



Flood Risk Assessment for Planning

March 2024

Our reference:

94030-Karoo-ManchesterRd

Prepared for:

Mr Chris Karoo

Location:

Higher Gibfield Barn
Manchester Road Barn
Burnley
BB11 5NS



Document Issue Record

Project:	Flood Risk Assessment for Planning
Client:	Mr Chris Karoo
Application:	Construction of a 5-bed residential dwelling on same built footprint as the existing barn.
Location:	Higher Gibfield Barn, Manchester Road Barn, Burnley, BB11 5NS
Our reference:	94030-Karoo-ManchesterRd
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Lead Consultant:	Miss Jesy Ferry
Authorisation:	Ms Jackie Stone

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Southpoint, Old Brighton Road, Gatwick, West Sussex, RH11 0PR

+44 (0) 1293 214 444

www.unda.co.uk

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1. Key Facts

1.1 Flood Risk Posed:

- The site is situated within Flood Zone 1 when using the Environment Agency Flood Map for Planning (Rivers and Sea).
- The site is not at located within a 'dry island'.
- Given the distance to the nearest flood zone 1.5km to the south east of the site it is reasonable to assume that climate change effects on the flood zone will not impact the site.
- No flood storage areas are located within close proximity to the site and the site is not located within a functional floodplain (Flood Zone 3b).
- There are no formal flood defences owned or maintained by the EA in the area of the site.
- No records of historical flooding having affected the site or the surrounding area.
- The EA Risk of Flooding from Surface Water Map suggests that the site lies in an area of "Very Low" to "Low" risk from surface water.
- No further information has been provided to suggest that the site is susceptible to groundwater, sewer surcharge or reservoir flooding.

1.2 Flood Risk Mitigation:

- There will be no increase in built footprint, introduction of business units, land raising or impermeable areas proposed as part of the development.
- Finished ground floor levels will be raised 150mm above external adjacent ground levels for the new dwelling.
- The proposed development will utilise the existing drainage arrangements on site.
- Due to the scale of the development, a full Surface Water Drainage Strategy is not required at this stage of planning.

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

2. Introduction

Unda Consulting Limited have been appointed by Mr Chris Karoo (hereinafter referred to as “the applicant”) to undertake a Flood Risk Assessment for the proposed development at Higher Gibfield Barn, Manchester Road Barn, Burnley, BB11 5NS (hereinafter referred to as “the site”). The FRA has been undertaken in accordance with the National Planning Policy Framework (NPPF) and the associated technical guidance.

The site appears to be located within Flood Zone 1 as defined by the Environment Agency (EA) on their Flood Map for Planning. Under the National Planning Policy Framework (NPPF), a FRA is required if a proposed development:

- Includes building or engineering works in Flood Zone 2 or 3;
- Includes building or engineering works on land classified by the EA as having critical drainage problem;
- Changes the use of land or buildings in a location at risk of flooding from rivers or the sea, or with critical drainage problems;
- Changes the use of land or buildings in a way that increases the flood vulnerability of the development where it may be subject to other sources of flooding;
- Is larger than 1 hectare.

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 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 Situation

3.1 Site Usage:

The site is accessed by a single track and has an existing barn structure. The approximate site area is 1.75 acres.

Site location plans are provided in the report Appendix.



Figure 1: Aerial Photograph of Site and Surrounding Area (Source: Google Earth)

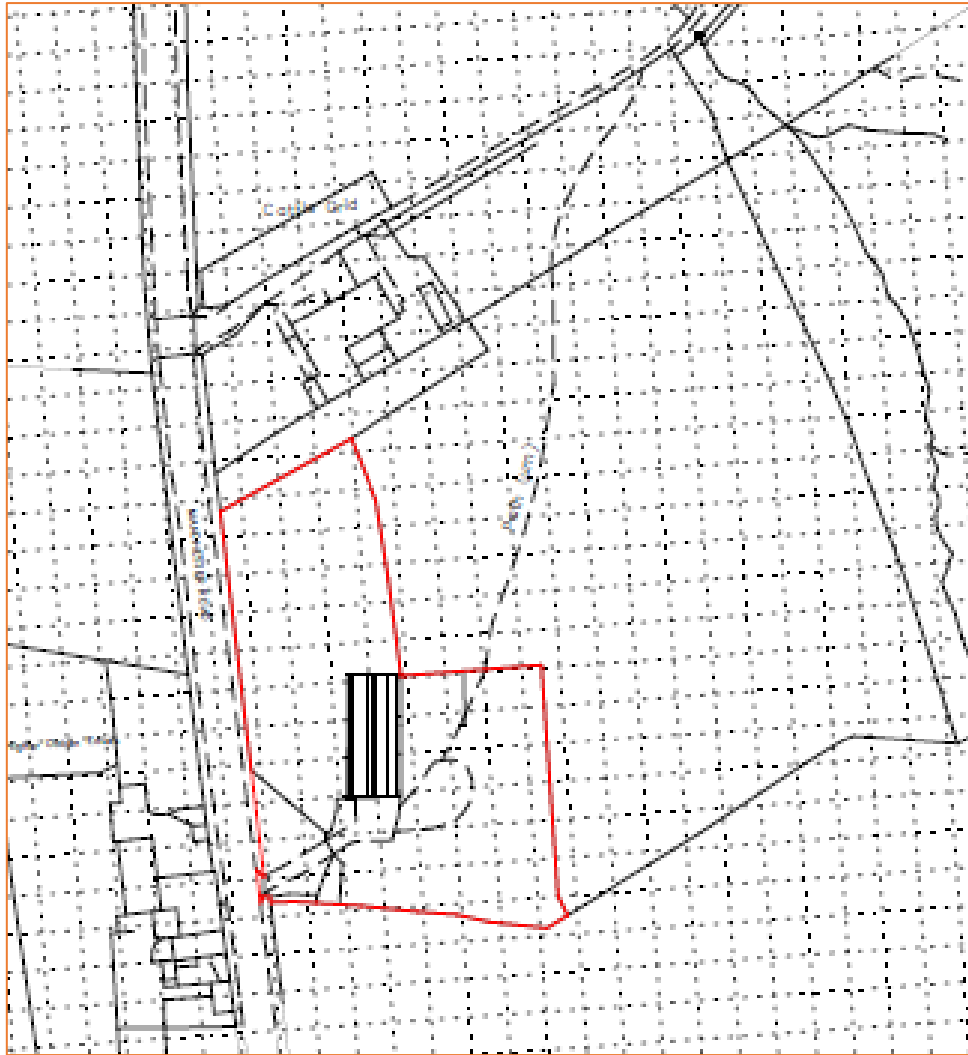


Figure 2: Site Location (Source: Solidvoid)

3.2 Topography:

EA 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 +0.15m every 1m. This dataset is derived from a combination of our 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.

1m LiDAR remotely sensed digital elevation data suggests that the ground topography across the entire site ranges between approximately 290.68mAOD to 303.86mAOD. However, the digital elevation data of the proposed development outline ranges between approximately 296.96mAOD to 297.40mAOD.

