

Key

- Site Boundary
- Search Extent
- 30 Year Extent
- 100 Year Extent
- 1000 Year Extent
- Flow Direction



Samuel House, 5 Fox Valley Way, Stocksbridge, Sheffield, S36 2AA

CLIENT:
Hartwood Estates Ltd

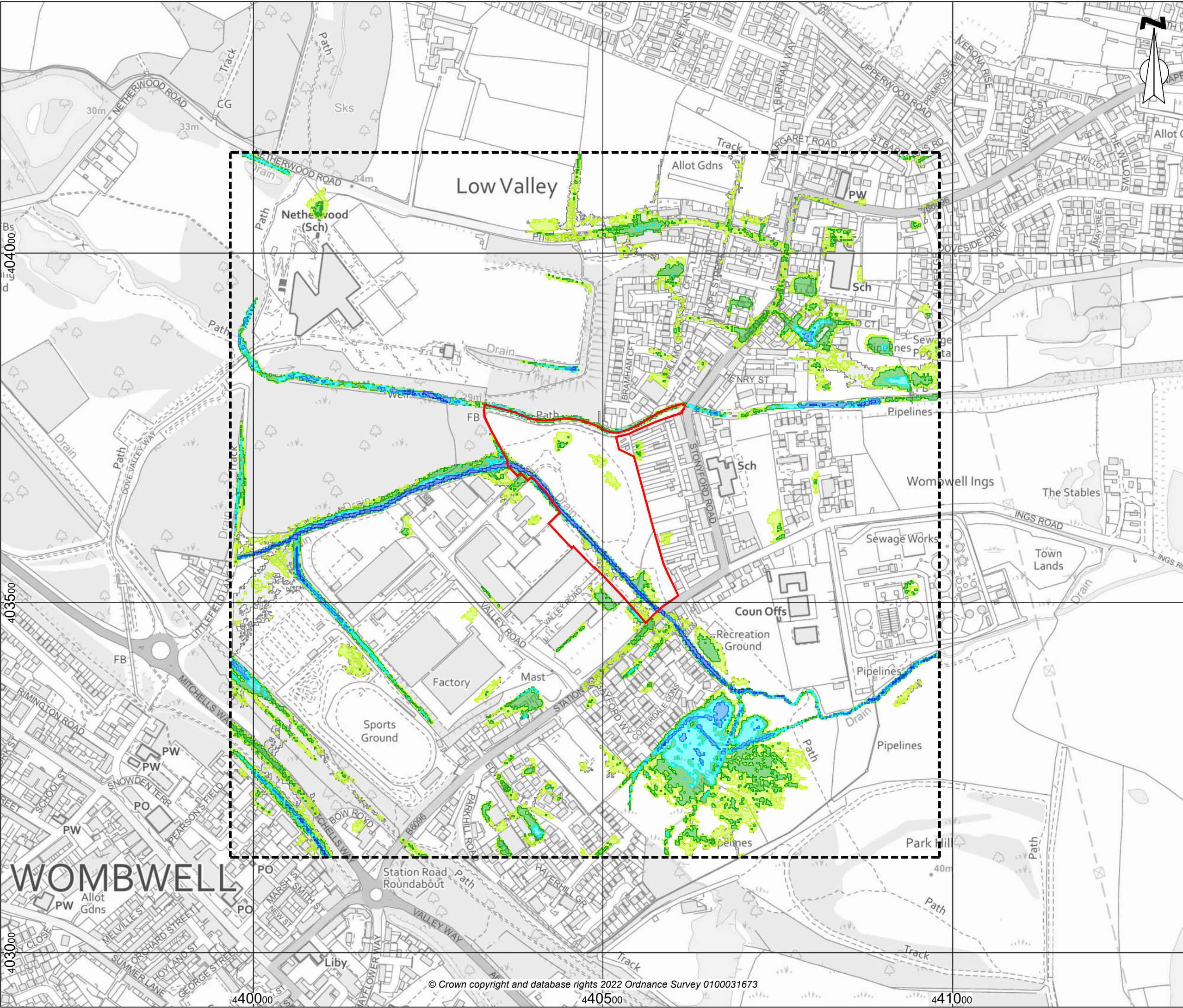
SCALE: 1:5,000@A3 PROJECT REF: SHF.1122.009

DRAWN: LW CHECKED: MG DATE: Nov 2022









PROJECT:
Land at Station Road, Wombwell

TITLE:
Environment Agency Surface Water Flow Paths

FIGURE NO:
SHF.1122.009.HY.D.010.1



Key

-  Site Boundary
-  Search Extent
-  Depth greater than 1.20 (m)
-  Depth 0.90 - 1.20 (m)
-  Depth 0.60 - 0.90 (m)
-  Depth 0.30 - 0.60 (m)
-  Depth 0.15 - 0.30 (m)
-  Depth 0.0 - 0.15 (m)



