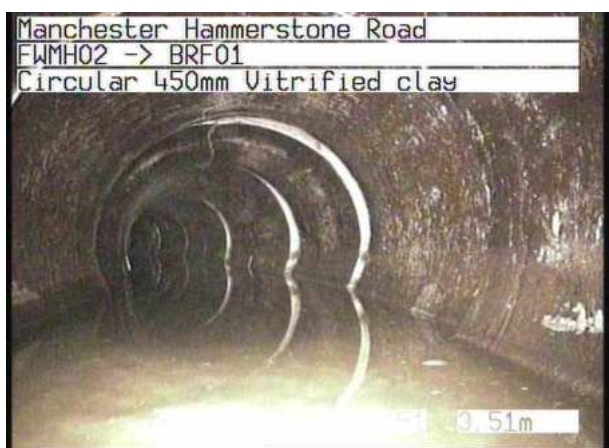
Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
1	Downstream	FWMH02X	DK0363	



FWMH02X_a7ce946b-a5c9-424a-86eb-51f0a8fcff04_20230628_102921_045.jpg, 00:00:59, 2.08 m
Attached deposits, encrustation at joint from 8 o'clock to 4 o'clock, 10% cross-sectional area loss



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Crack, circumferential at joint from 11 o'clock to 2 o'clock



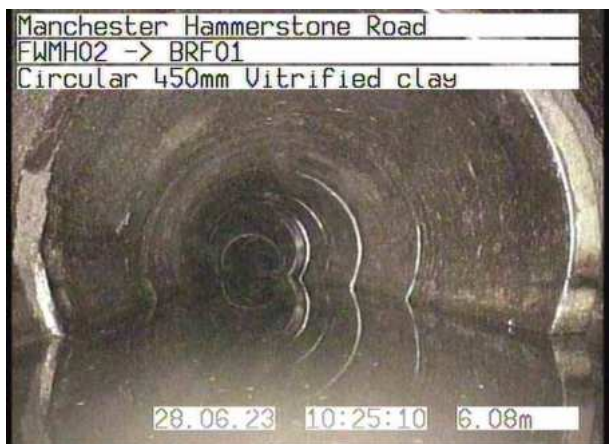
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Crack, longitudinal at joint at 12 o'clock, start



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Line deviates left, start

Section Pictures - 28/06/2023 - FWMH02X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
1	Downstream	FWMH02X	DK0363	



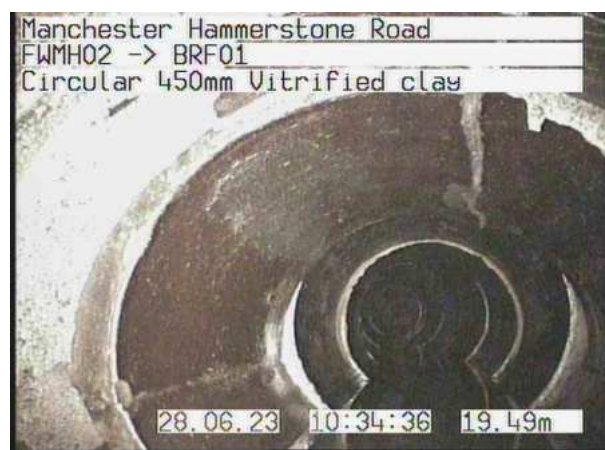
FWMH02X_843432e1-3587-4ec5-aad0-246872d8816d_2023
0704_092046_828.jpg, 00:03:27, 6.09 m
Broken pipe at 9 o'clock



FWMH02X_a5d1eb1f-37c1-4bc2-8a2e-f654ab212450_20230
628_103631_547.jpg, 00:08:01, 12.17 m
Fracture, longitudinal at joint at 12 o'clock



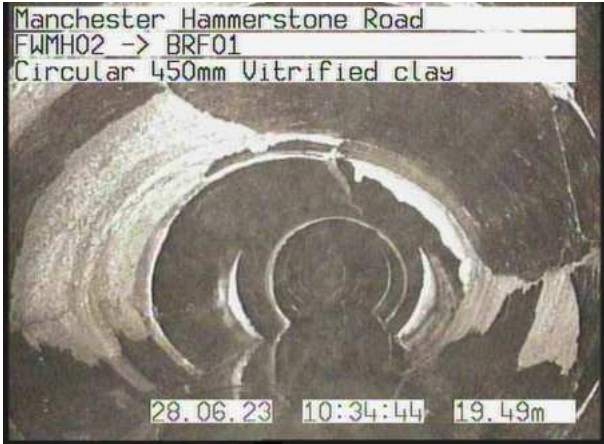
FWMH02X_7d793936-b1e4-4fb6-b0b0-916719dee72a_20230
704_092158_557.jpg, 00:12:19, 18.85 m
Broken pipe from 8 o'clock to 4 o'clock



FWMH02X_7c48f7e4-fcd9-4bc9-810b-eea80249d89c_202306
28_104110_684.jpg, 00:12:41, 19.49 m
Infiltration, dripping at 12 o'clock

Section Pictures - 28/06/2023 - FWMH02X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
1	Downstream	FWMH02X	DK0363	



FWMH02X_efbfd325-baf5-469d-b1a8-2b283e3c7379_202306
28_104118_343.jpg, 00:12:41, 19.49 m
Infiltration, dripping at 12 o'clock

Section Inspection - 04/10/2023 - MH24X



Item No.	Insp. No.	Date:	Time:	Client's Job Ref	Weather	Pre Cleaned	PLR
2	1	04/10/23	10:11	DK0526 ADANA CONSTRUCTION	Rain	Yes	MH24X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
ROBBIE DAVIN		Not Specified		Solo	Not Specified	Not Specified	1

Town or Village:	Gorton, Manchester	Inspection Direction:	Downstream	Upstream Node:	MH24
Road:	1 Hammerstone Road	Inspected Length:	17.72 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	17.72 m	Downstream Node:	DS
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Combined		Pipe Shape:	Circular	
Type of Pipe:	Gravity drain/sewer		Dia/Height:	100 mm	
Flow Control:	No flow control		Pipe Material:	Vitrified clay	
Year Constructed:	Not Specified		Lining Type:	No Lining	
Inspection Purpose:	Sample condition survey		Lining Material:	No Lining	
Comments:	FOUL SMELL IN MH				
Recommendations:					

Scale:	1:154	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m MH24 0.00 0.00 10.78 17.72 DS Depth: m							
		MH		Start node, manhole, reference: MH24	00:00:00		
		WL		Water level, 5% of the vertical dimension	00:00:01		
		JDM		Joint displaced, medium	00:00:41	MH24 DS_10-78 m_101357	
		MHF		Finish node, manhole, reference: DS: UNCHARTED, POSS UNDER CABINS	00:01:15	MH24 DS_17-72 m_101457	

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

Section Pictures - 04/10/2023 - MH24X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
2	Downstream	MH24X	DK0526 ADANA	NRC WWS LTD



MH24 DS_10-78m_101357.jpg, 00:00:41, 10.78 m
Joint displaced, medium



MH24 DS_17-72m_101457.jpg, 00:01:15, 17.72 m
Finish node, manhole, reference: DS, UNCHARTED, POSS
UNDER CABINS

Section Inspection - 06/10/2023 - C1X



Item No. 3	Insp. No. 1	Date: 06/10/23	Time: 9:35	Client's Job Ref DK0526 ADANA CONSTRUCTION	Weather Rain	Pre Cleaned Yes	PLR C1X
Operator ROBBIE DAVIN		Vehicle Not Specified		Camera Solo	Preset Length Not Specified	Legal Status Not Specified	Alternative ID 1

Town or Village:	Gorton, Manchester	Inspection Direction:	Downstream	Upstream Node:	C1
Road:	1 Hammerstone Road	Inspected Length:	10.69 m	Upstream Pipe Depth:	3.250 m
Location:	Property or buildings	Total Length:	10.69 m	Downstream Node:	DS
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Combined	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Pipe Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:93	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: 3.25 m C1 0.00 0.00 4.20 10.69 DS Depth: m							
			MH	Start node, manhole, reference: C1	00:00:00		
			WL	Water level, 10% of the vertical dimension	00:00:00		
			H	Hole in drain or sewer from 9 o'clock to 2 o'clock: POOR REPAIR	00:00:22	MH C1 DS_4-20m_094321.j	
			BRF	Finish node, major connection without manhole, reference: DS: CULVERT	00:00:47	MH C1 DS_10-69m_094359	

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

Section Pictures - 06/10/2023 - C1X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
3	Downstream	C1X	DK0526 ADANA	NRC WWS LTD



MH C1 DS_4-20m_094321.jpg, 00:00:22, 4.20 m
Hole in drain or sewer from 9 o'clock to 2 o'clock, POOR
REPAIR



MH C1 DS_10-69m_094359.jpg, 00:00:47, 10.69 m
Finish node, major connection without manhole, reference: DS,
CULVERT

Section Inspection - 22/08/2023 - MH34X



Item No. 4	Insp. No. 1	Date: 22/08/23	Time: 12:55	Client's Job Ref Not Specified	Weather No Rain Or Snow	Pre Cleaned Yes	PLR MH34X
Operator D.MORRISON		Vehicle PK20 Syx		Camera Coiler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Manchester	Inspection Direction:	Downstream	Upstream Node:	MH34
Road:	Hammerstone Road	Inspected Length:	17.55 m	Upstream Pipe Depth:	
Location:	Road	Total Length:	17.55 m	Downstream Node:	EXFW1B
Surface Type:	Concrete Footway	Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Pipe Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Investment planning	Lining Material:	No Lining		

Comments:

Recommendations:

Scale: 1:152 Position [m] Code Observation MPEG Photo Grade

Code	Observation	MPEG	Photo	Grade
MH	Start node, manhole, reference: MH34	00:00:00		
WL	Water level, 0% of the vertical dimension	00:00:02		
WL	Water level, 5% of the vertical dimension	00:00:21		
FC	Fracture, circumferential from 12 o'clock to 12 o'clock: ON BACKDROP	00:01:20	MH34X_0 941c1a5-6 953-41b3-	3 / 2
REM	General remark: BACKDROP	00:01:29		
MHF	Finish node, manhole, reference: EXFW1B	00:01:36		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
1	40.0	2.3	40.0	3.0	1	1.0	0.1	1.0	2.0

Section Pictures - 22/08/2023 - MH34X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
4	Downstream	MH34X		DK0472



MH34X_0941c1a5-6953-41b3-8a84-c1a6191d4dc4_2023082
2_125832_514.jpg, 00:01:20, 17.46 m
Fracture, circumferential from 12 o'clock to 12 o'clock, ON
BACKDROP

Section Inspection - 22/08/2023 - MH36X



Item No. 5	Insp. No. 1	Date: 22/08/23	Time: 12:02	Client's Job Ref Not Specified	Weather No Rain Or Snow	Pre Cleaned Yes	PLR MH36X
Operator D.MORRISON		Vehicle PK20 Syx		Camera Coiler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Manchester	Inspection Direction:	Downstream	Upstream Node:	MH36
Road:	Hammerstone Road	Inspected Length:	13.21 m	Upstream Pipe Depth:	
Location:	Road	Total Length:	13.21 m	Downstream Node:	EXFW1B
Surface Type:	Concrete Footway	Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Investment planning	Lining Material:	No Lining		

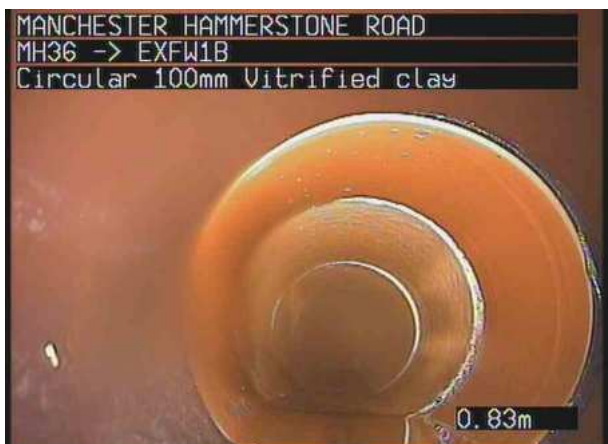
Comments:
Recommendations:

Scale: 1:115	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m MH36						
	0.00	IC	Start node, inspection chamber, reference: MH36	00:00:00		
	0.00	WL	Water level, 5% of the vertical dimension	00:01:00		
	0.83	MCPVC	Pipe material changes to polyvinyl chloride at this point	00:00:43	MH36X_b d74fbc5-b 345-47a2-	
	7.59	WL	Water level, 35% of the vertical dimension	00:01:58		
	8.37	CUW	Loss of vision, camera under water	00:02:04		
	9.57	WL	Water level, 100% of the vertical dimension	00:02:54		
	13.21	MHF	Finish node, manhole, reference: EXFW1B	00:03:11		
						EXFW1B Depth: m

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Pictures - 22/08/2023 - MH36X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
5	Downstream	MH36X		DK0472



MH36X_bd74fbc5-b345-47a2-8157-43e8e117741c_20230822_120336_574.jpg, 00:00:43, 0.83 m

Pipe material changes to polyvinyl chloride at this point

Section Inspection - 04/10/2023 - FWIC2X



Item No. 6	Insp. No. 1	Date: 04/10/23	Time: 10:40	Client's Job Ref DK0526 ADANA CONSTRUCTION	Weather Rain	Pre Cleaned Yes	PLR FWIC2X
Operator ROBBIE DAVIN		Vehicle Not Specified		Camera Solo	Preset Length Not Specified	Legal Status Not Specified	Alternative ID 1

Town or Village:	Gorton, Manchester	Inspection Direction:	Upstream	Upstream Node:	FWIC2
Road:	1 Hammerstone Road	Inspected Length:	7.74 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	7.74 m	Downstream Node:	FWIC1
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:68	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m FWIC1 0.00 0.00 1.14 5.53 6.16 7.74 FWIC2 Depth: m							
		0.00	IC	Start node, inspection chamber, reference: FWIC1	00:00:00		
		0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
		1.14	WL	Water level, 20% of the vertical dimension	00:00:10		
		5.53	WL	Water level, 50% of the vertical dimension	00:01:03		
		6.16	CUW	Loss of vision, camera under water	00:01:11		
		7.74	ICF	Finish node, inspection chamber, reference: FWIC2	00:01:21		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

Section Inspection - 29/09/2023 - Fwmh01X



Item No. 7	Insp. No. 1	Date: 29/09/23	Time: 11:32	Client's Job Ref DK0526	Weather No Rain Or Snow	Pre Cleaned Yes	PLR FWMH01X
Operator P Windle		Vehicle Not Specified		Camera Not Specified	Preset Length Not Specified	Legal Status Not Specified	Alternative ID 1

Town or Village:	Manchester	Inspection Direction:	Upstream	Upstream Node:	FWMH01
Road:	Hammerstone Rd	Inspected Length:	0.02 m	Upstream Pipe Depth:	
Location:	Other location	Total Length:	0.02 m	Downstream Node:	FWMH02
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Pipe Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	Cured in place lining		
Inspection Purpose:	Post rehab inspection	Lining Material:	Fibre reinforced plastics		
Comments:	POST PATCH CCTV				
Recommendations:					

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m Fwmh02 0.00 MH Start node, manhole, reference: F2 00:00:01 0.00 WL Water level, 5% of the vertical dimension 00:00:02 Fwmh01 0.02 MHF Finish node, manhole, reference: F1: patch on view 00:00:45 F1X_7149 0003-b3f0- 40ea-863b Depth: m							

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Pictures - 29/09/2023 - Fwmh01X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
7	Upstream	FWMH01X	DK0526	



F1X_71490003-b3f0-40ea-863b-8bdebed17308_20231017_1
45304_211.jpg, 00:00:45, 0.02 m

Finish node, manhole, reference: F1, patch on view

Section Inspection - 28/06/2023 - FWMH01X

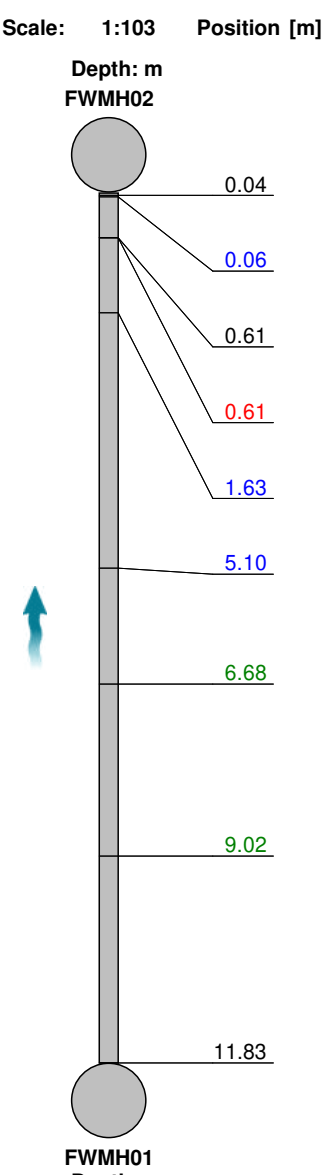


Item No. 8	Insp. No. 1	Date: 28/06/23	Time: 14:00	Client's Job Ref DK0367	Weather No Rain Or Snow	Pre Cleaned Yes	PLR FWMH01X
Operator jamie g		Vehicle Not Specified		Camera Push Rod	Preset Length Not Specified	Legal Status Not Specified	Alternative ID 1

Town or Village:	M18 8Eq	Inspection Direction:	Upstream	Upstream Node:	FWMH01
Road:	Hammerstone Road	Inspected Length:	11.83 m	Upstream Pipe Depth:	
Location:	Road	Total Length:	11.83 m	Downstream Node:	FWMH02
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Pipe Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:

Recommendations:

Scale:	1:103	Position [m]	Code	Observation	MPEG	Photo	Grade
 Depth: m FWMH02 0.04 0.06 0.61 0.61 1.63 5.10 6.68 9.02 11.83 FWMH01 Depth: m	MH	Start node, manhole, reference: FWMH02	00:00:00				
	WL	Water level, 0% of the vertical dimension	00:00:00				
	JN	Junction at 6 o'clock, 225mm dia	00:00:06				
	JDL	Joint displaced, large	00:00:15	FWMH02 US FWMH01_	1 / 4		
	WL	Water level, 15% of the vertical dimension	00:00:22				
	WL	Water level, 5% of the vertical dimension	00:00:37				
	DER	Settled deposits, coarse, 5% cross-sectional area loss	00:00:43	FWMH01X _fca69c75 -ec5f-4891	3		
	LR	Line deviates right	00:00:51				
	MHF	Finish node, manhole, reference: FWMH01	00:01:03				

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
1	2.0	0.2	2.0	1.0	2	5.0	0.6	7.0	4.0

Section Pictures - 28/06/2023 - FWMH01X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
8	Upstream	FWMH01X	DK0367	



FWMH02 US FWMH01_0-61m_140927.jpg, 00:00:15, 0.61 m
Joint displaced, large



FWMH01X_fca69c75-ec5f-4891-b983-80ffa3de1089_20230704_091625_459.jpg, 00:00:43, 6.68 m
Settled deposits, coarse, 5% cross-sectional area loss

Section Inspection - 22/08/2023 - G3X



Item No. 9	Insp. No. 1	Date: 22/08/23	Time: 14:50	Client's Job Ref Not Specified	Weather No Rain Or Snow	Pre Cleaned Yes	PLR G3X
Operator D.MORRISON		Vehicle PK20 Syx		Camera Coiler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Manchester	Inspection Direction:	Upstream	Upstream Node:	G3
Road:	Hammerstone Road	Inspected Length:	7.98 m	Upstream Pipe Depth:	
Location:	Road	Total Length:	7.98 m	Downstream Node:	M32
Surface Type:	Concrete Footway	Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Pipe Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Investment planning	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:70	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m M32 0.00 0.00 6.29 7.98 G3 Depth: m MH WL SS GYF Start node, manhole, reference: M32 Water level, 0% of the vertical dimension Surface damage, spalling from 10 o'clock to 2 o'clock Finish node, gully, reference: G3 00:00:00 00:00:01 00:00:42 00:00:58 G3X_0aa1f7fa-6cd4-4596-b480 2							

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
1	20.0	2.5	20.0	2.0	0	0.0	0.0	0.0	1.0

Section Pictures - 22/08/2023 - G3X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
9	Upstream	G3X		DK0472



G3X_0aa1f7fa-6cd4-4596-b480-e012c28a25d0_20230822_14
5216_936.jpg, 00:00:42, 6.29 m
Surface damage, spalling from 10 o'clock to 2 o'clock

Section Inspection - 02/10/2023 - Rod EyeX



Item No. 10	Insp. No. 1	Date: 02/10/23	Time: 11:02	Client's Job Ref N Kirton	Weather No Rain Or Snow	Pre Cleaned Yes	PLR ROD EYEX
Operator ROBBIE DAVIN		Vehicle PJ210MA		Camera Pushrod	Preset Length Not Specified	Legal Status Private Drain	Alternative ID Not Specified

Town or Village:	Adana	Inspection Direction:	Upstream	Upstream Node:	ROD EYE
Road:	Hammerstone Rd	Inspected Length:	32.23 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	32.23 m	Downstream Node:	MH1
Surface Type:	Asphalt Highway	Joint Length:		Downstream Pipe Depth:	
Use:	Culverted watercourse	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale: 1:280	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m MH1						
	0.00	MH	Start node, manhole, reference: MH1	00:00:00		
	0.00	WL	Water level, 5% of the vertical dimension	00:00:06		
	1.24	JN	Junction at 2 o'clock, 100mm dia	00:00:27		
	2.07	WL	Water level, 10% of the vertical dimension	00:00:33		
	5.04	WL	Water level, 5% of the vertical dimension	00:00:42		
	13.14	D	Deformed sewer or drain, 30%	00:01:22	Rod EyeX_89df 72d6-3b80	4 / 4
	16.50	D	Deformed sewer or drain, 5%	00:01:41	Rod EyeX_ccd 54a6e-8f3	1 / 2
	29.03	WL	Water level, 10% of the vertical dimension	00:02:43		
	31.18	JN	Junction at 9 o'clock, 100mm dia	00:03:04		
	31.55	JN	Junction at 3 o'clock, 100mm dia	00:03:17		
	32.04	LU	Line deviates up	00:03:29		
	32.23	REF	Finish node, rodding eye, reference: Rod Eye	00:03:45		
ROD EYE Depth: m						

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
2	80.0	2.5	80.0	4.0	2	5.0	0.2	6.0	4.0

Section Pictures - 02/10/2023 - Rod EyeX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
10	Upstream	ROD EYEX	N Kirton	NRC WWS Ltd



Rod
EyeX_89df72d6-3b80-41c3-8f57-19804605fbd5_20231002_1
10348_578.jpg, 00:01:22, 13.14 m
Deformed sewer or drain, 30%



Rod
EyeX_ccd54a6e-8f3a-4a5b-afef-6d8136f2e6f5_20231002_110
406_458.jpg, 00:01:41, 16.50 m
Deformed sewer or drain, 5%

Section Inspection - 02/10/2023 - MH1AX



Item No. 11	Insp. No. 1	Date: 02/10/23	Time: 10:54	Client's Job Ref N Kirton	Weather No Rain Or Snow	Pre Cleaned Yes	PLR MH1AX
Operator ROBBIE DAVIN		Vehicle PJ210MA		Camera Crawler	Preset Length Not Specified	Legal Status Private Drain	Alternative ID Not Specified

Town or Village:	Adana	Inspection Direction:	Upstream	Upstream Node:	MH1A
Road:	Hammerstone Rd	Inspected Length:	22.59 m	Upstream Pipe Depth:	1.070 m
Location:	Property or buildings	Total Length:	22.59 m	Downstream Node:	MH1
Surface Type:	Asphalt Highway	Joint Length:		Downstream Pipe Depth:	
Use:	Culverted watercourse			Pipe Shape:	Circular
Type of Pipe:	Gravity drain/sewer			Dia/Height:	150 mm
Flow Control:	No flow control			Pipe Material:	Polyvinyl chloride
Year Constructed:	Not Specified			Lining Type:	No Lining
Inspection Purpose:	Sample condition survey			Lining Material:	No Lining

Comments:
Recommendations:

Scale: 1:196	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m MH1 0.00 0.00 22.59 MH1A Depth: 1.07 m						
	0.00	MH	Start node, manhole, reference: MH1	00:00:00		
	0.00	WL	Water level, 5% of the vertical dimension	00:00:08		
	22.59	MHF	Finish node, manhole, reference: MH1A	00:01:34		

Construction Features
Miscellaneous Features
Structural Defects
Service & Operational Observations

STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 29/09/2023 - UU 3803X



Item No. 12	Insp. No. 1	Date: 29/09/23	Time: 11:05	Client's Job Ref N Kirton	Weather No Rain Or Snow	Pre Cleaned Yes	PLR UU 3803X
Operator ROBBIE DAVIN		Vehicle PJ210MA		Camera Crawler	Preset Length Not Specified	Legal Status Private Drain	Alternative ID Not Specified

Town or Village:	Adana	Inspection Direction:	Upstream	Upstream Node:	UU 3803
Road:	Hammerstone Rd	Inspected Length:	47.24 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	47.24 m	Downstream Node:	MH1
Surface Type:	Asphalt Highway	Joint Length:		Downstream Pipe Depth:	
Use:	Culverted watercourse	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	750 mm		
Flow Control:	No flow control	Pipe Material:	Brick		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale: 1:410	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH	Start node, manhole, reference: MH1	00:00:00		
	0.00	WL	Water level, 10% of the vertical dimension	00:00:07		
	0.00	REM	General remark: rope running along invert	00:00:17	UU 3803X_7c 4fe95a-61	
	0.60	S01	Attached deposits, encrustation from 7 o'clock to 5 o'clock, 5% cross-sectional area loss, start: Patchy	00:00:38	UU 3803X_ec a04b50-e1	
	11.45	CN	Connection other than junction at 1 o'clock, 150mm dia	00:01:37	UU 3803X_2d 64c7c1-49	
	26.09	MH	Start node, manhole, reference: Node point: 150mm pipe incoming	00:03:18	UU 3803X_7c 8327ac-b3	
	33.23	CXD	Connection defective, connecting pipe is damaged at 12 o'clock, 150mm dia: saddle to main missing	00:04:17	UU 3803X_eff 886a3-924	
	36.74	DES	Settled deposits, fine, 10% cross-sectional area loss	00:04:51		3
	37.38	MH	Start node, manhole, reference: node point: no laterals	00:05:45	UU 3803X_89 4b8984-5c	
	38.99	C01	Attached deposits, encrustation from 7 o'clock to 5 o'clock, 10% cross-sectional area loss, change: Patchy	00:06:28	UU 3803X_99 a6e569-ce	
	44.62	CX	Connection defective at 10 o'clock, 225mm dia: Half blocked with encrustation	00:07:31	UU 3803X_d2 a16a24-99	
	45.40	CN	Connection other than junction at 3 o'clock, 300mm dia	00:08:06	UU 3803X_3c a19a47-24	
	45.63	DES	Settled deposits, fine, 20% cross-sectional area loss	00:08:41		4
	47.24	F01	Attached deposits, encrustation from 7 o'clock to 5 o'clock, 10% cross-sectional area loss, finish: Patchy	00:09:43		3
	47.24	SA	Survey abandoned: Due to silt	00:09:51		

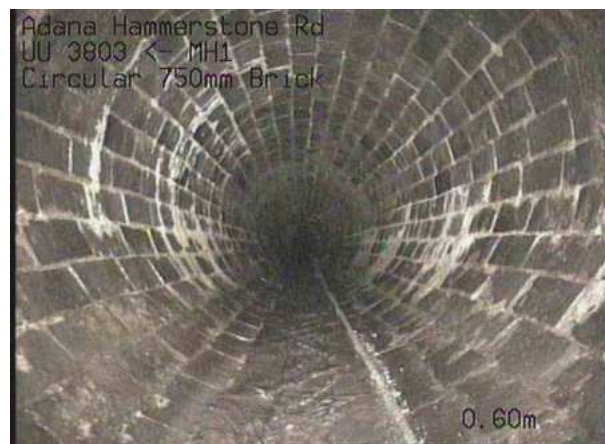
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	3	7.0	2.1	101.0	4.0

Section Pictures - 29/09/2023 - UU 3803X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
12	Upstream	UU 3803X	N Kirton	NRC WWS Ltd



UU
3803X_7c4fe95a-6172-400c-8e55-e9b46b12f59b_20230929_110556_997.jpg, 00:00:17, 0.00 m
General remark, rope running along invert



UU
3803X_eca04b50-e131-4dfe-8786-ba9a1bf9edd0_20230929_110618_260.jpg, 00:00:38, 0.60 m
Attached deposits, encrustation from 7 o'clock to 5 o'clock, 5% cross-sectional area loss, start, Patchy



UU
3803X_2d64c7c1-4914-4176-8e85-39894b60b95c_20230929_110716_314.jpg, 00:01:37, 11.45 m
Connection other than junction at 1 o'clock, 150mm dia



UU
3803X_7c8327ac-b3ef-4fae-86ac-5e048638f9f8_20230929_110857_666.jpg, 00:03:18, 26.09 m
Start node, manhole, reference: Node point, 150mm pipe incoming

Section Pictures - 29/09/2023 - UU 3803X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
12	Upstream	UU 3803X	N Kirton	NRC WWS Ltd



UU

3803X_eff886a3-9245-4379-9a54-673bd7d69ebb_20230929_110956_482.jpg, 00:04:17, 33.23 m

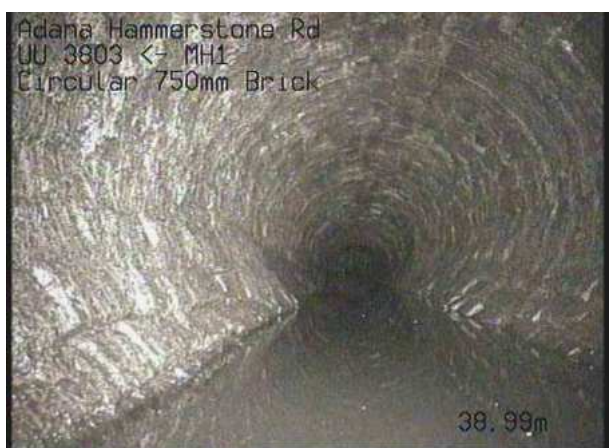
Connection defective, connecting pipe is damaged at 12 o'clock, 150mm dia, saddle to main missing



UU

3803X_894b8984-5c81-408d-a3ff-856742ecc766_20230929_111130_446.jpg, 00:05:45, 37.38 m

Start node, manhole, reference: node point, no laterals



UU

3803X_99a6e569-ced3-4896-b8c2-f3ac361cc375_20230929_111207_657.jpg, 00:06:28, 38.99 m

Attached deposits, encrustation from 7 o'clock to 5 o'clock, 10% cross-sectional area loss, change, Patchy



UU

3803X_d2a16a24-99c2-48d6-9eae-0b7b58d8eb97_20230929_111310_253.jpg, 00:07:31, 44.62 m

Connection defective at 10 o'clock, 225mm dia, Half blocked with encrustation

Section Pictures - 29/09/2023 - UU 3803X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
12	Upstream	UU 3803X	N Kirton	NRC WWS Ltd



UU

3803X_3ca19a47-249f-40ed-abcb-2825530696c9_20230929_111346_245.jpg, 00:08:06, 45.40 m

Connection other than junction at 3 o'clock, 300mm dia

Section Inspection - 02/10/2023 - U/SX



Item No. 13	Insp. No. 1	Date: 02/10/23	Time: 11:13	Client's Job Ref N Kirton	Weather No Rain Or Snow	Pre Cleaned Yes	PLR U/SX
Operator ROBBIE DAVIN		Vehicle PJ210MA		Camera Pushrod	Preset Length Not Specified	Legal Status Private Drain	Alternative ID Not Specified

Town or Village:	Adana	Inspection Direction:	Upstream	Upstream Node:	U/S
Road:	Hammerstone Rd	Inspected Length:	7.74 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	7.74 m	Downstream Node:	MH1A
Surface Type:	Asphalt Highway	Joint Length:		Downstream Pipe Depth:	1.070 m
Use:	Culverted watercourse	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:68	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: 1.07 m MH1A							
		0.00	MH	Start node, manhole, reference: MH1A	00:00:00		
		0.00	WL	Water level, 10% of the vertical dimension	00:00:05		
		7.74	XP	Collapsed drain or sewer, 95% cross-sectional area loss	00:01:23	U_SX_551 ced77-908 5-490f-9a3	5
		7.74	SA	Survey abandoned: Pipe collapsed, broken pipe and full bore concrete	00:01:46		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
1	165.0	21.3	165.0	5.0	0	0.0	0.0	0.0	1.0

Section Pictures - 02/10/2023 - U/SX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
13	Upstream	U/SX	N Kirton	NRC WWS Ltd



U_SX_551ced77-9085-490f-9a3d-03c1825fe094_20231002_1
11536_088.jpg, 00:01:23, 7.74 m

Collapsed drain or sewer, 95% cross-sectional area loss

Section Inspection - 04/10/2023 - RWPX



Item No. 14	Insp. No. 1	Date: 04/10/23	Time: 8:34	Client's Job Ref DK0526 ADANA CONSTRUCTION	Weather Rain	Pre Cleaned Yes	PLR RWPX
Operator ROBBIE DAVIN		Vehicle Not Specified		Camera Solo	Preset Length Not Specified	Legal Status Not Specified	Alternative ID 1

Town or Village:	Gorton, Manchester	Inspection Direction:	Upstream	Upstream Node:	RWP
Road:	1 Hammerstone Road	Inspected Length:	12.15 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	12.15 m	Downstream Node:	MH3
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

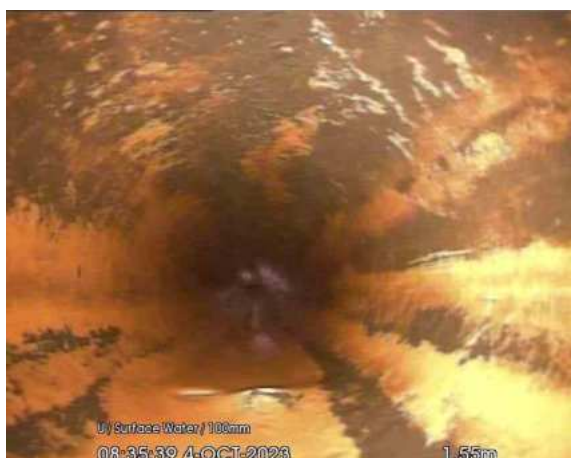
Comments:
Recommendations:

Scale: 1:106	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m MH3						
	0.00	MH	Start node, manhole, reference: MH3	00:00:00		
	0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
	1.55	D	Deformed sewer or drain, 15%	00:00:12	MH3 US RWP_1-5 5m_08353	
	4.52	D	Deformed sewer or drain, 10%	00:00:25	MH3 US RWP_4-5 2m_08355	
	5.37	LL	Line deviates left	00:00:31		
	7.06	D	Deformed sewer or drain, 10%	00:00:39	MH3 US RWP_7-0 6m_08362	
	11.83	LU	Line deviates up	00:00:59		
	12.15	SA	Survey abandoned: RWP MISSING OFF WALL	00:01:02	MH3 US RWP_12- 15m_0837	