3.3 Geology and Soil:

The British Geological Survey (BGS) Map indicates that the bedrock underlying the site is the Old Lawrence Rock - Sandstone.

The British Geological Survey (BGS) Map indicates that the superficial deposits consist of Till, Devensian - Diamicton.

The British Geological Survey (BGS) Map shows the soil type of the site is relatively deep soils from Glacial Till parent material with clayey loam to silty loam texture.

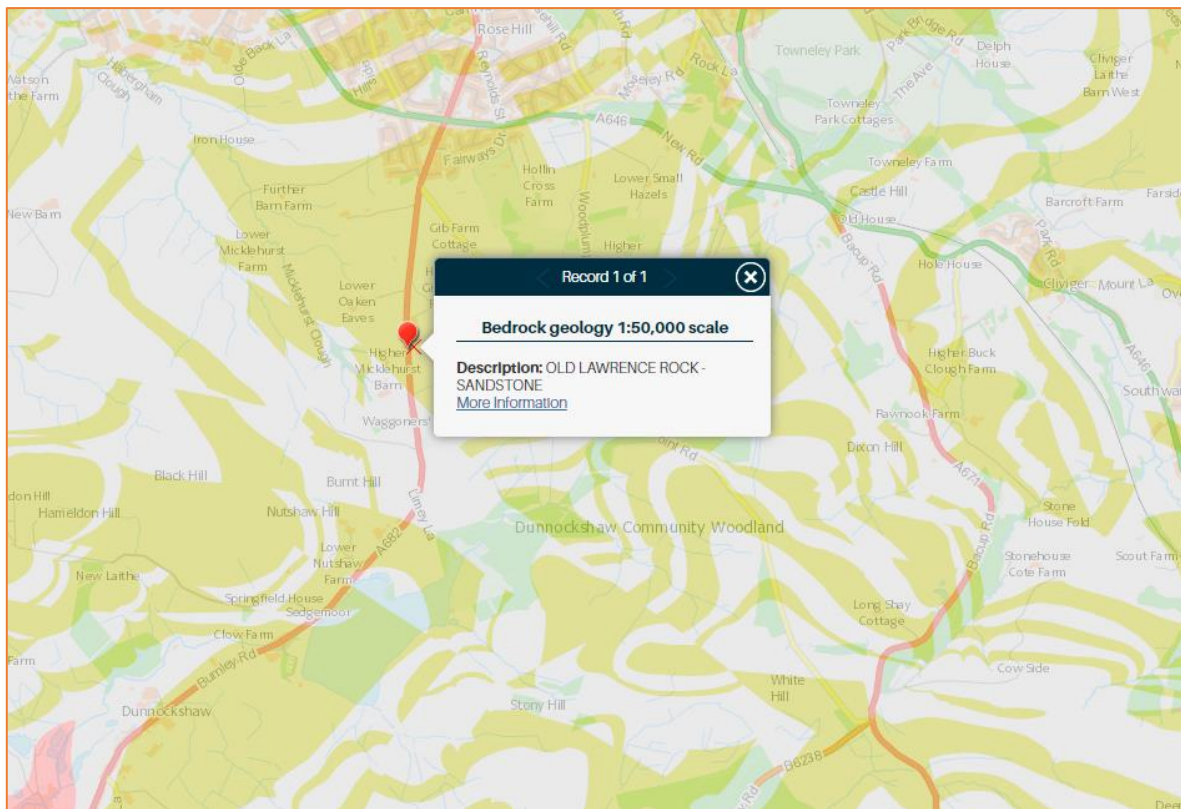


Figure 3: Local Bedrock Geology (Source: BGS)

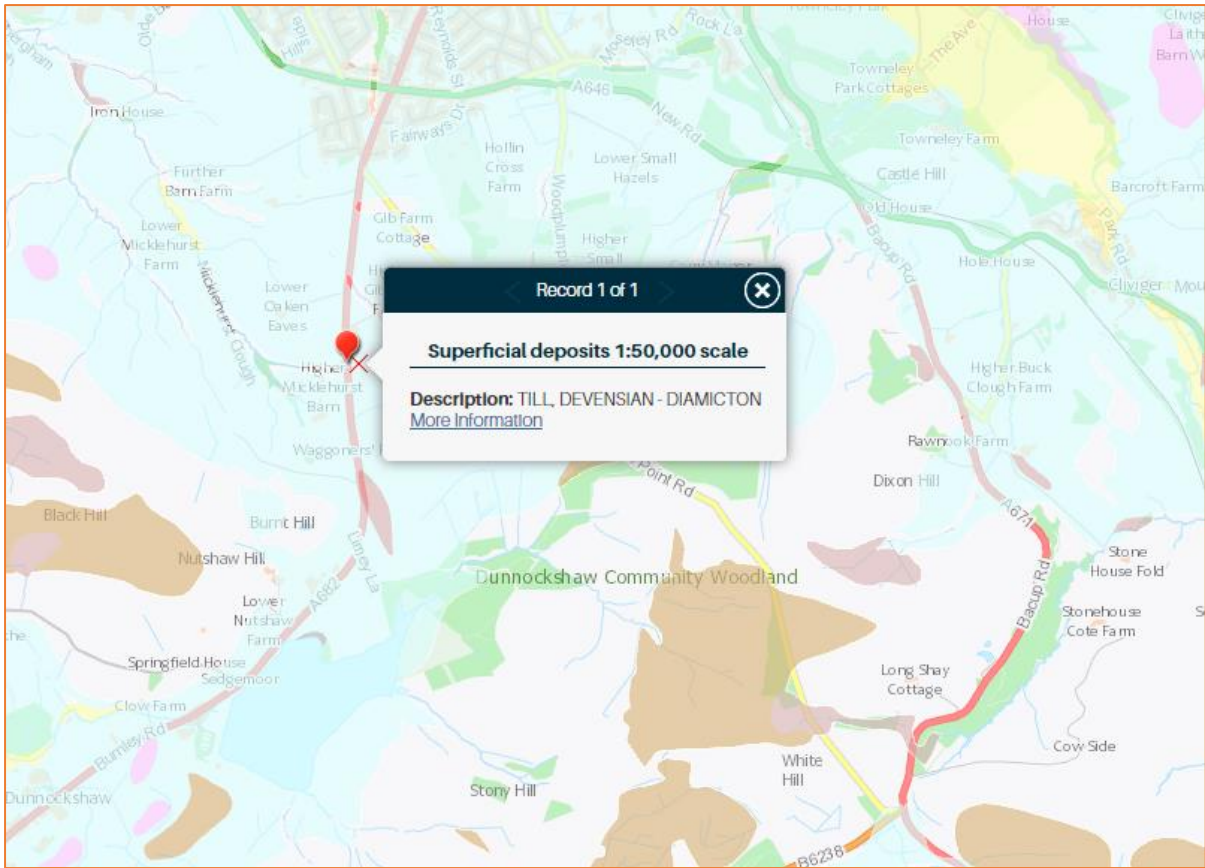


Figure 4: Local Superficial Deposits (Source: BGS)

