# Education

Design Experience

2025



3DReid

3DReic

Education & Learning

# Contents

01	Early Learning Environments
02	Special Education Needs (SEN) Schools
03	Primary & Secondary Schools
04	Higher & Further Education
05	PBSA Developments
06	Flexibility, Adaptability, Sustainability

# Introduction

We are an award winning architectural design, interior design and masterplanning practice.

We are a creative team of over 120 people working across five UK studios in Birmingham, Edinburgh, Glasgow, London and Manchester.

We work across all design stages and sectors including aviation, culture & community, education, hospitality, industry & technology, residential, retail & leisure and workplace.

We are proud of everything we do, from concept to delivery. We believe the best design comes from a culture of collaboration and sharing ideas. We deliver well designed projects that stand the test of time and a practice that people enjoy being part of.

Our rigorous and pragmatic approach to design helps ensure our projects are delivered on time and on budget. We work hard to create built environments that look to the future and are truly sustainable.

We are the go-to practice for inspiring, considered design solutions that leave a positive impact on occupants, future generations and the environment.



Chris Dobson, Director / Concept Coach.



Mark Bedey, Director.

# Our team

We work directly with local stakeholders to deliver community specific education and learning environments.

Andrew Chris and Mark have extensive

Andrew, Chris and Mark have extensive experience working within the education sector, working alongside our team of over 120 people across five studios.





# About us Our expertise

We are a collaborative team of architects, interior designers, urban designers, researchers, visualisers, and dynamic problem solvers.

We offer the full spectrum of design services, from early-stage feasibility and proof of concept to full planning applications, technical design and construction delivery.

The best buildings and places come from engagement and collaboration. We listen to our clients and we work openly and collaboratively, convening regular workshops that empower the right people to contribute at the right time. This builds trust, consensus and certainty across our team, our clients, project stakeholders, consultants and endusers.

We bring value to all our projects through clear analysis and well executed design. We approach every project with the same ambition, across all sectors, whether it is a hotel refurbishment, a workplace, or a new airport terminal.



Andrew Marshall, Director.



We are a creative team of over 120 people working collaboratively across five UK studios.

# Education & Learning Our Expertise

Our community orientated education projects aim to inspire young minds, stimulate educators, and reach out to engage the wider community. The successful development of multi-functional & accessible learning environments offers a real opportunity to develop civic pride.

01

# Early Learning Environments

We understand the principals of 'seeing play as the highest form of Learning' and how this can be supported by design to ensure opportunities for play and the transition between play areas are maximised and have referred to the forest nurseries approach to influence some of our designs.



02



# **SEN Schools**

Our Special Educational Needs (SEN) schools are carefully structured around the particular needs of those who use them, in order to offer the foundations for a successful journey through life.



04

# Higher & Further & Education

Our broad experience across the sector extends the HE & FE facilities, encompassing learning spaces; residential developments, R+D and laboratory spaces.



# **PBSA** Developments

By combining our architectural and interior design capabilities we are able to deliver residences that are robust, inspirational and create communal spaces that become the heart of these new communities.



06

03

# Primary & Secondary Schools

Our primary and secondary projects often include an element of shared community facilities, these are always well thought-out to balance pupil and public demands. Having delivered learning environments throughout the UK, we bring a wealth of experience that recognises current best practice and embraces site specific challenges.





# Sustainable Design

We are RIBA 2030 Climate Challenge and Architects Declare signatories. We respect both commitments in our own processes and in the way that we work to support you in sustainability.

# We believe that education facilities are an investment in our social fabric and that inspiring and sustainable design can make a real and lasting contribution.

We work directly with local stakeholders to deliver community specific learning environments.

We partner with private, public and third sector clients, sharing our expertise across nursery, primary, secondary and tertiary education sectors. We have designed over 50 innovative learning environments, across the UK, ranging from all-through schools, community campus settings and stand-alone facilities.

We continue to expand our sector knowledge through in-house and collaborative R&D projects.

Our community orientated education projects aim to inspire young minds, stimulate educators, and reach out to engage the wider community. The successful development of multi-functional and accessible learning environments offers a real opportunity to develop civic pride.

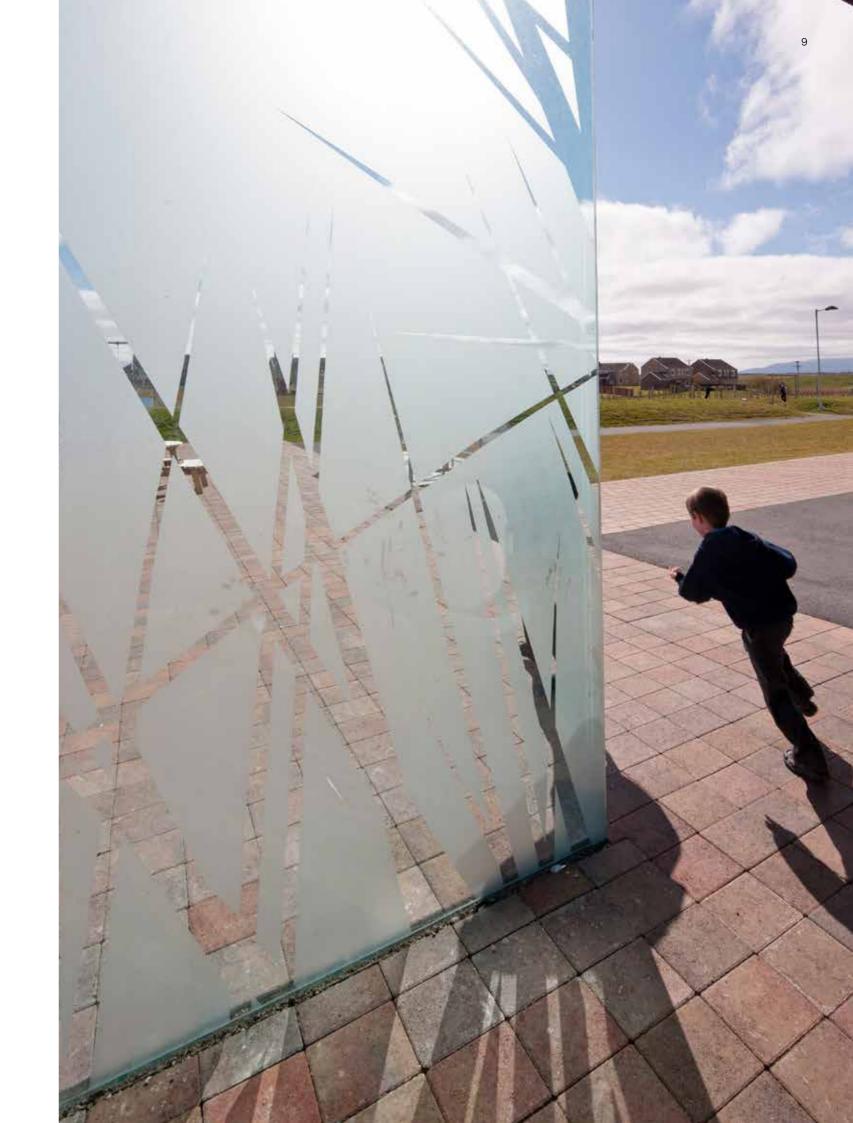
We have developed an understanding of the requirements of learning environments which have taken into account best practice in educational architecture and interior design, which includes:

- Early Learning Experience
- · SEN Schools Experience
- · Primary & Secondary Schools Experience
- · Higher & Further Education Experience
- · Inclusive Design



3DReid workshop to develop proposals in support of Mull and Iona Community Trust's plan for a nursery on the Isle of Mull.

