



With sustainability credentials, more than 50% of the steel frame has been sourced from EAF production sites.

Bigger and better

The UK's first distribution park is continuing to expand as logistics developer GLP is constructing its largest speculative unit to date.

The UK's need for sustainable large-scale distribution centres shows no sign of abating, as a raft of new developments continue to enter the domestic pipeline.

A large number of these schemes are being built in an area of the East Midlands dubbed the 'Golden Triangle'. Bounded by the M1, M6 and M69 motorways, this part of the UK is the first choice for distribution centres due to its strategic position in the centre of the country.

One of the logistics parks that takes advantage of these excellent road connections, is Magna Park Lutterworth, which covers 550 acres and represents the UK's first and Europe's largest dedicated distribution location.

Home to 29 different occupiers, including Toyota, BT, Asda Walmart, Amazon, DHL and Britvic, Magna Park Lutterworth is GLP's flagship distribution park.

It is a private estate and offers a fully managed, dedicated logistics park environment with 24/7 access, 24hr security and a controlled HGV circulation.

The park, which is divided into North and South areas, is continuing to expand and currently Winvic Construction is building the largest speculative unit that GLP has developed to date. Known as MPN 761, the steel-framed 70,699m² distribution centre features six 30m-wide spans, has an 18m clear height to haunch and includes a three-storey office and two transport hubs.

This is the first time the developer has worked with Winvic and commenting on this new partnership, Peter Baird, Senior Construction Manager, GLP, says: "We are pleased to be partnering with Winvic to deliver MPN 761 as we embark upon the next important phase of development at Magna Park North.

"This is a testament to our confidence in the resilience of the UK logistics market and the strategic importance of the Midlands in particular. Winvic possess an impressive track record within the industrial sector, and we are pleased to welcome their expertise to our supply chain as we deliver a best-in-class mega distribution unit with occupier demand, technological advancements and environmental, social and governance principles at its core."

To this end, a number of sustainability initiatives are in place as the project has been designed to achieve net zero carbon in construction and a BREEAM 'Outstanding' rating.

"We have partnered with a carbon neutral subcontractor for the earthworks package and have set up an onsite batching plant for all the required ready-mix concrete," explains Winvic Project Manager Charlie Caldicott. "This is cutting down on truck movements in the local area."

Meanwhile, steelwork contractor Cauntion Engineering has been tasked with sourcing 60% of its hot-rolled steel from Electric Arc Furnace (EAF) production facilities.

This provides a carbon saving, as EAF steelwork is considered to be much greener and more efficient in terms of energy consumption for the production process. It can utilise renewable energy from wind farms and the process also relies on recycled content.

Work started onsite in June 2024, with an

FACT FILE**Magna Park Lutterworth, Leicestershire**Main client: **GLP**Architect: **Chetwoods Architects**Main contractor: **Winvic Construction**Structural engineer: **Burrows Graham**Steelwork contractor: **Cauntion Engineering**Steel tonnage: **2,470t**

enabling earthworks package and the installation of pad foundations, in readiness for the steel frame erection.

Using up to four 70t-capacity mobile cranes, the steel frame was completed in 11 weeks. Starting with the gable end that includes the three-storey internal office block, the steelwork was erected sequentially along the entire length of the 384m-long structure.

In order to have an efficient programme, erecting the office block first is the usual method of construction on schemes such as this. The offices have the most work for follow-on trades to complete, such as installing floors and walls, and the full fit-out for the workspaces and ground floor reception.

As well as three floors of office space, the uppermost level of the office block will accommodate meeting rooms alongside a plant deck. Measuring 14m-deep and 60m-long, the office floors have been formed with steel beams supporting metal decking and a concrete topping to create a composite solution.

Another follow-on task is the application of fire protection. All of the steelwork, within the offices and supporting its frame, has been coated with intumescent paint, giving it two hours of fire protection.

By far the largest part of the steel package is the erection of the six-span portal frame, which has perimeter columns spaced at 8m centres. Each of the internal 30m-wide spans is formed with two spliced 15m-long rafters, which were bolted together on the ground, before being lifted into place as a connected pair.

Internally, the design is based around a hit-and-miss configuration, whereby alternate columns have been omitted to create extra open-plan floorspace. A series of 16m-long valley beams, running the length of the building, connect the internal columns at roof level and support the rafters where members have been omitted.

The entire length of the building has the same design, with the exception of one gable corner at the opposite end to the offices. Here, an existing retaining wall and the need to maintain enough space for an access road that goes around the structure, means a dog-leg has had to be formed, by omitting two bays of the steel frame.

Adding some future-proofing to the project, the steel members framing the distribution centre's four level access doors have pre-drilled holes that will allow canopies to be added to the structure if a tenant requires them.

MPN 761 is due to complete in June 2025. ■



A combination of mobile cranes erected the steelwork and cladding.



Visualisation of the completed MPN 761 scheme.