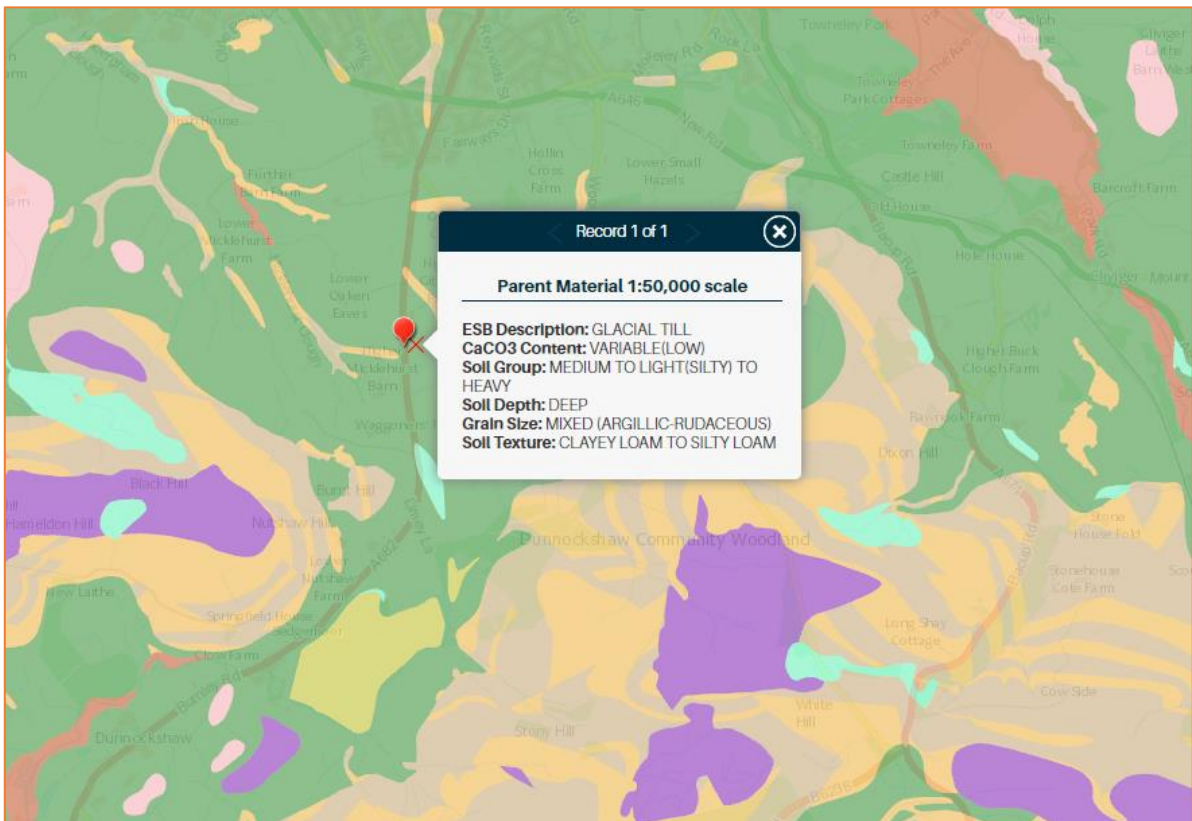


Figure 5: Local Soil Types (Source: BGS)

4. Development Proposal

The proposed application is for the demolition the existing, dilapidated, barn structure and construction of a 5-bed residential dwelling in place of the existing building.

There will be no increase to the build footprint, introduction of business units, land raising or impermeable areas are proposed.

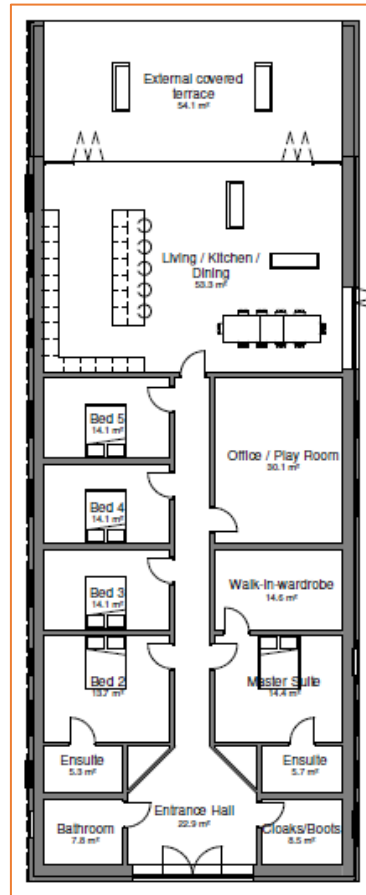


Figure 6: Proposed Floor Plan (Source: Solidvoid)

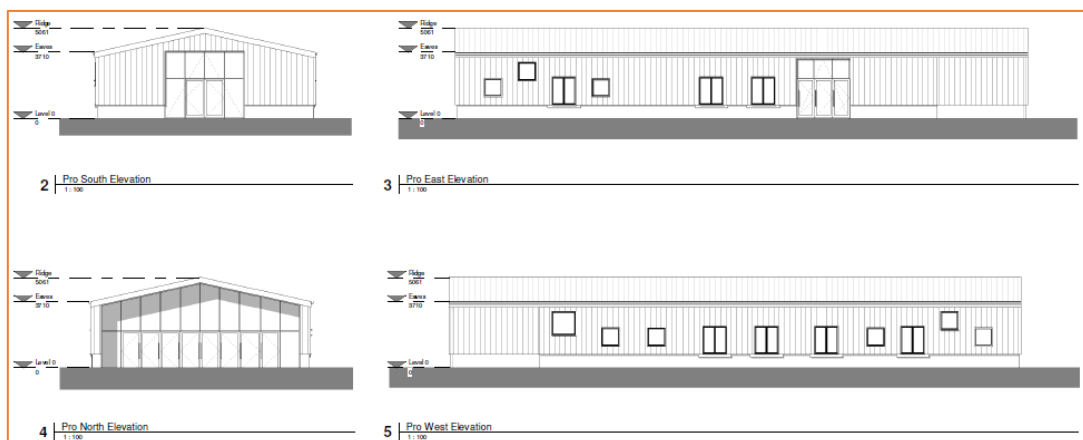


Figure 7: Proposed Site Plan (Source: Solidvoid)

5. Assessment of Flood Risk

5.1 Flood Zones:

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

Flood Zone	Definition
Zone 1 Low Probability	Land having a less than 1 in 1,000 annual probability of river or sea flooding. (Shown as 'clear' on the Flood Map – 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. (Land shown in light blue on the Flood Map)
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. (Land shown in dark blue on the Flood Map)
Zone 3b The Functional Floodplain	This zone comprises land where water has to flow or be stored in times of flood. 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: Flood Zones

The Flood Zones shown on the EA'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.

