



By Appointment to HM The Queen
Display Case Suppliers
ClickNetherfield Limited
Livingston

8

ACCESS SUPPLIED

The redevelopment of
Cambridge University's
Museum of Archaeology and
Anthropology

16

A WONDROUS PLACE

A stunning new addition to
Liverpool's famous waterfront

24

BLAZING TRAILS

A look at the Natural History
Museum of Utah project
with AJ Higgs

SHOWCASE



CLICKNETHERFIELD
MAGAZINE | 2012



**NATIONAL MUSEUM
OF SCOTLAND**

Since opening on 29th July
2011 there have been over
1.5 million visitors through
the doors

**DRAMATIC
TRANSFORMATION
UNVEILED**

Breathing new life into one of the
finest Victorian buildings in Britain

CLICKNETHERFIELD



By Appointment to
Her Majesty The Queen
Display Case Suppliers
ClickNetherfield Limited
Livingston

CLICKNETHERFIELD



NOW YOU CAN CLICKNETHERFIELD



SUBSCRIBE TO OUR E-NEWSLETTER BY VISITING
WWW.CLICKNETHERFIELD.COM OR BY EMAILING
MARKETING@CLICKNETHERFIELD.COM





Welcome to the 2012 edition of Showcase, ClickNetherfield's annual magazine produced for our customers, our industry contacts, our network of distributors, our joint venture companies and of course our staff.

2011 was a successful year for the business in our home market, working on the two largest projects available in the UK at the Museum of Liverpool and the National Museum of Scotland. Internationally, we also enjoyed renewing acquaintances with The Art Gallery of Ontario and also completing the brand new and highly prestigious Natural History Museum of Utah.

Sadly, the end of 2011 saw the untimely passing of our former Chairman and friend John French. John is missed by all who knew him.

In terms of the year to come, I am pleased to say that we are preparing ourselves for another busy one with a substantial new project in Qatar and a very interesting project at Manchester Museum that we look forward to working on.

I hope you will find this edition of Showcase to be an exciting and informative read. Please continue to send us your comments and ideas – we love hearing from you.

Jim Stewart

IN THIS ISSUE

- | | |
|---|---|
| <p>04 NEWS ROUND-UP
Global expansion, conference follow-up, research collaboration and our new line of customer services.</p> <p>05 NEW PRODUCTS UPDATE
The latest additions to the ClickNetherfield showcase design range.</p> <p>06 HOME TO A MILLION THOUGHTS
Julien Parsons on the recent redevelopment at the Royal Albert Memorial Museum.</p> <p>08 ACCESS SUPPLIED
The redevelopment of Cambridge University's Museum of Archaeology and Anthropology.</p> <p>10 THE START OF AN ERA
The National Maritime Museum's new £36.5 million project.</p> <p>11 TRAGEDY REMEMBERED
Ulster Folk and Transport Museum unveil Titanic exhibition to mark the centenary of the ship's launch.</p> <p>12 NEW REPLICATING OLD
Providing bespoke solutions for English Heritage.</p> <p>13 IN THE FIRING LINE
The ground-breaking new Firing Line museum at Cardiff Castle.</p> | <p>14 SEA STORIES
The undertaking of the first major refurbishment exercise in around 20 years at Arbroath Signal Tower Museum.</p> <p>15 SCOTLAND'S OTHER CROWN JEWELS
Returning James V's 16th-century palace at Stirling Castle to its former renaissance magnificence.</p> <p>16 A WONDROUS PLACE
A stunning new addition to Liverpool's famous waterfront.</p> <p>20 DRAMATIC TRANSFORMATION UNVEILED
Breathing new life into one of the finest Victorian buildings in Britain.</p> <p>24 BLAZING TRAILS
A look at the Natural History Museum of Utah project with AJ Higgs.</p> <p>26 DRAWING ON EXPERIENCE
An incredible visible storage solution created for the Art Gallery of Ontario.</p> <p>27 VITAL STATS
The low-down on a project we're currently working on at Toronto Reference Library.</p> <p>30 EASTERN PROMISE
Developing relationships in the East.</p> |
|---|---|

Events diary 2012

27th April

Touring Exhibitions Group
Marketplace - Edinburgh, UK
www.teg.org.uk

29th April-2nd May

American Association of
Museums Annual Conference
- Minnesota, USA -
www.museumexpo.org

16th-17th May

Museums & Heritage Show -
London, UK -
www.museumsandheritage.com

October

ClickNetherfield Annual
Conference - date and venue
TBC -
www.clicknetherfieldevents.com

8th-9th November

Museums Association Annual
Conference & Exhibition -
Edinburgh, UK -
www.museumassociation.org/conference

NEWS ROUND-UP

CONFERENCE FOLLOW-UP

Thanks to all who attended our annual conference held in association with National Museums Liverpool in December. As in previous years, the event was hugely popular with a great turnout on the day.

This year's format covered the major aspects of managing a museum project, such as design, site construction and cost management.

The new Museum of Liverpool was used as a case study and many of the speakers focussed on their involvement in the project; discussing both the successes and the challenges. You can read more about the Museum of Liverpool on page 16.

Watch this space for information about our 2012 conference...



Museum of Liverpool Project
Director, Sharon Granville

CUSTOMER SERVICES DIVISION

We are pleased to announce the forthcoming launch of a new line of services offering showcase maintenance and accessories, including retrofit conservation equipment. Keep an eye on our website for more information.

GLOBAL EXPANSION

Our network of global distributors is growing. During 2011 we signed contracts with three new distributors in Spain, Kuwait and Denmark.

