



Office Workspace

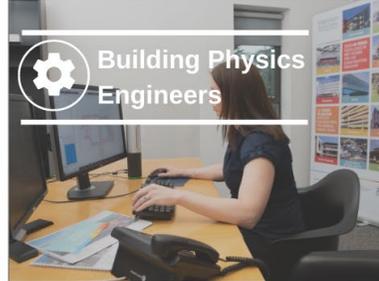
Refurbishment :: Fit Out :: New Build

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.

 <p>MEP Engineering Consultants</p>	 <p>Sustainability Consultants</p>	 <p>BREEAM Assessors & Accredited Professionals</p>	 <p>Building Physics Engineers</p>
 <p>CIBSE Low Carbon Consultants & Energy Assessors</p>	 <p>Founded in 1983 - 40 years old</p> <p>Hannan Associates MEP Design Solutions</p>	 <p>Head office in Denton, Manchester</p>	 <p>80% of our turnover is achieved through repeat business</p>
 <p>Platinum Award level independent client satisfaction survey</p> <p><small>This is to certify that the above organisation has commissioned an independent customer satisfaction survey conducted in compliance with ISO/TS 10004:2012: Quality Management System Guidelines</small></p> <p><small>The customer satisfaction level achieved: 90%</small></p> <p>Platinum Award</p>	 <p>Experts in the Commercial, Residential, Industrial and Stadia Sectors</p>	 <p>ISO 9991 Quality Assurance Certified</p> <p>ISO 9001 REGISTERED</p> <p><small>This document certifies that the quality management systems of</small></p> <p>WILLIAM E. HANNAN & ASSOCIATES LIMITED Beta House, Alphagate Drive, Manchester Road, Denton M34 3SH</p>	 <p>Working throughout the UK & internationally</p>

Our Team.....

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

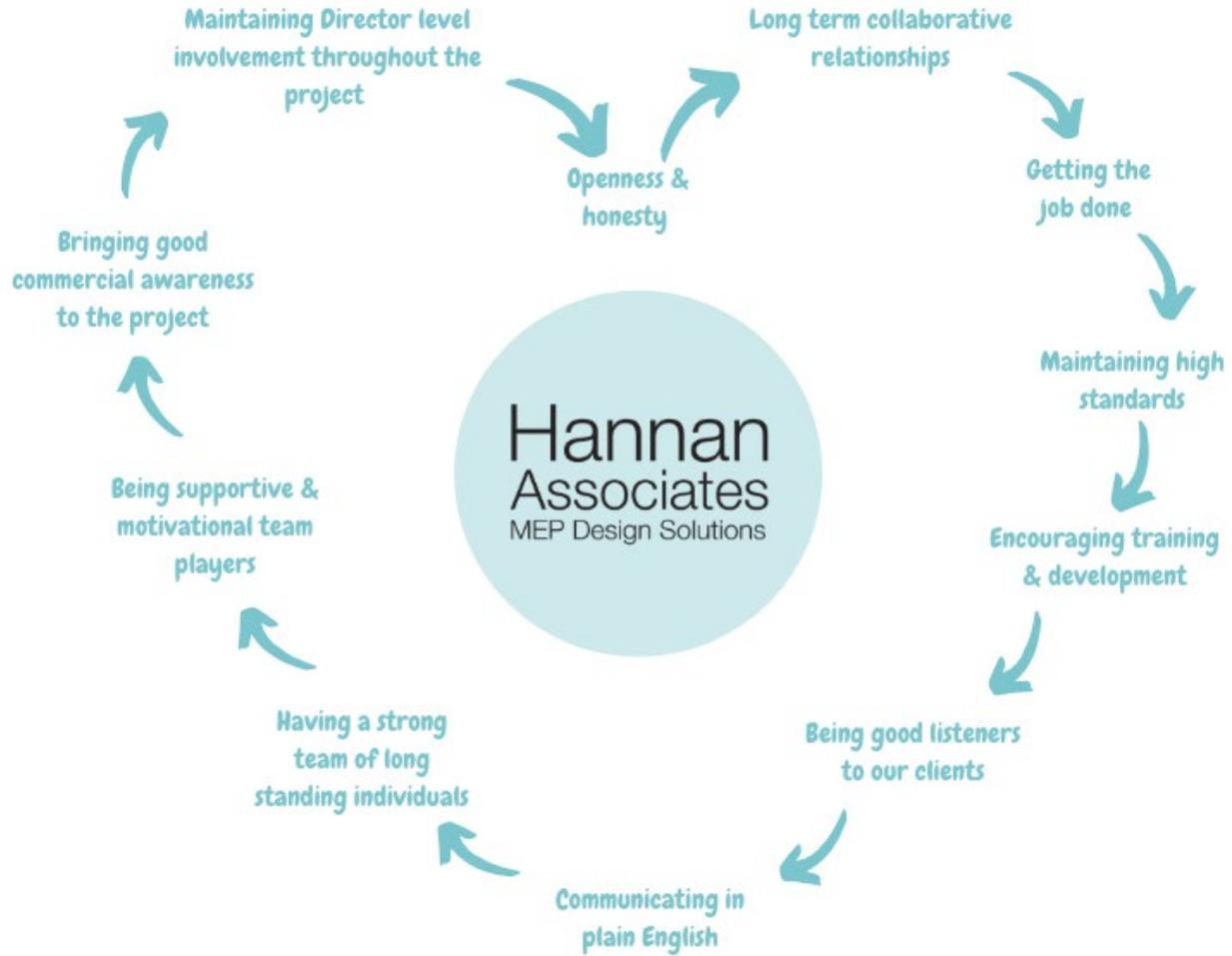
The development of the company has been aided by a strong, long serving work force through which we have developed lasting relationships with our clients, ensuring that 80% of our turnover is achieved through repeat business.

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 ...



What we do.....

