

# INSIGHT

---

## WALDECK EXPAND UK PRESENCE IN THE NORTH WEST

---

**Announced  
as 'Most  
Outstanding  
Infrastructure  
Consultancy'**

---

**INWED:  
How we can  
Transform  
the Future**





---

**Waldeck announced as  
'MOST OUTSTANDING  
INFRASTRUCTURE  
CONSULTANCY'**

Waldeck have been recognised in BUILD's 2019 Design & Build Awards as the 'Most Outstanding Infrastructure Consultancy - UK'.

The Design & Build Awards endorse and recommend the most promising and best performing firms across all sectors of the construction industry, and each winner is hand-picked by their panel through a strictly merit-based process of research and analysis.

The announcement follows Waldeck's successful appointment and delivery on a number of high calibre projects for clients.

We take a look at an example of our forward-thinking digital approach, which we are proud to say is making a difference in three key infrastructure sectors:

### **Logistics & Transportation**

Over the past two years, Waldeck have developed and delivered a unique Digital Reality Capture solution for major logistics and transportation clients.

Our in-house solution leverages Machine Learning and Artificial Intelligence to capture and intelligently categorise client's assets such as warehouses and distribution centres, including their associated defects. The solution utilises gaming technology to enable clients and end users to visualise the outputs, all of which are accessed via a free-view virtual 3D environment, ensuring rapid turnaround of project deliverables for clients.

The added capability of integrating location and context-based information, such as existing plans and layouts, means that these deliverables present a huge step change from traditional paper-based reporting and schedules.

Waldeck's Digital Reality Capture solutions now enable the planned, managed, safe and efficient surveying of any environment. Data is captured, synchronised and processed using our authored software solutions. This has provided a seamless solution, from data capture through to utilising the data to make non-subjective assessments of the client's physical assets.

### **Ports**

Waldeck are working with a large ports operator, to develop and trial an intelligent asset management solution.

The solution focuses on aggregating Building Information Modelling (BIM), Geographic Information System (GIS), Industrial Internet of Things (IIoT) and telemetry-based data into an intelligent dashboard interface, allowing our clients to fully understand their assets such as harbour walls and lock gates.

This innovation is being continuously developed as we work closely with our client to finalise solutions for integration into their operations.

The solution will operate from a secure dashboard interface, enabling an intuitive and interactive environment for our client's asset management teams to understand real-time asset health and condition.

Within the dashboard, real-time telemetry data sources relay data critical to the operating state and

condition of each part of the asset. These data streams will be aggregated and analysed by complex algorithms to display and communicate the asset state to the client's asset management teams.

Utilising our solution, the asset management team will be able to observe a world-view of their overall estate, understanding visually their assets locations, current condition and health. The configurable dashboard interface and mobile application will offer the same user experience ensuring that data is accessible at all times.

For the client, the integration of BIM and GIS data provides a holistic insight into both their enterprise, and the environment their assets are situated within. The overall objective of the solution has been to ensure that all forms of data specific to each asset are viewable within a single interface, eliminating the issues encountered by the client's current disparate systems.

### **Rail**

Through Waldeck's investment in Research and Development (R&D) and success in securing Innovate UK funding, Waldeck have been working closely with our rail client's asset management and engineering teams to develop digital surveying and reporting solutions.

The project comprises of a proof-of-concept trial where Waldeck's team are trialling the use of digital capture and reporting technologies developed in-house, with a view that enables the client's team to take a non-subjective comparison against traditional analogue methods that are currently being used.

Focusing on a variety of assets including bridges and viaducts as identified by our client, the project's ultimate objectives are to ascertain an understanding of the comparable time, cost and solution-based benefits for undertaking the works digitally and providing intelligent 3D deliverables.

The proof of concept trials entail two different approaches, facilitating the deliverable of a single unified and navigable 3D environment which is fully annotated with our engineer's findings of the assets condition. In tandem with this aspect of the trial, the surveying team will also be capturing the same assets / environments to provide navigable measurable 3D environments which support future translation into intelligent Building Information Models (BIM).

The next development stages of the solution have seen the Waldeck team focussing on the automation of digital capture data through to model based bridge components. This has also seen the team working to incorporate engineering codes of practice, guidelines and information requirements to ensure comprehensive model and object creation.

Working with the clients IT team, we are ensuring all deliverables are suitable for systems use and fully accessible to their teams. Working towards the overall development goal of virtual analysis tool-sets with the teams, the solution offers a step change from traditional paper-based condition reporting.



# Waldeck expand UK presence in the North West

Following continued success, Waldeck are pleased to share that we are expanding our UK presence in the North West, with the opening of a full multi-disciplinary team based within Morson Projects head office in Irlam, Manchester.

Director, Andrew Dent, who has been with the business 13 years, and has seen the business expand considerably in this time, shares:

“We are delighted to be growing our presence in the North West. The new office in Irlam enables us to support clients with an extended range of professional services whilst continuing to work closely with the Morson Projects team.