"All our projects start with local conversations. Through listening and engaging with stakeholders we seek to deliver innovative, accessible and sustainable buildings for learning and growing. Andrew Marshall, Director & Education Lead, 3DReid



Selected Experience

# Early Learning Experience

# Early Learning Design Experience

We understand that the environment is the third teacher and these facilities should place emphasis on both pedagogy and wellbeing to create beautiful nurturing learning environments.

We understand the principals of 'seeing play as the highest form of Learning' and how this can be supported by design to ensure opportunities for play and the transition between play areas are maximised and have referred to the forest nurseries approach to influence some of our designs.

## Selected projects include:

- 20+ early year provision within wider campus projects
- · Little Glen and The Den, Gleneagles
- Mull Community Nursery, Isle of Mull
- Rural Crèche Concept, Perthshire
- Tynecastle Early Learning Centre



Little Glen, play room for children aged from 2 to 9 years old.



The Den, recreation space for young members.





Little Glen and The Den is the re-imagining of Gleneagles facilities for younger members and guests with two unique space for distinct age groups. Little Glen is a fully supervised crèche for children aged from 2 to 9 years old, intended as a safe, fun and stimulating play environment. This was created by constructing a new steel framed, single storey extension, within a formerly underutilised garden to the north of a modern extension of the Hotel.

The Den is filled with play resources for younger members and designed as a recreation space. The conversion of existing meeting rooms transformed this space into a state-of-the-art leisure space featuring interactive floors, a cinema room and a mix of traditional and electronic games.

Client: Gleneagles / Ennismore

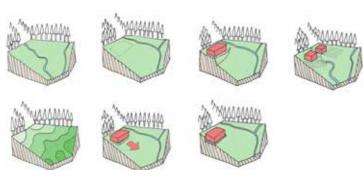


# Mull & Iona Community Trust (MICT) early years project Isle of Mull

3DReid was appointed to develop proposals in support of Mull and Iona Community Trust's plan to build and operate an indoor/outdoor nursery for up to 20 children, to address the lack of flexible childcare on the island

Structured around a series of consultations, with both the community and key stakeholders, a scheme was produced which provides a flexible and characterful care and learning environment, maximising its engagement with the surrounding landscape, the site being located on the edge of forestry land.

Client: Mull & Iona Community Trust



Site proposal sketches.



MICT workshops.







# Rural Creche Concept *Perthshire*

The Kids Camp concept is part of a wider mixed-use leisure development in Highland Perthshire, offering authentic and immersive outdoor experiences. The camp includes the development of various multi-use indoor and outdoor children's activity spaces as well as forest adventure trails, play spaces and sports areas. The conceptual approach is of a simple rustic agricultural structure, repurposed to inspire imaginative play whilst responding to the rural setting. The building façade incorporates a bouldering wall and covered terraces to encourage outdoor play.

Client: Confidential

Selected Experience

# SEN Schools

# **SEN Schools Experience**

Our Special Educational Needs (SEN) schools are carefully structured around the particular needs of those who use them, to offer the foundations for a successful journey through life.

Our workshops promote conversations that help us to understand the needs of those who we are designing for. This is never more important than when dealing with those who may be vulnerable, or marginalised.

We seek to hear their voices and to ensure that they feel represented and invested in the process.

Selected projects include:

- · Seamab SEN, Perth & Kinross
- The Yard SEN Centre Proposal, Dundee
- · Willow Dene ASN School, Greenwich Council
- Senses of Place Learning Spaces
- Cathedral & Fir Park ASN Campus
- Fife Schools (eight new build Community Primary Schools including SEN facilities).



# Seamab School Rumbling Bridge, Kinross

Seamab provides care and education for children and young people from across Scotland who have more complex needs and require specialised intensive support. Up to 21 children are at Seamab, with up to 15 children in residential placements in 3 bungalows about a mile away from the school.

3DReid is working in collaboration with Seamab School and LBA on the architectural proposals, which include a variety of consultations with the school steering group, workshops with the students and design development.

The proposal is to create a design that takes precedent from the landscape, the nature of the site and the character of the existing setting. The form of the building reflects the scale of the agricultural buildings within the area but the feel of the building itself is more reminiscent of a domestic setting. A blend of these ideals within the external palette should be clear.

Client: Seamab School



Model produced by Twa Dugs Design.

"The 'Building our Future' project will build a new school for the children of Seamab, a school which will be able to meet their needs and provide them with the environment they require and the future they deserve."



### Our workshop process

A series of workshops with the students during the design process informed the design concept. Using a design idea that one of the pupils has created, we proposed building a small scale structure with the students. The structure will go on to form part of the playground and a permanent fixture for the children to play with.







Entrance view.

**Education & Learning** 

# Willow Dene SEN Primary Royal Borough of Greenwich Council

The project consists of two linked buildings, one of which is a refurbished ASN / SEN unit and new teaching accommodation and Administration tower. The accommodation is a mix of single and multiple storey masses, which reflect the existing topographical features, as well as the educational needs of the pupils. A new sports hall which doubles as an assembly and dining hall is also included, together with an sensory warm pool for inclusive learning and automotive development.

An innovative approach to construction and procurement led to a reduction in the on-site construction period.

This was implemented via an early assessment of the construction options and utilising a design which could be delivered through an off-site prefabrication solution. The use of prefabricated construction has reduced the H+S risks associated with working on a tight and constrained site as well as helping to reduce, as far as possible, the impact to the occupied school. Paramount to the site strategy and construction phase design, was the impact to the live

Client: Graham Construction Greenwich Council











The Yard concept designs for the internal play spaces.



# The Yard SEN Centre Dundee

The Yard is an award-winning charity running adventure play services for disabled children, young people and their families in the east of Scotland, providing the chance to experience imaginative, adventurous indoor and outdoor play in a wellsupported environment. 3DReid were engaged to help develop a brief and associated concept design for their new centre, in the expansion of their services, to Dundee. A key focus of the project is the provision of a fluid environment that links the internal play spaces to the external environment, maximising choice and creativity in learning through play.

Client: The Yard

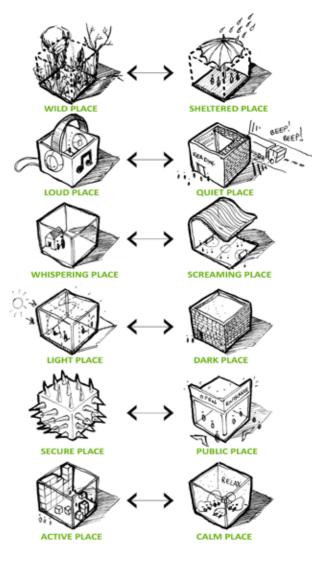
# Senses of Place Learning Spaces Study

This project explored new concepts for well designed learning environments which could potentially support the new Curriculum for Excellence and changes in teaching methods for nursery schools.

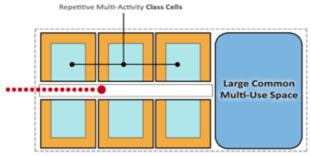
Extremes of environmental spaces were considered along with emotive and physical responses to these and how they could be physically manifested to create an intensified environment. From this a selection of spaces were developed as examples of 'Polarised Learning Spaces' and consideration was given as to how these might be implemented in a school building.

Client: Architecture & Design Scotland

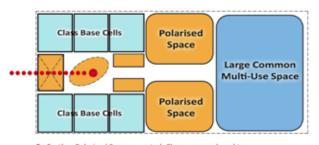




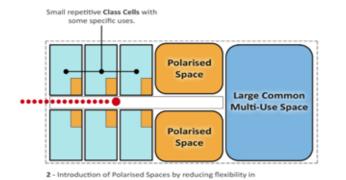
## ...Space Evolution



1 - Traditional Layout



3 - Further Polarised Spaces created. Classes are reduced to simple rooms with no specialised uses.



