

Flood Risk Assessment

108 Mornington Avenue

Manchester



Author: Mr Tarique Cousins BSc MCABE

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Figure 1 Location Plan

Development site

The proposed development site is located 1 Mornington Avenue, Manchester and is currently a dwelling house. Looking over the lifetime of the proposed development, the site lies within Flood Zone 2 (Figure 2) and therefore a Flood Risk Assessment is required.

Development proposals

The development proposal for the above site is a single storey side /rear extension. The proposed development is therefore classified as less vulnerable and of a minor development.

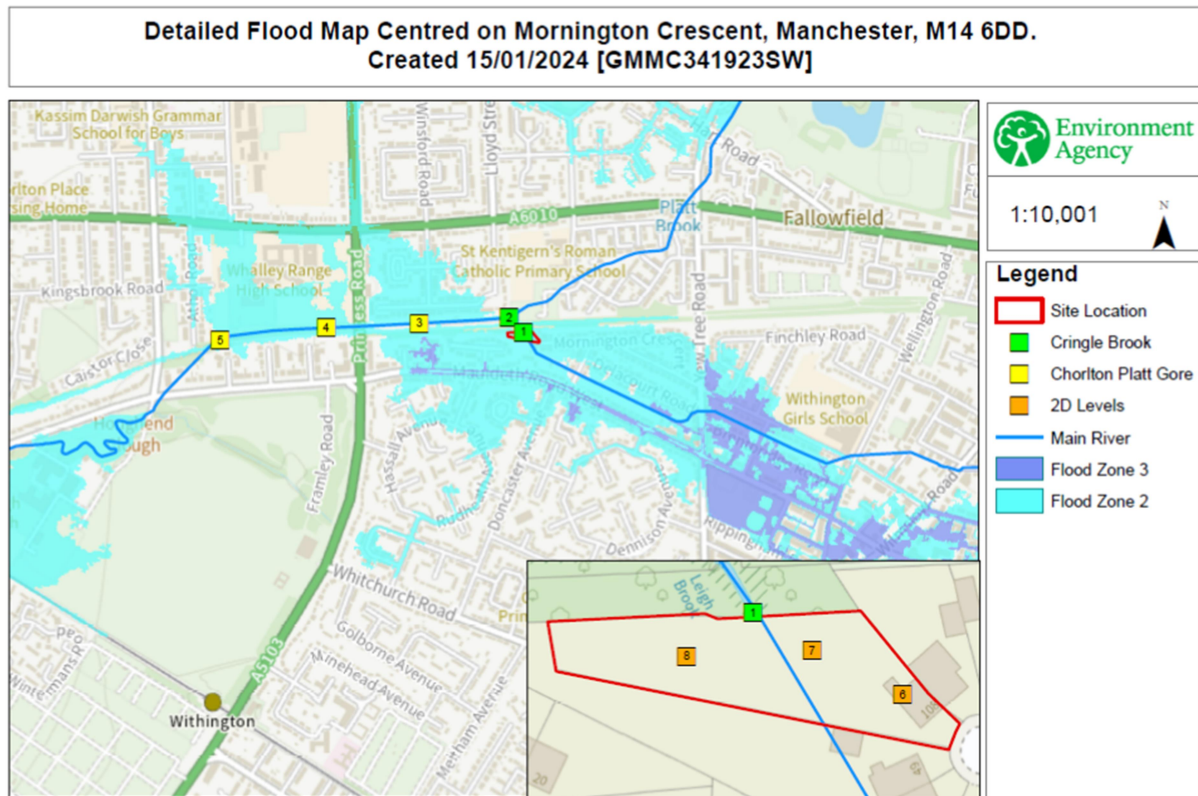