Our current distributors:

Australia	Designcraft
China	Sichuan ClickNetherfield Exhibition and Display Co Ltd.
Denmark	Kvorning Design and Communication
Egypt	Techno Master for Metal Industries
Greece	ANACO Ltd
Japan	Bevel Corporation
Kuwait	City General Trading & Contracting Company Kuwait
Qatar	Qatar Vision Projects
Singapore	Trika (S) Pte Ltd
Spain	Ypuntoending, S.L.
Turkey	NIK Insaatt Ticaret Ltd, Sti
USA	Maltbie

RESEARCH COLLABORATION

ClickNetherfield are involved in a research project being conducted by PhD student, James Crawford at the University of Warwick. James is studying as part of the Analytical Science Projects group within the Physics Department, and is being supervised by Professor Mark Dowsett. The research is also in collaboration with English Heritage and aims to improve passive climate control for museum conservation grade display cases.

We have donated two cases to James for the duration of the project, in which the air exchange mechanisms are currently being studied closely with the eventual aim of finding ways to further lower this air exchange.

For more information about the project, please visit www.warwick.ac.uk/fac/sci/physics/research/condensedmatt/sims/groupmembers/jamescrawford/

NEW PRODUCTS

AT CLICKNETHERFIELD WE INVEST HEAVILY IN RESEARCH AND DEVELOPMENT. AS WELL AS CONSTANTLY WORKING ON INNOVATIVE DESIGN SOLUTIONS FOR BESPOKE CASES, WE ARE CONSTANTLY DEVELOPING OUR OWN SHOWCASE DESIGN RANGES.

We have now added the stylish Mono 6 to match the highly successful Inca 6 range. We will also be launching our new Prism 6 in the next few weeks.

NEW MONO

Our new Mono is available now. The improved Mono features surface-bonded glass technology, resulting in a stunning minimalist look, and bringing a fresh and contemporary edge to any display.



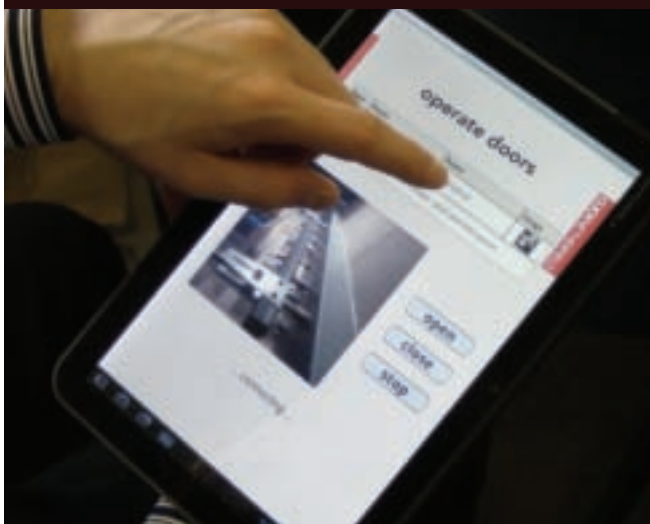
NEW PRISM

We are currently redesigning our Prism case with a view to improving the aesthetics. The new Prism will also come with additional install options, increasing flexibility and display possibilities.



SHOWCASE DOOR CONTROL

We have developed a fantastic new system whereby large showcase doors and other electronically operated cases can be controlled remotely using hand-held tablet computers. We are using the system on our project at The Mary Rose Museum in Portsmouth where the largest door is a staggering 2080mm wide, 2750mm tall and weighs 300kg. Get in touch if you'd like to see a video demonstration of the door control in action.



HOME TO A MILLION THOUGHTS

SENIOR COLLECTIONS OFFICER AT THE ROYAL ALBERT MEMORIAL MUSEUM, **JULIEN PARSONS** DISCUSSES THE CHALLENGES AND SUCCESSES OF THE RECENT REDEVELOPMENT

The redevelopment of the Royal Albert Memorial Museum (RAMM) in Exeter has taken about a decade to complete from initial discussions with the Heritage Lottery Fund (HLF) to the re-opening of the museum in December 2011. Before the project, RAMM was a well-performing regional museum attracting around 250,000 visitors a year, but many of the displays needed modernising and the building needed improved visitor access and facilities. The project cost almost £24 million in total, with funds coming mainly from the HLF and Exeter City Council.

RAMM's collections are amongst the best in a regional museum in the UK, consisting of over one million individual objects and specimens from all over the globe. The exhibition design by Ralph Appelbaum Associates (RAA) has created a visually stunning voyage of discovery for visitors; galleries draw on a wide variety of collections to tell the history of the museum, its collectors and the stories behind our objects and specimens.

As with all major capital projects, we faced challenges of time and budget. Unexpected structural issues with the Victorian museum meant that the building phase was behind schedule, with consequences for the design and fitting out of the galleries. We worked closely with RAA and our fit-out contractors Benbow to bring the scheme back to budget, but the timetable was always challenging. ClickNetherfield needed to respond to



Exhibition Design: Ralph Appelbaum Associates
Fit-out Contractor: The Benbow Group

both the budget and timetable without compromising on the quality of the finished product.

The staff at RAMM couldn't have prepared themselves for the public reaction to the new displays; over 100,000 visitors in the first 10 or so weeks. Some periods were so busy that the doors had to close because the building was at capacity! The top terms used to describe the museum are 'high quality', 'educational' and 'family friendly', and RAMM has earned

a coveted spot amongst the ten names on the 2011 Art Fund prize for museums and galleries.

The design and quality of ClickNetherfield's showcases have allowed RAMM's display scheme to work so successfully. We needed to achieve the necessary environmental conditions within cases, including many different types of material, and a simple and unfussy look to the cases to ensure that the visitors' attention was focused on the displayed objects. It was also important that ClickNetherfield worked closely with our fit-out contractors, Benbow who were responsible for much of the internal architecture of the cases. The final result is a testimony to the strength of the whole display team.

Exhibition Design: Ralph Appelbaum Associates. Fit-out Contractor: The Benbow Group

“The design and quality of ClickNetherfield's showcases have allowed RAMM's display scheme to work so successfully.”





ACCESS SUPPLIED

EXHIBITIONS CO-ORDINATOR AT CAMBRIDGE UNIVERSITY'S MUSEUM OF ARCHAEOLOGY AND ANTHROPOLOGY, **DR MARK ELLIOT** TELLS US ABOUT THE MUSEUM'S REDEVELOPMENT.

