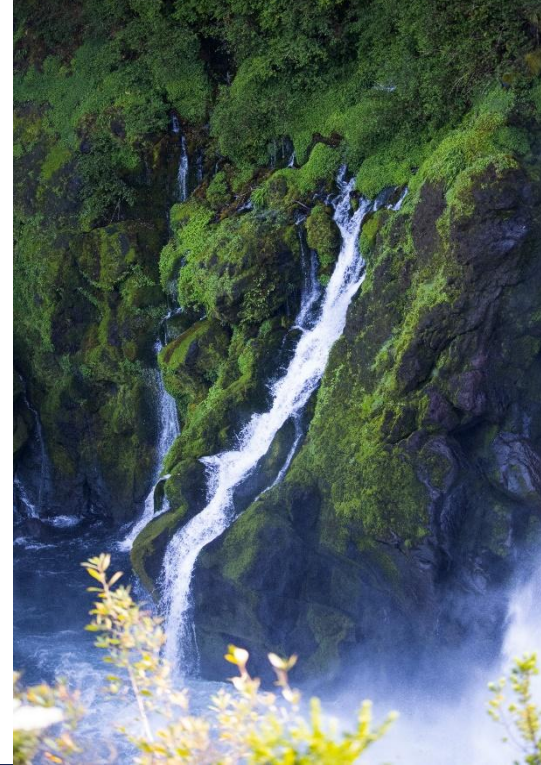




Flood Risk Assessment AEG8028_BN6_Hassocks_01

Site Address: Rossmead
Orchard Lane
Mid Sussex
BN6 8QF

UK Experts in Flood Modelling, Flood Risk
Assessments, and Surface Water Drainage Strategies



Document Issue Record

Project: Flood Risk Assessment

Prepared for: Mr Patrick Awty

Reference: AEG8028_BN6_Hassocks_01

Site Location: Rossmead, Orchard Lane, Mid Sussex, West Sussex, BN6 8QF

Issue	Date	Author	Check	Auth.	Comments
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Summary

Development Description	Existing	Proposed
Development Type	A residential dwelling	The alterations to the existing rear ground floor plan and the construction of a single-storey side extension, modifications to the rear elevation and the construction of a single-story link building is proposed between the main dwelling and the annex.
EA Vulnerability Classification	More Vulnerable	More Vulnerable
Ground Floor Level	Based on topographic survey provided, ground levels vary between 45.78m AOD and 46.99m AOD.	No change – FFLs of proposed extension to be set no lower than FFLs of residential dwelling. Client has advised that there is a 150mm step up from the glazed link into the main dwelling.
Level of Sleeping Accommodation	First floor	No change
Surface Water Drainage	N/A ¹	Proposal is a minor development and thus runoff should be discharged via existing system. Small scale SuDS such as rainwater planters and water butts could be implemented in external areas to provide betterment over existing situation.
Site Size	c. 1560m ²	No change
Development Size	N/A ¹	Proposed development less than 250m ² (minor development in terms of flood risk)
Risk to Development	Summary	Comment
EA Flood Zone	Flood Zone 1	Proposed development is located within Flood Zone 1 and at ‘low’ risk of experiencing flood depths greater than 0.2m.
Flood Source	Pluvial	
SFRA Available	Level 1 Strategic Flood Risk Assessment (Mid Sussex District Council, 2024) and Strategic Flood Risk Assessment Level 1 (Mid Sussex District Council, 2015)	

Management Measures	Summary	Comment
Ground floor level above extreme flood levels	Yes	Existing and proposed footprint is located within Flood Zone 1 and at 'low' risk of pluvial flooding.
Safe Access/Egress Route	N/A ¹	Proposal is for an extension to an existing dwelling and thus access/egress arrangements would not differ from existing situation, post-development.
Flood Resilient Design	Recommended as a precautionary approach.	See details in Section 5.
Site Drainage Plan	N/A ¹	To drain via existing drainage system. Small scale SuDS such as rainwater planters or water butts could be incorporated into the design to provide a betterment.
Flood Warning and Evacuation Plan	N/A ¹	Recommended that occupier monitor Met Office Weather Warnings for extreme weather events.
Offsite Impacts	Summary	Comment
Displacement of floodwater	Negligible	Development is classified as a minor development in terms of flood risk and therefore in isolation should not result in an increase in flood risk elsewhere in accordance with Paragraph 051 of the NPPG. In addition, proposed extension and link are in Flood Zone 1 and at 'low' risk of pluvial flooding.
Increase in surface run-off generation	Negligible	To drain via existing drainage system. Small scale SuDS such as rainwater planters or water butts could be incorporated into the design to provide a betterment.
Impact on hydraulic performance of channels	Negligible	The nearest watercourse is c. 180m west of the site.

¹ not required for this assessment

² data not available.

1. Introduction

- 1.1. Aegaea were commissioned by Mr Patrick Awty to undertake a Flood Risk Assessment (FRA) to facilitate a planning application for the proposed development. This FRA has been prepared in accordance with the requirements set out in the National Planning Policy Framework (NPPF) and the associated Planning Practice Guidance.
- 1.2. This FRA is intended to support a full planning application and as such the level of detail included is commensurate and subject to the nature of the proposals.

Site Overview

- 1.3. The site of the proposed development is Rossmead, Orchard Lane, Mid Sussex, BN6 8QF (Figure 1).

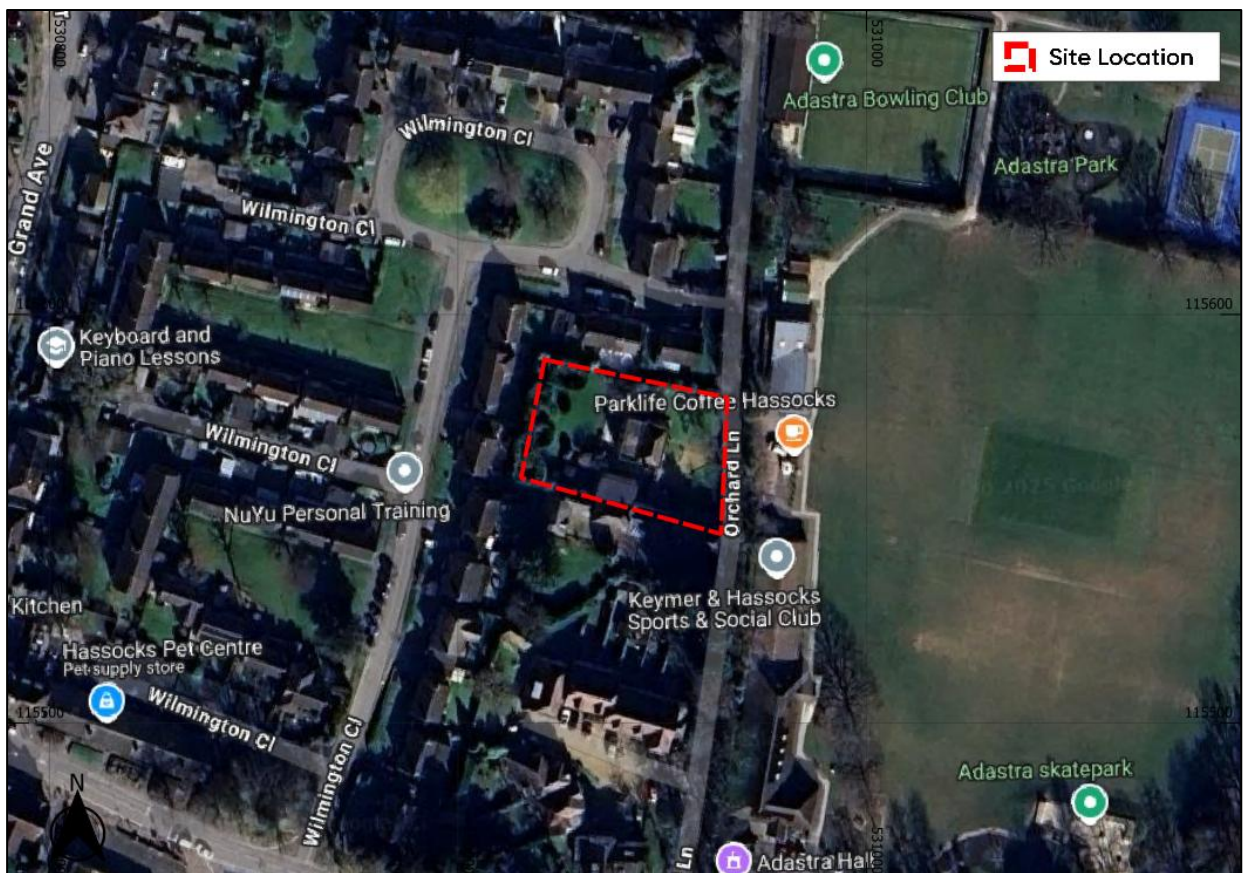


Figure 1: Site Location (Base map and data from Google Satellite Imagery ©)

- 1.4. The client has submitted an application for the alterations to the existing rear ground floor plan and the construction of a single-storey side extension, modifications to the rear elevation and

the construction of a single-story link building is proposed between the main dwelling and the annex. All proposed plans can be found in Appendix A of this report.

- 1.5. The topographic levels of the site have been provided and can be found in Appendix B. Analysis of the topographic levels shows that the site has ground levels of between c. 45.78m AOD and 46.99m AOD.
- 1.6. However, Environment Agency Light Detection and Ranging (LiDAR) data Digital Terrain Model has been used to provide a visualisation of the topography of the site (Figure 2).
- 1.7. The surrounding area shows a general downwards slope travelling in the west direction towards a nearby ordinary watercourse, which is situated c. 180m west in relation to the site.

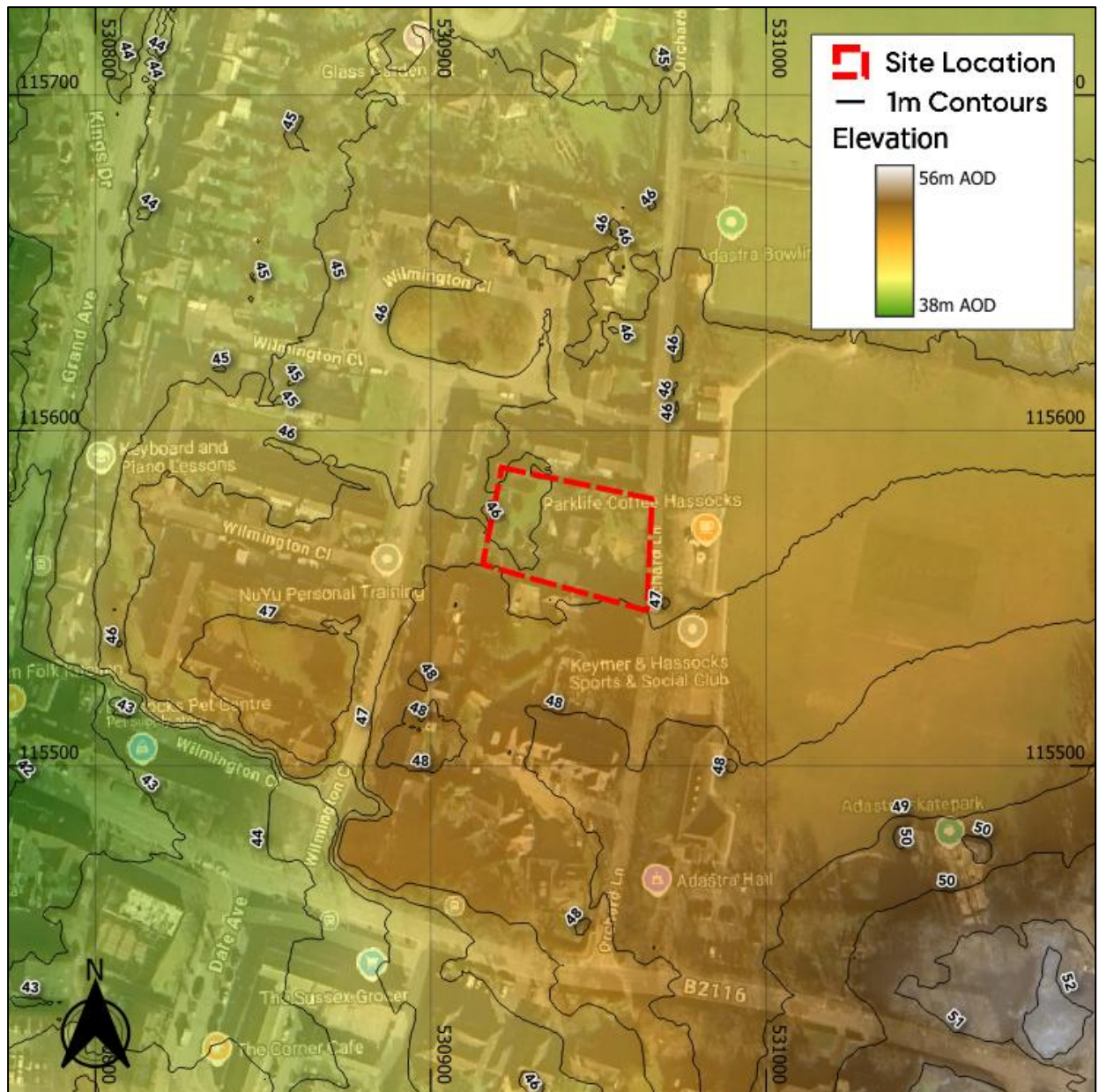


Figure 2: Site Topography (Base map and data from Google Satellite Imagery ©. Contains public sector information licensed under the Open Government Licence v3.0)

- 1.8. Mid Sussex District Council is the Local Planning Authority (LPA) for the site and West Sussex County Council is the designated Lead Local Flood Authority (LLFA). The site sits within the Environment Agency's Solent and South Downs region.

Planning Policy and Guidance

1.9. UK government planning guidance states¹ that an FRA is required for developments which are:

- *in flood zones 2 or 3 including minor development and change of use*
- *more than 1 hectare (ha) in flood zone 1*
- *less than 1 ha in flood zone 1, including a change of use in development type to a more vulnerable class (for example from commercial to residential), where they could be affected by sources of flooding other than rivers and the sea (for example surface water drains, reservoirs)*
- *in an area within flood zone 1 which has critical drainage problems as notified by the Environment Agency*

1.10. The LPA have noted:

"The updated Risk of Flooding from Surface Water mapping shows the proposed development site is located within an area impacted by the Low surface water flood risk (1:1,000 flood event). Following the approach set out under the NPPF for assessing fluvial flood risk (flood zones) this area would be considered consistent with Flood Zone 2 (1:1000 extent)."

1.11. As such, an FRA is required to support the planning application.

1.12. The objective of this FRA is to demonstrate that the proposals are acceptable in terms of flood risk. This report summarises the findings of the study and specifically addresses the following issues in the context of the current legislative regime:

- Fluvial/tidal flood risk
- Surface water flood risk
- Risk of flooding from other sources

¹ <https://www.gov.uk/guidance/flood-risk-assessment-for-planning-applications#when-you-need-an-assessment>

2. Planning Policy

- 2.1. Inappropriate development in a flood risk area could pose significant risk in terms of personal safety and damage to property for the occupiers of the development or for people elsewhere. The approach taken in the assessment of flood risk at the planning stage is set out in national, regional, and local planning policy and associated guidance. This section summarises the key policies and guidance relevant to the proposed development.

National Planning Policy Framework (NPPF)

- 2.2. The National Planning Policy Framework² (NPPF) (MHCLG, 2024) which includes UK Government policy on development and flood risk states:

170. Inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk (whether existing or future). Where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere.

176. Applications for some minor development and changes of use should also not be subject to the sequential test, nor the exception test [set out below], but should still meet the requirements for site-specific flood risk assessments set out in footnote 63.

181. When determining any planning applications, local planning authorities should ensure that flood risk is not increased elsewhere. Where appropriate, applications should be supported by a site-specific flood-risk assessment. Development should only be allowed in areas at risk of flooding where, in the light of this assessment (and the sequential and exception tests, as applicable) it can be demonstrated that:

- a) within the site, the most vulnerable development is located in areas of lowest flood risk, unless there are overriding reasons to prefer a different location;*

² <https://www.gov.uk/guidance/national-planning-policy-framework>, last updated Dec 2024

- b) the development is appropriately flood resistant and resilient such that, in the event of a flood, it could be quickly brought back into use without significant refurbishment;*
- c) it incorporates sustainable drainage systems, unless there is clear evidence that this would be inappropriate;*
- d) any residual risk can be safely managed; and*
- e) safe access and escape routes are included where appropriate, as part of an agreed emergency plan.*

2.3. Paragraph 051 of the Flood Risk and Coastal Change Planning Practice Guidance (PPG) states:

Minor development means:

- minor non-residential extensions (industrial/commercial/leisure etc): extensions with a floorspace not in excess of 250 square metres.*
- alterations: development that does not increase the size of buildings, e.g. alterations to external appearance.*
- householder development: for example, sheds, garages, games rooms etc within the curtilage of the existing dwelling, **in addition to physical extensions to the existing dwelling itself**. This definition excludes any proposed development that would create a separate dwelling within the curtilage of the existing dwelling (e.g. subdivision of houses into flats) or any other development with a purpose not incidental to the enjoyment of the dwelling.*

2.4. As such, the proposal would be considered a Minor Development under the PPG.

2.5. Footnote 63 of the NPPF states:

A site-specific flood risk assessment should be provided for all development in Flood Zones 2 and 3. In Flood Zone 1, an assessment should accompany all proposals involving: sites of 1 hectare or more; land which has been identified by the Environment Agency as having critical drainage problems; land identified in a strategic flood risk assessment as being at increased flood risk in future; or land that may be subject to other sources of flooding, where its development would introduce a more vulnerable use.

