



# bam bulletin

Building the present, creating the future

## BELOW OUR FEET Viking Exhibition goes on Public Display

A wealth of artefacts from the Viking era unearthed during BAM's major development of the former Beamish & Crawford site in Cork city centre are on display at the Cork Public Museum.



The discoveries have yielded fascinating detail of the city's origins, positioning Cork as one of the earliest Viking settlements in Ireland. As it was not possible to allow the public on site during excavation, BAM has funded the 'Below our Feet' exhibition at Cork Public Museum at Fitzgerald's Park. The excavation undertaken by

the renowned archaeologist Dr Maurice Hurley and his UCC team on the site of the Cork Events Centre and new student accommodation at South Main Street revealed:

- Evidence of the earliest urban layout recorded of Cork dated to 1070 AD,



L-R: Dr Maurice Hurley, Theo Cullinane – CEO BAM Ireland, Cllr. Tony Fitzgerald (Former Lord Mayor of Cork 2017/18) & Ann Doherty Chief Executive of Cork City Council

- the foundations of 19 wooden Viking Age houses from the 11th and 12th century,
- three stone walls and a door way of St Laurence's Church understood to be from the 13th century,
- a perfectly preserved 1,000-year-old weaver's sword featuring a carved human face,
- a collection of spoons, ladles and buckets as well as a wooden thread-winder with the design of two horses' heads carved into it.

Commenting on the exhibition BAM Ireland CEO Theo Cullinane, said: 'The discovery of artefacts at our development at the former Beamish & Crawford site gives a flavour of life and society of Viking era Cork and the historical importance the city played during this age. Cork is of huge importance to BAM - we are honoured to have played a central role in developing the modern city and now also helping to reveal a hidden chapter of its past.'

Dr Hurley and his team excavated the site between November 2016 and March 2018 on behalf of BAM. The excavation produced evidence of the earliest urban layout of Cork City discovered to date with the first houses on the site built around 1070 AD. The lowest excavated features were 4m (or 12ft) below the level of South Main Street today and excavated strata represented almost every period from the history and development of Cork.

The exhibition aims to highlight some of the findings with emphasis on the earliest excavated levels dating from the 11th and 12th centuries and the Late Viking-Age or Hiberno-Norse era, a period when the cultural sphere experienced a mixture of Scandinavian and Native Irish influence. Also on display are the wooden structures and items recovered from the excavations that reveal 12th century Cork as a wooden town where all the houses and many of the objects in everyday use were made from wood.

## New Children's Hospital and Satellites are all Progressing Well

Construction work on the 160,000m<sup>2</sup> New Children's Hospital, started in October 2017, is progressing well and is on track.

It is Ireland's first digital hospital and once complete it will bring together the three children's hospitals, Our Lady's Children's Hospital, Crumlin, Temple Street Children's University Hospital and the National Children's Hospital, Tallaght into a world class building. BAM are also constructing two new Paediatric Outpatients and Urgent Care Centres – one at Connolly Hospital, due to open in 2019 and one at Tallaght, due to open in 2020. The external façade of

the facility in Connolly is almost complete and work has just started at the Tallaght facility.

On the NCH, piling works are currently 83% complete. Excavation and disposal is currently 61% complete. The south basement works have progressed to stage of completion of first B02 level floor slab and trimming of B01 formation in readiness for sub-slab drainage works. The north side works commenced with the excavation and blinding of the

first core and the construction and tying back of the first sections of the Cameron Square capping beam. Utility tunnel M&E works are at commissioning stage and demolition of the existing tunnel and services is complete.

The Drimnagh Sewer manholes are also substantially finished and the four south side tower cranes are erected and operational. Works have also forging ahead on the Basement Slab.



# Official Opening of Cork Courthouse PPP Project

The new Cork Courthouse was officially opened in May by Minister for Justice and Equality Mr Charlie Flanagan TD following a €35 million redevelopment project by BAM.



New Cork Courthouse on Anglesea Street

The work involved the redevelopment of the former Model School building on Anglesea Street into a six-storey courthouse that provides six new courtrooms as well as improved custody and legal practitioner facilities.

It is one of seven courthouses that BAM has restored, renovated and built across Ireland as part of the Courts Bundle PPP project, the contract also provides for the 25-year facility management of each courthouse.

The new Cork Courthouse has been developed around the original structure which was built circa 1865. BAM's new development has expanded the site's area size from 1,815m<sup>2</sup> to 10,100m<sup>2</sup>. It was designed to incorporate Court Services offices, training rooms, Garda and DPP facilities also.