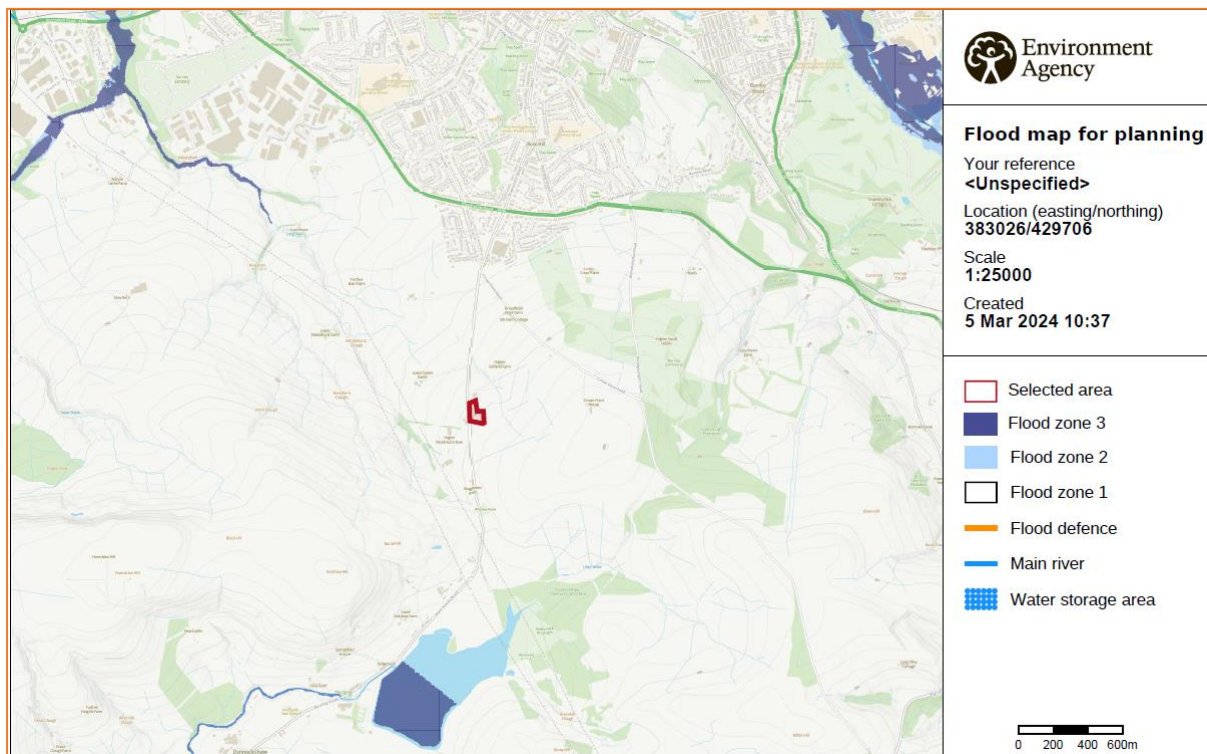


Figure 8: Environment Agency Flood Map for Planning (Rivers and Sea) (Source: EA)

The site is located entirely within Flood Zone 1 (Low Probability) which means it is defined as land having less than a 1:1000 annual probability of fluvial or tidal flooding.

In addition, the site is not located within a 'dry island' and given the distance to the nearest flood zone 1.5km to the south east of the site it is reasonable to assume that climate change effects on the flood zone will not impact the site.

5.2 Fluvial / Tidal

There is a network of streams, stream tributaries and ditches located in the surrounding area of the site. The nearest waterbody is a small un-named stream which is approximately 67m to the south west of the site.

The site is located entirely within Flood Zone 1 with a less than 1:1000 annual probability of river / tidal flooding.

5.2.1 Flood Storage Areas:

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.

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

5.2.2 Functional Floodplain:

This zone comprises land where water is required to flow or be stored in times of flood. The functional floodplain designation encompasses land which would flood with an annual probability of 1 in 30 or greater in any year; and includes areas of land required for water conveyance routes.

The site is not located within the functional floodplain (Flood Zone 3b).

5.2.3 Flood Defences:

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.

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.

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.

According to the EA there are no Environment Agency maintained raised defences that defend the site directly.

5.2.4 Historical flood events:

The EA have no records of historical flooding having affected the site or the surrounding area.

In addition, according to the Burnley Strategic Flood Risk Assessment level 1: March 2017 the site is not located within a recorded historical flood outline.

No further records of flooding at the site previously have been provided.

5.3 Pluvial (Surface Water):

Pluvial flooding is the term used to describe flooding which occurs when intense, often short duration rainfall is unable to soak into the ground or to enter drainage systems and therefore runs over the land surface causing flooding. It is most likely to occur when soils are saturated (or baked hard) so that they cannot infiltrate any additional water or in urban areas where buildings tarmac and concrete prevent water soaking into the ground. The excess water can pond (collect) in low points and result in the development of flow pathways often along roads but also through built up areas and open spaces. This type of flooding is usually short lived and associated with heavy downpours of rain.

The potential volume of surface runoff in catchments is directly related to the size and shape of the catchment to that point. The amount of runoff is also a function of geology, slope, climate, rainfall, saturation, soil type, urbanisation and vegetation.

Pluvial flooding can occur in rural and urban areas, but usually causes more damage and disruption in the latter. Flood pathways include the land and water features over which floodwater flows. These pathways can include drainage channels, rail and road cuttings. Developments that include significant impermeable surfaces, such as roads and car parks may increase the volume and rate of surface water runoff.

Urban areas which are close to artificial drainage systems, or located at the bottom of hill slopes, or in valley bottoms and hollows, may be more prone to pluvial flooding. This may be the case in areas that are down slope of land that has a high runoff potential including impermeable areas and compacted ground.

Pluvial flooding can affect all forms of the built environment, including:

- Residential, commercial and industrial properties;
- Amenity and recreation facilities; and
- Infrastructure, such as roads and railways, electrical infrastructure, telecommunication systems and sewer systems.

This type of flooding is usually short-lived and may only last as long as the rainfall event. However occasionally flooding may persist in low-lying areas where ponding occurs. Due to the typically short duration, this type of flooding tends not to have consequences as serious as other forms of

flooding, such as flooding from rivers; however it can still cause significant damage and disruption on a local scale.

In 2013 the EA, working with Lead Local Flood Authorities (LLFAs), produced an updated Flood Map for Surface Water. It is considered to represent a significant improvement on the previous surface water flood maps available, both in terms of method and representation of the risk of flooding. The modelling techniques and data used are considerably improved, and also incorporated locally produced mapping where this is available to represent features best modelled at a local scale.

The Flood Map for Surface Water assesses flooding scenarios as a result of rainfall with the following chance of occurring in any given year (annual probability of flooding is shown in brackets):

- High: Greater than or equal to 3.3% (1 in 30) chance in any given year (3.3%)
- Medium: Less than 3.3% (1 in 30) but greater than or equal to 1% (1 in 100) chance in any given year
- Low: Less than 1% (1 in 100) but greater than or equal to 0.1% (1 in 1,000) chance in any given year
- Very Low: Less than 0.1% (1 in 1,000) chance in any given year

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.