2.6. Flood Zones in England are defined as follows:

Table 1: Flood Zone Definitions

Flood Zone	Definition
Zone 1 Low Probability	Land having less than 1 in 1,000 annual probability of river or sea flooding (all land outside Zones 2 and 3).
Zone 2 Medium Probability	Land having between a 1 in 100 and 1 in 1,000 annual probability of river flooding; or land having between a 1 in 200 and 1 in 1,000 annual probability of sea flooding.
Zone 3a High Probability	Land having a 1 in 100 or greater annual probability of river flooding; or Land having a 1 in 200 or greater annual probability of sea flooding.
Zone 3b The Functional Floodplain	This zone comprises land where water from rivers or the sea has to flow or be stored in times of flood. The identification of functional floodplain should take account of local circumstances and not be defined solely on rigid probability parameters. Functional floodplain will normally comprise: land having a 3.3% or greater annual probability of flooding, with any existing flood risk management infrastructure operating effectively; or land that is designed to flood (such as a flood attenuation scheme), even if it would only flood in more extreme events (such as 0.1% annual probability of flooding). Local planning authorities should identify in their Strategic Flood Risk Assessments areas of functional floodplain and its boundaries accordingly, in agreement with the Environment Agency. (Not separately distinguished from Zone 3a on the Flood Map)

- 2.7. An FRA should be appropriate to the scale, nature, and location of the development. It should identify and assess the risk from all sources of flooding to and from the development and demonstrate how any flood risks will be managed over the lifetime of the development.
- 2.8. An assessment of hydrological impacts should be undertaken, including to surface water runoff and impacts to drainage networks in order to demonstrate how flood risk to others will be managed following development and taking climate change into account.

Local Plan

- 2.9. The Local Plan prepared by the Local Planning Authority, Mid Sussex District Council, sets out the policies for development in the local area.
- 2.10. Policy DP41 Flood Risk and Drainage outlines the requirements for new development within the area. It states:

Strategic Objectives: 1) To promote development that makes the best use of resources and increases the sustainability of communities within Mid Sussex, and its ability to adapt to climate change; and 2) To support sustainable communities which are safe, healthy and inclusive.

Evidence Base: Gatwick Sub Region Water Cycle Study; Strategic Flood Risk Assessment; Water. People. Places SuDS guidance.

Proposals for development will need to follow a sequential risk-based approach, ensure development is safe across its lifetime and not increase the risk of flooding elsewhere. The District Council's Strategic Flood Risk Assessment (SFRA) should be used to identify areas at present and future flood risk from a range of sources including fluvial (rivers and streams), surface water (pluvial), groundwater, infrastructure and reservoirs.

Particular attention will be paid to those areas of the District that have experienced flooding in the past and proposals for development should seek to reduce the risk of flooding by achieving a reduction from existing run-off rates.

Sequential and Exception Tests

- 2.11. The Sequential and Exception Tests are applied in specific cases defined by UK Government policy. Their purpose is to drive development to areas of low flood risk and to support developments which improve flood risk for developments in areas at risk of flooding.
- 2.12. Under the NPPF, all new planning applications should undergo a Sequential Test in accordance with Paragraph 172 and Footnote 63. This test should be implemented by local planning authorities with a view to location; particularly vulnerable new developments outside of the floodplain.
- 2.13. However, Paragraph 176 of the NPPF states:

*176. Applications for some **minor development** and change of use should also not be subject to the sequential test, but should still meet the requirements for site-specific flood risk assessments set out in footnote 63.*

- 2.14. As such, a site-specific Sequential and Exception Test for the proposed change of use is not considered necessary in line with the NPPF.

Summary

- 2.15. This flood risk assessment has been prepared with due consideration to the above local and national policy.

3. Document Reviews

Documents and Online Mapping

- 3.1. Local Governments and Lead Local Flood Authorities provide documents which contain data and policies on flood risk and new development in their areas. These documents are introduced and briefly summarised below. For the purposes of this FRA, these documents have been reviewed for relevant information and any relevant data is discussed within the appropriate sub heading of this report.
- 3.2. The following sources of information have been reviewed for this assessment:
- Flood Map for Planning on the Environment Agency website <https://flood-map-for-planning.service.gov.uk/>
 - Long Term Flood Risk Information on the Environment Agency website <https://www.gov.uk/check-long-term-flood-risk>
 - National Planning Policy Framework (NPPF) (Ministry of Housing, Communities and Local Government, 2024)
 - Planning Practice Guidance - Flood Risk and Coastal Change (Ministry of Housing, Communities and Local Government, 2022)
 - Geoindex Onshore (British Geological Survey, 2024)
 - Mid Sussex District Plan 2014-2031³ (Mid Sussex District Council, 2018)
 - West Sussex Preliminary Flood Risk Assessment⁴ (West Sussex County Council, 2011) and Preliminary Flood Risk Assessment Addendum⁵ (West Sussex County Council, 2017)

³ <https://www.midsussex.gov.uk/media/3406/mid-sussex-district-plan.pdf>

⁴ https://www.westsussex.gov.uk/media/1626/west_sussex_pfra.pdf

⁵ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/698548/PFRA_West_Sussex_County_Council_2017.pdf

- Level 1 Strategic Flood Risk Assessment (Mid Sussex District Council, 2024)⁶ and Level 1 Strategic Flood Risk Assessment⁷ (Mid Sussex District Council, 2015)
- West Sussex Local Flood Risk Management Strategy (2013-2018)⁸ (West Sussex County Council, 2014)

Preliminary Flood Risk Assessment (PFRA)

- 3.3. The PFRA, published in 2011 and 2017, is a high-level appraisal of flood risk across Lead Local Flood Authority West Sussex County Council. The flood risk from all sources, including fluvial, surface water, groundwater, and surcharged sewers is evaluated. It is the basis upon which the Local Flood Risk Management Strategy is produced.
- 3.4. The PFRA summarises historical flood incidents in West Sussex County Council. The site is not recorded as having been affected by any flood event.

Strategic Flood Risk Assessment (SFRA)

- 3.5. The SFRA, published in 2015 and 2024, provides the evidence base for the Local Planning Authority Mid Sussex District Council Local Plan and guidance for consideration when determining planning applications. The SFRA seeks to place new development into areas of lower flood risk taking into account current flood risk, future flood risk, and the effect a proposed development would have on the risk of flooding.
- 3.6. The SFRA mapping provided by Mid Sussex District Council has been used throughout production of this report as a source of information, particularly pertaining to historical flood incidents.

Local Flood Risk Management Strategy (LFRMS)

- 3.7. The Local Flood Risk Management Strategy sets out roles and responsibilities for flood risk management, assesses the risk of flooding in the area, where funding can be found to manage flood risk, and the policies, objectives, and actions of the Lead Local Flood Authority.

⁶ <https://www.midsussex.gov.uk/media/sl2jkh0z/env11-strategic-flood-risk-assessment-level-1-2024.pdf>

⁷ <https://www.midsussex.gov.uk/media/2609/strategic-flood-risk-assessment.pdf>

⁸ https://www.westsussex.gov.uk/media/1595/local_flood_risk_management_strategy.pdf

- 3.8. The West Sussex County Council LFRMS is used within this report to identify any flood management infrastructure and historical incidences of flooding.

4. Sources of Flood Risk

Fluvial

- 4.1. Flooding from watercourses arises when flows exceed the capacity of the channel, or where a restrictive structure is encountered, resulting in water overtopping the banks into the floodplain.

Main Rivers and Ordinary Watercourses

- 4.2. The nearest watercourse is an unnamed ordinary watercourse which is situated c. 180m west of the site. Another unnamed ordinary watercourse is also c. 310m north of the site.
- 4.3. The nearest EA Main River is situated c. greater than 1.0km northwest of the site.
- 4.4. There are no other mapped watercourse according to OS mapping.

EA Flood Map for Planning

- 4.5. Figure 3 shows the site is situated within Flood Zone 1 (all land outside Flood Zones 2 and 3). Flood Zone 1 denotes land having less than 1 in 1,000 annual probability of river or sea flooding.

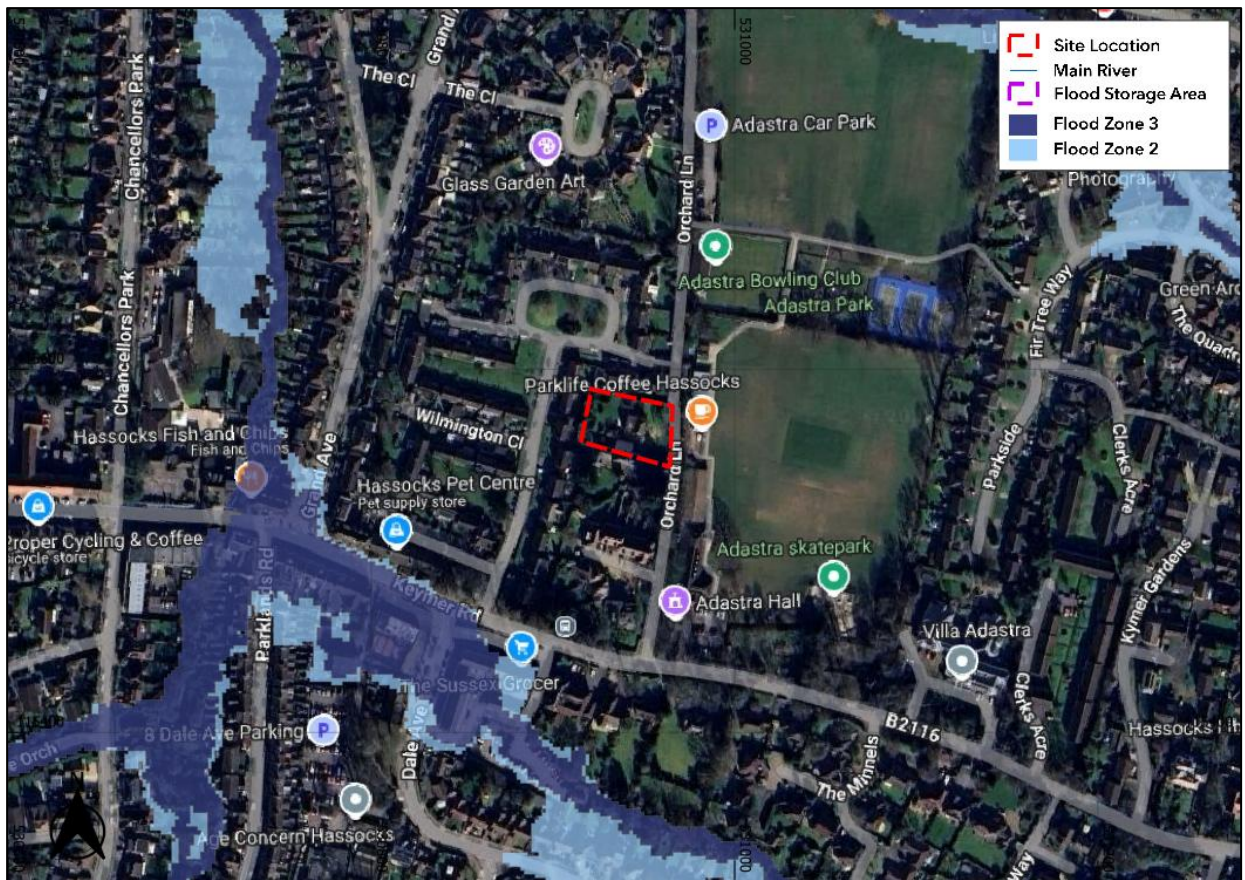


Figure 3: EA Flood Map for Planning (Base map and data from Google Satellite Imagery ©. Contains public sector information licensed under the Open Government Licence v3.0)

Historical Fluvial Flooding

- 4.6. Review of the EA Historical Flood Outline dataset, fluvial flooding has not occurred on or in the vicinity of the site previously (Figure 4).

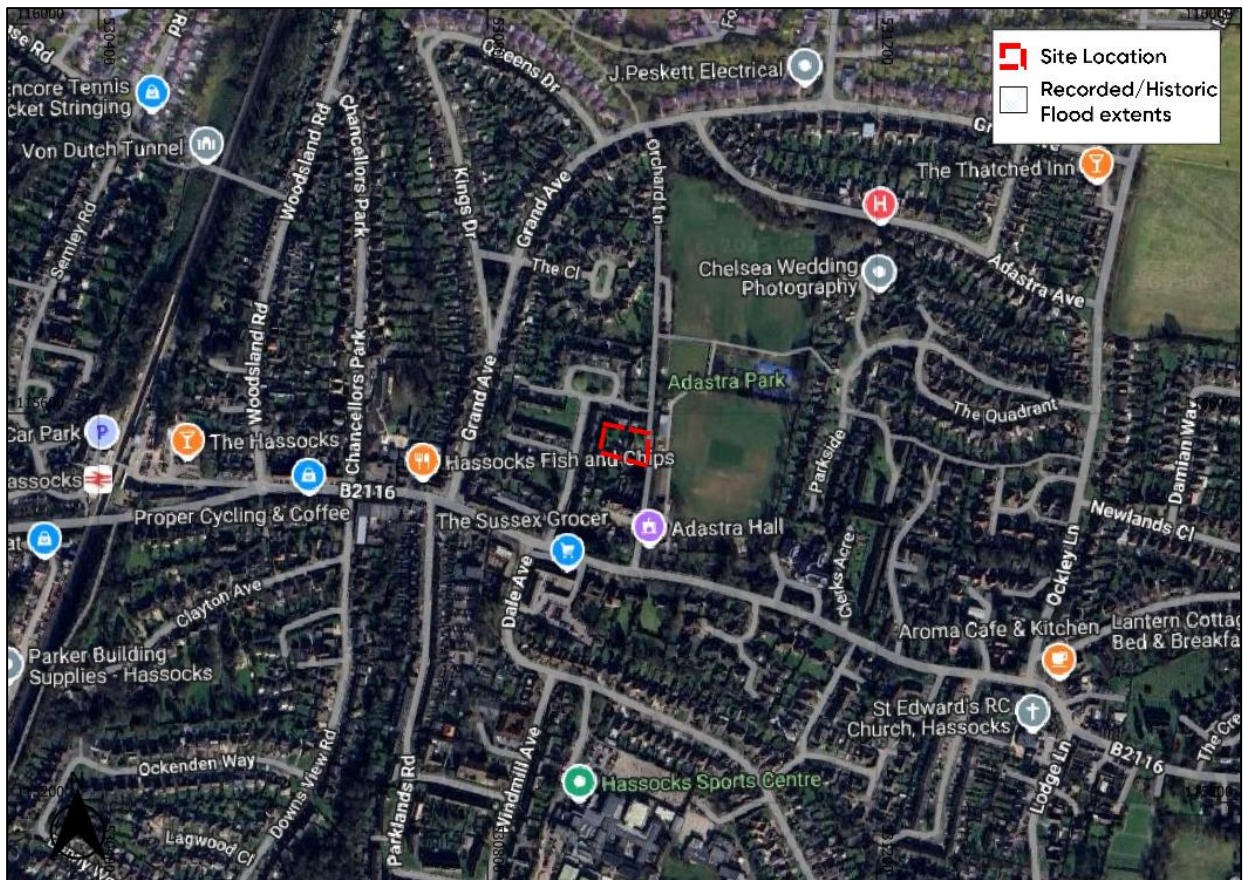


Figure 4: EA Historic Flood Mapping (Base map and data from Google Satellite Imagery ©. Contains public sector information licensed under the Open Government Licence v3.0)

Fluvial Flood Risk Summary

- 4.7. Based on the analysis above, the fluvial flood risk to the site and proposed development is considered low.

Tidal

- 4.8. Tidal flooding occurs when a high tide and high winds combine to elevate sea levels. An area behind coastal flood defences can still flood if waves overtop the defences or break through them. Tidal flooding can also occur a long way from the coast by raising river levels. Water may overtop the river bank or river defences when tide levels are high.
- 4.9. The site is a significant distance from any tidal source and above the anticipated extreme tidal levels, even when considering the impacts of climate change.
- 4.10. Therefore, the risk of flooding from tidal sources is considered low.

Canals

- 4.11. The Canal and River Trust (CRT) generally maintains canal levels using reservoirs, feeders, and boreholes and manages water levels by transferring it within the canal system.
- 4.12. No CRT maintained canals were identified within 1km of the site according to the UK CRT Network mapping⁹
- 4.13. The risk of flooding to this site from canals is considered to be low.

Pluvial

- 4.14. Pluvial flooding can occur during prolonged or intense storm events when the infiltration potential of soils, or the capacity of drainage infrastructure is overwhelmed leading to the accumulation of surface water and the generation of overland flow routes.