Class Base Area

Polarised
Spaces

Polarised
Spaces

4 - No class spaces, only transitory class bases & many Polarised Spaces.













Selected Experience

# Primary & Secondary Schools

# Primary & Secondary Schools Experience

Inclusive design is of paramount importance to the successful delivery of an educational and community facility.

Client and Stakeholder consultation is central to our way of working in the Education Sector. Engaging pupils, parents and teachers early in the process is critical and ensures that our projects are designed in a location specific manner.

3DReid recognise that considered, quality learning spaces can enrich young learners experience and through delivering light, sustainable buildings we strive to add positively to the built environment.

Our primary and secondary projects often include an element of shared community facilities, these are always well thought-out to balance pupil and public demands. Having delivered learning environments throughout the UK, we bring a wealth of experience that recognises current best practice and embraces site specific challenges.

### Selected projects include:

- · Borders Schools (three schools)
- Building Schools for the Future, Coventry & Rochdale
- Clackmannanshire Schools (three schools)
- · Dumfries & Galloway Schools (four schools)
- Fife Schools Project, Fife (eight schools)
- Lundavra Primary School, Fort William
- Kingussie High School, Cairngorm National Park
- South Lanarkshire Schools (four schools)
- · Western Isles Schools Project (six schools)





Point Primary School Sgoil an Rubha, Western Isles



**Daliburgh School** *Sgoil Dhalabroig, Western Isles* 



Balivanich School Sgoil Bhaile a' Mhanaich, Western Isles







### Added Value & Innovation

The design of the school adopts a series of innovative solutions to create a building with both civic presence and private, sheltered play spaces. Wind tunnel testing was undertaken to research and investigate the optimum roof pitch, building orientation and to provide a solution to the testing conditions found in the Western Isles.

# Sgoil Uibhist a Tuath Western Isles Schools Outer Hebrides

Sgoil Uibhist a Tuath brings together the island community. The amalgamation of three existing primary schools on North Uist to the chosen site, on the west side of the island was an outstanding opportunity in terms of sustainability, social and economic renewal and localism.

The new build community primary serves 100 pupils and 60 nursery pupils. The single story accommodation is wrapped to create a public courtyard, sheltered from the prevailing wind, with the teaching accommodation forming a u-shape beyond, creating a sheltered external play space.

Located centrally in the plan is the dining and gym hall, these large double height spaces are clad in the a site specific honorific colour. The design approach stems from an understanding of the contextual conditions of the Western Isles and the client's brief, which outlined, the physical appearance of the school shall be suitable for and sympathetic to their immediate context and to the existing architecture of the Western Isles.

Client: Comhairle nan Eilean Siar procured the project through SCAPE procurement route to engage the contractor, Robertson and the design team.

"The significance of this facility to the immediate and wider community cannot be over-stated. On an island with a population of just over 1,600 the building is a major hub for most community events outwith worship."











# Daliburgh Primary School Western Isles Schools Outer Hebrides

The design of the primary schools adopts a series of innovative solutions to create a building with both civic presence and private, sheltered play spaces. Wind tunnel testing and aerodynamic modelling was undertaken to research and investigate the optimum roof pitch, building orientation and threshold shelter; providing a working solution to the weather conditions found in the Western Isles.

On Daliburgh Primary School, including the other primaries within the project, our strategy from the start was location driven. We focused on the local resources, skills availability and climate to define our approach to the design and construction of the new school in terms of construction methodology and material choice.

Client: Sgoiltean Ura LLP on behalf of Comhairle nan Eilean Siar



# Point Primary School Western Isles Schools Outer Hebrides

Situated on the Point peninsula, on the east coast of the Isle of Lewis, Point Primary School was conceived together with three other primaries and developed as a 'family of schools'. Each school is set within their respective Hebridean townships, offering both educational and community use. Two sheltered courtyards form the basis of the scheme. The entrance court provides a mediating public threshold space, whilst the second court offers sheltered external play for the pupils. The designs provide robust, durable solutions which require minimal maintenance.

The greater ceiling height requirement of the gym was extended over the central facilities to create a distinct 'box' of different character and providing honorific status or civic presence.to the building.

Client: Sgoiltean Ura LLP on behalf of Comhairle nan Eilean Siar





Primary School Model was selected by A&DS for their 'Qualities, Places, Settings - Family of Schools' exhibition.





"Wind tunnel testing and aerodynamic modelling was undertaken to research and investigate the optimum roof pitch and building orientation; providing a working solution to the weather conditions found in the Western Isles."





# Sir E Scott School Western Isles Schools Outer Hebrides

The overall design intent for the all through school formed a hollow square round a central court containing play space for the nursery, primary school and breakout space from the communal facilities. Two strategies were adopted to resolve the potential conflicts: first, the creation of a formal, public entrance to the east with segregated entry to the school administration, the nursery school and the public facilities and a pupil entrance to the west from with separated entry to the primary and secondary schools; second, locating primary and nursery schools in one wing and the public facilities in another at ground floor and the secondary school at first floor throughout.

Added value for the client was achieved through land reclamation and construction phasing. 3DReid developed a site specific approach to community and pupil facility adjacencies, to ensure that both could be accessed; jointly and separately. This innovative approach ensured that the Campus could remain on the same site, without having to adopt inefficiencies like dual entrances and circulation.

Client: Sgoiltean Ura LLP on behalf of Comhairle nan Eilean Siar





"3DReid developed an innovative site specific approach to community and pupil facility adjacencies, to ensure that both could be accessed; jointly and separately."







# The Nicolson Institute Western Isles Schools Outer Hebrides

The new 1,100 pupil Nicolson Institute replaces the existing secondary school and includes the refurbishment and remodelling of three listed buildings (Matheson Hall, Pentland Building and the Clock Tower).

We undertook initial site options appraisals with the school, this offered the client the opportunity to feed in their priorities and ultimately led to a solution which stitched a new high school campus around Listed Heritage buildings and into a Heritage townscape, winning a Heritage Planning Award at the time of completion. Presenting a unified architectural language is important to the project.

Client: Sgoiltean Ura LLP on behalf of Comhairle nan Eilean Siar

# Lundavra Primary School Fort William

The school is designed with a long, low-maintenance life span, to be accessible, welcoming and functional. The primary school form comprises a composite of three main built masses; a nursery strand, school wing and civic block. These elements create a new public space, while a stimulating and diverse play environment is arranged around the lower loch side elevations of the building.

At the street frontage, the building forms a new public realm. The higher community facilities create a formal civic frontage; the nursery and school relate more closely to the landscape, with a reduced mass.

Utilising the existing site contours, the building is perceived as single storey on approach, as the levels fall away the school accommodation is arranged around a south-facing courtyard. The new classroom wing of the school takes reference from a highland vernacular, designed in-house by the council, with pitched ridges over the primary accommodation and strong gable end forms. The school form and material palette takes note of the agrarian tradition of building.

Client: The Highland Council







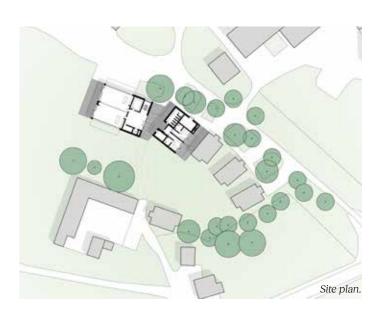
# Abernethy Adventure Centre Nethybridge

The Abernethy Trust welcomes a wide range of visitors spanning the generations, from children on school trips to family groups. The Trust required new guest accommodation to supplement their current Manor House accommodation, all set within a beautiful forest clearing near Aviemore. The brief set out a requirement for a robust and practical building, sensitive to the site surroundings, with a fun, inviting, yet unobtrusive presence.

