

Waldeck Consulting
www.waldeckconsulting.com

Morson Projects
www.morson-projects.co.uk

ISSUE 4/2021

INSIGHT

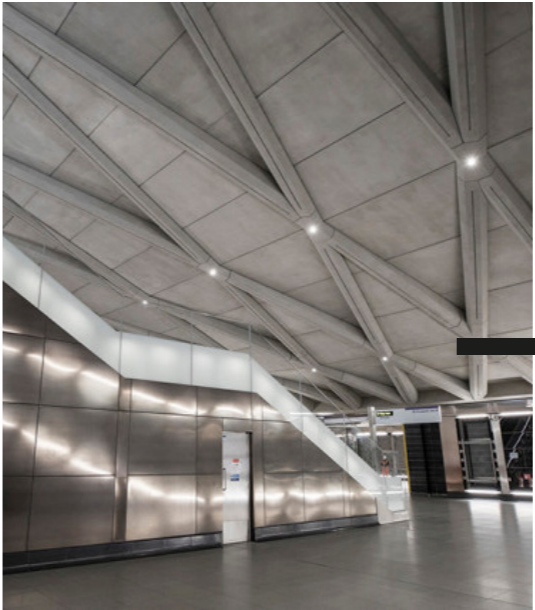
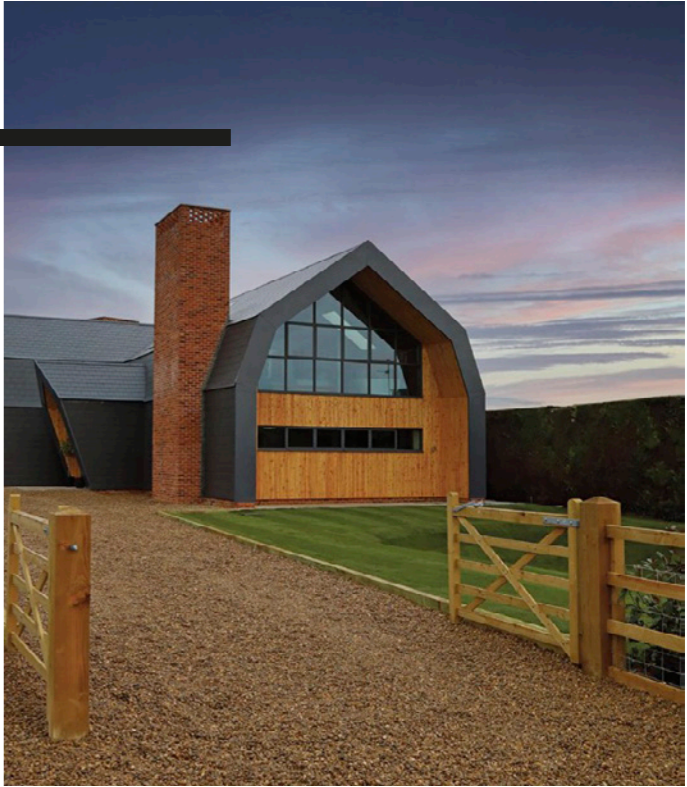
YOU NEVER
STOP BEING
AN ENGINEER
INTERVIEW

DESIGNING HOMES
FOR THE NEXT
GENERATION OF
HOME WORKERS





05 →
CASE STUDY:
GRAND
DESIGNS
PROJECT



← 10
FARRINGDON
STATION COMPLETES
CONSTRUCTION

14 →
WALDECK
WELCOMES TWO
NEW MEMBERS
TO SHEFFIELD
TEAM





CASE STUDY: **GRAND DESIGNS PROJECT**

Lincolnshire couple Nathan and Amye Marshall had grand ideas to create a Dutch-barn style property when they came across a plot of land near Weston Hills in South Holland. Channel Four's Kevin McCloud and the Grand Designs team also joined them on their journey to create their forever home.

The Waldeck team were appointed by architectural firm, Studio 11, to support them with the foundation and super-structure engineering design for a giant cathedral-like new home, which recently featured on Channel 4's Grand Designs. The building was modelled on the Dutch-barn style houses of the area – but with a sleek contemporary twist and a rather striking 5,000 tile 'armadillo' roof.

Adjacent to the property, which sits in about an acre of land, was an additional annexe which would accommodate Nathan's mum and stepdad to provide multi-generational living.

We caught up with Waldeck's Project Lead, Sanjay Dhanani, to find out more about our involvement: "Waldeck were responsible for the piled foundation and ground beam design for the project as well as the design of the super-structure steel frame to suit the Dutch-style barn shape. Our team modelled the civil and structural elements in 3D using Revit.

"On this unique project, we were able to apply the same standards and processes that we would usually use when we are designing much larger

structures, often for commercial and industrial developments. Such a large steel frame, which was necessary to achieve the Dutch-barn style roof, is not common for a house, so it was great to be able to use our expertise to help with this bespoke design solution.

"We had a couple of visits to the site, collaborating closely with the wider team in the early stages for the project, but the last time we went on site was to see the steel frame go up, so it was great to see the project progress into the final stages on Channel 4's Grand Designs.

"As always, it was a pleasure to work with Kris and the team at Studio 11 who we have been working with for several years now, supporting them on a selection of residential developments across the East Midlands.

"Studio 11 did a fantastic job of bringing this project to life and we are grateful to have been able to assist!"

Kris Baxter, Founder & Creative Director at Studio 11 added: "As usual it was a pleasure to work with Sanjay and the Waldeck team on this project. Achieving the open plan nature of the building meant that a steel frame was the only option, but the roof form created several intersection issues with

the building components that needed careful consideration. Sanjay was happy to develop those details with us and this attention to detail is reflected in the excellence of the completed home."

Home owner, Nathan shared: "We found the plot back in early 2019 and Studio 11's Kris and his team had completed the drawings and gained approval by August 2019, so work began the following month.

"As for the property itself, we wanted something architecturally different. The house is about 4,500sq ft, arranged over two storeys and has five bedrooms and five reception rooms.

"It took just over a year, from late September 2019 to November 2020, and the final filming for Grand Designs took place on 17th November 2020. That morning we were still rushing to get the last delivery of gravel down!

"To come home each evening to Amye and to the house that we've built, and to know there's a space for our parents and my older children, Noah and Ava, has really made the whole journey worthwhile." ●

Find out more: www.granddesigns.tv

MEET THE TEAM: **SANJAY DHANANI**

Following on from our engineering designs recently being showcased on Channel 4's Grand Designs, we caught up with Associate Director, Sanjay Dhanani, who led the super-structure and foundation design for the project.

Although the hour-long episode sharing the journey of building Nathan and Amye's dream home, may have been our 'fifteen minutes of fame', many of the projects Sanjay and the team have been involved with are equally (if not more) impressive.

We caught up with Sanjay, who is based in our Peterborough office, to find out more about what happens behind the scenes in our Civil & Structural Engineering team.

HI SANJAY! TELL US MORE ABOUT YOUR ROLE?

I have worked in the construction industry for over 20 years now and have been at Waldeck since 2007, where I lead a team of Civil and Structural Engineers and Technicians.

My experience covers a wide range of civil and structural engineering disciplines and has seen me working on multi-million pound schemes across sectors such as automotive, manufacturing, data centres, educational, retail, commercial and residential.

I work closely with clients and our in-house multi-disciplinary team to ensure the delivery of innovative and commercially-aware design solutions for projects across the UK.

WHAT IS YOUR FAVOURITE PART ABOUT YOUR JOB?

My favourite part is seeing the projects that the team have worked on go into construction, especially when we have seen the designs through from concept to completion. I still get that buzz!

I also really enjoy being able to work with Clients, Architects and Contractors alike to solve complex problems. For me, collaboration is key and we have a great team of engineers and technicians who work really well together to deliver projects both large and small.

WHAT WAS YOUR MOST REWARDING PROJECT?

I've been lucky enough to work on a range of significant projects, both close to home and on a national scale.

A few examples include the new Sports Centre at Stamford Endowed Schools and Primark at the Queensgate Centre in Peterborough, plus a host of complex manufacturing and infrastructure projects for Jaguar Land Rover and more recently some large Data Centres.



WHAT ARE YOU AND YOUR TEAMS' MAIN AREAS FOR FOCUS WHEN DESIGNING AND DELIVERING A PROJECT?

The key drivers for all projects have to be cost and efficiency. Finding effective engineering solutions that are economic to build provides benefits for both the Contractor and the Client. With the range and depth of experience that we have within the team, I have confidence that we are able to deliver practical solutions to the projects we work on.

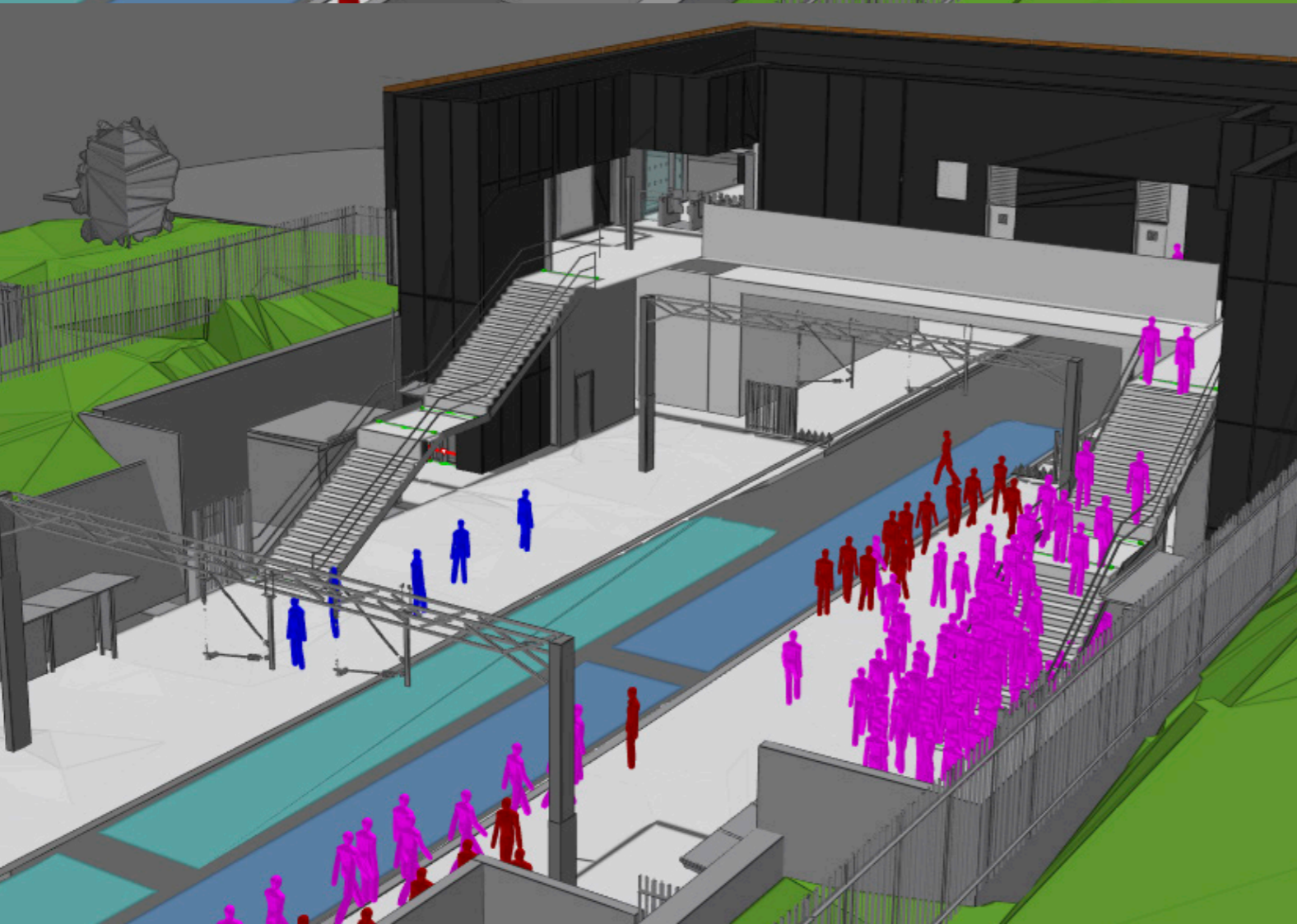
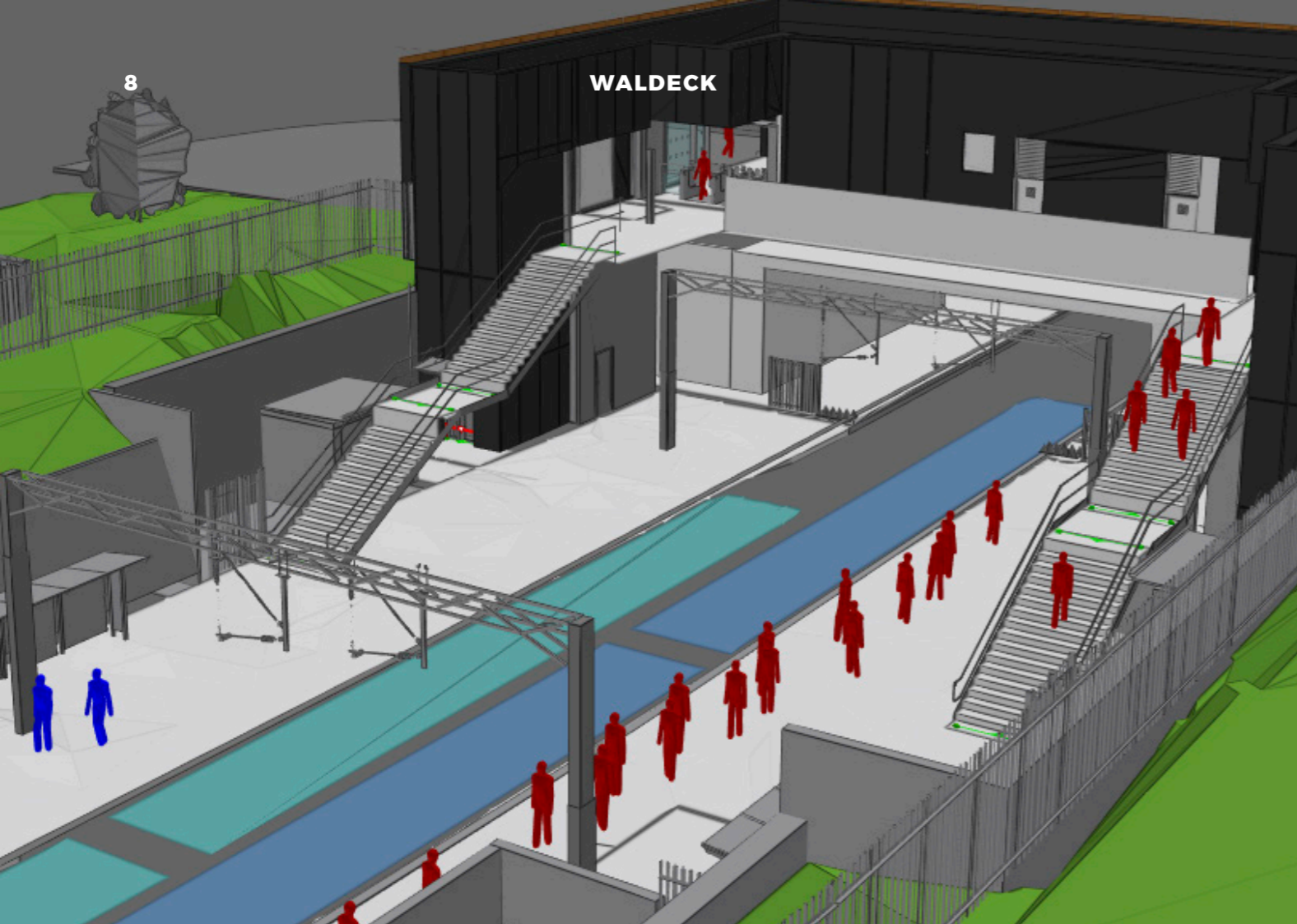
WHAT'S NEXT FOR YOUR TEAM?