Since opening in 1913, the museum has had little renovation work carried out. With a 300% increase in visitors over the last 5 years, we felt that it was long overdue a restoration to increase accessibility and help us to create something more like the public institution that we feel the museum deserves to be. For a long time we'd wanted to redo our archaeology galleries, and for an even longer time we'd wanted a front door! Previously access was gained via the courtyard and looked a little forbidding.

So with funding mainly from the Li Ka Shing Foundation and the DCMS-Wolfson Fund, we commenced a project to completely redevelop the

// The showcases are fundamental to the new galleries, and we're very pleased with them"

ground floor. This would give us a new front door with a reception area and a shop, a new temporary exhibition space and new archaeology galleries. It was hoped that this would improve the general orientation of the museum overall.

The project brought some challenges. We were hoping for a time scale of 3 years to complete the project, however in reality we got 13 months. The fact

that we were essentially creating a new-build within an old building also raised problems, however we were grateful for inevitable delays in building work which gave us a bit more time. From a curatorial perspective, trying to present our collection (not all of which is the most glittering!) in a visually exciting way was also challenging, but this is hopefully one of the things we have achieved quite well; attempting to relate the objects to one another and to people and to convince people to 'look again' because every object tells many stories.

We think the new space looks fantastic and are delighted with the finished results. It is brighter, airier, and generally a much more pleasant space to be in. We're also looking forward to being able to do a lot more with our collections thanks to the TESS Demountable cases we got for our temporary exhibition space.

The service ClickNetherfield provided was terrific. From the early stages of negotiating the order to installation completion, all went smoothly and problems were dealt with efficiently. The installation team themselves were top notch, and we were pleased with how quickly everything came together.



Exhibition Design: At Large

THE START OF AN ERA



Exhibition Design: Real Studios
Exhibition Fit-out: The Hub

THE NATIONAL MARITIME MUSEUM UNVEILED ITS BRAND NEW SAMMY OFER WING LAST JULY, A MASSIVE £36.5 MILLION PROJECT THAT AIMS TO MARK THE BEGINNING OF A RADICAL NEW ERA FOR THE INSTITUTION.

Made possible thanks to a whopping donation of £20 million from shipping magnate Sammy Ofer, who sadly died at the beginning of June last year as well as £5 million from the Heritage Lottery Fund, the new wing includes both permanent and temporary exhibition galleries, a café, brasserie, library, lounge area and significantly increased space for the museum's vast archive.

Dominated by a long, multi-faceted wave-like structure in the centre, onto which bespoke video is projected, the permanent Voyagers Gallery tells the story of Britain and the sea from the 16th to the 20th century through objects ranging from Nelson's last letter to his daughter to a 200-year-old ship's

// The cases from ClickNetherfield are very elegant, pleasing and accessible"

Albert Neher, Head of Object Conservation, National Maritime Museum

biscuit. ClickNetherfield provided display casing for the length of a 36m wall in the gallery, installing 2 bespoke integrated multi-bay Incas and 1 wall-mounted Prism. We carefully tailored the design of our existing Inca design in order to make perfect use of the space available.

Head of Object Conservation at the National Maritime Museum, Albert

Neher said "The general opinion, from comments volunteered rather than sought, is that the Voyagers Gallery cases from ClickNetherfield are very elegant, pleasing and accessible. I agree. They effortlessly cantilever out into the gallery and attract visitors to them, in spite of the spectacular multimedia display happening in front of the cases.

"On the working side, the doors function flawlessly and the environment is minutely stable. The Mini-clima units are well placed for access and maintenance. These are the features one looks for in a case and I feel that ClickNetherfield have achieved this with style."

TRAGEDY REMEMBERED



Designers: Haley Sharpe Design
Exhibition Fit-Out: Patton Heritage

WILLIAM BLAIR, HEAD OF HUMAN HISTORY AT ULSTER FOLK AND TRANSPORT MUSEUM TALKS ABOUT THEIR EXHIBITION DEDICATED TO TITANIC, OPENED TO COINCIDE WITH THE CENTENARY OF THE SHIP'S LAUNCH.

The exhibition, entitled 'TITANICa', explains why Titanic and her sister ships, Olympic and Britannic were built in Belfast and how local enterprise and skills combined to produce vessels of exceptional quality and design. Visitors to the exhibition can discover life on board through original artefacts and personal stories that explore the loss of Titanic in 1912.

At Ulster Folk and Transport Museum, Titanic is a theme we've always been interested in and have had various exhibitions relating to it for 25 years. Since opening, the new exhibition has created a renewed sense of excitement around the Titanic – a story of human and maritime tragedy, but one that also

opens a window on human endeavour, innovation and industrial prowess.

Presenting the collections beautifully, the ClickNetherfield showcases form the core architecture of the gallery; arranged in an unusual circular formation, creating an outer and inner ring around which visitors can circulate to engage with different narrative themes. Large double-sided cases divide the two main spaces, enabling visitors to explore in detail the rich and unique collections.

One 7m long case intended to accommodate the ship's long plans posed a particular design challenge for ClickNetherfield, but with some clever

engineering this was overcome and the case now forms the centrepiece of the exhibition.

With the anniversary of the ship's sinking approaching, we expect the exhibition to maintain its popularity for a while yet.

// The showcases form the core architecture of the gallery"

NEW REPLICATING OLD



Photography © zedphoto.com

CONSERVATOR, **BETH STANLEY** EXPLAINS WHY ENGLISH HERITAGE WANTED NEW SHOWCASES WITH A VERY SPECIFIC LOOK AND FEEL AND HOW CLICKNETHERFIELD WENT ABOUT PROVIDING THESE BESPOKE SOLUTIONS.

Established in 1881, JW Evans is one of the most complete surviving historic factories in the Jewellery Quarter of Birmingham. The buildings still contain all the machinery, fixtures and fittings, as well as an extremely complete archive. English Heritage stepped in to rescue the factory in March 2008, after a number of other initiatives to save the factory had failed. The project was funded by English Heritage, with some grant assistance from Birmingham City Council.

