



JUDWAA

29 DENTON ROAD, WOKINGHAM

DRAINAGE STRATEGY

March 2026

29 DENTON ROAD, WOKINGHAM

DRAINAGE STRATEGY

Quality Management

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JUDWAA CONSULTING
A Vision to Better Solutions

Judwaa Consulting Ltd
Suite 522
5 Charter House
Lord Montgomery Way
Portsmouth
PO1 2S

FLOOD RISK ASSESSMENT

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- Appendix C: Thames Water Sewer Map Record

1. INTRODUCTION

- 1.1 This drainage strategy report has been prepared by Judwaa Consulting on behalf of Mr H Butterfield to support a planning application for his proposed residential development at 29 Denton Road, Wokingham. The site nearest postcode is RG40 2DX.

2. SITE DETAILS

- 2.1 The proposed development site is an existing dwelling situated at No. 29 Denton Road, Wokingham with Sturges Road to the west of the site and residential buildings to south and east of the development site.
- 2.2 The overall plot size is approximately 0.04ha and the building was a single dwelling up until the mid-1990s. However, the building is now currently use as a chiropractor clinic at ground floor level with residential use above on first floor. See **Figure 1** for site location.



Figure 1: Site location plan

- 2.3 The development proposals comprise of converting the building back into a single dwelling and will no longer be used as clinic. All proposed changes will be internal to facilitate the change of use to a single dwelling. The proposal does not include any external alterations to the building or the paved areas outside of the building. The site access and parking area remain as existing. See **Appendix A** for proposed building plans.
- 2.4 The development site is classified as brownfield with a mixture of permeable and impermeable areas. The proposed development will have no increase in impermeable area, as such there will be no increase in surface water runoff generated by the new development.

3. SITE GEOLOGY

- 3.1 A review of the British Geological Survey (BGS) mapping indicates that the bedrock geology beneath the site is a Bagshot Formation - Sand. Sedimentary bedrock formed between 56 and 47.8 million years ago during the Palaeogene period. See **Figure 2** for the BGS map extract.
- 3.2 Superficial deposits underlying the site have been recorded as River Terrace Deposits, 6 - Sand and gravel. Sedimentary superficial deposit formed between 2.588 million years ago and the present during the Quaternary period.

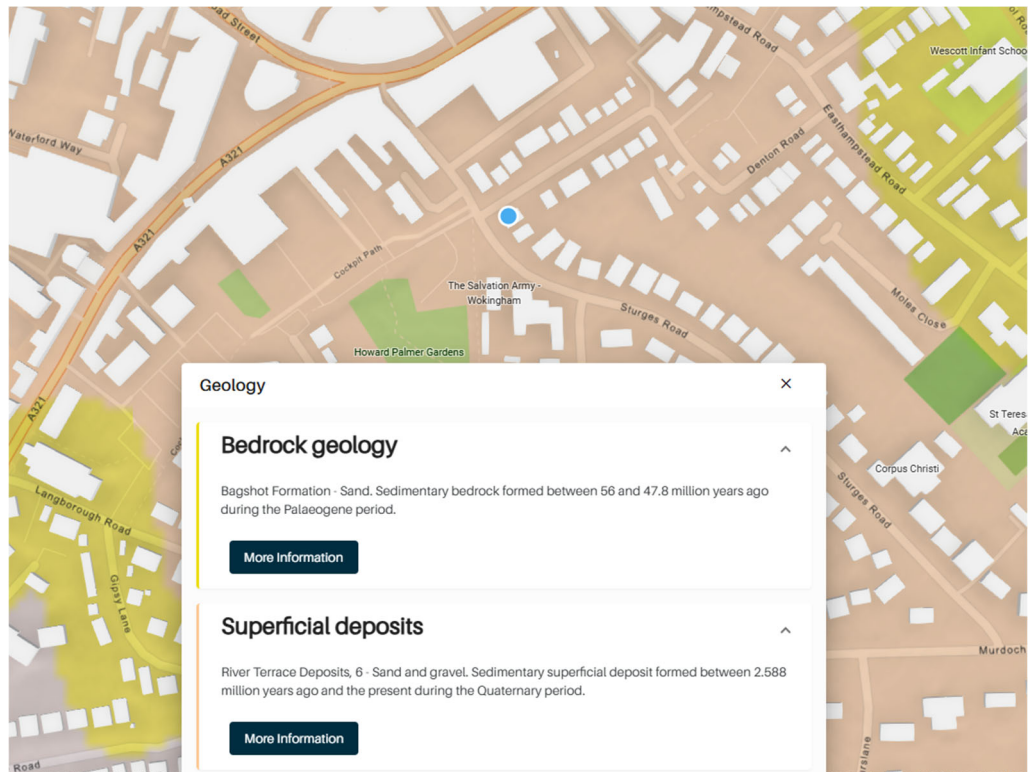


Figure 2: BGS Map Extract

- 3.3 Local boreholes from the BGS website shows two boreholes both of which are situated south-east of the development site. The boreholes are located approximately 327m away from the site boundary and their numbers are **SU86NW91** and **SU86NW92**. Both boreholes are 15m deep and shows the soil is medium dense orange / brown grey silty clayey sand with some gravel underneath a made ground comprising of tarmac and brick fill. See **Appendix B** for boreholes information.

4. EXISTING DRAINAGE

Existing Surface Water Drainage

- 4.1 The site is currently an existing building currently used as a chiropractor clinic at ground floor level with residential use above which appears to have a private drainage system serving the property. Any surface water runoff currently generated at the site appears to be drain by a gravity sewer and finally discharge to the public surface water sewer on Denton Road.
- 4.2 The application site is located within Thames Water drainage area. According to Thames Water existing sewer map record, there is an existing 150mm diameter surface water sewer located on Denton Road adjacent to the site which appears to drain the site. See **Appendix C** for Thames Water sewer map record.

Existing Foul Water Drainage

- 4.1 According to Thames Water existing sewer map record, it shows there is an existing 150mm diameter foul sewer running along Denton Road north of the development site and another 150mm diameter foul sewer running along Sturges Road south of the site. Foul drainage from the existing building appears to drain to one of these existing foul sewers. See **Appendix C** for Thames Water sewer map record.

5. FLOOD RISK

Fluvial/tidal flooding

- 5.1 Flood mapping obtained from the government's 'flood map for planning' website has identified that the site falls within Flood Zone 1 which shows a very low risk of flooding. This means the site is assessed as having a less than 0.1% annual probability of river or sea flooding (i.e. less than a 1 in 1,000 chance of flooding in any year). See **Figure 3** for map extract.



Figure 3: Flood Zone Map

- 4.2 The NPPF states that flood risk to land and property should not be increased as a result of new development.
- 4.3 It is best practice that the surface water drainage arrangements for any proposed development site should be that volumes and peak discharge rates, leaving the site, are no greater than the rates for the site prior to development.

6. PROPOSED DRAINAGE STRATEGY

Proposed Surface Water Drainage

- 6.1 The development site is classified as brownfield with a mixture of permeable and impermeable areas. The proposed development will have no increase in impermeable area, as such there will be no increase in surface water runoff generated by the new development. The surface water drainage for the existing building will therefore be retained and utilised to serve the new proposed development. The surface water drainage will continue to discharge to the Thames Water existing surface water sewer located on Denton Road.