Speaking at the opening, CEO of BAM Ireland Theo Cullinane said: 'The new Cork Courthouse is a first-class facility and one that the people of Cork can be proud of.'

Many of our parents attended the school and it is a fine example of utilising an existing site and turning it into a contemporary building that is befitting of this great city. It is one of seven courthouses throughout the country that BAM has designed, built, financed and will maintain for 25 years as part of the Courts Bundle PPP project. BAM has a great association with Cork City and this is just one of numerous projects we have completed to help shape it'



L-R: Theo Cullinane – CEO BAM Ireland, Charlie Flanagan TD – Minister for Justice Equality & Law Reform, Mr Justice Frank Clarke – Chief Justice of Ireland, Tony Fitzgerald (Former Lord Mayor of Cork 2017/18), Ger Harrington – COO BAM Building

# Cork Container Terminal at Ringaskiddy Official Launch

Tánaiste and Minister for Foreign Affairs and Trade, Simon Coveney officiated at the launch of the new Cork Container Terminal development at Ringaskiddy in June.

The new terminal which will be constructed by BAM, will provide a 360 metre quay with 13 metre depth alongside and will enable larger ships to berth in Ringaskiddy. BAM will also construct a 13.5 hectare terminal and associated buildings. The new facility will be operational by 2020 and will also include two ship to shore gantry cranes and container handling equipment to accommodate current and future container

shipping. The new facility will operate modern and efficient cargo handling equipment with innovative terminal operating and vehicle booking systems. Theo Cullinane, CEO BAM Ireland said, 'This development at Ringaskiddy will be transformational for the Port of Cork Company with it's obvious efficiencies, it will also act as the catalyst for the future development of Cork City and the much

talked about Docklands area, with the environmental issues associated with noise pollution and the loading and unloading of unsuitable cargo now being taken out of the City. I would like to wish the Ports site team led by Declan O Sullivan, our own team lead by Director Tadhg Lucey and Construction Manager Mark Phelan and our design teams RPS and MWP a safe and successful delivery of this project.'



# Your Safety is My Safety

That's the slogan for BAM's new worldwide safety campaign that was launched on 26 June 2018.



All operating companies together have chosen to send a single safety message with a single look & feel. A perfect example of how they are One BAM!

We believe safety is a shared responsibility. This applies not just to our building sites but to

everyone in the chain: from client to architect to supplier, engineer and subcontractor.

This new campaign has been inspired by BAM's ultimate goal: **'Everyone home safe and healthy every day!'**

From 1 July 2019, many different language versions of the slogan 'Your Safety is My Safety' will be seen on BAM construction sites around the world.

# BAM Team at NCH Raise Vital Funds for The Temple Street Foundation

The energetic BAM Team at the NCH battled 20 obstacles, 500,000 gallons of mud, 40 tons of ice over a gruelling 16km course to test their physical strength and mental grit at the recent Tough Mudder Event to raise funds for Temple Street Hospital.



The NCH Team presented a cheque for €3,345 to The Temple Street Foundation.

The Temple Street Foundation raises money to enable the Temple Street Children's University Hospital to provide world class care and to pioneer new treatments and cures for childhood illnesses. The hospital caters for over 145,000 patient visits annually.



# Air Traffic Control Tower at Dublin Airport Taking Shape

Once complete it will be one of Ireland's tallest structures



Construction of the new 23-storey Visual Control Tower at Dublin Airport, which is set to become one of the tallest structures in Ireland, is taking shape with the complex installation of a 106 tonne steel ring completed in May.

The ring, which forms Floor 1 of the control cab, was hoisted 105 metres into the air, by a specialist crane before being positioned into place on the 86.9-metre-high tower. The tower's height will surpass the Obel Tower in Belfast (85m) and The Elysian in Cork (79m).

Once positioned, a team of specialists worked for five hours to weld the ring to secure it to the

top of the tower, while the crane held it in place. The control cab will eventually accommodate 12 positions. This complex stage of the build, which was carried out on behalf of the Irish Aviation Authority (IAA), had taken days of meticulous planning with BAM taking advantage of the recent fine weather to complete the operation efficiently. The new visual control tower will replace the existing control tower allowing it to facilitate parallel runway operations by 2021 – something Dublin Airport currently hasn't the capacity to do.

CEO of BAM Ireland Theo Cullinane said: 'This was a very complex and vital stage of the building of the Air Traffic Visual Control tower. It involved the use of a crane hoisting the 106 tonne ring into the air and carefully lowering it as our team fixed it to the top of the tower. BAM has an incredible track record of perfecting structures of this complexity and once completed Dublin Airport will be getting a world class facility that will be to the benefit of Ireland. Well done Team BAM.'