Building Services

- Acoustics
- AV Systems
- Building Physics
- Construction Inspection & Supervision
- Electrical Building Services Design
- EPC Certification
- Fire Engineering
- Internal Environment Modelling
- IT Systems Design
- Low & Zero Carbon Strategy & Design
- Mechanical Building Services Design
- Planning Reports
- Public Health Building Services Design
- SBEM Calculations
- Thermal Modelling
- Vertical Transportation Design
- Water Conservation & Compliance Audits
- Value Engineering Reviews

Infrastructure

- Infrastructure planning & design
- Construction Inspection & Supervision
- Value Engineering Reviews

Sustainability

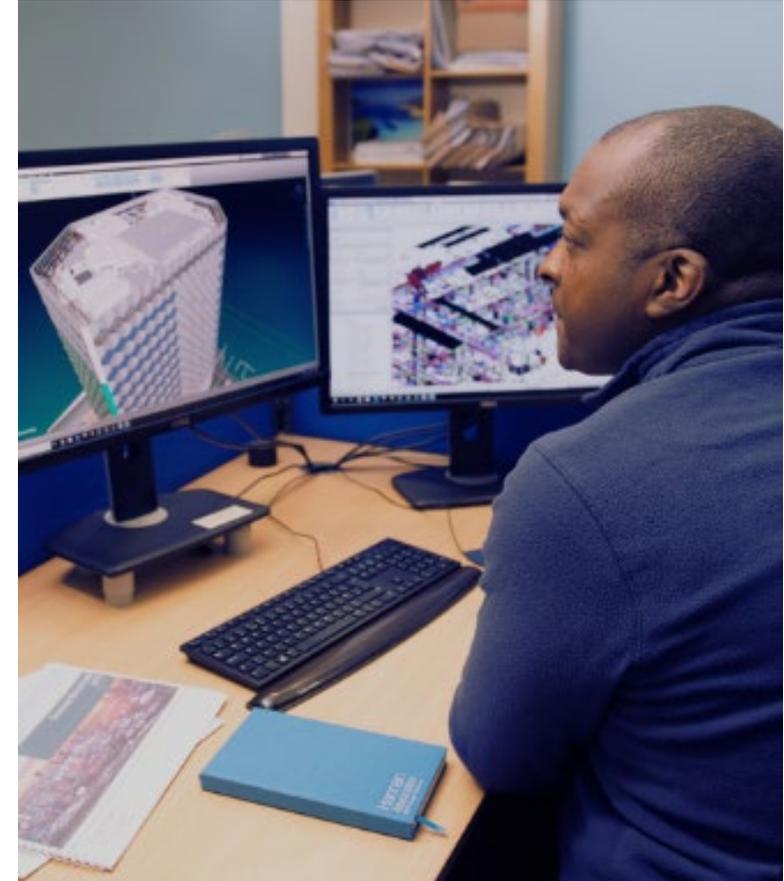
- BREEAM Assessment
- BREEAM Accredited Professional
- Building Physics
- Design for Performance Modelling
- LEED Assessment
- Low & Zero Carbon Strategy & Design
- Operational Energy Modelling
- Renewable Energy Technology Feasibility
- Sustainability Strategy
- WELL Building Consultancy

Building Performance

- Acoustics
- Building Health Checks
- Building Physics
- Design for Performance Modelling
- DEC Certification
- Low & Net Zero Carbon Strategy & Design
- Operational Energy Modelling
- Renewable Energy Technology Feasibility
- Thermal Modelling

Surveys & Reports

- Condition Surveys Energy Audits
- Feasibility Studies



Sustainability.....

Energy reduction, the core of sustainable design, was inherent in our building design process long before it reached the political agenda. Our sustainable credentials are therefore built upon years of experience at the forefront of low energy, low carbon solutions.

We are now at the forefront of change in relation to the way buildings are modelled to meet the demands of evolving building regulations and guidance from **UKGBC** and **LETI**, which are driving carbon targets for construction towards the 2050 net zero government commitments.

Our involvement includes pilot schemes for modelling energy and carbon in use for new buildings, such as **Design for Performance (DfP)** and **NABERS UK** and this experience enables a valuable contribution to development masterplan and individual building sustainability.

Hannans can provide sustainability advice across a wide range using in-house engineers and consultants and specialist partners where needed to define ways of achieving sustainability objectives. This includes.....

- ✓ Energy modelling and Carbon assessment of energy for building services
- ✓ Energy and carbon performance evaluation
- ✓ BREEAM assessment and BREEAM AP
- ✓ Carbon in construction
- ✓ Well Building Assessment



Net Zero Carbon Buildings: A Framework Definition

APRIL 2019

Advancing Net Zero Programme Partners

Lead Partner:



Programme Partners:



Our clients say.....

“

Hannan Associates are one of our best consultants. We have an excellent relationship with Hannan Associates who are very good team members. Their input and output are both first class. We would definitely use them again.

”

“

I've really enjoyed working with you and your team over the last 10 years. The fact that during all of my time here we have continued to work with Hannans on an increasing basis is testament to the relationship and trust that has been built. I'm sure you will continue to go from strength to strength.

”

“

Knowledgeable, commercial and capable M&E consultant. They get the job done in line with the demands of the project and are good to work with.

”

“

Very professional & client focused.

”

“

I think Hannan Associates are a brilliant company to work with. They have never let me down.

”

“

They have a no nonsense approach. Always happy to help.

”

“

I recommend them all the time. I have been using them for a some time now and never been let down.

”

“

Hannan Associates play an important role within the team, integrating well and always listening to their design team colleagues to ensure the desired client outcome is achieved.

”



Workspace

Offices, in all forms, have been at the core of our business for over 30 years.

Whether it be speculative offices designed to attract potential tenants or highly customised headquarter offices designed to meet the specific requirements of an occupier. Our engineers understand what our clients and end-users expect and need from the 21st Century workplace.

The workplace is ever evolving to meet developments in employee expectations, organisational culture, new technologies, sustainability and compliance.