The Peterborough team are currently delivering a host of medium-sized residential developments and large industrial projects throughout the UK, which have been our 'bread and butter' in recent years.

However, we're also involved in a range of projects in other sectors such as healthcare, food manufacturing and commercial retail, which we look forward to continue expanding over the coming months. Who knows, we might even get another TV appearance one day, too! ●

To find out more about how our Civil & Structural team can help you with your next project, please don't hesitate to contact Sanjay by calling 08450 990285.





A major redevelopment is taking place at the existing Perry Barr Station in Birmingham as part of the regeneration of the surrounding area for the Commonwealth games in 2022. Waldeck are the lead design organisation providing full multi-disciplinary services on the scheme for Galliford Try who are the main contractor.

As part of our involvement on the project, our team provided Pedestrian Flow Modelling.

Pedestrian Flow Modelling was used to establish the suitability of the design option for predicted future demand forecast of 1.1 million passengers in 2027, which would see a 58% increase from the base flows.

OUR SOLUTION

Our team utilised Oasys Software's MassMotion to create a 3D model from the model created by our architectural team. Simulations were set up and created to align with Perry Barr's peak train times, with Platform 1 and 2 trains arrival being 3 minutes apart with the passenger boarding and alighting demands taken from peak 3-hour survey data and factored by the 58%.

The model was stress-tested for a number of additional scenarios, including out of hours operations, event traffic, a degraded state such as when an entrance is out of use due to a malfunction or closed for safety reasons, provision of ticket barriers on peak trains and station design stress test determining maximum capacity of pedestrians during peak hours before elements are over stressed.

Pedestrian Flow Modelling has confirmed the suitability of the team's design at each GRIP stage and aided the streamlining of the scheme to suit budget and visual aspirations.

In addition, the passive provision of gate lines was simulated aiding future development of the station should these be installed at a later date.

We caught up with Associate Director, Veronica Ruby-Lewis to find out more:

CAN PEDESTRIAN FLOW MODELLING BE USED GOING FORWARD FOR ON-GOING FLOW MANAGEMENT WITHIN THE STATION?

The station is in close proximity to Aston Villa Football Ground and anecdotal evidence identified a noticeable impact on the passenger flow at such times despite only a number of trains being affected by this. An initial event train scenario was run as part of the project determining stress points, this could be built upon with further scenarios and flow options run to aid station management for such frequent events and for special events taking place, such as the Commonwealth Games 2022.

In addition, should the station undergo future design changes, then it could be used to inform design, but also temporary station environment as a result of construction work.

WOULD YOU RECOMMEND PEDESTRIAN FLOW MODELLING TO CLIENTS?

Yes definitely. The algorithm behind the agent profile mimics that of a person in terms of behaviour and decision making to suit surroundings and scenarios. This therefore can translate and be utilised to benefit many different types of projects where mass movement of pedestrians is key to the design outcome. The MassMotion software would be ideal for transport projects such as airports, bus depots, train stations, port terminals and so on, as well as event management for sporting and music events and large entertainment venues, such as stadiums, arenas, concert halls etc. ●

To find out more about how our Pedestrian Flow Modelling team can help you with your next project, please don't hesitate to contact Veronica by calling 08450 990285.

CASE STUDY:

PEDESTRIAN FLOW FOR PERRY BARR

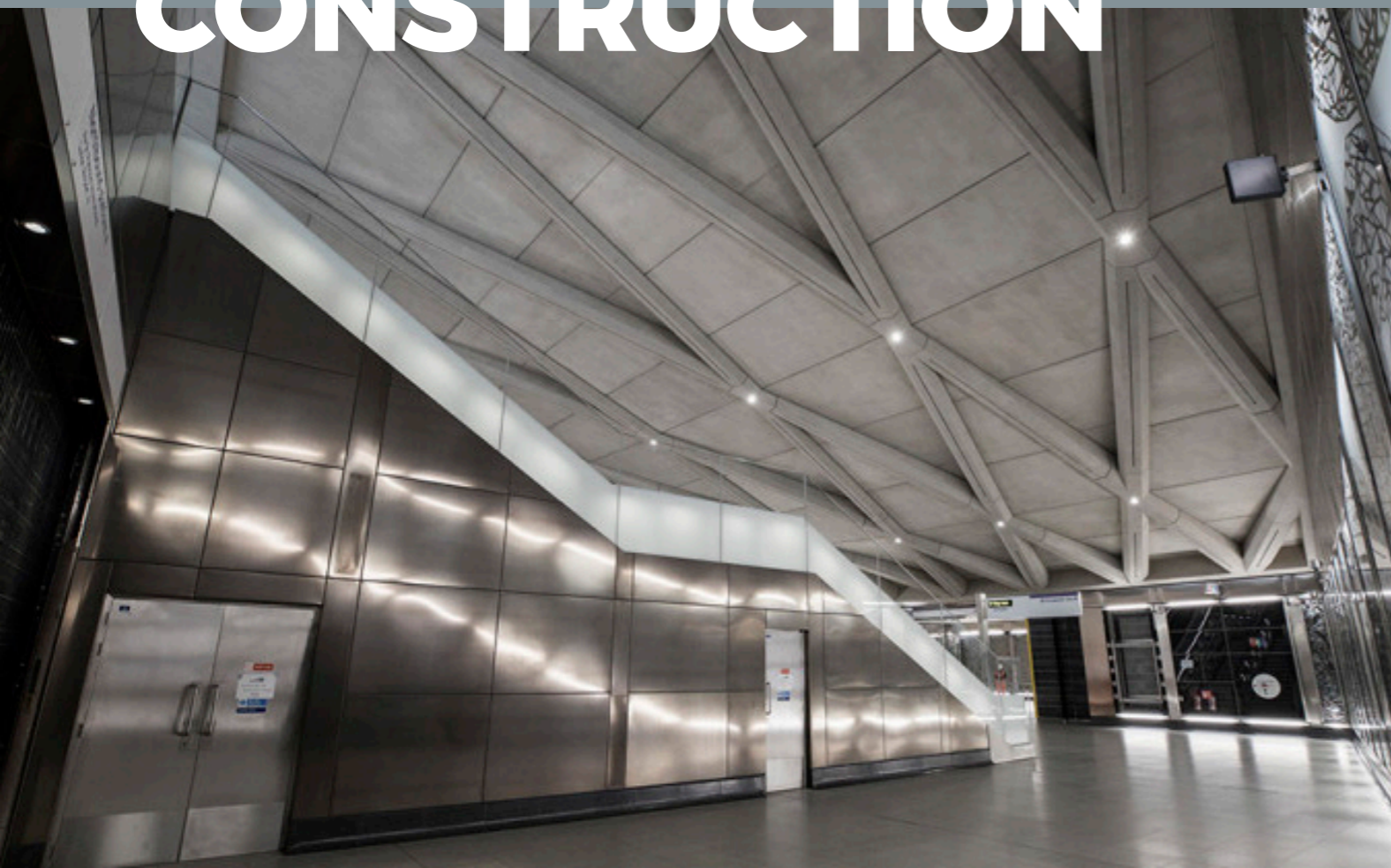


This therefore can translate and be utilised to benefit many different types of projects where mass movement of pedestrians is key to the design outcome.



FARRINGDON STATION COMPLETES CONSTRUCTION

Following our involvement in the project, we are delighted to hear that the Farringdon Station has successfully reached a momentous milestone with the completion of construction activity, as confirmed by Crossrail Ltd.



This is an incredibly important landmark for both the team at Farringdon Station and for the Crossrail project as a whole.

The station is set to be one of the busiest in the UK, connecting with Thameslink and the London Underground to run links with outer London, the home counties, the City, Canary Wharf and three of London's five airports.

Farringdon Station is the first of the central London stations to reach the T-12 landmark. This means the station works have reached a significant point and are now considered to be 12 weeks away from being ready for handover to Transport for London (TfL), who will operate the Elizabeth line.

Work at the station will now focus on the widespread testing and commissioning of systems ahead of the Elizabeth line opening.

Farringdon Station has been built by the BAM, Ferrovial and Kier Joint Venture (BFK JV) and will have accessible step-free access for passengers from street to train.

Waldeck were responsible for creating the precast concrete design for striking new architectural ceilings at the station.

Tim Leach, Director of Civil & Structural Engineering at Waldeck, explains: "Our Civil and Structural Engineering team were given the conceptual designs for the roof and tasked with digitally creating the detailed design for the ceilings. The bespoke pre-cast concrete ceiling consists of over 100 diamond-shaped concrete segments, which were pieced together on-site to create a dramatic lattice roof.

"The 25m ceiling weighs over 360 tonnes and is suspended to create a memorable cathedral-like entrance to the station, inspired by the historic Hatton Garden jewellery quarter located opposite the station."

Mark Wild, Crossrail Chief Executive, said: "This is an incredibly important landmark for both the team at Farringdon Station and for the Crossrail project as a whole.

"We have now reached the end of the construction phase at the first of our central London stations and the start of the testing and safety assurance journey which will enable us to hand over the station to Transport for London and open the Elizabeth line to passengers.

"I am proud of everyone who has worked so hard to get this magnificent new railway station over the line and I know that when it is open to passengers it will become an important and much-loved addition to London's transport network." ●

To find out more about how our Precast Design experts can help you with your next project, please don't hesitate to contact Tim by calling 08450 990285.



Click here to take a virtual tour of the new station

DESIGNING HOMES FOR THE NEXT GENERATION OF HOME WORKERS



Many of us have experienced the influence the pandemic has had on normalising remote working, which raises many questions for the future; will we back go to the office again – and, if so, how often?

This unexpected shift to flexible working has provided a once-in-a-generation opportunity to reimagine everything about how we do our jobs, and where we do them from, with research by the BBC showing that only 12% of people want to return to full-time office work, and 72% would prefer a hybrid remote-office model moving forward.

For the interim, this shift in behaviour may mean rearranging your living room or adding a filing cabinet to the corner of your dining room, but in the long term there will be increasing pressure on housing developers to deliver homes that meet the long-term needs of a large proportion of the UK population.

A 'hybrid' way of working will have a huge impact on the space people require in order to work, learn and create, both at home and in the office. Whilst office spaces can transition into a hot-desk style model with little difficulty, the considerations required for a 'work from home' scenario are more complex.



We caught up with Director of Architecture, Stuart Denniss as he uncovers the three key areas for consideration when designing and re-designing homes fit for the future:

Over the course of the last year, everyone has had to reconsider how they work and live. As a result, whoever you speak to will have anecdotes of where something hasn't gone quite right, be it kids screaming, dogs barking or random family members walking around in the background of important meetings.

Whether considering the refurbishment of an existing home for a private homeowner or discussing a

It is without question that the current global pandemic has had a significant impact on the way we spend our time, and in particular, how we spend our time at home.

new prototype modern dwelling for a developer, designing a future-proof property is about understanding the real needs of the end user. Engagement is key to this process and therefore we must walk in their shoes to fully comprehend this.

It is not difficult to understand that the main function required for a dwelling suitable for a balanced home and working life is flexibility. Finding a healthy work and home-life compromise can become difficult when both places are the same. From an Architectural perspective, there are three key elements to consider in the design or re-design of a modern home:

SPACE AND ENVIRONMENT

When working from home, the ergonomics of stretching over your dining room table or those flickering LED lights in the kitchen are all factors of your Space and Environment. Ensuring that there is adequate space and suitable lighting in a room is important. We must be comfortable in our surroundings to ensure maximum concentration. This may include planning spaces compactly and considering moveable elements such as screens as a way of allowing flexibility. The considered positioning of working spaces and controllable lighting systems are other ways of maximising efficiencies and minimising disruption when using spaces for both work and home life.

Of course, the external environment is also very important for us all. We can use these areas for either a time out from the pressures of the day or incorporate them into our views which can enhance our productivity and mental health. Consideration has to be given to the overall environment not just the space immediately surrounding us.

Going forward, detailed discussions need to be had with local authorities and developers to ensure the best utilisation of our green spaces to assist with the shift towards 'hybrid' working.