The cases contain some examples of the huge range of silverware that JW Evans manufactured. This collection is very important, as often they are the only examples we have of the

finished product as Evans always sold to other manufacturers and normally supplied 'in the rough'. The company they supplied to would then plate and polish the objects and stamp them with their own makers mark.

We have images of the original showroom which contained these items and wanted the room to look as similar as possible, with blue fabric interiors and narrow wooden frameworks. We have been very pleased with the finished result as it has retained the look of the original showroom.

The showcases look good, and as the cladding is fixed to a standard

frame we are confident that the environmental performance and security will be an improvement on the original cases. They can also be safely opened by one person, which is excellent. All in all the cases look great and are performing as we would hope!

JW Evans is open to the public from April – September by pre-booked guided tours only (many of the guides are ex-employees).

Booking is through Customer Services 0870 333 1181 and details are on our website.

IN THE FIRING LINE



Exhibition Design: Furneaux Stewart
Exhibition Fit-Out: Paragon Creative

CURATOR, **RACHEL SILVERSON** WRITES ABOUT THE GROUND-BREAKING NEW FIRING LINE MUSEUM AT CARDIFF CASTLE, ALSO KNOWN AS CARDIFF MUSEUM OF THE WELSH SOLDIER.

Forming an innovative collaboration between 1st The Queen's Dragoon Guards and The Royal Welsh, the Firing Line Museum highlights collections relating to the Welsh Cavalry and Infantry simultaneously in a contemporary and fully accessible space.

The two Regiments have had to 'think outside the box' about how their heritage could be re-interpreted to appeal to a wider and more diverse audience group. The new museum uses a chronological layout, and focuses on more social-historic context. It has also implemented a new and changing exhibition programme to allow the range and diversity of

regimental collections to be fully utilised and appreciated.

Security was an important consideration during the showcase design stages, as was the need for easy access to the cases. The finished cases have anti-bandit glass and alarms, ensuring that the security requirements of the museum were met; and for ease of access, the display cases were manufactured with doors that open once unlocked by specialist keys, which in turn disable any alarms in use within individual cases. Ideally for a small team, the display cases can be opened by one person.

A key change within the new museum was the introduction of environmental

monitoring policies, so each display case was fitted with a silica gel tray. Silica gel controls the impact that relative humidity and temperature may have on our artefacts. These trays have also proved to be an ideal location for 'trembler' alarms, giving additional security.

The contemporary design of the Firing Line Museum has facilitated options for the installation of three in-house temporary exhibitions annually within a display case especially designated for changing displays.

To find out more about our temporary exhibition and events programme please visit www.cardiffcastlemuseum.org.uk.



SEA STORIES

ARBROATH SIGNAL TOWER MUSEUM CALLED IN CLICKNETHERFIELD RECENTLY WHEN THEY UNDERTOOK THEIR FIRST MAJOR REFURBISHMENT EXERCISE IN AROUND 20 YEARS.

Next to Arbroath's picturesque harbour, Signal Tower Museum is housed within the original shore station for the Bell Rock Lighthouse. The museum was refurbished and upgraded as part of the 2011 Year of the Light celebrations marking the 200th anniversary of the Bell Rock Lighthouse.

Models, multimedia displays and historic objects help museum visitors to explore the history of the lighthouse. What were the dangers of the sea that led to the need for a lighthouse? Why was its construction so challenging? What engineering innovations were incorporated into its design? Who were the personalities involved and did they always agree on the correct approach to overcoming the challenges?

Generations of keepers and their families lived in the Signal Tower shore station watching over the lighthouse from the relative safety of Arbroath harbour. Museum displays tell their stories too. The lifestyle of those families, tied to the never-ending need to keep a light shining from the lighthouse through summer and winter calm and storm, is almost forgotten in the 21st-century world of mobile phones and instant communication.

The museum displays are a reminder; not only of the old ways of saving lives at sea but also a reminder of the continuing dangers of the sea.

A museum spokesperson said: "We are delighted with the ClickNetherfield showcases. They have transformed the displays and the quality of the design, construction and build of the cases is clear for all to see. The firm also provided us with a professional, helpful and prompt service from the word go."

// The ClickNetherfield showcases have transformed our displays and the quality they represent is clear for all to see"

Spokesperson for Arbroath Signal Tower Museum



Photography © zedphoto.com

Exhibition Design: Studioarc Design Consultants
Interpretation Project Management: Matthew Johnson

SCOTLAND'S OTHER CROWN JEWELS

WE RECENTLY SUPPLIED A SERIES OF BESPOKE CASES FOR THE STIRLING HEADS GALLERY AT STIRLING CASTLE, IN WHAT WAS PART OF A WIDER £12 MILLION HISTORIC SCOTLAND PROJECT TO RETURN JAMES V'S 16TH-CENTURY PALACE AT THE CASTLE TO ITS FORMER RENAISSANCE MAGNIFICENCE.

Created in the mid 16th century and often described as Scotland's other Crown Jewels, the Stirling Heads are metre wide oak medallions carved with depictions of Scottish royalty, mythical heroes and Roman emperors. Now a precious national artistic treasure, the Heads originally decorated the ceiling of the Palace's royal apartments. In the renovated apartments, replica Heads have been created and painted in bright colours, as the originals almost certainly were judging by traces of paint found to be on them.

The 34 remaining original Heads have been safely housed in environmentally controlled ClickNetherfield showcases to preserve them for visitors to see. The gallery also contains interpretation to explain the significance of the characters represented. Visitors can see the replica hand-carved and painted Heads set on the ceiling of the King's Inner Chamber in the Palace; and then compare these with the originals.

The completion of the Palace project, including the creation of the Stirling

Heads gallery, was seven years in the making and has significantly enhanced the visitor experience at Stirling Castle. Feedback from visitors has been incredibly positive, and visitor numbers have increased.