The proposal responds to the strongest geometries of the site: the existing Manor House front elevation and the face of the nearby Stable Block, used for staff accommodation. The building is conceived as two timber-clad volumes separated by a frequently travelled existing footpath between the stable block and the main house; the two halves of the building are then reconnected by an enclosed bridge at the upper storey.

The requirement for a biomass boiler gave an opportunity to further articulate the design with a chimney tower extending to tree height; the chimney tower is also used as a climbing wall. In contrast to the timber cladding, a series of mirror clad surfaces break down the apparent mass of the building and allow its walls to take on the colours and textures of the surrounding woodland; the mirrored walls also generate possibilities for play for younger visitors. Hinged panels open to extend the common areas to the outdoors in the summer, but can be closed for warmth in the winter; these movable elements further enhance interactivity and excitement.

Client: Abernethy Trust

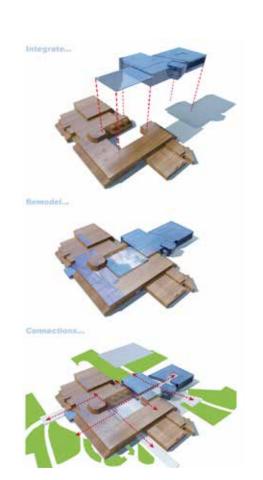


# Building Schools for the Future Proposals Coventry City Council

BSF proposals for a £4.5 million remodel and extension of the existing school, providing a new learning wing with a public orientated frontage, creating important connections with the adjacent leisure centre and community. The flexible design resolves existing complex circulation issues whilst providing a range of personalised learning opportunities to support the schools evolving curriculum.

Designed to 'BREEAM Outstanding', A range of sustainable measures were designed, including a modular timber framed structure, mixed mode ventilation and an ETFA canopy over the existing courtyard to extend and revitalise the space for social, performance and education uses.

Client: Sir Robert McAlpine, Aura Consortium, Coventry City Council











# Building Schools for the Future Proposals Rochdale Borough Council

Design and procurement advice to Council in relation to their Building Schools of the Future programme, and St. Anne's Academy project. Working alongside the client from inception to completion, performing a range of tasks to help ensure the schools' aspirations are delivered within the BSF programme and are of the highest quality.

Conducting design quality workshops for individual schools as well as a corporate design indicator session for the Borough, which will serve as guiding principles for the entire BSF programme at Rochdale. Also setting up best design practice workshops for schools to create awareness about educational buildings within the UK and abroad.

Client: Rochdale MBC







Moffat Academy.



### Key details:

- · Total project bundle value of £51.6m.
- Schools delivered with commonality of detailing and material use.
- Local spend maximised through specification workshops with client.
- Site options appraisal study gained client buyin to a townscape incorporated scheme.
- Integration with community sports facility and swimming pool development.
- Recognition of school heritage with the repurposing of Listed buildings for school use.
- Civic space creation and integrated traffic calming measures and shared surfaces.
- Internally space planned to ensure secure community use out of school hours.

# Dumfries and Galloway Smarter Schools Dumfries and Galloway

3DReid were appointed to design and deliver four new build schools within the Dumfries and Galloway region, consisting of two Primary Schools, one 'All-through' Primary / Secondary School and one colocated Primary and Secondary School, all with Pre-5 facilities. To tie the new school estate together all schools featured landscaped courtyards, impressive triple height social spaces, community libraries and external classroom play decks.

Whilst addressing the brief, each school differs in massing with a local response to the immediate context of each site. A restrained palette of materials was implemented; vertical local timber, brown brick, rainscreen cladding and dark grey metal work. Colour was added to the external treatments in consultation with the stakeholders, ensuring that the end users had ownership of the projects. Using this framework permits the new buildings to be read together as a result of the consistent architectural language.

In addition to delivering four schools, 3DReid acted as Design Te am Lead, controlling the design and quality of the overall project.

Client: Cyril Sweett, Amey Ventures Ltd and FMP



# Clackmannanshire Secondary Schools

Three new build secondary schools each designed in response to specific site locations and conditions. They are landmark buildings within their respective communities, providing flexible learning environments to meet 21st century educational needs and community facilities to encourage extended community use such as a County Sports Centre and Community Theatre. The integration of Fairfield School (catering for pupils with ASN) with Alloa Academy enhances the community approach.

Client: Bilfinger Berger & Ogilvie

# Borders Schools Secondary Schools

Three new build Secondary Schools, in challenging locations, each with site specific issues including high marine exposure, breeding bird habitat and a flooding river. The schools provide high quality educational, social and sporting facilities within their respective communities. An integrated Public Library, Vocational Training Centres and a Horticultural Department enhance these community facilities. Sustainable design features (biomass boilers, wind turbines etc) have enabled the schools to achieve a pre-construction 'Excellent' BREEAM rating.

Client: Bilfinger Berger & Graham Construction





# South Lanarkshire Secondary Schools

Four new build Secondary Schools, all designed around a 'street' concept, with the main dining, social and assembly spaces combined to create a 'heart' to each school, supported by a series of teaching, administration and sports wings. Integrated ASN facilities are provided along with community sports and library facilities. Extensive landscaping creates integrated, holistic design solutions. Standardisation of design and detailing created cost efficiencies that enabled the consortium to offer seventeen new build schools rather than the eight plus nine refurbishments envisaged by the Council.

Client: InspirED & Morgan Ashurst

"We are well versed in leading the high levels of public engagement and consultation that forms the foundation of any such scheme, in seeking to enrich the architecture and experience of those who engage with it."

Chris Dobson, Director, 3DReid

Selected Experience

# Higher & Further Education

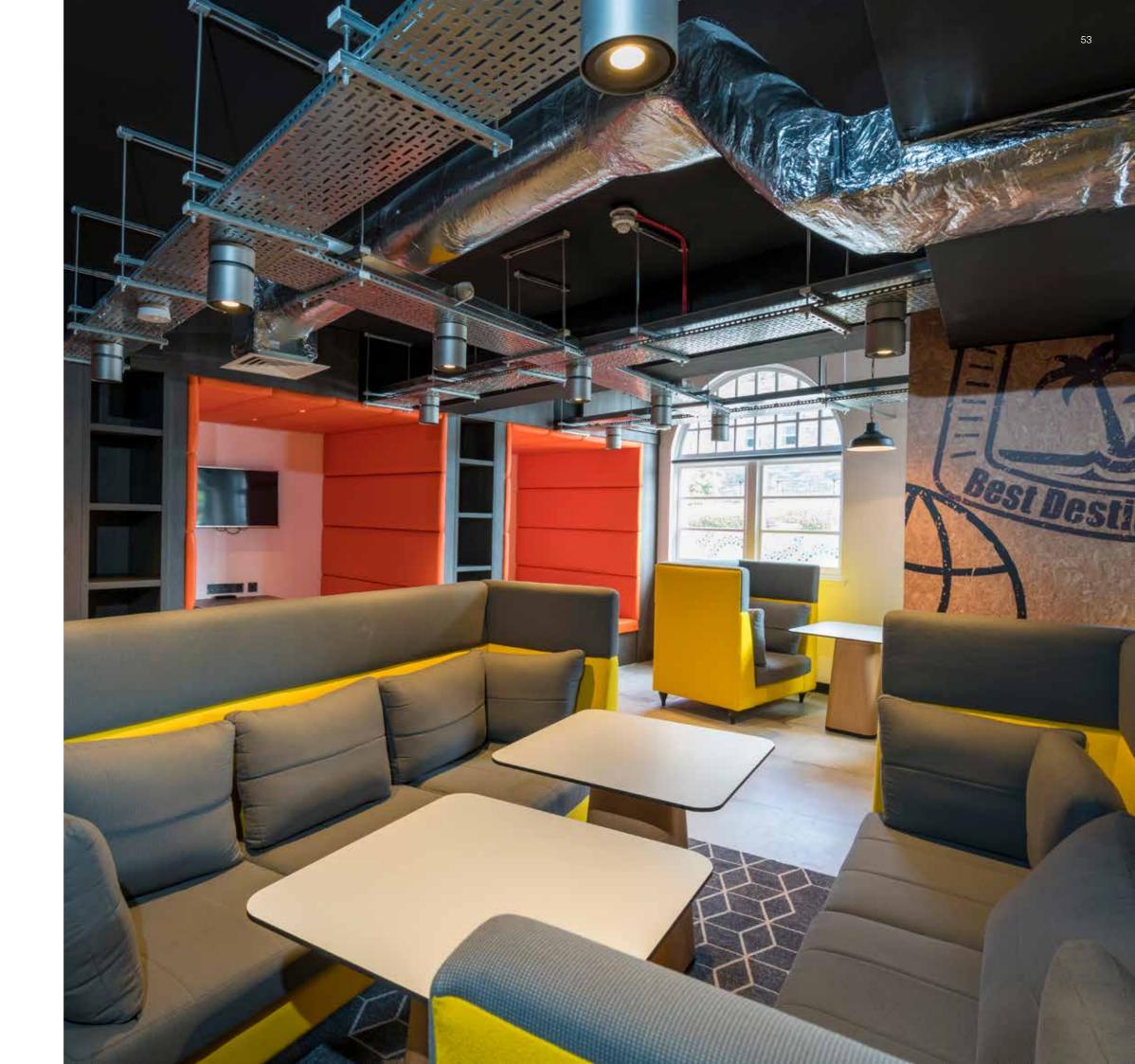
Our broad experience across the sector extends the HE & FE facilities, encompassing learning spaces; residential developments, R+D and laboratory spaces.