The €27m project is set to be completed in February of next year and will be handed over to IAA Technology and Operations for the installation, commissioning and testing of associated air traffic management equipment and systems.

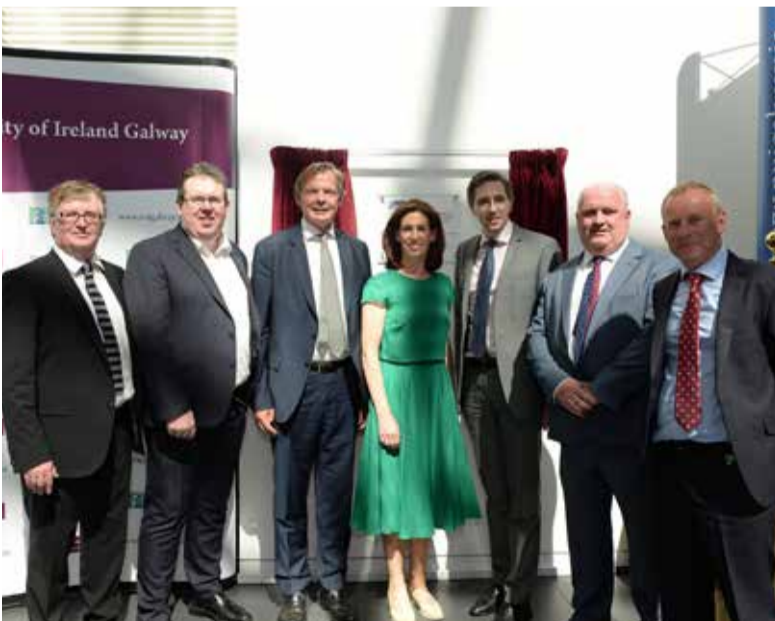
The new facility will be ready for single runway operation during the first half of 2020 and will be ready for parallel runway operations by 2021 when the Northern parallel runway is introduced at Dublin Airport. Peter Kearney, IAA Chief Executive Designate said: 'We are very pleased with the progress on the Air Traffic Visual Control tower at Dublin Airport. This will be a state-of-the-art facility that will see us continue to offer a world class service to the highest safety standards. We look forward to operating from the new tower from 2020.'

In addition to the VCT tower, BAM will deliver an associated technical and facilities support building, a new car park replacing the existing car park and a new security building.



# Official Opening of Human Biology Building, NUI Galway

Minister for Health, Simon Harris TD, was joined by Professor Ciarán Ó hÓgartaigh, President of NUI Galway for the official opening of the Human Biology Building at NUI Galway in June.



This new 8,200m<sup>2</sup> structure, built by BAM under a design and construct contract, brings the Pharmacology & Therapeutics, Anatomy and Physiology Departments of the University under one roof for the first time. The contemporary five storey building sits sympathetically

between two protected structures; the Arts Science Complex and the Áras na Mac Léinn building.

The building will be home to undergraduate and post-graduate teaching and will carry out cutting-edge research by academics from throughout the

campus in the areas of Science and Medicine, and Engineering.

Commenting at the opening, Theo Cullinane, BAM CEO said 'BAM are delighted to deliver this striking building for NUI Galway which provides the ideal environment for medical learning, research and development. This project follows on from the award winning Engineering Building and the Lambe Institute, also completed by BAM for NUI Galway in recent years.'



# TINE Ireland awards Construction Contract of New Jarslberg Cheese Factory to BAM

In June, TINE Ireland, a subsidiary of the Norwegian dairy cooperative TINE awarded the construction of a new Jarslberg® cheese production facility and administration building at Mogeely, Cork, to BAM.



TINE is Norway's largest producer, distributor and exporter of dairy products with 11,400 members (owners) and 9,000 cooperative farms.

Jarslberg® is a mild cow's-milk cheese with large regular holes, that originates from Norway, but which is also produced abroad under licenses from Norwegian dairy producers. The location of the proposed building is on a greenfield site adjoining the existing Dairygold Mogeely site. The new facility has an estimated capacity of 14,000 tonne of cheese per annum.

Construction, valued at €25m plus, commenced in June

and is due for completion in November 2019. There is a significant volume of earthworks required in order to prepare the site for building foundations. The structure will be a steelwork frame with long spanning trusses (up to 35 metre) and will be clad with Kingspan insulated panels.