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

Section Pictures - 04/10/2023 - RWPX

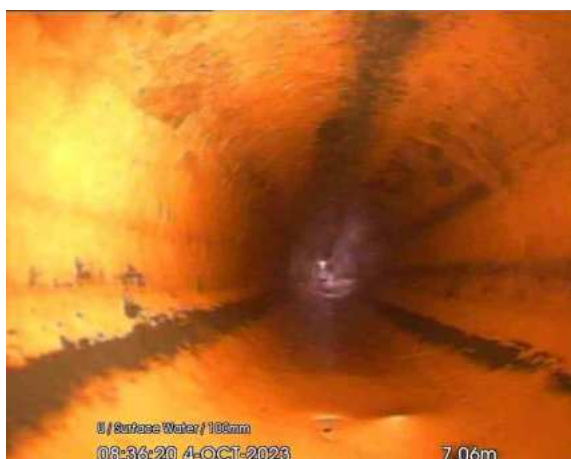
Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
14	Upstream	RWPX	DK0526 ADANA	NRC WWS LTD



MH3 US RWP_1-55m_083539.jpg, 00:00:12, 1.55 m
Deformed sewer or drain, 15%



MH3 US RWP_4-52m_083557.jpg, 00:00:25, 4.52 m
Deformed sewer or drain, 10%



MH3 US RWP_7-06m_083620.jpg, 00:00:39, 7.06 m
Deformed sewer or drain, 10%



MH3 US RWP_12-15m_083706.jpg, 00:01:02, 12.15 m
Survey abandoned, RWP MISSING OFF WALL

Section Inspection - 04/10/2023 - ACOX



Item No.	Insp. No.	Date:	Time:	Client's Job Ref	Weather	Pre Cleaned	PLR
15	1	04/10/23	8:38	DK0526 ADANA CONSTRUCTION	Rain	Yes	ACOX
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
ROBBIE DAVIN		Not Specified		Solo	Not Specified	Not Specified	1

Town or Village:	Gorton, Manchester	Inspection Direction:	Upstream	Upstream Node:	ACO
Road:	1 Hammerstone Road	Inspected Length:	15.02 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	15.21 m	Downstream Node:	MH3
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:132	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m MH3 0.00 0.00 9.49 10.69 10.69 10.69 10.69 12.04 13.56 13.93 13.93 14.16 14.55 14.55 15.00 15.02 ACO Depth: m							
		0.00	MH	Start node, manhole, reference: MH3	00:00:00		
		0.00	WL	Water level, 5% of the vertical dimension	00:00:01		
		9.49	JDM	Joint displaced, medium	00:00:41	MH3 US ACO_9-49 m_083943	
		10.69	FM	Fractures, multiple at 12 o'clock	00:00:48	MH3 US ACO_10-6 9m_08395	
		10.69	B	Broken pipe at 12 o'clock	00:00:50		
		10.69	D	Deformed sewer or drain, 20%	00:00:51		
		12.04	JDL	Joint displaced, large	00:01:08	MH3 US ACO_12-0 4m_08403	
		13.56	LL	Line deviates left	00:01:17		
		13.93	JDL	Joint displaced, large	00:01:23	MH3 US ACO_13-9 3m_08410	
		13.93	MCPVC	Pipe material changes to polyvinyl chloride at this point	00:01:25		
		14.16	JN	Junction at 9 o'clock, 100mm dia	00:01:29		
		14.55	MCVC	Pipe material changes to vitrified clay at this point	00:01:35		
		14.55	LL	Line deviates left	00:01:36		
		15.00	LL	Line deviates left	00:01:41		
		15.02	GYF	Finish node, gully, reference: ACO GULLY	00:01:48		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

Section Pictures - 04/10/2023 - ACOX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
15	Upstream	ACOX	DK0526 ADANA	NRC WWS LTD



MH3 US ACO_9-49m_083943.jpg, 00:00:41, 9.49 m
Joint displaced, medium



MH3 US ACO_10-69m_083959.jpg, 00:00:48, 10.69 m
Fractures, multiple at 12 o'clock



MH3 US ACO_12-04m_084036.jpg, 00:01:08, 12.04 m
Joint displaced, large



MH3 US ACO_13-93m_084102.jpg, 00:01:23, 13.93 m
Joint displaced, large

Section Inspection - 03/10/2023 - GULLYX



Item No. 16	Insp. No. 1	Date: 03/10/23	Time: 14:07	Client's Job Ref DK0526 ADANA CONSTRUCTION	Weather Rain	Pre Cleaned Yes	PLR GULLYX
Operator ROBBIE DAVIN		Vehicle Not Specified		Camera Solo	Preset Length Not Specified	Legal Status Not Specified	Alternative ID 1

Town or Village:	Gorton, Manchester	Inspection Direction:	Upstream	Upstream Node:	GULLY
Road:	1 Hammerstone Road	Inspected Length:	0.85 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	0.85 m	Downstream Node:	MH3
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:	
Recommendations:	

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m							
MH3							
0.00		MH		Start node, manhole, reference: MH3	00:00:00		
0.00		WL		Water level, 5% of the vertical dimension	00:00:01		
0.20		LU		Line deviates up	00:00:05		
0.85		GYF		Finish node, gully, reference: GULLY	00:00:20		
GULLY							
Depth: m							

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

WEB PROJECT
CLICK TO OPEN THIS SECTION

Section Pictures - 03/10/2023 - GULLYX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
17	Upstream	GULLYX	DK0526 ADANA	NRC WWS LTD



MH4 US GULLY_0-30m_141058.jpg, 00:00:04, 0.30 m
Fractures, multiple at joint from 8 o'clock to 5 o'clock

Section Inspection - 03/10/2023 - MH3X



Item No. 18	Insp. No. 1	Date: 03/10/23	Time: 14:01	Client's Job Ref DK0526 ADANA CONSTRUCTION	Weather Rain	Pre Cleaned Yes	PLR MH3X
Operator ROBBIE DAVIN		Vehicle Not Specified		Camera Solo	Preset Length Not Specified	Legal Status Not Specified	Alternative ID 1

Town or Village:	Gorton, Manchester	Inspection Direction:	Upstream	Upstream Node:	MH3
Road:	1 Hammerstone Road	Inspected Length:	22.35 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	22.35 m	Downstream Node:	MH4
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale: 1:194	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m MH4 0.00 0.00 4.38 22.35 MH3 Depth: m						
	0.00	MH	Start node, manhole, reference: MH4	00:00:00		
	0.00	WL	Water level, 10% of the vertical dimension	00:00:01		
	4.38	JN	Junction at 1 o'clock, 100mm dia: GULLY NEXT TO MOBILE OFFICE	00:00:17		
	22.35	MHF	Finish node, manhole, reference: MH3	00:01:10		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

Section Inspection - 04/10/2023 - INTERCEPTOR MHX



Item No. 19	Insp. No. 1	Date: 04/10/23	Time: 8:16	Client's Job Ref DK0526 ADANA CONSTRUCTION	Weather Rain	Pre Cleaned Yes	PLR INTERCEPTOR MHX
Operator ROBBIE DAVIN		Vehicle Not Specified		Camera Solo	Preset Length Not Specified	Legal Status Not Specified	Alternative ID 1

Town or Village:	Gorton, Manchester	Inspection Direction:	Upstream	Upstream Node:	INTERCEPTORMH
Road:	1 Hammerstone Road	Inspected Length:	16.61 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	16.61 m	Downstream Node:	MH4A
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Pipe Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale: 1:144	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m MH4A 0.00 0.00 9.92 16.61 INTERCEPTOR MH Depth: m						
	0.00	MH	Start node, manhole, reference: MH4A	00:00:00		
	0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
	9.92	JN	Junction at 3 o'clock, 100mm dia	00:00:38		
	16.61	OCF	Finish node, other special chamber, reference: INTERCEPTOR MH: INT MH WASH DOWN AREA	00:01:02		MH4A US INTERCEPTOR

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

Section Pictures - 04/10/2023 - INTERCEPTOR MHX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
19	Upstream	INTERCEPTOR MHX	DK0526 ADANA	NRC WWS LTD



MH4A US INTERCEPTOR MH_16-61m_081913.jpg, 00:01:02,
16.61 m

Finish node, other special chamber, reference:
INTERCEPTOR MH, INT MH WASH DOWN AREA

Section Inspection - 04/10/2023 - MH7X



Item No. 20	Insp. No. 1	Date: 04/10/23	Time: 8:20	Client's Job Ref DK0526 ADANA CONSTRUCTION	Weather Rain	Pre Cleaned Yes	PLR MH7X
Operator ROBBIE DAVIN		Vehicle Not Specified		Camera Solo	Preset Length Not Specified	Legal Status Not Specified	Alternative ID 1

Town or Village:	Gorton, Manchester	Inspection Direction:	Upstream	Upstream Node:	MH7
Road:	1 Hammerstone Road	Inspected Length:	19.93 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	19.93 m	Downstream Node:	MH4A
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:173	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m MH4A 0.00 0.00 1.15 15.57 19.93 MH7 Depth: m							
		0.00	MH	Start node, manhole, reference: MH4A	00:00:01		
		0.00	WL	Water level, 10% of the vertical dimension	00:00:01		
		1.15	LL	Line deviates left	00:00:09		
		15.57	JN	Junction at 12 o'clock, 100mm dia: GULLY	00:00:56		
		19.93	MHF	Finish node, manhole, reference: MH7: NO INLETS IN MH	00:01:17		

Construction Features
Miscellaneous Features
Structural Defects
Service & Operational Observations

STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

Section Inspection - 28/09/2023 - Line AX



Item No. 21	Insp. No. 1	Date: 28/09/23	Time: 10:08	Client's Job Ref N Kirton	Weather No Rain Or Snow	Pre Cleaned No	PLR LINE AX
Operator ROBBIE DAVIN		Vehicle PJ210MA		Camera Crawler	Preset Length Not Specified	Legal Status Private Drain	Alternative ID Not Specified

Town or Village:	Adana	Inspection Direction:	Upstream	Upstream Node:	LINE A
Road:	Hammerstone Rd	Inspected Length:	0.23 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	0.23 m	Downstream Node:	MH5
Surface Type:	Asphalt Highway	Joint Length:		Downstream Pipe Depth:	5.150 m
Use:	Culverted watercourse	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	750 mm		
Flow Control:	No flow control	Pipe Material:	Brick		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
		0.00	MH	Start node, manhole, reference: MH5	00:00:00		
		0.00	WL	Water level, 10% of the vertical dimension	00:00:06		
		0.23	REM	General remark: General MH survey	00:00:24		
		0.23	SA	Survey abandoned: Visual of line entering MH - Line A	00:01:16		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Pictures - 28/09/2023 - Line AX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
21	Upstream	LINE AX	N Kirton	NRC WWS Ltd



Line
AX_e91a9475-7b4e-47fb-a422-8ee038e079f9_20230928_100
927_614.jpg, 00:00:24, 0.23 m
General remark, General MH survey



Line
AX_8e7aa481-461d-44bb-8f15-7b653cb4fe82_20230928_100
930_894.jpg, 00:00:24, 0.23 m
General remark, General MH survey

Section Inspection - 03/10/2023 - MH4AX



Item No. 22	Insp. No. 1	Date: 03/10/23	Time: 14:17	Client's Job Ref DK0526 ADANA CONSTRUCTION	Weather Rain	Pre Cleaned Yes	PLR MH4AX
Operator ROBBIE DAVIN		Vehicle Not Specified		Camera Solo	Preset Length Not Specified	Legal Status Not Specified	Alternative ID 1

Town or Village:	Gorton, Manchester	Inspection Direction:	Downstream	Upstream Node:	MH4A
Road:	1 Hammerstone Road	Inspected Length:	5.65 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	5.65 m	Downstream Node:	MH5
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		
Comments:	MH4A NOT ON PLAN				
Recommendations:					

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m MH4A 0.00 0.00 1.88 5.65 MH5 Depth: m							
		0.00	MH	Start node, manhole, reference: MH4A	00:00:00		
		0.00	WL	Water level, 20% of the vertical dimension	00:00:00		
		1.88	OBZJ	Other obstacles at joint from 10 o'clock to 3 o'clock, 5% cross-sectional area loss: PLASTIC	00:00:11	MH4A DS MH5_1-88 m_141855	
		5.65	MHF	Finish node, manhole, reference: MH5: CULVERT MH	00:00:33	MH4A DS MH5_5-65 m_141930	

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

Section Pictures - 03/10/2023 - MH4AX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
22	Downstream	MH4AX	DK0526 ADANA	NRC WWS LTD



MH4A DS MH5_1-88m_141855.jpg, 00:00:11, 1.88 m
Other obstacles at joint from 10 o'clock to 3 o'clock, 5% cross-sectional area loss, PLASTIC



MH4A DS MH5_5-65m_141930.jpg, 00:00:33, 5.65 m
Finish node, manhole, reference: MH5, CULVERT MH

Section Inspection - 29/09/2023 - MH1X



Item No. 23	Insp. No. 2	Date: 29/09/23	Time: 8:22	Client's Job Ref N Kirton	Weather No Rain Or Snow	Pre Cleaned Yes	PLR MH1X
Operator ROBBIE DAVIN		Vehicle PJ210MA		Camera Crawler	Preset Length Not Specified	Legal Status Private Drain	Alternative ID Not Specified

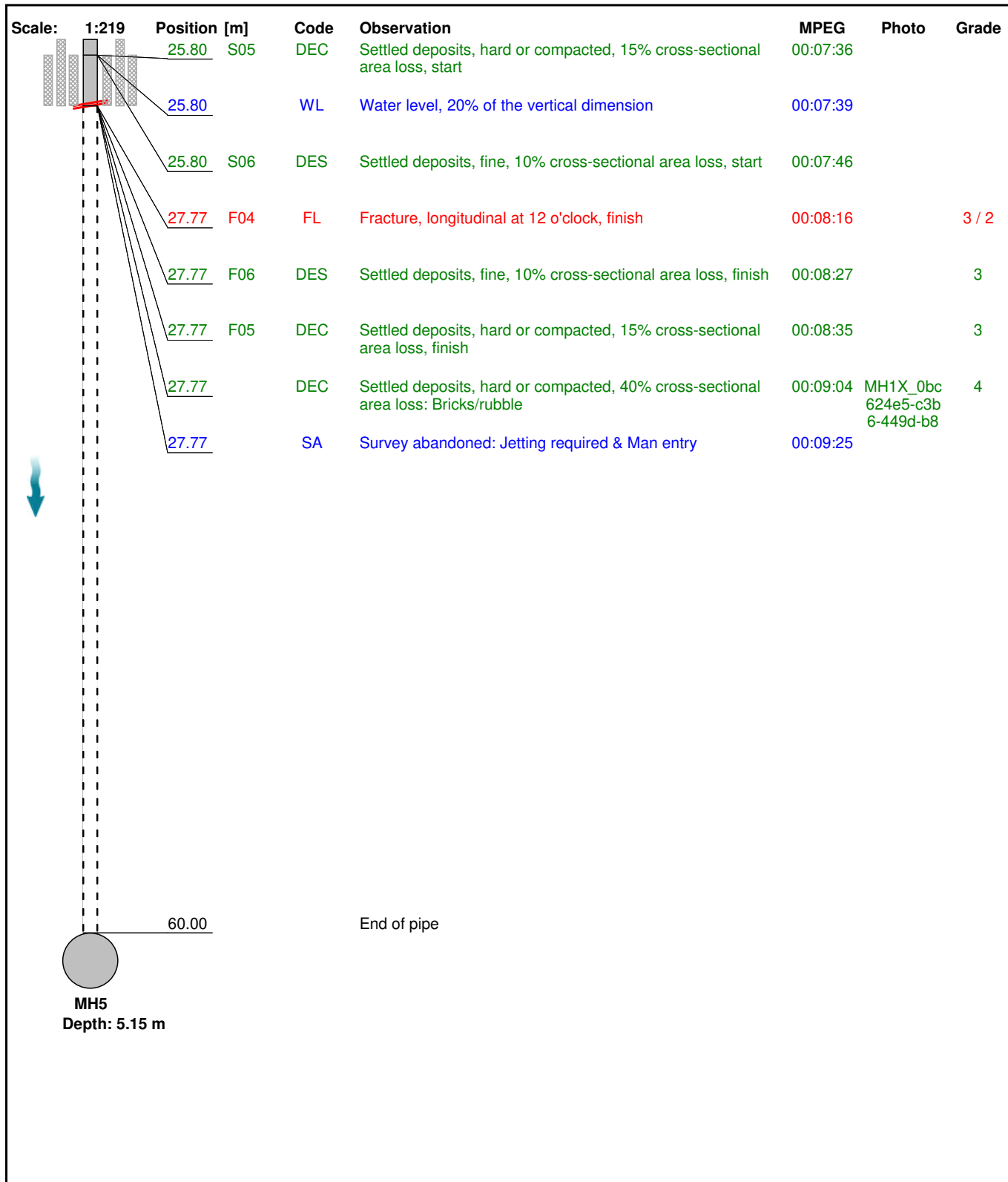
Town or Village:	Adana	Inspection Direction:	Downstream	Upstream Node:	MH1
Road:	Hammerstone Rd	Inspected Length:	27.77 m	Upstream Pipe Depth:	4.500 m
Location:	Property or buildings	Total Length:	60.00 m	Downstream Node:	MH5
Surface Type:	Asphalt Highway	Joint Length:		Downstream Pipe Depth:	5.150 m
Use:	Culverted watercourse			Pipe Shape:	Circular
Type of Pipe:	Gravity drain/sewer			Dia/Height:	750 mm
Flow Control:	No flow control			Pipe Material:	Concrete
Year Constructed:	Not Specified			Lining Type:	No Lining
Inspection Purpose:	Sample condition survey			Lining Material:	No Lining
Comments:	Overlap as jet wont go through debris coming upstream				
Recommendations:					