# Higher & Further Education Experience

Our broad experience across the sector extends the HE & FE facilities, encompassing learning spaces; residential developments, R+D and laboratory spaces.

# Selected projects include:

- · KM Central, The University of Edinburgh
- · Mason House, The University of Edinburgh
- Management Development Institute of Singapore (MDIS) Iskandar, Malaysia
- · Media City UTC, Manchester
- · Knutsford Academy, Cheshire



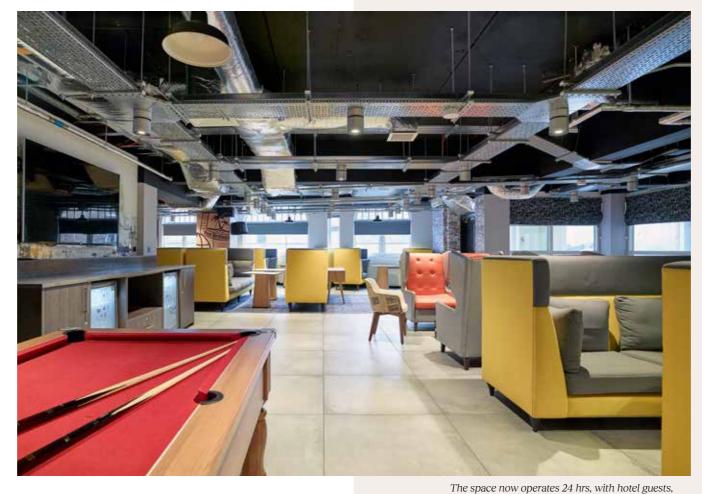
Education & Learning

# **KM Central Hotel** Edinburgh

KM Central has been repurposed, from a former student residence, to create much needed hotel space for the central Edinburgh market. Working with Edinburgh First, the commercial arm of The University of Edinburgh, 3DReid's interiors team created a bespoke solution to suit the client's business case, then designed and delivered this vibrant rebranding and interior concept.

The flexible multipurpose spaces, are now used by both students and the public with the addition of 45 hotel rooms and associated spaces. Key to the success of the project was the rebranding and repositioning of the spaces within both a commercial hospitality offering, and also increasing the flexibility of the breakfasting room, to facilitate more productive student use. A lighter, more quirky and fun feel was brought in with an eclectic mix of materials, textures and furniture. Bright bursts of colour within the fixed joinery elements and furniture softened the industrial feel.

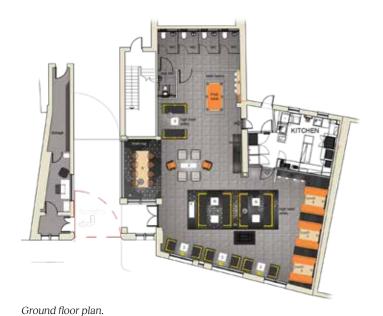
Client: The University of Edinburgh



"KM Central 3-star 45 room hotel owned and operated by The University of Edinburgh, offers a quirky left bank interior concept to guests."





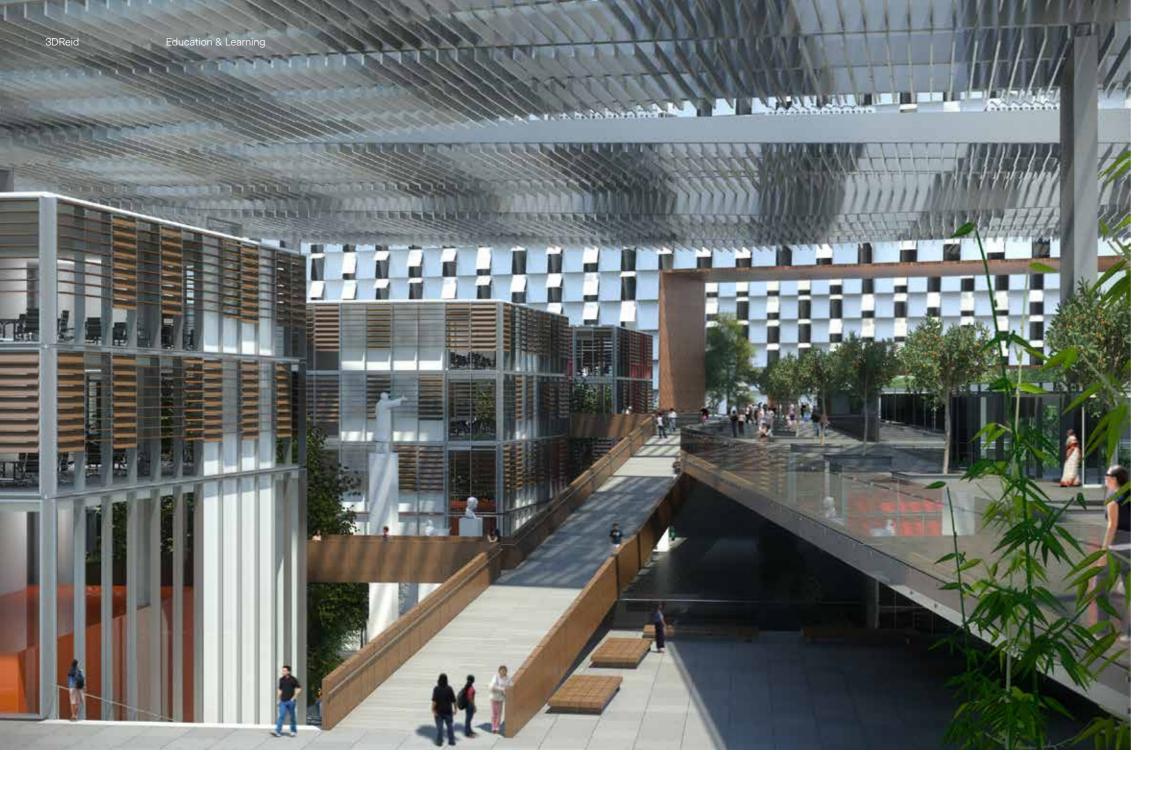








and accommodating students for single or group study, workshops and satellite learning.