Figure 2 Flood Zone 2

Sequential Test

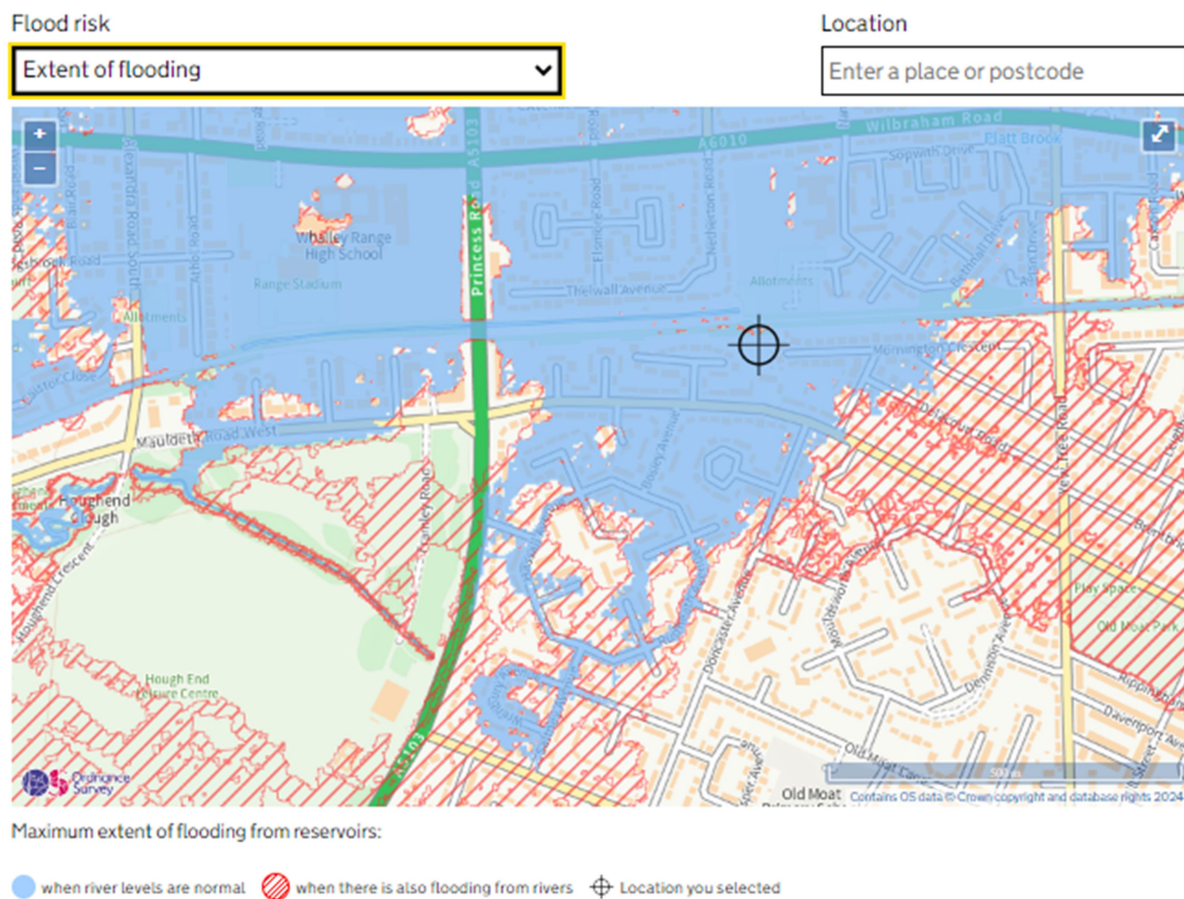
Due to this application being of a minor development. A Sequential test is not required. However, the requirements of the sequential test have been met.

Exception Test

The development does not increase the flood risk elsewhere. The requirements of the exception test have been met.

Site specific flood hazards

The proposed development site lies within Flood Zone 2 with the main risk of flooding coming from a river source.



Fluvial flooding

Flood model data for the site suggests that over the lifetime of the development, there is a low flood risk from flooding from Cringle Brook (Figure 3 – low risk).

