

AVL Technical Centre



Project name:

AVL Technical Centre

Location:

Ansty Park, Coventry

Value:

£5.5m new build project

Services:

Masterplanning
Architecture
Landscape Architecture
Building Services
Structural & Civil Engineering
Project Management



The Brief

AVL is the world's largest company for the development of powertrain systems with internal combustion engines as well as instrumentation and test systems. The ambition was to create a world-class technical facility providing exceptional Powertrain solutions to support the UK automotive market to be best in class.

Once the appropriate site was secured, the Tech Centre had to house up to 6 state-of-the-art Powertrain Test Beds to enable enhanced rig testing of prototype cars.

With such specific needs a bespoke design was paramount, based on a firm project brief agreed between AVL's European Headquarters and UK based personnel. Regular co-ordination and detailed communication with the client's full project team throughout the tightly scheduled project was also essential.

Project Overview

Having decided that a new purpose built building was the most viable option, One Creative Environments Ltd. (One) proposed two designs for two differing sites. Ansty Park was determined as the most suitable location allowing One to lead the way through the planning stage and assist the client with the purchase and negotiations of the site.

The new home for technology and innovation, Ansty Park is a sustainable development in the heart of the UK's key transport hub. The AVL Tech Centre measures approximately 1.58 ha in size and incorporates the facility itself and surrounding hard and soft landscaping.

The high-tech facility was designed to suit the parameters of the site whilst enabling potential future expansion for testing and office space. The completed facility will be a world class test centre of cars initially used to develop and test combustion engines but is planned to expand to the development of electric vehicles.

Presentation of early proposals were delivered to the client project group, including key suppliers of the technical equipment, to allow any concerns or issues to be raised early on in the design process. Pre-application advice was also sought from the planning department in order to utilise their assistance. Early advice and involvement ensured this bespoke design met the needs of all parties, helped meet the tight schedule and avoided any unnecessary delays along the way.

Arranged in a large two-story block, the weather proof and air tight testing facility accommodates 93 staff within the workshop and office area. Using a low carbon design approach, reception and washroom facilities are also incorporated, as is a Soak area for vehicle testing and integrated within the building are the crucial 6 Powertrain Test Bed modules.

There is flexibility in the design and structure of the building to adapt for any future changes; an area of the ground site is designated for any future expansion consideration, plus two additional floors could be added above the two storey office space. The Powertrain Test Beds are also designed with a 'plug and play' ethos, so are removable from the main structure of the building to allow for technological changes.

Externally the landscape design has been designed to create a simple, functional and natural setting to the building. With clear wayfinding and access, a SuDS scheme is in place to capture storm water and to discharge slowly at a restricted rate.

AVL anticipate that over the coming years, 200 engineers and technicians will be employed at the centre.

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The professionalism and flexibility of One is to be commended. They kept rigidly to the programme and delivered in a timely manner, even when changes outside of their control were imposed.”

DI Martin Panzitt, Director International Tech Centre Management Powertrain Engineering, AVL List GmbH



The Benefits

- **Early delivery of the project** - A 2 stage tender process was instigated to reduce the overall time scales by allowing the tender process to overlap with construction activities on site. This cut the overall project timeframe by about 4 months of a more traditional route.
- **Multi-disciplinary design approach** – Enables the One team to take a holistic approach to the building design and draw on the knowledge and expertise within each in-house discipline. In addition it also adds to the speeding up process and eases the co-ordination of the overall project.
- **Future-proofed bespoke design** – The Powertrain Test Beds are unique and designed to be removable in order to accommodate future technology adjustments and give the client much needed flexibility.



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