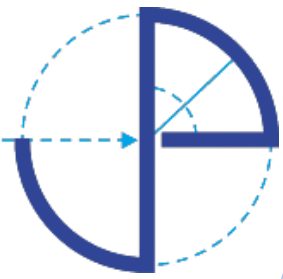


JPC Environmental Services

(A Division of J P Chick & Partners Ltd)

Consulting Civil & Structural Engineers



**Grange Farm,
Wenham Road,
Washbrook, Suffolk,
IP8 3EZ
Level 1 Screening Study
Flood Risk Assessment**

Report: IE23/087/FRA

24 October 2023

Rev. 00



DOCUMENT CONTROL

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EXECUTIVE SUMMARY

Site Name & Address:	Grange Farm, Wenham Road, Washbrook, Suffolk, IP8 3EZ
	Grid reference: OS X (Eastings) 609809, OS Y (Northings) 240784
	What3words: passport.nesting.clinking
Client:	Mr. and Mrs. Church
Planning Consultant/Architect	Vision Design and Planning Consultants Ltd
Local Planning Authority:	Mid Suffolk Council
Application Type	Outline Planning Application
Present Site Use:	Residential dwelling and associated former agricultural outbuildings
Proposed Site Use:	Construction of a two-storey rear extension to the main dwelling, demolition and replacement of existing single storey rear wing, one-and-a-half storey rear extension to proposed rear wing and other alterations.

Objectives:

- Determine any extant risk of flooding from off-site sources;
- Research local incidents of flooding;
- Explore the potential impact of the planned development on surface water run-off;
- To make recommendations in respect of any flood mitigation measures or surface water management improvements that might be required to minimise the impact of the development; and
- To determine the scope of any additional investigations or hydraulic modelling that might be required to fully establish the degree of potential flood risk.

Findings:

General

- According to the GOV.UK indicative flood mapping, the application site is located entirely in Flood Zone 1 and therefore has a low probability of flooding (<0.1% annually) from fluvial and/or tidal sources;
- The risk of pluvial flooding occurring within the confines of the application site is High, while the risk of pluvial flooding significantly impacting the on-site dwelling during the design flood event is considered to be Medium-Low;
- The overall risk of groundwater flooding, sewer flooding and flooding from artificial sources is considered to be NEGLIGIBLE; and
- The site is not considered to be liable to significant or unmanageable flooding from the other sources identified in the Flood and Water Management Act (2010).

Planning

- In planning terms, the National Planning Policy Framework considers the sensitivity of the proposed site use to flood risk as 'More Vulnerable';



Grange Farm, Washbrook

- This use is considered appropriate for its Flood Zone 1 designation, and therefore passes the Sequential Test; and
- The Exception Test does not need to be applied.

Recommendations:

Based on the findings of our desk-based research, and a review of the development proposal, JPC Environmental Services would advise as follows:

- The integration of wet proofing or flood-resilient measures into the proposed extensions. Such measures might reasonably include (but not limited to):
 - Non-absorbent insulation within the floor construction and ground floor walls; and
 - Non-absorbent floor coverings (such as ceramic tile, or polished concrete) at ground level;
 - Raising the electric supply;
 - Orientating the plasterboard horizontally;
 - Flood resistant air brick/vents;
 - Using water/corrosion resistant materials; and
 - Installing non-return valves to drainage.
- A SuDS compliant drainage system should be incorporated into the development proposals. Such measures might reasonably include (subject to detailed design) the provision of permeable surfacing and/or surface SuDS components. This will provide some on-site attenuation to reduce future risk of surface water flooding, as well as provide a means of treatment before the off-site discharge;
- Consideration should be given to the use of 'surface' SuDS components and for appropriate components to be incorporated into the development to promote the four pillars of SuDS (i.e., Quality, Quantity, Biodiversity and Amenity); and
- Consideration should be given to the integration of water re-use and/or rainwater harvesting into the development for the use in non-potable systems/uses.



Grange Farm, Washbrook

1 INTRODUCTION

1.1 Brief

1.1.1 JPC Environmental Services were appointed by Mr. and Mrs. Church to prepare a Level 1 Flood Risk Assessment (FRA). This is to support a planning application associated with the erection of extensions, and other alternations to the residential dwelling at Grange Farm, Wenham Road, Washbrook, Suffolk (hereafter to be referred to as 'the site').

1.1.2 This report shall be for private and confidential use of the Mr. and Mrs. Church. It should not be reproduced in whole or in part or relied upon by a third party for any use without the express written authority of JPC Environmental Services. If any unauthorised third party makes use of this report, they do so at their own risk and JPC Environmental Services owes them no duty of care or skill.

1.1.3 This report has been written in accordance with, and meeting the requirements of, planning policy currently guided by:

National Legislation/Codes

- National Planning Policy Framework (NPPF) (Ministry of Housing Communities & Local Government, 2021)
- Ciria 753 – The SuDS Manual (Woods Ballard, B, Wilson, S, Udale-Clarke, H, Illman, S, Scott, T, Ashley, R, Kellagher, R, 2015)
- Defra's Non-statutory technical Standards (Department for Environment, Food and Rural Affairs, 2015)
- Building Regulations – Approved Document H (HM Government, 2015)
- BS8582:2013 – Code of Practice for Surface Water Management for Development Sites (British Standards Institution (BSI), 2013)
- National Design guide, Planning Practise Guidance for beautiful, enduring and successful Places (Ministry of Housing Communities & Local Government)

Local Policy

- Strategic Flood Risk Assessments JBA Consulting (2020). Babergh and Mid Suffolk Level 1 Strategic Flood Risk Assessment (August 2020) and Level 2 Strategic Flood Risk Assessment (October 2020)

1.1.4 In producing this report, we have exercised all the reasonable skill, care and diligence to be expected of an appropriately qualified and competent consultant, experienced in carrying out equivalent services for developments of a similar size, scope and complexity, value and purpose.



Grange Farm, Washbrook

1.2 Scope

1.2.1 This strategy has been produced in line with the NPPF. The purpose of this report is to:

- Determine any extant risk of flooding from off-site sources;
- Research local incidents of flooding;
- Explore the potential impact of the planned development on surface water run-off;
- To make recommendations in respect of any flood mitigation measures or surface water management improvements that might be required to minimise the impact of the development, and
- To determine the scope of any additional investigations or hydraulic modelling that might be required to fully establish the degree of potential flood risk.

1.3 Location

1.3.1 The site is located approximately 2.4km to the south-west of Washbrook, on a parcel of land to the south of Wenham Road. The site is approximately centred at Ordnance Survey grid reference 609809, 240784.

1.3.2 The site's location plan is provided at **Appendix A**, and within **Figure 1** below.

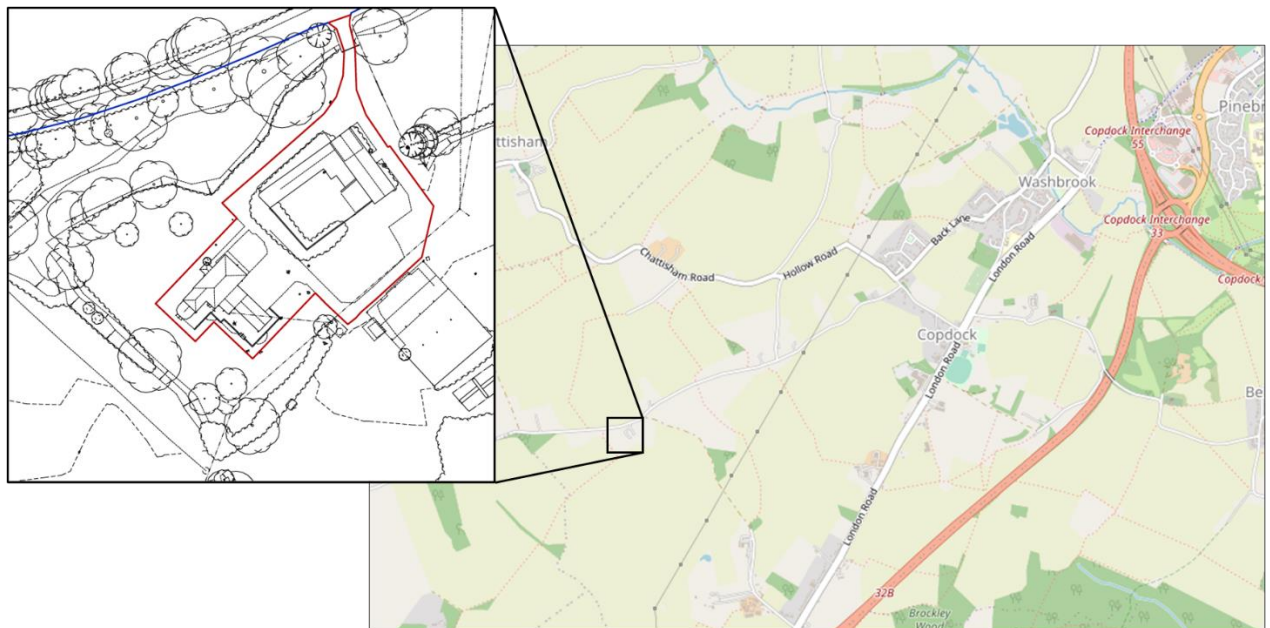


Figure 1 - Application Site Location Plan
(mapping source: <https://en-gb.topographic-map.com/maps/de54/>)



Grange Farm, Washbrook

1.4 Site Description

- 1.4.1 The application site extends to approximately 0.22ha. The site consists of a mix of the residential dwelling and a range of former agricultural outbuildings.
- 1.4.2 The site is surrounded by agricultural fields. The closest development to the site is a veterinary practice located approximately 0.2km to the north-west of the site.

1.5 Development Proposal

- 1.5.1 The planning application's development description is as follows:

'Planning permission is sought for the erection of extension and alterations to the dwelling as per the below:

- *Two-storey rear extension to the main dwelling;*
- *Demolition and replacement of existing single storey rear wing;*
- *One-and-a-half storey rear extension to proposed rear wing; and*
- *Other alternations to include fenestration detailing and removal of existing porch'*

- 1.5.2 A development layout is provided at **Appendix B**.

1.6 Flood Risk Vulnerability Classification

- 1.6.1 Developments are classified based on their sensitivity to flood risk. In this instance, in accordance with the NPPF Annex 3: Flood Risk Vulnerability Classification, the vulnerability of the proposed development is considered to be 'More Vulnerable'. Please refer to **Figure 2**, overleaf.



More vulnerable

- Hospitals
- Residential institutions such as residential care homes, children's homes, social services homes, prisons and hostels.
- Buildings used for dwelling houses, student halls of residence, drinking establishments, nightclubs and hotels.
- Non-residential uses for health services, nurseries and educational establishments.
- Landfill* and sites used for waste management facilities for hazardous waste.
- Sites used for holiday or short-let caravans and camping, subject to a specific warning and evacuation plan.

Figure 2 - Flood Risk Vulnerability Classification (NPPF Annex 3)



Grange Farm, Washbrook

2 BACKGROUND TO FLOOD RISK AND REGULATORY CONTEXT

2.1 National Guidance

2.1.1 In relation to flood risk, planning policy in England is currently guided by the NPPF and the associated guidance relating to flood risk (25th August 2022). The purpose of this planning framework is to ensure that flood risk issues are taken into account at every stage of the planning process and that new development is steered towards less vulnerable locations in preference to higher risk areas.

2.1.2 At all levels this policy relies on a series of predicted flood zones, which are defined by the Environment Agency (EA). These zones are: -

- **Flood Zone 1** – Low probability – less than 0.1% annual exceedance probability (AEP) of fluvial or tidal flooding.
- **Flood Zone 2** – Medium probability – between 1% to 0.1% AEP of fluvial flooding; or 0.5% to 0.1% AEP of tidal flooding.
- **Flood Zone 3a** – High probability – a 1% or greater AEP of fluvial flooding; or greater than 0.5% AEP of tidal flooding.
- **Flood Zone 3b** – Functional flood plain – land where water has to flow or be stored in times of flood (during events having greater than 3.3% or greater AEP).

2.1.3 In addition to exploring the potential risk and impact of flooding on the development, site specific FRA's are required to assess the potential impact of the development itself on existing sites and the local hydrology. This is designed to ensure that new developments, which typically include extensive areas of impermeable surfacing, do not exacerbate flooding elsewhere.



Grange Farm, Washbrook

3 DESK STUDY

3.1 Source of Information

3.1.1 As part of the desk-based research, JPC Environmental Services consulted the following sources of information:

- Indicative flood risk mapping (GOV.UK);
- Historic flood event information (EA/DEFRA);
- Babergh and Mid Suffolk Councils Level 1 and 2 Strategic Flood Risk Assessment (August and October 2020 respectively).
- Groundsure Flood Report (ref: GEO-G2857082-2, dated October 2023);
- CON29DW Residential Drainage and Water Search (ref: G2857082-1, dated October 2023);
- British Geological Survey (BGS) mapping and online referencing;
- Magic Map Website – magic.defra.gov.uk; and
- Google Earth (aerial photography).

3.2 Topography

3.2.1 On reviewing the England topographic map, it is noted that the topography of the area falls slightly from the south-west to the north-east.

3.2.2 Ground levels within the confines of the site are in the order of 44.08 to 44.40m AOD (refer to **Appendix C**), with the entrance to the site being lower than the existing dwelling, following the topographical arrangement of the area. Refer to **Figure 3**.



Figure 3 - Extract from England Topographic Maps
(source: <https://en-gb.topographic-map.com/maps/de54/>)



Grange Farm, Washbrook

3.3 Geology

- 3.3.1 With reference to the 1:50,000 British Geological Survey (BGS) Geological Mapping, the site is underlain by Lowestoft Formation – Diamicton (formerly known as Boulder Clay), over Red Crag Formation (Sand).
- 3.3.2 In addition to the geological mapping, we have reviewed the BGS database for the closest available boreholes. There is a record held by the BGS (ref: TM04SE31) on land to the west of the site which indicates findings of Boulder Clay (i.e., bands of topsoil and clay) to approximately 26 feet (i.e., approximately 7.9m bgl), with underlying sand and gravel, L.C., WRB and Chalk. The depth of the borehole was approximately 285 feet (i.e., approximately 87m bgl).
- 3.3.3 The BGS borehole records also indicate groundwater strikes at approximately 37 feet, 74 feet and 130 feet, and records a resting water level of approximately 52 feet (i.e., 15.8m) bgl. Copies of the borehole logs are provided at **Appendix D**.

3.4 Hydrological Features

- 3.4.1 The Flood Map for Planning shows the site lies in Flood Zone 1 (the low probability flood area) and shows a network of Ordinary Watercourses/drainage ditches immediately to the east and west of the site.
- 3.4.2 It is noted that a pond is located between the application site boundary and Wenham Road, to the north. The England topographic map indicates the crest of the pond is at the same level or slightly below the elevation of the existing dwelling.
- 3.4.3 There are no designated Main Rivers in the vicinity of the site. Refer to **Appendix E**.

3.5 Hydrogeology

- 3.5.1 The EA divides significant groundwater catchments into three Source Protection Zones (SPZ). With reference to the source protection zones on DEFRA's MAGIC map the site is located within Zone III – Total Catchment. This is the area around a supply source within which all the groundwater ends up at the abstraction point. This is the point from where the water is taken. This could extend some distance from the source point.
- 3.5.2 In terms of groundwater vulnerability, the site is classified as Medium on the EA's groundwater vulnerability mapping.
- 3.5.3 The site is located within the drinking water safeguard zones for surface waters only.



Grange Farm, Washbrook

3.6 Potential Sources of Flooding

3.6.1 In line with the recommendations contained in the NPPF and the sources identified in the Flood and Water Management Act (FWMA) 2010, a review of the various potential sources of flooding has been explored, which could potentially impact the site both before and after the proposed development.

3.6.2 This assessment will evaluate the following sources of potential flood risk:

- Tidal/Fluvial flooding;
- Surface water (pluvial) flooding;
- Groundwater flooding;
- Sewer flooding; and
- Reservoir, Canal and other artificial sources of flooding

Tidal/Fluvial flood risk

3.6.3 With reference to the Indicative Flood Map for Planning, the site is located entirely within Flood Zone 1 (the low probability flood zone) and thus at less than 0.1% chance of flooding in any given year from either fluvial or tidal sources (refer to **Figure 4**). A larger scale version of the Flood Map for Planning is included within at **Appendix E**.

3.6.4 It is, therefore, considered that fluvial/tidal flooding represents a Negligible risk to the site.

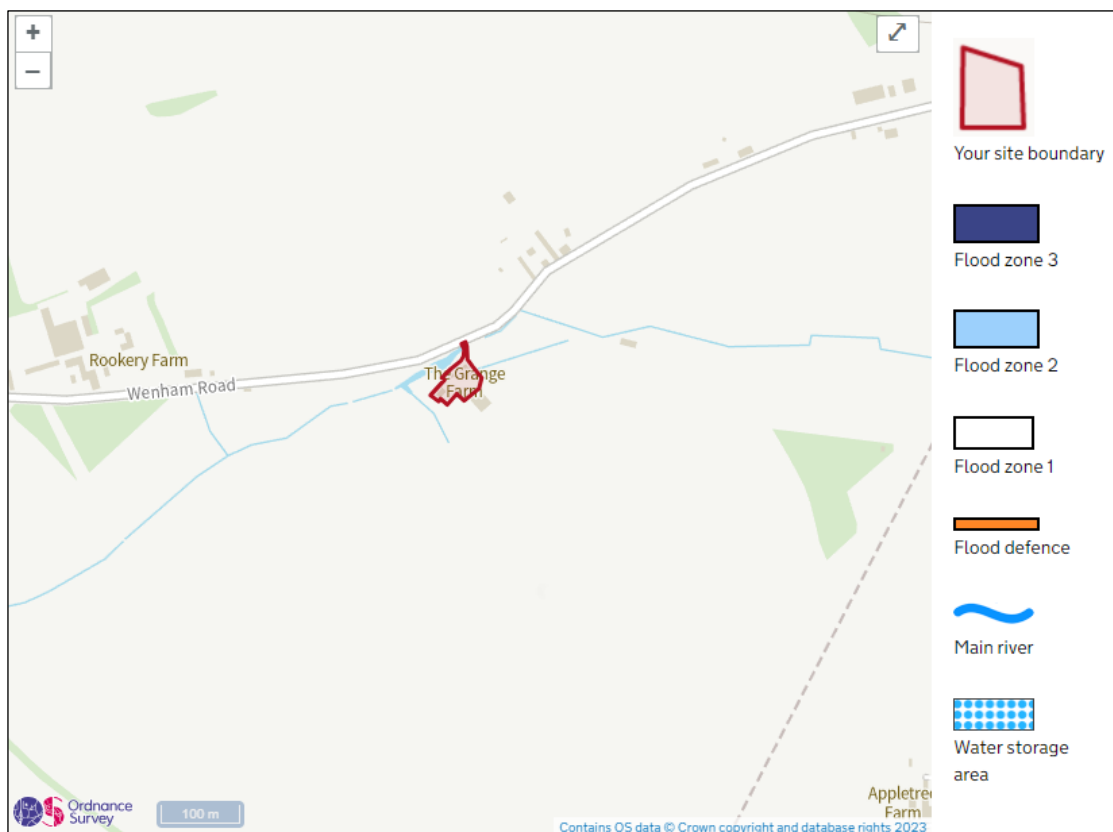


Figure 4- Extract of the Flood Map for Planning



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Surface Water (Pluvial) Flooding

3.6.5 Pluvial (surface water) flooding typically occurs when intense rainfall occurs within a catchment to such an extent that it is unable to be absorbed at which point it makes its way to the nearest watercourse/surface water sewer. Due to the anticipated effects of climate change this is expected to be a more frequent and increasing source of flood risk, particularly in built up areas.

3.6.6 Flooding from surface water is difficult to predict as rainfall location and volume are difficult to forecast. In addition, local features can greatly affect the chance and severity of flooding. The GOV.UK Surface Water Flood Map highlights areas where runoff is likely to flow and/or gather based on LIDAR data and defines surface water flood risk as categories from 'Very Low' to 'High'. These zones are: -

- **Very Low** – area of less than 0.1% chance of flooding each year;
- **Low** – area between 0.1% and 1% chance of flooding each year (i.e., an extreme event);
- **Medium** – area of between 1% and 3.3% chance of flooding each year. This category is designated as the 'design event' for surface water flooding; and
- **High** – area of greater than 3.3% chance of flooding each year.

3.6.7 The pluvial flood risk mapping (GOV.UK) shows that the site is located as an area at risk of surface water flooding (refer to **Figure 5**).

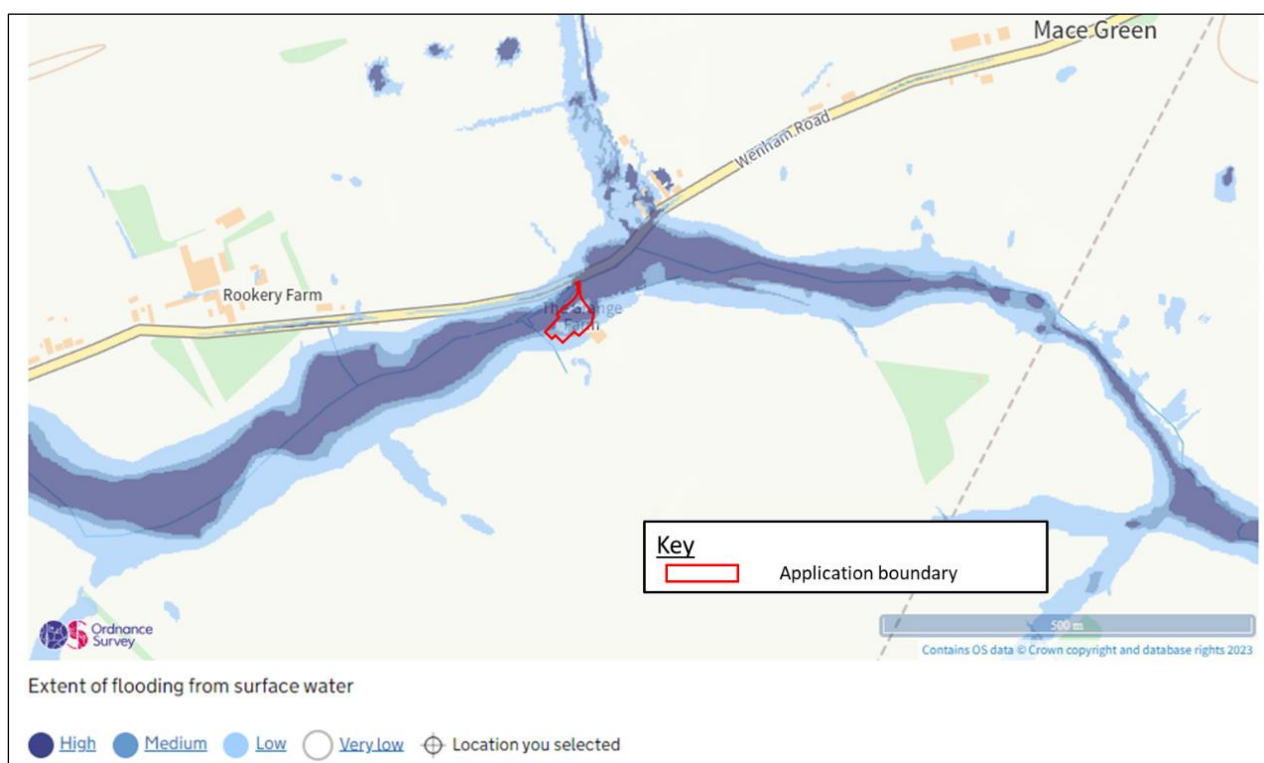


Figure 5 - Extract of Environment Agency Surface Water Flooding



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- 3.6.8 More detailed flood mapping hosted by DEFRA indicates that the modelled extent for the >3.3% AEP pluvial flood event (i.e., the High-Risk area) encroaches within the confines of the application boundary. It is, however, observed that the proposed extension works associated with this application are located outside of the modelled extents. Refer to **Figure 6**.
- 3.6.9 The corresponding depth of flood water in this event is shown to range within the bands from 0.00 – 0.15m and 0.15 to 0.30m (i.e., up to maximum 300mm) deep within the confines of the application boundary and immediately north of the proposed extension.



Figure 6 - Detailed surface water mapping – High Risk Extent

- 3.6.10 For the 1% to 3.3% AEP pluvial flood event (i.e., the Medium Risk area; or ‘Design Flood Event’) the extent of pluvial flooding increases and is shown to extend across much of the application site (please refer to **Figure 7** overleaf). It is noted that the footprint of the existing dwelling is shown to be outside of the modelled extent of predicted flooding.
- 3.6.11 The corresponding depth of flood water in this event is shown to again range within the bands from 0.00 – 0.15m and 0.15 - 0.30m (i.e., up to maximum 300mm) deep within the confines of the application boundary. Please refer to **Figure 8**, overleaf.
- 3.6.12 The detailed mapping also shows the velocity of the flow within the application site to range in bands in the order of 0.00 - 0.25m/s, 0.25 – 0.50m/s and increasing to a maximum of 0.50 - 1.00m/s (refer to **Figure 9**, overleaf).
- 3.6.13 The combination of flood depth and flood velocity allows a flood hazard score to be attributed. Please refer to Section 3.6.18 for a summary of the flood hazard for each event.



