

APPENDIX C – SITE PHOTOGRAPHS

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APPENDIX D – DRAINAGE INVESTIGATIONS

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IF THIS AREA IS DEVELOPED IT SHOULD
BE ON A SEPERATE SYSTEM WITH THE
FOUL FLOWS GOING TO MANHOLE 973 (ON SHEET 50)
AS THIS BYPASSES THE SSO

50

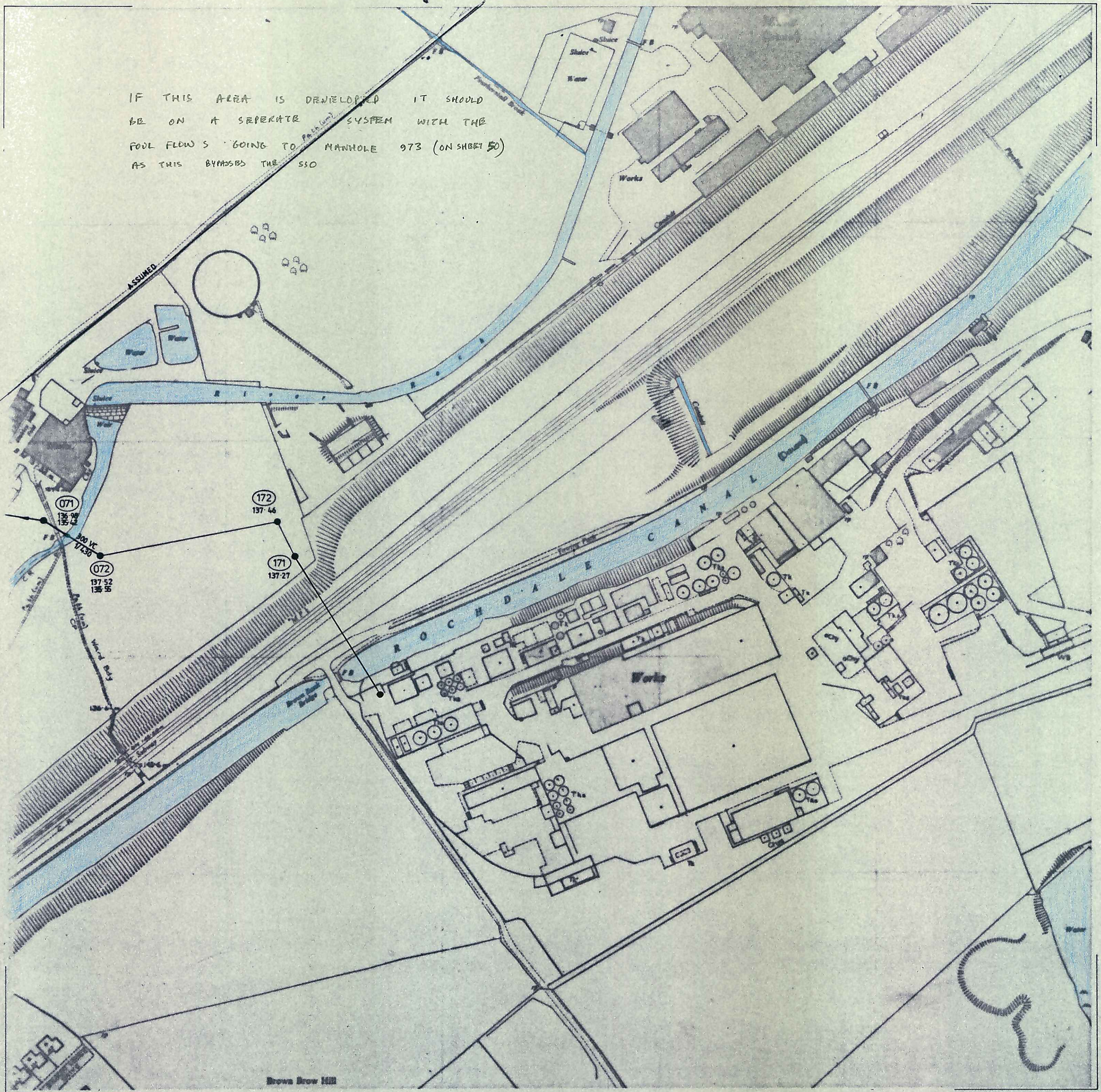
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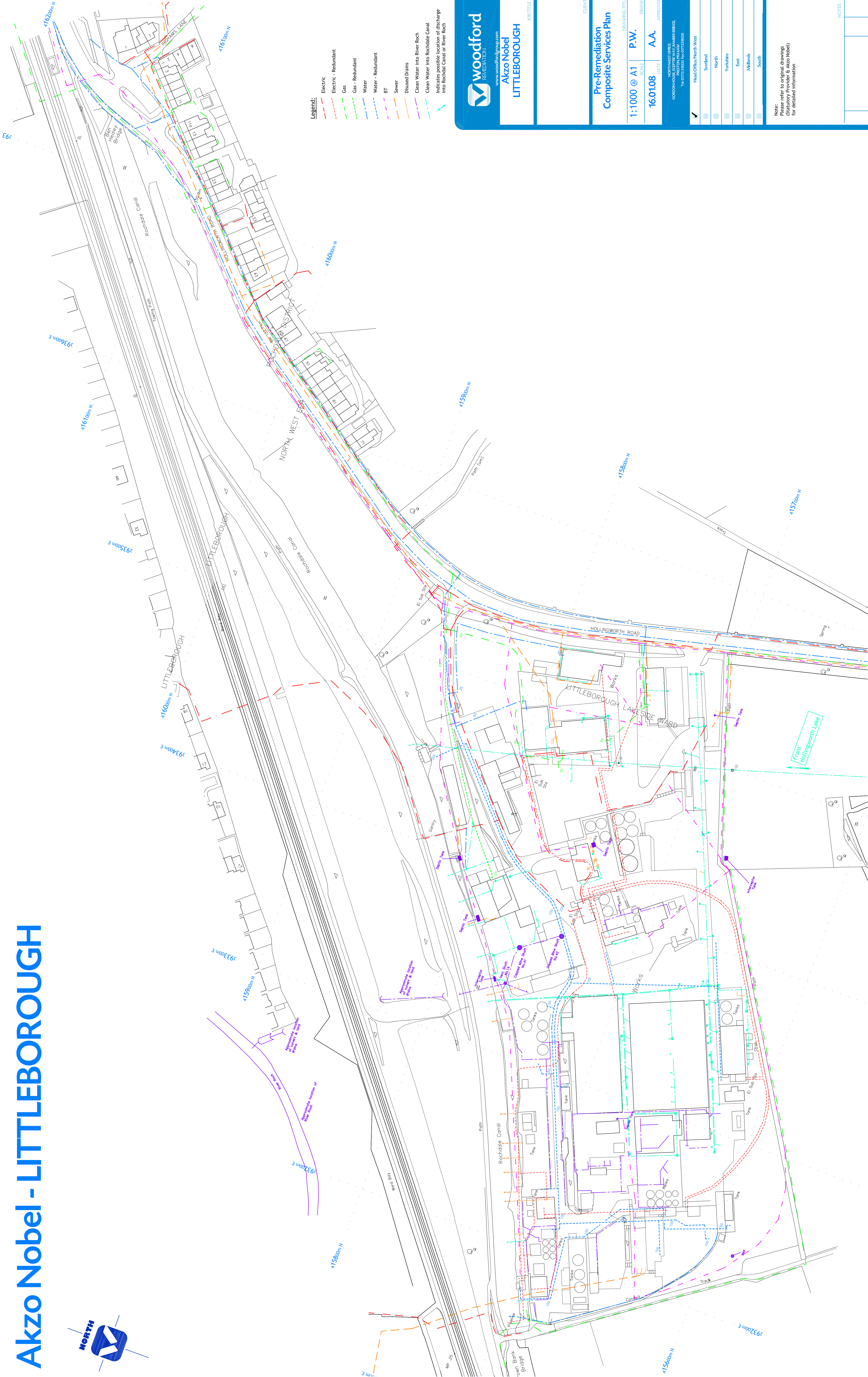
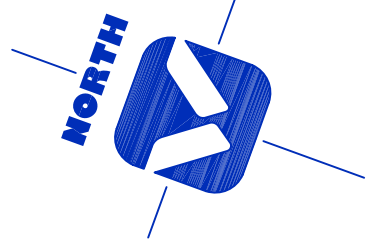
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9315NW