Scale:	1:219	Position [m]	Code	Observation	MPEG	Photo	Grade	
Depth: 4.50 m MH1 0.00 0.00 1.37 15.92 18.30 18.30 18.98 19.71 20.48 20.48 21.93 24.56 24.56								
		0.00	MH	Start node, manhole, reference: MH1	00:00:00			
		0.00	WL	Water level, 10% of the vertical dimension	00:00:07			
		1.37	S01	FL	Fracture, longitudinal at 12 o'clock, start	00:00:36	MH1X_e8 ddb24d-3b 20-4023-af	
		15.92	FL	Fracture, longitudinal at 7 o'clock	00:02:43	MH1X_57c 3ec85-d13 d-4d4f-ba5	3 / 2	
		18.30	F01	FL	Fracture, longitudinal at 12 o'clock, finish	00:03:29		3 / 2
		18.30	S02	FL	Fracture, longitudinal at 2 o'clock, start	00:03:37	MH1X_c25 94daa-fcaf -402d-bd6	
		18.98	FC	Fracture, circumferential from 3 o'clock to 9 o'clock	00:04:16	MH1X_b6f ec33a-22d 3-4af2-983	3 / 2	
		19.71	FM	Fractures, multiple from 11 o'clock to 2 o'clock	00:04:34	MH1X_56c 66650-322 1-4101-b6	4 / 2	
		20.48	F02	FL	Fracture, longitudinal at 2 o'clock, finish	00:04:57		3 / 2
		20.48	S03	FM	Fractures, multiple from 12 o'clock to 12 o'clock, start	00:05:06	MH1X_e0 97ea5e-e3 66-4a2c-9	
		21.93	CN	Connection other than junction at 9 o'clock, 150mm dia	00:05:56			
		24.56	F03	FM	Fractures, multiple from 12 o'clock to 12 o'clock, finish	00:06:47		4 / 2
		24.56	S04	FL	Fracture, longitudinal at 12 o'clock, start	00:06:57	MH1X_3d 9dbc05-6e 24-48b4-b	

Section Inspection - 29/09/2023 - MH1X



Item No. 23	Insp. No. 2	Date: 29/09/23	Time: 8:22	Client's Job Ref N Kirton	Weather No Rain Or Snow	Pre Cleaned Yes	PLR MH1X
Operator ROBBIE DAVIN		Vehicle PJ210MA		Camera Crawler	Preset Length Not Specified	Legal Status Private Drain	Alternative ID Not Specified



Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
7	200.0	25.3	1520.0	4.0	10	5.0	0.8	45.0	4.0

Section Pictures - 29/09/2023 - MH1X

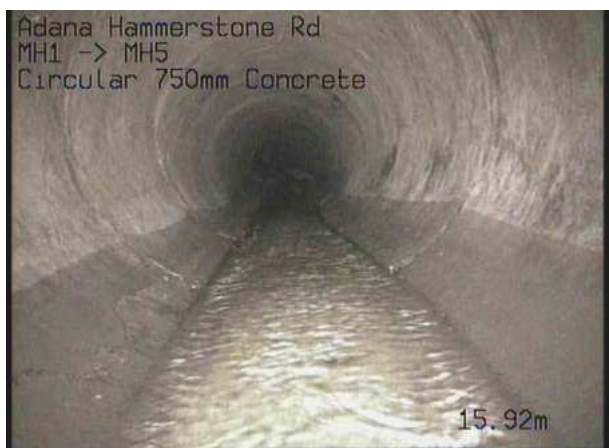
Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
23	Downstream	MH1X	N Kirton	NRC WWS Ltd



MH1X_e8ddb24d-3b20-4023-afa7-0dde4b1c943f_20230929_082331_720.jpg, 00:00:36, 1.37 m
Fracture, longitudinal at 12 o'clock, start



MH1X_3c9c27db-fb99-4094-9bf2-97fcb271940e_20230929_082340_048.jpg, 00:00:36, 1.37 m
Fracture, longitudinal at 12 o'clock, start



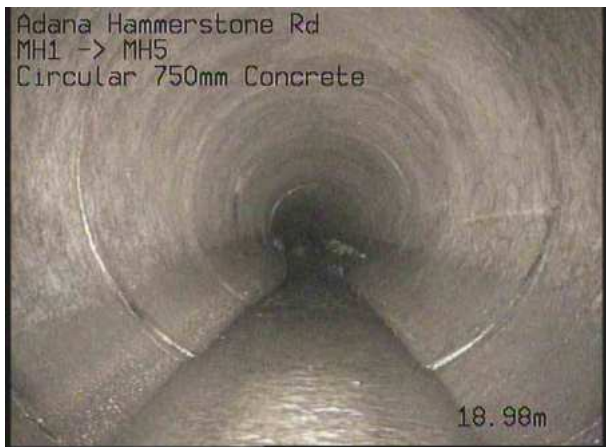
MH1X_57c3ec85-d13d-4d4f-ba57-254ecc38816c_20230929_082539_013.jpg, 00:02:43, 15.92 m
Fracture, longitudinal at 7 o'clock



MH1X_c2594daa-fcaf-402d-bd67-0043181de174_20230929_082633_141.jpg, 00:03:37, 18.30 m
Fracture, longitudinal at 2 o'clock, start

Section Pictures - 29/09/2023 - MH1X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
23	Downstream	MH1X	N Kirton	NRC WWS Ltd



MH1X_b6fec33a-22d3-4af2-9836-bf00c744b5a6_20230929_082711_786.jpg, 00:04:16, 18.98 m
Fracture, circumferential from 3 o'clock to 9 o'clock



MH1X_56c66650-3221-4101-b6ba-7d3f042609b4_20230929_082729_854.jpg, 00:04:34, 19.71 m
Fractures, multiple from 11 o'clock to 2 o'clock



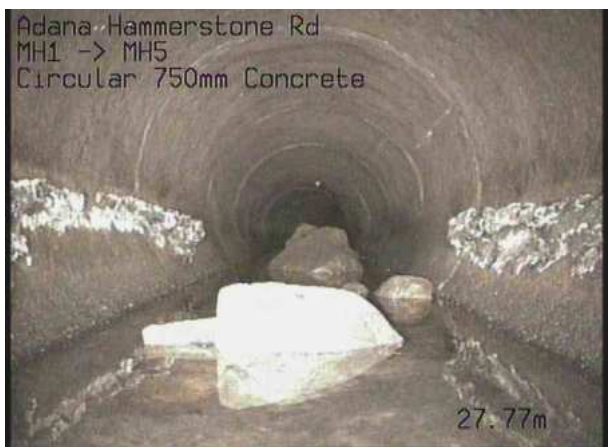
MH1X_e097ea5e-e366-4a2c-9436-68de88a165e2_20230929_082822_672.jpg, 00:05:06, 20.48 m
Fractures, multiple from 12 o'clock to 12 o'clock, start



MH1X_3d9dbc05-6e24-48b4-bd28-cb39d0947a73_20230929_082952_988.jpg, 00:06:57, 24.56 m
Fracture, longitudinal at 12 o'clock, start

Section Pictures - 29/09/2023 - MH1X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
23	Downstream	MH1X	N Kirton	NRC WWS Ltd



MH1X_0bc624e5-c3b6-449d-b80d-909b61ccf2e0_20230929_083200_349.jpg, 00:09:04, 27.77 m

Settled deposits, hard or compacted, 40% cross-sectional area loss, Bricks/rubble

WEB PROJECT
CLICK TO OPEN THIS SECTION

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	1	5.0	0.1	5.0	4.0

Section Pictures - 28/09/2023 - MH1X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
23	Upstream	MH1X	N Kirton	NRC WWS Ltd



MH1X_1e4fff8e-f462-4aec-b3d1-adf4e246590f_20230928_14
4150_540.jpg, 00:01:02, 0.00 m
Settled deposits, hard or compacted, 40% cross-sectional area
loss, Rocks & Bricks ahead

Section Inspection - 03/10/2023 - MH4X



Item No. 24	Insp. No. 1	Date: 03/10/23	Time: 14:12	Client's Job Ref DK0526 ADANA CONSTRUCTION	Weather Rain	Pre Cleaned Yes	PLR MH4X
Operator ROBBIE DAVIN		Vehicle Not Specified		Camera Solo	Preset Length Not Specified	Legal Status Not Specified	Alternative ID 1

Town or Village:	Gorton, Manchester	Inspection Direction:	Downstream	Upstream Node:	MH4
Road:	1 Hammerstone Road	Inspected Length:	17.14 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	17.14 m	Downstream Node:	MH5
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale: 1:149	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m MH4						
	0.00	MH	Start node, manhole, reference: MH4	00:00:00		
	0.00	WL	Water level, 20% of the vertical dimension	00:00:00		
	2.93	JN	Junction at 10 o'clock, 100mm dia	00:00:13		
	7.02	WL	Water level, 30% of the vertical dimension	00:00:27		
	8.23	S01 CUW	Loss of vision, camera under water, start	00:00:34		
	13.11	F01 CUW	Loss of vision, camera under water, finish	00:00:49		
	13.13	WL	Water level, 20% of the vertical dimension	00:00:50		
	16.69	JDM	Joint displaced, medium	00:01:10		MH4 DS MH5_16-6 9m_14155
	16.73	LL	Line deviates left	00:01:12		
	17.14	MHF	Finish node, manhole, reference: MH4A: UNCHARTED MH	00:02:08		MH4 DS MH5_17-1 4m_14171
Depth: m MH5						

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

Section Pictures - 03/10/2023 - MH4X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
24	Downstream	MH4X	DK0526 ADANA	NRC WWS LTD



MH4 DS MH5_16-69m_141551.jpg, 00:01:10, 16.69 m
Joint displaced, medium



MH4 DS MH5_17-14m_141711.jpg, 00:02:08, 17.14 m
Finish node, manhole, reference: MH4A, UNCHARTED MH

Section Inspection - 04/10/2023 - MH16X



Item No. 25	Insp. No. 21	Date: 04/10/23	Time: 8:56	Client's Job Ref DK0526 ADANA CONSTRUCTION	Weather Rain	Pre Cleaned Yes	PLR MH16X
Operator ROBBIE DAVIN		Vehicle Not Specified		Camera Solo	Preset Length Not Specified	Legal Status Not Specified	Alternative ID 1

Town or Village:	Gorton, Manchester	Inspection Direction:	Downstream	Upstream Node:	MH16
Road:	1 Hammerstone Road	Inspected Length:	21.11 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	21.11 m	Downstream Node:	MH15
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:183	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m MH16 0.00 IC Start node, inspection chamber, reference: MH16 00:00:00							
0.00 WL Water level, 5% of the vertical dimension 00:00:00							
21.11 ICF Finish node, inspection chamber, reference: MH15: IC INSTALLED AGAINST FLOW 00:01:12							
MH15 Depth: m							

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

Section Inspection - 04/10/2023 - ROD EYEX



Item No. 26	Insp. No. 1	Date: 04/10/23	Time: 9:16	Client's Job Ref DK0526 ADANA CONSTRUCTION	Weather Rain	Pre Cleaned Yes	PLR ROD EYEX
Operator ROBBIE DAVIN		Vehicle Not Specified		Camera Solo	Preset Length Not Specified	Legal Status Not Specified	Alternative ID 1

Town or Village:	Gorton, Manchester	Inspection Direction:	Upstream	Upstream Node:	ROD EYE
Road:	1 Hammerstone Road	Inspected Length:	7.67 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	7.67 m	Downstream Node:	MH16
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:67	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m MH16 0.00 0.00 0.00 5.08 6.68 7.67 ROD EYE Depth: m							
		0.00	IC	Start node, inspection chamber, reference: MH16	00:00:00		
		0.00	WL	Water level, 5% of the vertical dimension	00:00:01		
		0.00	LR	Line deviates right	00:00:03		
		5.08	JN	Junction at 10 o'clock, 100mm dia	00:00:21		
		6.68	LU	Line deviates up	00:00:29		
		7.67	REF	Finish node, rodding eye, reference: ROD EYE: NO CAP ON RE	00:00:34	MH16 US ROD EYE_7-67	

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

Section Pictures - 04/10/2023 - ROD EYEX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
26	Upstream	ROD EYEX	DK0526 ADANA	NRC WWS LTD



MH16 US ROD EYE_7-67m_091805.jpg, 00:00:34, 7.67 m
Finish node, rodding eye, reference: ROD EYE, NO CAP ON
RE

Section Inspection - 03/10/2023 - MH16X



Item No. 27	Insp. No. 1	Date: 03/10/23	Time: 9:10	Client's Job Ref DK0526 ADANA CONSTRUCTION	Weather Rain	Pre Cleaned Yes	PLR MH16X
Operator ROBBIE DAVIN		Vehicle Not Specified		Camera Solo	Preset Length Not Specified	Legal Status Not Specified	Alternative ID 1

Town or Village:	Gorton, Manchester	Inspection Direction:	Upstream	Upstream Node:	MH16
Road:	1 Hammerstone Road	Inspected Length:	8.23 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	8.23 m	Downstream Node:	MH17
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:72	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m MH17 0.00 IC Start node, inspection chamber, reference: MH17 00:00:00 0.00 WL Water level, 5% of the vertical dimension 00:00:01							
8.23 ICF Finish node, inspection chamber, reference: MH16 00:00:22 MH16 Depth: m							

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

WEB PROJECT
CLICK TO OPEN THIS SECTION

Section Pictures - 03/10/2023 - MH17X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
28	Downstream	MH17X	DK0526 ADANA	NRC WWS LTD



MH17 DS MH18_12-77m_094242.jpg, 00:00:47, 12.77 m
Finish node, inspection chamber, reference: MH18, DIP IN
CHAMBER

Section Inspection - 03/10/2023 - GULLYX



Item No. 29	Insp. No. 1	Date: 03/10/23	Time: 10:00	Client's Job Ref DK0526 ADANA CONSTRUCTION	Weather Rain	Pre Cleaned Yes	PLR GULLYX
Operator ROBBIE DAVIN		Vehicle Not Specified		Camera Solo	Preset Length Not Specified	Legal Status Not Specified	Alternative ID 1

Town or Village:	Gorton, Manchester	Inspection Direction:	Upstream	Upstream Node:	GULLY
Road:	1 Hammerstone Road	Inspected Length:	2.62 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	2.62 m	Downstream Node:	MH18
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:

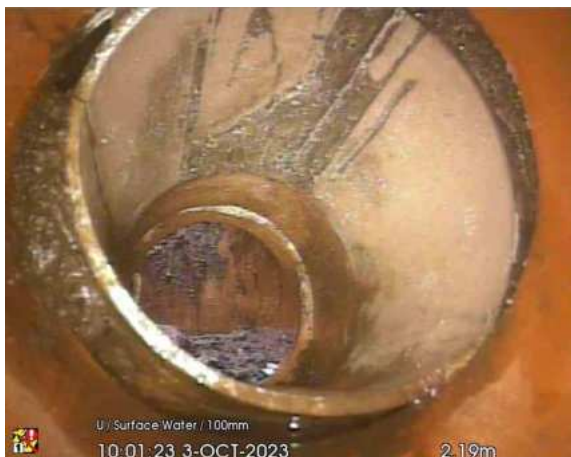
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m MH18							
		0.00	MH	Start node, manhole, reference: MH18	00:00:00		
		0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
		0.20	LR	Line deviates right	00:00:03		
		2.19	JDL	Joint displaced, large	00:00:14	MH18 US GULLY_2- 19m_1001	
		2.30	LL	Line deviates left	00:00:17		
		2.62	GYF	Finish node, gully, reference: GULLY	00:00:21		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

Section Pictures - 03/10/2023 - GULLYX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
29	Upstream	GULLYX	DK0526 ADANA	NRC WWS LTD



MH18 US GULLY_2-19m_100123.jpg, 00:00:14, 2.19 m
Joint displaced, large

Section Inspection - 03/10/2023 - MH18X



Item No. 30	Insp. No. 1	Date: 03/10/23	Time: 9:43	Client's Job Ref DK0526 ADANA CONSTRUCTION	Weather Rain	Pre Cleaned Yes	PLR MH18X
Operator ROBBIE DAVIN		Vehicle Not Specified		Camera Solo	Preset Length Not Specified	Legal Status Not Specified	Alternative ID 1

Town or Village:	Gorton, Manchester	Inspection Direction:	Downstream	Upstream Node:	MH18
Road:	1 Hammerstone Road	Inspected Length:	18.68 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	18.68 m	Downstream Node:	MH19
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale: 1:162	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m MH18 MH19 Depth: m						
0.00	IC	Start node, inspection chamber, reference: MH18	00:00:00			
0.00	WL	Water level, 5% of the vertical dimension	00:00:00			
0.00	IC	Start node, inspection chamber, reference: MH18	00:00:00			
0.00	WL	Water level, 5% of the vertical dimension	00:00:01			
11.36	JN	Junction at 9 o'clock, 100mm dia	00:00:35			
11.59	JN	Junction at 9 o'clock, 100mm dia	00:00:38			
17.35	WL	Water level, 20% of the vertical dimension	00:00:54			
18.68	MHF	Finish node, manhole, reference: MH19	00:01:15			

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

Section Inspection - 03/10/2023 - GULLYX



Item No. 31	Insp. No. 1	Date: 03/10/23	Time: 10:11	Client's Job Ref DK0526 ADANA CONSTRUCTION	Weather Rain	Pre Cleaned Yes	PLR GULLYX
Operator ROBBIE DAVIN		Vehicle Not Specified		Camera Solo	Preset Length Not Specified	Legal Status Not Specified	Alternative ID 1

Town or Village:	Gorton, Manchester	Inspection Direction:	Upstream	Upstream Node:	GULLY
Road:	1 Hammerstone Road	Inspected Length:	21.68 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	21.68 m	Downstream Node:	MH19
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale: 1:188	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m MH19						
	0.00	MH	Start node, manhole, reference: MH19	00:00:00		
	0.00	WL	Water level, 5% of the vertical dimension	00:00:01		
	0.30	LR	Line deviates right	00:00:07		
	1.89	JDM	Joint displaced, medium	00:00:16	MH19 US GULLY_1- 89m_1012	
	4.43	JN	Junction at 10 o'clock, 100mm dia	00:00:29		
	4.43	WL	Water level, 10% of the vertical dimension	00:00:31		
	13.34	WL	Water level, 40% of the vertical dimension	00:01:04		
	13.49	JN	Junction at 10 o'clock, 100mm dia	00:01:10		
	13.99	S01 CUW	Loss of vision, camera under water, start	00:01:17		
	21.68	F01 CUW	Loss of vision, camera under water, finish	00:02:15		
	21.68	SA	Survey abandoned: CUW AND NO VISUAL	00:02:17		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