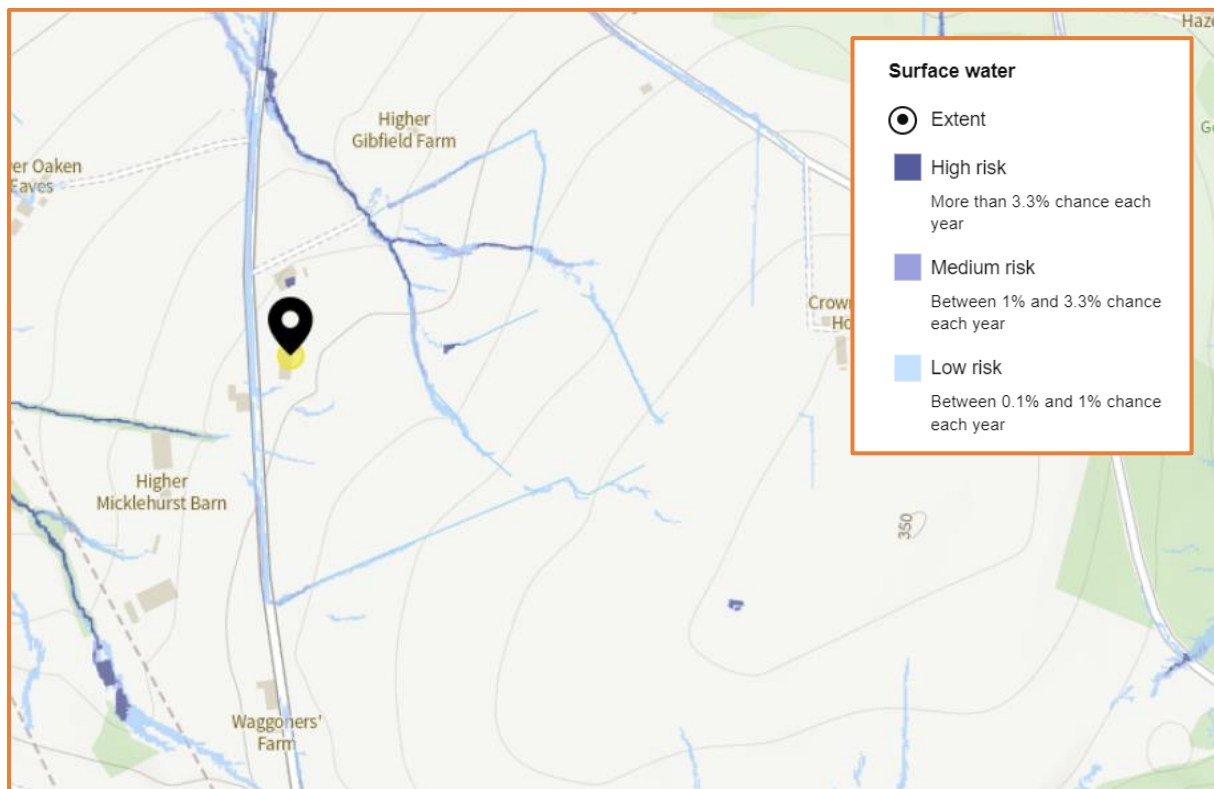


Figure 9: Extract from Environment Agency Surface Water Flood Map (Source: EA)

The EA Risk of Flooding from Surface Water Map suggests that the site lies in an area of "Very Low" to "Low" risk from surface water. It should be noted that Manchester Road directly adjacent and the access track to the proposed site appears to lie in an area of "Low" risk from surface water.

No records of surface water flooding at the site or the surrounding area have been provided.

5.3.1 Critical Drainage Areas

A Critical Drainage Area (CDA) is an area that has critical drainage problems and which has been notified to the local planning authority as such by the Environment Agency in line with the National Planning Policy Framework (NPPF). In these locations, there is a need for surface water to be managed to a higher standard than normal to ensure any new development will contribute to a reduction in flooding risks in line with NPPF. These higher standards are determined by the Environment Agency.

According to the Burnley Strategic Flood Risk Assessment level 1: March 2017 there are currently no CDAs in the Burnley borough.

5.4 Groundwater:

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.

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.

According to the EA, flooding from groundwater is unlikely in this area. In addition, according to the to the Burnley Strategic Flood Risk Assessment level 1: March 2017 the site is located within an area where there is a low susceptibility to groundwater flooding.

No further information has been provided to suggest that the site has flooded from groundwater flooding previously.

5.5 Sewer Surcharge:

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.

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.

According to the Burnley Strategic Flood Risk Assessment level 1: March 2017 no historical sewer flooding has occurred on site or in the surrounding area.

No further information has been provided to suggest that the site itself has flooded as a result of sewer surcharge.

5.6 Other Sources:

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 EA. The site is outside 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 EA 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.

Records of flooding from reservoirs and canals are erratic as there is no requirement for the EA 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.

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.

There do not appear to be any further artificial (man-made) sources of flood risk (such as raised canals) in the vicinity of the site.

6. Flood Risk Management

6.1 Vulnerability to flooding:

The NPPF classifies property usage by vulnerability to flooding.

The existing site usage is classified as “Less vulnerable” throughout.

The proposed application is for the construction of a 5-bed residential dwelling on the same built footprint as the existing barn.

As such, the site will become “More vulnerable”, post development.

6.2 EA Standing Advice:

The EA Standing Advice guidance is for domestic extensions and non-domestic extensions where the additional footprint created by the development does not exceed 250m². It should not be applied if an additional dwelling is being created, e.g. a self-contained annex or additional commercial unit.

This application is for a construction of a residential dwelling.

6.3 Physical Design Measures:

The site is shown to be entirely outside of Flood Zone 2 & 3 on the EA Flood Map for Planning (Rivers and the Sea), and is identified to be at a “Low” to “Very Low” Risk of Flooding from Surface Water.

There will be no increase in built footprint, introduction of business units, land raising or impermeable areas proposed as part of the development.

As such, following a precautionary approach, it is recommended that finished ground floor level is raised 150mm above external adjacent ground levels for the new dwelling.

6.4 Safe Escape and Flood Action Plan:

The NPPF requires a route of safe escape for all residents and users to be provided from new residential properties in Flood Zone 3. Safe escape is usually defined as being through slow moving flood water no deeper than 25cm during the 1:100 fluvial plus allowance for climate change / 1:200 year tidal plus allowance for climate change flood event.

As the development lies entirely within Flood Zone 1 and is at “Very Low” to “Low” risk from surface water flooding. As such, a safe escape route is not required.

6.7 Off-Site Impacts:

6.7.1 Fluvial Floodplain Storage:

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.

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.

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.

The application site is situated within Flood Zone 1. Post development, there will be no loss of fluvial floodplain storage.

6.7.2 Surface Water Drainage:

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;

Due to the development being construction of a dwelling on the same built footprint as the existing barn which will incur no increase in built footprint or increase in impermeable areas as such, there will be no need for additional surface water drainage features. The proposed development will utilise the existing drainage arrangements on site.

7. Sequential and Exception Test

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.

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.

The site is situated within Flood Zone 1 when using the Environment Agency Flood Map for Planning (Rivers and Sea) and The EA Risk of Flooding from Surface Water Map suggests that the site lies in an area of “Very Low” to “Low” risk from surface water.