67



Akzo Nobel - LITTLEBOROUGH



- Legend:**
- Electric
 - Electric - Redundant
 - Gas
 - Gas - Redundant
 - Water
 - Water - Redundant
 - BT
 - Sewer
 - Disused Drains
 - Clean Water into River Roch
 - Clean Water into Rochdale Canal
 - Indicates possible location of discharge into Rochdale Canal or River Roch



www.woodfordrem.com
Akzo Nobel
LITTLEBOROUGH

JOB TITLE

CLIENT
**Pre-Remediation
Composite Services Plan**

DRAWING TITLE
1:1000 @ A1
SCALE
16.01.08
DATE
AA
APPROVED

WOODFORD REMEDIATION
GORDON HOUSE, SCOTCH WAY, LAMBERT BARDE,
LEICESTER, LE19 5JH
Tel: 01772 34555 Fax: 01772 34550

☒	Head Office/North West
☐	Scotland
☐	North
☐	Yorkshire
☐	East
☐	Midlands
☐	South

Note:
Please refer to original drawings
for details of the Akzo Nobel
for detailed information

NOTES



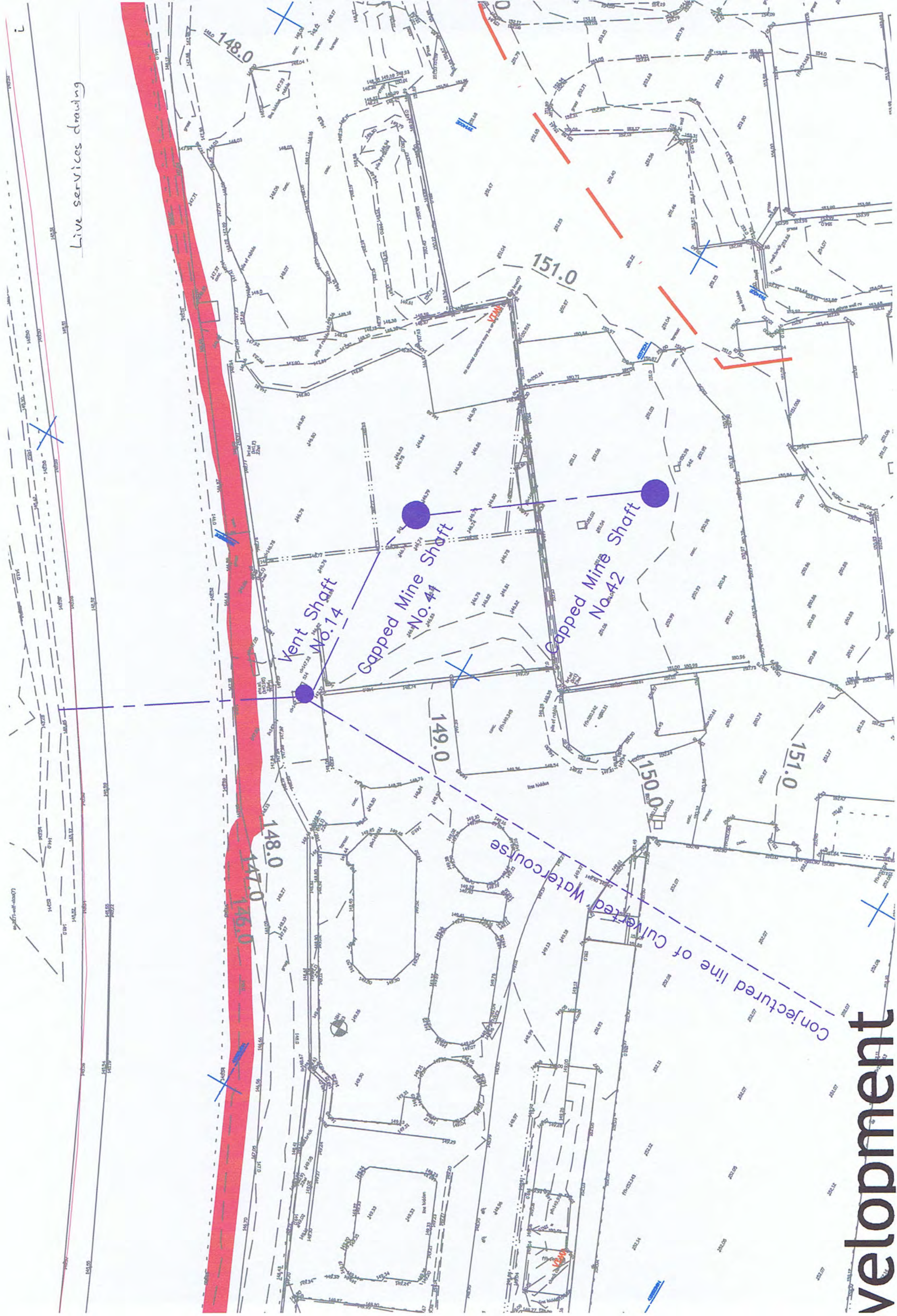


Akzo Nobel LITTLEBOROUGH	JOB TITLE SOCIAL
Proposed Landform above Shafts 41 & 42	DATE 28-03-08
	DRAWING A.R.
	A.A

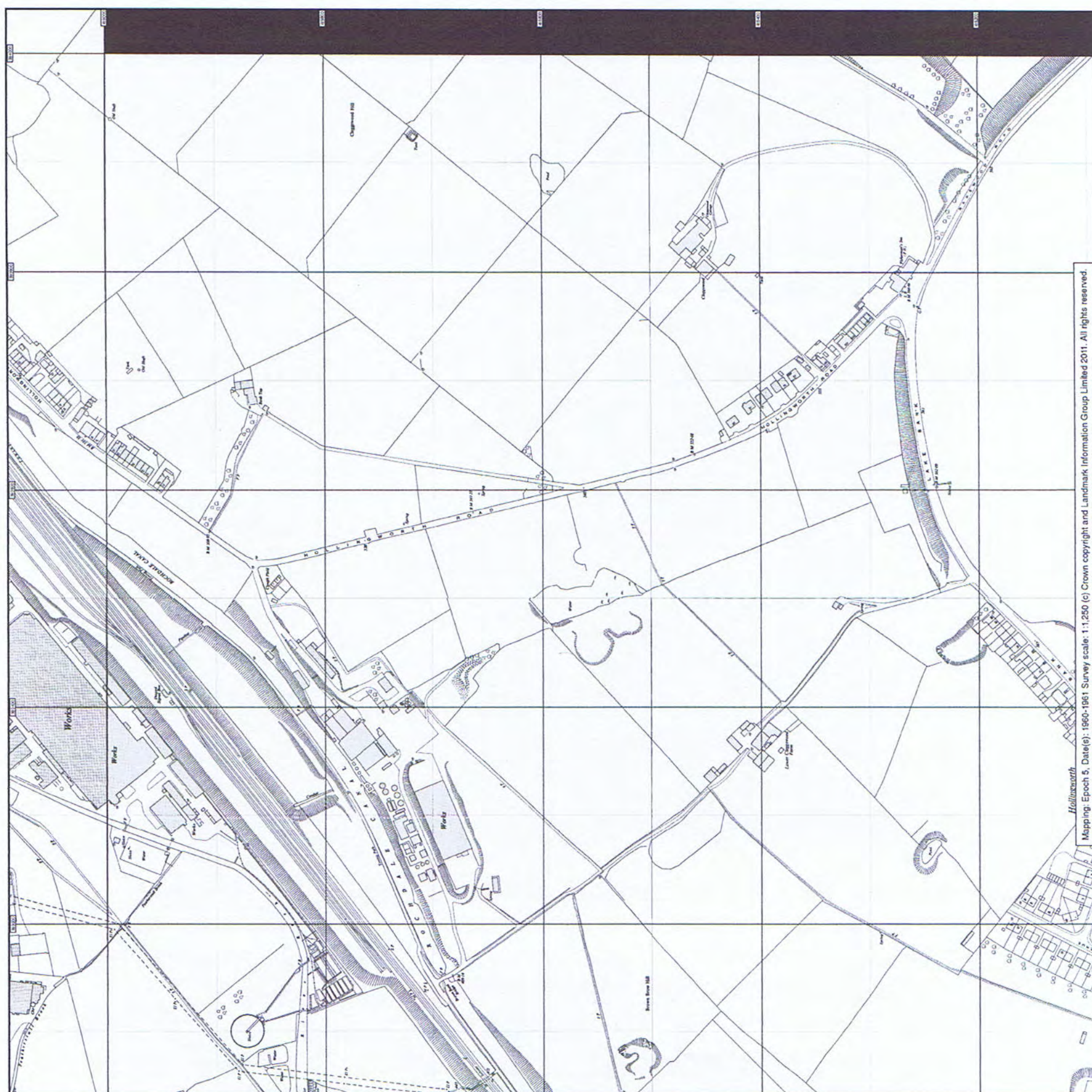
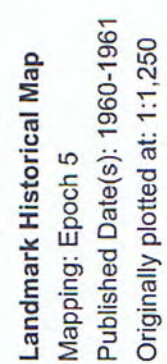
[illegible]

