

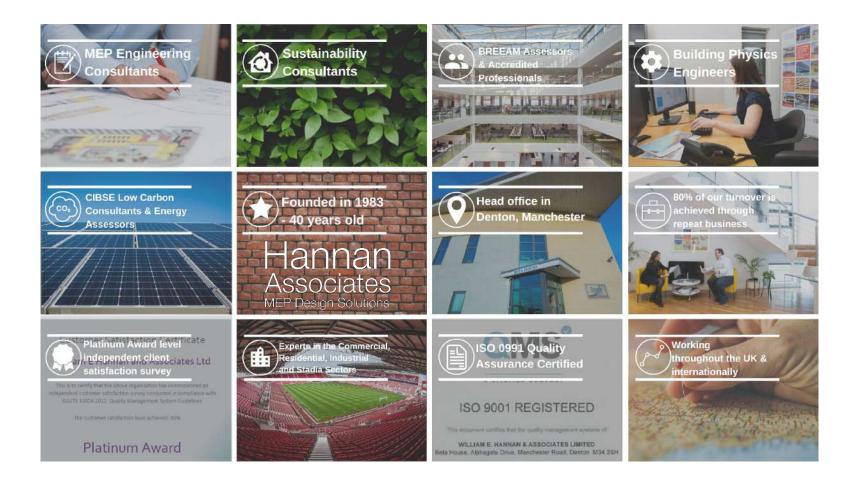
# Hannan Associates BREEAM® MEP Design Solutions

#### Introductions.....

Hannan Associates is an engineering consultancy formed in 1983 to provide MEP Design Solutions to the Construction Industry.

We pride ourselves on delivering our service with a higher level of personal attention than larger competitors but providing a comparable strength of management, process discipline, expertise and creativity.

We focus on building services and deliver projects valued in excess of £500m with national and international design teams. We work in a range of sectors with projects of varying sizes, providing us with good market resilience and an exceptional breadth of track record and design competence.



#### Our Team.....

The Hannan team is led by long standing directors lan Joyce, Jamie Hall and John Walker.

The development of the company has been aided by a strong, long serving work force through which we have developed lasting relationships with our clients, ensuring that 80% of our turnover is achieved through repeat business.

We recognise that we cannot do this without the support and enthusiasm of all our team members and we therefore endeavour to maintain the highest levels of team work and co-operation and develop staff that possess well founded self-belief who will act with diligence and integrity on behalf of our clients.

Many of our engineers have worked together over a long period of time, some for over 25 years, completing many successful projects together. Treating each project as unique we handpick each team to collectively possess the skills and range of experience needed to succeed, whilst creating a dynamic environment that encourages creativity.



## We love ...

Maintaining Director level involvement throughout the project



Bringing good commercial awareness to the project



Being supportive & motivational team players



Having a strong team of long standing individuals



Openness & honesty

Hannan

Associates MEP Design Solutions





Getting the Job done



Maintaining high standards



Encouraging training & development



Being good listeners to our clients



Communicating in plain English





# Our clients say.....



# How we can help.....

Hannan Associates provide a comprehensive BREEAM Assessment and BREEAM Accredited Professional service.

We are highly proficient in the techniques and processes required to design and achieve BREEAM certification to the highest standards.

#### What is BREEAM?

The Building Research Establishment Environmental Assessment Method (BREEAM) is the leading and most widely used environmental assessment method for buildings.

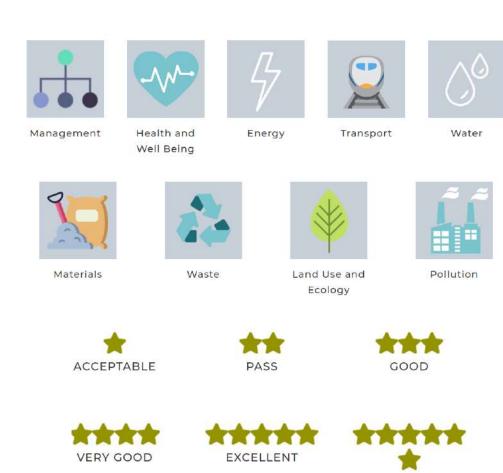
It was launched by BRE (the building Research Establishment) in 1990 and is recognised for setting the standard for best practice in sustainable design. It has become the industry standard to measure a building's environmental performance.

