Flood Risk Assessment for Planning

November 2025

Prepared for:

Pishder Properties Ltd

Location:

20 Winsover Road

Spalding

PE11 1EJ

Our reference:

96581-Turk-WinsoverRd

Unda

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Document Issue Record

Project Details	
Project:	Flood Risk Assessment for Planning
Prepared for:	Pishder Properties Ltd
Application:	Conversion of an existing three-bedroom, two storey flat into 2 x self-contained one-bedroom flats, with cycle storage on the flat roof and bin store beneath the existing staircase
Location:	20 Winsover Road, Spalding, PE11 1EJ
Our reference:	96581-Turk-WinsoverRd
Issue no.:	v1.0
Issue date:	17th November 2025

Project Consultants	
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Authorisation:	Ms Jackie Stone, MSc DIC

Contents

1. Key Facts

Flood Risk Posed:

- The site is located within Flood Zone 3 (High Probability), defined as land having a 1:100 or greater annual probability of river flooding; or Land having a 1:200 or greater annual probability of sea flooding. The nearest watercourse to the site is the River Welland located approximately 485m east.
- No Flood Storage Areas located in close proximity to the site.
- The River Welland is flanked by natural high ground with a 1:100 year standard of protection. The current condition rating of the asset is unknown.
- The site is located within the Spalding Urban catchment of the Welland and Deepings IDB.
- The EA Risk of Flooding from Surface Water Map suggests that the site is located within an area at "Very Low" chance of flooding from surface water for the present day and between 2040 and 2060.
- No information has been provided to suggest that the site itself has previously been affected by flooding from groundwater, sewer surcharge or reservoirs.

Flood Risk Mitigation:

- The proposed application is for the conversion of an existing three-bedroom, two storey flat into 2 x self-contained one-bedroom flats, with cycle storage on the flat roof and bin store beneath the existing staircase.
- Post development, the site will remain classified as "more vulnerable" (residential).
- There are no new ground floor bedrooms or basements as part of this proposal. All bedrooms are situated on the first and second floor. In addition, there will be no increase to the built footprint, number of floors proposed or impermeable areas on site.
- There will be an intensification of usage due to introduction of additional residential units (a change of use from a single dwelling to two dwellings).
- There will be no loss of fluvial floodplain storage.
- Flood proofing the development will be incorporated, where appropriate.
- Safe escape will be provided by a flood warning and evacuation plan that will be prepared in liaison with the Council's Emergency Planners and tied in with the existing emergency plans for the area.
- In the event that the site floods unexpectedly with no flood alert or warning then safe refuge is provided on the first (flat 1) and second floor (flat 2) of the building.
- The applicant will register with the free Environment Agency Floodline Alert Direct service.

Assuming accordance with these flood risk management measures, Unda Consulting Limited consider the proposed application to be suitable in flood risk terms.

2. Introduction

2.1. Unda Consulting Limited have been appointed by Pishder Properties Ltd (hereinafter referred to as "the applicant") to undertake a Flood Risk Assessment for the proposed development at 20 Winsover Road, Spalding, PE11 1EJ (hereinafter referred to as "the site"). The purpose of the study is to support a planning application for the proposed development.

2.2. This report presents our findings based on the readily available information and data relating to the site and surrounding drainage area.

2.3. The site appears to be located within Flood Zone 3 as defined by the Environment Agency (EA) on their Flood Map for Planning. Under the National Planning Policy Framework (NPPF), a FRA is required for all development or changes of use proposed:

- In Flood Zones 2 or 3 or see flood map for planning;
- Within Flood Zone 3b;
- Within Flood Zone 1 with a site area of 1 hectare or more;
- Within 'Flood Zones plus Climate Change', showing it is at increased risk of flooding from rivers or sea in future - see flood map for planning;
- With Flood Zone 1 and the flood map for planning shows it is at risk of flooding from surface water;
- In areas with critical drainage problems;
- Within Flood Zone 1 where the LPA's strategic flood risk assessment (SFRA) shows it will be at increased risk of flooding during its lifetime;
- That increases the vulnerability classification and may be subject to sources of flooding other than rivers or sea.

2.4. The assessment should demonstrate to the Local Planning Authority (LPA) and EA how flood risk will be managed now and over the development's lifetime, taking climate change into account, and with regard to the vulnerability of its potential users.

- Whether the proposed development is likely to be affected by current or future flooding from any source;
- Whether it will increase flood risk elsewhere;
- Whether the measures proposed to deal with these effects and risks are appropriate.

3. Existing Site

3.1. The site comprises of a three-storey property, with a retail shop at ground level and an existing flat across the first and second floors.

3.2. The first and second floor is understood to have lawful planning permission for residential use.

3.3. The surrounding area is characterised by mixed use properties of commercial and residential usage.

3.4. Existing plans are provided in the report Appendix.

Figure 1: Aerial imagery of site and surrounding area (Source: Google Earth)

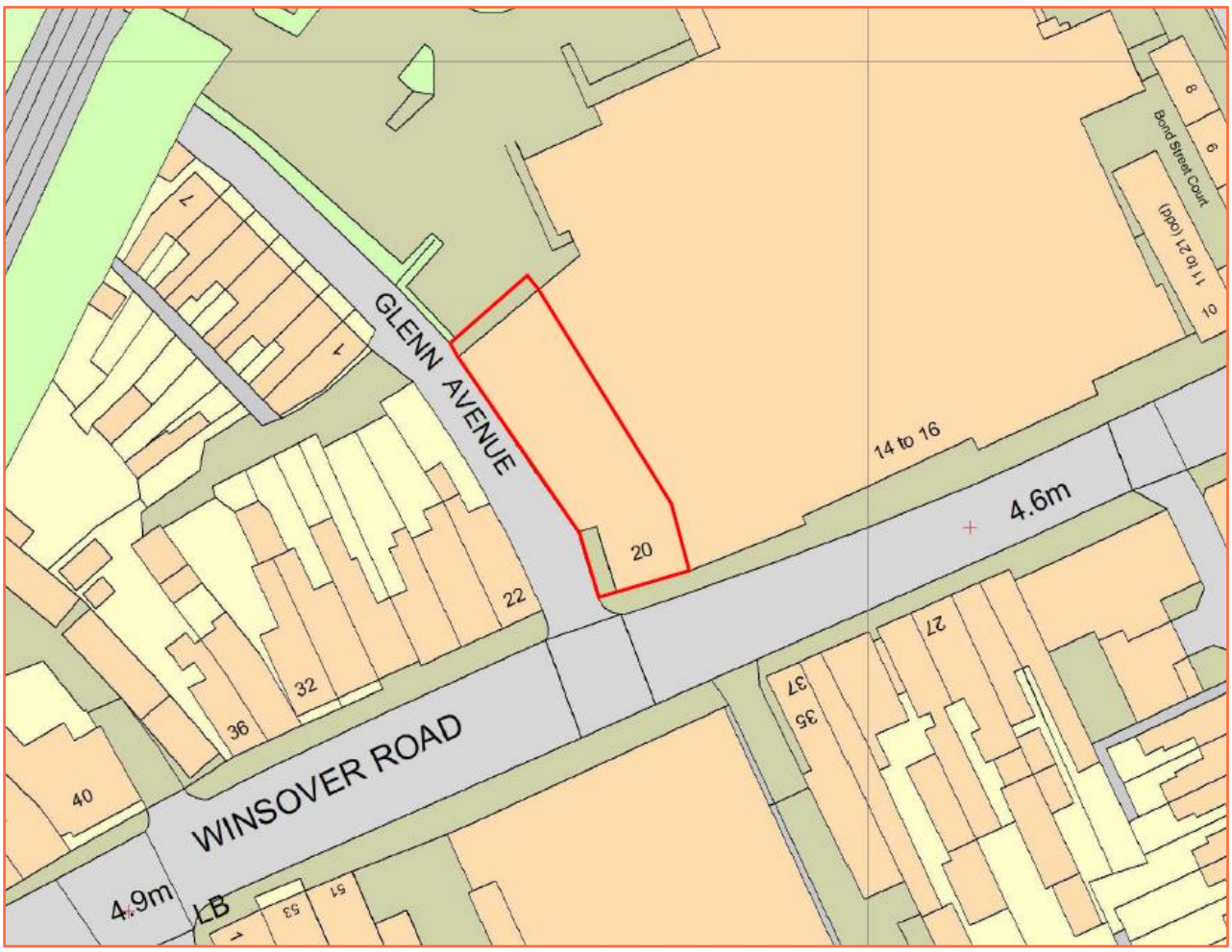


Figure 2: Site location plan (Source: ULAS Planning)

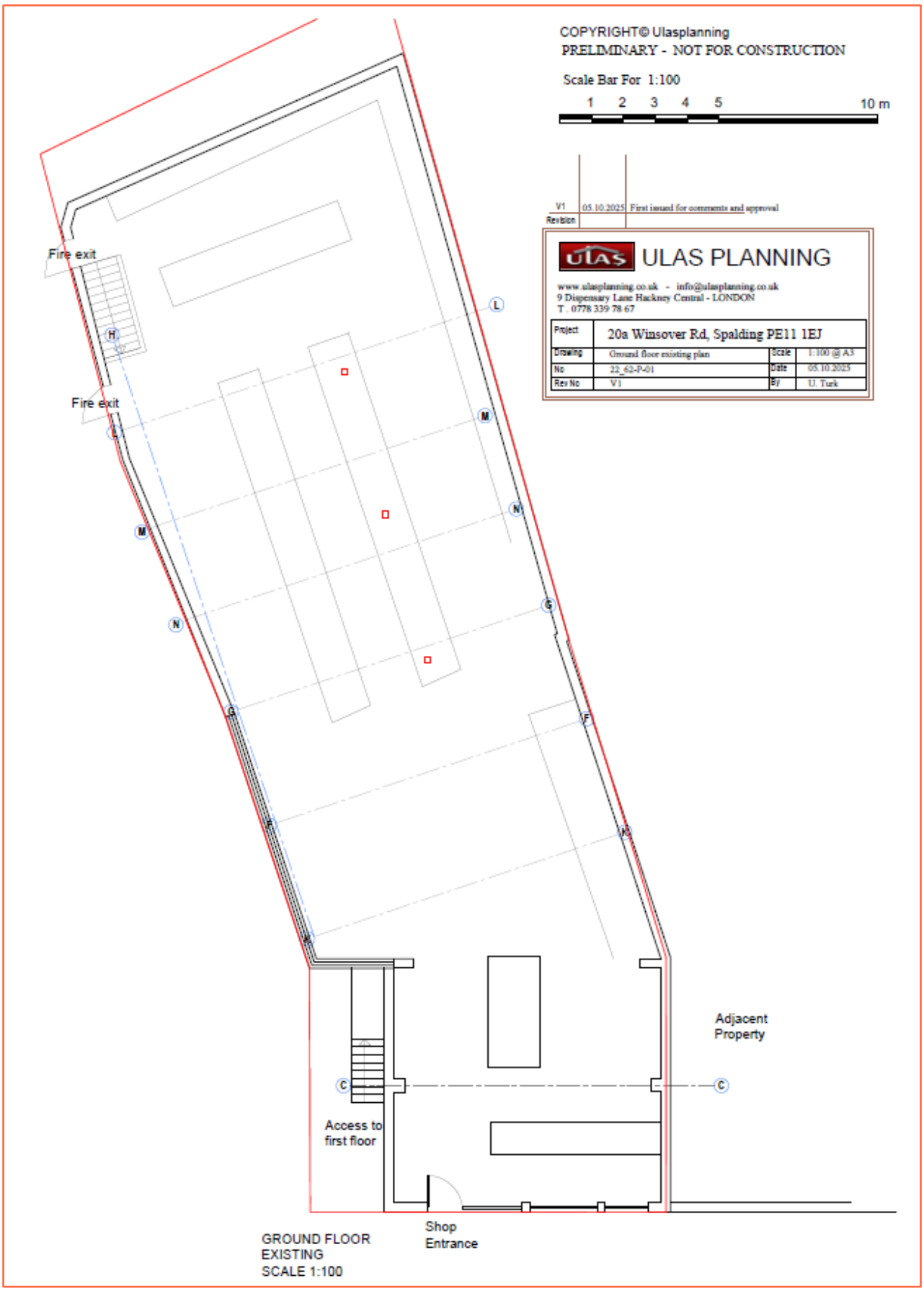


Figure 3: Existing ground floor plan (Source: ULAS Planning)

Figure 4: Existing first floor plan (Source: ULAS Planning)

