



RECRUITMENT BRIEF

Structural Engineer

ADEPT LEEDS OFFICE

www.adepctsce.com



Introduction



This is an exciting opportunity to join a dynamic, rapidly growing and strongly established civil and structural engineering consultancy with an excellent reputation for the delivery of complex and specialist projects.

ABOUT US

Adept Consulting Engineers Ltd was founded in January 2007 by business partners Erol Erturan, Richard Parker and Matthew Ramsden, who work to engineer better together using BIM.

Our clients choose us because of our reputation as a customer focused personal and responsive company that employs the best staff who use the latest technology to deliver the best value service on time.

We have a loyal client base and almost 80% of our work is generated from repeat business.

We work within a wide range of sectors, including:

- **Commercial**
- **Distribution**
- **Education**
- **Energy**
- **Extra Care**
- **Food Processing**
- **Health**
- **Hotel & Leisure**
- **Listed buildings**
- **Residential**
- **Retail**
- **Warehousing**



Our Services

Our mission is to provide high quality civil and structural engineering services to our clients within the construction industry. Our specialist areas of work include:

- Preparation of conceptual schemes
- Detailed designs and drawings of foundations
- Superstructure
- Drainage
- External works and highways for new build and refurbishment projects
- Building Information Modelling (BIM) including providing data rich 3D models
- Structural surveys and reports for existing properties
- Desktop studies, flood risk assessments, site investigations
- General civil and structural advice
- Feasibility studies
- Project management and lead consultant services
- Laser point cloud surveying
- BIM consultancy, converting laser point cloud to BIM

Digital Innovation

We understand that Building Information Modelling (BIM) is key to our industry's shared future. We see this as self evident and have modelled our business around this.

We are a forward thinking, technologically advanced company and use the latest tools to deliver our projects, resulting in increasing productivity, efficiency and better service to our customers. Despite our extensive experience, we are always looking for new and innovative ways to improve and develop. Exploring new software and processes are part of our working day. Our staff are continually encouraged and inspired to implement cutting edge solutions.

Our focus and expertise in BIM is rather unique. Having achieved BIM Level 2 accreditation in 2015 we became the first civil and structural engineering consultancy in the UK to receive such an award. This validated our advanced capability in modelling, analysis exchange and process maturity beyond compliance with UK standards, and we haven't stopped progressing.

We embrace trust based collaboration and recognise that working together creates benefits far greater than the sum of its parts. Clients, staff and design partners have gravitated towards this approach and the positives have been numerous.

Reduced rework, clash detection on site, intelligent data exchange, improved accuracy and greater transparency are just some of the quantifiable benefits we continue to share.

At the end of our projects all parties are more knowledgeable, experienced and better equipped for the future and we see this as a great achievement. We openly share knowledge, models, processes and ideas and actively encourage our clients and sub-contractors to do the same.

Adept's attitude to Digital Innovation has been our unique selling point since our early days. BIM is integral and fundamental to the delivery of all our projects. There are no exceptions, it just makes eminent sense.

In practice we go beyond what is traditionally seen as BIM for Civil/Structural Engineers and routinely deploy our Laser Scanner, UAV and VR equipment.

All of our models are workshared for data segregation, most contain analysis data and other intelligent features beneficial to the digital twin envisaged for the lifecycle of the facility. This is our modus operandi. Our current interests lie in mesh feature recognition from point clouds, LEAN processes and practical Virtual Reality.

We are members of Cyber Essentials Plus, a government backed cyber certification scheme.

For project delivery Adept uses a wide (and often changing) array of technical software, bespoke solutions and modules.



The Growth of Adept

Over the years we have invested a significant amount of time and money into the development of our business, BIM and staff training. Growth and evolution is key to the success of Adept.