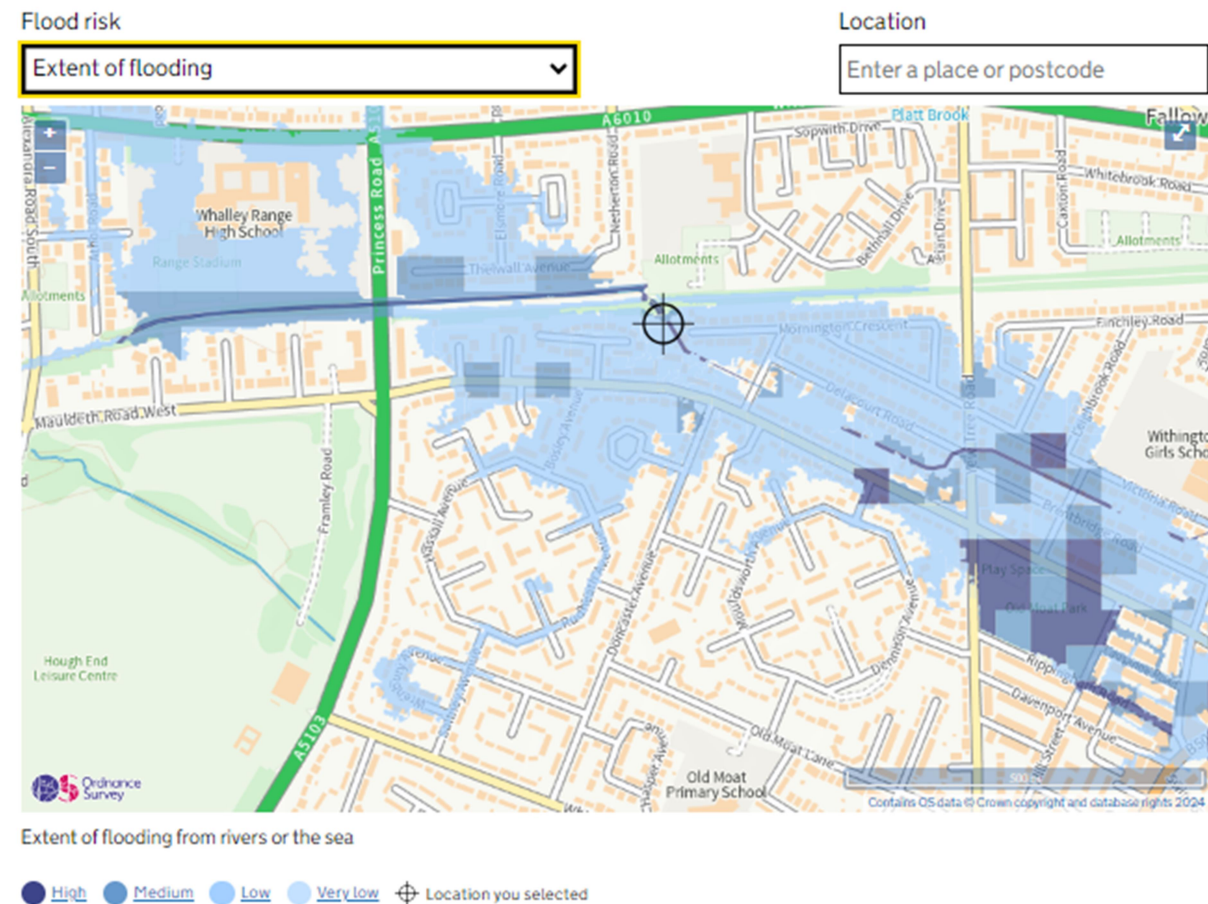


Figure 3 Extent of flooding from Rivers

Surface water flooding

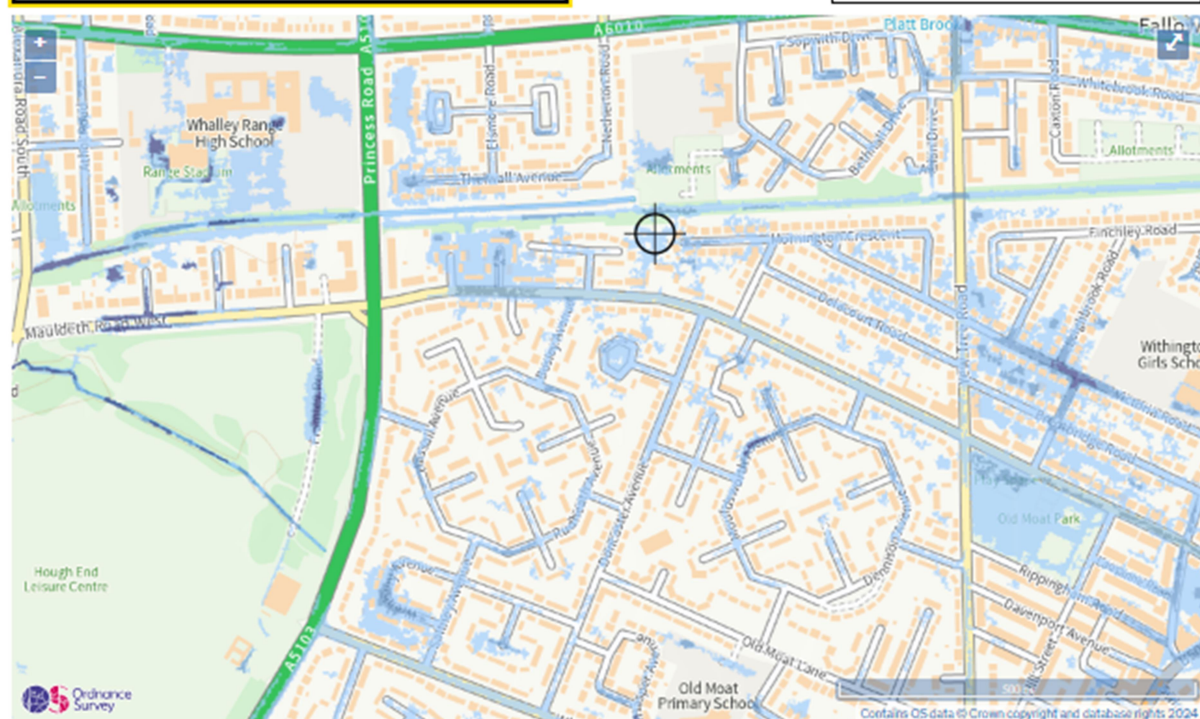
Surface water at the site is currently managed by United Utilities. The proposals for surface water management are to connect to the existing surface water system. Extent of flooding is low from surface water