RoFSW Data Analysis

- 4.15. The new National Flood Risk Assessment (NaFRA2), published in Jan 2025, has updated the Risk of Flooding from Surface Water (RoFSW) products which show the chance of flooding from surface water to areas of land.
- 4.16. The RoFSW products are an assessment of where surface water flooding may occur when rainwater does not drain away through the normal drainage systems or soak into the ground but lies on or flows over the ground instead. It includes information about flooding extents and depths including the potential impact of climate change on flood risk, based on the latest UK Climate Projections (UKCP18).
- 4.17. Risk is displayed as one of three likelihood categories:
 - 'High Risk'; >3.3% AEP (annual probability greater than 1 in 30).
 - 'Medium Risk'; 1.1% to 3.3% AEP (annual probability between 1 in 100 and 1 in 30).
 - 'Low Risk'; 0.1% to 1% AEP (annual probability between 1 in 1000 and 1 in 100).

⁹ <https://canalrivertrust.org.uk/canals-and-rivers>

- 4.18. The new RoFSW depth mapping shows the annual chance of flooding (based on the three risk categories listed above) beyond a specific depth, for depths at the following intervals from 20cm to 120cm (i.e. 0.2m, 0.3m, 0.6m, 0.9m, and 1.20m).
- 4.19. As well as present day risk of flooding from surface water, climate change scenarios have been produced to indicate the predicted impacts of climate change on future flood risk. The climate change allowances are based on the latest UK Climate Projections (UKCP18) from the Met Office, using the Representative Concentration Pathway (RCP) 8.5. A near-term epoch (2040 – 2060 “2050s” epoch) and central allowances are being used initially, to support short and medium-term decisions informed by the highest flood likelihood projections.

RoFSW Present Day Scenario

- 4.20. The EA Online ‘Flood Risk from Surface Water’ map (published in January 2025) indicates that some areas to the west and south of the site is at ‘low’ and ‘medium’ risks of experiencing surface water flooding (Figure 5). However, the majority of the site is not at risk of surface water flooding.
- 4.21. It is noted that the extension to the north is not at risk of flooding; however, the proposed link is partially within the ‘low’ risk extent.

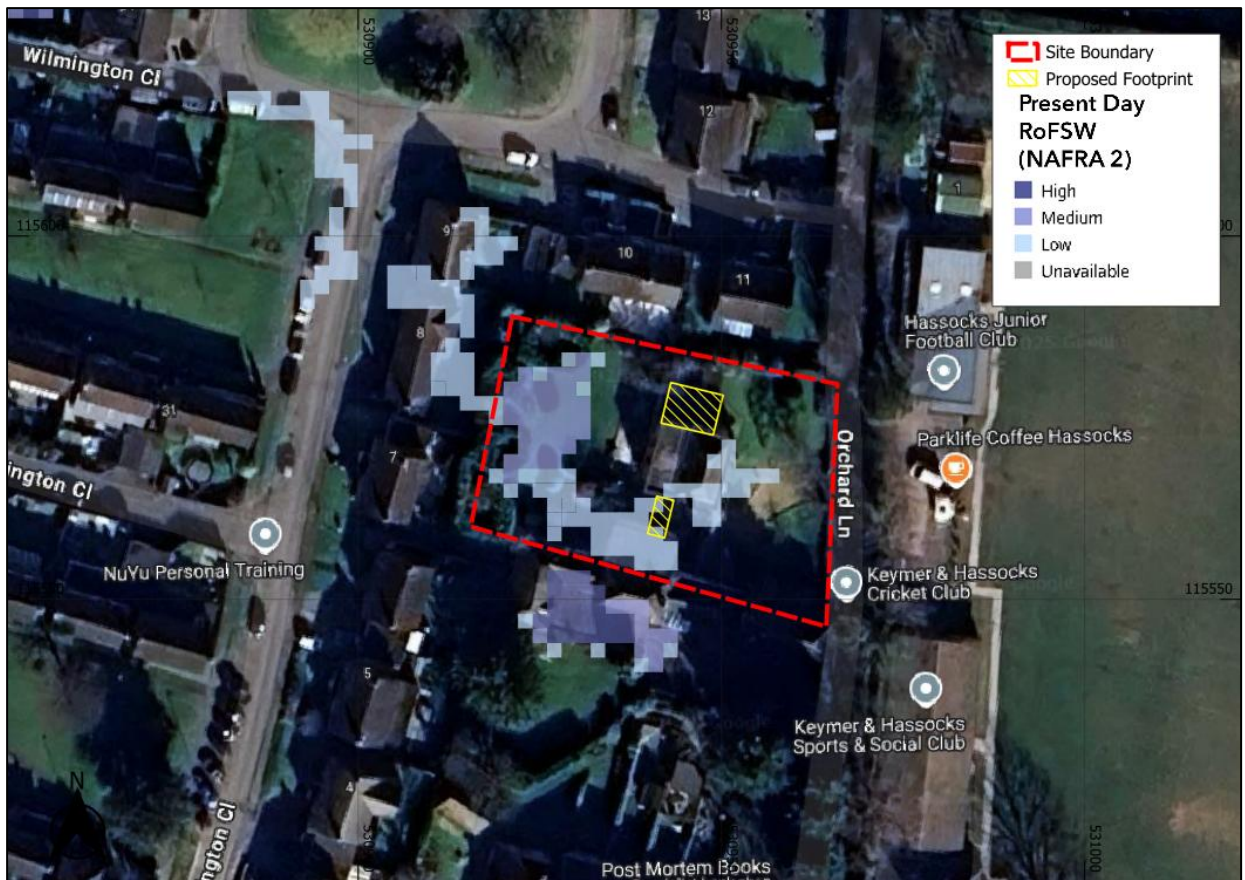


Figure 5: EA Present Day Surface Water Flood Risk Mapping (Base map and data from Google Satellite Imagery©. Contains public sector information licensed under the Open Government Licence v3.0)

- 4.22. Analysis of 0.2m depth interval shows that the site is not at risk of flood depths exceeding 0.2m (Figure 6).

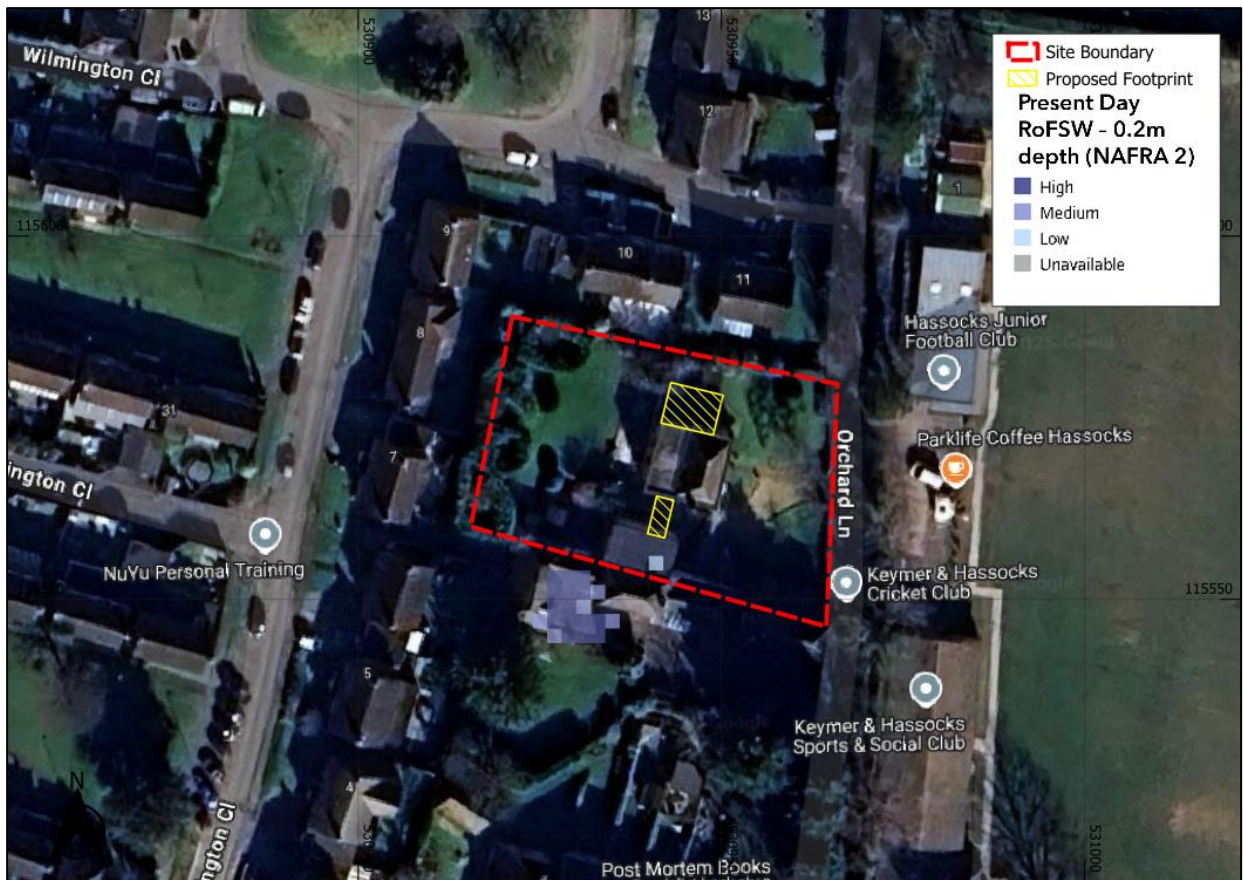


Figure 6: RoFSW Present Day Likelihood of Flood Depths Exceeding 0.2m (Base map and data from Google Satellite Imagery ©. Contains public sector information licensed under the Open Government Licence v3.0)

- 4.23. Review of the other surface water flood depth intervals during the present day scenario shows that the site is not at risk of flood depths exceeding 0.2m.

RoFSW Climate Change Scenario

- 4.24. The EA Online 'Flood Risk from Surface Water – Climate Change' map (published in January 2025) indicates that areas to the west and south of the site are located within 'low' to 'high' risk categories of experiencing surface water flooding (Figure 7).
- 4.25. The proposed extension to the north is not at risk of flooding whilst the proposed link is at 'low' risk.

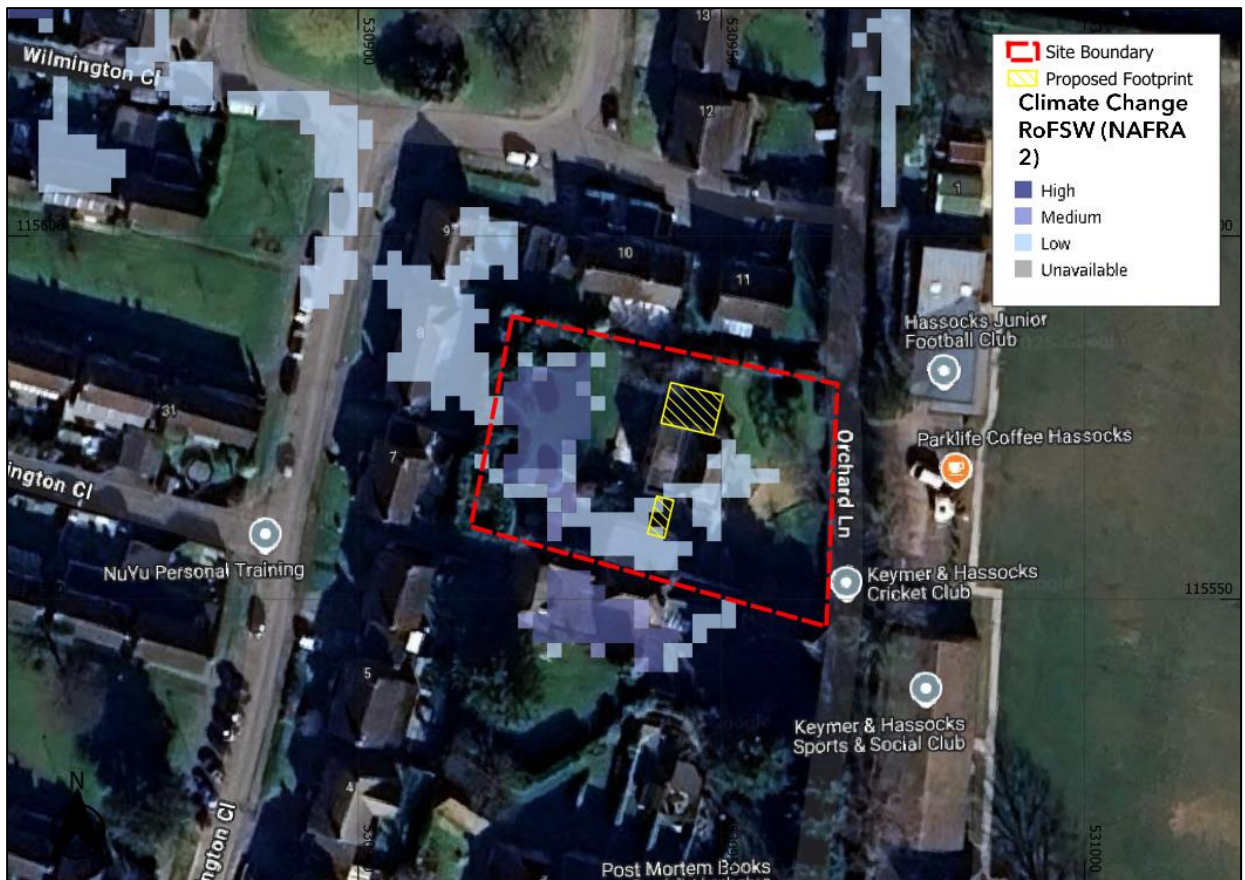


Figure 7: EA Climate Change Surface Water Flood Risk Mapping (Base map and data from Google Satellite Imagery ©. Contains public sector information licensed under the Open Government Licence v3.0)

- 4.26. Analysis of 0.2m depth interval shows that the site is not at risk of flood depths exceeding 0.2m inclusive of climate change (Figure 8).



Figure 8: RoFSW Climate Change Likelihood of Flood Depths Exceeding 0.2m (Base map and data from Google Satellite Imagery ©. Contains public sector information licensed under the Open Government Licence v3.0)

- 4.27. Review of the other surface water flood depth intervals during the climate change scenario shows that the site is not at risk of flood depths exceeding 0.2m.

Pluvial Flood Risk Summary

- 4.28. Given the proposed extension and link are not at risk or at 'low' risk of surface water flood depths exceeding 0.2m, the pluvial flood risk to the development is considered low.

Reservoirs

- 4.29. Large waterbodies or reservoirs that have walls built above the surrounding ground level pose a risk of flooding. Walls could fail due to old age, accident, or because excess flood water has been added to the reservoir. Although a breach is unlikely the consequences would be significant, leading to rapid inundation of the downstream floodplain.

- 4.30. According to the EA's Flood Risk from Reservoirs mapping the site is outside modelled flood extents in the event of reservoir flooding (Figure 9).

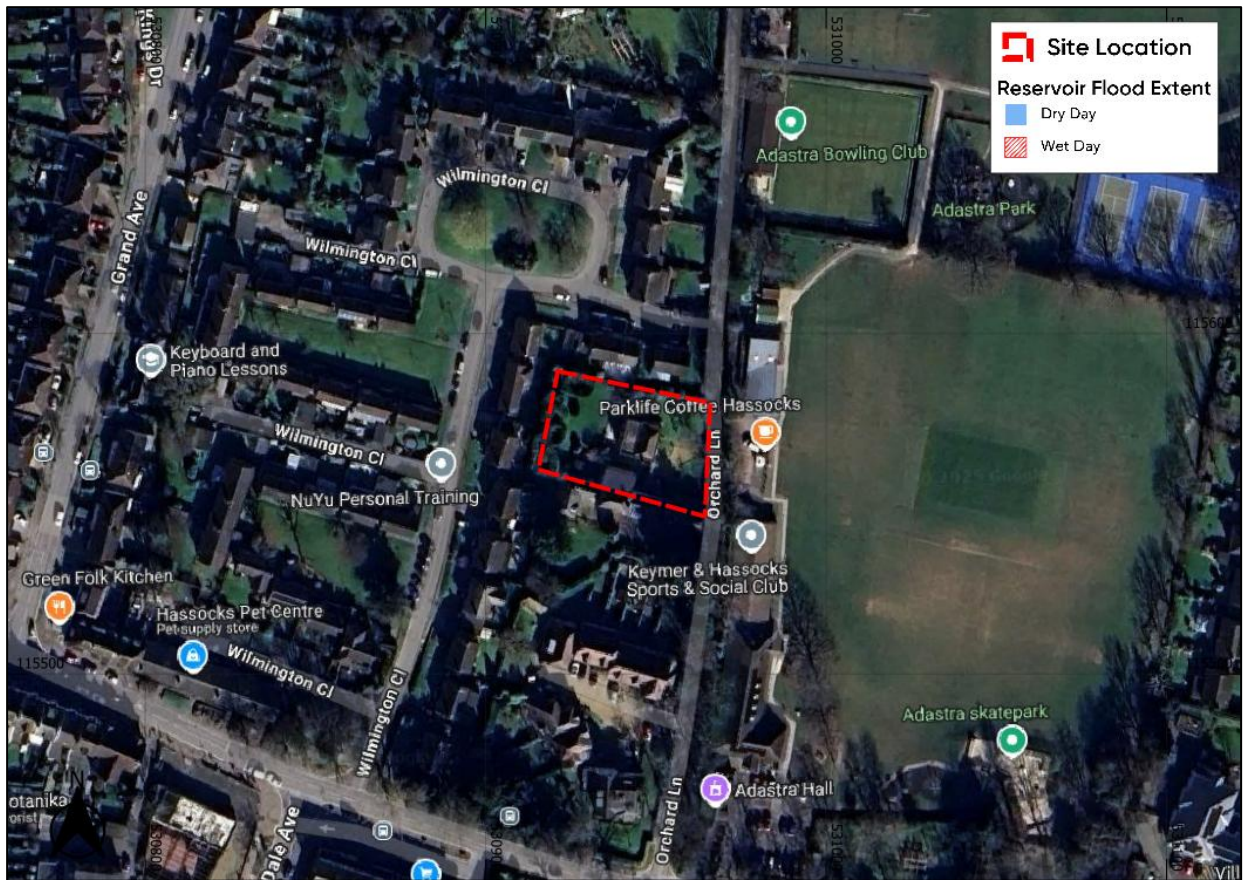


Figure 9: EA Reservoir Flood Risk Mapping (Base map and data from Google Satellite Imagery ©. Contains public sector information licensed under the Open Government Licence v3.0)

- 4.31. Therefore, the site and proposed development is considered low risk from this flood source.