QUESTIONS	ANSWERS	ALL
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Live services drawing



development





Drainrite Environmental Services Limited
Suite 11, Kirkless House, Kirkless Industrial Estate, Cale Lane, Wigan. WN2 1HF.
Tel. (01942) 230023 (24 Hours). Fax. (01942) 230024.

Report for the Man Entry Chamber Inspection of
SW MH S14.

Site : Former Akzo Nobel Site, Hollingworth Road,
Littleborough, Rochdale.

Client : Woodford Group / Countryside
Properties.

Document Ref : GL1382/MAB

13 August 2015

Compiled By : Michael A. Bent

General

A Man Entry Inspection Survey of the MH Chamber was carried out on 20 July 2015.

The inspection was carried out in accordance with the 2013 Confined Spaces Regulations as detailed in the Method Statement.

The weather conditions at the site on the day of the inspection were dry and warm. No rain was predicted at all that day.

Initial Gas Testing of the chamber showed a low level of Oxygen (Approx 15%). Clearance of the Pond Outlets allowed the water levels to drop and for the atmosphere in the chamber to move and be replenished. After approximately 2hrs, the Oxygen level has increased to the correct level of 20.9%.

Basic Construction

A drawing showing a section through the chamber and each landing level plan is attached. The drawing does not include the hand rails and ladders for clarity.

The chamber is constructed from PCC Rings and PCC bolted sections.

There are 2 No. light duty grade metal access covers on the chamber.

One 600x600mm square access for Man Entry purposes.

One 1200x1200mm double cover which allows straight down access to the base of the chamber for works.

There are 3 landing levels in the chamber and the 600x600mm, man entry access holes in each level are staggered from each other.

Access from the Surface to Level 1 is via. plastic coated, studded metal foot irons which are fixed into the MH ring. There are 2 No., 1m deep, 3m diameter MH rings at the first level. There is a mastic seal between the 2 MH rings.

There is a GRP, bolted safety handrail fitted at Level 1 which has a gap in the middle. The gap is crossed and secured with removable stainless chains.

Access from Level 1 to Level 2 is via. a stainless ladder bolted into the chamber wall.

The construction at Level 2 down to the base of the chamber is via. bolted PCC sections. A 900mm high, cast in-situ wall has been built in the corner of the chamber. The position and size of the wall is indicated on the drawing. This wall forms a small pocket chamber which has a 225mm outlet pipe. The outlet pipe discharges into the sump below. The base of this pocket chamber is benched to allow water to drain into the outlet pipe.

There is a Stainless, bolted safety Handrail fitted at Level 2. Two removable safety chains protect the ladder access to Level 3.