Samuel House, 5 Fox Valley Way, Stocksbridge, Sheffield, S36 2AA

CLIENT:
Hartwood Estates Ltd

SCALE:
1:5,000@A3

PROJECT REF:
SHF.1122.009

DRAWN:
LW

CHECKED:
MG

DATE:
Nov 2022

PROJECT:
Land at Station Road, Wombwell

TITLE:
**Environment Agency 1 in 1000
Year Surface Water Depth**

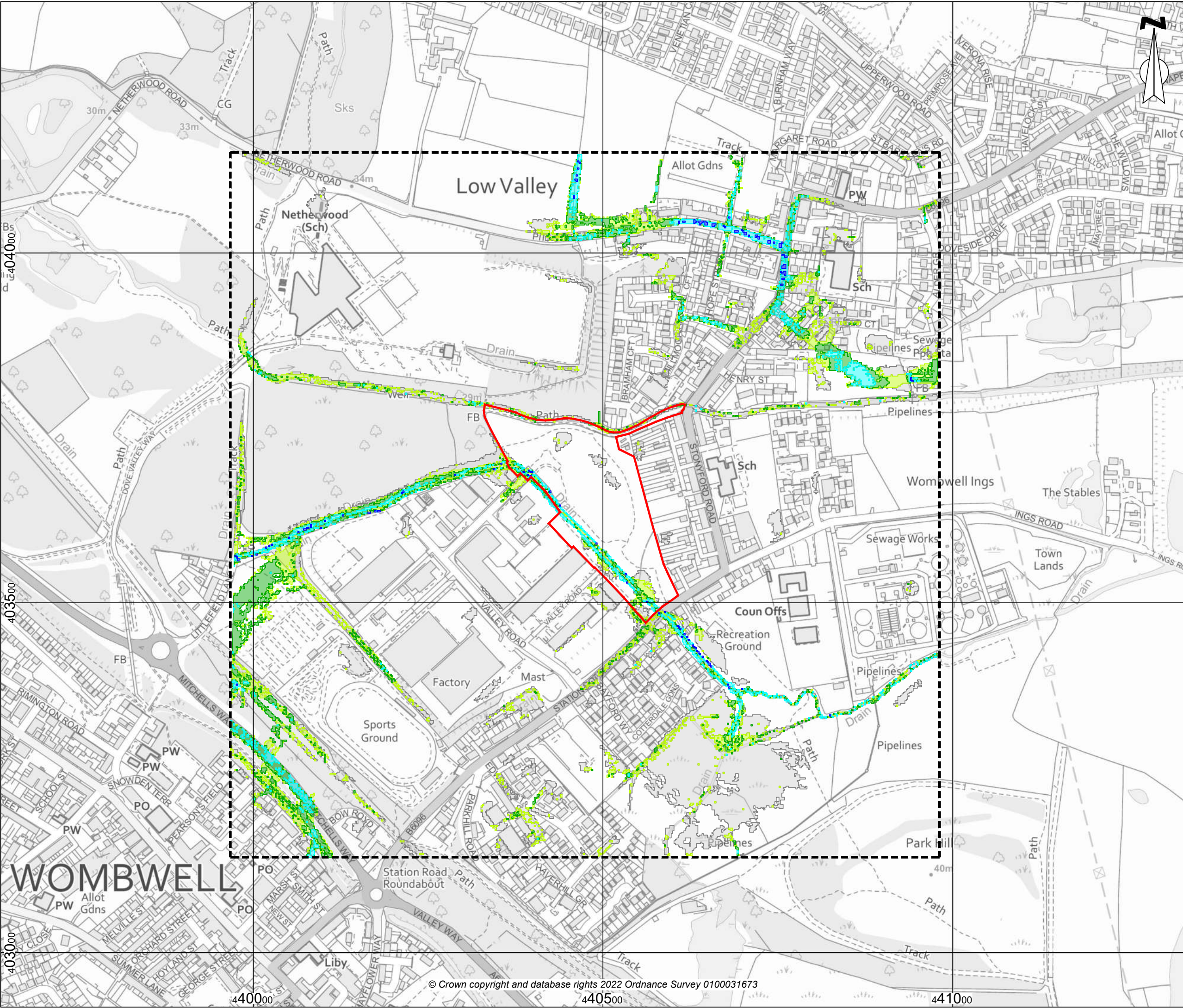
FIGURE NO:
SHF.1122.009.HY.D.010.2

WOMBWELL








Low Valley

404000
403500
403000

44000 440500 441000



Key

-  Site Boundary
-  Search Extent
-  Velocity 2.00 or greater (m/s)
-  Velocity 1.00 - 2.00 (m/s)
-  Velocity 0.50 - 1.00 (m/s)
-  Velocity 0.25 - 0.50 (m/s)
-  Velocity 0.00 - 0.25 (m/s)



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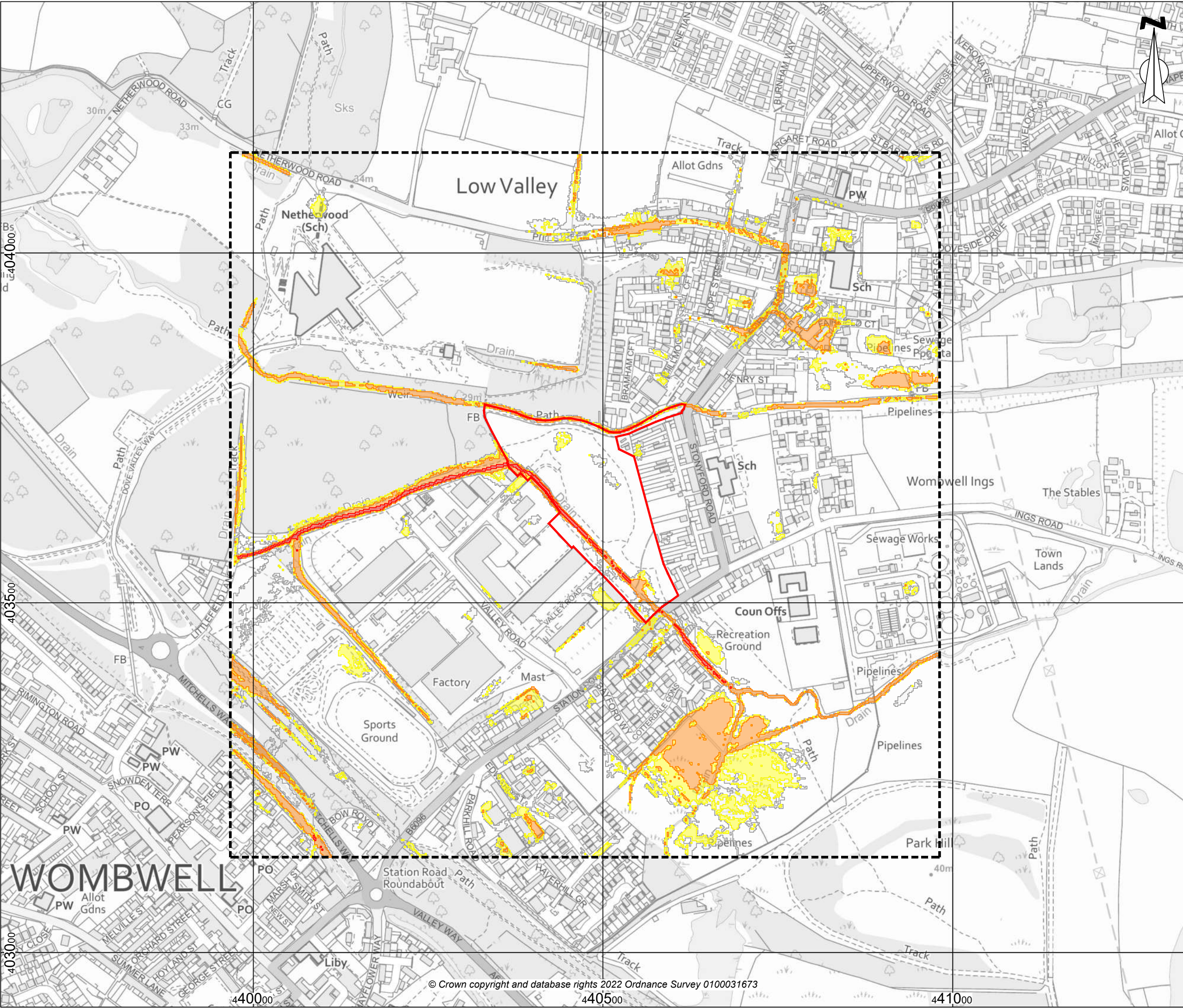
SCALE: 1:5,000@A3 PROJECT REF: SHF.1122.009

DRAWN: LW CHECKED: MG DATE: Nov 2022







PROJECT:
Land at Station Road, Wombwell

TITLE:
Environment Agency 1 in 1000 Year Surface Water Velocity

FIGURE NO:
SHF.1122.009.HY.D.010.3



Key

-  Site Boundary
-  Search Extent
-  Extreme Hazard (> 2.0)
-  Significant Hazard (1.25 - 2.00)
-  Moderate Hazard (0.75 - 1.25)
-  Low Hazard (0.50 - 0.75)



