Scottish **Construction Leadership** Forum

Local Value-Add Case Study Commonwealth Games Village

Adding local value and impact to project delivery by working with the community

Project: **Commonwealth Games Athletes' Village** Contract value: **circa £245m**

Working for the common good The community regeneration legacy of Glasgow's Commonwealth Games

When Glasgow was selected as the host city for the 2014 Commonwealth Games, it signalled the beginning of a sevenyear race to put all the necessary infrastructure into place. Roads and transportation, training and events facilities — and not least accommodations for the 6,500 athletes and officials who would be taking part.





THE BACKGROUND

Glasgow's Commonwealth Games bid promised a blend of new and refurbished venues, an enhanced roads and transportation network and a specially-built athletes' village, as well as a combined heat and power energy centre. It also outlined plans for a transformational and lasting legacy that would benefit the city and its inhabitants for many years to come. The Athletes' Village project was focused from the outset on achieving the maximum public benefit possible.

THE BRIEF

As well as seeking a new events centre, the Council wanted something that would be environmentally responsible, sustainably built and carbon-neutral.

The brief for the Athletes' Village, created by Glasgow City Council, Scottish Enterprise and the Scottish Government, stipulated the creation of residential buildings that would positively contribute to the image of Glasgow's East End.

Areas like Dalmarnock, where the Village would be based, had suffered from the post-industrial economic downturn. They were not traditionally seen as desirable places to live or to establish new businesses and enterprises.

The project aimed to change that through a mix of affordable rented housing and private ownership homes, as well as a world-class sports facility and a blend of local businesses and services that would create a complete community.

The finished site would need to function over two phases: games mode, which would accommodate athletes and officials, and residential mode. This would involve retro-fitting the Village to create permanent residences, 300 for private sale and 400 for affordable rent.

At least 10 per cent of the overall workforce had to be new to construction, boosting new and living wage jobs, work experience and apprenticeships, particularly in the local workforce. Finally, it asked for homes built to Scottish Building Regulations 2013 for energy performance, and a district heating scheme to reduce fuel poverty and generate affordable, sustainable heat.



BUILDING A LOCAL TEAM

City Legacy, a consortium of Glasgow-based firms that included CCG, Cruden, McTaggart and Mickel and WH Malcolm, won the contract to deliver the Athletes' Village. As well as their ability to fulfil the terms of the brief and create the upskilling programme required, the client felt their knowledge of Glasgow and each other would create the cohesion and collaboration necessary to make the project work.

Established as a corporate entity, City Legacy brought a strong operational structure along with the resource, experience and expertise to address the legal, planning, architectural, engineering and financial challenges the project would represent.

Under the consortium agreement, each partner understood the parameters under which it would be working, meaning clear responsibilities, structure and mechanisms for resolving issues, should they arise. The legal framework documents included:

- The lease, which was the mechanism the client used to deliver the site
 - The Organising Committee licence, which governed handover, use and handback of the site
 - Funding guarantees

• The building contracts - each equity partner delivered a proportion of the works and was governed by standard building contracts with City Legacy

Glasgow, as represented by the briefing team, benefited from having a single point of responsibility and communication, underpinned by a strategic approach to project management. The three-stage tender process also helped client and consortium to consolidate their understanding of stakeholder objectives and deliverables, and to establish relationships, respect and trust across the board.

This project was all about businesses from Glasgow who wanted to succeed for Glasgow.

COMMUNICATION WITH THE LOCAL COMMUNITY

From the outset, City Legacy had to interact closely with the local community in which the Village would be built. They and all the project partners attended or fed into meetings with communities, gathering feedback, ideas and opinions and helping to communicate immediate and future plans.

It wasn't always easy - public opinion about the development was mixed, but conversations with the community, explaining the value of the project to them, helped to address most of the issues. Ultimately, the Village would provide future housing in the area, so it was vital to get that local input to ensure it would be fit for purpose.

The consortium also had to work closely with the council to ensure all accommodation was up to specification for varying needs — for example, accessibility for mobility-impaired users.

There was also significant consultation and collaboration to establish travel and transportation routes from the Village to the city,

MODERN CONSTRUCTION METHODS

The immovable deadline of the Commonwealth Games event,

and on the various services the future community would require.

Community benefit for both residents and businesses was built in. The overall, long-term objective was regeneration, so the emphasis on every procurement process, every contract, every discussion was how to create a world-class sporting village and supporting facilities that could then be transformed into exceptional housing and community services.

This was a regeneration project first and foremost. Glasgow City Council had always intended to regenerate the area. Creating the Village created the opportunity to deliver that earlier than planned.

as well as the future-forward energy targets specified in the brief, posed significant challenges for the City Legacy team. To help them meet those challenges, project specifications were well-developed by the client, and maximized the use of modern methods of construction.

Utilising an enhanced designed for manufacture (DfMA) approach, City Legacy partner CCG was able to automate the manufacture of building components like panelised wall systems in a quality controlled factory environment.

By presenting a number of these elements for inspection by the client before the project began in earnest, CCG and City Legacy were able to agree the standard of product with the client, and a contractual commitment was made between all parties that assured all elements delivered to the site met the same standard.

> The applied use of MMC enabled CCG to deliver their allocation of 237 homes and the Energy Centre within 14 months, representing a seven month advance on a 'standard build' construction programme. A terrace of eight

townhouses, for example, was delivered wind and watertight in 10 days.

Employed across the entire site, this method allowed the creation of 700 homes in just 700 days, and a 95 per cent carbon reduction — even higher than the 60 per cent reduction required by the brief.

This was a good opportunity for the housebuilders to test products, like soundproofed fencing that substantially reduced external noise carrying between properties. Lots of lessons were learned around communityimproving products and innovation.



CONSERVING ENERGY THROUGH A LOCAL HEATING SCHEME

As well as designing and building the homes in the Athletes' Village to an excellent eco-homes rating, the City Legacy team created a complementary energy centre supported by additional sustainability features like PV panels.

The 1.68MW combined heat and power (CHP) centre, designed and built by Vital Energi, supplies all homes, the care home, the community centre and nursery with heating and hot water via a network of underground pipes. In fact, the network also provides heat and hot water to the nearby Emirates Stadium, which includes the Sir Chris Hoy Veldrome. Powered by a CHP engine and three back-up gas boilers, the centre includes capacity for expansion to meet any additional development beyond the site boundary, and allow for connection with other district heating schemes across the city.

LOCAL VALUE: THE ATHLETES' VILLAGE AT A GLANCE

12 house types 1 and 2 bed flats 2, 3 and 4 bed terraced houses



700 units 400 social rent 300 private ownership

£90,000 donated



£230m

investment

In Glasgow's east end

300 homes sold within 18 months

18 77 11

WINNEF OF



25 industry awards120 bedroom care home86 apprenticeships141 work placements

CONSTRUCTION SCOTLAND INNOVATION CENTRE

This case study was prepared by Construction Scotland Innovation Centre on behalf of the Scottish Construction Leadership Forum – **March 2021**.

to the Prince and Princess of Wales Hospice