ACOUSTIC

The sound of the dishwasher or kids screaming in the background of your Zoom call both relate to the Acoustic design of your space.

Designs must consider the acoustics of each space to ensure the right level of internal room noise or external environments are controlled, these can come in form of removable objects or fixed fittings, but also layout and space planning of the overall dwelling, location and internal room details are essential to ensure a suitable working environment.

SUSTAINABILITY

Although working from home has reduced the need for travel and in some areas of the world, has turned the sea blue again, many of us are now using more energy at home. Concerns include extra heating for the long periods of time we are in our homes and the increased use PCs or laptops being utilised for over 8 hours a day, our energy consumption has increased up to 30% in the average home, which on the most part has decreased the Sustainability of our homes.

Increased energy consumption at home can be counteracted within the design of new dwellings through the use of external envelope materials such as Hempcrete (which would also in turn reduce the level of Mechanical & Electrical installation required). In existing dwellings, increasing the sustainability of a space can be more difficult due to the materials which have already been used, but the installation of basic control systems and thermal upgrades are definitely an option to consider.

Whatever the future brings, we are in a new world of working and the future of our working lives have been changed forever. As a result, our homes and buildings must evolve to maintain an enjoyable work and home life balance. ●

WALDECK WELCOMES TWO NEW MEMBERS TO SHEFFIELD TEAM

We have recently welcomed two new starters to our well-established Mechanical & Electrical Building Services Design team, based in Sheffield.



Joe Armitage

ELECTRICAL ENGINEER

Joe is an experienced Electrical Engineer and skilled IET (The Institute of Engineering and Technology) member and has been a valued addition to the busy team due to his wide range of experience on projects both in the UK and the Middle East.



Angus Knowlson

GRADUATE MECHANICAL ENGINEER

Last month we welcomed Graduate Mechanical Engineer, Angus Knowlson to our team. Angus has recently finished his studies in Mechanical Engineering (BEng Hons) at the University of Manchester which is accredited by the IMechE.

HI BOTH, WELCOME TO WALDECK! HOW HAS YOUR FIRST MONTH BEEN?

JOE: Thank you! This first month has been slightly different from past experiences due to the global pandemic, which is to be expected. Where the simple things like shaking hands and face to face introductions seem a distant memory.

But apart from the pandemic, my first month has gone very well and I have been given a great opportunity to join Waldeck during an exciting time! I managed to spend my first week in the Sheffield office where I had the opportunity to meet Steve and Adam, go through some training and start looking at Waldeck's existing projects. Since the current lockdown, I have been remote working helping the team out on a number of projects and using this time to meet the remainder of the team via Microsoft Teams.

ANGUS: Thank you! I've been given a very warm welcome to Waldeck over this past month, meeting a lot of the team and work closely alongside Principal Mechanical Engineer Luke Mitchell.

I spent the first week in the office, getting to grips with the software and learning the trade, before continuing to work from home due to the pandemic. Microsoft Teams and Whatsapp have definitely been useful in getting to know the team. I've also experienced a few visits to some of the sites the team are working on which has proved valuable.

WHAT PROJECTS ARE YOU WORKING ON?

JOE: My project experience primarily includes residential, hospitality, industrial, commercial, high spec office developments fit-outs and

educational facilities which has made it really easy for me to fit right in with the type of projects the team are currently delivering.

The first few weeks I initially started helping the team out on a number of different projects including a primary school and high-end hotel, which has helped me meet the teams from other disciplines and further develop my BIM experience.

Currently, I am working on a refurbishment project for an existing sheltered apartment block where Waldeck are appointed to provide a multi-disciplinary design. Working on this project will give me the opportunity to collaborate with some of the other disciplines at Waldeck which is something I am excited about.

ANGUS: I've been helping out on a range of projects including primarily a rail depot, a prison block and some university buildings. There are also several residential and healthcare projects I am looking forward to getting involved with over the coming weeks. The projects have given me a chance to meet the wider team and collaborate with a mix of disciplines.

WHAT PARTICULAR SKILLS DO YOU BRING TO THE TEAM?

JOE: During my time in the Middle East, I gained experience in sustainable design on various projects that achieved different levels of certification from multiple sustainability assessment methods such as LEED, BREEAM and WELL.

To further add to my sustainable design experience, I participated and completed a Sustainability Diploma that consisted of 120 CPD hours and focused on upskilling designers in sustainable and low carbon design

...it has become apparent that the company holds sustainability and innovative designs as a key company value to success and with my experience, I hope I can contribute to Waldeck designing a more sustainable built environment.

solutions across the whole built environment. Since joining Waldeck it has become apparent that the company holds sustainability and innovative designs as a key company value to success and with my experience, I hope I can contribute to Waldeck designing a more sustainable built environment.

ANGUS: I'm technologically fluent, a quick learner and competent in what I do. I consider myself hard working and dedicated and so far I've really enjoyed getting stuck in to some of the current projects the team are working on.

Sustainability is really important to me so I hope to be able to be able to build my understanding and experience around sustainability conscious design solutions and apply these to the projects I work on.

WHAT IS YOUR FAVOURITE PART ABOUT YOUR JOB?

JOE: The most enjoyable part of my job is the diversity that comes with being a Project Lead Engineer which includes the design, development and implementation of a vast scope of electrical installations for a wide range of projects/buildings and applications. This allows me to work closely with clients and to collaborate with other disciplines to design innovative solutions that best suit the client's requirements.

ANGUS: I've really enjoyed applying the knowledge from my degree into real-life scenarios, I consider myself to have a logical mind-set, so combining that with what I've learnt throughout my degree has been going really well so far.

I had some great Fish & Chips at a place called 'Whitby's Fish & Chips' which is local to the Sheffield office too!

WHAT'RE YOU LOOKING FORWARD TO MOST ABOUT THE NEXT FEW MONTHS AT WALDECK?

JOE: First things first, on a personal level I hope the current pandemic slows and the lockdown eases so I can meet the team face to face (hopefully over a beer).

Professionally, I am looking forward to developing my BIM skills to further understand how BIM integrates the whole design process resulting in reduced project risk and therefore improving its success.

Lastly, being a member of the IET I am currently working towards my chartered status and hope that this is something I will achieve within the next couple of years.

ANGUS: I'm very much at the start of my career so I'm looking forward to working closely with the senior engineers in the team to learn more about the role and improve my technical knowledge and software skillset.

Leading my first project in the near future is also something I'm really looking forward to. ●

To find out more about how our Mechanical & Electrical Building Services Design team can help you with your next project, please don't hesitate to contact Joe or Angus by calling 08450 990285.

NATIONAL APPRENTICESHIP WEEK: APPRENTICE CATCH-UP

Our Apprenticeship Scheme recruits groups of school and college leavers and graduates onto our bespoke programme which combines their studies with on-the-job training, enabling them to become fully qualified CAD Designers and Engineers working on real-life projects.

We caught up with two of our Apprentices to find out more about their experiences during an apprenticeship.

HI BOTH! TELL US ABOUT YOUR EXPERIENCES SO FAR OF DOING AN APPRENTICESHIP?

JOE: During my apprenticeship and continued learning, I have been balancing my one day of study through Lincoln College and college work, with working at Waldeck on live multi-disciplinary projects for a variety of clients.

The main projects I have been involved with are large new-build infrastructure schemes for clients across city regeneration and rail.

My main roles have been to work within the Civil Engineering team, carrying out drawing work from engineering designs, document control, carrying out variations, responding to RFI's and TQ's and keeping our document management systems up to date; I have been using software such as AutoCAD, Civils 3D and Revit.

I was also given the opportunity to complete my BIM Essentials course, and train on niche software relevant to different projects I have been working on.

GEORGE:

During my apprenticeship so far, I have been balancing University studies alongside working at Waldeck on live multi-disciplinary projects for a variety of clients. I have been involved in a variety of projects including Energy from Waste (EfW) schemes and new-build hotels as well as retail, rail, and education sector projects.

My main roles have been to work closely within the M&E Team, carrying out the electrical tasks required on projects including, calculations, drawings, specifications, document

control. Since starting at Waldeck with no previous design experience I have become proficient in using, Relux, Amtech, Revit, AutoCAD.

I have also been able to complete CPD Seminars and short courses such as BIM Essentials, as part of the workplace learning which is a requirement of the apprenticeship.

WHAT FIRST INTERESTED YOU IN A CAREER IN CONSTRUCTION?

JOE: My Dad owns a local construction business, so it is something I have grown up around. I used to work with him at the weekends when I was at school, and really enjoyed it, so decided to take BTEC construction subjects at Sixth Form, before I then considered my routes into a career within the industry and chose to pursue this through an apprenticeship.

GEORGE: I have always been interested in engineering and construction from a young age. At 16 I managed to get a placement at an electrical contractor becoming a Level 3 Electrical Installation Apprentice.

From this time the apprenticeship route has always appealed to me and therefore I moved to Waldeck as a career progression but also due to Waldeck's employee investment commitments via training.

WHAT HAS BEEN YOUR PERSONAL CAREER HIGHLIGHT SO FAR?

JOE: I have really enjoyed my time at Waldeck so far, working as part of a strong team to achieve tight deadlines and deliver quality work.

I have surprised myself with how quickly I am learning and progressing. I feel very settled in my role and am positive



LEEDS
BECKETT
UNIVERSITY



George Naylor

ELECTRICAL DESIGN ENGINEER

Mechanical & Electrical (M&E) Building Services Design team

George has been working at Waldeck since 2018, where at the age of 20 we welcomed him as an Assistant Electrical

Engineer as part of the team. George then enrolled onto the degree apprenticeship scheme in 2019, studying BSc Building Services Engineering at Leeds Beckett University, which he is due to complete in 2021.

about my future prospects. It is great to feel like I have achieved something at the end of each working day, especially as each project we work on is so different.

GEORGE: I have really enjoyed being able to transfer my onsite skills into the role I now perform at Waldeck. Understanding the tasks which the onsite operatives need to undertake, helps in producing designs which ensure 'buildability'. I enjoy working as part of a team at Waldeck, as well as building relationships clients and other disciplines within the projects.

Working directly with contractors on projects giving them solutions as well as gaining good feedback, on Waldeck's quality of work, is a personal highlight.

WHAT ARE YOUR PLANS FOR THE FUTURE?

JOE: For now, I want to keep doing what I am doing, stay focused on my College course and developing my role at work. Having the support of my mentor, and other experts in the business is helping me to pick up new skills and expand my knowledge, and I would definitely like to continue to learn about the other disciplines too.

After completing my HNC, I would then like to complete a HND to then go on to completing a degree, and perhaps become Chartered at some point in the future!

GEORGE: As part of my Degree Apprenticeship, I will be applying to CIBSE to become an Associate Member as well as gaining Incorporate Engineer (IEng) Status, this will be a massive achievement for me and gives me a good steppingstone to becoming a Chartered Engineer (CEng). In September I hope to enrol onto a MSc Building Services Engineering course to further enhance my Building Services knowledge as well to gain the



Joe Baker

JUNIOR TECHNICIAN Civil & Structural (C&S) Engineering team

Joe has been working at Waldeck since 2017, where at the age of 18 we welcomed him as a Trainee Technician as part of our apprenticeship scheme. Joe began his apprenticeship with a

Level 3 Construction Technical and Professional: Construction Contracting Operations course and is now in the first year of his Higher Education course studying a HNC in Construction and the Built Environment – Civil Engineering at Lincoln College, which he is due to complete in 2022.

accredited qualification required in order to attain CEng Status. Within Waldeck I hope to be a critical part of the M&E team and work towards project managing complex projects. I also hope to become a role model and mentor to younger engineers as I am able to offer advice on their training options to encourage future engineers in achieving their career goals.

IN THE FACE OF A SKILLS GAP AND LACK OF PEOPLE CHOOSING A CAREER IN STEM SUBJECTS, HOW WOULD YOU INSPIRE SOMEONE TO TAKE A SIMILAR ROUTE INTO THE WORKPLACE?

JOE: I would say if you were considering taking a route into construction or any other STEM subject, it is important to think about what interests you the most. I have seen first-hand how the roles can be so varied, creative and rewarding.

For me, an apprenticeship was the best option, it has been a great way to get into the workplace, combining education with hands-on learning and transferable skills that I wouldn't necessarily have learnt at University, such as liaising with clients and working within a design team. The social aspects (pre-Covid) have been great too!

GEORGE: Apprenticeships are available in a huge variety of subjects now, especially within STEM subjects. I would encourage any aspiring young person to find something which interests them and apply for apprenticeships in that field.

My personal opinion is that an apprenticeship is a good route as you are performing the job within the workplace whilst studying at college or university. The skills you learn in the workplace are beneficial to the classroom and vice versa. There is no cap on how far you can take your training or career after completing an apprenticeship. ●

IAN WALTON

As part of a series of 'Meet the Team' interviews with our Architecture team, we caught up with Associate Director, Ian Walton, to find out more about his role at Waldeck.

Ian is a knowledgeable member of our team with over 25 years experience working on projects across the pharmaceutical, residential, leisure, office, retail and industrial sectors for clients in the UK, Europe and the Far East.

Ian joined Waldeck in 2019 and has been an integral part of our Architecture team ever since. He has been working within our multi-disciplinary team on a range of projects for clients including Network Rail, Glaxosmithkline (GSK), Phenix Suites and Premier Foods.

In his spare time, Ian enjoys cycling and going on family walks with their dog.

SO IAN TELL US A LITTLE BIT ABOUT YOUR ROLE AS AN ASSOCIATE DIRECTOR?

I have found that my expertise has come to fruition within my role at Waldeck. Having a wide range of sector knowledge which has evolved over the past 25 years, including my time working for different sized Architects practices, has been of huge benefit to my role as Associate Director.

I enjoy being an integral part of a team and working on a variety of sized projects from large rail schemes to smaller leisure and retail work.

WHAT IS YOUR FAVOURITE PART ABOUT YOUR JOB?