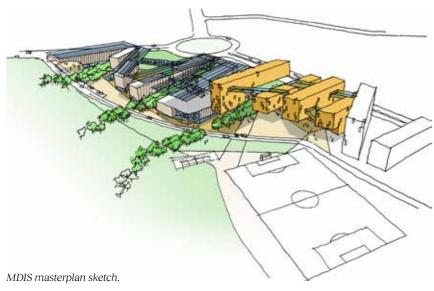
# MDIS, Iskandar Malaysia

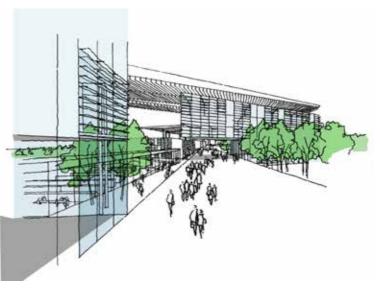
The university campus is designed so that all facilities are linked into the surrounding landscape. The concept provides a humane, beautiful and efficient environment that is well connected by strong but simple to use routes that provide a range of experiences.

The priority placed by MDIS in securing a campus design which is disability friendly has led directly to the principal concept of level access throughout the development, reflecting the importance of equality of opportunity, increasingly apparent throughout the region and internationally.

### Client:

Management Development Institute of Singapore





"The masterplan helps realise a sense of community for the university establishment as well as a recognisable and unique place within Iskandar Malaysia."

# Selected Experience

# PBSA Developments

With more than 20 years experience designing and delivering student residential projects across the UK, working with both Universities and developers, we have the capability to engage Planners and key stakeholders, to deliver efficient, flexible, durable buildings and create accommodation which enhances the student's experience of university life.

By combining our architectural and interior design capabilities we are able to deliver residences that are robust and inspirational, creating communal spaces that become the heart of these new learning communities.



Plot B looking east.



ганиясаре ріан.



Plot A and B looking west.



Plot B looking north.

# Central Quay Glasgow

The Central Quay development site provides an opportunity to remaster a prominent and strategic part of Glasgow city centre. The proposals will deliver a major urban regeneration project.

The mixed-use development comprises residential, purpose-built student accommodation (PBSA) and commercial uses, with associated landscaping, public realm and rejuvenate the existing office building.

The urban strategy puts placemaking at the heart of the design process. An understanding of the history, stories and built fabric of this place have tailored a contextual response unique to Central Quay. The design principles of the Glasgow grid-iron urban pattern are applied to the site as a means to organically grow the city centre west. High density neighbourhoods are organised around a recognisable network of characterful streets and spaces.

The proposed urban strategy defines four development plots. Plot A is PBSA, 933 beds for Unite. Plots B and D are residential, developed by 3DReid. Plot C is residential by Graeme Nicholls. The proposals also include supplementary retail, wellbeing and food & beverage opportunities.

Client: Summix Capital



Aerial visual looking south.

# 179 Canongate *Edinburgh*

Proposed redevelopment of the site at 179 Canongate for PBSA use, providing a characterful and adaptable place to live and study, within the heart of Edinburgh's Old Town.

Situated adjacent to Old Tolbooth Wynd and the Canongate Kirk, the site sits within the boundary of both the UNESCO World Heritage Site and the Old Town Conservation Area.

The footprint of the building takes cognisance of the existing structures and spaces, enhancing permeability across the site by way of a continuation of the Old Town's characteristic close and court arrangement. Pronounced level changes across the site have been reconciled to ensure ease of access throughout, with the articulation of its massing being such to stitch the development into the predominant urban grain of the wider conservation area.

The development comprises 76 studio apartments. Supporting facilities such as a secure cycle store, large common room, laundry and parcel room are accommodated at ground floor level, with a communal bin store accessed directly off the newly formed courtyard Miller's Close.

Client: S Harrison Developments & Summix (CGE)



A cobbled court.



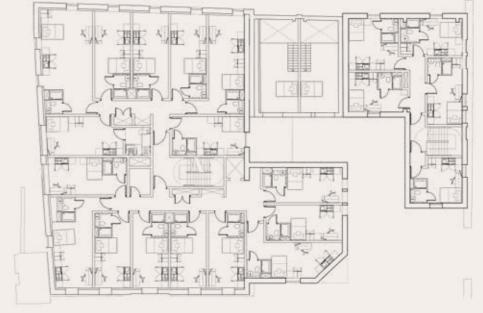
The next layer.



Old Tolbooth Lane.

"The proposal takes cues from the rich language of the Old Town, employing playful corbels, stringcourses and caphouses in reference to the Scots Baronial style."

Ryan Hodge Associate, 3DReid



First floor plan.

Education & Learning





Main approach.

Sunken gardens and care centre entrance.

# Craigmillar PBSA Intergenerational Living and Care Edinburgh

Craigmillar Care and Residential Development comprises Purpose Built Student Accommodation, assisted living residences and dementia care centre.

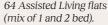
Craigmillar development is intended to respond to the challenges presented by our society's ageing demographic, the scheme seeks to promote an intergenerational approach to integration of care, in a non-institutional environment, which is positively engaged with the wider community.

In accordance with Craigmillar's Urban Design Framework, the PBSA and Assisted Living components of the scheme aim to reinstate the street edge to Niddrie Mains Road, with four storeys of new accommodation complete with commercial units, active frontage, and new public realm.

Client: Key-workers Living Ltd

# Craigmillar comprises:

153 Student Residence rooms 89 Dementia Care rooms (60 standard / 29 palliative care) 64 Assisted Living flats





# **65 London Road** *Edinburgh*

A high quality 76-bed Purpose Built Student Accommodation (PBSA) within Edinburgh's Meadowbank area and characterised by its industrial heritage and later commercial and residential development.

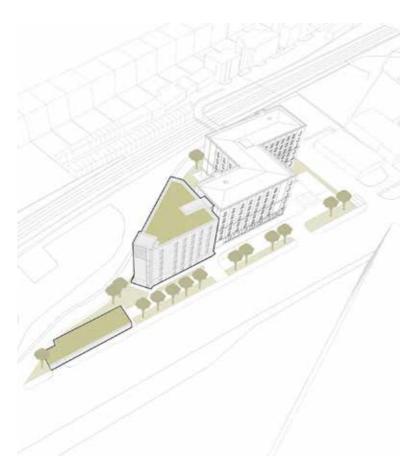
The development seeks to build upon HG Development's investment in the area, with a student residential accommodation, on the neighbouring plot at 63-65 London Road.

The proposals provide 76 self-contained studios with a shared communal room located on each floor. The new development is connected to the neighbouring student housing scheme via a glazed link corridor that will ensure a more efficient energy strategy across both developments and promote the use of sustainable technologies such as heat recovery. A green roof to the new development supports both the attenuation of surface water and the enhancement of biodiversity within the site, with the wider landscaping offering increased amenity space for the students and a greater greening of the wider London Road streetscape. On-site bicycle storage and car-club spaces promote active travel.

Client: HG Developments Limited



Proposed plan.







East elevation.



North elevation.





# The Mill House *Edinburgh*

3DReid was the Architect and Interior Designer for The Mill House, a new build 258 bed student residence in central Edinburgh.

The student apartments range in size from single studios to six bedroom clusters. Each bedroom includes a double bed, work desk, storage area and en-suite shower room.

The development includes an outdoor landscaped courtyard and games area along with on-site quiet study area, gym and social spaces, dedicated staff facilities and retail and office space to the ground floor.

The faceted and stepped façade has been designed to reference Edinburgh's surrounding building vernacular and provides a contemporary architectural language which has been carefully modelled to create visual interest, with cast stone and zinc dormers.

