

FORTEM

Civil Engineering Consultants Ltd

**Proposed Residential Development
Lee Lane, Royston**

Flood Risk Assessment

March 2026

Homes By Honey

Report

This report consists of a Flood Risk Assessment and Drainage Strategy, produced to support the proposed residential development of the site located off Lee Lane, Royston. It has been produced by FORTEM Civil Engineering Consultants Ltd for Homes by Honey.

Revision History

Rev Ref	Date	Amendments	By	Chk'd
1	03.03.2026	First Issue	LS	AC
2				
3				

Contract

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Executive Summary

Site Description

The proposed development site is located off the B6428 Lee Lane, Royston. The site is 8.75ha and currently consists of arable grassland. Foul, surface and combined sewers are located in the residential area to the east of the site (approximately 300m from site). There are foul and surface water sewers (under S104) in the new residential area to the north-east.

There is an existing surface water drain crossing the frontage of the site in Lee Lane that is assumed to be a highway drain or watercourse.

An unnamed open water course is located approximately 120m to the north and one 500m to the south.

Proposed Development

It is proposed to construct 247 residential dwellings on the site, with associated infrastructure.

Flood Risk

The site is located in Flood Zone 1 with the flood risk from all sources Low except surface water (High-Low).

The High-Low surface water flood risk is to be mitigated by reprofiling the identified areas of the site and the introduction of a positive development surface water drainage system.

The following standard development mitigation measures are recommended:

- Finished floor levels to be set a minimum 150mm above external levels to mitigate any risk from blockage and exceedance events.
- Drainage is to be designed with separate foul and surface water systems. The development surface water drainage scheme is to be designed such that there is no external flooding for up to and including the 1 in 100 year plus climate change event.
- Detailed blockage and exceedance assessment at detailed design stage.

Drainage

Surface water from the development is proposed to discharge to the existing open watercourse located to the north of the site, with flows restricted to 37.2 l/s.

The development surface water drainage scheme is to be designed so that there is no external flooding for the 1 in 30 year event and all flows retained on site for up to the 1 in 100 year plus 45% climate change event + 10% allowance for urban creep.

It is proposed to discharge the foul water flows from the development to the existing 225 diameter sewer located to the east in Lee Lane.

Due to the site topography and the location of the existing watercourse and foul sewer, it is necessary to pump the foul and surface water flows.

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	BMBC Consultation response (29.08.2018)
	Yorkshire Water Pre-Planning Enquiry A/02851 (10.11.2025)

1. Introduction

1.1. Report Background

- 1.1.1. This report has been produced to support the Full Planning Application by Homes by Honey for the proposed residential development off Lee Lane, Royston. It has been produced in accordance with the National Planning Policy Framework (NPPF) and guidance documents produced by Barnsley Metropolitan Borough Council (BMBC).
- 1.1.2. The study consists of data collection, consultation and review with regulatory bodies and third parties in relation to flood risk and drainage. FORTEM cannot guarantee the reliability of third-party information and/or changes in consultee conclusions/responses.

1.2. Site Description

- 1.2.1. The site is located off Lee Lane, Royston, OS grid reference SE 434853, 411063, see drawing 1238-001 Site Location Plan, Appendix A.

Details of the site are tabled below:

Site Area		8.75ha
Topography		The site generally slopes from Southwest (84.50m AOD) to Northeast (72.46m AOD), with gradients ranging from 1in150 to 1in17, see eGeomatics topographical survey, Appendix A.
Land Use		The site currently consists of arable grassland.
Boundaries	North:	B6428 Lee Lane.
	South:	Arable grassland.
	East:	Arable grassland.
	West:	Arable grassland.
Watercourses		There is an unnamed open watercourse located circa 120m north of the site and another circa 500m south of the site. The topographical survey and ordnance survey maps confirm an existing pond on the north-eastern corner of the site (outside of the development boundary). This is in low lying land, however there is no indication of a water source other than the collection of field water in the lower ground.
Public Sewers		Yorkshire Water records confirm foul, surface and combined water sewers in the residential area east of the site (approximately 300m) and foul and surface water sewers in the new residential area to the northeast, see Yorkshire Water record drawing, Appendix A.
Other Drainage		The utility survey confirms an existing 300mm diameter surface water drain within Lee Lane (at site frontage), see ZS Survey drawings 4603-UT001 – UT002, Appendix A. The drain is not recorded on Yorkshire Water records, therefore it assumed to be a highway drain or watercourse.
Ground		The E3P intrusive site investigation (11-604-r0) confirms the site ground conditions are CLAY overlaying Sandstone/Siltstone. 4No percolation tests were undertaken as part of the investigation, of which all failed (no infiltration recorded). Therefore infiltration drainage is considered unsuitable.

1.3. Proposed Development

- 1.3.1. A Full Planning Application is to be submitted for the construction of 247No residential dwellings complete with associated infrastructure. See Homes by Honey viability layout LL-0001 Rev E, Appendix B.

1.4. Consultation

- 1.4.1. Consultation with the relevant consultees has been undertaken, see summary below:

Consultee	Response Summary
Barnsley Metropolitan Borough Council (BMBC) as Lead Local Flood Authority (LLFA)	BMBC have been consulted as part of an earlier flood risk and drainage assessment. As part of this consultation the surface water discharge from the proposed development was agreed to watercourse. The development discharge is to be restricted to greenfield rates in accordance with BMBC requirements (5l/s/ha), resulting in a development restricted surface water discharge of 37.2l/s.
Yorkshire Water (YW)	YW pre-planning enquiry (A/02851) confirms: <ul style="list-style-type: none"> • Development foul water to the existing 225mm diameter foul water sewer in Lee Lane (circa 300m east of site); • Capacity issues within the foul water network have been highlighted. This will be assessed following the submission of a planning application and may result in upgrade work to be funded by YW; • There is no capacity within the surface water sewer network for development drainage; • 3rd party land rights will be required for any sewer connection to a none main river watercourse.

See Appendix D for consultation responses.

2. Sources of Flood Risk

2.1. Summary

2.1.1. Below is a summary of the sources of flood risk and the potential risk associated to the proposed development:

Source	Risk Level	Notes
Fluvial	Low	Site is within Flood Zone 1.
Tidal	Low	The site is located outside of any sources of tidal risk.
Surface Water/Pluvial	High-Low	See Section 2.2 below.
Groundwater	low	There are no known records of any historic groundwater flooding or risk.
Sewers	low	Based upon the searches undertaken as part of this report, no historic incidents have been recorded either within the proposed development or within the vicinity.
Other Man-Made Sources	low	The site is not in an area at risk from a major failure of a reservoir and there are no other known artificial sources of flood risk in the area.

Copies of the Gov.uk flood maps are included in Appendix C.

2.2. Surface Water/Pluvial

2.2.1. There is a number areas identified as High-Low surface water flood risk all within the small low lying flat area of the site located in the north-east corner. The mapping confirms the areas are isolated (no source of water external to the site) and are consistent with the low lying topography. The north-eastern corner of the site is to be reprofiled as part of the development removing the low lying areas. Any minimal residual risk will be mitigated by the introduction of a positive development surface water drainage system.

2.3. Standard Mitigation

2.3.1. In addition to the specific flood risk mitigation measure above, the standard development mitigation measures below are recommended:

- Finished floor levels to be set a minimum of 150mm above external levels to mitigate any risk from blockage and exceedance events;
- Within the detailed drainage design blockage/exceedance events should be considered ensuring the proposed development and surrounding areas are not put at risk from overland flows;
- Development surface water drainage scheme to be designed such that there is no external flooding for the 1 in 30 year event and all flows retained on site for up to the 1 in 100 year event plus climate change.

3. Development Drainage

3.1. Existing Site Drainage

- 3.1.1. As covered in Section 1.2, Yorkshire Water records confirm foul, surface and combined water sewers in the residential area east of the site (approximately 300m) and foul and surface water sewers (under S104) in the new residential area to the northeast, see Yorkshire Water records, Appendix A.
- 3.1.2. There is an unnamed watercourse located circa 120m north and another circa 500m south of the site. The topographical survey and ordnance survey maps confirm a pond on the north eastern boundary located outside of the site.
- 3.1.3. The existing greenfield runoff from the site follows topography to the north eastern corner of the site. The existing runoff has been calculated in accordance with BMBC requirements (5l/s/ha), with an existing greenfield runoff rate for the site of 37.2l/s.

3.2. Development Surface Water Drainage

- 3.2.1. The potential surface water outfall/discharge options have been considered and summarised below:

Outfall/Discharge Option (Ranked in order of Preference)	✓/✗	Notes
1. Infiltration	✗	As part of the E3P site investigation, percolation testing was undertaken, with all 4No test locations failing (no infiltration recorded). Development infiltration drainage is therefore not suitable.
2. Discharge to Watercourse	✓	Unnamed watercourse located circa 120m to the north of the site and one circa 500m to the south. Based upon topography and an assessment of the catchment, the site falls within the northern watercourse catchment (maintaining surface water discharge regime).
3. Discharge to Public Surface Water Sewer.	✗/✓	Existing surface water sewers located east of the site in the existing residential developments. YW have confirmed no capacity in the network.
4. Discharge to Public Combined Sewer.	✗	There are public combined sewers located to the east in the existing residential developments. Discharge to combined sewer will only be acceptable should all other means of surface water disposal be discounted.

- 3.2.2. Based upon the findings of the review above and in accordance with the drainage hierarchy, it is proposed to discharge the surface water from the proposed development to the existing watercourse located to the north of the proposed development. The development discharge is to be restricted to greenfield rates (37.2l/s), which is in accordance with the principles agreed by BMBC, see BMBC consultation response, Appendix D.
- 3.2.3. The proposed development surface water drainage is to be designed such that there is no external flooding for the 1 in 30 year event and all flows retained on site for up to the 1 in 100 year plus climate change event. Early consideration into exceedance and blockage events has been undertaken to ensure the layout does not increase potential flood risk. This will be fully detailed post planning and an exceedance assessment produced.

- 3.2.4. Based upon a restricted discharge rate of 37.2l/s, the attenuation required for the development is 2,385m³, (1in100 +45% c/c event +10% urban creep), with attenuation provided in an underground tank and attenuation basin. Due to the topography of the site and the location/depth of the existing watercourse, it is necessary to pump the surface water flows. See drawings 1238-003 Proposed Drainage Strategy, 1238-004 Proposed Off-site Drainage Strategy and drainage calculations, Appendix B.

3.3. Development Foul Water Drainage

- 3.3.1. It is proposed to discharge the foul water flows from the development to the existing 225mm diameter foul water sewer in Lee Lane approximately 300m to the east of the site. Due to the topography of the site and the location of the existing foul sewer, it is necessary to pump the foul water flows. In accordance with YW consultation, the foul water pump rate will be set at 4.75l/s, with supplementary emergency storage provided in the network.

3.4. Maintenance

- 3.4.1. The foul and surface water drainage networks are to be adopted by Yorkshire Water or Independent Water Authority under a Section 104 Agreement. Therefore, maintenance of the adoptable networks will be the responsibility of the adopting Water Authority.