Section Pictures - 03/10/2023 - GULLYX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
31	Upstream	GULLYX	DK0526 ADANA	NRC WWS LTD



MH19 US GULLY_1-89m_101245.jpg, 00:00:16, 1.89 m
Joint displaced, medium

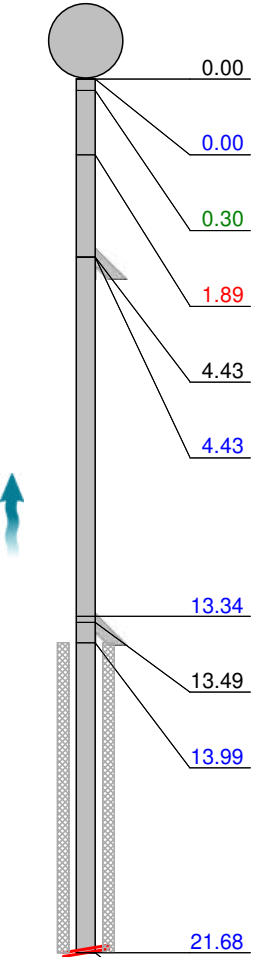
Section Inspection - 03/10/2023 - GULLYX



Item No. 32	Insp. No. 1	Date: 03/10/23	Time: 10:11	Client's Job Ref DK0526 ADANA CONSTRUCTION	Weather Rain	Pre Cleaned Yes	PLR GULLYX
Operator ROBBIE DAVIN		Vehicle Not Specified		Camera Solo	Preset Length Not Specified	Legal Status Not Specified	Alternative ID 1

Town or Village:	Gorton, Manchester	Inspection Direction:	Upstream	Upstream Node:	GULLY
Road:	1 Hammerstone Road	Inspected Length:	21.68 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	21.68 m	Downstream Node:	MH19
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:188	Position [m]	Code	Observation	MPEG	Photo	Grade																																																																								
Depth: m MH19  <table><tr><th>Position [m]</th><th>Code</th><th>Observation</th><th>MPEG</th><th>Photo</th><th>Grade</th></tr><tr><td>0.00</td><td>MH</td><td>Start node, manhole, reference: MH19</td><td>00:00:00</td><td></td><td></td></tr><tr><td>0.00</td><td>WL</td><td>Water level, 5% of the vertical dimension</td><td>00:00:01</td><td></td><td></td></tr><tr><td>0.30</td><td>LR</td><td>Line deviates right</td><td>00:00:07</td><td></td><td></td></tr><tr><td>1.89</td><td>JDM</td><td>Joint displaced, medium</td><td>00:00:16</td><td>MH19 US GULLY_1- 89m_1012</td><td></td></tr><tr><td>4.43</td><td>JN</td><td>Junction at 10 o'clock, 100mm dia</td><td>00:00:29</td><td></td><td></td></tr><tr><td>4.43</td><td>WL</td><td>Water level, 10% of the vertical dimension</td><td>00:00:31</td><td></td><td></td></tr><tr><td>13.34</td><td>WL</td><td>Water level, 40% of the vertical dimension</td><td>00:01:04</td><td></td><td></td></tr><tr><td>13.49</td><td>JN</td><td>Junction at 10 o'clock, 100mm dia</td><td>00:01:10</td><td></td><td></td></tr><tr><td>13.99</td><td>S01 CUW</td><td>Loss of vision, camera under water, start</td><td>00:01:17</td><td></td><td></td></tr><tr><td>21.68</td><td>F01 CUW</td><td>Loss of vision, camera under water, finish</td><td>00:02:15</td><td></td><td></td></tr><tr><td>21.68</td><td>SA</td><td>Survey abandoned: CUW AND NO VISUAL</td><td>00:02:17</td><td></td><td></td></tr></table>								Position [m]	Code	Observation	MPEG	Photo	Grade	0.00	MH	Start node, manhole, reference: MH19	00:00:00			0.00	WL	Water level, 5% of the vertical dimension	00:00:01			0.30	LR	Line deviates right	00:00:07			1.89	JDM	Joint displaced, medium	00:00:16	MH19 US GULLY_1- 89m_1012		4.43	JN	Junction at 10 o'clock, 100mm dia	00:00:29			4.43	WL	Water level, 10% of the vertical dimension	00:00:31			13.34	WL	Water level, 40% of the vertical dimension	00:01:04			13.49	JN	Junction at 10 o'clock, 100mm dia	00:01:10			13.99	S01 CUW	Loss of vision, camera under water, start	00:01:17			21.68	F01 CUW	Loss of vision, camera under water, finish	00:02:15			21.68	SA	Survey abandoned: CUW AND NO VISUAL	00:02:17		
Position [m]	Code	Observation	MPEG	Photo	Grade																																																																										
0.00	MH	Start node, manhole, reference: MH19	00:00:00																																																																												
0.00	WL	Water level, 5% of the vertical dimension	00:00:01																																																																												
0.30	LR	Line deviates right	00:00:07																																																																												
1.89	JDM	Joint displaced, medium	00:00:16	MH19 US GULLY_1- 89m_1012																																																																											
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4.43	WL	Water level, 10% of the vertical dimension	00:00:31																																																																												
13.34	WL	Water level, 40% of the vertical dimension	00:01:04																																																																												
13.49	JN	Junction at 10 o'clock, 100mm dia	00:01:10																																																																												
13.99	S01 CUW	Loss of vision, camera under water, start	00:01:17																																																																												
21.68	F01 CUW	Loss of vision, camera under water, finish	00:02:15																																																																												
21.68	SA	Survey abandoned: CUW AND NO VISUAL	00:02:17																																																																												

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

Section Pictures - 03/10/2023 - GULLYX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
32	Upstream	GULLYX	DK0526 ADANA	NRC WWS LTD



MH19 US GULLY_1-89m_101245.jpg, 00:00:16, 1.89 m
Joint displaced, medium

WEB PROJECT
CLICK TO OPEN THIS SECTION

Section Inspection - 04/10/2023 - USX



Item No. 34	Insp. No. 1	Date: 04/10/23	Time: 10:05	Client's Job Ref DK0526 ADANA CONSTRUCTION	Weather Rain	Pre Cleaned Yes	PLR USX
Operator ROBBIE DAVIN		Vehicle Not Specified		Camera Solo	Preset Length Not Specified	Legal Status Not Specified	Alternative ID 1

Town or Village:	Gorton, Manchester	Inspection Direction:	Upstream	Upstream Node:	US
Road:	1 Hammerstone Road	Inspected Length:	10.41 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	10.41 m	Downstream Node:	MH24
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Combined	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:91	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m MH24							
		0.00	MH	Start node, manhole, reference: MH24	00:00:00		
		0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
		6.54	FCJ	Fracture, circumferential at joint at 12 o'clock	00:00:35	MH24 US_6-54m _100726.j	
		6.88	WL	Water level, 20% of the vertical dimension	00:00:50		
		7.80	WL	Water level, 5% of the vertical dimension	00:01:06		
		9.71	LU	Line deviates up	00:01:15		
		9.73	LR	Line deviates right	00:01:14		
		10.41	SA	Survey abandoned: UNABLE TO PASS BENDS	00:01:26	MH24 US_10-41 m_100850	

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

Section Pictures - 04/10/2023 - USX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
34	Upstream	USX	DK0526 ADANA	NRC WWS LTD



MH24 US_6-54m_100726.jpg, 00:00:35, 6.54 m
Fracture, circumferential at joint at 12 o'clock



MH24 US_10-41m_100850.jpg, 00:01:26, 10.41 m
Survey abandoned, UNABLE TO PASS BENDS

Section Inspection - 04/10/2023 - RWGX



Item No. 35	Insp. No. 1	Date: 04/10/23	Time: 10:09	Client's Job Ref DK0526 ADANA CONSTRUCTION	Weather Rain	Pre Cleaned Yes	PLR RWGX
Operator ROBBIE DAVIN		Vehicle Not Specified		Camera Solo	Preset Length Not Specified	Legal Status Not Specified	Alternative ID 1

Town or Village:	Gorton, Manchester	Inspection Direction:	Upstream	Upstream Node:	RWG
Road:	1 Hammerstone Road	Inspected Length:	2.21 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	2.21 m	Downstream Node:	MH24
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m MH24 0.00 0.00 0.20 2.21 RWG Depth: m 0.00 0.00 0.20 2.21 MH WL LU GYF Start node, manhole, reference: MH24 Water level, 5% of the vertical dimension Line deviates up Finish node, gully, reference: RWG 00:00:00 00:00:00 00:00:05 00:00:24							

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

Section Inspection - 04/10/2023 - FWIC1X



Item No. 36	Insp. No. 29	Date: 04/10/23	Time: 10:43	Client's Job Ref DK0526 ADANA CONSTRUCTION	Weather Rain	Pre Cleaned Yes	PLR FWIC1X
Operator ROBBIE DAVIN		Vehicle Not Specified		Camera Solo	Preset Length Not Specified	Legal Status Not Specified	Alternative ID 1

Town or Village:	Gorton, Manchester	Inspection Direction:	Downstream	Upstream Node:	FWIC1
Road:	1 Hammerstone Road	Inspected Length:	7.51 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	7.51 m	Downstream Node:	MH25
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:66	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m FWIC1 0.00 IC Start node, inspection chamber, reference: FWIC1 00:00:00							
0.00 WL Water level, 10% of the vertical dimension 00:00:00							
6.19 WL Water level, 20% of the vertical dimension: DIP 00:00:27 FWIC1 DS MH25_6-1 9m_10450							
7.21 WL Water level, 10% of the vertical dimension 00:00:36							
7.21 LL Line deviates left 00:00:36							
7.21 LD Line deviates down 00:00:36							
MH25 7.51 MHF Finish node, manhole, reference: MH25 00:00:39							
Depth: m							

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

Section Pictures - 04/10/2023 - FWIC1X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
36	Downstream	FWIC1X	DK0526 ADANA	NRC WWS LTD



FWIC1 DS MH25_6-19m_104500.jpg, 00:00:27, 6.19 m
Water level, 20% of the vertical dimension, DIP

Section Inspection - 04/10/2023 - USX



Item No. 37	Insp. No. 1	Date: 04/10/23	Time: 10:17	Client's Job Ref DK0526 ADANA CONSTRUCTION	Weather Rain	Pre Cleaned Yes	PLR USX
Operator ROBBIE DAVIN		Vehicle Not Specified		Camera Solo	Preset Length Not Specified	Legal Status Not Specified	Alternative ID 1

Town or Village:	Gorton, Manchester	Inspection Direction:	Upstream	Upstream Node:	US
Road:	1 Hammerstone Road	Inspected Length:	24.33 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	24.33 m	Downstream Node:	MH25
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Pipe Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale: 1:211	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m MH25 0.00 0.00 4.07 5.41 7.04 24.33 MH WL MH LR WL MHF Start node, manhole, reference: MH25 Water level, 5% of the vertical dimension Start node, manhole, reference: UNDER CABIN Line deviates right: OUT OF MH Water level, 20% of the vertical dimension Finish node, manhole, reference: US UTL 00:00:00 00:00:01 00:00:16 00:00:25 00:00:35 00:01:47 MH25 US_24-33 m_102353						
US Depth: m						

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

Section Pictures - 04/10/2023 - USX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
37	Upstream	USX	DK0526 ADANA	NRC WWS LTD



MH25 US_24-33m_102353.jpg, 00:01:47, 24.33 m
Finish node, manhole, reference: US UTL

Section Inspection - 03/10/2023 - USX



Item No. 38	Insp. No. 1	Date: 03/10/23	Time: 10:33	Client's Job Ref DK0526 ADANA CONSTRUCTION	Weather Rain	Pre Cleaned Yes	PLR USX
Operator ROBBIE DAVIN		Vehicle Not Specified		Camera Solo	Preset Length Not Specified	Legal Status Not Specified	Alternative ID 1

Town or Village:	Gorton, Manchester	Inspection Direction:	Upstream	Upstream Node:	US
Road:	1 Hammerstone Road	Inspected Length:	0.00 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	0.00 m	Downstream Node:	MH26
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Pipe Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m							
MH26							
	0.00	MH	Start node, manhole, reference: MH26		00:00:01		
	0.00	WL	Water level, 5% of the vertical dimension		00:00:01		
	0.00	REM	General remark: CAPPED		00:00:02	MH26	
	0.00	SA	Survey abandoned: LINE CAPPED		00:00:05	US_0-00m_103515.j	

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

Section Pictures - 03/10/2023 - USX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
38	Upstream	USX	DK0526 ADANA	NRC WWS LTD



MH26 US_0-00m_103515.jpg, 00:00:02, 0.00 m
General remark, CAPPED

Section Inspection - 03/10/2023 - MH28X



Item No. 39	Insp. No. 1	Date: 03/10/23	Time: 10:18	Client's Job Ref DK0526 ADANA CONSTRUCTION	Weather Rain	Pre Cleaned Yes	PLR MH28X
Operator ROBBIE DAVIN		Vehicle Not Specified		Camera Solo	Preset Length Not Specified	Legal Status Not Specified	Alternative ID 1

Town or Village:	Gorton, Manchester	Inspection Direction:	Downstream	Upstream Node:	MH28
Road:	1 Hammerstone Road	Inspected Length:	18.67 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	18.67 m	Downstream Node:	MH26
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Pipe Material:	Cast iron		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale: 1:162	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m MH28 0.00 0.00 0.00 0.00 18.67 MH26 Depth: m						
	0.00	MH	Start node, manhole, reference: MH28	00:00:00		
	0.00	WL	Water level, 5% of the vertical dimension	00:00:01		
	0.00	MH	Start node, manhole, reference: MH28	00:00:01		
	0.00	WL	Water level, 5% of the vertical dimension	00:00:02		
	18.67	MHF	Finish node, manhole, reference: MH26	00:01:26		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

Section Inspection - 03/10/2023 - MH26X



Item No. 40	Insp. No. 1	Date: 03/10/23	Time: 10:36	Client's Job Ref DK0526 ADANA CONSTRUCTION	Weather Rain	Pre Cleaned Yes	PLR MH26X
Operator ROBBIE DAVIN		Vehicle Not Specified		Camera Solo	Preset Length Not Specified	Legal Status Not Specified	Alternative ID 1

Town or Village:	Gorton, Manchester	Inspection Direction:	Downstream	Upstream Node:	MH26
Road:	1 Hammerstone Road	Inspected Length:	15.66 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	15.66 m	Downstream Node:	MH27
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Pipe Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		
Comments:	MH27 UTR				
Recommendations:					

Scale:	1:136	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m MH26 0.00 MH Start node, manhole, reference: MH26 00:00:00 0.00 WL Water level, 10% of the vertical dimension 00:00:00 15.66 MHF Finish node, manhole, reference: MH27: UTR REVERSE 00:01:43 CCTV COMPLETED MH27 Depth: m							

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

Section Inspection - 03/10/2023 - RWP BX



Item No. 41	Insp. No. 1	Date: 03/10/23	Time: 10:24	Client's Job Ref DK0526 ADANA CONSTRUCTION	Weather Rain	Pre Cleaned Yes	PLR RWP BX
Operator ROBBIE DAVIN		Vehicle Not Specified		Camera Solo	Preset Length Not Specified	Legal Status Not Specified	Alternative ID 1

Town or Village:	Gorton, Manchester	Inspection Direction:	Upstream	Upstream Node:	RWP B
Road:	1 Hammerstone Road	Inspected Length:	15.65 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	15.65 m	Downstream Node:	MH28
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Cast iron		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:136	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m MH28							
		0.00	MH	Start node, manhole, reference: MH28	00:00:00		
		0.00	WL	Water level, 5% of the vertical dimension	00:00:01		
		15.65	LU	Line deviates up	00:01:40		
		15.65	SA	Survey abandoned: RWP B	00:01:41	MH28 US RWP B_15-65m	

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

Section Pictures - 03/10/2023 - RWP BX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
41	Upstream	RWP BX	DK0526 ADANA	NRC WWS LTD



MH28 US RWP B_15-65m_102753.jpg, 00:01:41, 15.65 m
Survey abandoned, RWP B

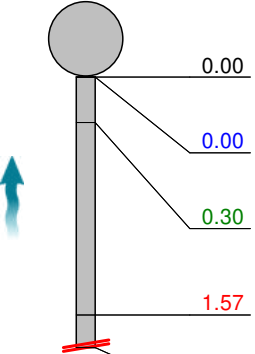
Section Inspection - 03/10/2023 - RWP AX



Item No. 42	Insp. No. 1	Date: 03/10/23	Time: 10:21	Client's Job Ref DK0526 ADANA CONSTRUCTION	Weather Rain	Pre Cleaned Yes	PLR RWP AX
Operator ROBBIE DAVIN		Vehicle Not Specified		Camera Solo	Preset Length Not Specified	Legal Status Not Specified	Alternative ID 1

Town or Village:	Gorton, Manchester	Inspection Direction:	Upstream	Upstream Node:	RWP A
Road:	1 Hammerstone Road	Inspected Length:	1.79 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	1.79 m	Downstream Node:	MH28
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade																									
Depth: m MH28  <table><tr><td>0.00</td><td>MH</td><td>Start node, manhole, reference: MH28</td><td>00:00:01</td><td></td></tr><tr><td>0.00</td><td>WL</td><td>Water level, 5% of the vertical dimension</td><td>00:00:02</td><td></td></tr><tr><td>0.30</td><td>LU</td><td>Line deviates up</td><td>00:00:06</td><td></td></tr><tr><td>1.57</td><td>OJM</td><td>Open joint, medium</td><td>00:00:32</td><td>MH28 US RWP A_1-57m_</td></tr><tr><td>1.79</td><td>SA</td><td>Survey abandoned: UNABLE TO PUSH ON</td><td>00:00:46</td><td></td></tr></table>								0.00	MH	Start node, manhole, reference: MH28	00:00:01		0.00	WL	Water level, 5% of the vertical dimension	00:00:02		0.30	LU	Line deviates up	00:00:06		1.57	OJM	Open joint, medium	00:00:32	MH28 US RWP A_1-57m_	1.79	SA	Survey abandoned: UNABLE TO PUSH ON	00:00:46	
0.00	MH	Start node, manhole, reference: MH28	00:00:01																													
0.00	WL	Water level, 5% of the vertical dimension	00:00:02																													
0.30	LU	Line deviates up	00:00:06																													
1.57	OJM	Open joint, medium	00:00:32	MH28 US RWP A_1-57m_																												
1.79	SA	Survey abandoned: UNABLE TO PUSH ON	00:00:46																													