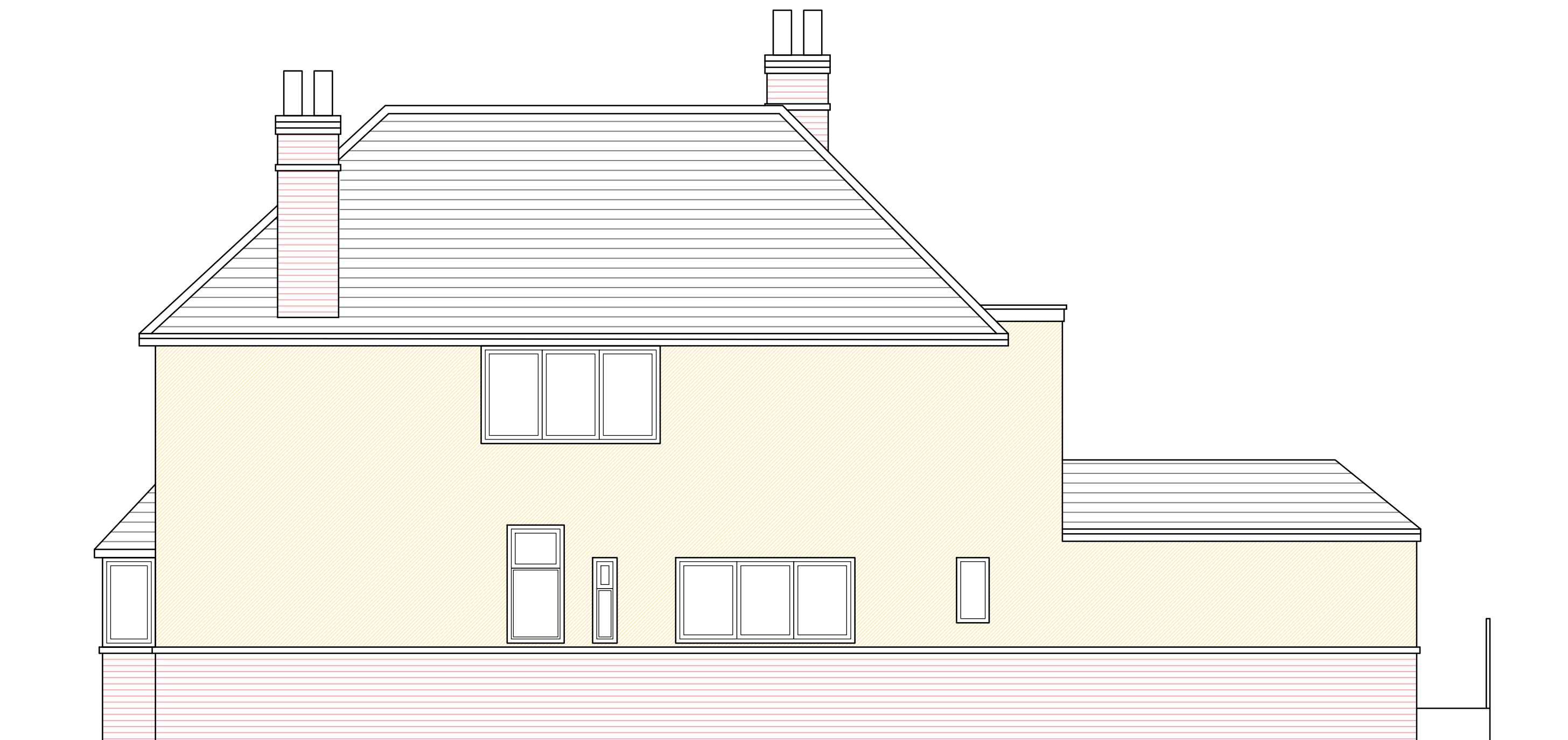
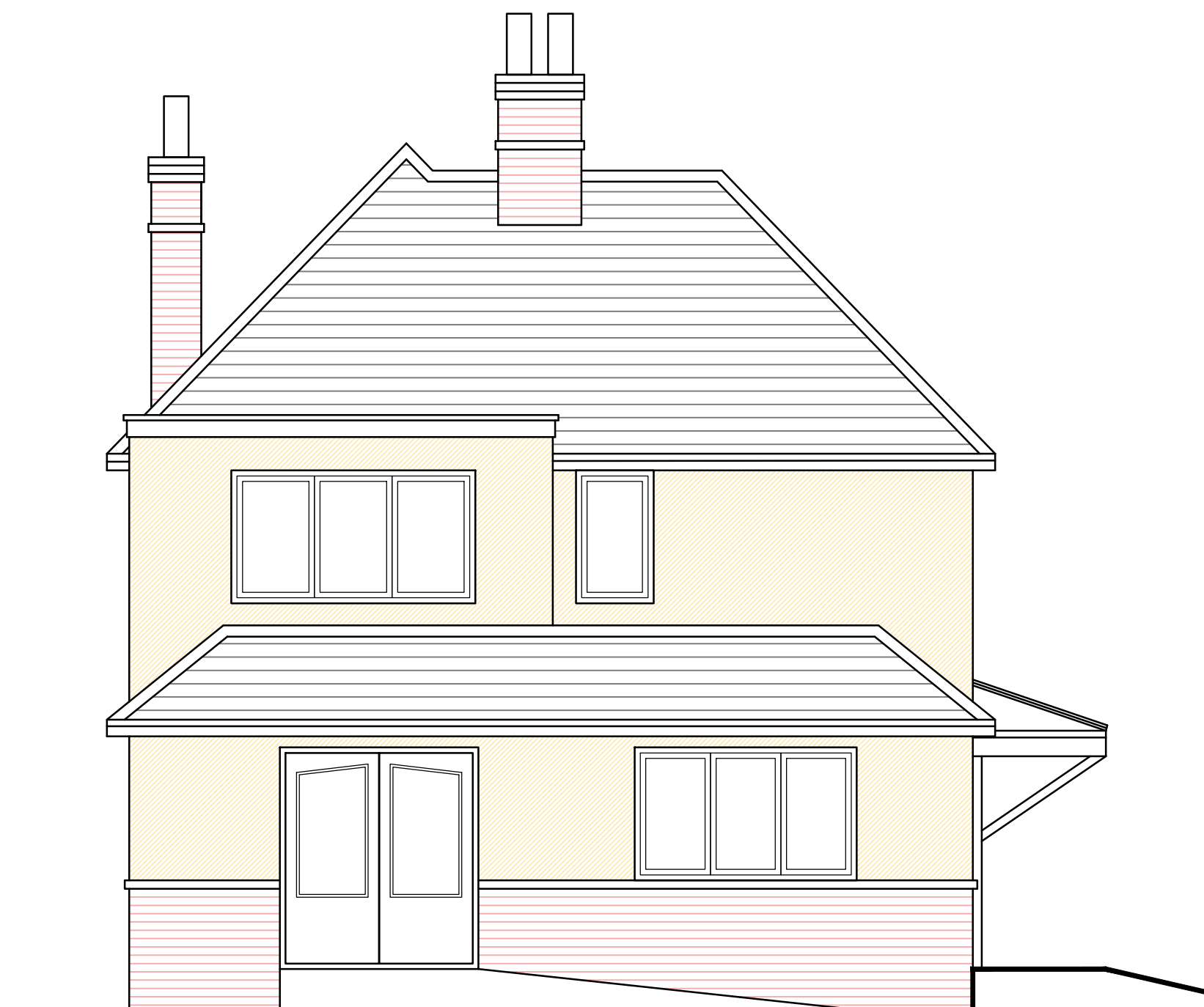
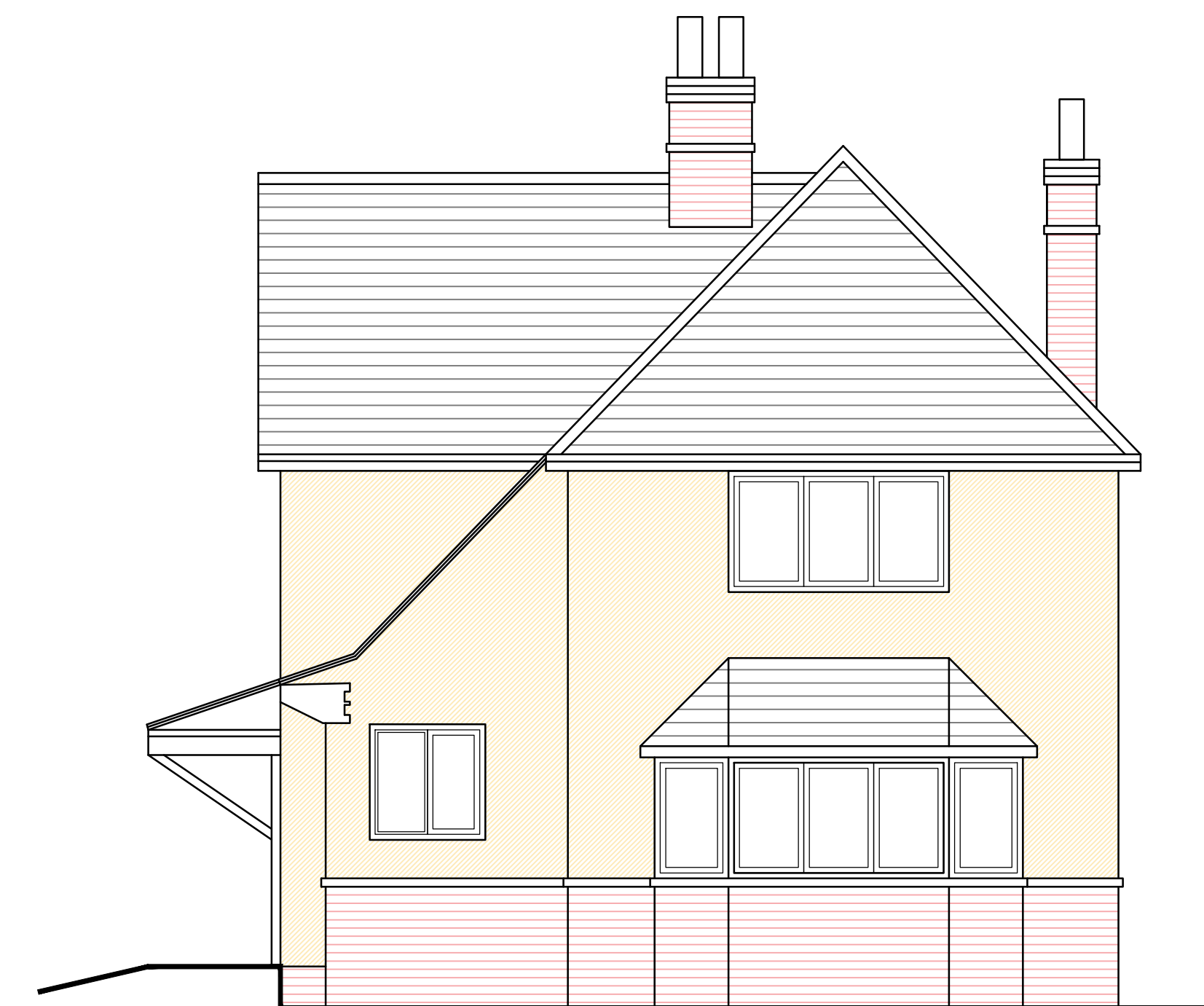
Proposed Foul Water Drainage