“The North West is an area of the country that is in a state of rapid growth. We are already working on key projects across the nuclear, defence and automotive sectors and we are excited for the opportunities a bigger base in Manchester will create for the business.”

The office will support new and existing clients with services to include:

- Civil and Structural Engineering
- Commercial and Risk Management
- Digital and Technologies Solutions
- Industrial Architecture
- Mechanical and Electrical Building Services Design



‘The North West is an area of the country that is in a state of rapid growth, we are already working on key projects across the nuclear, defence and automotive sectors...’

# Orbit Homes win residential property of the year at RICS awards 2019

Fordham House in Stratford-Upon-Avon, a project which Waldeck have been working on with client Orbit homes, has won the Residential Property of the Year at the Royal Institute of Chartered Surveyors (RICS) awards, West Midlands.

Waldeck were the Project Manager on the project, which is situated on the corner of Birmingham Road and Clopton Road. Fordham House comprises of 82 high-quality private rented apartments, with a focused letting strategy to support local workers key to the Stratford economy.

Adam Cooper, Commercial Director at Orbit, said: "We are delighted to receive this award, Fordham House is a great example of how creating much needed centrally located homes, for people working in local businesses, can help regenerate town centres.

"We are very proud to have won this award, fighting off strong competition from prestigious central Birmingham residential developments, and we hope that Stratford is proud to have an award-winning project in the town."

Each home is designed with minimum maintenance requirements and the latest in cutting edge technology. Fordham House sits on a centrally located site once occupied by a redundant office building, giving residents easy access on foot or bicycle into the town and workplaces. Work started on site in 2016 and took two years to complete with all apartments now fully let.

The development was brought to market through a partnership between Stratford Town Trust, Orbit, ABD Developments and Robothams Architects, with Deeley Construction as design and build contractors.

Peter Deeley, Managing Director of the Deeley Group, also shared: "We are thrilled to see Fordham House pick up this prestigious award. It has been a fantastic example of working in partnership with Stratford Town Trust and Orbit, to deliver a project that has brought much-needed new homes to the local community in Stratford. With so many strong entries for this prize, it is testament to everyone who worked on Fordham House that it emerged as the winner."

The prestigious annual RICS awards, sponsored by Sika Building Trust, celebrates the region's most inspirational initiatives in the land, property and construction sectors that are having a significant positive impact on the communities they serve.

Graham Wright, Commercial Director at Waldeck added: "As framework partners to Orbit Homes, Waldeck are proud to have supported Orbit on this exemplar PRS scheme working in partnership with Deeley Group."



## Waldeck announced as winners at the Celebrating Construction Awards

Waldeck were announced as winners last week, at the East Midlands Celebrating Construction Awards 2019.

The awards, which took place on the 10th May at the Nottingham Belfry Hotel, saw Waldeck scoop awards for two of the three categories we were shortlisted for:

### Digital Construction Project Award

For our whole-lifecycle asset management solution for our port-operator client.

### Innovation Award

For our digital reality capture solution currently being rolled out for some of our logistics clients.

The awards are a high point in the Midlands construction calendar, bringing together the industry and celebrating the best of the East Midlands region.



THOUGHT PIECE:

# BIM vs DIGITAL CONSTRUCTION



**By Veronica Ruby Lewis**  
Associate Director

'BIM' and 'Digital Construction' are buzz-words of choice for the construction industry, but what is the real difference between the two, and how do they work together to deliver a successful project?

## What is BIM?

Building Information Modelling (BIM), in simplest terms "is the process for creating and managing information on a construction project across the entire project lifecycle."

BIM is a way of working; it is data capture, information modelling and information management in a collaborative environment, where all teams involved work to the same standards. The main output being a Building Information Model, the digital description of every aspect of the built asset.

**"Digital Construction is the use and application of digital tools to improve delivery and operating the built environment."**

## What is Digital Construction?

The industry has a number of definitions for 'Digital Construction' made apparent by the different forms in which it takes, and the role played by an organisation within construction projects. The definition which rings true with Waldeck being "digital construction is the use and application of digital tools to improve delivery and operating the built environment."

Digital Construction sees the industry stepping away from traditional drawings to a more digital and data-driven approach in order to enhance their activities.

For example, project stakeholders could be utilising digital design and coordination tools, digital data capture tools for context capture, accessing data in the field via tablets or phones to aid progress reviews, snagging review and post occupancy evaluations, or to allow autonomous site machinery activities.

## So... what's the difference?

The two carry different definitions however are entwined. BIM is the fundamental process implemented at the start of a project, giving the design team a framework to follow (requirements, standards, procedures etc.) to produce deliverables against ensuring that projects are delivered on time and to budget. With the ultimate output being a data set that the facilities management team can utilise during the lifecycle of the asset aiding operation and maintenance of the facility.

Like BIM, Digital Construction aims to improve delivery, however it is dependent upon the implementation of a digital strategy to begin with so to maximise the potential of all project data through its lifecycle.

