

FLOOD RISK STATEMENT

Proposal: Single Storey Rear Extension

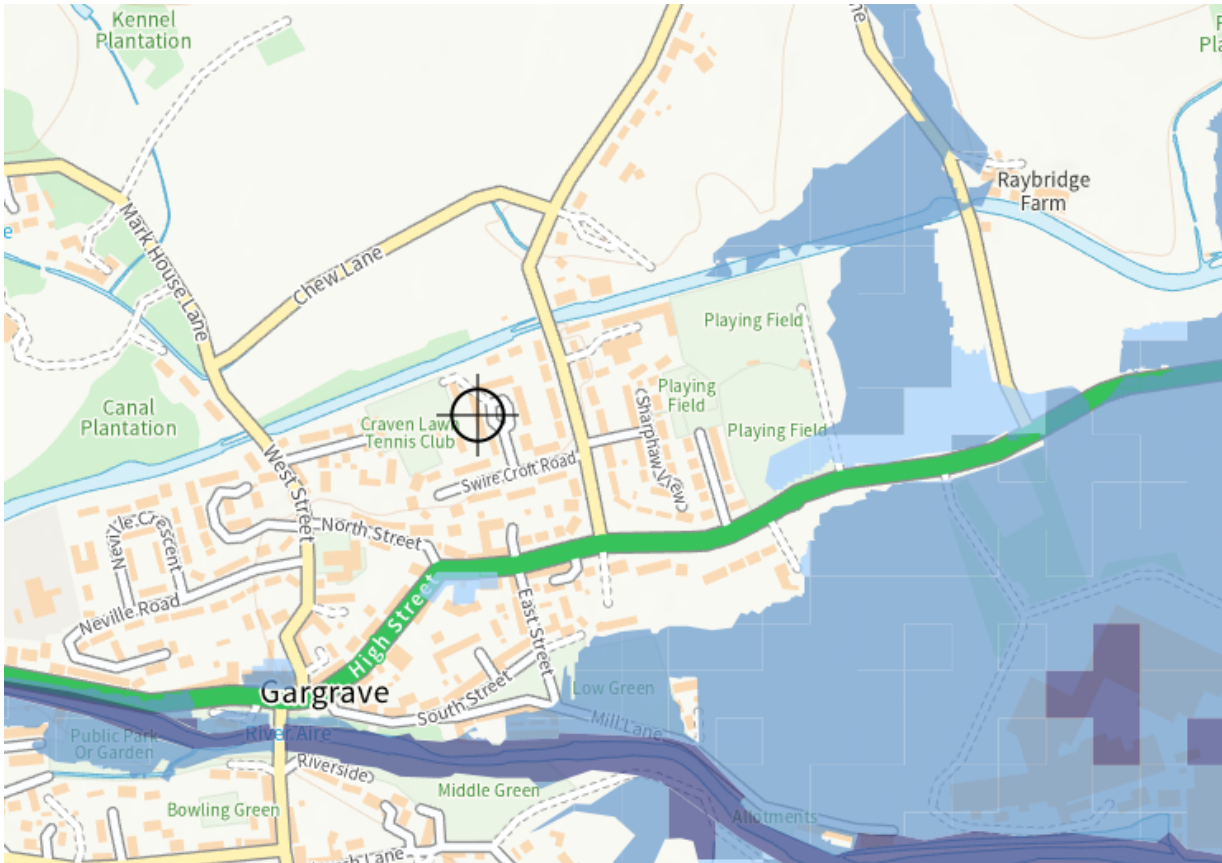
Location: 11 Smithy Croft Road Road, Gargrave, BD23 3SL

Date: April 2023

Applicant: Mr William Beckwith

Purpose of document

The purpose of this document is to comply with the National Planning Policy Framework, Department for Communities and Local Government (2012) and to support the planning application for the single storey extension to the rear elevation of the existing dwelling to create an open plan kitchen/ dining and living room to the rear of the property.