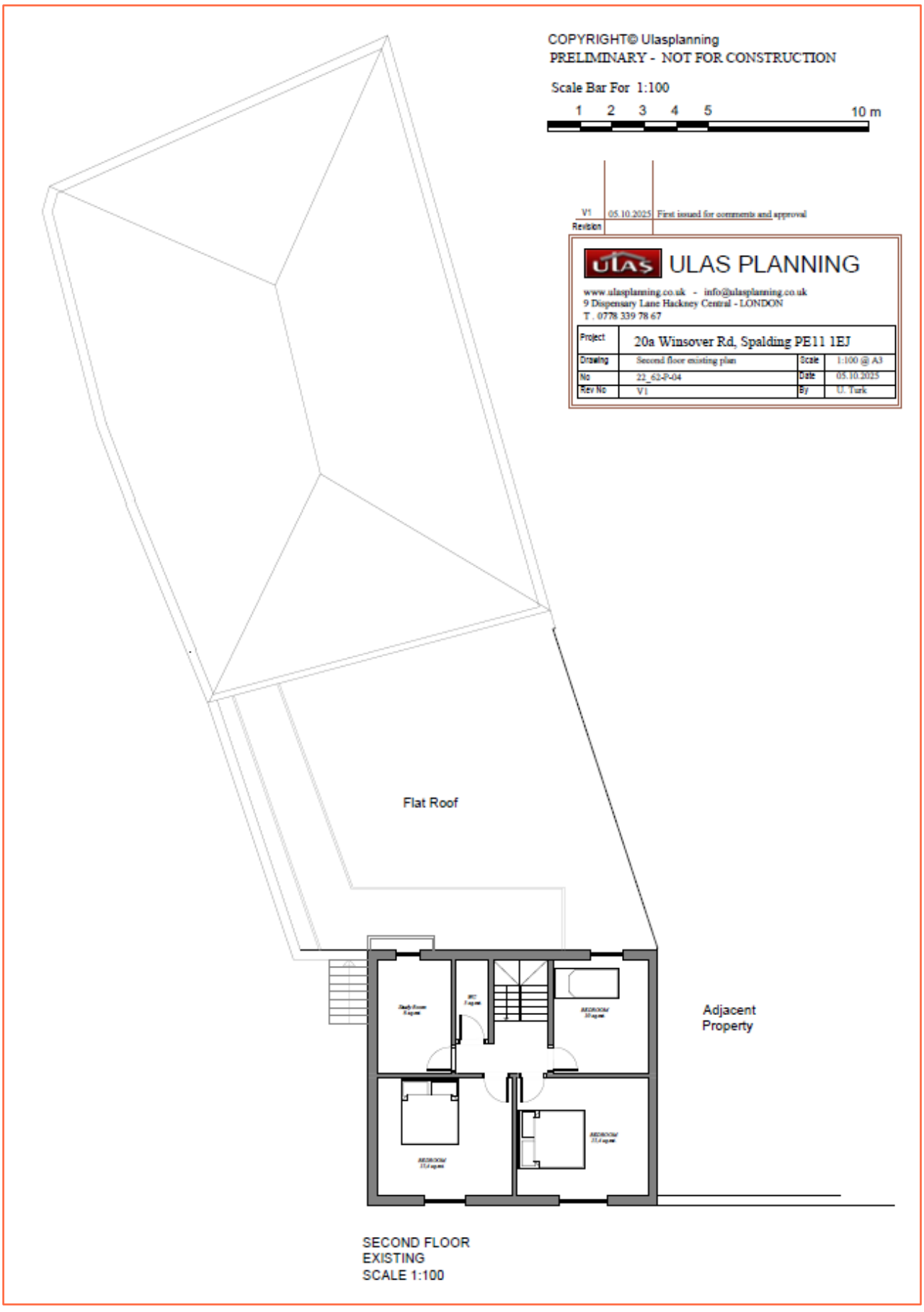


Figure 5: Existing ground floor plan (Source: ULAS Planning)

Site Topography:

3.5. Environment Agency LiDAR has been used to assess the topography across the site and wider area. Light Detection and Ranging (LiDAR) is an airborne mapping technique, which uses a laser to measure the distance between the aircraft and the ground surface. Up to 100,000 measurements per second are made of the ground, allowing highly detailed terrain models to be generated at high spatial resolutions. The EA's LiDAR data archive contains digital elevation data derived from surveys carried out by the EA's specialist remote sensing team. Accurate elevation data is available for over 70% of England. The LiDAR technique records an elevation accurate to +/-5cm to 15cm with spatial resolutions ranging from 25cm to 2 metres. This dataset is derived from a combination of the full dataset which has been merged and re-sampled to give the best possible coverage. The dataset can be supplied as a Digital Surface Model (DSM) produced from the signal returned to the LiDAR (which includes heights of objects, such as vehicles, buildings and vegetation, as well as the terrain surface) or as a Digital Terrain Model (DTM) produced by removing objects from the Digital Surface Model. 1.0m horizontal resolution DTM LiDAR data has been used for the purposes of this study.

3.6. LiDAR remotely sensed digital elevation data suggests that the ground topography on site ranges from approximately 4.60mAOD to 5.20mAOD.

Existing Ground Conditions:

3.7. The 1:50,000 BGS map shows that the bedrock underlying the site is Oxford Clay Formation – Mudstone.

3.8. The BGS mapping shows superficial deposits of Tidal Flat Deposits – clay and silt underlying the site.

3.9. The soil type taken from the UKSO Soil Map Viewer, shows the site to be located upon relatively deep soils of Quaternary Marine/Estuarine Clay/Silt parent material with a soil texture of clayey loam to silty loam.

Nearby Watercourses / Drainage Features:

3.10. The nearest watercourse to the site is the River Welland located approximately 485m east.

3.11. The Vernatt's river is also located approximately 1,380m north west of the site.

4. Development Proposal

4.1. The proposed application is for the conversion of an existing three-bedroom, two storey flat into 2 x self-contained one-bedroom flats, with cycle storage on the flat roof and bin store beneath the existing staircase.

4.2. There are no new ground floor bedrooms or basements as part of this proposal. All bedrooms are situated on the first and second floor.

4.3. In addition, there will be no increase to the built footprint, number of floors proposed or impermeable areas on site. However, as there is an introduction of an additional residential unit, there will be an intensification of use through the change of use from a single dwelling to two dwellings.

4.4. Proposed plans are provided in the report Appendix.

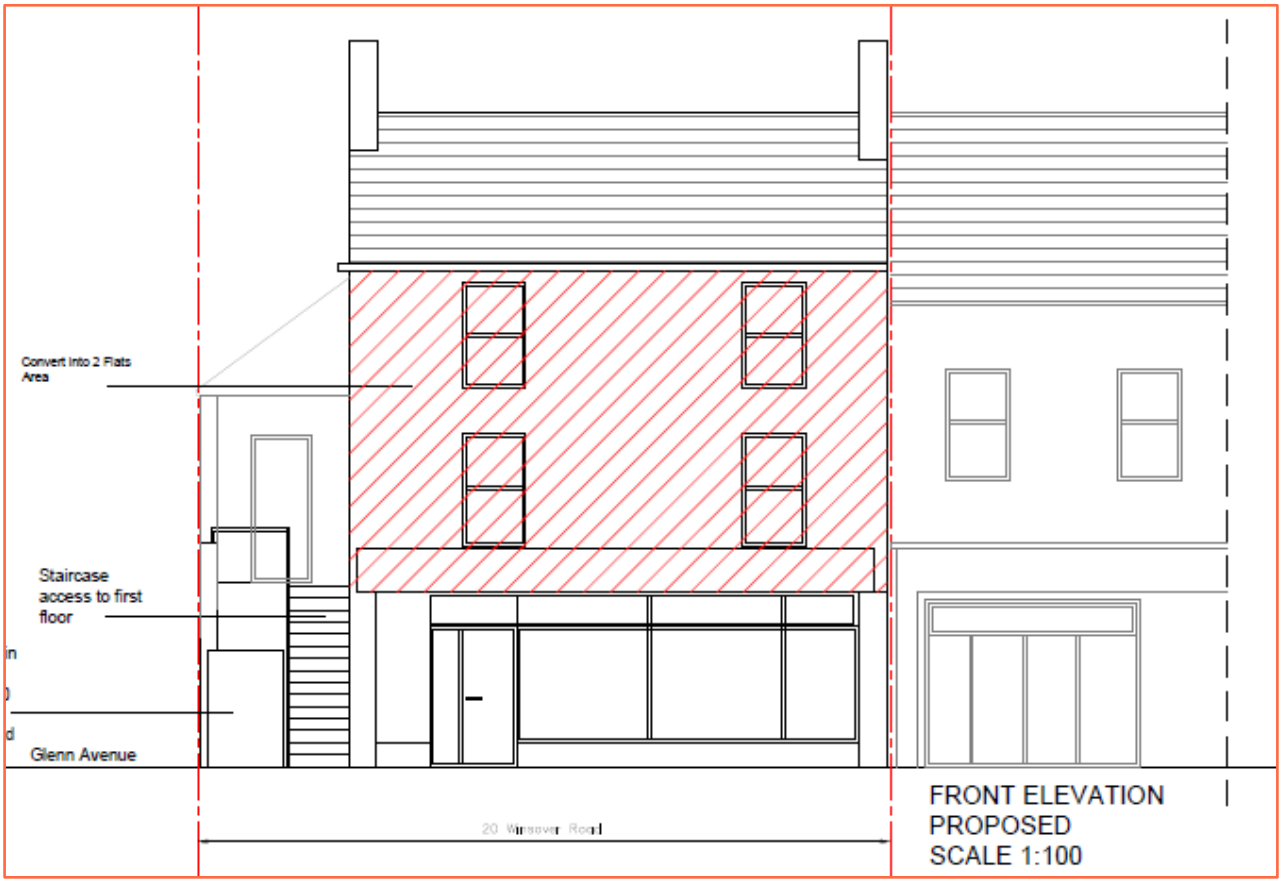


Figure 6: Proposed front elevation plan (Source: ULAS Planning)

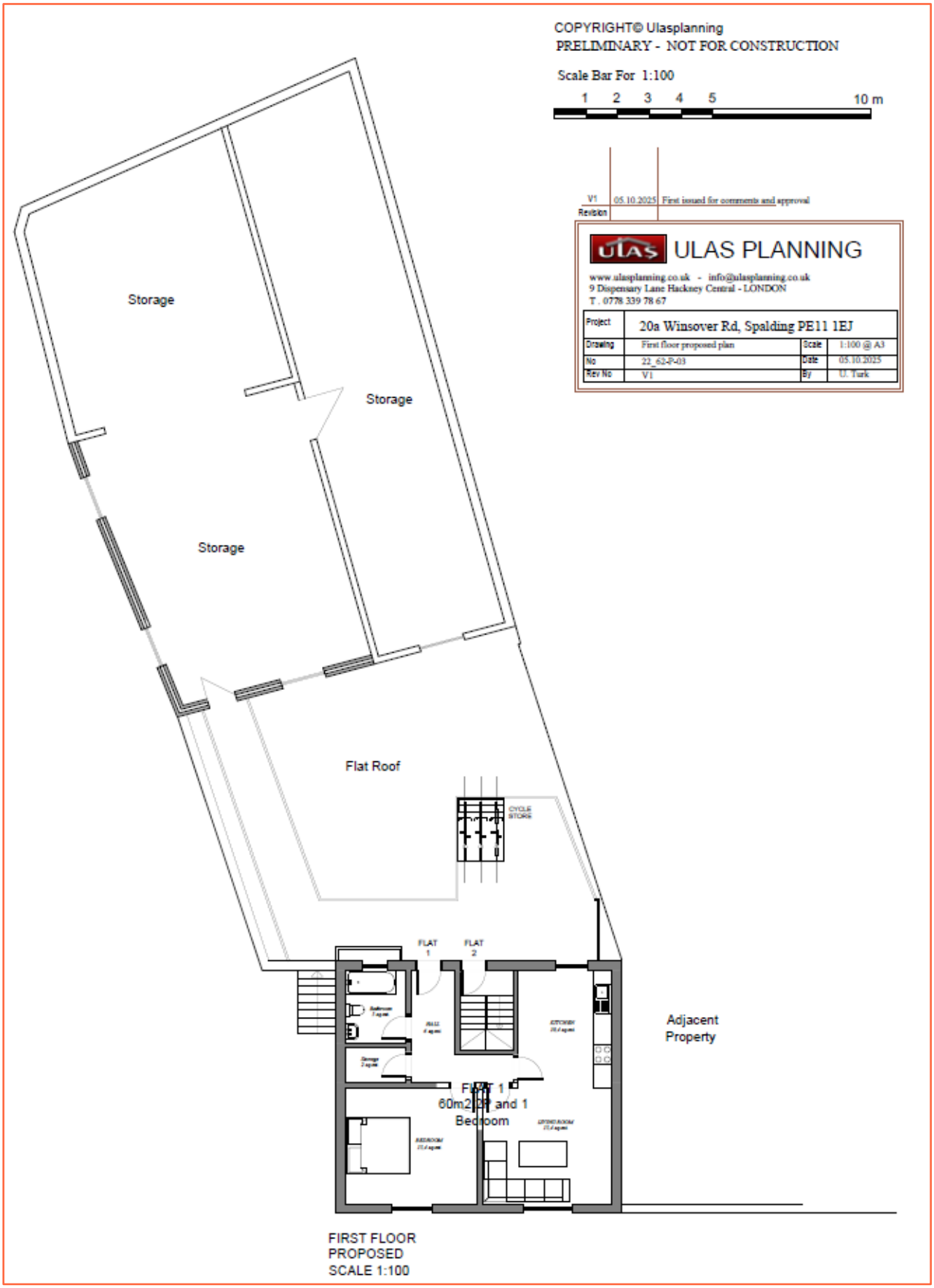


Figure 7: Proposed first floor plan (Source: ULAS Planning)

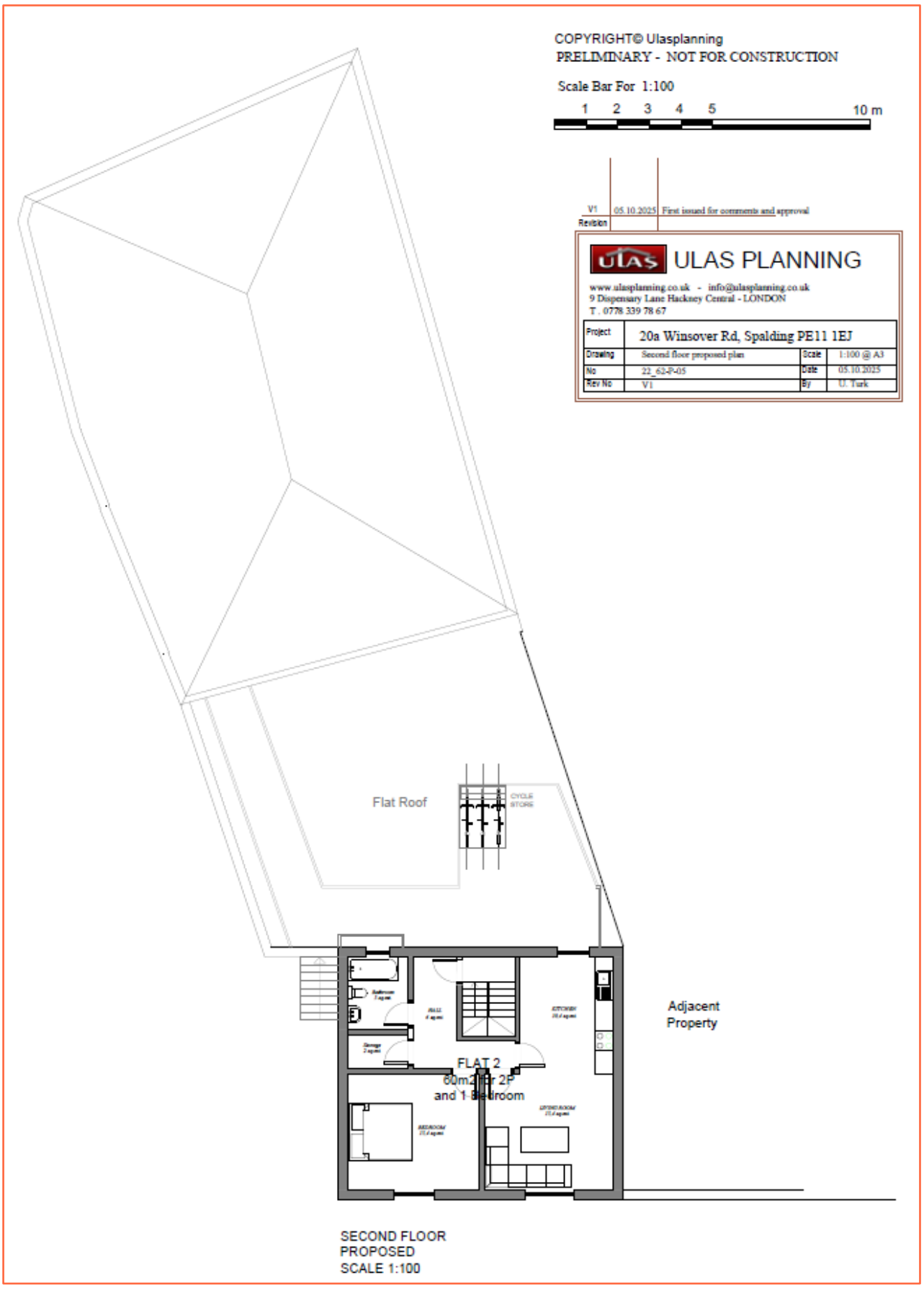


Figure 8: Proposed second floor plan (Source: ULAS Planning)

5. Flood Risk Assessment

EA Flood Zones:

5.1. Within planning, Flood Zones refer to the probability of river and sea flooding, ignoring the presence of defences. They are shown on the Environment Agency's Flood Map for Planning (Rivers and Sea), available on the Environment Agency's website.