The plant includes warm rooms and cool rooms for the different phases of cheese maturing and flavour development. These contain super flat floors for forklift access. Also provided is a brine room with gantry crane. Specialist equipment includes mould presses and vats for the production of curd and whey.

# BAM Staff Day in Support of Aoibheann's Pink Tie

Well done to all our BAM Colleagues who took part in the BAM Staff Day in May. This year our fundraising cycle/walk was in memory of Darragh Herbert and in support of Aoibheann's Pink Tie, Children's Cancer Charity.



This charity is close to a lot of people's hearts here in BAM as they provided essential support and care to Darragh, his siblings and his parents, Keith and Ciara Herbert. This invaluable support enabled Darragh to be cared for at home surrounded by his family and friends.

A cycling group and a walking group took full advantage of the glorious summer's day to explore the wonderful Waterford Greenway Route. The world-class 46km Waterford Greenway runs from Waterford to Dungarvan along the route of an old railway line and includes coast, viaducts, tunnels and a spectacular gorge.

The route has plenty of highlights including the history of the railway

and the tunnel, the ruins of the old Durrow station, and the Ballyvoyle viaduct, which was blown up in the 1922 civil war.

Other points of interest include the Waterford and Suir Valley railway at Kilmeaden, and the Kilmacthomas workhouse and viaduct. In Dungarvan, there's King John's Castle, the Augustinian church overlooking the sea at Abbeyside and Walton Park, named after Ernest Walton, the physicist who split the atom. Aoibheann's Pink Tie provides financial and practical support to the children and their families to see them through the darkest of days to help brighten their lives during these times ([www.aoibheannspinktie.ie](http://www.aoibheannspinktie.ie))

# Irish Team working on the Museum of the Future in Dubai

The MOTF site team are now on their eighteenth month on site. We spoke to some of our Irish colleagues about working on this complex project.



Aerial view of progress on the Museum of the Future

Shaun McGinley is the Project Manager on the MOTF and is from Kerry. He believes that visually, the most apparent part of the project is the structural steel diagrid. The main reinforced in-situ concrete core topped out last month. The cast-in embed plates weigh over 2 tonne each resulting in a complex construction arrangement. The diagrid will slowly start to engulf the top of the core and commence



L-R Seamus O'Sullivan (Construction Manager, Waterville, Co. Kerry), Denis McNelis (Engineering Manager, Shannon, Co. Clare), Derek Bourke (BIM Manager, Castleiney, Co. Tipp), Micheal O'Reilly (Engineer, Virginia, Co. Cavan), Tom O'Dwyer (Engineer, Douglas, Cork), Eoin Ryan (BIM Co-ordinator, Loughmore, Co. Tipp), Richard O'Mahony (MEP Quality Co-ordinator, Bettystown, Co. Meath), Shaun McGinley (Project Manager, Tarbert, Co. Kerry)

its cantilevered stages out along the bridge sections of levels 6 and 7, to rest on the temporary props on the opposite side before it will be jacked into alignment and finally connected with the southern side of the building.

The MEP (mech, elec & plumbing) element is also progressing well and the forthcoming installation of the 13t goods lift will be very beneficial to construction works. Our on-site BIM Team play a key role in this complex and challenging services coordination

enabling clash detection at the earliest stages.

The first of the stainless steel cladding panels were delivered to site in May. These are bespoke GFRP panels with factory installed DGUs complete with LED lighting to the periphery of the glazing. The solar tinted glass is intended to contrast to the stainless steel of the cladding in the daylight and conversely contrast at night when the stainless steel will appear dark and the glazing will be illuminated by the LED's. Each one of the 1024

panels are different and range in size from 9m to 18m long.

Denis McNelis, Engineering Manager has been with BAM for over a year now but has worked for thirty years in the industry. Denis provides technical coordination between the design team and the various subcontractors on structural matters, as well as coordinating internally with our engineering office and the construction team.

Tom O'Dwyer, Project Engineer is from Douglas in Cork and has worked with BAM for over 8 years in Ireland, Australia and UAE. On site he manages the structural steel subcontractor to assist in planning their works and coordinating with other packages while measuring progress to ensure the diagrid completion date is achieved.

Richard O'Mahony from Meath is MEP Quality Coordinator. He is 25 years old and has been working in UAE for nearly 3 years. His role is to manage the onsite activities of MEP sub-contractors and ensuring they carry out the works to the highest quality within the strict project time frame.

Micheál O'Reilly hails from Cavan as is a Site Engineer on the project and has been with BAM since 2015. He was heavily involved in the reinforced concrete structure phase which includes an 80m high core wall and a 2.5m x 2.5m x 165m ring beam.