Our extensive experience in this sector along with continued training and research means that we can contribute in depth knowledge of a wide range of design solutions available for office environments and advice on cost in use.

Refurbishment

We have been involved in the restoration and refurbishment of several listed buildings. Our approach to historic buildings acknowledges working within a very sensitive environment and that the services that we design have to be accommodated within the historic building fabric. Successful integration of modern building services requires a level of detail significantly beyond that of the design of a new building.

We have extensive experience of refurbishment and re-modelling projects including office workspace, public buildings and event venues, sport & leisure venues, education facilities and residential property.

For all these projects it is vital to gain a thorough understand of the existing systems and review and define the scope required to achieve the users' requirements at the early project stages. This may involve both desktop and physical surveys and in some cases testing and specialist investigation of existing systems.

FREETRADE EXCHANGE, MANCHESTER

Client: Clearbell Capital

Project Value: £4.8

Contract Duration: 2021 – ongoing

Hannan Associates are providing Building Services Engineering consultancy for the refurbishment of the Grade II listed building Freetrade Exchange, on Manchester's Peter Street.

The revamp of the six-storey, 36,000 sq ft office building includes the conversion of the lower ground floor being to a 5,000 sq ft bar, the existing entrance will be reconfigured and expanded as well as a new entrance being created.

The building's basement will feature a gym, sauna, showers, changing rooms, toilet facilities and a secure cycle storage.

Freetrade Exchange was originally built as a fabric warehouse in 1868 under the name Harvester House and was renamed after the refurbishment in 2007.

We are working alongside Michael Laird Architects, Quartz Project Services, Paragon and Hann Tucker on Clearbell's design team.



NO. 1 FIRST STREET, MANCHESTER

Client: ASK Real Estate
Project Value: £35M
Contract Duration: 2007 – 2009

We were MEP Consultants for the refurbishment and fit out of the former BT building at Grand Island, now known as No. 1 First Street.

This seven-storey, 180,000 sq ft, Grade A, BREEAM Excellent office building became home to Manchester City Council during their 3 million sq ft masterplan development of the area around Whitworth Street West in the city centre of Manchester.

The building was designed to run independently or have the ability to connect to a borehole farm planned for the site.

ASK were highly satisfied with the services received and through professional recommendation Hannan Associates were awarded the Tenant Fit Out Design contract associated with occupation of the building by Manchester City Council during the refurbishment of Manchester Town Hall.

We have subsequently monitored a number of tenant fit outs on behalf of ASK Developments in No. 1 First Street including FCE Bank, Gazprom and Auto Trader.



SHIP CANAL HOUSE, MANCHESTER

Client: Catalyst Capital

Architect: Sheppard Robson

Project Value: £3.5 M

This project involved the refurbishment of the Grade II listed Ship Canal House, an existing 10 story office building situated on King Street in Manchester City Centre.

The building was built in 1924 for the Manchester Ship Canal Company headquarters and at the time was one of the tallest office blocks in the UK. It was designed by architect Harry S Fairhurst in a neo-classical style and displays Art-Deco and Edwardian Baroque motifs.

Phase One of the project incorporated the refurbishment of the ground floor reception area, third and eighth floors.

The existing Mechanical & Electrical services were stripped out and new services were installed on these floors. The Phase Two works incorporated the full refurbishment of all the remaining floors excluding the two remaining tenanted areas on the fourth floor.



ST GEORGE'S HOUSE, MANCHESTER

Client: Scottish Widows
Architect: AFL Architects

Built in 1911 for the Y.M.C.A incorporating gymnasium with oval running track and swimming pool plus other sporting facilities.

The building was one of the first modern concrete structures in Manchester and is a Grade II listed building.

Hannans were employed to integrate modern engineering services for Scottish Widows to provide Grade A Office Accommodation.



RIVERSIDE HOUSE, NEW BAILEY SALFORD

Client: The English Cities Fund
Architect: Alford Hall Monaghan Morris
Contract Duration: 2018 – 2019

NEW
BAILEY



BREEAM®
★★★★☆
Excellent

Hannan Associates were part of the team that redeveloped 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 and Building Services Engineering consultancy for the CAT A installations which expanded to include the CAT B fit out for Muse Developments who have occupied 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.



BUPA PLACE MEDIA CITY, SALFORD

Client: Bupa
Project Value: £50M
Project Duration: 2015 –2018



This project involved the delivery of a new 146,186 sq ft, 5 storey regional HQ office for BUPA at Media City, Salford. The Cat B scheme saw approximately 2,000 Bupa personnel relocate from two neighbouring buildings.

Part of Bupa's drive for investing in 'BUPA PLACE' was to occupy a building which was more environmentally sustainable through efficient design, fit-out, location and approach to travel.

We provided MEP services consultancy duties for the project which included monitoring the CAT A installations and performance design and monitoring duties associated with the CAT B fit out. The building achieved a **BREEAM Excellent** rating.

We joined Shepherd Gilmour, Sheppard Robson, Colliers and Turner Townsend on the Client's CAT B fit out team. Chapman Taylor provided architectural duties for the base building which was constructed by Morgan Sindall.



PEAKS & PLAINS HOUSING TRUST OFFICE ALTERATION & FIT-OUT

Client: Peaks and Plains
Architect: Band Architects
Contract Duration: Sep 2016 – Jan 2018



In the wake of their 10 year anniversary, the head office of Peaks and Plains Housing Trust underwent a transformational fit out programme.

The award winning project, designed by BAND Architects, involved the refurbishment of the trust's Ropewalks building to reflect the changing needs of their business.

Hannan Associates were appointed as MEP Design consultants on the project alongside BAND Architects, Abacus Cost Management, Brown and Bancroft Interiors, JMC Contractors and Kinnarps Workspace Solutions.

We provided the outline design of the MEP Services and carried out a technical checking role for the client, reviewing both the detailed design of the Contractor and also the site installation works.

The new layout of the offices reflects the vibrant communities that Peaks & Plains work with across Cheshire, by creating a homely feel whilst bringing together its core operations into a single working environment.