Flood Zone	Definition
Zone 1 **Low Probability**	Land having a less than 0.1% annual probability of river or sea flooding. (Shown as 'clear' on the Flood Map for Planning – all land outside Zones 2, 3a and 3b)
Zone 2 **Medium Probability**	Land having between a 1% and 0.1% annual probability of river flooding; or land having between a 0.5% and 0.1% annual probability of sea flooding. (Land shown in light blue on the Flood Map)
Zone 3a **High Probability**	Land having a 1% or greater annual probability of river flooding; or Land having a 0.5% or greater annual probability of sea flooding. (Land shown in dark blue on the Flood Map)
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)

Table 1: Environment Agency Flood Map for Planning (Rivers and Sea) (Source: EA)

5.2. The Flood Zones are created using local flood model outputs, recorded flood outlines and national flood model information. These are combined to generate extents of land at flood risk, with the aim of using the best available flood risk information in any one location. The Flood Zones shown on the Environment Agency's Flood Map for Planning (Rivers and Sea) do not take account of the possible impacts of climate change and consequent changes in the future probability of flooding.

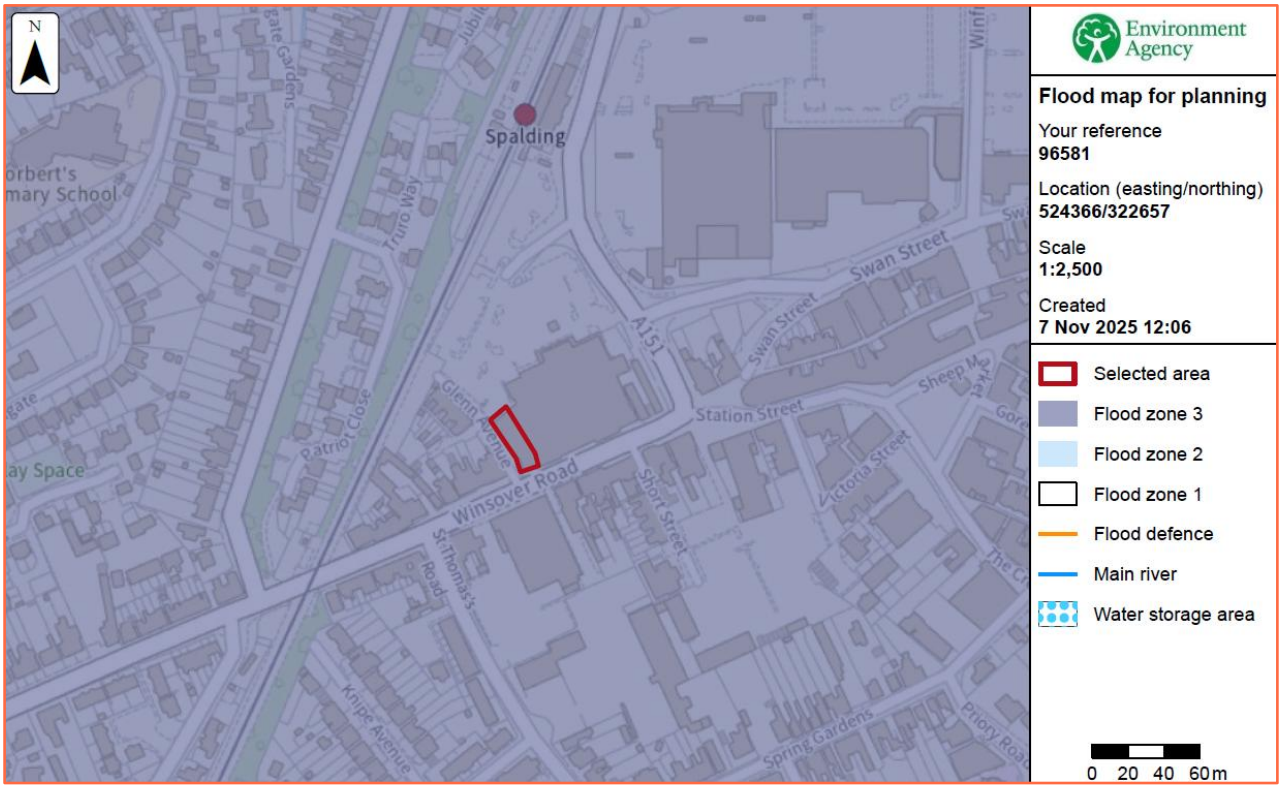


Figure 9: Environment Agency Flood Map for Planning (Rivers and Sea) (Source: EA)

5.3. The site is located within Flood Zone 3 (High Probability), defined as land having a 1:100 or greater annual probability of river flooding; or Land having a 1:200 or greater annual probability of sea flooding.

EA Flood Zones plus Climate Change:

5.4. The Flood Zones plus climate change dataset shows how the combined extent of Flood Zones 2 and 3 could increase with climate change over the next century, ignoring the benefits of any existing flood defences. The EA have assumed no changes to flood defences or land-use that could occur in future. The effects of climate change on flood risk which may be seen in the future could be different to those currently considered.

5.5. 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.

5.6. The datasets shown on Flood Map for Planning are aimed at supporting planners and developers to make long-term decisions about the location and design of development and the use of land. Such decisions need to account for the full anticipated lifetime of the development being planned.

5.7. The EA have therefore chosen:

- The 'Central' allowance for the 2080s epoch (2070-2125) for risk of flooding from rivers
- The 'Upper End' allowance for risk of flooding from the sea, accounting for cumulative sea level rise to 2125

5.8. The Flood Zones plus climate change dataset is created using local flood model outputs, recorded flood outlines and national flood model information, and by adding climate change scenarios from local and national modelling, using the maximum extents from:

- Rivers and sea with defences 3.3%, 1%/0.5% and 0.1% AEPs
- Rivers and sea without defences 1%/0.5% and 0.1% AEPs

5.9. The extents are merged to create a single outline.

5.10. Climate change mapping data is unavailable for this area.

Internal Drainage Boards (IDBs)

5.11. Each internal drainage board (IDB) is a public body that manages water levels in an area, known as an internal drainage district, where there is a special need for drainage. The Board maintains many miles of watercourses, rivers and associated infrastructure such as pumping stations and other structures. IDBs undertake works to reduce flood risk to people and property, and manage water levels for agricultural and environmental needs within their district.

5.12. The site is located within the Spalding Urban catchment of the Welland and Deepings IDB.

5.13. The Welland and Deepings IDB states:

No Obstructions within 9 metres of the Edge of the Watercourse

No person without the previous consent of the Board shall erect any building or structure (including a fence), whether temporary or permanent, or plant any tree, shrub, willow or other similar growth within 9 metres of the landward toe of the bank where there is an embankment or wall or within 9 metres of the top of the batter where there is no embankment or wall, or where the watercourse is enclosed within 9 metres of the enclosing structure.

5.14. The proposed development is not located within 9m of an IDB drain.

Fluvial/Tidal (River Welland):

5.15. The River Welland is a lowland river in the east of England, stretching approximately 65 miles (105 kilometres) from source to mouth. It rises in the Hothorpe Hills near Sibbertoft in Northamptonshire and flows generally northeast through Market Harborough, Stamford, and Spalding before entering The Wash estuary near Fosdyke in Lincolnshire, where it meets the North Sea. The Welland drains part of the Midlands eastwards and forms part of the wider River Nene and Welland catchment. Its principal tributaries include the River Gwash, River Chater, and Eye Brook, along with numerous smaller drains and ditches that feed into it across the Fenland area.

5.16. It is a key waterway within the reclaimed Fens, particularly across the district of South Holland, where it has been engineered to accommodate floodwaters within controlled washlands. These washlands consist of two channels between widely spaced embankments, originally designed to allow floodwaters to spread while tidal conditions in the estuary restricted outflow. Following the severe floods of 1947, extensive works such as the Coronation Channel were constructed to protect Spalding, enabling more efficient flood management. Today, the washlands are no longer used solely for grazing but also support arable farming as part of the managed Fenland landscape.

5.17. The River Welland is classified as a “Main River” by the Environment Agency.

Detailed Flood Modelling:

5.18. Product 4 modelled flood levels and extents have been requested from the Environment Agency for use within this report.

Flood Storage Areas:

5.19. Flood Storage Areas are areas that act as a balancing reservoir, storage basin or balancing pond. Their 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. Flood storage areas do not completely remove the chance of flooding and can be overtopped or fail in extreme weather conditions.

5.20. According to EA data, there are no Flood Storage Areas located in close proximity to the site.

Flood Defences:

5.21. Flood defences are typically raised structures that alter natural flow patterns and prevent floodwater from entering property in times of flooding. They are generally categorised as either ‘formal’ or ‘informal’ defences. A ‘formal’ flood defence is a structure that was built specifically for the purpose of flood defence, and is maintained by its respective owner, which could be the EA, Local Authority, or an individual. An ‘informal’ flood defence is a structure that has not been specifically built to retain floodwater, and is not maintained for this specific purpose, but may afford some protection against flooding.

5.22. Asset inspections are undertaken on average every six months, although some critical assets are assessed on a more regular basis. It is possible that adjacent assets are inspected on different dates, which may result in two assets of a similar state of repair having different condition ratings. It is unclear when both assets were last inspected.

5.23. Condition ratings of assets may also be affected by the time of year the surveys are conducted, as vegetation may obscure the asset in the summer months, or accessibility may be an issue during winter months. These factors would not usually affect the recorded condition rating of an asset unless the asset is on a borderline between two ratings.

5.24. The River Welland is flanked by natural high ground with a 1:100 year standard of protection. The current condition rating of the asset is unknown.

Residual Risk (breach or overtopping of flood defences):

5.25. Breaching of flood defences can cause rapid inundation of areas behind flood defences as flow in the river channel discharges through the breach. A breach can occur with little or no warning, although they are much more likely to occur with extreme river levels or tides when the stresses on flood defences are highest. Flood water flowing through a breach will normally discharge at a high velocity, rapidly filling up the areas behind the defences, resulting in significant damage to buildings and a high risk of loss of life. Breaches are most likely to occur in soft defences such as earth embankments although poorly maintained hard defences can also be a potential source of breach.

5.26. Overtopping of flood defences occurs when water levels exceed the protection level of raised flood defences. The worst case occurs when the fluvial or tidal levels exceed the defence level as this can lead to prolonged flooding. Less severe overtopping can occur when flood levels are below defence levels, but wave action causes cyclic overtopping, with intermittent discharge over the crest level of the defence. Flood defences are commonly designed with a freeboard to provide protection against overtopping from waves. The risk from overtopping due to exceedance of the flood defence level is much more significant than the risk posed by wave overtopping. Exceedance of the flood defence level can lead to prolonged and rapid flooding with properties immediately behind the defences at highest risk.

5.27. In the event of a failure (breach) or overtopping (exceedance) of the flood defences in place, the site may be at risk of inundation.

Pluvial (Surface Water):

5.28. Pluvial (surface water) flooding occurs 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.

5.29. The mapping below shows the Risk of Flooding from Surface Water (RoFSW). Please note that the EA do not consider this information suitable to be used to identify the risk to individual properties or sites. It is useful to raise awareness in areas which may be at risk and may require additional investigation. This information tells you the flood risk of the land around a building, not the building itself.

5.30. The RoFSW products are an assessment of where surface water flooding may occur.

5.31. The mapping shows the following likelihood categories, for the present day risk of flooding from surface water, and the climate change scenarios have been produced to indicate the predicted impacts of climate change on future flood risk.

- High - greater than or equal to 1 in 30 (3.3%) chance of flooding in any year.
- Medium – Less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance of flooding in any given year.
- Low – Less than 1 in 100 (1%) but greater than or equal to 1 in 1000 (0.1%) chance of flooding in any given year.

5.32. 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.

5.33. The EA Risk of Flooding from Surface Water Map suggests that the site is located within an area at “Very Low” chance of flooding from surface water.

5.34. The EA Risk of Flooding from Surface Water mapping shows the site to be at “Very Low” chance of flooding between 2040 and 2060.