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

Section Pictures - 03/10/2023 - RWP AX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
42	Upstream	RWP AX	DK0526 ADANA	NRC WWS LTD



MH28 US RWP A_1-57m_102307.jpg, 00:00:32, 1.57 m
Open joint, medium

Section Inspection - 22/08/2023 - G1X



Item No. 43	Insp. No. 1	Date: 22/08/23	Time: 14:32	Client's Job Ref Not Specified	Weather No Rain Or Snow	Pre Cleaned Yes	PLR G1X
Operator D.MORRISON		Vehicle PK20 Syx		Camera Coiler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Manchester	Inspection Direction:	Upstream	Upstream Node:	G1
Road:	Hammerstone Road	Inspected Length:	11.17 m	Upstream Pipe Depth:	
Location:	Road	Total Length:	11.17 m	Downstream Node:	MH31
Surface Type:	Concrete Footway	Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Investment planning	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:97	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m MH31 0.00 MH Start node, manhole, reference: MH31 00:00:00 0.00 WL Water level, 0% of the vertical dimension 00:00:02 2.57 JN Junction at 10 o'clock, 150mm dia 00:01:07 9.75 LU Line deviates up 00:01:53 10.64 GYF Finish node, gully, reference: G1 00:02:04 11.17 LL Line deviates left 00:02:02 G1 Depth: m							

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 22/08/2023 - G2X



Item No. 44	Insp. No. 1	Date: 22/08/23	Time: 14:44	Client's Job Ref Not Specified	Weather No Rain Or Snow	Pre Cleaned Yes	PLR G2X
Operator D.MORRISON		Vehicle PK20 Syx		Camera Coiler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Manchester	Inspection Direction:	Upstream	Upstream Node:	G2
Road:	Hammerstone Road	Inspected Length:	6.39 m	Upstream Pipe Depth:	
Location:	Road	Total Length:	6.39 m	Downstream Node:	MH32
Surface Type:	Concrete Footway	Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Pipe Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Investment planning	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:56	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m MH32 0.00 MH Start node, manhole, reference: MH32 00:00:00 0.00 WL Water level, 0% of the vertical dimension 00:00:01 2.00 FCJ Fracture, circumferential at joint from 12 o'clock to 12 o'clock: FROM HOLE 00:00:26 G2X_d3ff5865-e93a-4ec7-a84c 3 / 2 2.30 H Hole in drain or sewer at 12 o'clock 00:00:23 4 2.30 B Broken pipe from 4 o'clock to 8 o'clock 00:01:03 G2X_2be08d98-3f9c-4bdc-8a9a 4 2.30 D Deformed sewer or drain, 10% 00:01:08 G2X_747da227-0512-4bbe-84f2 4 / 3 3.74 FLJ Fracture, longitudinal at joint at 1 o'clock 00:01:49 G2X_ab06da00-461d-487a-906 3 / 2 4.59 LU Line deviates up 00:02:02 5.12 FC Fracture, circumferential from 12 o'clock to 12 o'clock 00:02:07 G2X_7d0afabf-d9d6-4a7d-873b 3 / 2 6.39 GYF Finish node, gully, reference: G2 00:02:21 G2 Depth: m							

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
6	240.0	56.3	360.0	4.0	4	2.0	0.8	5.0	3.0

Section Pictures - 22/08/2023 - G2X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
44	Upstream	G2X		DK0472



G2X_d3ff5865-e93a-4ec7-a84c-383277f4871d_20230822_14
4547_320.jpg, 00:00:26, 2.00 m
Fracture, circumferential at joint from 12 o'clock to 12 o'clock,
FROM HOLE



G2X_2be08d98-3f9c-4bdc-8a9a-d6455144f56f_20230822_14
4653_113.jpg, 00:01:03, 2.30 m
Broken pipe from 4 o'clock to 8 o'clock



G2X_747da227-0512-4bbe-84f2-efa2331e3276_20230822_14
4655_798.jpg, 00:01:08, 2.30 m
Deformed sewer or drain, 10%



G2X_ab06da00-461d-487a-9062-864238af2135_20230822_1
44730_122.jpg, 00:01:49, 3.74 m
Fracture, longitudinal at joint at 1 o'clock

Section Pictures - 22/08/2023 - G2X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
44	Upstream	G2X		DK0472



G2X_7d0afabf-d9d6-4a7d-873b-f683bedce10f_20230822_144
819_634.jpg, 00:02:07, 5.12 m

Fracture, circumferential from 12 o'clock to 12 o'clock

WEB PROJECT
CLICK TO OPEN THIS SECTION

Section Pictures - 22/08/2023 - MH31X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
45	Upstream	MH31X		DK0472



MH31X_56cae0d2-2bc6-4c28-862c-216765a5cfea_20230822_142250_192.jpg, 00:00:24, 0.90 m
Fracture, longitudinal at joint at 11 o'clock



MH31X_a7e1bd3b-4274-4a7a-8eac-753dbce24893_20230822_142250_429.jpg, 00:00:24, 0.90 m
Fracture, longitudinal at joint at 11 o'clock

WEB PROJECT
CLICK TO OPEN THIS SECTION

Section Pictures - 22/08/2023 - MH32X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
46	Upstream	MH32X		DK0472



MH32X_24bb07b8-93c2-4e3b-8492-e88e5f53e045_20230822
_123855_790.jpg, 00:00:15, 0.30 m
Joint displaced, large

Section Inspection - 22/08/2023 - MH33X



Item No. 47	Insp. No. 1	Date: 22/08/23	Time: 12:30	Client's Job Ref Not Specified	Weather No Rain Or Snow	Pre Cleaned Yes	PLR MH33X
Operator D.MORRISON		Vehicle PK20 Syx		Camera Coiler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Manchester	Inspection Direction:	Upstream	Upstream Node:	MH33
Road:	Hammerstone Road	Inspected Length:	15.26 m	Upstream Pipe Depth:	
Location:	Road	Total Length:	15.26 m	Downstream Node:	MH34
Surface Type:	Concrete Footway	Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Pipe Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Investment planning	Lining Material:	No Lining		

Comments:
Recommendations:

Scale: 1:133	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m MH34 0.00 0.00 2.97 5.53 5.53 8.25 12.62 15.26 MH33 Depth: m						
	0.00	MH	Start node, manhole, reference: MH34	00:00:00		
	0.00	WL	Water level, 10% of the vertical dimension	00:03:16		
	2.97	WL	Water level, 20% of the vertical dimension	00:00:15		
	5.53	WL	Water level, 100% of the vertical dimension	00:00:19		
	5.53	CUW	Loss of vision, camera under water	00:00:21		
	8.25	WL	Water level, 15% of the vertical dimension	00:00:33		
	12.62	WL	Water level, 5% of the vertical dimension	00:00:47		
	15.26	MHF	Finish node, manhole, reference: MH33	00:01:00		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 22/08/2023 - G5X



Item No. 48	Insp. No. 1	Date: 22/08/23	Time: 15:13	Client's Job Ref Not Specified	Weather No Rain Or Snow	Pre Cleaned Yes	PLR G5X
Operator D.MORRISON		Vehicle PK20 Syx		Camera Coiler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Manchester	Inspection Direction:	Upstream	Upstream Node:	G5
Road:	Hammerstone Road	Inspected Length:	6.25 m	Upstream Pipe Depth:	
Location:	Road	Total Length:	6.25 m	Downstream Node:	MH34
Surface Type:	Concrete Footway	Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Pipe Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Investment planning	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:55	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m MH34 0.00 0.00 5.32 6.25 G5 Depth: m MH WL LU GYF Start node, manhole, reference: MH34 Water level, 0% of the vertical dimension Line deviates up Finish node, gully, reference: G5: GULLY FULL REQUIRES ACCESS 00:00:00 00:00:02 00:00:22 00:00:32							

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 22/08/2023 - MH1 INTERNX



Item No. 49	Insp. No. 1	Date: 22/08/23	Time: 15:19	Client's Job Ref Not Specified	Weather No Rain Or Snow	Pre Cleaned Yes	PLR MH1 INTERNX
Operator D.MORRISON		Vehicle PK20 Syx		Camera Coiler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Manchester	Inspection Direction:	Upstream	Upstream Node:	MH1 INTERN
Road:	Hammerstone Road	Inspected Length:	10.70 m	Upstream Pipe Depth:	
Location:	Road	Total Length:	10.70 m	Downstream Node:	MH34
Surface Type:	Concrete Footway	Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Investment planning	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:93	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m MH34 0.00 0.00 10.70 MH1 INTERN Depth: m							
		0.00	MH	Start node, manhole, reference: MH34	00:00:00		
		0.00	WL	Water level, 0% of the vertical dimension	00:00:01		
		10.70	MHF	Finish node, manhole, reference: MH1 INTERN	00:00:54		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 22/08/2023 - G4X



Item No. 50	Insp. No. 1	Date: 22/08/23	Time: 15:05	Client's Job Ref Not Specified	Weather No Rain Or Snow	Pre Cleaned Yes	PLR G4X
Operator D.MORRISON		Vehicle PK20 Syx		Camera Coiler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Manchester	Inspection Direction:	Upstream	Upstream Node:	G4
Road:	Hammerstone Road	Inspected Length:	4.98 m	Upstream Pipe Depth:	
Location:	Road	Total Length:	4.98 m	Downstream Node:	MH34
Surface Type:	Concrete Footway	Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	125 mm		
Flow Control:	No flow control	Pipe Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Investment planning	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m MH34 0.00 0.00 2.95 3.82 4.98 G4 Depth: m MH WL JDL LU GYF Start node, manhole, reference: MH34 Water level, 0% of the vertical dimension Joint displaced, large Line deviates up Finish node, gully, reference: G4 00:00:00 00:00:01 00:00:49 00:01:03 00:01:12 G4X_9f59 69be-001d -4340-b98 1 / 4							

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
1	2.0	0.4	2.0	1.0	1	5.0	1.0	5.0	4.0

Section Pictures - 22/08/2023 - G4X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
50	Upstream	G4X		DK0472



G4X_9f5969be-001d-4340-b98b-1ba644824653_20230822_1
50615_700.jpg, 00:00:49, 2.95 m
Joint displaced, large

Section Inspection - 22/08/2023 - MH37X



Item No. 51	Insp. No. 1	Date: 22/08/23	Time: 11:58	Client's Job Ref Not Specified	Weather No Rain Or Snow	Pre Cleaned Yes	PLR MH37X
Operator D.MORRISON		Vehicle PK20 Syx		Camera Coiler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Manchester	Inspection Direction:	Downstream	Upstream Node:	MH37
Road:	Hammerstone Road	Inspected Length:	1.42 m	Upstream Pipe Depth:	
Location:	Road	Total Length:	1.42 m	Downstream Node:	MH36
Surface Type:	Concrete Footway	Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Investment planning	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
		0.00	MH	Start node, manhole, reference: MH37	00:00:00		
		0.00	WL	Water level, 10% of the vertical dimension	00:00:00		
		0.91	JDL	Joint displaced, large: SEALING RING VISIBLE	00:00:24	MH37X_2 a16aa07-3 1ea-4574-	1 / 4
		1.42	ICF	Finish node, inspection chamber, reference: MH36	00:00:55		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
1	2.0	1.4	2.0	1.0	1	5.0	3.5	5.0	4.0

Section Pictures - 22/08/2023 - MH37X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
51	Downstream	MH37X		DK0472



MH37X_2a16aa07-31ea-4574-9c90-f29b9d278d83_20230822_115907_537.jpg, 00:00:24, 0.91 m

Joint displaced, large, SEALING RING VISIBLE

Section Inspection - 22/08/2023 - MH38X



Item No. 52	Insp. No. 1	Date: 22/08/23	Time: 11:45	Client's Job Ref Not Specified	Weather No Rain Or Snow	Pre Cleaned Yes	PLR MH38X
Operator D.MORRISON		Vehicle PK20 Syx		Camera Coiler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Manchester	Inspection Direction:	Upstream	Upstream Node:	MH38
Road:	Hammerstone Road	Inspected Length:	12.35 m	Upstream Pipe Depth:	
Location:	Road	Total Length:	12.35 m	Downstream Node:	MH37
Surface Type:	Concrete Footway	Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Pipe Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Investment planning	Lining Material:	No Lining		

Comments:
Recommendations:

Scale: 1:107	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m MH37 0.00 0.01 2.63 12.35 MH38 Depth: m MH WL JDL MHF Start node, manhole, reference: MH36 Water level, 5% of the vertical dimension Joint displaced, large Finish node, manhole, reference: MH38 00:03:28 00:00:00 00:00:37 00:01:39						
1 / 4						

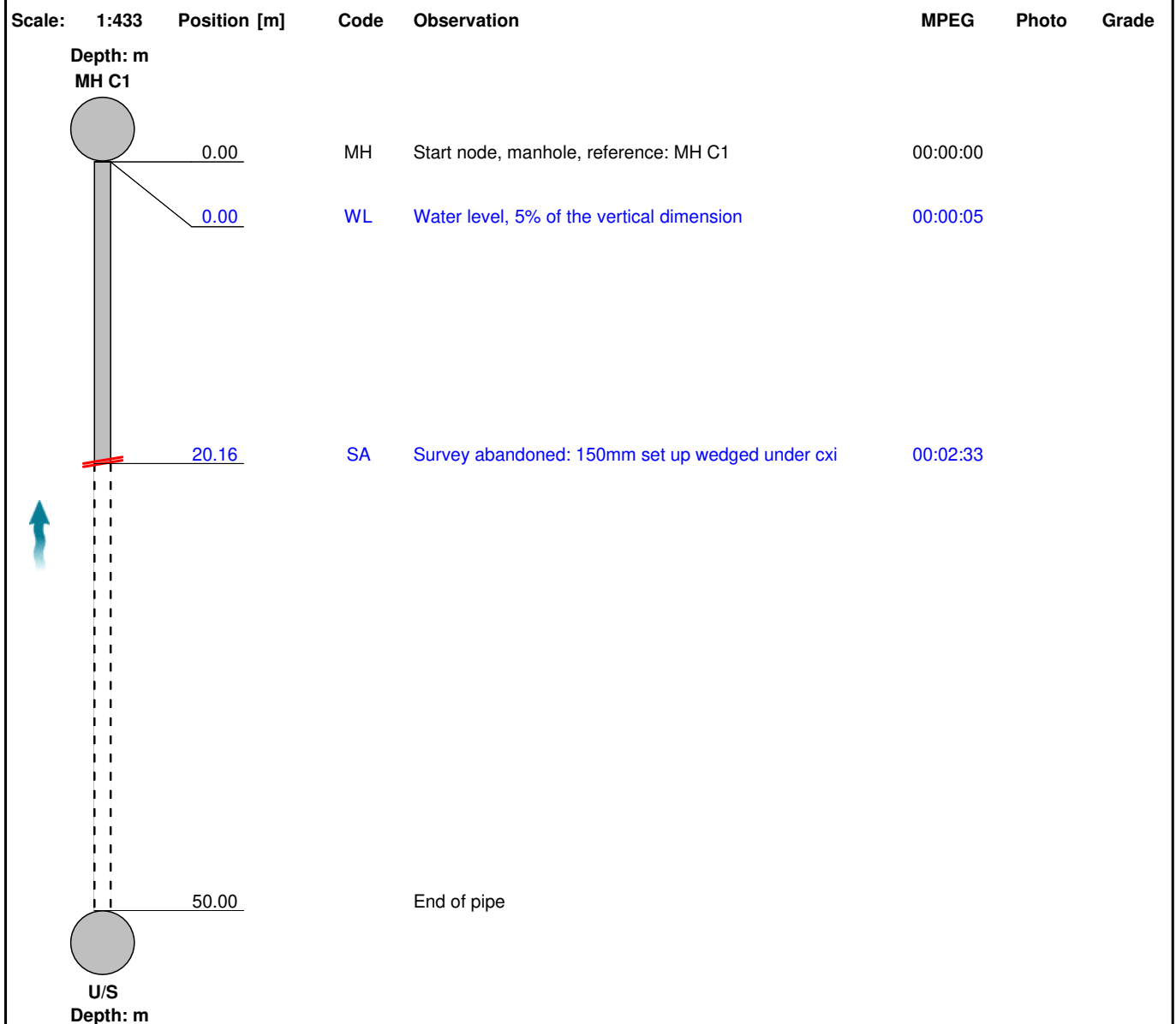
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
1	2.0	0.2	2.0	1.0	1	5.0	0.4	5.0	4.0

Section Inspection - 06/10/2023 - U/SX



Item No. 53	Insp. No. 1	Date: 06/10/23	Time: 10:14	Client's Job Ref N Kirton	Weather No Rain Or Snow	Pre Cleaned Yes	PLR U/SX
Operator ROBBIE DAVIN		Vehicle PJ210MA		Camera Pushrod	Preset Length Not Specified	Legal Status Private Drain	Alternative ID Not Specified

Town or Village:	Adana	Inspection Direction:	Upstream	Upstream Node:	U/S
Road:	Hammerstone Rd	Inspected Length:	20.16 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	50.00 m	Downstream Node:	MH C1
Surface Type:	Asphalt Highway	Joint Length:		Downstream Pipe Depth:	
Use:	Combined	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Pipe Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		
Comments:	150mm set up to pass CXI				
Recommendations:					



Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 29/09/2023 - FWMH02X



Item No. 54	Insp. No. 1	Date: 29/09/23	Time: 12:44	Client's Job Ref N Kirton	Weather No Rain Or Snow	Pre Cleaned Yes	PLR FWMH02X
Operator ROBBIE DAVIN		Vehicle PJ210MA		Camera Crawler	Preset Length Not Specified	Legal Status Private Drain	Alternative ID Not Specified