## What should you be thinking about when looking to use BIM / Digital Construction on a project?

Start with the end in mind. As with any construction project embarked upon during recent times, it's important for consideration to be given to what data the Facilities Management team require in order to operate and maintain the asset over the course of its lifecycle but also the plethora of benefits it can pose to the project and its various stakeholders.

## Take-aways...

Digital advances have transformed the construction industry over recent years and continue to revolutionise the way we work. Both BIM and Digital Construction aim to improve and enhance within both organisations and projects alike; BIM provides project teams with a solid foundation to deliver against, whilst Digital Construction continues to build upon the data harnessed, leveraging tools and processes making automation become a reality.

Waldeck have a wealth of knowledge applying BIM together with Digital Construction across a broad spectrum of industries and sectors and offer BIM Consultancy to our clients. For more information, please contact Veronica by calling 08450 990285.





## CASE STUDY:

# Digital Capture of Sizewell C

### Project overview

As part of EDF's proposed new nuclear power station, Sizewell C in Suffolk, Waldeck were appointed to undertake a UAV survey of the areas surrounding the existing nuclear facilities Sizewell A & Sizewell B.

With a total of 275 hectares to be surveyed, EDF required a fast and efficient capture method which would provide them with deliverables which give an insight into the current land uses, as well as a topographic drawing output for use by the Engineering Team.

Waldeck delivered services to include:

- UAV survey
- Production of point cloud
- Production of topographic drawings
- Production of orthomosaic

### The technology

Focusing on the high priority survey area totalling 66 hectares which was identified by EDF, Waldeck chose to utilise an Unmanned Aerial Vehicle (UAV) in conjunction with Global Navigation Satellite System (GNSS) smart antenna to capture the area.

Ground Control Points (GCP) large enough to be easily identified within the UAV data capture were distributed across the survey area and their location recorded with the GNSS smart antenna.

A series of autonomous flights were completed and included over areas which are inaccessible on foot. Aerial images captured by the UAV were combined with the GNSS data during processing to create a geolocated and highly detailed point cloud.

From the point cloud, the terrain of the survey area was extracted, and full topographical drawings created.

### Overcoming challenges

One of the challenges the Waldeck team faced on this project was flying the UAV in restricted airspace and over a SSSI. All Nuclear power stations in the United Kingdom are protected by restricted airspace, which applies to all aircraft including UAVs. Therefore to complete the required aerial works, Waldeck were successful in their request from the Civil Aviation Authority (CAA) Safety and Airspace Regulatory Group to receive Exemption from the Air Navigation (Restriction of Flying) (Nuclear Installations) Regulations 2016.

Furthermore, permission was gained from Natural England to fly over the SSSI which formed part of the survey area, providing the client with an insight into an area which they cannot gain access to due to the marshes within.

Another challenge faced by the Digital Capture team was working in close proximity to the sea, with local wildlife and winds being continuously monitored to ensure the safety of each flight.

### How we added value

The key deliverable on this project was the production of topographic drawings to inform the planning and enabling works on the project by draping intelligent surfaces directly over the point cloud.

The orthomosaics also enabled the client to see in high resolution the context of the survey area, including areas which they were unable to gain physical access to such as the marshland within the SSSI. Although not a key deliverable, point clouds of the capture area were also provided along with a guide to enable the client to fully leverage the data from the point cloud in addition to the intelligent 3D topographic drawings.



### INTERNATIONAL WOMEN IN ENGINEERING DAY:

# Transform the Future



## Waldeck celebrated International Women in Engineering Day (INWED) on the 23rd June.

The international awareness day celebrated its sixth year in 2019, focusing attention on the remarkable careers available in engineering and technical roles for women.

Women studying and working in Science, Technology, Engineering and Mathematics (STEM) are generally underrepresented, but this is particularly apparent in engineering. In 2018, just 12% of the engineering workforce was female.

We spoke to some of our female engineers to discuss their experiences within their careers, including what they think the industry can do to create a more diverse working environment and #TransformTheFuture.

### We caught up with:

Alison Doubell **(AD)**

Director

Veronica Ruby **(VR)**

Associate Director and Lead BIM Consultant

Rachel Shaw **(RS)**

Principal Electrical and Lighting Design Engineer

Cristina Lanivski **(CL)**

Senior Structural Engineer

### Tell us about your job role

**AD**– I'm a Director at Waldeck, and the Key Account Manager for several large multi-disciplinary projects. I also work to bring new projects into the company through business growth activities, and as a Chartered Engineer I'm also civil and structural CRE for several rail related projects.

**VR**– I'm an Associate Director/Lead BIM Consultant at Waldeck. My role in the business is very varied, including delivering BIM Consultancy for projects, leading Waldeck's internal BIM strategy, heading up Research and Development activities across the business and also being responsible for ensuring technical training requirements are met for our staff.

**RS**– I'm a Chartered Principal Electrical Engineer responsible for the electrical services design of a number of residential and commercial buildings. I carry out site visits and surveys, attend meetings, prepare drawings, models, calculations, specifications and reports for the various design and construction stages of a project and for various electrical services.