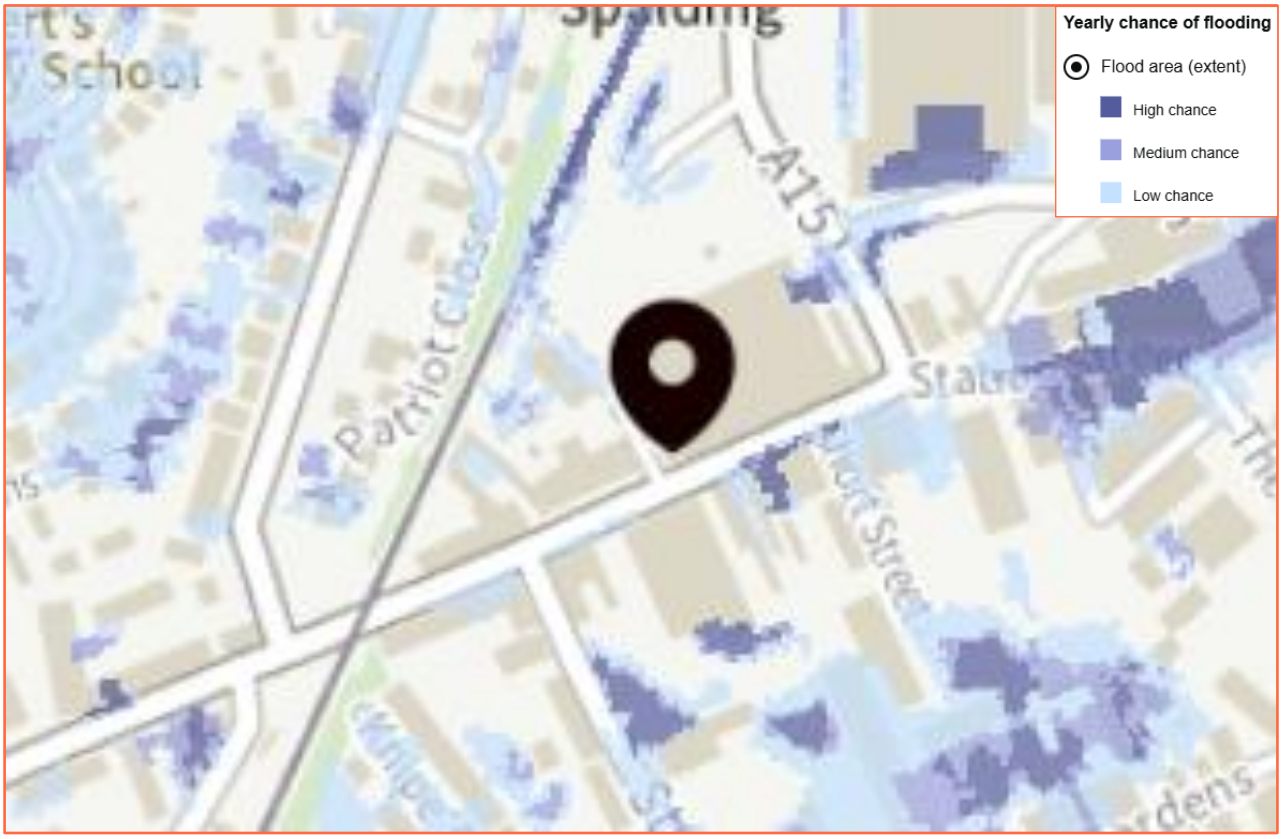


Figure 10: Extract from EA Risk of Flooding from Surface Water mapping – present day (Source: EA)

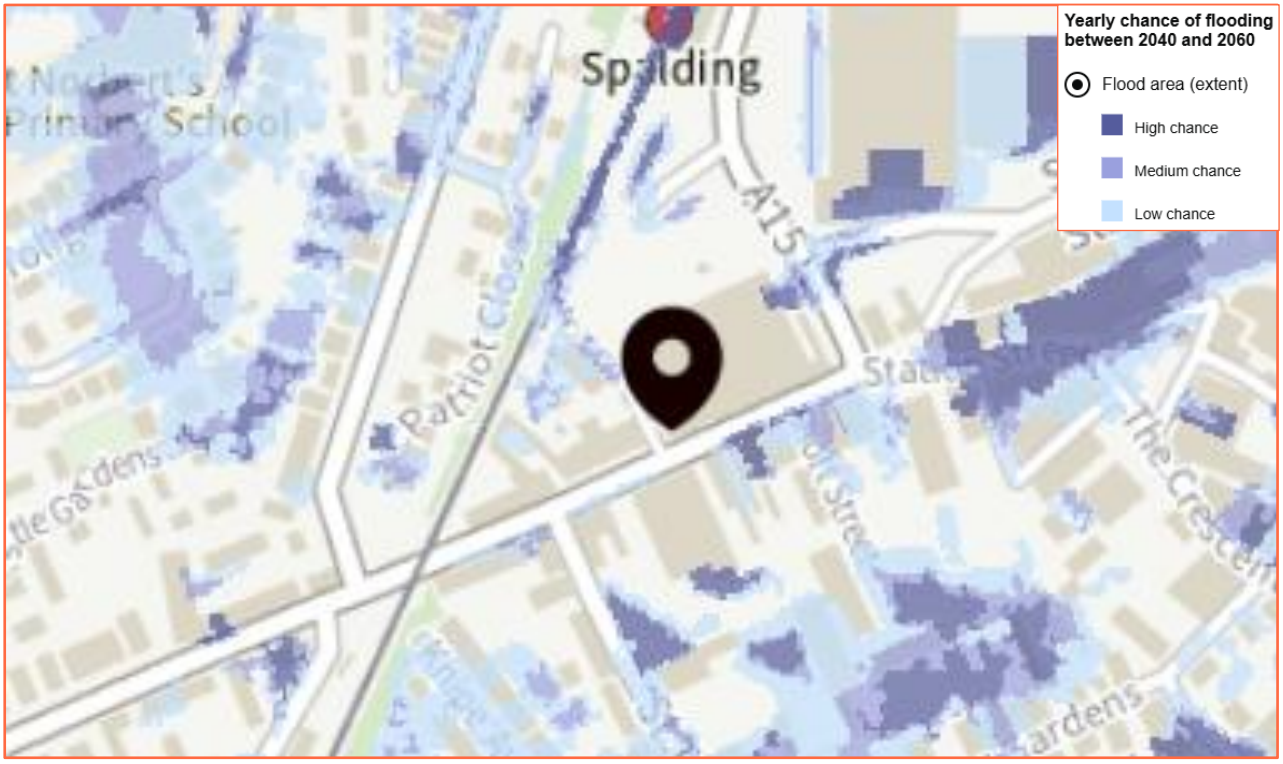


Figure 11: Extract from Environment Agency RoFSW map – between 2040 and 2060 (Source: EA)

Groundwater:

5.35. Groundwater flooding occurs as a result of water rising up from the underlying rocks or from water flowing from abnormal springs. This tends to occur after much longer periods of sustained high rainfall. Higher rainfall means

more water will infiltrate into the ground and cause the water table to rise above normal levels. Groundwater tends to flow from areas where the ground level is high, to areas where the ground level is low. In low-lying areas the water table is usually at shallower depths anyway, but during very wet periods, with all the additional groundwater flowing towards these areas, the water table can rise up to the surface causing groundwater flooding.

5.36. Groundwater flooding is most likely to occur in low-lying areas underlain by permeable rocks (aquifers). These may be extensive, regional aquifers, such as chalk or sandstone, or may be localised sands or river gravels in valley bottoms underlain by less permeable rocks. Groundwater flooding takes longer to dissipate because groundwater moves much more slowly than surface water and will take time to flow away underground.

5.37. This location is outside of a groundwater flood alert area.

5.38. No information has been provided to suggest that the site has flooded historically due to groundwater.

Sewer:

5.39. Sewer flooding occurs when the sewer network cannot cope with the volume of water that is entering it. It is often experienced during times of heavy rainfall when large amounts of surface water overwhelm the sewer network causing flooding. Temporary problems such as blockages, siltation, collapses and equipment or operational failures can also result in sewer flooding.

5.40. All Water Companies have a statutory obligation to maintain a register of properties/areas which have reported records of flooding from the public sewerage system, and this is shown on the DG5 Flood Register. This includes records of flooding from foul sewers, combined sewers and surface water sewers which are deemed to be public and therefore maintained by the Water Company. The DG5 register records of flood incidents resulting in both internal property flooding and external flooding incidents. Once a property is identified on the DG5 register, water companies can typically put funding in place to address the issues and hence enable the property to be removed from the register. It should be noted that flooding from land drainage, highway drainage, rivers/watercourses and private sewers is not recorded within the register.

5.41. No information has been presented to suggest that the site is susceptible to sewer flooding.

Other Sources:

5.42. Reservoirs with an impounded volume in excess of 25,000 cubic metres (measured above natural ground level) are governed by the Reservoirs Act and are listed on a register held by the Environment Agency. The site is located outside of the maximum inundation extent on the EA Reservoir Inundation Map. The EA also advise on their website that reservoir flooding is extremely unlikely. There has been no loss of life in the UK from reservoir flooding since 1925. All major reservoirs have to be inspected by specialist dam and reservoir Engineers. In accordance with the Reservoirs Act 1975 in England, these inspections are monitored and enforced by the EA themselves. The risk to the site from reservoir flooding is therefore minimal and is far lower than that relating to the potential for fluvial / tidal flooding to occur. The Environment Agency Reservoir Flood Map illustrated below, illustrates the largest area that might be flooded if the storage area were to fail and release the water it is designed to hold during a flood event.

5.43. Records of flooding from reservoirs and canals are erratic as there is no requirement for the Environment Agency to provide information on historic flooding from canals and raised reservoirs on plans. In particular, the NPPF does not require flood risk from canals and raised reservoirs to be shown on the Environment Agency flood zones.

5.44. Overflows from canals can be common as they are often fed by land drainage, and often do not have controlled overflow spillways. Occasionally, major bank breaches also occur, leading to rapid and deep flooding of adjacent land.

5.45. No information has been provided to suggest that the site is susceptible to flooding from other sources.

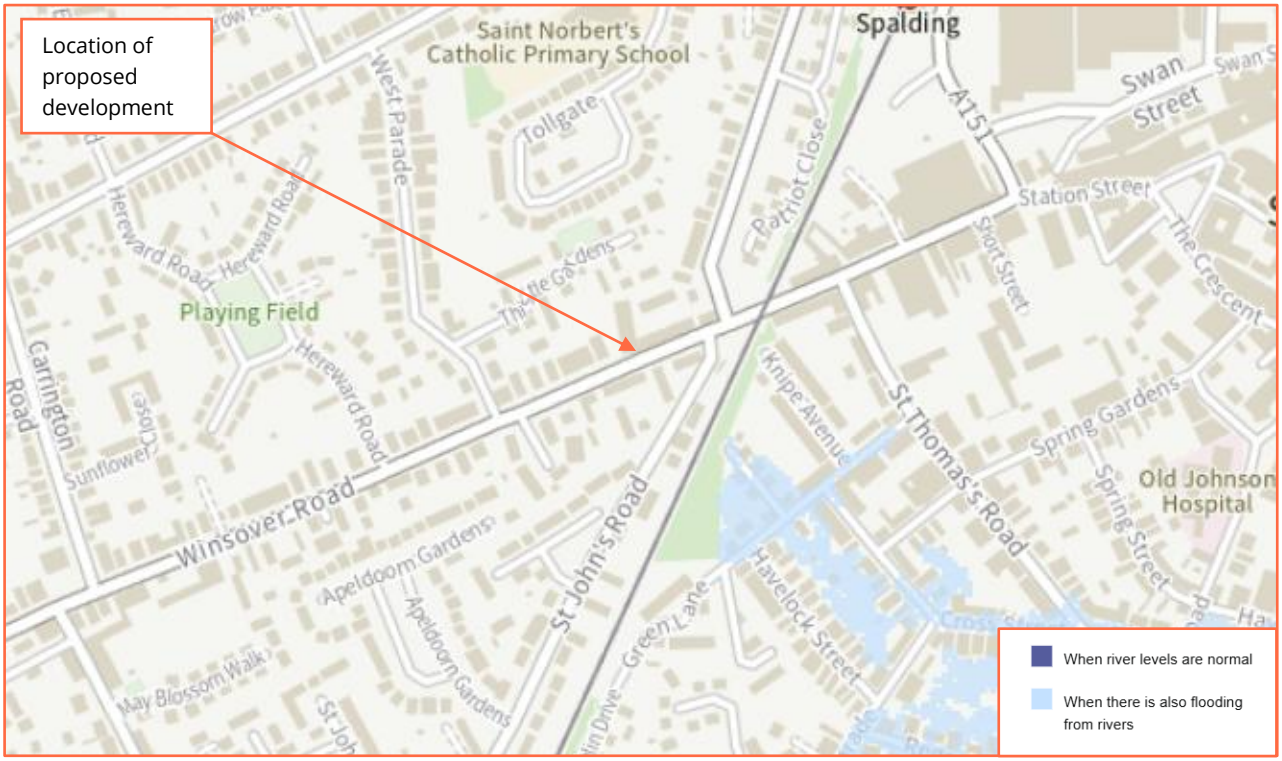


Figure 12: Extract from Environment Agency Reservoir Flood Map (Source: EA)

Historical Flood Events:

5.46. The EA hold records of historic flood events from rivers and the sea. The EA map flooding to land, not individual properties. Their historic flood event record outlines are an indication of the geographical extent of an observed flood event. Their historic flood event outlines do not give any indication of flood levels for individual properties. They also do not imply that any property within the outline has flooded internally.

5.47. The EA historical flood records are not comprehensive, and they advise that further enquiries locally are made with specific reference to flooding at the location.

6. Flood Risk Management

Vulnerability to Flooding:

6.1. The NPPF classifies property usage by vulnerability to flooding.

6.2. The existing site usage is classified as "more vulnerable" (residential) as the property is currently a residential flat across the first and second floor.

6.3. Post development, the site will remain classified as "more vulnerable" (residential), as the application is for the conversion of an existing three-bedroom, two storey flat into 2 x self-contained one-bedroom flats, with cycle storage on the flat roof and bin store beneath the existing staircase.

6.4. There are no new ground floor bedrooms or basements as part of this proposal. All bedrooms are situated on the first and second floor. In addition, there will be no increase to the built footprint or impermeable areas on site.

6.5. Accordingly, it is considered that while the vulnerability of the site as a whole will not increase post development, there will be an intensification of usage due to introduction of additional residential units.

EA Standing Advice for Minor Extensions:

6.6. EA Standing Advice guidance is for domestic extensions and non-domestic extensions where the additional footprint created by the development does not exceed 250m^2. It should not be applied if an additional dwelling is being created, e.g. a self-contained annexe or additional commercial unit.

6.7. The proposed application is for the conversion of an existing three-bedroom, two storey flat into 2 x self-contained one-bedroom flats, with cycle storage on the flat roof and bin store beneath the existing staircase.

