



## **Awards for Planning Excellence Case Study**

**St Sidwell's Point**  
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## 1. Project Background

Planning 2010 – 2016.

Construction from January 2019 to spring 2022.

Cities are people places and to thrive cities must have a clear plan for how they will respond to, and take advantage of, major changes in technology, social expectations and the environment. 'Business as usual' planning and development processes on their own are not enough to ensure that cities can achieve their potential and give all citizens the chance to live the best possible lives.

Exeter City Council has a clear vision for the City that includes commitment to being a carbon neutral city by 2030 and becoming an active and accessible city. St Sidwell's Point is the UK's first leisure centre built to Passivhaus standard and is testament to forward thinking planning and commitment to placeshaping in Exeter.

A robust methodology and design review process was undertaken in May 2010, in consultation with Exeter City Council, Devon County Council, English Heritage and representatives of CABE. A series of workshops were established resulting in a number of Development Principles which were then agreed. This resulted in the Princesshay Leisure Masterplan with Crown Estates; to create a lively and vibrant environment that provided a variety of experiences for both visitors and the local community and expand the attractiveness of the city centre. This approach required obtaining outline planning consent, then reserved matters for each parcel of land.

Saint Sidwell's Point is the anchor project for the regeneration of the eastern sector of the city centre, CityPoint, and is the first part of a wider masterplan to develop an old bus station site and provide new mixed use development to modernise the area.

The location of the leisure centre was chosen specifically to create footfall to protect the Exeter's High Street and move to a mixed residential and commercial centre with less reliance on private cars.

The building will achieve an annual energy saving of 70% compared to a Building Regulations compliant scheme. This £42m new centre provides a facility that utilises healthy-building biology principles, is designed for 2080 climate predictions and is highly energy efficient.

St. Sidwell's Point is a unique and exceptional project that has overcome challenges, pushed the boundaries with the concept and set a new precedence for future design and climate resilient developments.

### **Project Objectives:**

- To achieve the highest quality health and leisure facilities for residents.
- Improving accessibility for all by providing leisure and public transport facilities together.
- Significant anchor for the city centre to ensure continued vitality and footfall.
- A high quality, Passivhaus building helping to meet Exeter's 2030 net zero target.

## 2. Outcomes for People and Communities

St. Sidwell's Point is an investment in the city's health and wellbeing. The central and prominent location signifies the importance of Exeter's vision to promote active and healthy lifestyles and become the most active city in the UK.

### **Economy:**

- Employment for 40 people.
- Over 2,500 people have helped to design, construct and deliver the project.
- A prestigious anchor building for the wider redevelopment of the site, known as CityPoint.
- All staff will be paid the Living Wage and there will be no Zero Hours contracts throughout.
- It will protect and enhance city centre investment and create footfall for local retail.

**Facilities:**

The new centre provides a 25-metre 8 lane competition pool, 20-metre community pool, (both of which have accessible steps into the pool, submersible wheelchair lifts, moveable floors allowing for a range of depth to suit different activities, as well as pool drowning detection technology) and a confidence pool.

**In addition:**

- a top of the range gym,
- a spa fitted with a hydrotherapy pool, saunas, treatment and relaxation rooms,
- soft play, cafe and children's area

**Health:**

The high quality ventilation system warms and filters fresh air, reducing indoor contamination. All the materials used in construction contain no volatile organic compounds, further reducing contamination, giving a fresh, healthy environment.

First public leisure centre in England to use 'microfiltration', where pool water is forced through a semi-permeable ceramic membrane which filters to a finer grade than conventional pool filter systems, removing unwanted particles and bacteria.

Water treatment using ultraviolet (UV) light kills waterborne microorganisms and bacteria. Without reproduction, they become far less dangerous.

The innovative filtration process and UV water treatment combine to provide exceptional water quality using a minimal amount of chlorine disinfection. This makes the pools healthier for all, particularly those with respiratory problems and will greatly improve the experience for all swimmer.

The NHS spends around £1billion a year treating and caring for people with asthma. Minimal chlorine content at St. Sidwell's Point reduces the risk of asthma and prevents red eye after swimming.

Air is extracted from the pool halls at both high and low level to promote the collection of potentially harmful gasses from close to the pool surface.