Client: Cold Spring Asset & Development Management for Fresh Student Living







# Elliott House Student Residence Edinburgh

Elliott House is a prime student residences development in Edinburgh's city centre.

138 studios have been created, 134 within the main seven storey building and 4 duplex units in a single storey mews style building, with a communal courtyard area in between.

3DReid provided full architectural and interior design services to transform the former seven storey office development within the Edinburgh New Town Conservation Area, involving a full reclad of the existing structure replacing the original concrete cladding with natural stone, and bronze coloured rain screen details on the main elevations, as well as a full internal refit.

The interiors team achieved a high-level of quality, specification and finishes throughout providing a refined student living experience with common room, quiet study rooms and a communal launderette.

Client: McLaren Property Ltd.





Unit type	Tota
Studio	127
Studio (wheelchair accessible)	7
Duplex unit	4
Total no of units	138









# Trinity Square Gateshead

3DReid was the Architect for the delivery of Trinity Square, a major retail led mixed use town centre regeneration development by Spenhill Developments in conjunction with Gateshead Metropolitan Bourough Council, providing a range of facilities and public spaces to energise the town centre and provide social and economic sustainability.

The student residence development comprise 993 bedrooms in studio apartments and 2-5 bedroom clusters, with a student 'Hub' of social facilities situated on a dedicated roof podium 15m above adjacent street levels providing private outdoor space including a football/basketball area. Accommodation comprises 8 blocks aligned north/south to optimise eastern and western aspects, the massing of each block being sculpted to create a cityscape profile.

In addition, Trinity Square provides more than 30 retail units and restaurants, a Tesco Extra superstore, a 9 screen Vue cinema complex, Grade A office accommodation, a Primary Care Centre and a 700 space car park.

Client: Spenhill Developments and Northumbia University







Trinity Square, Gateshead Town Centre.









Refurbishment of 33 apartments offering a range of 3, 4, 5 & 6 beds and construction of a new build common room. The refurbishment was undertaken within a tight off-season programme including new kitchens, lounge and dining areas, and all 148 bedrooms to provide a more contemporary student living experience.

The new build common room was constructed as a focal point for the scheme and our interiors team achieved a relaxed and modern feel within the space which includes group study facilities and a new private entertaining kitchen & dining room.

The building fabric features a palette of high quality materials and includes smooth stonework, larch cladding, extensive glazing with bi-fold doors that lead out to the new private landscaped courtyard, and a green roof system was included to reduce the building's impact upon neighbouring sites.

Client: McLaren Property Ltd.





"Refurbishment of 33 apartments and introduce a new common room hub with group study facilities and private entertaining kitchen & dining room to provide a more contemporary student living experience."



# The Combworks Student Residence Aberdeen

The Combworks Aberdeen is a 121 studio room development which includes a reception space, shared multi-functional common room, study spaces and its own private garden.

The building takes its name from the old Combworks, previously situated on the site, which closed in 1969. The factories were since demolished and various new buildings have been formed on the site over the years. There are very subtle design references to the Combworks throughout the design which were achieved without being too literal.

The client's desire first and foremost was for the interior space to be homely and welcoming so warm neutral tones were used for the flooring and walls as a backdrop to the colour palette. The common room area features large Chesterfield sofas and a gas flame fire within a bookcase feature wall adding to the character of the space. These are surrounded by different armchair groupings and a comfy L-shaped sofa to provide different zones where students can relax on their own or with their friends.

Client: McLaren Property Ltd for Hines/Aparto





The common room area also features a ommunal study area and a separate meeting room that the students can use.



Reception lobby.

"The reception area is enhanced with a large digital screen, feature bookcase wall-covering and includes a coffee machine and pastry point for the residents A communal study area and a separate meeting room that the students can use."



Bedrooms vary in size from small compact studios to large apartment style spaces which are designed for couples - a first in this market area. All bedrooms have their own private bathrooms and kitchens.



Section through the student common room area.



# Dumbarton Road Stirling

A highly specified, prime located 150 student units, offering excellent shared space and common amenity including laundry, reception with office and communal common room, a private gym and cinema.

Accommodation includes 48 self contained studios with six accessible studios and 96 beds are single en-suites in cluster flats, arranged in 4, 6 and 8 bed clusters.

Client: McLaren Property Ltd.





Peterson Hall, Dundee. (81 beds).

# Peterson Hall Dundee

Peterson Hall is an existing student accommodation property comprising three buildings and providing 81 student bed spaces arranged across 43 apartments.

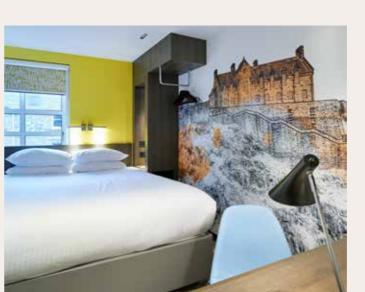
3DReid have designed a significant refurbishment/ reconfiguration for the property to significantly improve the overall facilities and quality of the student accommodation.

Client: McLaren Property Ltd

# Edinburgh College Edinburgh

Mixed-use development at Granton waterfront, including foodstore, offices, bar/restaurant, retail units and student residence accommodation. The 110 bed student residences forms part of the Granton Neighbourhood Centre, Edinburgh which comprises the first phase of a much needed mixed-use core serving the existing communities of Granton and the emerging communities of Forth Quarter and Waterfront Edinburgh. Central to the project has been integrating the development into the existing urban fabric.

Client: Wm Morrison plc (Shell), Alumno Miller (fitout)



KM Central, Edinburgh (45 bedrooms).



 $Edinburgh\ College\ Student\ Residence,\ Edinburgh\ (110\ beds).$ 

# KM Central Edinburgh

3DReid worked with The University of Edinburgh to convert a former student residence into a 45 bedroom hotel, incorporating flexible multipurposes spaces for use by both students and the public.

The key to the success of the project was the rebranding and repositioning of the spaces within both a commercial and hospitality offering, and also increasing the flexibility of the breakfasting room to facilitate more productive student use.

Client: University of Edinburgh

Selected Experience

# Flexibility Adaptability Sustainability

Education & Learning

# Flexible Architecture

Flexible Architecture is not new; we have rebuilt/reconfigured and reused for as long as we have been building and inhabiting spaces. In times of increasing (and imminent) change and commercial pressures, it is ever more critical to consider when and how we can adapt buildings. We have developed this roadmap so that we can asses the best way to approach all our projects.

> ADAPTABLE DESIGN Is there requirement for a flexible development? Demonstrate financial and environmental benefits to the client and seek to change approach

> > Transformability

The ability to change the function / use with minimal change / alteration to built fabric. The change is temporary.

Adaptability

+ FF&E

ADAPTIVE REUSE

+ Finishes

subsequent stage thereafter) for both:

+ Multi function spaces

The ability of spaces to change in response to conditions through moveable or responsive parts. The change is temporary.

- + Temporary units / containers / pods

- + Moveable walls

The ability to allow for change through construction work. The change is permanent and will require further construction to change again.

Convertability

- + Space for extensions

# + Sub/super structure

# Stuff: 1 day - 1 month Space Plan: 3-30 years

· Projects where there is an existing building (or buildings) which may be adapted and reused, and

• New buildings which are designed with inbuilt resilience to accommodate future flexibility.

3DReid's cross sector experience means we are able to

collate our shared knowledge and develop internal toolkits, for consideration at feasibility stage (and to be reviewed at each

The shearing layers concept (right) views buildings as a set of components that evolve in different timescales.