Groundwater

- 4.32. Groundwater flooding occurs in areas where underlying geology is permeable and water can rise within the strata sufficiently to breach the surface.
- 4.33. The British Geological Survey's (BGS) mapping shows no superficial deposits underlying the site. The bedrock geology is mapped as Folkestone Formation and Lower Greensand Group both comprised of sandstone.
- 4.34. No identified BGS boreholes were identified within a 300m radius of the site.
- 4.35. The Mid Sussex District Council SFRA (2015) details the following on groundwater flooding.

- *Area affected by groundwater flooding: 0.164km², 0.049% of Total Area.*
- *The majority of the district is considered to have medium potential for groundwater flooding.*
- *The West Sussex Strategic Flood Risk Assessment (2010), produced by Capita Symonds on behalf of West Sussex County Council, identified a single groundwater flooding event at Cuckfield.*

4.36. Furthermore, the updated SFRA (2024) states:

It is evident that majority of Mid Sussex is considered to have a low potential for groundwater flooding as a result of the underlying geology.

4.37. Considering the information above from the 2015 and 2024 SFRAs, coupled with the fact that the development proposals do not include any proposed basements, the risk from groundwater flooding to the development is considered to be low.

Sewers

4.38. Foul or surface water sewers can be a cause of flooding if the drainage network becomes overwhelmed, either by blockage or due to local development beyond the designed capabilities of the drainage system.

4.39. It is noted that limited information was provided in the 2024 SFRA and therefore information from the predated 2015 SFRA has been used.

4.40. The SFRA (2015) includes mapping of internal and external sewer incidents provided by Southern Water DG5 database. The site is not located within areas identified as being impacted by historical internal or external sewer incidents (Figure 10).

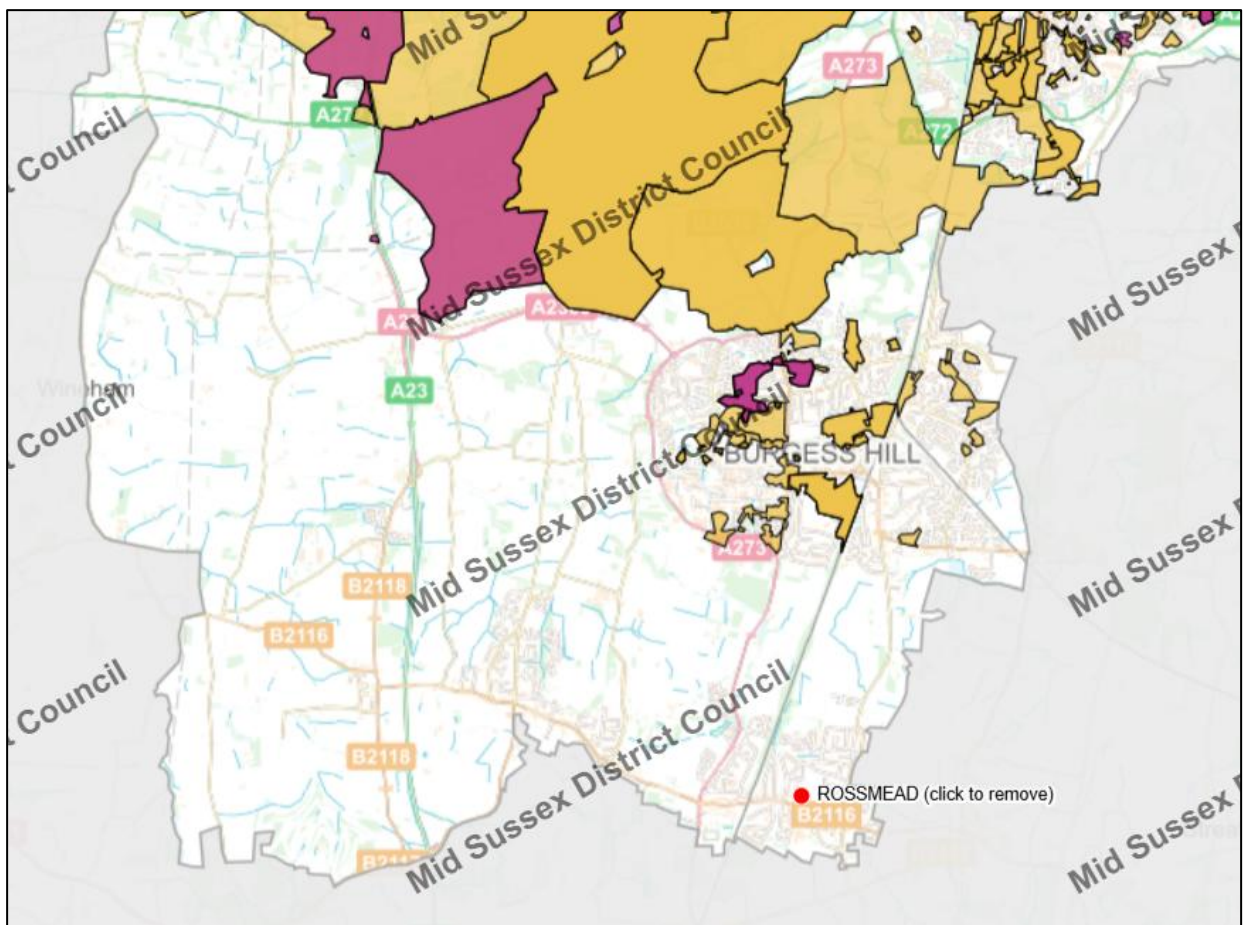


Figure 10: Southern Water Internal and External Flooding Incidents (Mid Sussex District Council SFRA, 2015). Site represented by red circle labelled 'ROSSMEAD (click to remove)'

4.41. Therefore, the site is considered to be at a low risk from sewer flooding.

5. Flood Risk Mitigation

Sources of Flooding

- 5.1. Based on the data reviewed above and analysis in Section 4 of this report, flood risk to the proposed development from fluvial, tidal, canal, pluvial, reservoir, groundwater and sewer flood sources are considered to be low.
- 5.2. Given the northern extension is outside all modelled fluvial and pluvial flood scenarios, no mitigation is required to be incorporated into the development.
- 5.3. The link development is at a 'low' risk of experiencing surface water flooding during the present day and climate change scenarios. Therefore, as a precautionary approach, mitigation is recommended. However, due to this corridor development being constructed from glass, it is considered limited with the mitigation measures that can be recommended.
- 5.4. It is recommended that the link is developed with no soft furnishings and should be constructed with tiled flooring. Also, a demountable flood barrier on the internal door between the proposed link corridor and the main residential dwelling is proposed as a precautionary approach.
- 5.5. Small scale SuDS such as rainwater planters and water butts should be incorporated into the rear garden of the residential dwelling to provide betterment over the existing scenario.

The Met Office Weather Warnings

- 5.6. Residents of the residential dwelling should also monitor Met Office Weather Warnings as a precautionary approach, to be prepared for extreme weather events.
- 5.7. The Met Office issues weather warnings up to 5 days in advance, through the National Severe Weather Warning Service, when severe weather has the potential to bring impacts to the UK. It is also possible to stay up to date with weather warnings through the Met Office app (available on Apple and Android devices), social media e.g. X (formerly Twitter) and Facebook or email alerts.
- 5.8. Flood warnings/alerts can be enforced at any time of the day or night. Signing up for this service provides residents some notice before a flood event. The amount of time afforded before a flood occurs depends on the site-specific location (e.g. proximity to the source of flooding,

topography of the surrounding area) and the flood mechanism (e.g. bank over topping versus a breach event). Flood alerts and warnings provide residents with time to take necessary action, e.g. communication of the risk of flooding to others, evacuation of residents offsite or to a safe level and the removal of valuable items out of reach of flooding.

Increase to Flood Risk Elsewhere

- 5.9. The proposal constitutes a Minor Development under the NPPF and Paragraph 051 of the Flood Risk and Coastal Change Planning Practice Guidance (PPG) states:

Minor developments are unlikely to raise significant flood issues unless:

- they would have an adverse effect on a watercourse, floodplain or its flood defences;*
- they would impede access to flood defence and management facilities, or;*
- where the cumulative impact of such developments would have a significant effect on local flood storage capacity or flood flows.*

- 5.10. As such, and given that the proposed extension and link are in Flood Zone 1 and not at risk of surface water flood depths exceeding 0.2m, the proposed development in isolation should have a negligible impact on flood risk elsewhere.

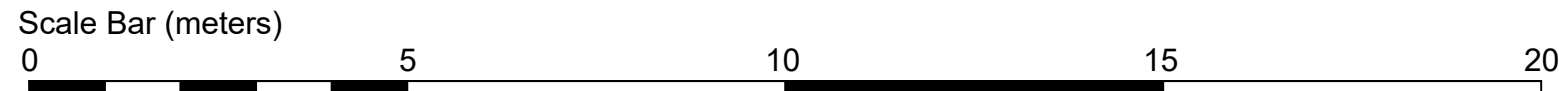
6. Conclusions

- 6.1. This FRA has been undertaken with reference to the requirements of NPPF and Planning Practice Guidance with respect to the development at Rossmead, Orchard Lane, Mid Sussex, West Sussex, BN6 8QF. It has been written to support a planning application and prepared with due consideration to the nature of the proposed development to provide the appropriate level of detail.
- 6.2. An assessment of the risk of flooding from all sources has been undertaken and is summarised in the table below:

Source of Flooding	Flood Risk Summary
Fluvial Pluvial Tidal Reservoirs Groundwater Sewers Canals	The site and proposed development are considered to be at low risk from other analysed sources of flooding.

- 6.3. The FRA supports the planning application and demonstrates that there is an acceptable level of flood risk to the site if the mitigation strategies recommended are implemented in the scheme. The development does not increase flood risk off site or to the wider area.
- 6.4. This Flood Risk Assessment should be submitted as part of the planning application to satisfy the requirements under NPPF.

Appendix A - Development Proposals



LAYER INFORMATION	
0	EMPTY
1	Drainage bank armour
2	Subgrade of bank
3	Bank reinforcement
4	Bank reinforcement
5	Edge of concrete
6	Edge of Road
7	Edge of concrete
8	Face of Road
9	Face of concrete
10	Face of concrete
11	Face of concrete
12	Face of concrete
13	Face of concrete
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166	Face of concrete

Building Lines	100.40
Rooflines	100.40
Top & Back of Kerb	100.40
Edge of Surface / Footpath	100.40
Edge of Road	100.40
Edge of Concrete	100.40
Top of bank	100.40
Bottom of bank	100.40
Fence / Handrail	
Overhead Cables	

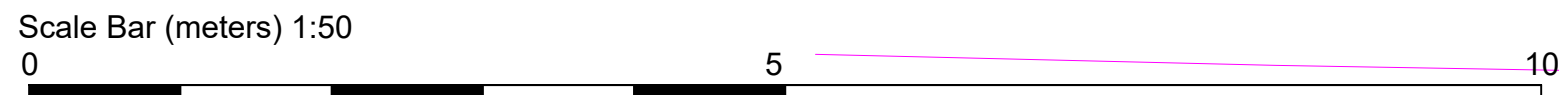
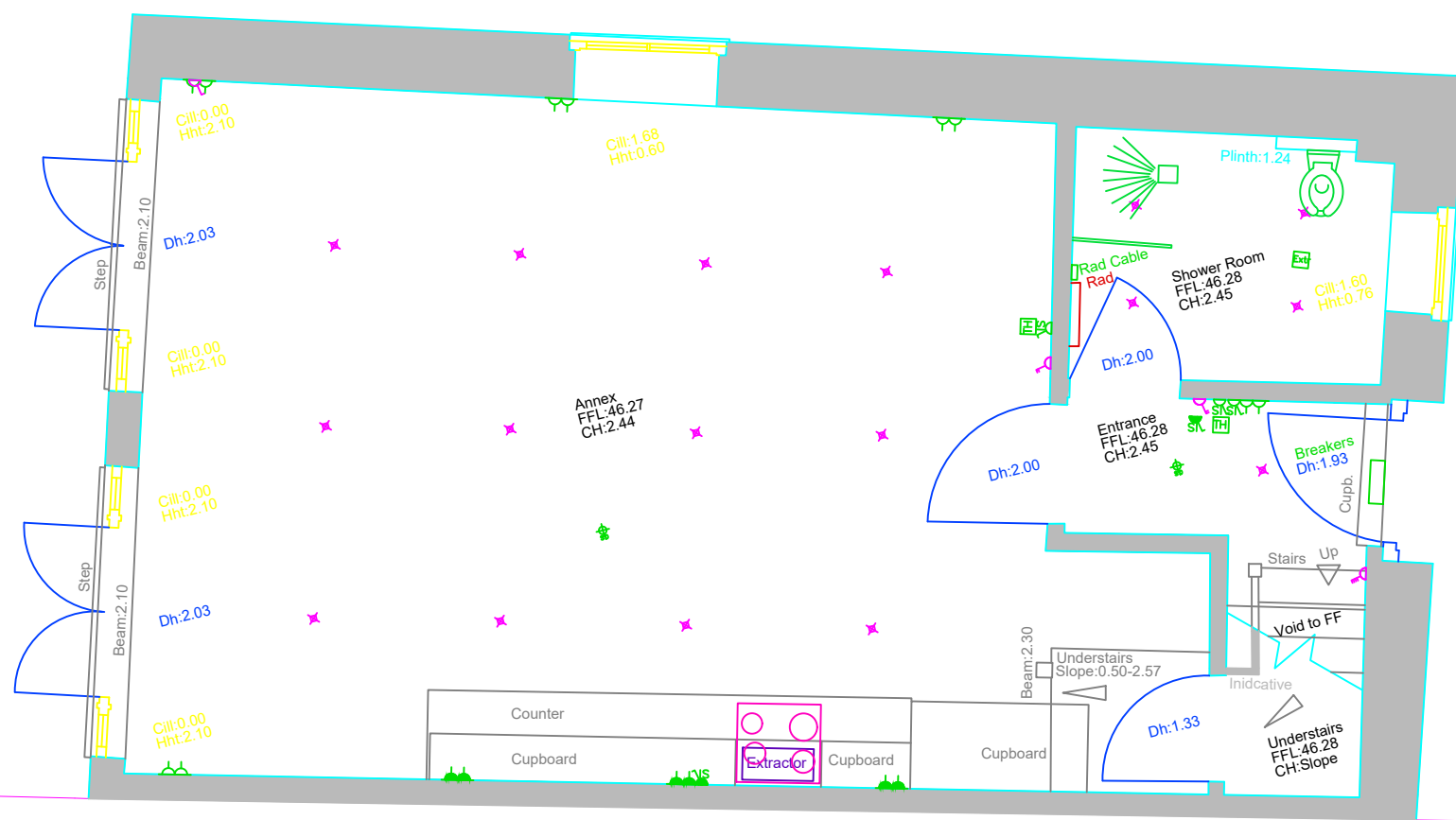
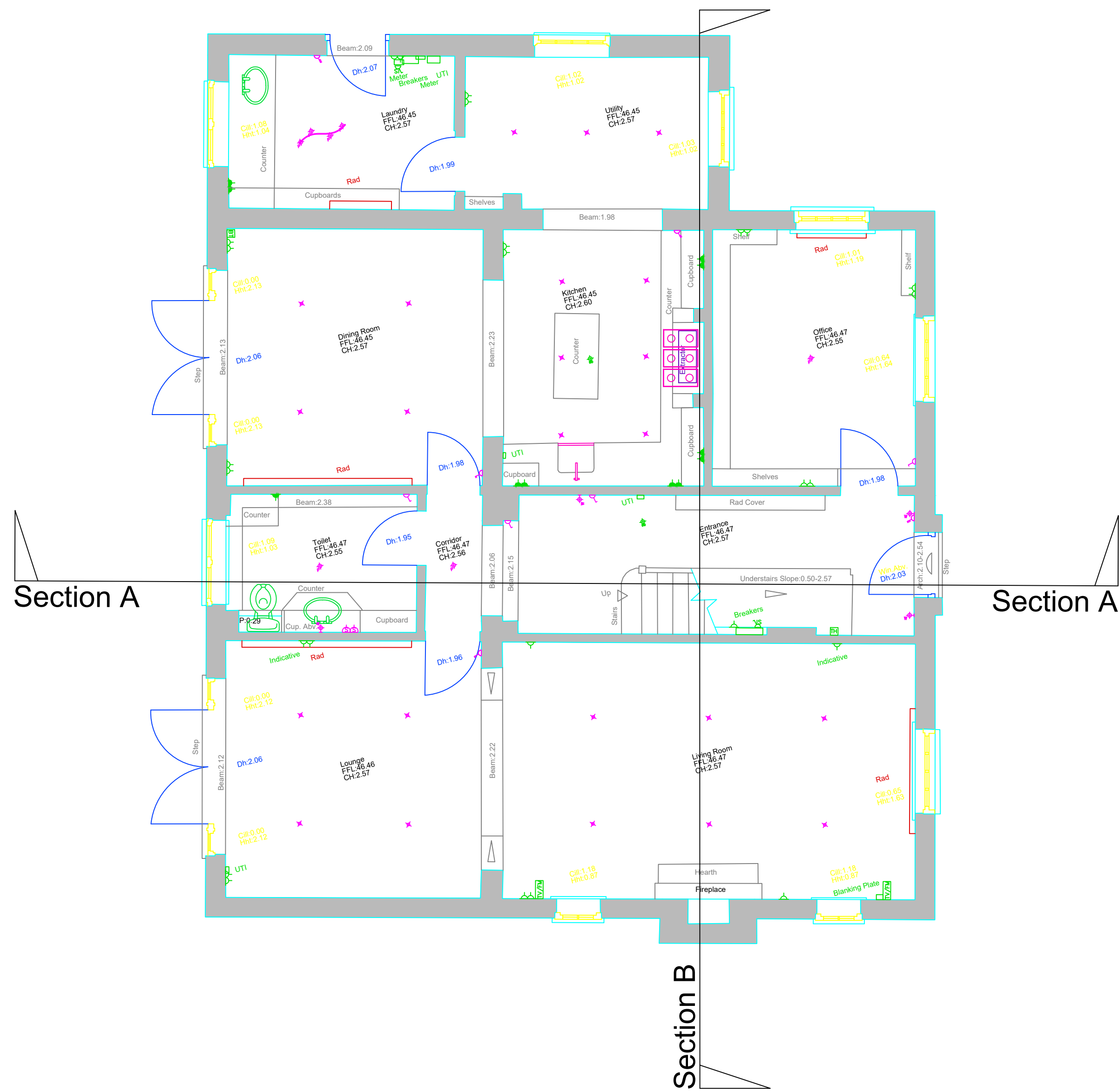
The diagram shows a road layout with several features labeled on the left and right sides. On the left, the labels are: 'Road Markings', 'Hedge Line', 'Walls', 'Steps', 'Plant', and 'Gates'. On the right, the labels are: 'Hedge', 'tw 100.40', 'pier ht 100.40', '100.20', '100.20', '100.00', 'Plant', and 'Gate'. The diagram includes a green wavy line for the hedge, a pink line for the road, a blue line for the wall, a yellow line for the steps, a green square for the plant, and a red line for the gate.