ADDLESHAW GODDARD OFFICES, LEEDS

Client: Addleshaw Goddard
Project Manager: Arcadis
Project Duration: 2015 – 2016



We provided MEP Consultancy services for the Cat B/C Fit Out of Addleshaw Goddard's new offices in Leeds, No.3 Sovereign Square.

Addleshaw Goddard took 51,000 sq ft over three floors within the building developed by Bruntwood and Kier.

Meetings with the Client and associated IT specialists, FM specialists, etc. ensured that all of the client's requirements were captured. Whilst ongoing monitoring of the base build/Cat A installations, including witnessing of testing and commissioning of the completed installations, guarantee that the project complied with the Developers Specification, and the Agreement to Lease.



ADDLESHAW GODDARD OFFICES, MANCHESTER

Client: Addleshaw Goddard
Project Manager: Arcadis
Project Duration: 2015 – 2017



Following the successful delivery of Addleshaw Goddard's new Leeds office at Sovereign Square, Hannan Associates also provided MEP Consultancy services for the CAT B/C Fit Out of their new offices at No.1 St Peter's Square in Manchester.

The international legal firm took two-and-a-half floors of the building and has now successfully relocated from their offices in Barbirolli Square.

We provided MEP services consultancy duties for the project which included working closely with Addleshaw Goddard's in house department team leaders to develop a bespoke corporate MEP services standards requirements design specification which is to be used to inform future office fit out projects.

Monitoring of the base build/CAT A installations, witnessing of testing and commissioning of the completed installations and checking for compliance with the Agreement to Lease also formed part of our duties.



SQUIRE PATTON BOGGS OFFICE, MANCHESTER

Client: Squire Patton Boggs
Project Value: £3M
Contract Duration: 2015 – 2017

SQUIRE
PATTON BOGGS

We provided MEP Consultancy services for the fit out of international legal practice, Squire Patton Boggs new offices based in Manchester.

Our client occupies 27,500 sq ft of workspace in Allied London's No.1 Spinningfields, constructed by BAM. We joined Gardiner and Theobald and Sheppard Robson on the project team.

The fit out works included reception, open plan and cellular offices, support areas, full catering kitchen, conference facility and server room.

Our duties included:

- Due diligence review of the landlords design and specification
- Assisting the client with the development of the fit out brief and specification
- Liaison with the base build construction team
- Stage 4 Design with 3D coordination of fit out package
- Tender, review and negotiations
- Construction monitoring

The Sustainability design features incorporated within the project included:

- Lighting control for occupancy and daylight sensing
- High efficiency EC motors on the fan coil units
- Energy metering / monitoring
- CHP



TWO NEW BAILEY, SALFORD

Client: The English Cities Fund
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 achieved an A rated Energy Performance Certificate, a **BREEAM Excellent** rating along with a Wired Score rating of Platinum.

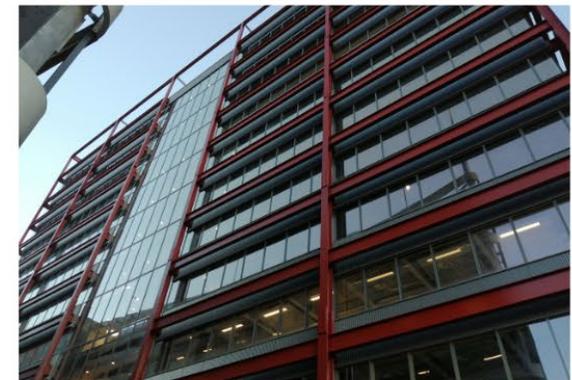
Hannan Associates provided Building Services Engineering Consultancy and BREEAM Assessment for the development.

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 have taken 50,000 sq ft of space across the part eight, ninth and tenth floors with BLM LLP signed to occupy the 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.



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.

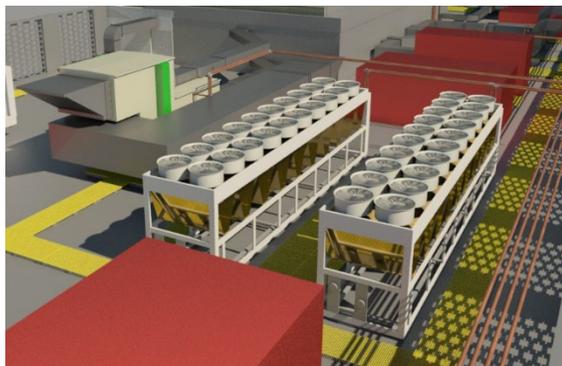
We played a key role in liaising with the occupiers technical advisors in order to obtain their specific technical requirements for the MEP services installations which were agreed, costed and accommodated within the building design.

The building was handed over in February 2021.

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



THREE NEW BAILEY, SALFORD CENTRAL



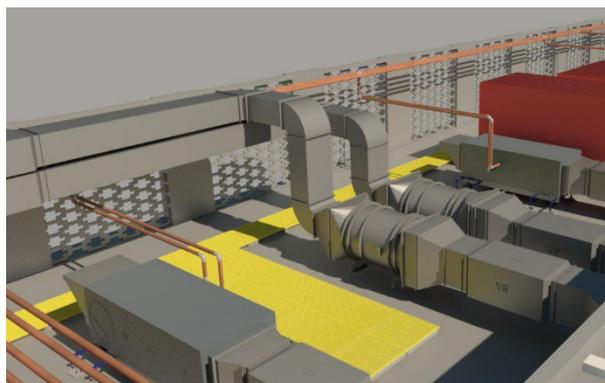
Chillers Isometric View



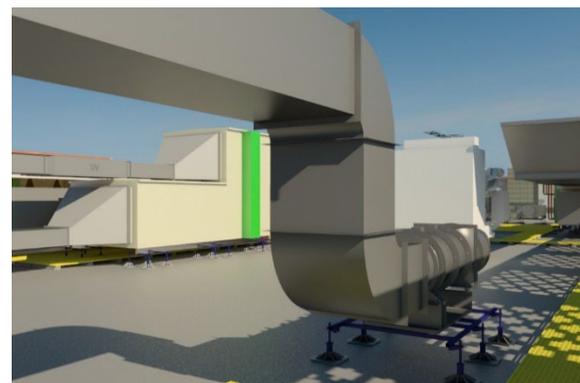
Office AHUs Isometric View



Plant Roof Extract Fans



Toiler Extract Fans Isometric



Extract Fan Isometric View

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.