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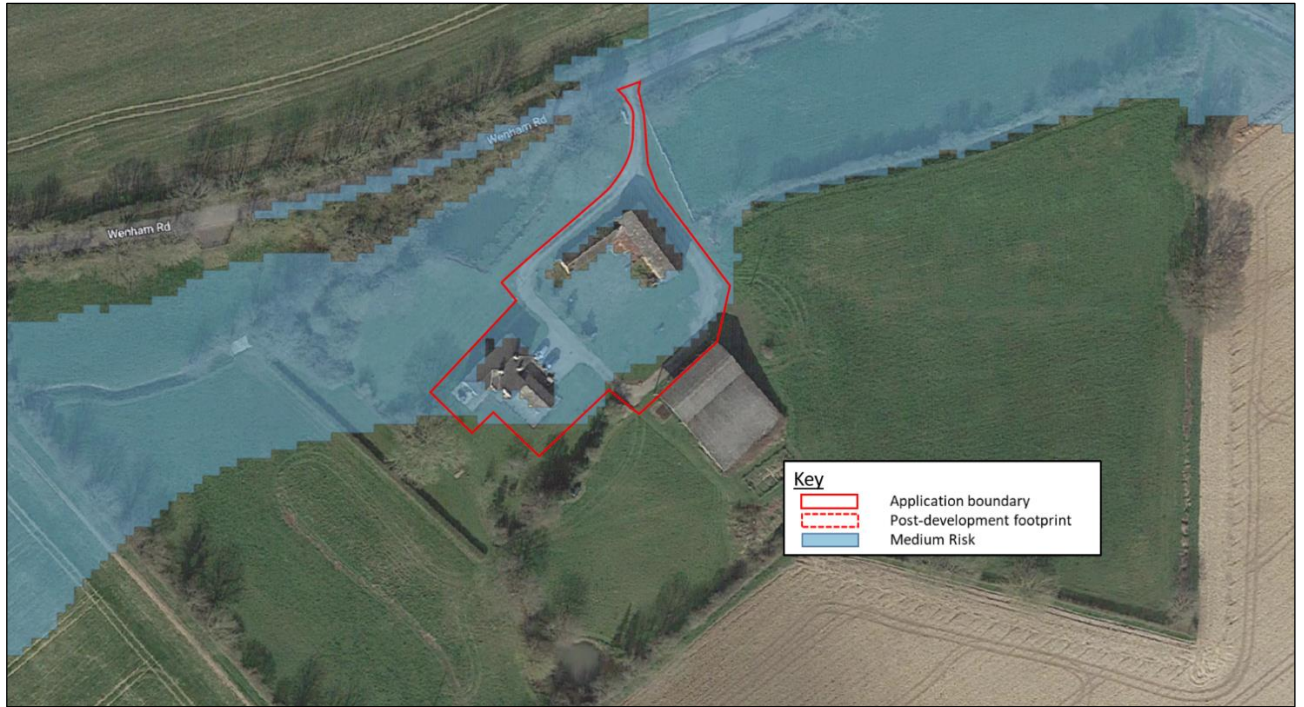


Figure 7 - Detailed surface water mapping - Medium Risk Extent

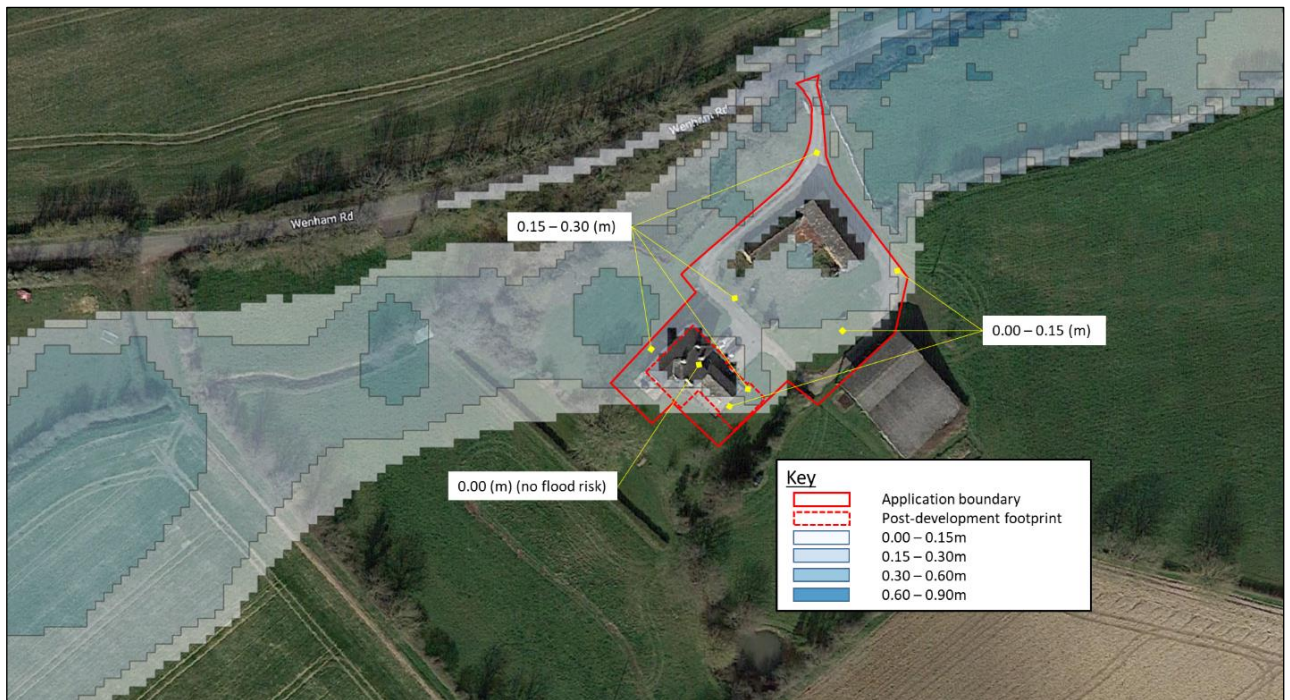


Figure 8 - Detailed surface water mapping - Medium Risk Depth



Grange Farm, Washbrook



Figure 9 - Detailed surface water mapping – Medium Risk Velocity

3.6.14 During the Low-risk scenario (i.e., 0.1% - 1% AEP; or extreme event), the detailed mapping indicates that pluvial flooding would wholly inundate the application site (refer to **Figure 10**, overleaf).

3.6.15 The corresponding depth of flood water in this event is shown to range within the bands from 0.00 – 0.15, 0.15 - 0.30m and 0.30 – 0.60 (i.e., up to maximum 600mm) deep within the confines of the application boundary. Please refer to **Figure 11**, overleaf.

3.6.16 This information has been used for the purposes of setting the flood mitigation measures for the 0.1% AEP or 'extreme' event (i.e., beyond the design flood event). Refer to Section 3.8.

3.6.17 The detailed mapping also shows the velocity of the flow within the application site to range in bands in the order of 0.00 - 0.25m/s, 0.25 – 0.5m/s and increasing to 0.50 - 1.00m/s (refer to **Figure 12**, overleaf).



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Figure 10 - Detailed surface water mapping – Low Risk Extent

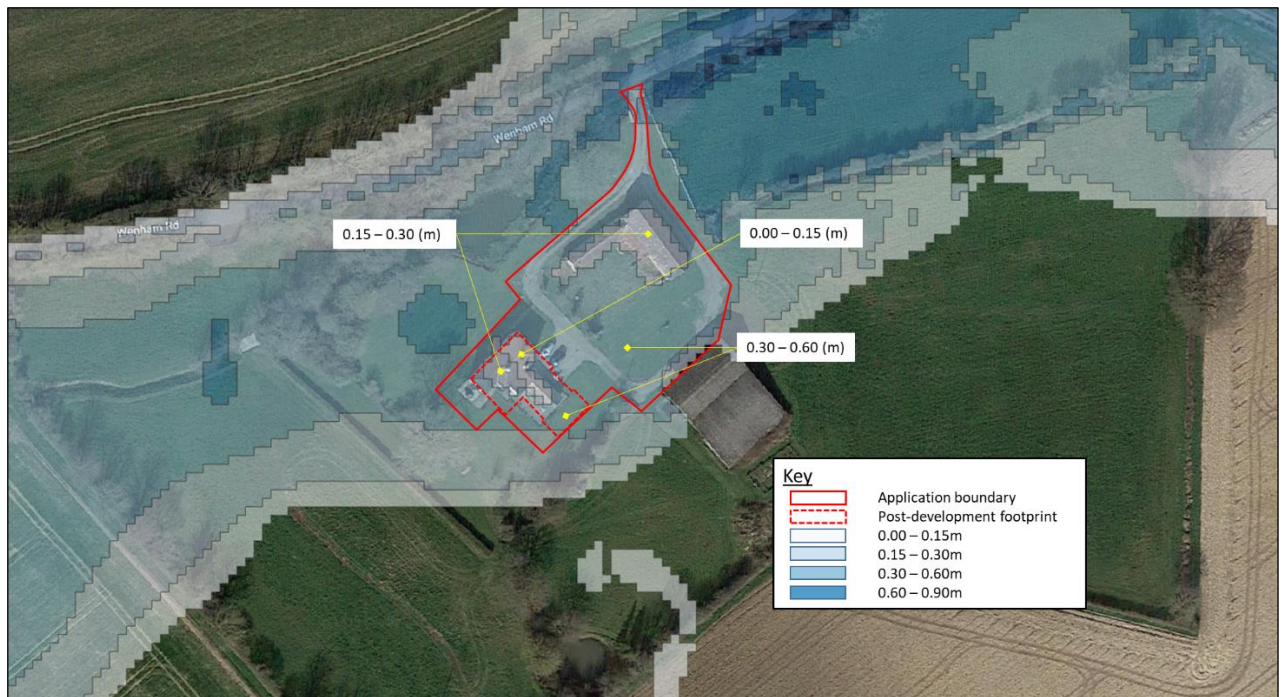


Figure 11 - Detailed surface water mapping – Low Risk Depth



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Figure 12 - Detailed surface water mapping – Low Risk Velocity

3.6.18 Table 1 (below) provides a summary of the flood hazard rating scores for the each of the modelled events. The ratings have been captured from the following points 1) within the confines of the application side (but outside of the proposed redevelopment) and 2) in the location of the proposed extension. Please refer to **Figures 13 – 15** for extracts for flood mapping.

Table 1 – Summary of Flood Risk Hazard Rating Scores.

Modelled Event (AEP)	Hazard Rating			
	Point 1) Max. rating within Application Boundary		Point 2) Max. rating within Proposed Extension	
	Score	Category	Score	Category
High (> 3.3% AEP)	0.75 – 1.25	Danger for Some	N/A	N/A
Medium (1%-3.3% AEP)	0.75 – 1.25	Danger for Some	0.50 – 0.75	Very Low Risk
Low (0.1% - 1% AEP)	1.25 – 2.00	Danger for Most	1.25 – 2.00	Danger for Most



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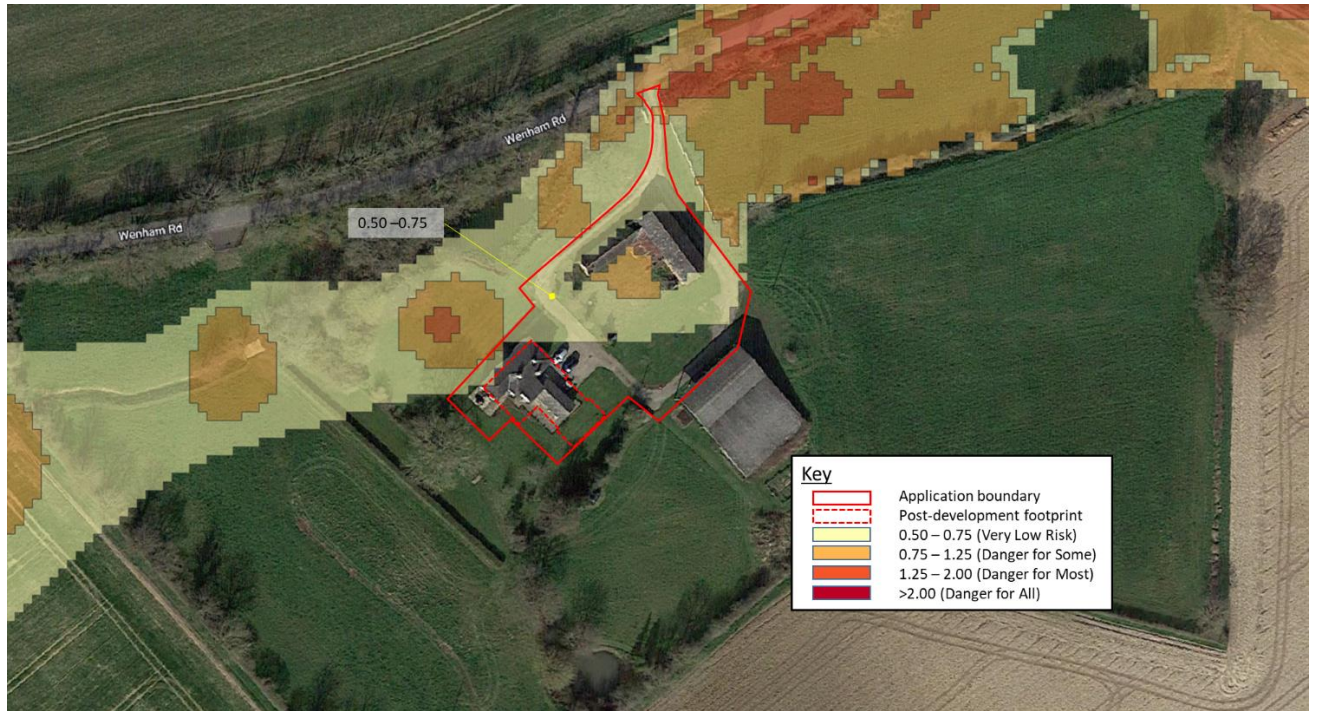


Figure 13 - Detailed surface water mapping – High Risk Hazard Rating

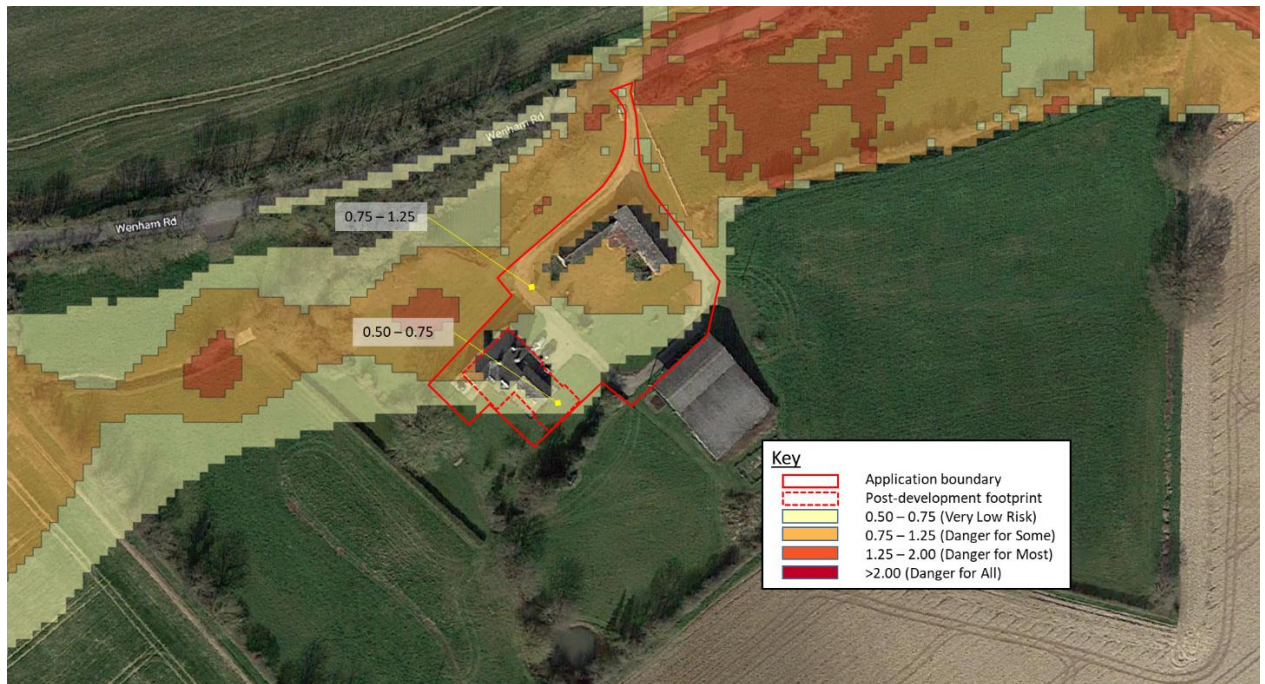


Figure 14 - Detailed surface water mapping – Medium Risk Hazard Rating



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Figure 15 - Detailed surface water mapping – Low Risk Hazard Rating

3.6.19 Overall, it is considered the risk of pluvial flooding occurring on-site to be High, while the risk of pluvial flooding significantly impacting the on-site structures is considered to be Medium - Low (during the design flood event).

3.6.20 It is also considered that the risk posed to the proposed development can be readily managed through flood management and mitigation measures. It is recommended these include setting the ground floor finished level (as a minimum) no lower than the existing ground floor level and the provision of flood resistant and resilient measures (where possible) for the ground floor to a level above the modelled Low-risk surface water flooding (i.e., up to a maximum depth of approximately 600mm above existing external levels).

3.6.21 Furthermore, it is recommended that the passage for surface water is maintained within the masterplan to continue to allow any overland flows to pass through the site. The current redevelopment proposals accord with these recommendations.

3.6.22 The extent of impermeable surfacing will increase following completion of the proposed development. As a result, surface water must be carefully managed via the design and construction of a SuDS compliant drainage design strategy, to ensure that the risk of surface water flooding does not increase flooding of the development and where possible reduced.



Grange Farm, Washbrook

Groundwater flood risk

- 3.6.23 Groundwater flooding is closely associated with heavy rainfall events and pluvial flooding. Depending on the nature of the underlying geology and the seasonal depth of groundwater, periods of abnormally high rainfall can result in groundwater flooding of basements and the emergence of groundwater at the surface, causing damage to property and infrastructure.
- 3.6.24 The Groundsure Flood Search risk assessment (refer to **Appendix F**) is based on a 5m Digital Terrain Model (DTM) and 1-in-100-year and 1-in-250-year return periods. The report records a Low risk of groundwater flooding on-site.
- 3.6.25 Furthermore, BGS borehole logs (refer to **Appendix D**) for the closest available boreholes recorded groundwater strikes greater than approximately 11m bgl.
- 3.6.26 It is therefore considered, that in the unlikely event that groundwater levels were to rise to a point where they meet/coincide with ground levels, then the resulting flows would tend to follow the topography and exit the site as overland flow (as opposed to pooling within the site boundaries).

Sewer flood risk

- 3.6.27 Anglian Water indicate there are no public sewer assets or water supply infrastructure located beneath and/or near the site (refer to **Appendix G**).
- 3.6.28 As there are no sewers recorded on-site or nearby, the risk of flooding from such source is considered to be Negligible.

Reservoir, Canal and other Artificial sources of flooding

- 3.6.29 The site is not shown to lie within an area denoted as being at risk of flooding from a breach (failure) of a raised reservoir embankment.
- 3.6.30 There are no other lakes/ponds or canals in the vicinity of the site deemed as posing a risk to the development.
- 3.6.31 It is therefore considered that the risk of flooding from such sources is Negligible.

3.7 Ambiential FloodScore™ Insurance Rating

- 3.7.1 The Ambiential FloodScore™, included within the Groundsure Flood Report (refer to **Appendix G**), provides an indication of the perceived insurance risk classification.



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3.7.2 In this instance, the site is classified as 'High'. As stated within the Groundsure Flood Report Ambiental's FloodScore™ insurance rating for high 'indicates a level of risk that may make it more likely that standard insurance premiums will be higher, or additional terms may apply to the provision of flood cover. There is a high possibility that the cover for flooding at the property will be ceded into the Flood Re scheme, particularly if the property has flooded in the past.'

3.7.3 It is also noted that other underwriting considerations may be taken into account, such as flood mitigation and management measures (i.e., raising the building, raising the contents off the floor, etc).

3.8 Proposed Mitigation Measures

3.8.1 The key objectives of flood risk mitigation/management are:

- To reduce the risk of the development being flooded;
- To allow continued operation and safely during flood events; and
- To not exacerbate flood risk downstream of the site by increased runoff, or as a result of the development.

3.8.2 Up to this point in the report the risk of flooding to the site has been analysed and the consequences from each source has been considered. In this instance, mitigation measures are considered with respect to the impacts of the Low risk of surface water flooding.

Raising floor levels

3.8.3 It is acknowledged that the finished floor level of the proposed extensions will likely be dictated by the existing ground floor level of the main dwelling so as to maintain a constant level throughout. However, if there is scope to increase the height of the ground floor level this should be considered. In addition to setting flood levels, it is recommended that flood resistant and resilient measures are considered throughout the ground floor.

3.8.4 It is noted that the proposals will introduce new two-storey elements to the dwelling, and therefore, the future occupants will have additional areas of 'safe refuge' at the first-floor level (if required).

Compensatory floodplain storage

3.8.5 No compensatory floodplain storage is required in this instance as the site is located in Flood Zone 1.

Flood Resistance and resilience construction

3.8.6 Flood resilient techniques, or wet proofing measures, should be adopted for the ground floor level in consideration of the low probability 0.1% pluvial event (i.e., beyond the 'design flood event'). As a minimum these measures should be adopted for all construction below approximately 44.80m AOD (i.e., approximately 600mm above existing site levels).



Grange Farm, Washbrook

3.8.7 Flood resilient construction measures reasonably include, but are not limited to, the following (subject to the late detailed design stages and owner preference), and in-keeping with the development proposals:

- Non-absorbent insulation within the floor's construction and ground flood walls;
- Non-absorbent floor coverings (such as ceramic tile, or polished concrete) at ground level;
- Raising the electric supply;
- Orientating the plasterboard horizontally;
- Flood resistant air brick/vents;
- Using water/corrosion resistant materials; and
- Installing non-return valves to drainage.

3.9 Summary

3.9.1 The site is not considered to be liable to significant or unmanageable flooding from the sources identified in the FWMA (2010, however, the inclusion of flood mitigation measures is strongly recommended.



Grange Farm, Washbrook

4 PLANNING POLICY

4.1 Flooding Sequential Test and Exception Test

- 4.1.1 The NPPF requires the (flood risk) Sequential Test to be applied at all stages of the planning process. It directs local authorities, developers, and consultants to follow a sequential, risk-based approach to identifying land suitable for development.
- 4.1.2 This approach is designed to steer new development away from high-risk areas and towards those areas at lower risk of flooding, taking all sources of flood risk and climate change into account. However, in some areas where development land is in short supply there can be an overriding need to build in areas that are at risk of flooding. In such circumstances, the application of the Sequential Test is used to ensure that lower risk sites are developed before the higher risk ones.
- 4.1.3 Whilst the responsibility for validating the Sequential Test falls to the Local Planning Authority¹, the nature of the proposals (i.e., classified as ‘More Vulnerable’) in Flood Zone 1 would suggest that the development proposal is ‘appropriate’ in this location and does not require the application of the Sequential Test to be passed (refer to **Table 1**, below). Furthermore, it is considered the Exception Test does not need to be applied.

Table 2 – Flood Risk Vulnerability and Flood Zone ‘incompatibility’

Flood Zone	Risk Classification				
	Essential Infrastructure	Highly Vulnerable	More Vulnerable	Less Vulnerable	Water Compatible
Zone 1	✓	✓	✓	✓	✓
Zone 2	✓	Exception Test Required	✓	✓	✓
Zone 3a	Exception Test Required	x	Exception Test Required	✓	✓
Zone 3b	Exception Test Required	x	x	x	✓

✓ - Exception test is not required.

x - Development should not be permitted.

Based on information contained in NPPF Table 2: Flood risk vulnerability and flood zone ‘incompatibility’ Paragraph: 079
 Reference ID: 7-079-2022082, Revision date: 25 08 2022

¹ NPPF Table 2 (August 2022) no longer mentions that a ‘development is appropriate’ in Flood Zones 2 and/or 3, therefore, the table can no longer be used by the developer/developer team to demonstrate the Sequential Test is passed.

5 PROPOSED DEVELOPMENT DRAINAGE

5.1 Background and Policy

- 5.1.1 The FWMA 2010 and NPPF require all new development to ensure that peak discharge rates and volume of surface water runoff does not exceed that of the existing site, and where possible reduced rates of discharge are encouraged.
- 5.1.2 The guidance also requires that peak rainfall intensity should be increased with the application of a percentage uplift, to take into account the potential impact of climate change on future weather patterns during the design life of the development.
- 5.1.3 In the absence of a defined design life for the development, it is assumed a residential development to have a minimum lifetime of approximately 100 years.
- 5.1.4 For developments with a lifetime beyond 2100, and located in the East Suffolk Management Catchment, it is recommended that the climate change allowance should follow the GOV.UK 'Upper End' allowance for the 2070s epoch (i.e., 2061 to 2125) and consider a 40% - 45% increase.
- 5.1.5 Any additional volume of rainwater arising from a 1 in 100-year (1 % AEP) storm event with a 6-hour duration should ideally be managed on-site, using techniques such as infiltration or recycled for non-potable application (i.e., such as flushing toilets or irrigation). Where this is not possible, post-development discharges should be restricted to greenfield rates.