Post development, the site will become “more vulnerable” as the proposed application is for a residential dwelling.

Flood Zones	Flood Risk Vulnerability Classification				
	Essential infrastructure	Highly vulnerable	More vulnerable	Less vulnerable	Water compatible
Zone 1	✓	✓	✓	✓	✓
Zone 2	✓	Exception Test required	✓	✓	✓
Zone 3a	Exception Test required	✗	Exception Test required	✓	✓
Zone 3b	Exception Test required	✗	✗	✗	✓

Table 2: Flood risk vulnerability and flood zone ‘compatibility’

Using the table above, the proposed application is considered to be suitable within Flood Zone 1.

The Sequential and Exception Tests do not need to be applied.

8. Discussion and Conclusions

Unda Consulting Limited have been appointed by Mr Chris Karoo (hereinafter referred to as “the applicant”) to undertake a Flood Risk Assessment for the proposed development at Higher Gibfield Barn, Manchester Road Barn, Burnley, BB11 5NS (hereinafter referred to as “the site”). The FRA has been undertaken in accordance with the National Planning Policy Framework (NPPF) and the associated technical guidance.

The proposed application is for the construction of a dwelling on the same built footprint as the existing barn. The existing site usage is classified as “Less vulnerable”. Post development, the site will become “More vulnerable”.

The site is located entirely within Flood Zone 1 (Low Probability) which means it is defined as land having less than a 1:1000 annual probability of fluvial or tidal flooding. In addition, the site is not located within a ‘dry island’ and given the distance to the nearest flood zone 1.5km to the south east of the site it is reasonable to assume that climate change effects on the flood zone will not impact the site.

According to EA data, there are no Flood Storage Areas located in close proximity to the site and the site is not located within the functional floodplain (Flood Zone 3b).

There are no formal flood defences owned or maintained by the EA that defend the site directly.

The EA have no records of historical flooding having affected the site or the surrounding area. In addition, according to the Burnley Strategic Flood Risk Assessment level 1: March 2017 the site is not located within a recorded historical flood outline. No further records of flooding at the site previously have been provided.

The EA Risk of Flooding from Surface Water Map suggests that the site lies in an area of “Very Low” to “Low” risk from surface water. It should be noted that Manchester Road directly adjacent and the access track to the proposed site appears to lie in an area of “Low” risk from surface water. No records of surface water flooding of the site have been provided.

According to the Burnley Strategic Flood Risk Assessment level 1: March 2017 there are currently no CDAs in the Burnley borough.

According to the EA, flooding from groundwater is unlikely in this area. In addition, according to the Burnley Strategic Flood Risk Assessment level 1: March 2017 the site is located within an area where there is a low susceptibility to groundwater flooding. No further information has been provided to suggest that the site has flooded from groundwater flooding previously.

No information has been provided to suggest that the site is susceptible to sewer surcharge or reservoir flooding.

As the development lies entirely within Flood Zone 1 and is at “Very Low” to “Low” risk from surface water flooding. As such, a safe escape route is not required.

Due to the development being construction of a dwelling on the same built footprint as the existing barn which will incur no increase in built footprint or increase in impermeable areas as such, there will be no need for additional surface water drainage features.

The applicant has confirmed that:

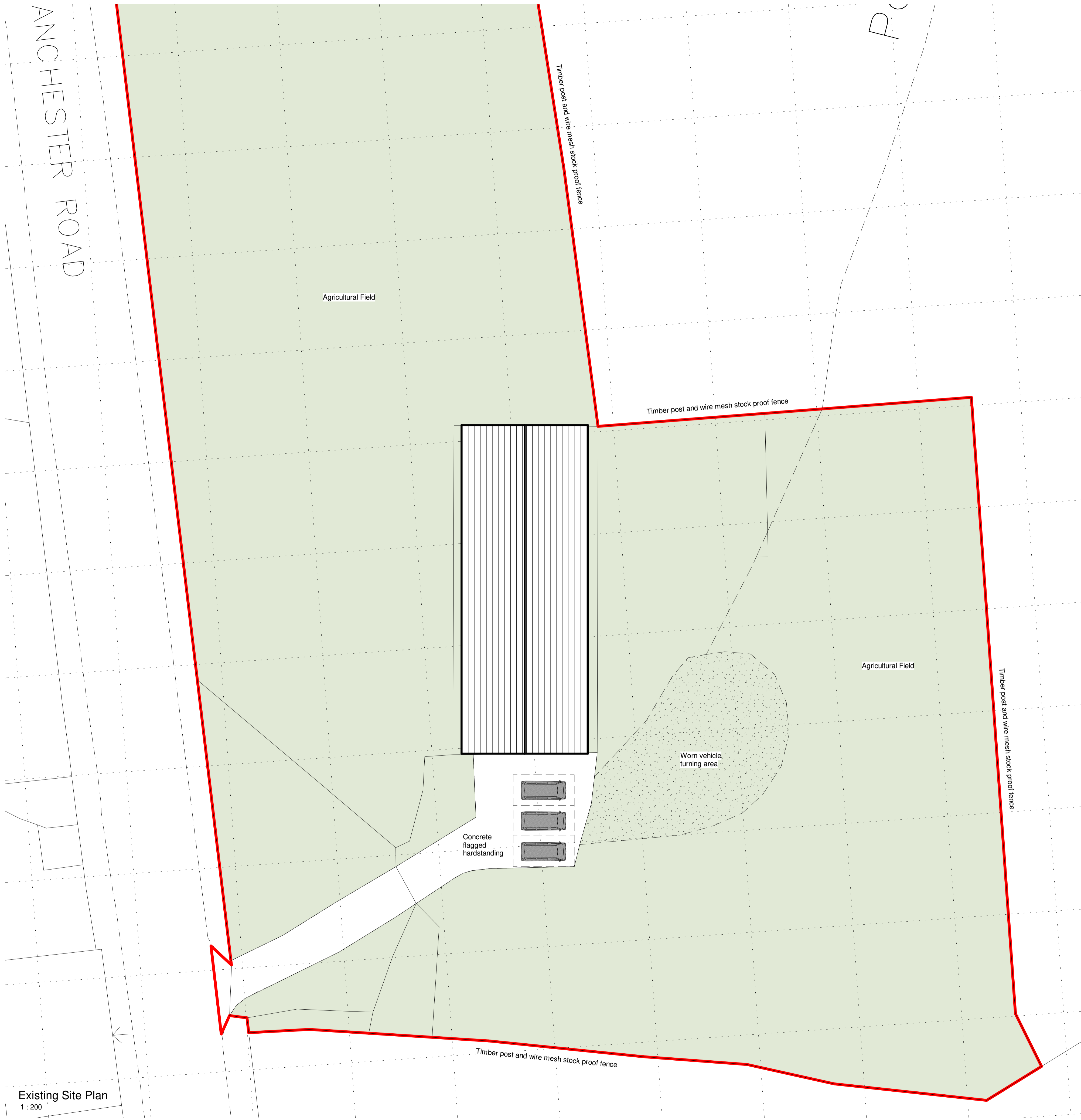
- The proposed application is for the demolition the existing, dilapidated, barn structure and construction of a 5-bed residential dwelling in place of the existing building.
- There will be no increase in built footprint, introduction of business units, land raising or impermeable areas proposed as part of the development.
- Finished ground floor levels will be raised 150mm above external adjacent ground levels for the new dwelling.
- The proposed development will utilise the existing drainage arrangements on site.
- Due to the scale of the development, a full Surface Water Drainage Strategy is not required at this stage of planning.

