

CASE STUDY

Permission Granted: ADC triumphs on a tough site with ArchiCAD

by Rob Hathaway

When a regional developer approached Midlands-based architectural design company ADC in May 2006 and asked it to prepare a detailed planning application for a site in Four Oaks, Sutton Coldfield the practice knew it had the tools to get this difficult job done. Associate Rob Hathaway explains.



1. Four Oaks Sketch.

“The site was in a very appealing location, within one of the housing hotspots of the Midlands. The private location in a leafy green setting was perfect for a high quality development of four 2.5 storey 2500sqft detached houses. However, our design proposal would be a backland development, additional houses built within an already built up area, on the edge of Sutton Park.

“We were confident that we could design a scheme that would give maximum site coverage whilst retaining the leafy setting. The trick would be to reassure the residents of Four Oaks, who had already set up numerous action committees to object to and thwart backland developments in their neighbourhood and numerous similar schemes had been refused planning permission.”

2D to 3D

ADC was formed by Nick Kirkland in 2001. The practice has concentrated on the residential sector since and become adept at dealing with the issues of local planning. Initially, ADC had committed to use MicroStation 2D CAD software but realising that the practice had to innovate to be successful, Kirkland and his team decided some 18 months ago to move to a 3D working platform.

“ADC invested in Graphisoft’s ArchiCAD because three dimensional architectural presentations give clients and planners a better insight into schemes,” says Hathaway. “They do not misconceive proposals; residents and consultees have an improved understanding; and, contractors can envisage what the finished build will look like. The advantages are potentially endless.

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2. Four Oaks Plot 1.

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“We drew the initial Four Oaks scheme in 3D, with surrounding properties, buildings and trees modelled to create a contextual model. This formed the backbone of our submission to Birmingham City Council as to why this backland site would suit redevelopment.

“At the presentation, all the views that the planners wanted to see were displayed immediately, as opposed to us having to ‘redraw’ 2D views and re-present them at a later date. A fly-through was also prepared to show how the development would look to someone driving into the site.”

Smooth progress

Within eight months a full detailed consent was granted without refusal or the need for expensive, time consuming appeals. “ArchiCAD was a major influence in our winning planning permission,” says Hathaway. “It came into its own, instantly giving planning officers a true representation of what we wanted to build and saved time and money by speeding up the whole permissions process. This is one of the key benefits of working in 3D.”

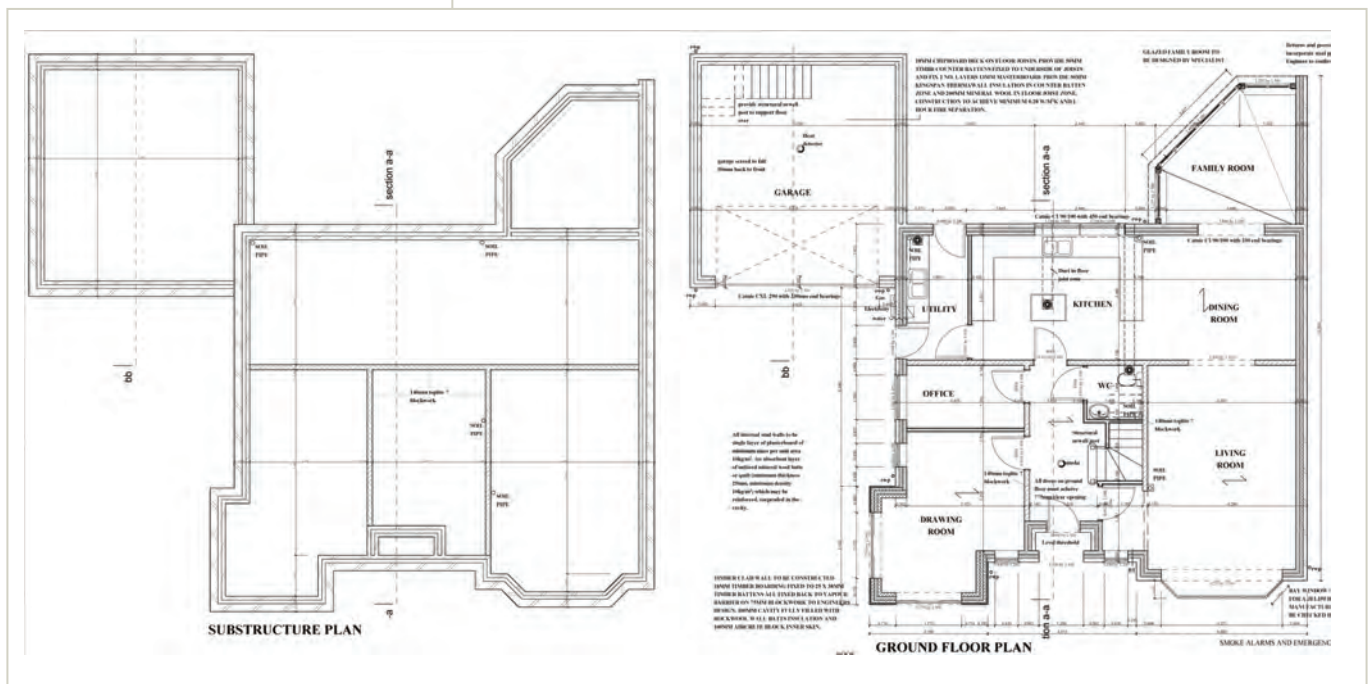
ADC Ltd is a modern Midlands based design consultancy specialising in bespoke designs that maximise site potential for residential, commercial and industrial sectors. Formed in 2001, the practice has established itself as a bright and intuitive firm that has designed numerous high quality developments such as Millfield Wharf, Fazeley, Great Barr Business Park and leading supermarket food factories. ADC also has an extensive portfolio of successful refurbishment and conversion projects.