flooding (Figure 4). Flood depths of below 300mm (Figure 5) can be expected and will be of low velocity (Figure 6).

Flood risk

Extent of flooding

Location

Enter a place or postcode



Extent of flooding from surface water

High Medium Low Very low Location you selected

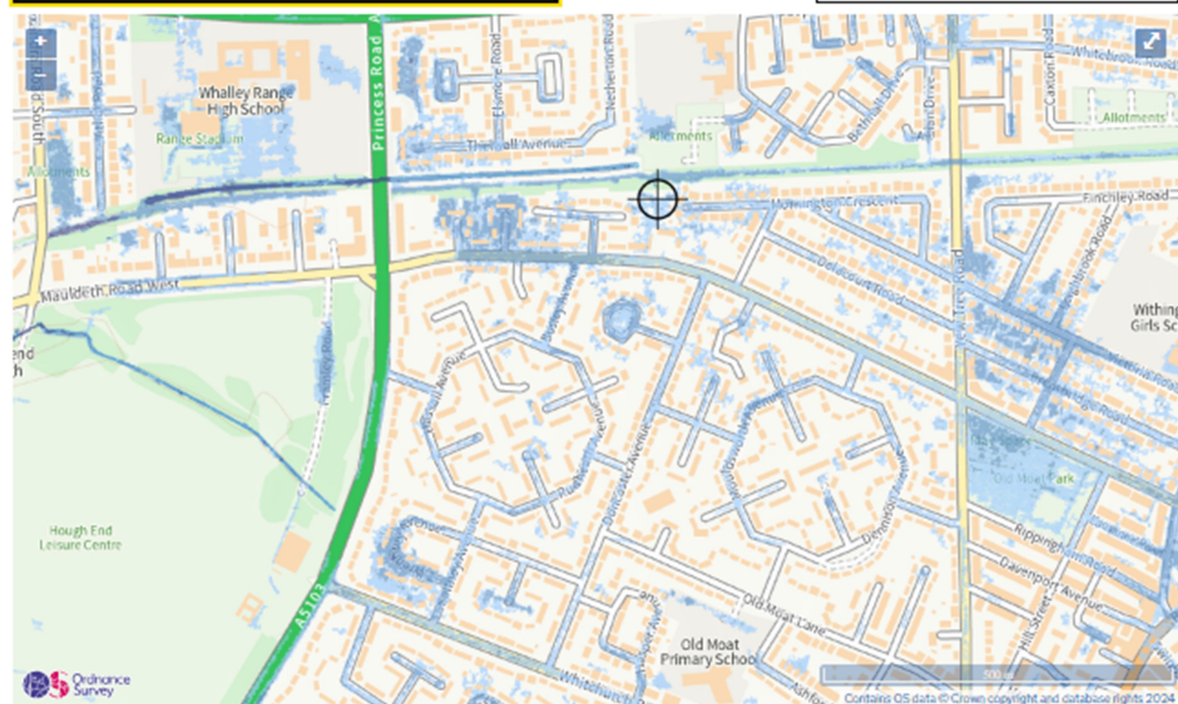
Figure 4 Low Risk Surface Water Flood Risk