4. Conclusion

4.1. Flood Risk

- 4.1.1. The proposed development is located in Flood Zone 1 with the flood risk from all sources Low, except High-Low surface water flood risk.
- 4.1.2. The High-Low surface water flood risk is to be mitigated by reprofiling the identified areas of the site and the introduction of a positive development surface water drainage system.
- 4.1.3. In addition to the specific mitigation above, the following are recommended:
 - Finished floor levels to be set a minimum of 150mm above external levels to mitigate any risk from blockage and exceedance events;
 - Within the detailed drainage design blockage/exceedance events should be considered ensuring that the proposed development and surrounding areas are not put at risk from overland flows;
 - Development surface water drainage scheme to be designed such that there is no external flooding for the 1 in 30 year event and all flows retained on site for up to the 1 in 100 year event plus climate change.

4.2. Drainage

- 4.2.1. Surface water from the development is proposed to discharge to the existing watercourse located to the north of Lee Lane, with flows restricted to greenfield rates (37.2 l/s).
- 4.2.2. The development surface water drainage scheme is to be designed so that there is no external of flooding for the 1 in 30 year event and all flows retained on site for up to the 1 in 100 year event plus 45% climate change + 10% allowance for urban creep.
- 4.2.3. Due to the topography of the site and the downstream receiving watercourse network, it is necessary to pump the development surface water.
- 4.2.4. It is proposed to discharge the foul water flows from the development to the existing 225mm diameter foul water sewer in Lee Lane circa 300m to the east of the site.
- 4.2.5. Due to the site topography and the location of the existing foul water sewer, it is necessary to pump foul water flows, with the rate restricted to 4.75l/s.

Appendix A Existing Site

Drawing 1238-001 Site Location Plan

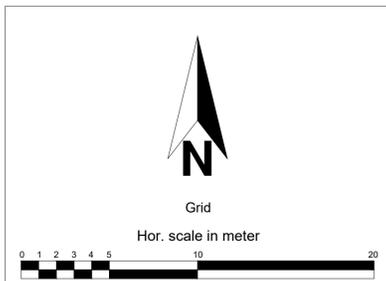
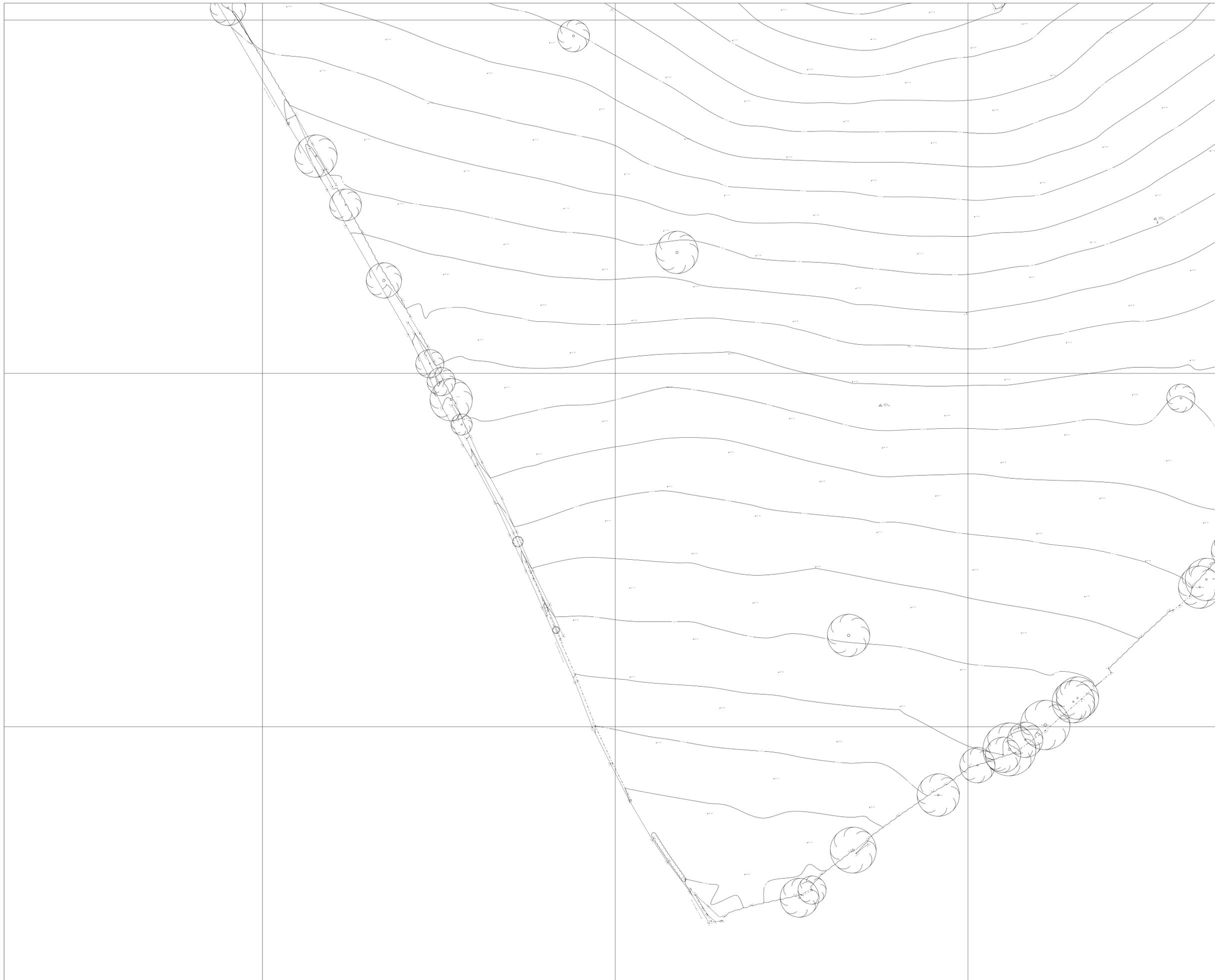
eGeomatics Land Surv Topographical Survey

eGeo120726_T01REVB

Drawing 1238-002 Existing Drainage Networks

Yorkshire Water Sewer Records

ZS Survey Utility Mapping Drawings 4603-UT001 – UT002



Abbreviation & Symbol Key:

B	Bollard	WM	Water Meter
BB	Bellish Beacon	WP	Waste Pipe
BT	British Telecom Cover	WT	Wall Top
CL	Cover Level		Fence and Walls
CK	Drop Kerb	Ret	Retaining Wall
DK	Drop Kerb	BW	Barbed Wire
EL	Electricity Cover	CB	Close Boarded
EP	Electricity Pole	C/L	Chain Link
FH	Fire Hydrant	IR	Iron Railing
FFP	Flagged Footpath		Lines
G	Gully	Bank_bottom	-----
GM	Gas Meter	Bank_top	-----
GV	Gas Valve	Bridge	=====
IC	Inspection Cover	Bus canopy	=====
IL	Invert Level	Buildings	=====
LB	Letter Box	Chan_surfac	-----
LP	Lamp Post	Concrete	-----
MH	Man Hole	Fences	-----
Mir	Marker Post	Verges	-----
MS	Man Stone	Walls	-----
NB	Notice Board		
NFI	No Further Information		
OSBM	Ordnance Survey BM		
P	Post		
PB	Post Box		
RE	Rodding Eye		
RS	Road Sign		
SS	Street Name Sign		
RWP	Rain Water Pipe		
SC	Stop Cock		
SP	Sign Post		
STP	Stand Pipe		
SV	Stop Valve		
SVP	Soil Vent Pipe		
SWG	Storm Water Gully		
TFP	Tarmac Footpath		
TL	Traffic Light		
TP	Telegraph Pole		
UTL	Unable To Lift		
VP	Vent Pipe		

TABLE OF CO-ORDINATES

Station	Easting	Northing	Level
LE01	435045.384	411316.624	71.462
LE02	434956.497	411343.101	72.198
LE03	435010.162	411461.571	70.939
LE04	435042.435	411310.184	70.691
LE05	434919.523	411326.812	72.550
LE06	434946.211	411271.296	72.078
LE07	434903.455	411410.344	71.230
LE08	434928.741	411547.835	72.035
LE09	434894.948	411458.698	71.493
LE20	434876.977	411301.438	72.998
LE21	434825.117	411270.186	73.168
LE22	434797.093	411140.451	74.085
LE23	434875.192	410990.923	79.745
LE24	434953.130	411043.726	77.801
LE25	435073.164	411136.678	78.984
LE26	434966.903	411172.266	74.867
LE27	434969.324	411199.480	72.956
LE28	434940.629	411274.663	72.045
LE29	435013.756	411278.933	70.982
LE30	434886.541	411217.578	72.586

Rev	Date	Description	Drawn	Auth'd

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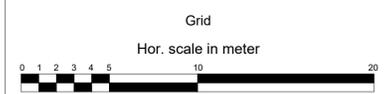
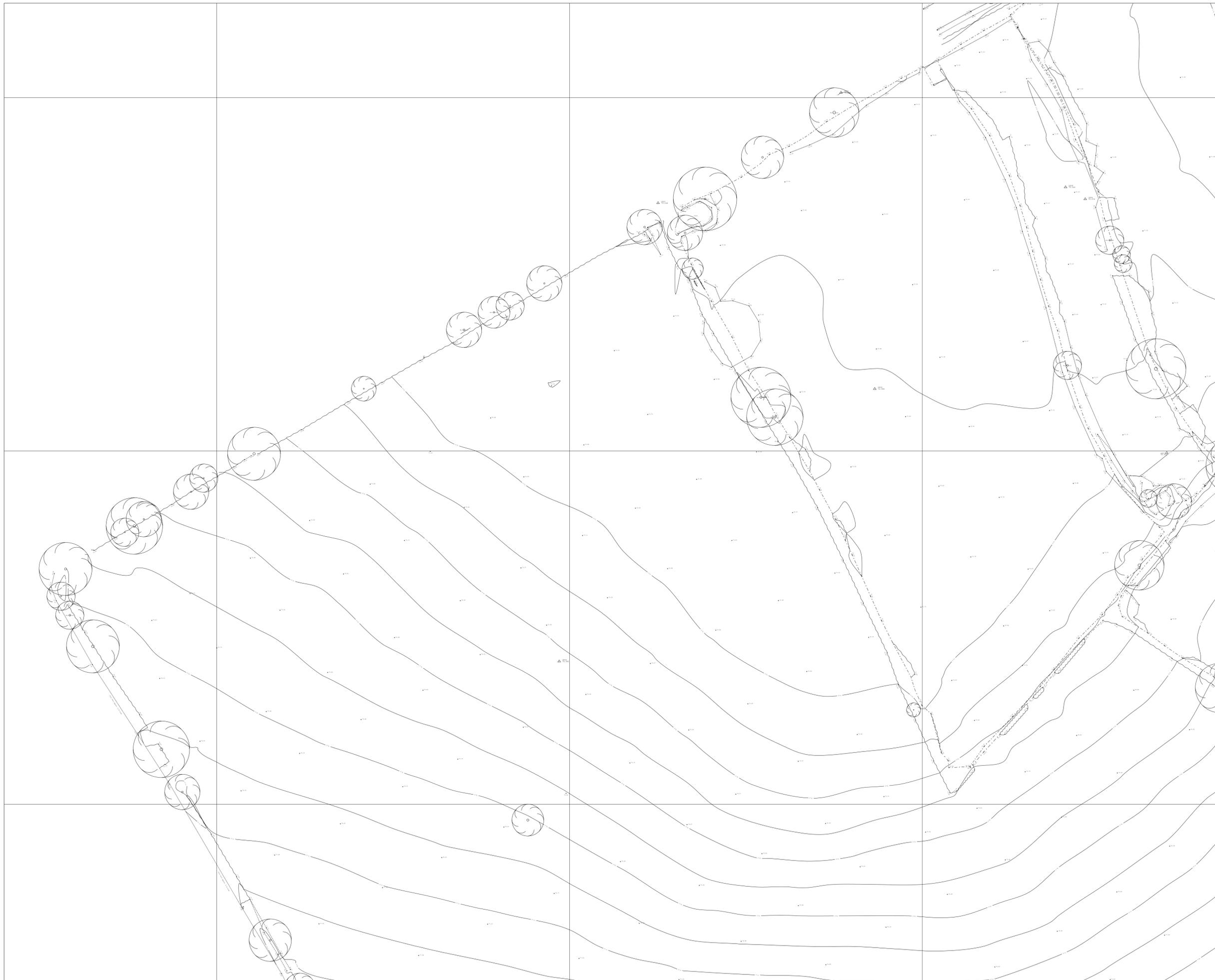
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Job number: eGeo120726
Sheet No: 1 of 5