The Palace was officially opened in July 2011 by Her Majesty the Queen and Prince Philip, truly giving the project the royal seal of approval that it is so worthy of.



City Soldiers

17

City Soldiers

City Soldiers

LIVERPOOL, UK

A WONDROUS PLACE

THE NEW MUSEUM OF LIVERPOOL LAUNCHED ON 19TH JULY 2011, 100 YEARS TO THE DAY THAT ITS ICONIC NEIGHBOUR THE ROYAL LIVER BUILDING OPENED. A STUNNING NEW ADDITION TO THE CITY'S FAMOUS WATERFRONT AND ITS VIBRANT CULTURE, IT DEMONSTRATES THE CITY'S UNIQUE CONTRIBUTION TO THE WORLD, SHOWCASING POPULAR CULTURE WHILE TACKLING SOCIAL, HISTORICAL AND CONTEMPORARY ISSUES.

// The creation of five of the galleries in this new landmark building on Liverpool's historic waterfront has been a wonderful opportunity for our design and project delivery teams and has resulted in a museum that we're all immensely proud of.

The new galleries give unprecedented access to more than 10,000 objects from the vast wealth of collections held by National Museums Liverpool, many of which have never been on public display and each presenting different challenges. There is every type of object here, from a steam locomotive to delicate textiles, requiring showcases that provide a safe environment for their display."

Laury Redman, Partner, Redman Design

The new museum builds on the success of the former Museum of Liverpool Life. This original award-winning museum was housed in the old Pilotage and Salvage Association buildings on Liverpool's waterfront, in between the Albert Dock and Pier Head. Its popular displays looked at the life, work and leisure activities of Liverpool people from all walks of life over the last 200 years. After 13 fantastic years the Museum of Liverpool Life closed its doors to the public for the last time on Sunday 4 June 2006, to allow preparations for building work for the new museum to begin.

Liverpool's story is fascinating, its culture rich and its history long. The aspirations and tenacity of its people have created a place with a diverse tale to tell. Taking on highs and lows of all proportions, this once prosperous city has encountered war, poverty and decline, yet continued to flaunt its unparalleled determination to re-emerge as an exciting and dynamic 21st century city.

The Museum of Liverpool is testament to this story and the ambitions of its people and will remain a legacy to those who have shaped the city and continue to influence its history. More than 10,000 local people have been consulted on the content of the museum, which has enabled local people to present their interpretations of the Museum's themes through co-produced displays with Museum of Liverpool Curators.



Exhibition Design: Haley Sharpe / Redman Design
Exhibition Construction Managers: Patton Heritage
Cost Managers: Turner & Townsend

The museum was officially opened by The Queen and The Duke of Edinburgh on 1 December 2011, and is the largest newly built national museum in Britain for more than a century with 8,000 square metres of public space across three floors. Powered using state-of-the-art renewable and energy efficient technologies, its combined heat and power (CHP) system will reduce carbon emissions by 884 tonnes each year - equivalent to the environmental benefit of 88,400 trees.

Working alongside exhibition designers, Haley Sharpe and Redman Design, as well as fit-out contractors, Patton Heritage, ClickNetherfield designed and manufactured a total of 173 cases for the museum. We provided a complete FES (flexible exhibition system) package to include reconfigurable cases, walling and graphics to allow displays to be updated at reasonable cost to maintain the latest social relevance for the museum.



"Patton continued their long relationship with ClickNetherfield on the Museum of Liverpool project. The delivery of this prestigious project over two phases required the integration of a number of specialist packages that could only be achieved with a close working relationship and mutual understanding of the project's objectives. ClickNetherfield delivered on this requirement, not only display cases but also the Flexible Exhibition System (FES) that was a critical component of the project vision."

Dominic Sore, Heritage Manager, Patton

DRAMATIC TRANSFORMATION UNVEILED



THE NATIONAL MUSEUM OF SCOTLAND IN EDINBURGH HAS COMPLETED ITS MOST SIGNIFICANT REDEVELOPMENT IN OVER A CENTURY, BREATHING NEW LIFE INTO ONE OF THE FINEST VICTORIAN BUILDINGS IN BRITAIN.

EDINBURGH, UK



16 new galleries, home to over 8,000 objects, take visitors on an inspirational journey through the wonders of nature, the cultures of the world and the excitement of science and discovery.

Working with the museum, the award-winning Gareth Hoskins Architects has opened up and expanded the Museum's public space, restoring and revitalising the grandeur of the Victorian Grade A listed building. Ralph Appelbaum Associates, international interpretive planners and designers, were responsible for creating dramatic new exhibitions for visitors.

Spectacular stone-vaulted spaces on Chambers Street, originally used for storage and hidden from public view, have been excavated and sensitively developed to form an impressive new Entrance Hall, accessible from street level and encompassing welcoming visitor facilities.

A broad range of exhibition design approaches have been developed to bring the rich collections to life: from a spectacular array of open-display taxidermy to contemplative object-rich installations; from an immersive cinematic experience to dramatic objects which act as focal points; and from hands-on interactives to displays of internationally important and unique objects.

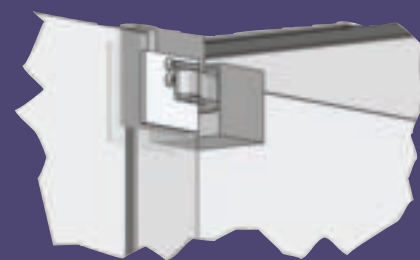
The redevelopment is the centrepiece of a visionary Masterplan to realise a 21st century museum which will stimulate and inspire people for generations. The project

cost £47.4 million and was jointly funded by the Heritage Lottery Fund, the Scottish Government and various private donors.

ClickNetherfield were contracted by museum fit-out specialists, Beck Interiors to design, manufacture and install a total of 168 bespoke showcases over 15 of the 16 galleries.

A fascinating challenge for us on this project was the new bespoke hinged system we designed for Ralph Appelbaum.