**Accessibility:**

- Submersible wheelchair lifts
- Easy entry steps
- Dedicated 'changing places' room featuring a ceiling hoist, changing bed, shower facilities and toilet
- Roommate box installed in all accessible toilets. This provides audio description of toilet layout for visually impaired users
- Accessible toilets on every floor
- Lift access to all areas
- WelcoMe app for customers with special access requirements
- Membership is designed to be accessible to all

**Education/Skills:**

The project has enabled the work force to upskill by providing bespoke Passivhaus training that has been delivered to all operatives working on the scheme, including Passivhaus Passports to demonstrate improved skills in this form of construction. It has also been used as a 'live' case study for educational establishments, community groups and industry organisations to learn about the design and techniques used in delivery.

**3. Planning Contribution**

St Sidwell's Point is testament to forward thinking planning and commitment to placeshaping in Exeter.

Following a period of major positive change since the early noughties Exeter continued to attract investment and predictions indicated that the population of greater Exeter was set to grow by approximately 50% by 2026. This growth, and its physical impact on the city centre, in tandem with the higher profile reduced carbon agenda was recognised by Exeter City Council as a driver for changing the approach to planning and development.

Planners also recognised that it was not Exeter's fundamental character that needed to change. Exeter is valued for its manageable scale, green and open character, pace of life and proximity to the stunning Devon countryside. Retaining and where necessary reinstating this charm - whilst providing a much improved City centre – was put at the heart of the City Centre Vision.

The decision to locate a leisure centre at St. Sidwell's Point was made during various stages of collaborative design – some of which is highlighted in project background.

In addition, Turley Associates were commissioned by Exeter City Council in to undertake an Urban Analysis (2007) of Sidwell Street and the surrounding area, to provide indicative development principles to guide medium and long term change. This work looked at the historical context of the area, the recent changes to Princesshay, accessibility and townscape. The work recommended a set of development principles, including a landmark building on the St. Sidwell's Point site, a mixed use city centre quarter, improved public realm including safe accessible spaces for pedestrians. These principles were then put to public consultation.

The location of St. Sidwell's Point has been controversial and feedback suggested putting it outside the city centre. However Exeter City Council have been committed to ensuring that this is a building that is sustainable and supports the goal of 50% of all journeys being made by active travel modes.

To further this early work LDA Design developed the initial 'Green capital' vision (2011), the planning team at Exeter City Council identified two distinct components to facilitate change over time:

- A number of spatial framework principles help to bring out and build on those elements that are, or could be, memorable and great about Exeter; and
- Four big moves or development projects that represent one way of delivering change within this framework over the coming years to deliver the ambitions of a prosperous and growing city.

The framework principles applied to the whole of the city centre and together created a basic structure within which specific development projects can happen. The structure built on the essential qualities of Exeter's city centre and set out a long-term direction for change.

The big moves are place specific projects that can be turned into deliverable development briefs for specific sites. Together, the framework and the big moves set out the key elements that deliver the vision for Exeter city centre. A vision that puts people at the heart of place.

#### **4. Outcomes for climate action**

Exeter is targeting net zero city by 2030. The roadmap for achieving this is set out in the Net Zero 2030 Plan which has been written by Exeter City Futures.

Championing climate action through planning St. Sidwell's Point showcases the standards of sustainable development that Exeter can achieve. Quality design, efficiency and climate mitigation and adaptation have therefore been crucial in planning; with the Council recognising the role of the built environment in placeshaping; the need to plan cities inclusivity and sustainability to ensure future climate resilience.

The original brief was for a new centre that was healthy for residents, climate ready to 2080 predicted weather patterns (with a lifespan designed to exceed this). The solution proposed by designers was Passivhaus, fully certified to ensure there was no performance gap.

Designers Space & Place and others worked with the Passivhaus Institute (PHI) to develop a building that minimised heat loss through an airtight envelope. The PHI set a target of 0.4 m<sup>3</sup>/hr/m<sup>2</sup> @ 50pa for the envelope (compared to 8 m<sup>3</sup>/hr/m<sup>2</sup> for building regulations). The final air test demonstrated the building as constructed by Kier is 0.3 m<sup>3</sup>/hr/m<sup>2</sup>.

The M&E design has been optimised by Arup, PHI and T Clarke to reduce energy use at every opportunity. This includes using heat pump technology to transfer excess heat from the pool areas to heat or cool the gymnasium and studios.