Drawing No.	Rev.
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Grid computed from WGS84 using OSTN02
Levels computed using Geoid Model OSGM02



Abbreviation & Symbol Key:

B	Bollard	WM	Water Meter
BB	Bellia Beacon	WP	Waste Pipe
BT	British Telecom Cover	WT	Wall Top
BM	Bench Mark		
CL	Cover Level	Fence and Walls	
DK	Drop Kerb	Ret	Retaining Wall
EL	Electricity Cover	BW	Barbed Wire
EP	Electricity Pole	CB	Close Boarded
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IL	Invert Level	Bridge	
LB	Letter Box	Bus canopy	
LP	Lamp Post	Buildings	
MH	Man Hole	Chan_surfac	
Mir	Marker Post	Concrete	
MS	Man Stone	Fences	
NB	Notice Board	Verges	
NFI	No Further Information	Walls	
OSBM	Ordnance Survey BM		
P	Post		
PB	Post Box		
RE	Reading Eye		
RS	Road Sign		
SS	Street Name Sign		
RWP	Rain Water Pipe		
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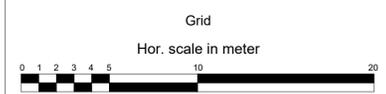
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Sheet No: 4 of 5

Drawing No. **eGeo120726_T01_Rev** Rev. **B**

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Grid

Hor. scale in meter



Abbreviation & Symbol Key:

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BT	British Telecom Cover	WT	Wall Top
BM	Bench Mark		
CL	Cover Level	Fence and Walls	
DK	Drop Kerb	Ret	Retaining Wall
EL	Electricity Cover	BW	Barbed Wire
EP	Electricity Pole	CB	Close Boarded
FH	Fire Hydrant	CL	Chain Link
FFP	Flagged Footpath	IR	Iron Railing
G	Gully	Lines	
GM	Gas Meter	Bank_bottom	
GV	Gas Valve	Bank_top	
IC	Inspection Cover	Bridge	
IL	Invert Level	Bus canopy	
LB	Letter Box	Buildings	
LP	Lamp Post	Chan_surfac	
MH	Man Hole	Concrete	
Mir	Marker Post	Fences	
MS	Man Stone	Verges	
NB	Notice Board	Walls	
NFI	No Further Information		
OSBM	Ordnance Survey BM		
P	Point		
PB	Post Box		
RE	Reading Eye		
RS	Road Sign		
SS	Street Name Sign		
RWP	Rain Water Pipe		
SP	Sign Post		
STP	Stop Cock		
SV	Stop Valve		
SVP	Soil Vent Pipe		
SWG	Storm Water Gully		
TFP	Tarmac Footpath		
TL	Traffic Light		
TP	Telegraph Pole		
UTL	Unable To Lift		
VP	Vent Pipe		

TABLE OF CO-ORDINATES

Station	Easting	Northing	Level
LE01	435045.384	411316.624	71.462
LE02	434956.497	411343.101	72.198
LE03	435010.162	411461.571	70.939
LE04	435042.435	411310.184	70.691
LE05	434919.523	411326.812	72.550
LE06	434946.211	411271.296	72.078
LE07	434903.455	411410.344	71.230
LE08	434928.741	411547.835	72.035
LE09	434894.948	411458.698	71.493
LE20	434876.977	411301.438	72.998
LE21	434825.117	411270.186	73.168
LE22	434797.093	411110.451	74.085
LE23	434875.192	410990.923	79.745
LE24	434953.130	411043.726	77.801
LE25	435073.164	411136.678	78.984
LE26	434966.903	411172.266	74.867
LE27	434969.324	411199.480	72.956
LE28	434940.629	411274.663	72.045
LE29	435013.756	411278.933	70.982
LE30	434866.541	411217.578	72.586

Rev	Date	Description	Drawn	Auth'd

eGeomatics

Land-Surv

Sheaf Bank
Business Park
Sheffield
S2 3EN

Tel +44 (0) 114 345 3467 Fax +44 (0) 114 345 3466
enquiries@land-surv.co.uk

CLIENT
Strategic Land Group Ltd
3 King Street
Salford
M3 7DG

PROJECT
Lee Lane Royston

TITLE
Topographical
Survey

SCALE	DATE	DRAWN	AUTH'D
1:500	25/06/12	RO	MK

Level datum	GPS orthometric using OSGM02
Grid	Plane, BNG on LE01 using OSTN02
Job number	eGeo120726
Sheet No	3 of 5

Drawing No.	Rev.
eGeo120726_T01_Rev	B

THIS IS A CAD DRAWING - DO NOT ALTER
Grid computed from WGS84 using OSTN02
Levels computed using Geoid Model OSGM02



NOTES:

- THIS DRAWING IS BASED UPON:
 - HOMES BY HONEY VIABILITY LAYOUT LL-0001 REV E;
 - EGEOMATICS LAND SURV TOPOGRAPHICAL SURVEY EGE0120726_T01 REV B;
 - YORKSHIRE WATER RECORDS;
 - ZS SURVEY'S UTILITY MAPPING SURVEY 4603;
 - ORDNANCE SURVEY MAPS.

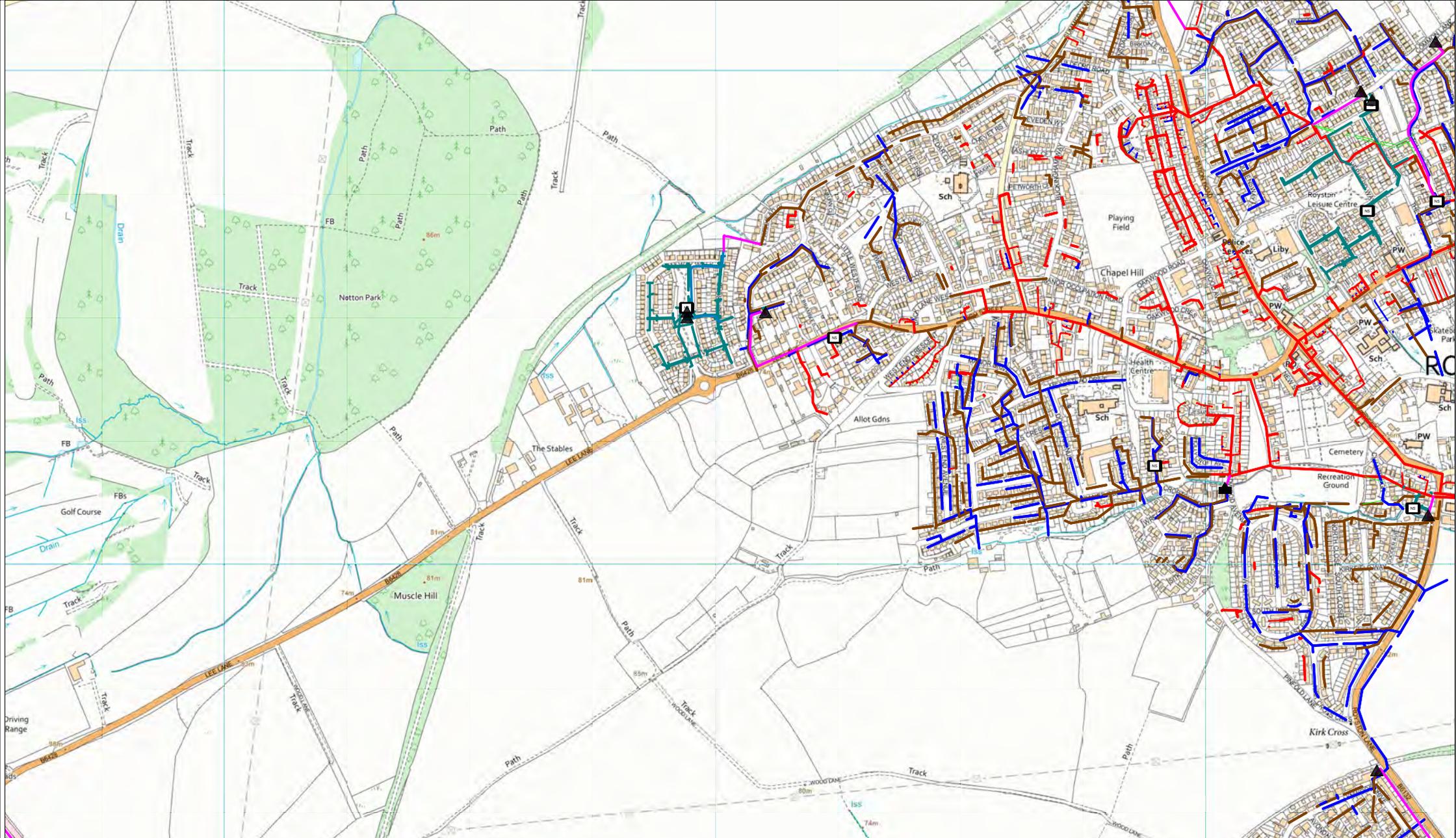
KEY:

- DEVELOPMENT BOUNDARY
- EXISTING OPEN WATERCOURSE
- EXISTING FOUL WATER SEWER / MANHOLE
- EXISTING FOUL WATER RISING MAIN
- EXISTING SURFACE WATER (ASSUMED HIGHWAY DRAIN) (FROM ZS SURVEY MAPPING)



Rev	Date	Amendments	By
Drawing Status: INFORMATION			
FORTEM			
FORTEM Civil Engineering Consultants Ltd T. 07377 556170 / 07748 982468 E. info@fortemconsultants.co.uk W. www.fortemconsultants.co.uk			
Client: HOMES BY HONEY			
Project: LEE LANE, ROYSTON			
Drawing Title: EXISTING DRAINAGE NETWORKS			
Drawn: LS	Scale: 1:1000 @ A1		
Checked: RD	Date: MAR 2026		
Drawing No. 1238 - 002	Rev. -		

C:\barberdy\FORTEM\Archives\Calvert - FORTEM\Projects\1238 - Lee Lane, Royston\2. Drawings\1. FORTEM\1238-002 Existing Drainage Networks.dwg 05 Mar 2026 - 12:09pm



433669 : 410510	Map Name : SE3310SE
 Yorkshire Water PO Box 500, Halifax Road, Bradford BD6 2LZ Contact Name : R Thornton Contact Tel :	

Title
Notes
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Partial Key
Foul Sewer = F
Combined Sewer = C
Surface Water Sewer = SW
Trade Sewer = TD
Partially Separate = PS
Date Req : 11/11/2025, 13:22:34
Source : Sewer Network Enquiry

This plan is furnished as a general guide only and no warranty as to its correctness is given or implied. This plan must not be relied upon in the event of excavations or other works made in the vicinity of public sewers. No house or property connections are shown.