5.2 Existing Surface Water Management

- 5.2.1 It is considered that the existing residential dwelling is served by a private drainage network and discharges to the ground and/or surrounding network of ditches/watercourses.

5.3 Pre- and Post-development Runoff Rates

- 5.3.1 The rates of surface water run-off for the pre- and post-development scenarios (including the site's current arrangement, and its original greenfield status) have been calculated. A summary of the results is provided at **Table 3** (overleaf).
- 5.3.2 The greenfield calculation assumes no development (i.e., pre-development site) and a SOIL type 3 to match the existing (recorded) geological conditions. For the current pre-development scenario, the rate of runoff has been determined by the modified rational method development section (for an assumed 15-mins storm duration). Similarly, the same method has been used to calculate the unmitigated runoff rates for the post-development scenario. Refer to enclosed calculation sheets.
- 5.3.3 The calculation sheets can be found at **Appendix H**.



Grange Farm, Washbrook

Table 3 – Surface Water Run-off Rates

	Site Greenfield (Developed area only) 0.026ha IH124		Pre-development (current scenario) 0.019ha Wallingford*		Post-development (unmitigated) (Developed area only) - 0.026ha Wallingford*	
	(l/s)	(l/s/ha)	(l/s)	(l/s/ha)	(l/s)	(l/s/ha)
QBAR	<0.1	2.25	-	-	-	-
Q 1 year		1.95	1.91	100.69	2.56	100.69
Q 30 year	0.14	5.50	4.69	247.04	6.28	247.04
Q 100 year	0.21	7.99	6.09	320.62	8.14	320.62
	*based on a 15-minute storm					

5.4 Surface Water Management

- 5.4.1 The development proposals will result in a net increase in impermeable surfaces with an uplift from approximately 190m² (0.019ha) to approximately 254 m² (0.026ha). Refer to **Appendix B**.
- 5.4.2 Current best practice guidance document: the SuDS Manual (CIRIA Report C753), promotes sustainable water management through the use of Sustainable Drainage Systems (SuDS).
- 5.4.3 The detailed design process should there consider the principle of SuDS and Building Regulations, and follow the drainage hierarchy (i.e., the destination for surface water runoff, that is not collected for re-use within the development).
- 5.4.4 The discharge of surface water should be prioritised firstly to the ground via infiltration, and then via a connection to a sewer (in the absence of a suitable watercourse).
- 5.4.5 There are several potential measures that can be introduced into the development which will manage surface water in a sustainable way and will not result in an increase in discharge rates.
- 5.4.6 It is recommended that the inclusion of surface SuDS (i.e., components such as SuDS planters, rain gardens and bio-retention features) to reduce/improve runoff rates and improve the quality of water discharged from the site, while also promoting biodiversity and amenity benefits (i.e., the four pillars of SuDS, see 5.4.8) will be considered during the detailed design stages.
- 5.4.7 There are four main categories of benefits that can be achieved by SuDS, which are referred to as the 'four pillars of SuDS design'; water quantity, water quality, amenity and biodiversity, as depicted in **Figure 12** (overleaf).

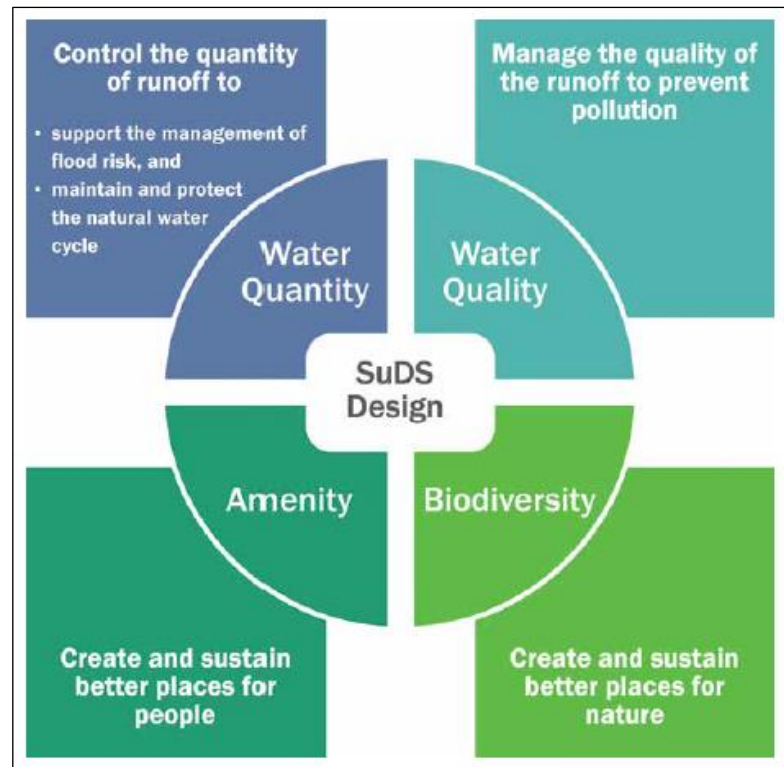


Figure 16 - Four Pillars of SuDS (extract from CIRIA Report C753)

5.4.8 Appropriately designed, constructed, and maintained SuDS support sustainable development through combining water management with green space with benefits for amenity, recreation and wildlife. SuDS are more sustainable than conventional surface water drainage methods as they can mitigate many of the adverse effects that stormwater run-off has on the environment. This can be achieved by:

- Reducing run-off rates, thereby lessening the risk of flooding downstream;
- Minimising additional run-off emanating from urban development, which could exacerbate the risk of flooding and impair water quality;
- Encouraging natural groundwater recharge (as appropriate) and so reduce the impact on aquifers and rivers;
- Reducing pollution risks associated with development;
- Contributing to, and enhancing, the amenity and landscape of an area and to promoting community involvement and enjoyment; and
- Providing habitats for wildlife and opportunities for biodiversity enrichment.

5.4.9 All proposals and rates are subject to detailed design and the approval of relevant parties.

6 CONCLUSIONS & RECOMMENDATIONS

6.1 Summary of Flood Risk

- 6.1.1 GOV.UK mapping indicates that the site is located in Flood Zone 1 (the low probability flood area).
- 6.1.2 Surface water (pluvial) flooding is shown on-site during all modelled return periods.
- 6.1.3 The detailed surface water modelling outputs indicate that the proposed extensions are located within the modelled Medium-risk area (i.e., the design flood event). However, it is considered that the risk of pluvial flooding significantly impacting the on-site structures to have a very low flood hazard rating as the combination of modelled flood depth and velocity provide a corresponding very low score.
- 6.1.4 For the Low-risk (i.e., extreme) event, the maximum depth of floodwater at the location of the proposed extensions is up to 600mm (i.e., within 0.30m to 0.60m). It is therefore recommended that the flood management and mitigation measures are considered in line with this maximum value.
- 6.1.5 It is considered that the risk posed to the proposed development can be readily managed through flood management and mitigation measures such as setting the ground floor finished level (as a minimum) no lower than the existing ground floor level and the provision of flood resistant and resilient measures (where possible) for the ground floor to a level above the modelled Low-risk surface water flooding (i.e., up to a maximum depth of approximately 600mm above existing external levels).
- 6.1.6 Furthermore, it is recommended that the passage for surface water is maintained within the masterplan to continue to allow any overland flows to pass through the site. The current redevelopment proposals accord with these recommendations.
- 6.1.7 Ample safe refuge for occupants will be available at the first-floor level.
- 6.1.8 The site is not considered to be liable to significant or unmanageable flooding from the other sources identified in the FWMA (2010).
- 6.1.9 The proposals will result in a net increase in the impermeable cover at the site, and therefore, the rate of surface water runoff shed from/by the site would increase over the lifetime of the development with the inclusion of an allowance for climate change (without mitigation). It is, therefore, recommended that the use of a SuDS based drainage system, incorporating surface SuDS and green/blue/blue-green roofs (where practicable), is incorporated into the detailed design stage.
- 6.1.10 The technical assessment of flood risk presented within this FRA demonstrates that flood risks and residual flood risks are manageable over the lifetime of the development without increasing flood risk elsewhere. Further, there is an opportunity for the development to reduce the existing risk by attenuating surface water run-off from the new and existing surfaces.



Grange Farm, Washbrook

6.1.11 We consider this Flood Risk Assessment to be sufficient and proportionate to the nature and scale of the planned development.

6.2 Recommendations

6.2.1 Based on the information gathered as part of the assessment JPC Environmental Services recommends the following:

- The integration of wet proofing or flood-resilient measures into the proposed extensions. Such measures might reasonably include (but not limited to):
 - Non-absorbent insulation within the floor construction and ground floor walls; and
 - Non-absorbent floor coverings (such as ceramic tile, or polished concrete) at ground level;
 - Raising the electric supply;
 - Orientating the plasterboard horizontally;
 - Flood resistant air brick/vents;
 - Using water/corrosion resistant materials; and
 - Installing non-return valves to drainage.
- A SuDS compliant drainage system should be incorporated into the development proposals. Such measures might reasonably include (subject to detailed design) the provision of permeable surfacing and/or surface SuDS components. This will provide some on-site attenuation to reduce future risk of surface water flooding, as well as provide a means of treatment before the off-site discharge;
- Consideration should be given to the use of 'surface' SuDS components and for appropriate components to be incorporated into the development to promote the four pillars of SuDS (i.e., Quality, Quantity, Biodiversity and Amenity); and
- Consideration should be given to the integration of water re-use and/or rainwater harvesting into the development for the use in non-potable systems/uses.

6.2.2 The opinions and recommendations expressed within this report are based on the results of desk-based research and information provided by third party agencies. No additional hydraulic modelling has been undertaken.

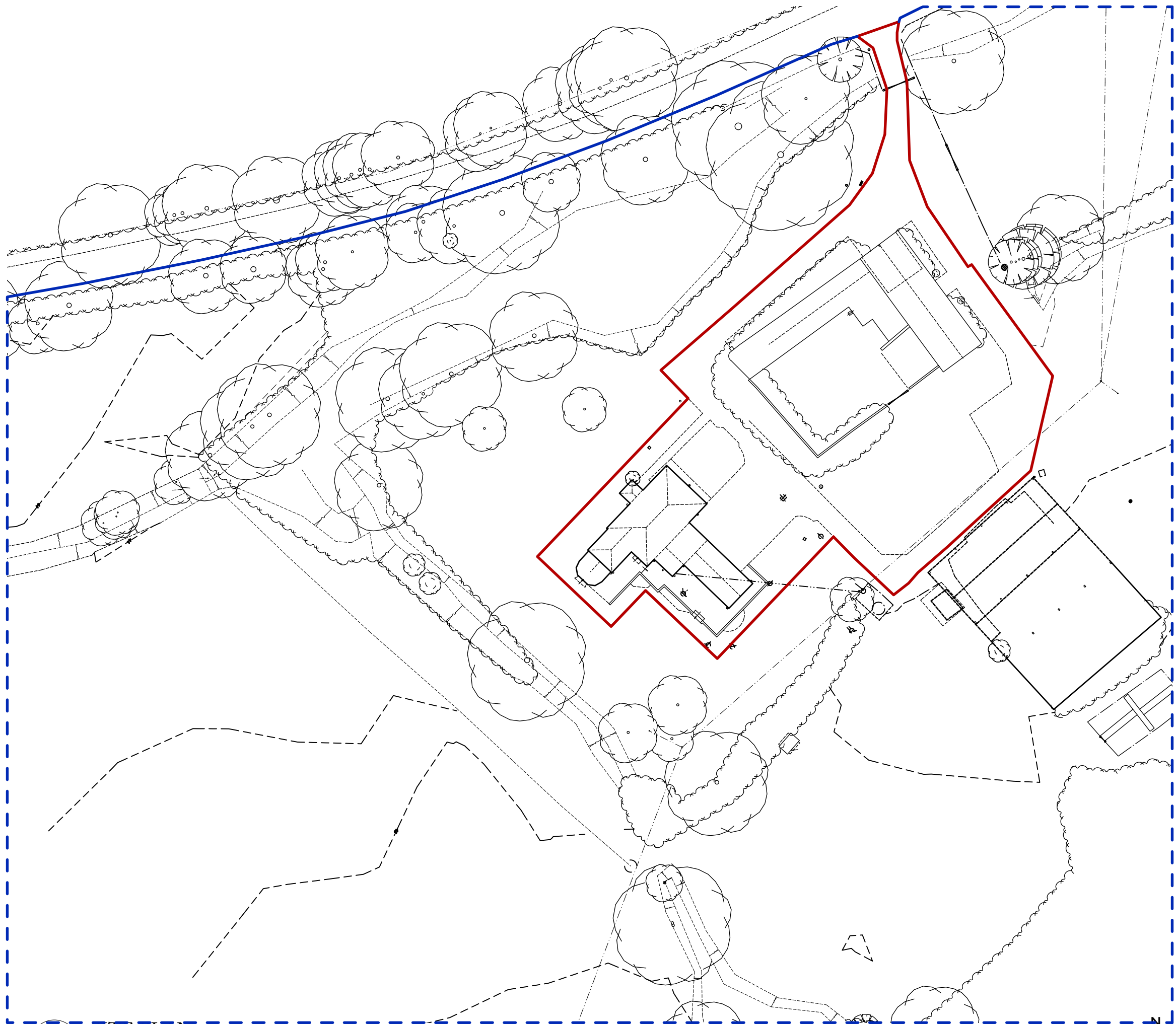
Appendix A - Site Location Map

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REVISIONS

- 16.08.2023 EJ

PLANNING



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PROJECT GRANGE FARM
Washbrook

DRAWING TITLE SITE PLAN
As Existing

SCALE 1:500 at A3

STATUS PLANNING

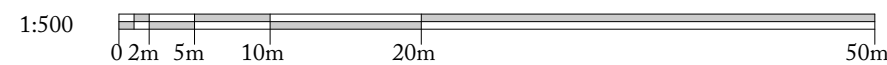
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Snape
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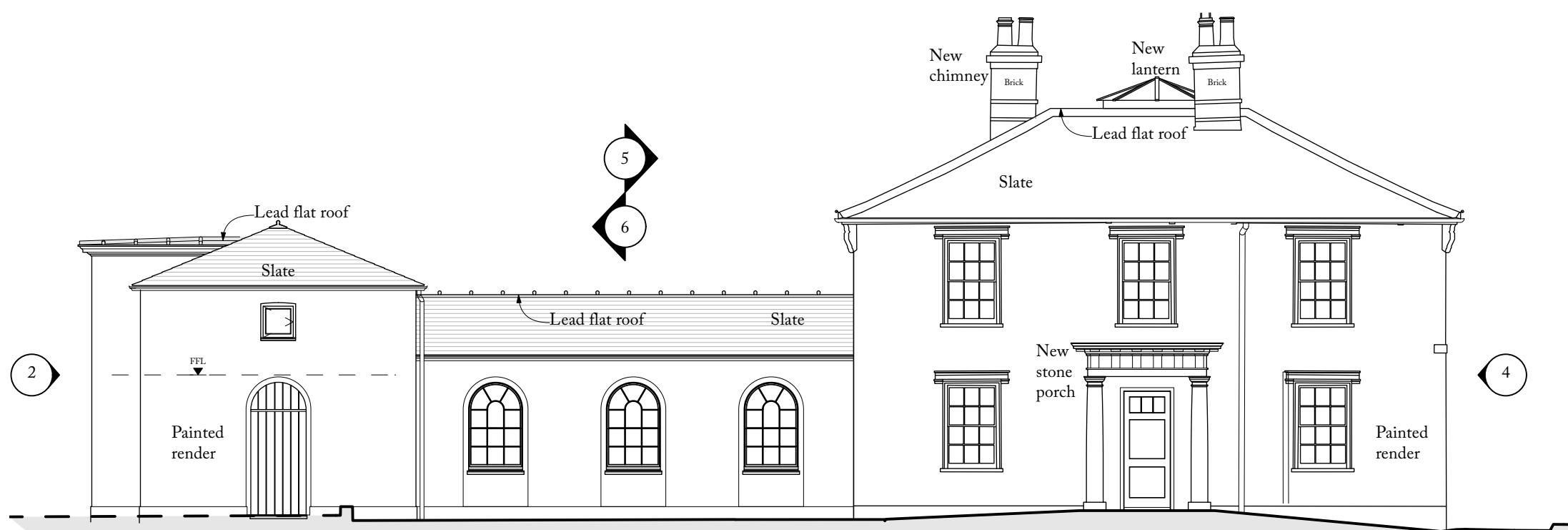
01728 688747
hrma@hrma.co.uk
www.hrma.co.uk

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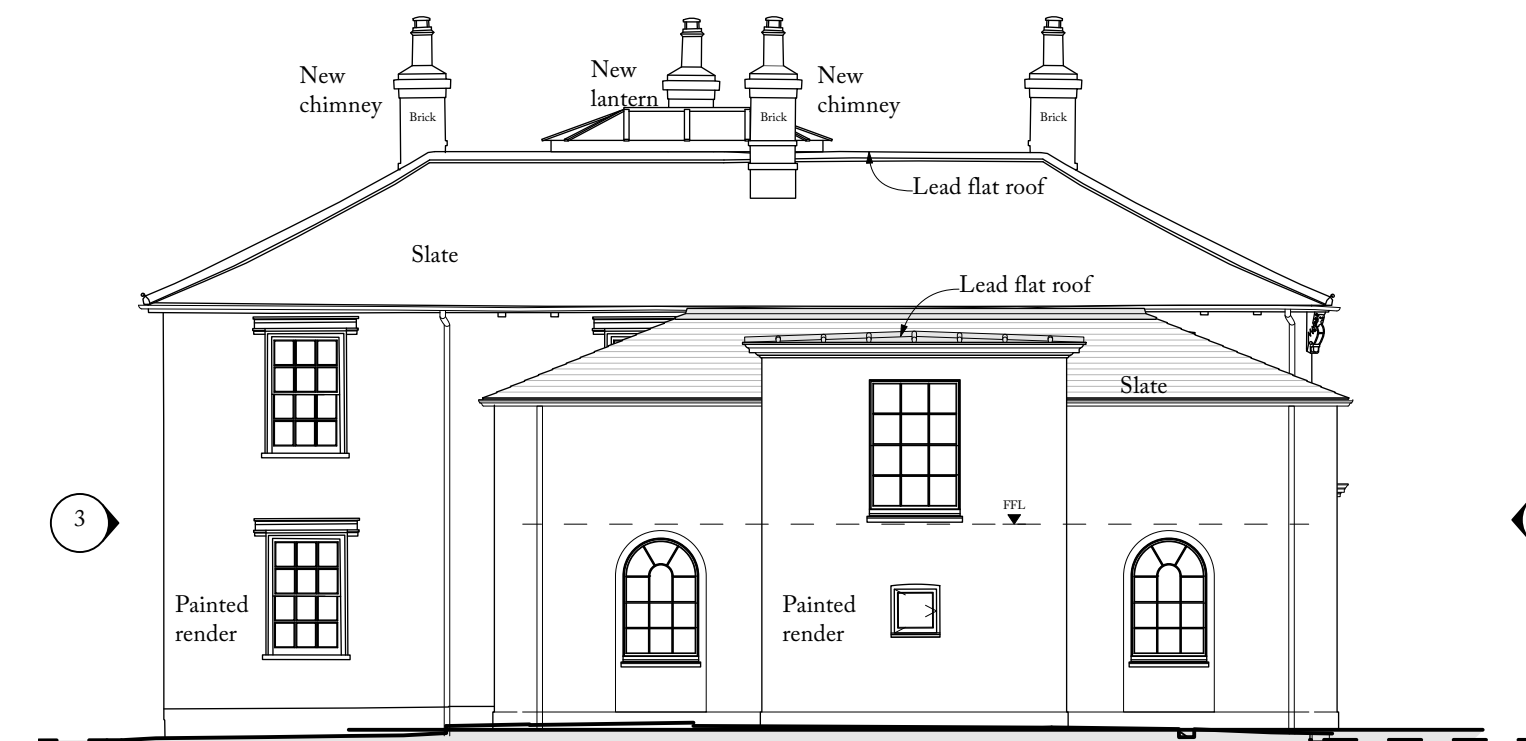
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As Existing, 1:500



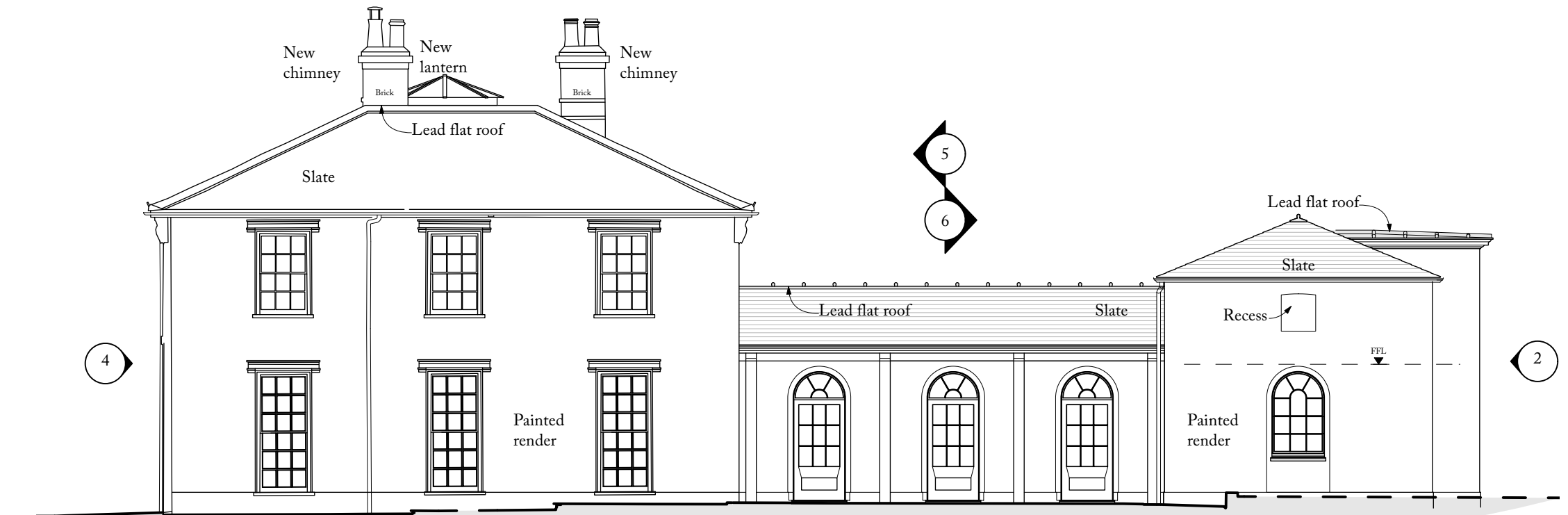
Appendix B - Architectural Layout



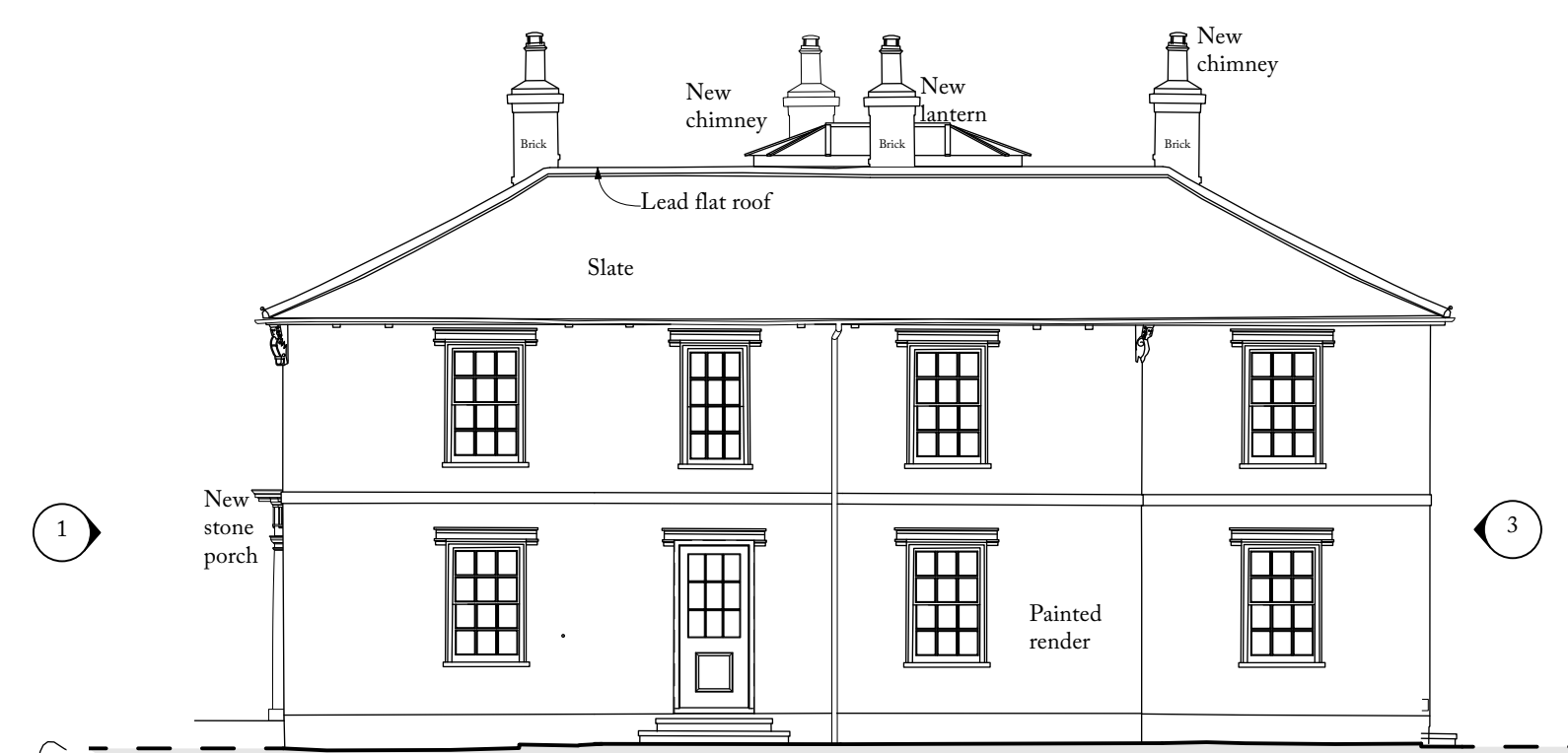
1 NORTHEAST ELEVATION
As Proposed, 1:100



