



### Wellbank Park Self-build Housing Submitted by 2B Landscape Consultancy Ltd

### Awards category Early housing scheme – not yet completed



Lead or collaborating organisation(s)	2B Landscape Consultancy Ltd, Hugr Homes, Artform Architects, PSA Engineers, David Nuttall
Location of SuDS	LA19 5TB

## 1. SuDS overview

SuDS components used	<ul> <li>Network of swales associated with access road and active travel path network</li> <li>2 large lakes at the heart of the development</li> <li>Porous sub-base to drives to collect and detain domestic roof surface water</li> <li>Shallow highway crossing drains, designed to maintain near-surface overall level in SuDS system</li> <li>Permeable paving and sub-base to Community Hub car park</li> </ul>	
Size of the scheme and its local context	4.25Ha. The Wellbank site is located in south-west Cumbria and within the boundary of the Lake District National Park. It is situated within the borough of Copeland, half a mile outside the village of Bootle. Whilst formerly the location of MoD barracks dating from 1942, the military buildings have since been demolished and more recently the site has become derelict and overgrown.	
Approximate age of scheme (years)	Under construction	
Benefits of the scheme	<ul> <li>Manages Local Flood Risk</li> <li>Enhances Biodiversity</li> <li>Provides Amenity Interest</li> <li>Affords community space and facilitates active travel</li> <li>Improves water quality</li> <li>Reduces carbon cost of project by largely eliminating underground pipework/tanks for surface water</li> </ul>	

Briefly describe the scheme	Wellbank Park is the vision of David Nuttall at FN Solutions, aspiring to establish a vibrant new community with people, landscape and the environment at its heart.
	2B's involvement in this mixed housing site has resulted in a SuDS- driven masterplan. The site features 50 custom-build houses, and 8 holiday homes catering for wheelchair users. Surface drainage features include a network of biodiverse swales, leading residents to two beautiful biodiverse attenuation lakes by a multi-purpose hub building at the heart of the new community.
	Surface water is attenuated on site in the event of a 1 in 100-year flood, and beyond that ultimately overflows to an existing watercourse.
	The lakes are a key component both environmentally and visually. They provide a focal point for residents, with the Community Hub on the waters' edge; as well as being a significant contributor to the overall ecology and integral part of the site-wide SuDS strategy. The swale and path network has been carefully developed to work with the sloping topography and prioritise accessible active travel connectivity.
	The scheme is currently under construction, with SuDS elements amongst the first to be built; core Green Infrastructure as a base upon which to build a new neighbourhood.

# 2. SuDS details

No.	Question	Answer
1	What difference has this scheme made to the local community or area?	Wellbank Park has a strong focus on sustainability, accessibility and placemaking, in addition to combatting the climate crisis, whose effects are seen in flooding locally.
		Public consultation, and liaison with local community organisations, has been key to design process. The team are proud to be part of such a vibrant area with a strong community focus.
		The team has worked closely with the end operator, whose business provides fully inclusive and accessible holiday homes - provision often lacking in the current market.
		The inclusive landscape design responds to this expected audience, bringing the whole community together and closer to nature.

2 What is exceptional about this scheme beyond a standard approach?		The scheme combines keeping SuDS close to the surface with ensuring accessible, car-free routes throughout the development. Shallow highway-crossings were sourced to enable the swales and
		lakes to operate as close to the general surface level as possible, for safety, functionality and amenity.
		Inclusivity is key to detailing, including long ramps that provide access to the lower pond terraces; all are included in the space, and experience of being near the water.
		The placemaking SuDS language gives these unique and individual houses an exceptional setting that knits them together and provides a shared environment and experience for a new community.
3	How much work went into getting this scheme realised?	FN Solutions, Hugr Homes, Artform Architects, and PSA engineers, were strongly supportive of 2B's vision for a SuDS-led masterplan, which has provided a USP for the development, and given the self- build plots in the beautiful Lake District setting an extra attraction.
		The interdisciplinary team of SME consultancies recognised the special qualities of the site, and has worked hard to realise the dream, over a period of more than 4 years.
		The time period has spanned Covid, rising interest rates, and the cost-of-living crisis, but the team has overcome all challenges and the development was finally granted full planning consent recently.
4	Is this scheme part of a masterplan or integrated into other initiatives?	In addition to being a masterplan in its own right, the development provides housing opportunities for locals, and a unique accessible offering for Cumbria's tourists. Wellbank Park is working with Cumbria Tourism to advertise the offering.
		The team has also worked with renewable energy specialists, Cumbria Wildflowers, and South Lakeland Orchard Group, increasing the environmental resilience of the area.
		The master plan will continue to evolve, as new residents start their custom build journey, supported by the team of industry professionals; each unique build weaving into the SuDS-based landscape fabric, currently being laid as a foundation for this new community.