Date Gen : 11/11/2025, 13:22:36



Topographic Legend	
Bottom of Bank	OH Electric
Top of Banking	Railway Line
Building	Road Centre
Building Canopy	Road Markings
Concrete Base	SC Hard/Hard
Contour Major	SC Hard/Soft
Contour Minor	SC Soft/Soft
Fences	Steps
General	Tree Canopy
Kerb Bottom	Vegetation
Kerb Drop	Visible Trench
Kerb Top	Walls
OH Comms	Water Edge

Topographic Abbreviations			
AV	Air Valve	PB	Pedestrian Beacon
BH	Borehole	PBx	Post Box
BO(L)	Bollard (Illuminated)	PGR	Pedestrian Guard Rail
BS	Bus Stop	PM	Parking Meter
Cab	Cabinet	PO	Post
CL	Cover Level	RE	Rodding Eye
COL	Column	RS(L)	Road Sign (Illuminated)
Conc	Concrete	RWP	Rain Water Pipe
DC	Drainage Channel	SPL	Sign Post (Illuminated)
DFBin	Dog Foul Bin	SRCam	Speed Camera
DP	Down Pipe	ST	Stop Tap
EP	Electricity Pole	SV	Sluice Valve
ER	Earth Rod	SVP	Soil Vent Pipe
FFL	Finished Floor Level	Tbox	Telephone Box
FH	Fire Hydrant	TL	Traffic Light
FP	Flag Pole	TOF	Top of Fence Level
GP	Gate Post	TOF	Top of Wall Level
GV	Gas Valve	TP	Telecoms Pole
GV	Gully	VP	Vent Pipe
IC	Inspection Cover	WB	Waste Bin
KO	Kerb Outlet	WB	Window Bottom Level
LP	Lamp Post	WM	Water Meter
MH	Manhole	WO	Wash Out
Mr	Marker	WTH	Window Top Level
MP	Marker Post	WV	Water Valve
MW	Monitoring Well		

Measured Building Legend		
External Building Line		
Internal Building Line		
Building Overheads		
Stairs/Steps		
Doors		
Windows		
Sanitaryware		
Kitchen Furniture		
Direction of Stairs (Arrow points up)		
Direction of Sloped Ceiling (Arrow points down)		
Window Sill and Head Height		
Double door	CH=0.00	Ceiling Height
Single door	FCH=0.00	False Ceiling Height
Window	FFL=0.00	Finished Floor Level

Utility Legend	
Air Line	SWD Sewer
Alarm Cable	Survey Extents
BT Cable	Heating Pipe
CATV Cable	HV Electric Cable
Chamber Extent	Kingston Comms
Comms Cable	Oil Pipe
CWD Sewer	Rising Main
Earth Wire/Tape	Traffic Control
Electric Cable	Unknown Detection
Fibre Optic Cable	Vent Pipe
Fuel Line	GPR Detection
FWD Sewer	Assumed Route
Gas Pipe	Records Route
Band of Cables	Cable Riser
Empty Service Duct	Drainage Backdrop

Utility Abbreviations			
CP	Cathodic Protection	LoS	Loss of Signal
CU	Disconnected Utility	MDPE	Middle Density PE
DI	Ductile Iron	SI	Span Iron
DoB	Depth of Bottom	TLC	Traffic Light Control
DoC	Depth of Cover	UDI	Unreliable Depth into
ED	Empty Duct	uPVC	Unplasticised
End of Trace		PE	Polyethylene
PE	Polyethylene	UVC	Unusable to Raise
HDPE	High Density PE	VC	Verified Clay

Manufacturer Stated Depths	
○	Detected Using Electromagnetic Location Methods e.g. Any metallic pipe/cable. Accuracy ± 2.5% of depth reading.
○	Detected Using Electromagnetic Location Methods e.g. Using a Scale to locate drainage pipework. Accuracy ± 2.5% of depth reading.
○	Detected Using Ground Penetrating Radar e.g. A plastic pipe or service not located by other means. Accuracy depends on ground conditions.

CAUTION - LIVE SERVICES PRESENT - EXTREME CARE SHOULD BE TAKEN WHEN EXCAVATING

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If this drawing and any associated drawings should be used in relation to works, we advise that the users of this information follow the principles detailed by the Health and Safety Executive guidance directive HSG 47, 'Avoiding Danger from Underground Services'. Further details of this directive are available at www.hse.gov.uk/ch11p/.

Notes

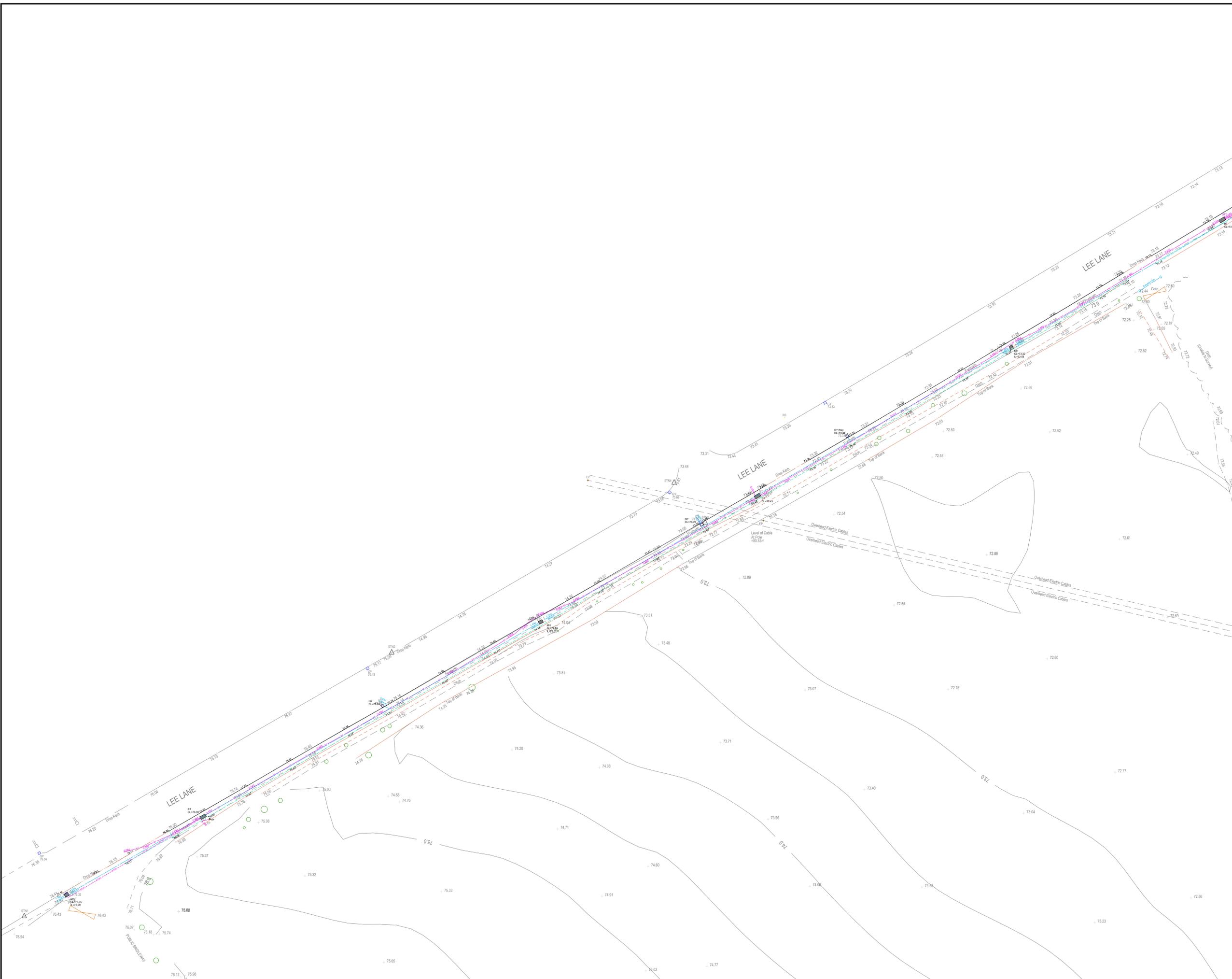
THIS DRAWING SHOULD ONLY BE USED FOR ITS ORIGINAL PURPOSE. ZS SURVEYS LTD ACCEPTS NO RESPONSIBILITY FOR THIS DRAWING IF SUPPLIED TO ANY PARTY OTHER THAN THE ORIGINAL CLIENT.

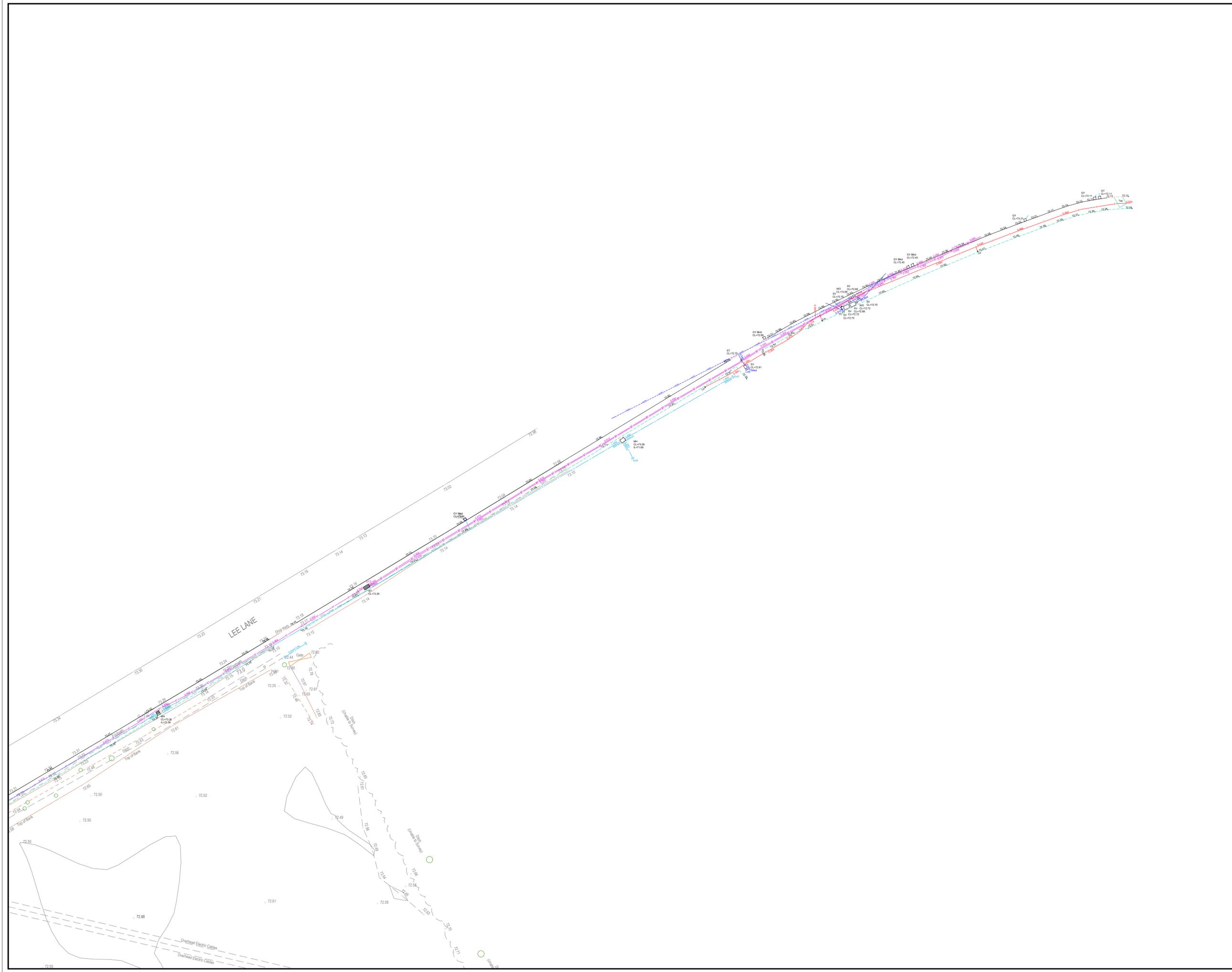
ALL LEVELS RELATED OSTN15 GRID PROJECTION.