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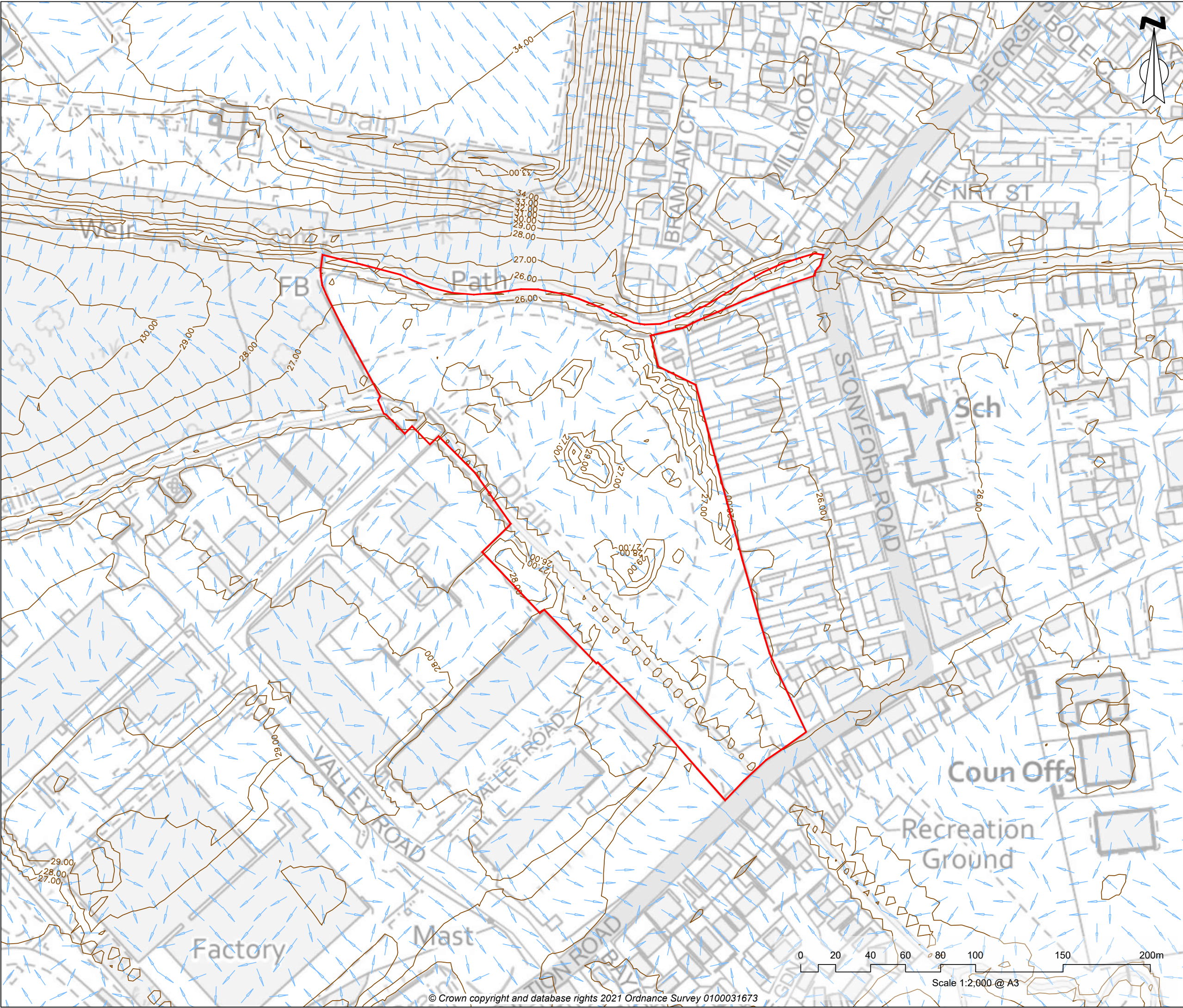
SCALE: PROJECT REF:
1:5,000@A3 SHF.1122.009

DRAWN: CHECKED: DATE:
LW MG Nov 2022




PROJECT:
Land at Station Road, Wombwell

TITLE:
Environment Agency Surface Water 1000 Year Hazard Rating

FIGURE NO:
SHF.1122.009.HY.D.010.4



Key

-  Site Boundary
-  Contours
1m Intervals (mAOD)
-  Surface Water Flow Path

Notes:
Ground Model Specification: 2m DTM LIDAR data



Samuel House, 5 Fox Valley Way, Stocksbridge, Sheffield, S36 2AA

CLIENT:
Hartwood Estates Ltd

SCALE:
1:2,000@A3

PROJECT REF:
SHF.1122.009

DRAWN:
LW

CHECKED:
MG

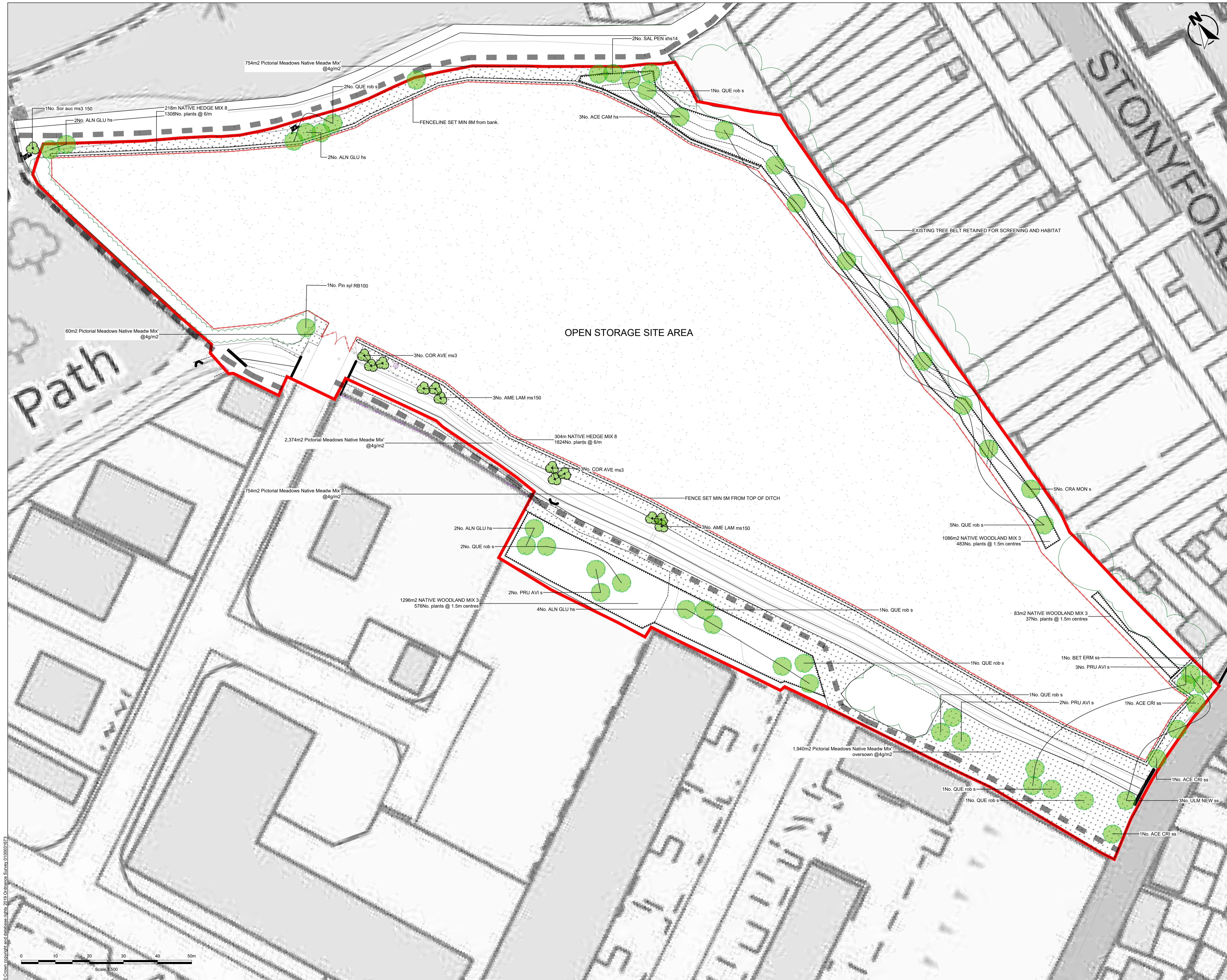
DATE:
Nov 2022

PROJECT:
Land at Station Road, Wombwell

TITLE:
Exceedance Routes

DRAWING NO:
SHF.1122.009.HY.D.011

Appendix 1 – Site Layout



NOTES

- Do not scale from this drawing
- All dimensions are in meters unless stated otherwise
- This drawing is to be read in conjunction with all relevant drawings and documents associated with this project.
- All surveyed information including levels and layout is provided by others
- All existing and proposed dimensions, levels and locations to be checked and verified by the main contractor on site prior to the commencement of the works and any anomalies reported to the engineer.