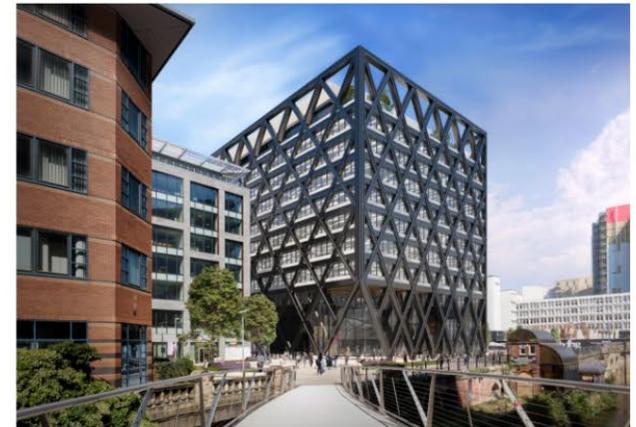
We have been appointed as MEP design consultants on the project and we are pleased to be working alongside Make Architects, Cundall, Chroma Consulting, Reform Landscape Architects and main contractor B&K.

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.



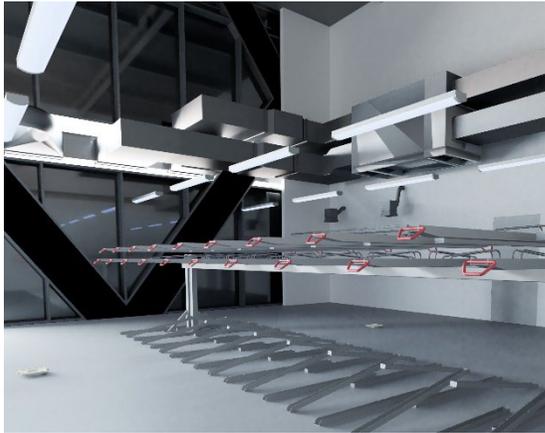
FOUR NEW BAILEY, SALFORD CENTRAL



Cycle Room



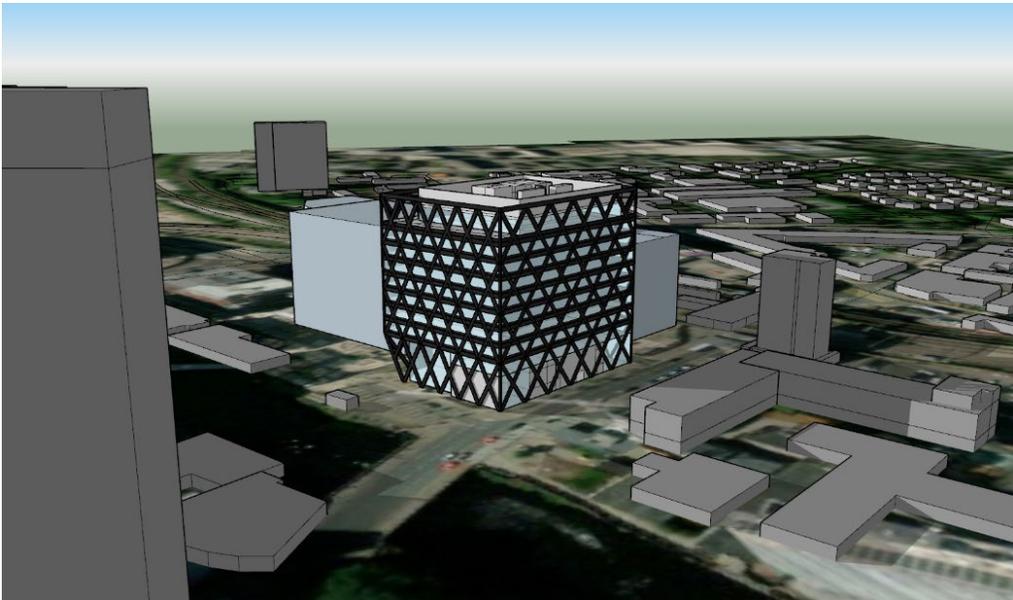
Roof Plant



Drying Room



Accessible Toilet



RALLI QUAYS, SALFORD

Client: Legal & General
Architect: EPR Architects
Contract Duration: October 2018 – Ongoing



Hannan Associates are part of Legal & General Investment Management's team for the design of the Ralli Quays office and hotel scheme on the River Irwell in Salford.

The client is targeting net zero carbon via a combination of the UKGBC 2030 targets and carbon offset for both construction and operation, including a high **NABERS Star Energy Rating**. The building is also targeting **BREEAM excellent** and **EPC A**.

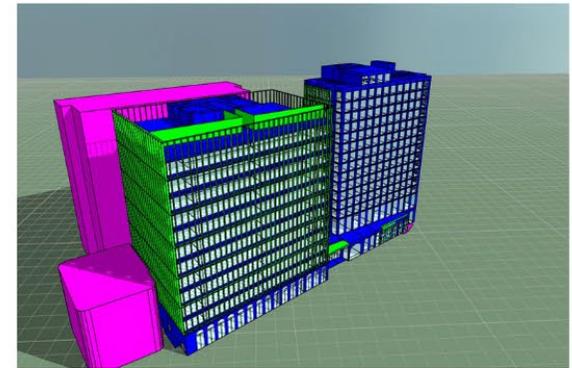
Our role on the project includes Sustainability Services, BREEAM and MEP Design.