Physical Design Measures:

6.8. The site lies within Flood Zone 3 according to the EA Flood Map for planning (Rivers and the Sea).

6.9. The EA Risk of Flooding from Surface Water Map suggests that the site is located within an area at "Very Low" chance of flooding from surface water for the present day and between 2040 and 2060.

6.10. To help protect against flooding during extreme events, the applicant has agreed to implement flood resistant design measures into the development where practical and feasible, in consultation with the Local Authority building control department. These measures can include the following:

- Solid concrete ground floor slab, with waterproof membrane;
- Closed-cell foam used in wall cavities;
- Waterproof ground floor internal render;
- Waterproof screed used on ground floors;
- Damp proof membranes;
- External walls rendered resistant to flooding to at least 600mm above ground floor level;
- Exterior ventilation outlets, utility points and air bricks fitted with removable waterproof covers;
- Raised wiring and power outlets at least 600mm above ground floor level;
- Ground floor electrical main ring run from first floor level; and on separately switched circuit from first floor;
- Electrical incomer and meter situated at least 600mm above ground floor level;
- Boilers, control and water storage / immersion installed at least 600mm above ground floor level;
- Gas meter installed at least 600mm above ground floor level;
- Plumbing insulation of closed-cell design;

- Non-return valves fitted to all drain and sewer outlets;
- Manhole covers secured;
- Kitchen units of solid, water resistant material at ground floor level;
- Use of MDF carpentry (i.e. skirting, architrave, built-in storage) avoided at ground floor level;
- Stairs of solid hardwood construction with wood faces treated to resist water penetration at ground floor level.

6.11. It is recommended that flood proof doors and windows are installed for all ground floor external doors and windows.

Safe Escape:

6.12. The Flood Risk and Coastal Change Planning Practice Guidance (PPG) states that access considerations should include the voluntary and free movement of people during a design flood, as well as the potential for evacuation before a more extreme flood, considering the effects of climate change for the lifetime of the development. Emergency access and escape plans are needed if any part of a development is below the estimated design flood level, which connects the site to an area away from current or future flood risk.

6.13. Safe escape will be provided by a flood warning and evacuation plan that will be prepared in liaison with the Council's Emergency Planners and tied in with the existing emergency plans for the area.

6.14. In the event that the site floods unexpectedly with no flood alert or warning then safe refuge is provided on the first (flat 1) and second floor (flat 2) of the building.

6.15. Residents will follow the Flood Warning and Evacuation Plan detailed in the following section.

Flood Warning:

6.16. The EA is responsible for issuing flood warnings. Flood warnings are issued to the emergency services and local authorities. Both private individuals and organisations can sign-up to receive warnings via phone, text or email. This system of receiving warnings is currently voluntary.

6.17. Advice regarding severe flood warnings will generally be given during weather forecasts on local radio and TV. In the case of extreme events, warnings can also be disseminated via door to door visits by the police or locally appointed flood wardens.

6.18. The applicant has agreed to subscribe to the EA's flood warning service.

6.19. The EA issue flood warnings/alerts to specific areas when flooding is expected. The site lies within the Pinchbeck and the West of Spalding in Wisbech Flood Warning Area.

Flood Warning	Flood Alert	Flood Warning	Severe Flood Warning
			
What it means?	Flooding is possible. Be prepared.	Flooding is expected. Immediate action required.	Severe flooding. Danger to life.
When it's used?	Two hours to two days in advance of flooding.	Half an hour to one day in advance of flooding.	When flooding poses a significant threat to life.
What to do?	Be prepared to act on your flood plan. Prepare a flood kit of essential items. Monitor local water levels and the flood forecast on our website.	Move family, pets and valuables to a safe place. Turn off gas, electricity and water supplies if safe to do so. Put flood protection equipment in place.	Stay in a safe place with a means of escape. Be ready should you need to evacuate from your home. Co-operate with the emergency services. Call 999 if you are in immediate danger.

Table 2: EA Flood Warning Service

Flood Plan:

6.20. It is recommended that the applicant and future owners, occupiers and Landlords of the properties prepare a flood plan to protect life and property during a flood event:

	Action
Before a flood	• Find out if you are at risk of flooding. • Find out if you can receive flood warnings. • Prepare and keep a list of all your important contacts to hand or save them on your mobile phone. • Think about what items you can move now and what you would want to move to safety during a flood such as pets, cars, furniture, and electrical equipment. • Know how to turn off gas, electricity and water supplies. • Prepare a flood kit of essential items and keep it handy. It can include copies of important documents, a torch, a battery-powered or wind-up radio, blankets and warm clothing, waterproofs, rubber gloves and a first aid kit including all essential medication. • Consider buying flood protection products such as flood boards and airbrick covers to help reduce flood water getting into your property.
During a flood	• Tune into your local radio station on a battery or wind-up radio. • Fill jugs and saucepans with water. • Grab your flood kit - if you have prepared one. • Collect blankets, torch, first aid kit, medication and food. • Move important documents, personal items, valuables, and lightweight belongings upstairs or to high shelves. • Raise large items of furniture, or put them in large bags if you have them. • Move people, outdoor belongings, cars and pets to higher ground. • Switch off water, gas and electricity at mains when water is about to enter your home. Do not touch sources of electricity when standing in water. • Fit flood protection products, if you have them, for example flood boards, airbrick covers, sandbags. • Put plugs in sinks and baths. Weigh them down with a pillowcase or plastic bag filled with soil. • If you do not have non-return valves fitted, plug water inlet pipes with towels or cloths. • Move your family and pets upstairs or to a high place with a means of escape. • Listen to the advice of the emergency service and evacuate if told to do so. • Avoid walking or driving through flood water. Six inches of fast-flowing water can knock over an adult and two feet of water can move a car.
After a flood	• If you have flooded, contact your insurance company as soon as possible. • Take photographs and videos of your damaged property as a record for your insurance company. • If you don't have insurance, contact your local authority for information on grants and charities that may help you. • Flood water can contain sewage, chemicals and animal waste. Always wear waterproof outerwear, including gloves, wellington boots and a face mask. • Have your electrics, central heating and water checked by qualified engineers before switching them back on.

Table 3: Flood plan

Off-Site Impacts:

Fluvial Floodplain Storage:

6.21. The NPPF requires that where development is proposed in undefended areas of floodplain, which lie outside of the functional floodplain, the implications of ground raising operations for flood risk elsewhere needs to be considered. Raising existing ground levels may reduce the capacity of the floodplain to accommodate floodwater and increase the risk of flooding by either increasing the depth of flooding to existing properties at risk or by extending the floodplain to cover properties normally outside of the floodplain. Flood storage capacity can be maintained by lowering ground levels either within the curtilage of the development or elsewhere in the floodplain, in order to maintain at least the same volume of flood storage capacity within the floodplain.

6.22. In undefended tidal areas, raising ground levels is unlikely to impact on maximum tidal levels so the provision of compensatory storage should not be necessary.

6.23. For development in a defended flood risk area, the impact on residual flood risk to other properties needs to be considered. New development behind flood defences can increase the residual risk of flooding if the flood defences are breached or overtopped by changing the conveyance of the flow paths or by displacing flood water elsewhere. If the potential impact on residual risk is unacceptable then mitigation should be provided.

6.24. As the site is located within an area of predominantly tidal risk, there will be no unacceptable loss of fluvial floodplain storage.

Surface Water Drainage:

6.25. Where feasible, the development will utilise Sustainable drainage systems (SuDS) design in accordance with the NPPF for Planning Applications and the drainage hierarchy as follows:

1. Store rainwater for later use;
2. Infiltration techniques;
3. Attenuate rainwater by storing in tanks for gradual release;
4. Discharge rainwater direct into watercourse;
5. Discharge rainwater into surface water sewer;
6. Discharge rainwater into a combined sewer.

6.26. Due to the nature of the development (change of use of existing building), there will be no increase to the built footprint, no change to the impermeable coverage, and therefore no increase to surface water runoff generation. The existing surface water drainage arrangements for the site will continue to be utilised.

7. Sequential and Exception Test

7.1. The Sequential Test aims to ensure that development does not take place in areas at high risk of flooding when appropriate areas of lower risk are reasonably available.

7.2. The Sequential Test is applied to developments in areas identified as being at risk of any source of flooding now or in the future. The Sequential Test ensures that a sequential, risk-based approach is followed to steer new development to areas with the lowest risk of flooding, taking all sources of flood risk and climate change into account.

7.3. The sequential approach is designed to ensure that areas at little or no risk of flooding from any source are developed in preference to areas at higher risk. This means avoiding, so far as possible, development in current and future medium and high flood risk areas considering all sources of flooding including areas at risk of surface water flooding. Other forms of flooding need to be treated consistently with river and tidal flooding in mapping probability and assessing vulnerability, so that the sequential approach can be applied across all areas of flood risk.

7.4. The site is situated within Flood Zone 3 when using the Environment Agency Flood Map for Planning (Rivers and Sea) and within an area at "Very Low" chance of flooding from surface water for the present day and between 2040 – 2060. Post development, the site will remain classified as "more vulnerable" (residential), as the application is for the conversion of an existing three-bedroom, two storey flat into 2 x self-contained one-bedroom flats, with cycle storage on the flat roof and bin store beneath the existing staircase.

	Flood Risk Vulnerability Classification				
Flood Zones	**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	✓

Table 4: Flood risk vulnerability and flood zone 'compatibility' (Source: NPPF Table 3 Technical Guidance)

7.5. Using the table above, the proposed application ("more vulnerable") is considered to be suitable within Flood Zone 3. The Sequential and Exception Tests do not need to be applied to minor developments and changes of use.

8. Discussion and Conclusion

8.1. Unda Consulting Limited have been appointed by Pishder Properties Ltd to undertake a Flood Risk Assessment for the proposed development at 20 Winsover Road, Spalding, PE11 1EJ. The purpose of the study is to support a planning application for the proposed development.

8.2. The site comprises of a three-storey property, with a retail shop at ground level and an existing flat across the first and second floors. The first and second floor is understood to have lawful planning permission for residential use. The surrounding area is characterised by mixed use properties of commercial and residential usage.

8.3. The proposed application is for the conversion of an existing three-bedroom, two storey flat into 2 x self-contained one-bedroom flats, with cycle storage on the flat roof and bin store beneath the existing staircase.

8.4. The existing site usage is classified as "more vulnerable" (residential) as the property is currently a residential flat across the first and second floor. Post development, the site will remain classified as "more vulnerable" (residential), as the application is for the conversion of an existing three-bedroom, two storey flat into 2 x self-contained one-bedroom flats, with cycle storage on the flat roof and bin store beneath the existing staircase.

8.5. There are no new ground floor bedrooms or basements as part of this proposal. All bedrooms are situated on the first and second floor. In addition, there will be no increase to the built footprint, number of floors proposed or impermeable areas on site. However, as there is an introduction of an additional residential unit, there will be an intensification of use through the change of use from a single dwelling to two dwellings.

8.6. The site is located within Flood Zone 3 (High Probability), defined as land having a 1:100 or greater annual probability of river flooding; or Land having a 1:200 or greater annual probability of sea flooding. The nearest watercourse to the site is the River Welland located approximately 485m east.

8.7. The site is located within the Spalding Urban catchment of the Welland and Deepings IDB.

8.8. Product 4 modelled flood levels and extents have been requested from the Environment Agency for use in this report.

8.9. According to EA data, there are no Flood Storage Areas located in close proximity to the site.

8.10. The River Welland is flanked by natural high ground with a 1:100 year standard of protection. The current condition rating of the asset is unknown.

8.11. The EA Risk of Flooding from Surface Water Map suggests that the site is located within an area at "Very Low" chance of flooding from surface water for the present day and between 2040 – 2060.

8.12. No information has been provided to suggest that the site itself has previously been affected by flooding from groundwater, sewer surcharge or reservoirs.

In Summary:

- The proposed application is for the conversion of an existing three-bedroom, two storey flat into 2 x self-contained one-bedroom flats, with cycle storage on the flat roof and bin store beneath the existing staircase.
- Post development, the site will remain classified as "more vulnerable" (residential).
- There are no new ground floor bedrooms or basements as part of this proposal. All bedrooms are situated on the first and second floor. In addition, there will be no increase to the built footprint, number of floors proposed or impermeable areas on site.

- There will be an intensification of usage due to introduction of additional residential units (a change of use from a single dwelling to two dwellings).
- There will be no loss of fluvial floodplain storage.
- Flood proofing the development will be incorporated, where appropriate.
- Safe escape will be provided by a flood warning and evacuation plan that will be prepared in liaison with the Council's Emergency Planners and tied in with the existing emergency plans for the area.
- In the event that the site floods unexpectedly with no flood alert or warning then safe refuge is provided on the first (flat 1) and second floor (flat 2) of the building.
- The applicant will register with the free Environment Agency Floodline Alert Direct service.

Assuming accordance with these flood risk management measures, Unda Consulting Limited consider the proposed application to be suitable in flood risk terms.

Unda Consulting Limited
November 2025

Appendix

A – Development Plans:

- Site location, existing and proposed plans – ULAS Planning.