In deriving the risk of an event, consideration of the probability of the event and its consequence must be made. The probability must consider a flood happening at all and the probability of the level if it does. The consequence depends on the level reached when the event occurs, and the time taken for water to subside. This document will therefore consider these aspects and then put forward measures to mitigate damage to the property yet keep these measures commensurate with probability and costs associate.

This risk assessment is written in line with the guidance and check sheet given in local government document, Planning Policy Statement 25, Development and Flood Risk Practice, Guidance Document. Headings are taken from that document.

Location

The proposals at 11 Smithy Croft Road, Gargrave is located approximately 55m south of the Leeds Liverpool Canal. The general level of the property is at the level of the surrounding area.

Vulnerability Classification (Ref: Appendix D PPS25 Tables D1 to D3) As this is internal alterations to the existing building the vulnerability classifications may be chosen as Less Vulnerable (although strictly there is no obvious choice. Table D.323: Flood Risk Vulnerability and Flood Zone 'Compatibility' shows that for a Flood Zone 3A for a Less Vulnerable category, development would be compatible.

Sequential and Exception Testing Annex B of PPS25, D15, Minor development, states that applications for minor development and changes of use should not be subject to the Sequential or Exception Tests but will still have to meet the requirements for FRAs and flood risk reduction. Minor developments are unlikely to raise significant flood risk issues unless they would: a) have an adverse effect on a watercourse, floodplain or its flood defenses; b) would impede access to flood defense and management facilities; or c) where the cumulative impact of such developments would have a significant effect on local flood storage capacity or flood flows. It is believed that none of the above will be affected by this development.

Effects of additional area to the property. There will be minimal increase in footprint to the existing dwelling 11 Smithy Roaft Road, Gargrave. Therefore, no increase in flood risk to the existing building or surrounding dwellings in the area.

The location has several potential sources for flooding as follows. a) Canal or other artificial source flooding b) Heavy rainfall or pluvial flooding c) Flooding from land d) Flooding from ground water e) Flooding from sewers.

Surface water flooding: The EA map shows only water courses which in the main have a low risk of flood. This in effect shows their natural state in carrying surface/ground water to outlets and thus preventing build up i.e. performing their duty as drainage channels.

Flood risk from reservoirs: As no substantial reservoirs are in the vicinity this shows no risk.

Flood risk from the sea and rivers: The site is not within risk of flooding from the sea or a major river. Risk from Pluvial flooding is shown below and again the raised level of the property keeps it safe.

Surface Water Drainage Currently the route of the surface water drainage system from the existing roof is not known.

Flood Risk Management Proposals:

Given that there is a possibility of flooding at the property, albeit small, the following measures will be taken:

1. The proposed footprint is predominantly either existing building or hard standing. Therefore, the proposed extension roof will present minimal additional no permeable surface.
2. The specification for the new door to the extension will aim at high quality seal features for flood resistance.
3. The existing air brick vents will have engineering seals to be easily fixed against them at times of intermittent flooding.
4. The first floor will naturally become a flood refuge.
5. All new sockets will be located at 450mm above the floor level.
6. The floor to the proposed extension will be concrete and could be tiles for ease of cleaning in the unlikely event of flooding.

Summary

It is believed this minor development will not increase flood risk elsewhere and have negligible effect on the drainage system and foul sewage flow. Run off from building will be the same as predevelopment. Therefore, no increase in flood risk.

The residual risks that cannot be designed out will be the human factors inherent in providing equipment to be erected/fitted prior to a flood warning when it may be ignored and become too late to action them. However, the residual risk must be considered against that of neglecting to address the safety measures. The overall risk is considered very low.

This FRA for the minor development at 11 Smithy Croft Road, Gargrave has considered the sources of possible flooding and has looked at the history of flooding in the area. With a low lying land mass compared to the levels of canal there is a risk of flooding. However, the general floor level is slightly higher than the surrounding area which helps in its protection. The property has never been flooded. By the intended modifications to the property, it would be prudent to consider and action the proposed precautions listed above.