ENVIRONMENTAL FLOOD RISK DRAINAGE ECOLOGY

Land at Spring St, Hucknall

Savills

Project Aims

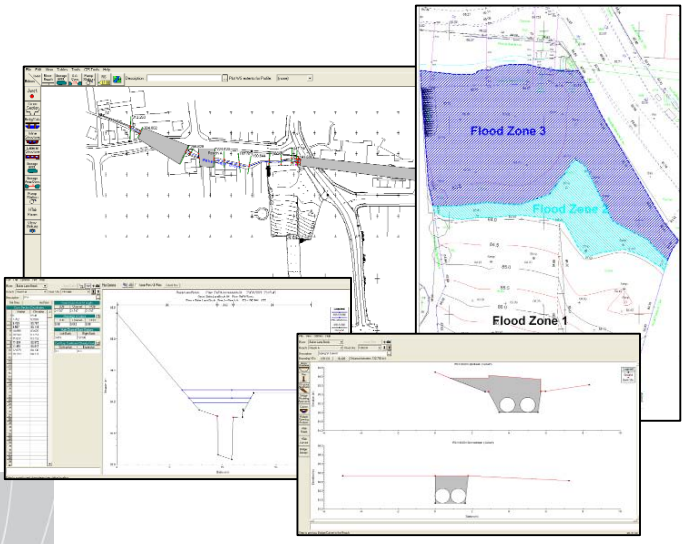
Clear was employed by Savills to undertake a Flood Risk Assessment including a hydrological assessment and hydraulic modelling of the adjacent Baker Lane Brook for a proposed residential development on playing fields belonging to the former Spring St School lying to the rear of the land.

The aim of the project was to assist in the design of the site to steer all proposed new buildings to the area of the site outside of both the 1 in 100 year and 1 in 1000 year floodplains. Access issues to and from the site in times of extreme flood also required investigation.

Consultations with the Environment Agency were undertaken throughout the production of the Flood Risk Assessment as more detailed information on the brook became available and as the design of the site progressed. Ashfield District Council was also consulted and who are able to provide much valuable information from residents in the area who had experienced flooding.

Project Summary

The Baker Lane Brook has a history of flooding and during the production of the Flood Risk Assessment the Environment Agency were undertaking their own assessment to aid in their own modelling of the Baker Lane brook system. However, due to the limited time available to complete the Flood Risk Assessment it was not viable to wait for the completion of the EA's model therefore surveying and modelling of the Brook using HEC-RAS was undertaken by ourselves.
The results of the modelling allowed each of the flood zones to be mapped across the site and provided the basis on which the architect could design the site.
The final design retained all new buildings within Flood Zone 1 (outside of both the 1 in 100 yr and 1 in 1000yr floodplains) with an area of open space proposed within the area falling within Flood Zone 3 and areas of car parking within Flood Zone 2.



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