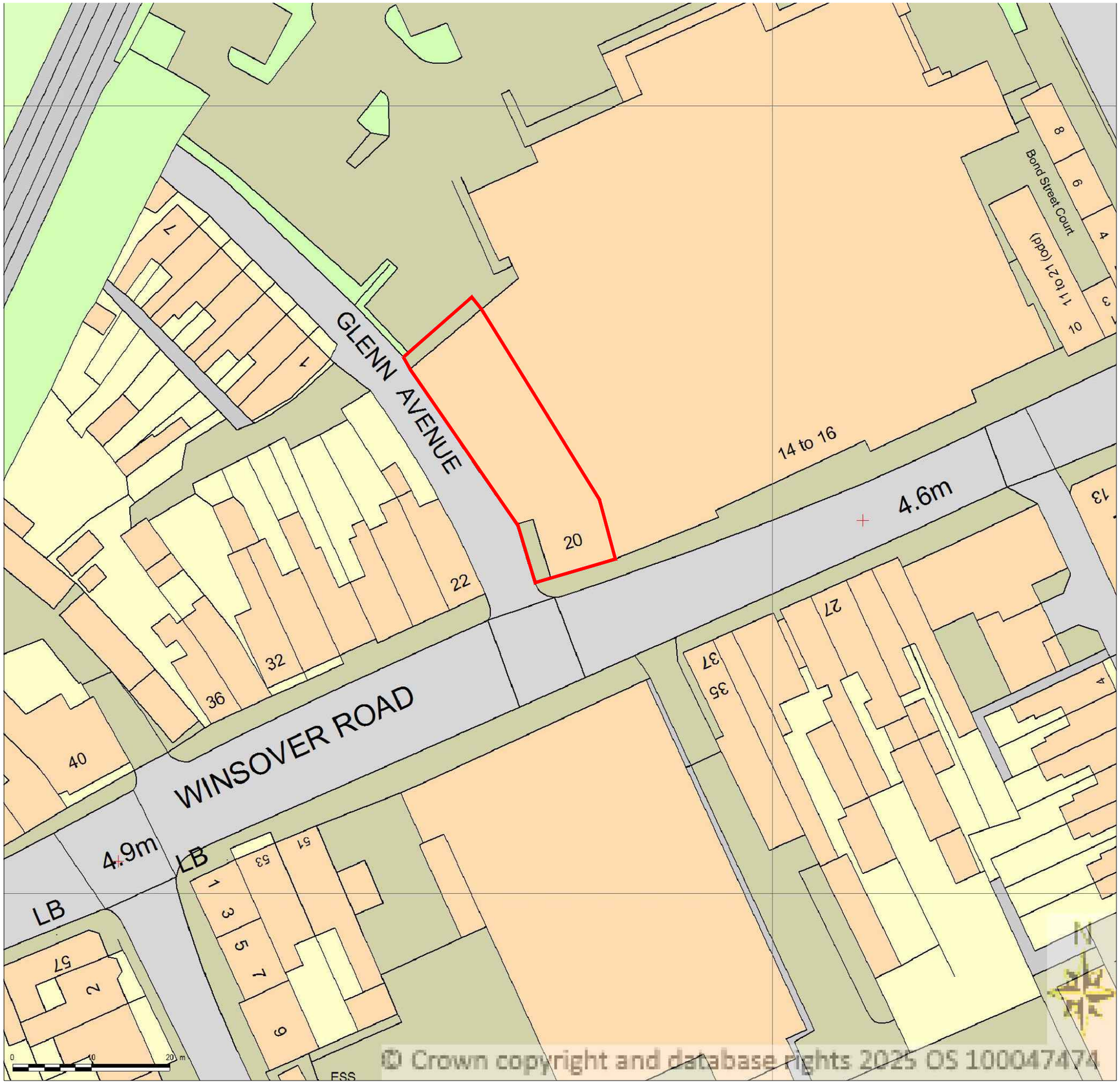
B – EA Flood Map for Planning:

- Flood Map for Planning – Environment Agency.

C – NPPF Annex 3:

- NPPF Annex 3: Flood risk vulnerability classification table.

Appendix A



LOCATION PLAN
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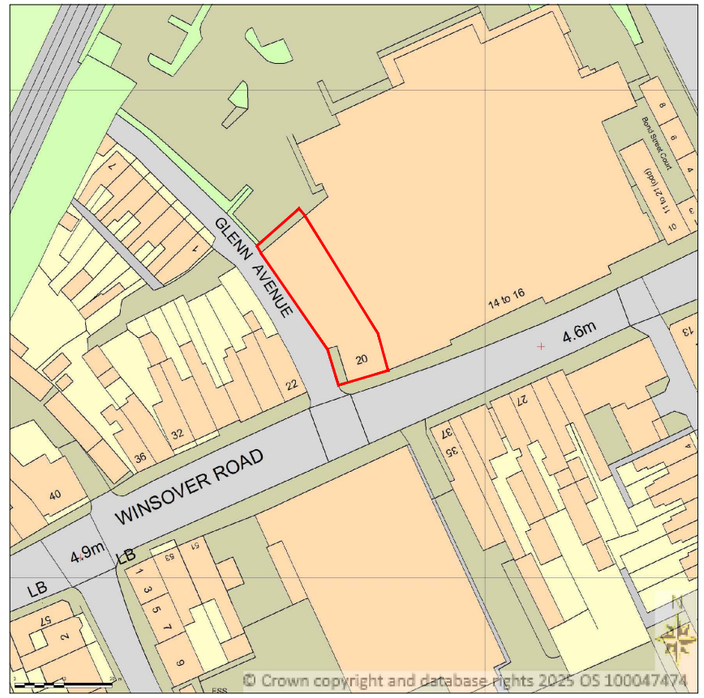

BLOCK PLAN
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Scale Bar For 1:500 — 10 20 30 40 m

V1	05.10.2025	First issued for comments and approval
Revision		

ULAS PLANNING
www.ulasplanning.co.uk - info@ulasplanning.co.uk
9 Dispensary Lane Hackney Central - LONDON
T . 0778 339 78 67

Project	20a Winsover Rd, Spalding PE11 1EJ		
Drawing	Location plan	Scale	1:500 @ A3
No	22_62-P-00	Date	05.10.2025
Rev No	V1	By	U. Turk

PRELIMINARY - NOT FOR CONSTRUCTION

Scale Bar For 1:100

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Revision		
V1	05.10.2025	First issued for comments and approval

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Project	20a Winsover Rd, Spalding PE11 1EJ		
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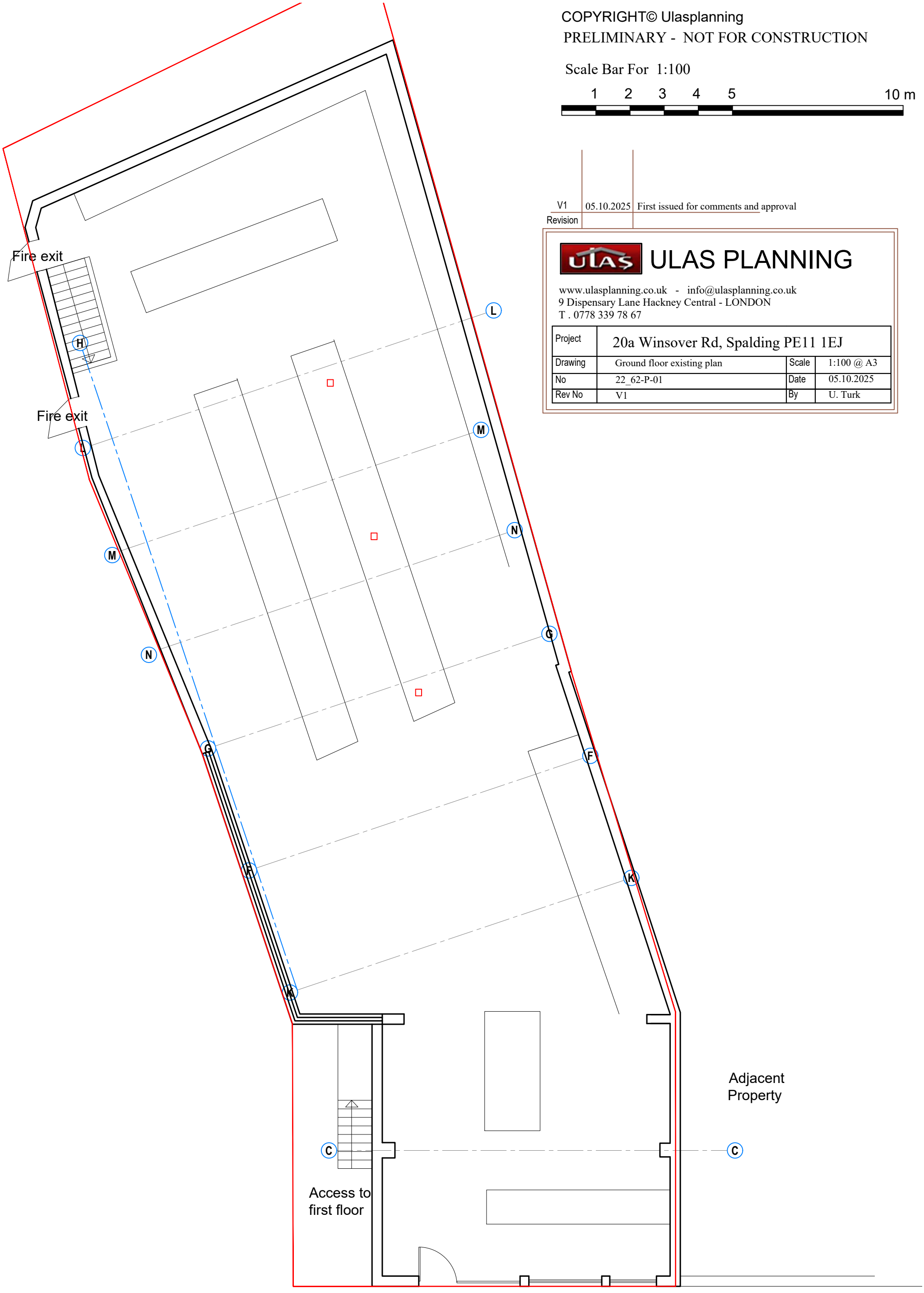
No	22_62-P-01	Date	05.10.2025
Rev No	V1	By	U. Turk



GROUND FLOOR
EXISTING
SCALE 1:100

PRELIMINARY - NOT FOR CONSTRUCTION

Scale Bar For 1:100

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Revision		
V1	05.10.2025	First issued for comments and approval

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Project	20a Winsover Rd, Spalding PE11 1EJ		
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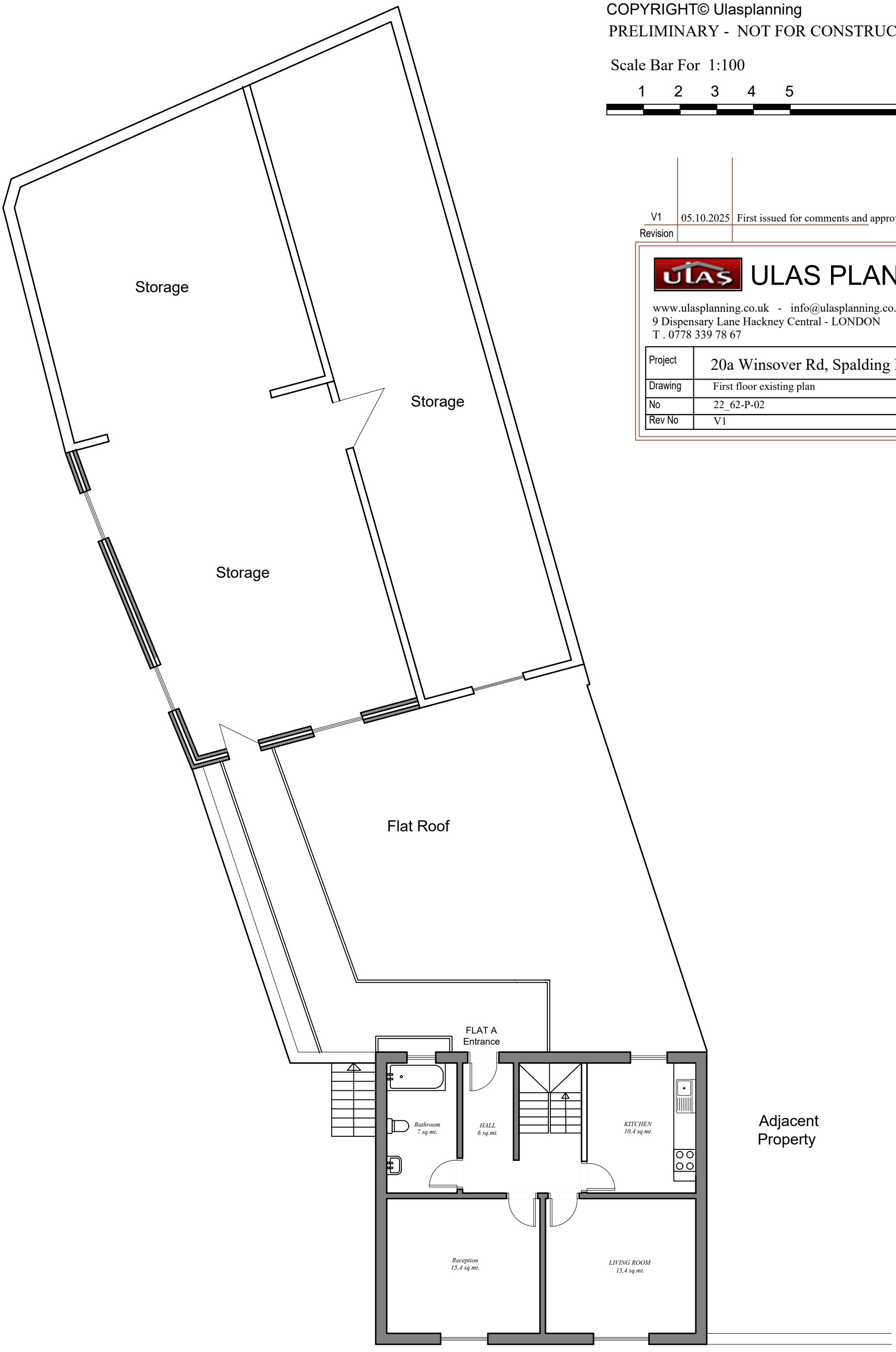
No	22_62-P-02	Date	05.10.2025
Rev No	V1	By	U. Turk



FIRST FLOOR EXISTING
SCALE 1:100

PRELIMINARY - NOT FOR CONSTRUCTION

Scale Bar For 1:100

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Revision		
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Project	20a Winsover Rd, Spalding PE11 1EJ		
Drawing	First floor proposed plan	Scale	1:100 @ A3
No	22_62-P-03	Date	05.10.2025
Rev No	V1	By	U. Turk

