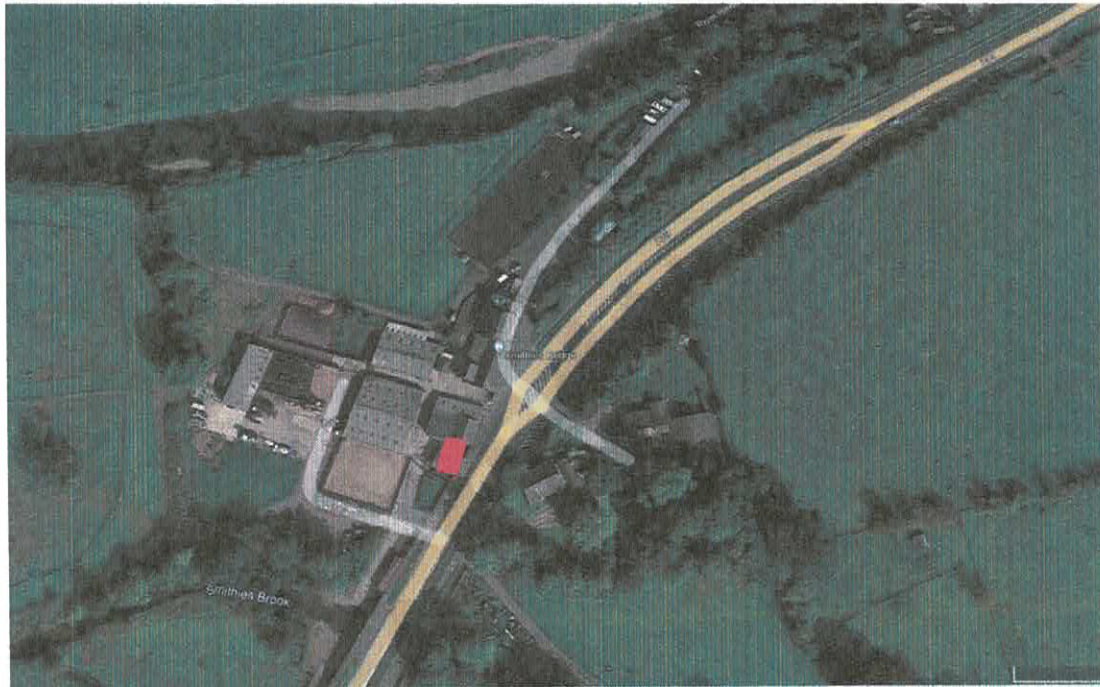


# Flood Risk Assessment

IN SUPPORT OF A PLANNING APPLICATION AT  
Smithies Bridge Farm, Sawley, Clithroe, BB7 4NA

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economic & environmental development

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## 1.0 Introduction

### 1.1 Site Details

This report is produced to support a planning application for the removal of a dilapidated agricultural building and the replacement of a steel frame building on the same footprint. The building is intended for livestock handling at Smithies Bridge Farm. The provision of covered accommodation for livestock handling operations such as routine dosing, foot trimming etc will prevent dirty water run-off and reduce the risk of diffuse pollution.

The site is located immediately west of the main A59 Skipton – Clitheroe trunk road. The River Ribble runs 132 metres to the northwest.

A flood risk assessment is required as the site lies within the indicative flood risk area as detailed on the Environment Agency Flood Zone 2. ( See Appendix 1).

There are no flood defences.

### 1.2 Flood Risk

The Flood Risk and Coastal Change strategy defines Zone 2 as follows (Table 1):

#### ***Zone 2 Medium Probability***

|                           |  |
|---------------------------|--|
| 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) |
|---------------------------|--|

Environment agency maps show the risk from surface water flooding is low.

The proposal is for an agricultural building within Flood Zone 2. The intended use is for livestock handling and guidance indicates that land and buildings used for agriculture and forestry fall into the '**Less Vulnerable**' classification.