Access from Level 2 to Level 3 is via. a stainless ladder bolted into the chamber wall. The construction at Level 3 is via. bolted PCC sections and the chamber is split into two halves.

In one half, a 375mm diameter, SW pipe flows through the base of the chamber and the base is benched around this pipe.

In the opposite half of the chamber is a sump, into which flows a 300mm SW pipe and the 225mm pipe from the pocket chamber at level 2 above. The 300mm pipe was not flowing at the time of the inspection.

Separating the two halves is a 500mm high, 290mm wide wall (measured from the top of the 375mm pipe benching) with a 400mm wide, 300mm deep notch cut into it at the mid point. The water level in the sump side of the chamber is governed by the bottom of the notch in the wall. When flow enters the chamber from the 300mm inlet pipe, the level in the sump side of the chamber rises and overflows the notch into the 375mm pipe.

There is a stainless ladder fixed to the separating wall which allows access into the sump.

Condition Report

Surface Level

There was some build-up of surface vegetation which was cut back from the chamber slab prior to carrying out the inspection.

The chamber access covers are lightweight in duty and non locking. Consideration should be given to replacing them with heavier duty, locking types to prevent as far as possible, any unauthorised entry.

The Cover Slab of the chamber appears to be in good condition.

Level 1

The access foot irons are in good condition with no visible deterioration. All were tested and are secure.

Water infiltration and associated scaling has occurred at Level 1 of the chamber. Water appears to be ingressing at the joint between at the top most MH ring and the reducing slab. Some of the grouted up lifting holes in the MH rings are weeping slightly.

The mastic seal is intruding by approximately 50mm along the entire perimeter of the chamber, although there was no visible infiltration. The landing at Level 1 is secure and clean. The GRP safety hand rails are secure and in good condition.

Level 2

The stainless ladder from Level 1 to Level 2 is in good condition and is secure. The landing at Level 2 has some debris (stones and broken masonry) which does not appear to have been part of the original chamber structure. The reducing slab structure appears to be in good condition.

The wall forming the pocket chamber is in good condition as is the outlet pipe and concrete benching.

There is infiltration through some of the PCC bolted sections and minor rusting of the bolts and fasteners. None appeared to be missing or broken at the time of our inspection.

The stainless hand rails and chains are secure and in good condition.

Level 3

The stainless ladder from Level 2 to Level 3 is in good condition and is secure. The benching around the 375mm pipe has a thin layer of greasy material and slime. A bag (possibly rat control) is lying on the benching.

There is some infiltration at the side of the inlet pipe on top of the benching. The area is blackened.

The 375mm channel is lined with an ochre deposit and is clearly visible in the photographs. There was very little loose debris in the channel in the pipe at the time of the inspection. The water level in the channel was fast moving ($>0.5\text{m/s}$) and at approximately 30% level.

The separating wall appears to be in good condition and the notch is sharply defined.

The Sump was not easily inspected due to the water level, however the chamber base appears to be benched as shown on the drawing. The level of silt in the chamber was not easily determined but appears to be 300mm – 400mm deep at the base of the chamber.

The stainless ladder into the sump is in good condition and was tested at the top rung only. It appeared to be safely fixed.

Photographs



Views from Surface Level
to Level 1 and Chamber
Base



Views From Surface Level to Level 1
Landing



View from Level 1 to underside of MH cover.





View from Level 1 of MH rings showing infiltration.

Level 1 Access Ladders



Views of Infiltration from Cover Slab at Level 1



View from Level 1 through to Level 2





Views from Level 2 Landing
Showing Debris, Ladders and
Cover Slab above.





View of Access Ladder to Level 3, Hand Rails and Safety Chains.

‘Pocket Chamber’ Walls.





Typical Detail of PCC Bolted Sections and Fasteners.

Pocket Chamber Outlet Pipe





Views from Level 2

Foot of Ladder and Outlet Pipe at Level 3





225mm Drop
Pipe



Views of MH Walls at Level 3





375mm Inlet Pipe and Channel

300mm Inlet Pipe into Sump and 225mm Drop Pipe.