Flood risk

Low risk: depth

Location

Enter a place or postcode



Surface water flood risk: water depth in a low risk scenario

Flood depth (millimetres)

Over 900mm 300 to 900mm Below 300mm Location you selected

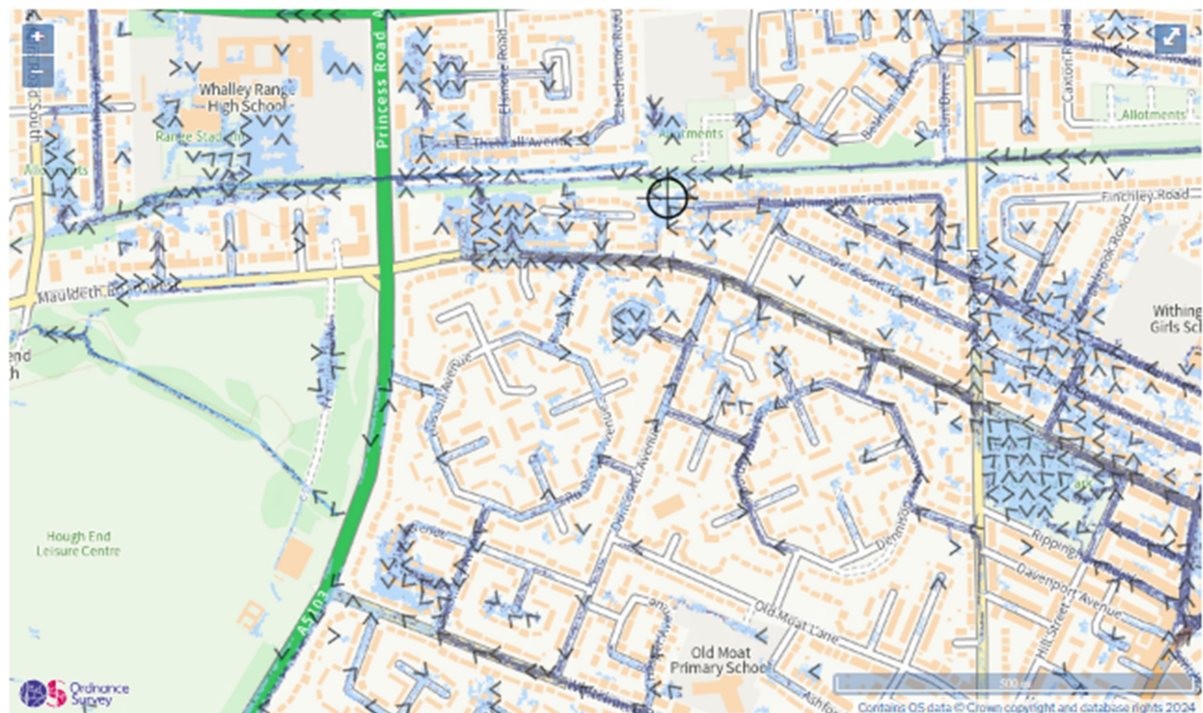
Figure 5 Low Risk: Depth from Surface Water

Flood risk

Low risk: velocity

Location

Enter a place or postcode



Surface water flood risk: water velocity in a low risk scenario

Flood velocity (metres/second)

Over 0.25 m/s Less than 0.25 m/s Direction of water flow Location you selected

Figure 6 Low Risk Velocity Water Flood Risk

Flood Risk Management

The development being of a minor development will not require any real flood risk management.