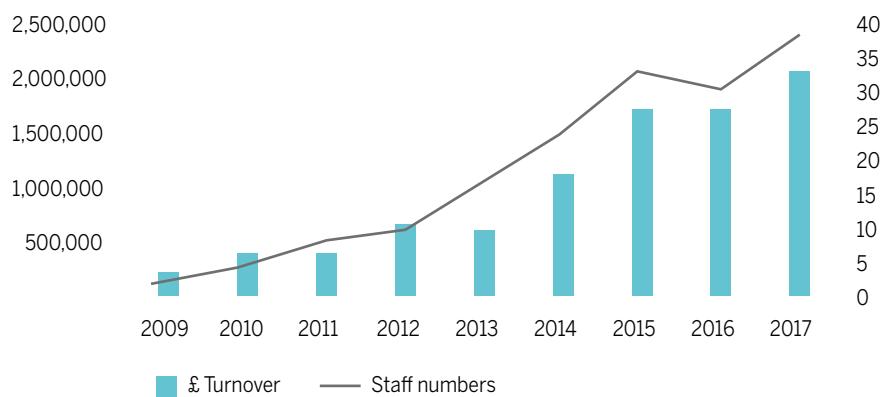
2018 was our most successful year to date and we recruited more staff than ever before. 2019 will be another exciting year of growth and expansion for Adept. We plan to appoint Directors in London and Manchester in 2019 as part of our long-term growth strategy. The two new Directors will become key in sustaining our business growth.

Within our industry we are recognised for leading service excellence and professional development. This has created a loyal client base and a healthy, continued stream of repeat business.

We are now involved in a wide range of complex schemes nationwide.

Other long-term plans include the diversification of Adept's services to include project and information management, lead consultancy and geo-environmental site investigations, including setting up associated companies with motivated key individuals.

Adept's Growth





Testimonials

"Further to your specific assistance with all the elements of Structural and Drainage works carried out over the past two years at the Kirkgate Market Refurbishment in Leeds, in particular due to the regional award we have recently received of "Project of the Year"
I would like to thank you personally and to express our appreciation for a most excellent and professional service we have received from yourselves, well done!"

**Eamonn Cahill,
Interserve Construction**

"Without Adept's help through value engineering proposals, Sewell would not have secured the project. [Adept are] always in touch and responsive."

Josh Donnelly, Sewell Construction

"Friendly, helpful and efficient service. We will recommend your services where possible."

Tim Clayton, HTC Architects

The Opportunity

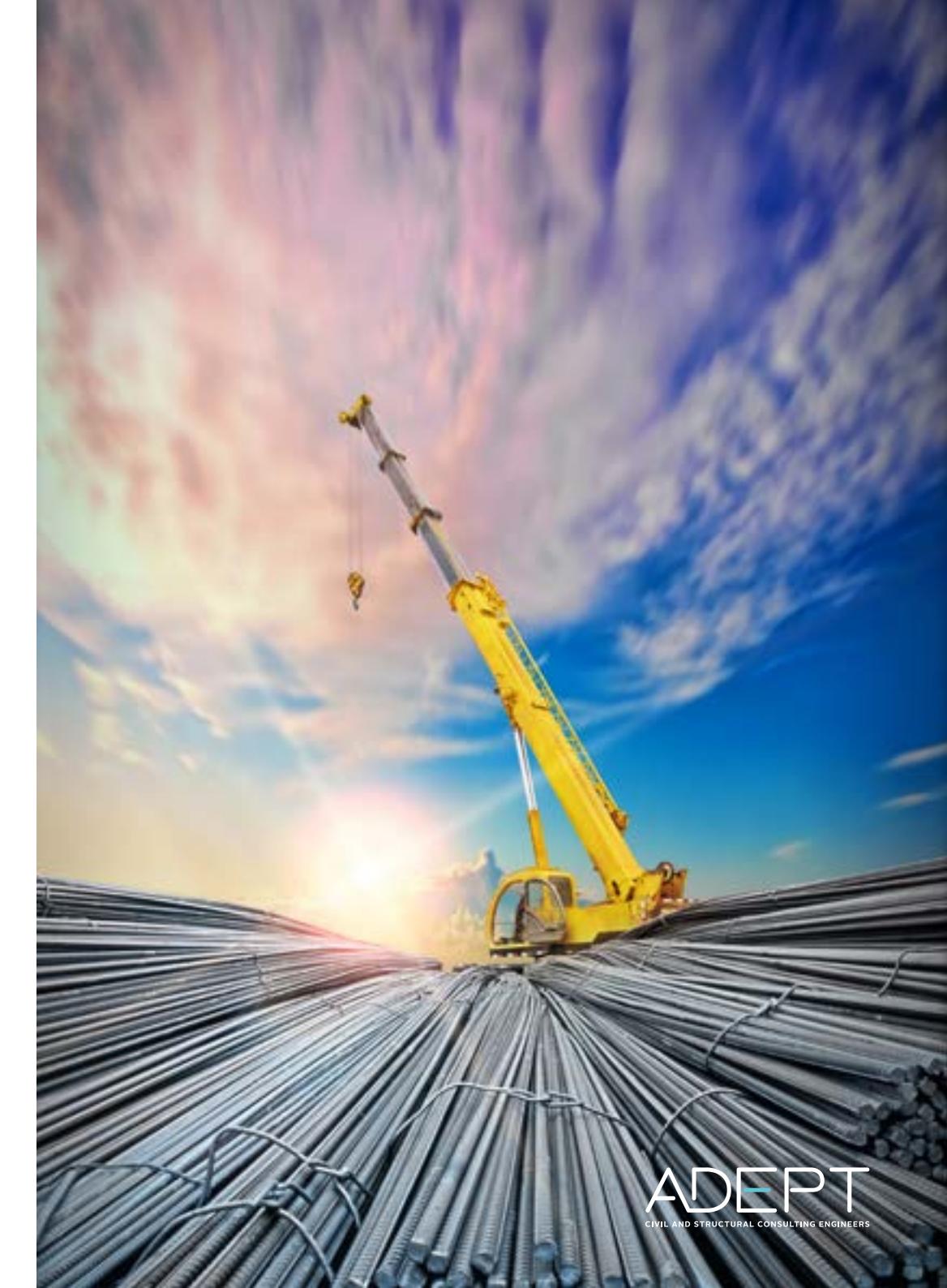
Dynamic and optimistic in their approach, we are looking for an ambitious and well rounded Structural Engineer who can identify innovative and cost effective strategies and design solutions