- KEY**
- Application boundary
 - Proposed Open storage area
 - Proposed security fence
 - PROW
 - Retained vegetation
 - Retained Trees.
 - Proposed tree
 - Proposed native hedgerow
 - Proposed woodland mix planting
 - Proposed Wildflower Meadow

PL01	24/11/22	For Planning	GB	NS	DM
Rev	Date	Description	DRA	CHK	APP

Project
 Land at Station Road
 Wombwell, Barnsley
 S73 0BS

Client
 Hartwood Estates Ltd

Drawing Title
 Planting Plan

Status	Date	Scale
For planning	24/11/22	1:500 @ A1

Drawn	Designed	Checked	Approved
GB	GB	NS	DM

DWG No.	Revision
1122-009-ENZ-XX-XX-D-L-45-001	PL01

enzygo
 environmental consultants

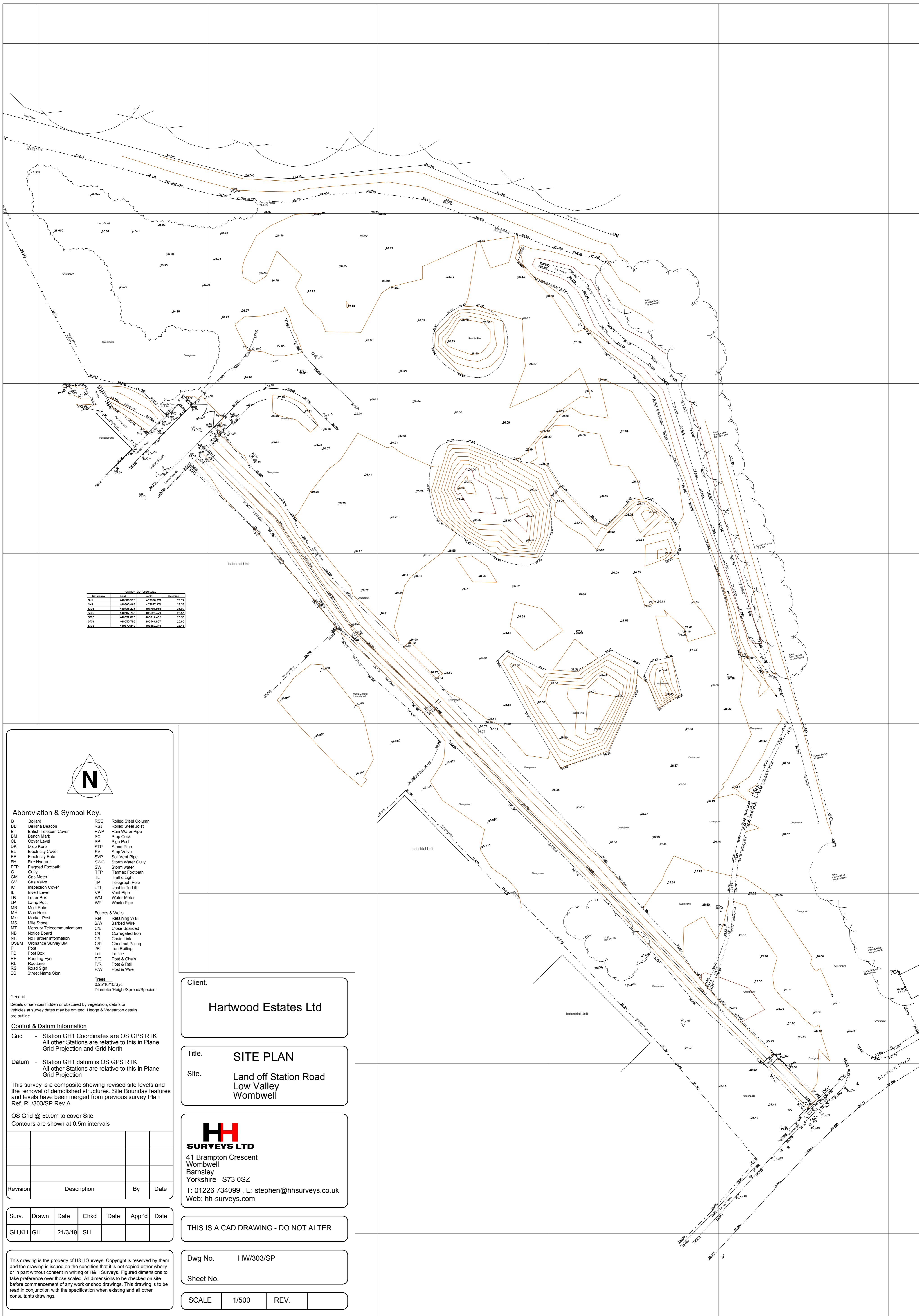
BRISTOL 01454 269 237
 www.enzygo.com

MANCHESTER 0161 413 6444

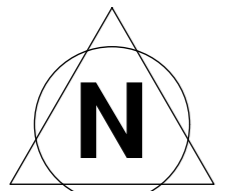
SHEFFIELD 0114 321 5151
 hello@enzygo.com

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Appendix 2 – Topographic Survey



Reference	East	North	Elevation
001	44556.325	45566.721	26.29
002	44556.482	45567.071	26.32
003	44548.328	45573.989	26.82
004	44557.748	45558.578	26.52
005	44552.823	45581.482	26.38
006	44555.788	45544.851	26.83
007	44550.848	45548.249	25.43



Abbreviation & Symbol Key.

- | | | | |
|-----|-----------------------|------|---------------------|
| B | Bollard | RSC | Rollod Steel Column |
| BB | Belisha Beacon | RSJ | Rollod Steel Joist |
| BT | British Telecom Cover | RWP | Rain Water Pipe |
| BM | Bench Mark | SC | Stop Cock |
| CL | Cover Level | SP | Sign Post |
| DK | Drop Kerb | STP | Stand Pipe |
| EL | Electricity Cover | SV | Stop Valve |
| EP | Electricity Pole | SVP | Soil Vent Pipe |
| FH | Fire Hydrant | SWG | Storm Water Gully |
| FFP | Flagged Footpath | SW | Storm water |
| G | Gully | TFFP | Tarmac Footpath |
| GM | Gas Meter | TL | Traffic Light |
| GV | Gas Valve | TP | Telegraph Pole |
| IC | Inspection Cover | UTL | Unable To Lift |
| IL | Invert Level | VP | Vent Pipe |
| LB | Letter Box | WM | Water Meter |
| LP | Lamp Post | WP | Waste Pipe |
- Fences & Walls**
- | | | | |
|------|----------------------------|-----|-----------------|
| MH | Man Hole | Ret | Retaining Wall |
| Mkr | Marker Post | B/W | Barbed Wire |
| MS | Mill Stone | C/B | Close Boarded |
| MT | Mercury Telecommunications | C/I | Corrugated Iron |
| NB | Notice Board | CL | Chain Link |
| NFI | No Further Information | C/P | Chestnut Paling |
| OSBM | Ordnance Survey BM | IR | Iron Railing |
| P | Post | Lat | Lattice |
| PB | Post Box | P/C | Post & Chain |
| RE | Roosting Eye | P/R | Post & Rail |
| RL | Root Line | P/W | Post & Wire |
| RS | Road Sign | | |
| SS | Street Name Sign | | |
- Trees**
- 0.25/10/10/Syc
Diameter/Height/Spread/Species

