Flood Risk Assessment Report.

Location: 35 LOTHIAN AVENUE HAYES.

Scope This flood risk assessment has been prepared in support of the planning application for a proposed demolition of existing outbuilding and erection of a Erection of a single storey Annex to the rear garden.

PROPOSAL:

Erection of a single storey Annex to the rear garden.

FLOOD RISK ASSESSMENT/DESK TOP STUDY:

This study report is compiled to accompany a planning application for the above site. Plans are provided as part of the application . The report is compiled under criteria within the National Planning Policy Guidance (NPPG) and the Environment Agency (EA) Advisory Notes to Local Authorities. As depicted from the mapping above the latest EA maps shows the site lies on the edge of Flood Zone 2. As stated this is considered a minor development within NPPG. It lies near a local watercourse known as Yeading Brook. On the long term EA mapping this shows the flood threat is low to very low.

Surface water mapping from the EA shows the property is not at major risk from surface water flooding. Should fluvial flooding occur the site stands on the very edge of the flood plain. The EA considers the threat to be low to very low. This would mean that there could be pooling in the area with standing water at a low to very low level.

There would no threat from velocity of flood water which would be practically nil. Under NPPG it states that minor developments are unlikely to cause significant flood risk unless they : Have an adverse effect on a watercourse, flood plain or its flood defences Would Impede access to flood defence and management facilities, or Where the cumulative impact of such developments would have a significant effect on local flood storage capacity or flood flows .

The NPPG definition of minor development is as follows : The minimum requirements for an FRA that is submitted to the Local Planning Authority for minor development within Flood Zone 1/3, in relation to flood risk, is defined as follows, 1. minor non residential extensions: industrial/commercial/leisure etc. extensions with a footprint less than 250 m2. 2. Alterations: development that does not increase the size of buildings e.g. alterations to the external appearance. 3. householder development: For example; sheds, garages, games rooms, Annexes etc. within the curtilage of the existing dwelling, in addition to physical extensions in the existing dwelling itself.

Groundwater

The site is not in a groundwater protection zone nor in a vulnerability zone Flood Warning Area The applicants will be advised to sign up to the EA's flood warning service. Safe Access This has historically been achieved and there is no reason to consider this will not pertain into the future Flood Resilience Measures for the Annex. It is recommended that the proposed Annex be subject to these measures : As far as possible resilience measures should be taken on the outside and inside of the Annex to a height of 0.4 metres. No piping running under the new build should be of metal due to the threat of corrosion. Electrics should run down from the ceiling to sockets and switches which should be at a height of 0.4m. There should be a facility for an external door to be floodproof. Non Return valves should be fitted to foul drainage.

Further advice is detailed within the Government Document " Improving flood performance in new buildings " a copy of which is provided with this report. Residual risk . It is recommended that the occupants of the property subscribe to the EA Flood Line Initiative which gives a three phase warning system 1. Be aware 2. Be prepared to evacuate 3. Get out However, there is only one method of safe evacuation. That is to get out when the escape route is still dry. The Floodline initiative may give occupants of the site a misconception as to how long they should stay on site before going. We consider that the sight of advancing floodwater can create panic particularly to the old and infirm. Better to go at the first warning when everything can be done in a controlled and orderly manner and in the dry. If the flood waters do not actually reach the site then nothing is lost . But there is a big gain in terms of safety. It will also show the evacuation plan works and will give everybody concerned the confidence of knowing the site owners value their safety.

Drainage Strategy It is considered that the extra footprint of this proposal is so low to be de minimis in its contribution to the cumulative effect of development in this area . However it is recommended that in view of the small increase in impermeable area it is advised that consideration be given to provide an appropriate storm water source control device. Cranfield Institute reports that there is slow permeability in this area due to loamy and clayey under surface conditions. Offsite Implications With recommendations made above there will be no implications

CONCLUSION This is a very small development in a residential area and as such it would not affect adjoining properties. Recommendations are made in this report for the safety of occupants within the ground floor extension which includes flood resilience measures and evacuation procedures. It is considered that all relevant criteria within NPPF and the EA Advisory Notes to local authorities have been considered and followed where appropriate.