

Flood Risk Assessment: Swan House, Emsworth



Image 1: View from Emsworth Sailing Club towards Swan House

Background

Emsworth Mill Pond was originally a tidal inlet. Now the Westbrook Stream drains into the pond through a culvert under the A259 road from the north. A remotely controlled sluice controls the opening of the Mill Pond to the tide. The pond sluice is opened when there is the threat of flooding. The town Mill Pond has little in the way of natural vegetation, but the birds are well fed by locals and visitors.

The Mill Pond has various different types and styles of retaining walls surrounding it off Bath Road and Bridgefoot Path. All these walls act to protect the surrounding properties from flooding and erosion.

It is very clear that the existing retaining walls from Swan House have a very limited life expectancy and as they deteriorate further they will leave Swan House exposed to flooding and the garden to erosion from the Mill Pond.

Proposed Scheme

The scheme surrounding the Mill Pond is shown on the submitted drawings [14047-01 and 02]. The proposal is for minor works to repair the existing wall and raise it slightly to reduce the risk of flooding to Swan House. The wall will then be rendered to give it a uniform effect. To Bath Road we are constructing a small dwarf brick wall with intermediate piers to provide a visual break.

Havant Borough Council

The Council sets out the flooding issues for the Mill Pond on its website, stating that:

Flooding is most likely to occur when the water level in Chichester Harbour is higher than the main weir, and waves have been breaking over the promenade. In these conditions the Mill Pond becomes part of the harbour and the Mill Pond water levels cease to be affected by the promenade wall and weirs. However, flooding at Bridge Road in September 1995, September 2000 and November 2010 has shown that this is not always the case if the West Brook is in high flow - on these occasions there was little or no flooding in Bath Road or Bridgefoot Path adjoining the Mill Pond.

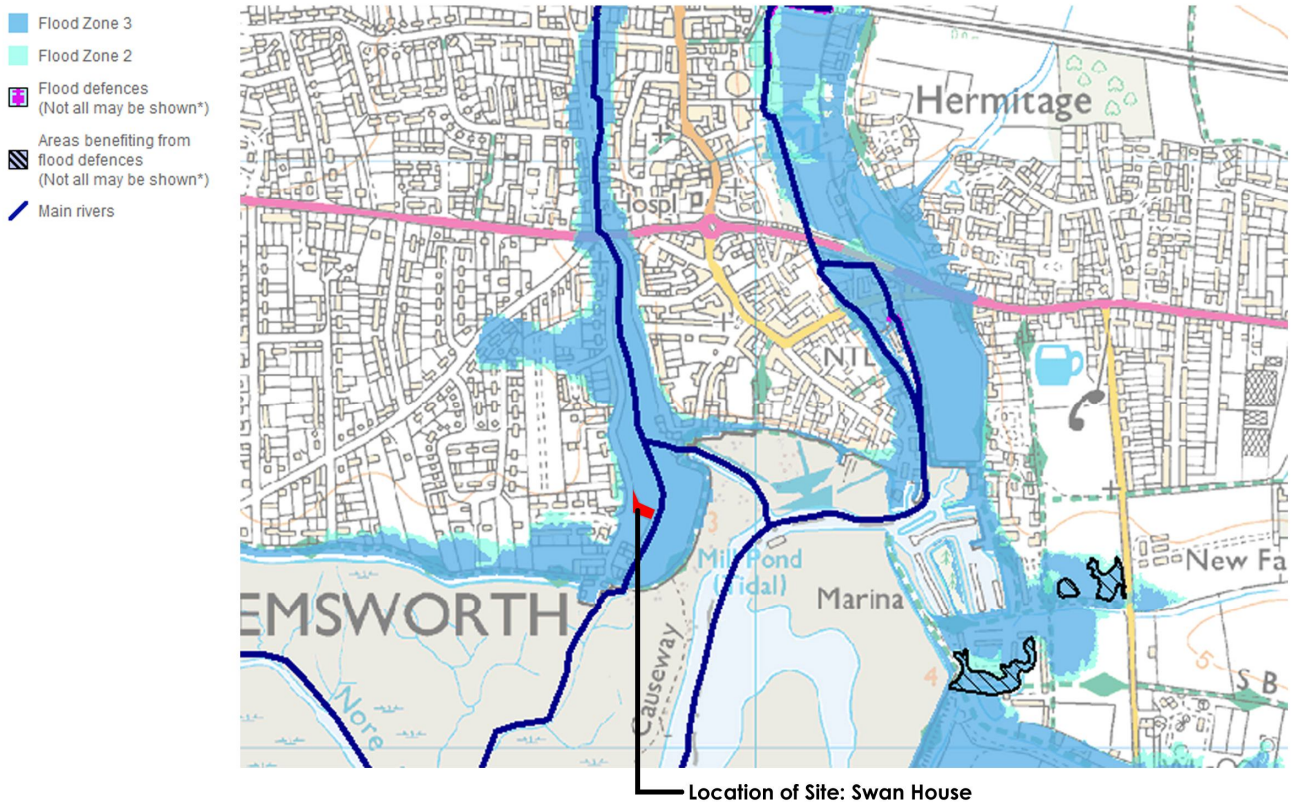
The worst combination at any time and especially over the five-day period at each Spring Tide is:

- *Prolonged heavy rainfall*
- *Wind greater than gale force from the south to south-east*
- *Low barometric pressure*

This combination is likely to give rise to flooding due to surface water run-off in and around Bridge Road, Bath Road, Bridgefoot Path and Victoria Road, with extensive flooding due to the tidal surge affecting the same areas together with the lower end of South Street and of the A259 Havant Road.

Flood Risk

The whole purpose of this application and proposals is to reduce the risk of flooding to Swan House and other properties along Bath Road that already lies within flood zone 3. This will be achieved by repairing the existing wall and raising the height slightly.



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