General
Details or services hidden or obscured by vegetation, debris or vehicles at survey dates may be omitted. Hedge & Vegetation details are outline

Control & Datum Information
Grid - Station GH1 Coordinates are OS GPS RTK
All other Stations are relative to this in Plane Grid Projection and Grid North

Datum - Station GH1 datum is OS GPS RTK
All other Stations are relative to this in Plane Grid Projection

This survey is a composite showing revised site levels and the removal of demolished structures. Site Boundary features and levels have been merged from previous survey Plan Ref. RL/303/SP Rev A

OS Grid @ 50.0m to cover Site
Contours are shown at 0.5m intervals

Revision	Description	By	Date

Surv.	Drawn	Date	Chkd	Date	Appr'd	Date
GH,KH	GH	21/3/19	SH			

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Client.
Hartwood Estates Ltd

Title. **SITE PLAN**
Site. **Land off Station Road
Low Valley
Wombwell**

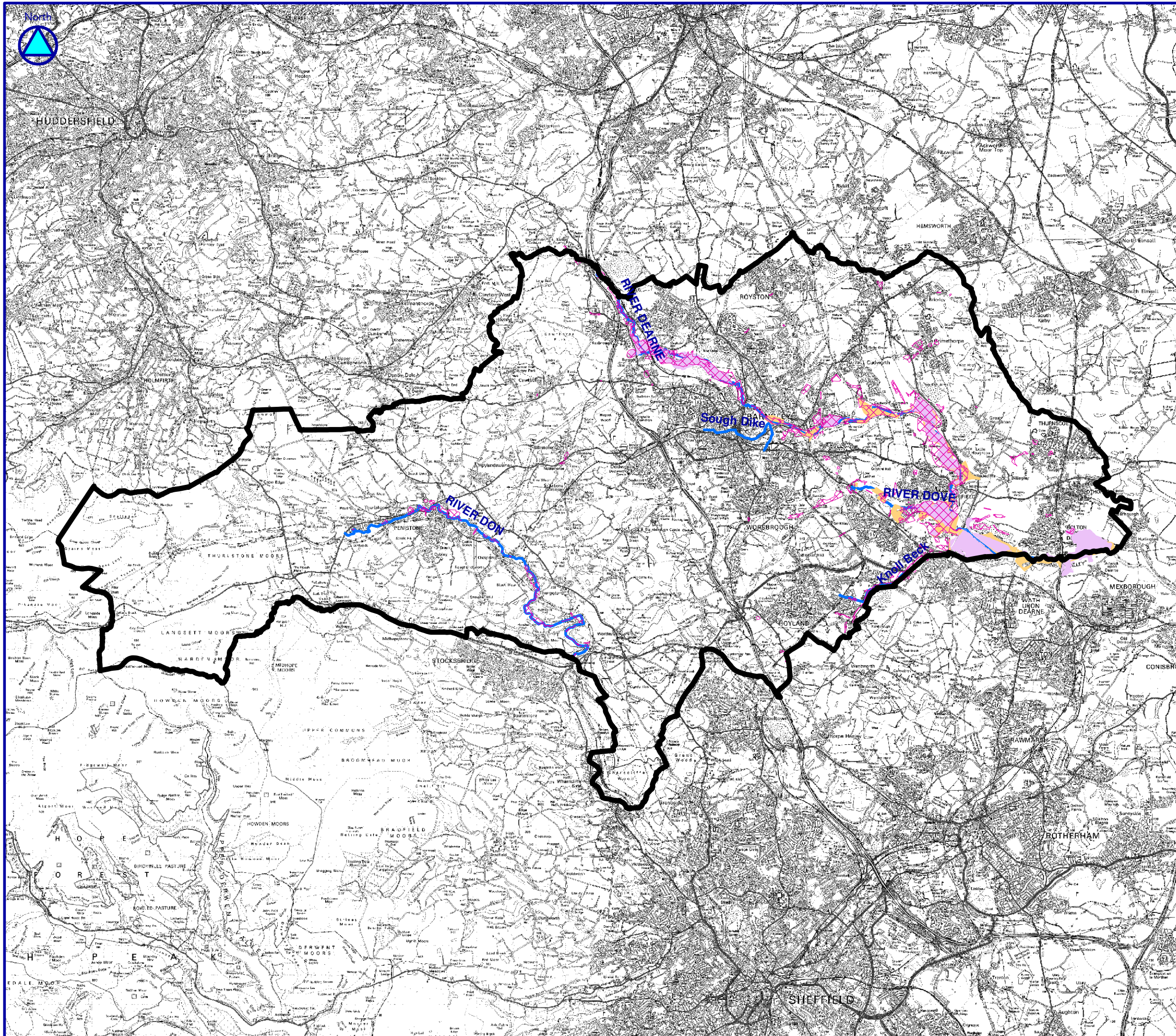
H&H SURVEYS LTD
41 Brampton Crescent
Wombwell
Barnsley
Yorkshire S73 0SZ
T: 01226 734099 , E: stephen@hhsurveys.co.uk
Web: hh-surveys.com

THIS IS A CAD DRAWING - DO NOT ALTER

Dwg No. **HW/303/SP**
Sheet No.

SCALE	1/500	REV.

Appendix 3 – SFRA Mapping Extracts






Huddersfield

Sheffield

LEGEND

1:126,172

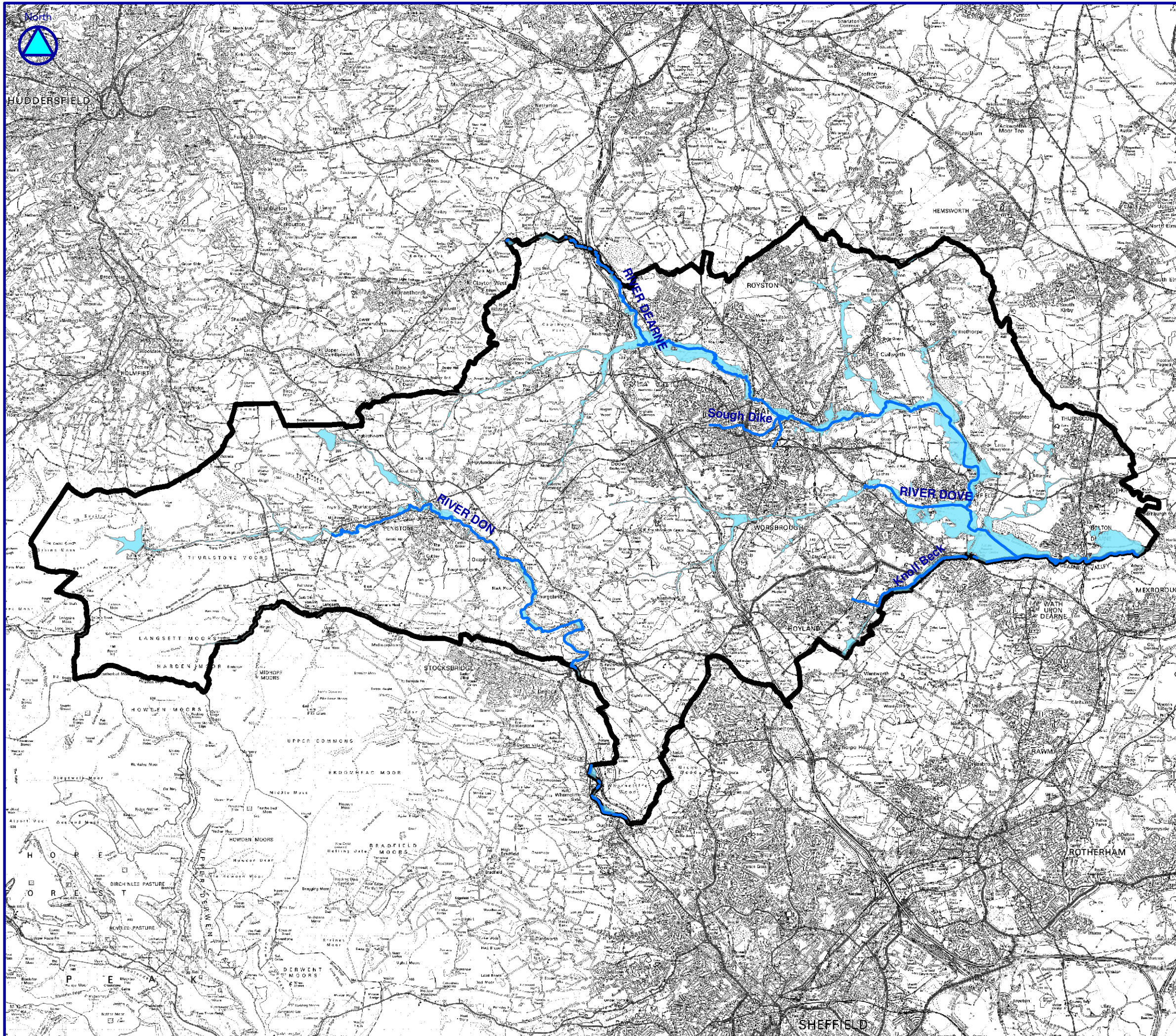
-  Barnsley MBC Boundary
-  Main River
- Historical Flood Extents**
-  June 2007
-  Autumn 2000
-  January 1982
-  March 1947