THE PERSON

- In depth building construction knowledge
- Motivated, collaborative, passionate
- Reliable and enthusiastic
- An analytical and detailed approach to work
- A confident team player with superb interpersonal skills
- A creative innovator with a technical approach to projects and tasks
- Unquestionable integrity, experience, confidence, and the stature to effectively address major client needs and challenges
- Detailed knowledge and understanding of the principles of Building Information Modelling (BIM)
- A hands-on approach to projects
- A natural troubleshooter who can find simple, efficient solutions to identified challenges or complications
- A keen interest in the design and structure of buildings

SKILLS AND EXPERIENCE

- Three or more years experience in the industry
- Good problem-solving skills
- Sound understanding of physics and mathematics
- Three-dimensional conceptual skills
- Extremely strong communication, presentation and negotiation skills
- Diagrammatic skills
- The ability to work effectively and efficiently within a team
- Impeccable attention to detail
- The ability to liaise well with professionals from other disciplines
- Excellent knowledge of relevant software (please refer to our Digital Innovation section for further details)
- The ability to work on multiple projects simultaneously



The Role

The work is office-based with occasional visits to construction sites.
The role itself is both technical and creative.

OBJECTIVES AND KEY RESPONSIBILITIES

- The preparation of reports, specifications, designs and drawings, briefing documents, feasibility studies and options appraisals
- Assisting with or leading a variety of projects to completion; undertaking integrated 3D modelling and structural design
- Structural analysis with a particular focus on calculations in relation to loads and stresses
- Obtaining planning and/or building regulations approval
- Assessment, monitoring and integration work undertaken by specialists
- Administering contracts
- Managing projects from inception through to completion
- The consideration of the strength of various materials, e.g. timber, concrete, steel and brick, to evaluate how their inclusion may necessitate a change in structural design
- Liaison with other designers, including architects, to agree on safe designs and their fit with the aesthetic concept of the construction
- On-site inspection and testing
- Fire protection of structures
- The examination of structures at risk of collapse and advise how to improve their structural integrity, such as recommending removal or repair of defective parts or rebuilding the entire structure
- Work collaboratively with geotechnical engineers to investigate ground conditions and analyse results of soil sample and in situ tests
- Liaison with construction contractors to ensure that newly erected buildings are structurally sound
- Apply expert knowledge of the forces and their subsequent effect on various structures
- Site appraisals and surveys
- Geotechnical and geological investigations
- Material investigations
- Ground improvement studies
- The structural design and detailing of foundations, retaining walls buildings, for example
- Assessment of special loads
- Building regulations submissions
- Defect assessment and the development of remediation solutions





Why consider this opportunity?