I really enjoy the client day-to-day contact, and quite simply, making them happy and appreciative of our work and effort which goes into creating their projects. I like seeing a project through from the initial start-up meeting and then running this all the way to completion and handover. Knowing the beginning product and then seeing it finalised is hugely satisfying.



WHAT HAS BEEN THE MOST REWARDING PROJECT TO WORK ON SO FAR, AND WHY?

All projects whatever size are as equally important in my view. I am currently working on a new Network Railway Station project, running and being part of that Architectural team has its challenges due to a logistically difficult site, but seeing it being built onsite is the rewarding element which makes it all worthwhile.

WHAT ARE YOUR MAIN AREAS FOR FOCUS WHEN DESIGNING AND DELIVERING A PROJECT?

The starting point is always the client aspirations and brief, and then expanding on these expectations. Communication is key to the success of any project alongside a collaborative working ethic. Every single person involved in the delivery of a project is crucial to its success, and starting with a suitable and thought-through design is the fundamental starting point for any project.

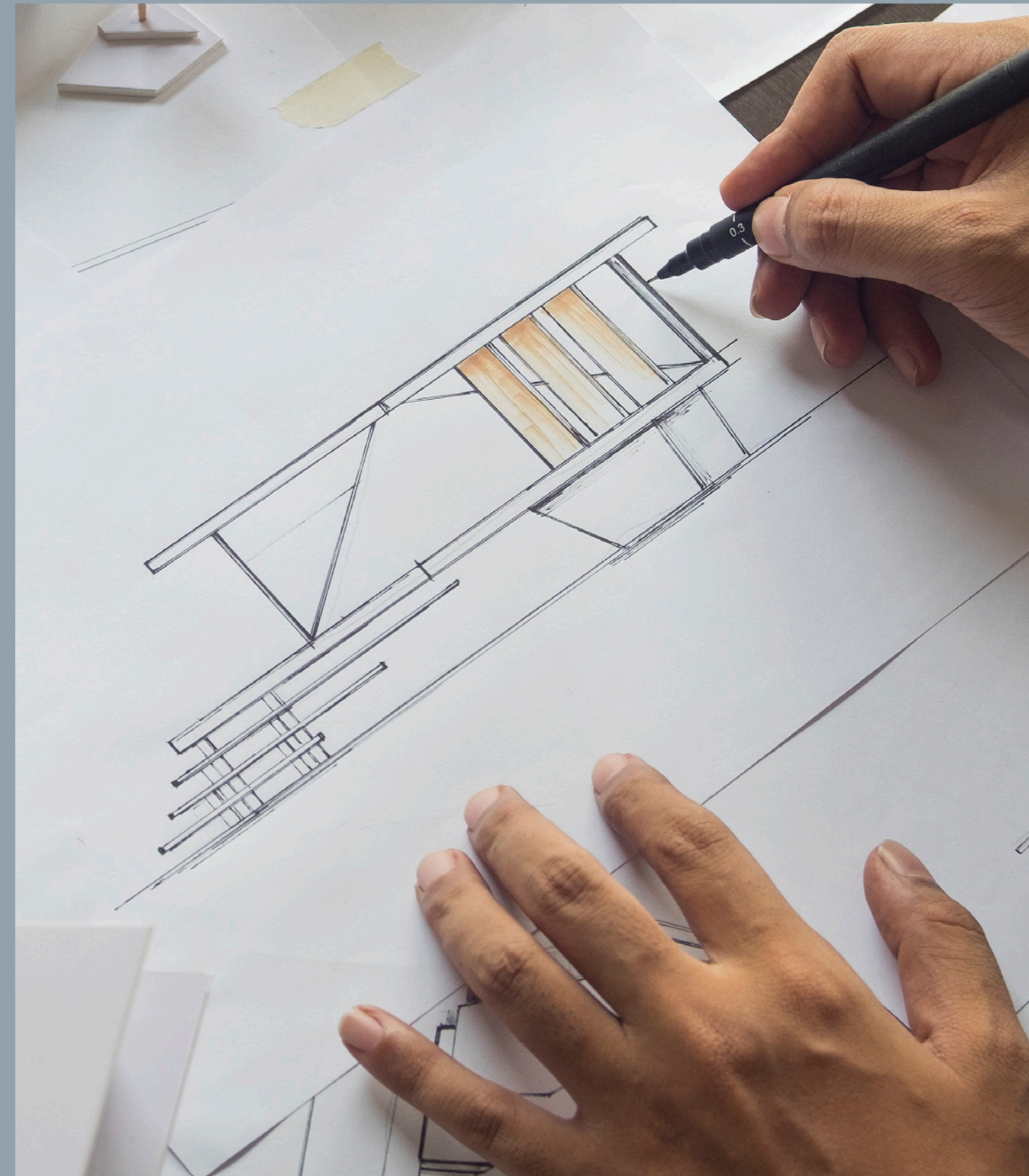
WHAT'S NEXT FOR YOU AND THE ARCHITECTURE TEAM?

Waldeck have a fantastic Architectural team at all levels of the business and all of these design and delivery levels matter. The current team have a diverse range of sector experience and growing these new sectors will be the main focus moving forward. ●

To find out more about how our Architecture team can help you with your next project, please don't hesitate to contact Ian by calling 08450 990285.

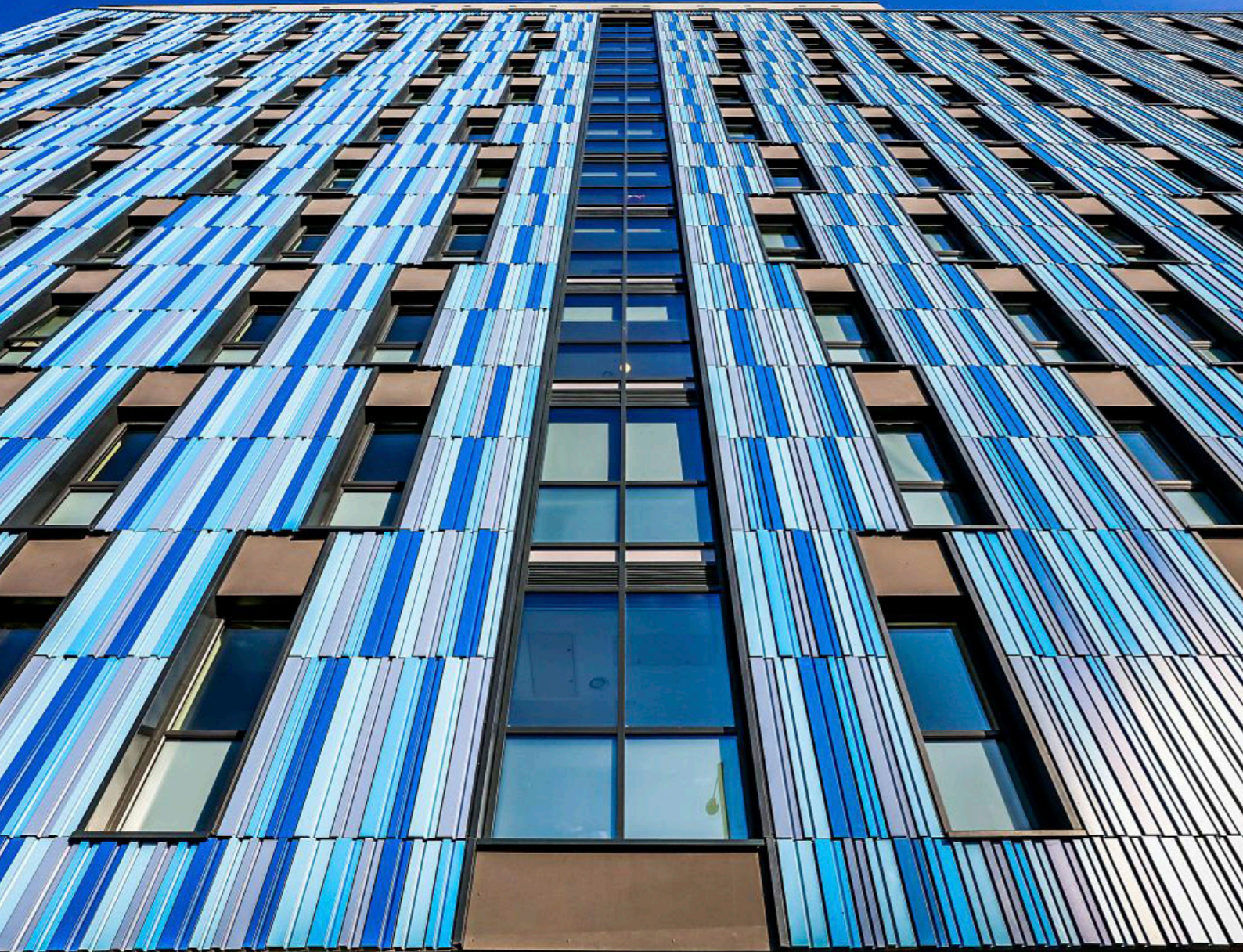


Every single person involved in the delivery of a project is crucial to its success, and starting with a suitable and thought-through design is the fundamental starting point for any project.

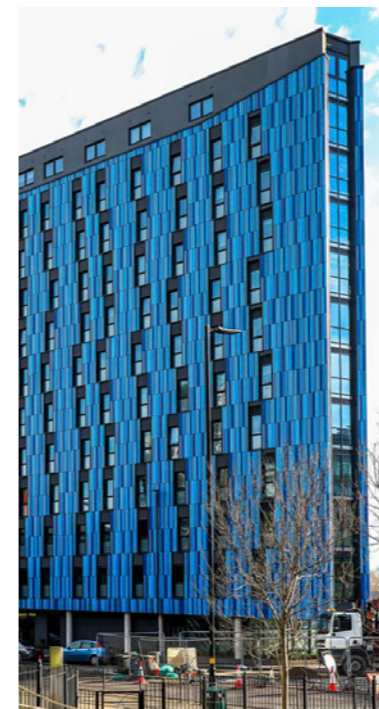


|| We have been involved in over £700million worth of projects under contract, which in itself is a great achievement.

WALDECK'S COMMERCIAL TEAM CELEBRATES 4 YEARS



As our Commercial team celebrate their 4th anniversary since the opening of their Birmingham office, we caught up with Director, Graham Wright, to find out more about how the team has grown and what services the team are now able to offer clients.



HAPPY ANNIVERSARY TO YOUR TEAM, GRAHAM! TELL US A BIT MORE ABOUT HOW YOUR TEAM HAS GROWN OVER THE PAST FOUR YEARS?

Thank you! The team started off as just me and a business plan to help provide solutions to our clients, with the ambition to provide a high-quality Commercial & Risk Management service, with senior team members running the projects on a day-to-day basis.

As our offering has grown, we have been able to recruit more experts into the team, all who have brought in additional experience across a range of sectors including residential and care, retail, hotels, education and commercial.

We were originally offering Interim Management and Health and Safety services and have since expanded this offering to deliver Quantity Surveying, Employer's Agent, Project Management, Contract Administration, Building Surveying and Clerk of Works across a range of multi-million-pound projects.

WHAT SORT OF PROJECTS HAVE YOUR TEAM BEEN WORKING ON?

The main sectors for us are the housing, care, extra care and commercial sectors, however we also provide Building Surveying across the retail and industrial sectors.

We have been involved in over £700million worth of projects under contract, which in itself is a great achievement. We look forward to continuing to work closely with clients such as Orbit Homes, Premier Foods, Harrods, Stonewater, Wrekin Housing, Platform Housing, Shropshire Council and WCS Care.

HAS THERE BEEN A HIGHLIGHT FOR YOU OVER THE PAST 4 YEARS?

One of our residential projects, Fordham House winning the 'Best Build for Rent Development' award at the Inside Housing Development Awards was definitely a highlight for us. We worked on behalf of our long-term client, Orbit

Homes, to deliver Project Management for the scheme, which is situated on the corner of Birmingham Road and Clopton Road and features 82 high-quality homes.

We've also just finished Bath Court, a 435 Student Accommodation scheme over the past 3 years which is situated in Birmingham City Centre, on this project we acted as Employer's Agent and Project Management support.

The main highlight for me is that we've built some fantastic relationships with clients and are able to work with them on an on-going basis, we've got some great schemes in the pipeline as a result of this. Examples of this are where we have a portfolio of projects with clients such as Orbit Homes, Stonewater Housing and Wrekin Housing, where we have over £40million in build contracts at any one time.

WHAT'S NEXT FOR THE COMMERCIAL TEAM?

As I've mentioned above, we have some strong roots in Birmingham and a fantastic team, which has led to us having solid relationships across the housing, care and extra care sectors.

We are in the process of now replicating our West Midlands team and building a similar offering across the North West (covering Manchester, Liverpool, Chester etc) and the East Midlands (covering Lincolnshire, Nottinghamshire, Leicestershire, Yorkshire etc). We are already delivering a selection of schemes and have secured positions on the ICNW, Fusion21, Re-allies and Pagabo Frameworks for these areas.

We're also currently recruiting for two Associate's to head up these two new divisions. Find out more about these roles on our careers page. ●

To find out more about how our Commercial & Risk Management team can help you with your next project, please don't hesitate to contact Graham by calling 08450 990285.



WALDECK WELCOMES BACK LIAM WILLIS AS TRAINEE QUANTITY SURVEYOR

Last year, we caught up with Placement Quantity Surveyor, Liam Willis, before he embarked on his final year of his BSc in Quantity Surveying at Sheffield Hallam University. And now, we are delighted to welcome Liam back as a Trainee Quantity Surveyor!



We are delighted to have Liam back with us, he proved a valuable resource to our team and client's and I look forward to seeing him continue to learn and grow during his time with us. Welcome back!

HI LIAM, IT'S GREAT TO HAVE YOU BACK! WHAT ARE YOU MOST LOOKING FORWARD TO IN YOUR NEW ROLE?

Thank you... It's great to be back. I am really looking forward to working with the Commercial team again as they continue to help me gain valuable knowledge and experience in Quantity Surveying.

I have been able to apply the skills I developed throughout my placement to assist in completing assignments and exams at university and look forward to putting this back into practice on real world projects.