Modelled to withstand predicted changes in climate conditions up to 2080 and designed using forecast data from University of Exeter climate scientists, meaning the building will be in use long after others are obsolete. All services are designed to accommodate this forecast (a 4.5 deg C increase on 2010) and the building will not overheat at this level and will be comfortable to use in future years when climate change impacts. The building is also designed to accommodate greater rainfall and more severe storms as well as temperature difference.

The building has exceptional energy efficiency and is expected to save up to 70% on annual energy costs. In St Sidwell's Point the Council has recognised that using less energy is the key to improving sustainability and making good business sense in a world of rising energy costs. Leisure centres have proportionally higher energy costs compared to other building, so reducing energy costs in a leisure centre has a greater impact on running costs.

By building to super energy efficient standard (as opposed to a standard pool), the local authority is making annual carbon savings equivalent to 105 hectares (or 250 football pitches) of managed woodland, and preventing annual emissions from 750 average UK cars (commuting 40 miles a day).

Water reduction of 50% - higher humidity in the pool halls reduce evaporation rates. Grey water harvesting from excess pool waste water – used to flush WCs.

The construction of St. Sidwell's Point as a Passivhaus with energy reducing measures was supported by a Business Case that demonstrated a payback period for the additional costs of 8-9 years (before recent energy cost increases).

## **5. Outcomes for sustainable development**

St. Sidwell's Point is an exemplar scheme that exceeds current planning policy and the high standards achieved will leave a legacy of creating inclusive, safe, resilient and sustainable places. (SDG 13.2 and 17.14) From the early planning stages, the project has joined up placemaking strategies to deliver a high quality landmark building at the cutting edge of sustainability.

1. No poverty: Focused on improving health and wellbeing, accessibility and employment; a clear link to helping to overcome the causes of poverty.
2. Zero hunger: Indirectly, the provision of employment which may increase incomes and improve access to a healthy diet. Educational programmes will also explore the links between activity, sport and health diets.
3. Good health and wellbeing: It ensures health and wellbeing is central to the life of the city.

4. Quality education: Skills in sustainable construction techniques have been central to the provision of St Sidwell's Point providing an exemplar to other projects.
5. Gender equality: St Sidwell's Point aims to provide improved access to sport and leisure to all, irrespective of gender.
6. Clean Water and Sanitation: a 50% reduction in water use. Micro-filtration pool water to ensure the building minimises its impact on the water environment.
7. Affordable and clean energy: Passivhaus reduces energy use by 70% and reduce carbon emissions and running costs.
8. Decent work and economic growth: A key anchor for the city, attracting investment and supporting economic growth.
9. Industry, innovation and infrastructure: Key city infrastructure and an exemplar for innovative design and Passivhaus construction.
10. Reduced inequalities: Owned and run by the Council ensures that access to facilities is open to all. This is supported by the location of the centre adjacent to a brand new bus station to increase travel choices.
11. Sustainable Cities and communities: St Sidwell's Point is a keystone supporting the wider City Vision to coordinate sustainable and inclusive growth to create a city that's ready for the future.
12. Responsible consumption and production: The design and construction has followed strict building and waste management standards to minimise waste.
13. Climate action: As part of the Council corporate priority of achieving net zero emissions by 2030, St Sidwell's Point directly responds to the challenges of climate change.
14. Life below water: the sanitation infrastructure and micro-filtration processes at St Sidwell's Point ensures that the project maintains the condition of our local marine habitats, including the Exe Estuary.
15. Life on land: the scheme regenerates a brownfield site rather than building on a greenfield site, adopts practices and technologies that reduce the use of chemicals that could harm the environment and makes use of sustainably sourced timber structural elements in its construction.
16. Peace, justice and strong institutions: St Sidwell's Point has been delivered through strong leadership by Exeter City Council and its partners with strong community engagement to ensure it provides facilities that the city needs.
17. Partnerships for the goals: St Sidwell's Point has come forward through strong joint working across public and private sectors.

## **6. Community Engagement**

Initial public engagement events were held at Exeter Guildhall, in winter 2015. The events were publicised via the local media, social media and the Council's communications channels. Publicity included information about the exhibition, including times venues and format.

