KEYNSHAM CIVIC CENTRE & ONE STOP SHOP
KEYNSHAM, SOMERSET, UK

Client
Bath and North East Somerset Council

Project Value
£28m

Total Internal Area
9,600 m²

Completion
2014

Sector
Civic, Commercial (office), Retail, Public Realm

Sub-sector
Civic and Community

Services
Architecture

Project Director
Karle Burford

Lead Office
Bristol

Procurement Route
NEC Design & Build

DEC Rating
Targeting EPC A & DEC A

Awards
National BCO Awards 2015
WINNER Best of the Best
—
National BCO Awards 2015
WINNER Corporate Workplace
—
RIBA South West Awards 2015
WINNER Award & Sustainability
—
Civic Trust Awards 2015
—
Highly Commended, Regeneration
RICS South West Awards 2015
—
Winner, Commercial Workplace of the Year
South West Property Insider Awards 2015
—
Best Commercial Mixed-Use Design
2016 Construction & Engineering Awards

The new Keynsham Civic Centre & One-Stop-Shop has completely transformed the town centre in a way that far exceeds the expectations of a new corporate office development.

The redevelopment replaces outdated 1960s buildings, bringing new jobs and investment to the town centre with a new 68000sqft Council office, Library and One-Stop-Shop, 20,000sqft retail located around two new pedestrian streets, a market square, new car parking and highways improvements.

Key features of the project are:

- A landmark anchor scheme which forms a catalyst for the regeneration of the town
- Over 50% of the site area given over to new public space
- Innovative 'passive first' approach to sustainable design
- Full natural ventilation achieved on a noisy town centre site
- The first project to target a DEC A rating from the outset and using the BSRIA Soft Landings process to support its delivery
- An innovative hybrid Cross Laminated Timber frame
- A clear building organisation focussed around a 4 storey atrium containing a café, formal and informal meeting areas, 'touchdown' desks and social spaces
- High quality, low maintenance natural materials and cladding including standing seam brass, solid oak flooring and exposed CLT structure

SITE CONTEXT

The form of the building has provided a massive improvement in public space within the town including new pedestrianised retail streets, a café terrace, play spaces and a market square giving back almost 50% of the site area to the public realm.

The position and orientation of the external spaces improves connections to the local memorial park and leisure centre, provides a south west facing sunny market square and new steps and ramps provide a wheelchair friendly accessible route across the sites 9m slope.

The decision to separate parts of the council office space into the standalone One-Stop-Shop has created a landmark Community Hall which provides a focal point for the High Street and a flexible multi-purpose space capable of holding community meetings, accommodating fitness, dance and activity classes on a semi-sprung oak floor; and hosting performances and films on retractable seating.

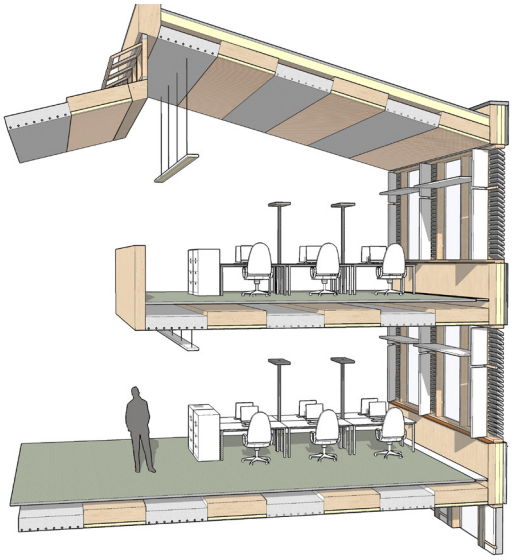
The community space is orientated to the high street and when lit up provides an exciting backdrop to the new market square.

For members of the public who need to access council services the separation of the One-Stop-Shop gives the community a sense of ownership of the building and makes the council feel more accessible.

The project has also been able to fund the restoration and display of a significant Roman mosaic under a glass floor for public display.

The office spaces benefit from the elevated site position which provides stunning long distance views across the town and local countryside.

Office workers arrive into a generous reception which leads up directly into the main breakout atrium around which the office spaces are organised. Extensive glazing makes this a bright and transparent hub to the building. Views across voids and through windows make the space feel connected and engaging.



FUNCTIONALITY

Slicing through the site with two new pedestrian streets has created three narrow wings of office accommodation running east-west. A service and circulation spine connects north-south through the wings. The site diagram aims to reconcile the urban grain of the existing high street with the optimum solar orientation for a naturally ventilated building.

The council identified a 3:2 desksharing ratio which resulted in a target of 455 workstations for 688 people. The departmental mix was unknown at the outset and deliberately ambiguous to ensure that the building provided a variety of types of spaces which could accommodate different team sizes, had different levels of security and acoustic privacy.

We achieved this by arranging four differently sized wings around a central breakout and touchdown spine.

The wings accommodate teams of between 20 and 90 people, some are secure and enclosed while others are open balconied to the atrium.

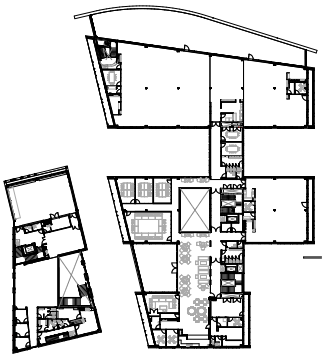
Opportunities for working away from your desk were seen as very important and the breakout space and touchdown 'decks' have proved popular as informal meeting spaces.