- 5.2 The foul water drainage for the existing building will also be retained and utilised to serve the new proposed development. The foul water drainage will continue to discharge to the Thames Water existing foul water sewer located on either Denton Road or Sturges Road.

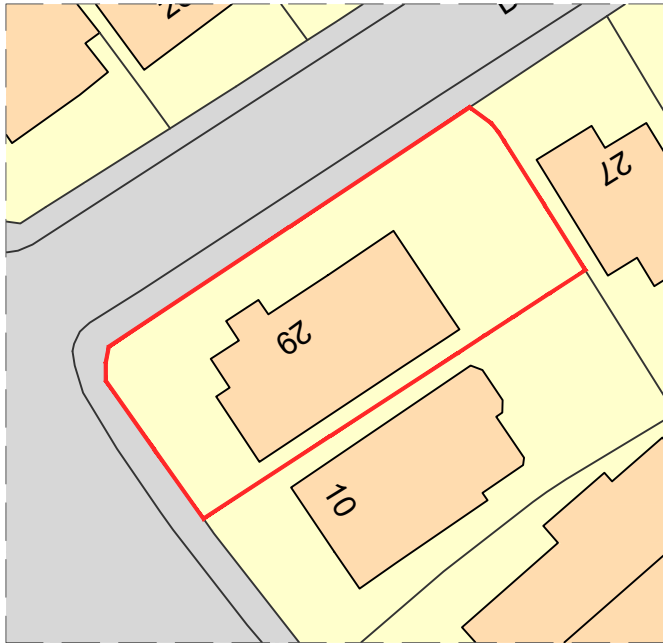
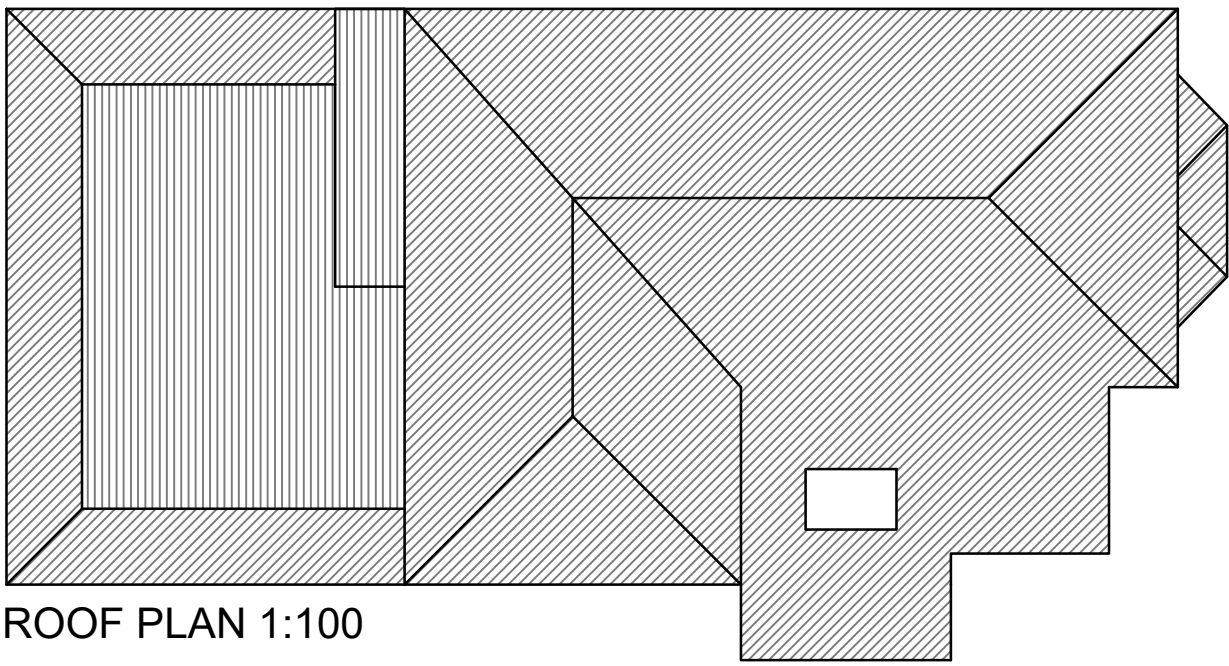
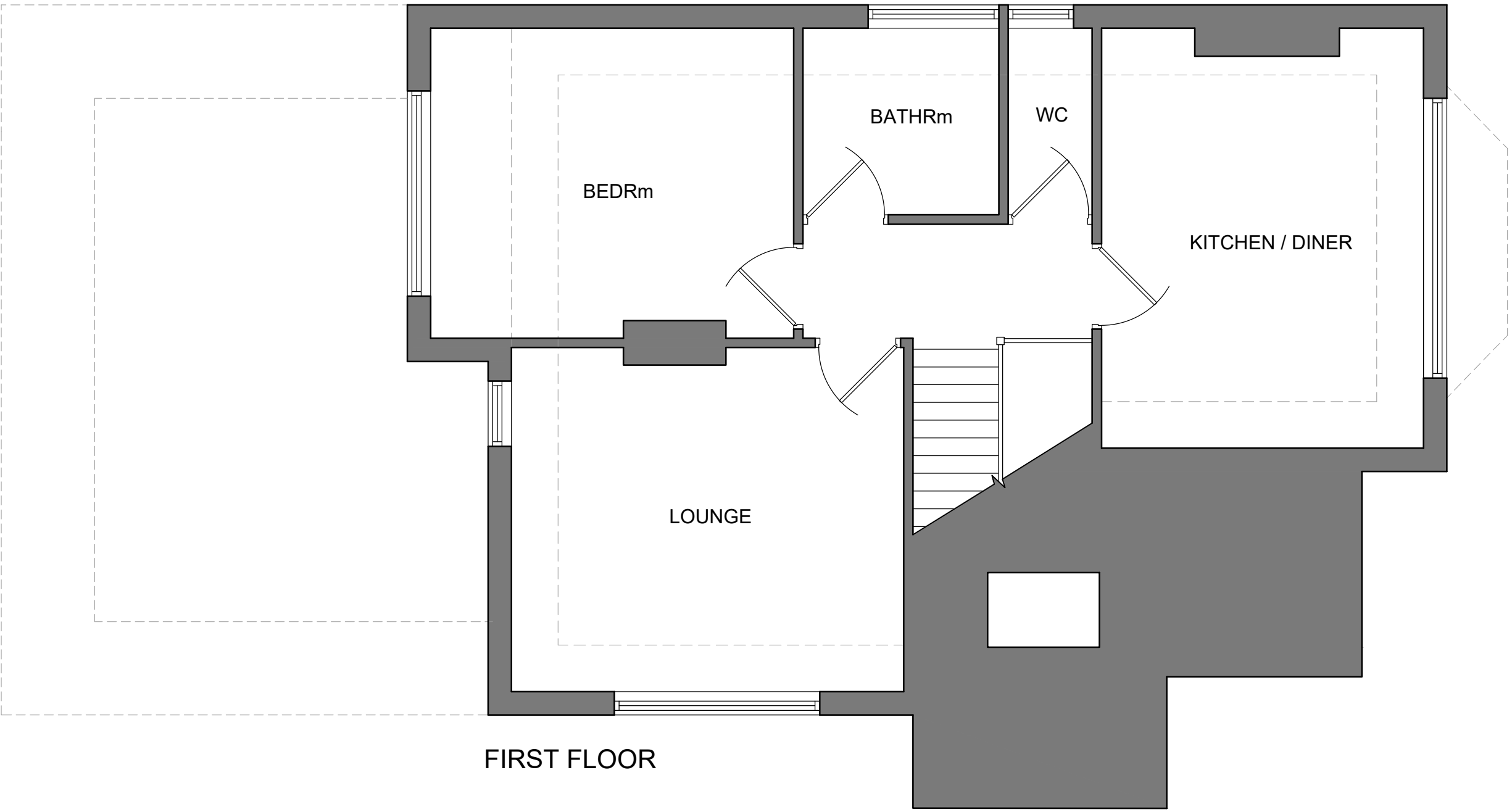
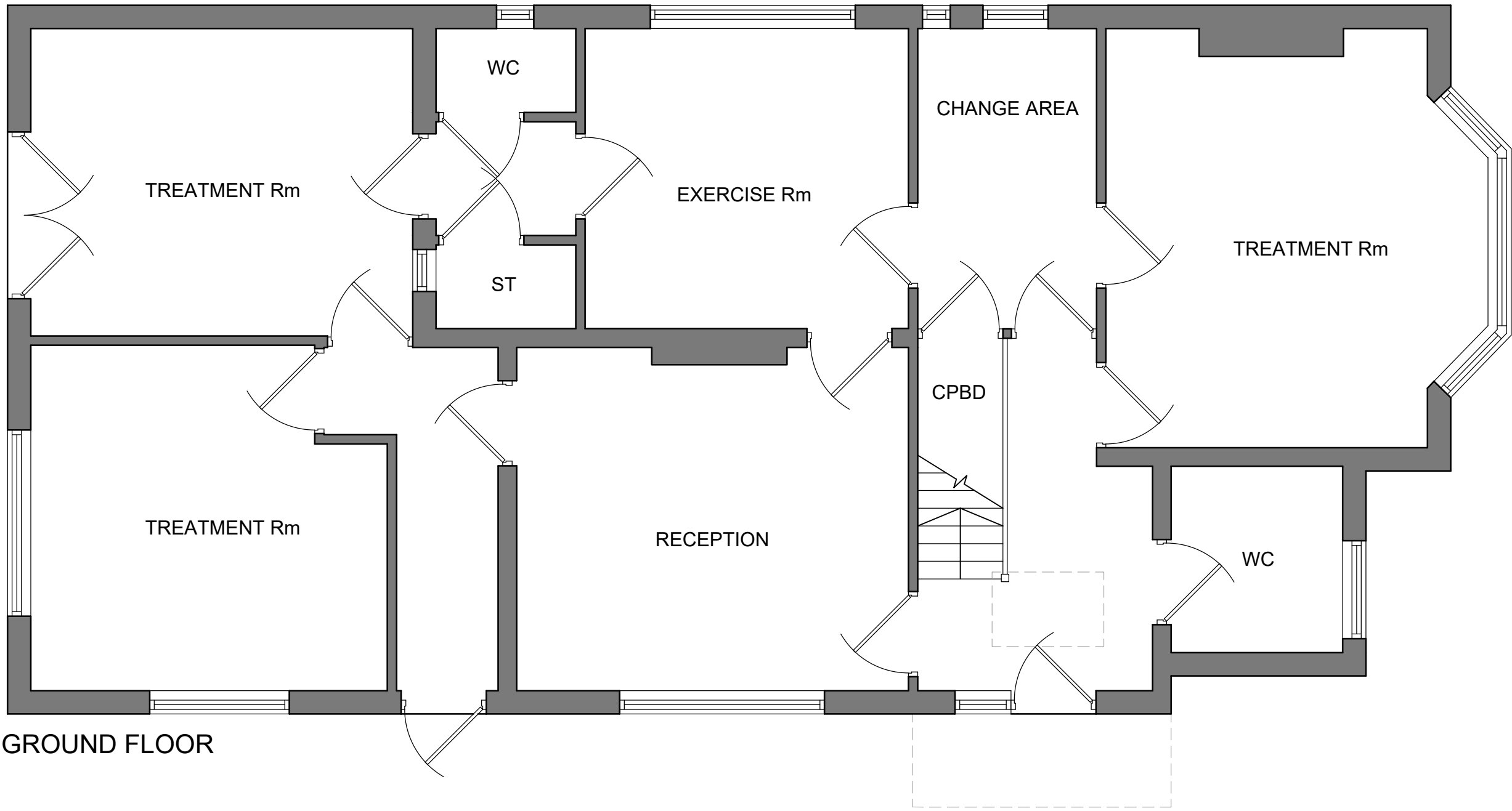
7. SUMMARY AND CONCLUSION