YOU'RE STILL FINISHING OFF YOUR FINAL YEAR STUDIES TOO?

Yes, I still have just over 2 months left at university before completing my degree in Quantity Surveying. Waldeck have been really accommodating, allowing me to work part time, providing the flexibility to attend university whilst working. This provides me with the perfect blend of academic learning whilst gaining hands on experience.

WHAT EXPERIENCE FROM YOUR PLACEMENT AT WALDECK WILL YOU BRING BACK INTO THE WORKPLACE?

I learnt a lot during my placement, but one of the key points I took away for sure is that good relationships and collaboration are vital to delivering successful projects and always equate to a better outcome. Following my return to Waldeck, I look forward to re-establishing and creating new working relationships with clients and colleagues. During my placement I gathered a lot of information about Waldeck's work processes, which has allowed me to hit the ground running when I returned back to work.

Graham Wright, Director of our Commercial & Risk Management team, added: "We are delighted to have Liam back with us, he proved a valuable resource to our team and clients and I look forward to seeing him continue to learn and grow during his time with us. Welcome back!" ●

To find out more about how our Commercial & Risk Management team can help you with your next project, please don't hesitate to contact Liam by calling 08450 990285.



WALDECK RESIDENTIAL TEAM HELP CLIENTS HIT YEAR-END TARGETS

Our Commercial team have been supporting our residential clients for their year-end targets and we are pleased to have achieved handover of all our units.

As well as this, we are pleased to share that we have secured new projects and exchanged on new schemes across the Midlands and North West, for clients including:

- Pioneer Housing
- Orbit Homes
- Wrekin Housing
- Accord Group
- Midland Heart
- WHG
- Citizen Housing
- Warwick Council
- Great Places Housing
- Stripe Homes

We are looking forward to now delivering the next phase of 450+ new residential and later living units. This is a fantastic achievement with thanks to our team, as we celebrate £60million of new contracts being awarded to our partners, including:

- Jessup Brothers
- Piper Homes
- Countryside Properties
- Fitzpatrick
- Partner Construction
- SJ Roberts

We also have 600 units to contract by June 21.

Graham Wright, Director, shares: "Our team continues to grow, and the progress we have made is fantastic. We are very much looking forward to working with our existing and new clients and partner constructors over the coming months and years on a range of important schemes.

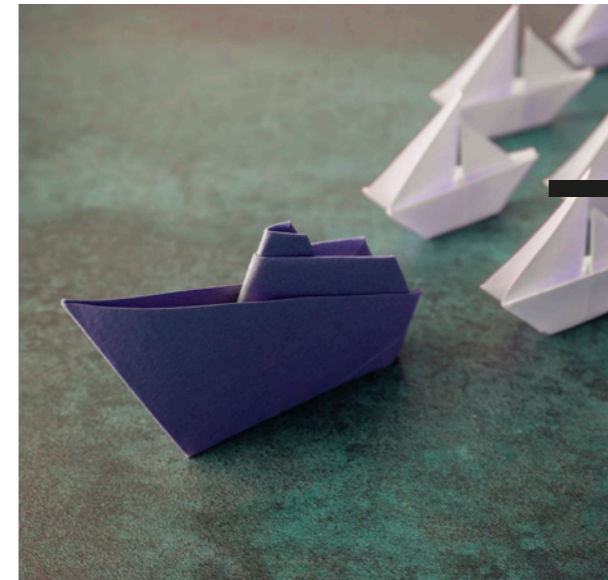
"We are also pleased to welcome our new Head of Project Management, John Priest to the team, John will play an important role building the project management team and expanding our services by growing existing commercial and retail and private housing sectors." ●

To find out more about how our Commercial & Risk Management team can help you with your next project, please don't hesitate to contact Graham by calling 08450 990285.



Our team continues to grow, and the progress we have made is fantastic. We are very much looking forward to working with our existing and new clients and partner constructors over the coming months and years on a range of important schemes.





← **28**
YOU NEVER
STOP BEING
AN ENGINEER
INTERVIEW

34 →
APPROVED
SYSTEMS
INTEGRATOR
FOR CODRA



↓ **48**
MEET THE PANEL
BUILD TEAM



“YOU NEVER STOP BEING AN ENGINEER” – THE BENEFITS OF ENGINEERING SKILLS IN BUSINESS LEADERSHIP

In a 2020 report, it was indicated that 28% of chief executives at Fortune 500 companies had an engineering degree, with 34 of the top 100 of the Harvard Business Review’s Best Performing CEOs also being engineers.



This was the case even in companies that weren’t themselves engineering-based, such as Jeff Bezos at Amazon. But how can a background in engineering help develop the skills needed for a senior leadership role, and why are so many companies succeeding with engineering-savvy CEOs?

Within Morson Projects and the wider Morson Group, several of our longest-serving directors began their careers within the Morson Projects division of the business as engineering apprentices, working their way through the business to hold key executive positions.

Morson Group Managing Director Dr Kevin Gorton, said: “For me, engineering gives people a clinical way of thinking and solving problems. It allowed me to visualise the world through a deterministic lens, making decision making easier. Engineering provides a great platform to build qualifications and learning across different disciplines and sectors. It has given me the confidence and drive to be successful. I would recommend young people to become engineers because of the skills and diversity of the discipline, from mechanical to civil engineering market sectors.”

Morson Projects Managing Director, Chris Burke, said: “As an engineer you are taught to have a logic fact-based approach to any situation. I hope that this approach helps team members understand the mission at hand and use facts to work out whether they are winning or losing. As with many professions, engineering is rooted in an apprentice culture. It is well understood and accepted that senior engineers have a duty to bring along the younger generation. As a result there is a natural expectation to lead young aspiring engineers, I have always enjoyed this leadership privilege.”

We spoke to two of our design apprentices who have gone on to have long careers throughout Morson; Morson Groups Client Services Director Steve Seddon and Morson Projects’

Business Development Director Andy Hassall, to find out how their engineering and design backgrounds have helped propel them through a combined experience of almost 80 years with Morson.

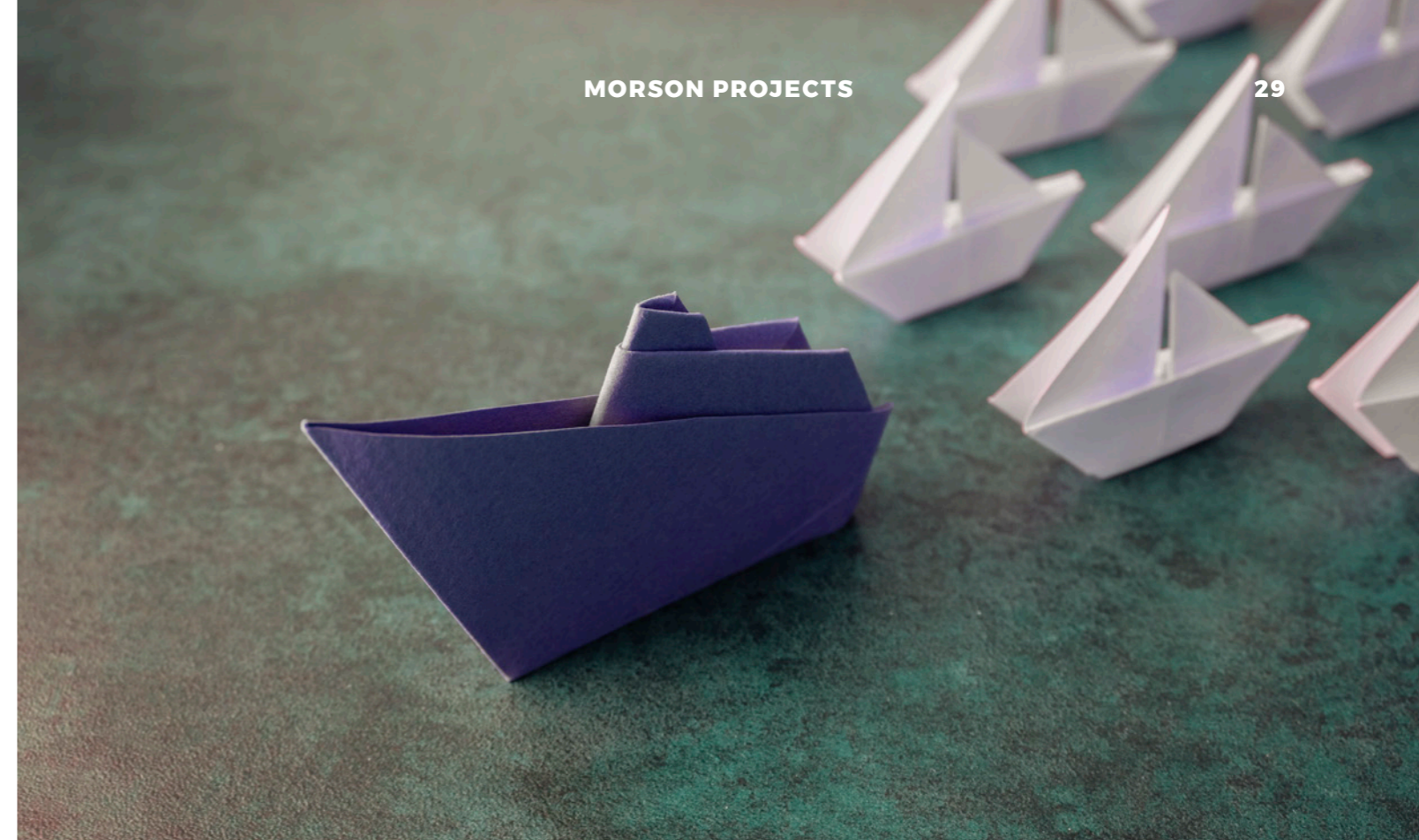
PROBLEM-SOLVING

“Engineers are generally practically and academically trained throughout their career and wired in the same way. We see the world through eyes that analyse, apply logic, question why things are how they are and look for opportunities to improve. Our purpose in life is to problem solve using standards but also recognise the part research and development plays to foster innovation.” – Steve

Problem-solving is a key skill in both engineering and leadership. The ability to analyse how things work and then rebuild them in a more efficient way can work extremely well when looking at both an engineered structure and the structure of a team. In the same way that knowing how all the parts of a particular machine work together to create the whole, or how one faulty part can have a severely negative effect on the smooth running of a device, a knowledge of the constituent elements of a team gives you a knowledge of how things work that gives you the confidence and skills to make subtle changes for the good of the whole.

KNOWLEDGE OF ENGINEERING

“The definition of engineering is the use of scientific principles to design and build machines, structures, and other items, including bridges, tunnels, roads, vehicles, and buildings. In particular, the discipline of engineering encompasses a broad range of more specialised fields of engineering, each with an emphasis on particular area of expertise” – Andy



Science teaches you the why, engineering the how. If your business is an engineering one, a knowledge of engineering itself can be crucial, as Andy finds working at design consultancy Morson Projects. Having the relevant business qualifications for a leadership role is always useful but knowing the mechanics of the engineering process you design or make is almost more crucial. It allows you to build teams and know which people to surround yourself with in order to get results.

It allows you to match the right person to the most suitable role and take an objective view on projects with incisive and knowledgeable input.

PROJECT MANAGEMENT SKILLS

“My son and daughter always used to ask me “why has everything always got to be a project, Dad?” My answer was that everything needs a plan, a programme and a budget, even if just in my head. This approach has helped me build a career from apprentice to director and add value to senior management teams by ensuring that all ideas are considered, risks are assessed with affordability with tolerances communicated. It can be challenging for colleagues who are wired differently, neither is wrong or right, we just see the world in a different but complimentary way.” – Steve

Engineers can see a set of related parts as a whole ‘project’, with the constituent elements being part of a larger whole. With every engineering project worked on needing a budget, a plan and a set of recordable outcomes, this thinking can be incredibly suited to leadership and management roles where a keen eye for planning and delivery is needed throughout.

COMMUNICATION

“I think my background at Morson Projects, working with teams of engineers and designers to deliver complex client

challenges across a range on sectors, has helped me massively in my leadership role at Morson Projects. I have had to work with a diverse range of people and personalities with a broad range skills and capabilities. This experience has helped me to understand, shape and develop the dynamics of the business development team that currently works for me. We are all different, whether by ability or personality; understand this and you can work and get the best from any team and the diverse engineering teams I have worked with over the years have taught me this!” – Andy

Concise, effective, and clear communication is key for everyone in a leadership or management role, and a strong foundation in engineering and the associated technical communication can be invaluable – especially if the business happens to be technology or engineering-focused but not exclusively. Leadership and management involve working with teams of diverse people with often niche skill sets and experience, so being able to effectively communicate with a variety of stakeholders makes for better, more efficient outcomes.

Leadership involves knowing how the constituent parts of an organisation work together effectively to create an efficient whole. This same theory is true in engineering projects, so it’s not surprising that so many successful CEOs in so many leading global companies have swapped the drawing board for the boardroom.

Morson Projects and Morson Group are working to help develop the next generation of engineering talent, and hence the future leaders. Our Gerry Mason Scholarships at the University of Salford help bright students by paying for their three-year engineering courses, helping those who may otherwise have struggled to finance them. ●

MORSON PROJECTS:

CARBON ZERO EMISSIONS PLEDGE

Working closely with our parent company, Morson Group, we are committed to continually reducing our total Greenhouse Gas Emissions in absolute terms in order to achieve Net Zero emissions by 2023. This will be achieved through absolute emission reduction and offsetting the residual amounts.

As a Group, 82% of our emissions are currently derived from Operational Road Travel and other business travel. We aim to reduce our business travel and accommodation associated emissions through the greater use of technology including virtual meetings, virtual site tours and tech-savvy asset management tools.

REDUCING EMISSIONS THROUGH TRAVEL

We are committed to the de-carbonisation of our company cars and commercial vehicles, with 49% of our company car fleet already being low emission vehicles (either electric or hybrid) and plans to increase this to 95% total by the end of 2023.

By 2023 we aim to complete all regular, commercial vehicle journeys under 50 miles distance round trip by electric, commercial vehicles. As suitable ultra-low emission commercial vehicles come to the market Morson Group are committed to being an early adopter of new technology, ultra-low emission vehicles.