ALL DIMENSIONS SHOULD BE VERIFIED ON SITE PRIOR TO CONSTRUCTION.

ALL HATCHING IS FOR PRESENTATIONAL PURPOSES ONLY.

Client		honey	
Site Location:		Lee Lane Barnsley S71 4RT	
Drawing Type:		Utility Mapping Survey	
Surveyed:	CR	Drawn:	ZH
Checked:	CR	Authorised:	ZS
Date:	03/12/25	Scale:	1:200@A0
ZS Surveys Ltd Land, Building & Engineering Surveyors www.zssurveys.com info@zssurveys.com			
Project Number:	4603		
Sheet Number:	UT001		





Topographic Legend

Bottom of Bank	OH Electric
Top of Banking	Railway Line
Building	Road Centre
Building Canopy	Road Markings
Concrete Base	SC Hard/Hard
Contour Major	SC Hard/Soft
Contour Minor	SC Soft/Soft
Fences	Steps
General	Tree Canopy
Kerb Bottom	Vegetation
Kerb Drop	Visible Trench
Kerb Top	Walls
OH Comms	Water Edge

Topographic Abbreviations

AV Air Valve	PB Pedestrian Beacon
BH Borehole	PBx Post Box
BO(L) Bollard (Illuminated)	PGR Pedestrian Guard Rail
BS Bus Stop	PM Parking Meter
Cab Cabinet	PO Post
CL= Cover Level	RE Rodding Eye
COL Column	RS(L) Road Sign (Illuminated)
Conc Concrete	RWP Rain Water Pipe
DC Drainage Channel	SPL Sign Post (Illuminated)
DFBin Dog Foul Bin	SRCam Speed Camera
DP Down Pipe	ST Stop Tap
EP Electricity Pole	SV Sluice Valve
ER Earth Rod	SVP Soil Vent Pipe
FFL= Finished Floor Level	Tbox Telephone Box
FP Flag Pole	TL Traffic Light
GP Gate Post	TOF= Top of Fence Level
GV Gas Valve	TOF= Top of Wall Level
GY Gully	TP Telecoms Pole
IC Inspection Cover	VP Vent Pipe
KO Kerb Outlet	WB Waste Bin
LP Lamp Post	WM Water Meter
MH Manhole	WO Wash Out
Mrk Marker	WTH Window Top Level
MP Marker Post	WV Water Valve
MW Monitoring Well	

Measured Building Legend

External Building Line	Window Sill and Head Height
Internal Building Line	Double door CH=0.00 Ceiling Height
Building Overheads	Single door FCH=0.00 False Ceiling Height
Stairs/Steps	Window FFL=0.00 Finished Floor Level
Doors	
Windows	
Sanitaryware	
Kitchen Furniture	
Direction of Stairs (Arrow points up)	
Direction of Sloped Ceiling (Arrow points down)	

Utility Legend

Air Line	SWD Sewer
Alarm Cable	Survey Extents
BT Cable	Heating Pipe
CATV Cable	HV Electric Cable
Chamber Extent	Kingston Comms
Comms Cable	Oil Pipe
CWD Sewer	Rising Main
Earth Wire/Tape	Traffic Control
Electric Cable	Unseen Detection
Fibre Optic Cable	Vent Pipe
Fuel Line	GPR Detection
FWD Sewer	Assumed Route
Gas Pipe	Records Route
Band of Cables	Cable Riser
Empty Service Duct	Drainage Backdrop

Utility Abbreviations

CP Cathodic Protection	LoS Loss of Signal
CU Disconnected Utility	MDPE Middle Density PE
DI Ductile Iron	SI Span Iron
DoB Depth of Bottom	TLC Traffic Light Control
DoC Depth of Cover	UDI Unreliable Depth into
ED Empty Duct	uPVC Unplasticised
End of Trace	PE Polyethylene
PE Polyethylene	UTR Unstable to Raise
HDPE High Density PE	VC Verified Clay

- Manufacturer Stated Depths**
- Detected Using Electromagnetic Location Methods
e.g. Any metallic pipe/cable. Accuracy ± 2.5% of depth reading.
 - Detected Using Electromagnetic Location Methods
e.g. Using a Sonde to locate drainage pipework.
Accuracy ± 2.5% of depth reading.
 - Detected Using Ground Penetrating Radar
e.g. A plastic pipe or service not located by other means.
Accuracy depends on ground conditions.

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Notes

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ALL LEVELS RELATED OSTN15 GRID PROJECTION.

ALL DIMENSIONS SHOULD BE VERIFIED ON SITE PRIOR TO CONSTRUCTION.

ALL HATCHING IS FOR PRESENTATIONAL PURPOSES ONLY.

Client	honey		
Site Location:	Lee Lane Barnsley S71 4RT		
Drawing Type:	Utility Mapping Survey		
Surveyed:	CR	Drawn:	ZH
Checked:	CR	Authorised:	ZS
Date:	03/12/25	Scale:	1:200@A0
ZS Surveys Ltd			
Land, Building & Engineering Surveyors			
www.zsurveys.com			
info@zsurveys.com			
Project Number:	4603		
Sheet Number:	UT002		

Appendix B Proposed Development

Drawing LL-0001 Rev E Homes by Honey – Viability Layout

Drawing 1238-003 Proposed Drainage Strategy

Drawing 1238-004 Proposed Off-site Drainage Strategy

Attenuation Calculations

76.8m
74.8m
LEE LANE



- Notes:**
1. THE COPYRIGHT OF THIS DRAWING IS VESTED IN homes by honey
 2. WORK TO FIGURED DIMENSIONS ONLY.
 3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS', SERVICE ENGINEERS' AND homes by honey DRAWINGS AND SPECIFICATIONS.
- Application boundary
 - Screen brick wall
 - Bin collection point - to only be used on collection days
 - Private slatted bin storage area
 - Gate
 - Indicates brindle block paviors
 - Indicates cycle storage - to be conditioned
 - Indicative proposed tree planting (refer to detailed landscape plan)
 - Existing trees/ vegetation to be retained
 - Trees/ vegetation removed
 - M4(2) 26%
 - M4(3) 6%

B Updated to show bus stop locations and raised tables. n47 10.03.26
 A Updated to latest planning layout. n47 23.02.26

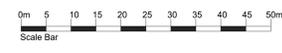
REV.	DESCRIPTION	BY	DATE

STATUS:

homes by honey
 Third Floor, 197 Wards Exchange
 Ecclesall Road, Sheffield
 S11 6HW
www.homesbyhoney.co.uk



SITE: LEE LANE, ROYSTON			
TITLE: COLOURED PLANNING LAYOUT			
SCALE AT A3:	DATE:	DRAWN:	CHECKED:
1:500	20.02.26	-	-
PROJECT NO:	DRAWING NO:	REVISION:	
3422	008-01	B	

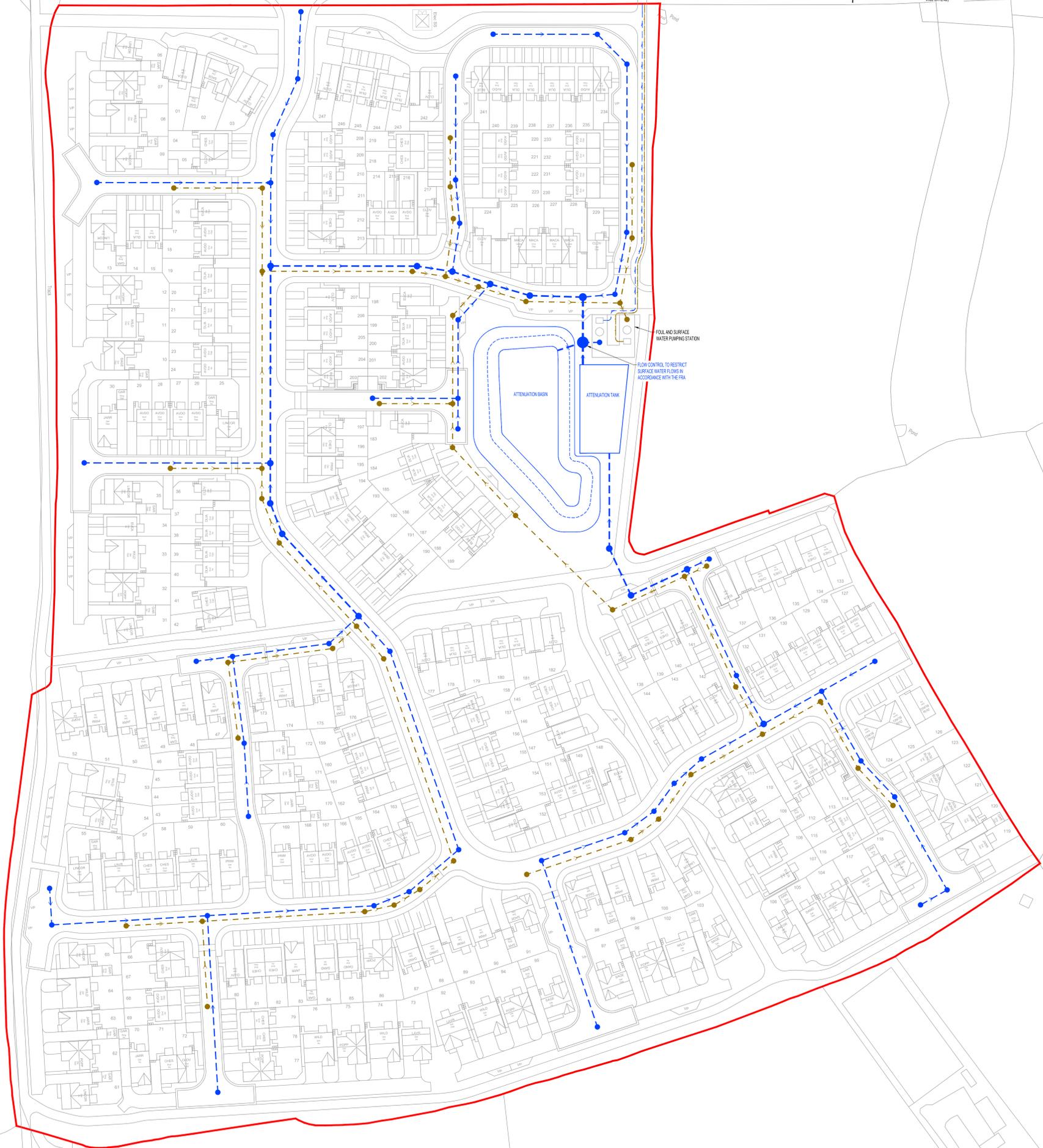




EXTENT OF ZS SURVEY (ANTICIPATED SYSTEM WILL EXTEND) LEE LANE EXISTING 2250 EXISTING 2000 BEAR LEE LANE FOR OFF-SITE FOUL AND SURFACE WATER REUSE TO DRAWING 1238-004 EXISTING 2000 EXISTING 2000 EXTENT OF ZS SURVEY (ANTICIPATED SYSTEM WILL EXTEND)

- NOTES:**
- THIS DRAWING IS BASED UPON:
 - HOMES BY HONEY VIABILITY LAYOUT LL-001 REV. E;
 - EGEOMATICS LAND SURVY TOPOGRAPHICAL SURVEY E650/20766 TO REV. B;
 - YORKSHIRE WATER RECORDS;
 - ZS SURVEYS UTILITY MAPPING SURVEY 4603;
 - ORNANCE SURVEY MAPS.
 - THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE FORTEM FLOOD RISK ASSESSMENT REPORT REF: 1238-R001 AND PROPOSED OFF-SITE DRAINAGE STRATEGY DRAWING 1238-004.