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MAP 2

HISTORICAL FLOOD EVENTS



LEGEND

1:120,000

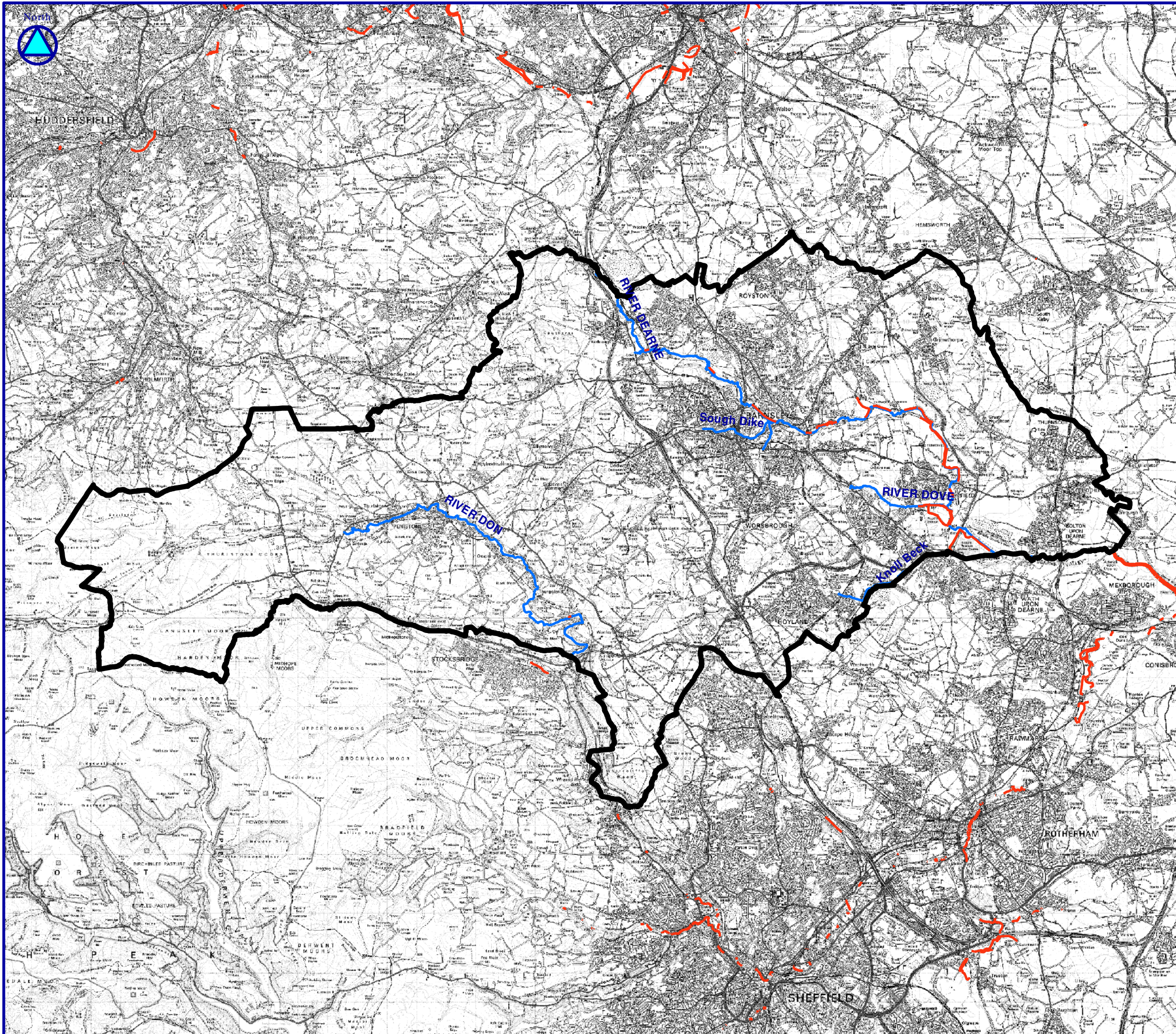
-  Main River
-  Flood Zone 2
-  Barnsley MBC Boundary