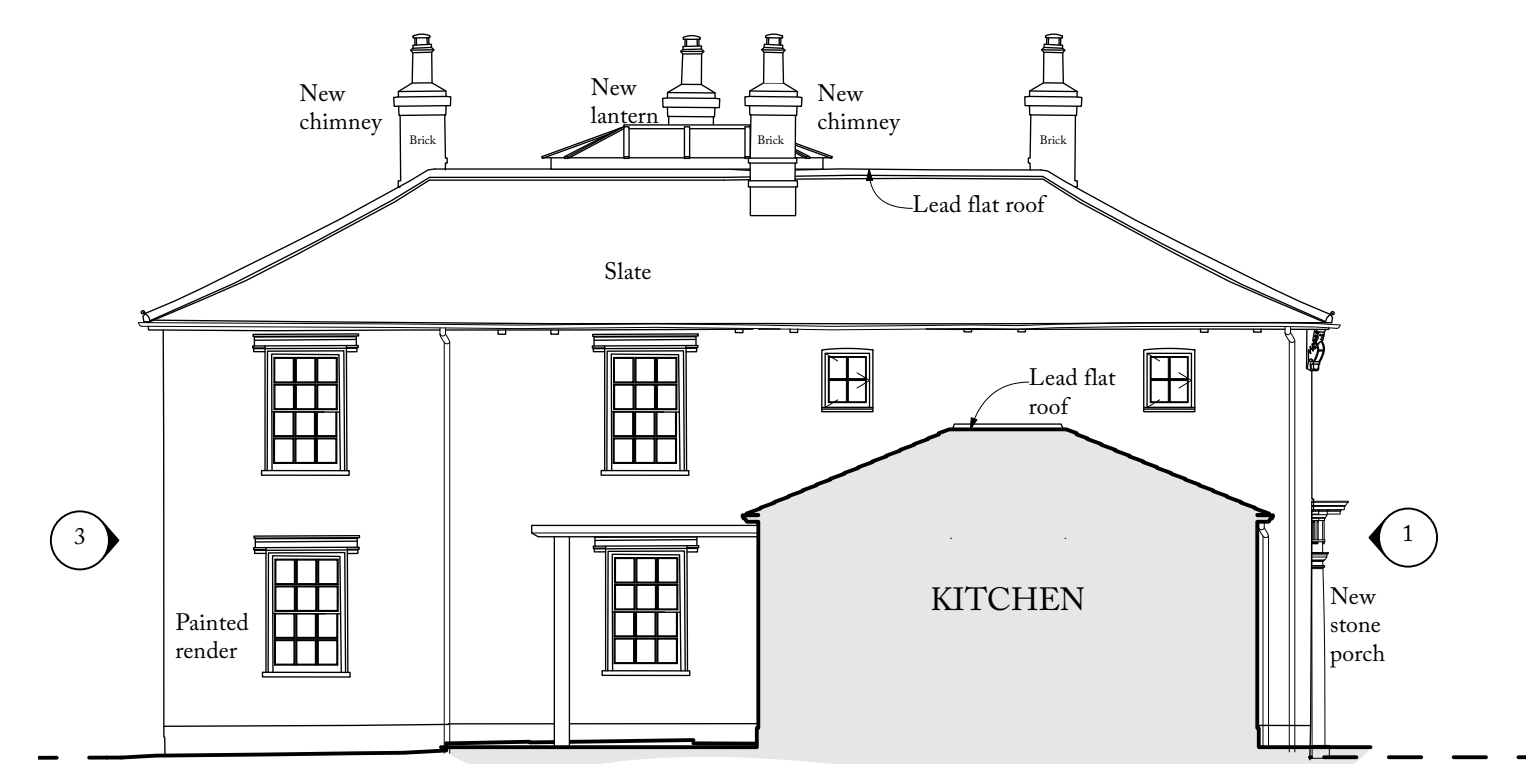
2 SOUTHEAST ELEVATION
As Proposed, 1:100



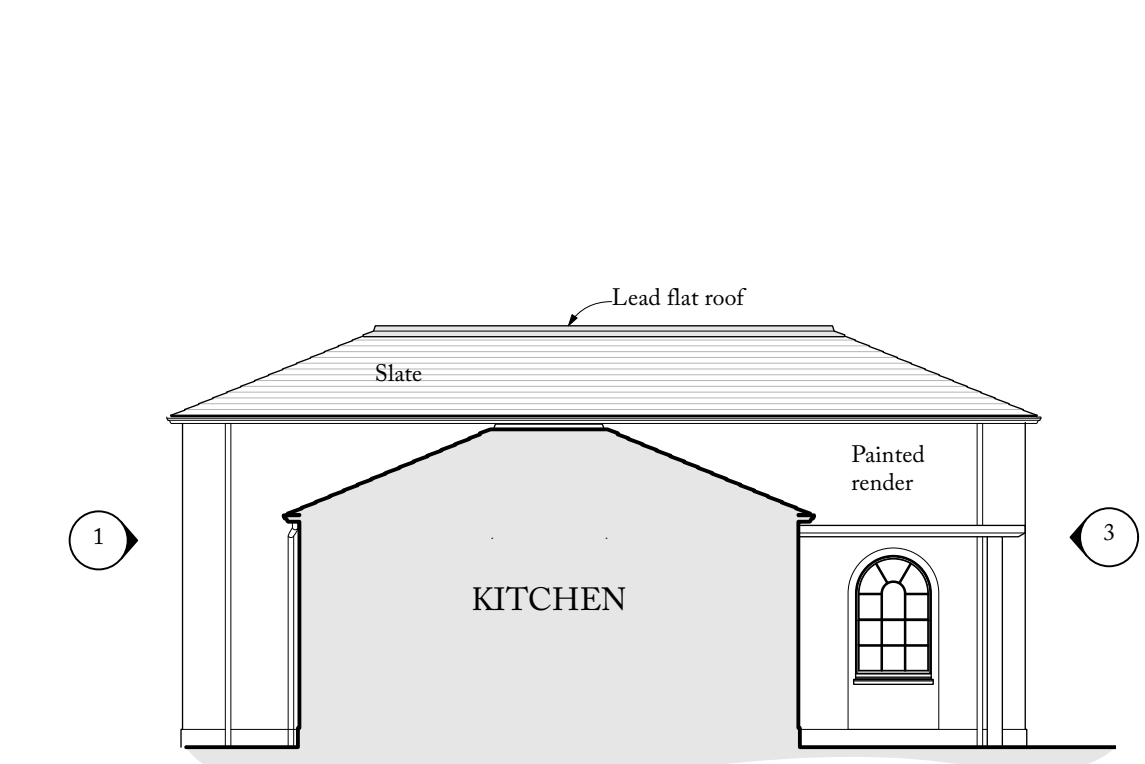
3 SOUTHWEST ELEVATION
As Proposed, 1:100



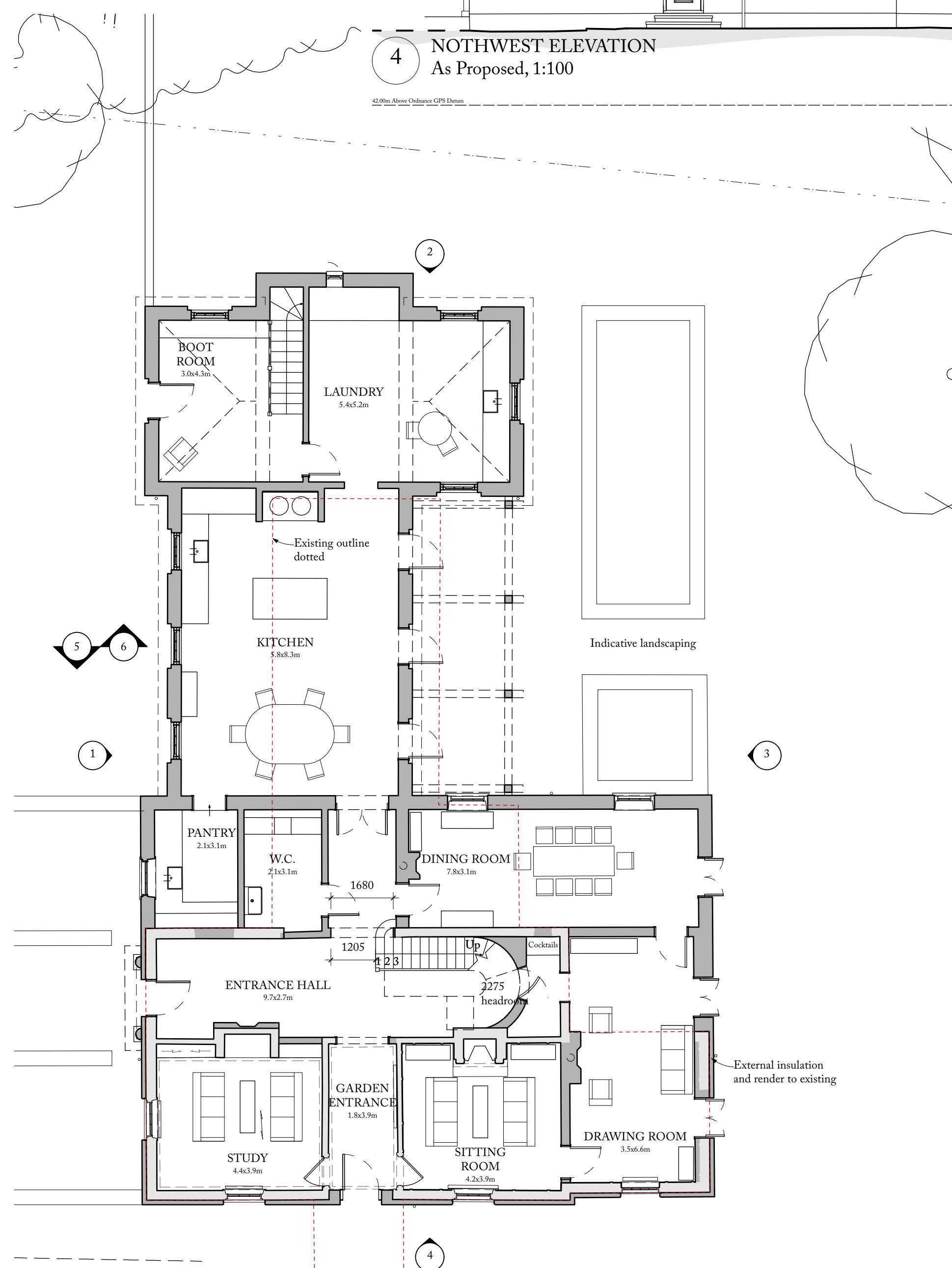
4 NORTHWEST ELEVATION
As Proposed, 1:100



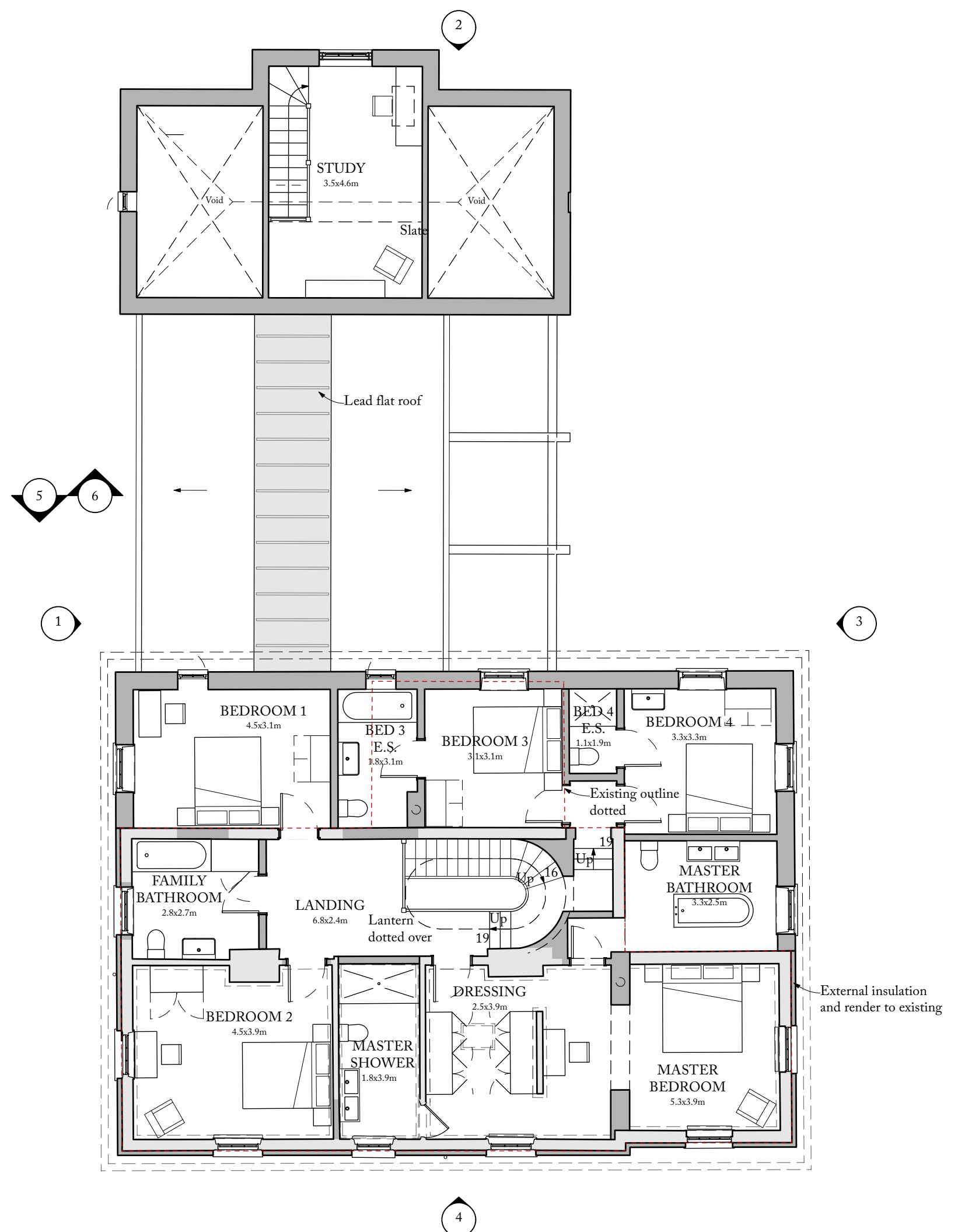
5 SOUTHEAST ELEVATION/SECTION
As Proposed, 1:100



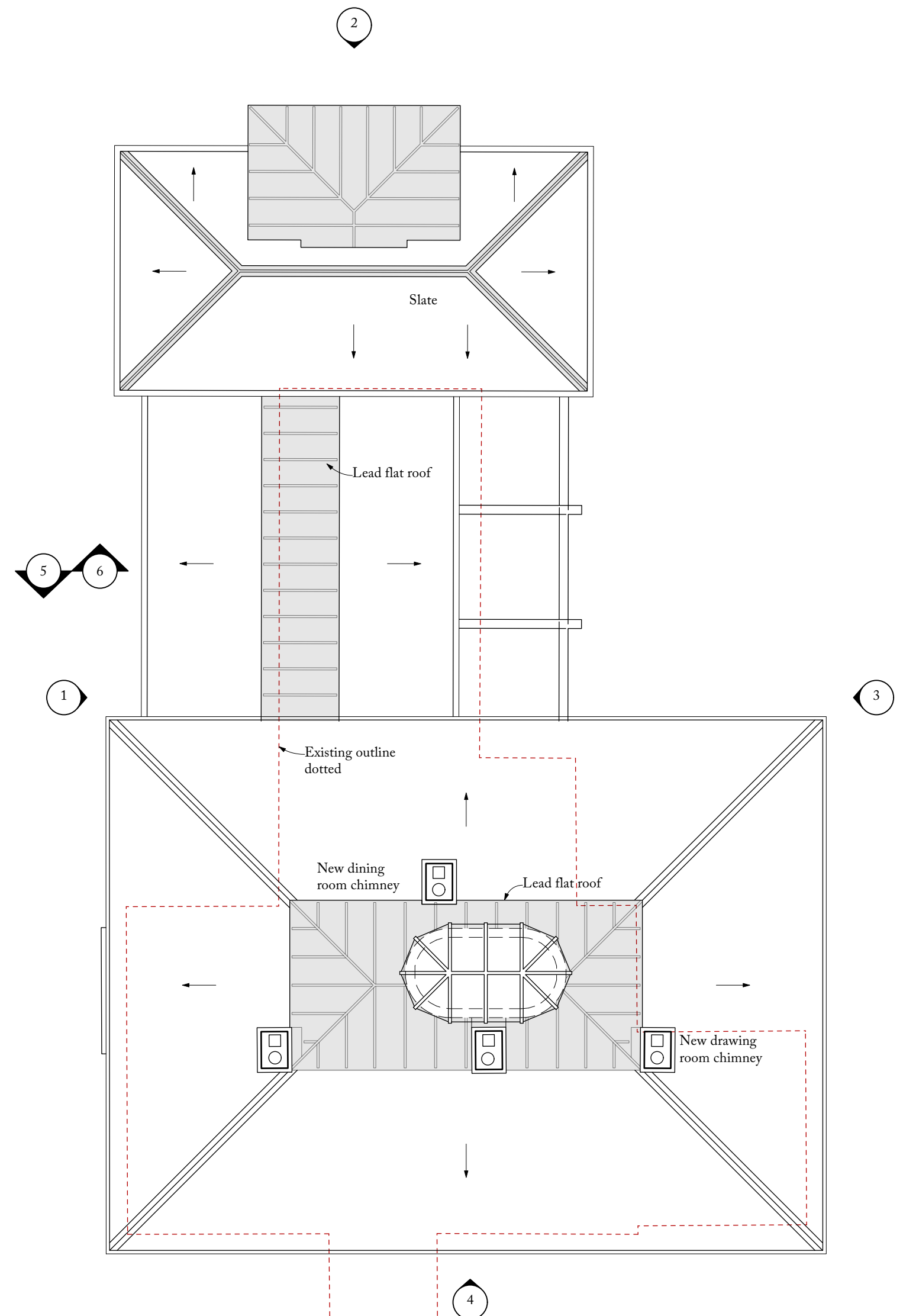
6 NORTHWEST ELEVATION/SECTION
As Proposed, 1:100



7 GROUND FLOOR PLAN
As Proposed, 1:100



8 FIRST FLOOR PLAN
As Proposed, 1:100



9 FIRST FLOOR PLAN
As Proposed, 1:100

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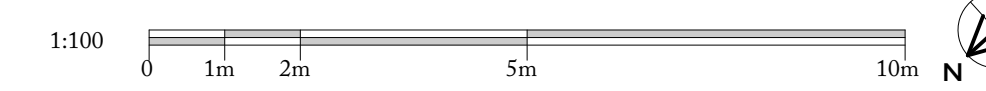
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-	16.08.2023 EJ	PLANNING
A	25.08.2023 EJ	PLANNING

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PROJECT	GRANGE FARM Washbrook
DRAWING TITLE	FLOOR PLANS & ELEVATIONS As Proposed
SCALE	1:100 at A1
STATUS	PLANNING
DRAWING NO.	213.PL.03A

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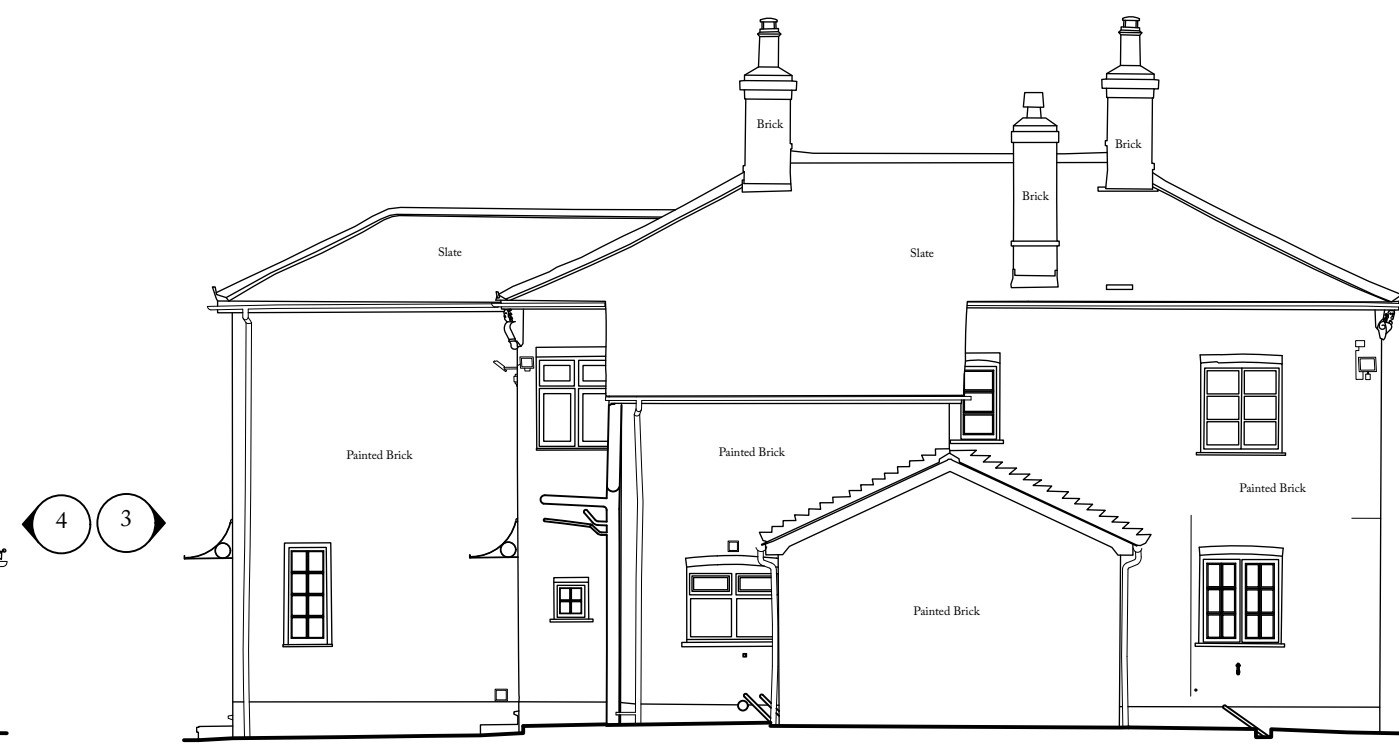


Appendix C - Topographical Survey



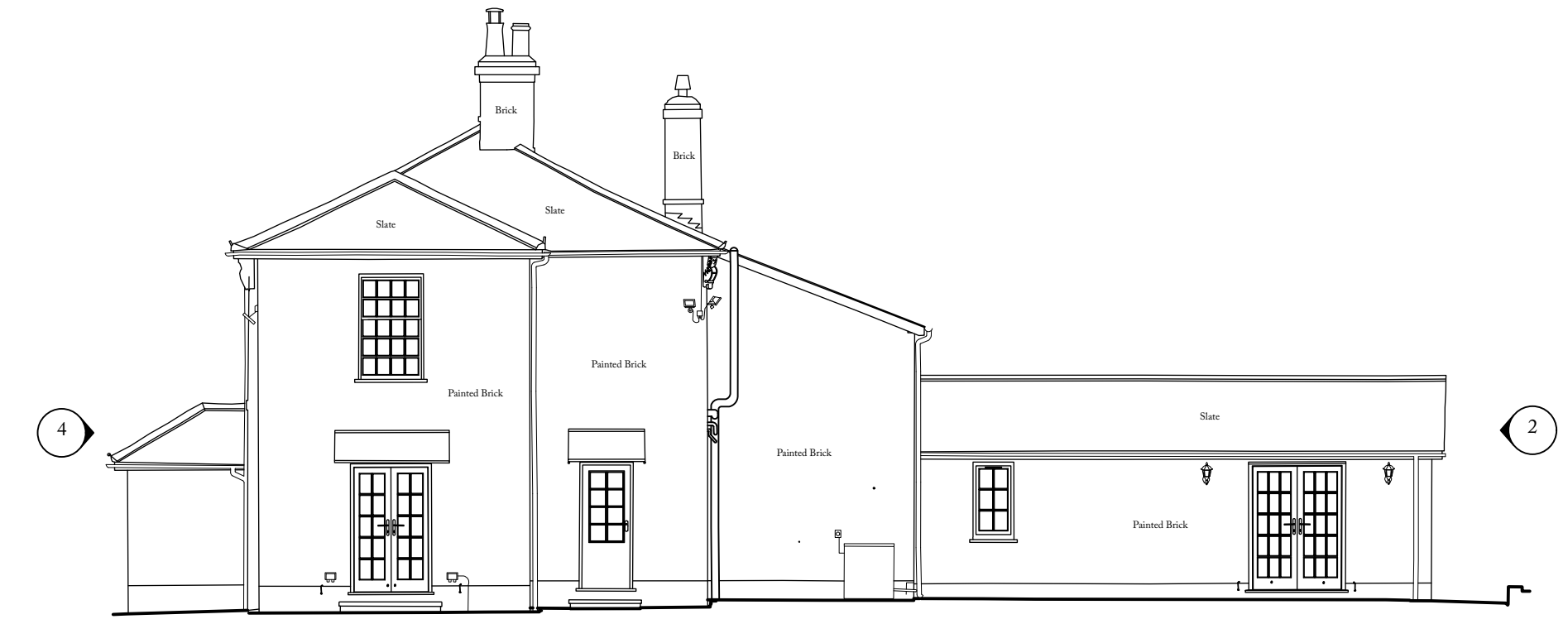
1 NORTHEAST ELEVATION
As Existing, 1:100