- KEY:**
- DEVELOPMENT BOUNDARY
 - EXISTING SURFACE WATER (ASSUMED HIGHWAY DRAIN FROM ZS SURVEY MAPPING)
 - PROPOSED FOUL WATER SEWER / MANHOLE
 - PROPOSED FOUL WATER RISING MAIN
 - PROPOSED SURFACE WATER RISING MAIN
 - PROPOSED SURFACE WATER ATTENUATION TANK
 - PROPOSED ATTENUATION BASIN



Rev	Date	Amendments	By
Drawing Status: PLANNING			
FORTEM			
FORTEM Civil Engineering Consultants Ltd T: 01277 656171 / 01748 862468 E: info@fortemconsultants.co.uk W: www.fortemconsultants.co.uk			
Client: HOMES BY HONEY			
Project: LEE LANE, ROYSTON			
Drawing Title: PROPOSED DRAINAGE STRATEGY			
Drawn: LS	Scale: 1:500 @ A0		
Checked: RD	Date: MAR 2026		
Drawn No. 1238 - 003	Rev. -		

C:\Users\AFC\Documents\Projects\1238 - Lee Lane - Drainage Strategy - FORTEM\Drawings\1238-004\1238-004.dwg, 22/03/2025, 11:23 AM

FORTEM Civil Engineering Consultants Ltd		Page 1
11 The Covert York YO24 1JN	Lee Lane Royston QSE 37.21/s	
Date 04/03/2026 File 260304 QSE 37.21s 100yr...	Designed by RD Checked by ADC	
XP Solutions	Source Control 2020.1.3	

Summary of Results for 100 year Return Period (+45%)

Storm Event	Max Level (m)	Max Depth (m)	Max Control (l/s)	Max Volume (m ³)	Status
15 min Summer	70.674	1.174	37.1	933.3	O K
30 min Summer	71.060	1.560	37.1	1240.2	O K
60 min Summer	71.458	1.958	37.1	1557.0	O K
120 min Summer	71.820	2.320	37.1	1844.3	O K
180 min Summer	71.984	2.484	37.1	1974.9	O K
240 min Summer	72.062	2.562	37.1	2036.5	O K
360 min Summer	72.107	2.607	37.1	2072.3	O K
480 min Summer	72.087	2.587	37.1	2056.6	O K
600 min Summer	72.051	2.551	37.1	2028.3	O K
720 min Summer	72.011	2.511	37.1	1996.3	O K
960 min Summer	71.924	2.424	37.1	1927.2	O K
1440 min Summer	71.746	2.246	37.1	1785.9	O K
2160 min Summer	71.475	1.975	37.1	1570.4	O K
2880 min Summer	71.157	1.657	37.1	1317.0	O K
4320 min Summer	70.638	1.138	37.1	904.9	O K
5760 min Summer	70.292	0.792	37.1	629.3	O K
7200 min Summer	70.068	0.568	36.0	451.8	O K
8640 min Summer	69.927	0.427	34.1	339.6	O K
10080 min Summer	69.837	0.337	32.1	267.7	O K
15 min Winter	70.820	1.320	37.1	1049.6	O K
30 min Winter	71.258	1.758	37.1	1397.6	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m ³)	Discharge Volume (m ³)	Time-Peak (mins)
15 min Summer	130.490	0.0	961.5	26
30 min Summer	87.266	0.0	1287.8	40
60 min Summer	55.699	0.0	1655.1	70
120 min Summer	34.349	0.0	2042.0	128
180 min Summer	25.522	0.0	2276.1	186
240 min Summer	20.533	0.0	2441.8	244
360 min Summer	15.048	0.0	2684.3	362
480 min Summer	12.070	0.0	2870.8	460
600 min Summer	10.165	0.0	3021.8	514
720 min Summer	8.828	0.0	3149.3	576
960 min Summer	7.062	0.0	3358.1	704
1440 min Summer	5.146	0.0	3668.0	984
2160 min Summer	3.743	0.0	4013.3	1404
2880 min Summer	2.982	0.0	4263.3	1792
4320 min Summer	2.161	0.0	4631.6	2508
5760 min Summer	1.718	0.0	4914.6	3176
7200 min Summer	1.437	0.0	5137.0	3832
8640 min Summer	1.241	0.0	5323.2	4504
10080 min Summer	1.097	0.0	5489.5	5240
15 min Winter	130.490	0.0	1077.6	26
30 min Winter	87.266	0.0	1442.7	40

FORTEM Civil Engineering Consultants Ltd		Page 2
11 The Covert York YO24 1JN	Lee Lane Royston QSE 37.21/s	
Date 04/03/2026 File 260304 QSE 37.21s 100yr...	Designed by RD Checked by ADC	
XP Solutions	Source Control 2020.1.3	

Summary of Results for 100 year Return Period (+45%)

Storm Event	Max Level (m)	Max Depth (m)	Max Control (l/s)	Max Volume (m ³)	Status
60 min Winter	71.707	2.207	37.1	1754.2	O K
120 min Winter	72.123	2.623	37.1	2085.2	O K
180 min Winter	72.320	2.820	37.1	2241.6	O K
240 min Winter	72.419	2.919	37.1	2320.8	O K
360 min Winter	72.494	2.994	37.1	2380.3	O K
480 min Winter	72.495	2.995	37.1	2381.1	O K
600 min Winter	72.455	2.955	37.1	2349.1	O K
720 min Winter	72.394	2.894	37.1	2301.0	O K
960 min Winter	72.288	2.788	37.1	2216.5	O K
1440 min Winter	72.039	2.539	37.1	2018.8	O K
2160 min Winter	71.640	2.140	37.1	1701.7	O K
2880 min Winter	71.154	1.654	37.1	1315.1	O K
4320 min Winter	70.404	0.904	37.1	718.6	O K
5760 min Winter	70.017	0.517	35.5	411.2	O K
7200 min Winter	69.831	0.331	32.0	262.9	O K
8640 min Winter	69.746	0.246	28.9	195.6	O K
10080 min Winter	69.719	0.219	25.6	173.9	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m ³)	Discharge Volume (m ³)	Time-Peak (mins)
60 min Winter	55.699	0.0	1854.1	68
120 min Winter	34.349	0.0	2287.4	126
180 min Winter	25.522	0.0	2549.5	182
240 min Winter	20.533	0.0	2735.0	240
360 min Winter	15.048	0.0	3006.6	354
480 min Winter	12.070	0.0	3215.4	462
600 min Winter	10.165	0.0	3384.4	566
720 min Winter	8.828	0.0	3527.1	610
960 min Winter	7.062	0.0	3760.8	746
1440 min Winter	5.146	0.0	4106.9	1058
2160 min Winter	3.743	0.0	4495.1	1520
2880 min Winter	2.982	0.0	4775.3	1936
4320 min Winter	2.161	0.0	5188.5	2596
5760 min Winter	1.718	0.0	5504.6	3224
7200 min Winter	1.437	0.0	5753.8	3824
8640 min Winter	1.241	0.0	5962.6	4408
10080 min Winter	1.097	0.0	6149.7	5144

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11 The Covert York YO24 1JN	Lee Lane Royston QSE 37.21/s	
Date 04/03/2026 File 260304 QSE 37.21s 100yr...	Designed by RD Checked by ADC	
XP Solutions	Source Control 2020.1.3	

Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	100	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	19.000	Shortest Storm (mins)	15
Ratio R	0.361	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+45

Time Area Diagram

Total Area (ha) 3.975

Time (mins)		Area	Time (mins)		Area	Time (mins)		Area
From:	To:	(ha)	From:	To:	(ha)	From:	To:	(ha)
0	4	1.325	4	8	1.325	8	12	1.325

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11 The Covert York YO24 1JN	Lee Lane Royston QSE 37.21/s	
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XP Solutions	Source Control 2020.1.3	

Model Details

Storage is Online Cover Level (m) 73.000

Tank or Pond Structure

Invert Level (m) 69.500

Depth (m)	Area (m ²)	Depth (m)	Area (m ²)
0.000	795.0	3.500	795.0

Hydro-Brake® Optimum Outflow Control

Unit Reference	MD-SHE-0231-3720-3000-3720
Design Head (m)	3.000
Design Flow (l/s)	37.2
Flush-Flo™	Calculated
Objective	Minimise upstream storage
Application	Surface
Sump Available	Yes
Diameter (mm)	231
Invert Level (m)	69.500
Minimum Outlet Pipe Diameter (mm)	300
Suggested Manhole Diameter (mm)	2100

Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	3.000	37.2
Flush-Flo™	0.870	37.1
Kick-Flo®	1.809	29.2
Mean Flow over Head Range	-	32.5

The hydrological calculations have been based on the Head/Discharge relationship for the Hydro-Brake® Optimum as specified. Should another type of control device other than a Hydro-Brake Optimum® be utilised then these storage routing calculations will be invalidated

Depth (m)	Flow (l/s)						
0.100	7.7	1.200	36.4	3.000	37.2	7.000	56.0
0.200	23.2	1.400	35.2	3.500	40.0	7.500	57.9
0.300	31.1	1.600	33.1	4.000	42.7	8.000	59.7
0.400	33.6	1.800	29.4	4.500	45.2	8.500	61.5
0.500	35.2	2.000	30.6	5.000	47.6	9.000	63.2
0.600	36.3	2.200	32.0	5.500	49.8	9.500	64.9
0.800	37.1	2.400	33.4	6.000	51.9		
1.000	37.0	2.600	34.7	6.500	54.0		