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MAP 4

FLOOD ZONE 2



LEGEND

1:126,172

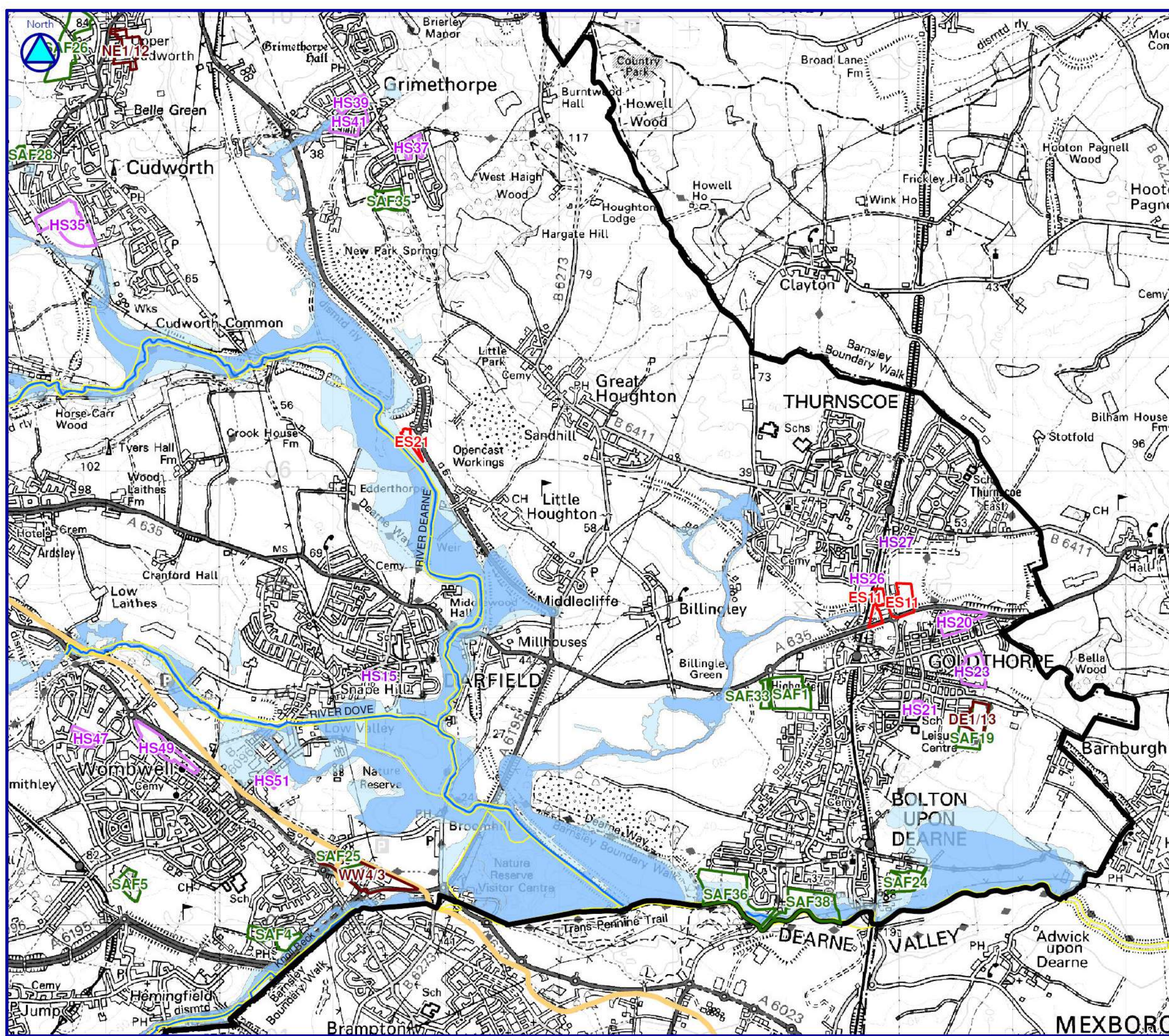
-  Barnsley MBC Boundary
-  Main River
-  Existing Flood Defences
-  Flood Defence

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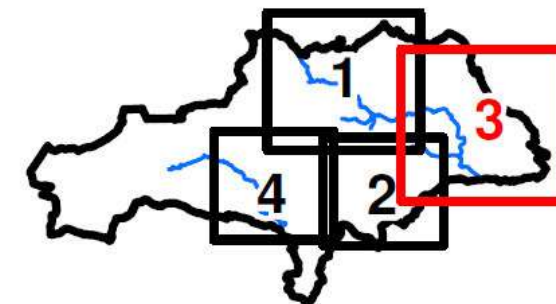


MAP 5

EXISTING DEFENCES



KEYPLAN



LEGEND

1:32,596

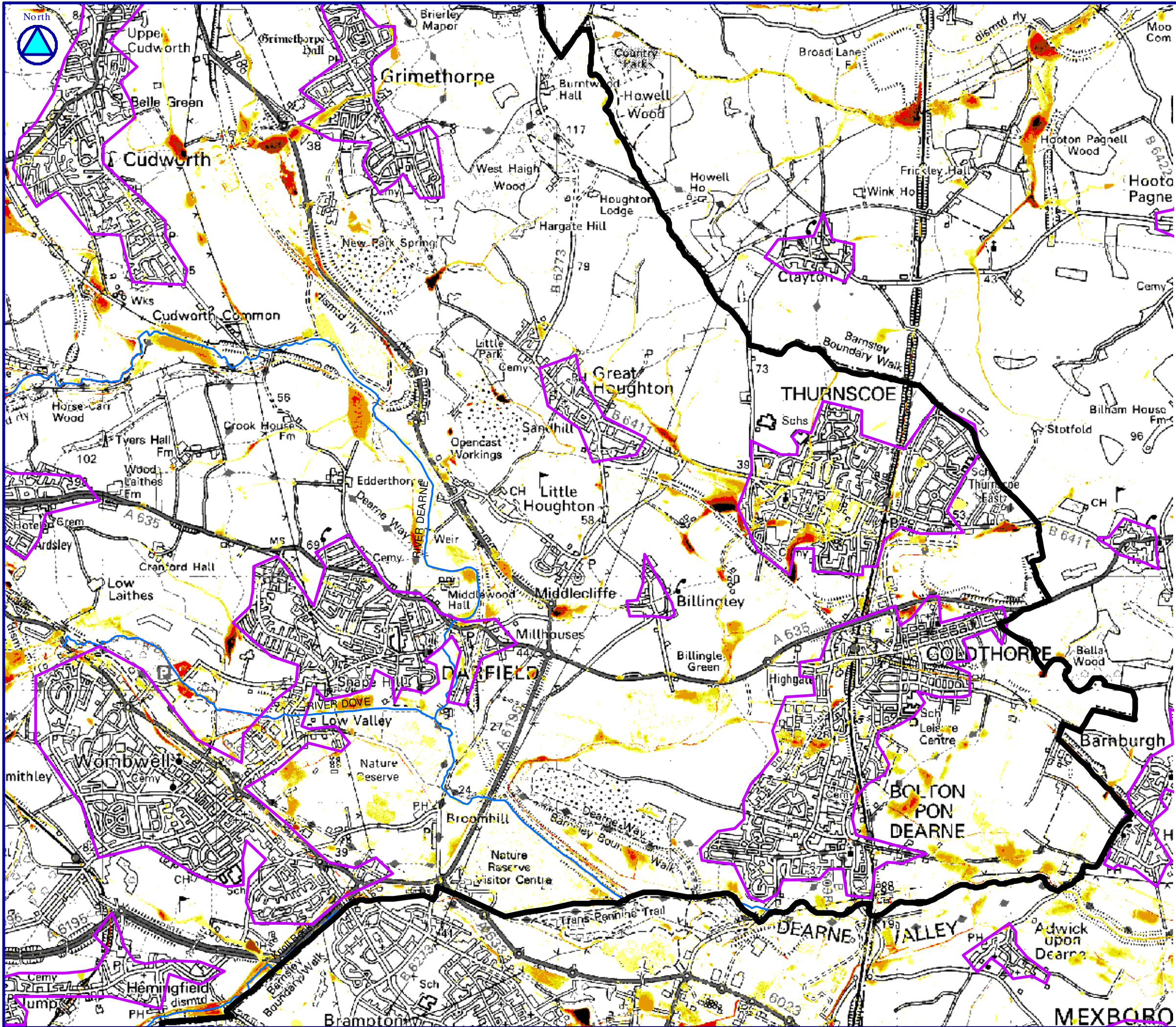
-  Barnsley MBC Boundary
 -  Defence
 -  Main River
 -  Possible route of restored canal
 -  Flood Zone 3
 -  Flood Zone 2
- Proposed Development Sites**
-  Employment Sites
 -  Housing Sites
 -  UDP Sites
 -  Safeguarded Land

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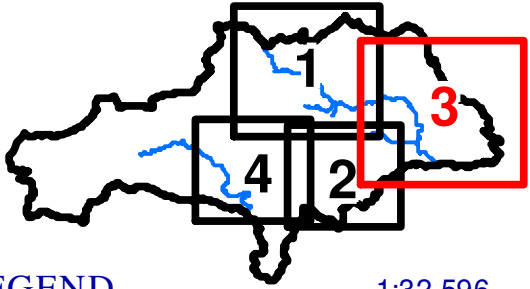


MAP A - 3

PROPOSED DEVELOPMENT SITES AND FLOOD ZONES



KEYPLAN



LEGEND

1:32,596

- Barnsley MBC Boundary
- Urban Areas
- Main River
- Surface Water Flooding
- Flood Depth (m)
- 0.15 - 0.3
- 0.3 - 0.5
- 0.5 - 1
- 1 - 1.5
- 1 - 2
- > 2

Note:
Please see Section 5.8 of the SFRA
for further details.