Support will be given for you to work towards Chartership with the Institution of Structural Engineers or the Institution of Civil Engineers

BENEFITS

This is an exciting opportunity to join a forward thinking company. We are offering a competitive salary with a range of benefits inclusive of a contributory pension, healthcare scheme, free on site parking, tailored training opportunities and the opportunity to attend a range of employee social events.

The successful candidate will be working with a highly motivated and committed team who successfully deliver an interesting and broad range of civil and structural engineering projects, within sectors such as healthcare, education and residential.

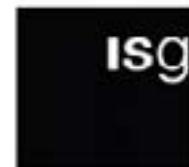
Our office is a friendly and supportive working environment. Our extremely high retention rate and annual appraisal staff feedback demonstrates Adept's employee satisfaction.

We have a Social Committee who organise and run regular social events every year. The events for 2018 included an American pool tournament, a bowling tournament, a Krypton Factor Challenge, a team building weekend away, a virtual golf tournament, a bingo event, a casino night out and monthly sponsored pub outings. Each member of staff also receives a £100 birthday bonus.

Our dedication to valuing and nurturing our employees has been recognised by Investors In People. We now hold a IIP Silver award.

Adept is an Equal Opportunities Employer

Our Clients



next



Industry Recognition and Accreditations

We are proud of our accreditations which represent industry recognition of our expertise, service delivery and exceptional standards.



BIM Level 2



The Adept Culture and Team

We know that a happy workforce leads to increased morale, productivity and efficiency.

CULTURE AND TEAM

Our culture is based on being entirely staff and customer focused. We invest in tailor made training programmes (apprenticeship schemes, degrees, software and technical training and sales and management training) for our staff, to help them develop and progress in their career. Our staff have a wealth of experience, talent, skills and industry knowledge.

Our staff have taken part in a number of charitable events over the years, to raise money for different charities including Action Medical Research and Barnados:

- Yorkshire 3 Peaks
- York Cycling 100km Route
- Windermere 20 Challenge

A number of staff also provide 'volunteering days' to Lineham Farm Children's Centre in Leeds (who aim to enhance the lives of local children by organising respite breaks and holidays) to help out with improvements to the facilities. All Adept staff are provided with two days paid volunteering leave per annum.

Adept promotes social responsibility, growing our own talent, and promoting engineering and construction to young people.

APPRENTICESHIP SCHEME

Adept runs a successful Apprenticeship programme, employing students from Leeds College of Building and Barnsley College. Every year new apprentices are recruited and developed, enabling them to learn and thrive.

We are proud of our ability to support the engineers of tomorrow and have employed at least one apprentice every year since 2008.

Nine members of our team have come through this route, and we continue to support Higher Apprenticeships to degree level. Our very first apprentice is now a senior engineer, having graduated from a university degree funded by Adept, and is now running his own complex scheme. A number of other Adept apprentices are currently studying at university.

EXECUTIVE TRAINING

Management training is offered through a number of professional organisations and business mentors who we have developed strong relationships with over the years. We draw upon their qualified experience to reflect on our methods and guide our business development strategy forward.

Our continued involvement with the Goldman Sachs 10KSB scheme, gives access to a variety of leadership level training and development courses.





EROL ERTURAN | MANAGING DIRECTOR BSc, MSc, CEng, MInstuctE, MICE

Erol is a BRE Accredited BIM Professional with over 25 years in the industry. He is an experienced Chartered Civil and Structural Engineer with hands on experience in the design and project management of multi-storey steel and concrete framed buildings, large warehouses and major refurbishment projects.

Erol set up Adept in 2007 and the organisation has grown over the years and now employs 40 staff. Erol has a very 'hands on' approach to projects and specialises in client liaison, management and co-ordination of projects from the very early stages to completion.

Client testimonial:

"I have worked with Erol and his team on a number of occasions and have always been impressed with Adept's quality of work and professionalism. I would not hesitate in recommending Adept to new clients."