Appendix C Flood Risk Mapping

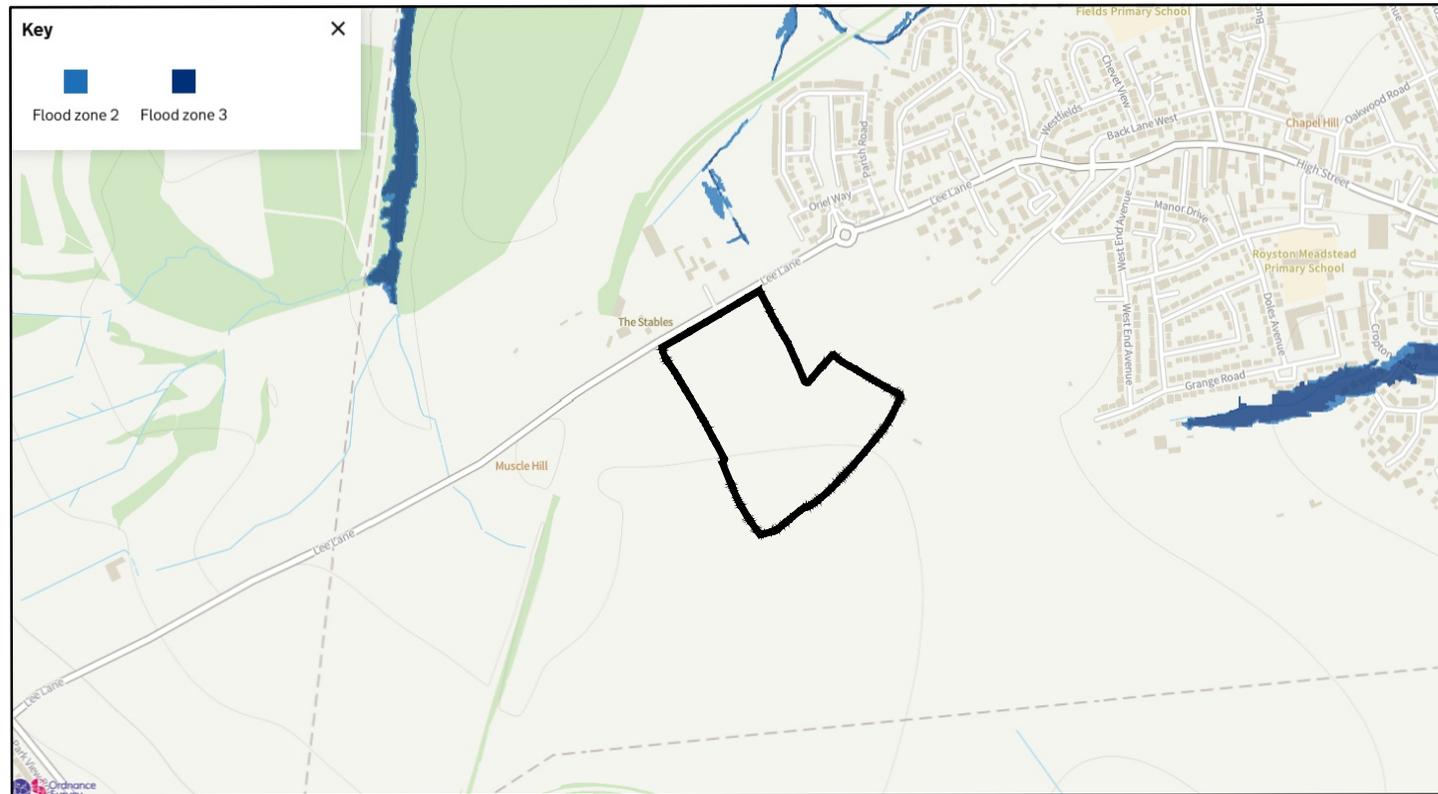
Gov.uk Map – Risk from Rivers or Sea

Gov.uk Map – Risk from SW – 1in1000 (Low)

Gov.uk Map – Risk from SW – 1in100 (Medium)

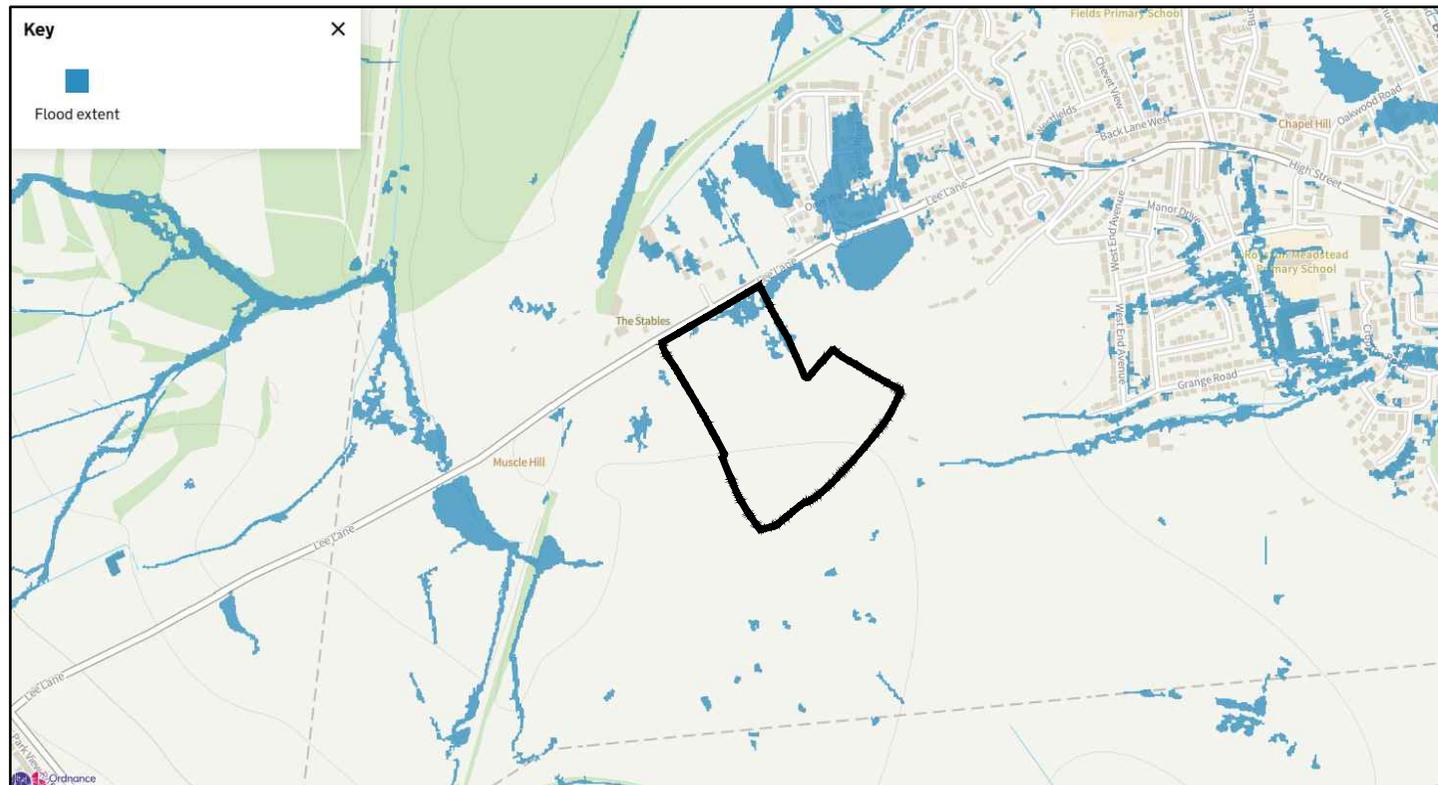
Gov.uk Map – Risk from SW – 1in30 (High)

— Development
Boundary



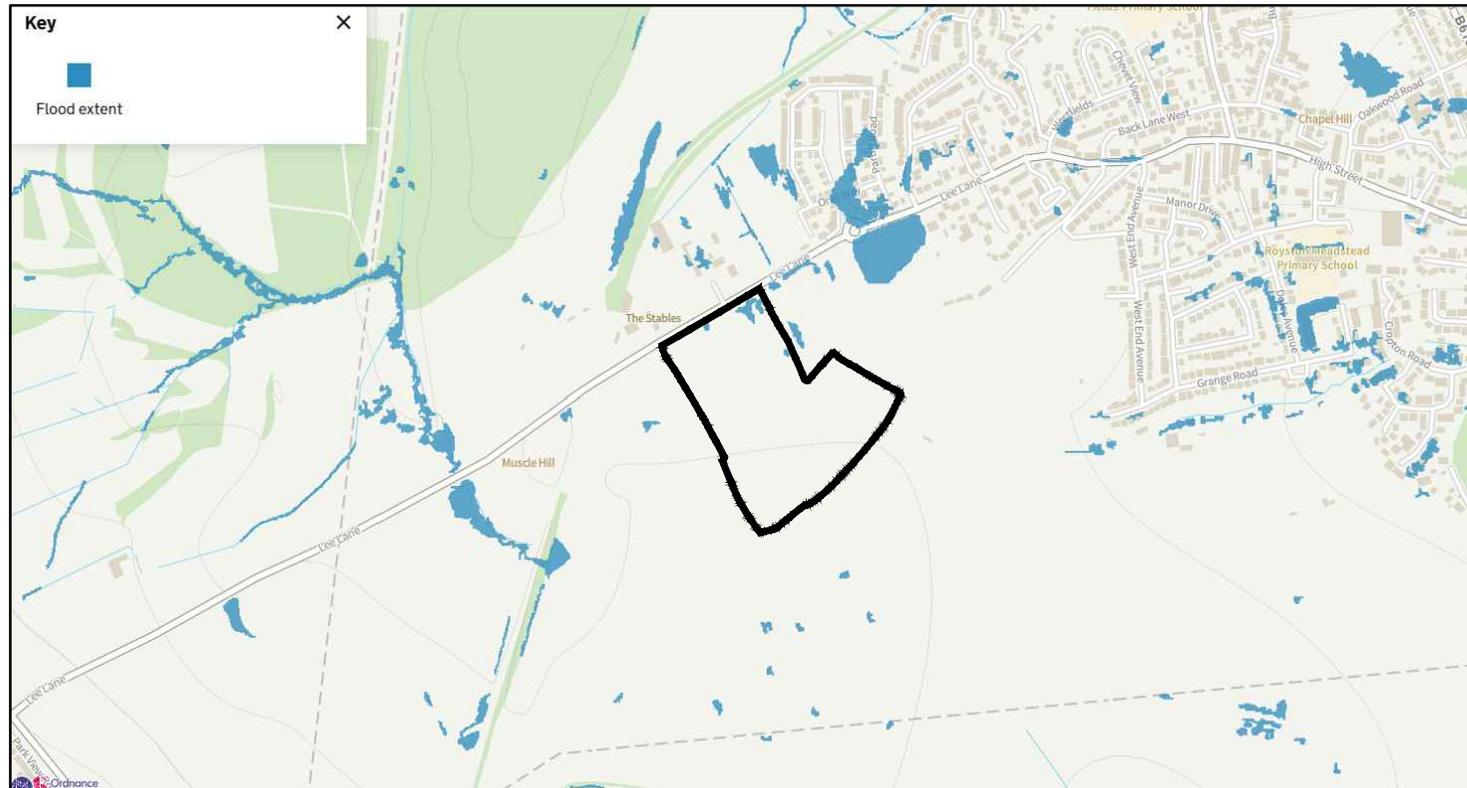
LEE LANE, ROYSTON
EXTRACT FROM ENVIRONMENT AGENCY MAPPING (GOV.UK)
RISK OF FLOODING FROM RIVERS OR SEA
EXTRACT TAKEN 04.02.2026 : NTS