The BREEAM assessment method is designed to recognise and reward performance above regulation, which delivers sustainable benefits in environmental, comfort and health sectors.

During the assessment process 'Credits' are awarded under certain environmental categories shown opposite.

The overall score is determined by multiplying the number of credits per sector by an environmental weighting factor which takes into account the relative importance of each section.

Once the overall score for the building is known this is translated into a rating on a scale from Acceptable to Outstanding.



OUTSTANDING

#### **BREEAM Assessment Service**

Our team is fully qualified under the BREEAM UK New Construction 2018 & 2018 Version 6 schemes and can assess the following buildings:

- BREEAM 2018 / 2018 Version 6
- BREEAM Offices
- BREEAM Healthcare
- BREEAM Education

- BREEAM Other Buildings
- BREEAM Retail
- BREEAM Industrial
- BREEAM Prisons & Law Courts

Our BREEAM Assessment team have years of experience in the field of sustainability and have devised a suite of bespoke documents tailored to streamline the assessment process and provide a highly efficient service.

Our BREEAM Assessors work with the project team to manage this assessment process prior to checking by the certification body, <u>BRE Global.</u>



# **BREEAM Advisory Professional Service**

We also provide our clients with a stand alone BREEAM Advisory Professional service (BREEAM AP).

The BREEAM AP provides the design team with guidance and support from the early stages of the design process, through to construction, to ensure that good environmental and sustainability practice is incorporated into a building in an efficient and cost-effective manner.

Often sustainability is not considered until the technical design and specification stage of a project, by which time many opportunities for including sustainability measures may have been missed and the required BREEAM rating unobtainable.

The BREEAM AP should be appointed to the design team pre-planning, so that these opportunities can be highlighted and acted upon early, thus avoiding expensive last minute 'bolt-on' solutions that are sometimes needed to reach specified BREEAM targets.

This is particularly important under BREEAM 2018, as there is even more onus on early action. It is unrealistic to expect an Excellent BREEAM rating when the early actions have not been completed.



#### BREEAM 2018 Version 6 Early Actions

The 2018 New Construction scheme places a real focus on completing sustainability actions much earlier in the design process.

There are a whole host of credits which need to be completed at Concept Stage design or earlier.

Preparation & Brief (stage 1) and concept design (stage 2) requirements include, but aren't limited:

Man02 - Elemental life cycle cost analysis

Mat01 - Materials life cycle assessment of embodied carbon

Ene04 - Passive design and LZC feasibility analysis

Tra01 - Travel Plan and assessment

Mat03 - Sustainable Procurement plan

Wst01 - Pre-demolition audits

Wst05 - Climate change adaptation appraisal

Wst06 - Disassembly & functional adaptability studies

Ene01 - Energy workshops for future operational energy

#### TWO NEW BAILEY, SALFORD

Client: The English Cities Fund

**Architect:** Allford Hall Monaghan Morris

**Project Value: £35M** 

**Contract Duration:** 2016 –2020







No. 2 New Bailey is the second new office building at Salford Central's New Bailey development. This 188,500 sq ft office building is the first scheme designed by architects Alford Hall Monaghan Morris in Greater Manchester.

The 11-storey building includes CAT A open plan office across 10 floors, commercial unit space at ground floor, basement car parking, external roof terrace and a public square and is on target to achieve an A rated Energy Performance Certificate, a **BREEAM Excellent** rating along with a Wired Score rating of Platinum.

Hannan Associates provided Building Services Engineering Consultancy and BREEAM Assessment for the development.