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

Appendix

- Site location and proposed plans
- EA Flood Map for Planning

ANCHESTER ROAD



Existing Site Plan
1 : 200



Location Plan
1 : 1250



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Designed with reference to the surveys, information and reports listed: Ordnance Survey Promap, Licence number 10002432

James Kelly Architects Ltd via Solid Void - 16 Woolfenden Way, Wardle, OL12 9SS
Tel: 07949448088 - Email: solidvoid@outlook.com - Web: www.solidvoid.co.uk - Company No. 08545034

Rev	Date	Description
04.12.23		Planning Issue

Dwn	Ckd	Drawn	Checked	Date	Scale @ A1
		JK	JK	OCT 2023	As indicated

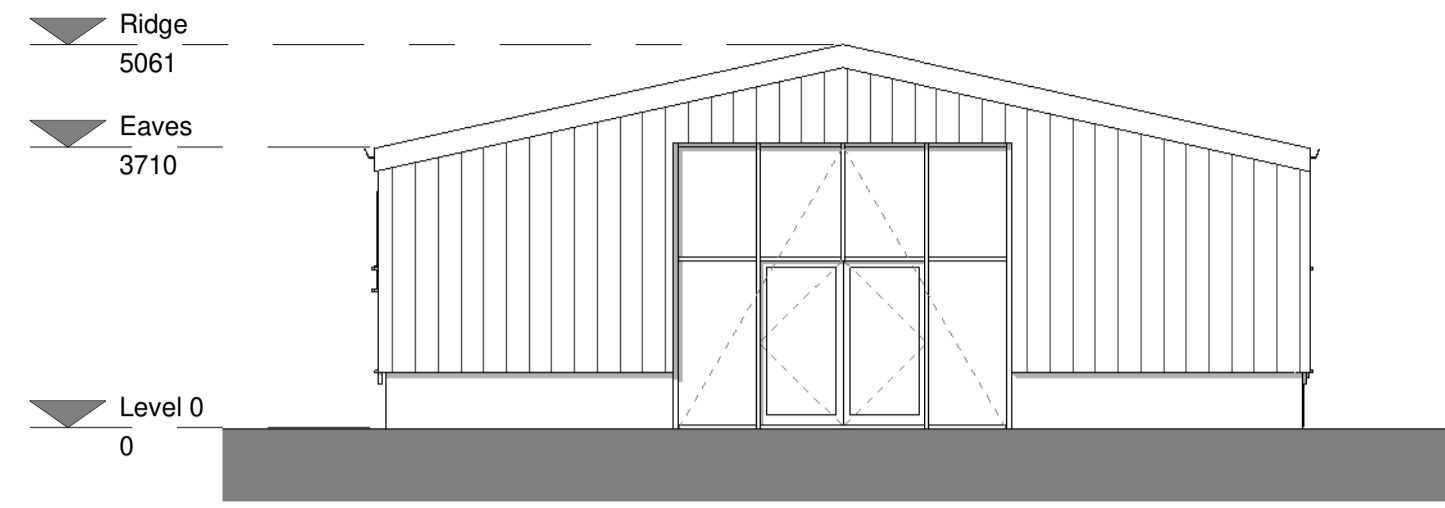
**Manchester Road Barn,
Burnley (2347)**
Existing Site and Location Plans