- 7.1 JUDWAA has been commissioned by Mr H Butterfield to prepare a site specific drainage strategy to support application for a residential development at 29 Denton Road, Wokingham.
- 7.2 The Application Site has a gross area of approximately 0.040ha and the development proposals are located within Flood Zone 1. This zone comprises land assessed as having a less than 1 in 1,000 annual probability of river or sea flooding (<0.1%).
- 7.3 The flood risk to and arising from the Proposed Development has been classified as very low to negligible.
- 7.4 The existing surface water drainage serving the existing building which appears to be discharging to Thames Water public sewer on Denton Road will be retained and continue to serve the proposed development as there will be no external change to the building footprint and no increase in impermeable area or surface water run off generated by the proposed development.
- 7.5 The foul water drainage for the existing building will be retained and utilised to serve the new proposed development.
- 7.6 The development proposals are therefore compliant with the requirements of NPPF and do not increase flood risk in all areas upstream and downstream of the site. The application should therefore be looked at positively by the planning authority with regards to flood risk and drainage.

APPENDIX A
Proposed Building Plans

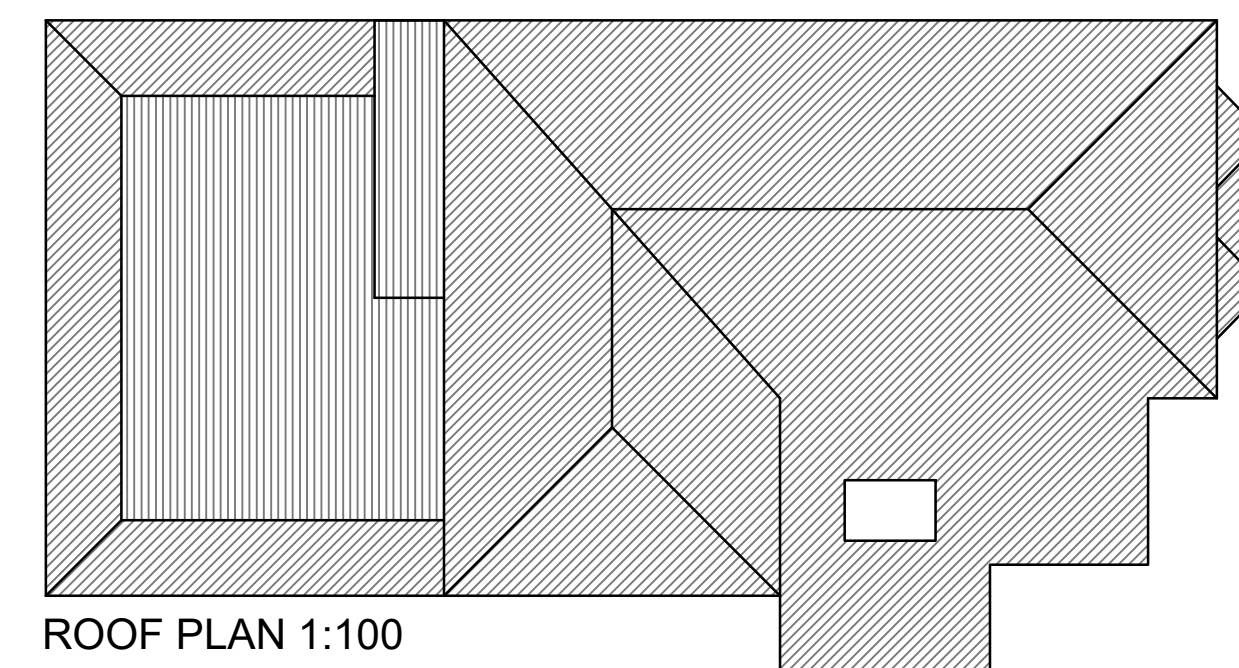
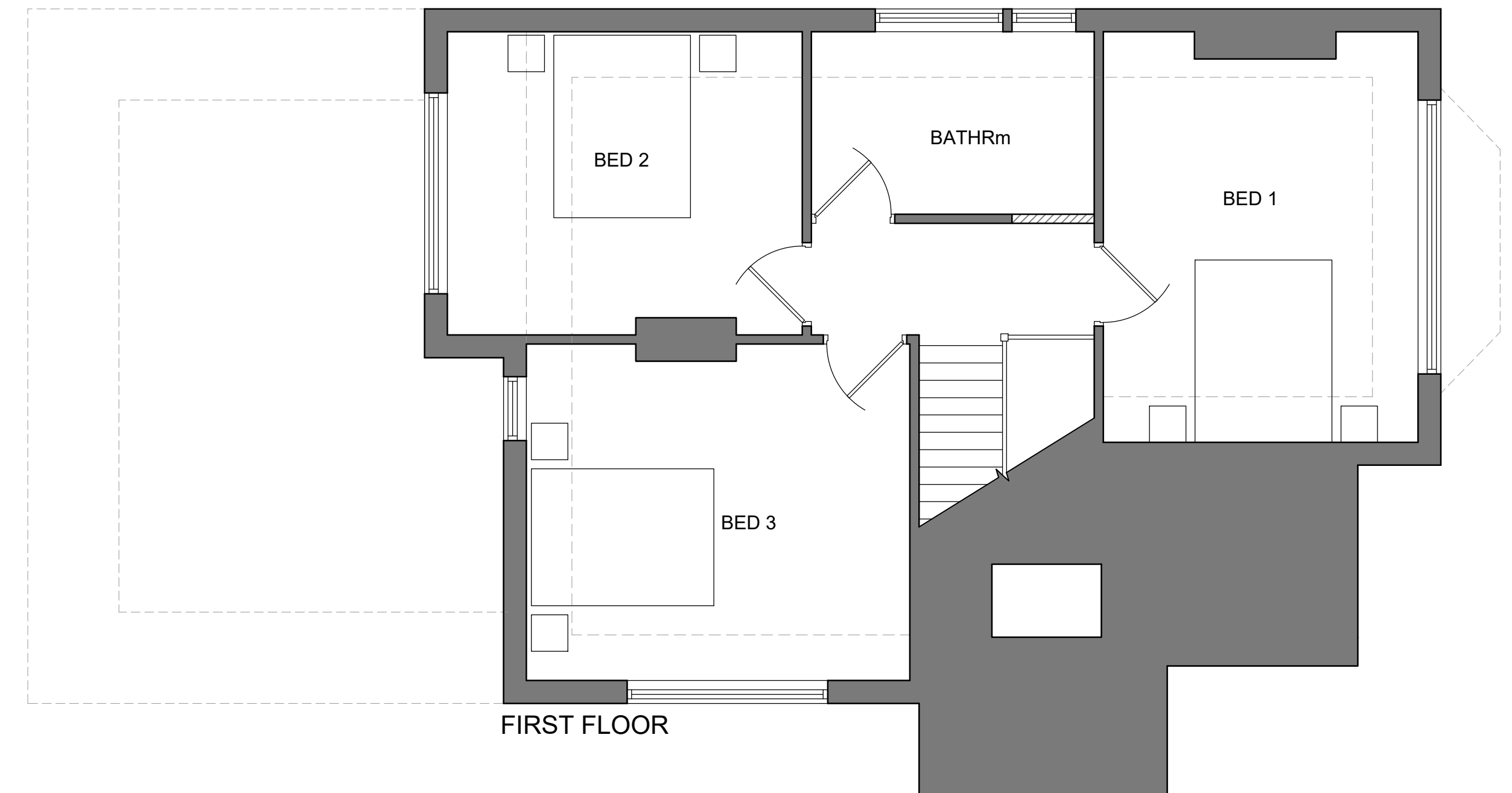
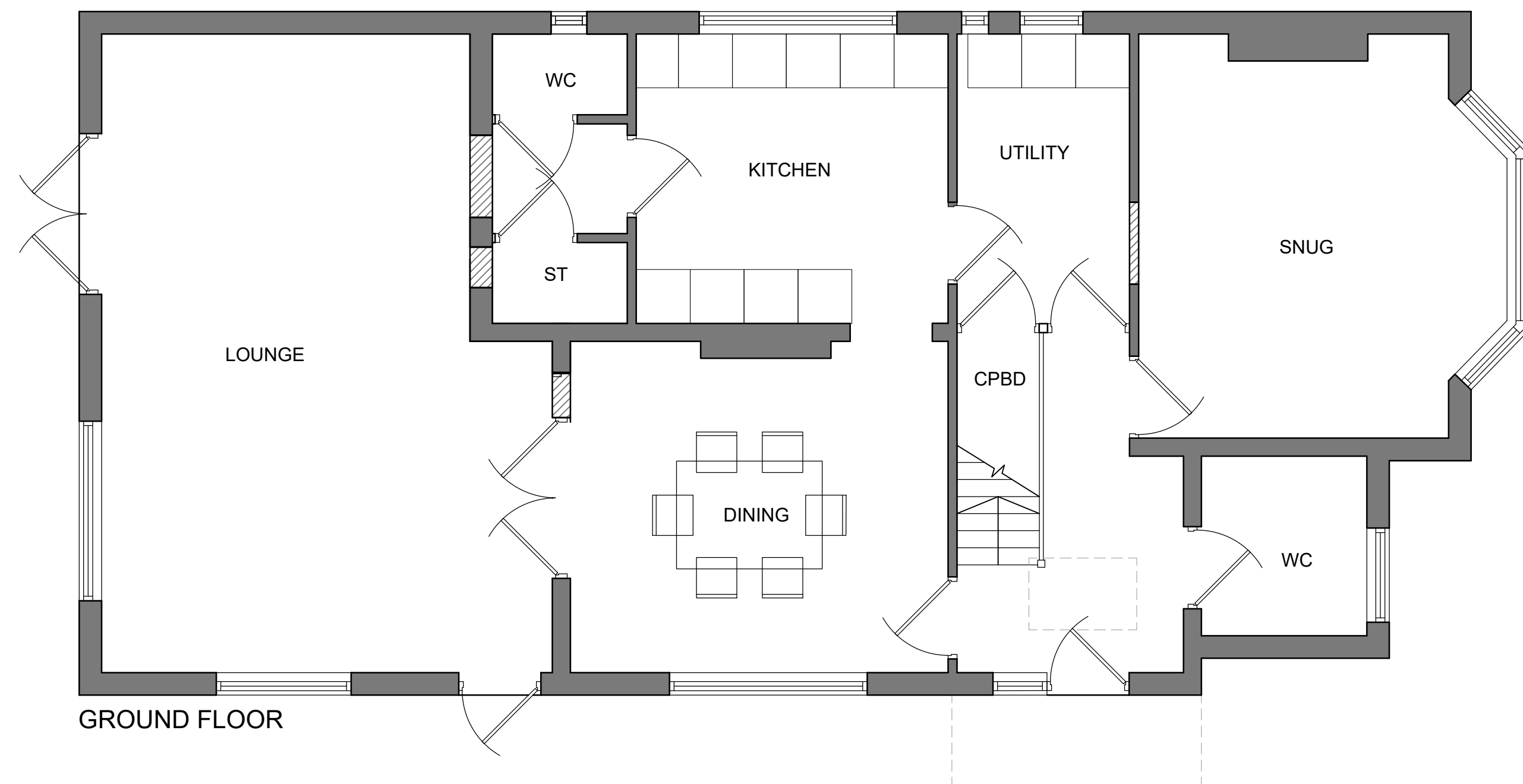


Phase	PHASE 2: Planning			Client	Mr H Butterfield			Drawing Title	JAUNTY Angles Interior & Architectural Design	
NOTE Use figured dimensions only. Scale drawing only when a scale bar is present. All dimensions to be checked by user and any discrepancies, error or omissions to be reported to Jaunty Angles Ltd before work commences. Read this drawing with all relevant materials.				Job	29 Denton Road, Wokingham, RG40 2DX			EXISTING & PROPOSED ELEVATIONS		
© Jaunty Angles Ltd 2026				Job No.	Drawing No.	Rev.	Scale	Drawn		Date
				25163	01.01 (2 of 2)		1:50 @ A1	KW	05.03.26	www.jauntyangles.co.uk