Derek Bourke from Tipp is BIM manager and has gained over 10 years' construction experience. His responsibilities include: overseeing the overall delivery of the client's EIR (Employers Information Requirement); liaising with the client by acting as the point of contact for BIM management issues and managing the delivery of BIM requirements as per the BEP (BIM Execution Plan).

His remit also includes the management and maintenance of all BIM contract documentation and manages the roll-out and use of BIM 360 Field and Glue along with developing the projects laser scanning strategy and implementation. He also ensures that the MOTF achieves BSi Certification in relation to BIM level 2 compliance against PAS 1192-2.

## Official Opening of Glucksman Library, University of Limerick

University of Limerick's Glucksman Library extension was officially unveiled in June by former Tanaiste Mary Harney.



The facility has now doubled in size and capacity due to the construction of a 7,600m<sup>2</sup> extension to the original library building. The New Glucksman Library, built by BAM, provides



2,200 study spaces and includes a range of world class innovations in book storage and retrieval, digital research, accessibility and 'inspirational learning spaces'. One stand out feature is the ARC

(Automated Reserve Collection) - a 10 meter high book vault and robotic crane, with the capacity to store 500,000 volumes in a space 1/9th of conventional shelving, which will see UL's historic collections, currently housed off-site, returned to campus.

It features a Law Library and Appellate Court along with a Medical and Health Sciences Library. There are discrete spaces for postgraduate and faculty study, group study and exhibition spaces.

Other bespoke areas include a Digital Scholarship Centre, Social Learning Spaces and an Assistive Technology Centre.

## The Annual Cork Simon Community Golf Classic was held in May at Monkstown Golf Club

BAM once again sponsored the Annual Cork Simon Community Golf Classic organised by Arup.

The Golf Classic helps fund Cork Simon Community's work with the Cork homeless.

BAM has sponsored the event since its inception, ensuring that all proceeds from the event go directly to the homeless.

Olympic rower Claire Lambe rustles up support for annual Cork Simon Golf Classic



### KEY PERSONNEL

#### MANAGEMENT

Theo Cullinane - CEO  
Tadhg Lucey - COO (Civil / International / Safety)  
Ger Harrington - COO (Building / Property / FM)  
Lorna Cross - CFO

#### BAM BUILDING:

Regional MD's  
Luke Gibbons  
Denis McCarthy  
Ger Moloney

#### Director

Perry Haughton

#### Construction Directors

Pat Connolly  
Howard McDonagh  
Aidan O'Connell  
Derek O'Connor  
Kevin O'Driscoll  
Seamus Sheahan  
Padraig Walsh

#### Regional Commercial Directors

Seamus Kealy  
Jim Martin  
Pat Murphy

#### BAM CIVIL

Regional MD  
John Lucy

#### Director

Brian Cunningham

#### Construction Directors

Adrian Cunningham  
Darren Devane  
William Diver  
Alan Finn  
Pat McAndrew  
Declan Roche  
Mark Phelan

#### Regional Commercial Directors

Philip Desmond  
Peter Walsh

#### BAM FM / HOUSING

Construction Director  
Micheál Keohane

#### BAM PROPERTY

Directors  
Ger Moloney  
Sean O'Brien

#### BAM PPP

Managing Director Ireland  
Tim Hesketh

#### M&E Coordinators

David Barron - East & Dublin  
Paul Devine - South  
Tiernan O'Malley - West

#### BUSINESS UNITS

Milke Jones - Business Development / Communications Director  
Tadhg Lucey - Sustainability CSR Director  
Kathy O'Leary - SHE Manager & CSR Manager  
Seamus Brady - Chief Estimator, Building  
Paul Brennan - BIM Manager  
Adrienne Bryan - HR & Payroll Manager  
Tommy Flaherty - Plant Manager  
Andrew Kehoe - Procurement Manager  
Tim McCarthy - ICT Manager

### OFFICES

#### HEAD OFFICE

Kill, Co Kildare, W91 KH3E  
T: +353 45 886 400  
e: info@bamcontractors.ie

#### SOUTHERN REGIONAL OFFICE

Euro Business Park,  
Little Island, Co Cork, T45 R902  
T: +353 21 451 7300  
e: info@bamcork.ie

#### WESTERN REGIONAL OFFICE

Unit 5, Liosban Business Park,  
Tuam Road, Galway, H91 DR5W  
T: +353 91 778 583  
e: info@bamgalway.ie