Ordinarily, you'd think that a hinge for a piece of glass would be simple, but when that hinge is fully visible, has to support a glass door weighing up to 200kg and be able to close with precise geometry that hermetically



The new hinge we engineered for the project

seals to an adjacent flush glass panel, it becomes quite a different challenge. Our existing hinge system achieves this using a dual-action opening mechanism with two arms mounted within the system channel or within a 150mm wide stainless steel or powdercoated aluminium block.

The seemingly impossible challenge from Ralph Appelbaum was to achieve the same performance but from within a 50mm square hinge housing. The use of laminated glass was a pre-requisite for the museum so solutions that may have been possible with toughened glass were not an option. However, with some cunning lateral thinking, our clever design team rose to the challenge and delivered the fully customised solution that has been used throughout the stunning new galleries.

Since opening on 29th July 2011 there have been just under 1.5 million visitors through the doors; an extraordinary achievement as well as a testament to a very successful project.

“This is a proud moment in the history of a great museum – the climax of a once-in-a-lifetime transformation through which we have rediscovered our exceptional collections and breathed new life into a beautiful building. The result is a new National Museum of Scotland – a place where the cultures of Scotland and the world meet, and the arts and sciences connect. We look forward to sharing the results with our visitors now and those of many generations to come.”

Dr Gordon Rintoul, Director, National Museums Scotland





// The cases are beautiful."

Becky Menlove, Director of Exhibits & Public Programs at the Natural History Museum of Utah

BLAZING TRAILS

AT THE END OF LAST YEAR THE NATURAL HISTORY MUSEUM OF UTAH UNVEILED ITS NEW HOME AT THE SPECTACULAR RIO TINTO CENTER. **AJ HIGGS**, VICE PRESIDENT OF PROJECTS AT MALTBIE DISCUSSES THIS AMAZING PROJECT.

Nestled into the Wasatch Mountain Range, the Natural History Museum of Utah features some 34,000 square feet of exhibition space across 10 permanent galleries. Access to the Bonneville Shoreline Trail is, literally, outside the Museum's front doors. So cleverly enough, the Exhibits inside the Museum are designed as a system of trails with dramatic switchbacks and overlooks along the way.

Nine thematic exhibition galleries explore the Sky, Native Voices, Life, Land, First Peoples, Lake (Great Salt Lake), Past Worlds, Our Backyard and Utah's Futures. The final and 10th permanent gallery is titled "The Canyon" and is aptly named with enormously high ceilings and vast open spaces. But the Canyon is just the beginning (although it serves as a literal centerpiece of the Museum itself) while ascending through the dramatic elevation changes inside the building, visitors may not even notice some of the structural and construction challenges we overcame during the project. One example, a large freestanding case in the Native Voices gallery literally spans a seismic expansion joint and straddles two separate building slabs by being cantilevered over a massive yet concealed structural steel platform. With an almost 40' diameter circular showcase serving as the centerpiece, the Native Voices gallery serves as one of the highest points of the site and



Building Architect: Ennead Architects
Exhibition Designer: Ralph Appelbaum Associates
Fit-Out Contractor: Kubik Maltbie, Inc.

sets the tone for visitors after they have ascended the various galleries.

Like the Native Voices cases, most of the showcases ClickNetherfield produced for this project were custom solutions. In fact each of the twenty-one showcases they designed and fabricated for the Museum included stringent structural steel work, integrated LED lighting, elaborate interpretive case interiors and modular direct-to-substrate printed graphics.

Part of the First Peoples Gallery, one of the multi-bay showcases literally plunges into the slab of the building and intersects a 'working archeological dig' where visitors can learn how archaeologists study a site by touching, seeing, smelling and listening. Surrounded by immersive interactive and tactile exhibits, the

showcases serve as milestones amongst the gallery spaces.

"Rarely in a natural history museum do you walk in and have all your senses engaged," says Tim Lee, a senior exhibit designer at the museum.

A ramp leads you into the cavernous space of the Past Worlds gallery, where you walk amid the feet of huge dinosaurs, up to a level where you can look them in the eyes. "It's a perspective not many of us have had", says Lee, who stands just shin-high to the Barosaurus.

Together with the RAA team and Staff at the Museum, ClickNetherfield and Maltbie have produced one of the finest examples of a fully integrated and carefully executed museum showcase project in the world.

DRAWING ON EXPERIENCE

RYAN A. SKORCH, MALTBIÉ'S PROJECTS & DEVELOPMENT DIRECTOR ON THE INCREDIBLE VISIBLE STORAGE SOLUTION WE CREATED FOR THE DAVID MILNE CENTRE AT THE ART GALLERY OF ONTARIO.

Returning to the AGO some 4 years on from the dramatic Transformation project, ClickNetherfield has completed a complicated new vertical storage drawer display unit to archival standards for the new David Milne Centre, which overlooks Grange Park. Fittingly enough, artist David Milne was born in southwestern Ontario near Paisley in 1882; he was the last of 10 children born to Scottish immigrant parents.

ClickNetherfield were asked to create a robust oak-clad structure to house 20 individual rolling drawers, each fitted with a double-sided archival case capable of housing multiple pieces of art and archives. With internal display panels crafted from smooth powder-coated steel, we worked intimately with the AGO curatorial team to help devise an unobtrusive mounting system all based on the use of rare earth magnets.

ClickNetherfield first carefully design developed and prototyped a full-height rolling archival drawer system for review; before completing installation of the gorgeously clad display in January 2012. Topped off with a custom patinated series of solid brass full-length handles, the piece is timeless, elegant and grounded.

Designed to house many of the approximately 3,000 sketches, letters, notebooks, early canvases and watercolours from all stages of Milne's career being gathered in one dedicated space, this experimental initiative argues for the central role of archives in the museum.



Photography © Josh Heise, used with the permission of the Art Gallery of Ontario

Architects: KPMB
Design and Build: Kubik Maltbie, Inc.