Ralli Quays is one of only fourteen developments in the UK pioneering the Better Buildings Partnership Design for Performance initiative. The key objective of the Pilot Programme was to provide a strong evidence base for proceeding to a fully-fledged DfP Scheme.

As part of our package we are utilising complex thermal modelling software to accurately simulate HVAC plant and control networks for each building in order to ascertain the predicted in use operational energy consumptions for a variety of on-axis and off-axis scenarios. This is vital in providing a building-integrated approach where the HVAC systems and building are assessed as a whole all gains/losses, heat transfer and thermal mass in the building to be accounted for alongside system performance.

This allows us to address the performance gap that has been created by the out of date methodology to design buildings for compliance, as we can accurately assess the results of simulations and check against the latest Energy Performance Targets based on the Australian NABERS approach.

We are very pleased to join EPR Architects, DPP One, Turner & Townsend, Walker Sime, Clancy Consulting, Colliers on the project design team.



WIRRAL REGENERATION

Client: Wirral Growth Company
Architect: AHR Architects
Project Value: 1BN
Project Duration: October 2017 – ongoing



Hannan Associates are part of the team chosen for the redevelopment of the Wirral.

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

The first phase of work would involve the development of two grade A offices alongside retail, leisure and new public realm in Birkenhead town centre, for which plans have now been lodged.

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



DWP HUB, TALBOT GATEWAY BLACKPOOL

Client: Muse Developments

Architect: Make Architects

Contract Duration: November 2020 – ongoing

Plans for this new 215,000 sq ft, £100m office development will form part of the third phase of the Talbot Gateway regeneration scheme in Blackpool, led by Muse Developments.

When complete the seven storey office building will become home to over 3000 staff from the Department of Work and Pensions.

Hannan Associates are providing Building Services Engineering Consultancy including **Net Zero Carbon operational energy** modelling and BREEAM assessor duties for the development.

The building has been designed to be ultra-low energy. Low-carbon heating and cooling to the office will be provided via air source heat pumps. Demand-driven ventilation will also be provided, helping improve indoor air quality while saving energy during periods of reduced occupancy.

The building has been designed to achieve a **BREEAM 'Excellent'** rating.

We are working alongside Make Architects, RPS, Chroma, Arup on Muse Development's design team.

The Talbot Gateway regeneration is transforming Blackpool town centre and will comprise of a new business district and civic quarter, grade A offices, retail space, event space and a new public transport interchange.



BLACKPOOL COUNCIL OFFICES, TALBOT GATEWAY

Client: Muse Developments
Project Value: £17M
Contract Duration: Sep 2010 – Sep 2014



Bickerstaffe House is the 125,000 ft² HQ Offices built for Blackpool Council as part of the Talbot Gateway Development.

We were employed by Muse Developments to develop the design of the mechanical, electrical & plumbing services including the environmental services strategy to meet their development brief. The building has achieved a **BREEAM Excellent rating and an A rated Energy Performance Certificate**. We undertook Dynamic Simulation Modelling and worked closely with the design team on the incorporation of passive solar shading via vertical fins on the south-west and south-east elevations, high performance solar & fritted glazing and low air permeability in order to reduce heating and cooling loads whilst maximizing natural daylight.

Our detailed design for the MEP services further supplemented this approach by the use of air source heat pumps to provide space heating and comfort cooling, daylight dimming and occupancy control for lighting installations, roof mounted photovoltaic panels and the re-use of waste heat from the data centre. Water usage was reduced via a rainwater harvesting installation to serve the WCs within the core accommodation.



1 CENTENARY SQUARE, ARENA CENTRAL BIRMINGHAM

Client: Arena Central Developments Ltd
Architect: Make Architects
Project Duration: Dec 2013 – Feb 2019



1 Centenary Square, now home to HSBC is part of Arena Central, a £500 million mixed-use development scheme in Birmingham city centre being developed by Arena Central Developments LLP.

Hannan Associates are providing Building Services Engineering consultancy for the development scheme.

The 210,000 sq ft, 10 storey, Grade A office building accommodates around 2,500 employees, with high quality flexible working and break out spaces.

We took the lead 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 within a very short timescale.

This ensured successful delivery of the complex MEP services installations, which provide excellent internal environmental comfort conditions for the occupants and help achieve **LEED Gold** accreditation for the building, the first in the city.

The MEP services include full standby back-up generators, which also supports the heating, cooling and ventilation systems. This means that the MEP services within the building will continue to operate in the event of a full power outage of the incoming electrical supply to ensure business operations are unaffected and can continue as normal, which is a critical requirement of HSBC.

We worked alongside Make Architects, Gillespies Landscape Architects, Arcadis and WSP on the design team and main contractor Galliford Try.

The project won the 'Commercial' category at the RICS Awards 2019, West Midlands.

RICS Awards
2019
Winners



3 ARENA CENTRAL, BIRMINGHAM

Client: Arena Central Developments Ltd
Architect: Make Architects
Project Duration: 2015 - 2020



3 Arena Central is a 242,000 sq ft, grade A office building which forms part of the Arena Central Development which commenced as Birmingham's first speculative office scheme since the recession. The UK Government subsequently committed to take the full building as the sole tenant.

The new office building is now home to 3,600 civil servants across a number of government services, including the midlands regional hub for HM Revenue and Customs (HMRC) and is located at the heart of the nine acre mixed use regeneration site.

Having already worked successfully on the neighbouring 1 Centenary Square, Hannan Associates were appointed to provide Building Services Engineering, Site Infrastructure Services & BREEAM Assessment for the project which was the second building on the Arena Central development delivered by ACDL, a joint venture led by Kier Property.

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 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.



ONE ANGEL SQUARE, MANCHESTER

Client: The Co-operative Group
Project Value: £100M
Contract Duration: Feb 2010 – May 2012



Hannans were part of the team which designed the MEP Services for the 320,000 sq ft Co-operative Group Headquarters building.