**CL**– I'm a Senior Structural Engineer, and my main role includes the design and analysis of structures to meet necessary safety requirements. I am involved in a wide range of construction projects throughout the entire design process, from concept to completion. Within my role I also prepare models, calculations, specifications and reports.

### Why did you choose an engineering career path?

**AD**– I was naturally good at STEM subjects at school and was fortunate that I had teachers who encouraged me to go on several courses and work experience that promoted engineering. Civil and Structural Engineering was the discipline that appealed the most, so I chose to study this at University.

**VR**– Leaving school, I was never 100% clear with what I wanted to do. Not having the desire to continue my education into University after leaving Sixth Form I was looking for work which had career prospects and most importantly I found of interest. I applied to Waldeck to become a trainee draughtswoman and have since developed my career at the company over the past 17 years, undertaking a variety of roles and building on my design skills.

**RS**– I worked in the Administration Team of a building services consultancy after leaving school which was the first experience I'd had within the construction industry. I quickly realised that a career as an Electrical Engineer was the path I wanted to take.

### What are your career highlights so far?

**AD**– There have been many! Starting up a new office for Waldeck in Newark, which is a thriving multi-disciplinary design hub for the company has definitely been a key highlight, as well as working on a range of different projects; from manufacturing facilities and rail maintenance depots to the International Broadcast Centre of the London 2012 Olympics.

**RS**– The main achievements that stand out for me are achieving a distinction for my MSc, achieving Chartered status with the Engineering Council and working on the IKEA Greenwich project as the electrical services lead for the client-side team.

**CL**– A career in Structural Engineering has offered me great opportunities to study and work in multi-cultural environments, whether this has been whilst preparing my MSc Dissertation, PhD or during design projects (mainly industrial, commercial or residential buildings) in different countries across Europe.



### What do you think the industry could do to promote a more diverse working environment?

**AD**– I think there is still a perception that engineering is not for women and this perception starts at a very young age. There needs to be more interaction with schools at all ages to introduce construction as a whole and show the variety of roles on offer within the industry.

**VR**– As women working in engineering, it's up to us to promote this as an attractive career to pupils in schools and colleges, hopefully giving young women the information they need to imagine themselves having a career in the industry.

**CL**– I do think education in schools should promote the construction industry more. I have seen books and TV shows for children presenting construction in an attractive manner and I must say I felt proud to be a Structural Engineer.

### What advice can you offer to women who would like to pursue a career in engineering?

**AD**– It is possible, and don't be persuaded otherwise. There are numerous opportunities and the industry covers

a wide spectrum of different roles. You can be involved in great projects that make a real difference to how we live and have a long and rewarding career that is never ever boring.

**VR**– Don't be discouraged by a male dominated industry. Engineering is a diverse area to work in and with technology changing the way the industry operates it is an exciting time to be a part of it.

**RS**– My advice is more to women who are currently pursuing a career in engineering, we need to create more female role models in engineering, who are ambassadors for the industry. I feel there's a lack of these and I think that if there were more present, young women are more likely to consider a career path in area.

**CL**– I believe the boundaries between gender stereotyped careers are starting to fade away. As technology continues to evolve, I think everyone should at least have in mind a related profession.

---

To find out more about International Women in Engineering Day please visit [www.inwed.org.uk](http://www.inwed.org.uk)



# Employee fundraising efforts reach a new high

As part of Waldeck's commitment to Corporate Social Responsibility, employees are granted one day's annual leave each year to partake in a charity event of their choice. A huge well done to some of our staff who have taken time out to raise money for various charities so far in 2019:



## Sam Young

### Longest Day Golf Challenge Macmillan Cancer Support

Project Engineer, Sam Young and a group of his friends took on The Longest Day Golf Challenge on the 21st June, raising over **£1,200** for Macmillan Cancer Support.

With 72 holes to play, The Longest Day Golf Challenge claimed to be the biggest game of their lives. The group managed to complete the challenge in 16 and a half hours, reaching an impressive 57,000 steps from just over 25 miles of walking.

Sam shared: "The support from the golf club members and the club itself on the day was fantastic; members halting their play to allow us to play through, food and drink bought by members to keep us going, and the round of applause from the bar when we walked off the course after our final round really was the cherry on top. We're so grateful for the donations received on the day and through our JustGiving page, the money is going to a fantastic cause."



## Ed Wells

### 'Ultimate' Triathlon Forever Hounds Trust

Senior Technician, Ed committed to the 'Ultimate' Triathlon in Bristol to raise money for Forever Hounds Trust, in memory of his lurcher, Luna.

On the 2nd June, Ed endured the gruelling 2.4 mile swim, 112 mile bike, and 26 mile marathon to finish in 12 hours and 38 seconds, and smashed his target of **£500** for the Forever Hounds Trust.

Ed shared: "Forever Hounds Trust are the charity which I rehomed my dog Luna from eight years ago, as she started to slow down with old age I reflected on all the adventures we shared. Had it not been for the charity she would not have had a second chance at life, which I know we are both so grateful for.

