

90 SWITHLAND LANE

CLIENT:	PRIVATE
SECTOR:	RESIDENTIAL
LOCATION:	LEICESTERSHIRE
VALUE:	£2.5M
DATE:	2008-2009



This is one of the largest ever individual residential projects with which HWA have been involved, with a total floor area of around 2000m². Technically, the project is an extension to an existing property, although the scale of the project is such that the original dwelling is dwarfed by the new-build elements.

The majority of the property is on 2-3 storeys and incorporates substantial open areas on the ground floor. This dictated the use of structural techniques more usually seen in commercial developments, including a substantial steel frame and hollowcore precast concrete floors.

Many elements are curved on plan, adding to the complexity of the structural design as no two members are the same. The flat roof structure was initially designed to withstand

loads from soil and vegetation on a green roof, although a subsequent value engineering exercise resulted in a change to a lighter conventional roof covering.

The large trees around the property are the subject of preservation orders which, together with the potentially shrinkable nature of the sub-soil, resulted in the need for a partially piled foundation. This provided stability whilst avoiding damage to tree roots – the positions of some of the piles had to be adjusted individually following initial hand excavation to ensure that the trees were not harmed.

The project has presented many challenges. We have however overcome them with ingenuity to deliver a spectacular but efficiently engineered one-off property for a very satisfied client.