IMPROVING THE EFFICIENCY OF OUR BUILDINGS

Electricity consumption on our premises accounts for 14% of our carbon emissions and we have already commenced the Building Information Modelling of our premises by our in-house team in pursuit of increasing building efficiency.

Initial carbon reduction projects include the installation of a power metering solution and LED lighting at Head Office and other premises. As current electricity supply contracts expire, we will purchase carbon neutral electricity including power from renewable sources for our premises. We have commenced a feasibility study for on-site generation on our premises and intend to install solar generation and potentially wind power.

In addition to these carbon reduction steps, we will invest in carbon removal projects selected on the basis of quality criteria and verification of the carbon reduction impact. In doing so we will offset the remaining residual emissions.

The Morson Projects team supported by Morson Group and its associated companies and other interested parties will develop a collaborative hub with our clients, business partners and other key industries to accelerate the transition to a net zero future together.

Morson Group's HSQE Director Gareth Morris said: "It is important that we communicate to our staff, our clients, our community and our value chain that we care for our environment. The vast majority of our emissions come from our use of commercial vehicles in the delivery of certain contracts.

Our Group Fleet Manager, David Robinson, has worked for many years to reduce these emissions through the use of lower emission vehicles, driver training and in-vehicle telemetry systems. One year ago we joined Shell's fuel offset scheme which has reduced our overall Net Zero carbon emissions by 80%, and we are currently working hard on reducing the remaining carbon emissions in order to achieve Net Zero."

Chris Burke, Executive Director at Morson Projects added: "The team at Morson Projects are working closely with the wider Morson Group team to continually reduce our Greenhouse Gas Emissions over the next 2 years. This offsetting of emissions goes much further than our own operations and is also an important consideration for our technical team when designing and delivering projects for our clients." ●



It is important that we communicate to our staff, our clients, our community and our value chain that we care for our environment. The vast majority of our emissions come from our use of commercial vehicles in the delivery of certain contracts.

NAVIGATING IR35 WITH MORSON PROJECTS

Earlier this month, IR35 legislation came into play across the private sector.

Following our recent webinars covering the topic, we are working with new and existing clients to provide the necessary support to deliver IR35 compliant solutions across the engineering and technical services landscape.

For more than 40 years, Morson Projects has been delivering fully contracted-out services to clients, long before IR35 legislation was established. However, since the introduction of IR35 in 2000, we have successfully delivered more than 12,000 projects as fully contracted-out solutions, with a value in excess of £750m.

This method of working puts us in the position of the 'End Client' to any relevant Personal Service Company (PSC) engaged. It, therefore, means we are responsible for ensuring reasonable care is exercised correctly by producing and issuing an IR35 Status Determination Statement.

Our robust processes, procedures and tools to ensure IR35 compliance are underpinned with a comprehensive insurance policy. Our experts can help guide businesses through the offload process, helping them clearly define their requirements and supporting them in generating Statements of Work (SOWs).



...we provide a suite of robust solutions tailored to your organisation to help shape an effective IR35 strategy...

HOW CAN WE HELP?

From full reviews of your contractual workforce to practical and commercial IR35 solutions including fixed price statements of work, we provide a suite of robust solutions tailored to your organisation to help shape an effective IR35 strategy to remove the burden of IR35, minimise risks and costs.

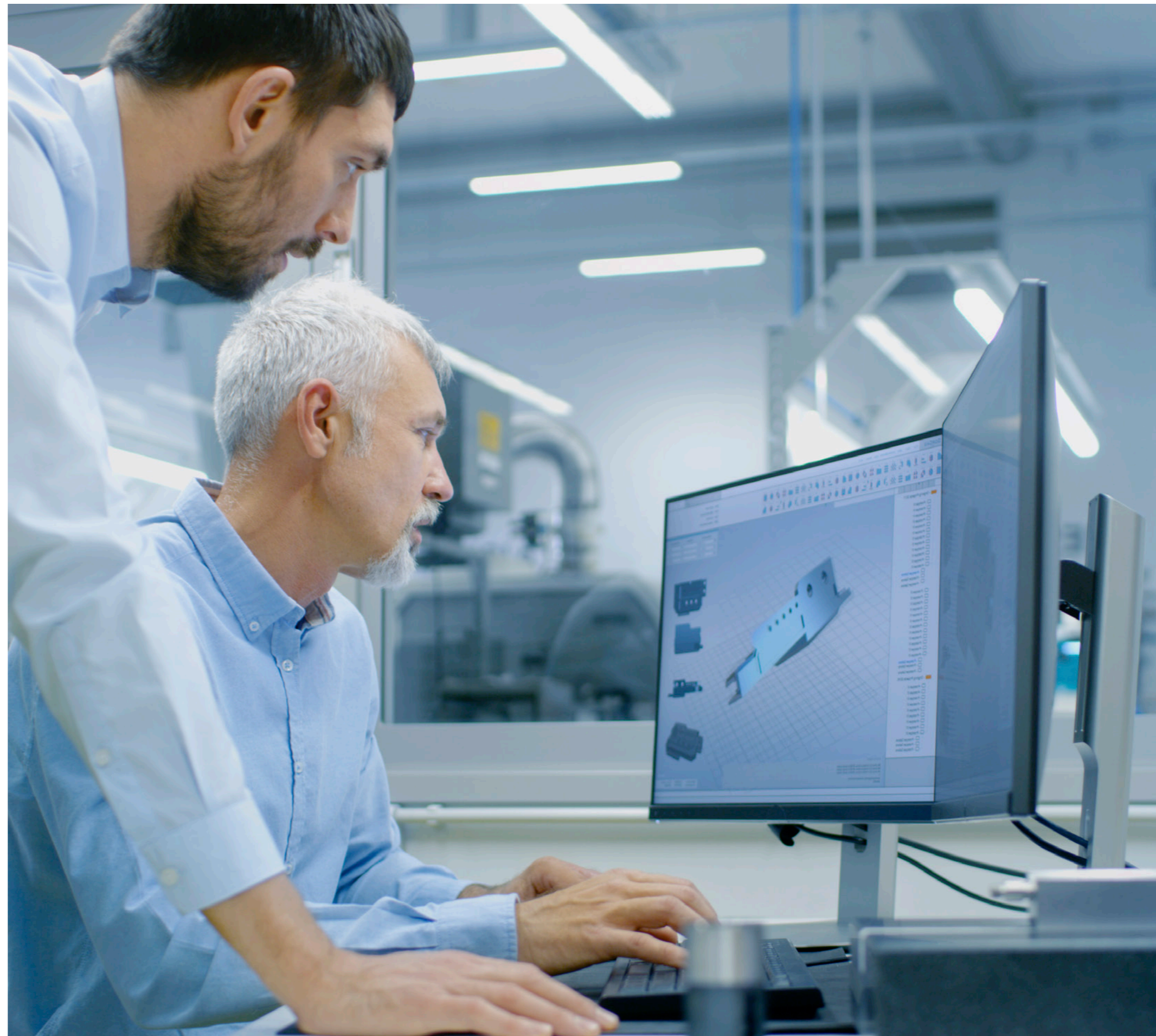
WHY CHOOSE A FULLY CONTRACTED-OUT SOLUTION?

Private sector organisations who engage contractor populations are turning their attention to ensuring compliance with the legislation, yet few hiring managers, procurement heads and HR professionals consider a fully contracted-out service as a potential option.

A fully contracted-out service – often referred to as a Statement of Work (SOW) or a bought-out service is a flexible, effective and highly successful commercial route which has many benefits and incidentally, can remove off-payroll considerations related to IR35. Already commonplace in engineering, IT and tech sectors, many other industries could benefit from choosing this advantageous and effective way of working.

Whilst there is strictly no prescribed format, a fully contracted-out service comprises a 'contract for services', which governs the relationship and outputs agreed between the client and service provider. ●

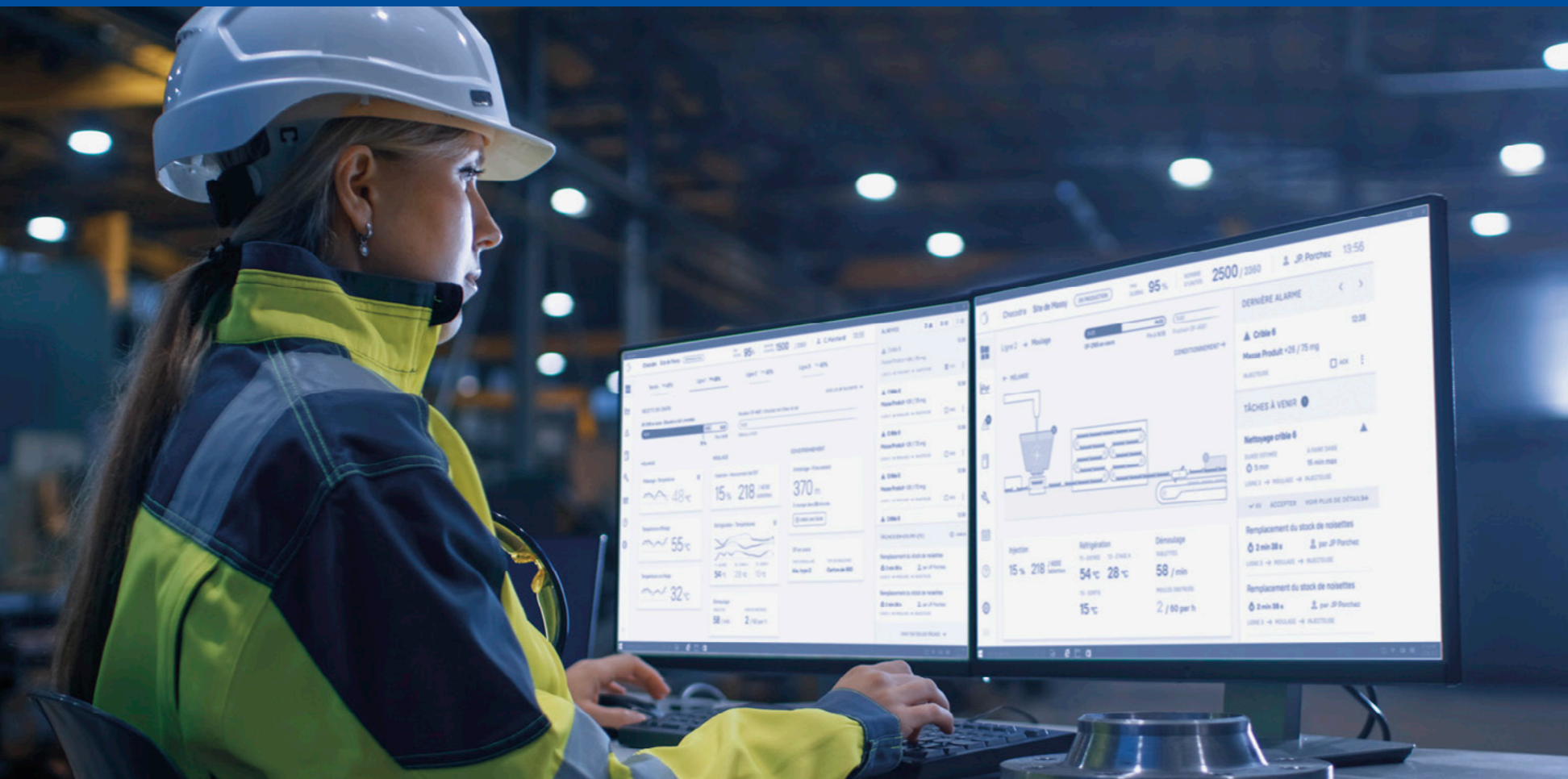
Our experts are on hand to help businesses navigate the reforms, to find out more, please don't hesitate to contact the team on 0161 707 1516.



MORSON PROJECTS: APPROVED SYSTEMS INTEGRATOR FOR

CODRA

Morson Projects are an approved systems integrator for software engineering business, Codra, having worked with them collaboratively since 2014 on major projects across the UK.



CODRA

We caught up with our specialist control systems integration team within our Ematics division, to find out more about Codra, and what benefits our partnership creates for our clients.

WHO ARE CODRA?

Codra is the software manufacturer of the Panorama Suite Platform, specialising in industrial information technology: Front-end communication, SCADA, Data Historian & Reporting tools. As an International IT Engineering Services provider, the company has forged its know-how from experience in services demanding very specific skills in highly technical sectors, such as embedded and real-time systems, critical applications, scientific computing, test systems and other complex automation and instrumentation and control projects.

WHAT DOES BEING A PARTNER MEAN?

Morson Projects and our Ematics division are a Codra Certified Integration Partner for Panorama E2, Panorama Suite, and the legacy Panorama P2.

As a trusted integration partner, Morson Projects are able to take advantage of Codra's expert engineering support team in the development and integration of the Panorama software for major UK infrastructure projects. This direct collaboration with Codra maximises development efficiency and helps reduce fault snagging at testing stage.

Our team have worked on numerous major control system developments using Panorama software including tunnel upgrades for Merseytravel, Power Station upgrades for Drax and work on the UK rail infrastructure's traction power networks.

HOW DO THE SERVICES OF THE TWO BUSINESSES INTEGRATE?

Codra provide the necessary software platform and tools for us to carry out critical control system development and integration works for our clients.

For our projects, our software development team is supported by the Codra team. We define the software and infrastructure architecture for the project and have the design validated by Codra to ensure best practice is being followed. This ensures that we are compliant with the Panorama product roadmap, allowing for seamless upgrades to future versions of Panorama, which saves our clients in the long term. On project completion, Codra will audit our software to provide independent validation.

Codra support us with technical expertise, providing patches to the Panorama software if we encounter any bugs during development or upgrade cycles.

WHAT BENEFIT DOES THIS CREATE FOR CLIENTS?

Our excellent collaborative relationship with Codra helps us to provide support to clients throughout the whole project lifecycle. From early contractor involvement and tender support, through development support and input, and finally system maintenance and updates.