Town or Village:	Adana	Inspection Direction:	Downstream	Upstream Node:	FWMH02
Road:	Hammerstone Rd	Inspected Length:	16.91 m	Upstream Pipe Depth:	5.050 m
Location:	Property or buildings	Total Length:	16.91 m	Downstream Node:	NEW MH
Surface Type:	Asphalt Highway	Joint Length:		Downstream Pipe Depth:	4.470 m
Use:	Combined	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	450 mm		
Flow Control:	No flow control	Pipe Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale: 1:147	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: 5.05 m FWMH02						
	0.00	MH	Start node, manhole, reference: FWMH02: Hard standing in MH	00:00:00	FWMH02X_db9322b8-9ab3-4d	
	0.00	WL	Water level, 20% of the vertical dimension	00:00:30		
	0.76	S01	DEE Attached deposits, encrustation from 7 o'clock to 5 o'clock, 5% cross-sectional area loss, start	00:01:26	FWMH02X_d2215c8f-f3bb-4127	
	3.11	LR	Line deviates right	00:01:59		
	3.26	S02	FL Fracture, longitudinal at 12 o'clock, start	00:02:12	FWMH02X_d67fa18a-261f-42cc	
	4.78	F02	FL Fracture, longitudinal at 12 o'clock, finish	00:02:51		3 / 2
	8.87	CN	Connection other than junction at 3 o'clock, 150mm dia	00:04:00		
	9.68	DEC	Settled deposits, hard or compacted, 30% cross-sectional area loss: Concrete	00:04:32	FWMH02X_22d30264-c456-4a	4
	11.54	S03	FL Fracture, longitudinal at 12 o'clock, start	00:05:27	FWMH02X_633f7784-7216-437	
	12.29	FL	Fracture, longitudinal at 6 o'clock	00:06:02	FWMH02X_f3b58675-fd07-4717	3 / 2
	13.52	F03	FL Fracture, longitudinal at 12 o'clock, finish	00:06:31		3 / 2
	13.52	WL	Water level, 10% of the vertical dimension	00:06:35		
	16.51	OBBJ	Other obstacles, brick or masonry in invert at joint from 5 o'clock to 6 o'clock, 10% cross-sectional area loss	00:07:37	FWMH02X_88bea82c-ac8f-4bd	5
	16.91	F01	DEE Attached deposits, encrustation from 7 o'clock to 5 o'clock, 5% cross-sectional area loss, finish	00:07:56		3
	16.91	MHF	Finish node, manhole, reference: NEW MH	00:08:01		
NEW MH Depth: 4.47 m						

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
3	80.0	11.8	200.0	3.0	6	12.0	3.2	54.0	5.0

Section Pictures - 29/09/2023 - FWMH02X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
54	Downstream	FWMH02X	N Kirton	NRC WWS Ltd



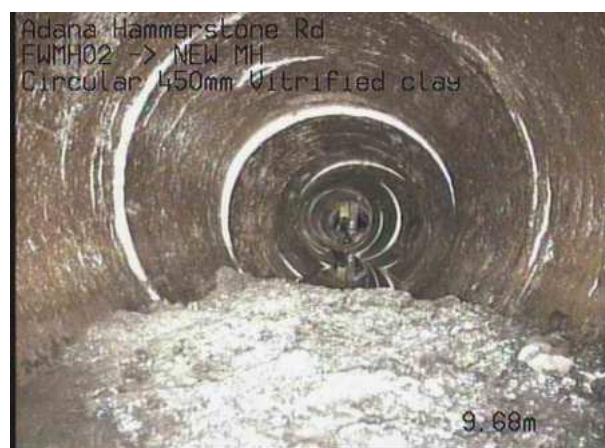
FWMH02X_db9322b8-9ab3-4d4a-8258-9b1e2f5a8361_20230929_124453_432.jpg, 00:00:00, 0.00 m
Start node, manhole, reference: FWMH02, Hard standing in MH



FWMH02X_d2215c8f-f3bb-4127-9b8e-fde0659868d8_20230929_124600_242.jpg, 00:01:26, 0.76 m
Attached deposits, encrustation from 7 o'clock to 5 o'clock, 5% cross-sectional area loss, start



FWMH02X_d67fa18a-261f-42cc-b472-823572ada9df_20230929_124648_735.jpg, 00:02:12, 3.26 m
Fracture, longitudinal at 12 o'clock, start



FWMH02X_22d30264-c456-4ae7-aeda-8c7f10495bb9_20230929_124915_902.jpg, 00:04:32, 9.68 m
Settled deposits, hard or compacted, 30% cross-sectional area loss, Concrete

Section Pictures - 29/09/2023 - FWMH02X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
54	Downstream	FWMH02X	N Kirton	NRC WWS Ltd



FWMH02X_633f7784-7216-4371-80bf-317db178d39e_20230929_125002_555.jpg, 00:05:27, 11.54 m
Fracture, longitudinal at 12 o'clock, start



FWMH02X_f3b58675-fd07-4717-8b15-d7f2aa510cb6_20230929_125036_729.jpg, 00:06:02, 12.29 m
Fracture, longitudinal at 6 o'clock



FWMH02X_88bea82c-ac8f-4bd6-ad0a-3f201e129369_20230929_125210_984.jpg, 00:07:37, 16.51 m
Other obstacles, brick or masonry in invert at joint from 5 o'clock to 6 o'clock, 10% cross-sectional area loss

Section Inspection - 29/06/2023 - EXMH06X



Item No. 56	Insp. No. 3	Date: 29/06/23	Time: 13:53	Client's Job Ref DK0363	Weather No Rain Or Snow	Pre Cleaned No	PLR EXMH06X
Operator JAME G		Vehicle PJ210MA		Camera Atex Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Manchester	Inspection Direction:	Downstream	Upstream Node:	EXMH06
Road:	Hammerstone Road	Inspected Length:	85.92 m	Upstream Pipe Depth:	
Location:	Other walkway	Total Length:	85.92 m	Downstream Node:	UU1902
Surface Type:	Concrete Footway	Joint Length:		Downstream Pipe Depth:	
Use:	Combined	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	750 mm		
Flow Control:	No flow control	Pipe Material:	Brick		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale: 1:527	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m EXMH06						
	0.00	MH	Start node, manhole, reference: EXMH06	00:00:00		
	0.00	WL	Water level, 10% of the vertical dimension	00:00:04		
	7.27	DER	Settled deposits, coarse, 5% cross-sectional area loss	00:00:36	EXMH06X _eed5b47 b-ed46-48	3
	13.44	DER	Settled deposits, coarse, 5% cross-sectional area loss	00:00:56	EXMH06X _a55d7d8 3-2f42-41d	3
	15.50	WL	Water level, 10% of the vertical dimension	00:01:07		
	16.74	CN	Connection other than junction at 9 o'clock, 750mm dia: Major Branch	00:01:13		
	19.18	OBB	Other obstacles, brick or masonry in invert from 7 o'clock to 8 o'clock, 15% cross-sectional area loss: Unable to jet due to bricks catching encrustation	00:01:51	EXMH06X _1122bd2 8-ce2d-4a	5
	19.18	REM	General remark: Needs to be jetted from the downstream node	00:01:51		
	20.02	OBB	Other obstacles, brick or masonry in invert at 6 o'clock, 10% cross-sectional area loss	00:02:00	EXMH06X _061fc6ce -03c3-410	5
	20.92	CN	Connection other than junction at 9 o'clock, 300mm dia	00:02:19		
	21.52	DEE	Attached deposits, encrustation from 5 o'clock to 7 o'clock, 15% cross-sectional area loss: Bricks are catching on this whilst jetting, unable to remove	00:02:25	EXMH06X _705dcd7 5-53f9-487	3
	35.12	DH	Deformed horizontally, 5%: Bricks moved causing an improper flow	00:04:43	EXMH06X _db1f7b05 -343a-492	2 / 2
	46.13	SCO	Shape changes to oval, new size(s), 750mm high, 800mm wide	00:05:32		
	53.59	S01 DEE	Attached deposits, encrustation from 8 o'clock to 4 o'clock, 5% cross-sectional area loss, start	00:06:00	EXMH06X _b2d37cc8 -baa6-423	
	58.49	CN	Connection other than junction at 9 o'clock, 300mm dia	00:06:18		

Section Inspection - 29/06/2023 - EXMH06X



Item No.	Insp. No.	Date:	Time:	Client's Job Ref	Weather	Pre Cleaned	PLR
56	3	29/06/23	13:53	DK0363	No Rain Or Snow	No	EXMH06X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
JAME G		PJ210MA		Atex Crawler	Not Specified	Not Specified	Not Specified

Scale:	1:527	Position [m]	Code	Observation	MPEG	Photo	Grade
		63.02	CN	Connection other than junction at 3 o'clock, 750mm dia: Major Branch	00:06:40		
		66.41	F01 DEE	Attached deposits, encrustation from 8 o'clock to 4 o'clock, 5% cross-sectional area loss, finish	00:07:32	EXMH06X_6b01fa59-4330-489	3
		85.24	CN	Connection other than junction at 9 o'clock, 300mm dia	00:08:52		
		85.24	LD	Line deviates down	00:08:52		
		85.92	MHF	Finish node, manhole, reference: UU1902: MH In View	00:09:28		
Depth: m							

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
1	20.0	0.2	20.0	2.0	7	10.0	0.6	53.0	5.0

Section Pictures - 29/06/2023 - EXMH06X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
56	Downstream	EXMH06X	DK0363	



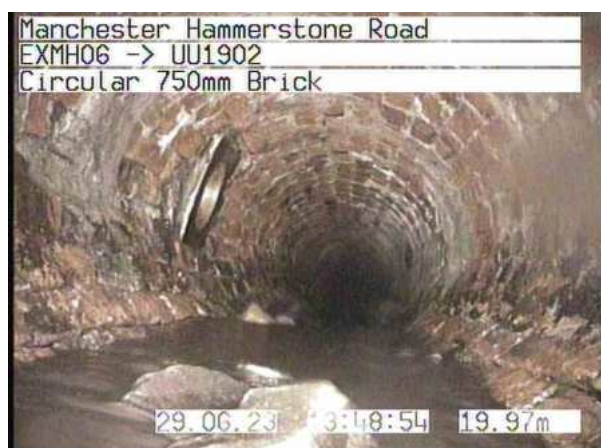
EXMH06X_eed5b47b-ed46-48a0-857e-6e44c42f80e7_20230704_092341_194.jpg, 00:00:36, 7.27 m
Settled deposits, coarse, 5% cross-sectional area loss



EXMH06X_a55d7d83-2f42-41d3-88d7-abd184265b1f_20230704_092346_033.jpg, 00:00:56, 13.44 m
Settled deposits, coarse, 5% cross-sectional area loss



EXMH06X_1122bd28-ce2d-4a72-aa66-86907662bf99_20230704_092352_690.jpg, 00:01:51, 19.18 m
Other obstacles, brick or masonry in invert from 7 o'clock to 8 o'clock, 15% cross-sectional area loss, Unable to jet due to bricks catching encrustation



EXMH06X_061fc6ce-03c3-4108-b9bc-a6451c6e9e0e_20230704_092358_690.jpg, 00:02:00, 20.02 m
Other obstacles, brick or masonry in invert at 6 o'clock, 10% cross-sectional area loss

Section Pictures - 29/06/2023 - EXMH06X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
56	Downstream	EXMH06X	DK0363	



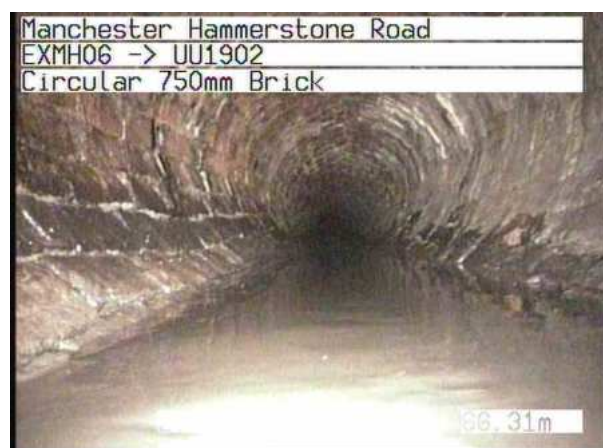
EXMH06X_705dcd75-53f9-4874-8eb6-03ca64d7bcdd_20230704_092405_783.jpg, 00:02:25, 21.52 m
Attached deposits, encrustation from 5 o'clock to 7 o'clock, 15% cross-sectional area loss, Bricks are catching on this whilst jetting, unable to remove



EXMH06X_db1f7b05-343a-4923-9bc0-7baf1208481a_20230704_092412_620.jpg, 00:04:43, 35.12 m
Deformed horizontally, 5%, Bricks moved causing an improper flow



EXMH06X_b2d37cc8-baa6-4236-ae01-568821f6fe03_20230704_092421_558.jpg, 00:06:00, 53.59 m
Attached deposits, encrustation from 8 o'clock to 4 o'clock, 5% cross-sectional area loss, start



EXMH06X_6b01fa59-4330-4891-a585-e5ad4d59d3d0_20230704_092429_813.jpg, 00:07:32, 66.41 m
Attached deposits, encrustation from 8 o'clock to 4 o'clock, 5% cross-sectional area loss, finish

Section Inspection - 04/10/2023 - MH25X



Item No. 57	Insp. No. 1	Date: 04/10/23	Time: 10:25	Client's Job Ref DK0526 ADANA CONSTRUCTION	Weather Rain	Pre Cleaned Yes	PLR MH25X
Operator ROBBIE DAVIN		Vehicle Not Specified		Camera Solo	Preset Length Not Specified	Legal Status Not Specified	Alternative ID 1

Town or Village:	Gorton, Manchester	Inspection Direction:	Downstream	Upstream Node:	MH25
Road:	1 Hammerstone Road	Inspected Length:	10.09 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	10.09 m	Downstream Node:	UU2801
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Combined	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Pipe Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:

Recommendations:

Scale:	1:88	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m MH25							
	0.00	MH	Start node, manhole, reference: MH25	00:00:00			
	0.00	WL	Water level, 5% of the vertical dimension	00:00:00			
	10.09	JN	Junction at 6 o'clock, 150mm dia: DROPSHAFT	00:01:27		MH25 DS UU2801_1 0-09m_10	
	10.09	MHF	Finish node, manhole, reference: UU2801	00:01:29			
UU2801 Depth: m							

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

Section Pictures - 04/10/2023 - MH25X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
57	Downstream	MH25X	DK0526 ADANA	NRC WWS LTD



MH25 DS UU2801_10-09m_102744.jpg, 00:01:27, 10.09 m
Junction at 6 o'clock, 150mm dia, DROP SHAFT

Section Inspection - 22/08/2023 - UUMH2708X



Item No. 58	Insp. No. 1	Date: 22/08/23	Time: 11:16	Client's Job Ref Not Specified	Weather No Rain Or Snow	Pre Cleaned Yes	PLR UUMH2708X
Operator D.MORRISON		Vehicle PK20 Syx		Camera Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Manchester	Inspection Direction:	Downstream	Upstream Node:	UUMH2708
Road:	Hammerstone Road	Inspected Length:	29.74 m	Upstream Pipe Depth:	
Location:	Road	Total Length:	29.74 m	Downstream Node:	UUMH2706
Surface Type:	Asphalt Highway	Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	450 mm		
Flow Control:	No flow control	Pipe Material:	Concrete		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Investment planning	Lining Material:	No Lining		

Comments:
Recommendations:

Scale: 1:258	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m UUMH2708 0.00 0.00 29.74 UUMH2706 Depth: m						
	0.00	MH	Start node, manhole, reference: UUMH2708	00:00:00		
	0.00	WL	Water level, 5% of the vertical dimension	00:03:34		
	29.74	MHF	Finish node, manhole, reference: UUMH2706	00:03:23		

Construction Features
Miscellaneous Features
Structural Defects
Service & Operational Observations

STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 22/08/2023 - EXFW1BX



Item No. 59	Insp. No. 1	Date: 22/08/23	Time: 11:00	Client's Job Ref Not Specified	Weather No Rain Or Snow	Pre Cleaned Yes	PLR EXFW1BX
Operator D.MORRISON		Vehicle PK20 Syx		Camera Coiler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Manchester	Inspection Direction:	Upstream	Upstream Node:	EXFW1B
Road:	Hammerstone Road	Inspected Length:	7.05 m	Upstream Pipe Depth:	
Location:	Road	Total Length:	7.05 m	Downstream Node:	UUMH2708
Surface Type:	Asphalt Highway	Joint Length:		Downstream Pipe Depth:	2.200 m
Use:	Combined	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Pipe Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Investment planning	Lining Material:	No Lining		

Comments:

Recommendations: PATCH / FULL LINER

Scale:	1:62	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: 2.20 m UUMH2708							
		0.00	MH	Start node, manhole, reference: UUMH2708	00:00:00		
		0.01	WL	Water level, 5% of the vertical dimension	00:00:00		
		3.09	FCJ	Fracture, circumferential at joint from 1 o'clock to 10 o'clock	00:00:46	EXFW1BX_4dbb72b 1-1295-45	3 / 2
		4.58	FL	Fracture, longitudinal at 4 o'clock	00:01:32	EXFW1BX_db974e7 2-2cce-4a	3 / 2
		4.58	FL	Fracture, longitudinal at 8 o'clock	00:01:38	EXFW1BX_5939447 d-403e-4a	3 / 2
		6.29	FCJ	Fracture, circumferential at joint from 10 o'clock to 1 o'clock	00:02:03	EXFW1BX_1f52a089 -6d68-439	3 / 2
		7.05	MHF	Finish node, manhole, reference: EXFW1B	00:03:29		
EXFW1B Depth: m							

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
4	80.0	22.7	160.0	3.0	4	2.0	0.6	4.0	3.0