MRB-SVA-ZZ-ZZ-DR-A-2000
REV -
PLANNING





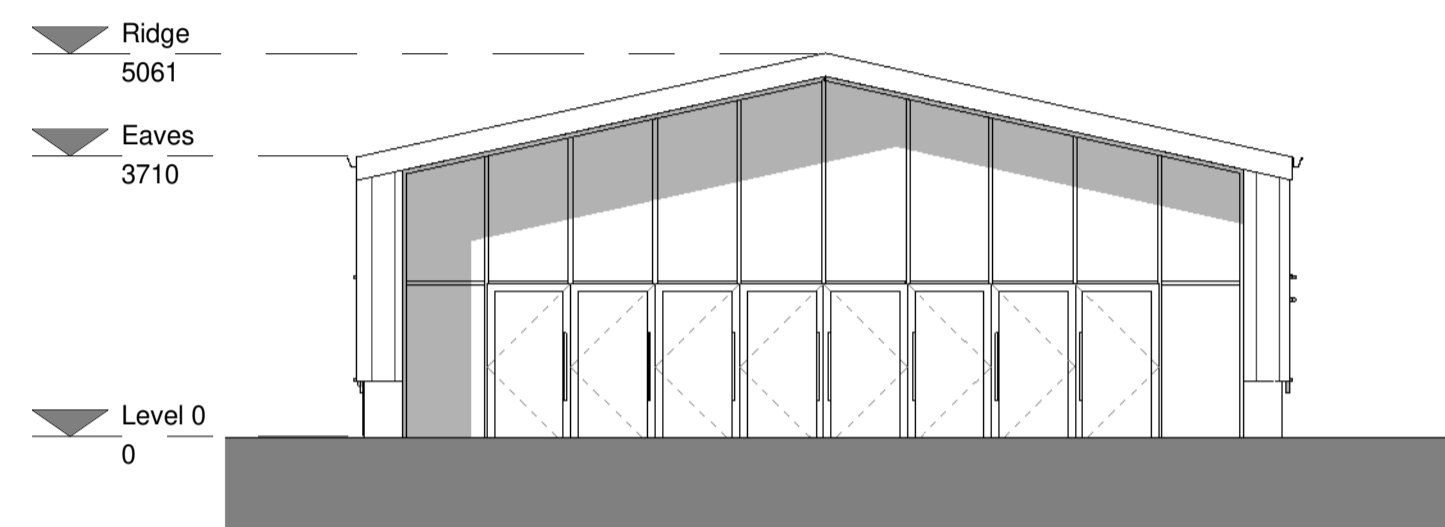
1 | Pro Level 0
1 : 100



2 | Pro South Elevation
1 : 100



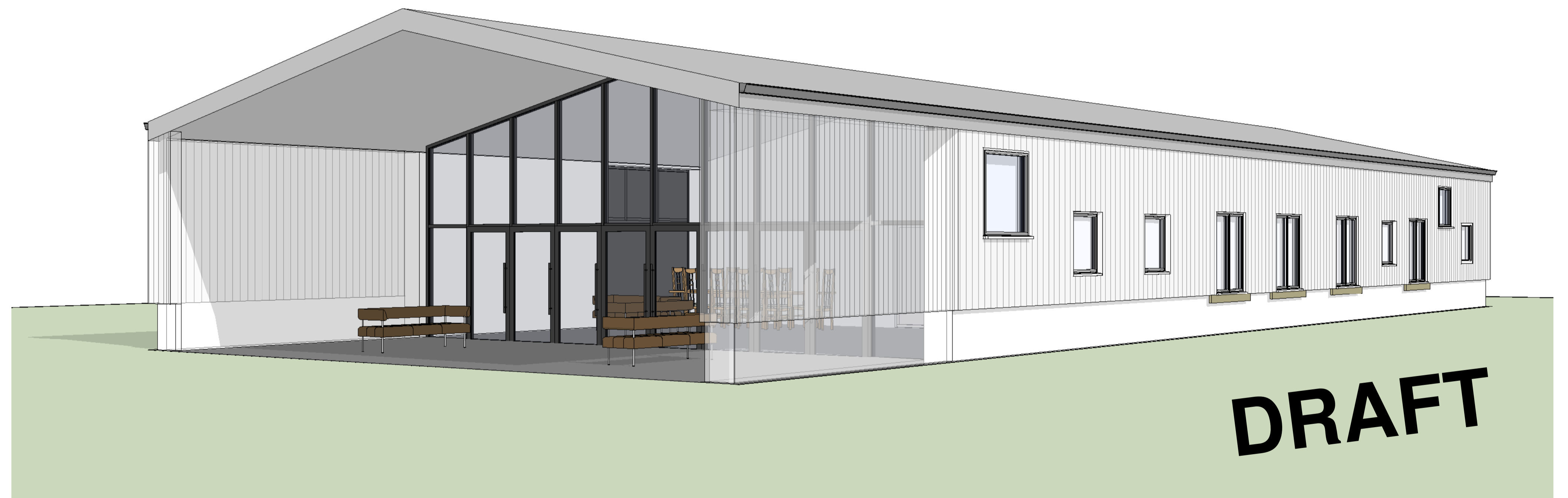
3 | Pro East Elevation
1 : 100



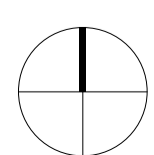
4 | Pro North Elevation
1 : 100



5 | Pro West Elevation
1 : 100



6 | Proposed Perspective View



0m 2m 4m 6m 8m

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James Kelly Architects Ltd t/a Solid Void - 16 Woolfenden Way, Wardle, OL12 9SS
Tel: 07949448088 - Email: solidvoid@outlook.com - Web: www.solidvoid.co.uk - Company No. 08545034

Rev	Date	Description
-	22.10.23	First Issue
A	22.11.23	Planning Issue

Dwn	Ckd	Drawn	JK
		Checked	JK
		Date	OCT 2023
		Scale @ A1	1 : 100

**Manchester Road Barn,
Burnley (2347)**
Proposed Floor Plan and
Elevations

MRB-SVA-ZZ-ZZ-DR-A-2006
REV A
PLANNING

SOLIDVOID

Flood map for planning

Your reference
BB11 5NS

Location (easting/northing)
383026/429707

Created
4 Mar 2024 10:57

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

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

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

Notes

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

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

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

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

Flood map for planning

Your reference

BB11 5NS

Location (easting/northing)

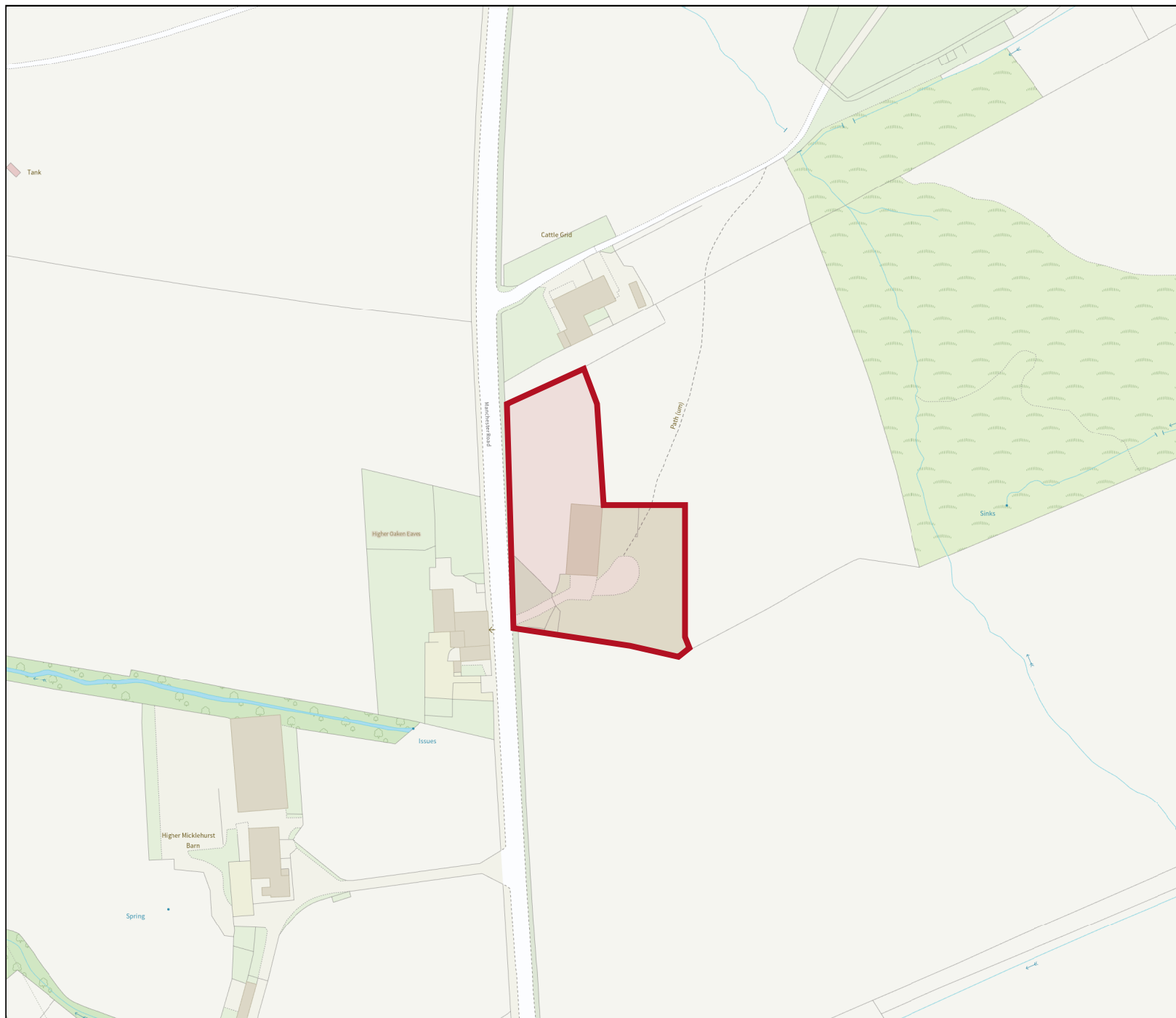
383026/429707

Scale

1:2500

Created

4 Mar 2024 10:57



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