Each floor is designed to be sub-divided into two separate tenancies, each area provided with a private external balcony. Simultaneous Variable Refrigerant Flow heating & cooling systems are provided to each tenancy, mechanical fresh air ventilation from roof mounted air handling plant incorporating heat recovery, which offers good flexibility and is easily adaptable to cope with sub-division and high occupant density.

The client's design aspirations included exposed services with acoustic rafts to conceal the indoor VRF units and improve the acoustics of the open plan office space.

Eversheds Sutherland are taking approximately 50,000 sq ft across the part 8th, 9th and 10th floors with BLM LLP signed to occupy first to fourth floors .

The project is being backed by the English Cities Fund (tECF) – a joint venture between Muse Developments, Legal and General and Homes England.







#### WIRRAL REGENERATION

Client: Wirral Growth Company Architect: AHR Architects

Project Value: 1BN

Project Duration: October 2017 – ongoing



Our client Muse Developments were selected in March 2018 to partner with Wirral Borough Council for this exciting 10-15 year regeneration scheme – creating a 50/50 joint venture called Wirral Growth Company.

Our role on the project includes Sustainability, BREEAM, Infrastructure and MEP design.

This proposed large scale mixed development scheme covers 32 sites in Moreton, Wallasey, Bebington, Bromborough and Birkenhead and will include office spaces, leisure facilities, residential, extra care accommodation, retail and public realm.

We are currently working on the development of two grade A offices alongside retail, leisure and new public realm in Birkenhead town centre, which is now under construction by Morgan Sindall. One of office buildings will be occupied by Wirral Borough Council.

We are also working on the design for the proposed new Birkenhead Market.

Current proposals involve the demolition of a former House of Fraser store and the creation of a standalone market, including independent retail, food and beverage stalls and new public realms spaces.

We join AHR Architects, Curtins Consulting, Abacus, Gillespies and Vectos on the design team.







#### LOC8 BUSINESS PARK, MAIDSTONE

Client: Clearbell Capital LLP
Architect: PRC Architects

Contract Duration: November 2020 - ongoing

Hannan Associates are working for Clearbell Capital on the development of this new mixed-use business park, known as LOC8. This new employment area, which has the potential to create up to 1,200 new jobs will deliver a range of modern and sustainable buildings.

As a part of our role we are providing Building Services Engineering, Utilities Infrastructure and Sustainability Consultancy including advice regarding BREEAM, WELL and Net Zero Carbon.

Phase 1 of the development, which includes eleven new industrial units, is currently under construction by main contractor Readie Construction. The development is currently targeting **BREEAM Very Good**.

Proposed plans for phase 2 includes a mix of industrial, retail and commercial office space.

We are working alongside Belshaw, PRC Architects, EPCA, Lloyd Bore, Savills, Goodrich Consulting and Patrick Parsons on Clearbell Capital's design team.





#### **WINGATES, BOLTON**

Client: Harworth Group
Contract Duration: March 2021 – ongoing

Hannan Associates are very pleased to be working on phases 1 and 2 of the proposed 2.5 million sq ft logistics and manufacturing space being delivered by Harworth Group at Wingates, Bolton.

We are currently providing utilities infrastructure, BREEAM and Net Zero Carbon analysis consultancy services for the development of the site masterplan.



#### THREE NEW BAILEY, SALFORD CENTRAL

Client: The English Cities Fund Architect: Make Architects Contract Duration: 2016 – 2021













Three New Bailey is a part of the English Cities Fund's regeneration of Salford Central and will be the fourth new office building on the New Bailey site.

The seven storey, 157,000 sq ft building was pre-let to the Government Property Unit, who announced that HMRC would occupy the entire building as the sole tenant on a 25-year lease, for their new regional centre hub.

We have been appointed as Building Services Engineering consultants for the project and we are pleased to be working alongside Make Architects, Chroma Consulting, HED Landscape Architects and main contractor Bowmer & Kirkland.

