

## Case study: McAleer & Rushe

**McAleer & Rushe unites with its sub-contractors to accelerate delivery and hit hard deadlines on student accommodation**



### Summary

McAleer & Rushe has an enviable track record on Design and Build projects for delivery on time and on budget that is almost 50 years old. Achieving efficiency in its programmes is always a goal, and Asta Powerproject is its tool of choice for planning and client reporting.

That would prove important on the Unite project at Angel Lane. It was a project which started two months late – but for which the academic year deadline was immovable.



Paul Marlow was richly rewarded for a project extremely well-managed when he walked away from the CMYA Awards not only with a Gold Medal for the Angel Lane project, but also the supreme accolade of Construction Manager of the Year. He is the youngest ever to gain that overall award.

First impressions count. When McAleer & Rushe was awarded main contractor status by Unite Students to develop a large student accommodation building in Stratford, it was determined to deliver the project on time. This would not only deliver a great first project for their new client, Unite, but was also important to fit in with the immovable dates of the academic year.

The £29 million development at Angel Lane, Stratford in East London, was a substantial residential block which would deliver 759 student rooms arranged as clusters or as individual studios, with en-suite bathrooms and fully-fitted kitchens, communal areas, and 903 sqm of commercial space at ground floor level. Facilities were

arrayed in a three-sided U shape, with each side varying in height between seven, 10 and 14 storeys.

### Aggressive targets to overcome late start

The project started late, due to an unforeseen two-month delay in completing the land-purchase by the client. The original 21-month time frame called for construction to start in early November 2013, and complete ready for occupation at the start the new academic year in September 2015. Throughout the delay period, Project Manager Paul Marlow was hard at work envisioning smart ways to claw back time. He and Senior Planner Fiachra Woods utilised Asta Powerproject to

help them in numerous ways throughout this time and the ensuing construction phase.

Setting aggressive targets for sub-contractors was an inevitability, and Paul knew that achieving the completion date would depend on gaining their support for accelerated working

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and hard deadlines. No amount of imagination would reduce the number of rooms to complete or bathroom pods to crane into position. He told us: “We had to shave 2 months off our programme from the start – and that’s no easy task. Our main planning tool is Asta Powerproject, and we saw a big advantage in using it to support our discussions with sub-contractors. We used it to develop collaborative plans, because without sub-contractor buy in we would never have met our end date. We would have drawn up the programmes as we thought they should be, but in discussion with sub-contractors we would create revised programmes that had aggressive, but realistic, targets.”

Certain key activities required extremely aggressive deadlines if the overall scheme was to be delivered on time, as Paul explained: “We use Asta Powerproject for all our construction programmes, from frame right through to completion – but on this project its two most extensive uses were with the internal fit-out and external façade

contractors. We had nearly 800 rooms to fit-out in a very short time, so we had to create very detailed programmes which we gave to all our sub-contractors. We could filter their scope out easily within the software. The aim of the programme was to give them clear targets for each floor, to say when they needed to be completed. Those targets were deemed unachievable at times – but through the work of our sub-contractors, the site team and the management, we got there.”

### Programme certainty from informed decisions



When McAleer & Rushe became involved, it identified some concerns about the assumptions made during the design and planning of the project. Using Asta Powerproject, Paul and Fíachra conducted numerous ‘what if’ analyses to consider alternative approaches, support some critical decisions, and validate them to the client. Paul outlined the priorities: “It’s a good example of our use of Asta Powerproject. Given a large-scale project like this, plus a very aggressive overall programme, the key things are to get the frame complete as quick as possible, and get it weathertight as quick as possible to allow fit-out finishes to commence. “

The frame was a major concern and constraint: the building had been designed with a post-tensioned concrete frame. Although often regarded as a speedy solution for structural framing, Paul was convinced that a change was required to win back flexibility in the constrained time frame. “We knew we could achieve the end result, thanks to our expertise in using in-situ concrete frames, and the trust we had in our supplier. We made the switch to give us more programme certainty, because we knew that they could deliver. In a post-tensioned frame you need a lot of front-end M&E design and coordination. To give that more time to develop, we used an in-situ concrete frame, and allowed the M&E coordination to happen in tandem with that. It enabled us to hit the ground running.”

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Asta Powerproject: The power behind successful projects

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A second issue was identified around the design choice of a brickwork façade, where several challenges existed. Paul described it in this way: “By using Asta Powerproject we could work through different scenarios and work out impact on fit-out. The required finish of the building was a brickwork façade, and there were a couple of options. If we had gone for traditional brick-work it would have required a scaffold around the full perimeter of the job. With this route, we’d also be very weather-dependent, and that could also impact on the programme. Using Asta Powerproject we looked at the knock-on effect of that on the programme, and it informed our decision to go with an alternative lightweight Gebrik cladding.”

Material changes are never insignificant decisions, as Paul continued: “When a material choice had to be made, we had to factor in the lead-in times. You can plug in the lead-in time as an exercise, and right away see what it does to the programme. That determines what is and is not an option. The beauty of Asta Powerproject is that it helps you make the right decisions for the success of the job.”

The team chose a light-weight cladding route that would enable them to install the façade more quickly and easily, using less scaffolding, along with mast climbers and cradles. It not only freed up the tower cranes to complete the concrete frames but also reduced dependency on scarce brick-working skills. The main gain was time efficiency, as Fiachra stated: “If we’d gone with the original proposal of traditional brick-work, we analysed that we would be two to three months late in completion. Changing to the Gebrik system brought us back in line with the contract completion date. It was cost-averse but, by analysing the programme options, we could highlight the impact of the different methodologies. That’s just one



example of decisions that we made with the help of Asta Powerproject.”

### Control, collaboration and coordination

The client was not only delighted by the building, but by Paul’s leadership and ability to coordinate solutions to reclaim the time lost early in the project. Managing activities within an incredibly tight timeline was a notable achievement. Reflecting on this, Paul said that “Asta Powerproject was a great tool and very important for the success of the scheme. Whenever we were to have our coordination meetings, our planner could very quickly do a filter on Asta Powerproject to give me a visual one-page document. I could sit down with a sub-contractor and right away we could see if they were on track or behind. To achieve the end date, we had to do that process right from the start through to completion of the scheme.”

Fiachra concluded: “I’ve been a planner for many years and most software is very similar – but where we see the advantage with Asta Powerproject is that you can get the presentation right for the site team, and you can filter off information to make it easily readable. It helps us give less technical or programme-oriented people information they can make use of.”

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### About Elecosoft

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Our core product, Asta Powerproject, provides solutions for managing any size and any type of project and is widely recognised as one of the world’s leading project management software solutions for construction.

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