(Shearing Layers - Stewart Brand)

Skin: 20 years

Site: Eternal

Structure: 30 - 300 years

# Are there existing buildings on site?

Client Brief

### **BENEFITS**

Flexible Architecture and Adaptive Reuse benefits

### CONSIDERATIONS

**√** 

Demolition through

Technical, Economical, Planning, and Site Considerations



Is the use change

considered permitted

sustainable development? methods

> Will required sqft. Planning Refer to policy fit within existing permission **4**..... documents buildings? required

> > **:**......

<u>:...</u>...... Does external envelope require material change?

•••••

Possible permitted development?

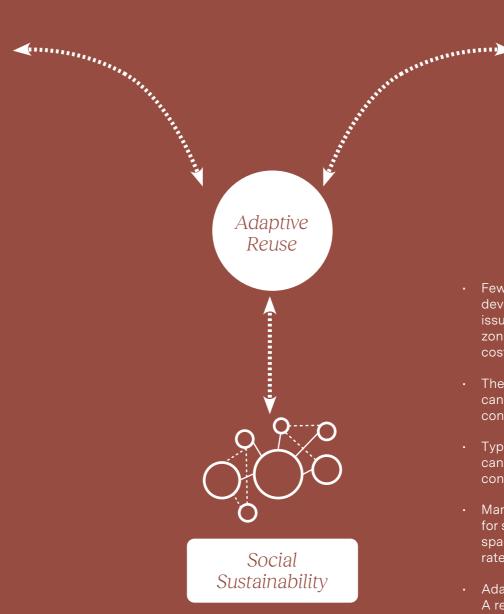
# Adaptive reuse

The largest benefit of adaptable design is the ability to keep the built environment relevant and useful as time goes on. Occupant needs can change drastically even in the span of just a decade, and this typically results in the need for buildings to undergo renovations or other updates. If successful flexible and adaptable space is achieved at a reasonable price, then landlords would be able to respond to market conditions without altering the shell construction, thus maximising the return at all times, and minimising construction time and costs. With buildings that are purpose built and difficult to adapt the cost of refurbishment can be as high as new build.

Adaptable design offers an effective solution to the challenges that face designers in this new era of the sharing, collaborative economy. Ideally future savings would outweigh initial investment. Factors such as maintenance costs, life expectancy and cost of adaptions should be taken into account. By adopting an agile approach, designers and developers are creating truly innovative, configurable spaces that are fundamentally practical but unique to their setting.



- The greenest building is often one that already exists. AR retains the embodied energy and carbon of the existing building
- 85% of the buildings which will be in use in 2050 already exist today – we need to learn to adapt and retrofit our existing building stock. (World Green Building Council 2019)
- Adaptive reuse is itself considered sustainable because of the reduction in building materials and resources needed to transform a space
- Adaptive reuse reduces the energy consumption and carbon emissions associated with demolishing a structure and building a new one to replace it
- AR conserves land and reduces the expansion of unsustainable urban sprawl and extensive daily commuting patterns.



- Restoring a historic space goes a long way in preserving local sense of place and authentic experiences that cannot be replicated elsewhere.
- With good design, displaying harmony between old and new infrastructure illustrates the community's identity.
- As more abandoned and dilapidated properties are revitalized, more businesses, communities, and healthcare facilities will see the benefits of adaptive reuse.



- Fewer hurdles generally associated with development of greenfield sites including legal issues, pressure from anti-development factions, zoning problems, finance, design and construction costs and environmental impacts.
- The adaptive reuse of existing buildings in general can be 16% less costly than other forms of construction.
- Typically an overlooked expense, demolition costs can run as high as 5-10% of the total cost of new construction.
- Many of these spaces also become ideal settings for start-up businesses because cost efficient shell space can be made available at a lower leasing rate than the market for new construction.
- Adaptive reuse can save time and therefore cost.
   A renovated existing building becomes suitable for occupancy sooner rather than later. This allows developers to have cash inflow and for cities to turn around desolate areas in a much shorter time frame.



# How we support you in sustainability

We are RIBA 2030 Climate Challenge and Architects Declare signatories. We respect both commitments in our own processes and in the way that we work to support you in sustainability.

The RIBA 2030 Climate Challenge sets project targets for sustainability. In support of this, our inhouse Environmental Management System (EMS) has been shaped to focus on our project work and minimisation of the associated Scope 3 emissions, and adopts the RIBA 2030 Climate Challenge targets. Our EMS is reviewed and updated annually, and is independently certified as ISO 14001 compliant.

Architects Declare have set twelve points for engagement by built environment professionals. We have made our own statement of the twelve points and the processes defined in our in-house EMS reflect them.

### 01 Raise Awareness

### We will

Prioritise sustainability in client and team interactions

Make sure that practice members and all stakeholders know our targets

### 03 New Goals

### We will:

Recognise and reward sustainability in our own work Enter our best projects for sustainability awards

### 05 Evaluate Projects

### We will:

Use energy modelling (such as PHPP or CIBSE TM54) iteratively from project inception

Promote the best certification process (such as BREEAM)

Promote lifecycle carbon assessment

Promote post-occupancy evaluation

### 07 Whole Life Carbon

### We will:

Determine how lifecycle carbon will be assessed at briefing

Ensure that building energy use is accurately modelled and that fossil fuel use is not disguised by offsetting

Promote low energy, low embodied carbon design that enables circularity and re-use

# 09 Collaborate & Re-use

### We will:

Promote the use of reclaimed materials, including structural materials

Promote material passporting

Collaborate with like-minded clients, consultants and contractors

### 11 Minimise Waste

### We will:

Design to enable low-carbon lifestyles and active travel, and minimise car dependency

Promote low carbon choices in our own practice life

Design spatially efficient buildings that minimise waste in construction

### - 02 Change Fast

### We will:

Engage with relevant professional groups and knowledge-sharing events Publicise our own approach and

### .....

- 04 Share Knowledge

### We will

Identify project-relevant sustainability knowledge at briefing

Share our own R&D widely

Consistently state our values via the channels that are open to us

# 06 Upgrade Existing

# We will:

Promote re-use or retrofit and avoid unnecessary demolition

### - 08 Regenerate

## We will:

Promote connections to nature

Promote natural regeneration where opportunities exist

Promote the use of natural, minimally processed materials from sustainable sources

Be aware of the potential for 'greenwash'

### - 10 Low Carbon

### We will:

Promote the use of low carbon structural materials

Ensure that all team members, including specification writers, give priority to low carbon materials

Communicate the demand for low carbon materials to suppliers

### — 12 Climate Justice

### We will:

Advocate for biosphere protection and defend the freedom of individuals to engage in such advocacy

Act in support of justice with respect to the environment consistent with our capacity to effect change.



Retail / Primark Birminghan

# Cross Sector Expertise

Take a look at our work in further sectors. All of our brochures can be downloaded from our website: www.3DReid.com



Aviation & Rail / Gibraltar Airport.



Culture & Community / Thistle Centre of Wellbeing, Edinburgh.



 $Hospitality \, / \, Gleneagles, \, Edinburgh.$ 



Workplace / One Angel Square Manchester.



Residential / Apex House, London.



Industry & Technology / Farnborough Airport Hangars.

"All our projects start with local conversations. Through listening and engaging with stakeholders we seek to deliver innovative, accessible and sustainable buildings for learning and growing. We continue to expand our sector knowledge through in-house and collaborative R&D projects."

Andrew Marshall, Director, 3DReid

# Spaces that work, beautifully.

Birmingham 103 Colmore Row B3 3AG T +44 (0)345 271 6200

Edinburgh 36 North Castle Street EH2 3BN T +44 (0)345 271 6300

Glasgow 45 West Nile Street G1 2PT T +44 (0)345 271 6350

London 1 Hills Place W1F 7SA T +44 (0)345 271 6100

Manchester 26 Cross Street M2 7AQ T +44 (0)345 271 6250

3DReid.com