Phase	PHASE 2: Planning		Client		Mr H Butterfield		Drawing Title			JAUNTY Angles Interior & Architectural Design						
NOTE Use figured dimensions only. Scale drawing only when a scale bar is present. All dimensions to be checked by user and any discrepancies, error or omissions to be reported to Jaunty Angles Ltd before work commences. Read this drawing with all relevant materials.			Job		29 Denton Road, Wokingham, RG40 2DX											
			Job No.		Drawing No.		Rev.									
			© Jaunty Angles Ltd 2026		25163		01.01 (1 of 2)									
			Scale		1:50 @ A1		Drawn		KW		Date		05.03.26		www.jauntyangles.co.uk	

JAUNTY Angles
Interior & Architectural Design



- EXISTING WALLS
- PROPOSED WALLS
- BLOCKED UP EXISTING OPENINGS
- STRUCTURAL SUPPORT OVER

Phase	PHASE 2: Planning	Client	Mr H Butterfield	Drawing Title	PROPOSED PLANS			JAUNTY Angles Interior & Architectural Design www.jauntyangles.co.uk
NOTE	Use figured dimensions only. Scale drawing only when a scale bar is present. All dimensions to be checked by user and any discrepancies, error or omissions to be reported to Jaunty Angles Ltd before work commences. Read this drawing with all relevant materials.	Job	29 Denton Road, Wokingham, RG40 2DX					
© Jaunty Angles Ltd 2026		Job No.	25163	Drawing No.	01.01 (1 of 2)	Rev.		
		Scale	1:50 @ A1	Drawn	KW	Date	05.03.26	

APPENDIX B

Boreholes Information



PAGE: 2		JOB 1735				BOREHOLE 1	
DATE: 18.07.00		ST TERESA'S SCHOOL - WOKINGHAM					
DESCRIPTION	DEPTH LEH. n	DEPTH m	LEGEND	SAMPLE TYPE	DEPTH m	SPT N	REMARKS
TARMAC.....	0.00				0.10		481663
Stone HARDWARE.....	0.10				0.20		168363
Medium dense clay, brick, ash and gravel.....	0.10				0.20		
FILL.....	0.50				0.60		
Medium dense dark brown/grey slightly clayey silty SAND with some fine gravel	0.50				0.60		
Soft brown/grey very silty sandy CLAY with occasional gravel	1.00				1.00		
Medium dense orange/brown silty SAND with occasional gravel	1.60				1.45		
Medium dense orange/brown/grey clayey sand and GRAVEL	2.00				1.70		
Firm orange/brown/grey sandy clayey SILT..	2.40				2.10		
					2.40		
					2.50		
					2.95		
					3.60		
					3.80		
					4.25		
Stiff grey silty sandy CLAY.....	4.70				4.80		
					5.10		
					5.75		
					6.50		
					7.00		
					7.45		
					8.50		
					8.95		
					10.10		
					10.55		
					11.50		
					11.95		
					12.90		
					13.35		
					14.50		
	15.00				14.95		
TERRAMECH INVESTIGATIONS LIMITED 183 LONG LANE TILEHURST READING		REMARKS:					
U100=100mm dia. UNDISTURBED SAMPLE		U30=30mm dia. UNDISTURBED SAMPLE		D=SMALL, DISTURBED SAMPLE			
B=BULK SAMPLE		M=MAKER SAMPLE		CPT=CONE PENETRATION TEST			



PAGE: 3		JOB 1735		BOREHOLE 2			
DATE: 18.07.00		ST TERESA'S SCHOOL - WOKINGHAM					
DESCRIPTION	METHOD REL. m	DEPTH m	LEGEND	SAMPLE TYPE DEPTH	DIAMETER mm	SPT N	REMARKS
TARMAC		0.00					481681
Brick FILL		0.10					168365
Medium dense dark brown silty gravelly...		0.40					
SAND		0.70		D	0.70		
Medium dense orange/brown grey silty...		1.10		D	1.00		
clayey SAND with some gravel		1.20		D	1.20		
Medium dense orange/brown silty gravelly...		1.40		D	1.40		
SAND		1.40		CPT	1.40	17	
		2.00				1.20	
Firm orange/brown/grey clayey sandy SILT...		2.30		D	2.40		
				U100	3.00		
				D	3.45	1.80	
Stiff grey clayey sandy SILT...		4.10		D	4.10		
				U100	4.40		
				D	4.85		
				D	5.10		
				U100	6.00		
				D	6.45		
				D	7.10		
				U100	7.50		
				D	7.95		
				D	8.60		
				U100	8.90		
				D	9.35	10.90	
				D	10.10		
				U100	10.50		
				D	10.95		
				D	12.00		
				D	12.45		
				U100	13.10		
				D	13.75		
				D	14.10		
				U100	14.50		
		15.00		D	14.95		

TERRAMECH INVESTIGATIONS LIMITED
183 LONG LANE TILEHURST READING

REMARKS:

U100=100mm dia. UNDISTURBED SAMPLE
B=BULK SAMPLE

U30=30mm dia. UNDISTURBED SAMPLE
M=WATER SAMPLE

D=SMALL, DISTURBED SAMPLE
CPT=CONE PENETRATION TEST

APPENDIX C
Thames Water Sewer Map Record

Judwaa Consulting
5 CHARTER HOUSE, LORD MONTGOME
PORTSMOUTH
PO1 2SN

Search address supplied 29
Denton Road
Wokingham
RG40 2DX

Your reference Denton Road Wokingham

Our reference ALS/ALS Standard/2026_5301885

Search date 14 March 2026

Keeping you up-to-date

Notification of price changes

We're changing our report prices from 4th June 2025. The price will increase by 3.5% based on Retail Price Index (RPI).

Find our new prices on our website thameswater.co.uk/property-searches

Any Questions? We're happy to talk through the changes with you – give our Property Searches team a call on 0800 009 4540 .



Thames Water Utilities Ltd
Property Searches,
Clearwater Court, Vastern Road, Reading RG1 8DB



property.searches@thameswater.co.uk
thameswater.co.uk/propertysearches



0800 009 4540

Search address supplied: 29, Denton Road, Wokingham, RG40 2DX

Dear Sir / Madam

An Asset Location Search is recommended when undertaking a site development. It is essential to obtain information on the size and location of clean water and sewerage assets to safeguard against expensive damage and allow cost-effective service design.

The following records were searched in compiling this report: - the map of public sewers & the map of waterworks. Thames Water Utilities Ltd (TWUL) holds all of these.

This search provides maps showing the position and size of Thames Water assets close to the proposed development and also manhole cover and invert levels, where available.

Please note that none of the charges made for this report relate to the provision of Ordnance Survey mapping information. The replies contained in this letter are given following inspection of the public service records available to this company. No responsibility can be accepted for any error or omission in the replies.

You should be aware that the information contained on these plans is current only on the day that the plans are issued. The plans should only be used for the duration of the work that is being carried out at the present time. Under no circumstances should this data be copied or transmitted to parties other than those for whom the current work is being carried out.