The MEP services installations are designed to meet the occupier's specific MEP services requirements and incorporate energy efficient installations, which will provide an excellent internal working environment and comfort conditions for the occupants. The building has been designed to achieve a **BREEAM Excellent** rating.

We played a key role in liaising with the occupiers technical advisors in order to obtain their specific technical requirements for the MEP services installations which were agreed, costed and accommodated within the building design.

The building was handed over in February 2021.

The English Cities Fund is a joint venture between Muse Developments, Legal & General and Homes England.

#### FOUR NEW BAILEY, SALFORD CENTRAL

Client: The English Cities Fund Architect: Make Architects

Contract Duration: September 2019 – ongoing





Four New Bailey will be a 10-storey Grade A Office building providing 175,000 sqft office space and will be the new regional hub for telecommunications giant British Telecom (BT), who have signed a 20-year lease on the entire building.

The building currently under construction by Bowmer & Kirkland, features a distinctive metal diagrid lattice structure, which references the industrial and Victorian engineering heritage of the area, inclusive of the numerous bridges locally which span the River Irwell.

We have been appointed as MEP design consultants on the project and we are pleased to be working alongside Make Architects, Cundall, Chroma Consulting, Reform Landscape Architects and main contractor B&K.

The building has been designed in line with BCO guidance and is set to achieve both a **BREEAM** 'Excellent' and Wired Score 'Platinum' rating. Key to the project's sustainability ambitions was an all-electric energy strategy.

As part of our appointment, we have undertaken BREEAM duties and developed the Part L model, inclusive of undertaking passive design analysis. We have worked in conjunction with the design team and tenant to ensure maximum flexibility for MEP services installations on the open plan office floor, while making sufficient provision within dedicated plant and distribution zones for tenant installed plant as part of the fit-out works.

The New Bailey development sits on the River Irwell in Salford and forms part of the English Cities Fund's £1bn regeneration of Salford Central.

The English Cities Fund is a joint venture between Muse Developments, Legal & General and Homes England.







#### RIVERSIDE HOUSE, NEW BAILEY SALFORD

Client: The English Cities Fund

Architect: Alford Hall Monaghan Morris

Contract Duration: May 2018 – October 2019







Hannan Associates are very pleased to be part of the team involved in the redevelopment of Riverside House at New Bailey, Salford for our client The English Cities Fund.

Riverside House is a four storey, 11,000 sq ft office building, which includes the retention of two sides of the 19th Century facade from the pre-existing building, thought to date back to around the mid 1800's when it was the Royal Veteran Tavern located behind the site of the Old Bailey Prison.

As part of our duties we provided BREEAM Assessment services and MEP Performance Duties for the CAT A installations which expanded to include the CAT B fit out for Muse Developments who are taking 2 floors of the building.

We carried out thermal modelling and system optioneering to conclude the best scheme to meet the Client requirements.

The MEP services strategy was based on chilled beams providing comfort cooling, which helps limit the maintenance requirements within the space and offers the tenants high comfort levels, good space acoustics & low annual running costs. Detailed co-ordination of the exposed services achieved a more visually appealing, quality finish, which helps meet higher end market requirements. The design also included roof mounted photovoltaic arrays, which provides the building with a source of renewable energy.

The retention of the Victorian Gothic style facade gives the building a real sense of place and history and helps to create a gateway to New Bailey. Utilising the floor void for ventilation helped to maintain floor levels which suited the existing façade.

The project won 'Fit Out of Workplace' at the 2020 BCO Awards and 'Design in Excellence' at the 2020 Insider Property North West Awards.







#### **CONWY COUNCIL OFFICES, COLWYN BAY**

Client: Conwy County Borough Council & Muse

**Developments** 

Architect: AHR Architects
Project Value: £36M

Project Duration: October 2015 - November 2018













Hannan Associates are very pleased to have been part of the team who delivered Conwy County Borough Council's new 100,000 sq ft Civic Offices in Colwyn Bay Town Centre after Muse Developments were chosen as the preferred development partner for the scheme during 2015.