// Working again with ClickNetherfield has just been a fabulous experience. They create casework truly fitting of the pieces of art for which they were designed to protect"

David Wistow, Interpretive Planner, Art Gallery of Ontario



Photography © Eric Schwab, used with the permission of Toronto Reference Library

Architect: Teshima & Moriyama Architects
Fit-out Contractor: Kubik Maltbie, Inc. (TD Bank Gallery)

VITAL STATS

MALTBIE'S **RYAN A. SKORCH** GIVES US THE LOW-DOWN ON A PROJECT WE'RE CURRENTLY WORKING TOGETHER ON AT TORONTO REFERENCE LIBRARY.

A total of 30 new high-specification showcases have been created for the Toronto Reference Library for use in their newly revitalized spaces. The Library is undergoing a five-year \$34 million revitalization to recreate itself as Toronto's foremost public centre for lifelong learning, the exchange of ideas and community engagement.

The original library design, by Moriyama and Teshima Architects has stood handsomely over the years as a Toronto landmark. Raymond Moriyama, who founded the firm in 1958, is a hero to many Canadians. His stories of being interned during the Second World War

because of his Japanese heritage and his rise to become one of Canada's most respected architects continue to inspire.

Aptly titled "re:vitalize" – the effort being led by the Toronto Public Library Foundation in support of the \$34 million renovation of the Toronto Reference Library was the focus of our work with Teshima & Moriyama alongside our partners in Canada, Kubik.

A complete suite of 20 showcases each with Amiran® anti-reflective glass by Schott, gorgeous solid cherry cladding and sleek stainless-steel angled base plinths was delivered for the new TD Bank Gallery. Specifically designed for

rare books, special collections and true artifacts, the cases were built to the highest standards both aesthetically and from a conservation perspective.

Additionally, being installed now as we go to print are 10 high-specification ClickNetherfield showcases for the high-traffic public space areas for rotating exhibitions. These areas have been collectively named the Gateway Experience. Created with powered vertical-lift access systems, the all-Amiran® glass cases provide the ultimate in unobstructed object handling for the Library's staff.

CAIRO CULTURE AND LEARNING

WORKING WITH OUR LOCAL PARTNER IN EGYPT, ABDEL MONIM ANWAR FROM OUR DISTRIBUTOR TECO MASTER FOR METAL INDUSTRIES, WE RECENTLY SUPPLIED SHOWCASES FOR THE CHILDREN'S CENTRE FOR CREATIVITY AND CIVILIZATION IN CAIRO. PROJECT ARCHITECT, **MICHAEL MALLINSON** RECOUNTS HIS EXPERIENCE WORKING ON THE PROJECT.



The long-awaited Children's Centre for Creativity and Civilization will open for the children of Cairo soon. In a city with over 4.5 million children of school age, and where state pupils have barely a text book and no computers, the museum's state-of-the-art interactive facilities will be a superb teaching resource.

The project began in 2005 as the brainchild of the now-deposed president's wife, Mrs Suzanne Mubarak. Its aim was to provide a space where children and families could learn about the history and development of their country's civilization through interaction and play.

Since 2008, and continuing after the outbreak of the 2011 revolution, the

project has been managed by the Major Projects Division of the Egyptian army. Managing Consultant on the project, General Ashraf Fatten has worked enthusiastically to bring the museum to fruition.

The 14-acre site chosen for the museum was an enclosed mature garden formerly serving as the approach to the British Sporting Club (on what was previously the first airfield in Africa and Asia), situated in the suburb of Heliopolis. The museum itself is set over four themed floors, and the garden outside is very much a part of it, helping to explain all about the Nile and the history and geography of Egypt over 400 million years.

Though the museum will officially be called the Children's Centre for Creativity and Civilization, it will no doubt be fondly known as the Cairo Children's Museum.

// In light of the country's on-going political turmoil, the completion of this project is a testament to the dedication and commitment of the staff working on it"



Photography © Luc Boegly

A MODERN MAKEOVER

MUSÉE DE BASTIA IN CORSICA, FRANCE RECENTLY UNDERWENT A RADICAL TRANSFORMATION AS PART OF THE RESTORATION OF THE PALACE OF GOVERNORS. PROJECT ARCHITECTS, C+D ARCHITECTURE CALLED UPON CLICKNETHERFIELD FOR SOME STYLISH CUSTOM SHOWCASE SOLUTIONS.

On the northeast coast of Corsica, atop imposing cliffs sits the newly renovated Musée de Bastia within the Palace of the Governors. The museum represents a fresh and contemporary cultural experience, and has drawn in the crowds since it re-opened in 2010.

In 2004 the new cultural programme for the museum was established based on Bastia's rich history; focussing particularly on its political, social, economic and artistic legacy. With an ever-expanding collection of exhibits, it became clear that the museum had to develop. Many parts which had been destroyed during the war were also renovated as part of these restoration works.

The result of this was a gallery space stripped bare to create a versatile blank canvass. This allowed the designers to create a dramatic but harmonious marriage of ancient and modern, sympathetic to the demands of today's museum-goers.

ClickNetherfield understood and appreciated the unique nature of the brief and supplied cases which met both the rigorous conservation requirements and striking design intent.



Photography © Luc Boegly

// The final result reflects exactly the conservation, presentation and technical specification we desired"

C+D Architects

EASTERN PROMISE

THE MUSEUM 2011

IN 2011 CLICKNETHERFIELD CONTINUED THEIR ONGOING AFFILIATION WITH AND SUPPORT OF THE UNIVERSITY OF LEICESTER BY SPONSORING THE MUSEUM 2011 – A CONFERENCE HELD IN TAIWAN BASED AROUND NATIONAL MUSEUMS AND IDENTITY.

It sought to observe how national museums construct history and sculpt national identity through the shaping of buildings, exhibitions, education programmes and other aspects of their practice. The 3-day event in November was followed by 2 design master classes – one in Taipei and the other in Hong Kong. The conference was the result of a long-standing collaboration between the University of Leicester, Taipei University of Education, the V&A Museum in London and the National Museum of History in Taipei.