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2 SOUTHEAST ELEVATION
As Existing, 1:100

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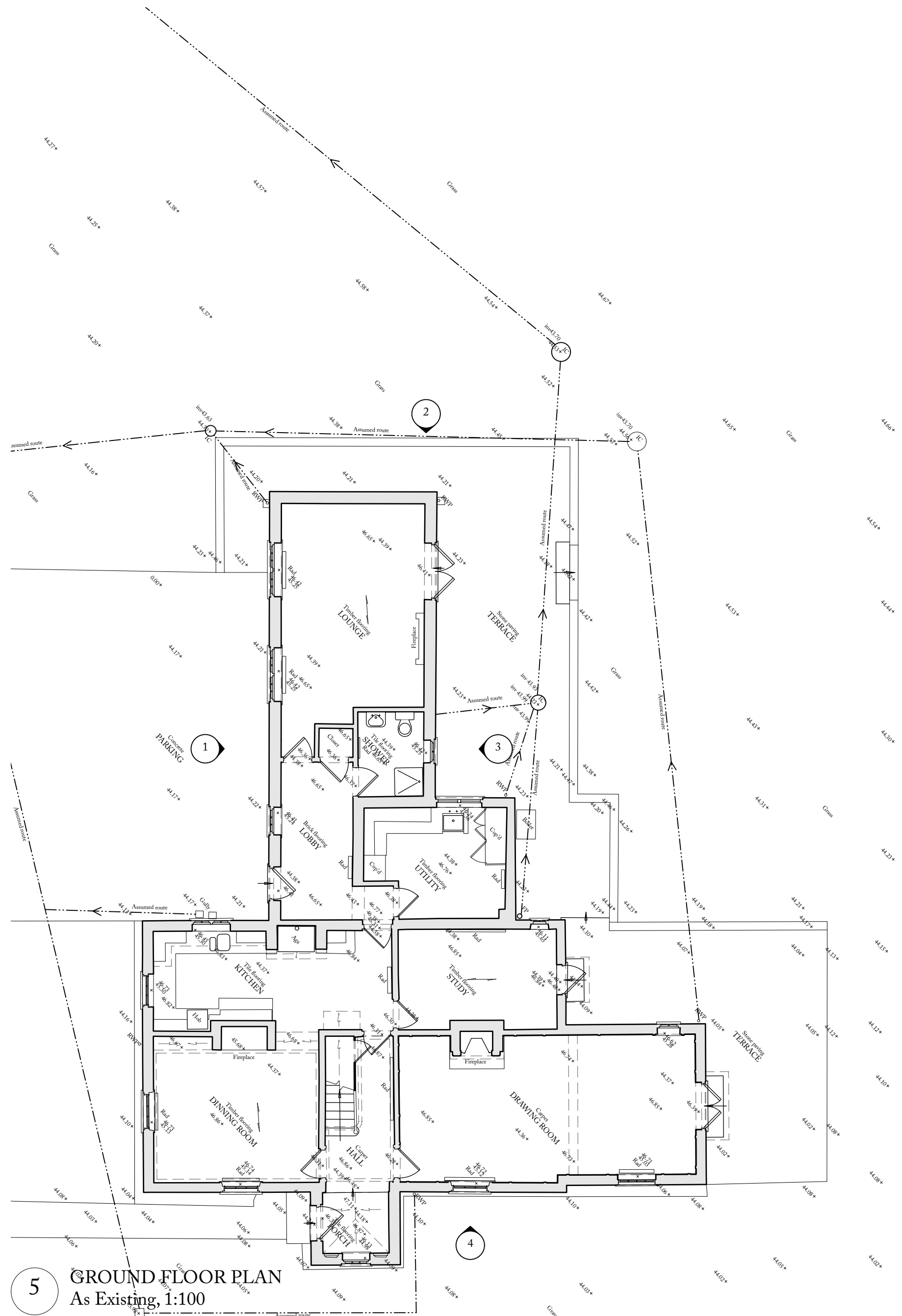
3 SOUTHWEST ELEVATION
As Existing, 1:100

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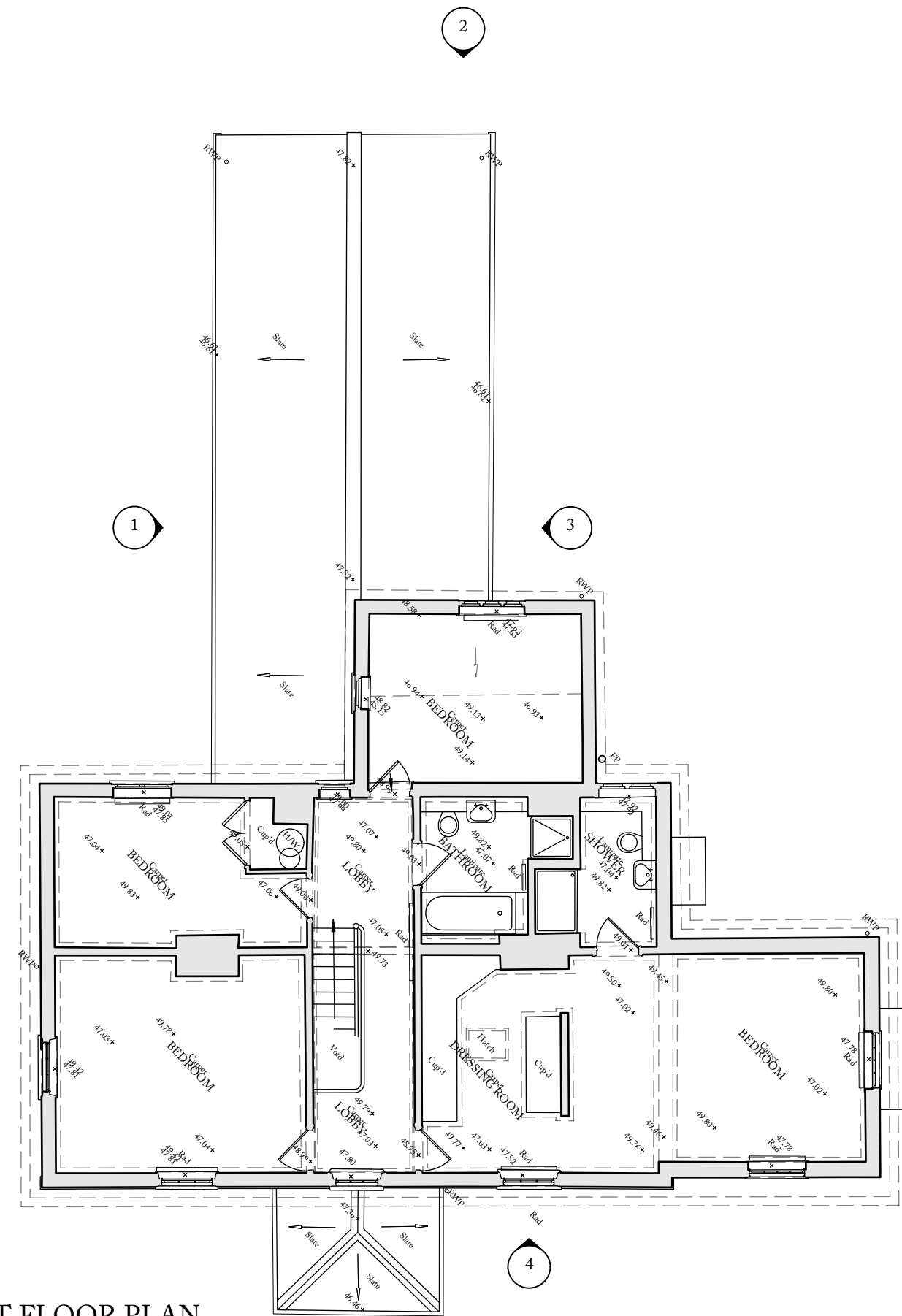


4 NORTHWEST ELEVATION
As Existing, 1:100

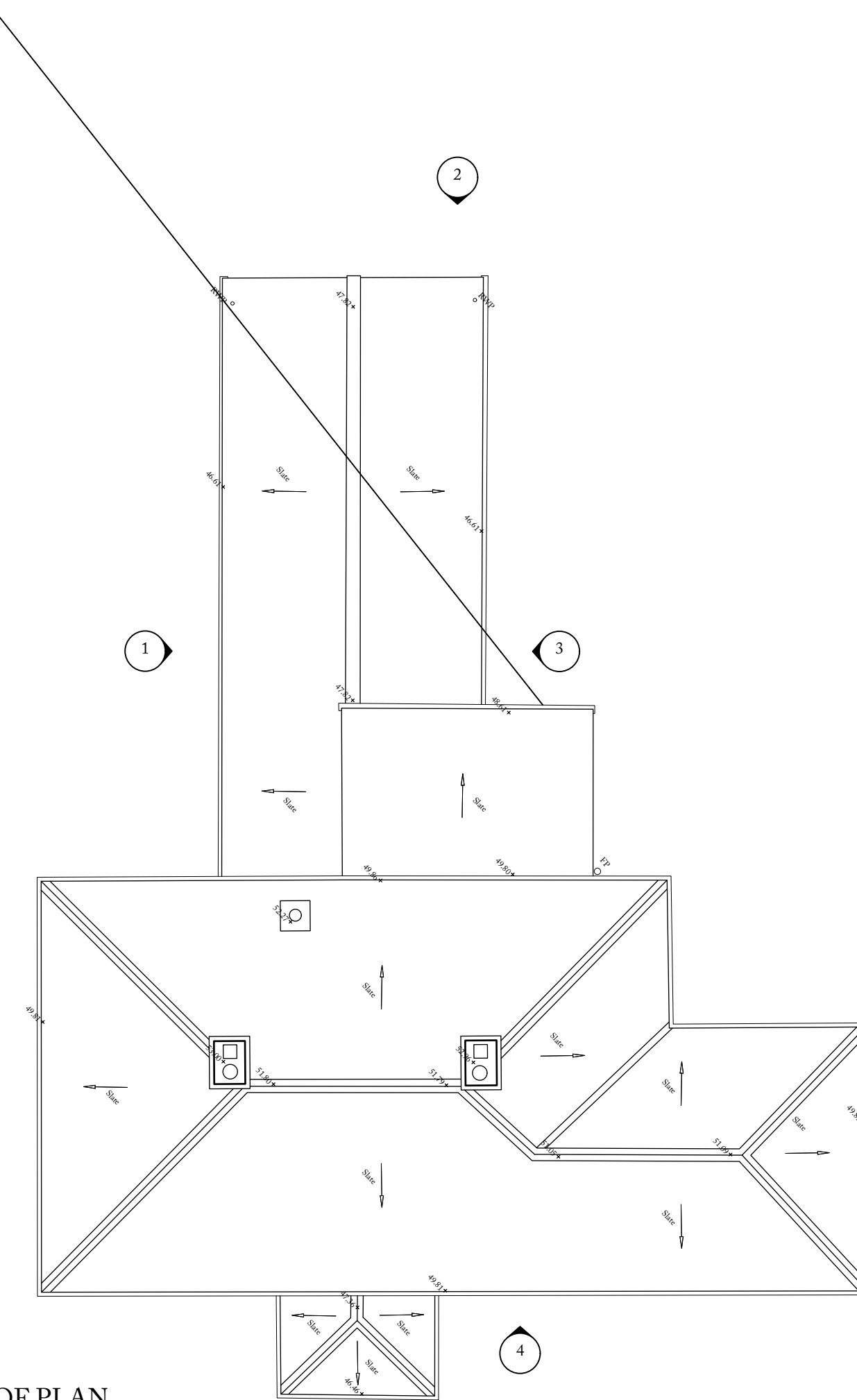
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5 GROUND FLOOR PLAN
As Existing, 1:100



6 FIRST FLOOR PLAN
As Existing, 1:100



7 ROOF PLAN
As Existing, 1:100

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1:100 0 1m 2m 5m 10m

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PROJECT GRANGE FARM
Washbrook

DRAWING TITLE FLOOR PLANS
& ELEVATIONS
As Existing

SCALE 1:100 at A1

STATUS PLANNING

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Appendix D - BGS Borehole Records



TM 04 SE/10
0929.4083

207/685 Rookery Farm, Washbrook

(a) (Disused). Surface +156. Shaft 34. Date unknown.
R.W.L. +149%. May 1956.

(b) (Temporarily disused). Surface +156. Lining tubes: 178 x 6 in from ¼ above.
Ck -6. Water struck at +130, +37 and -74. R.W.L. +52. P.W.L. +46. Recovered to +52 in 5 min. Suction +16. Yield 450 g.p.h. (8 h. test). Electric pump. Gosling.
Oct. 1950.

Ferruginous. 1960.

(b) Boulder Clay	...	...	26	26
Sand and Gravel	...	...	37	63
LC	...	...	51	114
WRB	...	...	48	162
UCk	...	...	123	285

Bowl det	{ Top soil clay		16	16
			10	26
Sand & gravel + ? mg	{ Ballast L.C.		37	63
			51	114
WRB	{ Blank ballast grey sand clay		5	119
			20	139
			23	162
	Chalk		123	285

RA

A 0927 4081
B 0929 4082

207/685 Rookery Farm, Washbrook

TM04/SA+B

(a) (Disused). Surface +156. Shaft 34. Date unknown.
R.W.L. +149½. May 1956.

(b) (Temporarily disused). Surface +156. Lining tubes: 178 x 6 in from ½ above.
Ck +6. Water struck at +130, +37 and -74. R.W.L. +52. P.W.L. +46. Recovered to
+52 in 5 min. Suction +16. Yield 450 g.p.h. (8 h. test). Electric pump. Gosling,
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Boulder clay	{ Top soil clay	16	16
		10	26
Sand & gravel	{ Ballast L.C.	37	63
		51	114
WRB	{ Blank ballast grey sand clay	5	119
		20	139
		23	162
Chalk		123	285

RA



RECORD OF WELL (SHAFT OR BORE)
(attach copy of analysis if available)

For Survey use only
TM04/SB N. 4391
207 B
16 5

EXACT SITE OF WELL

At Rookery Farm.
Town or Village Washbrook.
County Suffolk. Six-inch quarter sheet 81 NE/E
For Mr. A.H.F. Harwood. State whether owner, tenant, builder, contractor, consultant, etc. :- Owner.

Address (if different from above) _____
Level of ground surface above sea-level (O.D.) +c. 156 ft. If well-top is not at ground level, state how far above; 9" ft.

SHAFT _____ ft.; diameter _____ ft.; Details of headings _____

BORE 28.5 ft.; diameter of bore: at top 6" ins.; at bottom 6" ins.

Details of permanent lining tubes 178 feet of 6" lining tubes
screwed to butt in socket.

Water struck at depths of 26 - 119 - 230 feet. ft. below well-top.

TEST CONDITIONS

Rest-level of water 104 ft. above well-top. Suction at 140 ft. Yield on 8 hours' test pumping at 450 galls. per hour with depression to 110 ft. below well-top.

Recovery to rest-level in 5 mins. Capacity of pump 450 g.p.h. Date of measurements Oct '50

NORMAL CONDITIONS

Description of permanent pumping equipment:

Make and/or type Slimax 24R. Motive power 1 1/2 h.p. electric motor.

Capacity 450 gallons per hour. Suction at 140 ft.

Amount pumped 3,700 galls. per day. Estimated consumption 4,000 galls. per week.

Well made by JOHN J. GOSLING & CO. Date of well Oct. '50.

Information from _____

ADDITIONAL NOTES

Sited on Suffolk 81 NE/E
20.11.51. 474
Temporarily disused :: ferruginous water.
Inaccessible for measurements.
OD + c. 156.
Visited and site checked on 81 NE/E. RCD. 9.6.60.

(a) Old well in yard. Could be used - pumping gear assembled OD + c. 156.
Depth 34! RWL. 61.7" b.s. 10.5.56.
In dust only. Visited & sited on Suffolk 81 NE/E. RCD. 9.6.60.

LOG OF STRATA OVERLEAF.

GEOLOGICAL SURVEY AND MUSEUM, SOUTH KENSINGTON, LONDON, S.W.7.	Date Received	1" O.S. Map No.	Site marked (use symbol) on 1" Map	on 6" Map
	15.11.51			

(*35243) Wt. 447310424 12,000 2/43 A.R.E.W.Ltd. Gp. 685

Appendix E - Environment Agency Indicative Flood Map

Flood map for planning

Your reference
<Unspecified>

Location (easting/northing)
609825/240812

Created
19 Oct 2023 14:00

Your selected location is in flood zone 1, an area with a low probability of flooding.

You will need to do a flood risk assessment if your site is **any of the following**:

- bigger than 1 hectare (ha)
- In an area with critical drainage problems as notified by the Environment Agency
- identified as being at increased flood risk in future by the local authority's strategic flood risk assessment
- at risk from other sources of flooding (such as surface water or reservoirs) and its development would increase the vulnerability of its use (such as constructing an office on an undeveloped site or converting a shop to a dwelling)

Notes

The flood map for planning shows river and sea flooding data only. It doesn't include other sources of flooding. It is for use in development planning and flood risk assessments.

This information relates to the selected location and is not specific to any property within it. The map is updated regularly and is correct at the time of printing.

Flood risk data is covered by the Open Government Licence **which** sets out the terms and conditions for using government data. <https://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/>

Use of the address and mapping data is subject to Ordnance Survey public viewing terms under Crown copyright and database rights 2022 OS 100024198. <https://flood-map-for-planning.service.gov.uk/os-terms>

Flood map for planning

Your reference
<Unspecified>

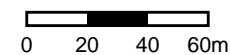
Location (easting/northing)
609825/240812

Scale
1:2500

Created
19 Oct 2023 14:00



-  Selected area
-  Flood zone 3
-  Flood zone 2
-  Flood zone 1
-  Flood defence
-  Main river
-  Water storage area



Appendix F - Groundsure Floodview report

Grange Farm, Wenham Road, Copdock And Washbrook, IP8 3EZ

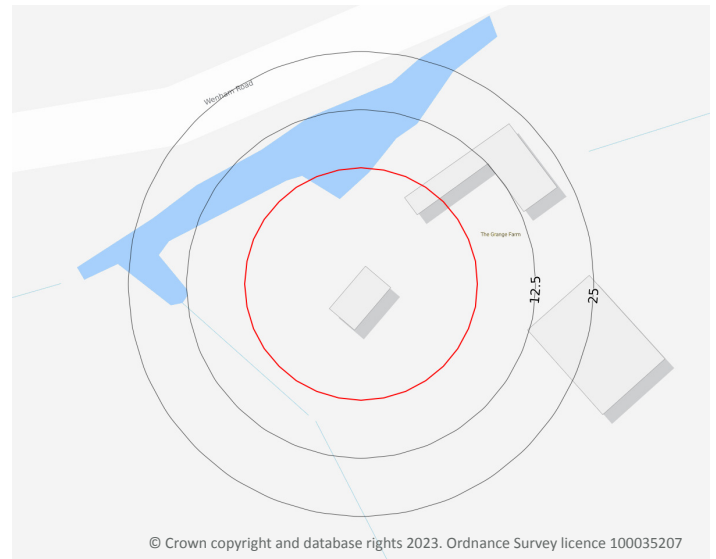
Overall Flood Risk



**MODERATE-
HIGH**

Groundsure Flood complies with relevant Law Society practice notes on flood risk in property transactions.

Site plan



Search Results



Rivers and the Sea
Very Low



Surface Water
Significant

[page 3 >](#)



Groundwater
Low



Historic Flood
Not identified



Flood Defences
No



FloodScore™ insurance rating
High

[page 5 >](#)

Full assessments for other environmental risks are available in additional Groundsure searches including the Groundsure Avista 7 in 1 report. Contact Groundsure or your search provider for further details.

Overview of findings and recommendations

To save you time when assessing the report, we only provide maps and data tables of features within the search radius that we have identified to be of note. These relate to environmental risks that may have liability implications, affect insurance premiums, property values and/or a lender's willingness to lend.

You can view the fully comprehensive library of information we have searched on [page 4 >](#).



Flooding

Flooding

An elevated level of flood risk has been identified at the property.

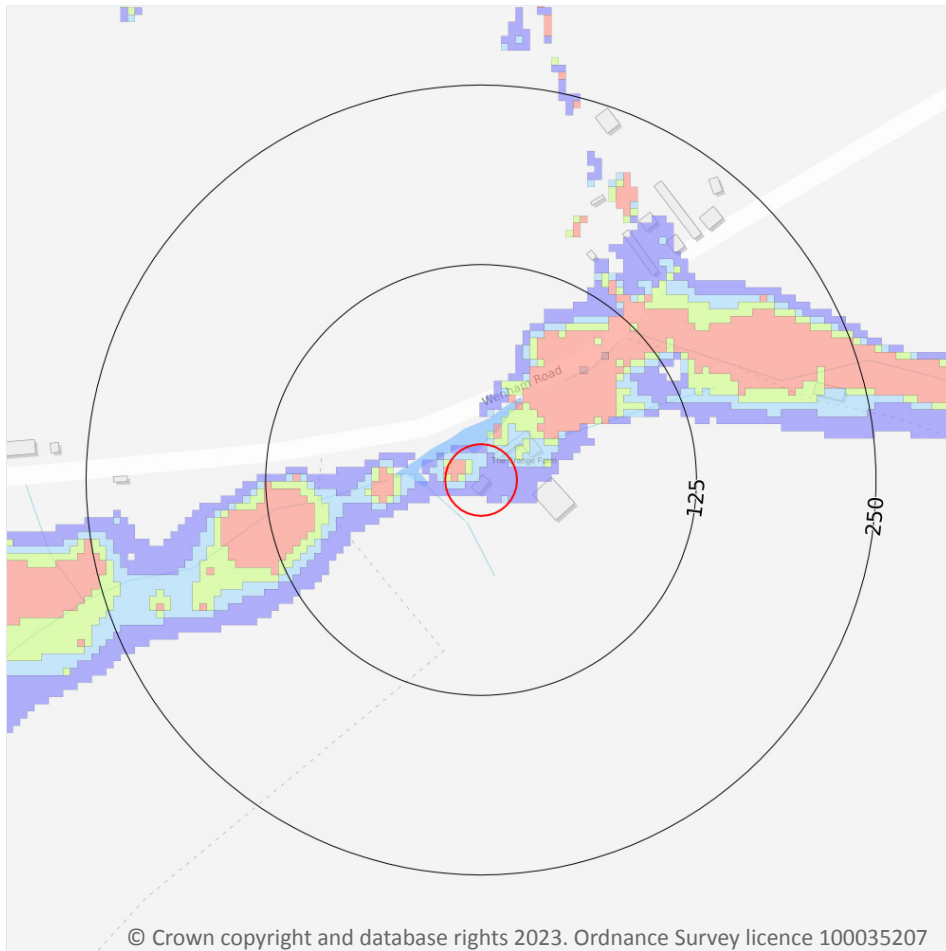
Next steps for consideration:

- check to see if the property is eligible for the Flood Re scheme, which enables many properties at risk of flooding to be insured at reasonable rates: <http://www.floodre.co.uk/homeowner/about-us/> ↗
- investigate the insurance on offer for the property to ensure any implications on premiums are fully understood before completion
- the assessment in this report is based on the highest flood risk found within the site boundary. The maps within the flood risk section clearly highlight which parts have a higher probability of flood risk, allowing you to visualise whether flood risk affects the buildings or the associated land. If required, we can provide an assessment that provides separate flood risk ratings for the main building and for the land/gardens around it. This assessment is carried out manually by one of our in house experts and can only be ordered by contacting our customer support team at info@groundsure.com ↗
- if the property has recently been constructed, the flood risk assessment contained within this report will not take into account any measures put in place by the developer to deal with flooding. You should seek further information from the developer on flood risk mitigation for the site
- investigate the various forms of flood resistance and resilience measures that will help protect your property in the event of a flood

Please note this report has been run on a point location buffered to 25m to account for uncertainties of the size of the property. Therefore some risk assessments and measurements may be overestimated.



Flooding / Surface water flood risk



Surface water flood risk

The property is likely to be prone to flooding following extreme rainfall, which may have an impact on insuring the property against flood risk. However, if built before 2009, it may be eligible for insurance assistance from the Flood Re scheme: www.floodre.co.uk/

The area in which the property is located has been assessed to be at a Significant risk of surface water flooding. This area is considered to have a 1 in 30 probability of surface water flooding due to rainfall in a given year to a depth of between 0.3m and 1.0m. However, as is the case with probability statistics and predictions, this information should be used as a guideline only. The area may flood several years in a row, or not at all for many years. Modern urban drainage systems are typically built to cope with rainfall events between 1 in 20 and 1 in 30 years, though some older ones may flood in a 1 in 5 year rainfall event.

