

## 3.11 HYDROLOGY, FLOOD RISK AND DRAINAGE

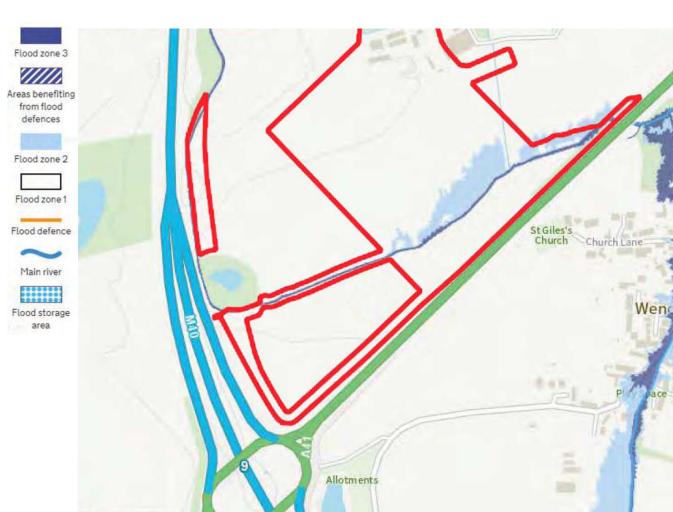
The majority of the site is currently in Flood Zone 1 (the lowest risk of flooding). A very small proportion of the site is located within Flood Zone 2. The area affected follows the existing route of the Brook, which is proposed to be re-routed along the M40/A41 boundaries as part of the proposals.

A Sustainable Urban Drainage System (SUDS) will be designed and implemented and will incorporate swales and below ground storage facilities, to ensure that the 1 in 100 year plus 40% climate change storm event can be contained on site.

The drainage strategy will be designed to ensure surface water run off does not exceed existing greenfield run off rates.

The proposed swales will add to and enhance the biodiversity of the development. The diverted ditch will be designed to have no greater impact on flood risk and will not increase the flood risk posed to the site or the surrounding area. It will also improve on site biodiversity.





MAP SHOWING THE SITE IN RELATION TO AREAS AT RISK OF FLOODING





## 3.12 ECOLOGY

A full suite of baseline ecological surveys have been undertaken including Phase 1 habitat surveys, hedgerow assessments, breeding bird surveys, bat tree roost assessments and activity surveys, badger surveys, water vole and otter surveys, great crested newt surveys, reptile surveys and brown hairstreak butterfly surveys.

There are no statutory designated sites of European/international importance within 10km of the site boundary.

There are two statutory designated sites of national importance within 2.5km of the site, these being Weston Fen Site of Special Scientific Interest (SSSI) and Wendlebury Meads and Mansmoor Closes SSSI. No adverse effects on these two statutory designations are anticipated, due to reasons of distance and lack of obvious hydrological connectivity.

There are three areas of ancient woodland, which are also designated as Local Wildlife Sites (LWS), within a 1km radius of the site, Stoke Bushes LWS, Stoke Wood LWS and Stoke Little Wood LWS. Owing to the nature of these designations and the Proposed Development, it is not considered that the proposals will result in significant adverse impacts to the nature conservation interest of these sites.