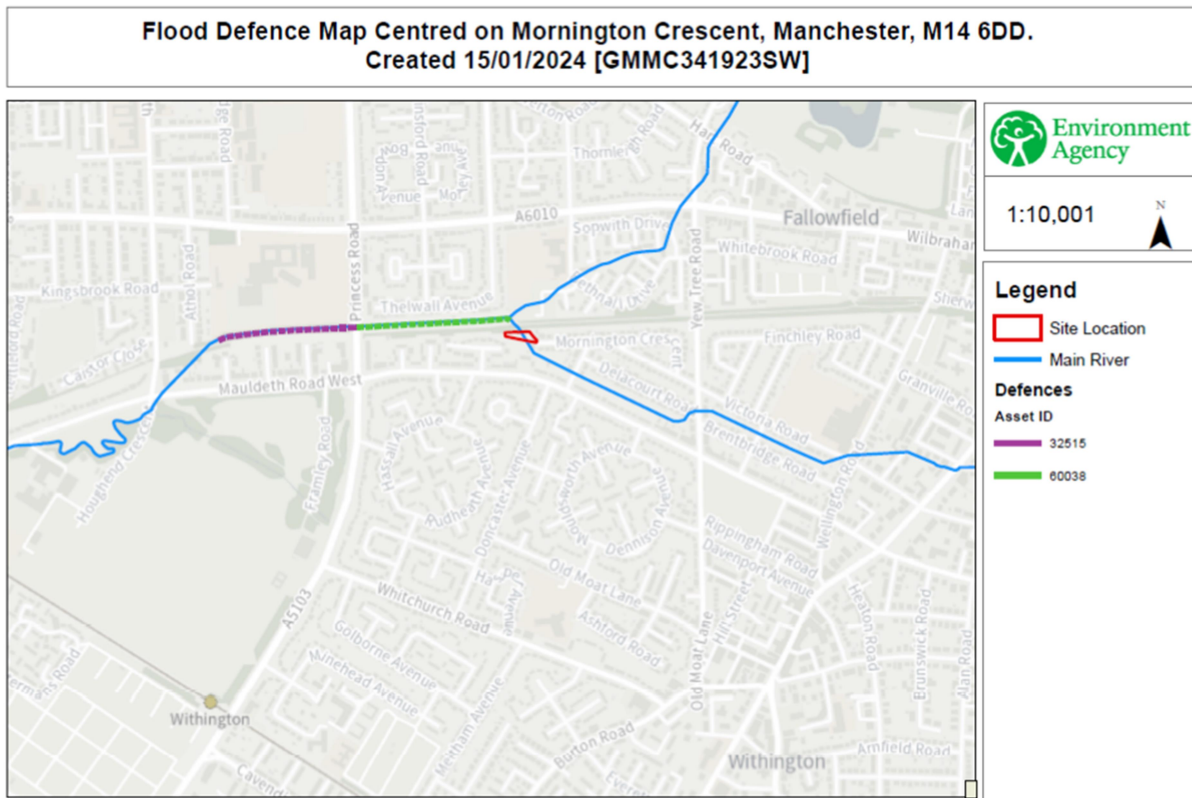


Figure 7 Existing Flood defence

Flood control measures

The development being of a minor development will not require any flood control measures apart from conventional piped drainage systems.

Flood mitigation measures

The proposed floor level is to be no lower than the existing property.

Conclusions

This proposal is of a minor development. There is no previous record of a flood affecting the property. There is a current flood defence within the area. The property lies within a Flood Zone 2, but has low risk in regards to depth of the flood and velocity. The rear extension floor level is to be no lower than the existing floor level. Conventional surface water drainage has been proposed for the development.