Section Pictures - 22/08/2023 - EXFW1BX

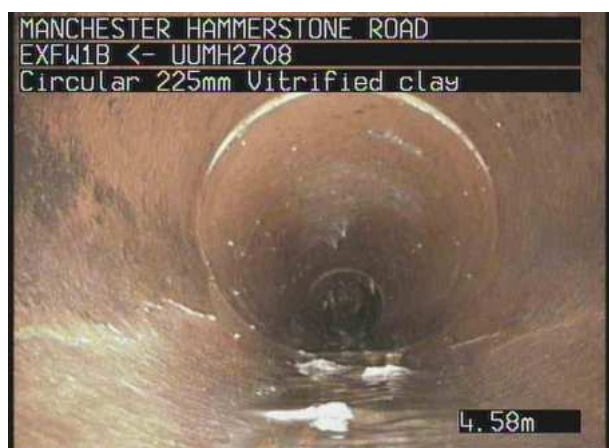
Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
59	Upstream	EXFW1BX		DK0472



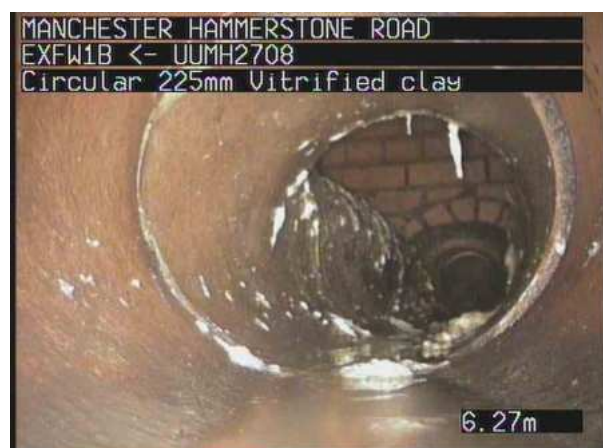
EXFW1BX_4dbb72b1-1295-4541-a76e-22125fdc992b_20230822_110208_059.jpg, 00:00:46, 3.09 m
Fracture, circumferential at joint from 1 o'clock to 10 o'clock



EXFW1BX_db974e72-2cce-4a01-80a6-9243de8bc956_20230822_110300_543.jpg, 00:01:32, 4.58 m
Fracture, longitudinal at 4 o'clock



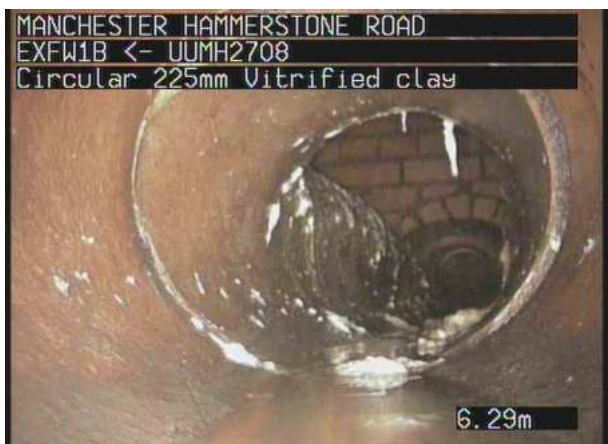
EXFW1BX_5939447d-403e-4a0f-ae56-577e9bebf2b4_20230822_110312_377.jpg, 00:01:38, 4.58 m
Fracture, longitudinal at 8 o'clock



EXFW1BX_1f52a089-6d68-439b-b6e4-a2acf425ded2_20230822_110353_274.jpg, 00:02:03, 6.29 m
Fracture, circumferential at joint from 10 o'clock to 1 o'clock

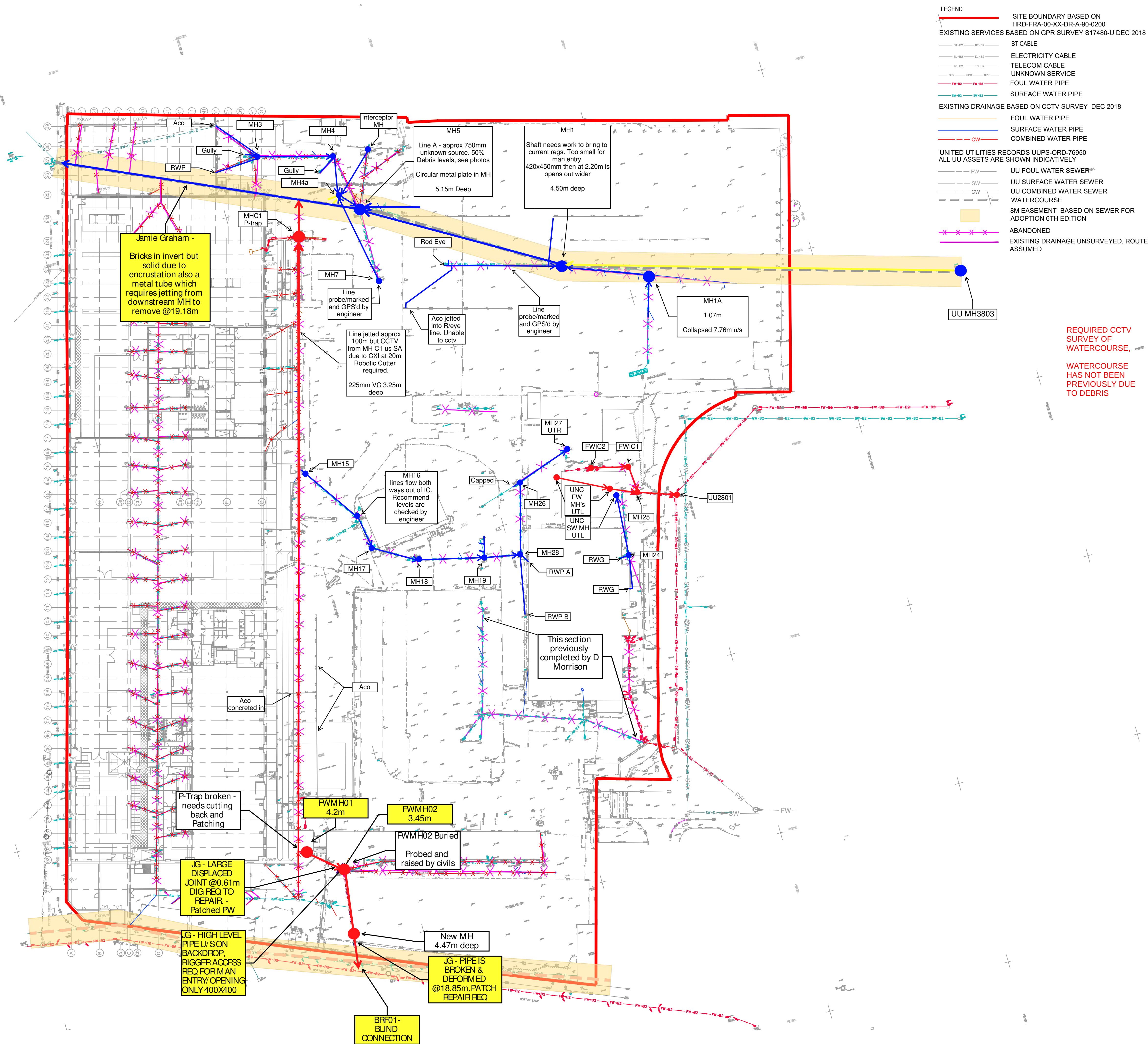
Section Pictures - 22/08/2023 - EXFW1BX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
59	Upstream	EXFW1BX		DK0472



EXFW1BX_9b32c581-e6a0-4426-97a8-5dfa9d785a36_20230
822_110456_184.jpg, 00:02:03, 6.29 m

Fracture, circumferential at joint from 10 o'clock to 1 o'clock



GENERAL NOTES:

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
 - DO NOT SCALE THIS DRAWING. ANY AMBIGUITIES, OMISSIONS AND ERRORS ON DRAWINGS SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IMMEDIATELY. ALL DIMENSIONS MUST BE CHECKED / VERIFIED ON SITE.
- DRAWING BASED ON:
TOPOGRAPHICAL SURVEY BY SEP S15724-T
GPR SURVEY BY SEP S17480-U DEC 2018 JUNE 2018
CCTV SURVEY BY SEP DRAINAGE SURVEYS LTD DEC 2018
ADDITIONAL CCTV SURVEY AUG 2020
EXISTING BUILDING SURVEY BY SEP S15724-GA JUNE 2018
UU RECORDS UUPS-ORD-76950
ARCHITECT RWP SKETCH PROVIDED 13.01.22

C01	CONSTRUCTION ISSUE	26.09.22	MW	MW
P02	UPDATED FOLLOWING CCTV SURVEY& RWPS POSITION PROVIDED ON ARCHITECT SKETCH	21.01.22	MW	MW
P01	STAGE 4 ISSUE	05.08.21	TH	MW
Rev:	Description:	Date:	By:	Chkd:



Merchant Exchange, 17-19 Whitworth Street West, Manchester, M1 5WG
0161 235 2384
manchester@curtins.com
www.curtins.com

Status:

STAGE 5

Project:

HAMMERSTONE ROAD

Dwg Title:

ASSUMED EXISTING DRAINAGE AND
ADDITIONAL SURVEY

Project No:	Size:	Date:	Drawn By:	Designed By:	Checked By:
068065	A1	05.08.21	TH	MW	MW
Scale:	1:500				
Project Code:	Originator:	Zone:	Level:	Type:	Discipline:
HRD - CUR - XX - 00 - DR - C - 92-514					

Rev:



Project

Project Name: DK0758 Adana Hammerstone rd Goreton Manchester 25-31 01 24
Project Date: 25/01/2024
Inspection Standard: MSCC5 Sewers & Drainage GB (SRM5 Scoring)





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DK0758 Adana Hammerstone rd Goreton Manchester 25-31 01 24		25/01/2024

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Section Item 2: MH1 > MH5 (MH1X)	3
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Section Item 4: UUMH3803 > MH1A (UUMH3803X)	6



Project Information

Project Name	Project Number	Project Date
DK0758 Adana Hammerstone rd Goreton Manchester 25-31 01 24		25/01/2024

Client

Company: ADANA CONSTRUCTION
Description: ADANA HOUSE
Contact: 140 HIGHER HILLGATE
Department: STOCKPORT
Street: SK1 3QT



Site

Company: ADANA CONSTRUCTION
Contact: DK0758 Adana Hammerstone rd Goreton Manchester 25-



Contractor

Company: NRCWWS
Contact: Derek Kearns
Department: Director
Street: unit D. Russell Road
Town or City: Rock Ferry
County: Wirral
Post Code: CH42 1LU
Phone: 0151 643 0800
Email: derek.kearns@nrcwws.co.uk



Section Inspection - 01/02/2024 - MH5X



Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
1	3	01/02/24	16:38	NRC WWS LTD	No Rain Or Snow	Yes	MH5X
Operator K.Graham		Vehicle PK68 XZZ		Camera Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Manchester	Inspection Direction:	Downstream	Upstream Node:	MH5
Road:	Hammerstone Rd	Inspected Length:	81.84 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	81.84 m	Downstream Node:	OFFSITE
Surface Type:	Asphalt Highway	Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular	Dia/Height:	600 mm
Type of Pipe:		Pipe Material:	Brick	Lining Type:	No Lining
Flow Control:	No flow control	Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:	Sample condition survey				

Comments:
Recommendations:

Scale: 1:486	Position [m]	Code	Observation	MPEG	Photo	Grade
	Depth: m MH5					
	0.00	MH	Start node, manhole, reference: MH5	00:00:00		
	0.00	WL	Water level, 5% of the vertical dimension	00:00:05		
	4.57	S01	DEE Attached deposits, encrustation from 01 o'clock to 11 o'clock, 5% cross-sectional area loss, start	00:01:30		
	14.87	WL	Water level, 10% of the vertical dimension	00:03:01		
	17.58	JX	Junction, defective at 09 o'clock, 450mm dia: lose bricks in jnction	00:04:39		
	19.34	DEZ	Attached deposits, other from 05 o'clock to 07 o'clock, 15% cross-sectional area loss: bricks and poss concrete in invert	00:05:39		3
	20.66	DEZ	Attached deposits, other from 05 o'clock to 07 o'clock, 15% cross-sectional area loss: concrete in invert	00:06:41		3
	20.93	CN	Connection other than junction at 09 o'clock, 225mm dia	00:06:59		
	28.16	IG	Infiltration, gushing at 09 o'clock: from joint on brick work	00:09:05		
	30.03	IG	Infiltration, gushing at 08 o'clock: from joint on brick work	00:09:42		
	32.38	FL	Fracture, longitudinal at 12 o'clock	00:10:11		4 / 2
	34.40	FL	Fracture, longitudinal at 12 o'clock	00:10:37		4 / 2
	41.23	D	Deformed sewer or drain, 10%	00:11:49		
	46.73	MB	Missing bricks at 11 o'clock	00:12:54		4
	55.46	CN	Connection other than junction at 09 o'clock, 300mm dia	00:14:36		

Section Inspection - 01/02/2024 - MH5X



Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
1	3	01/02/24	16:38	NRC WWS LTD	No Rain Or Snow	Yes	MH5X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
K.Graham		PK68 XZZ		Crawler	Not Specified	Not Specified	Not Specified

Scale:	1:486	Position [m]	Code	Observation	MPEG	Photo	Grade
		56.76	ID	Infiltration, dripping at 12 o'clock: from encrustation	00:15:02		
		60.28	JX	Junction, defective at 03 o'clock, 600mm dia: loose bricks	00:16:20		
		60.28	ID	Infiltration, dripping at 12 o'clock	00:16:28		
		62.80	F01 DEE	Attached deposits, encrustation from 1 o'clock to 11 o'clock, 5% cross-sectional area loss, finish	00:17:00		3
		62.80	S02 DEE	Attached deposits, encrustation from 12 o'clock to 05 o'clock, 5% cross-sectional area loss, start	00:17:18		
		81.84	LD	Line deviates down: sharp	00:20:16		
		81.84	CN	Connection other than junction at 09 o'clock, 225mm dia: in poss old chamber	00:20:41		
		81.84	F02 DEE	Attached deposits, encrustation from 12 o'clock to 5 o'clock, 5% cross-sectional area loss, finish	00:20:56		3
		81.84	MHF	Finish node, manhole, reference: OFFSITE: MH in view	00:21:16		
OFFSITE							
Depth: m							

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
3	120.0	3.9	320.0	4.0	6	4.0	2.0	164.0	3.0

WEB PROJECT
CLICK TO OPEN THIS SECTION

Section Pictures - 25/01/2024 - MH1X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
2	Upstream	MH1X	NRC WWS LTD	



MH1X_51f353b9-360a-4272-9ee9-2f0bf5299c1e_20240201_1
02217_287.jpg, 00:04:10, 14.00 m
Fracture, longitudinal at joint at 9 o'clock



MH1X_012cdac9-bc28-4f1c-bf1c-46af3d245a1e_20240201_1
01857_282.jpg, 00:03:13, 23.52 m
Attached deposits, grease at 08 o'clock, 5% cross-sectional
area loss, grease



MH1X_d86746ce-af0b-49ac-bf60-ade12876c7f0_20240201_1
02241_993.jpg, 00:04:23, 37.00 m
Fracture, longitudinal at joint at 8 o'clock



MH1X_cd383f44-f452-42c0-b12e-c7d4cdfae8e6_20240201_1
02311_947.jpg, 00:04:38, 40.00 m
Fracture, longitudinal at joint at 9 o'clock

Section Inspection - 25/01/2024 - MH1AX



Item No. 3	Insp. No. 1	Date 25/01/24	Time 9:25	Client's Job Ref NRC WWS LTD	Weather No Rain Or Snow	Pre Cleaned Yes	PLR MH1AX
Operator K.Graham		Vehicle PK68 XZZ		Camera Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Manchester	Inspection Direction:	Upstream	Upstream Node:	MH1A
Road:	Hammerstone Rd	Inspected Length:	38.00 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	46.53 m	Downstream Node:	MH1
Surface Type:	Asphalt Highway	Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:		Dia/Height:	750 mm		
Flow Control:	No flow control	Pipe Material:	Brick		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale: 1:403	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m MH1 0.00 MH Start node, manhole, reference: MH1 00:00:00 0.00 WL Water level, 5% of the vertical dimension 00:00:06 20.03 REM General remark: rope running through invert 00:01:50 26.67 MHF Finish node, manhole, reference: MH1A 00:02:34 MH1A Depth: m						

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
1	0.0	2.6	120.0	4.0	1	0.0	0.0	1.0	1.0

Section Inspection - 25/01/2024 - UU MH3803X



Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
4	2	25/01/24	13:24	NRC WWS LTD	No Rain Or Snow	Yes	UU MH3803X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
K.Graham		PK68 XZZ		Crawler	Not Specified	Not Specified	Not Specified

Town or Village:	Manchester	Inspection Direction:	Upstream	Upstream Node:	UU MH3803
Road:	Hammerstone Rd	Inspected Length:	10.68 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	10.68 m	Downstream Node:	MH1A
Surface Type:	Asphalt Highway	Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:		Dia/Height:	750 mm		
Flow Control:	No flow control	Pipe Material:	Brick		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Sample condition survey	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:93	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m MH1A 0.00 0.00 6.73 10.68 UU MH3803 Depth: m							
		0.00	MH	Start node, manhole, reference: MH1A	00:00:00		
		0.00	WL	Water level, 5% of the vertical dimension	00:00:05		
		6.73	H	Hole in drain or sewer at 12 o'clock: MISSING BRICK	00:01:37	UU MH3803X _7de389c	
		10.68	MHF	Finish node, manhole, reference: UU MH3803	00:03:11		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Pictures - 25/01/2024 - UU MH3803X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
4	Upstream	UU MH3803X	NRC WWS LTD	



UU

MH3803X_7de389c4-e6ec-4690-9aac-c2fc7a252f20_20240201_170816_726.jpg, 00:01:37, 6.73 m

Hole in drain or sewer at 12 o'clock, MISSING BRICK