"This encouraged me to sign up for an event, raise money and do all the running she could no longer do. It was my first Ironman distance triathlon, and I had hoped Luna was going to be there at the finish line but sadly the event was in her memory."



# Architectural Team

## Three Peaks Challenge Macmillan Cancer Support

Members of Waldeck's Architectural Team put down their pens and replaced them with trekking poles, as they took on the Three Peaks Challenge, raising over **£1000** for Macmillan Cancer Support, a charity which is particularly close to the heart of team member Martin Cheung.

Against the odds the team battled through adverse weather and treacherous conditions – in the end, knowing they weren't going to make the 24 hour cut-off, and not wanting to let down those who had sponsored them, the team completed two of the official 'Three Peaks' and finished the challenge with a hike up Pen-y-Ghent to make it (unofficially) three. Battered and bruised, the team completed their version of the challenge in 27 hours.

Martin shared: "My Dad had the misfortune of being diagnosed with stomach cancer just before Christmas. The news had distressed the entire family but the support of Macmillan providing physical and more importantly, moral support put us all at ease during a very difficult time."



**'The news had distressed the entire family but the support of Macmillan providing physical and more importantly, moral support put us all at ease during a very difficult time.'**



## Claire Gallagher

### Three Peaks Challenge Mind Charity

On the 1st June Bid Manager Claire and five of her friends committed to bunk beds and blisters in order to raise as much money as they could for their chosen charities. Claire successfully beat her target of **£250** for mental health charity, Mind.

The challenge involved climbing the highest peak in each country of Great Britain; Ben Nevis (Scotland), Scafell Pike (England) and Snowdon (Wales) which in total includes 23 miles of walking, a total ascent of 3064m, and 462 miles of driving – which the group of friends completed with 4 minutes to spare of the 24 hour cut-off time.

Claire shared: "Having worked in the construction industry for 13 years, I have really noticed a shift in conversations about mental health, and think it is great that we can support Mind in their mission to provide advice and support to empower anyone experiencing a mental health problem, as well as improving mental health services, raise awareness and promoting understanding."



# Waldeck launch Interim Management services for clients

‘...supporting them in periods of high volume bids and tenders allowing Waldeck to add value and build long term relationships at a strategic level.’



As Waldeck's Commercial team continues to secure work through a range of frameworks and clients, we have recently expanded our capabilities to include Interim Management services.

## What is Interim Management?

Interim Management enables the temporary secondment of professionals into critical roles, providing timely and flexible resourcing solutions to clients during construction projects, whether they are one-off small scale work-packages, or large multi-million pound schemes.

## Our Solution

Our team of experts work closely with clients to understand their needs and deliver the temporary provision of management resources and skills as and when required. We have a close network of experienced personal across roles to include:

- Bid Support
- Building Surveying
- Commercial Management
- Estimating Support
- Land Management
- Programme Management
- Project Management
- Technical Advisor

## Why Waldeck?

We have seen huge success in placing Interim Managers into our client organisations to deliver projects across the Buildings and Development sector, working closely with clients such including those in the Not for Profit Care Sector, PLC Developers, PLC Contractors and Not for Profit Housing Associations to deliver multi-million pound schemes across the UK, with particular expertise and experience in:

- Affordable Housing
- Extra Care
- Private Housing
- Retail
- Retirement Living
- Secondary Education
- Student Accommodation

Graham Wright, Director of the Commercial team shares: “Our Interim Management team has been steadily growing and providing solutions for our client’s development programmes and supporting them in periods of high volume bid and tenders allowing Waldeck to add value and build long term relationships at a strategic level.”



# Digital specialist delivers first guest lecture at BCU

Digital Specialist, Sagal Rooble was recently invited back to Birmingham City University's School of Engineering and the Built Environment to deliver her first Guest Lecture since completing her Masters there in 2017.

Sagal returned to Birmingham to cover Level of Detail (LOD) and Level of Information (LOI) for complex structures as part of the students 'Integrated Digital Design for Complex Structures' module, as well as giving students an insight into life after University.

Alongside delivering lectures at the University, Sagal has been working closely with staff to evolve their brief on the deliverables required by students to ensure the course content is reflective of projects in the workplace.

Sagal shares: "It is great to be able to take the insight and understanding of real-life projects which I have gained at Waldeck and help apply this to the University's briefs.

"I was really impressed with the standard of information students are being taught at Level 5. Having previously been a lecturing assistant at the University, I am proud of the jump the team have made in bridging the gap between theory in education and application within the construction industry.

"By inviting people like myself who implement these processes on a daily basis, I really believe this instils confidence in the students that everything they are being taught will be valuable as they make a transition into the next stage of their career."