Opened by the Queen on 14th November, the new head office at One Angel Square, Manchester was at the time officially the world's greenest office building with a **BREEAM score of 95.16% - 'Outstanding.'**

The design of the building was driven by the Co-operative Group's desire to create a Carbon Negative building. The sixteen storey office building was designed to achieve a BREEAM Outstanding rating, as well as an **EPC 'A' rated near zero carbon building**, with cutting edge integrated design. The services design included 3D modelling, together with building modelling and dynamic simulation to calculate and assess the buildings energy consumption and potential EPC and DEC ratings.

The project has won numerous honours including both Design & Innovation, and Overall Project of the Year at the 2013 RICS Awards, BCO 2013 Corporate workplace of the year, Property Week 2012 Sustainability Achievement Award, and a 2013 BREEAM Award.

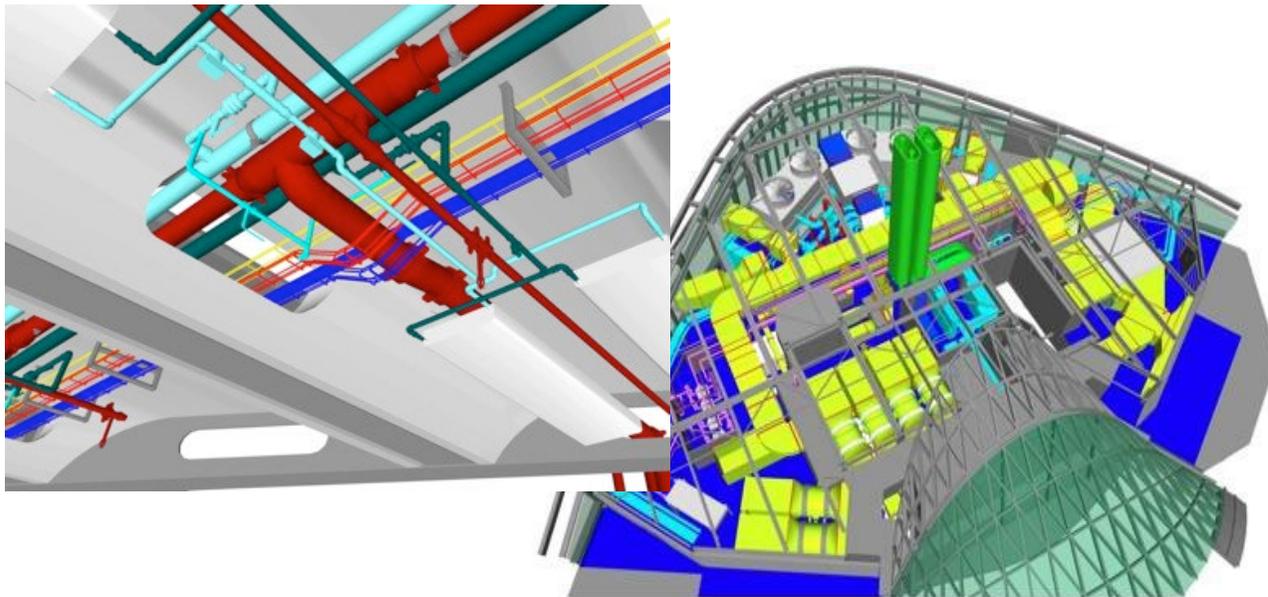


ONE ANGEL SQUARE, MANCHESTER

The building incorporates passive chilled beams which were designed to maximize the effect of the low carbon technologies including pure plant oil CHP, active façade, earth ducts, absorption chiller, cooling towers and air to water and water to air heat recovery.

Hannan Associates led the team develop and design in detail, the cutting edge building services on this landmark award winning low carbon office scheme, with Buro Happold providing structural design. The unusual building design comprising an exposed structure and precast units required a high degree of coordination with the services to integrate the exposed combined services chilled beam rafts with the curved pre cast units.

The high level of coordination and team working involved integration of fixings into the pre cast units to support the services, in addition all services on each floor were required to pass through the pre cast units and structural steel. Close coordination was achieved by sharing 3D models to develop the integrated solution. Early information required to coordinate holes in the three slip formed riser cores was achieved by intensive coordination workshops where a close working relationship succeeded in maintaining the required design programme.



Low energy consumption features include:

- Active facade in order to minimise both heating and cooling loads at all times of the year
- Recover Heat and Cooling from the Earth duct
- Energy Recovery Systems, air to air, air to water and water to water.
- Reduce Air Leakage and infiltration rates by good workmanship, testing & commissioning of ventilation systems
- High efficiency underfloor Ventilation systems
- High efficiency and comfort using a mixture of passive and active chilled beams
- Efficient Ventilation Systems Demand and Occupancy Control - Maximise diversity in the operation of the central plant by demand based variable air volume systems
- Efficient Zone controls for heating, cooling and ventilation
- Variable flow water circuits with 2 port control
- Adiabatic Cooling by Cooling Towers
- Combined Heat and Power design to CHPQA standards using pure plant oil
- Absorption Chiller matched to CHP
- Pump duty and assist arrangements to reduce part load energy
- Grey water harvesting and re-usage to reduce water consumption
- Rainwater harvesting and usage to reduce water consumption
- Low energy lighting design and control
- Low water consumption water fittings
- Leak detection and shut off of water services
- Metering and monitoring of water and all energy uses
- Variable Speed lifts

SMITHFIELD WORKS, STOKE

Client: Genr8 Developments
Project Value: £1.4M
Contract Duration: 2020 – 2022

The new co-working space Smithfield Works is a part of the Smithfield scheme developed by Genr8 Developments in partnership with Stoke City Council.

The space has been built across 2 Smithfield and the Clayworks. It offers a mix of shared office spaces, private work spaces, hot-desking facilities and open space.

Hannan Associates were appointed as MEP Design consultants on the project alongside Cartwright Pickard Architects, and main contractor Dragonfly Contracts.

