



A tale of two energy strategies

AJ Energy Consultants were engaged to ensure that both refurbished and new-build areas of the De Beauvoir Block development met Planning, budgetary, and end user requirements – which called for a creative, flexible service, working in partnership with the architect, construction company, and end client

et in the Conservation Area of De Beauvoir town, a ward of the London Borough of Hackney, De Beauvoir Block started life as a row of six individual commercial buildings built in the 1920s. Owners The Benyon Estate — which manages around 350 properties across the district — had a vision for this former factory and warehouse site, which would see it become a new hub and workspace for the vibrant, creative community that has made the area its home in recent years.

Launched in July 2017, the De Beauvoir Block houses 33 commercial units, ranging from 300 sq ft to 2,500 sq ft, as well as a workspace which features dedicated desks and storage for members, offering a lower-cost alternative for start-ups

and freelancers. Bookable meeting rooms, communal areas, and an all-day café are also tenant- and members-only, with an on-site concierge providing print services and ensuring that visitors are signed in at reception.

AJ Energy first got involved with the project in early 2014, through architects Henley Halebrown, with whom they have worked in partnership on a number of schemes in Hackney since 2009. The company's initial remit was to carry out a feasibility check of the M&E strategy for Phase 1 of the works, and to develop an energy strategy to meet Planning requirements – which included a 40% carbon reduction against the current Building Regulations (2010), which was standard London policy at the time.

"AJ Energy were great value for money. Their fees are very reasonable, and the efficiency of their process helped us to avoid costs mounting up unnecessarily"

Josh Summers, Commercial Manager





This involved demonstrating both how the refurbishment of the existing building, and the construction of additional space (both additional floors, and roof-top office pods), could meet the requirements – which involved two very difficult approaches. The existing spaces would be served by gas central heating, while the new areas would have heating and cooling provided by wall-mounted split units, for an easilyinstalled electric-only solution that would be both efficient and low-noise. Particularly pertinent at the time was the fact that the roof-top pods would likely be prefabricated – so the extension of existing services had to be coordinated to make sure that everything was in exactly the right place, for quick and easy connection once the pods were lowered into place.

"It was refreshing to work with a consultant who integrated so well, and worked as seamlessly as possible with every party involved. This meant we could be confident that every box was ticked, and nothing fell between the cracks"

Josh Summers, Commercial Manager

After Planning Permission had been obtained, AJ Energy was approached directly by The Benyon Estate, to provide M&E design services. Initially just asked to get involved with the new-build floors at 92 De Beauvoir Road, the project's scope grew as the benefits of their expert approach to M&E design became apparent. AJ Energy then took on the full M&E design for the refurbishment of the existing floors at 92 De Beauvoir Road, as well as the complete refurbishment and extension of the larger 94 De Beauvoir Road.

One of the biggest challenges was the limitations of the existing 200 amp, three-phase electricity supply, because it proved difficult to get a larger supply on site – no mean feat when you consider the demands that would be made by the tenants, all 21st century professionals relying on electronic technology, plus the electric-only heating in parts of the Block, a lift, and the busy café on the ground floor. In fact, although the fit-out of the café would be down to the

Continuous improvement

With the first two phases of the project completed – at which point the De Beauvoir Block was things in real life – such as the officially launched, and tenants moved in – John Simpson, Managing Director at AJ Energy took the opportunity to meet with The Benyon Estate team, to discuss how the building is working for them.

"It's rare to be able to get end user feedback, but it's invaluable when you will be working on a subsequent phase of development," he explains. "Finding out how people use heating controls, or the door entry system – will help us to make sure that we can hone our plans for the forthcoming phase, and deliver the best possible solution for everyone." As a result, AJ Energy is primed and ready to deliver an even better solution for the forthcoming new phase of works at the De Beauvoir Block.