The event included boards explaining the brief, initial concept layouts, environmental factors and work undertaken to that point. Members of the Design Team and Councillors were available to explain the proposals. This was followed up with a second event in 2016 as an update on the project progress including updates on some of the issues raised, again this was attended by the Design Team and Councillors with feedback forms provided for the public. Both engagements included digital animations, drawings and text to assist the public in understanding the proposals. The engagements were attended by over 2,000 visitors in total.

Attendees at the exhibition were offered feedback forms on arrival, which they were encouraged to complete at the exhibition. A postal address was also provided. Information about the exhibition was posted on the project website well in advance of the event. Exhibition panels and an online feedback form were placed on the website post event.

In total 407 feedback forms were submitted by the public. The information received helped shape the accessible design of the facilities in the building, whilst also seeking to address economic accessibility of the facilities through membership pricing.

In addition, a series of exhibitions with feedback forms were held across the city's existing sports facilities in respect of the children's water area and how this may best be developed. This was undertaken to specifically target families as a major user group of the proposed centre. This directly informed the detailed design of the children's water area and play equipment.

Meetings were held with Bisnet and CEDA to discuss issues of accessibility, explaining some of the ways the building could be designed to ensure accessibility and employment opportunities. Bisnet, explained some of the issues that may restrict access to individuals, including those with ASD, and the organisations that support them. As a result, the visitor 'journey' through the building was given a great deal of thought, considering noise, colours, obstructions, space, etc. Furthermore, the RNIB were involved in reviewing the detailed design proposals during the construction stage, with their comments feeding into the final design.

The nature, publicity, location and opening times of the two public engagement events enabled a widespread demographic to attend the events. The availability of the information boards and feedback forms online allowed others to review the proposals and provide feedback. The engagement with specific community representative groups also helped understand requirements and good practice.

Going forward, the engagement with communities will continue via the work of Live and Move, the Sport England Local Delivery Pilot for Exeter. In partnership with ECC this work will ensure St Sidwell's Point is a centre for wellbeing and community, belonging to everyone in the city, not just those who would conventionally visit a leisure centre or buy a membership.

## **7. Leading Practice**

Planning for future resilience is challenging so collaboration and leadership has been integral at every stage of the project from planning to completion (currently due April 2022 - delayed due to Covid-19).

This started with a brief for delivering a high architectural quality anchor for regeneration. To deliver this a set of development principles were agreed as a guide for a development scheme for the area. They allowed flexibility in the design layout and mix of uses, whilst ensuring that key principles are delivered. It was intended that the Development Principles be used as a planning guidance document to aid consideration of any planning applications for the site. The draft Development Principles were prepared in a series of collaborative workshops and this output fed into the master planning work to create a robust plan.

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The City Centre Vision was prepared by ECC to provide a development context for a City Centre Transportation Strategy and other potential studies and projects in the City Centre. Exeter City Council endorsed the use of the City Centre Vision to inform decision-making by the City Council.

A number of important background studies were also completed and these have informed the Development Principles. These studies include: Sidwell Street and Environs Urban Analysis, Height Constraints Analysis, Exeter Planned 'The Architecture and Townscape of Sidwell Street', Archaeological Assessment, Retail Capacity Study and, working with Devon County Council, a City Centre Transport Study.

Policy CP15 set BREEAM Excellent as minimum standard but as a Passivhaus development St. Sidwell's Point is an exemplar scheme that goes beyond BREEAM credits.

That St. Sidwell's Point is local authority developed, owned and operated allows the adoption of higher energy performance standard of Passivhaus.

Innovation to solve potential issues identified in risk workshops include the introduction of a Passivhaus Passport training scheme for all operatives so all understood the project brief, the risks that an operative needed to be aware of and the benefits of doing their work correctly. Each trade group had training specific to their activity.

Supply chain developed innovative solutions such a specially shaped machine buckets to prevent concrete pours damaging the EPS insulation around pile caps. Thermal imaging was used to assess impacts of cladding fixing, leaf blowers were used to test EPDMs to curtain walling.

Early adoption by the client team of Healthy Building Biology principles means that VOC - free materials are preferred (mineral paints, blockboard over glued-fibre products) and products with known carcinogens are removed.

The building is designed to last at least 80 years (bar refitting services) and is designed using 2080 medium data from the University of Exeter climate scientists, meaning the building will be in use long after others are obsolete.