Client			
Pfeiffer Design			
Drawing Title			
Topographical Survey			
Scale	Date	Drawn	
1:100 @ A1	1/01/25	DH/CH/MB/TP	
	Surveyed by	Checked	
	AR	SE	

Job Title
Rossmead, Orchard Lane,
Hassocks, BN6 8QF

Job No.	Drawing No.	Rev.
002 01 25	001	

LIGHTING KEY	
	Recessed LED downlight
	Recessed adjustable LED downlight
	Wall light fitting mains
	Wall light on PIR sensor
	External wall mounted light
	5 Amp Single Socket Outlet
	Table lamp
	Floor lamp
	Pendant light fitting mains
	Recessed LED floor illuminating light
	Mini LED spotlights
	LED strip lighting
	Recessed LED downlight - IP rated
	Recessed adjustable LED downlight - IP rated
	Pendant light fitting mains - IP rated
	Wall light fitting mains - IP rated
	Single switch
	2 circuit switch
	3 circuit switch
	4 circuit switch
	PIR sensor switch
	Centre line for setting-out
SERVICES KEY	
	Double socket outlet - low level
	Double socket outlet - high level
	Double socket outlet - floor
	Double socket outlet with USB charging - low level
	Double socket outlet with USB charging - high level
	Double socket outlet - low level
	Double socket outlet - high level
	Double socket outlet - floor
	Shaver socket
	Extractor fan
	Mirror Demister
	Isolator switch - low level
	Isolator switch - high level
	Television and FM aerial outlet
	Cat 5/6 Ethernet cable
	Cable box location
	Router Wi-Fi box location
	Wi-Fi Booster
	SONOS audio system
	Speaker locations
	Entry phone
	Telephone Point
	Thermostat
	Smoke detector
	Heat detector
	Underfloor heating perimeter



NOTES Survey Based On Local Grid Every effort has been made to survey the area as indicated. Where detail is inaccessible or obscured from view it has been deemed unable to survey.	LAYER INFORMATION g Roofing Doors Roofline Cutty Handrail Address Head Roofline Roofline Roofline Services Spot Level
---	--

Recessed LED downlight

Recessed adjustable LED downlight

Wall light fitting mains

Wall light on PIR sensor

External wall mounted light

5 Amp Single Socket Outlet

Table lamp

Floor lamp

Pendant light fitting mains

Recessed LED floor illuminating light

Mini LED spotlights

LED strip lighting

Recessed LED downlight- IP rated

Recessed adjustable LED downlight- IP rated

Pendant light fitting mains - IP rated

Wall light fitting mains - IP rated

Single switch

2 circuit switch

3 circuit switch

4 circuit switch

PIR sensor switch

Centre line for setting-out

Double socket outlet - low

Double socket outlet - high

Double socket outlet - floor

Double socket with USB charging - low

Double socket with USB charging - high

Single socket outlet - low

Single socket outlet - high

Single socket outlet - floor

Shaver socket

Extractor fan

Mirror Demister

Isolator switch - low level

Isolator switch - high level

Television and FM aerial outlet

Cat 5/6 Ethernet cable

Cable box location

Router Wi-Fi box location

WiFi Booster

SONOS audio system

Speaker locations

Entry phone

Telephone Point

Thermostat

Smoke detector

Heat detector

Underfloor heating perimeter

NOTES

Survey Based On Local Grid

Every effort has been made to survey the area as indicated. Where detail is inaccessible or obscured from view it has been deemed unable to survey.

LAYER INFORMATION

Room

Beams

Rooflines

Furniture

Gully

Handrail

Kitchen

Metal

Plant

Roofline

Sanitary

Services

Sign Post

Spot Levels

Stair

Wall Hatchings

Windows

EMPTY

Overhead beams, joists, roof elements ect.

External lighting columns

Doors and windows

External boundary lines

Plant furnishings

Drainage and waste water gullies

Cladding on roof walls

Plant hardware

Kitchen appliances and fixtures

Most structures

Significant ventilation and plant installation

Ridges, slopes, tops and valley lines

Planted garden features

Significant utility supplies

Significant signage

Roof and line

Ground point elevations

Stairs, doors or changes in floor levels

Notes

Wall used in plan view

Wall section line

Glazed windows in wall section

Line types and Symbols

Building Lines

Rooflines

Wall Lines

Wall Hatchings

Furniture

Kitchen Fixtures

Plant

Gully

Fence

Steps

Metal

Spotlevel

Windows

Doors

Radiator

Sanitary

Soffit

Beams

Skylights

Ceiling Slope

Plinths / Platforms

Stairs

Control Stations

Indicative Wall Thickness

Orientation

Rev.

Date

Description

Client

Pfeiffer Design

Drawing Title

First Floor Plan

Scale

1:50 @ A1

Date

1/01/25

Drawn

DH/CH/MB/TP

Surveyed by

AR

Checked

SE

Job No.

002 01 25

Drawing No.