"We were delighted with the value engineering that AJ Energy came up with, mostly on our lighting and heating specifications. These money-saving exercises meant that keeping our budgets under control became a lot easier"

Josh Summers, Commercial Manager





operators to arrange, AJ Energy was required to dictate the M&E design there, too, to ensure that the electrical supply was not overloaded.

In order to meet the needs of the target market, each leasable business unit had to be self-contained, with separately metered electric, and (owing to the complexity and imperfection of gas metering strategies) a clear policy on gas charging, based on floor area. This meant that the design of the electrics had to include check meters on every floor, so that the management's billing process could be kept simple and straightforward, reducing the administrative burden.

Because of the construction of the existing building – all solid brick walls with an exposed CLT ceiling in new build areas – and the 'industrial chic' aesthetic, all services were exposed, running in conduit. The steel structure in the ceilings also meant that suitable penetrations had to be designed in, while the placement of the old steam heating pipes – left for an



Keeping costs under control

Total project cost was a key consideration, and the works on site would only get given the go-ahead once the scheme met the budgetary requirement. "We carried out an extensive cost review and value engineering exercise, which resulted in savings of around 10% on the M&E installation budget compared to the client's original specification," explains John Simpson, Managing Director at AJ Energy. "As parts of the project involved the refurbishment of an existing building, we also made sure to include a number of contingencies in case of unforeseen issues that might be uncovered during strip-out."

"There were a number of areas in which we were able to effect cost savings without impacting on occupant comfort, and barely impacting on energy efficiency," he continues. "By comparing lift manufacturers we were able to save over £6k on the installation, while restricting comfort cooling to the café and the rooftop pods only, specifying gas-fired central heating elsewhere – where aspect and shading meant solar gain was low – also kept costs under control."

"Also, we saved around £13k on the lighting system, with only a small reduction in efficiency. LED lighting would have cost a considerable amount, so instead we opted for high efficiency T5 lighting installed within the office floorplates."



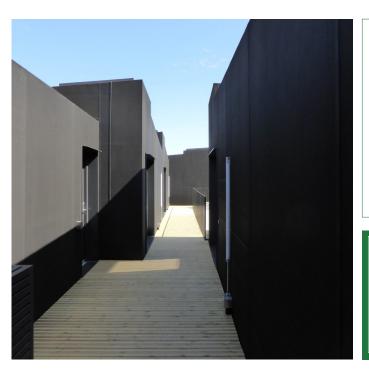


authentic industrial vibe, even though they were redundant on a practical level – dictated where the services might be best routed. With everything on show, precision design was called for, to ensure that the end result would suit the Block's target market of creatives and media types.

But it wasn't just a case of prioritising the visual appearance of the design – the practicality of use for members and tenants was paramount, while cost was also a major consideration. AJ Energy spent considerable time on value engineering, ensuring that the maximum benefit could be squeezed out of the budget. For example, rather than automatically putting both heating and cooling into every space, the design only featured cooling in some areas – as others, including much of

the existing part of the building, are shaded, so direct solar gain is minimal and cooling unnecessary.

"What really stood out with AJ Energy was the quality of the service," explains Josh Summers, Commercial Manager at The Benyon Estate. "Not only did we get access to the specialist knowledge and advice that we needed, we were able to do so easily and efficiently. Whereas some consultants will be slow to respond, or you'll get passed around the office before you can get an answer, AJ Energy took a very personal approach. They were prompt with their responses, so there was no time or money wasted through inefficiency. We were really happy with the ease of the process, and also the fact that AJ worked as seamlessly as possible with every single party involved."



PROJECT SUMMARY

- Located in De Beauvoir town, Hackney, London
- A terrace of six 1920s commercial buildings, transformed into a business hub
- AJ Energy recommended by architect
- Remit expanded to include M&E design, and Building Regulations compliance
- Comprehensive service included pre- and postplanning stages

Got any questions?

For more information on our comprehensive range of services, please visit our website at www.ajenergy.com.