The four storey, 100,000 sq ft office building has enabled the council to operate more efficiently and improve services for customers by consolidating staff and services into fewer sites.

The building achieved a **BREEAM Excellent** rating with an **A rated Energy Performance Certificate**. Passive design measures to reduce carbon emissions and energy consumption include enhanced insulation to the building envelope and engineered facade design.

The glazed proportion of the building façade and the central atrium maximizes natural daylight to offset the demand for lighting whilst at the same time high performance glazing minimizes thermal losses. To further reduce carbon emissions and energy consumption, the building's heating and cooling is produced via air source heat pumps, highly efficient LED lighting and roof mounted photovoltaic arrays.

The project won the 'Regeneration' category and was also shortlisted for the 'Design Through Innovation' category at the RICS Awards 2019, Wales. It has also won the 'Best Large Commercial Project' award at the North Wales LABC Building Excellence Awards 2019. It was shortlisted for a BCO Northern Award 2019 in the 'Corporate Workplace' category and an Insider Property Awards 2019 Wales for 'Development of the Year'.











#### **MOUNTPARK WARRINGTON OMEGA**

Client: Miller Developments
Architect: Chetwood Architects

Contract Duration: July 2017 - March 2019

Hannnan Associates are very pleased to have worked on two phases of Mountpark Warrington at Omega South Business Park.

Phase 1 of the development, considered the largest speculative industrial / logistics development in the north west, included four units totalling 757,556 sq ft:

Unit 1 provides 326,676 ft2 warehouse, 16,213 ft2 office, 3,049 ft2 transport office and 215 ft2 gatehouse together with associated service yard and external works and has been let to Royal Mail

Unit 2 provides 126,655 ft2 warehouse, 10,308 ft2 office together with associated service yard and external works and has been let to The Delivery Group

Unit 3 provides 83,953 ft2 warehouse, 6,818 ft2 office together with associated service yard and external works.

Unit 4 provides 170,967 ft2 warehouse, 12,487 ft2 office together with associated service yard and external works.

The Hannan team provided building services & utilities infrastructure consultancy, sustainability & BREEAM Assessment and construction stage progress and quality inspection.

The buildings achieved a **BREEAM Very Good** rating under the BREEAM New Construction 2014 scheme.

We were very pleased to join Chetwood Architects and Doig and Smith on the project design team. The principal contractor was Buckingham Group.







#### 3 ARENA CENTRAL BIRMINGHAM

**Client:** Arena Central Developments

**Architect:** Make Architects **Project Duration:** 2015 - 2020



3 Arena Central is a 240,000 sq ft, grade A office building currently under construction at Arena Central, Birmingham's first speculative office scheme since the recession.

The UK Government has committed to take the full 3 Arena Central building, which will sit at the heart of the nine acre mixed use regeneration site. The new Grade A, 14 floor office building will be home to 3,500 civil servants across a number of government services, including the Midlands regional hub for HM Revenue and Customs (HMRC).

Having already worked on the neighbouring 1 Centenary Square, Hannan Associates provided Building Services Engineering, Site Infrastructure Services & BREEAM Assessment for the scheme delivered by ACDL, a joint venture led by Kier.

The MEP services installations were designed to meet the occupiers specific requirements, which provide energy efficient installations, an excellent working environment and comfort conditions for the occupants contributing towards a **BREEAM Excellent** rating for the building.

We played a key role in liaising with the occupier's technical advisors in order to obtain their specific technical requirements and ensure successful delivery of the MEP services installations, which were agreed, costed and accommodated within the building design within a very short timescale.

We were very pleased to work alongside Make Architects, Gillespies Landscape Architects, Arcadis and WSP on the design team and main contractor Galliford Try.

The Arena Central masterplan will deliver 1.2 million sq ft of mixed-use development, alongside a unique public realm designed by Make Architects that features over 50 per cent soft landscaping at the heart of Birmingham city centre, designed to meet the city's ever growing demand of office space and residential accommodation.