Chris Austin
Director, Brewster Bye Architects

EXPERIENCE

NEXT Warehouse, Doncaster

Value: £55m

Client: Next

New automated warehouse with 60,000m² footprint and 8,500m² offices plus a link bridge to an existing warehouse



- Adept were responsible for both the concept and detailed design for the project situated at IDI Gazeley's 115 acre G Park.
- A steel structure was the ideal solution for this build, as it was quick to construct, cost effective and accommodated the long span qualities needed
- Adept engineers designed flexibility into the steel frame so that it not only meets the demands of the business now, but there is flexibly for further expansion in the future

Gateway House, Piccadilly Station, Manchester

Value: £20m

Client: Marshall Construction

Mixed use development to include the transformation of Gateway House into a hotel together with a new 40,000 sq ft office block over 8,000 sq ft of retail space



- The strategy for the refurbishment was one of conservation rather than reconstruction. The building was stripped back to its existing concrete structure and reload to meet current envelope requirements whilst retaining the horizontals and fine grain of the existing fenestration
- The new structure is generally steelwork beams craned in to trim new openings in the existing RC structure. Simplicity and economy were the main requirements overall.

Drax Biomass, Selby

Value: £10m

Client: Drax

Biomass conversion facility. The construction of the domes was achieved through the application of air form technology that utilises an inflated PVC membrane permanent shutter which is sprayed internally with shotcrete



- Close liaison with the U.S. based engineering and construction team was achieved through the creation of clear lines of dialogue which were maintained throughout the build
- Feedback from Dome Technology recognised the efforts of Adept's engineers to neutralise barriers which existed due to differences in the cross continental standards and procedures.



RICHARD PARKER | DIRECTOR

BEng (Hons)

Richard is an experienced Civil Engineer with over 20 years experience in the construction industry. Richard specialises in feasibility studies, drainage, highway design, ground modelling and flood risk assessments and generating new clients.

He has extensive experience in the design and project management of all civil works including external works/highway design and Section 38/102/104, agreements for adoptable works and Health and Safety (including CDM regulations).

His responsibilities include running large and medium scale projects from conceptual design stage through to completion.

Client testimonial:

"Adept Consulting always offer STG proactive advise Pre tender and the extend this professional approach throughout the construction process I would recommend Adept and Richard Parker for future works."

Andy Coates
Construction Director, Strategic Team Group
(Park Road)

EXPERIENCE

GEFCO, Liverpool

Value: £10m

Client: Marshall CDP

New purpose built £10m state-of-the-art supply chain hub. It is now helping to optimise supply chains for a number of GEFCO's customers including Jaguar Land Rover's Merseyside factory in nearby Halewood.



- The construction of a 132,000 sq ft warehouse with two-storey integrated offices, as well as a 50,000 sqft warehouse with two-storey integrated offices
- Works carried out on the 12m high warehouse included design of the steel framed buildings with pad foundations on improved ground.
- External works involved cut and fill analysis which was lime stabilised to provide a suitable piling platform. Drainage was attenuated

New Lodge Extra Care Village, York

Value: £20m

Client: Joseph Rowntree Housing Trust

Facilities for retired living comprising 105 one and two bedroomed Extra Care suites and 45 one bedroomed residential care suites, as well as useful community facilities



- The new buildings have been modelled using 3D software which has been used to generate 3D views to aid co-ordination with the site and design team.
- The size of the development site has required the design for a large volume of surface water storage which has been accommodated by a 90m long Tubosider storage pipe positioned to suit a narrow corridor of available space on the site.

Park Road, Telford

Value: £9m

Client: Wrekin Housing Trust

81 unit affordable housing development for main contractor STG



- Civils 3D BIM technology was used to undertake a successful cut and fill exercise.
- The scheme was built over a former colliery leading to a difficult and challenging pile and foundations design.
- Colliery spoil deposits unsuitable to bear traditional foundation were found up to 5.2m depth. Therefore a total number of 658 piles was used as a foundation solution.



MATTHEW RAMSDEN | DIRECTOR

BEng (Hons), CEng, MInstuctE

Matthew is a Chartered Structural Engineer with 20 years of experience in the design and project management of residential, historical and educational schemes, multi-storey construction and refurbishment work. He has worked on a number of projects where additional protocols were required such as in working health centres, working schools (DBS checked) and rehabilitation homes.

Matthew is a very focused Director with experience in the design and project management of both large and small schemes. He is responsive to the client's needs and has a strong track record of gaining repeat work.