The Environment Agency's standing advice if you're carrying out a flood risk assessment of a development classed as:

- a minor extension (household extensions or non-domestic extensions less than 250 square metres) in flood zone 2 or 3
- 'more vulnerable' in flood zone 2 (except for landfill or waste facility sites, caravan or camping sites)
- 'less vulnerable' in flood zone 2 (except for agriculture and forestry, waste treatment, mineral processing, and water and sewage treatment)
- 'water compatible' in flood zone 2

The requirements of the FRA are dictated by the zone in which the site lies as well as the use proposed. The Guidance provides the following within Table 3. The guidance indicates that the proposed '**Less Vulnerable**' uses in Flood Zone 2 are **appropriate**. The Exception Test is not required.



| Flood Risk Vulnerability classification (see Table D2) |                                  | Essential Infrastructure | Water compatible | Highly Vulnerable       | More Vulnerable         | Less Vulnerable |
|--|----------------------------------|--------------------------|------------------|-------------------------|-------------------------|-----------------|
| Flood Zone (see Table D.1)                             | Zone 1                           | ✓                        | ✓                | ✓                       | ✓                       | ✓               |
|  | Zone 2                           | ✓                        | ✓                | Exception Test required | ✓                       | ✓               |
|  | Zone 3a                          | Exception Test required  | ✓                | ✗                       | Exception Test required | ✓               |
|  | Zone 3b 'Functional Flood plain' | Exception Test required  | ✓                | ✗                       | ✗                       | ✗               |

Key: ✓ Development is appropriate ✗ Development should not be permitted.

### 1.3 Proposed Development

The proposed development is to construct a 10.00m x 6.50m steel frame building on the footprint of a dilapidated agricultural building and over a small concrete yard area.

The existing 9.00m x 6.30m prefabricated building will be removed.

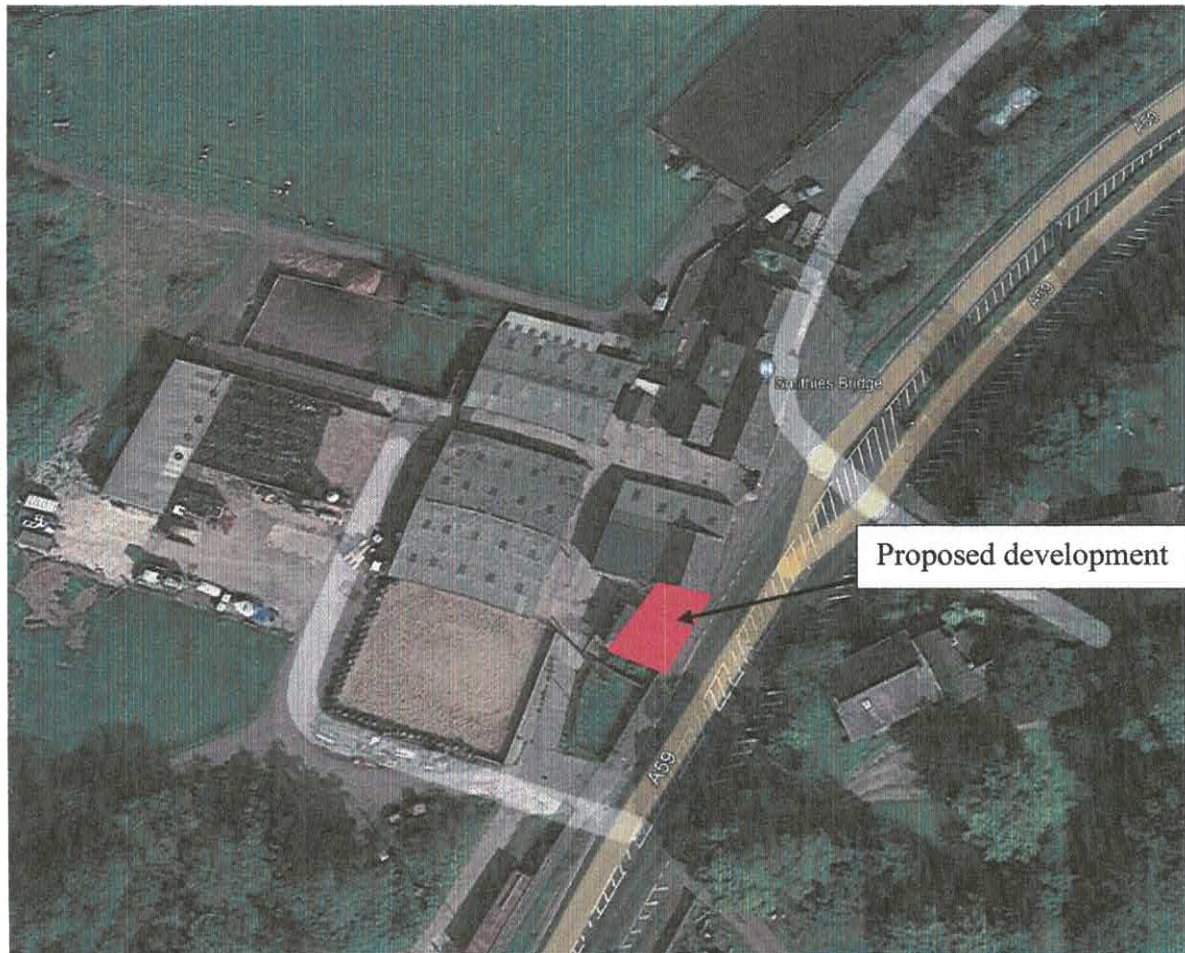
The proposed building will provide a covered building for livestock handling.