FIRST FLOOR
PROPOSED
SCALE 1:100

PRELIMINARY - NOT FOR CONSTRUCTION

Scale Bar For 1:100

1 2 3 4 5 10 m

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Project	20a Winsover Rd, Spalding PE11 1EJ		
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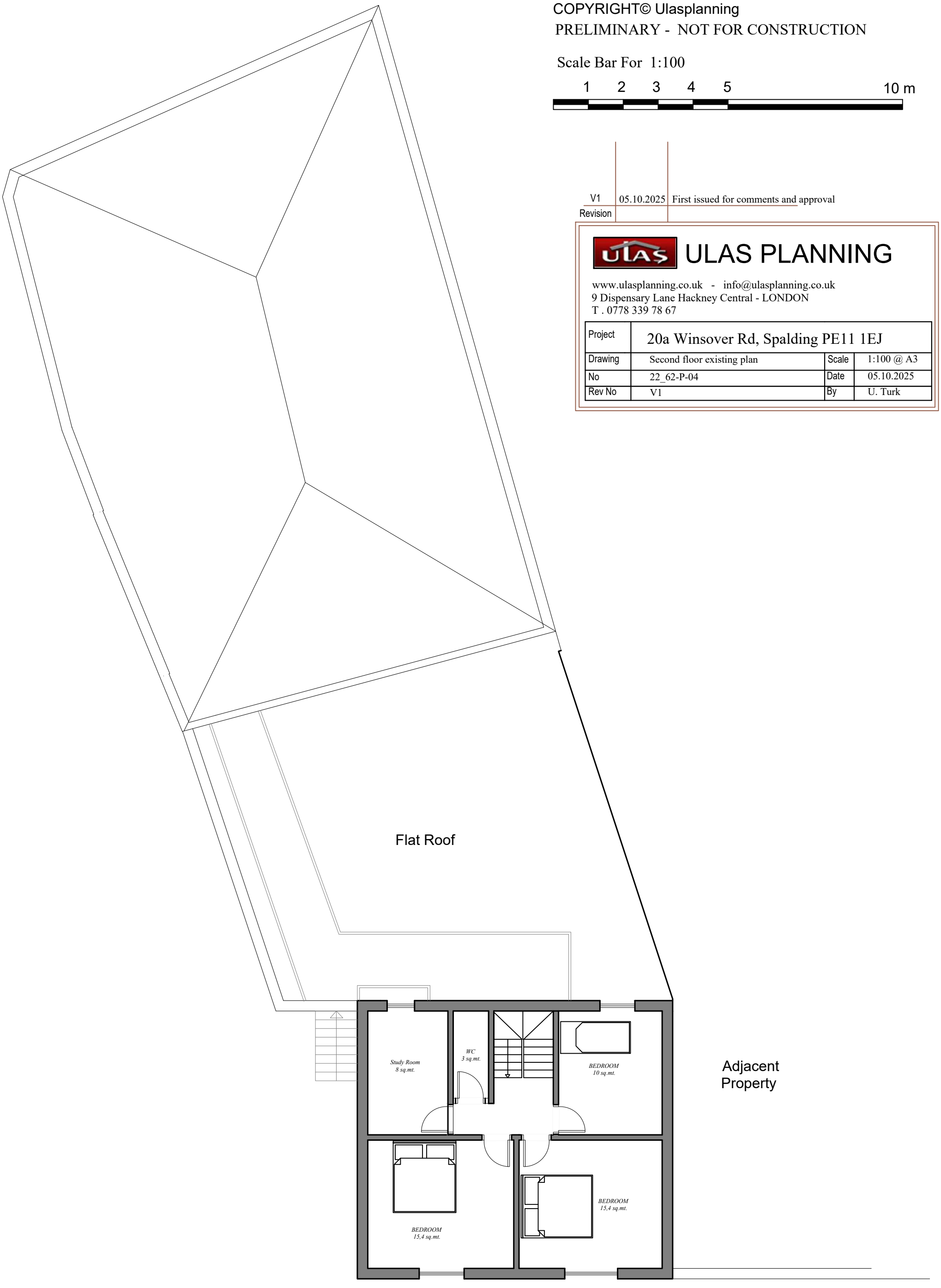
No	22_62-P-04	Date	05.10.2025
Rev No	V1	By	U. Turk



SECOND FLOOR
EXISTING
SCALE 1:100

PRELIMINARY - NOT FOR CONSTRUCTION

Scale Bar For 1:100

1 2 3 4 5 10 m

Revision		
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Project	20a Winsover Rd, Spalding PE11 1EJ		
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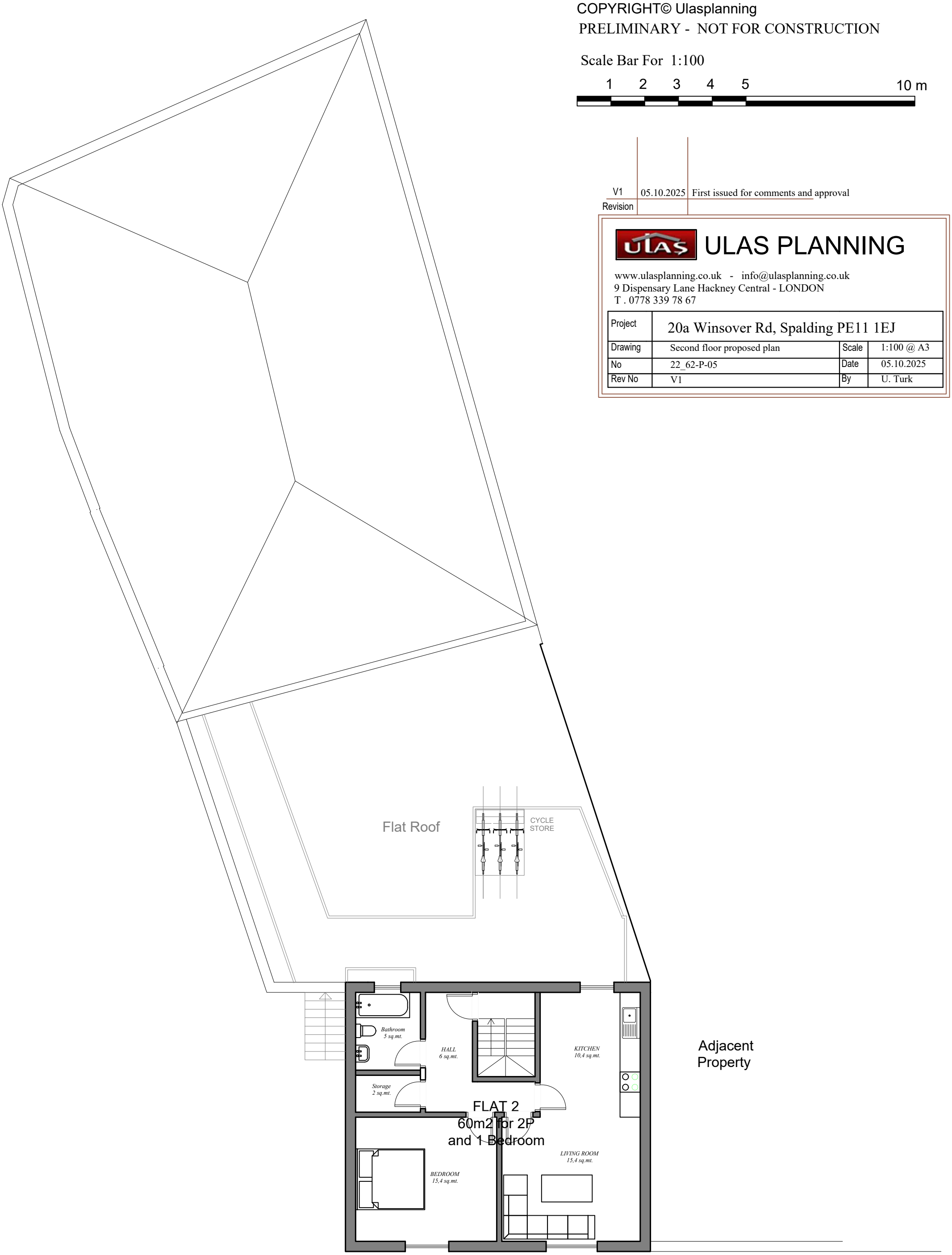
Rev No	V1	By	U. Turk



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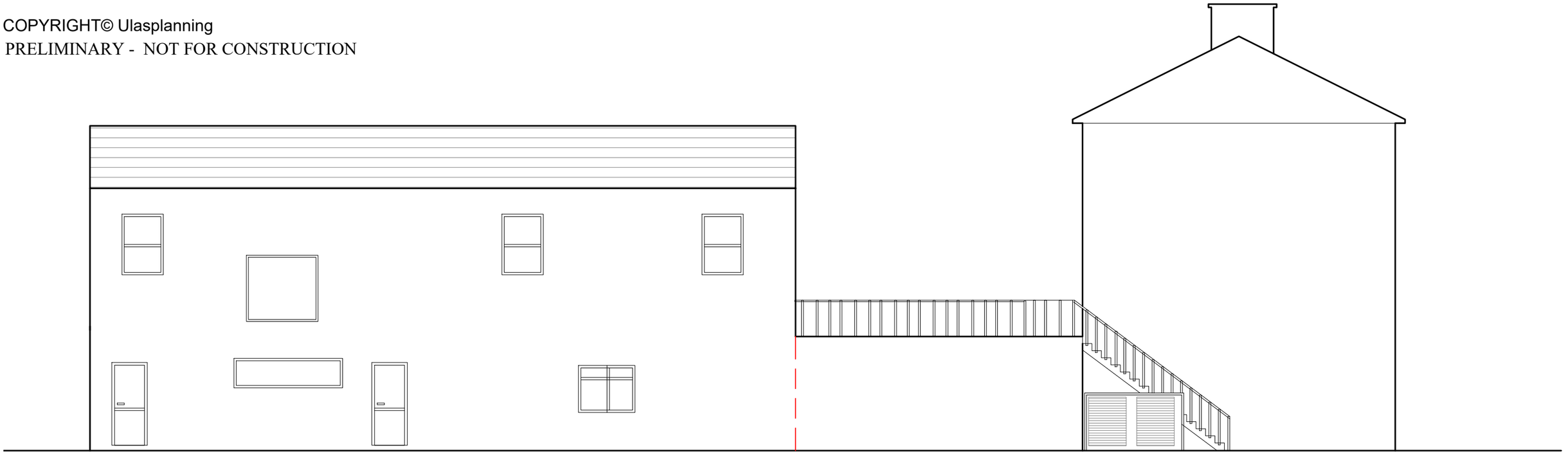

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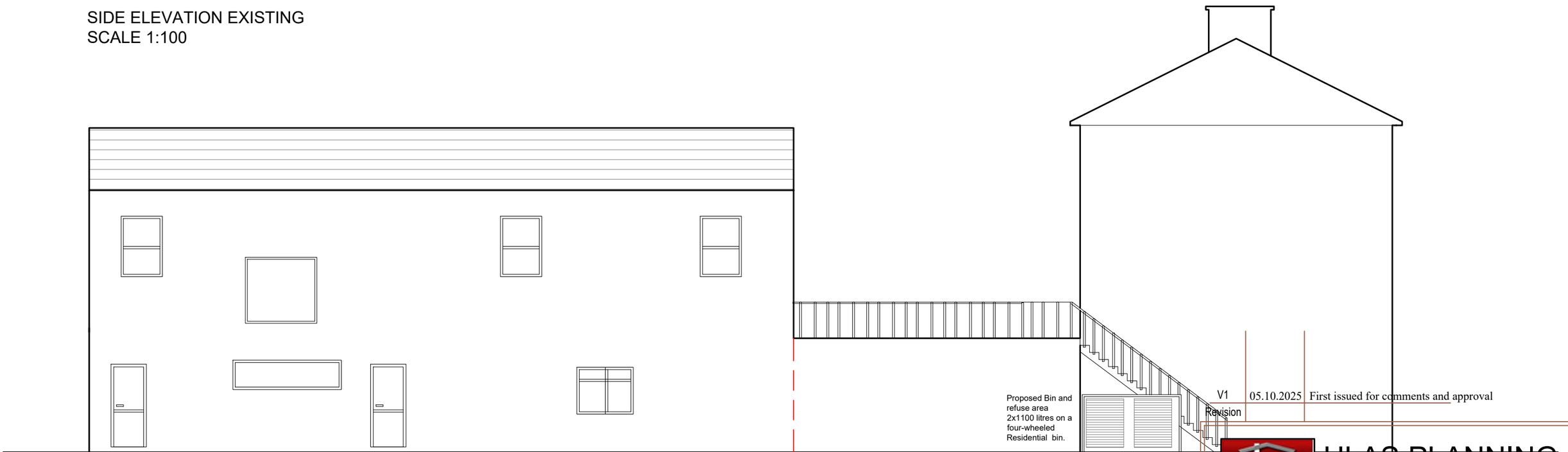

SIDE ELEVATION
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Scale Bar For 1:100

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Revision		
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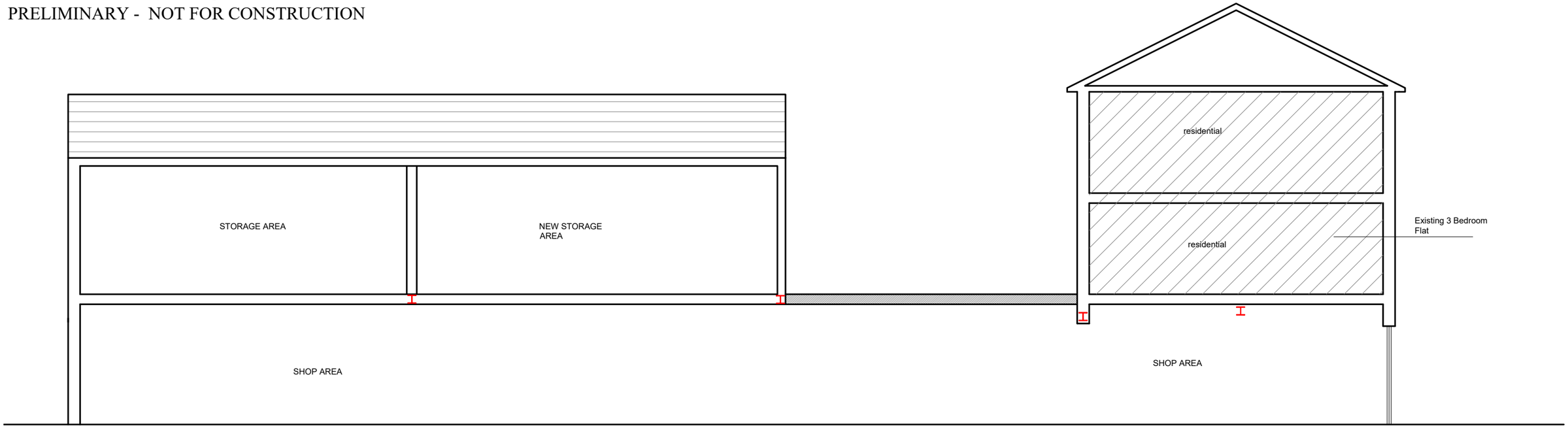
Project	20a Winsover Rd, Spalding PE11 1EJ		
Drawing	Side elevations existing and proposed	Scale	1:100 @ A3
No	22_62-P-06	Date	05.10.2025
Rev No	V1	By	U. Turk