**'Sharing insights from my role at Waldeck with the students has been really beneficial...'**

# Waldeck shortlisted for TechFest Awards

New Civil Engineer  
**TechFest.**  
FESTIVAL OF INNOVATION AND TECHNOLOGY 2019  
26 SEPTEMBER 2019 • THE BREWERY

Waldeck are pleased to announce that our Digital and Technologies team have been shortlisted for the New Civil Engineer TechFest Awards in the 'Team of the Year Award' category. The awards are dedicated to celebrating the industry's best technology-led innovations.

Mark Greatrix, Director of Digital and Technologies shares:

"Being recognised and shortlisted for the TechFest 'Team of the Year Award' is fantastic news, adding to what's proving to be an extremely successful year for both the team and our projects which have been recognised for several prestigious awards.

"This shortlist is a true testament to the hard work and dedication of the entire team, whom continue to push the boundaries of innovation and its application within digital construction."

Winners will be announced at a gala dinner on 26 September, at The Brewery, London.

# The Residential Sector

Waldeck have a breadth of experience across the residential sector, and are a specialist provider of:

- Bills of Quantities (BoQ)
- Builders Quants
- Building Surveying / Administration
- Cash Flow Preparation
- CDM Advisory
- Change Management and Variation Claims
- Civil and Structural Engineering
- Claim Management
- Clerk of Works
- Commercial Management
- Condition Surveys and Dilapidation Surveys
- Contract Administration
- Cost Planning
- Development and Fund Monitoring
- Dilapidation Surveys
- Employers Agent
- Expert Witness
- Health and Safety Audits
- Interim Contracts Management
- Mechanical and Electrical Engineering
- Party Wall
- Pre Purchase Due Diligence
- Procurement Advice and Selection
- Programme Management
- Programme Management
- Project Management
- Project Planning
- Quantity Surveying
- Risk Management
- Technical Due Diligence
- Value Engineering

Our team works closely with our clients in planning and setting up projects from inception to completion, preventing and mitigating potential delays and disruption; clients employ Waldeck to ensure that every aspect of their programme or project is properly governed, well-executed and fully supported from the outset of the commercial process delivering on cost, time and to highest quality standards.

Our team have access to the RICS and BICS market data, software and digital technologies, assuring clients that we can be relied upon to be there throughout the construction process, helping to make informed decisions and keep the project moving forward positively and with certainty.



## DEELEY CONSTRUCTION

### Warwick Care Homes

The programme consists of over 400 new build units over 5 years and a refurbishment and extension programme of 30 units. These combined schemes have a new build value of £50 million and a refurbishment value of £2.5 million.

Value

**£50m**

Start Date

**Jun 2017**

Duration

**66 Months**



## BOUYGUES UK

### Bath Court

Waldeck are providing post contract Employers Agent and Quantity Surveying services for a 435 unit Student Accommodation scheme in Birmingham City Centre. The scheme will include retail, gym and communal areas covering 13 stories on a complex site.

Value

**£26.5m**

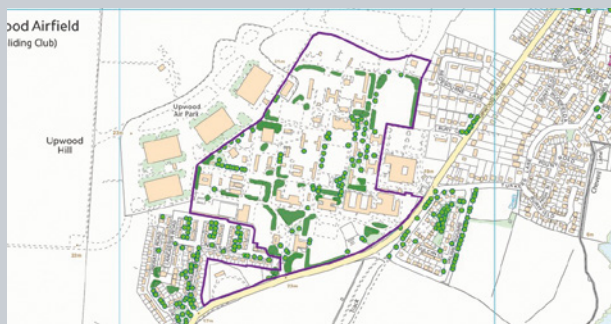
Start Date

**Jan 2018**

Duration

**30 Months**





## GEDA CONSTRUCTION & LONGHURST GROUP

### Upwood

Waldeck have been appointed on a project consisting of a 60 unit private residential scheme on a former RAF base. The works include service upgrades outside the boundary for a £9m build contract. We are now managing the delivery phases of this project which is currently on site.

Value	Start Date	Duration
<b>£9m</b>	<b>Mar 2019</b>	<b>17 Months</b>



## JESSUP BROTHERS & EMH GROUP

### Court Street

Waldeck have been appointed on a two phase scheme consisting of 90 units. Phase one consists of 72 units which commenced in January 2019 with the overall project expecting completion December 2021. The total project cost for this phase is estimated to be £14 million.

Value	Start Date	Duration
<b>£14m</b>	<b>Aug 2018</b>	<b>40 Months</b>



## JESSUP BROTHERS

### Albrighton Extra Care

Waldeck have been appointed to provide our services on an extra care and residential scheme. The developer led scheme received HE grant funding under the 2017 programme and will consist of over 70 extra care units and 60 residential units.