The floors will be concrete. Wall construction is limited to a single gable with Yorkshire boarding over a 250mm concrete block plinth.

There will be no electrical sockets within the building. Electrical fittings will be limited to lights with all circuitry at eaves height. Switches will be at 1.50m.

Internal equipment is limited to a portable cattle crush, sheep pens and gates.

The risk of flooding is fluvial. The site lies approximately 130.00m southeast of the River Ribble.



## 2.0 Flood Defence Assessment

### 2.1 Present & Future Flood Risk

The site is not protected by fluvial defences against the River Ribble.

### 3.0 Historical Flooding.

The site has a history of flooding. The applicants family have lived at the location for over 3 generations. Flooding has been occasional and has had minimal impact. The flooding has largely been from surface water drainage from Smithies Beck.

The flooding has only affected the agricultural buildings. No livestock have been harmed and inundation has been short.

## 4.0 Sequential Test

*As noted above, the NPPG states that when applying the sequential test a pragmatic approach to the availability of alternative sites should be taken. It gives an example of a planning application for an extension to an existing business premises and suggests that it **might be impractical to** suggest that there are more suitable alternative locations for that development elsewhere.*

*Not all development is stand alone or involves a cleared site. As the NPPG suggests, in some cases developments may involve an extension to an existing use. A development proposal may also involve the intensification or partial re-development (in whole or part) of an existing use.*



## **Statement of operational circumstances**

The nature of the farming business and the need for buildings to be available to house and for animal husbandry operations means alternative sites are impractical. Livestock must be moved from handling pens or buildings to the proposed building for routine operations (dosing, injecting, pregnancy diagnoses etc). Transporting to another site is not desired or practical. The handling area must be within the farm curtilage.

The location of the building is to the eastern boundary of the site furthest away from the source of flooding. The area to the west is in Flood Zone 3 with greater risk of flooding. The location has the lowest risk of flooding of any other practical places within the farm curtilage.

As shown an alternative site is impractical and the sequential test is not required.

### **5.0 Flood Precaution and Mitigation.**

The location of the building is to the eastern boundary of the site furthest away from the source of flooding. The area to the west is in Flood Zone 3 with greater risk of flooding. The location has the lowest risk of flooding of any other practical places within the farm curtilage.

The following mitigation measures will be incorporated.

These include the following:

- The applicant is signed up to the Environment Agency Flood Warning Alert
- Electrical services, wiring and switches will be positioned 1500mm above floor level.
- Roof water is collected for re-use as drinking water for livestock and other agricultural operations.

### **6.0 Impact on Surrounding Properties**

The proposal incorporates a rainwater harvesting system which will utilise the water for livestock and agricultural operations.

The location is at the lowest point of any neighbouring properties and will therefore have no impact on neighbouring properties. .

### **7.0 Conclusions**

The site is located within Flood Risk Zone 2 with a medium probability of flooding. The intended use is agricultural and classed as less vulnerable. The use is appropriate for Flood Zone 2.

The exception test is not required.

The Sequential Test is not required.

Mitigation measures have been identified.

The site will not generate any increase in surface water drainage compared to the present use. Rain water harvesting will deal with roof water.



## Flood map for planning

Your reference  
**Smithies Bridge Farm**

Location (easting/northing)  
**377412/445542**

Created  
**20 Oct 2022 7:49**

**Your selected location is in flood zone 2, an area with a medium 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 [www.gov.uk/guidance/flood-risk-assessment-standing-advice](http://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.

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 2021 OS 100024198. <https://flood-map-for-planning.service.gov.uk/os-terms>





## Flood map for planning

Your reference

**Smithies Bridge Farm**

Location (easting/northing)

**377412/445542**

Scale

**1:2500**

Created

**20 Oct 2022 7:49**



Selected point



Flood zone 3



Flood zone 3: areas  
benefitting from flood  
defences



Flood zone 2



Flood zone 1



Flood defence



Main river



Water storage area



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