These risk calculations are based on Ambiantal Risk Analytics maps.



Datasets searched

This is a full list of the data searched in this report. If we have found results of note we will state "Identified". If no results of note are found, we will state "Not identified". Our intelligent filtering will hide "Not identified" sections to speed up your workflow.

Flooding	
Risk of flooding from rivers and the sea	Not identified
Flood storage areas: part of floodplain	Not identified
Historical flood areas	Not identified
Areas benefiting from flood defences	Not identified
Flood defences	Not identified
Proposed flood defences	Not identified
Surface water flood risk	
Groundwater flooding	Not identified



Flood information

The Flood Risk Assessment section is based on datasets covering a variety of different flooding types. No inspection of the property or of the surrounding area has been undertaken by Groundsure or the data providers. The modelling of flood hazards is extremely complex and in creating a national dataset certain assumptions have been made and all such datasets will have limitations. These datasets should be used to give an indication of relative flood risk rather than a definitive answer. Local actions and minor variations, such as blocked drains or streams etc. can greatly alter the effect of flooding. A low or negligible modelled flood risk does not guarantee that flooding will not occur. Nor will a high risk mean that flooding definitely will occur. Groundsure's overall flood risk assessment takes account of the cumulative risk of river and coastal data, historic flood events and areas benefiting from flood defences provided by the Environment Agency/Natural Resources Wales (in England and Wales) and surface water (pluvial) and groundwater flooding provided by Ambient Risk Analytics. In Scotland the river and coastal flood models are also provided by Ambient Risk Analytics.

Risk of flooding from rivers and the sea

This is an assessment of flood risk for England and Wales produced using local data and expertise, provided by the Environment Agency (RoFRaS model) and Natural Resources Wales (FRAW model). It shows the chance of flooding from rivers or the sea presented in categories taking account of flood defences and the condition those defences are in. The model uses local water level and flood defence data to model flood risk.

The categories associated with the Environment Agency and Natural Resources Wales models are as follows:

RoFRaS (rivers and sea) and FRAW (rivers):

Very Low - The chance of flooding from rivers or the sea is considered to be less than 1 in 1000 (0.1%) in any given year.

Low - The chance of flooding from rivers or the sea is considered to be less than 1 in 100 (1%) but greater than or equal to 1 in 1000 (0.1%) in any given year.

Medium - The chance of flooding from rivers or the sea is considered to be less than 1 in 30 (3.3%) but greater than 1 in 100 (1%) in any given year.

High - The chance of flooding from rivers or the sea is considered to be greater than or equal to 1 in 30 (3.3%) in any given year.

FRAW (sea):

Very Low - The chance of flooding from the sea is considered to be less than 1 in 1000 (0.1%) in any given year.

Low - The chance of flooding from the sea is considered to be less than 1 in 200 (0.5%) but greater than or equal to 1 in 1000 (0.1%) in any given year.

Medium - The chance of flooding from the sea is considered to be less than 1 in 30 (3.3%) but greater than 1 in 200 (0.5%) in any given year.

High - The chance of flooding from the sea is considered to be greater than or equal to 1 in 30 (3.3%) in any given year.

Historic flood events

Over 86,000 events are recorded within this database. This data is used to understand where flooding has occurred in the past and provides details as available. Absence of a historic flood event for an area does not mean that the area has never flooded, but only that Environment Agency/Natural Resources Wales do not currently have records of flooding within the area. Equally, a record of a flood footprint in previous years does not mean that an area will flood again, and this information does not take account of flood management schemes and improved flood defences.

Surface water flooding

Ambient Risk Analytics surface water flood map identifies areas likely to flood following extreme rainfall events, i.e. land naturally vulnerable to surface water or "pluvial" flooding. This data set was produced by simulating 1 in 30 year, 1 in 100 year, 1 in 250 year and 1 in 1000 year rainfall events. The flood risks for these rainfall events are reported where the depth would be greater than the threshold for a standard property to modern building standards. Modern urban drainage systems are typically built to cope with rainfall events between 1 in 20 and 1 in 30 years, though older ones may even flood in a 1 in 5 year rainstorm event.



Proposed flood defences

The data includes all Environment Agency/Natural Resources Wales's projects over £100K that will change or sustain the standards of flood defence in England and Wales over the next 5 years. It also includes the equivalent schemes for all Local Authority and Internal Drainage Boards.

Flood storage areas

Flood Storage Areas may also act as flood defences. A flood storage area may also be referred to as a balancing reservoir, storage basin or balancing pond. Its purpose is to attenuate an incoming flood peak to a flow level that can be accepted by the downstream channel. It may also delay the timing of a flood peak so that its volume is discharged over a longer time interval. These areas are also referred to as Zone 3b or 'the functional floodplain' and has a 5% or greater chance of flooding in any given year, or is designed to flood in the event of an extreme (0.1%) flood or another probability which may be agreed between the Local Planning Authority and Environment Agency/Natural Resources Wales, including water conveyance routes. Development within Flood Storage Areas is severely restricted.

Groundwater flooding

Groundwater flooding is flooding caused by unusually high groundwater levels. It occurs as excess water emerging at the ground surface or within underground structures such as basements. Groundwater flooding tends to be more persistent than surface water flooding, in some cases lasting for weeks or months, and it can result in significant damage to property. This risk assessment is based on a 5m Digital Terrain Model (DTM) and 1 in 100 year and 1 in 250 year return periods.

Ambiental FloodScore™ insurance rating

The property has been rated as **High** risk. Please see [page 2 >](#) for further advice.

Ambiental's FloodScore™ risk rating gives an indicative assessment of the potential insurance risk classification from flooding, which can provide an indication of how likely it is that a property's policy will be ceded to Flood Re. The assessment is based on Ambiental's river, tidal and surface water flood data and other factors which some insurers may use in their assessment are not included.

Flood Re is a re-insurance scheme that makes flood cover more widely available and affordable as part of your residential property home insurance. Properties at higher risk of flooding may have the flood part of their policy ceded to Flood Re by their insurer. It is important to understand that Flood Re does not apply to all situations. Exclusions from Flood Re includes properties constructed after 1 January 2009; properties not within domestic Council Tax bands A to H (or equivalent); commercial properties, certain buy to let scenarios and buildings comprising four or more residential units. A full list of the exemptions can be found on the Flood Re website (<https://www.floodre.co.uk/can-flood-re-help-me/eligibility-criteria/>) ↗.

The Ambiental FloodScore™ insurance rating is classified into six different bandings:

Very High indicates a level of risk that may make it more likely that standard insurance premiums will be higher, or additional terms may apply to the provision of flood cover. There is a very high possibility that the cover for flooding at the property will be ceded into the Flood Re scheme, particularly if the property has flooded in the past.

High indicates a level of risk that may make it more likely that standard insurance premiums will be higher, or additional terms may apply to the provision of flood cover. There is a high possibility that the cover for flooding at the property will be ceded into the Flood Re scheme, particularly if the property has flooded in the past.

Moderate-High indicates a level of risk that may make it more likely that standard insurance premiums will be higher, or additional terms may apply to the provision of flood cover. There is a moderate possibility that the cover for flooding at the property will be ceded into the Flood Re scheme, particularly if the property has flooded in the past.

Moderate indicates a level of risk that may make it more likely that standard insurance premiums will be higher, or additional terms may apply to the provision of flood cover. There is a low possibility that the cover for flooding at the property will be ceded into the Flood Re scheme, unless the property has flooded in the past.

Low indicates a level of risk that is likely to mean standard cover and premiums are available for flood cover. There is a low possibility the cover for flooding at the property will be ceded into the Flood Re scheme, unless the property has flooded in the past.

Very Low indicates a level of flood risk that should not have any impact on the provision of flood cover for the property.



Conveyancing Information Executive and our terms & conditions

IMPORTANT CONSUMER PROTECTION INFORMATION

This search has been produced by Groundsure Ltd, Nile House, Nile Street, Brighton, BN1 1HW. Tel: 01273 257 755. Email: info@groundsure.com ↗. Groundsure adheres to the Conveyancing Information Executive Standards.

The Standards

- Conveyancing Information Executive Members shall act in a professional and honest manner at all times in line with the Conveyancing Information Executive Standards and carry out the delivery of the Search with integrity and due care and skill.
- Compliance with the Conveyancing Information Executive Standards will be a condition within the Conveyancing Information Executive Member's Terms and Conditions.
- Conveyancing Information Executive Members will promote the benefits of and deliver the Search to the agreed standards and in the best interests of the customer and associated parties.

Complaints Advice

If you have a query or complaint about your search, you should raise it directly with the search firm, and if appropriate ask for any complaint to be considered under their formal internal complaints procedure.

If you remain dissatisfied with the firm's final response, after your complaint has been formally considered, or if the firm has exceeded the response timescales, you may refer your complaint for consideration under The Property Ombudsman scheme (TPOs). The Ombudsman can award up to £5,000 to you if the Ombudsman finds that you have suffered actual financial loss and/or aggravation, distress or inconvenience as a result of your search provider failing to keep to the Standards.

Please note that all queries or complaints regarding your search should be directed to your search provider in the first instance, not to TPOs.

COMPLAINTS PROCEDURE: If you want to make a complaint, we will:

- acknowledge it within 5 working days of receipt
- normally deal with it fully and provide a final response, in writing, within 20 working days of receipt
- liaise, at your request, with anyone acting formally on your behalf

Complaints should be sent to:

Operations Director, Groundsure Ltd, Nile House, Nile Street, Brighton, BN1 1HW. Tel: 01273 257 755. Email: info@groundsure.com

↗ If you are not satisfied with our final response, or if we exceed the response timescales, you may refer the complaint to The Property Ombudsman scheme (TPOs): Tel: 01722 333306, E-mail: admin@tpos.co.uk ↗ We will co-operate fully with the Ombudsman during an investigation and comply with their final decision.

Groundsure's Terms and Conditions can be viewed online at this link: www.groundsure.com/terms-and-conditions-april-2023/ ↗

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All of the advice and reports that Groundsure produces are covered by a comprehensive Remediation Contribution policy to ensure customers are protected, see www.groundsure.com/remediation ↗ for full details.

Data providers

Groundsure works with respected data providers to bring you the most relevant and accurate information in your Flood report. To find out who they are and their areas of expertise see www.groundsure.com/sources-reference ↗.



[Back to Summary](#)

Contact us with any questions at:
info@groundsure.com ↗
01273 257 755

Ref: GEO-G2857082-2
Your ref: G2857082-2
Grid ref: 609806 240791











Appendix G - CON29DW Report / Anglian Water Asset Records

Your order reference: G2857082-1
Your client reference: IE23/087
Date of report: 19 October 2023
Water provider: Anglian Water Services Limited
Sewerage provider: Anglian Water Services Limited




Property search address
Grange Farm, Wenham Road, Copdock And Washbrook,
IP8 3EZ

All you need to know.

Asset and property analysis

 <p>Public sewer within property boundaries</p> <p>No</p> 	 <p>Public water mains within property boundaries</p> <p>No</p> 	 <p>Public pumping station within property boundaries</p> <p>No</p> 	 <p>Risk of internal sewer flooding</p> <p>No</p> 	 <p>Risk of low water pressure</p> <p>No</p> 
---	---	---	---	--

Water and sewerage connections

 <p>Water connection</p> <p>Yes</p>	 <p>Foul water drainage connection</p> <p>No</p>	 <p>Is there a water meter at the property?</p> <p>Yes</p>
--	--	--

Need some help or advice?

If you have any queries about this CON29DW search please contact our drainage and water experts on:

0800 085 8050
customer.services@geodesys.com

[Next Page ▶](#)





Dashboard



Information



Summary



Maps



Drainage



Water



Charging



Appendix

All you need to know - understanding the CON29DW report

To understand why the information included in this report is important, it's useful for you to understand a few basic definitions and responsibilities you may have as a property owner. You may find it useful to review the key points below - this applies particularly to first-time buyers, who may have limited experience of drainage and water issues.

Definitions

Foul water	Foul water is the water from the household (i.e. from toilets, sinks and baths). If the foul water does not drain to a public sewer, the property may rely on a cesspit or septic tank. This needs to be checked before the property purchase goes ahead.
Surface water	Surface water is basically rainwater (i.e. running off the land and roofs of properties). If the rainwater does not drain to a public sewer, the home buyer's solicitor needs to check how it drains away to avoid any risk of flooding.
Mains water	This is the public water supply. If the property is not connected to the mains water supply, it may rely on a borehole. This needs to be checked before the property purchase goes ahead.

Who's responsible for the maintenance of sewers and drains?

Responsibility for sewers and drains is generally shared between the property owner and Anglian Water Services Limited. Sometimes a Local Authority, the Highways Agency or an internal drainage board may also have responsibility.

The information below applies specifically to the split of responsibility between the property owner and the water company.

Public sewers (to take away foul water and surface water)

A public sewer is defined as all the sewers outside the boundary of the property and any shared sewers within the property boundary (provided the latter were connected to the public sewer before 1 July 2011). If a sewer is public, Anglian Water Services Limited owns the sewer and has responsibility for maintenance, and any blockages or leaks should be reported to them on 03457 145 145. Public sewers appear on the public sewer map which can be found at the end of your CON29DW report, but please note that, due to recent changes in sewer ownership, not all public sewers may yet be on the map.

Private sewers (to take away foul water and surface water)

If the sewer within the boundary serves a single property, the sewer is defined as private. If there's a private sewer within the property boundary, the property owner owns the sewer and is responsible for maintenance. This also applies to shared sewers if they were connected to the public sewer after 1 July 2011. Private sewers aren't shown on the sewer map in this report.

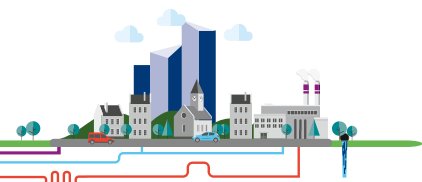
Drains

A pipe connecting a single property to a public sewer (or to a sewer covered by an [S104 agreement](#)) is referred to as a drain. Drains are private and the property owner is responsible for maintenance. Drains aren't shown on the sewer map in this report.

Your order reference: G2857082-1

Property address:

Grange Farm, Wenham Road, Copdock And Washbrook, IP8 3EZ



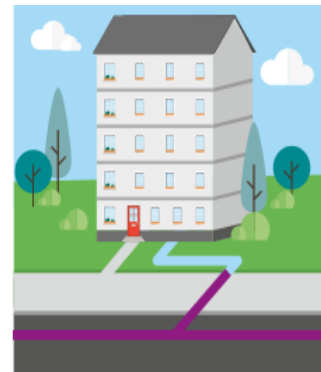
All you need to know - understanding the CON29DW report

Different property types

Sewer ownership can vary slightly depending on property type. Please see the illustrations below for full details. For further information you can also visit the Anglian Water website - <https://www.anglianwater.co.uk/services/sewers-and-drains/flooding/sewer-responsibility>

Private drains

Public drains



Terraced Properties

As sewer pipes for terraced properties are usually shared, the majority of terraced properties have a public sewer passing within the property boundaries. The exceptions are the pipes within the end terrace boundary (shown on the left in this illustration) where the run of the sewer begins, and the lateral drains connecting all individual properties to the public sewer.

Semi-Detached

The majority of semi-detached properties share a sewer, meaning that most of the sewer pipe is public. The exceptions are the pipes within the end property (shown on the left in this illustration), and the lateral drains connecting both properties to the public sewer.

Detached

Detached properties are most likely to connect directly to the public sewer, with no shared pipes. This means that in most cases the pipes within the boundary are private. This is important to note as owners are generally responsible for a longer length of sewer pipe.

Apartment/Flats

Apartments and flats generally connect directly to the public sewer meaning that, in most cases, the sewer pipes within the boundary are private. This is important for owners of the individual flats as they have joint responsibility for these pipes. In some cases the pipes may be the responsibility of the management company.

What's an adoption agreement and why is it important?

An adoption agreement, (also known as a Section 104 agreement) is an agreement between the owners of a private sewer (usually a property developer) and the water company. The agreement states that, once the developer has constructed the sewer to an agreed standard and maintained it for an agreed period, the water company will adopt it and it will become a public sewer. Before this happens, the sewer remains private, owned by the developer.

The solicitor should ask to see a copy of the Section 104 agreement (available from Anglian Water Services Limited or the developer) to check that it covers the particular property. They should also ask to see a copy of any Section 104 agreement to check that it covers the particular property and should also ask whether a bond was paid by the developer. The bond is intended to cover water company costs should the developer not complete the sewer to the agreed standard. If a bond has been paid, this information will be included in [question 2.6](#) of the report.

When dealing with fairly new properties it's quite common that the Section 104 agreement is not yet completed. If the proposed property purchase is more than about 5 years old, however, the purchaser's solicitor should enquire into why there's no agreement.

If there's no agreement in place the solicitor should check with Anglian Water Services Limited whether they're planning to adopt. If not, the purchaser and the lender need to be aware of this as the cost of maintaining and repairing private sewers can be very expensive.

Your order reference: G2857082-1

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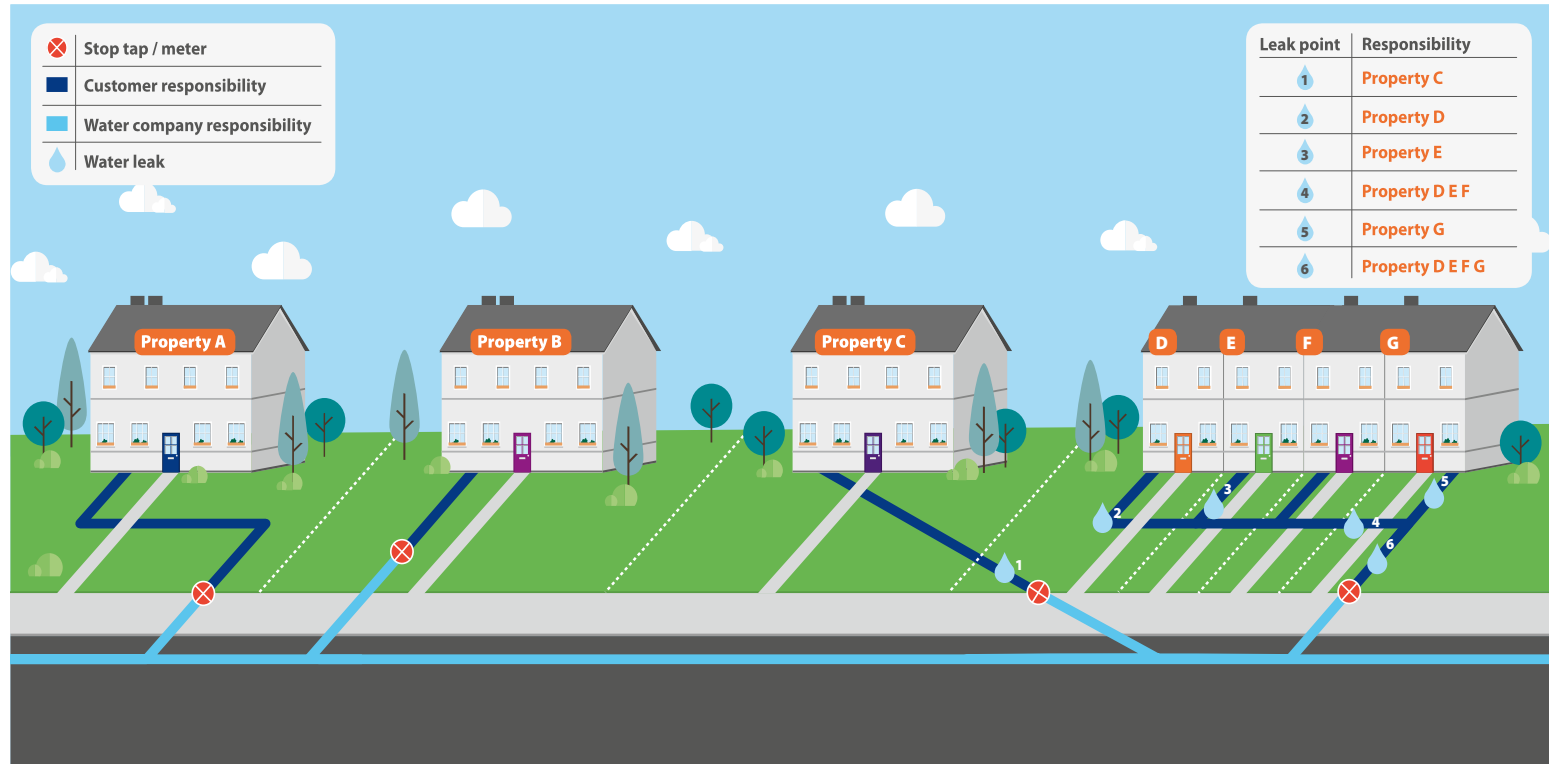
All you need to know - understanding the CON29DW report

Who's responsible for the maintenance of water supply pipes?

In most cases Anglian Water Services Limited is responsible for the pipes from the water mains up to your property boundary (or the stop tap / meter, if this is inside your property boundary). Sometimes the stop tap or meter is located on the external wall of your property (not reflected in our diagram); in which case you are responsible for the pipe work which runs between your property boundary and the inlet of the meter box.

There are a few situations when your responsibility can extend beyond your property boundary, but you (or your landlord) are responsible for that section of pipework. See property C below.

In the case of a shared supply pipe - see properties D, E, F and G below - responsibility and costs for maintenance or repair are shared between the properties.



Your order reference: G2857082-1

Property address:
Grange Farm, Wenham Road, Copdock And Washbrook, IP8 3EZ



All you need to know - understanding the CON29DW report

Who's responsible for the maintenance of pumping stations?

After 1 October 2016, many private pumping stations became the responsibility of water companies (provided they were connected before 1 July 2011). This applies to all stations that serve two or more properties, unless both properties are leasehold and situated on a single curtilage (e.g. many industrial or commercial pumping stations). A pumping station which serves only a single property remains private, unless it's situated on third-party land.

Anglian Water is currently identifying and assessing all pumping stations and, once the team identifies a station that's their responsibility, they write to the property owner(s) to inform them of their intention to adopt. This includes waivers of consent, i.e. allowing Anglian Water access to pumping stations on the homeowner's land. Once a pumping station becomes the responsibility of Anglian Water, it will also appear on the map within your CON29DW report.

Once the water company had taken on responsibility for a pumping station, they are responsible for maintenance and anything that goes wrong. If there's a private pumping station within the property boundary, the property owner has that responsibility. If there's more than one property owner, e.g. in the case of apartments and flats, owners may have joint responsibility or it may be the responsibility of the management company.

If you think your private pumping station should be the responsibility of Anglian Water, you can find out more on the Anglian Water website <https://www.anglianwater.co.uk/services/sewers-and-drains/private-pumping-stations>. As pumping stations come in all shapes and sizes, this page also includes a useful guide to what you should be looking for.

Sustainable drainage systems

Rather than surface water (rainwater) running straight into the sewers, sustainable drainage systems (also known as SuDS) slow down the water flow, absorbing it or holding it back in ponds or other landscape features. This helps to reduce the risk of flooding and of pollution caused by surface water carrying waste into watercourses.

Your CON29DW report provides information on whether surface water from a property drains to a public sewer. But if the property was built after 6 April 2015, the surface water drainage may be provided by a sustainable drainage system. If this is the case, then checks should be made either with the property developer or by reviewing question 3.3 of the CON29 from the Local Authority.

Paying for your water and sewerage services

For details of charges please visit your provider's website (see questions [4.1.1](#) and [4.1.2](#)). If your provider is Anglian Water, you can find details of both water and sewerage services on their website - <https://www.anglianwater.co.uk/account-and-bill/tariffs-and-charges/charges-explained>

If there's already a water meter at the property, your water usage will be measured and charged according to the meter. If there's no meter, the water charge will be a fixed annual charge (i.e. water rates). Homeowners with a fixed charge can also apply to have a meter fitted.

Please note that the water company may choose to install a meter at the property upon change of occupancy.

Who looks after what?