Client testimonial:

"Thank you for a most excellent and professional service. The work was within an extremely challenging environment within exceedingly tight time schedules and with several major constraints in a 100 year old Grade 1 Listed Building."

Matthew and his team had an excellent attitude, were very respectful and understanding of the project requirements.... Exemplary service - an outstanding advertisement for Adept."

**Eamonn Cahill,
Senior Project Manager, Interserve Construction
(Kirkgate Market)**

EXPERIENCE

Rotherham Interchange

Value: £12m

Client: Sheffield Combined Authority

The upgrade and refurbishment of this important town centre asset will improve the concourses with upgrades to flooring, plinths and glazing



- Adept designed a steel beam solution to strengthen the platform, saving significant time and money.
- We were responsible for verifying that the structural stability of the building is not compromised by the revised cladding.
- Adept's BIM Level 2 capabilities have ensured smooth design solution progress throughout

Kirkgate Market, Leeds

Value: £12m

Client: Leeds City Council

Extensive refurbishment, significant roof works and new internal structures



- Major refurbishment to a Grade I Listed building required sensitive engineering
- Re-design of the original drainage system saved the client valuable time and money
- Provided condition surveys to both historical roofs
- Coordinated an analytical survey enabling Matthew to advise the council on remedial strategy.

North Lincolnshire Retail Park, Scunthorpe

Value: £25m

Client: Simons Construction

New build retail park including 50,000ft² M&S, Debenhams and Boots



- Complex civil engineering design was required to address the lack of surface water drainage
- Director level involvement facilitated the engineering of the largest fully sustainable SUDS system that Adept have been responsible for
- Challenges surrounding underground water tables and raising floors above flood planes were eliminated thanks to the expertise of senior level involvement

Gateway House, Piccadilly Station

PROJECTS



SUMMARY

Client

Marshall CDP

Location

Manchester

Project value

£20m

Architect

Building
Management
Services

Contractor

Marshall
Construction
West Yorkshire

Project brief

This mixed use project comprised the refurbishment of the iconic Gateway House into a 182-bedroom hotel above the existing ground level of retail (and basement level public car park) together with a new 40,000 sq ft office block over 8,000 sq ft of retail space facing Ducie Street.

The £20m redevelopment of the Gateway House and Station Approach was delivered by a D&B contractor led team. Adept were appointed as civil and structural engineer for the scheme.

Simplicity and economy were the main requirements overall.

SOLUTIONS

Gateway House is one of Manchester's finest surviving buildings from the 1960s. As a result, the strategy for the refurbishment of Gateway House was one of conservation rather than reconstruction.

The building was stripped back to its existing concrete structure and reloaded to meet current envelope requirements whilst retaining the horizontals and fine grain of the existing fenestration.

New service provisions required new voids to be threaded through next to existing lift core areas, reusing some existing risers where

possible. This aspect presented some challenges due to opening up and coordination requirements.

Adept engineers studied the existing undercroft car park areas including altered Victorian barrel vaults. The new structure was generally steelwork beams craned in to trim new openings in the existing RC structure. Partial historical construction information was available but not complete, however the breadth of Adept's team experience allowed good coverage of all aspects of the project.

Rudding Park, North Yorkshire

SPA REDEVELOPMENT SCHEME

Rudding Park is a privately owned luxury five star hotel in 300 acres of gardens and woodland and is situated in Harrogate, North Yorkshire. The existing hotel has been developed and extended over a number of years. We were appointed to carry out specialist structural designs for Rudding Park's new, state of the art, contemporary £9.5m spa expansion. The spa was designed to be spacious, light and airy. Adept worked with main contractors Henry Boot and Howard Civil Engineering on the project which included a 17 metre swimming pool, a hydrotherapy suite, thermal rooms, treatment complex, restaurant and bar as well as a feature rooftop garden.

Designed by Leeds based Architects, Enjoy Design, the three storey structure features basement level treatment rooms, with the main pool on the ground floor. The sauna and steam rooms are contained within a glass structure at first floor level. From the outside, the true scale of the building is deceptive as many of the facilities are submerged below ground.

Adept designed and detailed the civil and structural elements of the project, including the reinforced concrete structures for the main building and basement areas, the swimming pool and suspended first floor level hydrotherapy pool. The spa extension is the latest addition to the hotel's impressive range of facilities which include a 90-bed four star hotel, the AA Rosette Clocktower Restaurant, golf course, cinema, conference.