003

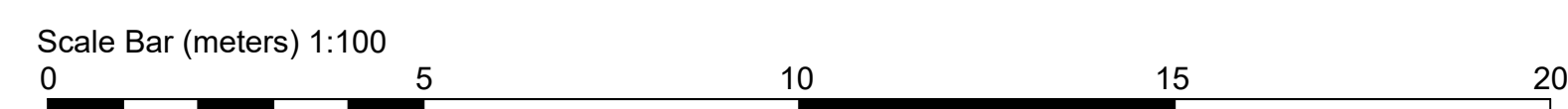
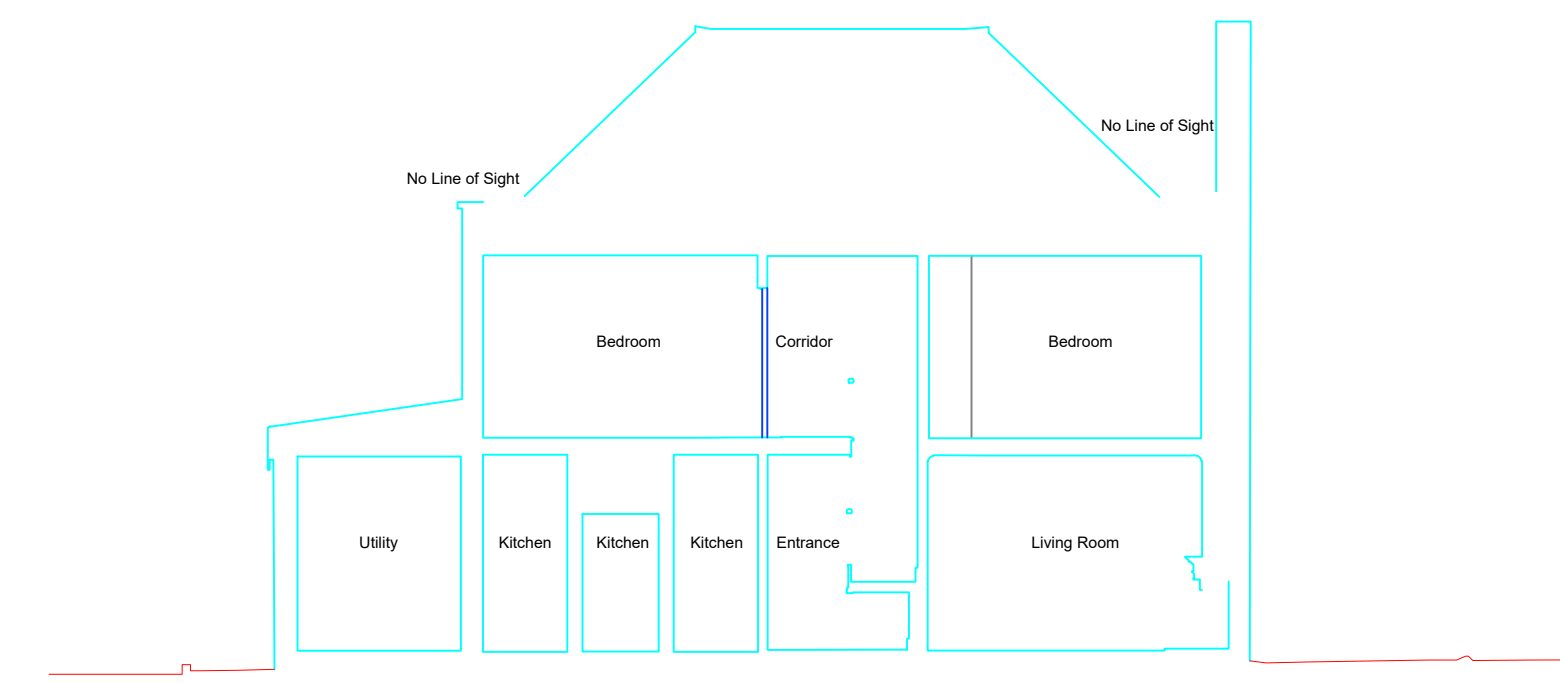
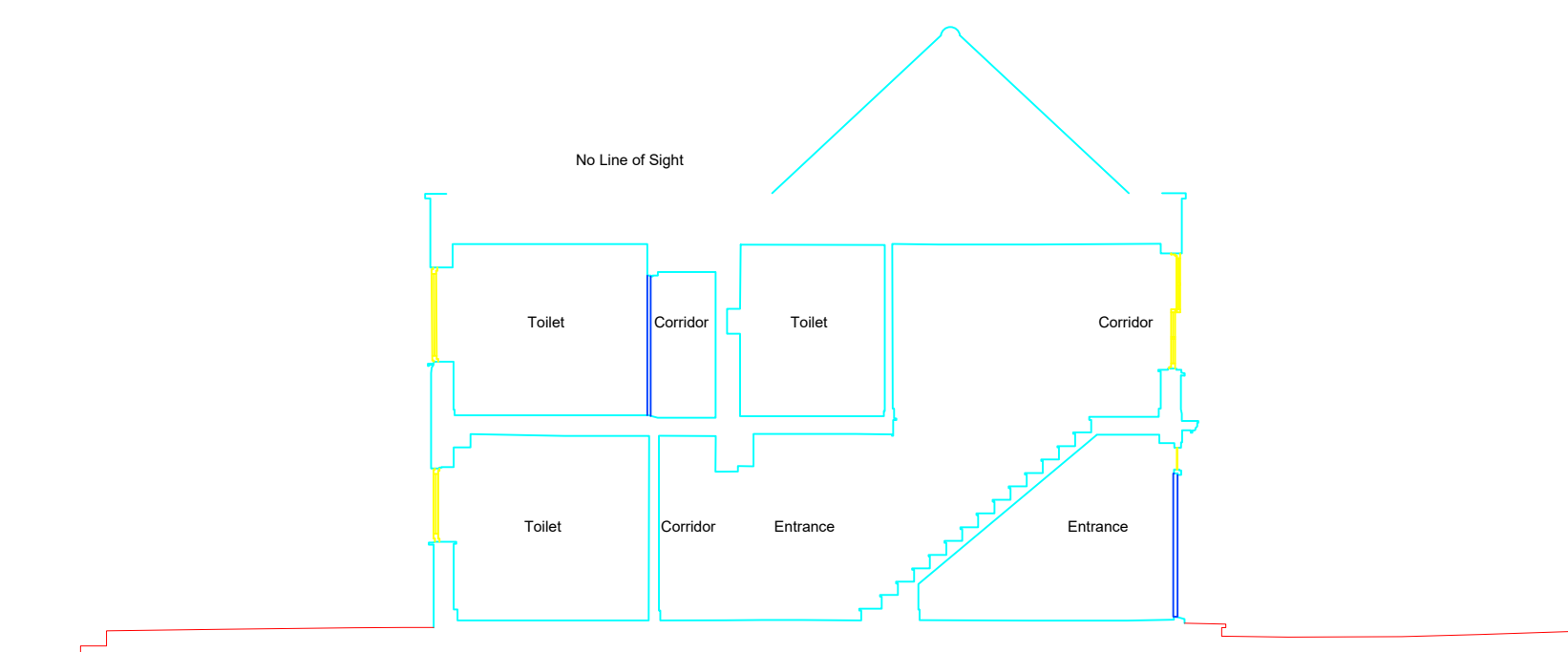
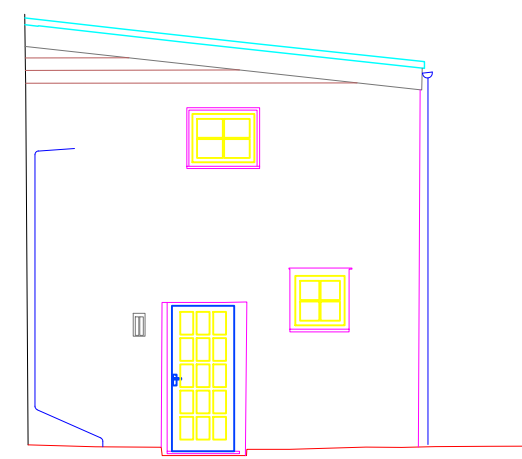
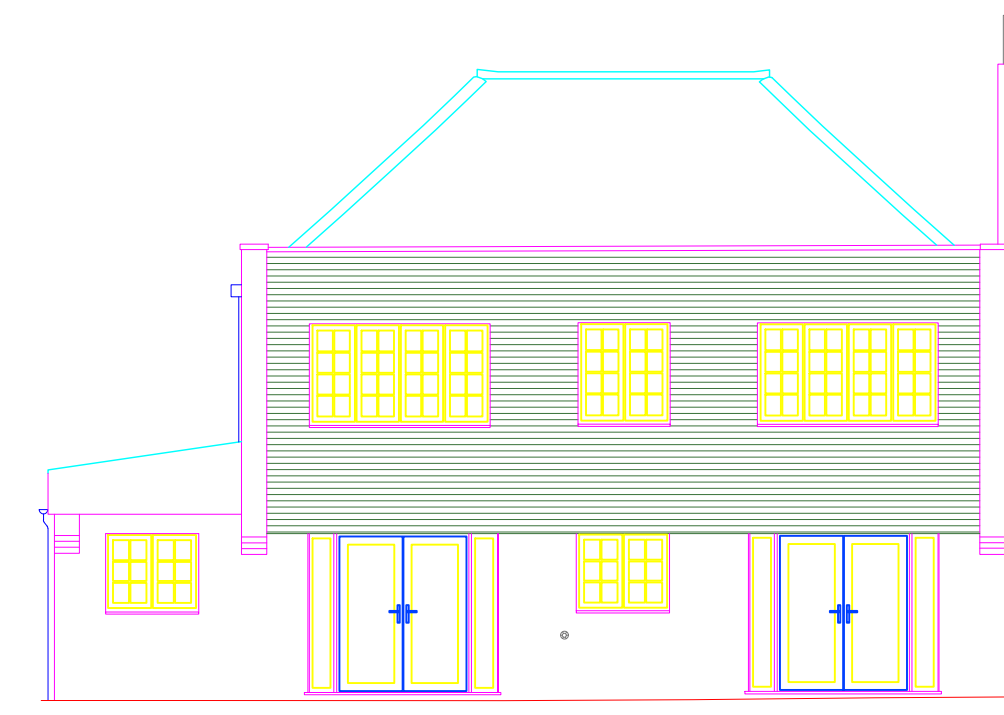
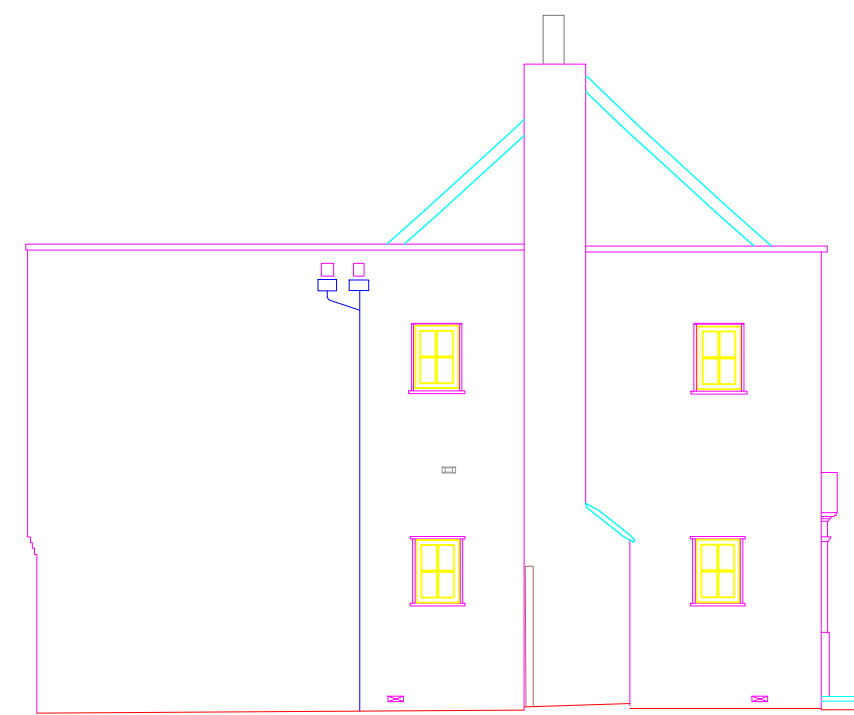
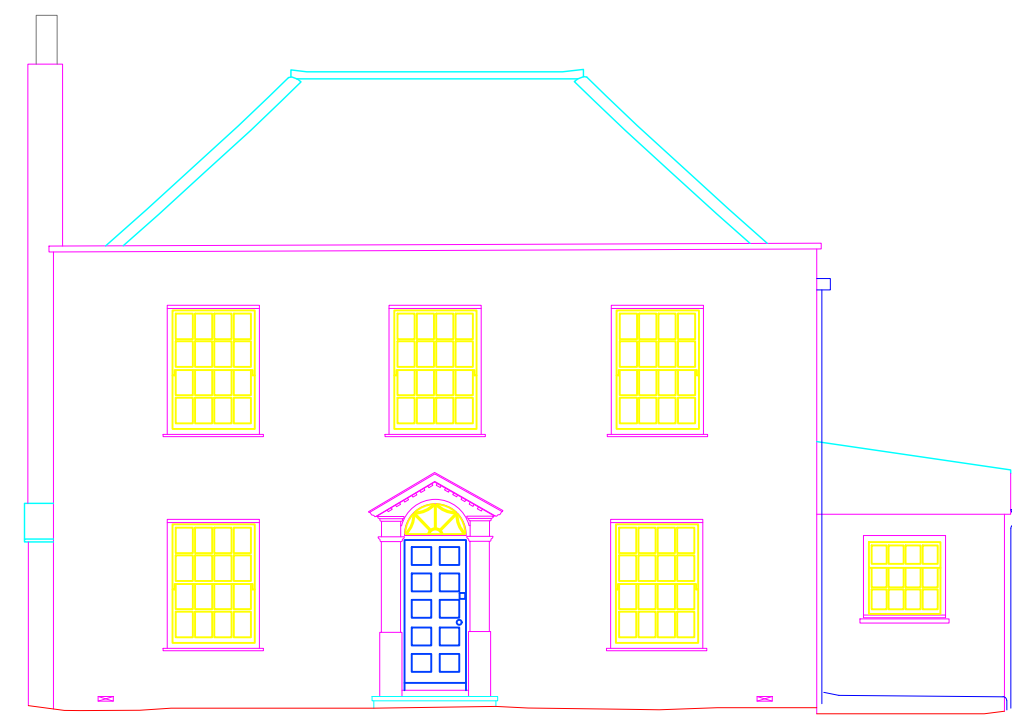
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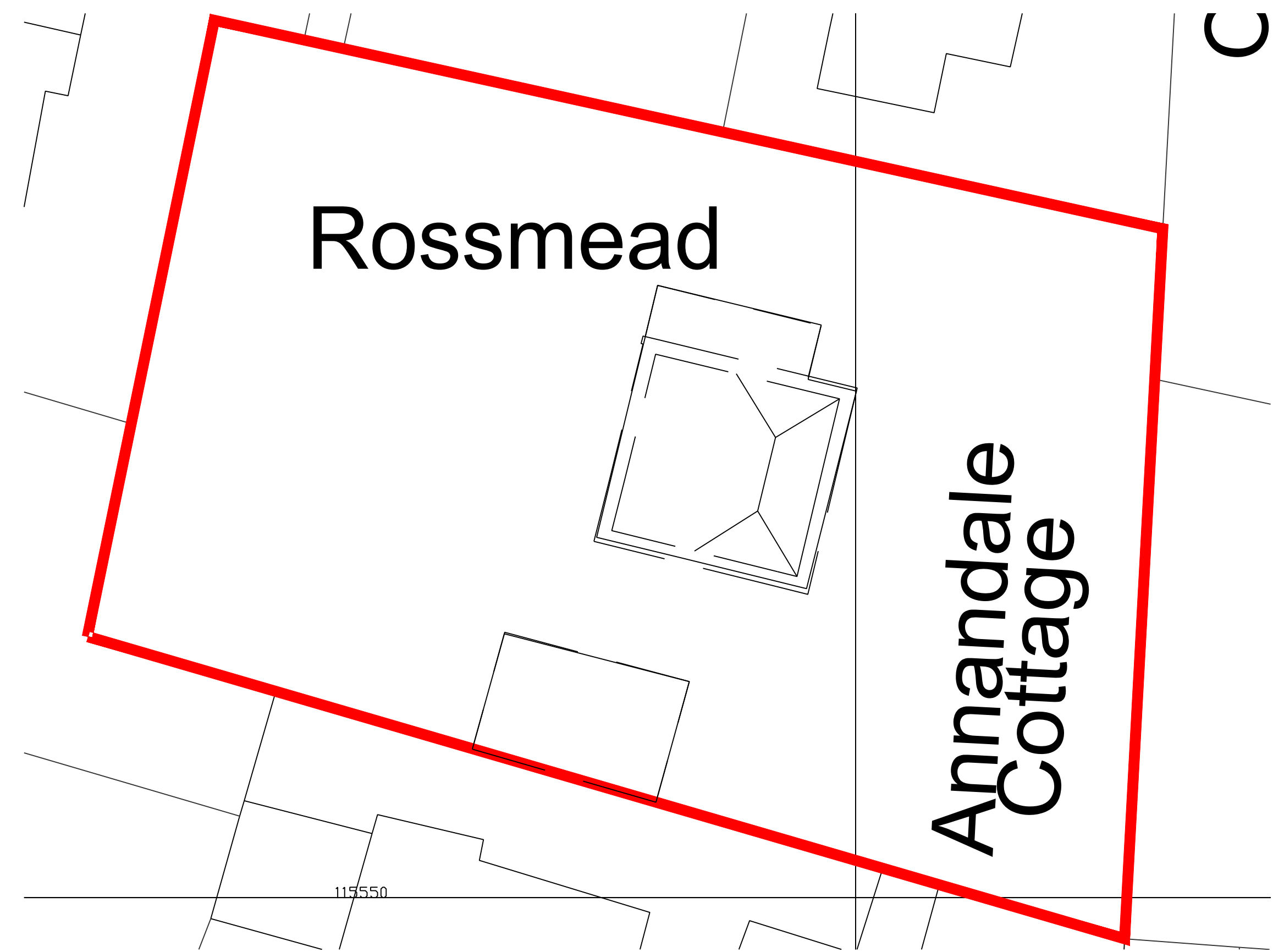
Job Title

Rossmead, Orchard Lane, Hassocks, BN6 8QF

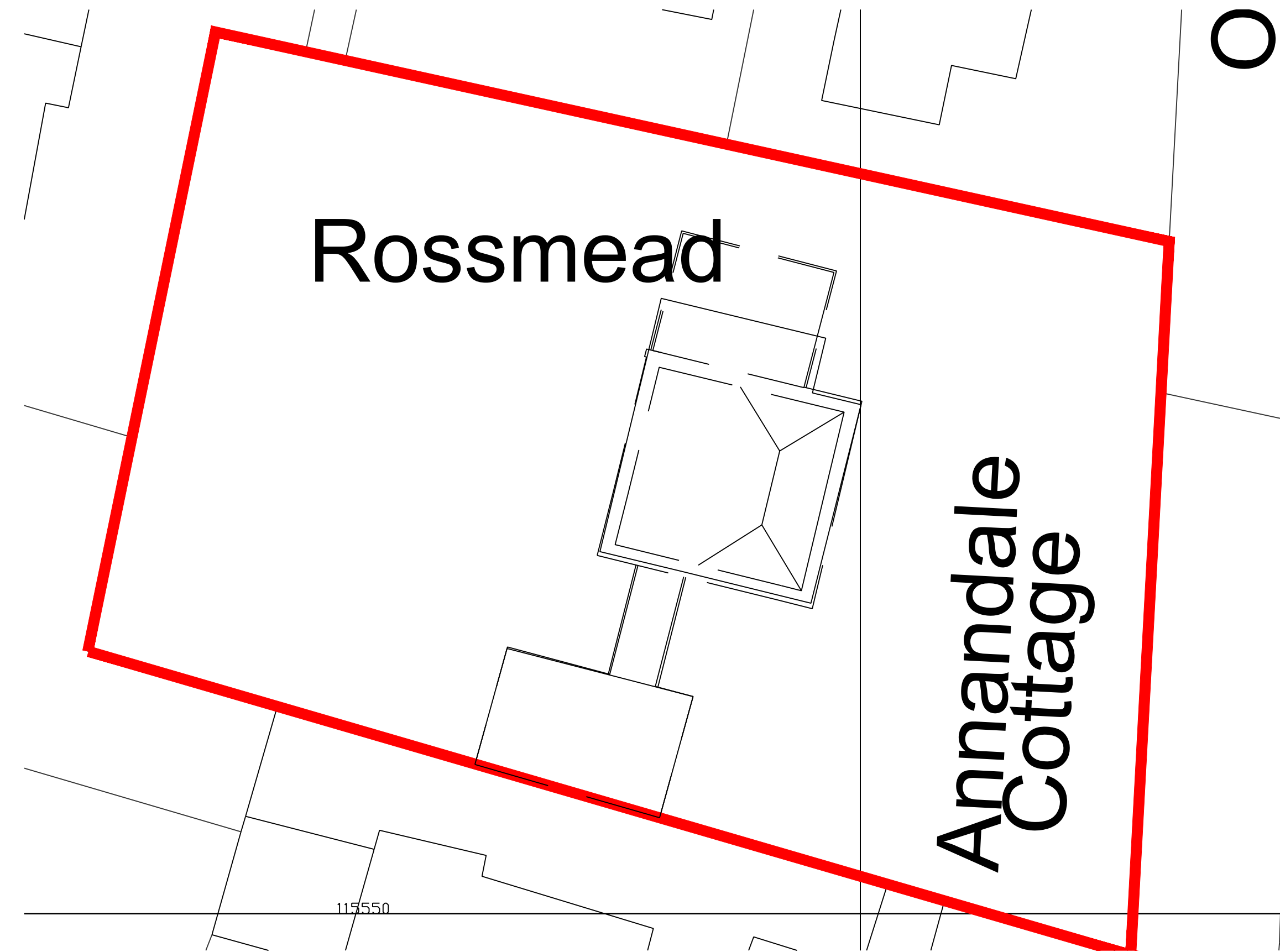
SESURVEY



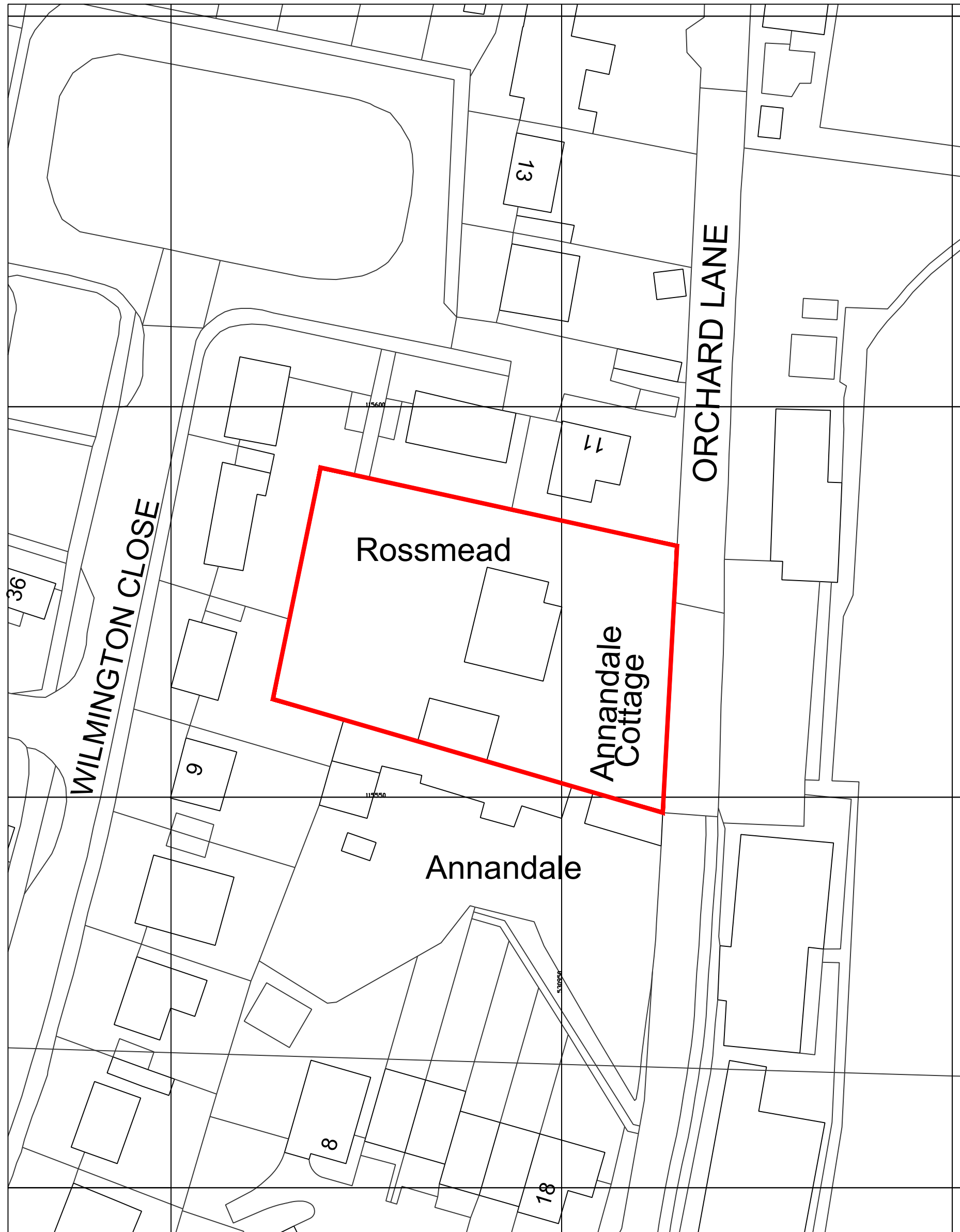
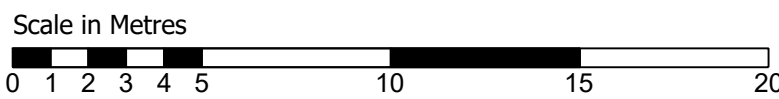
NOTES Survey Based On Local Grid Every effort has been made to survey the area as indicated. Where detail is inaccessible or obscured from view it has been deemed unable to survey.	LAYER INFORMATION Beam Subsidipline Door Furniture Gully Handrail Kitchen Plant Roofline Sanitary Stairs Spot levels Step Wall hatching Wall Section Windows EMPTY Overhead beams, joists, roof elements ect. External Building Outline Door and window Fence and subsidiary lines Fitted furnishings Overhead and down water gullies Callings or floor hatches Fitted handrails Kitchen appliances and fixtures Most structural and plant installation Fitted plumbing or electric installers Ropes, events, top and valley lines Planted sanitary fixtures Significant callings Significant callings Roof aerial line Significant callings Step, stairs or changes in floor levels Notation Wall section line Wall section line Ground window in wall section	Line types and Symbols Building Lines Rooflines Wall Lines Wall Hatching Furniture Kitchen Fixtures Plant Gully Fence Steps Metal Spotlevel Windows Doors Radiator Sanitary Softs Beams Skylights Ceiling Slope Plinths / Platforms Stairs	Control Stations	Orientation	Rev. Date Description	Client	Pfeiffer Design	SESURVEY
	Drawing Title	Job Title	Scale 1:100 @ A1	Date 1/01/25	Drawn DH/CHMB/TP	Job No. 002 01 25	Drawing No. 004	Rev. -
	Elevations & Sections	Rossmead, Orchard Lane, Hassocks, BN6 8QF	Surveyed by AB	Checked SE				