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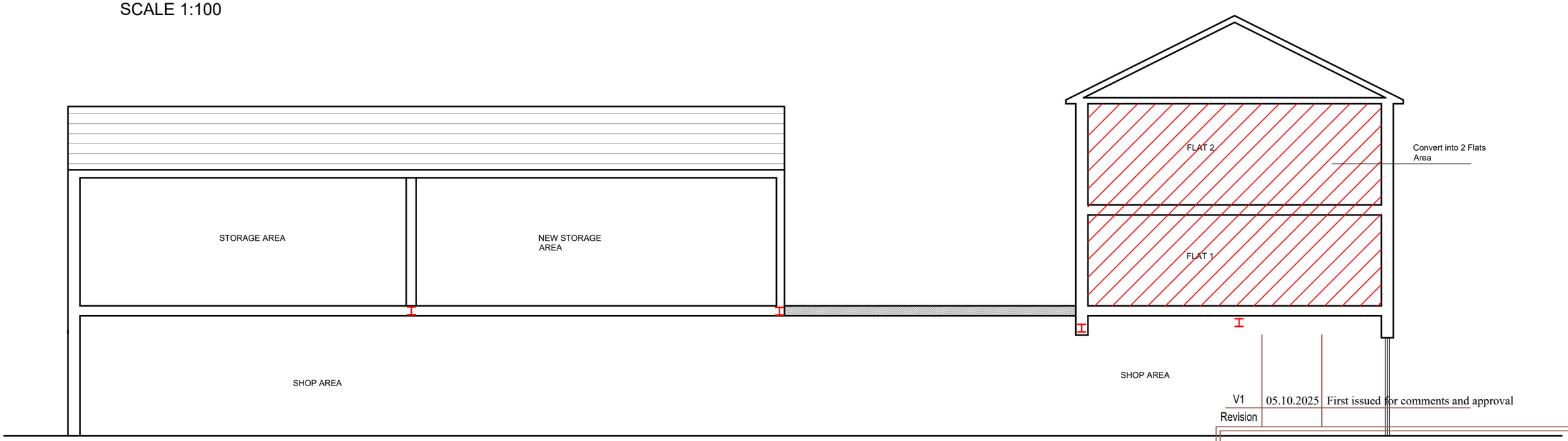

LONG SECTION PROPOSED
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Scale Bar For 1:100

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V1	05.10.2025	First issued for comments and approval

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Drawing	Long section existing and proposed	Scale	1:100 @ A3
No	22_62-P-07	Date	05.10.2025
Rev No	V1	By	U. Turk

PRELIMINARY - NOT FOR CONSTRUCTION

Scale Bar For 1:100

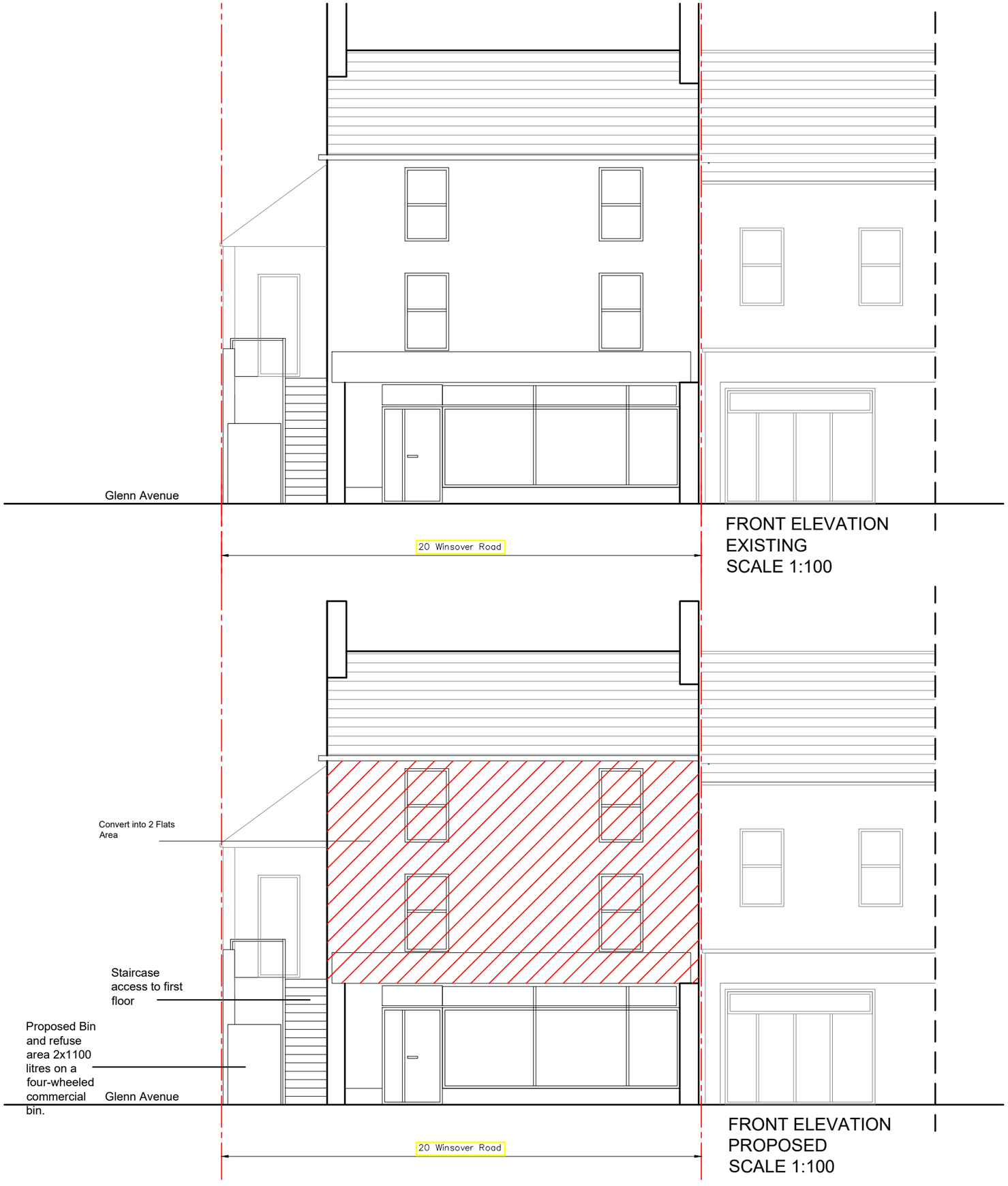
1 2 3 4 5 10 m

1100 Litre Container

Suitable for general waste, cardboard waste and dry mixed recyclables

These containers are lockable, easy to move around and are fitted with a wheel safety braking system.

Dimensions: 1.3m x 1.4m x 1.1m



FRONT ELEVATION
EXISTING
SCALE 1:100

FRONT ELEVATION
PROPOSED
SCALE 1:100

Revision		
V1	05.10.2025	First issued for comments and approval

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Project	20a Winsover Rd, Spalding PE11 1EJ		
Drawing	Front elevations existing and proposed	Scale	1:100 @ A3
No	22_62-P-08	Date	05.10.2025
Rev No	V1	By	U. Turk

Appendix B

Flood map for planning

Your reference	Location (easting/northing)	Created
96581	**524366/322657**	**7 November 2025 12:06**

Your selected location is in flood zone 3, an area with a high probability of flooding.

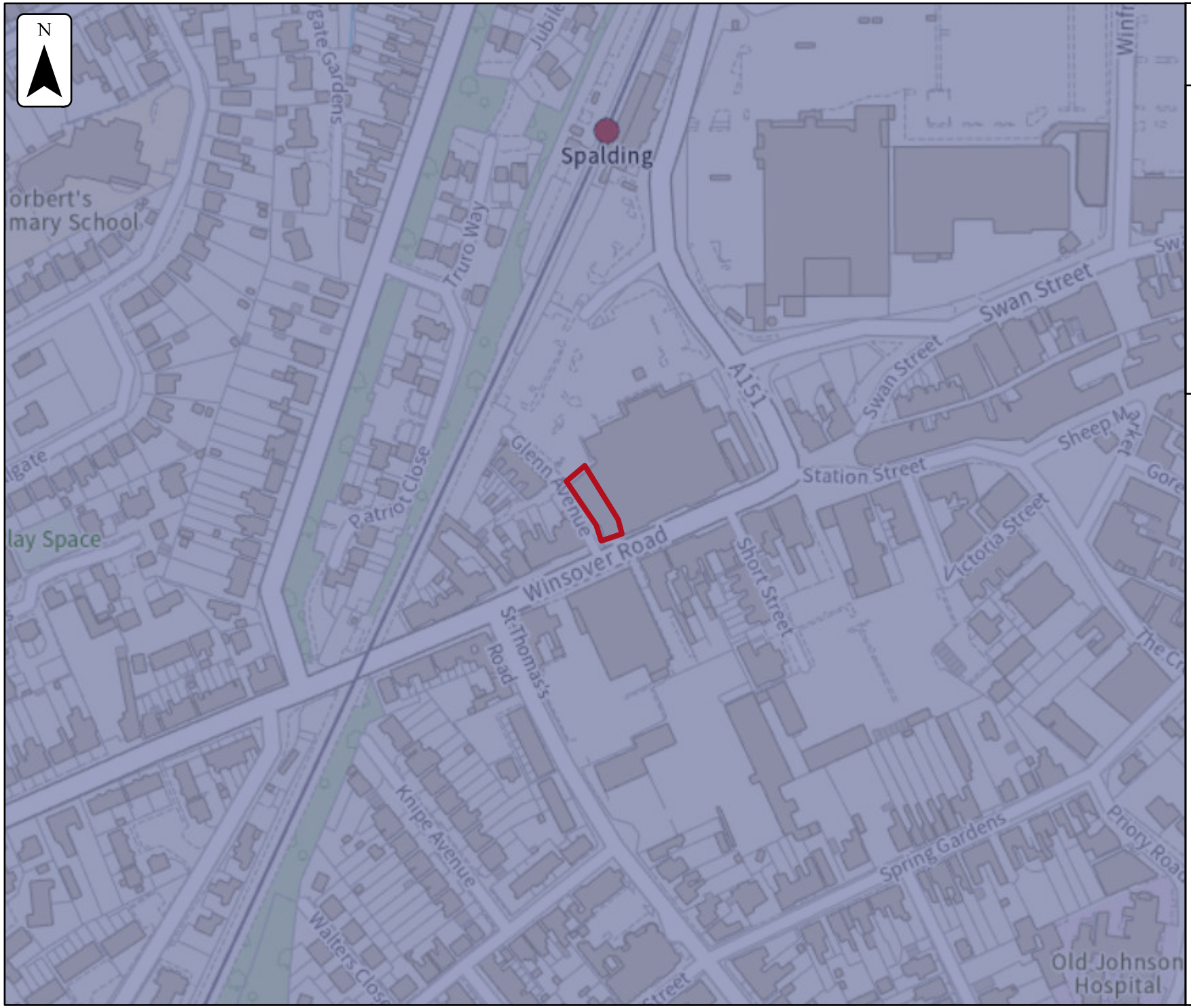
This means:

- you must complete a flood risk assessment for development in this area
- you should follow the Environment Agency's standing advice for carrying out a flood risk assessment (see https://www.gov.uk/guidance/flood-risk-assessment-standing-advice)

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.



Environment Agency

Flood map for planning

Your reference
96581

Location (easting/northing)
524366/322657

Scale
1:2,500

Created
7 Nov 2025 12:06

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

0 20 40 60 m

Appendix C

Annex 3: Flood Risk Vulnerability Classification	
Essential Infrastructure:	• Essential transport infrastructure (including mass evacuation routes) which has to cross the area at risk. • Essential utility infrastructure which has to be located in a flood risk area for operational reasons, including infrastructure for electricity supply including generation, storage and distribution systems; including electricity generating power stations, grid and primary substations storage; and water treatment works that need to remain operational in times of flood. • Wind turbines. • Solar farms.
Highly Vulnerable:	• Police and ambulance stations; fire stations and command centres; telecommunications installations required to be operational during flooding. • Emergency dispersal points. • Basement dwellings. • Caravans, mobile homes and park homes intended for permanent residential use. • Installations requiring hazardous substances consent. (Where there is a demonstrable need to locate such installations for bulk storage of materials with port or other similar facilities, or such installations with energy infrastructure or carbon capture and storage installations, that require coastal or water-side locations, or need to be located in other high flood risk areas, in these instances the facilities should be classified as 'Essential Infrastructure'.)
More Vulnerable: * Landfill is as defined in Schedule 10 of the Environmental Permitting (England and Wales) Regulations 2010	• 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.
Less Vulnerable:	• Police, ambulance and fire stations which are not required to be operational during flooding. • Buildings used for shops; financial, professional and other services; restaurants, cafes and hot food takeaways; offices; general industry, storage and distribution; non-residential institutions not included in the 'more vulnerable' class; and assembly and leisure. • Land and buildings used for agriculture and forestry. • Waste treatment (except landfill* and hazardous waste facilities). • Minerals working and processing (except for sand and gravel working). • Water treatment works which do not need to remain operational during times of flood. • Sewage treatment works, if adequate measures to control pollution and manage sewage during flooding events are in place. • Car parks.
Water-Compatible Development:	• Flood control infrastructure. • Water transmission infrastructure and pumping stations. • Sewage transmission infrastructure and pumping stations. • Sand and gravel working. • Docks, marinas and wharves. • Navigation facilities. • Ministry of Defence installations. • Ship building, repairing and dismantling, dockside fish processing and refrigeration and compatible activities requiring a waterside location. • Water-based recreation (excluding sleeping accommodation). • Lifeguard and coastguard stations. • Amenity open space, nature conservation and biodiversity, outdoor sports and recreation and essential facilities such as changing rooms. • Essential ancillary sleeping or residential accommodation for staff required by uses in this category, subject to a specific warning and evacuation plan.

National Planning Policy Framework Annex 3: Flood risk vulnerability classification