ADC Ltd

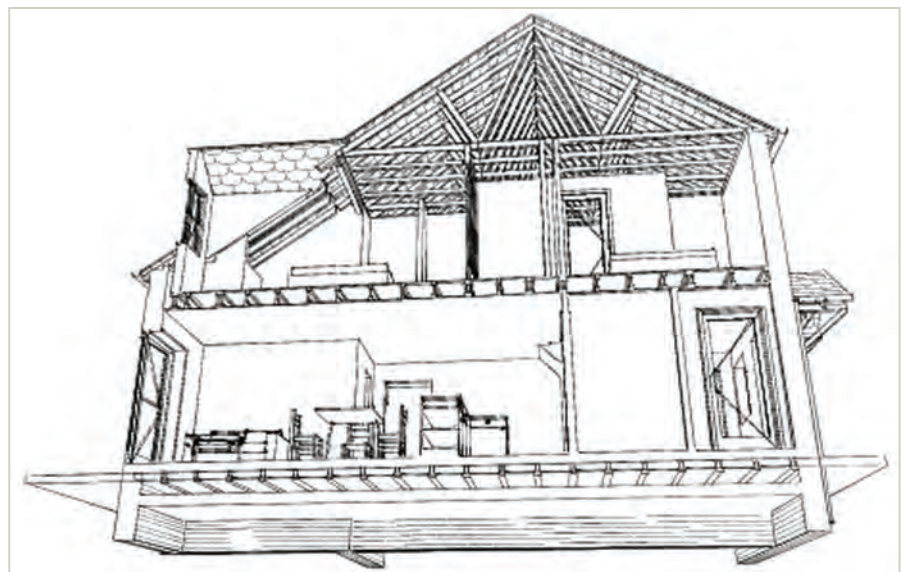
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Hathaway's designs, for a traditional courtyard layout featuring homes in an Arts and Crafts style, to suit the surrounding period properties are due to start on site soon. However, its work with ArchiCAD didn't stop following planning permission being granted. "The software is an invaluable tool in speeding up the detailed design process, too," says Hathaway, "ArchiCAD's ability to link different views and automatically check and alter drawings means that it will rule out errors and miscalculations, and simultaneously update designs. It also enables us to quickly create a very accurate schedule of quantities, making costing and procurement quicker, more accurate and easily understood in relation to the drawings."



3. Working Drawing.



4. Truss Layout

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"We used it to produce all of our working drawings and schedules, and, to explain to contractors exactly what we wanted. In fact, the software proved its worth when the roof truss manufacturer queried our design after looking at the 2D drawings. Using a 3D detail of the element in question, we were able to explain how the roof structure would work and he is now manufacturing trusses to our original design. The 2D drawings are what the contractors' use the most but these 3D blow ups of specific details really get the message across because whether you are a tradesman or a layperson it is far easier to visualise something in 3D."

ADC is looking forward to more work from the developer and others who can quite literally see the benefits of working in 3D. Its ArchiCAD models for Four Oaks are now also being utilised by agents as marketing material for the properties.

"As a consequence of moving to ArchiCAD everyone can understand our designs far easier. This, along with the undoubted cost and time savings that come from working in 3D, mean that ArchiCAD has added an extra string to our architectural bow," says Hathaway. "It has even enabled us to set up a satellite company that specialises in producing 360 degree visuals for other firms, and, the architectural practice is branching out into office design and the food manufacturing sector, too."

Rob Hathaway is an associate of ADC Ltd based in the Midlands.

About Graphisoft

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