Anglian Water billing services (general enquiries about your water bill)

0345 791 9155

Anglian Water emergency line (24/7)

0345 714 5145

Anglian Water - reporting a leak (24/7)

0800 771 881

In Your Area

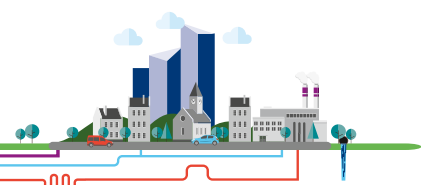
(get the latest updates on repairs or planned work in your area)

<https://inyourarea.digdat.co.uk/AnglianWater>

Your order reference: G2857082-1

Property address:

Grange Farm, Wenham Road, Copdock And Washbrook, IP8 3EZ





Dashboard



Information



Summary



Maps



Drainage



Water



Charging



Appendix

Summary of Responses:

Maps		
1.1	Where relevant, please include a copy of an extract from the public sewer map	Not Included
1.2	Where relevant, please include a copy of an extract from the map of waterworks	Map Included
Drainage		
2.1	Does foul water from the property drain to a public sewer?	No
2.2	Does surface water from the property drain to a public sewer?	No
2.3	Is a surface water drainage charge payable?	No
2.4	Does the public sewer map indicate any public sewer, disposal main or lateral drain within the boundaries of the property?	No
2.4.1	Does the public sewer map indicate any public pumping station or ancillary apparatus within the boundaries of the property?	No
2.5	Does the public sewer map indicate any public sewer within 30.48 meters (100 feet) of any buildings within the property?	No
2.5.1	Does the public sewer map indicate any public pumping station or ancillary apparatus within 50 metres (164.04 feet) of any buildings within the property?	No
2.6	Are any sewers or lateral drains serving or which are proposed to serve the property the subject of an existing adoption agreement or an application for such an agreement?	No
2.7	Has any Sewerage Undertaker approved or been consulted about any plans to erect a building or extension on the property over or in the vicinity of a public sewer, disposal main or drain?	Not Applicable
2.8	Is the building which is, or forms part of the property, at risk of internal flooding due to overloaded public sewers?	No
2.9	Please state the distance from the property to the nearest boundary of the nearest sewage treatment works.	See Answer
Water		
3.1	Is the property connected to mains water supply?	Yes
3.2	Are there any water mains, resource mains or discharge pipes within the boundaries of the property?	No
3.3	Is any water main or service pipe serving, or which is proposed to serve the property, the subject of an existing adoption agreement or an application for such an agreement?	No
3.4	Is this property at risk of receiving low water pressure or flow?	No
3.5	What is the classification of the water supply for the property?	Very Hard
3.6	Please include details of the location of any water meter serving the property.	See Answer
Charging		
4.1.1	Who is responsible for providing the sewerage services for the property?	Anglian Water Services Limited
4.1.2	Who is responsible for providing the water services for the property?	Anglian Water Services Limited
4.2	Who bills the property for sewerage services?	No Drainage Connections
4.3	Who bills the property for water services?	Anglian Water Services Limited
4.4	What is the current basis for charging for sewerage and/or water services at the property?	Measured
4.5	Will the basis for charging for sewerage and water services at the property change as a consequence of a change of occupation?	Measured

Your order reference: G2857082-1

Property address:

Grange Farm, Wenham Road, Copdock And Washbrook, IP8 3EZ





Dashboard



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Summary



Maps



Drainage



Water



Charging



Appendix

Maps

Question 1.1 Where relevant, please include a copy of an extract from the public sewer map

Answer No map is included, as there are no public sewers in the vicinity of the property.

Public Sewers are defined as those for which Anglian Water Services Limited holds statutory responsibility under the Water Industry Act 1991.

Question 1.2 Where relevant, please include a copy of an extract from the map of waterworks

Answer A copy of an extract of the map of waterworks is included, showing water mains, resource mains or discharge pipes in the vicinity of the property.

The map of the waterworks has been supplied by:

Anglian Water Services Limited
Lancaster House
Lancaster Way
Ermine Business Park
Huntingdon
Cambridgeshire
PE29 6XU
Tel: 03457 145 145
www.anglianwater.co.uk

The 'water mains' in this context are those which are vested in and maintainable by the water company under statute.

Assets other than public water mains may be shown on the plan, for information only.

Water companies are not responsible for private supply pipes connecting the property to the public water main and do not hold details of these. These may pass through land outside of the control of the seller, or may be shared with adjacent properties. The buyer may wish to investigate whether separate rights or easements are needed for their inspection, repair or renewal.

The enclosed extract of the public water main record shows 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.

[View Maps ▶](#)

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Question 2.1 Does foul water from the property drain to a public sewer?

Answer Records indicate that foul water from the property does not drain to a public sewer.

If foul water does not drain to the public sewerage system the property may have private facilities in the form of a cesspit, septic tank or other type of treatment plant.

An extract from the public sewer map is enclosed. This will show known public sewers in the vicinity of the property and it should be possible to estimate the likely length and route of any private drains and/or sewers connecting the property to the public sewerage system.

Question 2.2 Does surface water from the property drain to a public sewer?

Answer Records indicate that surface water from the property does not drain to a public sewer.

If the property was constructed after 6 April 2015 the Surface Water drainage may be served by a Sustainable Drainage System. Further information may be available from the developer or question 3.3 of the CON29 from the local authority from 4 July 2016.

Question 2.3 Is a surface water drainage charge payable?

Answer Records confirm that a surface water drainage charge is not payable for the property.

If the property was constructed after 6 April 2015 the Surface Water drainage may be served by a Sustainable Drainage System. Further information may be available from the developer or question 3.3 of the CON29 from the local authority.

Where surface water from a property does not drain to the public sewerage system no surface water drainage charges are payable.

Where surface water charges are payable but upon inspection the property owners believe that surface water does not drain to the public sewerage system, an application can be made to Anglian Water to end future surface water charges by contacting them on 0800 169 3271. Further information can be found by visiting: www.anglianwater.co.uk/household/your-account/bills-and-payments/tariffs/surface-water-drainage.aspx

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Question 2.4 Does the public sewer map indicate any public sewer, disposal main or lateral drain within the boundaries of the property?

Answer The public sewer map included indicates that there are no public sewers, disposal mains or lateral drains within the boundaries of the property. However, on 1 October 2011, private sewers that serve a single property and lie outside the boundary of that property, were transferred into public ownership. Therefore there may be additional public sewers, disposal mains or lateral drains which are not recorded on the public sewer map but which may prevent or restrict development of the property.

The boundary of the property has been determined by reference to the Ordnance Survey record.

The presence of a public sewer running within the boundary may restrict further development. Anglian Water Services Limited has a statutory right of access to carry out work on its assets, subject to notice. This may result in employees of the company or its contractors needing to enter the property to carry out work.

Sewers 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 that these details are checked with the developer

Please note if the property was constructed after 1 July 2011 any sewers and/or lateral drain within the boundary of the property are the responsibility of the homeowner.

Question 2.4.1 Does the public sewer map indicate any public pumping station or ancillary apparatus within the boundaries of the property?

Answer The public sewer map included indicates that there is no public pumping station within the boundaries of the property. Any other ancillary apparatus is shown on the public sewer map and referenced on the legend.

Only private pumping stations installed before 1 July 2011 and servicing 2 or more properties will be transferred into the ownership of Anglian Water Services.

Pumping stations installed after 1 July 2011 will remain the responsibility of the homeowners unless they are the subject of an adoption agreement.

Anglian Water Services will have rights of access to maintain their assets which is anticipated to be completed on a 12 monthly basis which will be reviewed dependent on monitoring and performance.

Further information can be found on the pumping station adoption in the appendices of the CON29DW.

Question 2.5 Does the public sewer map indicate any public sewer within 30.48 meters (100 feet) of any buildings within the property?

Answer The public sewer map indicates that there are no public sewers within 30.48 metres (100 feet) of a building within the property. However, it has not always been a requirement for such public sewers to be recorded on the public sewer map. It is therefore possible for unidentified sewers or public sewers to exist within the boundaries of the property. However, on 1 October 2011 private sewers were transferred into public ownership, therefore there may be additional lateral drains and/or public sewers which are not recorded on the public sewer map but are also within 30.48 metres (100 feet) of a building within the property.

The measure is estimated from the Ordnance Survey record, between any building within the boundary of the property and the nearest public sewer.

Sewers 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 that these details are checked with the developer.

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Question 2.5.1 Does the public sewer map indicate any public pumping station or ancillary apparatus within 50 metres (164.04 feet) of any buildings within the property?

Answer The public sewer map included indicates that there is no public pumping station within 50 metres (164.04 feet) of any buildings within the property. Any other ancillary apparatus is shown on the public sewer map and referenced on the legend.

Only private pumping stations installed before 1 July 2011 and servicing 2 or more properties will be transferred into the ownership of Anglian Water Services.

Pumping stations installed after 1 July 2011 will remain the responsibility of the homeowners unless they are the subject of an adoption agreement.

Anglian Water Services will have rights of access to maintain their assets which is anticipated to be completed on a 12 monthly basis which will be reviewed dependent on monitoring and performance.

Further information can be found on the pumping station adoption in the appendices of the CON29DW.

Question 2.6 Are any sewers or lateral drains serving or which are proposed to serve the property the subject of an existing adoption agreement or an application for such an agreement?

Answer The property is part of an established development and is not subject to an adoption agreement.

This enquiry is of interest to purchasers of new properties who will want to know whether or not the property will be linked to a public sewer.

Where the property is part of a very recent or ongoing development and the sewers are not the subject of an adoption application, buyers should consult with the developer to ascertain the extent of public drains and sewers for which they will hold maintenance and renewal liabilities.

On 1 October 2011 all foul Section 104 sewers laid before 1 July 2011 were transferred into public ownership, excluding those that discharge to a privately owned sewage treatment or collection facility. All surface Section 104 sewers that do not discharge to a public watercourse were also transferred. Our mapping records are currently being reviewed and updated and may not yet reflect this change, therefore there may be additional public sewers, disposal mains or lateral drains which are not yet recorded on the public sewer map or public sewers that still show as Section 104 sewers.

Question 2.7 Has any Sewerage Undertaker approved or been consulted about any plans to erect a building or extension on the property over or in the vicinity of a public sewer, disposal main or drain?

Answer The company's records confirm that there is not a statutory agreement or consent in respect of building over/near a public sewer at this property. For historical reasons the company may not be aware of some agreements or consents which have been entered into by the local authority. Whilst an 'agreement' may not exist, current Building Regulation guidance permits building over/near sewers in certain circumstances. Consent without an agreement may have been issued by Anglian Water or independently by the Building Control Body. As long as the extension has a valid building regulations certificate then this should prove adequate assurance to the purchaser.

Anglian Water Services Limited is obliged to maintain its sewers. If any problem was to arise, Anglian Water Services Limited would investigate the problem and has a statutory right of access to carry out work on its assets, subject to notice. This may result in employees of the company or its contractors needing to enter the property. In advance of any problem it is difficult to predict the effect the works would have on the property. Similarly, the position as to liability of both the property owner and Anglian Water Services Limited would need to be ascertained.

On 1 October 2011 private sewers were transferred into public ownership, therefore there may be additional public sewers, disposal mains or lateral drains which are not recorded on the public sewer map but which may further prevent or restrict development of the property.

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Question 2.8 **Is the building which is, or forms part of the property, at risk of internal flooding due to overloaded public sewers?**

Answer

The property is not recorded as being at risk of internal flooding due to overloaded public sewers. On 1 October 2011 private sewers, disposal mains and lateral drains were transferred into public ownership. It is therefore possible that a property may be at risk of internal flooding due to an overloaded public sewer which Anglian Water may not be aware of. For further information it is recommended that enquiries are made of the vendor as to any previous flooding occurrences.

A sewer is "overloaded" when the flow from a storm is unable to pass through it due to a permanent problem (eg. Flat gradient, small diameter). Flooding as a result of temporary problems such as blockage, siltation, collapses, and equipment or operational failures are excluded.

"Internal flooding" from public sewers is defined as flooding which enters a building or passes below a suspended floor. For reporting purposes, buildings are restricted to those normally occupied and used for residential, public, commercial, business or industrial purposes.

"At Risk" properties are those that the water company has included in its Register of properties at risk of sewer flooding. These are defined as properties that have suffered flooding from public foul, combined or surface water sewers due to overloading of the sewerage system more frequently than the relevant reference period (either once or twice in ten years) as determined by the Company's reporting procedure.

Properties which have flooded as a result of storm events proven to be exceptional (defined as a storm return period equal to or greater than 1 in 20) are not included on the Flood Risk Register.

Properties may be at risk of flooding but not included on the Register where flooding incidents have not been reported to the company.

Public sewers are defined as those for which the company holds statutory responsibility under the Water Industry Act 1991.

It should be noted that flooding can occur from private sewers and drains which are not the responsibility of Anglian Water Services Limited. This report excluded flooding from private sewers and drains and Anglian Water Services Limited makes no comment upon this matter.

For further information please visit www.anglianwater.co.uk or contact Anglian Water customer services on 03457 145 145.

Question 2.9 **Please state the distance from the property to the nearest boundary of the nearest sewage treatment works.**

Answer

The nearest sewage treatment works is 2.43 kilometres to the North of the property. The name of the sewage treatment works is HINTLESHAM-WILDERNESS H STW (Anglian Water Services).

The nearest sewage treatment works will not always be the sewage treatment works serving the catchment within which the property is situated.

The Sewerage Undertaker's records were inspected to determine the nearest sewage treatment works. It should be noted, therefore, that there may be a private sewage treatment works closer than the one detailed above that has not been identified.

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Question 3.1 Is the property connected to mains water supply?

Answer Records indicate that the property is connected to mains water supply.

Question 3.2 Are there any water mains, resource mains or discharge pipes within the boundaries of the property?

Answer The map of waterworks does not indicate any water mains, resource mains or discharge pipes within the boundaries of the property.

The boundary of the property has been determined by reference to the Ordnance Survey record.

Question 3.3 Is any water main or service pipe serving, or which is proposed to serve the property, the subject of an existing adoption agreement or an application for such an agreement?

Answer Records confirm that water mains or service pipes serving the property are not the subject of an existing adoption agreement or an application for such an agreement.

This enquiry is of interest to purchasers of new homes who will want to know whether or not the property will be linked to the mains water supply.

Section 51A of the Water Industry Act 1991, as amended by Water Industry Act 2003 "Agreements to adopt water main or service pipe at future date", sets out the framework for water companies to enter into agreements with persons constructing or proposing to construct new water mains and service pipes for domestic purposes.

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Question 3.4 Is this property at risk of receiving low water pressure or flow?

Answer Records confirm that the property is not recorded on a register kept by the water undertaker as being at risk of receiving low water pressure or flow.

"Low water pressure" means water pressure below the reference level which is the minimum pressure when demand on the system is not abnormal. We maintain a Low Pressure Register of properties that are at risk of persistently receiving pressure below the reference level, provided that allowable exclusions do not apply. (i.e. events which can cause pressure to temporarily fall below the reference level).

The reference level of service is a flow of 9 litres/minute at a pressure of 10 metres head on the customer's side of the main stop tap (mst). The reference level of service must be applied on the customer's side of a meter or any other company fittings that are on the customer's side of the main stop tap.

The reference level applies to a single property. Where more than one property is served by a common service pipe, the flow assumed in the reference level must be appropriately increased to take account of the total number of properties served. For two properties, a flow of 18 litres/minute at a pressure of 10 metres head on the customers' side of the mst is appropriate. For three or more properties the appropriate flow should be calculated from the standard loadings provided in BS806-3 or the Institute of Plumbing handbook.

Allowable exclusions: The Company includes in the Low Pressure Register properties receiving pressure below the reference level, provided that allowable exclusions listed below do not apply.

Abnormal demand: This exclusion is intended to cover abnormal peaks in demand and not the daily, weekly or monthly peaks in demand which are normally expected. We exclude properties which are affected by low pressure only on those days with the highest peak demands. During the report year we may exclude, for each property, up to five days of low pressure caused by peak demand.

Planned maintenance: We do not report low pressures caused by planned maintenance.

One-off incidents: This exclusion covers low pressure incidents caused by one-off events: mains bursts; failures of company equipment (such as PRVs or booster pumps); firefighting; and action by a third party.

Low pressure incident of a short duration: Properties affected by low pressure which only occur for a short period, and for which there is evidence that incidents of a longer duration would not occur during the course of the year.

Question 3.5 What is the classification of the water supply for the property?

Answer The water supplied to the property has an average water hardness of **121.8728 mg/l** which is defined as **Very Hard** by Anglian Water Services Limited.

Water hardness can be expressed in various different units, for example, the hardness setting for a dishwasher is commonly expressed in degrees Clark. You should be able to find the required unit in your appliance's manual. The following table shows the various different units of the water hardness measurement for this property:

Calcium (mg/l or ppm)	Calcium Carbonate (mg/l or ppm)	Degrees Clark (°Clark or °e)	Degrees French (°f or °fH)	Degrees German (°dH or dGH)	mmol/l (Millimoles of ca/l)
121.873	304.682	21.328	30.468	17.062	3.047

Question 3.6 Please include details of the location of any water meter serving the property.

Answer Records indicate that the property is served by a water meter, which is located not within the dwelling-house which is or forms part of the property, and in particular is located rhs drive ent.

Anglian Water have put together a list of these abbreviations to help you interpret the location of your water meter. Please remember that it is not uncommon for Water Meter locations to be recorded using a combination of these abbreviations.

For example: LHS 4M FNC - Left hand side 4 meters from fence

If you are still having difficulty interpreting these abbreviations, please visit: <http://www.geodesys.com/water-meter-locations/>

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Question 4.1.1 Who is responsible for providing the sewerage services for the property?

Answer

Anglian Water Services Limited
 Lancaster House
 Lancaster Way
 Ermine Business Park
 Huntingdon
 Cambridgeshire
 PE29 6XU
 Tel: 03457 145 145
 www.anglianwater.co.uk

Question 4.1.2 Who is responsible for providing the water services for the property?

Answer

Anglian Water Services Limited
 Lancaster House
 Lancaster Way
 Ermine Business Park
 Huntingdon
 Cambridgeshire
 PE29 6XU
 Tel: 03457 145 145
 www.anglianwater.co.uk

Question 4.2 Who bills the property for sewerage services?

Answer

The property is not billed for sewerage services.

If the property is not billed for sewerage services this could indicate that an account hasn't been set up with the sewerage provider or the property has a private drainage system. The above answer is based on the most up to date billing records listed for the property. If the current occupier believes this answer to be incorrect, they will need to contact their sewerage provider to ensure these records are amended.

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Question 4.3 Who bills the property for water services?

Answer The property is billed for water services by:

Anglian Water Services Limited
Lancaster House
Lancaster Way
Ermine Business Park
Huntingdon
Cambridgeshire
PE29 6XU
Tel: 03457 145 145
www.anglianwater.co.uk

If the property is not billed for water services this could indicate that an account hasn't been set up with the water provider or the property has a private water supply. The above answer is based on the most up to date billing records listed for the property. If the current occupier believes this answer to be incorrect, they will need to contact their water provider to ensure these records are amended.

Question 4.4 What is the current basis for charging for sewerage and/or water services at the property?

Answer The charges are based on actual volumes of water measured through a water meter. ("metered-supply")

Water and sewerage companies full charges are set out in their charge schemes which are available from the company free of charge upon request.

Question 4.5 Will the basis for charging for sewerage and water services at the property change as a consequence of a change of occupation?

Answer The basis for charges will be based on a metered supply.

For properties in the Anglian Water region, where Anglian Water supply clean water and a meter is installed, all charges levied at the property will be based on a metered consumption.

Water and Sewerage companies full charges are set out in their charges schemes which are available from the company free of charge upon request.

On change of occupation, the Company may install a meter at the premises and base charges upon the measured tariff. The Company may install a meter at the premises where a buyer makes a change of use of the property or where the buyer uses water for: watering the garden, other than by hand (this includes the use of sprinklers) Automatically replenishing a pond or swimming pool with a capacity greater than 10,000 litres.

Where charges are levied to a third party, the occupier needs to contact the vendor to confirm charging arrangements.

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APPENDIX 1: General interpretation

(1) In this Schedule-

"the 1991 Act" means the Water Industry Act 1991(a);

"the 2000 Regulations" means the Water Supply (Water Quality) Regulations 2000(b); "the 2001 Regulations" means the Water Supply (Water Quality) Regulations 2001(c);

"adoption agreement" means an agreement made or to be made under Section 51A(1) or 104(1) of the 1991 Act (d); "bond" means a surety granted by a developer who is a party to an adoption agreement;

"bond waiver" means an agreement with a developer for the provision of a form of financial security as a substitute for a bond; "calendar year" means the twelve months ending with 31st December;

"discharge pipe" means a pipe from which discharges are made or are to be made under Section 165(1) of the 1991 Act; "disposal main" means (subject to Section 219(2) of the 1991 Act) any outfall pipe or other pipe which-

(a) is a pipe for the conveyance of effluent to or from any sewage disposal works, whether of a sewerage undertaker or of any other person; and

(b) is not a public sewer;

"drain" means (subject to Section 219(2) of the 1991 Act) a drain used for the drainage of one building or any buildings or yards appurtenant to buildings within the same curtilage;

"effluent" means any liquid, including particles of matter and other substances in suspension in the liquid; "financial year" means the twelve months ending with 31st March;

"lateral drain" means-

(a) that part of a drain which runs from the curtilage of a building (or buildings or yards within the same curtilage) to the sewer with which the drain communicates or is to communicate; or

(b) (if different and the context so requires) the part of a drain identified in a declaration of vesting made under Section 102 of the 1991 Act or in an agreement made under Section 104 of that Act (e);

"licensed water supplier" means a company which is the holder for the time being of a water supply licence under Section 17A(1) of the 1991 Act(f);

"maintenance period" means the period so specified in an adoption agreement as a period of time-

(a) from the date of issue of a certificate by a sewerage undertaker to the effect that a developer has built (or substantially built) a private sewer or lateral drain to that undertaker's satisfaction; and

(b) until the date that private sewer or lateral drain is vested in the sewerage undertaker;

"map of waterworks" means the map made available under section 198(3) of the 1991 Act (g) in relation to the information specified in subsection (1A);

"private sewer" means a pipe or pipes which drain foul or surface water, or both, from premises, and are not vested in a sewerage undertaker;

"public sewer" means, subject to Section 106(1A) of the 1991 Act(h), a sewer for the time being vested in a sewerage undertaker in its capacity as such, whether vested in that undertaker-

(a) by virtue of a scheme under Schedule 2 to the Water Act 1989(i);

(b) by virtue of a scheme under Schedule 2 to the 1991 Act (j);

(c) under Section 179 of the 1991 Act (k); or

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(d) otherwise;

"public sewer map" means the map made available under Section 199(5) of the 1991 Act (I);

"resource main" means (subject to Section 219(2) of the 1991 Act) any pipe, not being a trunk main, which is or is to be used for the purpose of-

(a) conveying water from one source of supply to another, from a source of supply to a regulating reservoir or from a regulating reservoir to a source of supply; or

(b) giving or taking a supply of water in bulk;

"sewerage services" includes the collection and disposal of foul and surface water and any other services which are required to be provided by a sewerage undertaker for the purpose of carrying out its functions;

"Sewerage Undertaker" means the Company appointed to be the sewerage undertaker under Section 6(1) of the 1991 Act for the area in which the property is or will be situated;

"surface water" includes water from roofs and other impermeable surfaces within the curtilage of the property;

"water main" means (subject to Section 219(2) of the 1991 Act) any pipe, not being a pipe for the time being vested in a person other than the water undertaker, which is used or to be used by a water undertaker or licensed water supplier for the purpose of making a general supply of water available to customers or potential customers of the undertaker or supplier, as distinct from for the purpose of providing a supply to particular customers;

"water meter" means any apparatus for measuring or showing the volume of water supplied to, or of effluent discharged from any premises; "water supplier" means the Company supplying water in the water supply zone, whether a water undertaker or licensed water supplier;

"water supply zone" means the names and areas designated by a water undertaker within its area of supply that are to be its water supply zones for that year; and

"Water Undertaker" means the Company appointed to be the water undertaker under Section 6(1) of the 1991 Act for the area in which the property is or will be situated.

(2) In this Schedule, references to a pipe, including references to a main, a drain or a sewer, shall include references to a tunnel or conduit which serves or is to serve as the pipe in question and to any accessories for the pipe.

(a) 1991 c.56.

(b) S.I. 2000/3184. These Regulations apply in relation to England.

(c) S.I. 2001/3911. These Regulations apply in relation to Wales.

(d) Section 51A was inserted by Section 92(2) of the Water Act 2003 (c. 37). Section 104(1) was amended by Section 96(4) of that Act.

(e) Various amendments have been made to Sections 102 and 104 by section 96 of the Water Act 2003.

(f) Inserted by Section 56 of and Schedule 4 to the Water Act 2003.

(g) Subsection (1A) was inserted by Section 92(5) of the Water Act 2003.

(h) Section 106(1A) was inserted by Section 99 of the Water Act 2003.

(i) 1989 c.15.

(j) To which there are various amendments made by Section 101(1) of and Schedule 8 to the Water Act 2003.

(k) To which there are various amendments made by Section 101(1) of and Schedule 8 to the Water Act 2003.

(l) Section 199 was amended by Section 97(1) and (8) of the Water Act 2003.

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1. Introduction

1.1 These Terms set out the terms which will apply in respect of any Orders You place with Us for a Report, as defined below.

1.2 These Terms may need to be amended from time to time and have a publication date which will be updated when any changes are made. Every time You wish to place an Order, please check these Terms to ensure You understand the terms which apply at that time, as they may have changed since any earlier order You may have placed.

1.3 If You do not accept these Terms You must not place any Orders with Us.

1.4 If You are trading as a business, it is also Your responsibility to ensure that prior to placing an Order on behalf of a Client, that You make Your Client aware of the Terms, and that they accept them.

2. Interpretations & Definitions

2.1 In addition to any defined terms, the following words shall have the following meanings:

(a) "Client" means the person, company or body (including where required, their mortgage lender) for whom You have agreed to supply one or more Reports in the normal course of business.

(b) "Map" means any Ordnance Survey map (and any data contained therein) provided as part of the Services.

(c) "Order" means any request for a Report made by You to Us.

(d) "Report" means the report known as the "CON29DW" prepared by Us providing drainage and water information in relation to a Residential Property.

(e) "Residential Property" means the address(es) or location(s) of a residential property provided by You when You place an Order.

(f) "Services" means the provision of a Report.

(g) "Terms" means these terms and conditions for CON29DW enquiries and General Terms means any general commercial terms in effect between the parties.

(h) "We", "Our" and "Us" means Anglian Water Services Limited trading as Geodesys, being a company registered in England and Wales with company number 2366656, and whose registered office address is at Lancaster House, Lancaster Way, Huntingdon PE29 6XU, and whose principle place of trading is at Osprey House, 1 Percy Road, Huntingdon PE29 6XU.