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MAP C - 3

PLUVIAL FLOODING CAUSED BY
100YEAR RAINSTORM

Appendix 4 – Yorkshire Water Sewer Asset Plans

YORKSHIRE WATER PROTECTION OF MAINS AND SERVICES











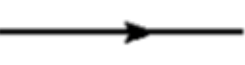


1. The position of Yorkshire Water Services Ltd (YWS) apparatus shown on the existing mains record drawing(s) indicates the **general** position and nature of our apparatus and the accuracy of this information cannot be guaranteed. Any damage to YWS apparatus as a result of your works may have serious consequences and you will be held responsible for all costs incurred. Prior to commencing major works, the exact location of apparatus must be determined on site, if necessary by excavating trial holes. The actual position of such apparatus and that of service pipes which have not been indicated must be established on site by contacting the Customer Helpline on 0845 124 24 24 for both water and sewerage.
2. The public sewer and water network is lawfully retained in its existing position and the sewerage and water undertaker is entitled to have it remain so without any disturbance. The provisions of section 159 of the Water Industry Act 1991 provides that the undertaker may "inspect, maintain, adjust, repair or alter" the network. Those rights are given to enable the undertaker to perform its statutory duties. Any development of the land or any other action that unacceptably hindered the exercise of those rights would be unlawful. The provisions contained in Section 185 of the Water Industry Act 1991 state that where it is reasonable to do so, a person may require the water supply undertaker to alter or remove a pipe where it is necessary to enable that person to carry out a proposed change of use of the land. The provisions contained in Section 185 also require the person making the request to pay the full cost of carrying out the necessary works.
3. Ground levels over existing YWS apparatus are to be maintained. Sewers in highways will **generally** be laid to give 1200mm of cover from finished ground level working to kerb races, other permanent identification of the limits of the road or to an agreed line and level. Substantial increases or decreases to this 1200mm depth of cover will result in the sewer being re-laid at your expense. Water mains and services will **generally** be laid with a minimum of 750mm depth of cover however some mains and services usually those installed over 50 years ago may have less ground cover.
4. If surface levels are to be decreased / increased significantly the effects on existing water supply apparatus will be carefully considered and if any alterations are necessary, the costs of the alterations will be recharged to you in full. Outlets on fire hydrants must be no more than 300mm below the new levels and all surface boxes must be adjusted as part of the scheme.
5. To enable future repair works to be carried out without hindrance; any pipe, cable, duct, etc. installed parallel to a water main or service pipe should not be installed directly over or within 300mm of a water main or service pipe or 1000mm of a waste water asset. Where a pipe, cable, duct, etc. crosses a main or service it should preferably cross perpendicular or at an angle of no less than 45° and with a minimum clearance of 150mm. These requirements apply to activities within an existing highway and are relevant to the installation of pipes, cables, ducts, etc. up to and including 250mm in diameter (*see illustration below*). Necessary protection measures for installations greater than 250mm in diameter and/or in private land will need to be agreed on an individual basis. Installations within a new development site must comply with the National Joint Utilities Group publication Volume 2: NJUG Guidelines On The Positioning Of Underground Utilities Apparatus For New Development Sites.
6. All excavation works near to YW apparatus should be by hand digging only.
7. Backfilling with a suitable material to a minimum 300mm above YW apparatus is required.
8. Adequate support must be provided where any works pass under YW apparatus.
9. Jointing chambers, lighting columns and other structures must be installed in such a way that future repair or maintenance works to YW apparatus will not be hindered.
10. Apparatus such as; railings, sign posts, etc. must not be placed in such a way that they prevent access to or full operation of controlling valves, hydrants or similar apparatus. YWS surface boxes must not be covered or buried. Any adjustment, alteration or replacement of manhole covers must be agreed on site prior to the commencement of the works with a YWS Inspector who may be contacted via our Call Centre on 0845 124 24 24.
11. Explosives shall not be used within 100 metres of any Yorkshire Water Services apparatus or installations.
12. Vibrating plant should not be used directly over any apparatus. Movement or operation by vehicles or heavy plant is not to be permitted in the immediate vicinity of YWS plant or apparatus unless there has been prior consultation and, if necessary, adequate protection provided without cost to YWS.
13. **Under no circumstances** should thrust boring or similar trenchless techniques commence until the actual position of the Company's mains/services along the proposed route have been confirmed by trial holes.
14. Any alterations to the highway should be notified following the procedures outlined in the New Road and Street Works Act 1991 Code of Practice; Measures Necessary Where Apparatus Is Affected By Major Works (Diversions Works).

15. You will be held responsible for any damage or loss to YWS apparatus during and after completion of work, caused by yourselves, your servant or agent. Any damage caused or observed to YWS plant or apparatus should be immediately reported to YWS. Should YW incur any costs as a result of non-compliance with the above, all costs will be rechargeable in full.
16. You should ensure that nothing is done on the site to prejudice the safety or operation of YWS employees, plant or apparatus.
17. In accordance with the New Roads and Street Works Act 1991, Chapter 22, Part 3, Section 80. The location of any identified YW asset "*which is not marked, or is wrongly marked, on the records made available*" should be communicated back to Yorkshire Water. The location of the apparatus should be identified on copies of the supplied plans which should be returned to Yorkshire Water (Asset Records Team) with photographic supporting evidence where possible.
18. The Government has decided that responsibility for private sewers serving two or more properties and lateral drains (the section of pipe beyond the boundary of a single property, connecting it to the public sewer) will be transferred to the water companies on Oct 1 2011. Private pumping stations will also transfer during the period 1 October 2011 – 1 Oct 2016. Records of these assets may not yet be shown on the existing mains record drawing(s). If you encounter any of these assets you must inform Yorkshire Water Services Ltd (YWS).
19. Please note that the information supplied on the enclosed plans is reproduced from Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office, © Crown Copyright. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. Licence Number 1000019559.
20. This information is for guidance only and the position and depth of any YW apparatus is approximate only. Likewise, the nature and condition of any YW apparatus cannot be guaranteed. YW has no responsibility for recording the locations of privately owned apparatus. As of 1 October 2011, there may be some lateral drains and/or public sewers which are not documented on YW records but may still be present. For the avoidance of doubt, this information is not a substitute for appropriate professional and/or legal advice. YW accepts no responsibility for any inaccuracy or omissions in this information. The actual position of YW apparatus must be determined on site by excavating trial holes by hand. YW requires a minimum of two working days' written notice of the intention to excavate any trial holes before any excavation can be undertaken. If there are any queries in this respect please contact Yorkshire Water on 0345 124 24 24.







Property Identifier



Sewer Legend

	Combined Sewer		S24 Combined Sewer
	Surface Water Sewer		S24 Surface Water Sewer
	Foul Sewer		S24 Foul Sewer
	Section 104 Sewer		Rising Main
	Overflow		Abandoned Sewer
	Syphon Sewer & Vacuum Sewer		
	Pumping Station		Public Sewer Treatment Works

Water Legend

	Water Main 4" and below
	Water Main 4" and above
	Raw Water Main
	Private Water Main
	Fire Hydrant
	Pumping Station

