

Innovative Housing Programme – IHP Year 3 (2019-20)

Scheme List - Short Description

030/19	Flintshire council	Marleyfield House	<p>This development will support residents to live with access to state of the art therapeutic support, with both social care and health service staff all working together. The innovative layout and spacing of the building will inform and support the innovative operational model.</p> <p>An exemplar model of how GP's support residents in Care Homes will be developed and Flintshire County Council are working alongside Betsi Cadwaladr University Health Board (BCUHB) to develop a solution that will ensure that residents receive timely and consistent care from all services. Having the entire cohort of newly discharged residents in a centralised is an innovation that will support both recovery and efficiency in service delivered.</p> <p>With access to outdoor space the proposed designs encourage users to be in, and move around, the outdoor space. Internally, spaces support both operational delivery, and resident usage. All rooms will have ample daylight, and will not be overlooking by others.</p>
031/19	First Choice HA	Health and Well Being Flexi Homes	<p>The proposed fabric first construction programme / timescales provides a rapid response to housing need and the flexibility of providing accommodation tailored to the individual. Quick responses allow those with physical disabilities to remain in their homes and live in suitable accommodation when in need. The design offers both permanent and temporary solutions to existing and proposed developments and provides retrofit opportunities to meet the needs of the identified tenant.</p> <p>Panelised or modular units manufactured off-site can be easily transported for rapid erection minimising any disruption to the exiting property and its tenants.</p>

			<p>The design offers scalability if the form of multiple units being clustered together or stacked on top of each other dependant on Local Authority requirements.</p> <p>The revenue element of the bid provides a unique research and development programme that enables the project team utilising BIM, to develop standardised components with the flexibility to react to situational change.</p>
038/19	Linc Cymru	48-54 City Road and Land at Vere Street Cardiff	<p>The development is a seven storey main block and four storey secondary block featuring vertical sky gardens, vertical greening, bio-solar blue/green roof and integrated SUDS system using CLT to the main block and Cemfree piling.</p> <p>The project provides commercial retail space and 46-48 one bedroomed flats. The entire block is constructed of CLT with horizontal and vertical greening residents have access to tend these areas if desired with three communal terraces each of which has its own unique identity and use.</p> <p>The City Road entrance leads into a living passage which links to a courtyard garden for the residents of the block to Vere Street and access to the ground floor flats. This will be the first CLT tower in Wales and with vertical sky gardens and external greening in the UK.</p>
018/19	Sero Homes	Parc Hadau,	<p>Parc Hadau includes multiple innovations throughout, the technical risks of these not succeeding are individually comparatively small, and the consequences therefore comparatively minor for the overall scheme.</p> <p>For example actual energy consumption effecting zero carbon goals, tenants may not respond positively to these homes, the thermal mass may not deliver the anticipated 4-6°C passive cooling in the homes experienced elsewhere, “Performance Gaps” may persist between the forecast design performance and the actual monitored performance of the homes.</p>

029/19	Swansea City Council	Clase	<p>The project will focus on 3 levels of innovation – firstly developing a high energy efficient Swansea Standard, which is adaptable and can be combined with renewable integrated or bolt technologies as part of the City Deal Homes as Power Stations project. Secondly, the projects will be delivered by innovative procurement methods, delivered in-house, promoting upskilling and creating local employment and training opportunities, and thirdly the project will prove a test bed for growing the supply chain to provide innovative low cost low carbon homes at scale.</p> <p>Swansea Council has a strong commitment to low carbon or zero carbon homes, and with the development being built in one of the most deprived areas in Swansea, eliminating fuel poverty is a key driver for new housing developments.</p>
034/19	Monmouthshire HA	Bulwark	<p>Innovation is across a number of themes. The project transforms blighted places, enhancing the wellbeing of residents. Site selection and location promotes active travel and using courtyard principles enables these very constrained sites to be developed to a density of 30-40 dwellings per Hectare – commensurate with the principles of the original Bulwark Garden Village.</p> <p>The introduction of house types supporting different tenure types reinforces integration of different uses. Dwellings are designed to be ‘long-life’ in that they have the capacity and technology to absorb changes to household numbers with the easy addition of a second bedroom.</p> <p>The project will eliminate the use of fossil fuels through the use of a combination of air source heat pump and photovoltaics. This will be backed up by a robust long life building envelope to Passivhaus standards of insulation. They will develop the circular economy by applying the ReSOLVE framework to promote the idea of a circular economy.</p>
036/19	Cardiff Council /	Eastern High School	<p>Using the same innovation as the Parc Eirin (IHP 2018, £7.6m) project but with new delivery and financial pathways to help transition to scale. The approach to</p>

	Sero Homes		<p>low carbon technology, customer experience, intelligence and electricity network support is integral to this project.</p> <p>The core innovation is structuring financial options that give residents and homebuyers the best chance of buying a home by educating the market on value, attracting and piloting new green finance initiatives and offering alternative long-term funding routes.</p> <p>A second innovation will demonstrate how higher density buildings like flats and apartments can be designed and operated to provide greater energy benefits to residents. The homes on the project will resemble a micro grid in their operation with the Distribution Network Operator taking responsibility for the network up to each home. Demonstrating a greater saving in energy will enable greater recovery of capital costs on future schemes.</p>
037/19	Coastal/ Pobl Group	Gwynfaen Farm	<p>Gwynfaen, an upscaling from earlier rounds of IHP projects. 165 homes will provide local supply chain opportunities to achieve economies of scale for the materials and components necessary to achieve Zero Carbon homes.</p> <p>Whole Market Approach mixed tenure development is an important innovation on site creating balanced communities. All homes are targeting same standards of SAP 96+ and EPC Rating of 'A', broadening the availability of Zero Carbon homes on the open market. This innovation will transform perceptions of customers, normalising the technology across all tenures.</p> <p>The superstructure of homes will use a Fabric First panelised approach with integrated renewable technologies and battery storage. The use of natural materials will help us to reduce the carbon emissions associated with the construction phase of the home, which can amount to as much as 50% of the carbon emitted over the lifetime of the home.</p>
044/19	Cartrefi Conwy	Glanrafon	<p>Cartrefi Conwy/Creating Enterprise have delivered an advanced manufacturing facility but want assistance to upscale and transition to a new purpose built</p>

		<p>1,500m2 production and training facility which will be established, built to Beattie Passive's Passive Plus performance standard, using renewable energy to power not only the building but the production equipment.</p> <p>It will achieve agile manufacturing through an innovative blend of automation and human labour to produce a wide variety of new dwellings and retrofit packages using combinations of volumetric, panel and frame components. Delivering high-performing, carbon positive Beattie Passive homes at scale and pace.</p> <p>To create a replicable, active- learning-based innovative partnership venture model amongst multiple social housing providers with Beattie Passive, using local supply chains and providing accessible and sustainable job opportunities that stay ahead of the curve and deliver the best homes for Wales.</p>
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