The southern wing is designed to be completely sub-lettable should the council not need the space. Already the local police have taken a small office space making use of the rear entrance which is 24hr accessible. The buildings form with shallow plans and large windows makes it easily adaptable to other uses such as residential.

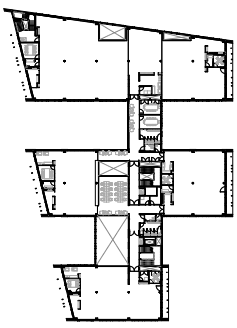
Specific enhancements to the office spaces include:

- A resource point in each wing including kitchen, meeting spaces and storage
- The open plan offices have general lighting to circulation routes and perimeters only. Local task lighting is provided to desks which provides greater user control and significant energy savings
- The FF&E design included the manufacture of 450 bespoke desks with a very robust stainless steel frame and trespa worktops

Ground Floor Plan



First Floor Plan



Second Floor Plan

CHALLENGES AND SOLUTIONS

CHALLENGE:
Accommodating 10,000 m² space within a town centre on a constrained site which also gave something back to the town through the creation of new public space and amenities.

Solution:

Rather than filling the site with a large low rise building we chose to slice through the site with 2 new pedestrian streets and make the buildings taller. This allowed us to arrange the buildings around new public realm at ground level which made the site permeable and publically accessible 24 hours.

CHALLENGE:
Creating a naturally ventilated building on a busy town centre site directly adjacent to a busy town centre road on a small site

Solution:

Slicing through the site with new pedestrian streets allowed us to divide up the buildings into narrower plans which could then be naturally cross ventilated.

CHALLENGE:
One of the key objectives for the project was to facilitate a workplace transformation, allowing the Council to adopt more flexible ways of working which would improve communication, collaboration and efficiency across teams and departments.

Solution:

AHR responded to this by arranging four wings around a central atrium which incorporates a large breakout area two touchdown decks. The atrium is the heart of the building, creating visual connectedness and opportunities for spontaneous meetings as users move across the building.

SUSTAINABILITY

Keynsham Civic Centre and One-Stop-Shop is a test case for an innovative approach to delivering exemplary building performance, and a truly sustainable building.

From the outset of the project Bath and North East Somerset Council was determined that the new development would achieve outstanding building performance and incorporated a target Display Energy Certificate (DEC) rating of A into the project brief.

It is expected to achieve this DEC A rating in 2017 once it has been in use for two years, and will be the first project in the UK to achieve that rating when applying BSRIA Soft Landings.

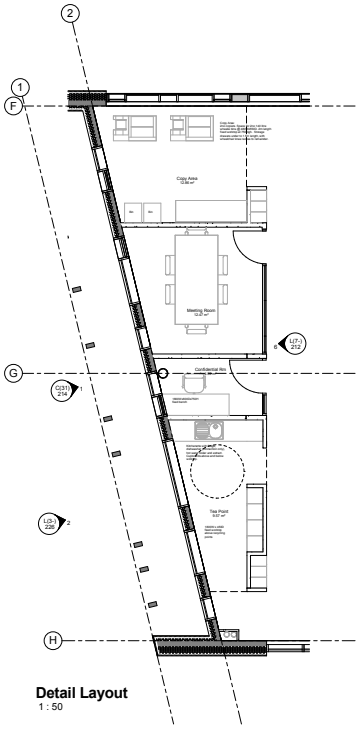
The DEC A rating will also confirm it as one of the lowest energy consuming public buildings in the UK.

As part of the BSRIA Soft Landings process, the team engaged with the client's facilities management team from an early stage to better understand occupant behaviour and operational needs.

The offices have already achieved an outstanding EPC rating of 5: almost zero-carbon and placing the project well on course to achieve the DEC A rating. in 2017. Specific environmental features include:

- 1150m^2 photovoltaic panels providing 200,000kWh per year of electricity
- Water cooled servers provide 20% of the building's total heating energy requirement
- Thin Client technology which reduces the need for cooling
- A Cross Laminated Timber frame which makes a sizable offset to the embodied carbon of an equivalent concrete frame building
- Use of the building outside of core working hours is contained to a dedicated out-of-hours working suite allowing power to be shut off in other areas to reduce unregulated energy use
- Restricting electronic equipment that the occupiers can bring into the building, such as such as desk fans, heaters or kitchen appliances
- The council adopts a 4 waste stream recycling policy throughout its buildings

SUSTAINABILITY



RENEWABLE SYSTEMS

The 'waste heat' given off by the building servers and computers is captured and used to provide heating and hot water to the building whenever possible. In this way a simultaneous cooling and heating process can be carried at greatly improved efficiencies compared with standalone processes.

Photovoltaic Cells are mounted on the roof of both the office and Civic Centre Buildings to help achieve the required CO2 reductions. PV's have been chosen due to their reliable output, lack of maintenance and unobtrusiveness.

Through feed in tariffs it is estimated that the buildings will make the council a profit of £8000 per year.

Future connection to a district heating network is possible should one be put forward as part of the redevelopment of the adjacent site.

SUSTAINABLE MATERIALS

Robustness was a primary driver in the local authority's brief. The principle was that the building must function and look good with minimum maintenance of the building envelope or environmental systems. Long lasting low maintenance external materials were chosen which included stone for ground level and brass and aluminium cladding above.

AHR undertook a pre-contract embodied carbon assessment which helped the team to appreciate the impact that the materials embodied carbon had on the buildings full lifecyle carbon footprint.

This helped the team to prioritise where to invest low embodied energy materials which gave the client best value for money.