Notch in Dividing Wall



View into Sump



Outlet Pipe

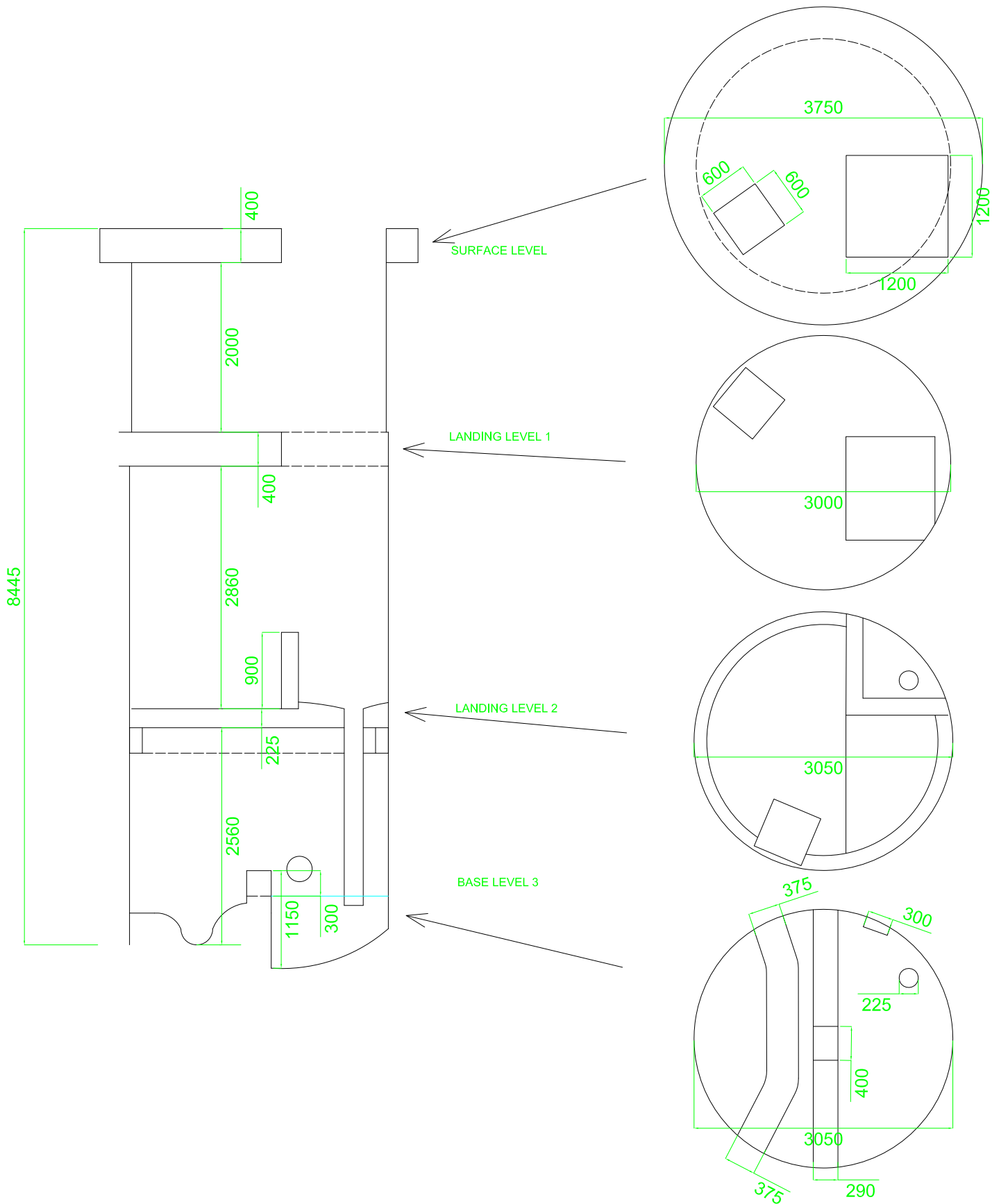
Channel



Access Ladder

Outlet Area





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APPENDIX E – EXISTING DRAINAGE PLAN

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APPENDIX F – CATCHMENT PLAN AND DATA

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