We provided performance specification and monitoring duties for design and build, review of contractors designs, site inspections, witnessing commissioning and testing.

The overall masterplan provides the crucial link between existing residential, shopping, cultural and heritage areas helping to bring the city together more coherently.



NO. 11 YORK STREET, MANCHESTER

Client: Kier Property

Architect: AHR Architects

Project Value: £13 M

Contract Duration: Oct 2012 - Aug 2021

Hannans worked with Kier Property and AHR Architects, for the redevelopment of 40 Fountain Street in Manchester City Centre. The new Grade A office building has been renamed as 11 York Street, and is designed to target the commercial, professional and financial services office sector.

Works comprise the demolition of an existing five-storey office building, and the construction of a new 79,000 sq ft, eight-storey building which incorporates double height main entrance lobby, private business lounge, 2nr ground floor retail units finished to shell specification and basement car parking.

The building has been designed to achieve **BREEAM 'Excellent'** rating as measured under BREEAM 2011 New Construction criteria, also achieving an 'A' Rated EPC. The MEP services installations have been designed in accordance with BCO Recommendations to maximise the flexibility of the CAT A open plan office space and to facilitate the possible sub-division of the floor plates into two independent tenancy areas, on a floor-by-floor basis.

As Kier Property's retained MEP Consultant, we reviewed construction information and visited site regularly to report quality of MEP services installations.



ST PAULS SQUARE, LIVERPOOL

Client: English Cities Fund
Architect: RHWL Architects
Project Value: £150 M
Contract Duration: May 2005 – Nov 2011



Hannans were part of the BCO award winning team that designed Building 4 at St Paul's Square in Liverpool. The building designed by Architects RHWL and Muse Developments won 'Commercial Workplace' at the North of England Awards. The project also won Development of the Year at the the 2011 RICS North West awards.

St Pauls Square totals 1,650,000 sq ft of mixed-use space, incorporating offices, retail, cafes, restaurants and 285 new homes in the city centre of Liverpool. We provided the enhanced performance specification and monitoring for phases 2 and 3.

No. 4 St Paul's Square is an 8 storey, 109,000 sq ft, Grade A office building which achieved a **BREEAM Excellent** rating.

No. 5 St Paul's Square is a 133,000 sq ft Grade A office building, which was designed specifically to minimise energy usage, associated carbon production and utilise its own infrastructure to obtain a minimum of 10% of the building's energy requirements, from an onsite renewable source.

This was achieved via the use of ground water source heat pumps, which provide the buildings heating and cooling. Overall the building achieved a 32% reduction in Carbon through a combination of passive and renewable measures. The building achieved a **BREEAM Very Good** rating



STOCKPORT EXCHANGE

Client: Muse Developments
Architect: RHWL Architects
Project Value: £60M approximately
Contract Duration: 2011 - ongoing



STOCKPORT
METROPOLITAN BOROUGH COUNCIL

BREEAM®



Excellent

Hannans 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 multi-storey 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 includes the design and construction of a 64,000 sq ft Grade A office building and 400-space multi-storey car park.

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



RICS Awards
2018
Winner



MANN ISLAND, LIVERPOOL

Client: Smith Group

Architect: Broadway Malyan

Project Value: £18M

Contract Duration: October 2009 – July 2010

BREEAM®



Excellent

Situated between the 'Three Graces' and Albert Dock, Mann Island is an award-winning mixed-use development which reconnects Liverpool's city centre to its historic waterfront.

Hannan Associates were responsible for the detail design of the Building Services systems, for the new commercial building within the complex. The building provides 172,000 sq ft of comfort cooled office space over 14 floors. The block is part of a scheme that opens up access to previously enclosed dockland areas, to create three new public spaces, two fourteen-storey residential buildings, retail, leisure, and exhibition spaces.

Our involvement included the base build Category A works to meet the Development brief and the Category B fit out to meet the requirements of Mersey Travel which includes an exhibition space on the ground floor.

The internal environment is controlled by a highly efficient VRF comfort cooling system, which incorporates renewable energy content. The design achieved **BREEAM Excellent** rating and won a 2015 RIBA North West Award.



CONWY COUNCIL OFFICES, COLWYN BAY

Client: Conwy County Borough Council & Muse
Project Value: £36M
Project Duration: Oct 2015 – Nov 2018



Hannan Associates were 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 is **BREEAM 2014 Excellent** 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'.



CITY PLACE, CHESTER

Client: Muse Developments
Architect: Aedas RHWL Architects
Project Value: £120 M
Contract Duration: Aug 2012 – Feb 2016

CITYPLACE

We are working with Muse Development and Aedas RHWL Architects on the development plans for the transformation of the area around Chester railway station.

We are currently involved with Phase 1 of the development which includes the first office building, One City Place. Completed in February 2016 this £20M office development is 70,000 sq ft with six-stories.

We are also providing site wide appraisal of the utilities, diversions & development loads, developing a design and procurement strategy and a Site wide lighting Strategy.

The masterplan designed by RHWL Architects has the capacity to deliver 500,000 sq ft of prime office space, 200 residential units, restaurants, leisure facilities, car parking and new public spaces including enhancements to the area surrounding the Shropshire Union Canal, which runs through the site. It is hoped that these proposed plans have the potential to transform this underused site into a thriving business district, helping to boost economic growth in Chester.



Contact Us

Head Office - Manchester

Beta House
Alphagate Drive
Manchester Road
Denton
Manchester
M34 3SH

Tel: +44(0)161 337 2200
Web: www.hannan-uk.com
Twitter: [@HannanAssociate](https://twitter.com/HannanAssociate)



Ian Joyce

Company Director

Tel: +44(0)161 337 2200

E-mail: ian.joyce@hannan-uk.com



Vicky Priestley

Business Development & Marketing Manager

Tel: +44(0)161 337 2200
+44(0)7887 563 970

E-mail: vicky.priestley@hannan-uk.com



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