Value	Start Date	Duration
<b>£25m</b>	<b>Jun 2017</b>	<b>48 Months</b>

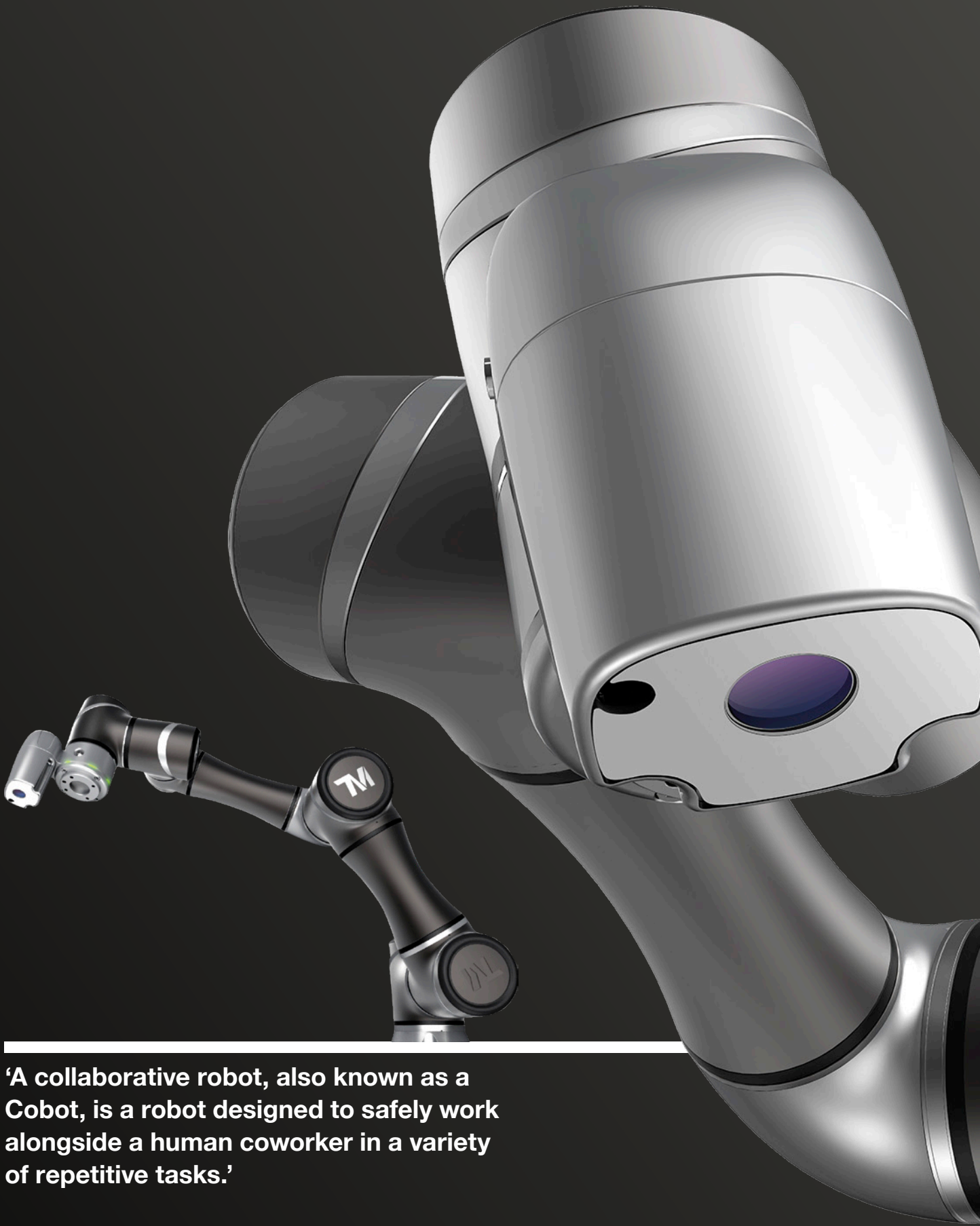


## JESSUP BROTHERS & WREKIN HOUSING TRUST

### Lesley Owen Way

Waldeck are acting as Employer's Agent and Principal Designer and are currently assisting all parties in getting the works onto site. The project comprises the development of 40 dwellings with a mix of affordable rented, shared ownership and wheelchair accessible bungalows.

Value	Start Date	Duration
<b>£4.9m</b>	<b>Jan 2019</b>	<b>18 Months</b>



---

**'A collaborative robot, also known as a Cobot, is a robot designed to safely work alongside a human coworker in a variety of repetitive tasks.'**



# Morson Projects Introduce COLLABORATIVE ROBOTS

Morson Projects has recently become a Systems Integrator and a training partner for HMK and a reseller for Techman (TM) Robot.

A collaborative robot, also known as a Cobot, is a robot designed to safely work alongside a human coworker in a variety of repetitive tasks. These are different to industrial robots which are robots that are usually built and programmed specifically to work on a task isolated task behind strict protective measures.

TM Robot is a subsidiary company of Quanta Computer Inc., the world's largest notebook computer OEM Company. Their Cobots have an intelligent built-in visual system that takes its place in the current global market. HMK Robotics supplies the broadest range of world class products for automation applications.

The Cobot learns like a real co-worker: you guide it through a task, it repeats the task perfectly down to +/- 0.05mm, every time. The TM-Flow software allows you to use your tablet, computer or smartphone to drag-and-drop commands into the Cobot's workflow, with no programming required. The Cobot is programmed for each task by the user or integration partner either through software or manual point to point, moving the 6 axes of the Cobot into step by step positions.