Jim Stewart and Mike Chaplin attended from our UK operation and David Nicholson and Peter Taylorson from the Asian side of our company. Technical Director Mike Chaplin said "This was a fantastic opportunity to meet and exchange ideas with like-minded heritage professionals and to build relationships for the future."



HOME FROM HOME

IN DECEMBER 2011, DAVID NICHOLSON AND PETER TAYLORSON FROM OUR CHINA OFFICE WERE INVITED TO HONG KONG FOR AN EVENING HOSTED BY THE SCOTTISH FIRST MINISTER, ALEX SALMOND.

The reception was held at the Hong Kong headquarters of HSBC, and was attended by delegates from various Scottish trade sectors. The event, organised by the Scottish Council for Development & Industry, celebrated ties between Scotland and Hong Kong, and was part of a trade mission organised by Scottish Development International.

As part of a Scottish company successfully operating on in mainland China, David and Peter received a lot of interest from companies hoping to follow in ClickNetherfield's footsteps. Lots of



promising connections were made through networking at the event, including potential suppliers and future projects.

A CULTURAL EXCHANGE

AS OUR OPERATIONS IN CHINA GO FROM STRENGTH TO STRENGTH, WE ARE INCREASINGLY BEING ASKED TO HELP DEVELOP RELATIONSHIPS BETWEEN THE MUSEUMS WE WORK WITH IN THE UK AND THOSE IN CHINA – THERE ARE MANY EXCITING OPPORTUNITIES.

The UK recently played host to a top-level delegation of Chinese museum directors. Organised by British Council Scotland, the directors toured the newly restored National Museum of Scotland and the Royal Botanic Gardens in Edinburgh, as well

as the Riverside Museum of Transport and the Kelvingrove Art Gallery and Museum in Glasgow.

At a seminar held in the Botanic Gardens our Technical Director, Mike Chaplin spoke about some of the latest trends in international museum showcase design. Philip Long, Director of the new V&A Dundee was among the other speakers to address the delegation at the event.

During their visit we hosted a dinner for the directors whilst in Edinburgh and this hospitality was generously returned when Mike visited China in February.

SAFE, SECURE AND ACCESSIBLE?

ACCESSIBILITY IS AN IMPORTANT CONSIDERATION FOR ANY MUSEUM IN ORDER TO ENSURE THAT THEIR COLLECTIONS ARE OPEN TO AS MANY PEOPLE AS POSSIBLE. WE INVITED DESIGNER AND ACCESS CONSULTANT, **CASSIE HERSCHEL-SHORLAND** TO GIVE US HER THOUGHTS ON THE ISSUE.

Safe, secure and yet also accessible are demanding and seemingly contrary expectations for museums in their care of collections. A display case micro-environment will keep an object for perpetuity but to make it accessible for some people involves getting close-up and hands-on.

Many museums run an inspiring range of access and community programmes to engage people with collections; but can more be done through inclusive design for more independent access?

The process of access auditing, design appraisal and inclusive design with direct involvement of deaf and disabled people can support a museum or design team in finding effective ways to make collections accessible, without undue compromise to care of collections.

A clear commitment to access and inclusive design is important in a display and interpretation strategy and also project design briefs. Too often these contain only a general intent to be accessible to 'as wide an audience as

possible'. To achieve tangible and effective inclusive design this needs clear principles and criteria to set out what is expected of the design, also feasible objectives that can be in the budget from the start.

In development of the Images of Nature gallery, the Natural History Museum set out their aim in the project brief to address sensory access as well as physical access. Specific features were to include induction loops on exhibits with audio, subtitling on all audio visual screens and 2 or 3 touch specimens. The gallery was also expected to be made accessible for blind and partially-sighted visitors.

The outcome of this commitment is an easy to navigate gallery with a choice of ways for people to engage with the exhibition about how the natural world is represented visually by scientists and illustrators. The gallery location, arrangement and content are described in an evocative audio description, downloadable from the Museum website; a tactile gallery guide is also available (with Braille text and raised images) which

gives context to the handling objects. Inclusive design of display plinths and interactive screens provide clear space underneath for easy reach.

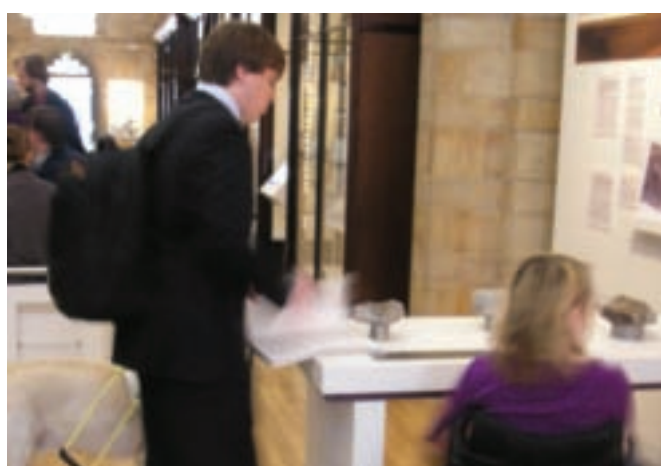
In addition to subtitles on the video interactive screens, visitors can select an option for British Sign Language delivered by a deaf art historian. Other on-screen options include text and image magnification options.

Display panels follow clear print principles. A quality easy-to-read gallery guide is available to include adults with a broad range of learning levels in understanding the gallery themes and content. There is much detail to consider when planning an inclusive display and as we come back to the opening question, there is much to do as we strive towards independent access by design.

Cassie manages a consultancy service, Access and Museum Design, advising on inclusive planning, design, operation and management for access to museums, galleries and heritage sites. www.cassiehs.com



Using the audio guide to understand the gallery, orientate and discover content



Using the Braille guide and plinth mounted handling objects

The Glassworks
Grange Road
Houstoun Industrial Estate
Livingston
Scotland UK
EH54 5DE

Tel: +44 (0) 1506 835200
Fax: +44 (0) 1506 835201
showcases@clicknetherfield.com
www.clicknetherfield.com