"This was a stunning project to work on, however, it was also a very complex project because of the vast weights involved. The roof garden alone has a loading requirement of over a tonne per square metre in places, once it had been landscaped. To overcome this, we designed a reinforced concrete frame which has the added benefit of being extremely water tight and very good acoustically, which means parts of the building are very quiet to enhance its relaxed ambience."

**Erol Erturan, Managing Director,
Adept Consulting Engineers**

"Our new Spa surpasses anything else in the north of England. The whole project was designed to recapture Harrogate's Spa heritage, by providing a range of superb facilities in tranquil surroundings, and we were delighted to work with such an experienced team of consultants to deliver the scheme."

**Peter Banks, Managing Director,
Rudding Park**



Leeds Kirkgate Market

REFURBISHMENT AND IMPROVEMENT SCHEME

Situated in a prime city centre location, on Vicar Lane, Leeds, the Grade I Listed building had a major £12.3m refurbishment and improvement scheme by Leeds City Council. Leeds Kirkgate Market is one of the largest indoor markets in Europe and is of significant local and historical importance, having enormous relevance to the diverse communities of Leeds and the wider Yorkshire region.

Adept's role was key to the success of the development scheme. Appointed by the contractor Interserve, we provided a full range of civil and structural engineering services on the project. Our services included designing the structures for the Market's new retail units and service areas, as well as creating a brand new event space that will become one of the Market's key focal points. We were also responsible for verifying the adequacy of the roof structure, designing a replacement floor slab and upgrading the market's drainage system.

The work to the roof areas provided a large proportion of the work and Adept were able to provide condition surveys to both the historic roofs and the more recent 1976 and 1981 space frame roofs. These roof inspections were coupled with coordinating an analytical survey which proved the loading capacity of the existing structures and together enabled Adept to provide direct advice to the council on matters pertaining the roof.

"This was a complex project because the Market was mostly constructed in four main periods dating back to 1875, 1904, 1976 and 1981 and each section has its own history and challenges. Large parts of the building are in need of repair and the drainage system is antiquated by today's standards."

Matthew Ramsden, Director, Adept Consulting Engineers

"Adept's team has a wealth of experience working on other large-scale and historical buildings and immediately understood the project's requirements, which made them the ideal engineers for us to work with."

Eamonn Cahill, Senior Project Manager, Interserve



Next Distribution Centre, Doncaster

PROJECTS

WAREHOUSE AND DISTRIBUTION

Adept worked with main contractor Bowmer & Kirkland and steelwork contractor Billington Structures on the 58,000 square metre, 25 metre high distribution centre and offices for retail giant Next.

Almost 5,000 tonnes of steel was used to create the impressive and modern structure. We were responsible for both the concept and detailed design for the project situated at IDI Gazeley's 115 acre G Park in Doncaster. The project value totalled £55m.

A steel structure was the ideal solution for this build, as it was quick to construct, cost effective and accommodated the long span requirement. The structure measures 380 meters in length and has spans of up to 37 meters. We designed flexibility into the steel frame so that it not only meets the demands of Next Plc now, but it allows the option for further expansion in the future. We modelled 800 tonnes of rebar using Revit software and this generated error free information.

One end of the distribution centre has a four storey office block attached. To the opposite end, a conveyor link bridge ensures that stock can be transferred to another existing Next warehouse, across Holme Wood Lane.

The bridge is a four span, 120 metre long structure formed with a series of trusses to accommodate the double deck configuration. The lower deck features conveyors, for transporting goods and the upper deck is a pedestrian thoroughfare for staff.

"Our firm has been responsible for both the concept and detailed design for the project and we were delighted to be working on this exciting project for Next."

**Erol Erturan, Managing Director,
Adept Consulting Engineers**

"We chose to work with Adept and Billington Structures as both firms are specialists in their fields. It was a large scale complex project that demanded skilled design teams who were highly experienced and professional and we were confident with the joint efforts of everyone working on this project."

**Ben Howard, Project Manager,
Bowmer & Kirkland**





Build your future and become a part of our success

INTERESTED?

If you are interested in this opportunity and would like to discuss it further, please contact Erol Erturan:

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t: 0113 239 4518

e: erol.erturan@adeptcsce.com

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