5	What value does this scheme provide to the local area and beyond?	Wellbank Park is leading the way as the first custom-build community in Cumbria. It showcases the value that exceptional SuDS design can bring, setting a standard for future schemes.	
		Local groups including a mental health charity, environmental conservation organisation, local councillors and MPs have visited the build site, and local BBC radio has run a feature.	
		Wellbank Park has great intrinsic value to residents and the local area. It puts the area on the map for sustainable, accessible, community-focussed custom build in rural areas challenged with a need to provide homes for local people as well as desirable holiday locations.	
6	What challenges/problems needed to be addressed to realise this scheme?	Details for keeping water near to the surface needed to be carefully considered. 2B challenged conventional piped drainage techniques, and worked closely with the project engineers to develop a system for keeping swales as attractive shallow features, and reducing the number of underground pipes required.	
		The variable level of the balancing ponds, which will fluctuate by 300mm during storm peaks, made the water's edge design challenging. Long ramps provide inclusive access to the lower terrace of the ponds, so that no one is excluded from the space, or the experience of being near the water.	
7	How does the scheme address related issues such as water scarcity, nutrient	The SuDS scheme is designed to capture and filter water close to where it lands, using nature-based solutions and design that mimics nature.	
	neutrality, or biodiversity net gain?	For example, soft margins to the central lakes will be formed from gentle slopes and a 'wet bench' terrace at normal water level, which is both a safety feature and an excellent habitat for waters' edge (marginal) planting.	
		Careful choice of climate-resilient and native species provides significant biodiversity uplift, using native wildflower meadows and orchard species for added community and wildlife value.	
8	Is learning from the scheme continually captured and communicated? Please give examples.	The scheme is currently on site, but feedback from the community has been integral to the design process, and the site has its own website and social media channels to communicate as it develops, please see <a href="https://wellbankpark.co.uk/">https://wellbankpark.co.uk/</a>	

9	What approaches/measures are taken to ensure the scheme is properly managed and maintained?	The site will continue to be managed by Hugr homes, who are completely invested in its continued success, and have developed a management plan with an emphasis on community involvement.
10	Have you collected any feedback on your scheme? What do people say about it? Can you provide any quotes?	Facebook comments: "nice how interactive you are on here with the development as locals we are intrigued " "Progress in a few weeks is astounding. Keep sharing please" "Beautiful" "2024 is going to be an exciting year." "looking forward to seeing more houses built and families move onto Wellbank Park" "love driving home and seeing progressimpressed how clean the site and road is kept given the weather!it'll be a lovely place to live" Vicki Murray: " thrilled about the partnership between Brickhouse Farm Cottages and Wellbank Park, and opportunity to offer more accessible accommodation in such a beautiful setting."

## 3. Supporting materials

Image (low resolution)	Caption	Image credit
	Wellbank Park is the vision of David Nuttall at FN Solutions, aspiring to establish a vibrant new community with people, landscape and the environment at its heart. 2B's involvement in this mixed housing site has resulted in a SuDS-driven masterplan. The site features 50 custom-build houses, and 8 holiday homes catering for wheelchair users. Surface drainage features include a network of biodiverse swales, leading residents to two beautiful biodiverse attenuation lakes by a multi-purpose hub building at the heart of the new community. Surface water is attenuated on site in the event of a 1 in 1000- year flood, and beyond that ultimately overflows to an existing watercourse. The 2 lakes are a key component both environmentally and visually. They provide a focal point for residents, with the Community Hub on the waters' edge; as well as being a significant contributor to the overall ecology and integral part of the site-wide SuDS strategy. The swale and path network has been carefully developed to work with the sloping topography and prioritise accessible active travel connectivity.	2B Landscape Consultancy Ltd

	The scheme is currently under construction, with SuDS elements amongst the first to be built; core Green Infrastructure as a base upon which to build a new neighbourhood.	Hugr Homes
	The sustainable drainage landscape became a driving force for the masterplan, with a green spine of meandering swales and accessible paths connecting the residents to the Lakeside Community Hub at the heart of the scheme.	Artform Architects Ltd
Here and the second sec	Service corridors were carefully located, and surface drainage kept as close to the finished surface as possible, in order that swales can be shallow and pleasant landscape features.	2B Landscape Consultancy Ltd
All of the second sec	Highway crossfall into swales has been designed to be consistent with the site's terrain, using sheet runoff entry to swales where possible to avoid erosion at point entries.	
	Where surface drainage (infrequently) needs to cross the highway, a product has been used that combines high load- bearing capacity with high-level crossing.	

The two central attenuation pond/lakes provide a beautiful relaxing setting for the Community Hub building at the centre of this new neighbourhood. The variable level of the ponds, which will fluctuate by 300mm during storm peaks, made the water's edge design challenging.	2B Landscape Consultancy Ltd
Long ramps provide inclusive access to the lower terrace of the ponds, so that no one is excluded from the space, or the experience of being near the water, and the biodiversity that surrounds the water's edge.	
Visuals have been produced that demonstrate the importance of the water landscape to the scheme. The attractive and biodiverse landscape, and sense of community that surrounds the	HAZE visualisations
lakes and Hub building, will be a key attractor for families that are choosing to build their own bespoke home at Wellbank Park.	

The accessible holiday homes, and self-build plots, feature driveways that store water collected from the roofs of the properties. The community hub building also features a permeable car park. Stormwater is then channelled close to the surface, into the swale system, and ultimately into the two lakes.	HAZE visualisations
Paths and swales under construction in 2023. SuDS elements have been amongst the first to be built; core Green Infrastructure as a sound base, and a key attraction, upon which to build a new neighbourhood.	2B Landscape Consultancy Ltd