(i) "Website" means <http://www.geodesys.com/>.

(j) "You" and "Your" means the person, firm or company requesting the provision of property-related and company search information and reports from Us.

3. Placing Orders and Our Agreement

3.1 Your Order constitutes an offer by You to purchase Report(s) from Us.

3.2 When You place an Order, You will receive an e-mail from Us acknowledging that We have received Your Order, but this does not mean We have accepted Your Order.

3.3 We may choose not to accept Your Order, but on the rare occasion that this may occur, We will aim to notify You within 48 hours. For the avoidance of doubt, no contract will exist between Us until We have expressly accepted Your Order.

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4. Cancellation rights

As a consumer

4.1 Where You are an individual consumer (and not acting for purposes wholly or mainly relating to Your trade, business, craft or profession), You have specific legal rights relating to cancellation of any Order You may place. You may cancel Your Order at any time within 14 days after the day on which the contract is entered into ("Cancellation Period").

4.2 To exercise the right to cancel, You must tell Us of Your decision to cancel this contract by a clear statement.

4.3 Where You are ordering a Report as a consumer, due to Your cancellation rights, We will not process Your Order or provide the Report to You before the end of the Cancellation Period unless You provide Your express consent and You acknowledge that You will lose the right to cancel the contract under regulation 29(1) of the Consumer Contracts (Information, Cancellation, and Additional Charges) Regulation 2013.

4.4 In addition to these rights, where We are able to, We will cancel any Order in accordance with Our cancellation policy, which can be found on Our Website.

As a Business

4.5 The Cancellation Period does not apply to Your Order if You are placing the Order wholly or mainly for purposes relating to Your trade, business, craft or profession.

4.6 If You cancel Your Order other than in accordance with this clause You may be liable for the payment of certain fees which are recoverable as detailed in Our cancellation policy at: www.geodesys.com/cancellation-policy.

5. The Report

5.1 We will prepare the Report using the Residential Property details You provide at the time You place Your Order. The Report You receive will rely on the accuracy, completeness and legibility of the address and/or plans You supply with Your Order.

5.2 The Report is produced only for use in relation to Residential Property which require the provision of drainage and water information and cannot be used for non-residential properties, development of land or any property used solely for carrying on a trade or business. Where You require a report for a non-residential property, or for the development of land, You can order a different report from Us, and different terms shall apply.

5.3 The Report provides information as to the indicative location and connection status of existing services and other information relating to drainage and water enquiries and should not be relied on for any other purpose.

5.4 As You may expect, the information contained in the Report can change on a regular basis, so We cannot be responsible to You or if You are trading as a business to Your Client for any change in the information contained in the Report after the date on which the Report was produced (as shown in the Report).

5.5 The Report does not give details about the actual state or condition of the Residential Property or its connecting private services, nor should it be used or taken to indicate or exclude actual suitability or unsuitability of the Residential Property for any particular purpose. It should not be relied upon for determining saleability or value or used as a substitute for any physical investigation or inspection. Further advice and information from appropriate experts and professionals should always be obtained.

5.6 We will send the Report to the address You have provided in Your Order, including email address for online Orders.

5.7 You agree only to use the Report for the purpose for which it is supplied in accordance with these Terms.

5.8 Where We accept Your Order:

(a) We will provide the Services with reasonable skill and care; and

(b) Your Order will be fulfilled within a reasonable period.

5.9 In providing the Report, We will comply with all laws and regulations which apply to the provision of the Report including ensuring that We have all the necessary licences and permissions, including intellectual property rights to provide the Report.

Your order reference: G2857082-1

Property address:

Grange Farm, Wenham Road, Copdock And Washbrook, IP8 3EZ

5.10 It is Your responsibility to ensure that Your Order, and the Report meet Your requirements if You are trading as a business the requirements of Your Client.

5.11 In providing You with this Report, We will comply with the Drainage & Water Searches Network (DWSN) Standards.

6. Disclaimers with regards to the Reports

6.1 Without prejudice to all other Terms, Geodesys accepts responsibility for the inaccuracy of location, or missing apparatus contained in the Maps within the Report that arise as a result of negligence.

6.2 Notwithstanding clause 6.1, for the purposes of this Report, Geodesys will not seek to rely on any statements and/or disclaimer shown on any Maps which limits liability in relation to the accuracy and/or location of apparatus.

6.3 The Report should not be relied upon in the event of excavations at the Residential Property or other works without seeking independent advice in advance.

7. Intellectual Property Rights

7.1 The Report You receive is confidential and is intended for (a) Your own internal or personal purposes and/or (b) where You are trading as a business, the personal use of Your Client. The Report shall not be used or copied (in whole or in part) for any other use whatsoever, whether for commercial gain or otherwise.

7.2 We grant You a non-exclusive and non-transferable licence:

- (a)** to make copies of the Reports (except the Map) for Your own internal purposes;
- (b)** to incorporate the Reports (other than the Map) into any written advice You provide in the normal course of Your business; and
- (c)** to disclose the Reports, where You are trading as a business, in the normal course of Your business to:

(i) Your Client; and or

(ii) anyone who is acquiring or considering acquiring an interest in or charge over the property to which the Report relates, and their professional advisers.

7.3 You must not alter any part of the Report including altering, removing or obscuring any logos and/or branding which is contained in a Report.

7.4 All intellectual property rights, including trademarks, domain names and copyright in the Reports are owned by Us and/or Our licensors.

7.5 Any Maps contained in any Report are protected by Crown Copyright. The Maps must not be used for any purpose other than as part of the Report. Neither You nor anyone You provide the Report to may reproduce the Maps without paying for a separate licence from Ordnance Survey.

7.6 No intellectual or other property rights are transferred or licensed to You or where You are trading as a business to Your Client or any other person except to the extent set out in these terms.

7.7 You agree to compensate Us against any losses, costs, claims, damages and/or expenses which We incur and/or suffer as a result of any breach of any intellectual property rights or obligations set out in any of the Terms) by You, or where You are trading as a business to Your Client or any party to whom You provide a copy of the Report.

Your order reference: G2857082-1

Property address:

Grange Farm, Wenham Road, Copdock And Washbrook, IP8 3EZ

8. Additional Intellectual Property Right Provisions

8.1 The enquiries in the Report are protected by copyright by the Law Society of 113 Chancery Lane, London WC2A 1PL and must not be used for any purpose which is not expressly set out in these Terms.

8.2 The answers and information in the Report are protected by copyright by Geodesys.

9. Liability

9.1 This paragraph sets out the exclusions to and limitations on Our liability to You and if You are trading as a business to Your Client.

9.2 We will not be liable to You (and/or if You are trading as a business to Your Client) in contract, tort, negligence, breach of statutory duty, misrepresentation or otherwise:

(a) if We do not accept Your Order;

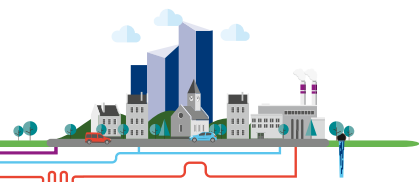
(b) for any inaccuracies, mistakes or omissions in the Reports unless any such liability arises as a direct consequence of Our negligence.

9.3 Notwithstanding the above, nothing affects any party's liability for (a) death or personal injury arising from its negligence, (b) liability for fraud or fraudulent misrepresentation and / or (c) any other liability which cannot be excluded or limited under applicable law.

Your order reference: G2857082-1

Property address:

Grange Farm, Wenham Road, Copdock And Washbrook, IP8 3EZ



10. Additional Provision relating to Our Liability to You for the Report

10.1 Subject to clause 9.3, Our total liability to You and/or if You are trading as a business to Your Client, whether for breach of contract, tort, negligence, breach of statutory duty, misrepresentation or otherwise, arising under or in connection with these Terms and/or the provision of a Report limited to £10 million in aggregate.

11. Customer Complaints Procedure

11.1 Geodesys offer a robust complaints procedure which can be found on Our Website.

11.2 If Your complaint has gone through Our complaints procedure and You are dissatisfied with the response or it has exceeded Our response timescales, You may refer Your complaint for consideration under The Property Ombudsman Scheme (TPOs). The Ombudsman can award up to £25,000 to you if the Ombudsman finds that you have suffered actual financial loss and/or aggravation, distress or inconvenience. You can obtain further information by visiting www.tpos.co.uk or email admin@tpos.co.uk.

11.3 In addition to the TPO redress scheme covering consumers, TPO will also provide redress for small businesses (including Charities and Trusts) that meet the following criteria:

- a small business (or group of companies) with an annual turnover of less than £3 million;
- a charity with an annual income of less than £3 million;
- a Trust with a net asset value of less than £3 million.

12. General

12.1 These Terms (and any General Terms or other documents referred to herein) are the only terms and conditions that shall apply to any Order and the provision of a Report by Us to You and shall constitute the entire agreement between You and Us and supersede, replace and extinguish any previous arrangement, understanding or agreement between Us relating to such Report.

12.2 Any dispute or claim arising out of or in connection with these terms and or their subject matter or formation (including non-contractual disputes or claims) shall be governed by the laws of England and Wales. Any dispute (including any non-contractual disputes or claims) shall be subject to the exclusive jurisdiction of the courts of England and Wales.

12.3 If there is any conflict or inconsistency between the provisions of these Terms and any other General Terms, the provisions of these Terms shall prevail.

12.4 In the event of any conflict of inconsistency between any information on the Website describing the features of the Report and these Terms, then these Terms shall prevail.

12.5 Where You are acting wholly or mainly in the normal course of Your trade, business, craft or profession Your Client is entitled to the benefit of these Terms. Save as provided in this clause 12.5, it is not intended that any other person who is not a party to these Terms has any right to enforce any term of these Terms under the Contracts (Rights of Third Parties) Act 1999.

Your order reference: G2857082-1

Property address:

Grange Farm, Wenham Road, Copdock And Washbrook, IP8 3EZ

APPENDIX 3: Important consumer protection information

This search has been produced by Geodesys, a trading name of Anglian Water Services Ltd. Our address is - Osprey House, 1 Percy Road, Huntingdon, Cambridgeshire, PE29 6SZ. To contact us - Tel 0800 085 8050 or email customer.services@geodesys.com.

Geodesys is a member of the Drainage and Water Searches Network (DWSN), a membership organisation for companies who are responsible for compiling full and complete responses to the Law Society's CON29DW Residential and CON29DW Commercial products.

For more information please visit www.dwsn.org.uk

Geodesys adhere to the DWSN Standards which set out to ensure DWSN members maintain high standards of product quality, consumer protection and customer service in the supply of responses to the Law Society's CON29DW Enquiry for the benefit of end-users and their professional advisers.

The DWSN Standards are:

- Promotion of best practice and quality
- Maintain adequate insurance
- Display the appropriate logos to signify high standards
- Respond to complaints in a timely fashion and provide an appropriate escalation procedure
- Comply with all applicable UK legislation, regulations and industry standards
- Act in a professional and honest manner and provide a service with due care and skill

Your order reference: G2857082-1

Property address:

Grange Farm, Wenham Road, Copdock And Washbrook, IP8 3EZ

Complaints

Whilst we make every effort to ensure that all our searches are accurate and dispatched in a timely way, we understand that occasionally things may not go as planned. If you have a query or complaint about your search, you should raise it directly with us, and if appropriate ask for any complaint to be considered under our formal internal complaints procedure. We will always try to resolve a query or complaint immediately. If you are not satisfied with our final response, or if we exceed the response timescales, you may refer the complaint to The Property Ombudsman Scheme (TPOS). The Ombudsman can award up to £25,000 to you if the Ombudsman finds that you have suffered actual financial loss and/or aggravation, distress or inconvenience.

If it is not possible to resolve your complaint immediately, we will:

- Take all of the details and investigate your complaint under our formal complaints procedure. If we do not contact you within 5 working days of you raising the complaint, you will be entitled to £50 compensation.
- Always aim to resolve a complaint fully and in writing within 5 working days, but no later than 20 working days of receipt.
- Keep you informed by letter, telephone or email as you prefer should we need more time to resolve the matter.
- Provide a final response, in writing, at the latest within 40 working days of receipt.
- Liaise, at your request, with anyone acting formally on your behalf.

If we consider your complaint to be justified we will:

- Refund your search fee.
- Provide you with a revised search.
- Take all action within our control to put things right.

Complaints should be sent to: Customer Services, Geodesys, Osprey House, 1 Percy Road, Huntingdon, Cambridgeshire, PE29 6SZ, Tel: 0800 085 8050, Email: customer.services@geodesys.com

If you are not satisfied with our final response, or if we exceed the response timescales, you may refer the complaint to The Property Ombudsman Scheme (TPOS).

TPOs Contact Details:

The Property Ombudsman scheme (TPOs)

The Property Ombudsman scheme, Milford House, 43-55 Milford Street, Salisbury SP1 2BP

Telephone: 01722 333306

Fax: 01722 332296

Website: www.tpos.co.uk

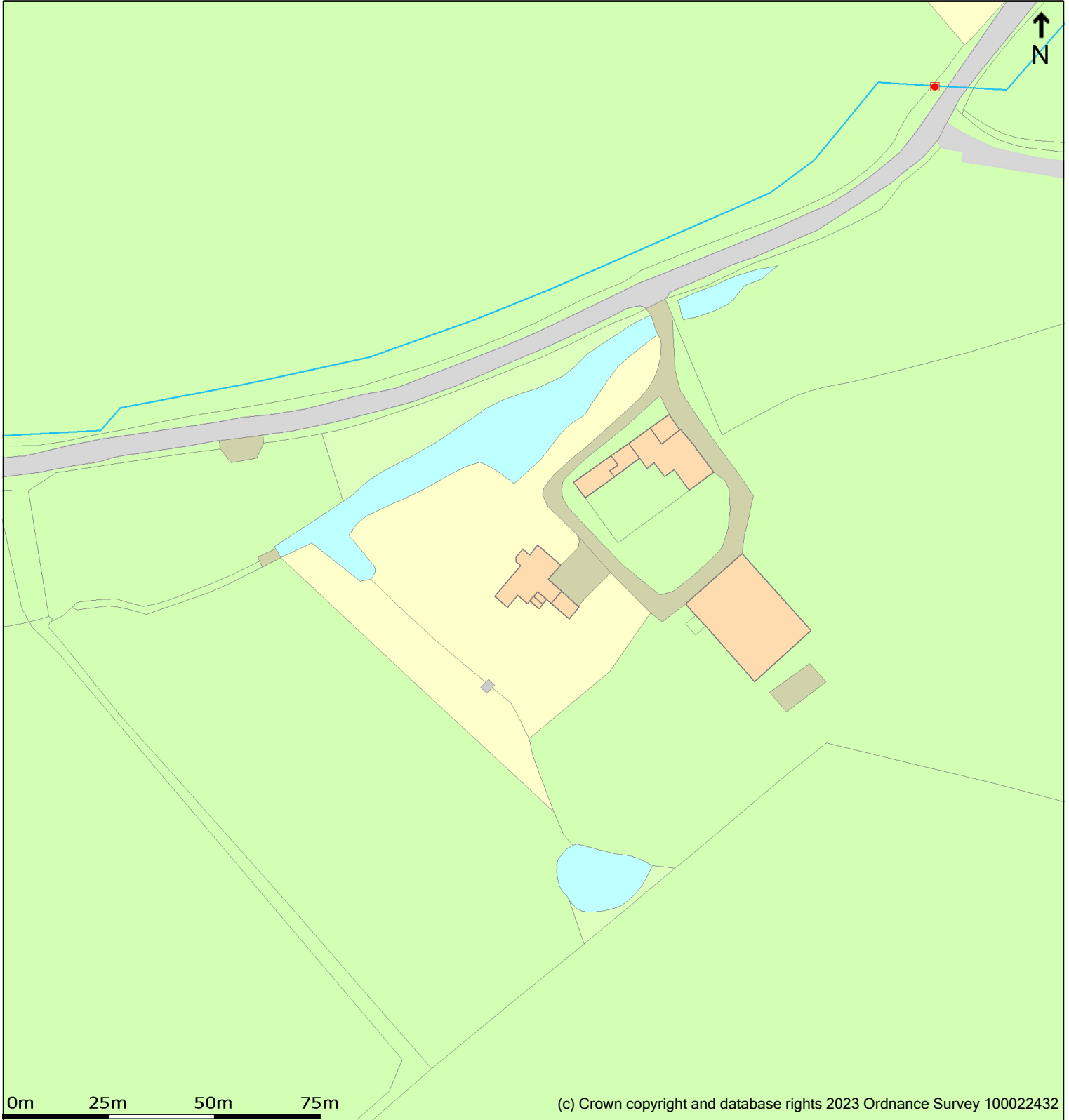
Email: admin@tpos.co.uk

We will co-operate fully with the Ombudsman during an investigation and comply with their final decision.

Your order reference: G2857082-1

Property address:

Grange Farm, Wenham Road, Copdock And Washbrook, IP8 3EZ



Title: G2857082-1 Date: 19/10/23 Scale: 1:1250 Map Centre: 609806,240791

Water Main (Potable)		Hydrant
Decommissioned Water		
Water Main (Raw)		Fitting

This plan is provided by Anglian Water pursuant its obligations under the Water Industry Act 1991 sections 198 or 199. It must be used in conjunction with any search results attached. The information on this plan is based on data currently recorded but position must be regarded as approximate. Service pipes, private sewers and drains are generally not shown. Users of this map are strongly advised to commission their own survey of the area shown on the plan before carrying out any works. The actual position of all apparatus MUST be established by trial holes. No liability whatsoever, including liability for negligence, is accepted by Anglian Water for any error or inaccuracy or omission, including the failure to accurately record, or record at all, the location of any water main, discharge pipe, sewer or disposal main or any item of apparatus. This information is valid for the date printed. This plan is produced by Anglian Water Services Limited (c) Crown copyright and database rights 2023 Ordnance Survey 100022432. This map is to be used for the purposes of viewing the location of Anglian Water plant only. Any other uses of the map data or further copies is not permitted. This notice is not intended to exclude or restrict liability for death or personal injury resulting from negligence.

Appendix H - Pre- and Post-development Runoff Calculations

Calculated by:	Robert Ward
Site name:	Grange Farm
Site location:	Washbrook

Site Details

Latitude:	52.02576° N
Longitude:	1.05690° E

This is an estimation of the greenfield runoff rates that are used to meet normal best practice criteria in line with Environment Agency guidance "Rainfall runoff management for developments", SC030219 (2013), the SuDS Manual C753 (Ciria, 2015) and the non-statutory standards for SuDS (Defra, 2015). This information on greenfield runoff rates may be the basis for setting consents for the drainage of surface water runoff from sites.

Reference: 1436599205

Date: Oct 19 2023 15:40

Runoff estimation approach IH124

Site characteristics

Total site area (ha): 1

Methodology

Q _{BAR} estimation method:	Calculate from SPR and SAAR
SPR estimation method:	Calculate from SOIL type

Notes

(1) Is Q_{BAR} < 2.0 l/s/ha?

When Q_{BAR} is < 2.0 l/s/ha then limiting discharge rates are set at 2.0 l/s/ha.

Soil characteristics

	Default	Edited
SOIL type:	3	4
HOST class:	N/A	N/A
SPR/SPRHOST:	0.37	0.47

(2) Are flow rates < 5.0 l/s?

Where flow rates are less than 5.0 l/s consent for discharge is usually set at 5.0 l/s if blockage from vegetation and other materials is possible. Lower consent flow rates may be set where the blockage risk is addressed by using appropriate drainage elements.

Hydrological characteristics

	Default	Edited
SAAR (mm):	567	567
Hydrological region:	5	5
Growth curve factor 1 year:	0.87	0.87
Growth curve factor 30 years:	2.45	2.45
Growth curve factor 100 years:	3.56	3.56
Growth curve factor 200 years:	4.21	4.21

(3) Is SPR/SPRHOST ≤ 0.3?

Where groundwater levels are low enough the use of soakaways to avoid discharge offsite would normally be preferred for disposal of surface water runoff.

Greenfield runoff rates		Default	Edited
Q _{BAR} (l/s):		2.25	3.77
1 in 1 year (l/s):		1.95	3.28
1 in 30 years (l/s):		5.5	9.24
1 in 100 year (l/s):		7.99	13.43
1 in 200 years (l/s):		9.45	15.88

This report was produced using the greenfield runoff tool developed by HR Wallingford and available at www.uksuds.com. The use of this tool is subject to the UK SuDS terms and conditions and licence agreement, which can both be found at www.uksuds.com/terms-and-conditions.htm. The outputs from this tool are estimates of greenfield runoff rates. The use of these results is the responsibility of the users of this tool. No liability will be accepted by HR Wallingford, the Environment Agency, CEH, Hydrosolutions or any other organisation for the use of this data in the design or operational characteristics of any drainage scheme.

Run-off from Hard Standing Areas - Pre Development

Peak Discharge $Q = 3.61 C_v i A$ $C_v = 0.9$
 $i =$ Rainfall Intensity From Micro Drainage
 $A =$ Area = 0.019 ha

1 Year Event

15 minute storm	=	3.61	x	0.9	x	30.99	x	0.019	=	1.913 l/s
30 minute storm	=	3.61	x	0.9	x	20.22	x	0.019	=	1.248 l/s
120 minute storm	=	3.61	x	0.9	x	7.94	x	0.019	=	0.490 l/s
6 hour storm	=	3.61	x	0.9	x	3.65	x	0.019	=	0.225 l/s

30 Year Event

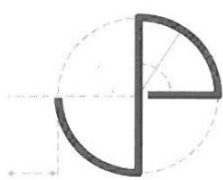
15 minute storm	=	3.61	x	0.9	x	76.04	x	0.019	=	4.694 l/s
30 minute storm	=	3.61	x	0.9	x	49.50	x	0.019	=	3.056 l/s
120 minute storm	=	3.61	x	0.9	x	18.62	x	0.019	=	1.149 l/s
6 hour storm	=	3.61	x	0.9	x	8.03	x	0.019	=	0.496 l/s

100 Year Event

15 minute storm	=	3.61	x	0.9	x	98.68	x	0.019	=	6.092 l/s
30 minute storm	=	3.61	x	0.9	x	64.79	x	0.019	=	3.999 l/s
120 minute storm	=	3.61	x	0.9	x	24.46	x	0.019	=	1.510 l/s
6 hour storm	=	3.61	x	0.9	x	10.42	x	0.019	=	0.643 l/s

Volume of Run-off from Hard Standing 6 Hour Storm

1 Year Storm	=	0.225	x	60	x	60	x	6	=	4862 litres or 4.862 m ³
30 Year Storm	=	0.496	x	60	x	60	x	6	=	10712 litres or 10.712 m ³
100 Year Storm	=	0.643	x	60	x	60	x	6	=	13891 litres or 13.891 m ³

Project:				
 <p>7 Museum Street Ipswich Suffolk IP1 1HQ</p> <p>Tel: (01473) 280699 Fax: (01473) 280701</p> <p>JP Chick & Partners Ltd Consulting Civil & Structural Engineers</p> <p>www.chick.co.uk ipswich@chick.co.uk</p>	Designed	Checked	Date Oct-23	Job No. IE23/087
	Calculation Sheet			
			Sheet No.	of

Run-off from Hard Standing Areas - Post Development

Peak Discharge $Q = 3.61 C_v i A$ $C_v = 0.9$
 $i =$ Rainfall Intensity From Micro Drainage
 $A =$ Area = 0.03 ha

1 Year Event

15 minute storm	=	3.61	x	0.9	x	30.99	x	0	=	2.558 l/s
30 minute storm	=	3.61	x	0.9	x	20.22	x	0	=	1.668 l/s
120 minute storm	=	3.61	x	0.9	x	7.94	x	0	=	0.655 l/s
6 hour storm	=	3.61	x	0.9	x	3.65	x	0	=	0.301 l/s

30 Year Event

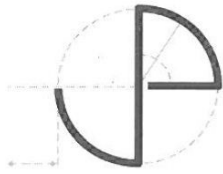
15 minute storm	=	3.61	x	0.9	x	76.04	x	0	=	6.275 l/s
30 minute storm	=	3.61	x	0.9	x	49.50	x	0	=	4.085 l/s
120 minute storm	=	3.61	x	0.9	x	18.62	x	0	=	1.536 l/s
6 hour storm	=	3.61	x	0.9	x	8.03	x	0	=	0.663 l/s

100 Year Event

15 minute storm	=	3.61	x	0.9	x	98.68	x	0	=	8.14 l/s
30 minute storm	=	3.61	x	0.9	x	64.79	x	0	=	5.347 l/s
120 minute storm	=	3.61	x	0.9	x	24.46	x	0	=	2.019 l/s
6 hour storm	=	3.61	x	0.9	x	10.42	x	0	=	0.860 l/s

Volume of Run-off from Hard Standing 6 Hour Storm

1 Year Storm	=	0.30	x	60	x	60	x	6	=	6499 litres or	6 m ³
30 Year Storm	=	0.66	x	60	x	60	x	6	=	14321 litres or	14 m ³
100 Year Storm	=	0.9	x	60	x	60	x	6	=	18570 litres or	19 m ³

Project:				
 <p>7 Museum Street Ipswich Suffolk IP1 1HQ</p> <p>Tel: (01473) 280699 Fax: (01473) 280701</p> <p>JP Chick & Partners Ltd Consulting Civil & Structural Engineers</p> <p>www.chick.co.uk ipswich@chick.co.uk</p>	Designed	Checked	Date	Job No.
	Calculation Sheet			
Oct-23 | IE23/087				
Sheet No. 1 of 1				