#### STOCKPORT EXCHANGE

Client: Muse Developments Architect: RHWL Architects

Project Value: £60M approximately Contract Duration: 2011 - ongoing





Excellent

We are part of Muse Development's team, selected as Stockport's development partner. Stockport Council bought the site in order to create a gateway from the train station to the town centre.

The development includes a high quality office quarter, an attractive public realm area, a hotel, retail units, ease of access to the town centre, and improved car parking for the station.

For **Phase 1** of the development we were involved in the design of a new 1,000 space multistorey car park.

For **Phase 2** we were involved in the design and construction of No.1 Stockport Exchange - a 50,000 sq ft office block, a 115 bedroom Holiday Inn Express Hotel, a new pedestrianized public space outside the train station and a new reconfigured road layout to improve station access.

**Phase 3** of the development included No.2 Stockport Exchange - a new six-storey, 60,000 sq ft, Grade A office. The building incorporates environmentally friendly design features such as a green roof, photovoltaic panels, LED lighting and ultra-low water consuming fittings. Features include the use of natural daylight and enhanced fabric to minimise the building's carbon emissions, creating a reduction in its indirect impact on climate change. Our analysis of the scheme included the consideration of connecting the development to Stockport's proposed heat network.

**Phase 4** works are currently underway including the design and construction of a 64,000 sq ft Grade A office and 399-space multi-storey car park due to be complete in summer 2023.

All the buildings have been designed to achieve a **BREEAM Excellent** rating.













#### HARRIER PARK, HUCKNALL

**Client:** Muse Developments

Project Value: £8.8M

Contract Duration: April 2019 – Nov 2020

The new national headquarters for RM Resources at Harrier Park, Hucknall has reached completion.

RM resources, part of RM plc, are a market leading provider of technology and resources to the education sector. Their new 195,840 sq ft headquarters will help to consolidate their distribution activities into a single location and forms part of a wider improvement programme across their business.

Hannan Associates are very pleased to have provided Building Services Engineering, Utilities Infrastructure and BREEAM assessment for the project working alongside The Harris Partnership, WSP, Re-Form Landscape Architects, RPP and main contractor GMI.

The building has been designed to achieve **BREEAM Very Good** rating under the BREEAM New Construction 2018 scheme.

Harrier Park is a 67 acre mixed-use development at Hucknall, led by an exciting joint venture between Muse Developments and the site-owner Rolls-Royce. The development will bring forward commercial space, industrial units, new homes, a primary school and community facilities, which will create a number of jobs in the area.







#### **BRAKES, OMEGA BUSINESS PARK, WARRINGTON**

Client: Miller Developments
Architect: Chetwood Architects

Project Value: £24 M

Contract Duration: May 2012 - October 2014



Brakes Brothers became the first business to take up residence in the Omega Business Park, upon completion of their 200,000 sq ft state of the art cold storage logistics centre.

The development takes up a quarter of the Omega North site based to the north of the M62. The building is designed to be at a constant temperature of -26c, to ensure stored food remains fresh before being delivered across the country.

Hannan Associates provided Building Services Engineering consultancy and BREEAM Assessment for the single storey industrial building, with ambient, chilled and frozen environments and a 15,000sq.ft, two storey office building.

The building achieved a **BREEAM Very Good** rating under the BREEAM New Construction 2011 scheme.

The building has been constructed on a secured enclosed site with external car parking, HGV parking, service yard, goods-in, goods-out, gatehouse, fuel storage and filling point and vehicle wash.







#### TRAVIS PERKINS, OMEGA BUSINESS PARK, WARRINGTON

**Client:** Miller Developments **Architect:** Chetwood Architects

Project Value: £14.5M

Contract Duration: May 2012 - October 2014



The handover of the Travis Perkins regional distribution centre marked the completion of more than a million sq ft of development on the north side of the Omega Warrington Business Park.