Our existing team have been delivering projects together for many years and have vast amounts of experience developing and supporting Panorama systems for major UK infrastructure.

Two key projects recently completed are the APMS Replacement at Drax Power Station and the Unified SCADA Upgrades for Mersey Travel, which we hope to share more information on soon.

WHAT'S NEXT?

Over the coming months and years, we look forward to continuing to work with Drax, Mersey Travel, and other clients on UK infrastructure projects using Panorama as one of our platforms of choice.

Several innovations have already been made available by Codra, such as IEC61850 for the electricity market and BIM operations. Others will follow at the end of the year with the arrival of Panorama Suite 2022, Web Client, the EdgeToCloud approach and many more.

Paul Ward, who heads up Morson Projects' Ematics division added: "Our relationship with Codra has evolved significantly over the past 7 years and we are proud to be one of their approved systems integrators. Our collaborative approach to projects means we are able to deliver successful, efficient solutions to our clients, whilst continually improving the software we use. We look forward to continuing to work with Codra on exciting projects over the coming months and years."

James Burgess, Sales Manager at Codra commented: "We are pleased to have Morson Projects on-board as one of our approved systems integrators. Their team brings a unique mix of technical expertise and experience to the table and we look forward to continuing to evolve our relationship over the coming years as we deliver successful projects together for our clients." ●



INTERNATIONAL WOMEN'S DAY 2021: #CHOOSE TO CHALLENGE

At Morson Projects, equality has always been important when considering aspects of the business such as recruitment, training and career progression, in order to create an inclusive, empowering future for all.

Today the world celebrates International Women's Day (IWD) 2021 and it's theme; #ChoosetoChallenge.

The IWD campaign focuses on the idea that a challenged world is an alert world. Individually, we're all responsible for our own thoughts and actions – all day, every day. We can all choose to challenge and call out gender bias and inequality. We can all choose to seek out and celebrate women's achievements. Collectively, we can all help create an inclusive world. From challenge comes change, so let's all choose to challenge.

We hear from Executive Director, Chris Burke about why Morson Projects supports #ChoosetoChallenge and how a diverse workforce drives a better

working world: "International Women's Day is a global day celebrating the achievements of women across all industries and in all environments, as well as calling out inequality and increasing visibility.

"Gender equality, and celebration across all diversities is essential for economies and communities to thrive, as well as businesses. In the Construction and Engineering industries it is clear that stereotypes are being challenged and a diverse representation of women is more evident, which is something we work hard to champion as a business.

"At Morson Projects, equality has always been important when considering aspects of the business such as recruitment, training and career progression, in order to create an inclusive, empowering future for all. As such, some of our female engineers are currently volunteering as mentors for the University of Salford's 'Go Beyond' programme, working with final year female students to help them step confidently into the industry."

Becky Hicks, from our HR Team adds: "Within STEM industries in particular there is a preconception that it is a 'man's world' and the statistics support this with only 12.37% of all engineers in the UK being women. This is why education is so important to ensure that young women feel inspired to use their creativity and knowledge to

build a career within STEM.

"With an above average 18% of our workforce being women, equality and diversity are an everyday learning activity at Morson Projects and days like International Women's Day only reinforce our commitment to this, raising awareness both internally and externally.

"Morson Projects, as part of the wider Morson Group have already taken huge steps to influence positive behaviour, with compulsory Equality & Diversity training for all employees and carrying out awareness events throughout the year.

"That said, there is still a continuing need worldwide for more progressive mind-sets and inclusive behaviours, which we hope to be able to continue to support through our internal programmes such as apprenticeship schemes, graduate training, professional development reviews, flexible working and other internal initiatives." ●

Find out more:

www.internationalwomensday.com



FEMALE ENGINEERS VOLUNTEER FOR 'GO BEYOND' MENTORING PROGRAMME

We are pleased to announce that four of our female engineers, Anna Davanzo, Ana Meek, Becky Veal and Maria Williamson, have volunteered to join the Morson Maker Space's 'Go Beyond' Mentoring Programme.

The Women in Engineering Mentoring Programme is powered by our parent company, the Morson Group and is a new mentoring initiative to cater for a select group of female students in their last year of study in engineering subjects in the School of Science, Engineering and Environment (SSEE) at the University of Salford.

The programme is running from February 2021 to May 2021 and aims to connect the University's final year female students with industry professionals to:

- Gain greater insights of the industries of their chosen subjects
- Obtain greater knowledge about their career prospects and have focus on the future
- Acquire broader skills for personal and/or career development
- Build understanding for communication and a range of interpersonal skills
- Discover good practices and understand how to enter the industry with confidence

Anna, Ana, Becky and Maria have been matched with students in order to offer valuable one-to-one mentoring sessions and will also take part in group webinars, providing guest talks alongside the other mentors.

Dr. Maria Stukoff, Maker Space Director shared: "The aims of 'Go Beyond' are to help our students to focus on the future, gain broader skills for personal or career development. The expectation is that the knowledge and influence of the mentor will assist the student in planning career objectives and help with gaining insight about how to step confidently into the industry.



I hope to help the students with their confidence and show how it is ok to take risks. I also believe that it is important to own our accomplishments and set positive examples for the next generation of women.

The focus is on developing the mentee professionally with the aims to achieve self-awareness, more confidence and to feel equipped to Go Beyond the University to get a job in industry.

"We welcome a phenomenal number of industry mentors who registered their supporting to the programme and are dedicating their time and expertise to help promote our graduate talent to encourage and upskill more women into engineering roles.

"It's a real testimony to our partnership with the Morson Group, and our collaborative investment to developing our talent pipeline and creating employment routes for the next generation of women in engineering, to have five of their team from across the Group onboard with the programme."

Anna Davanzo, Aerospace Engineer shared: "Helping to inspire young people and in particular young women to pursue careers in STEM based disciplines is so important for the future of our industry. Taking the first tentative steps into the workplace can be daunting and having a mentor who understands this can make the transition from university into work much less intimidating.

"I'm really excited to be a part of the mentoring programme at the University of Salford, to be able to share some of my knowledge and experiences with future engineers and help them to enter the industry with confidence."

Ana Meek, Chemical Process Engineer also shared: "I am very excited and honoured to be part of Go Beyond Programme. As a mentor, I am looking forward to engaging with young engineers, and understanding their drivers, ambitions for their emerging careers and supporting, guiding, and

encouraging them through the initial stages of the professional development. "Mentoring allows me an opportunity to reciprocate the guidance, kindness and support given to me by others when first starting out, giving something back to the engineering students and cohorts of tomorrow."

Becky Veal, Head of Business Unit, shared: "Having built from scratch and ran a successful engineering recruitment business before joining Morson Projects, I hope to bring a fresh perspective to the young women who are taking part in this mentoring programme. I believe it is important we nurture confidence in women from a young age, as they can often be underestimated by others and as a result, start to underestimate themselves.

"I hope to help the students with their confidence and show how it is ok to take risks. I also believe that it is important to own our accomplishments and set positive examples for the next generation of women."

Maria Williamson, Lead Design Engineer within our Marine team added: "To give these young women the best chances of success in this industry, it is important that time, advice and guidance is provided from the offset. It is a great responsibility being asked to help these young aspiring engineers, this is our chance to share experiences and discuss how they see their career progressing.

"These engineers have already chosen this path by going to university and studying so I'm looking forward to exploring what they want to get out of their career and hopefully make the transition a little more comfortable for them." ●

WOMEN LEADERS IN ENGINEERING

MARIA WILLIAMSON



As part of a series of 'Women Leaders in Engineering' interviews, we caught up with one of the Lead Design Engineers from our Marine division, Maria Williamson.

Maria has worked in Mechanical Design, specialising in marine and submarine design for over 11 years.

HI MARIA, TELL US A LITTLE BIT ABOUT YOUR ROLE...

A lot of what I do is very confidential, but what I can tell you is that my role requires me to think about every aspect of my team's work, from the processes they follow to the problems they face.

My team is built up of highly skilled designers, but the processes that require following are so complex that it is my job to guide the designers down the right path. With a wide range of stakeholders and the complexity of these routed systems, the design work often encounters a lot of changes even after it has been signed off. My team manage the design stage from initial concept through to release.

WHY DID YOU CHOOSE AN ENGINEERING CAREER PATH?

Engineering has always been interesting to me, but I don't believe enough information was available for me in school to guide me down this path straight from secondary education.

I took Design & Technology as a GCSE, and it was difficult being 1 of 2 girls in the year taking that subject further, I would say it actually set me back quite a bit, and it wasn't until 2 years after leaving school that I decided to get back into Engineering and take on an apprenticeship. This was much more inclusive, and I was made to feel supported.

The qualifications I've gained along the way cover Mechanical Engineering, Nuclear Familiarisation, and Leadership & Management training.

I do, however believe that now, 11 years after I started my apprenticeship, the industry welcomes women in a much larger capacity.

WHAT ARE YOUR CAREER HIGHLIGHTS SO FAR?

I'd say the highlight of my career was being re-located 2 years ago, I moved to Morson Project's Manchester office to set up a new team, which involved taking on half of an existing team and expanding it.

This was a great challenge for me professionally and was the first time I'd moved teams without knowing any of my immediate colleagues.

WHAT'S NEXT FOR YOU AND YOUR TEAM?

My team are currently expanding again, we are in the midst of setting up 2 more teams, which will allow us to bring more people on board and share the knowledge, so it's definitely an exciting time to be a part of this Morson Projects team.

HOW DO YOU THINK WE, AS AN INDUSTRY CAN WORK TO INSPIRE THE NEXT GENERATION OF WOMEN LEADERS IN ENGINEERING?

I believe that the inclusion for women into Engineering should start from a young age. If I had a better experience at school with this path, then I definitely believe I would of embraced it a lot earlier.

I believe the UK's STEM programme does a great deal for students of all backgrounds, but schools and parents do need to be actively encouraging young women to choose engineering roles if they show an interest.

WHAT ADVICE CAN YOU OFFER TO WOMEN WHO WOULD LIKE TO PURSUE A CAREER IN ENGINEERING?

Women that have an interest in engineering should climb over all the obstacles to stay on that path. I promise it's worth it!

There are ways in which women and men work and analyse situations differently and the Engineering industry can certainly benefit from the value that a mix of male and female colleagues can contribute to this. The women I meet in this industry, like myself, have had to overcome certain obstacles to get where they are, and as a result, have grown into strong, successful people. ●

To find out more about how our Marine team can help you with your next project, please don't hesitate to contact Maria by calling 0161 707 1516.



MEET THE TEAM: MORSON PROJECTS' BRISTOL OFFICE

As part of a series of 'Meet the Team' articles, we caught up with our Bristol office to find out about the team delivering our projects in the South West.

We caught up with Sam Pike, Principle Design Engineer, who runs our Bristol team to find out more:

HI SAM, TELL US A BIT MORE ABOUT THE BRISTOL OFFICE TEAM?

Our Bristol office is a diverse and dynamic team of 8 technical staff, who work closely with clients across the Aerospace & Defence industry. The team provide support on everything from structural design concept through to manufacturing detail, including the integration of systems, stress analysis, tooling design and manufacture, and production support.

The team also work collaboratively with other Morson Projects design and stress teams located in Manchester, Hull, Belfast and Yeovil. Typical services we provide clients with are:

- Certification and Technical Reports
- Check and Final Stress Analysis
- Detailed Design and DFM
- Dynamic Analysis of Mechanisms
- Fatigue and Damage Tolerance
- FEM Analysis Including Pre and Post Processing
- Initial Conceptual Design Studies
- Kinematics
- Product Development
- Project Planning and Programme Management
- Prototype and Production Design
- Stress Conceptual Design Evaluation
- Stress Sizing

WHAT MAKES YOUR TEAM DIFFERENT FROM COMPETITORS?

I believe that our biggest USP is our willingness and capability to work collaboratively with clients using the multitude of experience and methods that we have gained from working across a variety of different projects for a range of different clients.

Our unique experience allows the team to be adaptable and reactive to any task, meaning we can get the "right people on the job", as well as challenging the conventional ways of working "this is how we have always done it" by offering alternative view points and best practices from the teams gathered experience. This allows the wider team, the client and ourselves to work in partnership to achieve the best solution to any given challenge.

WHAT PROJECTS ARE YOU WORKING ON AT THE MOMENT?

We work with a variety of clients across the Aerospace & Defence industry, but an example of a key project for us would be the work we are doing with Leonardo Helicopters at the moment.

Over the years Morson Projects has nurtured the relationship with Leonardo Helicopters, developing our expertise across multiple platforms.

This long-term relationship has created offload opportunities for our Bristol office, enabling us to develop our team inline with the clients demands.

The team has been responsible for delivering small-scale stand-alone packages of work as well as working collaboratively on larger tasks such as creating customised aircraft to meet the specific requirements of the customer.

With new insight into existing platforms, this has enabled constructive exchange of views and collective discussions with the client.

The Bristol team are working closely with colleagues at our Hull and Manchester offices to provide:

- Initial Design Layouts & Stress Evaluation
- Production Design & Stress Analysis
- Certification Report

WHAT DID 2020 TEACH YOU AND YOUR TEAM?

From what was a strange year, my respect and confidence in the work the team do has only increased as I've experienced their ability to adapt to the ever-changing situation and the extra challenges that have come with it.

The team's ability to be self-reliant and also working remotely in a communicative way has meant the team has been able to come up with solutions to everything that has been thrown at them. ●

To find out more about how our Bristol team can help you with your next project, please don't hesitate to contact Sam by calling 0161 707 1516.





GARETH CLARKE — FROM TOOLING APPRENTICE TO ADVANCED TOOL DESIGNER

As part of a series of 'Meet the Team' articles, we caught up with Tooling Designer, Gareth Clarke, to find out more about his career at Morson Projects as he has progressed from a Tooling Apprentice to Advanced Tooling Designer.

SO, GARETH, WHAT MADE YOU DECIDE TO DO AN APPRENTICESHIP AT MORSON PROJECTS?

My Dad actually worked at Morson Projects for 28 years, so I definitely saw the success in his career and the variety in his job role which inspired me to follow a similar path.