Thames Water do update these service plans on a regular basis and failure to observe the above conditions could lead to damage arising to new or diverted services at a later date.

Contact Us

If you have any further queries regarding this enquiry please feel free to contact a member of the team on 0800 009 4540, or use the contact details below:

Thames Water Utilities Ltd
Property Searches
Clearwater Court
Vastern Road
Reading
RG1 8DB

Email: property.searches@thameswater.co.uk

Web: thameswater.co.uk/propertysearches

Waste Water Services

Please provide a copy extract from the public sewer map.

Enclosed is a map showing the approximate lines of our sewers. Our plans do not show sewer connections from individual properties or any sewers not owned by Thames Water unless specifically annotated otherwise. Records such as "private" pipework are in some cases available from the Building Control Department of the relevant Local Authority. Where the Local Authority does not hold such plans it might be advisable to consult the property deeds for the site or contact neighbouring landowners. The public sewer map relates only to sewerage apparatus of Thames Water Utilities Ltd, it does not disclose details of cables and or communications equipment that may be running through or around such apparatus. The sewer level information contained in this response represents all of the level data available in our existing records. Should you require any further Information, please refer to the relevant section within the 'Further Contacts' page found later in this document.

For your guidance:

- The Company is not generally responsible for rivers, watercourses, ponds, culverts or highway drains. If any of these are shown on the copy extract they are shown for information only.
- Any private sewers or lateral drains which are indicated on the extract of the public sewer map as being subject to an agreement under Section 104 of the Water Industry Act 1991 are not an 'as constructed' record. It is recommended these details be checked with the developer.

Clean Water Services

Please provide a copy extract from the public water main map.

With regard to the fresh water supply, this site falls within the boundary of another water company. For more information, please redirect your enquiry to the following address:

South East Water
Rocfort Road

Asset Location Search



Property Searches

Snodland
Kent
ME6 5AH

Tel: 0845 301 0845

www.southeastwater.co.uk.

For your guidance:

- Assets other than vested water mains may be shown on the plan, for information only.
- If an extract of the public water main record is enclosed, this will show known public water mains in the vicinity of the property. It should be possible to estimate the likely length and route of any private water supply pipe connecting the property to the public water network.

Further contacts:

Waste Water queries

Should you require verification of the invert levels of public sewers, by site measurement, you will need to approach the relevant Thames Water Area Network Office for permission to lift the appropriate covers. This permission will usually involve you completing a TWOSA form. You can do this by emailing customer.feedback@thameswater.co.uk with the email subject header 'Enquiry – TWOSA', along with details of the request.

If you have any questions regarding sewer connections, budget estimates, diversions or building over issues please direct them to our service desk which can be contacted by writing to:

Developer Services (Waste Water)
Thames Water
Clearwater Court
Vastern Road
Reading
RG1 8DB

Tel: 0800 009 3921
Email: developer.services@thameswater.co.uk

Clean Water queries

Should you require any advice concerning clean water connections, please contact:

Developer Services (Clean Water)
Thames Water
Clearwater Court
Vastern Road
Reading
RG1 8DB

Tel: 0800 009 3921
Email: developer.services@thameswater.co.uk

NB. Levels quoted in metres Ordnance Newlyn Datum. The value -9999.00 indicates that no survey information is available

Manhole Reference	Manhole Cover Level	Manhole Invert Level
351D	n/a	n/a
4554	69.92	68.72
2553	71.41	68.91
2504	71.38	69.28
251C	n/a	n/a
2505	71.39	69.38
2508	71.28	69.28
2507	n/a	n/a
2506	71.08	69.51
351L	n/a	n/a
351I	n/a	n/a
351J	n/a	n/a
351H	n/a	n/a
3401	70.46	69.56
3450	70.53	69.69
3550	70.6	69.3
3501	70.6	69.05
4551	70.1	68.65
4552	70.02	68.49
4502	69.9	68.05
4553	69.77	68.32
341B	n/a	n/a
341A	n/a	n/a
3451	70.19	69.2
3402	70.2	69.15
341F	n/a	n/a
3301	69.86	67.82
341E	n/a	n/a
3350	69.73	68.49
431C	n/a	n/a
441E	n/a	n/a
4401	69.75	68.45
4450	69.67	68.57
441D	n/a	n/a
2403	69.45	68.74
2404	69.85	69.02
The position of the apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed. Service pipes are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Thames Water for any error or omission. The actual position of mains and services must be verified and established on site before any works are undertaken.		



Asset Location Search - Sewer Key

Public Sewer Types (Operated and maintained by Thames Water)

	Foul Sewer: A sewer designed to convey waste water from domestic and industrial sources to a treatment works.
	Surface Water Sewer: A sewer designed to convey surface water (e.g. rain water from roofs, yards and car parks) to rivers or watercourses.
	Combined Sewer: A sewer designed to convey both waste water and surface water from domestic and industrial sources to a treatment works.
	Storm Sewer
	Sludge Sewer
	Foul Trunk Sewer
	Surface Trunk Sewer
	Combined Trunk Sewer
	Foul Rising Main
	Surface Water Rising Main
	Combined Rising Main
	Vacuum
	Thames Water Proposed
	Vent Pipe
	Gallery

Other Sewer Types (Not operated and maintained by Thames Water)

	Sewer		Culverted Watercourse
	Proposed		Decommissioned Sewer
	Content of this drainage network is currently unknown		Ownership of this drainage network is currently unknown

Notes:

- 1) All levels associated with the plans are to Ordnance Datum Newlyn.
- 2) All measurements on the plan are metric.
- 3) Arrows (on gravity fed sewers) or flecks (on rising mains) indicate the direction of flow.
- 4) Most private pipes are not shown on our plans, as in the past, this information has not been recorded.

Sewer Fittings

A feature in a sewer that does not affect the flow in the pipe. Example: a vent is a fitting as the function of a vent is to release excess gas.

	Air Valve		Meter
	Dam Chase		Vent
	Fitting		

Operational Controls

A feature in a sewer that changes or diverts the flow in the sewer. Example: A hydrobrake limits the flow passing downstream.

	Ancillary		Drop Pipe
	Control Valve		Weir

End Items

End symbols appear at the start or end of a sewer pipe. Examples: an Undefined End at the start of a sewer indicates that Thames Water has no knowledge of the position of the sewer upstream of that symbol. Outfall on a surface water sewer indicates that the pipe discharges into a stream or river.

	Inlet		Outfall
	Undefined End		

Other Symbols

Symbols used on maps which do not fall under other general categories.

	Change of Characteristic Indicator		Public / Private Pumping Station
	Invert Level		Summit

Areas

Lines denoting areas of underground surveys, etc.

	Agreement
	Chamber
	Operational Site

Ducts or Crossings

	Casement	Ducts may contain high voltage cables. Please check with Thames Water.
	Conduit Bridge	
	Subway	
	Tunnel	

5) 'na' or '0' on a manhole indicates that data is unavailable.

6) The text appearing alongside a sewer line indicates the internal diameter of the pipe in millimeters. Text next to a manhole indicates the manhole reference number and should not be taken as a measurement. If you are unsure about any text or symbology, please contact Property Searches on 0800 009 4540.