

123754 Planning Application 2018/0966
BALMORAL INDUSTRIAL TANKS, BARROWFIELD ROAD, THURNSCOE,
BARNSELEY, S63 0EW
November 2018

Overview of Manufacturing Design Process

Balmoral:

The council is aware of the status of Balmoral as a manufacturing business and their commitment to the area. Investment in their Thurnscoe site is heading towards £20m, and the quality of the facility they have produced puts a genuine world class business in the area. Job creation, local community support and a commitment to further investment sets out Balmoral's strategic thoughts.

Options On The New Extension:

Balmoral considered a number of options as you can see from the attached drawings. All of the options considered involved a separate building for the new product line which would of course kept the extension inside the existing boundary and avoided the small encroachment into the "green belt". A separate building was ultimately considered to be inefficient and did not suit the aspirations for the modern facility.

At the time of drafting the various options, the finite details of the new manufacturing process and equipment were unknown. As discussions with the providers of the manufacturing equipment evolved, it became clear that the size of the extension required to house the new process would limit the options available. Having said that, the length of the building is not the only factor which drove Balmoral to the realisation that the new process (and subsequent extension) would have to be linear with the existing process.

Other Factors:

Balmoral is a company which has set its sights on being the best tank design, manufacturing and installation company in the world. Balmoral understands their markets/business and the Thurnscoe investment is a platform which allows the business to deliver on the vision it has laid out to its employee's. Change is a constant and a company with increasing global ambitions, evolving production networks, acquisitions and an absolute commitment to developing its people must have some element of flexibility in how it will utilise its investments and assets. All of the above, if not managed well can lead to complexity which in turn can extract high costs if not actively managed.

The company considers a number of factors when looking at its manufacturing investments, namely; *equipment, materials, environment, process, people, management*. The impact on all six is shown in a summary table below.

	Separate Building	Linear Extension	Comments
Management	More difficult to manage and control.	Able to utilise one manufacturing manager and create a multi-skilled workforce.	Management can support the people and the vision by utilising and sharing the resource available
People	Possibly a culture of "them and us" between the two buildings/processes.	Maintain the feeling of one business with a range of products. Employee engagement is likely to be higher in a single building.	Operating between two buildings and maintaining a shared vision is more difficult.
Process	Process control is paramount to the finished quality of the products. Temperature control is more challenging and is a duplication of efforts.	The new and existing processes can be managed and optimised easier in the same building. Key process elements such as temperature will have tighter controls.	The products manufactured by Balmoral covering both processes can sometimes be sold to the same client. Quality control is more likely to be easier managed in the same building.
Environment	The environment created in manufacturing is critical to the way the processes are managed and optimised. More difficult in separate buildings.	Tight controls, high standards of cleanliness and quality control will be easier to achieve and manage in an environment which offers continuous flow.	No duplication of effort – everything focussed to deliver high quality products right first time. This is essential for the success of Balmoral in its chosen markets.
Materials	Two storage areas, goods inward and possibly even dispatch. All duplication of cost and not the basis upon which to build a manufacturing company capable of competing on a global basis.	One activity covering both current and new processes. Focus on production of goods and added value rather than unnecessary internal administration costs.	Two buildings and duplication of effort is completely the wrong way in which to make multi-million pound investments. To compete globally, Balmoral needs to think globally in all aspects of their business.
Equipment	Almost requires a duplication of all key elements of equipment if Balmoral is to optimise its manufacturing processes.	Easier to manage, maintain and improve OEE (overall equipment effectiveness). A key aspect for any modern manufacturing business to master.	Capital equipment which can be shared and with high levels of utilisation make this project viable for Balmoral.

Each of the above can affect cost, product quality, cycle times and service levels. All of the aspects which Balmoral needs to master in order to remain competitive. There must be synergies in the manufacturing processes and the environment must support sharing of best practice across the business. Asset utilisation and productivity are crucial to Balmoral and the way in which the extension is set up supports all of their criteria. The company faces competition and challenges which it is prepared to meet head-on hence the levels of investment made in the Thurnscoe facility.