When I applied for the apprenticeship, I didn't let anyone know my connection to him though as I wanted to know I'd got the job on my own merits.

TELL US A BIT MORE ABOUT YOUR ROLE...

I joined Morson Projects straight from High School in 2014 and have progressed in my career as part of the Tooling team. I currently lead a Tooling Design & Manufacture delivery team which consists of 4 others and me. We take our clients requirements, work out how to solve their problem or facilitate their requirements and then work with them to deliver whatever it is they might need.

Tooling is a unique and often quite 'wacky' discipline. Each project is unique and often means working with a vast range of other disciplines, whether that be Mechanical Engineering, Aircraft Design, Civil Engineering and so on.

WHAT DO YOU ENJOY MOST ABOUT YOUR JOB?

For me, I really enjoy the variety of work, particularly the CAD element of Tooling Design & Manufacture; creating and

testing a model to then see your ideas come to life, whether that is a lifting mechanism, trolley or overspeed test fixture. Regardless of what problem you are solving, it's all about the accuracy!

WHAT HAS BEEN YOUR FAVOURITE PROJECT TO WORK ON?

One of the most interesting jobs I have worked on was an engine upgrade for one of our defence sector clients. I was responsible for designing the seats used to secure the engines' intakes and exhausts. I was the lead Mechanical Design Engineer and I was responsible for producing over 100 individual designs with a team of 4 people. This is one of the largest and most interesting jobs I have worked on, as there was a lot of aspects to consider in order to get them right. Plus, it was great to see and work with one of the most impressive ships in the world!

As part of my day-to-day work, I am also in charge of producing all tooling jobs we receive for Siemens Industrial Turbomachinery. This involves working with Siemens to find solutions to any issues they may have, producing CAD designs and drawings of a solution and then organising the manufacture of the item for them to use. I have designed all sorts of equipment over the years from lifting mechanisms, laser trimming fixtures and industrial transport fixtures.

WHAT'S NEXT FOR YOU?

I'm currently in the third year of my BEng in Mechanical Engineering at

Manchester Metropolitan University, which I started after completing my Apprenticeship. I have been doing this part-time alongside working 4 days a week at Morson Projects and have one year of my studies remaining.

Following my graduation, I will be a fully qualified Engineer and then hope to work towards Chartership.

WOULD YOU RECOMMEND AN APPRENTICESHIP TO SOMEONE LOOKING TO START A CAREER IN ENGINEERING?

I would definitely recommend an apprenticeship to anyone looking to start in engineering. It is a great way to get started in the industry, I think it is a big advantage as the experience you gain as an apprentice from working in this environment as well as academic learning is invaluable. ●

To find out more about Morson Project's Tooling & Design Capability please speak get in touch with Gareth and the team by calling 0161 707 1516.

Alternatively, if you are interested in finding out more about an apprenticeship with Morson Projects, please contact our Group HR Assistant, Becky Hicks.



MORSON PROJECTS' POWER APPRENTICES GO FROM STRENGTH TO STRENGTH

As Morson Projects' Power division celebrates another successful year of business, we caught up with two members of their team, who started out as apprentices.



We interviewed them to find out more about their careers so far and why choosing to start an apprenticeship in 2021, might just be the best decision you make!

Paul Ward, who heads up our Power division explains: "We've been taking on apprentices for over ten years now. We have a fantastic success rate of recruiting both school and college leavers and training them to become valued members of our team, so much so, that 60% of our current Power team began their career with us as an apprentice.

"Our apprenticeship training scheme sees employees gain a broad range of experience across Power, Electrical and Instrumentation disciplines. Academically, some choose to continue their studies after completing their HND's at college, by going on to study for a degree."

We caught up with Craig Nuttall and James Adshead, who started with us as apprentices, to find out more about life as part of our Power Division.

HOW LONG HAVE YOU WORKED AT MORSON PROJECTS AND WHAT IS YOUR CURRENT ROLE?

JAMES: I've worked at Morson Projects for 3 years now and I am currently an Engineering Apprentice. My day-to-day duties include providing CAD support for one of our senior engineers as well as assisting in a variety of other office duties. Working alongside a senior engineer, I am able to continually improve my knowledge and experience, creating a foundation for what I hope will be a successful and rewarding career.

I study part-time at Wigan & Leigh College, on day release each week and will be officially completing my apprenticeship in the coming months when I receive my certificate for completing my NVQ in Design and Draughting. Once I have completed my apprenticeship, there are further opportunities at Morson Projects for progress onto further education.

CRAIG: I have worked at Morson Projects for just over 8 years now and my current role as a Senior CAD Technician involves working closely with a Senior Electrical Design Engineer on the electrical design aspects of projects as well as drafting AutoCAD drawings.

I completed my apprenticeship in 2016, after 4 years of studying at North Trafford College (ONC) and also Wigan & Leigh College (HNC).

WHAT HAS BEEN YOUR CAREER HIGHLIGHT SO FAR?

JAMES: A highlight for me has definitely been having the opportunity to travel to Scotland and other places within the UK to visit different sites. Our projects are located in a variety of places across the UK, so being able to go out and visit these sites is great experience and is a welcome change of scene from our typical way of working.

CRAIG: My career highlight has been attaining a First-Class Honours Degree in Electrical & Electronic Engineering at Manchester Metropolitan University.

DID YOU, OR DO YOU PLAN TO CONTINUE YOUR EDUCATION AFTER YOUR APPRENTICESHIP?

JAMES: As well as my NVQ, I am currently in my final year studying for a HND having completed the HNC in previous years, from this, there is the option to continue into a final 'top-up' year in order to achieve my BEng in Electrical Engineering.

I plan to continue past my HND at Wigan & Leigh College and onto my degree in order to make the most out of my time in education and to improve my knowledge and understanding of certain principles within work.

CRAIG: I started my degree just after completing my HNC in 2016 and graduated in 2020 with a First-Class Honours Degree in Electrical & Electronic Engineering from Manchester Metropolitan University.

WHAT IS THE NEXT STEP FOR YOU IN YOUR CAREER?

JAMES: I want to continue to learn and improve within work over the next few years with the goal of being able to produce design-based work, as well as being able to undertake draughting work in order to further progress my career.

CRAIG: The next step in my career is to become an Electrical Design Engineer.

WHY WOULD YOU RECOMMEND AN APPRENTICESHIP TO AN ASPIRING ENGINEER?

JAMES: I would highly recommend an apprenticeship to school and college leavers as an alternative to the traditional route. After finishing my A-Levels I was unsure whether an apprenticeship was a viable option in trying to work towards an engineering career but after working in the industry for 3 years and having spoken to others across the industry, I truly believe that apprenticeships can be beneficial to the traditional university route as you finish with the same qualifications but with more practical experience, as well as the opportunity to start earning instead of being straddled with debt.

CRAIG: Yes, I would highly recommend apprenticeships to young adults as you get paid whilst you learn. Engineering is an interesting topic as it is continuously evolving. As a former apprentice I learnt more about what I was doing in the drawing office as I was taken to site being shown what each project involved. ●

To find out more about how our Power team can help you with your next project, please don't hesitate to contact Paul by calling 0161 707 1516.

MEET THE TEAM:

PANEL BUILD

The Morson Projects' Panel Build team specialise in providing power system protection panels and cubicles for a wide range of clients.

Our team offer a full scope of works from primary and secondary engineering and design through to site installation, including connections to grid >132kv.

As part of our offering, our team are also able to offer clients the design and build of protection and control panels on existing frameworks.

Following the recent appointment of Jonathan McCreavey as Panel Shop Manager we caught up with him and the rest of the team to find out more about what projects they are working on and what offering they can provide to clients. The team currently includes the following members (left to right):

- **John Armstrong**
Installation Manager
- **Jonathan McCreavey**
Panel Shop Manager
- **Graeme Burns**
Senior Site Engineer
- **Josh Loughran**
Electrical / Site Engineer
- **Jay Lee Smith**
Apprentice

We have also been joined by Senior Design Engineer, Jack Roberts, who, thanks to recent software investment and training, will soon be EPLAN certified. We caught up with the team to find out more...

HOW CAN THE TEAM HELP?

Morson Projects specialise in providing power system protection panels and cubicles for all levels of electrical power transmission, distribution and

generation. Utilising a fully equipped workshop facility in Manchester, Morson Projects work closely with clients to define and supply their complete requirements.

WHAT SERVICES DO THE TEAM PROVIDE?

We work closely with clients across the Infrastructure, Nuclear, Transportation, Manufacturing and Renewables sectors. Our team includes experienced panel builders who, together with our team of project and design engineers are able to offer clients a complete solution to their control and system requirements, including install and commissioning services, covering the below:

TYPES:

- Critical Power & Standby Power (ATS & UPS)
- HV Secondary Protection & Control Panels
- LV & HV Metering (Remote Power Quality)
- LVAC Switchboards
- PLC & Motor Control Panels

APPLICATIONS:

- Data Centres
- Traffic Management
- Power Distribution (6.6kV – 400kV)
- Automation & Control
- Building Management

TESTING:

- FAT
- SAT

Our previous annual capacity was 80 per annum Large Secondary Protection Panels and 200 per annum Small LV/ MV Panels, however we have now secured additional storage at one of our sites in Irlam to increase our capacity due to heightened demand for this service.

WHAT PROJECTS ARE YOU CURRENTLY WORKING ON?

Although we can't go into detail about our current projects due to client confidentiality, we are currently working on a range of battery storage solutions, Remote Power Quality (RPQ) installations, infrastructure maintenance upgrades and some large projects in power generation and renewables.

WHAT'S NEXT FOR THE PANEL TEAM?

As mentioned earlier on, we grew our Panel Build team by initially providing full design from primary design to connection which then evolved into also offering secondary protection and control panel build, the next step for us is panel build installation for a wider range of clients, utilising our National Grid approved team. ●

To find out more about how our Panel Build team can help you with your next project, please don't hesitate to contact us by calling 0161 707 1516.



MEET THE TEAM: DEAN ELLISON SYSTEMS & SOFTWARE ENGINEER



HI DEAN! TELL US A LITTLE BIT MORE ABOUT YOU AND YOUR ROLE?

I joined Morson Projects in 2017, and work with a team of over thirty engineers in Belfast to develop safety-critical software for aircraft engine control systems.

I have a master's degree in aerospace engineering and am professionally chartered with the IMechE.

My current role is within our Hardware-Software Integration team, where I am responsible for testing that our designed software operates correctly when deployed onto engine hardware.

On a typical day, I try to find realistic scenarios to 'break' the control system, which often requires me to think outside-the-box. First I have to understand the system design, and then code some useful tests to verify that the hardware and software are behaving as expected.

As part of a series of 'Meet the Team' articles, we caught up with Systems and Software Engineer, Dean Ellison, to find out how he has been using his coding skills to enhance his role as an Engineer within our Control Systems team.

After finding issues I will then discuss possible solutions with the relevant design team. It's a challenging role that incorporates a good mix of technical disciplines. I get to interact with system designers, software developers and experts from other disciplines, to better understand the product and to verify that each sub-system works as per its design intent.

AT WHAT POINT DID YOUR CODING AND ENGINEERING CAPABILITIES START TO BE USED TOGETHER?

Like most engineers I enjoy analysing how things work and finding the best methods to improve products and solve problems for people.

While I had some good exposure to computer programming during my degree, I would consider myself more of a logical problem-solver than a software developer.

When I started work at Rolls-Royce in 2015, I was surprised that many of my engineering colleagues wrote code on a daily basis. Whether writing a simple batch script or coding a bespoke software solution, I discovered that I enjoy writing code to automate repetitive tasks and to help solve complex problems. So I suppose my coding and engineering capabilities developed alongside one another, and now I am working with a great team of engineers to develop software for aircraft engines.

HOW DO YOU CREATE BENEFITS FOR YOUR TEAM AND CLIENTS?

We are a close-knit team at Morson Projects, and this undoubtedly

benefits our clients in terms of working efficiently, meeting milestones and sharing best practise. It is a privilege to work with such a knowledgeable bunch of engineers.

I like to think that I bring some good benefits to my team, such as my systematic approach to identifying and solving issues, good initiative to find efficient ways of working, and a desire to keep things simple wherever possible. The goal is always to develop the best possible solutions for our clients, ensuring that the control systems we develop are safe and reliable.

WHAT PROJECTS HAVE YOU WORKED ON RECENTLY?

At Morson Projects I have worked on a range of civil and defence projects with a variety of clients, including Rolls-Royce, BAE Systems, and Mitsubishi Aircraft Corporation.

Each project has come with its own unique challenges and development opportunities. I have enjoyed working in multi-disciplinary teams, leading work packages, and interfacing with clients on-site. For example, I frequently travelled to the Rolls-Royce site in Birmingham to support key software certification activities for the Pearl 700 engine, and on a previous project with Mitsubishi I was the lead engineer within Morson Projects for systems verification work on the Pratt & Whitney 1000G engine.

WHAT'S NEXT FOR YOU?

A career in engineering is one of lifelong learning, so I am always looking for opportunities to develop myself and learn new skills.

I am continuing to enhance my knowledge of control systems and gain expertise in various stages of the systems development lifecycle. I am also passionate about the global push towards net zero carbon emissions and the increasing adoption of renewable energy technologies. In years to come I would like to say that I had used my engineering skills in the fight to tackle climate change. So perhaps one day I will be leading a team in the development of novel designs for future engineering technologies.

Gordon Murphy, who heads up Morson Projects Systems & Software team added: "Following a chance phone call and an excellent interview, we were delighted to welcome Dean to our team in Belfast in 2017.

"Dean joined Morson Projects with a strong technical background from his previous roles including working at Rolls-Royce and Bombardier, which was complimented by his academic achievements.

"Over the past 3 years, Dean has become a valued member of our Systems & Software team, who is willing and completely able to take on responsibility working and delivering a quality product for our clients." ●

To find out more about how our Control Systems team can help you with your next project, please don't hesitate to contact Dean by calling 0161 707 1516.



Waldeck



morson
projects



Ematics
CONTROL SYSTEMS ENGINEERS