Existing Block Plan
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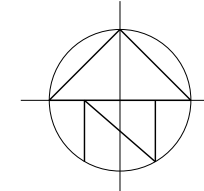


Proposed Block Plan
SCALE: 1:200 @ A1

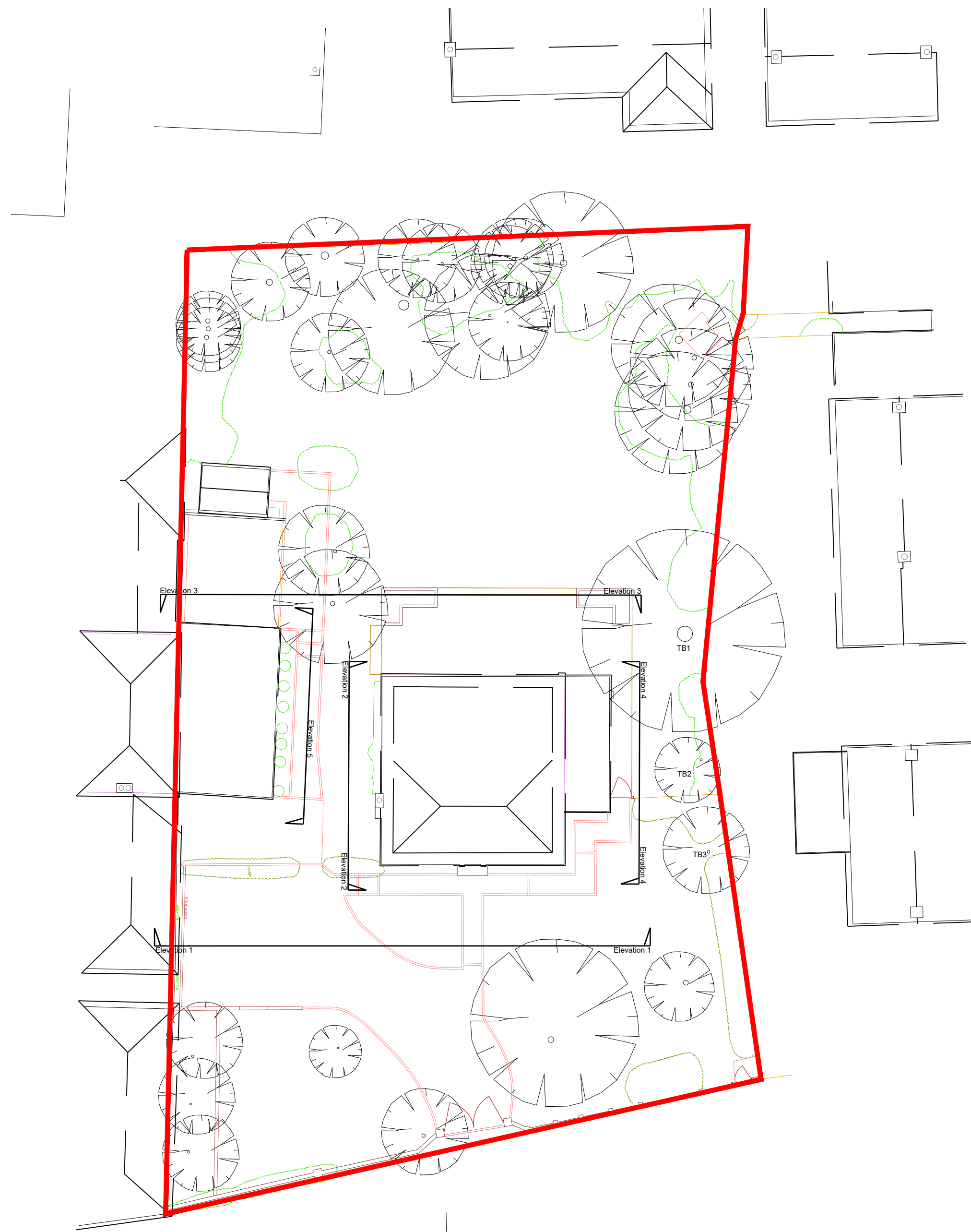


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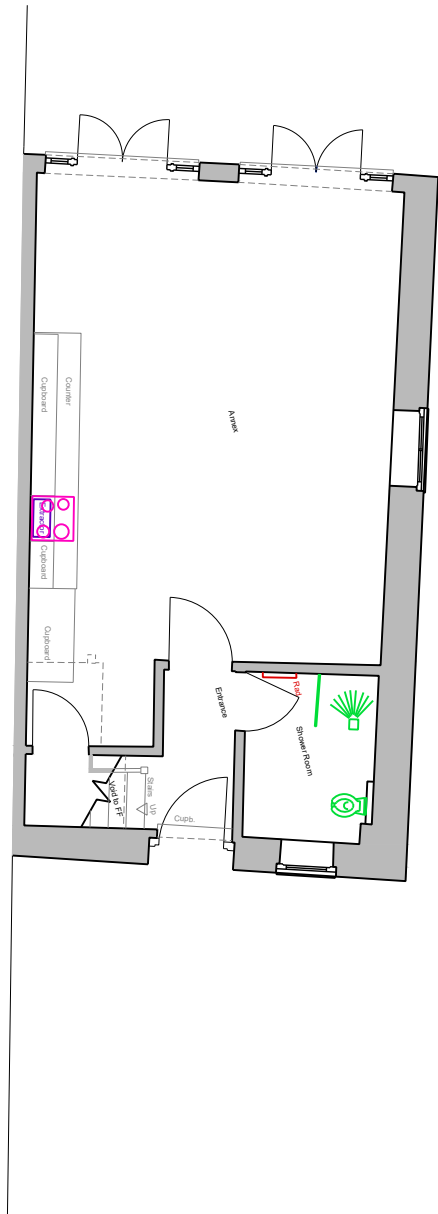
Location Plan
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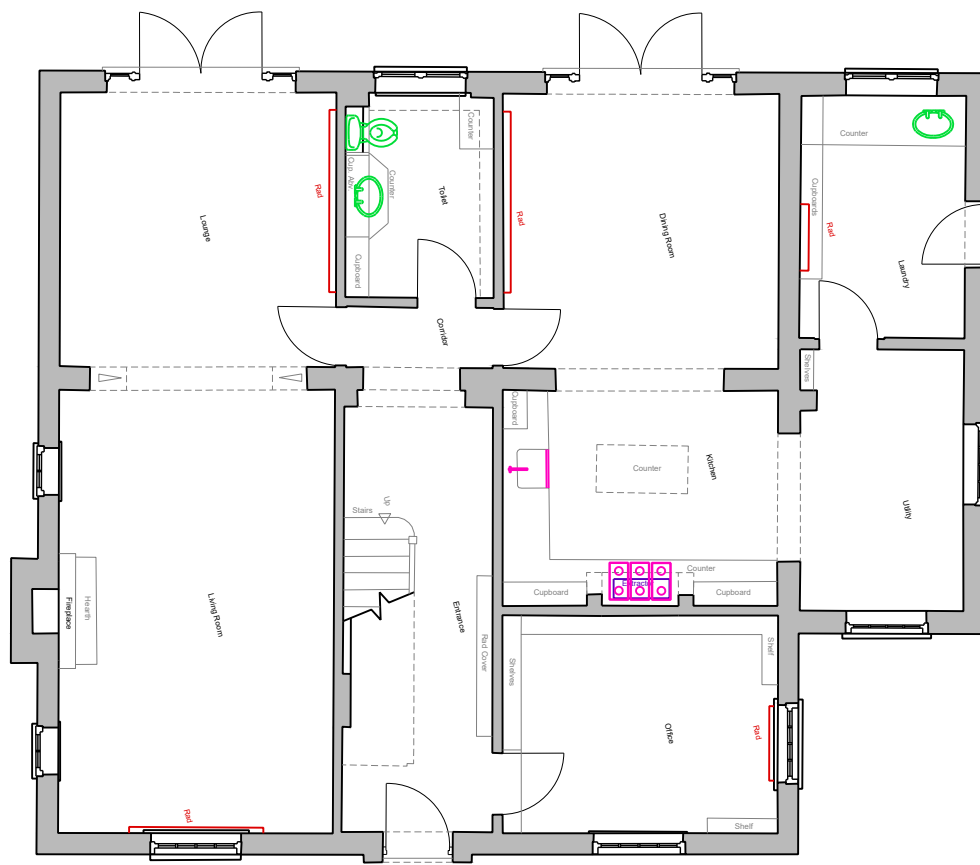
 CROWTHER ASSOCIATES ARCHITECTS LLP LGF 100/101 Queens Road, Brighton, BN1 3XF T: 01273 695533 www.crowtherassociates.co.uk	DRAWING	Extension and renovation of residence SITE PLAN BLOCK PLANS	CLIENT	Ali and Patrick Awty	JOB NO.	C-2503	DRAWING NO.	(08) 11	REV.	PA0
			PROJECT	Rossmead Hassocks BN6 8QF	SCALE	As shown @ A1	DATE	10/03/2025	DRAWN	MH



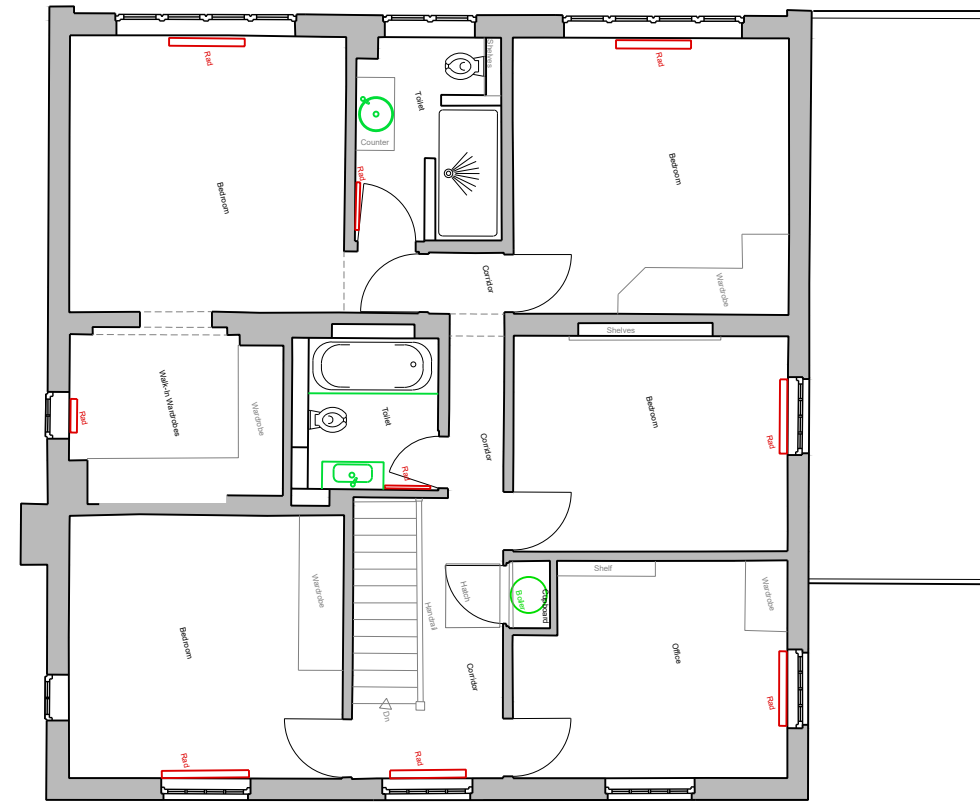
Existing Site Plan
SCALE: 1:200 @ A1
Scale in Metres
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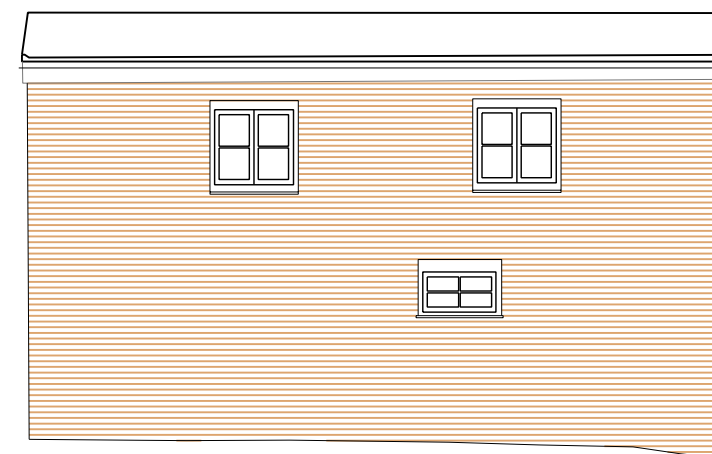
Existing Ground Floor Plan
SCALE: 1:100 @ A1