This project involved the construction and part fit out of their c630,000 sq ft regional distribution centre with support offices, car parking, vehicle and a future expansion site.

Our duties included Building Services Engineering consultancy & BREEAM Assessment for the shell & core warehouse, a 19,000 sq ft two storey office building and a 10,000sq ft two storey office pod with external car parking HGV parking, service yard, gatehouses, drivers welfare building, fuel storage & filling point and vehicle wash.

Heating and hot water to the office core areas was provided via air source heat pumps serving low temperature hot water.

The building achieved a **BREEAM Very Good** rating under the BREEAM New Construction 2011 scheme.







#### HERMES, OMEGA BUSINESS PARK, WARRINGTON

**Client:** Miller Developments **Architect:** Chetwood Architects

**Project Value:** £14.5 M

Contract Duration: May 2012 – April 2014



This project involved the construction and fit out of a c150,000 sq ft cross dock automated parcel sorting facility for Hermes at plot 1A, Omega North, Warrington.

The building includes office accommodation, a vehicle maintenance unit, a warehousing facility, and two gatehouses. The site area is 18.43 acres with the provision of 275 car parking spaces and 262 HGV parking spaces.

Our services included Building Services Engineering, BREEAM Assessment and Utilities Infrastructure Consultancy services associated with the landlords CAT A works and tenant enhancement CAT B works for the construction and fit out of a c150,000 sq ft cross dock automated parcel sorting facility with c16,000 sq ft two storey offices, external car parking, HGV parking, service yard, fuel storage & filling point and vehicle wash.

Warehouse heating was provided via gas-fired radiant heating with gas fired boiler plant serving radiators within the office area.

Liaison with the tenant was undertaken regarding the proposed CAT C works to ensure co-ordination of the power and water supplies, drainage etc for the intended fit-out works of the automated parcel sorting machinery.

The building achieved a **BREEAM Very Good** rating under the BREEAM New Construction 2011 scheme.







#### THE HUT GROUP, OMEGA BUSINESS PARK, WARRINGTON

Client: Miller Developments
Architect: Chetwood Architects

**Project Value:** £32 M

Contract Duration: May 2012 - December 2014

#### THEHUTGROUP'

The Hut Group's premises on a 41 acre plot at Omega South supports a mixture of functions including logistics, manufacturing, and offices, plus a further 150,000 sq ft of additional expansion land.

The project involved the construction and fit out of a 650,000 sq ft production, storage and distribution facility which includes vitamin supplement production, automated and manual order processing studio and support offices.

The new premises were built to consolidate The Hut Groups four existing UK distribution units. The facility is used to satisfy both its domestic and rapidly growing international operations.

We provided Building Services Engineering Design & BREEAM Assessment services for the CAT A fit-outs to the warehouse and 17,000 sq ft two storey office building, 11,000 sq ft two storey production office and transport office with gatehouse, external car parking, HGV parking and service yard.

The building achieved a **BREEAM Very Good** rating under the BREEAM New Construction 2011 scheme.

Air source heat pumps provided heating and comfort cooling to the office areas with sprinkler protection provided to the warehouse and office areas.







#### **AMAZON, OMEGA SOUTH WARRINGTON**

**Client:** Miller Developments **Architect:** Chetwood Architects

Project Value: £30 M

Contract Duration: April 2014 - March 2017

This project involved the design and construction of a new 357,000 sq ft speculative warehouse facility in zone seven of the Omega South Site.

The project was funded by LondonMetric, who successfully agreed a 15-year lease with Amazon to occupy the warehouse.

Hannan Associates provided Building Services Consultancy and BREEAM Assessment for the building shell and core.

We were very pleased to join Chetwood Architects, Doig & Smith, WSP and main contractor Bowmer & Kirkland on the project.

The building achieved a **BREEAM Very Good** rating.











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# Hannan Associates MEP Design Solutions

### Sustainability Services

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