



habitat architects

Flood Risk Assessmen

Introduction

This flood risk assessment has been prepared to support the planning application for the proposed erection of supported housing building with associated works including new access with Darnley Street at Charter House Resource Centre Morse Street Burnley.

The planning authority stated that.

Whilst it is difficult to see, the application site appears to be at medium risk of surface water flooding on the Environment Agency (EA) Flood Map for Planning. The EA long-term flood risk information suggests that the area around Charter House is subject to medium risk of surface water flooding. The proposal would introduce more vulnerable land use. Therefore, in accordance with Footnote 55 of the NPPF, we consider that a FRA is required. Alternatively, if you can obtain higher resolution mapping that shows the site is not at risk then a FRA would not be required.



Development site

The proposed development site is located at Darnley Street at Charter House Resource Centre Morse Street Burnley BB10 4PB.

Grid Reference 385537 432015

and it is currently land associated with Charter House.

Looking over the lifetime of the proposed development, the site does not lie within Flood Zone –it is however identified as medium risk of surface water flooding



Screen shot showing the standing information taken from the gov. web site "checklong- term- flood" in January 2023

The map and the information is not clear however the planning authority has requested a Flood Risk Assessment.

Development proposals

The development proposal for the above site is for a 2-story new supported housing with new access from Darnley Street and associated gardens and car parking within the curtilage of Charter House Resource Centre, Morse Street

The proposed development is therefore classified as more vulnerable –taken from the - flood risk vulnerability classification here –Table 2 of the Planning Practice Guidance.

The lifetime of the proposed development is assumed to be 100 years (residential)

Sequential Test

PLEASE NOTE: Applications for minor development or changes of use will not be subject to the sequential or exception tests but should still meet the requirements for site-specific flood risk assessments. Exception Test a) Wider sustainability benefits

b) Safe development (see Flood Control Measures & Flood Mitigation Measures sections below)

Site specific flood hazards

The proposed development site lies within Flood Zone with the main risk of flooding coming from surface water.

<u>More information about your level of flood risk from surface water</u> This flood risk summary reports the highest risk from surface water within a 15 metre radius of this property.

Medium risk means that this area has a chance of flooding of between 1% and 3.3% each year.

This information is suitable for identifying:

- which parts of towns or streets are at risk, or have the most risk
- the approximate extent and depth of flooding

It's likely to be reliable for a local area but not for identifying individual properties at risk.

Screen shot showing the standing information taken from the gov. web site "check-long-term-flood" in January 2023

Tidal flooding Not relevant

Fluvial flooding Not relevant

Surface water flooding

Currently surface water at the site is not currently managed. The owner of Charter House Resource Centre has never experienced any issues nor is aware of historical issues on or around the site.

The proposals for surface water management are to minimize the amount of hard landscaping and encourage the water to go round the proposed building. This will be achieved by the use of sustainable drainage systems. (SuDS).

A rain garden will be created to the rear of the building. This is based on infiltration –increasing the amount of water entering the soil and in turn, reducing the rate of runoff and volume of surface water.

Swales could also be introduced to collect and move water. These can provide temporary storage and infiltrations by storing and conveying storm water runoff. They also remove pollutants by encouraging infiltration.

All paving around the building and for the carparking will be permeable paving to minimize the impact of surface water.

Flood Risk Management

This section describes how the development will be made safe from flooding over its lifetime. Where applicable, it should also be detailed how any off-site impacts will be prevented and how any residual risks to the site will be managed.

Flood control measures

Prevention Measures:

- Elevate critical utilities and appliances.
- Install flood barriers or flood-resistant doors and windows at the rear of the building.
- Implement landscaping techniques such as grading and creating swales to divert water away from the property.

Emergency Preparedness:

- Develop an evacuation plan with designated meeting points and routes.
- Establish a communication protocol to notify residents of impending floods.
- Provide emergency kits with essential supplies and contact information for local authorities and emergency services.

Monitoring and Response:

• Install flood monitoring systems to detect rising water levels.

Community Engagement:

- Conduct regular training sessions for residents on flood preparednes.
- Foster community partnerships to share resources and support during em ergencies.
- Raise awareness about flood risks and mitigation strategies.

Review and Adaptation:

- Regularly review and update the flood risk management plan based on evolving risk assessments and feedback from residents and stakeholders.
- Incorporate lessons learned from past flooding incidents to improve future response and resilience.

Flood mitigation measures.

To control floor damage in a house, start by sealing any cracks or gaps in the foundation. Install sump pumps to remove excess water and prevent flooding. Elevate electrical outlets, appliances, and heating systems above potential water levels. Use waterproof sealants on basement floors and walls. Install floor drains in susceptible areas. Consider raised flooring systems for added protection. Regularly inspect and maintain plumbing fixtures to prevent leaks. Implement moisture-resistant flooring materials like tile or vinyl. Finally, ensure proper grading and landscaping around the house to direct water away from the foundation.

Conclusions

In conclusion, this risk assessment has provided valuable insights into potential hazards and vulnerabilities associated with the project. It is imperative that the recommended risk management measures are diligently implemented and regularly reviewed to adapt to evolving circumstances. Through proactive risk management practices, we can minimize the likelihood and impact of adverse events, safeguarding the project's objectives and stakeholders' interests.