Existing First Floor Plan
SCALE: 1:100 @ A1



Annex Side Elevation 5 (North)
SCALE: 1:100 @ A1



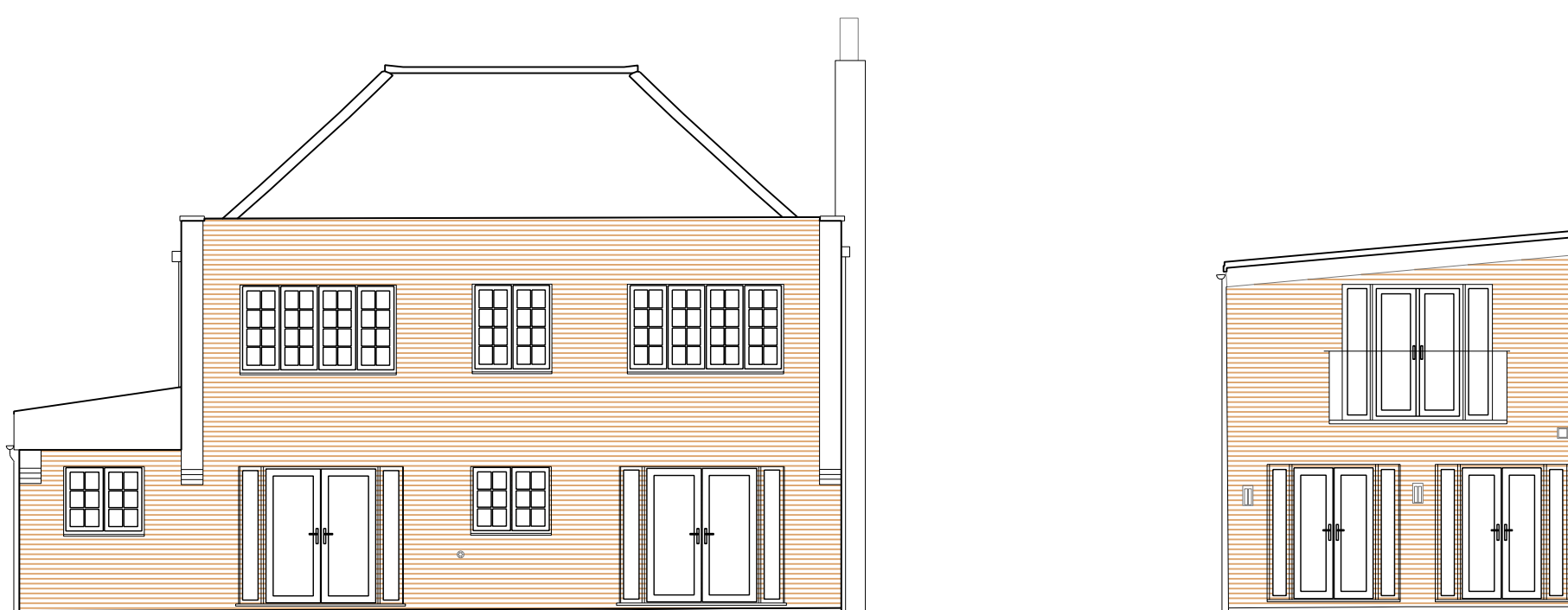
Side Elevation 4 (North)
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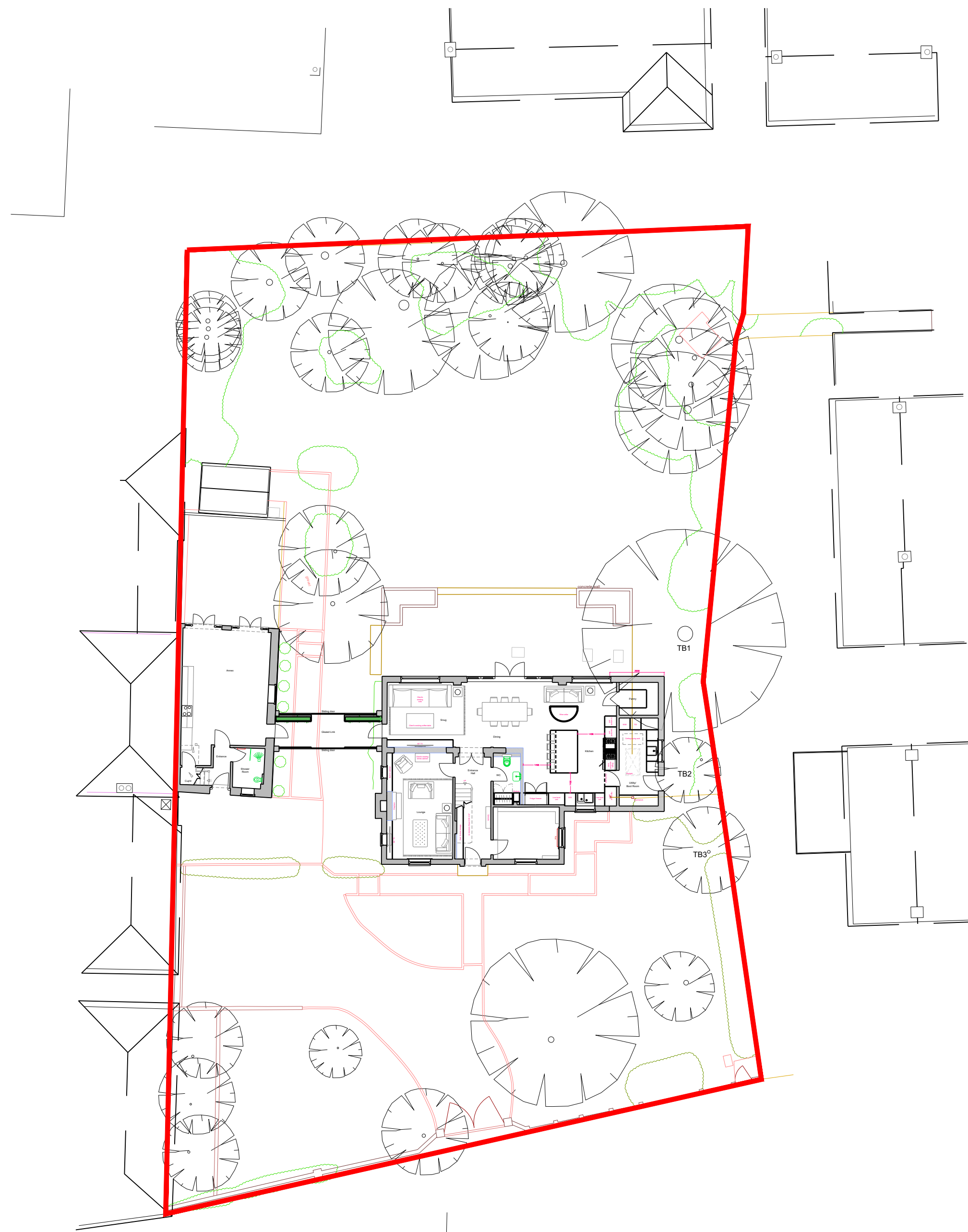
Side Elevation 2 (South)
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Front Elevation 1 (East)
SCALE: 1:100 @ A1

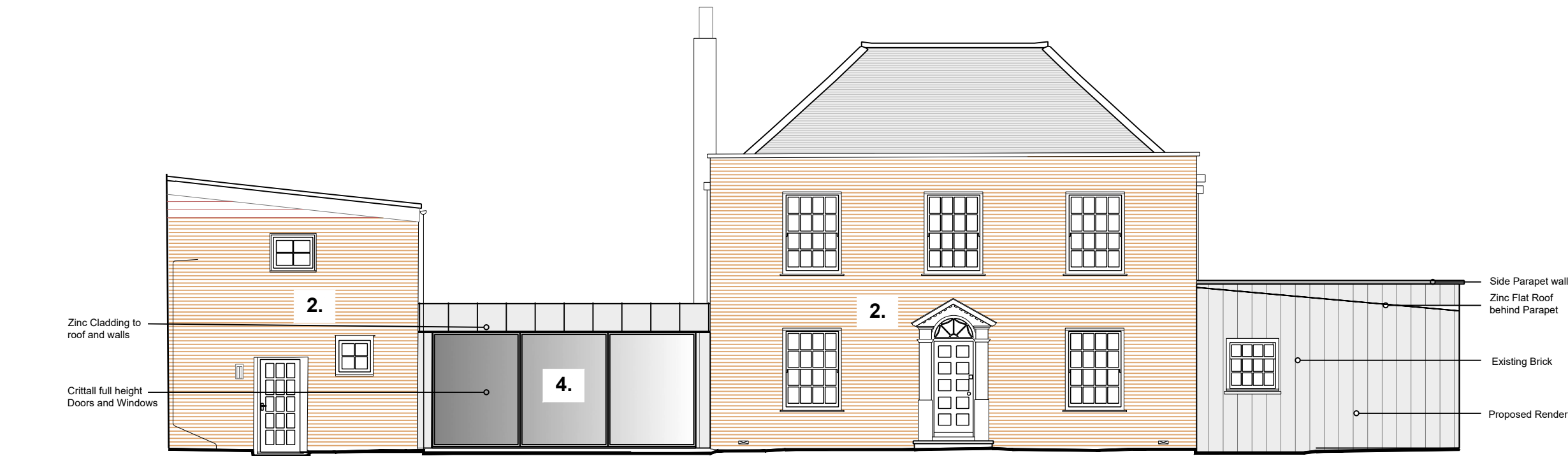


Rear Elevation 3 (West)
SCALE: 1:100 @ A1



Proposed Site Plan
SCALE: 1:200 @ A1

Scale in Metres
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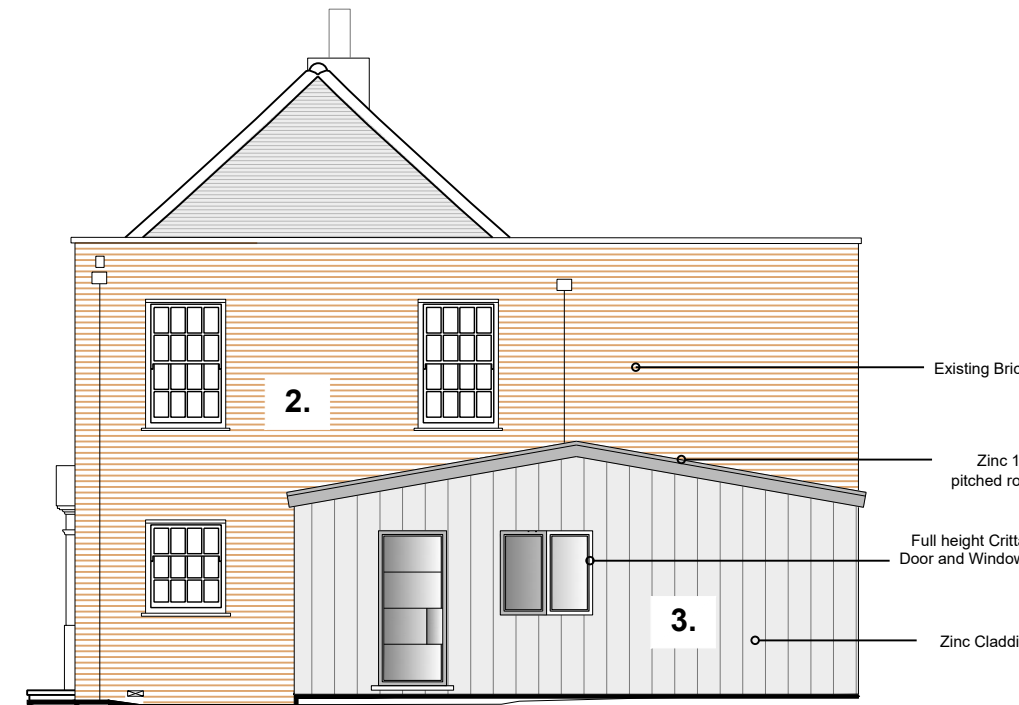
Front Elevation 1 (East)
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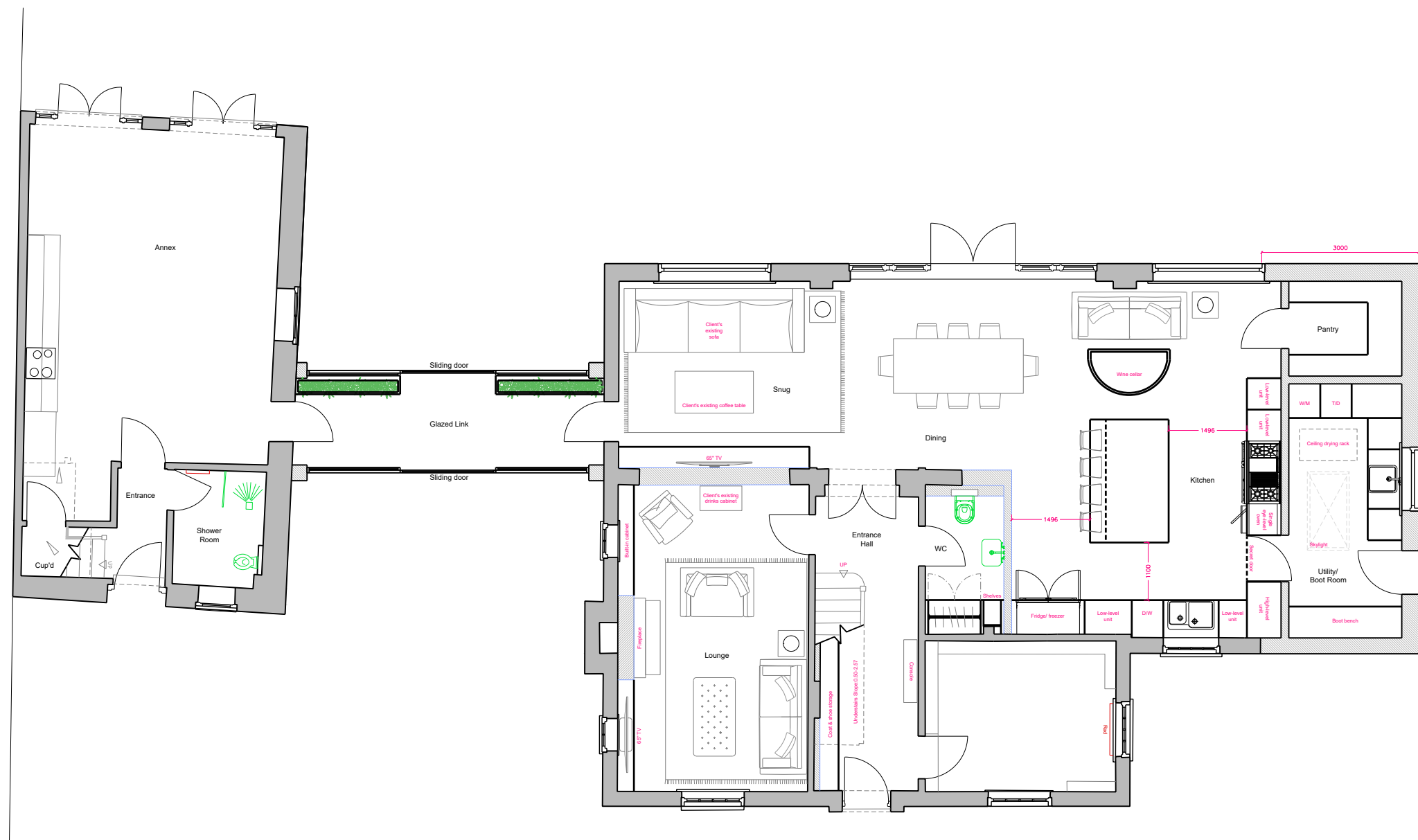
Rear Elevation 3 (West)
SCALE: 1:100 @ A1

- External Finishes:**
1. External wall finish: render
 2. Existing Brick work
 3. Cladding / Roof: Zinc
 4. Crittall full height doors and windows: Double glazed aluminium/Upvc
 5. Patio doors: Bifold double glazed aluminium/Upvc
 6. Balustrade: Metal
 7. Solar Panels

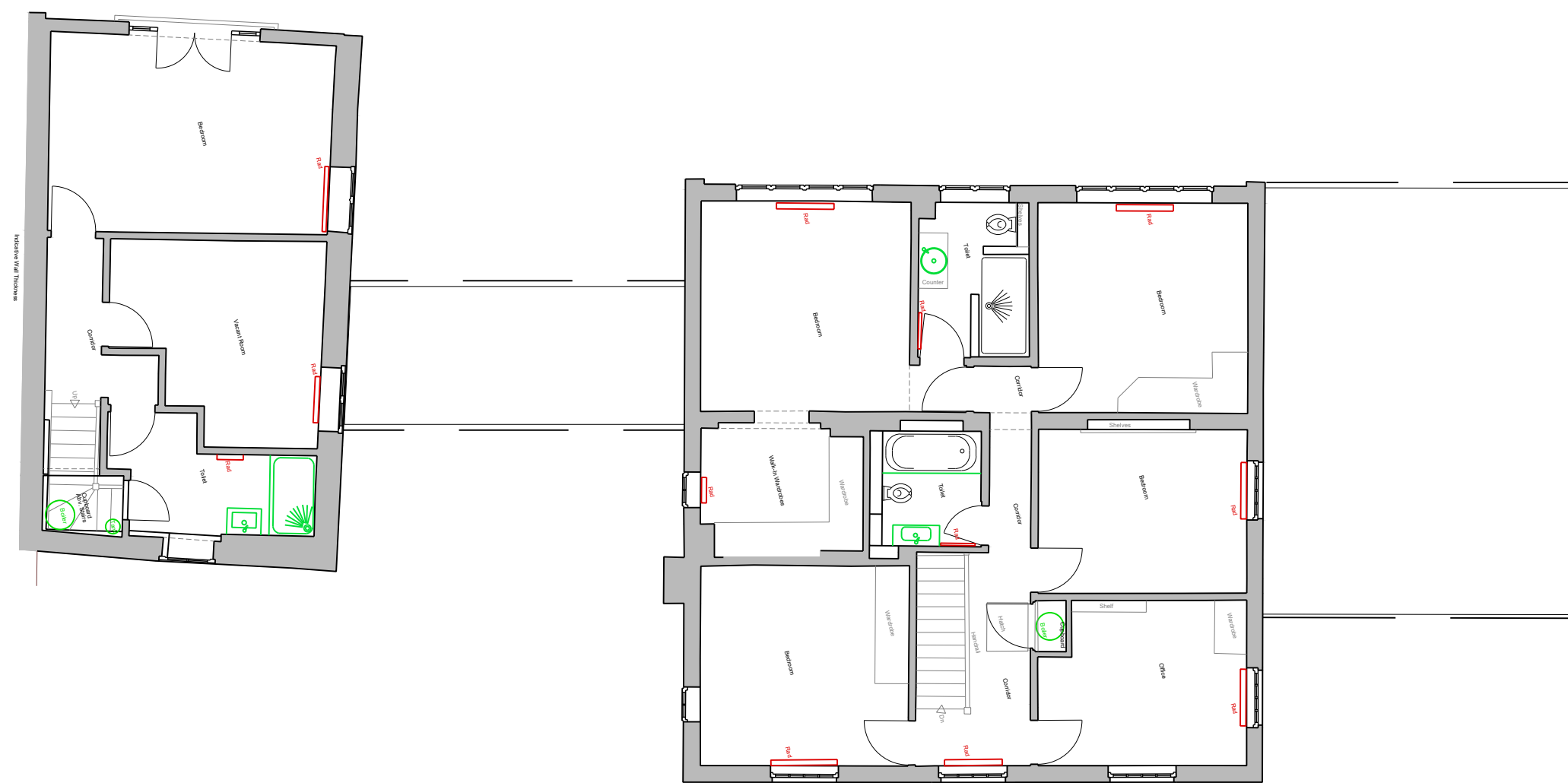
External Finishes
SCALE: 1:100 @ A1



Side Elevation 4 (North)
SCALE: 1:100 @ A1



Proposed Ground Floor Plan
SCALE: 1:100 @ A1



Proposed First Floor Plan
SCALE: 1:100 @ A1

Scale in Metres
0 1 2 3 4 5 10