## **What is the difference between Collaborative Robots and Industrial Robots?**

### **Collaborative Robots**

- Flexible as it can be programmed to perform multiple tasks
- Suitable for handling smaller weights (Under 5-14kg)
- Smaller footprint so less impact on the shop floor
- User friendly – easy to program and to re-deploy
- Protective caging not required
- Safety sensors will detect unexpected objects and pause workflow
- Low maintenance due to payload and reduced loads

### **Industrial Robots**

- Usually installed to perform one specific task
- Capable of handling large weight (over 20kg)
- Large footprint - takes up a vast amount of space
- More complex and specialist programming required
- Protective caging essential so has a greater impact on the shop floor
- High maintenance due to great dynamics and loads



---

# Waldeck and Morson Projects **JOINT NUCLEAR CAPABILITY**



## ‘We provide a complete range of nuclear services throughout the entire lifecycle of a nuclear asset...’

As the nuclear industry seeks to invest in further infrastructure, it is key that providers are optimising the lifecycle of their facilities through creating operational efficiencies and minimising costs.

Waldeck and Morson Projects together have over 40 years of experience in the nuclear industry, supporting clients across the UK with high profile new-build and decommissioning projects, as well as offering asset management solutions for existing sites.

The two companies are currently working on several of the largest nuclear new build, power and decommissioning projects globally. In order to support our clients' goals, we view every project as unique, taking the time to truly understand our clients' requirements, in order to deliver bespoke solutions.

### Our Solutions

Waldeck and Morson Projects support nuclear clients through engineering, technology and asset management-led solutions. We provide a complete range of nuclear services throughout the entire lifecycle of a nuclear asset that ensures the facility is optimised for use, incorporating efficiencies and cost savings from concept design through operations and maintenance to decommissioning.

An A-Z of our combined services includes:

- Asset Care, Maintenance & Technical Documentation
- BIM Consultancy
- Civil & Structural Design & Assessment
- Commercial and Risk Management
- Commissioning, Multi-Discipline Setting to Work, Testing & Operations Support
- Condition & Movement Monitoring
- Control, Electrical & Instrumentation
- Design Review & Design Assurance
- Design for Decommissioning – Decommissioning Mindset
- Design for Extreme Environmental & Accidental Events (Seismic, Blast, Dropped Loads etc.)
- Digital Surveying & Data Capture
- eMaster Lighting Control
- Electrical HV & LV Distribution
- Engineering Substantiation
- HAZOP & HAZCON
- Independent Structural Assessment
- Industrial Communication & Networking
- Industrial Architecture
- Industrial Cyber Security
- Installation & Commissioning
- Maintenance Strategy Optimisation TRAM, TBOM & Virtual Development Modelling

- Mechanical & Electrical Building Services Design
- Plant Configuration, Documentation Searches & Records Management
- Plant, Piping & Vessel Design
- Process Engineering
- Radiological & Conventional Safety Assessment
- Regulatory & Site License Compliant Design
- Reliability Centred Maintenance (RCM) Reviews
- Safety Case Engineering to ONR SAPs & TAGs
- SCADA & PLC Control Systems
- Software Development
- Systems Engineering & Integration
- Test & Build Software Toolkit
- Mechanical Handling, Tooling Design & Manufacture
- Training Development & Delivery

We are also able to offer ‘Radiological Classified’, ‘Monitored Workers’ and ‘Security Cleared’ personnel who are experienced in working at nuclear and defence sites.

### Our Experience

Our teams of top talent have worked on nuclear facilities across the UK including:

- AWE, Aldermaston
- BAE Systems, Barrow
- Capenhurst Site
- Chapel Cross
- Clyde Naval Base
- Devonport Royal Dockyard
- Dungeness A
- EDF Energy, Hinkley Point A
- EDF Energy, Hinkley Point C
- EDF Energy, Sizewell B
- EDF Energy, Sizewell C
- Horizon, Wylfa Nuclear Power Station
- Hunterston Power Station
- LLWR site
- Rolls Royce, Derby
- Sellafield
- Springfield
- Low Level Waste Repository
- Dounreay
- Trawsfynydd
- UKAEA, Culham
- Winfrith

If you would like to find out more about our combined nuclear experience and capabilities, please contact either Paul Waldeck on 07768 857049 or Ian Ross on 07966 532444.

**PROJECT ENQUIRIES**

Contact: Andrew Dent  
andrew.dent@waldeckconsulting.com  
Telephone: 08450 990285

**PR & MEDIA ENQUIRIES**

Contact: Hannah Wharton  
hannah.wharton@waldeckconsulting.com  
Telephone: 08450 990285

**CAREER OPPORTUNITIES**

Contact: Debs Newbery  
debs.newbery@waldeckconsulting.com  
Telephone: 08450 990285

[www.waldeckconsulting.com](http://www.waldeckconsulting.com)