— Development
Boundary



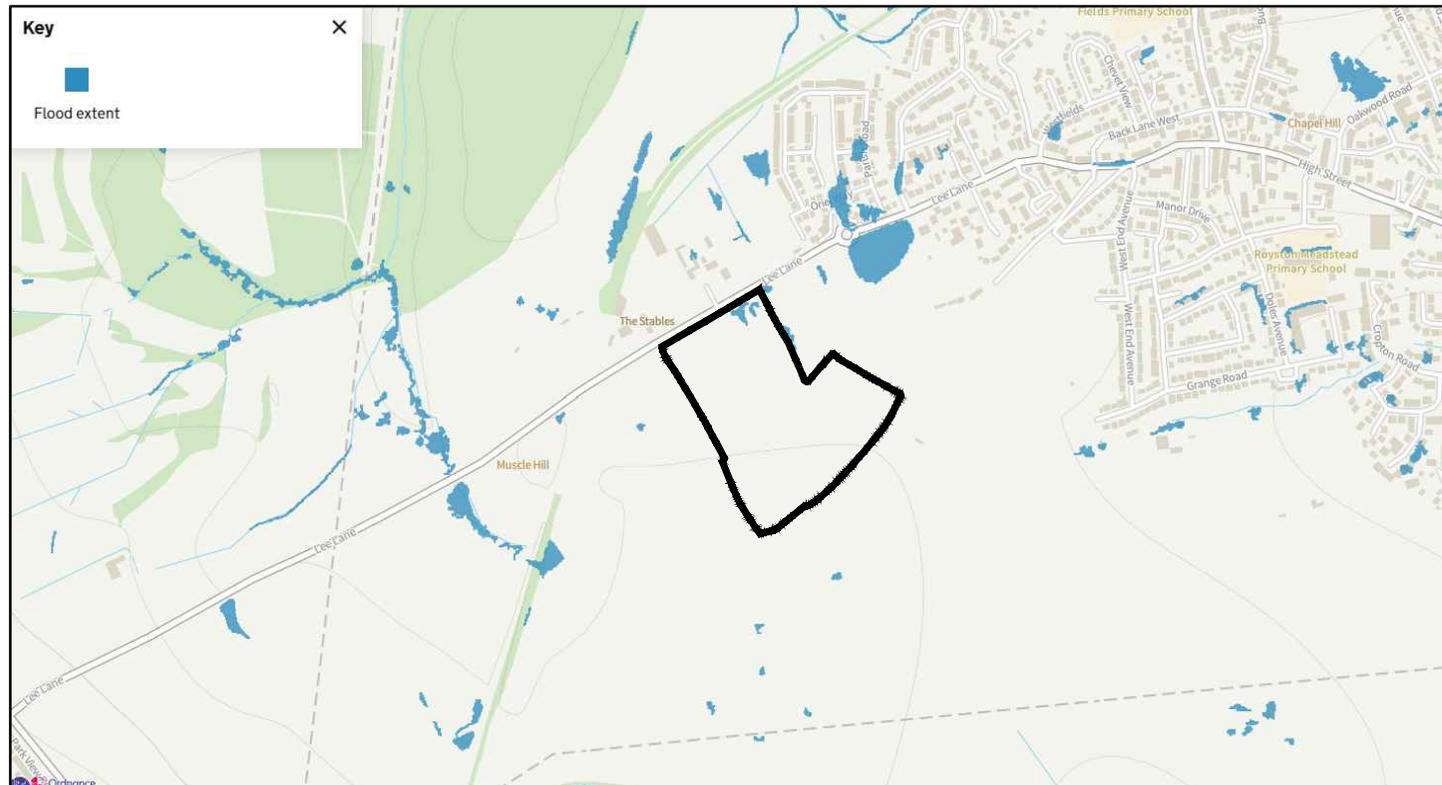
LEE LANE, ROYSTON
EXTRACT FROM ENVIRONMENT AGENCY MAPPING (GOV.UK)
RISK OF FLOODING FROM SURFACE WATER
ANNUAL LIKELIHOOD OF FLOODING: 1 IN 1000 (LOW)
EXTRACT TAKEN 04.02.2026 : NTS

— Development
Boundary



LEE LANE, ROYSTON
EXTRACT FROM ENVIRONMENT AGENCY MAPPING (GOV.UK)
RISK OF FLOODING FROM SURFACE WATER
ANNUAL LIKELIHOOD OF FLOODING: 1 IN 100 (MEDIUM)
EXTRACT TAKEN 04.02.2026 : NTS

— Development
Boundary



LEE LANE, ROYSTON
EXTRACT FROM ENVIRONMENT AGENCY MAPPING (GOV.UK)
RISK OF FLOODING FROM SURFACE WATER
ANNUAL LIKELIHOOD OF FLOODING: 1 IN 30 (HIGH)
EXTRACT TAKEN 04.02.2026 : NTS

Appendix D Correspondence

BMBC Consultation response (29.08.2018)

Yorkshire Water Pre-Planning Enquiry A/02851 (10.11.2025)

Wayne Walker

From: Atkins , Wayne <WayneAtkins@barnsley.gov.uk>
Sent: 29 August 2018 09:01
To: Wayne Walker
Cc: Ben Tidmarsh
Subject: RE: 105.002 Lee Lane, Royston - Discharge Rate & Connection Approval

Hi Wayne,

Apologies for the delay in responding.

If the developer is to carry out works within or in the proximity of any watercourse he must gain the relevant permissions from the Lead Local Flood Authority – Contact highwaydrainage@barnsley.gov.uk

I have no objections in principal to a discharge rate of 37.2ltr/sec into the watercourse to the north of the site.

There should be no increase in surface water runoff from the new development. PPS25 recognises that the management of flood risk is not simply restricted to flood plains and that a catchment-wide approach should be employed.

Any balancing facility should be designed to accommodate a 1 in 30 year flow from the site below ground and a 1 in 100 year flow retained within the site (including an allowance of 30% for climate change), without causing any flooding to buildings.

There are alternatives to conventional storage for the control of surface water run-off that are favoured by the authority where ground conditions are suitable. Sustainable Urban Drainage techniques (SUD's) tackle surface water run-off problems at source using features such as soakaways, permeable pavements, grassed swales, infiltration trenches, ponds and wetlands to attenuate flood peak flows, produce water quality improvements and environmental enhancements.

The authority seeks to promote the use of SUD's techniques to this site and the authority expects the developer of the site to submit detailed investigations such that the use of SUD's has been fully explored.

If you require any further information please let me know.

Regards

Wayne Atkins
Principal Engineer – Drainage
Environment & Transport
Place Directorate
Barnsley Metropolitan Borough Council

Telephone: 01226 772182
E-mail: wayneatkins@barnsley.gov.uk



YorkshireWater

Fortem Consultants
4100 Pure Offices
Leeds
LS15 8GB

Your Ref:
Our Ref: A/02851

Yorkshire Water Services
Developer Services
Sewerage Technical Team
PO BOX 52
Bradford
BD3 7AY

Tel: 0345 120 8482

Email:
Technical.Sewerage@yorkshirewater.co.uk

10th November 2025

Dear Sir/Madam,

**Lee Lane, Royston, South Yorkshire, Barnsley S75 6JZ – Pre-Planning Sewerage Enquiry
X126116**

Thank you for your recent enquiry. Our charge of £585.60 plus VAT has been made through the developer services portal. You will receive an invoice in due course. The following comments reflect our view, with regard to the public sewer network only, based on a 'desk top' study of the site and are valid for a maximum period of twelve months:

Please find enclosed a complimentary extract from the Statutory Sewer Map which indicates the recorded position of the public sewers. Please note that as of October 2011 and the private to public sewer transfer, there are many uncharted Yorkshire Water assets currently not shown on our records. The following comments reflect our view, with regard to the public sewer network only, based on a 'desk top' study of the site and are valid for a maximum period of twelve months:





YorkshireWater

Foul Water

The closest practicable point of discharge for foul will be the 225mm public foul water public sewer on Lee Lane (approximately 300 metres east of the site), but at present it does not have adequate capacity available to accommodate the anticipated foul water discharge from the proposed site. Subject to the submission of a Formal Planning Application and robust build plan and start date, Yorkshire Water will carry out a feasibility study to determine suitable foul connection points, any available capacity in the public sewer network, together with timescales for any potential upgrading works required. This permission is not an acceptance in respect to any planning conditions imposed under the Grant of Planning Permission.

The cost for any feasibility/modelling/upgrade works will be at Yorkshire Waters cost up-front and recouped via the sites eventual infrastructure charges.

What are infrastructure charges? We levy infrastructure charges for all newly connected properties that have not been connected to our water or sewer network before. The charges are calculated to recover the cost of reinforcing our existing water and sewer networks needed to serve new developments. The charges are set to recover the costs over the whole of the Yorkshire Water area to increase capacity.

For more information <https://www.yorkshirewater.com/developers/developer-services-charge> Please review section 4 (page 68) of our New Connection Charging Arrangements 2023/2024 for an explanation of our infrastructure charges.

From the information supplied, it is not possible to determine if the whole site will drain by gravity to the public sewer network. If the site, or part of it, will not drain by gravity, then it is likely that a sewage pumping station will be required to facilitate connection to the public sewer network. If sewage pumping is required foul water discharge must not exceed 4.75 litres per second. This permission is not an acceptance in respect to any planning conditions imposed under the Grant of Planning Permission.





YorkshireWater

Surface Water

The developer's attention is drawn to Requirement H3 of the Building Regulations 2010. This establishes a preferred hierarchy for surface water disposal. As the proposed site is currently undeveloped no surface water is known to have previously discharged to the public sewer network. As such, the local public sewer network does not have capacity to accept any surface water from the proposed site. If SuDS are not viable, the developer is advised to contact the Environment Agency/local Land Drainage Authority/Internal Drainage Board with a view to establishing a suitable watercourse for discharge.

It should be noted that if connection to a watercourse requires 3rd party land permission, Yorkshire Water would require this permission to be sought and refused before this means of surface water disposal is conclusively ruled out. -

(NB: From the supplied drawings, it is proposed that foul and surface water discharge to unmapped foul and surface water networks - given Yorkshire Water has no information regarding these sewers, nor where they ultimately discharge, it is not possible to judge their viability)

Other Observations

Any new connection to an existing public sewer will require the prior approval of Yorkshire Water. You may apply online or obtain an application form from our website (www.yorkshirewater.com/developers/sewerage/sewerage-connections/) or by telephoning 0345 120 84 82.

Under the provisions of section 111 of the Water Industry Act 1991 it is unlawful to pass into any public sewer (or into any drain or private sewer communicating with the public sewer network) any items likely to cause damage to the public sewer network interfere with the free flow of its contents or affect the treatment and disposal of its contents. Amongst other things this includes fat, oil, nappies, bandages, syringes, medicines, sanitary towels and incontinence pants. Contravention of the provisions of section 111 is a criminal offence.

The developer should note that the site drainage details submitted have not been approved for the purposes of adoption or diversion. If the developer wishes to have the sewers included in a sewer adoption/diversion agreement with Yorkshire Water (under Sections 104 and 185 of the Water Industry Act 1991), they should contact our Developer Services Team (Telephone 0345 120 84 82) at the earliest opportunity. Sewers intended for adoption and diversion should be designed and constructed in accordance with the WRC publication 'Sewers for Adoption - a design and construction guide for developers' 6th Edition, as supplemented by Yorkshire Water's requirements.





YorkshireWater

All the above comments are based upon the information and records available at the present time and are valid for a period of 12 months. The information contained in this letter together with that shown on any extract from the Statutory Sewer Map that may be enclosed is believed to be correct and is supplied in good faith. Please note that capacity in the public sewer network is not reserved for specific future development. It is used up on a 'first come, first served' basis. You should visit the site and establish the line and level of any public sewers affecting your proposals before the commencement of any design work.

Yours faithfully

Reuben Thornton
Land and Planning Team

